


**This Manual is available for download at:**

**http://www.pcmrp.com/manual.htm**

**pc/MRP for Windows**
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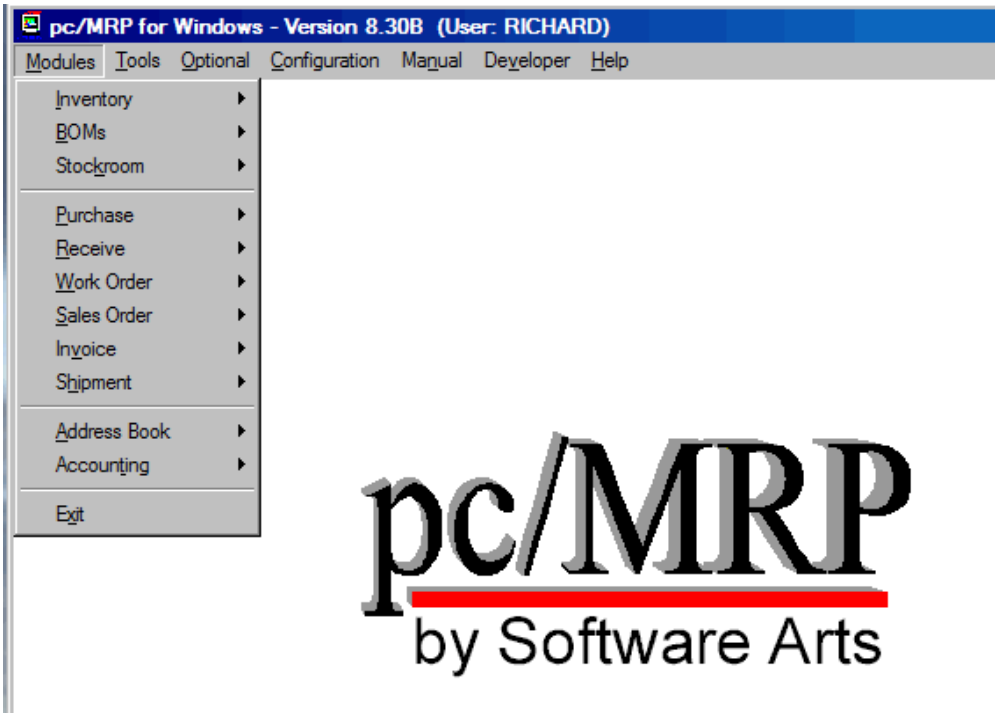
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# 1 pc/MRP Introduction

## 1.1 pc/MRP General Overview

Slideshow for pc/MRP walkthrough part 1: http://www.pcmrp.com/mrp101/walkthru1addressnew.htm
Slideshow for pc/MRP walkthrough part 2: http://www.pcmrp.com/mrp101/walkthru2overview.htm




pc/MRP is a fully integrated MRP/Accounting program for Windows. pc/MRP comes complete with eleven integrated modules: Address Book, Inventory, Purchasing, Receiving, Sales Order, Work Order, Invoice, Shipment, Bills of Materials, Stockroom and Accounting (GL, AP, AR). All of the modules can be accessed through pc/MRP's Main Menu shown above. Modules can be used on a stand-alone or integrated basis. pc/MRP also comes with a Configuration Utilities Module that allows you to configure pc/MRP to best suit your business operations. There are also eighteen Optional Modules available.

pc/MRP can be configured to support manufacturing, distribution, retail or many other types of business operations. pc/MRP's multi-user version allows a user to open multiple instances of pc/MRP and/or multiple people to enter purchase orders, invoices, etc. at the same time on PCs networked with any of the multi-user networks such as Windows XP, Vista, Windows 7, Windows 8 or Windows 10.

pc/MRP's Large Business and Multi-user Versions can track up to 1 billion part numbers. Please see the pc/MRP web site for current prices. http://www.pcmrp.com/pricing.htm Users can upgrade from one version to a higher version by contacting Software Arts, Inc. and paying the price difference between versions (no data will be lost).

## 1.2 Standard Modules

The modules menu of pc/MRP is the first of the menu selections. Within the modules menu we have Inventory, BOMs, Stockroom, Purchase, Receive, Sales, Work Order, Invoice, Shipment, Address Book, and Accounting. Clicking on any one of these items will bring you to the sub-menu for that module.

### 1.2.1 Inventory Module

pc/MRP's Inventory Module (Partmaster) allows users to enter, edit, and scroll for part numbers. Users can also print inventory reports, track inventory movement between the 20 areas and WIP, take physical inventories and cycle counts, print out labels, roll up assembly costs, and update selling prices automatically. Advanced features include digital imaging, price quantity breaks, 6 alternate part numbers, unlimited alternate vendors, 9 alternate manufacturers, and model numbers per part. Users can link infinite number of files, folders and URLs to a part.

### 1.2.2 Bills of Materials Module

pc/MRP's BOM Module allows users to enter, edit, and scroll through BOMs infinite levels deep. Where used reports, digital images, alternate part numbers, routing sheets, reference designator information and unlimited comments can be displayed at a touch of a button while scrolling through a BOM.

### 1.2.3 Stockroom Module

pc/MRP's Stockroom Module allows parts to be issued and received from manufacturing, shipping, receiving, and alternate warehouses. Parts issued to manufacturing under a specific work or sales order number are decremented from on-hand and placed into Work In Process (WIP). When the assembled parts are received from manufacturing, the parts are removed from WIP and the on-hand quantity of the completed assembly is incremented. The Stockroom Report Module provides job cost and lot tracing data. The Stockroom Module also provides options to automatically convert parts into assemblies and to check the availability of parts for specified assemblies.

### 1.2.4 Purchasing Module

pc/MRP's Purchasing Module allows you to enter, edit, duplicate, and print out purchase orders and reports. In addition, POs can be faxed or e-mailed directly from your PC (fax functionality requires an installed FAX/modem card and connected telephone line). Vendor address and part number information is automatically imported from their respective modules. Entering a PO automatically increments the on-order quantity in inventory. Over 100 different reports can be generated including "Consolidated Order Requirements", "ISO 9000 Vendor Performance”, and "Purchase Price Variation". Each Purchase Order line item can be taxable or non-taxable, have its own due date, and discount. Blanket POs can be created at the touch of a button. POs can be created automatically. Users can link infinite number of files, folders and URLs to a Purchase Order.

### 1.2.5 Receiving Module

pc/MRP's Receiving Module allows you to enter, edit, and print out receivers and receiving reports. Entering a receiver against a PO will automatically enter all necessary information from the purchase order, decrement the on-order quantity and increment the on-hand quantity in the Inventory database, calculate a new average cost, and create an accounts payable voucher. If pc/MRP is set in the auto accounting mode it will also debit and credit the general ledger automatically. If the quantity received completes the order for that line item, the purchase order's *Complete* field will be marked "Y" to close out the line item. Users can link infinite number of files, folders and URLs to a Receiver.

### 1.2.6 Work Order Module

pc/MRP's Work Order Module allows manufacturing to enter, edit, and print out work orders and work order reports. Sales orders entered by sales, automatically become work orders and will appear in the work order module and reports. Manufacturing can use work orders to build to stock or build to existing sales orders. Users can link infinite number of files, folders and URLs to a Work Order.

### 1.2.7 Sales Order Module

pc/MRP's Sales Module allows you to enter, edit, duplicate, and print sales orders and sales order reports. If the order entered is cash and carry or on account and carry, pc/MRP will create an invoice and decrement the on-hand quantity in inventory. If it is an 'order entry' order (to be delivered later), pc/MRP will create a sales order and increase the on demand quantity. pc/MRP's Sales Module will provide numerous reports including: All Overdue Sales Orders, All Sales Orders for a Month, Sales Tax, Sales Commission, and Cost of Sales. Each line item can be taxable or non-taxable, and have its own due date and discount. Blanket sales orders can be created at the touch of a button. Users can link infinite number of files, folders and URLs to a Sales Order.

### 1.2.8 Invoice Module

pc/MRP's Invoice Module allows you to enter, edit, and print out invoices, shippers, and invoice reports. Entering an invoice against an 'order entry' sales order will automatically enter all necessary information from the sales order, decrement the on-demand and on-hand quantities in inventory, and create an accounts receivable voucher. If pc/MRP is set in the auto-accounting mode, it will also debit and credit the general ledger automatically. If the quantity received completes the order for that line item, the sales order's *Complete* field will be marked "Y" to close out the line item. Each line item can be taxable or non-taxable and have its own due date. Users can link infinite number of files, folders and URLs to an Invoice.

### 1.2.9 Shipment Module

pc/MRP's shipping module integrates pc/MRP with UPS's WorldShip or FedEx's Ship Manager. Users will no longer have to re-enter the customer addresses. Users can also select 'BOL' from the Carrier Type dropdown list and create a Bill of Lading shipping document. Users can link infinite number of files, folders and URLs to a Shipment.

### 1.2.10 Address Book

pc/MRP's Address Module allows you to create and maintain a customer and vendor database. pc/MRP will automatically export address information to purchase orders and sales orders. Invoices, Receivers, etc. created by pc/MRP, as well as Balance Due, and Average Days to Pay information can be displayed at the touch of a button. pc/MRP has numerous report options allowing customer data to be parsed as desired. Users can also pick from an address list, and automatically create mail merge files and address labels. Users can link infinite number of files, folders and URLs to an Address.

### 1.2.11 Accounting

pc/MRP's Accounting Module consists of fully integrated GL, AP, AR, and a check-writing module. Debiting and crediting is automatic and all entries automatically update all journals. pc/MRP's accounting package supports multiple divisions and departments. The Pay Bills module will automatically create and print one check per vendor for the invoices selected. Up to 12 accounting periods can be active. The Accounting Report Module supports drill down reports such as "All Accounting Transactions for a Specified Invoice". Additional accounting reports include: sales tax, sales commissions, cost of sales, check reconciliation, and cash projections.

### 1.2.12 Configuration Utilities Module

pc/MRP's Configuration Utility Module allows you to configure pc/MRP to best suit your business operations. The configuration menu contains such items as Module Activation, Settings & Utilities, and information about pc/MRP. The Module Activation selection allows users to activate the Optional Modules. Settings & Utilities allows for the configuration of your pc/MRP to work optimally for your business needs. Note: Appropriate configuration codes are required to change these settings.

### 1.3 Tools

The Tools menu contains your basic Windows elements including cut, copy, paste, a calculator, and macro creator. The macro command is used for repeating sequences of keystrokes when a single key combination is entered. One reason to use a macro is in the instance of having repetitive tasks.

### 1.4 Optional Modules

Software Arts has created eighteen Optional Modules that you can use to enhance the efficiency of your business. The optional modules can be tested in both the trial version and the full version. Once tested, if the user wants the Optional Module(s), they can be purchased through Software Arts. Call Software Arts at (408) 226-7321 for further information or for activation codes. Please see the pc/MRP web site for current pricing: http://www.pcmrp.com/pricing.htm

#### 1.4.1 Alternate Currency Module

The optional Alternate Currency Module allows you to enter several different currency types and their related exchange rates into pc/MRP. You would then be able to select the desired currency for Purchase Orders, Receivers, Sales Orders, and Invoices. You can also print an Inventory Value Report or print checks using the desired currency.

#### 1.4.2 Audit Trail Module

The optional Audit Trail Module provides a means of tracing edit changes made to any or all of the pc/MRP modules with the exception of accounting. Whenever a change to a record occurs during an editing session, the Audit Trail module will record the *Date, Database, Time, User, and Field Name* as well as the *Record & Item numbers, Part/BOM number*, or *Address ID* number. A flexible search feature allows retrieval of the recorded change based upon a variety of criteria.

#### 1.4.3 Corporate Reporting Module

The optional Corporate Enterprise Module allows companies to select one of three methods to have their parts list and BOMs automatically synchronized (including all indexes) across the world in real time. They can switch from one division to another by selecting that division from the drop down menu. Companies can print out consolidated financial reports for all divisions, business units, and the entire corporation. Currencies are automatically reconciled if pc/MRP's Alternate Currency Module is active.

#### 1.4.4 Customer Bulk E-mailer

The optional Customer Bulk E-mailer Module utilizes the address book to allow users to send newsletters, advertisements, or other types of documents in bulk to specified address types. (Customers, Vendors, Employees).

#### 1.4.5 ECN Module

The optional Engineering Change Notice Module creates, edits, and prints out ECNs and ECN Reports. In addition, it will also print out ECN reports that provide Purchasing with a list of all open POs affected by ECNs issued in the last 30 days.

#### 1.4.6 EDI Import & Export Module

The optional Electronic Data Exchange (EDI) Module allows you to have electronic data exchange between you, your customers and vendors.

### 1.4.7 Employee Time Tracking Module

The optional Employee Time Tracking Module consists of two modules. The first module, Employee Information, is used by accounting to create and manage employee records. The second module, Time Sheet, is used by individuals and/or accounting to create and manage employee time sheets.

### 1.4.8 Infinite Bucket/MRP Module

pc/MRP's advanced optional MRP Module will generate a master production schedule / infinite bucket reports. The reports contains data that can be expressed in a daily schedule or consolidated into weekly, monthly, or a quarterly schedule, for a user definable time period. Running the MRP generates action items for purchases, issues to be made, makes, sales, buys, and labor actions. Users can display or print action item reports, timelines or item graphs.

### 1.4.9 Inspections Module

The optional Inspections Module allows users to set individual inventory items to require an inspection at four different stages of use: receiving, manufacturing, invoicing, and/or shipping.

### 1.4.10 Password Module

The optional Password Module allows an unlimited number of user name and password combinations to control access rights (delete, edit/create, view only, or no access) to each pc/MRP module.

### 1.4.11 Purchase Request Module

The optional Purchase Request Module creates, edits, and prints out purchase and quote requests. In addition, it can automatically convert PO requests and quotes into purchase orders.

### 1.4.12 QuickBooks® Export Module

The optional QuickBooks® Export Module allows users to routinely export AP, AR, inventory, and address data out of pc/MRP and import into QuickBooks®.

### 1.4.13 Routing Module

pc/MRP's optional Routing Module allows you to create routing records. You can then move and track work orders and sales orders through the factory floor from work station to work station.

### 1.4.14 Sales Analysis Module

The optional Sales Analysis Module contains several programs that will analyze sales history and set stocking and ordering requirements. The Sales Trend Reports can be used to spot sales trends over four user-defined time periods and subtotaled by part number, vendor, or customer. The Book to Bill Reports can analyze book to bill ratios and goals by customer and territory. The Estimated Usage and Min Quantity Reports automatically fill in each parts *usage* and *min quantity* fields based on prior sales. The Consolidated BOM Reports consolidate parts within various levels of a BOM and print out the consolidated quantity for each part. Multiple BOMs can be consolidated together and printed spreadsheet style to analyze the purchasing requirements as a whole.

### 1.4.15 Sales Quote Module

The optional Sales Quote Module creates, edits, and prints out sales quotes. In addition, it can automatically convert sales quotes to sales orders if/when you receive the order.

### 1.4.16 Serial/Lot Tracking Module

pc/MRP's optional Serial/Lot Number Module will store current on hand quantities of each serial/lot number. It also keeps records of all transactions adjusting the serial/lot number quantities as transactions are made. Entering an invoice will allow you to decrease the on hand quantity of the serial/lot number being shipped (I type transaction). Entering a receiver will allow you to increase the on hand quantity of the serial/lot quantity (R type transaction). Issuing parts to an assembly in the stock room will allow you to decrease the on hand quantity of the serial/lot number being issued (S type transaction). Users can print advanced tracking and composition reports.

### 1.4.17 User Task Manager & Tickler Module

The optional User Task Manager & Tickler Module allows the user to quickly enter a tickler and reminder date/time for notification. You can enter detailed information about a task or project to track.

### 1.4.18 Web Orders

The optional Web Orders Module allows users to manage orders created on a web sales site (currently ShopSite) by downloading and uploading the orders into pc/MRP's Sales Order module.

### 1.4.19 Barcode Package

Companies can purchase the optional Barcode Package, which contains barcode fonts. These fonts are used with the report generator to add a barcode to labels and reports.

# 2 Installing pc/MRP

## 2.1 Recommended Minimum Hardware Requirements

| | |
|---|---|
| Workstations: | Windows XP – 1GB RAM<br>Windows Vista – 2GB RAM<br>Windows 7, 8, 10 – 4GB RAM |
| Server: | Windows 2003 – 2GB RAM with 10+ GB free disk space<br>Windows 2008, 2008 R2 – 4GB RAM with 10+ GB free disk space<br>Windows 2012, 2012 R2 – 4GB RAM with 10+ GB free disk space |

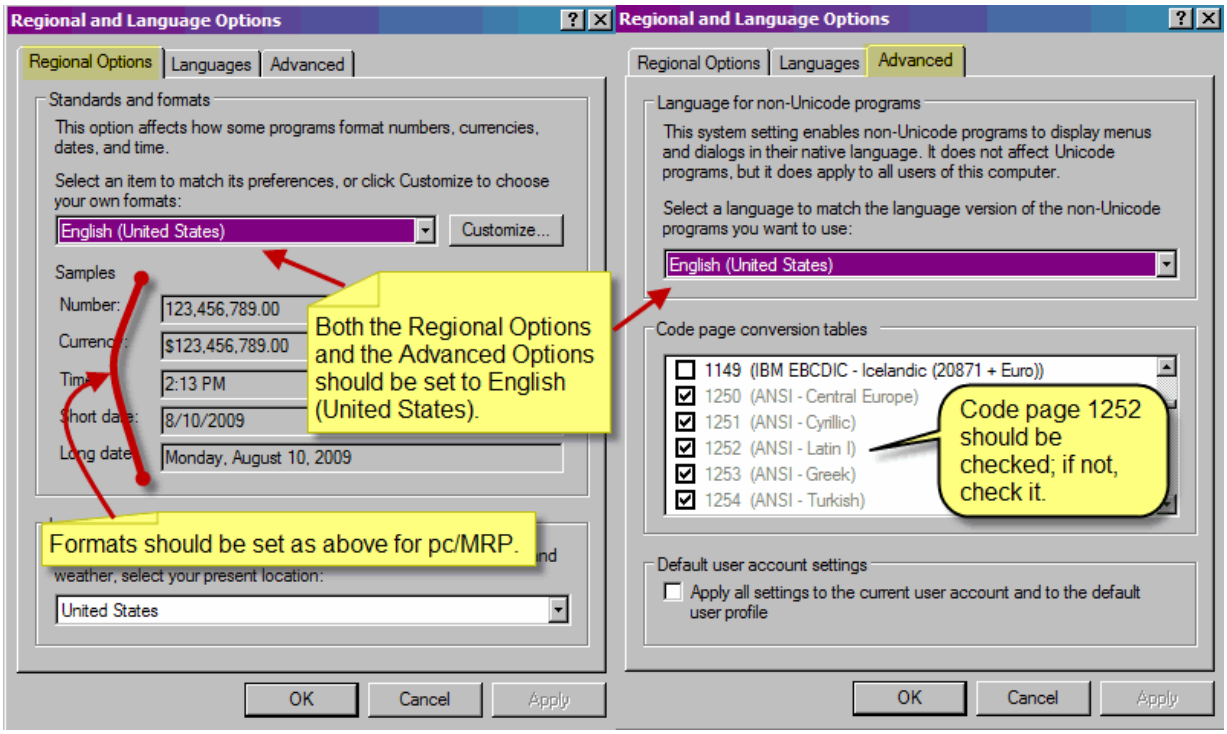
Software Arts, Inc. does NOT recommend using a workstation as a Server for pc/MRP. If the workstation crashes or is turned off, nobody can access pc/MRP. A crash would also greatly increase the chances of data corruption.

**Note** about Running pc/MRP on an **Apple/Mac Workstation**:

If you have a standard Windows Local Area Network Server 2003, 2008, or 2012, then you can install Parallels or VM Ware's Virtual Box (free download from VM Ware) on the Apple Work Station. You would then install the Windows Operating System from a Windows Install DVD. Once you are in and running Windows on the Apple Work Station create a desktop shortcut to the pcmrpw.exe file located in the pcmrp folder on the server's C: or D: drive. Our sources feel Virtual Box may be the best way to go. www.virtualbox.org
If you have a Windows Terminal Server 2003, 2008, or 2012, you would simply install an Apple Remote Desktop Client for Windows on the Apple Work Station.

## 2.2 Desktop Environment

Select the Windows 'Start' button, select the Control Panel and then Regional Settings and verify the following information:



## 2.3 Initial Installation (first time only)

Do not install pc/MRP in the Windows 'Program Files' or 'Applications' directory. Instead, allow it to install itself in its own directory such as C:\pcmrpw.

In a multi-user environment, pc/MRP runs as a client on a Windows workstation connected to a server.

Slideshow for pc/MRP install: http://www.pcmrp.com/mrp101/installpcmrpclickonlink.htm

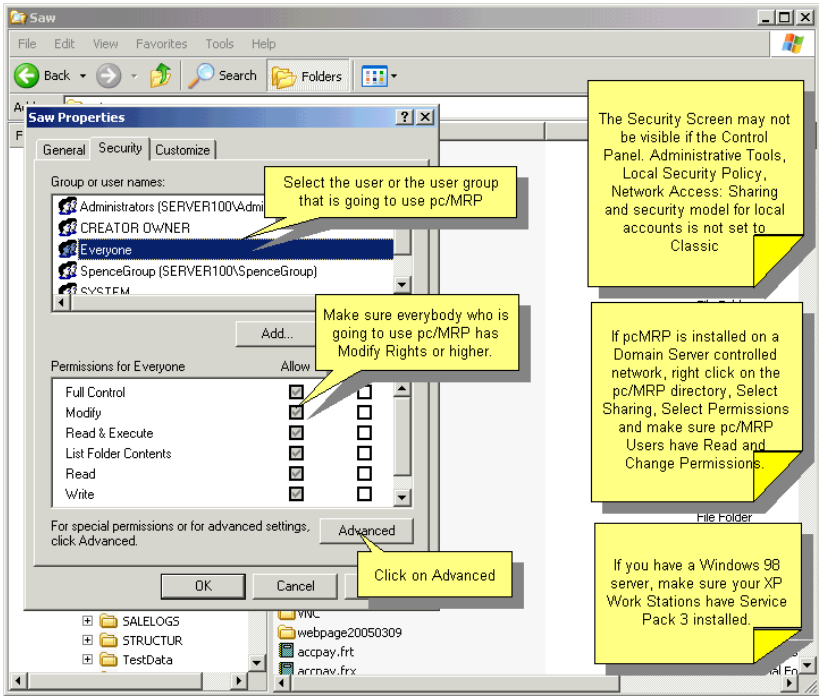
If you are installing pc/MRP from a downloaded file, simply double click on that file.

The installation program will prompt you to read the end-user agreement and select a suitable location for pc/MRP to be installed. pc/MRP offers C:\PCMRPW. If you want to place the application into a different folder, like C:\Company\PCMRPW, you first need to use Windows Explorer and create the folder. Then run the installer and when asked, select the desired folder.

Once the installation is complete, pc/MRP can be accessed either by your computer's Start and Programs menu, or the shortcut created on your desktop. The first time you start pc/MRP, the program will require that you define a password for future access to the program and then to enter your company's name, address and phone number.

If you have installed a single user version of pc/MRP, you are finished with the installation. If you are installing a multi-user copy, follow the instructions listed below.

For the server you should:
Double click on My Computer
Right click on the server's folder that contains the pcmrp files
Select Properties (select Sharing and Security on a workstation)
Select the Security tab
Select the Everyone group
Provide all pc/MRP users (or the group) with 'Modify' rights or higher. Please refer to the screenshot below:



For every workstation, on the network that you want to run pc/MRP, create an icon as follows:

1. Double-click on '**My Network Places**' (Icon in the open space on your desktop or in Windows Explorer).
2. Double-click on the server. On Windows 2000, double-click on "Computers near me" and then the server.
3. Double-click on the server's directory containing pc/MRP (if pc/MRP is not located at the 'Root' level).
4. Double-click on the folder containing pc/MRP.
5. **Right-click** on the pcrmpw.exe file and drag it to the desktop (note the 'W' at the end of pcmrpw).
6. Select '**Create Shortcut**'.

### 2.4 Possible Installation Errors

- An "Error writing file" message usually indicates there is not enough room on the hard disk to install all of the files. Your hard disk should have a minimum of 400 MB of free space prior to installing pc/MRP. The pcmrpw directory could grow to several GB over time.
- If you are installing pc/MRP from a download file (dem999x.exe) and the installation program asks you for Disk 2: The downloaded file is not complete. Re-download the file and attempt to reinstall pc/MRP with the new dem999x.exe file. (999x is replaced with the current version and revision, currently as dem900a.exe)
- If mapped drive says 'No space available' or there is an 'x' in the computer list icon, use the UNC location in the 'Network Connections' list.
- Also see Section 17.7.45 in this Manual.

### 2.5 Moving or re-storing the pc/MRP system

pc/MRP can be "moved" from one computer to another by COPYING and PASTING the pcmrpw directory. Never MOVE the PCMRPW directory as a network failure during the move will cause all sorts of problems. Follow the instructions above to re-create the shortcuts.

After testing that pc/MRP is up and running, you can delete the original pcmrpw directory if you wish.

This is also how you would backup the pcMRP directory each night; but you would copy to a USB disk drive. Software Arts recommends an odd day, even day, week-end, and month-end rotating back-up media.

You may need to do this if switching servers or moving from a Peer-to-Peer workstation to a regular server.

# 3 pc/MRP Tutorial

## 3.1 Tutorial Overview

The Tutorial is designed to teach new users about pc/MRP. The Tutorial has 18 lessons. Below is a description of each lesson.

| | |
|---|---|
| 3.1.1 pc/MRP Manual and Contents | A brief discussion about the Manual and where to find things. |
| 3.1.2 The Bicycle Shop | Discusses what the Bicycle Shop is and how to utilize the Tutorial. |
| 3.1.3 Settings and Utilities | Explains a few custom settings that users should learn. |
| 3.1.4 Creating a Practice Directory | Shows users how to make a backup copy and a practice directory of pc/MRP. |
| 3.1.5 Address Book Module | Discusses where all of your vendor and customer information resides. |
| 3.1.6 Inventory Module | Covers where all of you part information exists and how to enter and edit parts. |
| 3.1.7 BOM Module | Explains how to build the recipes that are your assemblies. |
| 3.1.8 Inventory Flow Model | Explains the general flow of material from order entry, to production and shipping. |
| 3.1.9 Sales Order Module | Order entry for customer sales. |
| 3.1.10 Work Order Module | Order entry for scheduling or building to stock. |
| 3.1.11 Single Bucket MRP Purchasing | Material Requirements Planning. This tells you what you need to buy based on your demand from Sales Orders and Work Orders. |
| 3.1.12 Infinite Bucket MRP | Advanced Material Requirements Planning. This tells you what you need to buy, when you need to buy it, and schedules your builds and issues to and from manufacturing. (MRP) |
| 3.1.13 Purchasing Module | Ordering from your vendors. |
| 3.1.14 Receiving Module | Vendors fulfilling Purchase Orders and creating Accounts Payable. |
| 3.1.15 Stock Room Module | Using the stockroom to build assemblies from parts, and to adjust inventory. |
| 3.1.16 Invoice Module | Creating invoices and building Accounts Receivable. |
| 3.1.17 Accounting | Posting GL transactions, paying bills, receiving payments from customers, and Posting Financials. |
| 3.1.18 Some Final Thoughts | Discusses where to go from here. |

### 3.1.1 pc/MRP Manual

The Manual for pc/MRP is broken down into five sections: Overview and Implementation; Modules; Settings, Utilities and Special Cases; Optional Modules; Troubleshooting. Take a few moments to review the chapter headings and become familiar with how the Manual is formatted. The Manual will become an invaluable tool while you are learning pc/MRP. The Manual is available both in the drop down menus within pc/MRP and from Software Arts' website: www.pcmrp.com. You might want to download it to your desktop for the fastest access.

### 3.1.2 The Bicycle Shop

The Bicycle Shop is the fictitious company that will be used in this Tutorial. Throughout running the bicycle shop, we will carry out several tasks that companies perform in their day-to-day operations. You will often be asked to refer back to pc/MRP.

This is the Tutorial. You are in the Tutorial NOW. The Tutorial is a written tutorial. There are no parts to load and or data sets available. Users should learn how to enter parts and build BOMs and run the program. That is why the Tutorial was written. You can expect the Tutorial to take about 2-4 hours.

### 3.1.3 Settings and Utilities

pc/MRP can be configured to operate in several different business environments. The Configuration, Settings and Utilities Chapter covers in detail all of the custom settings available depending on your business circumstances. Before you start using pc/MRP "live", you should have a thorough understanding of what these settings are and what they mean to your company. For the sake of this Tutorial, there are just a few that will be addressed now. To access the Settings and Utilities menu from within pc/MRP select: **C**onfiguration, and **S**ettings & Utilities.

Option 4, Inventory Adjustment Method (S/A/P/W/R)

We recommend "A." The Tutorial is designed around inventory adjustment method "A." This is the recommended method for manufacturers, distributors, and retailers. By default, pc/MRP is set to "A". You might find a setting that better fits your specific requirements. However, to successfully utilize the Tutorial, you must have this Option set to "A".

Option 8, Auto accounting -or- Make accounting separate (Manual)

We recommend "M." The Tutorial is designed around manually entering GL transactions. By default, pc/MRP is set to Manual. It is also recommended that it be always set to manual and never changed to automatic.

Take the time to study the Settings and Utilities Chapter. You may find several things that are of specific interest to your circumstances. By reading this section, you will be able to form ideas on how pc/MRP will work for your company. Be sure to make a list of all of the settings that will need changing for pc/MRP to run successfully with your company.

**Note:** The trial version of pc/MRP does not need a configuration code number or password.

**Note:** Throughout the Tutorial references will be made to executable paths in pc/MRP. These paths will always begin in the drop down menus accessible on the main screen in pc/MRP.

Example: Select **C**onfiguration, **A**bout pc/MRP. This means select from the drop down menus, **C**onfiguration, and then **A**bout pc/MRP. These executable paths will be used in performing specific tasks associated with completing the Tutorial. When a letter is underlined, you can press the Alt key and the underlined letter of the desired function. You can also use your mouse. At this time, press **O**K to return to the main pc/MRP screen.

To view your current Settings and Utilities start pc/MRP and select **C**onfiguration, and then **S**ettings & Utilities. Scroll up and down as desired. Hit **C**ancel to exit the Settings and Utilities.

**Note:** Throughout using pc/MRP you will be constantly accessing the drop down menus. At this time, take a few minutes to review all of the options accessible from the drop down menus.

### 3.1.4 Creating a Practice Directory and Backup Copies

A practice directory or practice copy of pc/MRP should be created to run the examples in this Tutorial. This practice directory can be created by following the commands listed below after you have initially installed pc/MRP.

1. Open Windows Explorer.
2. On the left scroll up to your **C** drive and find the pcmrpw directory.
3. Do a right-click on the pcmrpw directory and select **Copy**.
4. Right-click on the **C** drive and select **Paste**. This creates a "Copy of pcmrpw" on your **C** drive.
5. Press File and Close to close Explorer

We are finished creating a backup copy. You will want to become familiar with creating backup copies and practice directories. The file pcmrpw.exe starts pc/MRP and whenever you want to do a test run on something, simply make a copy of the pcmrpw folder and double click on the exe file. Do not however leave a lot of practice copies throughout your network. This simply confuses end-users.

Furthermore, for practice copies of pc/MRP, we recommend going to Configuration, Settings & Utilities, and Option 1. Edit the 'Division/Dept' line to contain the word 'practice'. This will put a red practice logo in place of the standard pc/MRP logo alerting users that they are in a practice copy and not the standard copy of pc/MRP.

We have thus far built a reasonable framework. You should have an understanding of how to: find things in the pc/MRP Manual, navigate through the pc/MRP menus, how to find and change the settings and utilities, and create and use practice directories. We will continue with explaining how to enter vendor/customer, inventory, and BOM information. This will be the foundation that we use to enter orders and complete the Order-to-Cash process.

### 3.1.5 Address Book

The primary source of all of your data is found in the Address-book, Inventory, and Bills of Materials modules. All of this data, once entered, is automatically carried into purchase orders, sales orders and work orders. We will first discuss the Address Book Module. The Address Book Module is the location in pc/MRP where all customer, vendor, employee, and contact information will be stored. At this time, take a few minutes to read the Address Book Module. This lesson will assume the chapter has been read.

#### 3.1.5.1 Entering an Address

While using pc/MRP in the course of running your business you will need to add addresses. To add new addresses simply select Modules, Address Book, and New.

**Note:** You will find that all of the modules are set up very similar. To make a new purchase order select Modules, Purchase, New. To make a new sales order select: Modules, Sales, New. This is constant throughout the program.

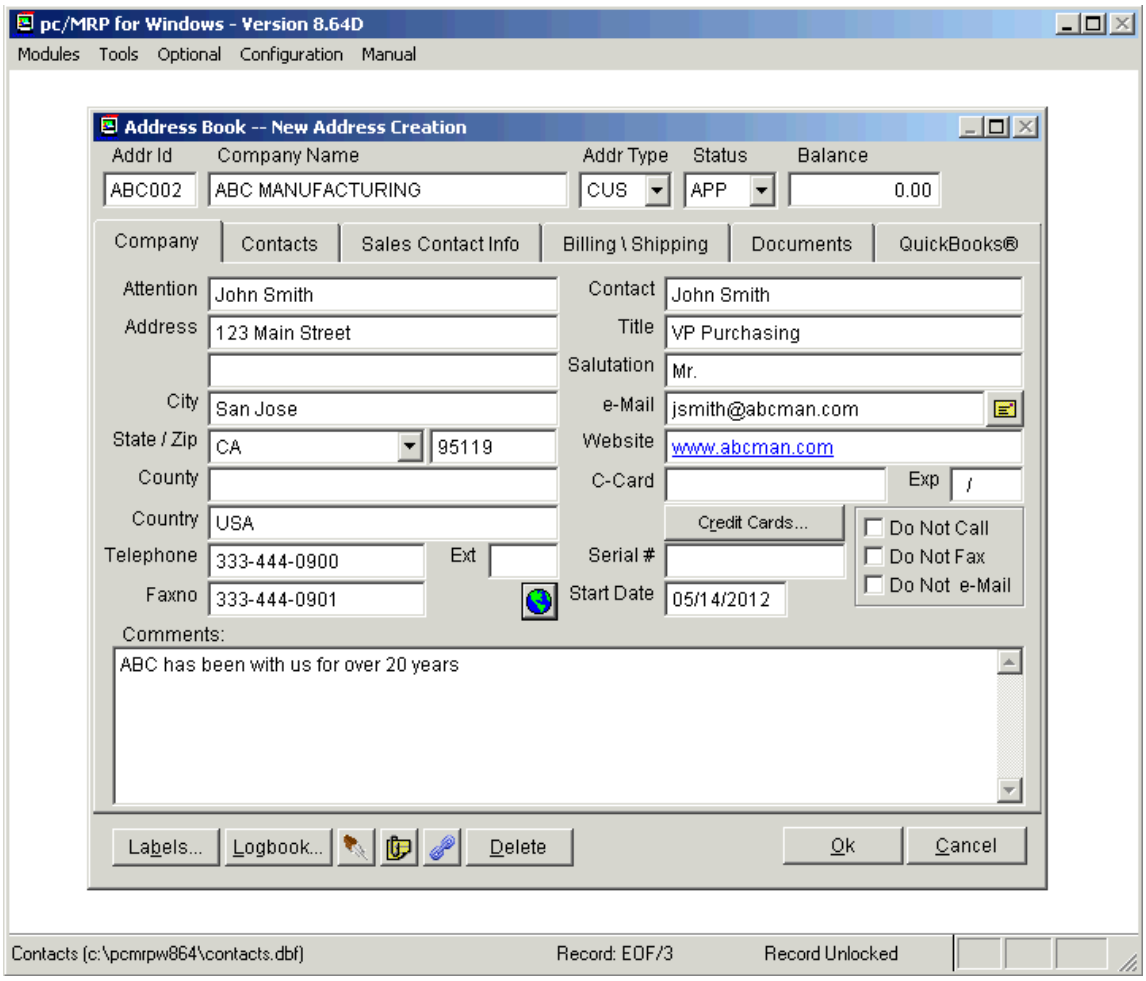
After selecting Modules, Address Book, New, you will be prompted to enter the company name that you wish to add to the address book. Please enter "ABC MANUFACTURING."

**Note:** when entering an address where most of the customer information exists in an address that is already entered into the address book, you can select "Import Address information from existing address" on this screen, to save time.

After entering the company name press: OK

As you can see, there are many options and fields to enter data for each entry. Most are self-explanatory. For further details on what each field does refer back to the chapter in the Manual on the Address Book. At this time, take a few moments to look over this screen and refer back to the Manual if there are questions about specific fields.

Enter the data as described in the picture below, except for the **Start Date** which will automatically be populated by the date in your computer.



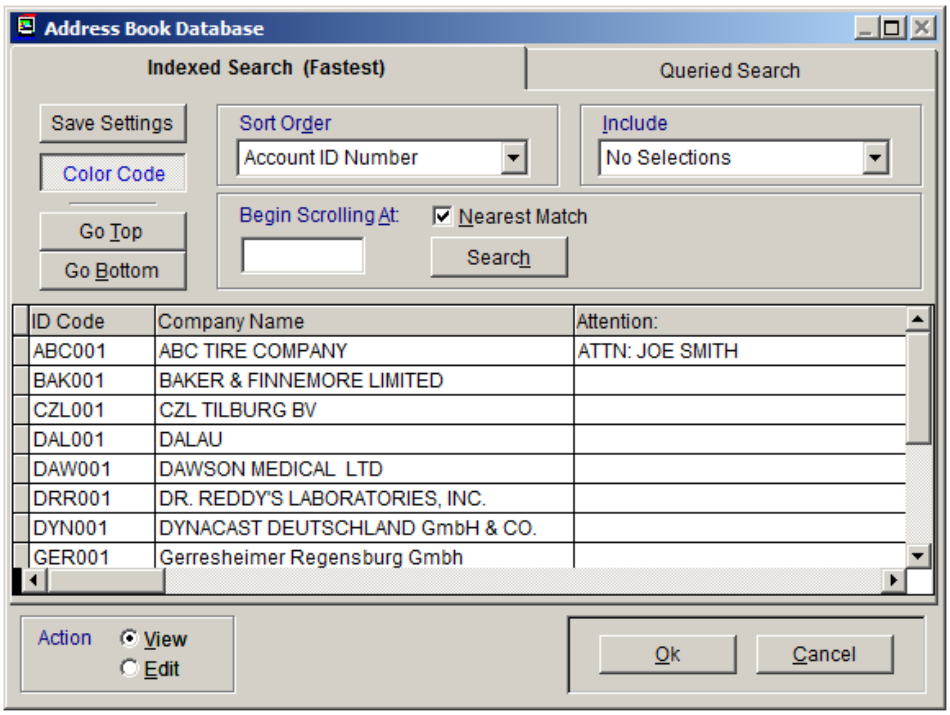

Notice that several tabs exist to allow users to enter additional data. The additional tabs consist of: unlimited number of Contacts, Sales Contact Information, Billing and Shipping addresses, and Invoice and Receiver history. Salesperson information, the billing and shipping addresses will automatically be populated in sales orders and invoices. Select the **Billing/Shipping** tab to enter address information if different from the main address. You can pre-load the address info from the main address or from another address using the buttons above the address fields. We will use this address entry later to enter purchase orders and sales orders. Click Ok to save.

### 3.1.5.2 Viewing an Address

To view the address just entered select Modules, Address Book, and Edit.

**Note:** The EDIT function is similar throughout pc/MRP. If you wish to edit a Sales Order, select Modules, Sales Order, and Edit. To edit a receiver select Modules, Receiver, and Edit.

To edit choices you must choose "Edit" under the Action square. To simply view without being able to edit data, select "View." Users can also search address information in a number of different ways: Account ID Number (a unique address ID number per customer created by pc/MRP), company name, company telephone number, and serial number. You can save these setting for the current by clicking at Save Settings. This doesn't affect other users' settings.




**Note:** This scroll selection and actual scroll screens are similar throughout pc/MRP. Sales Orders, Work Orders, Invoices, Receivers, Purchase Orders, Stockroom Transactions, and the BOM module all have a uniform look. Right click the Color Code button for the meaning of each color.

At this time, within the Address Book Scroll screen, select the entry we have created and press OK or enter.

After viewing the record, click Cancel to close.

### 3.1.5.3 Editing an Address

Repeat the above process, but choose Edit this time. If the OK button is not highlighted you are not in **Edit** mode. Select Cancel and attempt to edit the address entry again.

**Note:** Several fields have drop down menus. (Addr Type, Status, and under the sales contact information tab: source, purpose, priority, interest, and concern.)These fields are user definable through Option 52 in the Settings and Utilities, and are used in address reports to further parse customer/vendor data.

Example: ADDR TYPE allows users to define their relationship with the entry. Examples: EMP for employee, VEN for Vendor, CUS for customer, PRB for accounts on probation.

When you are done editing, click OK. This saves the changes made.

Look up the address again and see if the changes were saved. If the changes are not there, then you never made the changes, you probably clicked Cancel after making the changes. If the changes are there, congratulations, you have successfully edited an entry.

### 3.1.5.4 Deleting an Address

Create another address entry with a company name of "Bad Company." This will be the entry we remove. To delete an address or any record within pc/MRP is a two step procedure. The record must first be marked for deletion, and then the records marked for deletion must be removed from the database.

To mark the entry "Bad Customer" for deletion, select Modules, Address Book, and Edit. Make sure the Action square is set to edit and scroll for the "Bad Customer" entry. Select that entry. With the address book open to this customer entry click on the Delete button from the row of buttons on the bottom of the screen and then OK.

To remove records marked for deletion select, Modules, Address Book, and Remove Marked Records for Deletion. This two-step deletion method is the same throughout pc/MRP.

**Note:** Once your software is activated into the full version, deleting records marked for deletion will be secured by your configuration code. You should only attempt remove records when no one else is using the affected database table. The safest way to make sure is to set an Admin Lock first (we will explain this later).

You have now successfully deleted a record.

The steps above can be repeated for entering, looking up, editing, or deleting any address in the address book. For reports and label making, refer back to the Manual. We will continue with the lesson on data entry with the Inventory module.

### 3.1.6 Inventory Module

The Inventory Module contains price, quantity, lead-time data, and a number of other fields associated with parts, labor parts, and assemblies. The Inventory does not contain information about how the assemblies are built. That is in the Bills of Materials. BOMs will be covered in the BOM lesson.

To become familiar with what the various fields do in the main inventory screen, please take a few minutes to read the Inventory Module Chapter. You should not begin this lesson without having an understanding of the Inventory Module.

Several things should be considered when entering your own parts and creating a part number scheme. For the purpose of this Tutorial, we will keep all of the standard settings. As you begin entering your own parts, you will want to read about **Options, 28, 29, 48, and 49** in the Settings and Utilities module. For special cases and consignment parts, read Chapter 15.9, Special Cases.

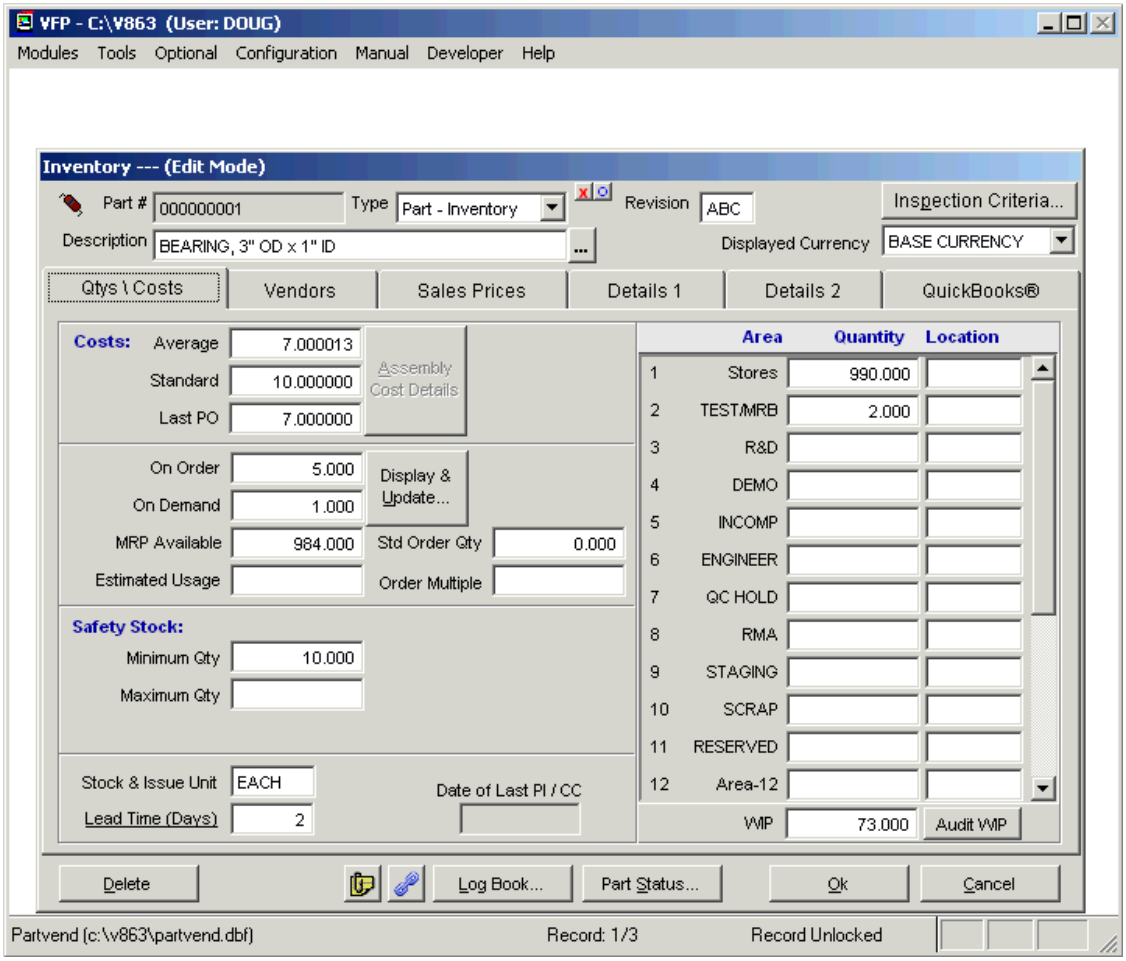
#### 3.1.6.1 Entering New Parts

Similarly to the Address Book, when you want to enter a new part, simply select: Modules, Inventory, and New. Then select "Next Available Partnumber".

pc/MRP will automatically assign the next available part number or users can simply highlight the pc/MRP built part number and enter their own.

Press OK to accept part number 000000001.

The part number data entry screen is presented. Enter data as described in the picture below.




Notice that similarly to the address book entry screen, several tabs exist in the inventory entry screen. A tab exists for Quantities/Costs, Vendor Information, Sales Prices, Manufacturers/Model Number/Alternate Part numbers, and Miscellaneous data. Each tab is explained in detail in the Inventory Chapter. For purposes of this Tutorial, be sure to enter the part description, a lead-time of 1 day and under the Sales Prices a price of $1,500.00 for Level 1 Quantity 1.

With all of the information entered, select Ok to have this entry saved. Congratulations, you have entered your first part.

### 3.1.6.2 Editing Parts

At this time, we will edit the part we just entered.

Select Modules, Inventory, and Edit. Select the same part number we just entered. Edit this part so that the Lead-time is 2 days. Click Save.

After making sure you successfully changed the lead-time for the bike assembly, take a few minutes to enter two more addresses, Smith Bikes and Canonwale, Inc., and the remaining parts for the bike assembly. The picture below lists the parts to create and the vendor to use for each part. For the sake of time, many of the basic fields are left blank. Please however enter:

- 2 days for the lead times on all parts and assemblies while in the Quantities\Costs tab.
- A STD cost of $5.00 for every inventory item using the Cost window, Standard section.
- A purchase price of $5.00 using the Vendor tab.

Associate each part with the applicable vendor using the vendor tab and ellipsis button [...] next to the Address ID field. The ellipsis button allows users to scroll through the address book to find an applicable vendor.
Finally, when you get to the bolts enter a purchase price of $0.2500 for quantity 1 and enter quantity 100 at $0.1000. Furthermore, be sure to enter a PO ratio of 100 for the bolts. We purchase bolts for the bicycle assembly in boxes of 100.

| PART NUMBER | DESCRIPTION | VENDOR |
|---|---|---|
| 000000001 | BICYCLE TOP ASSEMBLY | |
| 000000002 | WHEEL | |
| 000000003 | FRAME, BICYCLE FRAME | CANONWALE INC. |
| 000000004 | DIRT TEASER TIRE | SMITH BIKE |
| 000000005 | GEAR CHANGER ASSEMBLY | CANONWALE INC. |
| 000000006 | BANANA BICYCLE SEAT | SMITH BIKES |
| 000000007 | PEDALS | SMITH BIKES |
| 000000008 | NGF INTERTUBE (NEVER GOES FLAT) | SMITH BIKES |
| 000000009 | SPOKES (WHEEL SPOKES) | SMITH BIKES |
| 000000010 | STEM FOR TUBE | SMITH BIKES |
| 000000011 | BRAKE ASSEMBLY | SMITH BIKES |
| 000000012 | TUBE ASSEMBLY | |
| 000000013 | BOLTS | SMITH BIKES |

**Note:** If you edit the part number, you must select "Change Part Number" from the Inventory drop down menu. Using this feature, pc/MRP will automatically change the part number in all applicable modules in just one step.

Similar to the Address Book there are numerous fields that do a variety of things. All of these fields can be manually edited. Most of these fields require manual data entry. Most of these fields are self-explanatory. Several of these fields are automatically updated through performing specific actions. All of the following fields (except of the STD cost) are automatically calculated by pc/MRP. Users should not manually change these data.

**Average** Cost per Unit:
Component part Average Cost is recalculated by pc/MRP every time a component is received. Use Inventory's Cost Roll-Up Option to roll-up the total component average costs into their respective BOM/Assembly Average Costs.

**Standard** Cost per Unit:
Component part Standard Costs are entered and edited by hand. Use Inventory's Cost Roll-Up Option to roll-up the total component standard costs into their respective BOM/Assembly Standard Costs.

**Last PO** Cost:
This field brings in the cost of the last Purchase Order made for this part. This cost type is not fully supported by pc/MRP as far as accounting is concerned.

**On Order**:
This field contains the quantity on order from purchase orders. This field increases when purchase orders are made and decreases when receivers are made. This feature will be further discussed in purchasing.

**On Demand**:
This field contains the quantity on demand from open work orders and open sales orders (for this item). This field increases by creating work orders or sales orders. This field decreases when sales orders are invoiced or parts are converted into assemblies from the work order.

**MRP Available**:
This field contains the quantity available after allocation. This field is updated by running the single bucket (MRP) purchasing report or the optional module Infinite Bucket MRP. The MRP programs will allocate parts on hand and on order and populate the Quantity Available field with the quantity available after allocation.

These features will become more obvious as we make sales and work orders and run MRP reports. For the time being, we will just let this sink in.

**Note:** pc/MRP does not allocate things every time an order is entered. The quantity available field is only updated as described above. Therefore users should run the MRP once a day, to keep this number as close to accurate as possible.

**Note:** If the optional Infinite Bucket MRP has been activated, the date when the MRP was last run is displayed next to the MRP Available field. If the MRP was run today, this date is green, otherwise it turns red and bold (pc/MRP version **8.73D** and above). Software Arts, Inc suggests running the MRP every night as part of the Scheduled Tasks (see Ch. 15.16 in this Manual).

### 3.1.6.3 Deleting Parts

Deleting parts is exactly like deleting addresses. You must first mark the record for deletion and then remove marked records for deletion. To test this, delete the TUBE ASSEMBLY, part number 000000012. Once again, in the full version, deleting entries will be secured by your configuration code.

You should now be familiar with entering, viewing, editing, and deleting parts. If you have any questions about what these fields do or how to perform the tasks above, start the lesson over and refer back to the Manual.

Up to this time, we have discussed the Address Book and Inventory Modules. This next section completes the Data Entry Lesson by covering the Bills of Materials Module.

### 3.1.7 BOM Module

The BOM module is where all of your bills of materials (or recipes for assemblies) will be stored in pc/MRP. At this time, take a few minutes to read the Bill of Materials Chapter in the Manual. This lesson assumes you have read the BOM Chapter.

The BOM module is set up very similar to all other modules. To enter a new BOM simply select New from the BOM menu. To edit a BOM simply select Edit from the BOM menu. Most modules when printing have the Report option. For the address book and BOM module users select Print.

**Note:** All **parts** within a BOM must exist as an entry in inventory before you can create that BOM. Assemblies can exist in inventory but do not have to. If an assembly does not exist in inventory the BOM module will automatically create one.

Before we create a BOM in pc/MRP, it would be best to see one on a piece of paper.

Bicycle BOM

BOM NUMBER : 000000001 REV :
BOM DESCRIPTION: BICYCLE TOP ASSEMBLY MODELNO:
DATE : 01/31/2000
QTY : 1.0000

**UNCOSTED EXPLODED LEVEL BOM REPORT**

| P/B ITEM | BOM/PART NUMBER | DESCRIPTION |
|---|---|---|
| BOM 0001 | 000000002 | WHEEL |
| .PART 0002 | 000000004 | DIRT TEASER TIRE |
| .PART 0001 | 000000009 | SPOKES (WHEEL SPOKES) |
| .BOM 0003 | 000000012 | TUBE ASSEMBLY |
| ..PART 0002 | 000000008 | NGF INTERTUBE (NEVER GOES FLAT) |
| ..PART 0003 | 000000010 | STEM FOR TUBE |
| .PART 0004 | 000000013 | BOLTS |
| PART 0003 | 000000003 | FRAME, BICYCLE FRAME |
| PART 0005 | 000000005 | GEAR CHANGER ASSEMBLY |
| PART 0006 | 000000006 | BANANA BICYCLE SEAT |
| PART 0002 | 000000007 | PEDALS |
| PART 0004 | 000000011 | BRAKE ASSEMBLY |
| PART 0007 | 000000013 | BOLTS |

Notice how all of the various levels are separated by periods. Parts are labeled as PART and bills of materials are labeled as BOM. From this picture, we can deduce that parts and assemblies: 000000002, 000000003, 000000005, 000000006, 000000007, 000000011, and 000000013 are all on the first level of the Bicycle BOM. The WHEEL assembly contains parts 000000004, 000000013, and 000000009 and the BOM 000000012. The TUBE assembly contains two parts, 000000008 and 000000010.

To reinforce this idea of indented bills of materials we will make this BOM using the parts entered into pc/MRP in the Inventory lesson.

### 3.1.7.1 Entering Bills of Materials

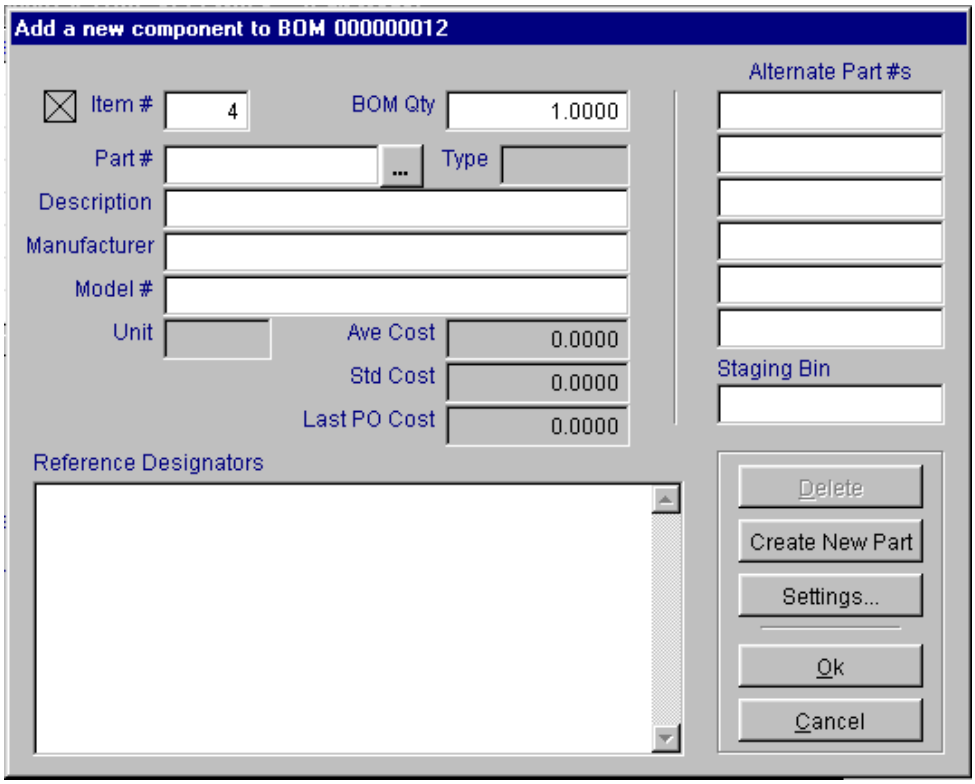
We are now going to begin by entering the lowest level of the Bicycle BOM. Users can start by entering the top of their assembly or at the bottom. For this Tutorial, we will start at the bottom.

Select Modules, BOM, New.

Enter BOM number: 000000012 with a description of TUBE ASSEMBLY.

Select Ok

You should now be at the main BOM data entry screen as depicted below.




We have just created the TUBE ASSEMBLY; now we have to add the parts for this BOM level. We will add the tube and stem inventory items to this assembly.

To add these items to this assembly:
Enter the desired quantity (2).
Then press the ellipsis button next to the **Part #** field.
Search for the stem and press Ok.
To add this to the assembly press Ok again.

Notice that we are now at the basic BOM edit screen. This screen allows users to edit the BOM, add additional items, save changes, enter reference designators (through the reference designator tab), view miscellaneous data (through the miscellaneous tab), and even revert the BOM. (Revert allows users to place the BOM back at the original condition, before editing.)

Select the Add Item button and add the NGF TUBE quantity 1 to this assembly. (After pressing Add Item button enter a quantity of 1 and press the ellipsis button to search and select the NFG TUBE.)
Select: Save and Finished to save the changes and then exit the BOM module.

**Note:** Bills of Materials are assembled in the BOM module one level at a time.

**Note:** Labor parts can also be entered into BOMs. This allows users to calculate theoretical job costs.

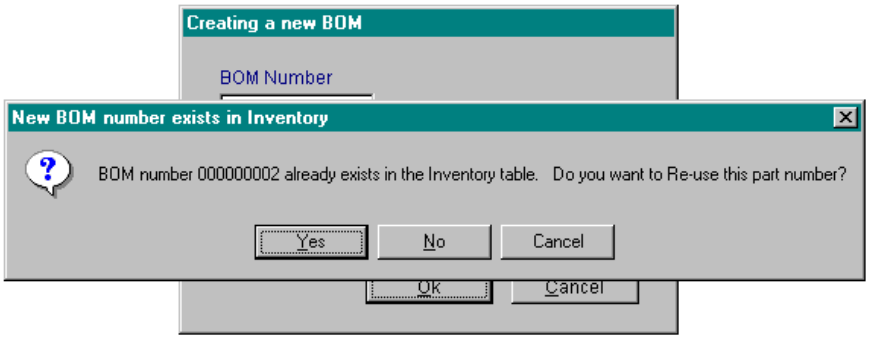
Now we are going to add our next level. This level we will add not only parts, but also the newly built TUBE ASSEMBLY.

Select Modules, BOM, New.

Enter BOM number: 000000002 with a description of WHEEL.

Select Ok.

This entry is a little different however. The WHEEL already exists in inventory. pc/MRP is going to warn you about this. Go ahead and select Yes.




Now we can add our parts just as we did before. Enter the first part, Dirt Teaser Tire. Click on Add Item.

Now simply add the remaining items. Add the spokes, quantity 40. Add a few bolts, quantity 4. Finally, add the TUBE ASSEMBLY just like you would any regular part. Press Save and Finished when you done.

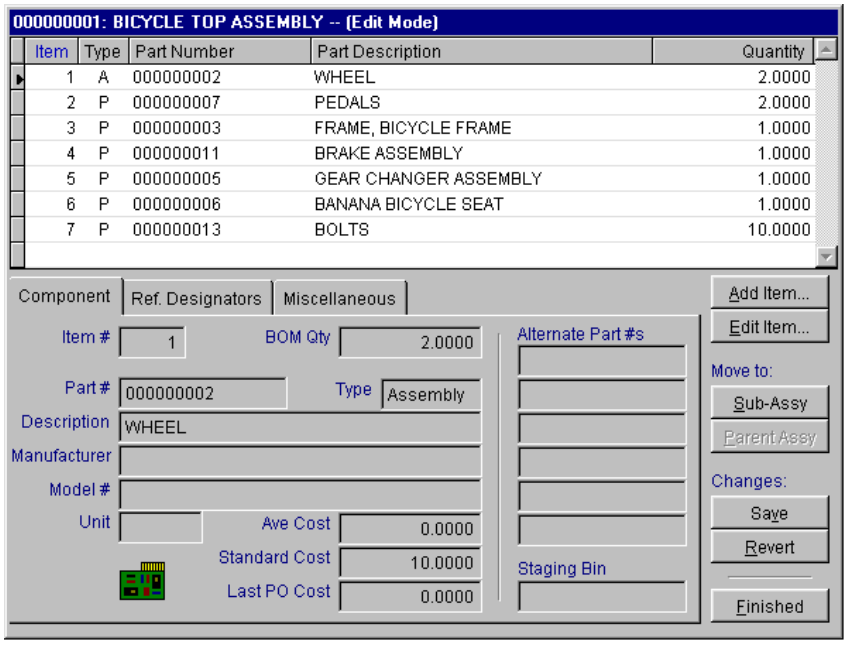
Now on your own...

Select Modules, BOM, New.

Enter BOM number: 000000001 with a description of BICYCLE TOP ASSEMBLY.

Select Ok

Enter the items that finish off this assembly so that it matches the picture below.




We have just completed the entire Bicycle BOM.

### 3.1.7.2 Editing the Bills of Materials.

Similar to everything in pc/MRP if you wish to edit something, select the module you wish to edit and select edit.

Select, Modules, BOM, and EDIT. Select BOM 000000001. When you select an item that is an assembly (depicted by an A in the Type column), you can use the **Move To: Sub-Assy** and **Parent Assy** features to scroll through the various levels of your assembly. Scroll to the TUBE ASSEMBLY. In the quantity field under BOM DATA, enter "1.0000" for the STEM quantity. We do not want to double up on STEM ordering.

Now just to see what we have done select Modules, BOMs, Print BOMs/Pick List/Where Used and select the Costed Exploded Report. Scroll to enter your BOM number. Select Print - Narrow and press the OK button. Your report should look very similar to the example report at the beginning of this section. If it does not, edit the BOM and run the report again. The BOM you created must be exactly like described above, for our purchasing results to match.

### 3.1.7.3 Deleting Parts within a BOM

Similar to all other areas of pc/MRP the deletion process is a two-step process. You must first mark the entry for deletion and then delete marked records. If you go into a BOM to delete a part and the delete button is not accessible, you do not have the Action Item Edit selected, or you do not have deletion rights in the Advanced Password Module.

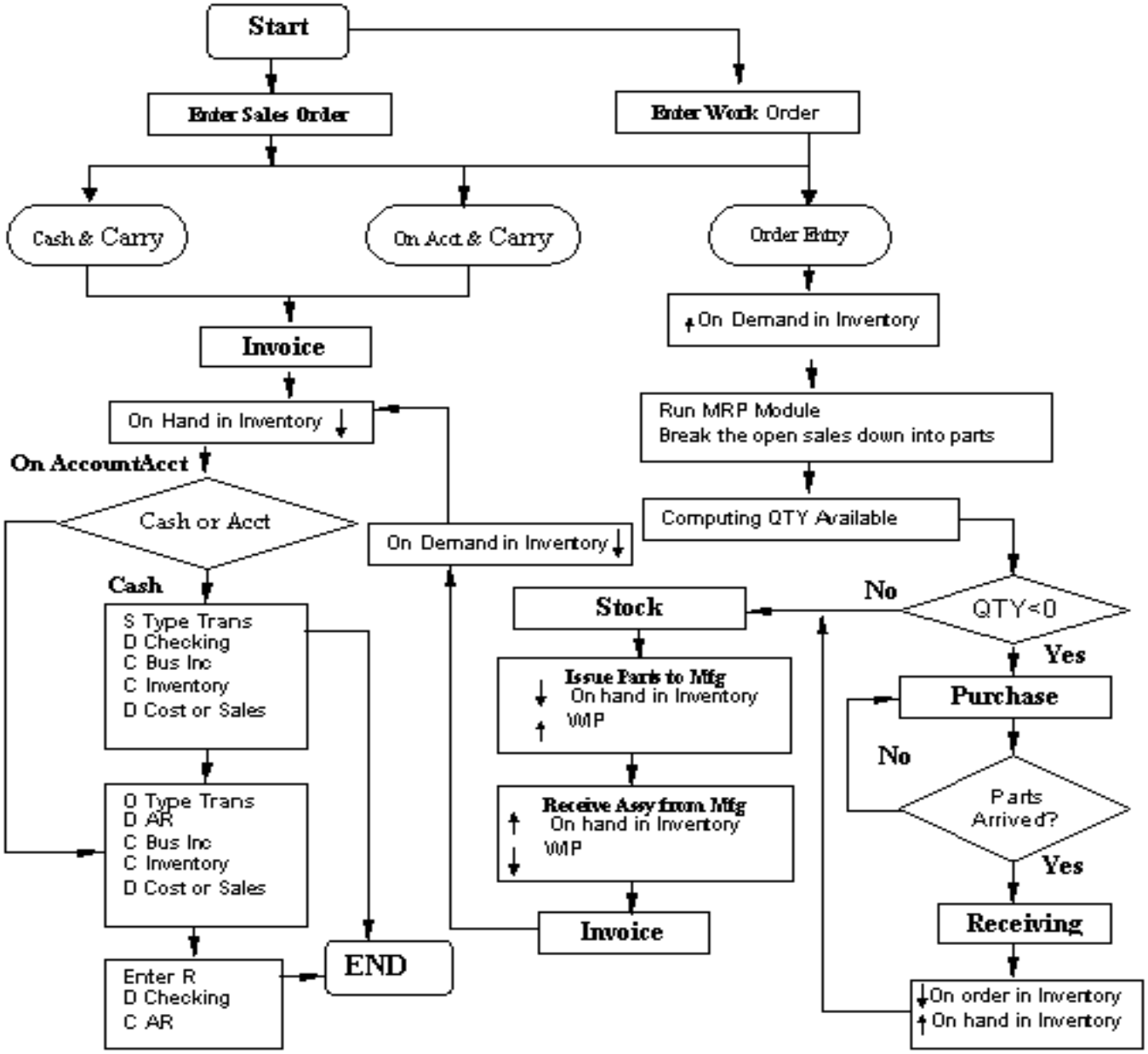
**Note:** There are several useful options in the BOM drop down menu. From that menu, you can delete a BOM, duplicate a BOM, change a BOM number, change the BOM description, and Audit BOMs.

**Note**: You can view the image for that specific part or BOM by selecting BOM Image or PART Image from the miscellaneous tab.

**Note**: Users can also view where used for a part or assembly and recalculate assembly costs in the miscellaneous tab.

### 3.1.8 Inventory Flow Model

pc/MRP has a simple Order-to-Cash process. Take a few minutes to view the diagram below.




As you can see, Sales Orders and Work Orders start the entire process. These orders are based on your demand from customers or a desire to build items to stock. Items that are available for sale are directly invoiced, inventory is automatically deducted from stock, and we can begin building some A/R (Accounts Receivable). Sales Orders on order entry and Work Orders that have to be built take a different path: they will go through the MRP process. Purchase orders and receivers will be made for the piece parts required and build A/P (Accounts Payable), the stockroom will be used to convert parts to assemblies, and finally we will sell the item once again building A/R. It is important to understand this basic process. Through the next several sections, we will follow this process.

### 3.1.9 Sales Orders

Sales orders and work orders generate demand for parts and assemblies. This demand sets in motion your purchase orders, receivers, stockroom, invoicing, and inevitably accounting. pc/MRP can use work orders and sales orders in a number of different ways since both can be issued into manufacturing. For complete details, refer to the Sales Order Module and Work Order Module in the Manual.

In short, one method uses work orders to build to stock and sales orders to build per customer order. Another method uses work orders to forecast demand while sales orders represent actual demand. pc/MRP can do this because demand from Sales Orders and Work Orders can be included or excluded from purchasing requirement reports. The differences between these two methods will become apparent once we run our MRP purchasing reports. For now, this Tutorial will use method one, where we use work orders to build to stock and sales orders for customers. The important thing to consider is once you have chosen how you are going to utilize Sales Orders and Work Orders, you should stick to this method. If you keep changing how requirements are generated, you are increasing the probability of making mistakes.

#### 3.1.9.1 Entering a Cash and Carry Sales Order

We will first simply create a Sales Order for a few bikes. To do this, first view the bicycle assembly in inventory (part 000000001). Make sure the quantity in Area Stores is 2. If it is not, edit the quantity so that it is 2. (Note: This is for testing purposes. In your production copy, users should not manually edit the onhand quantities.)

Now, select Modules, Sales Order, and New.

The next screen allows the user to select sales type, terms, tax code, product issuing area, and shipping method. For the purpose of this Tutorial, we will really only discuss the Sales Type. The other fields are explained more in the Sales Order Module Chapter. Understanding the Sales Type field is essential however and deserves more attention.

The Sales Type directly affects inventory and invoicing. Sales Types entered as Cash and Carry or On Account and Carry automatically decrease the stores quantity of the line items on the sales order and creates an invoice. Thus, if you have these items in stock or not, by telling pc/MRP you are carrying the line items out the door, on-hand quantities will decrease.

**Note:** pc/MRP will not automatically convert parts into assemblies or back flush in the sales order module. All back flushing is done through the Stockroom Module or by running the Convert Parts to Assemblies utility.

Select a sales type of On Account and Carry, issuing from Area 1, and press OK.

On the sales order entry screen notice that there is a Part Lookup checkbox and the part can be looked up by Part Number, Description, or Model Number. Having the **Part Lookup** and **Root Address Lookup** check boxes checked means that data from the Address module and Inventory module will automatically be entered when you choose an address or part that already exists in those DBF files. To make an address or part from this screen select one of the check boxes under Data. If the applicable address has an alternate Bill to Address or Ship to Address, they will automatically be populated in the sales order.

**Note:** To change the BILL TO or SHIP TO address, the customer address or part after initial selection simply check the desired box, highlight the root address of the desired entry, type in a partial for the entry and hit enter. This will bring back the scrolling box for selection of the correct entry. The Invoice form does not have these check boxes.

At this time, check "Create Address." We need to enter our new customer, TIM. Tim is purchasing two bicycles today. Once you have pressed Create Address, enter some applicable data for Tim in his address entry. Then select OK to finish the address entry. Now put the cursor back into the top left CUSTOMER field and type T and press enter. This allows you to scroll to the applicable address. Select Tim as our customer and press enter.

The customer data for TIM should have automatically appeared on the sales order screen. Now put the cursor down into the description field and type the first few letters of "BICYCLE" and press enter. This automatically brings up the part number, model number, description, and price. We could have also selected the "BICYCLE" by entering the applicable part or model number.

Enter two for the quantity of bikes being purchased.

With the bicycle assembly selected click on the words Part Number. This is a shortcut method to view the part selected in the sales order. The inventory screen for this assembly should appear. Notice that we just happen to have 2 finished bikes in area Stores (1). Press Cancel to get back to the sales order screen.

Select Finish on the sales order screen.

This next screen confirms that an invoice is going to be made since the sale was entered as On Account and Carry or Cash and Carry. Press OK.

This screen explains that two bicycles are being removed from inventory area Stores. Press OK. If you wish to print the Invoice, you can do so at this screen.

On this next screen, if you wish to view or print a shipping label press OK.

On the final screen, we can select No.

At this time go to the inventory module and view the bicycle assembly part. Notice that in the Stores area the quantity was driven to 0. As explained above and reinforced with this sales order, if you choose a sales type as cash and carry or on account and carry, it is automatically invoiced and the quantity field will decrease in the area chosen and by the quantity chosen in the sales order.

### 3.1.9.2 Entering Order Entry Sales Orders

Now, enter a new sales order for Tim but select Order Entry as the Sales Type. Put in quantity 1 and a DATE REQ (date required) of one week from today's date.

Note: to add additional line items we can select Add Item. To view these various items you can press Back and Next.

After entering the sales order, view the bicycle assembly in inventory. Notice that since this is order entry we have only created demand for this assembly. The QTY ON DEMAND field should be 1.

Take a few seconds to view the other parts in this assembly. Notice nothing has changed with these parts and the various quantity fields associated with these parts. Once again as mentioned above, when we run our purchasing report (single bucket MRP) or the optional Infinite Bucket MRP, the MRP available field will be updated.

### 3.1.9.3 Editing a Sales Order

To edit a sales order or work order is similar to editing any other entry in pc/MRP. Simply select edit in the drop down menu for that module. If you edit the SO quantity the on-demand quantity in inventory will automatically follow. It is important to note however, that if you frequently delete sales orders you should run the Audit sales orders function. This function re-populates the on-demand quantity and is representative of the updated sales orders. Edit the 'order entry' sales order for TIM to be quantity 2.

### 3.1.10 Work Order Module

Besides our existing sales order, we want to build three bicycles to stock. At this time, enter a Work order for three additional bicycles with a DATE REQ of 14 days from now. Work orders are entered the same way sales orders are. You do not need to enter a customer though. Simply enter the desired assembly or subassembly, the quantity and date desired, and press Finished.

**Note:** Work orders only allow one line item.

**Note:** There is no need to enter a Work order for an existing Sales Order. That would be double entry and would create false data in the On Demand field for the top assembly.

Once again, editing work orders is similar to all other modules. Simply select edit in that module.

At this time, we have entered demand for 4 bicycles. Take note in the inventory module that none of the subassemblies has been affected yet.

### 3.1.11 MRP, Scheduling Production, and Purchasing

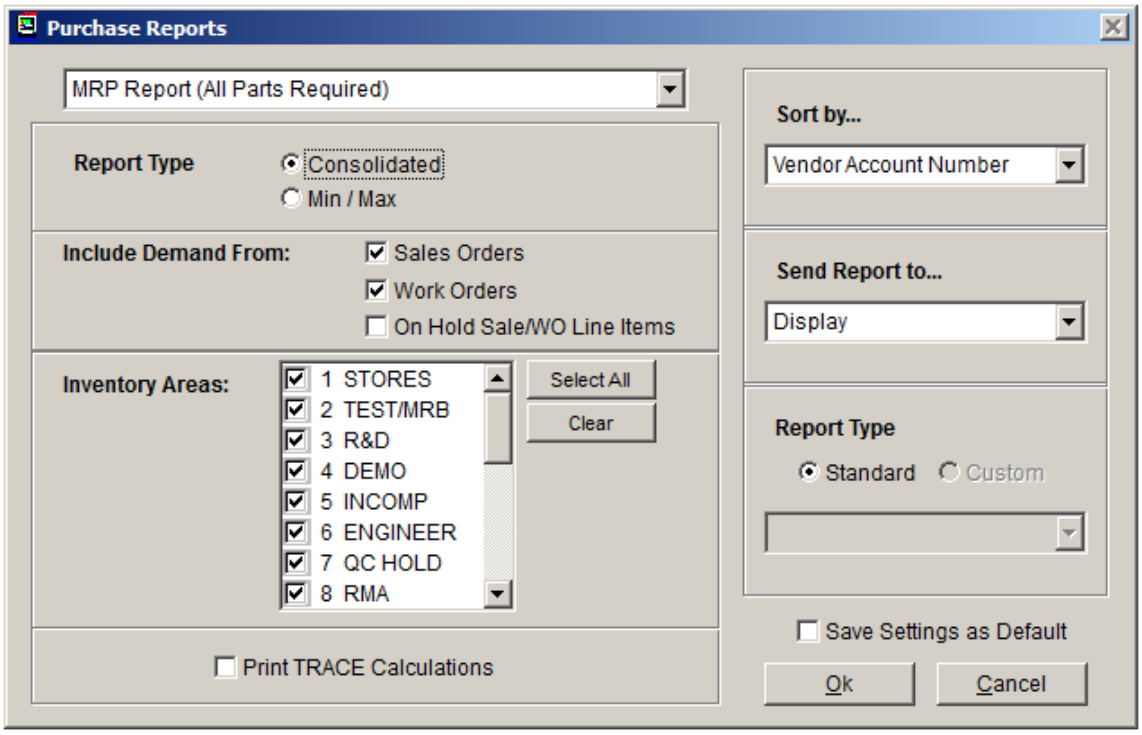
Since we have nothing on hand to build these bicycles, we will now run our MRP. Then we will print/display reports. These reports will tell us everything we need to buy to fulfill our orders. We will generate action items two different ways. First, we will use the standard MRP Single Bucket report, and then the optional Infinite Bucket MRP. After that, we will briefly compare the two. From there, we will make purchase orders to fulfill the demand, receivers to receive the parts necessary to build, issue the parts to the stockroom, receive finished goods back into inventory, and then we will be ready to invoice.

The Purchasing MRP (all parts required) report and Infinite Bucket optional module is where all of the demand calculations are made. Once we run one of these reports, demand will populate all parts necessary to build everything that has been entered as a sales order or work order.

#### 3.1.11.1 MRP, standard MRP purchasing report

We will first run the standard MRP purchasing report.

Select Modules, Purchasing, Reports. On the drop down menu, scroll to the bottom of the list and select the MRP Report (all parts required).

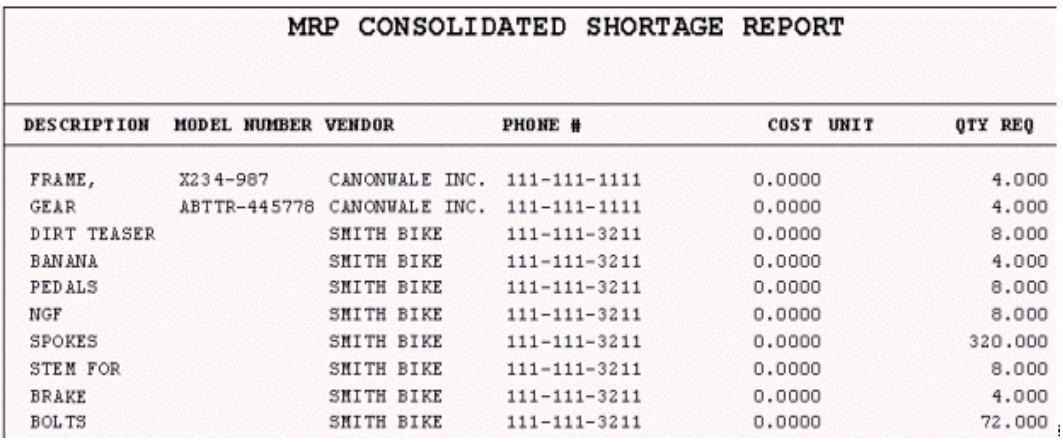



**Note:** Users can choose to include or exclude demand from Sales Orders or Work Orders. As mentioned above, this allows users to use work orders in several different ways and prioritize demand.
**Note:** The Consolidated report looks at both true demands from Sales Orders and Work Orders and takes into consideration MIN and MAX quantities set up in inventory. The MIN/MAX report only takes into consideration MIN and MAX quantities that were populated in the inventory entry screens.

**Note:** Print Trace Calculations creates a report that shows where demand is coming from for each individual part.

In the 'Include Demand from' field, leave the Sales Order and Work Order check boxes checked. Select Consolidated, area 1 Stores, Sort by Vendor, Display and press Ok.

A report is created that shows all current demand. Take note that all demand is representative of needing to purchase parts to build 4 bicycles. Furthermore, even though our sales order is not due for a week and our work order is not due for 2 weeks the standard MRP not utilizing lead-times does not schedule purchasing or builds.



MRP CONSOLIDATED SHORTAGE REPORT

| DESCRIPTION | MODEL NUMBER | VENDOR | PHONE # | COST UNIT | QTY REQ |
|---|---|---|---|---|---|
| FRAME, | X234-987 | CANONVALE INC. | 111-111-1111 | 0.0000 | 4.000 |
| GEAR | ABTTR-445778 | CANONVALE INC. | 111-111-1111 | 0.0000 | 4.000 |
| DIRT TEASER | | SMITH BIKE | 111-111-3211 | 0.0000 | 8.000 |
| BANANA | | SMITH BIKE | 111-111-3211 | 0.0000 | 4.000 |
| PEDALS | | SMITH BIKE | 111-111-3211 | 0.0000 | 8.000 |
| NGF | | SMITH BIKE | 111-111-3211 | 0.0000 | 8.000 |
| SPOKES | | SMITH BIKE | 111-111-3211 | 0.0000 | 320.000 |
| STEM FOR | | SMITH BIKE | 111-111-3211 | 0.0000 | 8.000 |
| BRAKE | | SMITH BIKE | 111-111-3211 | 0.0000 | 4.000 |
| BOLTS | | SMITH BIKE | 111-111-3211 | 0.0000 | 72.000 |

After examining this report, press Ok.

The Excess Inventory Report allows users to more closely track inventory. Go ahead and view this report as well by choosing the constraints you would like. At this time, there will not be any misallocation.

After viewing the Excess Inventory Report or hitting cancel, the next option is to automatically create purchase orders. At this time, select No. We are not quite ready to make purchase orders yet.

Take a few minutes to see all of the changes made in inventory. For all parts required, the quantity available decreased since we do not have these parts available. Once again, the quantity available field in inventory is only updated through running the MRP reports. If we had parts in inventory, the quantity available field would be the difference between existing inventory, on order parts, and demand representative of the constraints chosen. Furthermore, nothing in the sub-assemblies used has changed. pc/MRP does not place demand on these sub-assemblies unless they are directly created through a Sales Order or Work Order. Only the quantity available field for individual parts utilized in the builds has changed.

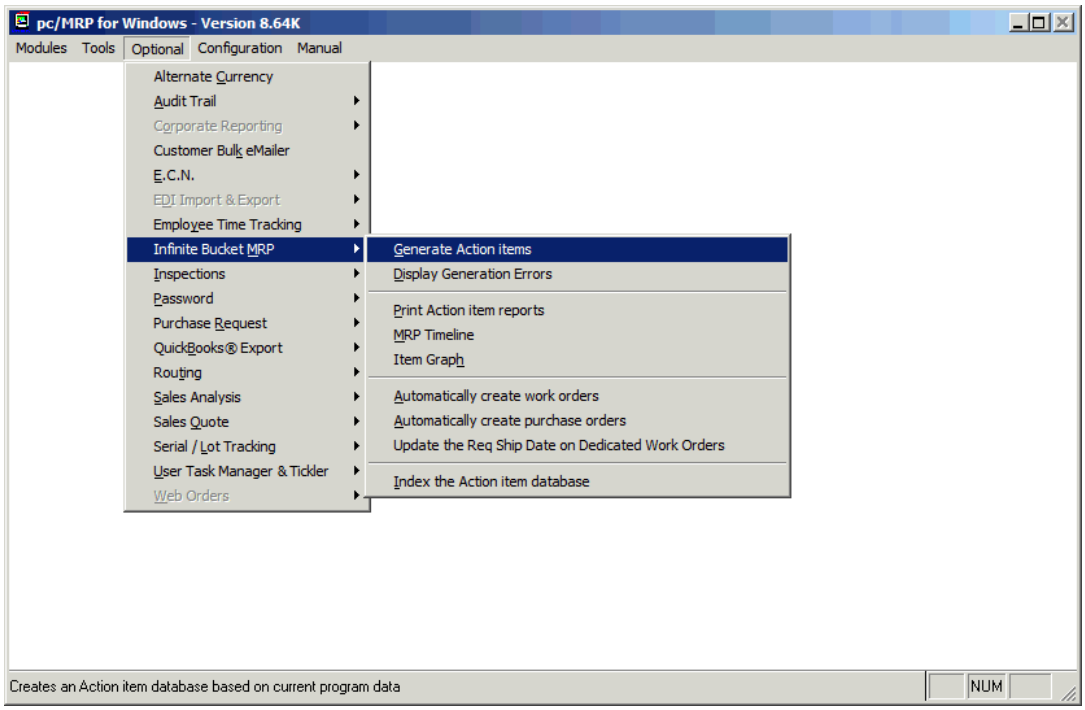
You might want to print this report or to make a screen shot, to compare it against the Infinite Bucket report. Once again, select No when you are prompted if you want to "Automatically create Purchase Orders".

### 3.1.11.2 Infinite Bucket MRP

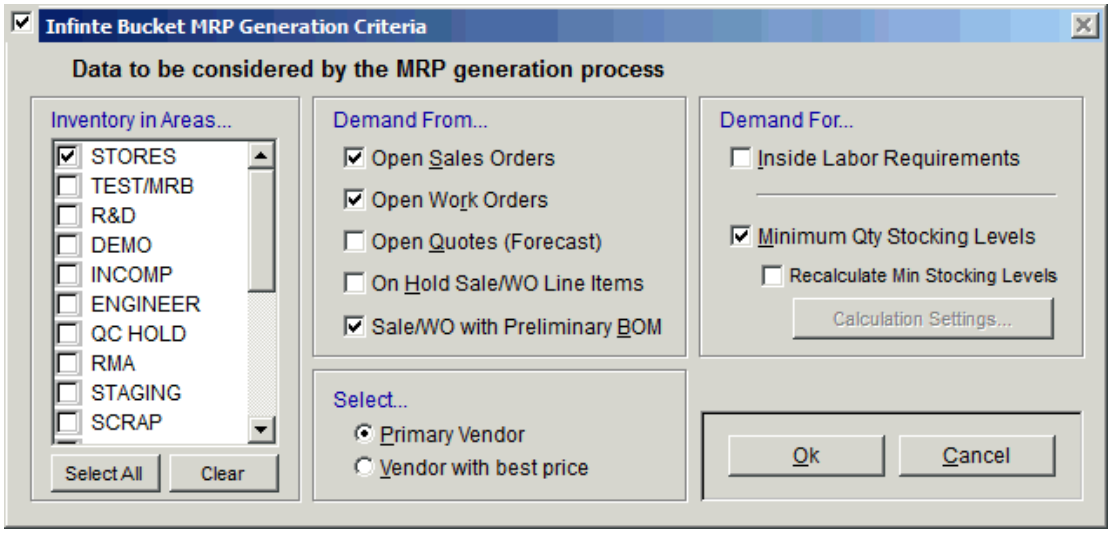
This time we will run the more advanced MRP, the Infinite Bucket. What this will do is utilize our lead times and provide a schedule to buy, issue, make, and sell.

**Note:** The Infinite Bucket MRP is an optional module. This module like most of the other optional modules is fully testable in the trial. To activate this module or any other optional module, select Configuration, Module Activation, Activate, and Yes. Optional modules are testable throughout the use of the trial. Once the trial is activated into a single user or multi-user version, optional modules can be activated for a 10-day trial period.

After activating the Infinite Bucket MRP module, select optional, Infinite Bucket MRP. You should have the options as depicted below.



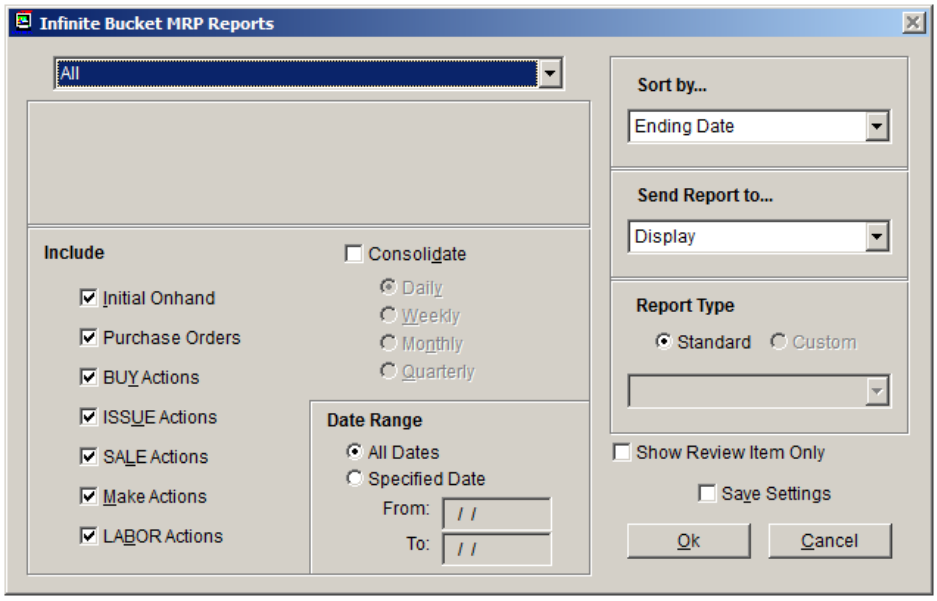

Select Generate Action Items. This step creates a database that we will access to create our purchasing reports. This action should be performed once a day, depending on how fast things are in your business.




Select to run your MRP on both Sales Orders and Work Orders and use just inventory area 1. Click OK.

You will see several screens flash in front of you. If you receive any errors in this process, you will have to view the errors and go back and fix them. Once the MRP generation process is complete, you will be back at the main pc/MRP screen.

Now select Optional, Infinite Bucket, and Print Action Item reports.




We will keep the default settings to look at this report. However, you should take note at all of the different options available to sort or parse the data. Your report should look similar to the picture below.

DATE: 07/16/2000 **ACTION ITEM REPORT**

ALL, FOR ACTION TYPES(PO, BUY, ISSUE, SALE, MAKE, LABOR), SORTED BY DATE

| ACTION | DRIVING SALES/WO | ITEM# | VENDOR | PART/ASSY # | DESCRIPTION | QTY | START DATE | END DATE | REVIEW |
|---|---|---|---|---|---|---|---|---|---|
| DATE | 07/17/2000 | | | | | | | | |
| BUY | 000002 | 0001 | SMI001 | 000000004 | DIRT TEASER TIRE | ***** | 07/14/2000 | 07/17/2000 | |
| ISSUE | 000002 | 0001 | | 000000004 | DIRT TEASER TIRE | ***** | 07/17/2000 | 07/17/2000 | |
| BUY | 000002 | 0001 | SMI001 | 000000008 | NGF INTERTUBE (N | ***** | 07/14/2000 | 07/17/2000 | |
| ISSUE | 000002 | 0001 | | 000000008 | NGF INTERTUBE (N | ***** | 07/17/2000 | 07/17/2000 | |
| BUY | 000002 | 0001 | SMI001 | 000000009 | SPOKES (WHEEL SP | ***** | 07/14/2000 | 07/17/2000 | |
| ISSUE | 000002 | 0001 | | 000000009 | SPOKES (WHEEL SP | ***** | 07/17/2000 | 07/17/2000 | |
| BUY | 000002 | 0001 | SMI001 | 000000010 | STEM FOR TUBE | ***** | 07/14/2000 | 07/17/2000 | |
| ISSUE | 000002 | 0001 | | 000000010 | STEM FOR TUBE | ***** | 07/17/2000 | 07/17/2000 | |
| MAKE | 000002 | 0001 | | 000000012 | TUBE ASSEMBLY | ***** | 07/17/2000 | 07/17/2000 | |
| BUY | 000002 | 0001 | SMI001 | 000000013 | BOLTS | ***** | 07/14/2000 | 07/17/2000 | |
| ISSUE | 000002 | 0001 | | 000000013 | BOLTS | ***** | 07/17/2000 | 07/17/2000 | |

Take note that everything is sorted by date with an action item listed for each part and assembly. Take a few minutes to examine this page. The Infinite Bucket can be an invaluable tool if businesses want to plan and keep inventory (costs) to a minimum.

Once again, print this report or take a screen shot.

### 3.1.11.3 MRP, comparing the two MRP options

**Note:** At this time, nothing has changed in inventory after running our regular purchasing report. Companies do not have to run both MRP reports. Companies either want the extra planning module or simply use the standard MRP Report (all parts required).

Take a few minutes to study the differences between the two different MRP reports. If you have a small company and like to take the time to plan things yourself, you might find the standard MRP in the Purchasing module adequate. If you want to schedule things, and produce more detailed reports about what to do and also when, then the Infinite Bucket is your best bet.

We are now going to act on the recommendations of our MRP reports and purchase the required parts for the sales order and work order entered above.

### 3.1.12 Purchasing Module

When entering purchase orders, we are entering individual parts or purchased assemblies and choosing a vendor. At this time, take a few minutes to read the Purchasing Module Chapter.

Choose the Banana Bicycle part in inventory. Make sure this part has a vendor. If this part does not have a vendor add an applicable address or choose and existing vendor. After viewing this part in inventory, take note that the quantity available field is -4. Now go to the Purchasing module and select New. Choose the bicycle seat by entering in the part number or entering the description. Vendor data should automatically appear.

Once again, take note of the Auto Look-up and Data check boxes. These can be used to save time.

By entering the part number or description first, a vendor list will pull up. Try to enter the quantity first, and the STD/COST per unit price break is automatically entered with the best vendor for that quantity.

To add items to this purchase order select Add. These buttons by now should be very familiar.

**Note:** The Clone button and Breakdown buttons can be utilized to automatically duplicate or break down orders to have multiple shipping dates.

After selecting the Banana Seat, enter the quantity of 4 and a due date of tomorrow. Press Finished. Now, go back to the inventory module to see what fields have changed. The QTY ON ORDER should now be 4.

Now that we have made our first purchase order, we will have pc/MRP do the rest of the work. Go to the optional module, the Infinite Bucket, and select to Generate Action Items. By creating the purchase order, our requirements have changed. After generating our action items, you can view the reports and see that we no longer have a buy requirement for the seats. Now select Optional, Infinite Bucket, and Automatically create Purchase Orders. Select Weekly Orders under ORDER CONSOLIDATION. This will consolidate all of the multiple orders for the same part by week.

**Note:** Automatically creating purchase orders is very handy. However, look at the purchase order for Bolts. It did two things that we could have prevented. #1, we did not enter a standard order quantity into inventory. If we had entered a standard order quantity of 100, then we would have had one purchase order for quantity 100. #2, when we choose to automatically create purchase orders, pc/MRP does not take advantage of any price/quantity breaks. To take advantage of our price break, we would have had to manually enter the purchase order. These are all things to watch for.

After automatically creating the purchase orders, we will bypass a few days and receive these purchase orders into inventory.

### 3.1.13 Receiving Module

The Receiving module is the next logical step in this process. We must receive parts and inform pc/MRP that we have parts to build our assemblies. This is what the Receiving module does. Refer to the Receiving Module Chapter for complete details.

At this time, enter a Receiver for the Banana Seat. As with the creation of new entries throughout pc/MRP, to do this, select New in the receiving module. You will be able to scroll for the associated purchase order and press OK. Once we have went through several screens informing us of everything that pc/MRP is doing we can accept this transaction. Continue to enter the rest of the receivers. You may also notice once you have started on a purchase order that has multiple line items you do have the option to automatically receive the remaining line items. You may want to take advantage of this to expedite this process.

**Note:** pc/MRP can receive partial shipments. You can also edit receivers. However, there is not an audit function to correct edited receivers. Once a receiver is edited, pc/MRP will offer to update the received qty for the purchase order, adjust the average cost, inventory area qty and on order qty. Users should keep these boxes checked.

Once again, view several parts in inventory. Your stores quantity should have increased. Also, notice that for the top bicycle assembly still nothing has changed. You could even run an additional MRP and you will find that the Single Bucket MRP has no Action Items. The Infinite Bucket however will still have issues, sales, and, makes.

Now that we have received our parts into inventory, we are ready to begin building. We will next utilize the Stockroom Module to convert parts into assemblies.

### 3.1.14 Stockroom Module

The Stockroom module is where we turn piece parts into assemblies, or back-flush. Select Modules, Stockroom New. There are several types of transactions available. To issue sales orders and work orders to the manufacturing floor use the I type transaction. To review the rest of these transactions refer to the Stockroom Module.

At this time select the I type transaction and select the order entry Sales Order that we created. Enter and accept the issuing quantities. Notice in inventory that parts have now moved from stores area 1 into WIP.

To receive this back as a finished assembly enter the R type transaction in the stockroom. Choose the Sales Order issued and receive this Sales Order back into area 1. WIP for the parts used was cleared, and onhand qty for the assembly has increased.

Take a few minutes to review this entire process. Go into inventory and view a few parts and the final Bicycle assembly. You will notice that all of the individual component parts have decreased the precise amount used to build the bicycles. The quantity of the bicycles in inventory has now increased.

**Note:** Once received, pc/MRP will only track one serial number per invoice line item. For multiple serial numbers per line item, the optional module Serial/Lot Number Tracking can be utilized.

**Note:** When entering the I type transaction, you have the choice to issue sub-assemblies or parts only. You can also do partial issuing and then utilize the P, F or M stockroom transactions for makeup issues. There is also an undo feature; transaction T that takes back issued parts.

**Note:** If you are often editing stock room transactions, you can use the audit WIP function in the Inventory module to help clean up things.

**Note:** It is always best to utilize the various stockroom transactions to help clean things up when mistakes have occurred. This creates a record for each transaction. When inventory is simply edited, there is no paper trail. (See Chapter 16.8 for the optional Audit Trail Module.) To help with this you can lock-up various editing processes from the end-users through **Option 62** in the Settings and Utilities.

**Note:** Work orders are issued and processed in the exact same way as sales orders.

Go ahead and build the work order too.

The final step in this process is invoicing. In this step, we will relieve quantities in the storage areas representative of the 'order entry sales order' we entered. This step is taken in the Invoicing Module.

### 3.1.15 Invoice Module

To enter a new invoice, select Modules, Invoicing, and New. You will have to choose the terms of the sale and accept the invoice information. Once again, if the invoice must be edited, you may wish to edit the sales order as well. You may even want to edit the sales order first, (before creating the invoice), thus the invoice will be automatically representative of the sales order. For more information, refer to the Invoice Module in the Manual.

Go ahead and invoice the sales order on account. Once you have invoiced the sales order, go into the Inventory Module and view what has changed. Inventory for the finished assemblies has decreased by the quantity of the invoice. The sales cycle is now complete. The process to pay vendors and track accounts receivable has just begun. If you anticipate using pc/MRP

for accounting, continue. If pc/MRP is going to be just an inventory and planning tool, now might be a good time to clean up this trial copy and start entering some of your inventory.

### 3.1.16 Accounting

The fastest way to become familiar with pc/MRP's Accounting System is by actually using it. By entering the work sheet transactions on the following page, you will become familiar with pc/MRP's easy to use accounting system.

The first entry, labeled 000001 represents a typical transaction for starting an account or business. pc/MRP will automatically increment this transaction number by one as transactions are made. Do not create your own transaction numbers. Transaction numbers should be chronological with no missing numbers.

To set up your company all of the company's assets are debited, and the starting capital account is credited an equal amount. Then the company's liabilities are credited and the starting capital account is debited an equal amount.

To make the same starting entries in pc/MRP, go to Modules, Accounting, GL Transactions, and New Transaction, select A for All types of transactions and press OK. pc/MRP will give you the next available transaction number. You will now see the transaction data entry screen. Take note that the transaction number is 000001.

Transaction 000001

Click on the Description field and enter the description as STARTING BUSINESS. Throughout all of these first three transactions, enter a description of STARTING BUSINESS. Now go to the first debit account field. Enter 10100000 and you will see the description, CASH ON HAND appear next to the account number. Enter the sum $5000 under the AMT Field. Next debit account 10200000 for $10,000 and account 12100000 for $6000 (pc/MRP will take up to four debit accounts and five credit accounts in one bite). Notice at the bottom right in red pc/MRP says the transaction is currently UNBALANCED. To balance the three debit accounts, credit Account 25100000, STARTING CAPITAL with $21,000. If the transaction is now balanced, press Save to enter this transaction. pc/MRP will ask, "Do another record?" Select Yes. If the transaction is not balanced, review the steps above and look to see where you made a mistake in entering the dollar amounts.

After selecting Yes, you should now be at transaction number 000002.

Transaction 000002

Now, debit accounts 13100000 for $15000, account 11100000 for $4000, and account 15100000 for $1000. To balance the debit accounts, credit account 25100000, STARTING CAPITAL for $20,000. Once again make sure the transaction is Balanced. If the transaction is balanced, press Save to enter this transaction and Yes to continue to the next transaction. If the transaction is not balanced, review the entries and make the necessary corrections.

Transaction 000003

Debit account 25100000, STARTING CAPITAL $25000 and credit account 24100000, NOTES PAYABLE $25000. If the transaction is balanced, select Save to save this transaction and select No when asked if you wish to enter another record. If the transaction is not balanced once again review the dollar amounts entered.

Transaction 000004

This final starting entry is only necessary for companies using periodic accounting methods and not companies using perpetual accounting methods. This type of transaction labeled 000004, prepares the inventory for purchase and sale transactions during the month. It does so by moving the stock from an asset account 12100000 to an expense account 40100000. Enter STOCK INVENTORY ADJUSTMENT in the description field. Debit account 40100000 for $6,000 and credit account 12100000 for $6,000.

Transaction 000005 - Transaction 000015

Enter the remaining transactions shown on 3.1.17.1

Transaction 000014 is only necessary for companies using periodic accounting methods and not companies using perpetual accounting methods. It moves the months end remaining inventory back into the asset account so that the month's retained earnings will reflect the changes in inventory levels.

Once all transactions have been entered, return to the Main Accounting Menu. Print out the transactions you have just entered by selecting Accounting, Reports, General Ledger Transactions. Select All Transactions (3 places), and select Print. Your Transaction Report should match the sample Transaction report found in the Accounting Report Section of this Manual.

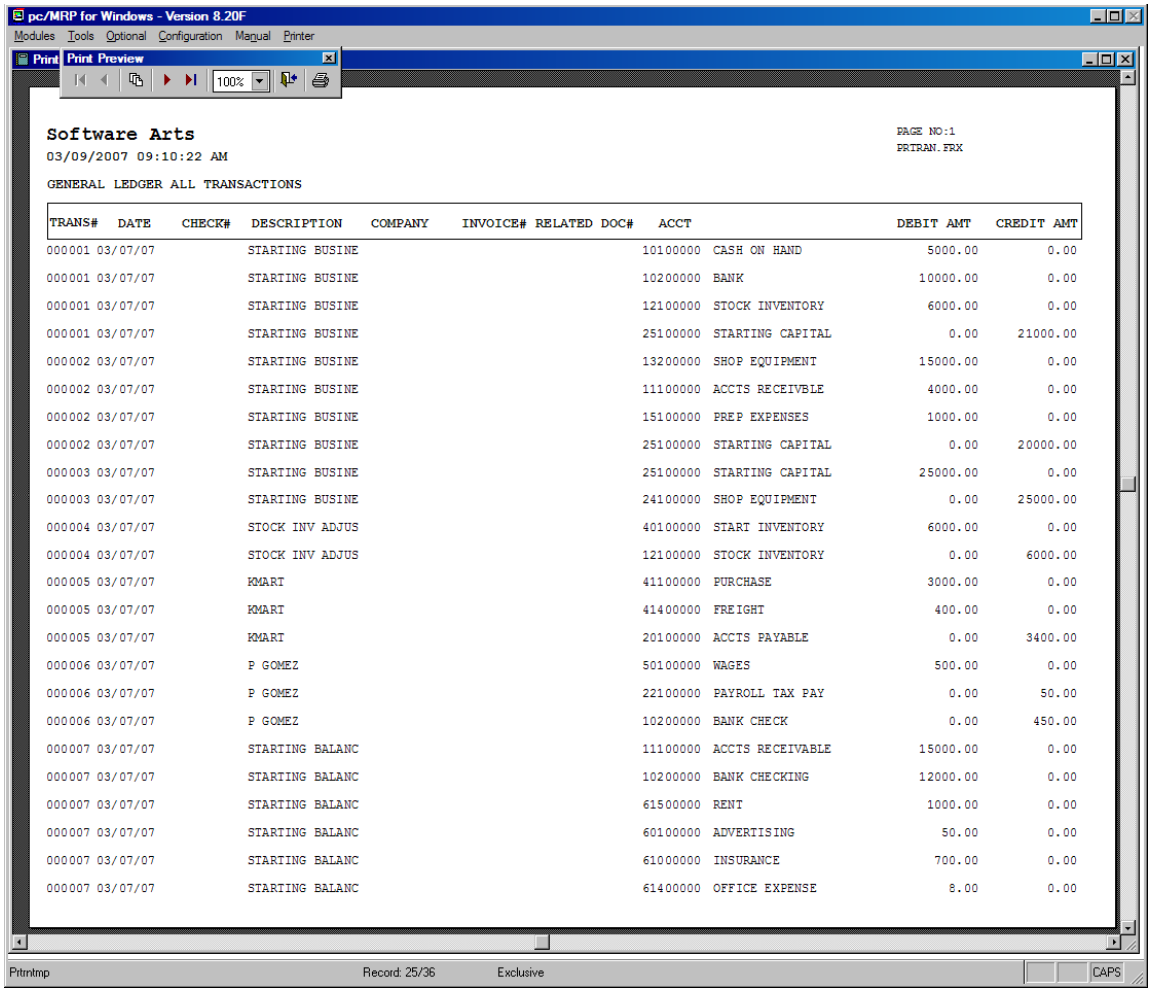
If the Transaction Report looks good, return to the Main Accounting Menu and post the month by selecting Post/Re-post a Month and Print Financials. Enter the month and year that contain the above entries. Since pc/MRP stores the transactions in a database, you can edit incorrect transactions and repost the month if necessary.

pc/MRP's posting program begins by making sure the initial debit and credit balances are equal.

When pc/MRP finishes posting the month, it automatically initializes the next month by: (1) zeroing out all starting balances of revenue and expense accounts; (2) transferring forward all asset, liability and equity accounts; (3) adding the retained earnings (rev - exp) to the YTD earnings.

Finally yet importantly, pc/MRP's posting program will automatically print out the month's financial statements such as Income Statement, Expense Distribution Report, Trial Balance, YTD Revenue and Expense Report, and a Detailed Transaction Report. If you entered all the transactions correctly, your reports should match the sample reports found on the following pages.

### 3.1.17.1.1 General Ledger Transactions Report for Transaction Lesson

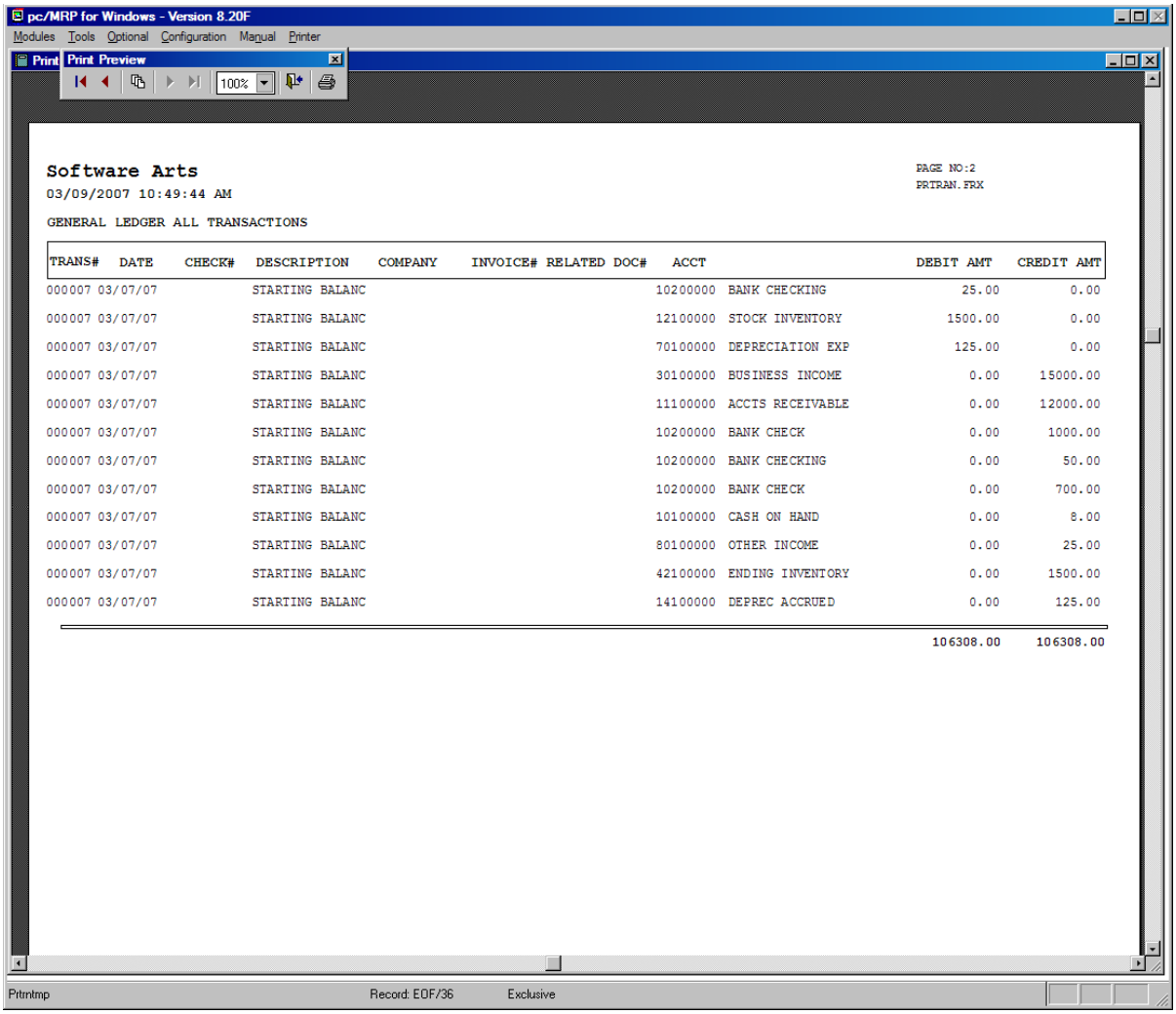



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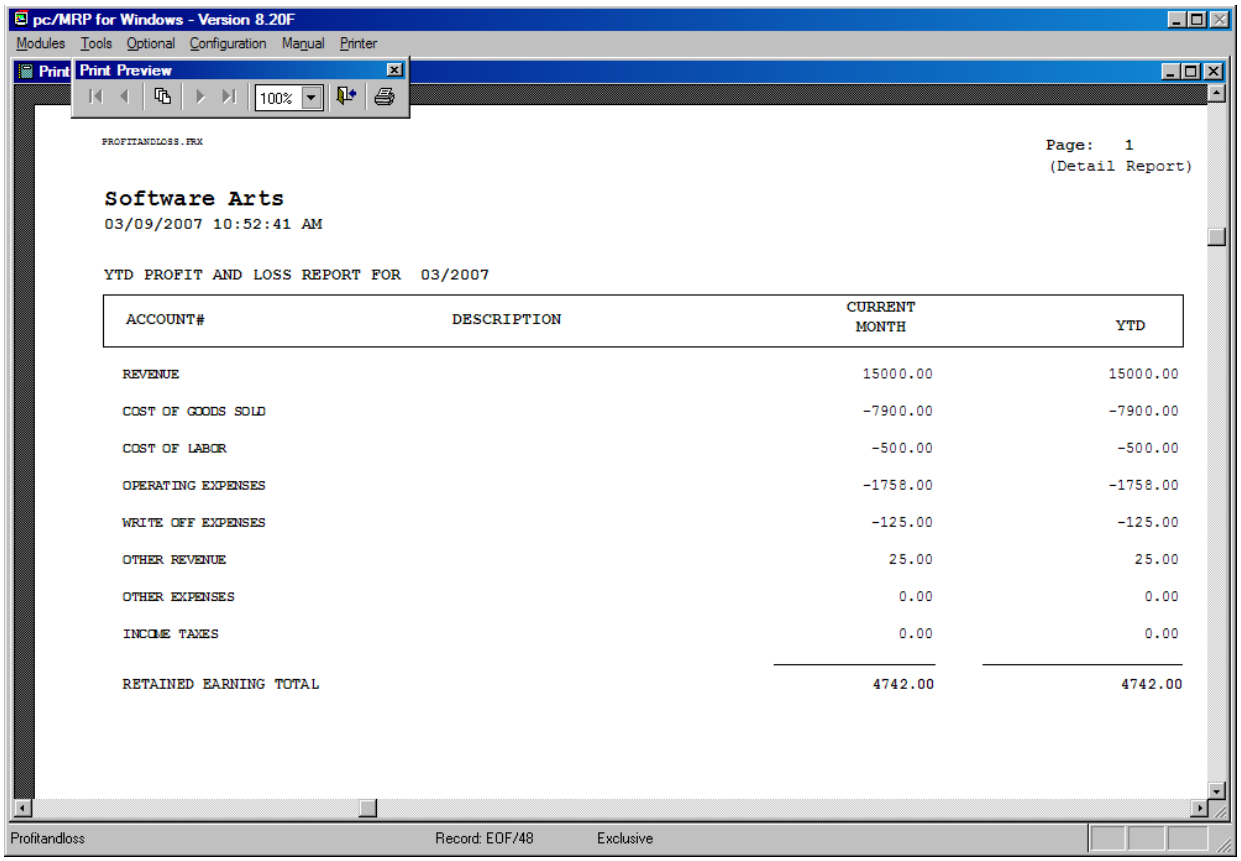
GENERAL LEDGER ALL TRANSACTIONS

| TRANS# | DATE | CHECK# | DESCRIPTION | COMPANY | INVOICE# | RELATED DOC# | ACCT | | DEBIT AMT | CREDIT AMT |
|---|---|---|---|---|---|---|---|---|---|---|
| 000001 | 03/07/07 | | STARTING BUSINE | | | | 10100000 | CASH ON HAND | 5000.00 | 0.00 |
| 000001 | 03/07/07 | | STARTING BUSINE | | | | 10200000 | BANK | 10000.00 | 0.00 |
| 000001 | 03/07/07 | | STARTING BUSINE | | | | 12100000 | STOCK INVENTORY | 6000.00 | 0.00 |
| 000001 | 03/07/07 | | STARTING BUSINE | | | | 25100000 | STARTING CAPITAL | 0.00 | 21000.00 |
| 000002 | 03/07/07 | | STARTING BUSINE | | | | 13200000 | SHOP EQUIPMENT | 15000.00 | 0.00 |
| 000002 | 03/07/07 | | STARTING BUSINE | | | | 11100000 | ACCTS RECEIVBLE | 4000.00 | 0.00 |
| 000002 | 03/07/07 | | STARTING BUSINE | | | | 15100000 | PREP EXPENSES | 1000.00 | 0.00 |
| 000002 | 03/07/07 | | STARTING BUSINE | | | | 25100000 | STARTING CAPITAL | 0.00 | 20000.00 |
| 000003 | 03/07/07 | | STARTING BUSINE | | | | 25100000 | STARTING CAPITAL | 25000.00 | 0.00 |
| 000003 | 03/07/07 | | STARTING BUSINE | | | | 24100000 | SHOP EQUIPMENT | 0.00 | 25000.00 |
| 000004 | 03/07/07 | | STOCK INV ADJUS | | | | 40100000 | START INVENTORY | 6000.00 | 0.00 |
| 000004 | 03/07/07 | | STOCK INV ADJUS | | | | 12100000 | STOCK INVENTORY | 0.00 | 6000.00 |
| 000005 | 03/07/07 | | KMART | | | | 41100000 | PURCHASE | 3000.00 | 0.00 |
| 000005 | 03/07/07 | | KMART | | | | 41400000 | FREIGHT | 400.00 | 0.00 |
| 000005 | 03/07/07 | | KMART | | | | 20100000 | ACCTS PAYABLE | 0.00 | 3400.00 |
| 000006 | 03/07/07 | | P GOMEZ | | | | 50100000 | WAGES | 500.00 | 0.00 |
| 000006 | 03/07/07 | | P GOMEZ | | | | 22100000 | PAYROLL TAX PAY | 0.00 | 50.00 |
| 000006 | 03/07/07 | | P GOMEZ | | | | 10200000 | BANK CHECK | 0.00 | 450.00 |
| 000007 | 03/07/07 | | STARTING BALANC | | | | 11100000 | ACCTS RECEIVABLE | 15000.00 | 0.00 |
| 000007 | 03/07/07 | | STARTING BALANC | | | | 10200000 | BANK CHECKING | 12000.00 | 0.00 |
| 000007 | 03/07/07 | | STARTING BALANC | | | | 61500000 | RENT | 1000.00 | 0.00 |
| 000007 | 03/07/07 | | STARTING BALANC | | | | 60100000 | ADVERTISING | 50.00 | 0.00 |
| 000007 | 03/07/07 | | STARTING BALANC | | | | 61000000 | INSURANCE | 700.00 | 0.00 |
| 000007 | 03/07/07 | | STARTING BALANC | | | | 61400000 | OFFICE EXPENSE | 8.00 | 0.00 |

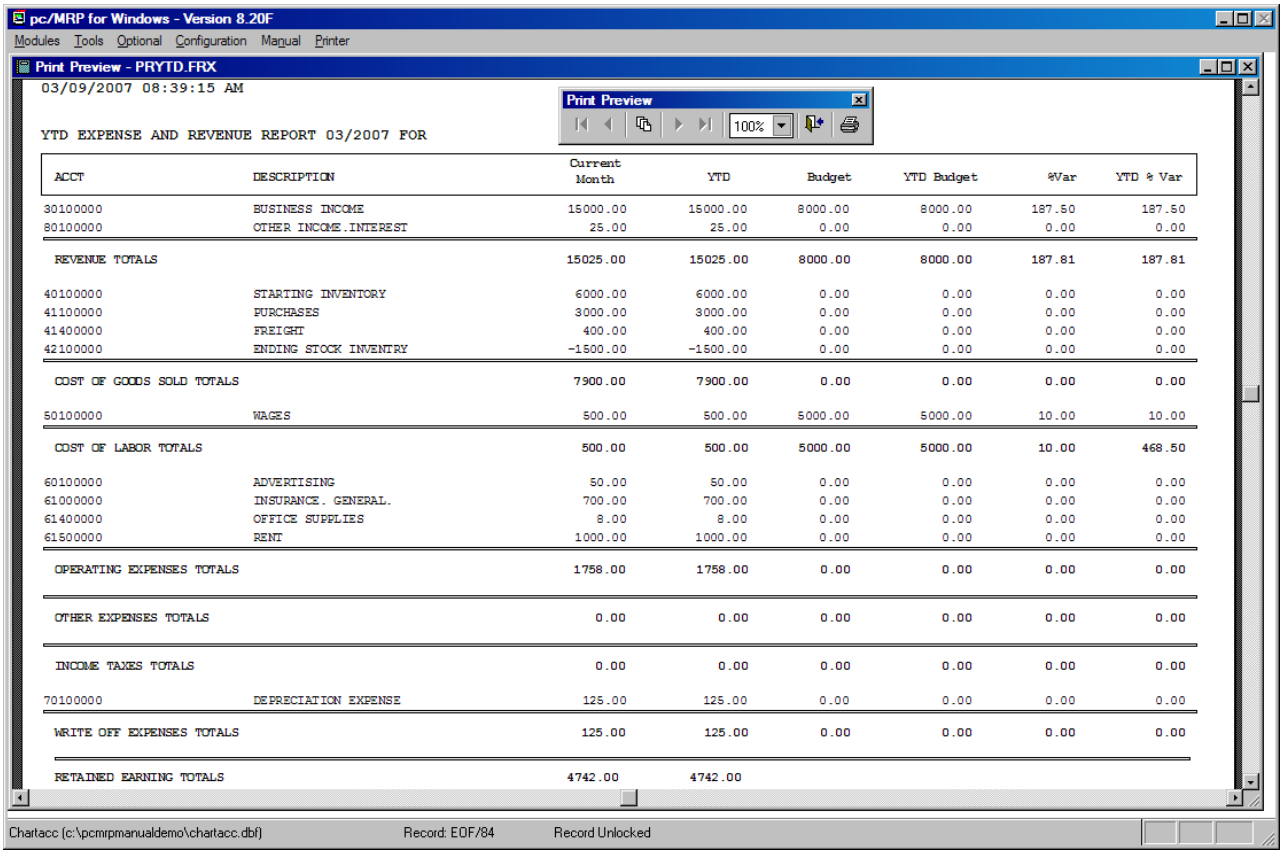
## 3.1.17.1.2 General Ledger Transactions Report for Transaction Lesson Continued



### 3.1.17.2 Profit and Loss Report for Transaction Lesson

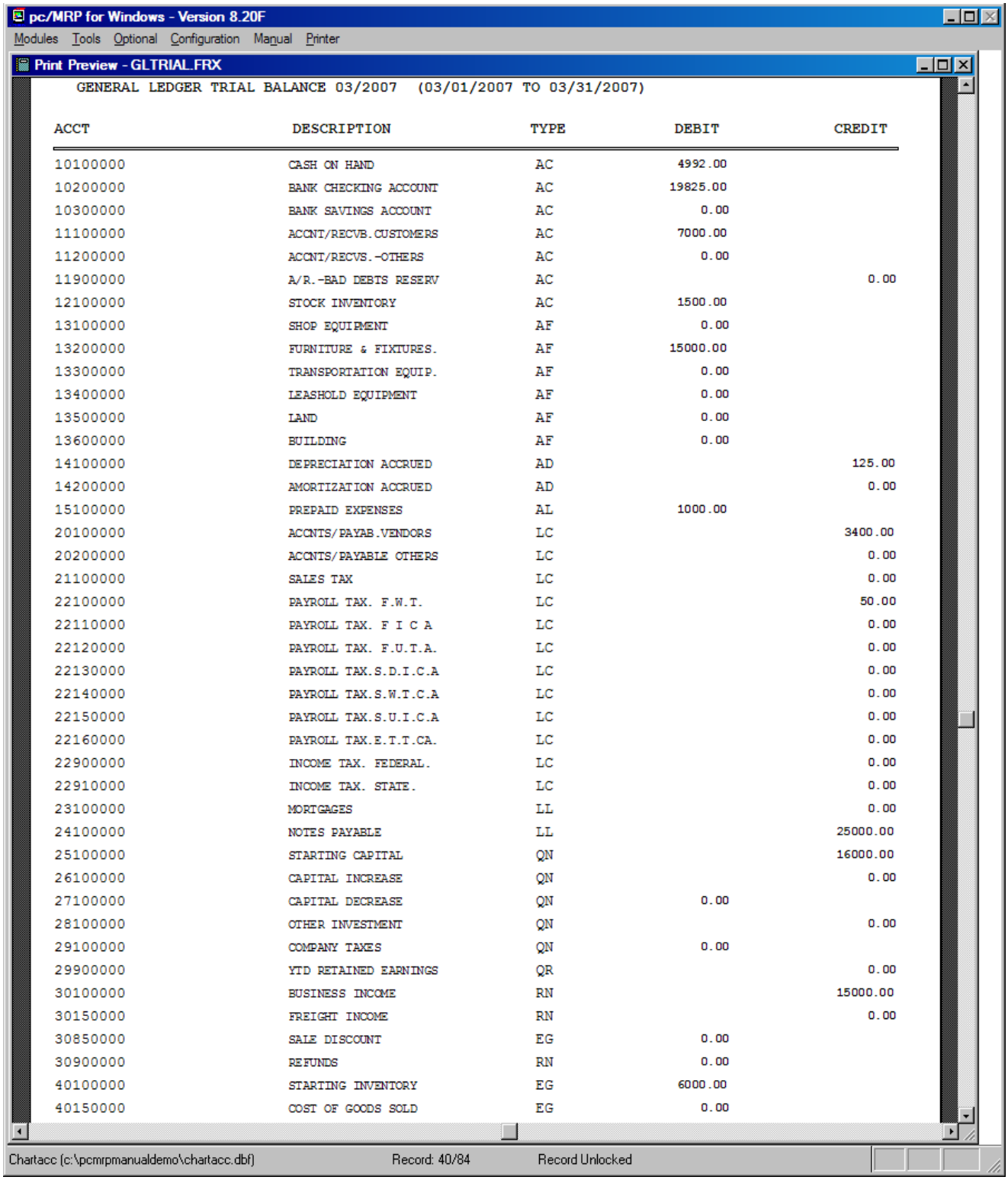


## 3.1.17.3 YTD Expense and Revenue Report for Transaction Lesson



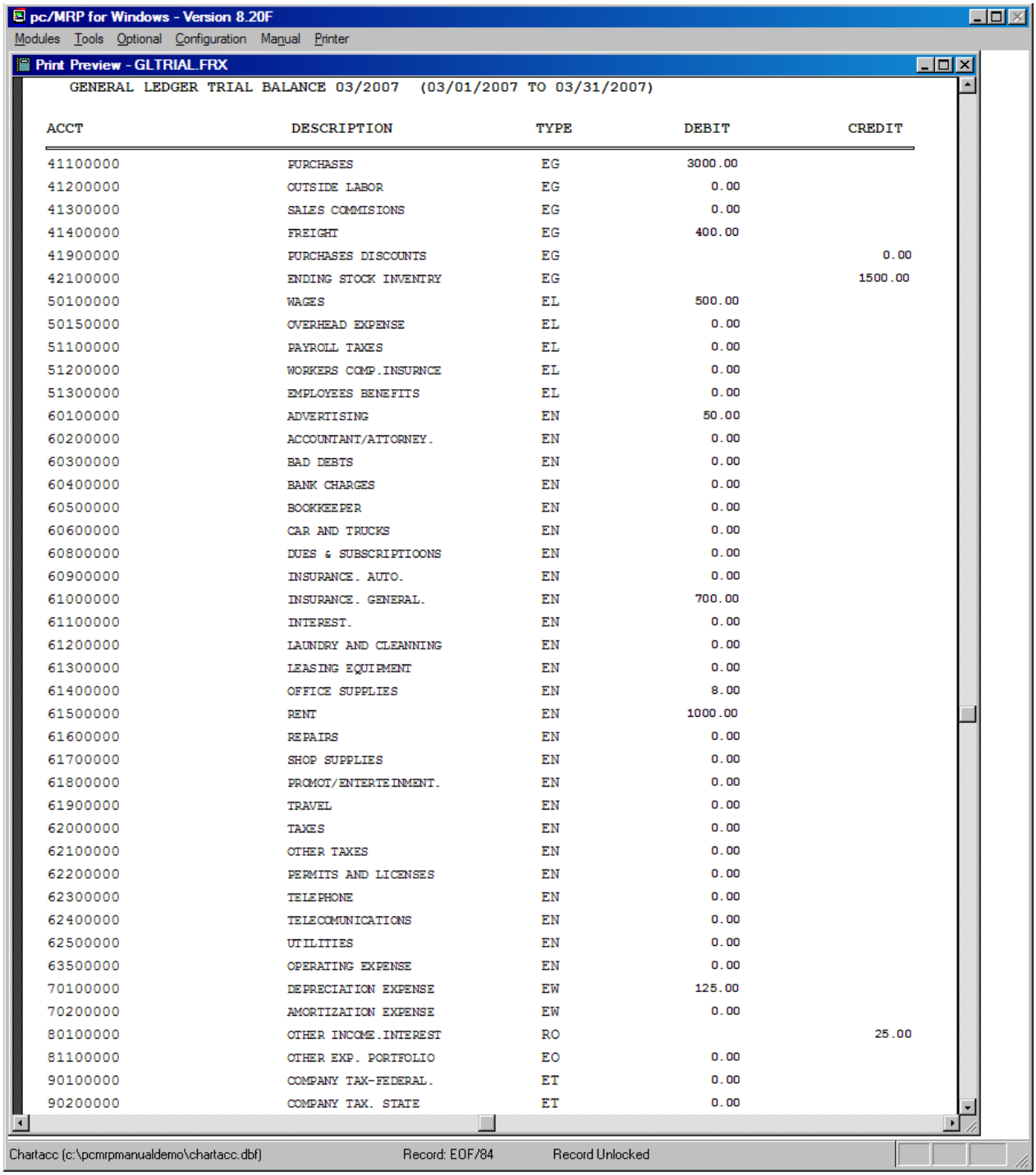

| ACCT | DESCRIPTION | Current Month | YTD | Budget | YTD Budget | %Var | YTD % Var |
|---|---|---|---|---|---|---|---|
| 30100000 | BUSINESS INCOME | 15000.00 | 15000.00 | 8000.00 | 8000.00 | 187.50 | 187.50 |
| 80100000 | OTHER INCOME.INTEREST | 25.00 | 25.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| REVENUE TOTALS | | 15025.00 | 15025.00 | 8000.00 | 8000.00 | 187.81 | 187.81 |
| 40100000 | STARTING INVENTORY | 6000.00 | 6000.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 41100000 | PURCHASES | 3000.00 | 3000.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 41400000 | FREIGHT | 400.00 | 400.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 42100000 | ENDING STOCK INVENTRY | -1500.00 | -1500.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| COST OF GOODS SOLD TOTALS | | 7900.00 | 7900.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 50100000 | WAGES | 500.00 | 500.00 | 5000.00 | 5000.00 | 10.00 | 10.00 |
| COST OF LABOR TOTALS | | 500.00 | 500.00 | 5000.00 | 5000.00 | 10.00 | 468.50 |
| 60100000 | ADVERTISING | 50.00 | 50.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 61000000 | INSURANCE, GENERAL | 700.00 | 700.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 61400000 | OFFICE SUPPLIES | 8.00 | 8.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 61500000 | RENT | 1000.00 | 1000.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| OPERATING EXPENSES TOTALS | | 1758.00 | 1758.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| OTHER EXPENSES TOTALS | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| INCOME TAXES TOTALS | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 70100000 | DEPRECIATION EXPENSE | 125.00 | 125.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| WRITE OFF EXPENSES TOTALS | | 125.00 | 125.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| RETAINED EARNING TOTALS | | 4742.00 | 4742.00 | | | | |

### 3.1.17.4.1 Trial Balance Report for Transaction Lesson



### 3.1.17.4.2 The Trial Balance Continued

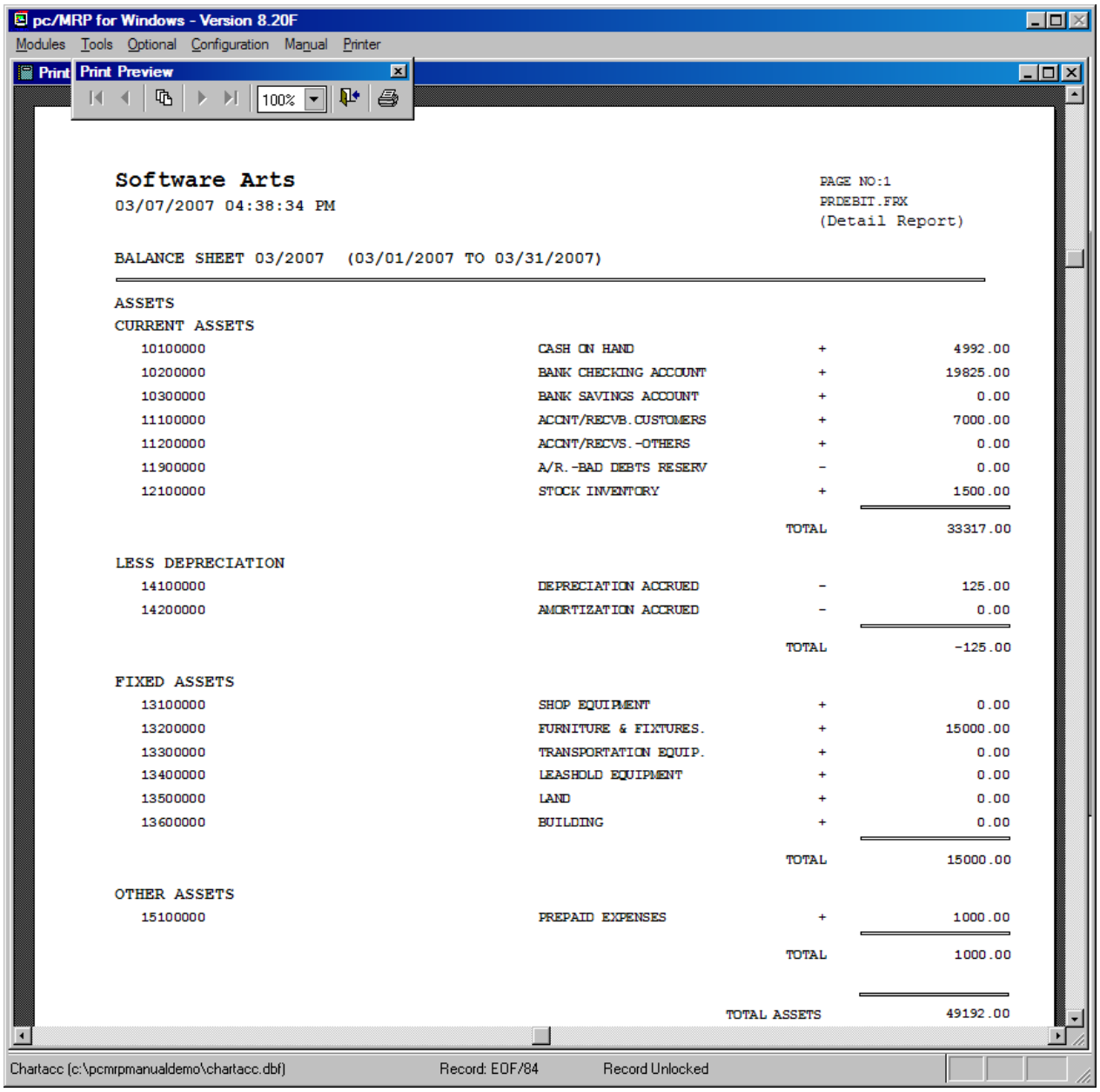
Please note that on the screen shot below the third page of the Balance Sheet shows Total Debits = 61100.00 and total credits = 61100.00.



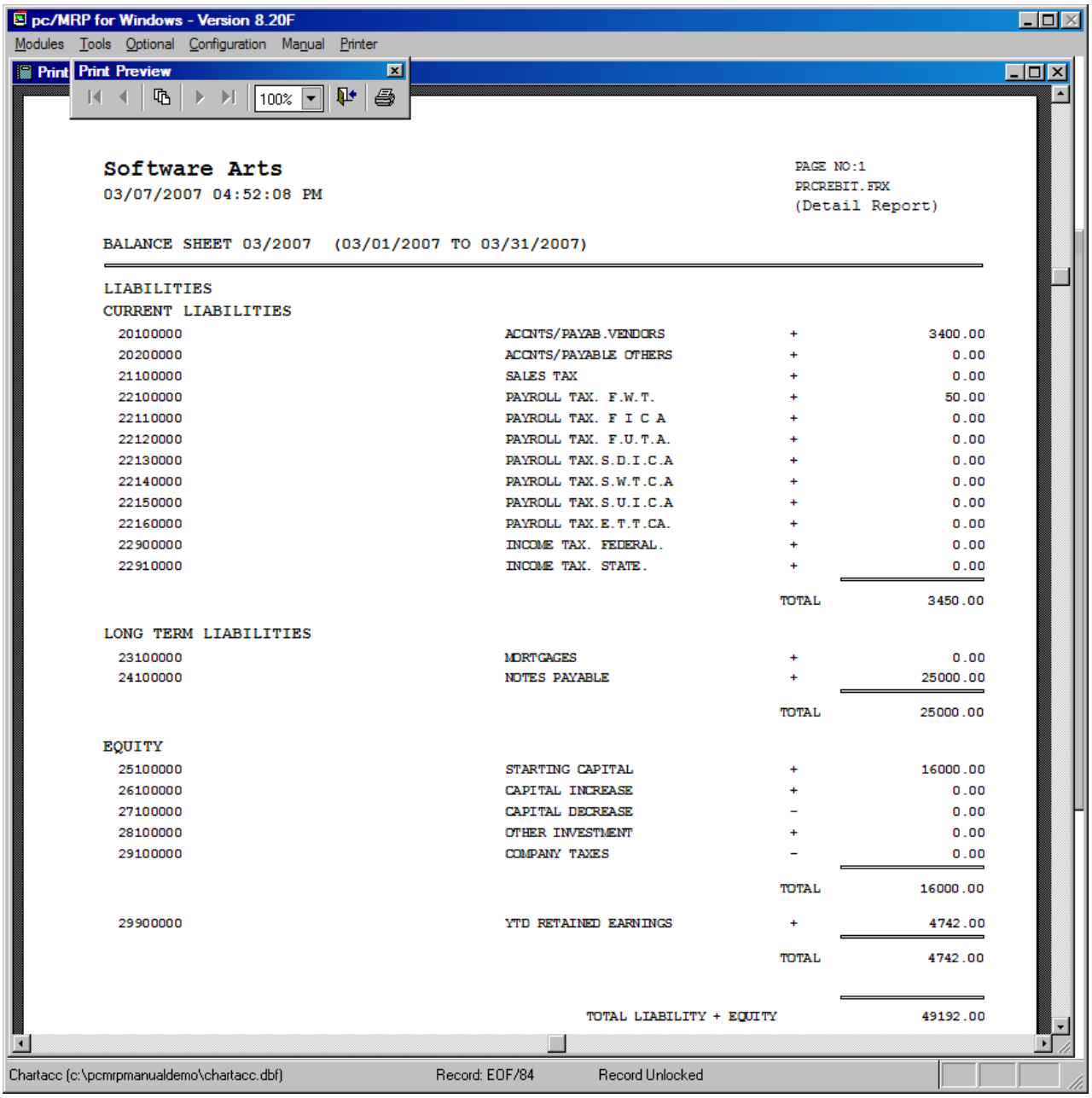

GENERAL LEDGER TRIAL BALANCE 03/2007 (03/01/2007 TO 03/31/2007)

| ACCT | DESCRIPTION | TYPE | DEBIT | CREDIT |
|---|---|---|---|---|
| 41100000 | PURCHASES | EG | 3000.00 | |
| 41200000 | OUTSIDE LABOR | EG | 0.00 | |
| 41300000 | SALES COMMISIONS | EG | 0.00 | |
| 41400000 | FREIGHT | EG | 400.00 | |
| 41900000 | PURCHASES DISCOUNTS | EG | | 0.00 |
| 42100000 | ENDING STOCK INVENTRY | EG | | 1500.00 |
| 50100000 | WAGES | EL | 500.00 | |
| 50150000 | OVERHEAD EXPENSE | EL | 0.00 | |
| 51100000 | PAYROLL TAXES | EL | 0.00 | |
| 51200000 | WORKERS COMP.INSURNCE | EL | 0.00 | |
| 51300000 | EMPLOYEES BENEFITS | EL | 0.00 | |
| 60100000 | ADVERTISING | EN | 50.00 | |
| 60200000 | ACCOUNTANT/ATTORNEY. | EN | 0.00 | |
| 60300000 | BAD DEBTS | EN | 0.00 | |
| 60400000 | BANK CHARGES | EN | 0.00 | |
| 60500000 | BOOKKEEPER | EN | 0.00 | |
| 60600000 | CAR AND TRUCKS | EN | 0.00 | |
| 60800000 | DUES & SUBSCRIPTIOONS | EN | 0.00 | |
| 60900000 | INSURANCE. AUTO. | EN | 0.00 | |
| 61000000 | INSURANCE. GENERAL. | EN | 700.00 | |
| 61100000 | INTEREST. | EN | 0.00 | |
| 61200000 | LAUNDRY AND CLEANNING | EN | 0.00 | |
| 61300000 | LEASING EQUIPMENT | EN | 0.00 | |
| 61400000 | OFFICE SUPPLIES | EN | 8.00 | |
| 61500000 | RENT | EN | 1000.00 | |
| 61600000 | REPAIRS | EN | 0.00 | |
| 61700000 | SHOP SUPPLIES | EN | 0.00 | |
| 61800000 | PROMOT/ENTERTEINMENT. | EN | 0.00 | |
| 61900000 | TRAVEL | EN | 0.00 | |
| 62000000 | TAXES | EN | 0.00 | |
| 62100000 | OTHER TAXES | EN | 0.00 | |
| 62200000 | PERMITS AND LICENSES | EN | 0.00 | |
| 62300000 | TELEPHONE | EN | 0.00 | |
| 62400000 | TELECOMUNICATIONS | EN | 0.00 | |
| 62500000 | UTILITIES | EN | 0.00 | |
| 63500000 | OPERATING EXPENSE | EN | 0.00 | |
| 70100000 | DEPRECIATION EXPENSE | EW | 125.00 | |
| 70200000 | AMORTIZATION EXPENSE | EW | 0.00 | |
| 80100000 | OTHER INCOME.INTEREST | RO | | 25.00 |
| 81100000 | OTHER EXP. PORTFOLIO | EO | 0.00 | |
| 90100000 | COMPANY TAX-FEDERAL. | ET | 0.00 | |
| 90200000 | COMPANY TAX. STATE | ET | 0.00 | |

### 3.1.17.5.1 Balance Sheet



### 3.1.17.5.2 Balance Sheet Continued



# 3.2 Implementing pc/MRP

### 3.2.1 Implementing pc/MRP

If you are ready to implement pc/MRP, and are ready to get to work, then this section is for you. Follow the steps below to get pc/MRP up and running for your company.

### 3.2.2 Data Entry

Data entry is critical to getting you company up and running with pc/MRP. After reading this section, you may want to step back and read Chapter 15.11, Importing Data Files. If your existing data is in a readable format for pc/MRP, then importing all that you can will save hours of needless data entry. This section assumes users already know the basics of each module. This chapter covers the sequence of implementing pc/MRP, not the exact method on how to perform each action. If you do not know how to enter data into a specific module, go to that chapter and learn. You could also study the tutorial slide shows and videos on our website, www.pcmrp.com. Look for the MRP101 button. If after reviewing the applicable chapters and/or online material, things are still not clear, you can always call our support line and we will be glad to help.

1. Register your copy of pc/MRP and obtain your Configuration Code Number by calling Software Arts at 408-226-7321.
2. Select Configuration, Settings and Utilities to set the size of your part number, the start of your fiscal year, your company's Name and Address, etc.

**Note:** If you have been using QuickBooks, please see Chapter 16.16 in this Manual to setup pc/MRP and import your customers, vendors, inventory, and BOMs and skip to step 6.

3. Enter all of your customers and vendors into pc/MRP's Address Book Module.
4. Enter all of your part numbers (description, part number, average and or standard cost)
5. Enter all of your Bills of Materials
6. Perform a cost roll up for average and standard costs (Section 5.1.10)
7. Enter all outstanding sales orders*. Select "Order entry" for sales type. Include sales orders that have not been shipped and sales orders that have been shipped but not paid for. Do not include sales orders that have been paid for.
8. Enter all outstanding purchase orders*. Include purchase orders that have not been received and purchase orders that have not been paid. Do not include purchase orders that have been paid.
9. Configure the accounting functions and Chart of Accounts as discussed in Section 14.3.2.
10. Enter your accounts receivable detail as follows:
    a. Set the Inventory Adjustment method to "S" and Auto Accounting to "Off"
    b. Enter all open invoices* that have not been paid for. Do this by entering sales orders on "Account and Carry." This will automatically create an invoice. Do not enter any invoices you have been paid for. If you do, make sure you put a "Y" in the complete field of those invoices.
    c. If you plan to implement pc/MRP's accounting module now or in the future, enter an "O" type accounting transaction for every open invoice you entered.
    d. Run an open invoice or AR report. Make sure the total amount receivable is correct.
    e. If you plan to implement accounting now or later, you must enter an "O" type transaction whenever you enter an invoice and an "R" type transaction whenever you receive a payment from a customer.
11. Enter your accounts payable detail as follows:
    a. Set Inventory Adjustment method to "S" and Auto Accounting to "Off"
    b. Enter all open receivers* that have not been paid for. Do not enter any receivers you have paid for. If you do, make sure you put a "Y" in the complete field of those receivers.
    c. If you plan to implement accounting now or later, enter an "I" type accounting transaction for each of the above open receivers.
    d. Run an open receiver or AP report and make sure the total amount for accounts payable is correct.
    e. If you plan to implement accounting now or at a later date, you must enter an "I" type transaction when you enter a receiver and an "E" type transaction or check run (multiple "E" type transactions) whenever you pay for a receiver.

12. Set up the inventory and WIP quantities and values as follows:
    a. Use pc/MRP's Physical Inventory program to enter your inventory quantities. Enter the total of the stores quantity and WIP quantity into the stores area (area 1).
    b. Run the Physical Inventory Variance report. Make sure the inventory value is correct.
    c. Use the Stockroom Module "I" type issue function to issue all sales orders that are presently on the manufacturing floor to WIP. This will correctly separate out stores inventory from WIP inventory in a manner such that pc/MRP will reduce the WIP quantities correctly when they are received back from manufacturing as finished goods back into the stock room.
    d. Set the Inventory Adjustment method back to "A".
13. Enter your starting balances as follows:
    a. Make sure you have a good trial balance from the month prior to when you are going to convert over to pc/MRP's accounting program.
    b. Select Accounting, GL Transactions, New to enter your starting balances using "A" type transactions. Be sure the transaction dates contain the date of the last day of the prior month. Transfer in all asset and liability accounts. Transfer in all expense and revenue accounts but not the YTD retained earnings amount.
    c. The inventory dollar amount should equal the inventory value report run on the last day of the prior month.
    d. The AP dollar amount should equal AP detail report run on the last day of the prior month.
    e. The AR dollar amount should equal AR detail report run on the last day of the prior month.
    f. Close (Post) the prior month and print out the Trial Balance, Balance Sheet and YTD Expense and Revenue report to make sure you balance.
    g. Once you have balanced you are ready to begin business and entering transactions for the new month (not the prior month).
14. For several of the steps described above data can be imported and or programs can be written to decrease the amount of manual labor in the data entry process. To explore these options you can either read Chapter 15.11 Importing Data Files or contact Software Arts directly.

***Note:** If keeping your own document numbers, ensure that they are six (6) alpha-numeric characters or if not, enter leading zeroes (0).

### 3.2.3 Wedge Type Barcode Wands

pc/MRP will work out of the box with any wedge type barcode reader. A wedge type barcode reader is defined as a barcode reader that inserts itself in between the computer keyboard and the CPU unit (i.e. the keyboard plugs into the wedge barcode reader and the wedge is plugged into the computer's keyboard connector). The computer will then read any input from either the wand or the keyboard. The Unitek HT630 comes with a built-in program (Section 16.4.3 in this Manual)

### 3.2.4 Portable Barcode Wands

Portable barcode wands can be used to take a physical inventory and then later download the part numbers and quantities from the portable barcode wand's docking station into pc/MRP's physical inventory program. The portable barcode wand must be programmed that it can download a comma delimited ASCII text file named physical.txt into the pcmrpw directory. The file must consist of part numbers and quantities separated by commas and line returns as shown below:

```
000000001,47.00
000000010,53.00
890000000,40.00
```

The Percon 2000 can be programmed to provide such an output. However, your programmers must create the program. The Unitek HT630 comes with a built-in program (Section 16.4.3)

### 3.2.5 Downloading data from UniTech's HT630 Barcode Scanner

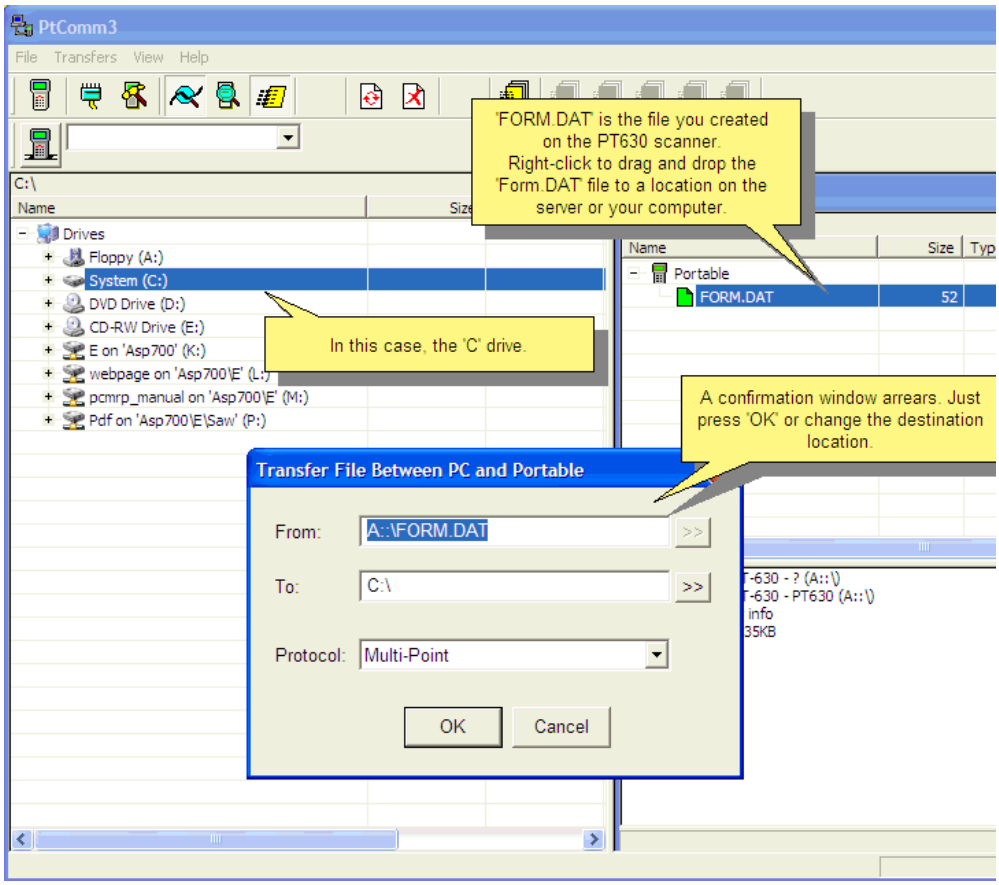
UniTech's HT630 (800-861-8648) comes with a program for pc/MRP built in. To take an inventory with the HT630 follow the steps listed below:

1. Turn on the HT630
2. Press and hold 'CMD'
3. Select Option 2 for Terminal from the Menu
4. Select Option 2 again for Form caching
5. At Item:, scan the barcoded parts or bin boxes
6. At Qty:, scan or enter the quantities
7. After you are finished, press 'Esc' to exit.
8. Screen clears to operating mode

To download the physical inventory count follow the steps listed below:

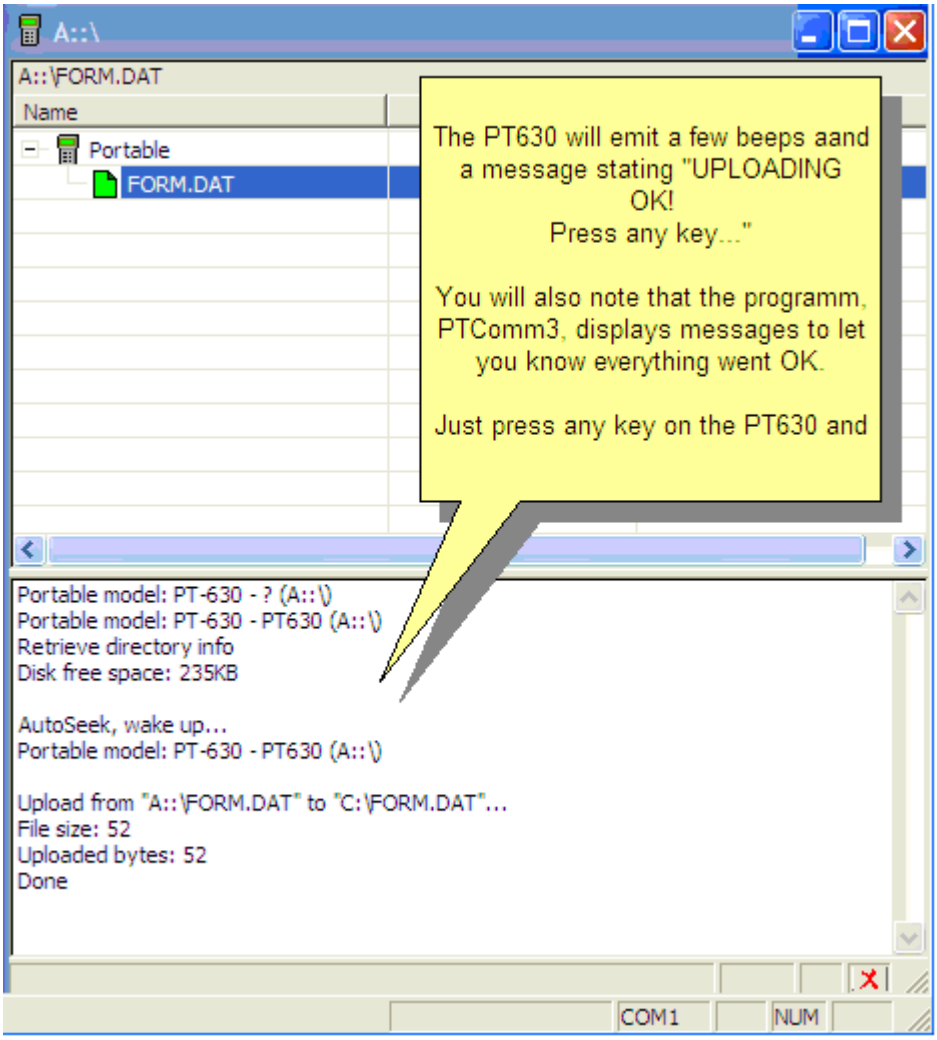
1. Set the HT630 into its cradle attached to the PC or connect the cable directly to the serial port.
2. Go into Start, Programs, and run PTComm3

The following screen appears:




The program recognizes the Barcode reader and displays the Form data file with the inventory data in the reader. Left-click on the file name and drag it to the directory structure you wish to save the file. This can be a server directory or your computer. Remember where you saved the data file.

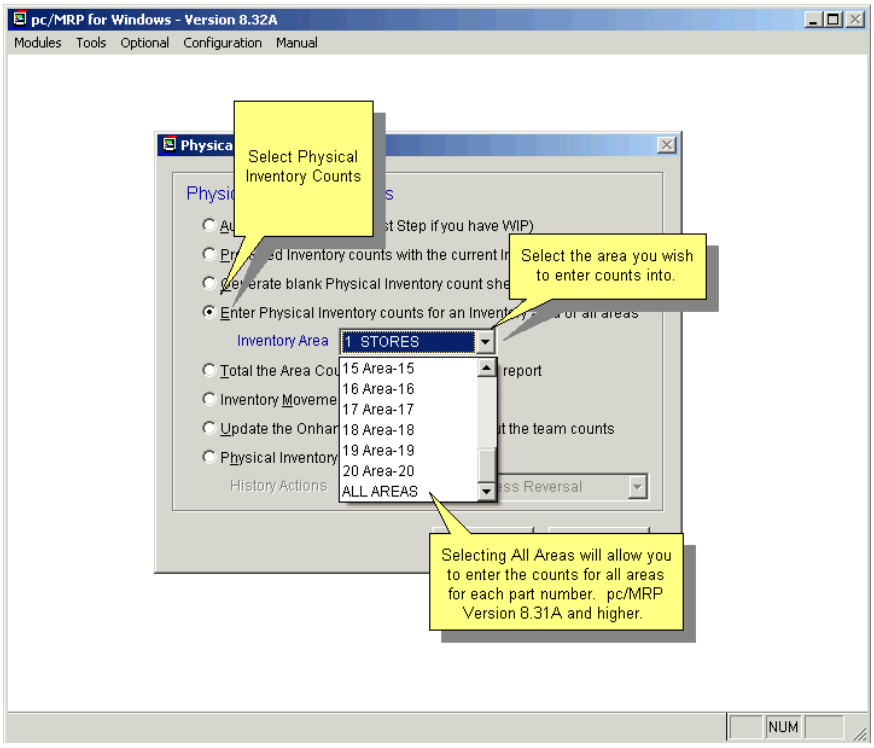
After you release the mouse button, this screen appears to show that the transfer went OK.



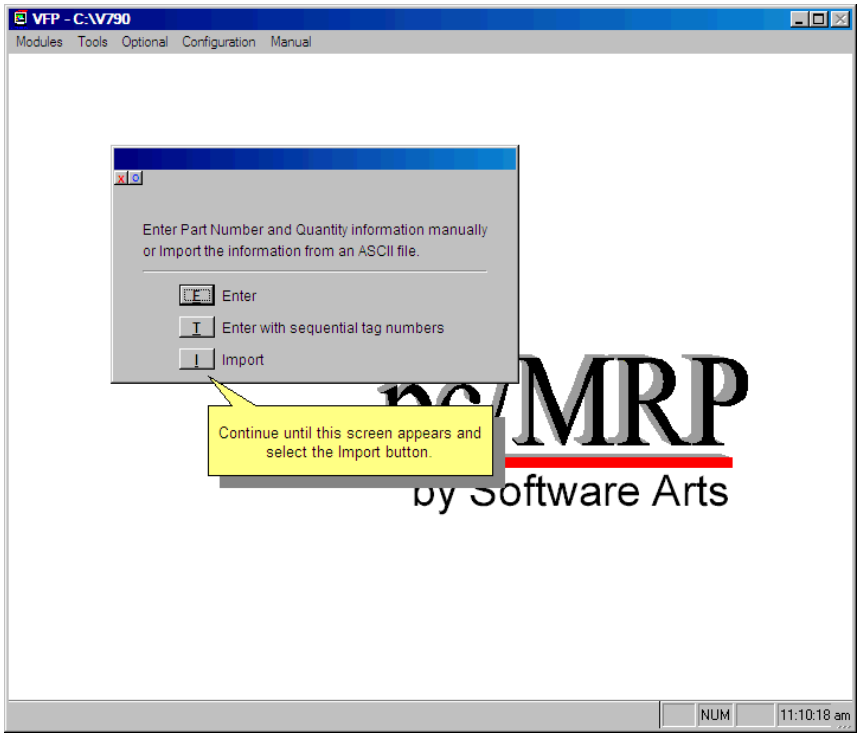
### 3.2.6 Import the downloaded data

To import the data with the Physical Inventory or Cycle Count, go to Modules, Inventory, Physical Inventory. For this example, Choose Physical.

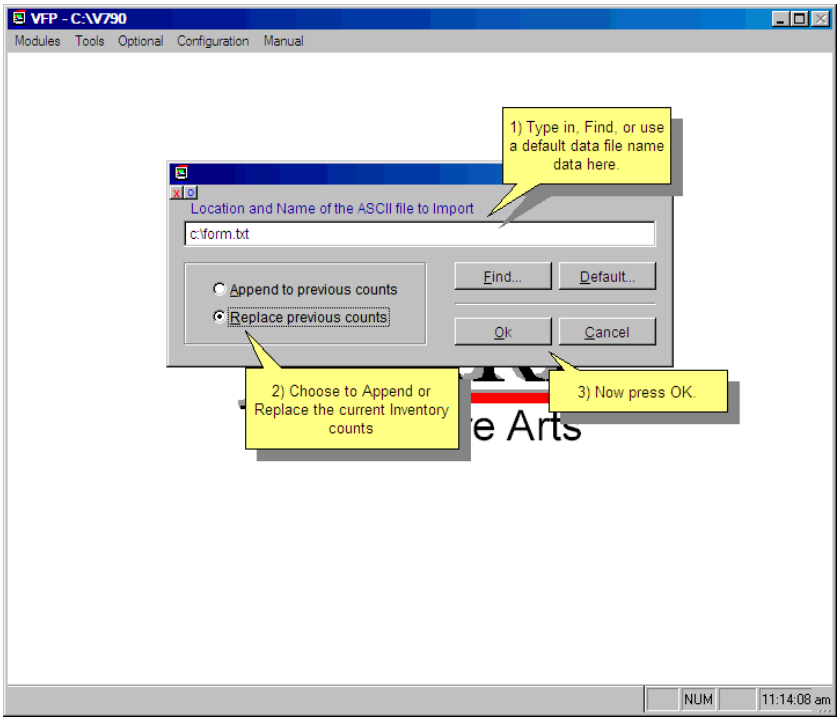
Select the area to receive the inventory counts.



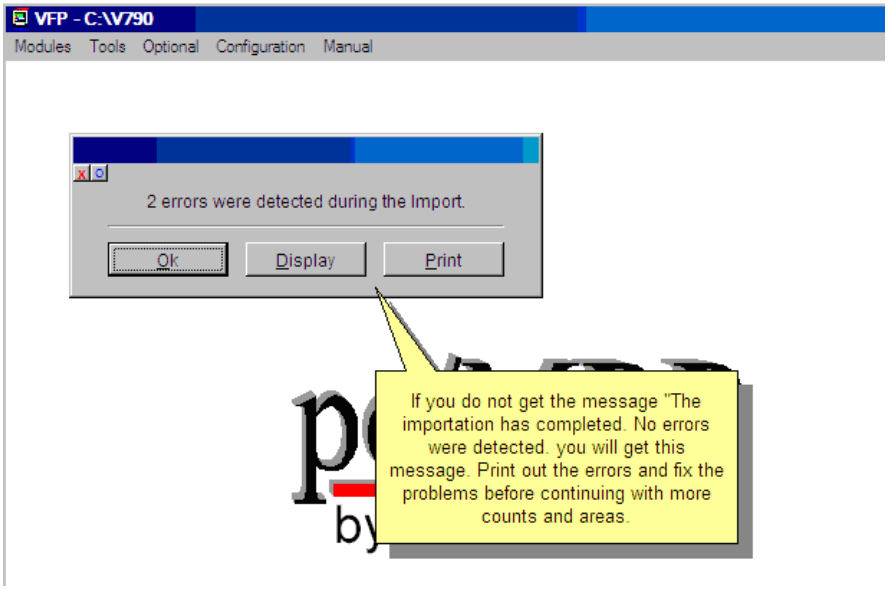

Select “Import” to get the data from the data file you created. (If using the HT630 see the previous section.)



Next: Select the saved inventory data file. Choose to append or replace counts. Press ‘OK’.




Most times, you will be replacing the previous inventory counts. A situation to “Append” would be where there are multiple storage areas for a part within a single ‘STORES’ area. The following screen appears (Hopefully you will not have any errors):



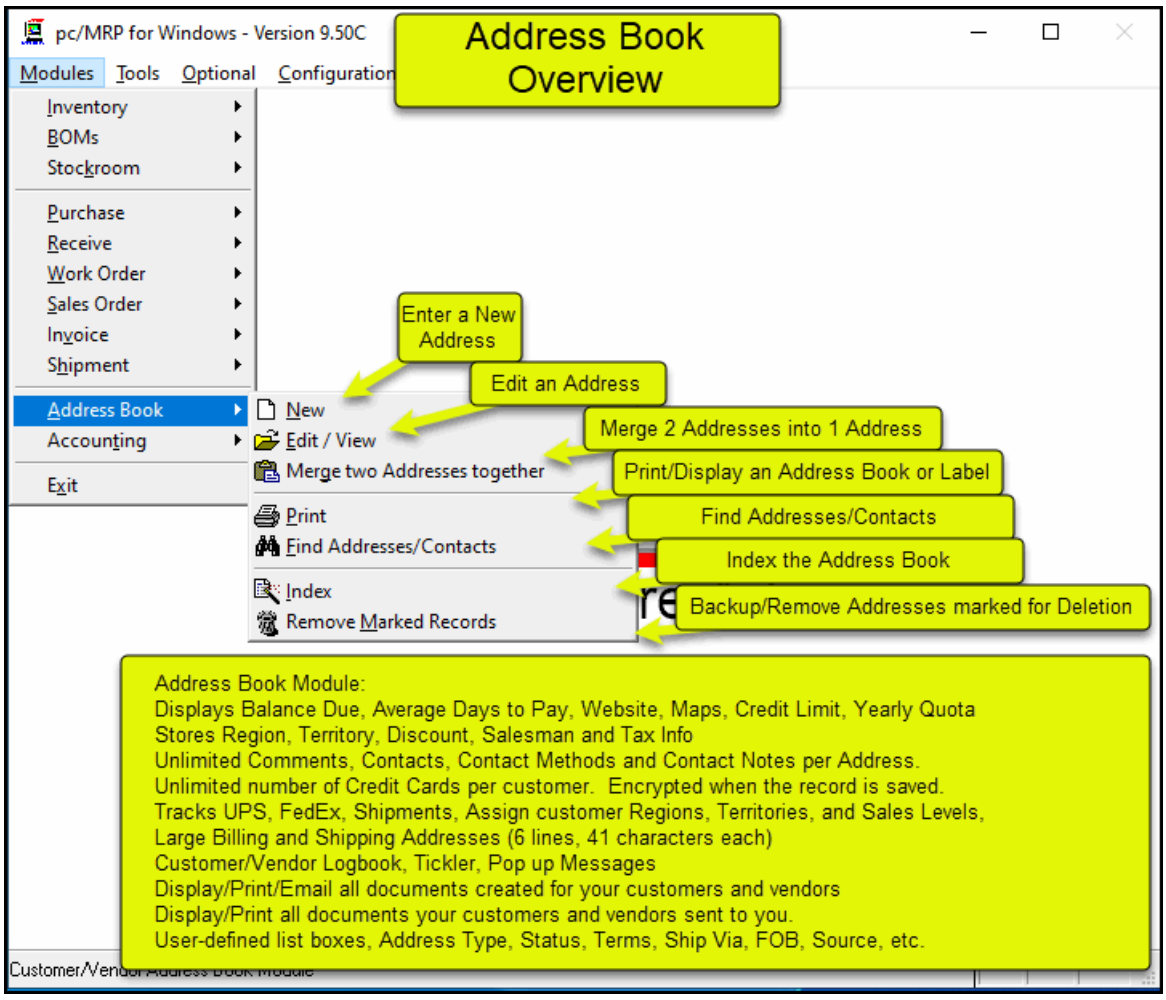

Correct any errors and re-process individually or in the next import. Now continue as described in Section 6.5 for your Physical Inventory.

### 3.2.7 Data Review

After entering all of your data into pc/MRP, be sure to perform an exhaustive data check. Make sure your accounting is online. Be sure to make all of the necessary changes in the Utilities and Configuration Module. Run several exploded BOM reports to make sure data was entered correctly. Perhaps, do one last check to make sure everything that is considered open, is still open. Everything considered to be in WIP is still in WIP. Where applicable, make the changes in pc/MRP to be representative of what really is going on.

# 4 Address Book Module

## 4.1 Address Book Overview




The Address Book Module in pc/MRP allows you to store, edit, and track information about customers, vendors, employees, and resellers. Address Book information is automatically imported into sales orders, purchase orders, sales quotes, and purchase request for quotes. The Address Book will be your primary source for customer and vendor data. The addrbook.dbf file is partially encrypted as credit card numbers are stored in this data base file. An on-line slideshow is located here: http://www.pcmrp.com/mrp101/addressoverview.htm

## 4.2 Enter a New Address

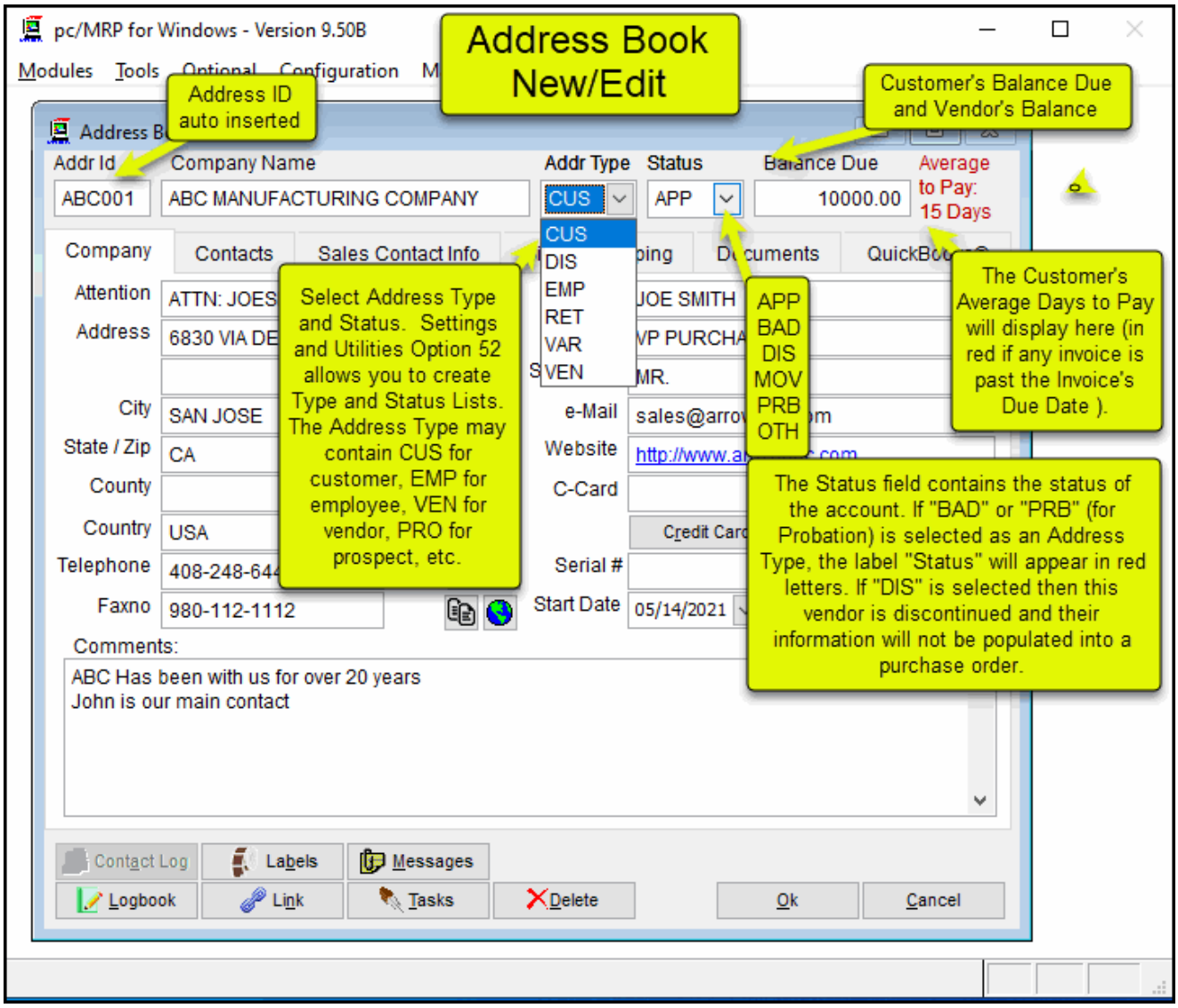
### 4.2.1 Enter a New Address

To enter a new customer or vendor address, select Modules, Address Book, and New. Enter the company name or last name of the person whose address you wish to enter.

### 4.2.2 Import Address (optional)

If you have a common base address for numerous clients at the same address, check Import Address. The pop up screen will ask if you wish to import address information from another address. Answer Yes, if you have a common base address for numerous clients at one location and do not wish to keep typing in the same address repeatedly.

### 4.2.3 Enter Company Type and Status

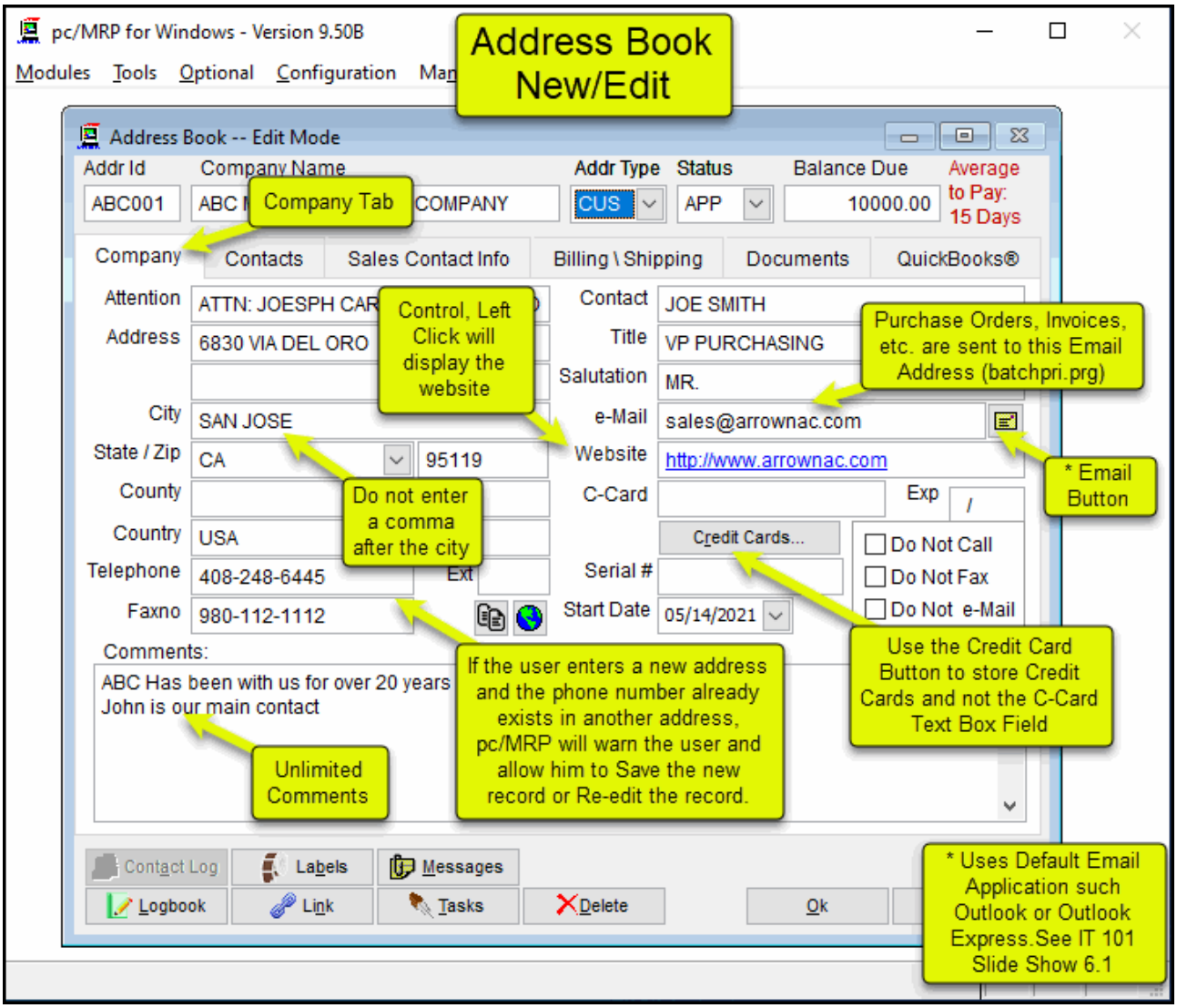



The **Address ID** Code (id) will consist of the first three alpha characters of the name followed by three numeric digits. For example, Hewlett Packard would be coded HEW001. If there were already an HEW001 in the address book, pc/MRP would assign HEW002 as the address ID code. You can override the pc/MRP ID code and enter any code you wish. We do recommend the address ID code contain some significance so that it is easier to begin scrolling close to the address you are looking for.

The **Address Type** (type) and **Status** (status) are user definable fields. The contents of these fields can be modified through Option 52 in pc/MRP's settings and utilities module. The **Address Type** may contain CUS for customer, EMP for employee, VEN for vendor, PRO for prospect, etc. In the **Status** field, if "BAD" or “PRB” (for Probation) is selected, the Status label will appear in red color, as a warning. If DIS is selected then this vendor is discontinued and their information will not be populated into a purchase order. For more information about the Status field, see Section 4.3.

The **Balance Due** field contains the current balance for the customer. For VEN type addresses only, BALANCE OWED contains the current balance owed to the vendor. In addition the **Average Days to Pay** will appear next to the balance. This will be displayed in red if there is an unpaid invoice that is past the **Due Date** shown on the Invoice.

### 4.2.4 Enter Company Information on Company Tab Page




The Company page of the address book data entry screen allows you to enter the following: Attention, Street Address, City, Zip Code, Country, Phone Number, FAX Number, Contact, Title, Salutation, Email Address, Credit Card Number and Expiration Date, Serial Number, Start Date and unlimited Comment information.

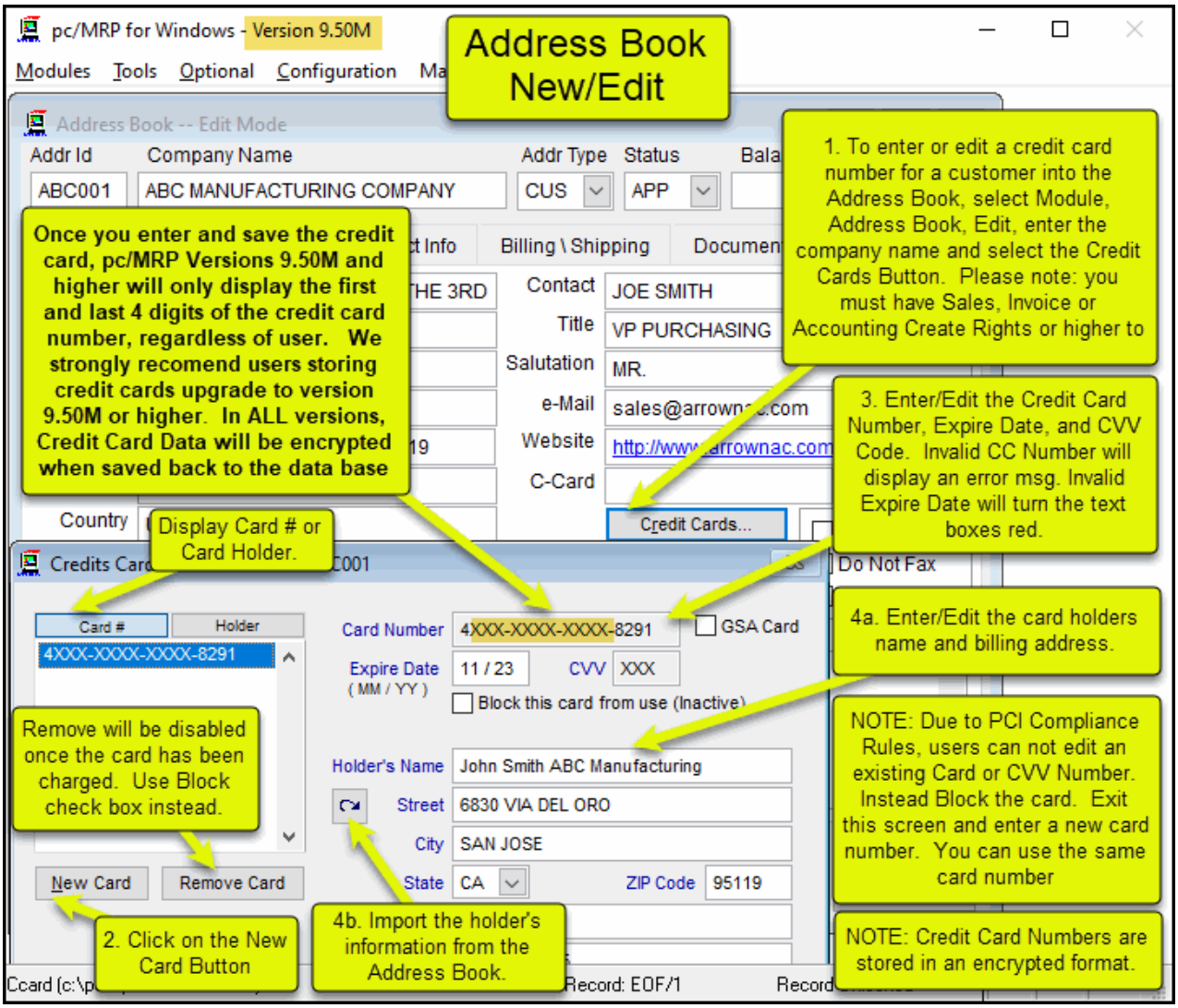
**Note:** The allowable ASCII characters for the Addresses, Part numbers, Phone numbers, and Description fields are:
upper & lowercase alpha 65(A)-90(Z), 97(a)-122(z), numeric 0-9, and these special characters:
,./<>?;':()[]{}-=_+!@#$%^&*”

The **Email** button allows integration with Microsoft Outlook to start an Email.

Hold down the Ctrl key and click on the **Website** address to go to the website.

Do not enter a comma after the city as this would keep the state from printing out on a check.

### 4.2.5 Enter Credit Card Numbers for a Customer's Address



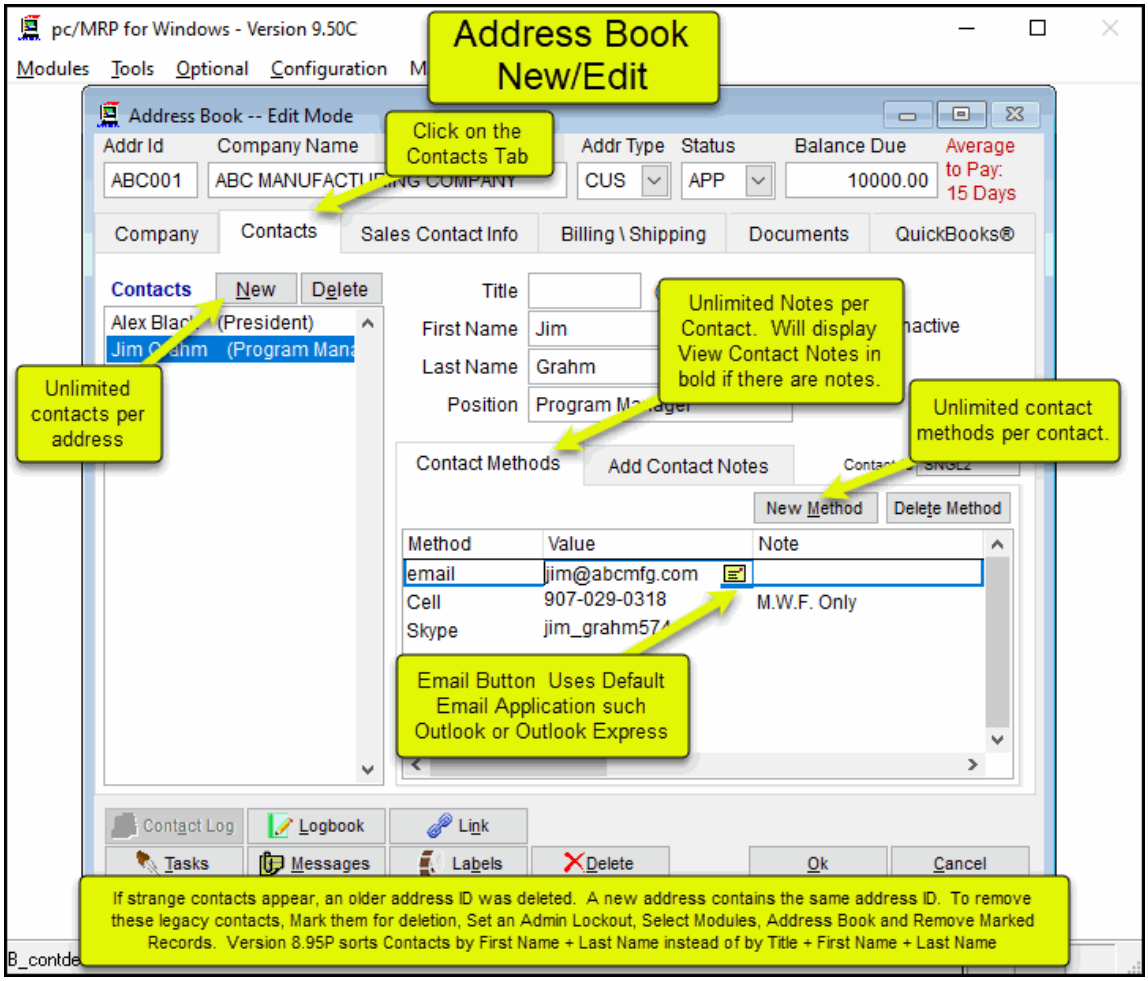

**Note:** The **C-Card** field on the Company tab is no longer in use in pc/MRP. Please do not use this field to store your customers' credit card number. This value will be seen by any user that has at least View rights to the Address Book module.
The **Credit Cards...** will be encrypted whenever the address record is saved and stored in the address book data base file. The encrypted credit card numbers will only be visible for users with higher rights. You can enter several credit cards here, and mark them as Inactive if needed. You can import the address of your choice from the Address Book.

The more information you add to the Credit Cards associated with XXX999 (customer ID) screen, the greater possibility for a lower processing rate from your credit card processor.

### 4.2.6 Display a map for the Address

Press the Show Map Button to display a map of the address. Your computer must be connected to the internet for this to work.

### 4.2.7 Enter Unlimited Contact Information




**Contacts:**

- **Title** (title) is 12 characters.
- **First Name** (firstname) is 30 characters.
- **Last Name** (lastname) is 30 characters.
- **Position** (position) is 40 characters.
- **Inactive** (inactive) is a 1 byte logical field of true/false.

**Contact Methods**:

- **Method** (method) is 20 characters.
- **Value** (value) is 50 characters.
- **Note** (note) is 50 characters.

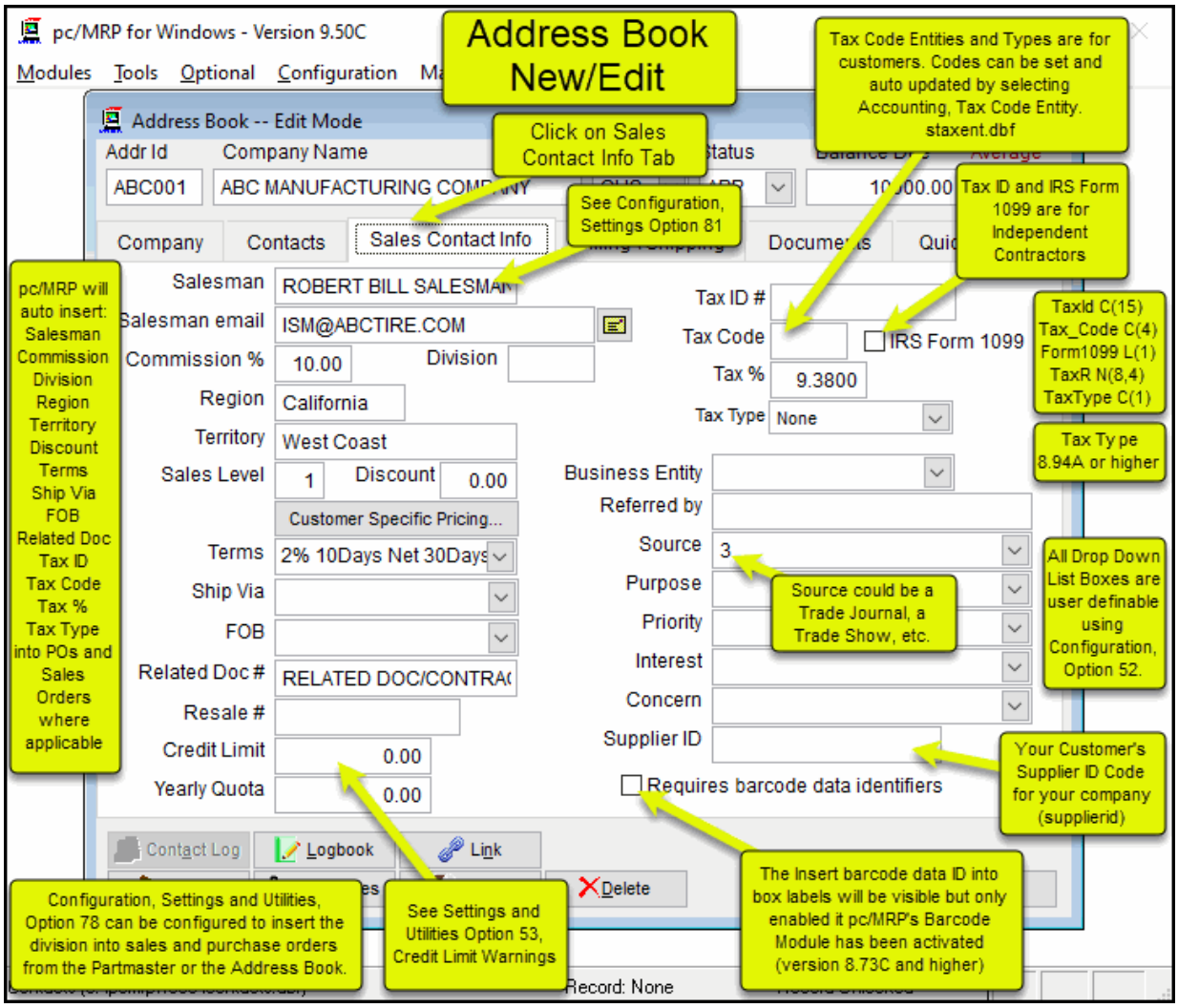
**Contact Notes** (notes) is a memo field of unlimited length. View Contact Notes is displayed in bold if there are any notes.

To enter a contact:

1. Press the **New** button to enter a new contact; you can also enter one contact method at this time.
2. Press the **New Method** button to add more contact methods for this contact.
    a. If you use '**Email**' as a method, an email icon will show at the end of a correctly formatted email address that is entered.
    b. Any other method value is free form data.
    c. A note value is free form text.
3. You can press the **Delete Method** button to delete the currently selected method.

To delete a contact, just press the **Delete** contact button next to the New button.

### 4.2.8 Enter a New Address, Step 5, Enter Company Contact and Tax Information




The **Salesman, Commission, Region**, and **Territory Fields** may be used to track customers and salespersons. Every time a sales order is entered for a customer, the data from these fields will be automatically entered into the sales and invoice records. If sales commissions are based on products, enter the salesman and sales commission in the Inventory Module. Note: Configuration, Settings and Utilities, Option 81 sets whether the sales commission should come from the Inventory or from the Address Book.

The **Salesman Email** address field contains the salesperson's email address.

If your company has divisions and/or departments, the first two digits of the **Division** Field should contain the Division Number and the second two digits should contain the department number. This would match the last 4 digits of the 8 character chart of accounts number if you are using pc/MRP's Accounting Module. (See Section 14.3.1.2 in this Manual.)

The **Sales Level** field is used to determine if a customer will be invoiced for a sales level 1, 2, 3, 4, or 5 price qty breaks listed for the item. Default is 1. If a customer is set at a higher level than there are prices for, pc/MRP will drop down to the next level that does contain prices. For details see Chapter 5.1.2.8.1 in this Manual.

The **Discount** field contains the trade discount for customers or vendors. Default is 0. For accounting purposes, do not include the *Terms* discount in with the *Trade* discount, as you never know if the customer will pay their bill in time to get the terms discount.

**Note:** If a Sales Level and a Discount both have values, both are used in the calculation.

The **Terms** field can hold default terms for this customer. If the Address Book contains Terms value for a customer, pc/MRP will automatically insert the terms in the Address Book into the sales order. If there was already a terms value in the sales order, the overwritten value will turn red and a tool-tip-message explanation appears. If users click into the field (acknowledge the value), the red color changes to black.

The **Related Document Number** field can be used to store a contract number for this address. Whenever a purchase order or sales order is entered, the related document number is transferred to the purchase or sales order's related document field.

The **Resale Number** field can be used to store the customer's state sales tax resale number.

The **Credit Limit** field allows a credit limit to be established for each customer. **Option 53** in the settings and utilities menu, enables or disables a warning message from popping up if the total of a new sales order plus any existing open invoices exceeds the customer's credit limit. In addition Option 53 will also allow you to establish an override password. Later when scrolling the addresses, any address whose balance exceeds their credit limit, will be displayed in red letters.

The **Yearly Quota** field stores the yearly quota goal for each customer. This field is used in an optional sales analysis report to provide % to quota for each customer.

The **Tax Code** field stores the tax id number for each account. pc/MRP's accounting module allows users to enter and maintain a Tax ID data base file containing state and county tax rates for user defined tax code entities such as CA01, CA02, OR01, etc. When an entity's tax rate changes, the user would change the tax code entity's tax rate (in the Accounting Module) and then select "Update" to update the tax rate on all addresses that have that tax entity code. At this point the tax rate will automatically be entered into the Tax % field on this page. If you do not wish to use the Tax ID data file, and still need to have a tax included on the sales order, just enter a tax percent into the Tax % field manually.

The **Tax %** field contains the sales tax percent for each customer. Whenever a person enters a sales order and selects taxable, that customer's tax rate from the address book will automatically be inserted into the sales order. The Tax % field is automatically updated when the user updates the tax rates from the Accounting module (see Tax Code above).

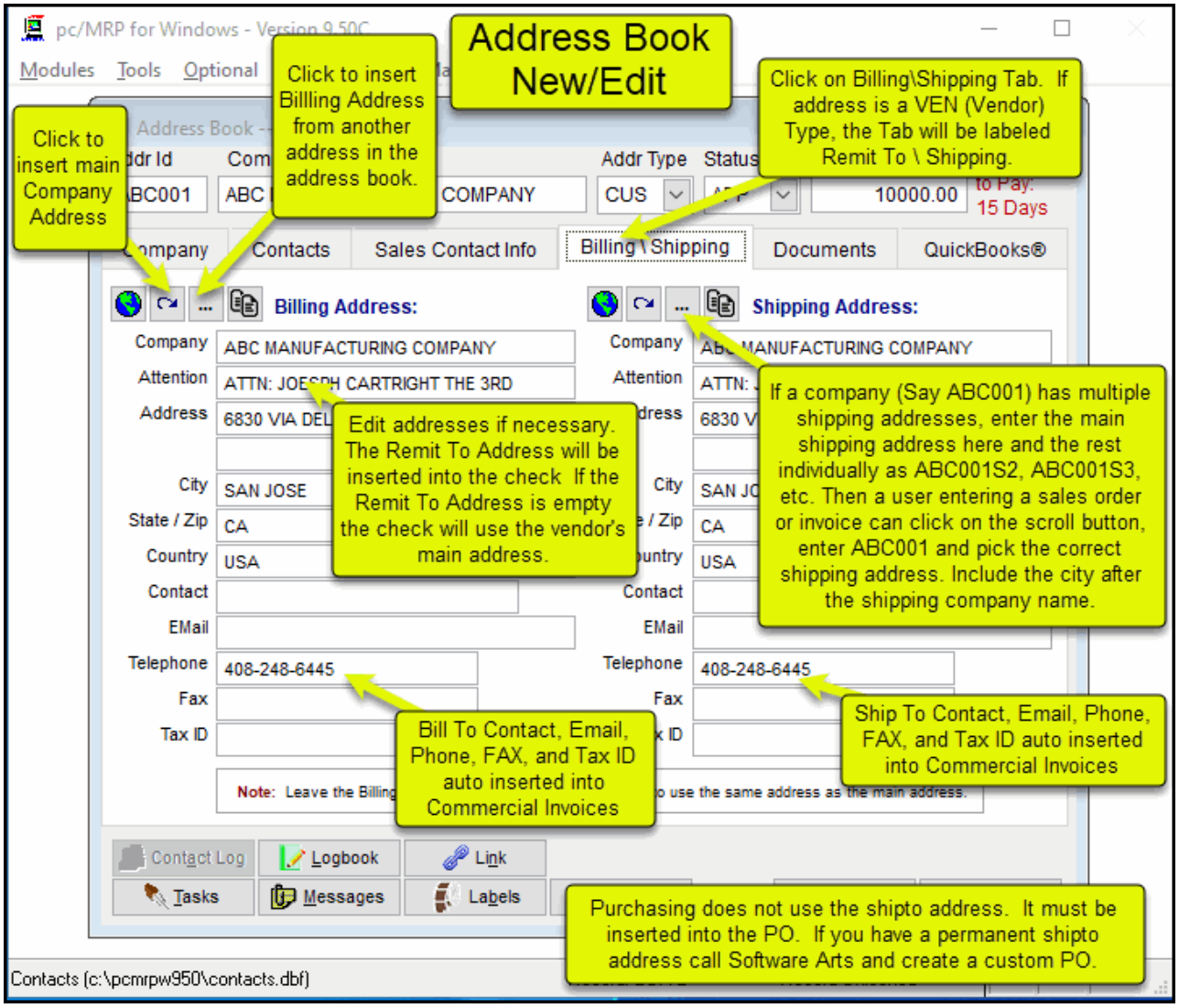
The **Tax Type** field can hold a default tax type for this customer. If the Address Book contains a Tax Type value for a customer, pc/MRP will automatically insert the tax type in the Address Book into the sales order. If there was already a tax type value in the sales order, the overwritten value will turn red and a tool-tip-message explanation appears.

Check the **IRS Form 1099** check box field if you expect you may need to print out a 1099 form for this customer in the future. At the end of the year, you can print out the 1099 forms and the 1099MISC by selecting Modules, Accounting and IRS Tax forms. See the Accounting Overview Chapter for further details.

The **Referred By** field can be used to store the name of the person or entity that referred this customer to you.

The **Source, Purpose, Priority, Interest,** and **Concern** fields are all user definable fields. These fields can be modified through **Option 52** in the settings and utilities. These entries allow pc/MRP to store additional personalized information about the entry and provide various address printouts, reports, and labels parsed to the user's specifications. **Priority** may contain a High, Low, or Medium designation. **Interests** may contain Golf, Soccer... **Concerns** could contain such things as quality, timelines, fair pricing. Inevitably, this allows Sales or any other department to keep detailed information on prospects, customers, and all entries to more efficiently meet the needs of people and their organizations.

### 4.2.9 Enter a New Address, Step 7, Enter Billing\Shipping or Remit To\Shipping Information



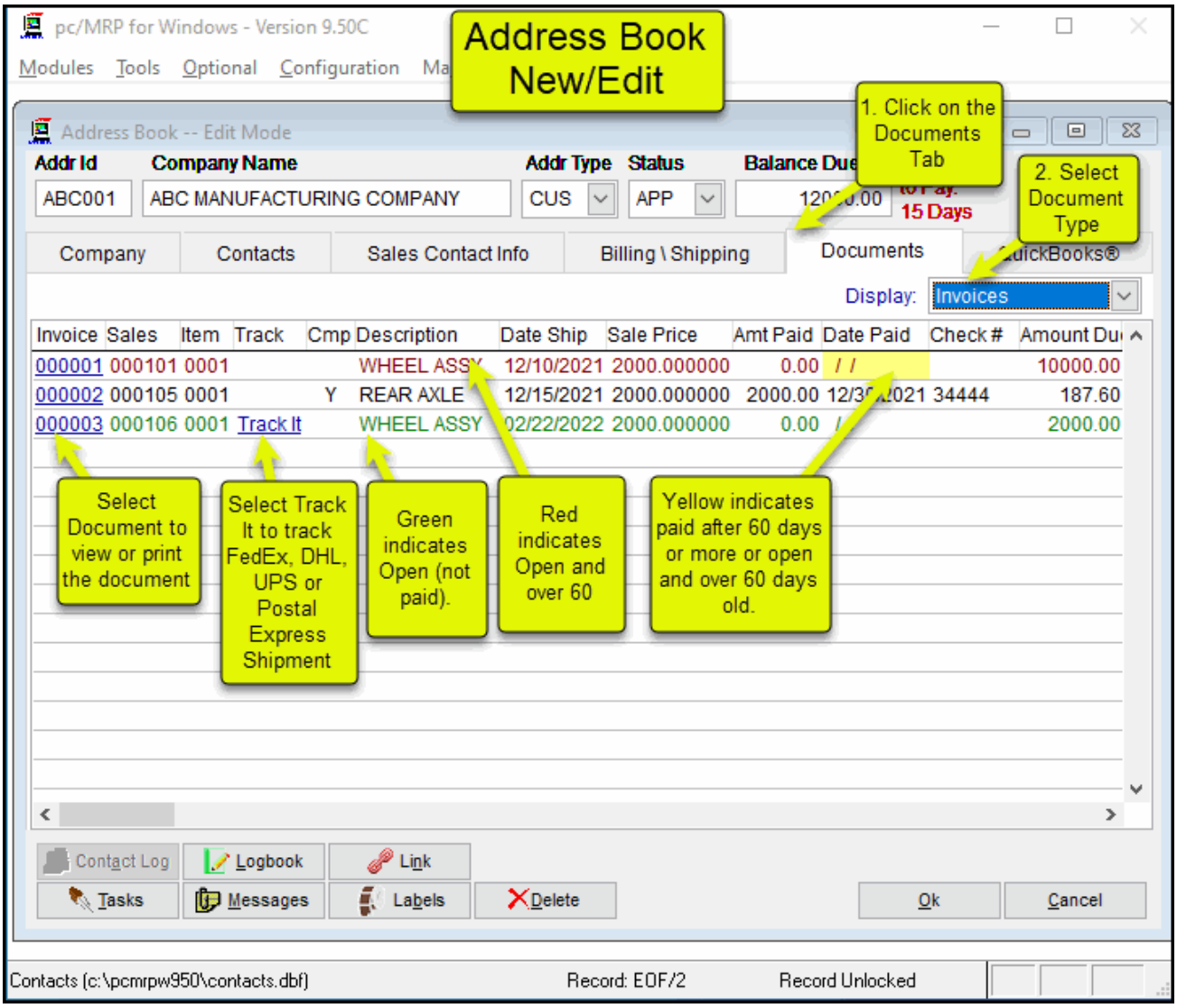

Whenever a sales order is created for a customer, pc/MRP will automatically insert the **Billing Address** and **Shipping Address** from this page. If you leave the Billing and Shipping Addresses blank, pc/MRP will insert the main customer address into a sales order's Billing and Shipping Addresses.

If you change the Address Type to vendor, **VEN**, then instead of a Billing Address, you can enter a **Remit to Address**. pc/MRP will use the Remit to Address when you print out a check for the vendor.

The **Billing and Shipping Address Buttons** will automatically insert the main address into the Billing and Shipping Fields.

The **Show Map Button** will display a map of the billing and shipping addresses.

### 4.2.10 Enter a New Address, Step 8, Documents Tab

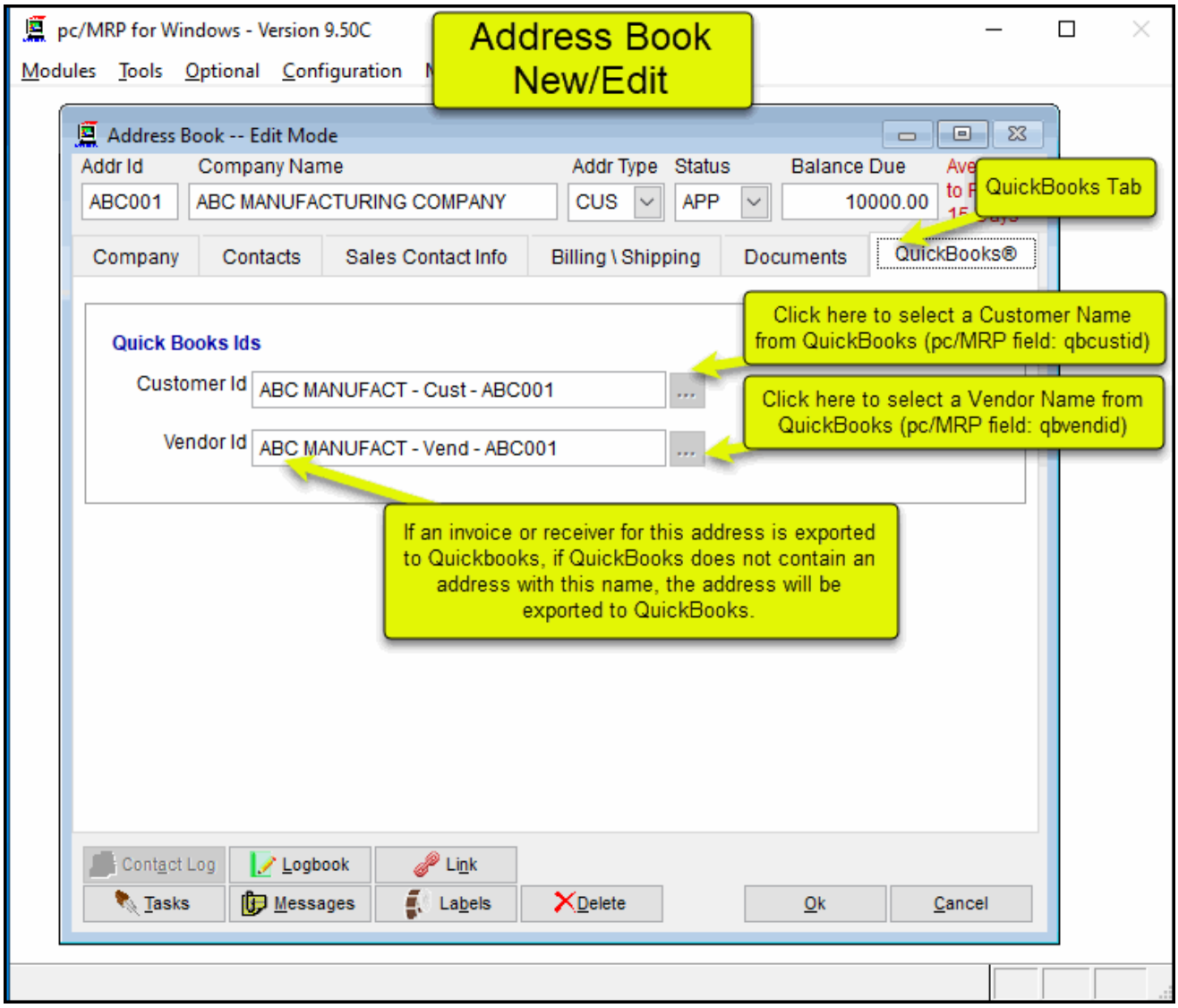



Selecting the Documents Tab will display all of the documents for this company that were created by pc/MRP, as shown above. (The documents for this company that were *not* created by pc/MRP can be linked using the File Links button, see Section 16 later in this Chapter.) When entering an address for the first time, this page will be empty. However in the future this page will fill up with all pc/MRP documents (Purchase Orders, Receivers, Invoices, etc) for this customer.

On the image above, rows are color-coded. Rows in black are complete (Complete equals Y). Rows in green are open (not Complete), rows in red are open and also over 60 days from invoice date. Invoices get a yellow background if paid after 59 days or open and over 59 days.

In addition pc/MRP will track UPS, FedEx, DHL, and U.S. Postal Service packages provided the document contains a valid tracking number. The user must have Internet Explorer installed to track DHL and U.S. Postal Service packages.

### 4.2.11 Enter a New Address, Step 9, QuickBooks Tab (QuickBooks Users Only)



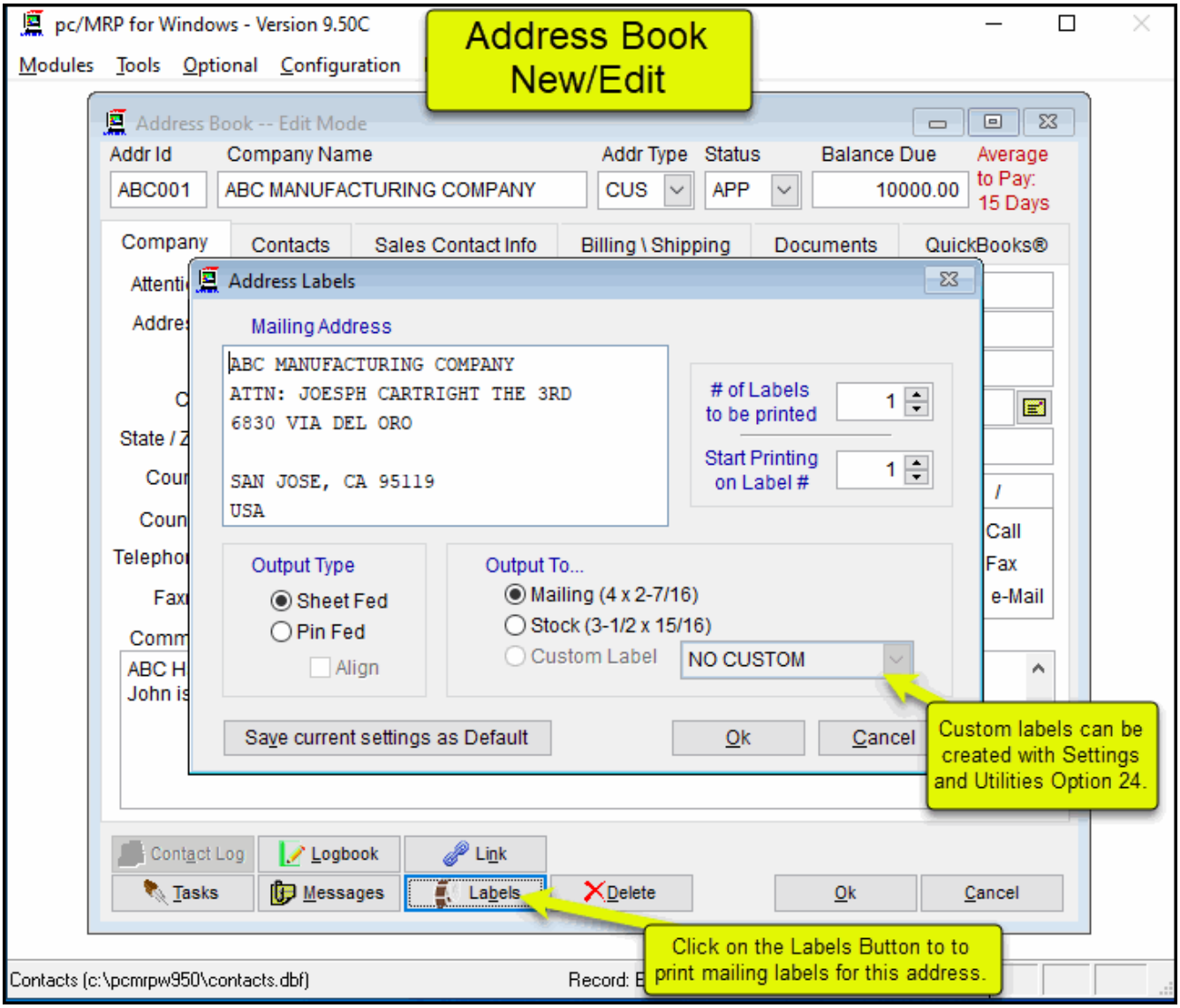

The QuickBooks Tab is only visible for users who have purchased pc/MRP's Optional QuickBooks Interface Module.

If the addresses are imported from QuickBooks, pc/MRP's Customer and Vendor ID fields will match the Customer and Vendor Name Fields in QuickBooks.

If you are entering a new address that does not exist in QuickBooks, the fields will be blank. Enter the Customer and or Vendor Name that is to go into QuickBooks. If you do not enter a name, pc/MRP will automatically fill out these fields as shown above.

If you are entering a new address that already exists in QuickBooks, make sure the QuickBooks Customer Id and/or Vendor Id matches the name field in QuickBooks (case does not matter). If they do not match, the address will be added to QuickBooks the first time it is listed as the vendor or customer on an exported receiver or invoice.

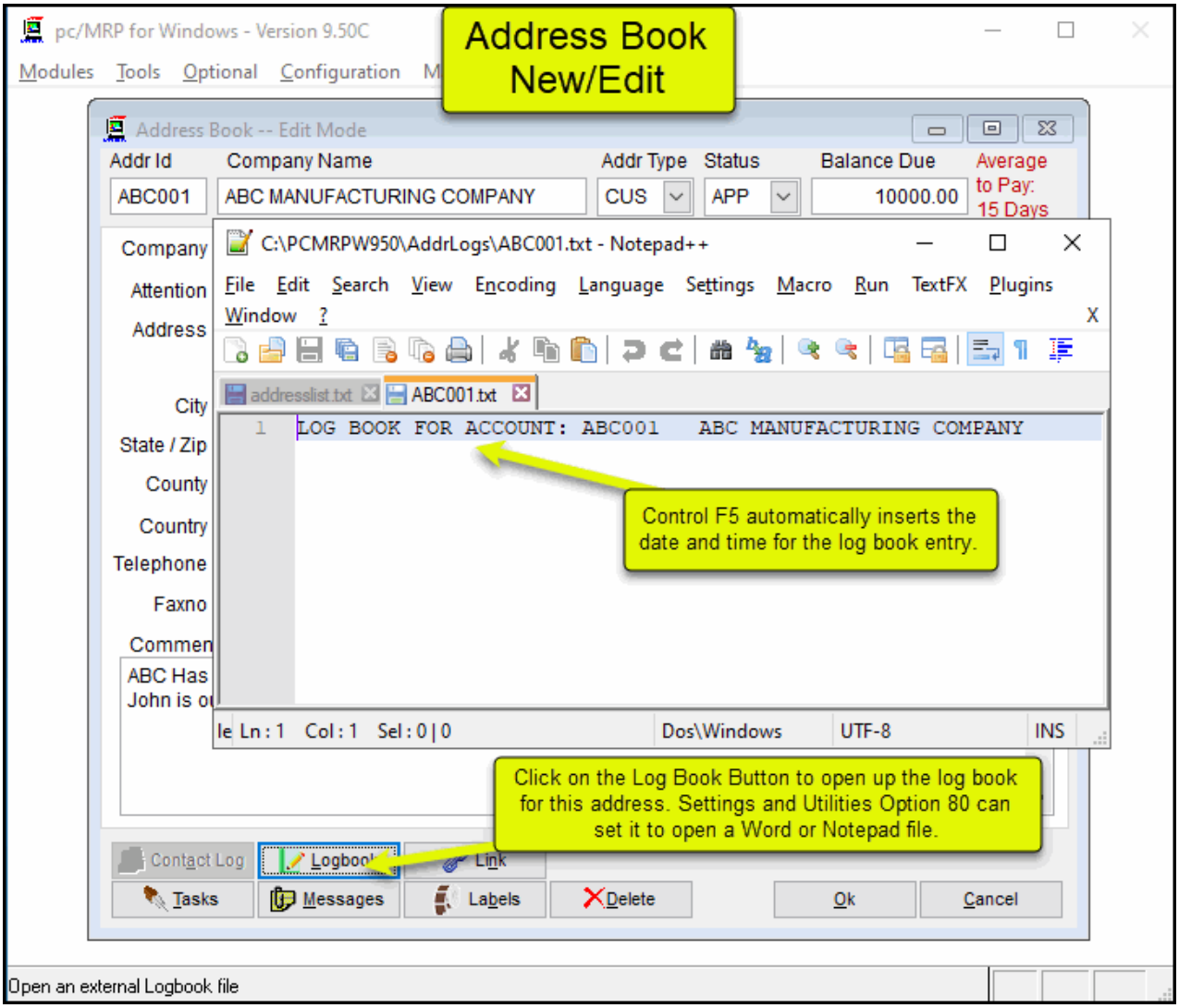
### 4.2.12 Enter a New Address, Step 10, Print Address Labels




The **Labels** button at the bottom of the page will allow you to create shipping labels for this address entry. The labels used here are: ADDRLBM.LBX, ADDRLBS.LBX, and ADDRLBS2.LBX

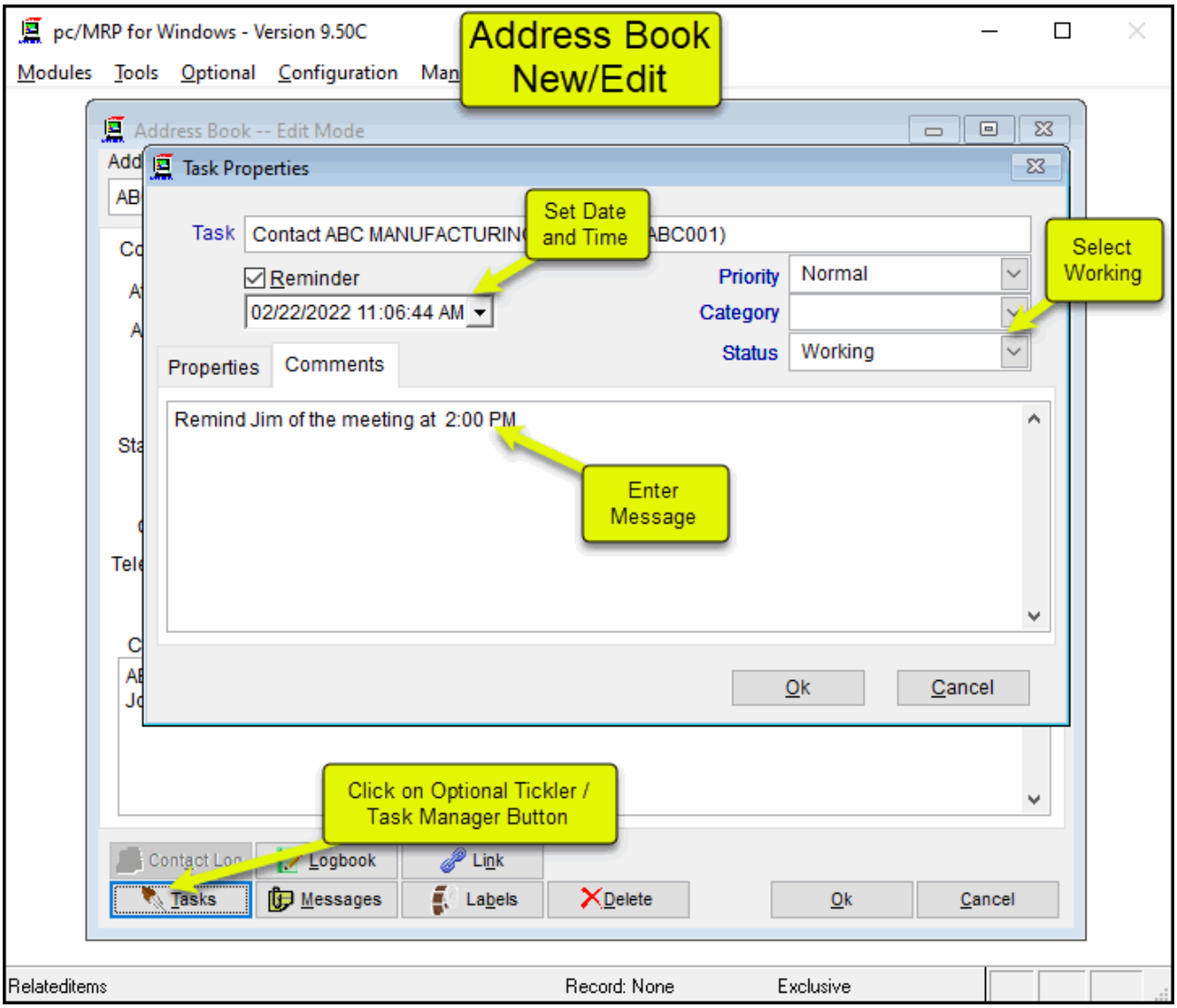
Also see Section 4.5 about printing address labels.

### 4.2.13 Enter a New Address, Step 11, Log Book



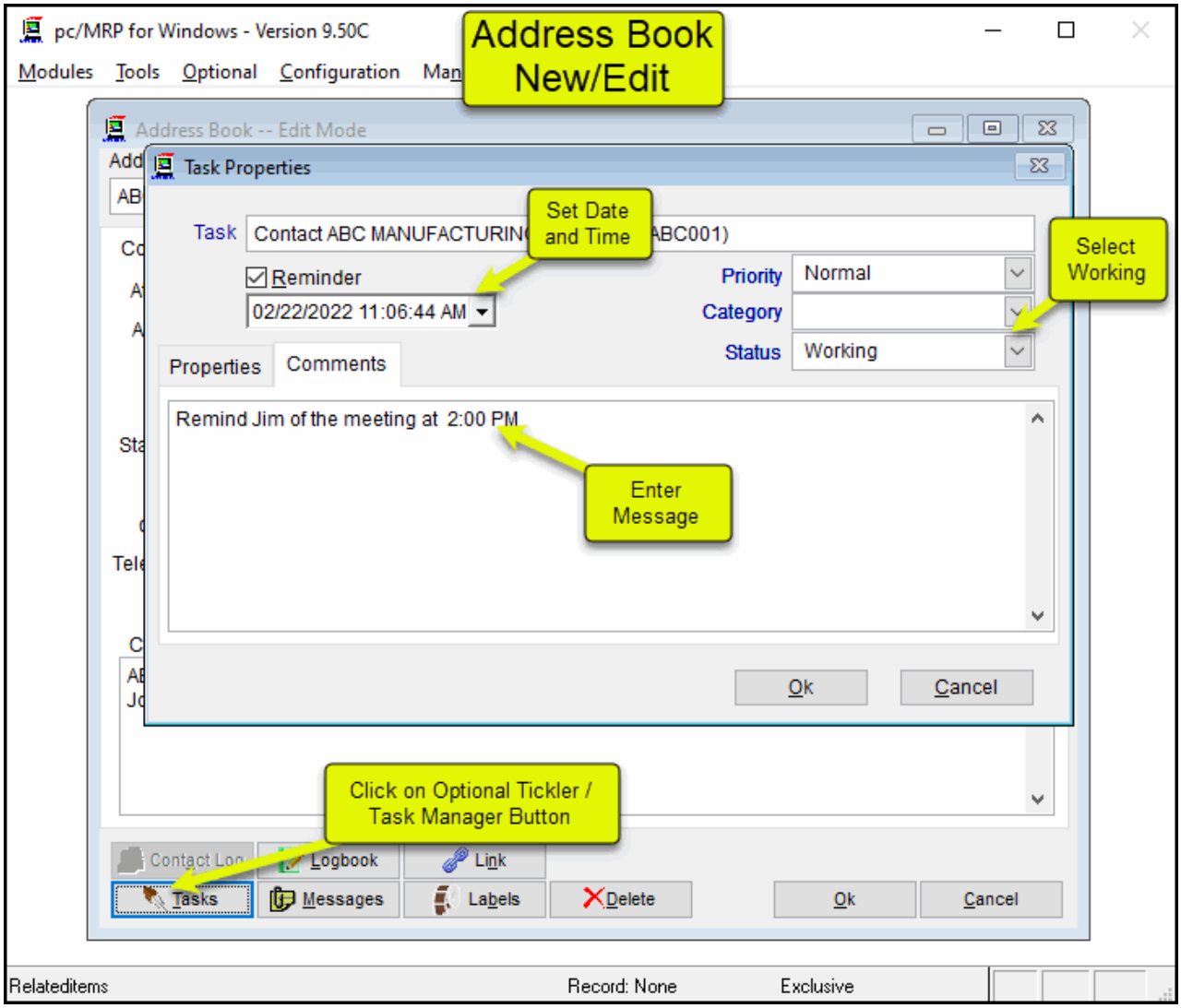

The **Logbook** button at the bottom of the page will allow you to enter a logbook for each customer and vendor to record conversations, commitments, etc. Settings and Utilities **Option 80** can set pc/MRP to open up a Notepad or Word file. Pressing the F5 key in Notepad will automatically enter the date and time into your notepad text.

### 4.2.14 Enter a New Address, Step 14, Create a tickler message for this address




Press the Tickler button to create a tickler message for this address. This option is only available to users who have purchased the Tickler/Task Manager Optional Module.

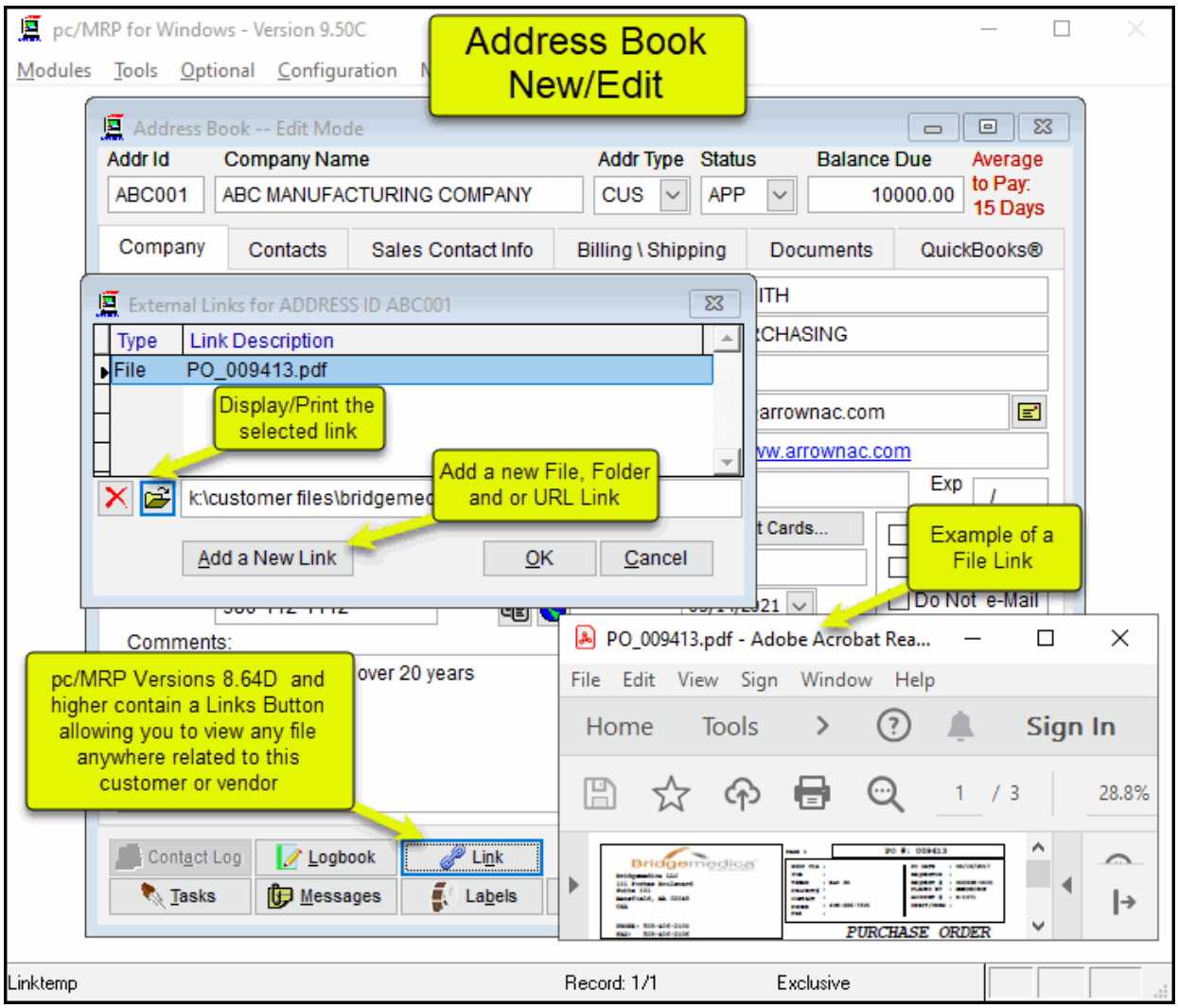
### 4.2.15 Enter a New Address, Step 12, Create Pop Up Messages for the Address




You can create **Pop-up Messages** that will appear when a user views this address, enters a sales order, enters a purchase order, etc. For example, you can make sure a message pops up warning the user to accept "Check or Credit Card Only" when a sales order is entered for this customer. The pop-up messages are stored in PopMsg.dbf. PopMsg contains the following fields: Module, Key, Icon, Title, Message and When.

Purchase Order Entry messages will be displayed when entering a PO, entering a purchase request, or converting a PR to a PO. Sales Order Entry messages will be displayed when entering a SO or entering a SQ.

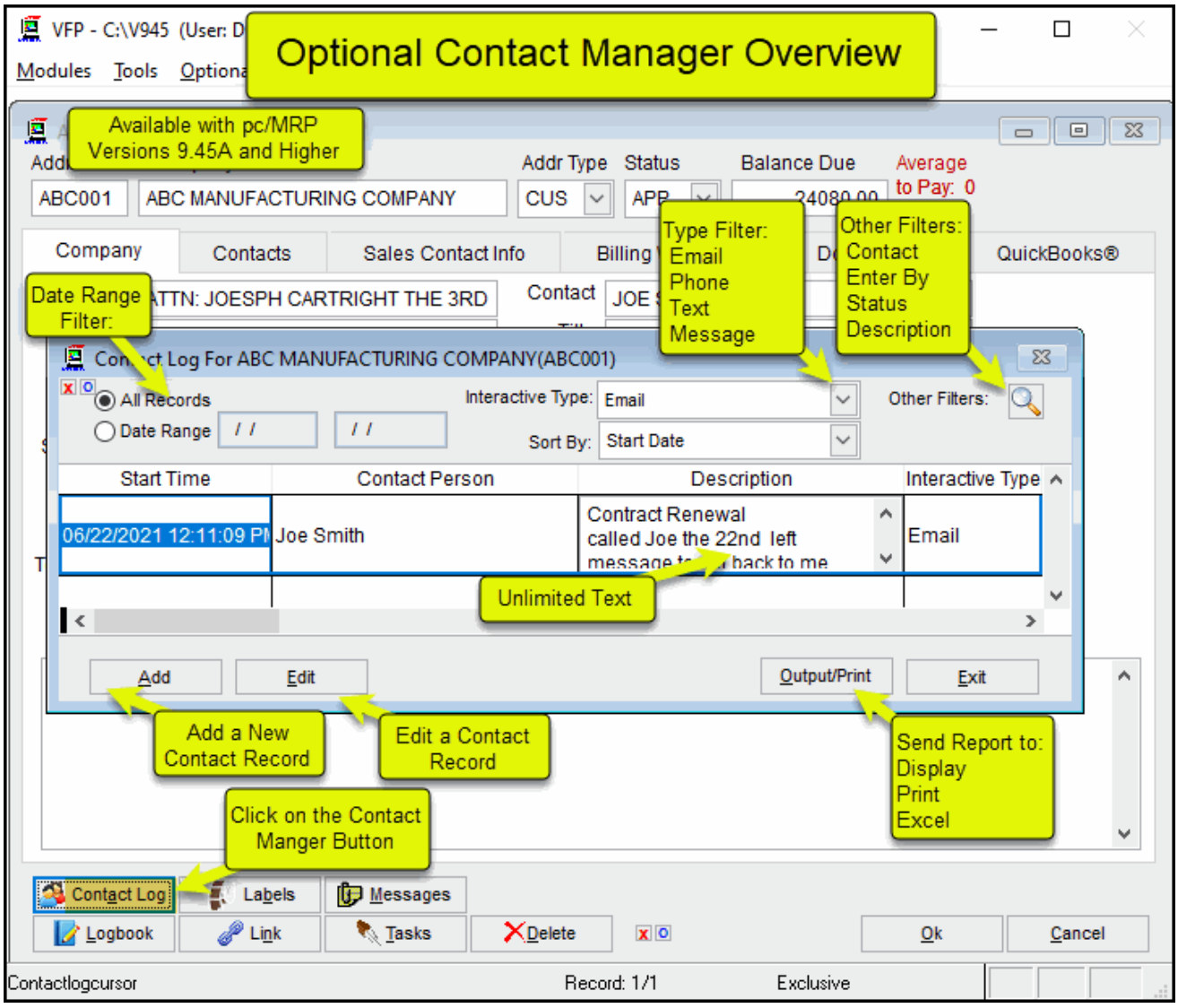
### 4.2.16 Enter a New Address, File Links




The File Links Button allows you to link unlimited number of files, folders or URLs to your customer or vendor. You can keep any documents not created by pc/MRP, like correspondence, .PDF or .DOC files, images, AutoCAD files, POs at your fingertips without leaving the address book.

Once you are finished entering the new address, press the OK Button down at the bottom of the Address Book screen.

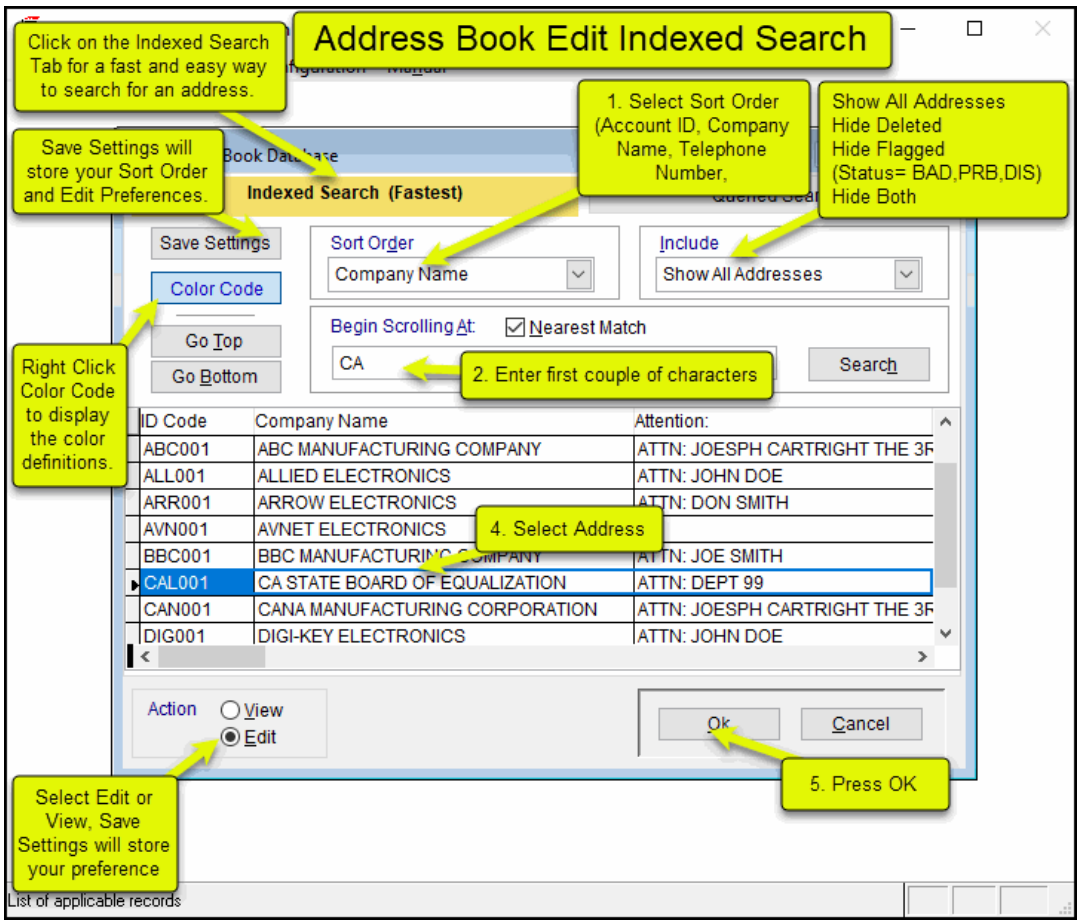
**4.2.17 Enter a New Address, Contact Manager Button**




pc/MRP's Contact Manager Button allows you to document discussions, emails and notes regarding your customer.

### 4.3 Edit an Address

Select Address Book, Edit/View.




This option allows users to scroll, edit, delete, undelete, or run queries against Address Book information.

- Selecting an **Indexed Search** allows users to search on indexed fields. This allows pc/MRP to find the information much faster. For further details, see Chapter 15.14.2

- Selecting to run a **Queried Search** allows users to build, run, save, and load queries for the Address Book table. For further details, see Chapter 15.14.1.

In the Address Book scroll window, “flagged addresses” (i.e. addresses with “BAD”, “DIS” or “PRB” in the Status field) will get a yellow background. Addresses marked for deletion get a red background. Users can exclude flagged and/or deleted addresses from being listed on the edit scroll screen. Any addresses, whose balance exceeds their credit limit, will be displayed in red letters. You can turn on/off the color coding by clicking on **Color Code**.

Almost every field in the Address Book is editable. However, users must understand the following key concept:
If you have changed the Address ID Code, a pop-up screen will ask, "Change Address ID Code through out all modules, purchasing, sales, etc". Answer Yes, if you wish to change the address ID code in every module. (It is recommended that you answer Yes, otherwise you might end up with many “orphan” records.

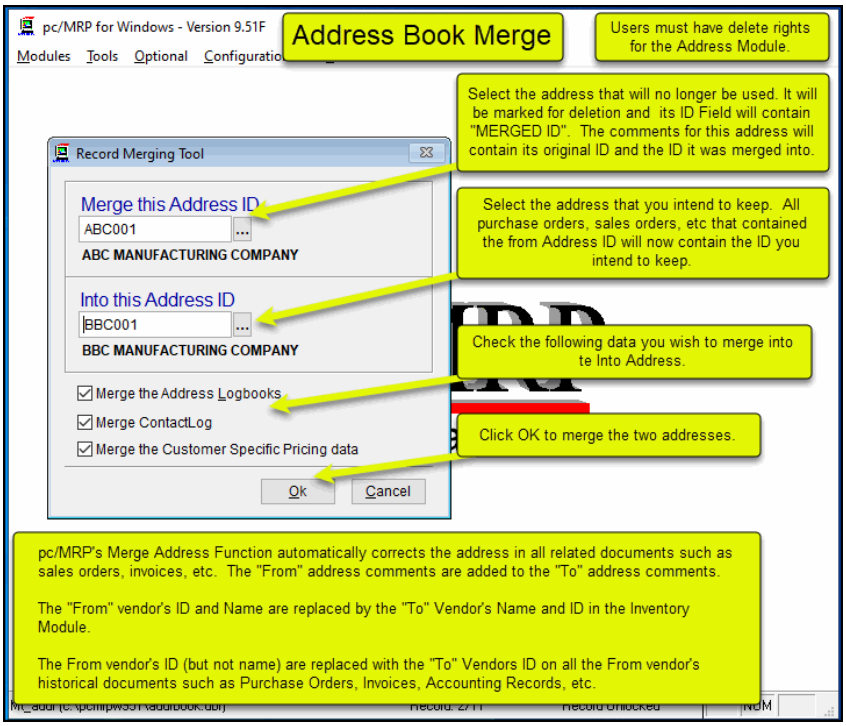
Use the **Delete** button to mark a record for deletion. Use the Undelete button to unmark the record for deletion. To permanently remove marked records from the database table, set an administrative lockout, and then select Address Book, Remove Marked Records.

Once you are finished editing the address, press the OK Button down at the bottom of the Address Book screen.

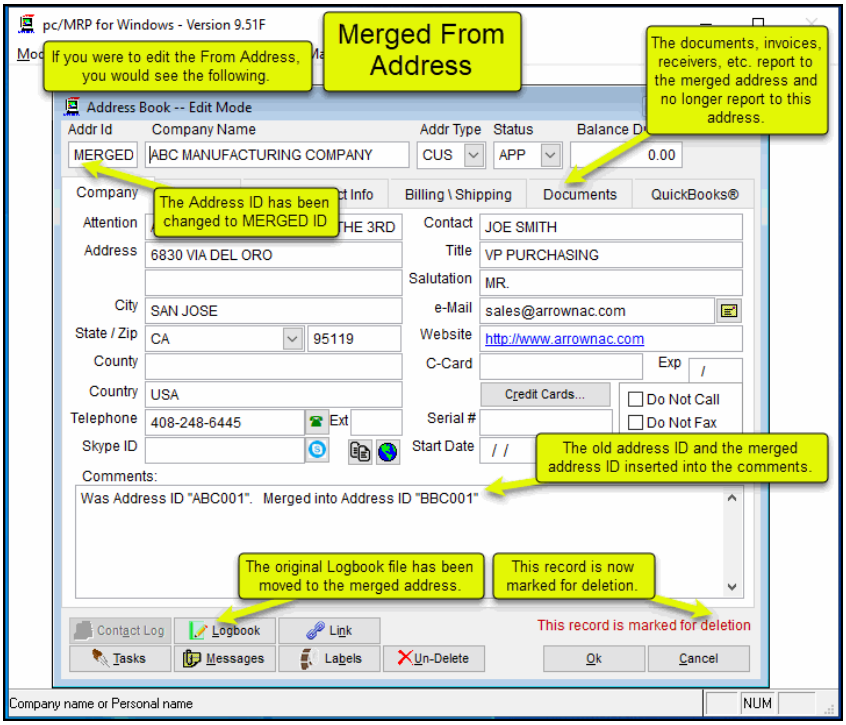
## 4.4 Merge Addresses

### 4.4.1 Merge Two Addresses Together

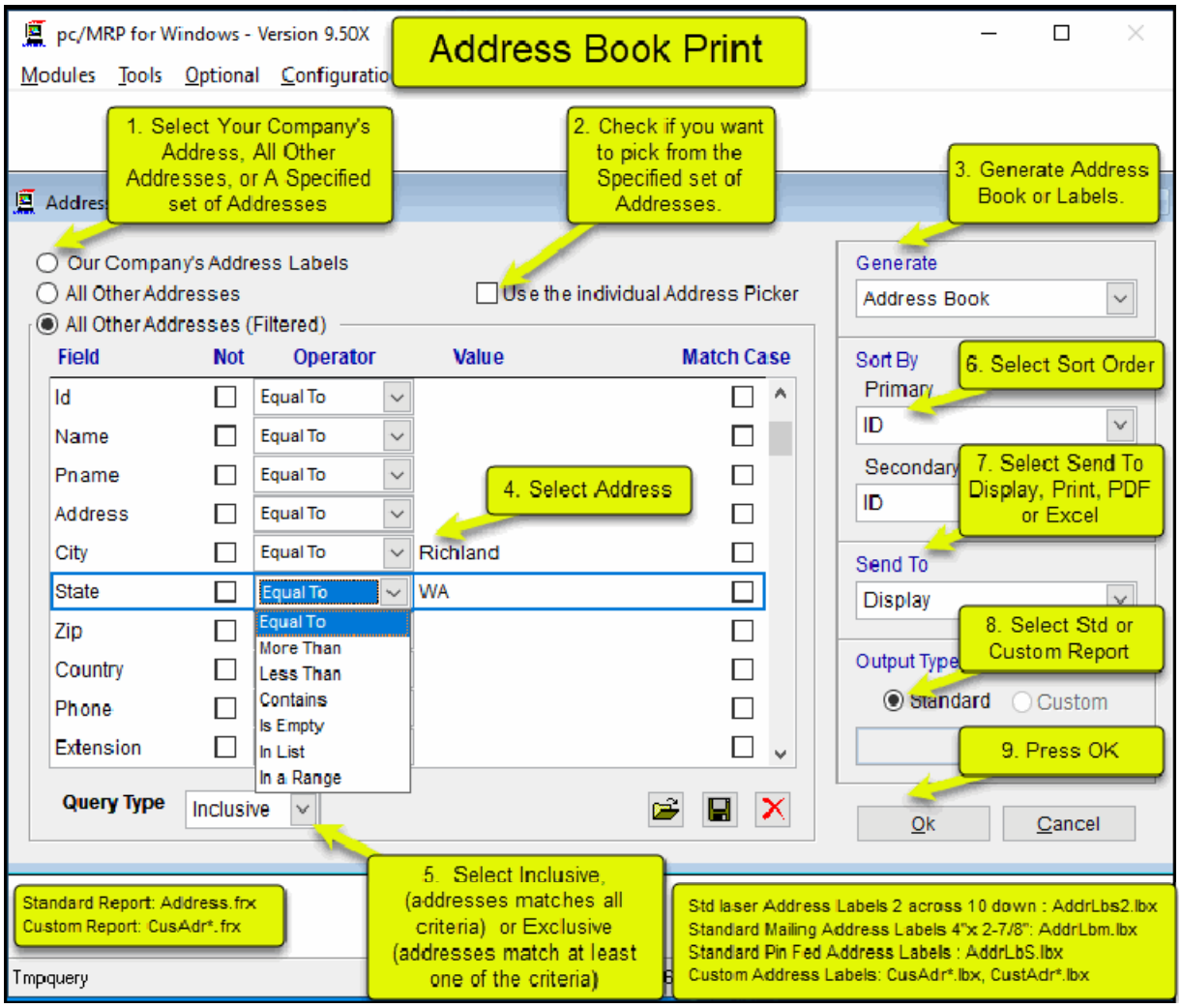
Select Address Book, Merge two Addresses together




### 4.4.2 From Address, After the Merge



## 4.5 Address Reports and Labels




To print out an address book or a series of labels, select Modules, Address Book, Print and the screen shown above will appear.

By example, let us say we wanted to know every customer who's City is Richland, their Current Balance is less than $1000.00, and their Interests are Golf.
You would select the **All Addresses (Filtered)** option. Then type Richland in the City line under **Value**. Or, you could type Rich, and select **Contains** for an **Operator**. Scroll down to **Curbal** and select **Less Than**, and write $1000.00 under **Value.** Select **Interest** and write in GOLF.
**Note:** For more information on running an address book query, please see Section 15.14.1.

Users can choose specific address entries after running the report by checking the **Use the individual Address Picker** box. After selecting the criteria for your query, you must decide what you wish to **Generate**. pc/MRP can generate: an **Address Book, Mailing Labels 4 X 2-7/16,** Or **Stock Labels 3-1/2 X 15/16**.

Any of the above may be **Sorted By** a **Primary** and or a **Secondary** field. The information can be sorted by: Address ID Code, Address Type, City, Concern, Country, Credit Limit, Current Balance, Date Entered, Interest, Phone, Priority, Purpose, Region, Salesman, Source, State, Tax Code, Territory, Yearly Quota, and Zip Code.

You can select where you wish the data to go to by selecting **Send Output To** and utilizing the drop down menu. pc/MRP can send output to: the Display, Print-Narrow, Print-Wide, An ASCII Text File, XLS File or a DBF File

By selecting a DBF file**,** users can import information onto word processing programs such as Word for creating form letters or catalogs. Specifically in Word, users can create a form letter by following these steps:

Create the desired Address Book by choosing the desired data and send it to a DBF file. Open Word and select **Tools**, **Mail Merge**. You will be prompted to complete three tasks:

1. Main Document. This is where you decide what you want to make with the merged data.
2. Data Source. This is where you select the DBF file created above.
3. Merge the data with the document. After performing these tasks, the merged information is made available through a drop down menu under the tool-bar in Word.

Through the drop down menu, double click the desired fields putting them in their desired locations and enter the desired text. Such fields as **Salutation, Contact Name,** and **Title** may be best utilized in these circumstances.

### 4.6 Find Addresses/Contacts

Your search will print out or display all addresses matching the partial description you entered.

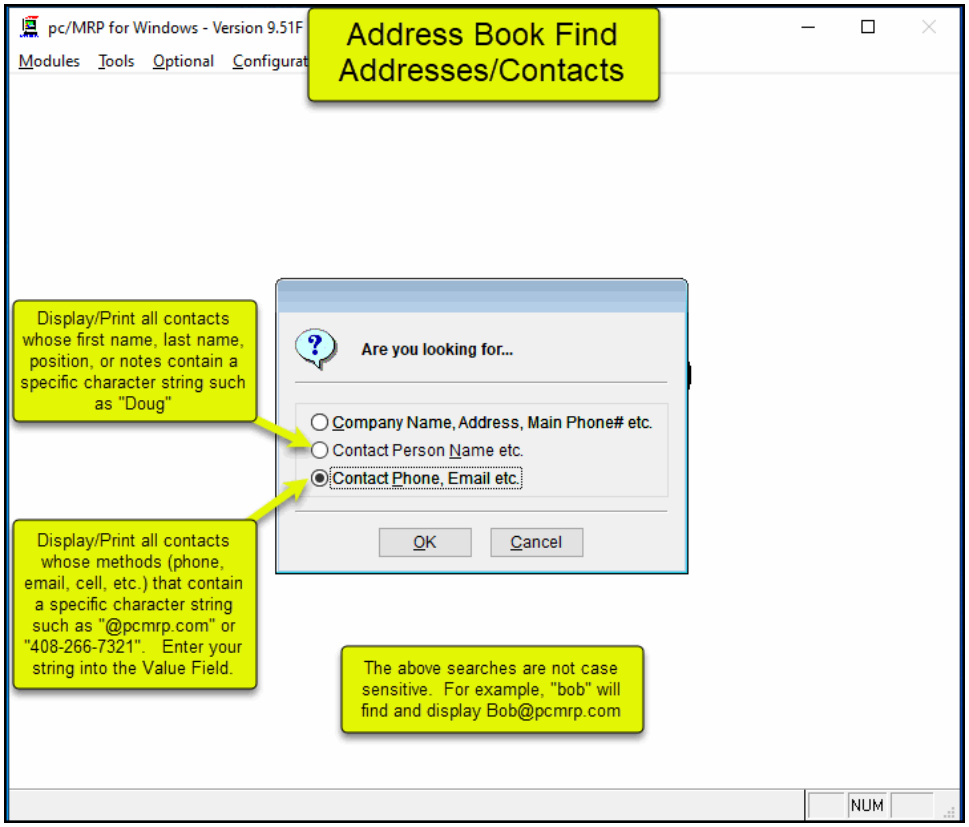
You can search for Company Information (name, address including both address lines, city, state, country, phone number or any text in the comment field).

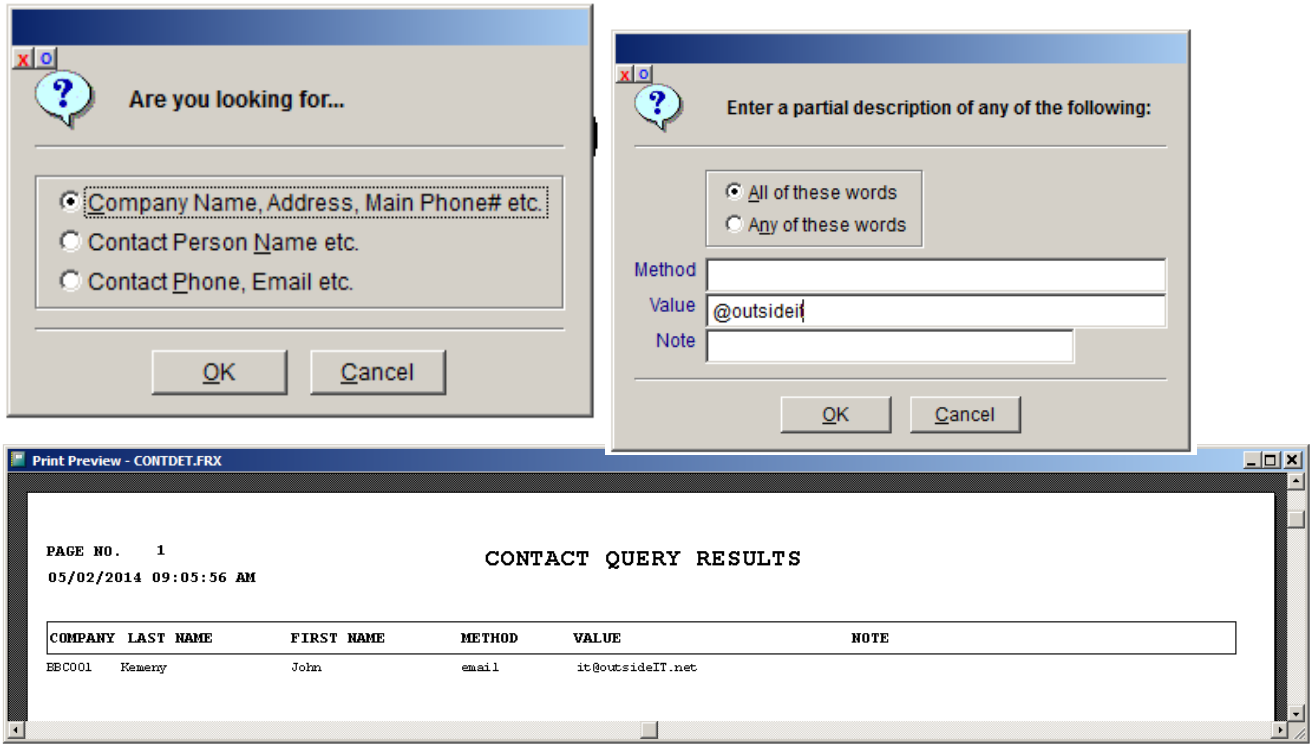
Search in Contacts offers first name, last name, position and text in notes.

Search in Contact Details offers contact method, email, phone number.  Example: Enter phone number in Value

All of these searches can be exclusive or inclusive (match all fields or any fields) and are case-insensitive.

This feature can be helpful when e.g. you only have an alternate email that is not of the company's domain email address, or a cell phone number, and need to find the main company.






### 4.7 Queried Search Overview (see 15.14.1)

### 4.8 Indexed Searches (see 15.14.2)

### 4.9 Index (see 15.14.3)

**Note:** This process will also reindex the database tables containing the credit card information, contacts and contact details, and (for all modules) the pop-up messages.

### 4.10 Remove Marked Records (see 15.14.4)

**Note:** This process will also remove marked records from the database tables containing the credit card information, contacts and contact details, and (for all modules) the pop-up messages.

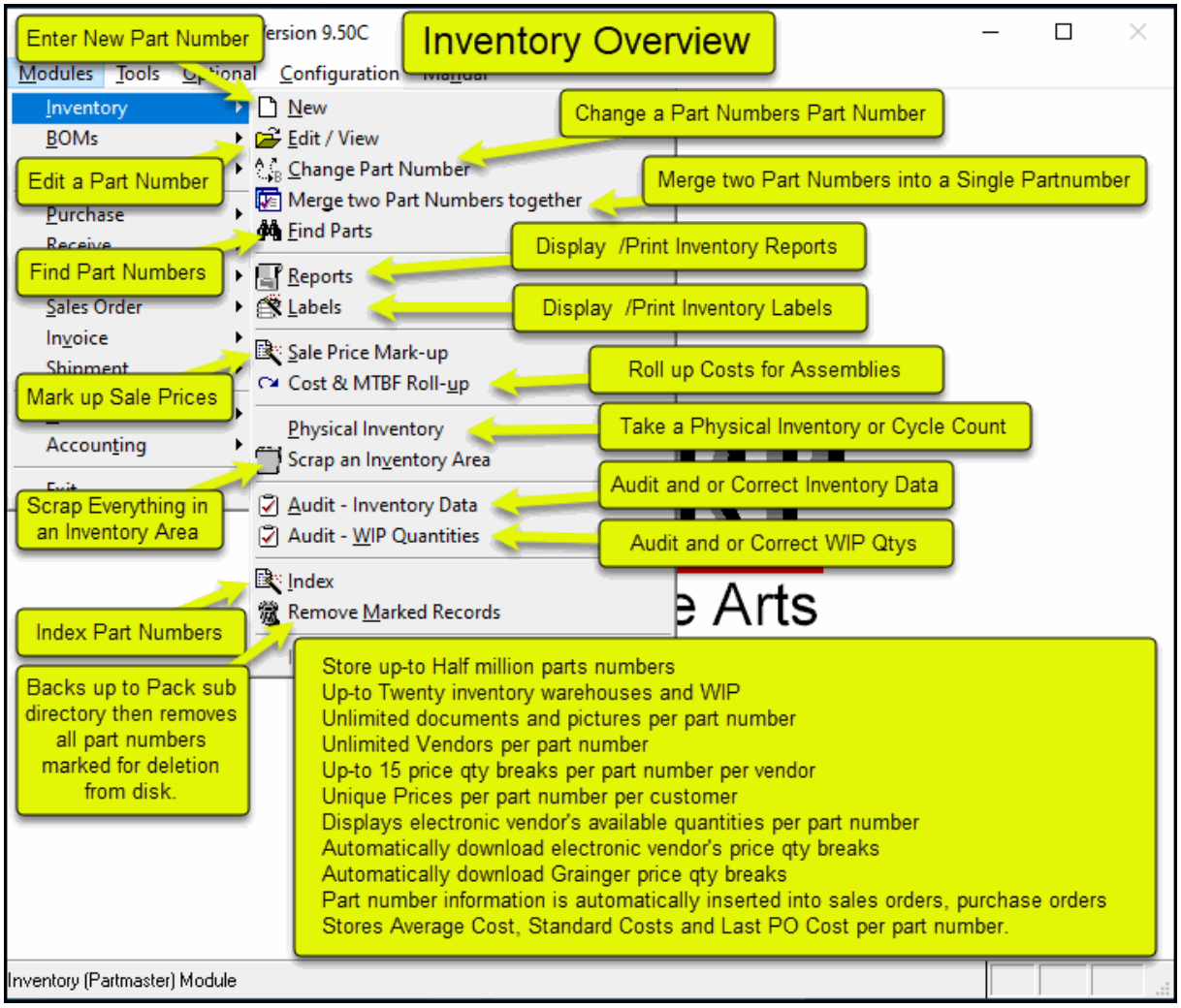
It is important to set an **administrative lockout** before removing marked records.

### 4.11 Remove Over X Years (see 15.14.5)

# 5 Inventory Module

### 5.1.1 Overview

The Inventory Module in pc/MRP allows you to store, edit, and track information and pictures for each part and assembly number in your inventory. Part number information is automatically imported into sales orders, purchase orders, sales quotes, and purchase requests for quotes. The inventory module will be your primary source for part and assembly information. An on-line slideshow is located here: [http://www.pcmrp.com/mrp101/partoverview.htm](http://www.pcmrp.com/mrp101/partoverview.htm)




### Defining your Part Number Size

Prior to entering part numbers, the size and configuration of the part number must be defined using pc/MRP's Configuration Menu. pc/MRP's part numbers can be numeric and/or alphanumeric.

**Part number size** - pc/MRP's Configuration Menu, **Option 28**, allows the part number size to be set from 6 to 15 characters, see Section 15.1.28 in this Manual.

**Part number prefix (product code) size** - pc/MRP's Configuration Menu, **Option 29**, allows the first X characters of the part number (including any dash) to be set as a prefix. This will allow scrolling to start with the product code. See Section 15.1.29 in this Manual.

**Part number suffix size** - pc/MRP's Configuration Menu, **Options 48 and 49** allow the last X characters of the part number (including any dashes) to be set as a suffix, see Section 15.1.48 and 15.1.49 in this Manual.

pc/MRP defaults to a 9-character part number size and a 2-character product code size which can be modified by the user in the Configuration Menu. Below are some additional ideas to think about if you are free to define the part number size and structure:
A straight non-encoded numeric part-numbering scheme can be employed. It is easier to maintain and expand an inventory with a non-encoded numeric part numbering system. However, with this method it is not easy to find part numbers by scrolling the inventory file.
Large part number structures slow down data input and lead to data input errors. In addition, large part number structures could make it difficult to switch over to bar coding in the future.

Alphanumeric part number structures can lead to errors due to upper and lower case letters and 0's versus O's.
Companies selling to retail markets would do well to consider using a 9 or 10-digit numeric part number to match retail UPC bar coding structures. Many retailers request their products be shipped with UPC bar code labels.
An 8-character part number structure could be optimal for companies that plan to use AutoCAD to generate and store their drawings.

Companies dealing with consignment parts should read Section 15.9.5 which covers part numbering schemes (methods) tailored for their needs.

Do not put your customer's or vendor's part number in the Part Number field. Create and use your own part numbers. Put the Vendor and customer part numbers in the Model Number fields. If you do not want your customers to see the vendor's model number, go to **Option 22** in 'Settings & Utilities', select Invoice, and select 'Serial Number' for 'Include on Printout'. (Users can also create a custom form to display both, or neither.)

## Making it easy for salesmen to pick the correct assy configuration

If you would like to make it easy for a salesperson to pick the correct part or description of the assy he/she is selling, consider the following method. Let's say you sell climbing walls. All climbing walls would start with the same base part number, say "3001", and the same base description, say "Climbing Wall". A climbing wall with blue hand holds would become part number "3001-B" and its description would be Climbing Wall w Blue Hand Holds. To create a climbing wall with red hand holds, you would duplicate BOM 3001-B and save it as BOM 3001-R. You would then edit 3001-R, delete the Blue Handholds and add the red Handholds. Now when the salesperson enters a sales order he/she can enter "3001" into the part number field or "Climbing Wall" into the description and press Enter. pc/MRP will display all Climbing Walls Configurations that he can pick from. This can be extended to 3001-B-SM, 3001-R-SM, etc.

## Un-displayed Inventory Fields

The Inventory table contains many un-displayed fields. The following is a list of those fields and the purpose for each of those fields.

pc/MRP's physical inventory program stores the physical inventory counts in the invarea1-invarea20 and invtot fields. Once the counts have been verified and the user pressed the update button, the counts are moved from the invarea fields to the stores and areaqty fields.

The lastqty1-lastqty20, lastqtywip fields store the physical inventory quantities recorded on the date the last physical inventory was taken with pc/MRP's Physical Inventory Module. These fields will also be filled when the part number is first entered.

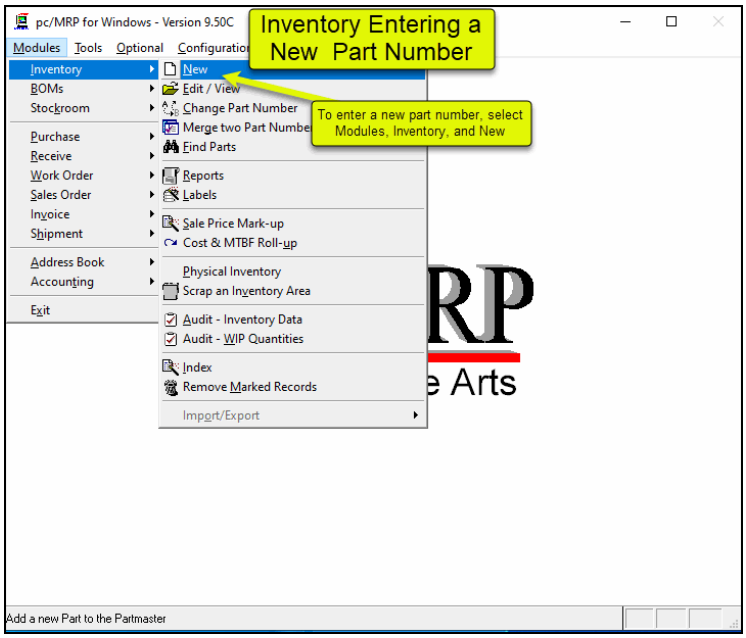
The above fields allow pc/MRP's inventory movement report to calculate the physical inventory at any date. However, for this to work, the following practices must be followed.

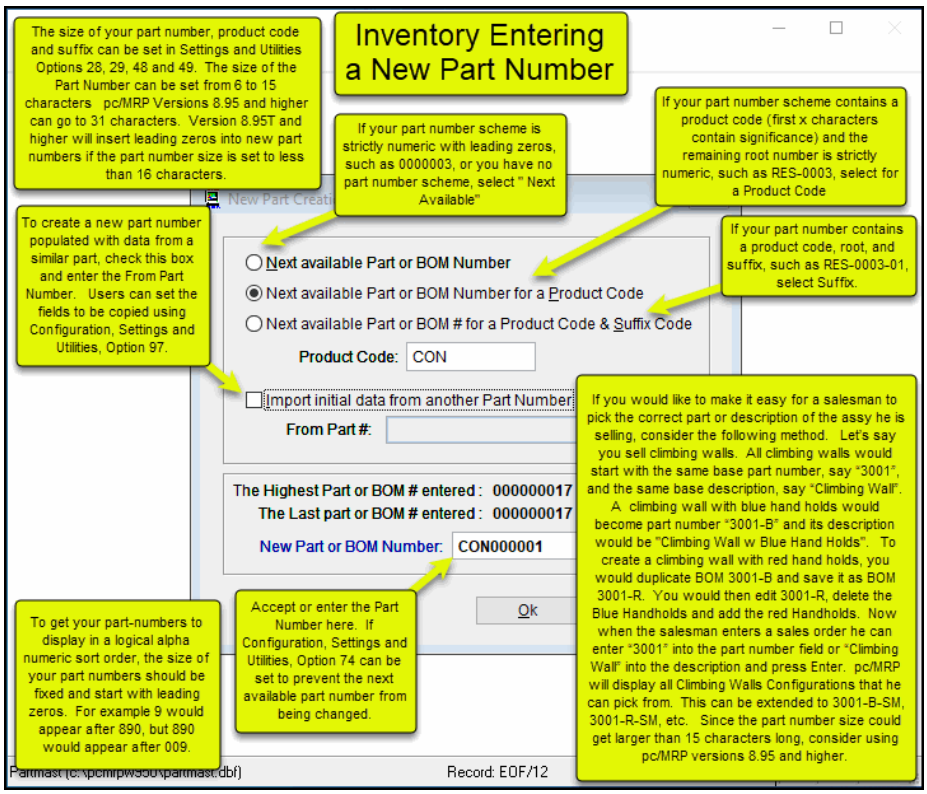
- The inventory adjustment method must be set to "**A**" in the configuration settings and utilities module **Option 4**.
- The last physical inventory was taken prior to the date being reported.
- The inventory adjustments were made using the stock room module's adjustment option rather than editing the quantity in the inventory module.

The stockroom's Issue and Receive options were used rather than Convert Parts to Assemblies.

### 5.1.2 Enter a New Part Number

#### 5.1.2.1 Enter a New Part Number, Step 1, Enter Part Number



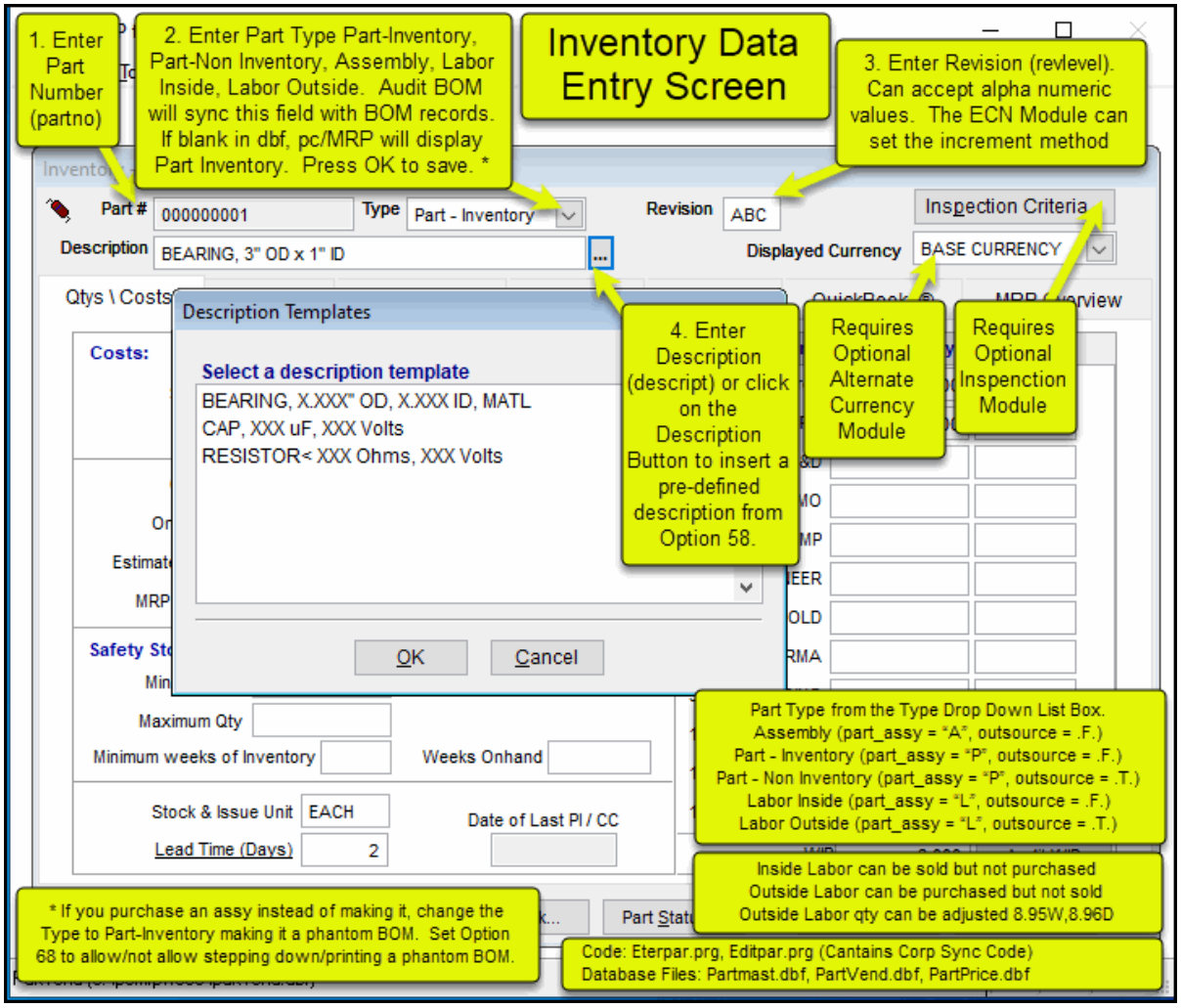




If you have no fixed part number scheme, select Next Available Part Number and enter the new part number.

Users can populate certain data fields from an existing, similar part's data. **Option 97** in Configuration, Settings and Utilities allows users to set the fields to be copied.

**Note:** See Section 15.11 Importing Data Files in this Manual about importing BOMs from other applications.

### 5.1.2.2 Enter a New Part Number, Step 2, Enter Part Type, Revision and Description




**Note:** The above slide shows the Inventory Data Entry Screen without the Sales Analysis Module, and with or without the Infinite Bucket Module. If you own the Sales Analysis Module, see the Sales Analysis Slide Show.

The Part Number (**partno**) contains the part number and can not be changed from this screen. To change a part number you must select Inventory, Change Part Number. If using or are planning to use QuickBooks for accounting, the allowable ASCII characters for the Addresses, Part numbers, Phone numbers, and Description fields are:

Upper & lowercase alpha A(65)-Z(90), a(97)-z(122), numeric 0-9, and these special characters:
, . < > ? ; ' : ( ) [ ] { } - = _ + ! @ # $ % ^ & * " /

Some characters that are known to be rejected by QuickBooks are:
° © ® | ¼ ½ ¾ ±

Select the correct Part **Type** from the Type drop down list box.

Assembly (part_assy = "A", outsource = .F.)
Part – Inventory (part_assy = "P", outsource = .F.)
Part – Non Inventory (part_assy = "P", outsource = .T.)
Labor Inside (part_assy = "L", outsource = .F.)
Labor Outside (part_assy = "L", outsource = .T.)

Definitions for Inventory Part Types:

Assembly: Collection of parts, assemblies, and labor.

Part – Inventory: Any part or vendor assembly you invoice or include in a BOM; e.g. 'finished goods'.

Part – Non-Inventory: Anything not invoiced or what is not a part of what you make and sell; e.g. Paper Towels, Office supplies, etc. Non-inventory part numbers were added to pc/MRP to increase compatibility with QuickBooks to be used as pc/MRP's accounting module. Classifying a part as non inventory only effects what type of account gets debited when accounting gets the vendor invoice and the receiver is posted to the general ledger. Also you can select to include non-inventory parts or not in your inventory value reports in the inventory module.

Labor – Inside: Labor used to build/create/modify the part or assembly internally.

Labor – Outside: Labor used to build/create/modify the part or assembly elsewhere (outsourced).

Facts about Labor items:

| Labor – Inside | Labor – Outside |
|---|---|
| Cannot be purchased | Can be purchased |
| Can be sold | Cannot be sold |
| OH qty doesn't go down when invoiced | OH qty doesn't go up when received |
| Won't be issued to MFG | Won't be issued to MFG |
| Qty can be adjusted using Stockroom A transaction | Qty can be adjusted using Stockroom A transaction |

If you purchase an assy instead of making it, change the Type to Part-Inventory making it a phantom BOM. pc/MRP's Infinite Bucket Module will now tell you to buy it instead of making it. If the assy is still listed in your BOM Module, set Option 68 to allow/not allow stepping down/printing a phantom BOM.

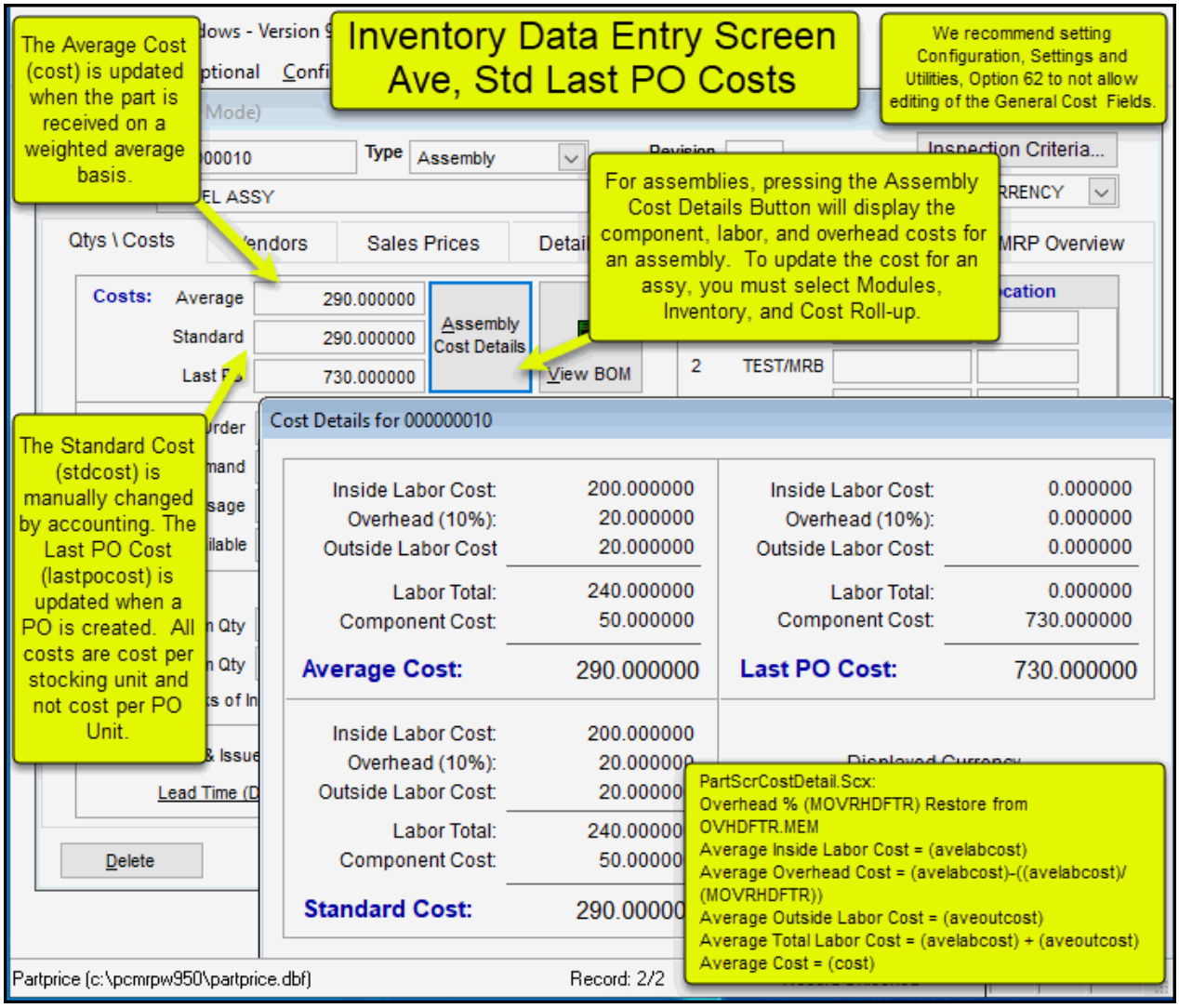
Enter the **Revision** Level (revlevel) of the part or assembly, i.e. A, B, C etc. If the part or assembly is changed such that it is still backwards compatible roll the Rev. If the part or assembly is not backwards compatible, change the part number. pc/MRP's optional ECN module will automatically increment the revision level for a part number whenever a new ECN is created for that part number.

Enter the **Description** (descript). Descriptions should be such that similar items appear together in any report sorted by description. **Option 58** allows users to create description templates that can be used when entering part descriptions. This helps create standard uniform descriptions. **Note:** If you need a longer description than 35 characters, you may use the General Info field on the Details 1 tab (Section 5.1.2.9) and print this on your forms.

The **Inspection Criteria** Button is available for companies who have purchased pc/MRP's Optional Inspection Module. It allows users to set when and where the inspection criteria will be displayed.

The **Displayed Currency** Drop-Down List Box is available for companies who have purchased pc/MRP's Optional Alternate Currency Module. It allows users to display the cost and pricing information in alternate currencies.

### 5.1.2.3 Enter a New Part Number, Step 3, Average, Standard and Last PO Costs



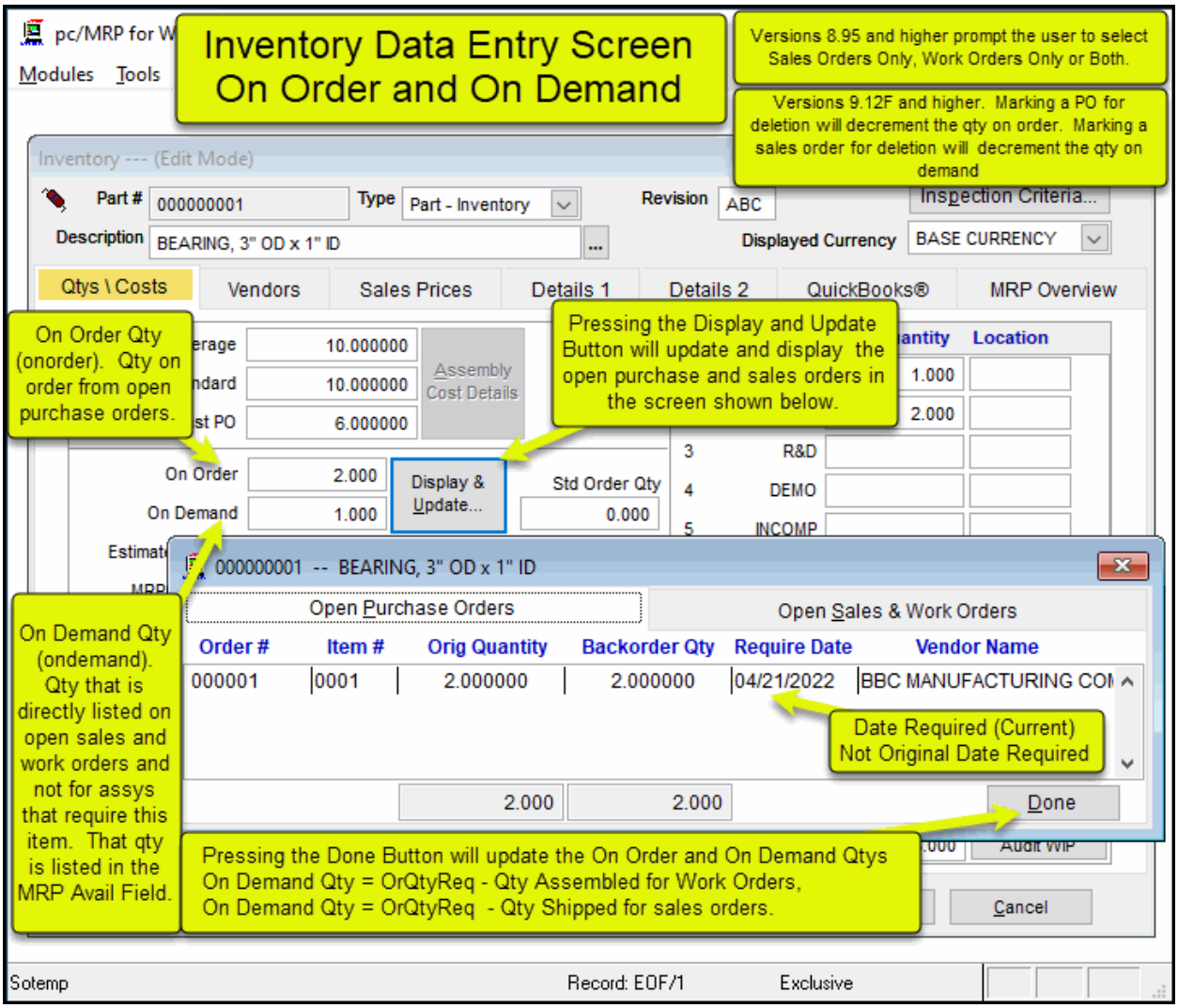

The **Average** Cost/Unit (cost) contains the average cost per unit. The value in this field is automatically recalculated every time a receiver is entered for that part number. The cost averaging formula and conditions are covered in the receiving Section of this Manual. The cost averaging defaults can be set with **Option 50** in the configuration settings and utilities module. (Calculation is shown in Section 8.1.3)

The **Standard** Cost/Unit (stdcost) field contains the list cost of the part. If your company's accounting department is using standard costs to value inventory, standard costs should only be entered and changed with their permission.

The **Last PO** Cost/Unit (lastpocost) field contains the cost of the last PO for this part. pc/MRP automatically enters the last PO cost whenever a purchase order is created for a part number. If the PO cost is changed after saving the PO, you must manually edit the part's Last PO Cost.

The **Assembly Cost Details** button will display the sum of the component, labor, and overhead costs for an assembly. This button will not respond for a component or labor part numbers. The standard cost of labor is stored in the stdlabcost field. The average cost of labor is stored in the avelabcost field. The last PO cost of labor is stored in the lpolabcost field. Please note that the 'Overhead %' calculated value is also stored with the labor cost fields in the database. So, as an example, calculating standard component cost is: stdcost – (stdlabcost + stdoutcost). **Option 60** in the configuration settings and utilities menu sets the overhead percentage.

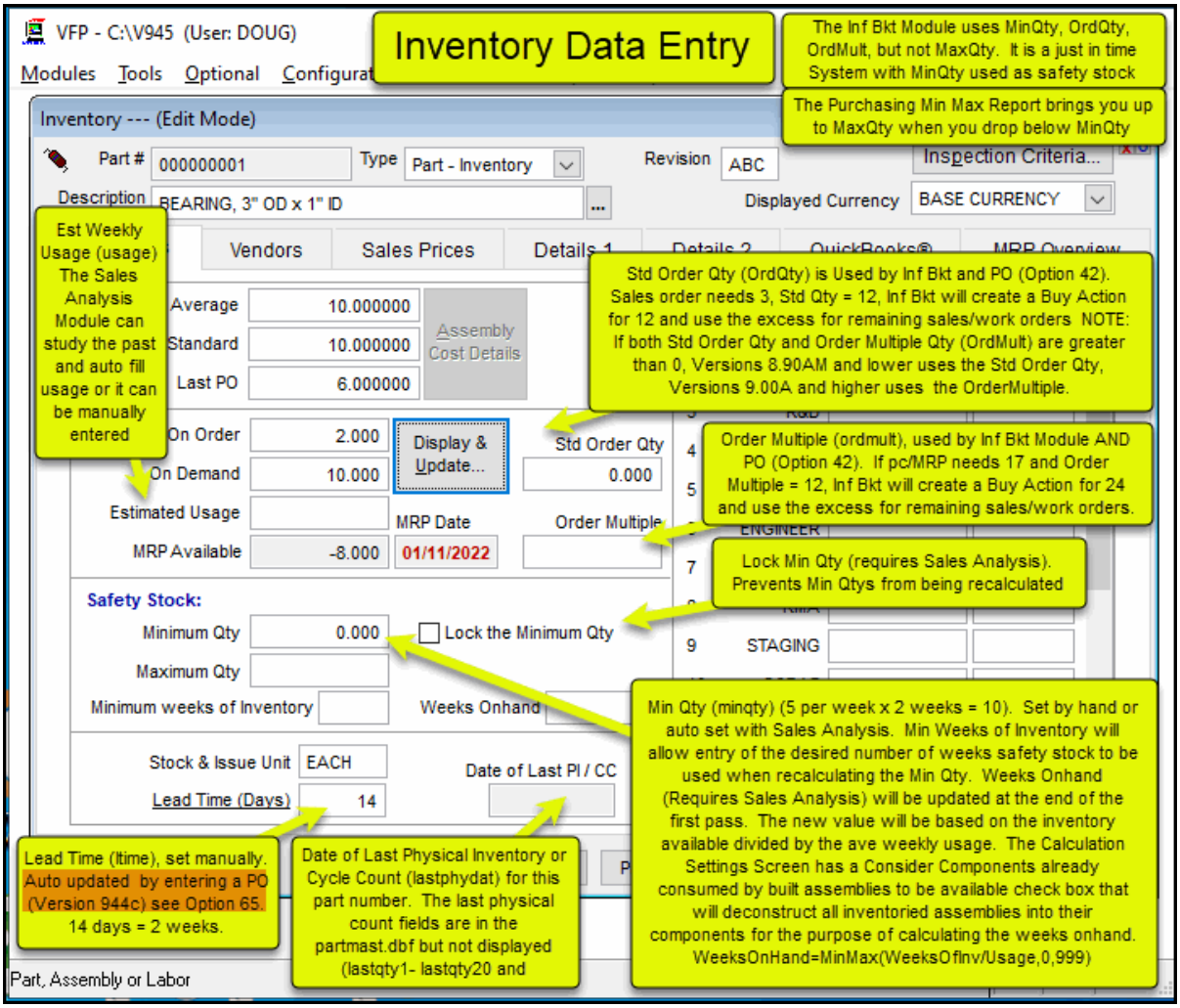
### 5.1.2.4 Enter a New Part Number, Step 4, Inventory Data Entry Screen, Left Side




The **On Order** (onorder) field contains the quantity on order from open purchase orders. As explained above the quantity on order in inventory will be increased by the quantity ordered x the purchase ratio. When the PO is received, the quantity on order will decrease, and the quantity on hand will increase by the quantity received x the purchase ratio.

The **On Demand** (ondemand) field contains the quantity on demand from open work orders and sales orders. Whenever a work order or an "Order Entry" sales order is entered, the quantity On Demand for that specific assembly is increased. It is important to note, the quantity On Demand for the component parts that go into that assembly do not increase. Instead, whenever an MRP is generated, pc/MRP decreases the quantity available field for the component parts to satisfy the demand from the open sales and work orders. Creating an invoice for a sales order will decrease the quantity On Demand for the assembly listed in that sales order. Using the stockroom's "Receive completed assemblies from manufacturing" for a work order will decrease the quantity On Demand for the assembly listed on that work order. To see the details about the On Order and On Demand quantities, click on the **Display and Update** button. This button will recalculate the demand by subtracting the qty shipped for sales orders and the qty assembled for sales orders from the original qty required for all of the open sales and work orders.

**Note:** Your screen will look different than the two images below, if you do not have the **Sales Analysis Module** and/or the **Infinite Bucket MRP Module** activated.




The **Estimated Usage**/Week (usage) field is used by pc/MRP's Inventory Cycle Count Module to automatically determine which parts are to be reclassified as Class A, B, or C parts based on usage and unit cost. pc/MRP's optional Sales Analysis Report will fill this field in automatically based on past sales (invoice) history. Class codes are not updated at this time.

The **Std Order Qty** (ordqty) field is used by pc/MRP's Infinite Bucket module. If the infinite bucket module needs to create a buy action item for a part number, it will use the actual quantity required. However if the standard order quantity for that part number is greater than 0 and greater than the actual quantity required, it will use the Std Order Qty and use the excess qty for remaining sales and work orders. In other words pc/MRP will tell you to order exactly the quantity you need, but at least the Std Order Qty.

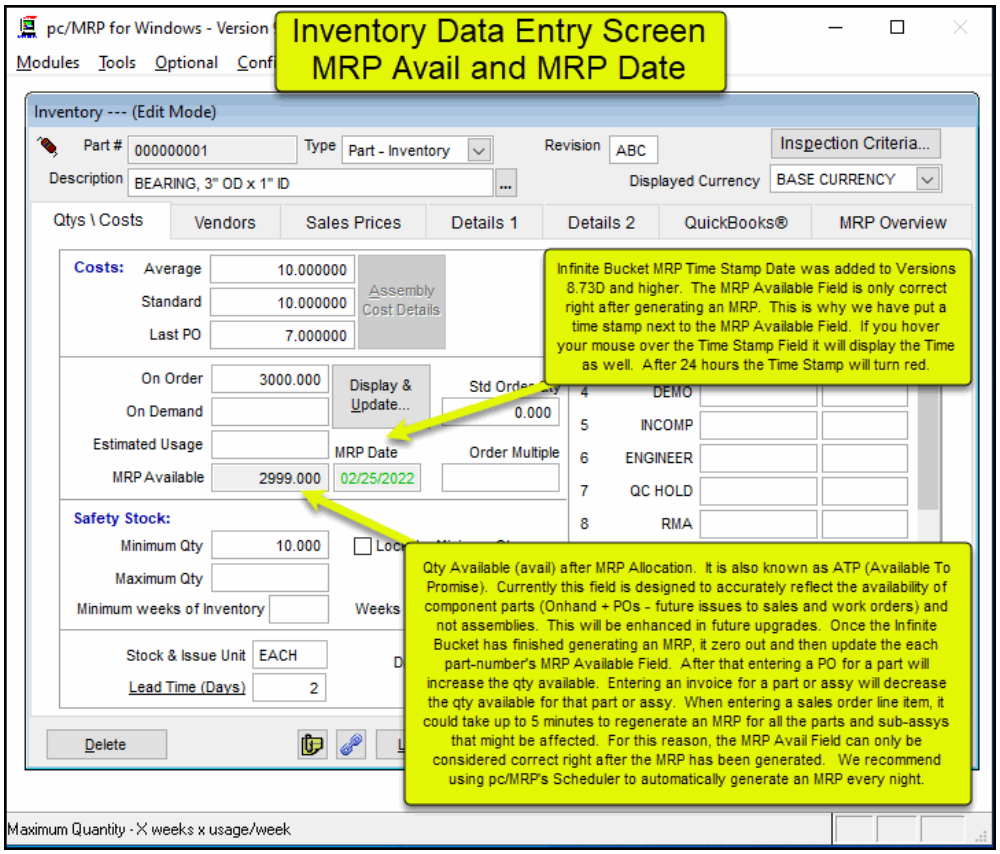
The **Order Multiple** qty (ordmult) field is used by pc/MRP's Infinite Bucket module. If the infinite bucket module needs to create a buy action item for a part number, it will use the actual quantity required. However if the Order Multiple quantity for that part number is greater than 0 and greater than the actual quantity required, it will use the order multiple quantity. An example of an order multiple would be eggs that can be purchased by the dozen to a carton. If the infinite bucket required a buy of 17 eggs, pc/MRP will generate a buy action item for 24 and use the excess for remaining sales and work orders.

**Note:** If <u>both</u> Std Order Qty and Order Multiple qty are greater than 0, the IB-MRP uses Order Multiple.

The **Min Qty** (minqty) field contains the quantity at which a part should be reordered. For example, if you use 2 parts per week and it takes 3 weeks to receive the part the min qty field should be set to 6. The Infinite Bucket MRP (if activated) can

create buy items to fill the min qty, or make items if this is a (sub)assembly. pc/MRP's optional Sales Analysis Module has an option that will study your sales (invoices), related BOMs for a specified period, and automatically fill in this field. If the **Cat Index** field contains the word "SAV" the Sales Analysis will not update that part's min qty.

The **Max Qty** (maxqty) field contains the maximum quantity to re-order. This field is used by the Min/Max report found in pc/MRP's purchasing report module.




The **MRP Available** (avail) field contains the quantity available after allocation. This field is updated by running pc/MRP's Single or Infinite Bucket MRP program. The MRP programs will allocate parts on hand and on order and fill in the quantity available field with the quantity after allocation. For example, if a company has 1200 bearings on hand, the quantity available might be 800 after allocation. The MRP Available field will consist of the onhand quantity + PO quantity (on order) - the allocated quantity (future issues and sales) - the minimum quantity**. pc/MRP dynamically adjusts the MRP Available field (new purchase orders increase the quantity available of component parts and invoices decrease the quantity available of finished assemblies). MRP Available is based upon the stores areas checked when generating the MRP Action items.
**The minimum quantity will not be factored in if you were running the IB-MRP and did not include demand for Minimum Quantities.

The MRP Available Field is only correct right after generating an MRP. This is why the **MRP Date** Time Stamp was added next to the MRP Available Field. If you place your cursor over the Date Stamp it will display the Time as well. The date stamp is displayed in green if the MRP was last generated on the current day. It will be displayed in red and bold if the MRP is older than that.

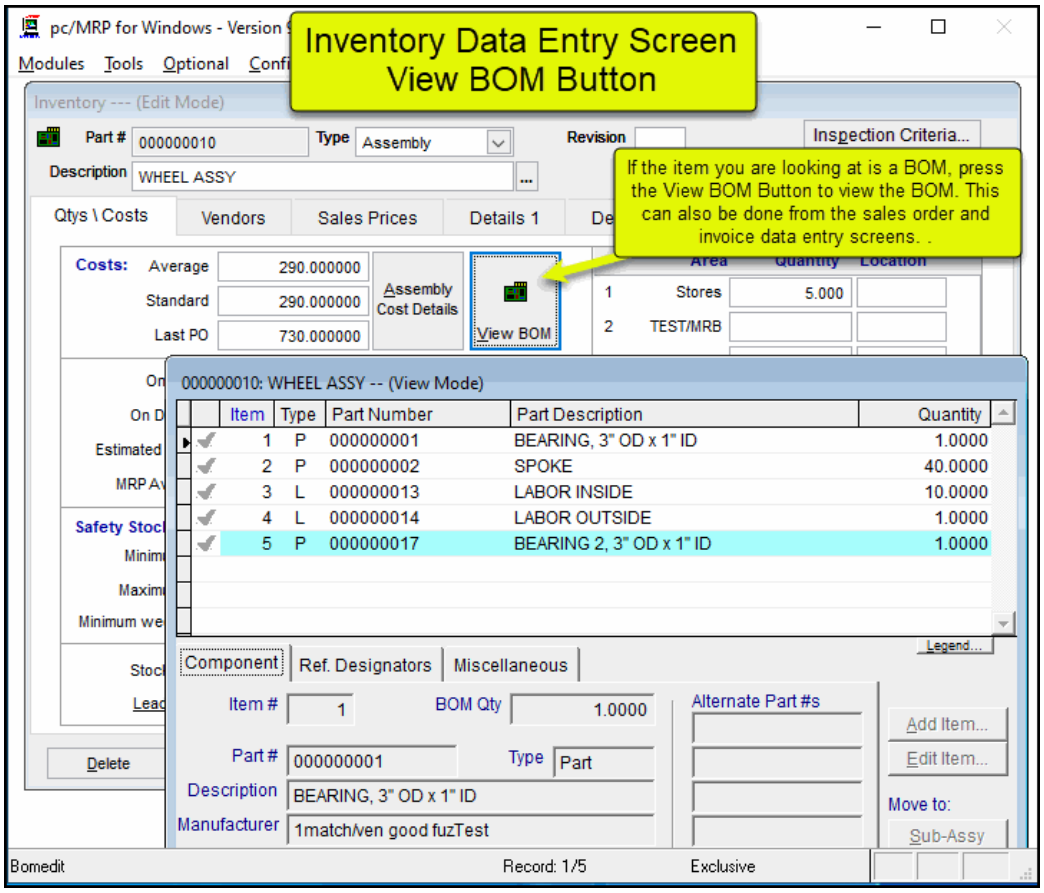
Once the Infinite Bucket has finished generating an MRP, it will update each part's and assembly's MRP Available field. The MRP Available field will contain the qty available after allocation (onhand+POs-issues and sales action items-min qty). After that entering a PO for a part will increase the qty available. Entering an invoice for a part or assy will decrease the qty available for that part or assy. When entering a sales order line item, it could take up to 5 minutes to regenerate an MRP for all the parts and sub-assys that might be affected. For this reason, the MRP Avail Field can only be considered correct right after the MRP has been generated. We recommend using pc/MRP's Scheduler to automatically generate an MRP every night.

The **Stock and Issue Unit** (unit) field contains the unit of measure (each, ft, lb, hrs, etc) that the part is issued to manufacturing and sold in.

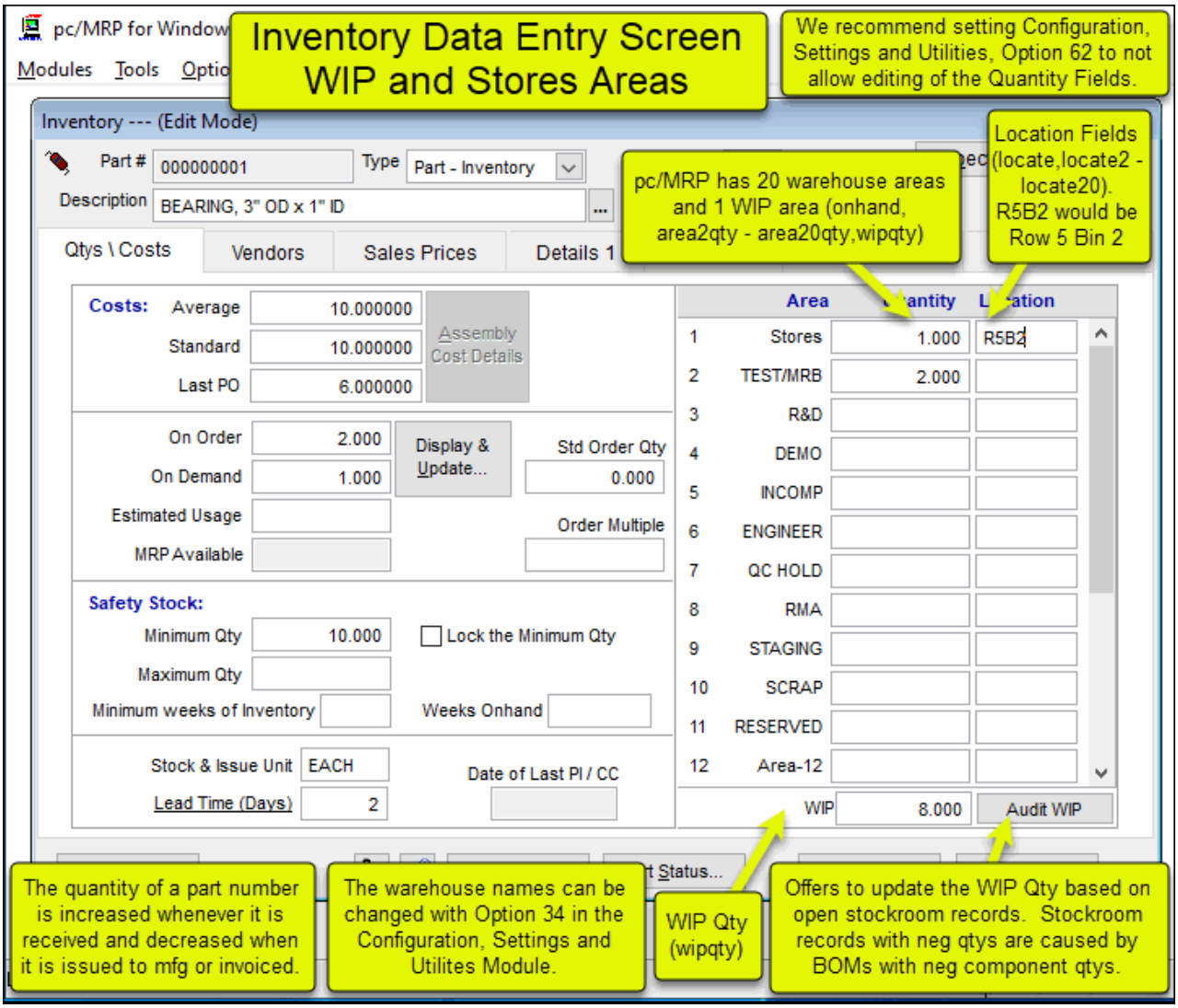
The **Lead Time** (ltime) field is used by the Infinite Bucket optional module. This tracks lead-time by days. For component parts, this represents the delivery time needed to receive the part for the vendor. For assemblies, it represents the build time for the assembly when building the assembly from sub-assemblies already built. The default lead times for parts and assemblies can be set in Configuration, Settings, and Utilities, **Option 65**. If pc/MRP's Infinite Bucket Module finds a 0 in the lead-time it will use the default lead times found in Option 65 (unless the Allow 0 lead times checkbox is checked). If it takes two weeks to build an assembly or order a part, enter 14 days, not 10 days. If any date starts or ends on a weekend, pc/MRP's Infinite Bucket MRP adjusts that date back to Friday. If Option 65 Update Lead Times Checkbox is checked, entering a PO for an item will update the parts lead time (Date Required - Order Date) provided the Order Date > Current Date and that it is the first line item on for that PO for that part number. This option requires pc/MRP Version 9.45 and higher.

The Date of **Last PI/CC** (lastphydat) field stores the date the last time a physical inventory or full cycle count was taken with pc/MRP's Physical Inventory Module. The lastphydat field will also be filled when the part number is first entered. When importing parts into pc/MRP, it is a good idea to populate this fields with the current date, as the Inventory Movement Report is more informative if the last PI date is filled out.

If the Part Type is an Assembly, the **View BOM Button** as shown below will allow you to view the BOM:



### 5.1.2.5 Enter a New Part Number, Step 5, Enter Stores Quantities and Locations

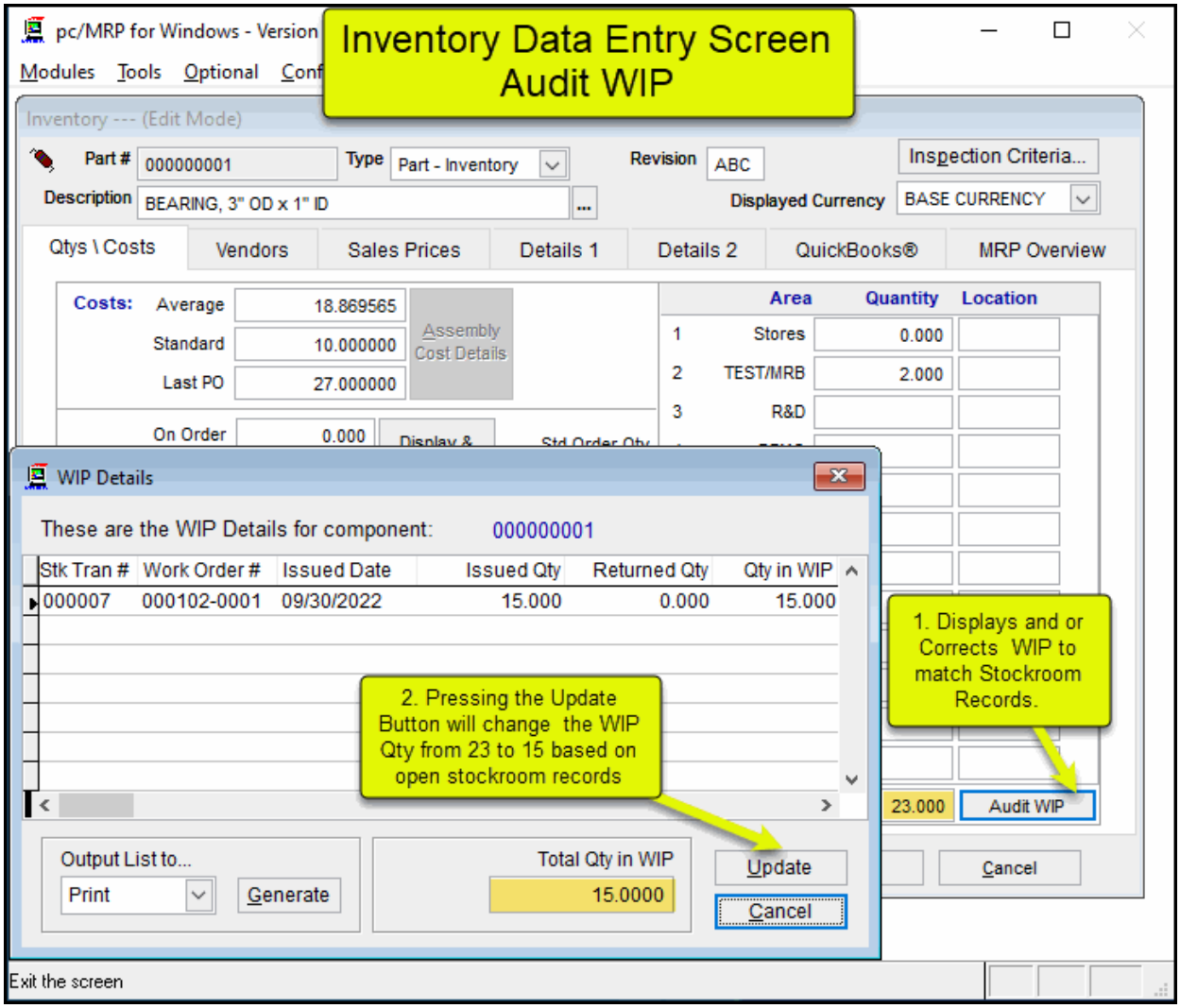



The warehouse **Area Names** such as TEST/MRB, ENGINEER, and R&D can be changed using **Option 34** in the Configuration, Settings and Utilities module. It is important to note that these are areas that store parts & assemblies, not manufacturing areas. pc/MRP has one area representing manufacturing and that area is WIP (work in progress). To move and track work orders and sales orders through the factory floor from work station to work station see the Optional Routing Module in Chapter 16.14 in this Manual.

Enter the initial **Stores Quantities** in the warehouse areas (onhand, area2qty-area20qty). After the initial entry, it is advisable to use **Option 62** in the configuration settings and utilities to prevent people from editing the quantities. Instead they should use the Stockroom's "Adjusting Quantities" Option to adjust quantities as this leaves a record of the adjustment. The quantity of a part number is automatically increased whenever the receiving module receives it. The quantity of a part number is automatically decreased when they are "Issued to Manufacturing" or "Invoiced". Much of this depends on how you set your inventory adjustment method (see **Option 4** in the Configuration, Settings and Utilities menu).

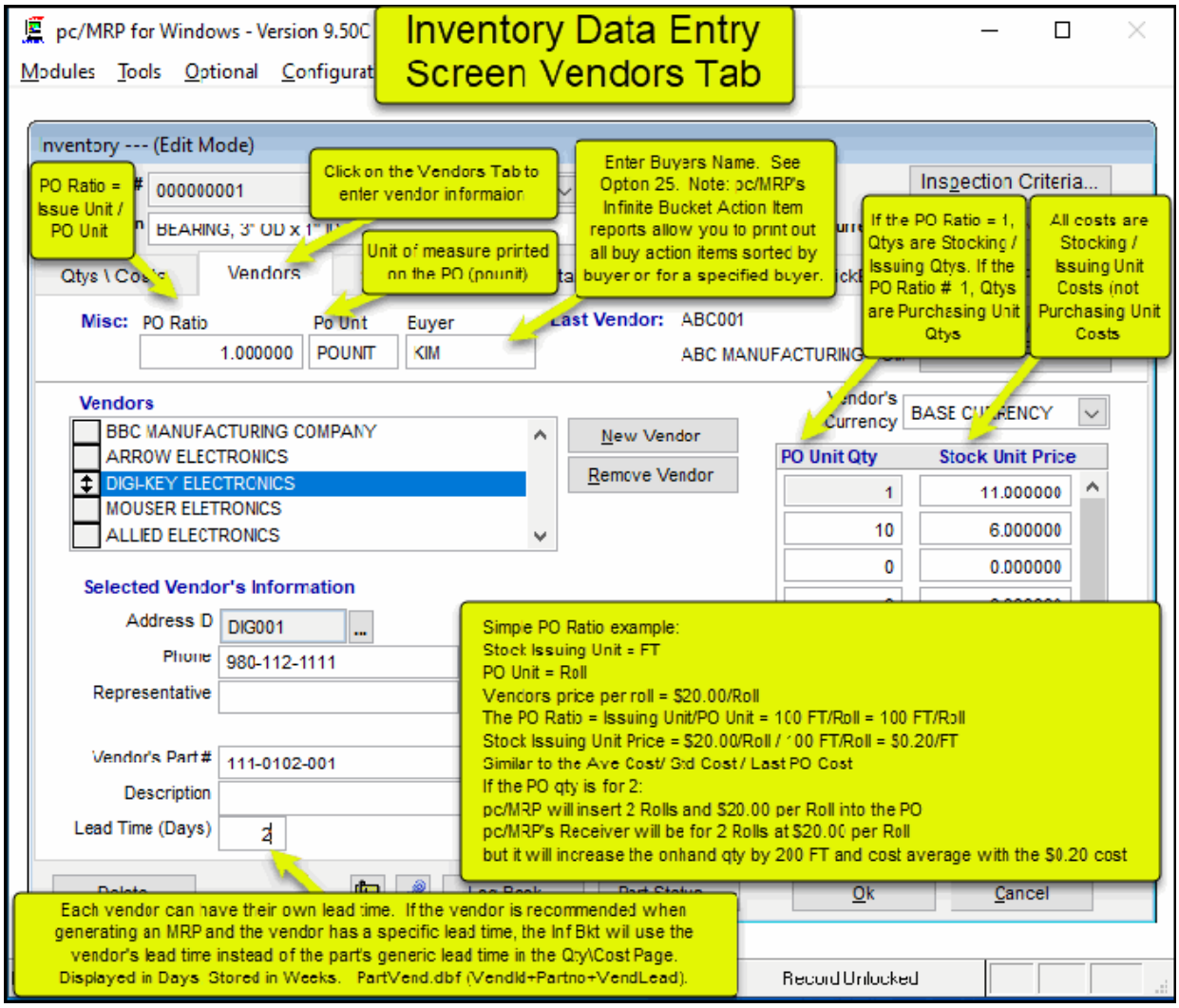
Do not enter **WIP Quantities** (wipqty), instead use the Stockroom's "I-type" (Issue Parts to Manufacturing) or "L-type" (Lower Level Issue) transactions as pc/MRP will only remove parts from WIP when a sales or work order is "Received back from manufacturing as completed assemblies" ("R-type" transaction) .

The part's **Location** fields (locate, locate2-locate20) can contain any six-digit code you care to come up with to aid in locating parts. E.g. R5B2 could be Row 5 Bin 2.




The **Audit WIP** button displays and or corrects WIP to match Stockroom Records. Pressing the **Update** button will change the WIP quantity based on open Stockroom records.

### 5.1.2.6 Enter a New Part Number, Step 6, Enter PO Ratio, PO Unit, Buyer



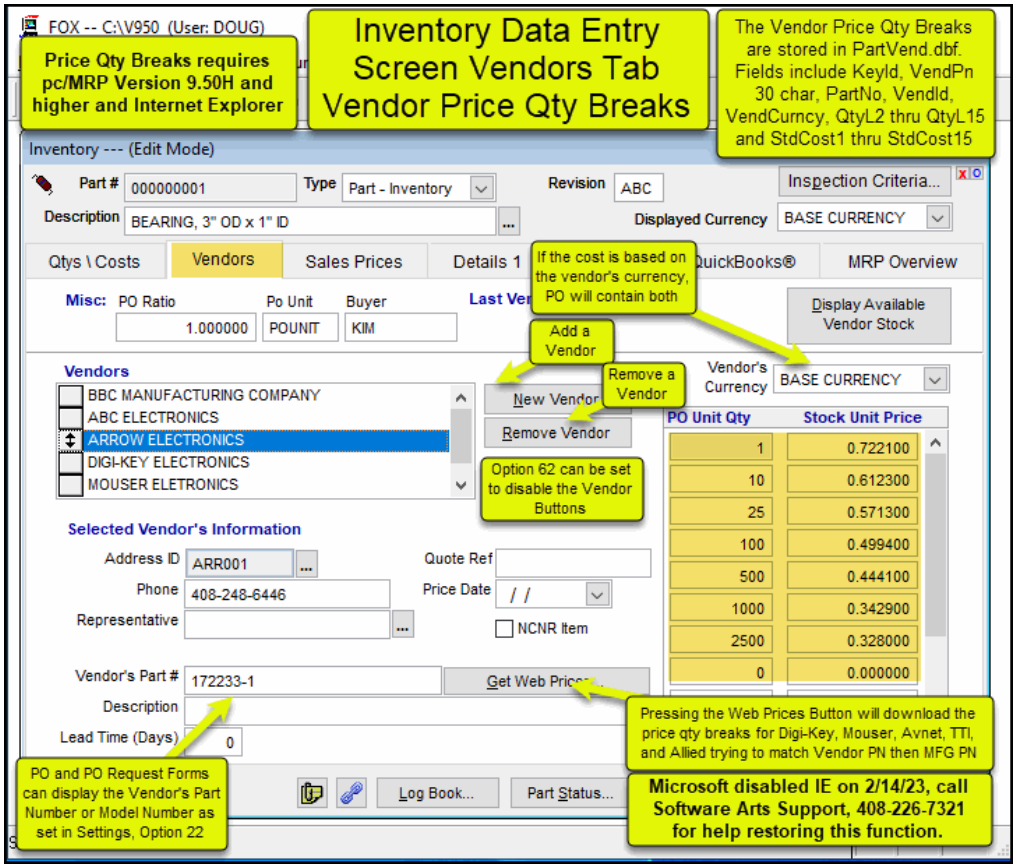

Vendor **Lead Time**: See the screen shot above.

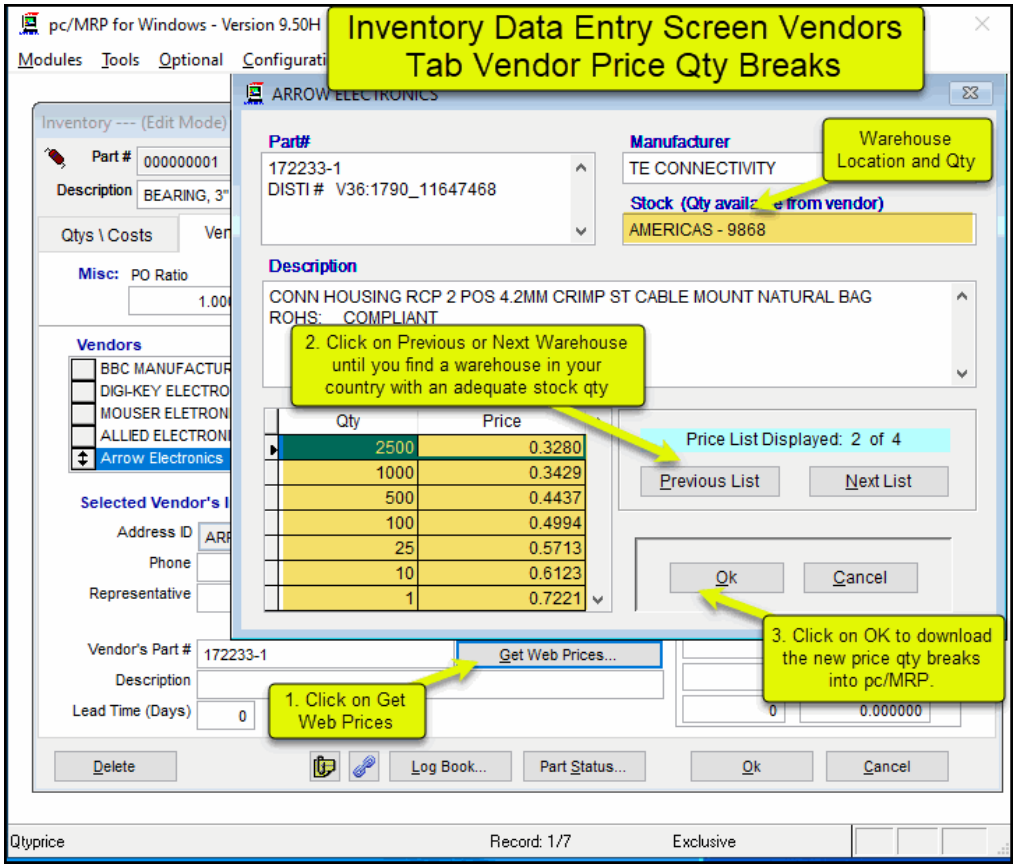
The **PO Ratio** (poratio) field is the ratio of the number of issued units required for one purchase unit. For example, if you issue in feet and purchase in yards, the PO Ratio would equal 3. Whenever a part number is created or data is imported into the partmast.dbf file, pc/MRP automatically inserts 1 into this field. We recommend keeping it simple. Leave the PO Ratio at 1 and enter the same unit of measure into the Stock & Issue Unit and PO Unit fields.

The **PO Unit** (pounit) field is the purchase unit of measurement. Referring to the example above this would be one yard. When entering a PO, enter the quantity of purchase units you require. pc/MRP will insert the purchase unit and multiply the vendor's unit cost by the purchase ratio. The quantity on order in inventory will be increased by the quantity ordered times the purchase ratio. When the PO is received, the quantity on hand will increase by the quantity received times the purchase ratio.

The **Buyer** (buyer) field contains the name of the buyer responsible for purchasing this part. pc/MRP's Infinite Bucket MRP action item reports allows you to print out all buy action items by buyer or for a specified buyer. **Option 25** allows you to select whether a PO's Placed by field should hold the Buyer's name or the current user's name.

### 5.1.2.7 Enter a New Part Number, Step 7, Enter Vendors and Price/Quantity Breaks



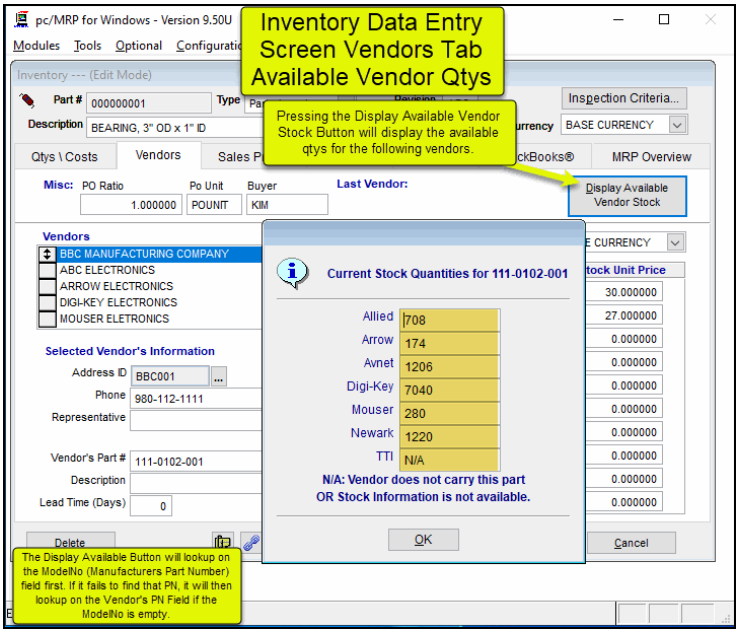
Click on **New Vendor** to scroll the Address Book and select any number of vendors for this part. The address ID and phone number will be entered automatically. You can list the vendors in order of preference using the ↕ button left to the vendor's name. You can enter up to 15 price/quantity breaks for each vendor. (QtyL2-QtyL15, StdCost1-StdCost15 in the Partvend database table.) When you place an order, you will see the list of the related vendors in the order of preference, but pc/MRP will highlight the vendor with the best price for that quantity.

**Get Web Prices:** pc/MRP will download the price/qty breaks for Digi-Key, Mouser, Avnet, Newark, TTI, Arrow, Allied and Grainger from the Internet, trying to match Vendor PN then MFG PN. You can save the results into the price/quantity chart above. For Grainger, if there is a minimum order quantity, pc/MRP will insert that quantity into the part's "Order Multiple" field. Also see Section 5.1.2.9. **Note:** If you are using Windows Vista and IE7 or higher, the **User Account Control** must be OFF. Click on the Start button, Control Panel, User Accounts, and turn the control OFF. You will have to also click OK in the warning window that pops up.

**Note**: You can reach the same feature from the Details 1 tab, see Section 5.1.2.9.

In some cases the downloaded price qty breaks do not start at 1. A work around would be to manually set the std order qty to the first qty downloaded. This will auto insert the std order qty into a new purchase order for that part number (version **9.00** and above).

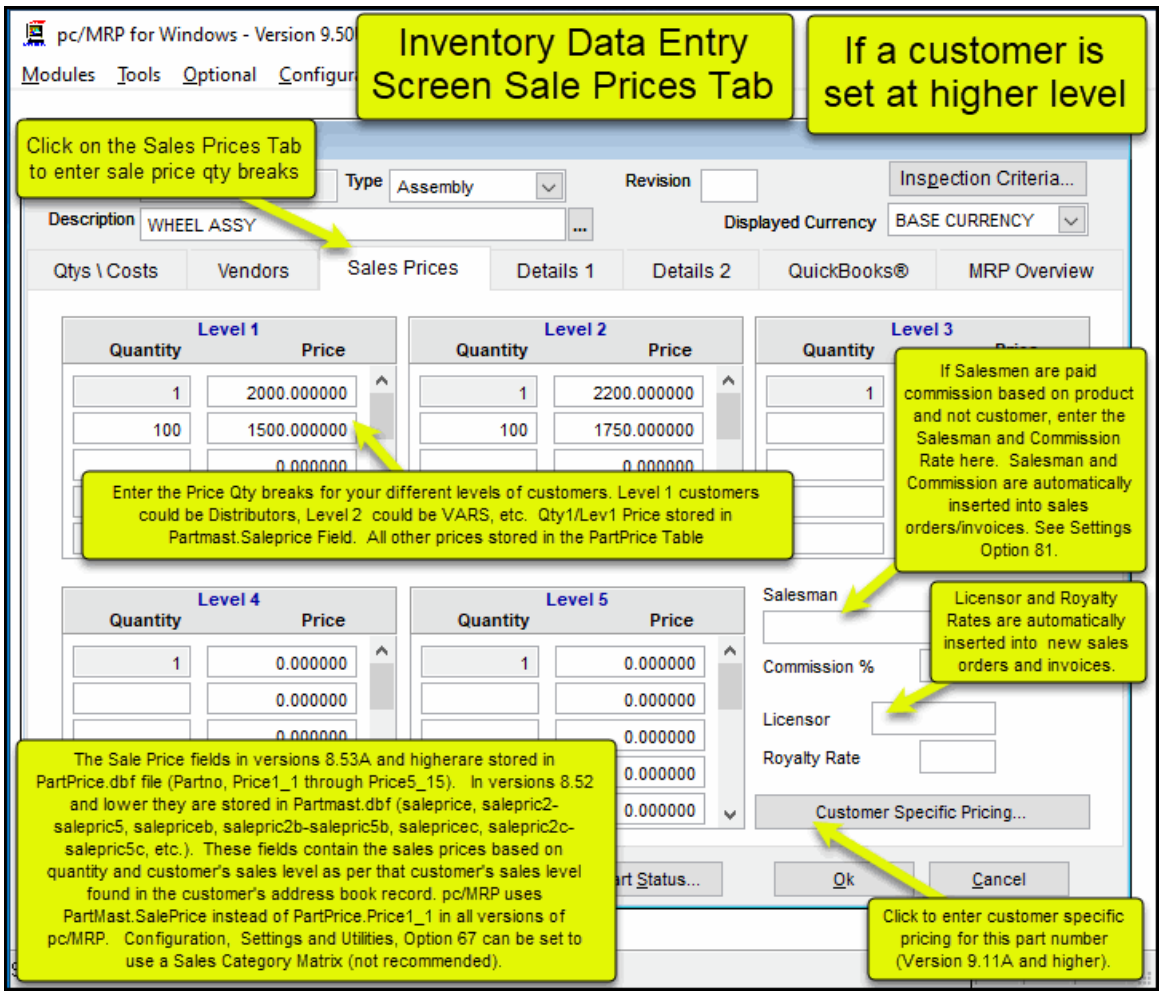
**Display Available Stock Quantities:** pc/MRP will download and display (not save) the current available stock quantities for the previously listed vendors (except for Grainger). The program does the look-up based on the model number, or if that is empty, the current vendor's part number.




For companies that own the Optional **Alternate Currency Module**:
As the currency exchange rate fluctuates, the two companies need to agree which will pay/receive a fix amount, and which will pay/receive a varied amount. If this vendor is to always get his set currency price, the **Vendor's Currency** should be set to his currency. If you are always going to pay your set currency price, this should be set to Base Currency. The vendor prices should be entered in the selected currency.

If you change a currency rate in the alternate currency module, pc/MRP will change the vendor cost for every vendor whose base currency is set at that currency. pc/MRP will calculate the new cost by using the following formula: OLD COST*(OLD RATE/NEW RATE). If you display the vendor costs in the base currency, pc/MRP displays the base currency as stored in those fields. If you select to display the cost in another currency, the standard costs for each vendor will be displayed as a multiple of the standard cost for that vendor and the selected currency.

### 5.1.2.8 Enter a New Part Number, Step 8, Enter Selling Prices




**Option 67** in pc/MRP's Configuration Settings and Utilities Menu, allow users to set the method pc/MRP will use to determine the selling prices for sales orders and invoices.

**Sales Level and Quantity Price Method (first option)**. With this method, selecting the Sale Prices Tab will display the sale price screen shown above.

The **Sale Price** fields are stored in the PartPrice.dbf file (Partno, Price1_1 through Price5_15). Price 1_1 is also stored in the Partmast field Saleprice. (If importing the prices, Price1_1 must be imported into both tables.) These fields contain the sales prices based on quantity and customer's sales level as per that customer's sales level found in the customer's address book record. If a customer is set at a higher level than there are prices for, pc/MRP will drop down to the next level that does contain prices.

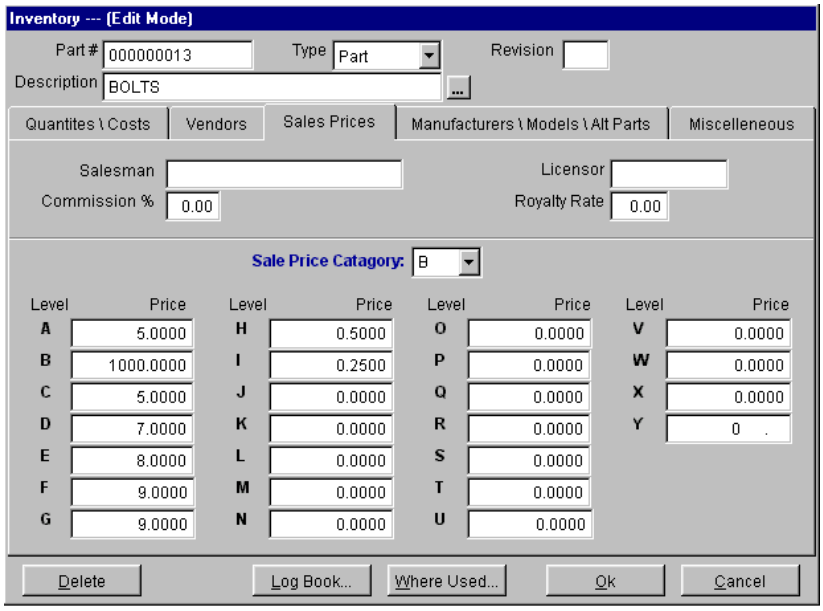
The **Salesman** (salesman) and Sales **Commission %** (commiss), fields are automatically inserted into sales orders, invoices, and accounting transactions to allow pc/MRP to track and report on sales commissions. A sales commission of 5.00 would represent 5%. Note: Configuration, Settings and Utilities, **Option 81** sets whether the sales commission should come from the Inventory or from the Address Book.

The **Licensor** (licensor) field is automatically inserted into sales orders and contains the name of the company that may have licensed this part number for resale.

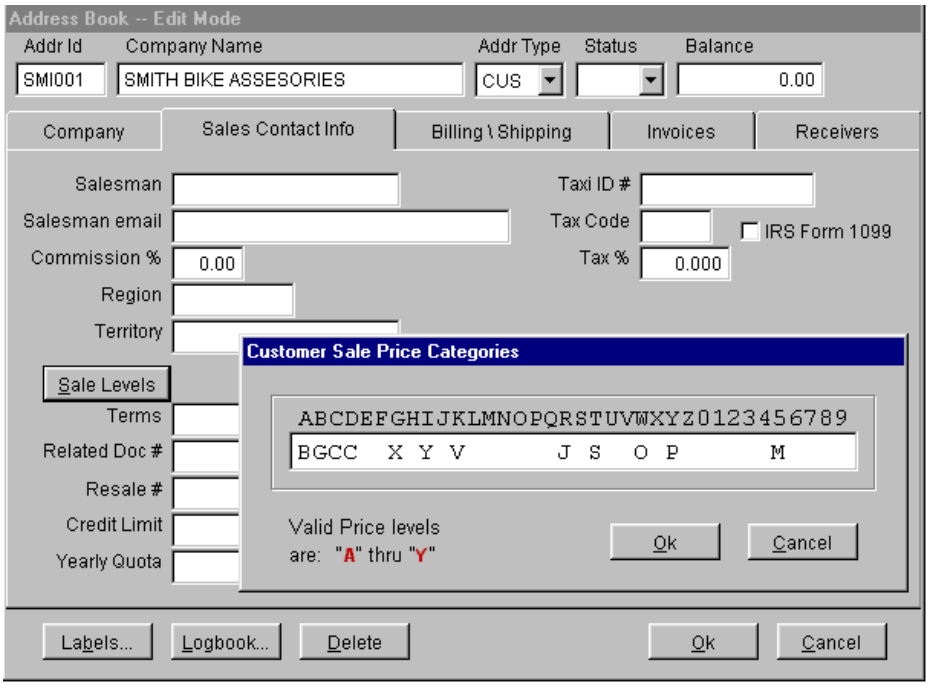
The **Royalty Rate** (royalrate) field contains the royalty rate charged for this part number.

**Enter Selling Prices (Second Option).** We do not recommend using this pricing method, as it is not simple and straightforward. We recommend using the Customer Specific Method and not using this method. With this method, selecting the Sale Prices Tab will display the following page of the inventory data entry screen.

Each part can be assigned a category (A-9). The part in the above screen has been assigned as a Sale Price Category 'B' part. The 'Sale Price Category' (pricekey), is like a product grouping such as 'Wheel Assemblies', 'Motherboards', or 'Cabinets'. A part can only reference one 'Sale Price Category'. Each part can be assigned up to 25 different prices (A-Y). In the above example, customers whose key assigns them level D pricing for B type parts would pay $7.00 per part.



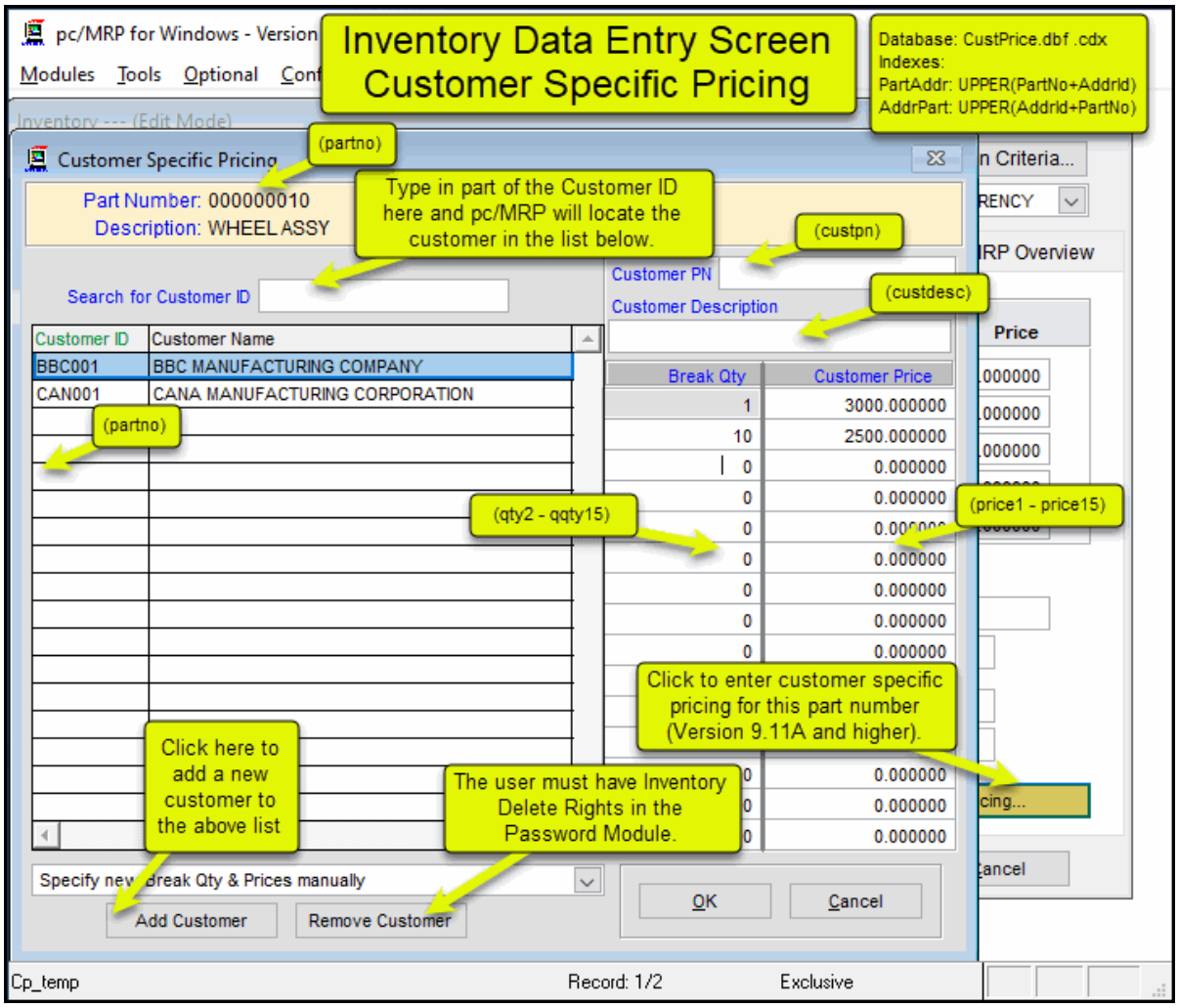

By selecting the Sales Contact Info tab in any address entry and pressing the Sales Level button within that tab, the price key screen will pop up as shown below.




In this case, the customer shown would pay the level G price for category B type parts. As such, his price would be $9.00. If a sales price level is left blank like E or F in the address entry or if the sales price category is left bank in inventory the sales price will default to sales price level A.

**Customer Specific Pricing (Third Option)**

Click on the Customer Specific Pricing button in the bottom right corner of the Sales Prices page.




First select Add Customer, and scroll for the customer. Then fill out the Break Qtys and Customer Prices.

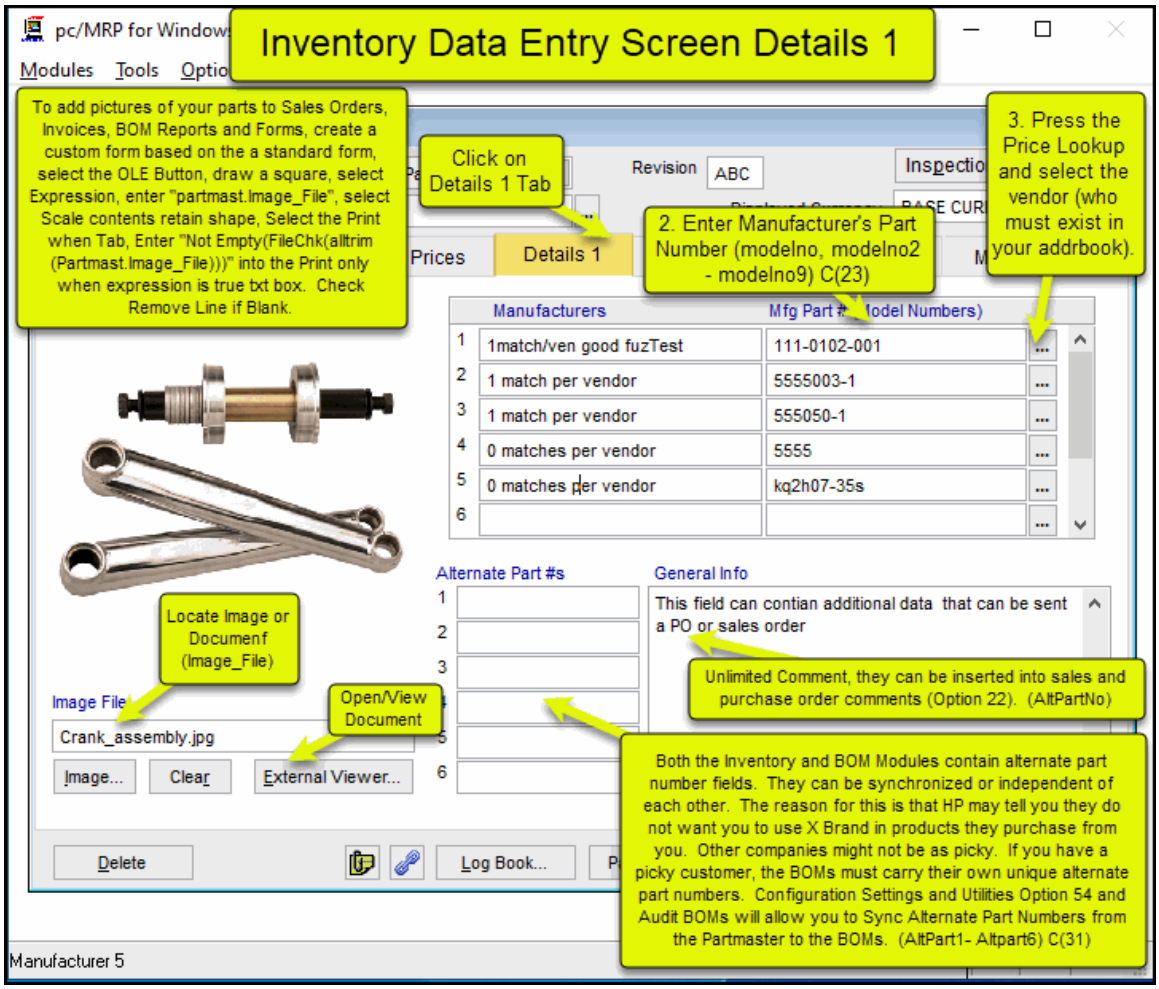
When you add a second customer select any of the following choices: “Specify new Break Qty and Prices manually”, “Copy Qty values from the current record into new records”, “Copy Qty & Price values from the current record into new records” to speed up your work.

Later when you need to look up or edit the Customer Specific Prices, start typing the customer ID into the search box “Search for Customer ID”. pc/MRP will automatically highlight the customer you are looking for.

The Customer PN and Customer Description fields are for your reference only.

The user must have Inventory Delete Rights in the Password Module to Remove the Customer.

### 5.1.2.9. Enter a New Part Number, Step 9, Details 1 Tab

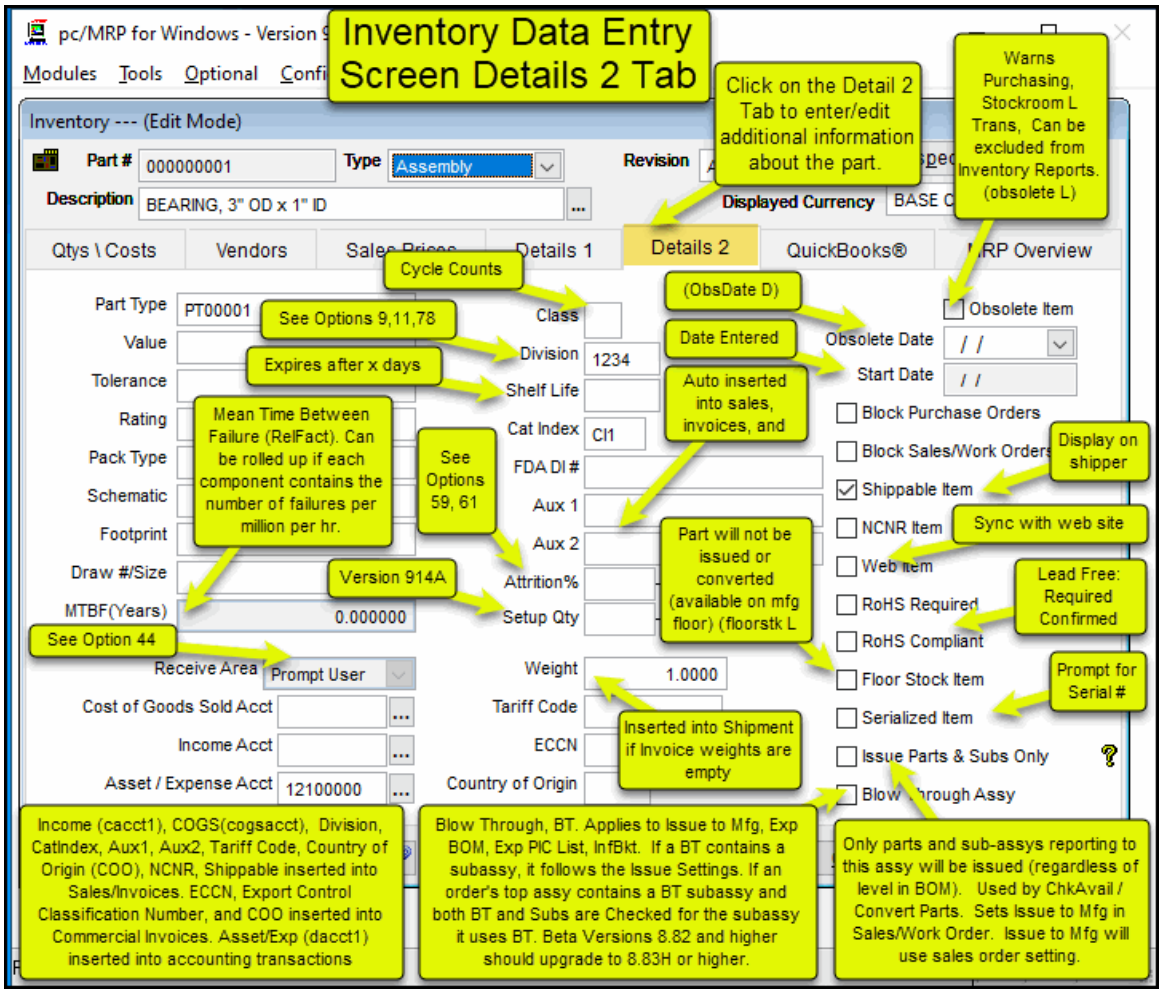



Enter **Manufacturers** (manufacter, mfg2-mfg9) and their respective **Model Numbers** (modelno, modelno2-modelno9). The **Alternate Part #s** (altpart1 - altpart6) allow users to store up to six alternate part numbers that can be used in place of this part number. These fields are for your reference only. **Option 54** in pc/MRP's configuration settings and utilities menu allows users to update the alternate part numbers in the BOM file with the alternate part numbers in inventory. Also see Section 15.9.8.

The **Image File** (image_file) field is used to store and display one picture for each part. GIF and JPG files are displayed directly within pc/MRP, while all other file types, (BMP, PDF, AVI, DOC...) are viewed by clicking the External Viewer button. We recommend that all files be deposited into a sub-directory of pc/MRP's main directory named *BMP*. This will eliminate difficulties that may occur when trying to view the image from workstations that have a different drive designation for the server. If you wish to view PDF files, you must install Adobe Acrobat Reader. Adobe Acrobat Reader can be downloaded from http:\\www.adobe.com/products/acrobat/readstep.html. A URL can be entered into this field. The URL must however contain the full URL. (http://www.xxxxx.xxx) **Note:** To learn how to easily *link any number of images* (and other files, folders and URLs) to each part, see File Links later in this Chapter.

The **General Info** (altpartno) field is sort of a wild card field. It can be used to store information such as purchasing specifications, additional description, alternate part numbers, etc. **Option 22** in pc/MRP's configuration settings and utilities menu can be set to automatically import the contents of this field into sales and purchase order comments field. Computer manufacturers and retailers who wish to increase the length of their descriptions by including "30 gig hard drive, 128 Megs RAM", etc. can use this option.

### 5.1.2.10. Enter a New Part Number, Step 10, Details 2 Tab




The following fields, **Part Type, Value, Tolerance, Rating, Package Type, Schematic** and **Footprint** were included to match similar fields in ORCAD.

The **Draw #/Size** fields contain the part number's drawing number (drawingno) and drawing size (drawsize).

The **MTBF** ((1/sum of the part reliability factors in the assembly)*(1,000,000/8769)) field (for assemblies only) contains the resulting mean time between failure for that assembly in years. The MTBF field for assemblies is read only. It can be automatically calculated and populated by entering all of the reliability factors for parts and then running the Cost and MTBF Roll Up option on the inventory menu.

The **Debit Account** (dacct1) field is automatically inserted into purchase orders and receivers. If a receiver's debit account field contains an 8-character chart of accounts number, pc/MRP will debit that account when posting the accounts payable voucher (receiver). If **Option 11** (multi-div) is set off or the division field is empty, pc/MRP will debit the default chart of account (12100000 inventory for Perpetual or 41100000 purchases for Periodic) found in Configuration, Settings & Utilities, **Option 9**'s account template file.

The **Credit Account** (cacct1) field is automatically inserted into sales orders and invoices. If an invoice credit account field contains an 8-character chart of accounts number, pc/MRP will credit that account when posting the accounts receivable voucher (invoice). If **Option 11** (multi-div) is set off or the division field is empty, pc/MRP will credit the default chart of account (30100000 business income) found in Configuration, Settings & Utilities, **Option 9**'s account template file.

The **Class** field (class) is used by pc/MRP's Inventory Cycle Count Module. All Class A parts are counted every 30 days. All Class B parts are counted every 90 days. All Class C parts are counted every 180 days. This field must be filled in with an A, B, or C. See the Cycle Count Module Section in this Manual for additional details on automatically filling this field. Settings & Utilities, **Option 64** sets the default class for new parts. Therefore, to not include labor and non-inventory parts, you must remove the default Class code at the time of creating the labor or non-inventory part.

The **Division** (division) field is automatically inserted into sales orders and purchase orders. pc/MRP uses this field to determine what division or department chart of accounts to credit or debit for sales orders and purchase orders.

The **Shelf Life** (shelflife) field contains the shelf life in days for that part number. If you have activated pc/MRP's optional serial/lot number module, receive completed assemblies back from manufacturing, and select to enter serial/lot numbers, pc/MRP will calculate and insert the expiration date into that serial/lot number record based on the current date and the shelf life.

The **Cat Index** (catindex) field is utilized in the optional Sales Analysis module. This allows the end-user to leave min quantities for part numbers or assemblies unchanged regardless of usage figures by entering "SAV" into that part or assembly's catindex field.

The **Aux 1** and **Aux 2** fields are character fields (max 30) that can be used as needed. You can create customs forms/reports that will display these values with an appropriate label.

pc/MRP uses the **Weight** (weight) field to insert the total weight of a shippable item into a UPS or Bill of Lading shipping document (labor for example is not a shippable item), but only if the invoice weight is empty.

The fields **ECCN** (Export Control Classification Number) and **COO** (Country of Origin) will be inserted into Commercial Invoices.

To obsolete a part, check the **Obsolete Item** checkbox (Obsolete L). **Obsolete Date** (obsdate D) is automatically set to the current date (you may change this). pc/MRP will display a warning if you try to purchase a part that is marked as obsolete and its obsolete date is earlier than the current date. The part will also be highlighted in yellow in the Inventory scroll window.

The **Start Date** (startdate) references to the date the part was first entered into the Part Master.

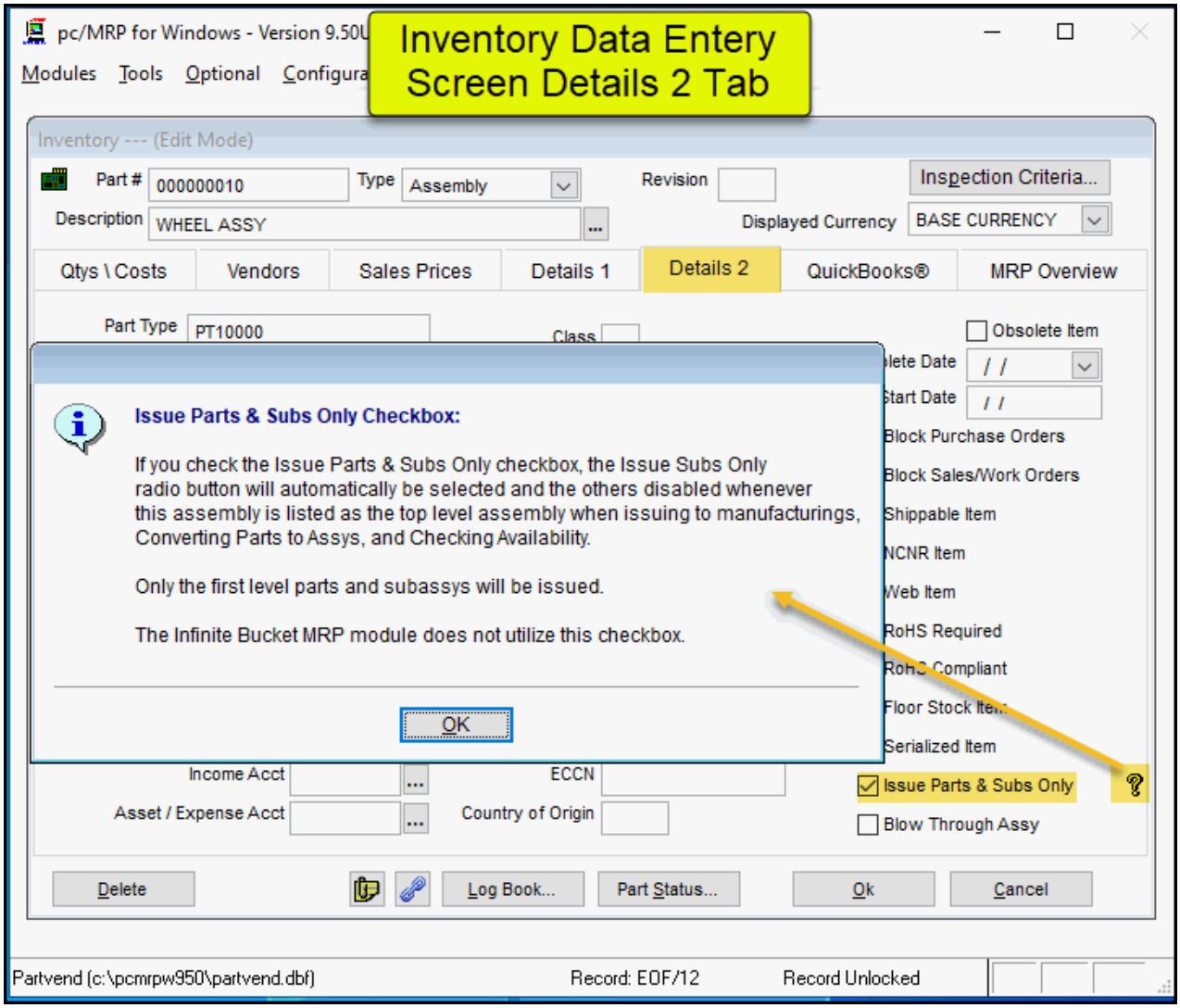
Parts checked as a **Shippable Item** (shippable) will automatically be included on a BOL Shipment Document.

Checking as **Web Item** (webitem) will allow you to mark a part number that is to be listed on your web site.

Check the **RoHS Compliant** Checkbox if part is RoHS Compliant (lead free, etc.). This information can be printed out on your reports, but is not used anywhere else.

Checking the **Floor Stock** Item check box (floorstk) will prevent this part number from being decremented when the stock room module is used to issue parts to manufacturing. If a part number is stored on the manufacturing floor (such as nuts and bolts) and is not issued with the assembly, you would check the floor stock check box. Use the stock room's "Adjust Quantity" method to decrement the stores quantity when refilling the bin box on the manufacturing floor. When converting parts to assemblies, these items will not be converted.

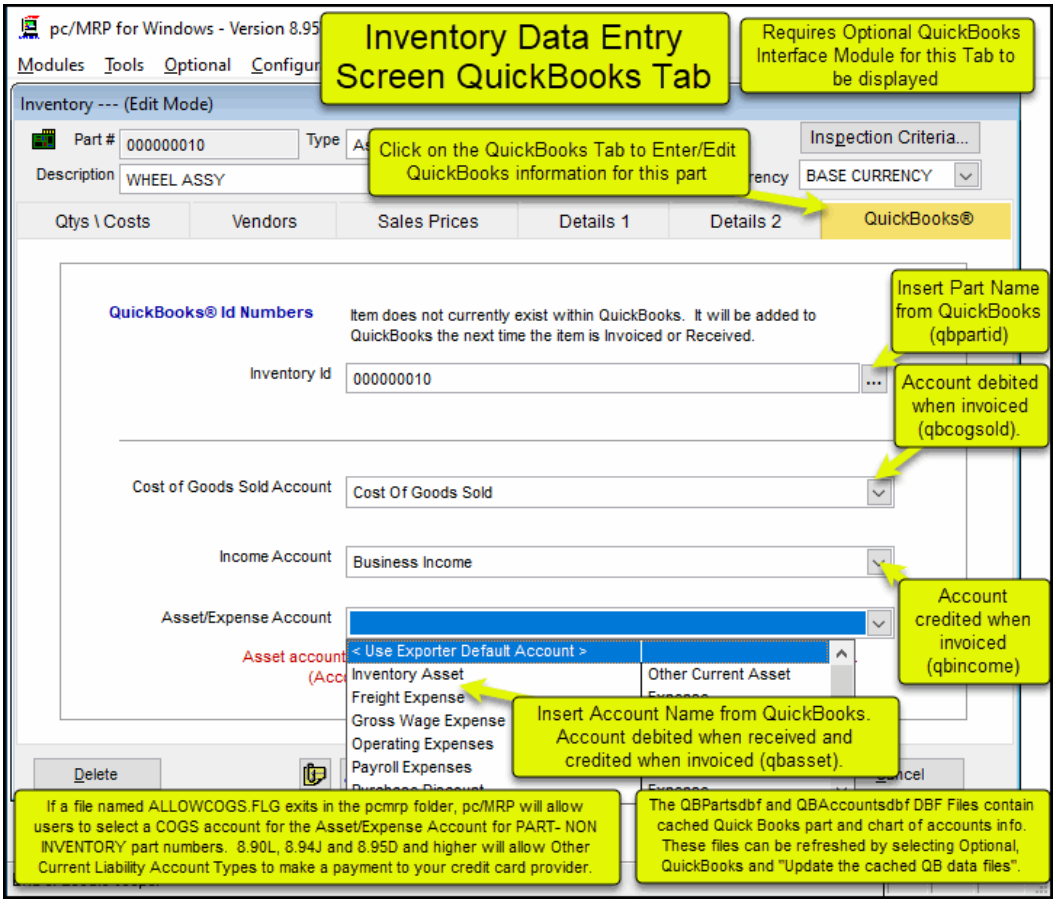
If you have the Optional Serial/Lot Number module and the **Serialized Item** (serialitem) check box is checked, pc/MRP will display a window allowing you to enter or pick serial numbers when receiving, issuing, receiving back or invoicing this part number.




Checking the **Issue Subs Only** Check Box (subonly) forces pc/MRP to issue parts and sub-assemblies reporting to this assembly when issuing this assembly (regardless of level in BOM). The Issue Subs Only check box is only visible for assemblies. Used by the Check Availability report and Convert Parts to Assemblies. Sets Issue to MFG in Sales/Work Order. Issue to Mfg will use sales order setting.

If an assembly reports to a parent assembly and it is checked as a **Blow Through Assembly**, pc/MRP will issue component parts and ignore any on hand quantities for that sub-assembly. This is true for Issuing to Manufacturing, Convert Parts to Assemblies, Generating an MRP (Infinite and Single Bucket), Check Availability, Maximum Potential Build, Exploded Pick List, Costed and UnCosted Exploded BOMs (the BOM will contain an "*" next to it, indicating it is a Blow Through BOM). Basically it is a BOM that is never pre-assembled, you always issue parts to it as though the component parts reported directly to the parent assembly. Applies to Issue to MFG, Exploded BOM, Exploded PIC List, Infinite Bucket. If a BT contains a subassy, it follows the Issue Settings. You cannot check both BT and Subs for a part.

### 5.1.2.11. Enter a New Part Number, Step 11, Enter QuickBooks Information




If you have activated pc/MRP's Optional QuickBooks Interface Module, select the QuickBooks Tab to enter/edit QuickBooks information for this part number.

Whenever an invoice is exported to QuickBooks:

The Cost of Goods Sold Account (QbCogSold) is debited for the total cost of the product.
The Asset/Expense Account (QbAsset) is credited for the component cost of the product.
The Income Account (QbIncome) or the Default Income Account is credited for the sale price.
The Default Accounts Receivable Account is debited for the sale price.

Whenever a receiver is exported to QuickBooks:

The Asset/Expense Account (QbAsset) is debited for the component cost of the product.
The Default Accounts Payable Account is credited for the cost of the product.

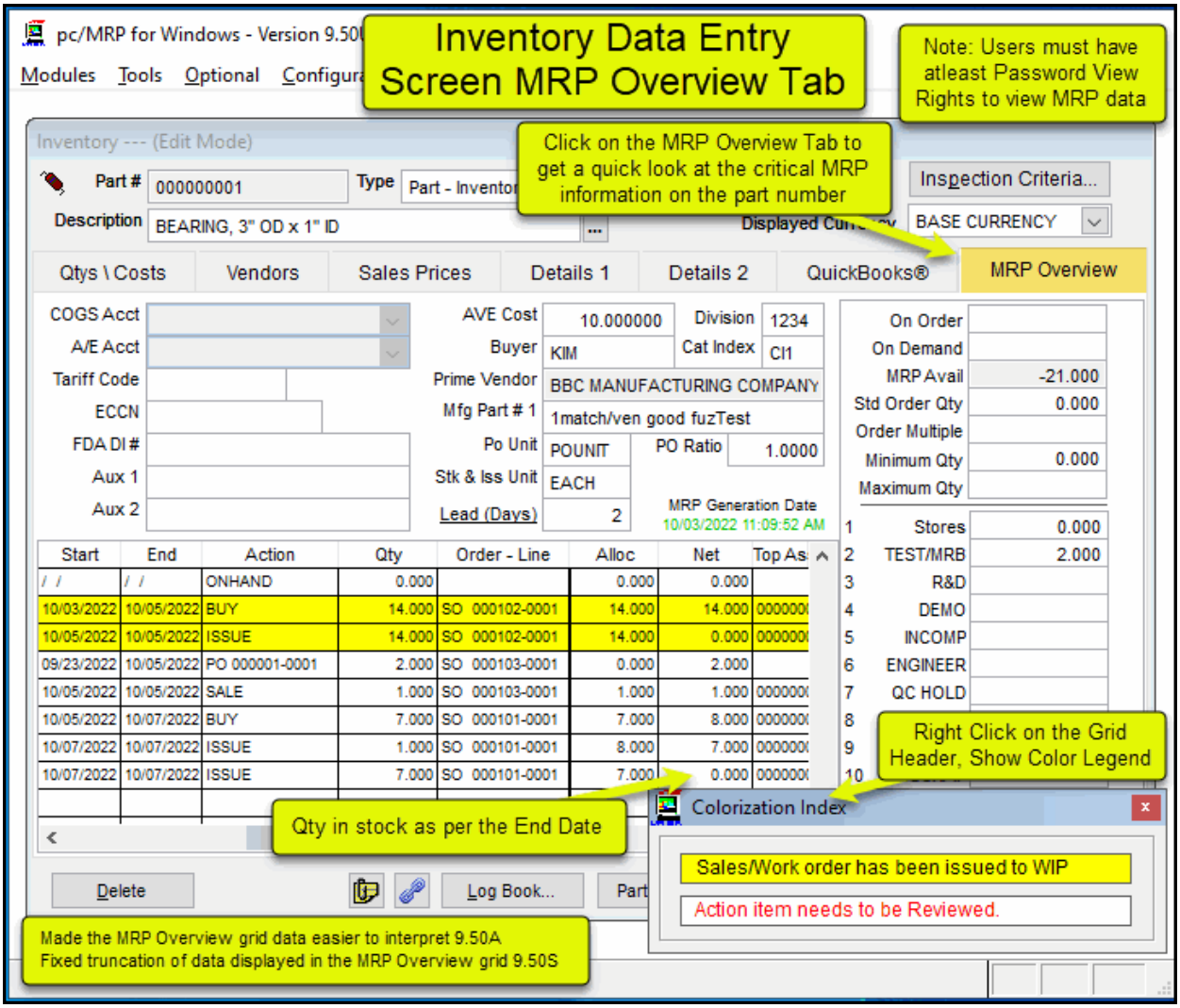
pc/MRP populates the drop down chart of accounts lists from its own QbAccountsDbf.dbf instead of populating the chart of accounts lists from QuickBooks. (This is very fast.) pc/MRP creates a fresh copy of QbAccountsDbf.dbf whenever invoices or receivers are exported to QuickBooks. If the account does not exist in the dropdown list, but exists in QuickBooks, delete the QbAccountsDbf.dbf file forcing pc/MRP to get the list directly from QuickBooks. The QbAccountsDbf.dbf file will be created the next time pc/MRP exports to QuickBooks.

pc/MRP's QuickBooks Accounting fields are 159 characters (QuickBooks' own limit). This allows for multiple sub-accounts and larger account descriptions.

See Chapter 16.16 in this Manual for details on the implementing the QuickBooks Interface Module.

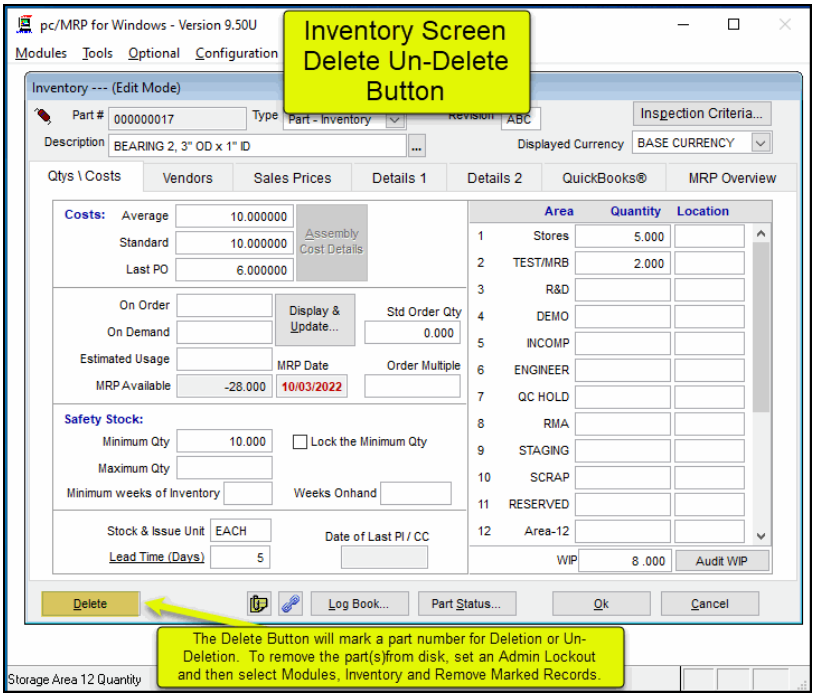
### 5.1.2.12. MRP Overview Tab

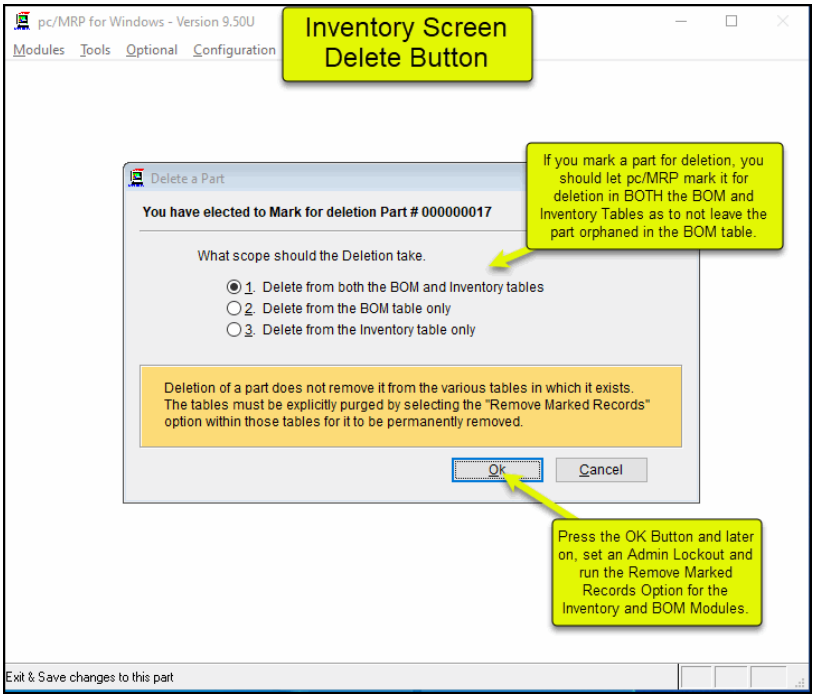
The MRP Overview Tab displays the resulting action items of the last Infinite Bucket Generation along with critical information for the part number being edited.



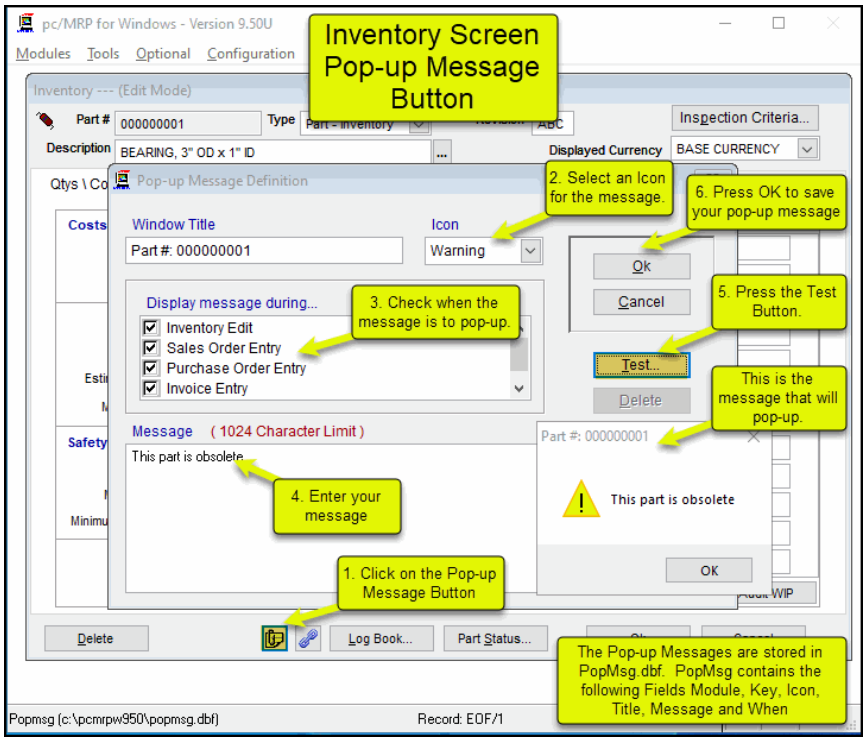
### 5.1.2.13. Enter a New Part Number, Step 13, Buttons in the Footer

You can mark a part for Deletion or Un-mark it or Deletion by pressing the **Delete Button**. You must have "Edit" rights if your company has the Optional Password Module activated. If users press the delete or undelete button, pc/MRP will ask what scope the deletion should take. In most cases you should select both the BOM and Inventory tables. Now pc/MRP will locate and mark for deletion or un-deletion every occurrence of that part in every BOM. The part numbers will be highlighted in red until deleted via the menu (Modules, Inventory (or BOMs), Remove Marked Records 5.1.15.1 & 12.13).

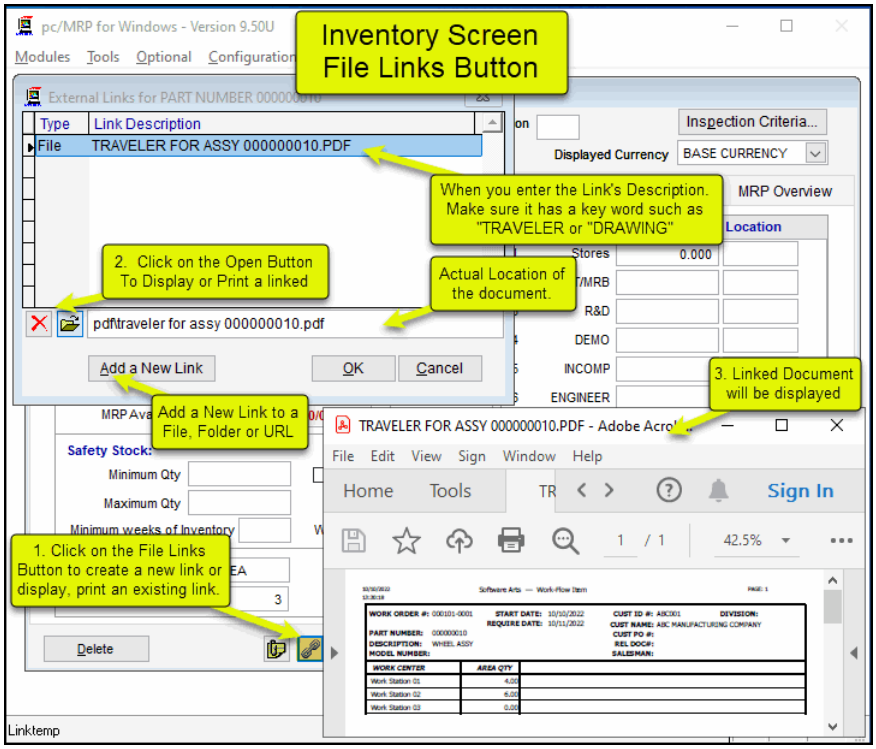


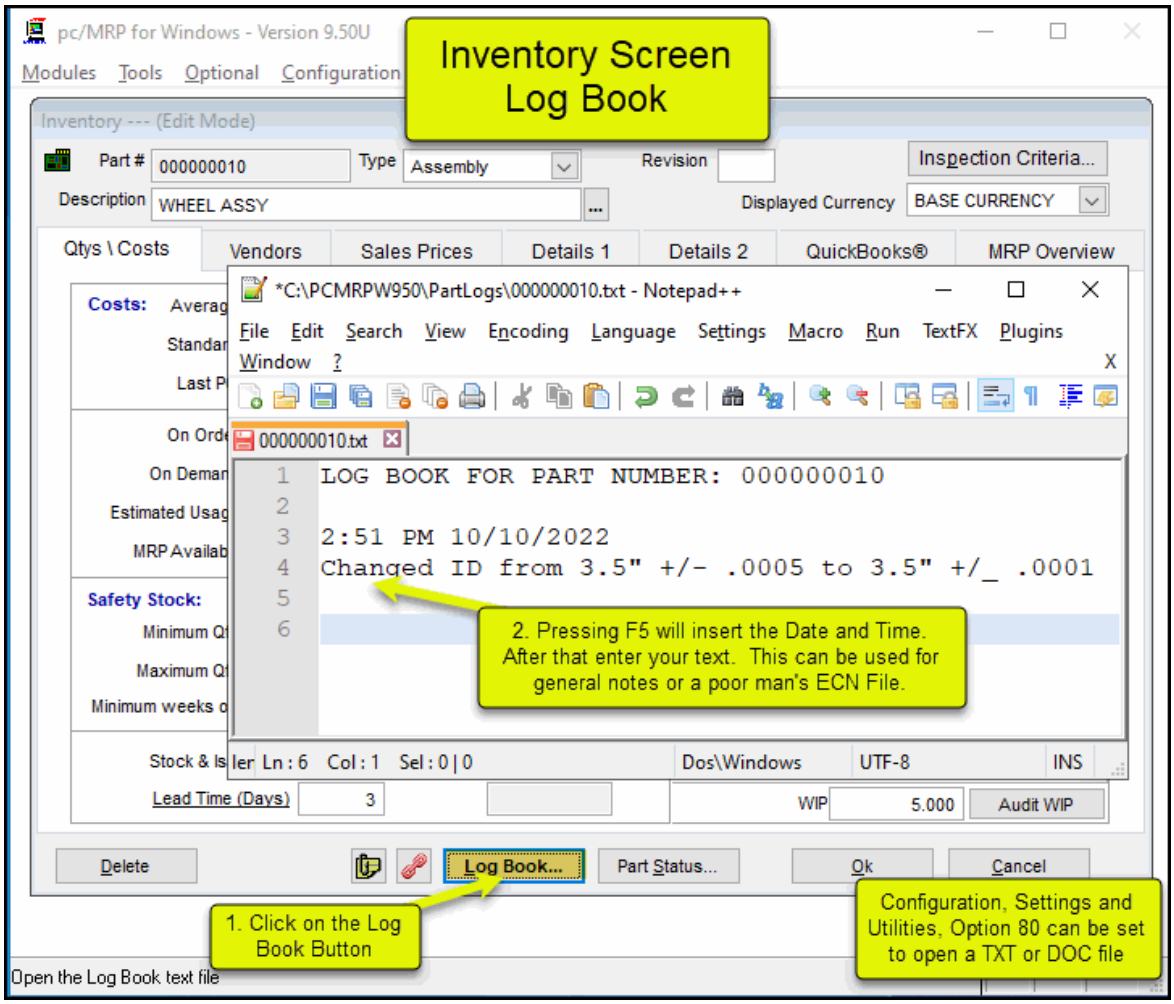
You can create **Pop-up Messages** that will display when a user edits this inventory item, enters an invoice for this item, etc. Purchase Order Entry messages will be displayed when entering a PO, entering a purchase request, or converting a PR to a PO. Sales Order Entry messages will be displayed when entering a SO or entering a SQ.




The **Links** button allows the user to create links to files, folders and URLs. In Inventory it is used to attach drawings or travelers. The file links icon turns red if there are any existing links for the part. To learn about how to automatically print the linked files along with a pc/MRP document, see the slide show starting at [http://www.pcmrp.com/mrp101/flinksdatabasefile.htm](http://www.pcmrp.com/mrp101/flinksdatabasefile.htm).



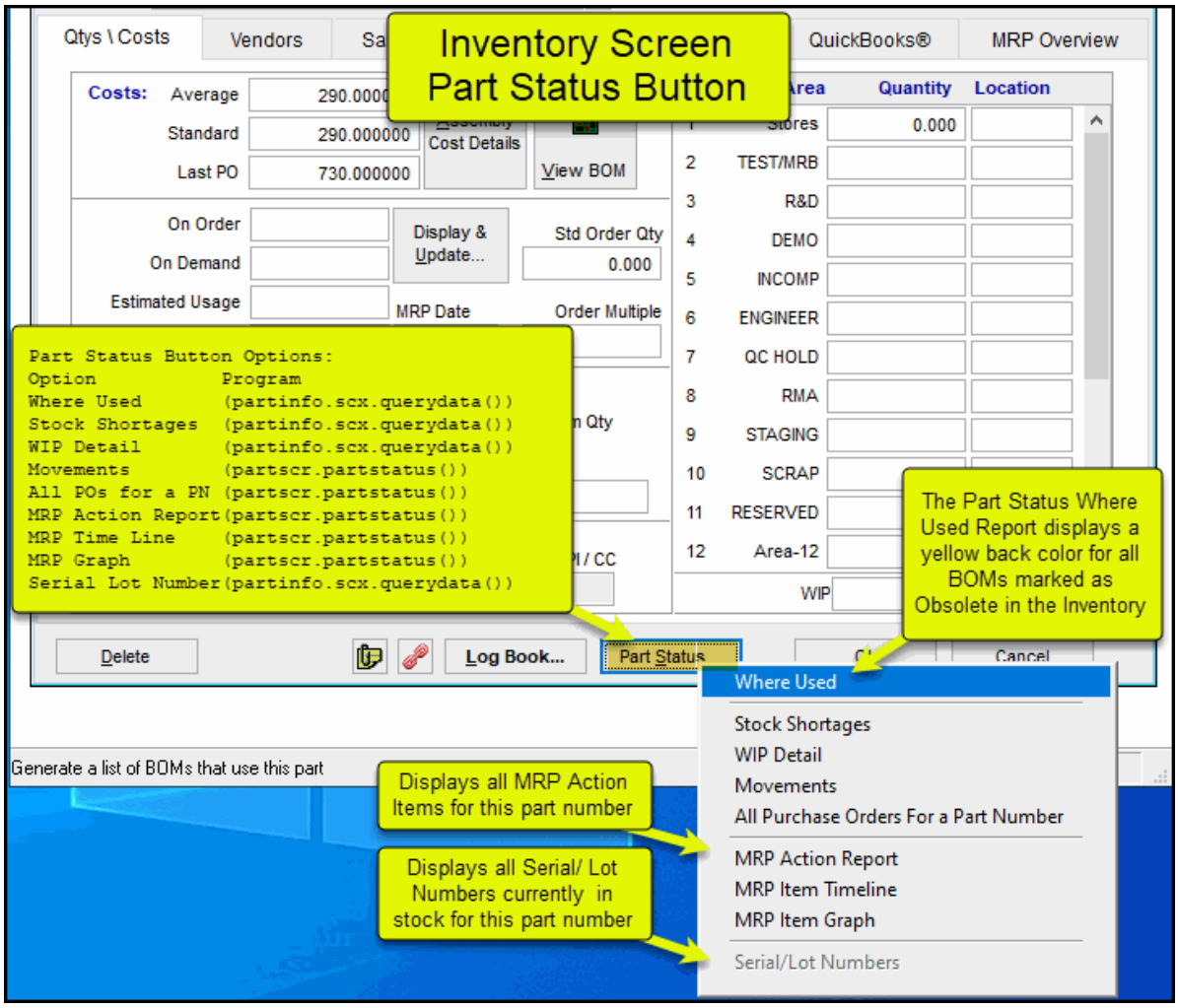
The **Logbook** button opens a text file where additional comments or instructions regarding the part may be recorded. **Option 80** lets you select whether .txt (Notepad) or .doc (Word) will be the default format. Important: Do not change the filename assigned to the log file. pc/MRP then would no longer be able to associate the file with the part number.



The **Part Status** button will allow the user to:

Display/Print all BOMs that use that part number
Display/Print all Shortages on the manufacturing floor by sales/work order for that part number
Display/Print all Quantities on the manufacturing floor by sales order for that part number
Display/Print all inventory movements for a specified time period for that part number
Display/Print all Purchase Orders for that part number
Display/Print all MRP action items (Buys, Issues, Makes, Etc.) for that part number
Display/Print a Graphical MRP Time Line (Buys, Issues, Makes, Etc.) for that part number
Display/Print a Graphical Item Map of the Onhand Quantities by date for that part number
Display/Print all Serial/Lot Number's available for that part number

Note: The 3 items that are related to the Infinite Bucket Module are only available if the Infinite Bucket Module has been activated and the user has view rights to it. The item that is related to the Serial Number Module is only available if the Serial Number Module has been activated and the user has view rights to it.

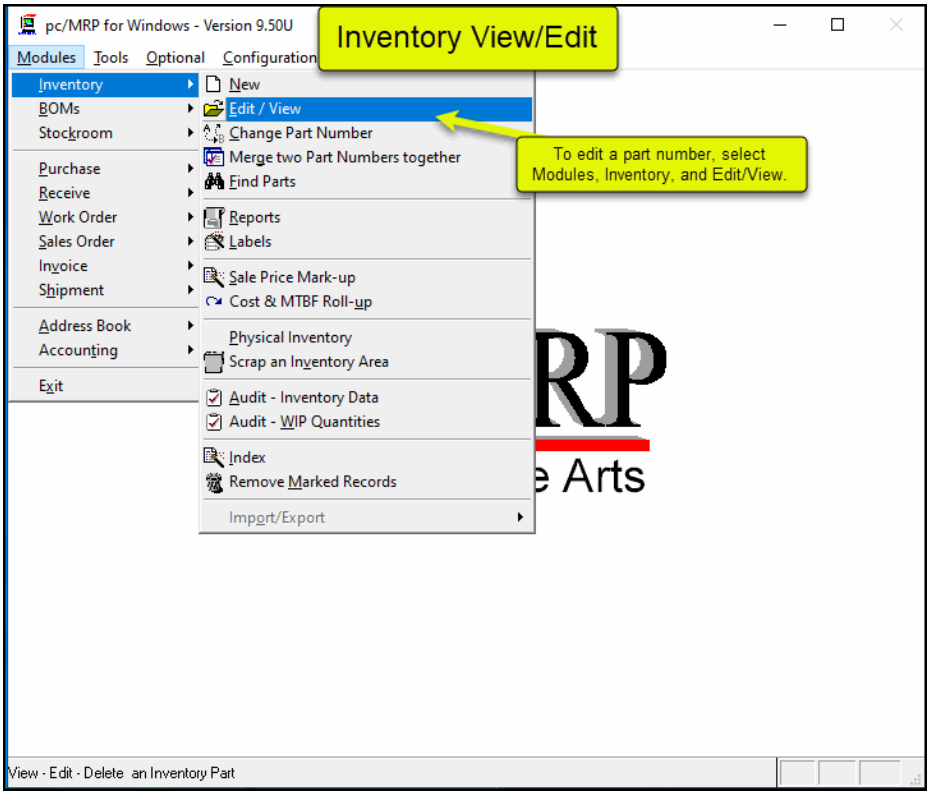


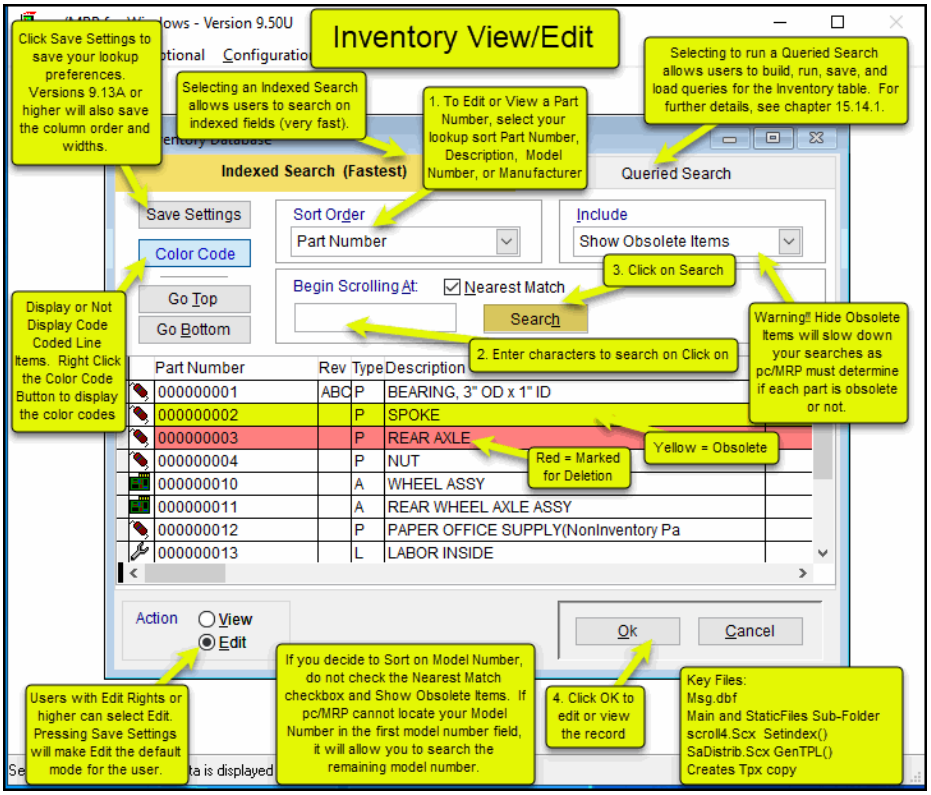

The **Ok** button saves changes to the record and returns you to the main menu.

The **Cancel** button does not save the changes to the record and returns you to the main menu.

### 5.1.3 Edit/View/Delete a Part Number

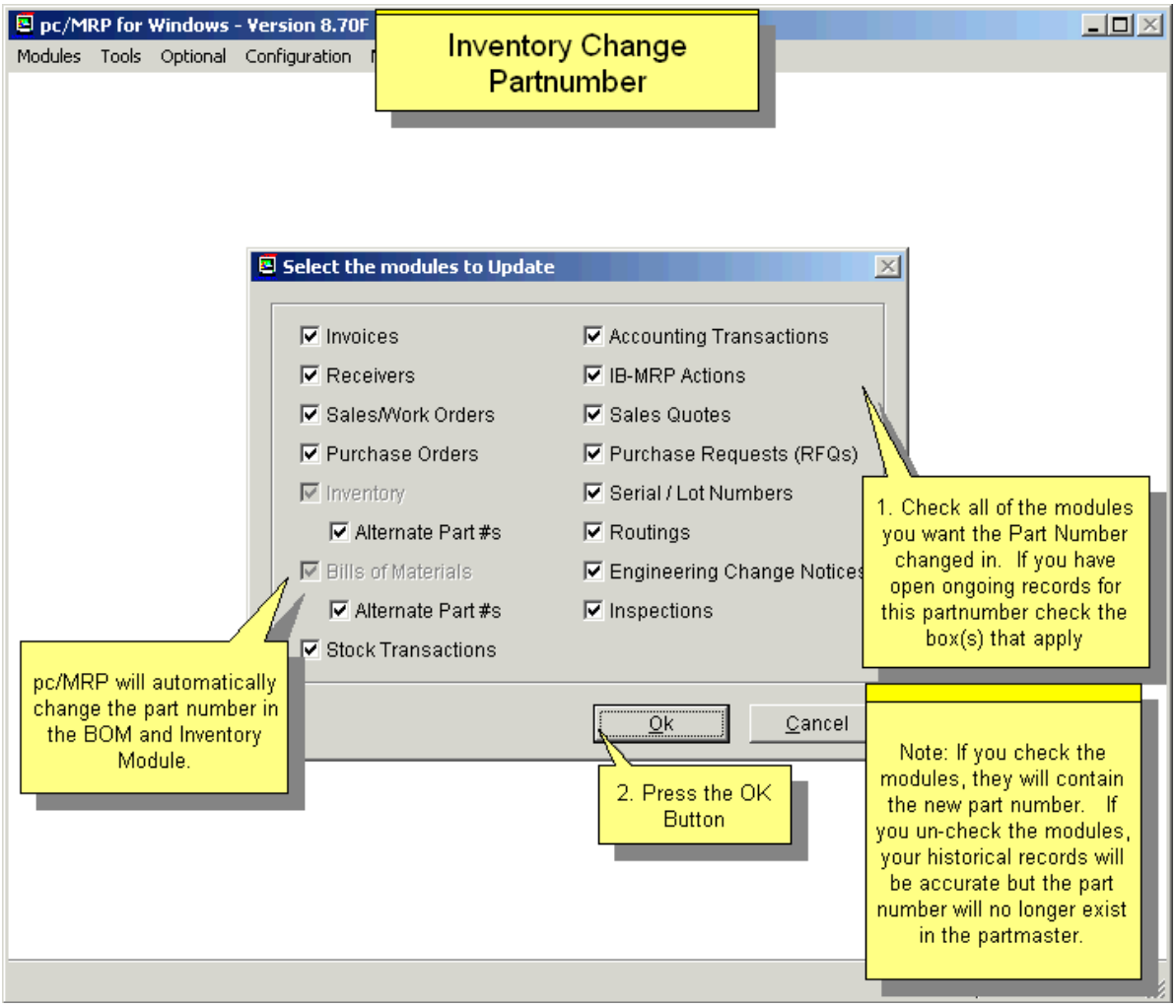
Click Inventory, Edit/View: Every field within the inventory edit screen is editable (except MRP Available). Configuration, Settings and Utilities, **Option 62** can be used to set various fields (costs, quantities, etc.) to be read only.



### 5.1.4 Change Part Number

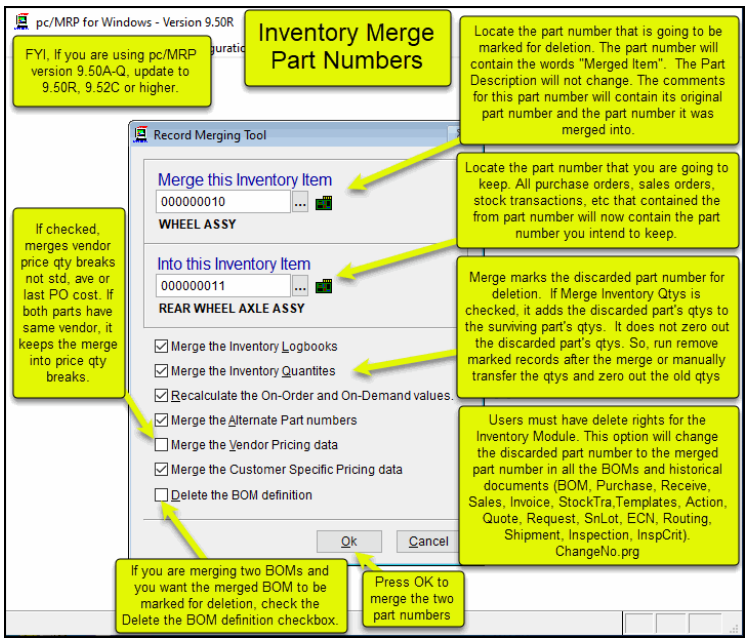
This option will change the part number in the Inventory database file and the BOM database file.




**Warning:** In case you would be changing a **blank** part number to a valid part number, make sure that you uncheck both "**Alternate Part #s**" fields. Keeping these fields checked will tell pc/MRP to fill up all blank altpart#s with the new part number in your entire Inventory in BOM table -- and pc/MRP will do just that. Call Software Arts, if this has happened.

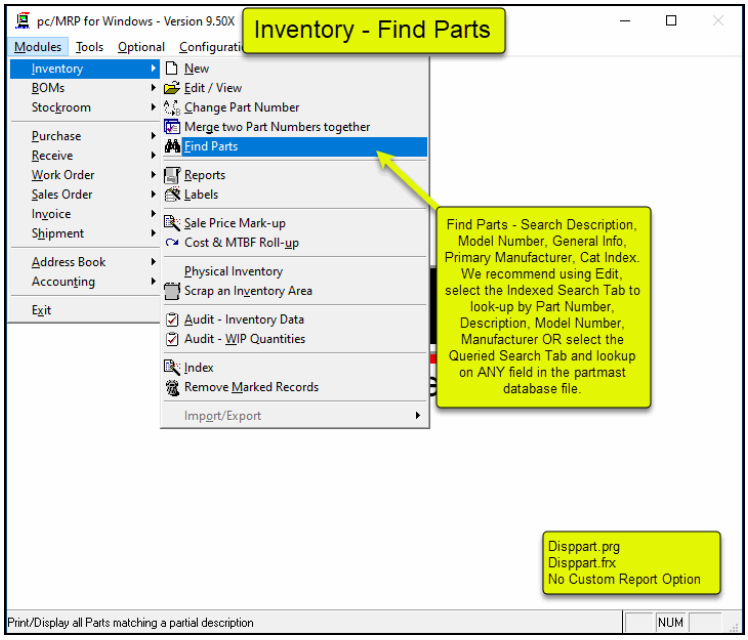
### 5.1.5 Merge Two Part Numbers

Inventory, Merge two Part Numbers Together. Please see the image below for detailed explanation.




**Note:** Vendor pricing data means the price/quantity breaks on the Vendor tab. The part's Average, Standard or Last PO cost will not change – it is Accounting's task to determine these values.

### 5.1.6 Find Parts (Matching a Partial Description)

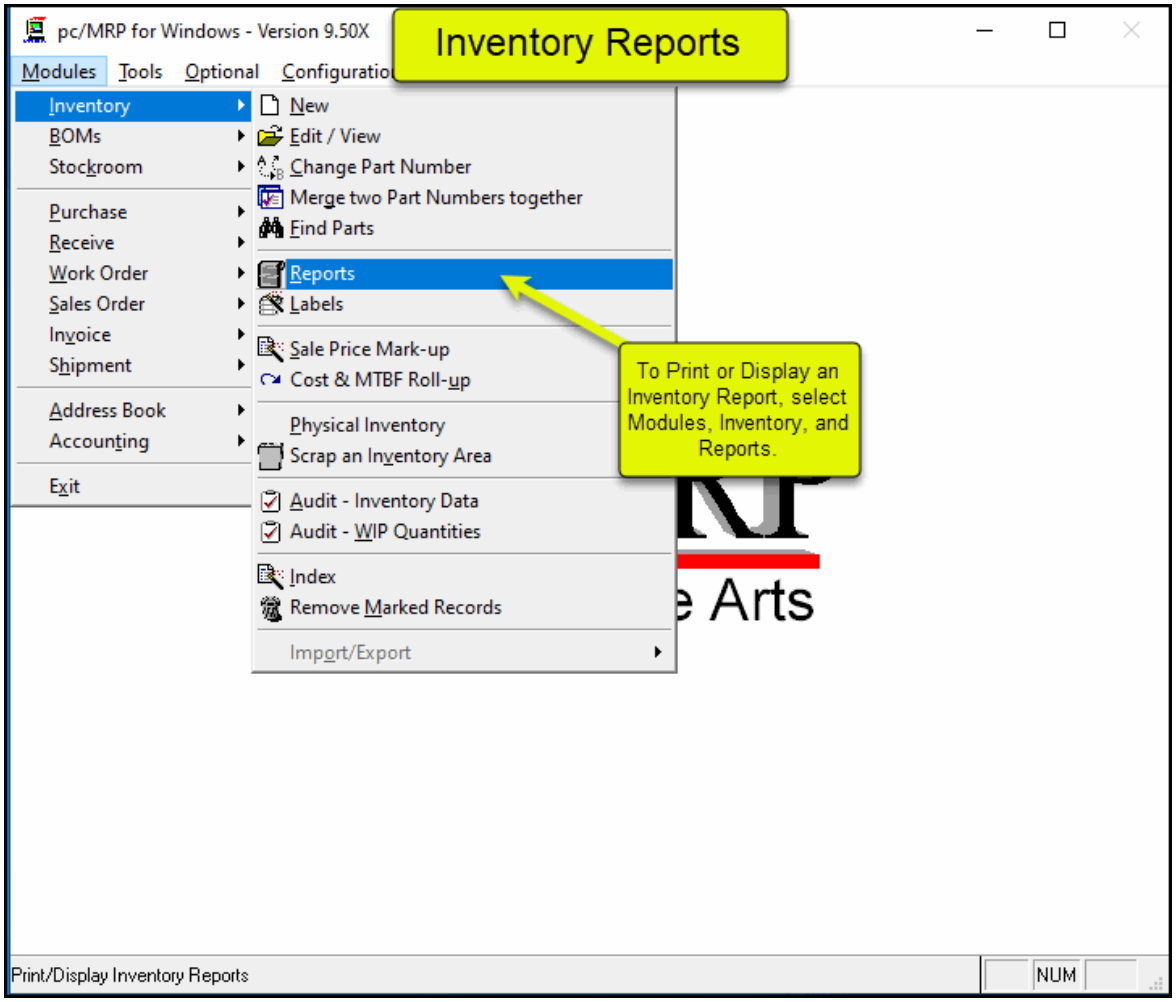



Allows users to search for all parts matching a specified description in the Inventory Description Field or Memo Field. For example, to search the Inventory Description Field for all elbows you could select D - Description to search on, and enter the letters ELB into the description field.

Search Description, Model Number, General Info, Primary Manufacturer, Cat Index. We recommend using Edit, select the Indexed Search Tab to look-up by Part Number, Description, Model Number, Manufacturer OR select the Queried Search Tab and lookup on ANY field in the partmast database file.

### 5.1.7 Reports

To Display and or Print an Inventory Report, select Modules, Inventory, and Reports.

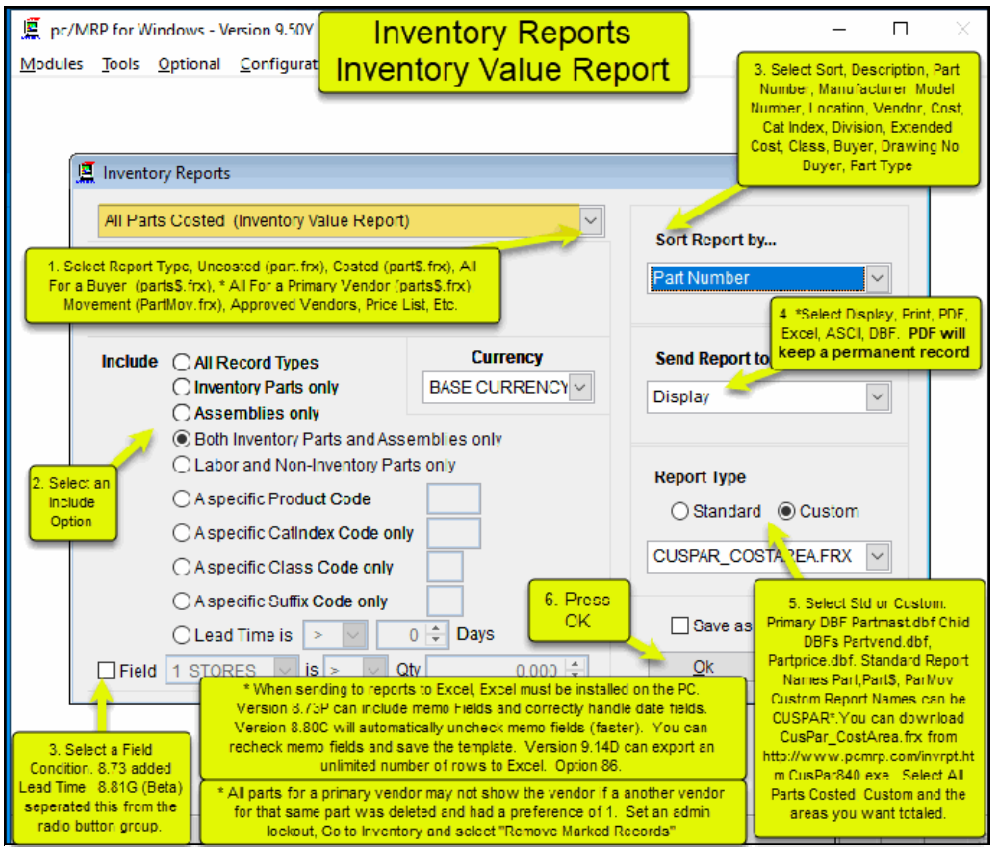


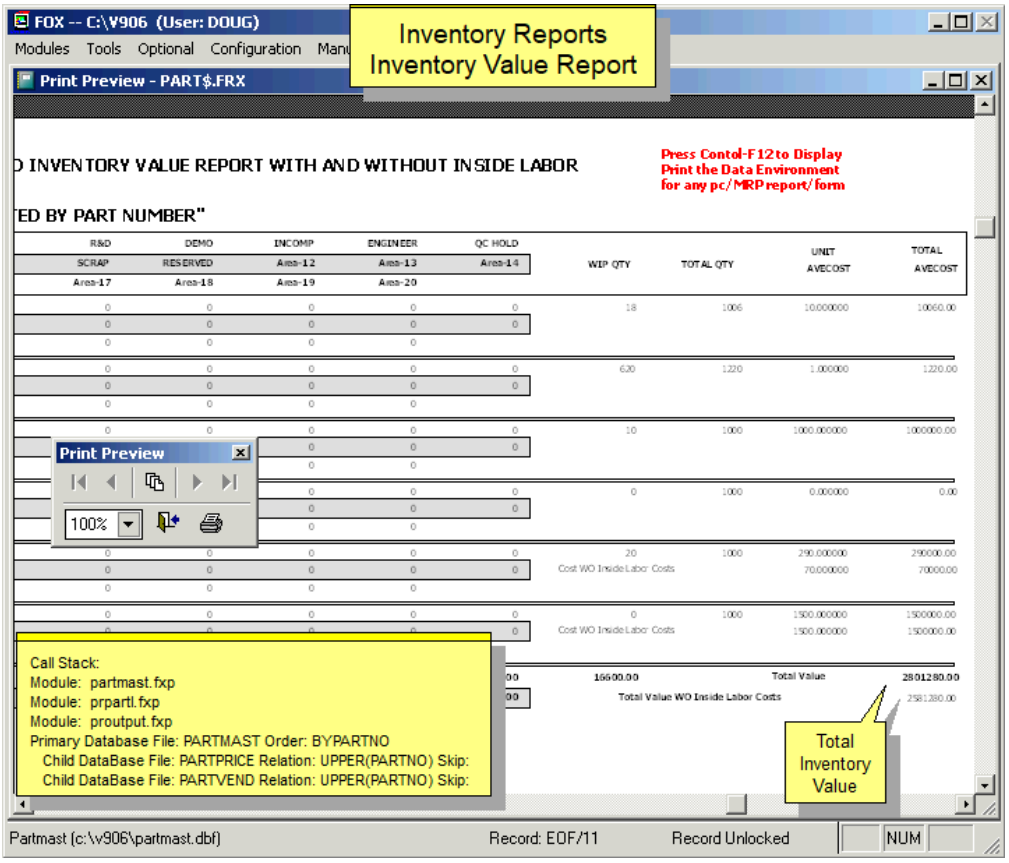

There are a variety of standard un-costed (part.frx), standard costed (part$.frx) and custom (cuspart*.frx) reports to choose from. See Section 15.4.1 about creating custom reports.

All parts costed for single areas are cuspart0-cuspart20.frx and are available for download at
http://www.pcmrp.com/invrpt.htm

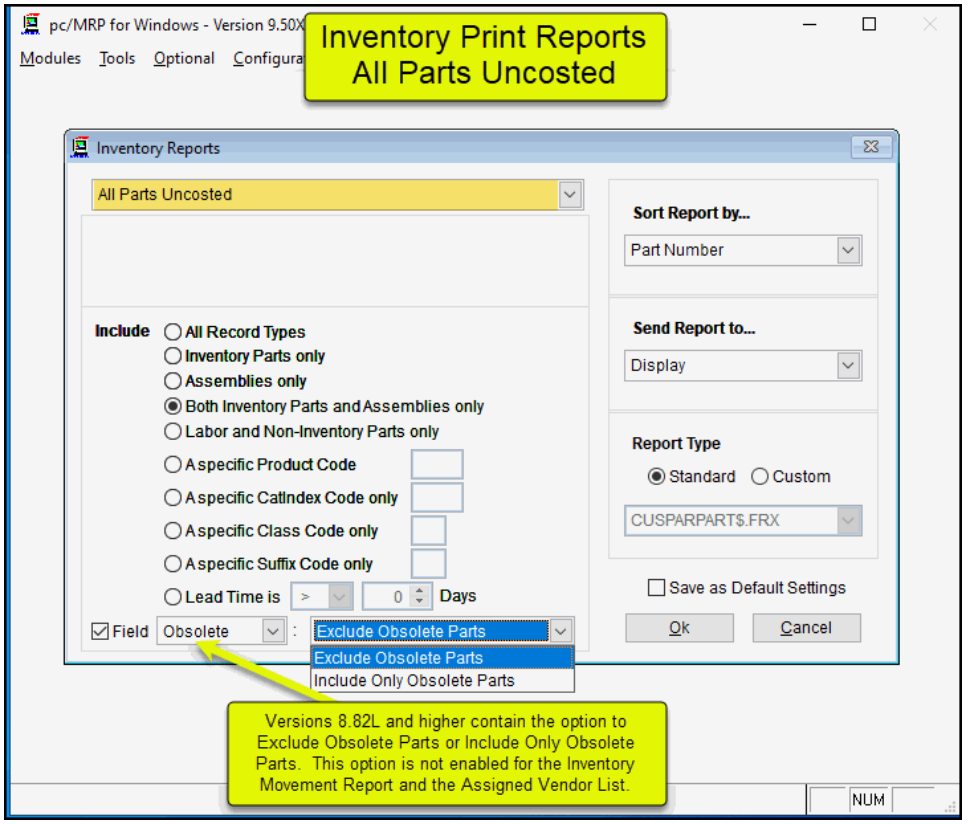
**Note:** Sending memo fields into Excel significantly slows down the process. Do not include memo type fields, unless you need them. pc/MRP defaults to not include memo fields.

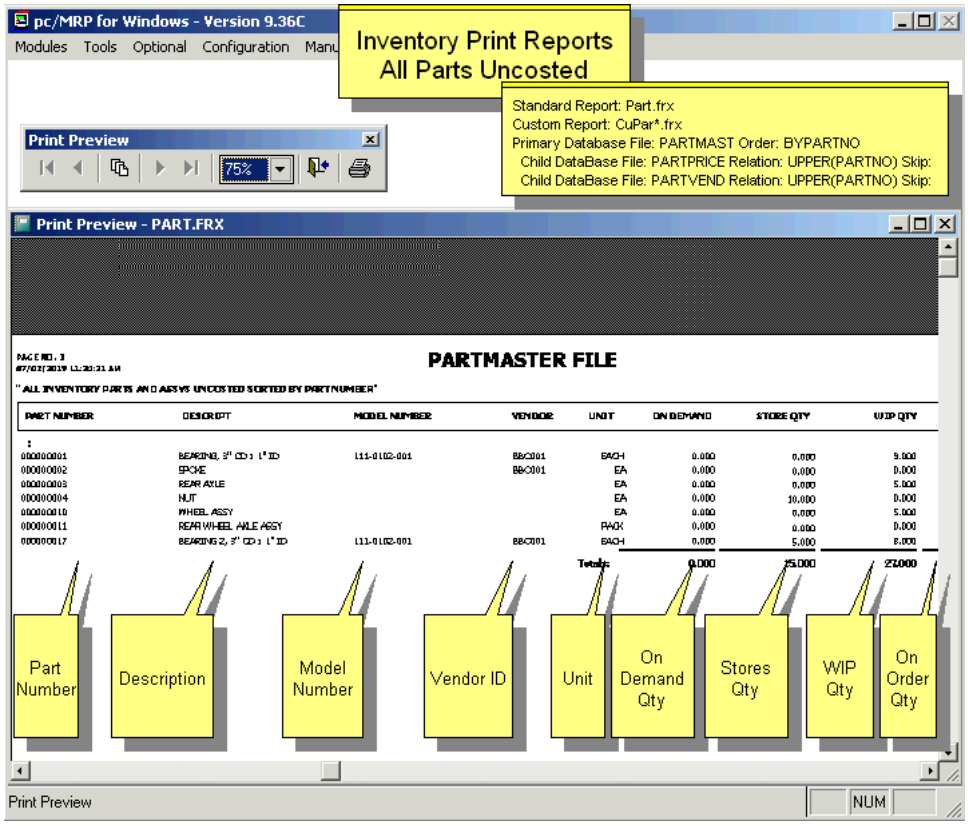
**All Parts Costed (Inventory Value Report)**



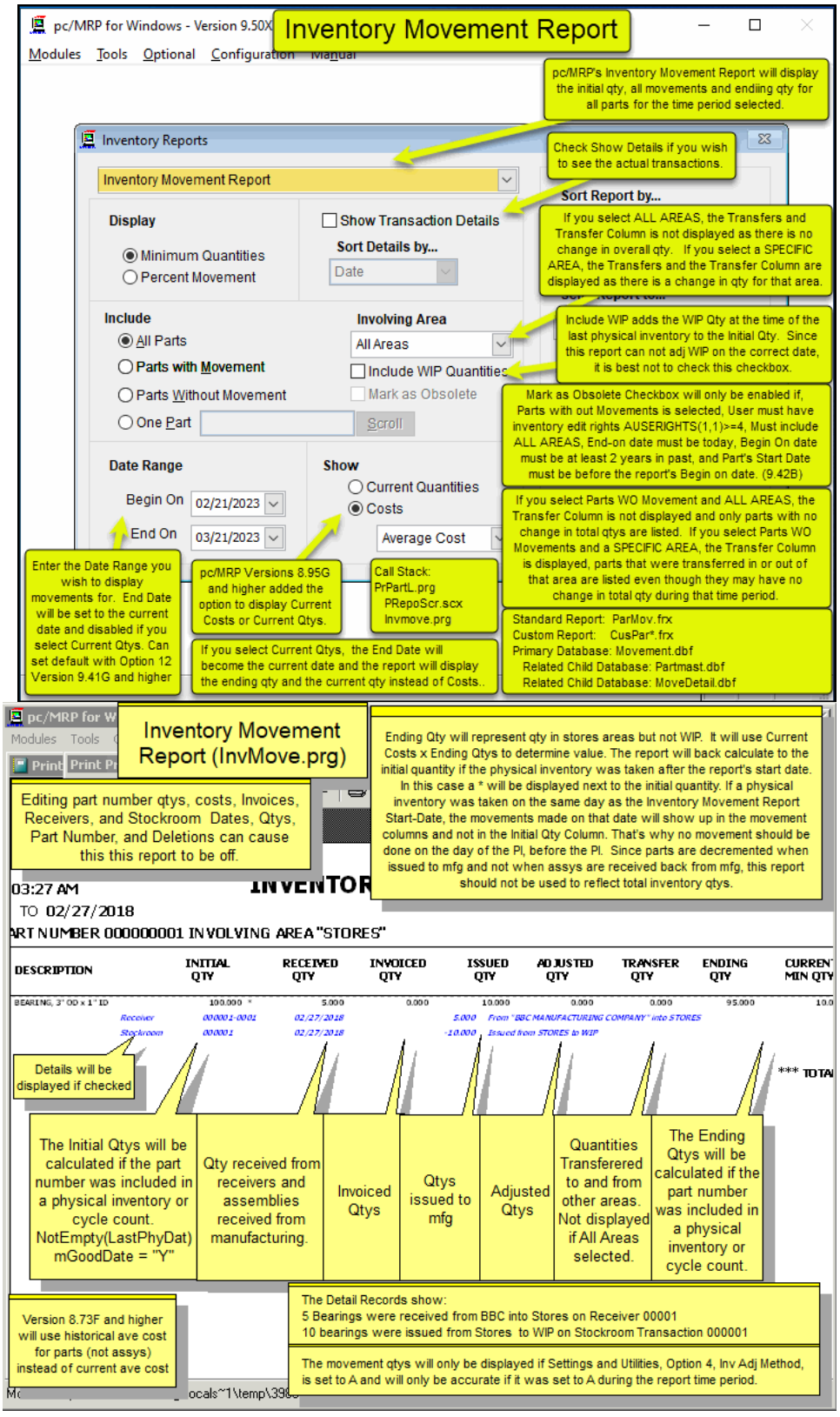



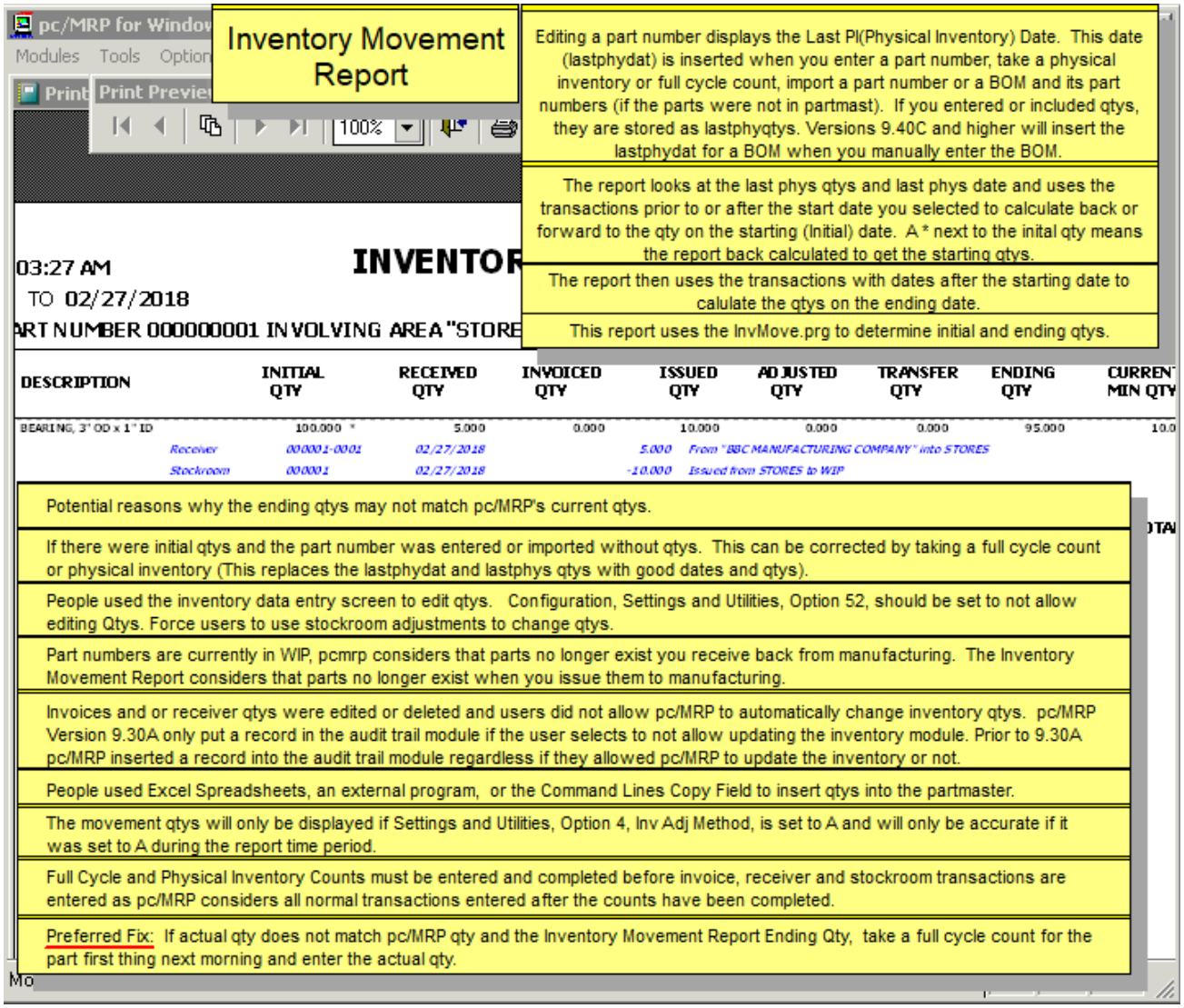
**All Parts Un-Costed Report**



The **Inventory Movement Report** (*parmov.frx)* summarizes all part movements for a time period you specify and categorizes as Received (component parts received, AP vouchers that receive component parts, debit memos for negative quantities, and assemblies received from manufacturing), Invoiced, Issued, and Adjusted Quantities.






**PAGE :** 1
**DATE :** 04/06/2015 03:49:09 PM
**PERIOD:** 03/06/2015 TO 04/06/2015
**REPORT TYPE:** ALL PART NUMBERS

## INVENTORY MOVEMENT REPORT

PARMOV.FRX

| PARTNO | DESCRIPTION | | INITIAL QTY | RECEIVED QTY | INVOICED QTY | ISSUED QTY | ADJUSTED QTY | ENDING QTY | CURRENT MIN QTY | CURRENT QTY | REVIEW |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 000000001 | BEARING, 3" OD x 1" ID | | 0.000 | 250.000 | 1.000 | 1.000 | 0.000 | 248.000 | 10.000 | 248.0000 | |
| | | Receiver | 000001-0001 | 04/02/2015 | | 100.000 | From "ARROW ELECTRONICS" into STORES | | | | |
| | | Receiver | 000002-0001 | 04/02/2015 | | 150.000 | From "ARROW ELECTRONICS" into TEST/MRB | | | | |
| | | Invoice | 000001-0001 | 04/06/2015 | | -1.000 | To "OREGON STATE BOARD OF EQUALIZATION" from STORES | | | | |
| | | Stockroom | 000010 | 04/06/2015 | | -1.000 | Issued from STORES to WIP | | | | |
| 000000002 | SPOKE | | 5.000 | 1000.000 | 10.000 | 40.000 | 0.000 | 955.000 | 10.000 | 957.0000 | REVIEW |
| | | Receiver | 000003-0001 | 04/02/2015 | | 250.000 | From "BBC MANUFACTURING COMPANY" into STORES | | | | |
| | | Receiver | 000004-0001 | 04/02/2015 | | 750.000 | From "BBC MANUFACTURING COMPANY" into R&D | | | | |
| | | Invoice | 000002-0001 | 04/06/2015 | | -10.000 | To "CA STATE BOARD OF EQUALIZATION" from R&D | | | | |
| | | Stockroom | 000011 | 04/06/2015 | | 0.000 | Issued from STORES to WIP | | | | |
| | | Stockroom | 000012 | 04/06/2015 | | -40.000 | Issued from R&D to WIP | | | | |
| 000000003 | REAR AXLE | | 10.000 | 0.000 | 0.000 | 0.000 | 0.000 | 10.000 | 0.000 | 10.0000 | |
| 000000004 | NUT | | 105.000 | 0.000 | 0.000 | 0.000 | 5.000 | 110.000 | 0.000 | 110.0000 | |

**Warning:** The Inventory Movement Report will only be accurate if **Option 4**, Inventory Adjustment Method is and has been set to A during the time period covered.

Check “Show Details” if you want to see the actual transactions. Select a specific area, or all areas. The Inventory Movement report includes all part types (inventory and non-inventory items, assys, labor).

When a Physical Inventory (or a full cycle count) is taken, each participating part’s last physical inventory date is updated with the current date. Behind the scenes, pc/MRP will also save the quantities counted in each area, and the wip quantity. When a user creates a new part in pc/MRP, these same fields get populated with the current date and the entered quantities. This date and quantities will be used by the Inventory Movement Report as a base:

The Initial Quantity is calculated from the quantities just described. The report will back calculate to the initial quantity if the physical inventory was taken after the report's start date. In this case a * will be displayed next to the initial quantity. If the part has been imported to pc/MRP and never been included in a physical inventory (or full cycle count), there is no base quantity to start the calculation with. In this case both Initial and Ending Quantities will show the word UNAVAILABLE.

If a physical inventory was taken on the same day as the Inventory Movement Report Start-Date, the movements made on that date will show up in the movement columns and not in the Initial Qty Column. That’s why no movement should be done on the day of the PI, before the PI.

*Do not check the include WIP Qtys checkbox.* If you do, the WIP Qtys from the last Physical Inventory will be taken into account when calculating initial quantities. Since this report does not use WIP quantities on the current date, it is best not to check this box.

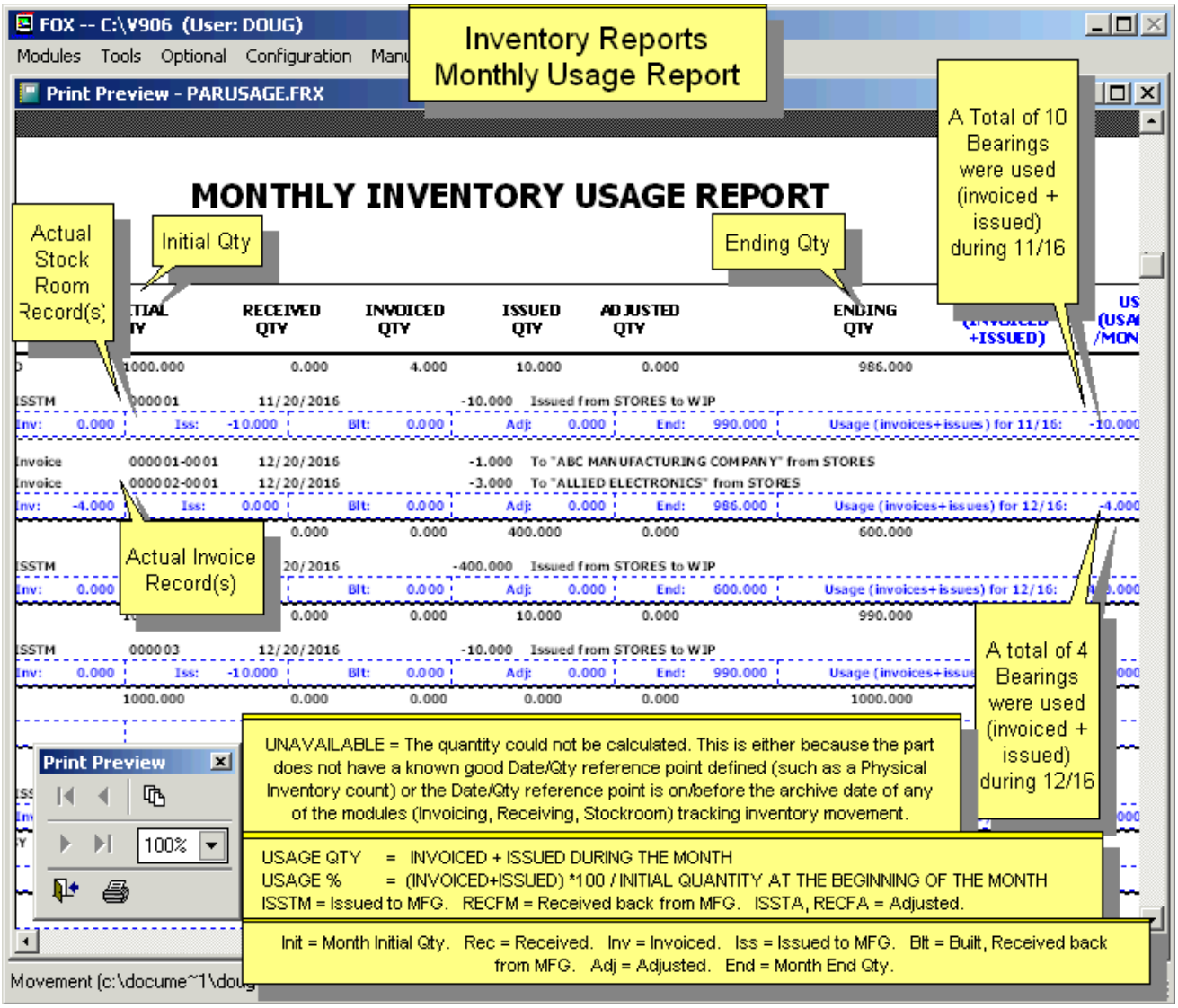
The Inventory Movement Report has the following columns: part number, initial quantity, received quantity (component parts received, AP vouchers that receive component parts, debit memos for negative quantities, and assemblies received from manufacturing), adjusted quantity, invoiced quantity, issued quantity, and ending quantity. The calculation starts with the Initial Quantity, as described above. Receiving increases the quantity of items, Issuing or Invoicing decreases it. Adjusting might increase or decrease the quantities.

If you run the report for all areas, B type (transferring between inventory areas) transactions do not change the ending quantity; therefore they will not be listed. However, if you are running the report for a certain inventory area, transferring transactions do have a role, and they *are* listed.

The report uses the actual average cost at the time of the End Date for parts, and the current average cost for assemblies, to determinate value.

If your goal is to compare Ending Quantities to current inventory quantities, select the Current Quantities option. This option displays current onhand quantities (for all areas or for a certain area) and a REVIEW flag if it is different than the ending quantity. Again, do not check Include WIP. Selecting this option is only meaningful with today’s date as the ending date, therefore the ending date defaults to today and is not editable if you select Current Quantities.

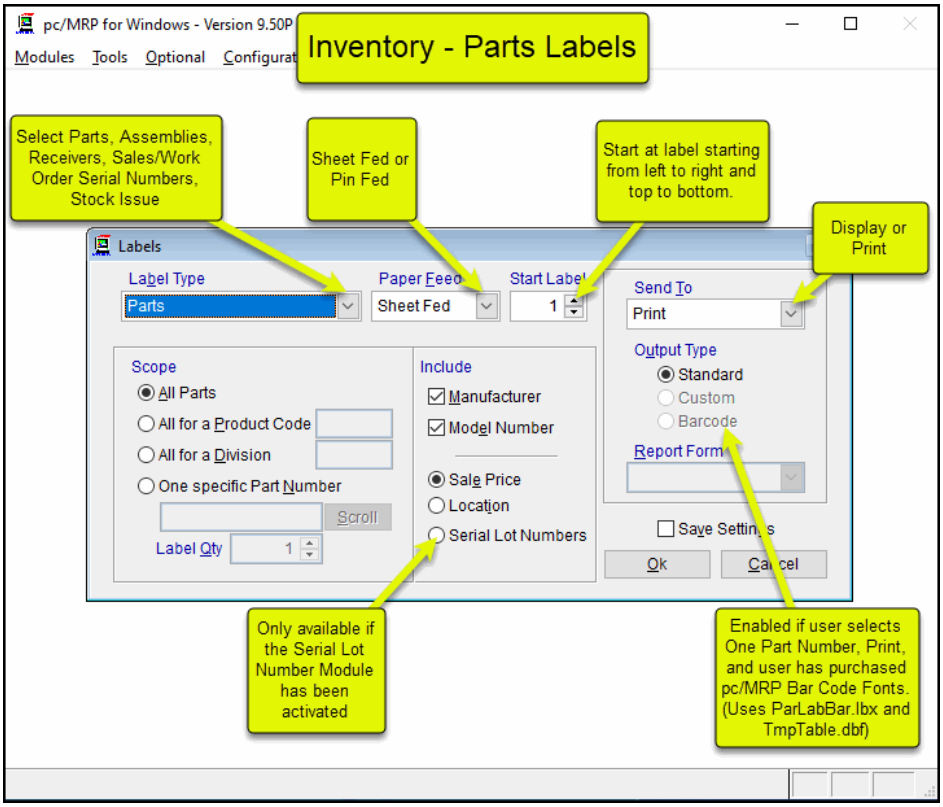
The **Monthly Inventory Usage Report** (*parusage.frx)* is similar to the Inventory Movement Report, but it subtotals the movements (received, invoiced, issued, adjusted) by month. In addition, the report will display the initial and ending quantities for the month. Finally, the usage for each calendar month in the selected data range will be displayed in total and as a percentage of the month initial quantity. Usage is defined as Invoices + Issues (ISSTM). Note: If you have a large amount of part data, upgrade to 9.40n or higher.

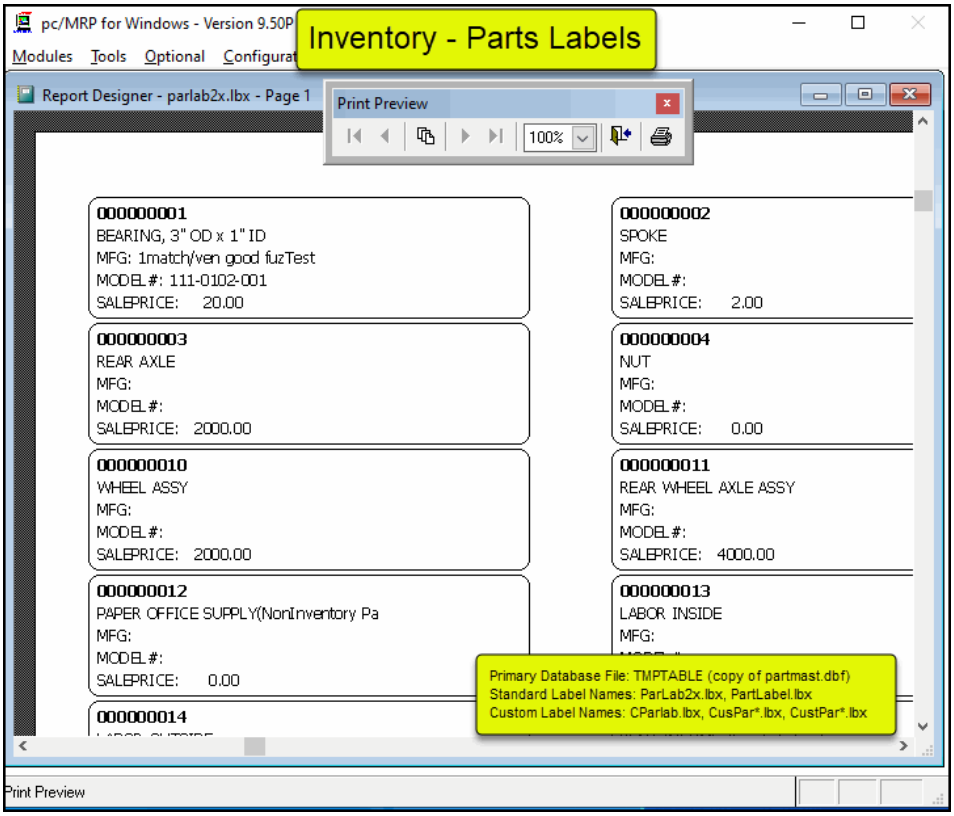



### 5.1.8 Labels

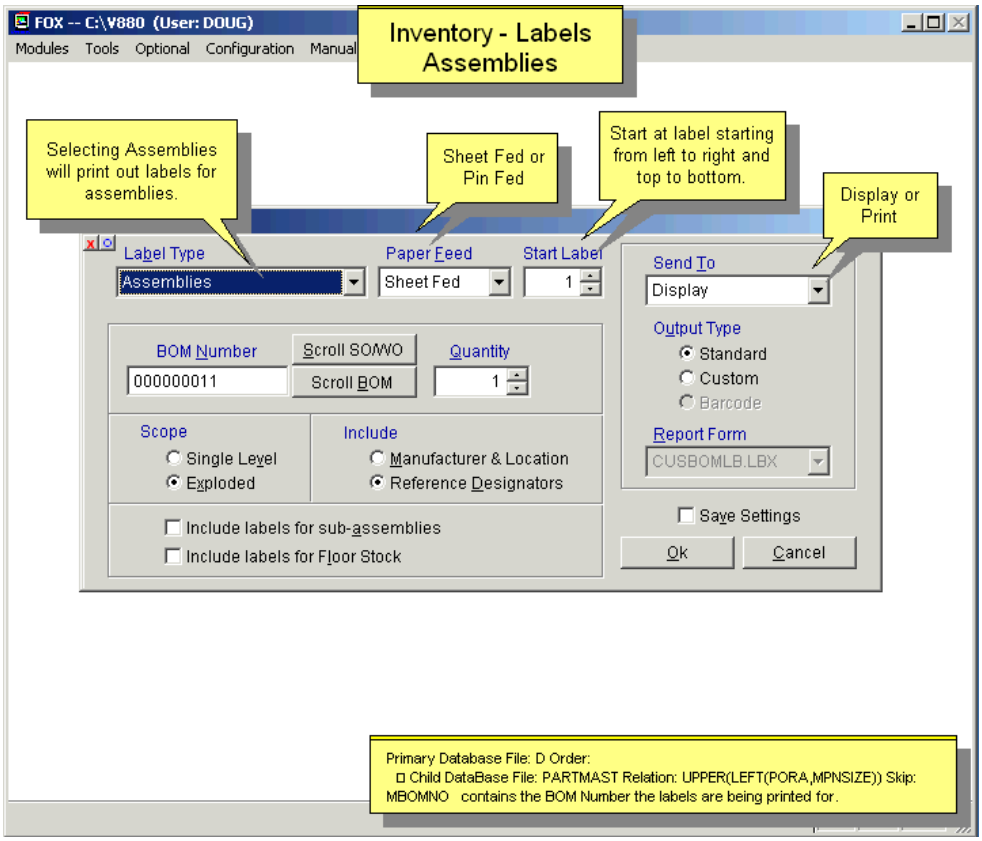
You can print out labels for Part Numbers, Assemblies, Receivers, Sales and Work Order Serial Numbers, and Stock Issues for a Sales/Work Order Number. For laser printers, select Sheet Fed and purchase standard 1" x 4" 20 labels/ page. For dot matrix printers select Pin Fed and purchase 15/16" high by 3-1/2" wide single row pin fed labels. You can create custom labels by reviewing Section 15.4.2.23 of this Manual and using Configuration, Settings and Utilities**,** Option 24.

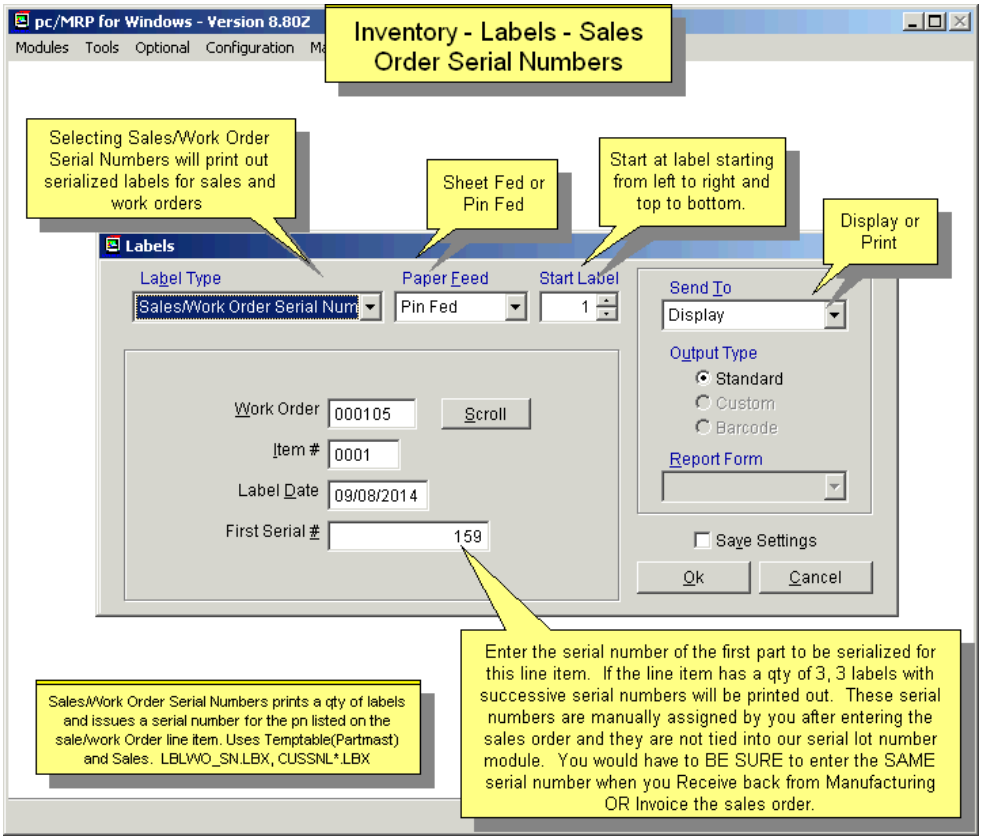
**Part Labels**

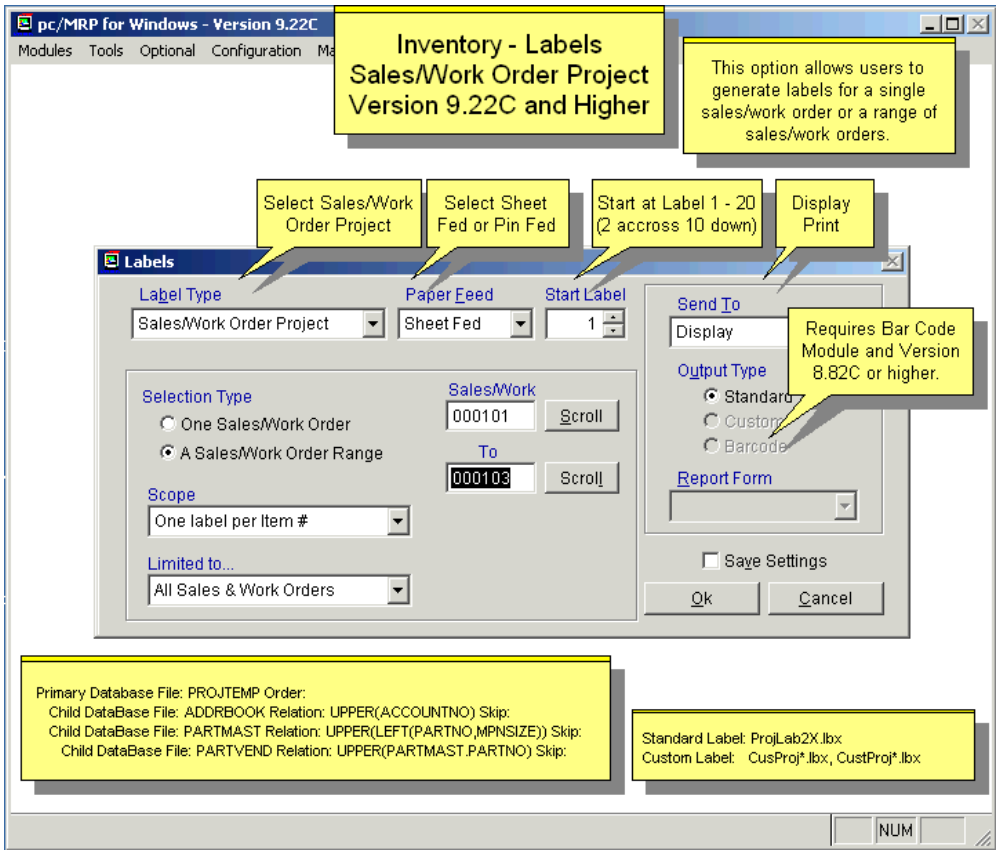


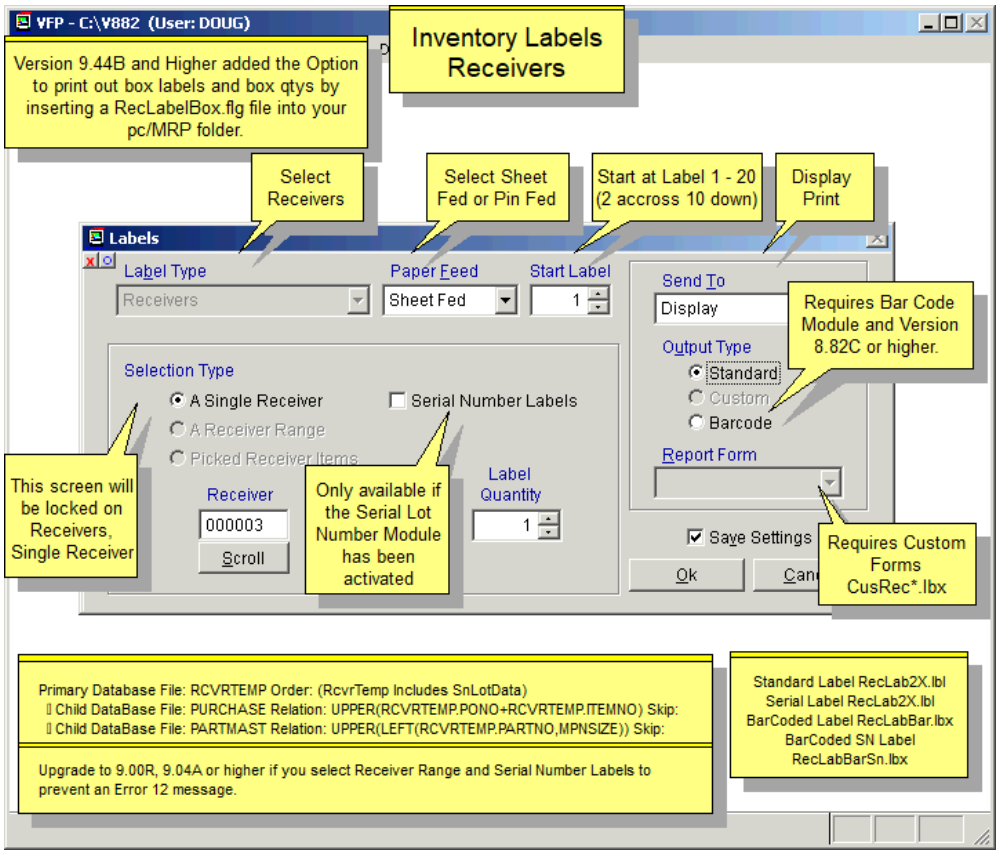



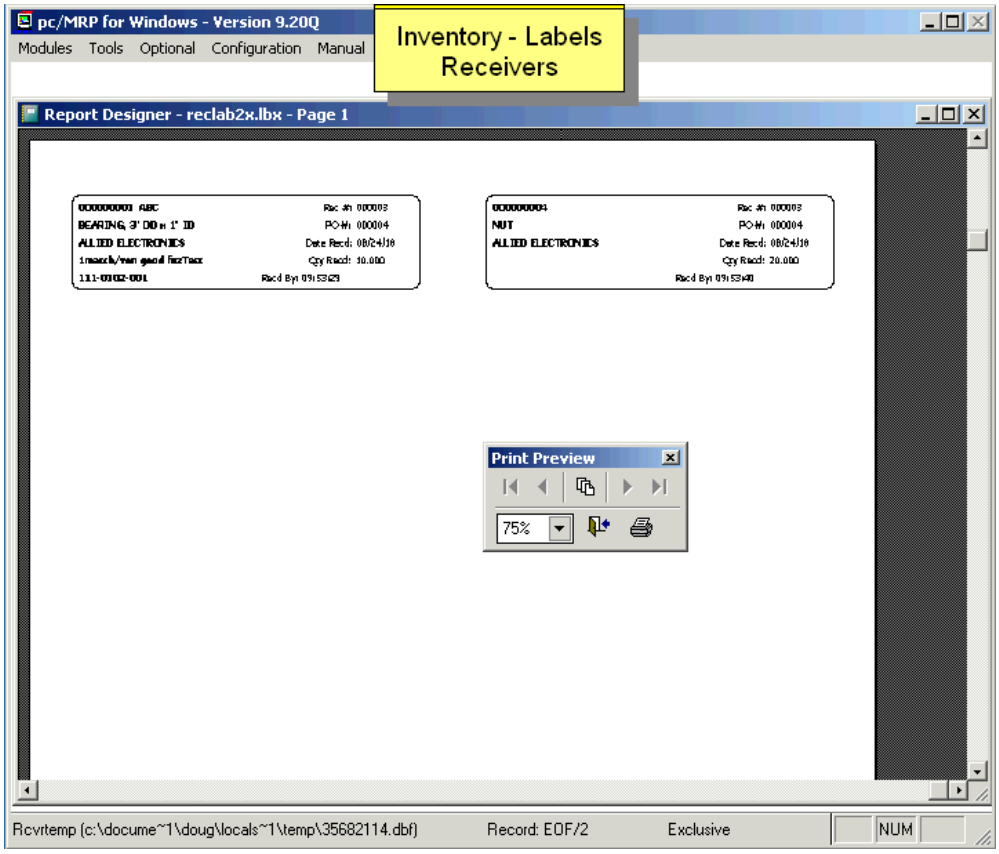

The Work/Sales Order label option creates a MEM file (*wosernum.mem*) to store the last serial number issued. It increases the serial number and prints out as many labels as received for the Work/Sales order line item.

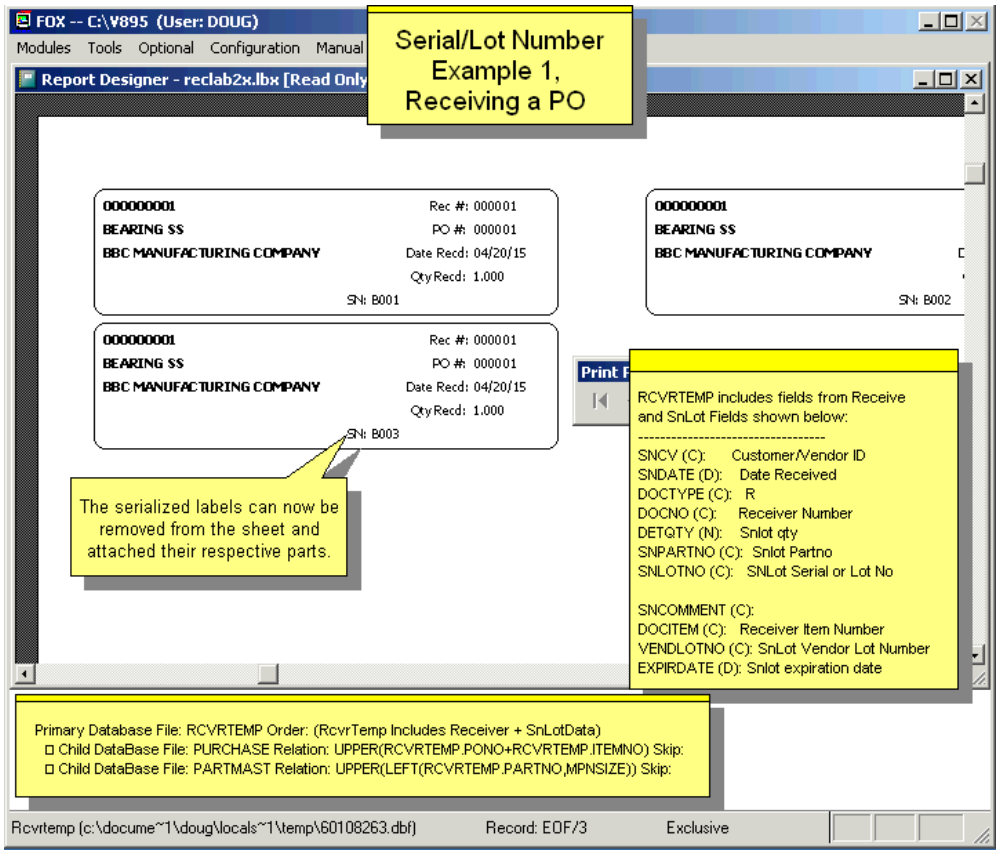

FOX -- C:\V880 (User: DOUG)
Modules Tools Optional Configuration Manual
Inventory - Labels Assemblies
Selecting Assemblies will print out labels for assemblies.
Sheet Fed or Pin Fed
Start at label starting from left to right and top to bottom.
Display or Print
Label Type
Assemblies
Paper Feed
Sheet Fed
Start Label
1
Send To
Display
BOM Number
000000011
Scroll SO/WO
Scroll BOM
Quantity
1
Output Type
Standard
Custom
Barcode
Scope
Single Level
Exploded
Include
Manufacturer & Location
Reference Designators
Report Form
CUSBOMLB.LBX
Include labels for sub-assemblies
Include labels for Floor Stock
Save Settings
Ok
Cancel
Primary Database File: D Order:
Child DataBase File: PARTMAST Relation: UPPER(LEFT(PORA,MPNSIZE)) Skip:
MBOMNO contains the BOM Number the labels are being printed for.


pc/MRP for Windows - Version 8.80Z
Modules Tools Optional Configuration
Inventory - Labels - Sales Order Serial Numbers
Selecting Sales/Work Order Serial Numbers will print out serialized labels for sales and work orders
Sheet Fed or Pin Fed
Start at label starting from left to right and top to bottom.
Display or Print
Labels
Label Type
Sales/Work Order Serial Num
Paper Feed
Pin Fed
Start Label
1
Send To
Display
Output Type
Standard
Custom
Barcode
Work Order
000105
Scroll
Item #
0001
Label Date
09/08/2014
First Serial #
159
Report Form
Save Settings
Ok
Cancel
Enter the serial number of the first part to be serialized for this line item. If the line item has a qty of 3, 3 labels with successive serial numbers will be printed out. These serial numbers are manually assigned by you after entering the sales order and they are not tied into our serial lot number module. You would have to BE SURE to enter the SAME serial number when you Receive back from Manufacturing OR Invoice the sales order.
Sales/Work Order Serial Numbers prints a qty of labels and issues a serial number for the pn listed on the sale/work Order line item. Uses Temptable(Partmast) and Sales. LBLWO_SN.LBX, CUSSNL*.LBX


pc/MRP for Windows - Version 9.22C
Modules Tools Optional Configuration
Inventory - Labels
Sales/Work Order Project
Version 9.22C and Higher
This option allows users to generate labels for a single sales/work order or a range of sales/work orders.
Select Sales/Work Order Project
Select Sheet Fed or Pin Fed
Start at Label 1 - 20 (2 accross 10 down)
Display Print
Labels
Label Type
Sales/Work Order Project
Paper Feed
Sheet Fed
Start Label
1
Send To
Display
Requires Bar Code Module and Version 8.82C or higher.
Output Type
Standard
Custom
Barcode
Selection Type
One Sales/Work Order
A Sales/Work Order Range
Sales/Work
000101
Scroll
To
000103
Scroll
Report Form
Scope
One label per Item #
Limited to...
All Sales & Work Orders
Save Settings
Ok
Cancel
Primary Database File: PROJTEMP Order:
Child DataBase File: ADDRBOOK Relation: UPPER(ACCOUNTNO) Skip:
Child DataBase File: PARTMAST Relation: UPPER(LEFT(PARTNO,MPNSIZE)) Skip:
Child DataBase File: PARTVEND Relation: UPPER(PARTMAST.PARTNO) Skip:
Standard Label: ProjLab2X.lbx
Custom Label: CusProj*.lbx, CustProj*.lbx
NUM

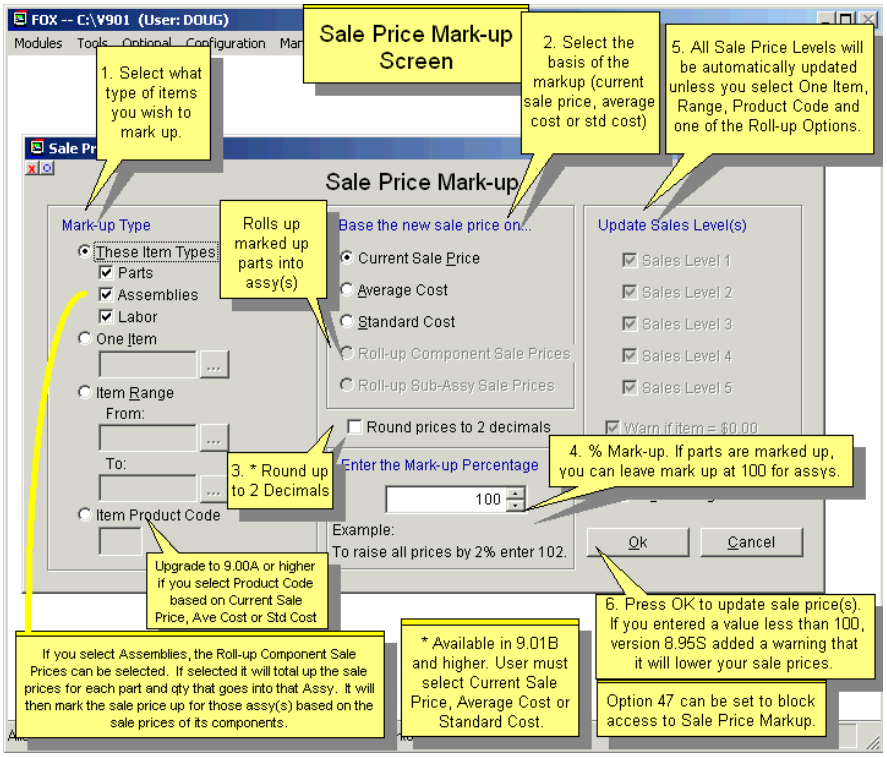

VFP - C:\V882 (User: DOUG)
Inventory Labels
Receivers
Version 9.44B and Higher added the Option to print out box labels and box qtys by inserting a RecLabelBox.flg file into your pc/MRP folder.
Select Receivers
Select Sheet Fed or Pin Fed
Start at Label 1 - 20 (2 accross 10 down)
Display Print
Labels
Label Type
Receivers
Paper Feed
Sheet Fed
Start Label
1
Send To
Display
Requires Bar Code Module and Version 8.82C or higher.
Output Type
Standard
Custom
Barcode
Selection Type
A Single Receiver
A Receiver Range
Picked Receiver Items
Serial Number Labels
Receiver
000003
Scroll
Label Quantity
1
Report Form
Save Settings
Ok
This screen will be locked on Receivers, Single Receiver
Only available if the Serial Lot Number Module has been activated
Requires Custom Forms CusRec*.lbx
Primary Database File: RCVRTEMP Order: (RcvrTemp Includes SnLotData)
Child DataBase File: PURCHASE Relation: UPPER(RCVRTEMP.PONO+RCVRTEMP.ITEMNO) Skip:
Child DataBase File: PARTMAST Relation: UPPER(LEFT(RCVRTEMP.PARTNO,MPNSIZE)) Skip:
Upgrade to 9.00R, 9.04A or higher if you select Receiver Range and Serial Number Labels to prevent an Error 12 message.
Standard Label RecLab2X.lbl
Serial Label RecLab2X.lbl
BarCoded Label RecLabBar.lbx
BarCoded SN Label RecLabBarSn.lbx

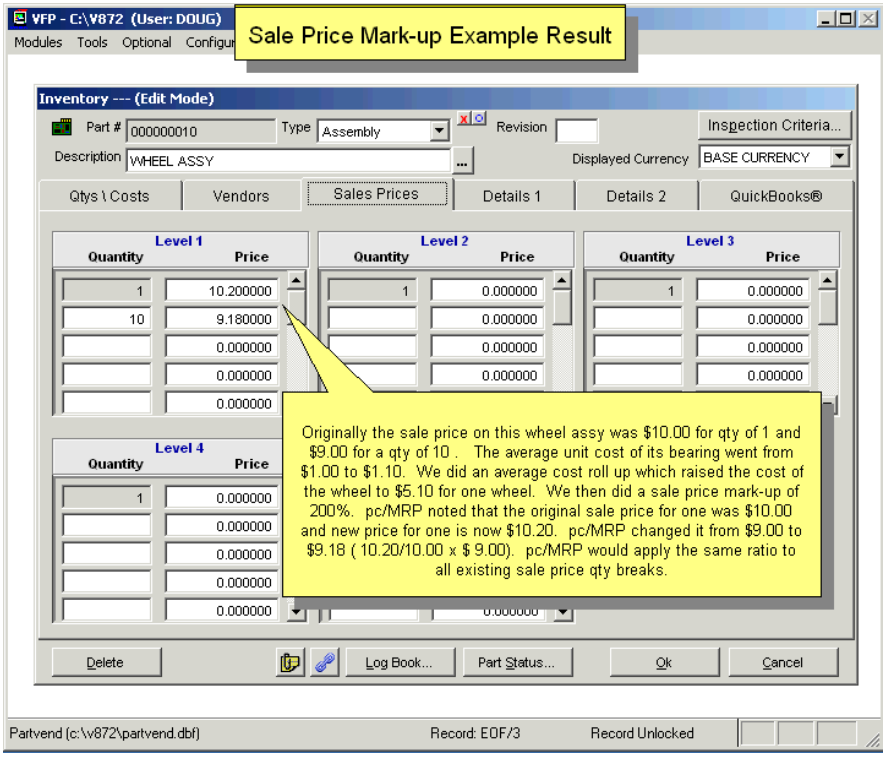

pc/MRP for Windows - Version 9.20Q
Modules Tools Optional Configuration Manual
Inventory - Labels Receivers
Report Designer - reclab2x.lbx - Page 1
000000001 ABC
Rec #: 000003
BEARING, 3" OD x 1" ID
PO #: 000004
ALLIED ELECTRONICS
Date Recd: 08/24/10
Qty Recd: 10.000
111-0102-001
Recd By: 09:53:29
000000004
Rec #: 000003
NUT
PO #: 000004
ALLIED ELECTRONICS
Date Recd: 08/24/10
Qty Recd: 20.000
Recd By: 09:53:40
Print Preview
75%
Rcvrtemp (c:\docume~1\doug\locals~1\temp\35682114.dbf)
Record: EOF/2
Exclusive
NUM


FOX -- C:\V895 (User: DOUG)
Modules Tools Optional Configuration Manual
Report Designer - reclab2x.lbx [Read Only
Serial/Lot Number Example 1, Receiving a PO
000000001
BEARING $$
BBC MANUFACTURING COMPANY
Rec #: 000001
PO #: 000001
Date Recd: 04/20/15
Qty Recd: 1.000
SN: B001
000000001
BEARING $$
BBC MANUFACTURING COMPANY
SN: B002
000000001
BEARING $$
BBC MANUFACTURING COMPANY
Rec #: 000001
PO #: 000001
Date Recd: 04/20/15
Qty Recd: 1.000
SN: B003
The serialized labels can now be removed from the sheet and attached their respective parts.
RCVRTEMP includes fields from Receive and SnLot Fields shown below:
SNCV (C): Customer/Vendor ID
SNDATE (D): Date Received
DOCTYPE (C): R
DOCNO (C): Receiver Number
DETQTY (N): Snlot qty
SNPARTNO (C): Snlot Partno
SNLOTNO (C): SNLot Serial or Lot No
SNCOMMENT (C):
DOCITEM (C): Receiver Item Number
VENDLOTNO (C): SnLot Vendor Lot Number
EXPIRDATE (D): Snlot expiration date
Primary Database File: RCVRTEMP Order: (RcvrTemp Includes Receiver + SnLotData)
Child DataBase File: PURCHASE Relation: UPPER(RCVRTEMP.PONO+RCVRTEMP.ITEMNO) Skip:
Child DataBase File: PARTMAST Relation: UPPER(LEFT(RCVRTEMP.PARTNO,MPNSIZE)) Skip:
Rcvrtemp (c:\docume~1\doug\locals~1\temp\60108263.dbf)
Record: EOF/3
Exclusive

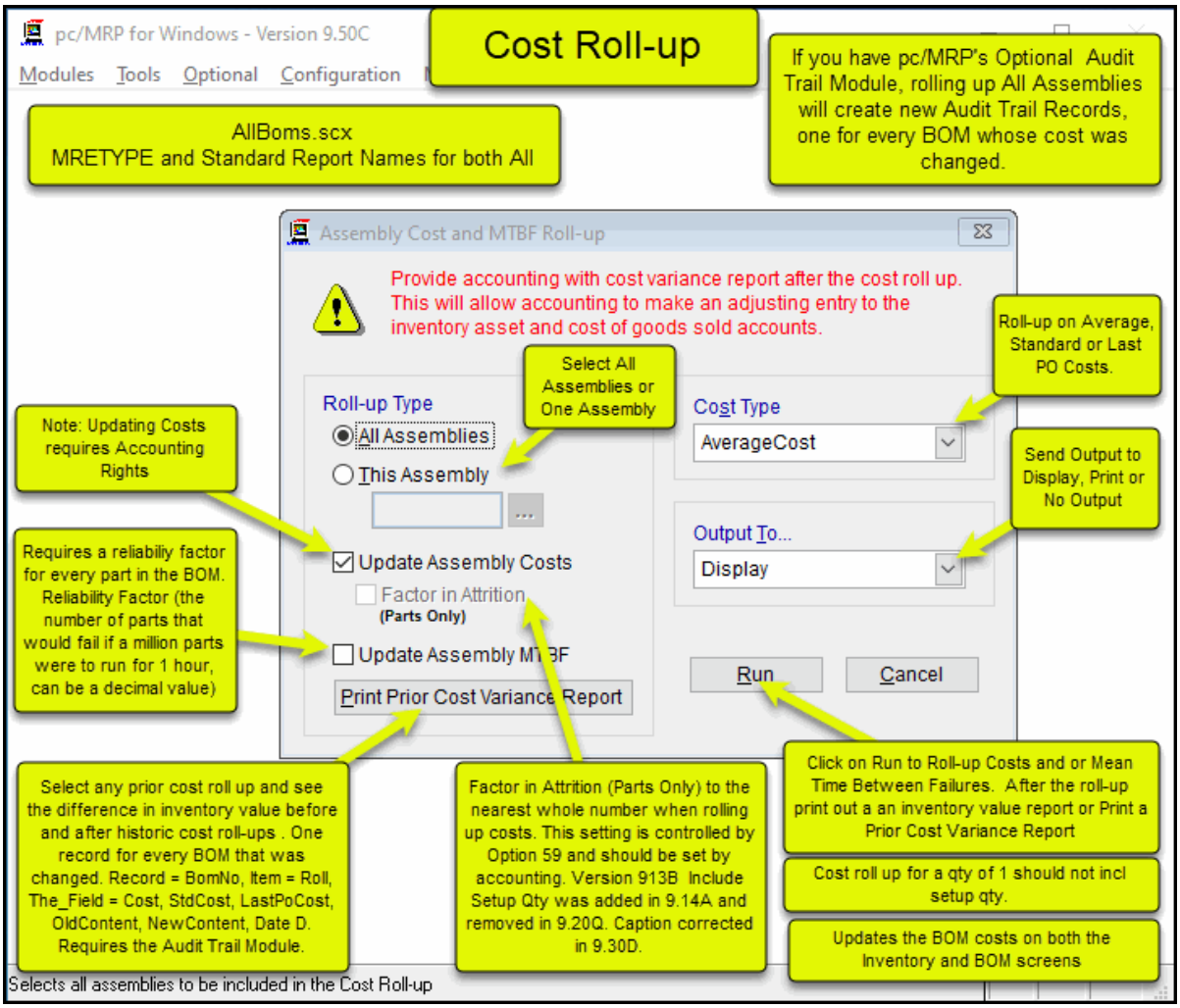
### 5.1.9 Sales Price Markup

Select Inventory, Sale Price Mark-up. Automatically mark up every part's sale price to a specified % of each parts current cost or sales price. E.g. if you want to increase your prices by 2%, enter 102. If you enter a percentage value that is smaller than 100, pc/MRP will warn you that you are about to lower your prices.



### 5.1.10 Cost Roll Up and MTBF Roll Up




The Inventory, Cost and MTBF Roll Up option will allow users to roll up costs (average, standard or last PO) and mean time between failures for all assemblies or a single assembly. The Cost and MTBF Roll Up screen is displayed above.

Select **All Assemblies** or **This Assembly**. If you select "This Assembly", you can scroll and lookup the assembly by pressing the ellipsis (…) button. In either case, the cost roll-up will not use any assembly cost in the calculation; it always totals their parts' costs (plus any labor costs). If you selected All Assemblies, all assemblies will have their costs re-calculated. If you selected This Assembly, only that assembly's cost will be re-calculated, none of its subassemblies' costs will be changed.

**Note:** Phantom BOMs (as default) are handled as parts. The phantom BOM's cost will be used in the calculation, regardless of its parts' costs. If **Option 59** is set to "Roll Phantom BOMs", then the cost roll-up will handle the phantom BOM as an assembly.

If you do not check any of the Update check boxes, pc/MRP will display the current assembly(s) cost and MTBF. However, it will not update the cost and MTBF in the partmaster file. If you do check these boxes, pc/MRP will update the cost and MTBF in the partmaster. You must have Edit rights in the partmaster file, to check the "Update" checkboxes. In addition, Configuration, Settings and Utilities, **Option 47** can be set so that only users with *accounting* Edit rights can check the "Update the Assembly Costs" checkbox. If you are not going to allow users without accounting rights to roll up assembly costs, be sure to set **Option 61** to not allow users to update assembly costs when displaying/printing out a costed exploded BOM.

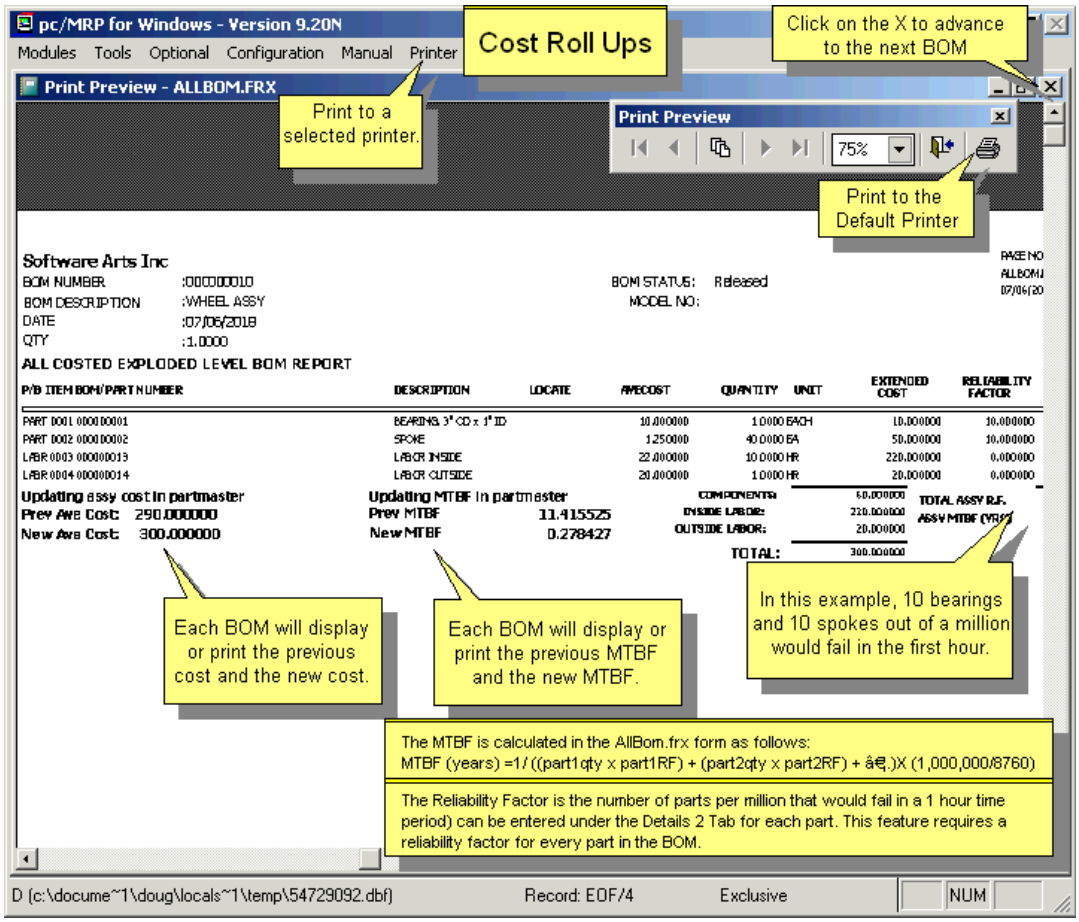
Before performing a cost roll-up, check with Accounting to see if they are using Average or Standard Costs and if it is OK with Accounting to perform a cost roll-up. Accounting should be provided with an inventory value report before and after the cost roll-up. This will allow Accounting to adjust the inventory Asset and Cost-of-Goods accounts. **Option 59** can be used to set the cost roll-up default settings (average, standard, last PO costs).

The "Output To" drop down list box allows users to send the report to "Display", "Print" or "None". If you selected All Assemblies and Display/Print, pc/MRP will display/print the results of the cost roll-up for the first assembly. Click on the X to advance to the next BOM. Select Yes to display/print the next BOM, No to cancel the cost roll-up process, All to finish the cost roll-up without displaying/printing anything.

If you want to print out the BOM currently shown on the screen, either click on the printer icon (the default printer will be used) or select Printer from the top menu (if you want to select a printer other than the default).

**Note**: If you display a costed exploded BOM, the total cost may not match the total cost for the costed single level BOM. After you run a cost roll-up for all BOMs, the two reports will match.

To print the Prior Cost Variance Report below, the optional Audit Trail Module must be activated.



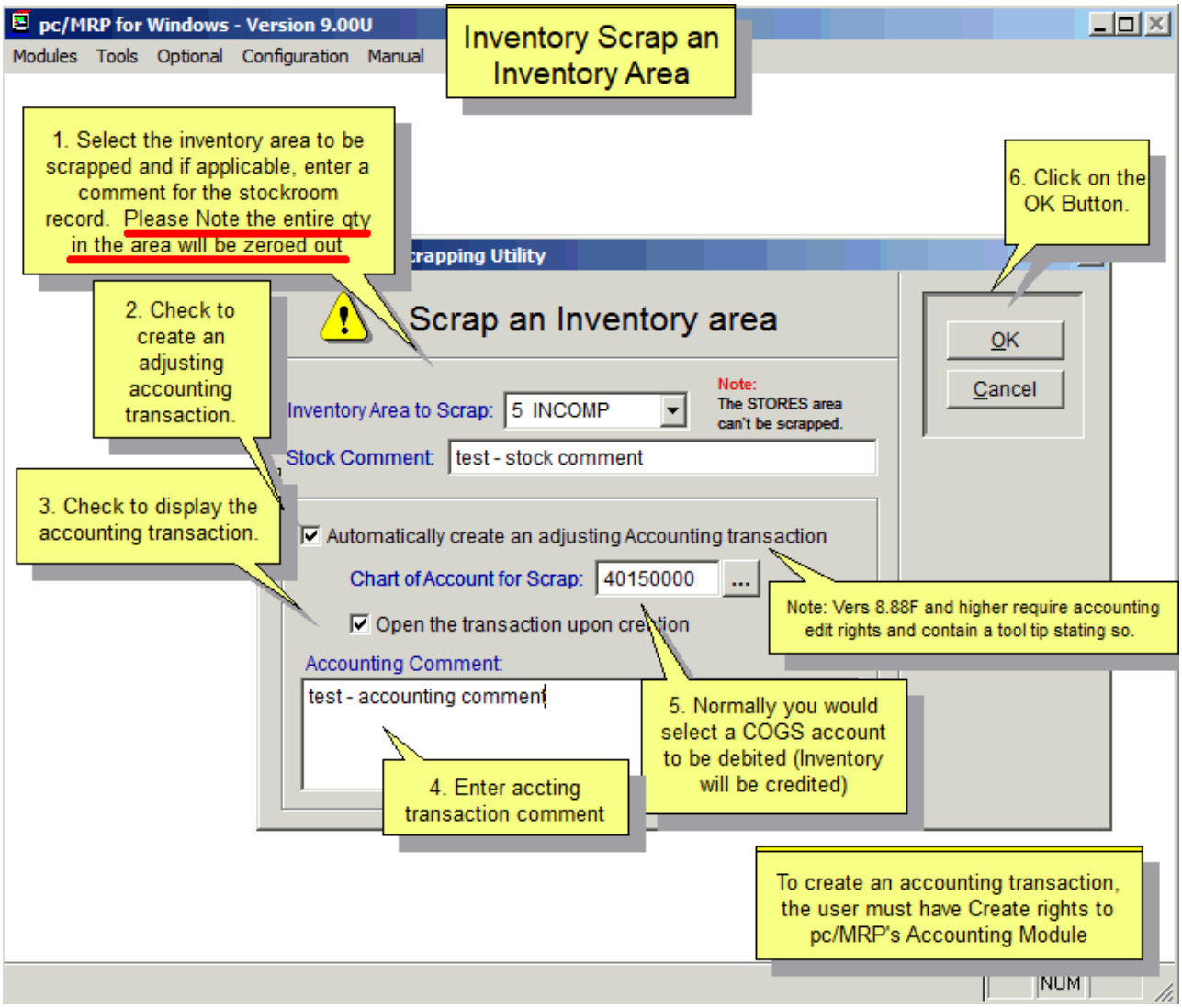

The **MTBF** is calculated as follows:

MTBF (years) =1/ ((part1qty x part1RF) + (part2qty x part2RF) + ….)X (1,000,000/8760)
The Reliability Factor (# of parts per million that would fail in a 1 hour time period) can be entered under the Details 2 Tab for each part. This feature requires a reliability factor for every part in the BOM.

### 5.1.11 Physical Inventory and Cycle Count Programs

This option allows users to take a physical inventory and/or cycle count of all parts that have not been issued to the MFG Floor (WIP). See the Physical Inventory Chapter of this Manual (Ch.5.2) for a complete description of the Physical Inventory and Cycle Count Programs.

### 5.1.12 Scrap an Inventory Area

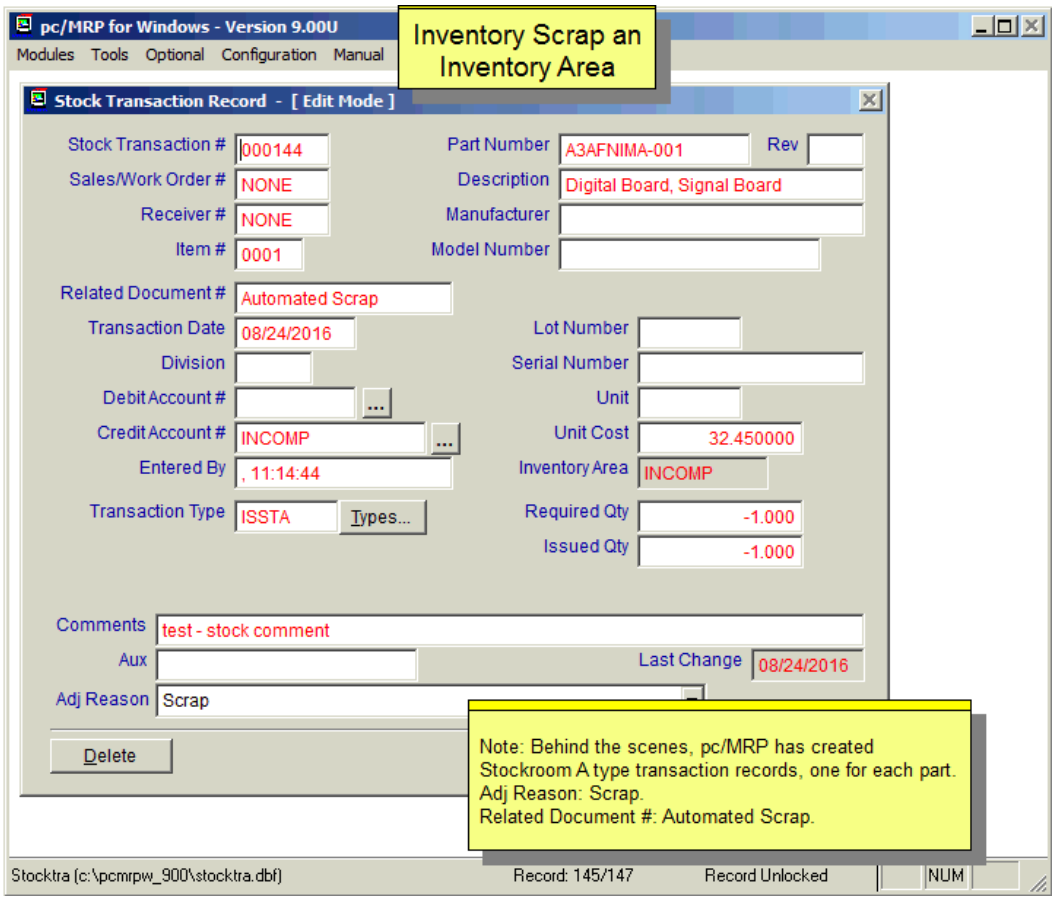


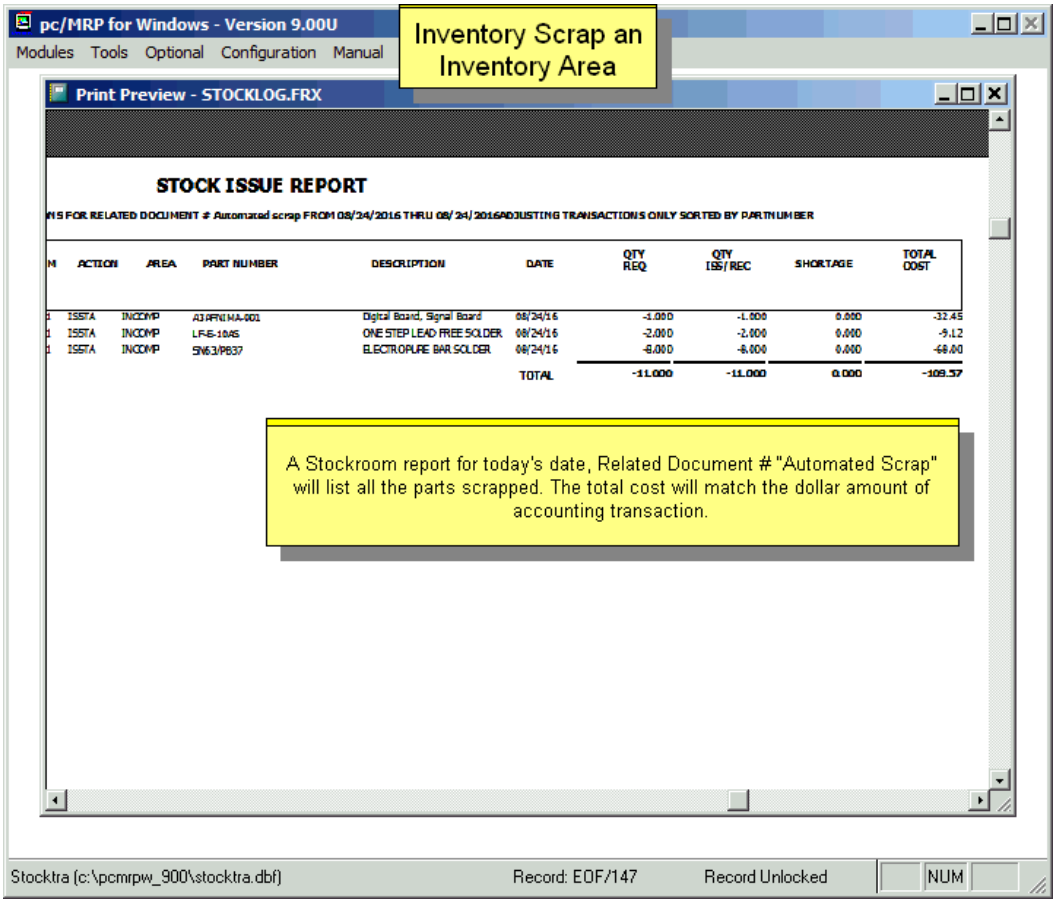

Select the area to be scrapped. **Note:** The Stores area cannot be selected.

pc/MRP zeroes out all the inventory quantities for that area, and creates Stockroom adjusting transactions, one for each part number. Positive quantities will be adjusted down and negative quantities will be adjusted up. If any of these items are serialized (and the optional Serial/Lot Number Module has been activated), pc/MRP will prompt you to enter the corresponding serial/lot number transactions. These will be "J" type adjusting transactions.

The screen below shows one of the Stockroom A type transaction records pc/MRP has created.
Adj Reason: Scrap.
Related Document #: Automated Scrap.

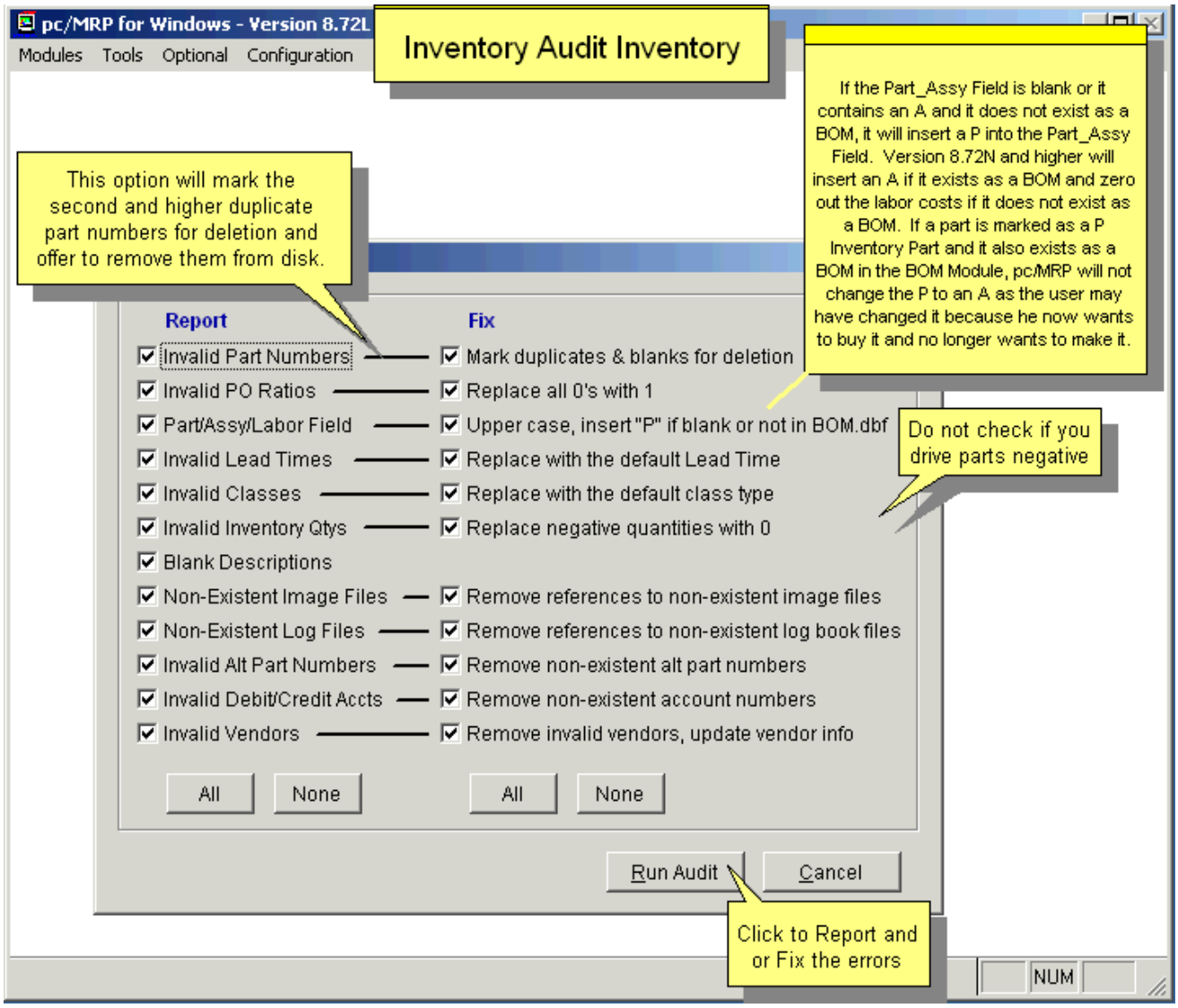
A Stockroom report for today's date, Related Document #: Automated Scrap will list all the parts scrapped. The total cost will match the dollar amount of accounting transaction.


pc/MRP for Windows - Version 9.00U
Modules Tools Optional Configuration Manual
Inventory Scrap an Inventory Area
Stock Transaction Record - [ Edit Mode ]
Stock Transaction # 000144
Sales/Work Order # NONE
Receiver # NONE
Item # 0001
Part Number A3AFNIMA-001
Rev
Description Digital Board, Signal Board
Manufacturer
Model Number
Related Document # Automated Scrap
Transaction Date 08/24/2016
Division
Debit Account #
Credit Account # INCOMP
Entered By , 11:14:44
Transaction Type ISSTA
Types...
Lot Number
Serial Number
Unit
Unit Cost 32.450000
Inventory Area INCOMP
Required Qty -1.000
Issued Qty -1.000
Comments test - stock comment
Aux
Last Change 08/24/2016
Adj Reason Scrap
Delete
Note: Behind the scenes, pc/MRP has created Stockroom A type transaction records, one for each part.
Adj Reason: Scrap.
Related Document #: Automated Scrap.
Stocktra (c:\pcmrpw_900\stocktra.dbf)
Record: 145/147
Record Unlocked
NUM


pc/MRP for Windows - Version 9.00U
Modules Tools Optional Configuration Manual
Inventory Scrap an Inventory Area
Print Preview - STOCKLOG.FRX
STOCK ISSUE REPORT
ACTION AREA PART NUMBER DESCRIPTION DATE QTY REQ QTY ISS/REC SHORTAGE TOTAL COST
ISSTA INCOMP A3AFNIMA-001 Digital Board, Signal Board 08/24/16 -1.000 -1.000 0.000 -32.45
ISSTA INCOMP LF-E-10AS ONE STEP LEAD FREE SOLDER 08/24/16 -2.000 -2.000 0.000 -9.12
ISSTA INCOMP SN63/PB37 ELECTROPLRE BAR SOLDER 08/24/16 -8.000 -8.000 0.000 -68.00
TOTAL -11.000 -11.000 0.000 -109.57
A Stockroom report for today's date, Related Document # "Automated Scrap" will list all the parts scrapped. The total cost will match the dollar amount of accounting transaction.
Stocktra (c:\pcmrpw_900\stocktra.dbf)
Record: EOF/147
Record Unlocked
NUM

If you selected Automatically create an adjusting Accounting transaction, a transaction will be created to reflect all the changes in this area (debit the selected account and credit the default Inventory account). This option needs at least Create rights to the Accounting module.

### 5.1.13 Audit Inventory Data




You can select any or all the options. If you uncheck Fix, you will just receive a report of all issues found. If you check fix, you will still receive the report of the issues, but in the same time the problems get fixed.

Of the multiple functions, the first one searches inventory for duplicate part numbers. You will be asked if you want to remove duplicate part numbers. If you answer yes and the program finds duplicate part numbers, it will mark the second part number for deletion. The program will then remove the part numbers marked for deletion from the disk. If you answer no, pc/MRP will display or print a list of duplicate part numbers.

If the Part_Assy field is “A” but the part number does not exist as a BOM, the Audit Fix will insert a “P” into the Part_Assy field. If the Part_Assy field is blank (because the part was imported into pc/MRP without this field) or invalid (lower case or not “P”,”A” or ”L”, pc/MRP will insert a “P” or an “A” according to whether the part exists as a BOM.

### 5.1.14 Audit WIP Quantities

WIP stands for Work In Progress and is the inventory out on the manufacturing floor. You can Audit (correct) your WIP quantities by selecting Modules, Inventory, Audit WIP or by selecting Modules, Inventory, Physical Inventory, and Audit WIP.

The WIP Variance Report (WIPVAR.FRX) contains the quantity in WIP based on the stockroom issue records and the quantity in WIP based on the WIP quantity fields in the inventory module. The quantity issued column contains the quantity of that part number issued to that sales/work order. The quantity returned column contains the quantity returned (as part of the finished assemblies). The correct WIP quantity (stockroom) contains the quantity issued - (minus) the quantity returned. The current WIP quantity represents the quantity in the inventory WIP quantity field. The variance is the difference between the stockroom module and inventory module.

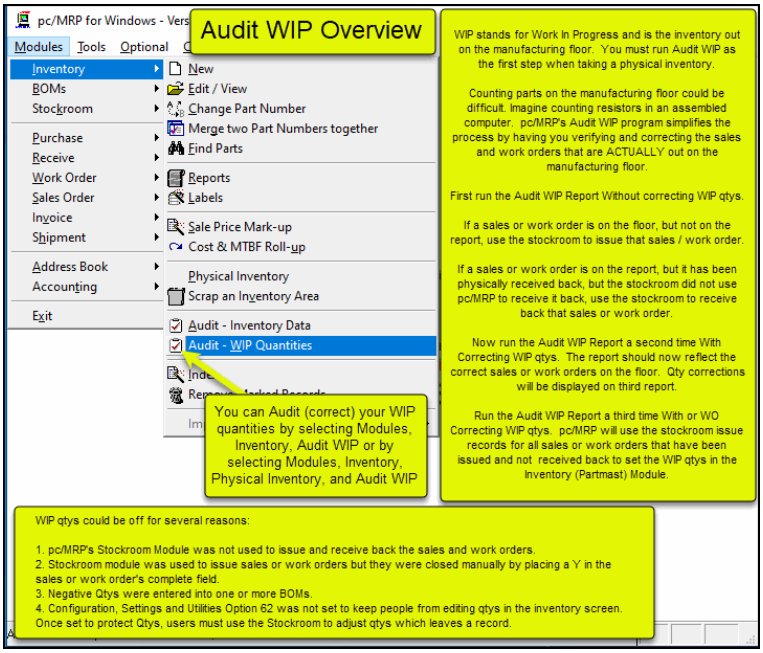
You must run Audit WIP as the first step when taking a physical inventory. Counting parts on the manufacturing floor could be difficult. Imagine counting resistors in an assembled computer. pc/MRP's Audit WIP program simplifies the process by having you verifying and correcting the sales and work orders that are ACTUALLY out on the manufacturing floor.

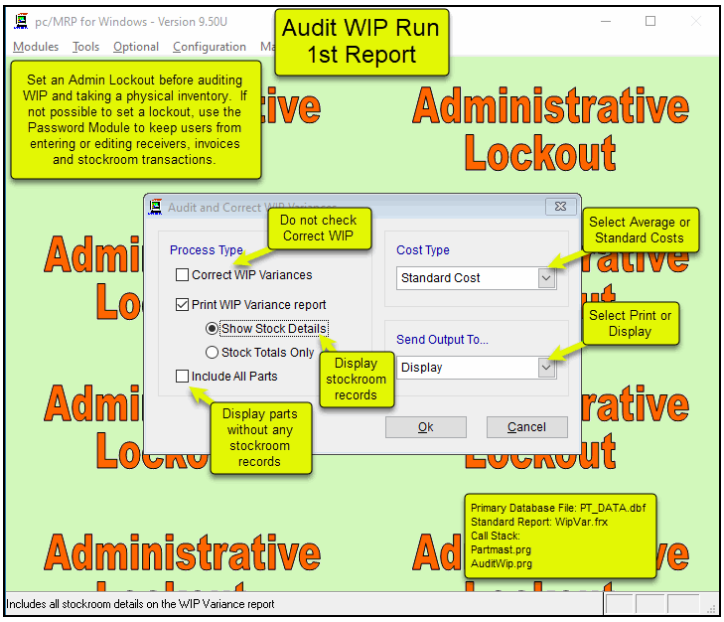
WIP quantities could be off for several reasons:

1. pc/MRP's Stockroom Module was not used to issue and receive back the sales and work orders.
2. Stockroom module was used to issue sales or work orders but they were closed manually by placing a Y in the sales or work order's complete field. The stockroom module never received back these sales or work orders, but they show as complete.
3. Negative part quantities were entered into BOMs.
4. Configuration, Settings and Utilities **Option 62** was not set to prevent users from editing quantities in the inventory screen. Once set to protect quantities, users must use the Stockroom to adjust quantities.

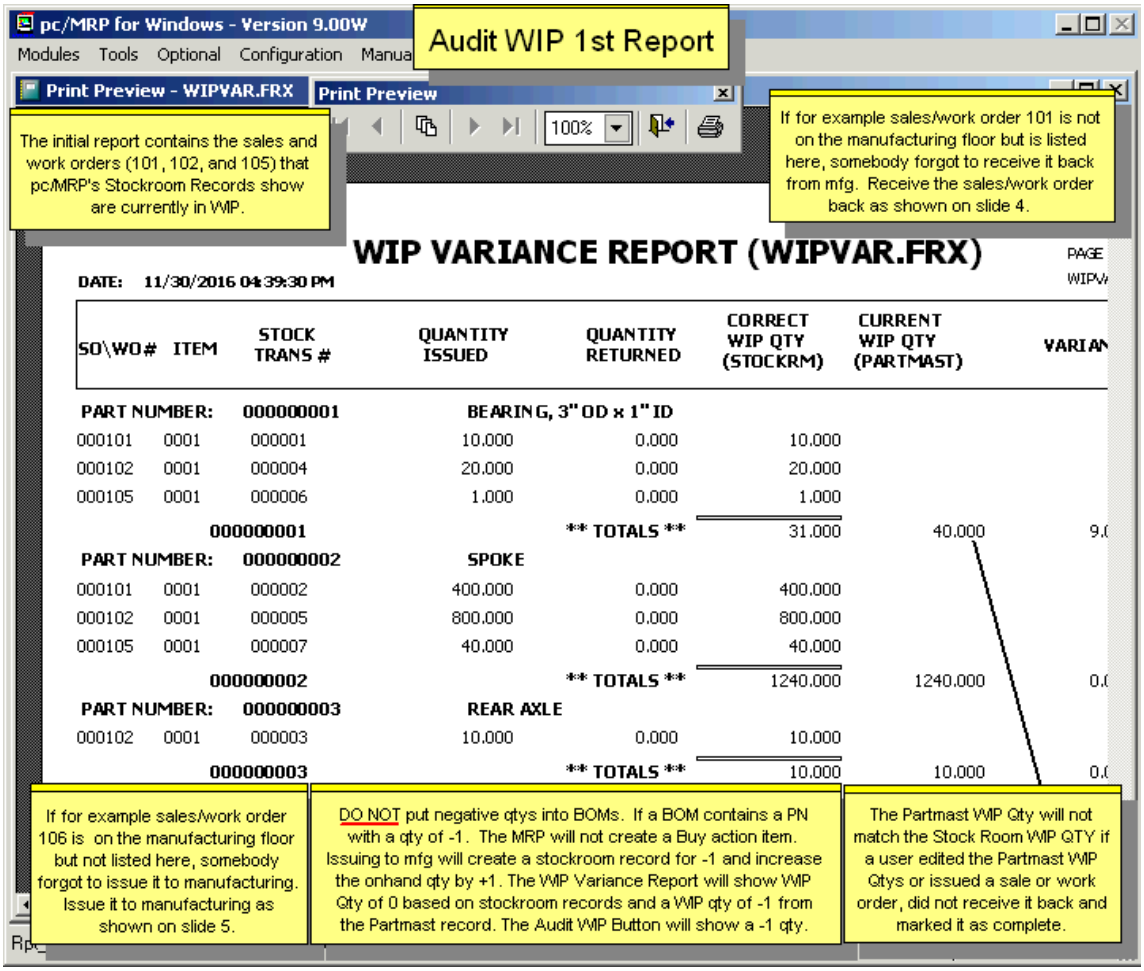
This report will only print or display sales or work orders that are not complete (the complete field does not contain a "Y"), the order was issued to MFG (in the Stockroom table there is an ISSTM record), and the quantity issued is greater than the quantity returned (i.e. at least part of the SO/WO is still in manufacturing). An online slideshow is located here: http://www.pcmrp.com/mrp101/auditwiprun.htm

Run Audit WIP by selecting Modules, Inventory, Audit WIP or Physical Inventory. First run the Audit WIP Report without correcting WIP qtys.





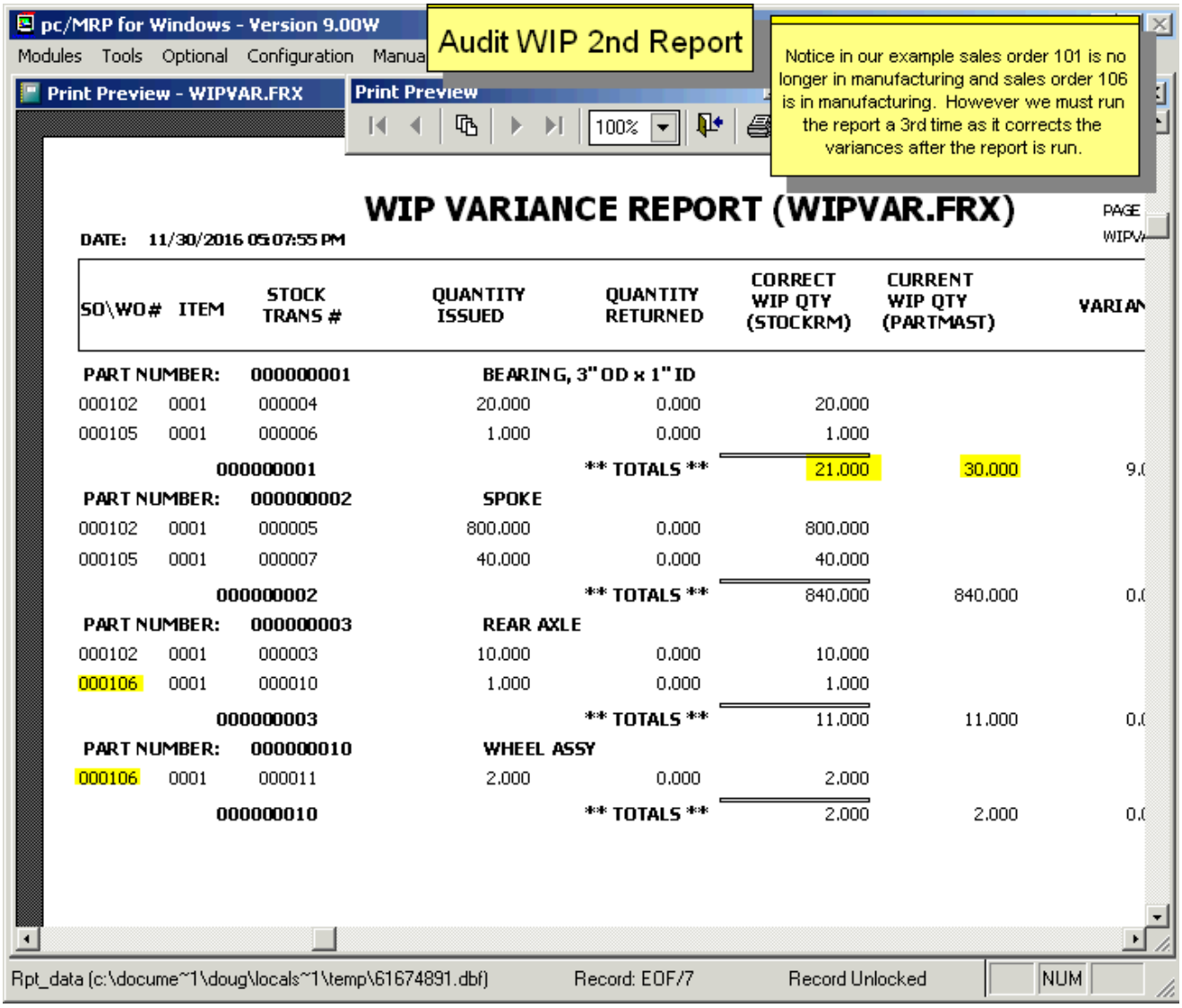

If a sales or work order is actually on the floor, but not on the report, use the stockroom I-type transaction to issue that sales or work order. If a sales or work order is on the report, but not on the floor any more, use the stockroom R-type transaction to receive it back. You can run the report as many times as you need (without checking the Correct button) until the list of sales/work orders on the report is correct.

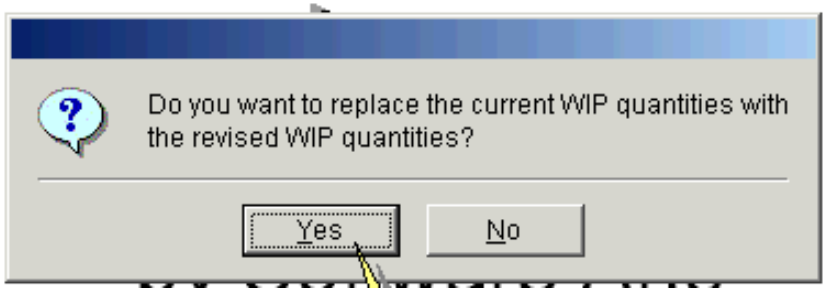


Now run the Audit WIP Report a second time and check Correct WIP qtys (which will run *after* the report is being displayed). The report should now reflect the correct sales and work orders on the floor.

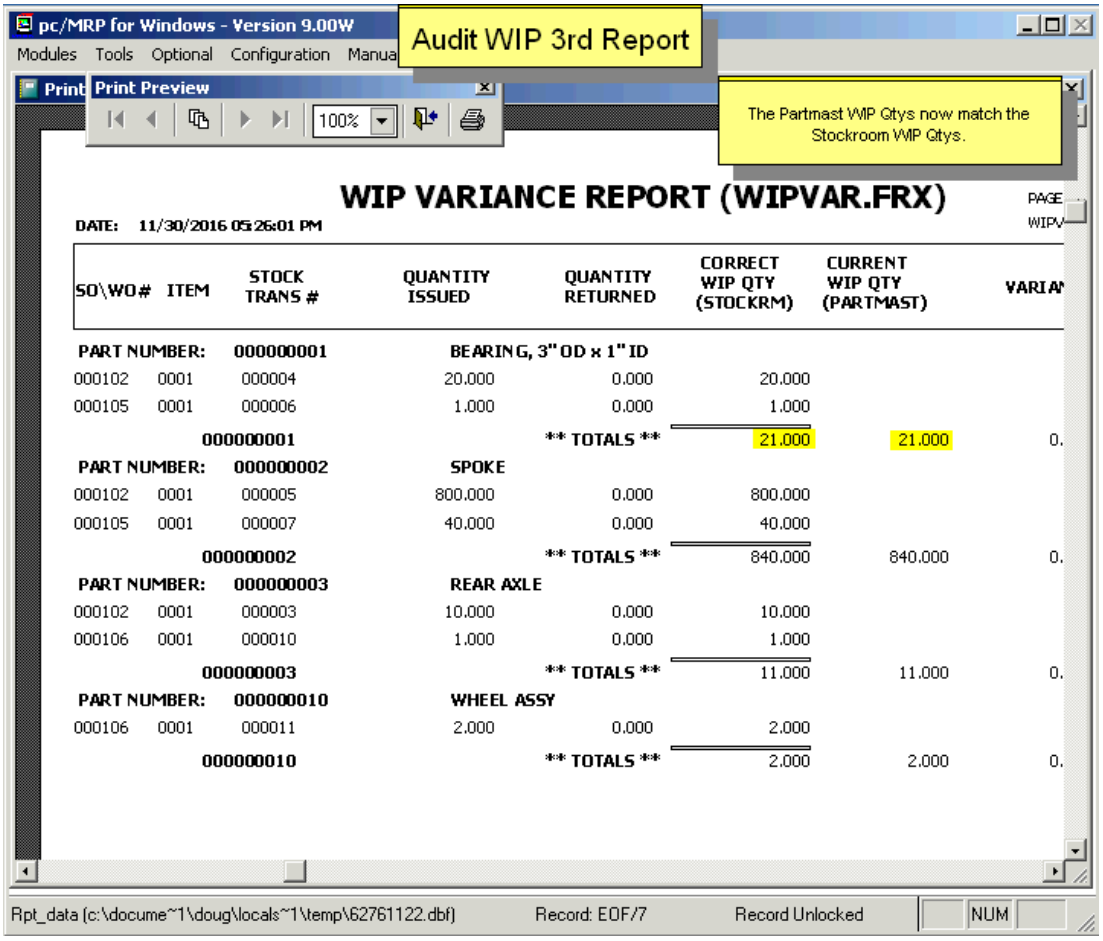
The quantity issued column contains the quantity of that part number issued to that sales/work order. The quantity returned column contains the quantity returned (as part of the finished assemblies). The correct WIP quantity (stockroom) contains the quantity issued - (minus) the quantity returned. The current WIP quantity represents the quantity in the inventory WIP quantity field. The variance is the difference between the stockroom module and inventory module.

Continue by confirming that you want to replace the current WIP quantities with the revised WIP quantities.




Run the Audit WIP Report a third time if you want to see the results of the WIP quantity corrections. At this point there will be no variances.

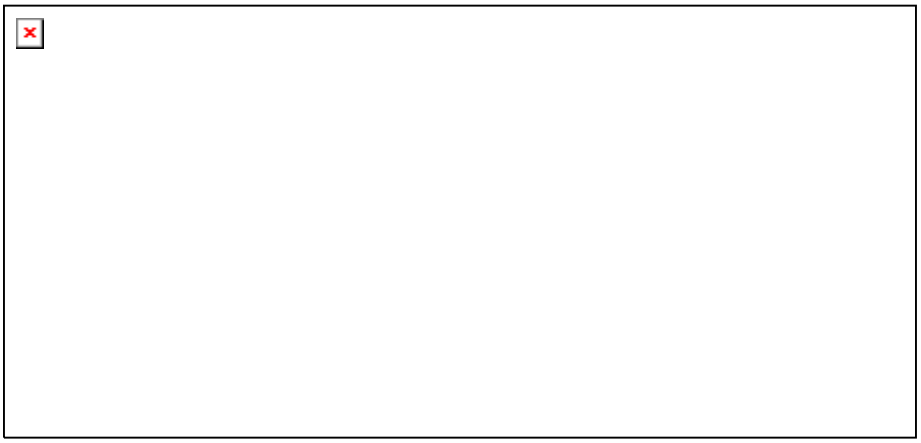



### 5.1.15 Index (see 15.14.3)

**Note:** This will also reindex the database tables holding the vendor price/quantity breaks and the sale prices.

### 5.1.16 Remove Marked Records (see 15.14.4)

**Note:** This will also remove marked records from the database tables containing the vendor price/quantity breaks and the sale prices.



# 5.2 pc/MRP Inventory Flow Model

### 5.2.1 Inventory Flow Model

The inventory flow model described below requires the Inventory Adjustment Method (select Config, Settings & Utilities, Option 4) be set to 'A'.

pc/MRP's inventory control flow model can be explained using a company that builds bicycles as an example. Let's assume the bicycle company has 100 completed bicycles and 600 pedals on hand and has just received an order for 500 bicycles.

Sales would enter a sales order for 500 bicycle assemblies as a sales order entry. Entering the sale as an order entry will cause the bicycle on demand quantity in inventory to be increased by 500. Please note that the quantity on demand did not increase for the individual parts that go into the bicycles (this is handled later by the purchasing consolidation report). Also note, if the sale had been entered as a "cash and carry" or "on account and carry" sale, pc/MRP would have automatically created an invoice as well, and would have decreased the on hand quantity of the bicycle in inventory by 500 (as if the bicycles would have then been carried out of the plant).

Purchasing should run pc/MRP's purchasing consolidation report or pc/MRP's Infinite Bucket report on a daily or weekly basis to find out what parts need to be ordered. This program breaks the open sales order on demand quantities down into parts required to be ordered using the quantity available field in the partmaster. If there are not enough finished assemblies, sub-assemblies, and parts on order, the consolidation report will request purchasing to order the necessary parts to fill the open sales orders using the quantity available field in inventory to track the quantity available. In this case, the pedals quantity on hand field will still show 600 but the quantity avail field will show -200 pedals on hand. The consolidation report listing all part numbers with negative quantity available fields will list 200 pedals required to be ordered.

Purchasing would then enter a purchase order for 200 pedals, which would increment the on order quantity of the pedals.

Receiving would enter a receiver for the 200 pedals when they arrive. This would decrease the on order quantity and increase the on hand quantity of the pedals in inventory by 200 giving a new on hand quantity of 800 pedals. This will be enough to build 400 bicycles in addition to the 100 finished bicycles on hand.

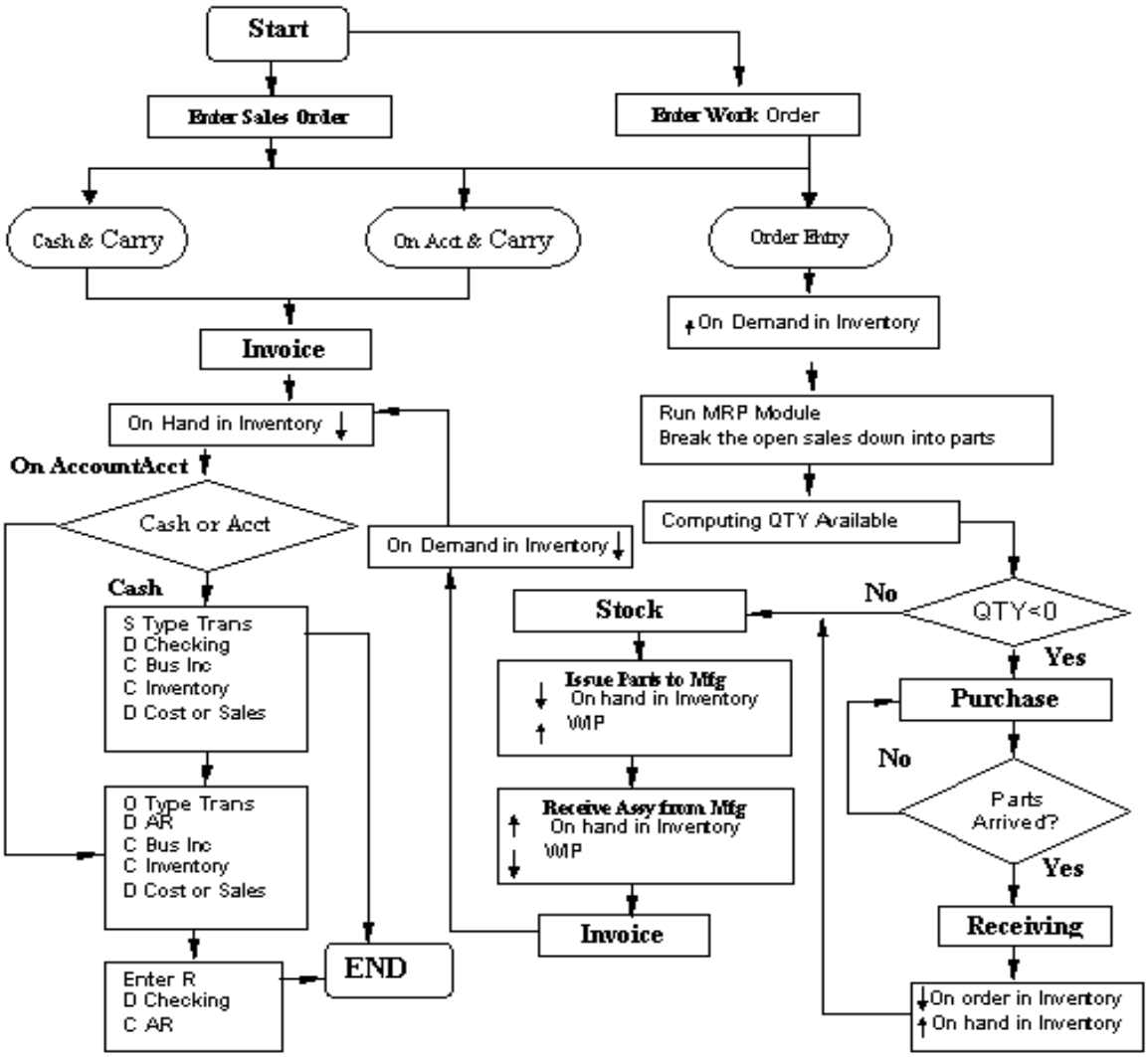
The Stock Room Module is used to build the assemblies from the parts, by either issuing parts to manufacturing and then receive assemblies from manufacturing (2 steps, recommended) or converting parts to assemblies (1 step).

The first method, issuing "I"- and "R"-type stockroom transactions, decrements the on hand quantity and increments the WIP quantity of the parts using a sales or work order number to track the parts issued. When the assemblies are completed and received from manufacturing, this option decrements all parts issued to that work order number from WIP and the on hand quantity of the finished assemblies are incremented. This method is recommended, as pc/MRP will be able to carry shortages, and you can keep your inventory quantities straight.

The second method, "Convert parts to assemblies", does not use WIP or work order numbers. Instead, it uses the BOM to convert parts to assemblies (decrementing the on hand quantity of the parts and incrementing the on hand quantity of the assemblies).

An invoice would be entered when the bicycles are ready to ship, which would decrement the quantity on demand for the bicycle assemblies by 500.

**5.2.2 The following flow chart describes each step.**



### 5.2.3 Examples

#### 5.2.3.1 First example

In this first, simple example we have a BOM named “ASSY” that consists of one part named “PART”. We have a Sales Order for 100 ASSYSs. To make it simple, this is the only Sales Order we have for ASSY, there are no open purchase orders for PART, and both PART and ASSY have a quantity of 0 in inventory. The yellow highlighting indicates a change in the value.

At the beginning (START), OnHand, OnOrder, OnDemand, MRP Available and WIP quantities are all 0.

| | | START | SO | IB | PO | REC | ISS | REC MFG | INV |
|---|---|---|---|---|---|---|---|---|---|
| ASSY | OH | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 |
| | OO | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | OD | 0 | 100 | 100 | 100 | 100 | 100 | 100 | 0 |
| | MRP | 0 | 0 | -100 | -100 | -100 | -100 | 0 | 0 |
| | WIP | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | | | | | | |
| PART | OH | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 |
| | OO | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 |
| | OD | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | MRP | 0 | 0 | -100 | 0 | 0 | 0 | 0 | 0 |
| | WIP | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 |

As we enter the Sales Order (SO) OD for the ASSY increases by 100. Please note that the PART’s OD quantity does not change, as the OD quantity is derived from open Sales Orders and open Work Orders.

Next we run the Infinite Bucket MRP or the MRP Buy Report. MRP available (MRP) will be -100 for the ASSY (because we need to build 100) and also for the PART (because we need to purchase 100).

When we enter a Purchase Order for 100 PARTs, OO will get the value of 100, as that’s how many we have on order. MRP Available is no longer negative, since right now there is nothing to do with the PART, the order is on its way. Note that none of the values for the ASSY change.

Now we receive 100 PARTs. OO becomes 0 and OH gets 100, as the parts are now in inventory. Note that none of the values for the ASSY change.

Next, issue the Sales Order to Manufacturing. The 100 PARTS are picked from the shelf and carried down to the manufacturing floor. OH becomes 0, WIP qty will be 100. Note that none of the values for the ASSY change.

When Manufacturing finished the job, we receive the ASSY back from MFG. OH for the ASSY will increase to 100, and MRP Available is no longer negative, since right now we don’t need to build any more ASSYs. WIP quantity for the PART becomes 0, as there are no parts on the manufacturing floor.

Finally we invoice 100 ASSYs. OH for the ASSY goes down to 0 as we ship the ASSY, OD will be 0 since there is no longer demand from the customer. All quantities remain 0 for the PART.

### 5.2.3.2 Second example

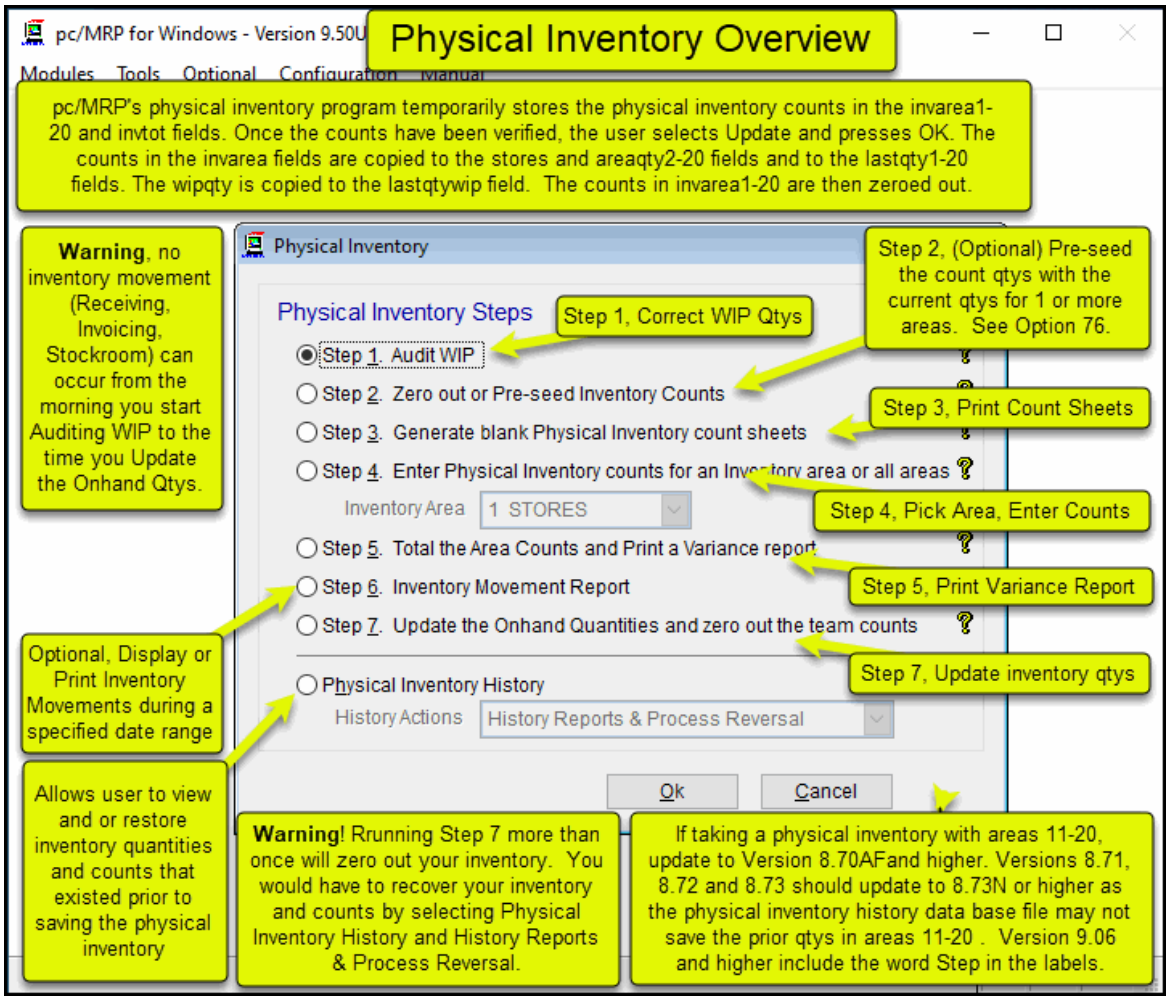
This example is a little more complicated. We are using the situation for Section 5.2.1 above. We still have only one Sales Order for the assembly, but both the assembly and the part have starting onhand quantities. One assembly (bicycle) calls for two parts (pedal).

| OVERVIEW | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | START | Create Sales Order for BICYCLE | Run IB | Create Purchase Order for PEDAL | Create Receiver | Issue to mfg | Receive from mfg | Create Invoice |
| BICYCLE | On Hand | 100 | 100 | 100 | 100 | 100 | 100 | 500 | 0 |
| | On Order | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | On Demand | 0 | 500 | 500 | 500 | 500 | 500 | 500 | 0 |
| | MRP Available | 0 | 0 | -400 | -400 | -400 | -400 | 0 | 0 |
| | WIP | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | | | | | | |
| PEDAL | On Hand | 600 | 600 | 600 | 600 | 800 | 0 | 0 | 0 |
| | On Order | 0 | 0 | 0 | 200 | 0 | 0 | 0 | 0 |
| | On Demand | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | MRP Available | 0 | 0 | -200 | 0 | 0 | 0 | 0 | 0 |
| | WIP | 0 | 0 | 0 | 0 | 0 | 800 | 0 | 0 |

# 6 Physical Inventory and Cycle Count

## 6.1 Physical Inventory

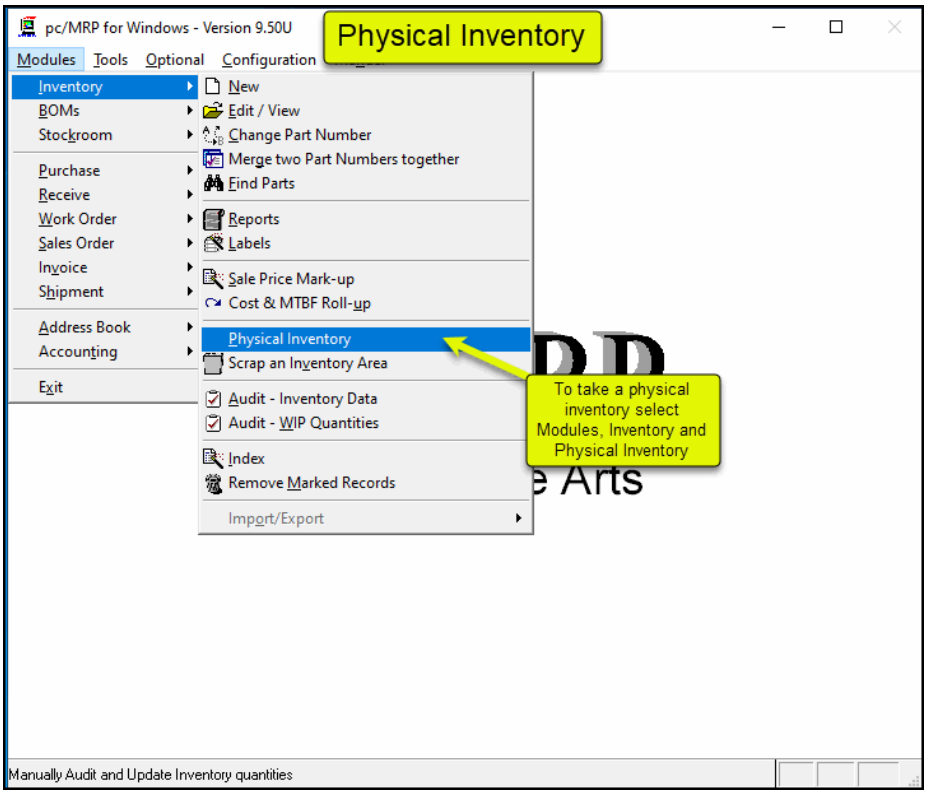
### 6.1.1 Overview

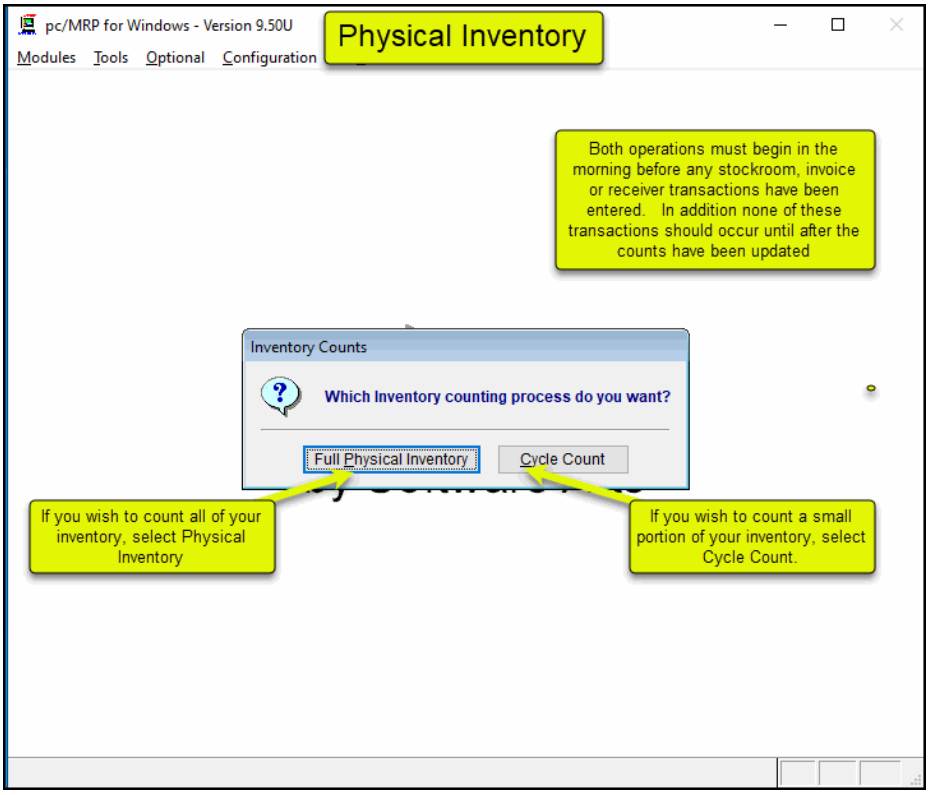



**Important warning:** No inventory movement (Receiving, Invoicing, Stockroom) can occur from the morning you start Auditing WIP to the time you Update the Onhand Qtys. Technically, you don't need an administrative lockout during the entire process (several users can enter counts and run the variance report) but it is a good idea to set an admin lock before doing the last step, Update Quantities.

pc/MRP's physical inventory program temporarily stores the physical inventory counts in the invarea1-20 and invtot fields. Once the counts have been verified, the user selects Update and presses OK. The counts are then moved from the invarea fields to the stores and areaqty2-20 fields, and also into the lastqty1-20 and the lastqtywip fields. The counts in invarea1-20 are then zeroed out. **Note:** The Inventory Movement Report will use the lastqty data as a base to its calculations.

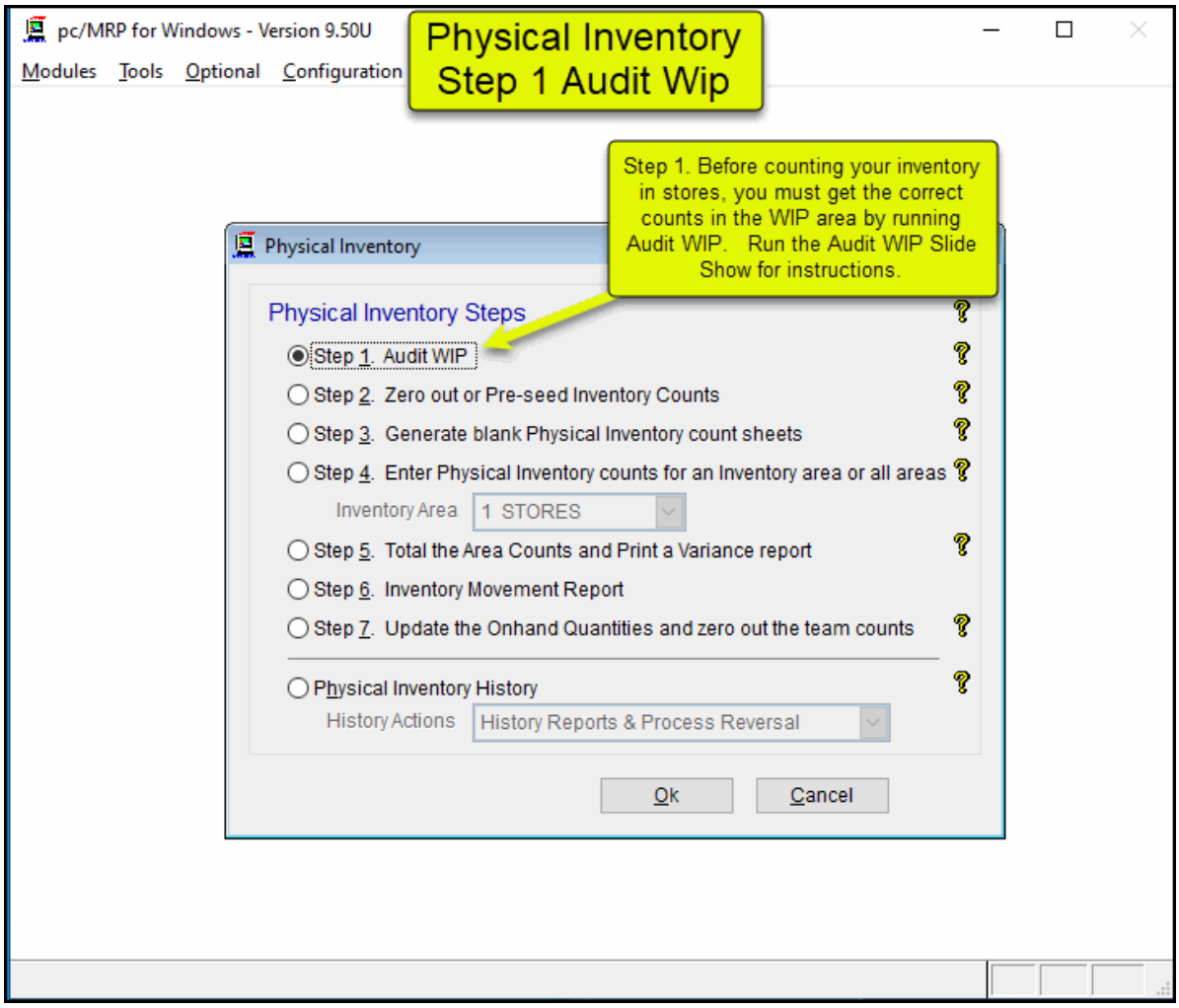
Select Inventory, Physical Inventory then Full Physical



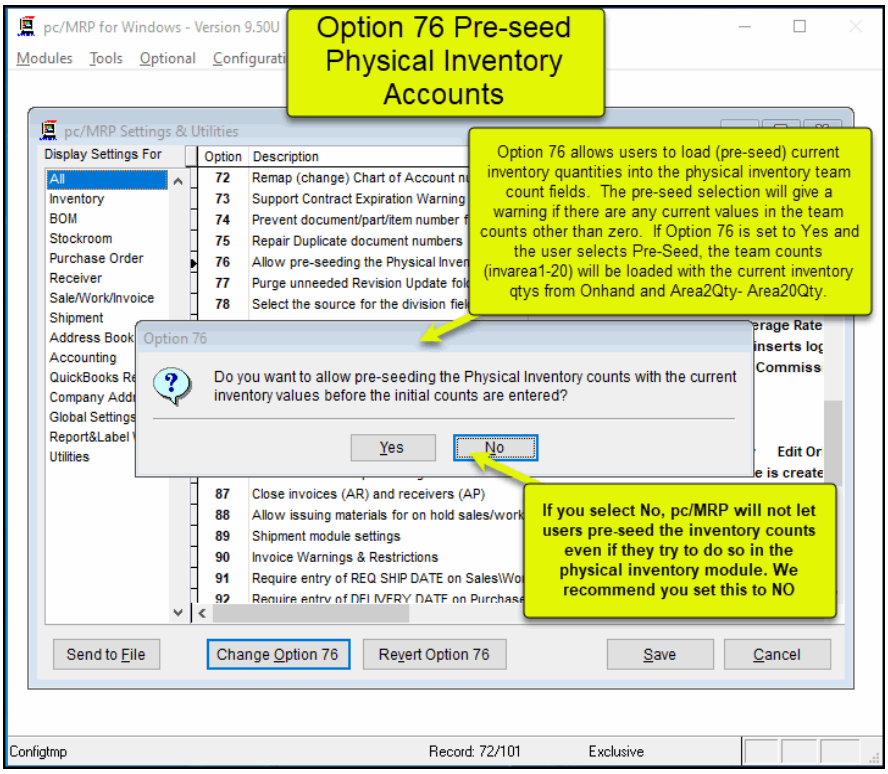
### 6.1.2 Audit WIP

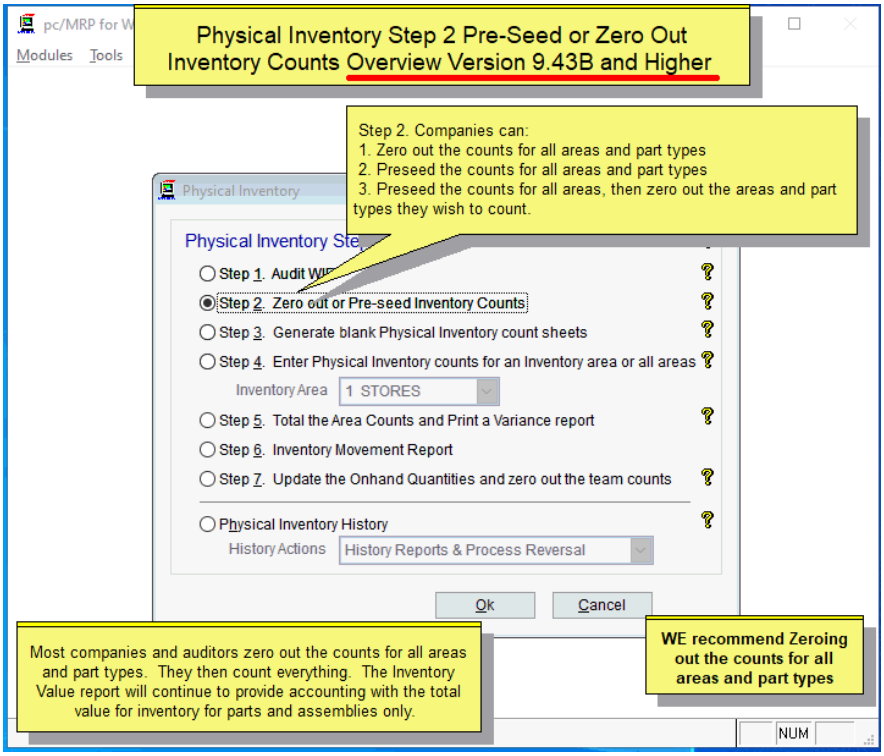
If you have any Work In Process on the manufacturing floor you must make sure the WIP quantities in pc/MRP's Inventory Module are correct before Entering Physical Inventory Counts for your stores areas. WIP quantities should be corrected by running the Audit WIP Function. See **Chapter 5.1.13** for instructions and an overview of this function. Quantities on the Floor will not be counted, because the Audit WIP takes care of them. (See on-line slide show at: http://www.pcmrp.com/mrp101/auditwiprun.htm)



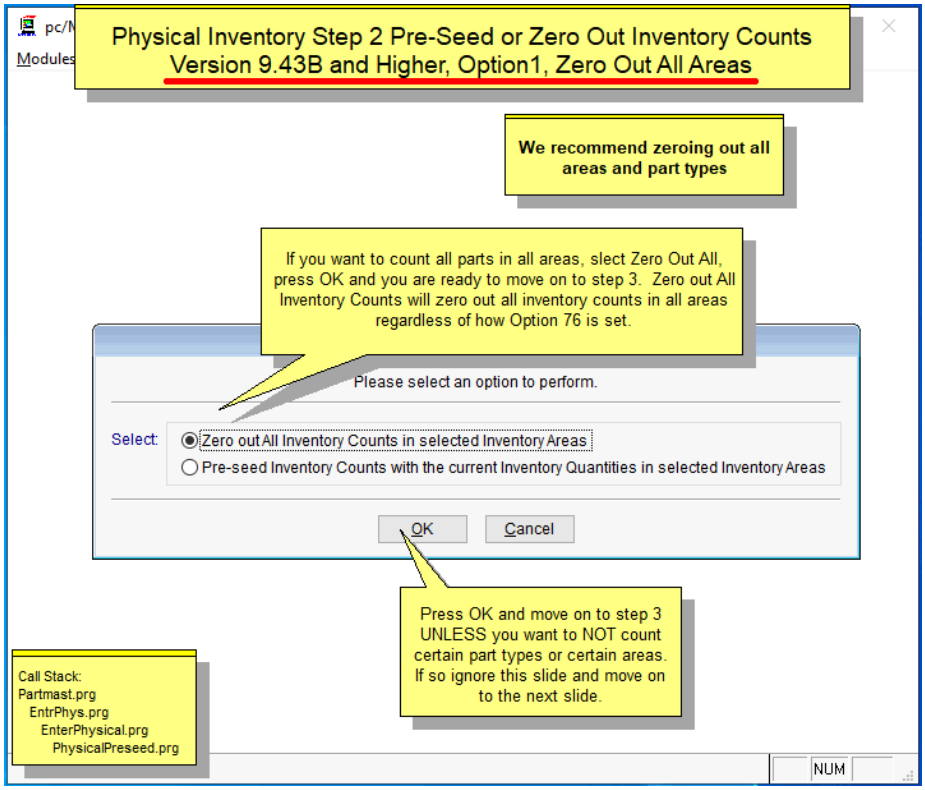
### 6.1.3.0 Pre-seed or Zero out inventory counts Overview

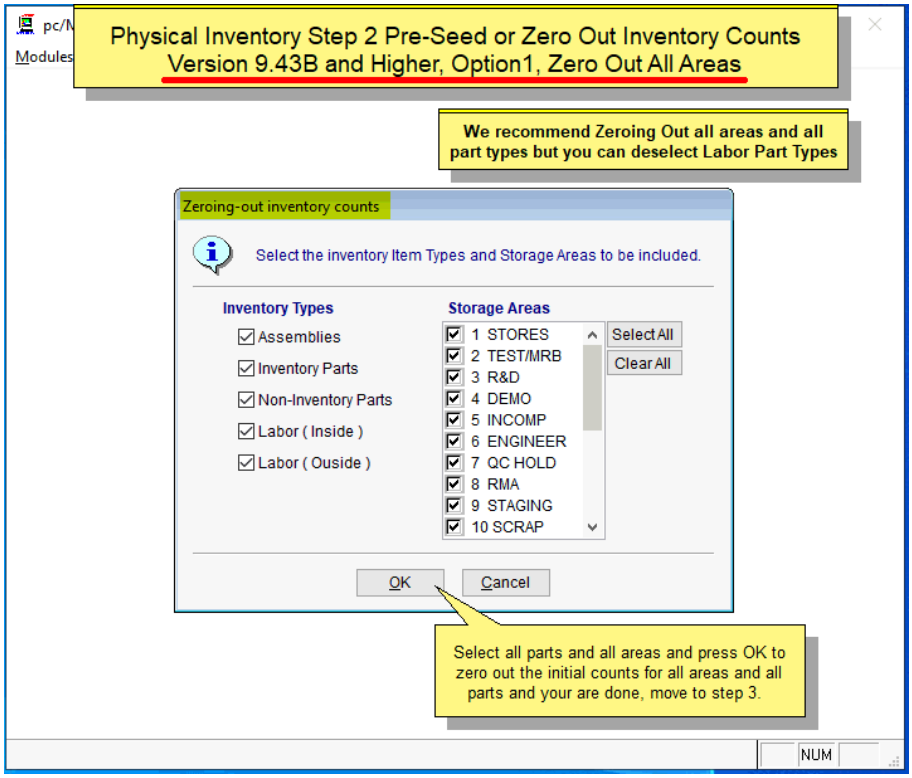
First you must determine if you want to zero out or pre-seed your inventory counts. We recommend zeroing out your inventory counts. Make sure Configuration, Settings and Utilities, Option 76 is set to allow or not allow Pre-seeding. We recommend Option 76 is set to not allow pre-seeding.



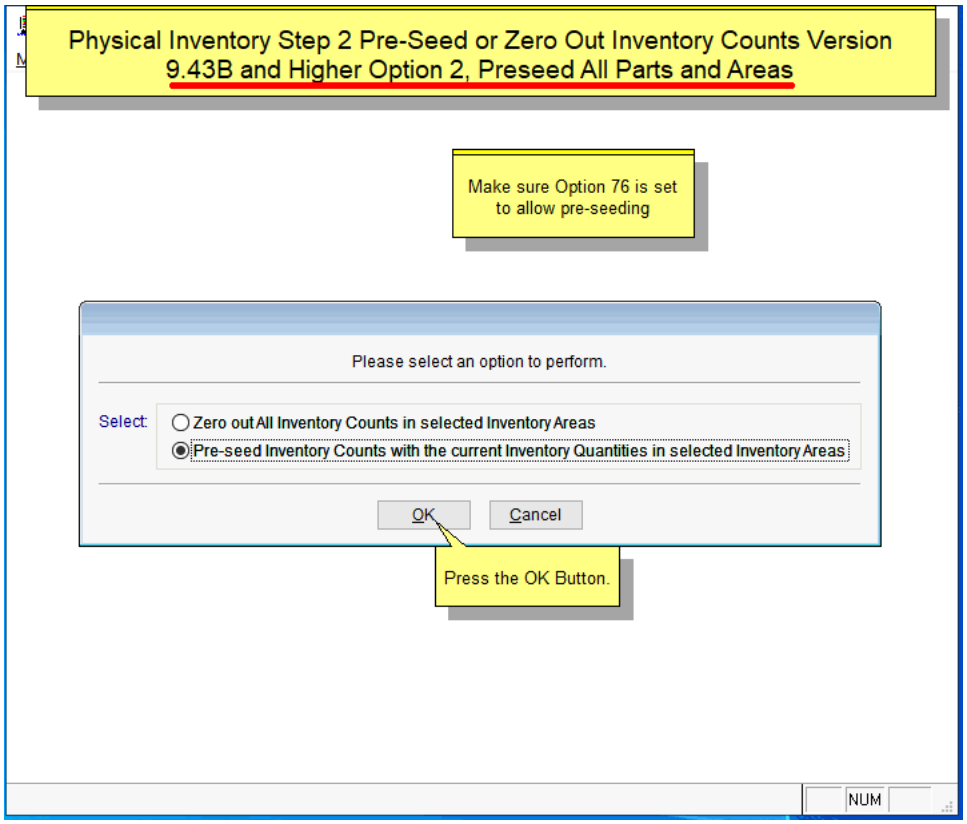



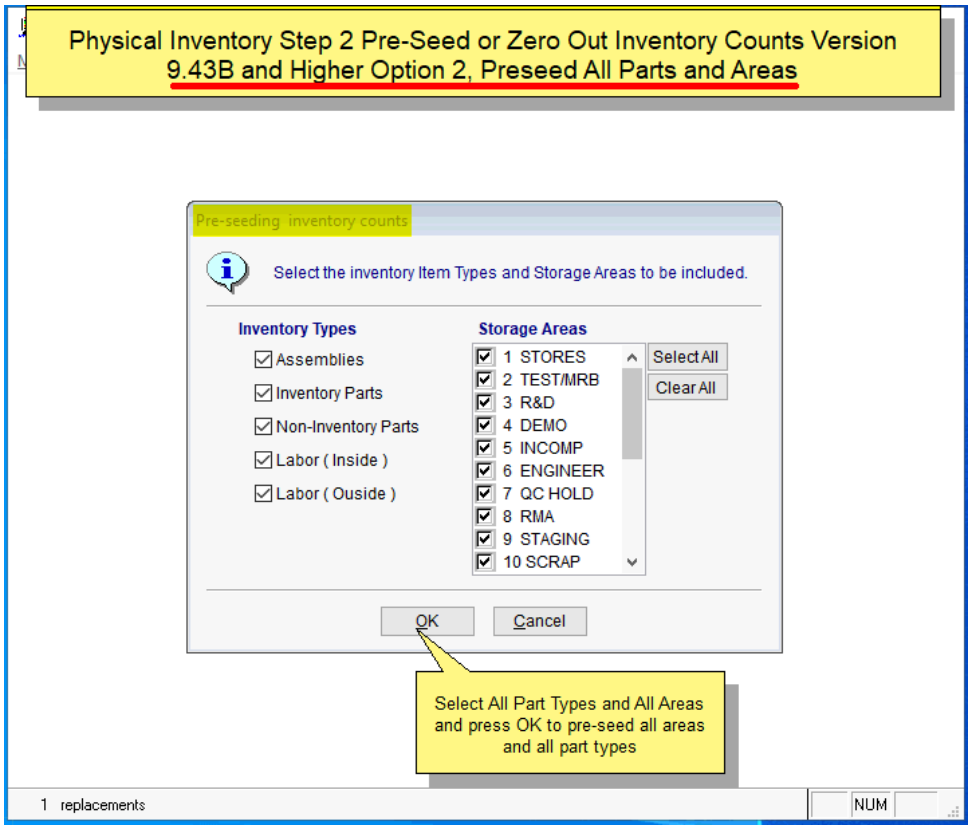
### 6.1.3.1 Option 1, If you only wish to Zero out all inventory counts



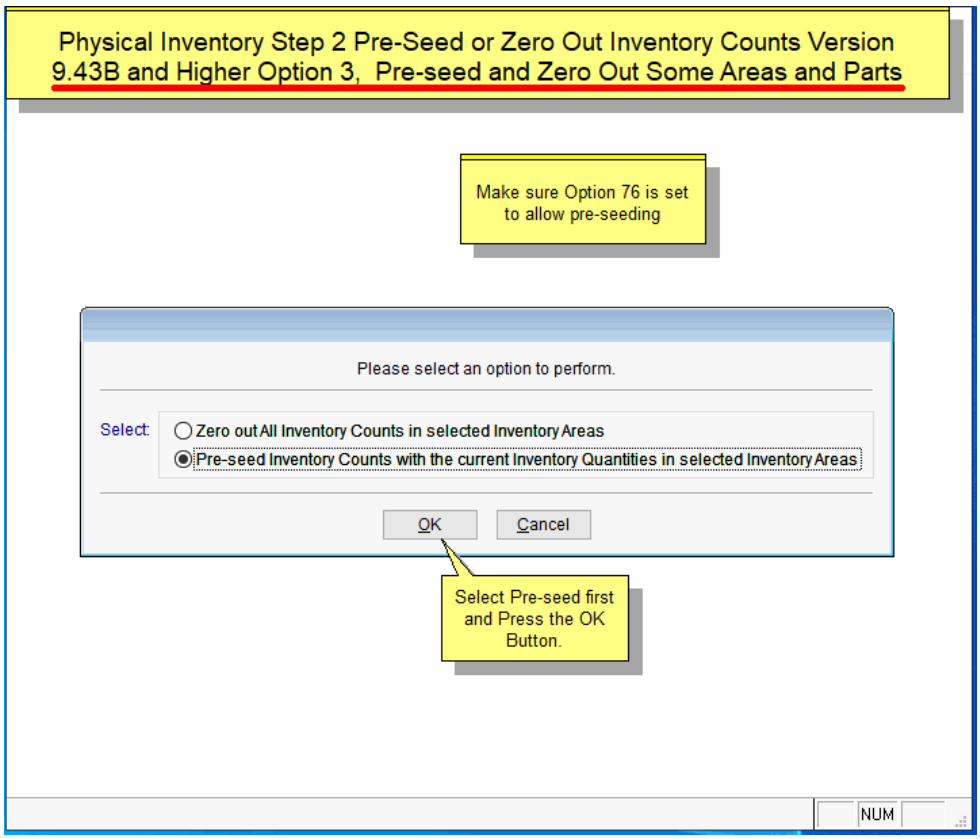



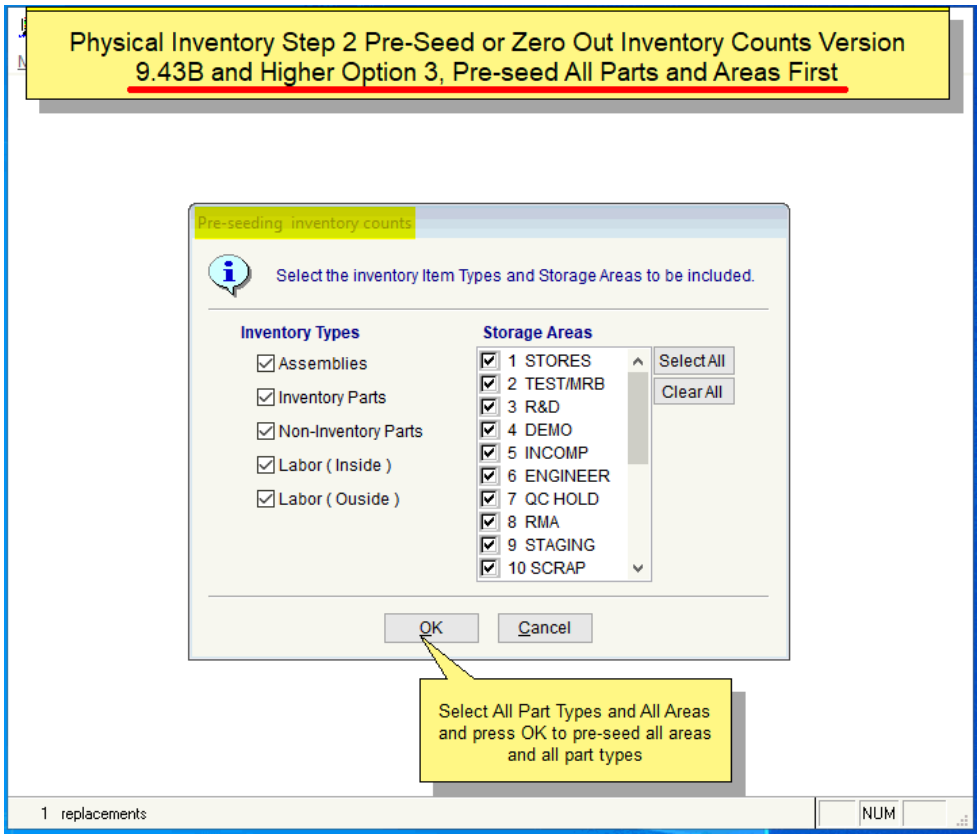
### 6.1.3.2 Option 2, If you wish to Pre-Seed all inventory counts



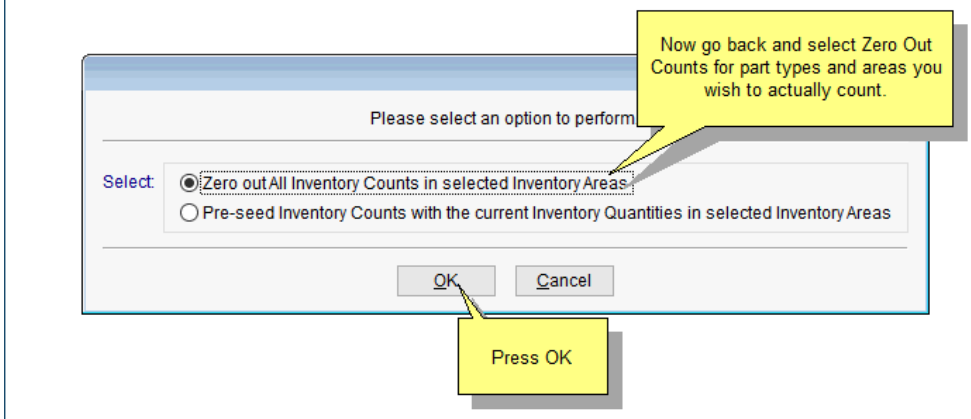



### 6.1.3.2 Option 3, If you wish to Pre-Seed some inventory counts and zero out the rest

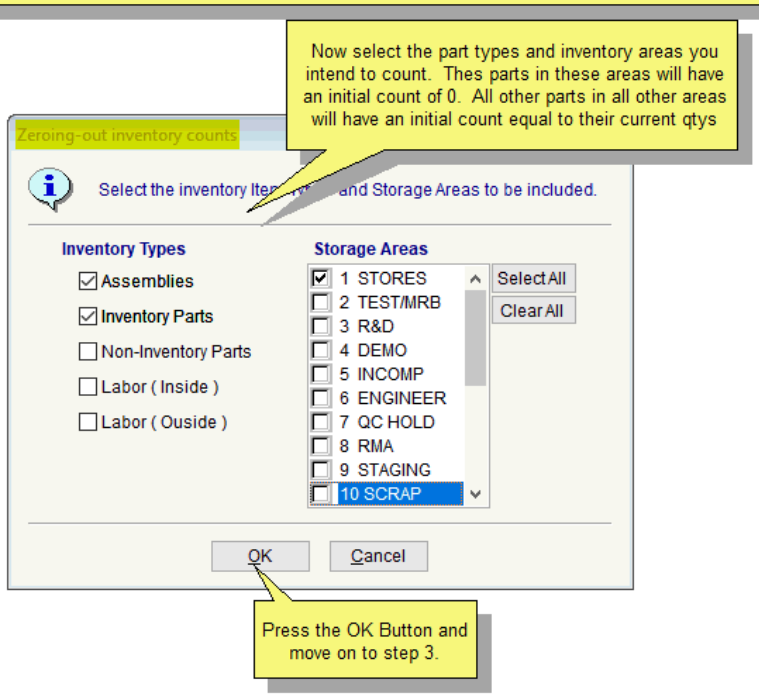


## Physical Inventory Step 2 Pre-Seed or Zero Out Inventory Counts Version 9.43B and Higher Option 3, Go Back and Select Zero Out



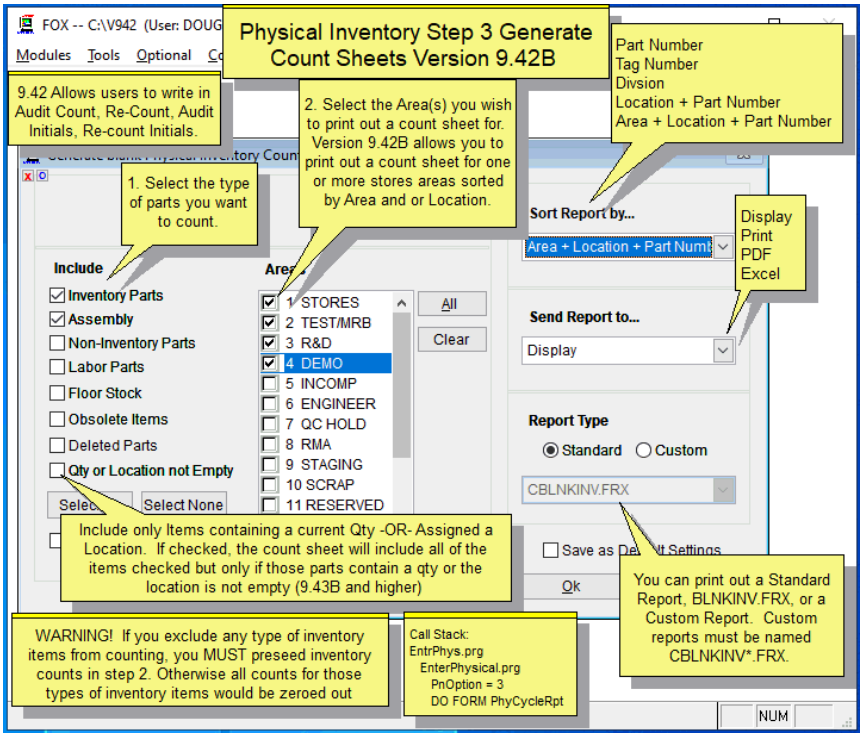

## Physical Inventory Step 2 Pre-Seed or Zero Out Inventory Counts Version 9.43B and Higher Option 3, Select Areas and Parts to Zero Out

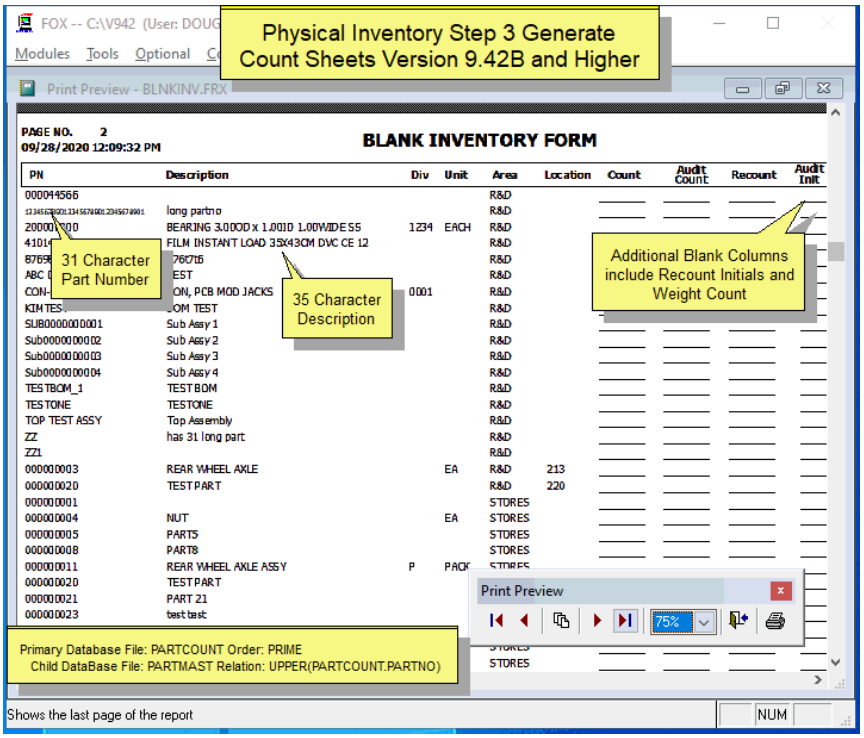


### 6.1.4 Generate Blank Physical Inventory Forms

This selection uses the partmast.dbf file to generate blank physical inventory forms (blankinv.frx) for inventory teams to take the inventory count. Generate as many blank Inventory Forms as there are inventory teams. You have the option to include or not include various types of parts on you count sheets.

The "Total the area counts and print out a variance report" option will total the count for each part number. It is important to note that WIP quantities should be corrected using the Audit WIP function (Section 5.1.14) prior to entering the physical inventory in stores.



### 6.1.5 Enter Physical Inventory Count

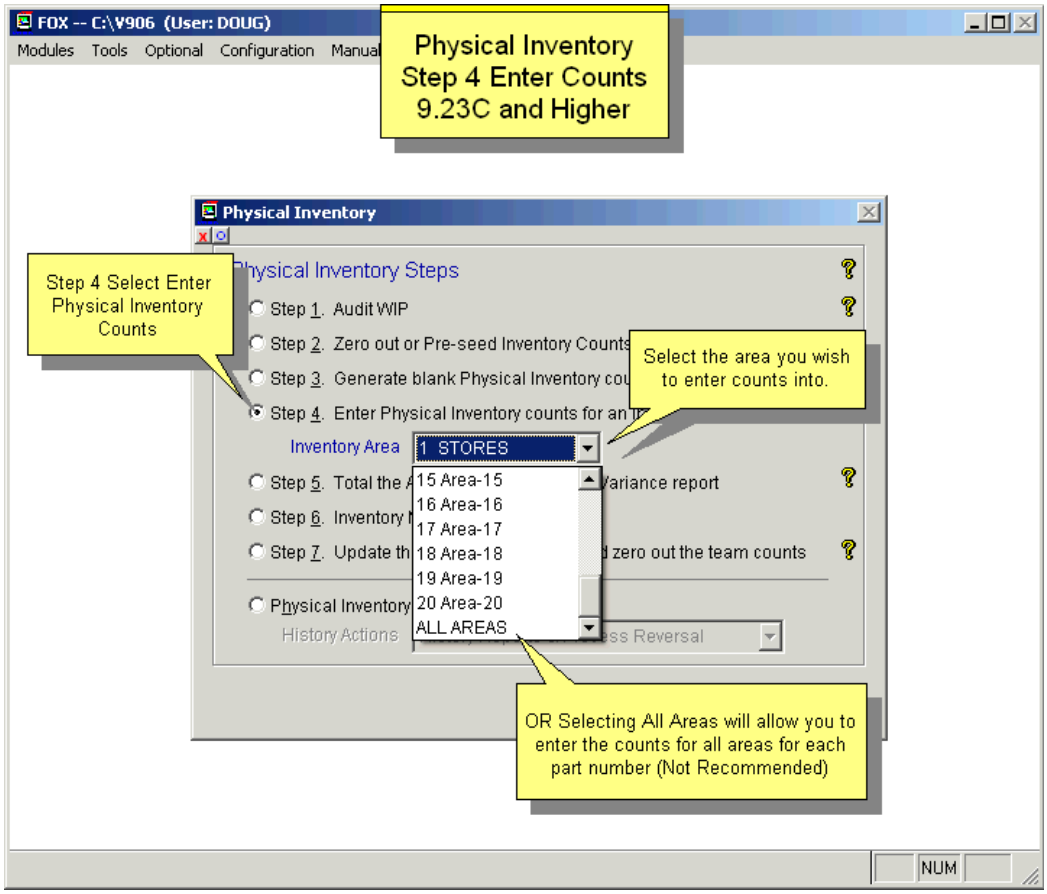
This function allows users to enter the count from each area into the inventory's physical inventory fields (**invarea1-invarea20**), without altering or disturbing your present inventory (**onhand, area2qty-area20qty**). The counts for each area may be entered manually or imported from a comma delimited ASCII file (.csv). **Note:** You don't count WIP. The WIP quantities have been taken care of with the Audit WIP function. Select "Enter Physical Inventory Counts" and select and inventory area or All areas. You can Enter your counts manually or you can Import from a file.

If you select **Manual Entry**, it is a good idea to sequence the entry the same way the count sheets were sequenced. Select a part, then enter the Quantity counted (and Tag number if desired) and click Enter. The temporary team counts will be saved in pc/MRP. Repeat the above steps for each part number, then for each inventory area that the company uses. If you need to make changes in your counts, select the part number and enter the revised count. If you want to overwrite the previous cont, select Enter. If you want to Add the additional quantity to the previous count, select Add. You must count each inventory area before updating inventory with the team counts.

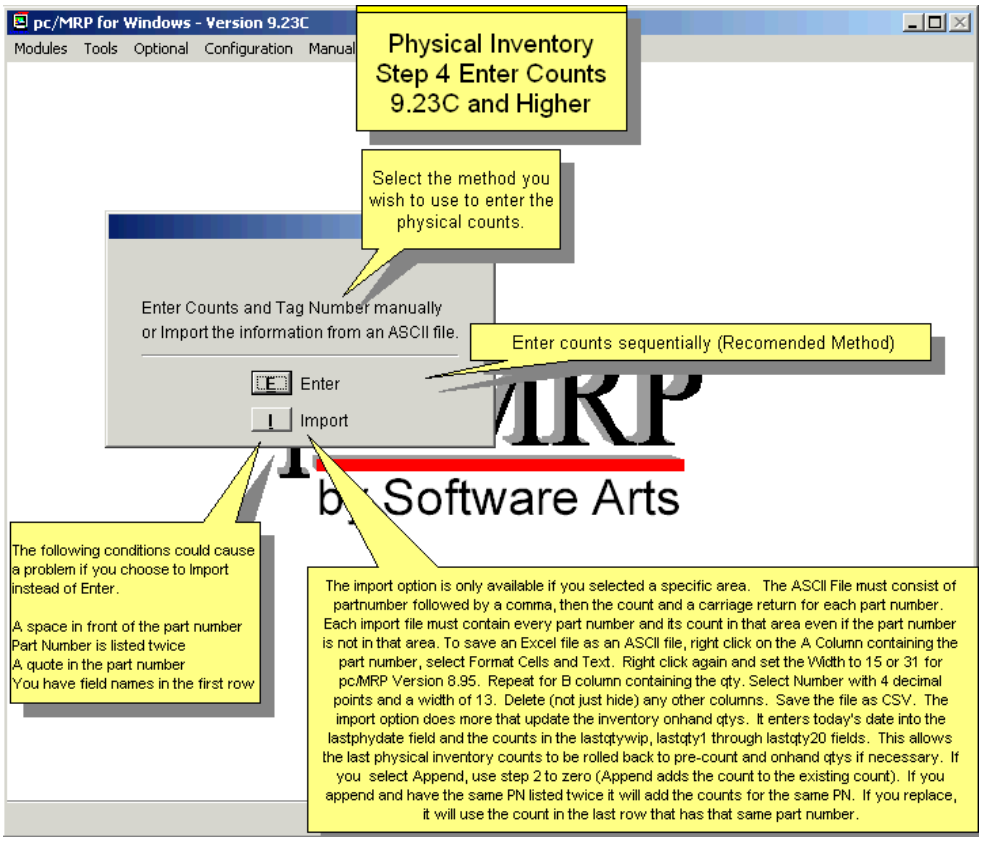
(**Example**: You entered count 5 for part# 100738, Shock absorber. Then someone finds 2 more shock absorbers. You need to revise your counts: you will either type 7 and click Enter, or type 2 and click Add.)

pc/MRP allows the entry of one area at a time or all areas as noted in the following screens:

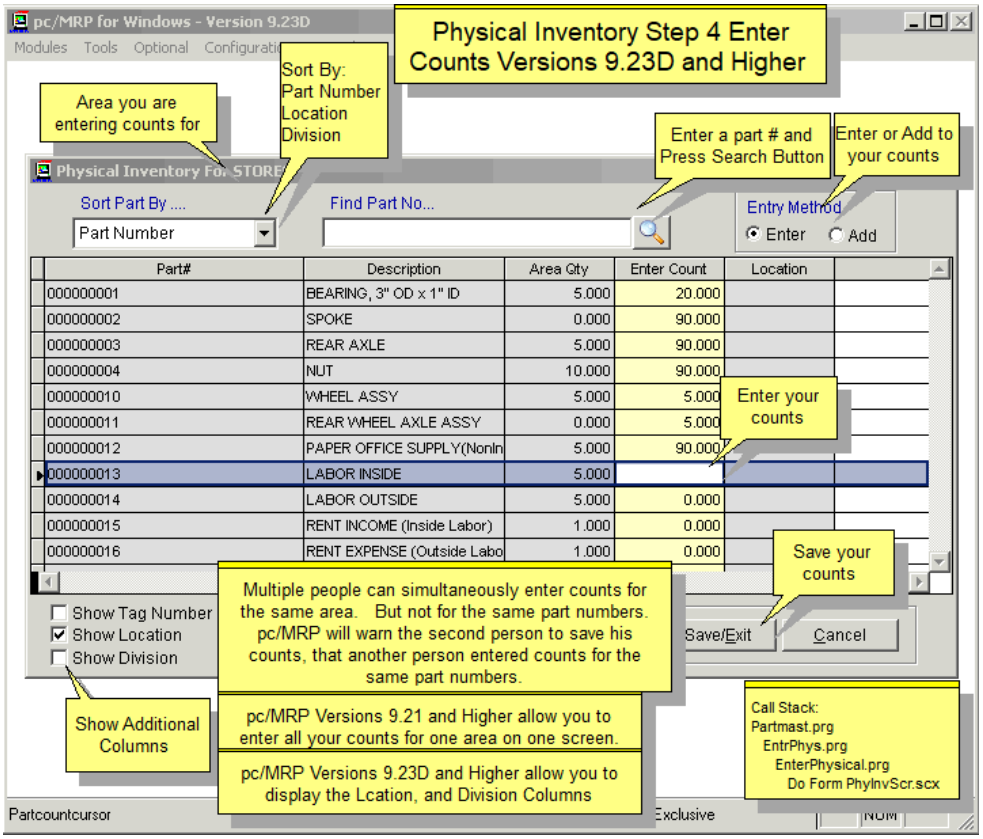
**One Area:**



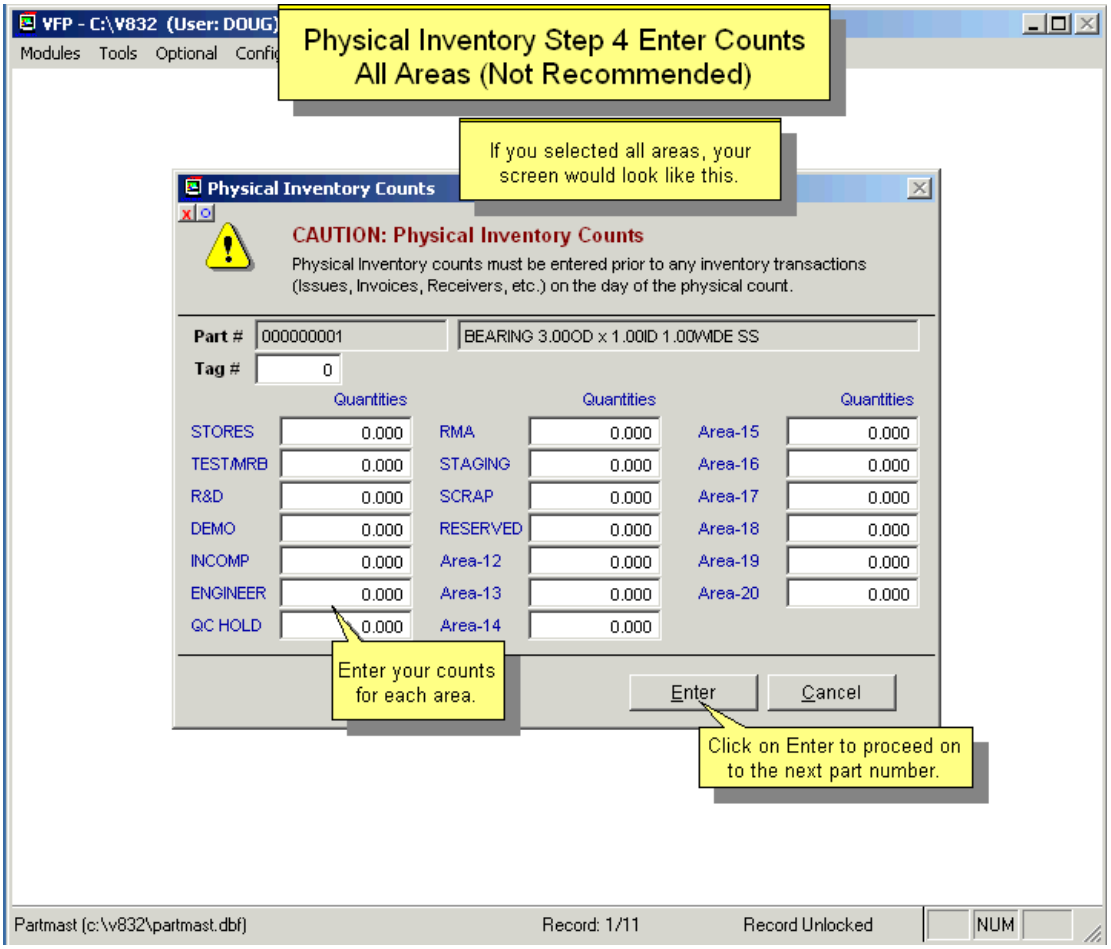
**Select Enter:**




**Enter Counts:**



**All Areas (Not Recommended):**



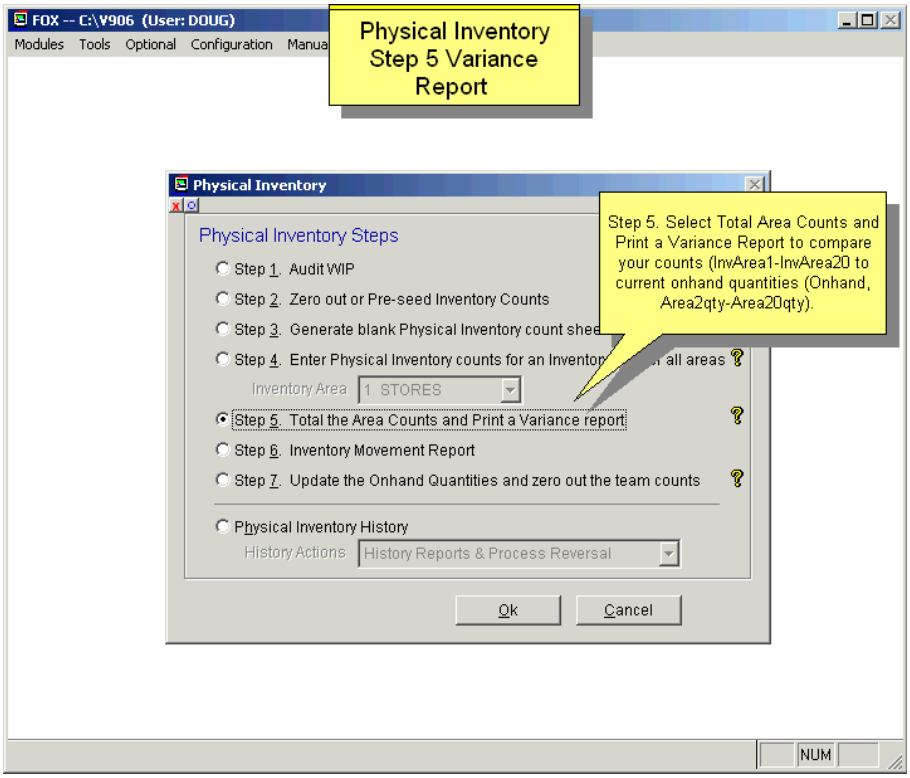

**Import Counts (Not Recommended):**

If you select to **Import** the counts from a .csv file, you need to upload counts to each area separately; pc/MRP will not offer to select All areas. The source **.CSV** file must have the part number and quantity as the first two data elements within the file (each line structure must be: part number 'comma' quantity & a carriage return). Any additional data elements are ignored. The file must contain every part number that exists in your inventory; otherwise that part will get a quantity of 0. You can avoid this by using the Preseed function. Users could create an inventory report, all parts uncosted (both inventory parts and assemblies only), then send the report to Excel. To select the fields for the report, click Select None, then check only the PartNo field. This will create a list of all parts, as the first column of an Excel sheet. The first row ("partno") needs to be deleted. The second column should be filled out with the inventory counts (blank means 0). Next, the file needs to be saved as a .csv file. It is a good practice to open the new .csv file with Notepad (not Excel). The Notepad view is the closest to how pc/MRP will see the file. Check if Excel changed any numeric part numbers, e.g 00000718 to 718. The number 00000718 and the number 718 are the same for Excel. But pc/MRP will not consider the characters 718 as a match for the characters 00000718 and will not import the count for that part. Changing the part number column to text could prevent Excel from changing your part numbers.

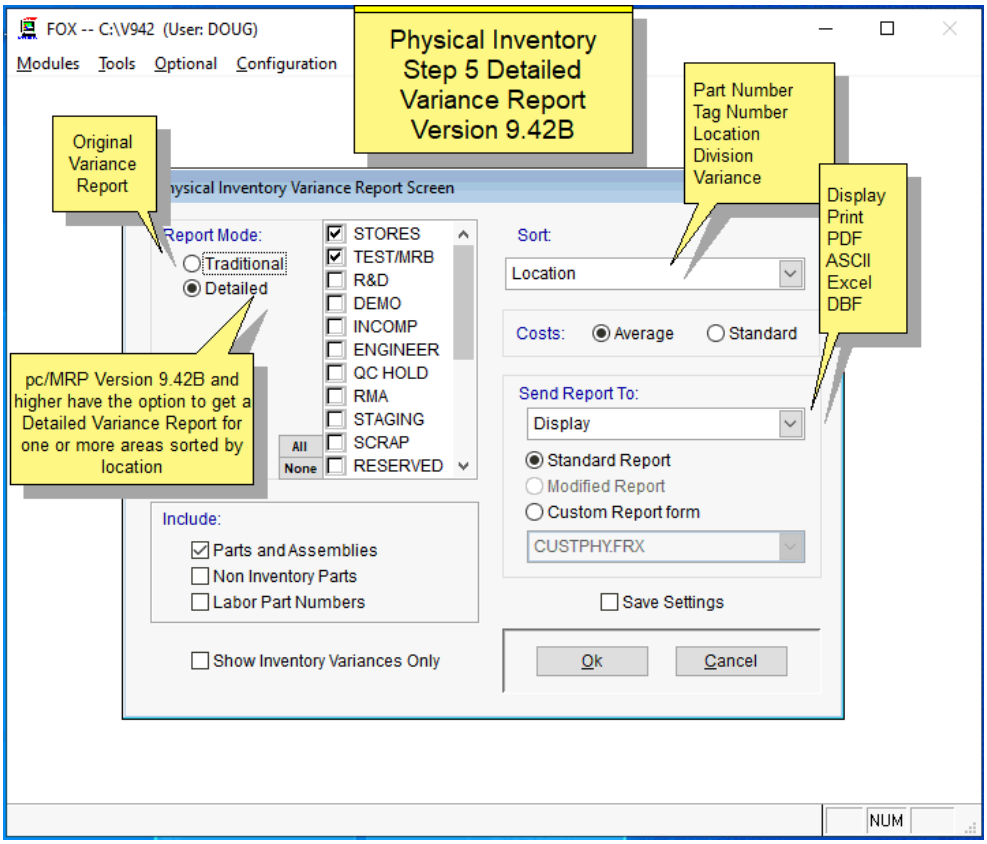
If you select to import your physical inventory counts from an ASCII file, counts for only the part numbers in the list will be appended (added to the existing count) or replaced (replacing the existing count). The other part numbers and other areas will not be affected. (pc/MRP uses ldtxtqty.prg to import the inventory counts.) The following conditions can cause a problem, and are often hard to trace: A space in front of the part number; Part number listed twice; A quote (") in the part number; Field names in the first row. Please note that if errors occur, you should print the report. The error import counts will still be replaced or appended as you selected.

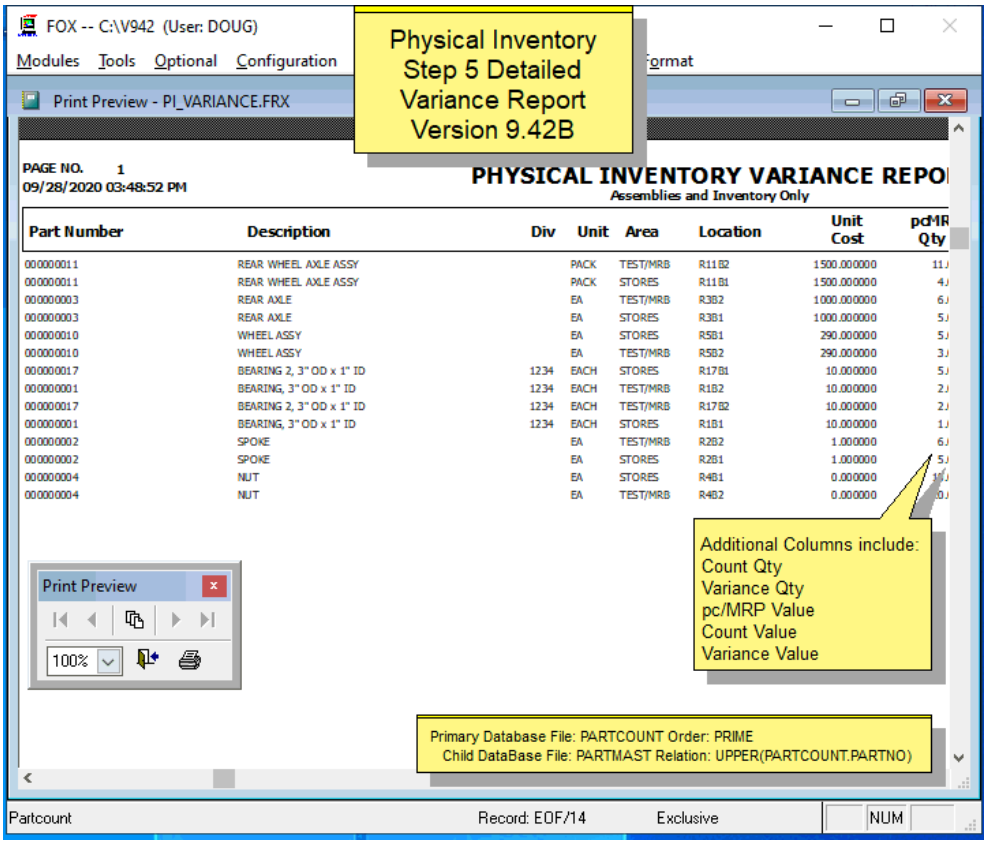
Please see Chapter 16.4.3 & 4 to create ASCII files using a Barcode reader. If you select to enter the counts manually, pc/MRP will prompt you to enter the counts in the order you selected (by part number or by location). In either case, the counts are entered into the inventory invarea1 through invarea20 fields. pc/MRP will allow you to add or enter (replace) the current count for that part number.

### 6.1.6 Total the Area Counts and Print a Variance Report

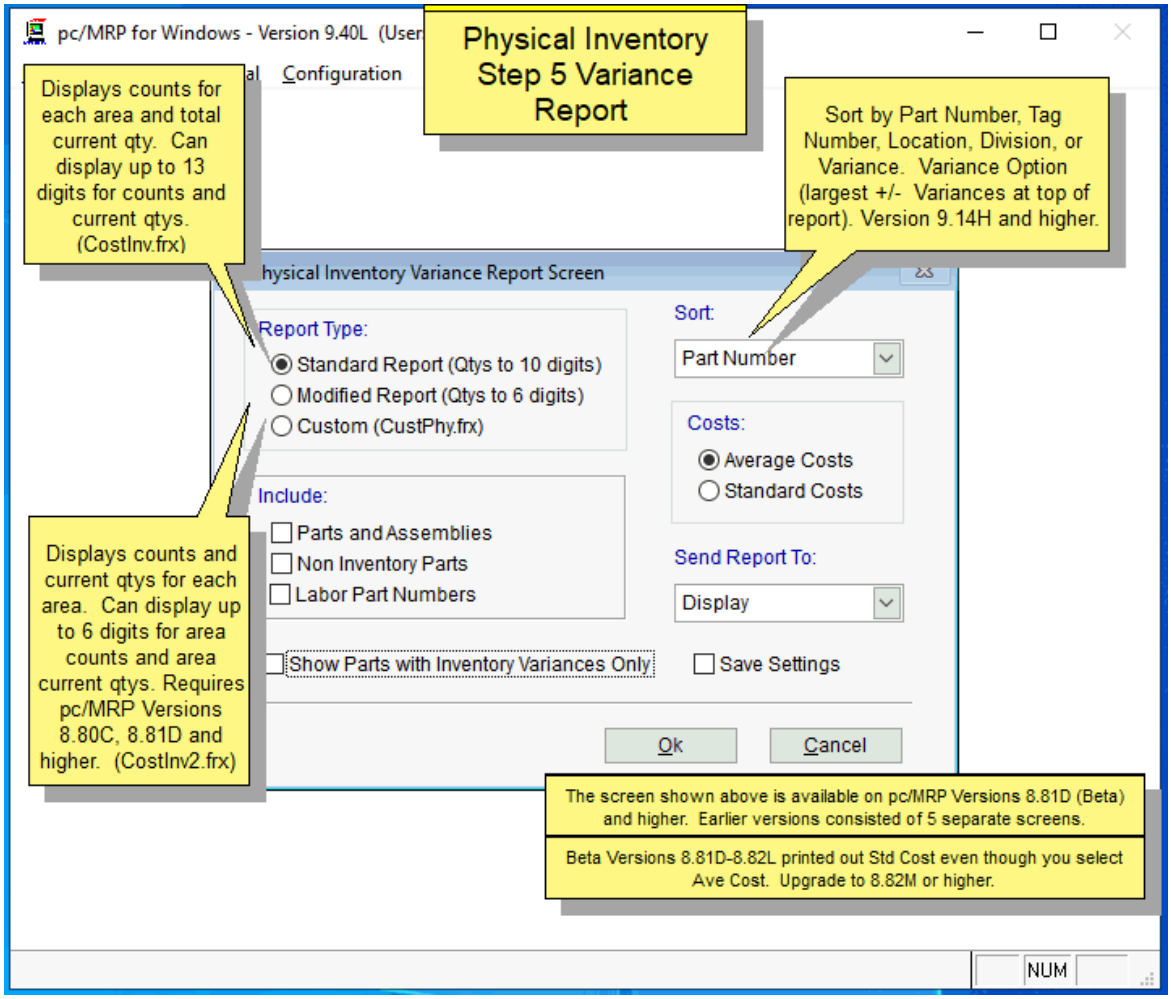


**Detailed Variance Report:**



**Traditional Variance Report:**



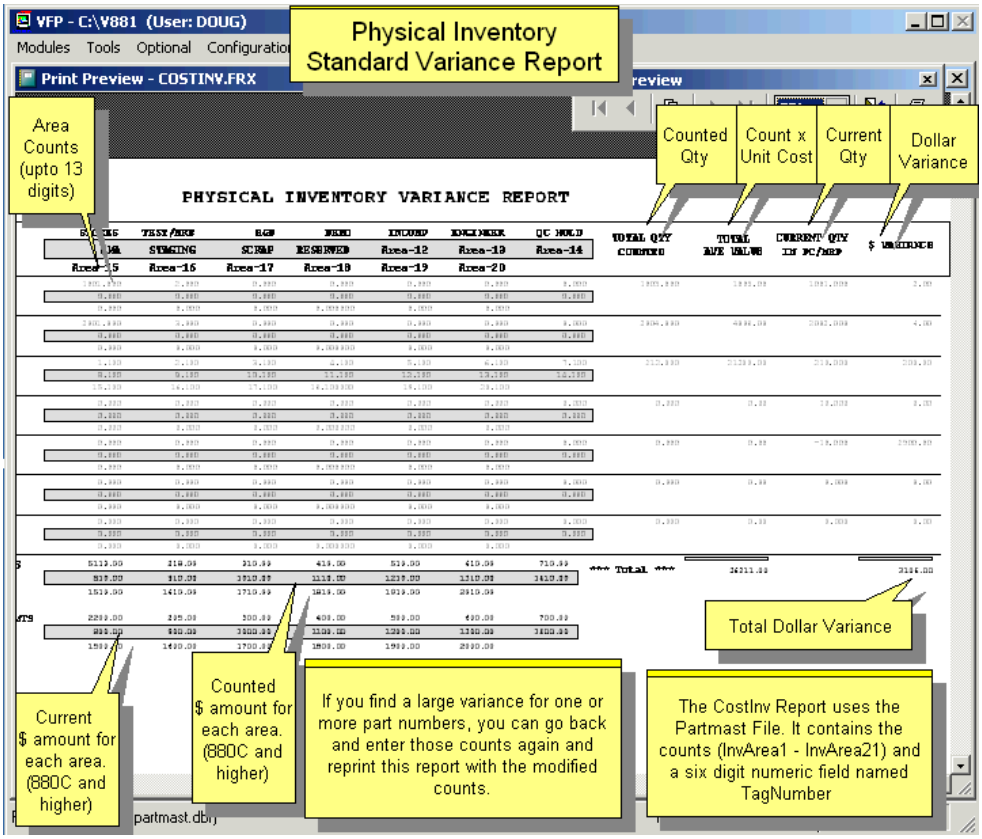

This report (costinv.frx) sums the area counts (invarea1-invarea20) and places the totals into the inventory **invtot** field. It also sums the current quantities (onhand, area2qty-area20qty) and places the total into the inventory **prevqty** field. This report allows you to compare the current counts with the current quantity in inventory.
**Note:** The report can be modified to show the six digit numeric field TagNumber.

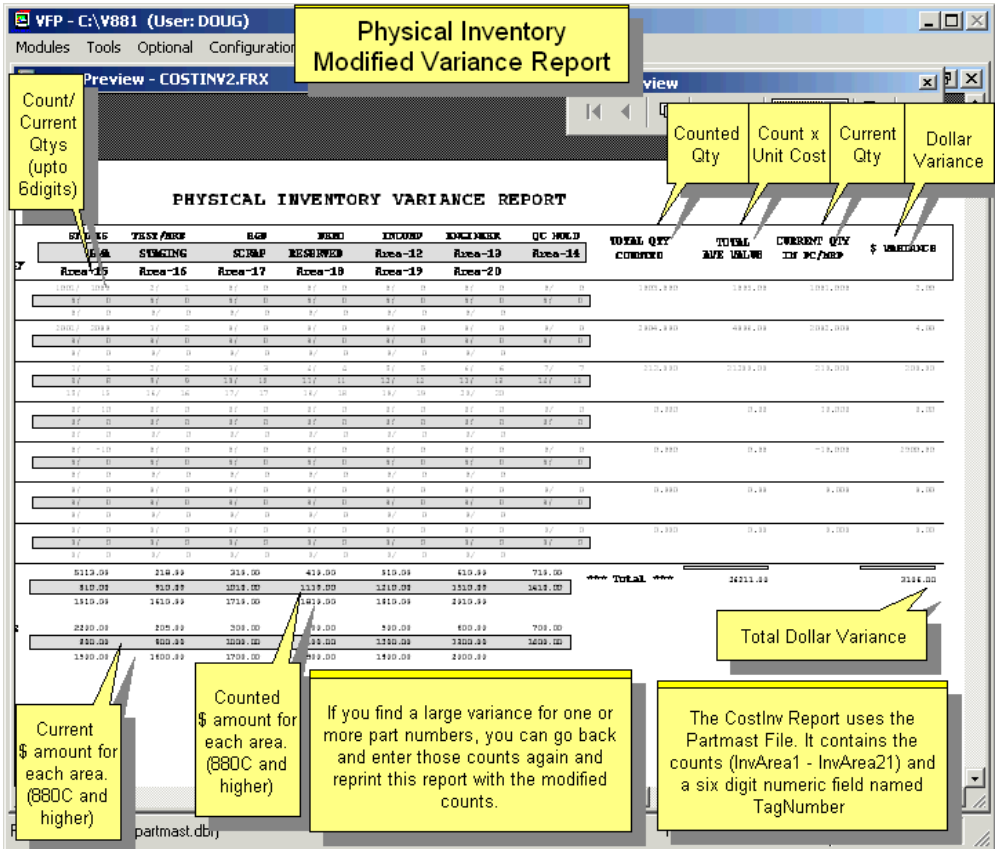
This report is designed to help locate any abnormal deviations in individual stocking levels and provide a dollar value for the physical inventory count with sub-totals by product type. **Once this report has been approved as to its accuracy THEN AND ONLY THEN should you run the option "Update The Onhand Quantity And Zero Out The Team Counts".** If you do not run this report before updating the onhand quantities, no damage will be done. However, you will miss your chance to compare your pc/MRP's on hand quantities.

The deviation values represent the difference in dollars and quantity that pc/MRP calculates you should have as compared to the audit's count. These deviation figures would only be accurate if you had used all of pc/MRP's modules (Invoice, Receiving, Purchasing, Stock Transaction, and Sales) and the previous physical inventory had been accurately taken with pc/MRP. If you do not use the Receiving and Stock Transaction Modules, which adjust the Onhand Quantities, the deviation values represent the change in quantity and value of each part number from the last physical inventory. We recommend not including WIP with this function.

Users can select between **Standard**, **Modified** and **Custom** variance reports. The standard report displays counts for each area and total quantity, up to 13 digits for each (CostInv.frx). The modified report displays counts and current quantities for each area, up to 6 digits for each (CostInv2.frx). The following images show an example for both reports.

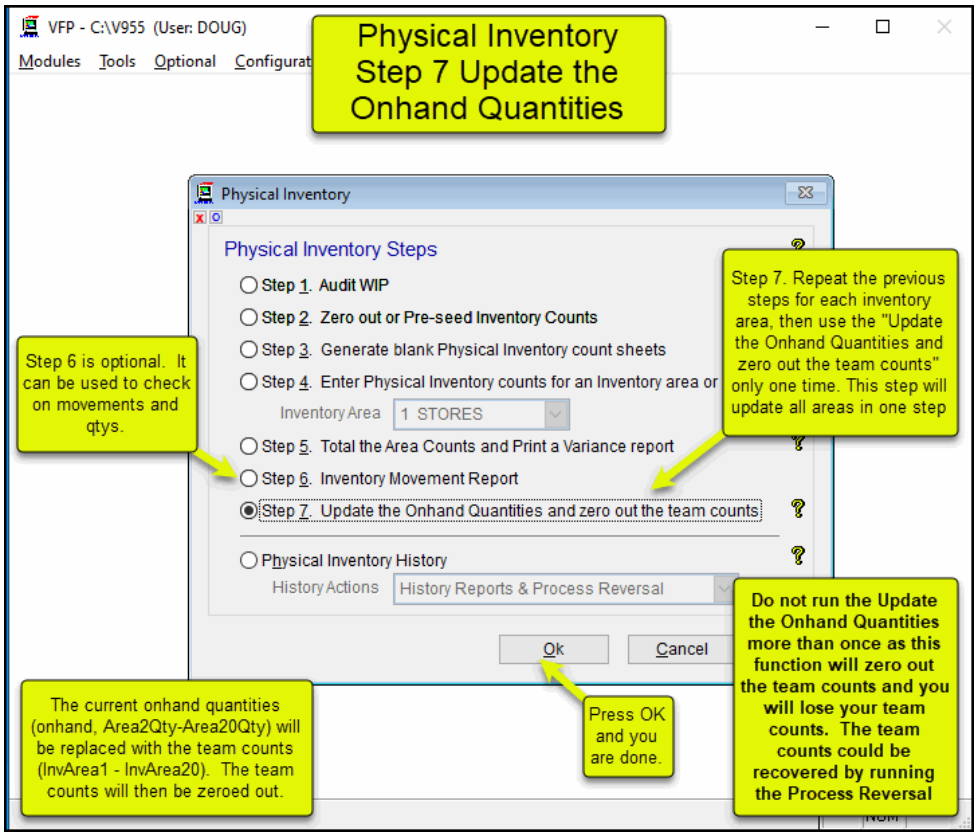
Users can **Include** Parts and Assemblies and/or Non Inventory Parts and/or Labor Part Number. They can **Send** the report to Display, Print, PDF, ASCII, Excel, DBF or HTML.


VFP - C:\V881 (User: DOUG)
Modules Tools Optional Configuration
Print Preview - COSTINV.FRX
Physical Inventory
Standard Variance Report
Area Counts (upto 13 digits)
Counted Qty
Count x Unit Cost
Current Qty
Dollar Variance
PHYSICAL INVENTORY VARIANCE REPORT
Total Dollar Variance
Current $ amount for each area. (880C and higher)
Counted $ amount for each area. (880C and higher)
If you find a large variance for one or more part numbers, you can go back and enter those counts again and reprint this report with the modified counts.
The CostInv Report uses the Partmast File. It contains the counts (InvArea1 - InvArea21) and a six digit numeric field named TagNumber
partmast.dbf


VFP - C:\V881 (User: DOUG)
Modules Tools Optional Configuration
Preview - COSTINV2.FRX
Physical Inventory
Modified Variance Report
Count/ Current Qtys (upto 6digits)
Counted Qty
Count x Unit Cost
Current Qty
Dollar Variance
PHYSICAL INVENTORY VARIANCE REPORT
Total Dollar Variance
Current $ amount for each area. (880C and higher)
Counted $ amount for each area. (880C and higher)
If you find a large variance for one or more part numbers, you can go back and enter those counts again and reprint this report with the modified counts.
The CostInv Report uses the Partmast File. It contains the counts (InvArea1 - InvArea21) and a six digit numeric field named TagNumber
partmast.dbf

### 6.1.7 Update the Onhand Quantities and Zero Out the Team Counts

Replaces the present onhand inventory quantities (**onhand, area2qty-area20qty**) with the new count from the physical inventory count (**invarea1-invarea20**). It stores the count in the **lastqty1-lastqty20** fields and zeros out the inventory count fields (invarea1-invarea20) for the next count. This should be done only after the "Total the Area Counts and Print Variance Report" option has been run and approved. One last time, we recommend not including WIP with this function as WIP counts were corrected using the Audit WIP function. The Update option will only run if the user has inventory delete rights (provided the Password Module has been activated).



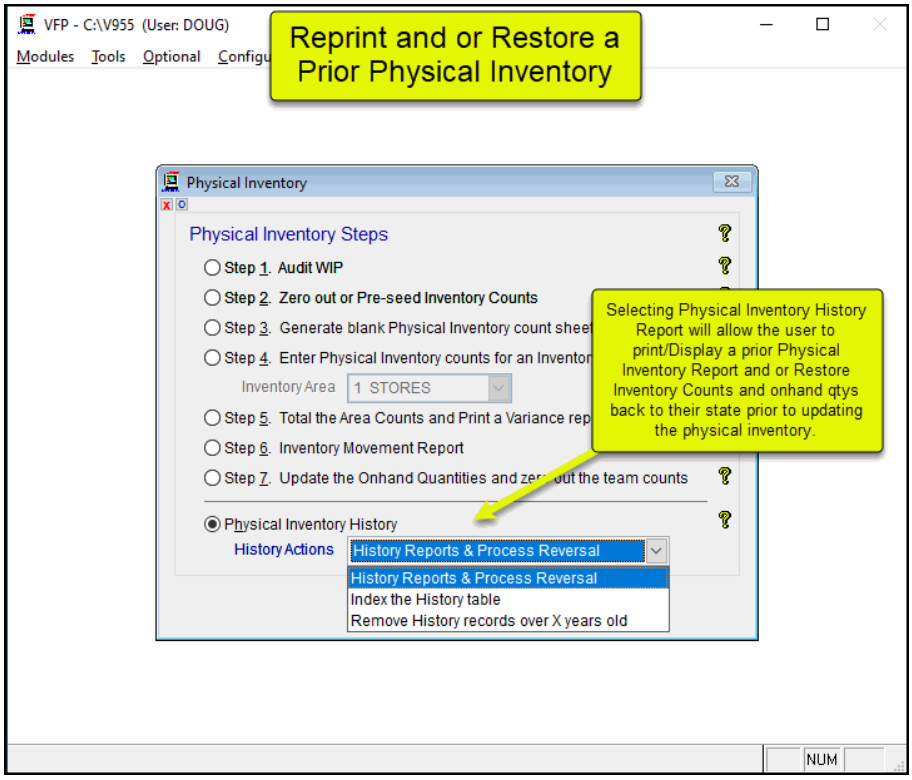

### 6.1.8 The Inventory Movement Report (parmovp.frx, movement.dbf)

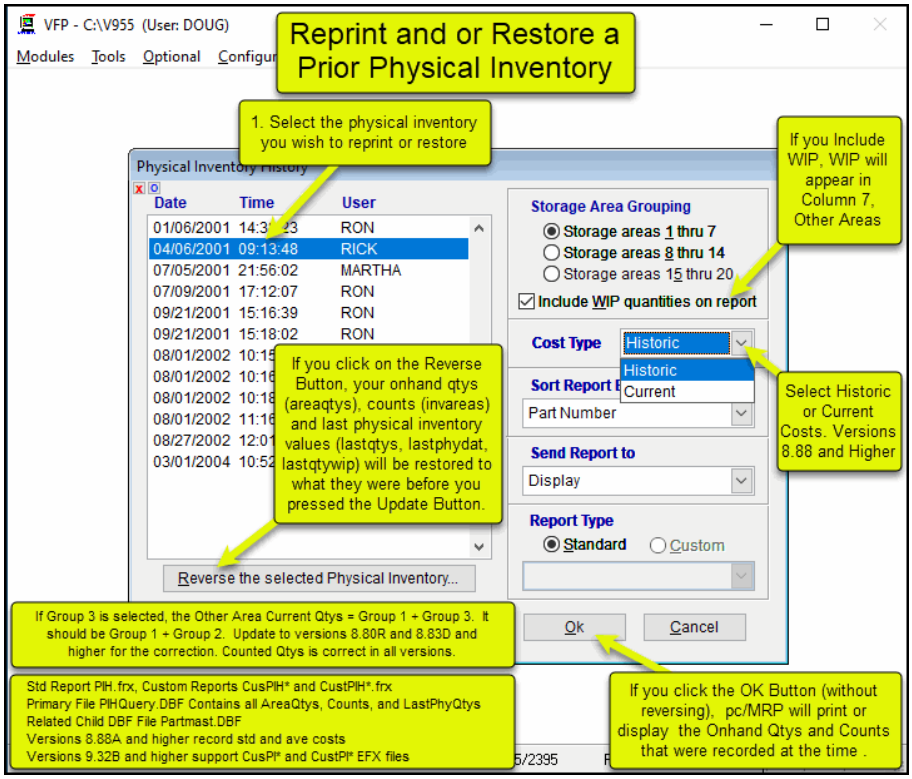
The inventory movement report will list all inventory movements during a specified period based on the last physical inventory count, receivers, issues, adjustments, and invoiced sales orders. The report will compare the theoretical count with the physical inventory count. pc/MRP will provide the correct starting and ending balances after you have taken a physical inventory or the starting date for the partnumber was earlier than the beginning date on the inventory movement report. With this report you should check the include WIP check box.

### 6.1.9 Physical Inventory History

Selecting History Reports & Process Reversal will display all prior physical inventories. You can then display, print, and/or restore past physical inventories. This option will restore the last physical inventory quantities, date, team counts, and areas 1-20 quantities as they were just prior to when you pressed “Update the OnHand Qty and Zero out the Team Count”. It will not change WIP quantities. If existing part numbers no longer exist after restoring, pc/MRP will give you an error message and add the part numbers without any quantities.

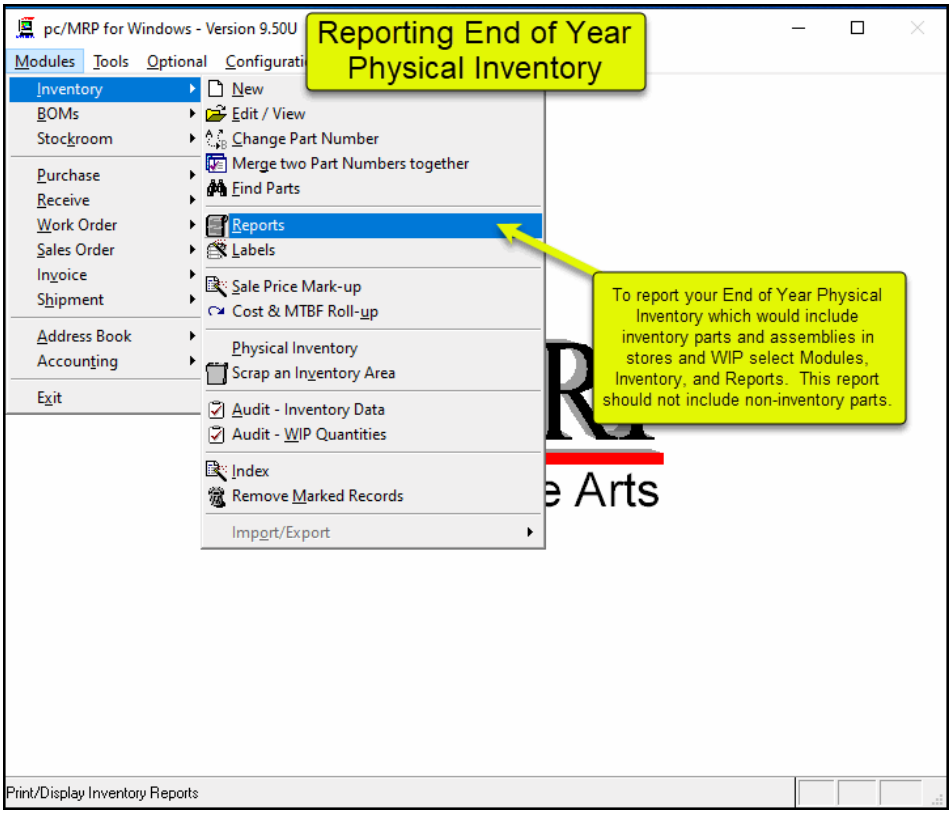
This option is great for restoring a physical inventory count if you accidentally have hit the U button twice and deleted your inventory and team counts.

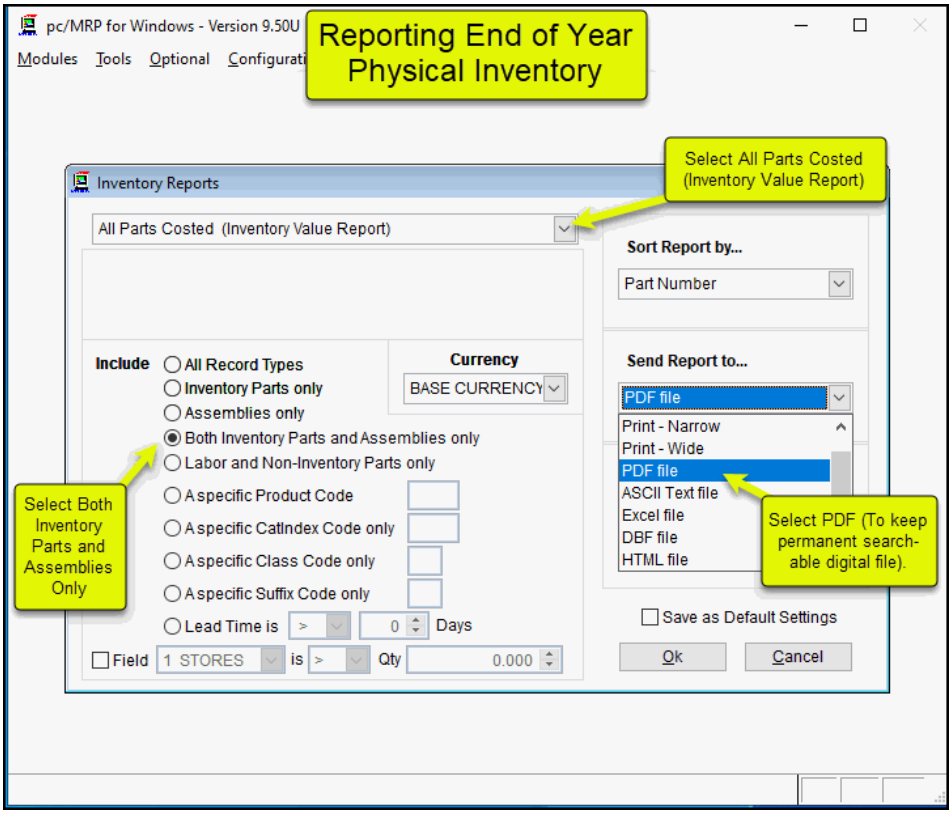

VFP - C:\V955 (User: DOUG)
Modules Tools Optional Configu
Reprint and or Restore a Prior Physical Inventory
Physical Inventory
Physical Inventory Steps
Step 1. Audit WIP
Step 2. Zero out or Pre-seed Inventory Counts
Step 3. Generate blank Physical Inventory count shee
Step 4. Enter Physical Inventory counts for an Inventor
Inventory Area 1 STORES
Step 5. Total the Area Counts and Print a Variance rep
Step 6. Inventory Movement Report
Step 7. Update the Onhand Quantities and ze out the team counts
Physical Inventory History
History Actions
History Reports & Process Reversal
History Reports & Process Reversal
Index the History table
Remove History records over X years old
Selecting Physical Inventory History Report will allow the user to print/Display a prior Physical Inventory Report and or Restore Inventory Counts and onhand qtys back to their state prior to updating the physical inventory.
NUM

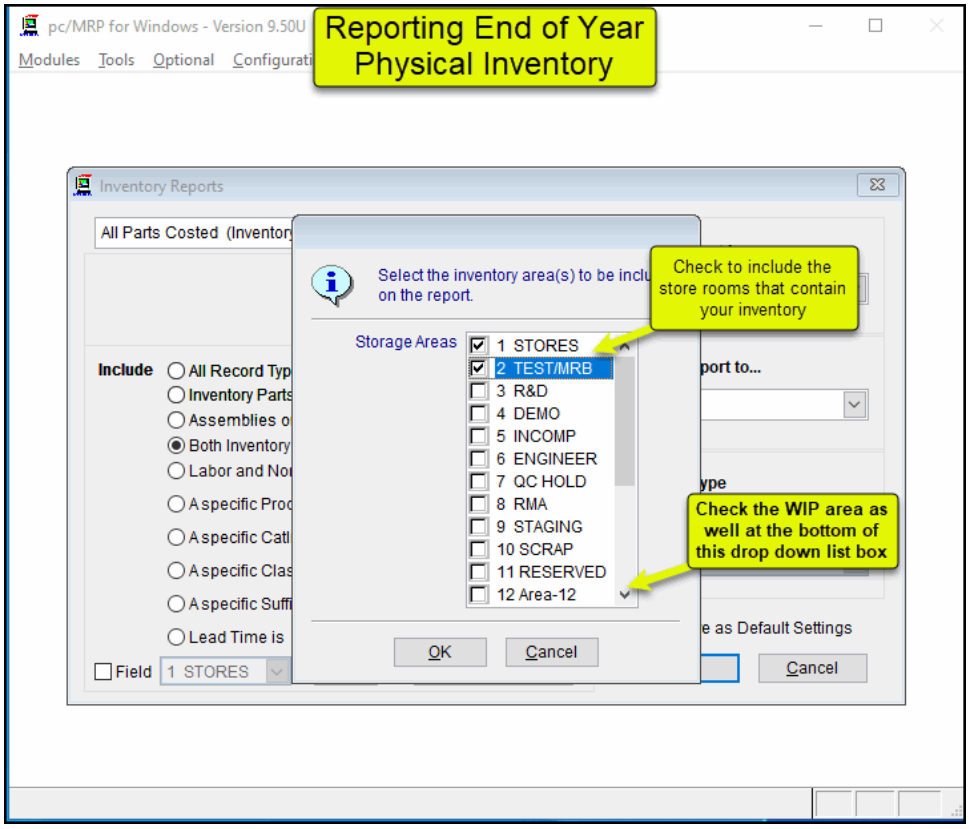

VFP - C:\V955 (User: DOUG)
Modules Tools Optional Configur
Reprint and or Restore a Prior Physical Inventory
1. Select the physical inventory you wish to reprint or restore
Physical Inventory History
Date Time User
01/06/2001 14:3 23 RON
04/06/2001 09:13:48 RICK
07/05/2001 21:56:02 MARTHA
07/09/2001 17:12:07 RON
09/21/2001 15:16:39 RON
09/21/2001 15:18:02 RON
08/01/2002 10:15
08/01/2002 10:16
08/01/2002 10:18
08/01/2002 11:16
08/27/2002 12:01
03/01/2004 10:52
If you click on the Reverse Button, your onhand qtys (areaqtys), counts (invareas) and last physical inventory values (lastqtys, lastphydat, lastqtywip) will be restored to what they were before you pressed the Update Button.
Reverse the selected Physical Inventory...
Storage Area Grouping
Storage areas 1 thru 7
Storage areas 8 thru 14
Storage areas 15 thru 20
Include WIP quantities on report
If you Include WIP, WIP will appear in Column 7, Other Areas
Cost Type
Historic
Historic
Current
Select Historic or Current Costs. Versions 8.88 and Higher
Sort Report
Part Number
Send Report to
Display
Report Type
Standard
Custom
Ok
Cancel
If Group 3 is selected, the Other Area Current Qtys = Group 1 + Group 3. It should be Group 1 + Group 2. Update to versions 8.80R and 8.83D and higher for the correction. Counted Qtys is correct in all versions.
Std Report PIH.frx, Custom Reports CusPIH* and CustPIH*.frx
Primary File PIHQuery.DBF Contains all AreaQtys, Counts, and LastPhyQtys
Related Child DBF File Partmast.DBF
Versions 8.88A and higher record std and ave costs
Versions 9.32B and higher support CusPI* and CustPI* EFX files
If you click the OK Button (without reversing), pc/MRP will print or display the Onhand Qtys and Counts that were recorded at the time .
5/2395

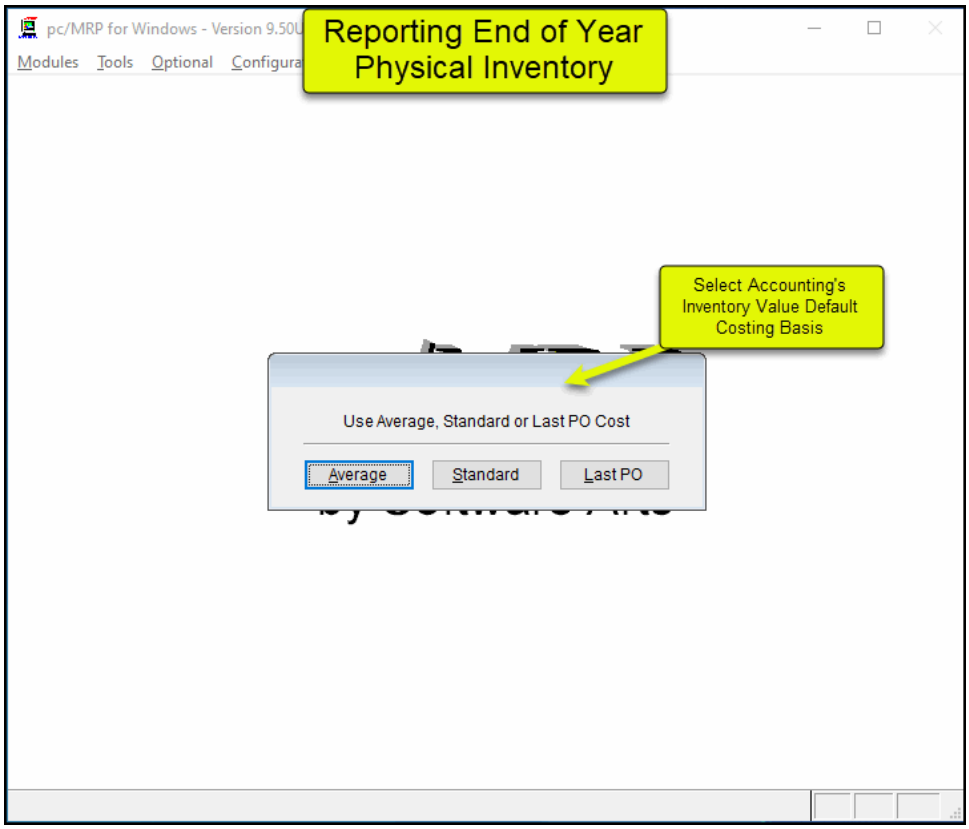
### 6.1.10 Reporting End of Year Physical Inventory

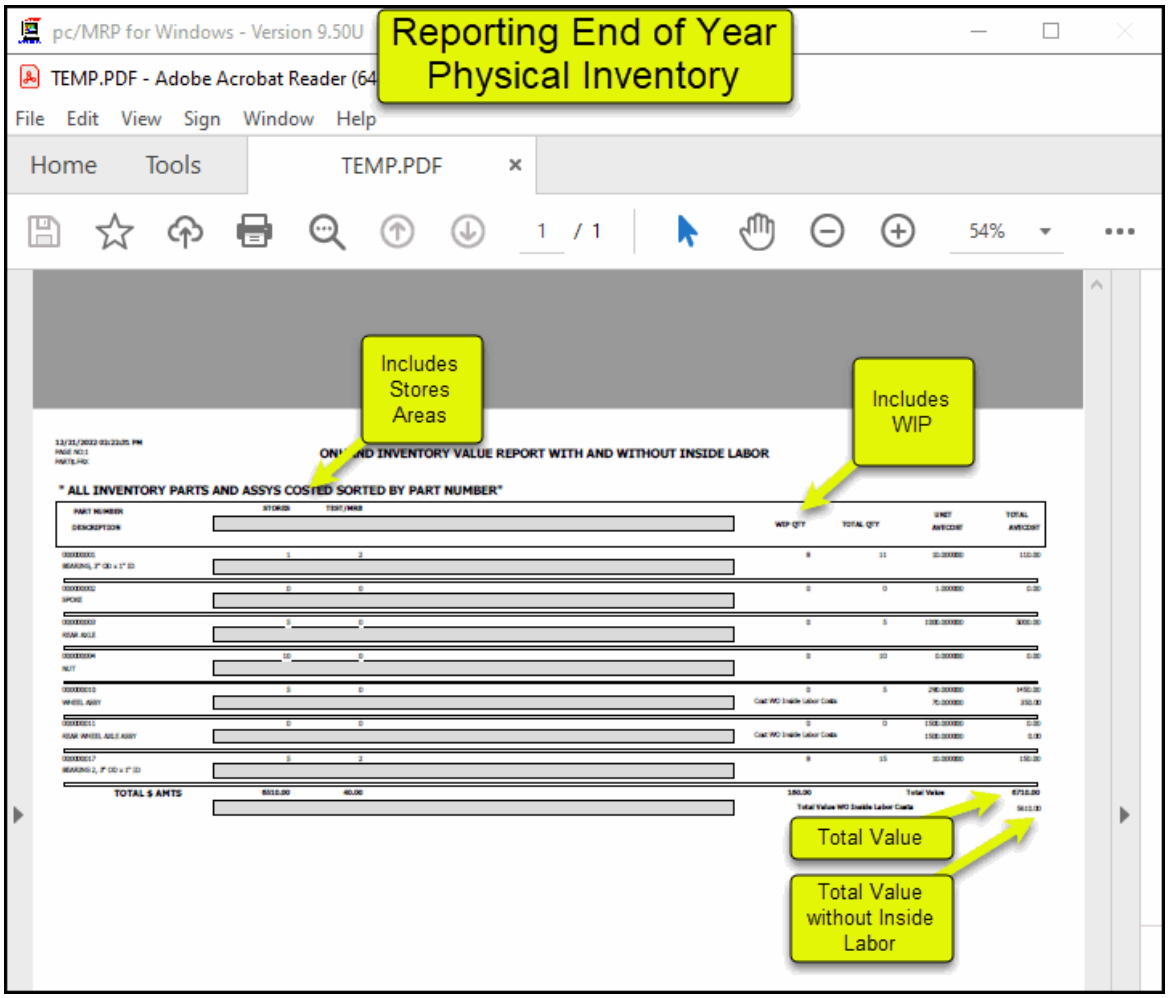
To report your End of Year Physical Inventory which would include inventory parts and assemblies in stores and WIP, select Modules, Inventory, and Reports. (This report should not include non-inventory parts)



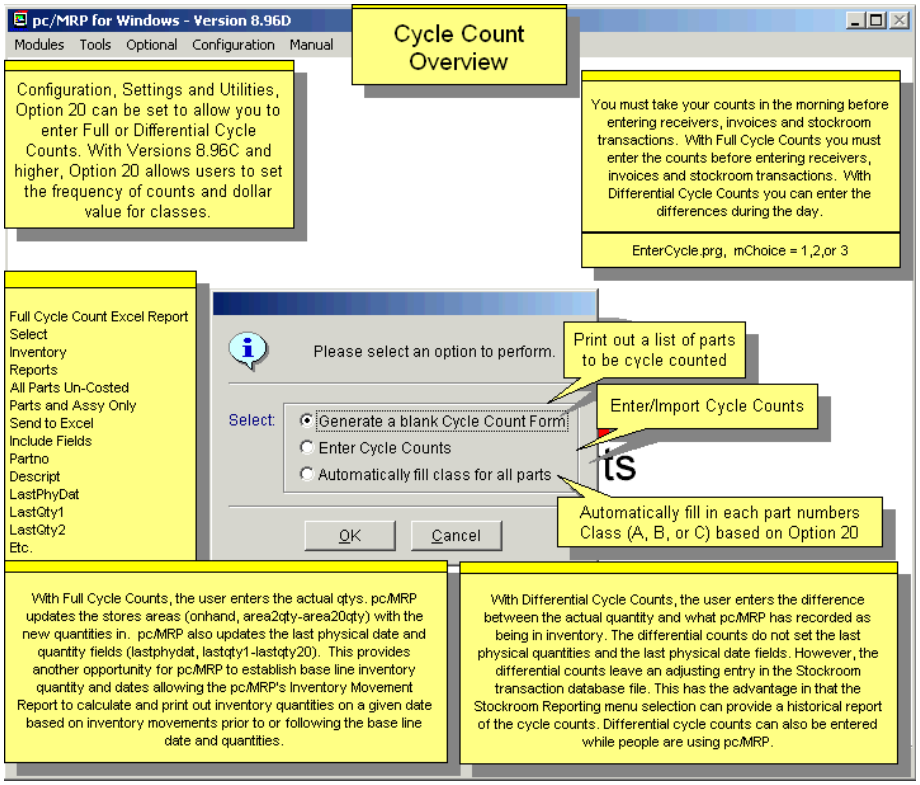

Reporting End of Year Physical Inventory
pc/MRP for Windows - Version 9.50U
Modules Tools Optional Configurati
Inventory Reports
All Parts Costed (Inventor
Select the inventory area(s) to be inclu on the report.
Storage Areas
1 STORES
2 TEST/MRB
3 R&D
4 DEMO
5 INCOMP
6 ENGINEER
7 QC HOLD
8 RMA
9 STAGING
10 SCRAP
11 RESERVED
12 Area-12
OK
Cancel
Check to include the store rooms that contain your inventory
Check the WIP area as well at the bottom of this drop down list box
Include
All Record Typ
Inventory Parts
Assemblies o
Both Inventory
Labor and Nor
A specific Proc
A specific Catl
A specific Clas
A specific Suffi
Lead Time is
Field
1 STORES
port to...
ype
e as Default Settings
Cancel


Reporting End of Year Physical Inventory
pc/MRP for Windows - Version 9.50U
Modules Tools Optional Configura
Select Accounting's Inventory Value Default Costing Basis
Use Average, Standard or Last PO Cost
Average
Standard
Last PO

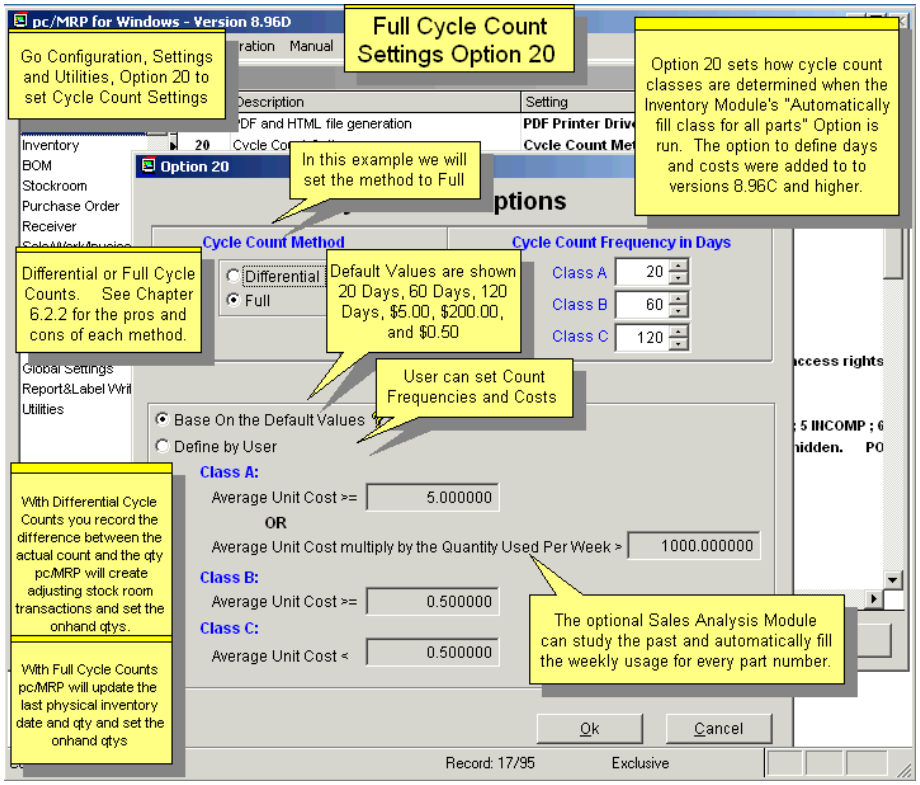

pc/MRP for Windows - Version 9.50U
Reporting End of Year Physical Inventory
TEMP.PDF - Adobe Acrobat Reader (64
File Edit View Sign Window Help
Home Tools
TEMP.PDF
1 / 1
54%
Includes Stores Areas
Includes WIP
ON HAND INVENTORY VALUE REPORT WITH AND WITHOUT INSIDE LABOR
* ALL INVENTORY PARTS AND ASSYS COSTED SORTED BY PART NUMBER*
PART NUMBER
DESCRIPTION
STORES
TEST/MKB
WIP QTY
TOTAL QTY
UNIT AVECOST
TOTAL AVECOST
TOTAL $ AMTS
Total Value
Total Value without Inside Labor

## 6.2 Cycle Count

Selecting the Cycle Count Option will display the screen below:




To determine the settings behind the Cycle Count, use Configuration, **Option 20**. The rest of this chapter explains all these settings and describes the Cycle Count process. When you click Ok, the CC Method and Frequency will be set. You still need to run the "Automatically Fill Class Fields for All Parts" utility. See section 6.2.3 below.



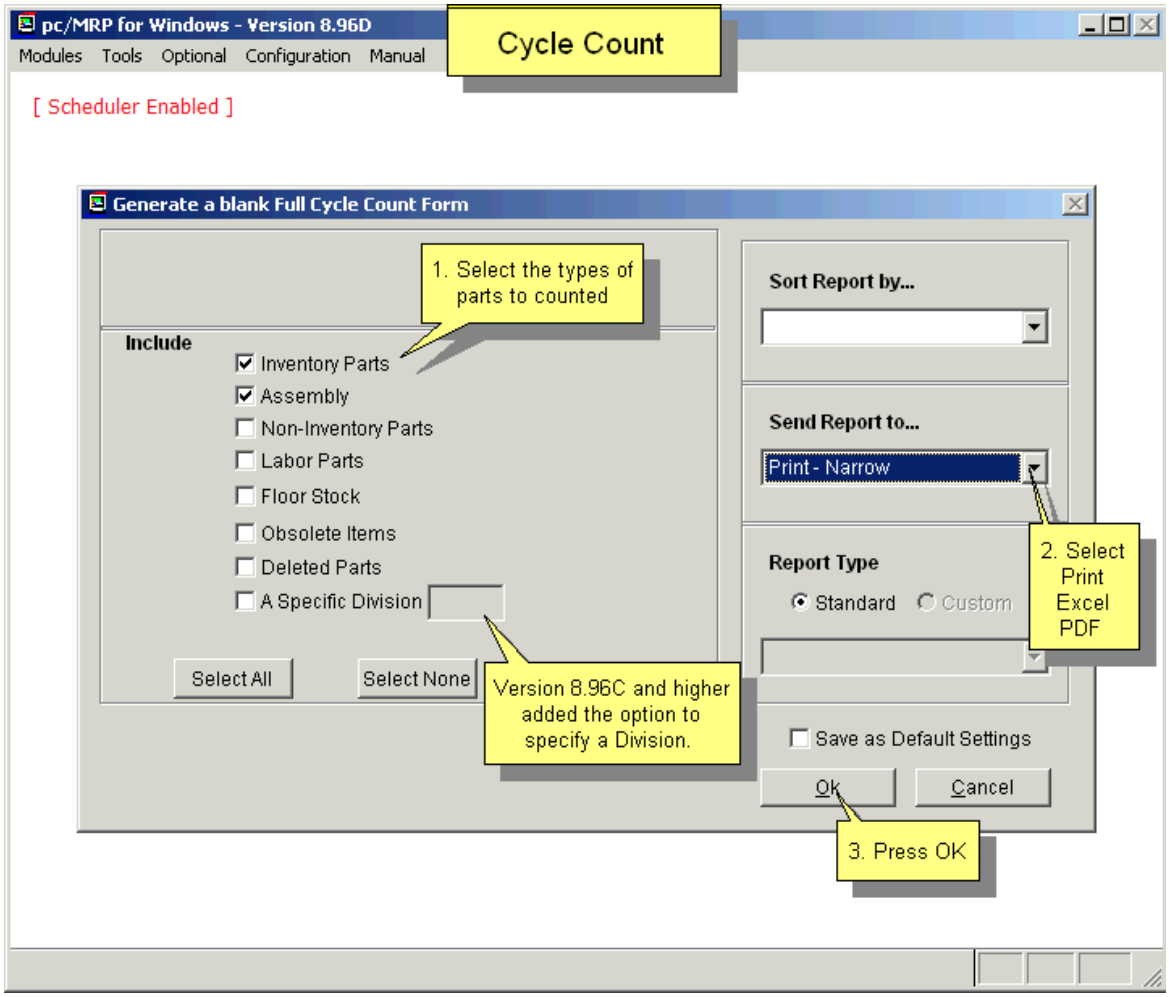
### 6.2.1 Generate Blank Cycle Count Forms

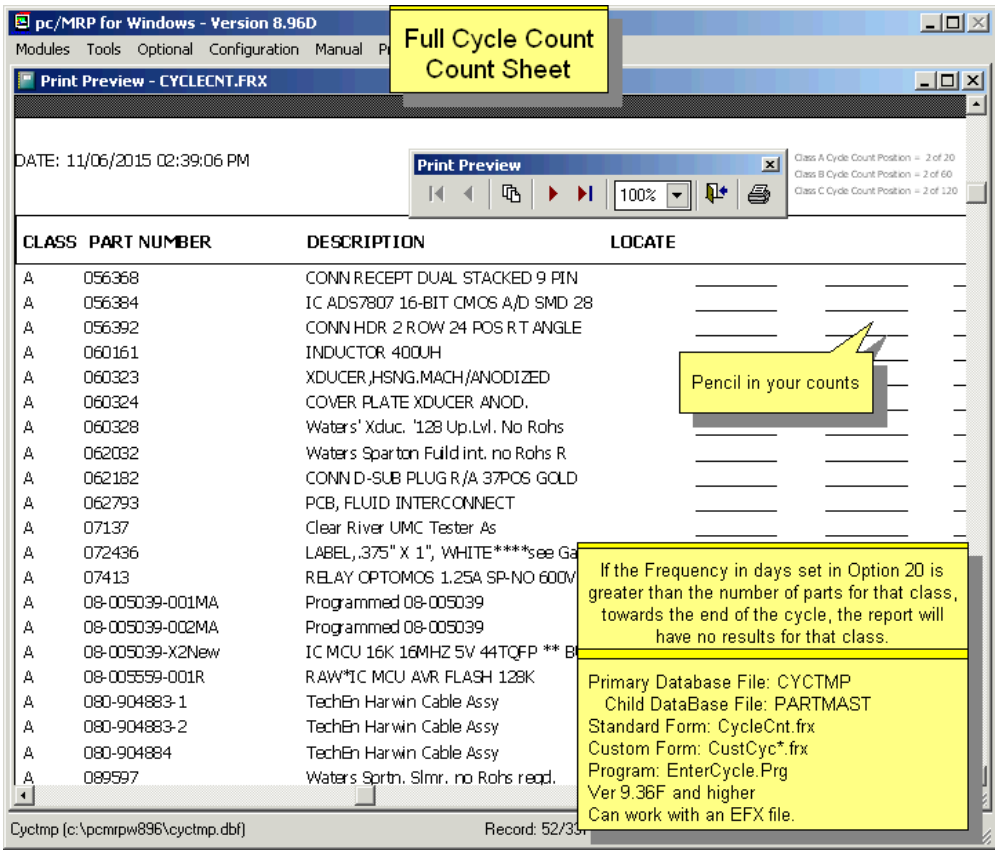
Items in your Inventory can be assigned one of 4 Class values: A, B, C or none. You can use Configuration, **Option 20** to set how often (in days) items in each class should be counted. The defaults are: A-20, B-60, C-120. The following description will assume that you have the default settings.

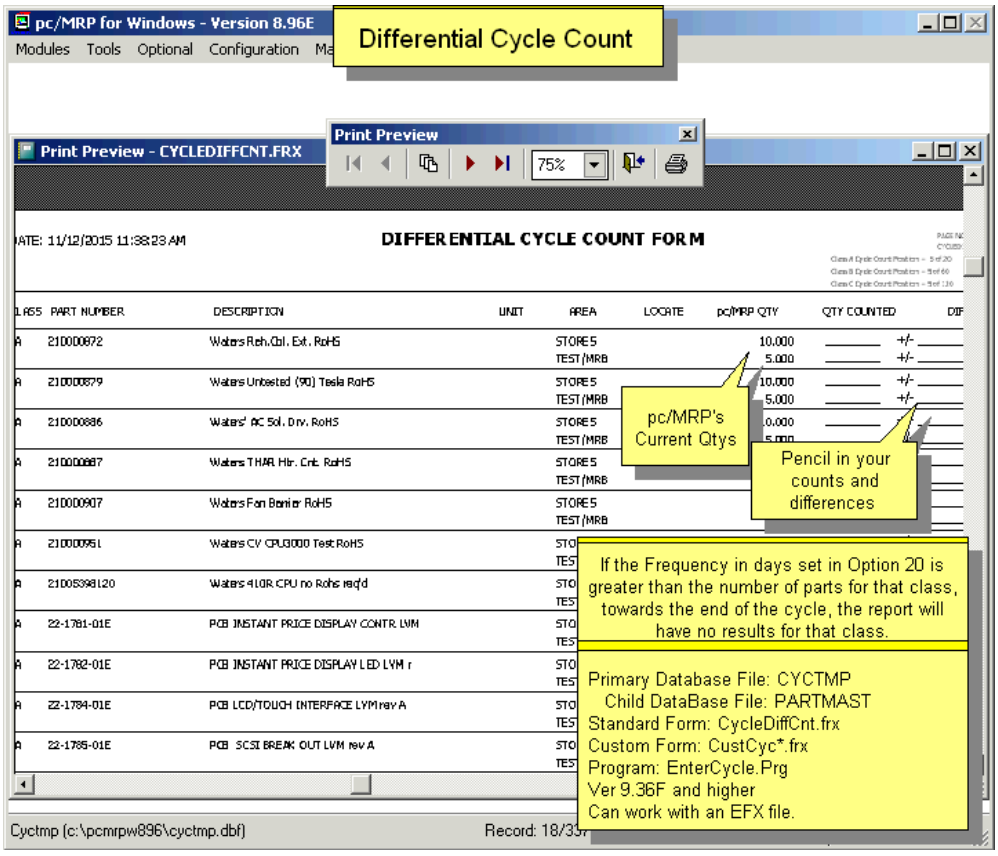
The blank cycle count form will contain 1 twentieth (1/20) of all the class A parts, 1/60 of all the class B parts, and 1/120 of all the class C parts. The above figures were derived from 20 working days/month, 60 working days per quarter, and 120 working days per 1/2 year. The second time the form is printed it will contain the second set of class A, B, C parts. In this manner, all class A parts will be inventoried at least once a month, all class B parts once a quarter, all C parts twice a year. If you have less than 20 class A part numbers, some of the cycle counts may not contain any class A part numbers. For example if you had 3 class A part numbers, the first 3 cycle counts would display one class A to be counted. The remaining cycle counts would be blank until you got to the 21st cycle count, which would display the first class A part number. Parts that do not have an "A", "B", or "C" in the class field will be ignored. Settings & Utilities, **Option 64** sets the default Class for new parts. Therefore, to not include labor parts, you must change the class of this labor item, or temporarily remove the default Class code.

Blank cycle count forms can be displayed, printed, or sent to PDF or Excel. You can select which type of inventory items you want to include or exclude: parts, assemblies, floor stock, etc. You can select to only include parts of a specific division.

**Note:** A part number may occur on consecutive cycle count forms, or may be skipped if there are changes in the number of items in the inventory database.




pc/MRP for Windows - Version 8.96D
Modules Tools Optional Configuration Manual
Full Cycle Count Count Sheet
Print Preview - CYCLECNT.FRX
DATE: 11/06/2015 02:39:06 PM
Print Preview
100%
CLASS PART NUMBER DESCRIPTION LOCATE
A 056368 CONN RECEPT DUAL STACKED 9 PIN
A 056384 IC ADS7807 16-BIT CMOS A/D SMD 28
A 056392 CONN HDR 2 ROW 24 POS R T ANGLE
A 060161 INDUCTOR 400UH
A 060323 XDUCER,HSNG.MACH/ANODIZED
A 060324 COVER PLATE XDUCER ANOD.
A 060328 Waters' Xduc. '128 Up.Lvl. No Rohs
A 062032 Waters Sparton Fuild int. no Rohs R
A 062182 CONN D-SUB PLUG R/A 37POS GOLD
A 062793 PCB, FLUID INTERCONNECT
A 07137 Clear River UMC Tester As
A 072436 LABEL,.375" X 1", WHITE****see Ga
A 07413 RELAY OPTOMOS 1.25A SP-NO 600V
A 08-005039-001MA Programmed 08-005039
A 08-005039-002MA Programmed 08-005039
A 08-005039-X2New IC MCU 16K 16MHZ 5V 44TQFP ** B
A 08-005559-001R RAW*IC MCU AVR FLASH 128K
A 080-904883-1 TechEn Harwin Cable Assy
A 080-904883-2 TechEn Harwin Cable Assy
A 080-904884 TechEn Harwin Cable Assy
A 089597 Waters Sprtn. Slmr. no Rohs reqd.
Pencil in your counts
If the Frequency in days set in Option 20 is greater than the number of parts for that class, towards the end of the cycle, the report will have no results for that class.
Primary Database File: CYCTMP
Child DataBase File: PARTMAST
Standard Form: CycleCnt.frx
Custom Form: CustCyc*.frx
Program: EnterCycle.Prg
Ver 9.36F and higher
Can work with an EFX file.
Cyctmp (c:\pcmrpw896\cyctmp.dbf)
Record: 52/35


pc/MRP for Windows - Version 8.96E
Modules Tools Optional Configuration
Differential Cycle Count
Print Preview - CYCLEDIFFCNT.FRX
Print Preview
75%
DATE: 11/12/2015 11:38:23 AM
DIFFERENTIAL CYCLE COUNT FORM
CLASS PART NUMBER DESCRIPTION UNIT AREA LOCATE pc/MRP QTY QTY COUNTED DIF
A 210000872 Waters Reh.Cbl. Ext. RoHS STORES 10.000 +/-
TEST/MRB 5.000 +/-
A 210000879 Waters Untested (90) Tesla RoHS STORES 10.000 +/-
TEST/MRB 5.000 +/-
A 210000886 Waters' AC Sol. Drv. RoHS STORES
TEST/MRB
A 210000887 Waters THAR Hir. Cnt. RoHS STORES
TEST/MRB
A 210000907 Waters Fan Barrier RoHS STORES
TEST/MRB
A 210000951 Waters CV CPU3000 Test RoHS STO
TES
A 210005981120 Waters 410R CPU no Rohs req'd STO
TES
A 22-1781-01E PCB INSTANT PRICE DISPLAY CONTR LVM STO
TES
A 22-1782-01E PCB INSTANT PRICE DISPLAY LED LVM r STO
TES
A 22-1784-01E PCB LCD/TOUCH INTERFACE LVM rev A STO
TES
A 22-1785-01E PCB SCSI BREAK OUT LVM rev A STO
TES
pc/MRP's Current Qtys
Pencil in your counts and differences
If the Frequency in days set in Option 20 is greater than the number of parts for that class, towards the end of the cycle, the report will have no results for that class.
Primary Database File: CYCTMP
Child DataBase File: PARTMAST
Standard Form: CycleDiffCnt.frx
Custom Form: CustCyc*.frx
Program: EnterCycle.Prg
Ver 9.36F and higher
Can work with an EFX file.
Cyctmp (c:\pcmrpw896\cyctmp.dbf)
Record: 18/35

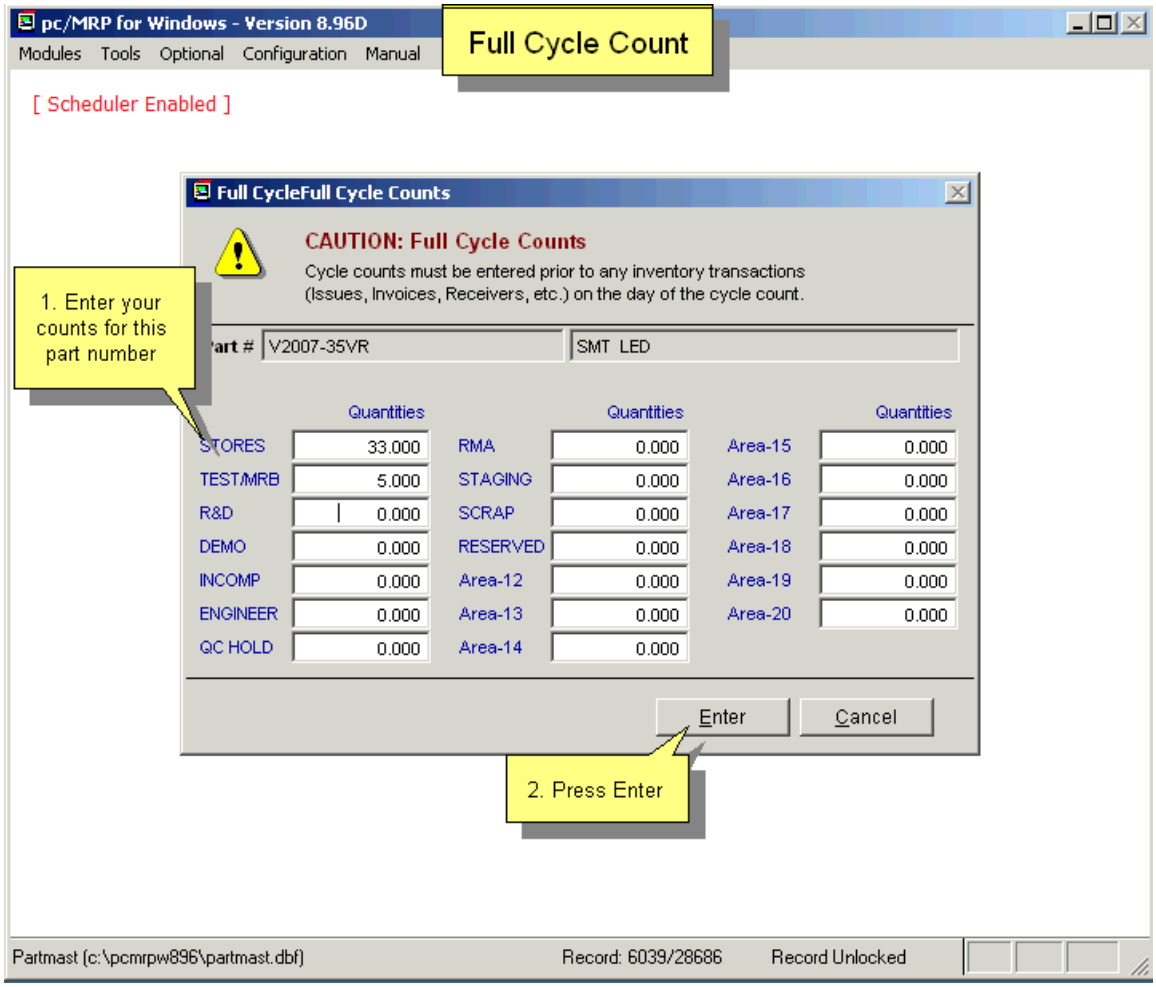
### 6.2.2 Enter Cycle Counts

### Full Cycle Counts

Allows users to rapidly enter the cycle counts into the inventory ONHAND QUANTITY field for each part number counted. The counts may be entered **manually**, in this case you can enter the count for each part number for all areas in one screen. The counts may also be **imported** from CSV files; in this case you will need to import each inventory area separately. pc/MRP will prompt you to select the area when uploading. The ASCII file must have the part number and quantity (in that area) as the first two data elements within the file. Any additional data elements will be ignored. Please see Chapter 16.4.3 to create the import files using a Barcode reader.

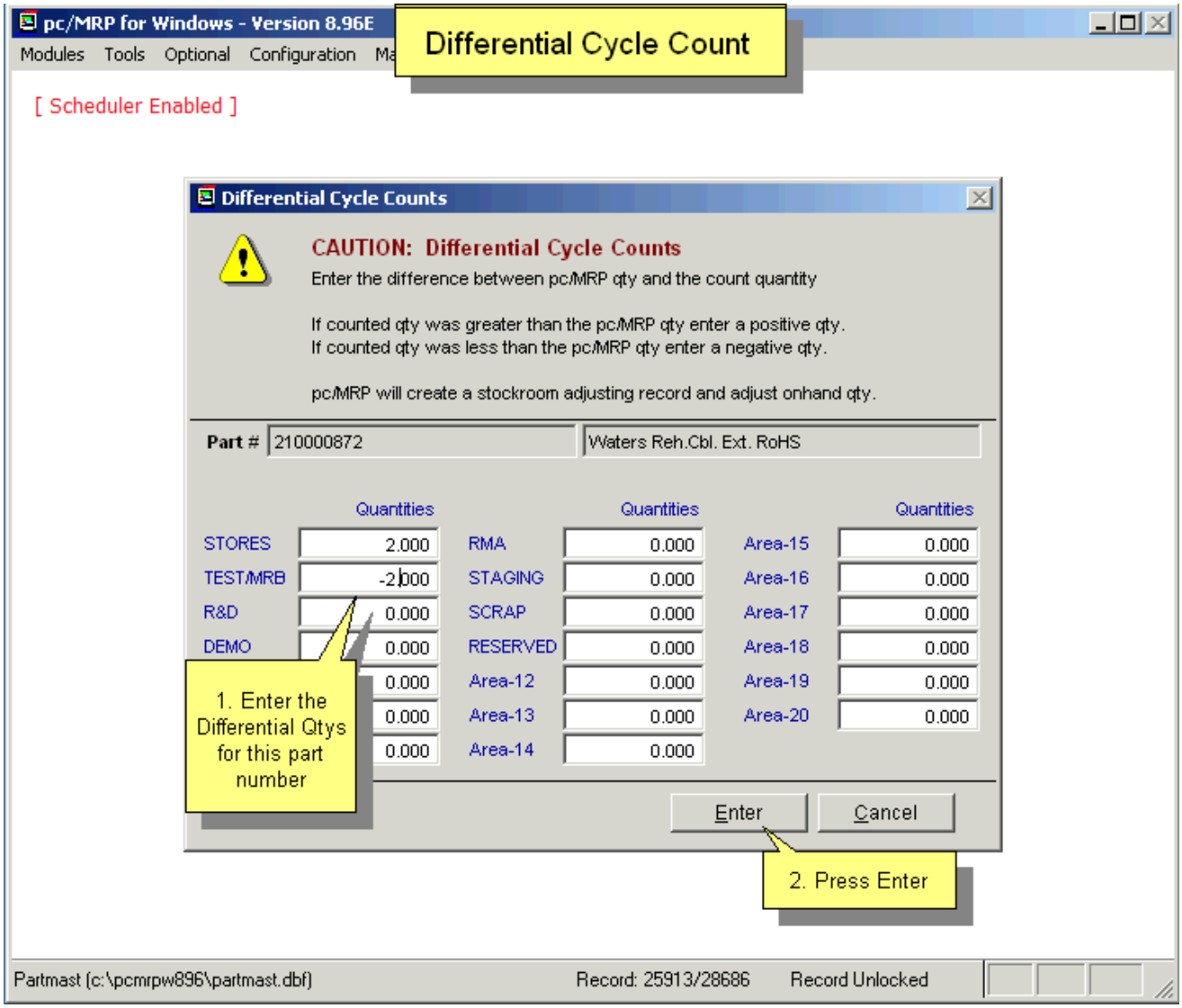
pc/MRP updates the stores areas (onhand, area2qty-area20qty) with the new quantities in. In addition, pc/MRP also updates the last physical inventory date and quantity fields (lastphydate, lastqty1-lastqty20), similar to the physical inventory program. This provides another opportunity for pc/MRP to establish base line inventory quantity and dates allowing the pc/MRP's Inventory Movement Report to calculate and print out inventory quantities on a given date based on inventory movements prior to or following the base line date and quantities. pc/MRP does not create stockroom transactions, again, similar to the physical inventory program.

**Note:** All inventory areas should be counted at the same time. (The Last PI/CC date for a given part will be updated after entering counts for that part, even if only one or some of the areas were counted.)



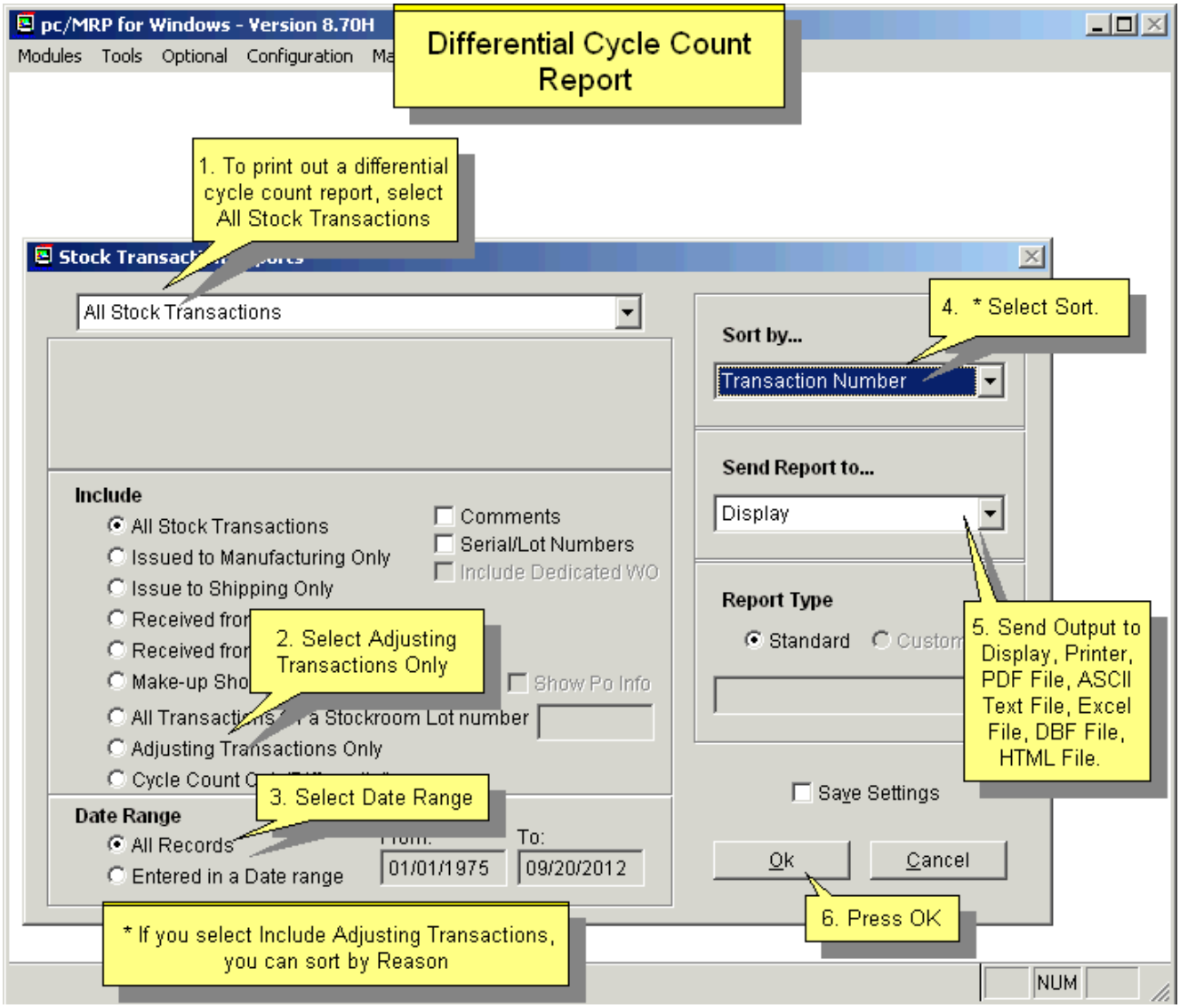
**Differential Cycle Counts**

With Differential Cycle Counts, the user enters the difference between the actual quantity and what pc/MRP has recorded as being in inventory. Enter the difference as a positive or a negative number. The differential counts do not set the last physical quantities and the last physical date fields. However, the differential counts leave an adjusting entry in the Stockroom transaction database file. This has the advantage in that the Stockroom Reporting menu selection can provide a historical report of the cycle counts. Differential cycle counts can also be entered while people are using pc/MRP. Differential Cycle Counts can only be entered manually. Users don't need to count all inventory areas at the same time.



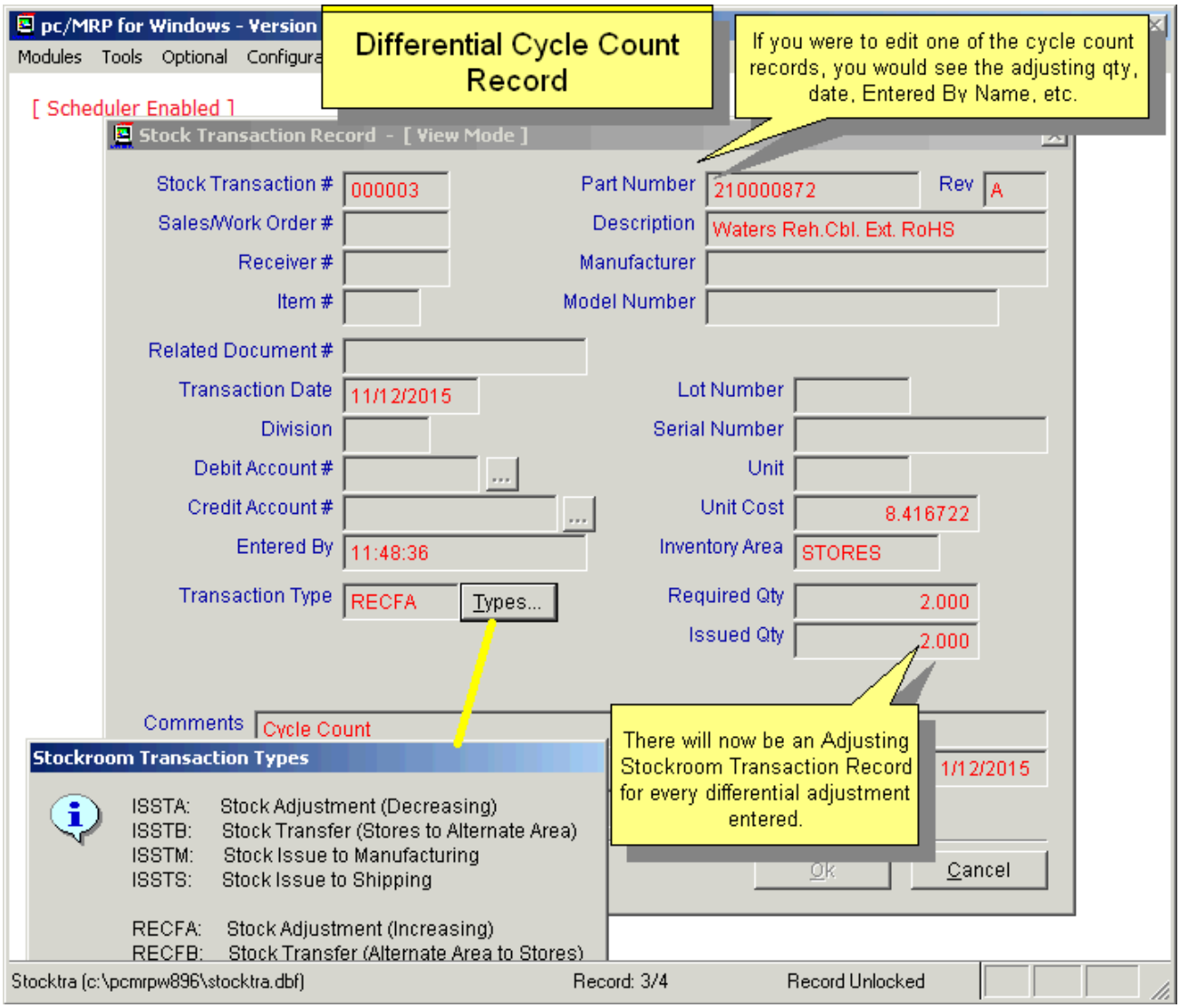
### 6.2.3 Reports

Selecting Modules, Stockroom, Reports will display the screen shown below.




Selecting “Adjusting Transactions Only” and entering a date range will provide the report of adjusting transactions.

If you want to see details of a record, take note of the transaction number from the first column of the report. You then select Modules, Stockroom, Edit/View and enter the transaction number in the search field. The new screen will display details of the requested transaction such as adjusting quantity, transaction date, entered by, etc.




### 6.2.4 Automatically Fill Class Fields for All Parts

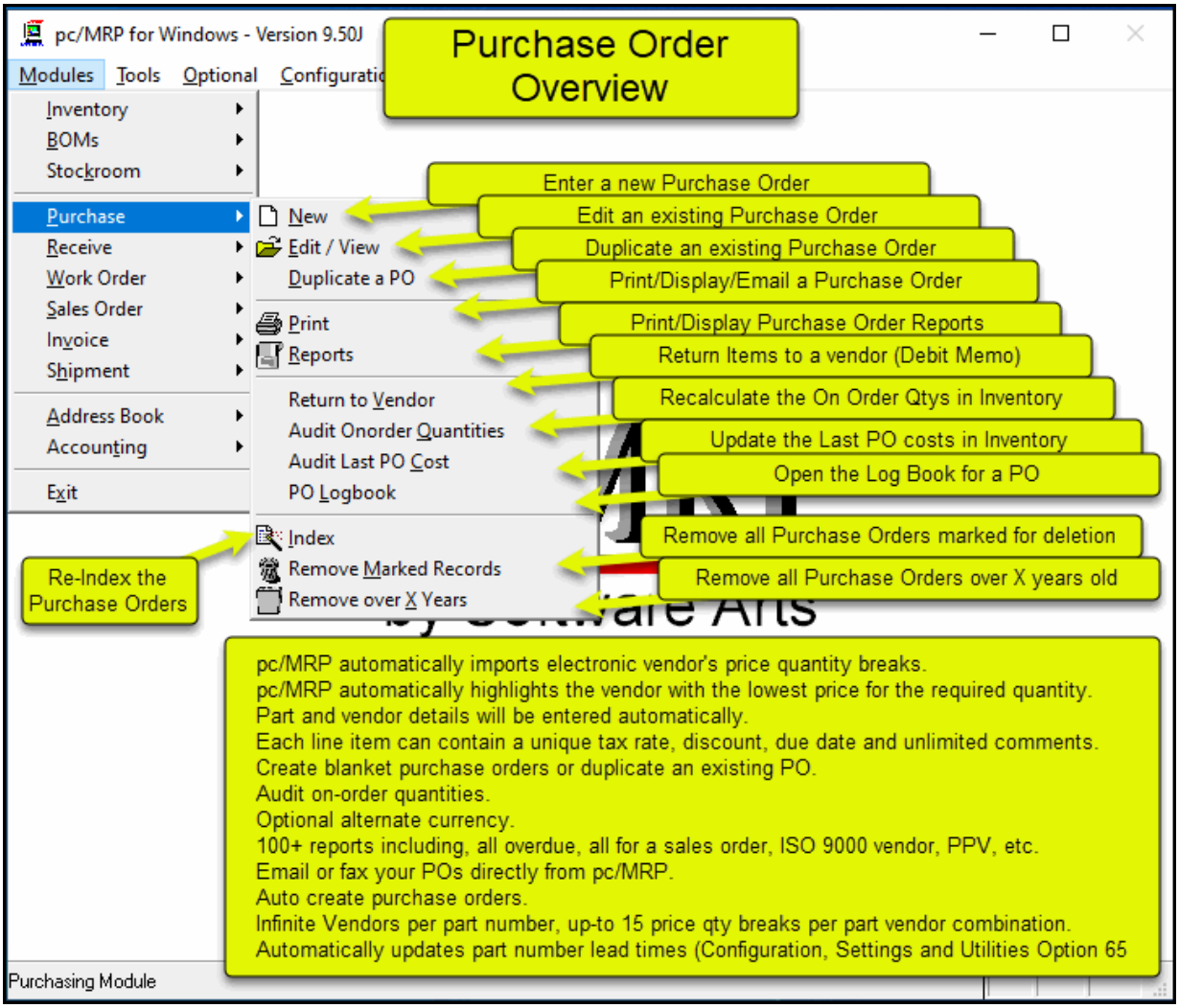
You can use **Option 20** to enter the dollar amount used per week to classify a part as a class **'A'** part, and the average cost values that determine the class of each part.

Selecting Automatically Fill Class Fields for All Parts here in the Cycle Count update the Class values in Inventory based on the rules you set in Option 20.

# 7 Purchasing Module

## 7.1 Overview

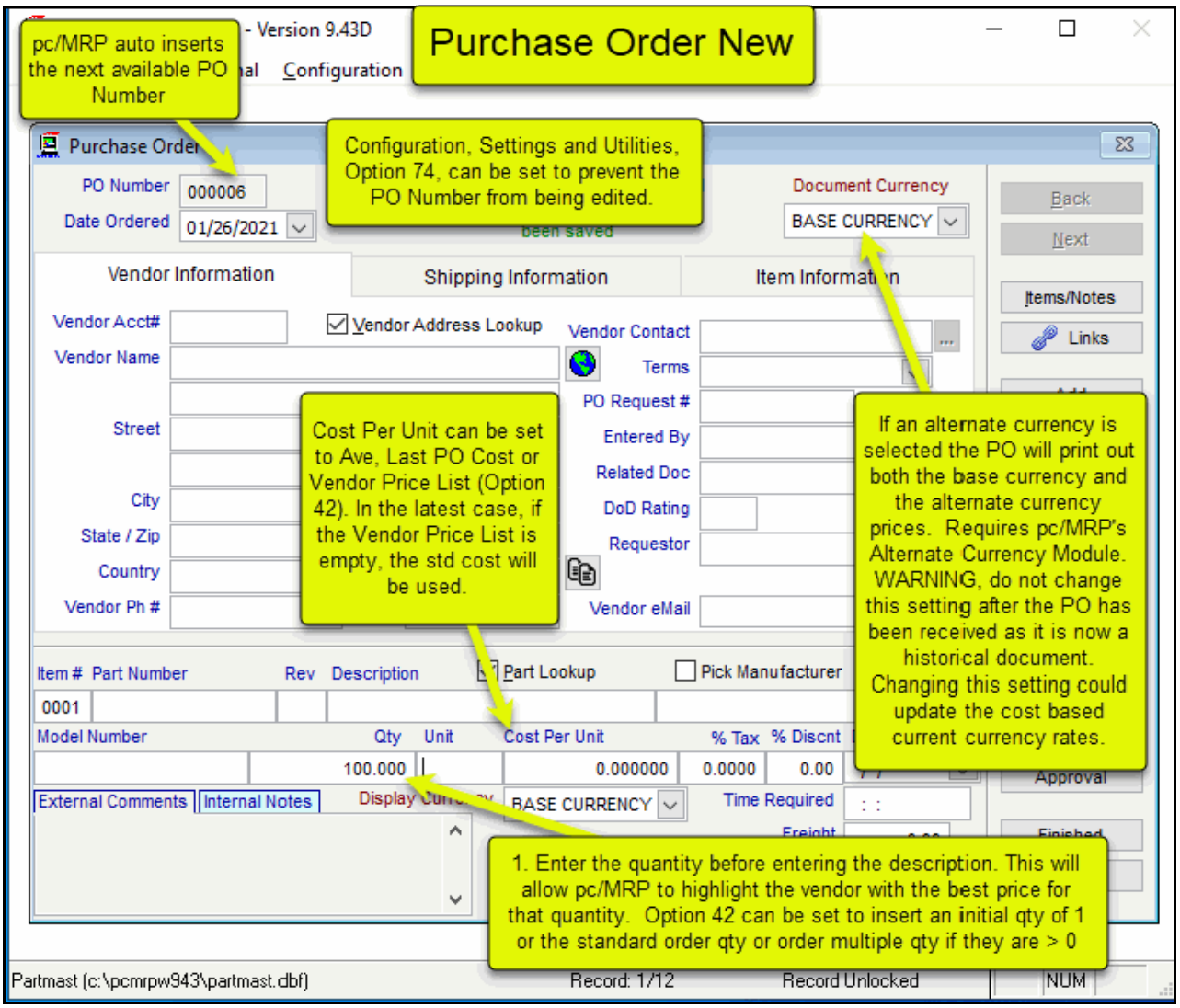
The Purchasing Module allows users to enter, edit and print out Purchase Orders and reports. In addition, reports can be sent to disk and POs can be emailed and or faxed directly from the PC. Address and part number information can be scrolled and imported from their respective modules. Entering a PO automatically increments the On Order quantity in the Inventory File, and updates the Last PO Cost for that part. Over 100 different reports can be generated including Consolidated Order Requirements, All Overdue Purchase Orders, All Purchase Orders for a Month, and Purchasing History Reports. Each Purchase Order can contain up to 9999 line items (settable via Settings & Utilities, **Option 63**). Each line item can be taxable or nontaxable, have its own due date and discount. An online slideshow is located here: http://www.pcmrp.com/mrp101/purchasenew.htm




### 7.1.1 Enter a new purchase order step 1, select purchase, new

From the Main Menu, select "**Purchase**" and "New". The PO Data Entry Screen shown below will appear with the next available PO number and current Date. You can overwrite the PO number with your own PO number. pc/MRP can increment a PO number like 000623, or it can increment B99999 to C00000. However, we don't suggest that you use a PO number system that tries to put "meaning" into the PO#, like the buyer code or the date. It takes a long time for pc/MRP to figure out how to increment PO# P23APR. You can prevent the PO numbers from being edited with **Option 74** in Settings and Utilities.

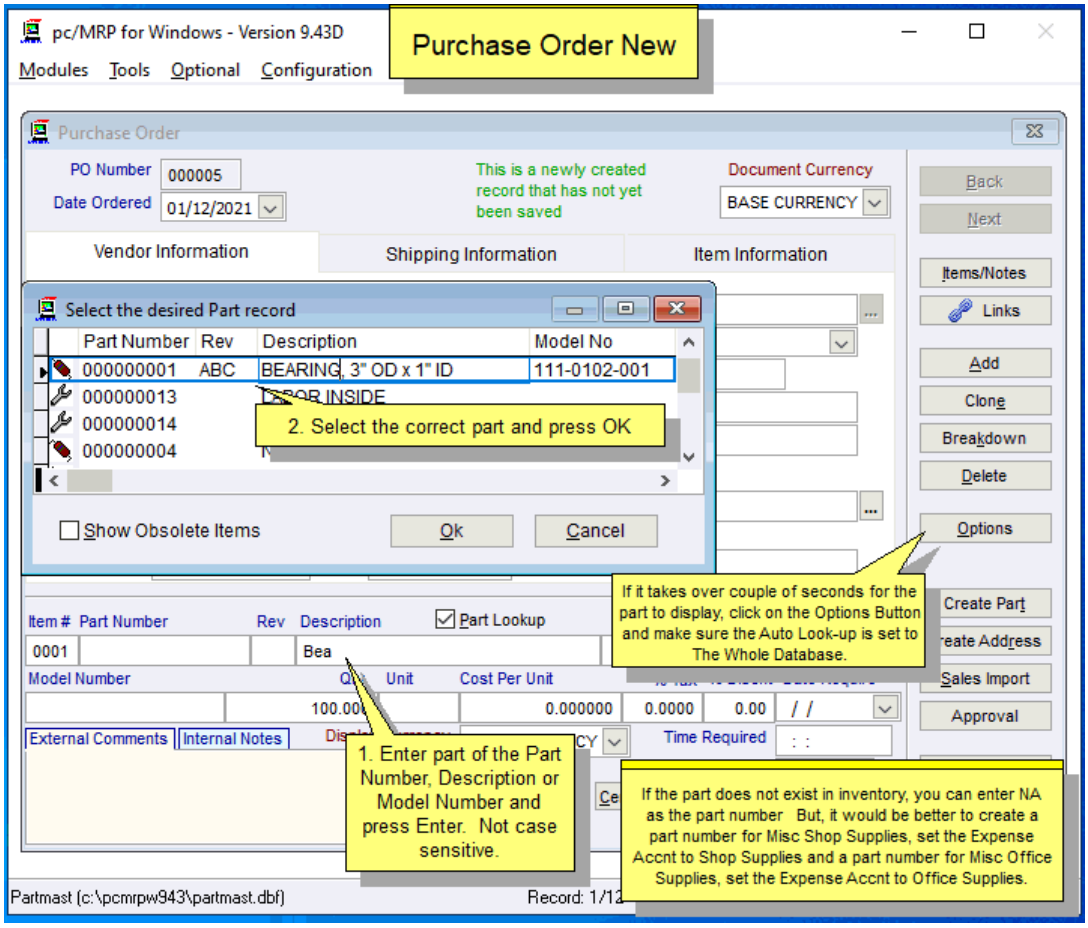
### 7.1.2 Enter a new purchase order step 2, enter the quantity




Enter the **quantity** before entering the description. This will allow pc/MRP to highlight the vendor with the best **price** for that quantity, provided **Option 42** in the Configuration/Settings and Utilities menu is set to "PO cost based on vendor price list" and not "Last PO Cost" or "Average Cost". If no vendor cost exists or the vendor is not listed for the part, Standard cost is used.

The unit **cost** part will be automatically inserted into the purchase order and will reflect any price per qty break that is entered into the system. If you have the same part on more than one line, then each cost will reflect the cost for the quantity on the individual line, not for the total. If you want all line items (with that certain part) reflect the cost for the total qty, then do the following: Enter one line item for the total quantity. This will insert the cost for the total qty. Now use the Breakdown button to break the total quantity into as many lines as you need, and enter the desired quantity and due date for each line. Now each line item (with that certain part) is reflecting the cost for the total quantity.

### 7.1.3 Enter a new purchase order step 3, select a part number




Place the cursor in the Part # Field, Description Field, or Manufacturer Field. Type in the first few characters of the part number, part description, or manufacturer. A list of parts matching the characters (that you have entered) will appear. Scroll to the desired part and hit Enter or double click. All the necessary part information (including **part #, description, model #, PO unit, cost/unit, and manufacturer**) will be entered automatically.

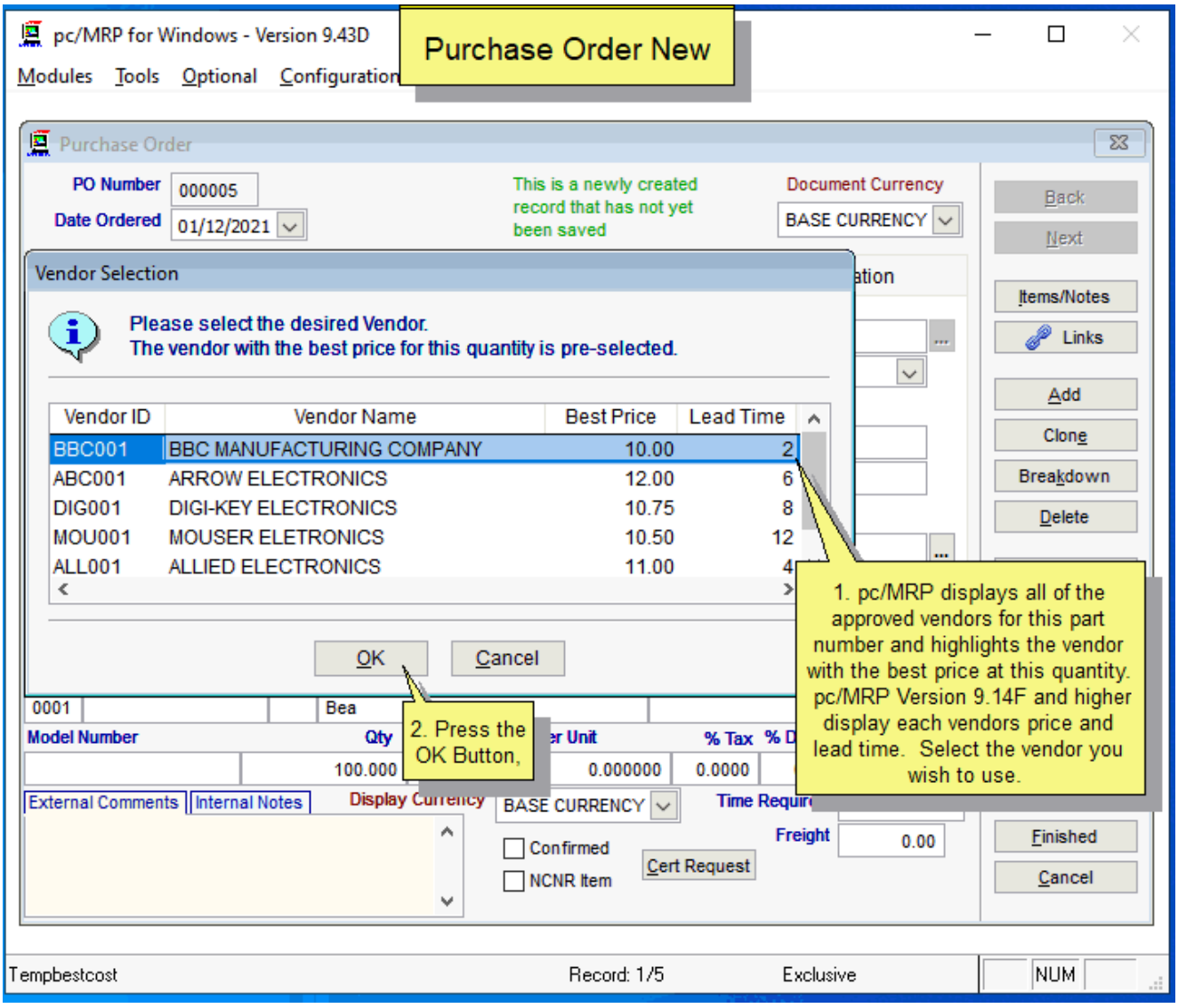
**Note:** It is the PO Unit that is carried over from Inventory, not the Stock/Issue Unit.

**Note:** If you just need to purchase a non-inventory item that you do not wish to assign a part number to, use “NA” as the part number. You will then have to enter the supplier yourself, as the vendor selection pop-up will not occur.

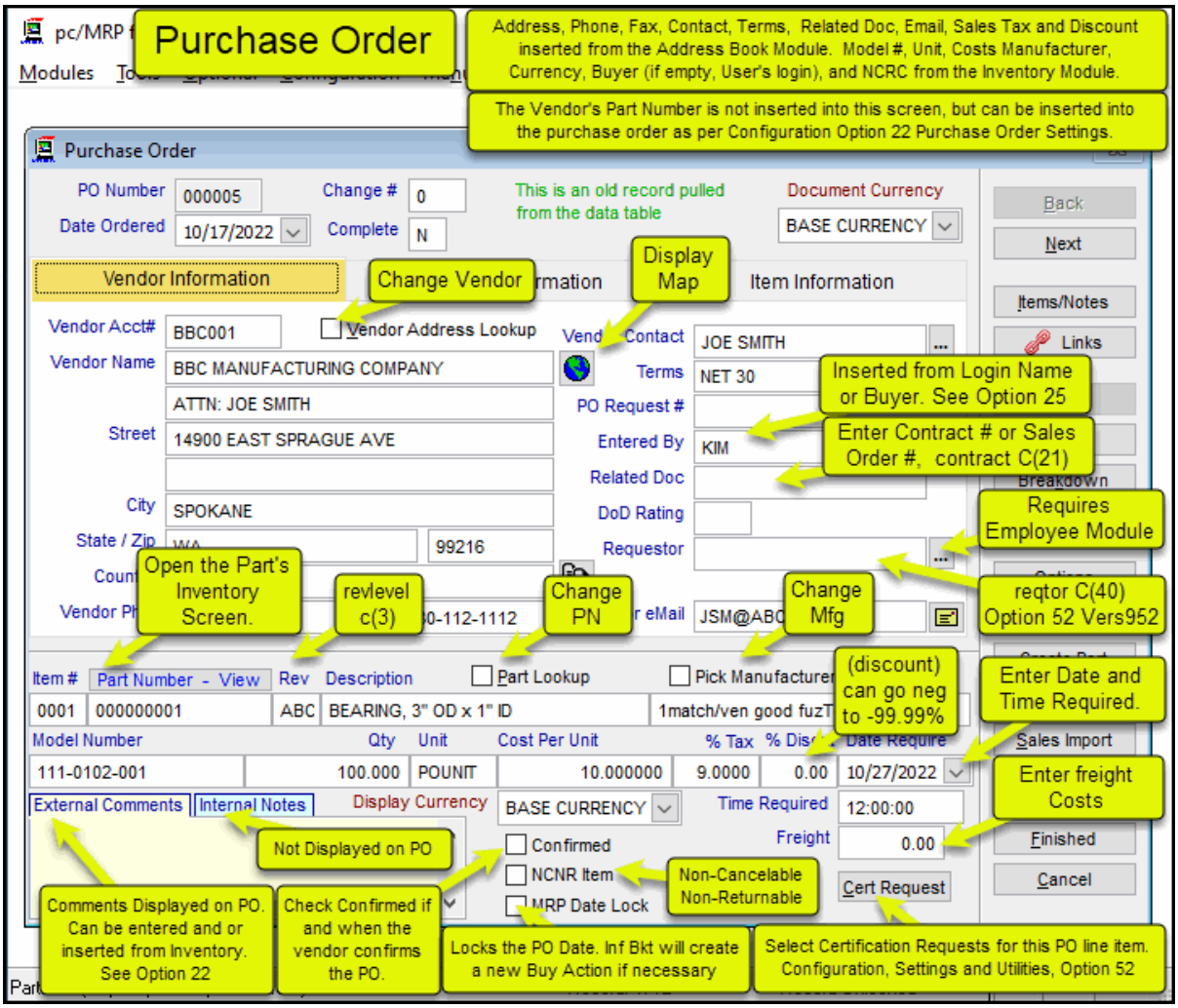
### 7.1.4 Enter a new purchase order step 4, select a vendor

Select from a list of vendors for that part number. The vendor with the best price for the quantity listed will be highlighted. Once you have selected a vendor from the list shown, the **Address**, **Terms**, **Tax Rate**, **Trade Discount** and **Account Number** will be entered automatically.

If the part has no assigned vendors, then type in the beginning of the vendor's name or the vendor ID, and scroll for the desired vendor.



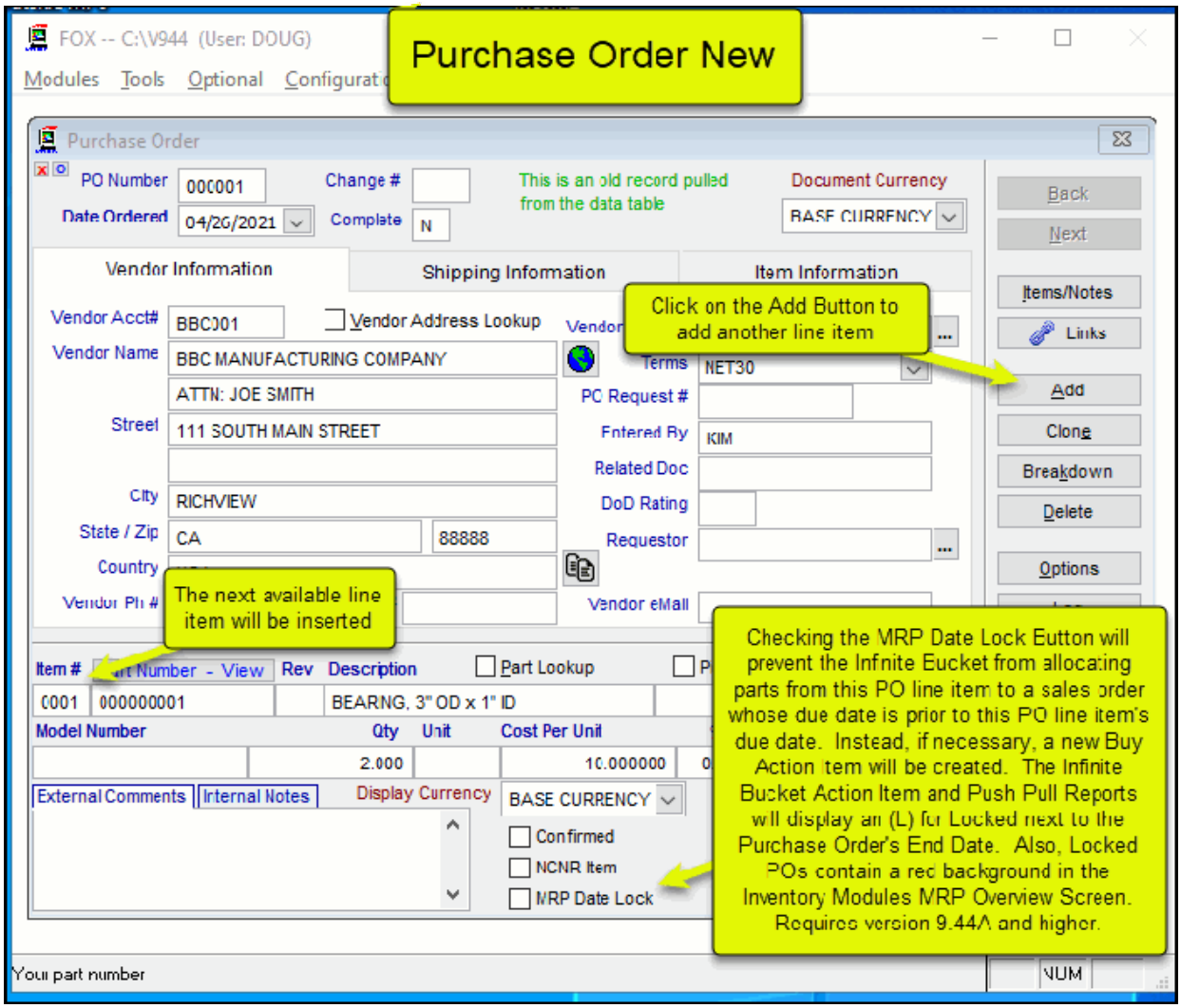
### 7.1.5 Enter a new purchase order step 5, enter remaining information




- **Date** and **Time Required.** pc/MRP will compare the date and time required with the actual date and time delivered when generating ISO 9000 Vendor Performance Reports. Use Configuration, Settings and Utilities, **Option 85** to set the allowable days early and late; **Option 92** to require or not require a [Delivery] Date Required. Time Required is never required to be filled out.
- **Related Document Number** (related sales order or contract #, contract c(21)) and **Vendor Contact** (These fields will automatically be populated from the Address Book contact field and can be manually overwritten.)
- **PO Entered By** (enterby) This field will be populated by the Buyer per inventory part or by the User Log-In, set by **Option 25**. This value can be manually overwritten or can be blocked, set by Option 25.)
- The **Requestor** field is only displayed if the Employee/Time Sheet module is activated.
- **DoD Rating** (Department of Defense Rating). This is used to help determine the priority of defense contracts.
- **Freight** Amount.
- **Rev** (revlevel c(3)) automatically populated from the inventory record
- Unlimited lines of **Comments**.
- You can check the **Confirmed** checkbox when the vendor has confirmed that they have received the PO.
- You can change the **Manufacturer** and **Model Number** by checking the Pick Manufacturer checkbox.
- Enter the **ShipVia** (UPS, FedEx) and **FOB** information on the Shipping Information Page.
- **Requestor** can be set to be required. Configuration, Settings and Utilities, Option 92 Version 9.52E

**Note:** See Section 7.1.14 for more information about Ship Via and Date Require.

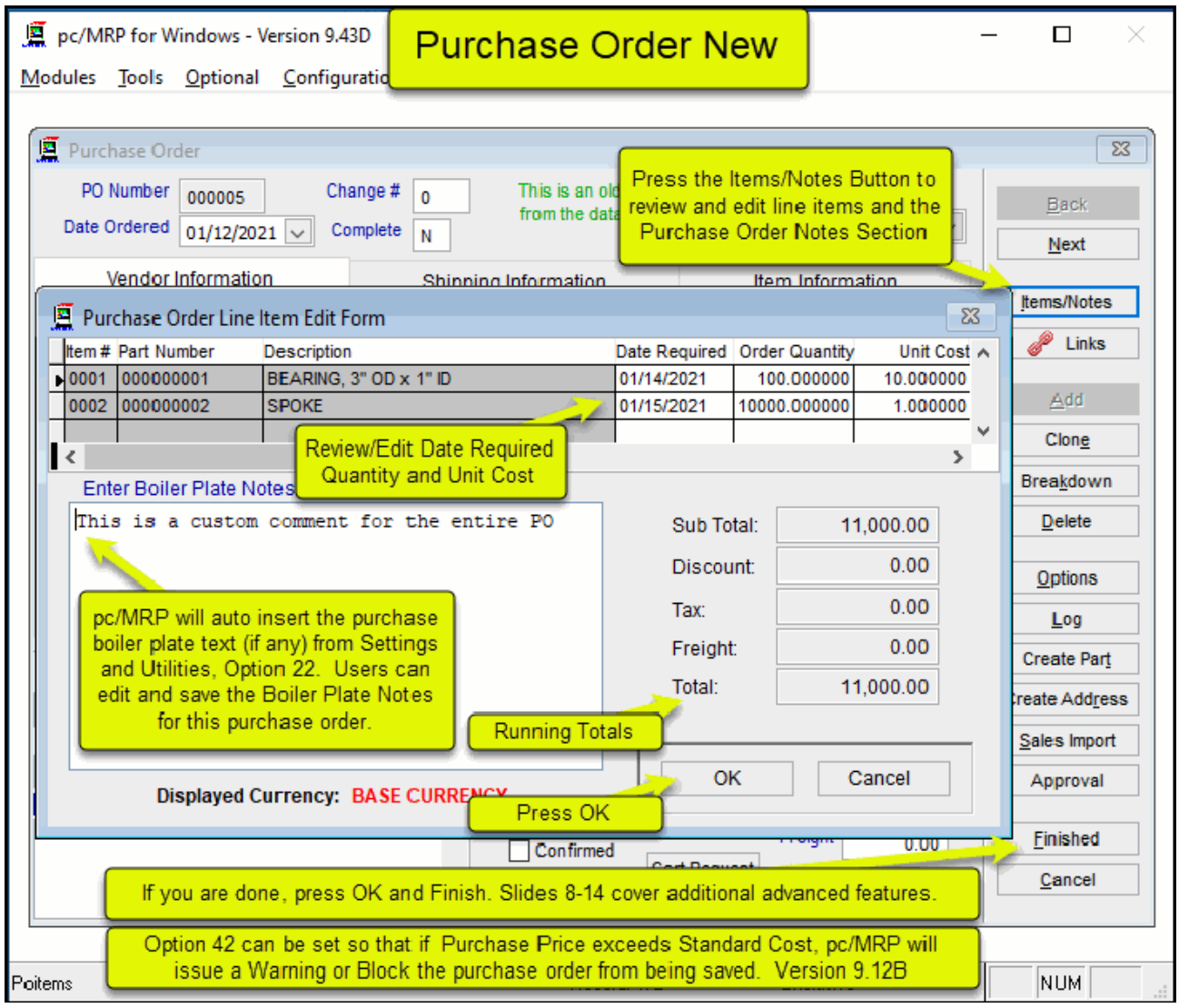
### 7.1.6 Enter a new purchase order step 6, add additional line items




Click on the **Add** Button to add another line item. Once a new line item is added to the PO you can click on the **Back** and **Next** Buttons to navigate the line items. In addition you can Create Part Numbers and Create Addresses on the fly. You can also add a PO line item from a sales order line item by clicking on the **Sales Import** Button. This function will insert the Sales Order + Item number into the purchase order's related document number field. If the vendor has a related document number it will insert that and not the sale number.

Pc/MRP Version 9.44A added the MRP Date Lock Checkbox as shown above whose purpose is to prevent pc/MRP from allocating parts from this PO line item to sales orders that are due prior a sales order whose delivery date is much sooner than the PO's delivery date. Instead if necessary, a Buy action item will be created.

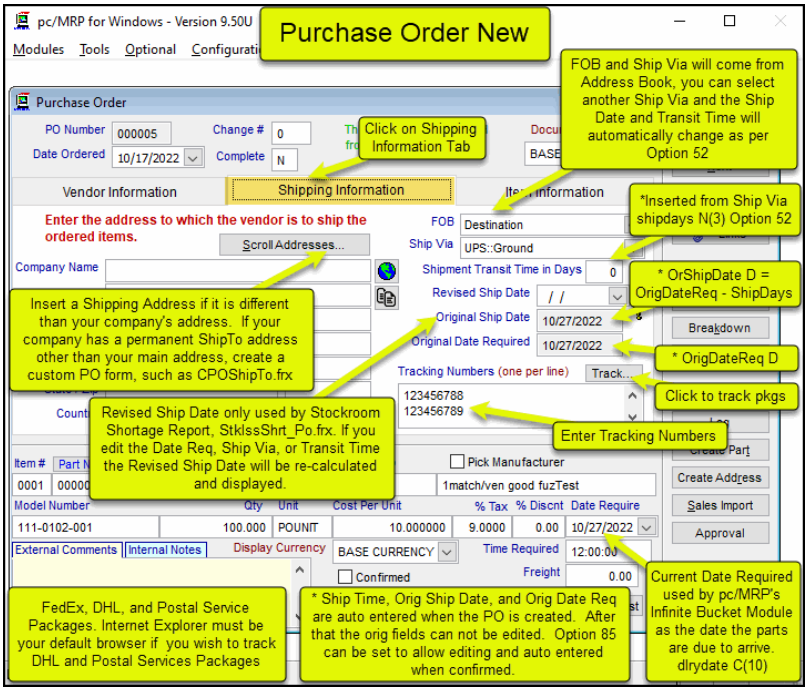
### 7.1.7 Enter a new purchase order step 7, enter boiler plate notes and review line items

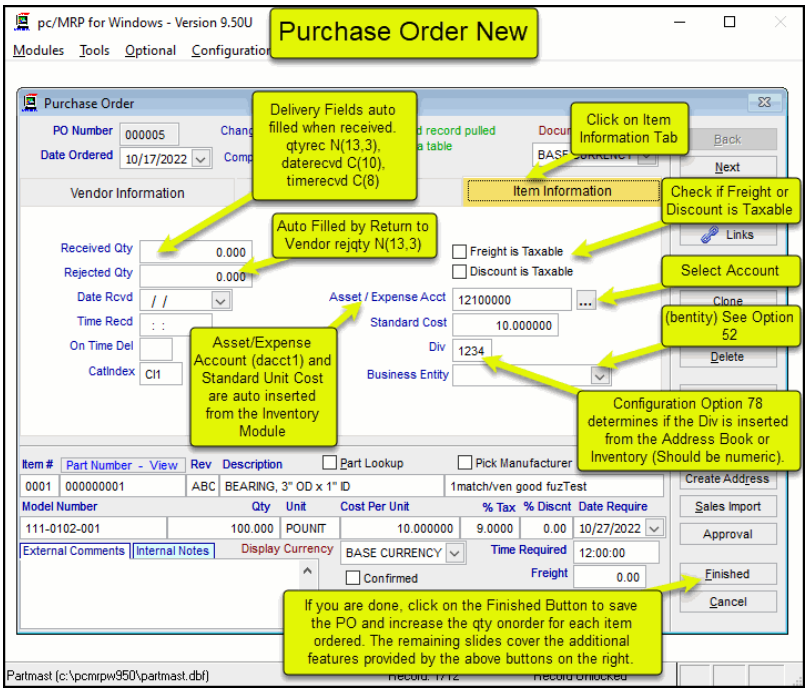



Purchase Order **Boiler Plate Notes** (if any) are automatically inserted from Configuration, Settings & Utilities, **Option 22**.

To review line items or to enter boiler plate notes other than the default ones, click on the Items/Notes Button.

### 7.1.8 Enter a new purchase order step 8, save the purchase order



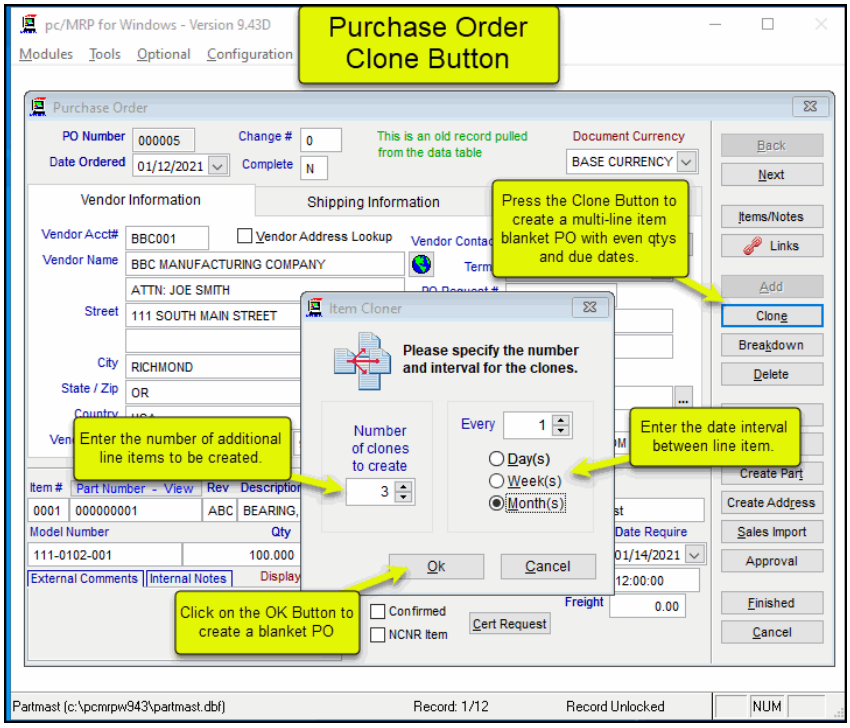

If the Purchase Order is for a non-standard part, enter **NA** in the Part Number field and pc/MRP will not check the Part Master. When you are satisfied with all the entries, click on the **Finished** Button to save.

### 7.1.9 Enter a new purchase order step 9, print, display or email the purchase order

You now have the opportunity to print, display, fax, send to e-mail as HTML or send to e-mail as PDF. To send to e-mail, MS Outlook (not MS Outlook Express) must be your default e-mail program. Users can also use pc/MRP's CDO instead of Outlook to email documents (see Section 15.1.99 in this Manual). To send to fax you must install a print driver like WINFAX. Furthermore, if the flag file **POMAILLB.FLG** exists, an address label for the vendor on that purchase order will automatically be created from the CUSADR*.LBX or the CUSTADR*.LBX.

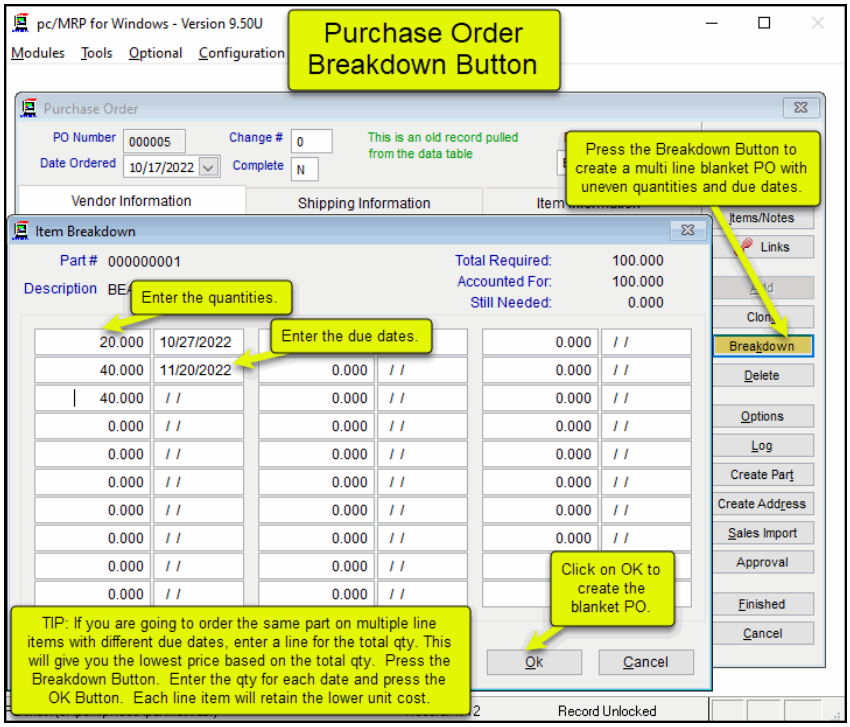
### 7.1.10 Creating blanket purchase orders with the Clone Button

Press the **Clone** Button to create a blanket purchase order with even delivery dates and quantities.

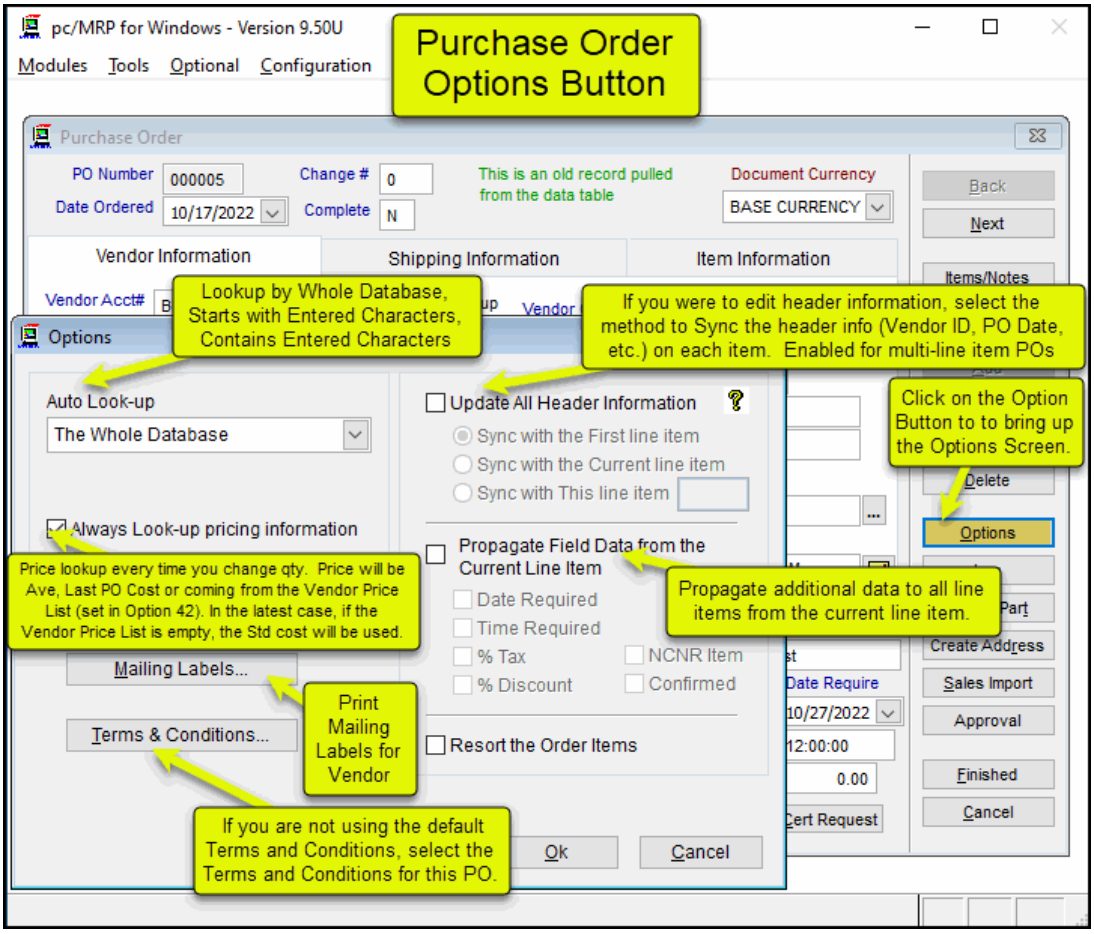



### 7.1.11 Creating blanket purchase orders with the Breakdown Button

Press the **Breakdown** Button to create a blanket purchase order with uneven dates and qtys.



### 7.1.12 Using the Options Button




The Auto Look-Up Drop Down List Box will allow you to set the look-up method for part numbers and addresses.

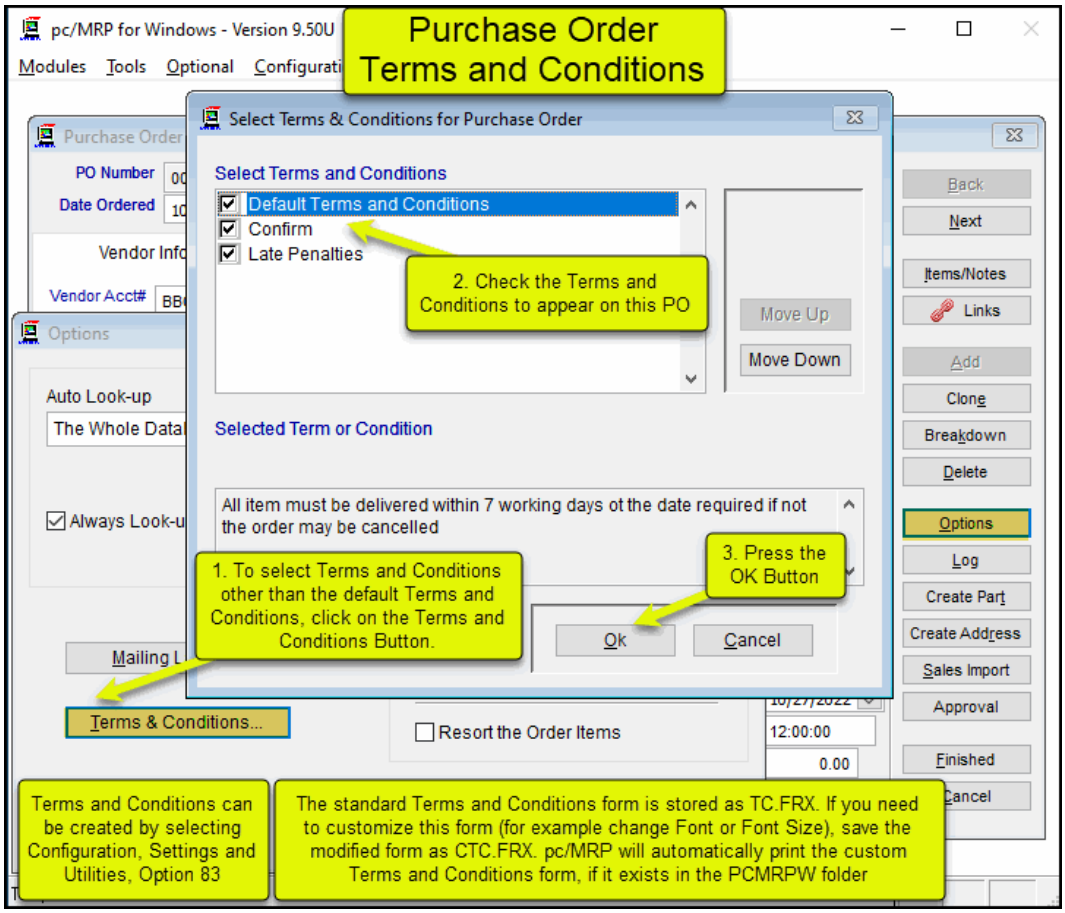
- **The Whole Database** (default setting) -- The look-up window will contain the whole database starting at the first matching name. By scrolling up and down, every entry of the database can be displayed. This is the fastest look-up method.
- **Starts with Entered Characters** -- The window will only show the entries starting with the characters entered in the data field.
- **Contains Entered Characters** -- The window will show all the entries as long as they contain the characters entered. This is the most versatile look-up method but is also the slowest of the three methods with a large database.

Other options on the Option Window include:

- **Always Look-up pricing info** – When checked, the pricing will always be looked up even when then quantity is edited. This checkbox value is set for the user login name.
- **Resort the Order Items** – When clicked, the Items Number will be sorted in ascending order.
- **Update all Header Information** – When this option is activated, the header information (the customer information) will sync with the selection (one of the three listed)
- **Mailing Labels** – The Mailing Labels button will allow you to create shipping labels for this purchase order.

### 7.1.13 Using the Terms and Conditions Button

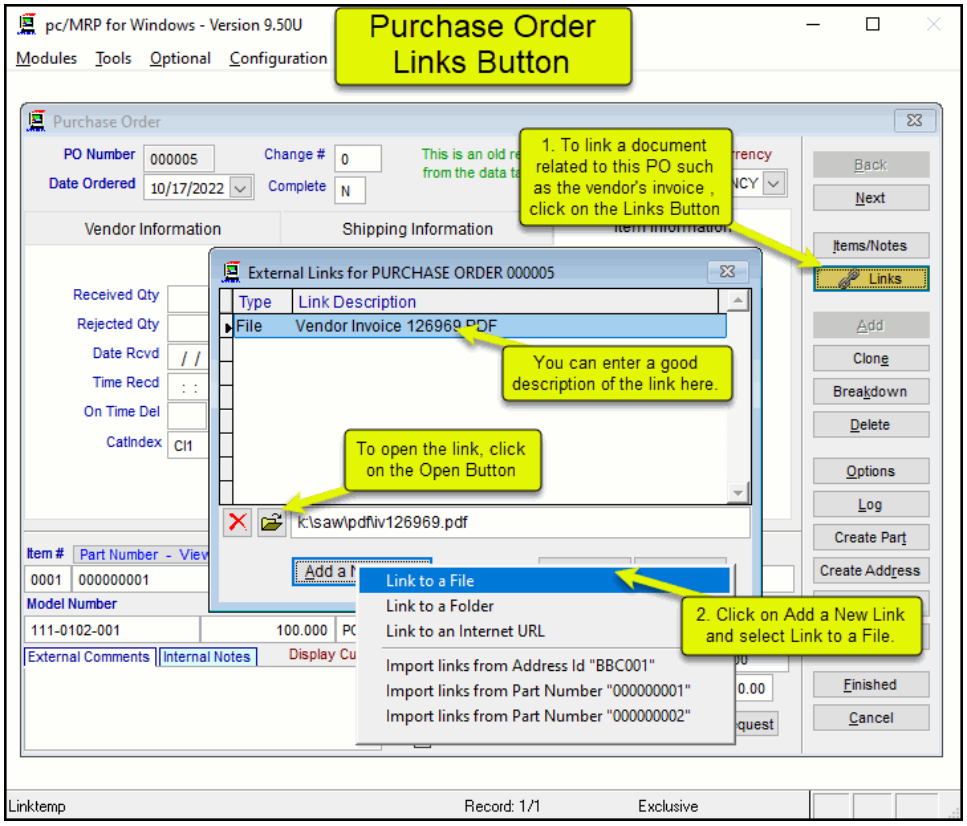
- **Terms and Conditions** – If you are not using the default terms and conditions, press the Terms and Conditions Button and select which terms you wish to include on this PO. Terms and Conditions can be created with **Option 83** in Settings and Configurations.

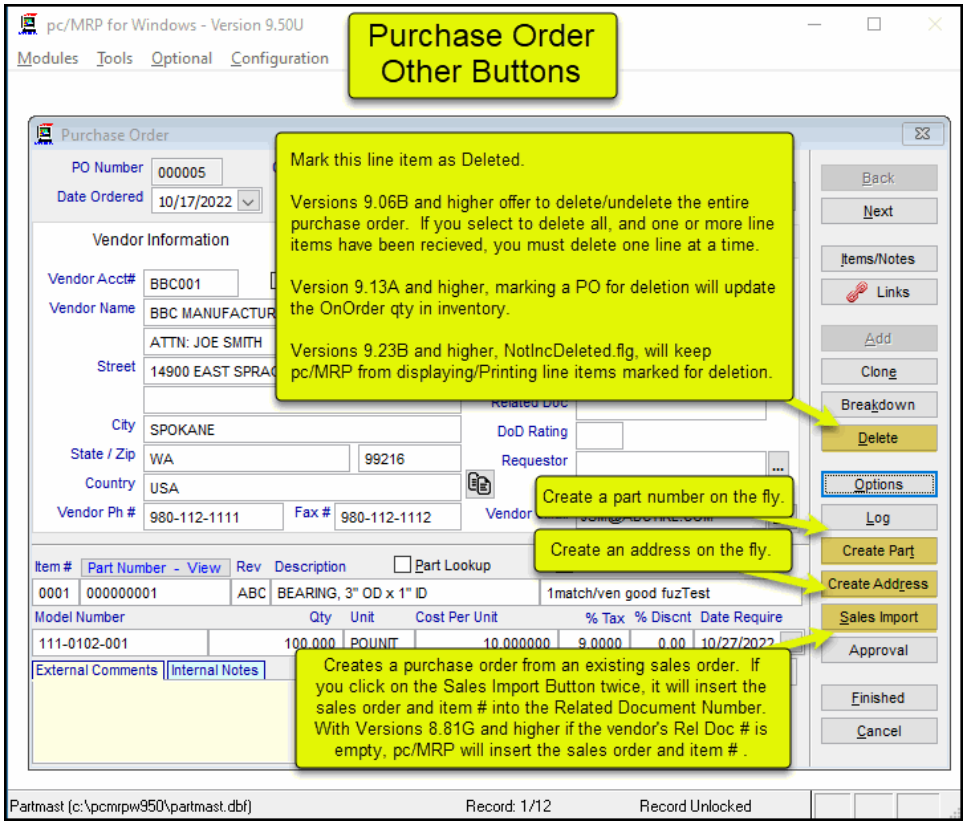



Pressing the **Terms and Conditions** Button on the Options Window allows you to select specific terms for this PO. Terms and Conditions can be created by selecting Configuration, Settings and Utilities, **Option 83**. The Terms and Conditions will be created as the last page of the PO.

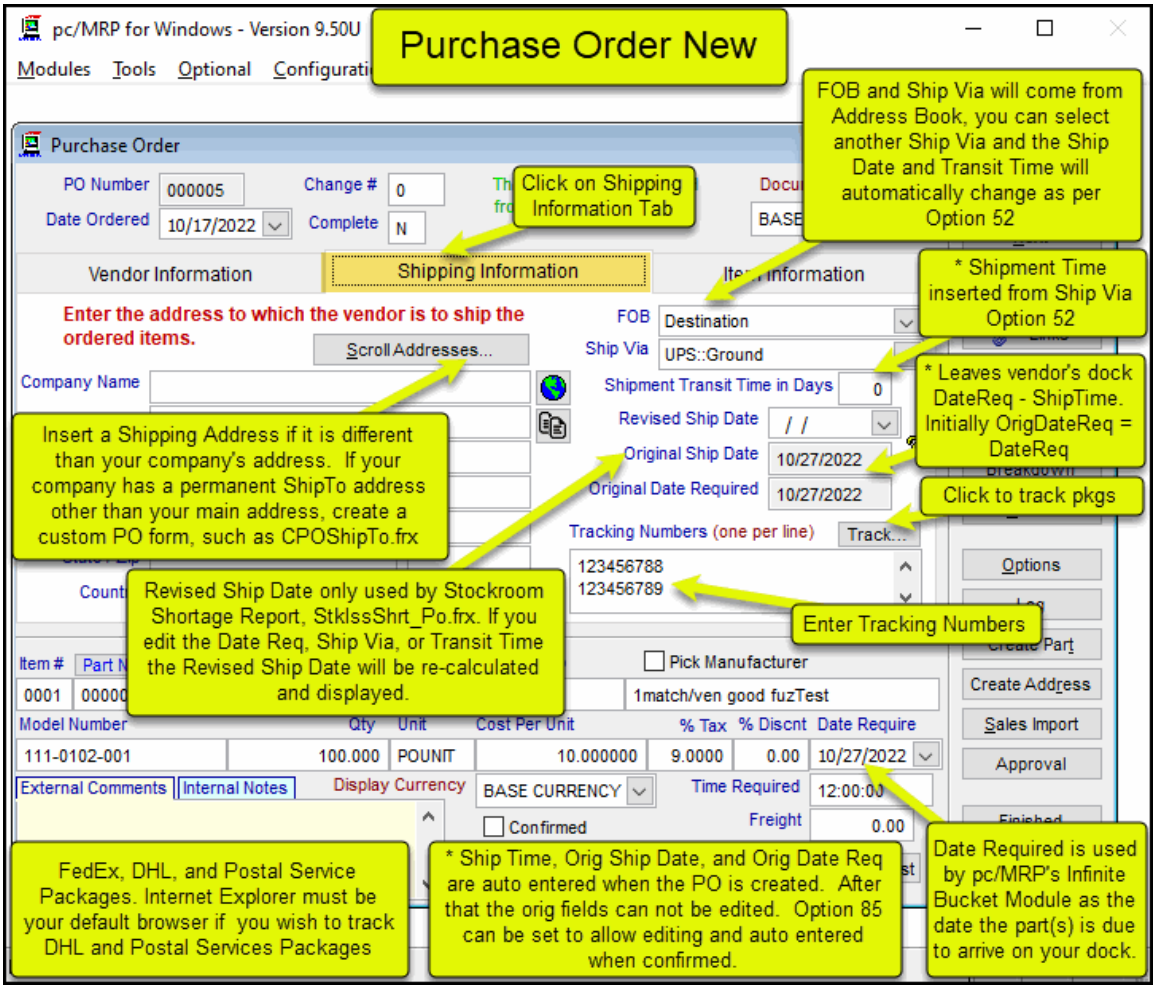
The standard Terms and Conditions form is stored as TC.FRX. If you need to customize this form (for example to change Font or Font Size), save the modified form as CTC.FRX. pc/MRP will automatically print the custom Terms and Conditions form, if it exists in the PCMRPW folder.

### 7.1.14 Using the Other Buttons



### 7.1.15 Shipping Information Page




The Shipping Information Page allows users to enter a different **Ship to Address** and **Tracking Numbers**. The Track Button will track the packages listed in the Tracking Numbers Window.

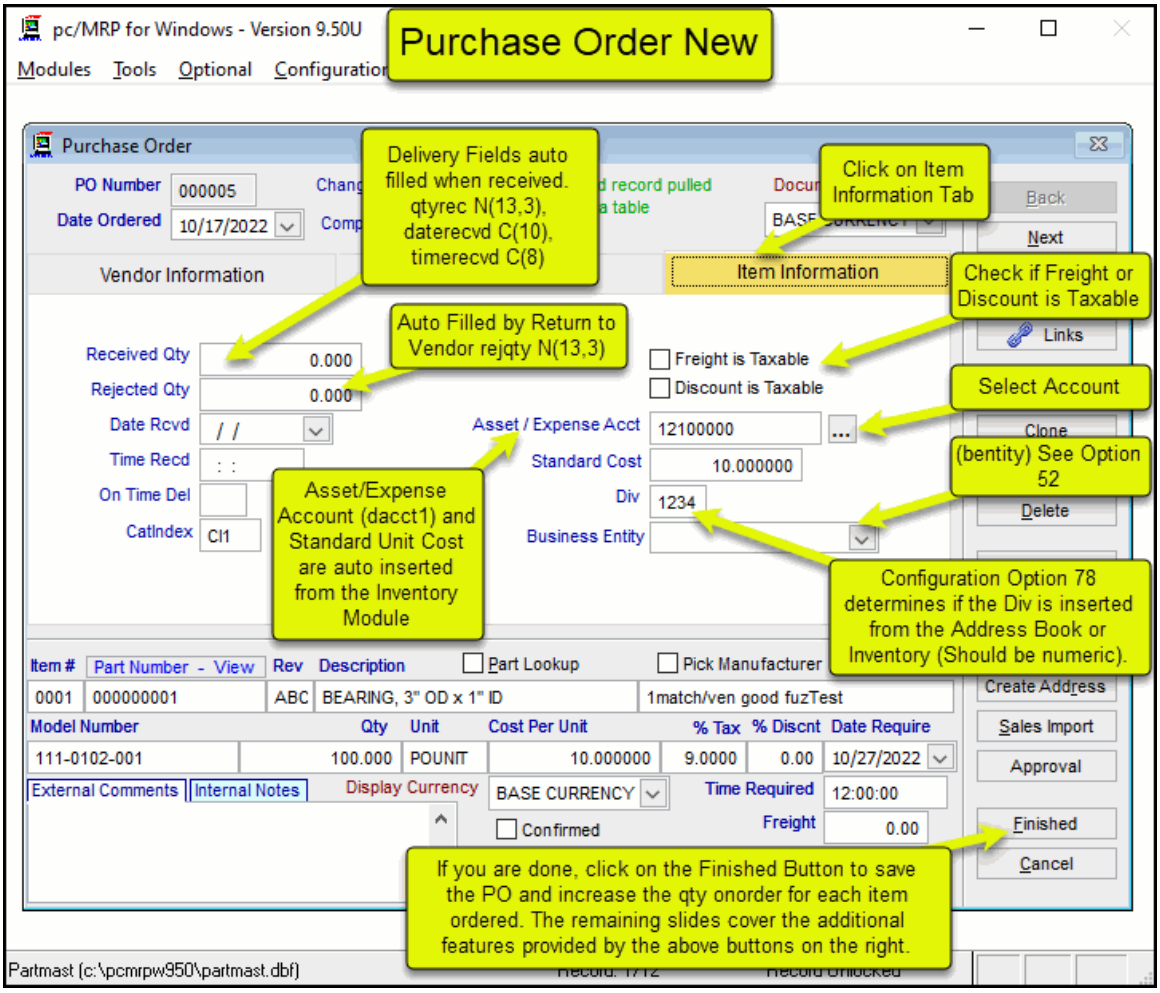
If you wish to track the packages through pc/MRP, enter the **Tracking Number(s)**. When you click the Track Button, pc/MRP will track the package. pc/MRP will first look to the Ship Via Edit Box to see which shipping vendor (UPS, FedEx, DHL, Postal Service, TNT) to use. If the Ship Via Edit Box is blank or you used multiple vendors pc/MRP will see if the tracking number is proceeded by UPS:, FEDEX:, DHL:, or TNT: to see which shipping vendor to use. If all of the above is blank, pc/MRP will prompt you to select a shipping vendor.

**Option 85** allows to set whether **Original Ship Date** (OrShipDate) and **Original Date Required** (OrDateReq) would be populated at the time when the Purchase Order is being created, or at the time when it is confirmed. It also sets whether these fields are editable. Original Date Required is the same date as Date Require, Original Ship Date will be calculated from Date Require and the **Shipment Transit Time**, if populated. The Shipment Transit Time is inserted according to the selected **Ship Via**, as long as **Option 52** has a Shipment Transit Time entered for that Ship Via.

The **Logbook** button at the bottom of the page will allow you to enter a logbook for each Purchase Order to record conversations, commitments, etc. Settings and Utilities **Option 80** can set pc/MRP to open up a Notepad or Word file. Pressing the F5 key in Notepad will automatically enter the date and time into your notepad text.

If If your company has a permanent **ShipTo** address other than your main address, call Software Arts. Let them remote in and create a custom PO form, such as CPOShipTo.frx

### 7.1.16 Item Information Page




Check **Freight is Taxable** (Taxfreight) if applicable.

Check **Discount is Taxable** (Taxdiscnt) if applicable. Tax will be paid for the full amount regardless of discount.

The **Debit/Charge Number** (Dacct1) is automatically inserted from the partmaster table. You can select another inventory or expense account to be debited when the receiver is posted by clicking on the Ellipse […] Button next to the Debit/Charge Text Box.

The **Standard Cost** (Stdcost) is inserted from the Inventory Data Base for that part number. It is used by the Purchase Price Variation Report found in pc/MRP's Accounting Module to compare with the actual cost on the purchase order.

The **Div** (Division) is automatically imported from the Inventory or Address Record depending on the setting of Configuration, Settings and Utilities, **Option 78**.

The **Rev Ship Date**, if used, is only shown on the Stockroom Shortage report. Not used by MRP.

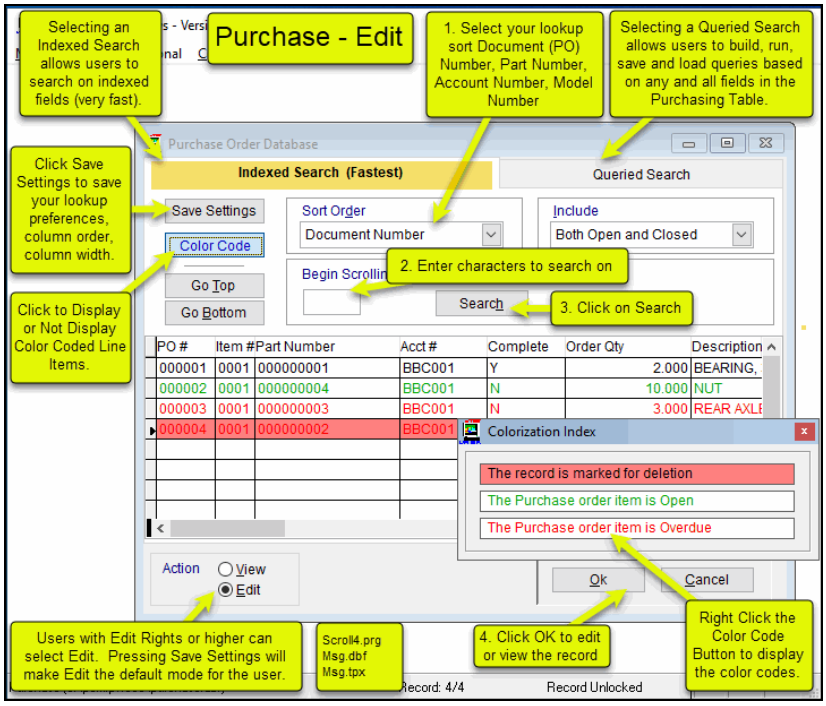
Please note that the **Rejected Qty** (rejqty) is updated with a 'Return to Vendor' transaction. If you repair the rejected quantity in-house, you must modify the **Rejected Qty** manually so the ISO9000 report is accurate.

The **Business Entity** (bentity) choices can be created using Configuration, Settings and Utilities, Option 52.

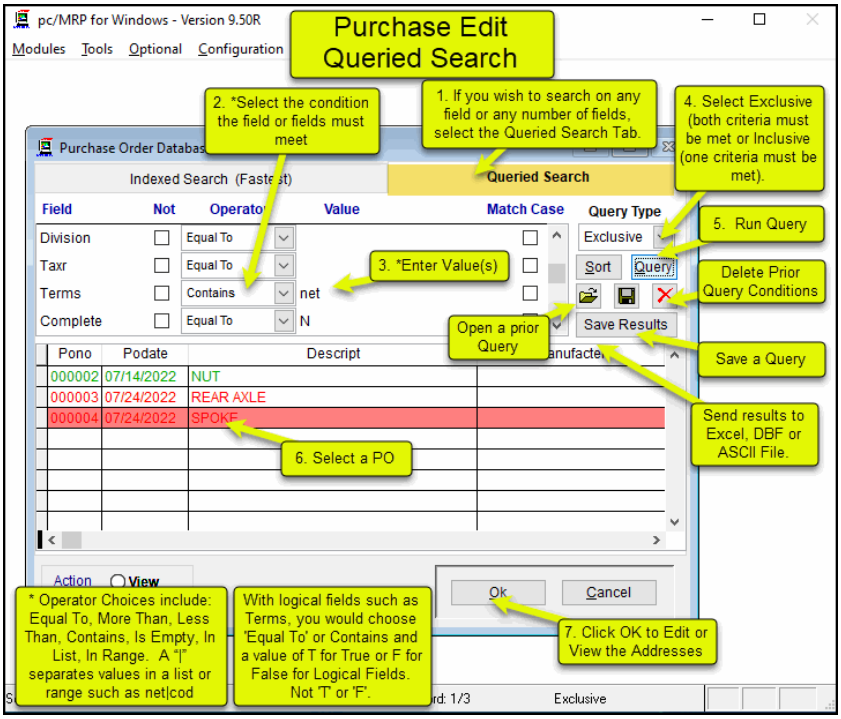
## 7.2 Edit a Purchase Order

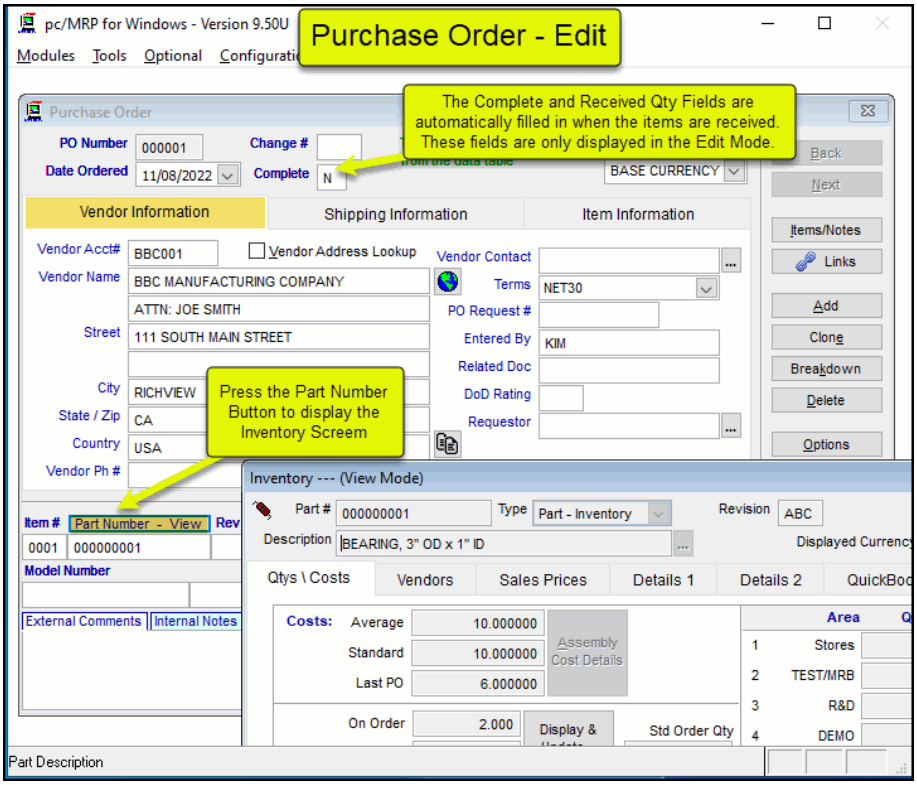
**Selecting Modules, Purchase, Edit** will display the screen shown below and allows users to scroll, edit, delete, undelete, or run queries against Purchase Order records.

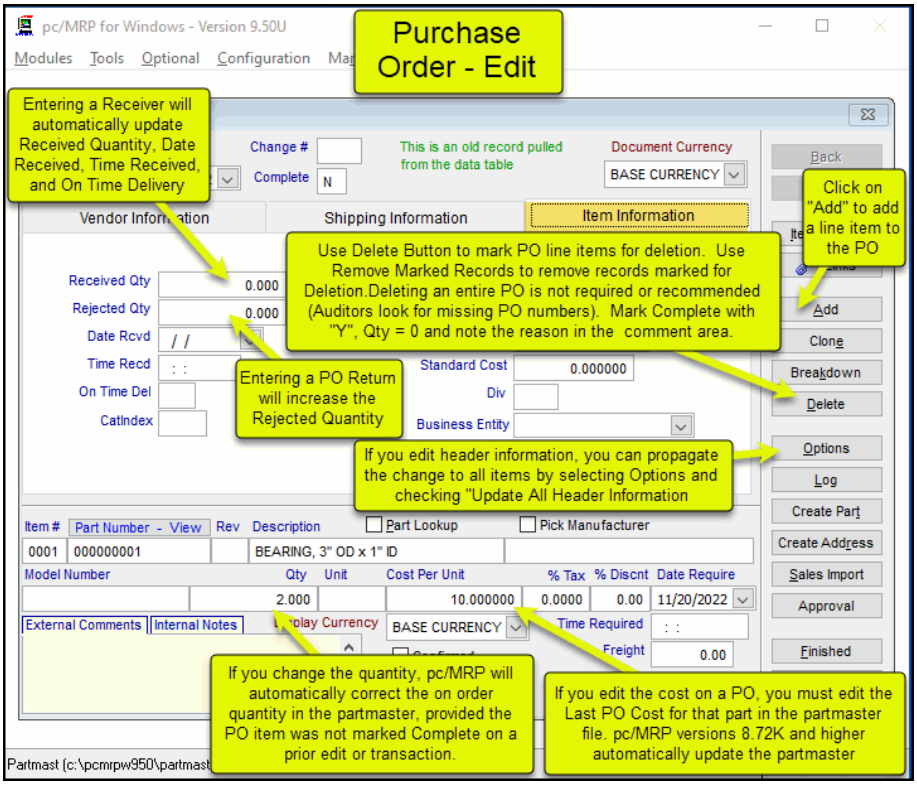
Selecting an **Indexed Search** allows users to search on indexed fields. An Indexed Search is much faster than a Queried Search.




Selecting to run a **Queried Search** allows users to build, run, save, and load queries for the Purchase Order table. For further details, see Chapter 15.14.1.




Purchase Order - Edit
pc/MRP for Windows - Version 9.50U
Modules Tools Optional Configurati
Purchase Order
PO Number 000001
Change #
Date Ordered 11/08/2022
Complete N
BASE CURRENCY
The Complete and Received Qty Fields are automatically filled in when the items are received. These fields are only displayed in the Edit Mode.
Vendor Information
Shipping Information
Item Information
Vendor Acct# BBC001
Vendor Address Lookup
Vendor Name BBC MANUFACTURING COMPANY
ATTN: JOE SMITH
Street 111 SOUTH MAIN STREET
City RICHVIEW
State / Zip CA
Country USA
Vendor Ph #
Vendor Contact
Terms NET30
PO Request #
Entered By KIM
Related Doc
DoD Rating
Requestor
Back
Next
Items/Notes
Links
Add
Clone
Breakdown
Delete
Options
Press the Part Number Button to display the Inventory Screem
Inventory --- (View Mode)
Item # Part Number - View Rev
0001 000000001
Model Number
External Comments Internal Notes
Part # 000000001
Type Part - Inventory
Revision ABC
Description BEARING, 3" OD x 1" ID
Displayed Currency
Qtys \ Costs
Vendors
Sales Prices
Details 1
Details 2
QuickBoo
Costs: Average 10.000000
Standard 10.000000
Last PO 6.000000
Assembly Cost Details
On Order 2.000
Display &
Std Order Qty
Area
1 Stores
2 TEST/MRB
3 R&D
4 DEMO
Part Description

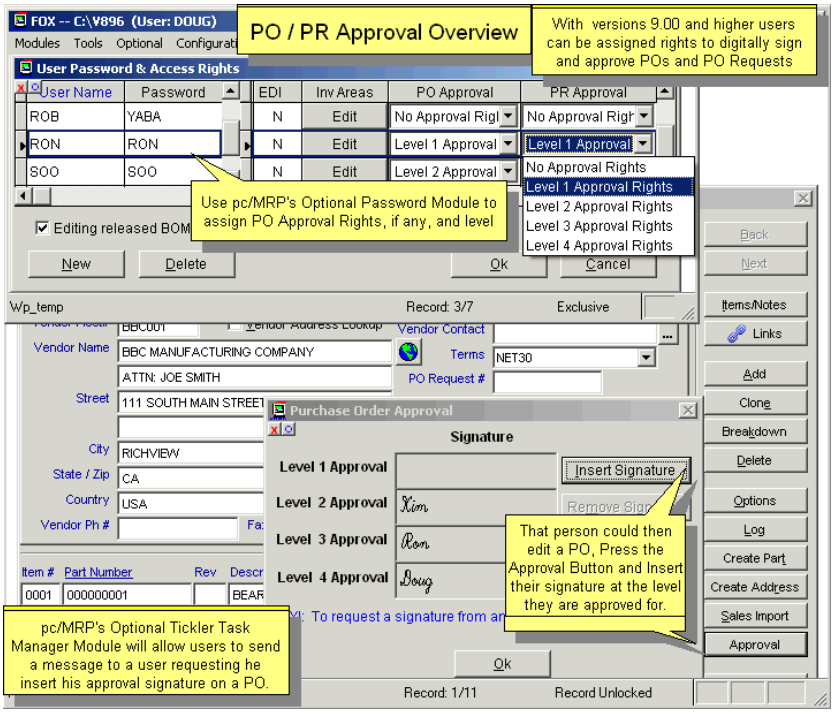

Purchase Order - Edit
pc/MRP for Windows - Version 9.50U
Modules Tools Optional Configuration
Entering a Receiver will automatically update Received Quantity, Date Received, Time Received, and On Time Delivery
Change #
Complete N
This is an old record pulled from the data table
Document Currency
BASE CURRENCY
Vendor Information
Shipping Information
Item Information
Use Delete Button to mark PO line items for deletion. Use Remove Marked Records to remove records marked for Deletion.Deleting an entire PO is not required or recommended (Auditors look for missing PO numbers). Mark Complete with "Y", Qty = 0 and note the reason in the comment area.
Click on "Add" to add a line item to the PO
Received Qty 0.000
Rejected Qty 0.000
Date Rcvd / /
Time Recd : :
On Time Del
CatIndex
Entering a PO Return will increase the Rejected Quantity
Standard Cost 0.000000
Div
Business Entity
If you edit header information, you can propagate the change to all items by selecting Options and checking "Update All Header Information
Back
Add
Clone
Breakdown
Delete
Options
Log
Create Part
Create Address
Sales Import
Approval
Finished
Item # Part Number - View Rev Description
Part Lookup
Pick Manufacturer
0001 000000001
BEARING, 3" OD x 1" ID
Model Number
Qty Unit Cost Per Unit % Tax % Discnt Date Require
2.000
10.000000
0.0000
0.00
11/20/2022
External Comments Internal Notes
BASE CURRENCY
Time Required : :
Freight 0.00
If you change the quantity, pc/MRP will automatically correct the on order quantity in the partmaster, provided the PO item was not marked Complete on a prior edit or transaction.
If you edit the cost on a PO, you must edit the Last PO Cost for that part in the partmaster file. pc/MRP versions 8.72K and higher automatically update the partmaster
Partmast (c:\pcmrpw950\partmast

Every field in the Purchase Order edit screen is editable. There are however, several key concepts users must understand when editing.

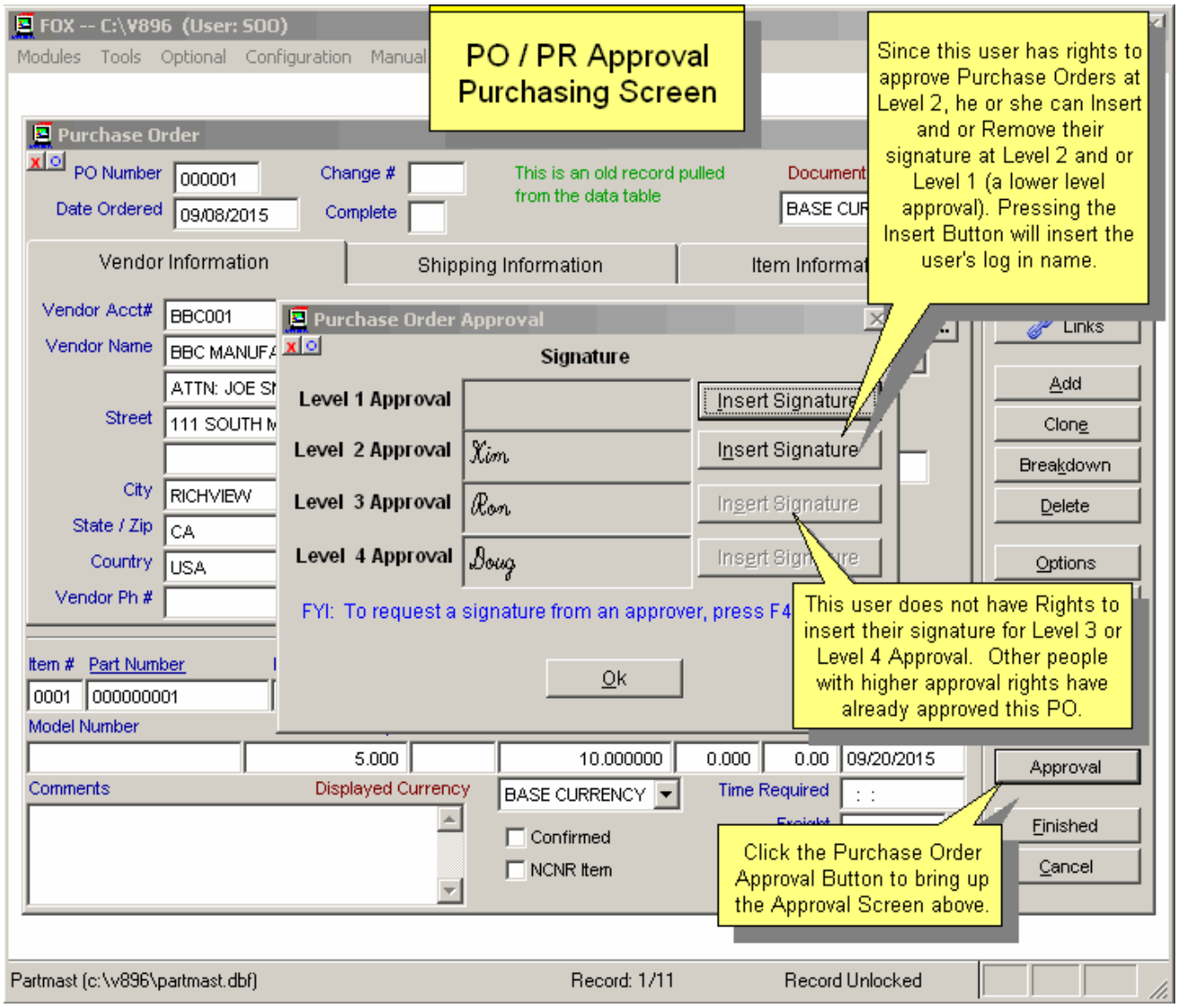
- pc/MRP automatically corrects the part number's on-order quantity whenever the quantity in the purchase order changes. If the PO cost is changed on the last PO, pc/MRP will offer to update the Last PO Cost in the Partmast. For earlier versions, you must manually edit the part's Last PO Cost.
- pc/MRP prints out the vendor's address from the first line item.
- To add an additional line item to an existing PO, select the "**Add**" button while on the last current item number of the PO.
- If you make a change to the header information while editing, you can quickly propagate that change to the header of the remaining items. Just click on the **Options** button and select the "Update All Header Information" check box.
- The **Complete** and **Qty Received** fields are displayed only in the edit mode and are filled in automatically when the items are received. The Qty Received field contains the accumulative amount received. pc/MRP uses the Complete field to determine if a record is overdue, open, or closed. A Y in the Complete field marks the record as closed (i.e. the original quantity ordered for the line item has been received). Users should not manually edit these fields unless they wish to close the purchase order or adjust the quantity received.
- Use the **Delete** Button to mark a line item or the entire purchase order for deletion. Line items that have been received can not be marked for deletion. To permanently remote the records from the database table, set an administrative lockout, then select Purchase, Remove Marked Records**.**
  **Note:** Versions 9.06B and higher offer to delete/undelete the entire purchase order. Version 9.13A and higher, marking a PO for deletion will update the OnOrder qty in inventory.

### 7.3 PO Approval

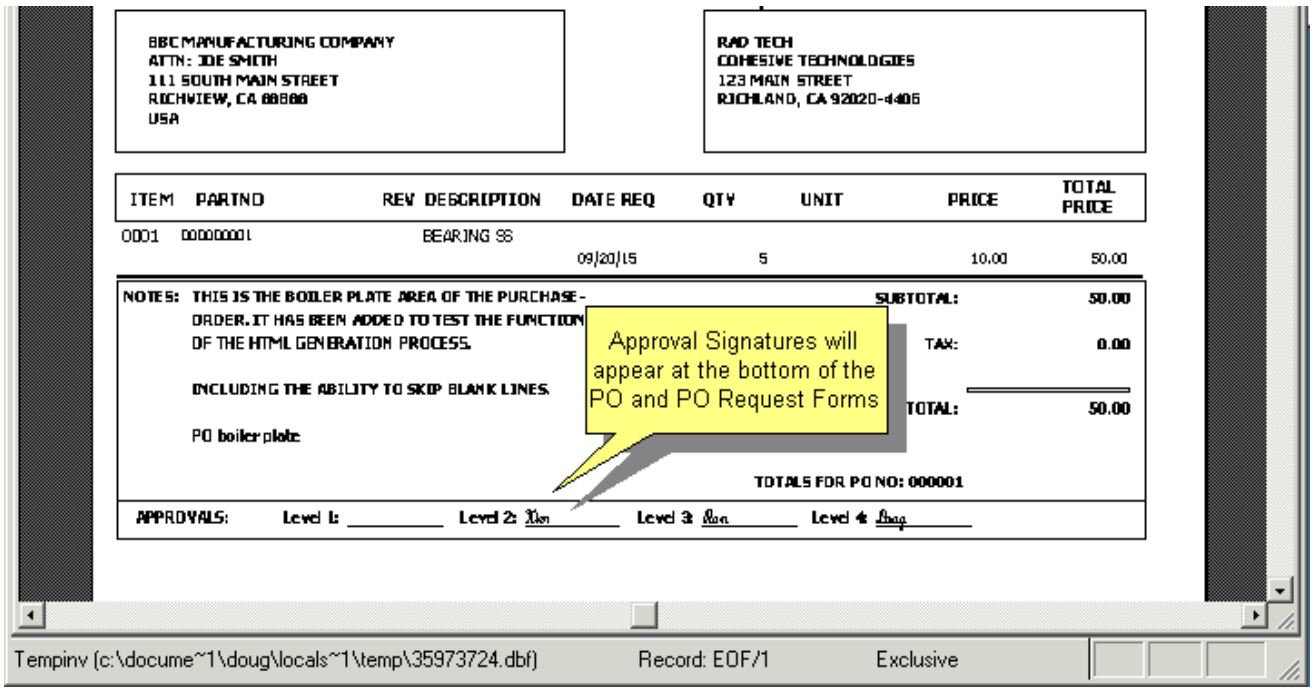
Companies that own the optional Advanced Password Module, can utilize the PO Approval feature below. The optional User Task Manager & Tickler Module adds an additional feature, but is not essential.



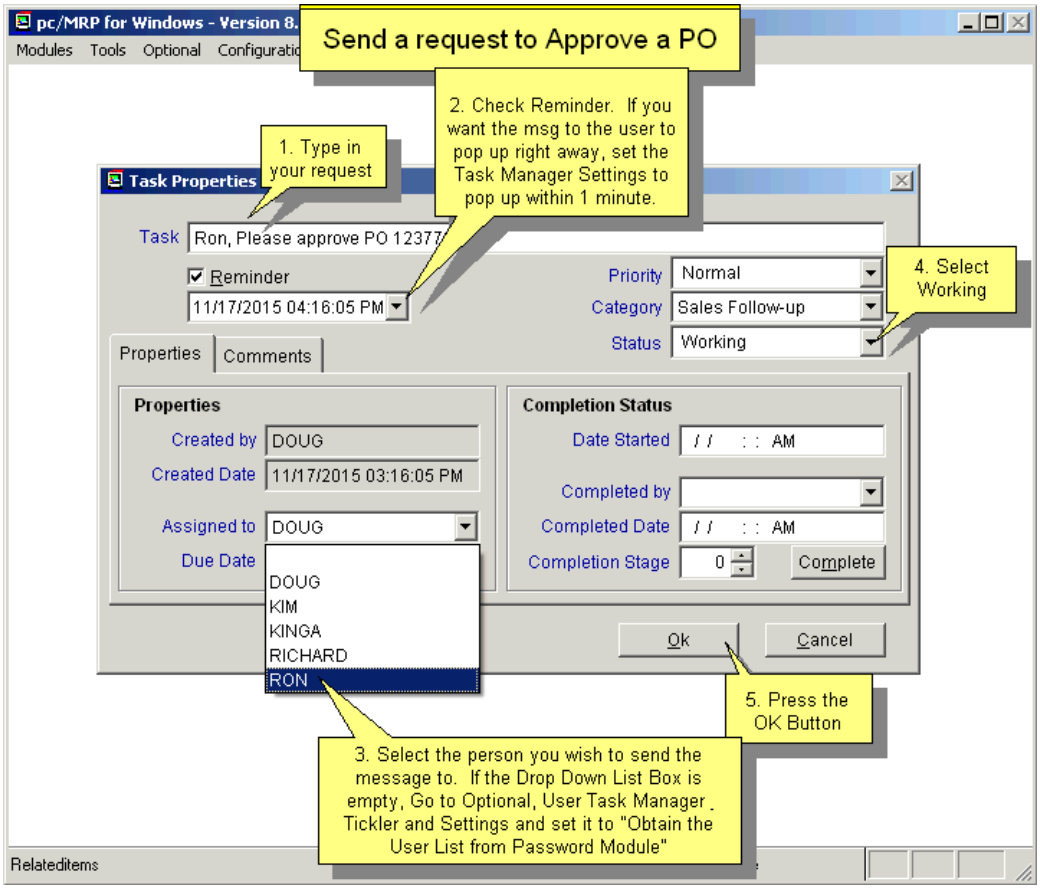

Users can have rights to approve a PO of 5 different levels, from No Approval Right to Level 4 Approval Rights. This is set in the Optional Advanced Password Module for each user. Users with PO approval rights can then click on the Approval button and insert their user name into an approval box on or below their approval level.

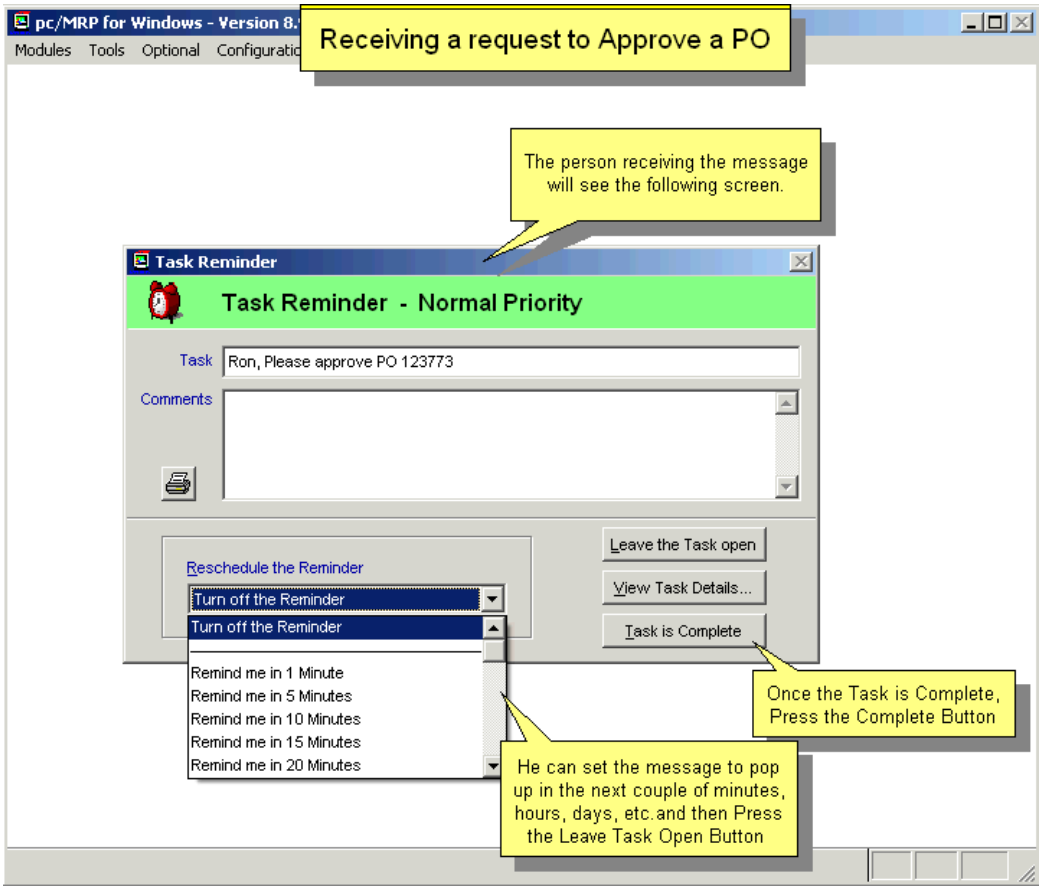



The approval signatures will appear at the bottom of the PO or PO Request forms.



If the optional User Task Manager & Tickler Module is activated, you can immediately send a request to another user to approve the PO. Press the F4 key, or select Optional, User Task Manager & Tickler, New Task.



### 7.4 Delete a Purchase Order

Deleting an entire PO is not required or recommended as Accounting does not like to see breaks in numbering.

- Option 1:
  - For each line item: mark item's **Complete** flag with a 'Y', change the **Qty** to **0**, and note the reason in the **Comments** area. The **OnOrder** qty is automatically updated when you save the record.
- Option 2:
  - Mark each line item's **Complete** flag with a "Y" and then run the **Audit OnOrder Quantities** from the Purchase menu. This keeps the original order qtys. The **OnOrder** qty is only updated when you click "Display and Update" next to the On Order quantity.

Once all the line items in a PO are marked **Complete** (maybe with 0 qtys), the whole PO is considered complete.

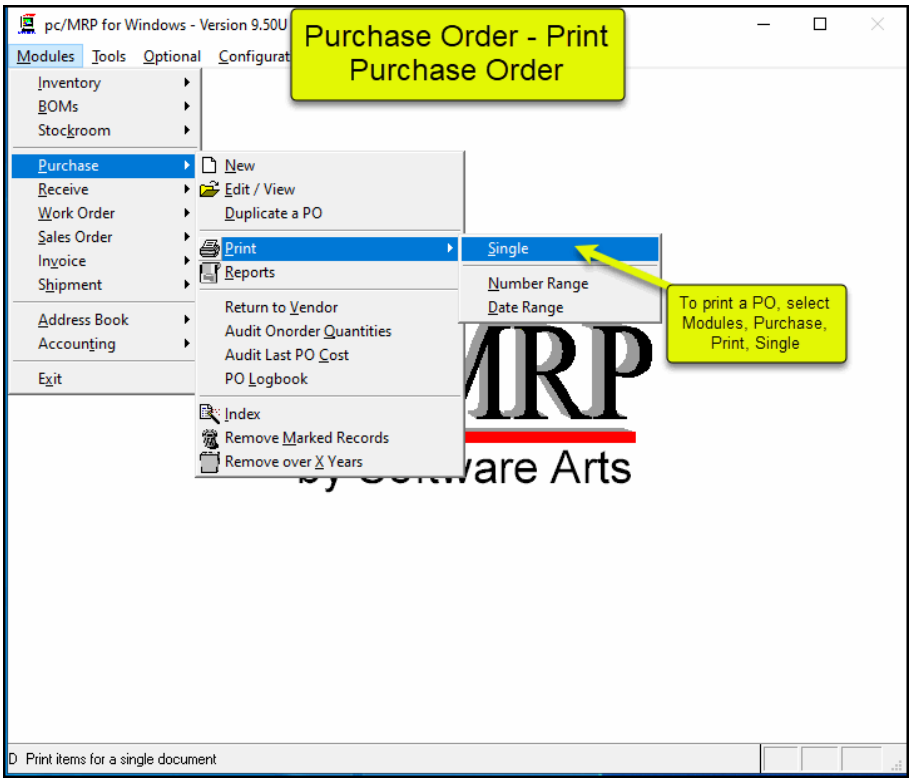
**Note:** Before version 9.13, the OnOrder quantity included POs marked for deletion.

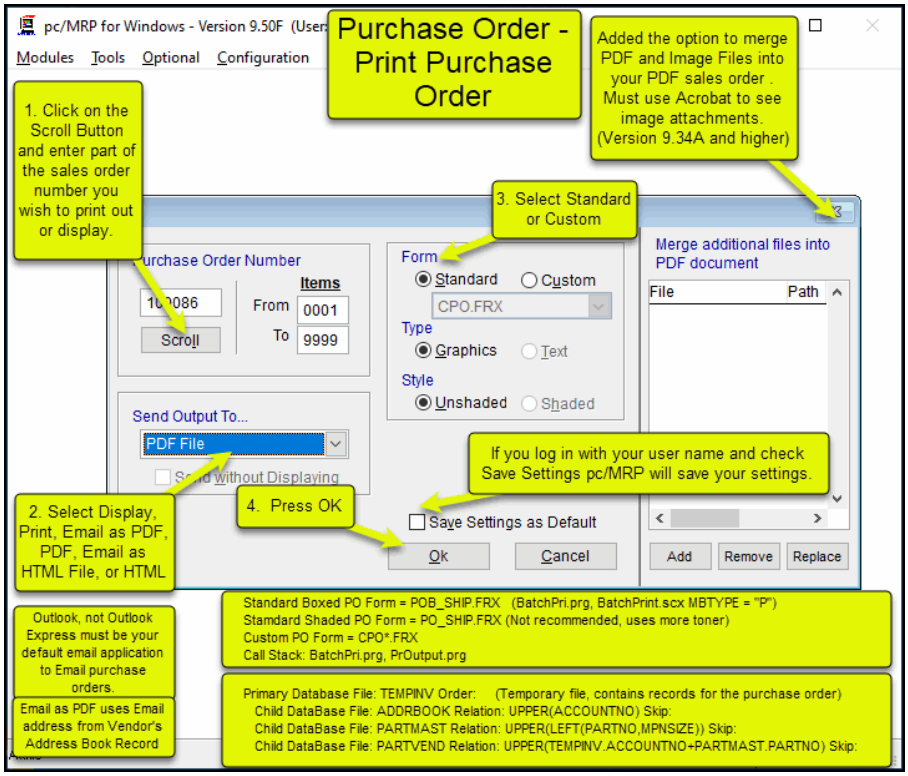
### 7.5 Duplicate a Purchase Order

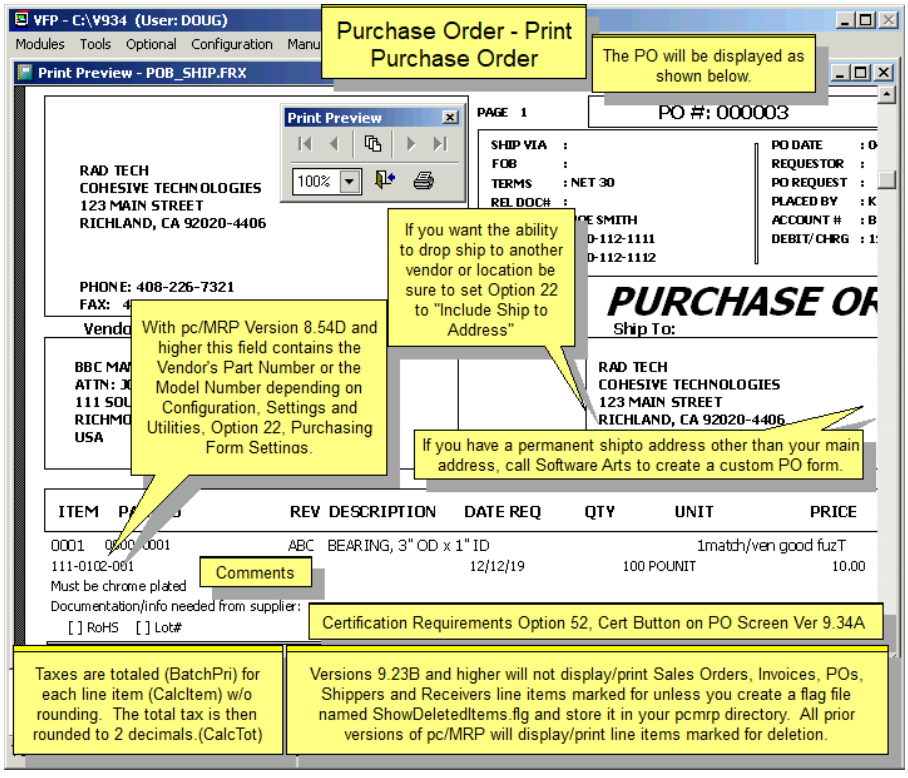
Select Modules, Purchase, Duplicate a PO. Scroll for (or type in) the PO number to duplicate. You can set if you want to open the new PO for editing. The new PO will be an exact copy of the original, except: PO date will be the current date. Received qty, rejected qty, change# will be 0. Date/time received, date/time required, original date required, original/revised ship date and on time delivery will be blank. Confirmed will be N. Buyer will be Original buyer, User login or Buyer for the part, set by Configuration, **Option 25**. (**Notes:** In versions **9.04** and lower Buyer was always the buyer of the original PO. Versions 9.10G and lower duplicated the approval signatures.)

### 7.6 Print, Display, or E-mail, a PO

To print, display, or e-mail a PO select Modules, Purchase, Print





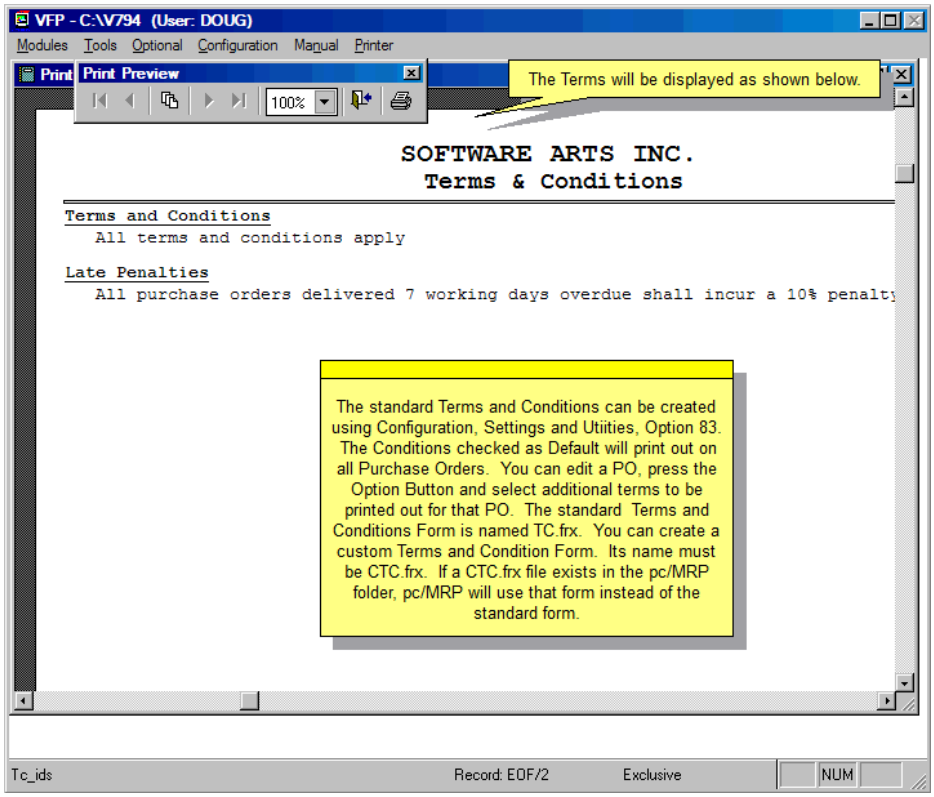




Configuration, Settings and Utilities

- **Option 24** allows you to create custom purchase order forms.
- **Option 22** allows you to add up to nine lines of **Notes** to all purchase orders.
- **Option 83** allows users to add selectable Terms and Conditions for purchase orders.
- **Option 82** allows users to add selectable Certification Requirements.

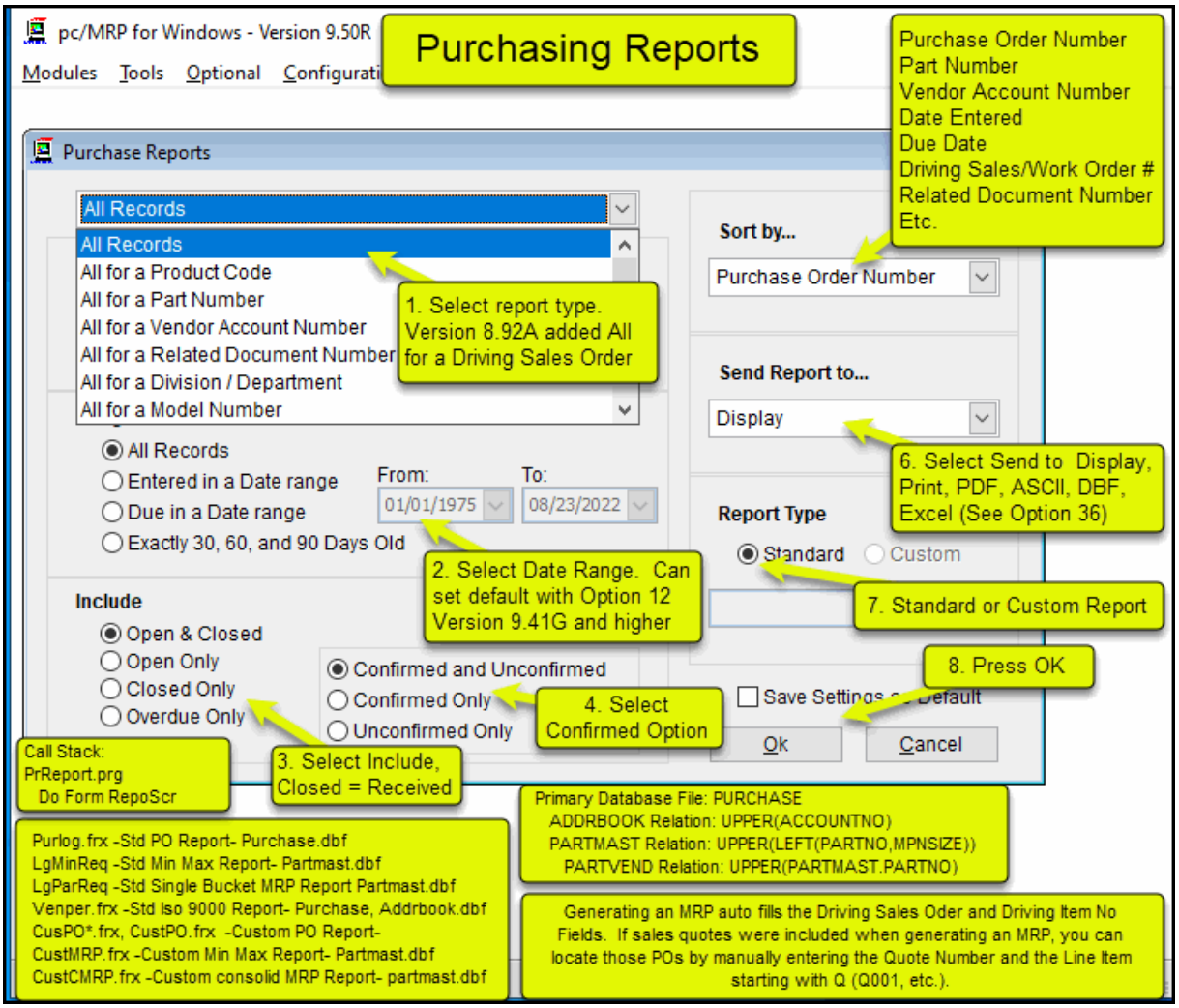
Purchase orders may be folded in three and placed in a double window envelope.

If you use Configuration, Settings and Utilities, Option 83 to create Terms and Conditions, a Terms and Condition Page will print ut as well.



## 7.7 Reports

### 7.7.1 Purchase Order Reports




Configuration, Settings and Utilities, **Option 24** allows users to create custom report forms. See Section 15.4.1 of this Manual for instructions on creating custom reports or forms.

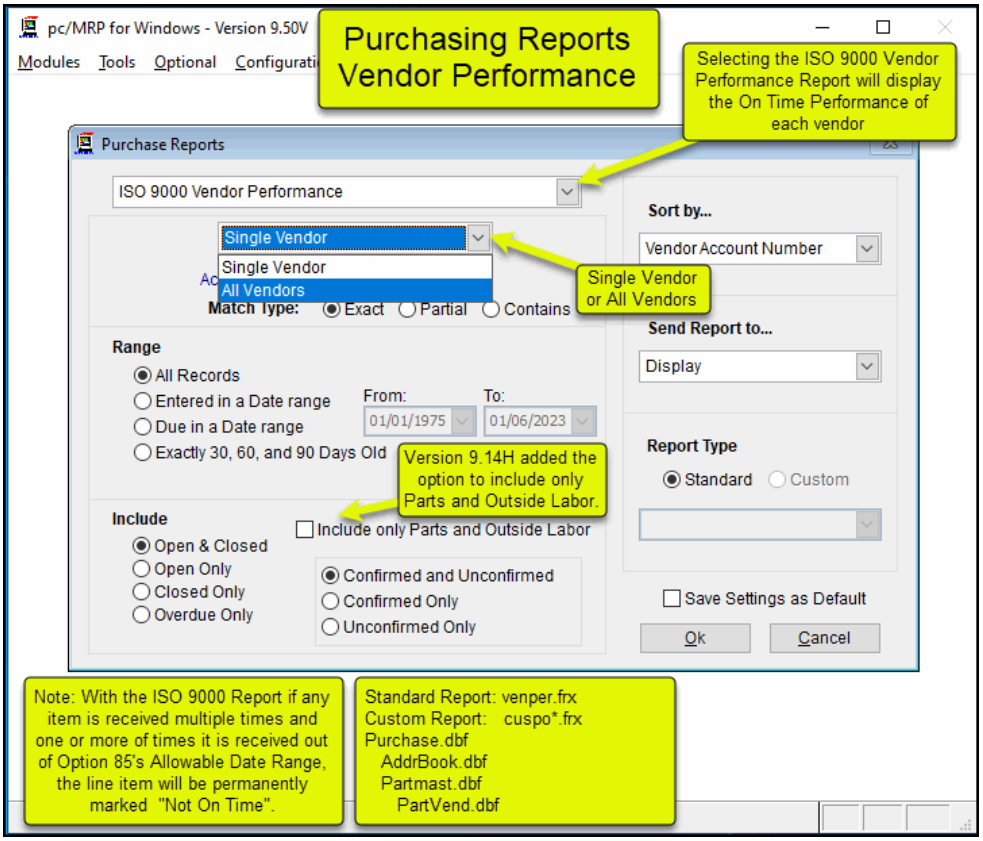
### 7.7.2 ISO 9000 Vendor Performance Report

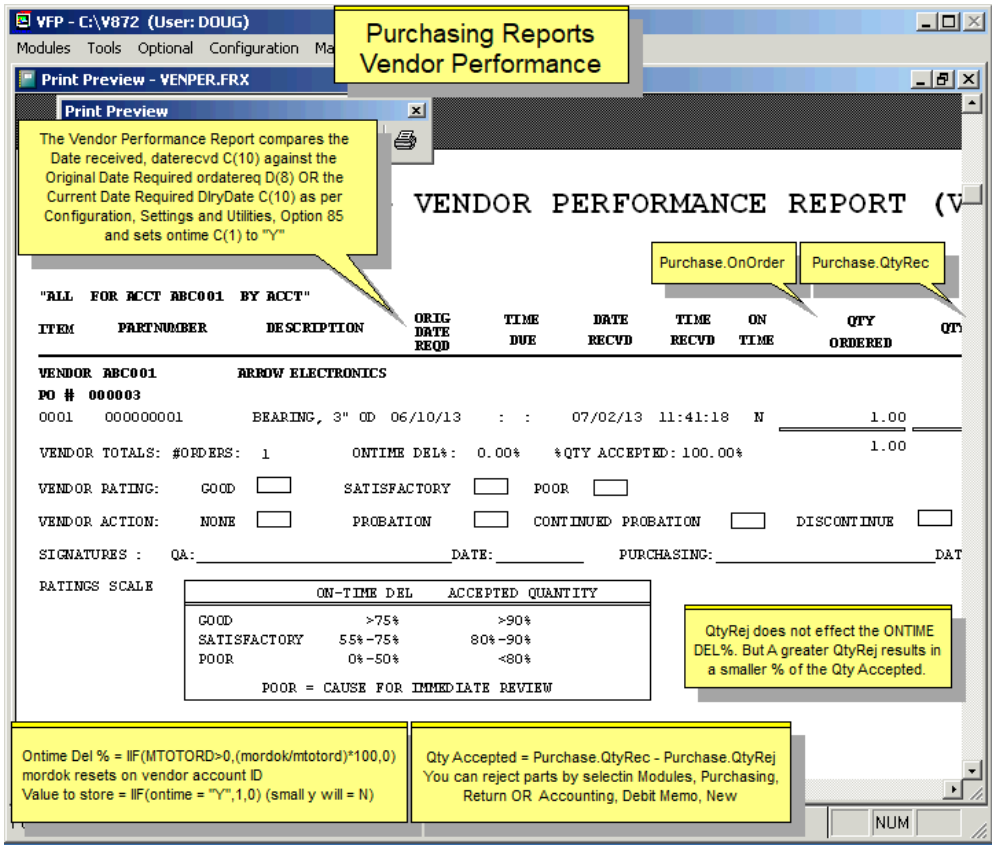
The ISO 9000 Vendor performance report allows users to track their vendor's performance and reliability. This report is automatically generated by using information compiled within the purchasing and receiving modules of pc/MRP. This report further allows the user to grade vendors and define a course of action based on the vendor's performance.

The criteria for lateness can be set with Configuration, Settings and Utilities, **Option 85**. Leaving the Vendor ID blank and checking the Partial Match Radio Button will print out a report that includes all vendors.

**Note:** There could be multiple receivers for one PO line item. If any receiver for a PO line item falls outside Option 85's acceptable date range, the PO line item will be marked as not on time.

On Time is determined when the part is received. pc/MRP uses the Original Date Required or the Current Date Required as per Option 85 in both determining whether delivery is On Time, and for the Vendor Performance Report.


pc/MRP for Windows - Version 9.50V
Modules Tools Optional Configurati
Purchasing Reports
Vendor Performance
Selecting the ISO 9000 Vendor Performance Report will display the On Time Performance of each vendor
Purchase Reports
ISO 9000 Vendor Performance
Single Vendor
Single Vendor
All Vendors
Single Vendor or All Vendors
Match Type: Exact Partial Contains
Sort by...
Vendor Account Number
Send Report to...
Display
Range
All Records
Entered in a Date range
Due in a Date range
Exactly 30, 60, and 90 Days Old
From:
To:
01/01/1975
01/06/2023
Version 9.14H added the option to include only Parts and Outside Labor.
Report Type
Standard Custom
Include
Open & Closed
Open Only
Closed Only
Overdue Only
Include only Parts and Outside Labor
Confirmed and Unconfirmed
Confirmed Only
Unconfirmed Only
Save Settings as Default
Ok
Cancel
Note: With the ISO 9000 Report if any item is received multiple times and one or more of times it is received out of Option 85's Allowable Date Range, the line item will be permanently marked "Not On Time".
Standard Report: venper.frx
Custom Report: cuspo*.frx
Purchase.dbf
AddrBook.dbf
Partmast.dbf
PartVend.dbf


VFP - C:\V872 (User: DOUG)
Modules Tools Optional Configuration
Purchasing Reports
Vendor Performance
Print Preview - VENPER.FRX
Print Preview
The Vendor Performance Report compares the Date received, daterecvd C(10) against the Original Date Required ordatereq D(8) OR the Current Date Required DlryDate C(10) as per Configuration, Settings and Utilities, Option 85 and sets ontime C(1) to "Y"
VENDOR PERFORMANCE REPORT (V
Purchase.OnOrder
Purchase.QtyRec
"ALL FOR ACCT ABC001 BY ACCT"
ITEM PARTNUMBER DESCRIPTION ORIG DATE REQD TIME DUE DATE RECVD TIME RECVD ON TIME QTY ORDERED QTY
VENDOR ABC001 ARROW ELECTRONICS
PO # 000003
0001 000000001 BEARING, 3" OD 06/10/13 : : 07/02/13 11:41:18 N 1.00
1.00
VENDOR TOTALS: #ORDERS: 1 ONTIME DEL%: 0.00% %QTY ACCEPTED: 100.00%
VENDOR RATING: GOOD SATISFACTORY POOR
VENDOR ACTION: NONE PROBATION CONTINUED PROBATION DISCONTINUE
SIGNATURES : QA: DATE: PURCHASING: DAT
RATINGS SCALE
ON-TIME DEL ACCEPTED QUANTITY
GOOD >75% >90%
SATISFACTORY 55%-75% 80%-90%
POOR 0%-50% <80%
POOR = CAUSE FOR IMMEDIATE REVIEW
QtyRej does not effect the ONTIME DEL%. But A greater QtyRej results in a smaller % of the Qty Accepted.
Ontime Del % = IIF(MTOTORD>0,(mordok/mtotord)*100,0)
mordok resets on vendor account ID
Value to store = IIF(ontime = "Y",1,0) (small y will = N)
Qty Accepted = Purchase.QtyRec - Purchase.QtyRej
You can reject parts by selectin Modules, Purchasing, Return OR Accounting, Debit Memo, New
NUM

### 7.7.3 MRP Report (All Parts Required)

The MRP Report in Purchasing can use one of two methods, Consolidated (Single Bucket MRP) or Min/Max, to determine the purchasing requirements. See the following two Sections.

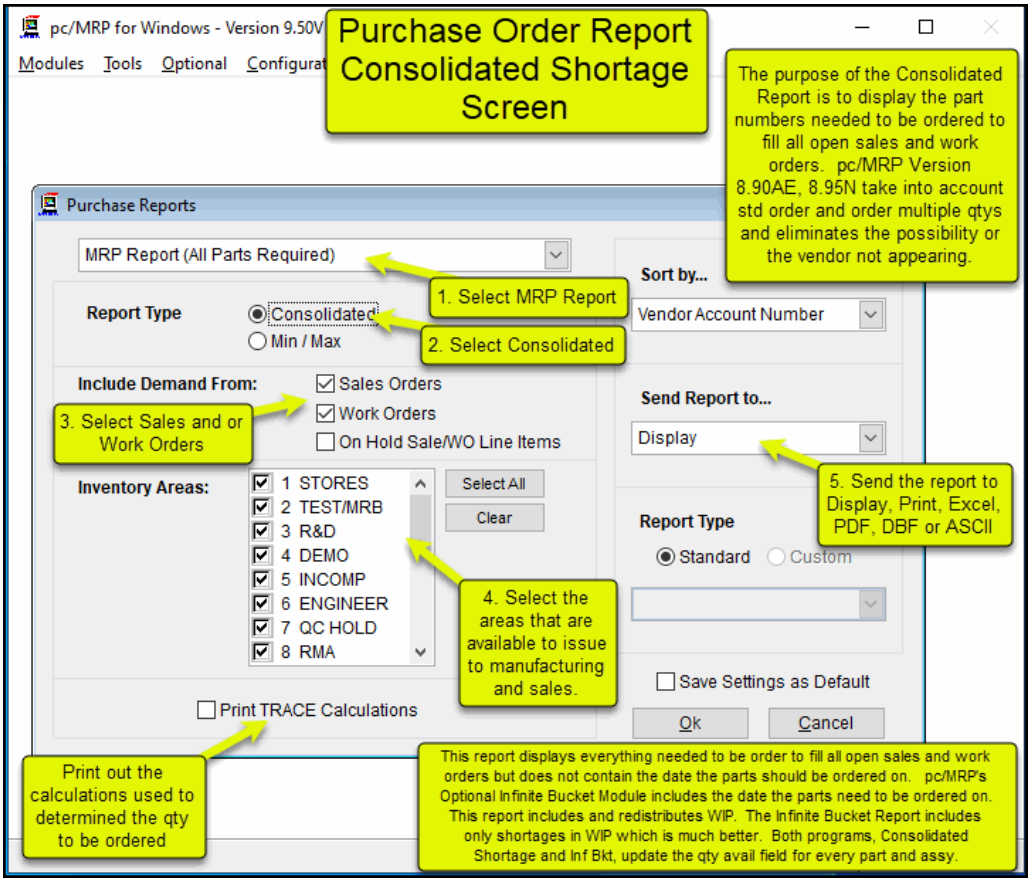
**Note:** For an advanced MRP method, see the optional Infinite Bucket MRP module in Chapter 16.3 in this Manual.

#### 7.7.3.1 Min/Max Report (lgminreq.frx)

One method is the MIN/MAX selection. This reports all parts under the minimum quantity allowable. The minimum quantity for each part is entered into the Inventory Database File and should equal the quantity used per week x lead-time in weeks x your safety factor. The maximum quantity for each part is entered into the Inventory Database File and should be set at some level higher than the minimum quantity. This report takes into account the order qty and the on-demand qty for each part and assembly. It report provides the quantity required to reach the minimum quantity and the quantity required to meet the maximum quantity. The report is easier to understand if you have maximum quantities for all your parts.

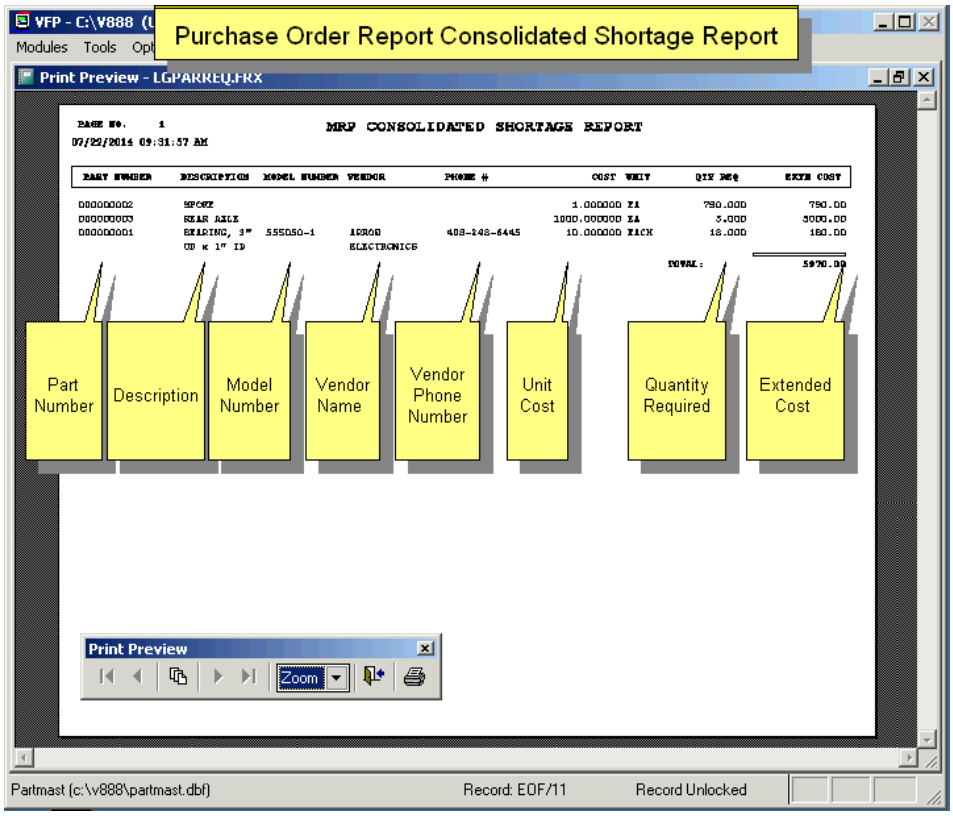
#### 7.7.3.2 Consolidated Single Bucket MRP Report (lgparreq.frx)

The other method, Consolidated, provides the exact number of parts required to be ordered to meet the demand driven by sales orders and/or work orders. The consolidation report first zeroes out all on order and on demand quantities in inventory and updates these fields representative of open purchase orders and sales/work orders. It then compares what is on demand from open sales/work orders with what is on order, in WIP, on hand (finished assemblies, sub assemblies, and minimum stocking levels). Consequently, the quantity required is calculated as described below.



If there are not enough finished assemblies and sub assemblies to fill the open sales and work orders pc/MRP will use the BOMs and current onhand quantities to determine which parts need to be ordered. The report lists parts to be ordered for assemblies. It does not list sub-assemblies, as they cannot be ordered. The Consolidated Purchasing Report will tell you what to order but not when to order. Software Arts offers an **optional Infinite Bucket module** that allows MRP reporting in much more detail. This is covered in Chapter 16.3.1 in this Manual.

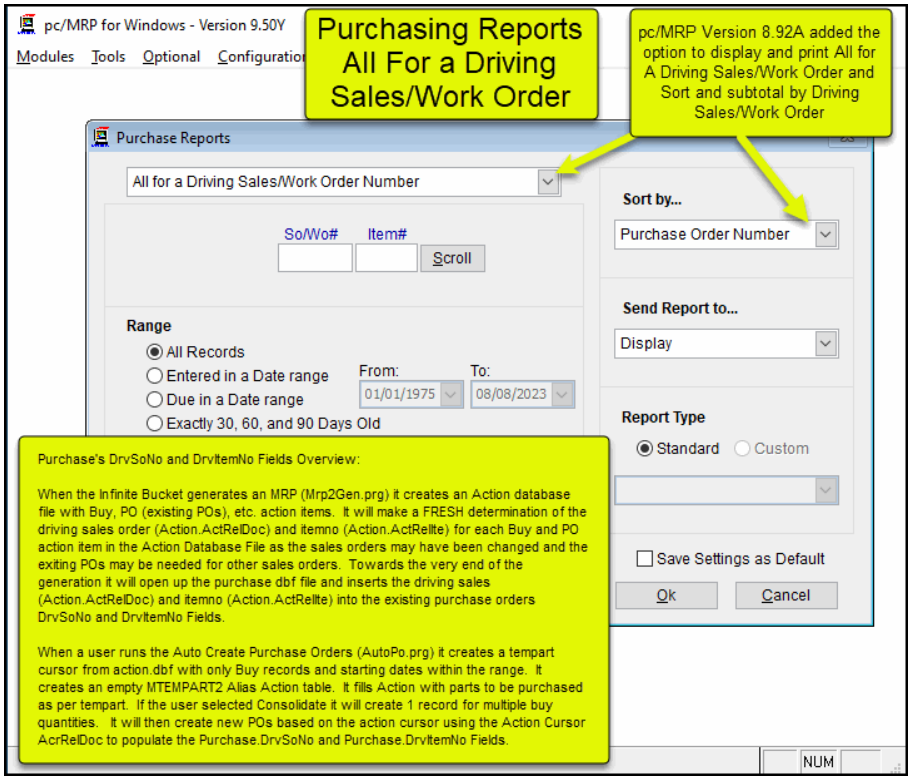
The Consolidated Purchasing Report can be run several different ways. Users can include or exclude sales orders and or work orders as well as all inventory locations. (Users must keep WIP checked to run this MRP.) Users can also select to Print Trace Calculations. This is a detailed report that explains exactly where and how demand for each part is driven. There is no need to print out and trace the calculations unless you disagree with the MRP results. The Consolidated Purchasing Report can also be sorted several ways and the output can be set to display, print, or several different file types.




After the consolidated report has been generated, pc/MRP offers an Excess Inventory report**.** Users can select one of the following reports: All Parts, Without Movement, More Onhand than Required or Both No Requirement and More Onhand than Required.

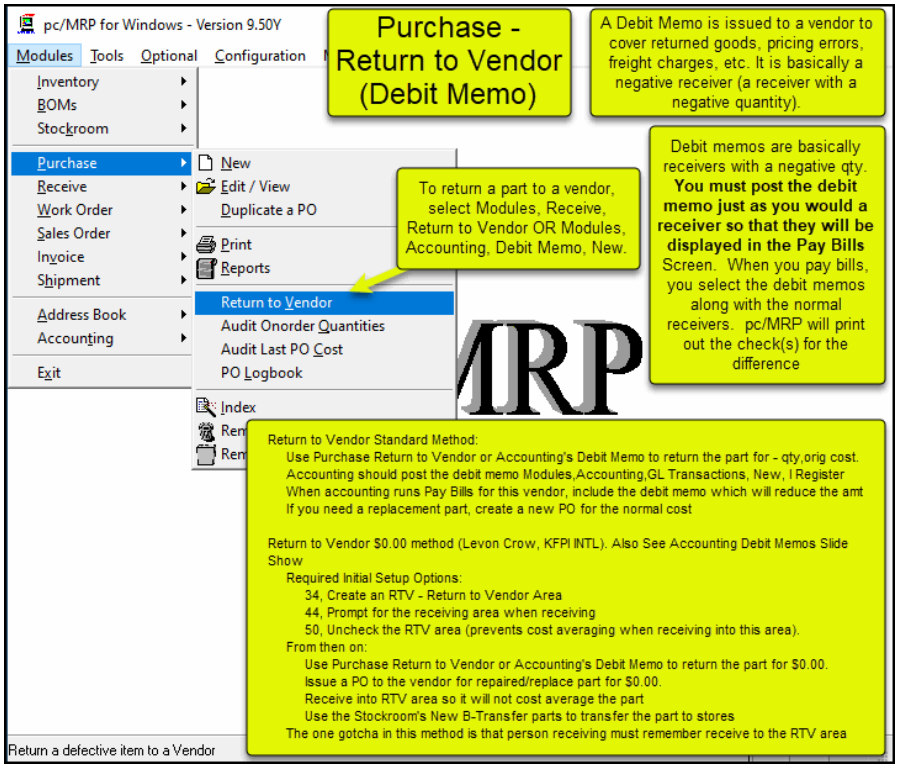
The report will also provide the Average or Standard cost of the excess inventory. If the user has Delete Rights for the password module the user will be given the option to **automatically generate Purchase Orders** based on the consolidated shortage report (versions 9.50X, 9.55B and higher). If this option is selected, a Purchase Order will be created to the primary vendor for all requirements. Users can select Set Process Defaults to see/change the due date for the Purchase Orders pc/MRP is about to create. All the Purchase Orders that were generated may then be printed. If the program is unable to create a Purchase Order item for a requirement (because there is no vendor associated with the part or the part number is invalid), an error report describing the error(s) will be available. Buyer will be the User login or the Buyer for the part, set by Configuration, **Option 25**. (**Note:** In versions **9.04** and lower Buyer was always the Buyer for the part.)

### 7.7.3.3 Purchase Report: All for a Driving Sales/Work Order




## 7.8 Return Items to a Vendor (Debit Memo)

This process is the same as creating a Debit Memo in the general ledger; see Chapter 14.11, Debit Memo module.



### 7.9 Audit Onorder Quantities

Zeroes out the onorder quantity in inventory and then replaces the onorder quantities with the onorder quantities from all open POs. If you deleted purchase orders, you should use this option to correct onorder quantities. This option will also display blank PO dates and part numbers that do not exist in inventory. If 'Audit Onorder Quantities' reports any errors, you must fix the errors and re-run the function again.

### 7.10 Audit Last PO Cost

Audits and if necessary corrects the Last PO Cost in each part's Inventory record. **Note:** User must have Password Edit Rights or higher.

### 7.11 PO Log Book

The **Logbook** button at the bottom of the page will allow you to enter a logbook for each Purchase Order to record conversations, commitments, etc. Settings and Utilities **Option 80** can set pc/MRP to open up a Notepad or Word file. Pressing the **F5** key in Notepad will automatically enter the date and time into your text.

### 7.12 Queried Search Overview (see 15.14.1)

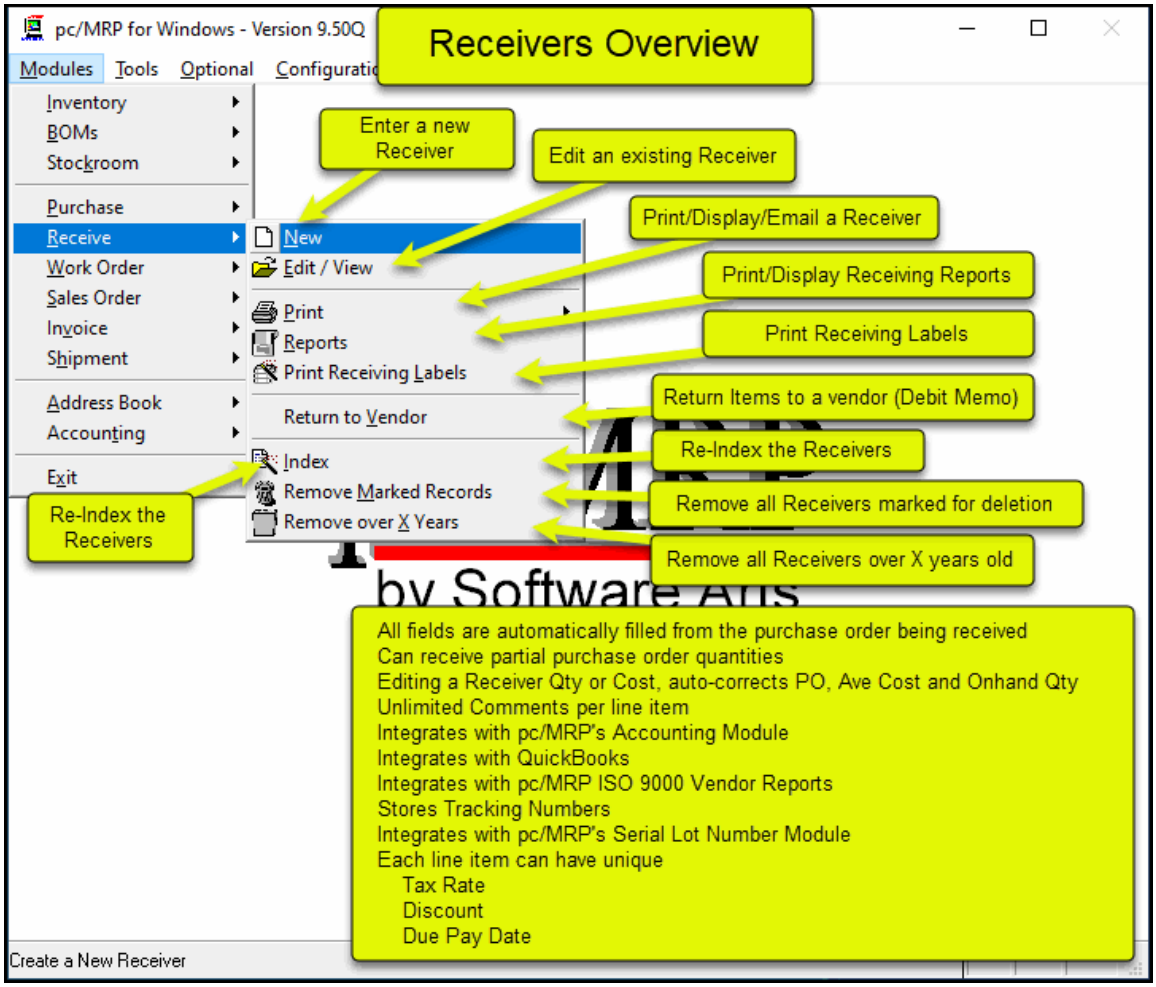
### 7.13 Indexed Searches (see 15.14.2)

### 7.14 Index (see 15.14.3)

### 7.15 Remove Marked Records (see 15.14.4)

### 7.16 Remove Over X Years (see 15.14.5)

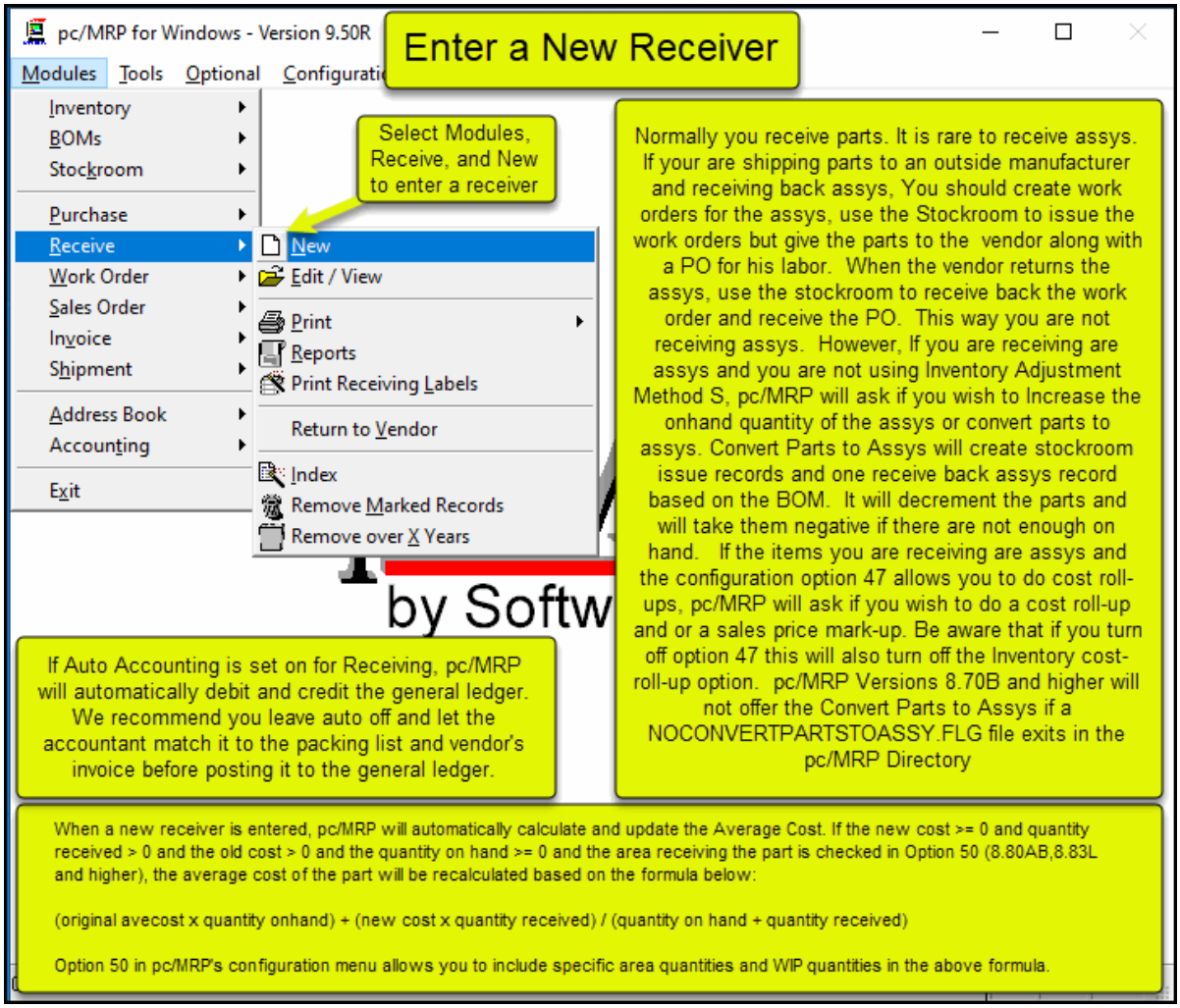
# 8 Receiving Module




## 8.1 Receiving Module Overview

All fields are automatically filled from the purchase order being received
Can receive partial purchase order quantities
Editing a Receiver Qty or Cost, auto-corrects PO, Ave Cost and Onhand Qty
Unlimited Comments per line item
Integrates with pc/MRP's Accounting Module
Integrates with QuickBooks
Integrates with pc/MRP ISO 9000 Vendor Reports
Stores Tracking Numbers
Integrates with pc/MRP's Serial Lot Number Module
Each line item can have unique
- Tax Rate
- Discount
- Due Pay Date

### 8.2.1 Enter a New Receiver

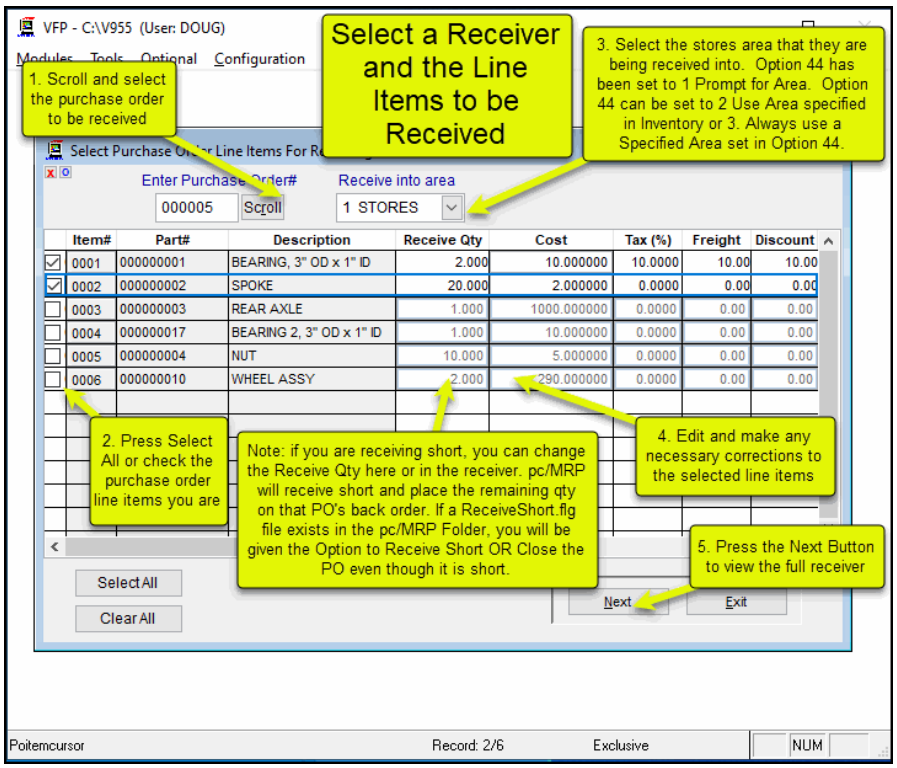



An online slideshow is located here: **https://pcmrp.com/mrp101/rec960overview.htm**

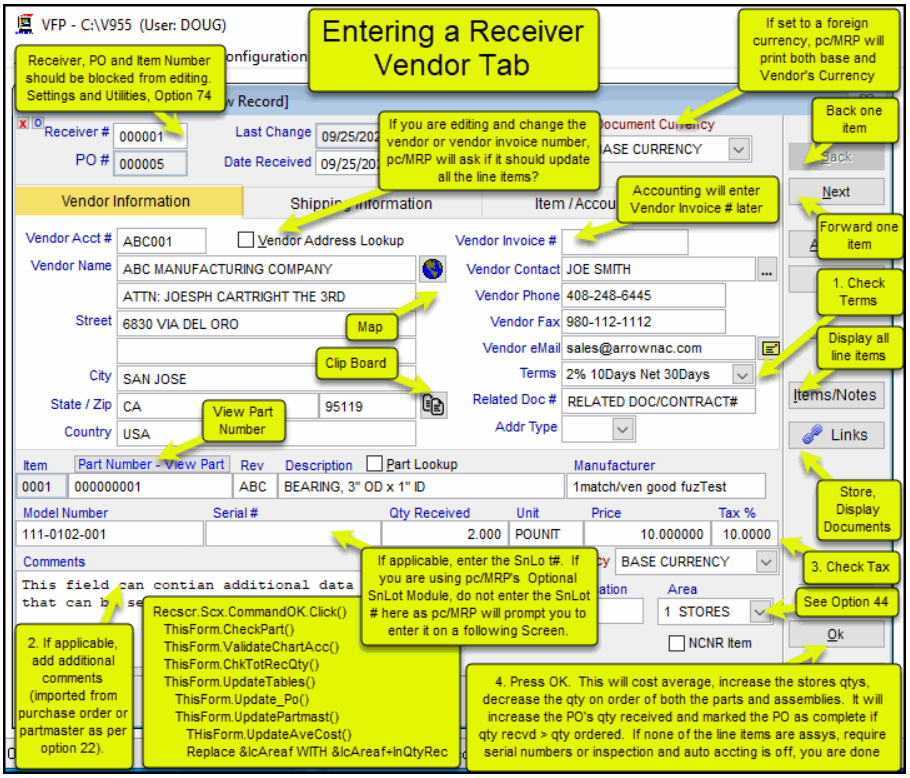
If Auto Accounting is set on for Receiving, pc/MRP will automatically debit and credit the general ledger. We recommend you leave auto off and let the accountant match it to the packing list and vendor's invoice before posting it to the general ledger.

Normally you receive parts. It is rare to receive assys. If your are shipping parts to an outside manufacturer and receiving back assys, You should create work orders for the assys, use the Stockroom to issue the work orders but give the parts to the vendor along with a PO for his labor. When the vendor returns the assys, use the stockroom to receive back the work order and receive the PO. This way you are not receiving assys. However, If you are receiving are assys and you are not using Inventory Adjustment Method S, pc/MRP will ask if you wish to Increase the onhand quantity of the assys or convert parts to assys. Convert Parts to Assys will create stockroom issue records and one receive back assys record based on the BOM. It will decrement the parts and will take them negative if there are not enough on hand. If the items you are receiving are assys and the configuration option 47 allows you to do cost roll-ups, pc/MRP will ask if you wish to do a cost roll-up and or a sales price mark-up. Be aware that if you turn off option 47 this will also turn off the Inventory cost-roll-up option. pc/MRP Versions 8.70B and higher will not offer the Convert Parts to Assys if a NOCONVERTPARTSTOASSY.FLG file exits in the pc/MRP Directory

Configuration, Settings and Utilities, **Option 44** can be set to Prompt for the receiving area, Use the area specified in inventory, or Always use the area specified in Option 44.

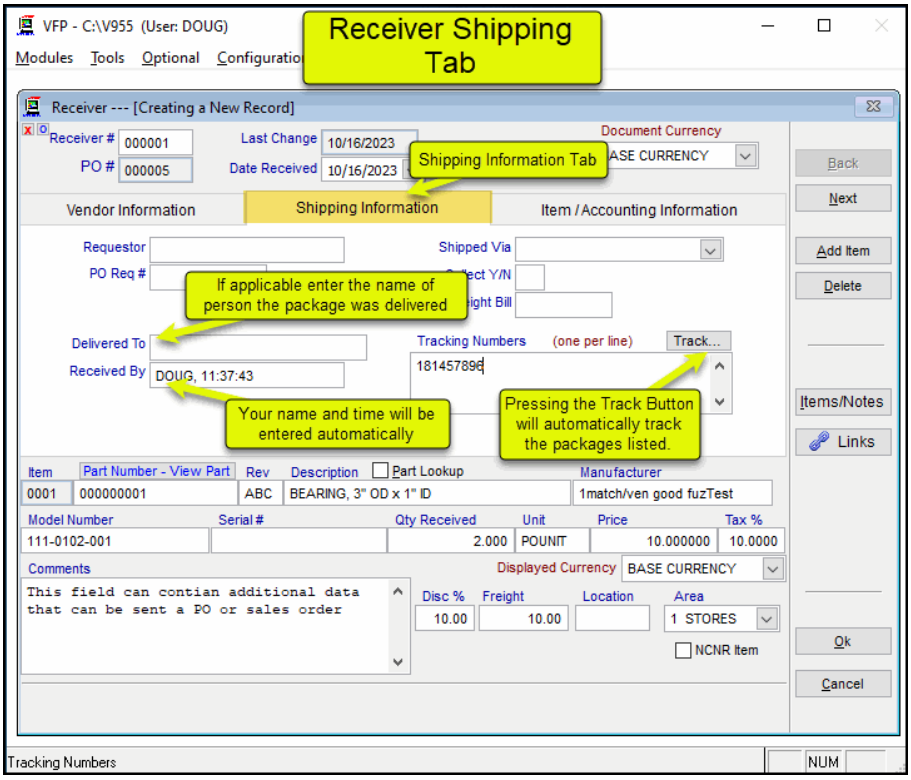



Select the PO, the line items you are receiving. If necessary, edit the quantities you are receiving to match the actual quantities you are receiving.

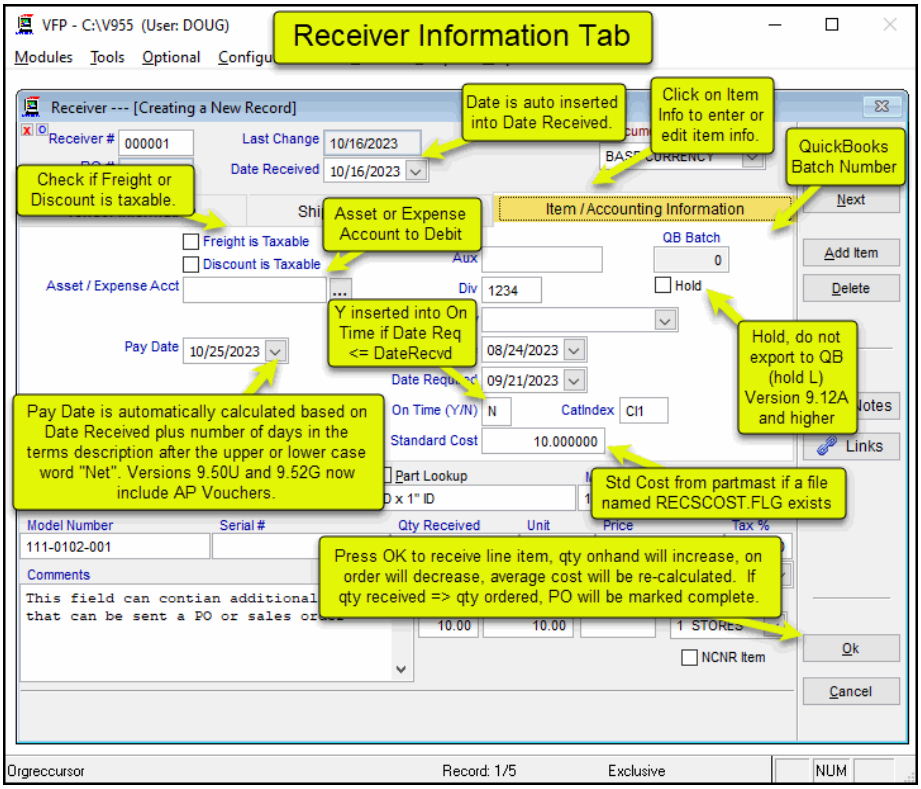


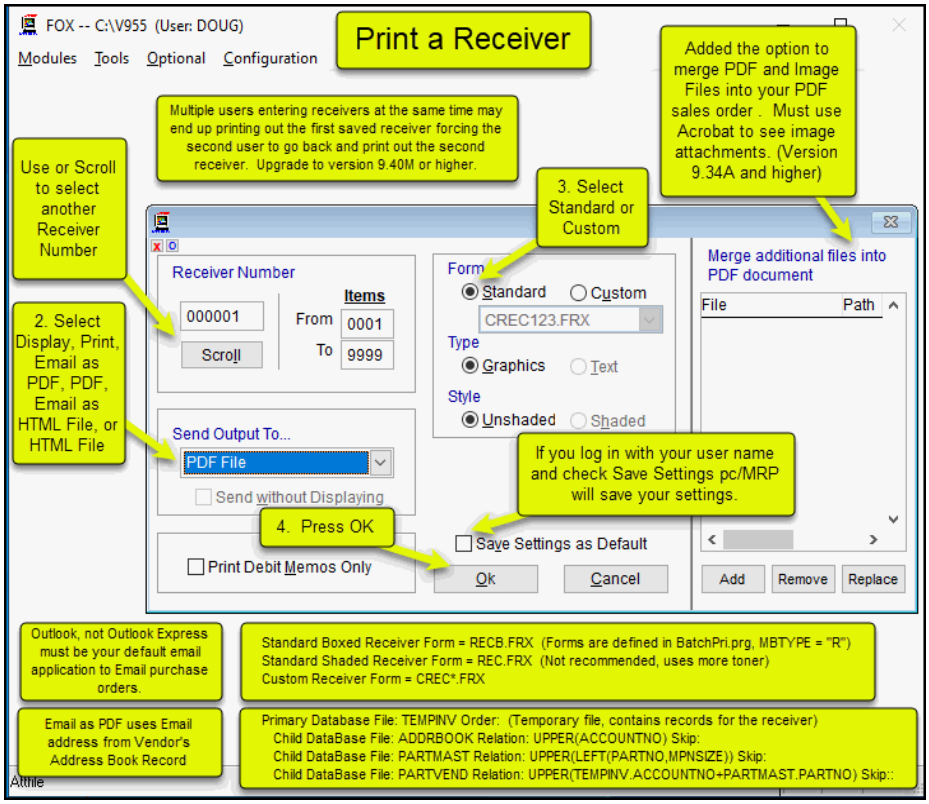

Examine the Receiver line items. If everything is OK, Press the OK Button.

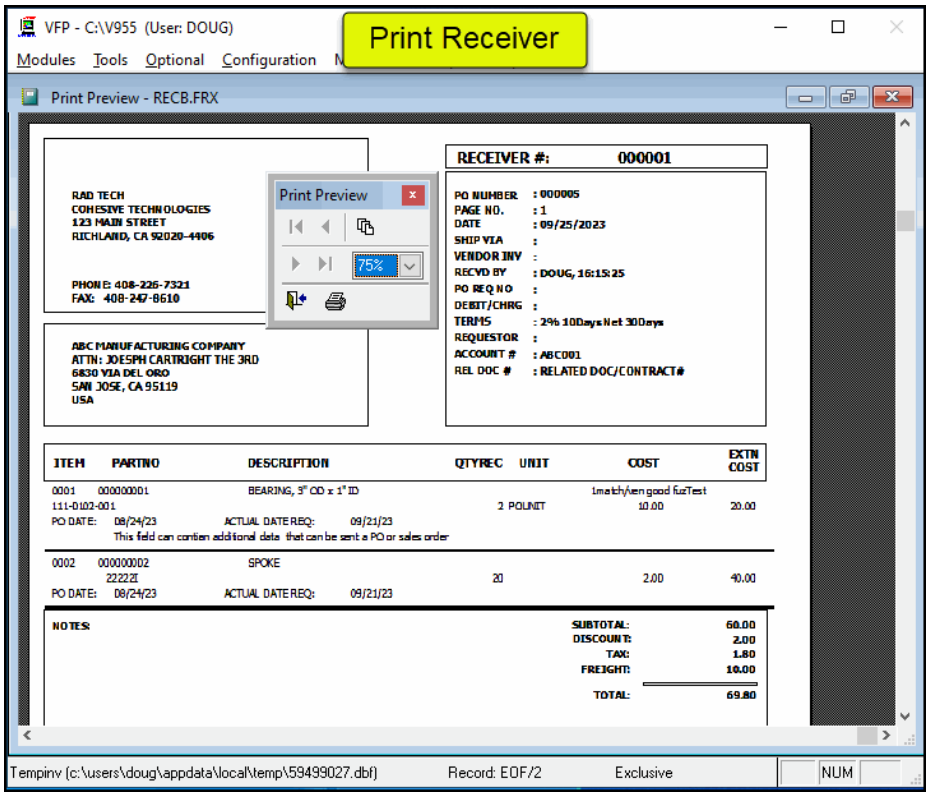
If you click on the Shipping Information Tab, pc/MRP will display the Shipping Information.




If you click on the Item Information Tab, pc/MRP will display the Item and Accounting Information.

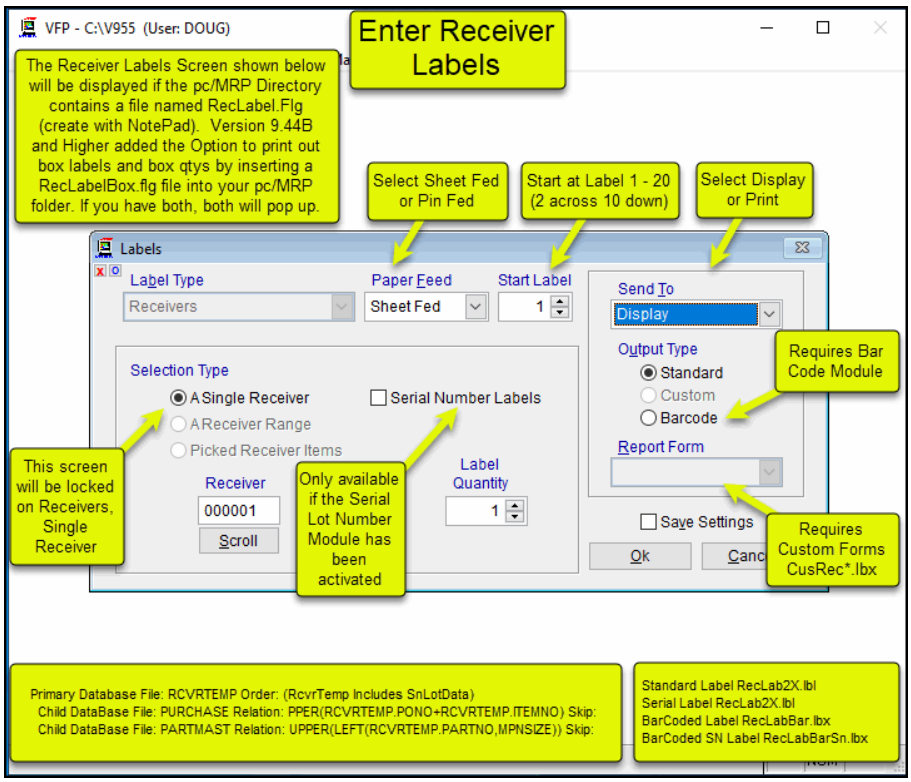


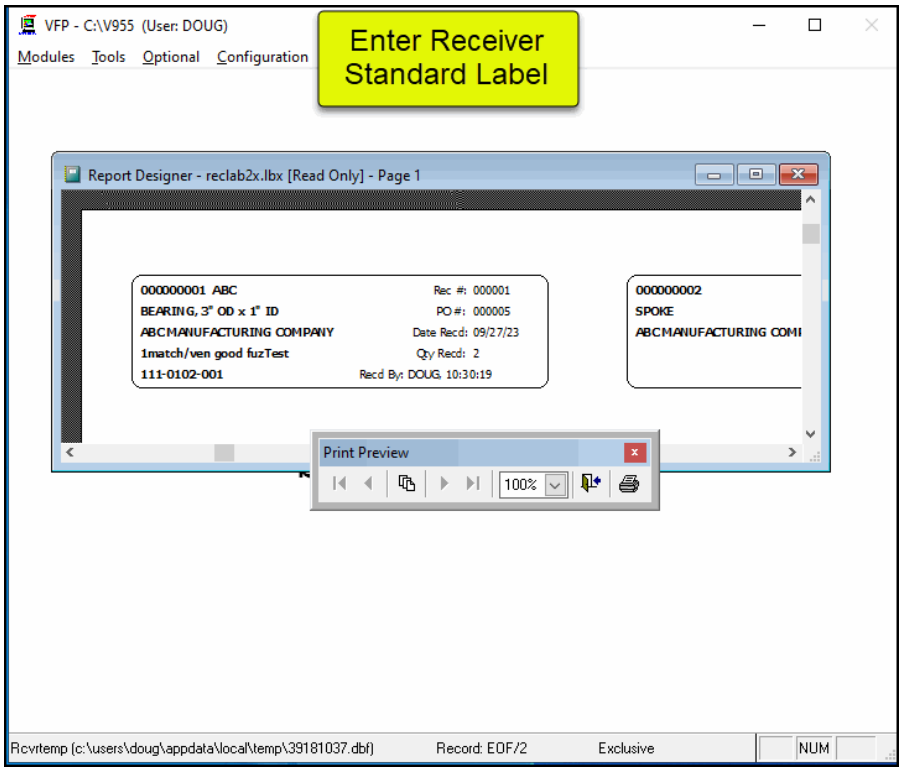


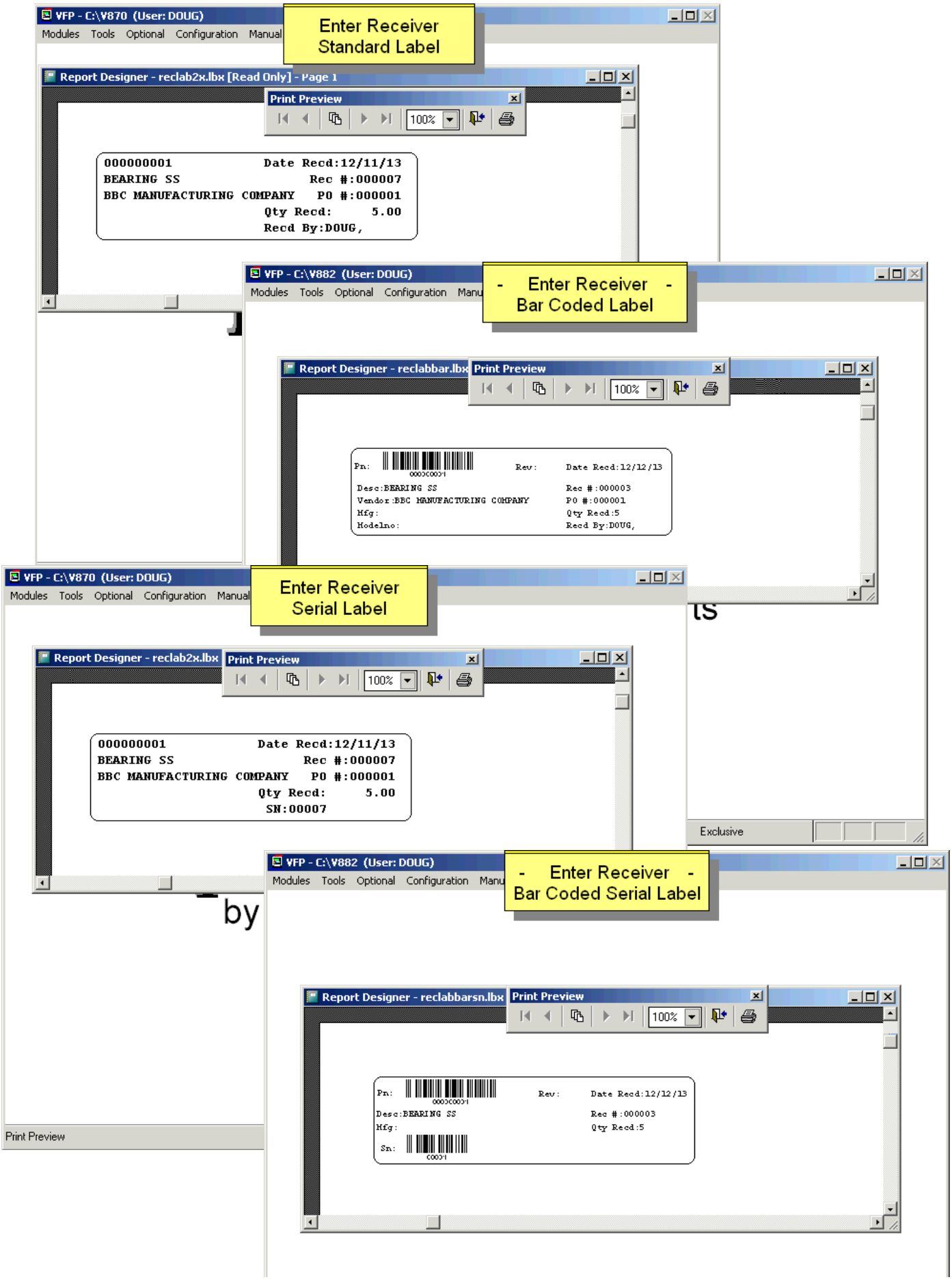

Print the Receiver, attach it to the packing list and send them to accounting. When accounting gets the vendor invoice, the accountant will check the vendor invoice against the receiver and packing list and if everything is OK accounting will enter the vendor invoice number into the receiver and then post the receiver.

If the pc/MRP contains a file named RecLablel.flg (create with Note Pad), the Receiver Labels Screen shown below will allow you to print out labels.



Users will be able to select from several types of labels (depending on what modules they have activated).



### 8.2.3 Additional Receiving Notes:

If Configuration, Settings and Utilities, **Option 8**, **Auto Accounting** is On for receivers, after all the line items have been received, pc/MRP will automatically debit and credit the general ledger. The newly entered GL transaction will be displayed for edit before it is saved. A "Y" will be inserted into the receiver's Posted field.

Software Arts recommends setting auto accounting OFF so that receiver mistakes are not automatically entered into the General Ledger.

If **Auto Accounting** is Off for receivers, the accountant should go into Accounting and enter a new I type transaction to debit and credit the general ledger. A "Y" will be inserted into the receiver's Posted field. When Accounting enters an E type transaction (Prints a Check) a "Y" will be inserted into the receiver's Complete field and the Amount Paid field will be increased by the amount paid.

If the freight or discount is taxable, check the **Freight is Taxable** and/or **Discount is Taxable** checkboxes.

If a file named **RECSCOST.FLG** exists, pc/MRP will insert the Standard Cost from the partmaster into the receiver's Standard Cost field when you enter a receiver. If the flag file does not exist, pc/MRP will insert $0.00 into the receiver Standard Cost field.

pc/MRP will debit **Debit/Charge Number** when accounting performs an I type accounting transaction (register an accounts payable invoice) for this receiver.

The **Pay Date** is automatically calculated from the number following the word "NET" or "Net" in the Terms field (as the Terms value is being carried over from the PO). Otherwise it is blank.

The current date is automatically inserted into the **Date Received** field. The Date Received field is used by pc/MRP's Accounting Module in aging the Accounts Receivables records. It is also the date used to determine which of the receiving records to delete with the "Delete all receiving records over X years old" function. pc/MRP will automatically fill out the **On Time** field according to your settings in **Option 85**.

Once the new receiving record has been entered, pc/MRP will update the Quantity Received, Date Received, On Time delivery, and Complete fields in the purchasing record. It will automatically increase the quantity on hand and decrease the quantity on order in Inventory, provided pc/MRP has been configured to do so (Configuration, Settings and Utilities **Option 4** set to A). If a receiver is over received pc/MRP will decrement the quantity on order in inventory but it will not take the onorder quantity negative.

The **Aux** field is a 20-character field for your use and can be reported on as "All for an Aux value".

If checked, the **Hold** field (hold L(1) will prevent the entire receiver from being exported to QuickBooks.

Part Number, Description, Manufacturer, Model Number, Vendor, Address, Order Quantity, Unit, Cost, Terms, Account Number, Trade Discount, Tax Rate, Div, and Freight are entered automatically from the PO and can be written over if no longer correct.

If Configuration Settings and Utilities **Option 16** is set to Enable Dynamic Stock Locations, pc/MRP will allow you to assign a new stock **Location** for a part number if there are none in stock in that area. The inventory will be updated with the location information.

Click on the **Part Number label** to see data from Inventory for this part.

**Quantity Received** can be edited if necessary (partial receiving). If a file named **SHORTREC.FLG** exists in the PCMRPW folder and you receive a partial quantity, pc/MRP will offer to…

- place the remaining quantity on backorder (this is the default action, without the flag file)
- close this PO item even though it is short

- re-enter the receiver for this item.

The **Comments** field can be used to store additional information such as weight, number of packages, etc.
The **Related Document** field is a 23 character scrollable field. It can be used to enter a related contract number, serial number, sales order number, etc. It will be carried over from the PO, if filled in.

**Vendor Invoice Number**, and **Freight** are usually entered by accounting when the vendor sends his invoice (Accounting will inspect and edit the receiver).

**Note:** The **Receiver Boiler Plate** is created in the Configuration, Settings & Utilities, **Option 22** and cannot be edited in the receiver data entry screen. Also, the Purchase Order Boiler Plate does NOT transfer into the Receiver Boiler Plate print area (receiver 'Notes:' area).

The **Received By** field is automatically populated by the user name and time.

If the freight charge is invoiced separately, enter the freight invoice number in the **Freight Bill** Number field.

Freight Bill Number, **Collect,** and **Delivered To,** will give your Receiving Logs valuable information.

The total amount for the **Freight**, if known, can be entered once in one line item in the freight field or entered individually for all line items. The freight totals for all line items will be totaled and printed out on the forms and reports.

When you click the **Track** Button, pc/MRP will track the package. pc/MRP will first look to the **Shipped Via** box to see which shipping vendor (UPS, FedEx, DHL, Postal Service, TNT) to track. If the Ship Via is blank or you used multiple vendors pc/MRP will see if the tracking number is proceeded by UPS:, FEDEX:, DHL:, or TNT: to see which shipping vendor to track. If all of the above is blank, pc/MRP will prompt you to select a shipping vendor.

If the freight or discount is taxable, check the **Freight is Taxable** and/or **Discount is Taxable** checkboxes.

If a file named **RECSCOST.FLG** exists, pc/MRP will insert the Standard Cost from the partmaster into the receiver's Standard Cost field when you enter a receiver. If the flag file does not exist, pc/MRP will insert $0.00 into the receiver Standard Cost field.

pc/MRP will debit **Debit/Charge Number** when accounting performs an I type accounting transaction (register an accounts payable invoice) for this receiver.

The **Pay Date** is automatically calculated from the number following the word "NET" or "Net" in the Terms field (as the Terms value is being carried over from the PO). Otherwise it is blank.

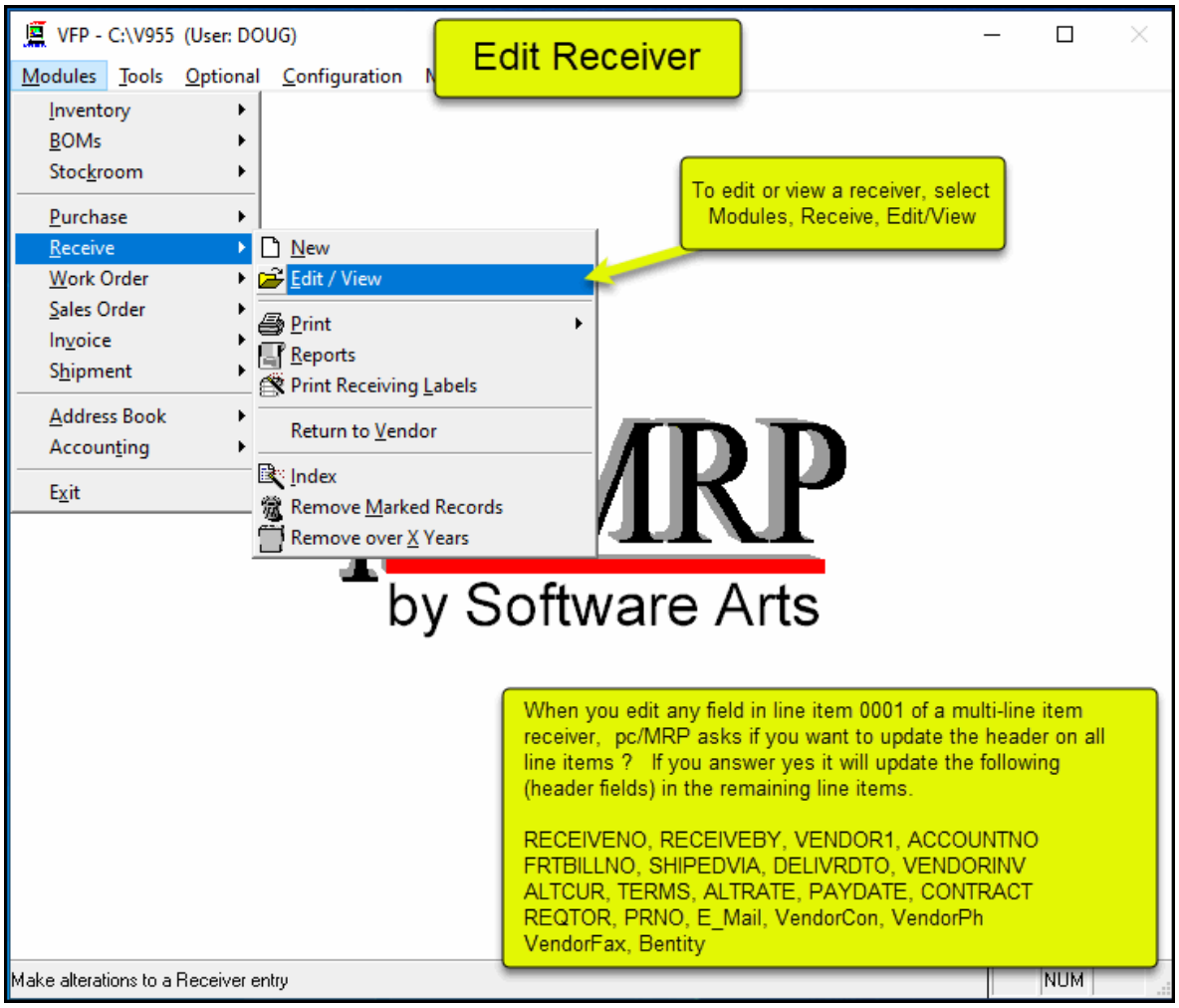
The current date is automatically inserted into the **Date Received** field. The Date Received field is used by pc/MRP's Accounting Module in aging the Accounts Receivables records. It is also the date used to determine which of the receiving records to delete with the "Delete all receiving records over X years old" function. pc/MRP will automatically fill out the **On Time** field according to your settings in **Option 85**.

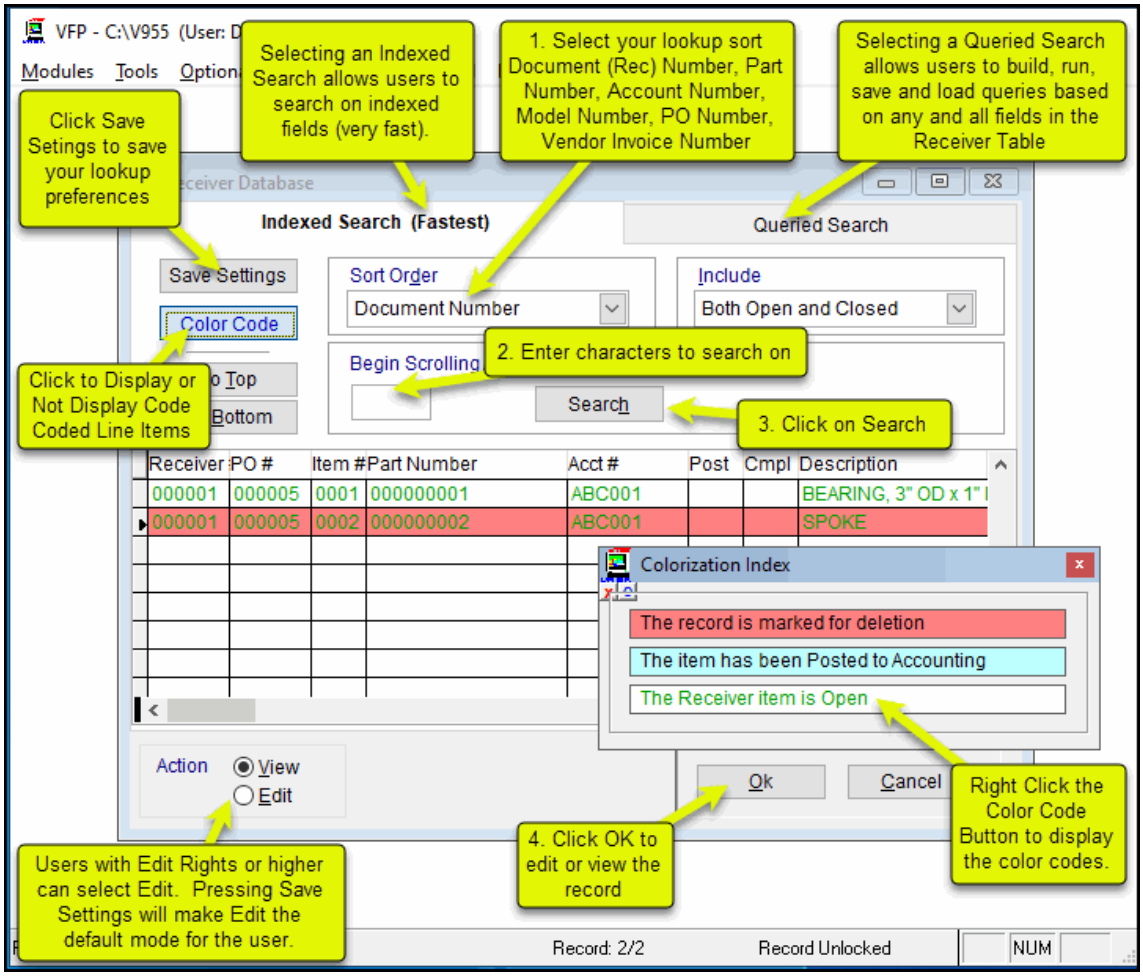
### 8.2.4 Entering Complex Receivers

Entering more complex receivers, such as receivers that contain assemblies, require serial lot numbers, require Inspections, Debit Memos and Accounts Payable Vouchers are covered in the following Slide Show:
https://pcmrp.com/mrp101/rec955overview.htm

### 8.3.1 Edit/Delete Receiver

This option allows users to scroll, edit, delete, undelete, or run queries against Receiver records. Select Receive, Edit/View.





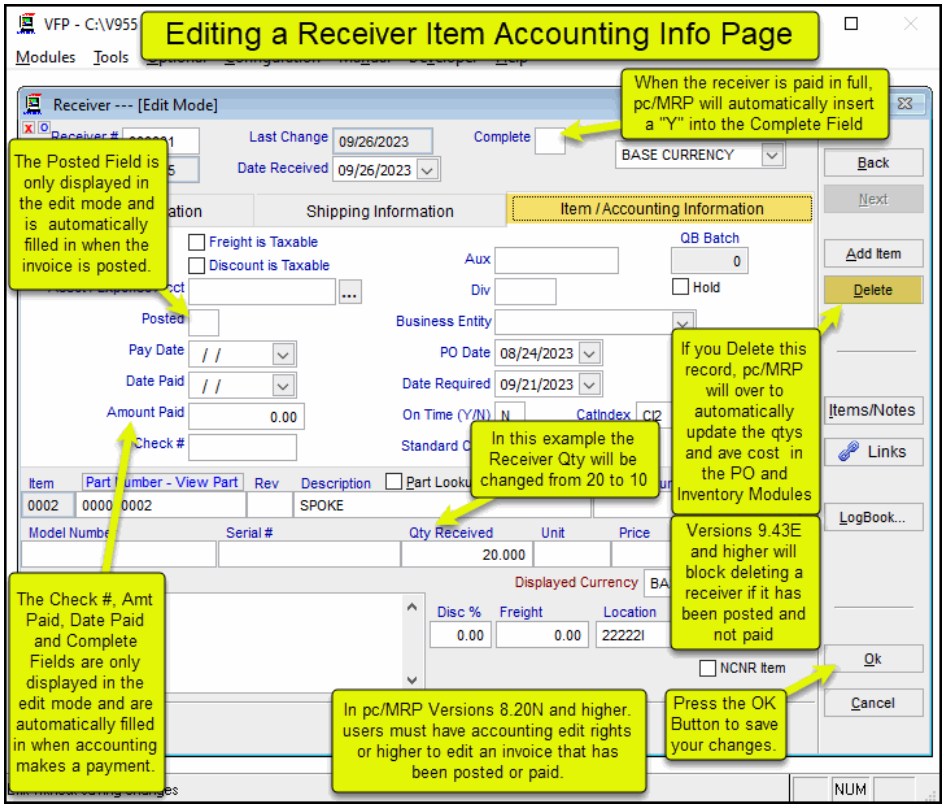

Selecting an **Indexed Search** allows users to search on indexed fields. This allows pc/MRP to find the information much faster. To perform an **Indexed Search** select the:

- **Indexed Search** tab
- Desired **Sort Order**
- Desired **Include** information: Open, Closed, Both Open and Closed
- Enter the applicable data in the **Begin Scrolling At**: field (i.e. the beginning of a vendor ID)
- Press **Search**
- Select the desired Action: **View** or **Edit**

pc/MRP will automatically scroll to the desired record or the nearest match (as selected). Select the desired record by scrolling and press **Ok** to proceed to the edit screen for that record.

Selecting to run a **Queried Search** allows users to build, run, save, and load queries for the Receiver table. For further details, see Chapter 15.14.1.

Every field in the receiver table is editable. There are several key concepts users must understand before editing.




If pc/MRP detects a QB batch number or an accounting transaction, it will display the transaction numbers that need to be edited (to match the edited receiver).

To add an additional item to an existing receiver, do not use the edit module. Instead, use the "Enter new receiver" option. After entering the new receiver and saving it, edit the receiver number to match the previously entered receiver and edit the line item number to match the next line item in sequence.

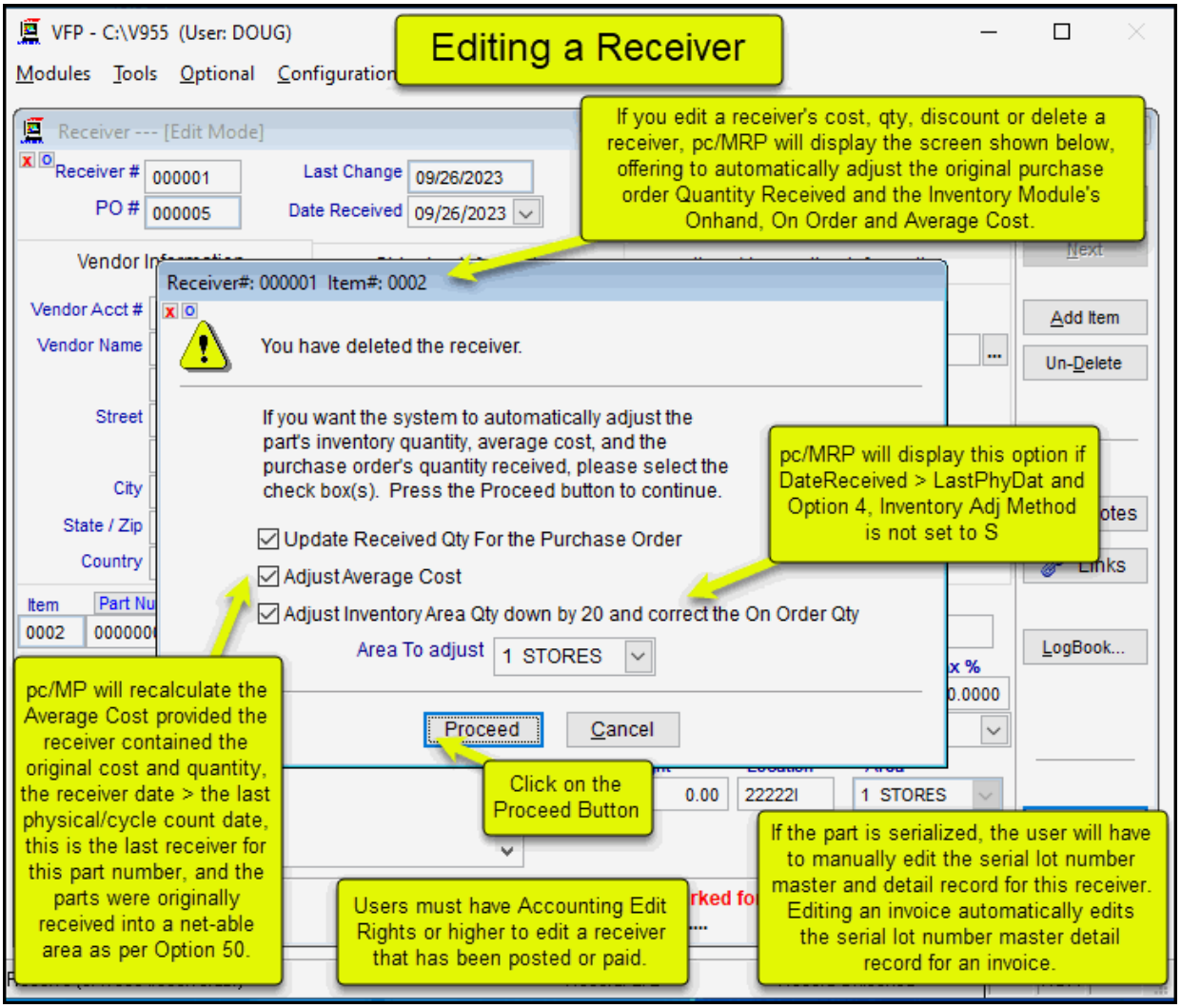
The **Complete, Amount Paid, and Check Number Fields** are displayed only in the edit mode and are filled in automatically when Accounting records a payment towards this debt. The Amount Paid field contains the accumulative amount paid. pc/MRP uses the Complete field to determine if a record is open or closed. A "Y" in the Complete field marks the record as closed. An "N" in the Complete Field marks the record as open. These fields should not be manually edited unless the user specifically wants to change the receiver status, amount paid, or check number. Edits made here do not automatically edit the General Ledger. If users are using pc/MRP Accounting, they must also manually edit the General Ledger.

The **Posted** field is displayed only in the edit mode and is filled in automatically with a Y when accounting enters the initial general ledger I (accounts payable) transaction.

Use the delete button to mark a record for deletion. To permanently remove the records from the database table, set an administrative lockout, and then select Receiver, Remove Marked Records.

Users must have Accounting Edit rights or higher to edit a receiver that has been posted or paid (if the Advanced Password Module is activated).

**Note:** In versions below **9.12F** and **9.20**, if the user opened a Receiver record and then clicked Ok without actually changing anything, then the LASTCHANGE field (not displayed on the Edit/View screen) changed to the current date. If the Optional Audit Trail module was activated then the change of the LASTCHANGE field was recorded.




If a user edits or deletes a receiver, pc/MRP will allow the option to automatically adjust:

- If the user edits the receiver quantity, pc/MRP will offer to Update the Purchase Order's quantity received and the Inventory On Order and Area Quantity, provided:
  The Receiver's Date is later than the last Physical Inventory Date for that part number.

- If the user edits a receiver's cost, quantity, or discount, pc/MRP will offer to re-calculate the weighted average cost for that part number provided:
  The receiver's qty cost or discount or deleted or undeleted was adjusted and
  The receiver's original ave cost >= 0 and
  The part's original inventory qty >= 0 and
  The receiver is the last receiver for that part number and
  The receiver's date is a later date than the last physical inventory date and
  The receiver's cost >= 0 and
  The received qty > 0

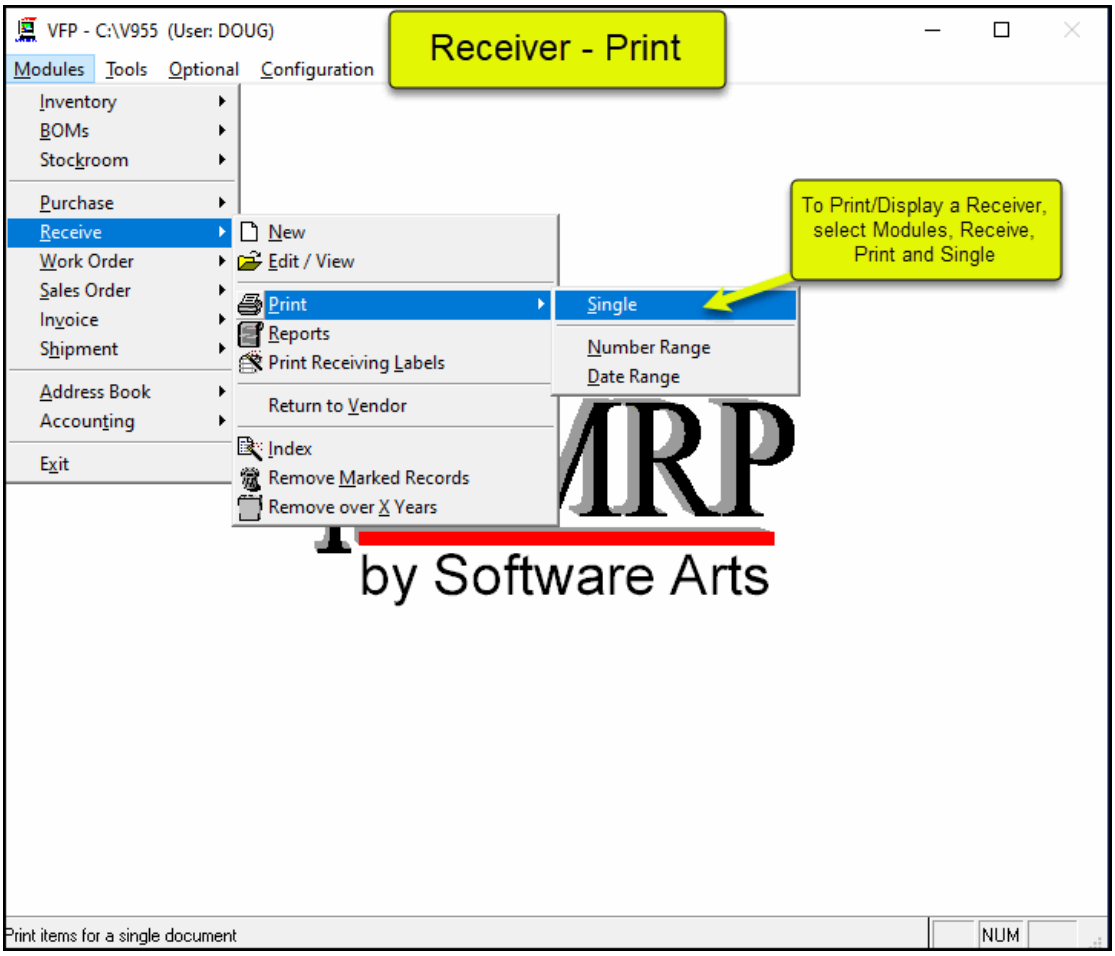
If the part is serialized, the user will need to adjust the serial/lot master and detail records manually.

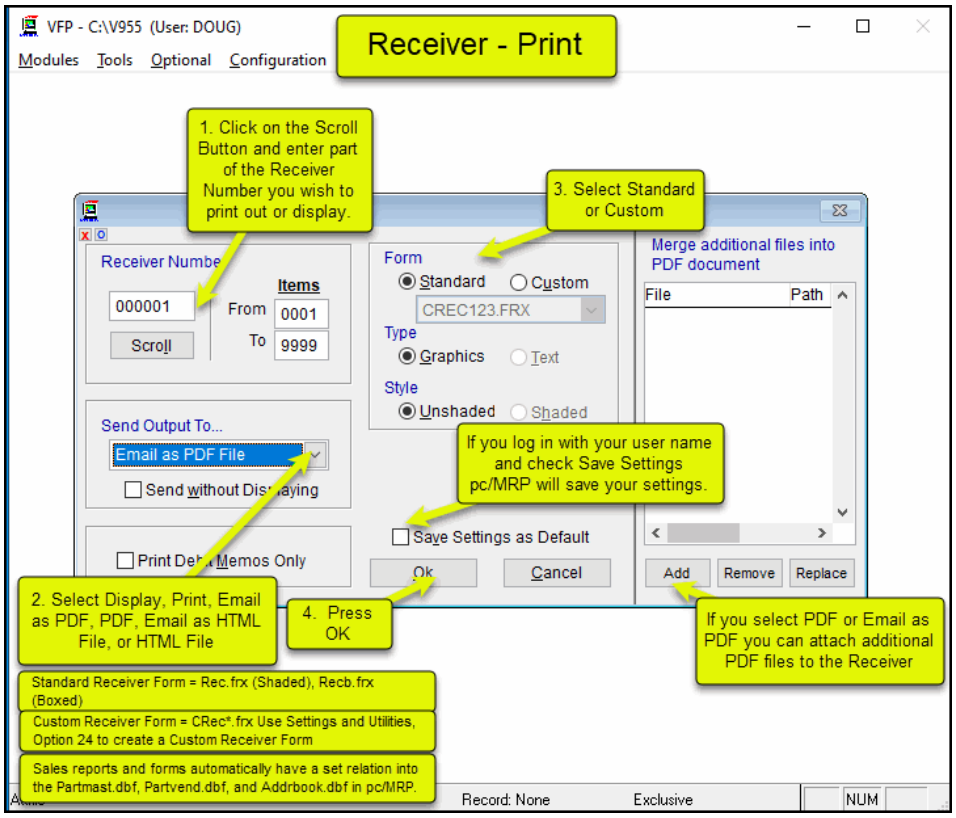
If any of these conditions is not met, pc/MRP will NOT re-calculate the weighted average.

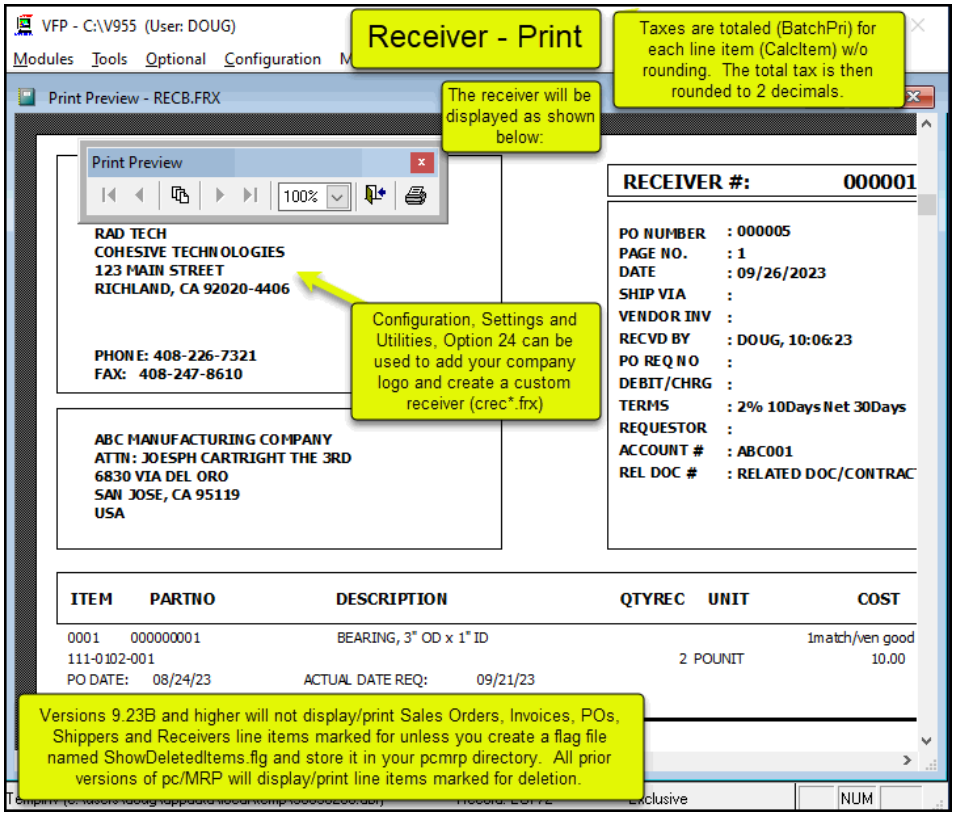
### 8.3.2 Print/Email Receivers

This option will print, display, PDF, or send the receiver to email. Furthermore, if the flag file **DMMAILLB.FLG** exists, an address label for the vendor on that receiver will automatically be created from the CUSTARD*.LBX or the CUSARD*.LBX.

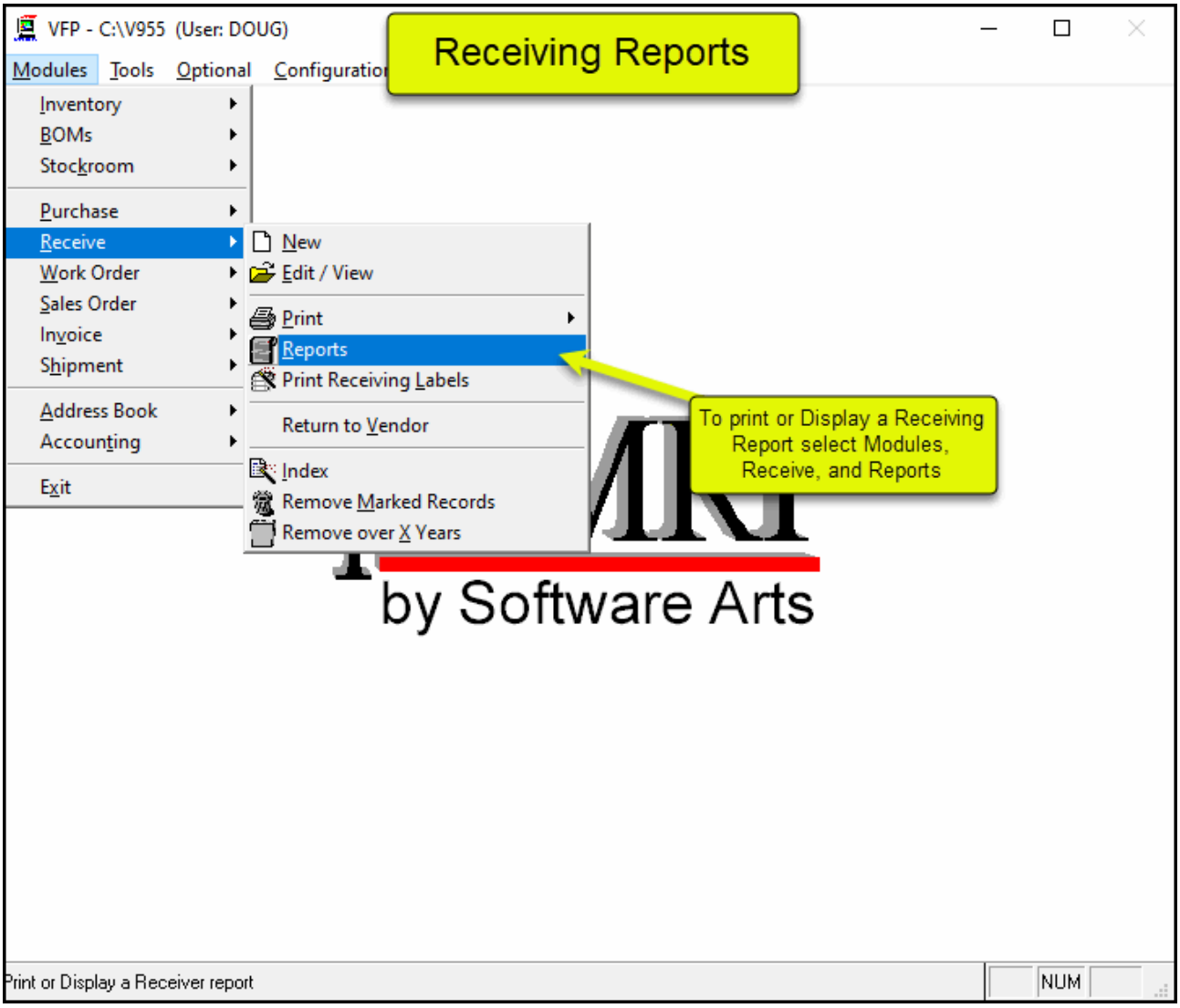
If you send an e-mail directly from pc/MRP, use MS Outlook. The e-mail address in MS Outlook will automatically be populated from the e-mail entry in the pc/MRP Address Book. If you create a PDF document, you can save this document and attach it to an e-mail created in your existing e-mail program.




VFP - C:\V955 (User: DOUG)
Modules Tools Optional Configuration
Receiver - Print
1. Click on the Scroll Button and enter part of the Receiver Number you wish to print out or display.
3. Select Standard or Custom
Receiver Numbe
000001
Scroll
Items
From 0001
To 9999
Form
Standard Custom
CREC123.FRX
Type
Graphics Text
Style
Unshaded Shaded
Merge additional files into PDF document
File Path
Send Output To...
Email as PDF File
Send without Displaying
Print Debit Memos Only
If you log in with your user name and check Save Settings pc/MRP will save your settings.
Save Settings as Default
Ok
Cancel
Add
Remove
Replace
2. Select Display, Print, Email as PDF, PDF, Email as HTML File, or HTML File
4. Press OK
If you select PDF or Email as PDF you can attach additional PDF files to the Receiver
Standard Receiver Form = Rec.frx (Shaded), Recb.frx (Boxed)
Custom Receiver Form = CRec*.frx Use Settings and Utilities, Option 24 to create a Custom Receiver Form
Sales reports and forms automatically have a set relation into the Partmast.dbf, Partvend.dbf, and Addrbook.dbf in pc/MRP.
Record: None
Exclusive
NUM

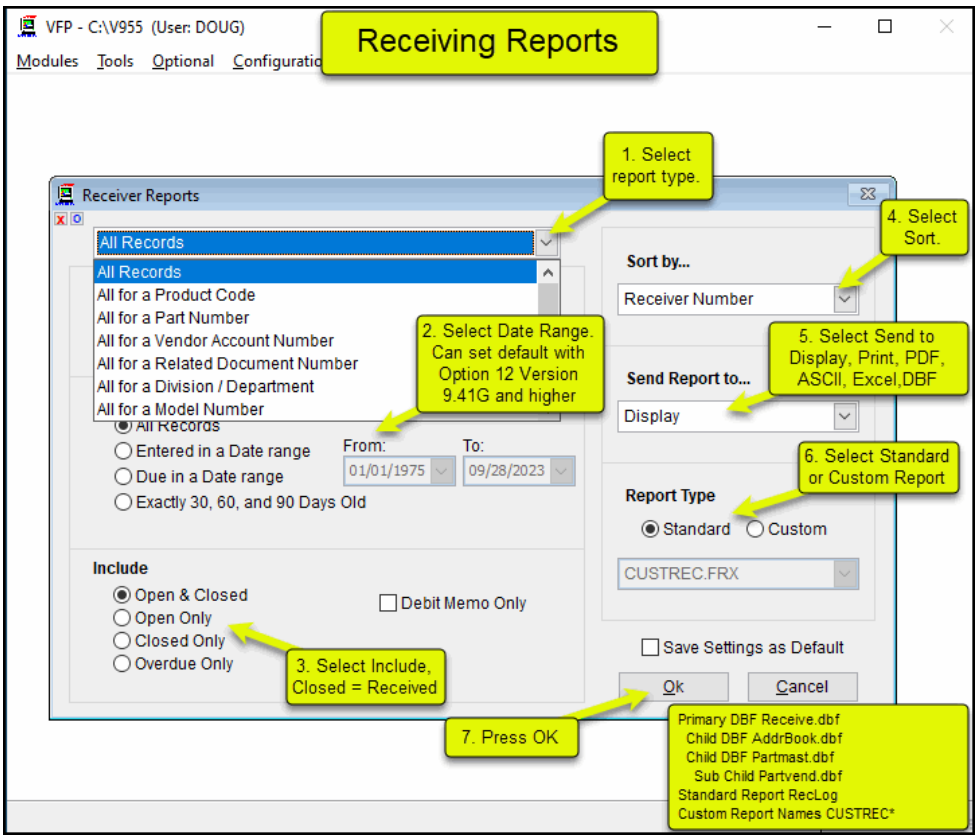

VFP - C:\V955 (User: DOUG)
Modules Tools Optional Configuration
Receiver - Print
Taxes are totaled (BatchPri) for each line item (CalcItem) w/o rounding. The total tax is then rounded to 2 decimals.
Print Preview - RECB.FRX
The receiver will be displayed as shown below:
Print Preview
100%
RECEIVER #: 000001
RAD TECH
COHESIVE TECHNOLOGIES
123 MAIN STREET
RICHLAND, CA 92020-4406
PHONE: 408-226-7321
FAX: 408-247-8610
PO NUMBER : 000005
PAGE NO. : 1
DATE : 09/26/2023
SHIP VIA :
VENDOR INV :
RECVD BY : DOUG, 10:06:23
PO REQ NO :
DEBIT/CHRG :
TERMS : 2% 10Days Net 30Days
REQUESTOR :
ACCOUNT # : ABC001
REL DOC # : RELATED DOC/CONTRAC
Configuration, Settings and Utilities, Option 24 can be used to add your company logo and create a custom receiver (crec*.frx)
ABC MANUFACTURING COMPANY
ATTN: JOESPH CARTRIGHT THE 3RD
6830 VIA DEL ORO
SAN JOSE, CA 95119
USA
ITEM PARTNO DESCRIPTION QTYREC UNIT COST
0001 000000001 BEARING, 3" OD x 1" ID 1match/ven good
111-0102-001 2 POUNIT 10.00
PO DATE: 08/24/23 ACTUAL DATE REQ: 09/21/23
Versions 9.23B and higher will not display/print Sales Orders, Invoices, POs, Shippers and Receivers line items marked for unless you create a flag file named ShowDeletedItems.flg and store it in your pcmrp directory. All prior versions of pc/MRP will display/print line items marked for deletion.
Exclusive
NUM

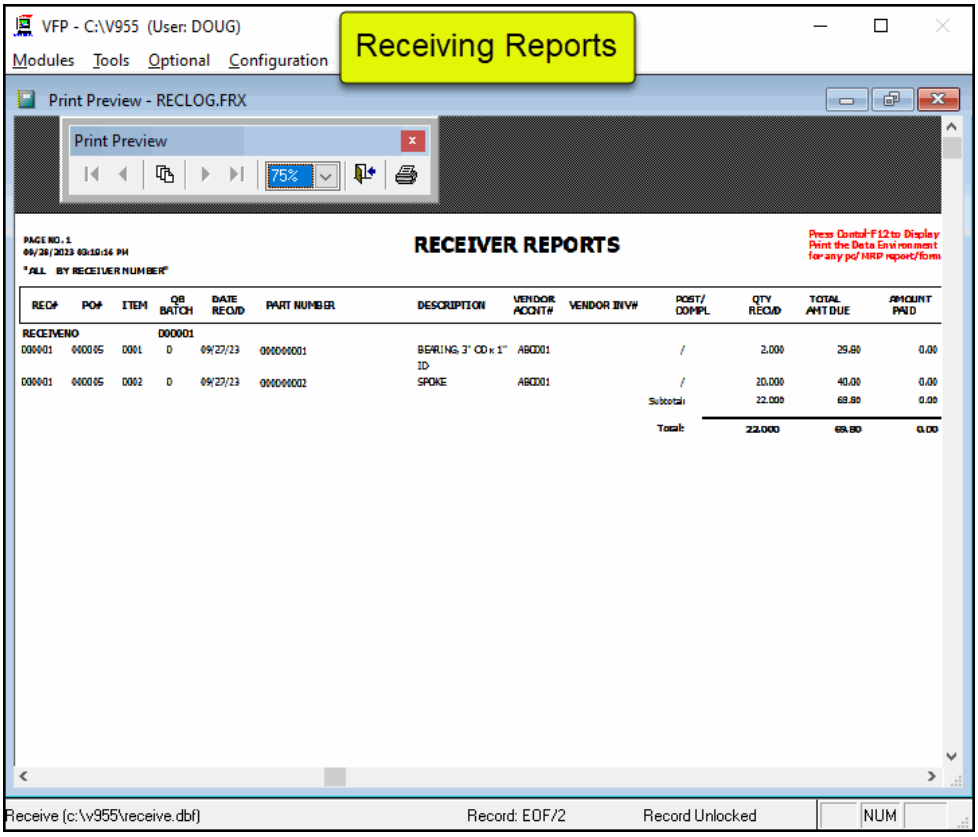
### 8.4 Receiver Reports




Select Modules, Receive and Reports to print out or display standard receiver reports (reclog.frx) and custom receiver reports (csustrec.frx). See Section 15.4.1 for instructions on creating custom receiver reports.

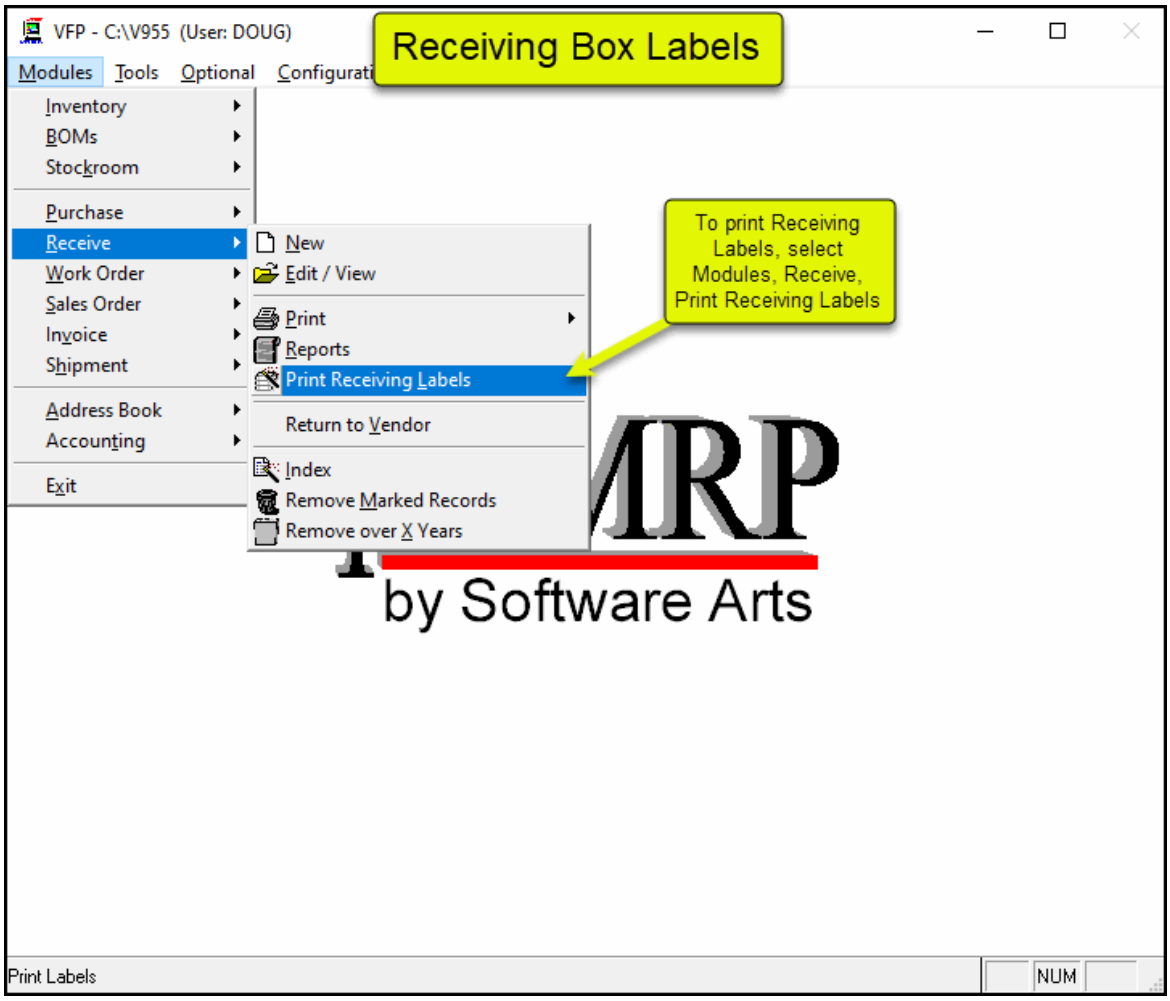
The reports can be displayed, printed, or sent to a file (PDF, ASCII, XLS, DBF). If the report is sent to Excel, the rows will be filtered but all of the fields will be included.

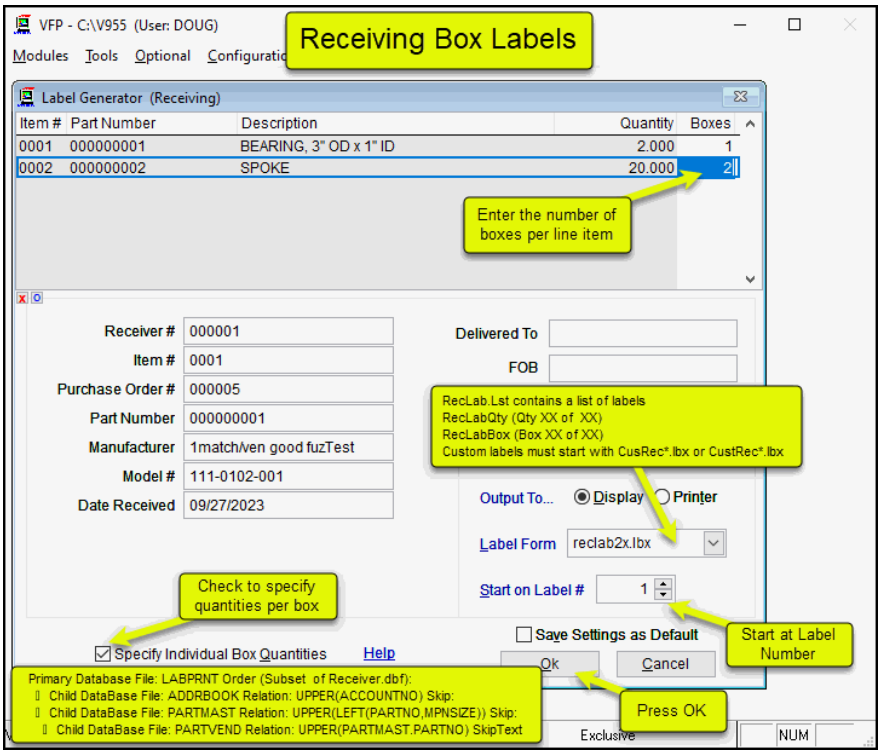

VFP - C:\V955 (User: DOUG)
Modules Tools Optional Configuratio
Receiving Reports
Receiver Reports
All Records
All Records
All for a Product Code
All for a Part Number
All for a Vendor Account Number
All for a Related Document Number
All for a Division / Department
All for a Model Number
All Records
Entered in a Date range
Due in a Date range
Exactly 30, 60, and 90 Days Old
From:
01/01/1975
To:
09/28/2023
Include
Open & Closed
Open Only
Closed Only
Overdue Only
Debit Memo Only
Sort by...
Receiver Number
Send Report to...
Display
Report Type
Standard
Custom
CUSTREC.FRX
Save Settings as Default
Ok
Cancel
1. Select report type.
2. Select Date Range. Can set default with Option 12 Version 9.41G and higher
3. Select Include, Closed = Received
4. Select Sort.
5. Select Send to Display, Print, PDF, ASCII, Excel,DBF
6. Select Standard or Custom Report
7. Press OK
Primary DBF Receive.dbf
Child DBF AddrBook.dbf
Child DBF Partmast.dbf
Sub Child Partvend.dbf
Standard Report RecLog
Custom Report Names CUSTREC*

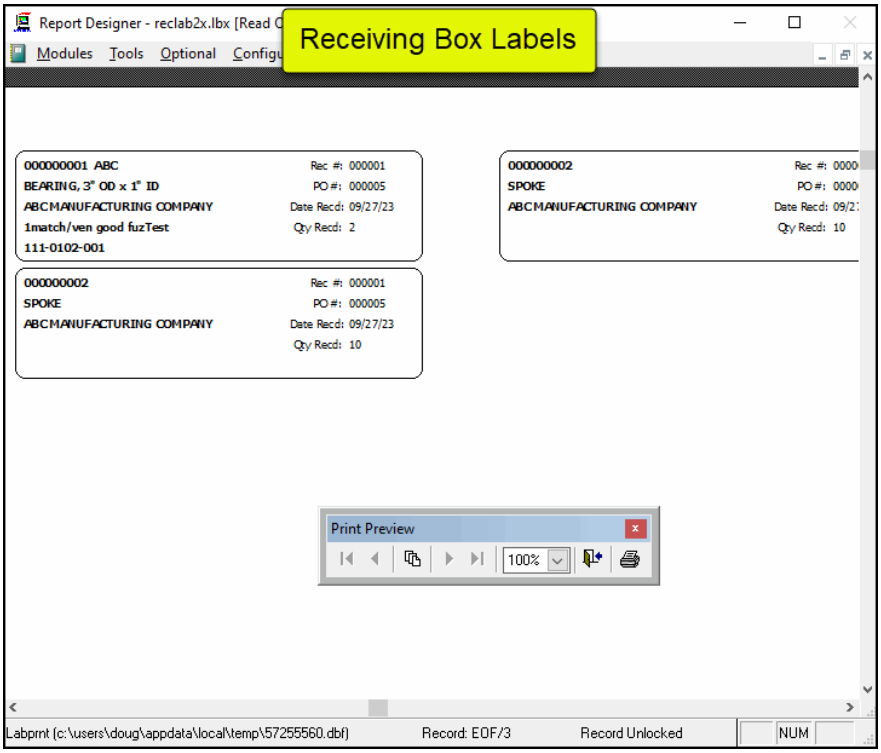

VFP - C:\V955 (User: DOUG)
Modules Tools Optional Configuration
Receiving Reports
Print Preview - RECLOG.FRX
Print Preview
75%
RECEIVER REPORTS
Press Control-F12 to Display Print the Data Environment for any po/MRP report/form
PAGE NO. 1
09/28/2023 03:19:56 PM
*ALL BY RECEIVER NUMBER*
REC# PO# ITEM QB BATCH DATE RECVD PART NUMBER DESCRIPTION VENDOR ACCNT# VENDOR INV# POST/ COMPL QTY RECVD TOTAL AMT DUE AMOUNT PAID
RECEIVENO 000001
000001 000005 0001 0 09/27/23 000000001 BEARING, 3" OD x 1" ID ABCD01 / 2.000 29.80 0.00
000001 000005 0002 0 09/27/23 000000002 SPOKE ABCD01 / 20.000 40.00 0.00
Subtotal: 22.000 69.80 0.00
Total: 22.000 69.80 0.00
Receive (c:\v955\receive.dbf)
Record: EOF/2
Record Unlocked
NUM

### 8.5 Receiving Printing Box Labels

Select Modules, Receiving, Print Labels to print box labels for receivers as shown below:





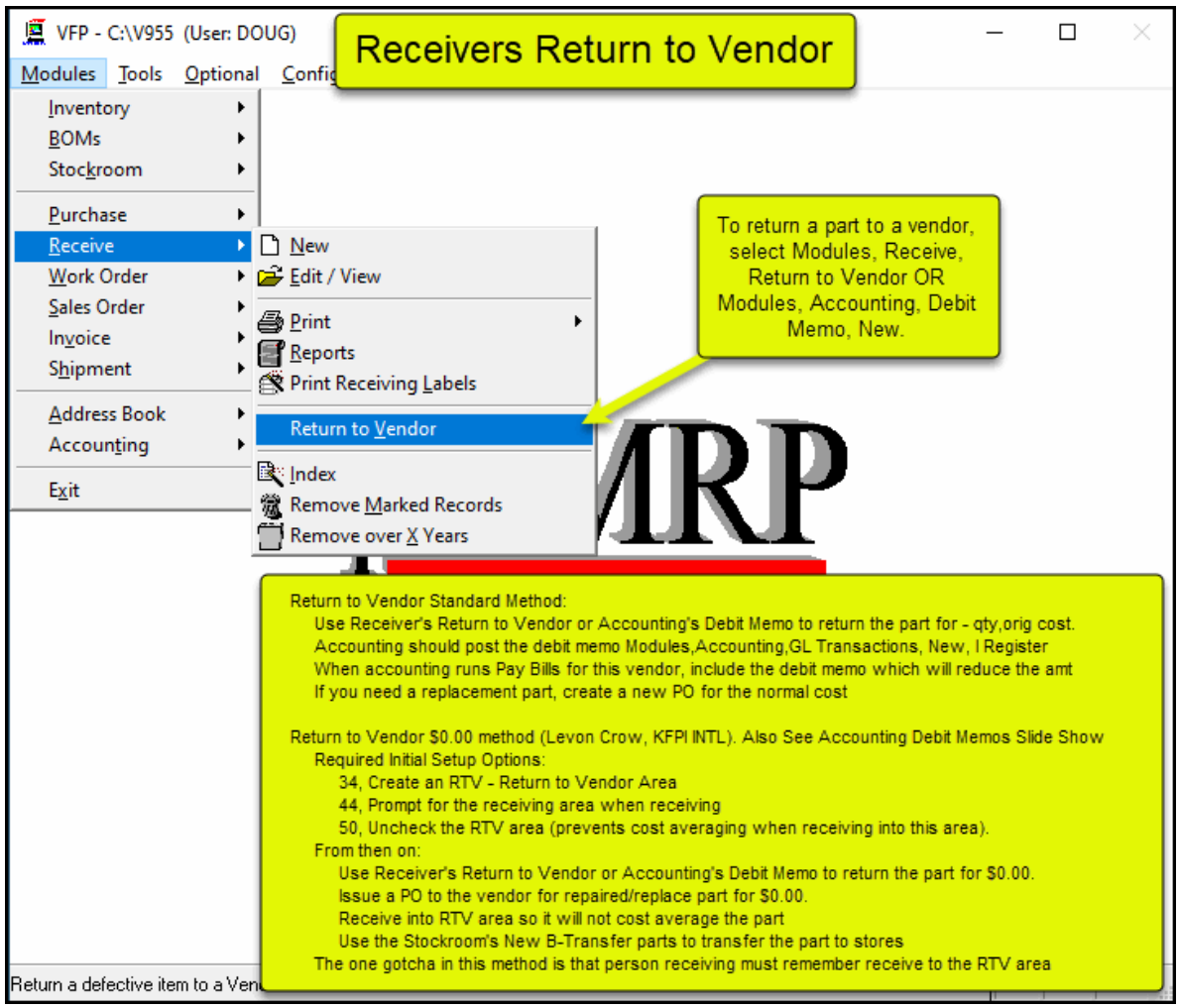




Configuration, Settings & Utilities, Option 24 can be used to create custom labels (CUSTREC*.LBX see Section 15.4.3).

Use Notepad to add the label filename to the list found in the file **RECLAB.LST** which resides in the pcmrpw directory.

To automatically print labels for the items just received, see Section 8.2.1 above.

**8.6 Receivers Return to Vendor**




Study pc/MRP Debit Memo Slide Show for step by step instructions (Slides 1-17):
https://pcmrp.com/mrp101/deb955start.htm
.

**8.7 Queried Search Overview (see 15.14.1)**

**8.8 Indexed Searches (see 15.14.2)**

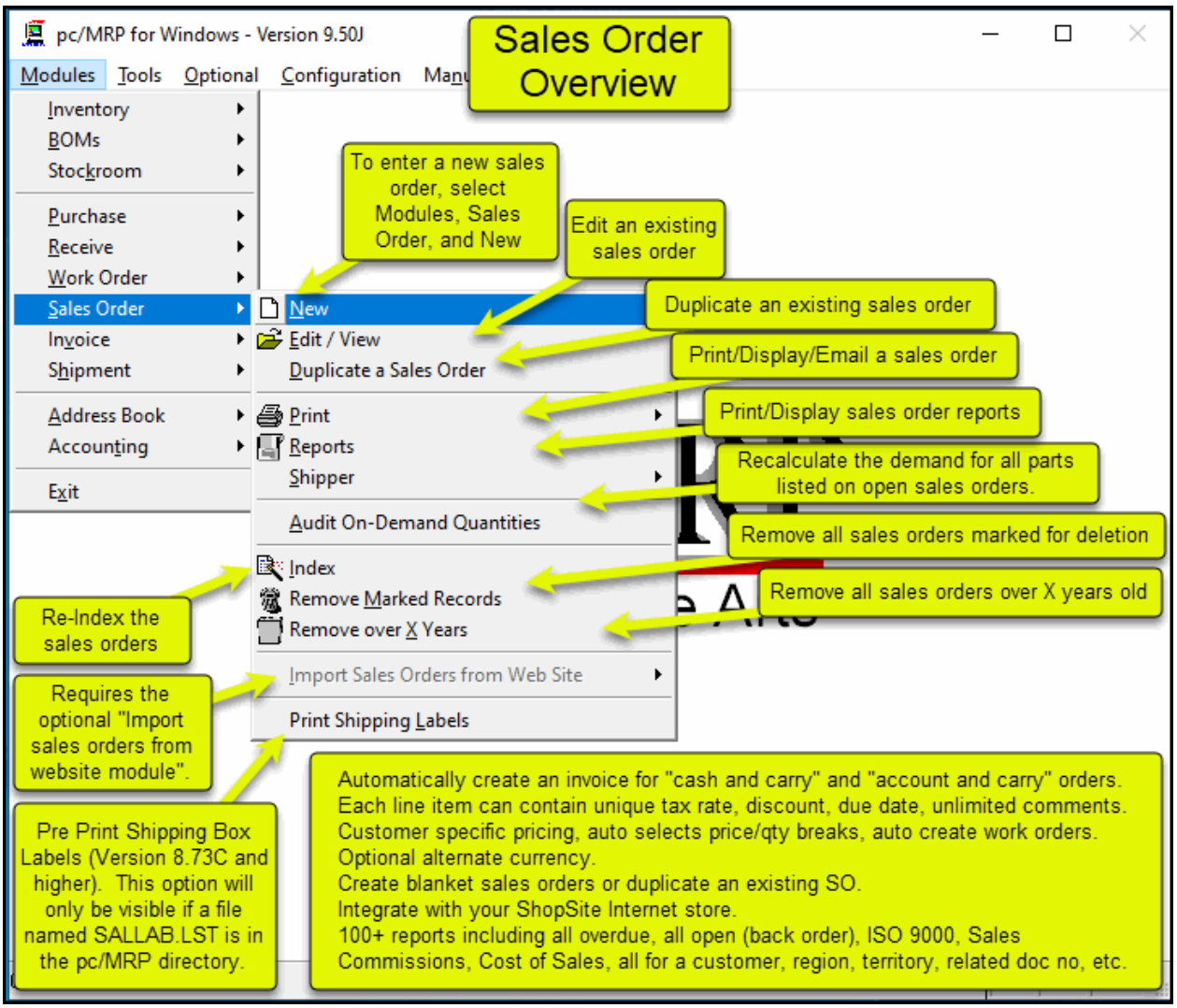
**8.9 Index (see 15.14.3)**

**8.10 Remove Marked Records (see 15.14.4)**

**8.11 Remove Over X Years (see 15.14.5)**

# 9 Sales Order (Order Entry)

## 9.1 Overview. Enter a New Sales Order

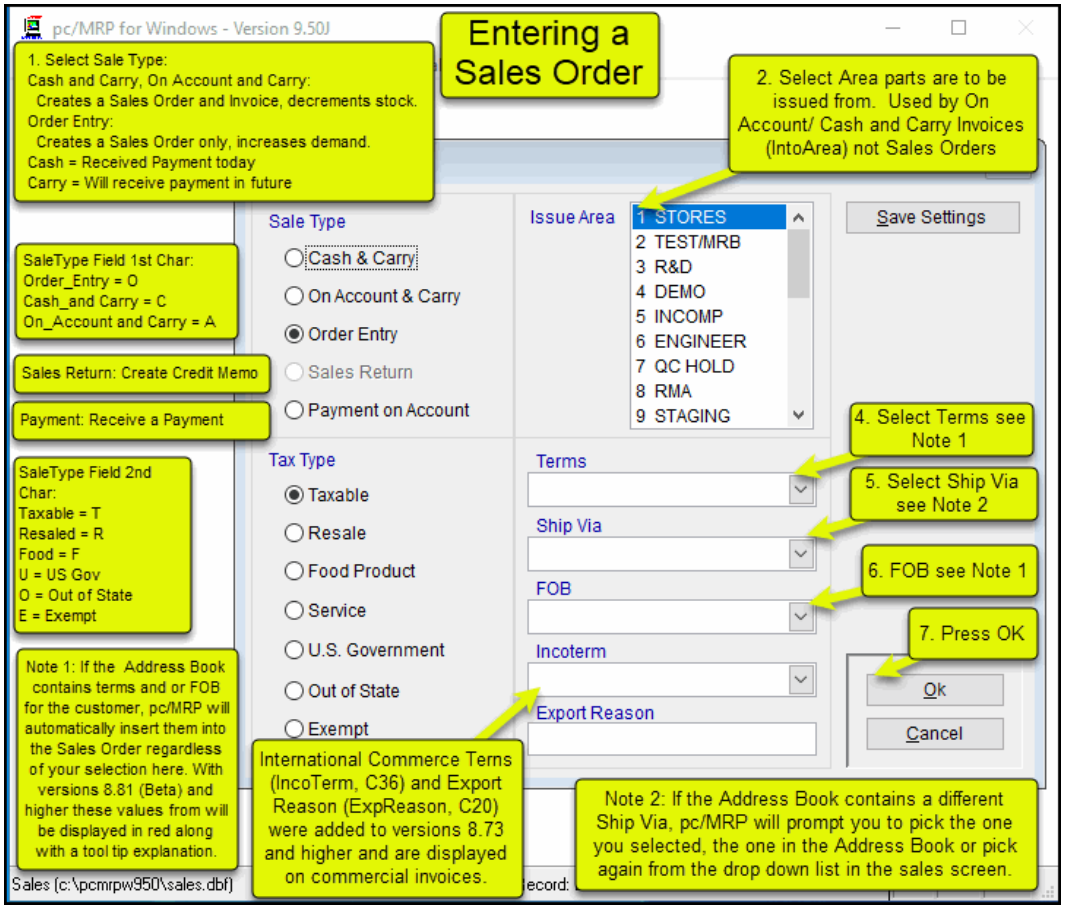



pc/MRP's Sales Module allows you to enter, edit, and print sales orders and print sales order reports. If a sales order is entered as a "cash and carry" or as an "account and carry" order, pc/MRP will create an invoice and decrement the on hand quantity in inventory (configurable in **Option 4**). If a sales order is created as "order entry" (to be delivered at a later date), pc/MRP will create a sales order and increase the on demand quantity. pc/MRP's Sales Module will provide numerous reports including All Overdue Sales Orders, All Sales Orders for a Month, Sales Tax, Sales Commission, and Cost of Sales. Each Sales Order can contain up to 9999 line items (settable via Settings & Utilities, **Option 63**). Each line item has a due date and can be taxable or non-taxable. An online slideshow is located here:
http://www.pcmrp.com/mrp101/saleselectnew.htm

### 9.1.1 Enter a new sales order step 1, Select Sales and New from pc/MRP's Main Menu

Select Modules, Sales and New as shown above and the following screen in step #2 will appear.

### 9.1.2 Enter a new sales order step 2, Select Type, Area, Terms, Ship Via, Tax and FOB




Select the Sale Type (A single character will be saved as the first character of the **Saletype** field):

- **Cash and Carry** (C) -- pc/MRP generates a Sales Order, creates/prints an Invoice and deducts stock.
- **On Account and Carry** (A) -- pc/MRP creates a Sales Order, creates/prints an Invoice and deducts stock.
- **Order Entry** (O) -- pc/MRP creates/prints Sales Order, increases on demand in inventory.
- **Sales Return** -- This creates a credit memo. See the credit memo chapter for more information. When creating a sales return, users can choose to re-stock the returned items.
- **Payment on Account** -- This is the same as the R type transaction in the Accounting GL. See the chapter on the Accounting GL for more details.

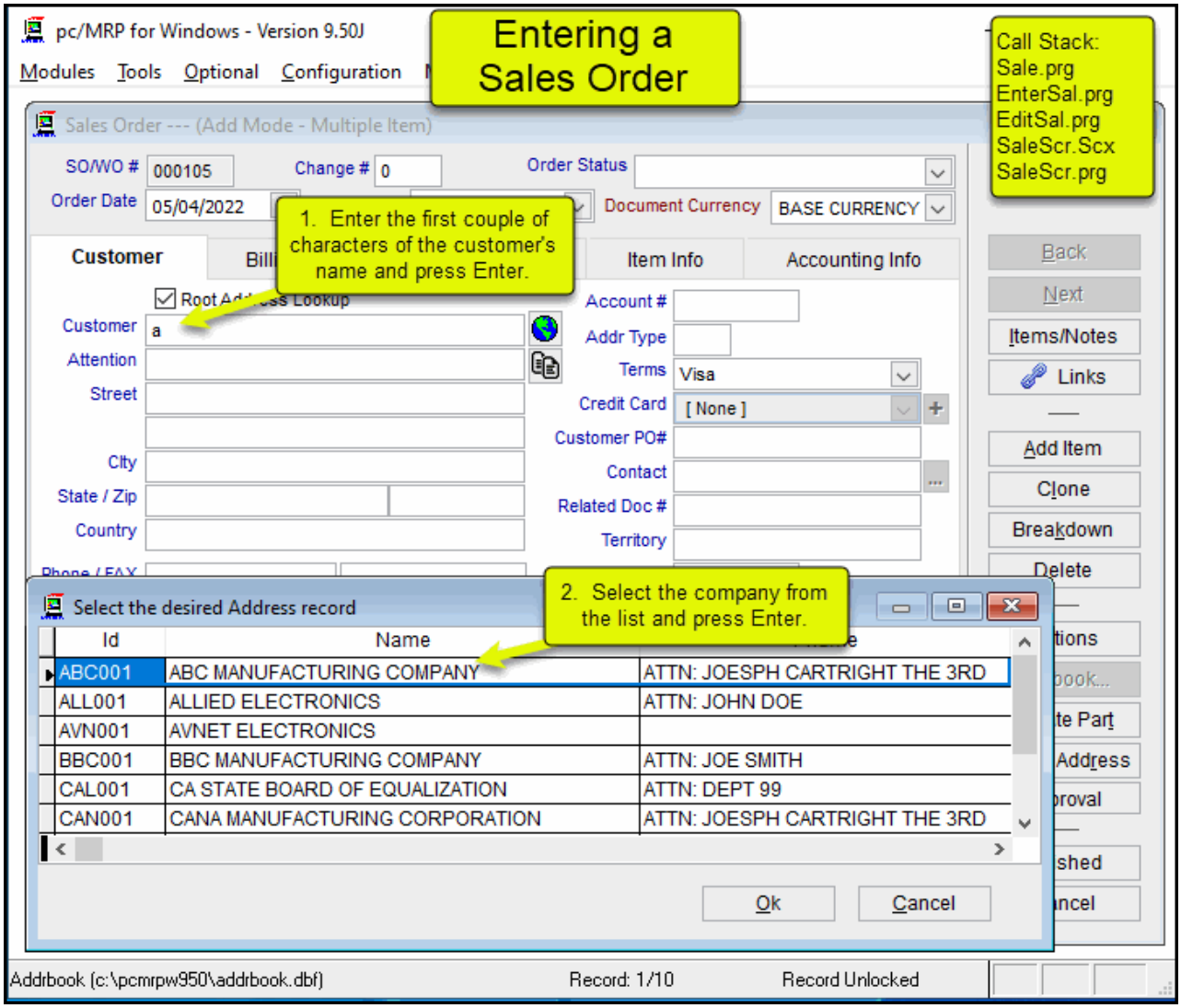
Select **Tax Type**. **Note:** If the Address Book contains tax type for the customer, pc/MRP will automatically insert that tax type into the sales order, regardless of your selection here. A single character (Taxable=T, Resale = R, Out of State = O, Exempt = E etc.) will be saved as the second character of the **Saletype** database field. Select the **Issue Area** (where the parts and assemblies will be issued from).

Select the **Terms, Ship Via** and **FOB** from their respective drop down list boxes. The drop down list boxes can be pre-populated by going to Configuration, Settings and Utilities, and selecting **Option 52**. **Note:** If the Address Book contains Terms or FOB for the customer, pc/MRP will automatically insert the terms in the Address Book regardless of your selection here. The overwritten value will turn red and a tool-tip-message explanation appears. If users click into the field (acknowledge the value), the red color changes to black. **Note:** If the Address Book contains a different Ship Via, pc/MRP will prompt you to pick the one you selected, the one in the Address Book or pick again from the drop down list in the sales screen.

International Commerce Terms (IncoTerm, C36) and Export Reason (ExpReason, C20) are displayed on commercial invoices.

Press the **Save Settings** Button to save the current settings of this screen (for the current user). Press the **OK** Button to move to the next screen.

### 9.1.3 Enter a new sales order step 3, Select the Customer



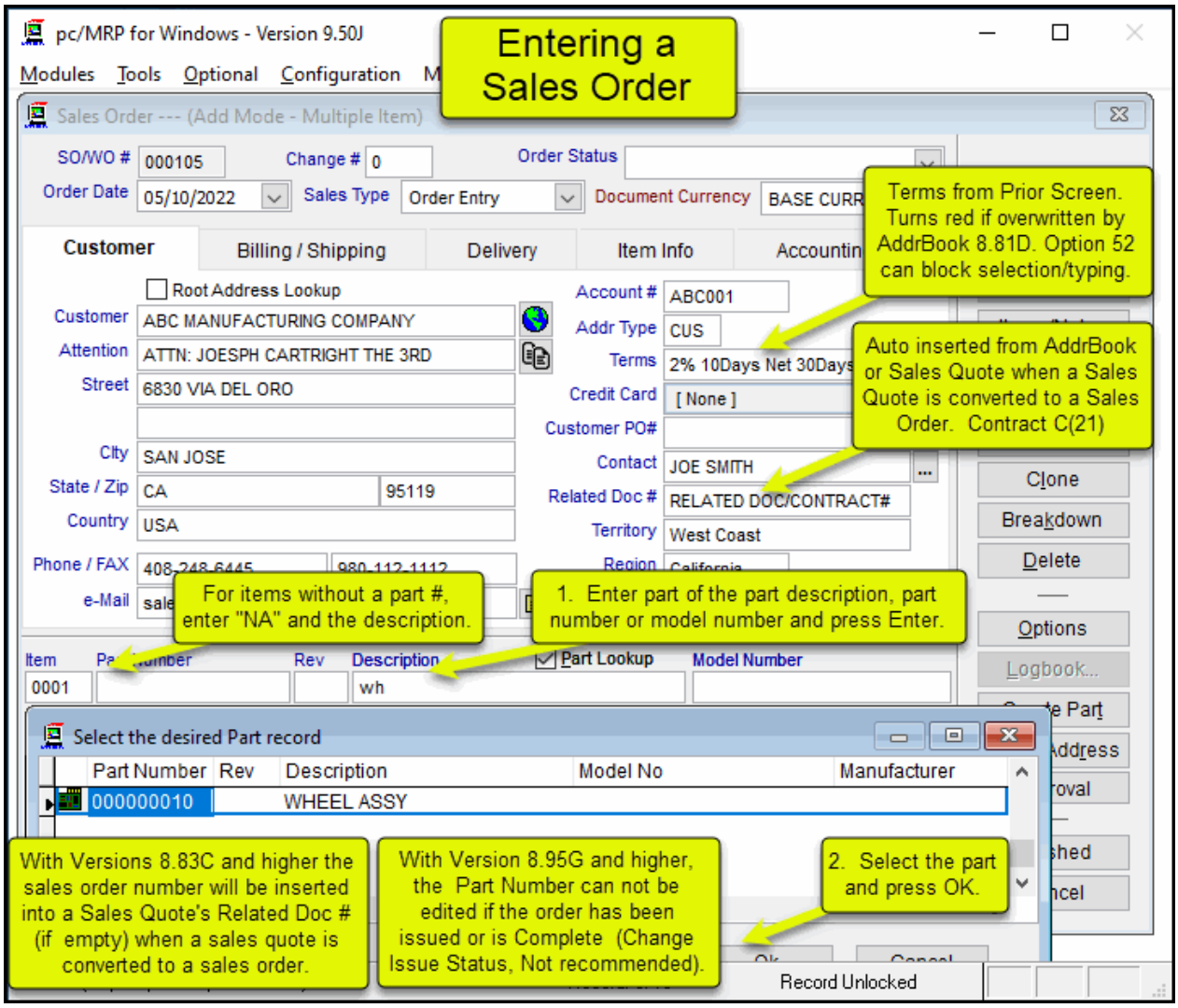

Place the cursor in the **Customer** Field or the **Account #** Field. Type the first few characters of the customer name or the Account #. A list of customer addresses will appear. Scroll to the desired customer and hit [Enter] or double click. All the address information will be entered automatically. If alternate billing and/or shipping addresses exist in the address entry for this customer, pc/MRP will automatically populate the BILL TO and/or SHIP TO fields.

The "**Account #**" and "**Part #**" fields are always linked to the Address Book and the Partmaster. This means that the entries to these two data fields must be valid numbers contained in the Address Book or the Partmaster.

Sales Order and Work Order numbers are automatically incremented. Though alpha characters are acceptable it is recommended to let pc/MRP automatically increment the Sales and Work Orders.

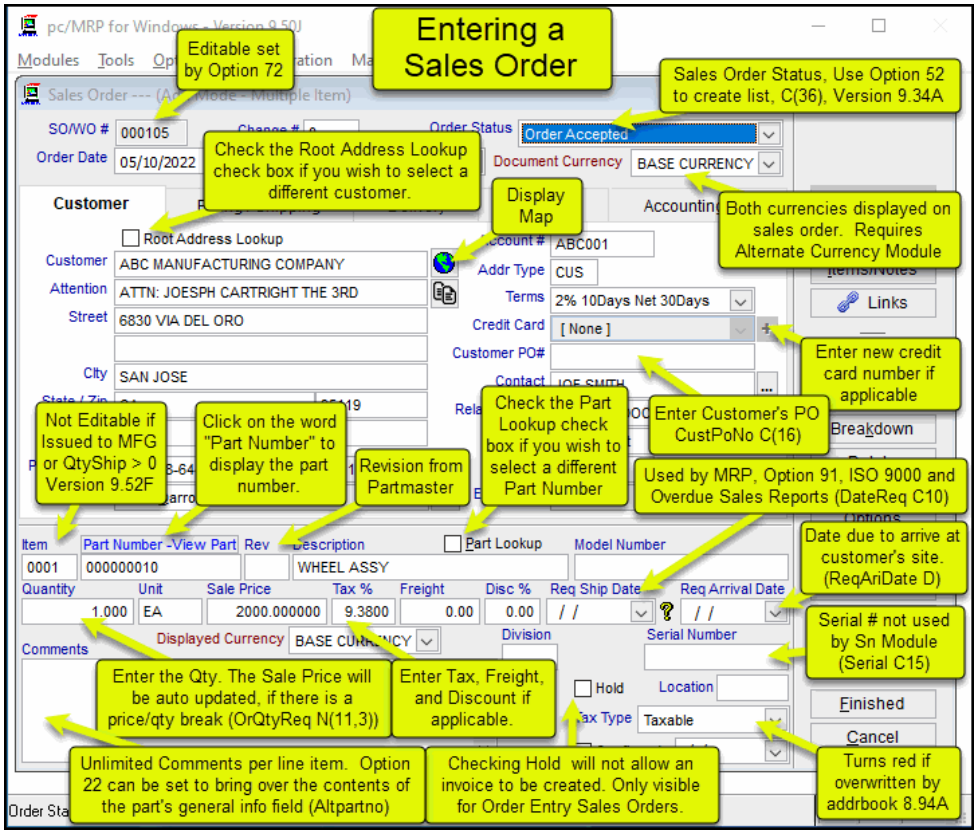
The **Related Doc#** (Contract) is auto-inserted from the Address Book, or, if a PO was created from this Sales Order (by selecting “Create from Sales Order” when creating the PO), this field contains the PO# and line item#.

### 9.1.4 Enter a new sales order step 4, Select the Part




Place the cursor in the Part # Field, Description Field or Model Number field. Type in the first few characters of the part #, part description, or model number. A list of parts matching the characters will appear. Scroll to the desired part and hit [Enter] or double click. All the necessary data will be entered automatically. At this point you can click on the Part Number – View button above the part number field, and view (not edit) the item in the Inventory (provided you have at list View rights to the Inventory module). For items without a part number, enter "NA". Then manually enter the description and any model number.

### 9.1.5 Enter a new sales order step 5, Enter Quantity, Tax, Freight and Discount




Enter the **Quantity** (Orqtyreq). **Unit** and **Sale Price** (saleprice) will be updated automatically, if there is a price/quantity break, the price data will be different for different quantity levels.

Enter the **Req Ship Date** (Datereq). This allows pc/MRP to track and print Overdue Sales Order Reports and ISO 9000 Customer Performance Reports. Set **Option 91** to require or not require a Req Ship Date.

The **Customer PO Number** (Custpono) and **Customer Contact** (Custcont) and any known **Freight** or handling charges should be entered. If the entire amount for the Freight is known, it can be entered once, in one line item in the freight field or entered individually for all line items. The freight subtotals for all line items will be totaled and printed out on the forms and reports. **Entered By** will be populated with the user's login name.

The **Req Arrival Date** (reqaridate) is currently used for information only.

The **Related Document Number** (Contract) is a 21 character scrollable field. It can be used to enter a related contract number, serial number, or document number. If the customer has a Related Document Number in the Address Book, it will be carried over into the Sales Order. If the Sales Order is being converted from a Sales Quote (see in Optional Modules), the Sales Quote's Related Document Number will be carried over into the Sales Order. If the Sales Quote doesn't have a Related Document Number, then the Sales Quote's number itself will be inserted into the Sales Order Related Document Number field, followed by a dash (-) and the change order number.

Each line item can include as many **Comments** as necessary.

Each line item can have one **Serial Number** (serial). If multiple serial numbers are needed per line item then you may need the optional Serial Lot Number module. (Chapter 16.10 in this Manual)

The **Division** Field (division) is automatically populated from the Inventory or Address Book Module depending on the setting in Configuration, Settings and Utilities, **Option 78**.

Checking the **Hold** Checkbox (hold) will prevent an invoice from being created for this sales order. When generating an MRP, on hold sales orders can be included or not included. This checkbox is available only for the Sales Type of "**Order Entry**".

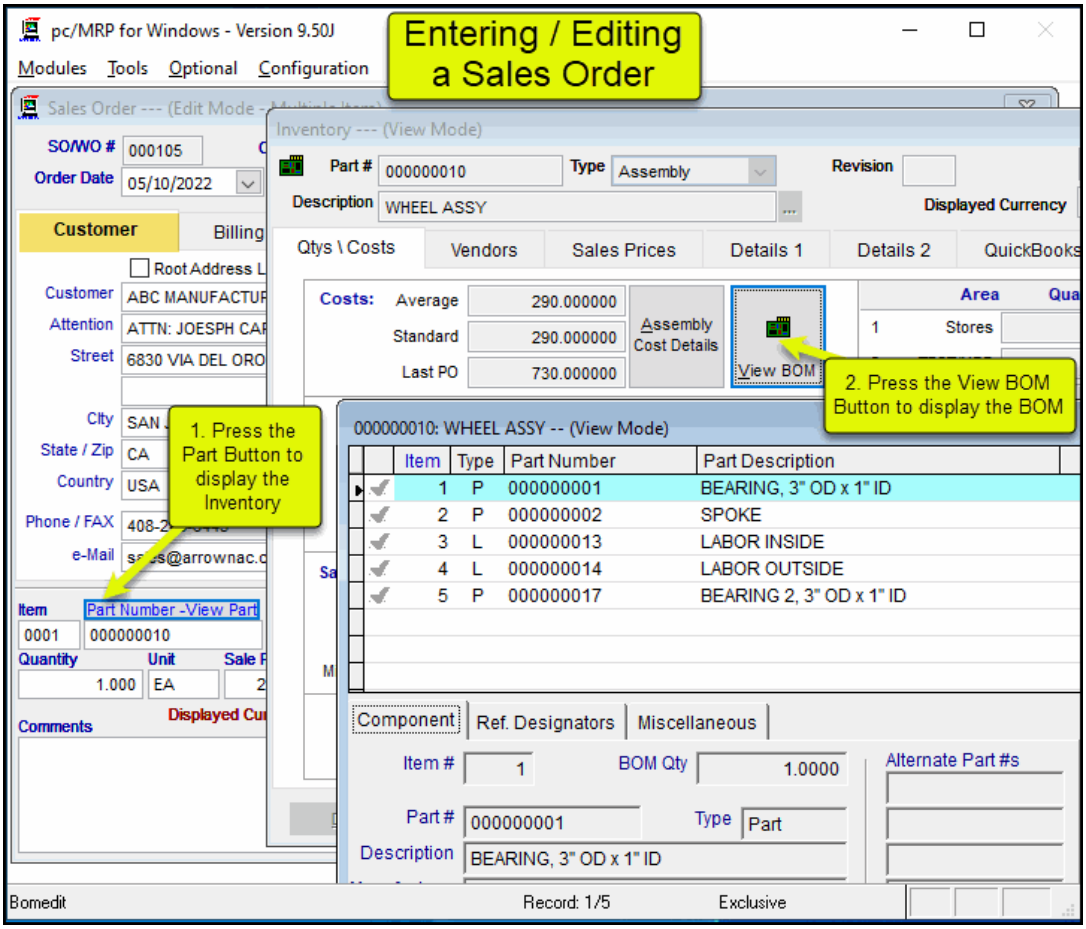
The **Rev** field (revlevel) is automatically populated from the inventory module.

The unit **Sale Price** (salepric) of the assembly or part will be automatically inserted into the sales order and will reflect any price per qty break the customer might have (let it be the sale price of one of the 5 levels or a customer specific price). If you have the same part on more than one line, then each sale price will reflect the price for the quantity on the individual line, not for the total. If you want all line items (with that certain part) reflect the price for the total qty, then do the following: Enter one line item for the total quantity. This will insert the price for the total qty. Now use the Breakdown button to break the total quantity into as many lines as you need, and enter the desired quantity and due date for each line. Now each line item (with that certain part) is reflecting the price for the total qty.

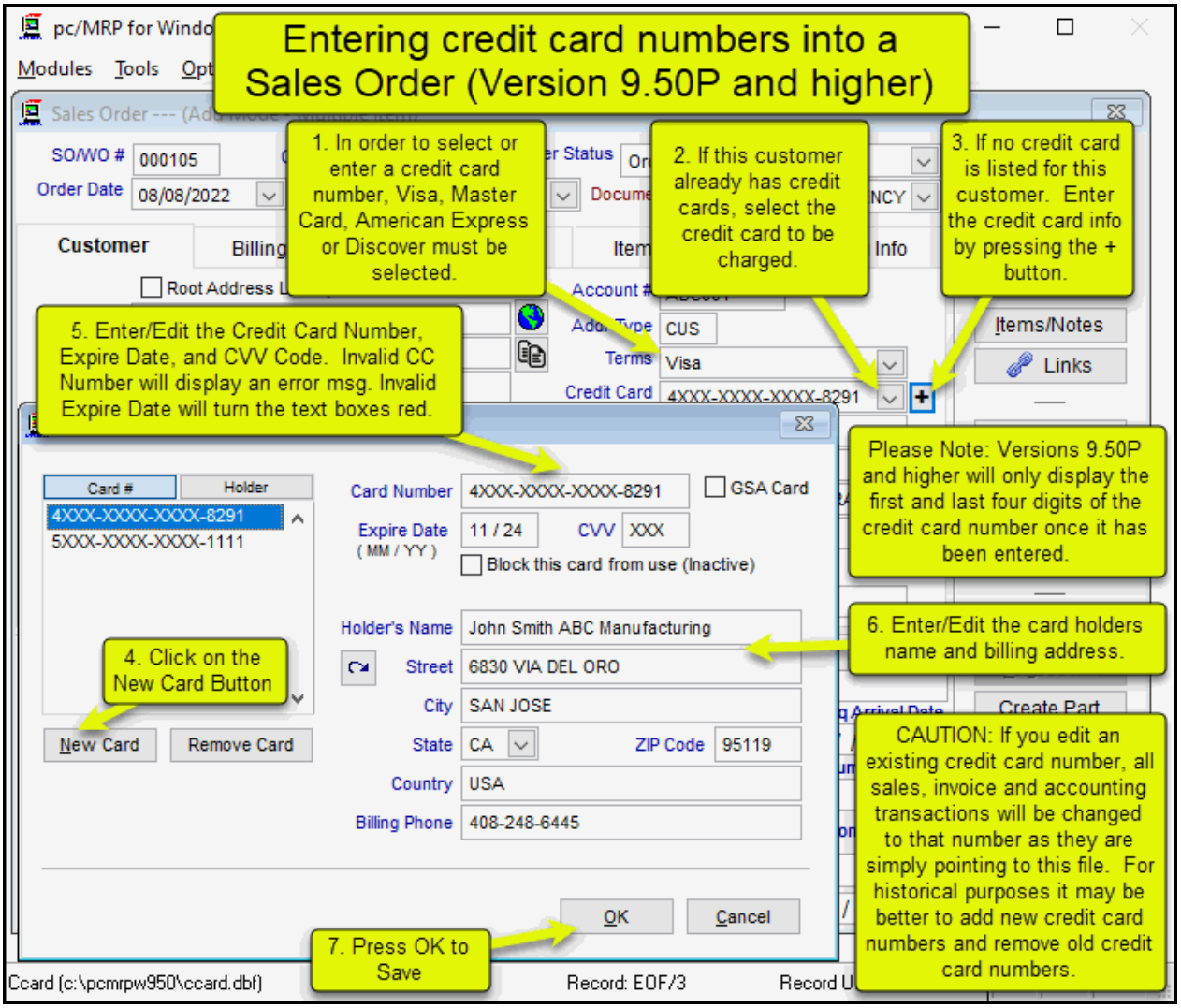
The **Purchase Cost** (po_cost) of the assembly or part will be automatically inserted into the sales order. Using settings and utilities **Option 35**, the unit cost can be set to average or standard and be comprised of component part costs only, component and labor costs, or component, labor and overhead costs.

Users can set the sales price lookup to either Level/Quantity (method set by default) or to a Category Matrix using **Option 67** in the settings and utilities. For a complete description of both methods, see the Inventory chapter.

In addition you can examine the inventory screen and if it is an assembly the BOM screen by clicking on the **Part Number – View Part** Button.



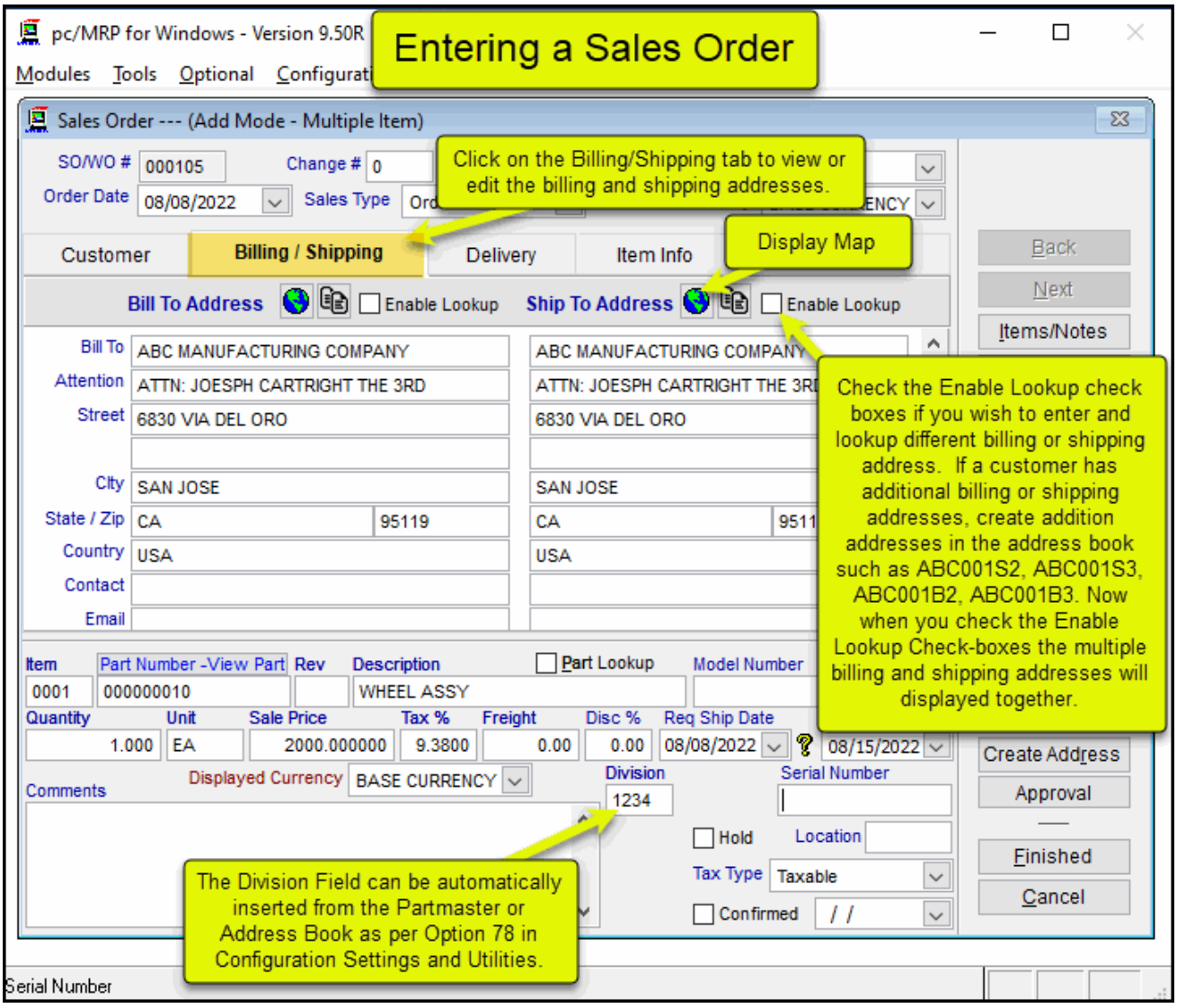
**9.1.6 Enter a new sales order step 6, Enter Credit Card information.**




pc/MRP allows you to enter or select a credit card to use with the sales order by clicking on the **Credit Card Drop Sown List Box or the + Button**. A user must have Sales Edit Rights to click on these Buttons.

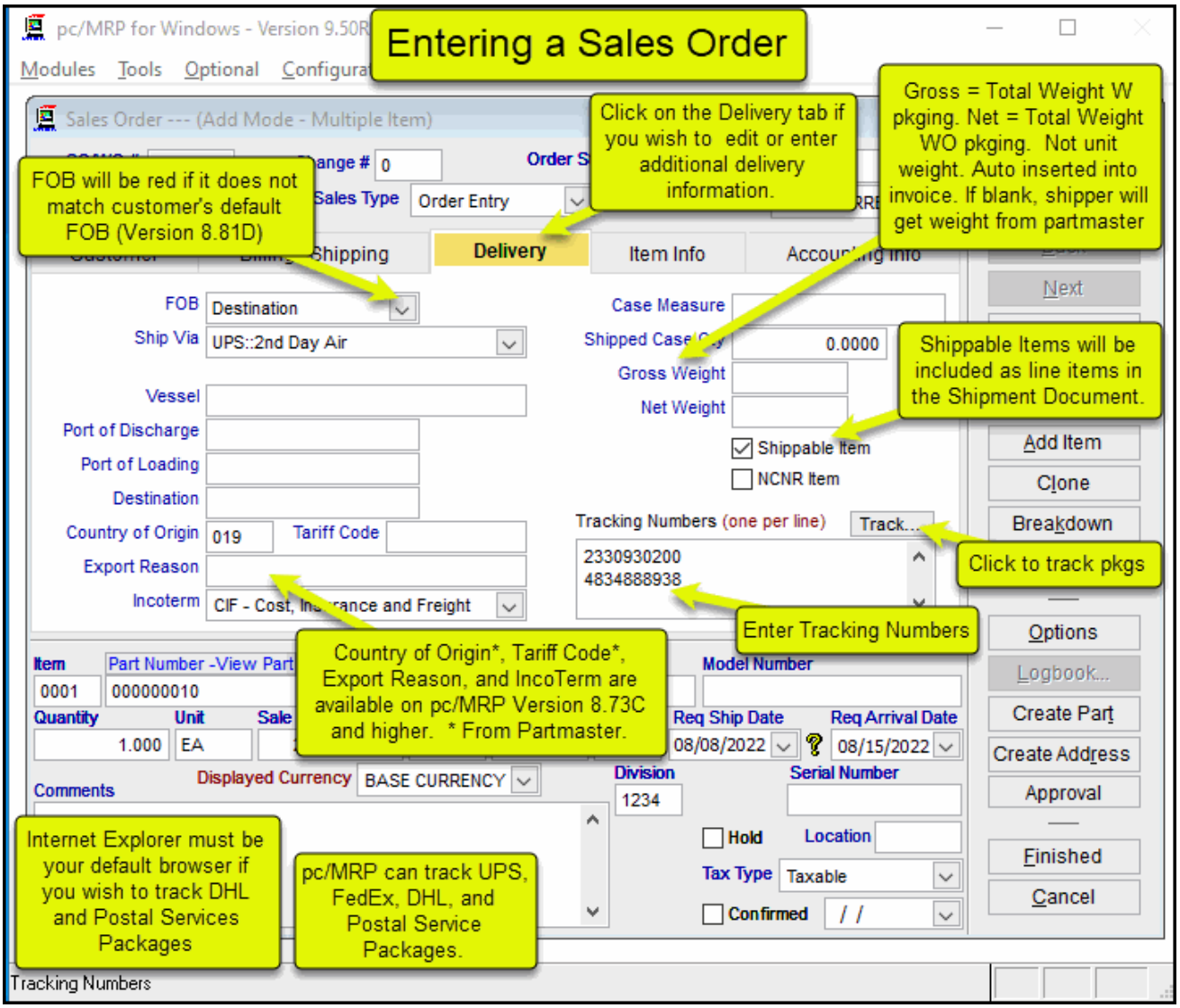
We now recommend using the EVO Interface to process credit cards. With EVO your customers enter their own credit card and or ACH information so that you no longer need to store your customer's credit card or bank account info. This way you are no longer need to pass PCI compliance certification and no longer liable for credit card data breaches.

### 9.1.7 Enter a new sales order step 7, Enter Billing and Shipping Addresses if necessary




If the Billing Address and/or Shipping Address are different from the Customer Address, you can manually enter the appropriate data fields. Or, (if **Enable Lookup** is checked), you can type in a few characters of the customer name in the "**Bill To**" and/or "**Ship To**" fields. Press [Enter] and the Address Book window will appear allowing you to select the desired addresses.

### 9.1.8 Enter a new sales order step 8, Enter Delivery Information if necessary




UPS, FedEx, DHL and Postal Service **Tracking Numbers** can be entered into the sales order and tracked by clicking on the **Track** Button. Internet Explorer must be your default browser if you wish to track DHL and Postal Service Packages.

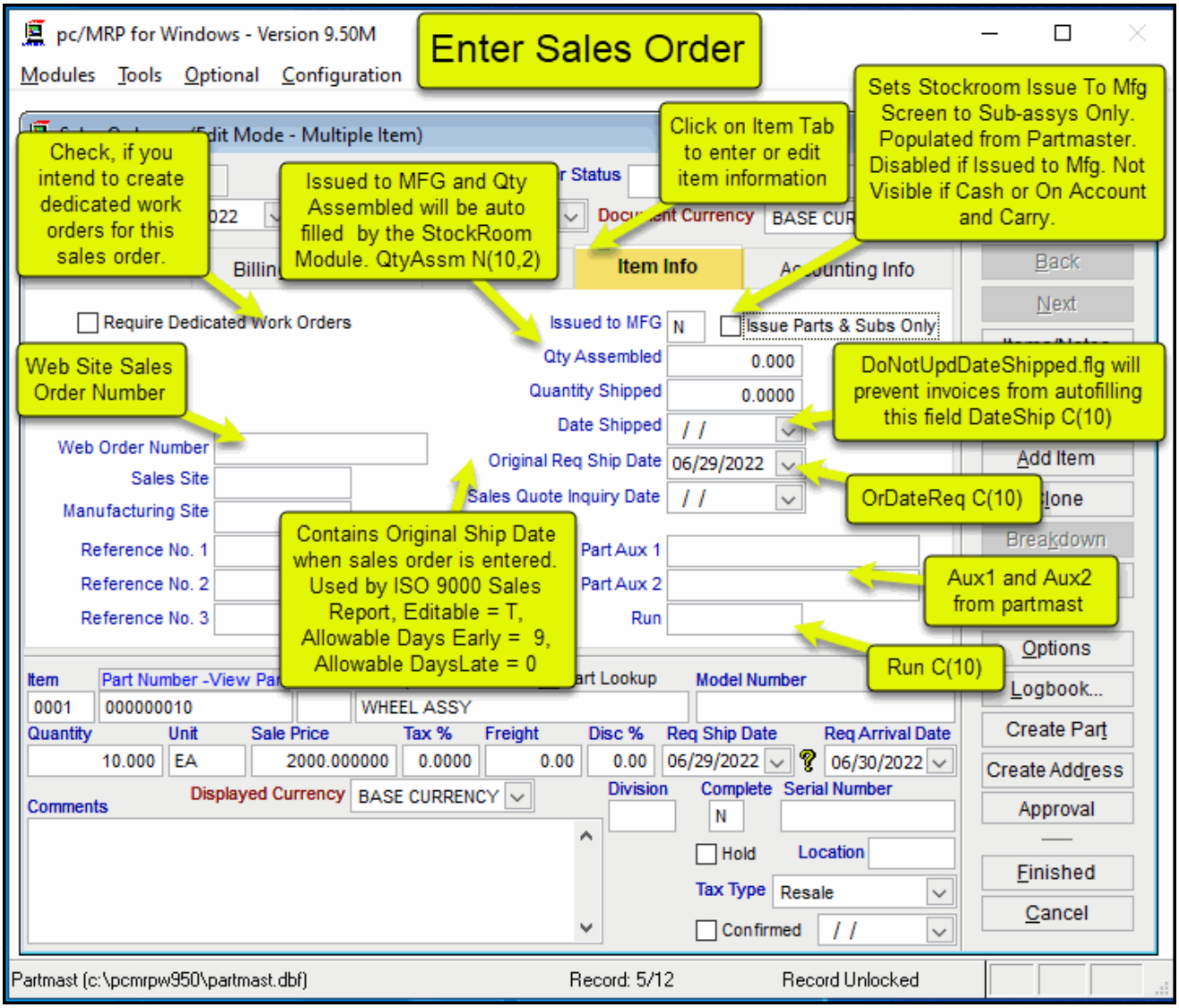
When you click the Track Button, pc/MRP will track the package. pc/MRP will first look to the **Ship Via** Box to see which shipping vendor (UPS, FedEx, DHL, Postal Service, TNT) to track. If the Ship Via Box is blank or you used multiple vendors pc/MRP will see if the tracking number is proceeded by UPS, FEDEX, DHL, or TNT to see which shipping vendor to track. If all of the above is blank, pc/MRP will prompt you to select a shipping vendor.

If an item is checked as **Shippable** (shippable), the item will be displayed on the shipment module line items. Labor type part numbers would not be checked as shippable (they would appear on the invoice but not on the shipment documents).

**Gross Weight** (grssweight) and **Net Weight** (netweight) will not automatically come from the inventory module. If they are entered here on the Sales Order, they will be carried over to the Invoice, and from there to the Shipment module. Otherwise the Shipment Module gets the weight directly from inventory.

**Country of Origin** and **IncoTerm** come from the Partmaster.

### 9.1.9 Enter a new sales order step 9, Enter Item Information if necessary




If the sales order requires dedicated work orders, check the **Require Dedicated Work Orders** checkbox. See the Work Orders Chapter, Section 13.1.10 and .11 for details on this feature.

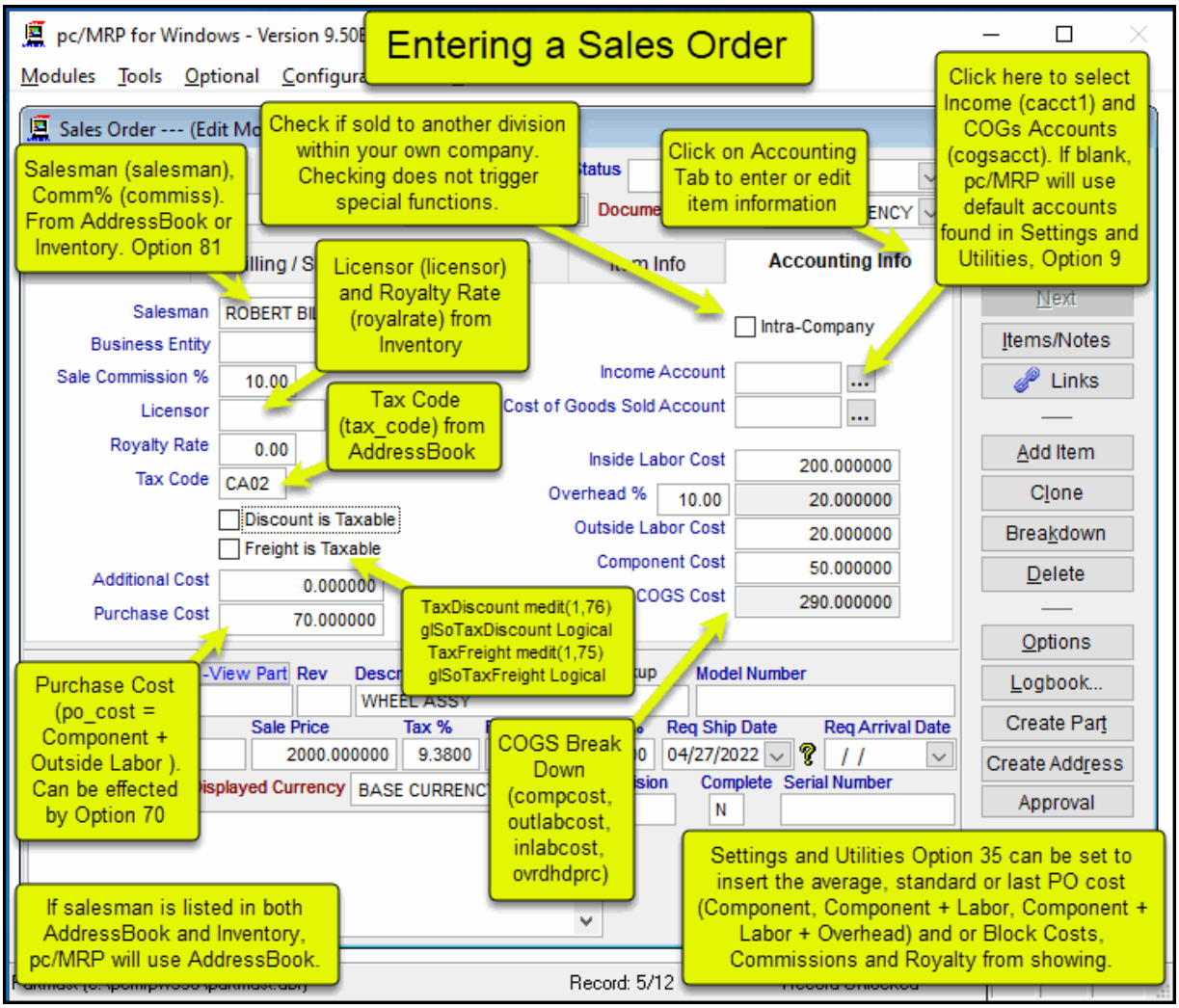
If Issue Parts & Subs Only is checked, only top parts and sub-assys reporting to this assembly will be issued.

The **Original Req Ship Date** (ordatereq) is automatically populated when the Req Ship Date is first entered (if it would otherwise be empty). This field does not change, even if the Req Ship Date is edited several times.

The **Sales Quote Inquiry Date** is inserted from the Sales Quote (if applicable).

The **Part Aux 1** and **Part Aux 2** fields are populated from the Partmaster.

### 9.1.10 Enter a new sales order step 10, Enter Accounting Information if necessary




The **Credit Account** (cacct1) field is automatically populated from the part or assembly entry in inventory. If there are several different accounts per sales order, pc/MRP will default to the standard business income account. If the Credit Account is the same throughout the sales order when the transaction is posted the account number in this field will be credited in the GL.

The **Purchase Cost** (po_cost) of the assembly or part will be automatically inserted into the sales order. Use Settings and Utilities **Option 35** to import the average or standard cost and include or not include labor and overhead costs. The **Additional Cost** (Addcost) field is a field currently not used in any calculations.

Check the **Freight is Taxable** (taxfreight) and **Discount is Taxable** Checkboxes (taxdiscnt) if they are taxable.

Check the **Intra-Company** (intracomp, logical) checkbox if the sale is internal to another division within the company.

**COGS** breaks down into inside labor cost, overhead, outside labor cost, component cost (inlabcost, ovrhdprcnt, outlabcost, compcost).

Each line item can have a separate sales discount (**Disc %**), **Salesman**, **Sale Commission %**, **Licensor** and **Royalty Rate**. The Licensor and Royalty Rate fields are used if you have to pay royalty fees. The Disc % may come from the address book or be manually entered. **Notes**: Configuration, Settings and Utilities, **Option 81** sets whether the sales commission should come from the Inventory or from the Address Book. If Salesman is listed both in the Address Book and Inventory, pc/MRP will use the Address Book. If the customer's **Sales Level**, in the address book and a **Disc %** both have values, both are used in the calculation.

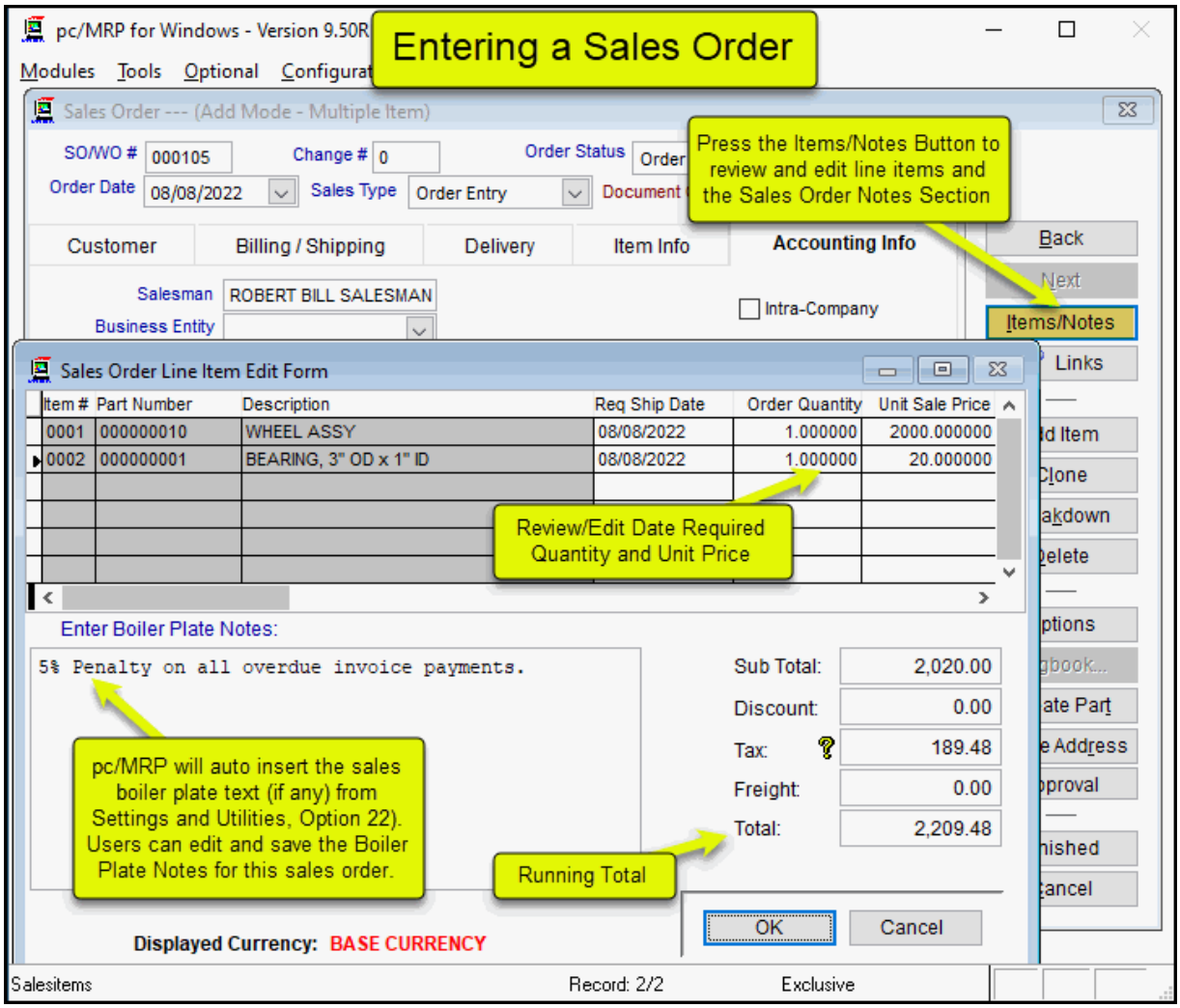
### 9.1.11 Enter a new sales order step 11, Add Another Line Item or click on Finished

Click the "**Add**" Button to enter another line item to the Sales Order.

Once you have added additional line items the following Navigational Buttons will be enabled:

- Click on the **Back** Button to see the prior line item.
- Click on the **Next** Button to see the next line item.
- Click on the **Jump To** Button to see a list of all of line items. Select the item you want to review.

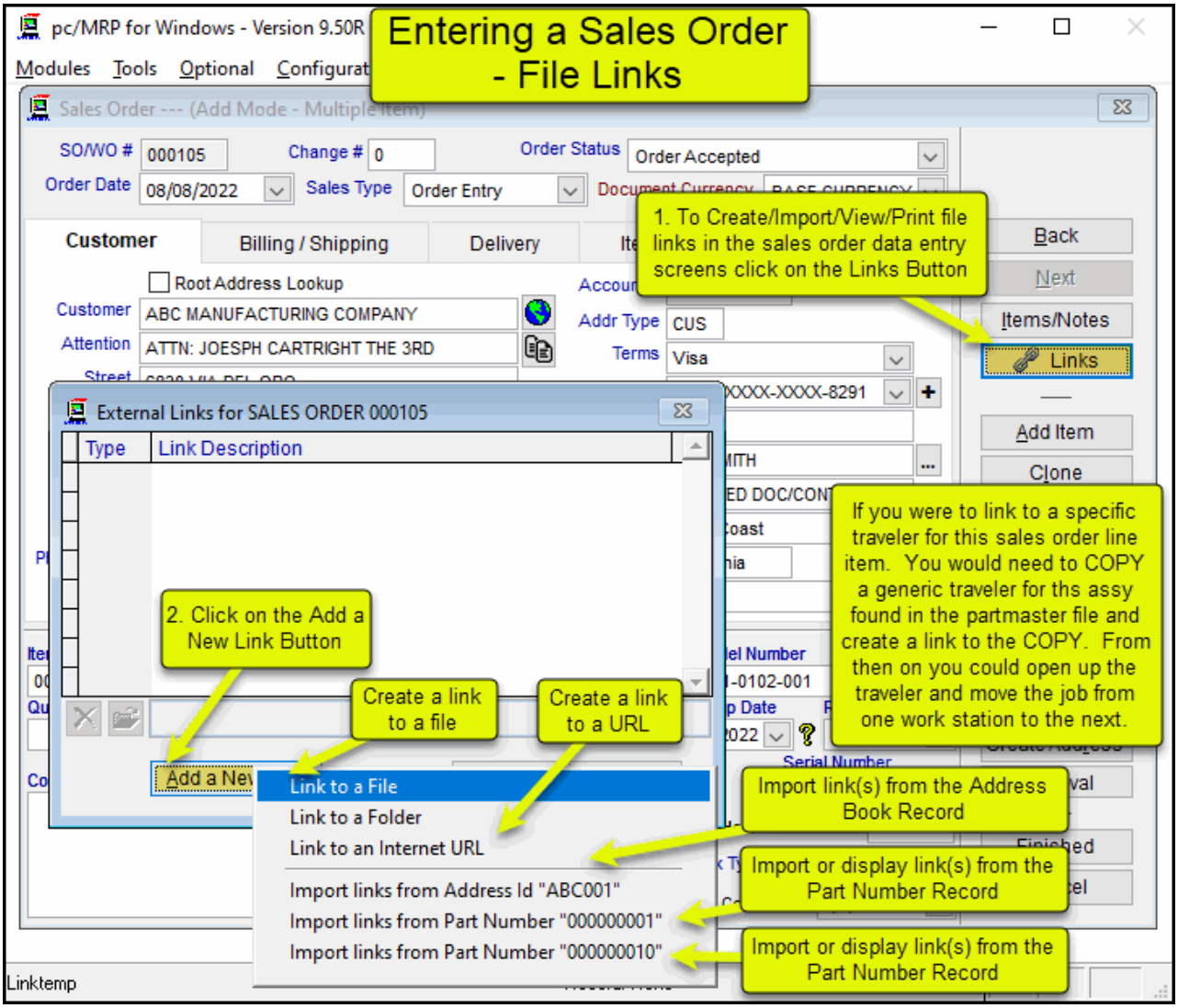
### 9.1.12 Enter a new sales order step 12, Enter the Boiler Plate and Review the line items




To enter/edit the sales order boiler plate and review/edit the sales order line items, click on the Items/Notes Button.

pc/MRP will automatically insert the **Sales Boiler Plate** text (if any) from Configuration, Settings & Utilities, **Option 22** into the **Boiler Plate Notes** edit box. Users can modify this text for this current Sales Order. This will not change the boiler plate text for other (existing or future) sales orders.

### 9.1.13 Enter a new sales order step 13, File Links



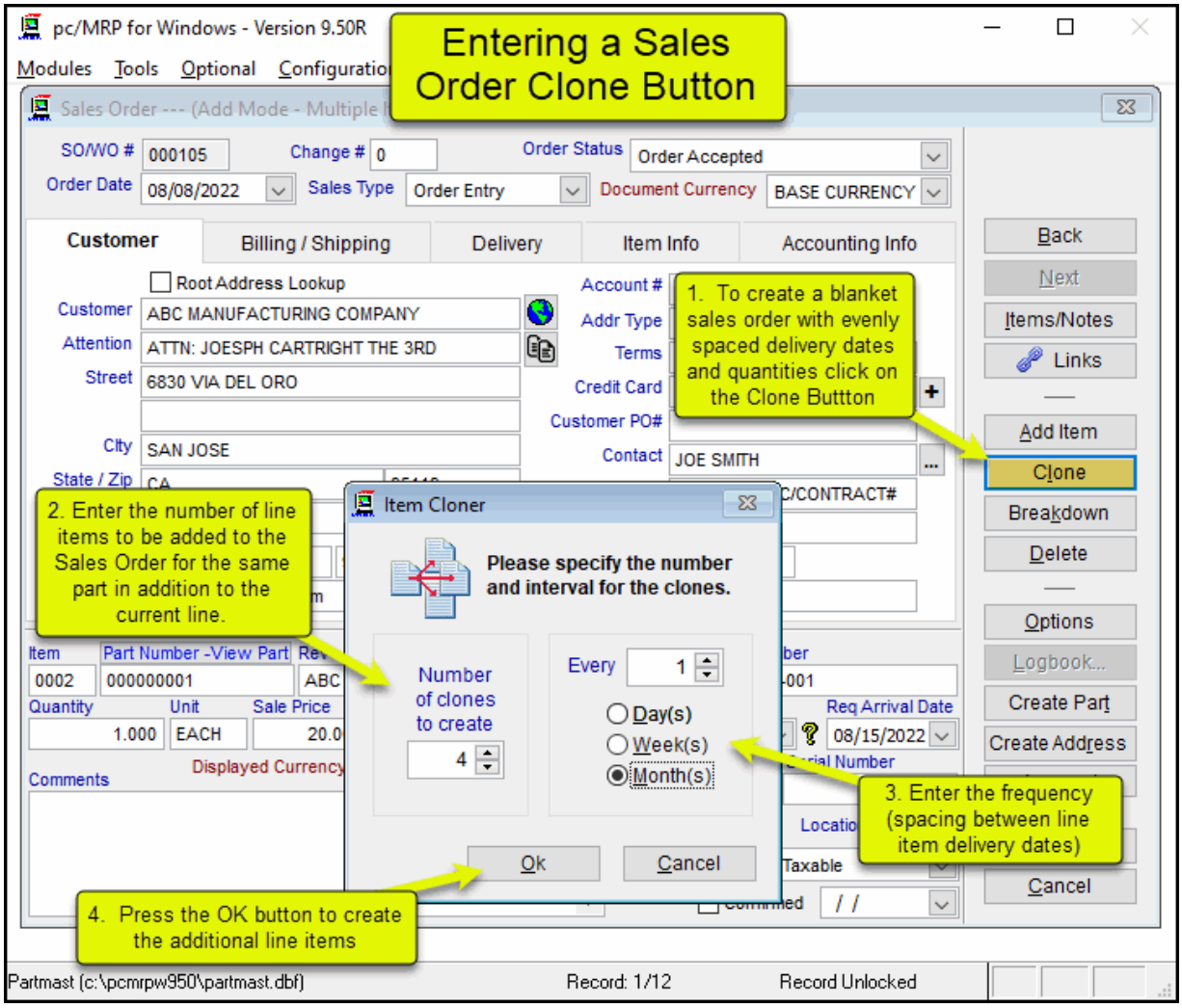

### 9.1.14 Enter a new sales order step 14, Click on Finished to save the sales order

pc/MRP will increase the on demand qty of each of the items ordered. If this was entered as an on account and carry or cash and carry sales order, the on-hand qty of each of the items would be decremented.

Click the "**Finished**" button to save the sales order.

**Note:** pc/MRP will check all the data validity. If the Customer Account # or Part Number is not valid (cannot be found in the Address Book or in the Part Master), the user will be prompted to take corrective actions. If the Sales Order is for a non-standard part, enter NA in the Part # field and pc/MRP will not check the Part Master. If the total of this new Sales Order plus any existing open invoices exceeds the customer's credit limit, pc/MRP can be made to prompt a warning. If desired the ability to override the credit limit can be password protected. (See **Option 53** in Configuration, Settings and Utilities for further detail on the credit limit warning.)

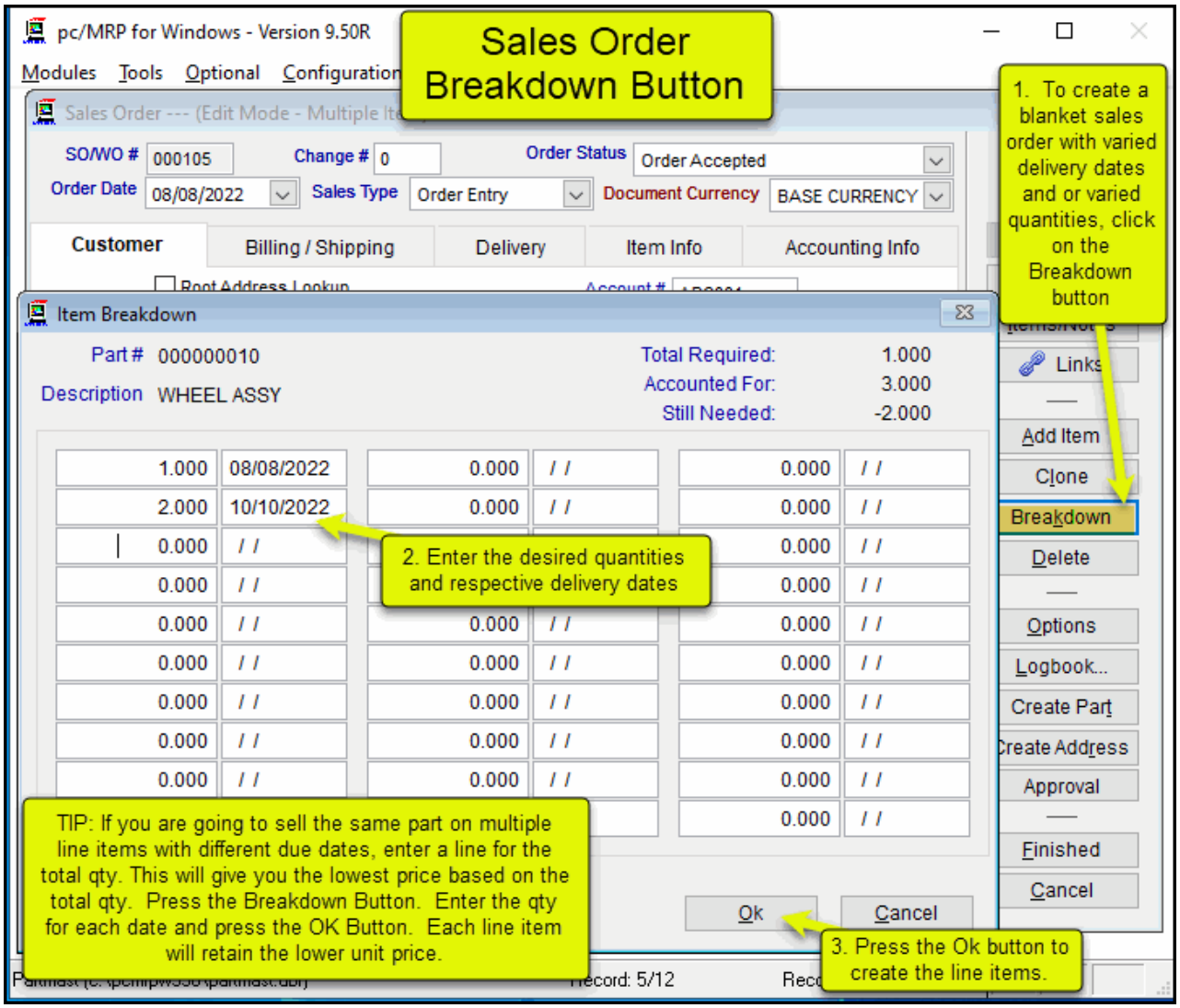
### 9.1.15 Other Buttons and Keys, Clone Button




Click on the **Clone** button to create a blanket sales order with evenly spaced delivery dates and quantities. The Req Ship Date has to have a valid date. The "**Number of clones to create**" means the number of line items to be added to the Sales Order for the same part in addition to the current line.

Enter the desired parameters and click "OK". Clicking "Cancel" will return to the Sales Order entry screen without adding any line items.

### 9.1.16 Other Buttons and Keys, Breakdown Button




Click on the "**Breakdown**" to create a blanket sales order with varied delivery dates and or varied quantities.

On the top of the window is the part that you are ordering followed by the total number of parts you have entered in the Sales Order entry screen.

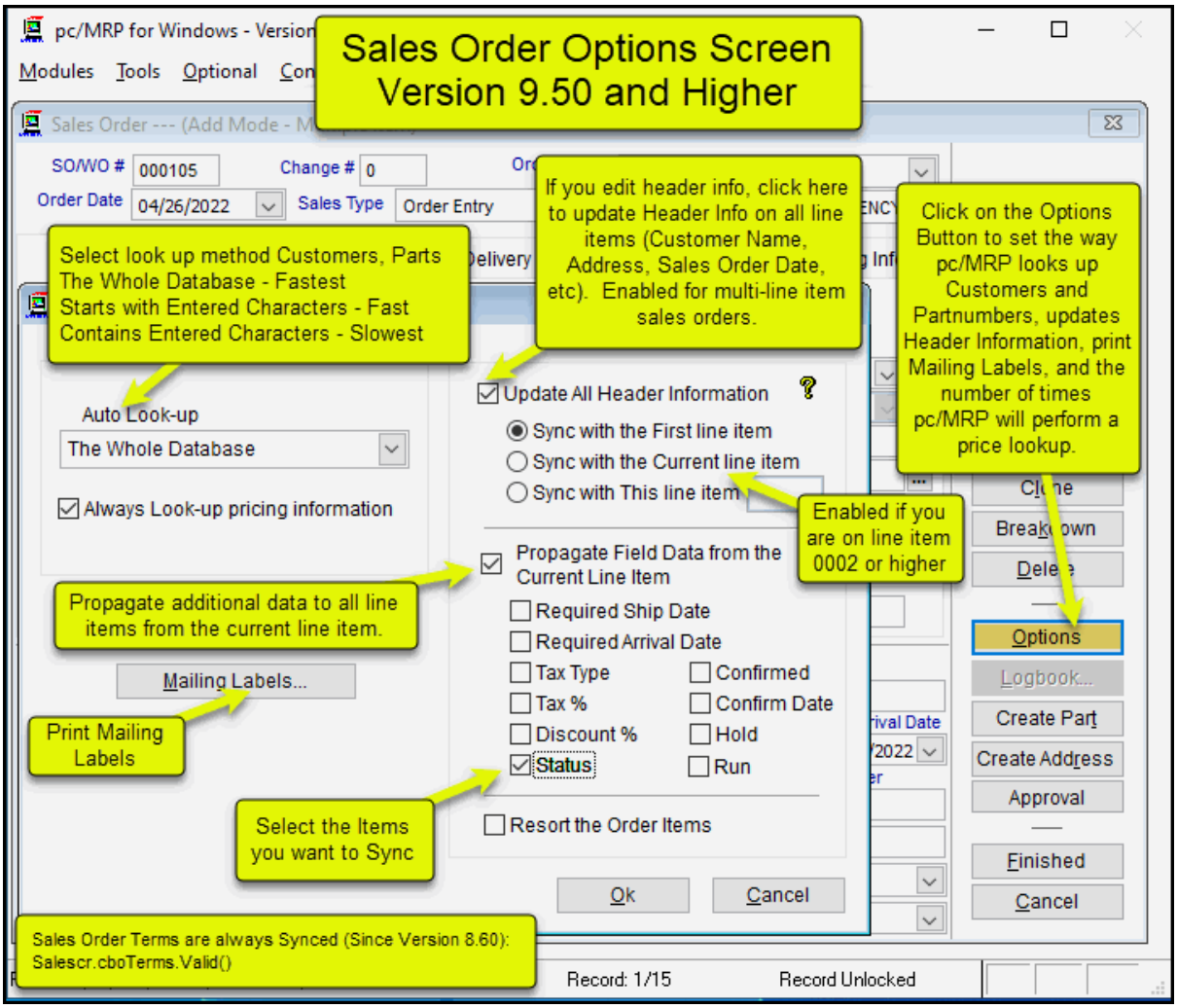
Enter the number of parts and the delivery dates in the highlighted columns.

As the numbers are entered, "Accounted for" will increase to reflect the total that has been entered so far.

"Still needed" indicates the number of parts left. It will become zero when all the required number of parts has been entered with delivery dates.

Click "OK" when all the entries are done. **Note:** if the total of all the deliveries does not match the number entered in the Sales Order entry screen, a warning will appear. Select "OK", pc/MRP will accept all the deliveries entered and discard the original quantity entered in the Sales Order entry screen. Click “Correct" to go back to the Breakdown window to correct the entries. Click "Abandon" will discard all the entries and go back to the Sales Order entry screen.

### 9.1.17 Other Buttons and Keys, Options Button




Click on the **Options Button** to perform the following tasks.

The **Auto Look-Up** will determine what appears in the customer list and the part number list during the selecting customer and selecting parts operations. **The Whole Database** window will contain the whole database starting at the first matching name. This is the fastest look-up method. **Starts with Entered Characters** will only show the entries starting with the characters entered in the data field. **Contains Entered Characters** will show all the entries as long as they contain the characters entered. This is the most versatile look-up method but is also the slowest of the three methods with a large database.

When the **Always Look-up pricing info** option is selected, the pricing will always be looked up even when the quantity is edited. This checkbox value is set, until changed, for the user login name.
**Note:** When duplicating a sales order, pricing information is not changed unless the quantity or part number is changed and the option is checked.

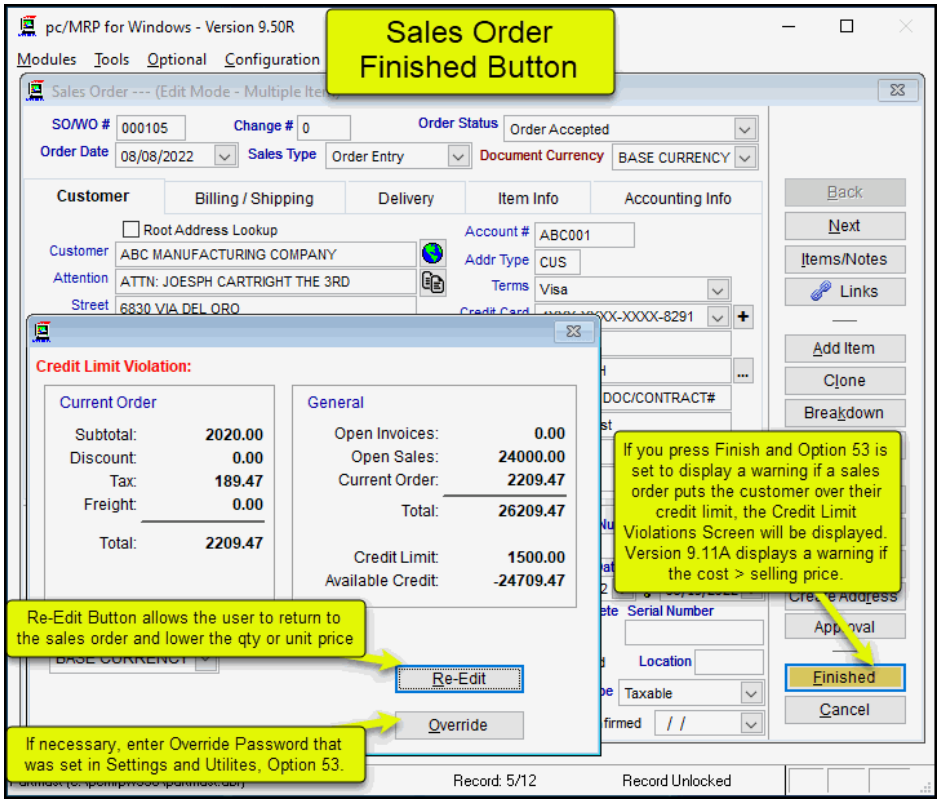
The **Resort the Order Items** option will resort the Line Items in ascending order.

The **Update all Header Information** option will sync the header information as per one of the three parameters listed.

The **Mailing Labels** button will allow you to create shipping labels for this sales order.

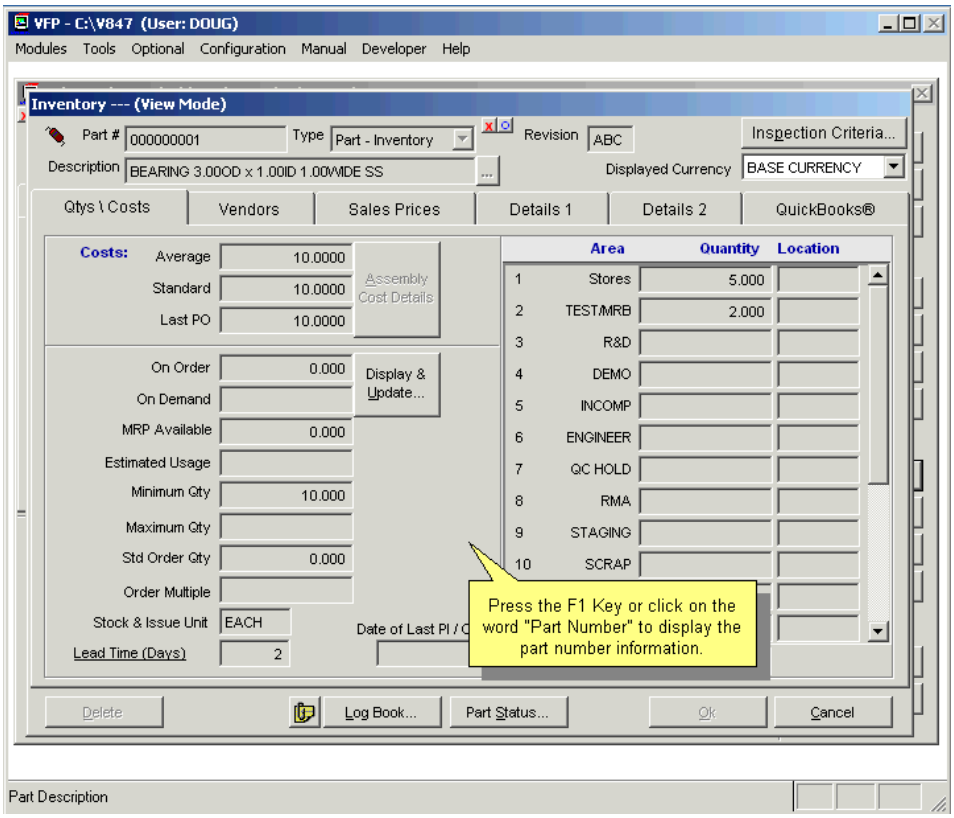
The **Propagate** checkbox will allow the user to edit a field and update the same field on the other line items on the sales. Handy if you want to add a discount to the entire order, etc.

### 9.1.18 Sales Credit Limit Override Screen




**Option 53** in the Configuration/Settings and Utilities can be set to provide or not provide credit limit warnings.

### 9.1.19 Other Buttons and Keys, F1 Button, Display Part Number Information



### 9.1.20 Notes on sales orders

The sales order Boiler Plate field will print the same statement on every sales order and can contain statements such as late payment penalties, etc. The sales order boilerplate can be created and edited from the Configuration Menu, **Option 22**, under "Boiler Plate Notes for Forms". This boiler plate text will be transferred to the invoice if you select it to transfer on the Invoice boiler plate selection and if there is no boiler plate text for the invoice boiler plate.

If auto accounting is set On in the configuration menu, after all the line items have been entered for a cash and carry or on account and carry sales order, pc/MRP will automatically debit and credit the general ledger. However, it is recommended that auto accounting is set off. This will allow the invoice to be reviewed prior to entering the general ledger transaction.

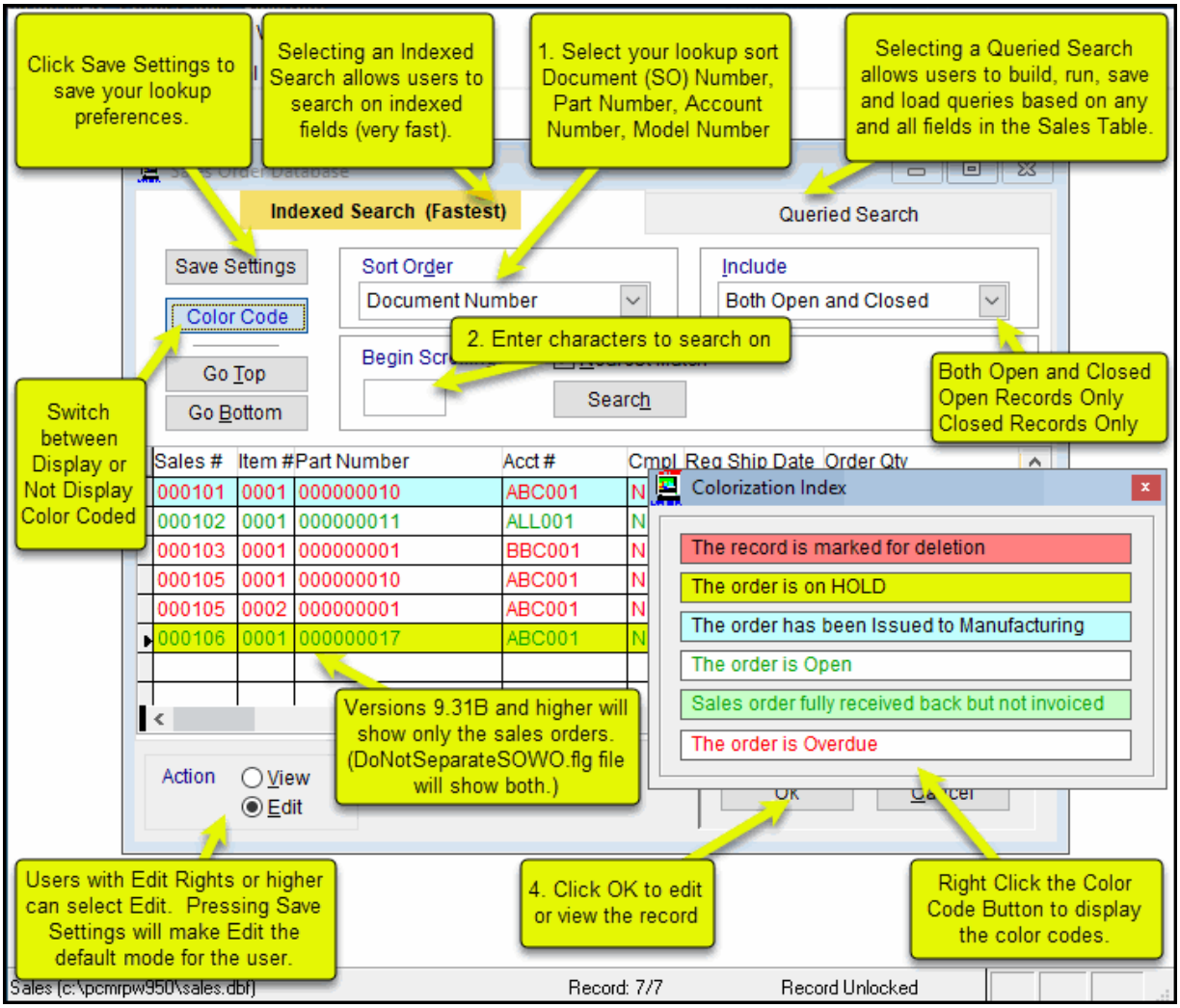
When a sales order is entered, pc/MRP will increment the On Demand quantity for the completed assembly and not the parts in that assembly. The allocation of sub-assemblies and parts in the parent assembly(s) is performed when the user runs “Generate MRP Action Items” in the optional Infinite Bucket module. The results will be displayed in the MRP Available field.

For “On Account and Carry” and “Cash and Carry” Sales Orders the Invoice will be created automatically. The Invoice’s data fields will be carried over from the Sales Order, including the Enterby field. The user gets a message about the Invoice Number created.

**For one of our customers, RCH**, pc/MRP will automatically create a BOM with a BOM number of the sales order number plus "00." Each line item on the sales order becomes a part of the BOM, is assigned an 8-character part number consisting of the sales order number plus the last two characters of the line item number. If you delete a sales order line item, the part is removed from the inventory/partmast database file. If you remove the last line item, the BOM is removed from the BOM database file. (This is only applicable to this one company.)

## 9.2 Edit/ Delete a Sales Order

To view or edit a sales order, select Modules, Sales and Edit. pc/MRP will display the screen shown below.

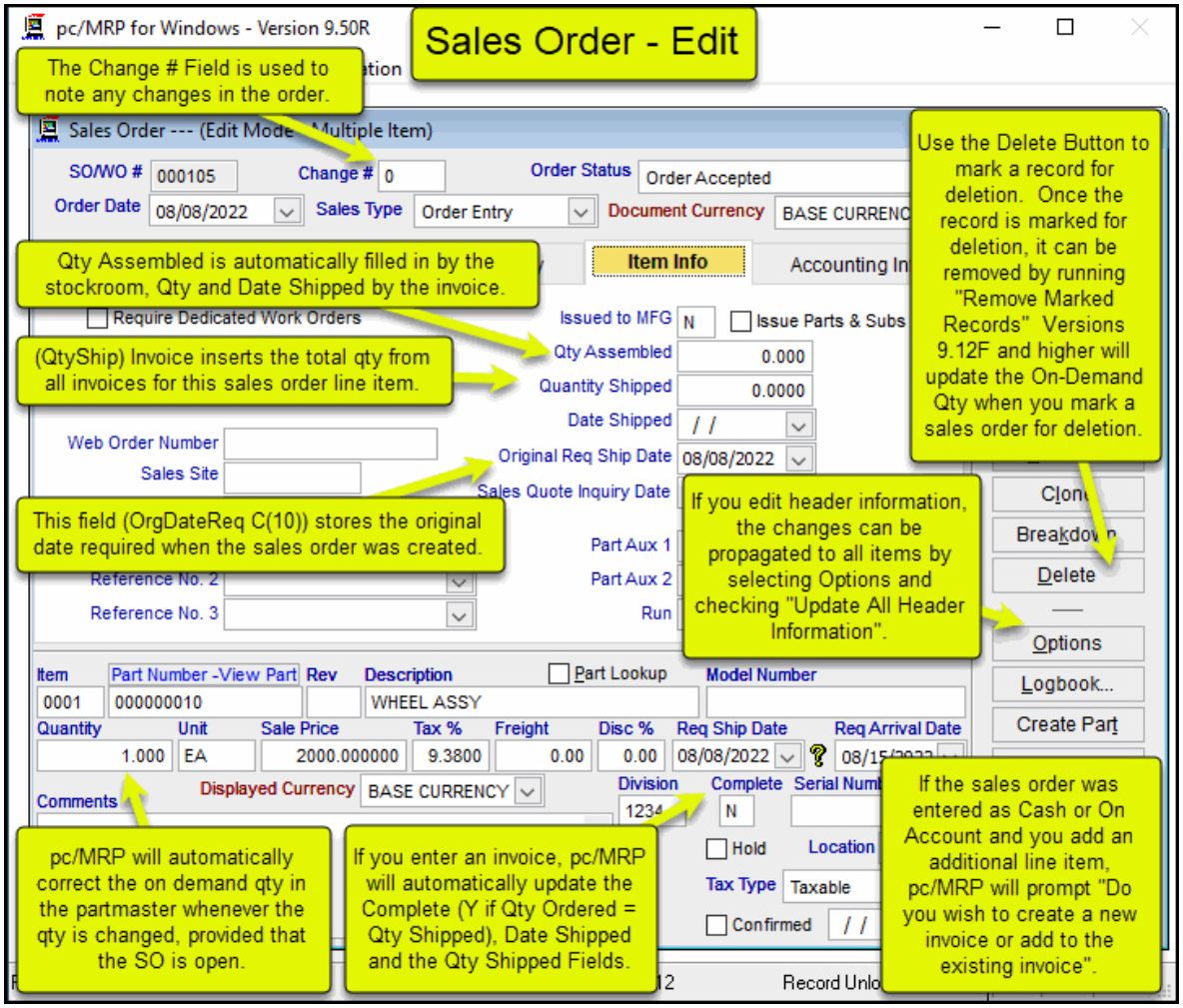



This option allows users to scroll, edit, delete, undelete Sales Order line items, or run queries against Sales Order records.

Selecting to run a **Queried Search** allows users to build, run, save, and load queries for the Sales Order table. For further details, see Chapter 15.14.1.

Selecting an **Indexed Search** allows users to search on indexed fields. This allows pc/MRP to find the information much faster. To perform an **Indexed Search** select the:

1. Desired **Sort Order,** Document #, Account #, Part #, Model #, Customer PO #, Ship to Address
2. Desired **Include** information, Open, Closed, Open and Closed (Closed = Invoiced)
3. Enter the applicable data in the **Begin Scrolling At:** field
4. Select the desired **Action**, **View** or **Edit**
5. Click Search
6. Select the correct record
7. Click **Ok** to proceed to the edit screen for that record.




Every field within the Sales Order table is editable. There are however, several key concepts a user must understand before editing.

If the Sales Order edited was originally entered as "**Cash and Carry**" or "**On Account and Carry**", and you add an additional line item you will be asked whether you wish to create a new invoice or add to an existing invoice. If you choose to add to an invoice and more than one invoice for this particular Sales Order exists, a scroll window with the last line item of each invoice will be displayed. Select the item with the invoice number you wish to append.

If you were to edit the **Quantity** on an open sales order, pc/MRP will automatically correct the part number's quantity on demand in inventory. If an invoice has been entered for this sales order and you edit the invoice, pc/MRP will offer to update the sales order "quantity shipped" and the inventory on hand quantities. To edit the **address**, simply edit the address in the first line item.

The **Issued to MFG** and **Qty Assembled** fields appear on the edit screen for **order entry** sales orders as these types of orders will act like work orders. pc/MRP will automatically enter a "Y" into the Issued to MFG field when the assemblies are issued from stock to manufacturing. The Qty Assembled field is automatically updated when the assemblies are received by the stock room from manufacturing for that sales order number.

The **Complete** and **Quantity Shipped** fields are displayed only in the edit mode and are filled in automatically when the items are invoiced. The Quantity Shipped field contains the accumulative amount shipped. pc/MRP uses the Complete field to determine if a record is overdue, open, or closed. A "Y" in the Complete field marks the record as closed. An "N" or <blank> in the COMPLETE field marks the record as open.

The **Date Shipped** field is updated automatically when invoicing.

The **Change #** stands for Change Order Number; this is used to note any changes in the order.

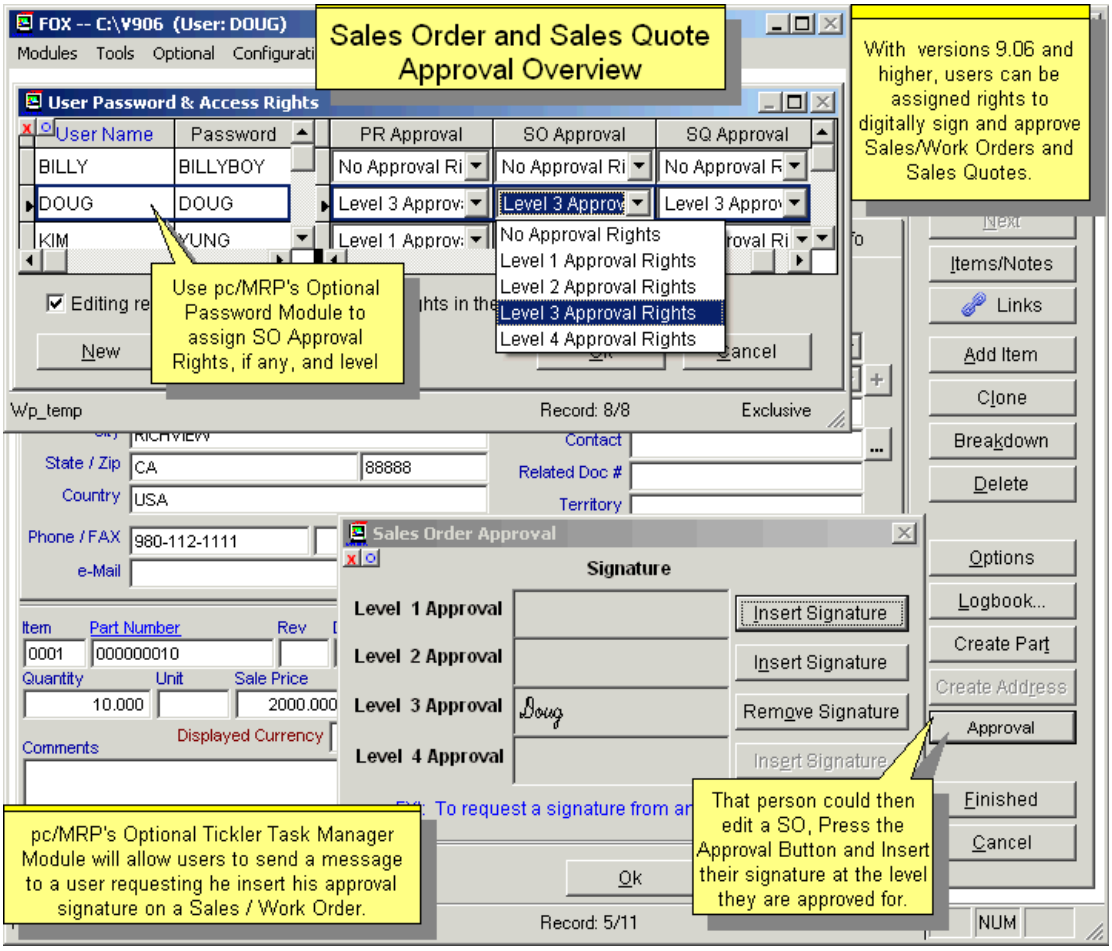
Use the **Delete** Button to mark a line item or the entire sales order for deletion. Line items that have been issued to MFG or invoiced, can not be marked for deletion. To permanently remote the records from the database table, set an administrative lockout, then select Sales, Remove Marked Records**. Notes:** Versions **9.06A** and lower only allowed the user to delete line items one-by-one. Version **9.12E** and lower did not update the On Demand qty.

If a SO has been issued to MFG but not fully received back, or if the SO was invoiced, users should avoid editing the Quantity on the SO. When trying to edit the quantity, users will either receive a warning (and can choose to continue) or they will be blocked completely. This is set by Configuration **Option 53.**

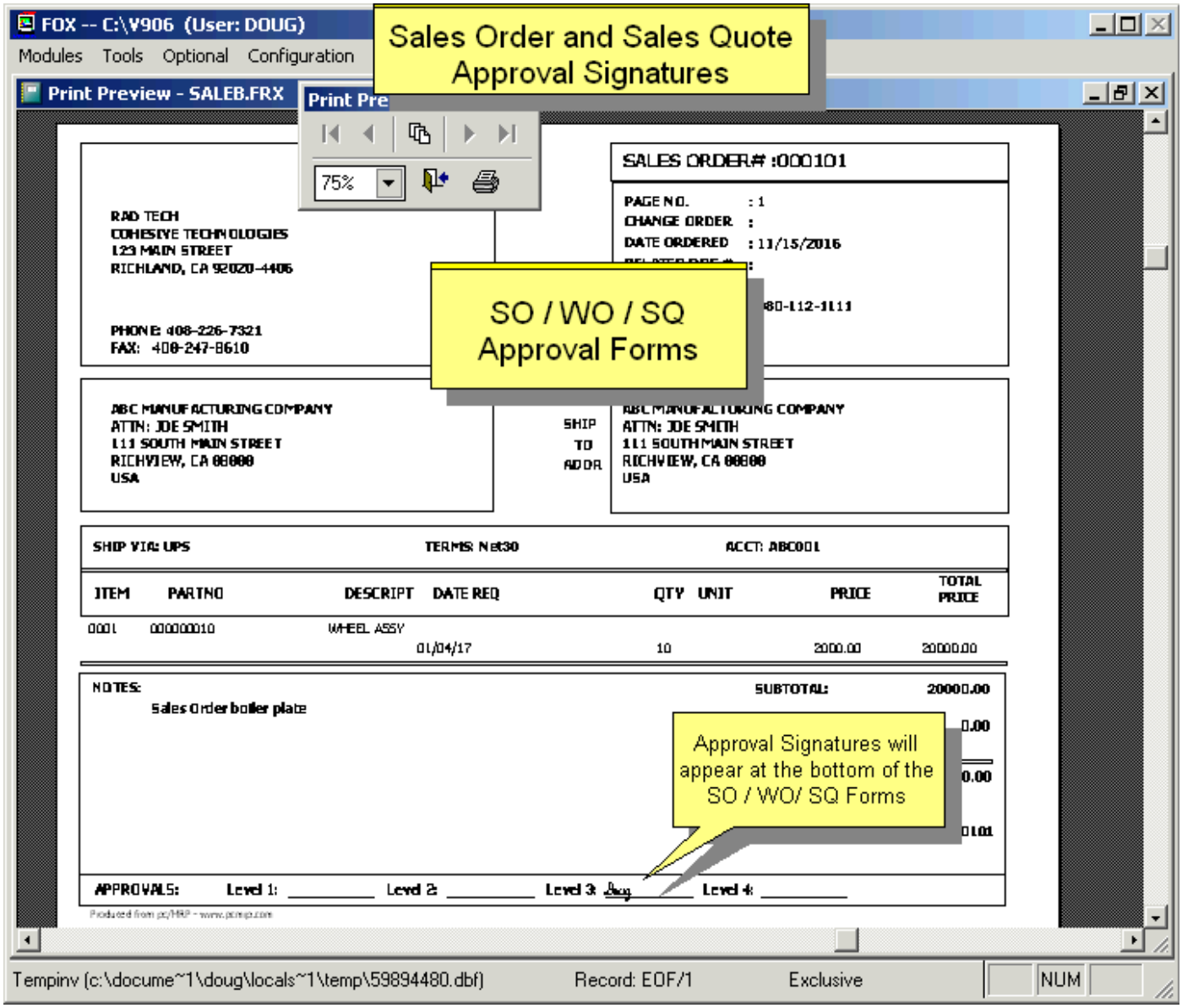
If a SO has been issued to MFG but not fully received back, or if the SO was invoiced; users will be blocked from deleting the SO or changing the part number on the SO. If you want to delete the SO or change the part number anyway, you need to remove the Y from the Complete and/or the Y from the Issued to MFG fields (not recommended).

## Sales Order Approval

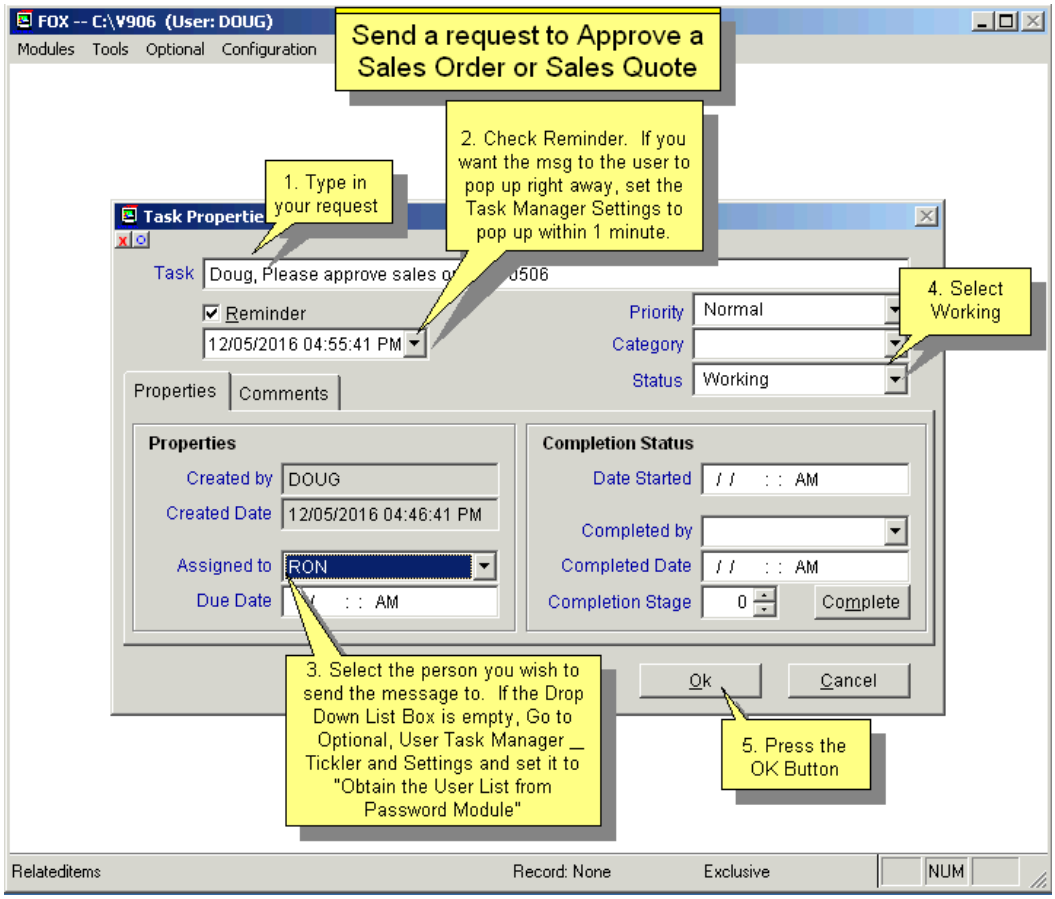
Companies that own the optional Advanced Password Module, can utilize the SO Approval feature below. The optional User Task Manager & Tickler Module adds an additional feature, but is not essential.

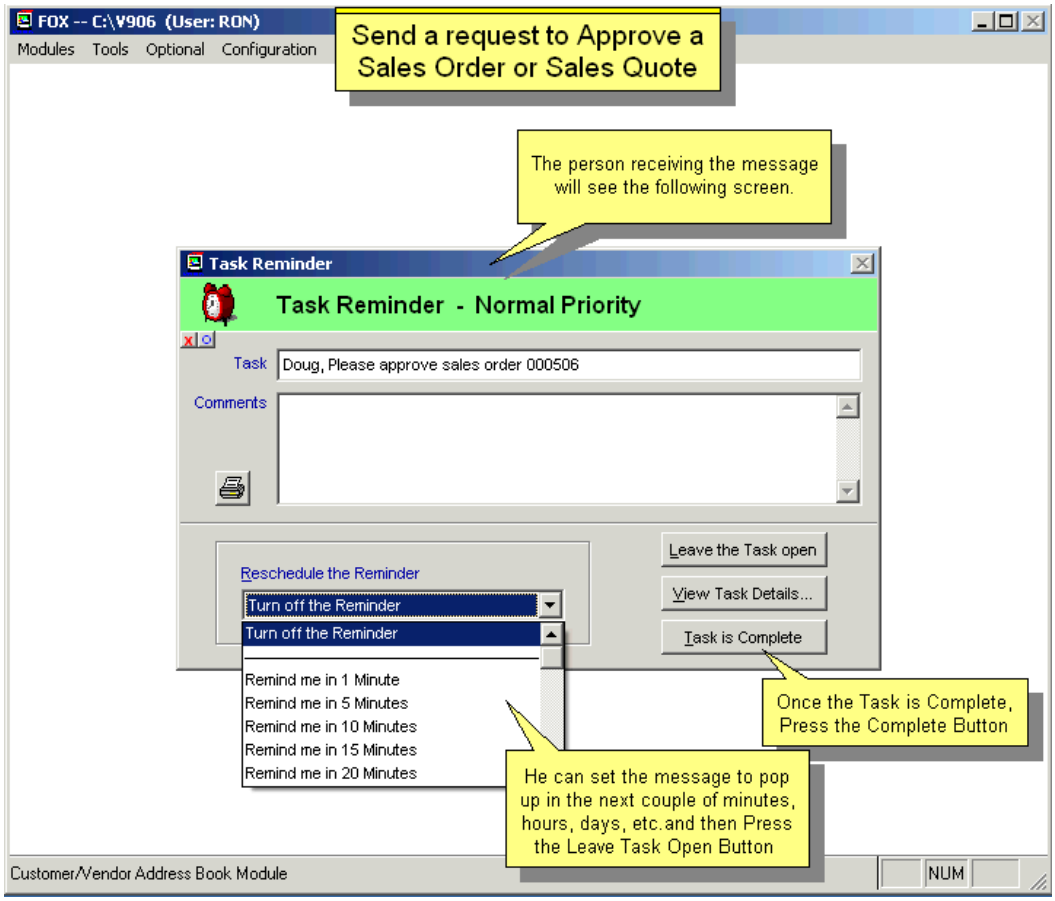



Users can have rights to approve a PO of 5 different levels, from No Approval Right to Level 4 Approval Rights. This is set in the Optional Advanced Password Module for each user. Users with PO approval rights can then click on the Approval button and insert their user name into an approval box on or below their approval level.
The approval signatures will appear at the bottom of the sales order form.


FOX -- C:\V906 (User: DOUG)
Modules Tools Optional Configuration
Sales Order and Sales Quote Approval Signatures
Print Preview - SALEB.FRX
Print Pre
75%
SO / WO / SQ Approval Forms
SALES ORDER# :000101
PAGE NO. : 1
CHANGE ORDER :
DATE ORDERED : 11/15/2016
RAD TECH
COHESIVE TECHNOLOGIES
123 MAIN STREET
RICHLAND, CA 92020-4406
PHONE 408-226-7321
FAX: 408-247-8610
ABC MANUFACTURING COMPANY
ATTN: JOE SMITH
111 SOUTH MAIN STREET
RICHVIEW, CA 88888
USA
SHIP TO ADDR
ABC MANUFACTURING COMPANY
ATTN: JOE SMITH
111 SOUTH MAIN STREET
RICHVIEW, CA 88888
USA
SHIP VIA: UPS
TERMS: Net30
ACCT: ABC001
ITEM PARTNO DESCRIPT DATE REQ QTY UNIT PRICE TOTAL PRICE
0001 00000010 WHEEL ASSY 01/04/17 10 2000.00 20000.00
NOTES:
Sales Order boiler plate
SUBTOTAL: 20000.00
0.00
0.00
0.01
Approval Signatures will appear at the bottom of the SO / WO/ SQ Forms
APPROVALS: Level 1: _____ Level 2: _____ Level 3: Doug _____ Level 4: _____
Tempinv (c:\docume~1\doug\locals~1\temp\59894480.dbf)
Record: EOF/1
Exclusive
NUM

If the optional User Task Manager & Tickler Module is activated, you can immediately send a request to another user to approve the sales order. Press the F4 key, or select Optional, User Task Manager & Tickler, New Task.



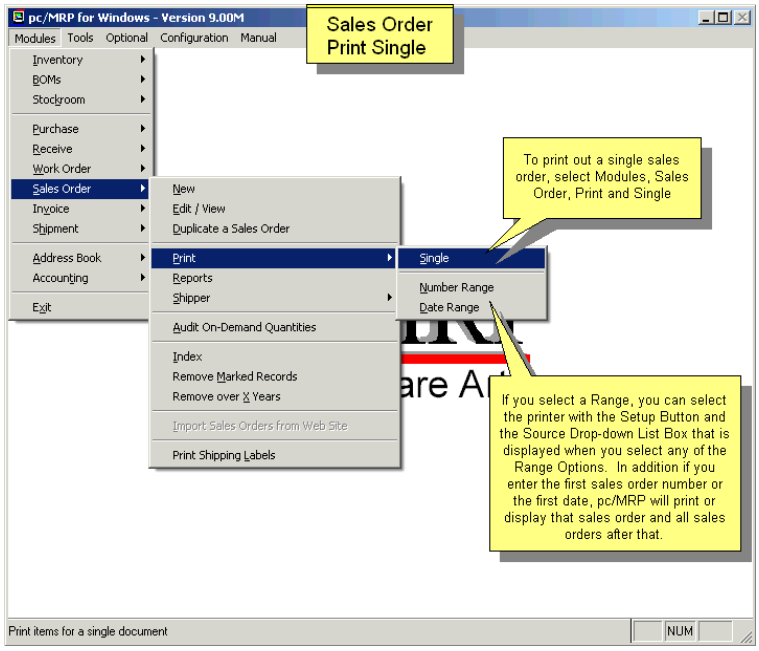



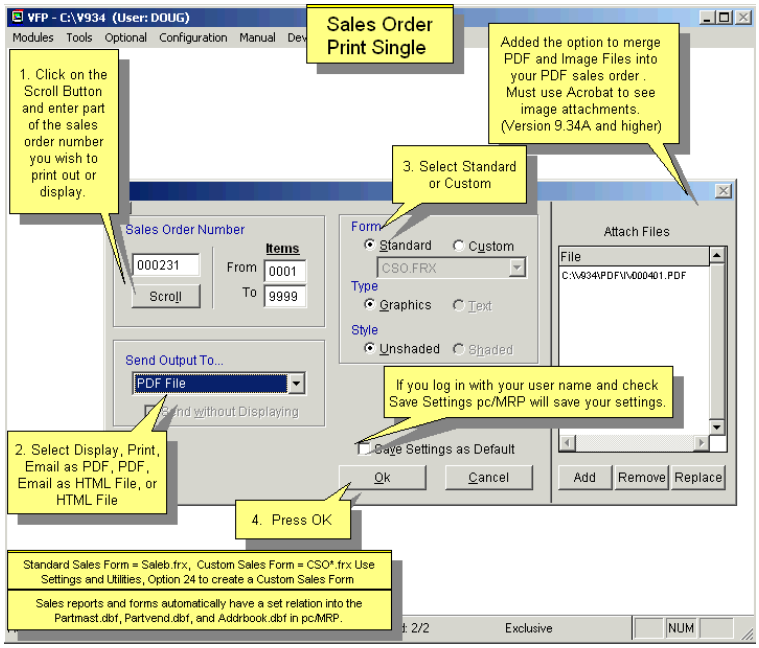
## 9.3 Duplicate a Sales Order

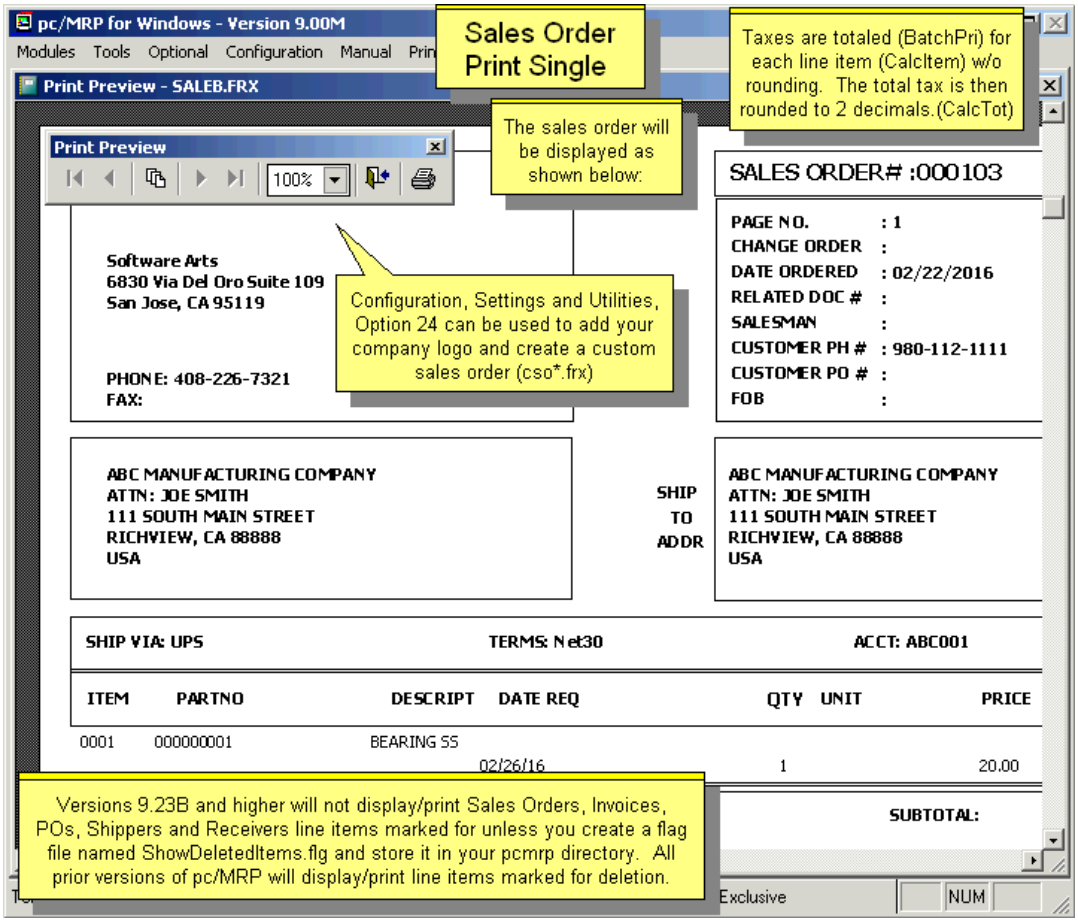
When you duplicate a sales order, the entire sales order is duplicated with a new Sales Order number, the current date and a blank Required Ship Date. **Note:** When duplicating a sales order, pricing information is not changed unless the quantity or part number is changed and the **Always Look-up pricing information** button is checked on the **Option** button. (Section 9.3.3) Duplicating a SO will increase the part's On Demand qty (versions **9.12F, 9.13H** and higher.) Check Open for Editing if you want to enter the Date Required.

## 9.4 Print, Email a Sales Order

To print, display, email, fax a sales order, select Modules, Sales, and Print. You can also create an HTML or PDF sales order document. If you select a Range, you can select the printer using the Setup button. If you enter the first sales order number or the first date, pc/MRP will print or display that sales order and all sales orders after that. If you select a Range, you can select the printer using the Setup button. If you enter the first sales order number or the first date, pc/MRP will print or display that sales order and all sales orders after that.






To e-mail a sales order directly from pc/MRP, you must use Outlook, not Outlook Express. The e-mail address in MS Outlook will automatically be populated from the e-mail entry in the pc/MRP Address Book.

If you choose to create an HTML or PDF document, you can save this document and attach it to an e-mail created in your existing e-mail program. The .PDF file name will include the Change#.

If the flag file **SOMAILLB.FLG** exists, an address label for the customer on that sales order will automatically be printed.

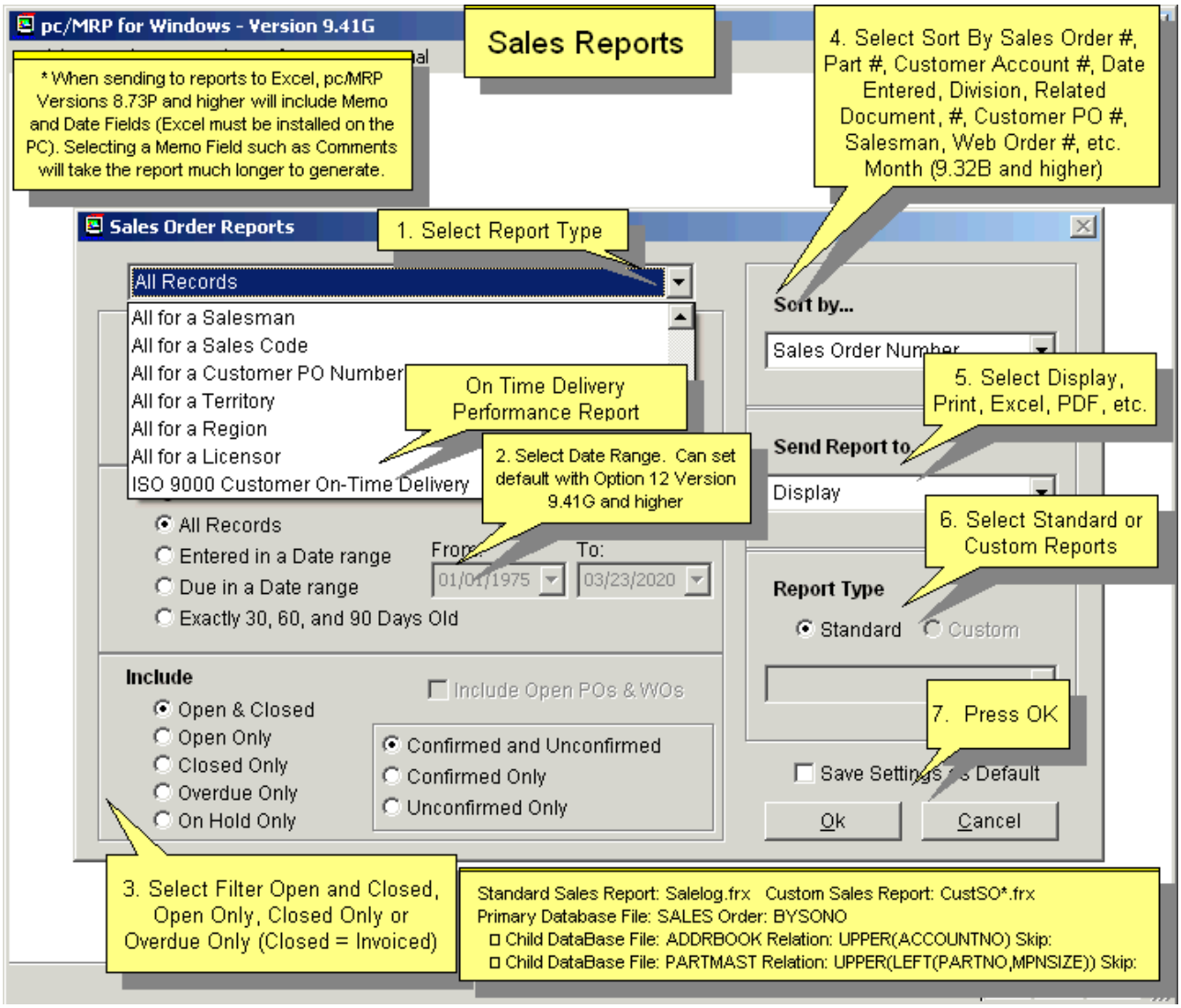
Sales Orders, Invoices, and Shippers can be configured to print out the Serial Number or Model Number using Settings and Utilities, **Option 22**.

If you need a "Sales Terms" pages printed after every sales order, call Software Arts. The Technician will create a custom EF file for you, using ~OUT~ ShellExec(fullpath(<*filename*>)).

If you select to print "Single Sales Order", and you have a custom form named **SOFORM1.FRX** or **SOFORM2.FRX**, pc/MRP will ask users if they want to print them after printing the sales order. These two additional forms can be used to make travelers.

## 9.5 Reports

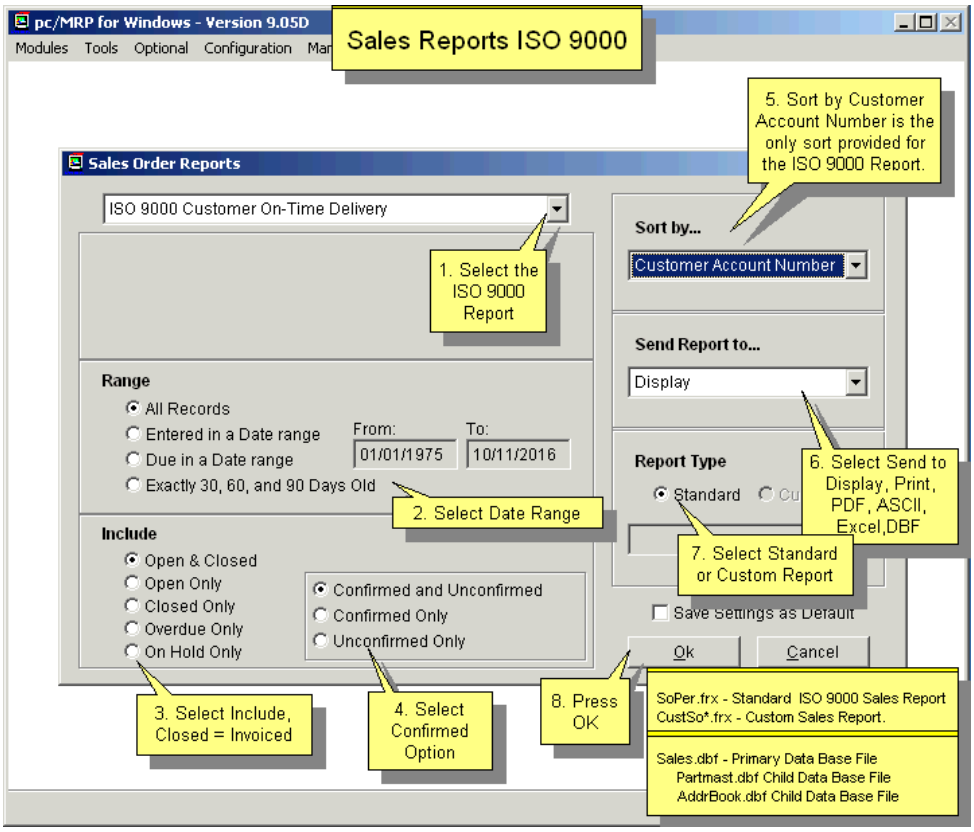
### 9.5.1 Print/Display Sales Order Reports

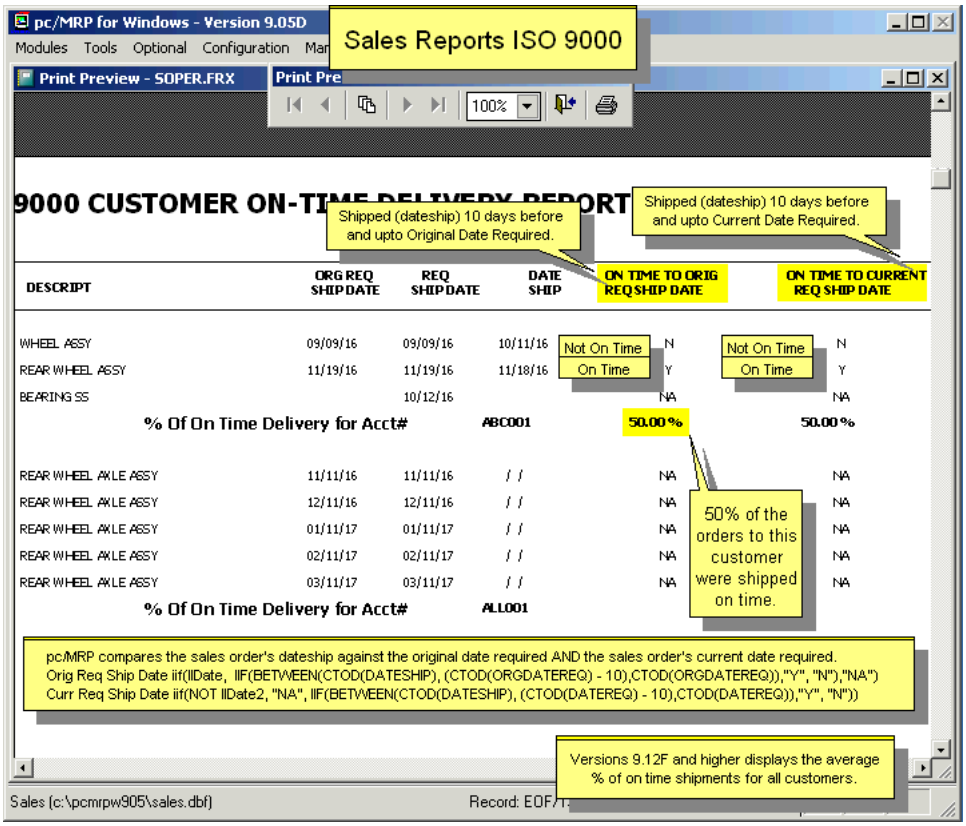



Select Modules, Sales Orders and Reports to display or print out a sales order report (SALELOG.FRX). See Section 15.4.1 to create custom sales order reports (CUSSO*.FRX or CUSTSO*.FRX).

### 9.5.2 ISO 9000 On Time Delivery Report for Customers

The report is sorted by customer Account Number. The order is On Time if it is not late, and is not more than 10 days early. The subtotal will be 100 * (number of on time orders/total number of orders).



### 9.6 Shipper (Print/Display a Shipper)

Allows you to print out or display a shipper for a specified sales order. Each shipper order can contain up to 9999 line items. Please note that a sales order line item that is on hold will not allow a shipper to be printed/displayed for that line item. For additional details see Section 9.4 above. The shipper will display the Backorder qty (**9.05G, 9.06B** and above).

### 9.7 Audit On-Demand Quantities

Zeros out the on demand quantity in inventory and then replaces the on demand quantities with the on demand quantities from all open sales orders and work orders. If several sale order quantities are edited, this option will automatically correct inventory quantities. If 'Audit On-Demand Quantities' reports any errors, you must fix the errors and re-run the function again.

### 9.8 Print Shipping Labels

Select the Sales Order number. On the next screen you can enter the number of boxes. The Date Code and Lot Code will be printed on the labels, but will not be saved back to any database file. If Specify Individual Box Quantities is checked, you will be able to edit the Date Code, Lot Code and Quantity for each box.

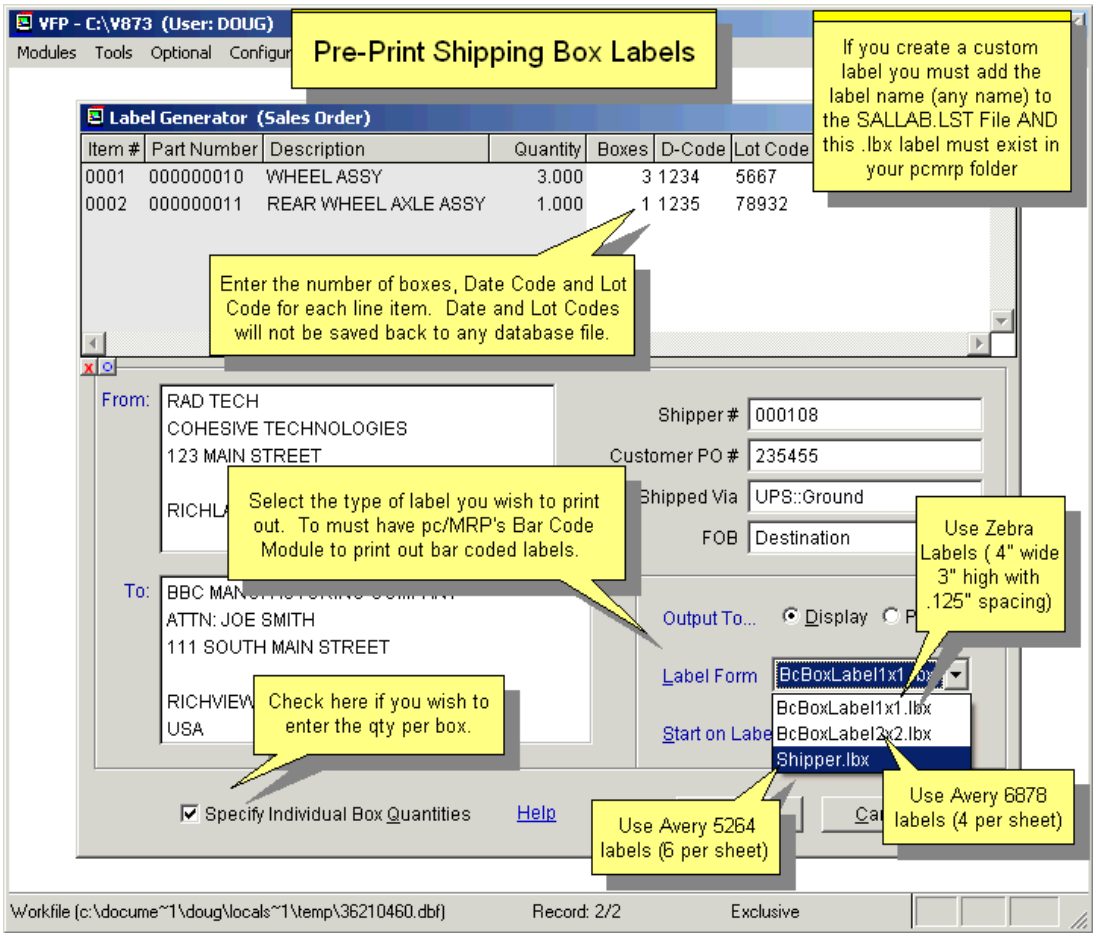
Select the type of label you wish to print. Customers who own pc/MRP's Optional Bar Code Module, can print out bar coded labels.

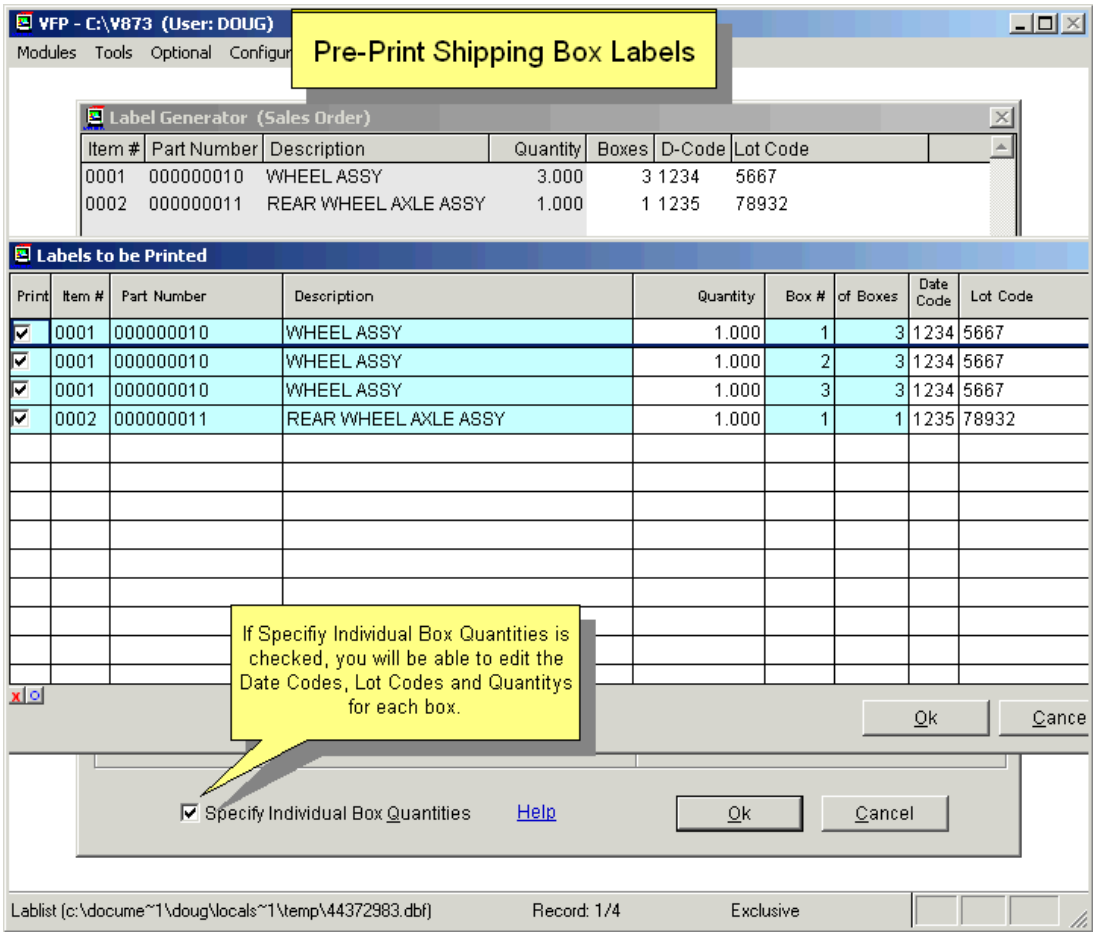
Users can create additional custom *.LBX labels or *.FRX forms. Any custom Label or Form you wish to utilize must be listed in a file called **SALLAB.LST**. This file can be created and or edited through Notepad and has to be located in the PCMRPW folder.

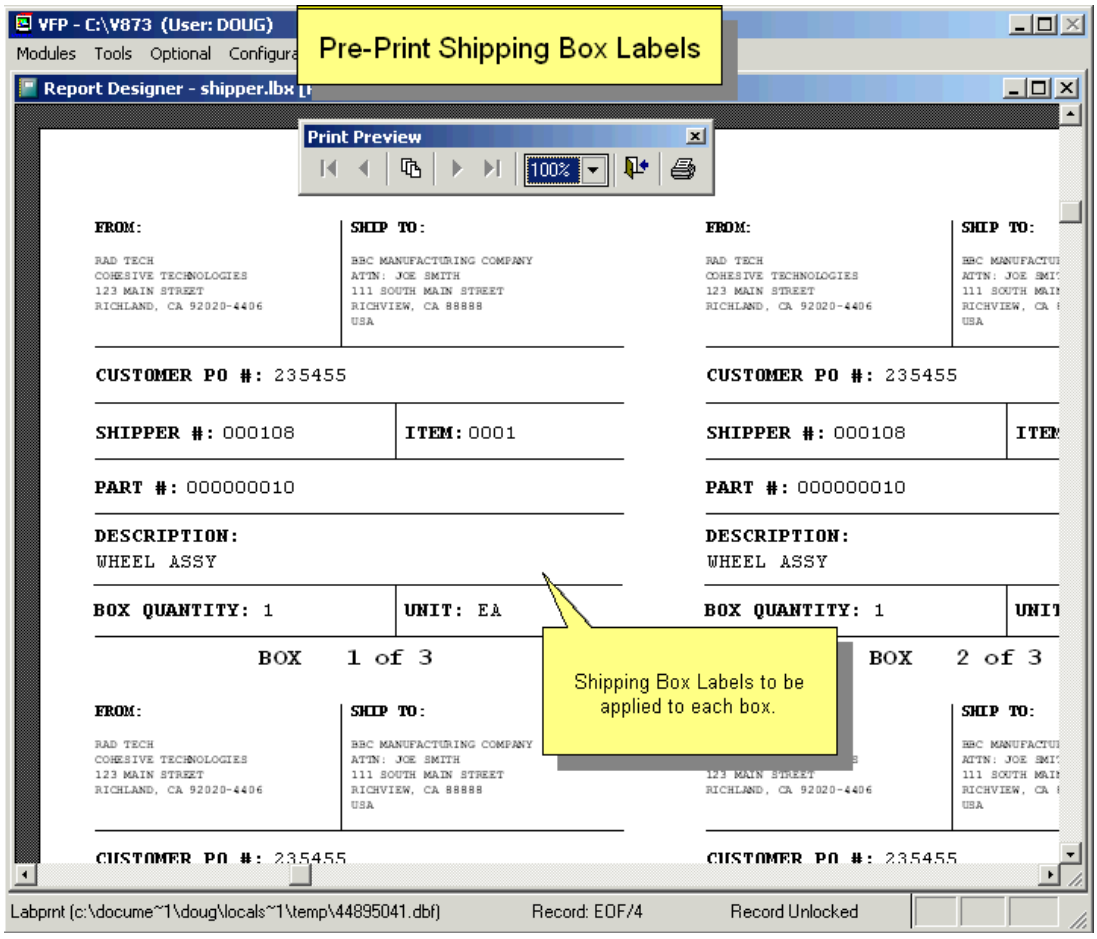
This option allows users to print out a shipping label for each shipping box required for an invoice. To activate this option in the Invoice menu, the **INVLAB.LST** & **INVSHIP.FLG** files must exist in the pcmrpw folder.

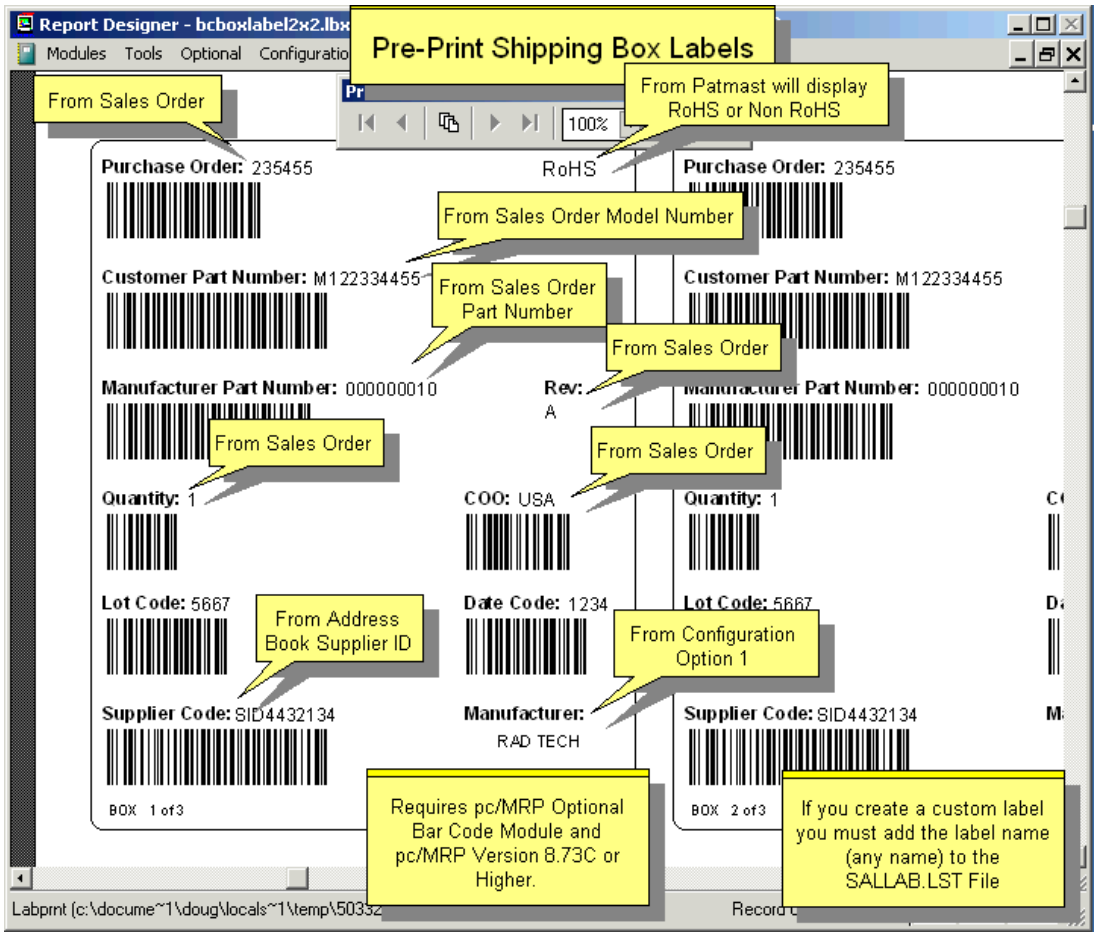
The text in an example SALLAB.LST file is shown below:

BcBoxLabel1x1.lbx = 3" x 4" continuous feed.
BcBoxLabel2x2.lbx = Avery 6878 labels - Four per sheet.
Shipper.lbx = Avery std 5264 labels - shipping labels. Six per sheet. 4-1/8" x 3-1/3"


VFP - C:\V873 (User: DOUG)
Modules Tools Optional Configur
Pre-Print Shipping Box Labels
If you create a custom label you must add the label name (any name) to the SALLAB.LST File AND this .lbx label must exist in your pcmrp folder
Label Generator (Sales Order)
Item # Part Number Description Quantity Boxes D-Code Lot Code
0001 000000010 WHEEL ASSY 3.000 3 1234 5667
0002 000000011 REAR WHEEL AXLE ASSY 1.000 1 1235 78932
Enter the number of boxes, Date Code and Lot Code for each line item. Date and Lot Codes will not be saved back to any database file.
From:
RAD TECH
COHESIVE TECHNOLOGIES
123 MAIN STREET
Shipper # 000108
Customer PO # 235455
Shipped Via UPS::Ground
FOB Destination
Select the type of label you wish to print out. To must have pc/MRP's Bar Code Module to print out bar coded labels.
Use Zebra Labels ( 4" wide 3" high with .125" spacing)
To:
ATTN: JOE SMITH
111 SOUTH MAIN STREET
USA
Output To... Display
Label Form BcBoxLabel1x1.lbx
BcBoxLabel1x1.lbx
BcBoxLabel2x2.lbx
Shipper.lbx
Check here if you wish to enter the qty per box.
Specify Individual Box Quantities
Help
Use Avery 5264 labels (6 per sheet)
Use Avery 6878 labels (4 per sheet)
Workfile (c:\docume~1\doug\locals~1\temp\36210460.dbf)
Record: 2/2
Exclusive


VFP - C:\V873 (User: DOUG)
Modules Tools Optional Configur
Pre-Print Shipping Box Labels
Label Generator (Sales Order)
Item # Part Number Description Quantity Boxes D-Code Lot Code
0001 000000010 WHEEL ASSY 3.000 3 1234 5667
0002 000000011 REAR WHEEL AXLE ASSY 1.000 1 1235 78932
Labels to be Printed
Print Item # Part Number Description Quantity Box # of Boxes Date Code Lot Code
0001 000000010 WHEEL ASSY 1.000 1 3 1234 5667
0001 000000010 WHEEL ASSY 1.000 2 3 1234 5667
0001 000000010 WHEEL ASSY 1.000 3 3 1234 5667
0002 000000011 REAR WHEEL AXLE ASSY 1.000 1 1 1235 78932
If Specifiy Individual Box Quantities is checked, you will be able to edit the Date Codes, Lot Codes and Quantitys for each box.
Ok
Cance
Specify Individual Box Quantities
Help
Ok
Cancel
Lablist (c:\docume~1\doug\locals~1\temp\44372983.dbf)
Record: 1/4
Exclusive


Pre-Print Shipping Box Labels
Report Designer - shipper.lbx
Print Preview
FROM:
SHIP TO:
RAD TECH
COHESIVE TECHNOLOGIES
123 MAIN STREET
RICHLAND, CA 92020-4406
BBC MANUFACTURING COMPANY
ATTN: JOE SMITH
111 SOUTH MAIN STREET
RICHVIEW, CA 88888
USA
CUSTOMER PO #: 235455
SHIPPER #: 000108
ITEM: 0001
PART #: 000000010
DESCRIPTION:
WHEEL ASSY
BOX QUANTITY: 1
UNIT: EA
BOX 1 of 3
BOX 2 of 3
Shipping Box Labels to be applied to each box.
Labprnt (c:\docume~1\doug\locals~1\temp\44895041.dbf)
Record: EOF/4
Record Unlocked


Report Designer - bcboxlabel2x2.lbx
Pre-Print Shipping Box Labels
From Sales Order
From Patmast will display RoHS or Non RoHS
From Sales Order Model Number
From Sales Order Part Number
From Sales Order
From Sales Order
From Sales Order
From Address Book Supplier ID
From Configuration Option 1
Purchase Order: 235455
RoHS
Customer Part Number: M122334455
Manufacturer Part Number: 000000010
Rev: A
Quantity: 1
COO: USA
Lot Code: 5667
Date Code: 1234
Supplier Code: SID4432134
Manufacturer: RAD TECH
BOX 1 of3
BOX 2 of3
Requires pc/MRP Optional Bar Code Module and pc/MRP Version 8.73C or Higher.
If you create a custom label you must add the label name (any name) to the SALLAB.LST File

### 9.9 Queried Search Overview (see 15.14.1)

### 9.10 Indexed Searches (see 15.14.2)

### 9.11 Index (see 15.14.3)

### 9.12 Remove Marked Records (see 15.14.4)

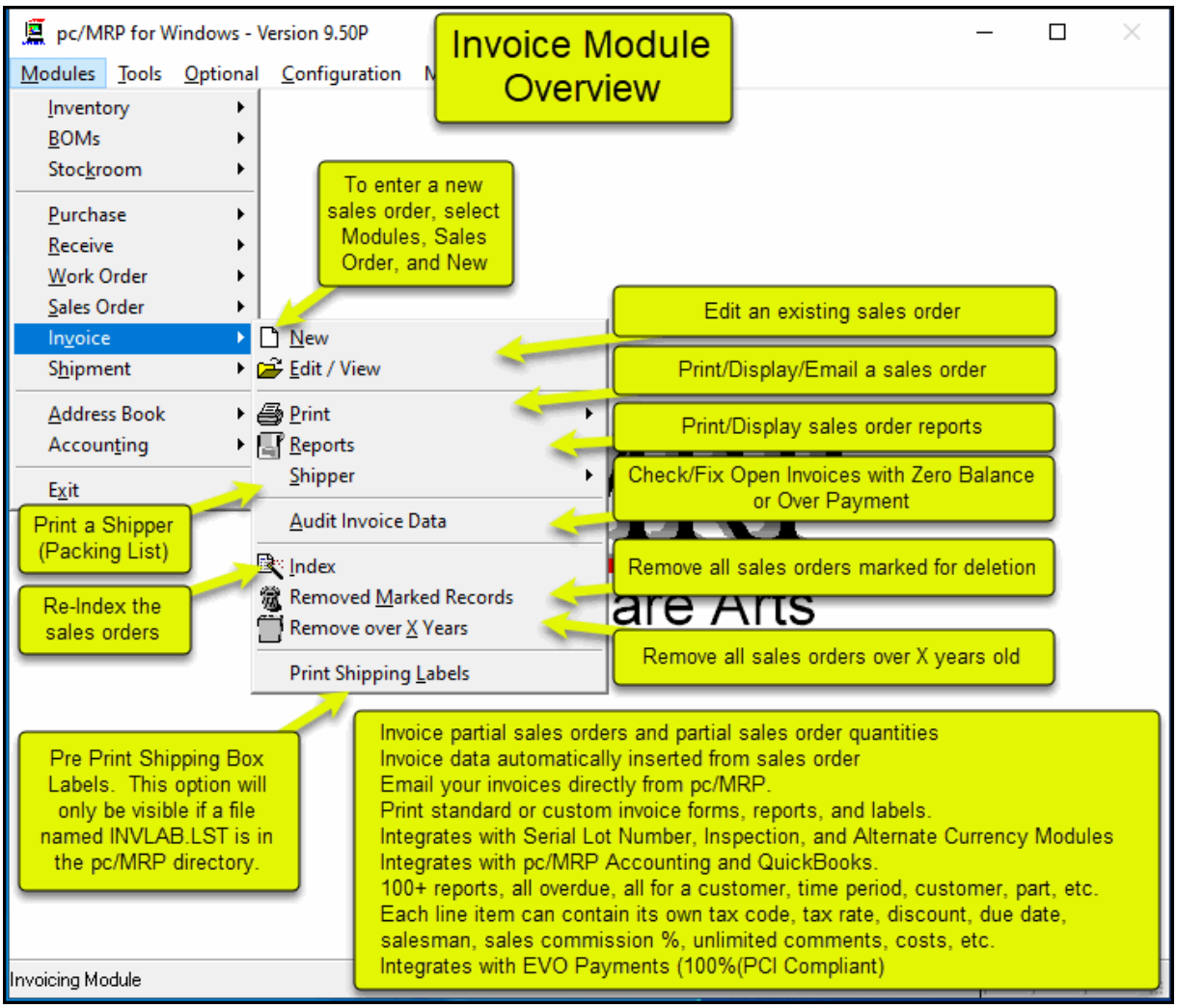
### 9.13 Remove Over X Years (see 15.14.5)

**Note:** Sales orders and Work orders share the same database table. When users instruct pc/MRP to remove all Sales orders older than X years, pc/MRP will also remove all Work orders that are olden than X years. If you want to keep all Work orders and only want to delete old Sales orders, call Software Arts for assistance.

# 10 Invoice Module

### 10.1.1 Overview. Enter a New Invoice

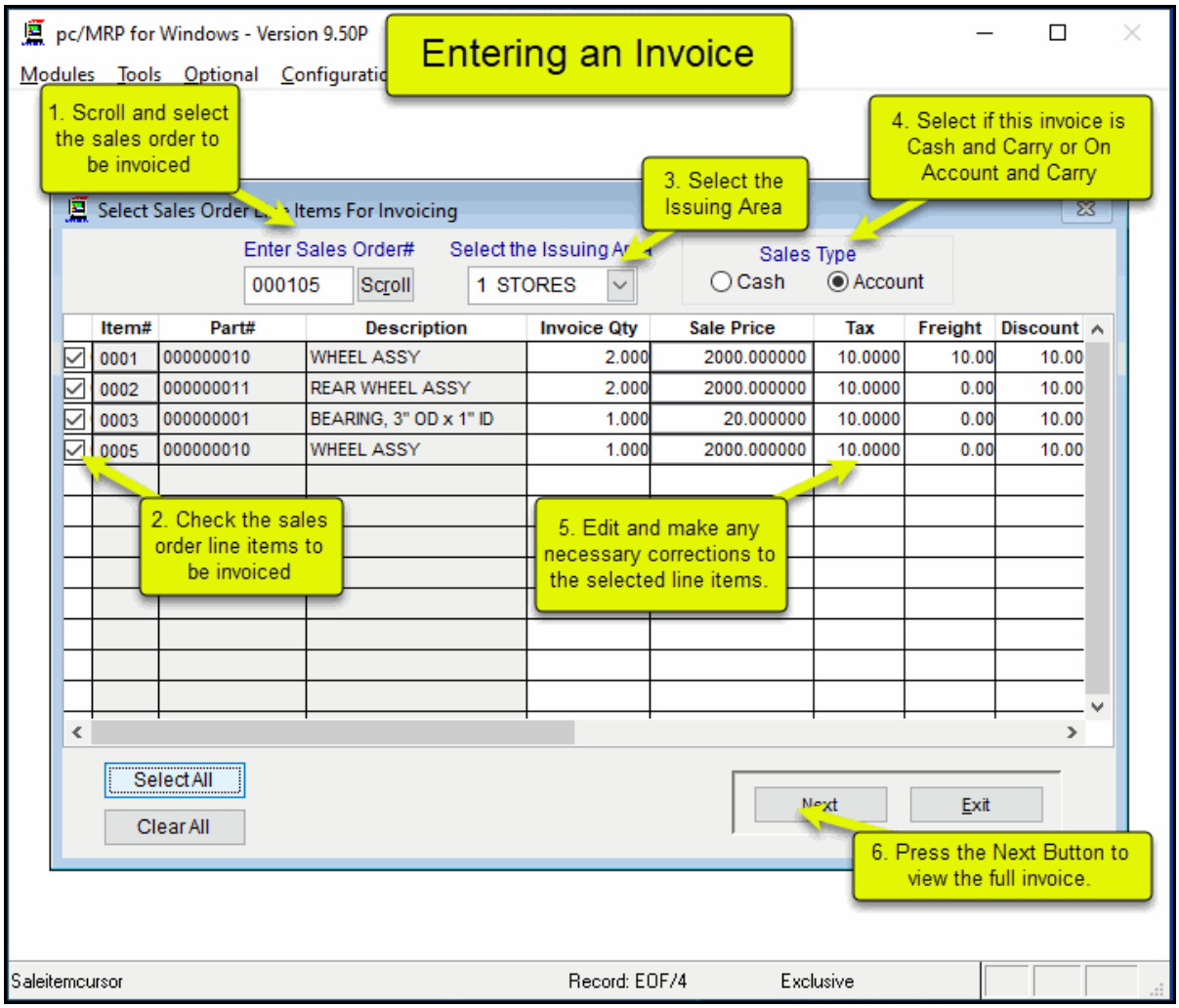
pc/MRP's Invoice Module allows you to enter, edit, and print invoices and invoice reports. **Note:** You will enter an Invoice for only "Order Entry" Sales Orders. For "On Account and Carry" and "Cash and Carry" Sales Orders the Invoice will be created automatically.




An online slideshow is located here: [http://www.pcmrp.com/mrp101/invoice880selectnew.htm](http://www.pcmrp.com/mrp101/invoice880selectnew.htm)

### 10.1.1.1 Enter a New Invoice Step 1, Select the Sales Order to be Invoiced

To enter a new invoice for an existing open sales order, select Modules, Invoice and New.
(If there is no existing open sales order and you have the finished goods in stock, enter the invoice by selecting Sales, New and On Account or Cash and Carry.) Scroll to select the Sales Order to be invoiced. (A green background indicates Sales Order items that have been built but not yet invoiced.) Select all the line items you wish to invoice. Select the Issuing Area and the Sales Type. At this point you can make any necessary corrections to the selected line items.

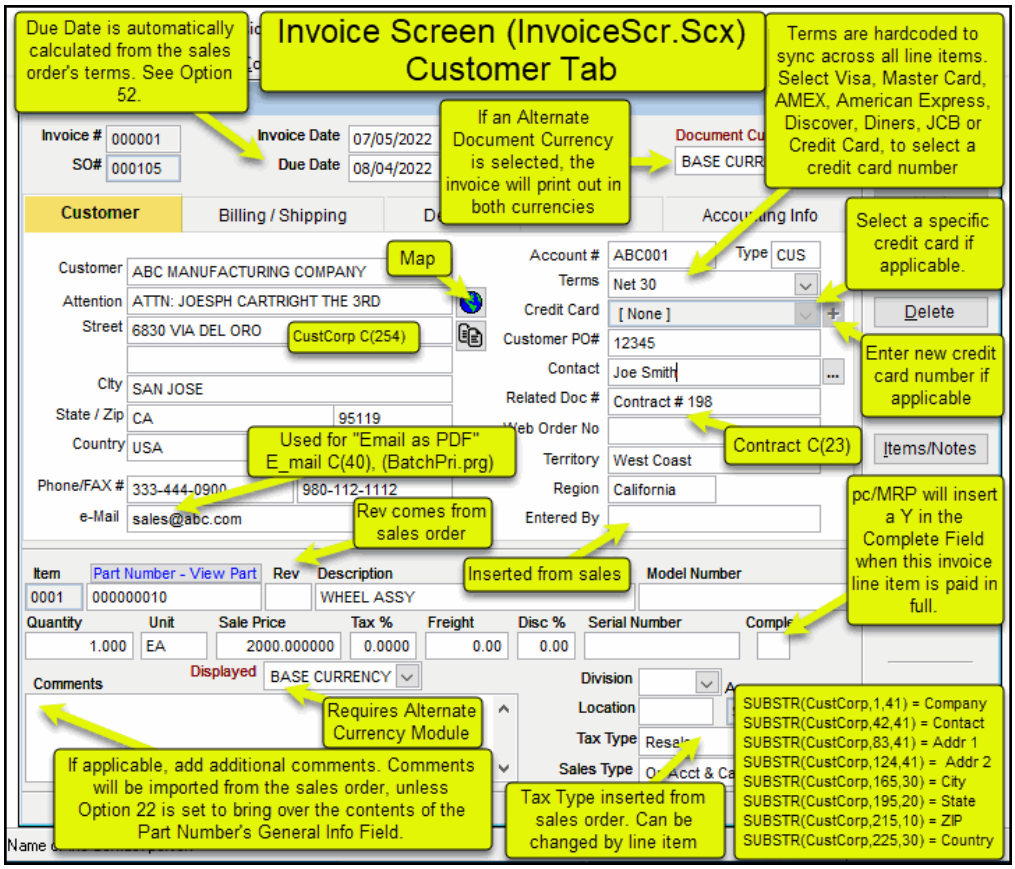



### 10.1.1.2 Enter a New Invoice Step 2, Make any necessary Changes to the New Invoice

pc/MRP will insert the next available invoice number. You can enter your own invoice number at this point, but it is not advisable to do so as pc/MRP can track the next available invoice number better than humans. The invoice number should consist of 6 numeric characters with leading zeros. pc/MRP is able to increment alpha characters in some cases. For example if the highest invoice number was B99999, pc/MRP would provide C00001 as the next available invoice number. However, pc/MRP will run faster if you accept the default invoice numbers. Configuration, Settings and Utilities, **Option 74** can be set to allow or not allow editing of the invoice number. We suggest companies block document numbers from being edited.

If none of the information on the invoice needs to be changed and none of the line items requires serial numbers or inspection and auto accounting is off, press OK. You are done! Proceed to **10.1.1.10**. Otherwise continue reading.

### 10.1.1.3 Enter a New Invoice Step 3, Customer Tab




**Part Number, Rev, Description**, **Customer Address**, **Ship to Address**, **Bill to Address**, **Original Quantity Required**, **Quantity Previously Shipped**, **Unit**, **Sale Price**, **Terms**, **Trade Discount**, **Freight**, **Tax Rate**, **Salesman**, **Ship Via**, **Credit Account**, **Licensor**, **Licensor Rate**, **Related Document**, and **FOB** are all automatically entered from the Sales Order. See **Option 22** to determine what goes into the **Comments** field.

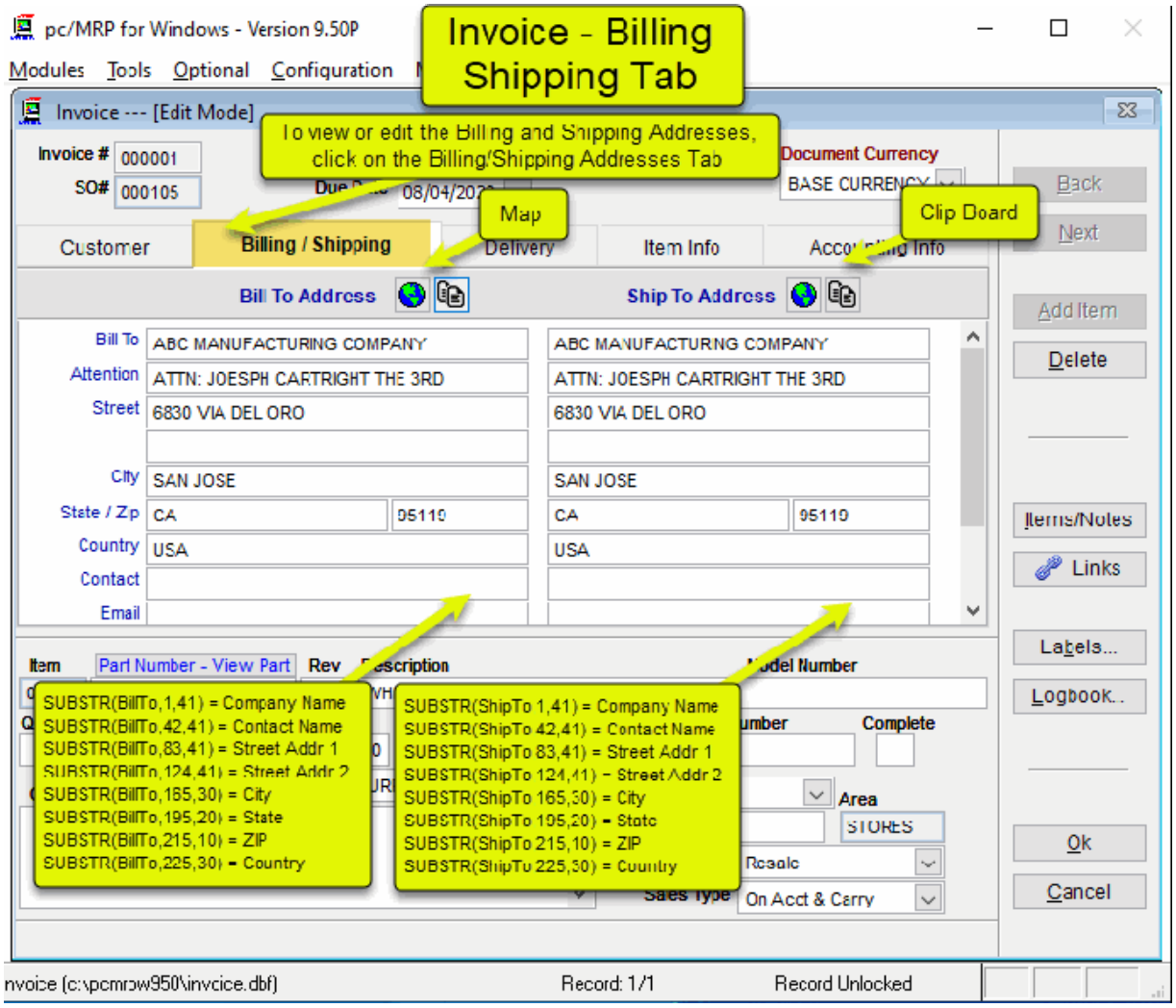
The **Quantity** field (QtyShip) can be overwritten if you are invoicing less than the full quantity.
**Invoice Date** is automatically entered from the system date and is used by the Accounting Module in aging the Accounts Receivables Records. It is also the date used by pc/MRP to determine which records are over X years old and ready for deletion. The **Related Doc #** field is a 21 character scrollable field. It can be used to enter a related contract or document number. The **Entered By** field will contain the current user's login name.

The entire amount for the **Freight** can be entered once in one line item in the freight field or entered individually for all line items. The freight totals for all line items will be totaled and printed out on the forms and reports. The **Document Currency** & the **Displayed currency** fields require the optional Alternate Currency Module, and if installed, will print using both currencies.

Invoices and Shippers can be configured to print out the **Serial Number** or **Model Number** using the **Boiler Plate** Option. (**Option 22**). If the optional **Serial Lot Number Module** has been purchased, do not enter serial numbers into the above serial number field. This field is only in use if the optional module has *not* been activated. Instead, wait for pc/MRP to prompt you to pick or enter the serial numbers for this invoice line item. You can set pc/MRP to print out serial numbers on the invoice using Configuration, Settings and Utilities, **Option 55.**

**InvoiceScr.Syn_Terms** automatically syncs terms across all line items.

### 10.1.1.4 Enter a New Invoice Step 4, Billing/Shipping Tab




Click on the Billing/Shipping Tab to check the Billing and Shipping Addresses which were imported directly from the sales order. Change these addresses if necessary.

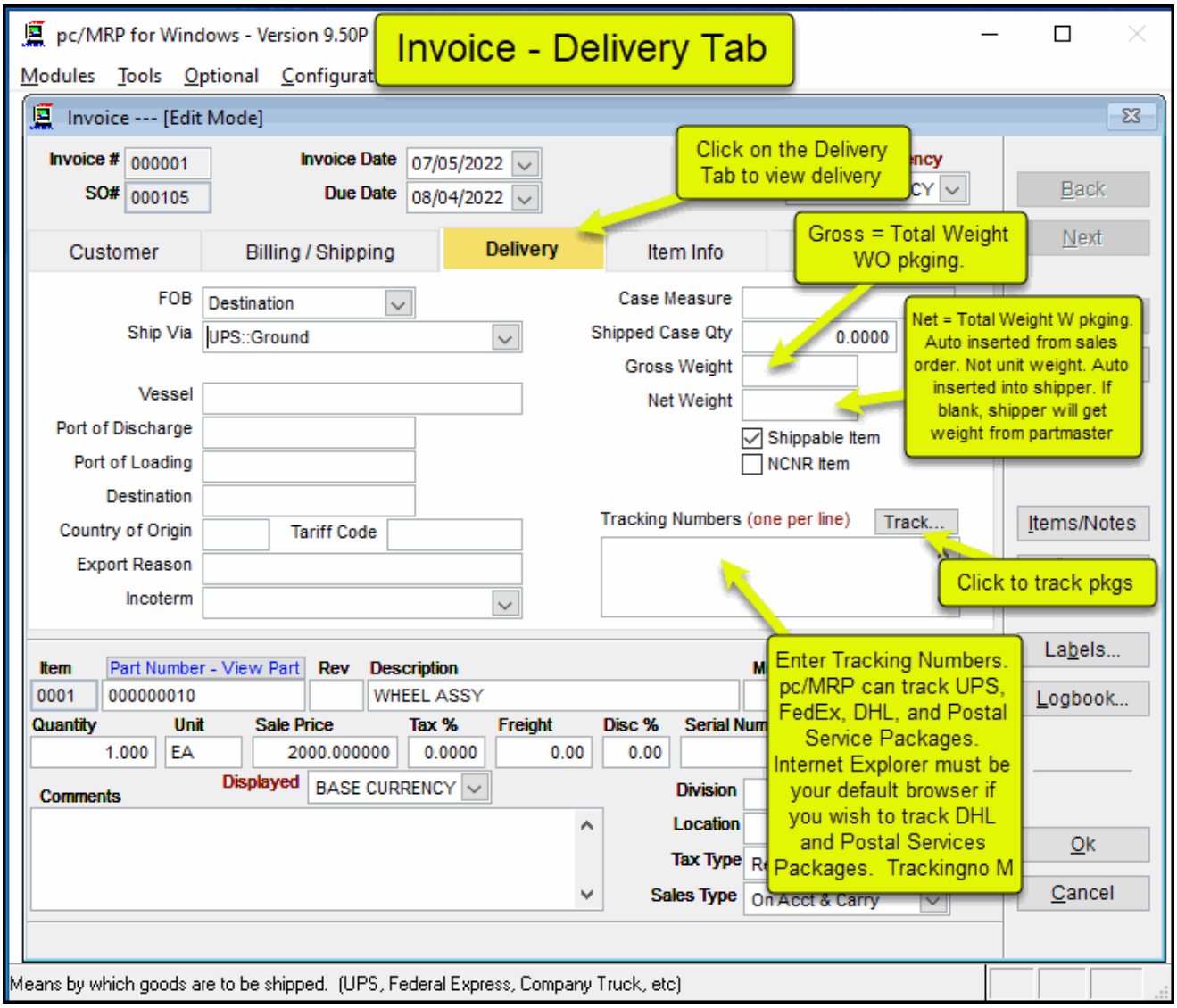
**Contact, Email, Phone, Fax and TaxID** for both the Bill To and Ship To addresses are available in versions **8.73** and higher. You can scroll to see all fields.

The **Payment Due Date** is the date the payment is due on. pc/MRP will automatically calculate by adding the term you entered plus the date of the invoice. You must simply begin with the word "Net." By example, a term of Net-60 or Net 60 will automatically calculate the payment due date 60 days beyond the invoice entry date.

An unlimited amount of **Comments** can be entered for <u>each invoice line item</u>.

Up to nine lines of notes can be added to all Invoices by modifying the Configuration Menu's **Boiler Plate**. (**Option 22**) The boiler plate will appear <u>once, on the last page</u> of the invoice.

### 10.1.1.5 Enter a New Invoice Step 5, Delivery Tab



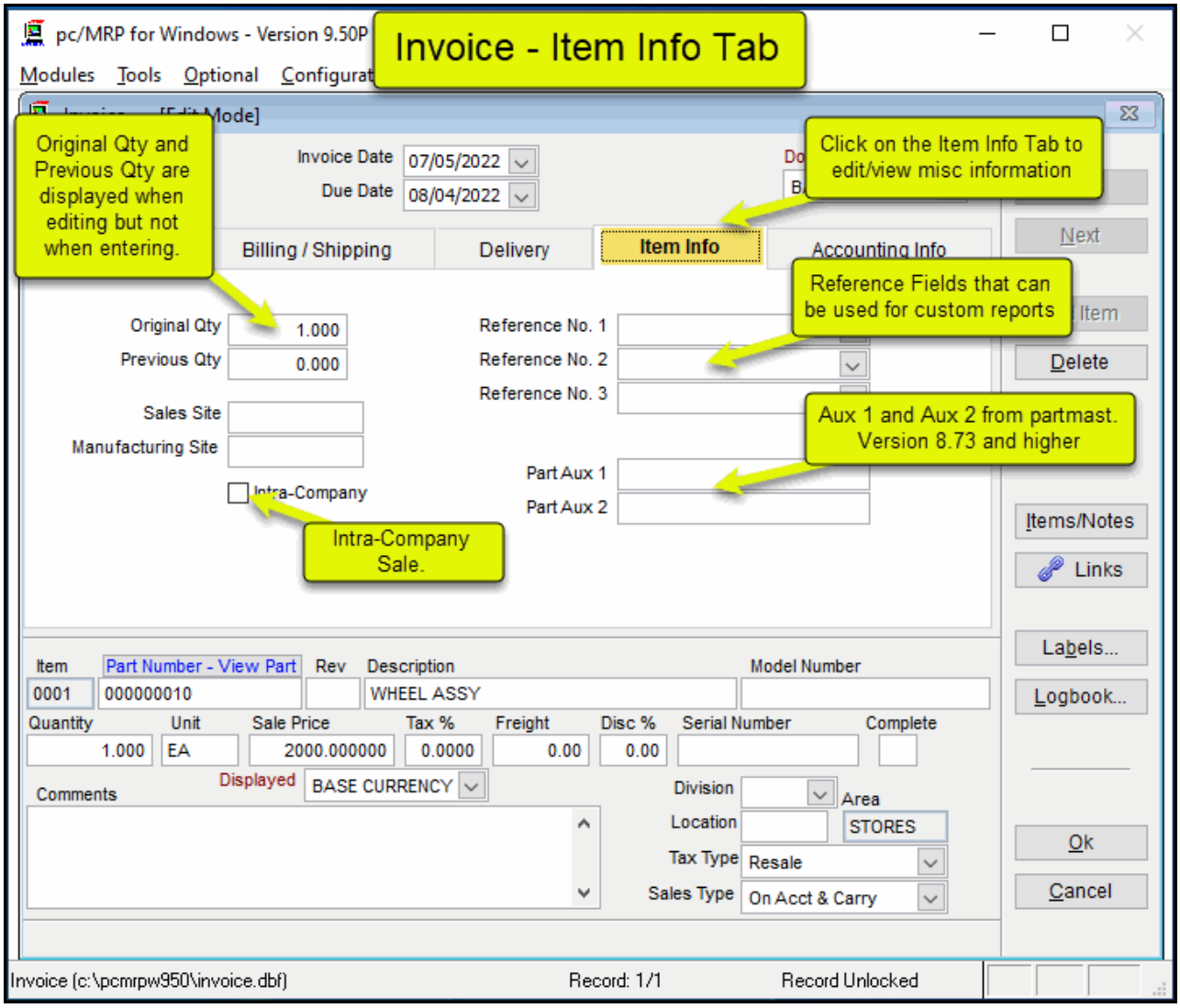

The **FOB** and **ShipVia** fields are imported from the sales order.

If you wish to track the packages through pc/MRP, enter the **Tracking Number(s)**. When you click the Track Button, pc/MRP will track the package. pc/MRP will first look to the Ship Via Edit Box to see which shipping vendor (UPS, FedEx, DHL, Postal Service, TNT) to track. If the Ship Via Edit Box is blank or you used multiple vendors pc/MRP will see if the tracking number is proceeded by UPS:, FEDEX:, DHL:, or TNT: to see which shipping vendor to track. If all of the above is blank, pc/MRP will prompt you to select a shipping vendor.

**Country of Origin**, **IncoTerm**, **Tariff Code** and **Export Reason** are available in version **8.73C** and higher. The first two of these fields come from the Partmaster.

**Gross Weight** (grssweight) and **Net Weight** (netweight) will not automatically come from the Sales Order and will be carried over to the Shipment module. If the weights on the Sales Order are blank, and they are not entered here on the Invoice, the Shipment Module will get the weight directly from inventory.

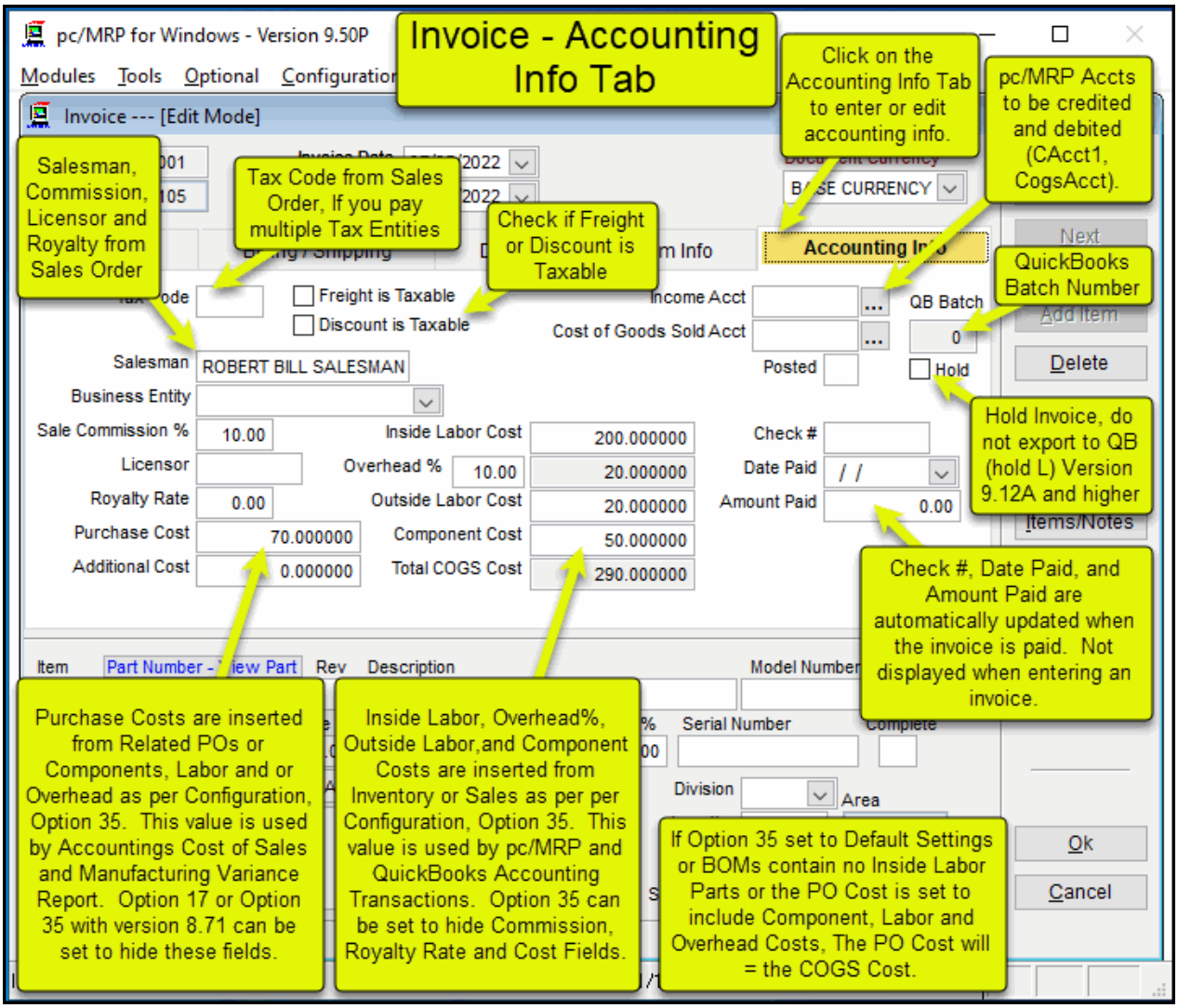
### 10.1.1.6 Enter a New Invoice Step 6 Item Info Tab




The **Reference** fields can be used for custom reports.

**Part Aux 1** and **Part Aux 2** are coming from the Partmaster.

### 10.1.1.7 Enter a New Invoice Step 7, Accounting Tab



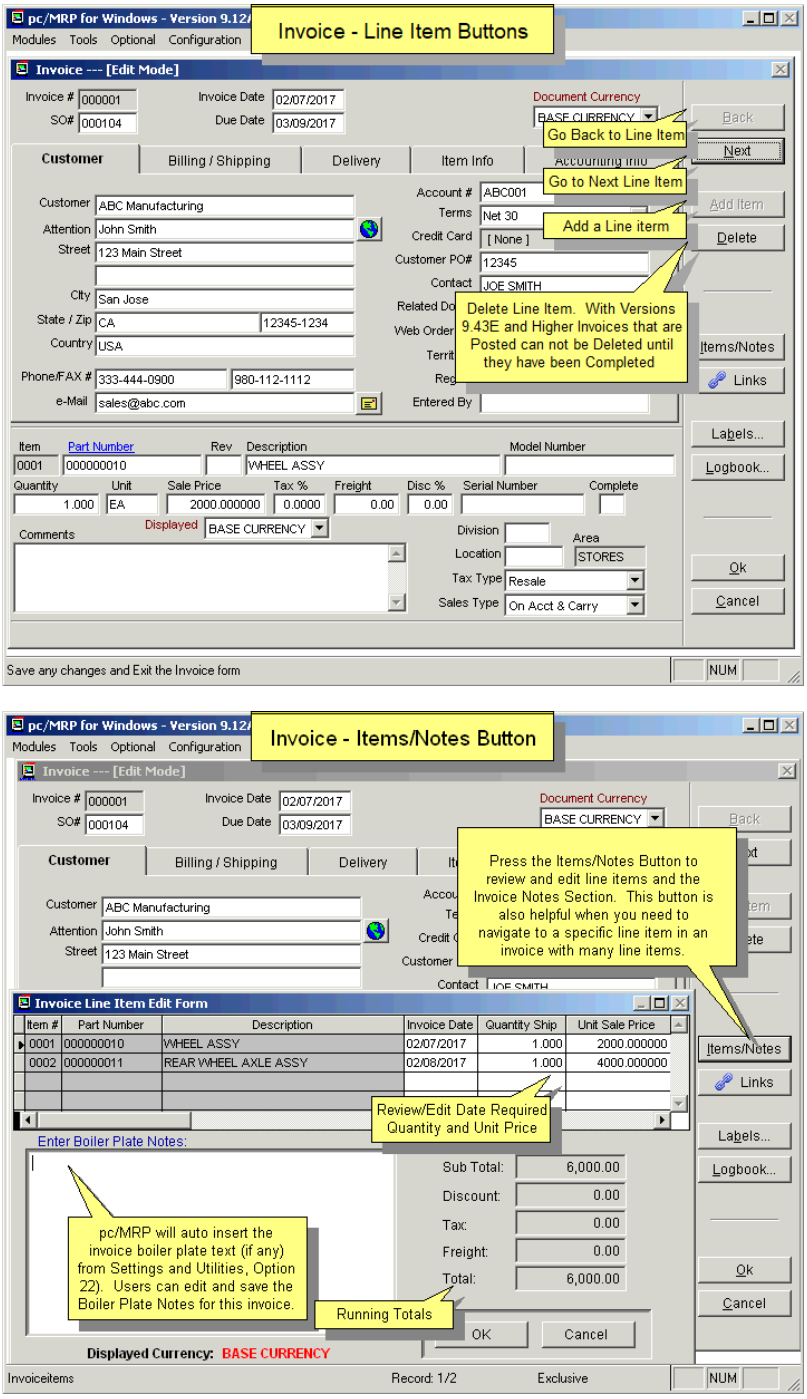

The **Salesman**, **Sale Commission %**, **Licensor, Royalty Rate**, and **Income Credit Account**, **Freight is Taxable** and **Discount is Taxable** are automatically inserted from the sales order.

The **Purchase Cost** and **Additional Cost** Fields are automatically imported from the sales order or the partmaster depending on Settings and Utilities Option 35. If the purchase cost is $0.00, Cost Roll Ups have not been performed on this item, if necessary enter the purchase cost manually.

The **Income Acct & Cost of Goods Sold Acct** fields are brought over from the sales order. Users can select another Income or COGS account to credit and debit by clicking on the corresponding ellipse button.

If the **Hold** field (hold L(1)) is checked in one line item of the invoice, it will prevent the whole invoice from being exported to QuickBooks.

### 10.1.1.8 Enter a New Invoice Step 8, Additional Buttons

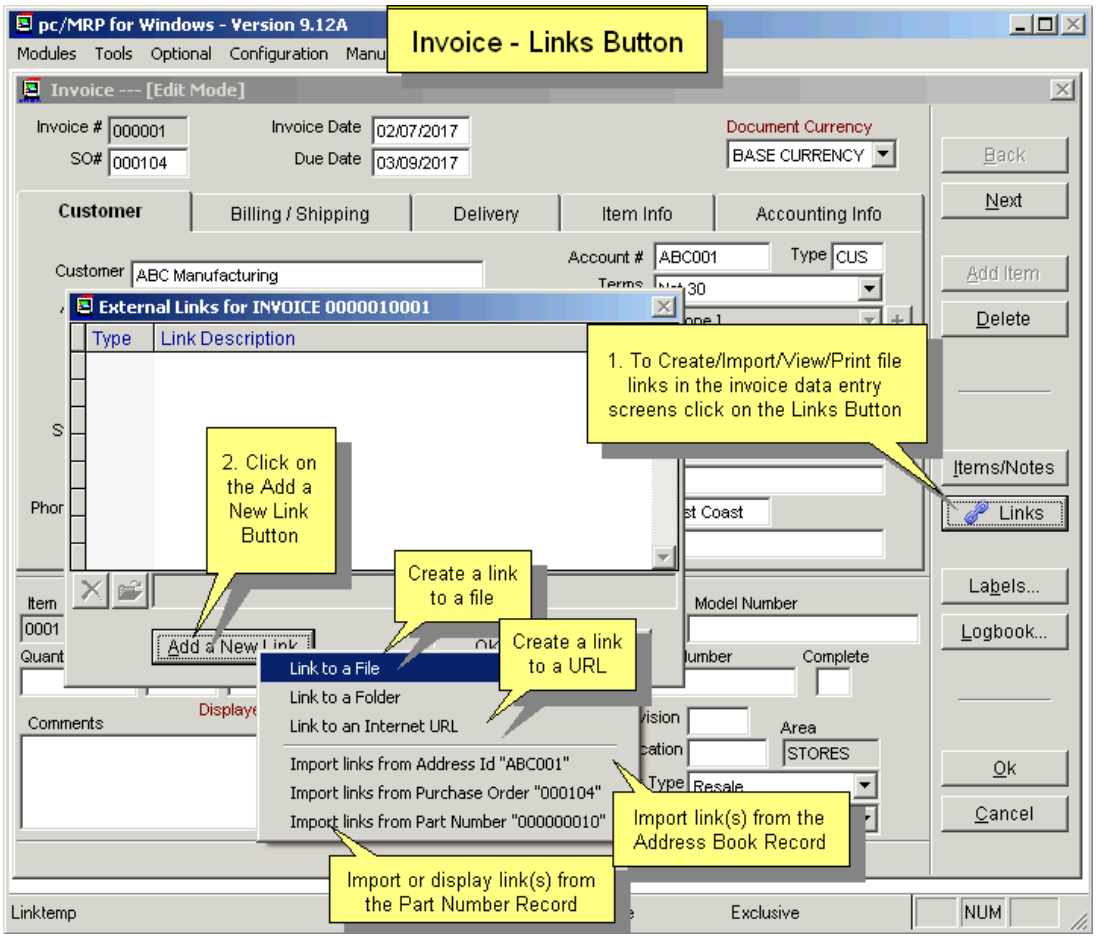


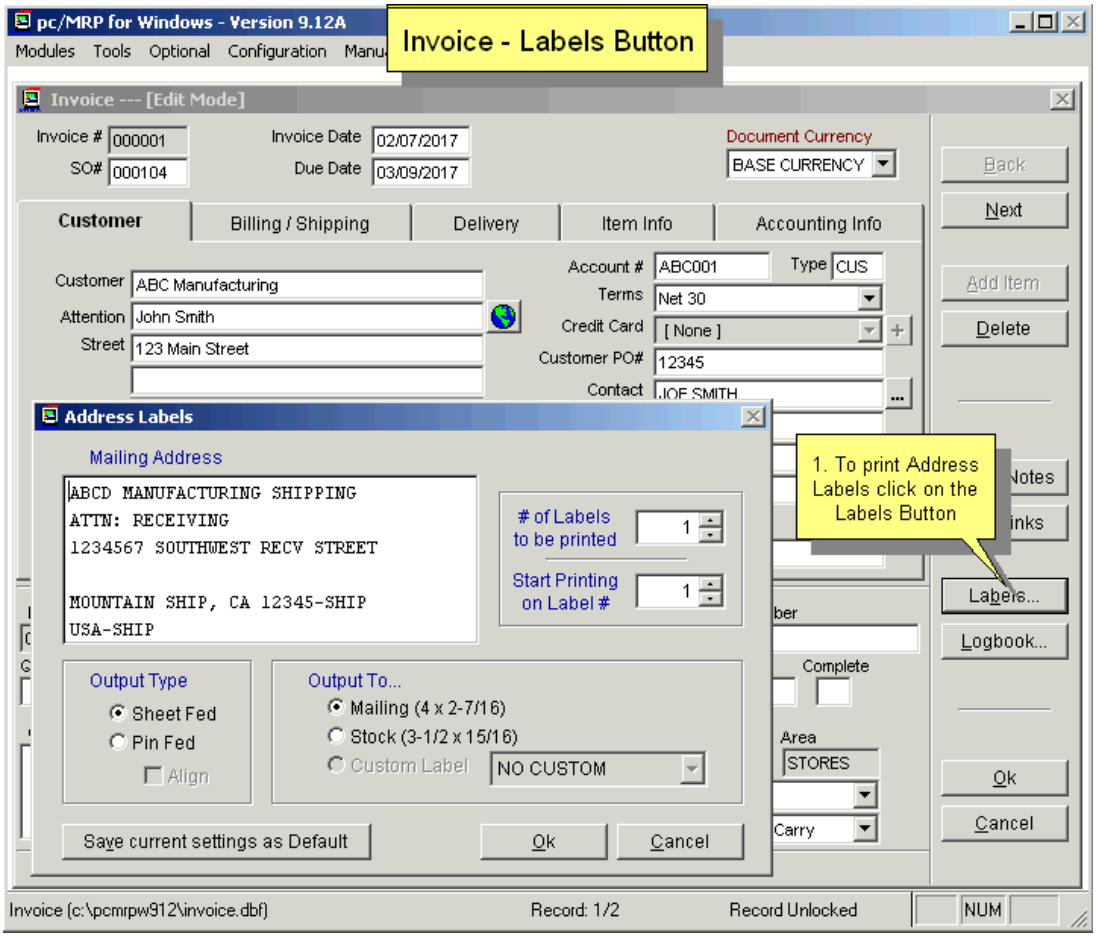

Pressing the **Items/Notes** Button will allow you to edit the default boiler plate notes for this invoice.

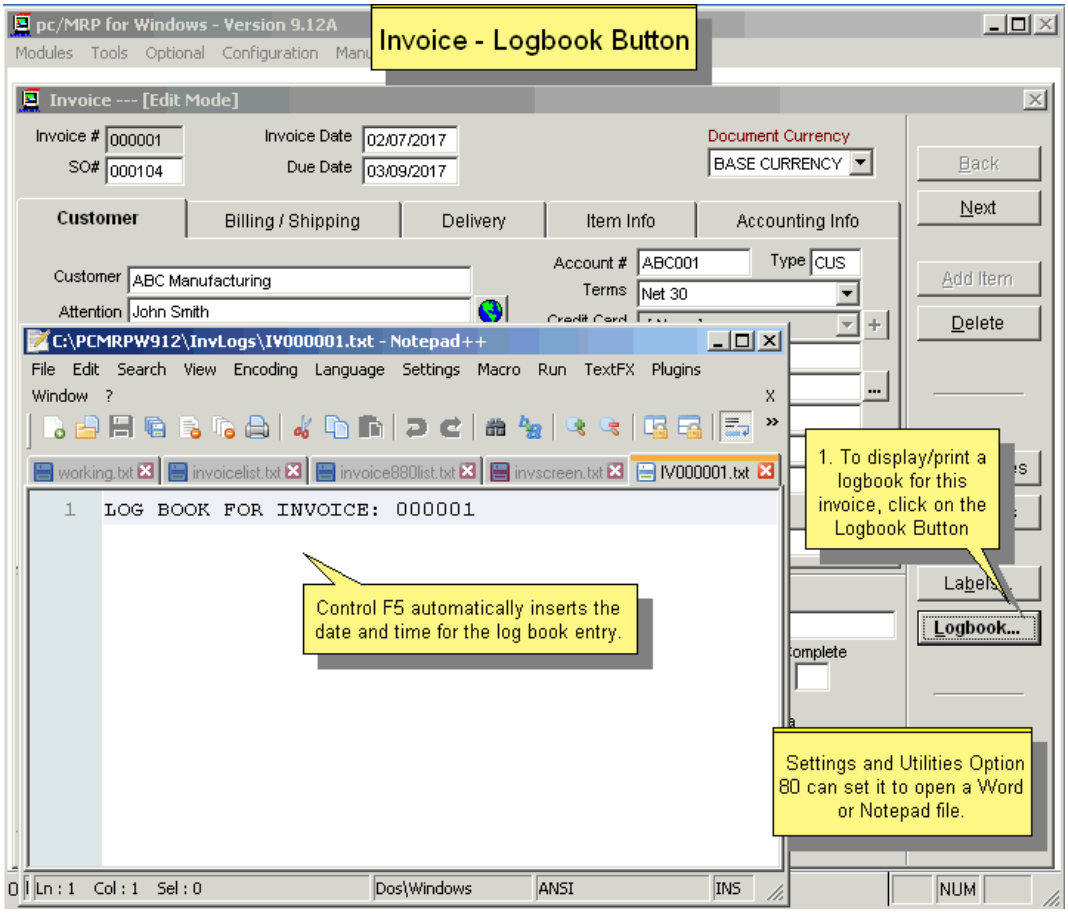
Configuration, Settings & Utilities, **Option 22** allows users to set the boiler plate to be inserted from the sales order or from Option 22's Invoice Boiler Plate itself. If both the sales order and the invoice have boiler plate text, only the invoice boiler plate will be used.

Among other information, the boiler plate could hold your company's remit to address.

The Items/Notes Button is also helpful when you need to navigate an invoice with many line items.

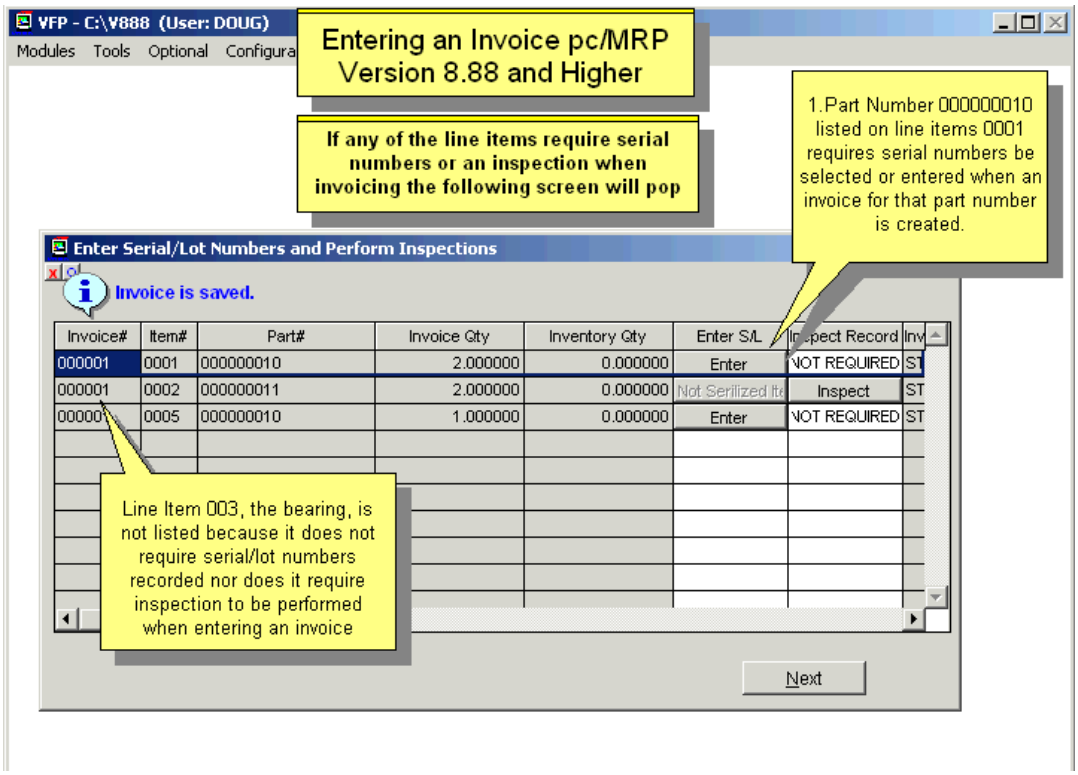

Invoice - Links Button
pc/MRP for Windows - Version 9.12A
Invoice --- [Edit Mode]
External Links for INVOICE 0000010001
1. To Create/Import/View/Print file links in the invoice data entry screens click on the Links Button
2. Click on the Add a New Link Button
Create a link to a file
Create a link to a URL
Link to a File
Link to a Folder
Link to an Internet URL
Import links from Address Id "ABC001"
Import links from Purchase Order "000104"
Import links from Part Number "000000010"
Import link(s) from the Address Book Record
Import or display link(s) from the Part Number Record


Invoice - Labels Button
pc/MRP for Windows - Version 9.12A
Invoice --- [Edit Mode]
Address Labels
Mailing Address
ABCD MANUFACTURING SHIPPING
ATTN: RECEIVING
1234567 SOUTHWEST RECV STREET
MOUNTAIN SHIP, CA 12345-SHIP
USA-SHIP
# of Labels to be printed
Start Printing on Label #
Output Type
Sheet Fed
Pin Fed
Output To...
Mailing (4 x 2-7/16)
Stock (3-1/2 x 15/16)
NO CUSTOM
Save current settings as Default
1. To print Address Labels click on the Labels Button



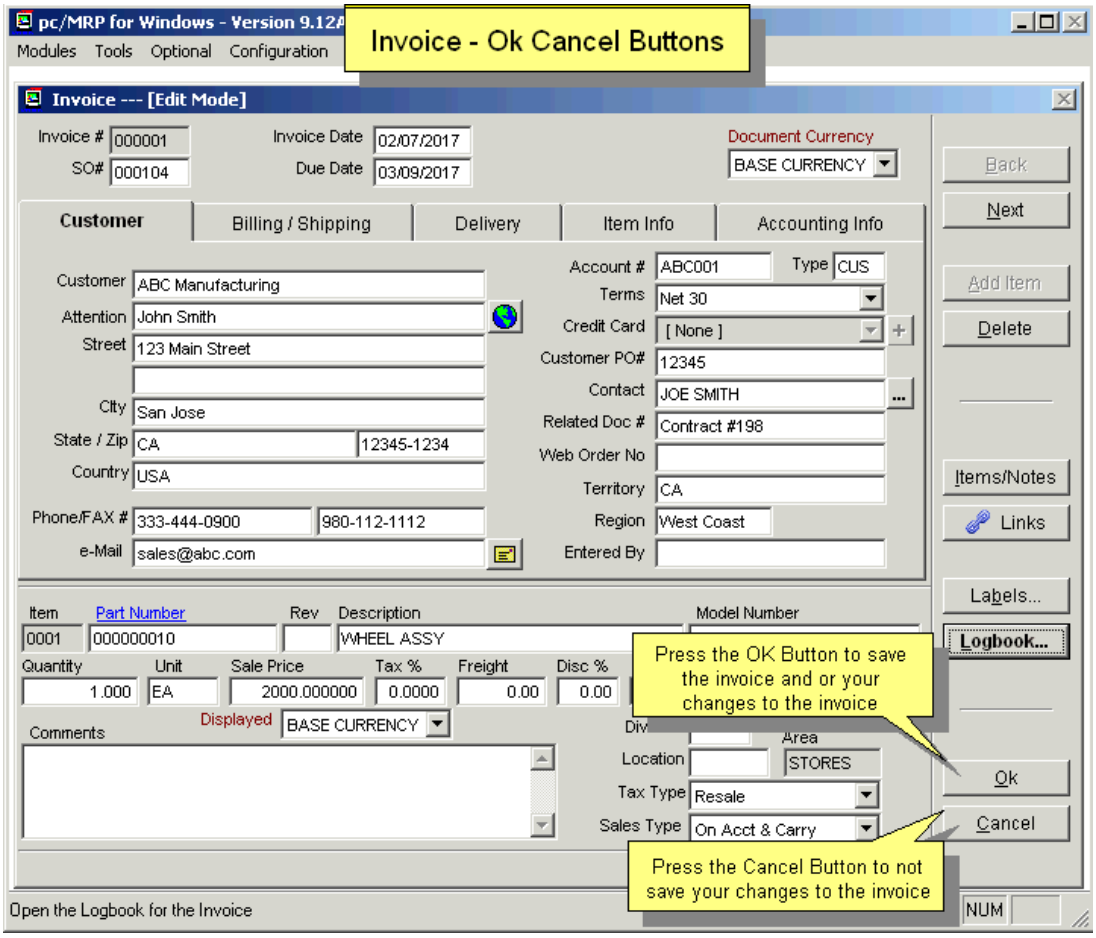

### 10.1.1.9 Enter a New Invoice Step 9 Serial/Lot Numbers, Inspections

If any of the line items require serial numbers or an inspection when invoicing the following screen will pop up.



### 10.1.1.10 Enter a New Invoice Step 10 Finish

You can click the Items/Notes button to see information about all items at one. Press the OK Button when done.




If the invoice quantity exceeds the sales order quantity, the user will be warned. Furthermore, pc/MRP will detect if there is sufficient inventory onhand to fulfill the invoice. If the quantity of the line item exceeds what is available in inventory the user will be prompted to:

- Invoice the requested quantity (driving onhand quantities negative),
- Issue as many as are available, or
- Cancel the invoice line item.

Once the invoice item is accepted, the part number's On-Demand and On-Hand quantities are decremented. The Sales Order's Quantity Shipped is increased. If the quantity shipped is >= the quantity ordered, the Sales Order's (NOT the Invoice's) Complete field will be updated to "Y".

If Configuration, Settings and Utilities, **Option 8**, **Auto Accounting** is On for invoices, after finishing the invoice, pc/MRP will automatically debit and credit the general ledger. The newly entered GL transaction will be displayed for edit before it is saved. A "Y" will be inserted into the invoice's Posted field.

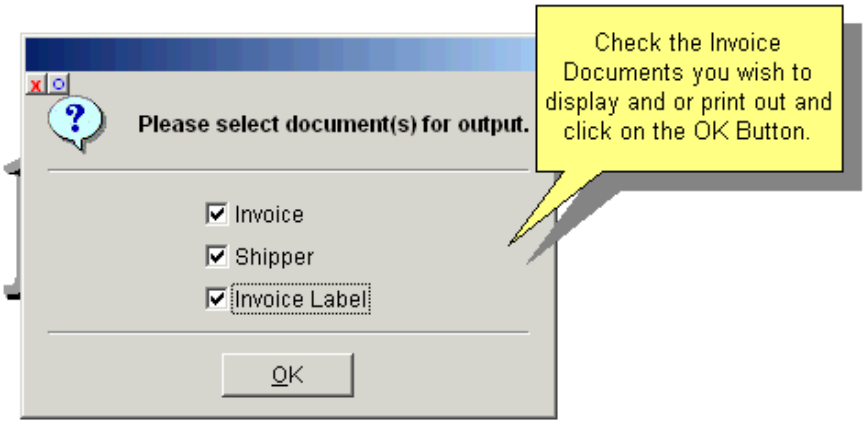
Software Arts recommends setting auto accounting OFF so that any invoice mistakes are not automatically entered into the general ledger.

If Auto Accounting is Off for invoices, the Accountant should go into Accounting and enter a new O type transaction to debit and credit the general ledger. A "Y" will be inserted into the invoice's Posted field.

When Accounting enters an R type transaction (Receives Payment) a "Y" will be inserted into the invoice's Complete field, the Amount Paid field will be increased by the amount paid, and the Date Paid will be populated.

### 10.1.1.11 Enter a New Invoice Step 11, Print Invoice Documents

pc/MRP will offer to print an Invoice Form, a Shipper Form, and/or Invoice Labels.

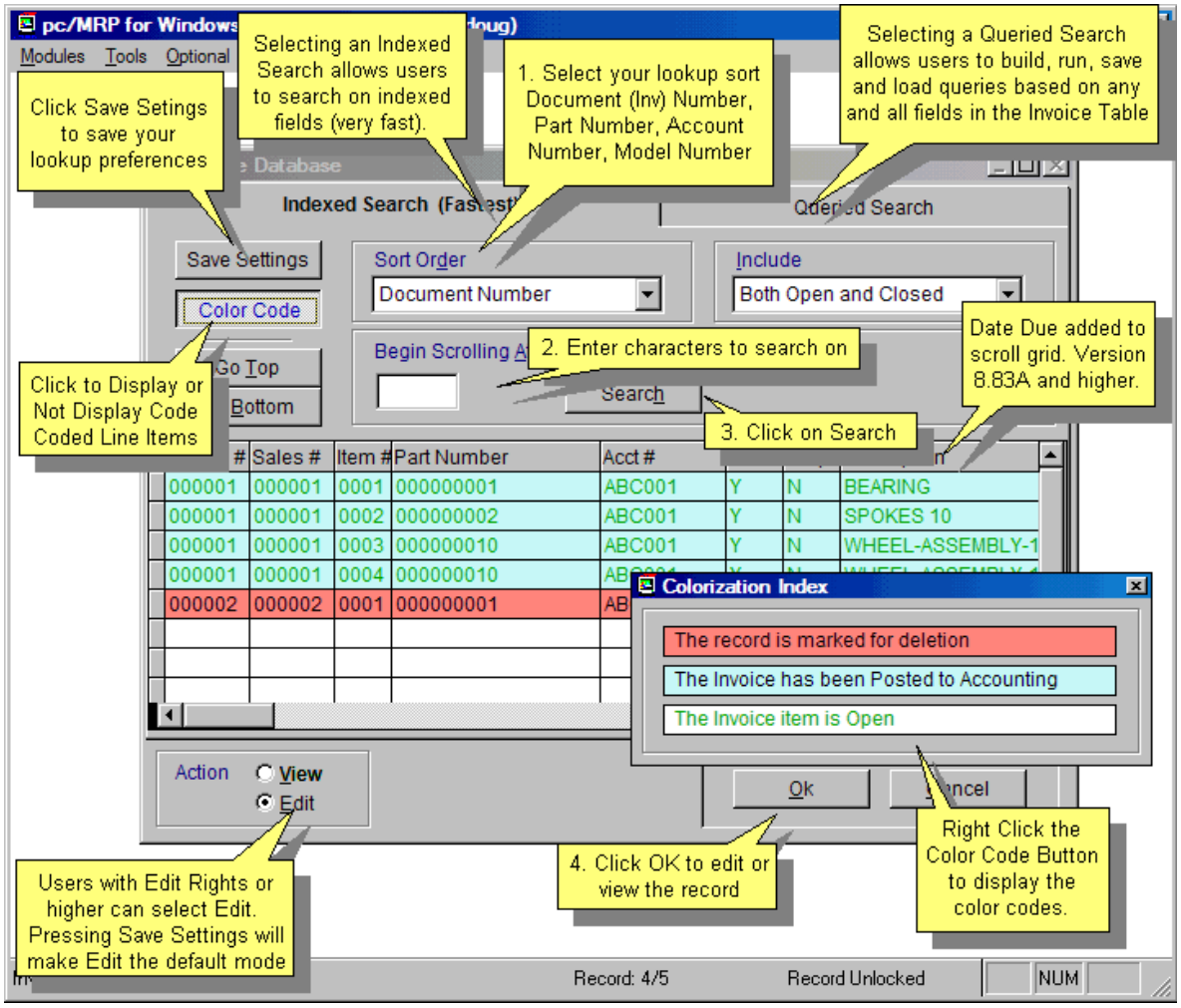



**Notes:**
You can select a Domestic or a Commercial Invoice form.
To create custom labels, please see Chapter 15.4.22 for labels and custom label naming conventions.

For more information on printing see Section 10.1.4 below.

### 10.1.2 Edit/Delete an Invoice

To view or edit an invoice, select Modules, Invoice and Edit. pc/MRP will display the screen shown below.




This option allows users to scroll, edit, delete, undelete, or run queries against Invoice records.

Selecting an **Indexed Search** allows users to search on indexed fields. This allows pc/MRP to find the information much faster. To perform an Indexed Search:

Select the desired **Sort Order,** Document # (Invoice #), Account #, Part #, Model #, Customer PO#
Select the desired **Include** information, Open, Closed, Open and Closed (Closed = Paid in full)
Enter the applicable data in the **Begin Scrolling At:** field
Select the desired **Action**: View or Edit
Press **Search** (not the Ok button)
Select the desired record
Press **Ok** to proceed to the edit screen for that record.

**Note:** Selecting to run a **Queried Search** allows users to build, run, save, and load queries for the Invoice table. For further details, see Chapter 15.14.1.

Any field in the invoice can be edited. However, there are a few things users need to be aware of.

The **Posted** field is displayed only in the edit mode and is filled in automatically with a "Y" when accounting enters the initial general ledger O (accounts receivable) transaction. Do not manually edit this field.
The **Complete, Amt Paid**, **Date Paid**, and **Check #** fields are displayed only in the edit mode and are filled in automatically when accounting enters a payment towards this debt. The Amt Paid field contains the accumulative amount paid. The Complete field determines if a record is open or closed. A "Y" marks the record as closed (paid). An "N" marks the record as

open (unpaid). Users should not manually populate these fields unless they know for sure they want to re-open or close an invoice. Please Note that you will not be able to delete an invoice that has been posted until it is complete

If partial payments were made, the **Date Paid** field will contain the last payment's date. (In versions **8.70AA, 8.72X, 8.73D** and lower, this field contained the first payment's date.)

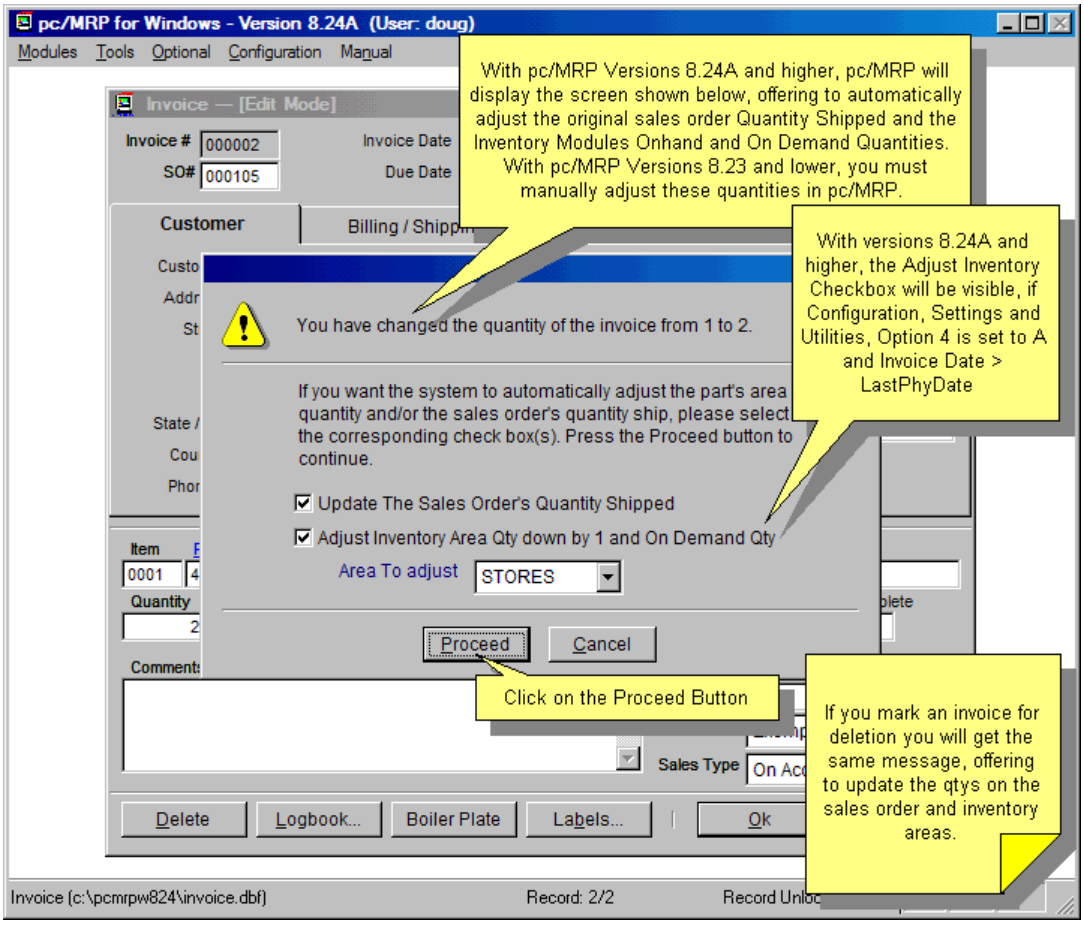
Use the **Delete** button to mark a record for deletion. Use the **Undelete** button if you wish to unmark the record for deletion. To permanently remove the records from the database table, set an administrative lockout, and then select Sales, Remove Marked Records.

Users must have Accounting Edit rights or higher to edit an invoice or receiver that has been posted or paid (requires the optional Advanced Password Module).

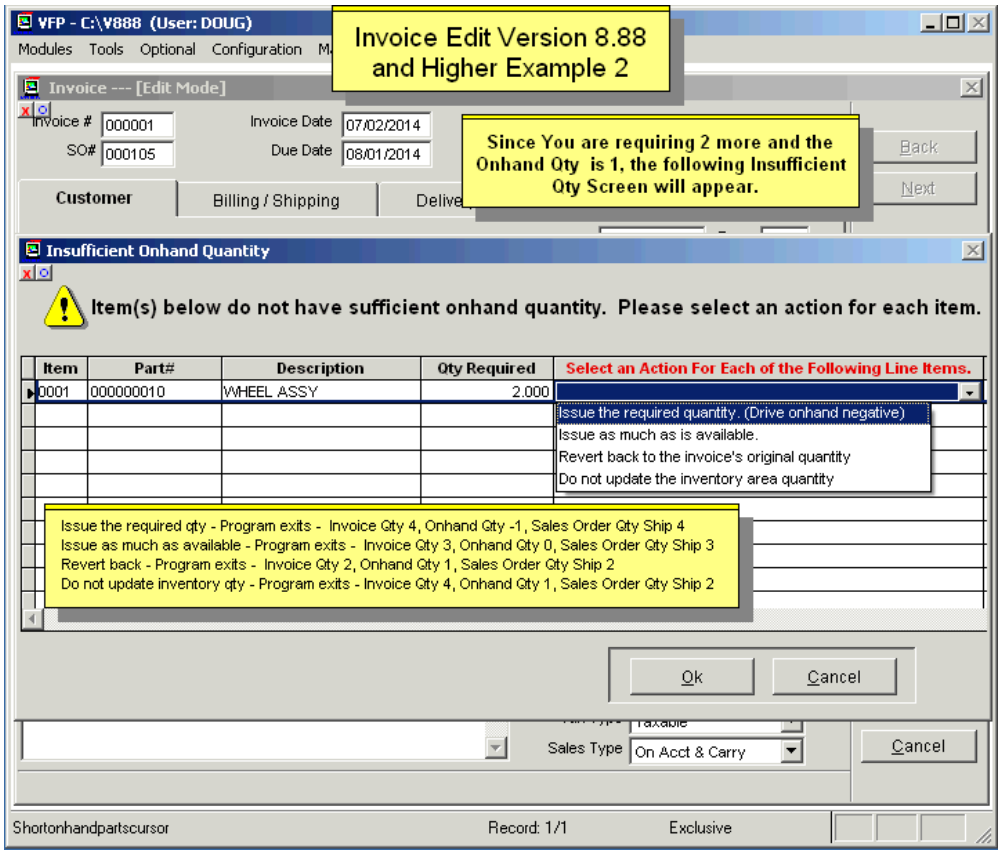
If pc/MRP detects a QB batch number or an accounting transaction, it will display the transaction numbers that need to be edited.

If the user edits or deletes an invoice, pc/MRP will offer to automatically adjust:

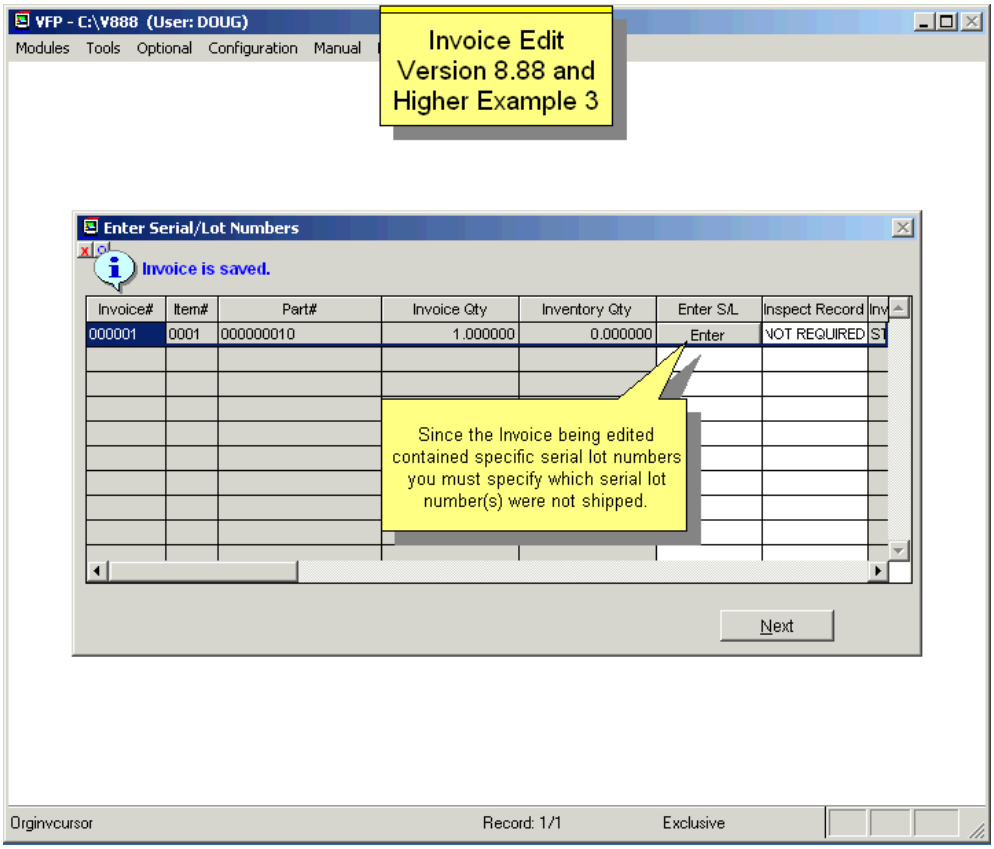
- The original sales order quantity shipped.
- The part number's 'On Demand' quantity.
- The part number's 'On Hand' quantity if the invoice's date is greater than the last physical or cycle count date for that part number and the Inventory Adjustment method is set to 'A', 'P', or 'W'.
- All existing subsequent invoice's 'Balance Due' quantities (sales order line item has multiple invoices and you are editing one of the earlier invoices).



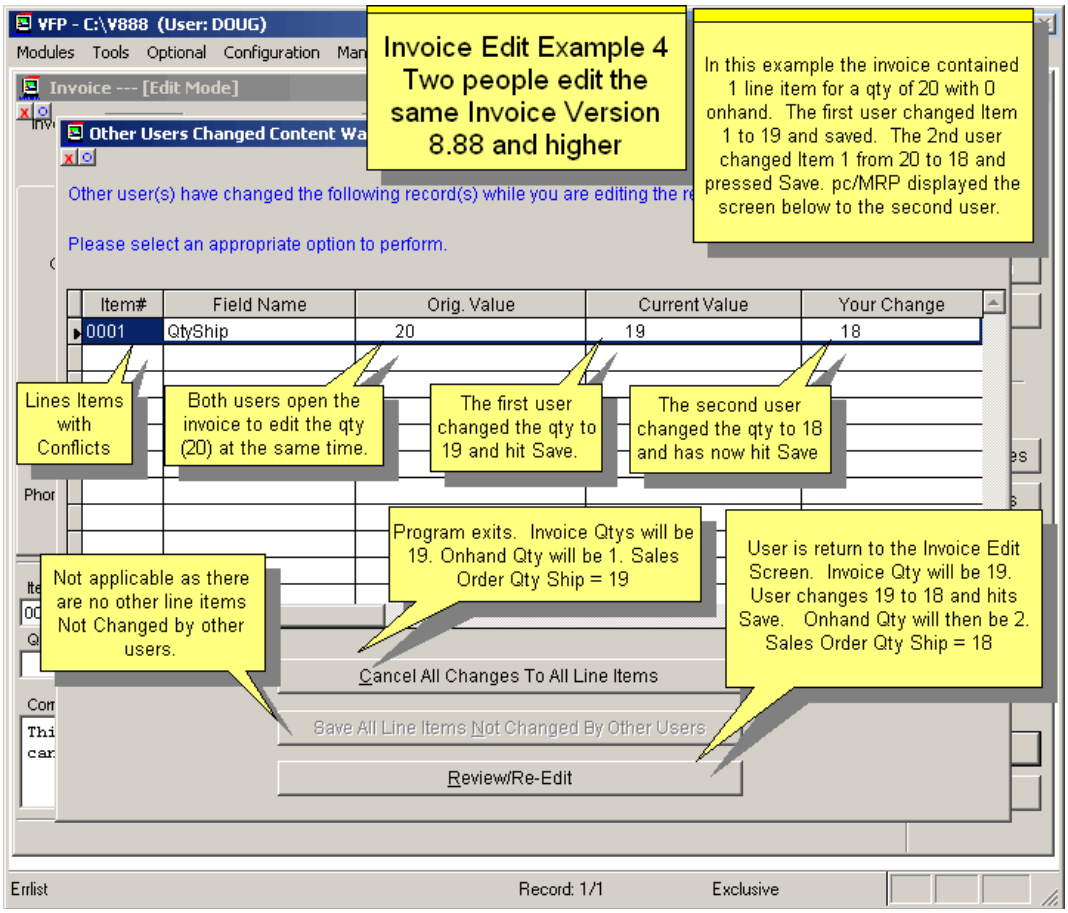

If you increased the Invoice quantity and there are not enough items on hand, you will see the following screen:

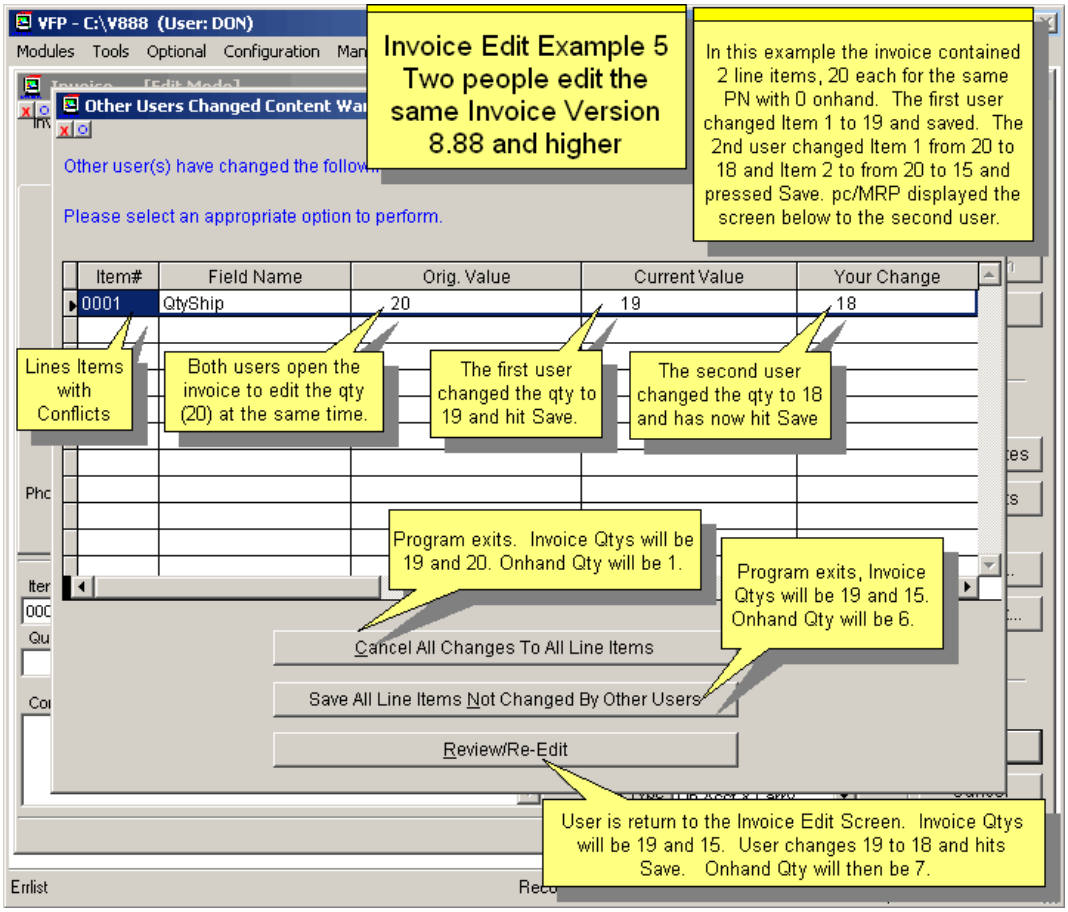



If the invoice you are editing was issued with serial numbers, you will see the following screen:



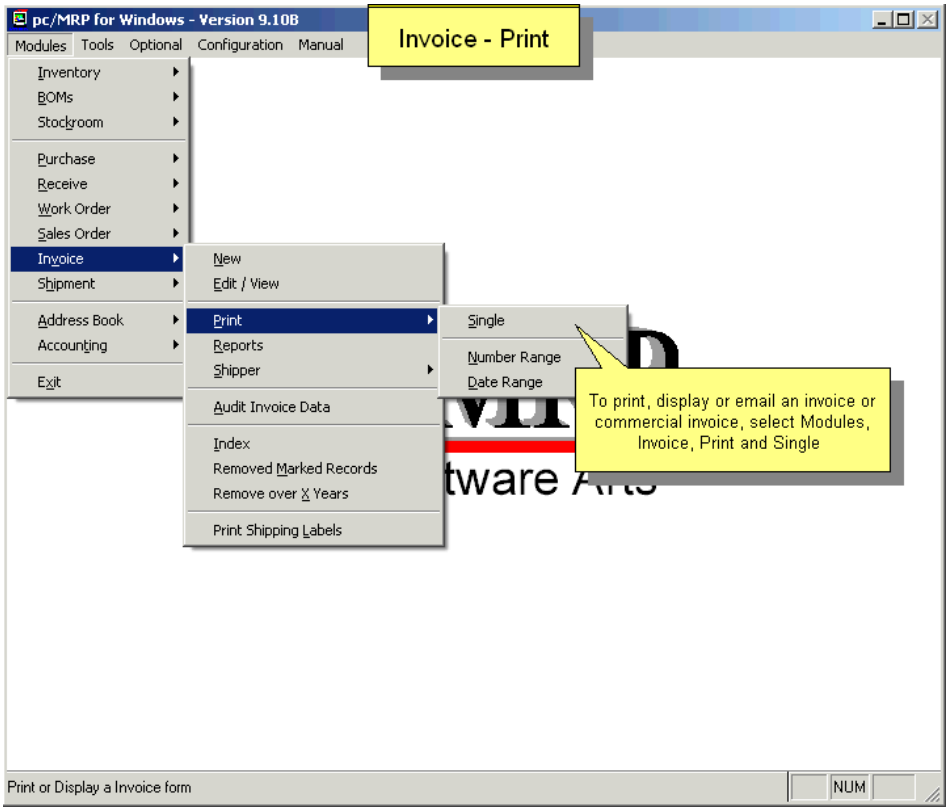
### 10.1.3 Example: Two Users Simultaneously Editing the Same Invoice

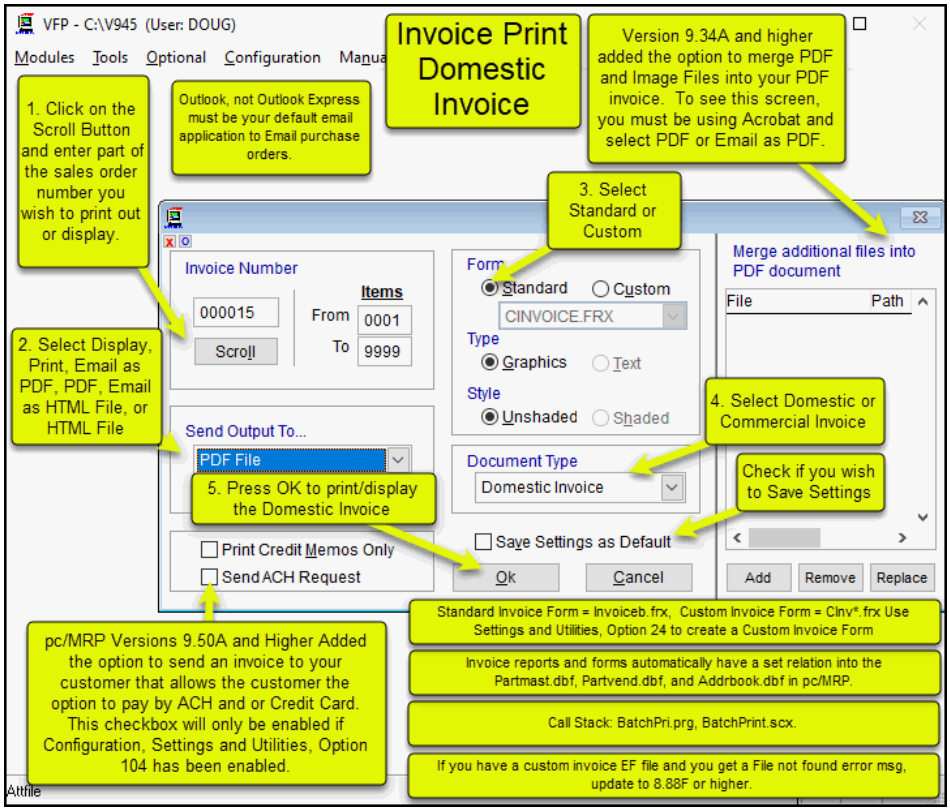


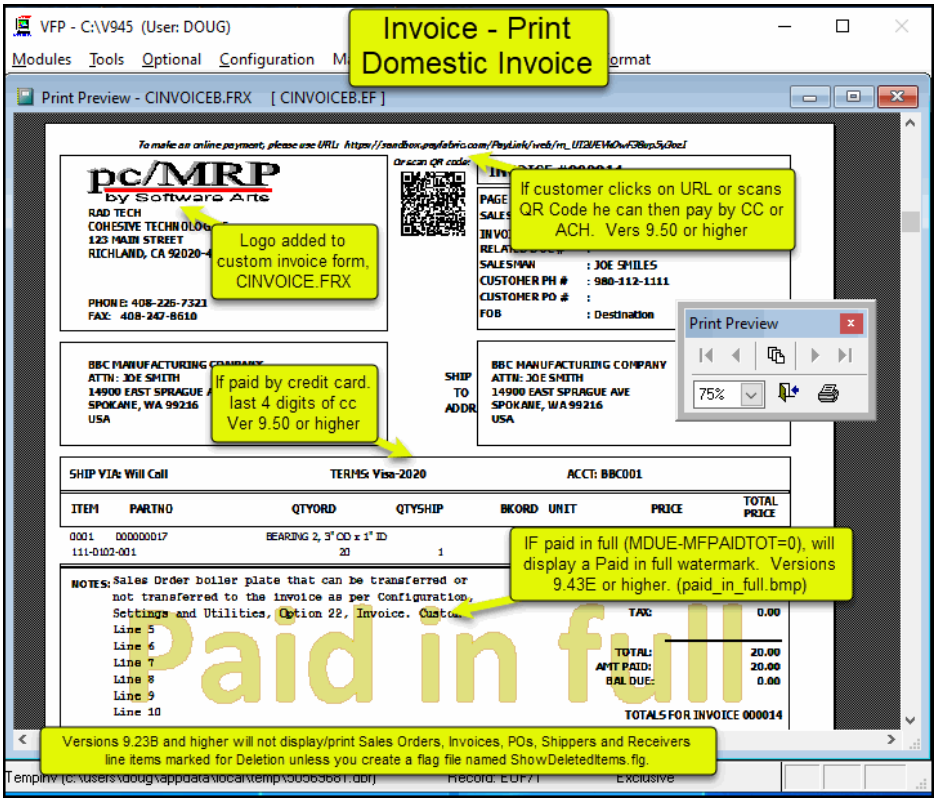



### 10.1.4.1 Printing a Domestic Invoice

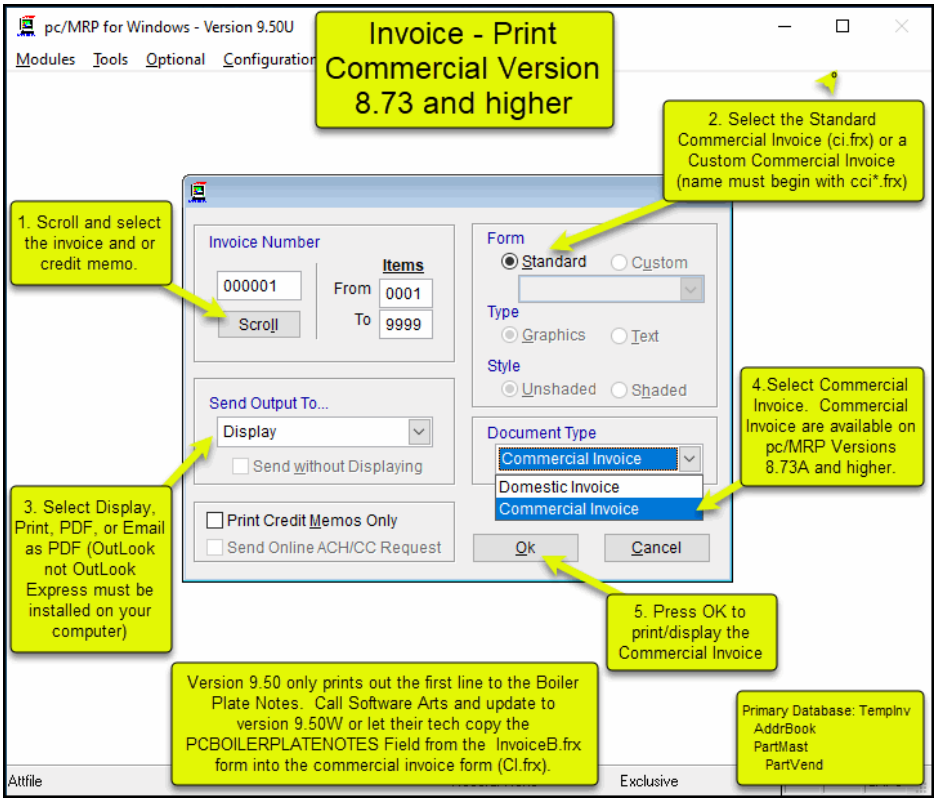
To print, display, email, fax an invoice, select Modules, Invoice, and Print. Sales Orders, Invoices, and Shippers can be configured to print out the Serial Number(s) or Model Number using the Configuration Menu's, Settings and Utilities, **Option 22**.



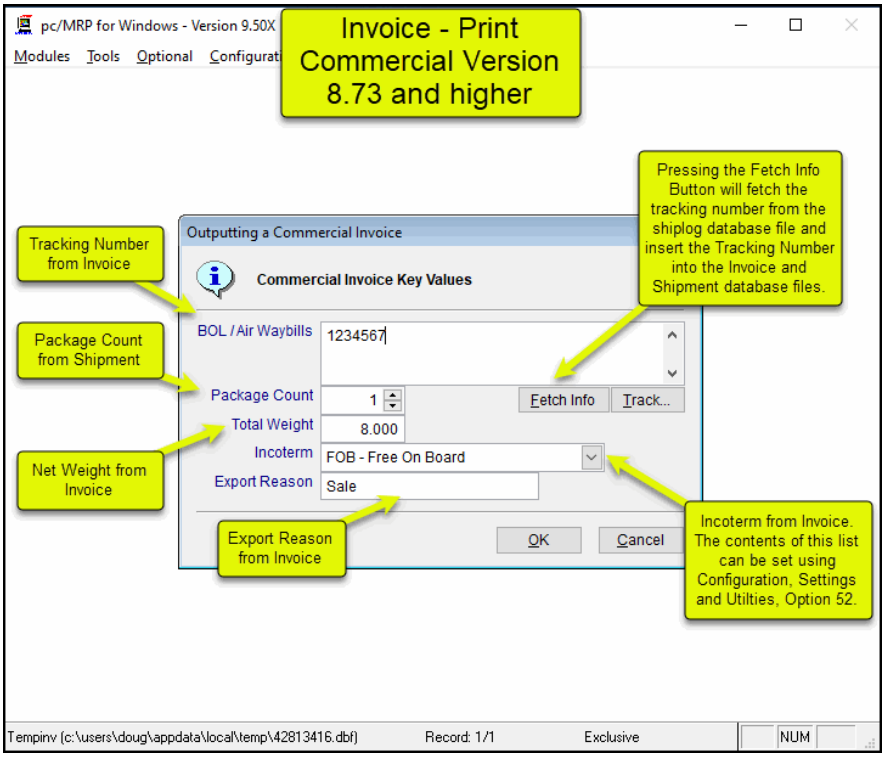



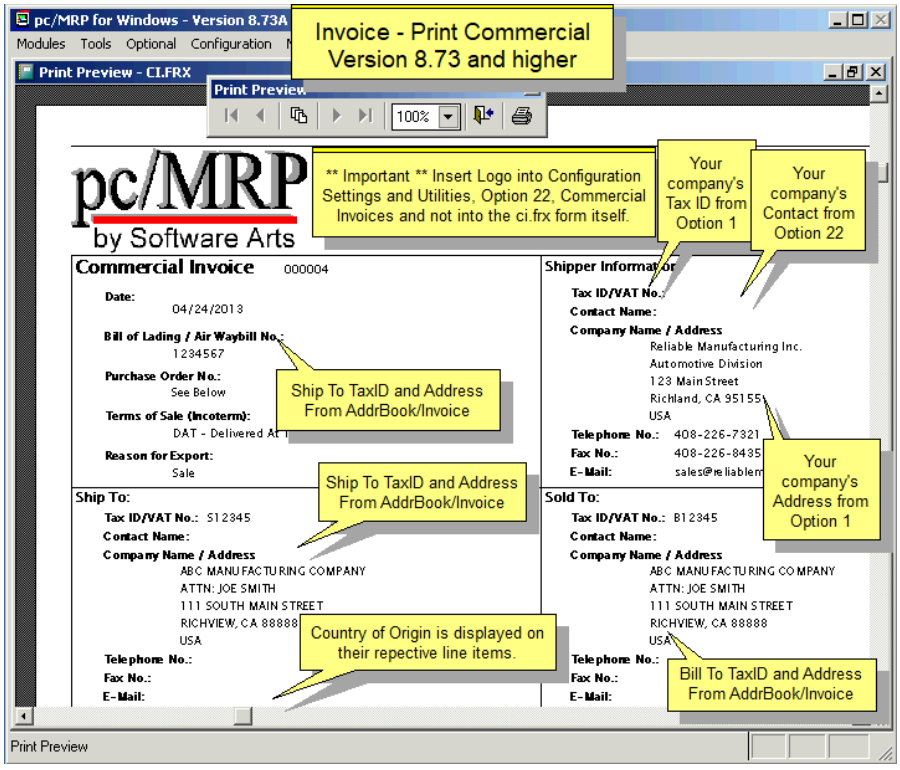



## 10.1.4.2 Printing a Commercial Invoice



Select Commercial Invoice as the Document Type. (**8.73** and higher) Clicking on the **Fetch Info** button will fetch the tracking number from the SHIPLOG database file and insert the tracking number into the invoice and shipment database files. The contents of the **Incoterm** list can be set in **Option 52** in Settings and Utilities.

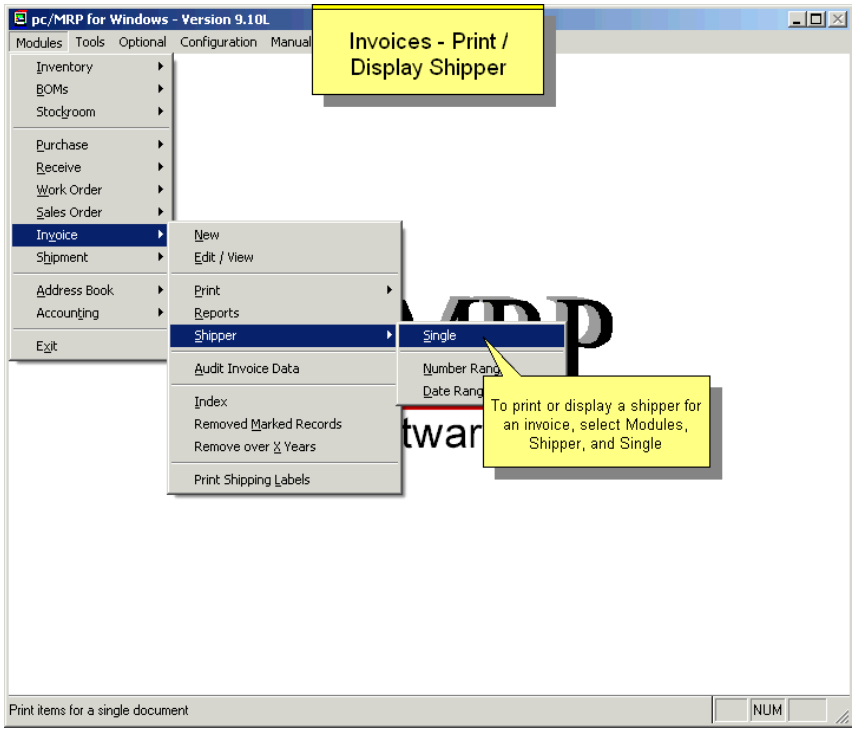


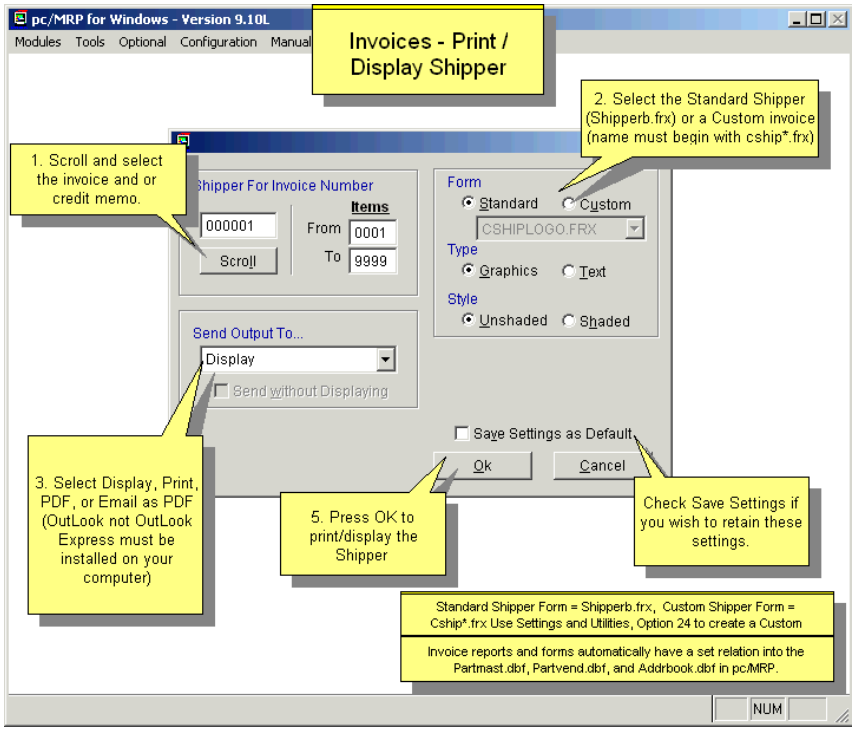



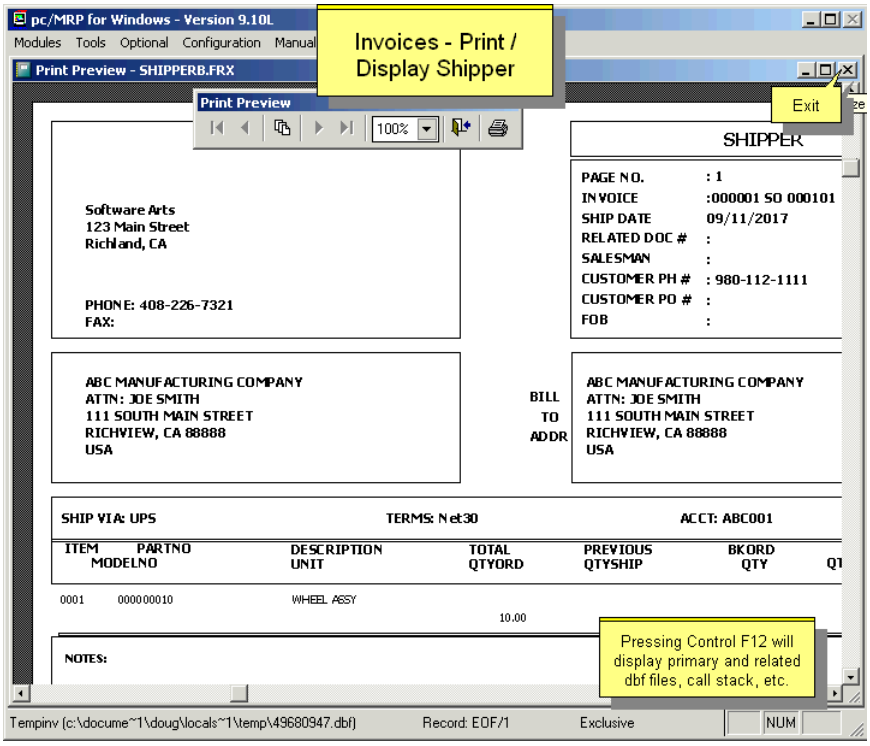

**Note:** While **Option 24** will be used for most forms and reports to insert your company's LOGO, use **Option 22** for the Commercial Invoice. You can still create custom commercial invoices from the standard CI.FRX, named as CCI*.FRX.

### 10.1.4.3 Printing Shippers

Once pc/MRP has displayed or printed the invoice, it will ask if you wish to print out a shipper for the invoice. The shipper can be folded in thirds and placed in a clear shipping envelope attached to the shipping box with the shipping address displayed. Configuration, **Option 22** will allow you to enter Shipper boiler plate comments if you wish. The invoice's boiler plate will NOT be transferred to the shipper.





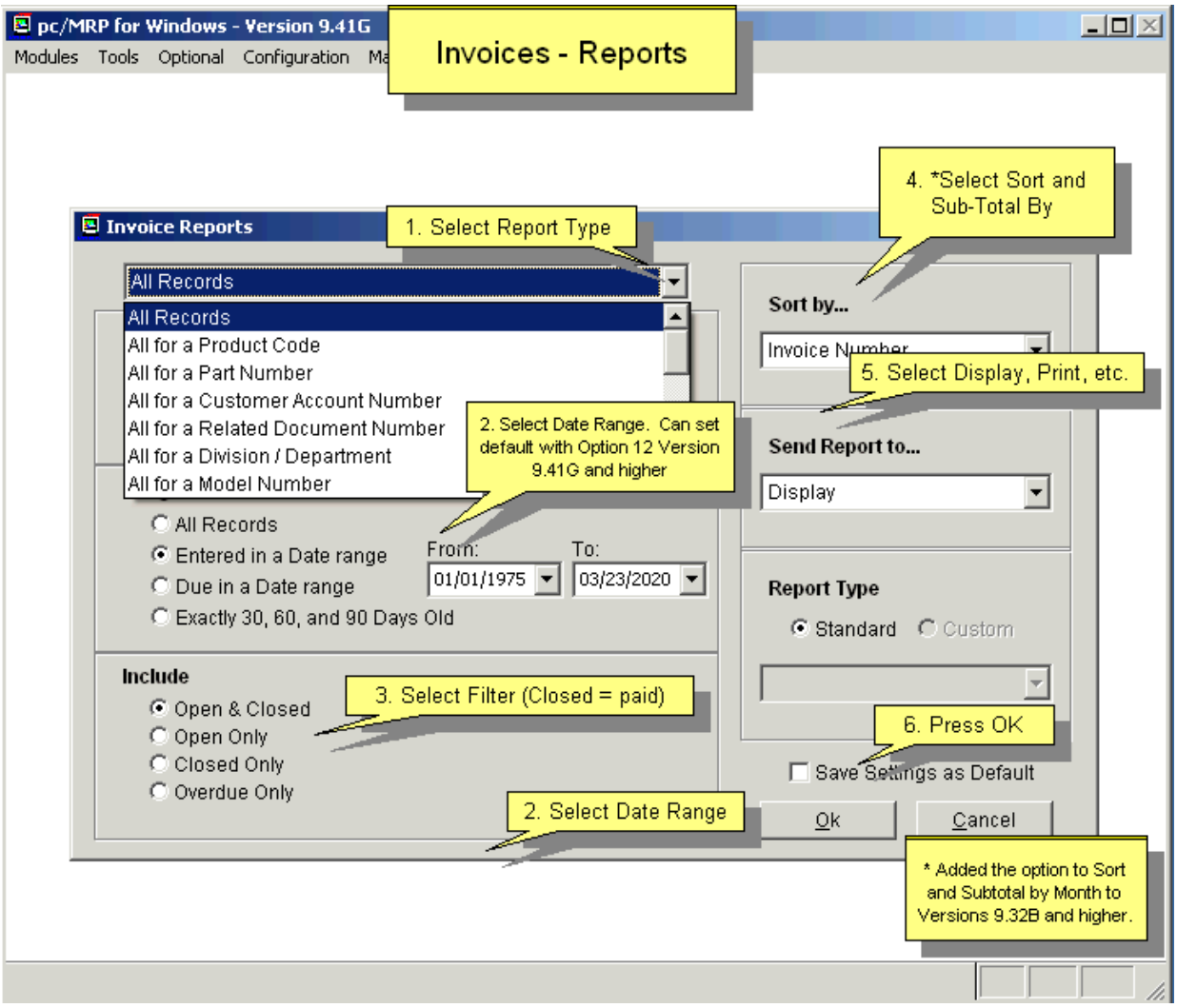

### 10.1.4.4 Printing Additional Mailing Labels

If you use Notepad to create a flag file called **IVMAILLB.FLG**, pc/MRP will add the option to print out mailing labels after the invoice is printed. Users can create custom address labels using pc/MRP's Custom Report Generator (**Option 24** in the Configuration, Settings and Utilities Menu). The custom labels be named CUSTADR*.LBX or CUSADR*.LBX. Create the custom address labels by opening a standard address label, addrlbm.lbx, modifying it and saving it as cusadr*.lbx. '*' is any alpha/numeric characters.

### 10.1.4.5 Pro Forma Invoice

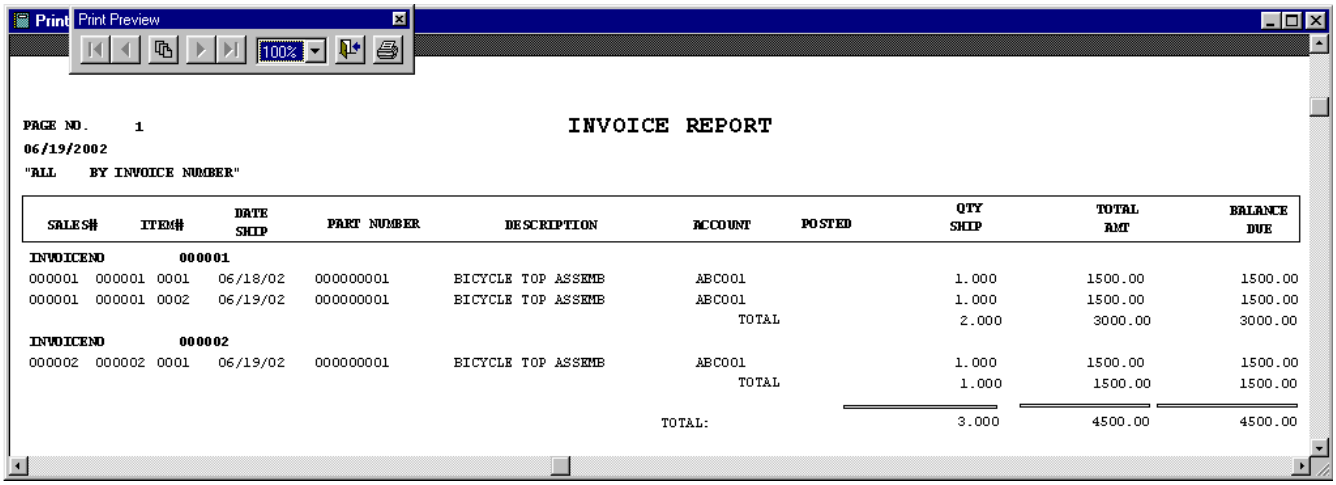
Sometimes users need to print a sample invoice but without actually creating an invoice (and affecting onhand and shipped quantities, or closing the sales order). To do this, you can create a custom sales order form (not invoice!) and change the form title to "Pro Forma Invoice".

### 10.1.5 Reports




Select Modules, Invoices and Reports to display or print out an invoice report. Allows users to print out or display various invoice reports (invlog.frx). See Section 15.4.1 to create custom sales order reports (cusinv*.frx).

An example of a standard invoice report is shown below.



### 10.1.6 Queried Search Overview (see 15.14.1)

### 10.1.7 Audit Invoice Data

To audit invoice data, select Modules, Invoice, Audit Invoice Data. The utility will find and list any open invoices with zero balance, and/or any open invoices that are overpaid. The program will offer to fix these anomalies, i.e. close those invoices (set Complete to "Y").

### 10.1.8 Indexed Searches (see 15.14.2)

### 10.1.9 Index (see 15.14.3)

### 10.1.10 Remove Marked Records (see 15.14.4)

### 10.1.11 Remove Over X Years (see 15.14.5)

### 10.1.12 Printing Additional Shipper Labels

To print additional shipping labels, select Modules, Invoice, Print Shipping Labels.

This option allows users to print out a shipping label for each shipping box required for an invoice. To activate this option in the Invoice menu, the **INVLAB.LST & INVSHIP.FLG** files must exist in the pcmrpw folder.
You can select a different printer by selecting **Print Setup**. Users can select what label to start on by using the **Start On #** spinner. This program allows the user to select pc/MRP's standard shipping label, **SHIPPER.LBX**). Users can create additional custom *.LBX labels or *.FRX forms. Any custom Label or Form you wish to utilize must be listed in a file called **INVLAB.LST**. This file can be created and or edited through Notepad.

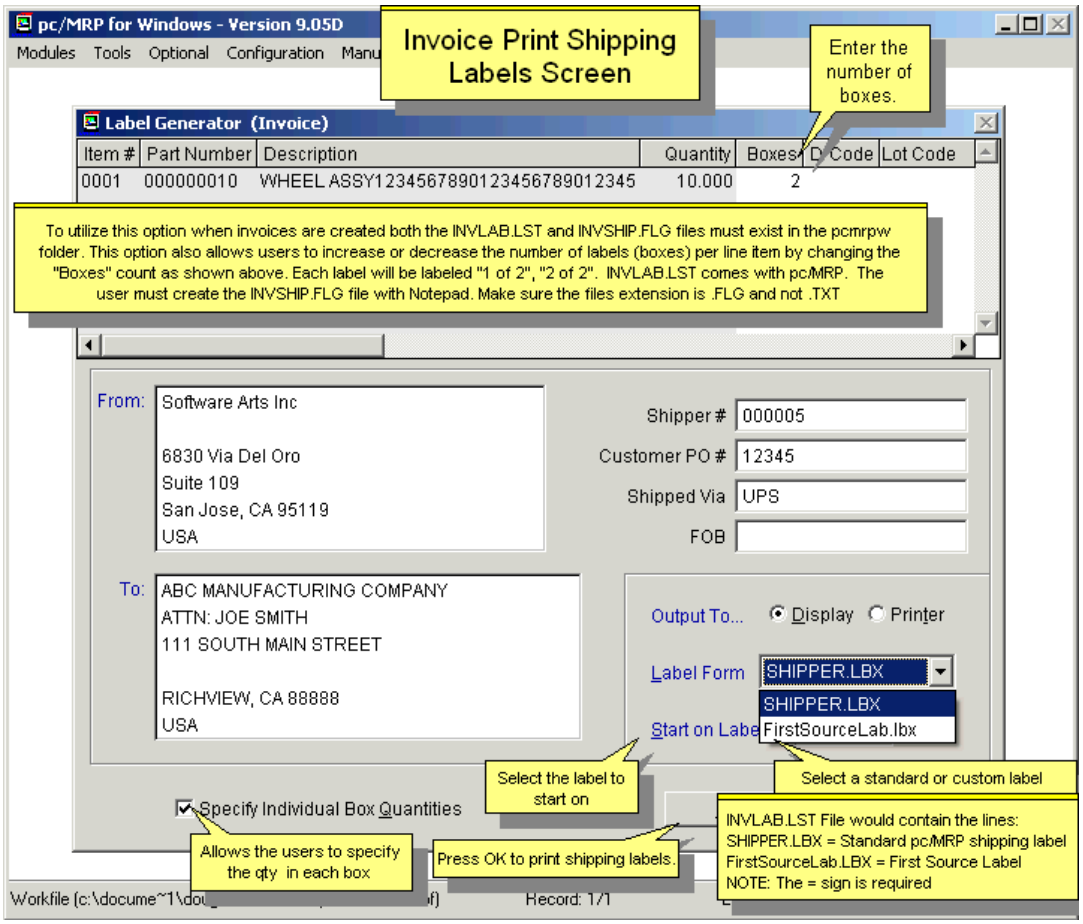
The text in an example INVLAB.LST file is shown below:

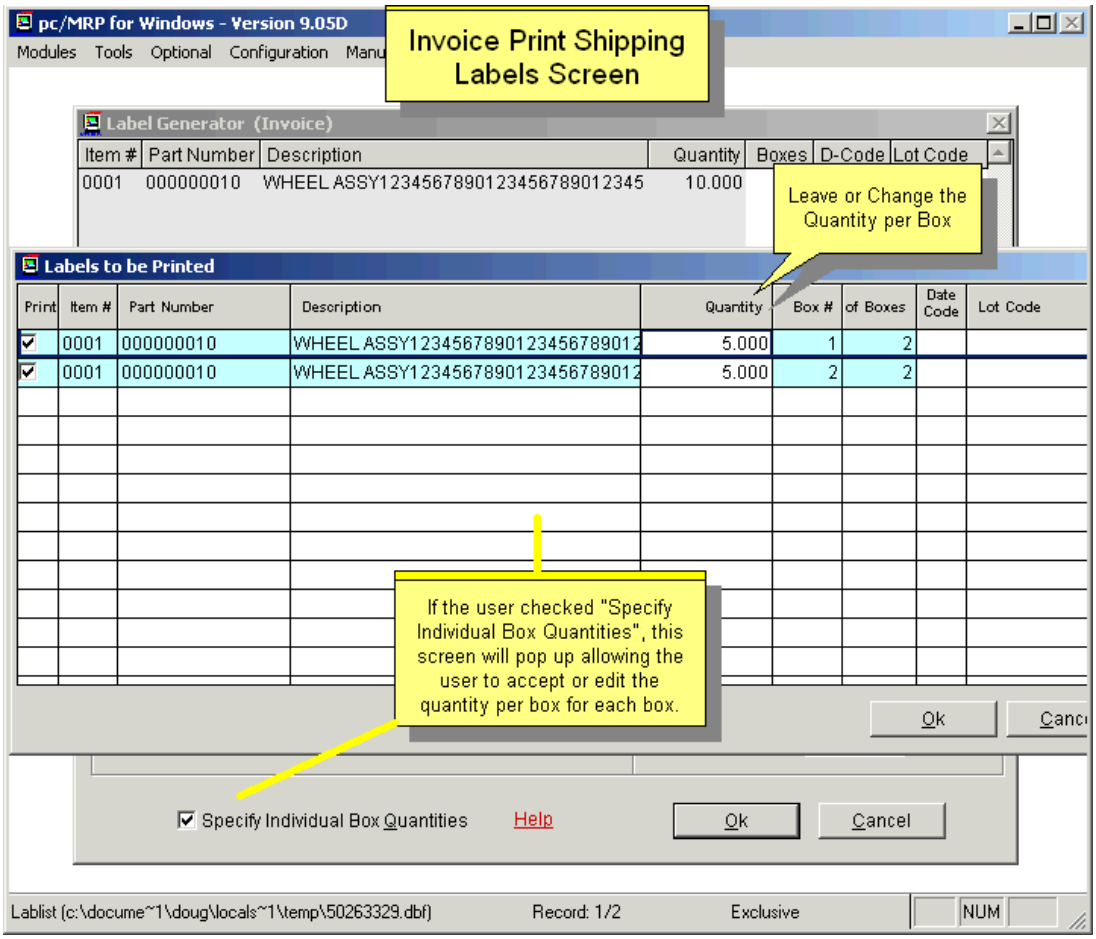
SHIPPER.LBX = Standard pc/MRP shipping label. Six per sheet. 4" x 3-1/2"
ACCURA.LBX = Standard Accura Precision shipping label
LOCKHEED.FRX = Bar-coded label for Lockheed Martin
TESTLAB.LBX = Label for testing purposes

When editing the **INVLAB.LST** file each line represents a different label. The first line of this file will read, SHIPPER.LBX = Standard pc/MRP shipping label.

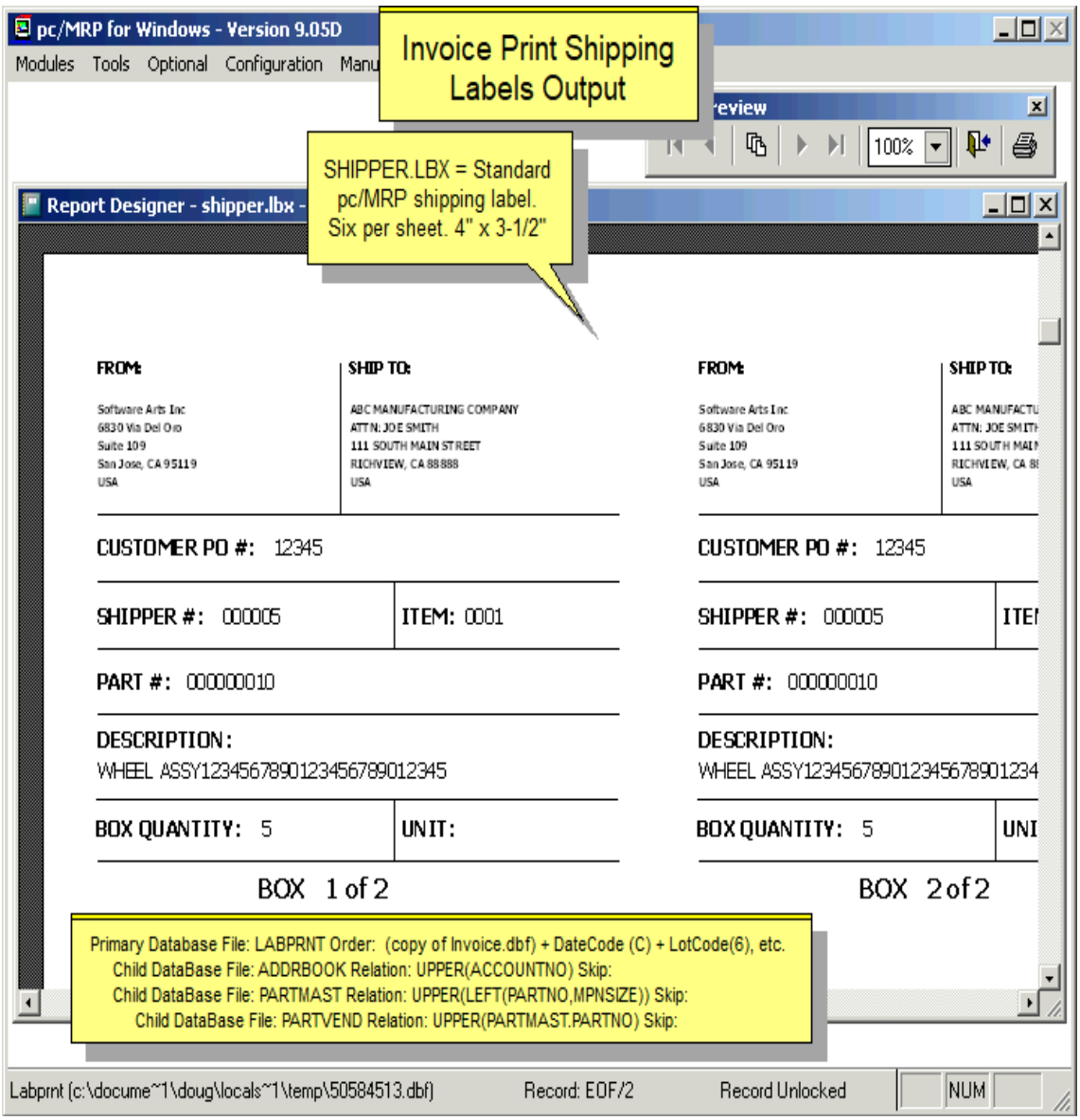
It is important to **follow the same structure** as the first line when adding labels. The character **=** needs to follow the label file name. Following the **=** character is a description of the label.

If a file named INVLAB1.upf and INVLAB2.upf exist, pc/MRP will follow the commands in these 'in' and 'out' program files to display a custom screen which can also set up custom variables and arrays read by the custom label '.FRX' file.


pc/MRP for Windows - Version 9.05D
Modules Tools Optional Configuration Manu
Invoice Print Shipping Labels Screen
Enter the number of boxes.
Label Generator (Invoice)
Item # Part Number Description Quantity Boxes D-Code Lot Code
0001 000000010 WHEEL ASSY12345678901234567890123 10.000 2
To utilize this option when invoices are created both the INVLAB.LST and INVSHIP.FLG files must exist in the pcmrpw folder. This option also allows users to increase or decrease the number of labels (boxes) per line item by changing the "Boxes" count as shown above. Each label will be labeled "1 of 2", "2 of 2". INVLAB.LST comes with pc/MRP. The user must create the INVSHIP.FLG file with Notepad. Make sure the files extension is .FLG and not .TXT
From: Software Arts Inc
6830 Via Del Oro
Suite 109
San Jose, CA 95119
USA
Shipper # 000005
Customer PO # 12345
Shipped Via UPS
FOB
To: ABC MANUFACTURING COMPANY
ATTN: JOE SMITH
111 SOUTH MAIN STREET
RICHVIEW, CA 88888
USA
Output To... Display Printer
Label Form SHIPPER.LBX
SHIPPER.LBX
FirstSourceLab.lbx
Start on Labe
Select the label to start on
Select a standard or custom label
Specify Individual Box Quantities
Allows the users to specify the qty in each box
Press OK to print shipping labels.
INVLAB.LST File would contain the lines:
SHIPPER.LBX = Standard pc/MRP shipping label
FirstSourceLab.LBX = First Source Label
NOTE: The = sign is required
Workfile (c:\docume~1\dou
Record: 1/1

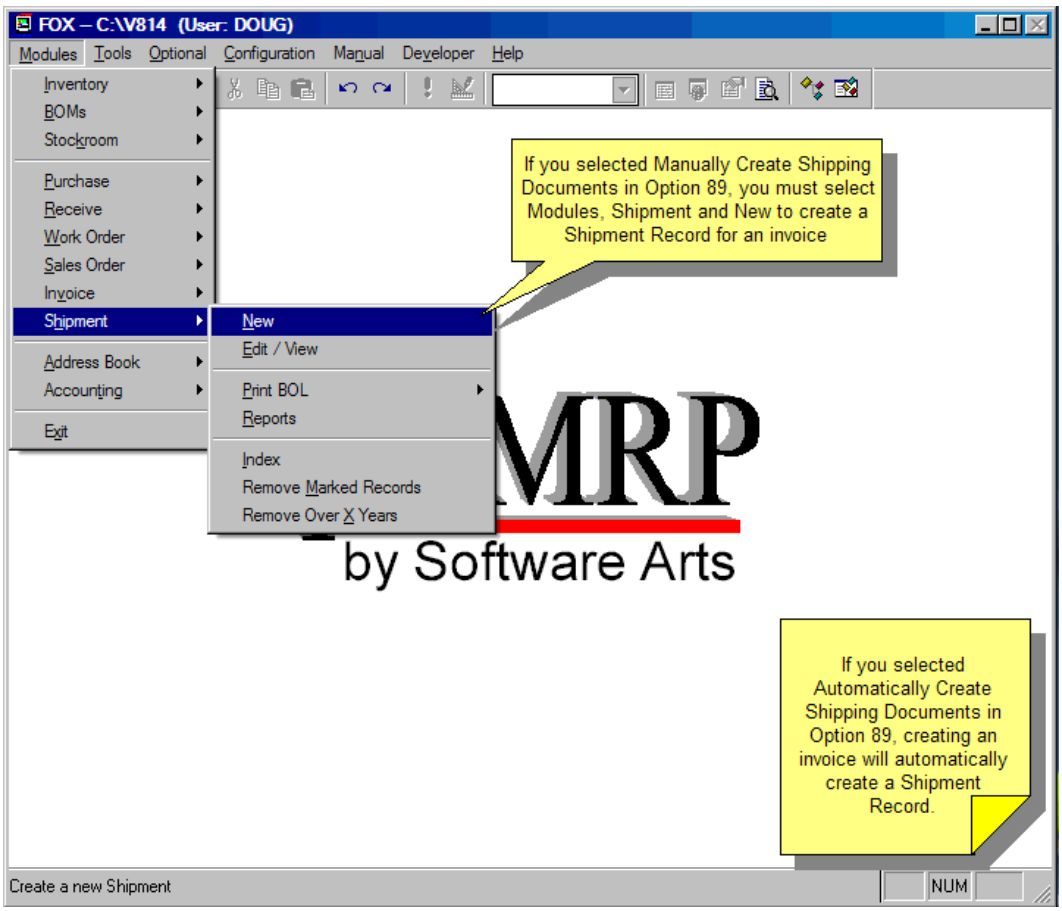

pc/MRP for Windows - Version 9.05D
Modules Tools Optional Configuration Manu
Invoice Print Shipping Labels Screen
Label Generator (Invoice)
Item # Part Number Description Quantity Boxes D-Code Lot Code
0001 000000010 WHEEL ASSY12345678901234567890123 10.000
Leave or Change the Quantity per Box
Labels to be Printed
Print Item # Part Number Description Quantity Box # of Boxes Date Code Lot Code
0001 000000010 WHEEL ASSY12345678901234567890123 5.000 1 2
0001 000000010 WHEEL ASSY12345678901234567890123 5.000 2 2
If the user checked "Specify Individual Box Quantities", this screen will pop up allowing the user to accept or edit the quantity per box for each box.
Ok
Canc
Specify Individual Box Quantities
Help
Ok
Cancel
Lablist (c:\docume~1\doug\locals~1\temp\50263329.dbf)
Record: 1/2
Exclusive
NUM

Here is a sample label generation:



# 10.2 Shipment Module

### 10.2 Overview. Create a shipment record




pc/MRP's new shipping module integrates pc/MRP with UPS's WorldShip or FedEx's Ship Manager. Users will no longer have to re-enter the customer addresses into UPS.

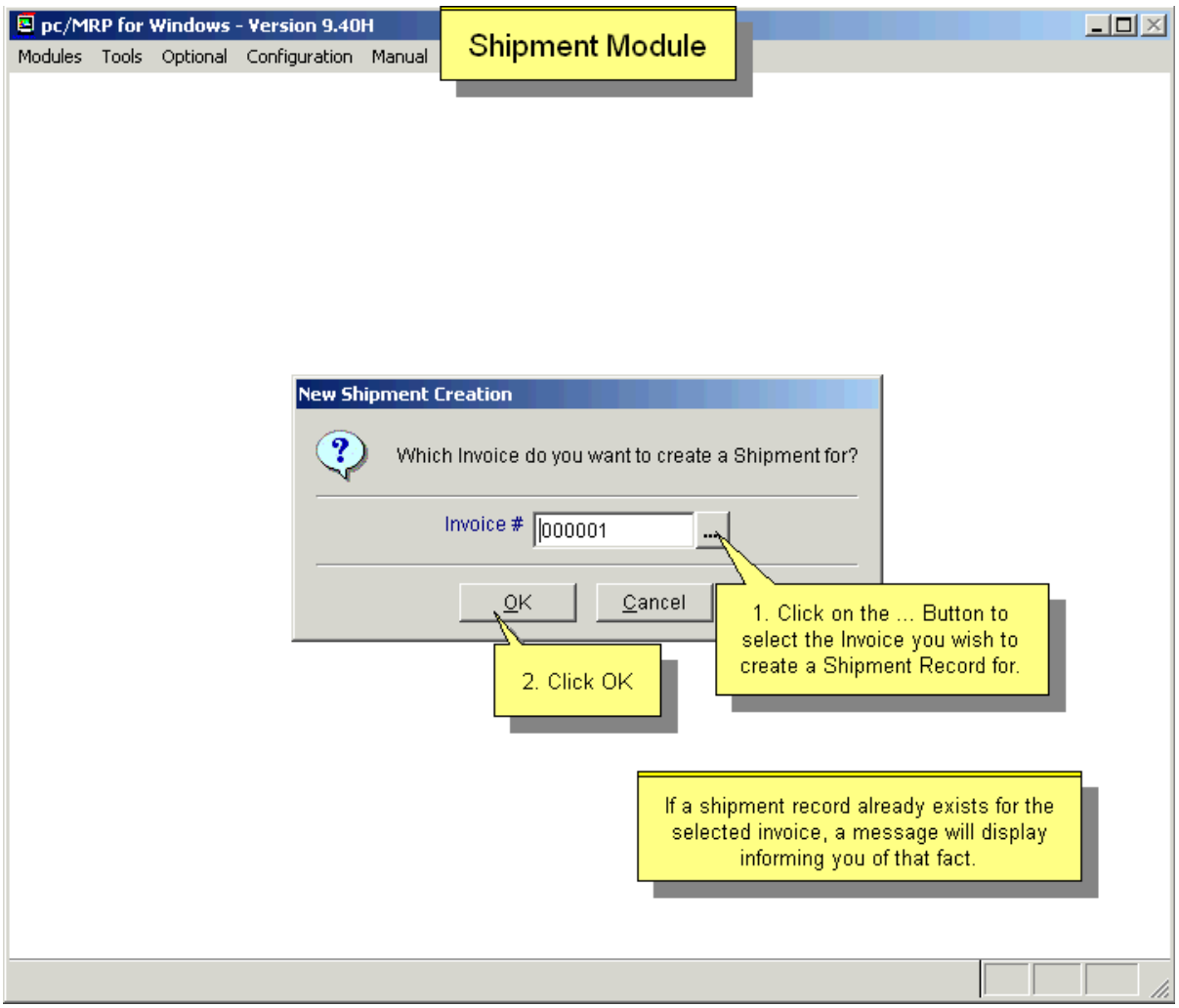
Users can also select 'BOL' from the Carrier Type dropdown list and create a Bill of Lading shipping document.

**Note:** If set to automatically generate a Shipment record for an invoice (**Option 89**), there must be a 'Shippable' partnumber on one of the invoice's line items. Otherwise no shipment record will be created. Parts are checked as shippable on the Inventory part's Miscellaneous tab; which then carries to the Sales Order line item and then to the Invoice on the Delivery tabs.

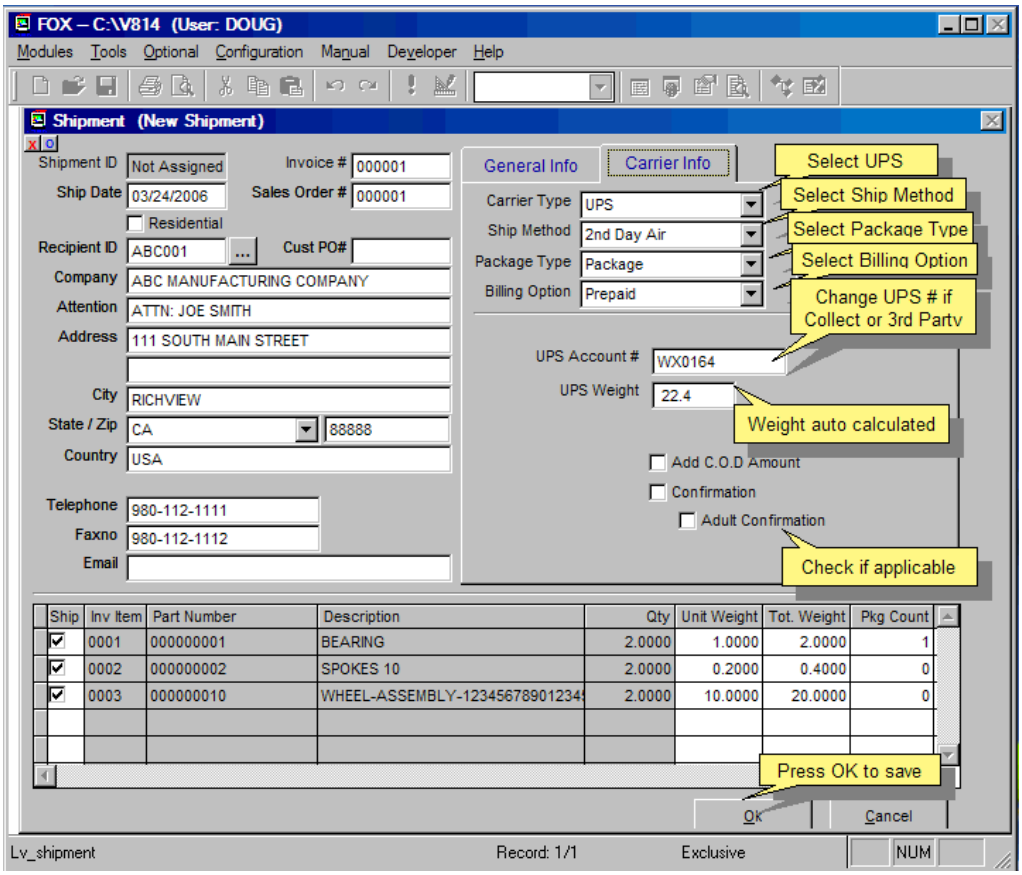
### 10.2.1 Step 1 Select an invoice to create a shipment record.

If a shipment record already exists for the selected invoice, a message will display informing you of that fact.

The easiest way to create a new Shipment record is to press the ellipsis button and then select an invoice from the scroll window that appears.



### 10.2.2 Step 2 Verify the data.




All invoice shipping information is automatically filled in for you.

If you are interfacing with UPS WorldShip OnLine version 8.0, you must select 'UPS' for the Carrier Type.

Only parts checked as 'Shippable' on the Invoice's Delivery tab will be listed in the scroll window. If no items on the invoice are shippable, an informational message will appear stating that there are no shippable items for the invoice and a shipping document cannot be created.

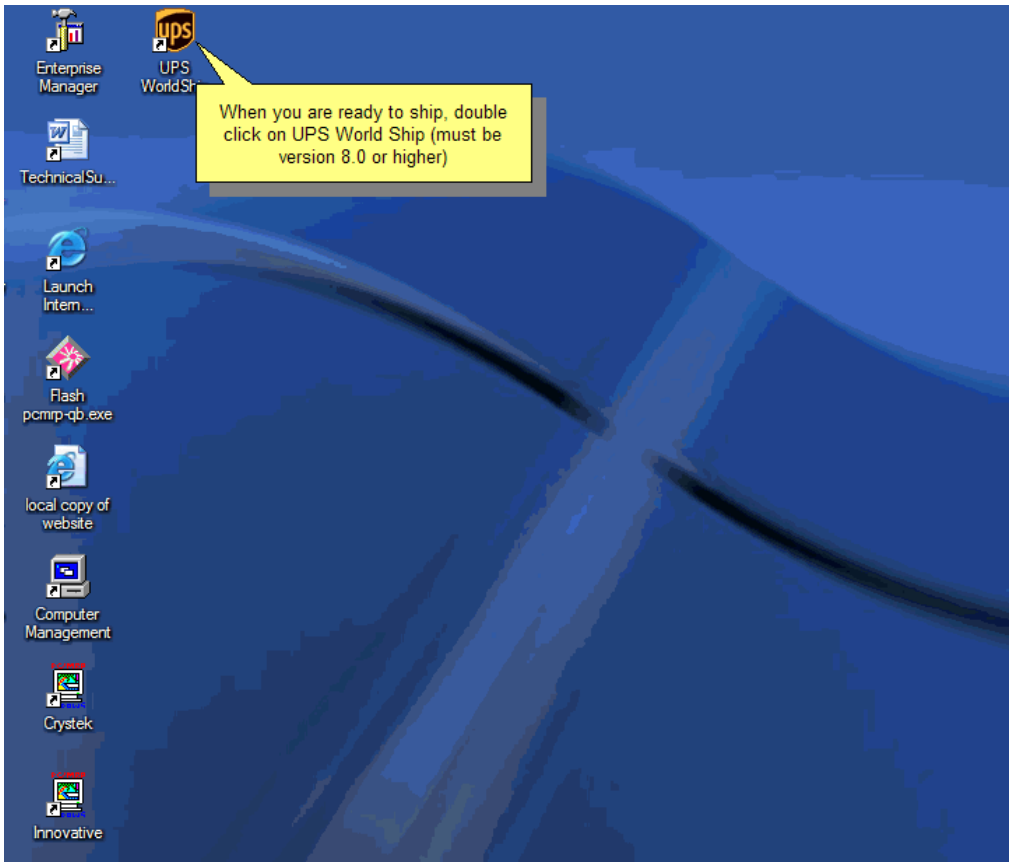
**Note:** Parts are checked as shippable on the Inventory part's 'Miscellaneous' tab.
**Note:** Unit weight comes from the partmaster (see 5.1.2.10 for the definition).

If Freight 'Collect' or 'Bill to 3rd Party' is selected as a billing option, you will have to enter the customer's UPS number after interfacing with the UPS online software.

All items must be checked (default) for the correct weight to be calculated for the shipment. This is NOT used to include or not include a line item for a shipment. It is assumed that the ALL INVOICE LINE ITEMS ARE SHIPPED on this document. You will not be able to partially ship an invoice and expect to ship the rest later. Create multiple invoices if you plan on splitting shipments.

Finish the data entry by pressing the 'OK' button to save the record.

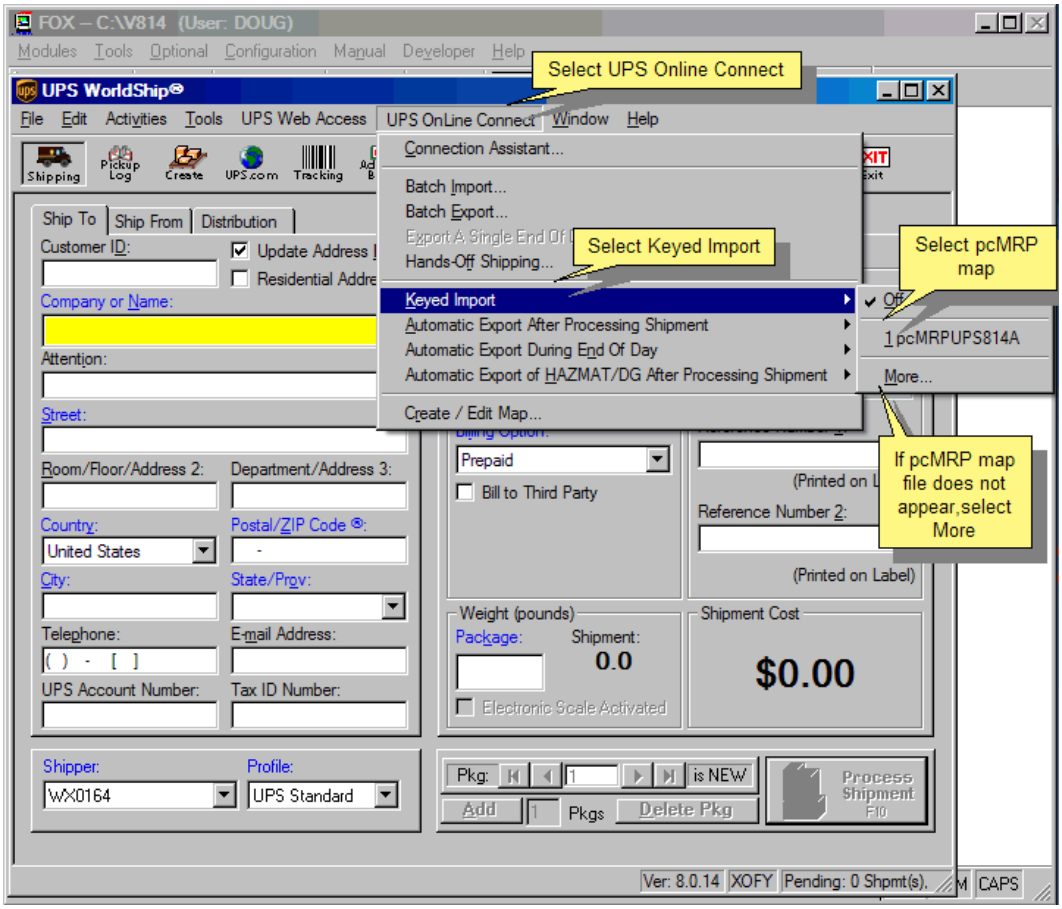
### 10.2.3 Step 3 Go to the UPS WorldShip Online interface.




UPS WorldShip Online version 8.0 should already be installed on your computer or a shortcut to the program should be available as shown above. If installed and no icon is on your desktop, check within the Start, All Programs, United Parcel Service (UPS), and select UPS WorldShip.

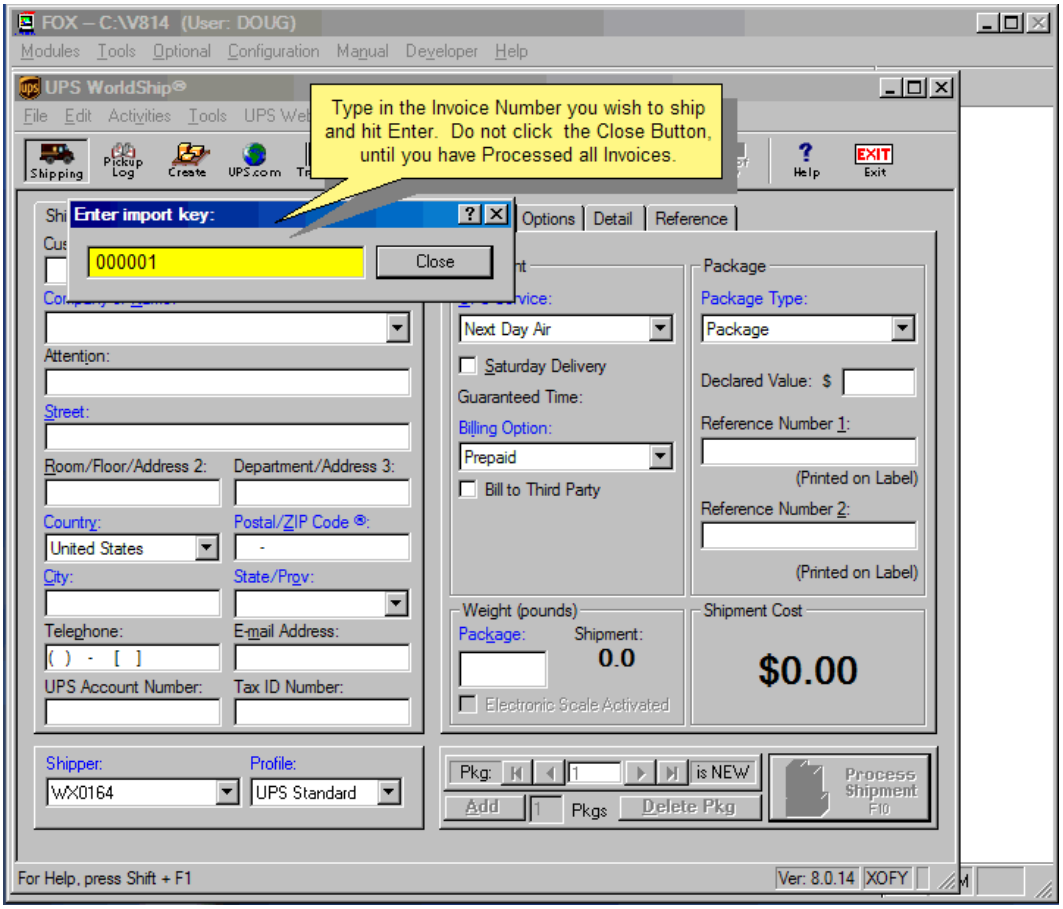
Sections 15.17 and 15.18 of the pc/MRP Manual will help you set up your UPS WorldShip interface.

### 10.2.4 Step 4 Select the pc/MRP import mapper




When the UPS WorldShip starts, select the menu item "**UPS OnLine Connect**", then "**Keyed Import**", and lastly, "**pcMRPUPS814A**". (The suffix of 814A means that pc/MRP's UPS interface works with pc/MRP versions 8.14A and higher.)

### 10.2.5 Step 5 Enter the invoice number to ship.

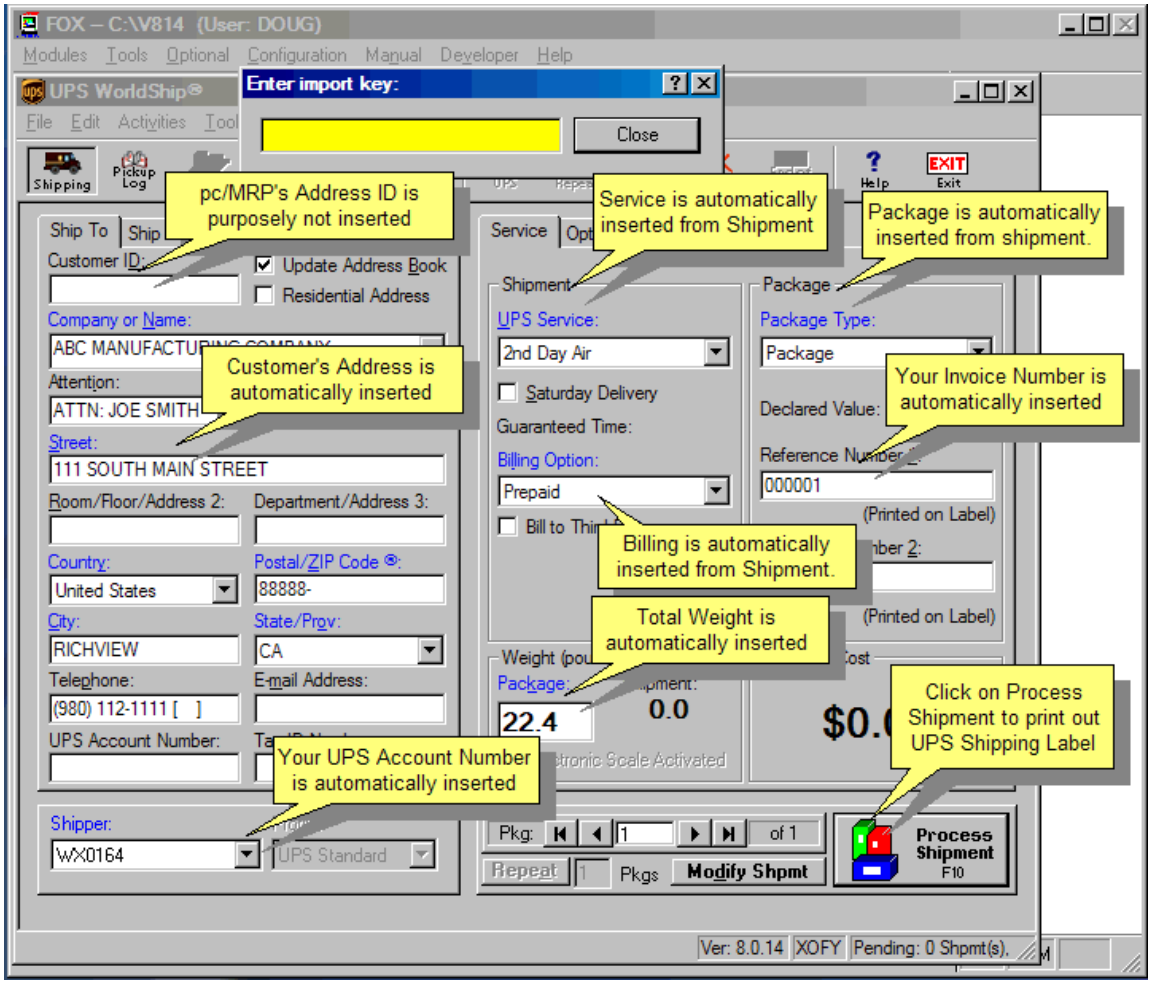



After the UPS WorldShip software connects to the UPS website, the Enter import key input box will appear.

**Note:** Please be patient as it takes time for the UPS software to connect to pc/MRP's Shipment Module.

Enter the Invoice number of the Shipment record you previously created and press the '**ENTER**' key. Do NOT press the Close button at this time. When you are finished creating all the UPS documents to ship, then you can simply exit UPS WorldShip or press the Close button and then exit UPS WorldShip.

### 10.2.6 Step 6 Verify the shipment data.




Verify the data automatically filled in by UPS WorldShip.

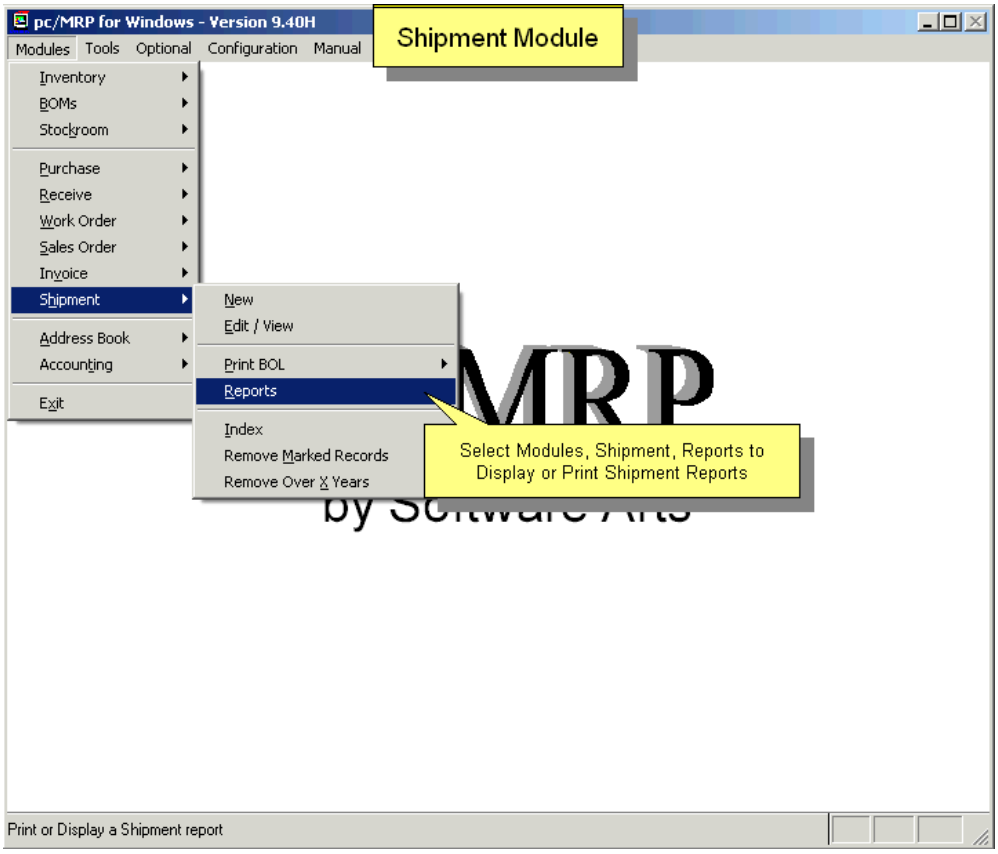
Please note several items are not required. The Customer ID and UPS Account Number are examples. Required data label fields are usually in blue color and normal fields are in black.

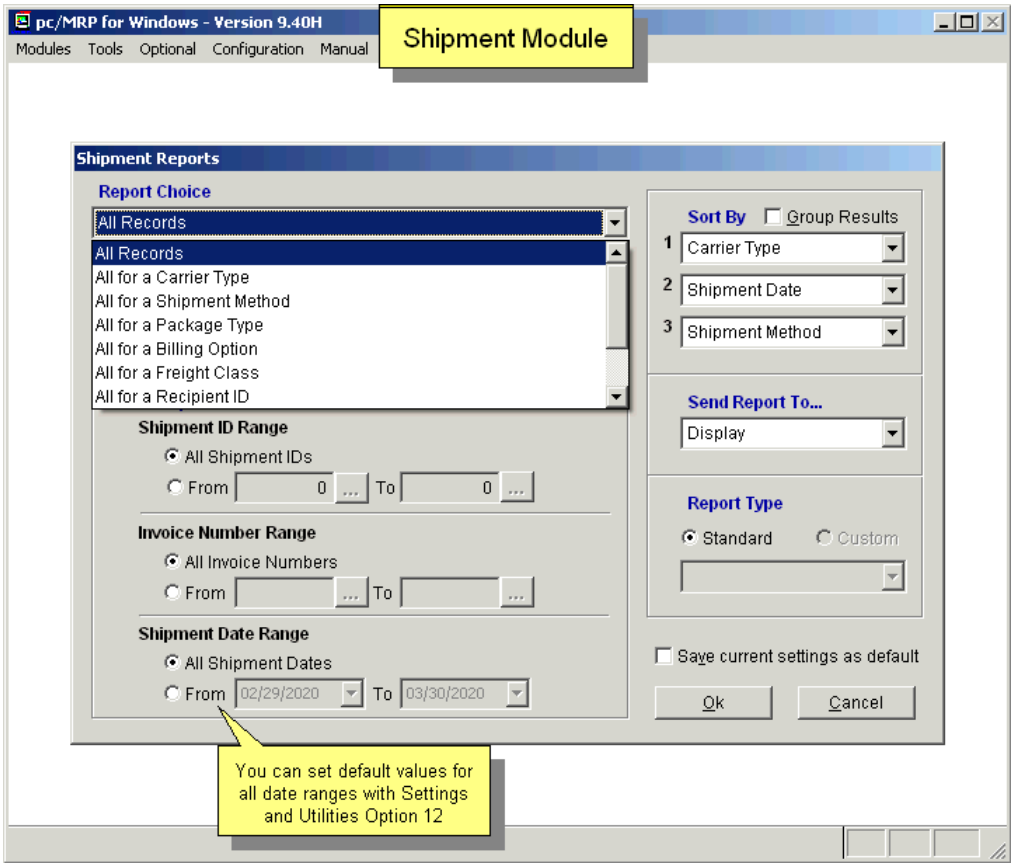
If you have chosen 'Freight Collect' as a billing option, the UPS Account Number would be a blue color and you would have to enter the customer's UPS number in this field. Your UPS number will stay in the 'Shipper' field.

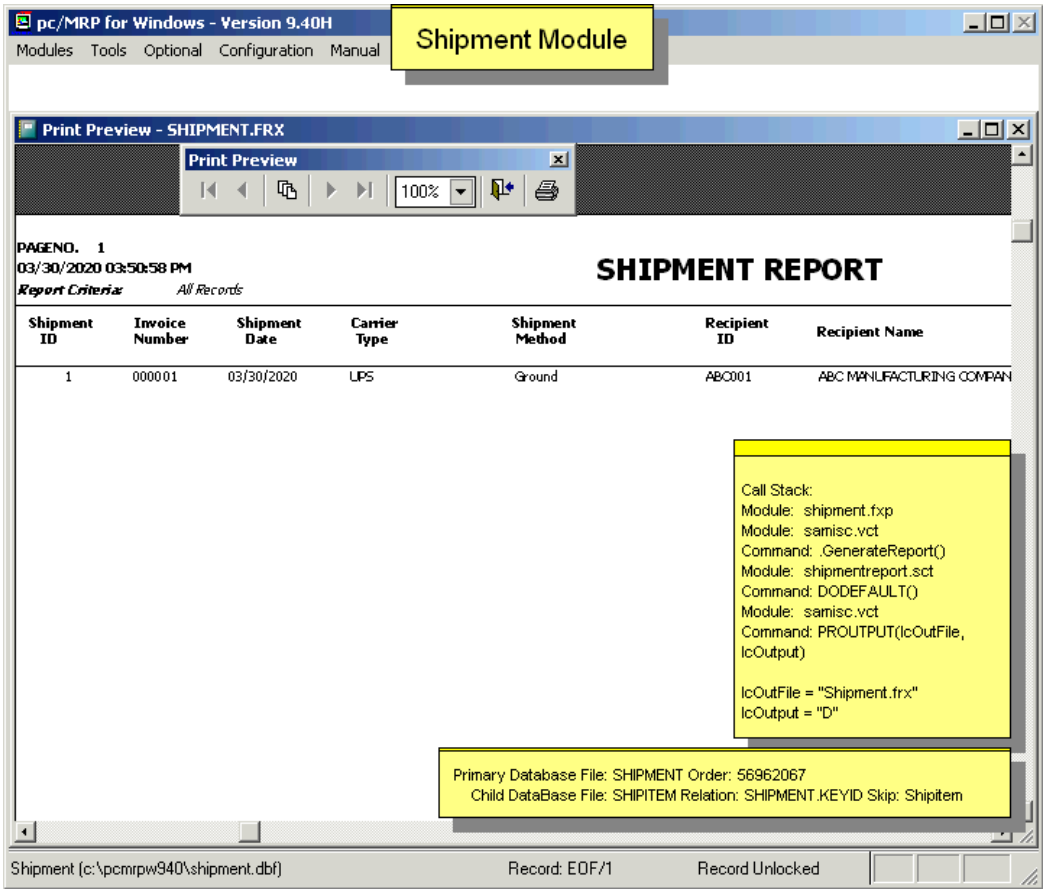
Press 'Process Shipment' to complete the process and print the shipment document.

pc/MRP will import the tracking number from UPS to pc/MRP's invoices.

**10.2.7 Shipment Reports.**






**10.2.8 Queried Search Overview (see 15.14.1)**

**10.2.9 Indexed Searches (see 15.14.2)**

**10.2.10 Index (see 15.14.3)**

**10.2.11 Remove Marked Records (see 15.14.4)**

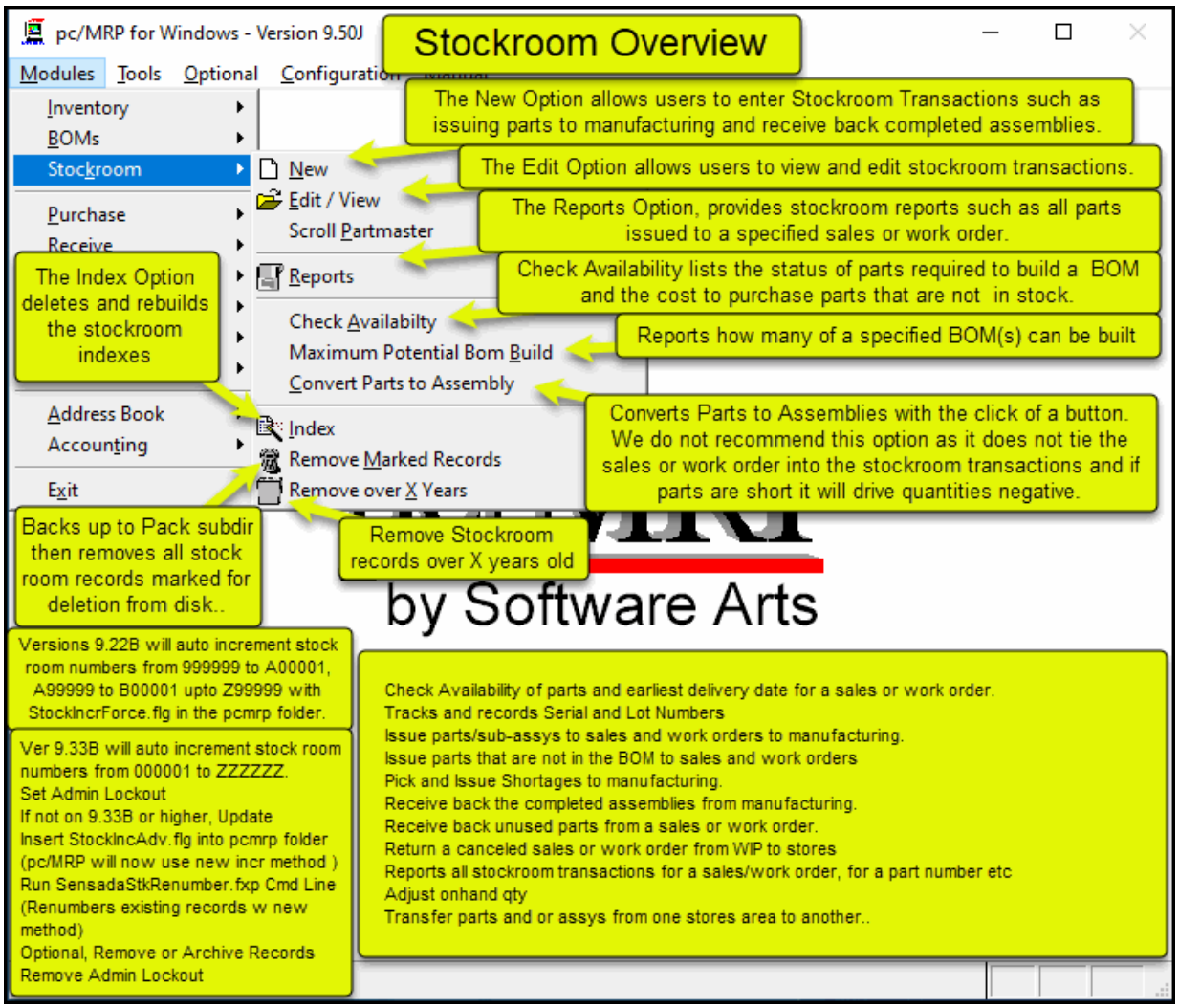
**10.2.12 Remove Over X Years (see 15.14.5)**

# 11 Stockroom Module

## 11.1 Overview of the Stock Transaction Module

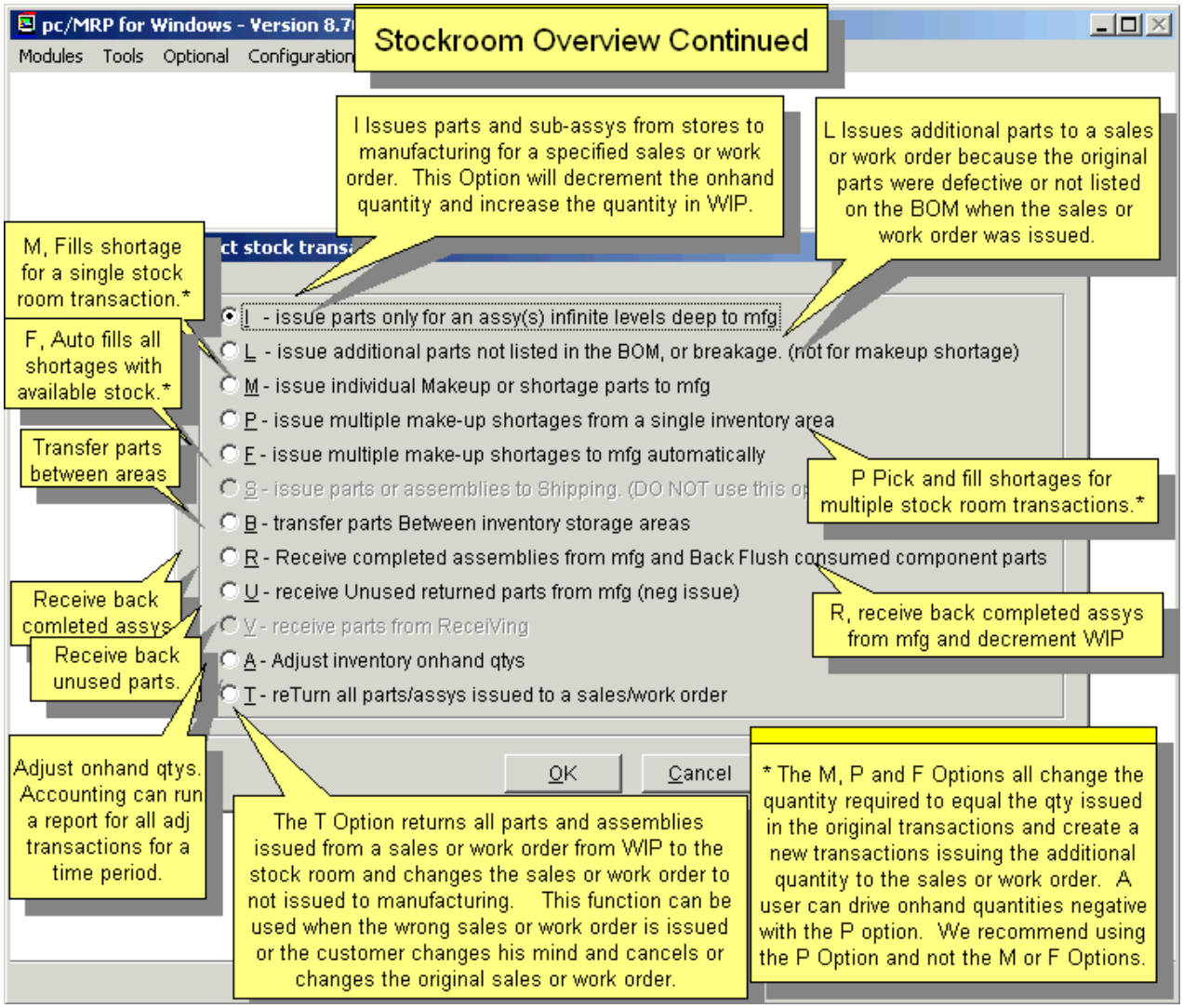
The Stockroom Module allows users to: issue parts and sub-assemblies to manufacturing, receive parts back from manufacturing as completed assemblies, backflush piece parts, issue parts and assemblies to shipping, transfer parts from one inventory area to another, and adjust the onhand quantities.

Every series of stockroom transactions to build your parts and raw material into assemblies) starts with an I-type stockroom issue. It might be followed by other types of issues, and always will be finished with an R-type transaction. Users can simply issue the sales order; there is no need to create work orders, unless you build for stock. pc/MRP will carry any shortages. We suggest that you only issue the quantity that is available, and don't allow MFG return when stock is short. This way your inventory won't go negative. See details in Section 11.2.5 below.




An online slideshow is located here: http://www.pcmrp.com/mrp101/stkroomnew.htm

Please Note with Versions 9.43A and higher, the Password Module can be used to restrict individual users from accessing one or more stockroom functions.

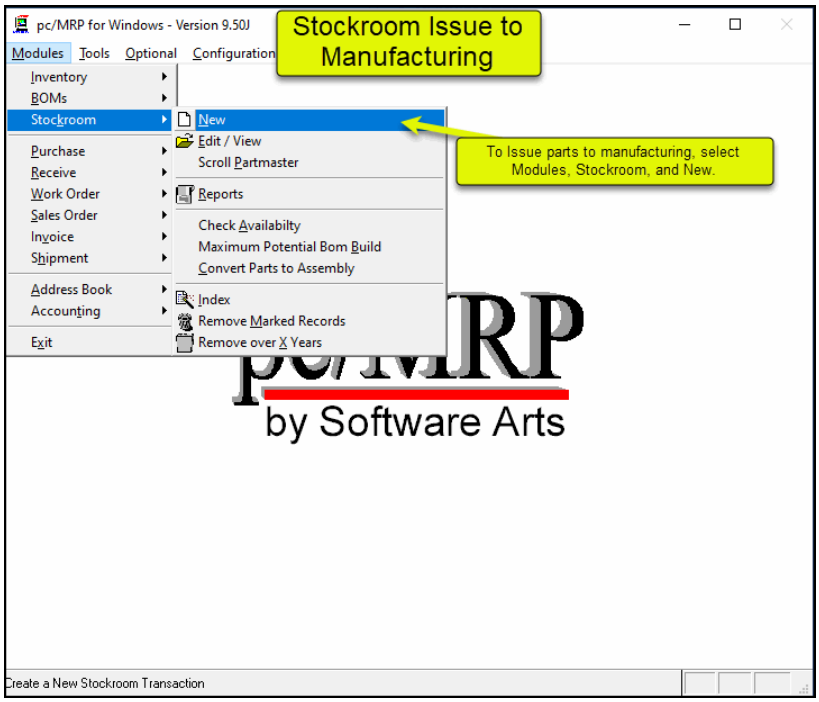


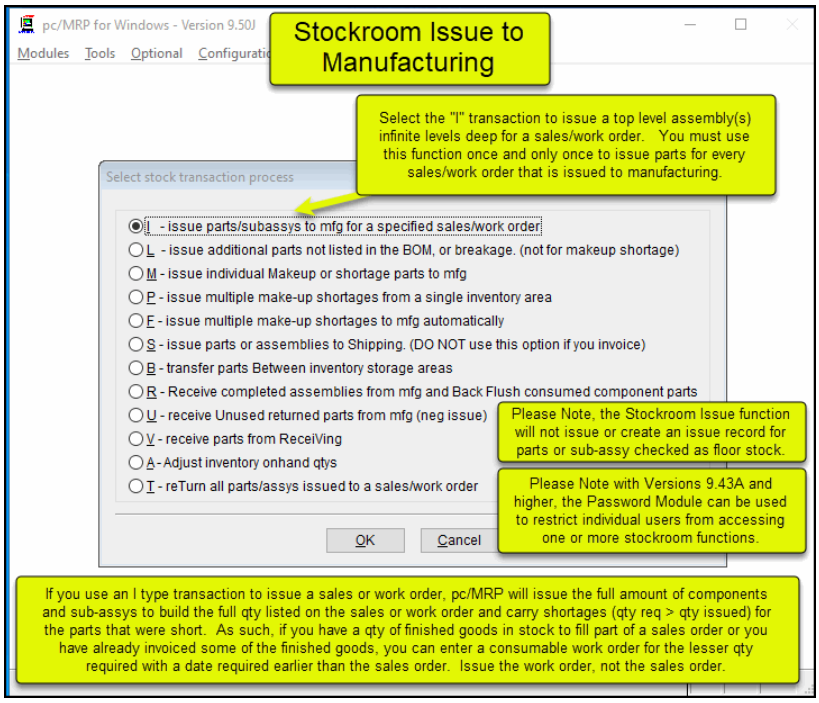

**Stockroom Transaction Type Codes**

ISSTA: Stock Adjustment (Decreasing)
ISSTB: Stock Transfer (Stores to other area)
ISSTM: Stock Issue to MFG
ISSTS: Stock Issue to Shipping

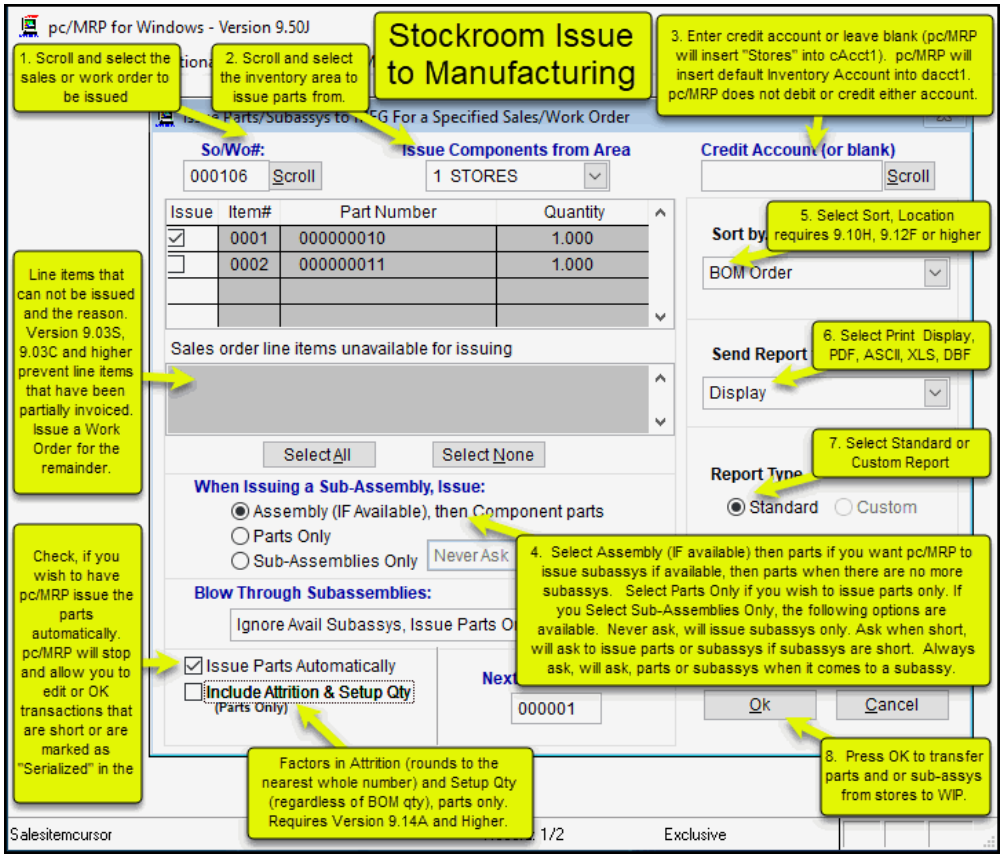
RECFA: Stock Adjustment (Increasing)
RECFB: Stock Transfer (other area to Stores)
RECFM: Receive back from MFG
RECFR: Receive from Receiving

## 11.2.1 Issue parts/sub-assemblies to a sales or work order




Select the "I" transaction to issue a top-level assembly(s) infinite levels deep for a sales/work order. You must use this function once and only once to issue parts for every sales/work order that is issued to manufacturing.




On the next screen select the inventory area you wish to issue the parts from. pc/MRP cannot issue from multiple areas during the I type transaction. If a user wishes to issue part of the build from one inventory area and other parts from a different inventory area, they will have to issue the I transaction short, and perform make up transactions, P (preferred) or M or F type transactions to issue from the alternate area.

pc/MRP will display the next available stock transaction number. Enter the sales order or work order number you want to issue. Then select all the line items you want to issue. Line items that can not be issued and the reason they can not be issued, will be displayed in the scrollable list box below the line item list. For example you cannot issue a SO line item that has been partially shipped.

Enter the account number to credit for these parts only if required to do so by accounting, otherwise leave this space blank (pc/MRP's accounting package does not use this field). pc/MRP will save typed in content or selected chart of accounts number in the Stockroom's cacct field.

**Note:** If you use an I type transaction to issue a sales or work order, pc/MRP will issue the full amount of components and sub-assys to build the full qty listed on the sales or work order and carry shortages (qty req > qty issued) for the parts that were short. As such, if you have a qty of finished goods in stock to fill part of a sales order or you have already invoiced some of the finished goods, you can enter a consumable work order for the lesser qty required with a date required earlier than the sales order. Issue the work order, not the sales order.

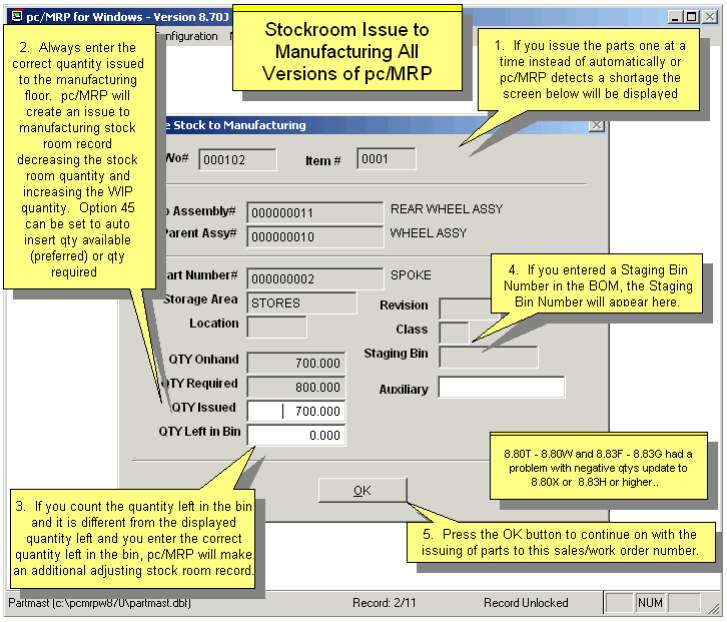
By default, pc/MRP will automatically issue items. If you prefer to verify each item or record serial/lot numbers using pc/MRP's standard serial/lot number features, uncheck the "**Issue parts automatically**" check box. If "Issue Parts Automatically' is checked and **Option 45** in Settings & Utilities is set to Issue Quantity Required instead of Issue Quantity Available, pc/MRP could drive On-hand quantities negative as if there is a shortage.

pc/MRP must be told how you want to issue the items. You can issue component parts only, sub-assemblies only or both part and sub-assemblies.

- Select **Assembly (IF available) then parts** if you want pc/MRP to issue sub-assemblies, if available, then parts when there are no more sub-assemblies available.
- Select **Parts Only** if you wish to issue parts only and no completed sub-assys, even if they are available.
- If you select **Sub-Assemblies Only** the following options are available:
    - **Never Ask**, will issue sub-assemblies only.
    - **Ask When Short**, will ask to issue parts or subassemblies if subassemblies are short. If you select Parts, it will issue remaining sub-assemblies and then parts.
    - **Always Ask**, will ask to issue parts or sub-assemblies when it comes to a sub-assembly. If you select parts, it will issue parts.

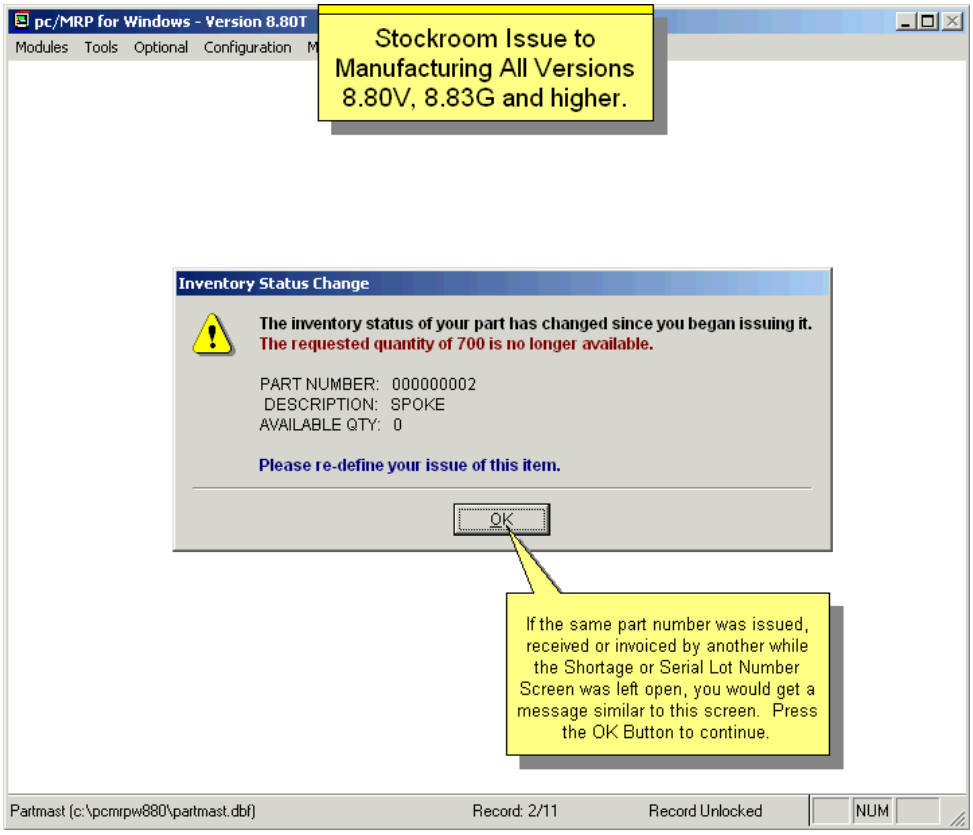
If you issue the parts one at a time instead of automatically or pc/MRP detects a shortage the screen shown below will be displayed. **Option 45** can be set to default the Qty Issued Field to the quantity available or the quantity required. We recommend you set Option 45 to the Quantity Available and always insert the actual quantity issued, as this will keep your WIP straight. (The qty issued and the qty left in stock fields are pre-populated according to the setting in Option 45.) If you set Option 45 to Required, you do not answer 'Yes' to track serial numbers, and you have checked Automatic issue, the screen above will not appear and part quantities can be driven negative.

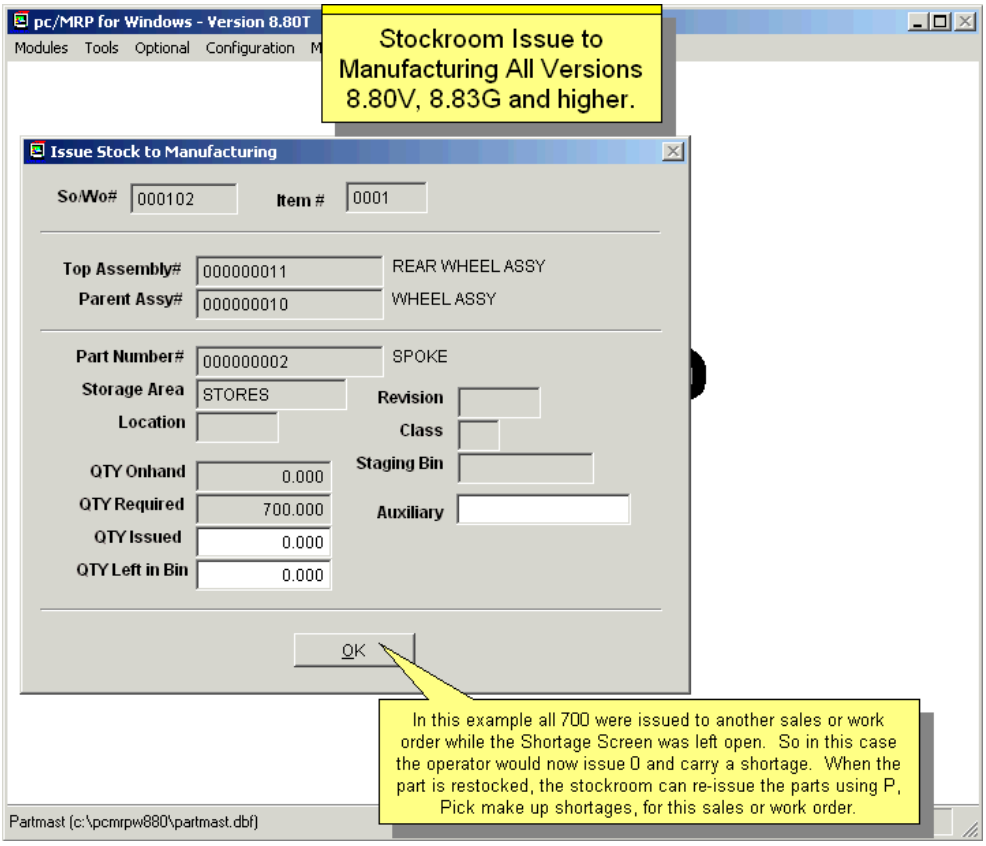
Always enter the correct quantity issued to the manufacturing floor. pc/MRP will create an issue to manufacturing stock room record decreasing the stock room quantity and increasing the WIP quantity. If you count the quantity left in the bin, it is different from the displayed quantity left, update that field and pc/MRP will make an additional adjusting stock room record.



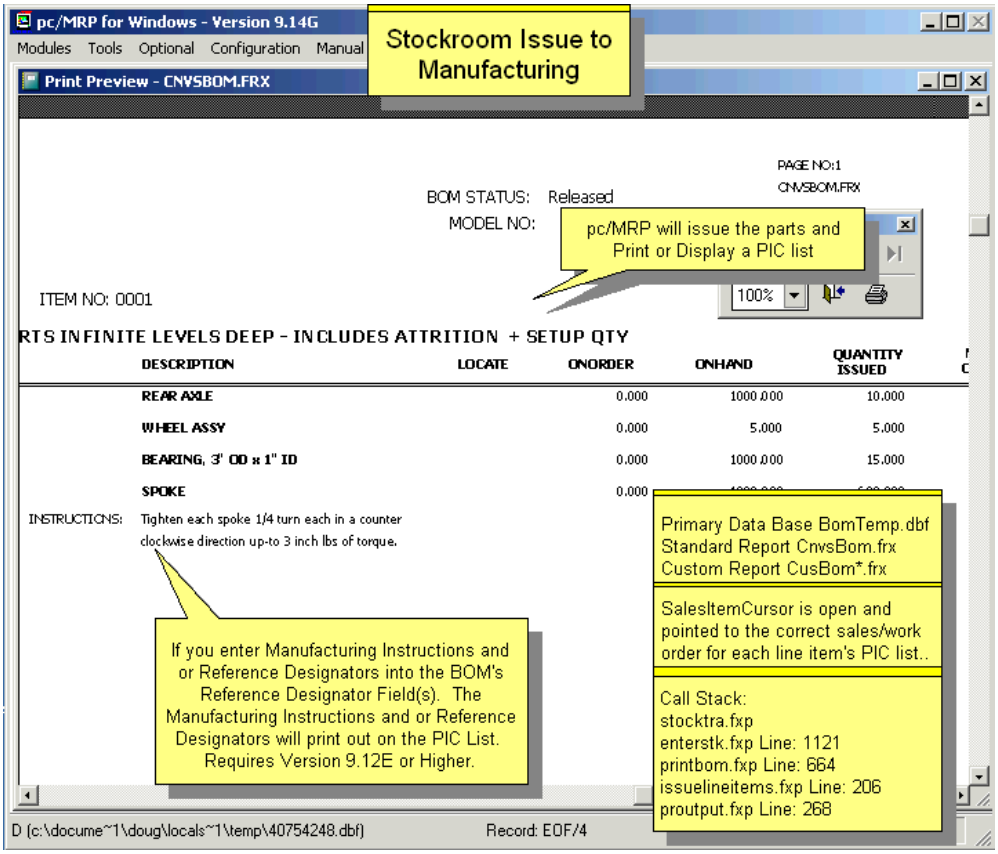

Whenever users enter an "I" type transaction, pc/MRP creates a stock transaction record for each part or sub-assembly issued. Each stock transaction record created contains the following fields:

- The stock transaction number (stktrano)
- The sales/work order number (sono)
- The part or assembly number being issued (partno)
- The quantity required (qtyreq)
- The quantity issued (qtyissued)
- The quantity returned (returnqty) is left at 0, as this field is filled in when the sales order is received back as completed assemblies.


pc/MRP for Windows - Version 8.80T
Modules Tools Optional Configuration
Stockroom Issue to Manufacturing All Versions 8.80V, 8.83G and higher.
Inventory Status Change
The inventory status of your part has changed since you began issuing it.
The requested quantity of 700 is no longer available.
PART NUMBER: 000000002
DESCRIPTION: SPOKE
AVAILABLE QTY: 0
Please re-define your issue of this item.
OK
If the same part number was issued, received or invoiced by another while the Shortage or Serial Lot Number Screen was left open, you would get a message similar to this screen. Press the OK Button to continue.
Partmast (c:\pcmrpw880\partmast.dbf)
Record: 2/11
Record Unlocked
NUM


pc/MRP for Windows - Version 8.80T
Modules Tools Optional Configuration
Stockroom Issue to Manufacturing All Versions 8.80V, 8.83G and higher.
Issue Stock to Manufacturing
So/Wo# 000102
Item # 0001
Top Assembly# 000000011 REAR WHEEL ASSY
Parent Assy# 000000010 WHEEL ASSY
Part Number# 000000002 SPOKE
Storage Area STORES
Location
Revision
Class
Staging Bin
QTY Onhand 0.000
QTY Required 700.000
QTY Issued 0.000
QTY Left in Bin 0.000
Auxiliary
OK
In this example all 700 were issued to another sales or work order while the Shortage Screen was left open. So in this case the operator would now issue 0 and carry a shortage. When the part is restocked, the stockroom can re-issue the parts using P, Pick make up shortages, for this sales or work order.
Partmast (c:\pcmrpw880\partmast.dbf)

pc/MRP will produce an "Issued PICK List" report containing the details of all items issued. The report can be displayed, printed, or saved as a PDF file.



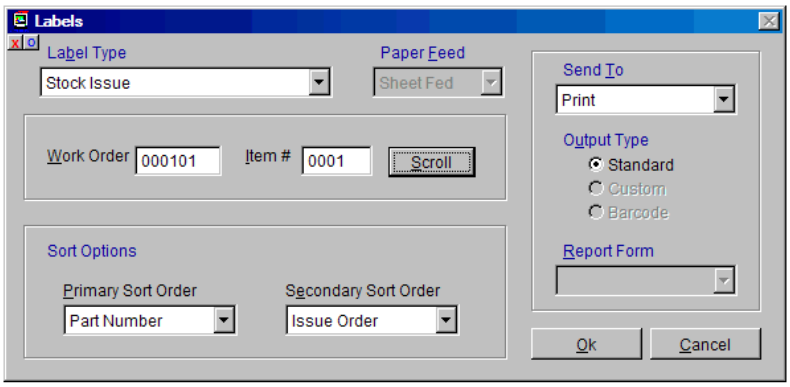

## 11.2.2 Issue parts/sub-assemblies to a sales or work order Record Serial Numbers

Please see Chapter 16.10 in this Manual.

## 11.2.3 Issue parts/sub-assemblies to a sales or work Print PIC List/Labels

Users can create a flag file (an empty text file) allowing labels to be created for the items being issued to manufacturing. The flag file has to be named **ISSTKLAB.FLG** and can be created with Notepad, save it without any content. If this file is present in the pcmrpw directory the screen shown below will appear.

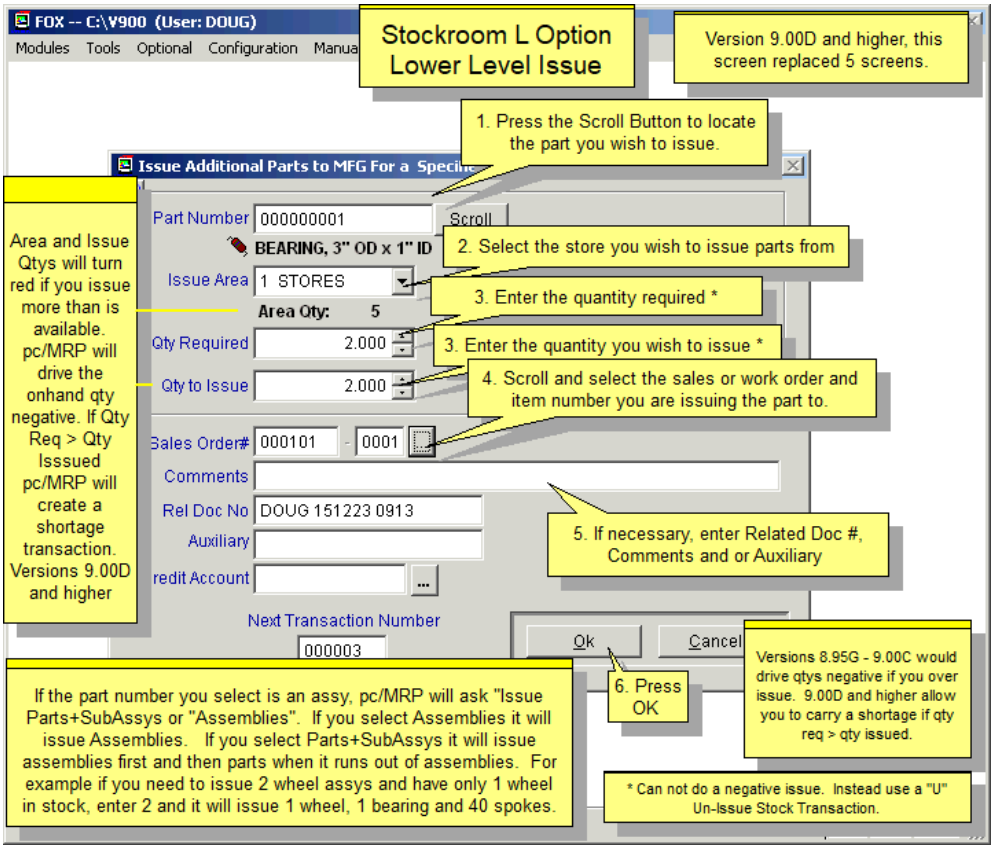
This option allows users to select various criteria, a specified work order, and multiple output types for the labels to be created.




Creating a file named "**ALLOWPARTISSREC.FLG**" with Notepad, will allow pc/MRP to issue to Manufacturing a Sales/Work Order line item that contains an inventory part instead of an assembly. Only the part listed on the Sales/Work order line item will be issued. Please note that no picklist will be printed. This flag file will also allow you to receive back such Sales/Work Order line item. This transaction will remove from WIP all the parts issued to that Sales/Work Order line item (i.e. the part listed on the Sales/Work order line item and any additional material issued with consecutive L-type issues) and increase the quantity of the part listed on the Sales/Work order line item. Software Arts does not recommend using this option.

## 11.3.1 L – Lower Level Issues

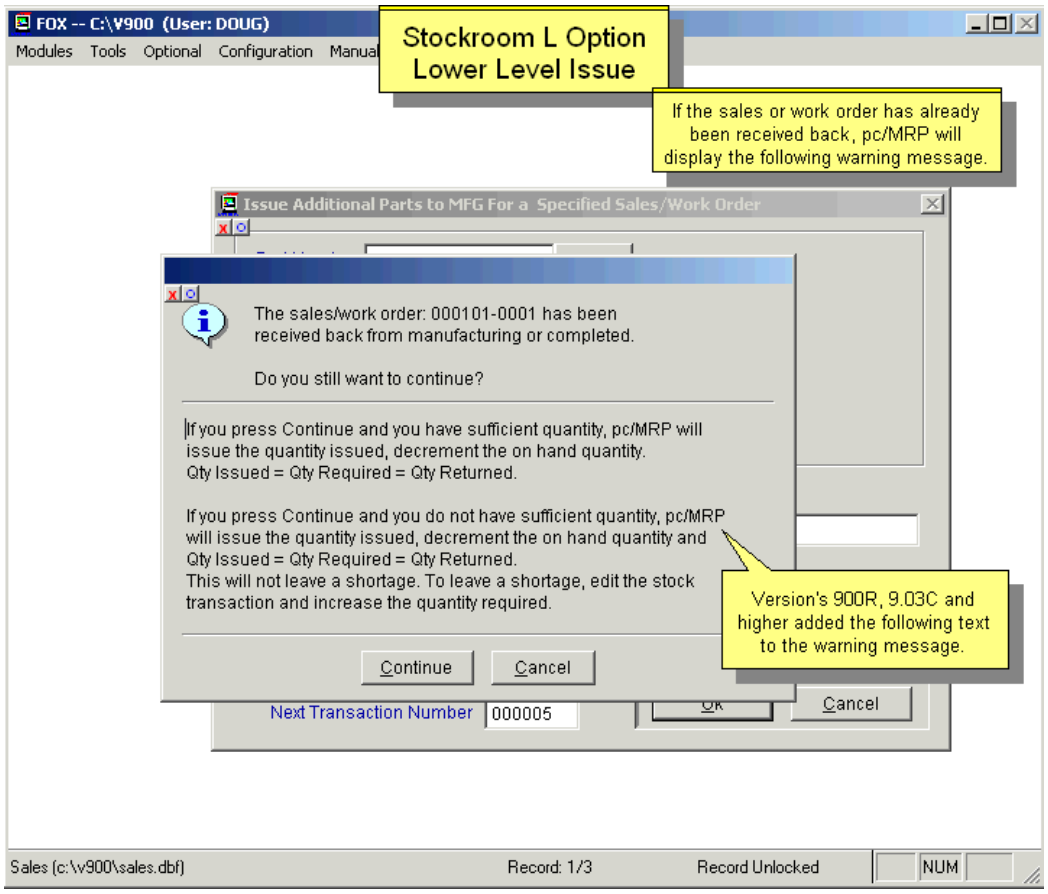
Only use this function to issue extra parts or parts that were not on the Bill of Materials. Select an "L" transaction to issue a part, or combination of parts and completed sub-assemblies for a sales or work order to manufacturing. You will be asked whether the information is to be manually entered or imported from an ASCII file. Manual entry is the most often used method and will be explained first. pc/MRP will reduce the onhand quantities and increase the WIP quantities of the parts and sub-assemblies issued. If the number entered was a BOM number, pc/MRP will ask if you wish to issue the BOM to the floor as a completed assembly or as component parts. If you choose to issue as a completed assembly, pc/MRP will issue the assembly as completed assembly. If you choose to issue the assembly as component parts, pc/MRP will issue assemblies first, then component parts when it runs out of assys.




pc/MRP will display the available quantity in the selected inventory area. As you enter the Qty Required, pc/MRP will automatically fill out the Qty to Issue. (1) If Option 45 is set to Qty Required (not recommended), Qty to Issue will be Qty Required. If the Qty to Issue is greater than the inventory quantity in the selected area, your inventory quantity will be taken to negative, and no shortage will be created. (2) If Option 45 is set to Qty Available (recommended), Qty to Issue will be Qty Required or Area Qty, whichever is smaller. pc/MRP will create a shortage that can be filled later, and does not take inventory negative. You can still issue more than available (pc/MRP will warn you against doing this) by overwriting the Qty to Issue to a higher number. In this case, just as in (1), your inventory quantity will be taken to negative, and no shortage will be created.
See the picture above for earlier pc/MRP versions.

Creating an empty text file, **LISSUPWO.FLG**, with Notepad in the pcmrpw directory will force pc/MRP to insert a 'Y' into the Sales/Work Order 'Issued to MFG' (ISSTM) field. This is not recommended, as pc/MRP will not allow an 'I' type issue transaction to that Sales/Work Order afterwards. The ISSTM Y value allows the SO/WO being received back from manufacturing (R type transaction).

If you enter an L-type transaction for a sales/work order that has been received back from MFG, you will get the following warning message:

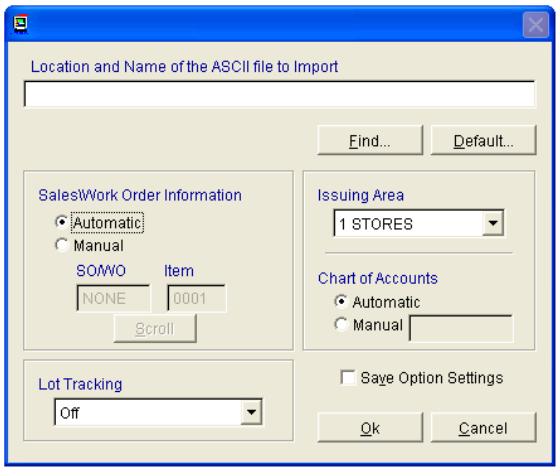

FOX -- C:\V900 (User: DOUG)
Modules Tools Optional Configuration Manual
Stockroom L Option
Lower Level Issue
If the sales or work order has already been received back, pc/MRP will display the following warning message.
Issue Additional Parts to MFG For a Specified Sales/Work Order
The sales/work order: 000101-0001 has been received back from manufacturing or completed.
Do you still want to continue?
If you press Continue and you have sufficient quantity, pc/MRP will issue the quantity issued, decrement the on hand quantity.
Qty Issued = Qty Required = Qty Returned.
If you press Continue and you do not have sufficient quantity, pc/MRP will issue the quantity issued, decrement the on hand quantity and
Qty Issued = Qty Required = Qty Returned.
This will not leave a shortage. To leave a shortage, edit the stock transaction and increase the quantity required.
Version's 900R, 9.03C and higher added the following text to the warning message.
Continue
Cancel
Next Transaction Number
000005
OK
Cancel
Sales (c:\v900\sales.dbf)
Record: 1/3
Record Unlocked
NUM

## 11.4.1 Importing Part Number and Quantity information

Importing creates a series of "L" type Stockroom transactions from a comma separated ASCII file (.CSV file). This file may be generated by a barcode reader or produced by another program. The ASCII file must contain the Part number and Quantity information and may contain other optional information.

The data structure of the ASCII file is shown below. The screen to the right configures the import process.

| DATA | TYPE |
|---|---|
| Part Number | 6-15 Character |
| Quantity Issued | Numeric |
| SO/WO Number (leading 0s) | 6 Character (optional) |
| SO/WO Item Number (leading 0s) | 4 Character (optional) |
| Issue Area (same as area name) | 8 Character (optional) |
| Lot Number | 6 Character (optional) |
| Quantity Required | Numeric (optional) |




- Enter the **Location and Name of the ASCII file to Import** or use the **Find** button to browse for it.
- Configure the **Sales/Work Order Information** to meet your situation.
- The **Automatic** setting will draw the sales/work order number from the import file. If the sale/work order number does not exist in the import file or it is invalid, the program will halt at each item and prompt the user to enter the correct sales/work order for that part.
- If all the items to be issued are against the same sales/work order, selecting **Manual** allows a one-time entry of the sales/work order number, which is then applied to all items issued.
- **Lot tracking** has three possible settings:
    - Automatic pulls the information from the source file.
    - Manual stops at each issue item and prompts the user to enter the Lot Number.
    - Off turns off lot number tracking
- Any of the twenty storage areas can be manually selected as the issuing area or it can be set to automatically draw the issuing area from the import file.
- Pressing OK will begin the import process.
- If any errors are detected during the process, an error report will be available after completion.

## 11.5.1 Issue Makeup or Shortage Parts to Mfg - M Option

We strongly recommend using the stockroom's P option instead of the M or F options to issue makeup shortages to sales and work orders.

Enter the stock transaction number of the part that is short. The stock transaction number can be located on the stock transaction report for that sales/work order number.

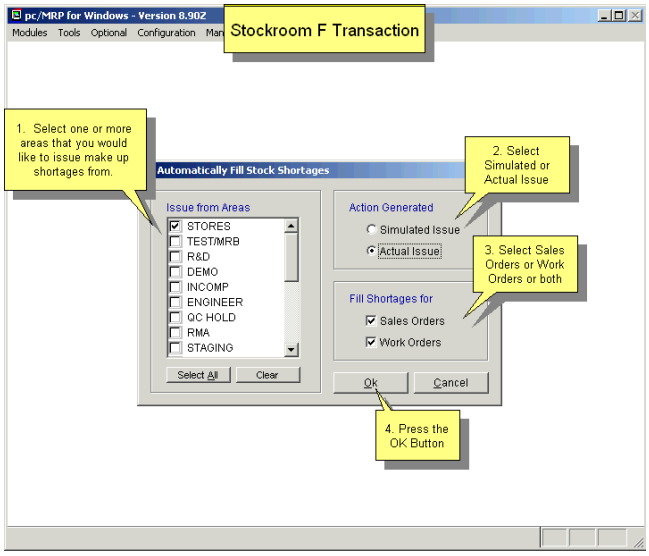
pc/MRP will allow you to enter the lot number and the quantity required to fill the shortage. pc/MRP will then reduce the onhand quantities and increase the WIP quantities of the parts issued.

pc/MRP will create a new issue transaction for makeup transactions and the quantity required will be reduced to equal the original quantity issued in the original stockroom record.

If the sales order is closed, pc/MRP will not allow you to issue a makeup issue against the order.

The M type stockroom issue does not provide a pick list.

## 11.5.2 Issue Multiple Makeup or Shortages to Mfg Automatically - F Optiom




We strongly recommend using the stockroom's P option instead of the M or F options to issue makeup shortages to sales and work orders. Versions 9.41B and higher will include Location Column for both the P and F Options.

Use this function to automatically issue make up shortages for items that were short when the original "I" type transaction was issued for a sales/work order number. It will fill as much of the shortage as the inventory level allows while giving priority to the sales/work orders with the earliest date required. This function looks at shortages for open sales and work orders (complete does not equal Y) that have been issued (issuedtmf = Y) that now have stock available to be issued (onhand greater than 0).

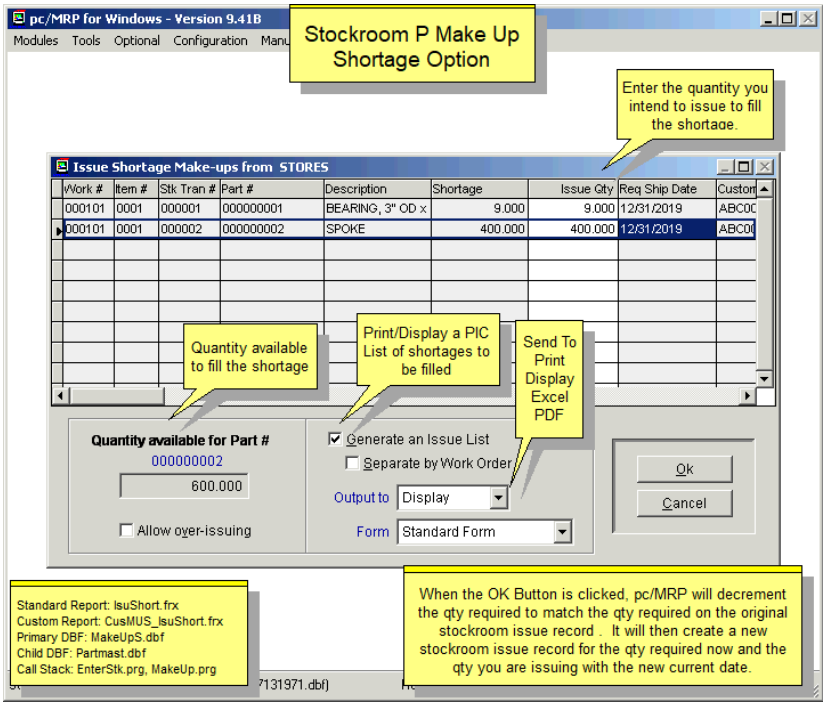
The user can select the inventory area(s) to consider when issuing items. The user also has the ability to issue only to sales order transactions or work order transactions.

Two reports are available after completion. The Action report details all of the stockroom shortages that were filled. The Make-up shortage Pick list produces an inventory list of material from each inventory area to be transferred from inventory to WIP.

The user may elect to actually issue shortage make-ups or to simulate the shortage make-ups. Actually issuing will produce the reports described above while reducing the quantity of the parts from the issuing area and increasing the quantity in

WIP. Simulating the shortage make-ups will produce the same reports as the actual issue without transferring inventory. This allows the user to check the shortage make-ups before they are transacted.

## 11.5.3 Issue Makeup or Shortage Parts to Mfg - P Option




The P option allows users to fill stock room shortages from a list of possible stockroom transactions that were issued short. When users select this option, pc/MRP will create the screen above. This screen allows users to select the criteria to generate the list of shortages to be filled.

The P option will modify the original stockroom issue record, reducing the quantity required by the quantity issued in this new transaction. It will create a new stockroom issue record; the required quantity and the issued quantity both will be the quantity issued in this new transaction. (This way the required quantity in the two transactions will add up to be the original required quantity.) The new transaction will use the current cost from the part master and the current date.

1. Select the area where the parts will be issued from.
2. Select the desired sort order.
3. The Issue Shortage Make-ups screen allows users to choose from a list of shortages that can be filled and fulfill them by entering the desired quantity to be issued.
4. Highlight the shortage that you wish to issue and enter the quantity in the **Issue Qty** field.
5. Continue this process until you have selected all of the shortages you wish to fulfill. The quantity still available to be used is displayed in the bottom left corner of the screen.

Users can have the Issue Shortage option generate a report. This report can be sent to several output types.

If the Serial/Lot Number Module is being utilized, once the items have been selected and the user presses OK, the user will be prompted to track serial numbers as needed.

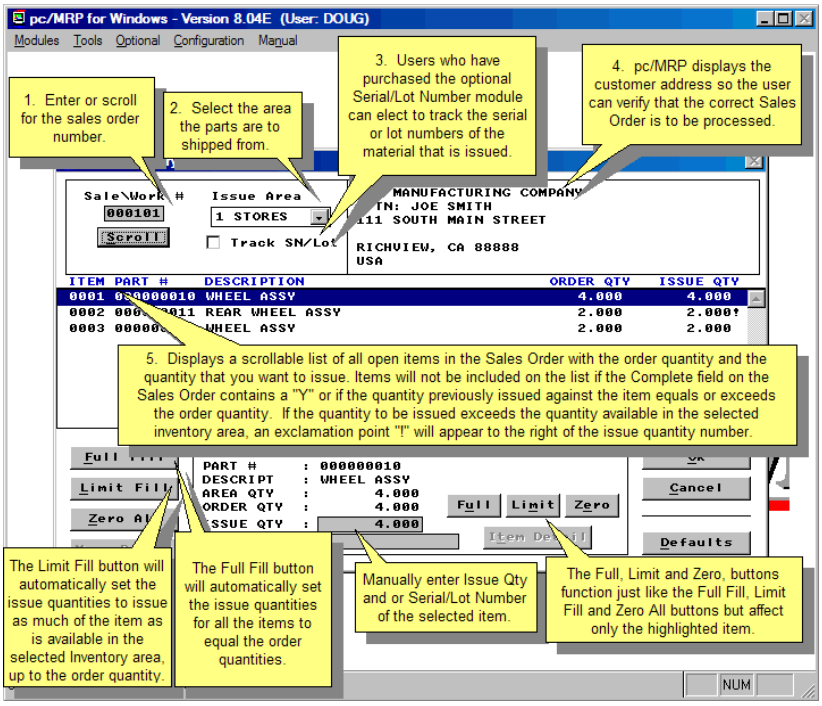
**Note:** The 'P' type transaction must have a positive quantity on hand in the chosen inventory area in order for the shortage to be displayed. Versions 9.41B and higher will include Location Column.

## 11.6.1 S - Issue Parts or Assemblies to Shipping

Enter an "S" to issue parts or assemblies to shipping.

This option was created for companies that do not use pc/MRP's Invoice module. If you use this option, set the inventory Adjustment method, Option 4, to 'S'. Do not use this option if you are using pc/MRP's Invoice module, as you will get a double decrement on your invoice movement report. pc/MRP will not allow the 'S' or 'V' transactions if **Option 4** is set to 'A'.

pc/MRP will issue each line item as you have configured it on this screen. The onhand quantity of each part shipped will be reduced if pc/MRP is configured to do so in the Configuration Menu.




**In the upper left corner of the window:**

- The Sales Order number against which the material is to be issued can be manually entered or you may elect to pull the number in by scrolling the Sales database.
- This is where the Inventory area from which the material is to be issued is selected.
- Users who have purchased the optional Serial/Lot Number module can elect to track the serial or lot numbers of the material that is issued.

**In the upper right corner of the window:**

The customer address is displayed so the user can verify that the correct Sales Order is to be processed.

**In the center of the window:**

- Displays a scrollable list of all open items in the Sales Order with the order quantity and the quantity that you want to issue. Items will not be included on the list if the **Complete** field on the Sales Order contains a **"Y"** or if the quantity previously issued against the item equals or exceeds the order quantity.
- If the quantity to be issued exceeds the quantity available in the selected inventory area, an exclamation point **"!"** will appear to the right of the issue quantity number. See Item 0002 on the example picture above.

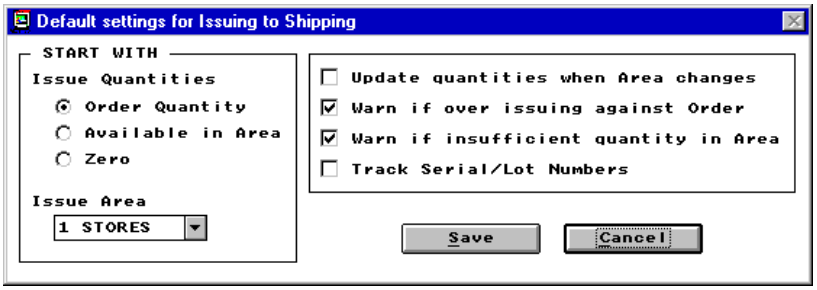
**In the lower left of the window:**

- The **Full Fill** button will automatically set the issue quantities for all the items to equal the order quantities.
- The **Limit Fill** button will automatically set the issue quantities to issue as much of the item as is available in the selected Inventory area, up to the order quantity.
- The **Zero All** button will reset all issue quantities to zero.
- The More Detail button is not used when issuing to shipping.

**In the lower center of the window:**

- This section displays information about the item currently highlighted in the center section. It also displays the quantity of this item currently available in the selected Inventory area.
- At the bottom of this area, you can manually set the issue quantity and enter a serial or lot number to be associated with this item. The serial/lot number will be retained as part of the Stock transaction record.
- The **Full**, **Limit,** and **Zero**, buttons function just like the **Full Fill**, **Limit Fill,** and **Zero All** buttons but affect only the highlighted item.
- The **Item Detail** button, like the More Detail button, is not used when issuing to shipping.
- In the lower right corner of the window:
- The **OK** button begins the issue process for the items you have specified while the Cancel button exits the screen without making any changes.
- The **Default** button opens a second window where some of the behavioral characteristics can be set.

**The Default Settings window: (The initial default settings are shown.)**




When a Sales Order is loaded into the first window for processing, the issue quantities for all items will be automatically entered based on the default **Issue Quantities** setting displayed in this window. The default Inventory issuing area can also be specified.

If the **Update quantities when Area changes** box is checked, changing the Inventory area on the first screen will automatically update the issue quantities based on the Issue Quantities setting.

If the **Warn if over issuing against Order** box is checked, a warning message will appear before transaction processing begins if the issue quantity of any of the items exceeds the order quantity. You then have the option to continue with the over-issue condition or return to the window for further editing.

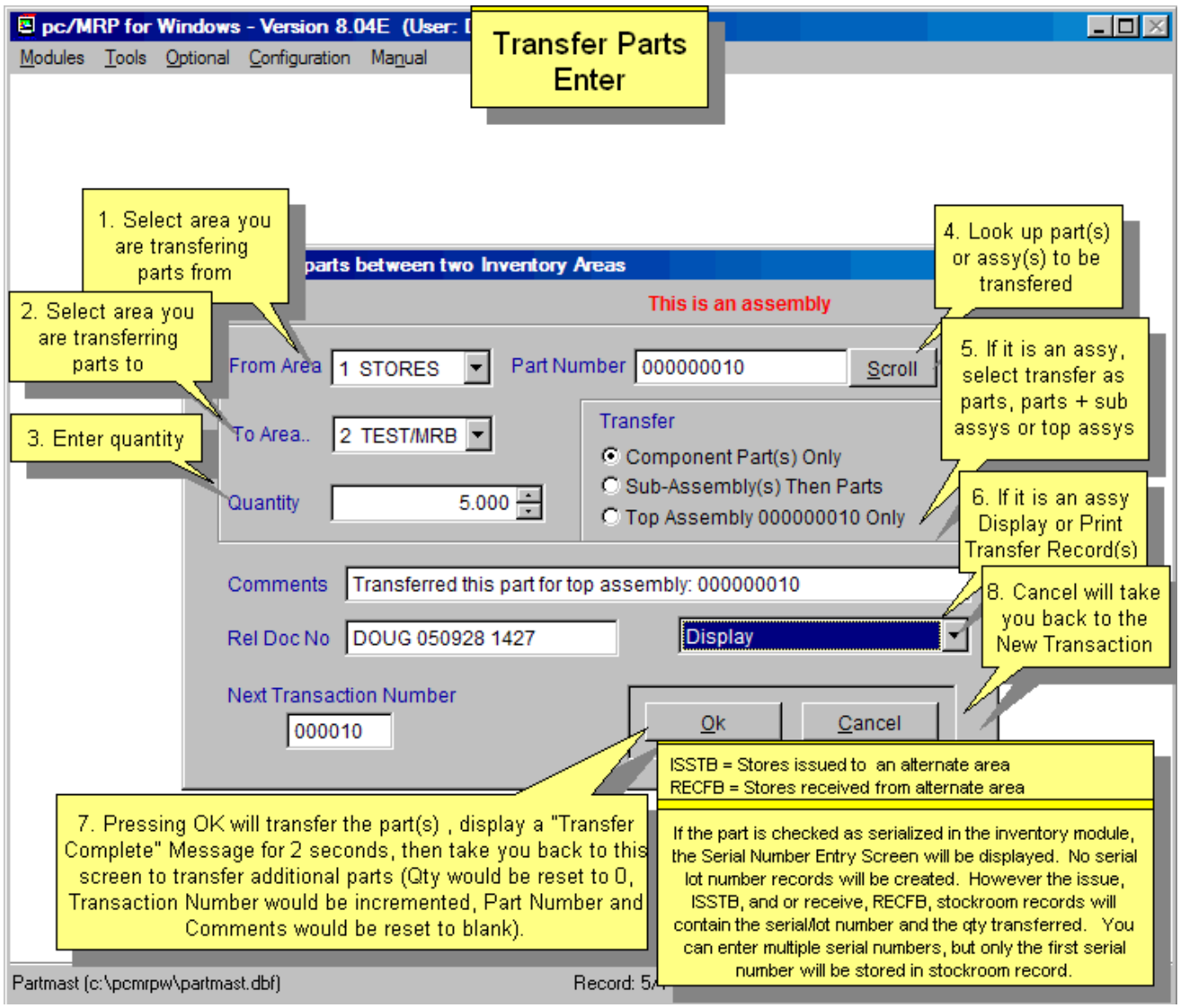
If the **Warn if insufficient quantity in Area** box is checked, a warning message will appear before transaction processing begins if the issue quantity of any of the items exceeds the quantity available in the selected Inventory area. You then have the option to continue with the over-issue condition (which will drive the Inventory quantity negative) or return to the window for further editing.

The **Track Serial/Lot Numbers** box will be available for those users who have activated the optional Serial/Lot Number module. When this box is selected, the Track SN/Lot check box on the first window will start in the checked condition.

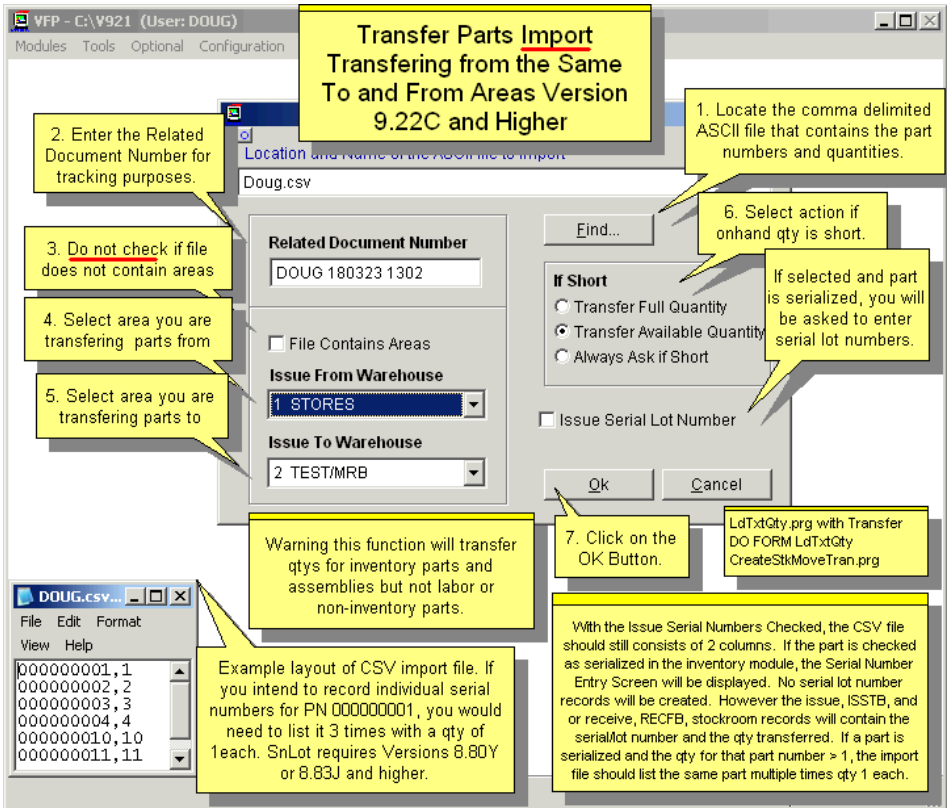
## 11.7.1 - Transfer Parts Between Inventory Areas

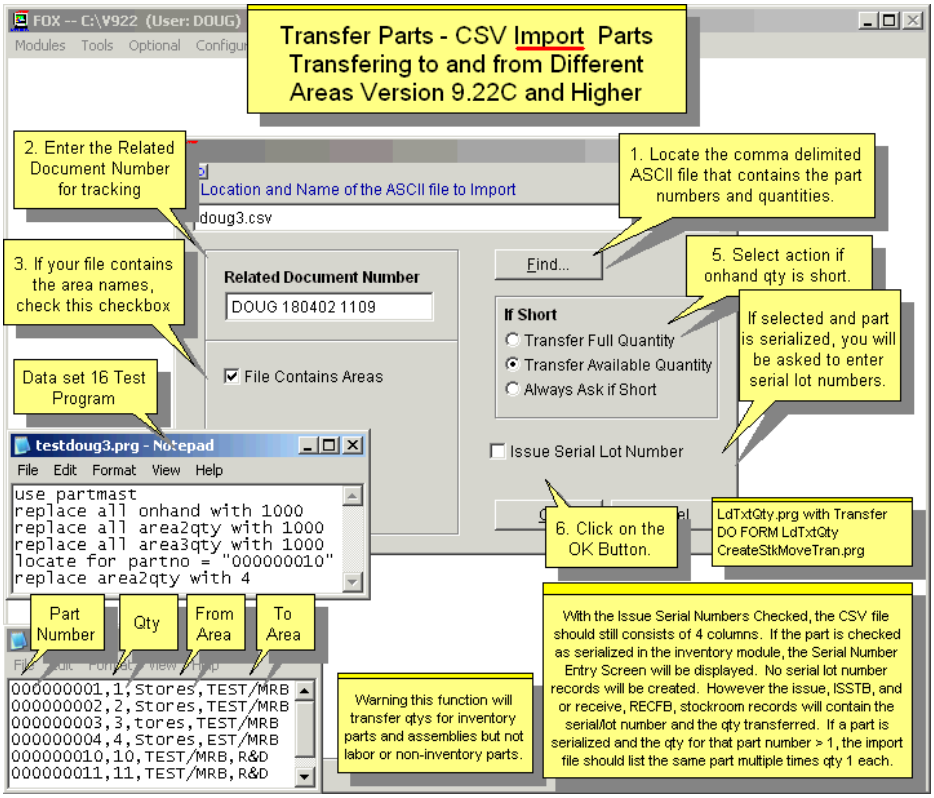
Transferring inventory from area 1 (Stores) into an alternate area creates an ISSTB record. Transferring inventory from an alternate area into area 1 (Stores) creates an RECFB record. Transferring inventory from an alternate storage area into another alternate storage area creates both an ISSTB and an RECFB record.

If you select to transfer parts between areas, you can enter the information manually or you can import it. If entering manually, the screen shown below will be displayed.

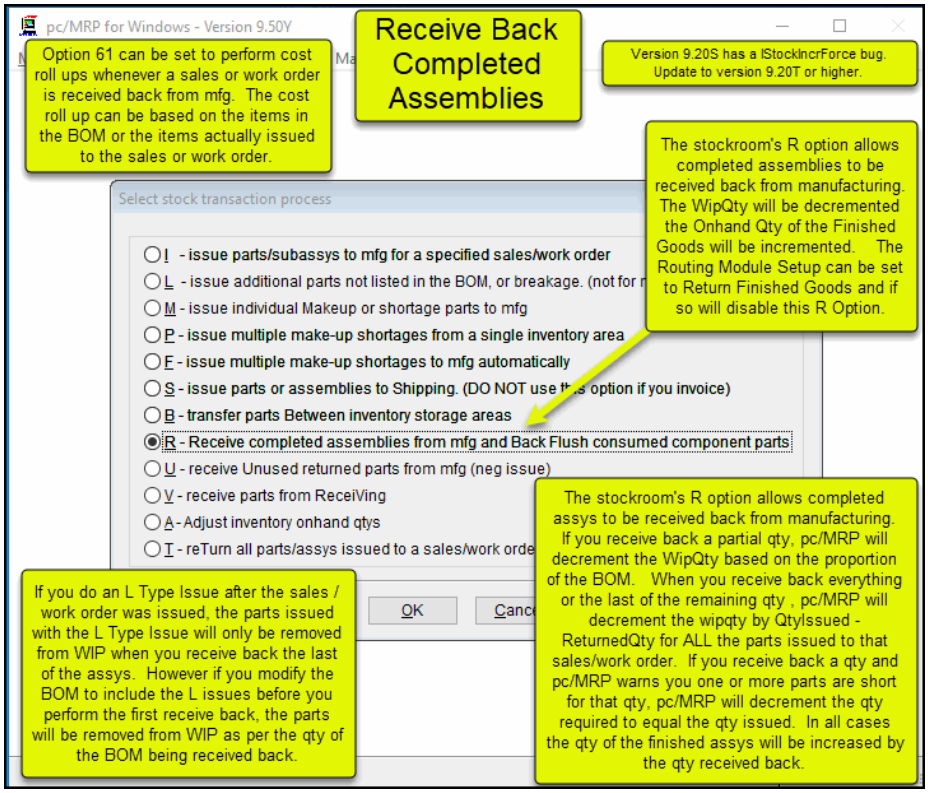


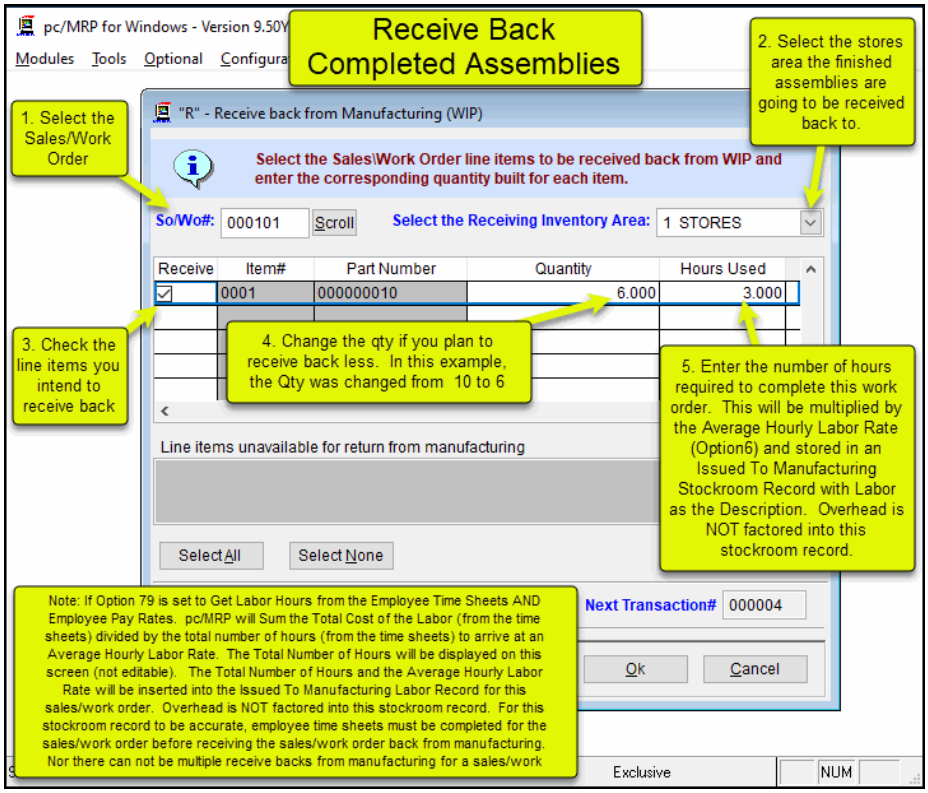
If the user selects to transfer parts between inventory areas using a CSV list of part numbers and quantities, the screen shown below is displayed. Your file should consist of two columns: part number and quantity. You can import as many transactions as you wish but only for one From Area – To Area combination at a time.



## 11.8.1 R - Receive Back Completed Assemblies from Manufacturing



This module allows completed assemblies to be received from the manufacturing floor back into the inventory. pc/MRP uses the following pseudo code:

- Find the stock transaction records for that sales/work order number.
- Reduce the quantity in WIP by the quantity issued to the sales/work order based on the BOM and the parts and sub-assemblies issued. The return quantity field contains the quantity WIP was reduced by.
- When the final assembly is returned pc/MRP reduces WIP by the difference of the quantity issued and the returned quantity. It also increases the quantity returned to match the quantity issued. pc/MRP decreases the quantity required to match the quantity issued. As such, it will not leave shortages in the stock room records for sales/work order that were completed and returned to the stock room.

The above method allows overages and waste to be deducted from WIP. It also does not require all parts to be issued before part of the sales/work order is returned as finished assemblies.

pc/MRP will ask for the sales/work order number that you wish to turn in as completed assemblies. It will then locate the original sales/work order record to determine how many assemblies were originally ordered and issued. pc/MRP will ask for the quantity being received and then increment the onhand quantity of the assembly listed on the sales/work order. Next, it will search the stock transaction database file and decrement the WIP quantities of all parts issued to manufacturing for that sales/work order. If you are turning in a partial order, it will make a partial deduction of the parts issued to manufacturing for that sales/work. For example, if you are turning in 6 completed assemblies for a sales/work order for 10 assemblies, pc/MRP would decrement the exact quantity of bolts, nuts, wheels, etc. for six assemblies.

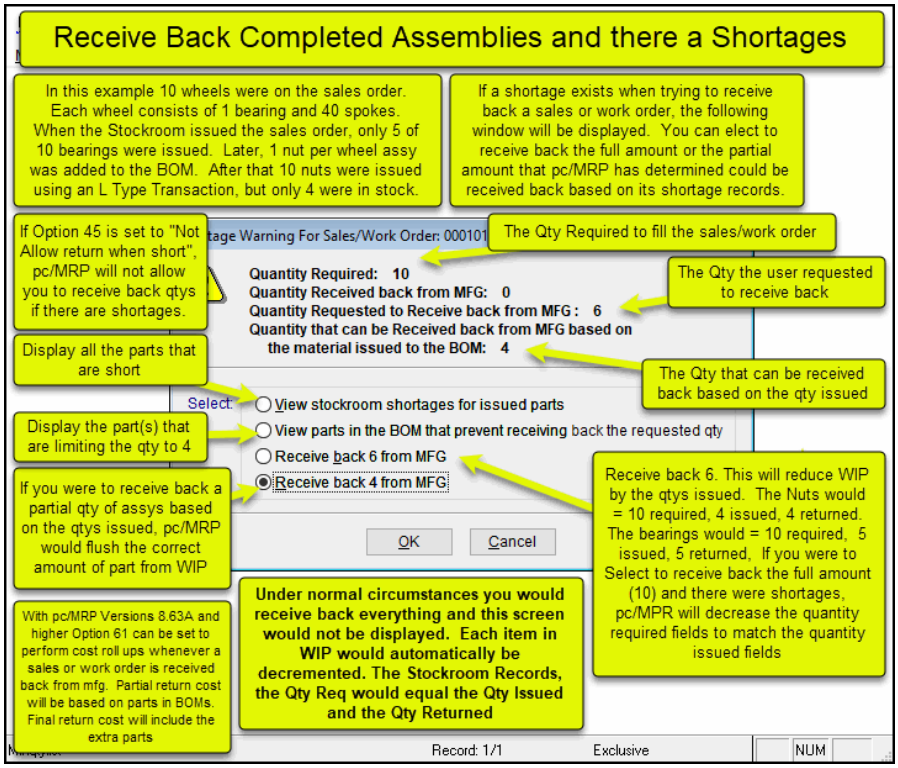
Users can enter the number of hours used to complete this assy(s). pc/MRP will multiply the number of hours and the average hourly labor rate found in Configuration, Settings and Utilities, **Option 6**. Alternately, if you have pc/MRP's Employee Time Sheet Module you can set **Option 79** to get the labor cost from this module. If people have not filled out their time sheets before the sales or work order is received back the labor costs will be short. However the Employee Time Sheet Module will contain the true labor cost (for everybody's labor rate) once everybody has turned in their time cards.

Creating a file named "**ALLOWPARTISSREC.FLG**" with Notepad, will allow pc/MRP to issue to Manufacturing a Sales/Work Order line item that contains an inventory part instead of an assembly. Only the part listed on the Sales/Work order line item will be issued. Please note that no picklist will be printed. This flag file will also allow you to receive back such Sales/Work Order line item. This transaction will remove from WIP all the parts issued to that Sales/Work Order line item (i.e. the part listed on the Sales/Work order line item and any additional material issued with consecutive L-type issues) and increase the quantity of the part listed on the Sales/Work order line item. Software Arts does not recommend using this option.

**Note:**

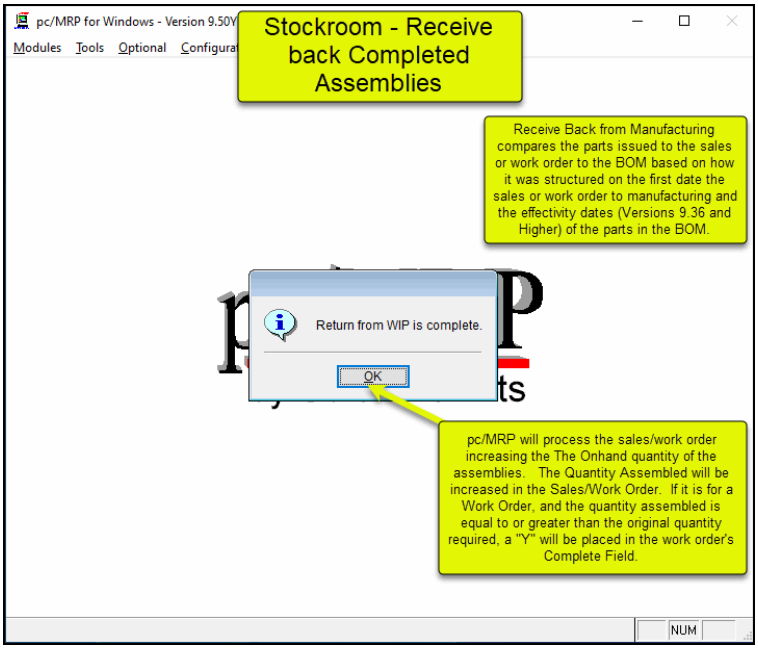
- You can start receiving back completed assemblies (for a partial quantity) even while you still have some shortages.
- If you plan to turn in completed sub-assemblies for a sales order, issue the sub-assemblies under their own work order numbers.
- If you are utilizing the Serial Lot Number Module, you can also issue serial numbers to returned assemblies with this transaction.

## 11.8.2 Receive Back Completed Assemblies Shortage Warning




When selecting “View stockroom shortages for issued parts”, the report’s name is SHRTAGEFORSONO.FRX. You would get the exact same information by selecting Stockroom, reports, all for a SO/WO (select the SO/WO), Make-up shortages issued to MFG only.

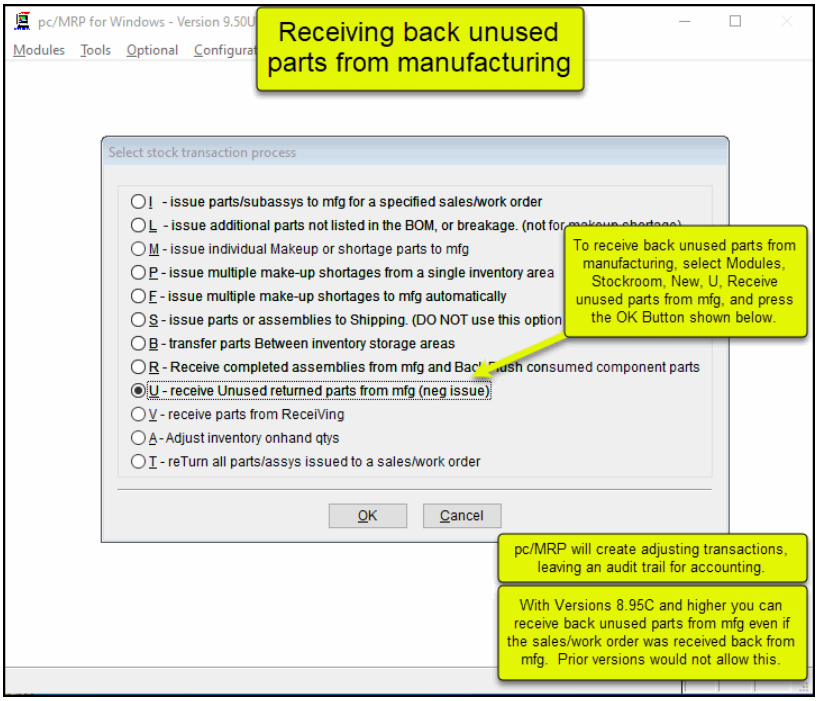
Receive Back from Manufacturing compares the parts issued to the sales or work order to the BOM based on how it was structured on the first date the sales or work order to manufacturing and the effectivity dates (Versions 9.36 and Higher) of the parts in the BOM to look for shortages. DateIssue C(10)



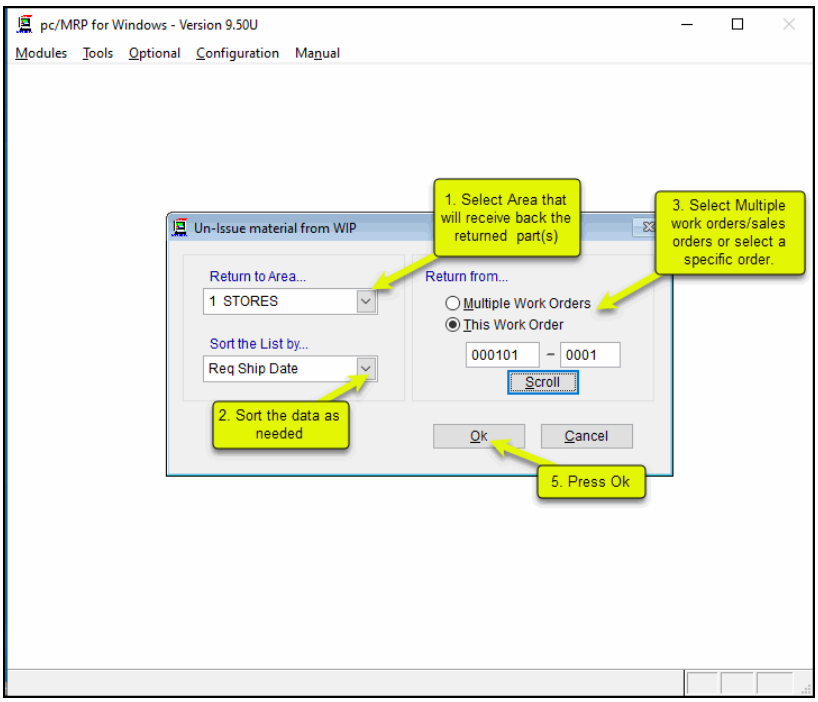
## 11.9.1 U - Receive Unused Returned Parts from Manufacturing

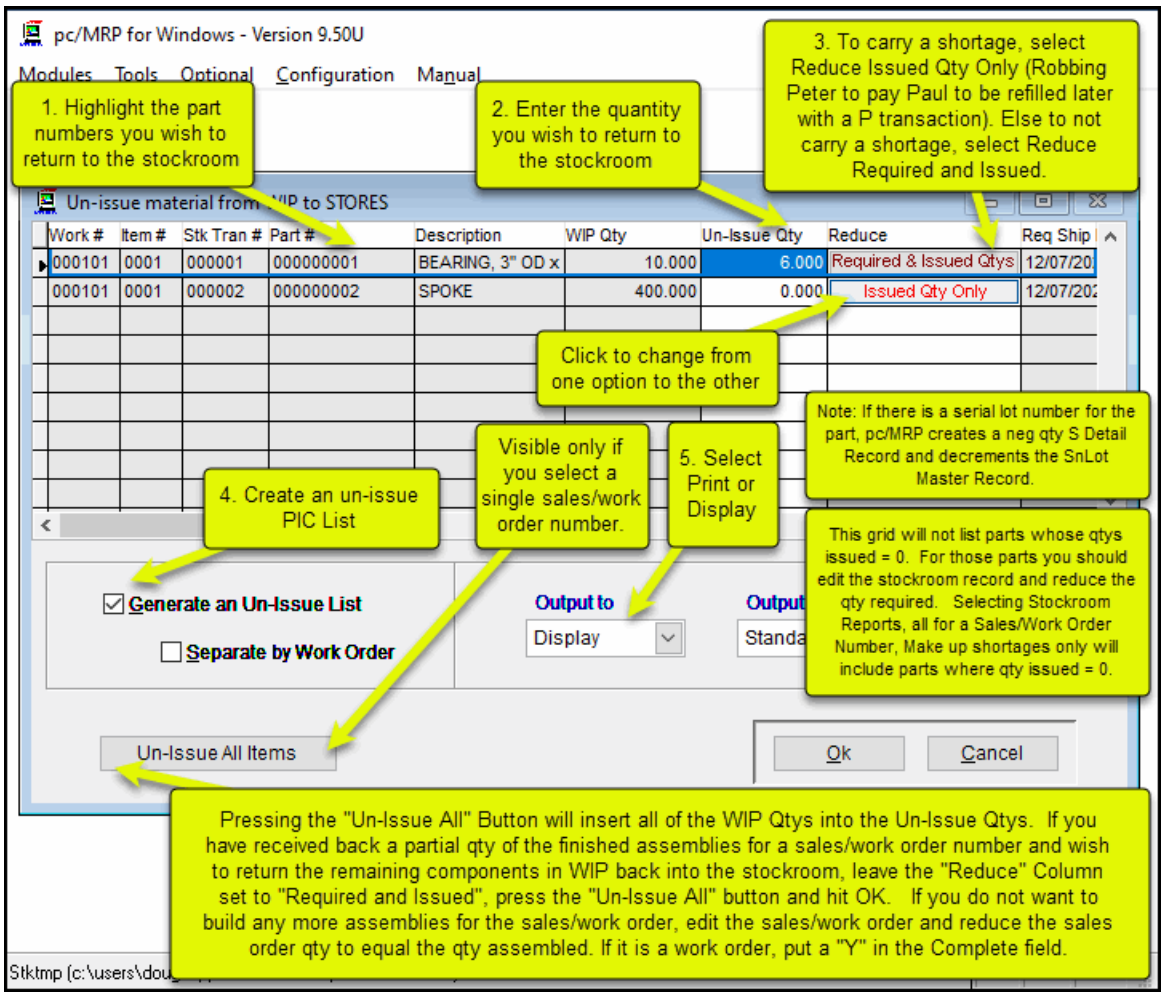
Check out the online slideshow for this transaction selection here:
http://www.pcmrp.com/mrp101/stockroomunissueselectu.htm

If the SO/WO has been received back from Manufacturing you will get a warning, but you will still be able to receive back unused parts.




This option allows users to return unused parts back into inventory. When users select this option, the screen shown below will appear.



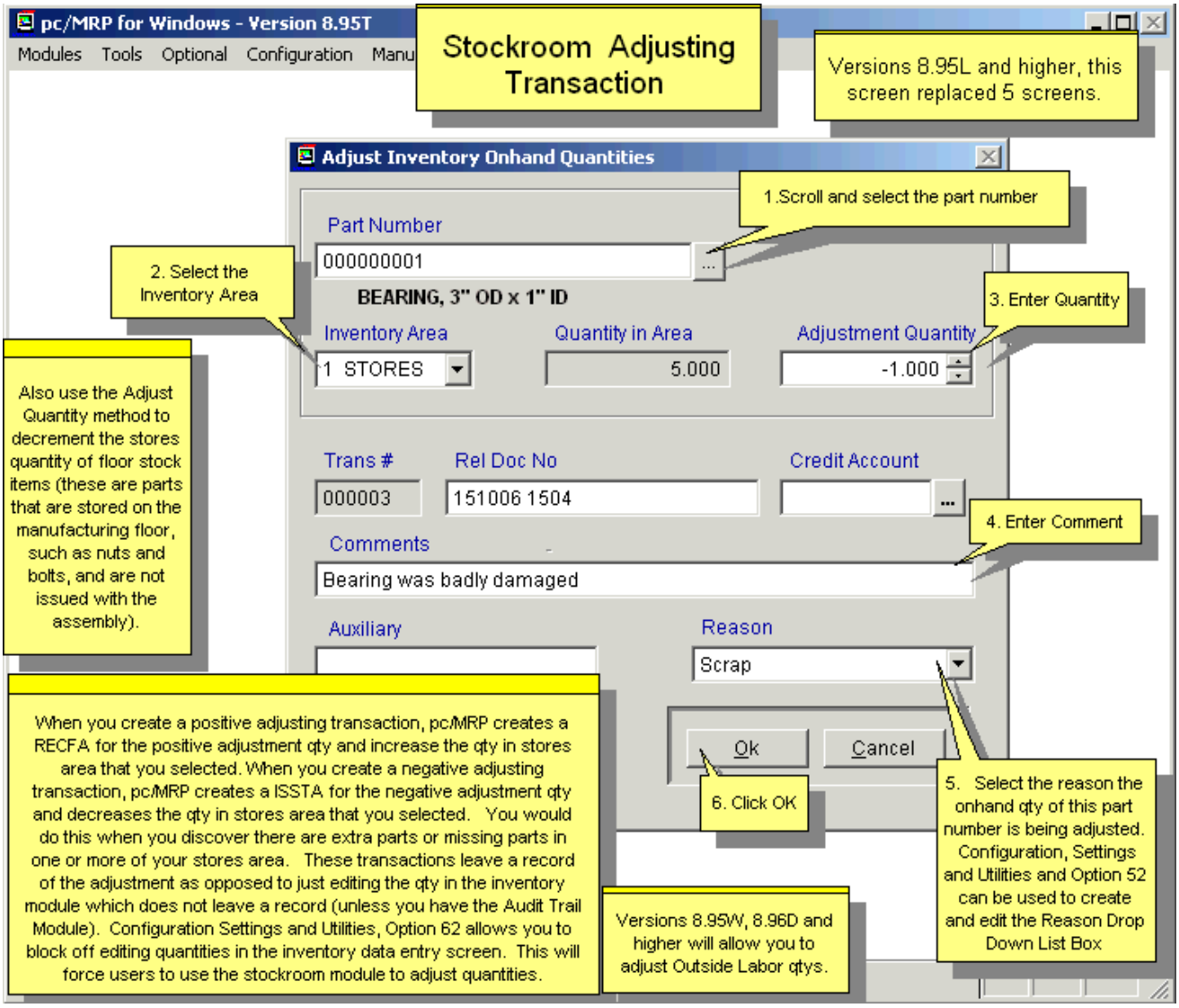



- Highlight the part that you wish to return and enter the quantity in the **Un-issue Qty field.**
- Continue this process until all of the items to be returned have been selected.
- Users can select to reduce **Required and Issued Qtys** or to reduce the **Issued Qty Only.** Use Required & Issued Qtys if you do not need to carry a shortage (BOM was wrong). Use "Issued Qty Only" if you want to carry a shortage e.g. removing from one job to supply another, or if you over-issued such as issuing a full reel, or if you over-issued to make up for defective parts.
- Users can also select to have the Un-issue option generate a report. This report can be sent to several output types.
- If the Serial/Lot Number Module is being utilized, once the item(s) has been selected and the user clicks OK, the user will be prompted to track serial numbers as needed.

Example: 5 items were issued by the initial I-type transaction number.
Trx#: 000240 Required: 5 Issued: 5 Returned: 0

We unissued 1 item by entering a U type transaction.
pc/MRP will change the original transaction:
Trx#: 000240 Required: 5 Issued: 5 Returned: 1
The new U-type transaction is entered as follows:
Trx#: 000241 Required: -1 Issued: -1 Returned: -1 Comment: Un-issued Qty 1
If the user selected to reduce Issued Qty Only, i.e. to carry the shortage, pc/MRP will also create
Trx#: 000241 Required: 1 Issued: 0 Returned: 0 Comment: Shortage Qty created by an un-issue action for 1

## 11.10.1 A - Adjust Onhand Quantities



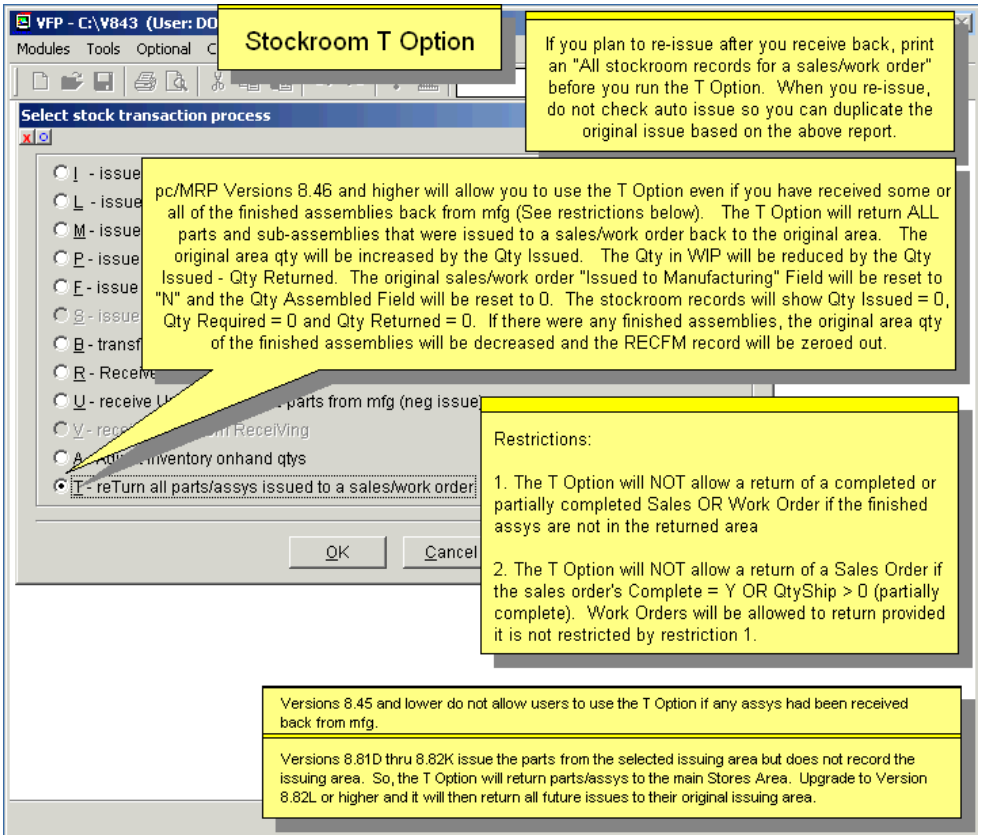

This option allows the onhand quantity of parts to be adjusted (increased or decreased). It leaves a record of the adjustment; while simply editing the part number qty on the inventory screen, would not leave any records (unless the optional Audit Trail Module is activated). Increasing the onhand quantity in stores or in another area creates RECFA stock transaction record(s). Decreasing the onhand quantity in stores or in another area creates ISSTA stock transaction record(s). If you are utilizing the Serial Lot Number Module, this transaction will also automatically adjust quantities in the Serial Lot Number database.

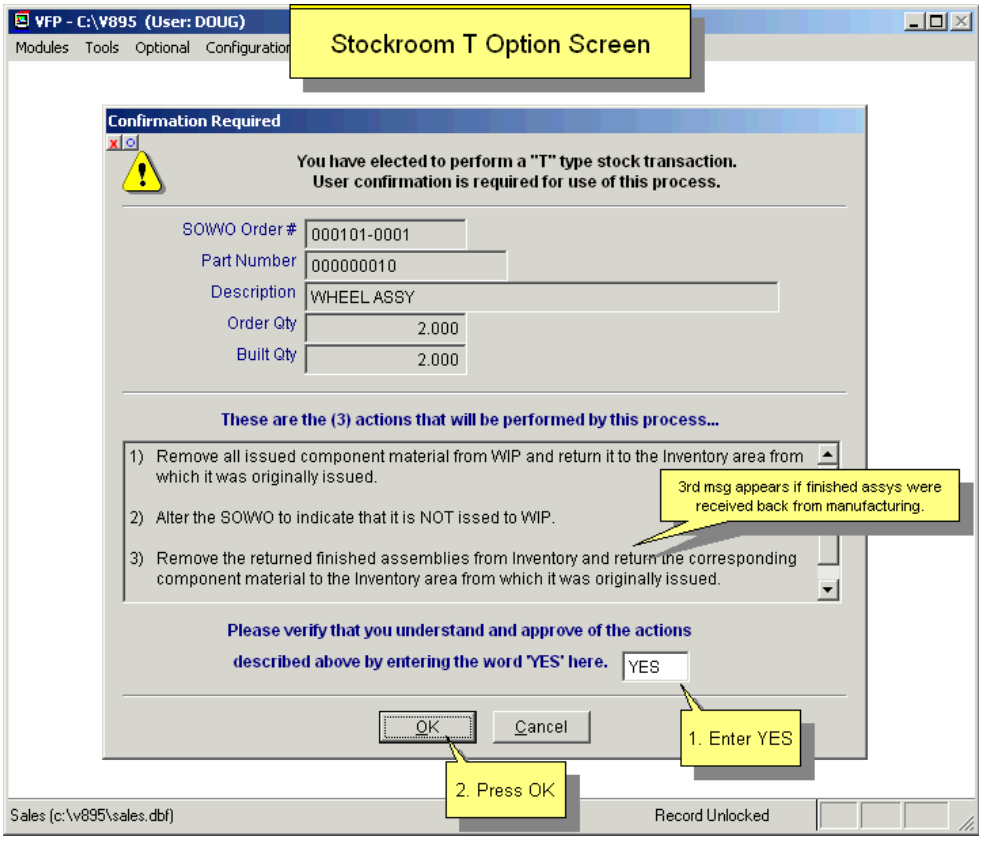
The **Auxiliary** field is a 20-character field for your use and can be reported on as "All for an AUX value".

Also use the Adjust Onhand Quantities method to decrement the onhand quantity of floor stock items. These are parts that are stored on the manufacturing floor, such as nuts and bolts, and are not issued with the other parts and material.

Also use the Adjust Onhand Quantities method to decrement the onhand quantity of non-inventory items such as paper towels and envelopes.

## 11.11.1 T - Return all Parts/Assemblies Issued to a Sales/Work Order



This option allows users to un-issue sales or work orders from manufacturing. This option subtracts the quantity issued into WIP for each part and or subassembly to a specific sales or work order and increments inventory in the issuing area. The QTYISSUED, QTYREQ and Qty Assembled are also set to 0.

The T type transaction will only work for Sales Orders if the SO is not complete and the shipped quantity is 0. It will work for all Work Orders regardless of the value of these fields.

You could use this transaction if the SO/WO was issued in error, or if the customer changed their mind, or if the BOM was wrong and must be corrected before it can be issued again. You can think of the T type transaction as the “Oops-option”. However, if you are using this option to reverse an erroneous R type transaction, and are planning to repeat the original I type transaction right after the T: make sure you run a Make-up shortages Issued to MFG Only report first, to see what needs to be issued and what needs to be left short. Then enter the I type issue with Issue Parts Automatically unchecked, so that you can enter the exact quantities you need to issue, regardless of the current onhand quantities.

### 11.12.1 V - Receive Parts from Receiving

Do not use this transaction if you are set to Inventory Adjustment method A, see Settings and Utilities, Option 4.

Enter a "V" to receive parts from receiving. pc/MRP will display the next available stock transaction number. Press OK to accept the number. If there is a receiver for this transaction, enter Yes, and enter the receiver number. pc/MRP will ask if you wish to track Lot Numbers. pc/MRP will display and receive each line item from the receiver. The onhand quantity of each part received will be increased provided pc/MRP is configured to do so in the configuration menu.

### 11.13.1 Edit/View/Delete/Undelete

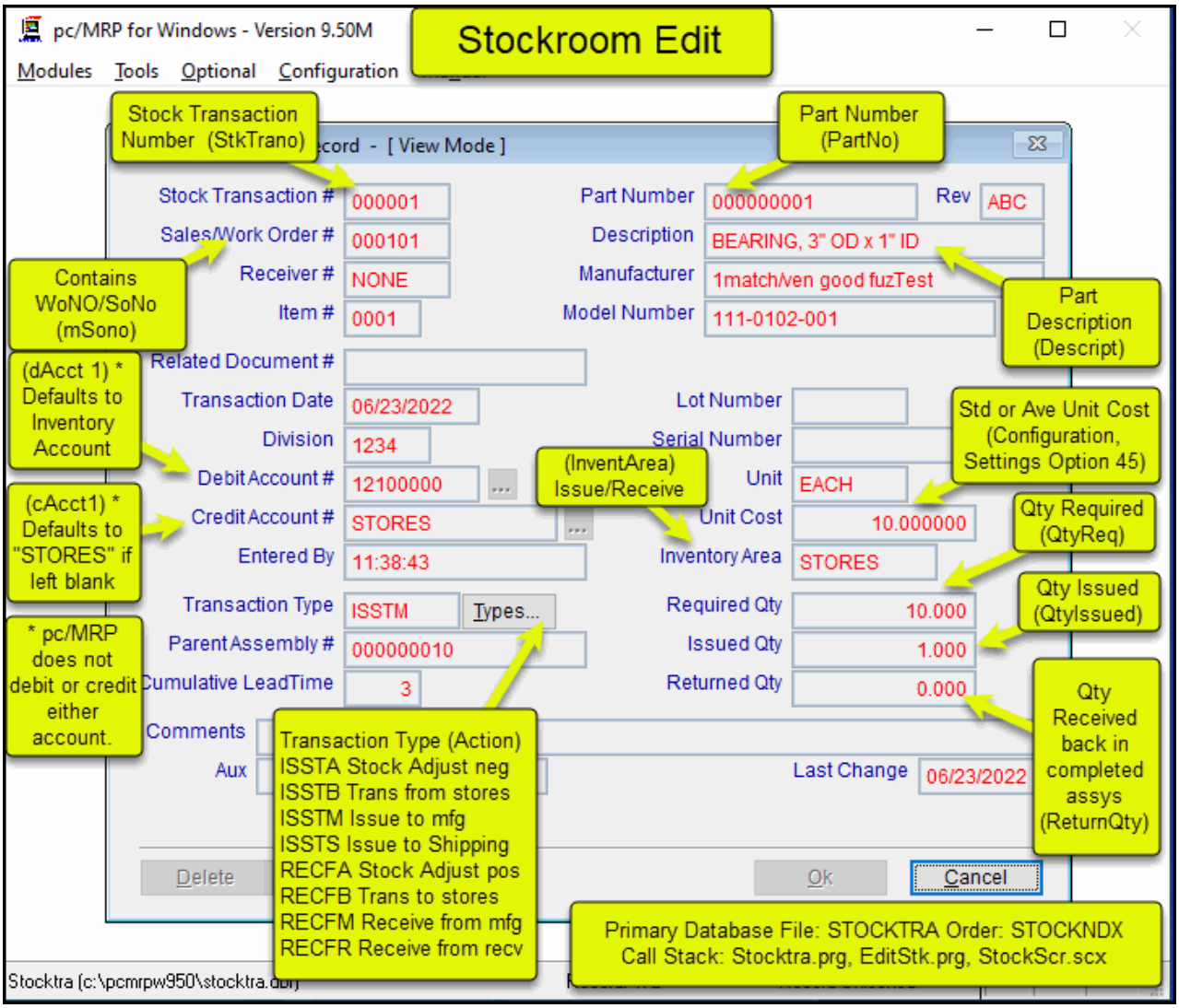
Selecting an **Indexed Search** allows users to find the information fast. To perform an Indexed Search select the Indexed Search tab, desired Sort Order, Document Number, Sales and Work order Number, Part Number or Model Number. Enter the applicable data in the Begin Scrolling At: field. Select the desired Action, View or Edit. Press Search. pc/MRP will automatically scroll to the desired record or the nearest match. Select the correct record by scrolling and press Ok to proceed to the edit screen for that record.

A **Queried Search** is slower, but gives the user more flexibility. See Chapter 15.14.

Every field in the Stockroom table is editable. Users however need to understand several key concepts before editing stockroom records.

- There are three key fields in most stockroom transaction, required qty, issued qty, and returned qty. The required qty is the quantity required for this transaction. Issued qty is the quantity actually issued for this transaction. If applicable to the transaction there may also be the returned qty, this is the quantity returned or back flushed for this transaction.
- When the issued qty does not equal the required qty, pc/MRP will flag this as a shortage in the stockroom shortage report. To correct a shortage where none exists, the job is already complete and returned from manufacturing; users must research to see what has happened. When performing the R type transaction pc/MRP will not warn users if a shortage still exists. Thus, in some instances, can make inventory be incorrect by not fulfilling makeup shortage transactions before the R type transaction. Users must research to see if the shortage needed to be fulfilled or if the job was completed with the shortage.
- If the shortage needs to be fulfilled, edit the issued qty to equal the required qty and manually deduct the difference from inventory. If the shortage does not need to be fulfilled, edit the required qty to equal the issued qty.

- Use the delete and undelete buttons to mark and unmark records for deletion. To permanently remove the records from the database table, set an administrative lockout, and then select Stockroom, Remove Marked Records. Removing stockroom transactions will not automatically change inventory. It is not recommended to delete stockroom transactions. If users choose to delete stockroom transactions and they wish to adjust inventory, they must manually accomplish each task.



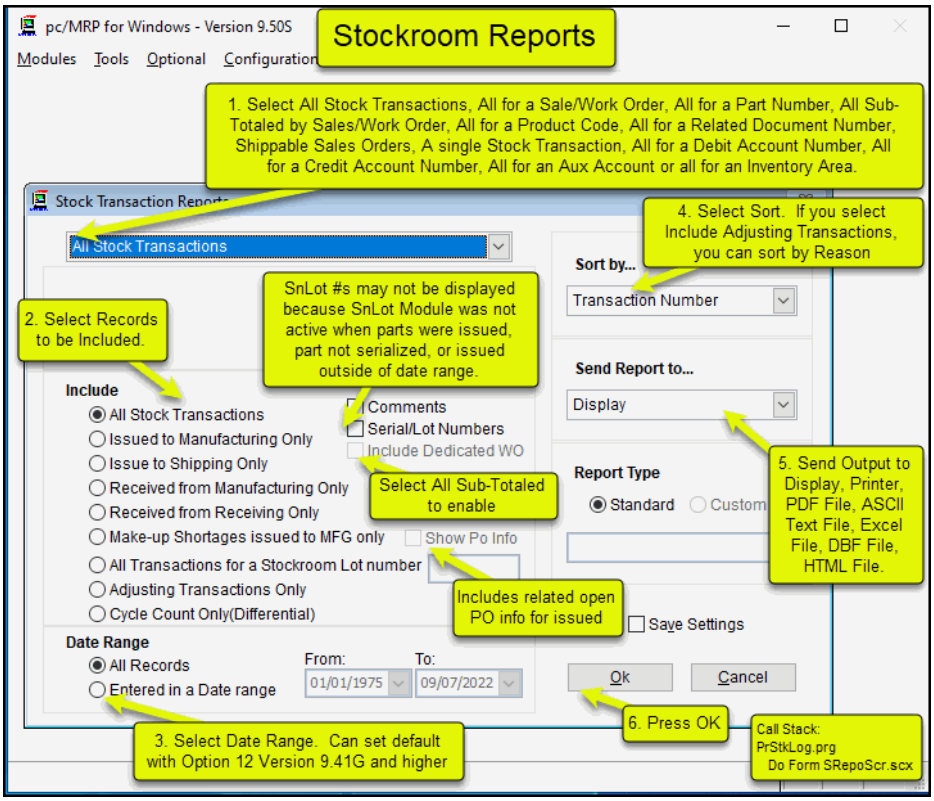

**Note:** In versions below **9.12F** if the user opened a Stockroom record and then clicked Ok without actually changing anything, then the LASTCHANGE field changed to the current date. If the Optional Audit Trail module was activated then the change of the LASTCHANGE field was recorded.

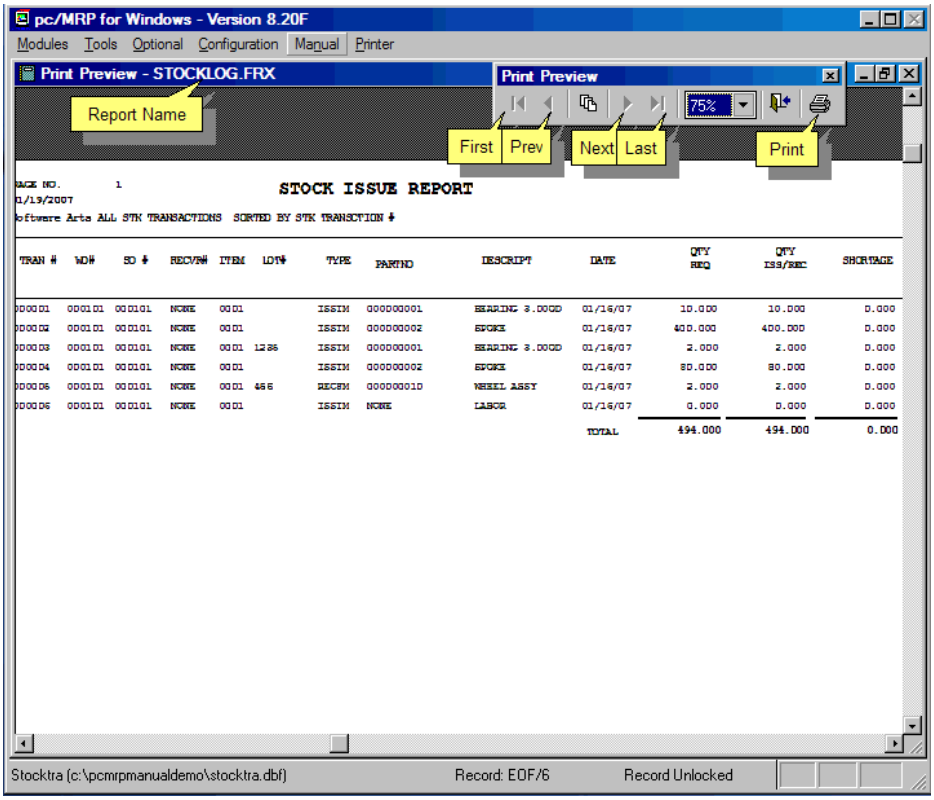
Scroll Partmaster

This option allows you to scroll or search for a part number. Select scroll if you know the first part of the part number, model number, or description. Select search if you wish to find the part by entering a partial description. For example, entering "elb" would start listing at the first part, such as elbow, that have the letters "elb" at the beginning of their description. A more complete detailed search feature is available in the **Queried Search** feature in Chapter 15.14.1.

## 11.14.1 Reports All Stock Transactions

Selecting Modules, Stockroom, Reports will display the screen shown below.




If you select All (stockroom transactions) Sub-Totaled by Sales/Work Order, Issued to Manufacturing Only and Include Dedicated Work Orders, pc/MRP will create a special stock issue report (swoincldewolog.frx) containing all the stockroom issues during the specified time period subtotaled by sales and work orders .

If the work order was dedicated to a sales order, it will appear under the parent sales order, provided they both were issued during the specified time period.

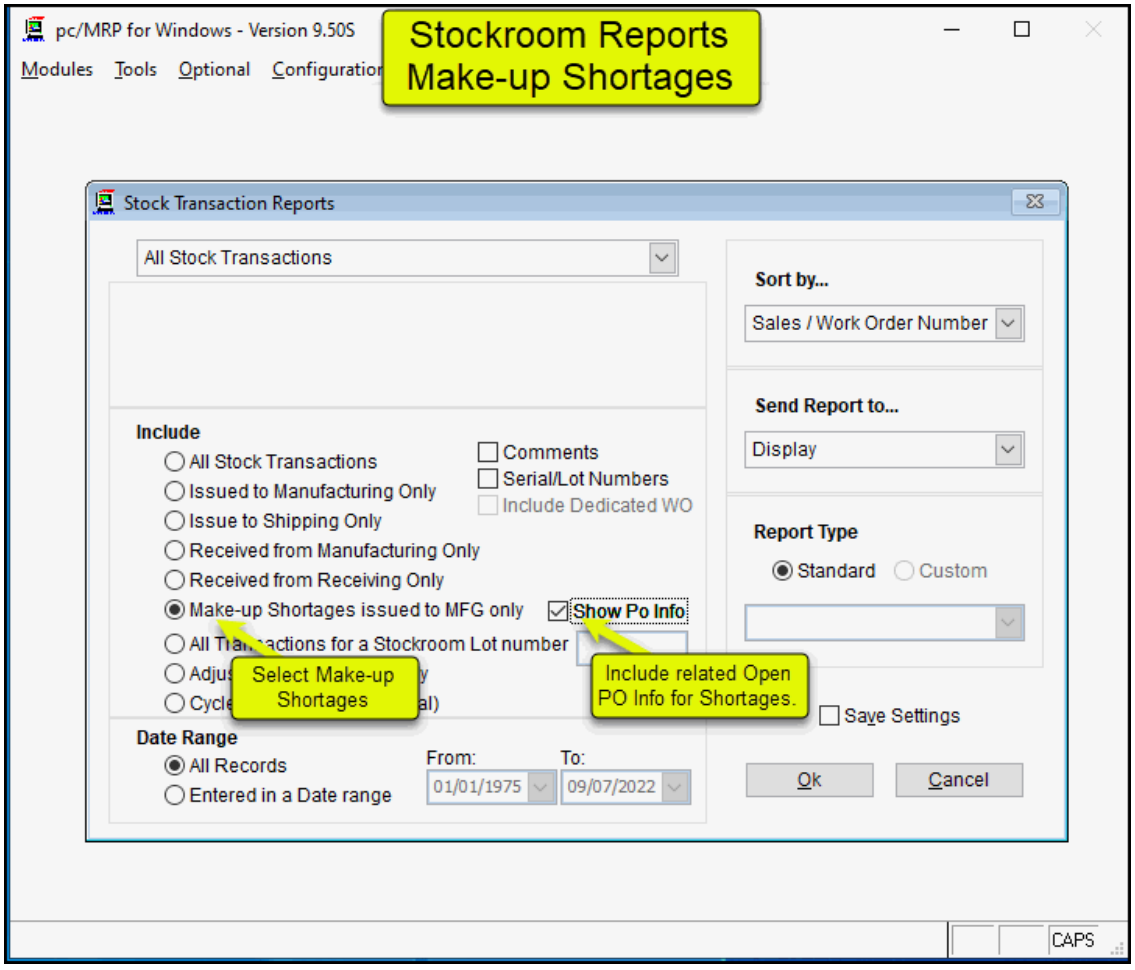
If a sub assembly was issued to the parent sales order and the sub assembly came from a dedicated work order that was issued during the specified time period, the sub-assembly cost under the sales order will be faded out and not included on the grand total for the sales and work orders.

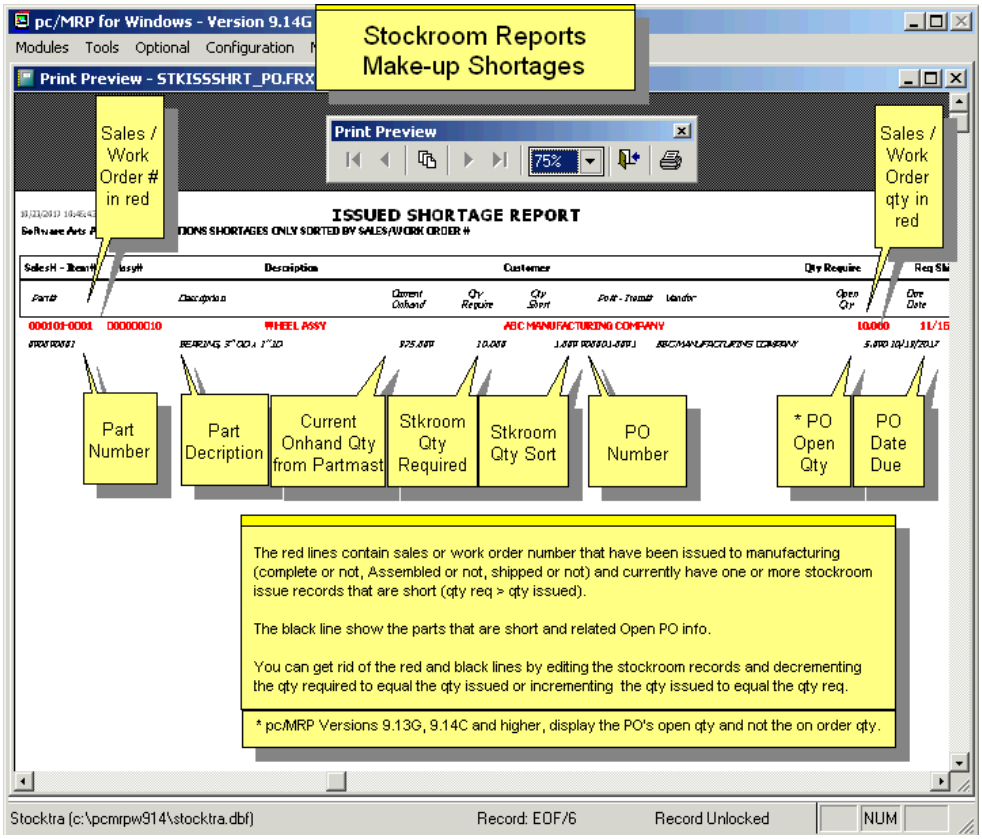
If the dedicated work order was not issued during the specified time period the sub-assembly cost will not be faded out and will be included on the grand total for each sales order and its work orders. Version 8.20D faded out the sub- assembly cost and did not include it in the grand total regardless of the issue date of the dedicated work order.

**Make-up Shortage Report**

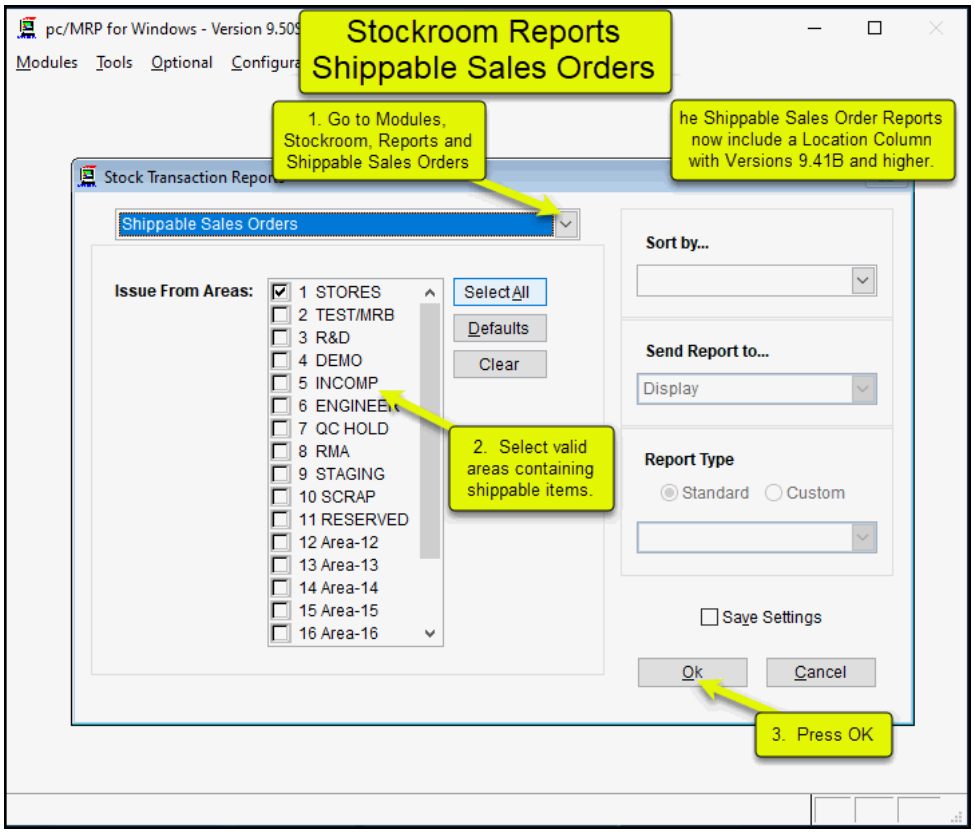
Selecting Make-up Shortages issued to MFG and checking the Show PO Info box, pc/MRP will provide shortage amounts along with related open PO Information. The report lists all open PO items with their open qty. **Note:** In versions **9.10K** and lower, the report displayed the full on order quantity instead.

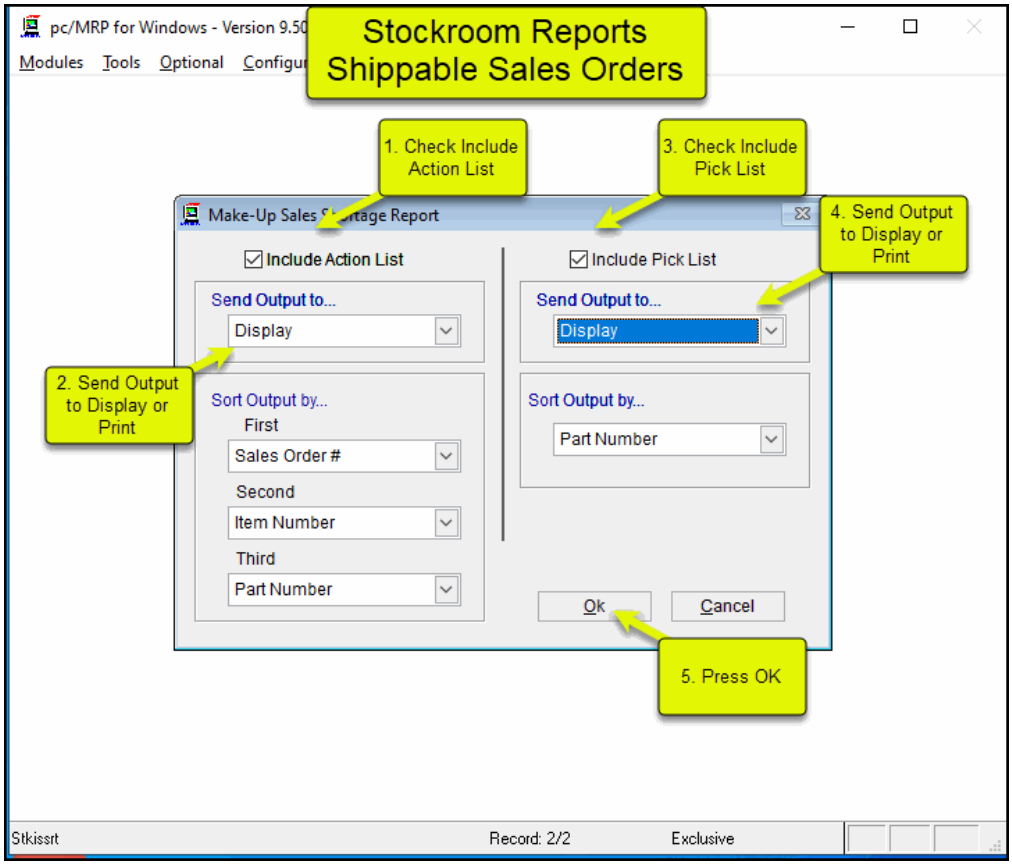
The "Issued Shortage Report" shows for each part the quantity that is short for the SO/WO, and the current onhand (Stores only) quantity, that could be used to fill this shortage.

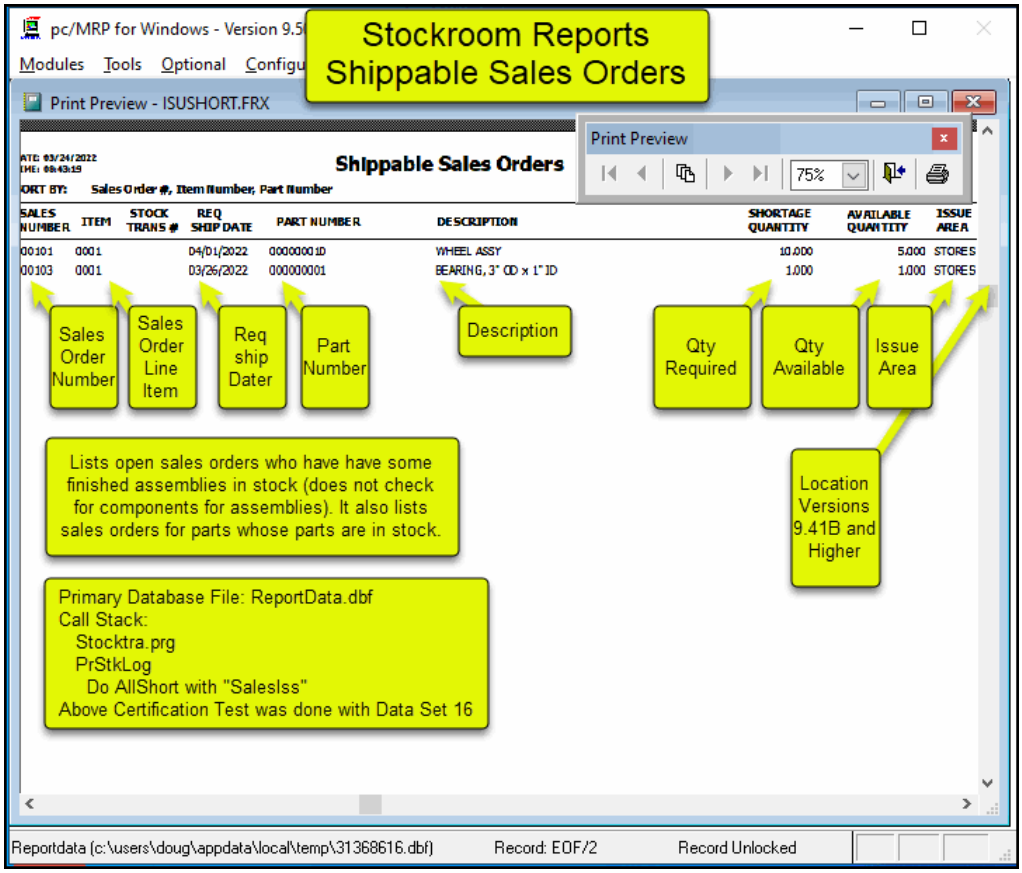





**Shippable Sales Orders Report**




Stockroom Reports
Shippable Sales Orders
pc/MRP for Windows - Version 9.50
Modules Tools Optional Configur
1. Check Include Action List
3. Check Include Pick List
4. Send Output to Display or Print
2. Send Output to Display or Print
Make-Up Sales Shortage Report
Include Action List
Include Pick List
Send Output to...
Display
Send Output to...
Display
Sort Output by...
First
Sales Order #
Second
Item Number
Third
Part Number
Sort Output by...
Part Number
Ok
Cancel
5. Press OK
Stkissrt
Record: 2/2
Exclusive


Stockroom Reports
Shippable Sales Orders
pc/MRP for Windows - Version 9.5
Modules Tools Optional Configu
Print Preview - ISUSHORT.FRX
Print Preview
75%
Shippable Sales Orders
SORT BY: Sales Order #, Item Number, Part Number
SALES NUMBER
ITEM
STOCK TRANS #
REQ SHIP DATE
PART NUMBER
DESCRIPTION
SHORTAGE QUANTITY
AVAILABLE QUANTITY
ISSUE AREA
00101 0001 04/01/2022 0000000010 WHEEL ASSY 10.000 5.000 STORES
00103 0001 03/26/2022 0000000001 BEARING, 3" OD x 1" ID 1.000 1.000 STORES
Sales Order Number
Sales Order Line Item
Req ship Dater
Part Number
Description
Qty Required
Qty Available
Issue Area
Location Versions 9.41B and Higher
Lists open sales orders who have have some finished assemblies in stock (does not check for components for assemblies). It also lists sales orders for parts whose parts are in stock.
Primary Database File: ReportData.dbf
Call Stack:
Stocktra.prg
PrStkLog
Do AllShort with "SalesIss"
Above Certification Test was done with Data Set 16
Reportdata (c:\users\doug\appdata\local\temp\31368616.dbf)
Record: EOF/2
Record Unlocked

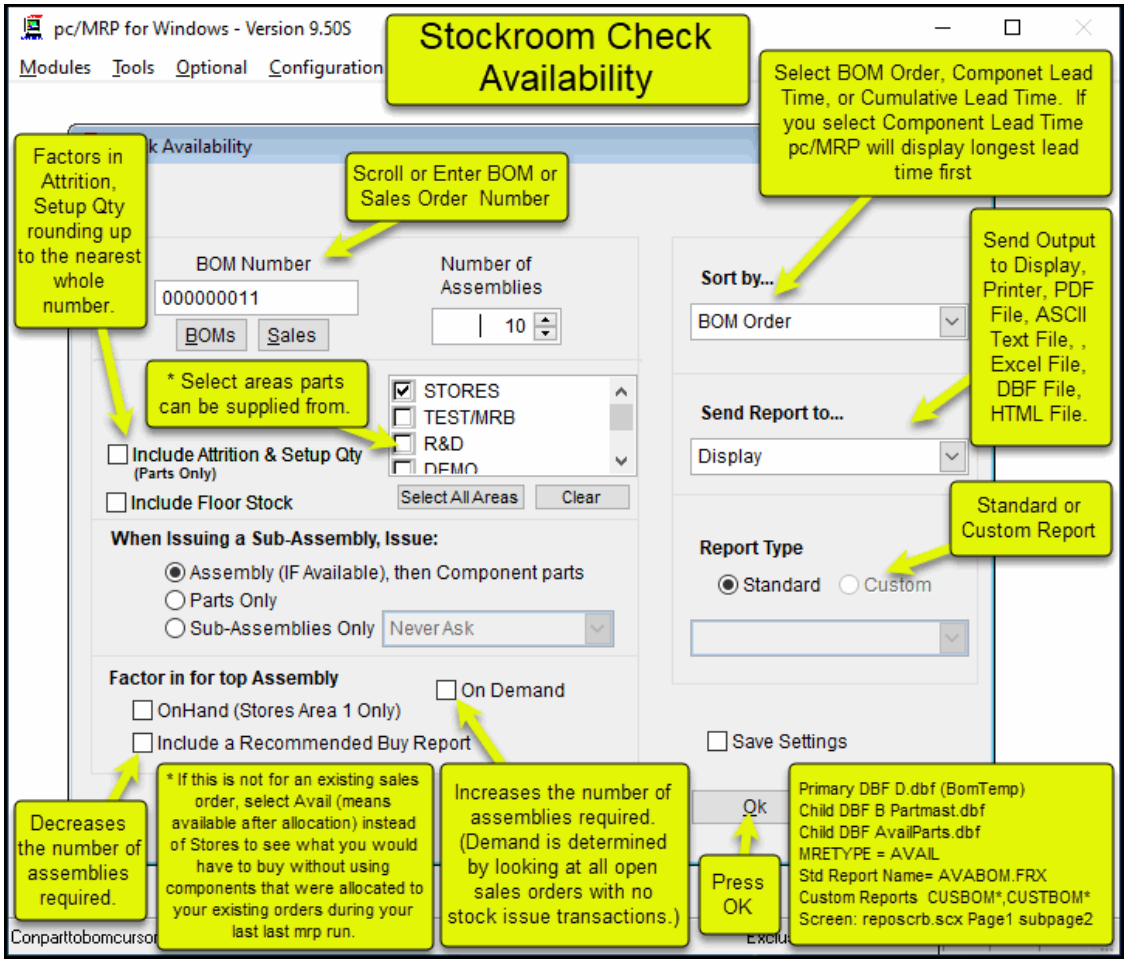
## 11.15.1 Check Availability (of parts for a specified assembly)

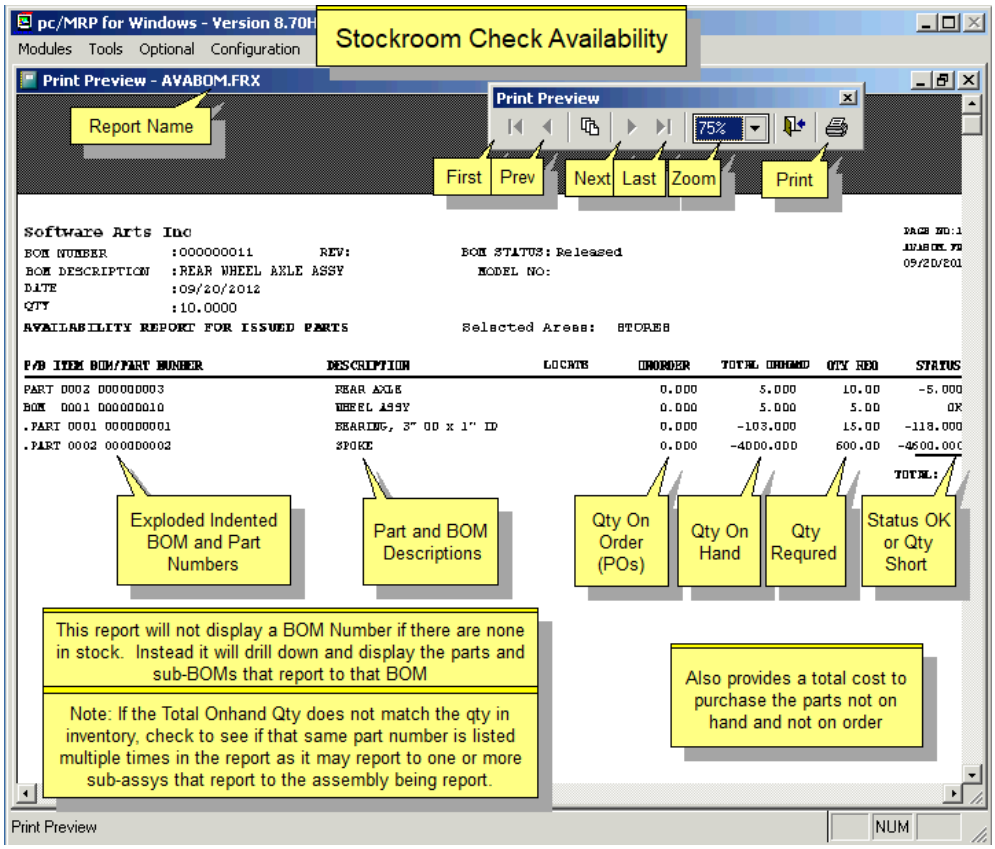
Will print out the status (quantity on hand, quantity on order, and quantity required) for each part number in a specified assembly. pc/MRP will ask for the BOM number and the quantity required. You also have a choice of a single stores area, All Areas, Qty Available, and Avail-OnOrder. If this is not for an existing sales order, select Qty Available instead of Stores to see what you would have to buy without using components that were allocated to your existing orders during your last MRP run (only if the IB-MRP module is activated). Next, select 'Parts Only' to check for parts infinite levels deep or 'Sub-Assemblies Only' for parts to one level deep. If any part is short, the report will list it as "SHORT". This report is not as thorough as the Consolidation Report in Purchasing (See Section 7.6.3.2 Consolidated Single Bucket MRP Report) as it only looks at what is currently on hand in the selected stores area. A narrow carriage print out will include a purchasing history of parts that are short. A wide carriage printout will include reference designators.

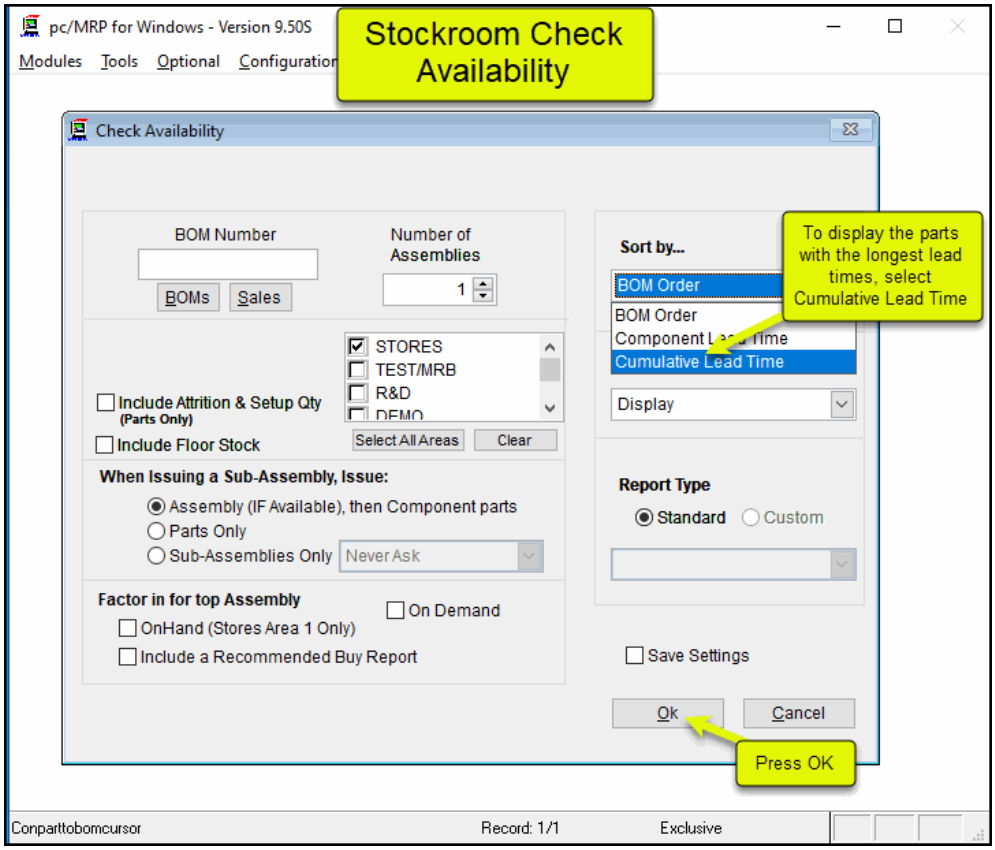
If you select Print and Parts Only, the Check Availability report will include PO Status for each part number that is short.

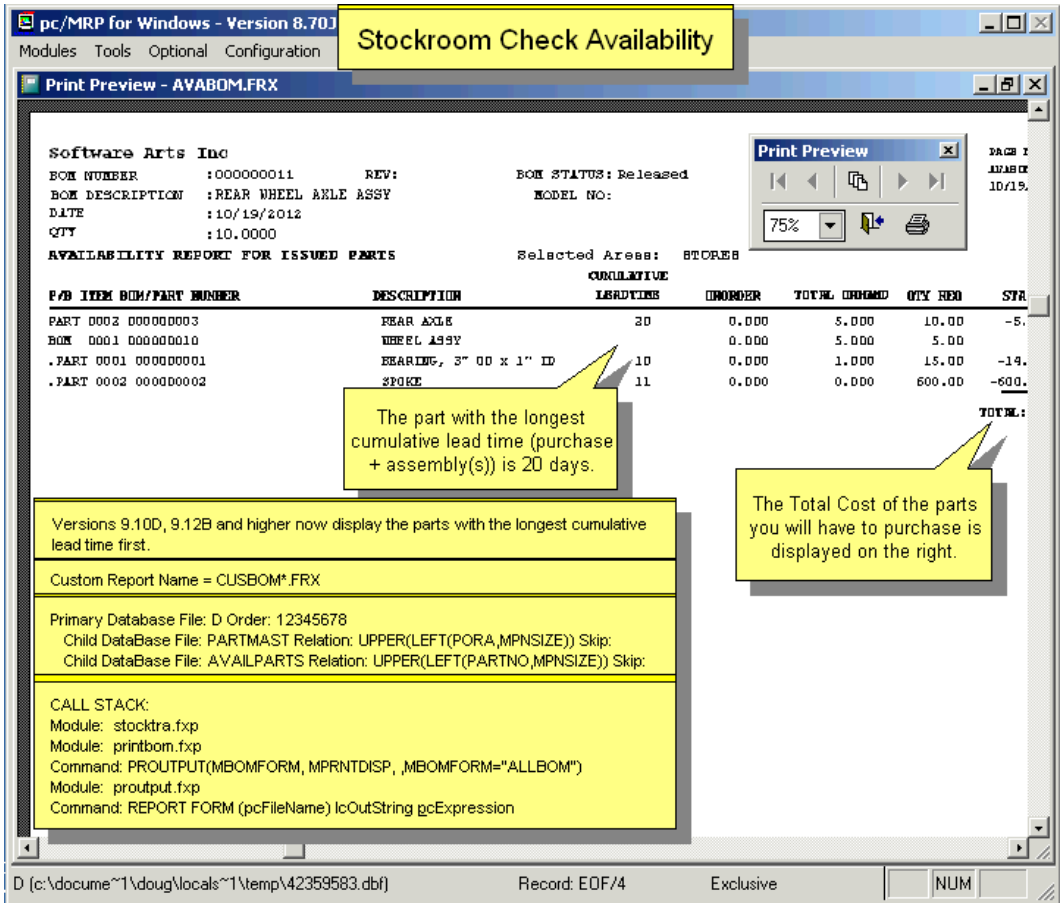
If you check Factor in 'On Demand' for the Check Availability report, it may not agree with the 'On-Demand' qty found in the inventory screen because the report's on-demand qty subtracts the qty issued while the screen's' On Demand' does not.

To see how long it would take to build an assembly, sort by Cumulative Lead Time. This report will use your current onhand quantities to calculate what is available and what needs to be ordered, and consider how long each step of the assembly takes. The longest lead time will show the cumulative lead time of the top assembly.




pc/MRP for Windows - Version 8.70H
Modules Tools Optional Configuration
Stockroom Check Availability
Print Preview - AVABOM.FRX
Report Name
Print Preview
75%
First
Prev
Next
Last
Zoom
Print
Software Arts Inc
BOM NUMBER :000000011 REV: BOM STATUS: Released
BOM DESCRIPTION :REAR WHEEL AXLE ASSY MODEL NO:
DATE :09/20/2012
QTY :10.0000
AVAILABILITY REPORT FOR ISSUED PARTS Selected Areas: STORES
P/B ITEM BOM/PART NUMBER DESCRIPTION LOCATN ONORDER TOTAL ONHAND QTY REQ STATUS
PART 0002 000000003 REAR AXLE 0.000 5.000 10.00 -5.000
BOM 0001 000000010 WHEEL ASSY 0.000 5.000 5.00 OK
.PART 0001 000000001 BEARING, 3" OD x 1" ID 0.000 -103.000 15.00 -118.000
.PART 0002 000000002 SPOKE 0.000 -4000.000 600.00 -4600.000
TOTAL:
Exploded Indented BOM and Part Numbers
Part and BOM Descriptions
Qty On Order (POs)
Qty On Hand
Qty Requred
Status OK or Qty Short
This report will not display a BOM Number if there are none in stock. Instead it will drill down and display the parts and sub-BOMs that report to that BOM
Note: If the Total Onhand Qty does not match the qty in inventory, check to see if that same part number is listed multiple times in the report as it may report to one or more sub-assys that report to the assembly being report.
Also provides a total cost to purchase the parts not on hand and not on order
Print Preview
NUM


pc/MRP for Windows - Version 9.50S
Modules Tools Optional Configuration
Stockroom Check Availability
Check Availability
BOM Number
BOMs Sales
Number of Assemblies
1
Sort by...
BOM Order
BOM Order
Component Lead Time
Cumulative Lead Time
To display the parts with the longest lead times, select Cumulative Lead Time
STORES
TEST/MRB
R&D
DEMO
Display
Include Attrition & Setup Qty (Parts Only)
Include Floor Stock
Select All Areas
Clear
When Issuing a Sub-Assembly, Issue:
Assembly (IF Available), then Component parts
Parts Only
Sub-Assemblies Only
Never Ask
Report Type
Standard
Custom
Factor in for top Assembly
On Demand
OnHand (Stores Area 1 Only)
Include a Recommended Buy Report
Save Settings
Ok
Cancel
Press OK
Conparttobomcursor
Record: 1/1
Exclusive

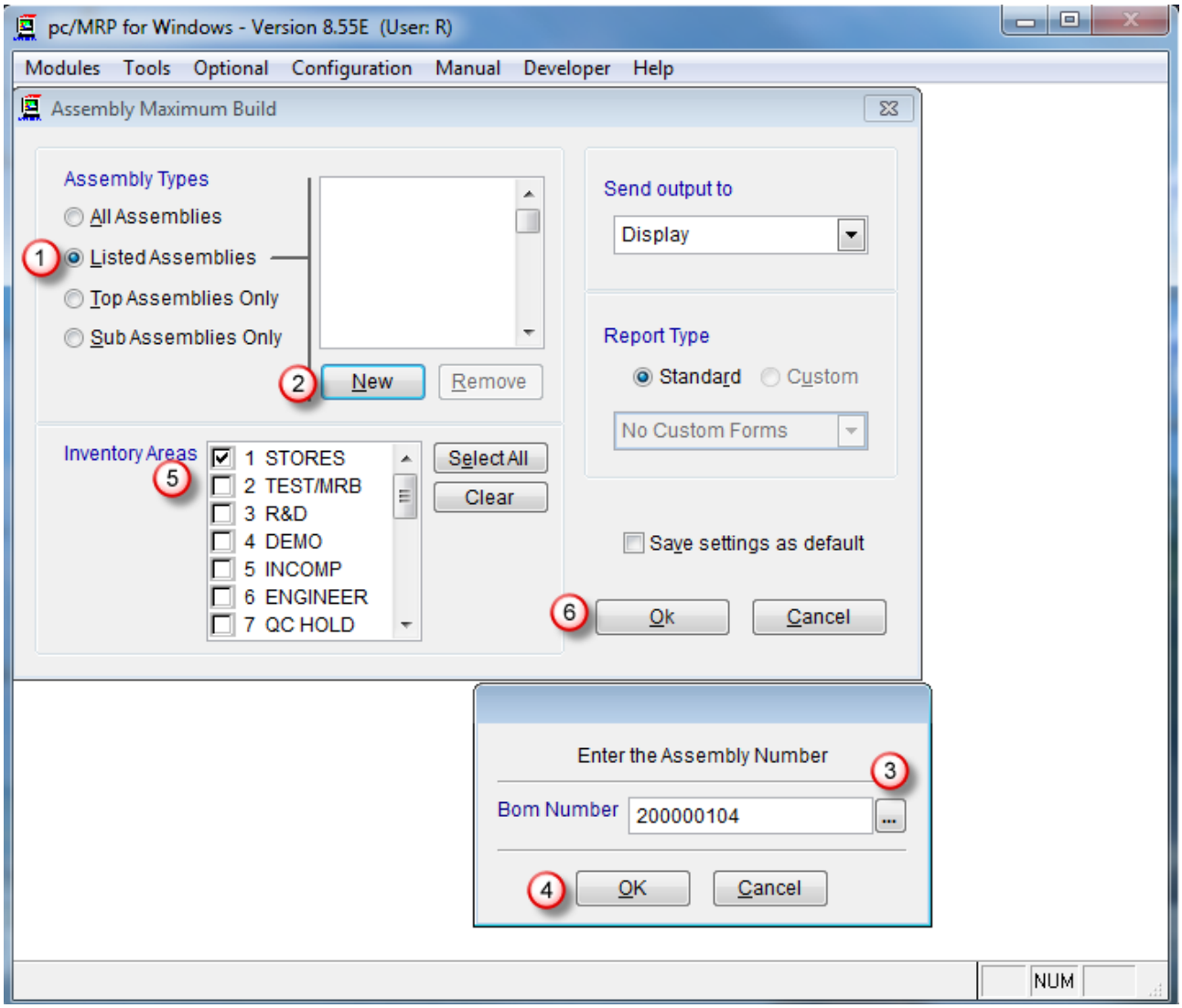

pc/MRP for Windows - Version 8.70J
Modules Tools Optional Configuration
Stockroom Check Availability
Print Preview - AVABOM.FRX
Software Arts Inc
BOM NUMBER :0000000011 REV: BOM STATUS: Released
BOM DESCRIPTION :REAR WHEEL AXLE ASSY MODEL NO:
DATE :10/19/2012
QTY :10.0000
AVAILABILITY REPORT FOR ISSUED PARTS Selected Areas: STORES
P/B ITEM BOM/PART NUMBER DESCRIPTION CUMULATIVE LEADTIME ONORDER TOTAL ONHAND QTY REQ
PART 0002 0000000003 REAR AXLE 20 0.000 5.000 10.00 -5.
BOM 0001 0000000010 WHEEL ASSY 0.000 5.000 5.00
.PART 0001 0000000001 BEARING, 3" OD x 1" ID 10 0.000 1.000 15.00 -14.
.PART 0002 0000000002 SPOKE 11 0.000 0.000 600.00 -600.
TOTAL:
Print Preview
75%
The part with the longest cumulative lead time (purchase + assembly(s)) is 20 days.
The Total Cost of the parts you will have to purchase is displayed on the right.
Versions 9.10D, 9.12B and higher now display the parts with the longest cumulative lead time first.
Custom Report Name = CUSBOM*.FRX
Primary Database File: D Order: 12345678
Child DataBase File: PARTMAST Relation: UPPER(LEFT(PORA,MPNSIZE)) Skip:
Child DataBase File: AVAILPARTS Relation: UPPER(LEFT(PARTNO,MPNSIZE)) Skip:
CALL STACK:
Module: stocktra.fxp
Module: printbom.fxp
Command: PROUTPUT(MBOMFORM, MPRNTDISP, ,MBOMFORM="ALLBOM")
Module: proutput.fxp
Command: REPORT FORM (pcFileName) lcOutString pcExpression
D (c:\docume~1\doug\locals~1\temp\42359583.dbf)
Record: EOF/4
Exclusive
NUM

## 11.16.1 Maximum Potential BOM Build

The Stockroom module allows one to see how many of:

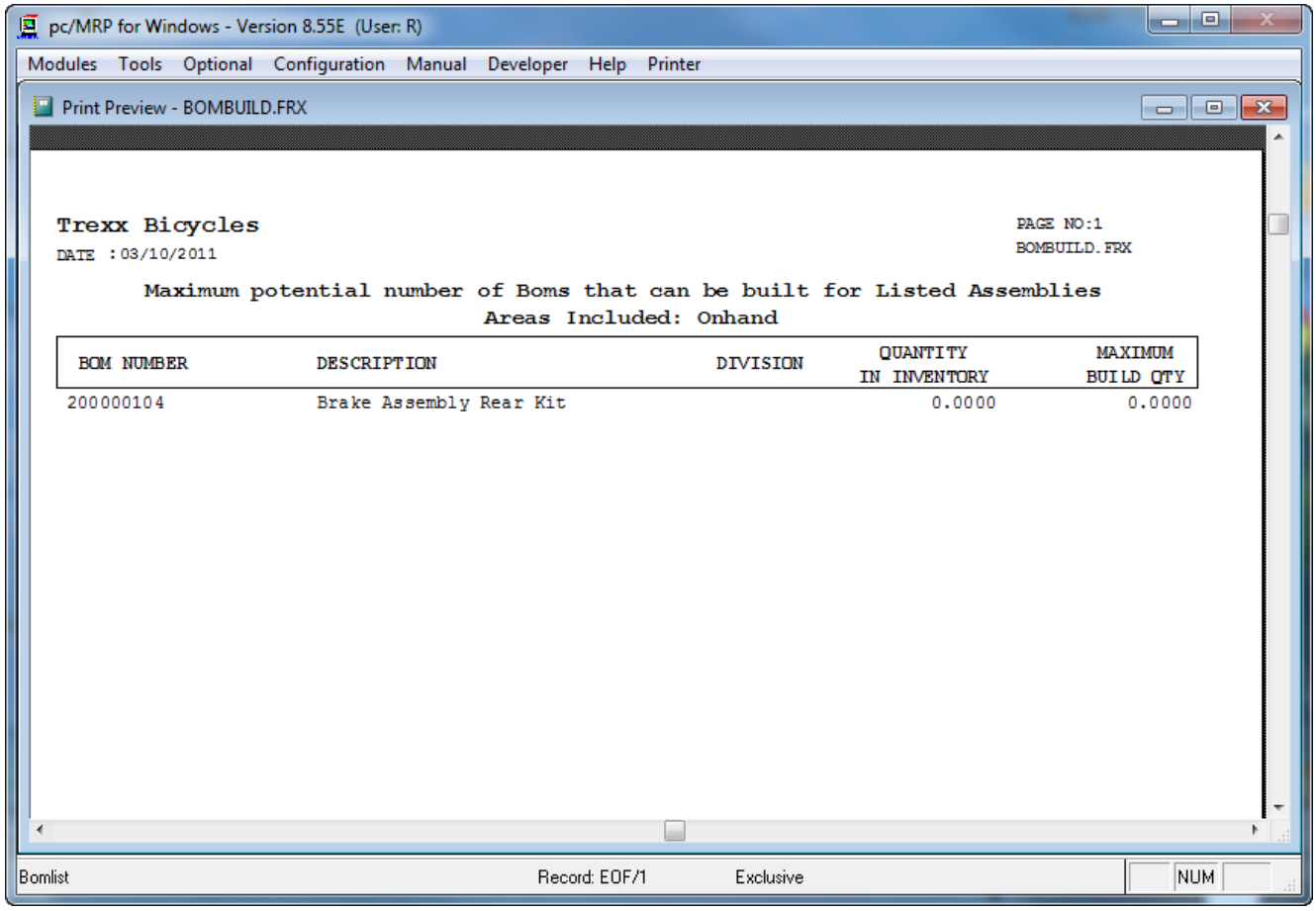
All Assemblies
Listed Assemblies
Top Assemblies only
Sub-Assemblies only

can be built from the onhand qty in certain inventory areas.




After selecting 'Maximum Potential Build',

1. Select Assembly Types
2. Press New
3. Select the Assembly Number
4. press OK
5. Select Inventory Areas to include for getting the parts to build the assemblies
6. Press OK to see the report as shown below

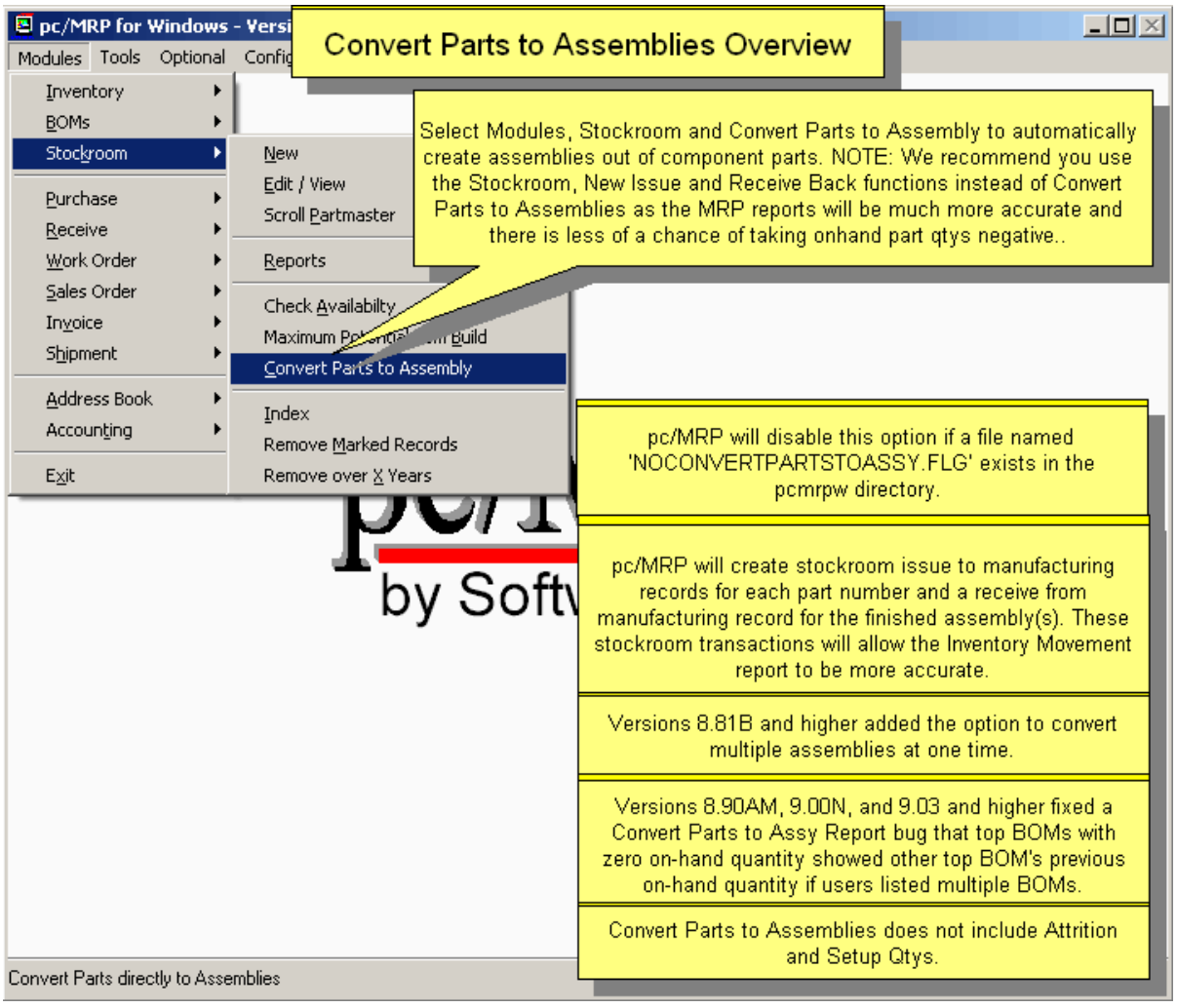

pc/MRP for Windows - Version 8.55E (User: R)
Modules Tools Optional Configuration Manual Developer Help Printer
Print Preview - BOMBUILD.FRX
Trexx Bicycles
DATE :03/10/2011
PAGE NO:1
BOMBUILD.FRX
Maximum potential number of Boms that can be built for Listed Assemblies
Areas Included: Onhand
BOM NUMBER DESCRIPTION DIVISION QUANTITY IN INVENTORY MAXIMUM BUILD QTY
200000104 Brake Assembly Rear Kit 0.0000 0.0000
Bomlist
Record: EOF/1
Exclusive
NUM

## 11.17.1 Convert Parts to Assemblies

This option provides a shortcut method that automatically converts parts into assemblies. This routine bypasses putting parts into WIP and using a work order number to record the transactions. pc/MRP will disable this option if a file named '**NOCONVERTPARTSTOASSY.FLG**' exists in the PCMRPW directory. If you send the report to the printer, you will receive a printed record of the transaction that can double as a PICK list.

We recommend using the Stockroom's "I" and "R" – type transactions instead of "**Converting parts to assemblies**" because in the latter case:

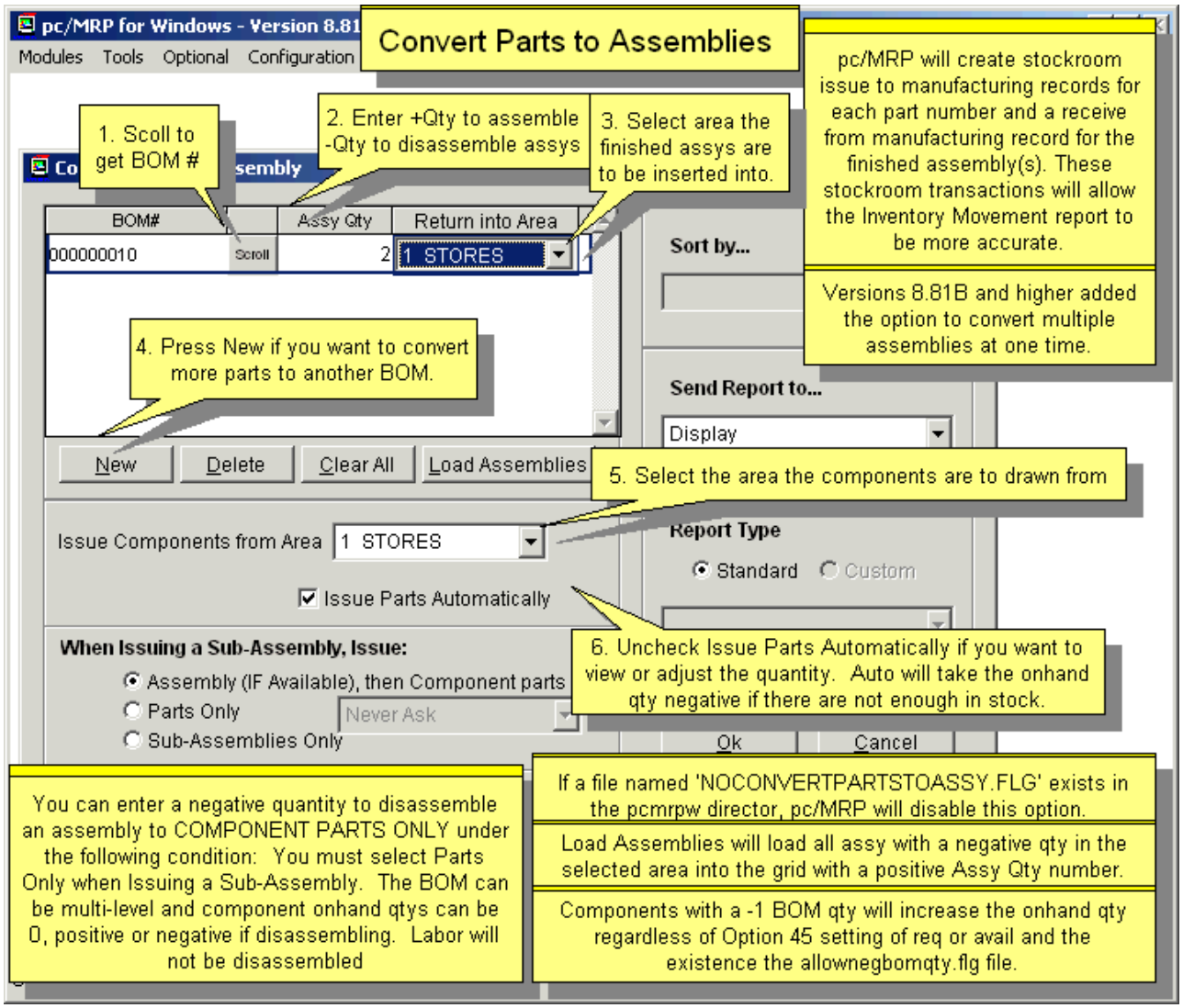
- There is no traceability to the actual sales order and invoice especially for serial/lot numbers.
- There is no ability to trace and fill shortages on the manufacturing floor.
- Converting parts to assemblies can take onhand quantities to negative.
- The MRP and Inventory Movement Reports may reflect onhand qtys of finished goods that are not yet completed.

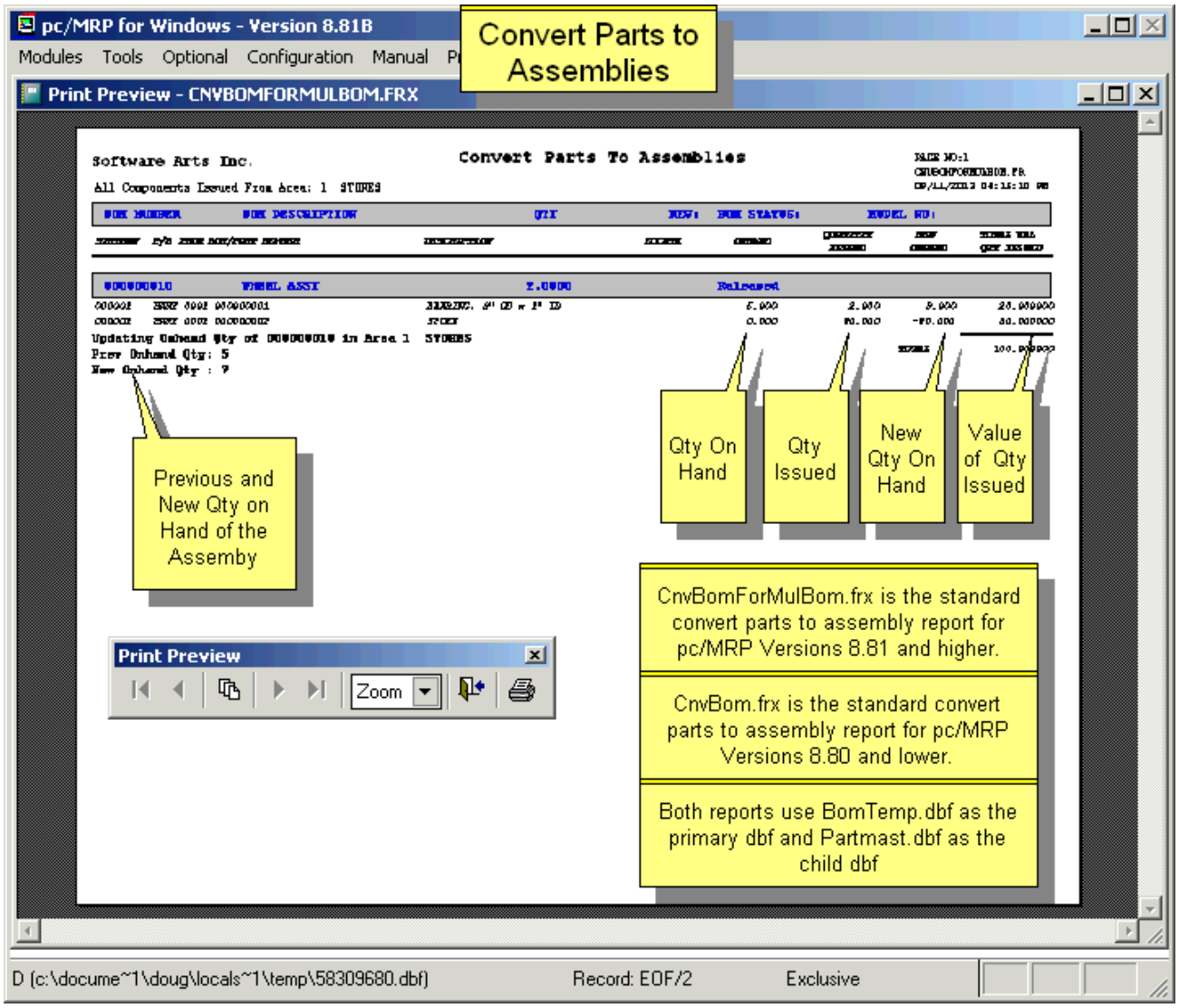


pc/MRP will create stockroom issue to manufacturing records for each part number and a receive from manufacturing record for the finished assembly(s). These stockroom transactions will allow the Inventory Movement Report to be more accurate.

If any of the component parts are short and you check **Issue Parts Automatically**, pc/MRP will drive the quantity of part numbers with shortages negative. This helps to keep track of shortages, but generally it is not recommended to drive onhand quantities negative.

If any of the component parts are short and you un-check Issue Parts Automatically, pc/MRP will allow you to select the quantity you wish to issue. This is not a good option because there is no mechanism to automatically fill shortages when the parts do come in.






**Note:** Earlier versions **9.00M** and below, showed the wrong on hand qtys for top assemblies in specific cases, when converting multiple BOMs. Please upgrade.

**Convert Parts to Assemblies with a Negative Quantity**

Not recommended for the same reasons outlined above. However, if you must, please see the note on the slide on the previous page. (Remember, you MUST select 'Parts Only'.)

## 11.18 Special Cases

## 11.18.1 Special Cases - Issuing Reels

Reels containing thousands of electronic components that must be issued to an assembly vendor or the manufacturing floor present a special issuing and tracking problem, as you must issue more than the quantity required to the machine picking off the required number of components. This can be resolved in one of the following ways:

- (Easiest but less Accurate) Let pc/MRP issue the required amount but physically issue the reel. Consider the reel as part of the stockroom stock even though the reel(s) are on the manufacturing floor. If extra parts were issued from the reel, enter an "L" type stockroom transaction to cover the extra quantity issued. This method has the advantage that components on the same reel can be issued to different sales/work orders. The IB-MRP will not tell you to buy components if the excess components on the floor are in sufficient quantity.
- (Easy but less Accurate) Let pc/MRP issue the required amount (automatically or manually). Once you are finished with your "I" type issue for that sales/work order number, enter an "L" type stockroom transaction and issue the remaining quantity on the reel. Before the sales/work order is returned from manufacturing as finished assemblies to the stockroom along with the reels, enter the quantity remaining on the reels using the stockroom's "U" type transaction. Select "Reduce Required and Issued Qtys". Once you have returned all the reel quantities, you can return the sales/work order as completed assemblies using the stockroom's "R" type transaction.
- (Easy but less Accurate) Let pc/MRP issue the full reel by un-checking the "Issue Parts Automatically" checkbox and entering the full quantity on the reel. When you do the "U" type stockroom transaction to return the unused quantity, select "Reduce the Issued Quantity Only". This method has the disadvantage of not allowing the reel to be available to other sales/work orders until the reel is returned with the transaction.
- (More Complicated but Accurate) Rename an unused Inventory Area to "WIP Exc" (WIP Excess) or similar. This area will hold components that are physically on the Floor, but won't be used by the SO/WO they were issued to. At the time of the initial "I" type transaction only issue the required quantity, and immediately after that enter a "B" type transaction moving the rest of the components from the original stockroom area to WIP Exc. When generating an MRP, make sure the WIP Exc area is checked. This method is very accurate as it doesn't show the components being on the shelves (they are not, they are on the floor!), neither does it show them as on the floor for the first SO/WO (they won't be used by this SO/WO!) but has them available for another SO/WO. The IB-MRP will not over-order.

## 11.18.2 Special Cases - Handling Scrap Parts

Go over this with accounting. Parts and Assemblies that are written off must be legally disposed.

Set up a scrap area by selecting Configuration, Settings and Utilities, Option 34
http://www.pcmrp.com/mrp101/option34inventoryareanames.htm

Transferring Parts from stores to a scrap area:
Transfer all or some qty of these part numbers into an inventory area designated as scrap. Select Modules, Stockroom, New and B - Transfer parts
http://www.pcmrp.com/mrp101/stkroomtransfer1.htm

Transferring parts from WIP to a scrap area:
Use the Stockroom's 'U' Transaction Type to return the defective part to an area designated as scrap. Select Reduce Issued Qtys Only so you leave a shortage . (Slides 1 - 11):
https://pcmrp.com/mrp101/stockroomunissueselectu.htm

Use the Stockroom's 'P' Transaction Type to issue replacement parts when they become available. (Slides 18-21):
https://pcmrp.com/mrp101/stkroomp1.htm

At the end of the month or period, work with accounting to write off the scrap in the scrap area (Slides 67 - 73): https://pcmrp.com/mrp101/partscrapinvareamenu.htm

## 11.18.3 Special Cases - Reporting Inventory Scrap transactions

OPTION 1:
Stockroom 'B' transactions allow transfer of parts from one stores area to another stores area.
Transferring from Stores area 1 to another area only creates an 'ISSTB' stockroom transaction, whereas transferring from say R&D stores area to 'Scrap' stores area will create both an 'ISSTB' and a 'RECFB' record.

Now, if you wish to track all transactions affecting the 'Scrap' stores area, you could enter the word 'Scrap' in the 'Rel Doc No' data field in the Stockroom 'B' type transaction and then run the Stockroom, 'All for a Related Document Number', and enter 'Scrap' in the 'Related Document #' data field. Select 'Partial' for the 'Match Type' (this means Starts With...), and then select for Include, 'All Stock Transactions'. For just a part number of group of product codes, append the part number product code to the word 'Scrap' when entering into the 'Rel Doc No' data field of the stockroom transaction and the report's 'All for a Related Document Number' data field.

Other Stockroom transaction types will require you to edit the transaction after entry so you can enter the 'Rel Doc No' data.

OPTION 2:
If you know there is always a certain percentage of un-usable parts in a batch of parts used to build an assembly, include the percentage in the BOM required quantity for the part (if the part is not in a liquid form, round up to the next whole number).

As an example:

The capacitors used in the assembly have a known failure rate of 10%. Therefore, adjust the quantity required in the assembly to 110% (if the part is not in a liquid form, round up to the next whole number). This will allow the purchasing department to automatically order the optimum part quantity and the stockroom issue transaction have the optimum quantity available of the part to complete the assembly(s).

If you need to use more capacitors because in a particular case the un-usable parts exceeded the 10%, use the stockroom "L" type transaction to issue more capacitors to the build.

If you did not use all the "extra 10%" of the capacitors in the build, use the stockroom "U" transaction to "Return unused parts from manufacturing to stock". You need to do this before the "R" type transaction.

You can also use the "U" transaction to return the scrapped parts to the Scrap stores area as in Option 1 above.

## 11.18.4 Special Cases - Handling Finished Assembly Yields

Go over this with accounting. Parts and Assemblies that are written off must be legally disposed.

There must be a scrap area set up as per 11.11.2, Setting up a Scrap Area.

Use the Stockroom's I Transaction to issue all the parts to the sales or work order.

Use the Stockroom's R Transaction Type to receive back all the completed (good and bad) assemblies to the stores area.

Optionally, use the Inspection Module to create a record an inspection record that includes the qty accepted and the qty rejected.

Use the Stockroom's B Transaction Type to move the rejected qty from stores to the scrap area.

If you do not intend to ship the original qty, Invoice the Qty that passed inspection and Edit the sales and put a Y in the complete field.
OR
Else you intend to ship the original qty, Create a work order, issue the parts, receive back the assemblies and then invoice the customer to full fill the sales order.

At the end of the month or period, work with accounting to write off the scrap in the scrap area (Slides 67 - 73):
https://pcmrp.com/mrp101/partscrapinvareamenu.htm

## 11.19 Queried Search Overview (see 15.14.1)

## 11.20 Indexed Searches (see 15.14.2)

## 11.21 Index (see 15.14.3)

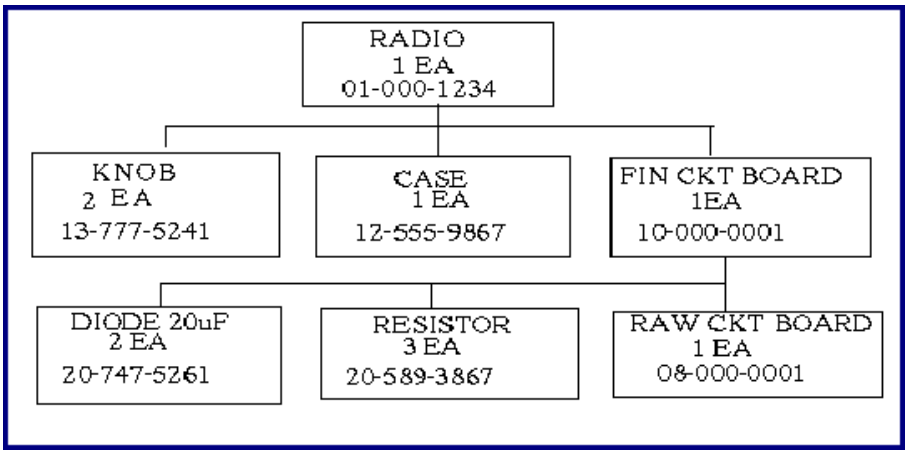
## 11.22 Remove Marked Records (see 15.14.4)

## 11.23 Remove Over X Years (see 15.14.5)

# 12 Bill of Materials Module

### 12.1 Bill of Materials Overview

A Bill of Materials or BOM, can be described as a list of items required to produce a finished assembly or sub-assembly. For example, a Bill of Materials for a circuit board might consist of resistors, diodes, and the raw circuit board itself. The finished board could in turn be a sub-assembly for a finished product such as the radio BOM shown below. An on-line slideshow is located here: http://www.pcmrp.com/mrp101/bommodulesnew.htm




A Bill of Materials could be called a recipe, formula, cut list, etc. pc/MRP can accept BOMs infinite levels deep. When entering a BOM, you must enter the lowest levels first as pc/MRP is always checking if the part or sub-assembly exists. In the above example, you would first enter the diode, resistor, and raw board into the part master as parts. Then you would enter the finished circuit board bill of materials listing all of the parts that go into a finished circuit board. Next the knob and the case. Finally you could enter the radio bill of materials.

pc/MRP uses the BOM files to provide PICK Lists, Where-Used Reports, Purchasing Consolidation Reports, Assembly Costs, and to correctly issue and track inventory.

BOMs are not limited to manufacturers, for example, restaurants can correctly track inventory by entering their recipes into pc/MRP's BOM file.

**Note:** If the Optional Password Module has been activated, users will have to have the same (or higher) rights to the Inventory module as they have to the BOM module.

A single level printout of an example BOM is shown below:

**KINAMED**

BOM NUMBER : 000000012 REV :
BOM DESCRIPTION: REAR END ASSEMBLY MODELNO:
DATE : 12/29/97
QTY : 1.0000

**UNCOSTED SINGLE LEVEL BOM REPORT**

| ITEM | BOM/PART NUMBER | DESCRIPTION | MANUFACTURER | MODELNO | QTY/ASSY |
|---|---|---|---|---|---|
| 002 | 000000004 | REAR TRANSAXLE | GUN MANUFACTURIN | | 1.0000 |
| 001 | 000000010 | WHEEL ASSEMBLY12345678901 | MANUFACTURER #16 | | 2.0000 |
| | | | MANUFACTURE | | |
| | | | MANUFACTURE | | |

An exploded printout includes sub BOM parts and their respective quantities. pc/MRP uses a technique called indenting to help illustrate how the sub assemblies fit together with other sub assemblies to create the final assembly. The same example BOM in an exploded printout is illustrated below:

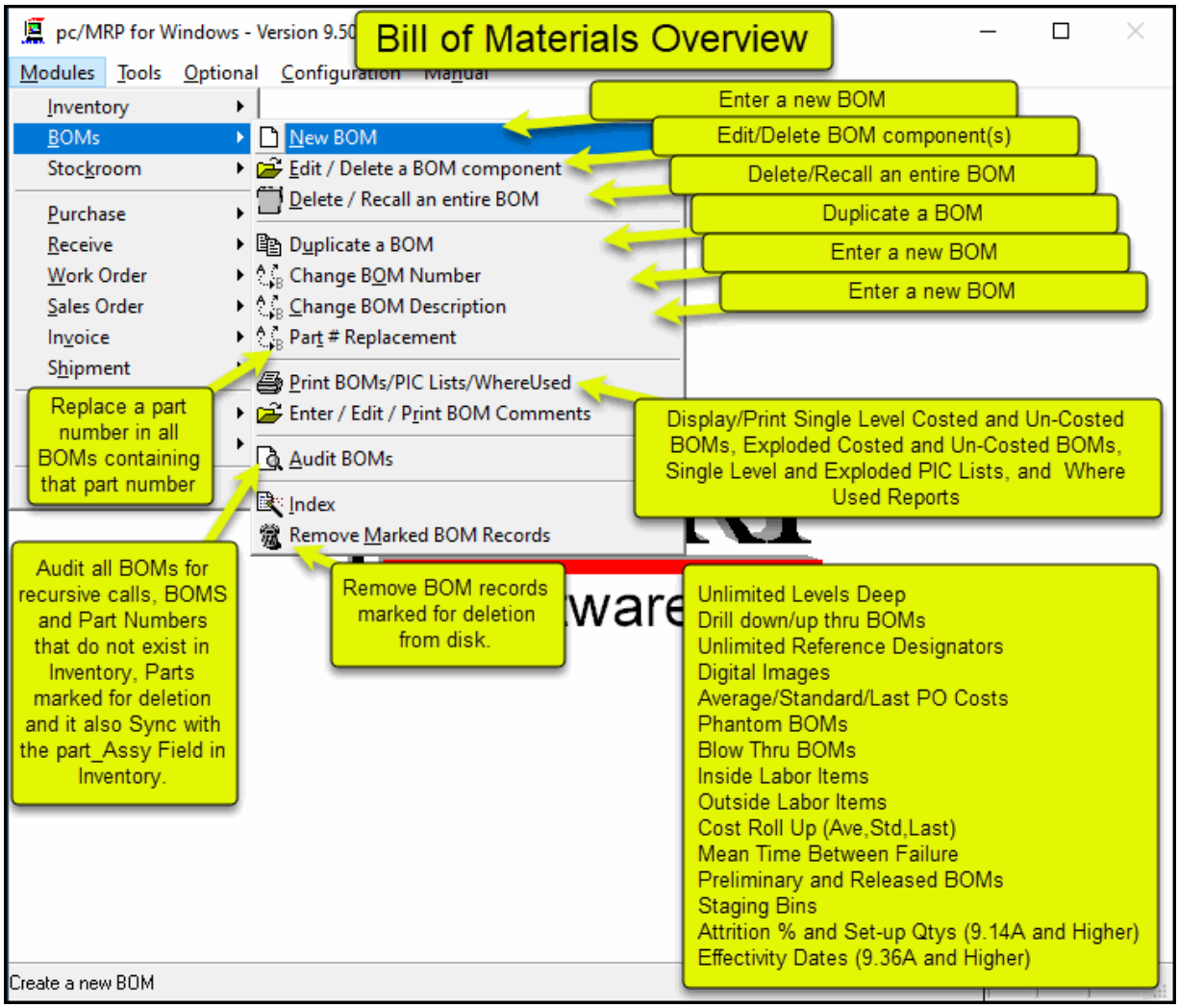
**KINAMED**

BOM NUMBER : 000000012 REV :
BOM DESCRIPTION: REAR END ASSEMBLY MODELNO:
DATE : 12/29/97
QTY : 1.0000

**UNCOSTED EXPLODED LEVEL BOM REPORT**

| P/B | ITEM | BOM/PART NUMBER | DESCRIPTION | LOCATE |
|---|---|---|---|---|
| PART | 002 | 000000004 | REAR TRANSAXLE | TSTPP |
| BOM | 001 | 000000010 | WHEEL ASSEMBLY12345678901234567890 | |
| PART | 003 | 000000001 | BearING 3" ID 5" OD STAINLESS STEE | 123456 |
| PART | 004 | 000000002 | SPOKES 10" x .125 DIA SS ALLOY | TSTPP |
| LABR | 006 | 000000020 | LABOR, JOURNEY MAN | TSTPP |

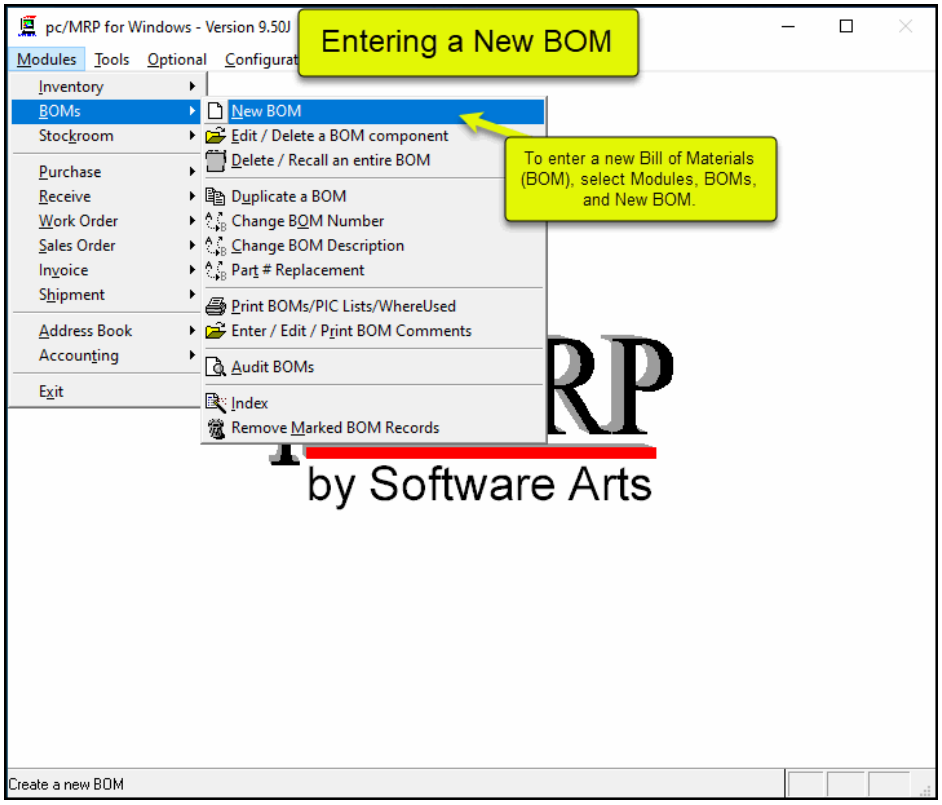
**BOM COMMENTS:**

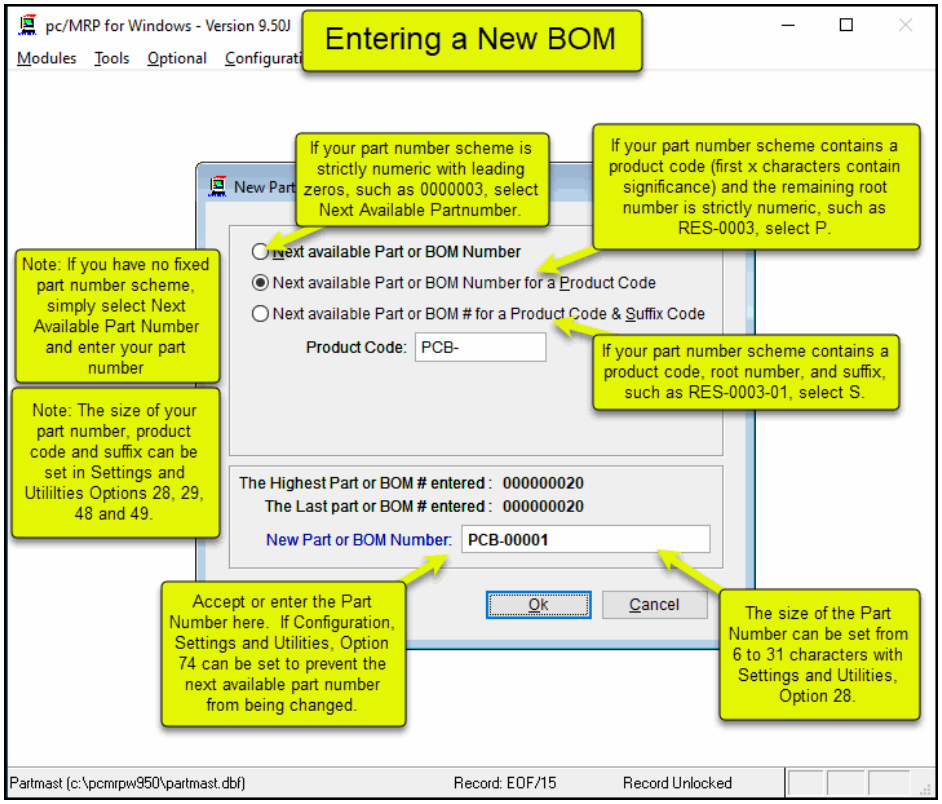


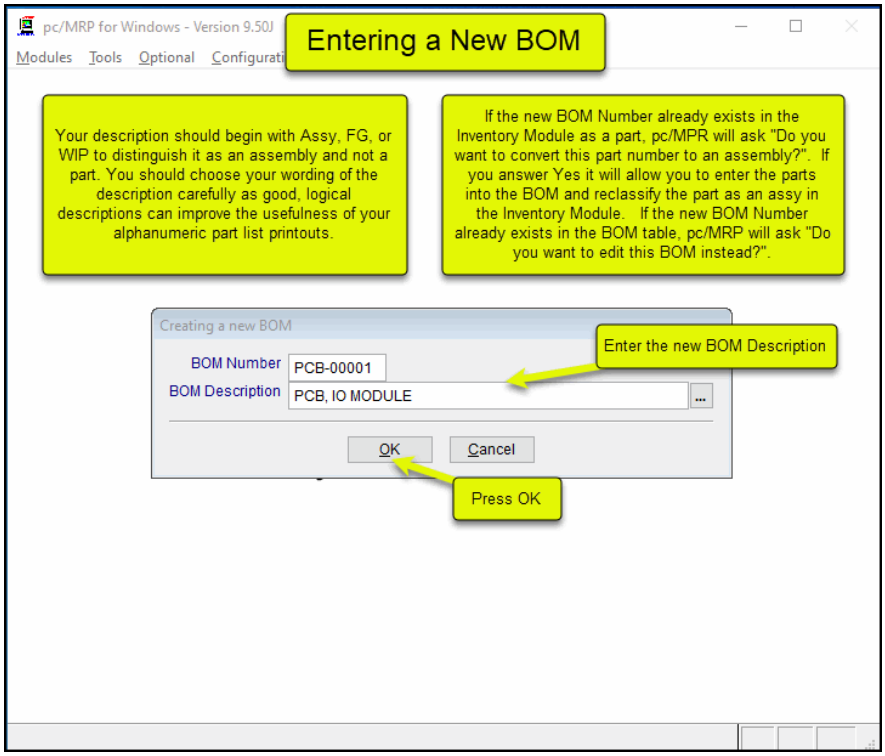
### 12.2 Enter a New BOM

**Note:** See Section 15.11 Importing Data Files in this Manual about importing BOMs from other Applications.

Select Modules, BOM, and New, to enter a new Bill of Materials into the BOM Database File.

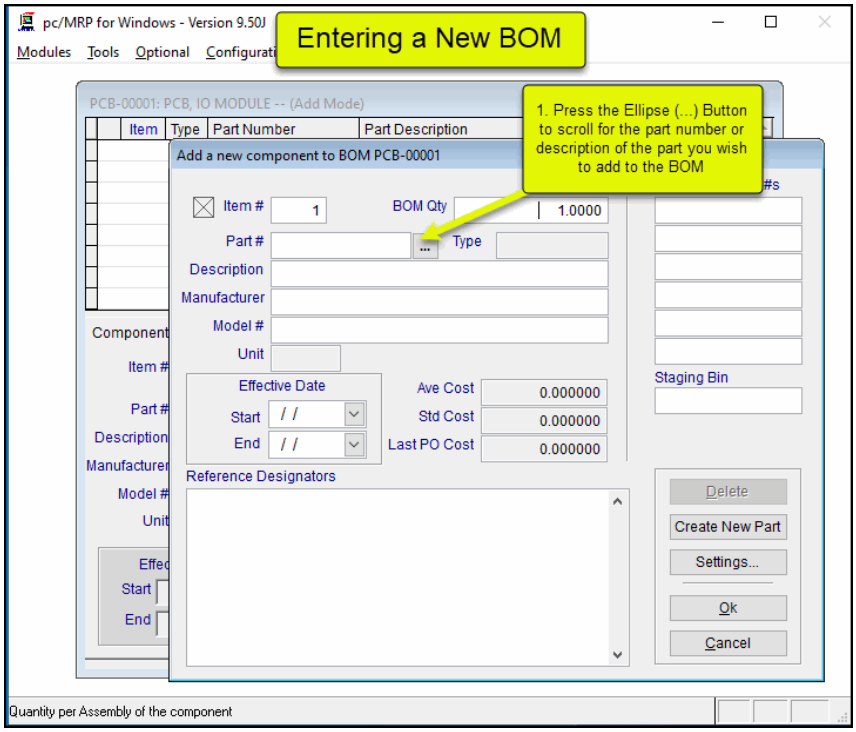


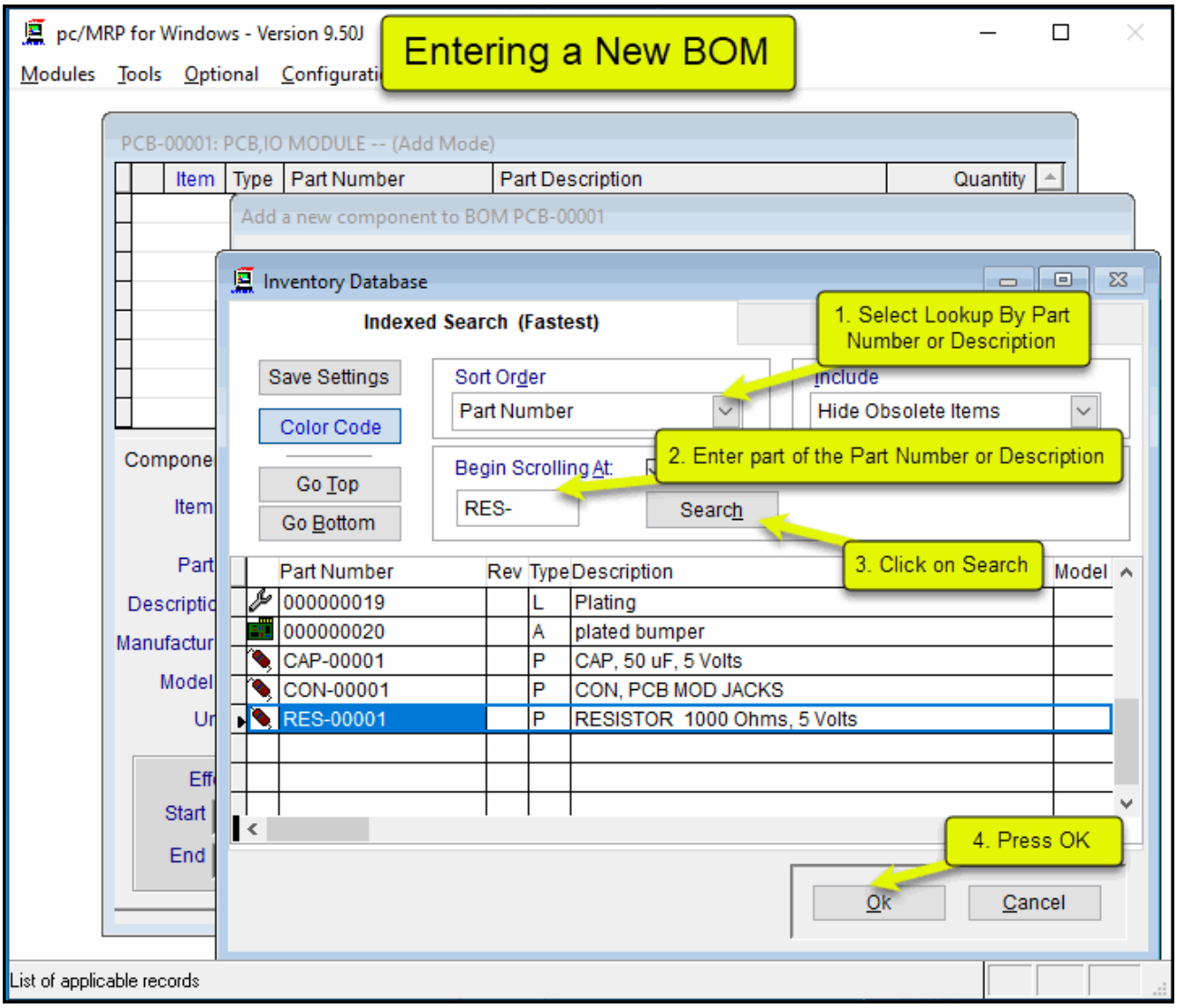



Enter the new **Bill of Materials Number** (bomno) and **BOM Description** (bomdescri). The wording of the description should be such that it prints out logically on an alphanumeric part list. If pc/MRP finds that the BOM Number already exists in the Inventory table (but not in the BOM table), it will display a message. If you select to use this part number, you will be able to enter BOM records for it, and if the part number in Inventory was type Part, it will be changed to type Assembly.

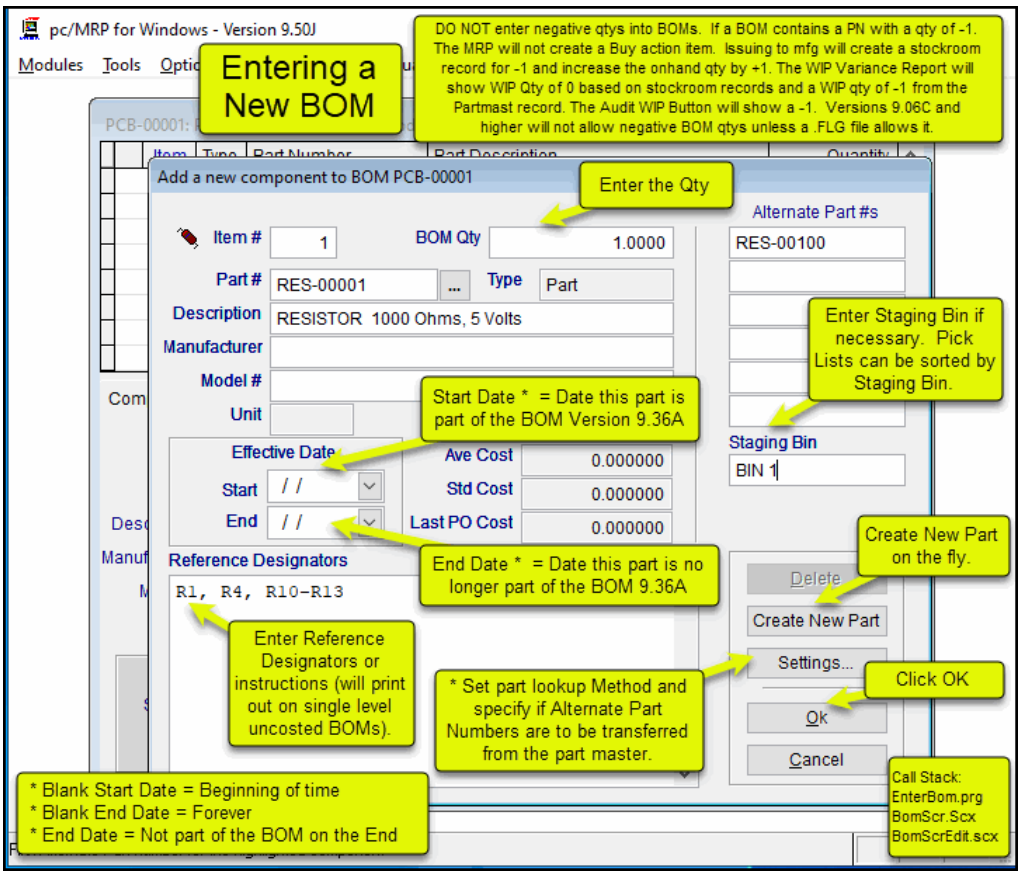
### 12.2.1 Enter a Part or Sub-assembly Number



Press the ellipsis (…) button to scroll and lookup the part or assembly number to be inserted into the BOM. You can look up part or assembly numbers by part number, description or model number. If you tried to enter a part/assembly that does not exist, you will have to exit this BOM, enter the part (or build the lower level assembly) first, than add it to this BOM. BOMs must be built from their lowest level up. (Or, see Create New Part below.)



### 12.2.2 Enter Quantity, Reference Designators, Staging Bin Number, Start and Stop Dates




The **Item Number** (Itemno) will automatically increment as additional parts or assemblies are added.

The **Part Type, Description, Manufacturer, Model Number, Unit,** and **Costs** are brought over automatically from inventory.

Enter the desired **Quantity** (Qty) of this part or assembly to be added to the BOM.

The **Alternate Part Numbers** (altpart1-altpart6) can be entered manually or automatically brought over from inventory depending on how you have set the alternate part numbers to be entered with the **Settings** button (see 12.2.9). These alternate part numbers are for your reference only. Also see Section 15.9.8.

An infinite number of **Reference Designators** (refdesmemo) can be entered for every part within the BOM.

Enter the **Staging Bin Number** (stagebin) if you desire the parts to be sorted into different manufacturing assemblies. The single/exploded Pick Lists (picbom.frx) can be sorted by staging bin.

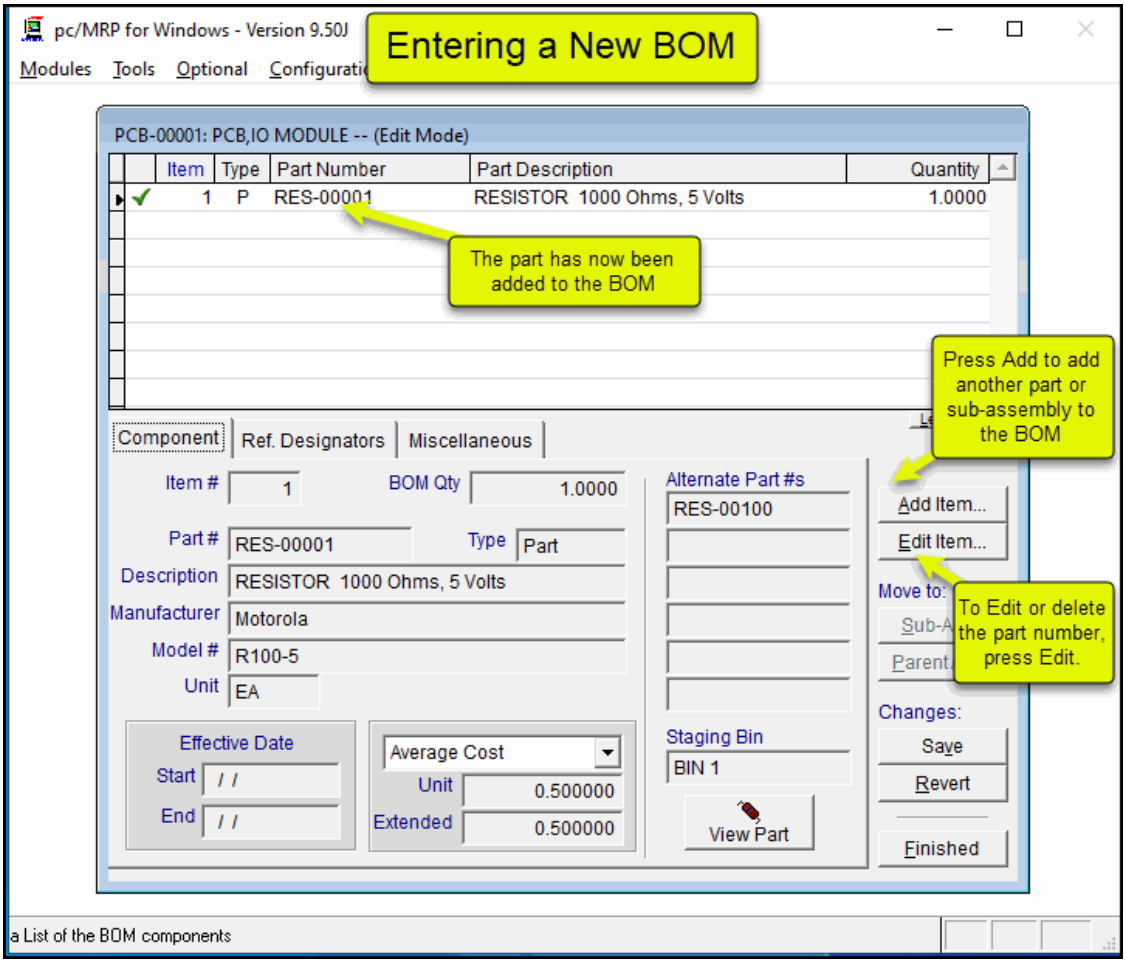
The **Create New Part** button will allow you to enter a new part number into inventory on the fly without having to go to the Inventory Module to enter the new part number.

**Start Date** (sdate) = Date this part is part of the BOM. Blank = Beginning of time.

**End Date** (edate) = Date this part is no longer part of the BOM. Blank = forever.

Press the **Ok** Button to save this entry.

### 12.2.3 Add Another Part to the BOM



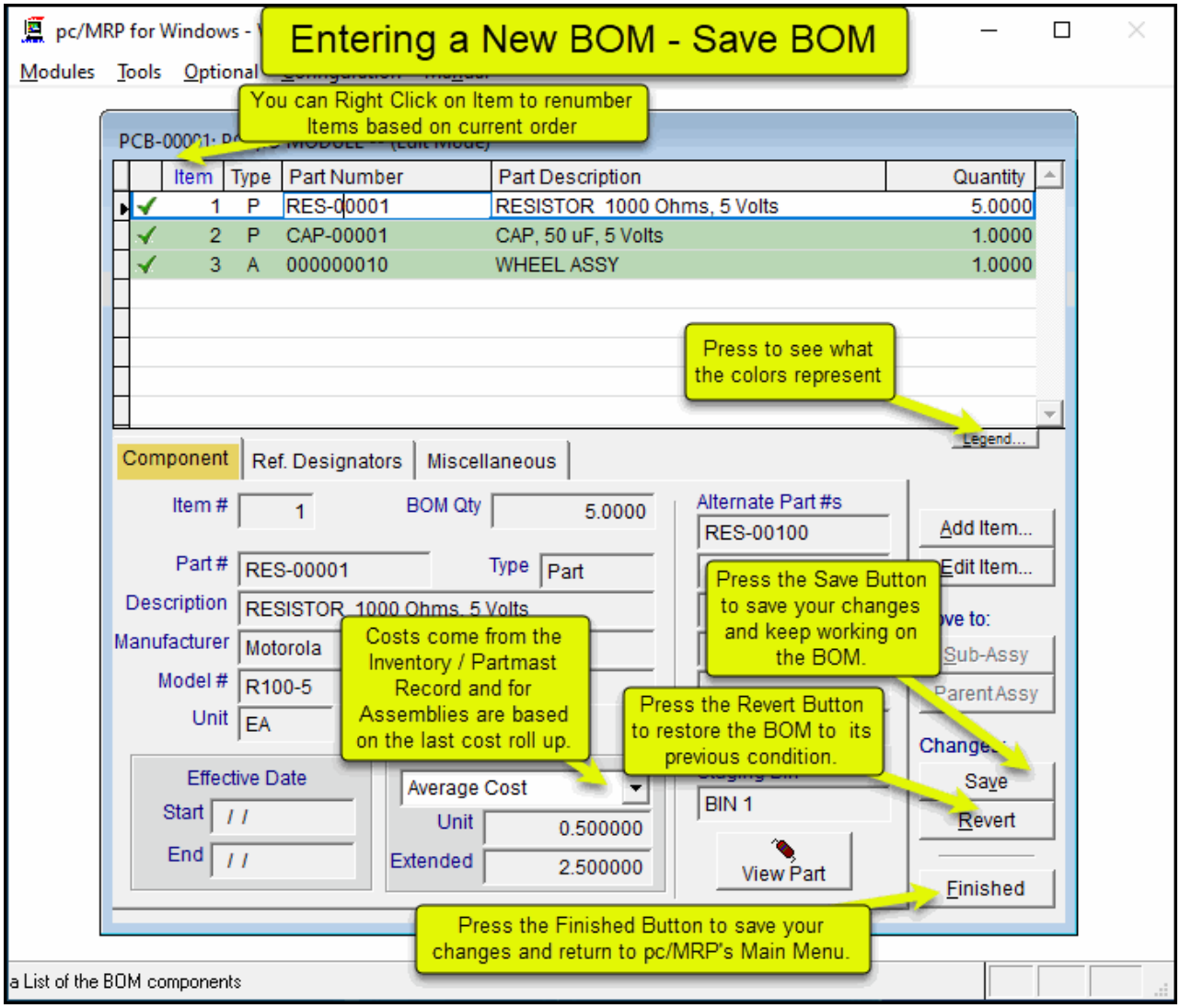

Once you have pressed the OK button, another part or sub-assembly can be added to the BOM by clicking on the **Add** Button.

In addition you can edit or delete a line item in a BOM by clicking on the **Edit Item** button. If you mark a line item for deletion, the line item will be displayed in red.

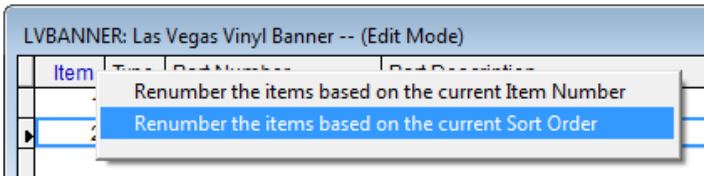
The parts and sub-assemblies that make up the BOM will be displayed in a grid as shown above. The grid will contain the following columns. The **Item Number** column contains the BOM item number for that part in the BOM being displayed. The **Type** column represents the type of component it is, P = component Part, A = Assembly, L = Labor. The **Part Number** column contains the part/sub-assembly number that goes into the BOM being displayed. The **Description** and **Quantity** columns are self-explanatory. You can sort the displayed list by clicking on the column heading (Item, Type, etc.) you wish to sort on.

**12.2.4 Save BOM**

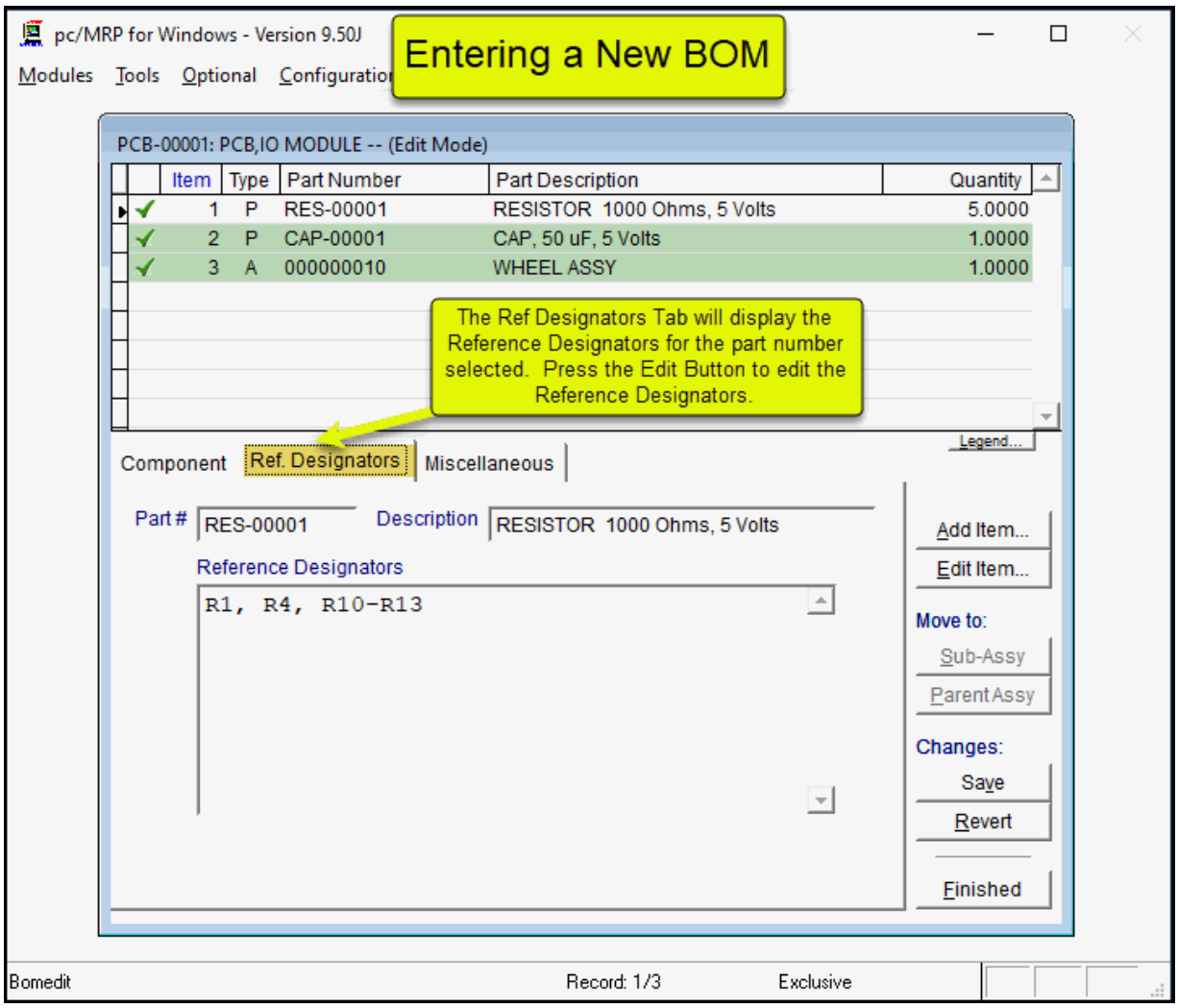
To save your changes to the BOM, press the **Save** Button and continue working. To discard your changes, press the **Revert** button. To save your change and return to pc/MRP's main menu, press the **Finished** button.




Right-click on the **Item** column label to re-sort the item numbers (see below):



**12.2.5 Reference Designators Tab**

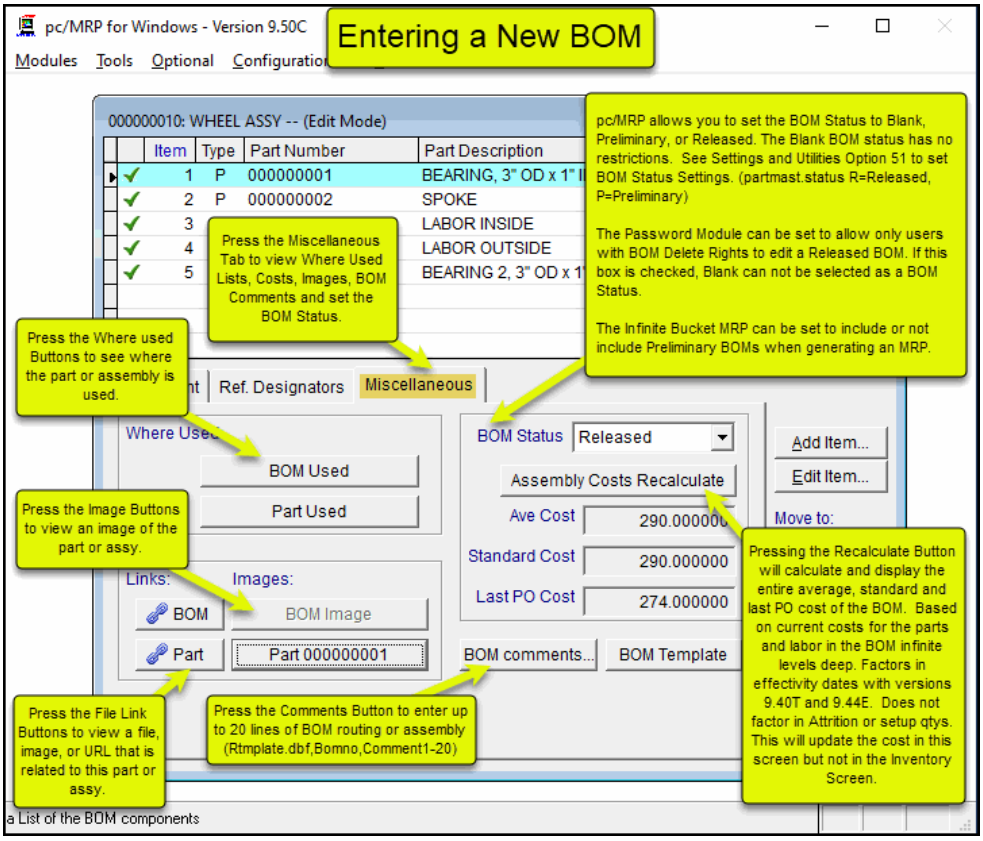



Clicking on the Reference Designator Tab will display the reference designator page shown above.

The Reference Designator field (Refdesmemo) can have an infinite length and can be printed out on an Uncosted Single Level Bills of Materials Report. It is used by circuit board manufacturers to help assemblers know where to place components on the circuit boards. It can be used by regular manufacturers to list special instructions for assembly, such as, cut 13" long. (Do not use the old, shorter Refdes-Refdes4 fields. These are not used any more; they were left in the program for backwards compatibility.)

**Note:** When importing BOMs (see Chapter 15.11) pc/MRP can import the entire content of the Refdesmemo field. (Earlier versions had a 255 character maximum.)

### 12.2.6 Miscellaneous Tab




Clicking on the Miscellaneous Tab will display the page shown above.

The **BOM Used** and **Part Used** buttons will display where they are used in other BOMs. The **BOM Image** and **Part Image** buttons will display a picture or document of either, if the picture or document exists in the part's inventory record. This page will display the **Average, Standard,** and **Last PO Costs** of the BOM you are modifying.

The behavior of the **BOM Status** (partmast.bomstatus) field depends on whether or not the '**Editing released BOMs requires Delete rights in the BOM module**' box in the Password module is checked.

- If the user does not have the PW module or the box is not checked, the BOM status can be set to **Blank, Preliminary, or Released**. For newly created BOMs default status is set by **Option 51**. Note: The Infinite Bucket MRP can be set to include or not include Preliminary BOMs when generating an MRP. (Blank status BOMs will always be included.)

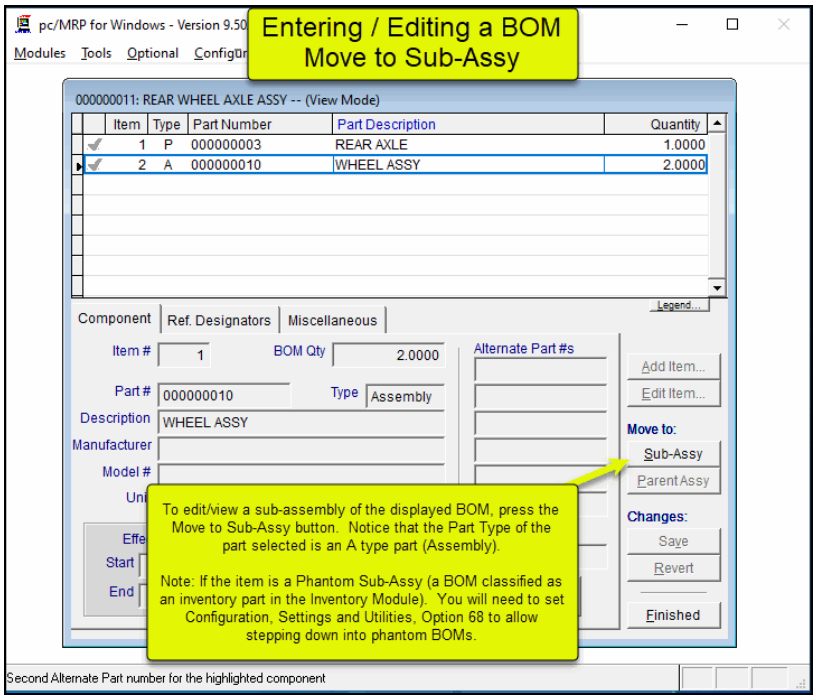
- If the above box is checked, the BOM status can be set only to **Preliminary or Released.** For newly created BOMs default status is set by **Option 51**. Already existing BOMs with a Blank status will remain Blank. Once changed to either Preliminary or Released, the status can not be changed back to Blank. Only users with BOM Delete rights are able to edit Released BOMs.

The Assembly Costs **Recalculate** button recalculates and displays the costs. This calculation goes one level deep, and will NOT be saved into the Inventory module costs. (You will need to perform a cost roll-up.)

Clicking on the **BOM Comments** button will allow you to enter comments applicable to the entire BOM. The comments field can contain up to 20 lines of routing or assembly instructions for that BOM. The BOM Comments are stored in the **RTMPLATE.DBF** database file.

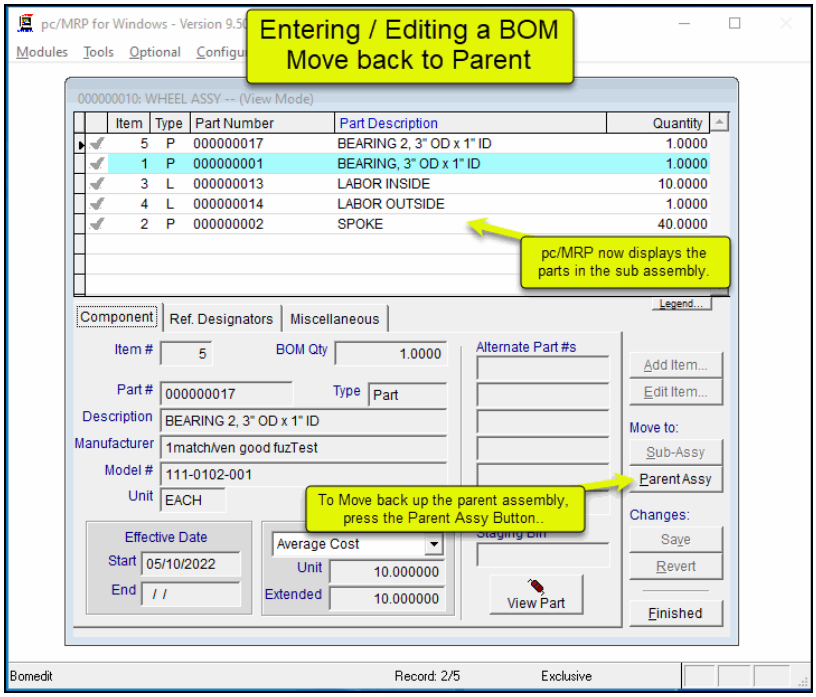
### 12.2.7 Move to Sub-Assembly Button

To drop down into a sub-assembly, select the sub-assembly in the grid and then click on the Sub-Assy Button. If the sub-assy is a phantom BOM (an assembly classified as an inventory part in the Inventory module) you will need to set Configuration, Settings and Utilities, Option 68 to allow stepping down into phantom BOMs.

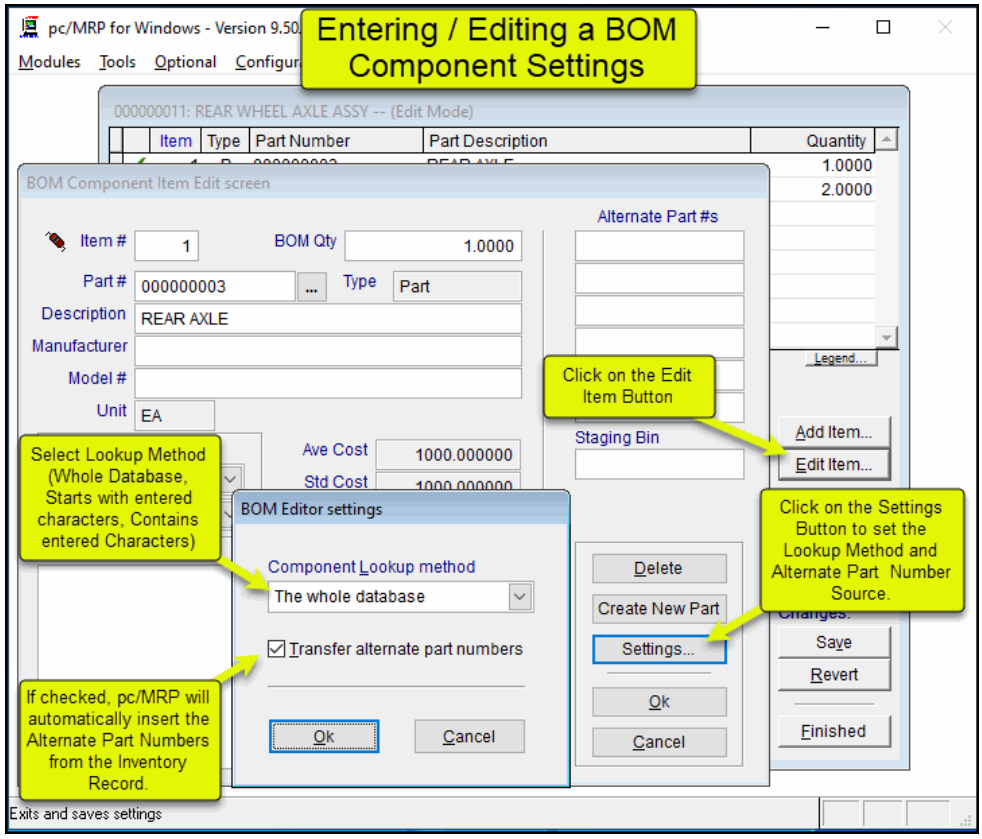



### 12.2.8 Move to Parent Assembly Button

To move back up to the parent assembly, click on the **Parent Assy** Button.



### 12.2.9 BOM Settings Button




Clicking on the Settings button when adding or editing a BOM part number will display the screen shown above.

The **Component Lookup** drop down list box allows the user to set the method the BOM module looks up part numbers. The options are:

- **Whole Data Base** - This method uses an index that is sorted by the field you are looking up the part on. It will stop and display the remainder of the database at the first record that matches the characters you typed in. This is the fastest lookup method possible. Its only drawback is that if you are looking for a listing of all your bearings, it will only find the records whose description start with the letters "bearing" and would not find the records such as "SS Bearing".

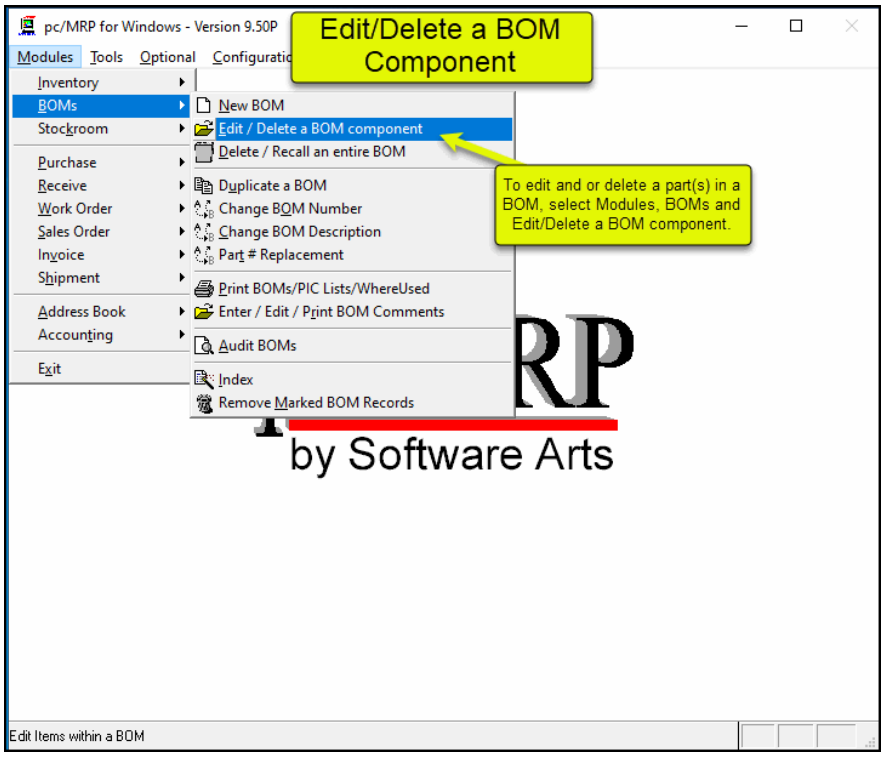
- **Starts With Entered Characters** - This method is also fast and similar to the first method. The only difference is that this method will only display the matches and not any of the records that follow the matches.

- **Contains Entered Characters** - This method starts fast when the database is small. However, as the database grows in size, this method will become slower as it must search the lookup field in each record looking for the word such as "bearing". This method would find and list a record starting with "SS bearing". With 20,000 records in the BOM file, this lookup could take up to 20 seconds depending on your PC and network.

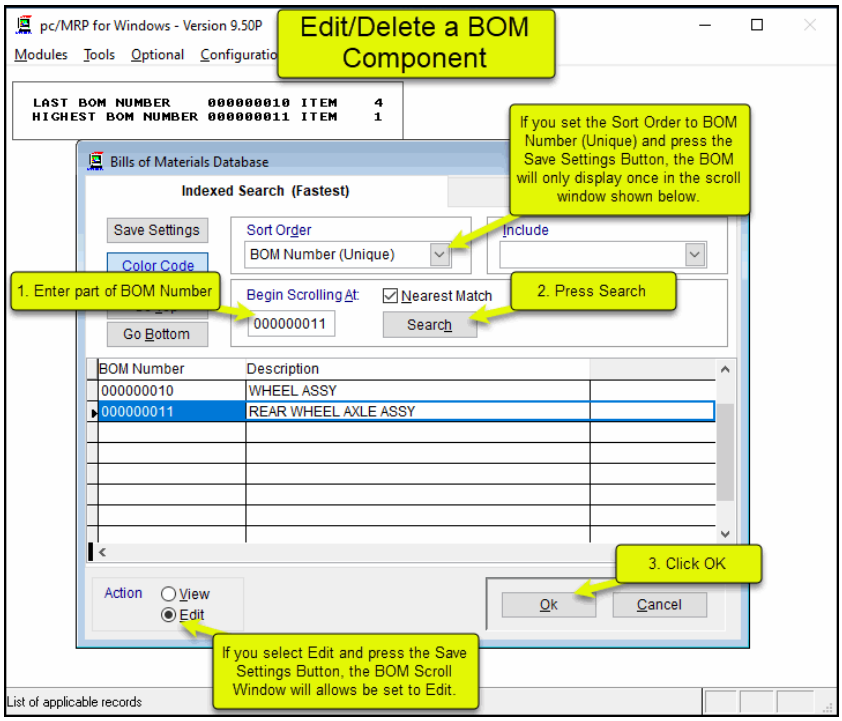
Checking the **Transfer Alternate Part Numbers** check box will set pc/MRP to automatically transfer alternate part numbers from the part number in inventory into the BOM record. If the alternate part numbers are BOM specific, do not check this check box.

### 12.3 Edit/Delete a BOM Component

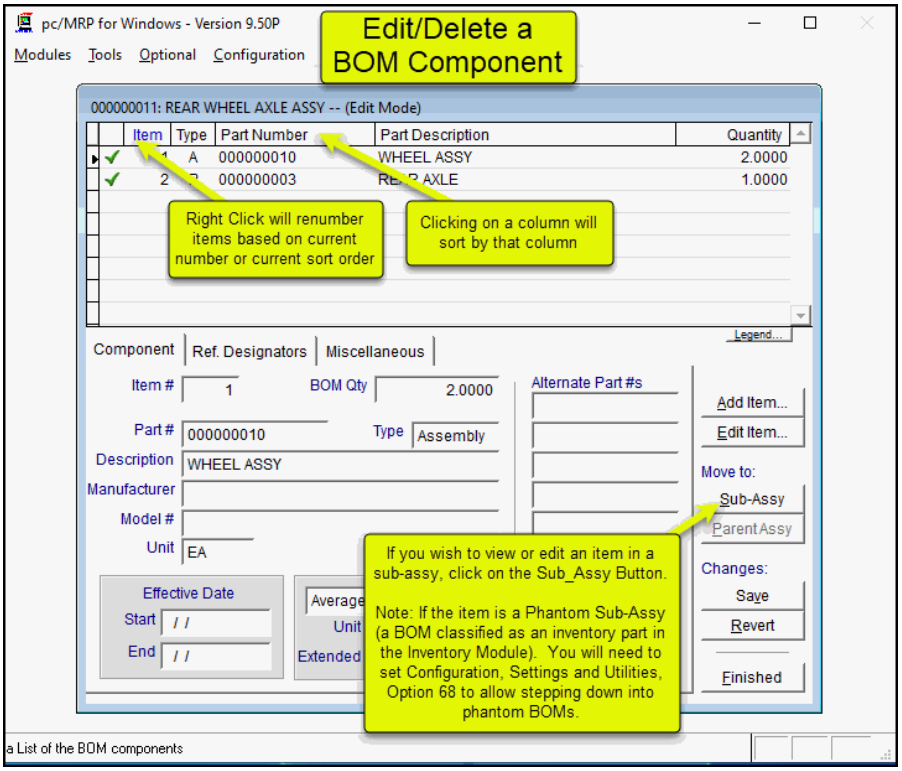
This option allows users to scroll, edit, delete, undelete, or run queries against BOM records. If you set the sort order to BOM Number (Unique) and click Save Settings, each BOM will only be displayed once in the scroll window. Select the desired BOM. The Edit screen is similar to the Entry screen, described in Section 12.2.3.



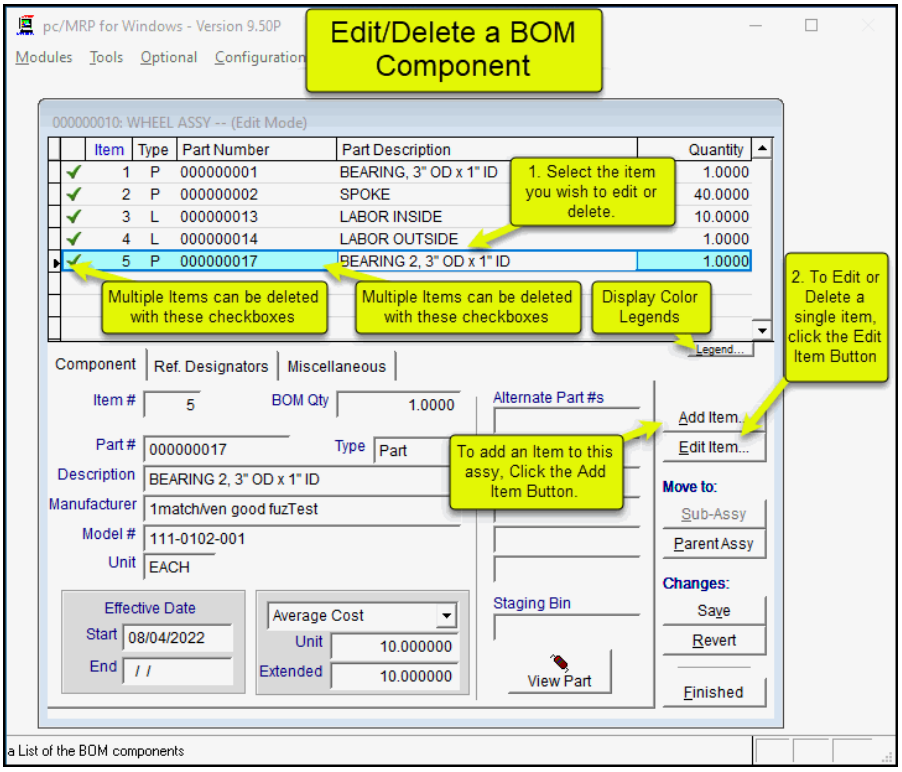

Select the BOM and click on the OK Button.



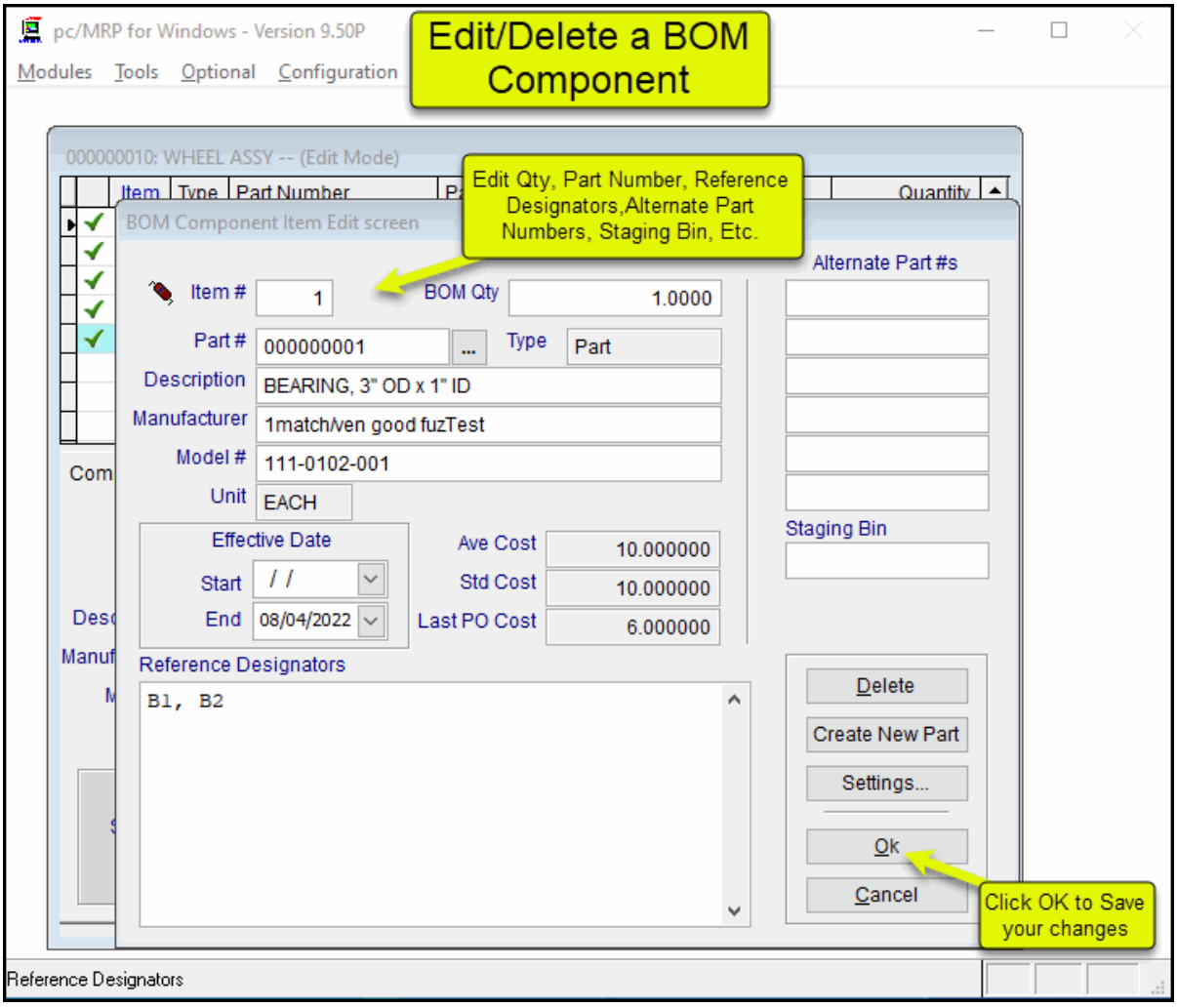
If you need to go deeper, select the sub-assy




Select the item you wish to edit

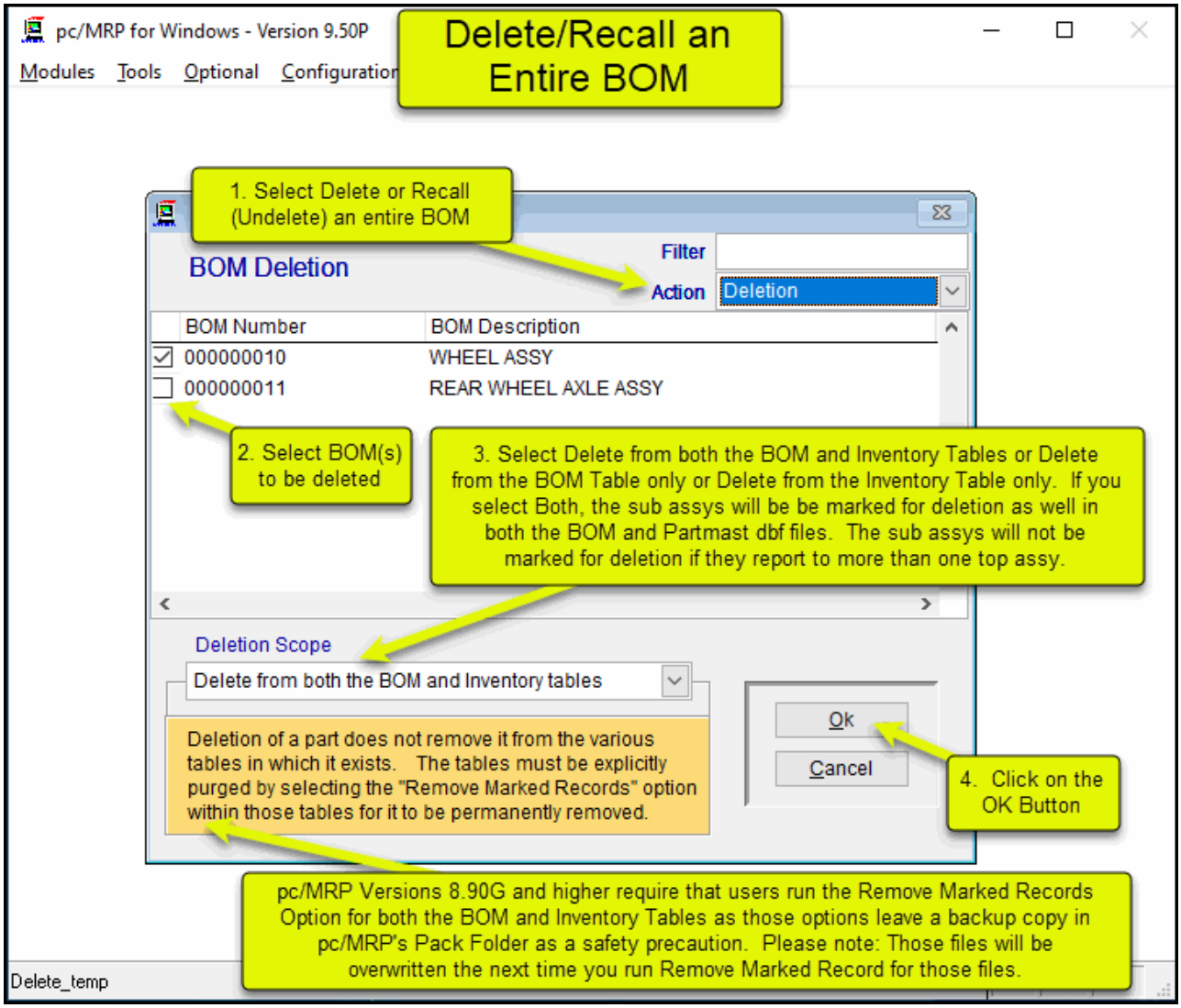


Now you can make your changes or mark the item for deletion. Now the deleted items are displayed in red. Deletion is a two step process. To permanently remove the records from the database table, set an administrative lockout, and then select BOMs, Remove Marked Records.



**12.4 Delete an Entire BOM**

Allows you to mark an entire BOM for deletion or un-deletion as shown on the screen below:




pc/MRP will ask what scope the deletion/recall should take. In most cases you should select both the BOM and Inventory tables. Now pc/MRP will locate and mark for deletion or un-deletion every occurrence of that part in every BOM. The records will be highlighted in red until deleted via the menu (Modules, Inventory (or BOMs), Remove Marked Records 5.1.15.1 & 12.13).

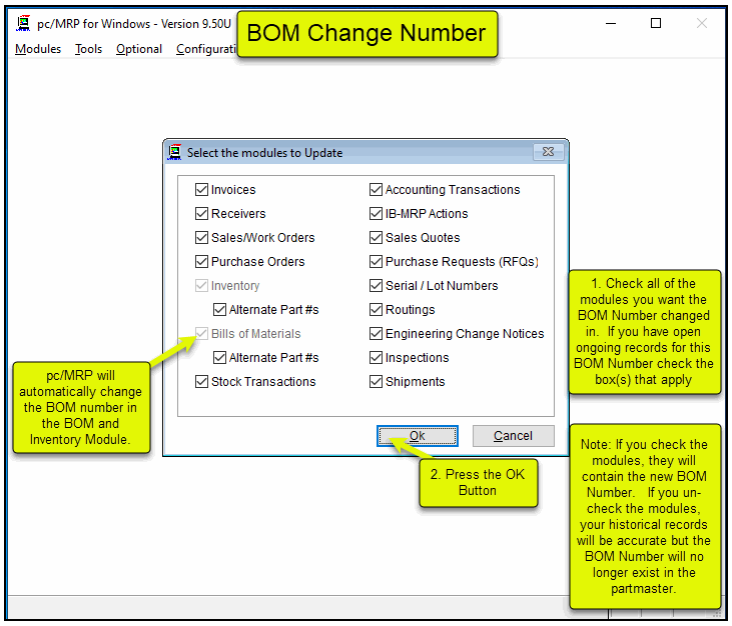
**12.5 Duplicate a BOM**

This feature is useful when the newly created BOM only slightly differs from an existing BOM. pc/MRP will ask for the new BOM's name and description, and create this new BOM with the exact same parts and sub-assemblies as the original BOM. You will need to modify the new BOM, as you would normally edit a BOM.

**Note: Option 51** configures the BOM's Status for newly created BOMs and for BOMs created by duplication.

### 12.6 Change a BOM Number

This option allows you to change a bill of materials number without having to edit every record that contains that bill of material number. pc/MRP also changes the part number in inventory.
https://pcmrp.com/mrp101/bomchangebomnumbermenu.htm




**Warning:** In case you would be changing a **blank** BOM number to a valid BOM number, make sure that you uncheck both "**Alternate Part #s**" fields. Keeping these fields checked will tell pc/MRP to fill up all blank altpart#s with the new BOM number in your entire Inventory in BOM table -- and pc/MRP will do just that.

### 12.7 Change a BOM Description

This allows you to change a Bill of Material's description without having to edit every record that contains that bill of material description. pc/MRP also changes the description in inventory.
https://pcmrp.com/mrp101/bomchangebomnumbermenu.htm

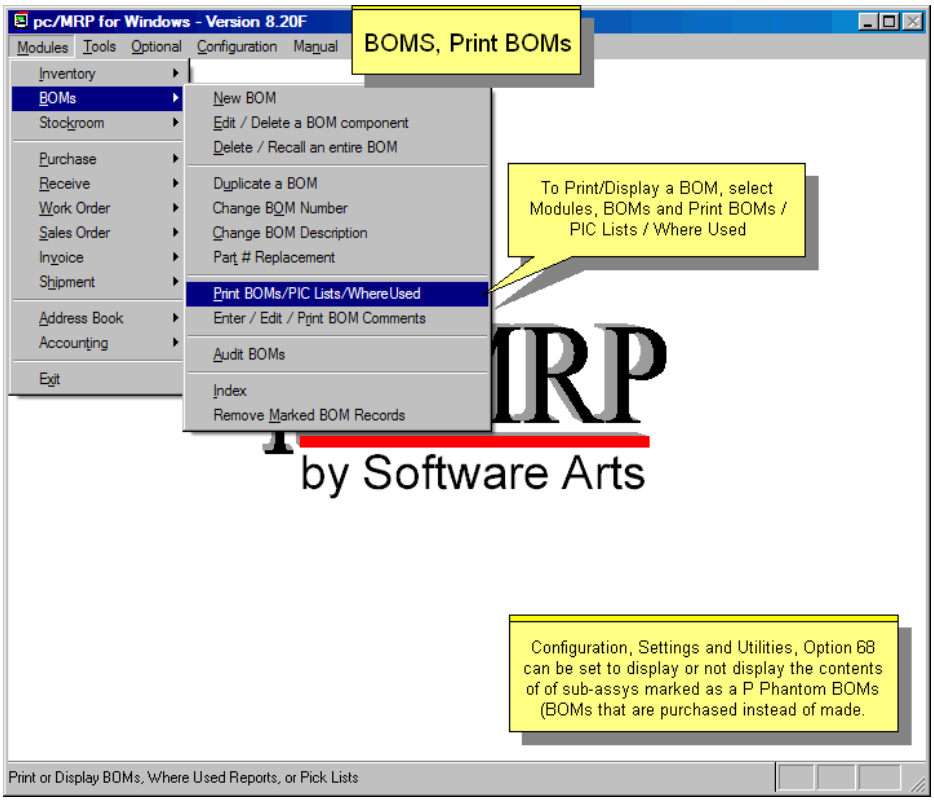
### 12.8 Part Number Replacement

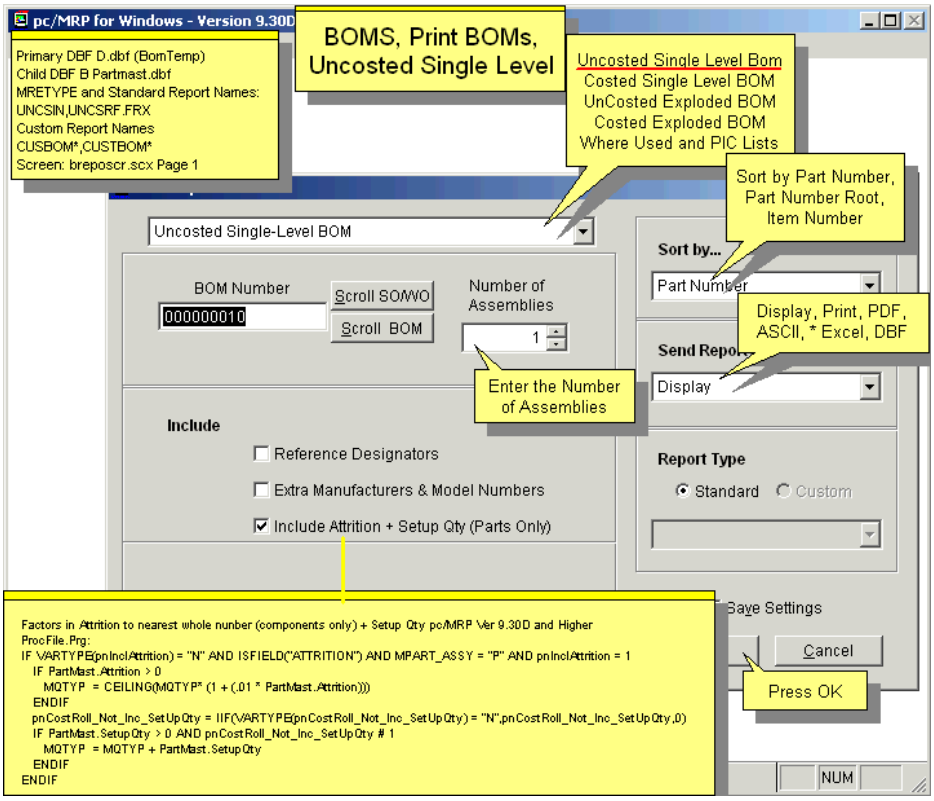
Allows you to replace one part number with another part number in any BOM containing the original part number. You will be able to pick (or select all) the BOMs that you want the part number replaced in.
https://pcmrp.com/mrp101/bomchangepartnumbermenu.htm

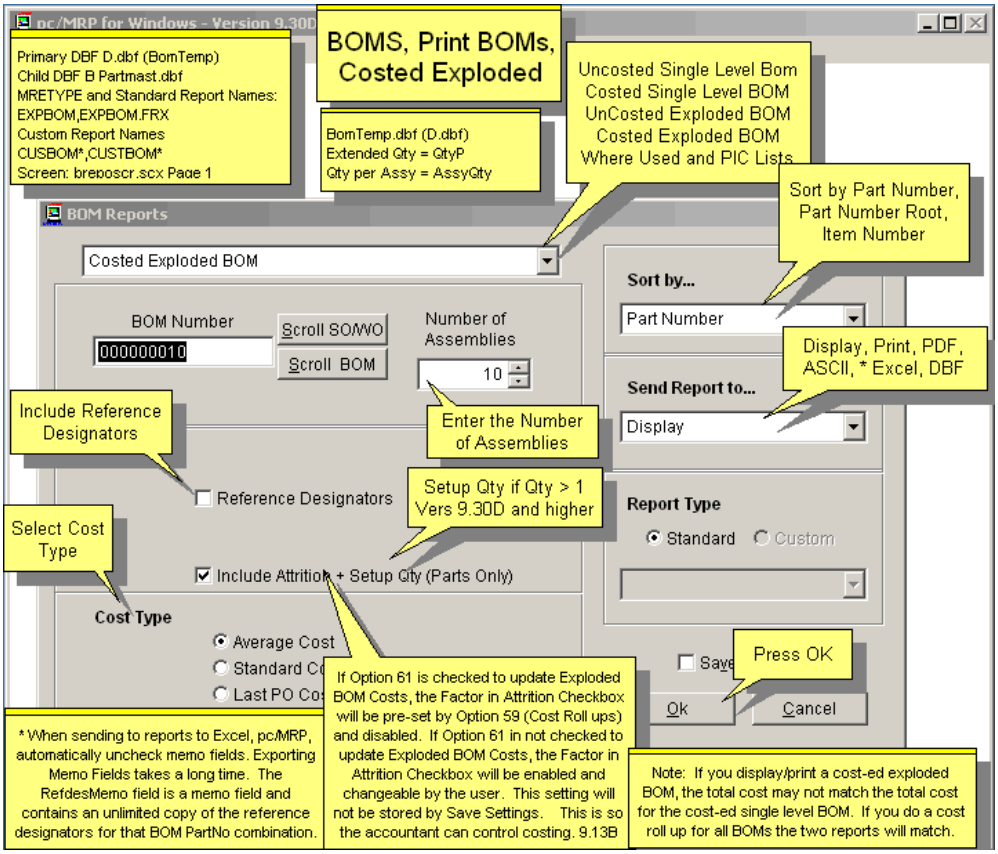
**12.9 Reports/Lists**

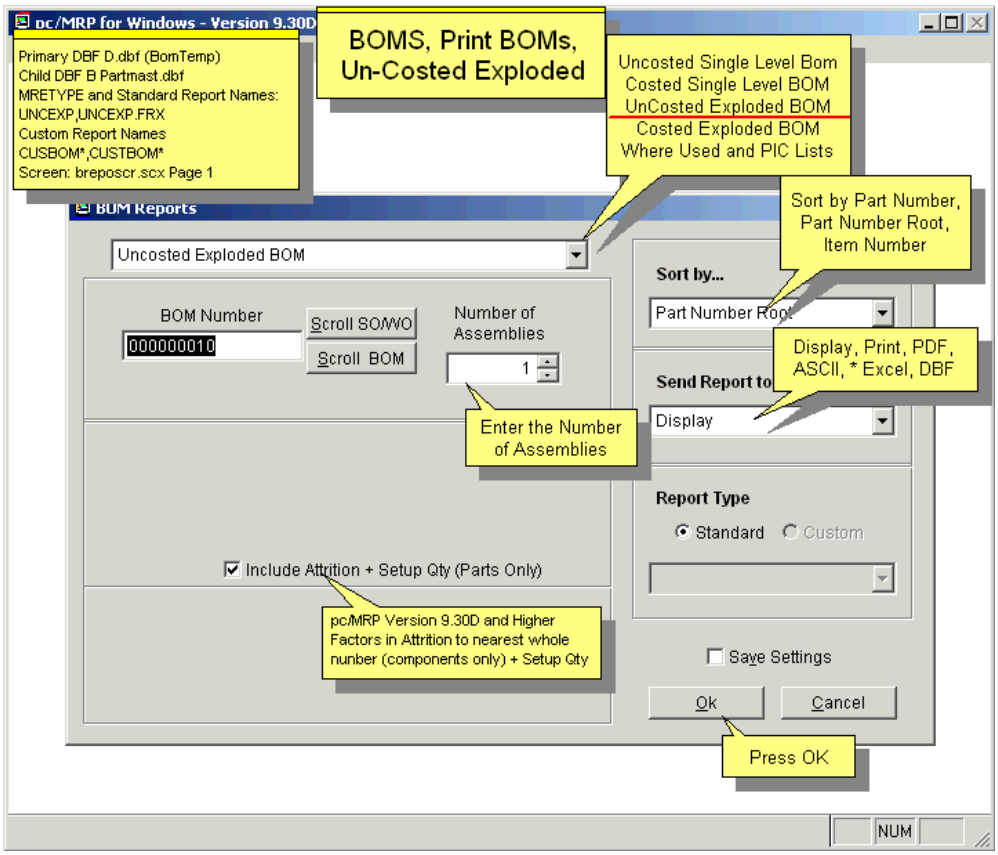
Allows you to print or display BOMs, PICK Lists, and Where Used Reports. pc/MRP will include the contents of the RefDesMemo field when sending the report to Excel.

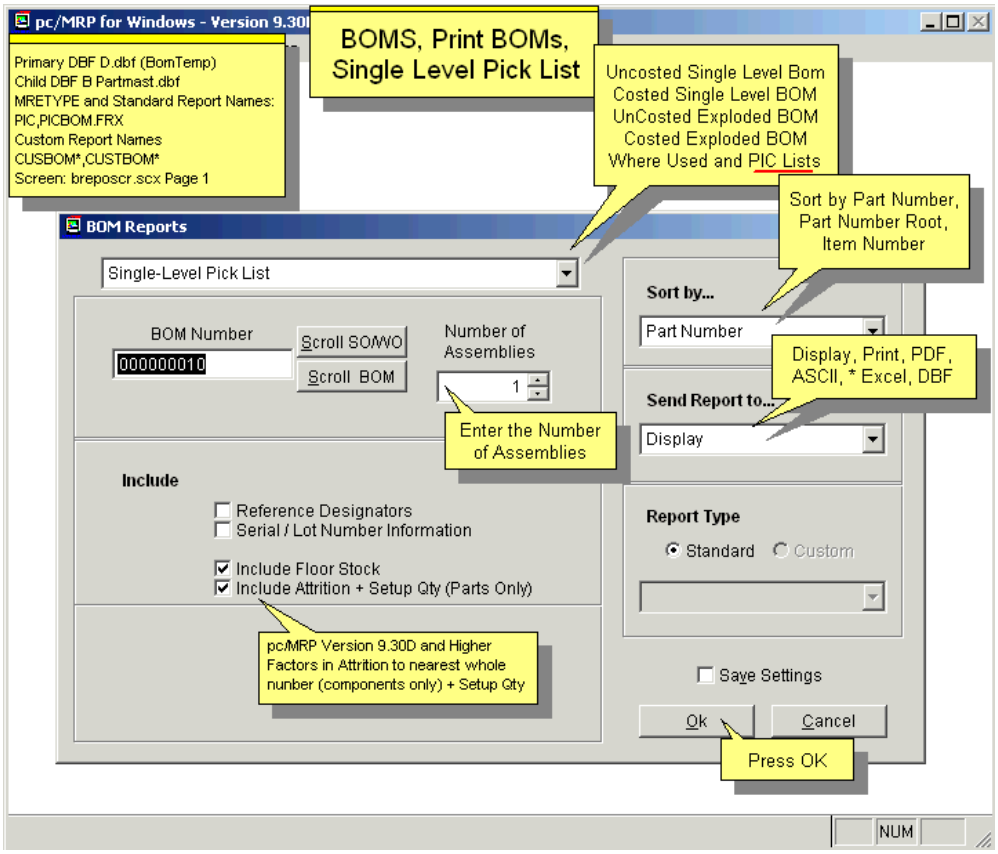
See Section 15.4.1 to create custom reports.

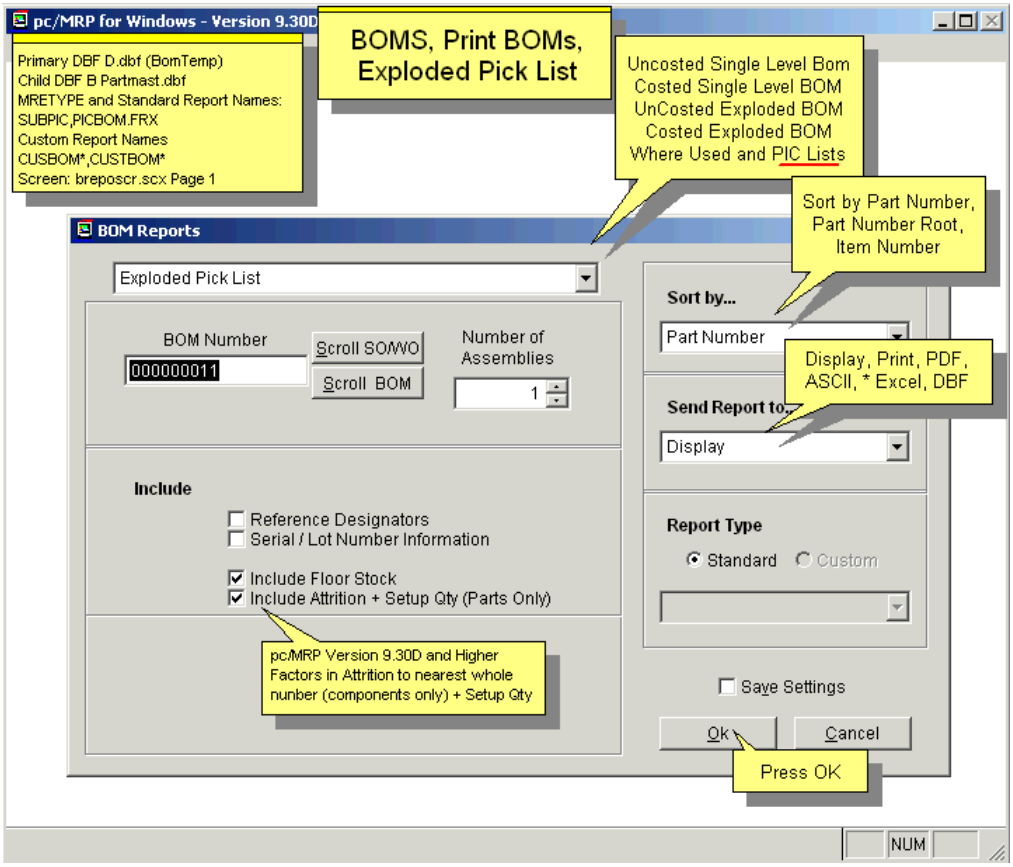


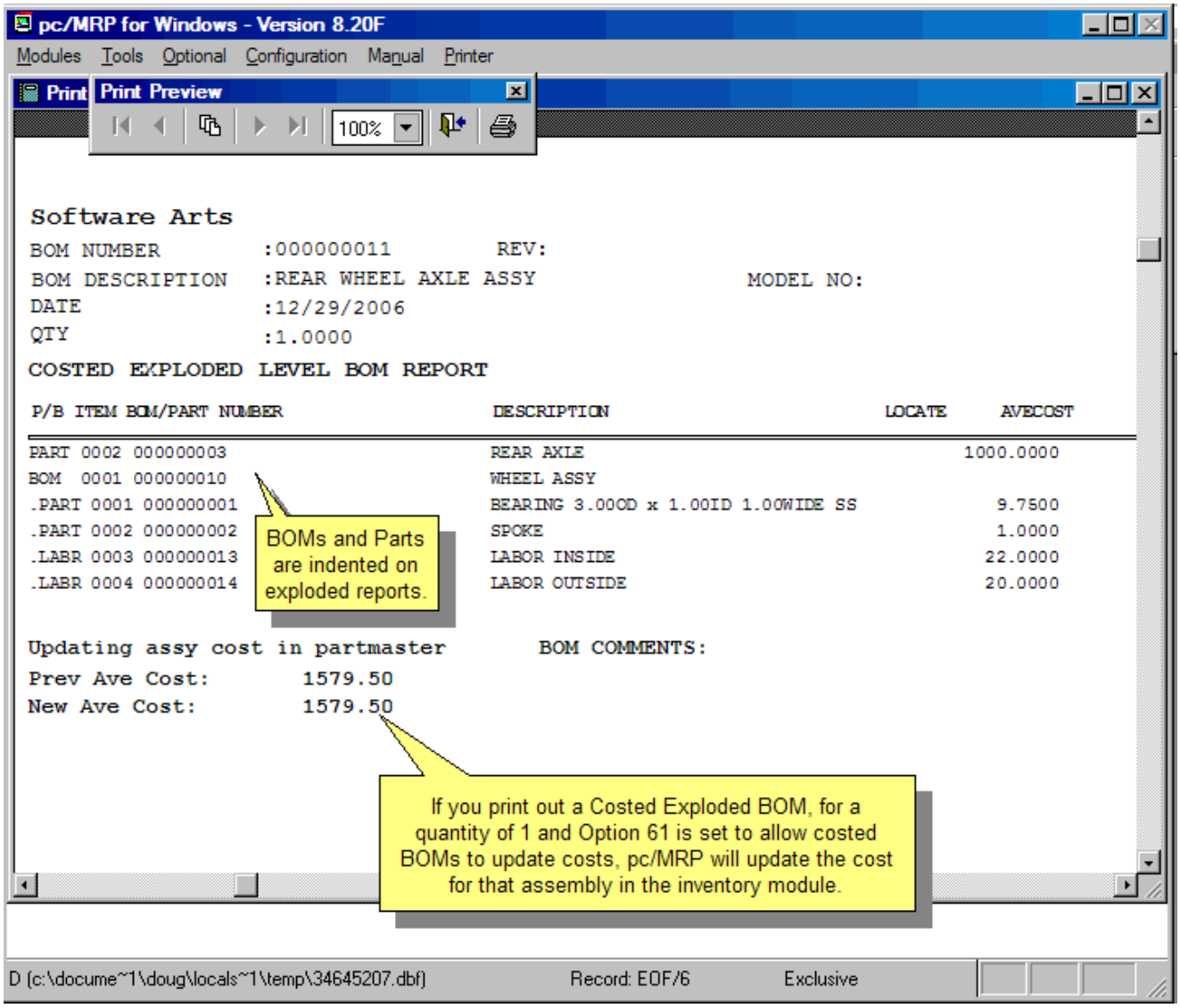

pc/MRP for Windows - Version 9.30D
Primary DBF D.dbf (BomTemp)
Child DBF B Partmast.dbf
MRETYPE and Standard Report Names:
EXPBOM,EXPBOM.FRX
Custom Report Names
CUSBOM*,CUSTBOM*
Screen: breposcr.scx Page 1
BOMS, Print BOMs, Costed Exploded
BomTemp.dbf (D.dbf)
Extended Qty = QtyP
Qty per Assy = AssyQty
Uncosted Single Level Bom
Costed Single Level BOM
UnCosted Exploded BOM
Costed Exploded BOM
Where Used and PIC Lists
Sort by Part Number, Part Number Root, Item Number
BOM Reports
Costed Exploded BOM
BOM Number
000000010
Scroll SO/WO
Scroll BOM
Number of Assemblies
10
Sort by...
Part Number
Send Report to...
Display
Display, Print, PDF, ASCII, * Excel, DBF
Enter the Number of Assemblies
Include Reference Designators
Reference Designators
Setup Qty if Qty > 1 Vers 9.30D and higher
Select Cost Type
Include Attrition + Setup Qty (Parts Only)
Report Type
Standard
Custom
Cost Type
Average Cost
Standard Co
Last PO Cos
Save
Press OK
Ok
Cancel
* When sending to reports to Excel, pc/MRP, automatically uncheck memo fields. Exporting Memo Fields takes a long time. The RefdesMemo field is a memo field and contains an unlimited copy of the reference designators for that BOM PartNo combination.
If Option 61 is checked to update Exploded BOM Costs, the Factor in Attrition Checkbox will be pre-set by Option 59 (Cost Roll ups) and disabled. If Option 61 in not checked to update Exploded BOM Costs, the Factor in Attrition Checkbox will be enabled and changeable by the user. This setting will not be stored by Save Settings. This is so the accountant can control costing. 9.13B
Note: If you display/print a cost-ed exploded BOM, the total cost may not match the total cost for the cost-ed single level BOM. If you do a cost roll up for all BOMs the two reports will match.


pc/MRP for Windows - Version 9.30D
Primary DBF D.dbf (BomTemp)
Child DBF B Partmast.dbf
MRETYPE and Standard Report Names:
UNCEXP,UNCEXP.FRX
Custom Report Names
CUSBOM*,CUSTBOM*
Screen: breposcr.scx Page 1
BOMS, Print BOMs, Un-Costed Exploded
Uncosted Single Level Bom
Costed Single Level BOM
UnCosted Exploded BOM
Costed Exploded BOM
Where Used and PIC Lists
Sort by Part Number, Part Number Root, Item Number
BOM Reports
Uncosted Exploded BOM
BOM Number
000000010
Scroll SO/WO
Scroll BOM
Number of Assemblies
1
Sort by...
Part Number Root
Send Report to
Display
Display, Print, PDF, ASCII, * Excel, DBF
Enter the Number of Assemblies
Report Type
Standard
Custom
Include Attrition + Setup Qty (Parts Only)
pc/MRP Version 9.30D and Higher Factors in Attrition to nearest whole nunber (components only) + Setup Qty
Save Settings
Ok
Cancel
Press OK
NUM


pc/MRP for Windows - Version 9.30
Primary DBF D.dbf (BomTemp)
Child DBF B Partmast.dbf
MRETYPE and Standard Report Names:
PIC,PICBOM.FRX
Custom Report Names
CUSBOM*,CUSTBOM*
Screen: breposcr.scx Page 1
BOMS, Print BOMs, Single Level Pick List
Uncosted Single Level Bom
Costed Single Level BOM
UnCosted Exploded BOM
Costed Exploded BOM
Where Used and PIC Lists
Sort by Part Number, Part Number Root, Item Number
BOM Reports
Single-Level Pick List
BOM Number
000000010
Scroll SO/WO
Scroll BOM
Number of Assemblies
1
Enter the Number of Assemblies
Sort by...
Part Number
Send Report to...
Display
Display, Print, PDF, ASCII, * Excel, DBF
Include
Reference Designators
Serial / Lot Number Information
Include Floor Stock
Include Attrition + Setup Qty (Parts Only)
pc/MRP Version 9.30D and Higher Factors in Attrition to nearest whole nunber (components only) + Setup Qty
Report Type
Standard
Custom
Save Settings
Ok
Cancel
Press OK
NUM

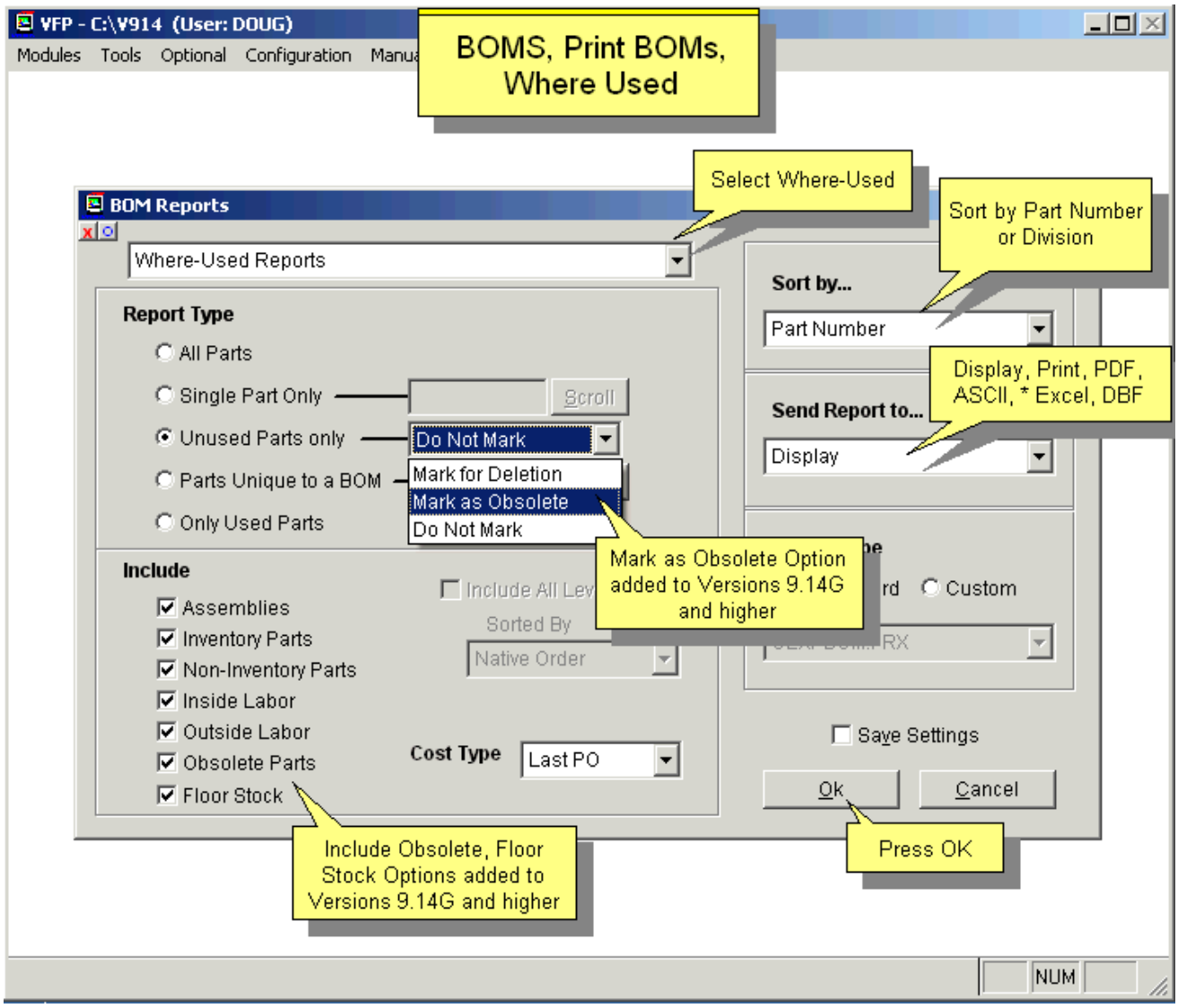

pc/MRP for Windows - Version 9.30D
Primary DBF D.dbf (BomTemp)
Child DBF B Partmast.dbf
MRETYPE and Standard Report Names:
SUBPIC,PICBOM.FRX
Custom Report Names
CUSBOM*,CUSTBOM*
Screen: breposcr.scx Page 1
BOMS, Print BOMs, Exploded Pick List
Uncosted Single Level Bom
Costed Single Level BOM
UnCosted Exploded BOM
Costed Exploded BOM
Where Used and PIC Lists
Sort by Part Number, Part Number Root, Item Number
BOM Reports
Exploded Pick List
BOM Number
000000011
Scroll SO/WO
Scroll BOM
Number of Assemblies
1
Sort by...
Part Number
Send Report to...
Display
Display, Print, PDF, ASCII, * Excel, DBF
Include
Reference Designators
Serial / Lot Number Information
Include Floor Stock
Include Attrition + Setup Qty (Parts Only)
pc/MRP Version 9.30D and Higher Factors in Attrition to nearest whole nunber (components only) + Setup Qty
Report Type
Standard
Custom
Save Settings
Ok
Cancel
Press OK
NUM

A Costed Exploded BOM would print/display as shown on the screen below:




**Note:** If you run the Costed Exploded BOM report and Option 61 in the Configuration menu is set to perform a cost roll-up, it will only roll-up the cost for the assembly you are running the report for. If you then run a Costed **Single-Level BOM report**, it might display a different cost for a multi-level assembly. The reason is that the subassemblies might not have the right cost in Inventory if their cost has not been rolled up recently. The Costed Single-Level BOM report calculates with the current cost in Inventory (which might be out of date). The Costed Exploded BOM report uses the current cost for all parts and subassys. To ensure that all BOM and sub-BOM costs are correct, perform cost roll-ups for all BOMs.

The **Where Used Report** will provide a printout for all parts or for a specified part number. The printout will provide a list of every assembly that uses that part number. It will also note parts that are not used in any assembly. The latter feature is designed to help reduce inventories and inventory write-offs. If the **Single Part** option is selected, users can include all levels of the assemblies where the part is used.




**PICK Lists** are used by stockroom personnel to print out the parts required for an assembly or sub-assembly.

An exploded PICK list includes all of the parts including parts from sub-assemblies in one consolidated list.

The Reference Designator Field prints out on the wide carriage PICK List, wide carriage Uncosted BOM, and narrow carriage uncosted single level BOM reports.

### 12.10 Audit BOMs

This option will check your BOM data base file. As a safety precaution, make a back up copy of the partmast.dbf and bom.dbf files before running this utility. An administrative lockout must be set before running this utility. Select "Compile a list of errors" when prompted. Once you have looked at the error list you can run the report again and select, "Step-through each BOM record with the option to remove it." This program will scan the bom.dbf file and look for the following errors:

- A BOM number that does not exist in the partmast.dbf
- A component part number that does not exist in the partmast.dbf
- A component part number that is marked for deletion in the partmast.dbf
- A BOM number that contains a part number that is the same as the BOM number (recursive BOM)

- A component part number that does not contain a P,A or L in the part_assy field in the partmast.dbf
- A BOM number in the partmast.dbf file that does not exist in the bom.dbf file
- A subassembly number found in a BOM that does not exist as a BOM in the bom.dbf file.
- A negative part quantity in a BOM.
- It automatically replaces the BOM part/assy/labor field with the contents of the partmast.dbf part_assy field.

Once it has finished the above error checking, the program will ask, "Do you wish to check for recursive BOM structures". Answer "Yes", to check for BOMs that call themselves at any level.

If you have selected the "Step through and delete" option, and have deleted records, answer "Yes" when asked if you wish to remove the records marked for deletion from disk, as long as you have an administrative lock in place. Otherwise wait with this step until you can set an admin lock.

If any recursive errors were found you must edit/delete the BOM record calling the parent BOM. (See 17.3.17)

Next, the Audit BOMs utility will offer to sync BOM Descriptions and/or Alternate Part Numbers from the Part Master.

**12.11 Phantom BOMs / Blow Through BOMs**

If you plan to purchase a sub-assembly from a vendor and not build the subassembly in house, it would be called a **phantom BOM**. This can be accomplished in pc/MRP by editing the BOM in the Inventory Module and changing the part/assy/labor field from A to a P. The MRP module would then create action items to buy the sub-assembly from a vendor rather than to buy the components and issue a make for the sub-assembly. However, you would still be able to print this phantom BOM in the BOM module.

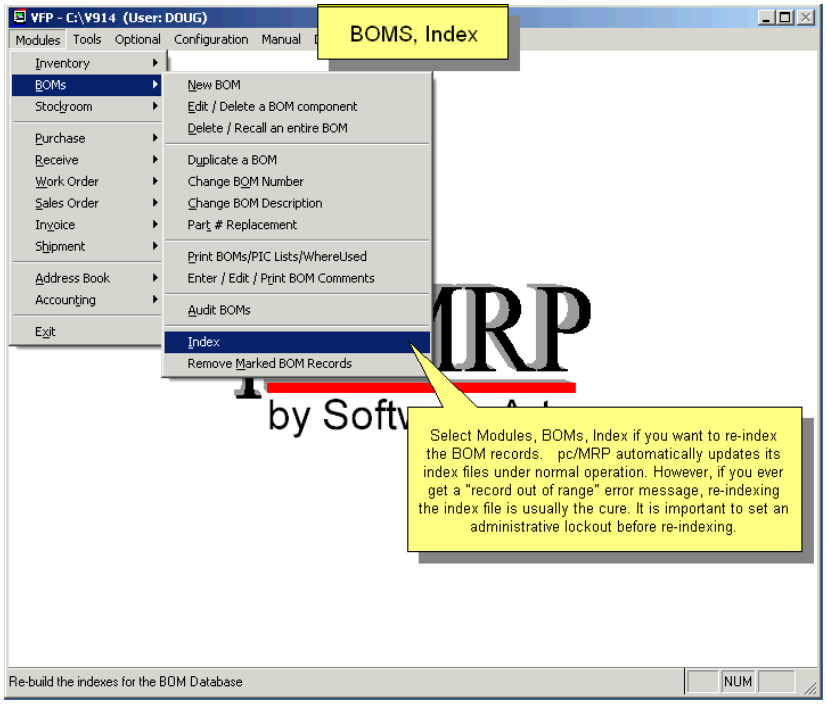
**Option 68** in the Configuration, Settings and Utilities module allows users to step down through phantom BOMs (sub-assemblies marked as P in the inventory module) while editing or printing out a costed or uncosted exploded BOM. In addition, Option 68 allows users to set the default print settings to: never print out phantom BOM subassemblies, always print, or ask.

If an assembly reports to a parent assembly and it is checked as a **Blow Through Assembly** on the inventory screen, pc/MRP will issue component parts and ignore any on hand quantities for that sub-assembly. This is true for Issuing to Manufacturing, Convert Parts to Assemblies, Generating an MRP (Infinite and Single Bucket), Check Availability, Maximum Potential Build, Single Level Pick List, Costed and Uncosted Exploded BOMs (the BOM will contain an "*" next to it, indicating it is a Blow Through BOM). Basically it is a BOM that is never pre-assembled, you always issue parts to it as though the component parts reported directly to the parent assembly.

**12.12 Index (also see 15.14.3)**

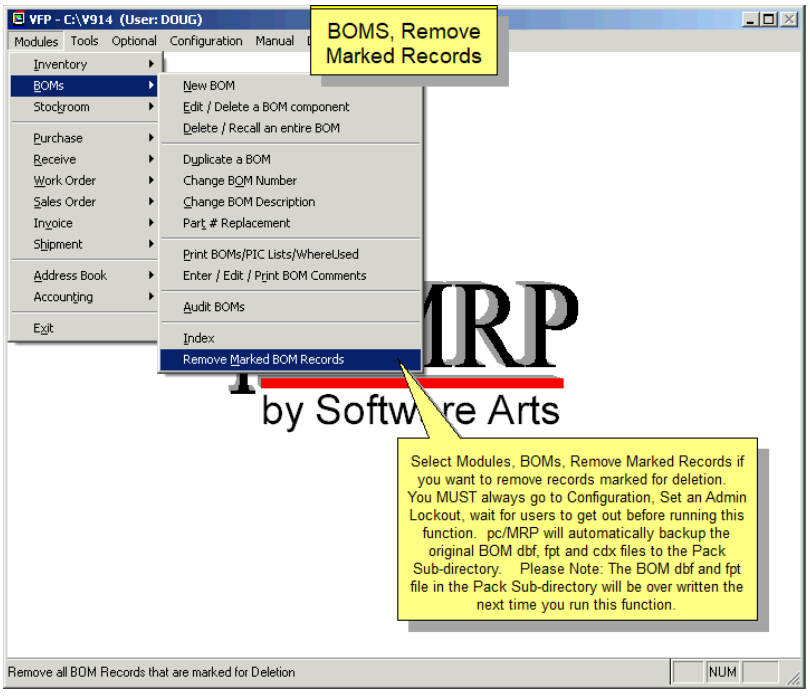
Selecting Modules / BOMs / Index to update the BOMs index file.

It is important to set an **administrative lockout** before re-indexing.



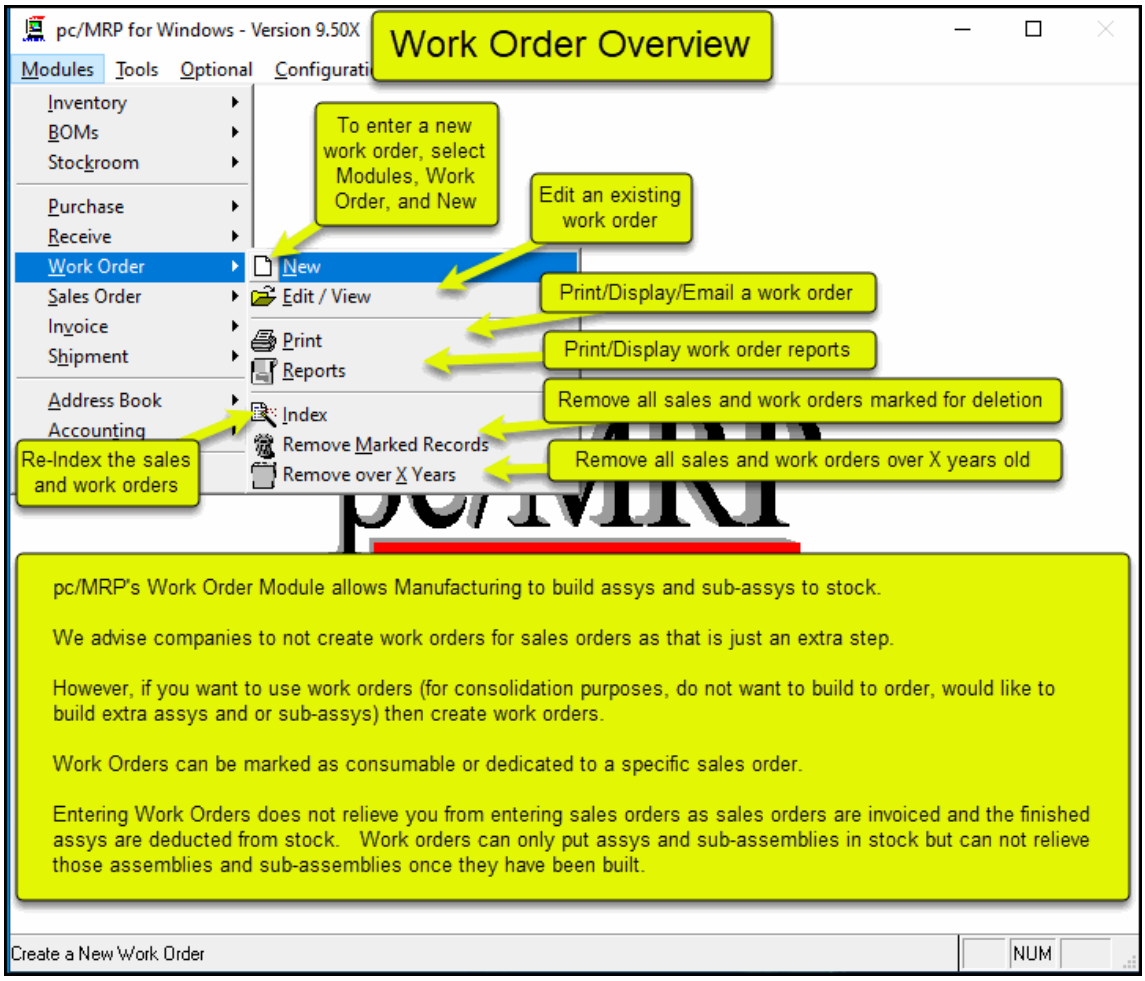

**12.13 Remove Marked Records (also see 15.14.4)**

Selecting Modules / BOMs / Remove Marked BOM Records to remove BOMs previously marked for deletion. It is important to set an **administrative lockout** before removing records.



# 13 Work Order Module

### 13.1 Overview




pc/MRP's Work Order Module allows Manufacturing to enter, edit, and print in house work orders to build to stock. There is no need to enter a WO for a Sales Order, unless you have a reason to. When you build a bicycle, the BOM is several levels deep, but still even if you gather all the parts and carry them in a box to the manufacturing floor, the guys will probably know what to do with them. If your final BOM is simple or obvious like this, then no need for extra paperwork; you can simply issue the SO to manufacturing, and yes, the system will figure out all steps, infinite levels deep.

Here are some possible reasons to use work orders:

1. The final BOM is too complicated, the workers would not know which part goes into which subassembly; even with the exploded BOM list in their hands it would be just too many parts in that pile of parts if all parts would be issued at once. Or, different groups are working on different subassemblies at the same time, and you don't want to give them all parts mixed. In this case enter work orders for some of the bigger subassemblies. You still don't need to enter WOs for every single subassembly. In this case enter the WOs with a due date earlier than the top assembly due date, and make sure that all WOs are marked as consumable. This is important for the IB-MRP. You will have to receive back each subassembly (R-type stockroom transaction) and then issue it to the higher level WO (or the SO itself). This is what we mean by extra paperwork.

2. You do not have a SO for this item, you are building for stock. In this case you would enter a WO for the top assembly. Again, you can enter WOs for some subassys, as described in (1).
3. You have a SO for 2 products but it is not worth it to drag out all the machines for to build just 2 top assemblies. You want to build 10, the rest of the 8 for stock. In this case enter a WO for 10. Again, consumable, with a due date earlier than the SO date.

4. You have a SO for 100 items, but the customer wants you to ship 10 every month. In this case it is probably better to enter the SO as 10 line items for 10 items each, with the due dates in 1 month increments for each item. (You could use the clone or breakdown buttons for this.) If the customer doesn't want that, then enter a SO for qty 100 due on the final date, and enter WOs for the partial quantities and due dates.

Sales Orders and Work Orders share the same database file. The Sales Order line items are numbered 0001, 0002, 0003, etc, up to 9999. Work Order line items are numbered 00WO, 01WO, 02WO, etc, up to 99WO. Work Orders are closed by issuing the work order (through the Stockroom Module) to manufacturing and receiving the finished assemblies back from manufacturing. Sales Orders are closed by entering invoices. **Note**: Versions **9.00** and below only allowed one line item per work order.

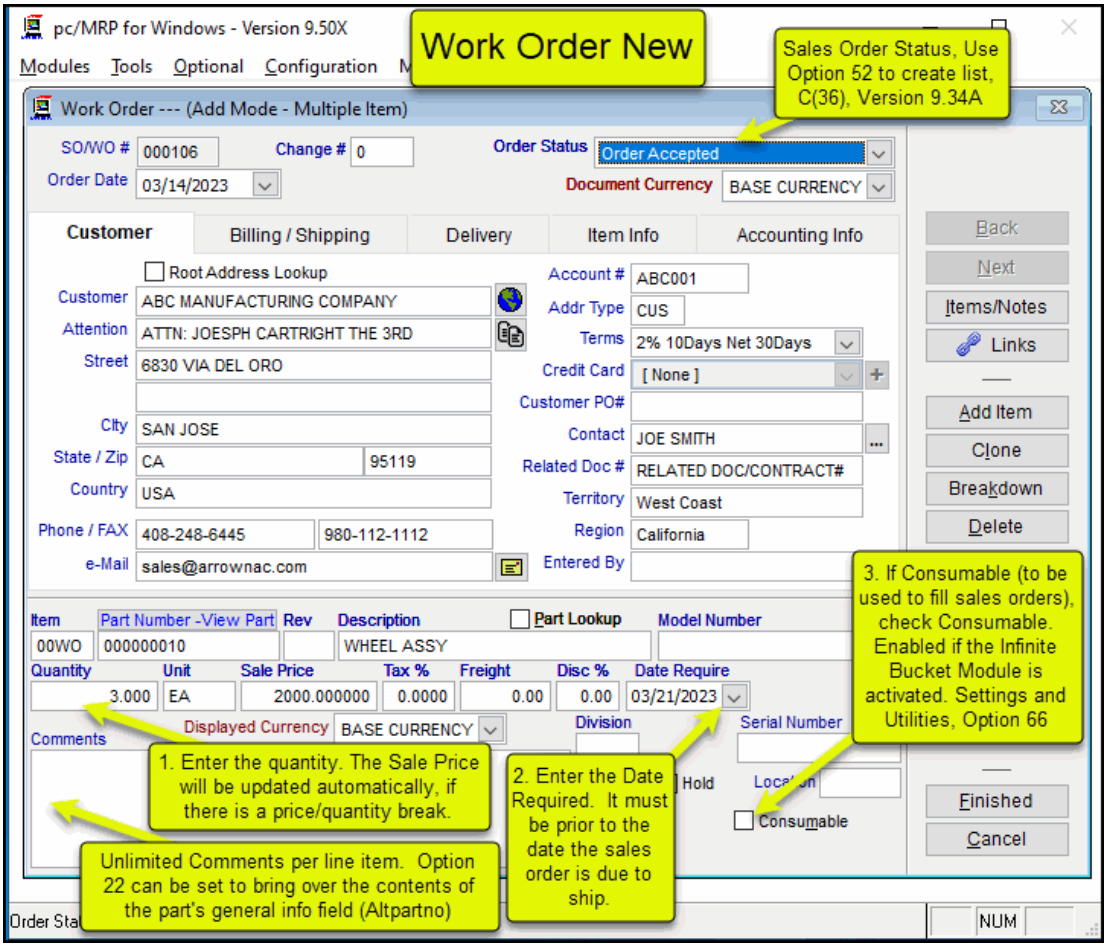
**Note:** If the flag file **SHORTRTN.FLG** exists in the PCMRPW folder, work orders returned from manufacturing short will prompt users to decide to

- leave the WO open and return only necessary WIP components (this is the default action w/o the flag file), or
- close the WO and return all WIP components.

If you use work orders when generating an MRP, include both sales and work orders to drive demand. pc/MRP's Infinite Bucket Module will use the work orders to fill sales orders. The sales orders will only generate sale action items. There will be no overbuilding. If the work orders do not cover the sales orders, you will see buy and issue action items for components driven by the sales order that is not filled by existing work orders letting you know that existing work orders do not cover all of your requirements.

If a customer orders **spare parts**, put those parts on a sales order, not a work order. Work Orders were designed to build sub-assys and assys, not to sell spare parts to a customer.

### 13.2 Enter a New Work Order




Select "**Work Order**", "**New**". The Work Order Data Entry Screen will appear. Entering a Work Order is very similar to entering a Sales Order, except:

- Entering a customer is optional. Leave it blank or enter your own company's name. Since a Work Order is an in-house build to stock, the Customer PO Number, Customer Contact, and Freight fields can be left blank. The part number must be a valid assembly number in Inventory, not a component part or "NA".

- Work Orders can be designated as being **consumable**. (This is only applicable if the Infinite Bucket Module has been activated.) Consumable work orders will be used to fulfill open Sales Orders and work orders whose date due exceed that of the consumable work order. See the chapter on the Infinite Bucket for more details. Also see **Option 66**.

- You can **Clone** a work order, but you cannot **Breakdown** a work order.

**Note:** When a work order is entered, pc/MRP increments the ondemand quantity for the completed assembly and not the parts in that assembly. The explosion is done later in a temporary scratch pad field whenever Purchasing runs an MRP Report. The MRP Report takes each assembly's on demand quantity and allocates finished on hand assemblies, subassemblies, and finally parts, to fill the demand. When it runs out of parts or goes below the minimum quantity level, it prints out that part number and the quantity to purchase.

The above method provides pc/MRP with the following advantages:

- The on-demand status of any assembly is available
- Line items can be quickly entered without waiting for an explosion
- You can build to stock, stocking finished-assemblies and sub-assemblies

### 13.3 Edit/View/Scroll/Delete/Undelete

All of the fields in a work order are editable, but users must understand several key concepts before editing WOs.

- If you were to edit the quantity on a work order, you must also edit the quantity on demand in inventory or run one of the Audit OnDemand features. The **Issued to MFG** and the **Qty Assembled** fields appear on the edit screen for work orders (under the Item Info tab). pc/MRP will automatically enter a "Y" when the assemblies are issued from stock to manufacturing. The Qty Assembled field is automatically updated when the assemblies are received by the stockroom from MFG.
- The **Complete** field is displayed only in the edit mode and is filled in automatically when *all* the items are received back from manufacturing. pc/MRP uses the Complete field to determine if a record is overdue, open, or closed. A "Y" in the Complete field marks the record as closed. An "N" in the Complete field marks the record as open.
- The **Change #** is used to note any changes in the order.
- Use the delete button to mark a record for deletion. As a second step you will need to Remove Marked Records, under an administrative lockout.
- If a WO has been issued to MFG but not fully received back, users should avoid editing the Quantity on the WO. When trying to edit the quantity, users will either receive a warning (and can choose to continue) or they will be blocked completely. This is set by Configuration **Option 53.**
- Use the **Delete** Button to mark a line item or the entire work order for deletion. Line items that have been issued to MFG but not fully received back, can not be marked for deletion. To permanently remote the records from the database table, set an administrative lockout, then select Sales, Remove Marked Records. **Note:** Versions **9.06A** and lower only allowed the user to delete line items one-by-one.

### 13.4 Multi-line Work Orders

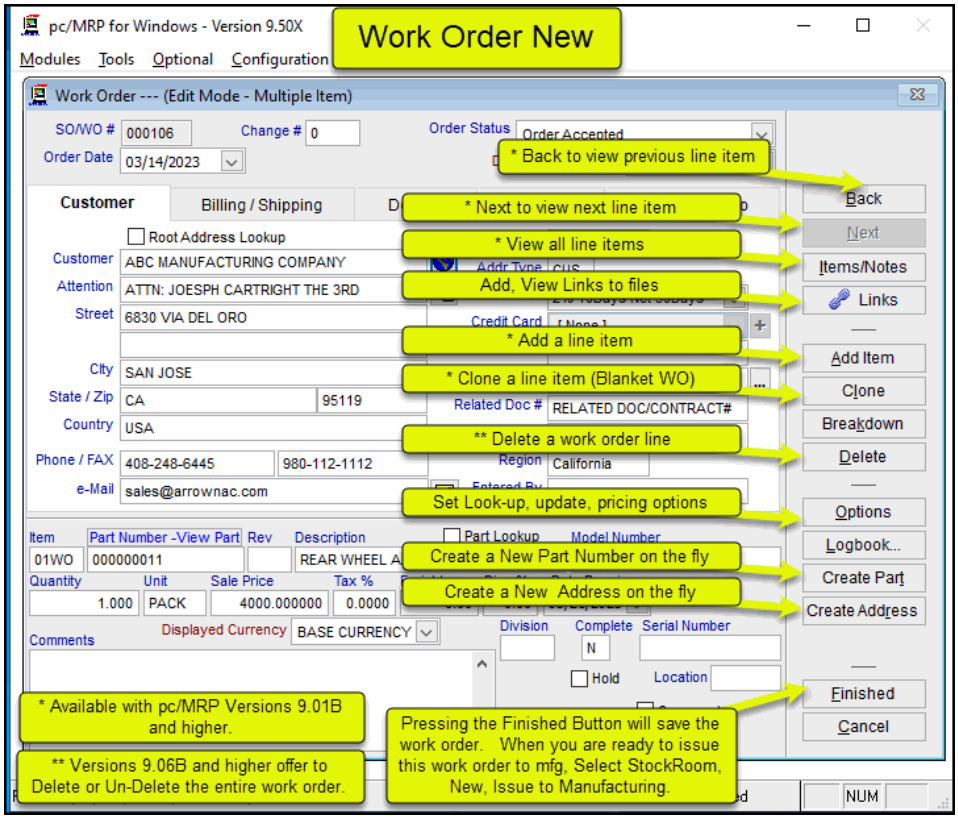
Works Orders can have up to 100 line items. Just like with Sales Orders, users can move to the next and to the previous line item, view all line items at once, or mark one or more line items for deletion. Users can also clone Work Orders, which can be a huge time saver if you need to create work orders for the same assembly for every week of the year. **Note:** Versions **9.00** and lower only offered one line item per Work Order.

### 13.5 Consumable Work Orders

If you are going to use work orders, we recommend marking work orders as consumable and not dedicated. If a customer changes his sales order, all of the dedicated work orders (of this sales order) must be changed to match. If the work order is consumable, pc/MRP will simply use the consumable work order to fill other sales orders.

If you are going to enter consumable work orders for a sales order, make sure the date required on the consumable work order is due *before* the date required on the first sales order this work order is to fill. Otherwise, pc/MRP will have you build both the sales order and work order, as the work order will not be finished in time for the sales order to use.

**Note**: The Consumable checkbox will only be available on the Work Order screen, if the Infinite Bucket MRP module has been activated. **Option 66** can set Work Orders to default to Consumable.




### 13.6 Dedicated Work Orders

To create a parent sales or work order, check its (the parent's) Require Dedicated Work Orders check box (Item Info tab). To create dedicated work orders, you must enter the sales/work order number and item number it is dedicated to (Item Info tab). See the screens on the next page.

### 13.6.1 Dedicated Work Order Rules

A top dedicated sales or work order cannot have a duplicate twin work order for the same assembly(s) reporting to it. The Infinite Bucket Module will not use the twin work order and insert an error message into the MRP Error Log asking you to delete the twin work order and re-generate the MRP. All work orders dedicated to a top parent work order must be sub-work orders, as shown in the figure above.

All sub-work orders regardless of level must be dedicated to the top parent sales or work order.

If you do not have a dedicated WO to the WO/SO requiring dedicated WOs, an error message is generated telling you that it created a MAKE action item referencing the WO/SO and you will have to create the dedicated WO yourself and re-run the MRP. "Error, no WO exists for SO xxxxxx, created an undedicated WO referencing the WO/SO."

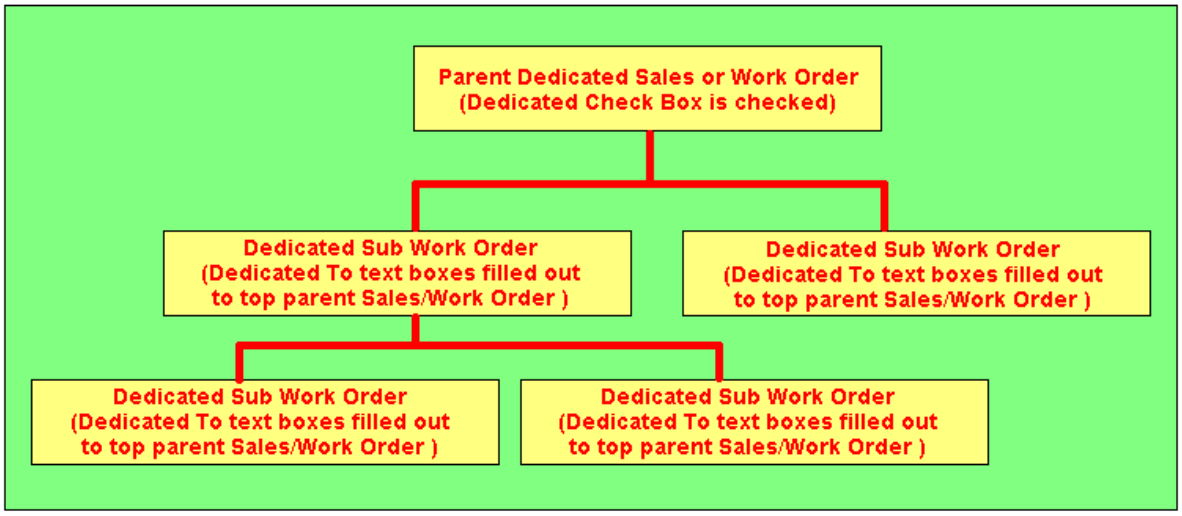
Once a sales or work order has been issued to manufacturing, you cannot change its dedication information.

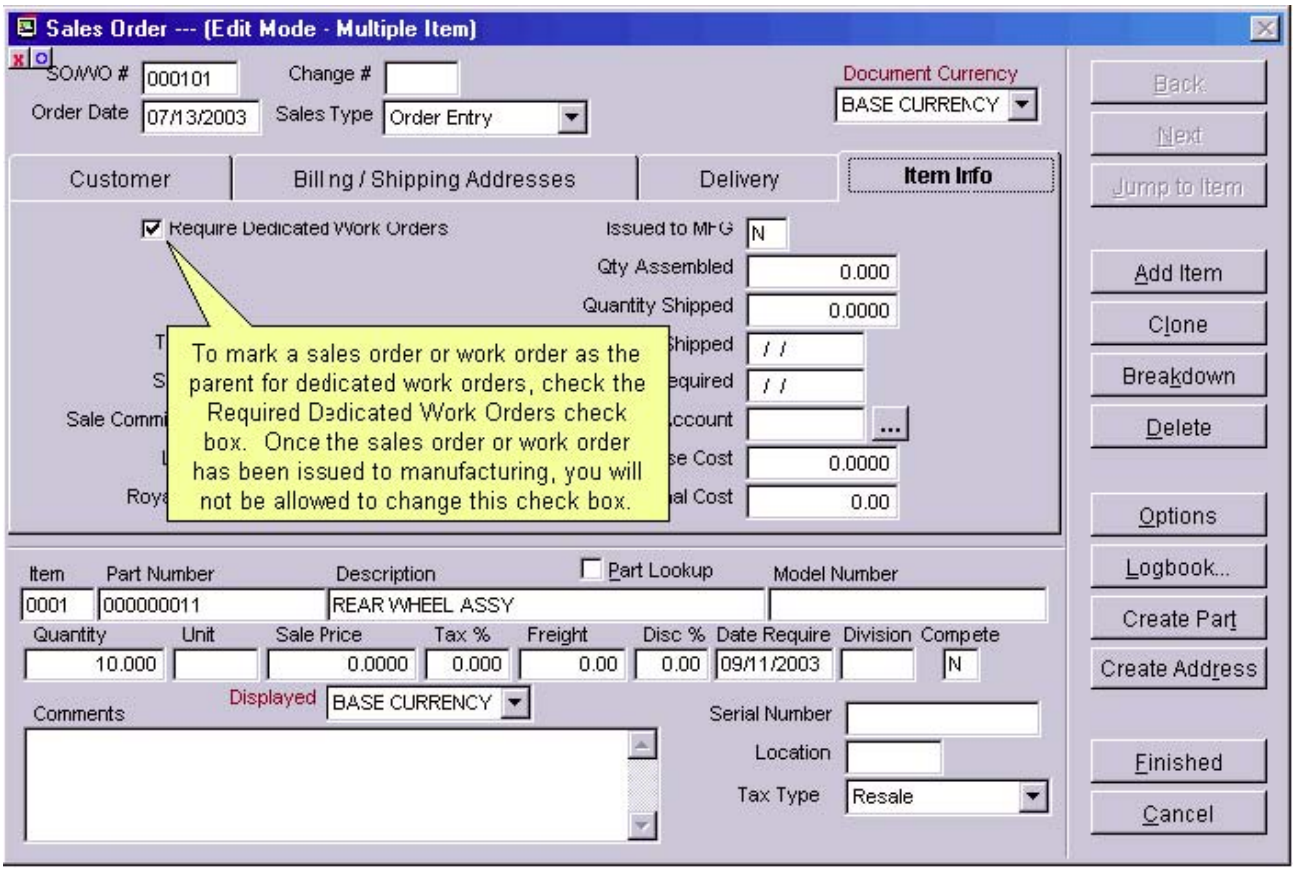
Dedicated sub-work orders for the lowest level assemblies must be issued first and received back from manufacturing before the next level up sub work orders can be issued to manufacturing. Failure to do so could cause pc/MRP's Infinite Bucket Program to generate error messages notifying you it created un-attached make action items. You would have to un-issue the work order and re-generate the MRP to correct the situation.

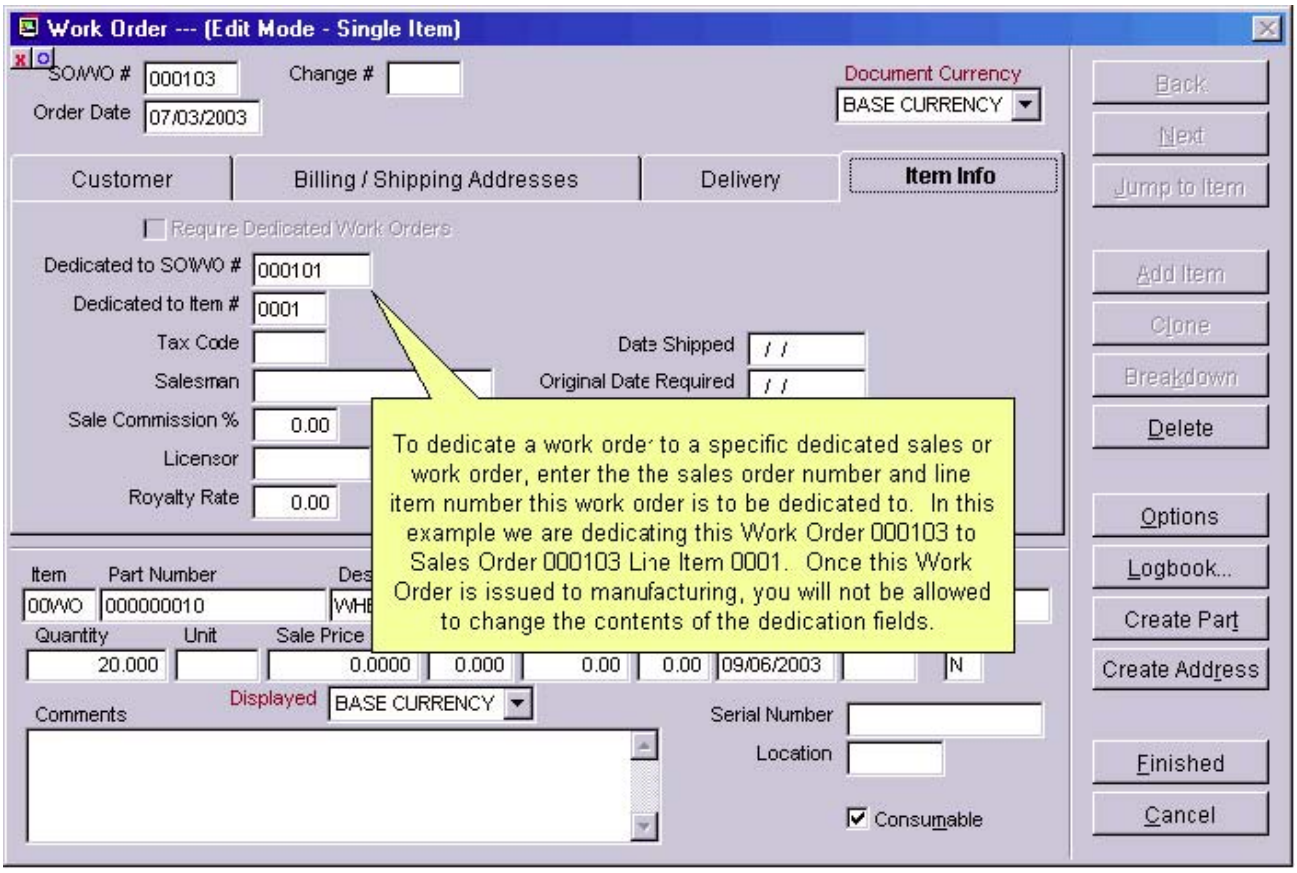
The dedicated sub work orders must have a date-required field that is prior to the date-required field on its parent sub-work order. If not, pc/MRP will insert an error message into the 'MRP Error Message Log' and the 'Make Push Pull Report', warning you that the date-required should be changed. pc/MRP will generate the MRP based on its recommended date, hoping that you will change the work order's date required and issue it on the date listed on the action item report.

You cannot have a dedicated Work Order for the same assembly as the Sales or Work Order to which it is dedicated.

All dedicated sub-work orders are consumable but will only be used by the top parent work order or another work order dedicated to the same top parent work order.






**13.6.2 How pc/MRP's Infinite Bucket Module processes dedicated work orders**

When generating an MRP, pc/MRP will first check that the date required on all dedicated sub-work orders are correct. If the date(s) required are not correct, it will add an error message to the MRP Error log and the Make Push Pull Report warning you to change the date(s) required. It will then use the correct date(s) required and generate an MRP.

When allocating sub-assemblies to a dedicated sales or work order, pc/MRP will first allocate from the on hand quantity of the sub-assembly. If more are required, it will allocate from sub-work orders dedicated to the same top work order or from non-dedicated consumable work order (based on which work order has the earliest date due). Finally, if it cannot allocate a sufficient quantity, it will insert an error message into the MRP Error Log warning you it created an unattached make for that assembly.

When generating an MRP with pc/MRP' Infinite Bucket Module and a sales order requiring dedicated work orders comes to a sub-assy that has an standard order qty or order multiple and there is only a partial qty of the sub-assy in stock, pc/MRP will handle it follows:

- The MRP generation will display an error message warning you that an undedicated make action item was created for the exact qty required - the qty available. It will ignore the fact that the sub-assy has a standard order qty or order multiple.

- The user should then create a dedicated work order manually or by automatically by selecting Optional, Infinite Bucket, Automatically create work orders, Per order requirement, Lower level sub-assys only.

- You should then regenerate your MRP so that the dedicated work order is included on your new schedule instead of the undedicated make action item.

**13.6.3 How pc/MRP's Infinite Bucket Module processes un-dedicated work orders**

pc/MRP's Infinite Bucket Module was originally designed such that users could simply enter sales orders, generate an MRP, and when ready, issue the top-level sales order and all of its assemblies to a staging box or area. If there were shortages,

pc/MRP's Stockroom module and MRP program would prompt you to order the missing parts and issue them when they arrived. Work orders did not need to be created for sub-assemblies. Work Orders for Sub-assemblies did not need to be issued on set dates and received back on set dates so the next level up work orders could be issued. When running the Infinite Bucket Module, pc/MRP simply looked at the current situation and modified its Make Action Items to get the job done. If parts or sub-assemblies were used for another job it simply created new make or buy action items to fill the sales orders. Work orders were used primarily to build runs of common sub-assemblies and could be used for any sales order.

**13.6.4 Additional error trapping code added to pc/MRP's Issue to Mfg function**

pc/MRP's Stockroom Module's I and L 'Issue To Manufacturing' functions will throw an error message and not allow the issue for the following conditions if you are issuing a dedicated sub-work order:

- If the top parent order does not exist
- If the top parent work order does not require dedicated work orders
- If the top parent work order is for the same part/assembly number

In addition, when issuing a dedicated sub-work order, pc/MRP's Issue to Manufacturing function will only allow the user to select the Issue Sub-assemblies Only option.

**13.7. Tracking Work Orders without Using Dedicated Work Orders**

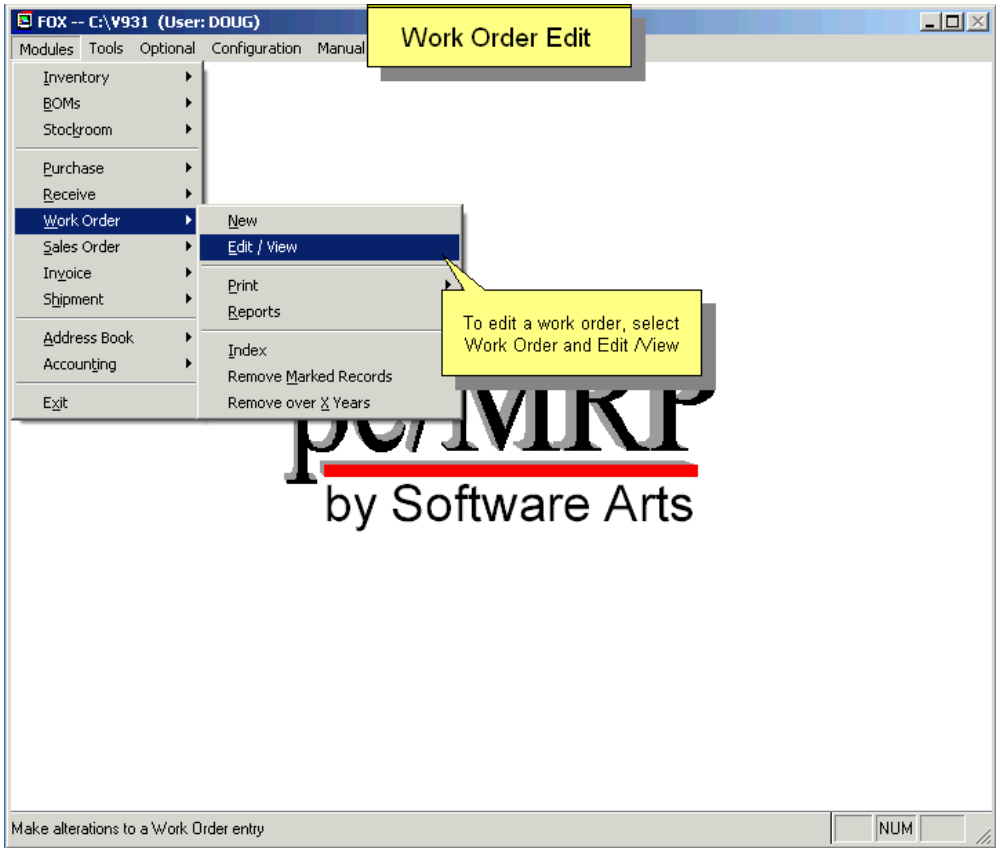
Companies that wish to track each work order that was created for a top assembly sales order or work order, but want to avoid using dedicated work orders, might find the following method useful.

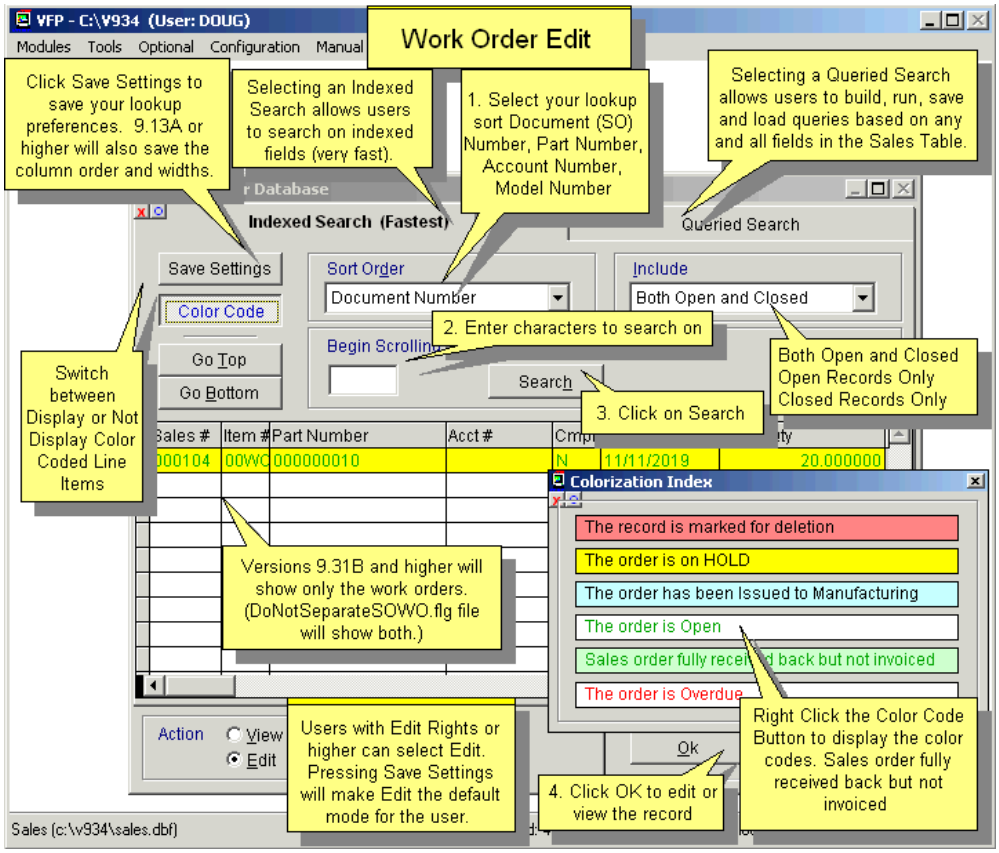
Let's assume we have a sales order 000101 0001 for a bicycle. pc/MRP does not require the user to enter a work order for each subassembly, but under some circumstances users might want to do so. Let's enter work order 000201 for 2 wheels. Use the related document number field to tie the SO and each of the subsequent WOs together; type the same top assembly sales order document number (000101 0001) into the related document number field of SO# 000101 0001, and also into the related document number field of WO# 000201 and any other WOs that are entered to build subassys for the SO.

In this example we always want the bicycle to be built from subassemblies and first level parts, i.e. we do not want wheel-parts (rims, spokes) be issued to SO 000101, but to WO 000201. If there is no finished wheel in stock, we want the SO to carry a shortage for the wheels, not for the parts of it. For this reason when issuing the SO to manufacturing we check "Subassemblies only". (It is even better to check the SO as "Parts and Subassys only", because then at the time of entering the I type stockroom transaction, only the "Subassys only" option will be available. Yet even better is to check the bicycle itself as "Parts and Subassys only", because then the SO will automatically be created as "Parts and Subassys only".)

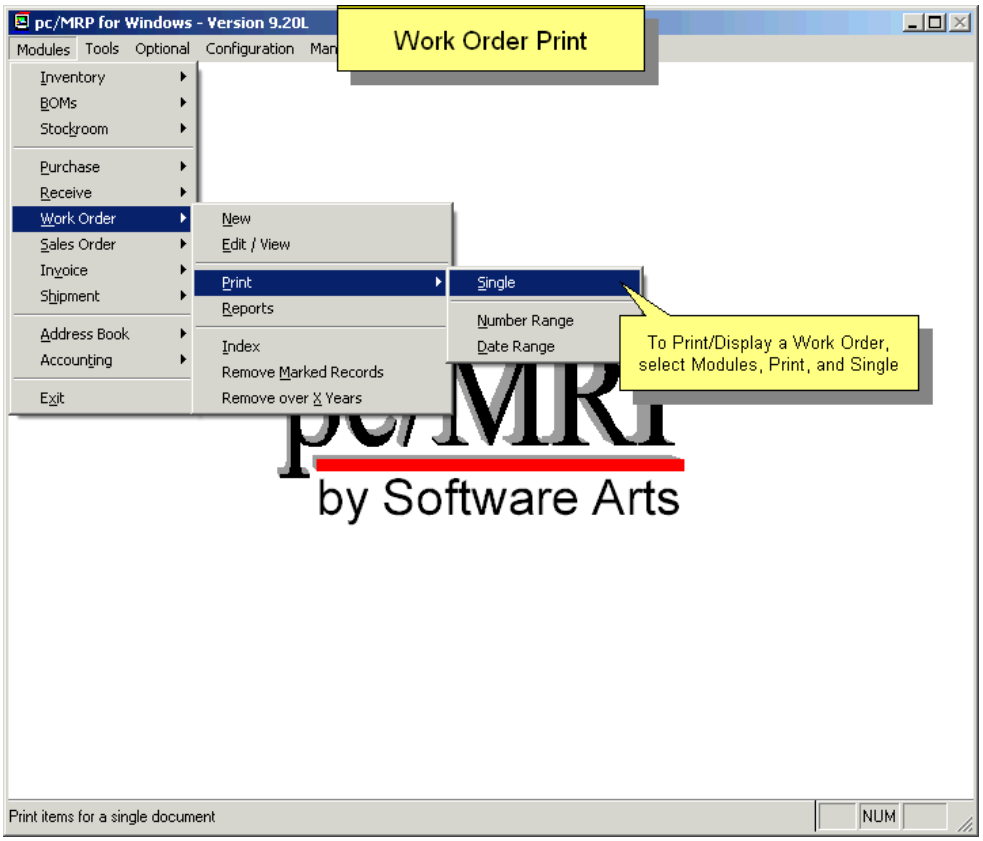
When we run a stock transaction report, all for the related document number 000101 0001, we will see all stockroom transactions associated with building this bicycle; i.e. all transactions for the top SO, and also for the WOs related to it.

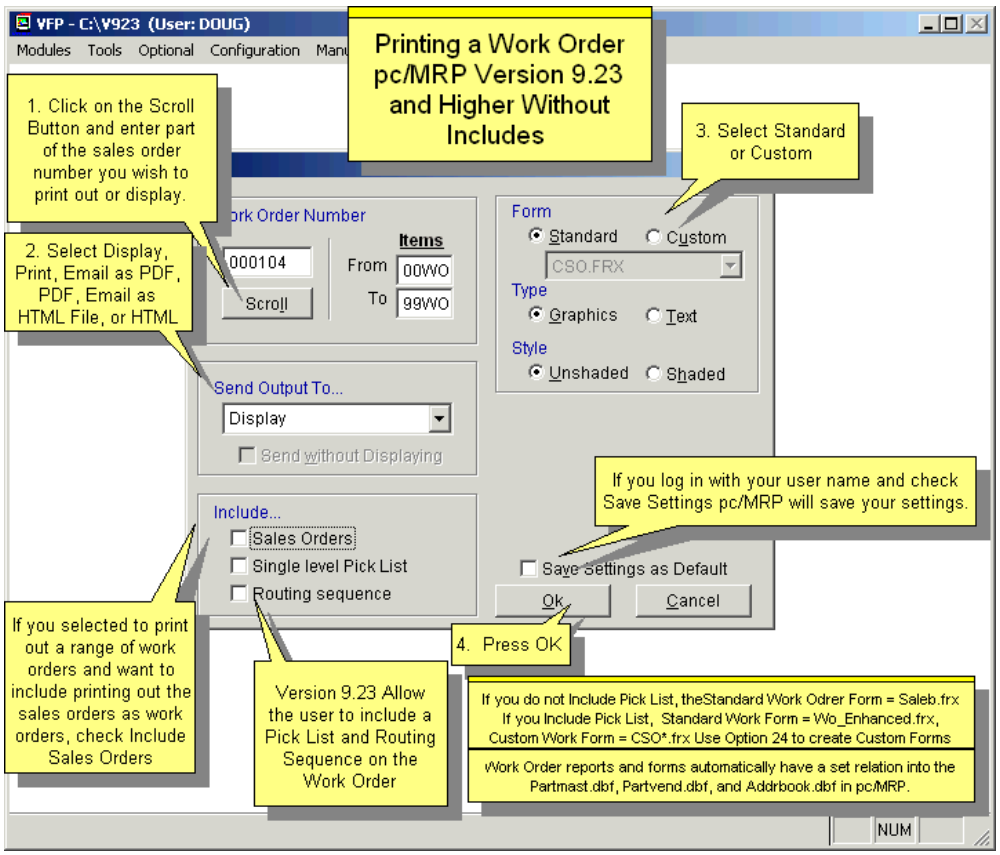
## 13.8 Edit a Work Order

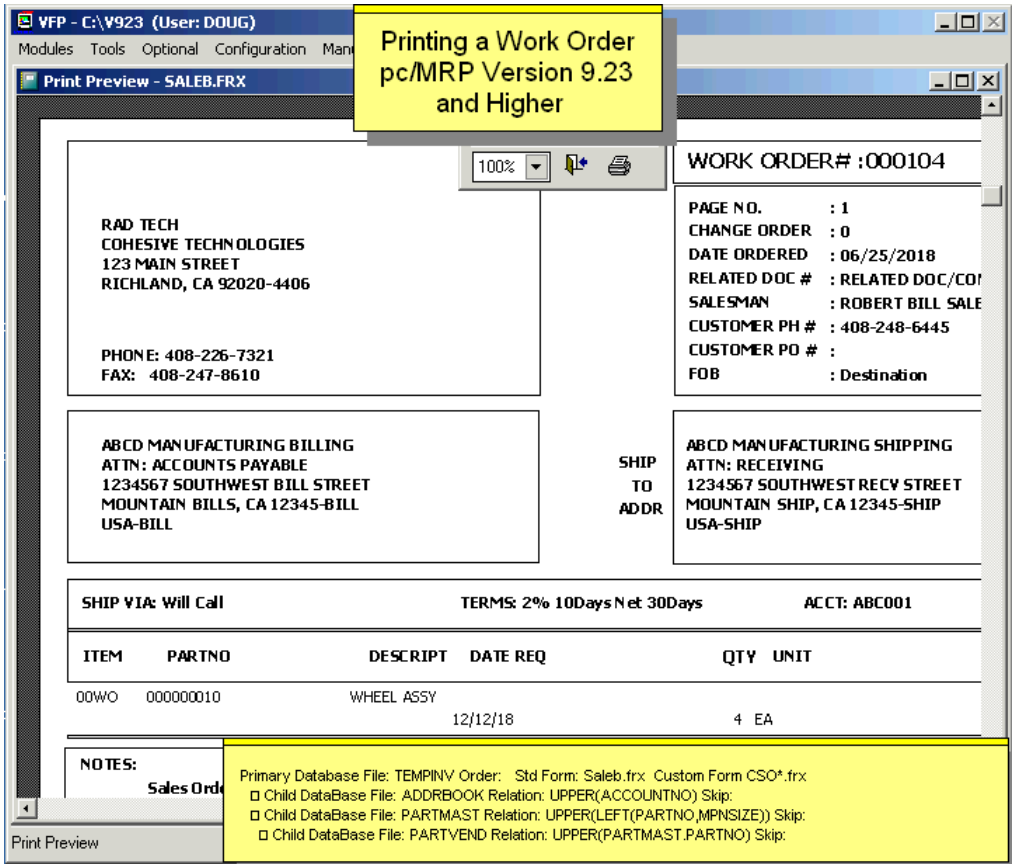


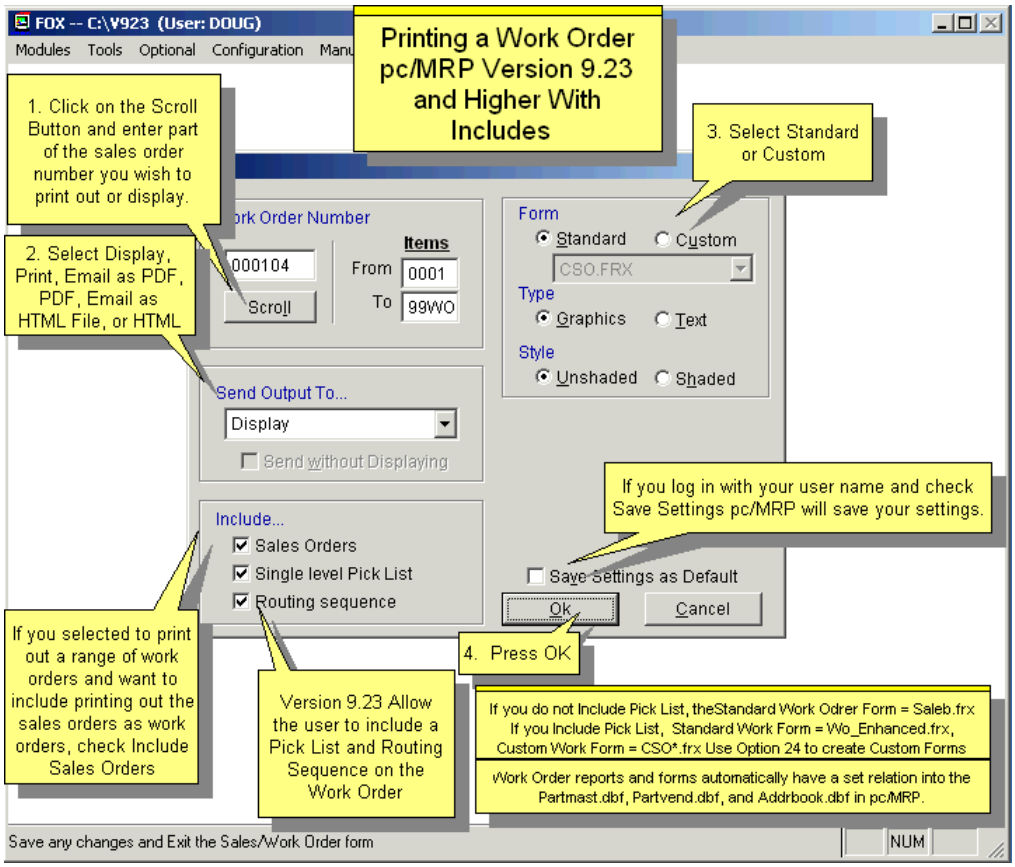



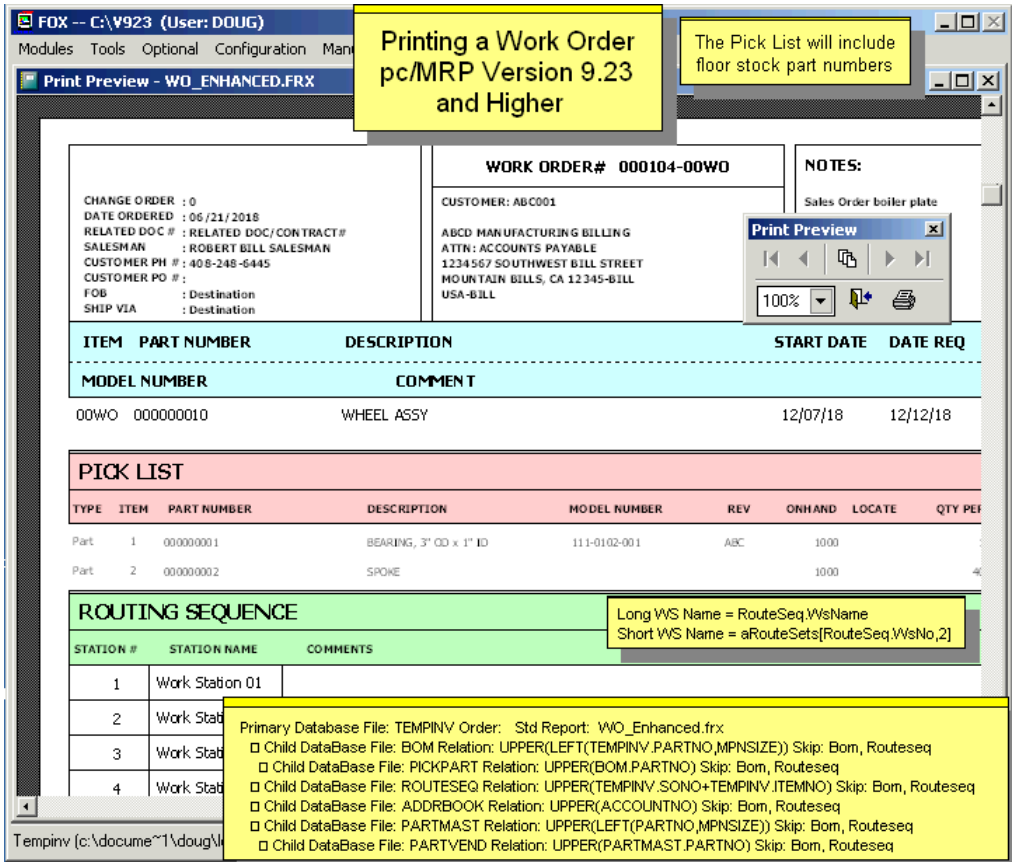
**13.9 Print Display a Work Order**




Printing a Work Order pc/MRP Version 9.23 and Higher
VFP - C:\V923 (User: DOUG)
Modules Tools Optional Configuration
Print Preview - SALEB.FRX
100%
WORK ORDER# :000104
RAD TECH
COHESIVE TECHNOLOGIES
123 MAIN STREET
RICHLAND, CA 92020-4406
PHONE: 408-226-7321
FAX: 408-247-8610
PAGE NO. : 1
CHANGE ORDER : 0
DATE ORDERED : 06/25/2018
RELATED DOC # : RELATED DOC/CO
SALESMAN : ROBERT BILL SALE
CUSTOMER PH # : 408-248-6445
CUSTOMER PO # :
FOB : Destination
ABCD MANUFACTURING BILLING
ATTN: ACCOUNTS PAYABLE
1234567 SOUTHWEST BILL STREET
MOUNTAIN BILLS, CA 12345-BILL
USA-BILL
SHIP TO ADDR
ABCD MANUFACTURING SHIPPING
ATTN: RECEIVING
1234567 SOUTHWEST RECV STREET
MOUNTAIN SHIP, CA 12345-SHIP
USA-SHIP
SHIP VIA: Will Call
TERMS: 2% 10Days Net 30Days
ACCT: ABC001
ITEM PARTNO DESCRIPT DATE REQ QTY UNIT
00WO 000000010 WHEEL ASSY 12/12/18 4 EA
NOTES:
Sales Ord
Primary Database File: TEMPINV Order: Std Form: Saleb.frx Custom Form CSO*.frx
Child DataBase File: ADDRBOOK Relation: UPPER(ACCOUNTNO) Skip:
Child DataBase File: PARTMAST Relation: UPPER(LEFT(PARTNO,MPNSIZE)) Skip:
Child DataBase File: PARTVEND Relation: UPPER(PARTMAST.PARTNO) Skip:
Print Preview


Printing a Work Order pc/MRP Version 9.23 and Higher With Includes
FOX -- C:\V923 (User: DOUG)
Modules Tools Optional Configuration
1. Click on the Scroll Button and enter part of the sales order number you wish to print out or display.
2. Select Display, Print, Email as PDF, PDF, Email as HTML File, or HTML
3. Select Standard or Custom
ork Order Number
000104
Scroll
Items
From 0001
To 99WO
Form
Standard
Custom
CSO.FRX
Type
Graphics
Text
Style
Unshaded
Shaded
Send Output To...
Display
Send without Displaying
Include...
Sales Orders
Single level Pick List
Routing sequence
If you log in with your user name and check Save Settings pc/MRP will save your settings.
Save Settings as Default
Ok
Cancel
4. Press OK
If you selected to print out a range of work orders and want to include printing out the sales orders as work orders, check Include Sales Orders
Version 9.23 Allow the user to include a Pick List and Routing Sequence on the Work Order
If you do not Include Pick List, theStandard Work Odrer Form = Saleb.frx
If you Include Pick List, Standard Work Form = Wo_Enhanced.frx,
Custom Work Form = CSO*.frx Use Option 24 to create Custom Forms
Work Order reports and forms automatically have a set relation into the Partmast.dbf, Partvend.dbf, and Addrbook.dbf in pc/MRP.
Save any changes and Exit the Sales/Work Order form
NUM




The small temporary table that holds the routing sequence data does NOT have a field for the short name. We never considered that the short name would repurposed to hold a value other than an abbreviated version of the long name. Since the long name appears on the WO form, we assumed the short name wouldn't be needed.

Fortunately, the short name for a routing station can easily be retrieved via an array reference while the WO form is being printed. The field expression within the "RouteSeq" band of the WO form would be: **ARouteSets[RouteSeq.WsNo, 2]**

Long WS Name = RouteSeq.WsName
Long WS Name = aRouteSets[RouteSeq.WsNo,1]
Short WS Name = aRouteSets[RouteSeq.WsNo,2]

**13.10 Queried Search Overview (see 15.14.1)**

**13.11 Indexed Searches (see 15.14.2)**

**13.12 Index (see 15.14.3)**

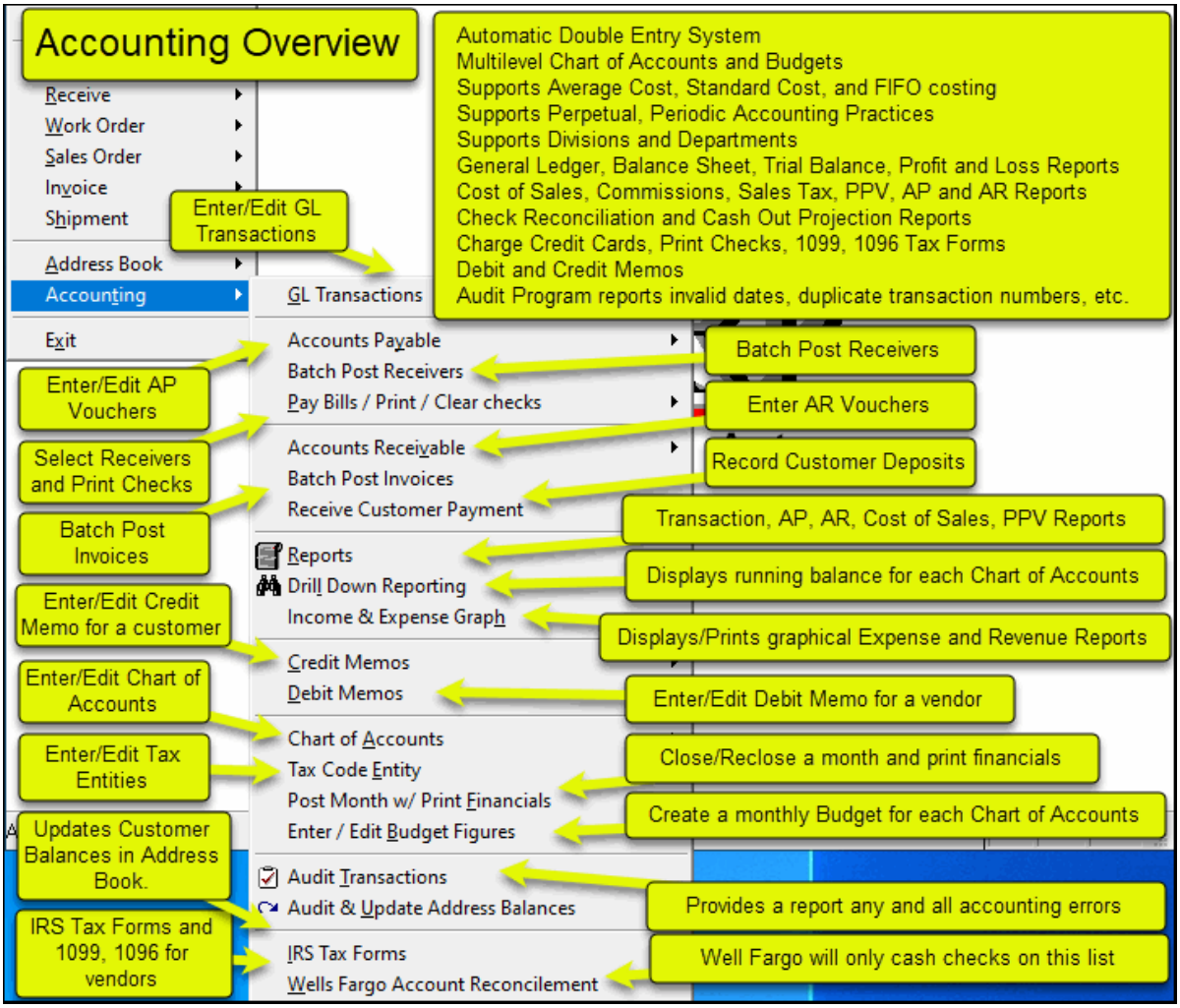
**13.13 Remove Marked Records (see 15.14.4)**

**13.14 Remove Over X Years (see 15.14.5)**

**Note:** Sales orders and Work orders share the same database table. When users instruct pc/MRP to remove all Work orders older than X years, pc/MRP will also remove all Sales orders that are older than X years. If you want to keep all Sales orders and only want to delete old Work orders, call Software Arts for assistance.

# 14.1 Accounting Overview

### 14.1.1 Accounting Overview




pc/MRP's Accounting package is an easy to use **Double Entry System**. pc/MRP's Accounting Package includes a General Ledger, Accounts Payable, Accounts Receivable, and an integrated Check Writing Module. pc/MRP's Reporting Module will provide State Sales Tax Reports, Sales Commission Reports, and Cost of Sales Reports. The Audit option checks every accounting transaction for errors, such as invalid dates, duplicate transaction numbers, etc.

The ChartAcc dbf file contains a record for each chart of account. Each record (chart of acct) contains the beginning and ending balance for that chart of account for each month of the current year.

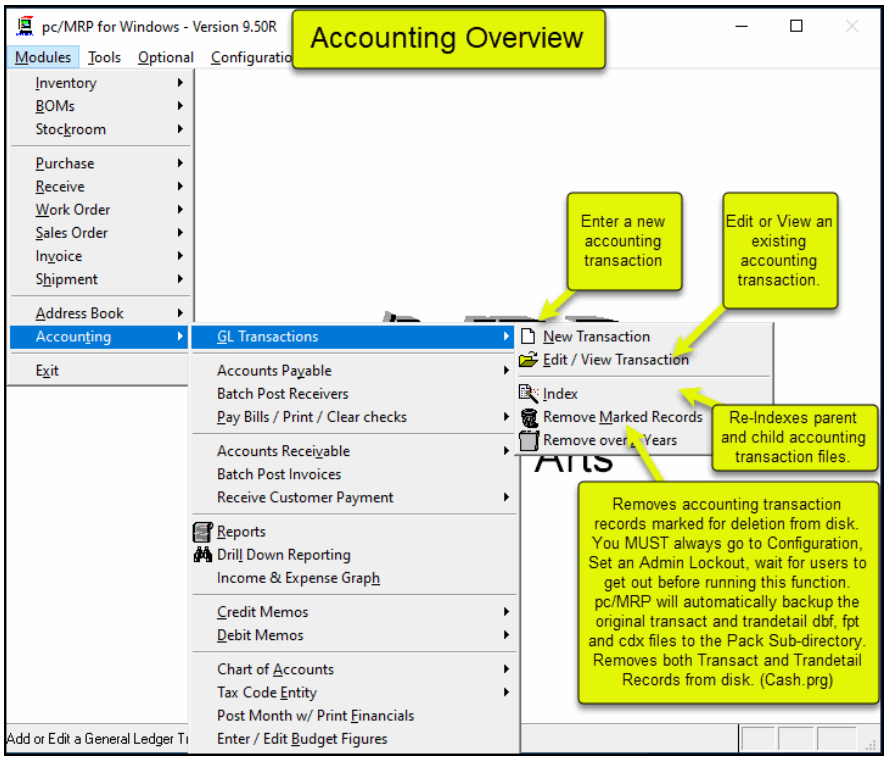
The Transact dbf file contains a record of each accounting transaction entered into pc/MRP. Each record (transaction) contains a transaction date and the chart of accounts that were debited and credited along with their respective amounts.

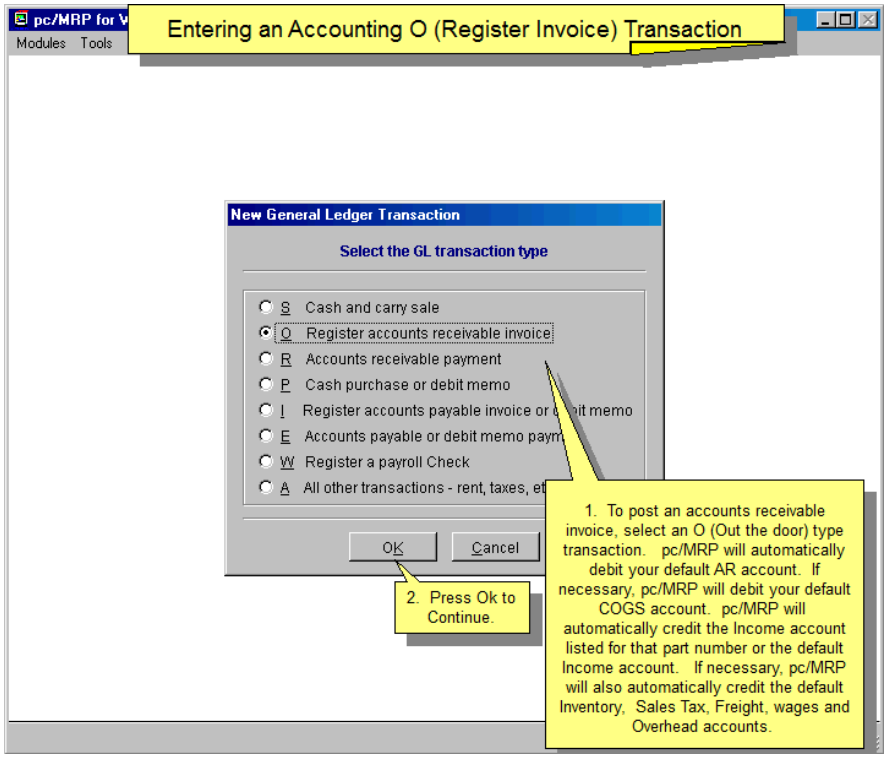
When you close (post) a month, pc/MRP prompts for which month, gets all of the transactions for that month, uses them to debit and credit against those accounts, and places the result in the ending balance for each chart of account for that month. It then prints out the financial statements for that month based on those ending balances. This simple method allows you to close and re-close months up to twelve months back.

pc/MRP generates a **CLOSEINPROGRESS.FLG** when a close is started. This flag will clear itself when the close process has completed or after 1 hour if a computer failure has occurred. The person who initiated the close can log back in immediately and not wait the hour.

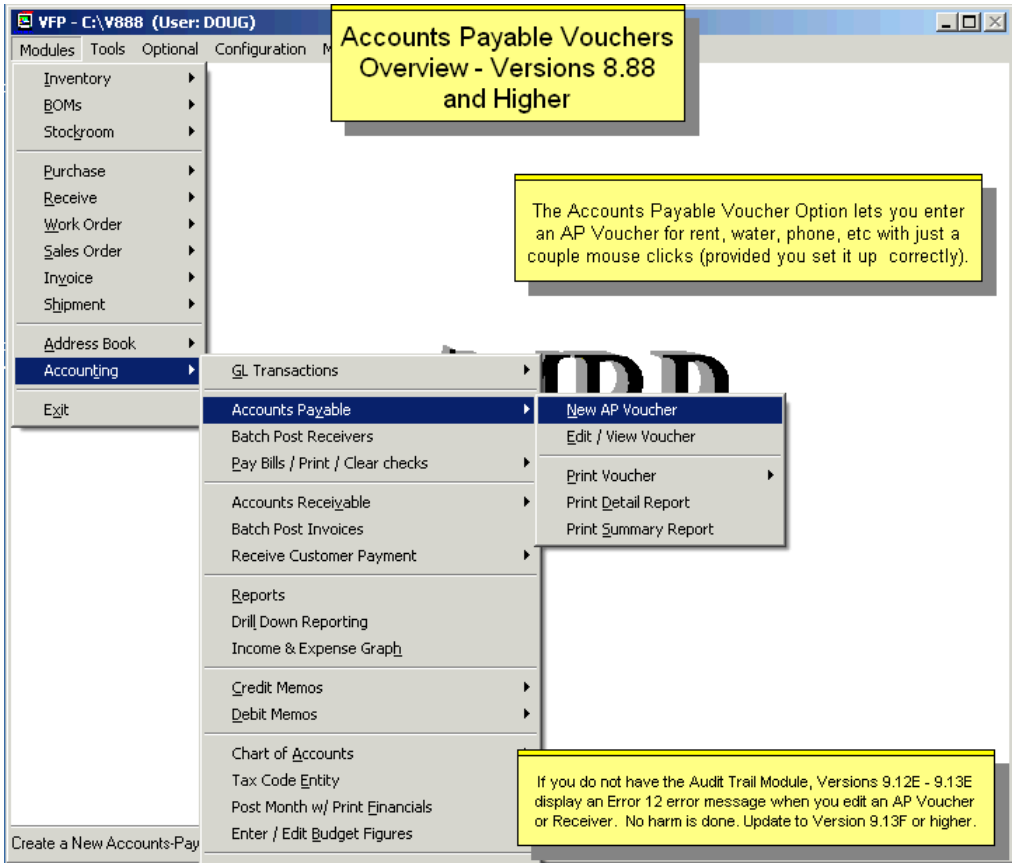
### 14.1.2 General Ledger Transactions

The General Ledger Module allows you to enter accounting transactions in the general ledger. Once the transactions have been entered, you can edit, scroll or print the transactions. You can also print out checks for those transactions either singularly or by batch. For additional details, see 14.4.1.



### 14.1.3 Accounts Payable




The Accounts Payable Module allows you to enter, edit and print out accounts payable vouchers and reports. Since pc/MRP uses receivers as account payable vouchers it is not necessary to use this module for items that are received by receiving. Items that are not received, such as rent, can be entered as an accounts payable voucher. The accounts payable voucher will be assigned the next available receiver number and actually become a receiver record with a "00AP" line item number. If auto accounting is on (in the configuration menu), entering a receiver or accounts payable voucher will automatically make an entry into the general ledger, debiting purchases and crediting accounts payable.

For items received with the receiving module, (Software Arts recommends leaving auto accounting off, selecting manual entry), the accountant would not enter an accounts payable voucher but would enter a general ledger transaction into the general ledger (Accounting, GL Transactions, New). The accountant would select an "**I**" type transaction. Entering an "I" type transaction for that receiver will debit the purchasing account and credit the accounts payable account.

The accountant would enter an "**E**" type transaction into the general ledger when the items on the receiver are paid for. Entering an "E" type transaction for that receiver will debit the accounts payable account and credit the checking account. The receiving record stores the amount due for each line item and the amount paid for each line item. If the amount paid equals or exceeds the amount due, pc/MRP marks the record as complete by placing a "Y" in the receiver record's 'Complete' field. For further details, see the Accounts Payable Chapter, 14.8.1.

### 14.1.4 Accounts Receivable/Billing

The Accounts Receivable Module allows you to enter, edit and print out accounts receivable vouchers and reports. Since pc/MRP uses invoices as account receivable vouchers it is not necessary to use this module for items that are invoiced. Items that are not invoiced can be entered as an accounts receivable voucher. The accounts receivable voucher will be assigned the next available invoice number and actually become an invoice record with a "00AR" line item number.

If auto accounting is on (Configuration, Settings and Utilities), entering an invoice or accounts receivable voucher will automatically make an entry into the general ledger, debiting purchases and crediting accounts receivable.

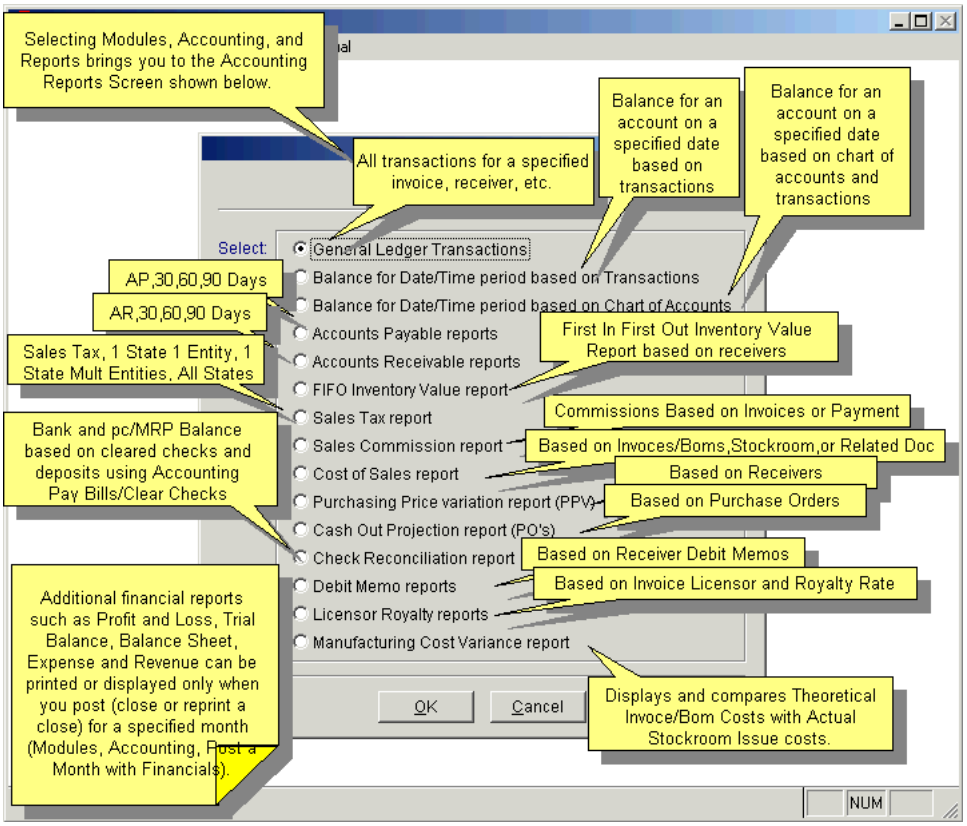
For items that were invoiced with the invoice module, (Software Arts recommends leaving auto accounting off, selecting manual entry), the accountant would not enter the accounts receivable module but would enter a general ledger transaction into the general ledger (Accounting, GL Transactions, New). The accountant would select an "O" type transaction. Entering an "**O**" type transaction for that invoice will debit the accounts receivable account and credit the business income account. (See Section: 14.4.1.2.)

The accountant would enter an "**R**" type transaction into the general ledger when the items on the invoice are paid for. Entering an "R" type transaction for that invoice will debit the checking account, and credit the accounts receivable account. The invoice record stores the amount due for each line item and the amount paid for each line item. If the amount paid equals or exceeds the amount due, pc/MRP marks the record as complete by placing a "Y" in the invoice record's 'Complete' field.

This module will also print out Billing Statements for every customer that has an open invoice in the invoice file. For further details, see the Accounts Receivable Module, Chapter 14.9.1.

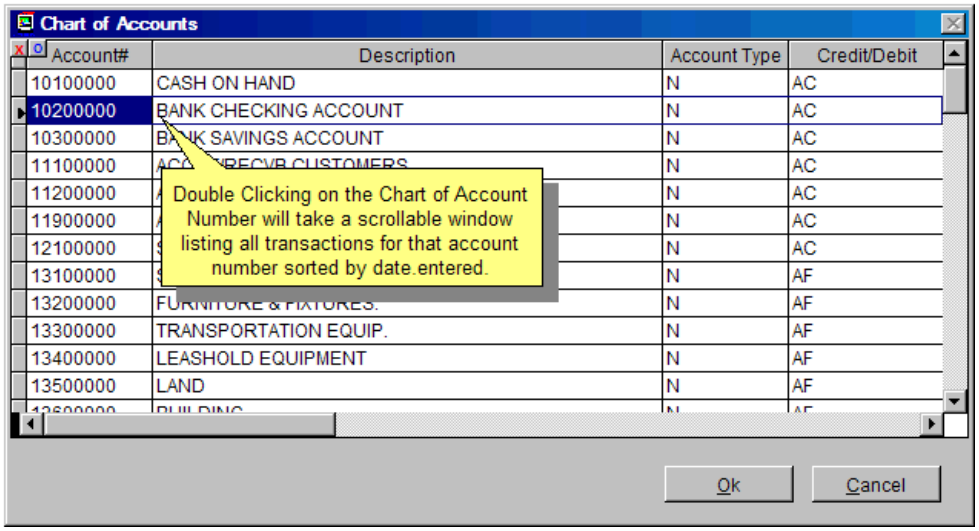
### 14.1.5 Reports

The Accounting Report Module provides a multitude of accounting reports. See Section 14.7.1 in this Manual for a full list of reports and options.

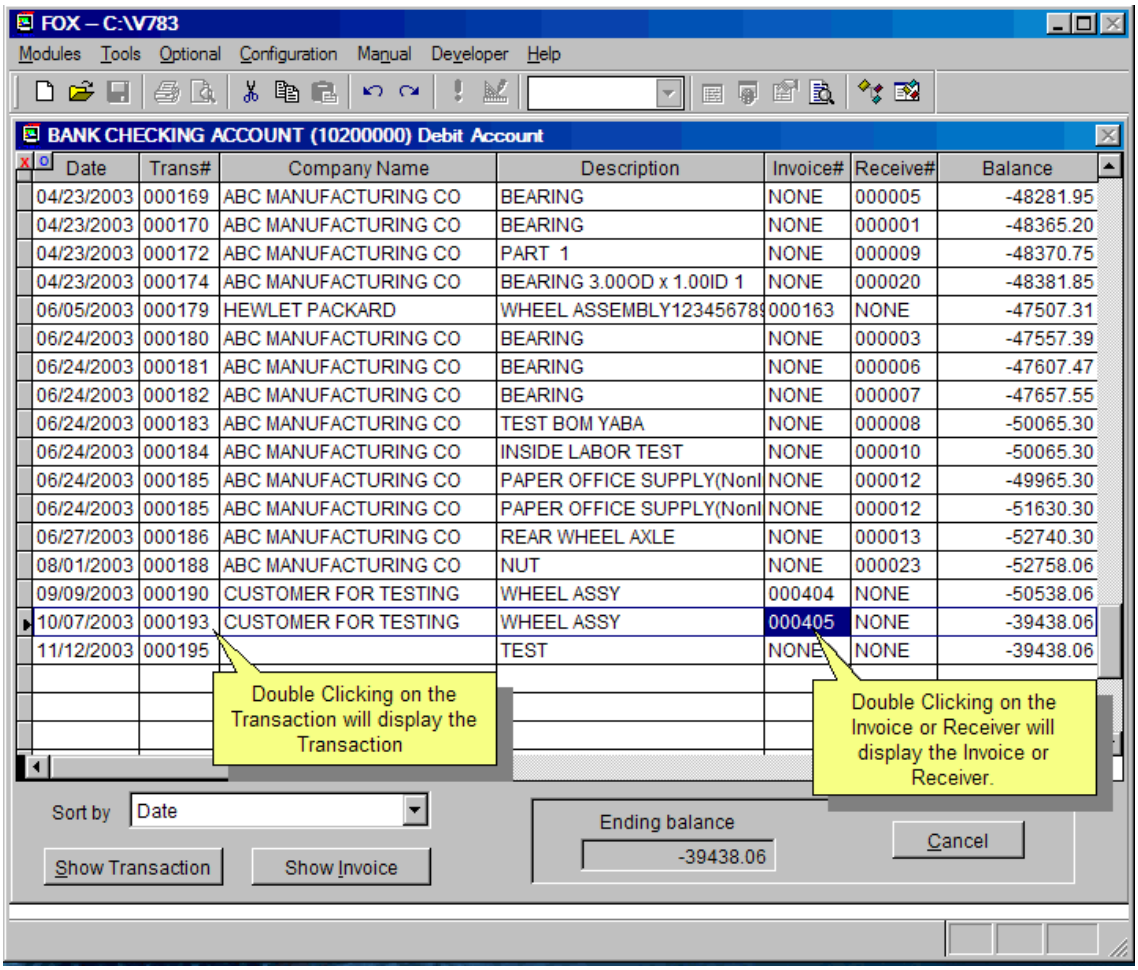


### 14.1.6 Drill-Down Reporting

This module will allow you to select a chart of accounts number as shown below.



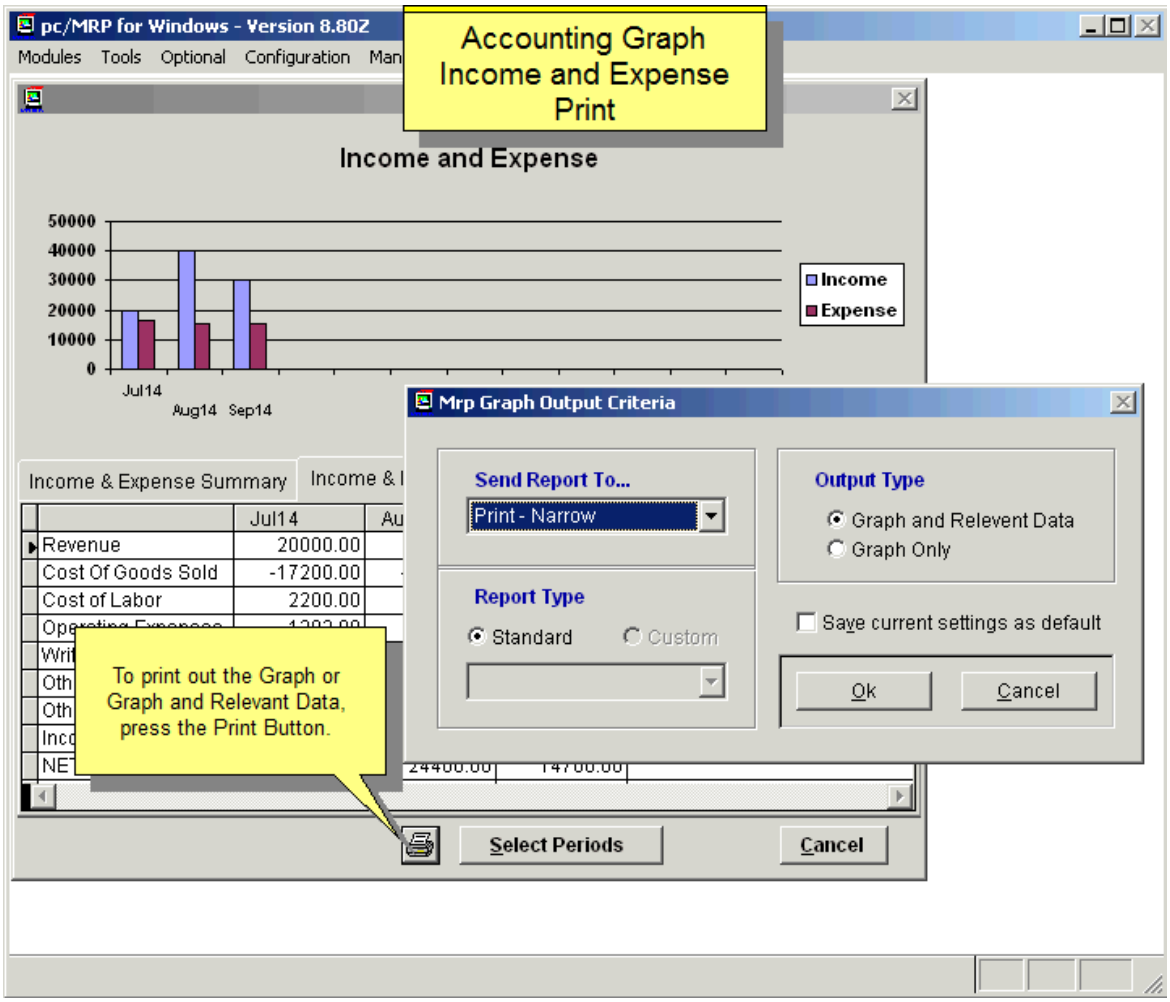

Clicking on a Chart of Accounts Number will display a scrollable window listing all transactions for that account number sorted by date entered as shown below.




Clicking on a transaction number will display the complete transaction. Clicking on the invoice or receiver number will display the complete invoice or receiver.

### 14.1.7 Income and Expense Graphs

This module will allow you to display/print Income and Expense Graphs as shown below:




### 14.1.8 Print/Clear Checks

This module will allow you to print, reprint, clear and unclear checks and to print a remittance report. For further details, see Printing Check, Chapter 14.14.1.

### 14.1.9 Credit Memo Module

The Credit Module allows you to issue a credit to a customer to cover returned goods, pricing errors, freight, etc. (see 14.10)

### 14.1.10 Debit Memo Module

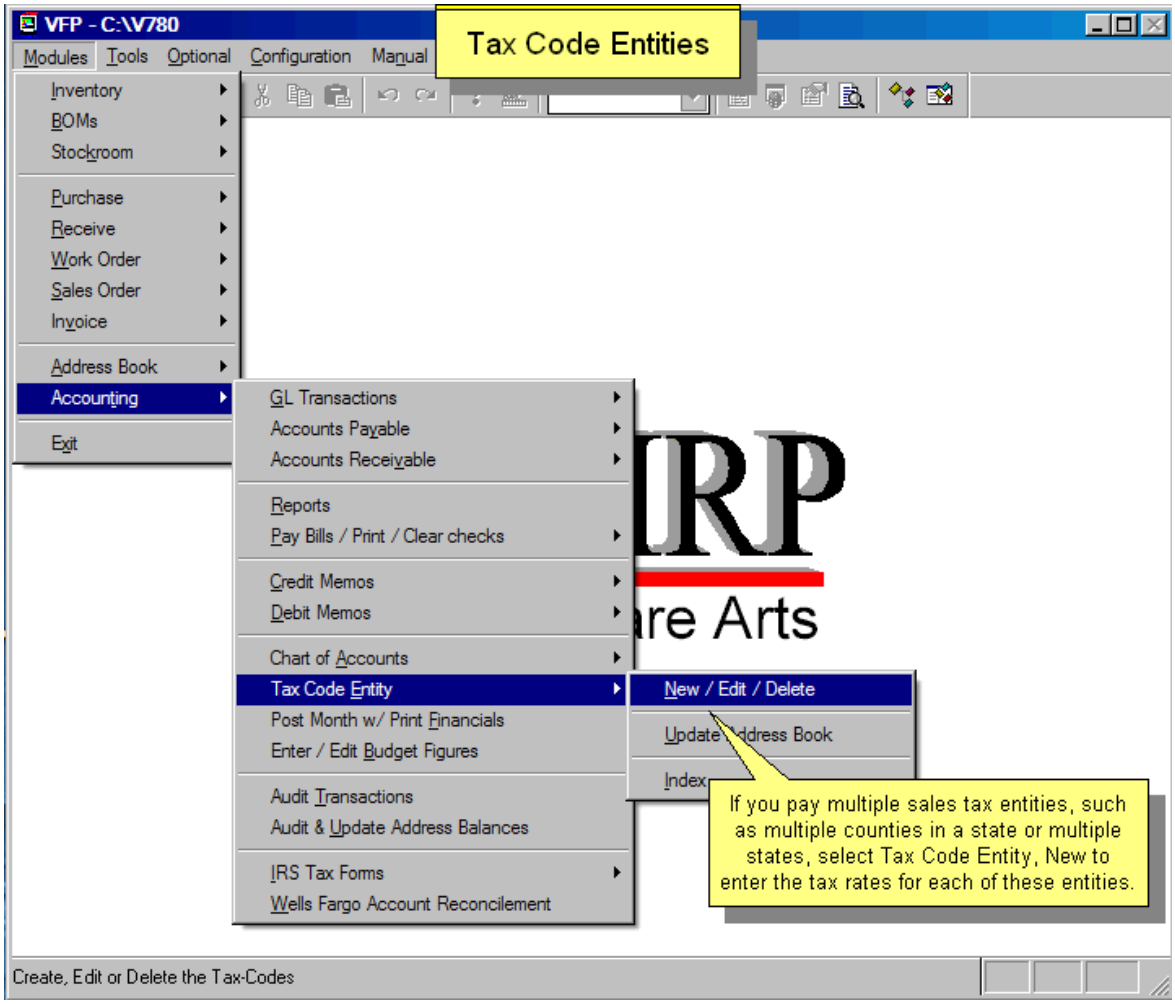
The Debit Module allows you to issue a debit to a vendor to cover returned goods, pricing errors, freight, etc. (see 14.11)

### 14.1.11 Chart of Accounts Module

The Chart of Accounts can support up to 10,000 accounts. The Chart of Accounts must be established prior to using pc/MRP's accounting modules. The chart of accounts provided by pc/MRP may be used as is, or modified

to suite the needs of the business. If the chart of accounts is modified, those modifications must also be entered into pc/MRP's Utility Module. See Chapter 14.3.1 for further details.

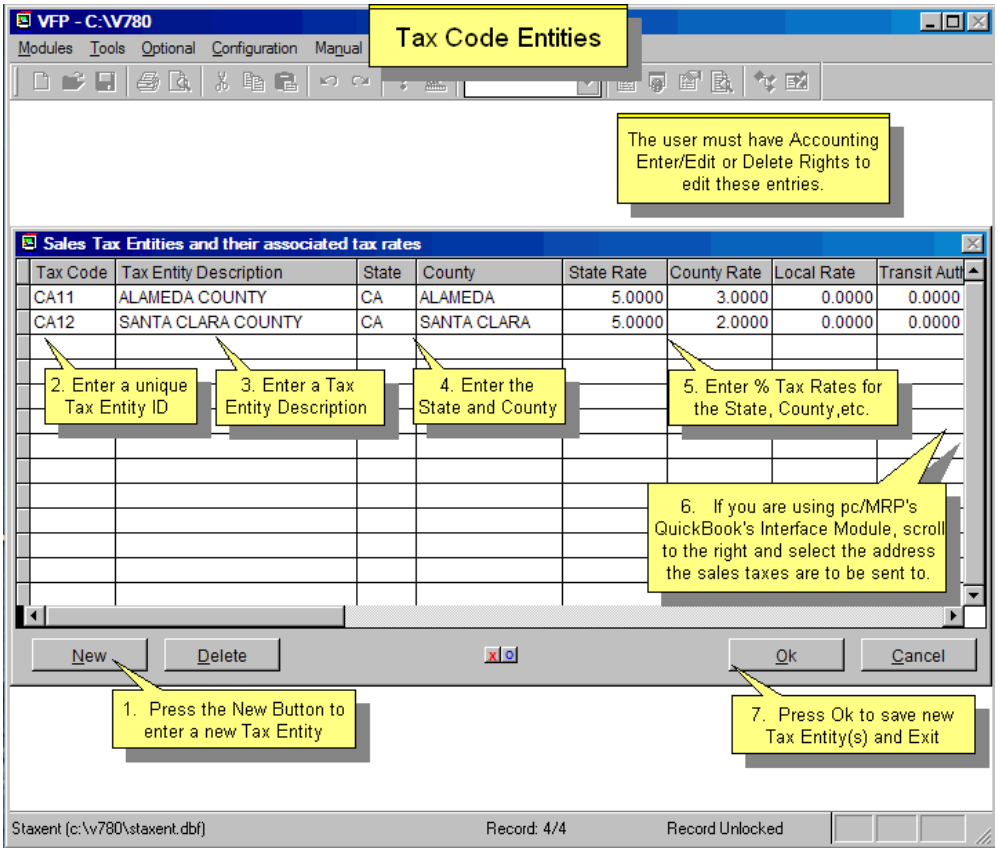
### 14.1.12 Tax Code Entity

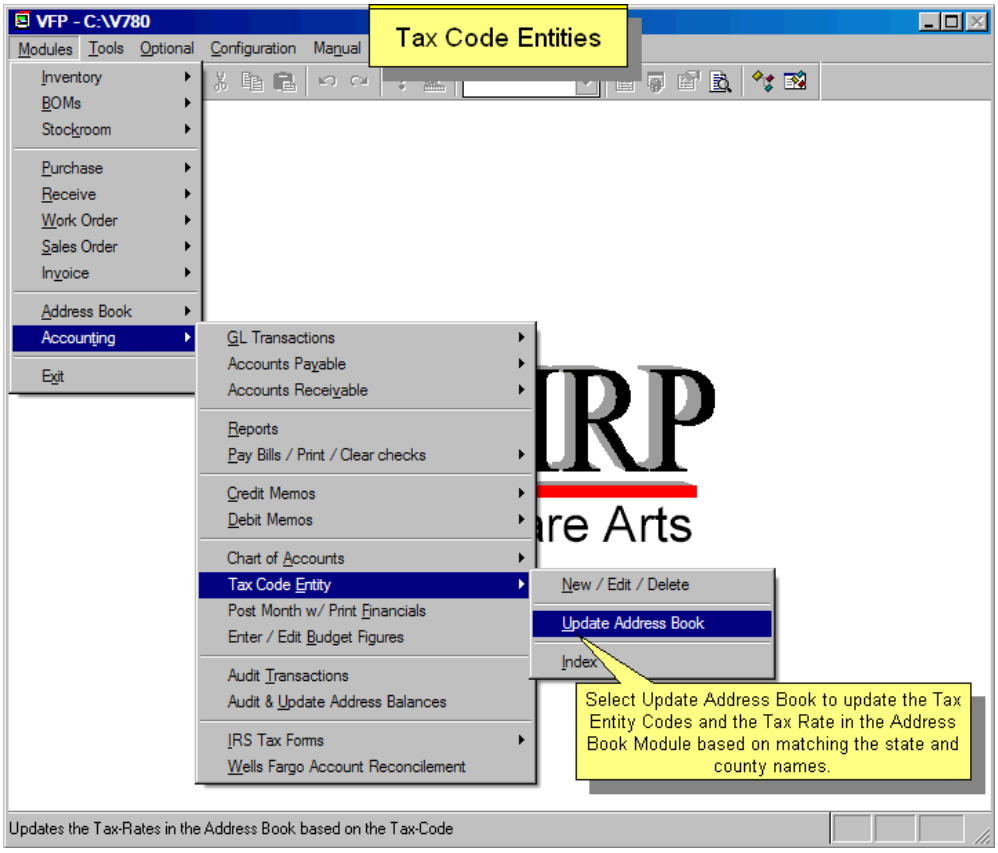



The Tax Code Entity option allows tax code entities to be entered, edited, deleted, updated in the address book, and indexed. Tax code entities such as CA22, TX05 etc. can be entered into the sales tax code entity data base file along with the sales tax rate for that specific state and county. Selecting the option to "Update the Address Book Tax Rates" will automatically update the tax rate of each address with the tax rate for that sales tax entity code tax rate from the sales tax code entity data base file. Each sales tax code entity should consist of the 2-character name of the state plus a 2-digit number such as OR01, OR02, NY23, etc. Whenever a sales order is entered, the sales tax rate and the sales tax entity code from the address book will be entered into the sales order and invoice. (Users can enter any alphanumeric code though, which is useful for customers outside of the US.)

As an alternative solution, users can import Tax Codes by ZIP codes from a .CSV file. The .csv file should have two columns: pc/MRP Tax Codes and ZIP codes. Tax codes and Tax Rates will need to be entered into pc/MRP separately. Defaults to check the first 5 digits of US ZIP codes, but can be set to Exact match which requires a match for all 10 characters.

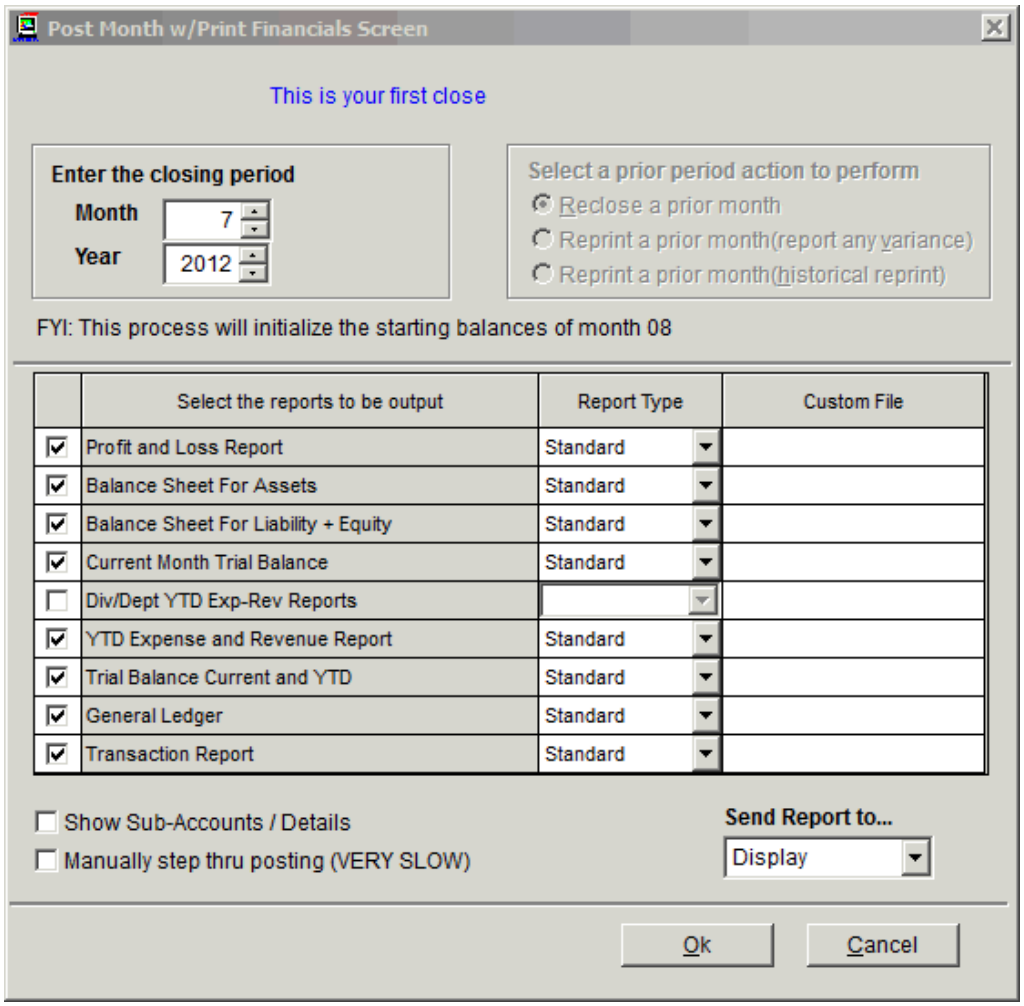
The Sales Tax Report in the accounting report module will automatically subtotal on the type of sale (taxable, out of state, service, etc.) and the sales tax entity code.


VFP - C:\V780
Modules Tools Optional Configuration Manual
Tax Code Entities
The user must have Accounting Enter/Edit or Delete Rights to edit these entries.
Sales Tax Entities and their associated tax rates
Tax Code | Tax Entity Description | State | County | State Rate | County Rate | Local Rate | Transit Auth
CA11 | ALAMEDA COUNTY | CA | ALAMEDA | 5.0000 | 3.0000 | 0.0000 | 0.0000
CA12 | SANTA CLARA COUNTY | CA | SANTA CLARA | 5.0000 | 2.0000 | 0.0000 | 0.0000
2. Enter a unique Tax Entity ID
3. Enter a Tax Entity Description
4. Enter the State and County
5. Enter % Tax Rates for the State, County,etc.
6. If you are using pc/MRP's QuickBook's Interface Module, scroll to the right and select the address the sales taxes are to be sent to.
New
Delete
Ok
Cancel
1. Press the New Button to enter a new Tax Entity
7. Press Ok to save new Tax Entity(s) and Exit
Staxent (c:\v780\staxent.dbf)
Record: 4/4
Record Unlocked


VFP - C:\V780
Modules Tools Optional Configuration Manual
Tax Code Entities
Inventory
BOMs
Stockroom
Purchase
Receive
Work Order
Sales Order
Invoice
Address Book
Accounting
Exit
GL Transactions
Accounts Payable
Accounts Receivable
Reports
Pay Bills / Print / Clear checks
Credit Memos
Debit Memos
Chart of Accounts
Tax Code Entity
Post Month w/ Print Financials
Enter / Edit Budget Figures
Audit Transactions
Audit & Update Address Balances
IRS Tax Forms
Wells Fargo Account Reconcilement
New / Edit / Delete
Update Address Book
Index
Select Update Address Book to update the Tax Entity Codes and the Tax Rate in the Address Book Module based on matching the state and county names.
Updates the Tax-Rates in the Address Book based on the Tax-Code

### 14.1.13 Post Month with Print Financials

Post Month with Print Financials automatically retrieves each account's starting balance for that month and all of the financial transactions recorded during that month. pc/MRP then calculates the new balances for each account and will prompt users to choose from a variety of financial reports to be created based on the newly calculated figures. For complete details, see Chapter 14.6.1.




### 14.1.14 Enter/Edit Budget Figures

Allows budget figures to be entered and or edited for each month of each chart of accounts. The budget figures, their monthly and yearly variance will be displayed on the **YTD Expense and Revenue** report when you select: **Accounting, Post month w/ Print Financials** (See 3.1.17.3 for a picture of the report).

### 14.1.15 Audit Transactions

Checks all accounting transactions for incorrect transaction dates, duplicate transaction numbers (which could cause a transaction report to go into an endless loop on that transaction number), blank transaction numbers, and duplicate blank transaction numbers (could cause transaction report to print out only lines and no transactions). The audit transaction report is completely benign; it only recommends changes and does not change or mark any transaction for deletion.

### 14.1.16 Audit and Update Address Balances

Initiating this feature will zero out the balance due amounts in the address book. The open invoices will then be used to re-calculate the balance due amounts and enter them into the address book. pc/MRP offers the option of using all open or all open posted invoices only. We recommend selecting all open invoices. If an invoice contains a blank account number or an account number that does not exist in the address book, an error message stating 'xxxx' not found will pop up for a set amount of time. pc/MRP will return to the main menu leaving the remaining address balances at 0. Since the error message remains on the screen for a set amount of time, it is recommended you watch your screen while it processes the invoices. If the error message appears, record the account number not found. Go to invoices, select edit, select scroll on address account number, enter the address account number that does not exist in the address book or change the invoice account number to an existing account number that does exist in the address book, and rerun this option again until it processes all invoices without an error message.

### 14.1.17 IRS Tax Forms

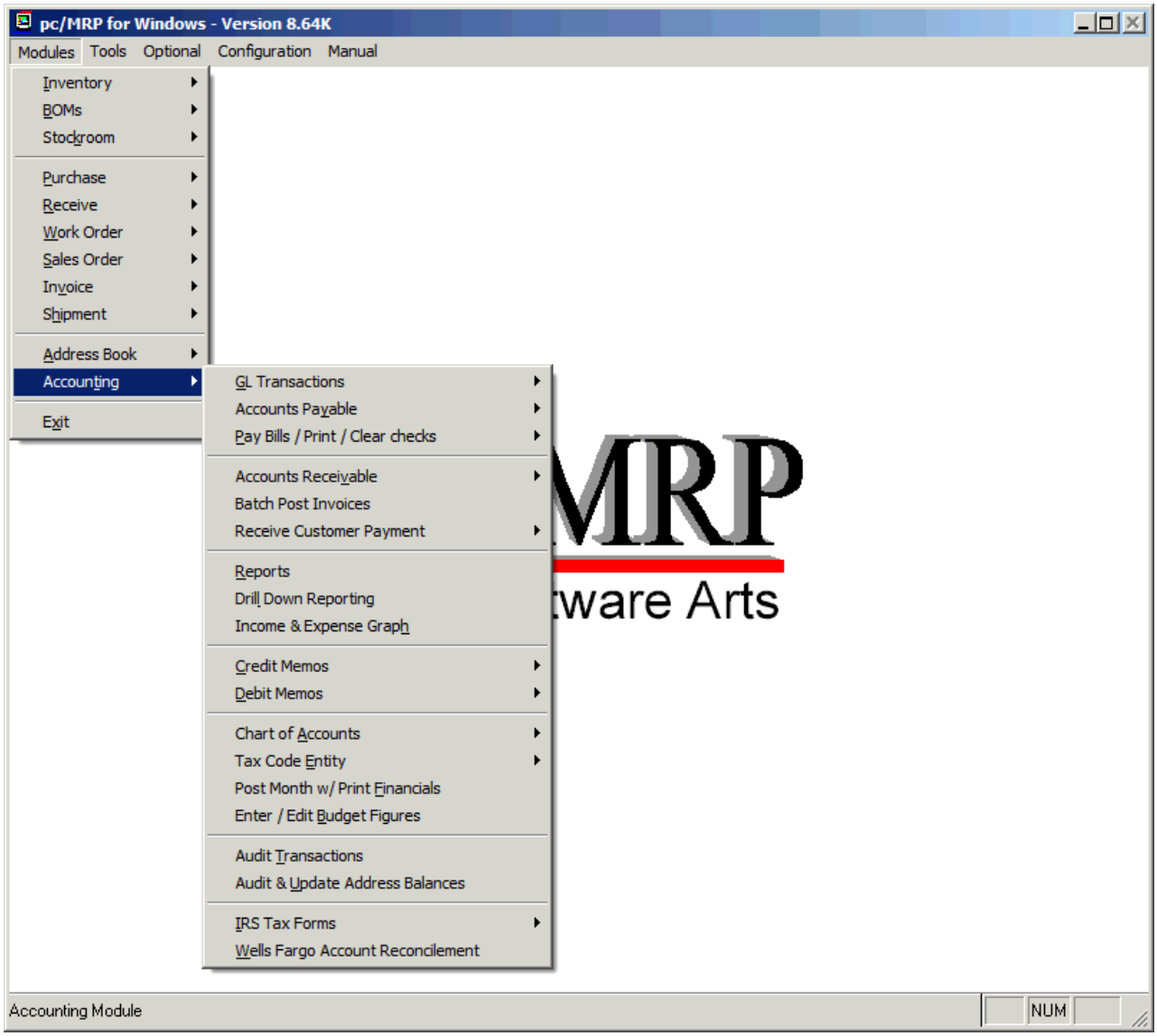
This selection allows users to set form criteria and print IRS forms 1099MISC and 1096. For further details, see Chapter 14.17.1.

### 14.1.18 Wells Fargo Account Reconcilement

This option allows users to create a file containing records for all checks written during a date range. Wells Fargo will then analyze this file and only cash checks registered through this file. For further details, see Chapter 14.18.

# 14.2 Implementing pc/MRP Accounting

### 14.2.1 Implementing pc/MRP Accounting




Implementing pc/MRP accounting requires users to perform several tasks. These tasks must be performed in sequence as described below. If you need any clarification, please contact Software Arts.

### 14.2.2 Configuring pc/MRP Accounting

Accounting must configure pc/MRP's accounting functions and chart of accounts following the steps outlined below:

1. Use pc/MRP's Configuration Menu to set the following options (recommended settings are underlined):
   - Select **Option 8**, to turn auto accounting on or off, see Manual, Section 15.1.8
   - Select **Option 10**, to run periodic or perpetual accounting inventory methods, see Section 15.1.10
   - Select **Option 14**, to allow or not allow editing of accounting transactions, see Manual, Section 15.1.14

2. Use pc/MRP's chart of accounts module as is or modify it to match your own so that you have a base chart of accounts that is satisfactory for your company, see Manual, Section 14.6.1

3. Use pc/MRP's configuration menu, **Option 9** to edit the Chart of Accounts template to match your modified chart of accounts numbers, see Section 15.1.9. If you do not plan to establish chart of accounts for sub divisions and departments, skip item 4.

4. If you want to establish chart of accounts for sub divisions and departments, use pc/MRP's configuration menu to do the following:
   - Select **Option 11**, to turn multi division on, see Section 15.1.11
   - Select **Option 12**, to turn set multi-div to key on product code or division, see Section 15.1.12
   - Select **Option 9**, to "Add" a new template set for a division or department. This will also automatically enter the new division chart of account numbers into the chart of accounts data base file, see Section 15.1.9

5. Set **Options 35, 45** and **59** in the Configuration Menu to use standard or average costs.

6. Set **Option 42** in the Configuration Menu to use the vendor price list.

**14.2.3 Entering Starting Balances into pc/MRP's Accounting Module**

After the Chart of Accounts has been established, the account balances must be transferred in by entering accounting transactions and not by inserting the dollar amounts directly into the Chart of Accounts. To enter the starting balances, select: Accounting, GL Transactions, New and then select an "A" type transaction. Debit the debit accounts and credit the credit accounts as per following guidelines.

If no previous accounting program has been used:

- Debit all assets such as cash, checking, accounts receivable, equipment, prepaid expenses, etc. by entering A type accounting transactions.
- Credit all liabilities such as taxes payable, accts payable, notes payable, etc. by entering A type accounting transactions.
- If Debits > Credits, credit the difference to Starting Capital
- If Credits > Debits, debit the difference to Starting Capital

If you are switching from another accounting system, you must transfer over the ending balances from the last good close by entering A type transactions with the same date as the last good close. The accounts you would transfer over would be as follows:

- If Mid Period:
  - Transfer all accounts from the trial balance.
- If Start of Period:
  - Transfer all liability, asset, equity accounts from the trial balance.
  - If you want year-to-date expense and revenue figures on your financial statements, you must also transfer all expense and revenue accounts from the trial balance.
- If Start of Year:
  - Transfer all liability, asset, and equity accounts from the trial balance. Remember to make an entry with the new years date transferring the year-to-date earnings into starting capital or undistributed retained earnings

At this point you can close the month to see if the debit and credit totals are equal and match the totals from the last good close of the prior accounting program.

**Note:** If these are the first accounting entries and the first period you are closing because you are just starting to use pc/MRP's accounting package, you must delete the file named "**LASTCLOS.MEM**" in the pcmrpw directory.

### 14.2.4 Entering AP (Open Receivers) and AR (Open Invoices) Detail Into pc/MRP

If you wish to enter detail aging information for accounts receivable (open unpaid invoices):

- Make sure auto-accounting has been turned off in the configuration menu, so that you do not double up on debiting accounts receivable.
- Temporarily set the inventory adjustment method (Option 4 in the Settings and Utilities) to "S." This will allow you to enter invoices without adjusting inventory. While you are making these entries do not allow other people to use the other modules in pc/MRP. When you are finished making the entries return to Option 4 and change the method back to the original setting, "A."
- Use the Sales Module to enter each open unpaid invoice as an "On Account and Carry Sales Order". This will automatically create an invoice as well. Make sure the invoice date is the date you originally invoiced the customer, as this will keep your aging reports correct.
- Once you have entered all open invoices, run an invoice (not sales order) report for all open invoices (Select Invoices, Reports, All Invoices, All Open Invoices). The total should match the $ amount entered as the accounts receivable amount when you entered your original starting balances.
- Once the accounts receivable numbers agree, enter all open (not invoiced) sales orders using the "Order Entry" Option when entering sales orders.

If you wish to enter detail aging information for accounts payable (open unpaid receivers):

Method 1, enter POs and Receivers

- Make sure auto-accounting has been turned off in the configuration menu, so that you do not double up on crediting accounts payable.
- Temporarily set the inventory adjustment method (Option 4 in the Settings and Utilities) to "S." This will allow you to enter receivers without adjusting inventory. While you are making these entries do not allow other people to use the other modules in pc/MRP. When you are finished making the entries return to Option 4 and change the method back to the original setting, "A."
- Use the Purchase Module to enter each closed (received) but unpaid PO. Edit the PO date to reflect the date you originally placed the order.
- Use the Receiver Module to enter each open (unpaid) Receiver. Edit the receiver date to reflect the date you received the order, as this will keep your aging reports correct.
- Once you have entered all open receivers, run a receiver report for all open receivers (Select Receivers, Reports, All Receivers, and All Open Receivers). The total should match the $ amount entered as the accounts payable amount when you entered your original starting balances.
- Once the accounts payable numbers agree, enter all open (not received) purchase orders using pc/MRP's purchase order module

Method 2, Enter accounts payable vouchers without part number detail

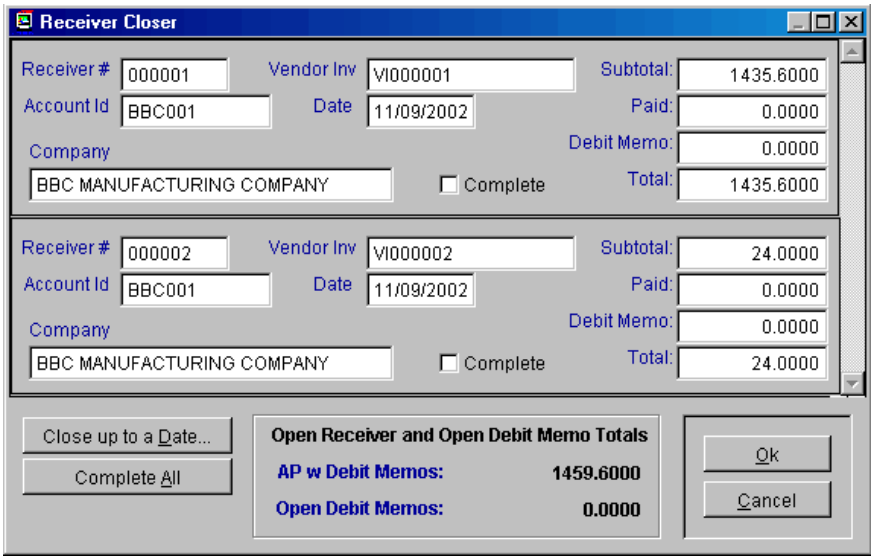
- Use pc/MRP's Accounts Payable Module to enter accounts payable vouchers. For each invoice, enter an accounts payable voucher. Enter or scroll for the vendors address id code number. If you do not want to record part numbers, select None for part number, 1 for quantity received and the total amount of the invoice. Make sure the date received is the date you received the item(s).
- Since this method would automatically make entries into the general ledger, debiting purchases and crediting accts payable, you may have to edit the original trial balance entry to $0.00 for accounts payable. Re-close the current month and make sure your accounts payables account dollar amount is correct.
- When you pay off any of these vouchers, you would enter a general ledger transaction as an E type transaction, answer Y, there is an existing receiver/accounts payable voucher number. Enter the voucher number and allow the program to debit accounts payable and credit checking. pc/MRP will then ask if you wish to print a check, answer Y if you wish pc/MRP to do so.

### 14.2.5 Automatically closing all Receivers that have been paid

If you have been entering receivers into pc/MRP but not using accounting transactions to close the receivers, your accounts payable detail reports would show a large amount of dollars owed. You can close a large quantity in a batch mode by doing the following:

If you have entered receivers into pc/MRP and have been closing them when they are paid, run this step as a double check on your AP. It will also open up any receiver with a partial payment so the entire receiver can be paid off at a later date.

Selecting Configuration, Settings and Utilities, **Option 87** will display the Receiver Closer Screen shown below.




This screen allows you to close any receivers that have been paid by simply checking the Complete Checkbox for each receiver that has been paid off. Only receivers that are not marked complete and have a vendor invoice number will be included in the AP w Debit Memos Total. This screen will display the first vendor invoice number it finds in a receiver. If you enter a vendor invoice number into a receiver or it already has a vendor invoice number, every line item on that receiver will be populated with that vendor invoice number when you press the OK button.

The AP total is equal to the amount due - amount paid for the following receiver line items and debit memos:

- All open receivers and debit memos with vendor invoice numbers.
- If one or more line items in a receiver /debit memos are marked as open, all the line items and associated debit memos are temporarily marked as open and are included in the AP total.

Scroll the receivers and check the Complete check box for all paid receivers and debit memos and add the vendor invoice number to all receivers that you wish to export (if your company uses the QuickBooks Export Module), until the AP with Debit Memo Total is correct.

If you check a receiver as complete, the entire receiver will be marked as complete by inserting a capital Y into the complete field of every line item on that receiver. This reduces the AP amount by the entire amount of the receiver (unless the amount due - amount paid equals 0). Receivers marked as complete will never be included in your accounts payable reports.

Pressing the Cancel button will leave the receivers unchanged. The receiver complete and posted fields will remain as they were prior to entering this screen.

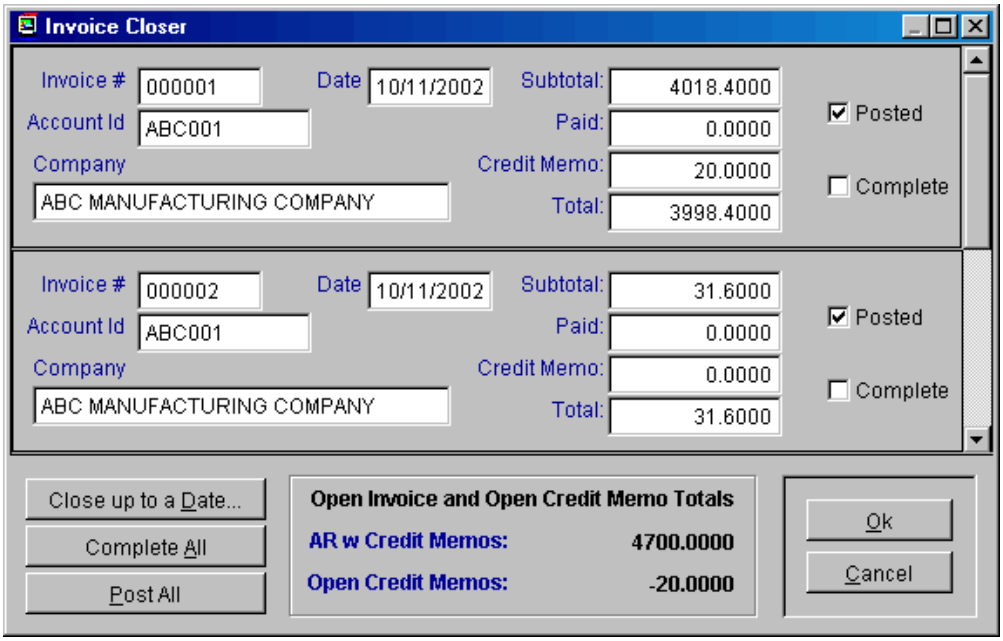
Pressing the OK button will change the receiver complete fields as per the changes you made with the closer.

### 14.2.6 Automatically closing all Invoices that have been paid

If you have been entering invoices into pc/MRP but not using accounting transactions to close the invoices, your accounts receivable detail reports would show a large amount of dollars owed. You can close a large quantity in a batch mode by doing the following:

If you have entered invoices into pc/MRP and have been closing them when they are paid, run this step as a double check on your AR. It will also open up any invoice with a partial payment so the entire invoice can be paid off at a later date.

Selecting Configuration, Settings and Utilities, **Option 87** will display the Invoice Closer Screen shown below.




The AR total is equal to the amount due - amount paid (((SalePrice*QtyShip*(1-(Discount/100))*(1+(TaxR/100.0000))+Freight)-AmtPaid) for the following invoice line items and credit memos:

- All open invoices and credit memos.
- If one or more line items in an invoice/credit memo are marked as open, all the line items and associated credit memos are temporarily marked as open and are included in the AR total.

Scroll the invoices and check the Complete check box for all paid invoices and credit memos until the AR with Credit Memo Total is correct. If you check an invoice as complete, the entire invoice will be marked as complete by inserting a capital Y into the complete field of every line item for that invoice. This reduces the AR amount by the entire amount of the invoice (unless the amount due - amount paid equals 0). Invoices marked as complete will never be included in an AR Report.

Pressing the Cancel button will leave the invoices unchanged. The invoice complete and posted fields will remain as they were prior to entering this screen.

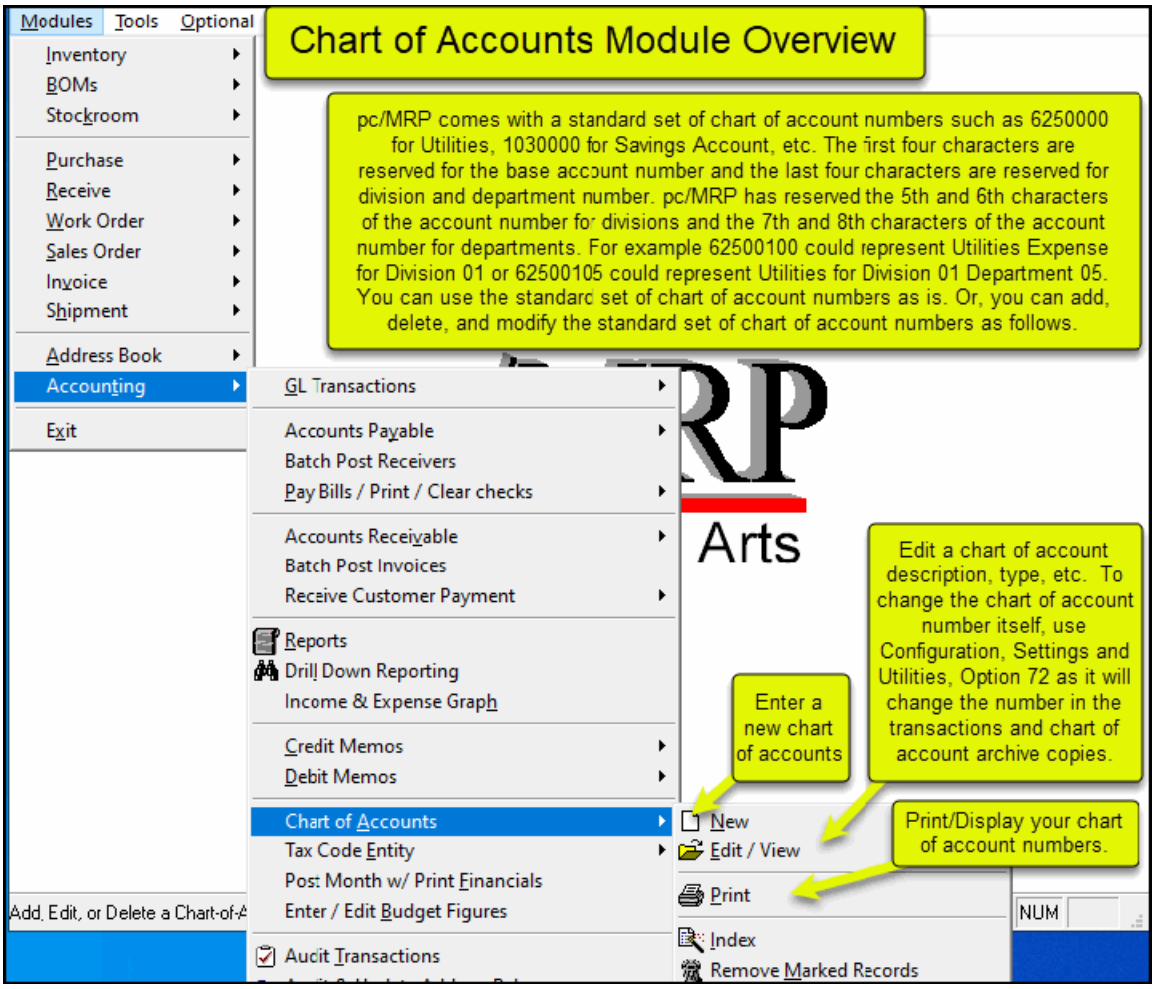
Pressing the Ok button will change the invoice complete fields as per the changes you made with the closer.

### 14.2.7 Post the Month with Financials

Before going live, make sure you have a good close. To learn how to close the month and Post the month with financials, refer to Section 14.6.1.

# 14.3 Chart of Accounts

### 14.3.1 Overview / Enter




(see slideshow here: http://www.pcmrp.com/mrp101/chartofaccountsnewbase.htm)

pc/MRP comes with a standard set of chart of account numbers such as 62500000 for Utilities, 10300000 for Savings Account, etc. The first four characters of the account number are reserved for the base account number, the 5th and 6th characters of the account number for divisions and the 7th and 8th characters for departments. For example 62500100 could represent Utilities Expense for Division 01 or 62500105 could represent Utilities for Division 01 Department 05.

You can use the standard set of chart of account numbers as is. Or, you can add, delete, and modify the standard set of chart of account numbers as described on the next page.

**Notes:**

- pc/MRP allows divisional and category sub accounts.
- You can add a base divisional chart of accounts by clicking on Chart of Accounts New
- You can add a divisional sub account to report to a base corporate chart of account (ends in 0000)
- You can select a divisional sub account as a parent account.
- The Div/Dept YTD Expense and Revenue reports work with div sub accounts that have 0000 parent accounts.

- Users can select a divisional sub account as a default account in the Account Template Module (unless a file named **RESTRICTCHART.FLG** exists in the pcmrpw folder).

#### 14.3.1.1 Establish a base chart of accounts structure on paper

First establish a base chart of accounts structure on paper. Base accounts must end in "0000" and do not report to a parent account. An example of a base chart of account structure is listed below:

Assets
    1020-0000 Checking
    1070-0000 Accounts Receivable
Liabilities
    2010-0000 Loan
    2070-0000 Accounts Payable
Equities
    3040-0000 Retained Earnings
Revenue
    4040-0000 Sales Income
Expenses
    5000-0000 Utilities

#### 14.3.1.2 Establish a set of sub-chart of account numbers on paper

pc/MRP allows you create sub-chart of account numbers that report to and roll up into a parent chart of account numbers. There are two types of sub accounts, category and divisional.

**Category Sub Accounts** should always end in 0000. An example chart of accounts using category sub-accounts is listed below:

Assets
    1020-0000 Checking
        1021-0000 Wells Fargo Checking
        1022-0000 Bank of America Checking
    1070-0000 Accounts Receivable
Liabilities
    2010-0000 Loan
    2070-0000 Accounts Payable
Equities
    3040-0000 Retained Earnings
Revenue
    4040-0000 Sales Income
Expenses
    5000-0000 Utilities
        5040-0000 Water
        5050-0000 Electricity

**Division Sub Account** should always end in a 4 digit number other than "0000". This allows pc/MRP to filter these accounts into Divisional YTD Expense and Revenue Reports. An example chart of accounts using category sub-accounts is listed below:

Assets
- 1020-0000 Checking
  - 1020-0100 Checking Division 1
  - 1020-0200 Checking Division 2
- 1070-0000 Accounts Receivable

Liabilities
- 2010-0000 Loan
- 2070-0000 Accounts Payable

Equities
- 3040-0000 Retained Earnings

Revenue
- 4040-0000 Sales Income
  - 4040-0100 Sales Income Division 1
  - 4040-0200 Sales Income Division 2

Expenses
- 5000-0000 Utilities
  - 5000-0100 Utilities Division 1
  - 5000-0200 Utilities Division 2

Gets filtered into a YTD Expense and Revenue Financial Statement for Division 1

**Including <u>both</u> Divisional and Category Sub Accounts** in your chart of accounts can be done two ways. The first way would be to create sub accounts by division and then category. This structure will show the rolled up Utilities Cost for the Divisional YTD Expense and Revenue Report:

Expenses
- 5000-0000 Utilities
  - 5000-0100 Utilities Division 1 (Will be displayed on the Div1 YTD Exp and Rev Report)
    - 5040-0100 Water Div 1
    - 5050-0100 Electricity Div 1
  - 5000-0200 Utilities Division 2
    - 5040-0200 Water Div 2
    - 5050-0200 Electricity Div 2

Gets filtered into a YTD Expense and Revenue Financial Statement for Division 1

The second way would be to create sub accounts by category and then division. This structure will not display the rolled up Utility Cost for the Division on the Divisional YTD Expense and Revenue Report.

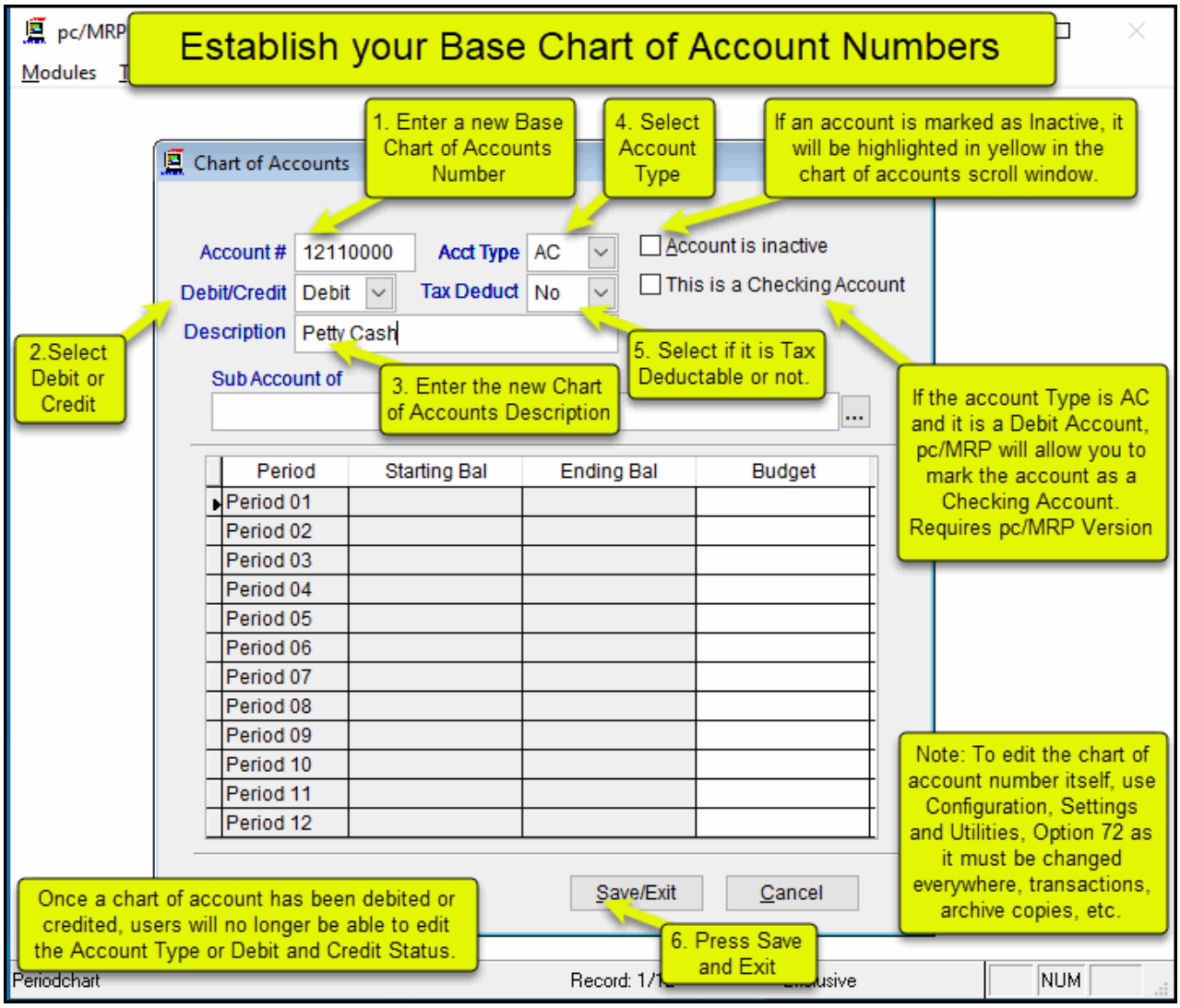
Expenses
- 5000-0000 Utilities
  - 5040-0000 Water
    - 5040-0100 Water Div 1
    - 5040-0200 Water Div 2
  - 5050-0000 Electricity
    - 5050-0100 Electricity Div 1
    - 5050-0200 Electricity Div 2

Gets filtered into a YTD Expense and Revenue Financial Statement for Division 1

Both of the above patterns will work in pc/MRP.

### 14.3.1.3 Entering a set of base chart of account numbers

You must first enter a set of base chart of account numbers such as checking, utilities, etc. Base chart of account numbers have no parent accounts and always end in 0000. To enter a base chart of account number, click on Modules, Accounting, Chart of Accounts, and New.




Enter the base chart of accounts number (it must end in "0000"). Enter the chart of accounts description, Account Type, select Yes or No for Tax Deductible, and select Debit or Credit. Do not select a parent account, as this is a base chart of account.

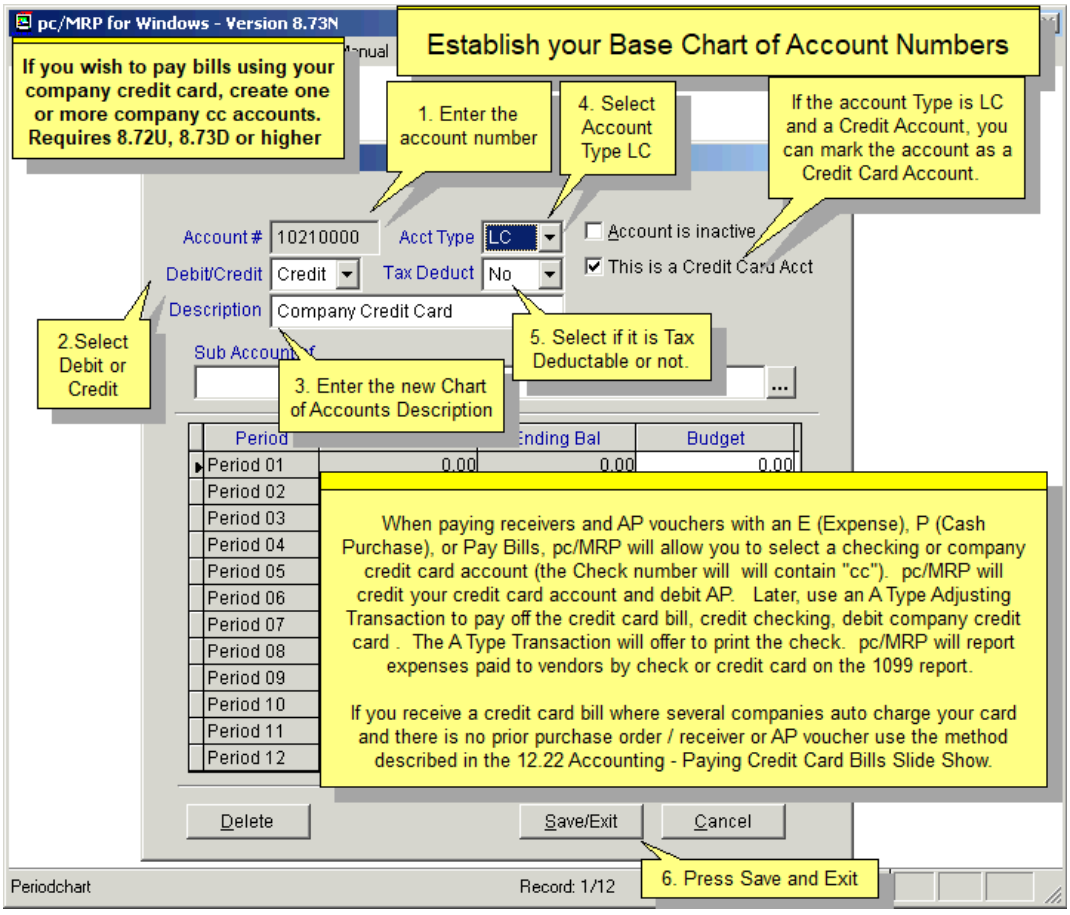
**Note**: If upgrading from version **8.47** or lower, please re-visit the checking accounts and make sure the Checking Account checkbox is checked for all your checking accounts.

Select the **Account Type** from the drop down list box which includes:

| | |
|---|---|
| AC | Asset, Current |
| AD | Asset, Depreciation |
| AF | Asset, Fixed |
| AL | Asset, Long Term |
| EG | Expense Cost of Goods Sold |
| EL | Expense Labor |
| EN | Expense, Normal Operating |
| EO | Expense, Other |
| ET | Expense, Taxes |
| EW | Expense, Write Off |
| LC | Liabilities, Current |
| LL | Liabilities, Long Term |
| QN | Equity |
| QR | Equity, YTD Retained Earnings (only one allowed!) |
| RN | Revenue, Normal |
| RO | Revenue, Other |

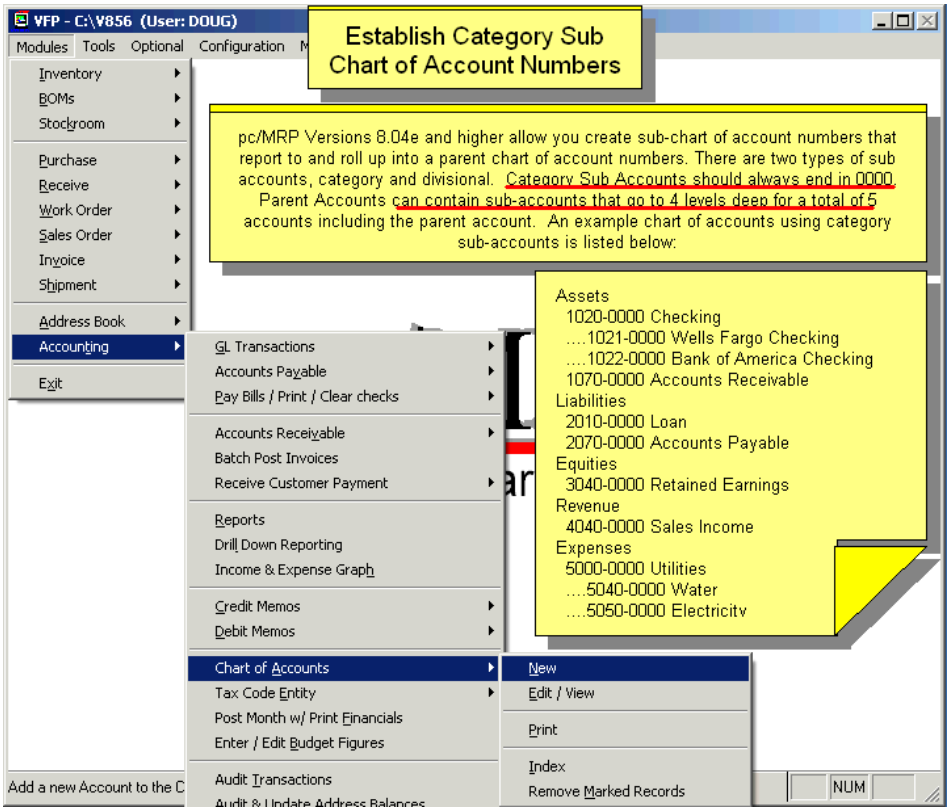
**Note:** Once you have selected an Account Type, and have entered accounting transactions for the account, you cannot change the Account Type. Call Software Arts, Inc. if this is a necessity.

**Company Credit Card account**

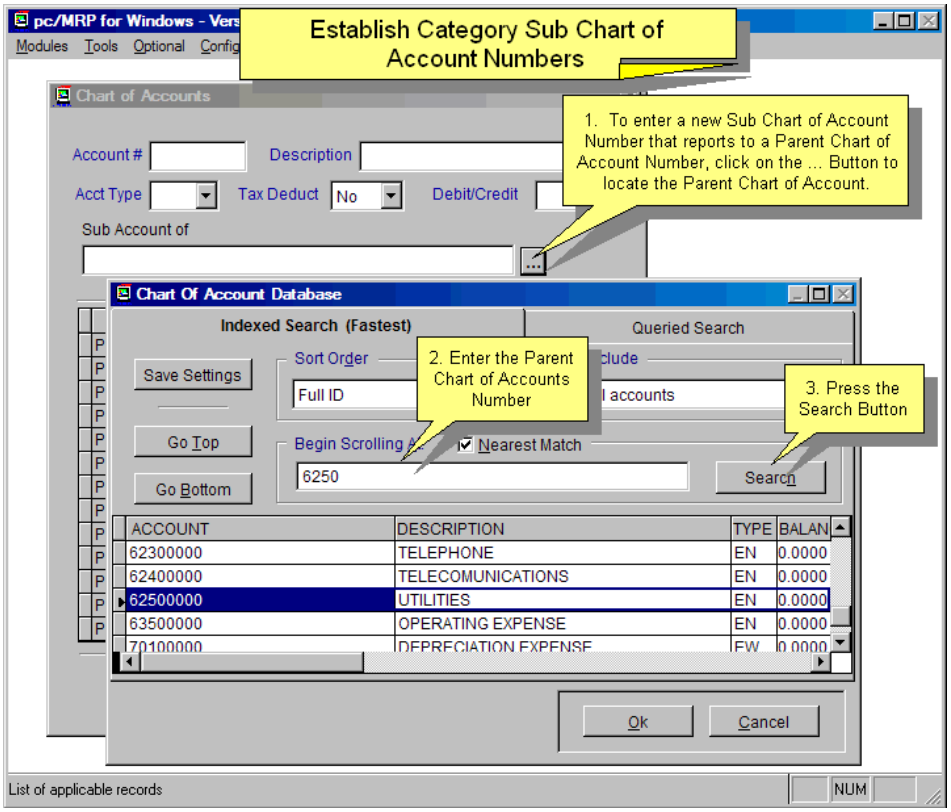


### 14.3.1.4 Entering Category Sub Chart of Account Numbers

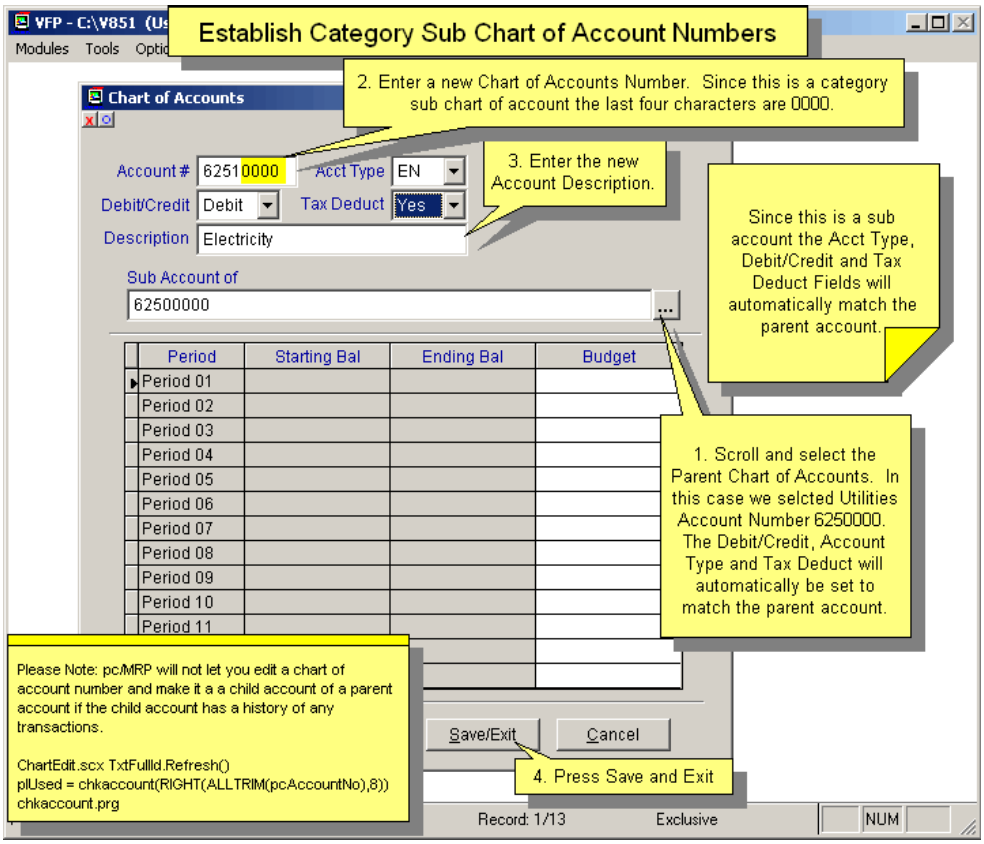
To create a sub-chart of account number you would select Modules, Accounting, Chart of Accounts, New or Edit.



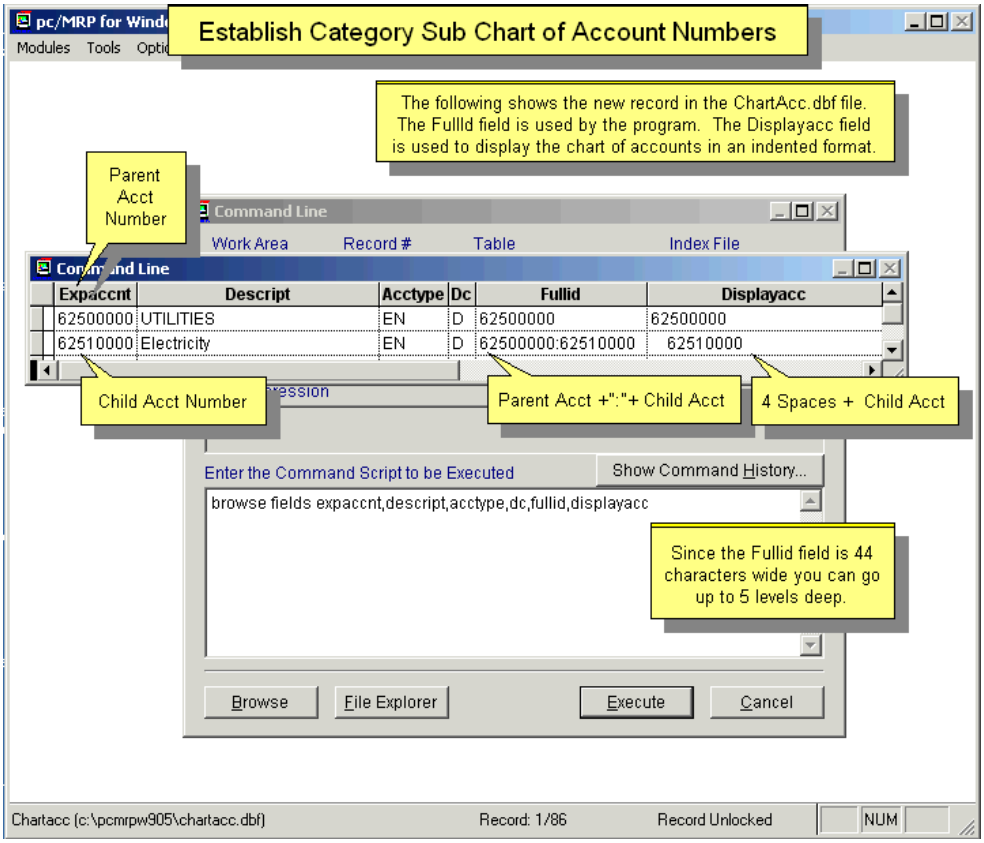

Select the parent account by pressing the "Sub Account of" Ellipsis Button as shown on the screen below.



The new sub-account will automatically be the same Account Type and Debit/Credit Type as its parent account.

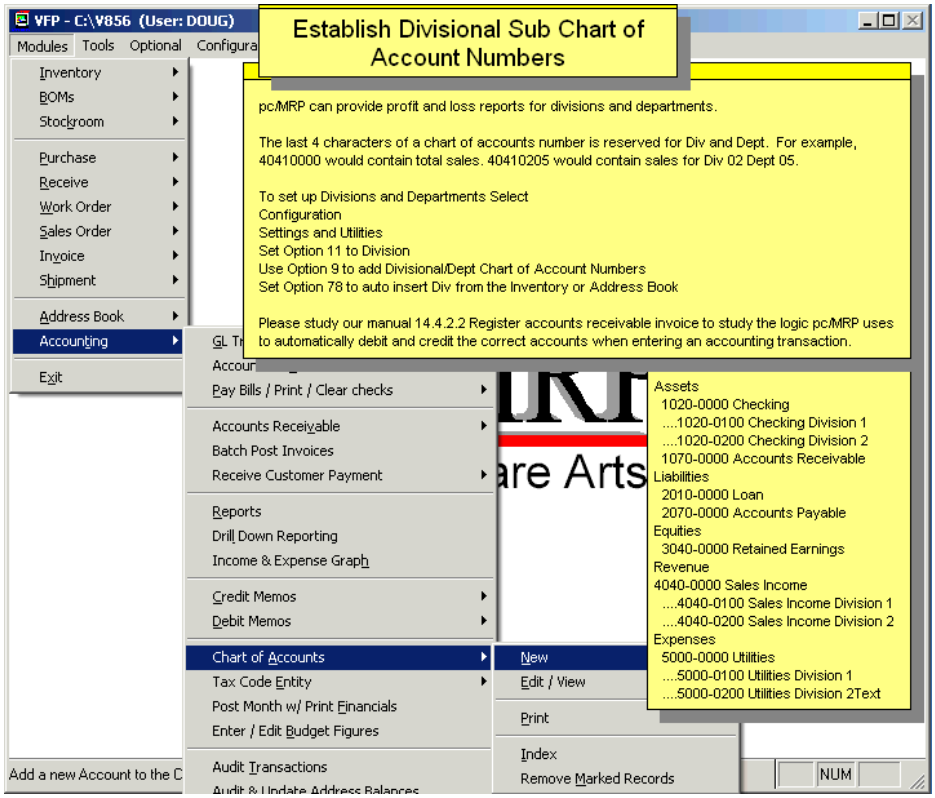


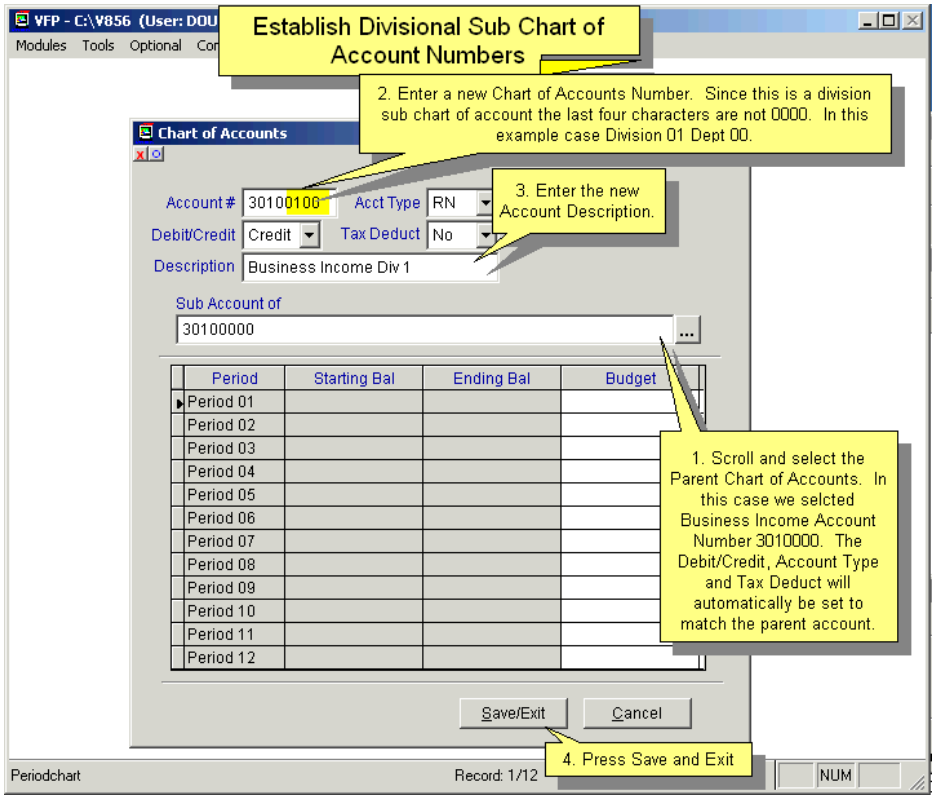

The picture below shows the new record in the Chartacc.dbf file. The FullId field is used by the program.



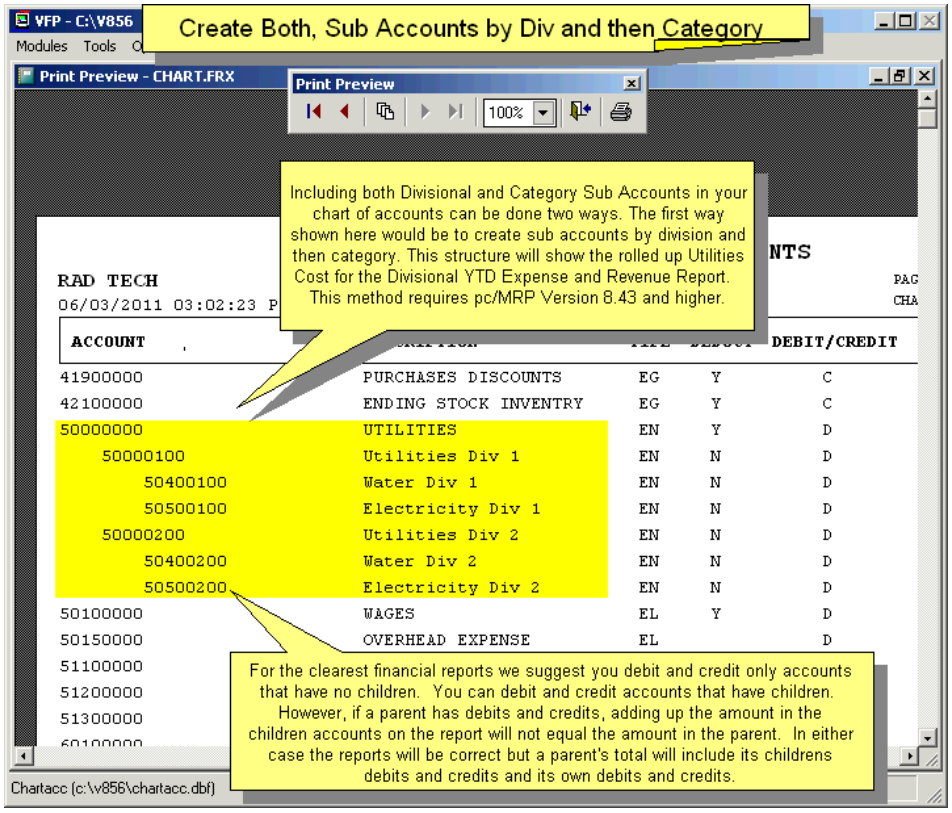
### 14.3.1.5 Entering Divisional Sub Chart of Account Numbers.

To create Divisional sub-chart of account number you would select Modules, Accounting, Chart of Accounts, New or Edit.

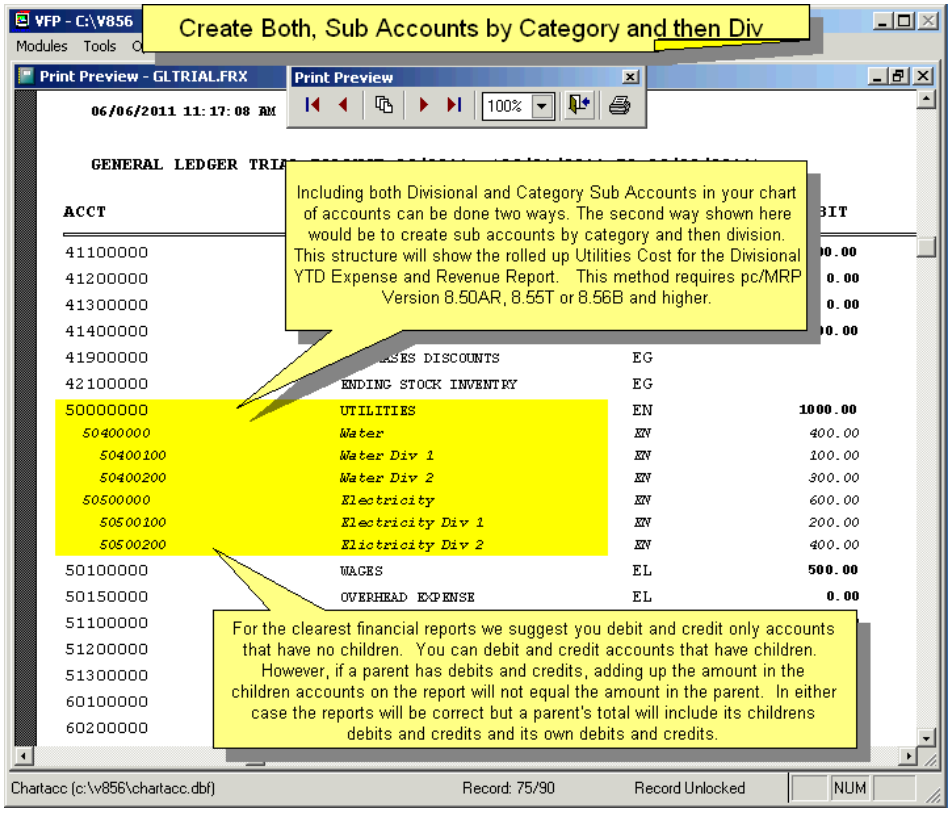


### 14.3.1.6 Create Both Sub Accounts by Div and then Category

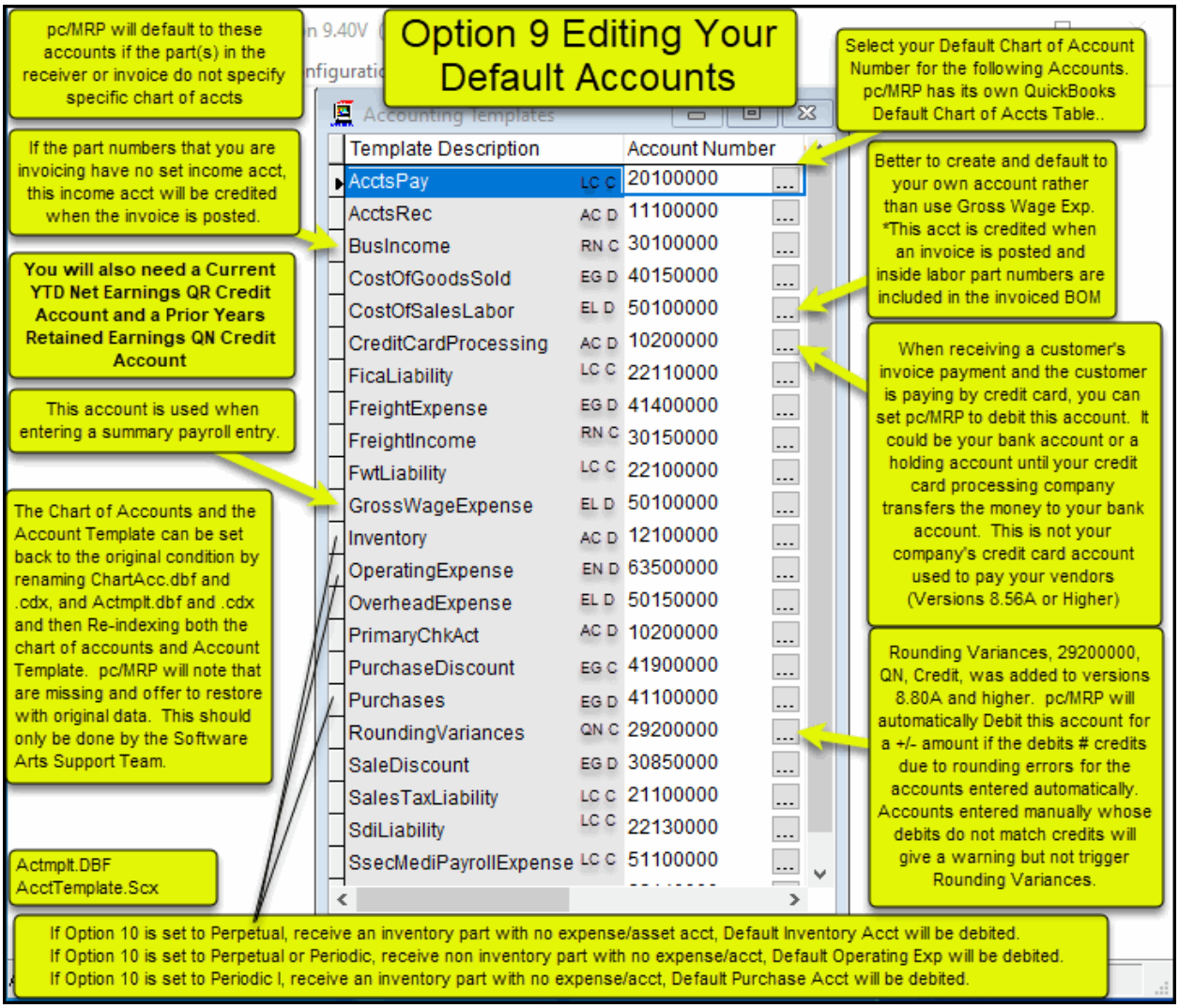



### 14.3.1.7 Create Both Sub Accounts by Category and then Div



**14.3.1.8 Register your default account numbers.**

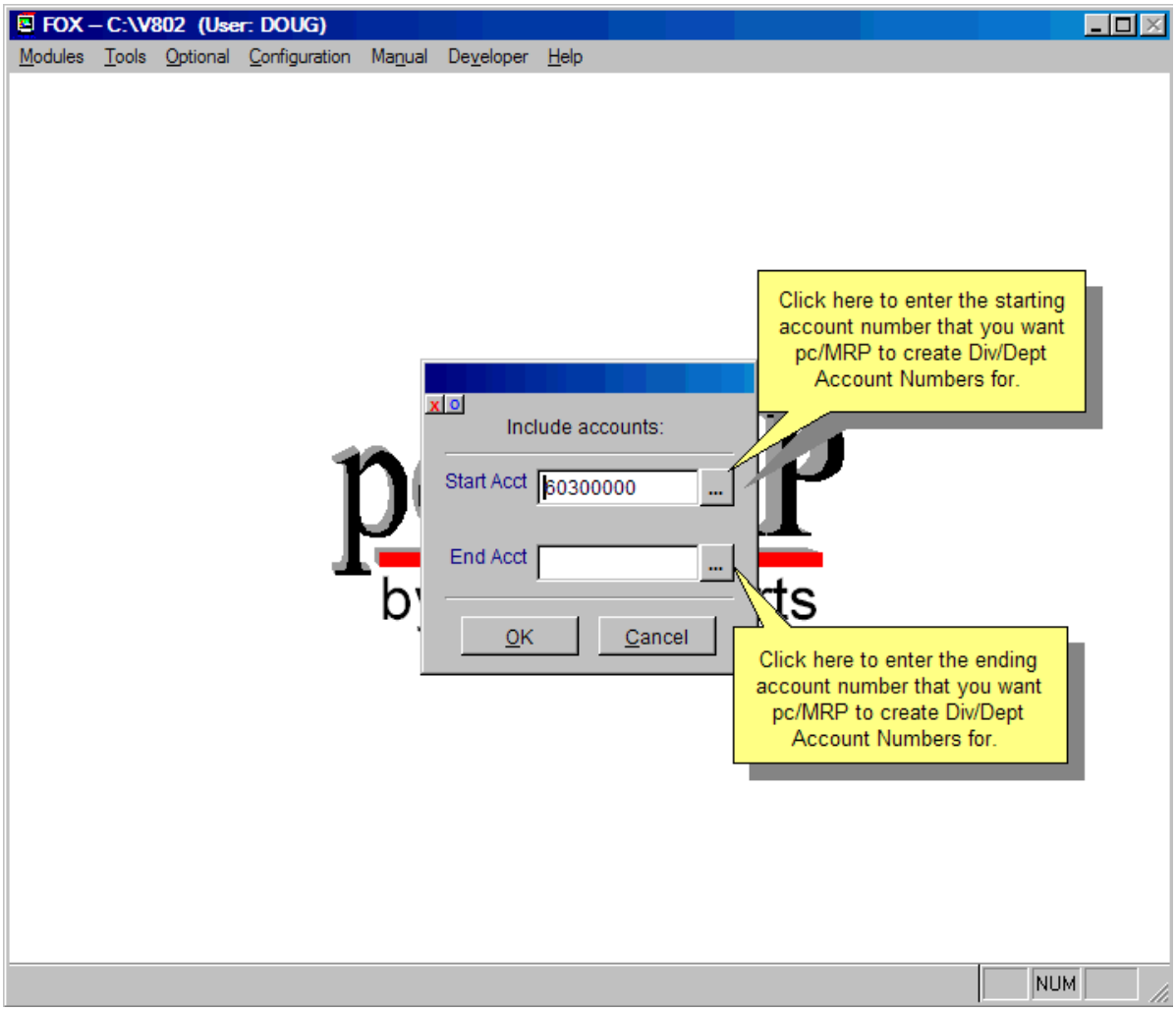
Once your base chart of account numbers are established, you must register your default account numbers with pc/MRP. This will allow pc/MRP to automatically pull up the correct accounts to debit and credit when you are making an entry into the general ledger. For example, pc/MRP needs to automatically pull up and debit and credit your AP and Checking Account Numbers when ever you are paying bills. To register your key chart of accounts select Configuration, Settings and Utilities, **Option 9**, and Edit Template Account Numbers. Enter your key chart of account numbers as shown on the following screen.



**14.3.1.9 Adding multiple division and department account numbers:**

With pc/MRP, you can enter divisional chart of accounts one account at a time by selecting Modules, Accounting, Chart of Accounts, New. If applicable, you can add new divisions or departments to pc/MRP's chart of accounts. pc/MRP has reserved the 5th and 6th characters of the account number for divisions and the 7th and 8th characters of the account number for departments.

For example if you wanted to add expense and revenue accounts for a division 10, department 01, you would select configuration, Settings and Utilities, **Option 9**, Add a New Division/Department. pc/MRP will ask you to enter the starting chart of account number (must end on 0000) and the ending chart of account number (must end in 0000). pc/MRP will create new chart of accounts ending in 1001 for every account that ends in 0000 between the starting number and the ending number as per the screen shown in the screen below.

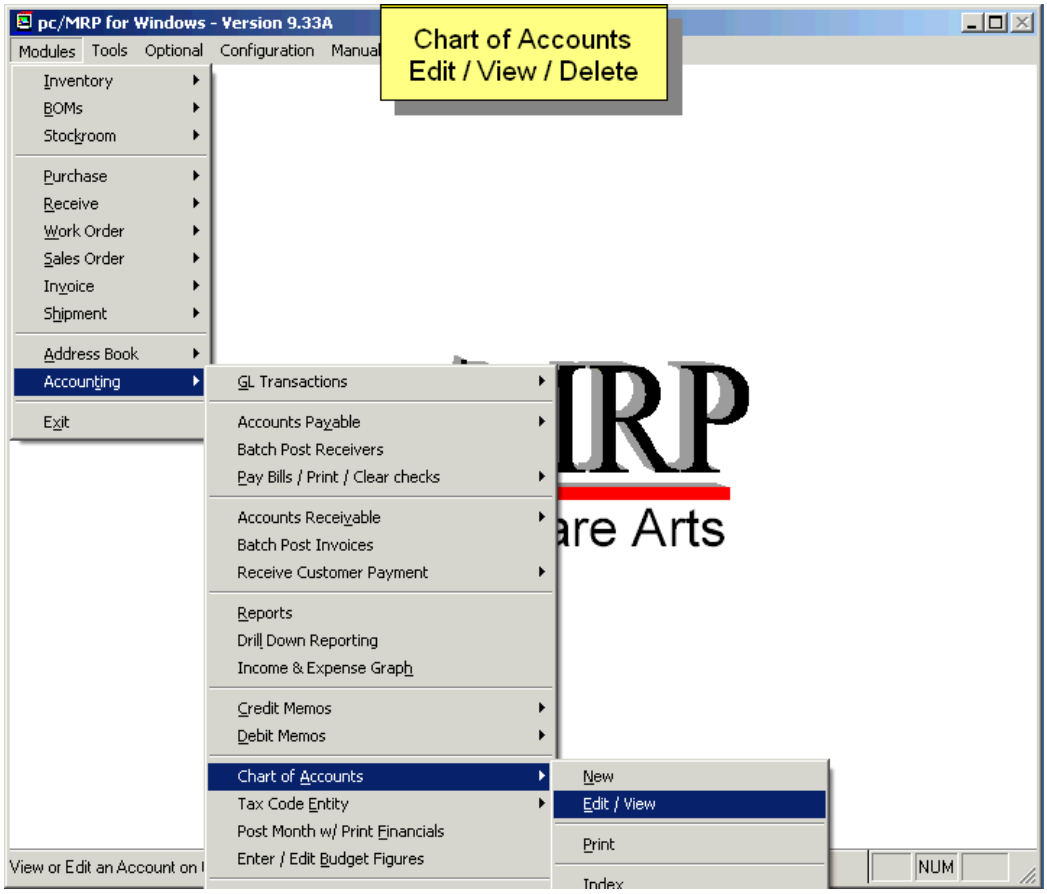


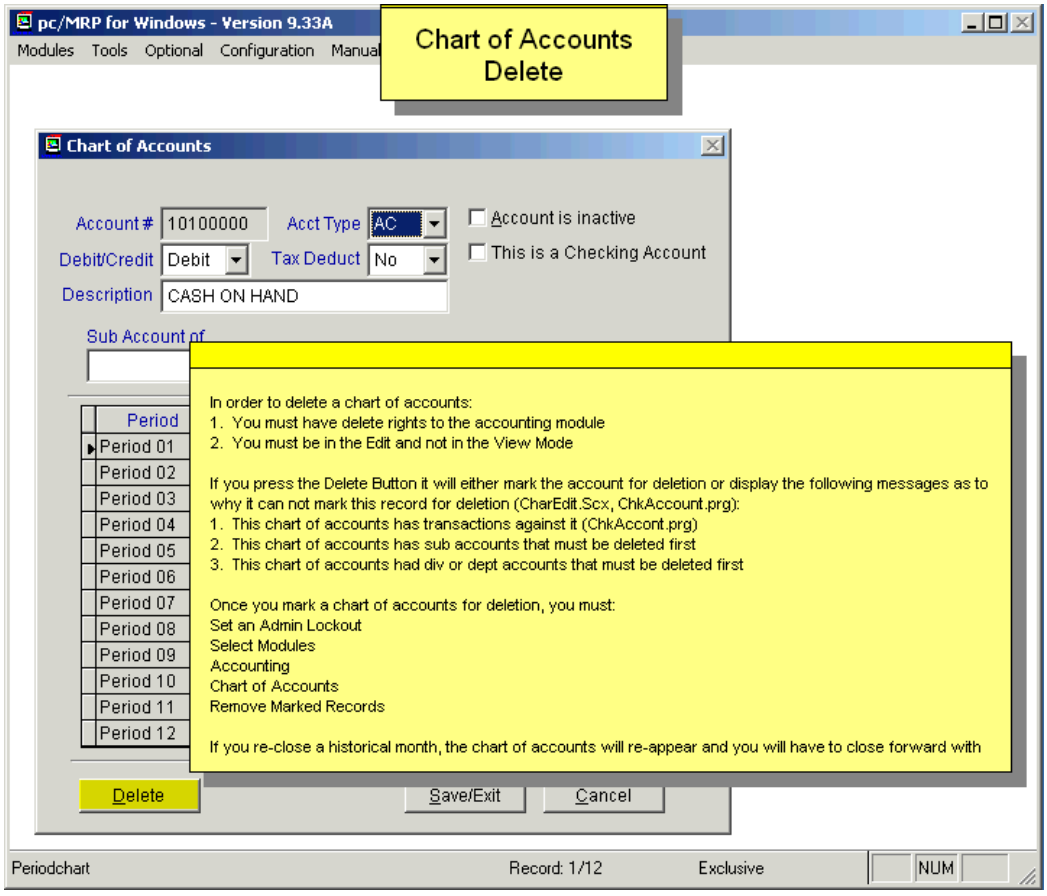

**14.3.2 Edit/View a Chart of Accounts**

Editing or adding chart of account numbers is not recommended unless you fully understand accounting, and how pc/MRP operates with the chart of account numbers. pc/MRP will not accept any changes made to accounts that have dollar amounts posted to them.

If you edit one of the base chart of account numbers, such as AR, AP, Checking, etc., you must also go to pc/MRP's configuration menu and make the same change in the chart of accounts template file.

To edit a chart of account number users must use **Option 72** in the Settings and Utilities Menu as this will change the account number everywhere including the prior backup copies made by pc/MRP after you close (post) a month.



### 14.3.3 COA Categories and Rules

The chart of account numbers have been divided into five different categories listed below.

| CATEGORY | EXAMPLES | NUMBERS | TYPE | DED | D/C |
|---|---|---|---|---|---|
| ASSET | +(cash, recvbls,inventory,advances,equip) | 1000 | Ax | N | D |
| | -(depreciation, allowance for bad accounts) | | | | C |
| LIABILITY | +(accounts pay, loans pay, taxes payable) | 2000 | Lx | N | C |
| | -(repayment of loan) | | | | D |
| EQUITY | +(stock issued, capital in, ret. earnings) | 2500 | Qx | N | C |
| | -(capital withdrawal by owner) | | | | D |
| REVENUE | +(interest income, sales) | 3000 | Rx | N | C |
| | -(sales discounts allowed, returned merch.) | | | | D |
| EXPENSES | +(rent, wages, supplies, taxes) | 4000 | Ex | Y | D |
| | -(purchase discounts taken, taxes refund) | | | | C |

Expense accounts are categorized as follows:
- EG Accounts will be totaled under Cost of Goods Sold
- EL Accounts will be totaled under Cost of Labor
- EN Accounts will be totaled under Normal Operating Expenses
- EW Accounts will be totaled under Write off Expenses
- EO Accounts will be totaled under Other Expenses
- ET Accounts will be totaled under Income Taxes

Revenue Accounts are categorized as follows:
- RN Accounts will be totaled under Revenue
- RO Accounts will be totaled under Other Revenue

Equity Accounts are categorized as follows:
- QN Accounts will be totaled under Equity
- QR Account is reserved for YTD Retained Earnings (only one QR account is allowed)

Liability Accounts are categorized as follows:
- LC Accounts will be totaled under Current Liabilities
- LL Accounts will be totaled under Long Term Liabilities

Asset Accounts are categorized as follows:
- AF Accounts will be totaled under Fixed Assets
- AC Accounts will be totaled under Current Assets
- AL Accounts will be totaled under Long Term Assets
- AD Accounts will be totaled Accum Write Offs

**pc/MRP's Chart of accounts are further defined as follows:**

| | | |
|---|---|---|
| 22100000 | PAYROLL TAX F.W.T. | = liability, federal withholding tax |
| 22110000 | PAYROLL TAX F.I.C.A | = liability, federal social security |
| 22120000 | PAYROLL TAX F.U.T.A | = liability, federal unemployment tax |
| 22130000 | PAYROLL TAX S.D.I. | = liability, state disability |
| 22140000 | PAYROLL TAX S.W.T. | = liability, state withholding |
| 22150000 | PAYROLL TAX S.U.I. | = liability, state unemployment |
| 22160000 | PAYROLL TAX E.T.T. | = liability, state employment training |
| 29100000 | COMPANY TAXES | = taxes paid by individual owner |
| 90100000 | COMPANY TAX-FEDERAL | = taxes paid by corporation |

## pc/MRP Chart of Account Structure Rules

Top Level Base Top Chart of Account Number
- Has no parent account
- The full account number must be unique
- Div/Dept suffix of any 4 numbers. If **RESTRICTCHART.FLG** file exists in pcmrpw directory, suffix must = 0000

2nd through 5th Level Sub Chart of Account Numbers
- Has a top level parent account
- The full account number must be unique
- Div/Dept Sub Acct must have a suffix that matches the parent suffix unless the top parent suffix = 0000
- Must be same account type a parent
- Parent & child debit/credit accounts do not have to match

Example:
- Utilities (1st) 6250 0000
  - Utilities Div 1 (2nd) 6250 0100
    - Water Div 1 (3rd) 6251 0100
    - Electricity Div 1 (3rd) 6252 0100
  - Utilities Div 2 (2nd) 6250 0200
    - Water Div 2 (3rd) 6251 0200
    - Electricity Div 2 (3rd) 6252 0200

Edit a Chart of Account
- Edit the Chart of Account Number Field
  - Must be done with Option 72
- Edit the Chart of Account Description Field
  - OK
- Edit the Account Type Field
  - Must have no existing transactions
  - Must have no existing sub accounts
  - Must have no twin div/dept accounts
- Edit the Debit/Credit Field
  - Must have no existing transactions
  - Must have no existing sub accounts
  - Must have no twin div/dept accounts
- Edit the Full ID Field
  - Must have no existing transactions
  - Must have no existing sub accounts
  - Must have no twin div/dept accounts

Delete a Top Base Chart of Account
- Must have no transaction history
- Must have no sub accounts (sub accounts must be deleted first)
- Must have no Div/Dept Accounts (Div/Dept accounts must be deleted first)

Delete a Base Sub Chart of Account
- Must have no transaction history
- Must have no sub accounts (sub accounts must be deleted first)
- Must have no Div/Dept Accounts (Div/Dept accounts must be deleted first)

Delete a Top Div/Dept Chart of Account
- Must have no transaction history
- Must have no sub accounts (sub accounts must be deleted first)

Delete a Div/Dept Chart of Accounts
- Must have no transaction history
- Must have no sub accounts (sub accounts must be deleted first)

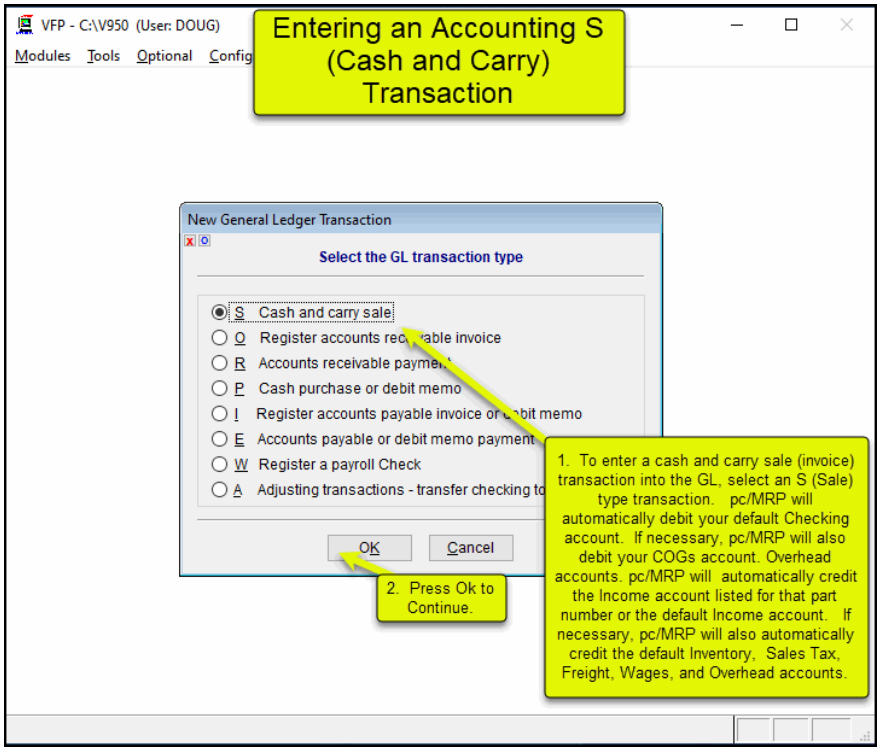
### 14.3.4 Index (see 15.14.3)

### 14.3.5 Remove Marked Records (see 15.14.4)

# 14.4 General Ledger

### 14.4.1 Overview

Select Accounting, GL Transactions, New Transaction.




The first selection allows you to enter an accounting transaction. You will be given the next available Transaction Number. The Transaction Number should consist of only numeric characters with leading zeros. pc/MRP is unable to increment alpha characters. The Entry Method Screen will appear giving you the following entry options:

If you select an **S**, **O**, or **R** type transaction, pc/MRP will prompt you to scroll the invoice file to locate the invoice or AR Voucher. You can scroll on document number (invoice number), customer account number, part number, model number and or sales order number.

If you select a **P**, **I**, or **E** type transaction, pc/MRP will prompt you to scroll the receiver file to locate the receiver or AP Voucher. You can scroll on document number (receiver number), vendor account number, part number, model number and or customer PO number.

Enter the first several characters you wish to begin scrolling at. When the desired record is located, press enter to preview the record. If it is the wrong record, press the escape key to continue scrolling. When you find the correct record press the enter key or click on the upper left button of the scroll window and select close to create a GL transaction for that record.

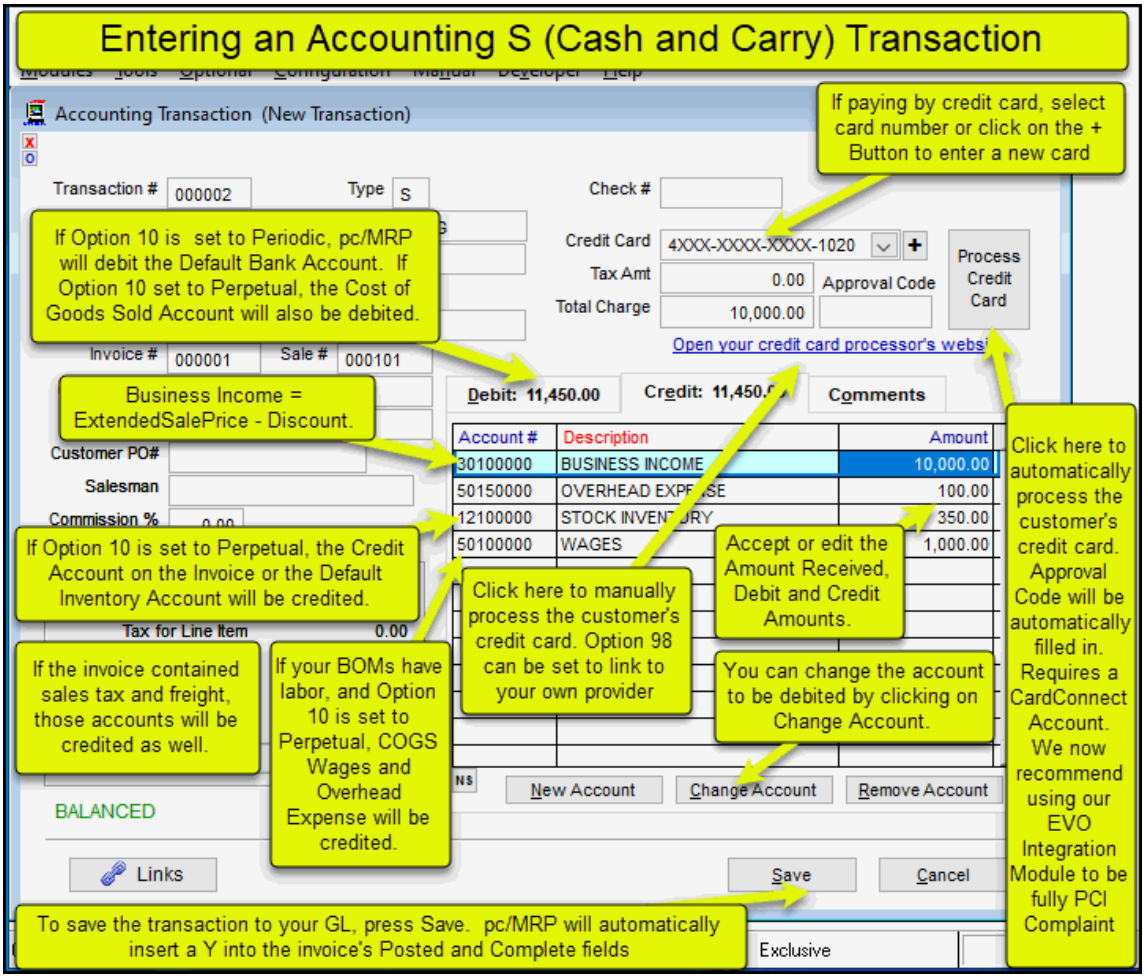
It should be noted that the following examples use pc/MRP's default chart of account numbers. You can use your own chart of account numbers if you edit or add your new chart of account numbers to the chart of accounts and accounting template file (**Option 9** in the configuration menu).

In addition it should be noted that the following examples were created with pc/MRP's inventory accounting method set to perpetual and not periodic (**Option 10** in the configuration menu's settings and utilities section).

Different chart of accounts would be debited and credited if pc/MRP's inventory accounting method were set to periodic.

### 14.4.2 A/R Transactions

#### 14.4.2.1 Cash and carry sale (S):




*Cash and carry / On Account & Carry Sale, S type, example transaction*
*(NOT RECOMMENDED FOR ORDER ENTRY SALES!)*

This type of entry is used to record a cash and carry sale. pc/MRP will bring in the above information from the invoice, and debit and credit the above chart of account numbers automatically. If the amounts are not correct, click on the cancel button, edit the invoice, and re-enter this transaction. Once you are satisfied with the transaction, click on the save button. pc/MRP will store the transaction in the transaction data base file, replace the posted field in the invoice with "Y", and replace the complete field in the invoice with a "Y". pc/MRP will also replace the check number and amount paid fields in the invoice with the correct values.

**If Multi Divisions is Off** (Default Setting in **Option 11**)

The Income Chart of Accounts

Case the Invoice or Part contain an Income Credit Account (uses invoice if populated)

pc/MRP credits the Income Account listed in the Invoice or Part

Otherwise

pc/MRP credits the Income Account listed in the Default Account Template

Remaining Chart of Accounts (Bank, Frt, Tax plus Inventory and COGs if Option 10 = Perpetual)

pc/MRP Debits and Credits Accounts listed in the Default Accounts Template

**If Multi Divisions is On (Option 11 is set to Division)**

The Income Chart of Accounts

Case the Part or Invoice contain an Income Account (uses invoice if populated)

If the invoice has a division

Credit a chart of accounts containing the first 4 chars of invoice acct + division

If the invoice does not contain a division

Credit that the Income Account listed in the Invoice or Part

Otherwise if the Part and Invoice do not contain an Income Account

If the invoice does not have a division

Credit the Income Account listed in the Default Account Template

Else the invoice has a division

If the default income account + division exists

Credit the default Income Account + Division

Else the Default Income Account + Division do not exist

Credit the Default Income Account + “0000”

Remaining Chart of Accounts (Bank, Frt, Tax, Inventory, OverHd, COGs if Option 10 = Perpetual)

If the invoice does not have a division

Debit and Credit Accounts listed in the Default Accounts Template

Else the invoice has a division

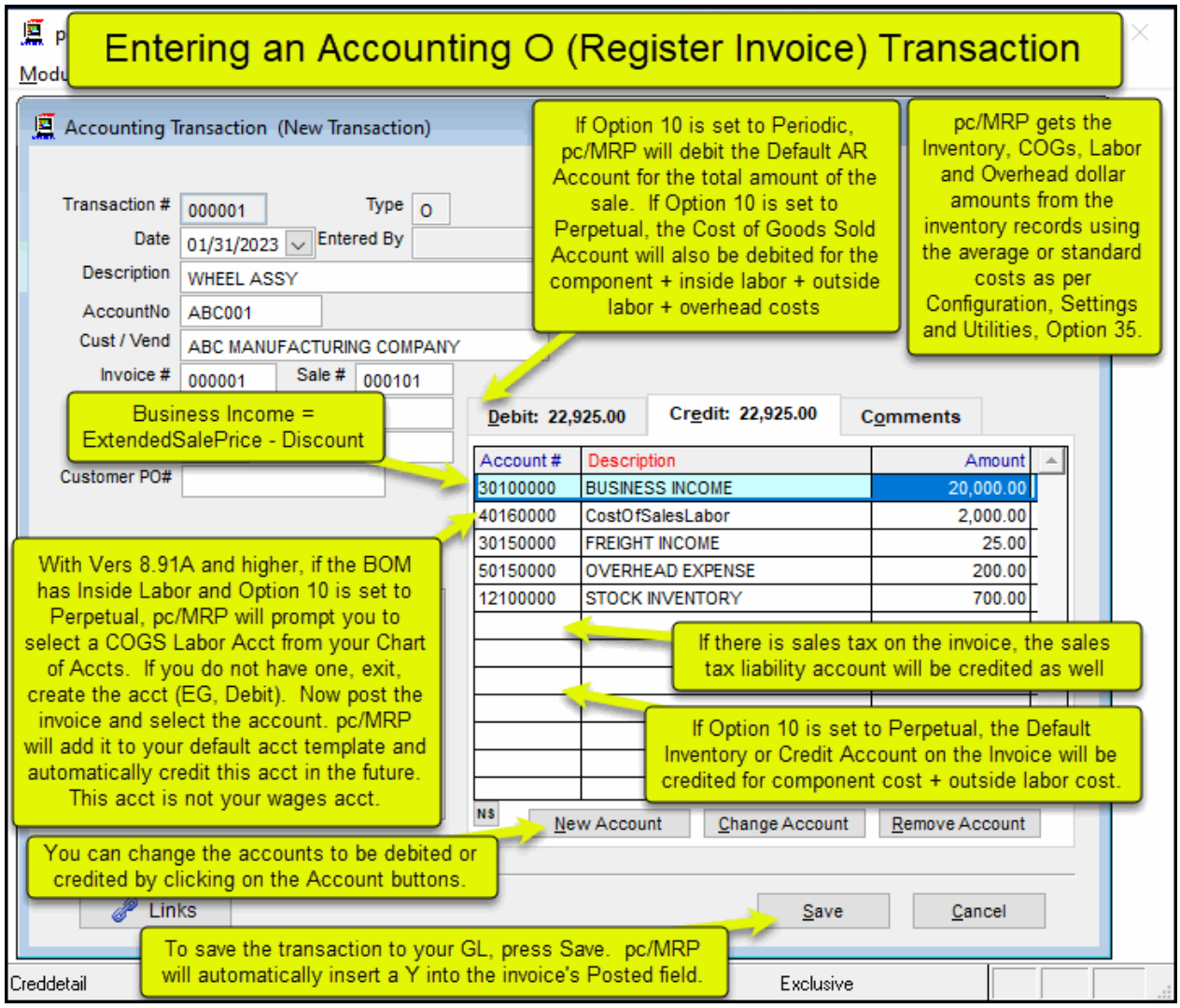
If the default account + division exists

Debit/Credit the default Accounts + Division

Else the Default Account + Division do not exist

Debit/Credit the Default Accounts + “0000”

**14.4.2.2 Register accounts receivable invoice (O):**




*Register accounts receivable, material going Out, O type, example transaction*

This type of entry is necessary whenever an item is invoiced on account. pc/MRP will bring in the above information from the invoice, and debit and credit the above chart of account numbers automatically. If the amounts are not correct, click on the Cancel Button, edit the invoice, and re-enter this transaction. Once you are satisfied with the transaction, click on the save button. pc/MRP will store the transaction in the transaction data base file, and replace the posted field in the invoice with a "Y". The Division Field is transferred from the part master or address book (Configuration, Settings and Utilities, **Option 78**) to the sales order and from there to the invoice.

**If Multi Divisions is Off** (Default Setting **Option 11**)

pc/MRP will debit the Default AR Account found in Option 9 for the amount of the sale pc/MRP will credit the Income Account found in the Invoice, Part or Default Accounts for the amt of the sale

pc/MRP will credit the Default Sales Tax Liability and Default Freight Income Accounts (Option 9)

If Option 10 set to perpetual accounting methods

Debits CoGS $100.00

Credits Inventory $60.00 (Inventory is not over driven and does not include labor)

Credits Gross Wages $30.00 (Only if the BOM contains labor type part numbers)

Credits Overhead $10.00 (Only if the BOM contains labor type part numbers and overhead % > 0)

**If Multi Divisions is On (Option 11 is set to Division)**

The Income Chart of Accounts

Case the Part or Invoice contain an Income Account (uses invoice if populated)

If the invoice has a division

Credit a chart of accounts containing the first 4 chars of invoice acct + division

If the invoice does not contain a division

Credit that the Income Account listed in the Invoice or Part

Otherwise if the Part and Invoice do not contain an Income Account

If the invoice does not have a division

Credit the Income Account listed in the Default Account Template

Else the invoice has a division

If the default income account + division exists

Credit the default Income Account + Division

Else the Default Income Account + Division do not exist

Credit the Default Income Account + "0000"

Remaining Chart of Accounts (AR, Frt, Tax, Inventory,OverHd, CoGS if Option 10 = Perpetual)

If the invoice does not have a division

Debit and Credit Accounts listed in the Default Accounts Template

Else the invoice has a division

If the default account + division exists

Debit/Credit the default Accounts + Division

Else the Default Account + Division do not exist

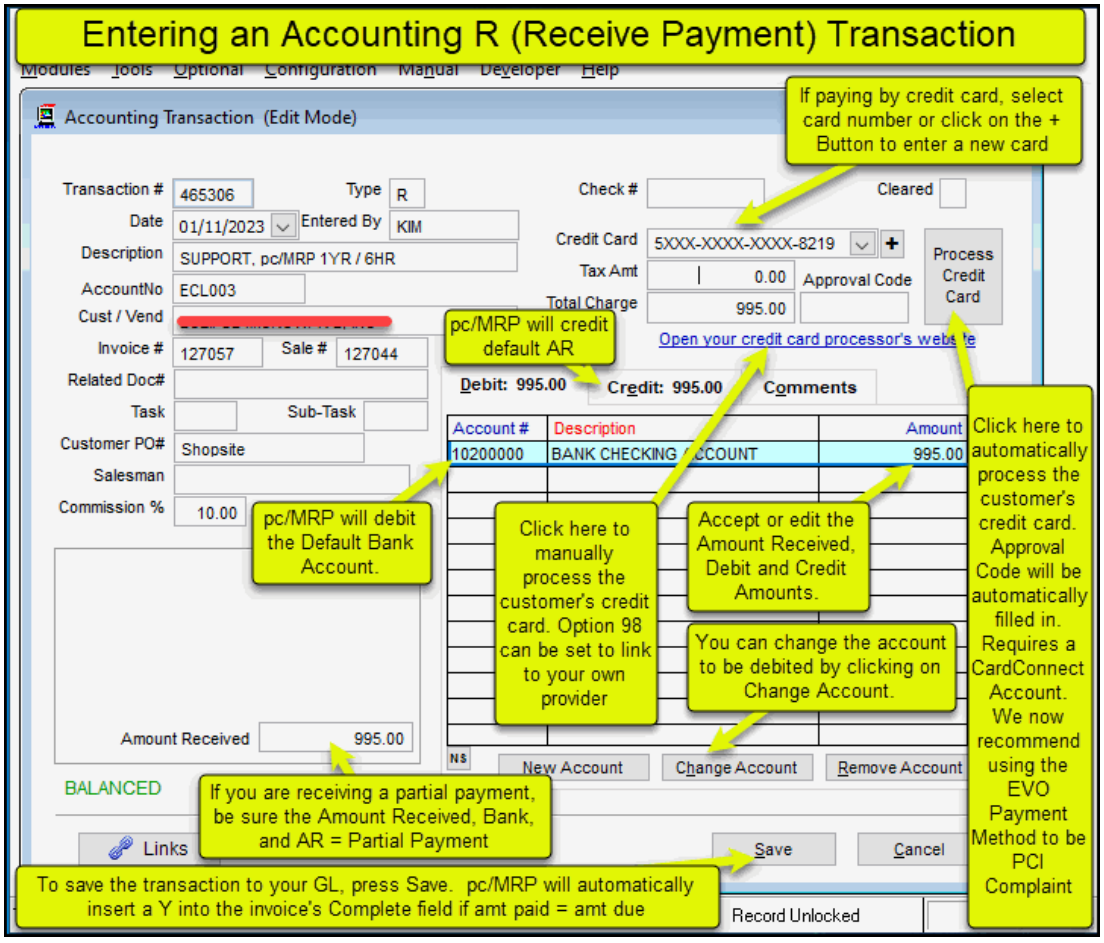
Debit/Credit the Default Accounts + "0000"

**Note:** pc/MRP only uses **Option 35** to determine whether to use average or standard costs. pc/MRP will calculate Cost of Goods Sold directly from the partmaster and not from the cost in the invoice or sales order regardless of how Option 35 is set. If there is labor and or overhead in the BOM, pc/MRP will credit those accounts regardless of how Option 35 is set. The reason for this is that pc/MRP's cost rollup function includes labor and overhead costs if they exist in the BOM. As such, the above invoice would be debited and credited as follows.

The cash sale (S) type transaction is similar to the above (O) type transaction with the exception the S type transaction debits the checking account instead of accounts receivable.

Outside labor is rolled into inventory and inside labor is rolled into gross wages.

**14.4.2.3 Accounts receivable payment (revenue) (R):**




This type of entry is used to record a payment from a customer towards an existing accounts receivable invoice or voucher. pc/MRP will bring in the above information from the invoice, and debit and credit the above chart of account numbers automatically. If the amounts are not correct, click on the cancel button, edit the invoice, and re- enter this transaction. Once you are satisfied with the transaction, click on the save button. pc/MRP will store the transaction in the transaction data base file, replace the check number in the invoice, and add the amount received to the amount received field in the invoice. If the total amount received is equal to or greater than the amount due pc/MRP will put a "Y" in the invoices complete field.

If the customer pays within 10 days and takes advantage of the terms discount, enter a general ledger transaction (accounts receivable payment). Enter the full amount originally due as the amount received. Debit checking for the amount actually received, debit Cash Discount or Business Income for the terms amount, credit Accounts Receivable for the full amount originally due.

**If Multi Divisions is Off** (Default Setting **Option 11**)

pc/MRP selects the AR and Checking Account listed in the Default Accounts Template

**If Multi Divisions is On (Option 11 is set to Division)**

If the invoice does not have a division

Selects the AR and Checking Accounts listed in the Default Accounts Template

Else the invoice has a division

If the default account + division exists

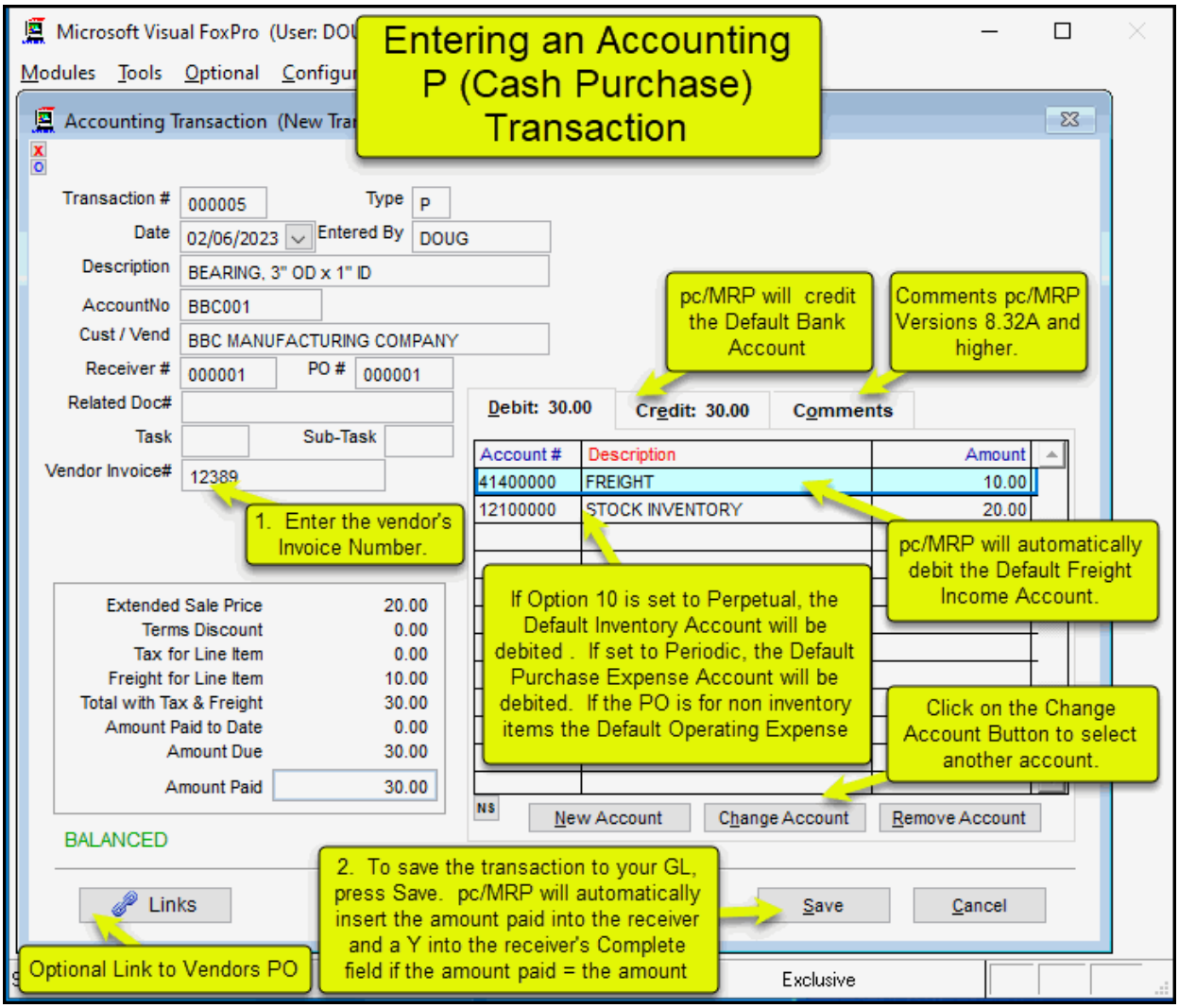
Credit/Debit the default Accounts + Division

Else the Default Account + Division do not exist

Credit/Debit the Default Accounts + “0000”

### 14.4.3 A/P Transactions

#### 14.4.3.1 Cash and carry purchase (P):




*Cash Purchase, P type, example transaction*

This type of entry is used to record a cash and carry purchase, for example Checks, Cash, Credit Card, & CODs. pc/MRP will bring in the above information from the receiver, and debit and credit the above chart of account numbers automatically. If the amounts are not correct, click on the cancel button, edit the receiver, and re-enter this transaction. Once you are satisfied with the transaction, click on the save button. pc/MRP will store the transaction in the transaction data base file, replace the posted field in the receiver with "Y", and replace the complete field in the receiver with a "Y". pc/MRP will also replace the check number and amount paid fields in receiver with the correct values. pc/MRP will then ask if you wish to print a check for transaction. If you have created a custom form (cuscheck.frx), then select Form Type, Custom. Check date will be the current system date.

**If Multi Divisions is Off** (Default Setting **Option 11**)

The Inventory, Purchase Expense or Operating Expense Chart of Accounts

Case the Receiver or Part contain a Debit Account (uses Receiver if populated)

pc/MRP debits the Debit Account listed in the Receiver or Part

Otherwise the receiver or part do not contain a Debit Account

If receiving inventory items,

If **Option 10** is set to Perpetual debit the Default Inventory Account

If Option 10 is set to Periodic debit the Default Purchase Expense Account

If receiving non inventory items,

Debit the Default Operating Expense Account.

Remaining Chart of Accounts (Bank, Freight Income)

pc/MRP Debits and Credits Accounts listed in the Default Accounts Template

**If Multi Divisions is On (Option 11 is set to Division)**

The Inventory, Purchase Expense or Operating Expense Chart of Accounts

Case the Receiver or Part contain a Debit Account (uses Receiver if populated)

If the receiver has a division

Debits a chart of accounts containing the first 4 chars of receiver acct + division

Otherwise the receiver does not contain a debit account

If the receiver does not have a division

If receiving inventory items,

If **Option 10** is set to Perpetual debit the Default Inventory Account

If Option 10 is set to Periodic debit the Default Purchase Expense Account

If receiving non inventory items,

Debit the Default Operating Expense Account.

Else the receiver has a division

If receiving inventory items,

If **Option 10** is set to Perpetual debit the Default Inventory Account + division

If Option 10 is set to Periodic debit the Default Purchase Expense Account + div

If receiving non inventory items,

Debit the Default Operating Expense Account + div.

Remaining Chart of Accounts (Bank, Freight Income)

If the receiver does not have a division

Debits and Credits Accounts listed in the Default Accounts Template

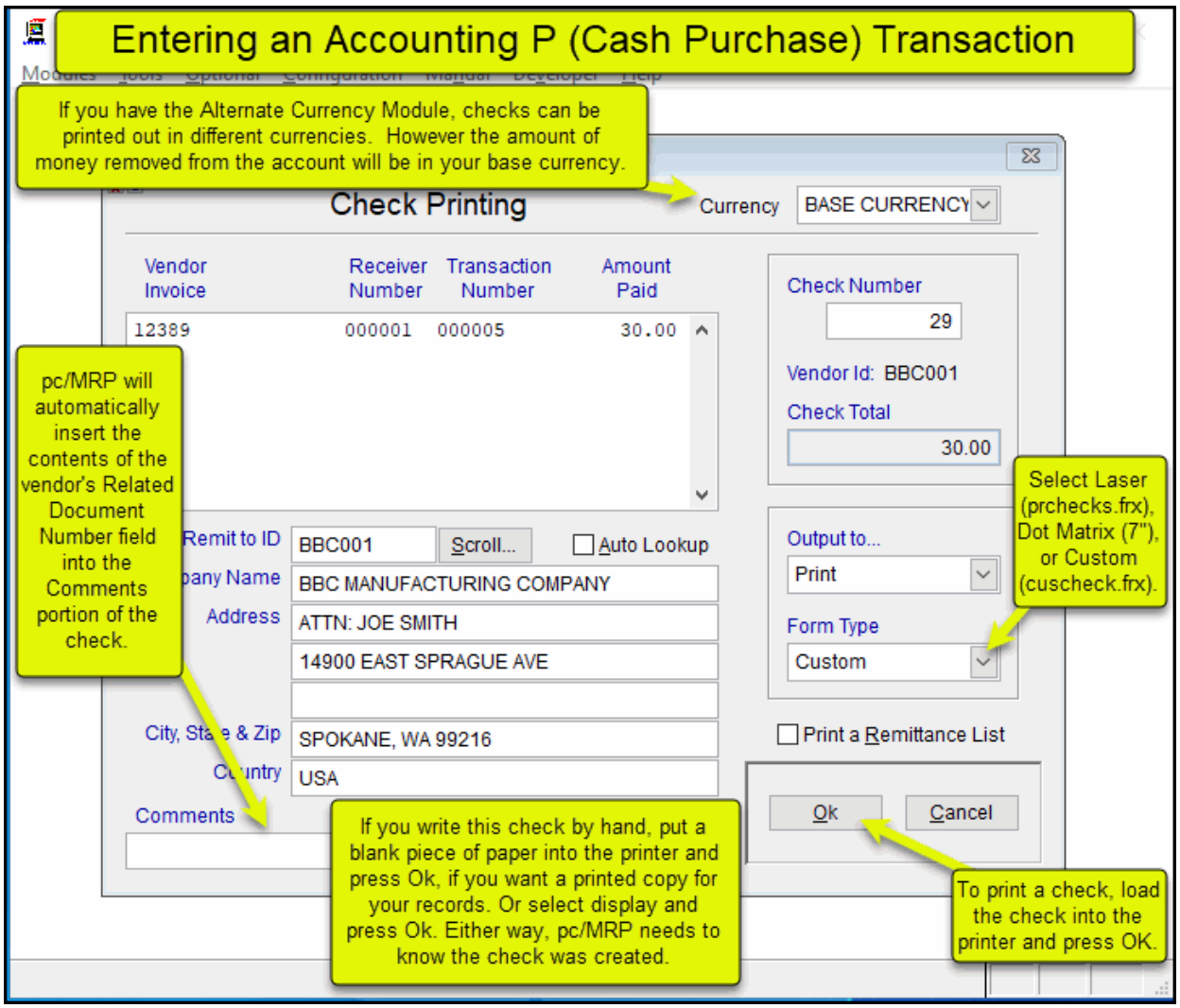
Else the receiver has a division

If the default account + division exists

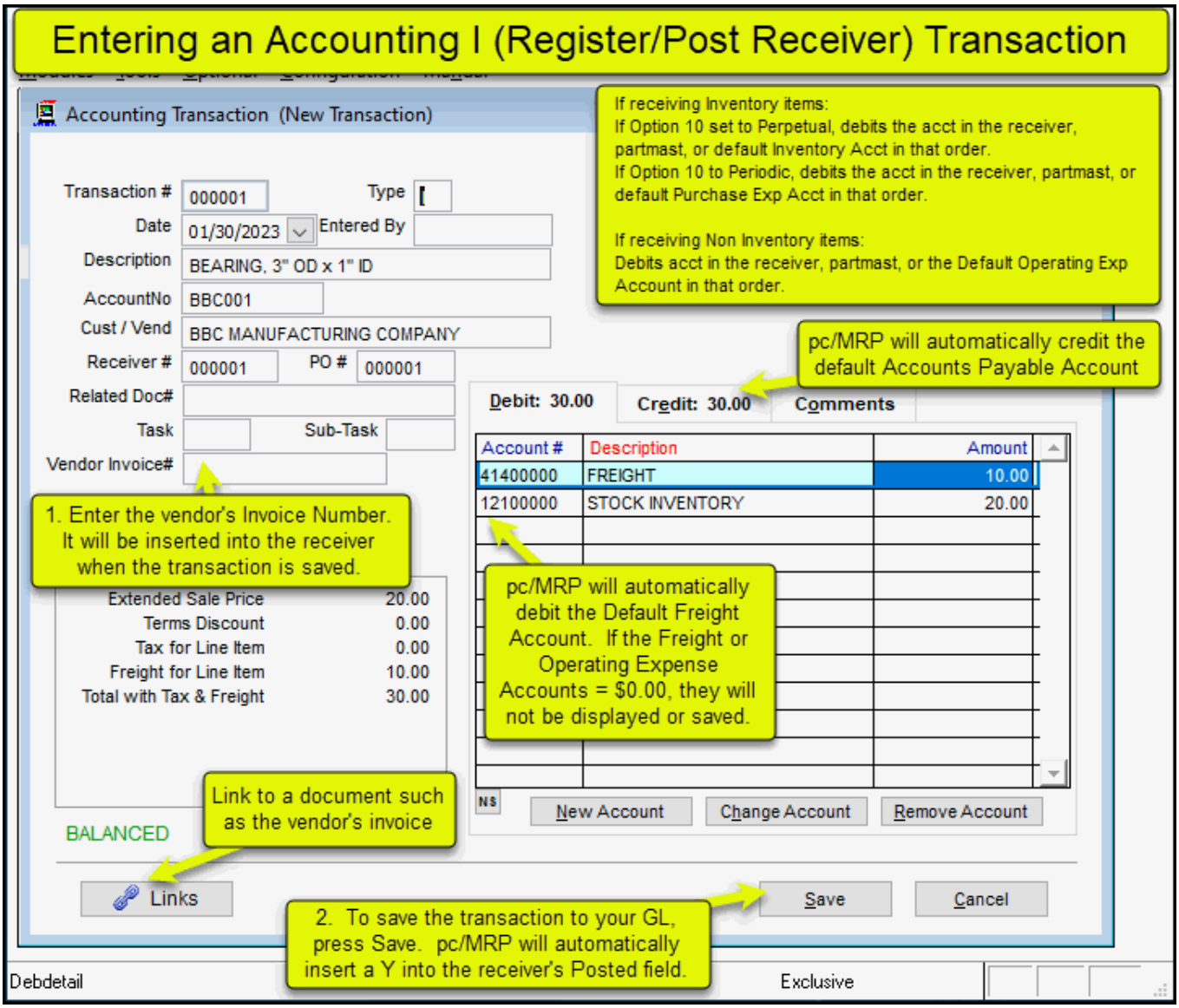
Debit/Credit the default Accounts + Division

Else the Default Account + Division do not exist

Debit/Credit the Default Accounts + “0000”


Entering an Accounting P (Cash Purchase) Transaction
If you have the Alternate Currency Module, checks can be printed out in different currencies. However the amount of money removed from the account will be in your base currency.
Check Printing
Currency
BASE CURRENCY
Vendor Invoice
Receiver Number
Transaction Number
Amount Paid
12389
000001
000005
30.00
Check Number
29
Vendor Id: BBC001
Check Total
30.00
pc/MRP will automatically insert the contents of the vendor's Related Document Number field into the Comments portion of the check.
Remit to ID
BBC001
Scroll...
Auto Lookup
BBC MANUFACTURING COMPANY
ATTN: JOE SMITH
14900 EAST SPRAGUE AVE
SPOKANE, WA 99216
USA
Comments
Output to...
Print
Form Type
Custom
Select Laser (prchecks.frx), Dot Matrix (7"), or Custom (cuscheck.frx).
Print a Remittance List
Ok
Cancel
If you write this check by hand, put a blank piece of paper into the printer and press Ok, if you want a printed copy for your records. Or select display and press Ok. Either way, pc/MRP needs to know the check was created.
To print a check, load the check into the printer and press OK.

**14.4.3.2 Register an Accounts Payable Invoice (I):**




*Register accounts payable, material coming in, I type, example transaction*

This type of entry is necessary whenever an item is received on account. pc/MRP will bring in the above information from the receiver, and debit and credit the above chart of account numbers automatically. If the amounts are not correct, click on the cancel button, edit the receiver, and re-enter this transaction. Once you are satisfied with the transaction, click on the save button. pc/MRP will store the transaction in the transaction data base file and replace the posted field in the receiver with a "Y"

**Note:** If **Option 10** is set to Perpetual, pc/MRP first looks at receiver, then inventory, and lastly, **Option 9** for the default inventory account. It the screen presented above, the default inventory account is 12100000.

**If Multi Divisions is Off** (Default Setting **Option 11**)

The Inventory, Purchase Expense, or Operating Expense Chart of Accounts are considered as follows:

Case the Receiver or Part contain a Debit Account (uses Receiver if populated)

pc/MRP debits the Debit Account listed in the Receiver or Part

Otherwise the receiver or part do not contain a Debit Account

If receiving inventory items,

If **Option 10** is set to Perpetual will debit the account in the receiver, partmast, or default Inventory Account in that order.

If Option 10 is set to Periodic will debit the account in the receiver, partmast, or default Purchase Expense Account in that order.

If receiving non inventory items,

Debit the Default Operating Expense Account.

Remaining Chart of Accounts (AP, Freight Income)

pc/MRP Debits and Credits Accounts listed in the Default Accounts Template

**If Multi Divisions is On (Option 11 is set to Division)**

The Inventory, Purchase Expense or Operating Expense Chart of Accounts are considered as follows:

Case the Receiver or Part contain a Debit Account (uses Receiver if populated)

SetAcct()

If the receiver has a division

Debits a chart of accounts containing the first 4 chars of receiver acct + division

Else the receiver has no division

Debits the chart of accounts listed on the receiver or partmaster

Otherwise the receiver does not contain a debit account

Settmplt()

If the receiver does not have a division

If receiving inventory items,

If **Option 10** is set to Perpetual debit the Default Inventory Account

If Option 10 is set to Periodic debit the Default Purchase Expense Account

If receiving non inventory items,

Debit the Default Operating Expense Account.

Else the receiver has a division

If receiving inventory items,

If **Option 10** is set to Perpetual

If exists in chart of accounts debit the Default Inventory Account + division

Else debit Default Inventory Account + “0000”

If Option 10 is set to Periodic

If exists in chart of accounts debit the Default Purchase Expense Account + div

Else debit Default Purchase Expense Account + “0000”

If receiving non inventory items,

Debit the Default Operating Expense Account + div.

Remaining Chart of Accounts (AP, Freight Income)

If the receiver does not have a division

Debits and Credits Accounts listed in the Default Accounts Template

Else the receiver has a division

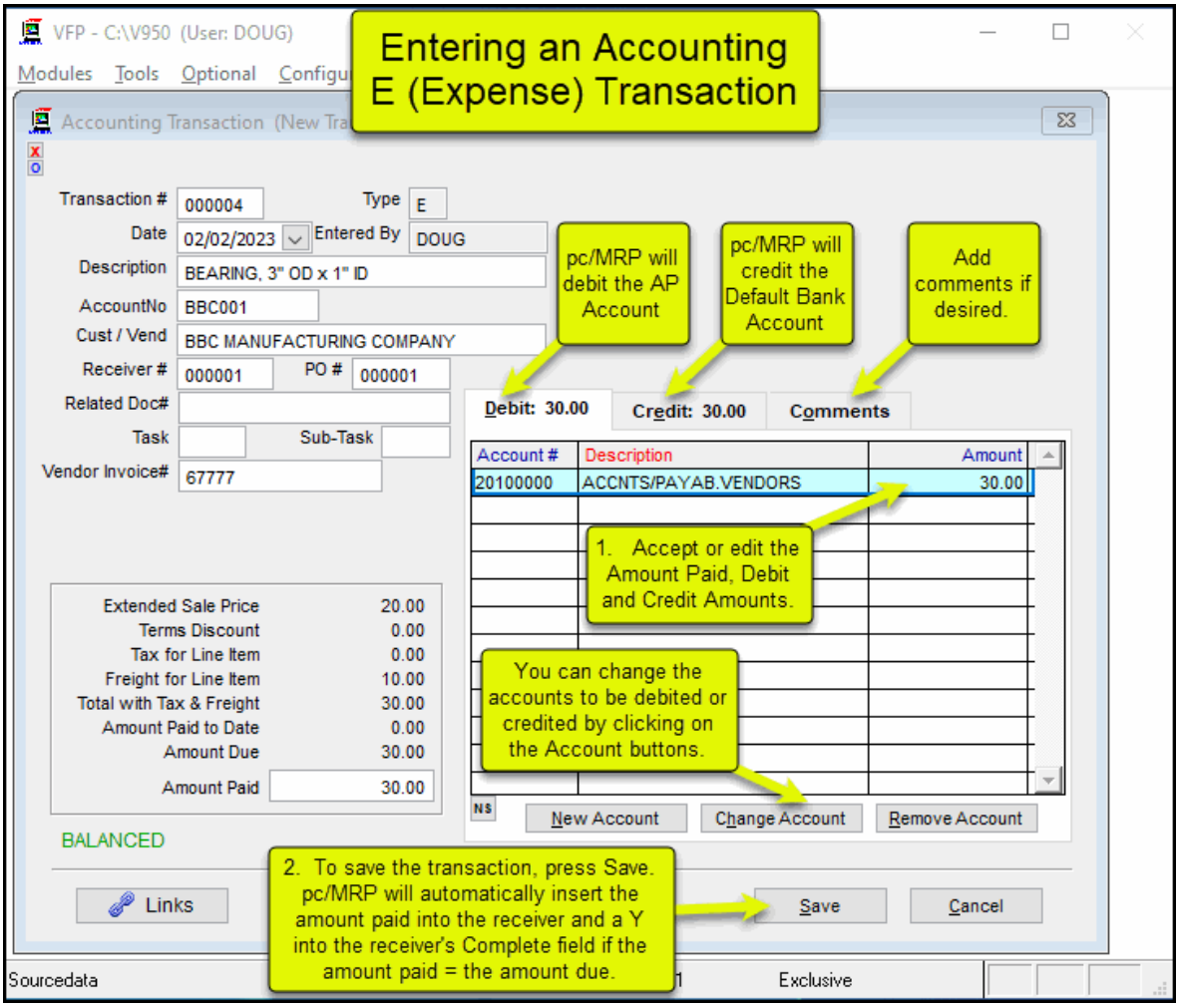
If the default account + division exists

Debit/Credit the default Accounts + Division

Else the Default Account + Division do not exist

Debit/Credit the Default Accounts + “0000”

**14.4.3.3 Accounts Payable Payment (expense) (E):**

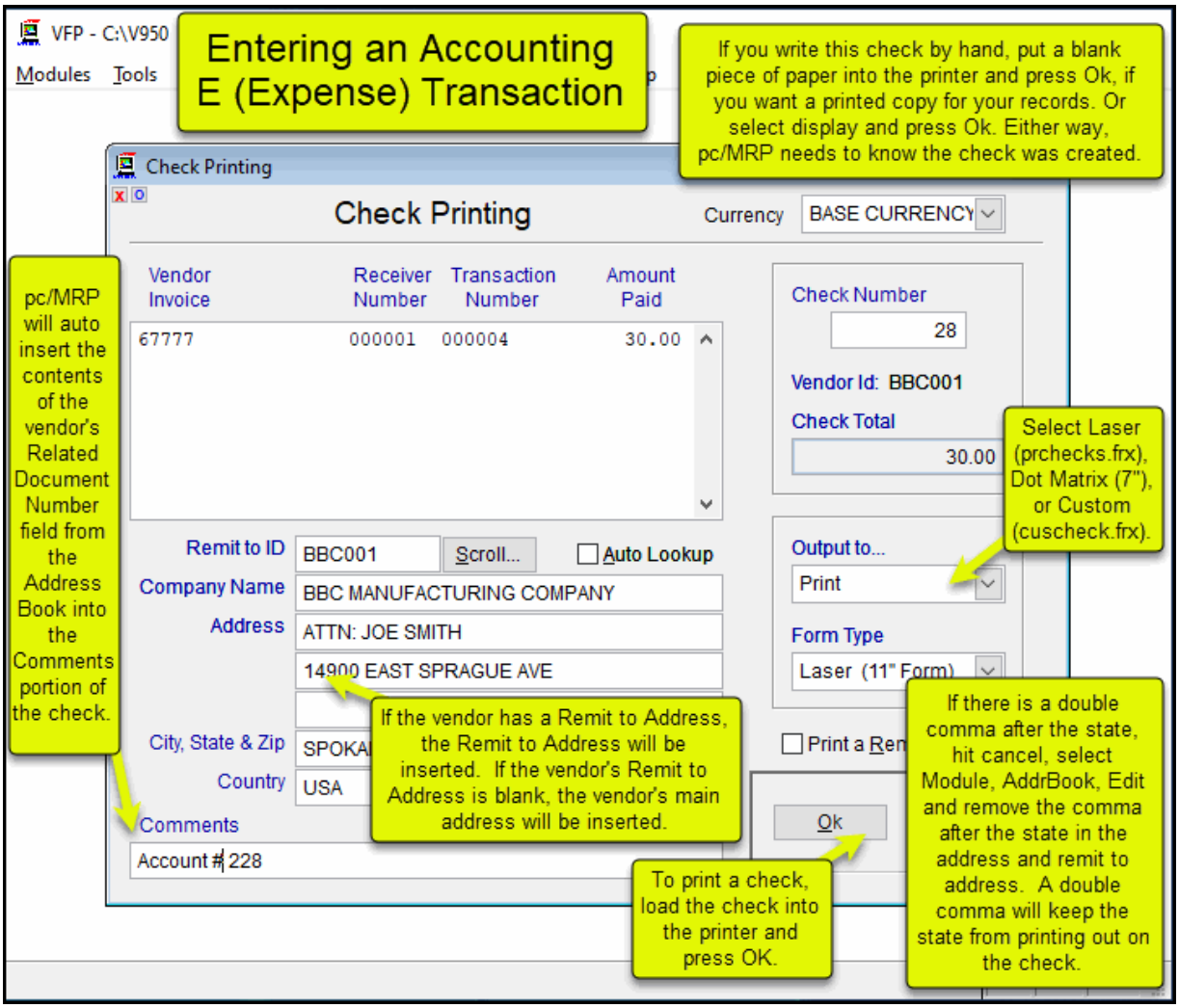



This type of entry is used to record a payment towards an existing accounts payable receiver or voucher. pc/MRP will bring in the above information from the receiver, and debit and credit the above chart of account numbers automatically. If the amounts are not correct, click on the cancel button, edit the receiver, and re-enter this transaction. Once you are satisfied with the transaction, click on the save button. pc/MRP will store the transaction in the transaction data base file, replace the check number in the receiver, and add the amount paid to the amount paid field in the receiver. If the total amount paid is equal to or greater than the amount due pc/MRP will put a "Y" in the receiver's complete field.

You can also use accounting's "Pay Bills/Print Checks" option to pay off a number of open unpaid receivers. The "Pay Bills" function creates a check run, entering E type transactions for each receiver selected and prints out one check per vendor.

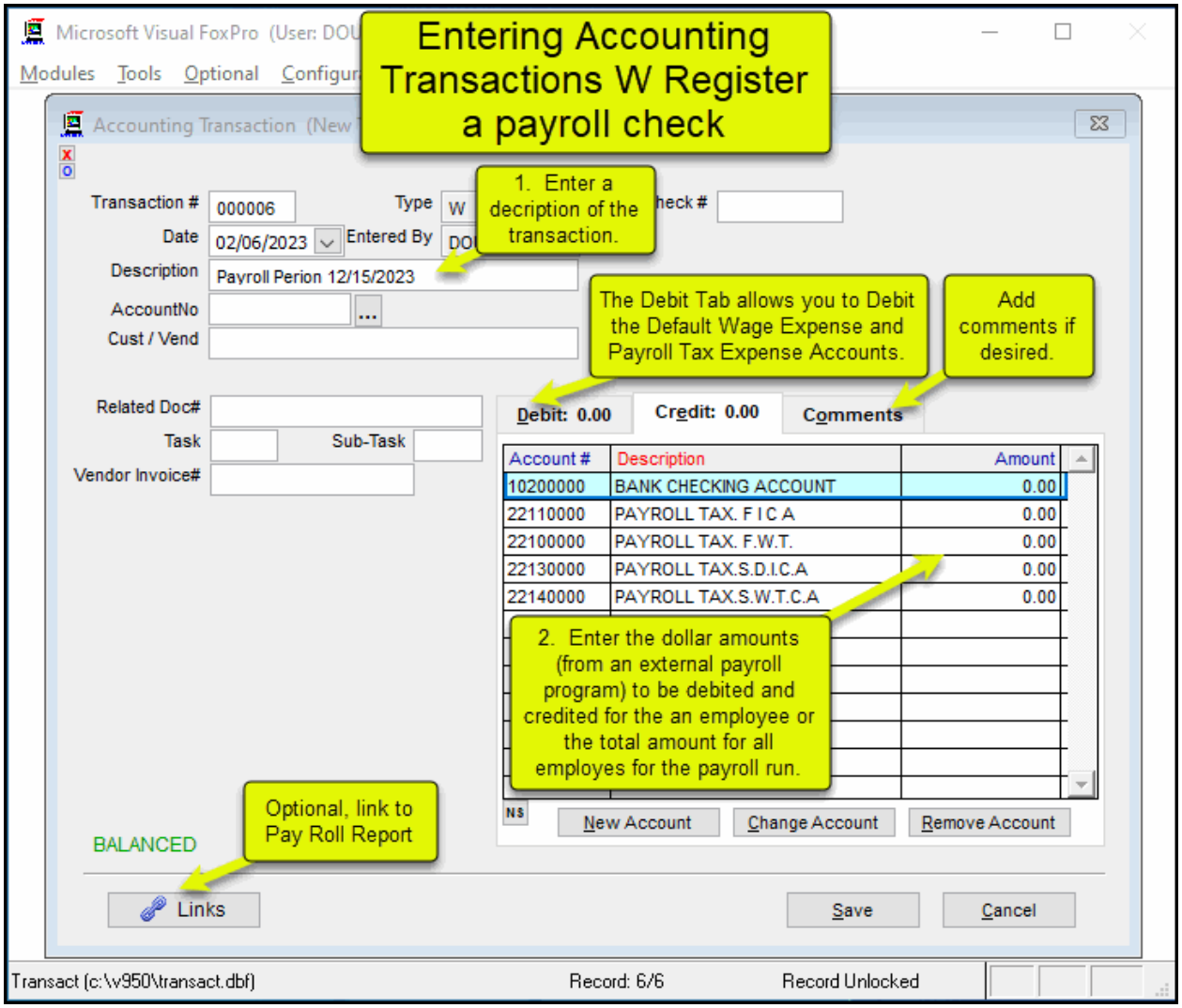
**If Multi Divisions is Off** (Default Setting **Option 11**)
pc/MRP selects the AP and Checking Account listed in the Default Accounts Template
**If Multi Divisions is On (Option 11 is set to Division)**
If the receiver does not have a division
Selects the AP and Checking Account listed in the Default Accounts Template
Else the receiver has a division
If the default account + division exists
Credit/Debit the default Accounts + Division
Else the Default Account + Division do not exist
Credit/Debit the Default Accounts + “0000”

pc/MRP will then ask if you wish to print a check for transaction. If you have created a custom form (cuscheck.frx), then select Form Type, Custom. Check date will be the current system date.



**14.4.4. Other Transactions**

**14.4.4.1 Payroll (W):**

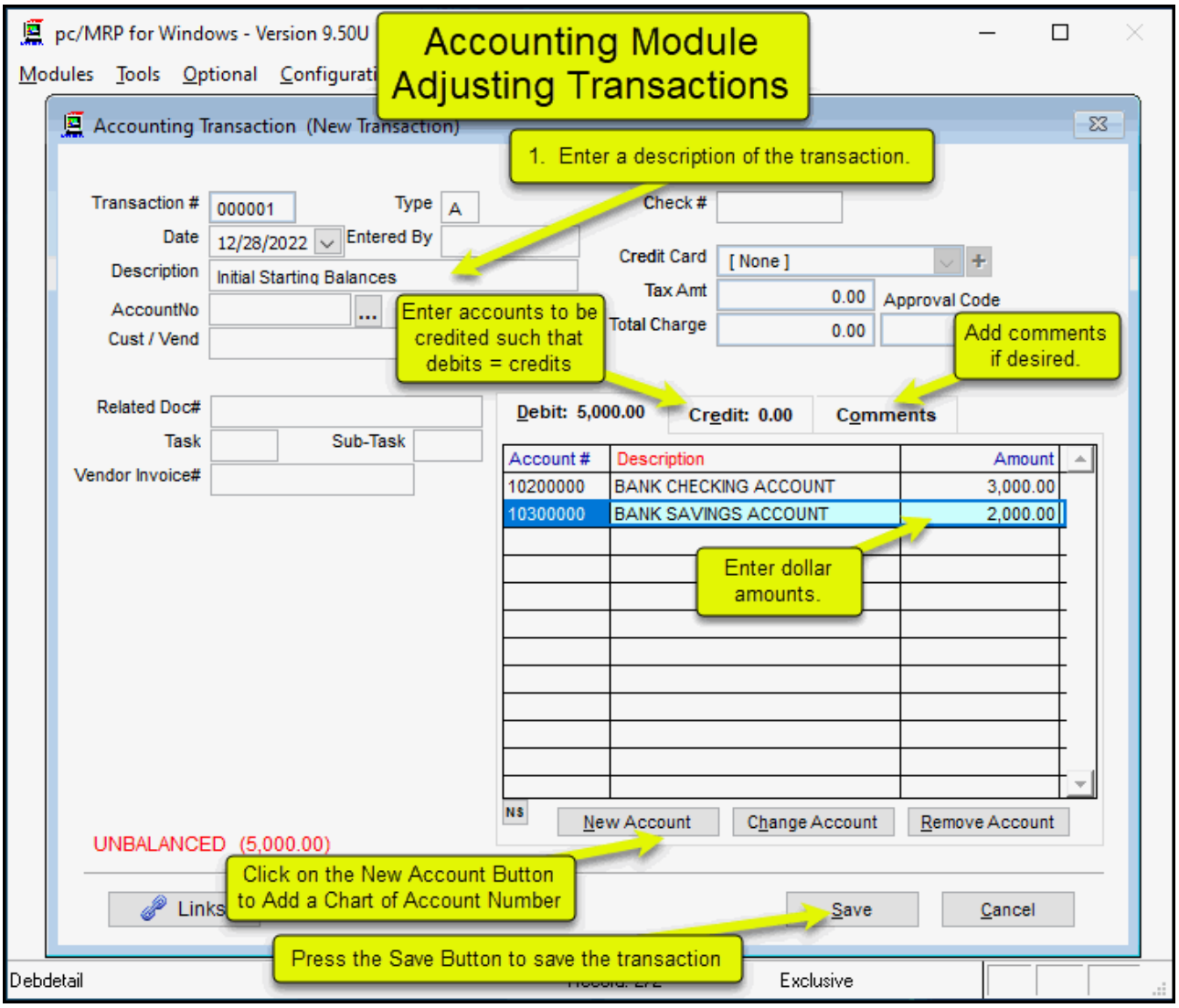



*Payroll, Wage, W type example transaction*

Selecting W will provide a payroll template for payroll entries. pc/MRP does not have a payroll module, just the above payroll screen. The payroll screen will automatically bring up the correct accounts to debit and credit. The user must enter the correct dollar amounts from a payroll program or payroll service. One entry can be made per payroll period, or an entry can be made for every person for every payroll period. See the example payroll transaction section (14.5.7) of this Manual for examples of entering various types of payroll transactions.

**Note**: The purpose of the W Option is to make a summary entry for a payroll period. This option can print out a standard check (not a payroll check) if Configuration, Settings and Utilities Option 13 is set to allow the W Option to "Print a check".

**14.4.4.2 Adjusting transaction types (A):**

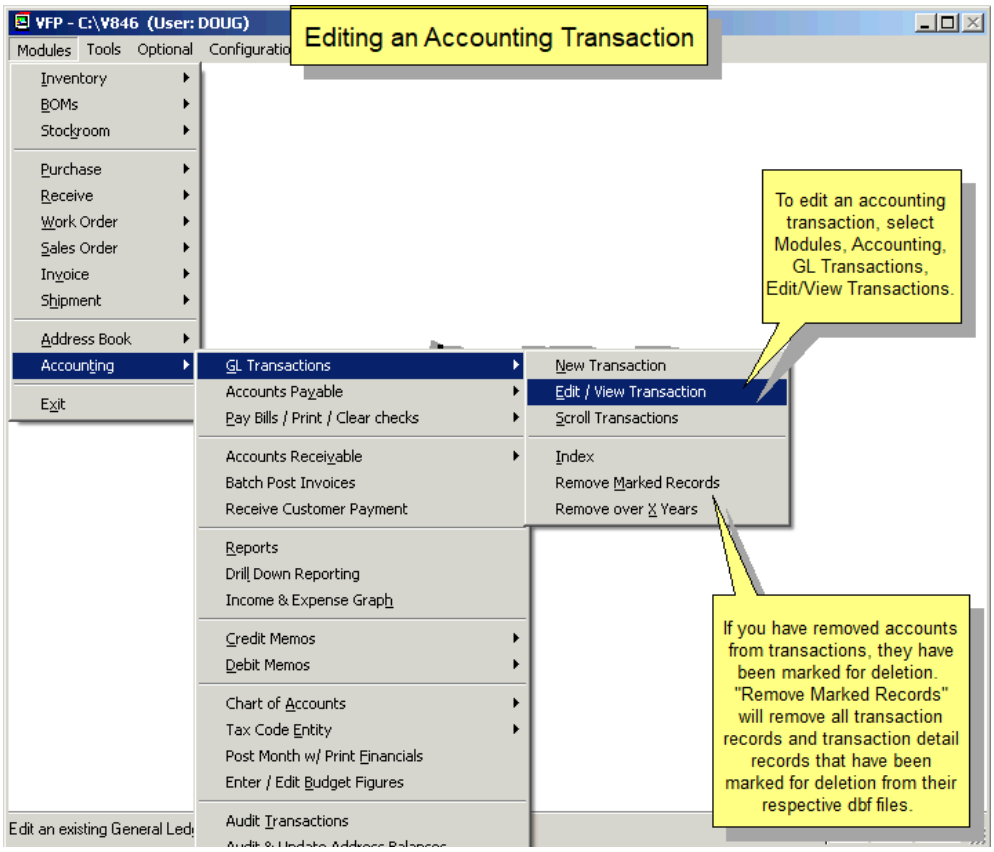


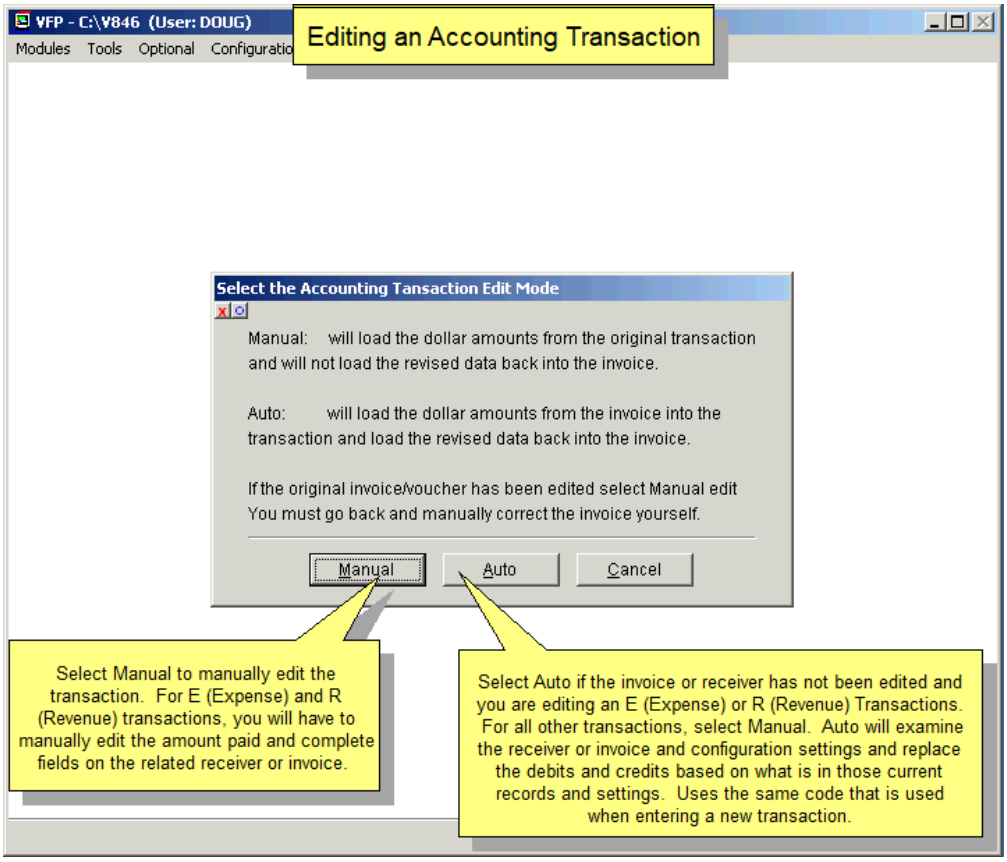

*All other, A type, example transaction*

This type of entry is used to record all other type of transactions. This quick entry form was designed to handle all transactions not involving an existing pc/MRP payable or receivable voucher. Adjusting transactions, transferring from checking to savings account are good examples. It is also the most efficient means for an outside accountant to make entries, as outside accountants are rarely required to make payables and receivable voucher entries.

This module is also used to startup or transfer in your existing account balances from your previous accounting system. Enter all your debits and credits from a previous trial balance by overriding pc/MRP's Out of Balance Message. When you have completed your entries post the month and print your financials. Check the Trial Balance Report to make sure you are in balance.

## 14.4.5 Edit/View a GL Transaction



Slideshow at: http://www.pcmrp.com/mrp101/editaccountingoption14.htm

The ability to edit General Ledger transactions can be enabled or disabled by using **Option 14** in the Settings and Utilities. If the option is set to Adjust, editing will not be available. If the option is set to allow Edits, the user can scroll, edit, delete, undelete, or run queries against General Ledger records.

Selecting an **Indexed Search** allows users to search on indexed fields. This allows pc/MRP to find the information much faster. To perform an Indexed Search select the:

1. Indexed Search tab
2. Desired Sort Order: Document Number, Account Number or Part Number
3. Enter the applicable data in the Begin Scrolling At: field
4. Select the desired Action: View or Edit
5. Press Search

pc/MRP will scroll to the desired record or the nearest match. Select the correct record by scrolling and press Ok to proceed to the edit screen for that record.

Selecting to run a **Queried Search** allows users to build, run, save, and load queries for the General Ledger table. For further details, see Chapter 15.14.

If you edit an A, W, O, or I type transaction, the corresponding invoices or receivers will not automatically be edited. Users would have to edit both the General Ledger and the corresponding invoice or receiver.

If you edit an E (AP expense payment) or P (cash purchase) transaction, pc/MRP will prompt you to edit the transaction automatically or manually. An automatic edit will correct the original receiver's amount paid and complete fields automatically. A manual edit will not correct the receiver's amount paid and complete fields. After you manually edit an E or P transaction, you must edit the receiver's amount paid and complete fields on each line item. If the original receiver has not been edited since entering the transaction, select "**Auto**". If the original receiver has been edited since entering the transaction, select "**Manual**". After manually editing the transaction, you must edit the receiver's amount paid and complete fields. Please note, if you auto edit an accounting transaction who's receiver's amounts or quantities have been edited, the amount paid will be incorrect on both the receiver and the accounting transaction.

If you edit an O (post an AR invoice), R (AR revenue payment), or S (cash sale) transaction, pc/MRP will prompt you to edit the transaction automatically or manually. An automatic edit of an R transaction will correct the original invoice's amount paid and complete fields automatically. A manual edit will not correct the invoice's amount paid and complete fields. After you manually edit an R or S transaction, you must edit the invoice's amount paid and complete fields on each line item. An automatic edit of an O transaction will cause pc/MRP to update the CoGS and Inventory based on current costs. If the original invoice has not been edited since entering the transaction, select "**Auto**". If the original invoice is recent and has been edited since entering the transaction, select "**Manual**". After manually editing the transaction, you must then edit the invoice's amount paid and complete fields. Please note, if you auto edit an accounting transaction who's invoice's amounts or quantities have been edited, the amount paid will be incorrect on both the invoice and the accounting transaction.

When you edit an E, P, R, or S type transaction, pc/MRP will display the Amount Paid/Received to Date minus the Amount Paid/Received from the Transaction you are editing. You can enter a new Amount Paid/Received or re-enter the original Amount Paid/Received that is being displayed. If you selected "Auto", upon completing the Edit Screen pc/MRP will subtract the Previous Amount Paid/Received and add the New Amount Paid/Received to the Total Amount Paid/Received.

If the payment for an invoice/receiver was received/paid in installments (more than one R type transaction for one invoice/receiver) the “Auto” option will not be offered, only “Manual” edit is available.

The Transaction Edit Module will automatically look for an Accounts Payable (receiver) or Accounts Receivable (invoice) Voucher to correct the amount paid if either of the following conditions exist: "Auto" was selected and Transaction Type = "R" and Invoice # is not "NONE" or "Auto" was selected and Transaction Type = "E" and Receiver # is not "NONE"

pc/MRP will not correctly process an existing voucher unless the Transaction Record contains either an "R" or an "E" and the correct number is in the Invoice # or Receiver # Field.

An accounting transaction record cannot be deleted unless the Amount Paid/Received or the first account debited and the first account credited equals zero.

Once you have finished editing the record, pc/MRP will ask Do you wish to mark this record for deletion? If you answer Y, a message will warn you that pc/MRP requires one record in each data base file. AT NO TIME SHOULD YOU EVER DELETE EVERY RECORD IN A DATABASE FILE. Once the record has been marked for deletion you must return to the menu and select REMOVE ALL DELETED RECORDS FROM DISK AND REINDEX.

**Entering Accounting Transactions Pseudo Code**

The following code is intended to help technical support personnel by displaying a short summary of the code that determines which accounts to debit and credit when entering an accounting transaction

ENTERTRA.PRG

```
Do While maccess = "GRANTED"
	If Inlist(mtrantype,'R','O','S') (if R (receiving revenue from an invoice), O (posting an invoice),  or S(cash sale)
		if minv = Y 	(if there is an invoice)
			If mmult = “Y” multidivision is ON	(if Option 12 set to Multi Division and Option 11 is set to “DIV” or “PRO”)
				picks up division from invoice
				IF SUBSTR(configdm,31,3) = "PRO"  &&  Option 12 Set to use first 4 char of partnumber for div code
					mcondit = 'Upper(InvoiceNo) = Upper(mInvoiceNo) AND mDiv = Substr(Partno,1,4) AND !Eof()'
				ELSE  &&  Option 12 Set to use invoice div for div code
					mcondit = 'UPPER(INVOICENO) = UPPER(MINVOICENO) AND MDIV = DIVISION AND !EOF()'
				ENDIF
			Endif
			mcacc1 = space(8)
			do while &mcondit (invoiceno and div stay the same)
				if mtrantype = O or S
					mcacc1 = SetAcct(mtrantype)
				endif
			enddo
		endif
		If mmult = 'Y'
			IF UPPER(invoiceno) = UPPER(minvoiceno)
				mitemno = itemno
				mdone = 'N'
			ELSE
				mdone = 'Y'
			ENDIF
		Endif
	Endif
	If Inlist(mtrantype,'E','I','P')  (if creating a transaction record for E (paying a receiver), I (posting a receiver), P (cash purchase)
		if mrec = Y 	(if there is a receiver)
			if multidivision is ON	(if Option 11 set to Multi Division)
				picks up division from invoice
			endif
			mdacc1 = space(8)
			mdacc4 = space(8)
			do while &mcondit (invoiceno and div stay the same)
				if mtrantype = I or P
					if part is designated non inventory
						mdacc4 = SetAcct(mtrantype)
					if part is anything else
						mcacc1 = SetAcct(mtrantype)
					endif
				endif
			enddo
		endif
	endif
	If substr(configdm,22,9) = 'Perpetual'
		Do Case
		Case Right(mitemno,2)='CM' and M_POSTED = 'Y' and mtrantype = "R"  && Credit memo posted
			DO settmplt WITH 'AcctsRec',mdacc1
			DO settmplt WITH 'PrimaryChkAct',mcacc1
		CASE RIGHT(MITEMNO,2)='CM' AND mtrantype = "R"	&& Credit memo not posted
			DO settmplt WITH 'BusIncome',mdacc1
```

```
                    DO settmplt WITH 'PrimaryChkAct',mcacc1
            CASE mtrantype = "R"        && accts receivable payment
                    If pcCallProgram = "RECORDCUSPAYMENT"
                            STORE mprimchk TO mdacc1
                            DO settmplt WITH 'AcctsRec',mcacc1, mcdescrip1
                    Else
                            DO settmplt WITH 'PrimaryChkAct',mdacc1
                            DO settmplt WITH 'AcctsRec',mcacc1
                    Endif
            ....
            CASE RIGHT(MITEMNO,2)='CM' AND mtrantype = "O"     && CREDIT MEMO VOUCHER
                    DO settmplt WITH 'BusIncome',mdacc1
                    DO settmplt WITH 'AcctsRec',mcacc1
            CASE mtrantype = "O"              && sale on account
                    DO settmplt WITH 'AcctsRec',mdacc1
                    IF EMPTY(MCACC1) OR MCACC1 = "MULTIPLE"
                            DO settmplt WITH 'BusIncome',mcacc1
                    ENDIF
                    DO settmplt WITH 'CostOfGoodsSold',mdacc2
                    DO settmplt WITH 'Inventory',mcacc2
                    ....
            ....
            Endcase
    Else  && periodic
            Do Case
    ....            Same code as 'Perpetual' for mtrantype = "R"
            EndCase
    Endif
    DO prtransc
    DO proctra
Enddo

PROCEDURE SETACCT
    Parameters SA_Trantype
    CASE SA_Trantype = O or S  && post an invoice or cash sale
            SA_NewVal = ""
            IF Multi Div is on AND (the invoice or the part has an income credit account) AND the invoice has a division
                    SA_NewVal = left(invoice or partmast income acct,4) + Division
            Endif
            CASE mcacc1 is empty
                    SA_RTNVAL = SA_NewVal
            CASE EMPTY SA_NewVal or mcacc1 = SA_NewVal
                    SA_RTNVAL = mcacc1
            OTHERWISE
                    SA_RTNVAL = "MULTIPLE"
            ENDCASE
    CASE SA_Trantype = I or P && post a receiver or cash purchase
    ENDCASE
    Return SA_RTNVAL

PROCEDURE SETTMPLT
    Parameters mcadescr, mcano
    IF it can find the description in the actmplt.dbf
            IF invoice does not have a Div OR Multi-Div turned off
                    Return the default chart of accounts number found in the actmplt table
            ELSE   && Div in invoice and Multi-Div turned on
                    macctnum = LEFT(canumber,4) + mdiv
                    IF macctnum exists in the chart of accounts
                            mcano = expaccnt
                    ELSE
                            mcano = LEFT(macctnum, 4) + "0000"
                    ENDIF
            ENDIF
    ELSE
            Display error mcadescr Not found in accts templet dbf file
    ENDIF  .
```

### 14.4.6 Index (see 15.14.3)

### 14.4.7 Remove Marked Records (see 15.14.4)

**Note:** Removes accounting transaction records marked for deletion from disk. If the parent transaction(s) are marked for deletion (through the program or the command line), both the parent and their related child records (stored in trandetail.dbf) will be removed from disk.

### 14.4.8 Remove Over X Years (see 15.14.5)

# 14.5 Example Transactions

### 14.5.1 Initial Startup (No Previous Accounting Program Used)

DEBIT: ALL ASSETS (CASH, CHECKING, EQUIPMENT, PREPAID EXP)
CREDIT: ALL LIABILITIES (TAXES, ACCTS PAY, NOTES PAY)
: DEPRECIATION ACCRUED
IF DEBITS > CREDITS, CREDIT THE DIFF TO STARTING CAPITAL
IF CREDITS > DEBITS, DEBIT THE DIFF TO STARTING CAPITAL

Enter all your debits and credits at once by overriding pc/MRP's Out of Balance Message. When you have completed your entries post the month and run a Trial Balance Report to make sure you are still in balance.

### 14.5.2 Initial Startup (Switch from Previous Accounting Program)

IF MID PERIOD
TRANSFER ALL ACCOUNTS FROM TRIAL BALANCE

IF START OF PERIOD
TRANSFER LIABILITY, ASSET, & EQUITY ACCTS FROM TRIAL BALANCE

IF START OF YEAR (TRANSFER YTD EARNINGS TO STARTING CAPITAL)
TRANSFER LIABILITY, ASSET, & EQUITY ACCTS FROM TRIAL BALANCE

Enter all your debits and credits at once by overriding pc/MRP's Out of Balance Message. When you have completed your entries, post the month and run a Trial Balance Report to make sure you are still in balance.

### 14.5.3 Owner Purchases Supplies with His Own Cash

ON THE TRANSACTION DATE
DEBIT : OFFICE SUPPLIES ETC. 61400000 (EN Debit account)
CREDIT : NOTES PAYABLE TO OWNER (LC Credit account - 20200000?)

WHEN HE IS REIMBURSED
DEBIT : NOTES PAYABLE TO OWNER (LC Credit account - 20200000?)
CREDIT : CHECKING 10200000, CASH 10100000, ETC.

### 14.5.4 Start of New Year

**Sole Proprietor**

DEBIT : YTD RETAINED EARNINGS 29900000 (TO BRING ACCT TO $0.00)
(this is a QR Credit Account - only one allowed)
CREDIT : STARTING CAPITAL 25100000
(this is a QN Credit - Equity Account)

**Corporation**

DEBIT : YTD RETAINED EARNINGS 29900000 (TO BRING ACCT TO $0.00)
(this is a QR Credit Account - only one allowed)
CREDIT: PRIOR YTD RETAINED EARNINGS (29950000)
(this is a QN Credit - Equity Account)

<u>This transaction should be dated as the first day of the new year.</u>

**14.5.5 Periodic Inventory Methods**

pc/MRP can be set in the configuration menu to use the periodic inventory method. The Periodic Inventory Method requires the inventory to be adjusted at the end of each month instead of with each transaction. The total dollar amount of the inventory at the end of one period is also the beginning balance for the next period. Since pc/MRP automatically increments and decrements the physical inventory, you can run pc/MRP's "Total Onhand Stock Value Report" to obtain the inventory value instead of taking a physical inventory. Example sales and purchasing transactions for companies using a periodic inventory are shown below:

Use the Inventory Value Report to find the inventory value at the Start and End of each month (SOM, EOM). Enter the following A type transactions into the general ledger.

START OF MONTH INVENTORY ADJUSTMENT

DEBIT : STARTING INVENTORY EXP 40100000 incr exp by SOM $amt
CREDIT: STOCK INVENTORY ASSET 12100000 zeros out asset acct

END OF MONTH INVENTORY ADJUSTMENT

DEBIT : STOCK INVENTORY ASSET 12100000 asset = new EOM $amt
CREDIT: ENDING INVENTORY EXP 42100000 decr exp by EOM $amt
(YTD Exp Rep will add the SOM and subtract the EOM $amt)

PURCHASE, CASH Transaction type 'P'

DEBIT : PURCHASES 41100000, RENT 61500000, SHOP SUPPLIES 61400000, ETC.
CREDIT: CHECKING 10200000, CASH 10100000, ETC.

PURCHASE, ON ACCOUNT

WHEN YOU RECEIVE INVOICE Transaction type 'I' (Material in the door)

DEBIT: PURCHASES 41100000, SHOP SUPPLIES 61400000, ETC.
CREDIT: ACCOUNT PAY 20100000

WHEN YOU PAY ON ACCOUNT Transaction type 'E' (Expense)

DEBIT:ACCOUNT PAY 20100000
CREDIT: CHECKING 1020, CASH 10100000, ETC.

SALE, CASH Transaction type 'S'
(Firms that do not sell on account, usually enter one cash receipt daily entitled Day's Receipts and the date.)

DEBIT : CHECKING 10200000, CASH 10100000, ETC.
CREDIT : BUSINESS INCOME 30100000 AND SALES TAX LIABILITY 21100000

SALE, ON ACCOUNT

WHEN YOU INVOICE Transaction type 'O' (matl Out the door)

DEBIT: ACCOUNT RECVB 11100000
CREDIT: BUSINESS INCOME 30100000 AND SALES TAX LIABILITY 21100000

WHEN CUSTOMER PAYS ON ACCOUNT Transaction type 'R' (Revenue)

DEBIT: CHECKING 10200000, CASH 10100000, ETC.
CREDIT: ACCOUNT RECVB 11100000

**14.5.6 Perpetual Inventory Methods**

pc/MRP can be set in the configuration menu to use the perpetual inventory method. The Perpetual Inventory Method requires the inventory to be adjusted with each sale and purchasing transaction. To employ this method the accountant must know the inventory cost for each sale. pc/MRP can provide those figures by first running the Automatic Cost Roll Up Option and then printing out an "All Parts Costed Report" in inventory. With this method, you must add a new account called "COST OF GOODS SOLD" to the chart of accounts as an "EG" Debit Account.

If you were to add labor to your BOMs you could manually credit inventory and overhead (credit acct) when debiting cost of goods sold.

PURCHASE, CASH Transaction type 'P'
DEBIT : INVENTORY 12100000
CREDIT : CHECKING 10200000

PURCHASE, ON ACCOUNT
WHEN YOU RECEIVE INVOICE Transaction type 'I' (Material In the door)
DEBIT : INVENTORY 12100000
CREDIT : ACCOUNT PAY 20100000

WHEN YOU PAY ON ACCOUNT Transaction type E (Expense)
DEBIT : ACCOUNT PAY 20100000
CREDIT : CHECKING 10200000, CASH 10100000, ETC.

SALE, CASH Transaction type 'S'
FOR THE SALE AMOUNT
DEBIT : CHECKING 10200000, CASH 10100000, ETC.
CREDIT: BUSINESS INCOME 30100000 AND SALES TAX LIABILITY 21100000

FOR THE COST OF INVENTORY SHIPPED
DEBIT : COST OF GOODS SOLD
CREDIT: INVENTORY 12100000

SALE, ON ACCOUNT
WHEN YOU INVOICE Transaction type 'O' (Material Out the door)

FOR THE SALE AMOUNT
DEBIT : ACCOUNT RECVB 11100000
CREDIT: BUSINESS INCOME 30100000 AND SALES TAX LIABILITY 21100000

FOR THE COST OF INVENTORY SHIPPED
DEBIT : COST OF GOODS SOLD
CREDIT: INVENTORY 12100000

WHEN CUSTOMER PAYS Transaction type 'R' (Revenue)
DEBIT : CHECKING 10200000, CASH 10100000, ETC.
CREDIT: ACCOUNT RECVB 11100000

### 14.5.7 Payroll Entries (Accounting ‘W’ transaction)

Please note the following caps, percentages, and deductions may vary from state to state and change without notice. The following are used for example only.

**Note:** The Accounting 'W' transaction is used for creating a summary entry of payroll information you receive from the company that does your payroll. This is not a 'Payroll System' as it does not offer to print checks; nor is the 'W' transaction listed in the Accounting, Print Unprinted Checks selection. If you intend to print payroll checks, you must use the Accounting 'A' type transaction and reference the correct accounts as listed below.

**PAYING WAGES** (ENTER AS A "W" TYPE ACCOUNTING TRANSACTION)

**EXAMPLE EMPLOYEE PAYROLL CHECK:**

| | |
|---|---|
| GROSS WAGES | 408.00 |
| FWT (Federal Withholding Tax) | 31.51 |
| SSEC (Social Security Tax) | 25.30 |
| MEDI (Social Security Medicare) | 5.92 |
| SWT (State Withholding Tax) | 1.94 |
| SDI (State Disability Tax) | 5.10 |
| | --- |
| NET PAY | 338.23 |

DEBIT :GROSS WAGE EXPENSES 50100000 408.00
DEBIT : EXPENSES PAYROLL TAXES (SSEC+MEDI) 51100000 31.22
CREDIT: FICA LIABILITY (SSEC+MEDI) 22110000 31.22
CREDIT: FWT LIABILITY 22100000 31.50
FICA LIABILITY (SSEC + MEDI) 22110000 31.22
SWT LIABILITY 22140000 1.94
SDI LIABILITY 22130000 5.10
CHECKING ACCT 10200000 (NET PAY) 338.23

PAYING FEDERAL GOVERNMENT PAYROLL TAXES (941)

DEBIT : ACCUM LIAB FWT 22100000 31.50
DEBIT : FICA(SSEC+MEDI) 22110000 62.44
CREDIT : BANK CHECKING ACCT 10200000 93.94

PAYING FEDERAL UNEMPLOYMENT TAX

DEBIT : EXPENSES PAYROLL TAXES 51100000
CREDIT : ACCUM LIAB FUTA 22120000
DEBIT : ACCUM LIAB FUTA 22120000
CREDIT : BANK CHECKING ACCT 10200000

PAYING STATE PAYROLL TAXES

DEBIT : ACCUMULATED LIAB SDI 22130000,SWT 22140000
CREDIT : BANK CHECKING 10200000

PAYING STATE PAYROLL TAXES

DEBIT : EXPENSES PAYROLL TAXES 51100000
CREDIT : ACCUM LIAB SUI 22150000 ETT 22160000
DEBIT : ACCUM LIAB SUI 22150000, ETT 22160000
CREDIT : BANK CHECKING ACCT 10200000

### 14.5.8 Owner Withdrawals And Contributions

SOLE PROPRIETOR
OWNER WITHDRAWS MONEY
DEBIT: OWNER WITHDRAW (QN, Debit Account)
CREDIT: CHECKING 10200000

OWNER PUTS HIS OWN MONEY IN (Not on a loan type basis)
DEBIT: CHECKING 10200000
CREDIT: OWNER CONTRIBUTION (QN, Credit Account)
CORPORATION
OWNER WITHDRAWS MONEY
DEBIT: CAPITAL DECREASE 27100000
CREDIT: CHECKING 10200000
OWNER PUTS HIS OWN MONEY IN (Not on a loan type basis)
DEBIT: CHECKING 10200000
CREDIT: OWNER CAPITOL INCREASE 26100000

### 14.5.9 Income Taxes

WHEN PREPAYING ESTIMATED TAXES
DEBIT : ASSETS, PREPAID FED TAX 16100000, PREPAID STATE TAX 16200000
CREDIT: CHECKING 10200000

WHEN PAYING INCOME TAXES INDIVIDUAL OWNER
DEBIT : EQUITY COMPANY TAXES 29100000 (Similar to Owner Withheld)
CREDIT: ASSETS, PREPAID TAXES 16100000 16200000 AND CHECKING 10200000

CORPORATION (Over simplified, see your accountant for details)
DEBIT : EXPENSES, COMPANY TAXES 90100000, 90200000
CREDIT: ASSETS, PREPAID TAXES 16100000, 16200000

### 14.5.10 Checking Account Adjustments

Make the following adjustments only if you cannot trace the reason for the imbalance. Please note that these adjustments can affect your tax liability.

SOLE PROPRIETOR
IF ACTUAL BANK BALANCE IS MORE THAN PC/MRP BALANCE
DEBIT CHECKING 10200000 FOR THE DIFFERENCE
EDIT OWNERS CONTRIBUTION (QN, Credit Account)

IF PC/MRP BALANCE IS MORE THAN ACTUAL BALANCE
DEBIT OWNERS WITHDRAWAL (QN, Debit Account)
CREDIT CHECKING 10200000

CORPORATION
IF ACTUAL BANK BALANCE IS MORE THAN PC/MRP BALANCE
DEBIT CHECKING 10200000 FOR THE DIFFERENCE
CREDIT INCOME ADJUSTMENT (RN, Credit Account)

IF PC/MRP BALANCE IS MORE THAN ACTUAL BALANCE
DEBIT EXPENSE ADJUSTMENT (EN, Debit Account)
CREDIT CHECKING 10200000

### 14.5.11 Breaking Out Freight Charges

When pc/MRP expenses a receiver or payable voucher it debits 41100000 (Purchases) for the full amount (including freight) and credits 20100000 (accounts payable) for the full amount (including freight). If you wish to have freight broken out in your financial statements, you would enter an 'I' type transaction into the general ledger as you normally would and:

DEBIT 41100000 PURCHASES FOR PURCHASE AMT ONLY (displayed at top of screen)
DEBIT 41400000 FOR THE FREIGHT AMT (displayed at top of screen)
CREDIT ACCTS PAYABLE FOR THE FULL AMT (displayed at top of screen)

### 14.5.12.1 Paying by Credit Card – Initial Preparation (first time only)

Use the Chart of Accounts Module to Create a Credit Card Chart of Accounts.
- Modules, Accounting, Chart of Accounts, New
- Chart of Account Number could be "20110000"
- Description could be "Discover Card J Smith"
- Account Type = Current Liability
- Debit/Credit = Credit
- Check "This is a Credit Card Acct"

This is not the Credit Card Processing Acct found in Configuration, Settings and Utilities, Option 9 as is for customer payments to your firm

Use the Address Book to enter a new address for your credit card company
- Name could be Discover Inc.
- Type – Vendor
- Address – If the remit to address is empty, pc/MRP will use the main address to print on the check

Use the Inventory Module to create a Credit Card Item with the holder's name,
- Part Number could be AP-000001
- Part Type = Non-Inventory
- Description – Discover Credit Card J Smith
- Vendor would be Discover Inc.
- Asset/Expense Account would be blank for the simple method and 2011000 for the full method

### 14.5.12.2 Paying by Credit Card (Simple Method – for gas, meals etc., will not support 1099s)

If items such as gas, meals, etc. were purchased by credit card, leave the receipts in your in basket.

When the credit card bill arrives
- Enter an AP Voucher for the first item on the bill
- Select Modules, Accounting, Accounts Payable, New AP Voucher
- Select Stores (receiving area does not matter)
- Select your Credit Card Part Number AP-000001
- Qty = 1
- Select Discover Inc as the vendor
- Enter the amount of the purchase and add something like gas to the description
- Press OK
- Select the account you wish to debit
- pc/MRP: will automatically:
  - Debit the account for the amount of the purchase
  - Credit Accounts Payable for the amount of the purchase
- Repeat this for every item on the credit card bill

When you have entered all the AP Vouchers
- Select Modules, Accounting, Pay Bills Print Checks
- Select Posted Only
- Select Your Bank Checking Account

Check all of the AP Vouchers you entered above
Select Print Checks Now, enter Beginning Check Number, put blank check in printer
Select Output to print, check show check dialog window and press the OK Button
Enter the credit card company's invoice number in the comments and check Print a Remittance List
pc/MRP will automatically
Debit Accounts Payable for the amount of every AP Voucher selected.
Credit Bank Checking for the amount of every AP Voucher selected.
Insert the amount paid and a Y in the complete field of every AP Voucher selected.

**14.5.12.3 Paying by Credit Card (Full Method – partial payments ok, receiver not left open, supports 1099's)**

See Initial Preparation 14.5.12.1 (Inventory part AP-000001 must contain 2011000 for the debit acct)

Enter your initial transactions Accounts Payable transactions
For POs that have been received
Enter an I type transaction for each of the Receivers
Select Modules, Accounting, General Ledger Transactions, New, I Type Transaction
Select the Receiver
pc/MRP will automatically create the I Type Transaction and:
Debit: Expense or Inventory depending on the purchase
Credit: Accounts Payable
Insert a Y in the receivers posted field.
For items such as gas and meal enter Accounts Payable Vouchers
Select Modules, Accounting, Accounts Payable, New AP Voucher
Select Stores (receiving area does not matter)
Select "No Part Number"
Select the real vendor's address
Qty = 1
Enter the amount of the purchase and add something like gas to the description
Press OK
Select the account you wish to debit
pc/MRP: will automatically:
Debit the account for the amount of the purchase
Credit Accounts Payable for the amount of the purchase
Insert a Y in the receivers posted field.

When you allow the vendor(s) to charge your credit card (this step can occur several times during the month):
Select Accounting, Pay Bills Print Checks
Select your credit card chart of accounts number in this case Discover, <u>not</u> your bank checking account
Select Assign Hand Check (this keeps pc/MRP from printing checks)
Check the Receiver(s) you wish to pay by credit card, the full amount of each bill, and put cc in Check #.
pc/MRP will create E type transactions for each item you wish to pay. pc/MRP will:
Debit: Accounts Payable (for the full amount of each transaction)
Credit: Discover Credit Card (for full amount of each transaction)
Insert Y in complete field of the receiver(s)
Since a credit card account is credited, these transactions can be used for the vendor's 1099 form.
Answer yes to print out a remittance list for your records

When you receive the credit card bill, create an AP Voucher for the amount due on the bill:
Select Modules Accounting, Accounts Payable, New AP Voucher,
Select Stores and the AP-000001 part number (This part number contains the credit card users name)
The vendor will be the credit card company such as Discover, Qty = 1, Discover's Invoice if any

Price = 1st time Total Amount Due, after that do not include the previous balance
The AP Voucher will automatically create an I type transaction. pc/MRP will:
Debit: Discover Credit Card Chart of Accounts 20110000
Credit: Accounts Payable for the full amount due

When you pay the credit card bill:
Select Accounting, Pay Bills Print Checks
Select your bank checking account, not the credit card account.
Check the AP Voucher for the credit card bill, enter the amount you wish to pay, select Print, press OK
pc/MRP will create E type transactions for each item you wish to pay. pc/MRP will:
Debit: Accounts Payable for the amount you selected to pay
Credit: Bank Checking Account for the amount you selected to pay
Print out a check to addressed to your credit card company for the amount you selected to pay

### 14.5.13 Adjusting Inventory Asset Chart of Account Values

Debiting an asset account, increases its value and crediting it, decreases its value.

IF YOU HAVE SET pc/MRP TO "PERPETUAL ACCOUNTING METHODS" (OPTION 10 IN SETTINGS AND UTILITIES)
IF YOU WISH TO INCREASE THE INVENTORY VALUE
DEBIT THE INVENTORY ASSET CHART OF ACCOUNTS
CREDIT THE COST OF SALES EXPENSE ACCOUNT NUMBER
IF YOU WISH TO DECREASE THE INVENTORY VALUE
DEBIT THE COST OF SALES EXPENSE ACCOUNT NUMBER
CREDIT THE INVENTORY ASSET CHART OF ACCOUNTS
IF YOU HAVE SET pc/MRP TO "PERIODIC ACCOUNTING METHODS" (OPTION 10 IN SETTINGS AND UTILITIES)
IF YOU WISH TO INCREASE THE INVENTORY VALUE
DEBIT THE INVENTORY ASSET CHART OF ACCOUNTS
CREDIT THE PURCHASES EXPENSE ACCOUNT NUMBER
IF YOU WISH TO DECREASE THE INVENTORY VALUE
DEBIT THE PURCHASES EXPENSE ACCOUNT NUMBER
CREDIT THE INVENTORY ASSET CHART OF ACCOUNTS

### 14.5.14 Purchasing a fixed asset (auto, capital equipment, etc.)

Debiting an asset account, increases its value and crediting it, decreases its value.

PUCHASING THE FIXED ASSET
DEBIT : ASSET, FIXED ASSET ACCOUNT
CREDIT: ASSET, BANK ACCOUNT **OR** LIABILITY, LOAN/NOTES PAYABLE ACCOUNT

PAYING OFF THE LOAN
DEBIT : LIANBILITY, LOAN/NOTES PAYABLE ACCOUNT
CREDIT: ASSET, BANK ACCOUNT

DEPRECIATION OF FIXED ASSET
DEBIT : EXPENSE, DEPRECIATION EXPENSE ACCOUNT
CREDIT: ASSET, ACCUMULATED DEPRECIATION FIXED ASSET ACCOUNT

### 14.5.15 Handling Dividends with pc/MRP

Do not debit or credit the YTD Retained Earnings Account directly in pc/MRP because pc/MRP handles this account automatically and if it sees additional debits and credits against the YTD Retained Earnings, pc/MRP will not automatically handle the YTD Retained Earnings Account.

You need to have 2 Chart of Accounts

1. "Provision for Dividends" Current Liability - Credit Account
2. "Dividend" Expense or Equity - Debit Account

If the "Dividend" is an Expense Account, the YTD Retained Earnings will be reduced.
If the "Dividend" is an Equity Account, the YTD Retained Earnings will not be reduced.
Talk to your CPA to determine what type of Account the Dividend Account is to be set to.

Journal Entries:

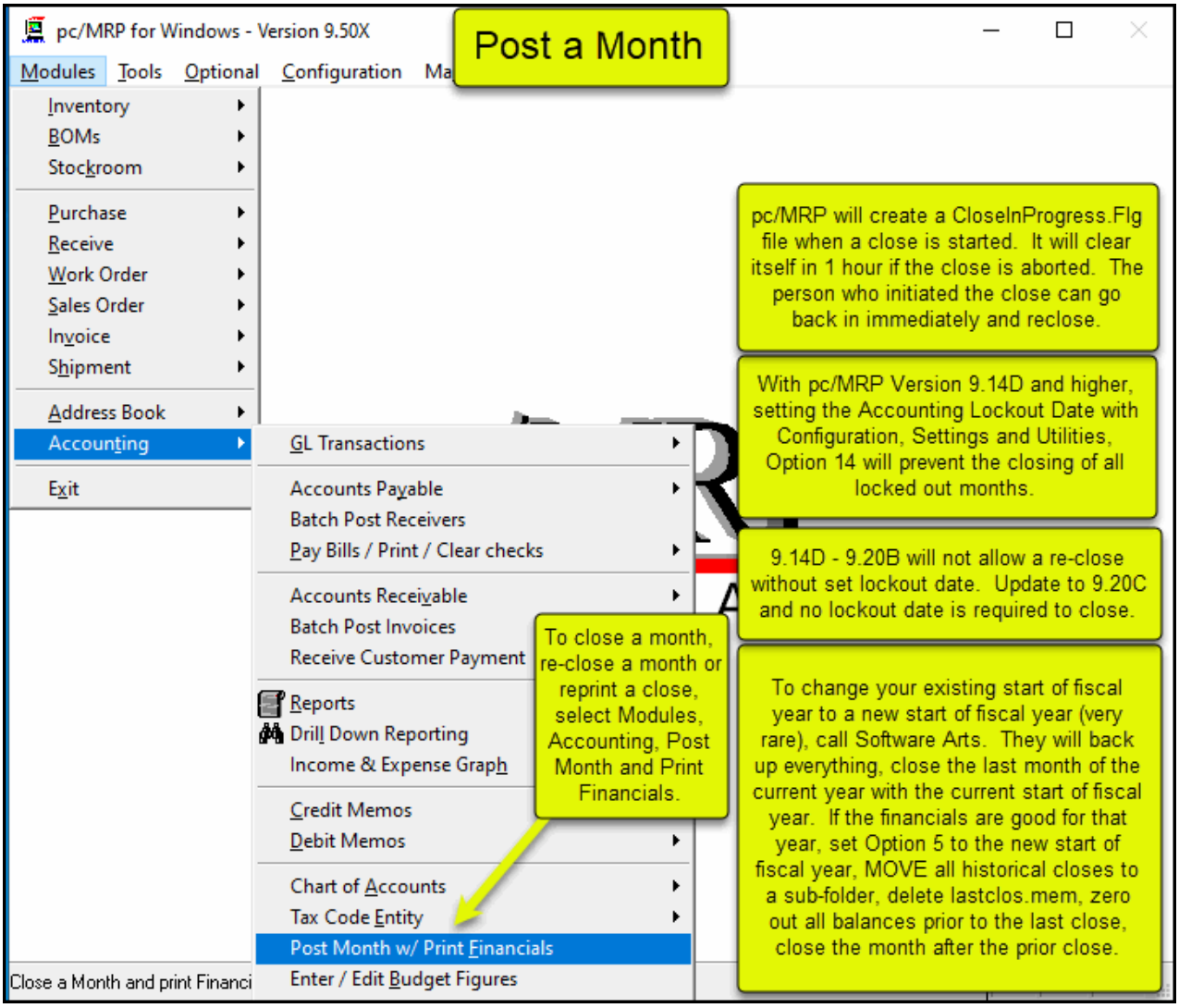
1. Board decides to give out dividends, make an Adjusting Entry:
Debit Dividend / Credit Provision for Dividends

2. Accountant pays out dividend, make an Adjusting Entry:
Debit Provision for Dividends / Credit Checking Account

# 14.6 Post the Month, Print Financials

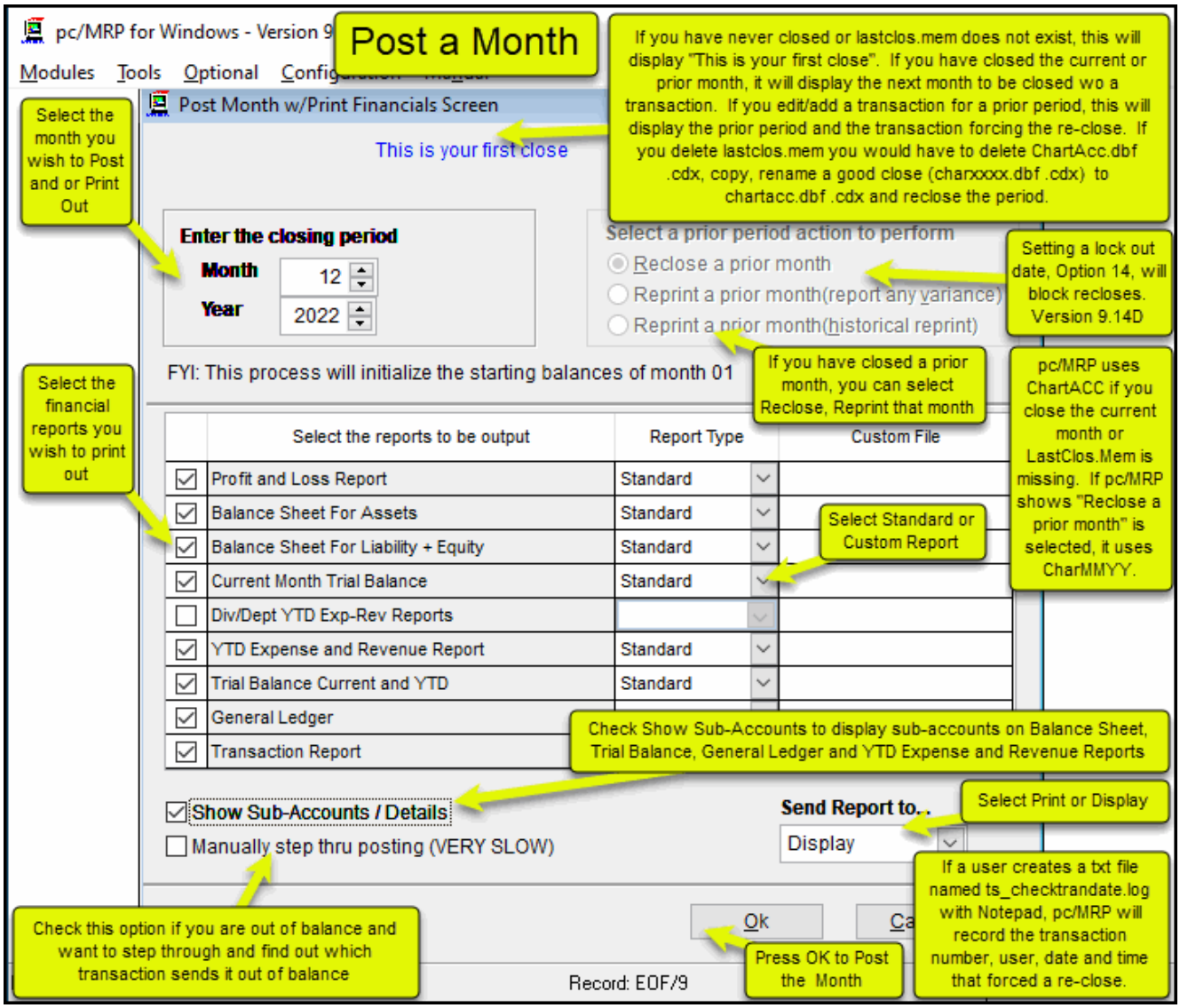
### 14.6.1 Post the Month and Print Financials Overview

(see slideshow here: http://www.pcmrp.com/mrp101/closemonthselectpostmonth.htm)




Post Month with Print Financials automatically retrieves each account's starting balance for that month and all of the financial transactions recorded during that month. pc/MRP then calculates the new balances for each account and will prompt users to choose from a variety of financial reports to be created based on the newly calculated figures. This process will safely guide and allow you to close and re-close the current month or any prior month in any prior year, provided pc/MRP has previously closed the prior period. The following is an explanation of how pc/MRP closes a month and is intended for those of you who would feel more comfortable knowing what happens when you are closing a month. It is also intended to serve as a first level technical support aid when trouble shooting a close.

To close or re-close a month, you would select "Modules", "Accounting", and "Post Month with Print Financials". pc/MRP will display the month and year of the current close (last month that was closed) and ask you to enter the month and year you wish to close.




pc/MRP will create a file named **CLOSEINPROGRESS.FLG** when the close is started, to keep other users out from the Accounting module for the time of the close. In the case the close is aborted, this file will clear itself in one hour. The person who initiated the close can go back into the Accounting module and start the reclose again.

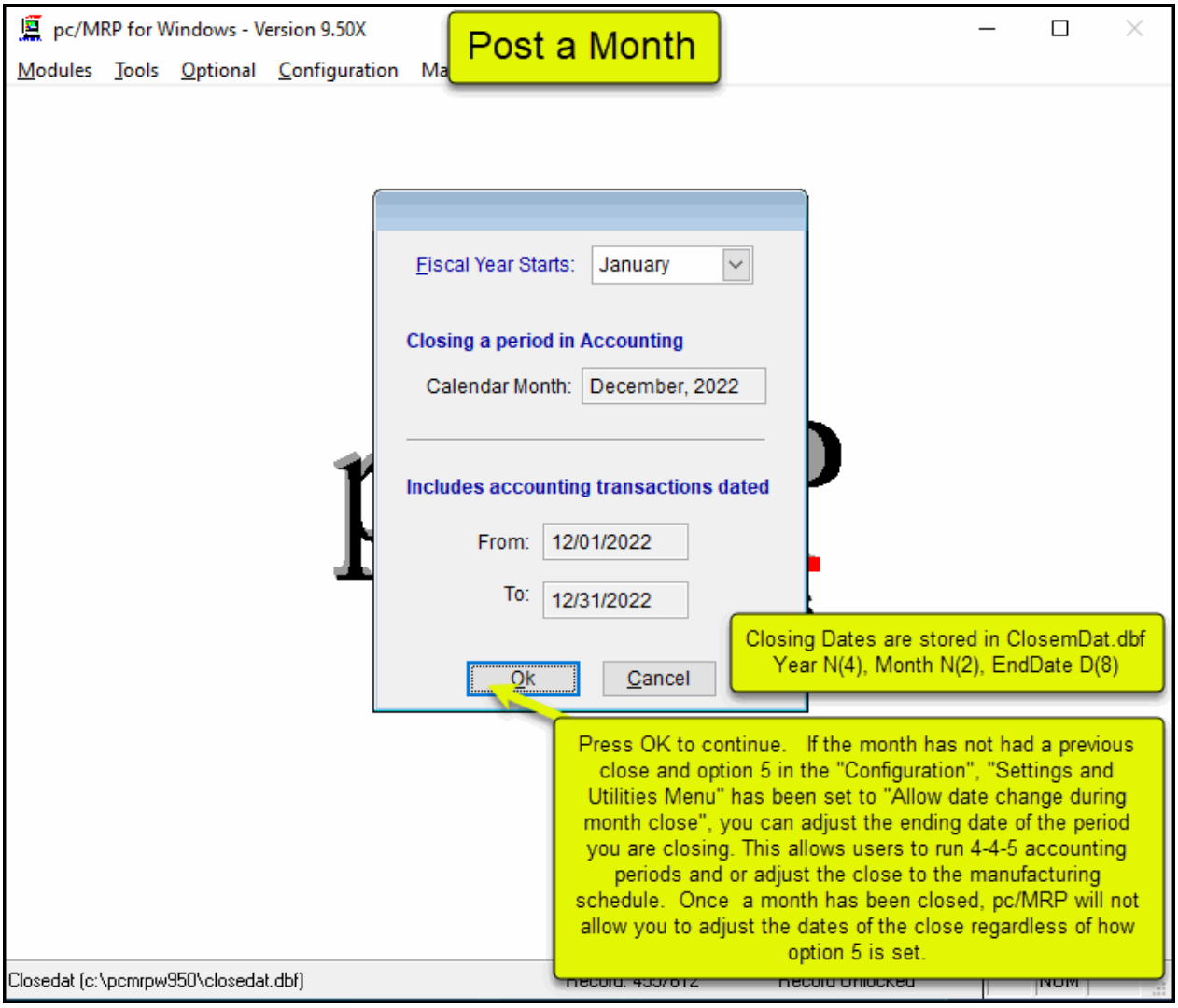
Select "Display" or "Print" your financial statements.

Select "Standard" or "Custom" financial statements.

Select the financial reports you wish to print out.

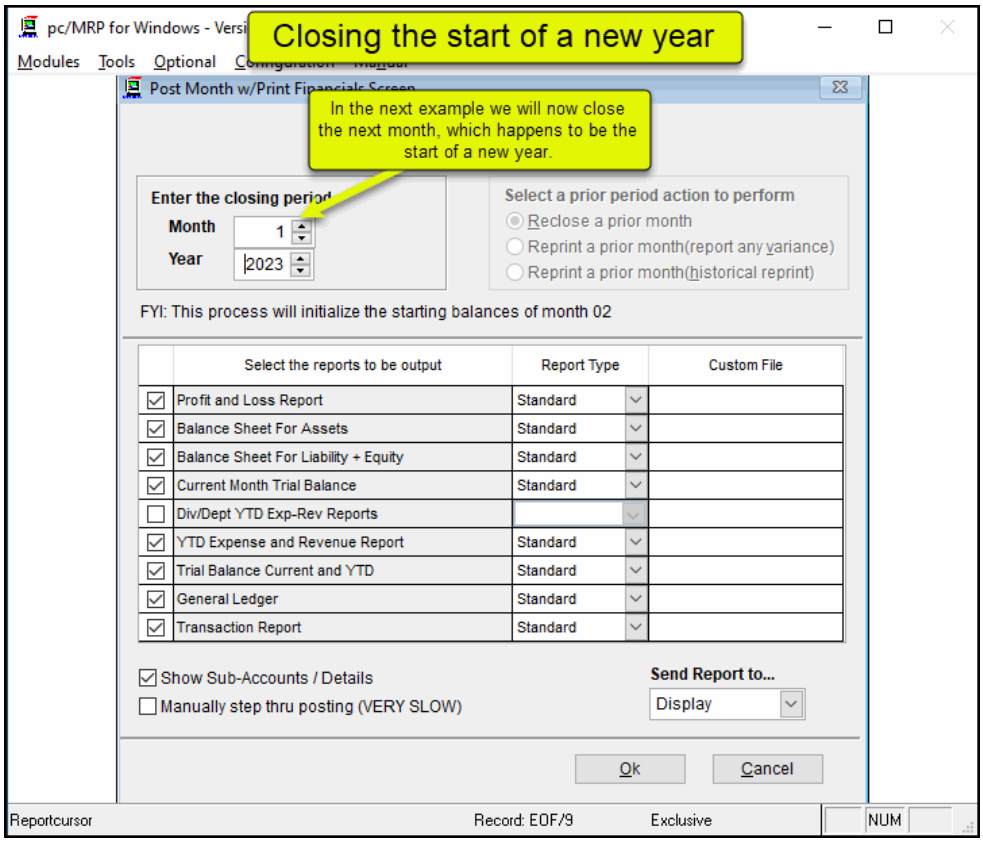
Do not step through posting (you would use this option if you were out of balance and you want to step through

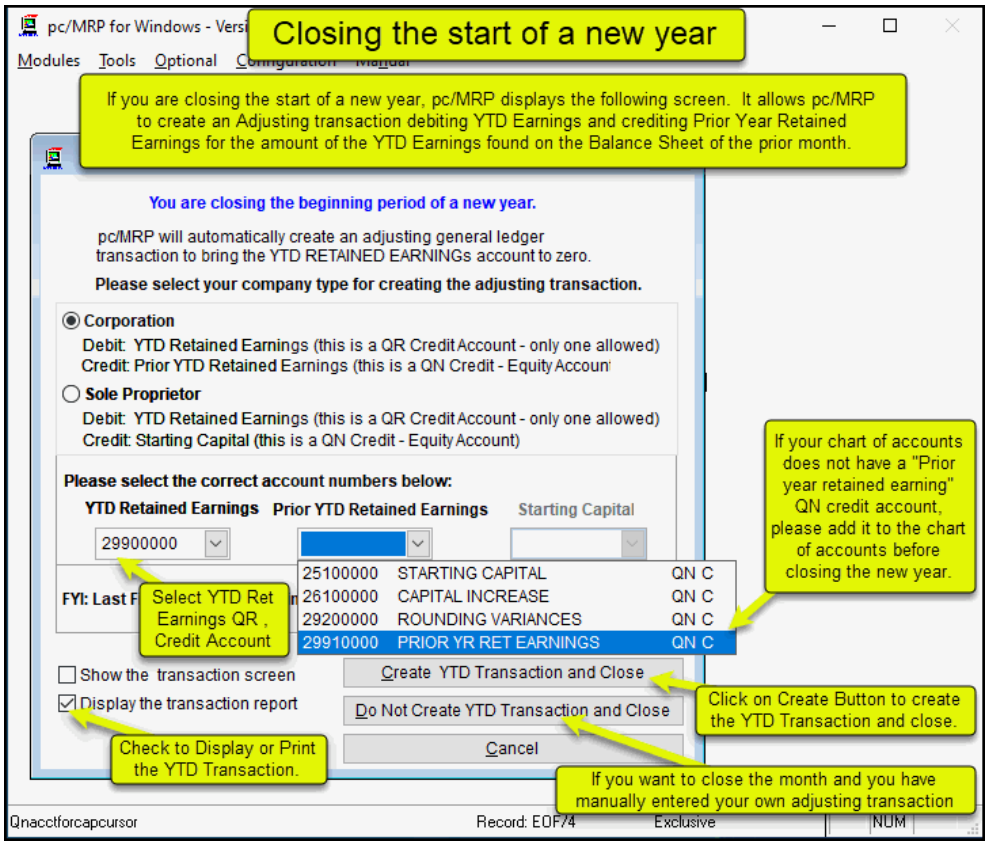
If you select to close, re-close the current month (displayed) or close the next month, pc/MRP will display the starting and ending dates of the month you selected to close (above).



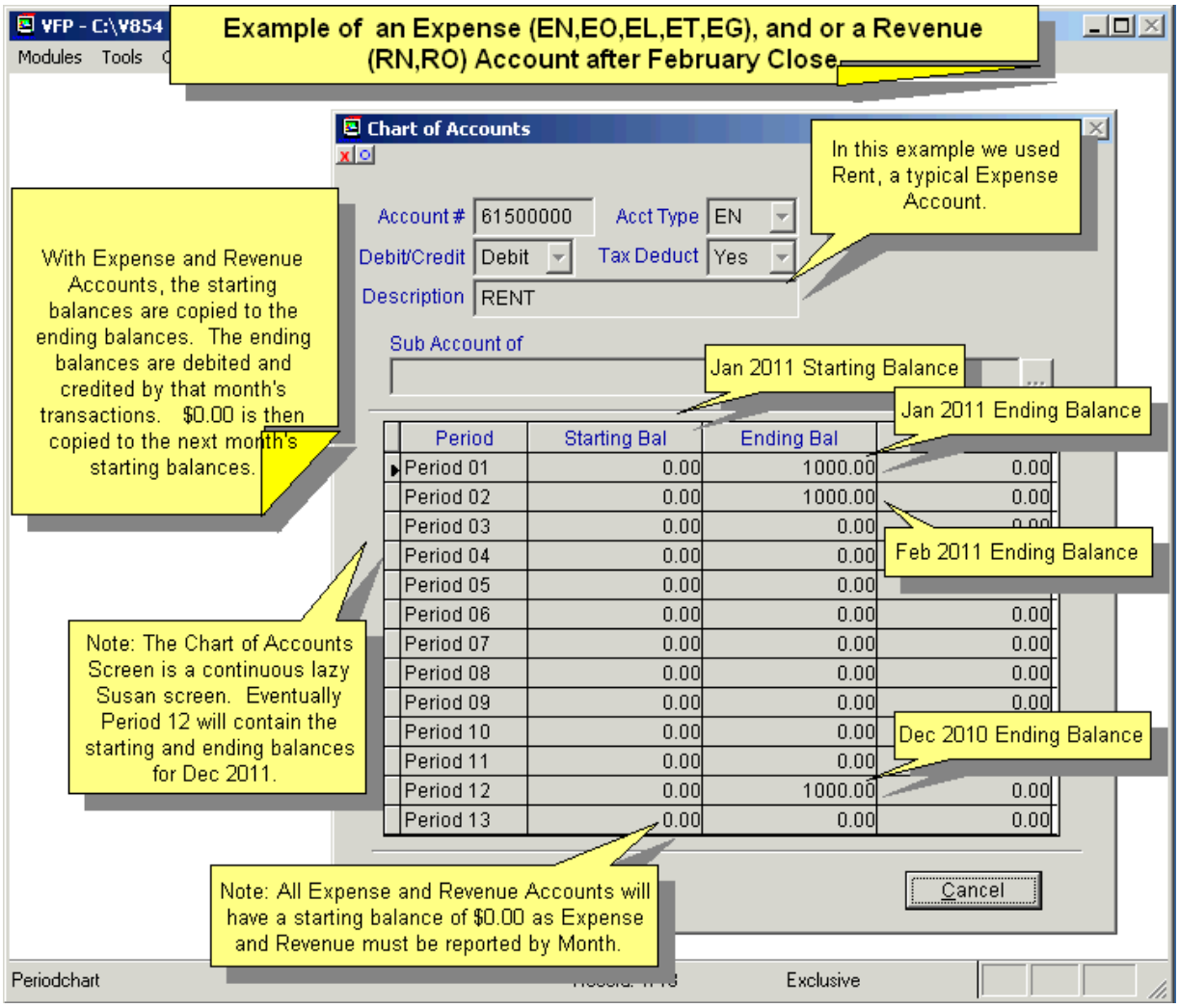

pc/MRP will begin closing the month by transferring the starting balance for the current month to the ending balance for each of the chart of account numbers in the chartacc.dbf file. pc/MRP will then use the transaction data base records to debit and credit the ending balances of each account as shown:

## 14.6.2 Closing the Start of your Fiscal Year



**Revenue Accounts (RN, RO) and Expense Accounts (EN, EO, EL, ET, EG)**

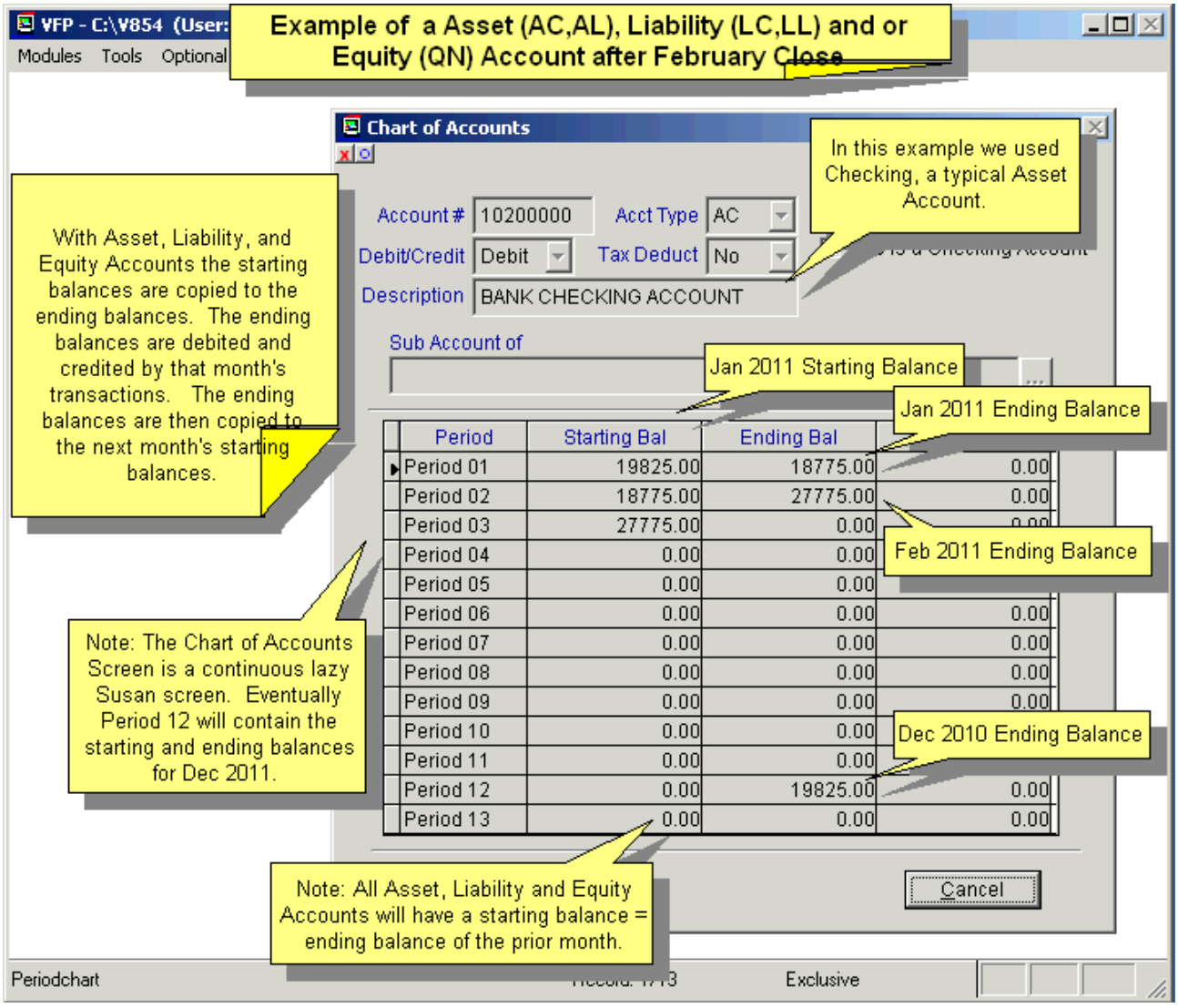



| Period | Starting Bal | Ending Bal | |
|---|---|---|---|
| Period 01 | 0.00 | 1000.00 | 0.00 |
| Period 02 | 0.00 | 1000.00 | 0.00 |
| Period 03 | 0.00 | 0.00 | |
| Period 04 | 0.00 | 0.00 | |
| Period 05 | 0.00 | 0.00 | |
| Period 06 | 0.00 | 0.00 | 0.00 |
| Period 07 | 0.00 | 0.00 | 0.00 |
| Period 08 | 0.00 | 0.00 | 0.00 |
| Period 09 | 0.00 | 0.00 | 0.00 |
| Period 10 | 0.00 | 0.00 | |
| Period 11 | 0.00 | 0.00 | |
| Period 12 | 0.00 | 1000.00 | 0.00 |
| Period 13 | 0.00 | 0.00 | 0.00 |

The starting balances are copied to the ending balances. The ending balances are debited and credited by that month's transactions. $0.00 is then copied into the next months starting balances.

**Asset Accounts (AC, AL), Liability Accounts (LC, LL) and Equity Accounts QN**

The starting balances are copied into the ending balances. The ending balances are debited and credited by that month's transactions. The ending balances are then copied into the next month's starting balances.




| Period | Starting Bal | Ending Bal | |
|---|---|---|---|
| Period 01 | 19825.00 | 18775.00 | 0.00 |
| Period 02 | 18775.00 | 27775.00 | 0.00 |
| Period 03 | 27775.00 | 0.00 | |
| Period 04 | 0.00 | 0.00 | |
| Period 05 | 0.00 | 0.00 | |
| Period 06 | 0.00 | 0.00 | 0.00 |
| Period 07 | 0.00 | 0.00 | 0.00 |
| Period 08 | 0.00 | 0.00 | 0.00 |
| Period 09 | 0.00 | 0.00 | 0.00 |
| Period 10 | 0.00 | 0.00 | |
| Period 11 | 0.00 | 0.00 | |
| Period 12 | 0.00 | 19825.00 | 0.00 |
| Period 13 | 0.00 | 0.00 | 0.00 |

**YTD Retained Earnings, QR**

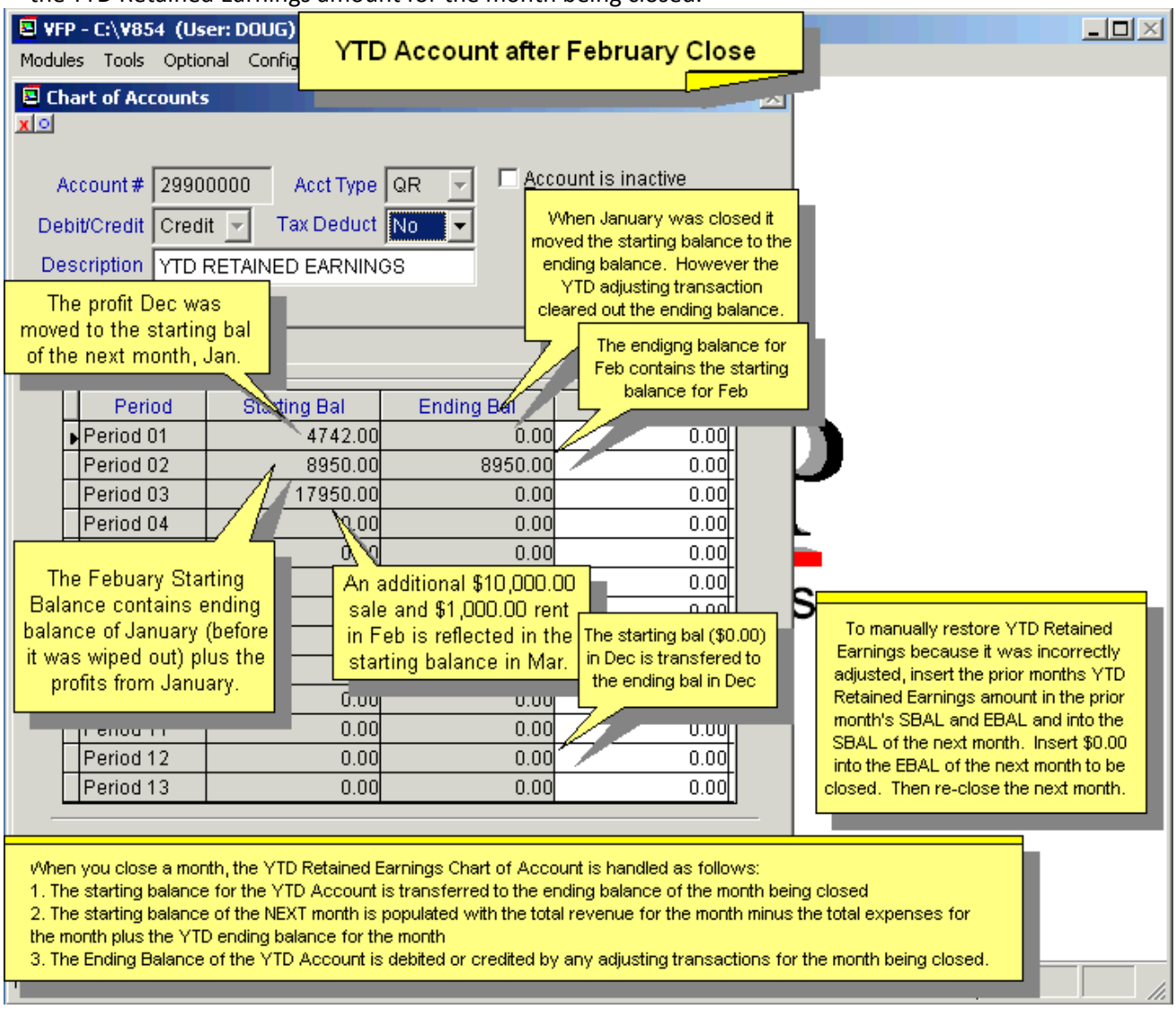
When you close a month, the YTD Retained Earnings Chart of Account is handled as follows:

1. The starting balance for the YTD Account is transferred to the ending balance of the month being closed
REPLACE &MENDBAL WITH MSTART

2. The starting balance of the NEXT month is populated with the total revenue for the month minus the total expenses for the month plus the YTD ending balance for the month
REPLACE &MNSTARTBAL WITH &MENDBAL + MREVTOT – MEXPTOT

3. The Ending Balance of the YTD Account is debited or credited by any adjusting transactions for the month being closed.

The Trial Balance Reports will contain the YTD Retained Earnings Amount from the prior month as the profits are already reflected in the revenue and expense accounts. However, the Balance Sheet Reports will contain the YTD Retained Earnings amount for the month being closed.




**The Profit and Loss Income Statement**

The General Ledger Income Statement (glincome.frx) uses the chartacc.dbf to sum up and display the following totals for the month being closed:

- Gross revenue (sum of ending balances of all RN accounts)
- Cost of goods sold (sum of ending balances of all EG accounts)
- Gross net profit (gross revenue – cost of goods sold)
- Cost of labor (sum of ending balances of all EL accounts)
- Operating Expenses (sum of ending balances of all EN accounts)
- Net profit before write-offs(gross net profit – labor and operating expenses)
- Write-off expenses (sum of ending balances of all EW accounts)
- Net profit before other income (net profit before write-offs – write-offs)
- Other income (sum of ending balances of all RO accounts)
- Other expenses (sum of ending balances of all RO accounts)
- Net profit before income taxes (net before other + other income – other exp)
- Income taxes (sum of ending balances of all ET accounts)
- Net profit after income taxes(net profit before income taxes – income taxes)

**The Balance Sheet**

The asset balance sheet (prdebit.frx) displays the ending balance of all asset accounts. The Liability and equity balance sheet (prcrebit.frx) lists the ending balance of all liability and equity accounts except for the year-to-date retained earning accounts (QR), which lists the starting balance for the next month for that account. The YTD retained earnings for the starting balance of the next month consist of the ending balance for the current month plus the revenue-expenses for the month.

**The Trial Balance**

The trial balance report (gltrial.frx) displays the ending balance for all charts of accounts except for the year-to-date retained earning accounts (QR), which lists the starting balance for the month for that account. This is because the Trial Balance report includes the Expense and Revenue accounts.

**The Year to Date Expense and Revenue Report**

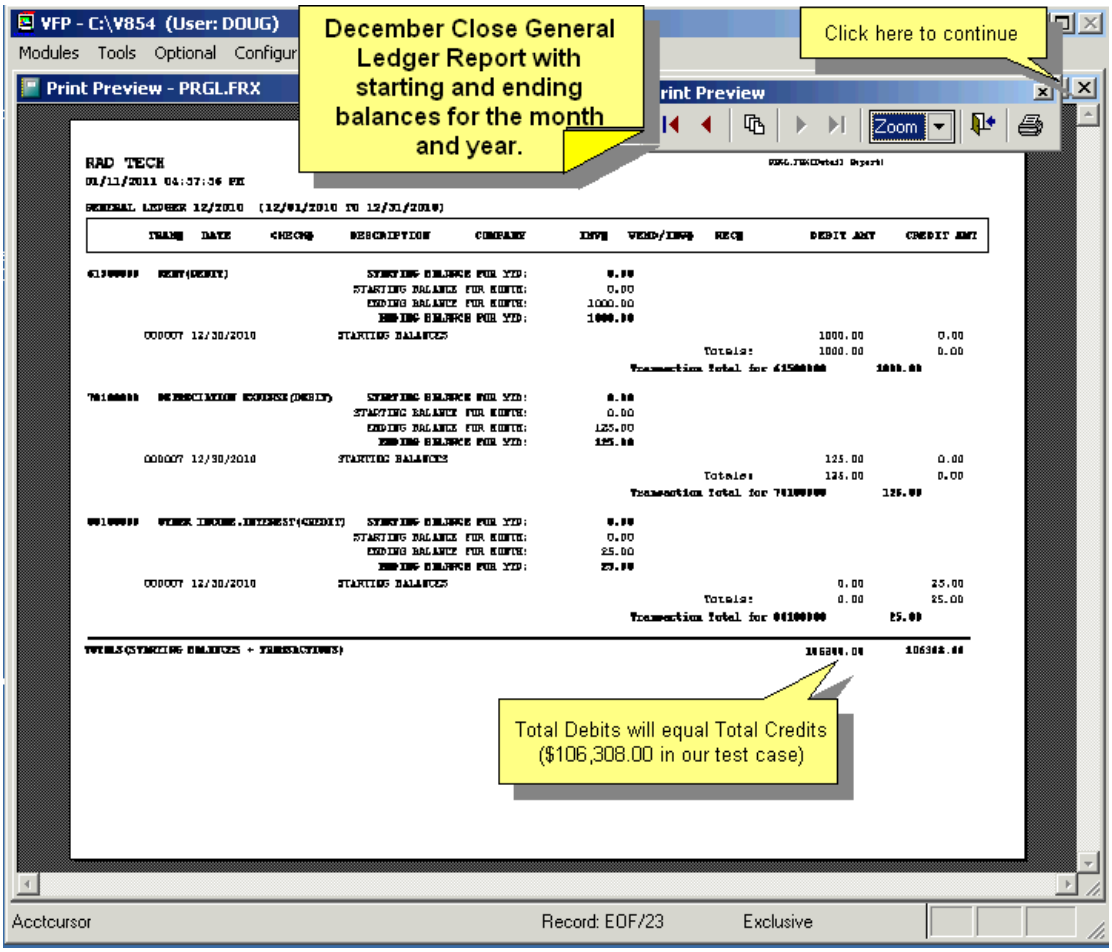
The YTD Expense and Revenue report (prytd.frx) list the ending balance of all revenue and expense accounts for the month and the year. With the profit and or loss total for the current month and year at the bottom. The YTD retained earnings is calculated by subtracting the YTD expenses from the YTD revenues.

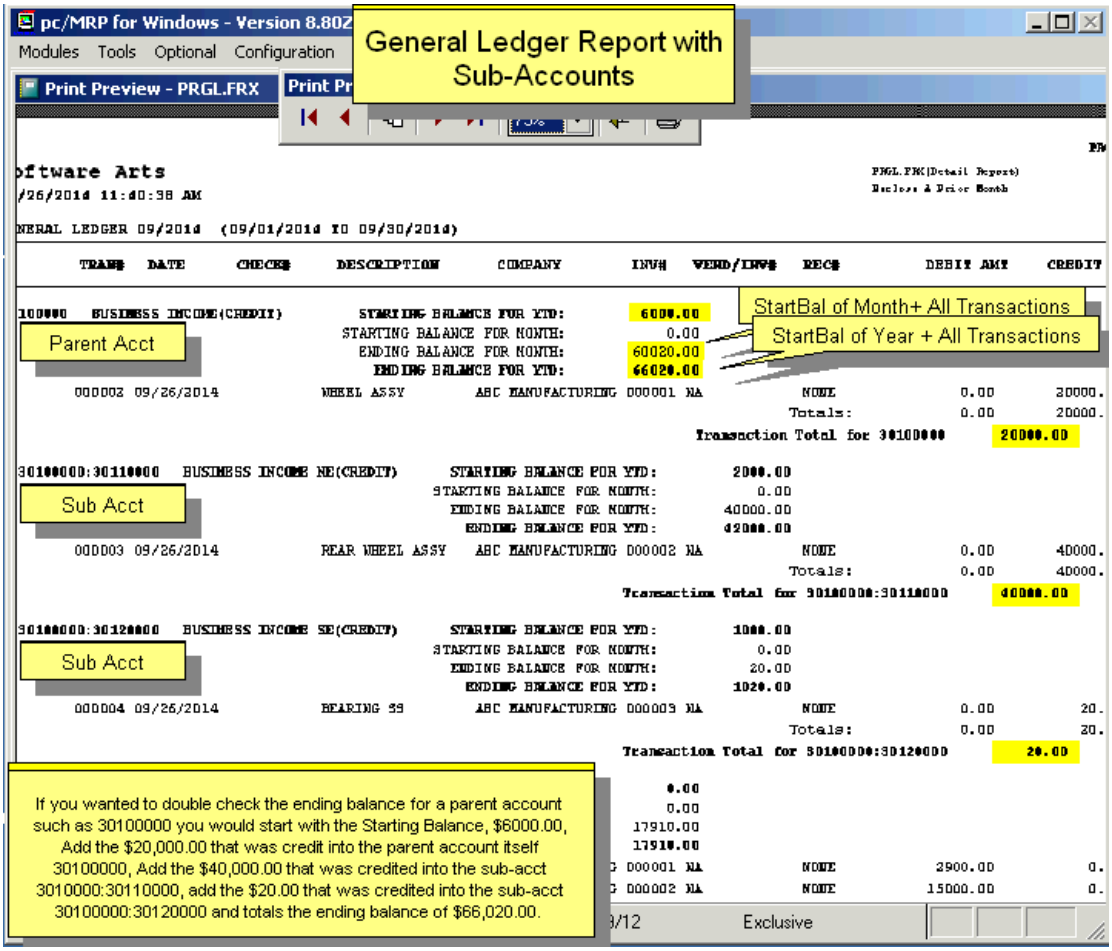
**The YTD Trial Balance Report**

The YTD Trial Balance report always displays the ending balance for the month and the YTD. The YTD Ret Earn Trial Balance will always = $0.00 as this report contains the Revenue & Expense account totals for the year.

**The General Ledger Report**

The general ledger report (prgl.frx) displays the starting balance for the year, the starting balance for the month, the transactions for the month, the ending balance for the month, and the ending balance for the year for every chart of accounts that was debited or credited during that month.
The ending balance for each account is the same amount that is displayed in the Trial Balance and Balance Sheets. The Ending Balance for each account can be calculated by taking its beginning balance, adding its Transaction Totals for each of its sub-accounts.

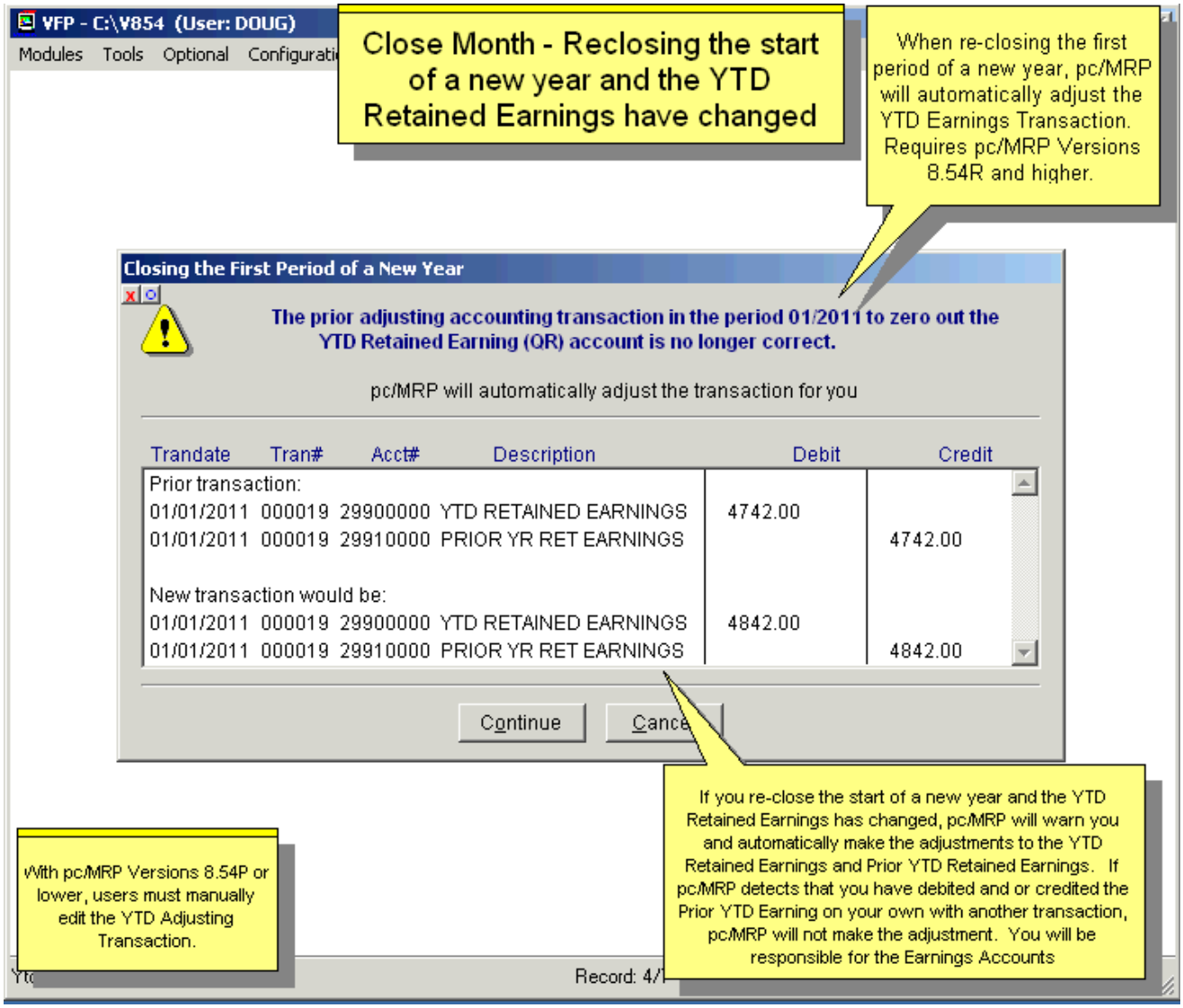

VFP - C:\V854 (User: DOUG)
Modules Tools Optional Configur
Print Preview - PRGL.FRX
December Close General Ledger Report with starting and ending balances for the month and year.
Click here to continue
Zoom
RAD TECH
01/11/2011 04:57:36 PM
GENERAL LEDGER 12/2010 (12/01/2010 TO 12/31/2010)
TRANS# DATE CHECK# DESCRIPTION COMPANY INV# VEND/INV# REC# DEBIT AMT CREDIT AMT
STARTING BALANCE FOR YTD: 0.00
STARTING BALANCE FOR MONTH: 0.00
ENDING BALANCE FOR MONTH: 1000.00
ENDING BALANCE FOR YTD: 1000.00
000007 12/30/2010 STARTING BALANCES 1000.00 0.00
Totals: 1000.00 0.00
Transaction Total for 61500000 1000.00
STARTING BALANCE FOR YTD: 0.00
STARTING BALANCE FOR MONTH: 0.00
ENDING BALANCE FOR MONTH: 125.00
ENDING BALANCE FOR YTD: 125.00
000007 12/30/2010 STARTING BALANCES 125.00 0.00
Totals: 125.00 0.00
Transaction Total for 74100000 125.00
STARTING BALANCE FOR YTD: 0.00
STARTING BALANCE FOR MONTH: 0.00
ENDING BALANCE FOR MONTH: 25.00
ENDING BALANCE FOR YTD: 25.00
000007 12/30/2010 STARTING BALANCES 0.00 25.00
Totals: 0.00 25.00
Transaction Total for 84100000 25.00
TOTALS(STARTING BALANCES + TRANSACTIONS) 106308.00 106308.00
Total Debits will equal Total Credits ($106,308.00 in our test case)
Acctcursor
Record: EOF/23
Exclusive


pc/MRP for Windows - Version 8.802
Modules Tools Optional Configuration
General Ledger Report with Sub-Accounts
Print Preview - PRGL.FRX
oftware Arts
/26/2014 11:40:38 AM
PRGL.FRX(Detail Report)
Include A Prior Month
NERAL LEDGER 09/2014 (09/01/2014 TO 09/30/2014)
TRANS# DATE CHECK# DESCRIPTION COMPANY INV# VEND/INV# REC# DEBIT AMT CREDIT
100000 BUSINESS INCOME(CREDIT) STARTING BALANCE FOR YTD: 6000.00
Parent Acct
STARTING BALANCE FOR MONTH: 0.00
ENDING BALANCE FOR MONTH: 60020.00
ENDING BALANCE FOR YTD: 66020.00
StartBal of Month+ All Transactions
StartBal of Year + All Transactions
000002 09/26/2014 WHEEL ASSY ABC MANUFACTURING 000001 NA NONE 0.00 20000.
Totals: 0.00 20000.
Transaction Total for 30100000 20000.00
30100000:30110000 BUSINESS INCOME NE(CREDIT) STARTING BALANCE FOR YTD: 2000.00
Sub Acct
STARTING BALANCE FOR MONTH: 0.00
ENDING BALANCE FOR MONTH: 40000.00
ENDING BALANCE FOR YTD: 42000.00
000003 09/26/2014 REAR WHEEL ASSY ABC MANUFACTURING 000002 NA NONE 0.00 40000.
Totals: 0.00 40000.
Transaction Total for 30100000:30110000 40000.00
30100000:30120000 BUSINESS INCOME SE(CREDIT) STARTING BALANCE FOR YTD: 1000.00
Sub Acct
STARTING BALANCE FOR MONTH: 0.00
ENDING BALANCE FOR MONTH: 20.00
ENDING BALANCE FOR YTD: 1020.00
000004 09/26/2014 BEARING SS ABC MANUFACTURING 000003 NA NONE 0.00 20.
Totals: 0.00 20.
Transaction Total for 30100000:30120000 20.00
If you wanted to double check the ending balance for a parent account such as 30100000 you would start with the Starting Balance, $6000.00, Add the $20,000.00 that was credit into the parent account itself 30100000, Add the $40,000.00 that was credited into the sub-acct 3010000:30110000, add the $20.00 that was credited into the sub-acct 30100000:30120000 and totals the ending balance of $66,020.00.
0.00
0.00
17910.00
17910.00
000001 NA NONE 2900.00 0.
000002 NA NONE 15000.00 0.
Exclusive

**The Transaction Report**

The transaction report (prtran.frx) displays all accounting transactions entered for the month being closed. pc/MRP will make a backup copy of the chart of accounts data base file named charxxxx.dbf. For example if you were to close September 2017, the backup file name would be char0917.

### 14.6.3 Re-closing the start of a new year, and the YTD Retained Earnings have changed




### 14.6.4 Closing a Month in the Future When a Previous Month has Never Been Closed

pc/MRP will not allow users to close a future month where any previous month was not closed correctly. Months must be closed sequentially.

### 14.6.5 Closing a Prior Month or Fiscal Year where pc/MRP does NOT have a Backup Copy of that Month

If you select to close a prior month and pc/MRP does not have a backup of that month, pc/MRP will warn you that it has no backup copy of that month and then display the backup copies it does have.

### 14.6.6 Closing a Prior Month or Fiscal Year where pc/MRP DOES have a Backup Copy of that Month

Users can close, re-close, and print financials from any prior month or fiscal year. If you select to close a prior month and pc/MRP has a backup of that month (charxxxx.dbf), pc/MRP will ask if you wish to "Reprint" or "Re-close" the month. Both options allow you to display or print the financial statements.

If users select "Reprint", pc/MRP will only reprint the Financials and NOT adjust starting or ending balances. The chart of accounts for that month will NOT be updated if any GL transaction edits or adjusting transactions were made. The detail on how pc/MRP accomplishes this is listed below.

pc/MRP accomplishes this by creating an empty cursor (file) from the current close (chartacc.dbf) and then populating the cursor account numbers and balances from the backup close (charxxxx.dbf). After printing out the prior period, the cursor will automatically be deleted.

If you select "Re-close", pc/MRP will warn you that after the close, you must re-close every subsequent month up to the current month that has been closed. The details on how pc/MRP accomplishes this are listed below.

pc/MRP accomplishes this by creating an empty cursor (file). pc/MRP will populate the empty cursor file, by appending the chart of account records from the backup close. In addition, it will append the chart of account records (without their ending balances) from the current close that do not exist in the backup close. pc/MRP will replace the old chart of account descriptions with the current chart of account descriptions.

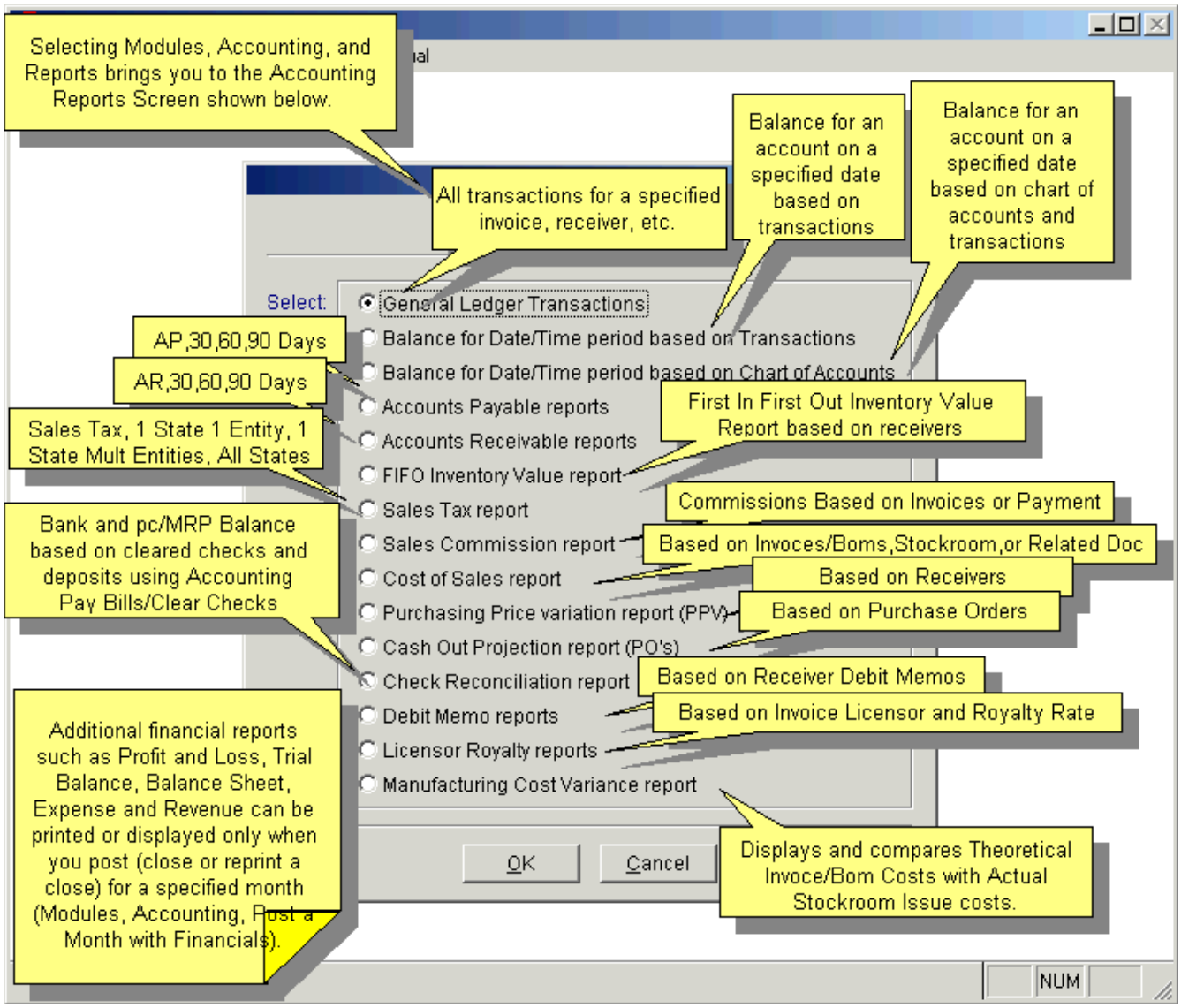
pc/MRP will ask if you wish to retain the current budget figures or the budget figures from the last close (this prompt only occurs if there were any changes to the budget figures). pc/MRP will then go through its normal close procedure as described above using the cursor instead of the chart of accounts data base file. Once the financial statements have been printed out, the cursor itself will become the current chart of accounts data base file (chartacc.dbf).

pc/MRP will make a backup copy of the chart of accounts data base file named charxxxx.dbf. You would now have to re-close all remaining months up to and including your current close in order to roll the new balances up into the current month.

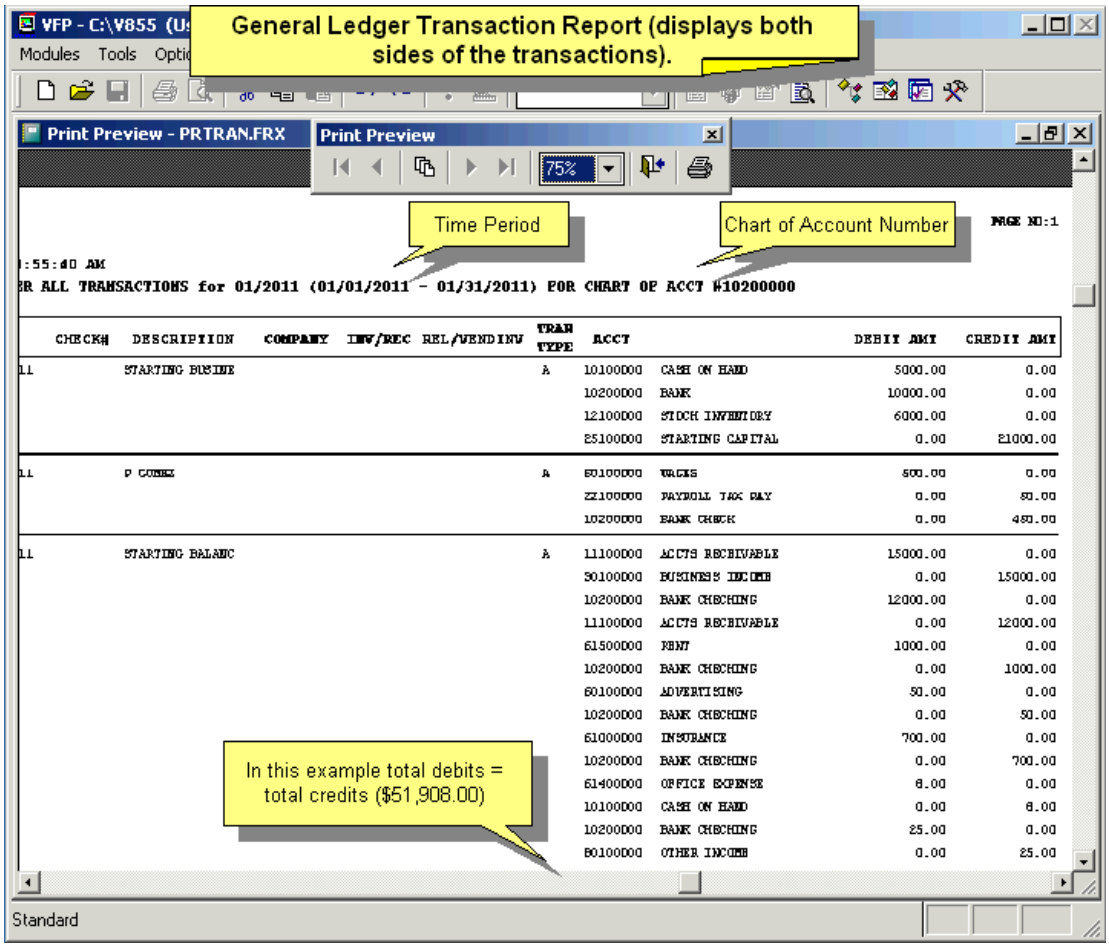
# 14.7 Accounting Reports

### 14.7.1 Overview

Selecting Modules, Accounting, and Reports brings you to the Accounting Reports Screen shown above. Financial reports such as Profit and Loss, Trial Balance, Balance Sheet, Expense and Revenue can be printed or displayed only when you post (close or reprint a close) for a specified month (Modules, Accounting, Post a Month with Financials).



### 14.7.2 General Ledger Transaction Reports




This report displays all accounts debited or credited for every transaction displayed. This report can be filtered as shown below:

- Month
- Time period
- Balance for a specific date
- All transactions regardless of time

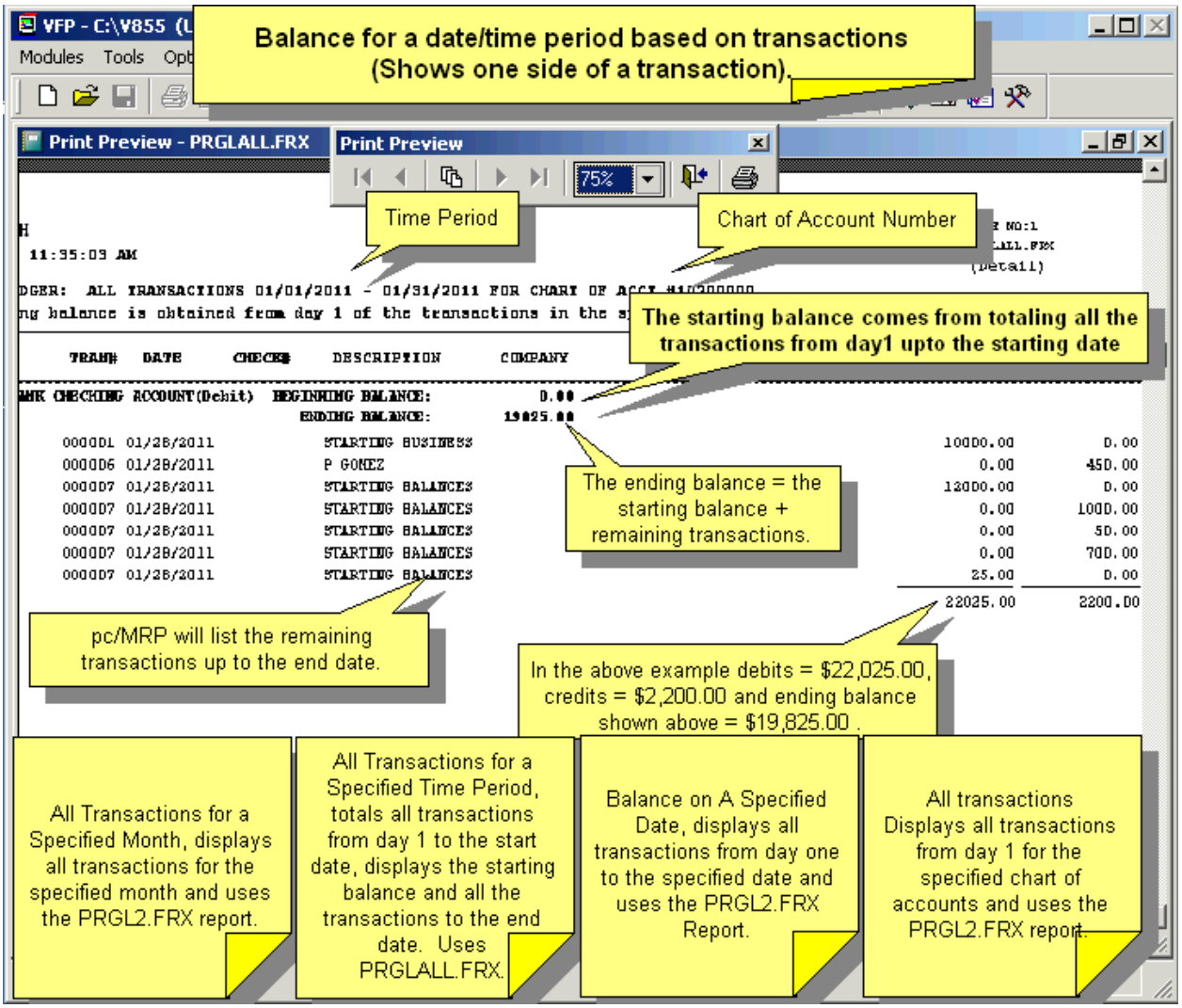
Include all transactions for a:

- Chart of accts #
- Vendor/customer acct #
- Check #
- Related Document #
- Invoice #
- Receiver #
- All transactions

Types of transactions to include:

- All
- Cash sales only (S)
- Receivable vouchers only (O)
- Receivable payments only (R)
- Cash purchases only (P)
- Accounts payable vouchers only (I)
- Payable payments only (E)
- Payroll checks only (W)

### 14.7.3 Balance for a Date or Time Period Based on Accounting Transactions




This report displays only the specified account for every transaction displayed (T Accounts). This report uses only accounting transactions as a basis to form the report. This report can be filtered as shown below:

Month

Displays all the transactions for that account for the specified month.

Time period

Totals all the transactions from day 1 to the start date, displays the starting balance, all the transactions from the starting date to the end date and the total amount debited and credited during that time period.

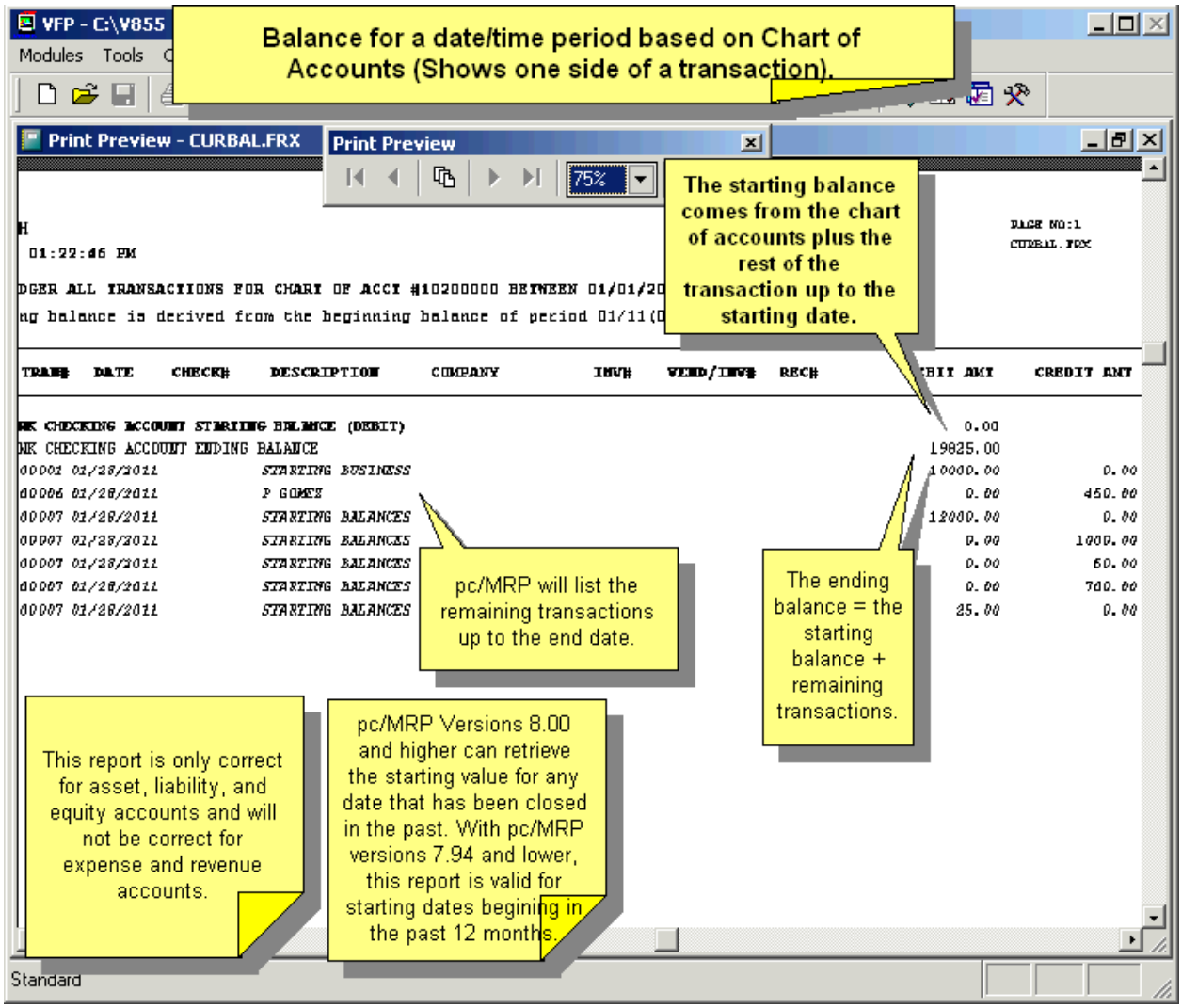
Balance on a specific date

Displays all transactions from day 1 for the specified chart of accounts up to the specified date

All transactions

Displays all transactions from day 1 for the specified chart of accounts

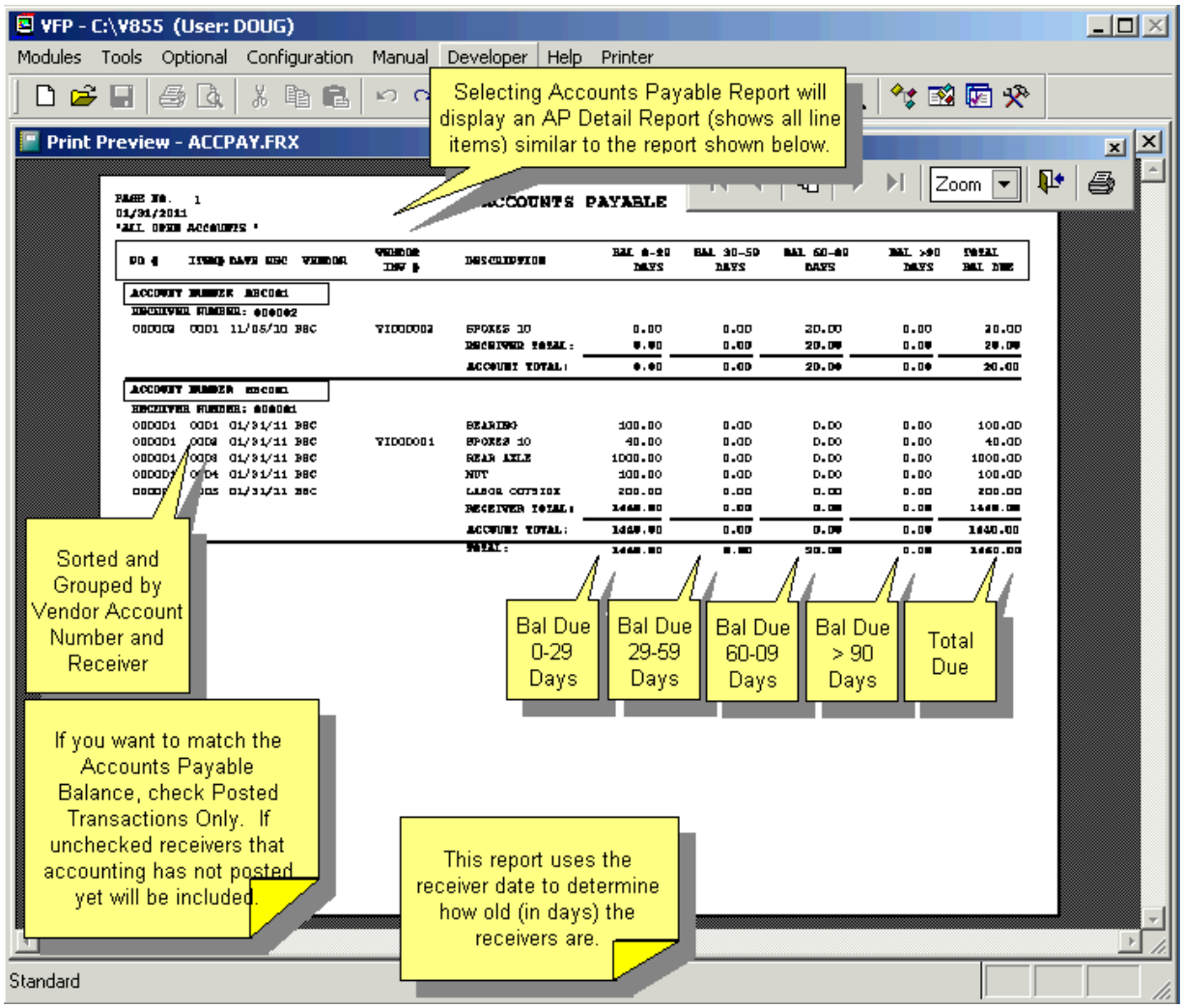
### 14.7.4 Balance for a Date or Time Period Based on Chart of Accounts




This report displays only the specified account for every transaction displayed (T Accounts). This report uses the starting balance of the month from the chart of accounts plus the transactions up to the ending date as a basis to form the report. This report is only correct for asset, liability, and equity accounts and will not be correct for expense and revenue accounts.

You will be prompted to enter the chart of account number, start date and end date. You can select a starting date from any month that has been closed in the past. pc/MRP will locate the starting balance at the start month from the chart of accounts database files, total all the transactions up to the start date, display the starting balance for the start date, display all the transactions up to the end date and the total of the starting balance and transactions.

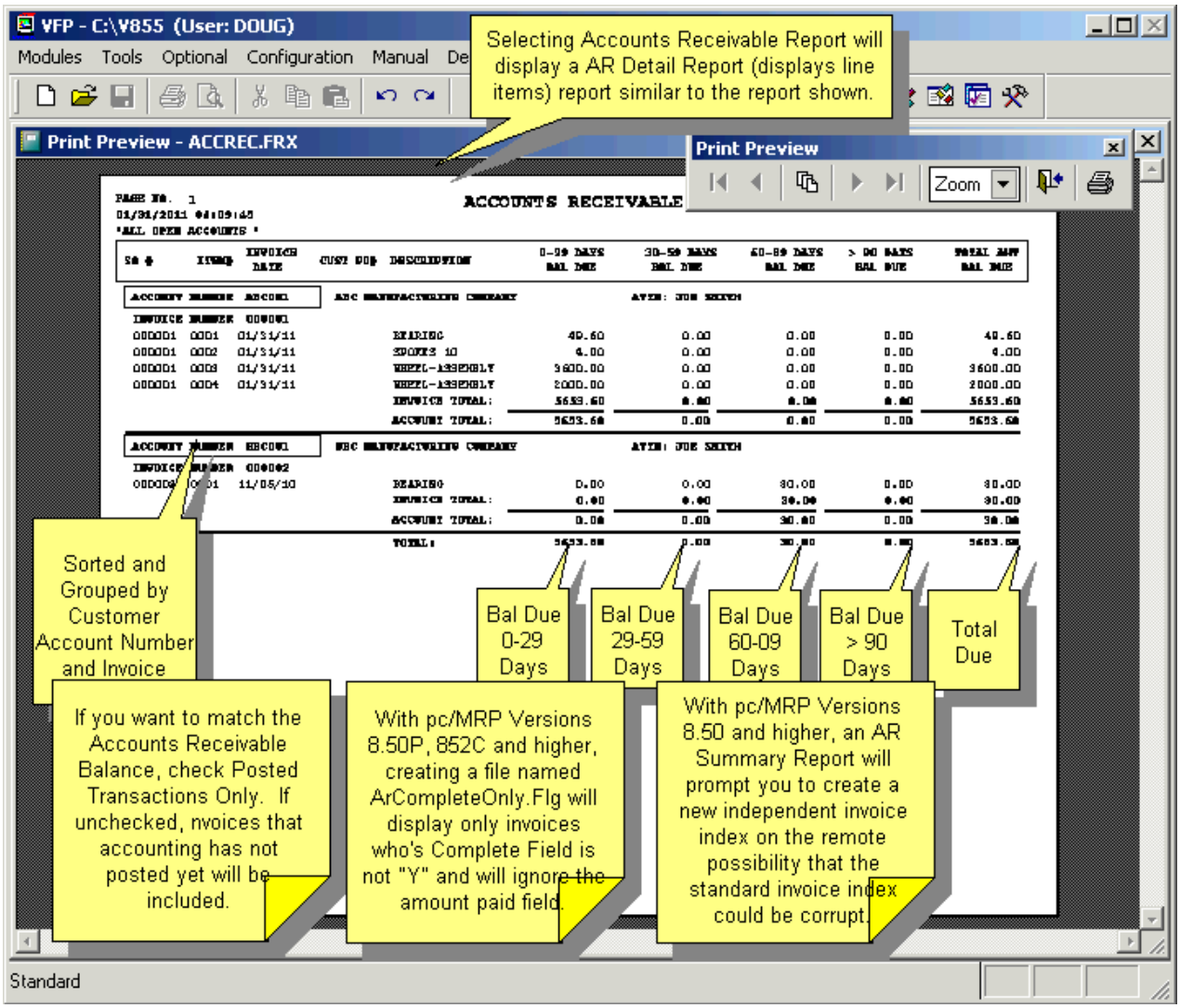
### 14.7.5 A/P Reports




You can select all open, all closed and aging reports of 30, 60 and 90 days.

If you run an open accounts payable summary report and the balance due for a receiver is less than or equal to 0 and the complete field does not contain a Y, the customer PO# field will contain the words Error Unmarked. You can edit the receiver record and put a Y in the complete field.

### 14.7.6 A/R Reports

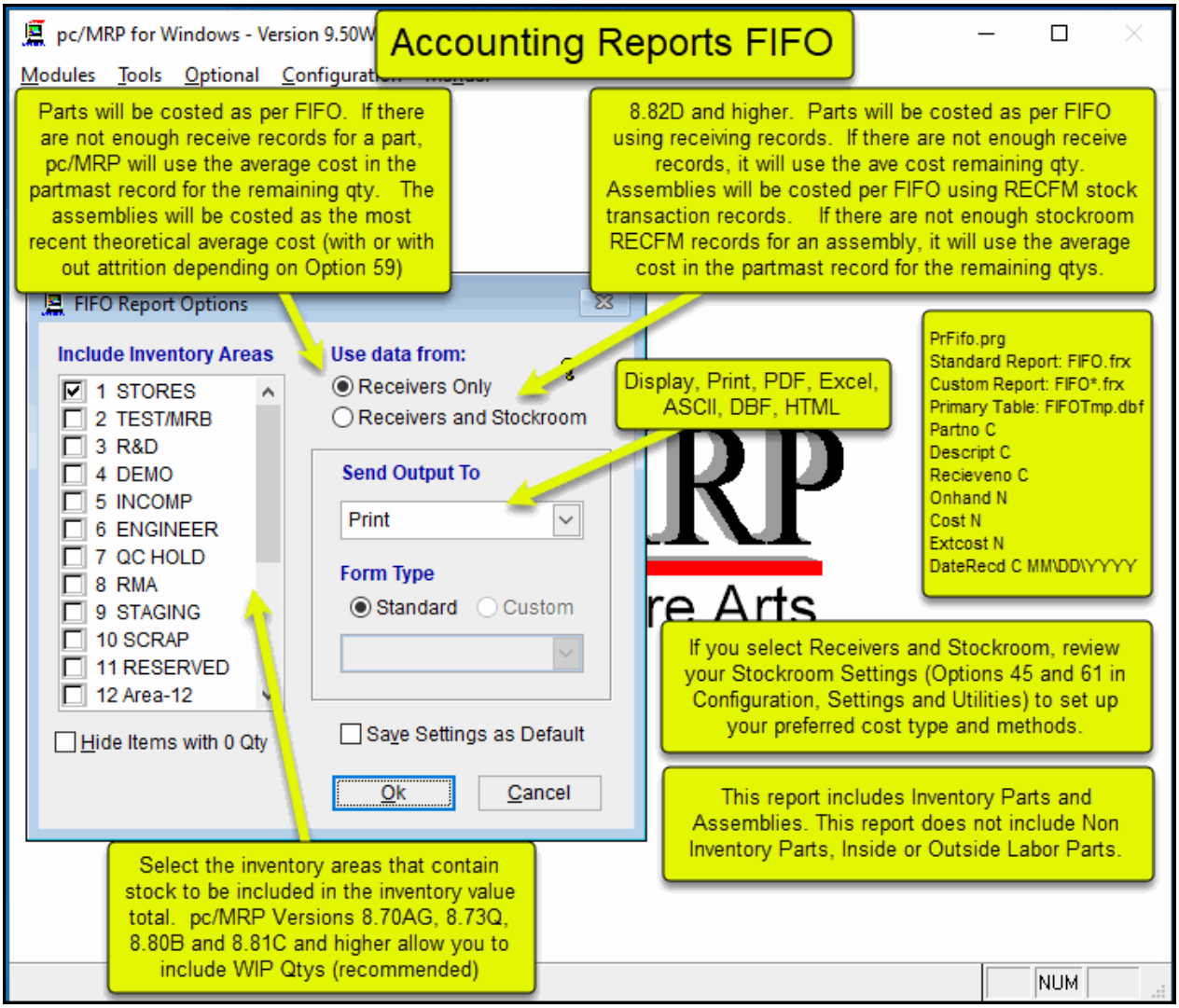


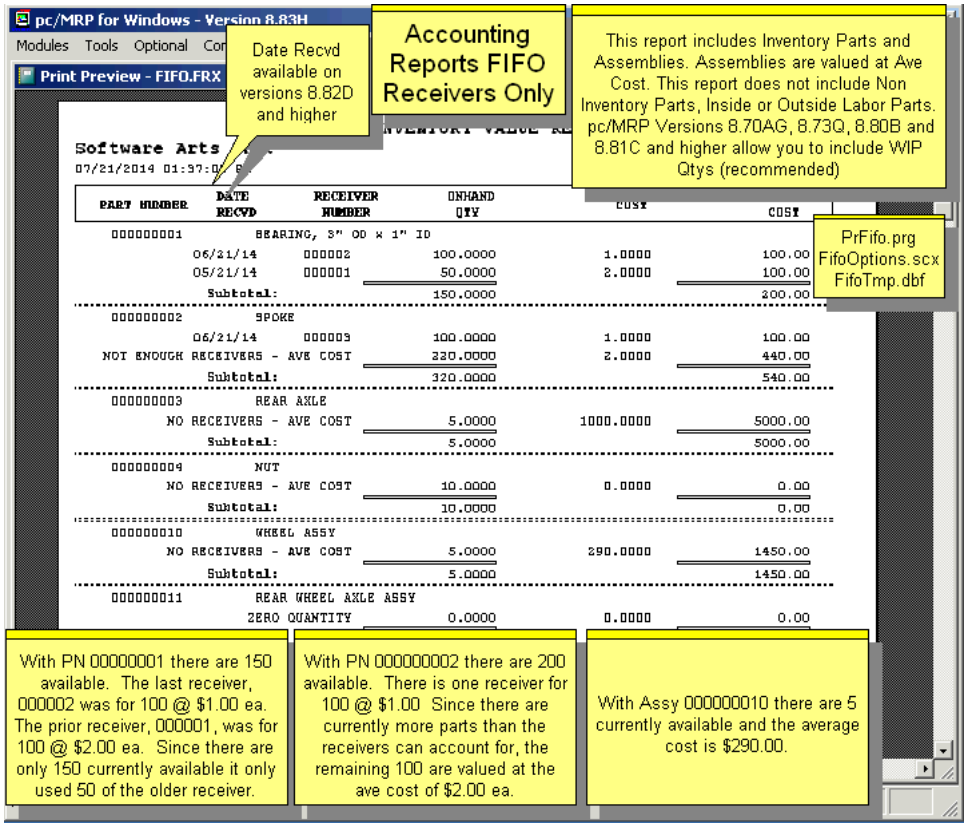

You can select all open, all closed and aging reports of 30, 60 and 90 days.

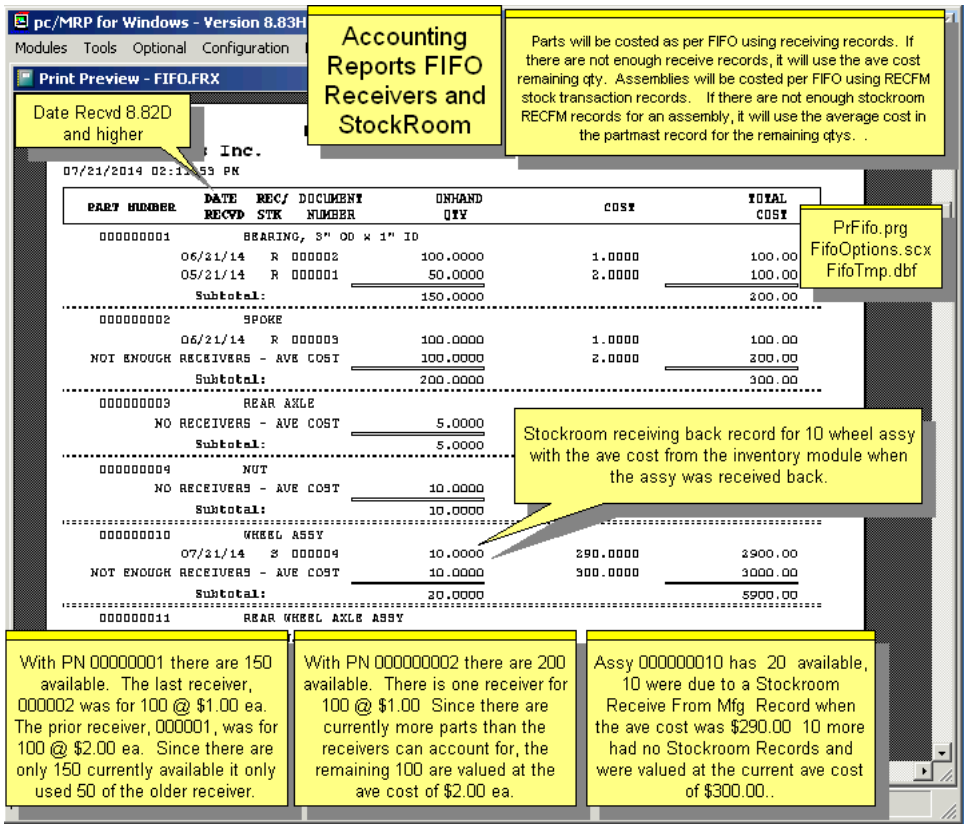
### 14.7.7 FIFO Inventory Value Report

Select the inventory areas that contain stock to be included into the inventory value total.

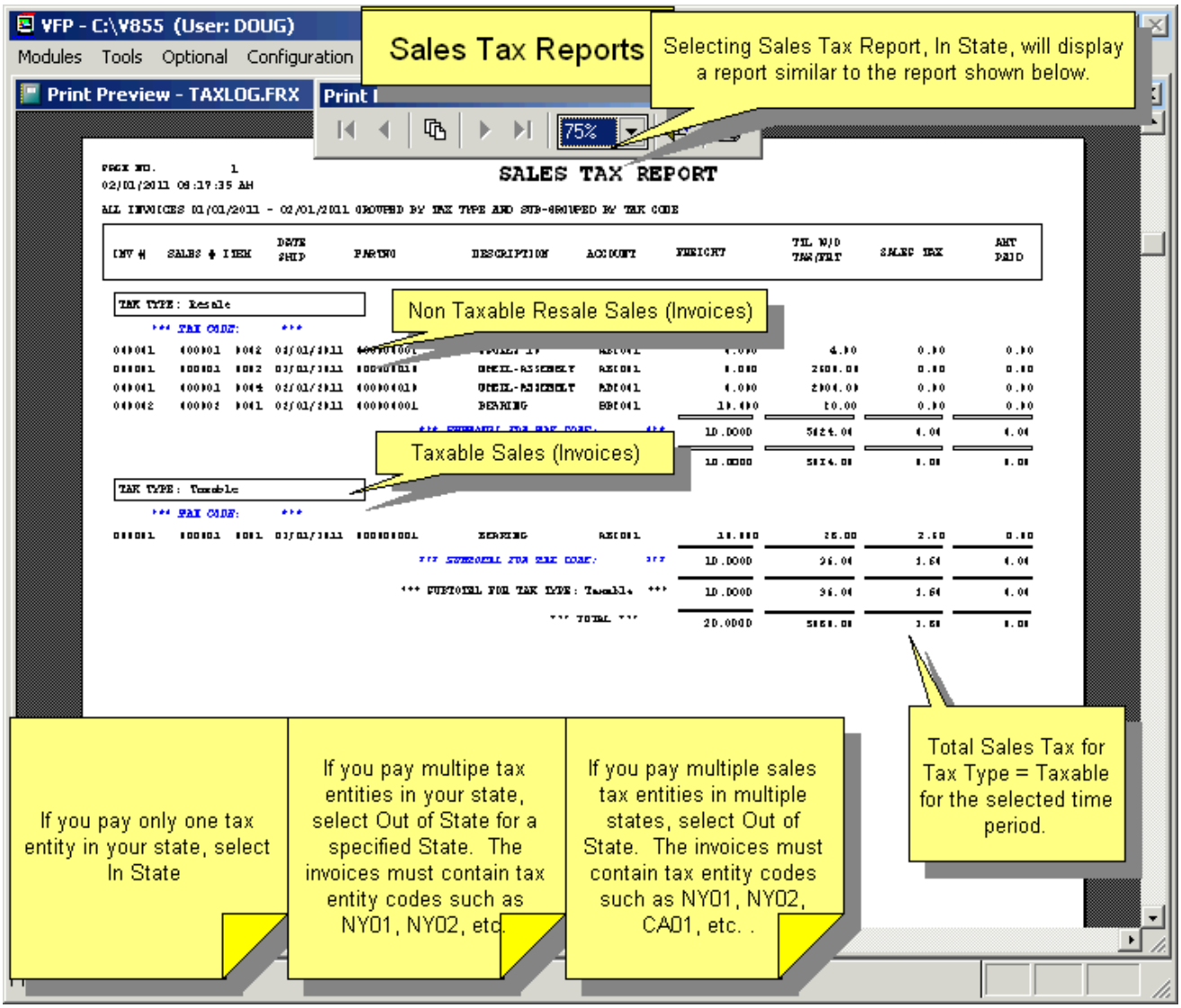
It is recommended to include WIP quantities.




pc/MRP for Windows - Version 8.83H
Modules Tools Optional Con
Print Preview - FIFO.FRX
Date Recvd available on versions 8.82D and higher
Accounting Reports FIFO Receivers Only
This report includes Inventory Parts and Assemblies. Assemblies are valued at Ave Cost. This report does not include Non Inventory Parts, Inside or Outside Labor Parts. pc/MRP Versions 8.70AG, 8.73Q, 8.80B and 8.81C and higher allow you to include WIP Qtys (recommended)
Software Arts
07/21/2014 01:37:0
PART NUMBER DATE RECVD RECEIVER NUMBER ONHAND QTY COST TOTAL COST
00000001 BEARING, 3" OD x 1" ID
06/21/14 000002 100.0000 1.0000 100.00
05/21/14 000001 50.0000 2.0000 100.00
Subtotal: 150.0000 200.00
00000002 SPOKE
06/21/14 000003 100.0000 1.0000 100.00
NOT ENOUGH RECEIVERS - AVE COST 220.0000 2.0000 440.00
Subtotal: 320.0000 540.00
00000003 REAR AXLE
NO RECEIVERS - AVE COST 5.0000 1000.0000 5000.00
Subtotal: 5.0000 5000.00
00000004 NUT
NO RECEIVERS - AVE COST 10.0000 0.0000 0.00
Subtotal: 10.0000 0.00
00000010 WHEEL ASSY
NO RECEIVERS - AVE COST 5.0000 290.0000 1450.00
Subtotal: 5.0000 1450.00
00000011 REAR WHEEL AXLE ASSY
ZERO QUANTITY 0.0000 0.0000 0.00
PrFifo.prg
FifoOptions.scx
FifoTmp.dbf
With PN 00000001 there are 150 available. The last receiver, 000002 was for 100 @ $1.00 ea. The prior receiver, 000001, was for 100 @ $2.00 ea. Since there are only 150 currently available it only used 50 of the older receiver.
With PN 000000002 there are 200 available. There is one receiver for 100 @ $1.00 Since there are currently more parts than the receivers can account for, the remaining 100 are valued at the ave cost of $2.00 ea.
With Assy 000000010 there are 5 currently available and the average cost is $290.00.


pc/MRP for Windows - Version 8.83H
Modules Tools Optional Configuration
Print Preview - FIFO.FRX
Date Recvd 8.82D and higher
Accounting Reports FIFO Receivers and StockRoom
Parts will be costed as per FIFO using receiving records. If there are not enough receive records, it will use the ave cost remaining qty. Assemblies will be costed per FIFO using RECFM stock transaction records. If there are not enough stockroom RECFM records for an assembly, it will use the average cost in the partmast record for the remaining qtys. .
Inc.
07/21/2014 02:11:55 PM
PART NUMBER DATE RECVD REC/ STK DOCUMENT NUMBER ONHAND QTY COST TOTAL COST
00000001 BEARING, 3" OD x 1" ID
06/21/14 R 000002 100.0000 1.0000 100.00
05/21/14 R 000001 50.0000 2.0000 100.00
Subtotal: 150.0000 200.00
00000002 SPOKE
06/21/14 R 000003 100.0000 1.0000 100.00
NOT ENOUGH RECEIVERS - AVE COST 100.0000 2.0000 200.00
Subtotal: 200.0000 300.00
00000003 REAR AXLE
NO RECEIVERS - AVE COST 5.0000
Subtotal: 5.0000
00000004 NUT
NO RECEIVERS - AVE COST 10.0000
Subtotal: 10.0000
00000010 WHEEL ASSY
07/21/14 S 000004 10.0000 290.0000 2900.00
NOT ENOUGH RECEIVERS - AVE COST 10.0000 300.0000 3000.00
Subtotal: 20.0000 5900.00
00000011 REAR WHEEL AXLE ASSY
Stockroom receiving back record for 10 wheel assy with the ave cost from the inventory module when the assy was received back.
PrFifo.prg
FifoOptions.scx
FifoTmp.dbf
With PN 00000001 there are 150 available. The last receiver, 000002 was for 100 @ $1.00 ea. The prior receiver, 000001, was for 100 @ $2.00 ea. Since there are only 150 currently available it only used 50 of the older receiver.
With PN 000000002 there are 200 available. There is one receiver for 100 @ $1.00 Since there are currently more parts than the receivers can account for, the remaining 100 are valued at the ave cost of $2.00 ea.
Assy 000000010 has 20 available, 10 were due to a Stockroom Receive From Mfg Record when the ave cost was $290.00 10 more had no Stockroom Records and were valued at the current ave cost of $300.00..

### 14.7.8 Sales Tax Report




The sales tax report option prints and or displays a sales tax report for a specified time period. The sales tax reports will include all invoices entered during the time period you specify.

If you select In State, pc/MRP will sort and subtotal sales taxes due on the invoice tax type, such as taxable, resale, out of state, US government, etc. The report (taxlog.frx) will consist of invoices created during the time period specified. The invoices must contain sales tax type (automatically inserted from sales orders into invoices). If you create a custom in state report, it must be named ctaxlog.frx.

If you select Out of State, pc/MRP will sort and subtotal sales taxes due by the invoice state and tax entity code such as CA01, CA02, NY01, etc. The report (taxlogo.frx) will consist of invoices created during the time period specified. . The invoices must contain tax entity code (automatically inserted from the address book into sales orders and then into invoices). If you create a custom out of state report, it must be named ctaxlogo.frx.

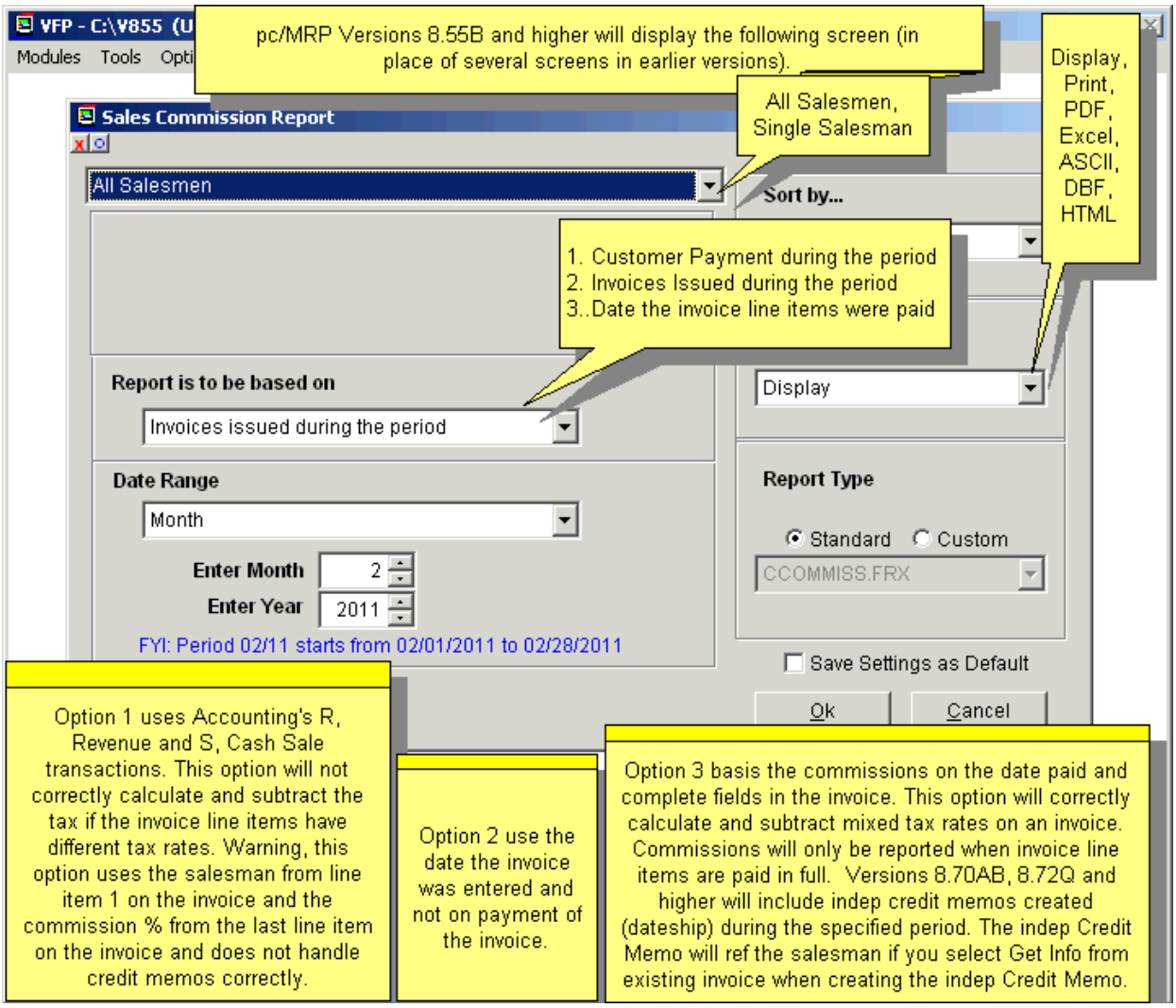
If you select Out of State for a specified state, pc/MRP will sort and subtotal sales taxes due by the tax entity code such as CA01, CA02 for the specified state such as CA. The report (taxlogo.frx) will consist of invoices created during the time period specified for the specified state. The invoices must contain tax entity codes (automatically inserted from the address book into sales orders and then into invoices). If you create a custom out of state report, it must be named, ctaxlogo.frx

If you are required to pay state sales taxes for only the county you are based in, print out the in state report.

If you are required to pay state sales taxes for other counties in your state, print out the instate report and the out of state report for a specified state (yours.)

If you are required to print out sales taxes to two or more states, print out the instate report and the out of state report.

### 14.7.9 Sales Commission Report




Prints out or displays a Sales Commission Report for a specified month, subtotaled by Salesman. Commissions can be based on:

Payments received during a specified month in the accounting module.

This option bases the commissions on the accounting's R, Revenue and S, Cash Sale transactions. This option will not correctly calculate and subtract the tax if the invoice line items have different tax rates, and does not handle credit memos correctly.

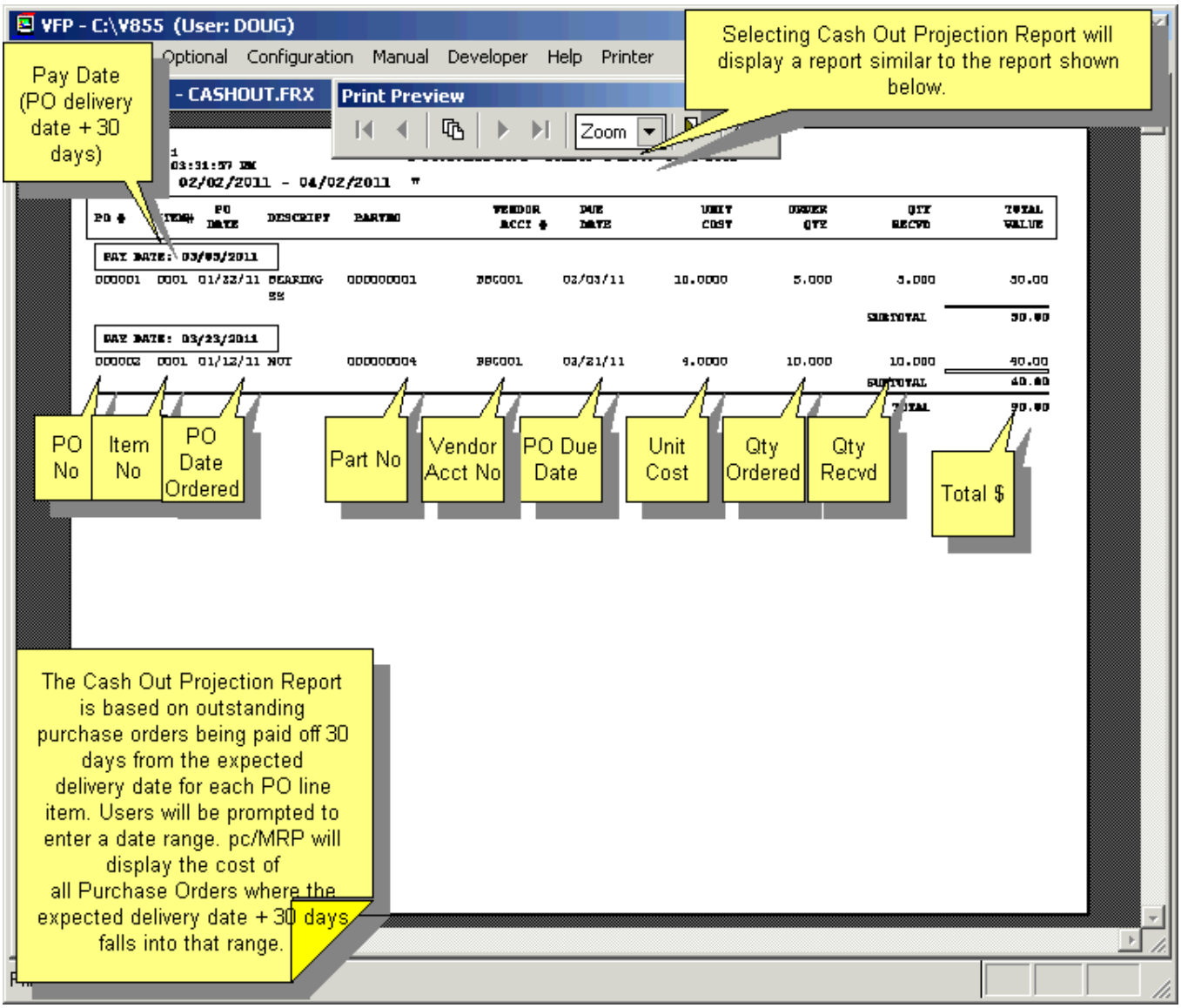
Invoices issued during the specified month.

This option bases the commissions on the date the invoice was entered and not on payment of the invoice.

Date the invoice line items were paid in full.

This option bases the commissions on the date paid and complete fields in the invoice. This option will correctly calculate and subtract mixed tax rates on an invoice. Commissions will only be reported when invoice line items are paid in full.

### 14.7.10 Cash Out Projection Report (POs)




The Cash Out Projection Report is based on outstanding purchase orders being paid off 30 days from the expected delivery date for each PO line item. Users will be prompted to enter a date range. pc/MRP will display the cost of all Purchase Orders where the expected delivery date + 30 days falls into that range.

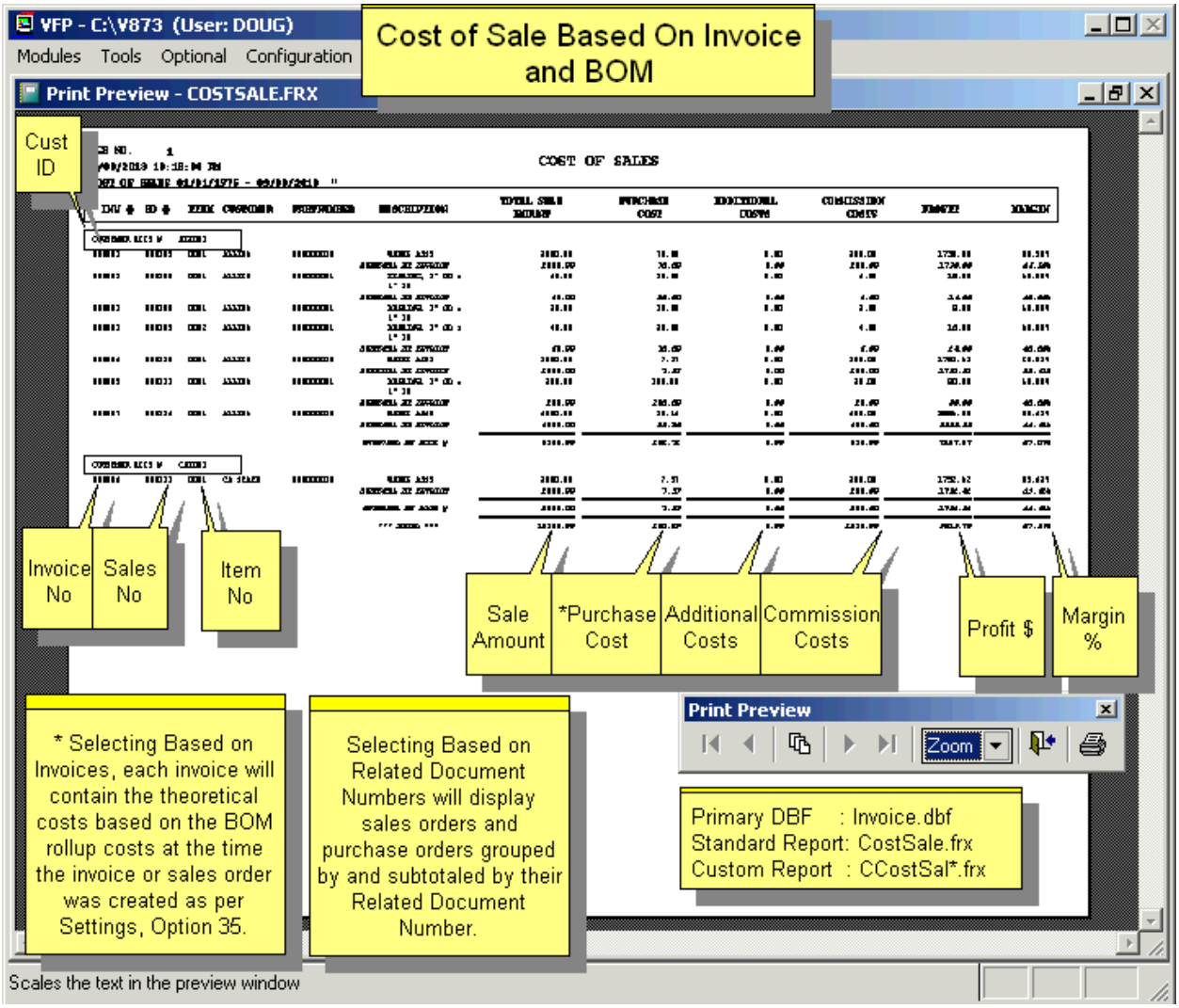
**14.7.11 Cost of Sales Report**

Cost of Sales Report based on

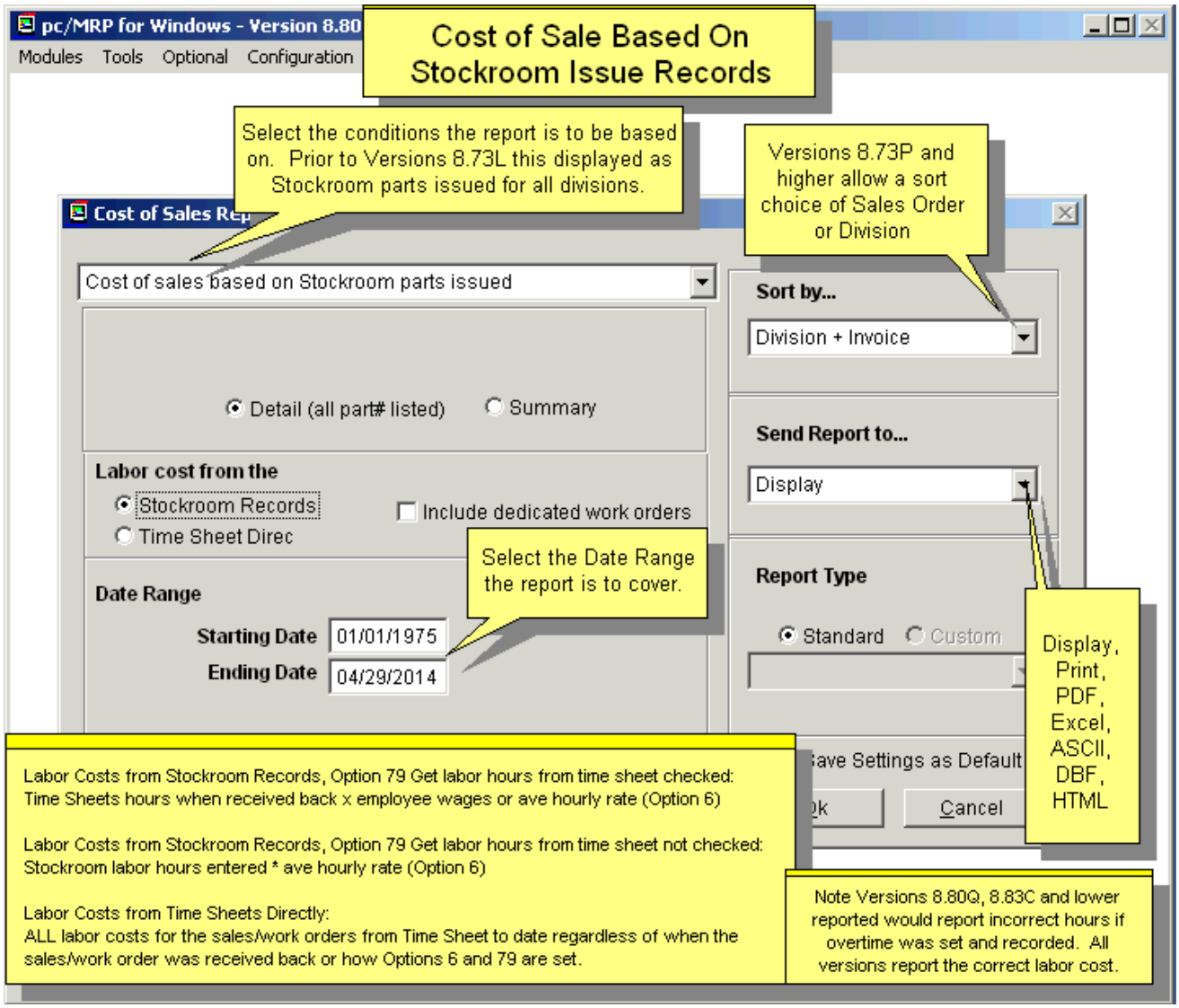
1. Invoices and Related BOMs (Theoretical Cost),
2. Stockroom and Employee Time Sheet (Actual Cost), and or
3. Related Document Numbers (Purchase Orders contain the sales order number its Related Document Number Field).

pc/MRP will allow you to print out a cost of sales report for a specified month based on invoices. Each invoice contains theoretical cost of the BOM based on cost-roll-ups or the cost based on stockroom transactions issued to those invoices. pc/MRP's Configuration Menu, Option 35, will allow you to select how the cost of sale for each invoice is obtained.

If the costs are populated from inventory, **Option 35** defines if standard or average costs will be in the cost of sale. For costs to work correctly from inventory all parts in inventory must have a standard or average cost populated and the "Cost Roll Up Option" in inventory module must be ran periodically to update the cost of all assemblies.

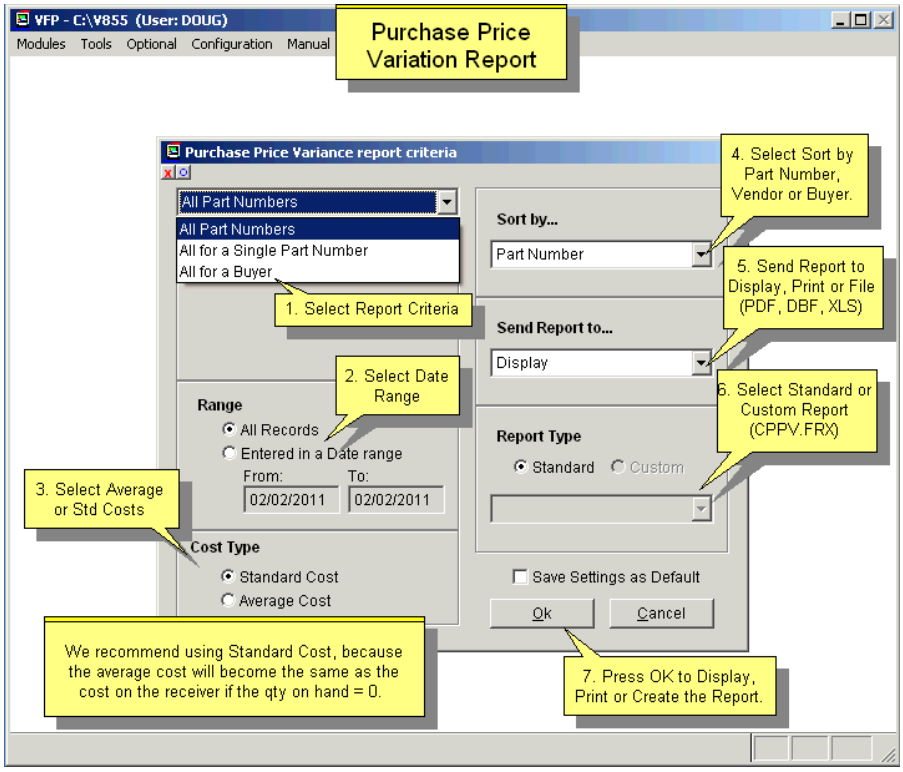


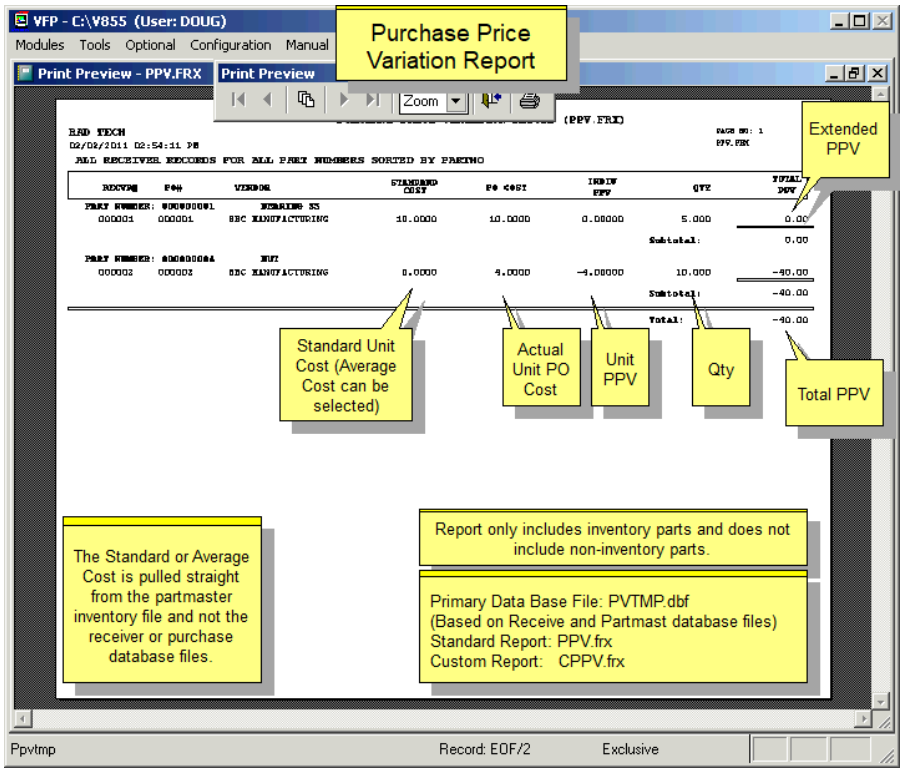
You can sort by Sales Order or Division.



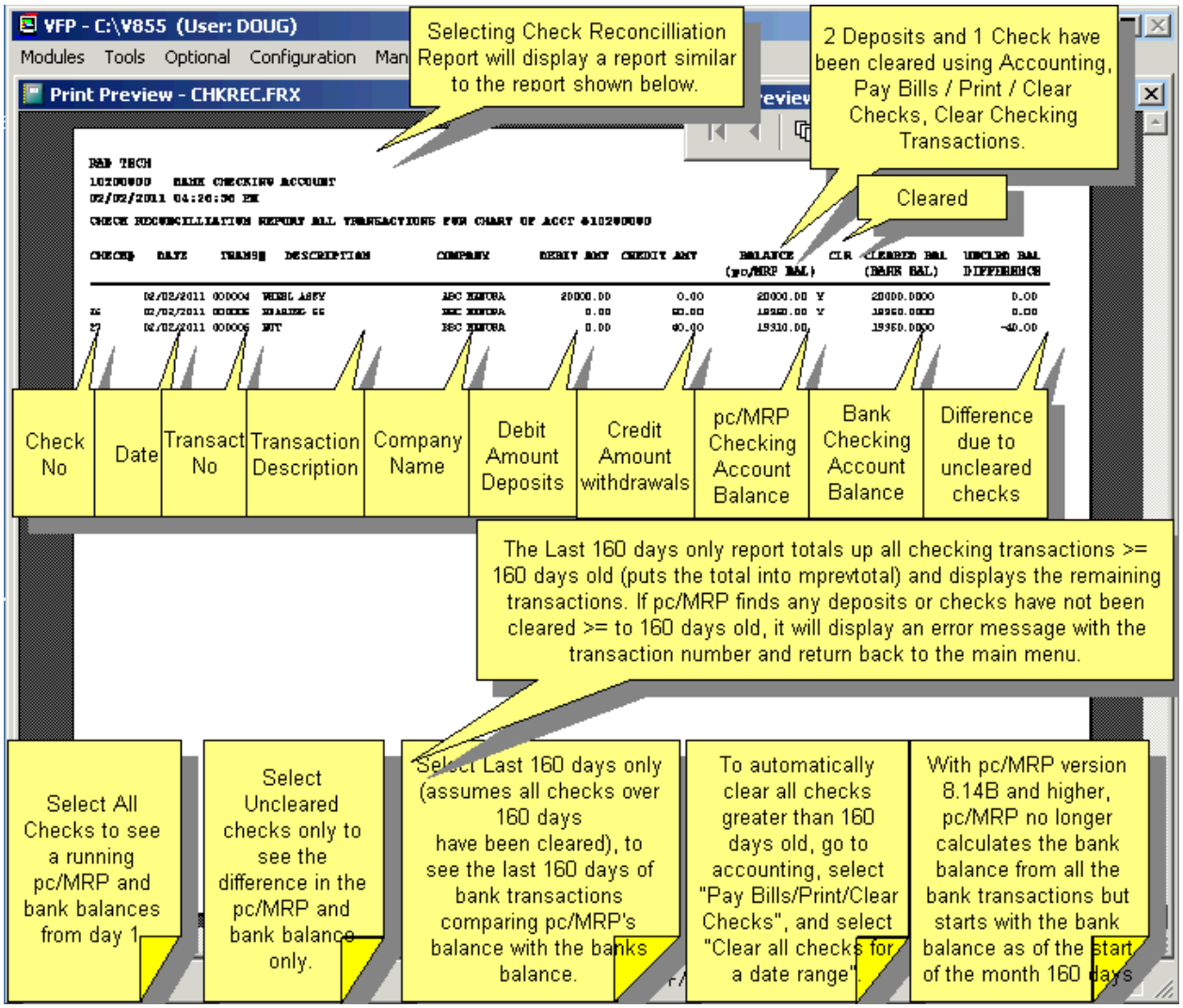
### 14.7.12 Purchasing Price Variance Report

Accounting's Purchase Price Variance Report compares standard costs or average costs listed in the Inventory Module with the actual purchase price from the receiver. Purchasing can use this report to show management the cost savings per month over list prices.



### 14.7.13 Check Reconciliation Report




pc/MRP allows you to print out a check reconciliation report for all checks or uncleared checks only. Select **All** checks to see a running pc/MRP and bank balances from day 1. Select **Uncleared checks only** to see the difference in the pc/MRP and bank balance only. Select **Last 160 days only** (assumes all checks over 160 days have been cleared), to see the last 160 days of bank transactions comparing pc/MRP's balance with the bank's balance.

Select how you would like this report sorted: by transaction number, date, or check number. Enter the checking accounts chart of accounts number. pc/MRP will then display/print the reconciled running balances between the bank statement and pc/MRP's transaction files. The balance column contains pc/MRP's balance. The cleared balance column contains the bank's balance. The uncleared balance column contains the differences in the two balances.

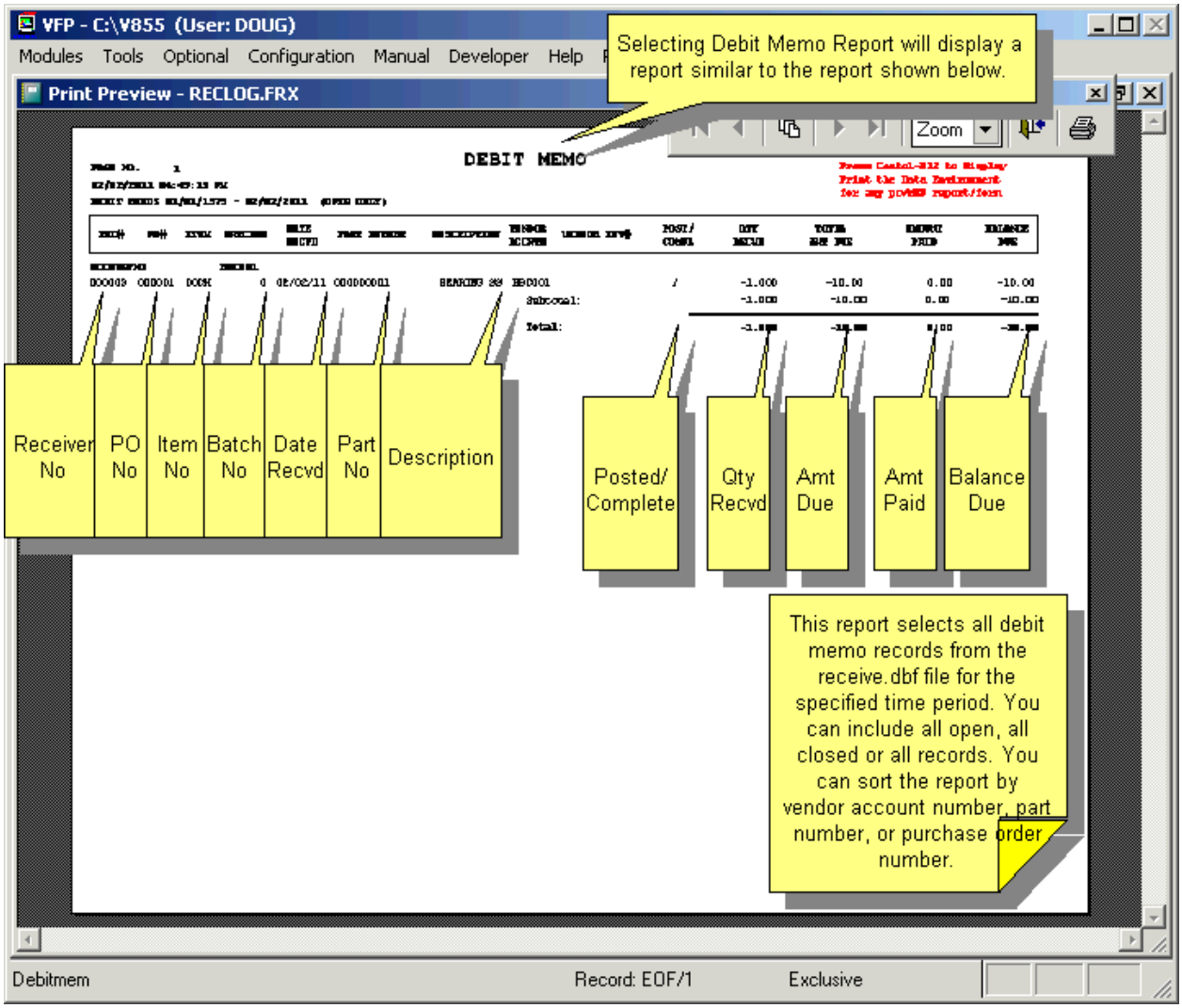
The Last 160 days only report first totals up all checking transactions greater than or equal to 160 days old. If pc/MRP finds any deposits or checks have not been cleared over or equal to 160 days old, it will display an error message with the transaction number and return back to the main menu. If all the 160 days and older checks have been cleared, pc/MRP puts the total of all the checks into a memory variable named mprevtot. It then goes on to create a report listing each checking transaction less than 159 days old, a running balance for pc/MRP, a running balance for the bank, and the difference based on if the check cleared or not.

It assumes the starting balance for the bank account six (6) months ago is correct and inserts that balance into the first transaction shown on the report.

To automatically clear all checks greater than 160 days old, go to accounting, select "Pay Bills/Print/Clear Checks", and select "Clear all checks for a date range".

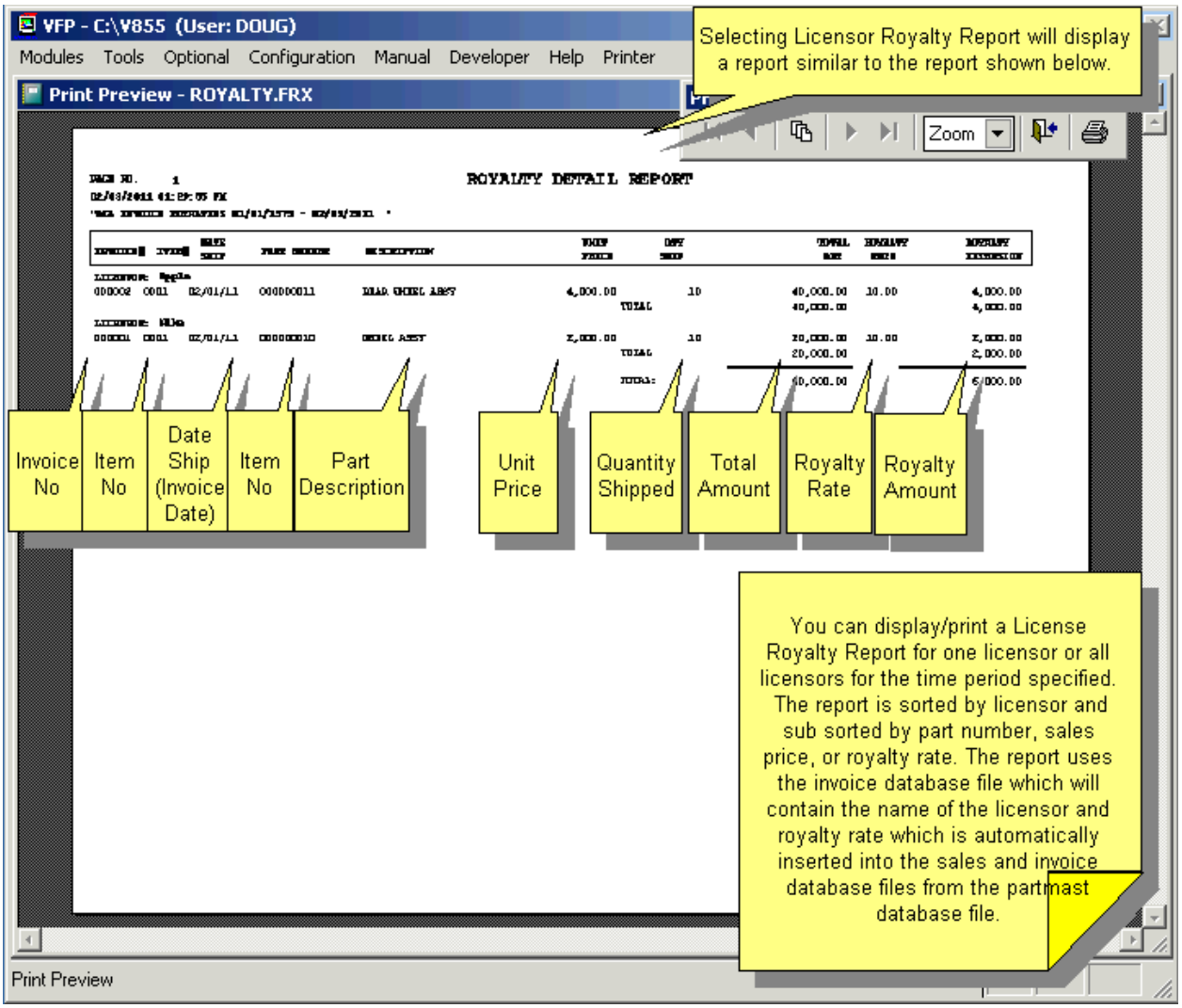
pc/MRP does not calculate the bank balance from all the bank transactions but starts with the bank balance as of the start of the month 160 days back.

### 14.7.14 Debit Memo Reports



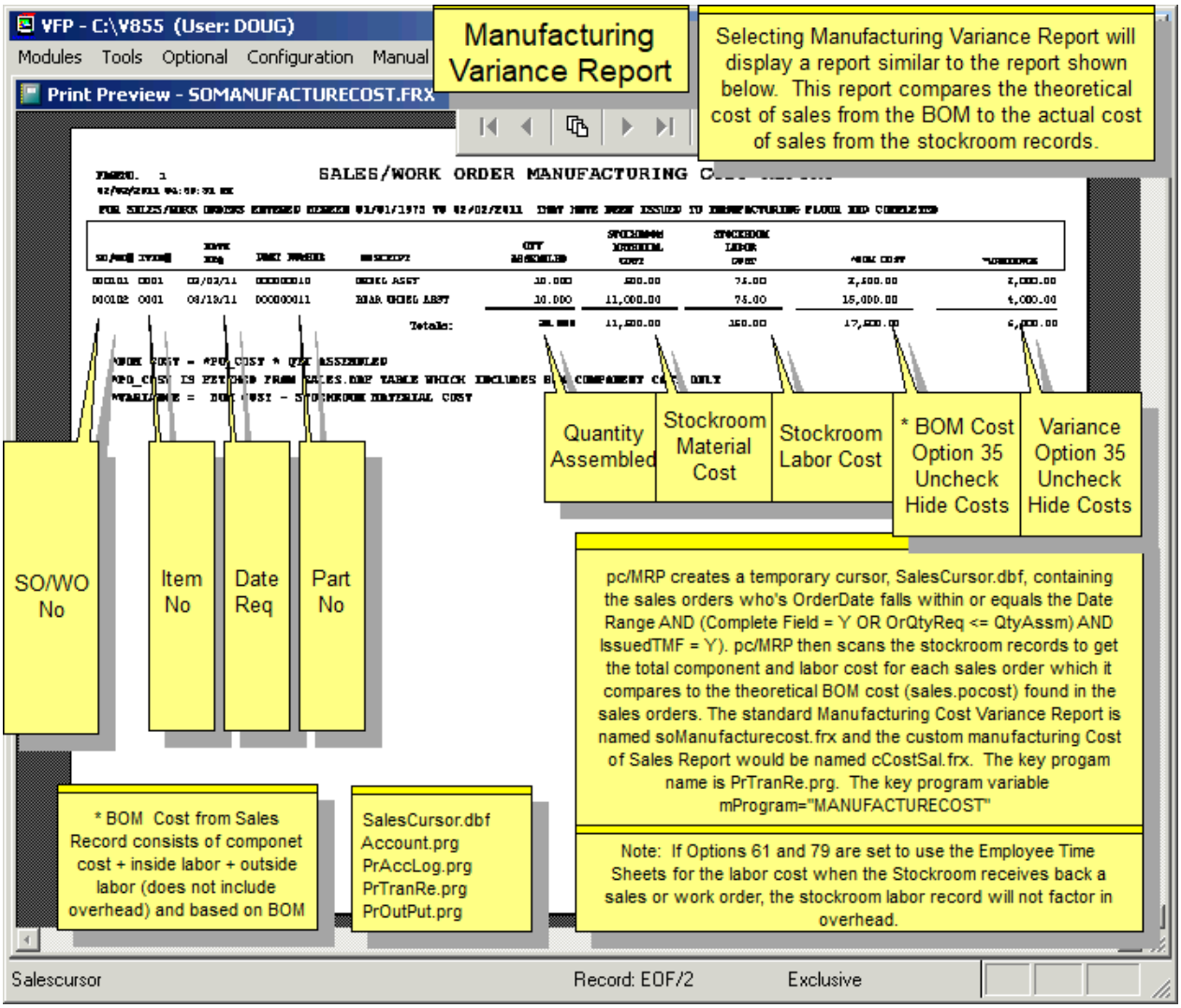

This report selects all debit memo records from the receive.dbf file for the specified time period. You can include all open, all closed or all records. You can sort the report by vendor account number, part number, or purchase order number.

### 14.7.15 Licensor Royalty Reports




You can display/print a Licensor Royalty Report for one licensor or all licensors for the time period specified. The report is sorted by licensor and sub sorted by part number, sales price, or royalty rate. The report uses the invoice database file which will contain the name of the licensor and royalty rate which is automatically inserted into the sales and invoice database files from the partmast database file.

### 14.7.16 Manufacturing Cost Variance Report




Users can display/print a manufacturing variance report comparing the theoretical cost of sales (from the BOM) to the actual cost of sales (from the stockroom records). pc/MRP prompts the user to enter a date range for the order date of the sales orders to be included. pc/MRP creates a temporary cursor, SalesCursor.dbf containing the sales orders selected. pc/MRP then scans the stockroom records to get the total component and labor cost for each sales order which it compares to the theoretical BOM cost (sales.pocost) found in the sales orders. The standard Manufacturing Cost Variance Report is named soManufacturecost.frx and the custom Manufacturing Cost of Sales Report would be named cCostSal.frx.

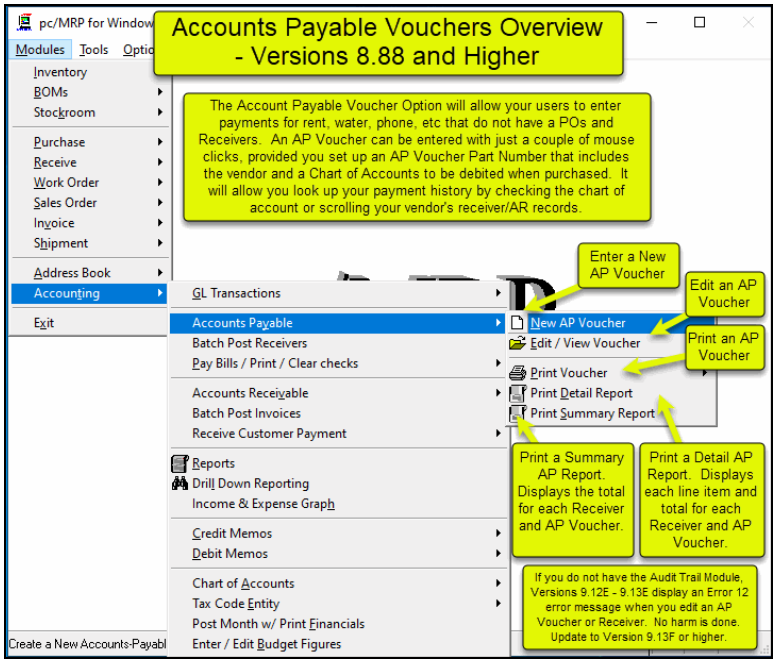
### 14.7.17 Accounting Report Errors

Accounting report errors can occur due to duplicate transaction numbers, duplicate blank transaction numbers, and incorrect dates. Accounting's Audit Option will automatically locate these transactions and allow you to correct them. Duplicate transaction numbers can cause an accounting report to loop on the duplicate number. To correct this delete one of the first duplicate transaction number. If necessary, the transaction can be re-entered with a new transaction number. Duplicate blank transaction numbers can cause an accounting report to loop on the blank transaction printing out only lines and no transactions. To correct this, delete the blank transaction numbers. Invalid dates such as 03/99/14 can cause a transaction report to skip all remaining transaction for month 03. Use the accounting audit option to locate any invalid dates and then edit the transaction's date.

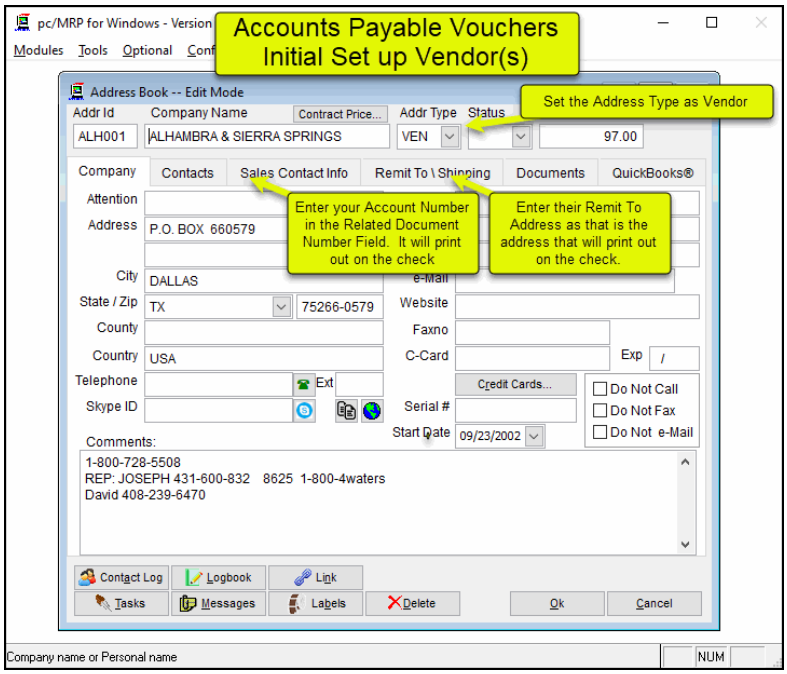
# 14.8 Accounts Payable

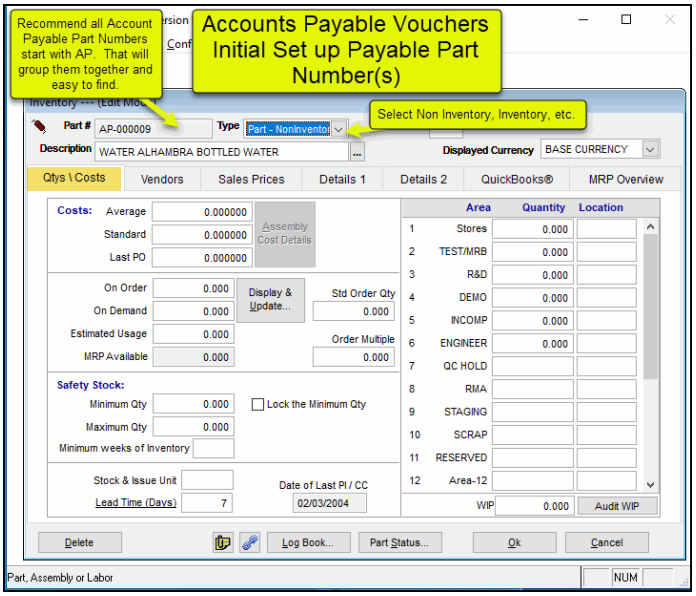
### 14.8.1 Accounts Payable Overview

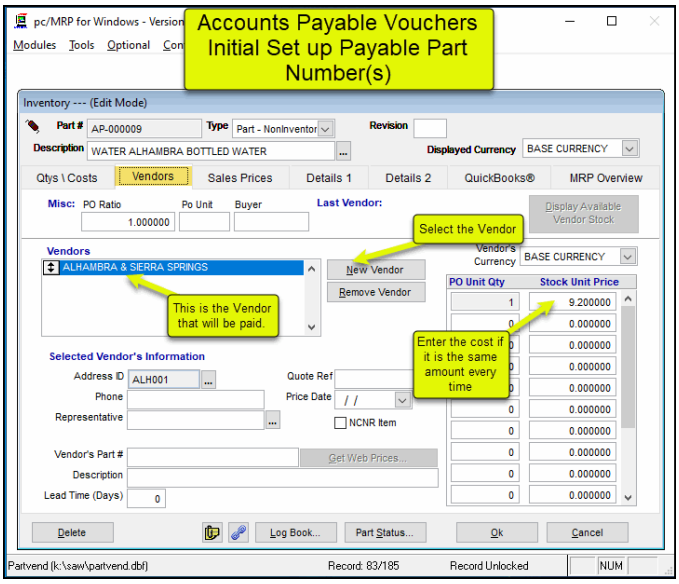
Accounts payable consists of purchase order receivers that have been posted but not paid and account payable vouchers that have not been paid. Account Payable Vouchers are basically receivers that do not have POs. Accounts Receivable Vouchers are created for such items as rent, water, phone, etc.
https://pcmrp.com/mrp101/ap875voucheroverview.htm

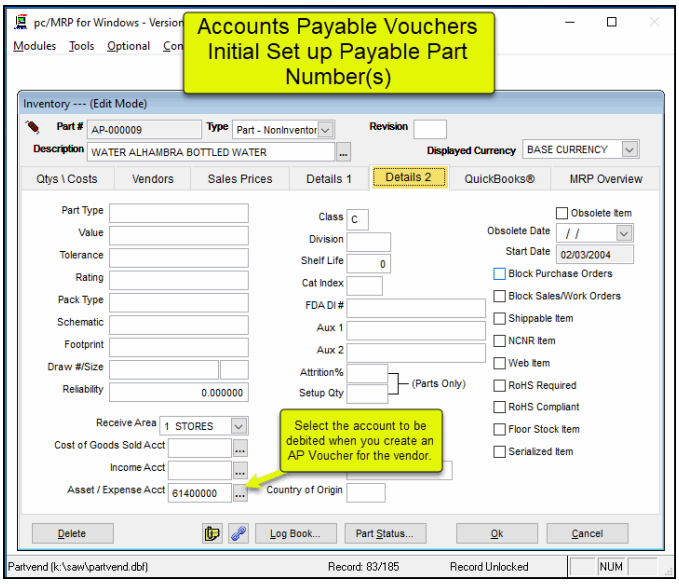



To initially set up your AP Voucher Payments you must first enter your AP Vendors and your AP Part Numbers into your pc/MRP Address Book and Inventory Database files

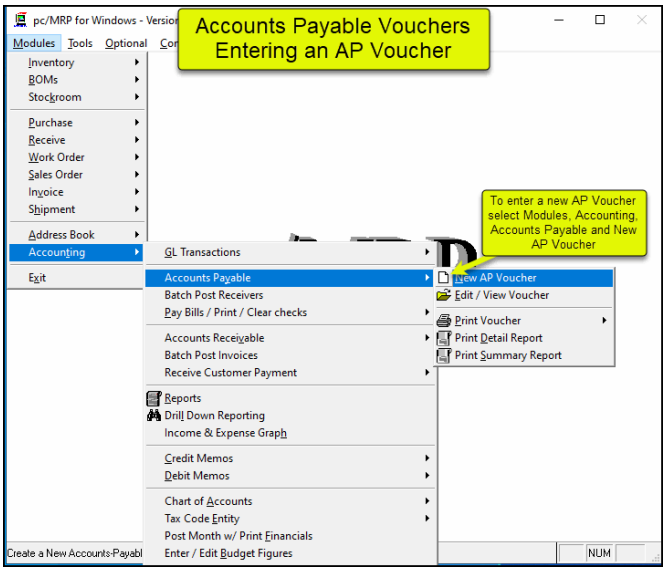


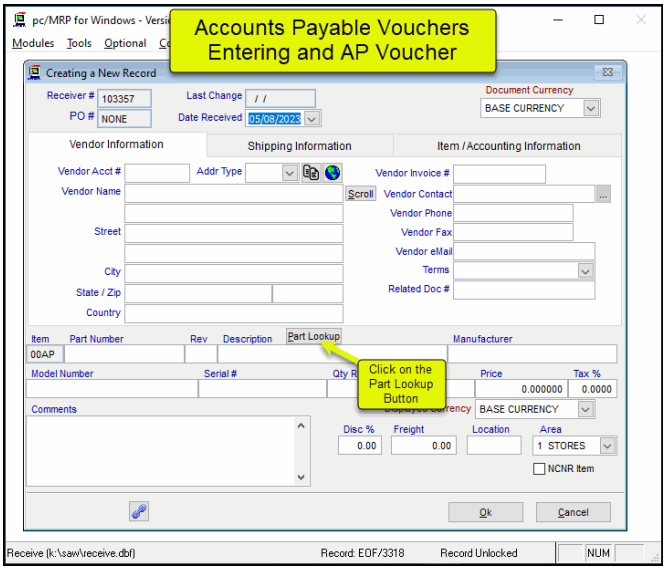

Accounts Payable Vouchers Initial Set up Payable Part Number(s)
Recommend all Account Payable Part Numbers start with AP. That will group them together and easy to find.
Select Non Inventory, Inventory, etc.
Part # AP-000009
Type Part - NonInventor
Description WATER ALHAMBRA BOTTLED WATER
Displayed Currency BASE CURRENCY
Qtys \ Costs
Vendors
Sales Prices
Details 1
Details 2
QuickBooks®
MRP Overview
Costs: Average 0.000000
Standard 0.000000
Last PO 0.000000
Assembly Cost Details
On Order 0.000
On Demand 0.000
Estimated Usage 0.000
MRP Available 0.000
Display & Update...
Std Order Qty 0.000
Order Multiple 0.000
Safety Stock:
Minimum Qty 0.000
Maximum Qty 0.000
Minimum weeks of Inventory
Lock the Minimum Qty
Stock & Issue Unit
Lead Time (Days) 7
Date of Last PI / CC 02/03/2004
Area Quantity Location
1 Stores 0.000
2 TEST/MRB 0.000
3 R&D 0.000
4 DEMO 0.000
5 INCOMP 0.000
6 ENGINEER 0.000
7 QC HOLD
8 RMA
9 STAGING
10 SCRAP
11 RESERVED
12 Area-12
WIP 0.000
Audit WIP
Delete
Log Book...
Part Status...
Ok
Cancel
Part, Assembly or Labor
NUM

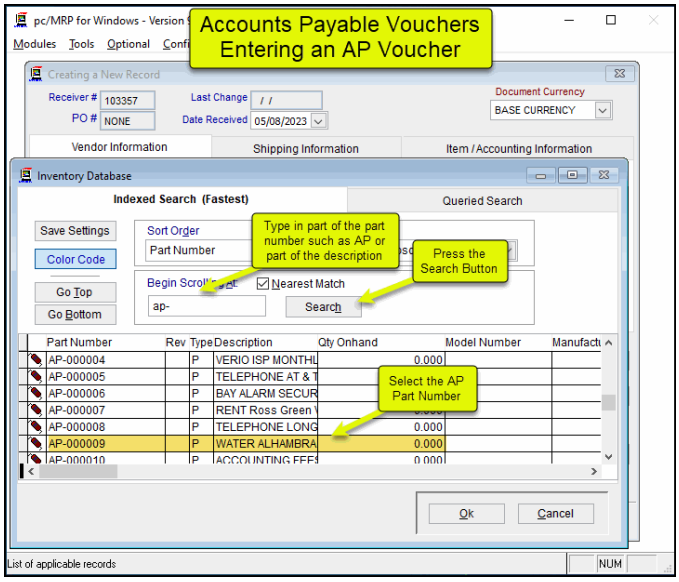

Accounts Payable Vouchers Initial Set up Payable Part Number(s)
pc/MRP for Windows - Version
Modules Tools Optional
Inventory --- (Edit Mode)
Part # AP-000009
Type Part - NonInventor
Revision
Description WATER ALHAMBRA BOTTLED WATER
Displayed Currency BASE CURRENCY
Qtys \ Costs
Vendors
Sales Prices
Details 1
Details 2
QuickBooks®
MRP Overview
Misc: PO Ratio 1.000000
Po Unit
Buyer
Last Vendor:
Display Available Vendor Stock
Select the Vendor
Vendors
ALHAMBRA & SIERRA SPRINGS
New Vendor
Remove Vendor
Vendor's Currency BASE CURRENCY
This is the Vendor that will be paid.
PO Unit Qty
Stock Unit Price
Enter the cost if it is the same amount every time
Selected Vendor's Information
Address ID ALH001
Phone
Representative
Quote Ref
Price Date / /
NCNR Item
Vendor's Part #
Description
Lead Time (Days) 0
Get Web Prices...
Delete
Log Book...
Part Status...
Ok
Cancel
Partvend (k:\saw\partvend.dbf)
Record: 83/185
Record Unlocked
NUM

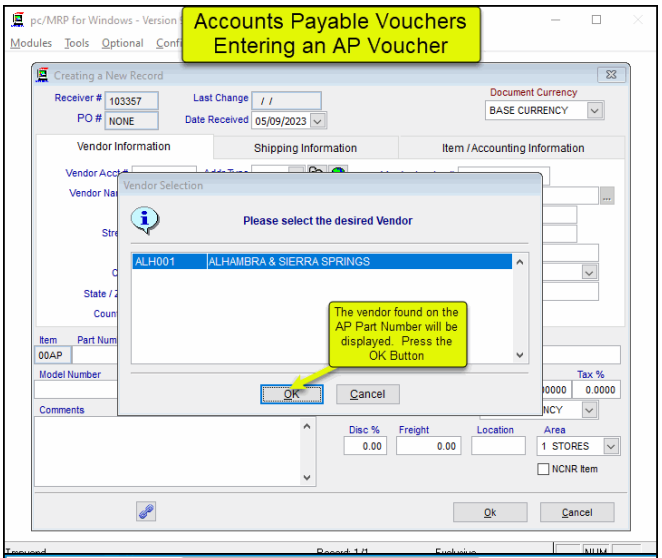

Accounts Payable Vouchers Initial Set up Payable Part Number(s)
pc/MRP for Windows - Version
Modules Tools Optional
Inventory --- (Edit Mode)
Part # AP-000009
Type Part - NonInventor
Revision
Description WATER ALHAMBRA BOTTLED WATER
Displayed Currency BASE CURRENCY
Qtys \ Costs
Vendors
Sales Prices
Details 1
Details 2
QuickBooks®
MRP Overview
Part Type
Value
Tolerance
Rating
Pack Type
Schematic
Footprint
Draw #/Size
Reliability 0.000000
Class C
Division
Shelf Life 0
Cat Index
FDA DI #
Aux 1
Aux 2
Attrition%
Setup Qty
(Parts Only)
Obsolete Item
Obsolete Date / /
Start Date 02/03/2004
Block Purchase Orders
Block Sales/Work Orders
Shippable Item
NCNR Item
Web Item
RoHS Required
RoHS Compliant
Floor Stock Item
Serialized Item
Receive Area 1 STORES
Cost of Goods Sold Acct
Income Acct
Asset / Expense Acct 61400000
Select the account to be debited when you create an AP Voucher for the vendor.
Country of Origin
Delete
Log Book...
Part Status...
Ok
Cancel
Partvend (k:\saw\partvend.dbf)
Record: 83/185
Record Unlocked
NUM

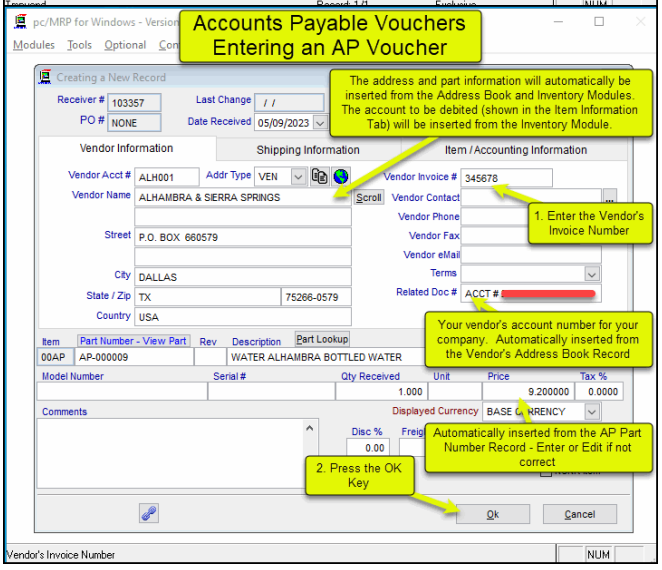
To create an Accounts Payable Voucher, select Modules, Accounting, Accounts Payable and New. With pc/MRP Versions 9.55 and higher, enter part of the part number and pc/MRP will display all matching part numbers.

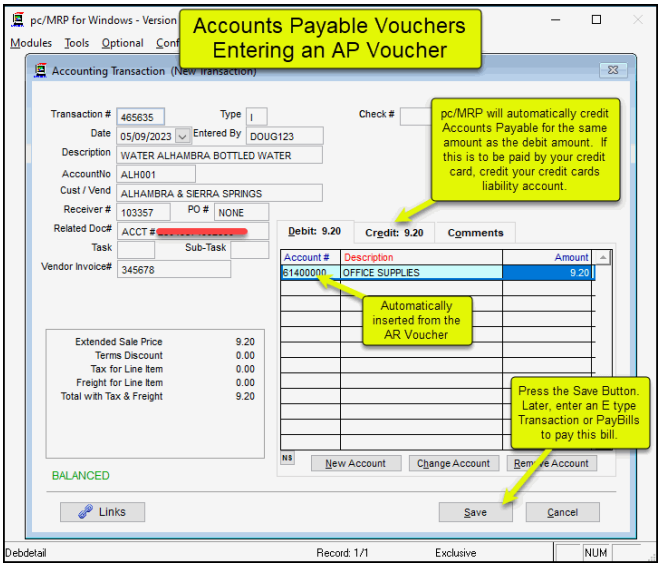


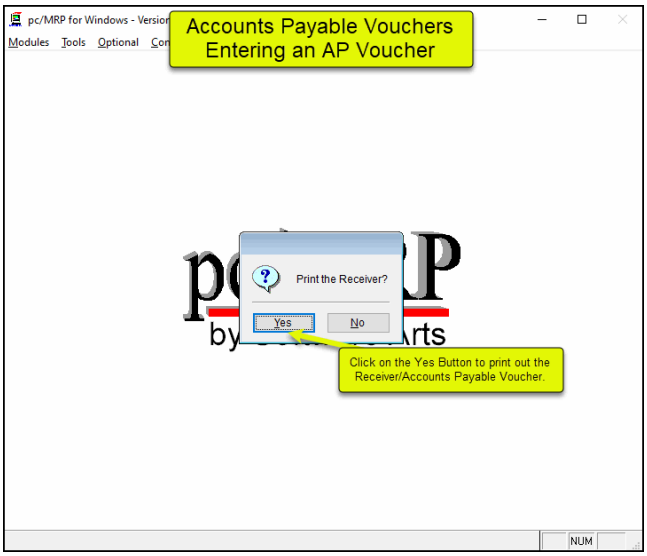



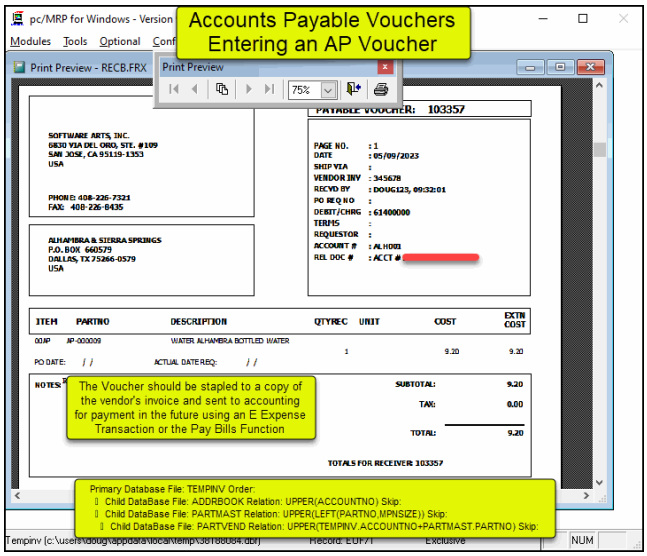



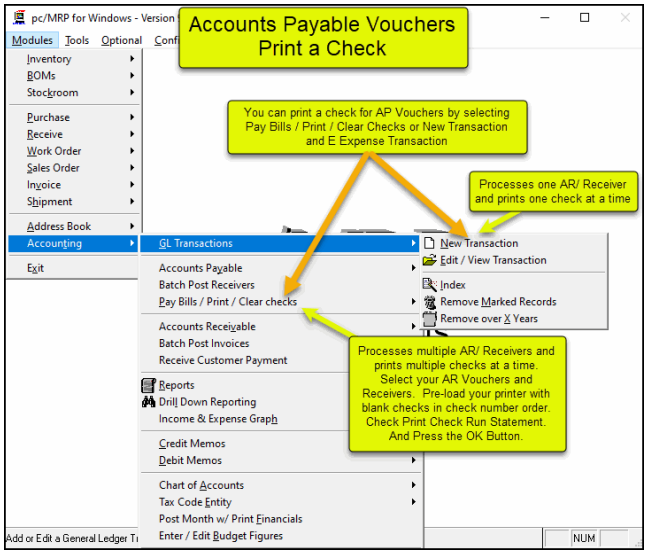

Accounts Payable Vouchers
Entering an AP Voucher
Creating a New Record
Receiver # 103357
PO # NONE
Last Change / /
Date Received 05/09/2023
Document Currency
BASE CURRENCY
Vendor Information
Shipping Information
Item / Accounting Information
Vendor Selection
Please select the desired Vendor
ALH001 ALHAMBRA & SIERRA SPRINGS
The vendor found on the AP Part Number will be displayed. Press the OK Button
OK
Cancel
Item
00AP
Model Number
Comments
Tax %
0.0000
Disc %
0.00
Freight
0.00
Location
Area
1 STORES
NCNR Item
Ok
Cancel


Accounts Payable Vouchers
Entering an AP Voucher
Creating a New Record
Receiver # 103357
PO # NONE
Last Change / /
Date Received 05/09/2023
The address and part information will automatically be inserted from the Address Book and Inventory Modules. The account to be debited (shown in the Item Information Tab) will be inserted from the Inventory Module.
Vendor Information
Shipping Information
Item / Accounting Information
Vendor Acct # ALH001
Addr Type VEN
Vendor Name ALHAMBRA & SIERRA SPRINGS
Street P.O. BOX 660579
City DALLAS
State / Zip TX 75266-0579
Country USA
Vendor Invoice # 345678
Vendor Contact
Vendor Phone
Vendor Fax
Vendor eMail
Terms
Related Doc # ACCT #
1. Enter the Vendor's Invoice Number
Item
Part Number - View Part
Rev
Description
Part Lookup
00AP
AP-000009
WATER ALHAMBRA BOTTLED WATER
Your vendor's account number for your company. Automatically inserted from the Vendor's Address Book Record
Model Number
Serial #
Qty Received
Unit
Price
Tax %
1.000
9.200000
0.0000
Comments
Displayed Currency
BASE CURRENCY
Disc %
0.00
Automatically inserted from the AP Part Number Record - Enter or Edit if not correct
2. Press the OK Key
Ok
Cancel
Vendor's Invoice Number
NUM


Accounts Payable Vouchers
Entering an AP Voucher
Accounting Transaction (New Transaction)
Transaction # 465635
Type I
Check #
Date 05/09/2023
Entered By DOUG123
Description WATER ALHAMBRA BOTTLED WATER
AccountNo ALH001
Cust / Vend ALHAMBRA & SIERRA SPRINGS
Receiver # 103357
PO # NONE
Related Doc# ACCT #
Task
Sub-Task
Vendor Invoice# 345678
pc/MRP will automatically credit Accounts Payable for the same amount as the debit amount. If this is to be paid by your credit card, credit your credit cards liability account.
Debit: 9.20
Credit: 9.20
Comments
Account #
Description
Amount
61400000
OFFICE SUPPLIES
9.20
Automatically inserted from the AR Voucher
Extended Sale Price 9.20
Terms Discount 0.00
Tax for Line Item 0.00
Freight for Line Item 0.00
Total with Tax & Freight 9.20
Press the Save Button. Later, enter an E type Transaction or PayBills to pay this bill.
New Account
Change Account
BALANCED
Links
Save
Cancel
Debdetail
Record: 1/1
Exclusive
NUM


Accounts Payable Vouchers
Entering an AP Voucher
Print the Receiver?
Yes
No
Click on the Yes Button to print out the Receiver/Accounts Payable Voucher.


Accounts Payable Vouchers
Entering an AP Voucher
Print Preview - RECB.FRX
Print Preview
The Voucher should be stapled to a copy of the vendor's invoice and sent to accounting for payment in the future using an E Expense Transaction or the Pay Bills Function

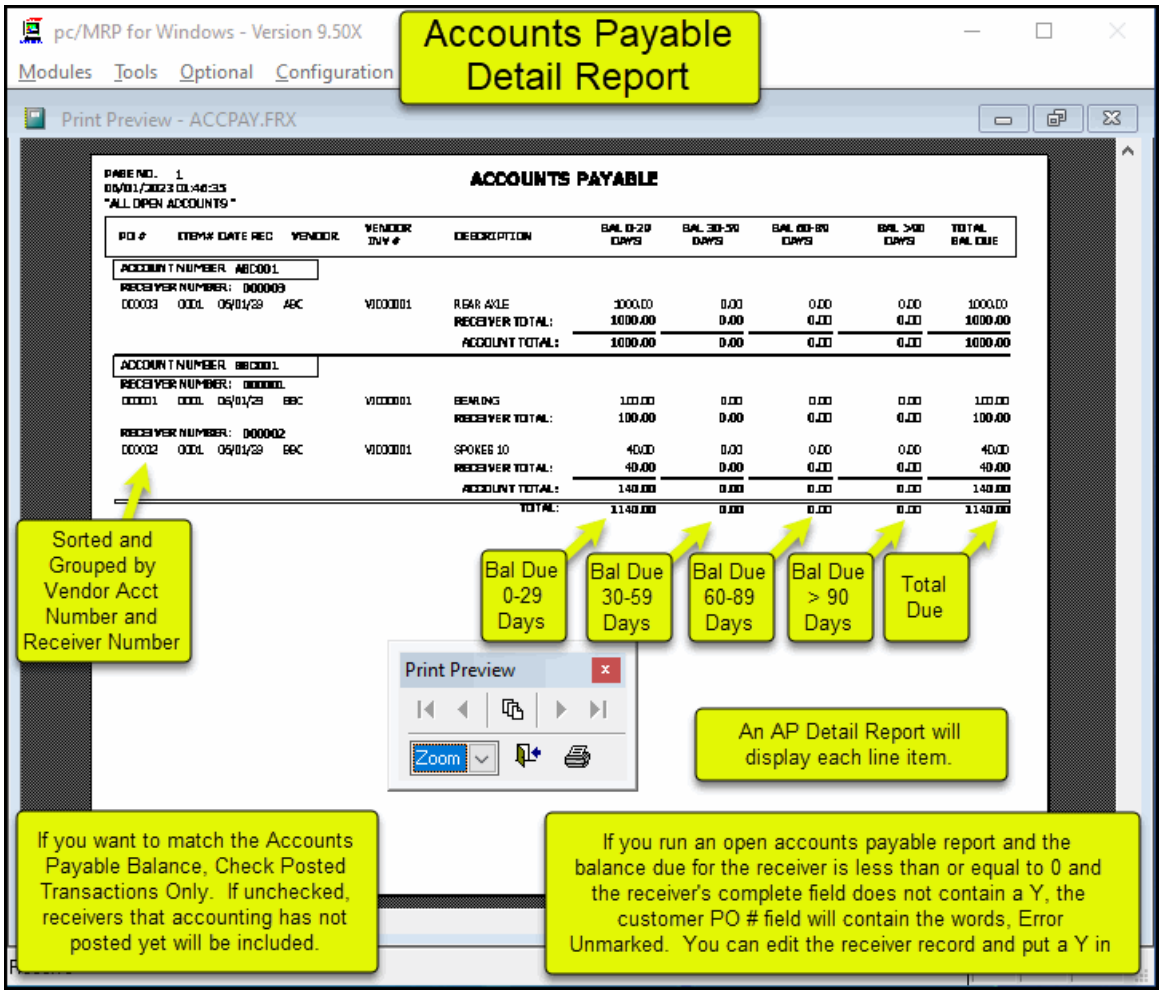

Accounts Payable Vouchers
Print a Check
You can print a check for AP Vouchers by selecting Pay Bills / Print / Clear Checks or New Transaction and E Expense Transaction
Processes one AR/ Receiver and prints one check at a time
Processes multiple AR/ Receivers and prints multiple checks at a time. Select your AR Vouchers and Receivers. Pre-load your printer with blank checks in check number order. Check Print Check Run Statement. And Press the OK Button.

### 14.8.2 Edit/View an Account Payables Voucher

This option allows users to scroll, edit, delete, undelete, or run queries against AP Voucher records. Since entering an AP Voucher automatically enters a general ledger transaction, editing an accounts payable voucher automatically takes you to the general ledger editing routine.

### 14.8.3 Print Detail Report

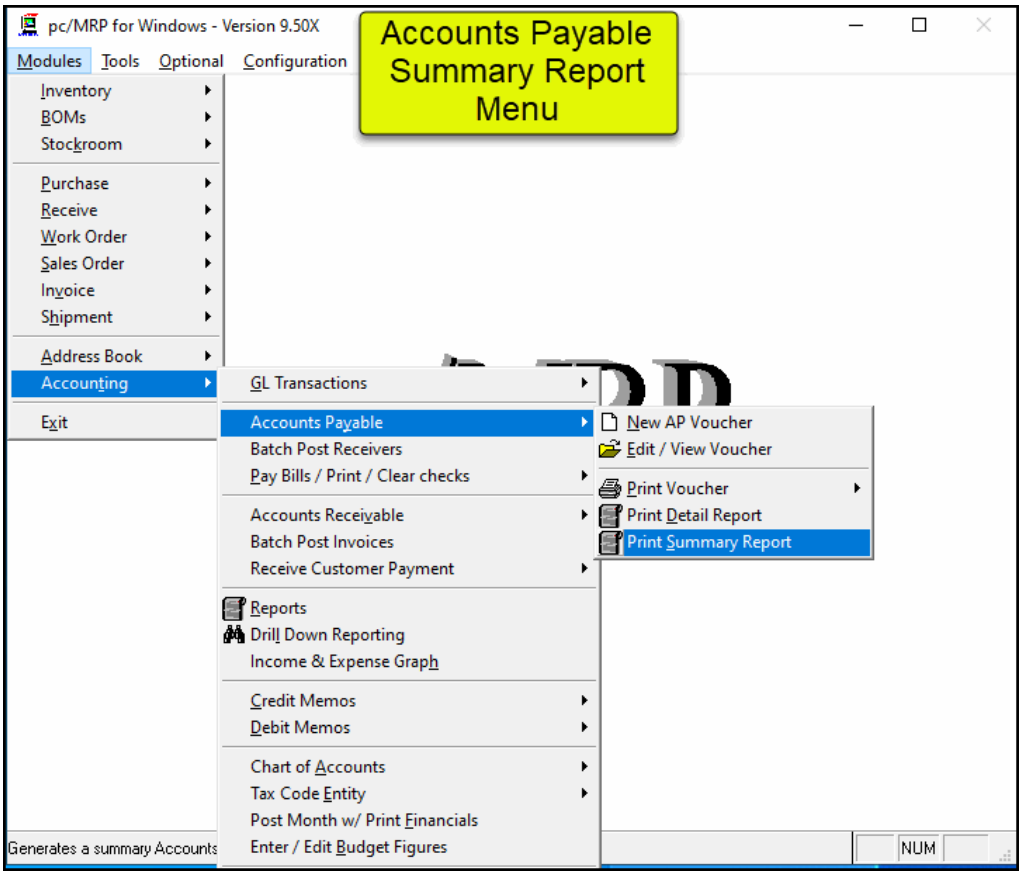
Selecting the accounts payable report option will provide a consolidated printout of all accounts or a single account subtotaled on receiver and account numbers. The balance due amounts are totaled in the 0-29, 30-59, 60-90, and Over 90 days columns.

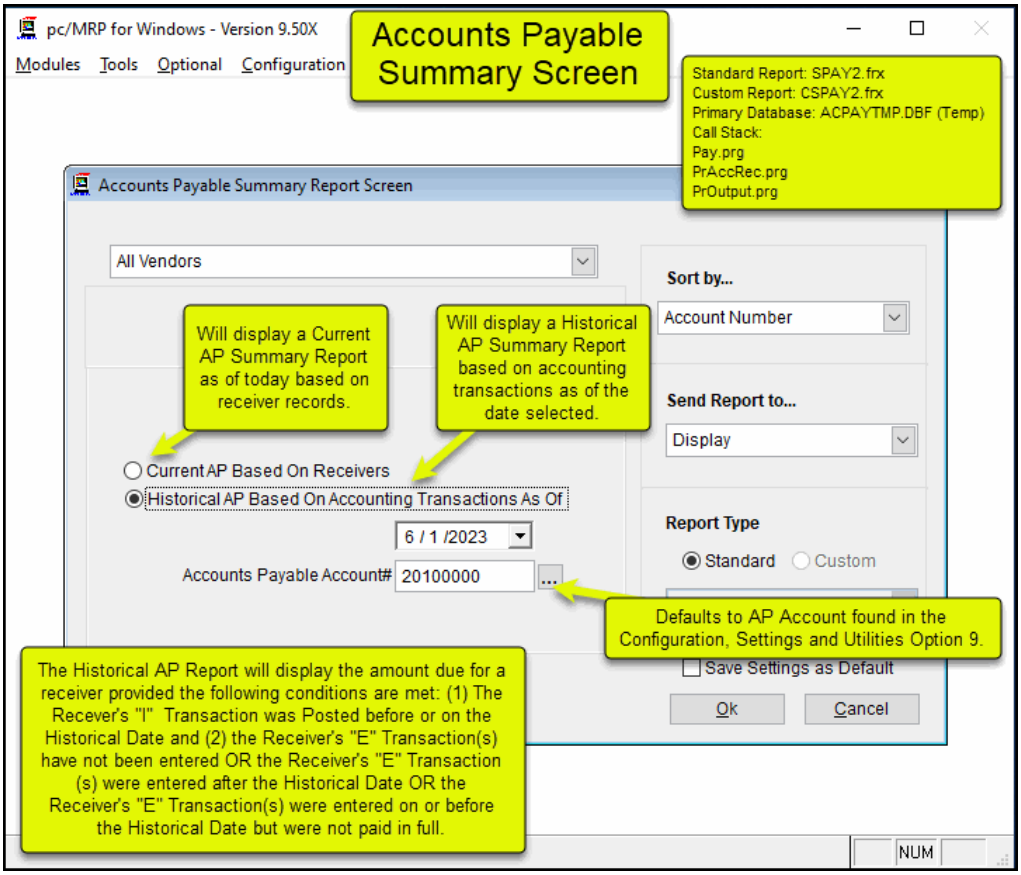



Additional accounts payable reports can be obtained by using the Receiving Report Module. The Receiving Report Module provides a variety of sorts and conditions for open and closed receivers. An open receiver is one that has not been paid and a closed receiver is one that has been paid (the **Complete** field contains a Y).

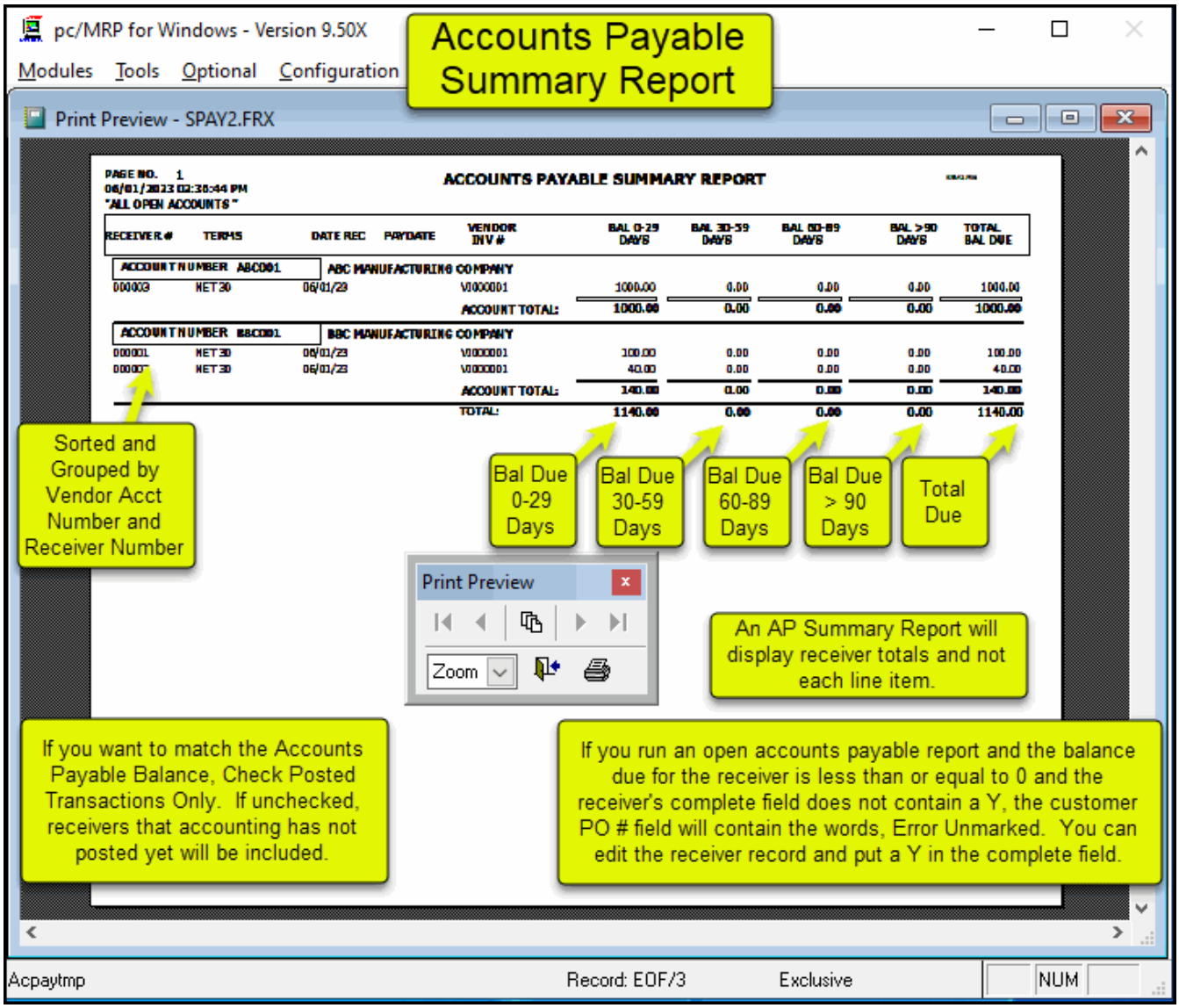
pc/MRP includes the option to print out posted receivers only. This means the accounts payable report will include only those open receivers that have been entered into the general ledger as an "I" type transaction. The advantage of selecting "Posted Receivers Only" is that it guarantees that the accounts payable $ amount in the financial statements will match the accounts payable $ amount in the accounts payable report, provided they are both printed on the same day with no new transactions entered between printouts.

### 14.8.4 Print Summary Report



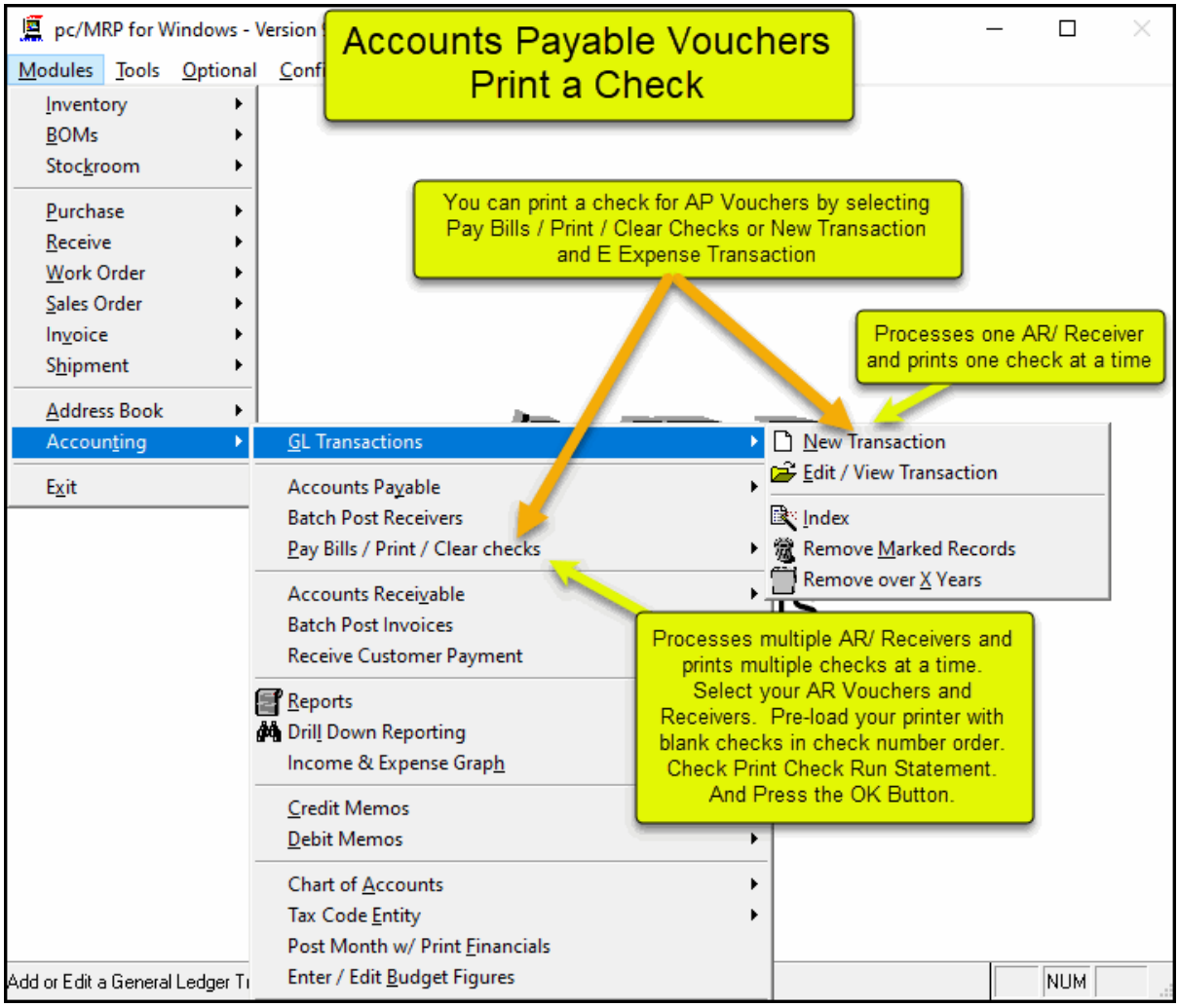
If you are generating a Historical AP Summary Report and pc/MRP finds one or more receivers marked as complete with an empty Date Paid field, the following message will be displayed. “Some of the closed receivers do not have a date paid. You can click on View Error for a list of these receivers; or click Continue to ignore the message and possibly have the report incorrect; or click Cancel to edit the receivers and later run the report again with corrected data.




If you run an open accounts payable summary report and the balance due for a receiver is less than or equal to 0 and the complete field does not contain a Y, the customer PO# field will contain the words, Error Unmarked. You can edit the receiver record and put a Y in the complete field.

### 14.8.5 Pay Bills / Print/Clear Checks

See Chapter 14.14 Pay Bills Option, for instructions on paying bills.




### 14.8.6 Batch Post Receivers

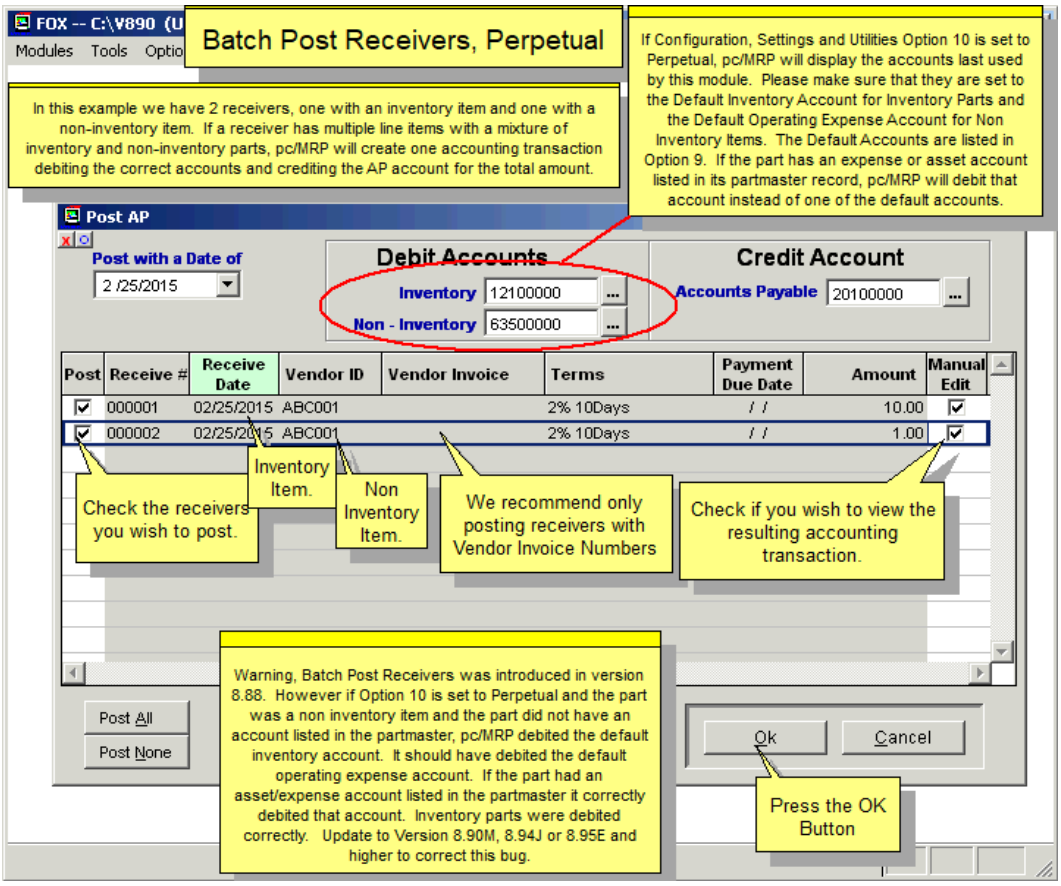
To batch post receivers, select Modules, Accounting, Batch Post Receivers.

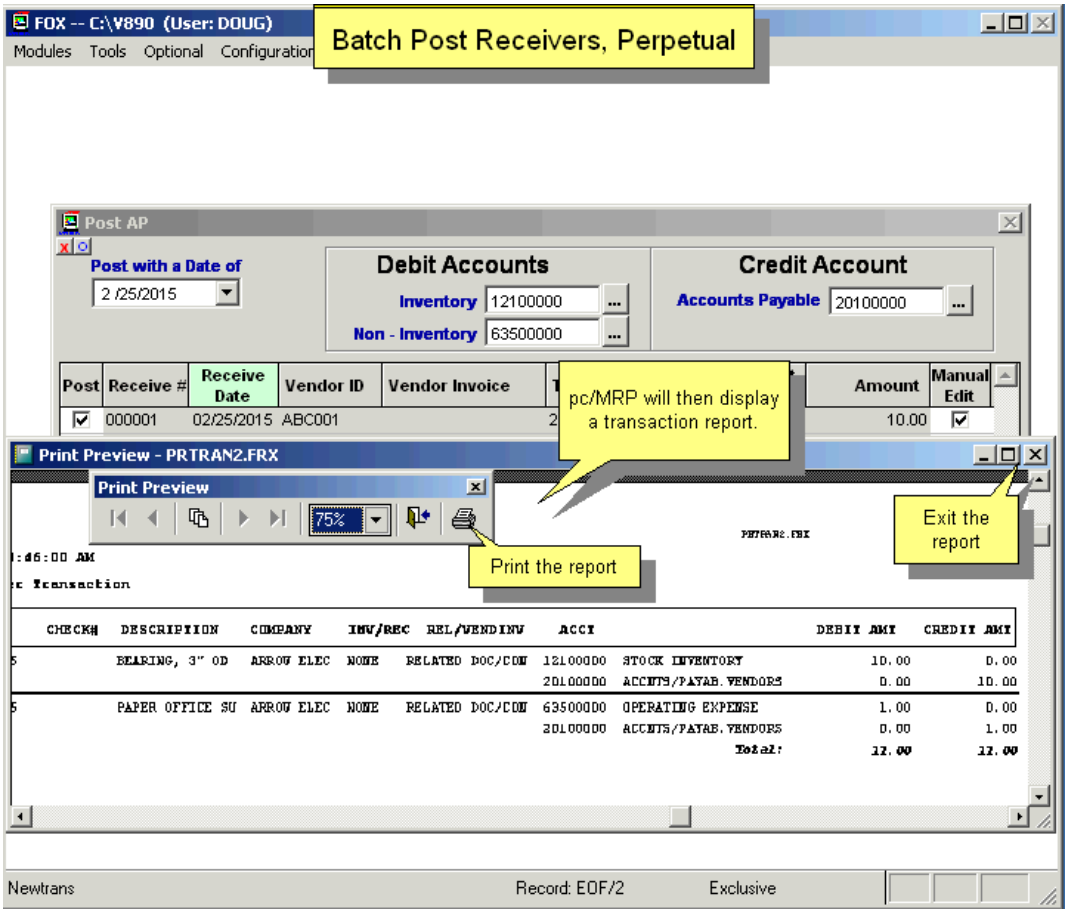
Your Accounting Method (Perpetual or Periodic, set in Configuration, Settings and Utilities, Option 10) determines which accounts should be debited. Please check your setting before proceeding.

pc/MRP will display the accounts last used by this module. Please make sure that they are set to the Default Inventory Account (Perpetual) or to the Default Purchases Account (Periodic) for Inventory Parts; and the Default Operating Expense Account for Non Inventory Items. The Default Accounts are listed in Configuration, Settings and Utilities, Option 9.

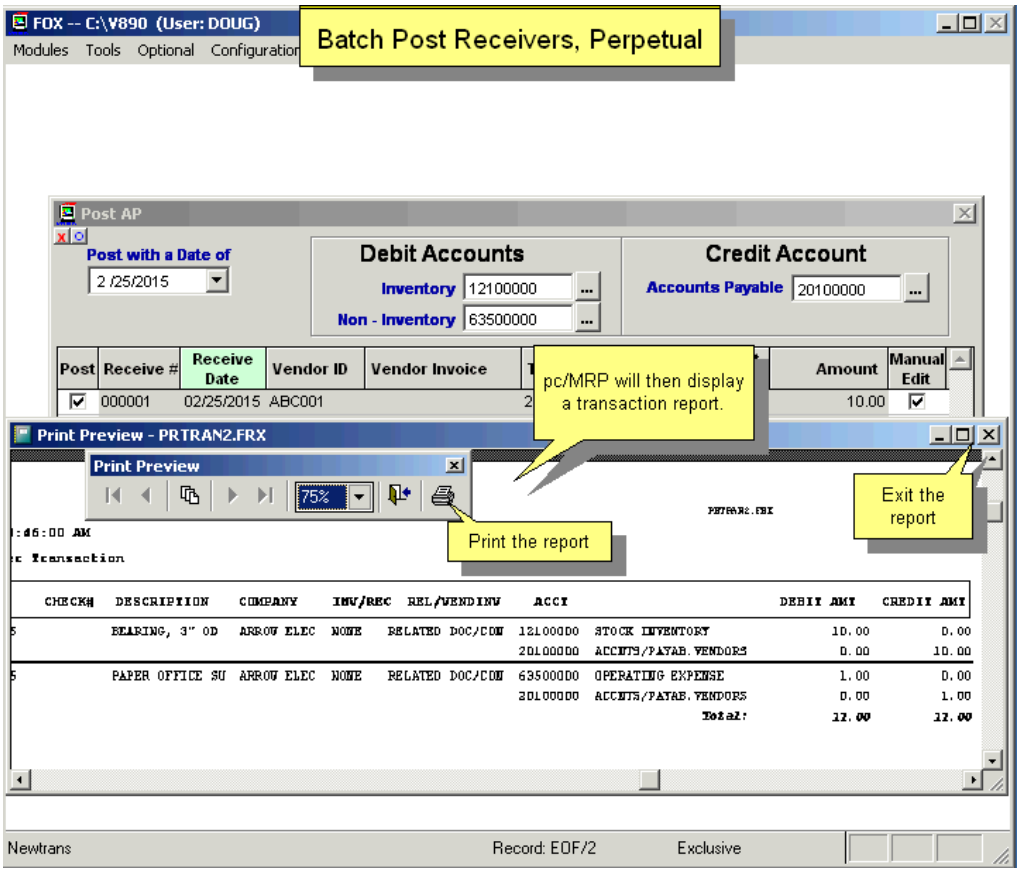
**Note:** If the part has an expense or asset account listed in its partmaster record, pc/MRP will debit that account instead of one of the default accounts.

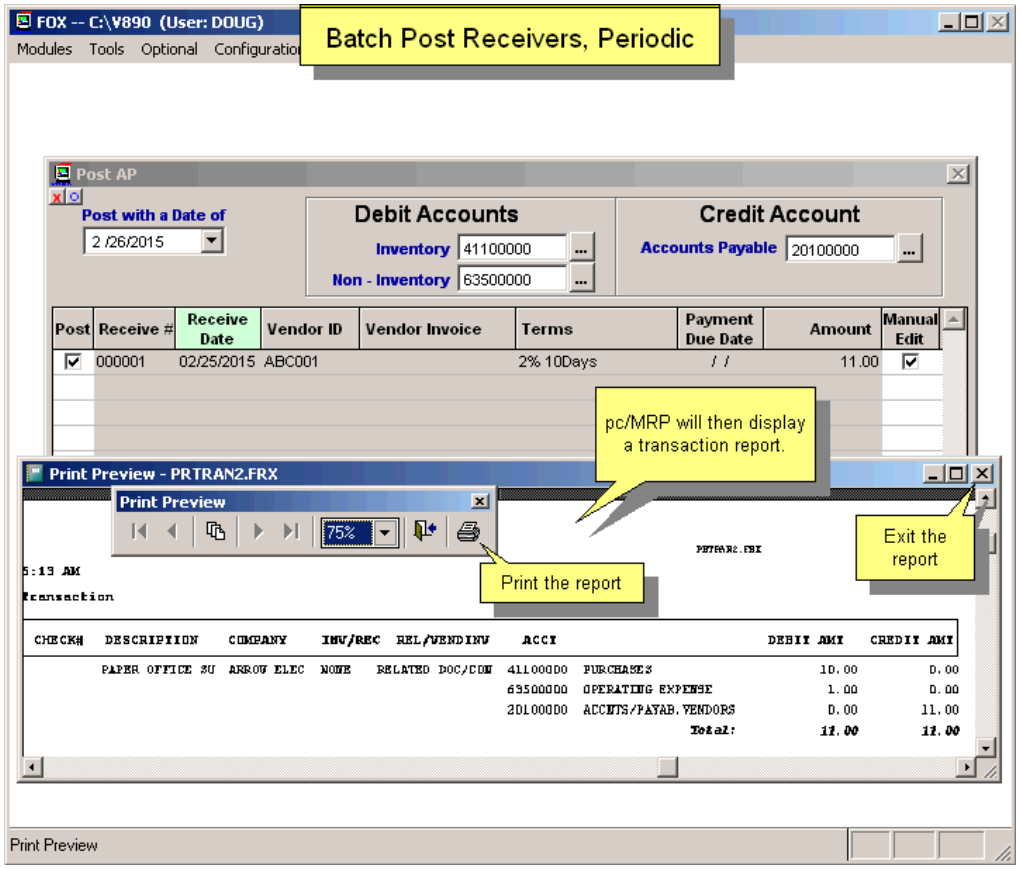
For Perpetual Accounting Method:



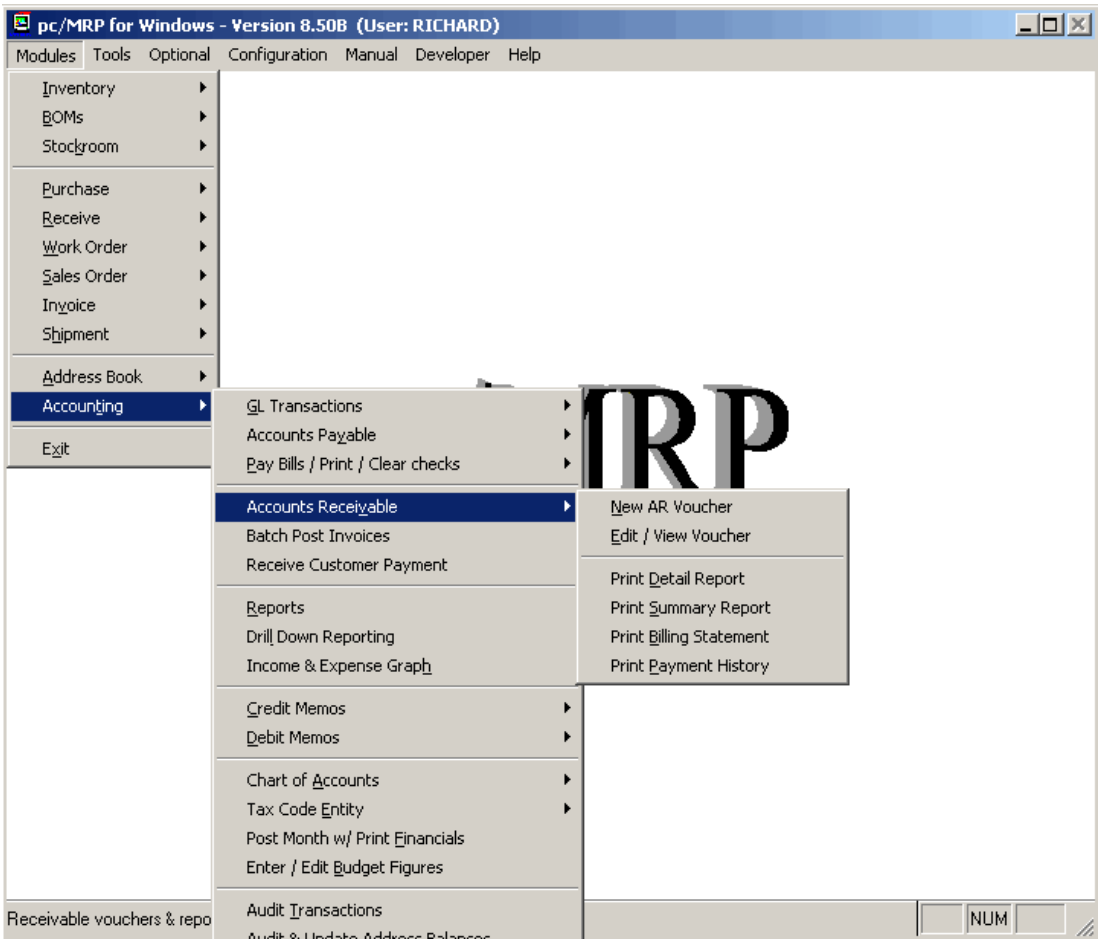



For Periodic Accounting Method:



# 14.9 Accounts Receivable




### 14.9.1 Enter an Accounts Receivable Voucher

Allows you to enter an AR Voucher without having to create a sales order and invoice.

However, we recommend entering a Sales Order, On Account and Carry instead of an AR Voucher. Entering a sales order 'On Account and Carry' is simpler and more automated than entering an AR Voucher. Entering a Sales Order, On Account and Carry creates a completed sales order and an invoice. If **Option 8**, Auto Accounting is set on for Invoices, it will also make a General Ledger entry, debiting AR and crediting Business Income.

Entering an AR voucher will automatically create an O type transaction debiting AR and crediting Business Income (regardless of how Option 8 is set). See Section: 14.4.1.2.

### 14.9.2 Edit an Accounts Receivable Voucher

This option allows users to scroll, edit, delete, undelete, or run queries against AR voucher records.

Since entering an accounts receivable voucher automatically enters a general ledger transaction, editing an accounts receivable voucher automatically takes you to the general ledger editing routine.

### 14.9.3 Print/Display Accounts Receivable Reports

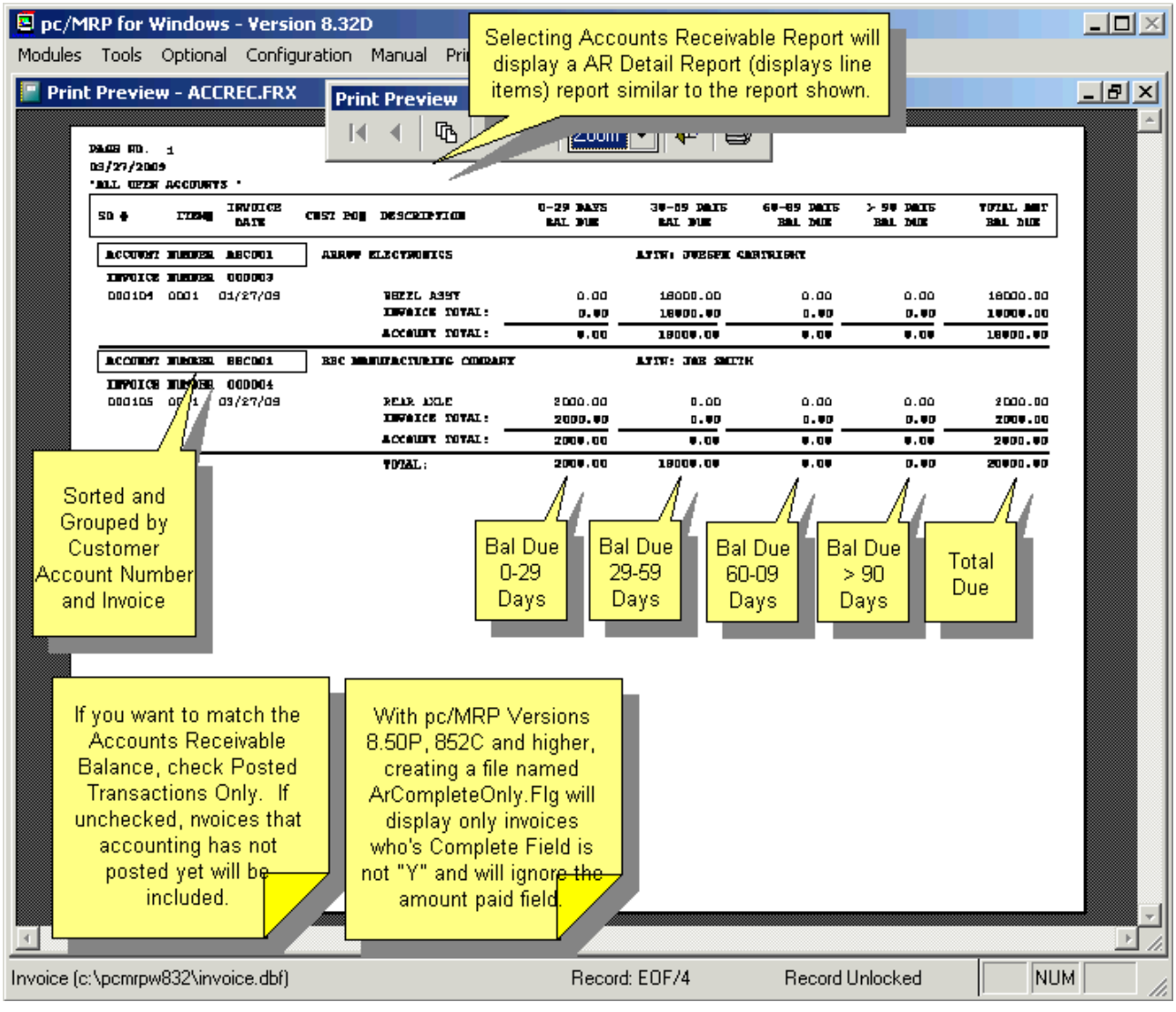
Selecting the accounts receivable report option will provide a consolidated printout of all accounts or a single account subtotaled on invoice and account numbers. The balance due amounts are totaled in the 0-29, 30-59, 60-90, and Over 90 days columns.

Additional accounts receivable reports can be obtained by using the Invoice Report Module. The Invoice Report Module provides a variety of reports for open and closed invoices. An open invoice is one that has not been paid and a closed invoice is one that has been paid (the complete field contains a Y).

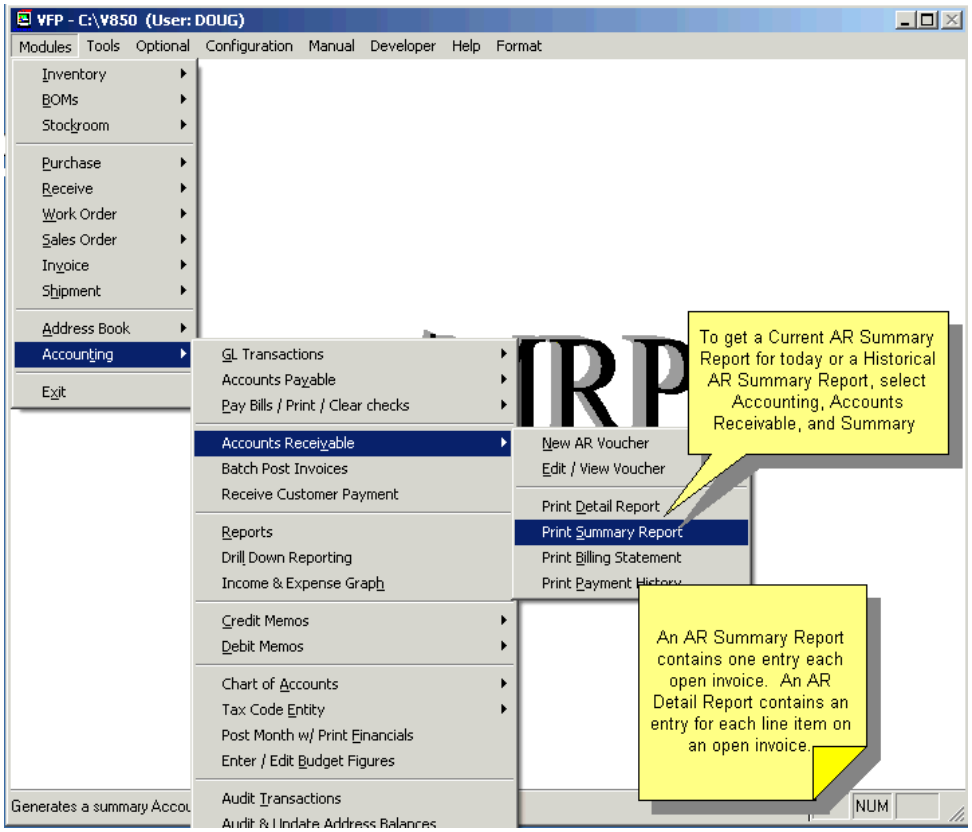
Since invoicing an item automatically creates an accounts receivable voucher, you may end up with some unwanted accounts receivable records. These records can be eliminated from showing up on the Accounts Receivable Report by using the Invoice Edit Module and entering a Y in the Complete field.

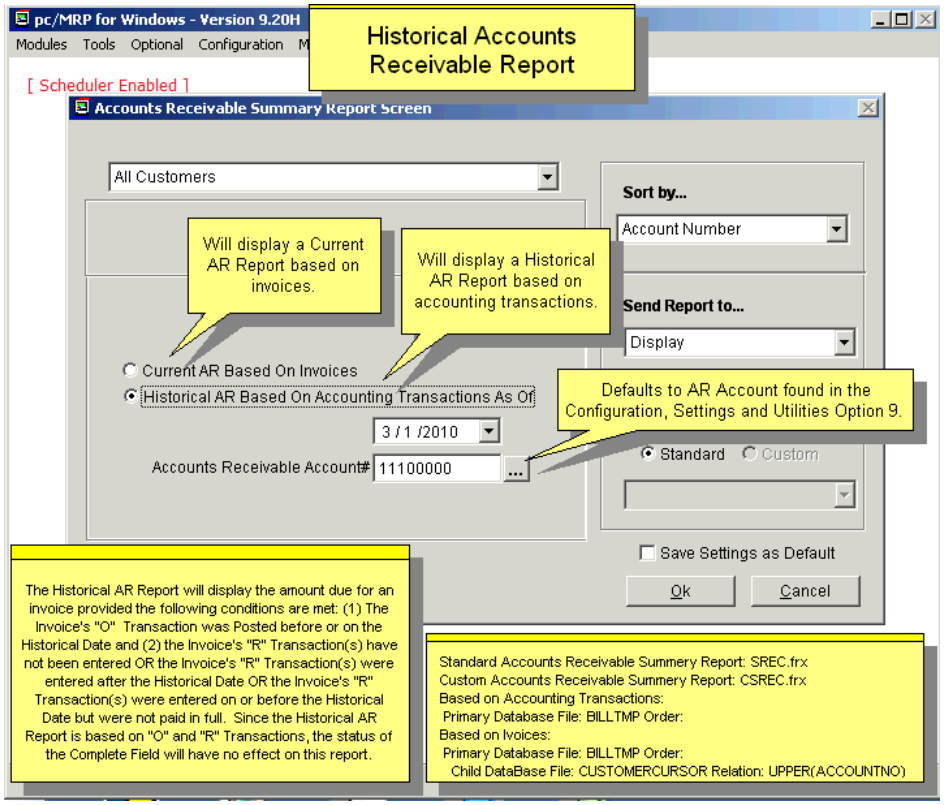
pc/MRP offers the option to print out posted invoices only. This means the accounts receivable report will include only those open invoices that have been entered into the general ledger as an "O" type transaction. The advantage of selecting "Posted Invoices Only" is that it guarantees that the accounts receivable $ amount in the financial statements will match the accounts receivable $ amount in the accounts receivable report, provided they are both printed on the same day with no new transactions entered between printouts.

#### 14.9.3.1 Accounts Receivable Detail Report

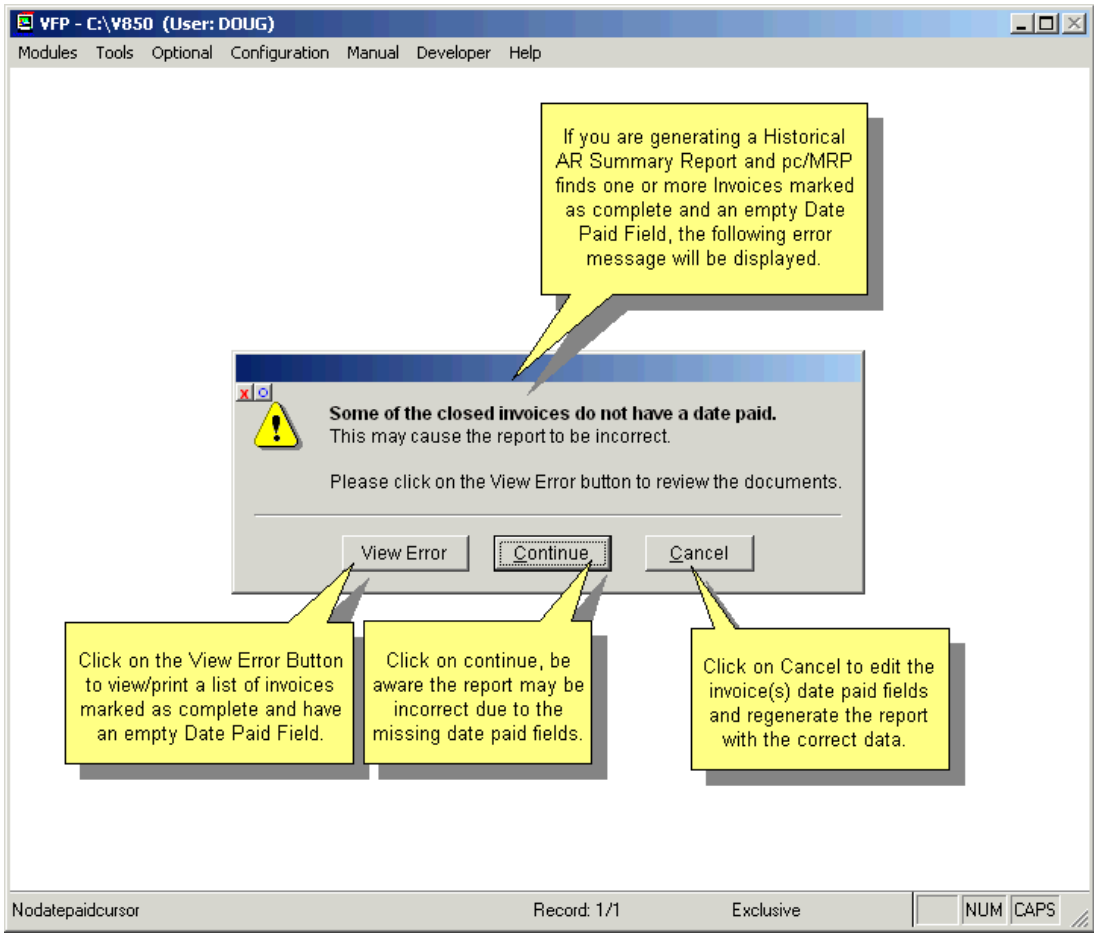


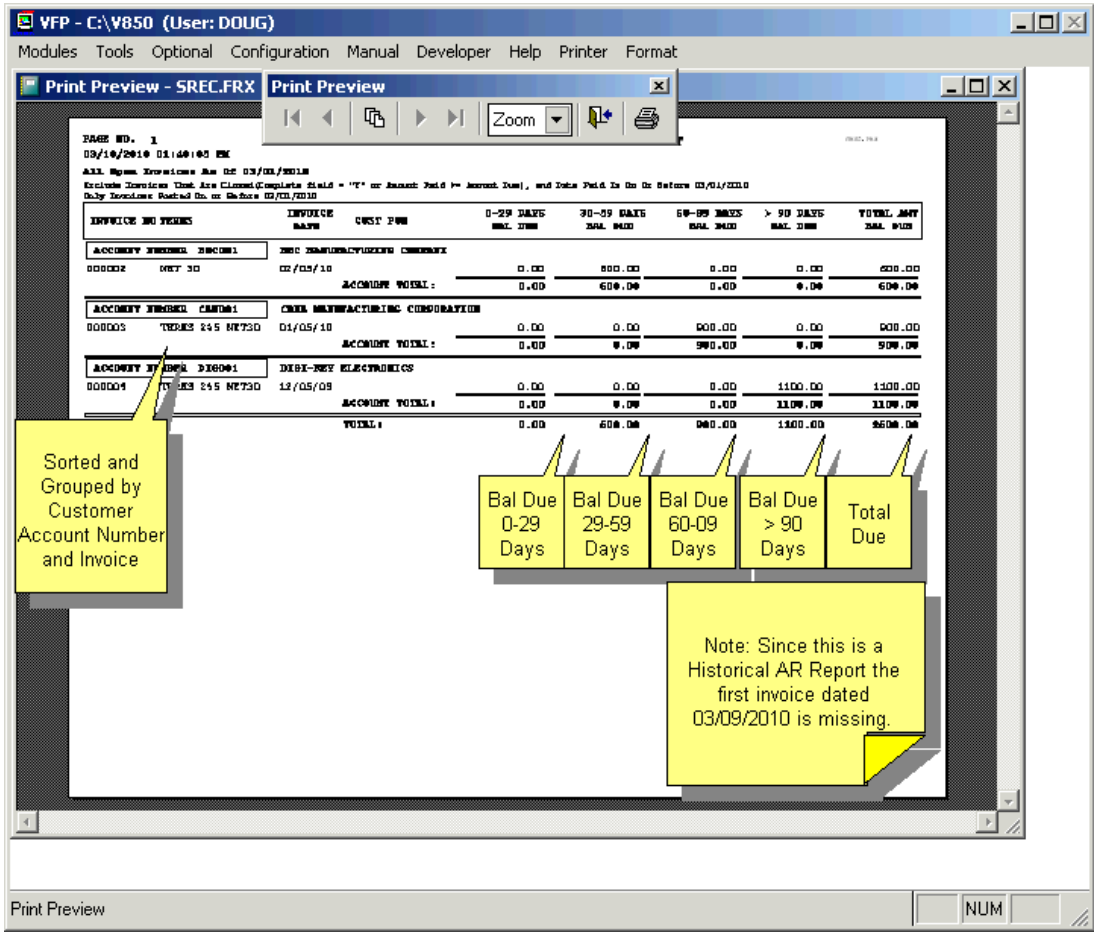
### 14.9.3.2 Accounts Receivable Summary Reports



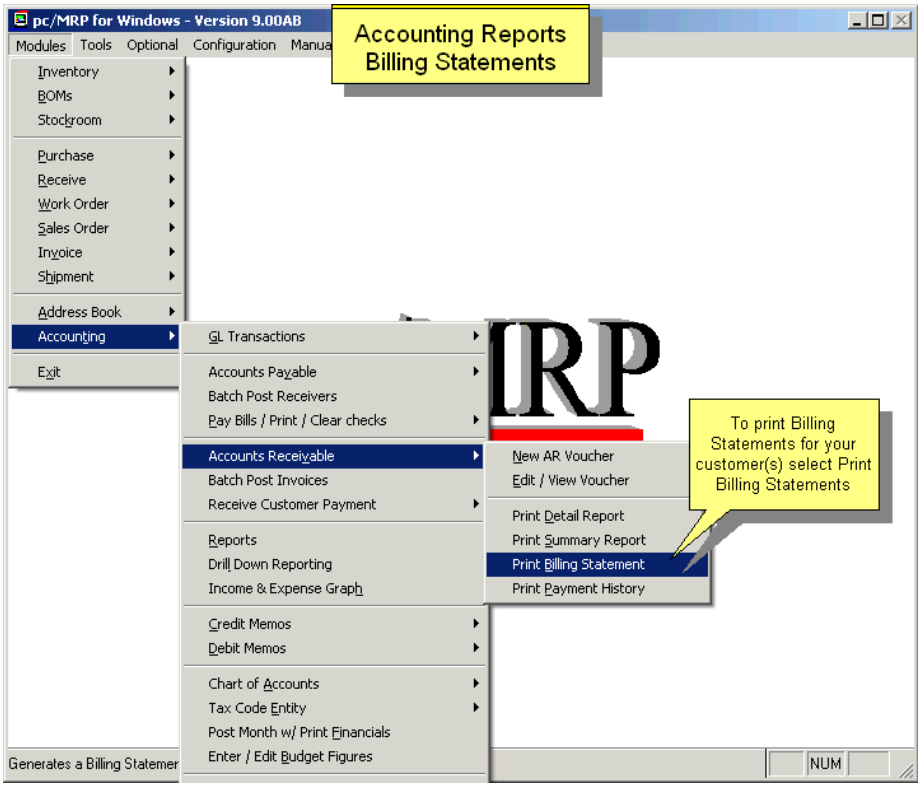

The AR Summary Report will prompt you to create a new independent invoice index on the remote possibility that the standard invoice index could be corrupt. **Note:** Since the Historical AR Report is based on “O” and “R” transactions, the status of the Complete field on the invoice will have no effect on this report.


VFP - C:\V850 (User: DOUG)
Modules Tools Optional Configuration Manual Developer Help
If you are generating a Historical AR Summary Report and pc/MRP finds one or more Invoices marked as complete and an empty Date Paid Field, the following error message will be displayed.
Some of the closed invoices do not have a date paid.
This may cause the report to be incorrect.
Please click on the View Error button to review the documents.
View Error
Continue
Cancel
Click on the View Error Button to view/print a list of invoices marked as complete and have an empty Date Paid Field.
Click on continue, be aware the report may be incorrect due to the missing date paid fields.
Click on Cancel to edit the invoice(s) date paid fields and regenerate the report with the correct data.
Nodatepaidcursor
Record: 1/1
Exclusive
NUM
CAPS

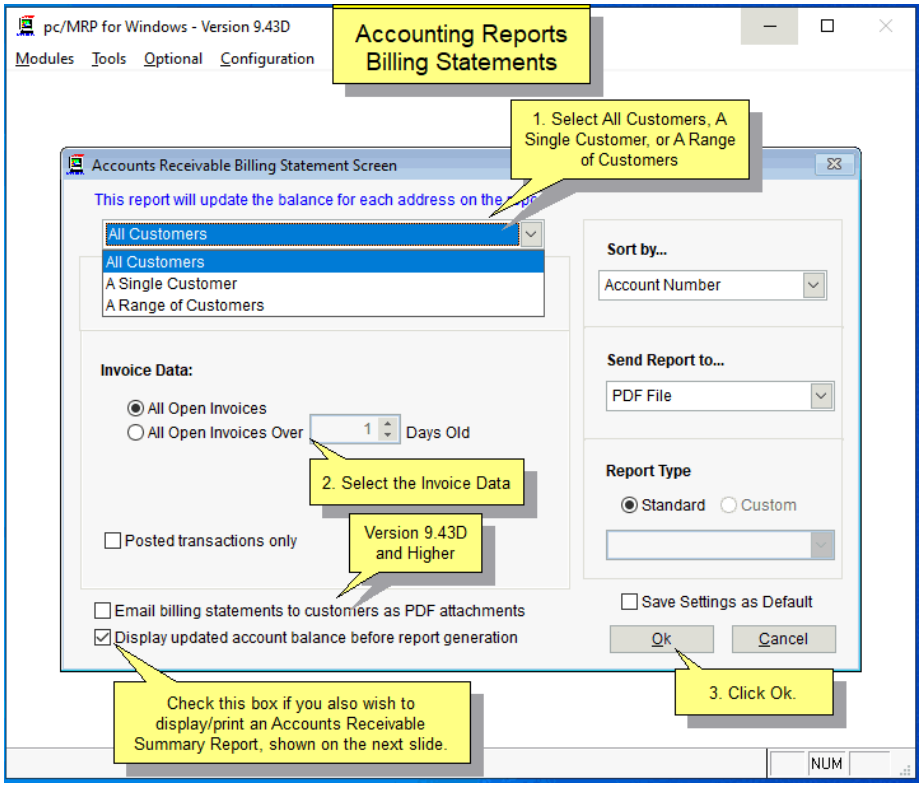

VFP - C:\V850 (User: DOUG)
Modules Tools Optional Configuration Manual Developer Help Printer Format
Print Preview - SREC.FRX
Print Preview
Zoom
Sorted and Grouped by Customer Account Number and Invoice
Bal Due 0-29 Days
Bal Due 29-59 Days
Bal Due 60-09 Days
Bal Due > 90 Days
Total Due
Note: Since this is a Historical AR Report the first invoice dated 03/09/2010 is missing.
Print Preview
NUM

### 14.9.4 Print/Display Billing Statements

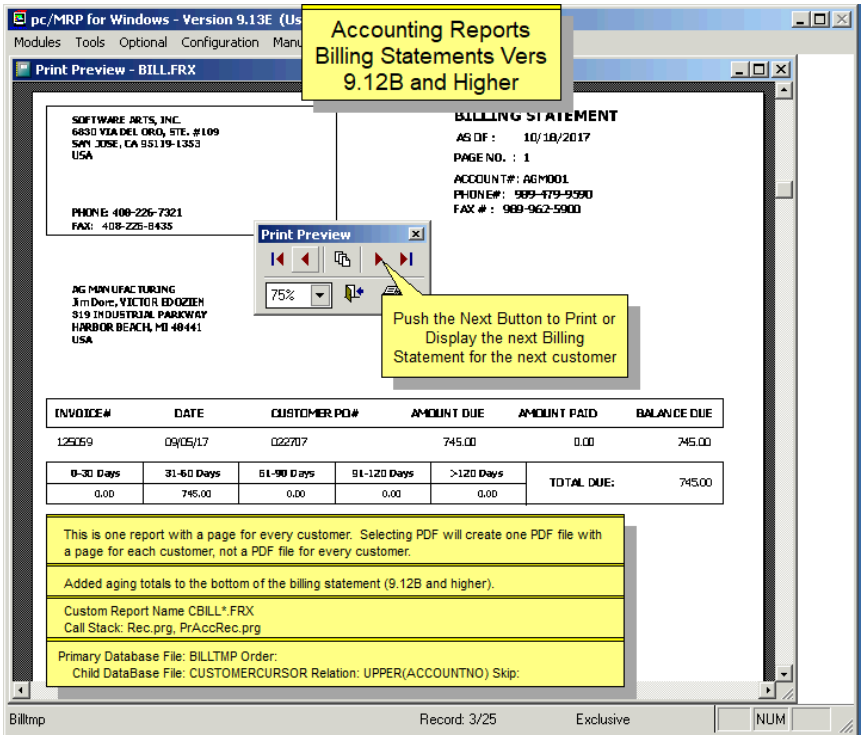
Allows you to print out a Billing Statement for every open account in accounts receivable. This report will update the balance due fields in the address book



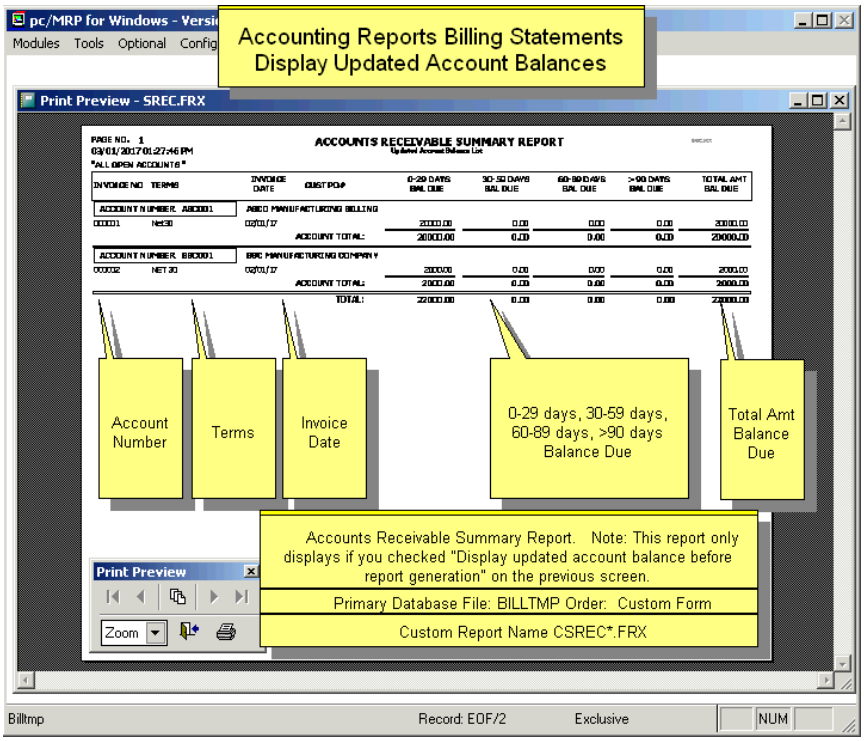

Version 9.43D and higher added the option to email the Billing Statements as PDF Attachments.



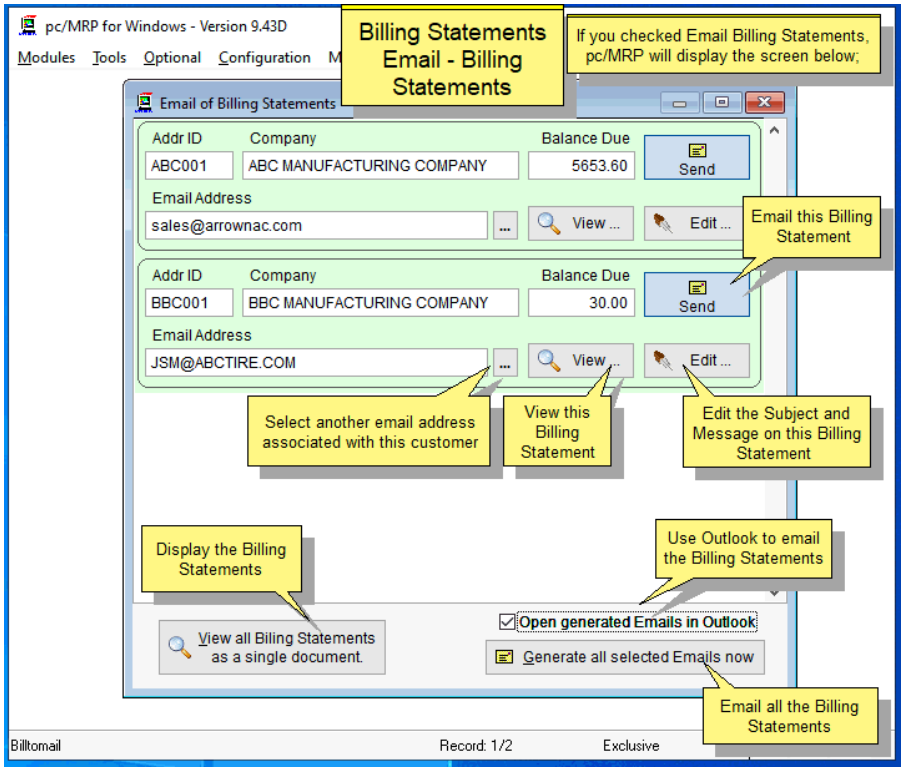
The billing form below is available on versions 9.12B and higher.

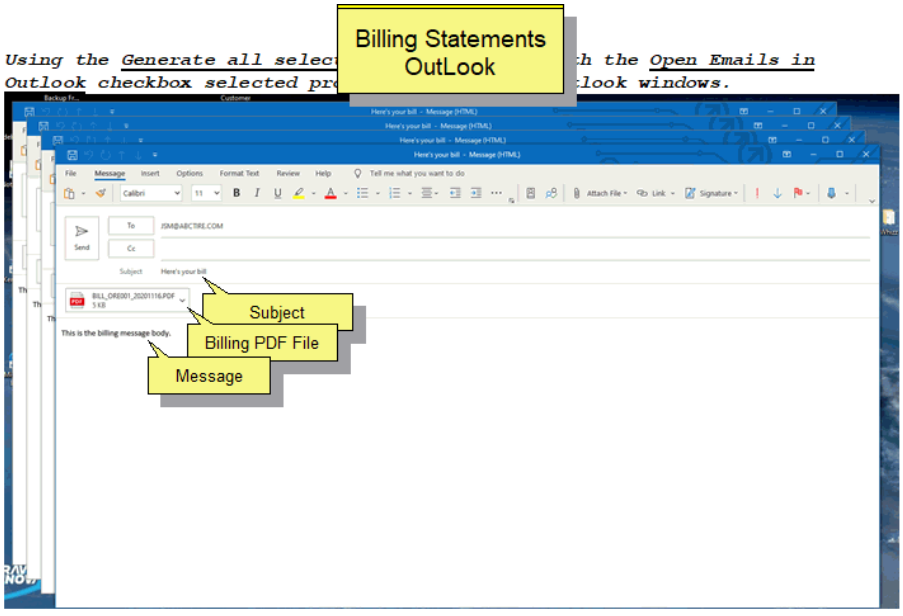



You can print a billing statement for all companies, a single company, or a range of companies. You can include all open invoices or all open invoices over a given number of days old. You have the option to also print out an Accounts Receivable Summary Report for all the companies in the range of the above report:



If you checked the Email Billing Statements Checkbox the screen shown below will appear. To set up pc/MRP to allow emailing billing statements, you must go to Configuration, Settings and Utilities, Option 33.




***Using the Generate all selected Emails button with the Open Emails in Outlook checkbox de-selected. All emails are deposited into Outlook's Outbox and are not displayed individually.***

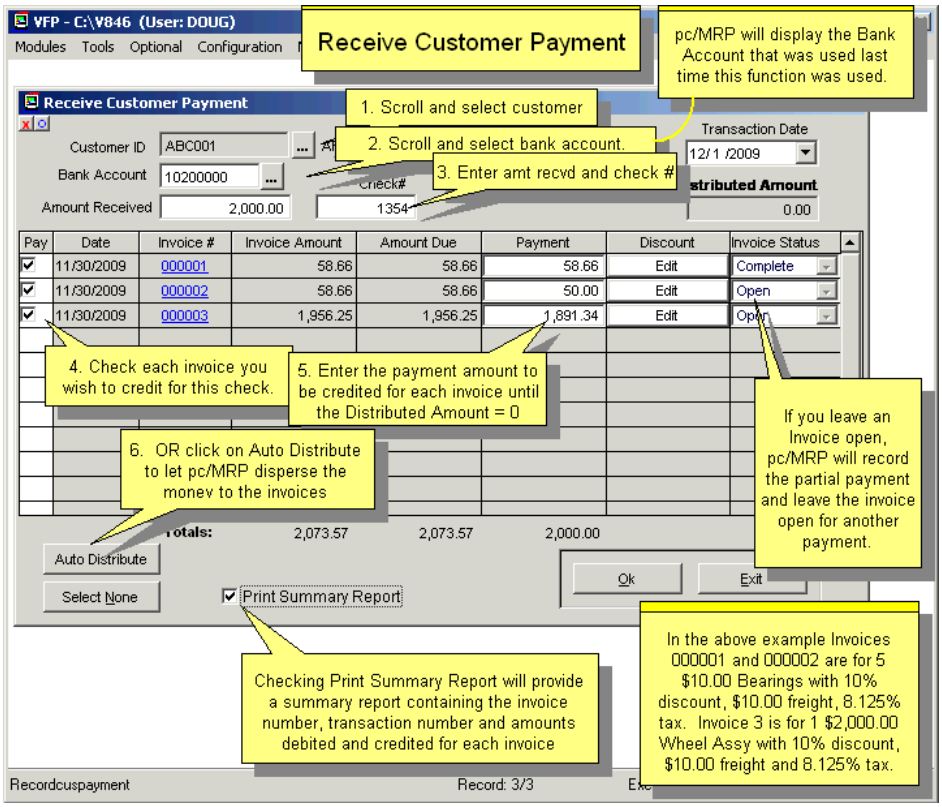
***Note:*** If an email is generated but it doesn't have an email address, then it will be displayed regardless of the checkbox status because Outlook WILL NOT permit an email to be put into the OUTBOX without one.

### 14.9.5 Print/Display Payment History Report

The Payment History Report provides a history of customer payments and the number of days variance from the payment due date for each invoice.

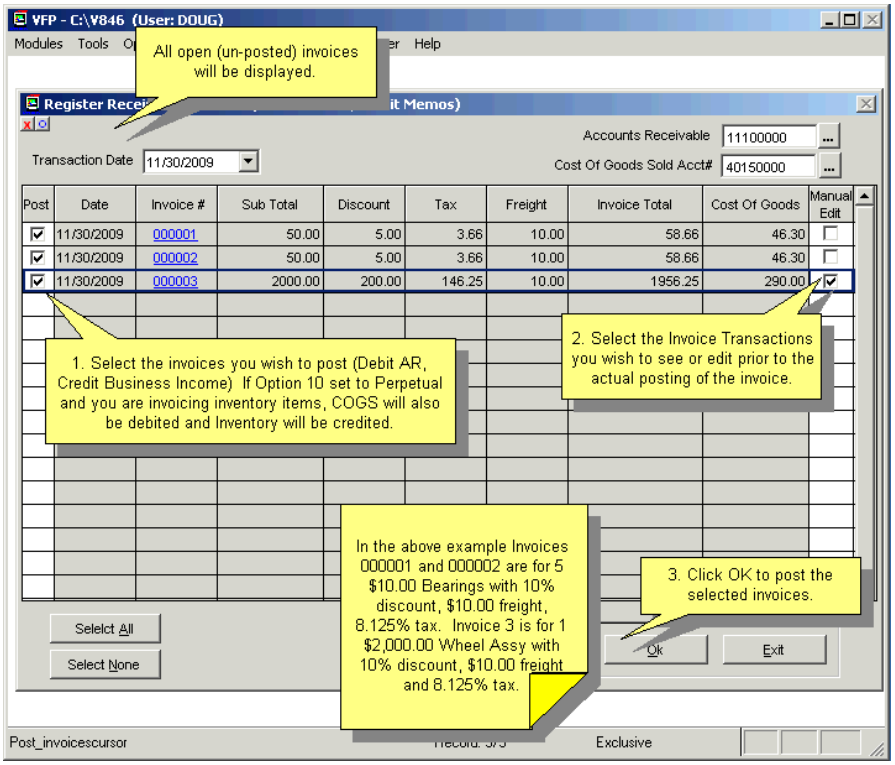
### 14.9.6 Receive Customer Payment

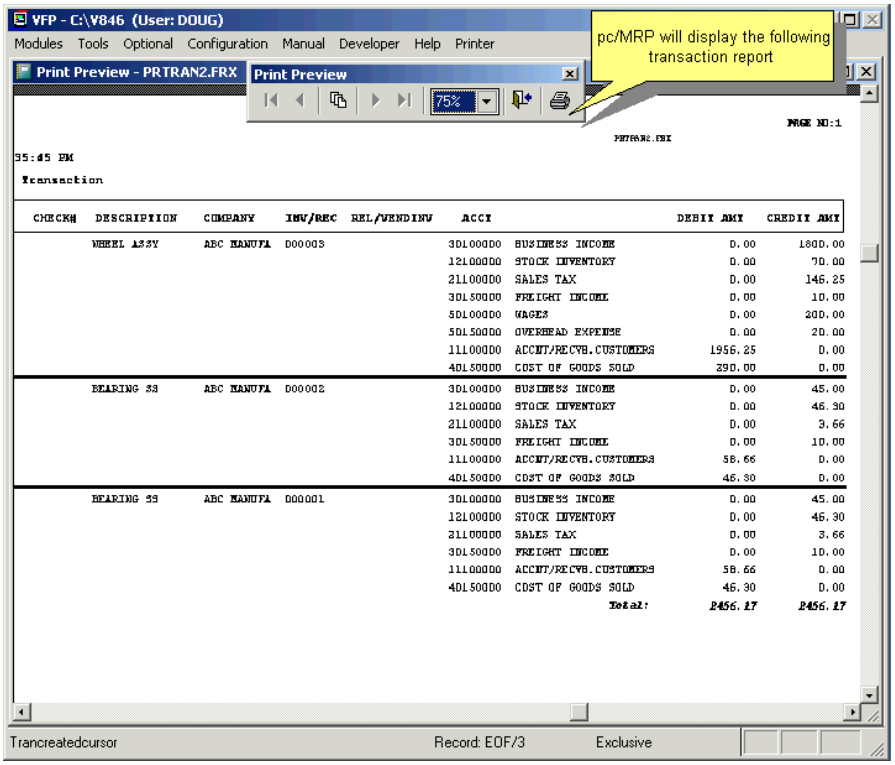
To record receiving a customer payment, select Modules, Accounting, and Receive Customer Payment.



### 14.9.7 Batch Post Invoices

To batch post invoices, select Modules, Accounting, Batch Post Invoices. All open, un-posted invoices will be listed. Select the invoices you wish to post. Click Manual Edit for those invoices you will want to see or edit prior to the actual posting of the invoices. Make your changes (if any) on the displayed transaction(s), and save them. pc/MRP will display a transaction report.

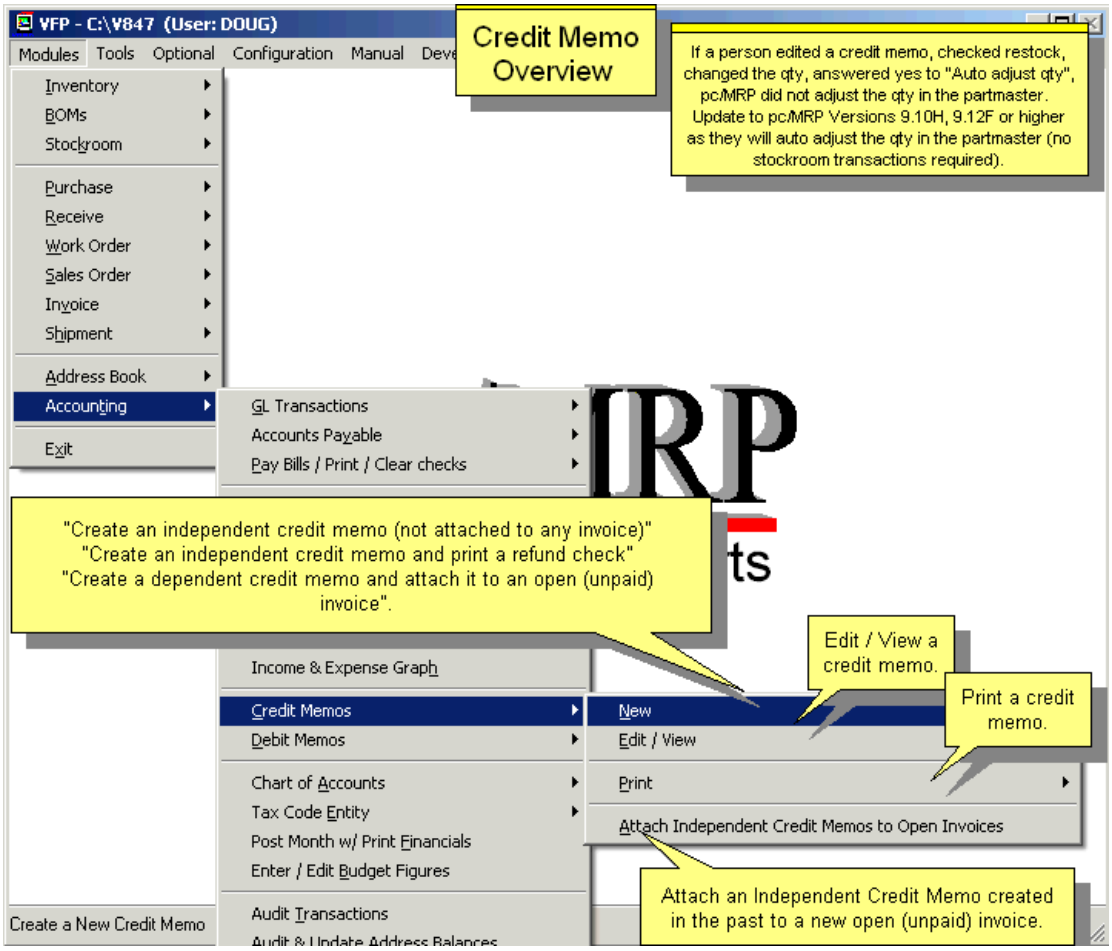


# 14.10 Credit Memos

### 14.10.1 Overview

Users with the necessary rights can enter credit memos from the Sales Order New Screen and from the Accounting Credit Memo Menu shown below.

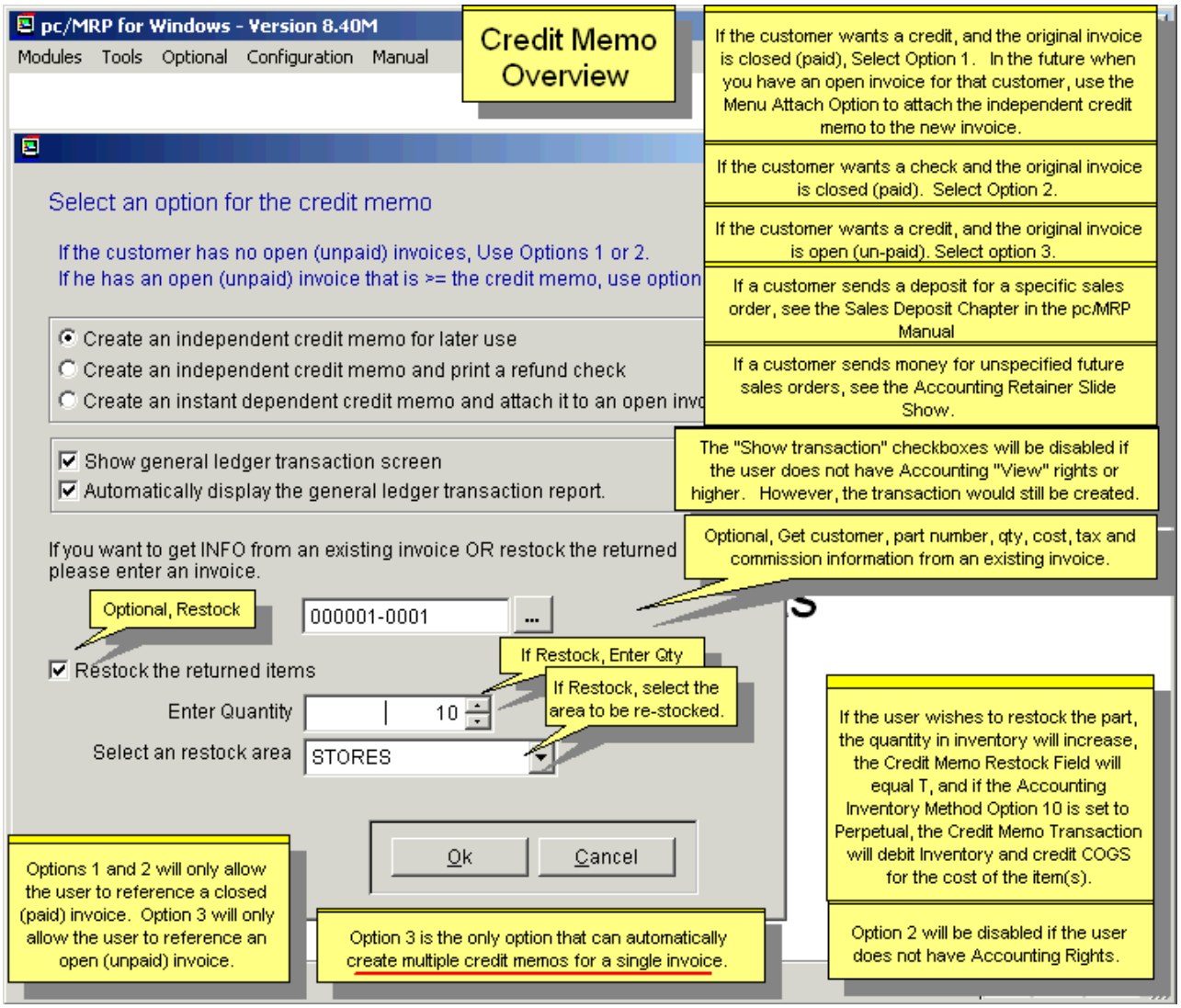



pc/MRP allows users to automatically create credit memos, including customers who currently have no open invoices. Credit memos can be directed to print checks and/or restock parts.

Select Credit Memos, New to:

Create an independent credit memo (not attached to any invoice);
Create an independent credit memo and print out a refund check;
Create a dependent credit memo and attach it to an open (unpaid) invoice.

Select Attach Independent Credit Memos to:
Attach an Independent Credit Memo created with option #1 above, to a new open (unpaid) invoice.
This will close the original independent credit memo and create a new dependent credit memo attached to the open (unpaid) invoice.




If the customer wants a credit, and the original invoice is closed (paid), select option #1, “Create an independent credit memo for use at a later date”. In the future when you have an open invoice for that customer, you can use the Menu Attach Option to attach the independent credit memo to the new invoice.

If the customer wants a check and the original invoice is closed (paid), select option #2, “Create an Independent credit memo and print a check”,

If the customer wants a credit, and the original invoice is open (un-paid), select option #3, “Create a dependent credit memo, and attach it to an open invoice”,

**Note:** If you are using pc/MRP’s Optional QuickBooks Export, and you wish to attach a Credit Memo to an invoice that transferred over to QuickBooks yet has not been paid in QuickBooks, you will need a flag file named “**ALLOWATTCHCLOSEDINVOICE.FLG**” in the pcmrpw directory to attach the Credit Memo.

pc/MRP’s Credit Memo Module will automatically:

- Create a credit memo
- Restock the part(s) (if Restock is checked)
- Debit Sales and Credit AR or Checking if printing a check
- Debit COGS and Credit Inventory (If Restock and **Option 10** set to Perpetual)
- Print a check (if selected)
- Display the transaction screen (If Show general ledger transaction screen checked)
- Display/Print the transaction report (if Display general ledger report checked)

Option #2 is disabled if the user does not have Accounting Rights.
Options #1 and #2 will only allow the user to reference a closed (paid) invoice.
Option #3 will only allow the user to reference an open (unpaid) invoice.

The “Show transaction” checkboxes will be disabled if the user does not have Accounting “View” rights or higher. However, the transaction is still created.

If the user wishes to restock the part, the quantity in inventory will increase, the Credit Memo Restock field will equal ‘T’, and if the Accounting Inventory Method, **Option 10**, is set to Perpetual, the Credit Memo transaction will debit Inventory and credit COGS for the cost of the item(s).

You can choose to restock none, some, or all of the items. If the user chooses to restock an item, the user must select the re-stock stores area.

If “Restock the returned items” is not checked, the credit memo will not be included in pc/MRP’s Inventory Movement Report.

If the user wishes to restock multiple part numbers from a single invoice, he must create multiple credit memos for that invoice.

**Note:** If the item is re-stocked is a serialized item:

1. You must delete the serial number record(s) in the detail file of the Serial/Lot Number module for the returned line item serial number(s) and
2. Adjust the master file record qty, of the Serial/Lot Number module, up for the re-stock quantity of that serial/lot number. For serial numbers, you would just adjust the qty from 0 to 1 for each serial number; for lot numbers, you would adjust the qty up by the qty returned.

Users can find all transactions for a specified invoice and it will include all relevant dependent (attached) credit memos. The Independent Credit Memo’s created by option #1 will eventually be washed out by “R” transactions and replaced by a new Dependent Credit Memo’s attached to specified invoices. This prevents the user from having to re-close a past accounting period as the original credit memo transaction can be left alone and does not have to be adjusted.

### 14.10.2 Entering a Credit Memo

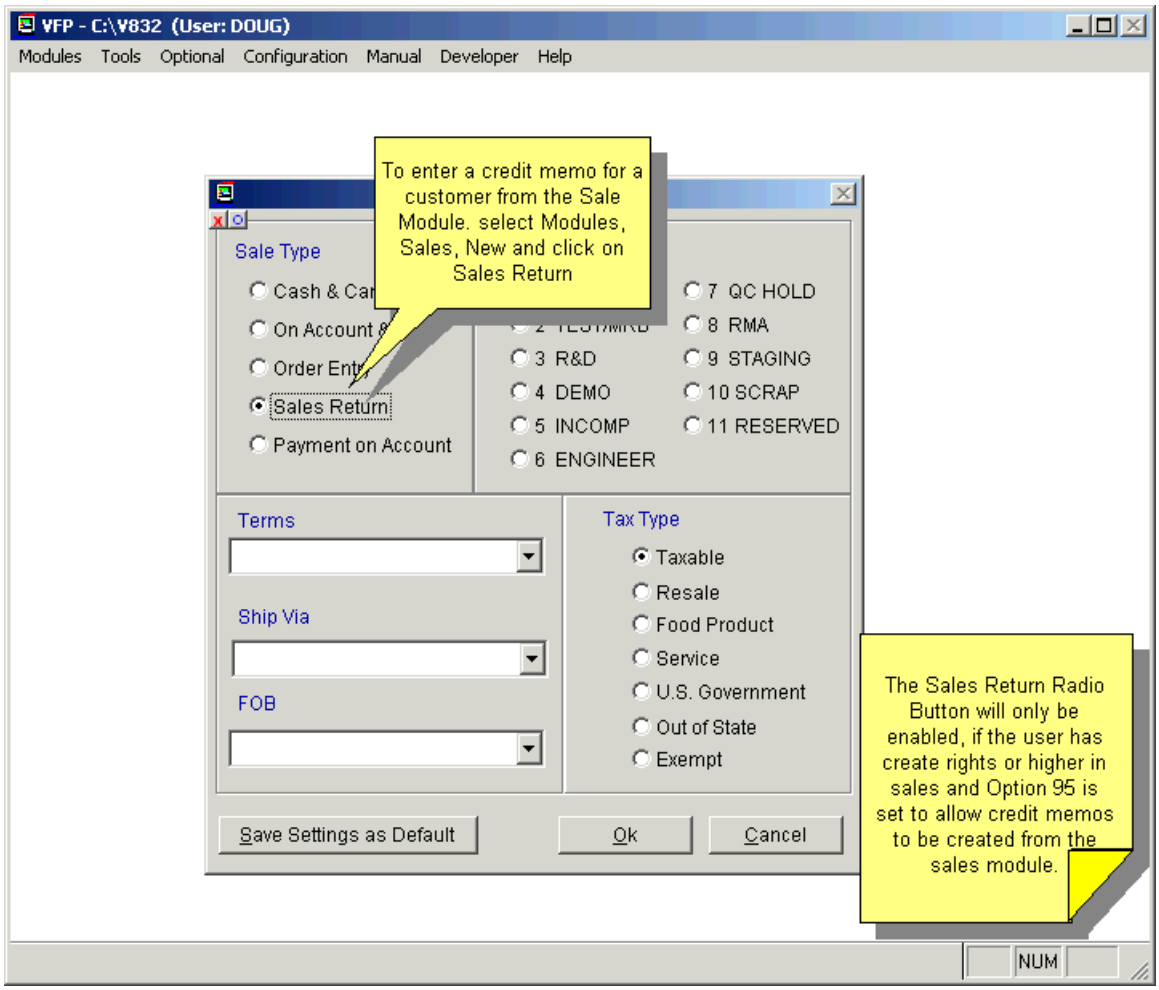
#### Entering a Credit Memo from the Credit Memo Menu

To enter credit memos from the Credit Memo Menu, select Modules, Accounting, Credit Memos and New.

The user must have "Create" accounting rights or higher to access the New and Attach Options on this menu.

**Entering a Credit Memo from the Sales Screen**

To enter credit memos from the Sales Screen, select Modules, Sales, New, and Sales Return as shown on the screen below.

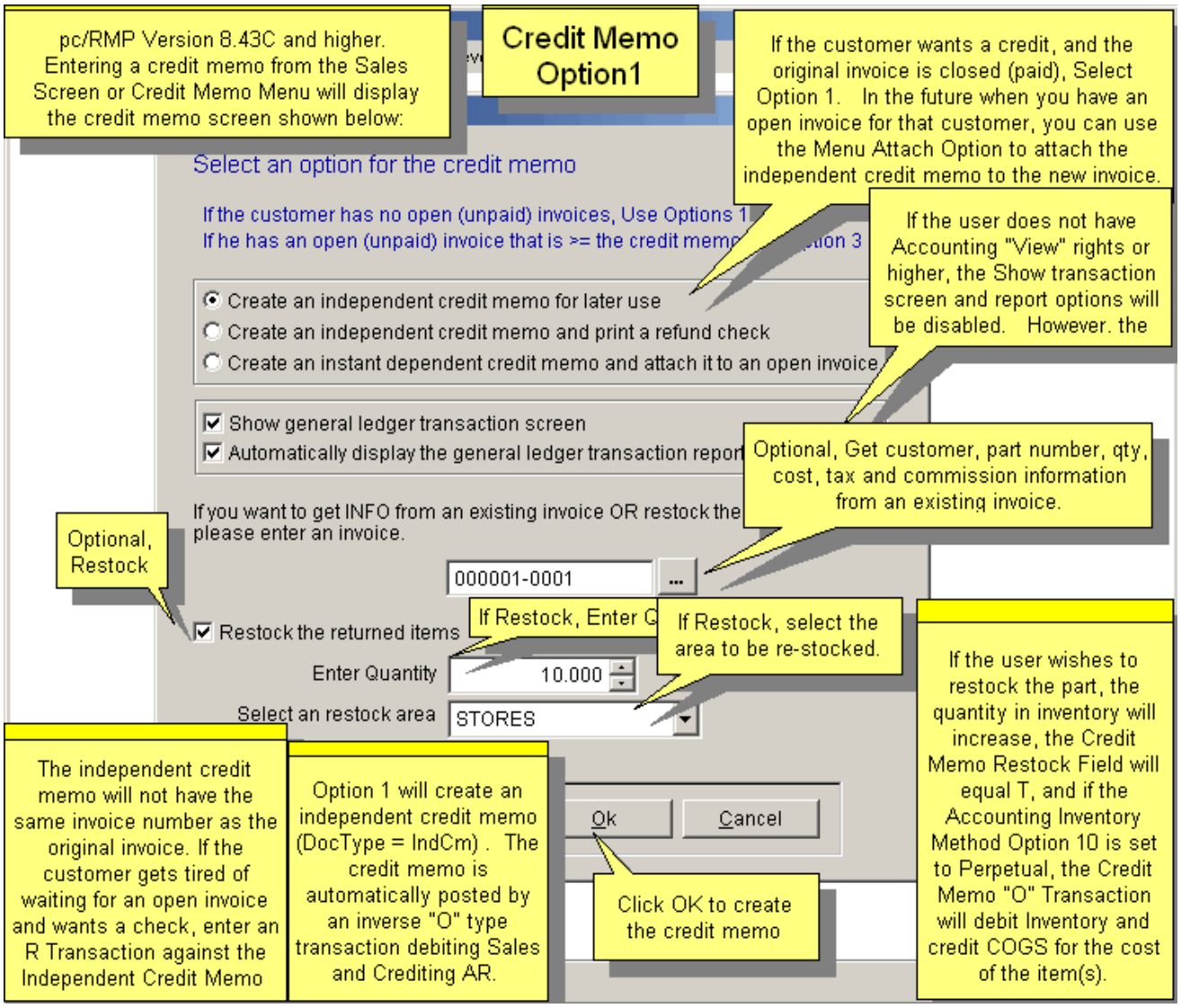



The user must have "Create" rights or higher in the sales module and Configuration, Settings and Utilities, **Option 95** is set to "Allow credit memo to be created from the sales module".

Option 95 gives users control over whether or not people in the sales order module can enter a credit memo. If a user has rights to use the sales order module but no rights to the accounting module and Option 95 is set to allow, the user will be allowed to enter a credit memo, but not print a check. Option 95 will initially default to "Not Allow".

### 14.10.3 Option #1: Create an Independent Credit Memo for Later Use

Entering a credit memo from the Sales Screen or Credit Memo Menu will display the credit memo screen shown below:



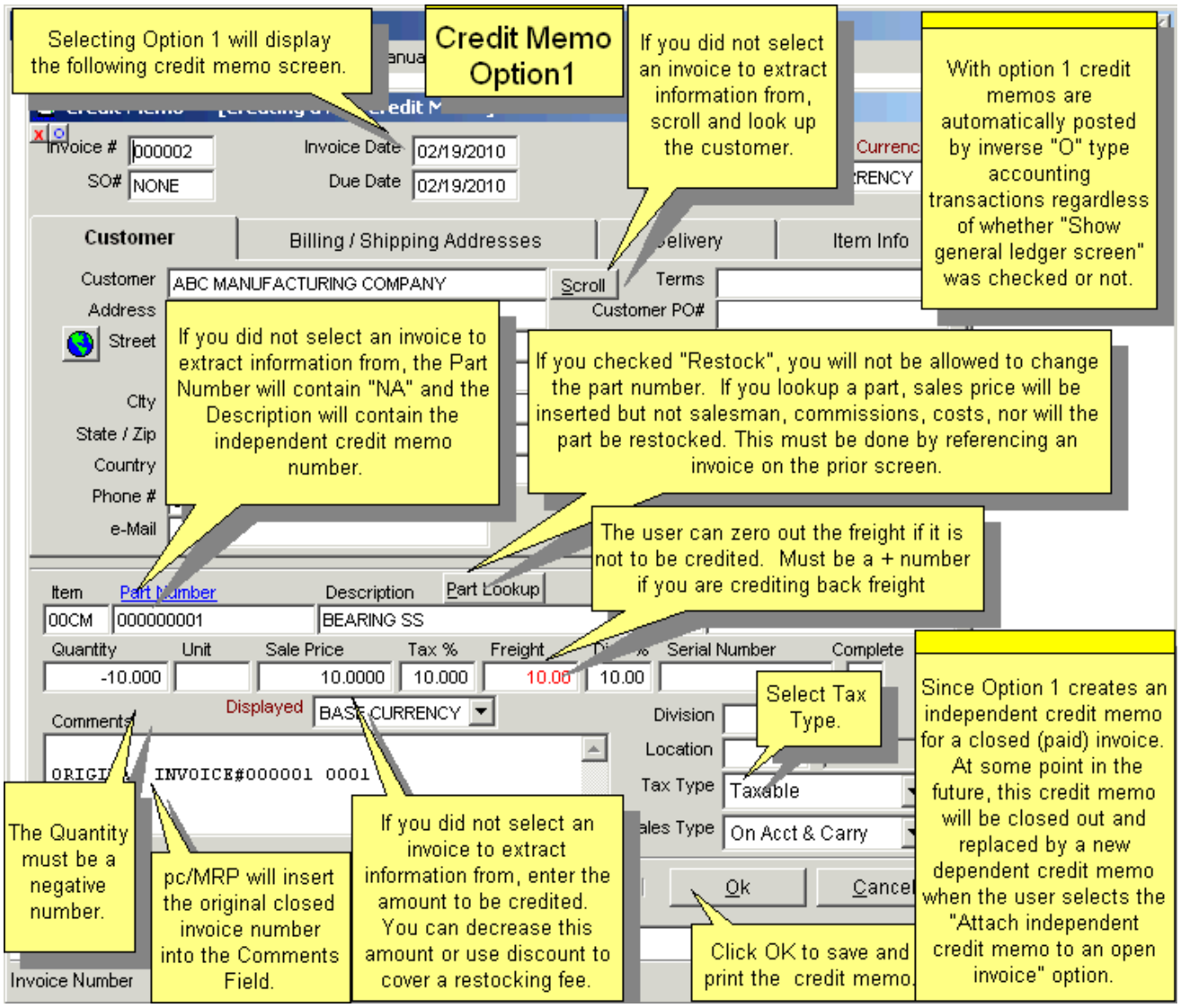

If the customer wants a credit, and the original invoice is closed (paid), select option #1, “Create an independent credit memo for use at a later date”. In the future when you have an open invoice for that customer, you can use the Menu Attach Option to attach the independent credit memo to the new invoice.

Option #1 will only allow the user to reference a closed (paid) invoice.

Option #1 will create an independent credit memo (DocType = IndCm) . The credit memo is automatically posted with an inverse “O” type transaction debiting Sales and Crediting AR.
If the user wishes to restock the part, the quantity in inventory will increase, the Credit Memo Restock Field will equal T, and if the Accounting Inventory Method **Option 10** is set to Perpetual, the Credit Memo “O” Transaction will debit Inventory and credit COGS for the cost of the item(s).

**Option #1, Credit memo screen**

If you selected option #1, “Create an independent credit memo for later use”, you would get the following credit memo screen:




If an invoice line item was selected, the part number and description will be displayed on the credit memo. If no invoice was selected, the Description will contain “INDEP CM# <CreditMemoNo> 00CM”

If the credit memo data came from an invoice and the freight was greater than $0.00, the freight amount will be displayed in red. The user can credit back the freight or zero it out.

If you want to charge a re-stocking fee, you can enter it as a Discount.

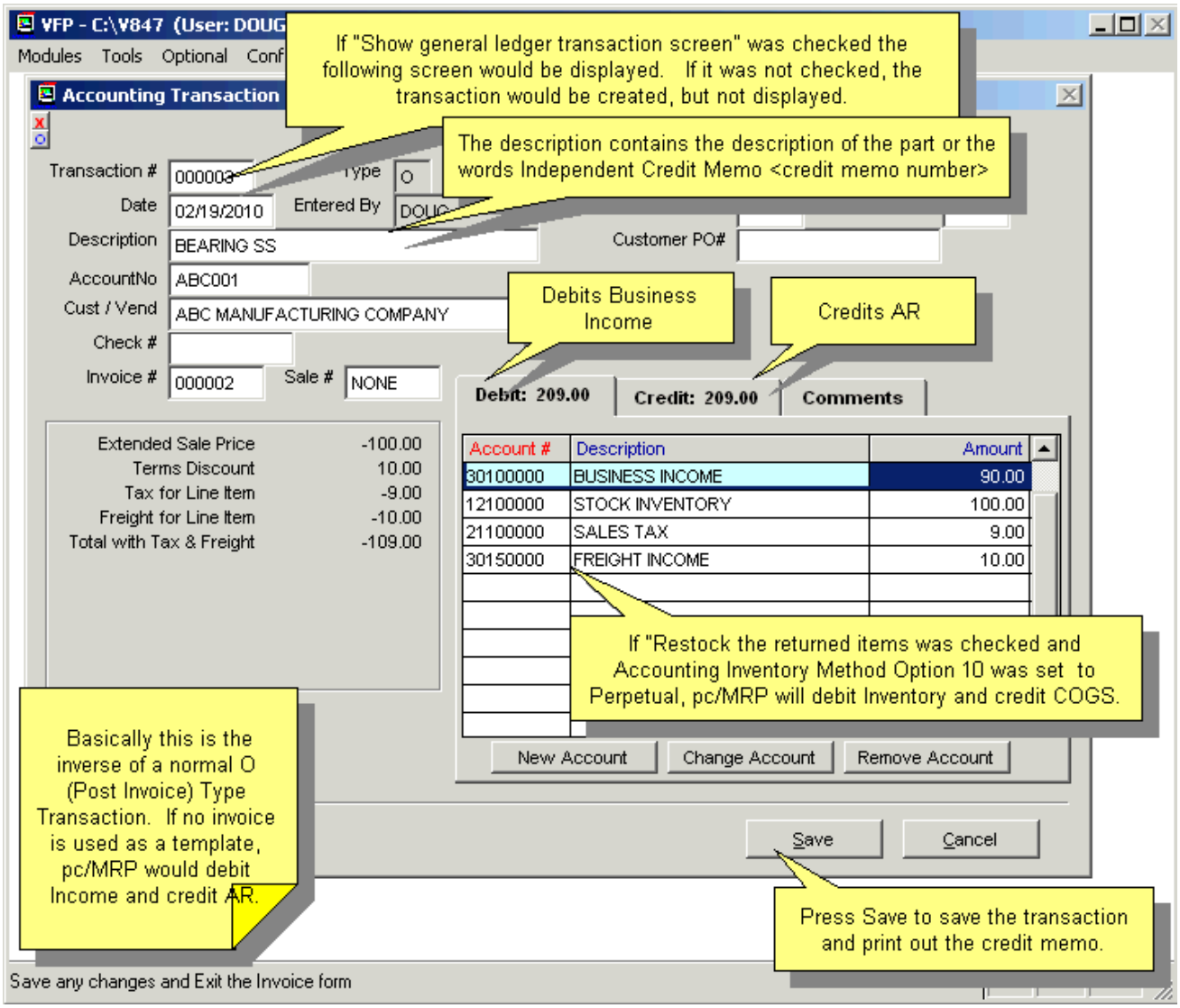
With credit memos pc/MRP will check for the following conditions, Quantity < 0, Sale Price > 0, Freight, Tax %, Discount >= 0, the address is not empty and the Part Number contains an “NA” or a valid part number.

With option #1 credit memos are automatically be posted by inverse “O” type accounting transactions regardless of whether “Show general ledger screen” was checked or not.

Since option #1 creates an independent credit memo for a closed (paid) invoice, at some point in the future, this credit memo will be closed out and replaced by a new dependent credit memo when the user selects the “Attach independent credit memo to an open invoice” option.

**Option #1, Credit memo transaction screen**

If "Show general ledger transaction screen" was checked the following screen would be displayed. If it was not checked, the transaction would be created, but not displayed.



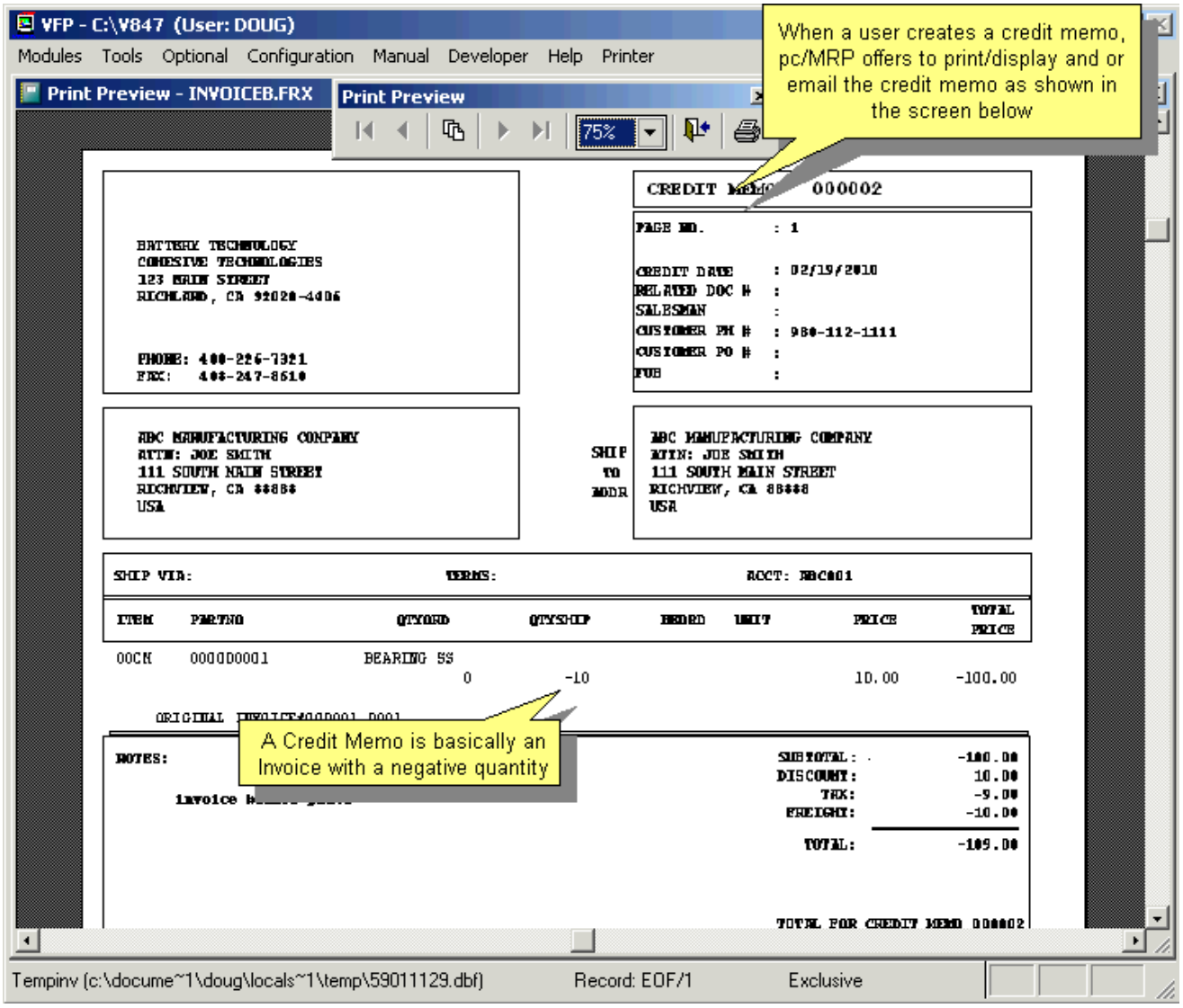

Basically this is the inverse of a normal O (Post Accounts Receivable Invoice) Type Transaction. If no invoice is used as a template, pc/MRP would debit Income and credit AR for the amount of the credit memo.

If “Restock the returned items” was checked and Accounting Inventory Method **Option 10** was set to Perpetual, pc/MRP will debit Inventory and credit COGS.

The description contains the description of the part or the words Independent Credit Memo <credit memo number>

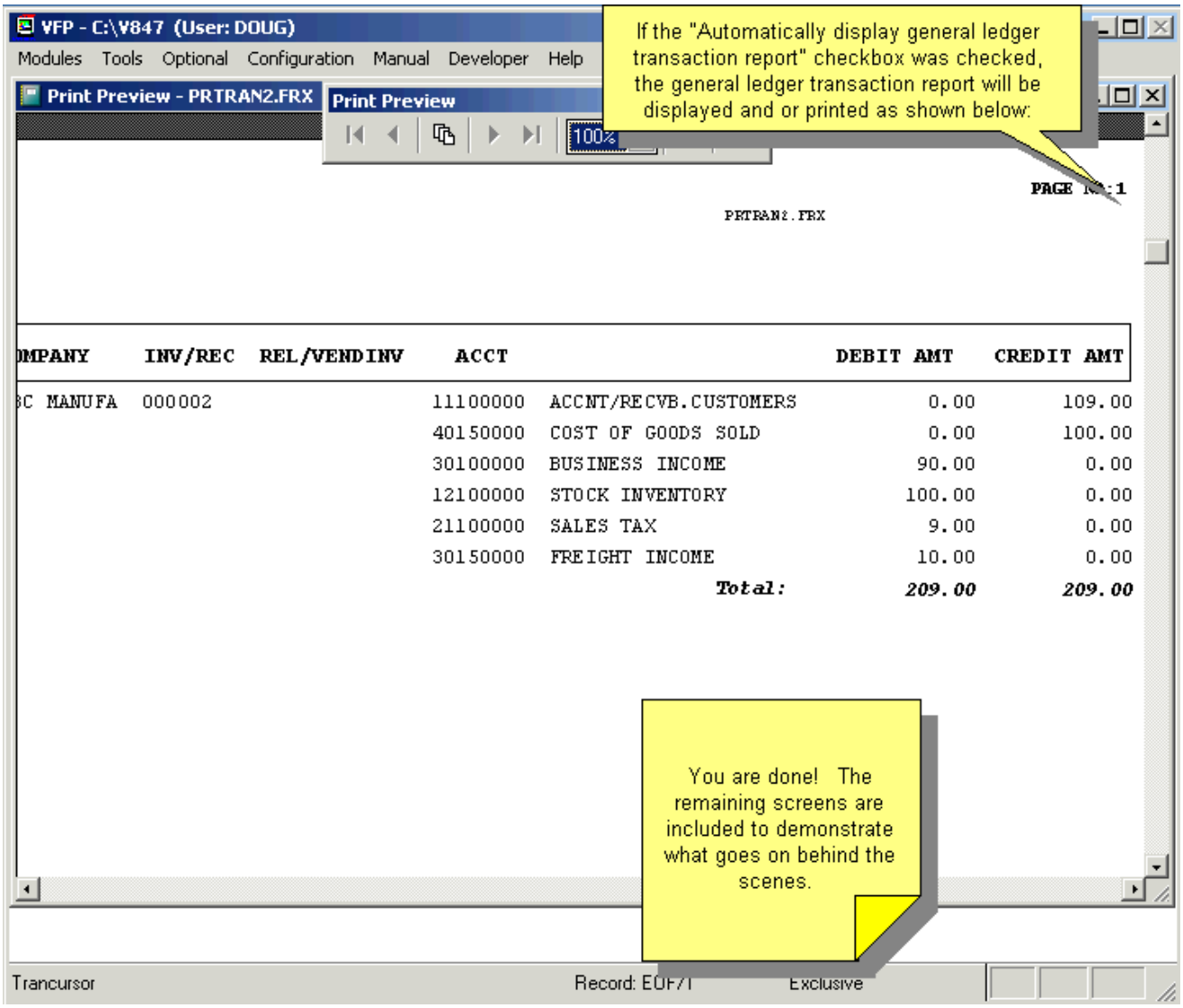
**Option #1, Print/Display Independent Credit Memo**

When a user creates a credit memo, pc/MRP offers to print/display and or email the credit memo as shown in the screen below:



**Option #1, Independent Credit Memo Transaction Report**

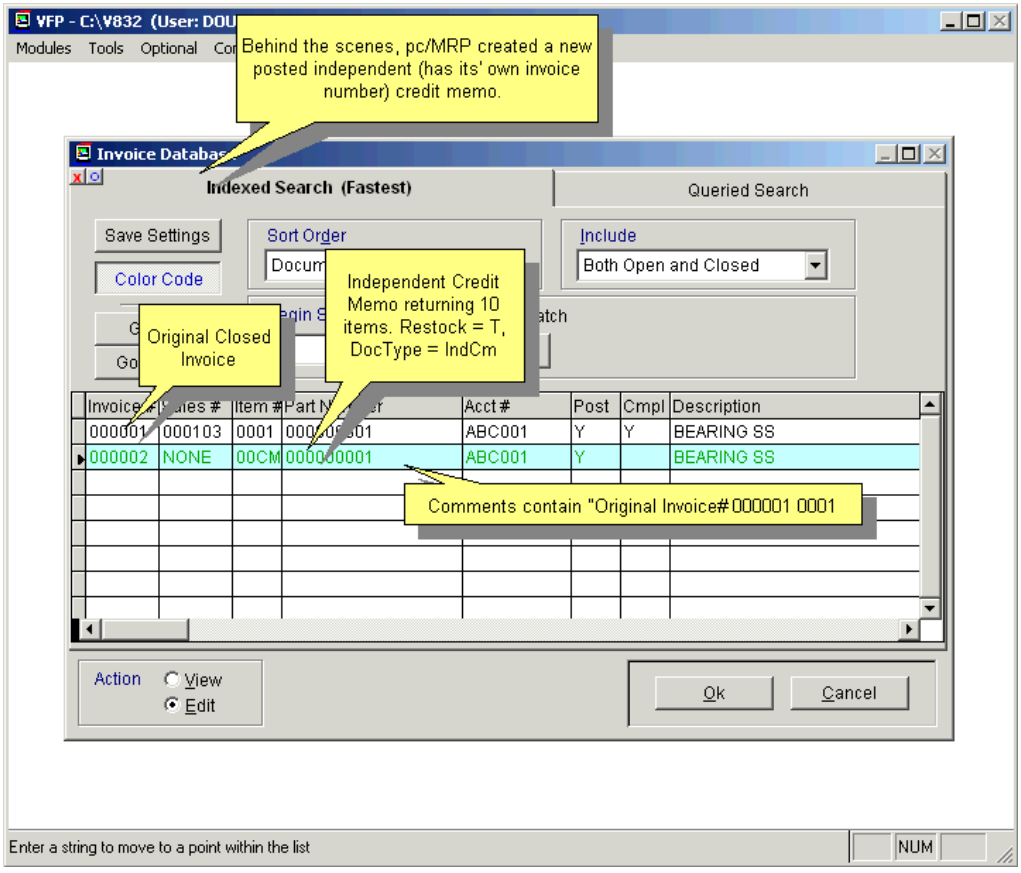
If the “Automatically display general ledger transaction report” checkbox was checked, the general ledger transaction report will be displayed and or printed as shown below:

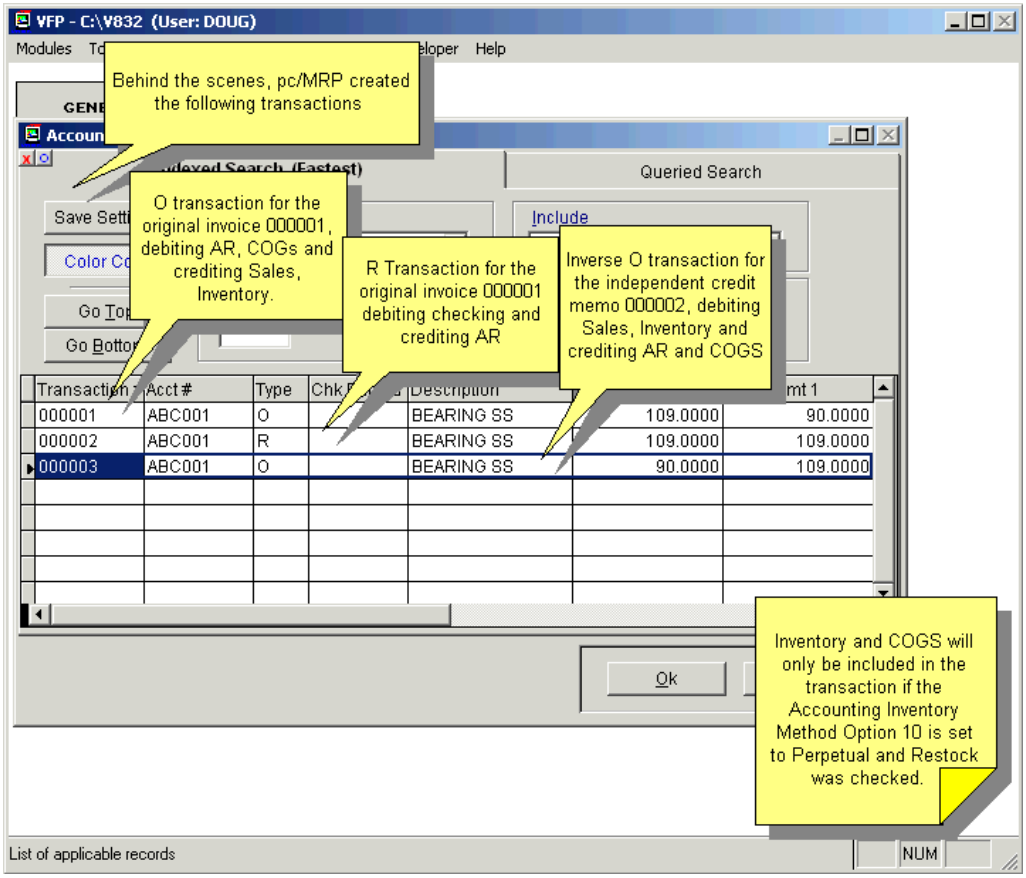



The next two illustrations show what goes on behind the scenes.

**Option #1, Behind the scenes**

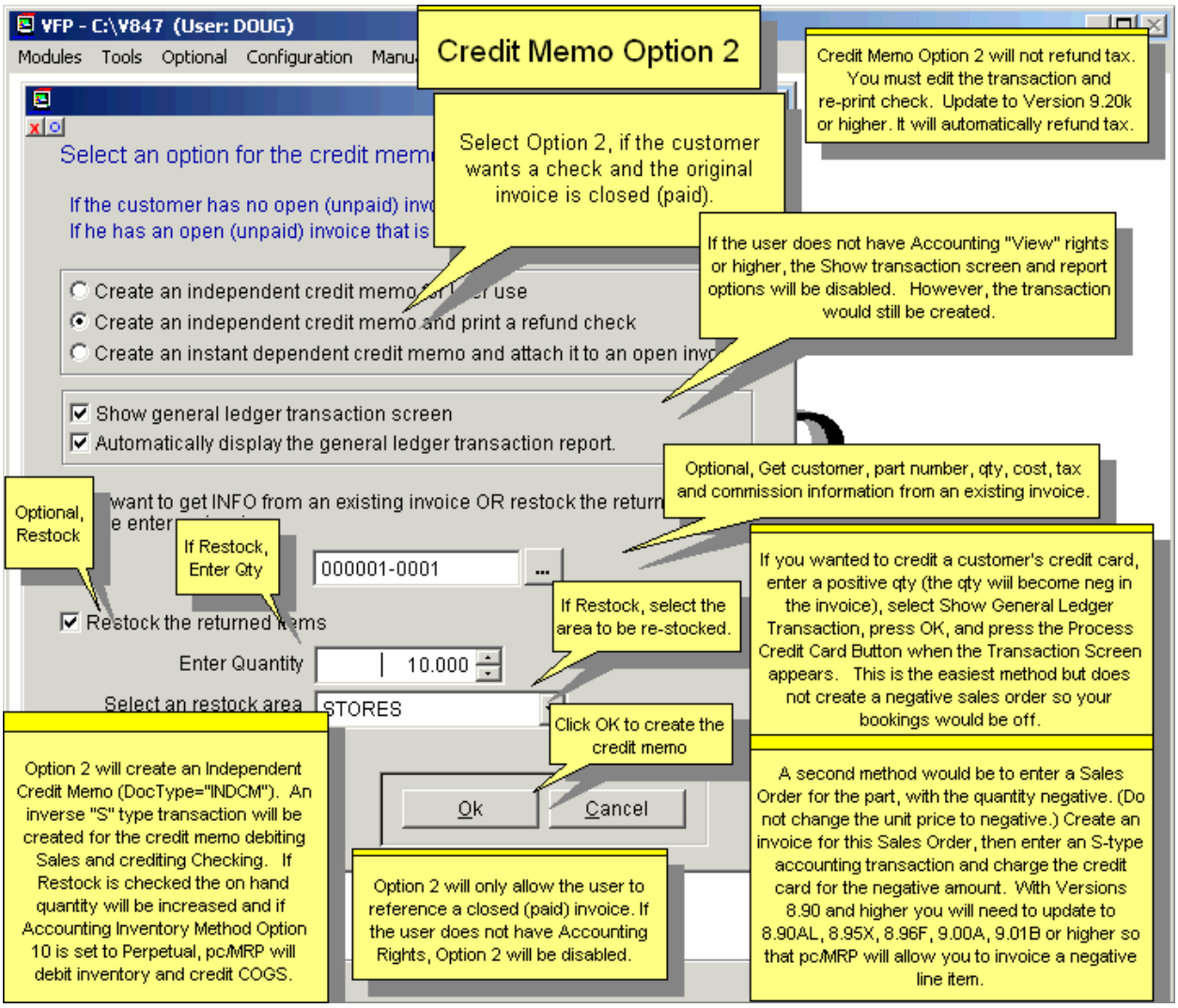
Behind the scenes, pc/MRP created a new posted independent (has its' own invoice number) credit memo.



### 14.10.4 Option #2: Create an Independent Credit Memo and Print a Check

Select option #2, if the customer received an order, wants a check and the invoice is closed (paid).




Option #2 will only allow the user to reference a closed (paid) invoice.

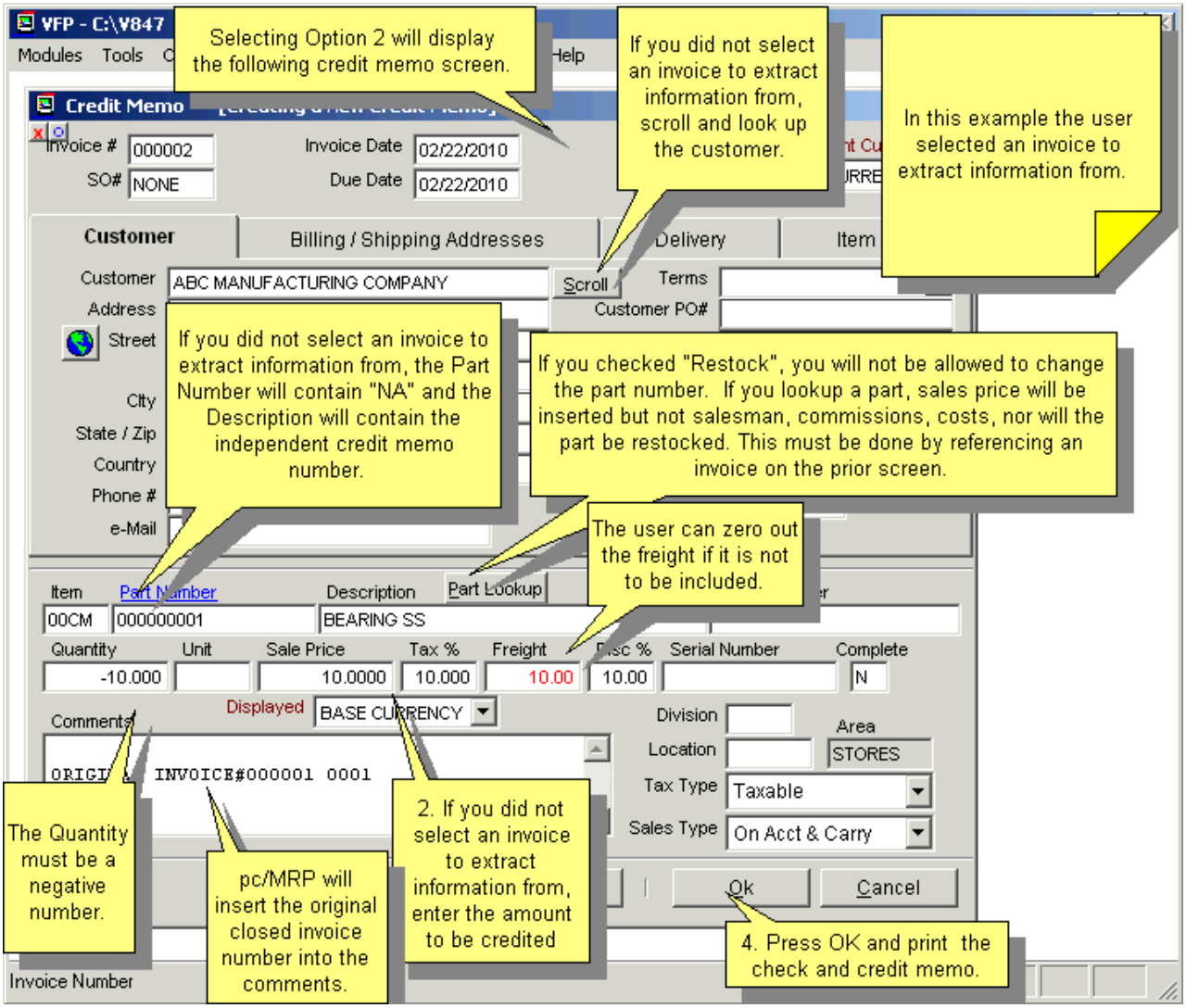
If the user does not have Accounting Rights, option #2 will be disabled.

An inverse “S” type transaction will be created for the credit memo debiting Sales and crediting Checking. If Restock is checked the on hand quantity will be increased and if Accounting Inventory Method **Option 10** is set to Perpetual, pc/MRP will debit inventory and credit COGS.

If the customer paid by credit a credit card and would like a credit back on their credit card, see section 11.21.5.

**Option #2, Credit memo screen**

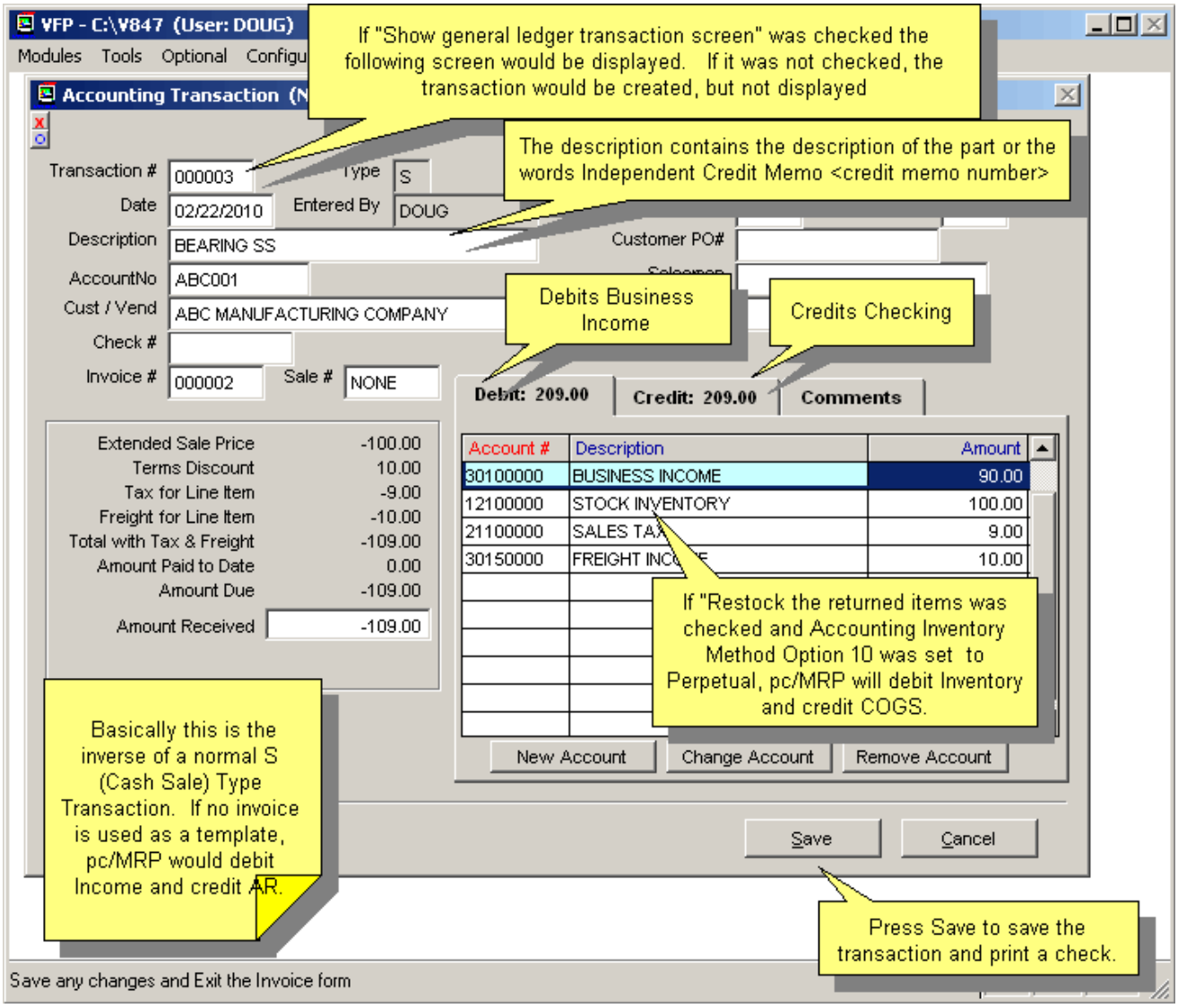
If you selected option #2, “Create an independent credit memo and print a check”, you would get the following credit memo screen:




With option #2 an “S” Type Transaction debiting Sales and Crediting Checking is automatically created for the credit memo. The credit memo is then completed with a Y in the credit memo’s Complete Fields. pc/MRP will then offer to print a check.

**Option #2, Credit memo transaction screen**

If “Show general ledger transaction screen” was checked the following screen would be displayed. If it was not checked, the transaction would be created, but not displayed.



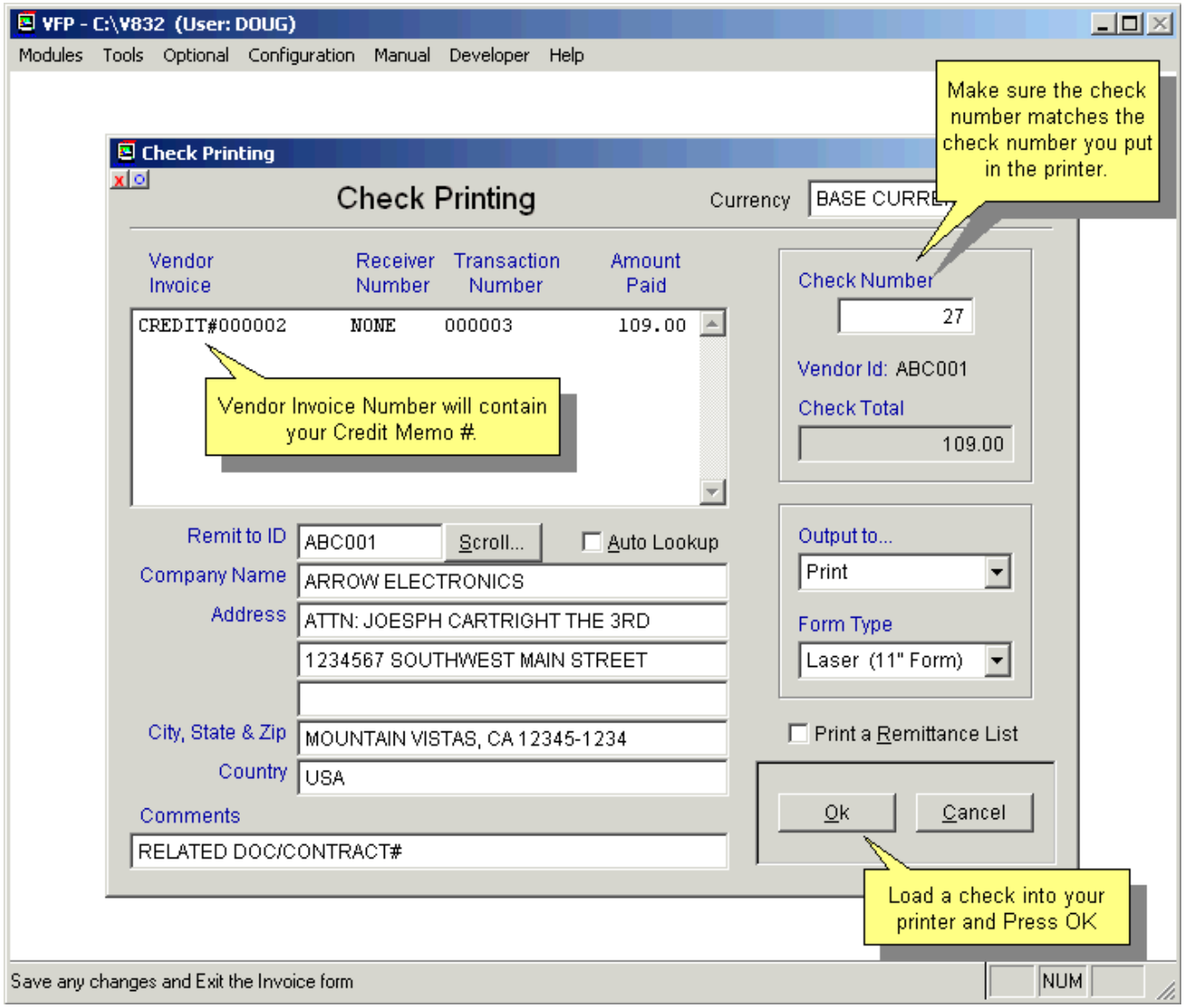

Basically this is the inverse of a normal S (Cash Sale) Type Transaction. If no invoice is used as a template, pc/MRP would debit Income and credit AR.

If "Restock the returned items" was checked and Accounting Inventory Method **Option 10** was set to Perpetual, pc/MRP will debit Inventory and credit COGS.

The description contains the description of the part or the words Independent Credit Memo <credit memo number>

**Option #2, Independent Credit Memo Print Check Screen**

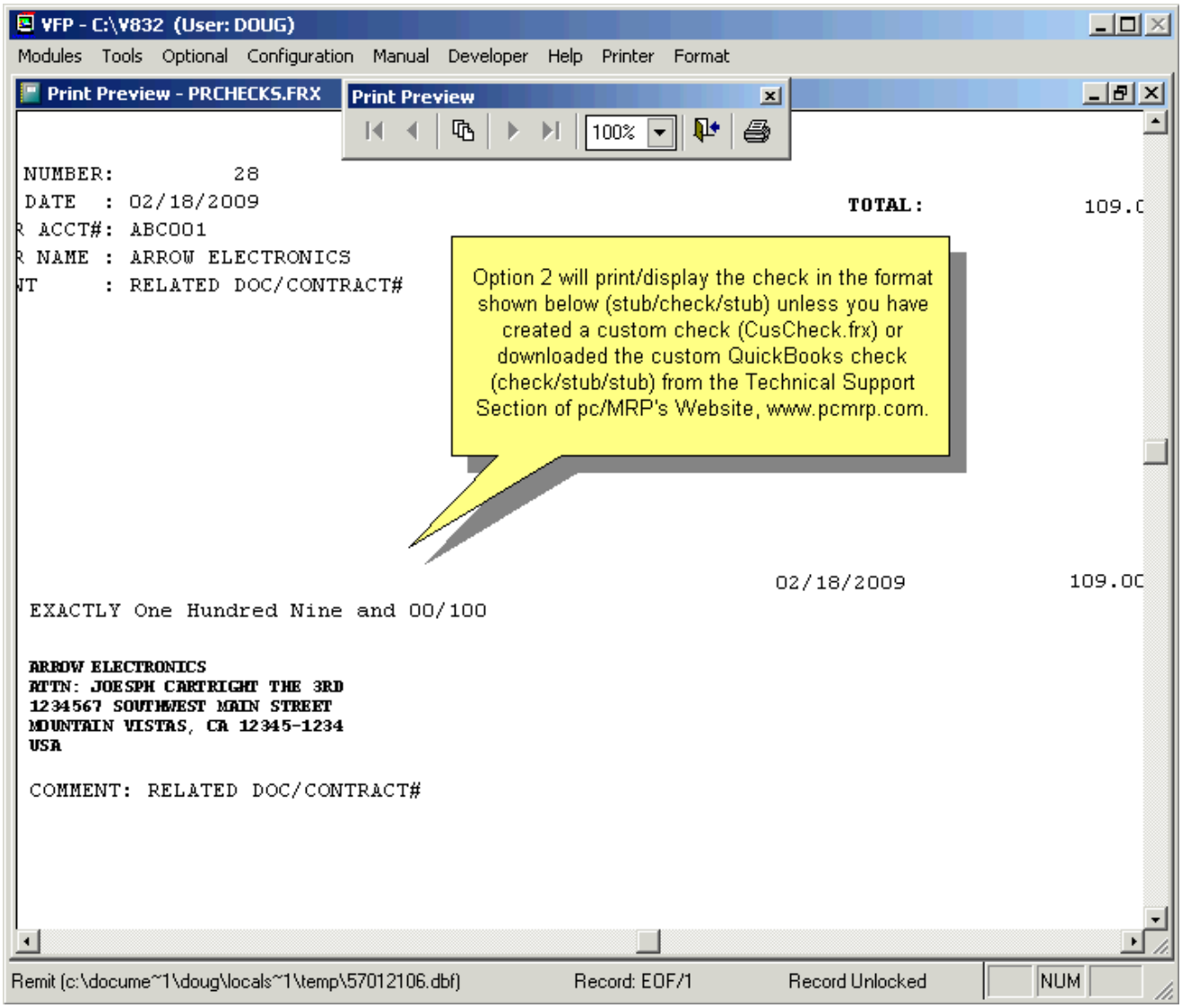
Option #2 will display the check printing screen shown below:




Put a check in the printer. Make sure the check number in the Check Number Text Box matches the check number on the physical check.

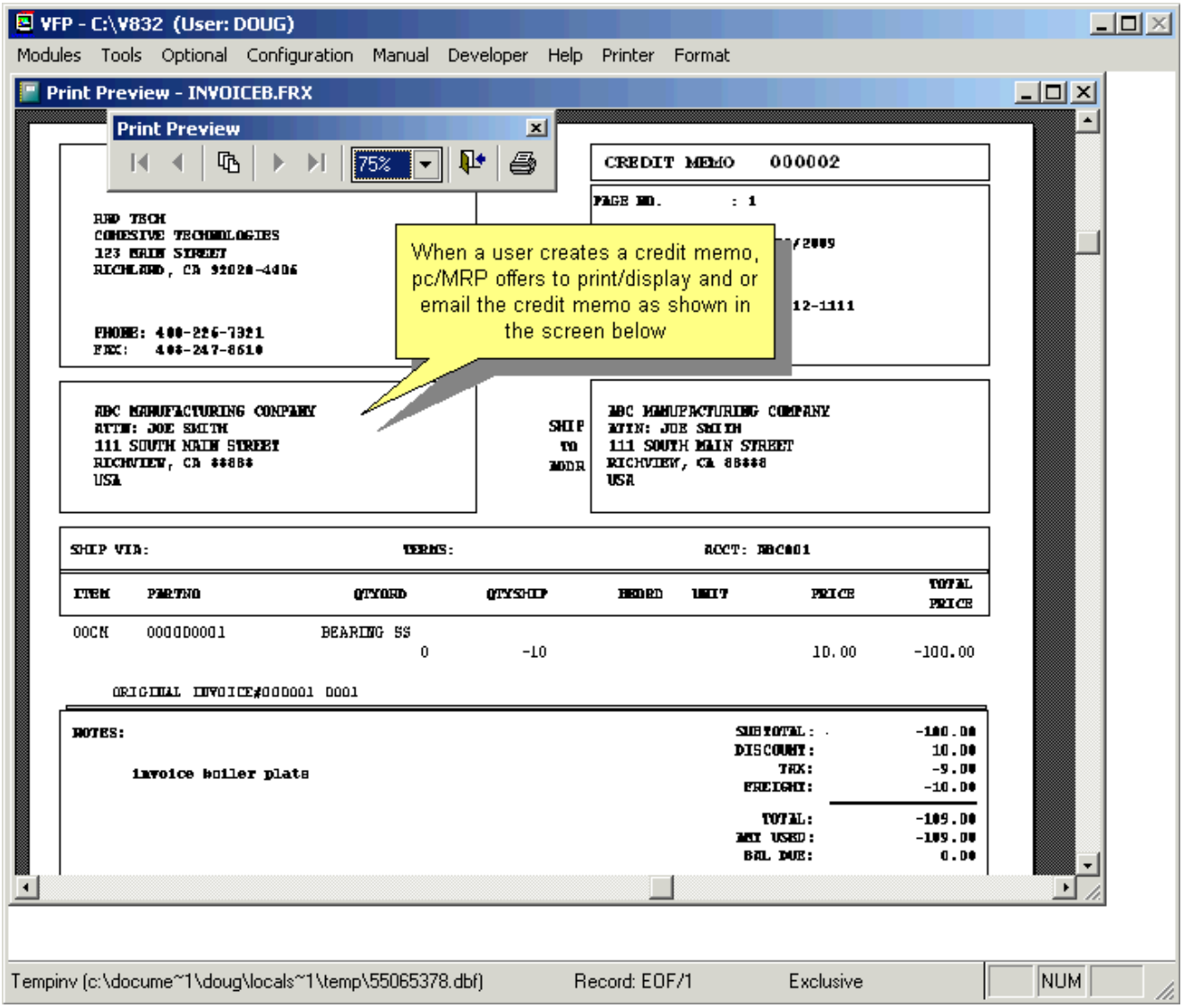
**Option #2, Independent Credit Memo Print Check**

Option #2 will print/display the check in the format shown below (stub/check/stub) unless you have created a custom check (CusCheck.frx) or downloaded the custom QuickBooks check (check/stub/stub) from the Technical Support Section of Software Arts' Website, www.pcmrp.com.



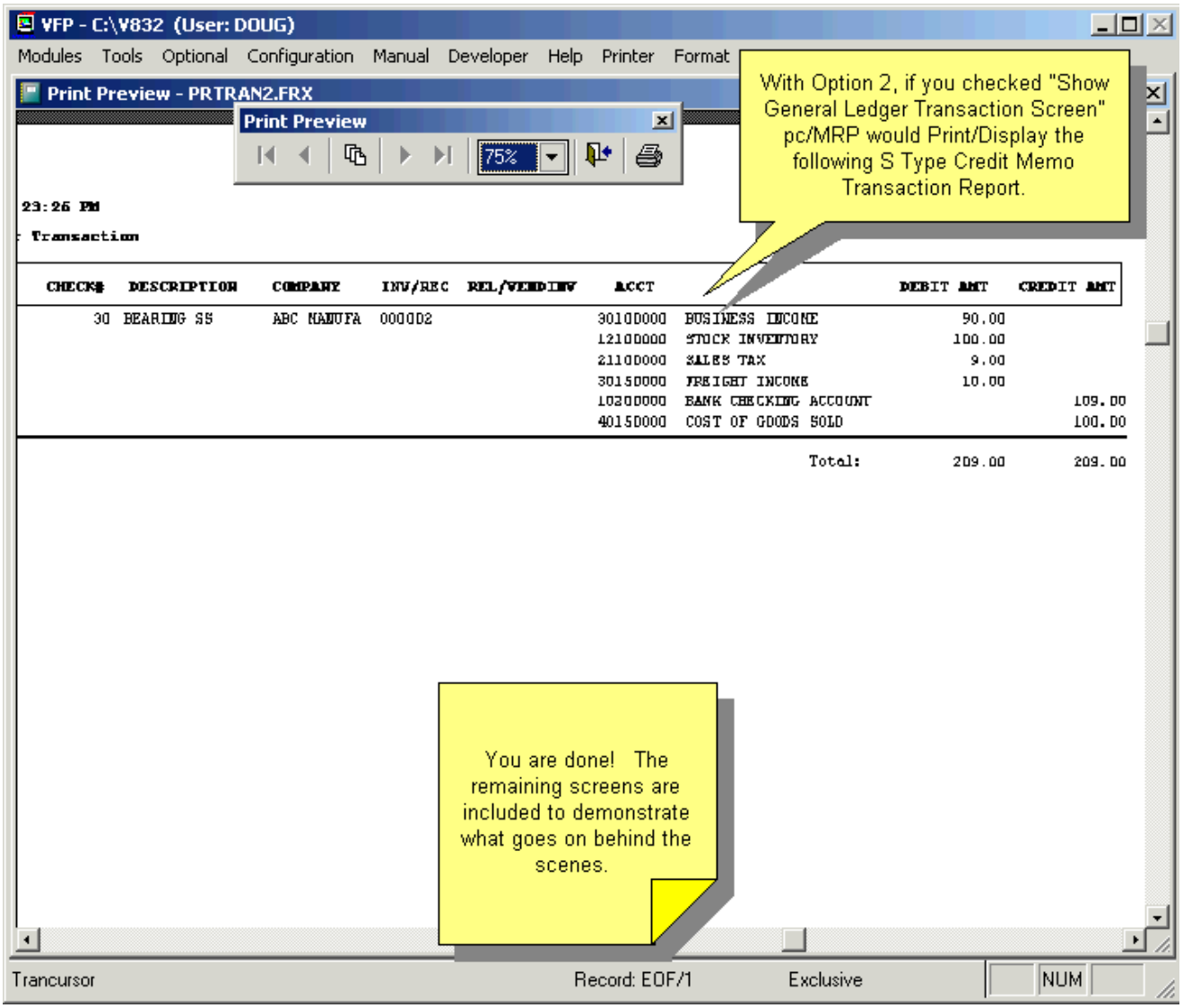
**Option #2, Print Independent Credit Memo**

Option #2 will offer to print, display or email the credit memo as shown below:



**Option #2, Print/Display Independent Credit Memo Transaction**

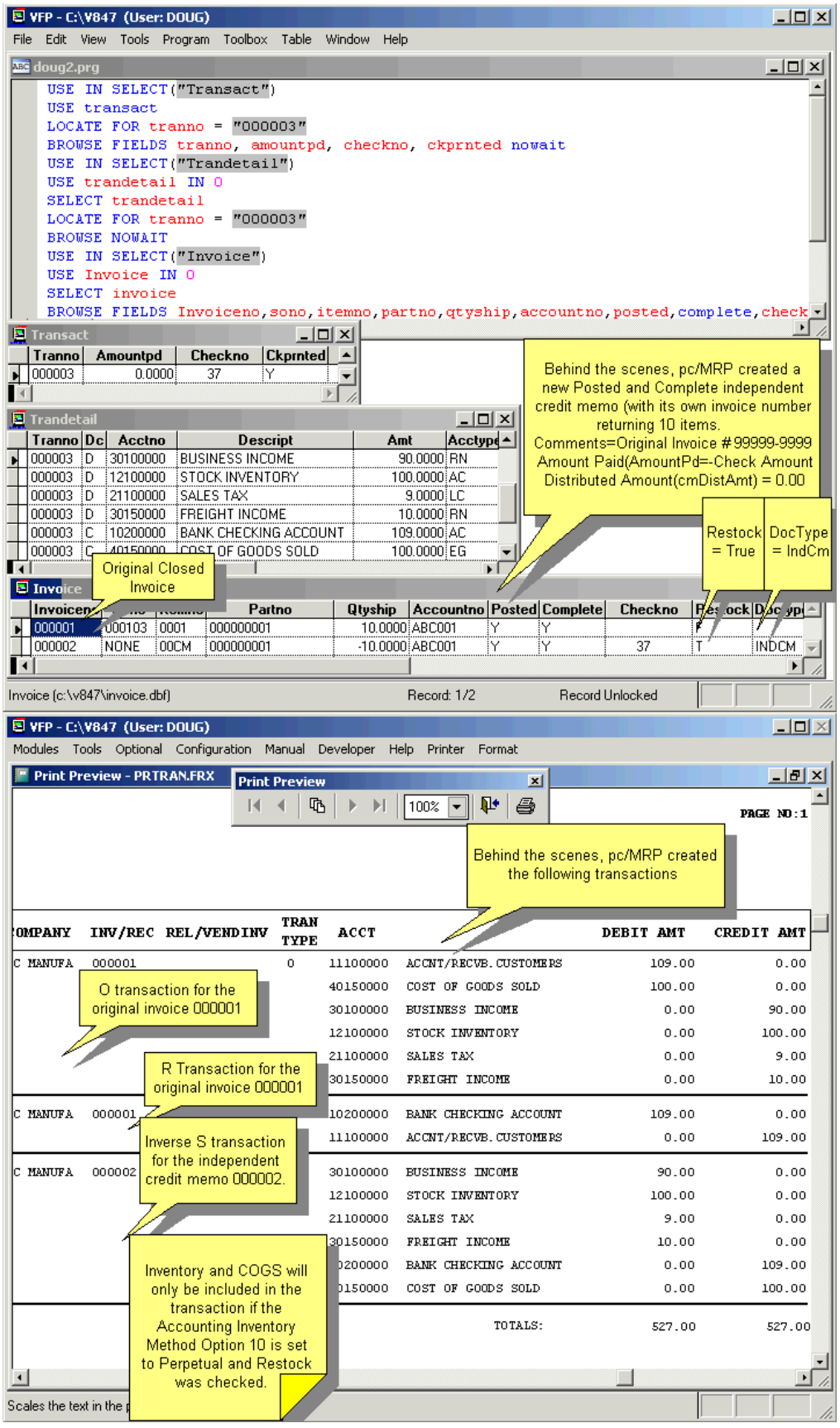
With option #2, if you checked “Show General Ledger Transaction Screen” pc/MRP would Print/Display the following S Type Credit Memo Transaction Report.




The next two illustrations show what goes on behind the scenes.

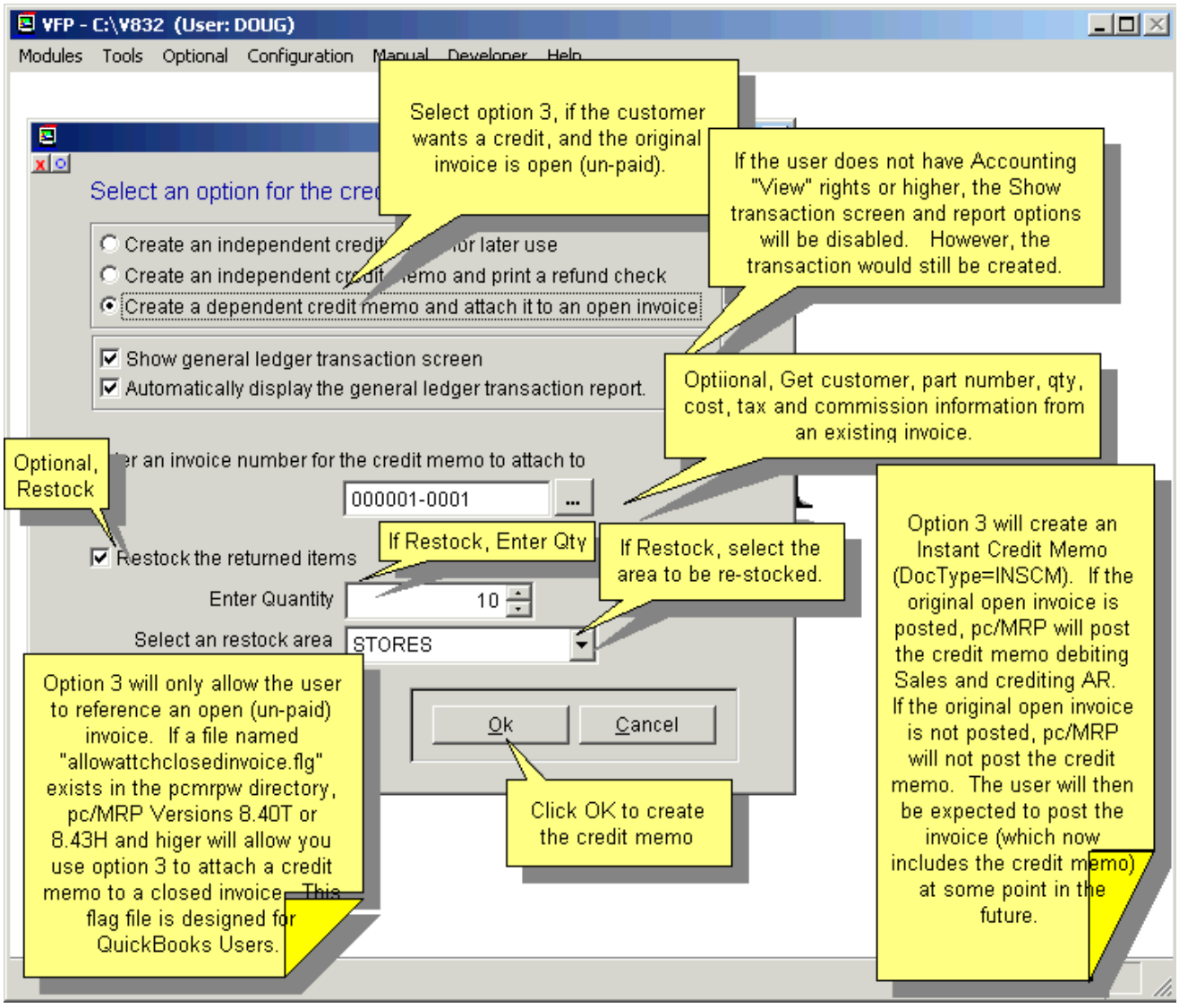
**Option #2, Behind the scenes**

Behind the scenes, pc/MRP created a new independent (has its own invoice number) credit memo. In addition, pc/MRP automatically posted the new credit memo.



### 14.10.5 Option #3: Create a Dependent Credit Memo and Attach It to an Open Invoice

Selected option #3, "Create a credit memo and attach it to an existing open invoice" if the customer wants a credit, and the original invoice is open (un-paid).




Option #3 will only allow the user to reference an open (un-paid) invoice.

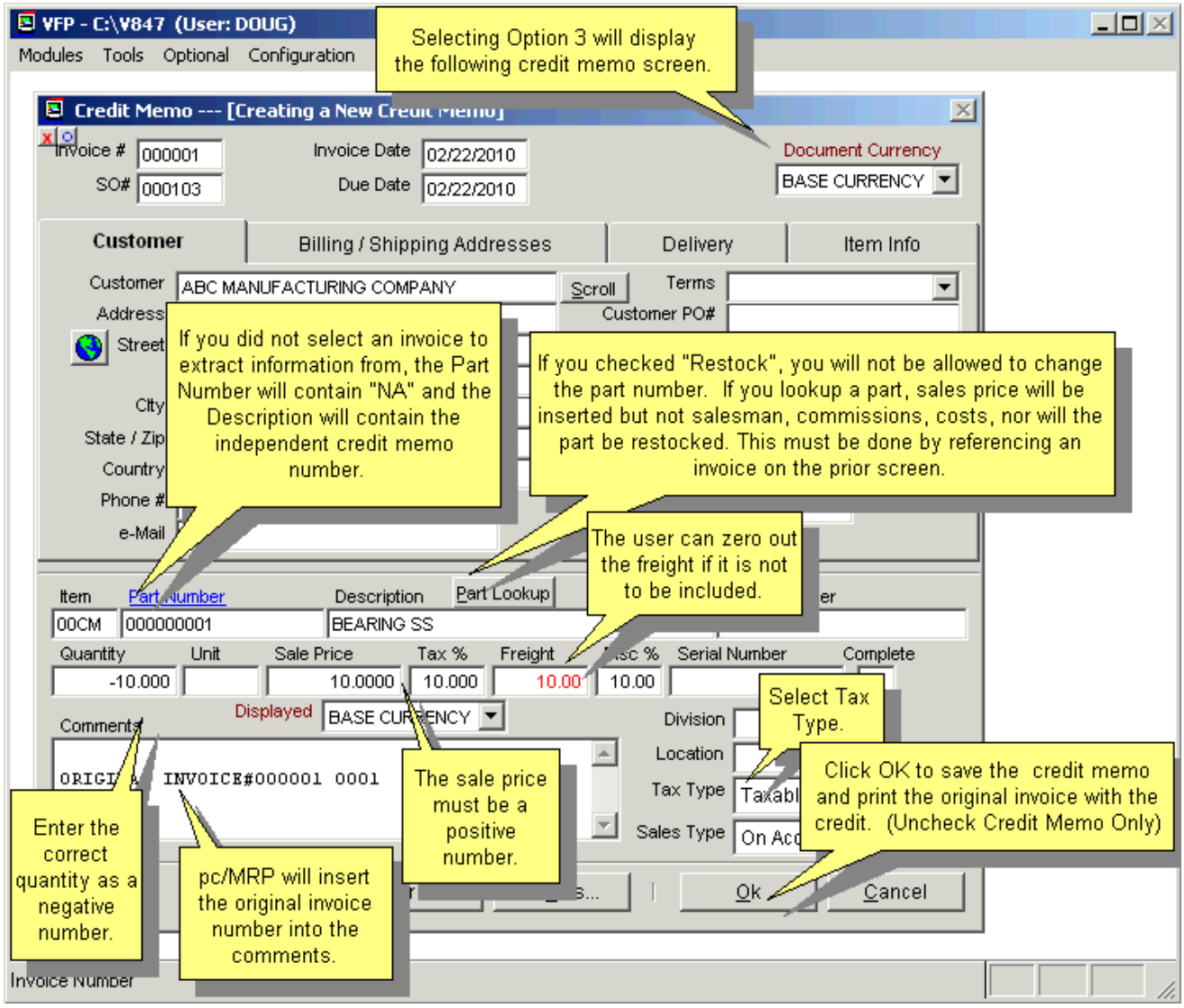
You can create several credit memos referencing the same invoice (only when using option #3). The line items will be 00CM, 01CM, 02CM, etc.

**Note:** If you are using pc/MRP's Optional QuickBooks Export, and you wish to attach a Credit Memo to an invoice that transferred over to QuickBooks yet has not been paid in QuickBooks, you will need a flag file named "**ALLOWATTCHCLOSEDINVOICE.FLG**" in the pcmrpw directory to attach the Credit Memo.

If the original open invoice is posted, pc/MRP will post the credit memo debiting Sales and crediting AR. If the original open invoice is not posted, pc/MRP will not post the credit memo. The user will then be expected to post the invoice (which now includes the credit memo) at some point in the future.

If the user does not have Accounting View Rights or higher, the "Show general ledger transaction report" and "Display general ledger transaction report" checkboxes will be disabled.

**Option #3, Credit memo screen**



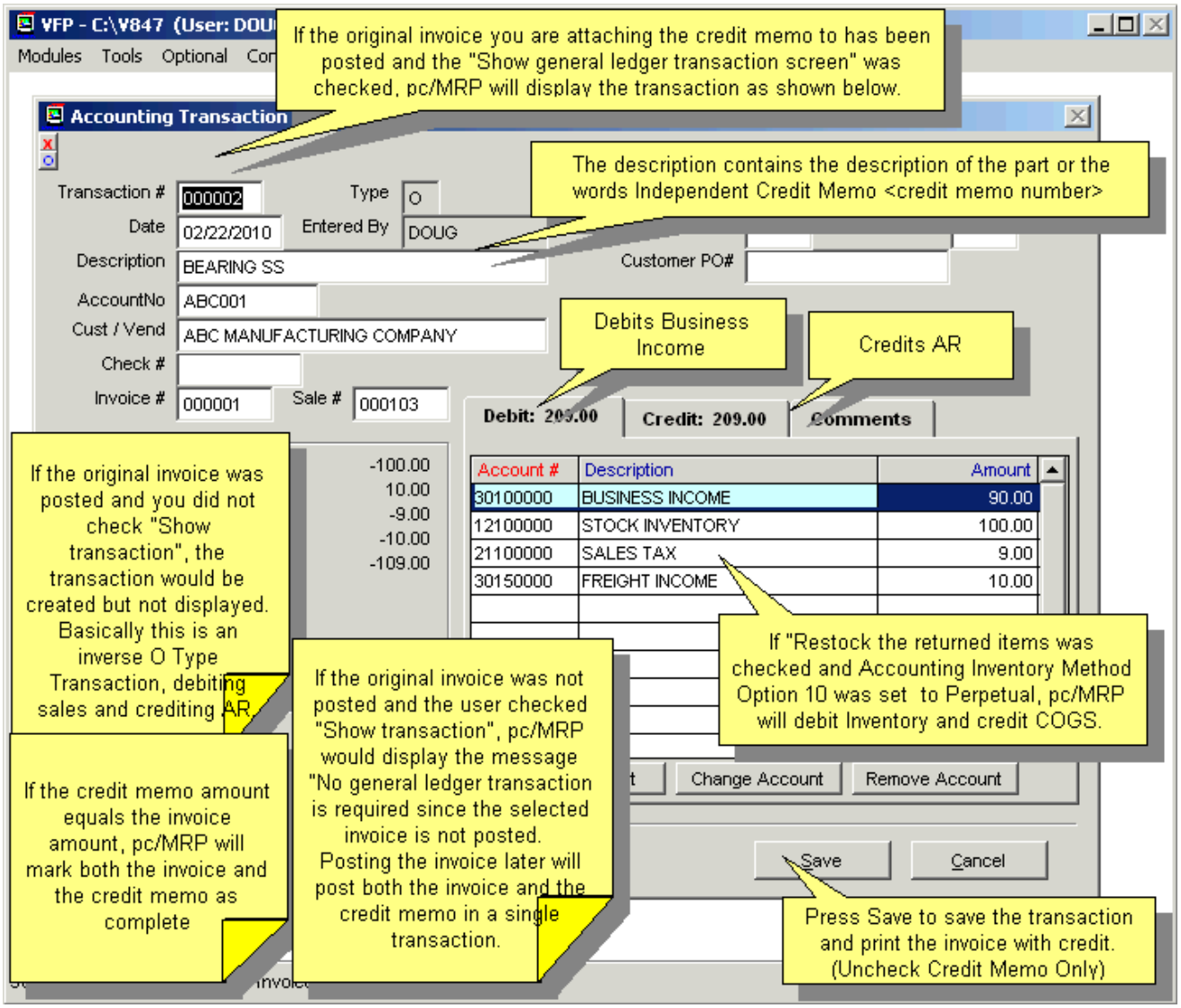

pc/MRP will not allow the following for a credit memo:

- A credit memo that is greater than the invoice
- A positive Quantity
- A negative Sale Price
- An Invalid Part Number other than NA

If “Restock the returned items” is NOT checked the part will NOT be restocked.
If “Restock the returned items” is checked the part number will be restocked.
The credit memo created will be a Dependent Credit Memo (same number as invoice).
If the invoice was posted the credit memo will be posted.
If the invoice was posted and the credit = invoice, both will be posted and complete.
If the invoice was not posted the credit memo will not be posted.

**Option #3, Credit memo Transaction**

If the original invoice you are attaching the credit memo to has been posted and the "Show general ledger transaction screen" was checked, pc/MRP will display the transaction as shown below.




The Quantity will default to -1. Enter the correct quantity as a negative number. If you accidentally forget to increase the negative qty, it would be better to enter a second credit memo than to edit the original credit memo.

If the original invoice was posted and you did not check "Show transaction", the transaction would be created but not displayed. Basically this is the inverse O Type Transaction debiting sales and crediting AR.

**Note:** If you are entering a series of credit memos against the same invoice, we recommend creating a dependent credit memo for each line item. However, if you only wish one accounting transaction, do the following:

- **Show General Ledger Transaction Screen** must be checked.
- When the transaction screen is presented to you, press CANCEL except for the final credit memo.
- You will notice that the total of all un-posted line items, including the credit memos are totaled to post on the final accounting transaction. Press SAVE on this last transaction.

If the original invoice was not posted and the user checked “Show transaction”, pc/MRP would display the message “No general ledger transaction is required since the selected invoice is not posted. Posting the invoice later will post both the invoice and the credit memo in a single transaction.

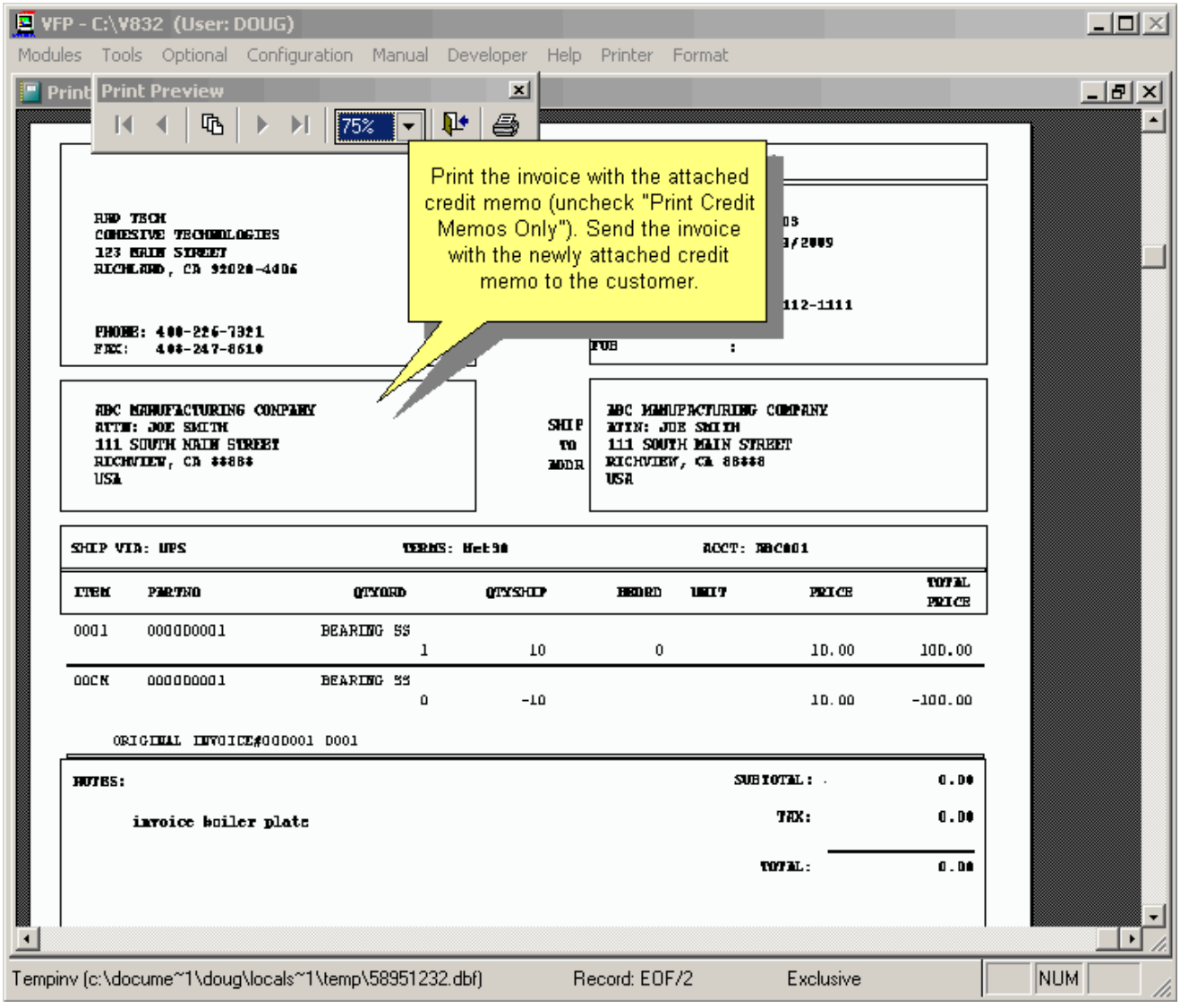
If the credit memo amount equals the invoice amount, pc/MRP will mark both the invoice and the credit memo as complete.

The description contains the description of the part or the words Independent Credit Memo <credit memo number>

If "Restock the returned items” was checked and Accounting Inventory Method **Option 10** was set to Perpetual, pc/MRP will debit Inventory and credit COGS.

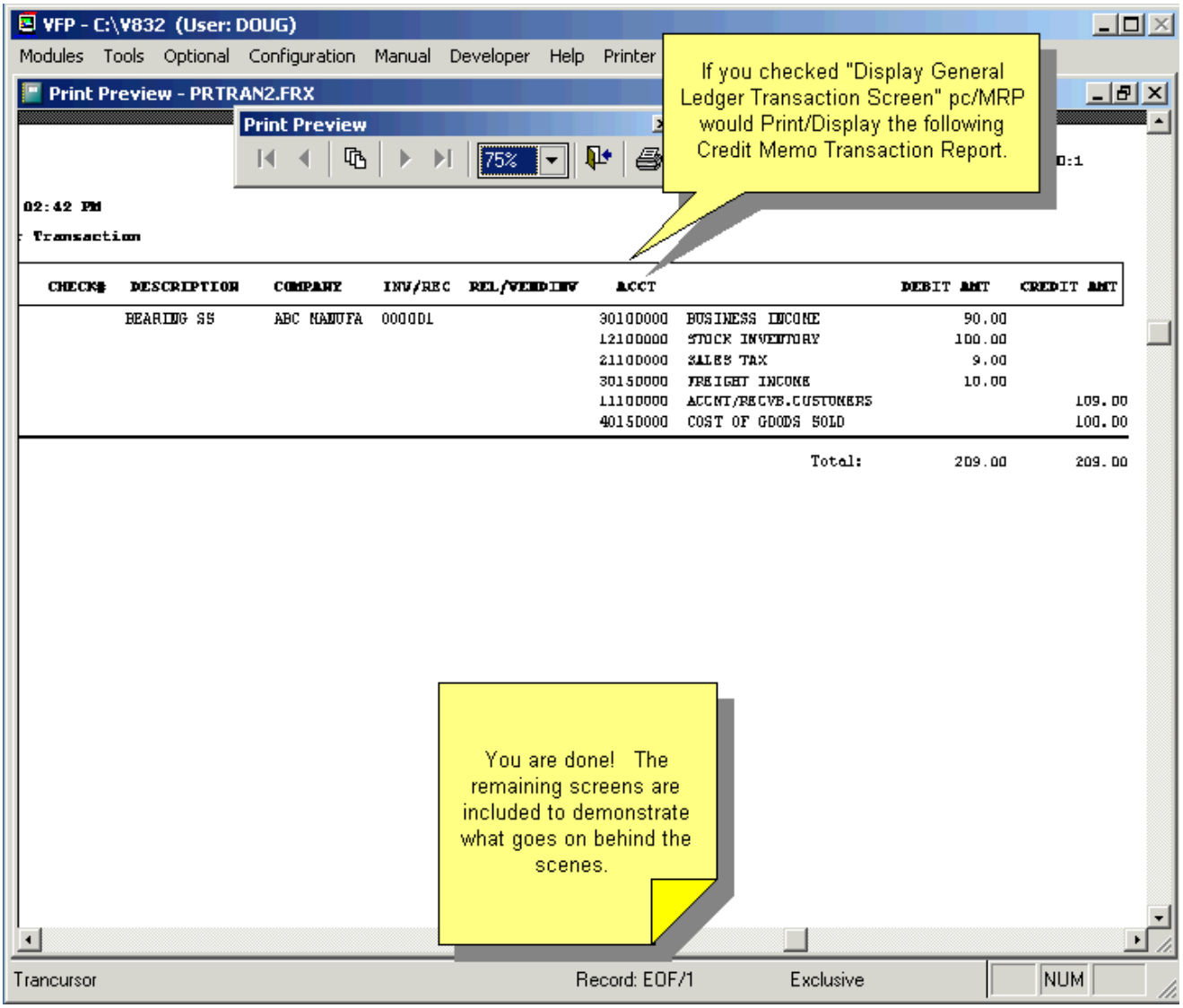
**Option #3, Print Invoice with attached credit memo**

Print the invoice with the attached credit memo (uncheck “Print Credit Memos Only”). Send the invoice with the newly attached credit memo to the customer.



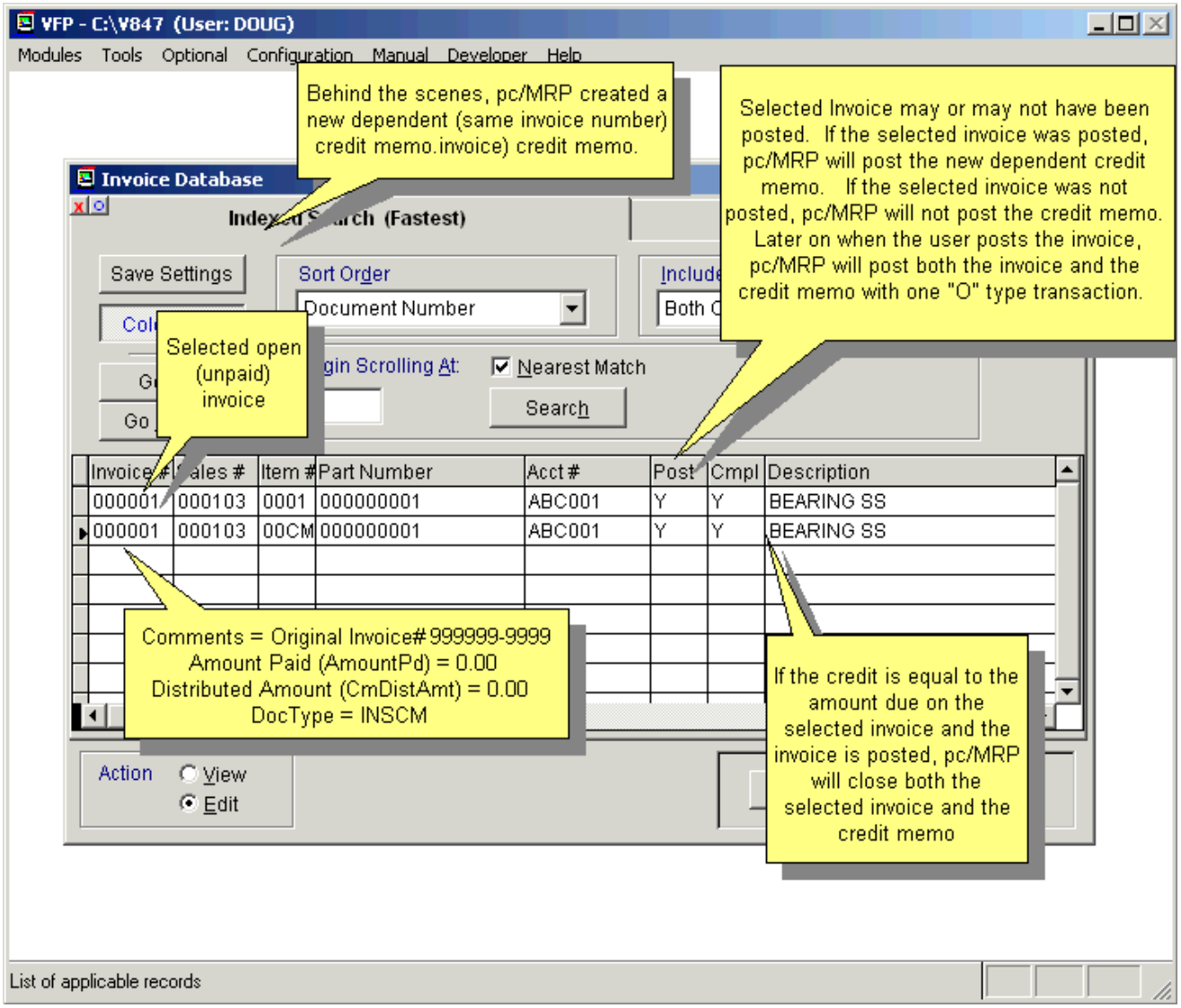
**Option #3, Print/Display Independent Credit Memo Transaction**

If you checked “Display General Ledger Transaction Screen” pc/MRP would Print/Display the following Credit Memo Transaction Report.



**Option #3, Behind the scenes credit memos**

Behind the scenes, pc/MRP created a new dependent (same invoice number) credit memo.

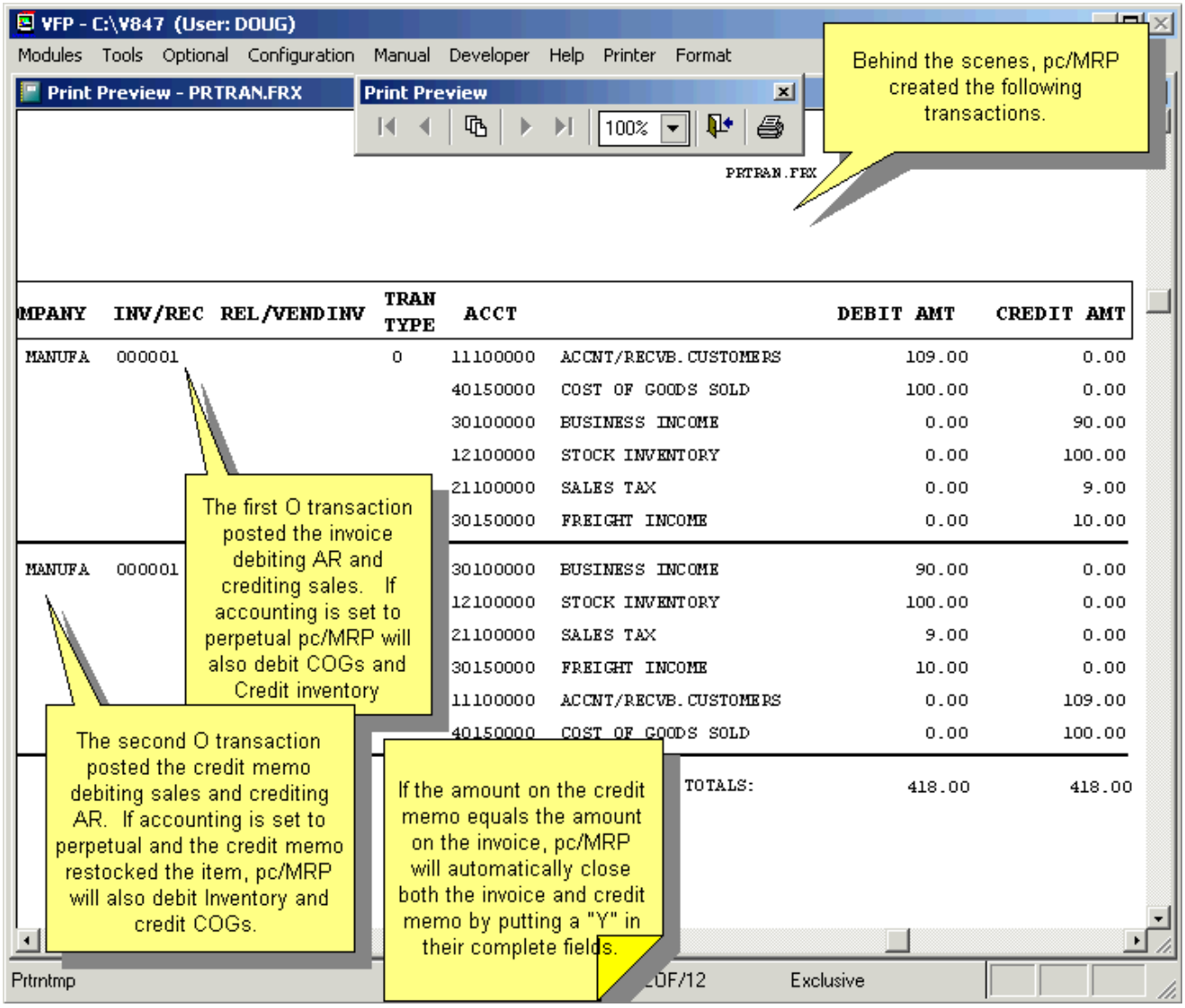



The selected invoice may or may not have been posted. If the selected invoice was posted, pc/MRP will post the new dependent credit memo. If the selected invoice was not posted, pc/MRP will not post the credit memo. Later on when the user posts the invoice, pc/MRP will post both the invoice and the credit memo with one “O” type transaction.

If the credit is equal to the amount due on the selected invoice, pc/MRP will close both the selected invoice and the credit memo.

**Option #3, Behind the scenes transactions**

Behind the scenes, pc/MRP created the following transactions.



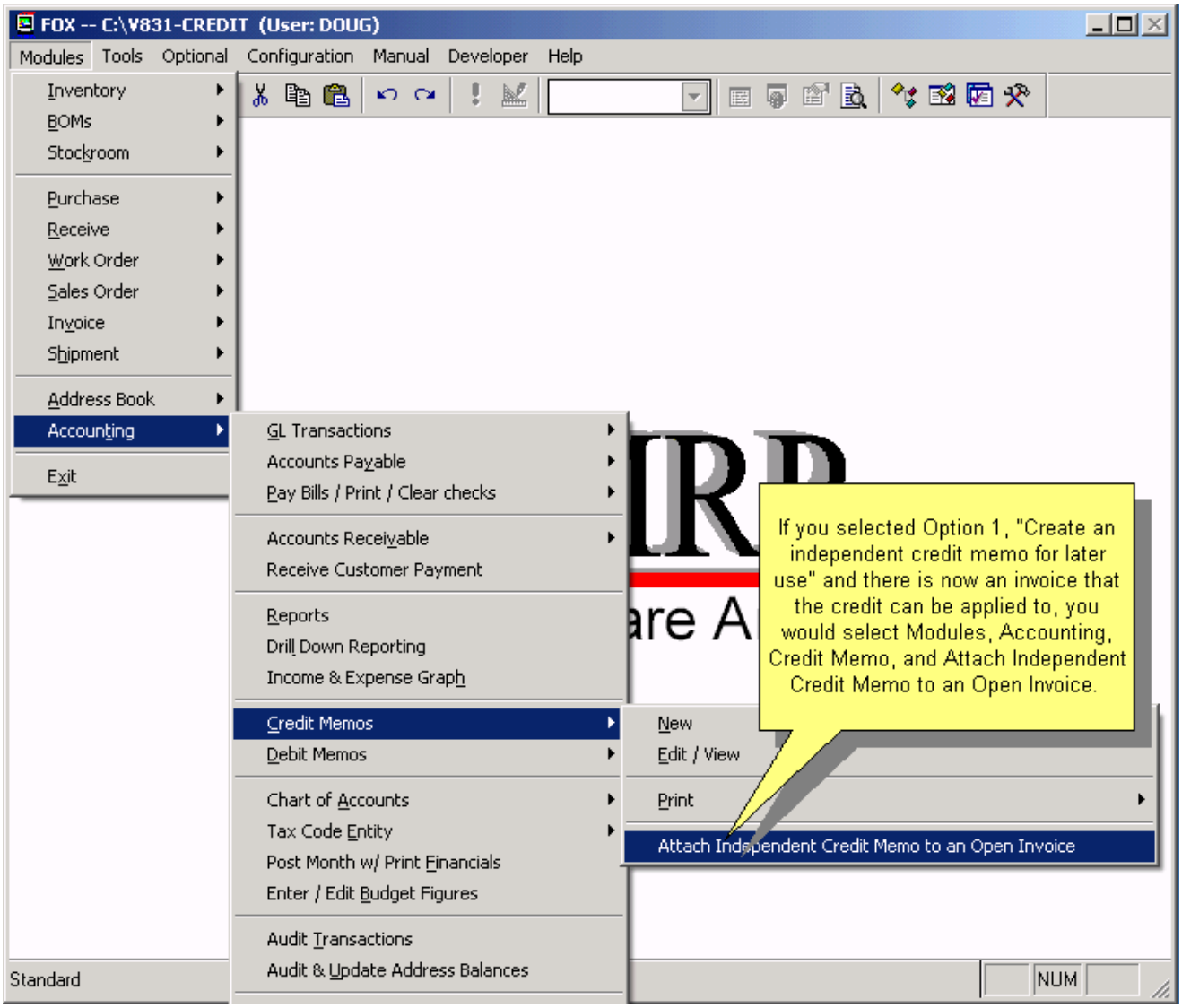

The first O transaction posted the invoice debiting AR and crediting sales. If accounting is set to perpetual pc/MRP will also debit COGs and Credit inventory.

The second O transaction posted the credit memo debiting sales and crediting AR. If accounting is set to perpetual and the credit memo restocked the item, pc/MRP will also debit Inventory and credit COGs.

If the amount on the credit memo equals the amount on the invoice, pc/MRP will automatically close both the invoice and credit memo by putting a “Y” in their complete fields.

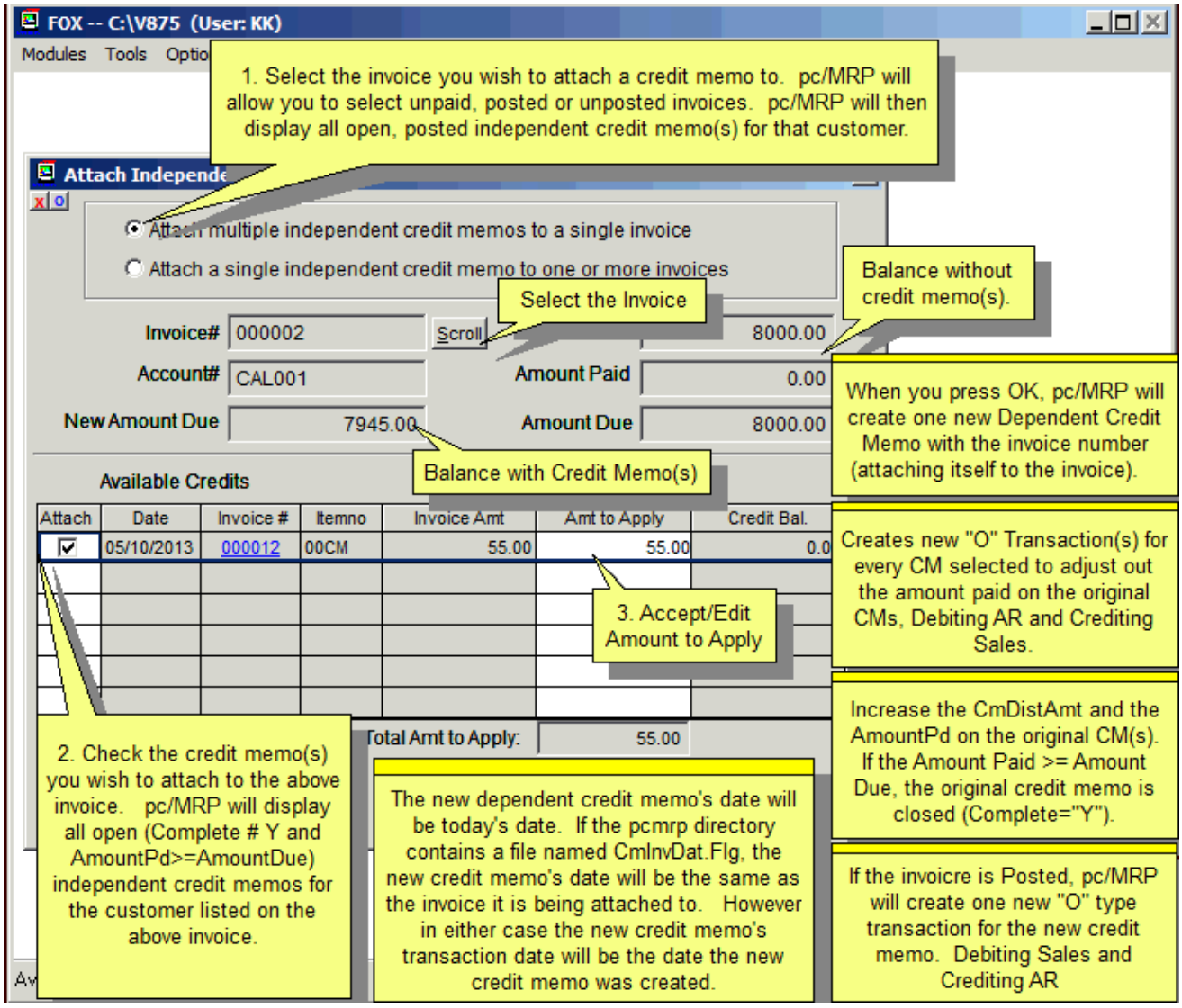
### 14.10.6 Attach Independent Credit Memo to an Open Invoice

If you selected option #1, “Create an independent credit memo for later use” and there is now an invoice that the credit can be applied to, you would select Modules, Accounting, Credit Memo, and Attach Independent Credit Memo to an Open Invoice as shown in the screen below.



**Attach independent credit memo screen**

The Attach Independent Credit Memo to an Open Invoice shown below will allow you to select and open, posted or un-posted invoice. It will then display all open, posted independent credit memo for that customer that are equal to or less than the invoices amount due.




Pressing OK will

pc/MRP will display a dialog box stating credit memo attached

Create a new “R” type transaction to wash out the original independent credit memo

Debits AR Credits Sales

If the amount = the amount due it closes the original independent credit memo

Create a new dependent credit memo to replace the original independent credit memo

If the invoice was posted

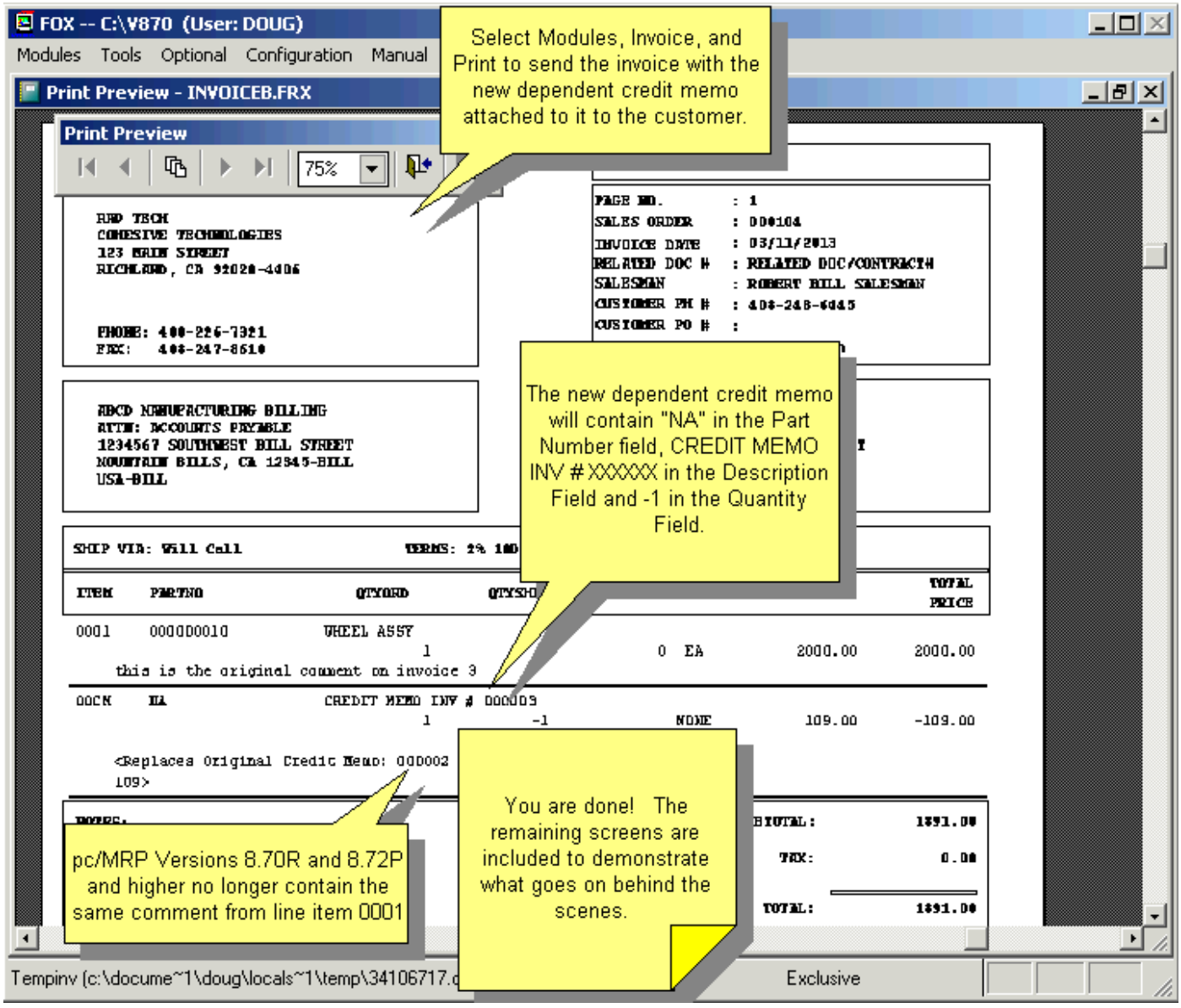
Creates a new “O” type transaction for the new dependent credit memo

Debits Sales Credits AR

Puts a “Y” in the new dependent credit memo’s Posted Field

**Attach Independent Credit Memo, Print the invoice with new credit memo**

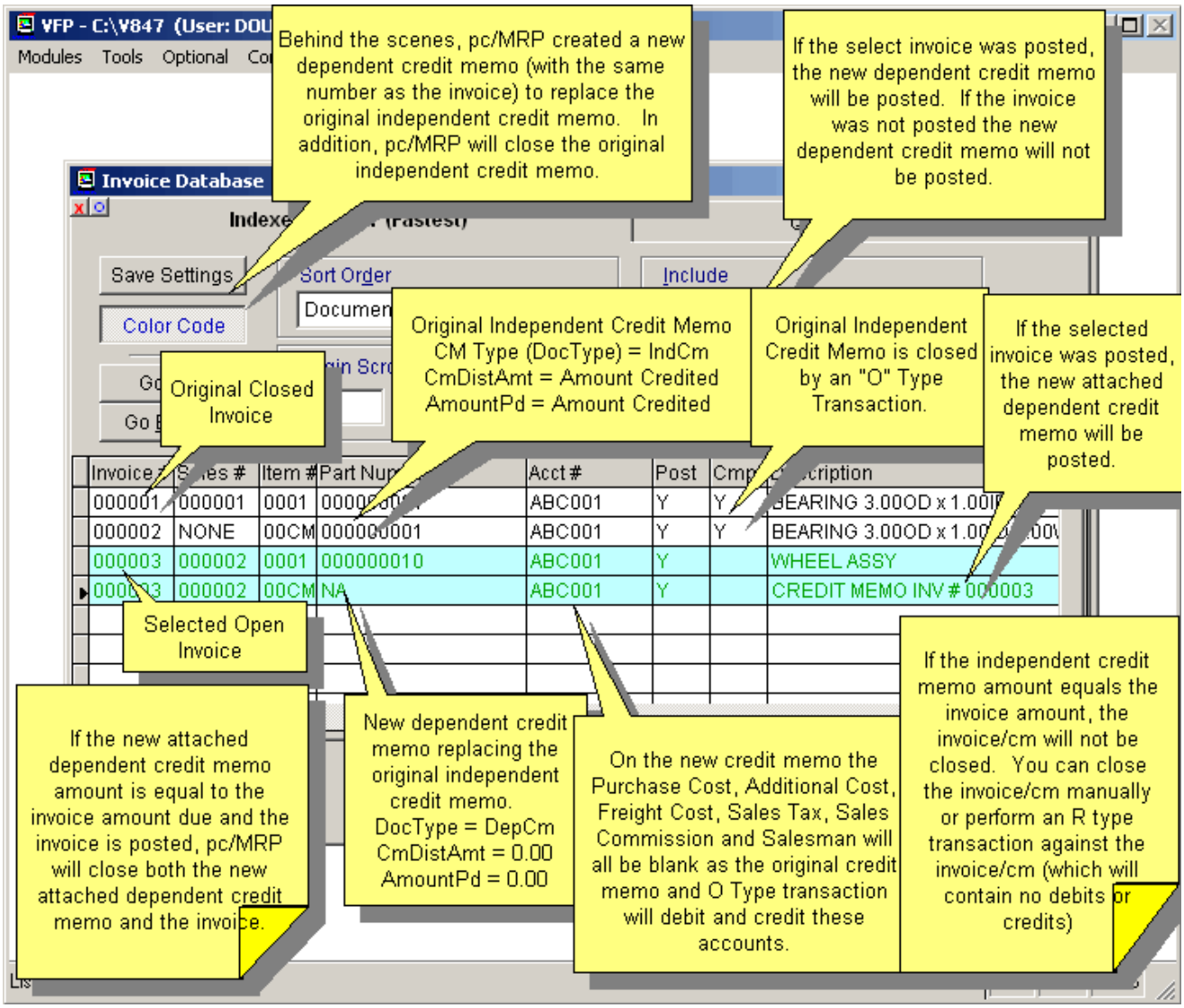
Select Modules, Invoice, and Print to send the invoice with the new dependent credit memo attached to it to the customer.




The next two pages show what goes on behind the scenes.

**Attach Independent Credit Memo, Behind the scenes**

Behind the scenes, pc/MRP created a new dependent credit memo (with the same number as the invoice) to replace the original independent credit memo. In addition, pc/MRP will close the original independent credit memo.

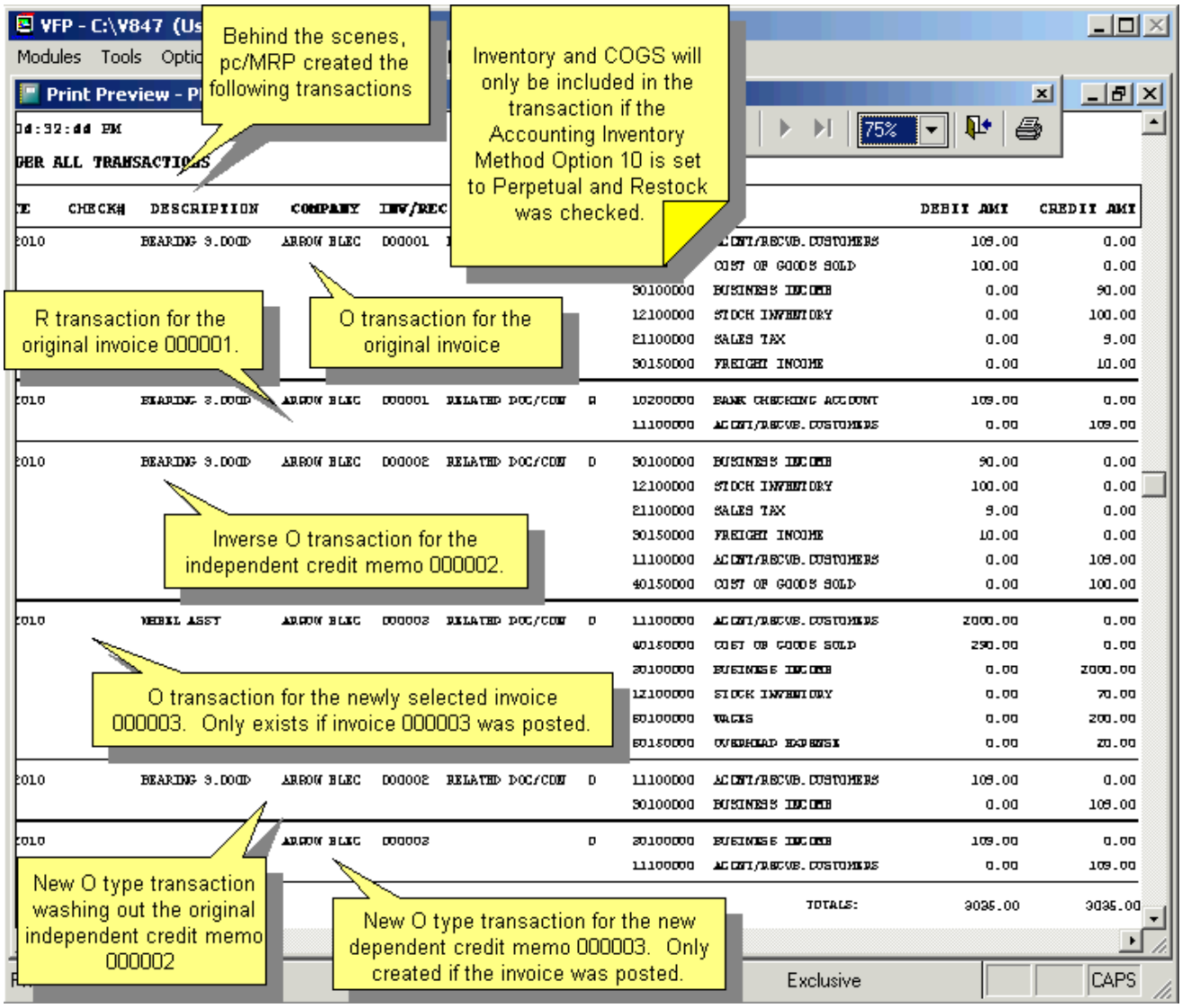



Original Independent Credit Memo 000002 comment:
ORIGINAL INVOICE#000001 0001
<Replace by new credited memo: 000003 00CM Amount: $60>

New Dependent Credit Memo 000003 comment:
<Replaces Original Credit Memo: 000002 00CM Amount: $60>

<u>If the new attached dependent credit memo amount is equal to the invoice amount due, pc/MRP will close both the new attached dependent credit memo and the invoice.</u>

Behind the scenes, pc/MRP created the following transactions:




Independent Credit Memos created by option #1 have their own invoice number and will eventually wash themselves out with inverse “O” and “R” transactions.

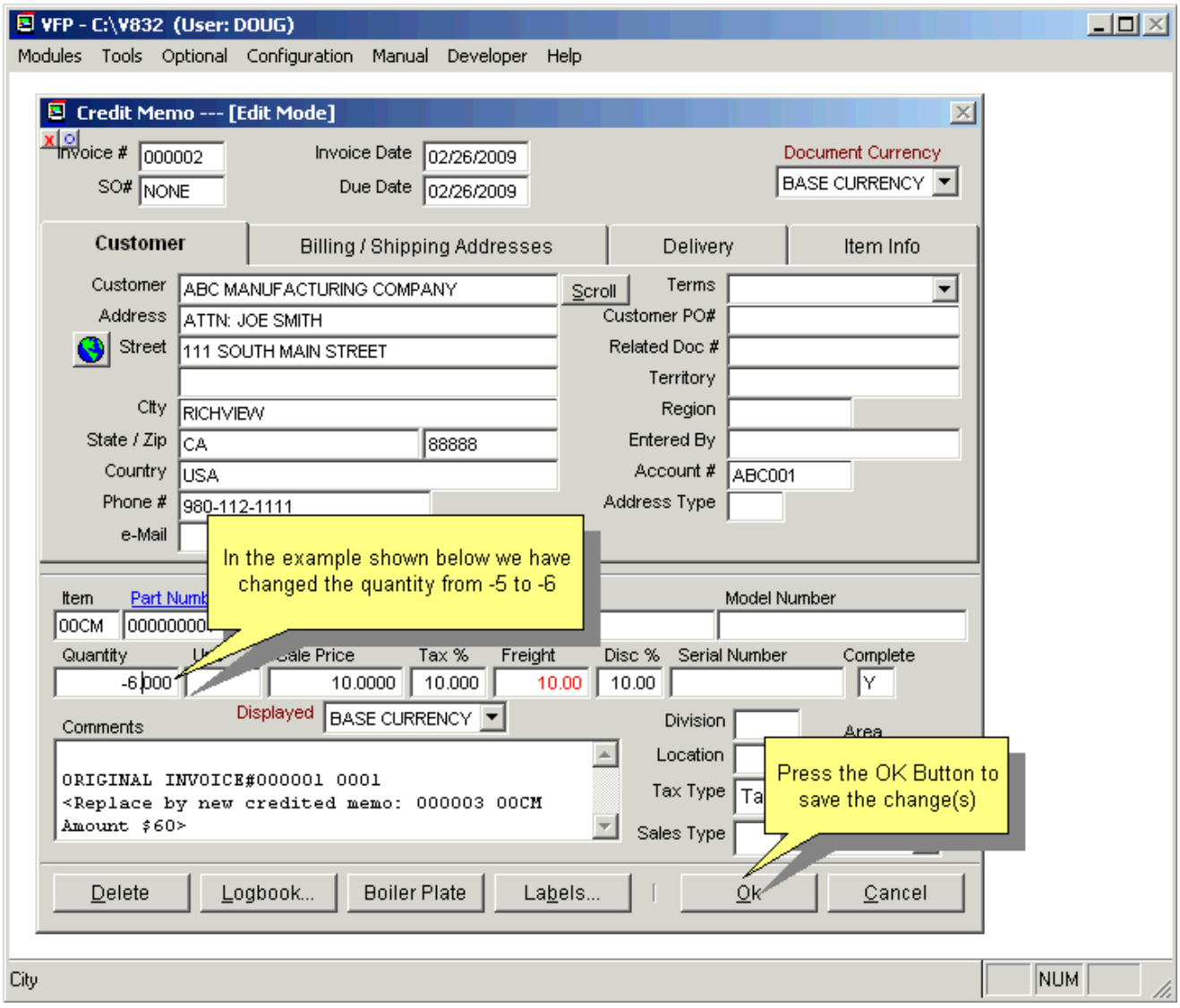
We can still find all transactions for a specified invoice and it will include all relevant dependent credit memos but not the independent credit memos.

Inventory and COGS will only be included in the transaction if the Accounting Inventory Method **Option 10** is set to Perpetual and Restock was checked.

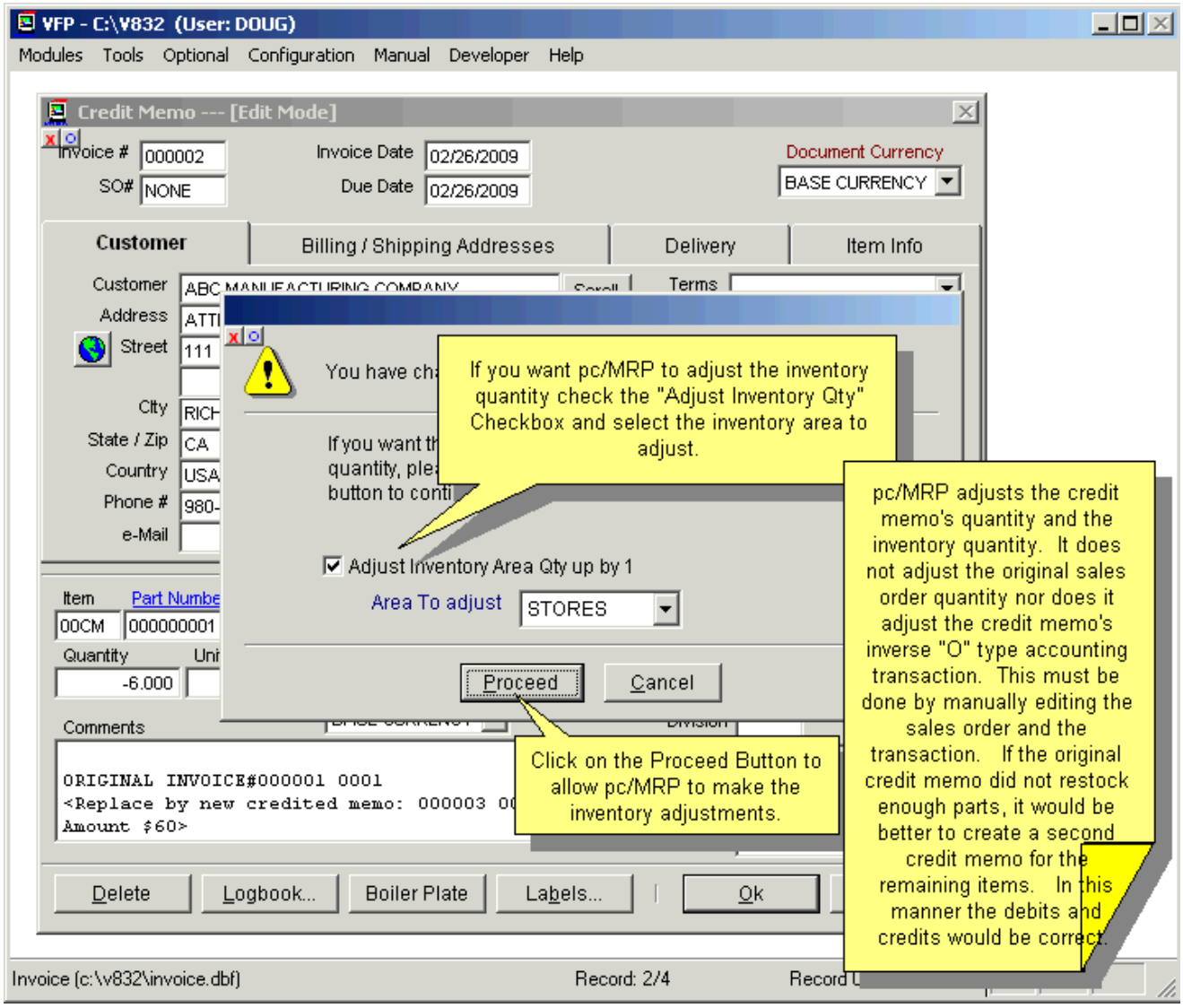
### 14.10.7 Edit a Credit Memo

To edit a credit memo, select Modules, Accounting, Credit Memos, and Edit.

In the example shown below we have changed the quantity from -5 to -6.

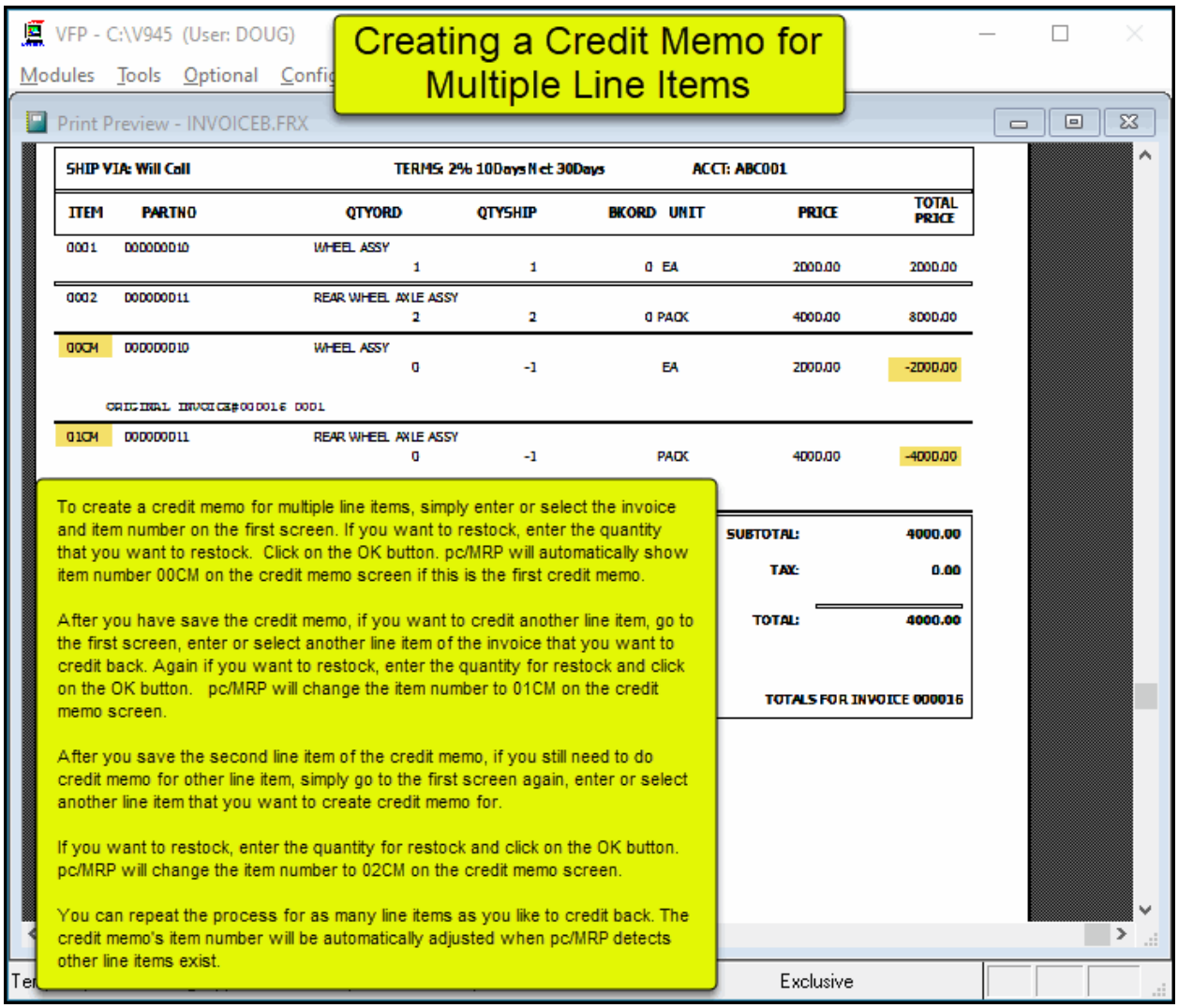


If you want pc/MRP to adjust the inventory quantity check the “Adjust Inventory Qty” Checkbox and select the inventory area to adjust.




pc/MRP adjusts the credit memo’s quantity and the inventory quantity. It does not adjust the original sales order quantity nor does it adjust the credit memo's inverse "O" type accounting transaction. This must be done by manually editing the sales order and the transaction. If the original credit memo did not restock enough parts, it would be better to create a second credit memo for the remaining items. In this manner the debits and credits would be correct.

## 14.10.8 Creating a Credit Memo for Multiple Line Items

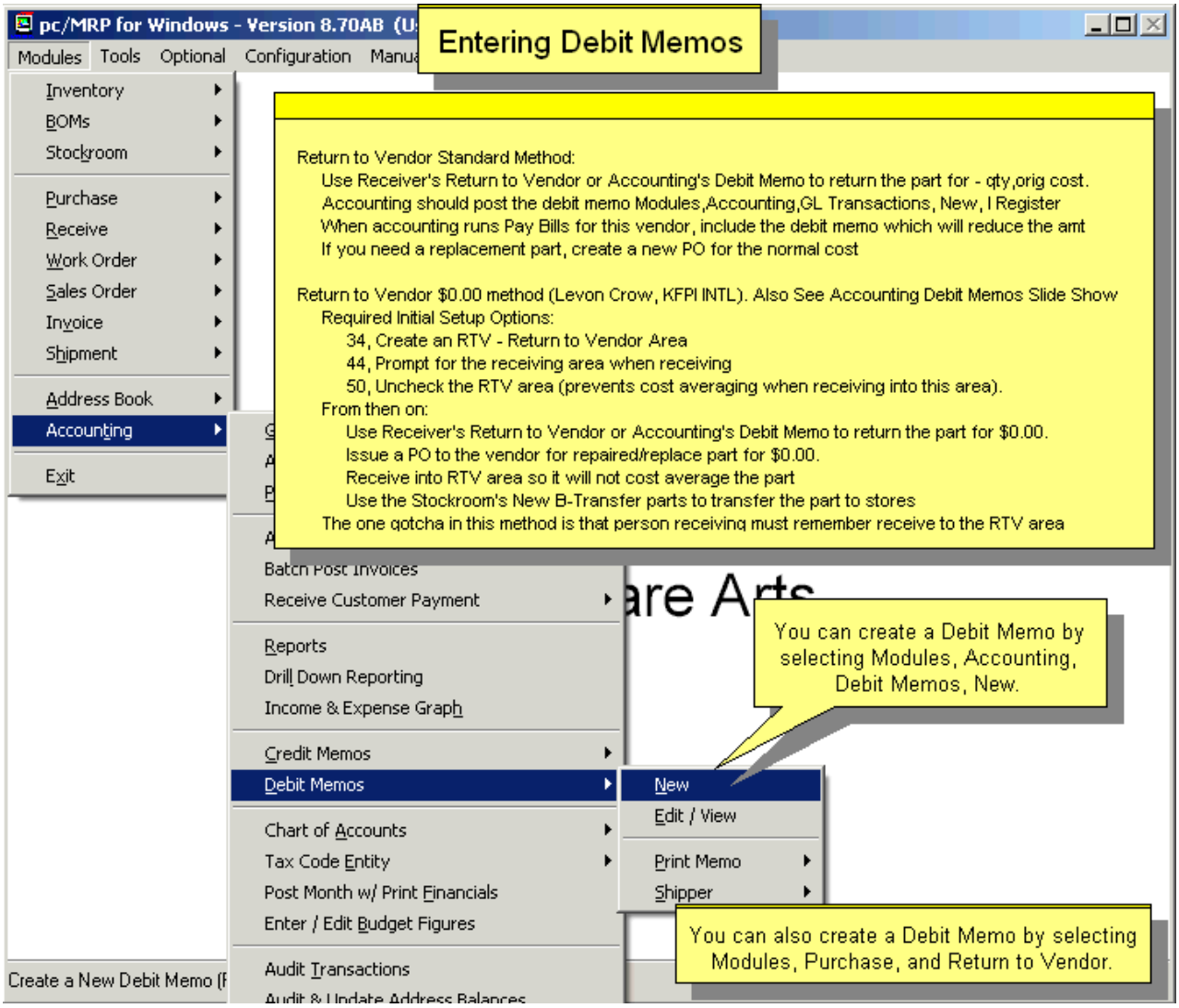


# 14.11 Debit Memos

### 14.11 New (Enter A Debit Memo) Overview

Slideshow at: http://www.pcmrp.com/mrp101/debitmemostart.htm

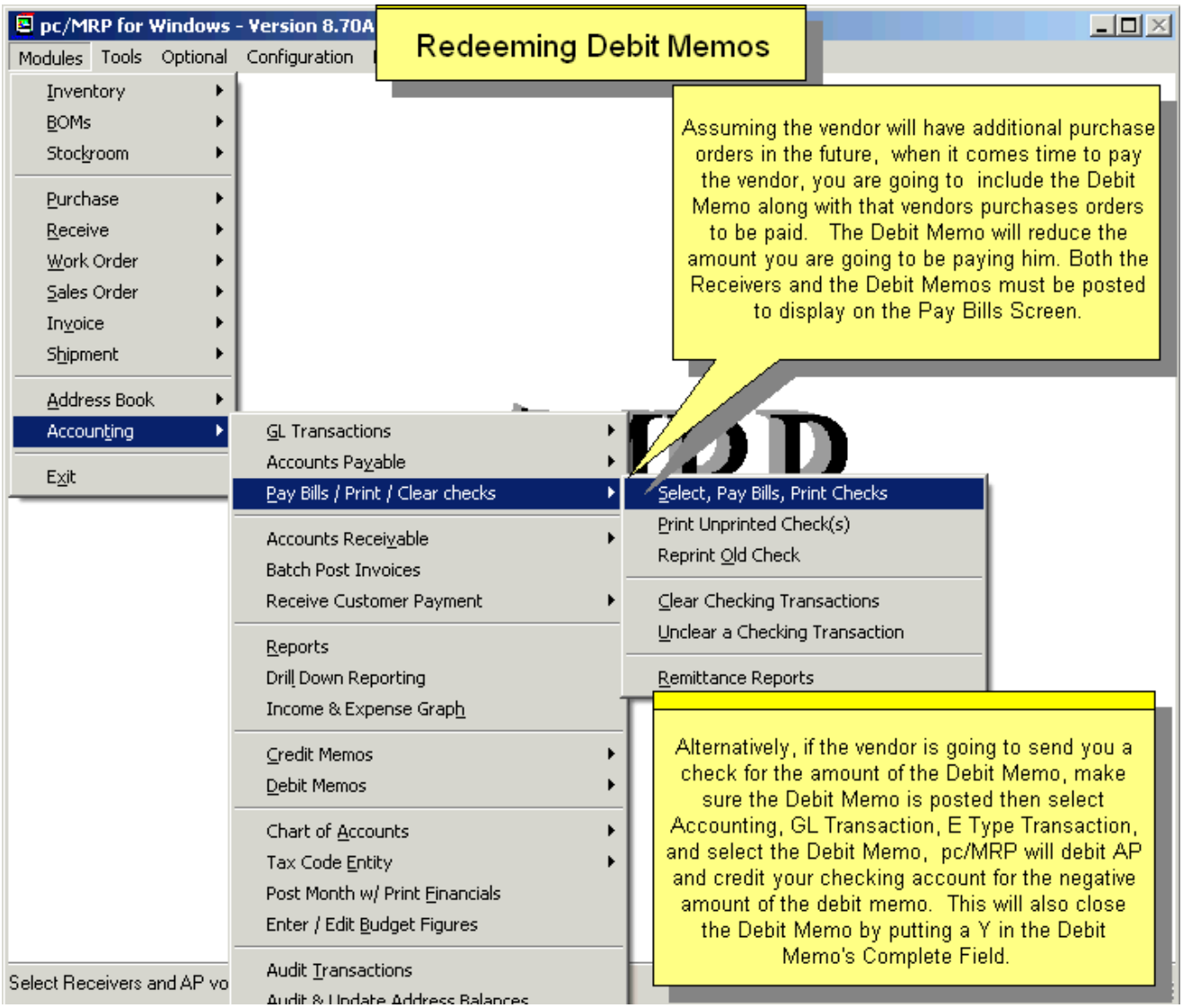
A debit memo is issued to a vendor to cover returned goods, pricing errors, freight charges, etc. It is basically a negative receiver (a receiver with a negative quantity, not negative cost).




Selecting “Accounting, Debit Memos, New” allows you to enter a debit memo. pc/MRP will prompt you to select the area which received the parts. Select the inventory area the parts are being issued from. Next, pc/MRP will ask, "Should this Debit Memo reference a specific Purchase Order?". Select "Yes" if you can tie it to a specific PO. Enter the quantity you are returning as a negative quantity.

By referring the debit memo to a specific PO, the quantity rejected field in that PO is automatically increased. Select "No", if the debit memo is not from a specific PO. If the part has a part number, enter the part number and the quantity returned as a positive quantity; this will be converted to a negative quantity in the debit memo receiver screen. If the part has no part number, leave the part number as "NA" and quantity as a -1 and the dollar amount you wish to be credited as a positive amount. In either case, if **Freight** is returned, enter a negative value.

If you need replacement parts for the ones you just returned, enter a separate PO for those. You can also add it as a new line item on the original PO.
When you pay bills, you select the debit memos along with the normal receivers. pc/MRP will print out the check(s) for the difference.




**14.11.1 The written method to process debit memos follows:**

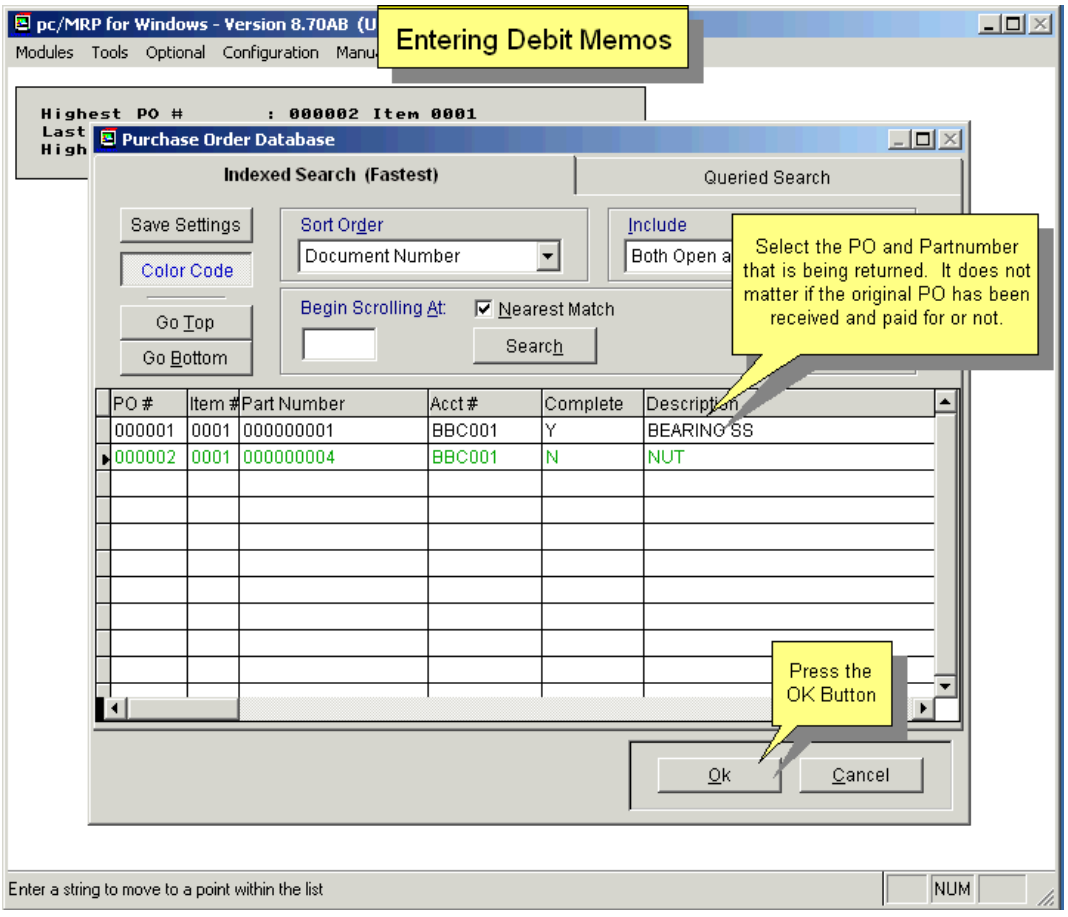
- Enter POs as you normally would
- Enter Receivers as you normally would
- Enter I type transaction for receivers as you normally would
    - Debits Inventory or purchases for the full amount
    - Credits AP for the full amount
- Enter E or Pay Bills (multiple E) type transactions as you normally would
    - Credits Checking for the full amount
    - Debits AP for the full amount
- When you return parts, enter a Debit Memo (negative quantity receiver) by clicking on Purchase, Return to Vendor or Accounting, Debit Memo, New. Accept the default receiver number pc/MRP assigns to the debit memo (do not attach the debit memo to a receiver). If possible, select a PO line item the part(s) originally came in on (automatically inserts vendor and part number into debit memo and quantity

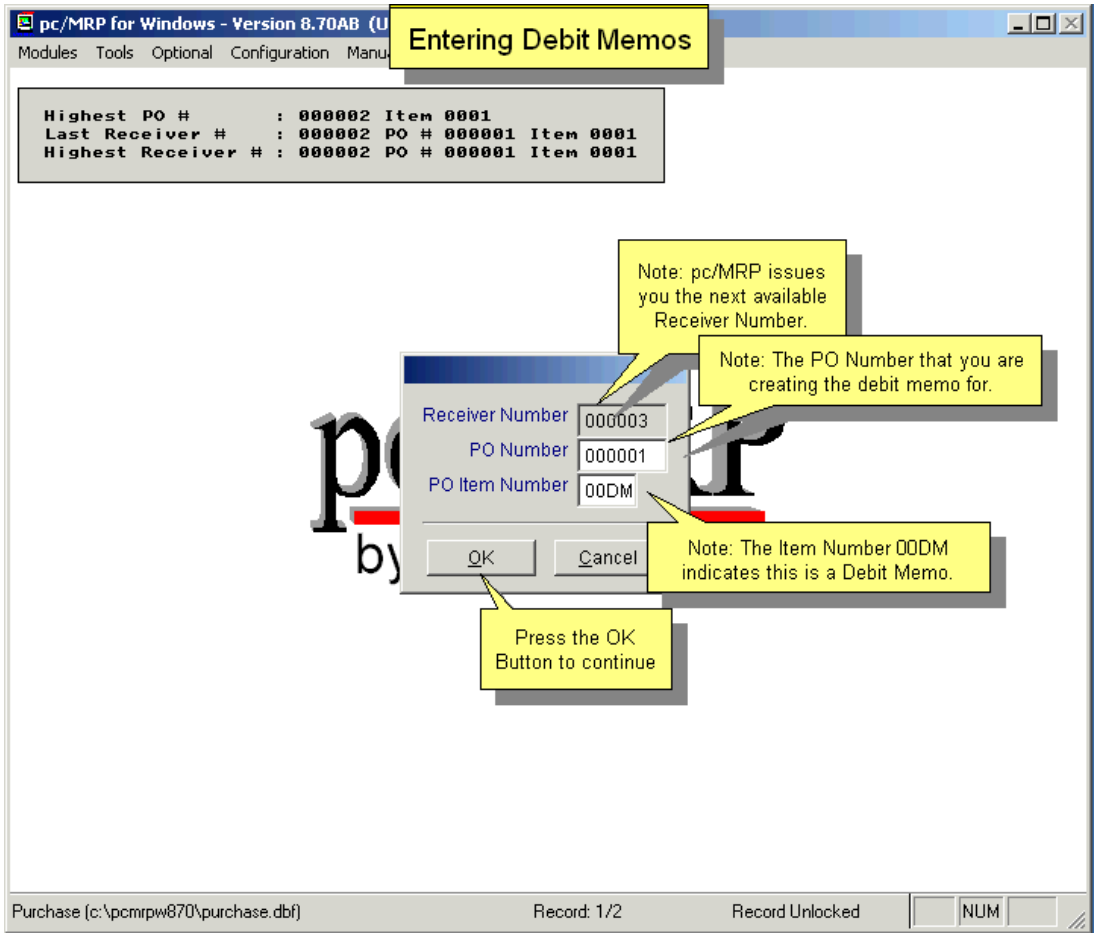
rejected into the PO). Enter the quantity you are returning as a negative number (if you are returning 5, enter -5). Leave the price as a positive amount.

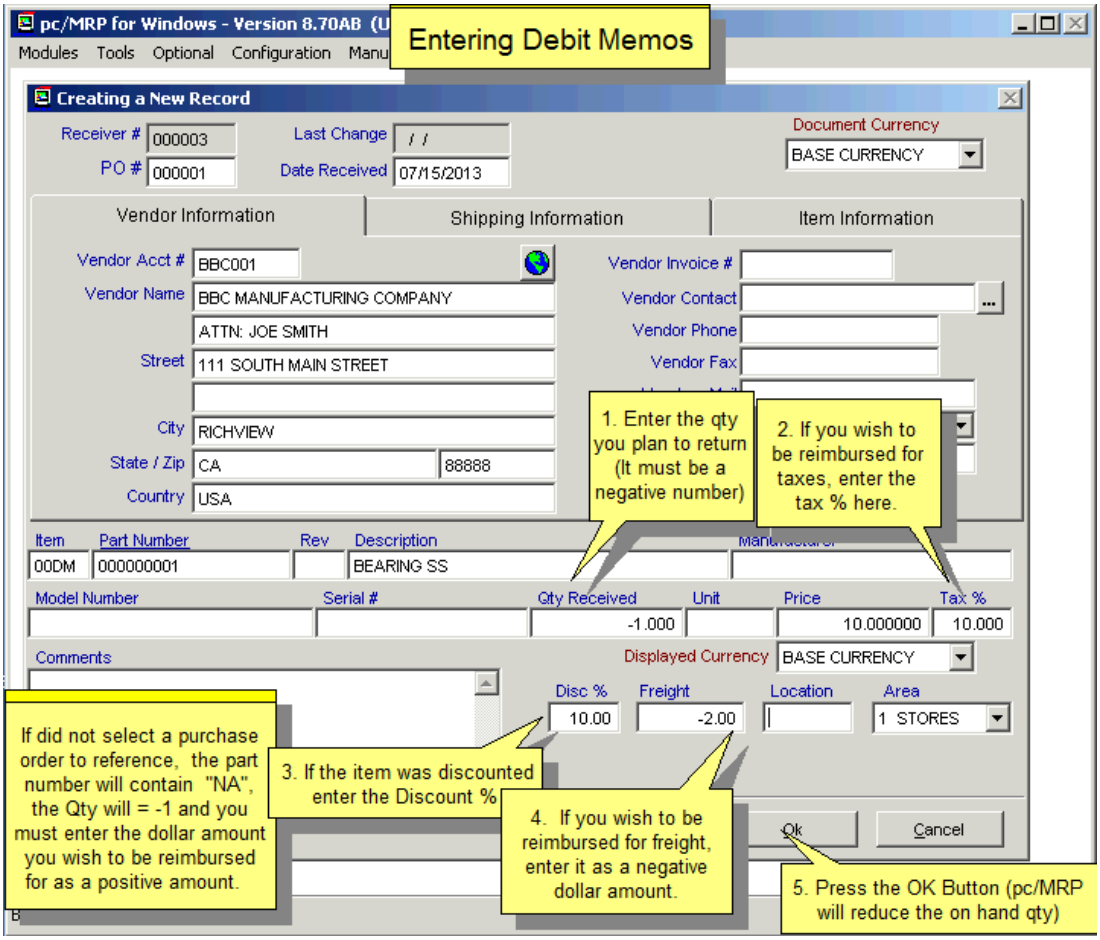
- Enter an I type transaction against the Debit Memo.
    - Debits Inventory or purchases for a negative amount
    - Credits AP for a negative amount
- The next time you use Pay Bills (multiple E) type transactions and there are unpaid receiver(s) for this vendor whose total amount is greater than the debit memo, select the receiver(s) and the debit memo(s).
    - Credits Checking for the full amt of the receiver(s)
    - Debits AP for the full amt of the receiver(s)
    - Credits Checking for the - amt of the debit memo(s)
    - Debits AP for the - amt of the debit memo(s)
    - pc/MRP will print a check for the difference.
- If the total amount due for the receivers exceeds the total amount due for the debit memos for a vendor, pc/MRP will automatically close the debit memos and receivers selected for that vendor as follows:
    - It will put a Y in each line item and debit memo's complete field.
    - Each line item's amount paid field will equal the amount due.
    - Each debit memo's amount paid field will equal the amount due (negative values).
- pc/MRP will distribute only part of the debit memo, if the total debit memo amount exceeds the total receiver amount for that vendor and no check will be printed out.

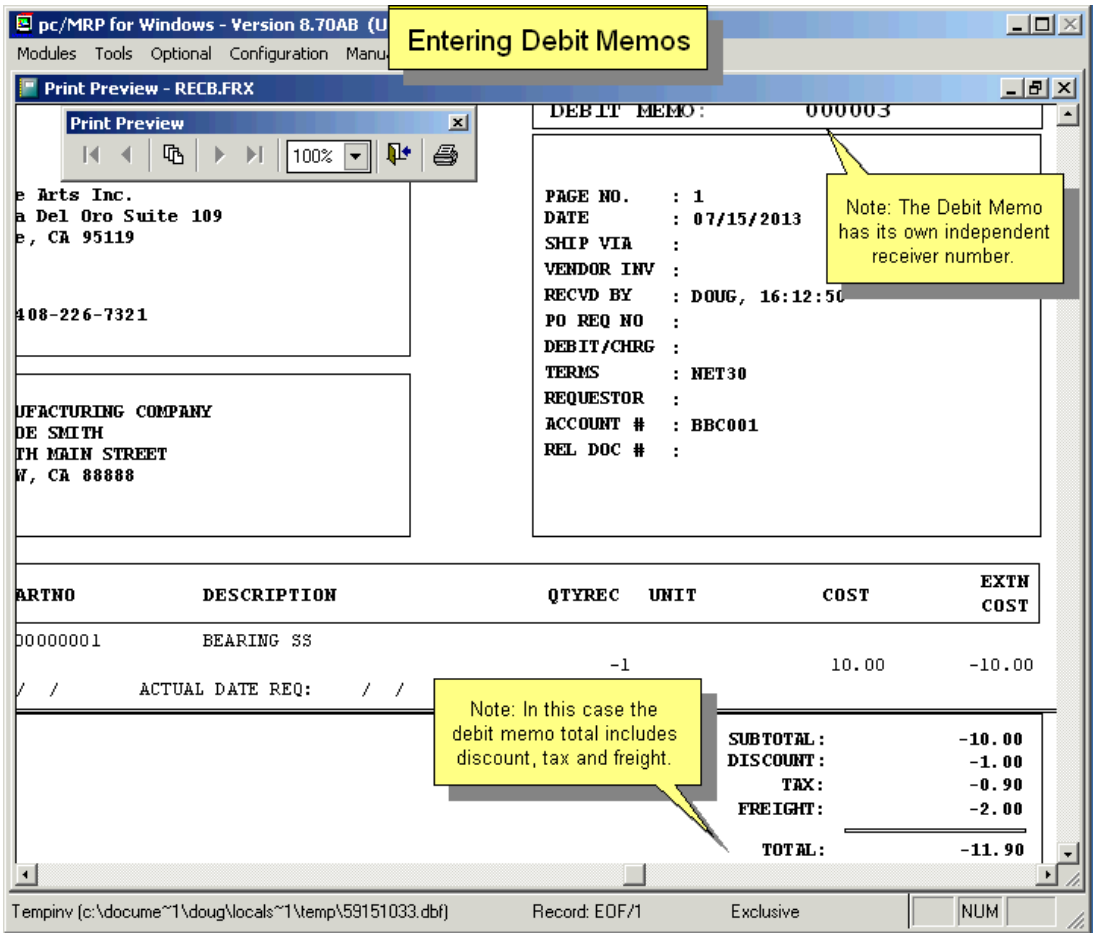
As you can see, the above method works well if there are unpaid receivers that you can take a credit (actually debit) against. If there are no open receivers, create an E-type accounting transaction for the Debit Memo.

**14.11.2 The illustrated method to process debit memos follows:**



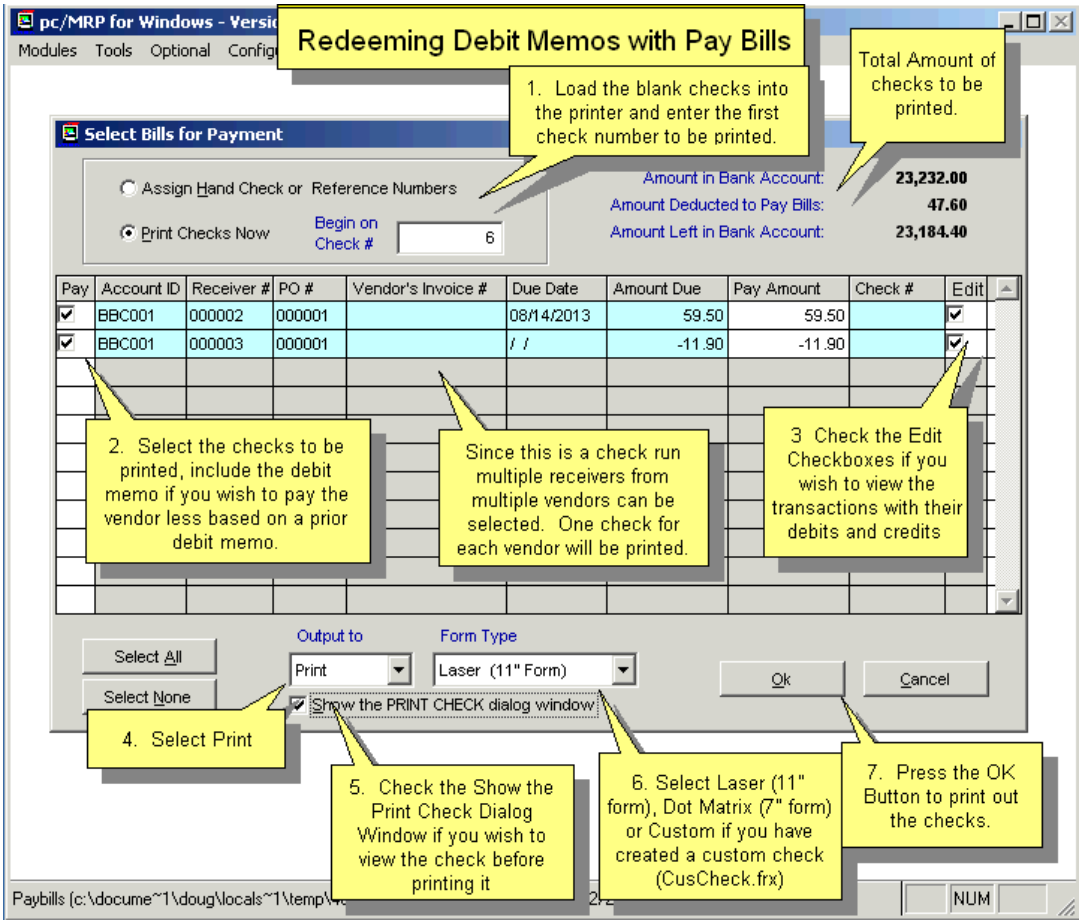

pc/MRP for Windows - Version 8.70AB (U
Entering Debit Memos
Modules Tools Optional Configuration Manu
Highest PO # : 000002 Item 0001
Last Receiver # : 000002 PO # 000001 Item 0001
Highest Receiver # : 000002 PO # 000001 Item 0001
Note: pc/MRP issues you the next available Receiver Number.
Note: The PO Number that you are creating the debit memo for.
Receiver Number 000003
PO Number 000001
PO Item Number 00DM
OK
Cancel
Note: The Item Number 00DM indicates this is a Debit Memo.
Press the OK Button to continue
Purchase (c:\pcmrpw870\purchase.dbf)
Record: 1/2
Record Unlocked
NUM

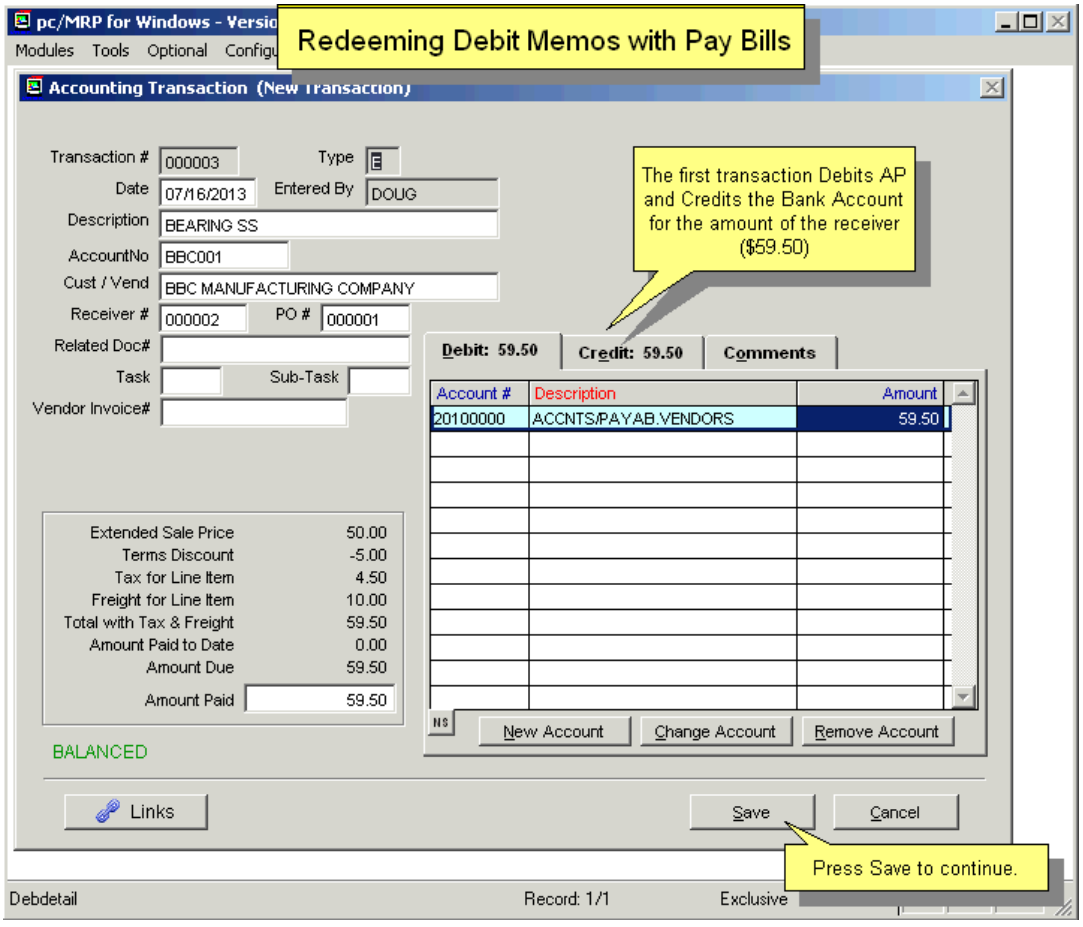

pc/MRP for Windows - Version 8.70AB (U
Entering Debit Memos
Modules Tools Optional Configuration Manu
Creating a New Record
Receiver # 000003
PO # 000001
Last Change / /
Date Received 07/15/2013
Document Currency
BASE CURRENCY
Vendor Information
Shipping Information
Item Information
Vendor Acct # BBC001
Vendor Name BBC MANUFACTURING COMPANY
ATTN: JOE SMITH
Street 111 SOUTH MAIN STREET
City RICHVIEW
State / Zip CA 88888
Country USA
Vendor Invoice #
Vendor Contact
Vendor Phone
Vendor Fax
1. Enter the qty you plan to return (It must be a negative number)
2. If you wish to be reimbursed for taxes, enter the tax % here.
Item Part Number Rev Description
00DM 000000001 BEARING SS
Model Number Serial # Qty Received Unit Price Tax %
-1.000 10.000000 10.000
Comments
Displayed Currency BASE CURRENCY
Disc % Freight Location Area
10.00 -2.00 1 STORES
If did not select a purchase order to reference, the part number will contain "NA", the Qty will = -1 and you must enter the dollar amount you wish to be reimbursed for as a positive amount.
3. If the item was discounted enter the Discount %
4. If you wish to be reimbursed for freight, enter it as a negative dollar amount.
Ok
Cancel
5. Press the OK Button (pc/MRP will reduce the on hand qty)

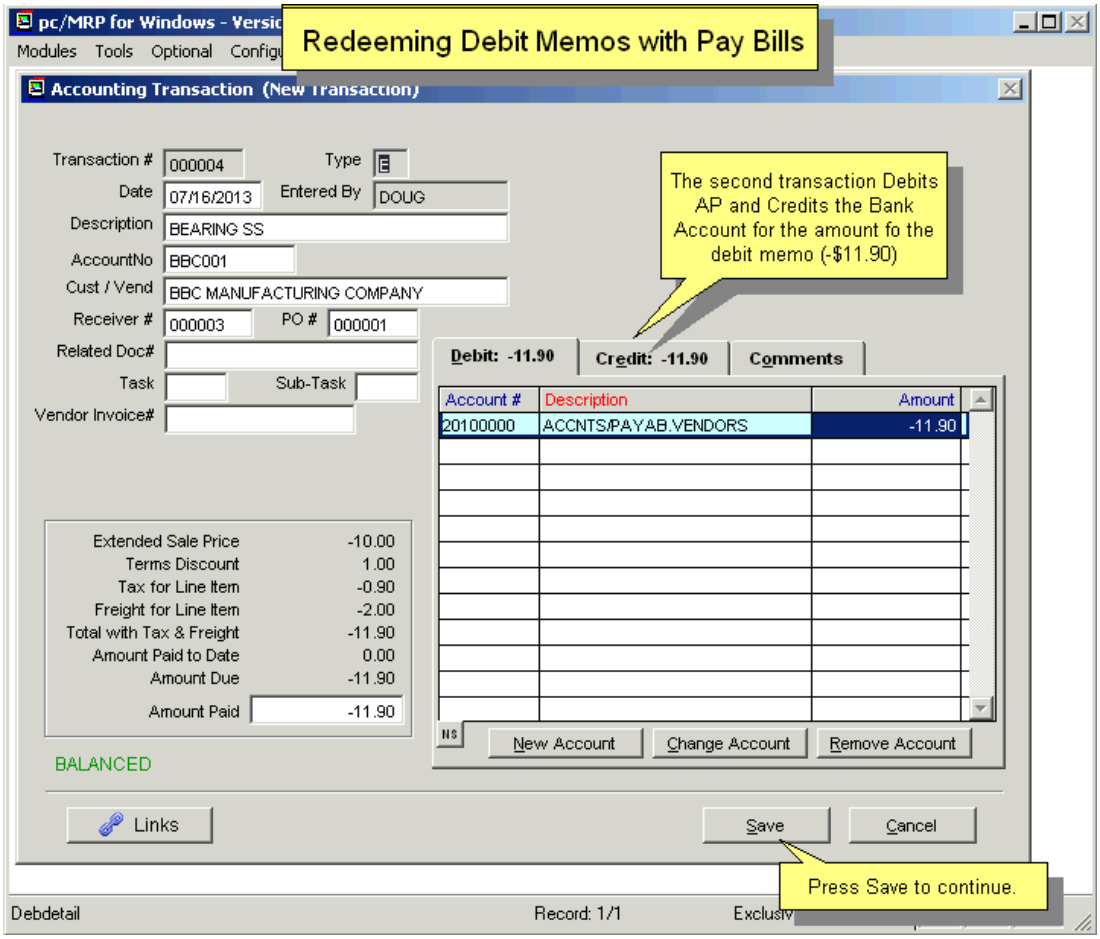


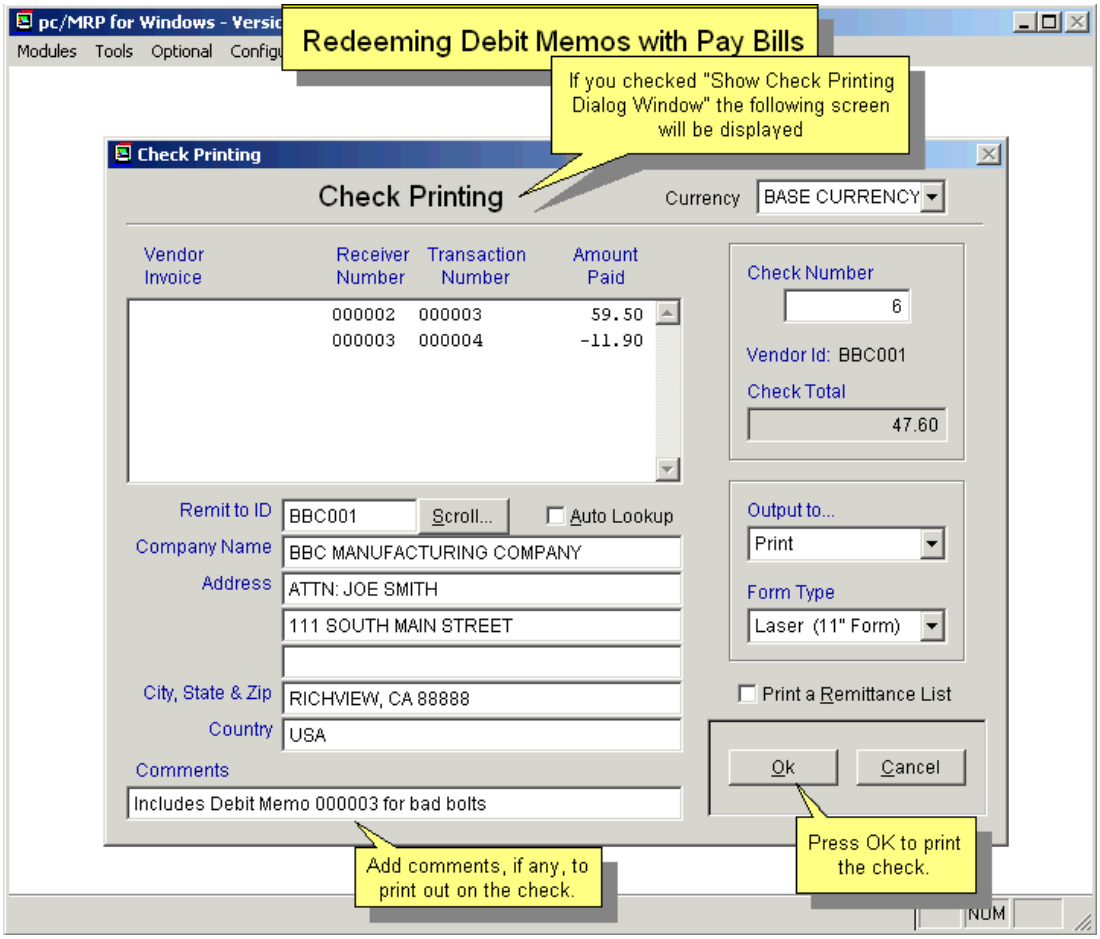

To post the debit memo transaction, select Modules, Accounting, GL Transactions and New Transaction. Select "I", Register accounts payable invoice or debit memo.

When it comes to pay your vendors, select Modules, Accounting, and Pay Bills (E type transactions). Receivers and Debit Memos must be posted to be displayed in the Pay Bills Screen.


Redeeming Debit Memos with Pay Bills
1. Load the blank checks into the printer and enter the first check number to be printed.
Total Amount of checks to be printed.
Select Bills for Payment
Assign Hand Check or Reference Numbers
Print Checks Now
Begin on Check # 6
Amount in Bank Account: 23,232.00
Amount Deducted to Pay Bills: 47.60
Amount Left in Bank Account: 23,184.40
Pay | Account ID | Receiver # | PO # | Vendor's Invoice # | Due Date | Amount Due | Pay Amount | Check # | Edit
BBC001 | 000002 | 000001 | 08/14/2013 | 59.50 | 59.50
BBC001 | 000003 | 000001 | / / | -11.90 | -11.90
2. Select the checks to be printed, include the debit memo if you wish to pay the vendor less based on a prior debit memo.
Since this is a check run multiple receivers from multiple vendors can be selected. One check for each vendor will be printed.
3 Check the Edit Checkboxes if you wish to view the transactions with their debits and credits
Select All
Select None
Output to
Print
Form Type
Laser (11" Form)
Show the PRINT CHECK dialog window
Ok
Cancel
4. Select Print
5. Check the Show the Print Check Dialog Window if you wish to view the check before printing it
6. Select Laser (11" form), Dot Matrix (7" form) or Custom if you have created a custom check (CusCheck.frx)
7. Press the OK Button to print out the checks.
NUM


Redeeming Debit Memos with Pay Bills
Accounting Transaction (New Transaction)
Transaction # 000003
Type
Date 07/16/2013
Entered By DOUG
Description BEARING SS
AccountNo BBC001
Cust / Vend BBC MANUFACTURING COMPANY
Receiver # 000002
PO # 000001
Related Doc#
Task
Sub-Task
Vendor Invoice#
The first transaction Debits AP and Credits the Bank Account for the amount of the receiver ($59.50)
Debit: 59.50
Credit: 59.50
Comments
Account # | Description | Amount
20100000 | ACCNTS/PAYAB.VENDORS | 59.50
New Account
Change Account
Remove Account
Extended Sale Price 50.00
Terms Discount -5.00
Tax for Line Item 4.50
Freight for Line Item 10.00
Total with Tax & Freight 59.50
Amount Paid to Date 0.00
Amount Due 59.50
Amount Paid 59.50
BALANCED
Links
Save
Cancel
Press Save to continue.
Debdetail
Record: 1/1
Exclusive


Redeeming Debit Memos with Pay Bills
pc/MRP for Windows - Versic
Modules Tools Optional Config
Accounting Transaction (New Transaction)
Transaction # 000004
Type
Date 07/16/2013
Entered By DOUG
Description BEARING SS
AccountNo BBC001
Cust / Vend BBC MANUFACTURING COMPANY
Receiver # 000003
PO # 000001
Related Doc#
Task
Sub-Task
Vendor Invoice#
The second transaction Debits AP and Credits the Bank Account for the amount fo the debit memo (-$11.90)
Debit: -11.90
Credit: -11.90
Comments
Account # Description Amount
20100000 ACCNTS/PAYAB.VENDORS -11.90
Extended Sale Price -10.00
Terms Discount 1.00
Tax for Line Item -0.90
Freight for Line Item -2.00
Total with Tax & Freight -11.90
Amount Paid to Date 0.00
Amount Due -11.90
Amount Paid -11.90
BALANCED
New Account
Change Account
Remove Account
Links
Save
Cancel
Press Save to continue.
Debdetail
Record: 1/1


Redeeming Debit Memos with Pay Bills
pc/MRP for Windows - Versic
Modules Tools Optional Config
If you checked "Show Check Printing Dialog Window" the following screen will be displayed
Check Printing
Check Printing
Currency BASE CURRENCY
Vendor Invoice
Receiver Number
Transaction Number
Amount Paid
000002 000003 59.50
000003 000004 -11.90
Check Number 6
Vendor Id: BBC001
Check Total 47.60
Remit to ID BBC001
Scroll...
Auto Lookup
Company Name BBC MANUFACTURING COMPANY
Address ATTN: JOE SMITH
111 SOUTH MAIN STREET
City, State & Zip RICHVIEW, CA 88888
Country USA
Output to... Print
Form Type Laser (11" Form)
Print a Remittance List
Comments
Includes Debit Memo 000003 for bad bolts
Ok
Cancel
Add comments, if any, to print out on the check.
Press OK to print the check.
NUM

# 14.12 Sales Deposits and Overpayments

### 14.12.1 Recommended way to process Sales Deposits if pc/MRP's accounting module is used (Auto-accounting on or off)

Create the Sales Order as an Order Entry Sales Order:

1. Create a sales order line item 0001 for the product, e.g. Bicycle, quantity 10 for $50,000.00 total.
2. Create a sales order line item 0002 for part "NA" for the deposit, say $10,000.00.
3. Create a sales order line item 0003 for part "NA" for a negative deposit (Qty 1, Saleprice -$10,000.00).
4. If you are exporting to QB Create a Sales Deposit, Non Inventory Part Number with a QB Sales Deposit Liability Account inserted into the QB Income Account and a QB Expense Account (as a place holder) in the QB Asset/Expense Field in the part's pc/MRP QB Tab.

Create an invoice for the deposit:

1. Create an invoice for line item 002 for $10,000.

Post the $10,000.00 deposit invoice (skip if auto-accounting is on):

1. Enter an 'O' type accounting transaction for line item 0002
2. Credit Sales Deposit (liability credit account), for $10,000, instead of Business Income.
3. Debit Accounts Receivable account, for $10,000.00.
4. If you are using QuickBooks, ignore 1-3 and export the deposit invoice to QuickBooks.

When you receive the deposit for line item 0002:

1. Enter a 'R' type accounting transaction for line item 0002.
2. Credit Accounts Receivable, for $10,000.00.
3. Debit Checking account, for $10,000.00.
4. Print out the invoice; it will show the amount paid as $10,000.00.
5. If you are using QuickBooks ignore 1-4 and enter the payment into QuickBooks

Build the product in line item 0001:

1. Enter an 'I' type stockroom transactions to issue parts to WIP.
2. Enter an 'R' type stockroom transaction to receive the finished product into stores.

Create a second invoice, this time for line items 0001 & 0003:

1. Create an invoice for line items 0001 and 0003 for a total of $40,000.

Post the $40,000.00 invoice (skip if auto-accounting is on):

1. Enter an 'O' accounting type transaction for line items 0001 & 0003.
2. Credit Business Income (Sales), for $50,000.00.
3. Debit Sales Deposit (Liability account), for $10,000.
4. Debit Accounts Receivable, for $40,000.00.
5. If you are using QuickBooks ignore 1-4 and export the invoice to QuickBooks.

When you receive payment for line items 0001 & 0003:

1. Enter an 'R' type accounting transaction for line items 0001 & 0003.
2. Credit Accounts Receivable, for $40,000.00.
3. Debit Checking account, for $40,000.00.
4. If you are using QuickBooks enter the payment into QuickBooks.

### 14.12.2 If pc/MRP's accounting module is not used

If the sale is on account and carry:

1. Enter the sale as on account and carry
2. Note the deposit amount in the comment field
3. Edit the invoice, enter the deposit into amount paid field
4. Print out the invoice, it will now show the amount paid
5. When a payment arrives edit the invoice, add the amount to the amount paid
6. If the invoice is paid in full enter a Y into the complete field

If the sale is an order entry for delivery in future:

1. Enter the sale as order entry
2. Note the deposit amount in the comment field
3. Invoice the sales order when item is ready to ship
4. Edit the invoice, enter the deposit into amount paid field
5. Print out the invoice, it will now show the amount paid
6. When a payment arrives edit the invoice, add the amount to the amount paid
7. If the invoice is paid in full enter a Y into the complete field

### 14.12.3 Your customer insists on receiving an invoice immediately even though not all of the order can be shipped (usually to send a deposit amount)

1. Enter an “On Account and Carry” sales order so an invoice is automatically created. Send the invoice to the customer.
2. When you receive the deposit, enter an accounting ‘R’ (revenue) transaction against the invoice.
3. Re-print the invoice which now will show the amount paid.
4. Create a work order for each sales order line item that needs to be built.
5. Use the stockroom to issue and receive back the work orders. When generating an MRP, only check “Work Orders” and not “Sales Orders”.

### 14.12.4 Handling Overpayments

When you receive a customer’s check and they have overpaid, you will first discover they overpaid when you are entering the payment using pc/MRP's Receive customer payments or pc/MRP's R Type Accounting Transaction. In either case, exit and do not enter the payment.

Edit the original sales order and add a line item:
Part Number "NA"
Description "Overpayment"
Sale Type "Cash and Carry"
Qty "1"
Sale Price <amount of the overpayment>
Click on the Finish Button
Select Add to an old invoice
Press Continue

Now post the invoice again by entering an O type transaction (it will just post the overpayment amount).

Next, enter the payment for the full amount of the check using pc/MRP's Receive customer payments or pc/MRP's R Type Accounting Transaction.

Now you are free to create a credit memo for the customer selecting Modules, Accounting and Credit Memos. You can select to:

Create an Independent Credit Memo to be applied against a future open (unpaid) invoice.
or
Create an Independent Credit Memo and print a check to the customer.
or
Create a dependent credit memo and attach it to an existing (unpaid) invoice.

http://www.pcmrp.com/mrp101/creditmemooverview.htm

# 14.13 Purchase Deposits

### 14.13.1 When you make a Deposit on a Purchase and use pc/MRP for Accounting

In the Chart of Accounts Module, create a Purchase Deposit chart of account
Type = AC, Asset Current, Debit Account

In the Inventory Module, create a Purchase Deposit Part Number
Type = Non Inventory,
Asset / Expense Account = Purchase Deposit

From then on, whenever you need to include a deposit on a purchase order:

Purchasing:
1. Make a purchase order line item 0001 contains the part number, qty and unit cost.
2. Add a second line item for the Purchase Deposit PN, qty 1, and a negative dollar amount for the deposit.
3. Add a third line item for the Purchase Deposit PN, qty 1, and positive dollar amount for the deposit.

Accounting:
4. Receive the third line item (Modules, Receive, New, select 3rd line item).
5. Post the receiver (Modules, Accounting, GL, New, I).
6. Print a check (Accounting, GL, New, E) for the receiver containing the third line item.

Receiving:
7. Receive line items 1 and 2.

Accounting:
8. Add the vendor invoice number to the receiver.
9. Post the receiver (Modules, Accounting, GL, New, I).
10. Print a second check (Accounting, GL, New, E) for the amount of the goods minus the deposit.

(please turn)

**14.13.2 When you make a Deposit on a Purchase and you are using QuickBooks for Accounting**

In QuickBooks' Chart of Accounts Module, create a Purchase Deposit chart of account
Type = Other Current Asset (Could call it Purchase Deposit to distinguish it from Sales Deposit)

In pc/MRP's Inventory Module, create a Purchase Deposit Part Number
Type = Non Inventory,
QuickBooks Asset/Expense Account = Purchase Deposit

From then on, whenever you need to include a deposit on a purchase order:

1. Make a purchase order line item 0001 contains the part number, qty and unit cost.
2. Add a second line item for the Purchase Deposit PN, qty 1, and a negative dollar amount for the deposit.
3. Add a third line item for the Purchase Deposit PN, qty 1, and positive dollar amount for the deposit.

Accounting:
4. Receive the third line item (Modules, Receive, New, select 3rd line item) VendInv XXXXA.
5. Export the receiver(s) to QB (Optional, QuickBooks, Export Receivers).
6. Use QuickBooks to print the check for the deposit.

Receiving:
7. Receive line items 1 and 2.

Accounting:
8. Add the vendor invoice number to the receiver XXXXB.
9. Export the receiver(s) to QB (Optional, QuickBooks, Export Receivers).
10. Print a second check (Accounting, GL, New, E) for the amount of the goods minus the deposit.

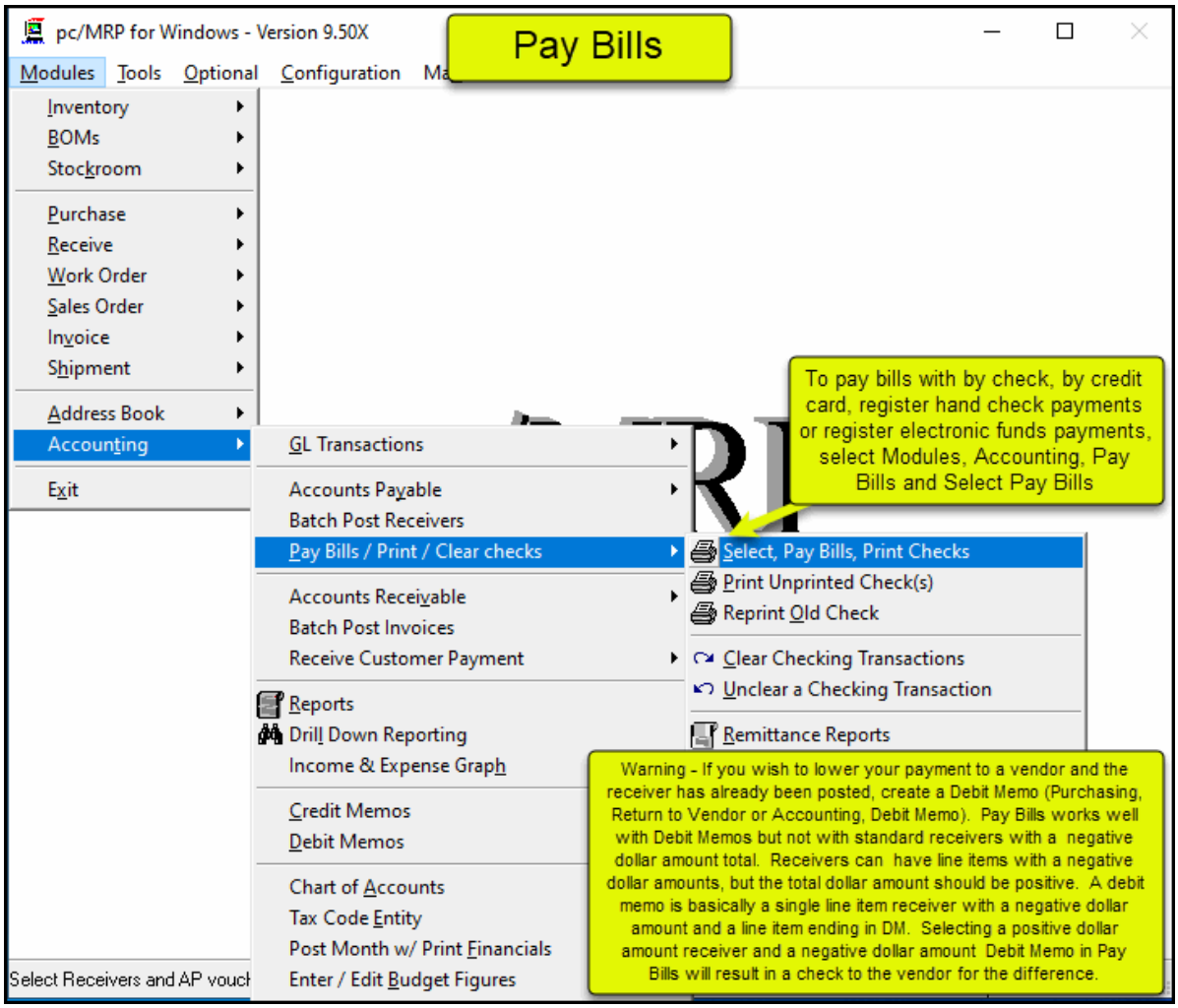
# 14.14 Pay Bills, Print and or Clear Checks,

**Overview**

This module allows users to print, reprint, clear and unclear checks, hand checks, electronic funds payments, make a credit card payment and print remittance reports. Slideshow is at: http://www.pcmrp.com/mrp101/paybillsmenu.htm

### 14.14.1 Pay Bills

**Step 1, Select Pay Bills, Print Checks from the menu**

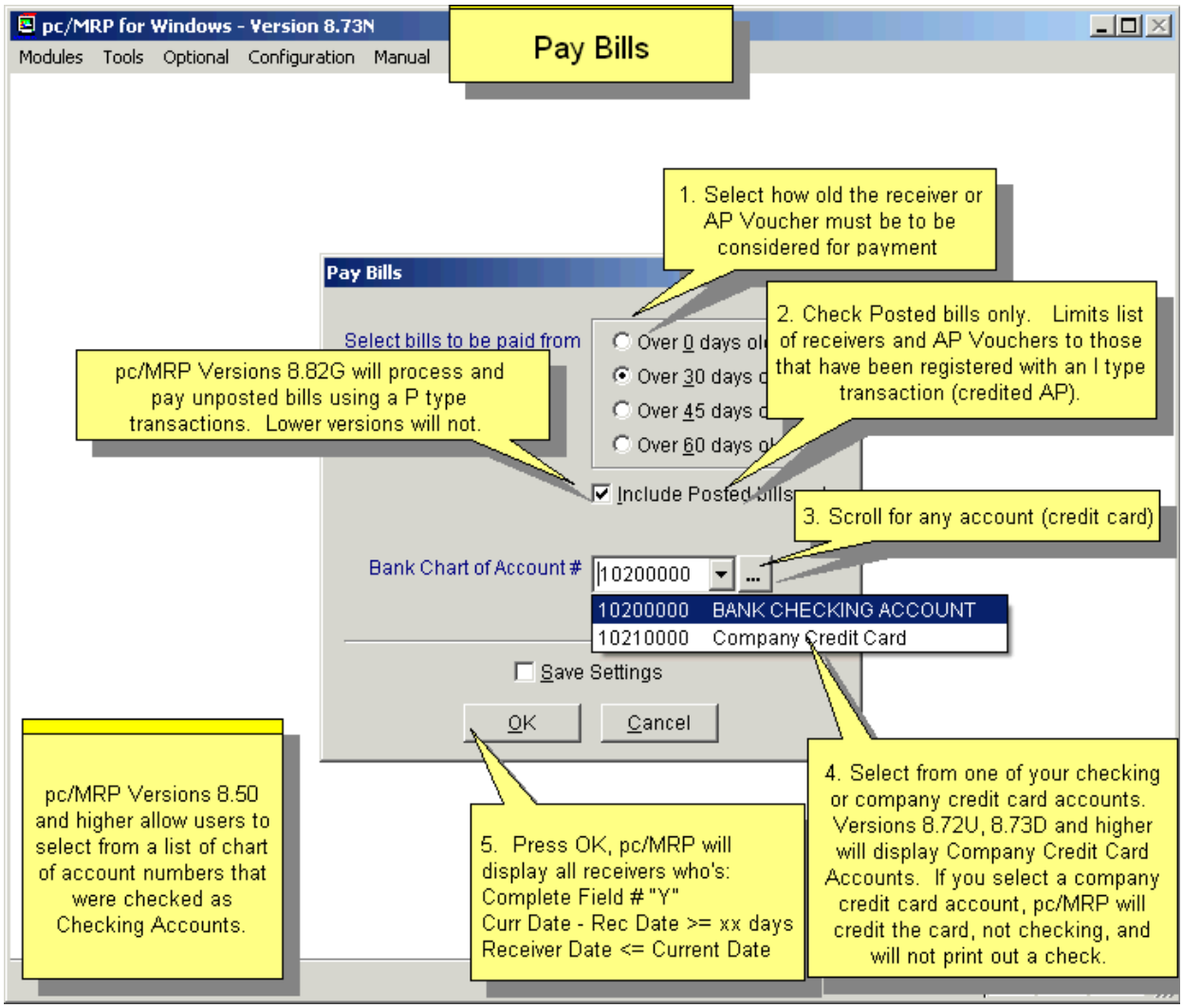



The Pay Bills option will allow you to select from a list of open (Complete field does not contain a Y) receivers and AP vouchers to be paid from a scrollable window. This option allows you print checks or register payments (debit AP, credit Checking) for hand checks and electronic funds payments.

To pay bills by check or credit card, register hand checks and electronic funds payments select Modules, Accounting, Pay Bills / Print/Clear Checks and Select Pay Bills Print Checks.

**Note:** If you need to lower your payment to a vendor and the receiver has already been posted, issue a Debit Memo. Otherwise you can still enter receivers with some line items having a negative amount, but the total of the receiver cannot be negative for Pay Bills to work well.

**Step 2, Select Age of Receivers and AP Vouchers and Bank Account Chart of Accounts**




The accounts payable default screen shown above will allow you to set the minimum age of open (Complete Field does not contain a Y) receivers and accounts payable vouchers to select from.

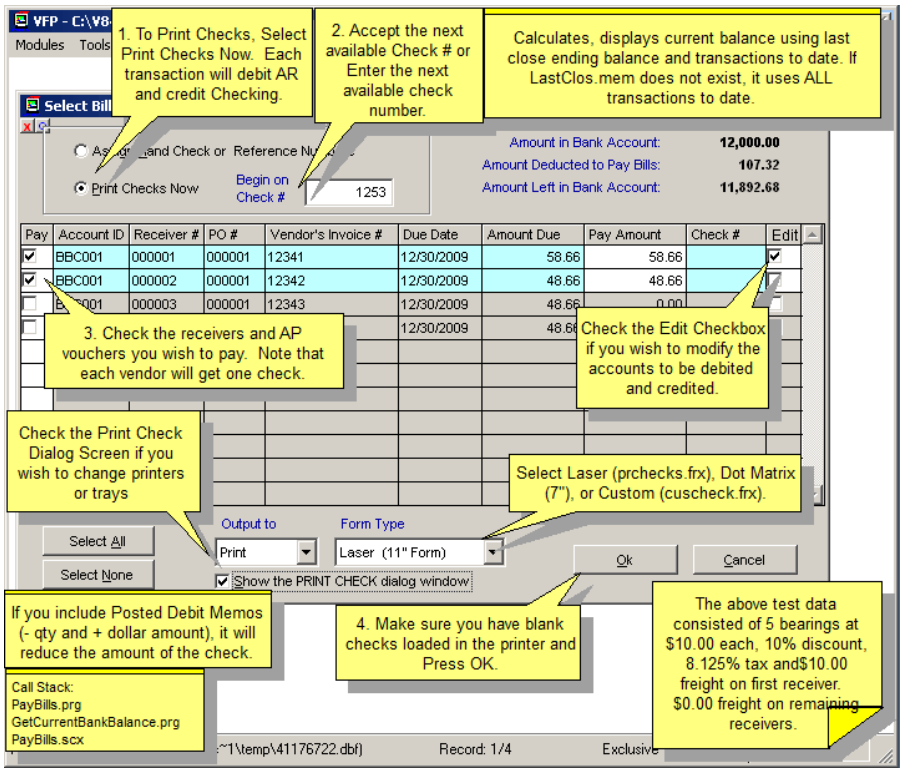
Checking Include Posted Only will allow you make sure only receivers and AP vouchers that have been posted (with an I type transaction debiting inventory or expense and crediting AP) will be considered for payment.

Select the Bank Chart of Account # and press the OK Button. If the account you are looking for is not available from the drop-down menu, edit that chart of account and make sure the “This is a checking account” box is checked.

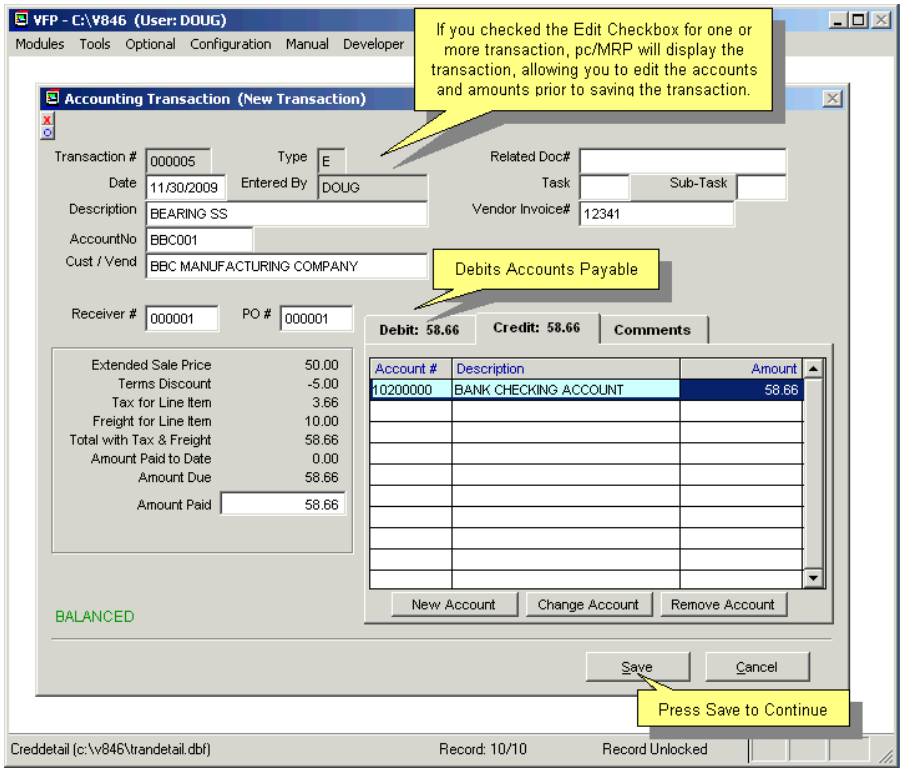
pc/MRP looks for a file named lastclos.mem, which contains the month and year that pc/MRP was last closed. If pc/MRP cannot find this file or if the last close did not occur in the current year, pc/MRP will prompt you to enter the balance in the checking account manually. If pc/MRP does find a good current close, it will use the ending balance of last month it was closed and calculate the current balance of the checking account using the checking transactions from the current month found in the accounting transaction file.

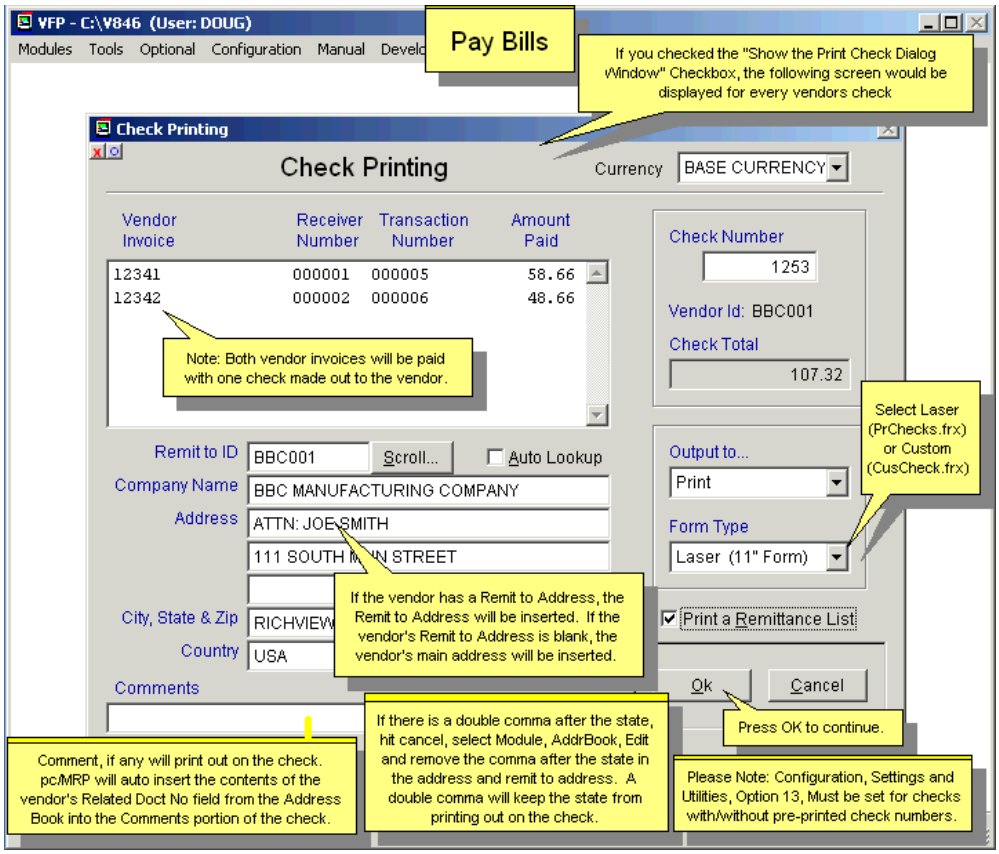
**Step 3, Select Receivers and AP Vouchers to be paid**

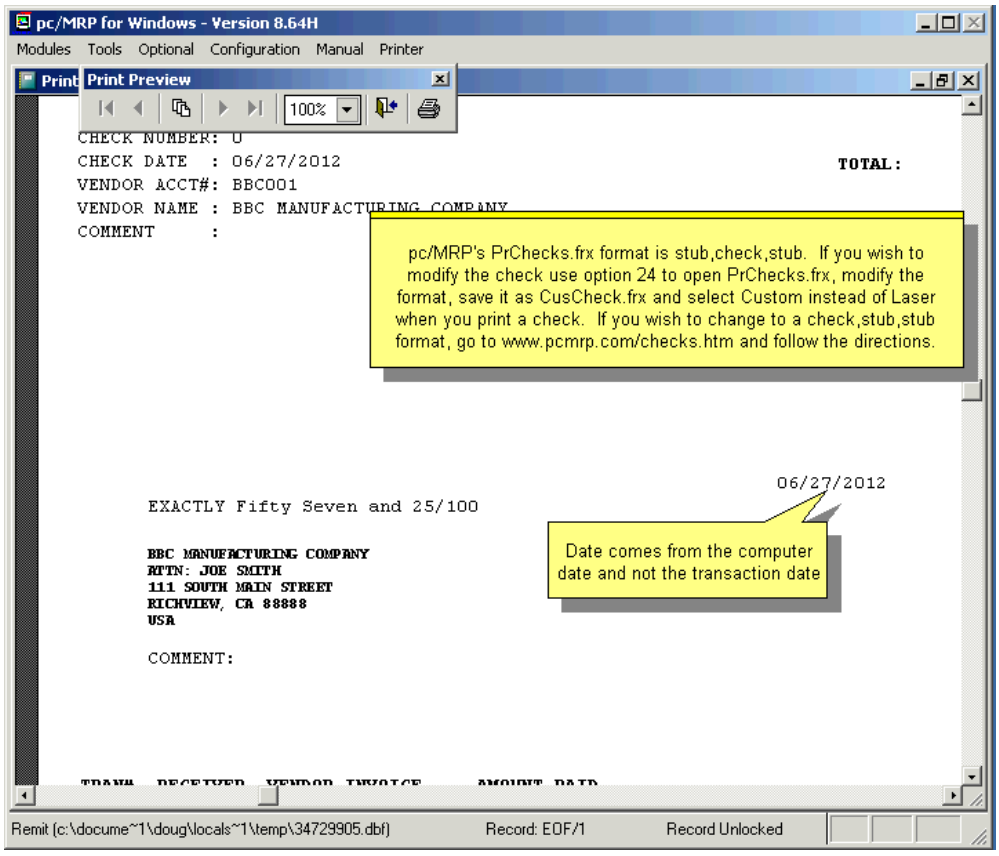
To process (debit AP and credit Checking) receivers, AP vouchers and print checks, select Print Checks Now as shown below. Check date will be the current system date.



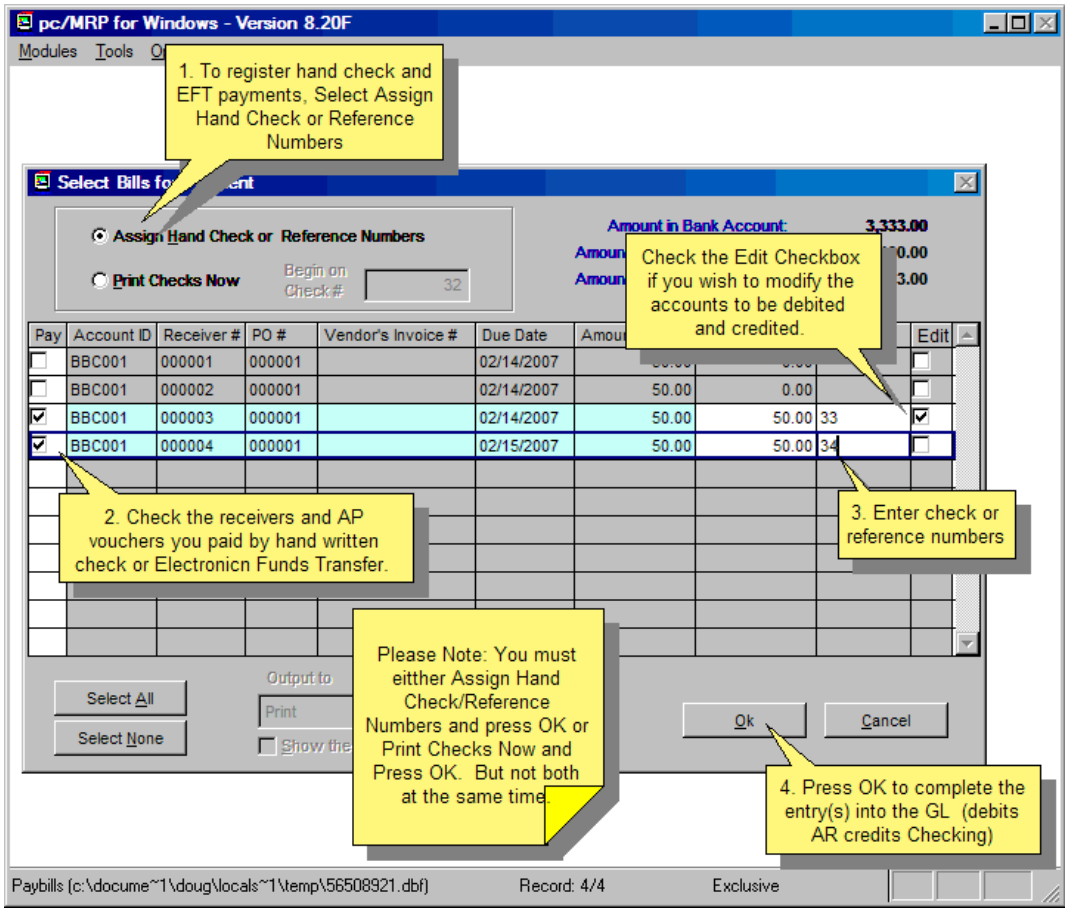

**Note:** You must check the 'Show the PRINT CHECK dialog window' if you need to change the printed check currency from the base currency!




VFP - C:\V846 (User: DOUG)
Modules Tools Optional Configuration Manual
Pay Bills
If you checked the "Show the Print Check Dialog Window" Checkbox, the following screen would be displayed for every vendors check
Check Printing
Check Printing
Currency BASE CURRENCY
Vendor Invoice
Receiver Number
Transaction Number
Amount Paid
12341 000001 000005 58.66
12342 000002 000006 48.66
Note: Both vendor invoices will be paid with one check made out to the vendor.
Check Number
1253
Vendor Id: BBC001
Check Total
107.32
Select Laser (PrChecks.frx) or Custom (CusCheck.frx)
Remit to ID BBC001 Scroll... Auto Lookup
Company Name BBC MANUFACTURING COMPANY
Address ATTN: JOE SMITH
111 SOUTH MAIN STREET
City, State & Zip RICHVIEW
Country USA
Output to... Print
Form Type Laser (11" Form)
If the vendor has a Remit to Address, the Remit to Address will be inserted. If the vendor's Remit to Address is blank, the vendor's main address will be inserted.
Print a Remittance List
Comments
Ok
Cancel
Press OK to continue.
Comment, if any will print out on the check. pc/MRP will auto insert the contents of the vendor's Related Doct No field from the Address Book into the Comments portion of the check.
If there is a double comma after the state, hit cancel, select Module, AddrBook, Edit and remove the comma after the state in the address and remit to address. A double comma will keep the state from printing out on the check.
Please Note: Configuration, Settings and Utilities, Option 13, Must be set for checks with/without pre-printed check numbers.


pc/MRP for Windows - Version 8.64H
Modules Tools Optional Configuration Manual Printer
Print Preview
100%
CHECK NUMBER: 0
CHECK DATE : 06/27/2012
TOTAL:
VENDOR ACCT#: BBC001
VENDOR NAME : BBC MANUFACTURING COMPANY
COMMENT :
pc/MRP's PrChecks.frx format is stub,check,stub. If you wish to modify the check use option 24 to open PrChecks.frx, modify the format, save it as CusCheck.frx and select Custom instead of Laser when you print a check. If you wish to change to a check,stub,stub format, go to www.pcmrp.com/checks.htm and follow the directions.
06/27/2012
EXACTLY Fifty Seven and 25/100
BBC MANUFACTURING COMPANY
ATTN: JOE SMITH
111 SOUTH MAIN STREET
RICHVIEW, CA 88888
USA
COMMENT:
Date comes from the computer date and not the transaction date
Remit (c:\docume~1\doug\locals~1\temp\34729905.dbf)
Record: EOF/1
Record Unlocked

To process (debit AP and credit Checking) receivers, AP vouchers that were paid by hand check or electronic funds payment, select  Assign Hand Checks or Reference Numbers.




Please note that you can either print and process checks, or process hand checks and electronic funds.  You can not do both at the same time.

If you selected Print Checks Now, select the receivers and AP vouchers you wish to print checks for.  Load the checks into your printer and press the OK Button.

If you selected Assign Hand Checks or Reference Numbers, select the all the receivers and AP vouchers you wish to process.  Enter the hand check number or the electronic fund payment reference number for each receiver or AP voucher selected.  Press the OK Button (No checks will be printed).

In both cases, an ‘E’ type transaction (debit AP, credit Checking) will entered for each receiver or AP voucher you selected.

The “Show Print Check Dialog” checkbox will allow you to stop at each check prior to printing the check.

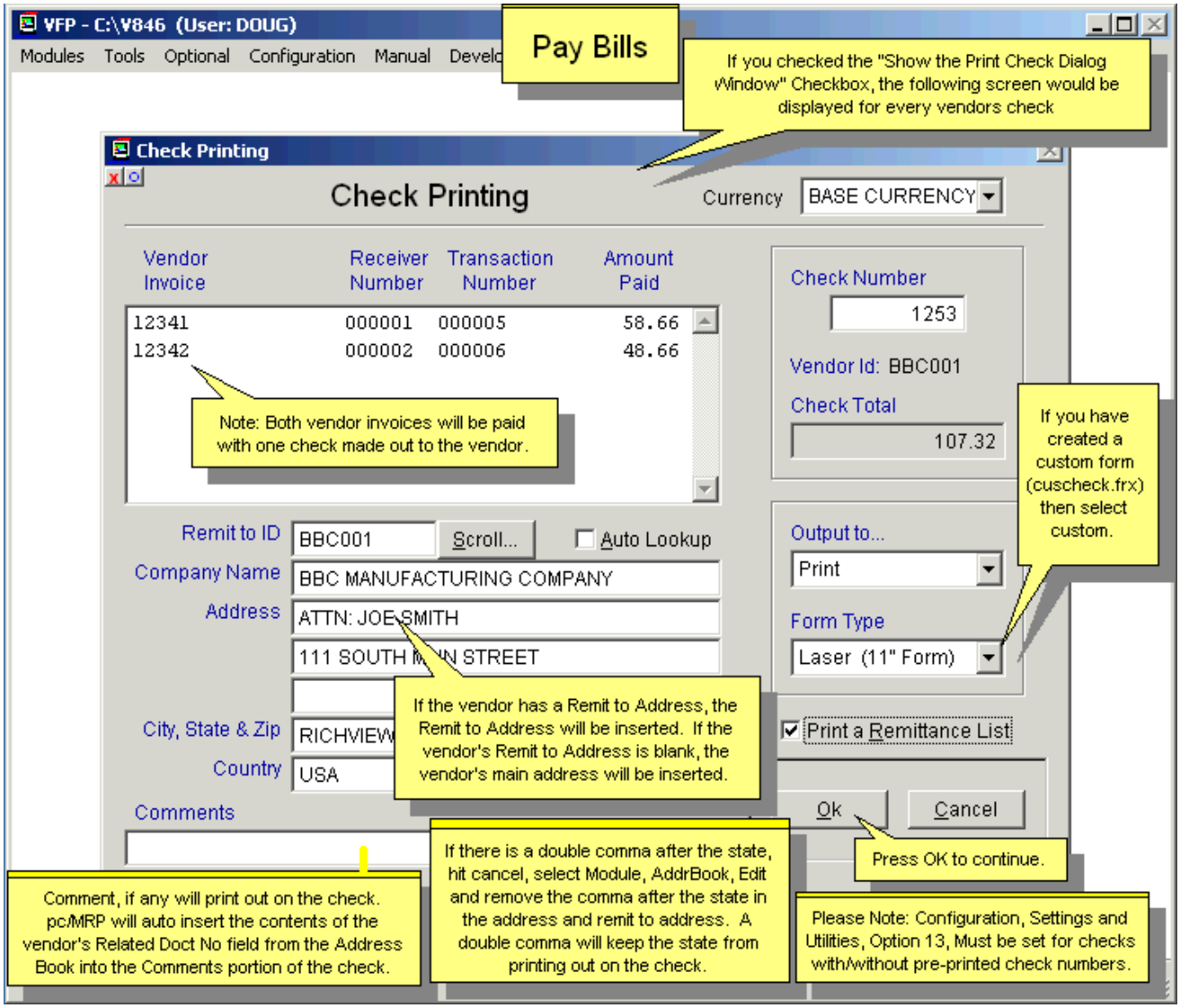
If a specific check has more than 10 receivers, pc/MRP will prompt you to place a blank check form in the printer, print it, and then ask you to place a blank sheet of paper in the printer to print out a remittance list for that specific check as the check stub does not contain enough room to include more than 10 receivers on a stub.

**Step 4, Print a Remittance List**

In both cases, you will be asked if you wish to print out a Remittance List (a list of receivers and AP Vouchers that were processed during the check run.

### 14.14.2 Print Unprinted Checks

The Print Unprinted Checks option will allow you to print checks for accounting transactions that have been entered, but no check was ever printed. pc/MRP will give you the option of select "Pick from all open accounting transactions" or "Build your own list" of accounting transactions to print checks for. If you have a small transact.dbf file, and know the receiver numbers, it is faster to use the "Pick" option. If you have a large transact.dbf file and know the transaction numbers, it is faster to use the "Build" option. The "Pick" option will allow you to select from any transaction that has credited the checking account and whose check printed (ChkPrnted) and cleared (cleared) fields do not contain a "Y". The "Build" option will allow you to enter any transaction number, be careful to select only E (accounts payable expense) or P (cash purchase) type transactions. Both options will consolidate multiple transactions from the same vendor and automatically print out a single check for each vendor.




**Note:** On one occasion a double comma after the state prevented the state from printing out on the check. If you see a double comma after the state, hit Cancel and edit the address to remove the comma after the state in the address and remit to address.

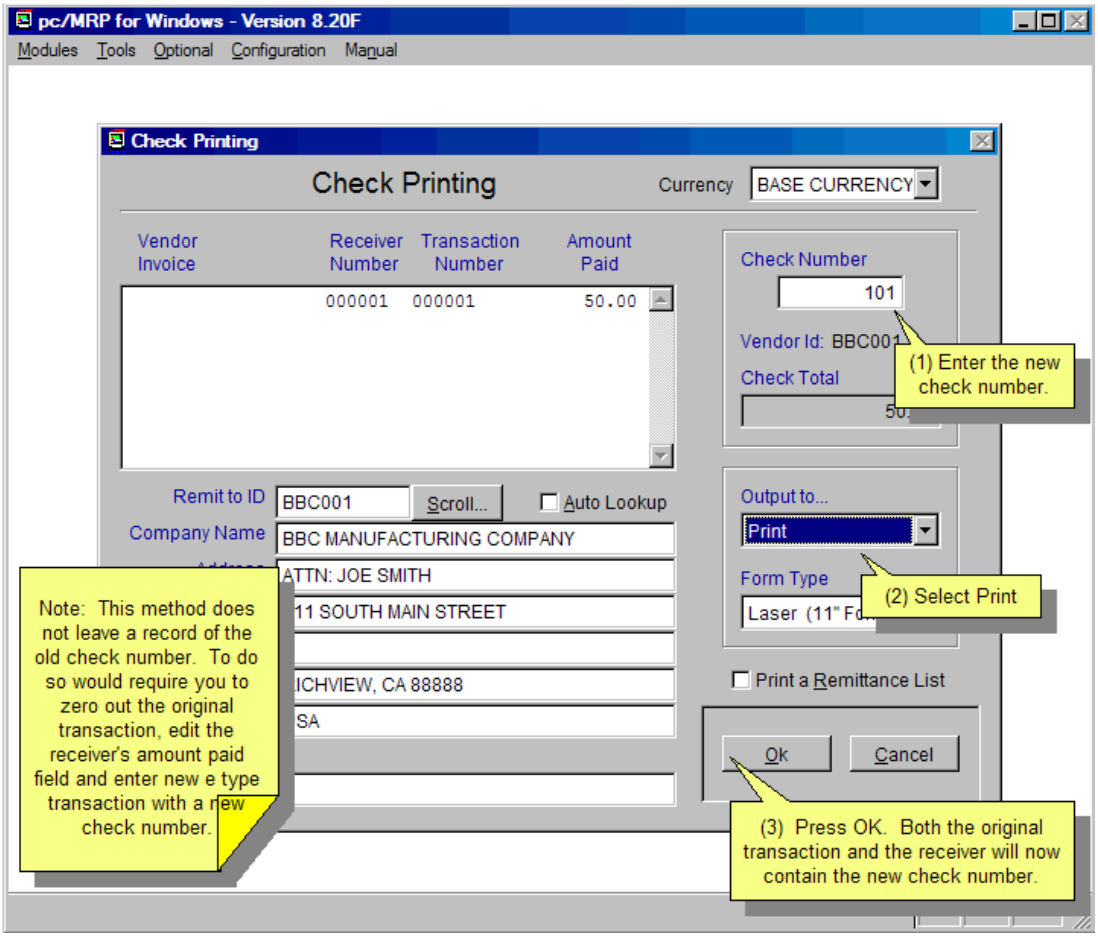
If you have checks with the check number already printed, use Configuration, **Option 13** to have the check printed without the check number.

### 14.14.3 Print Old Check or Void/Reprint a Check

The 'Reprint Old Checks' option will allow you to reprint checks for accounting transactions that have already had a check printed out. Simply enter the check number you wish to be reprinted. The check number can be changed at this time if needed. If the check number is changed, it is changed in all transactions where the old check number was used.

If you have been using pc/MRP for a very long time, or maybe your company was acquired by another company, it is possible that you had to start re-using the same check numbers. If this is the case, when you enter the number of the check you want to print, next to the recent transaction, a very old transaction (for a different vendor) might show up. Call Software Arts to solve this problem. The support person can change the old checks (all checks before a given date) by e.g. adding an "x" in front of the check number in both the Receiver and the Accounting modules.

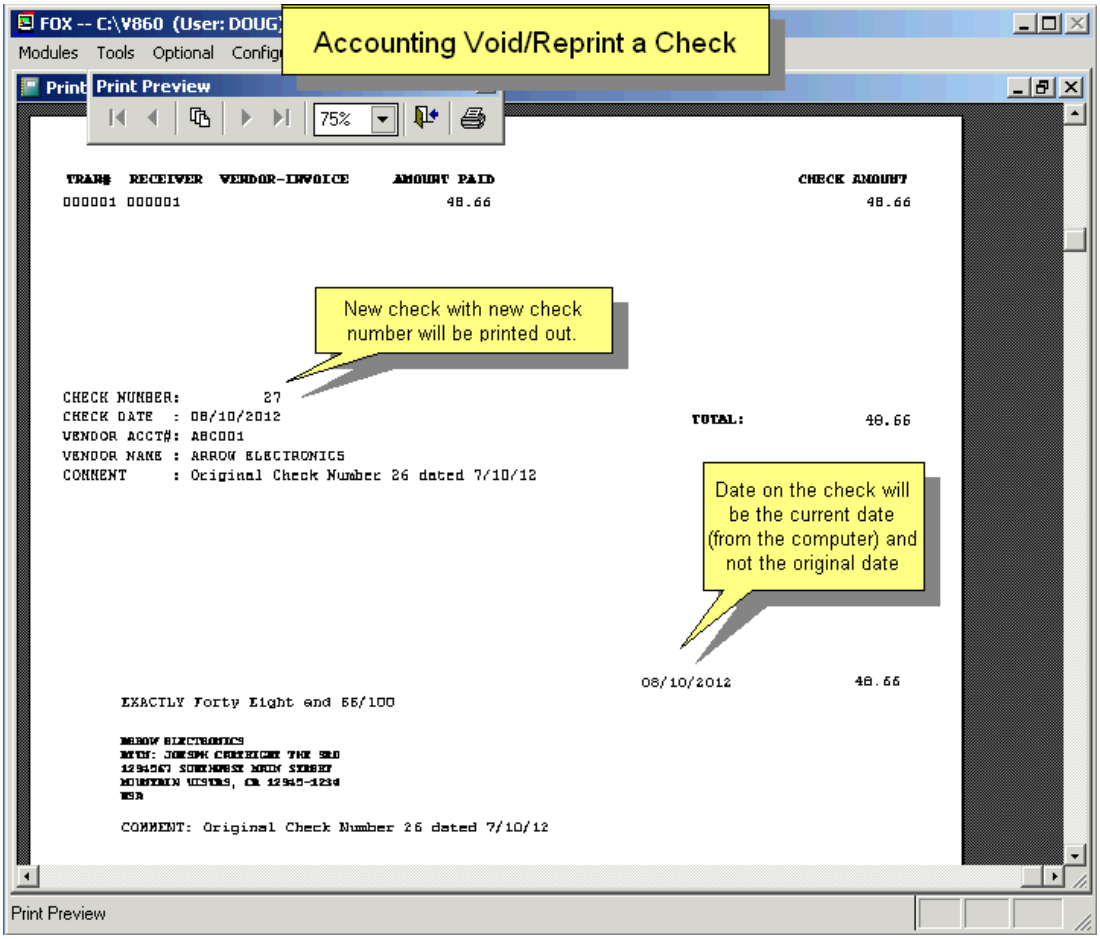
To void a check number and reprint a check (with a new check number) select the 'Reprint Old Checks' option, enter the checking account chart of accounts number, enter the original check number and click OK. pc/MRP will display the screen shown below (remember to change the check#):

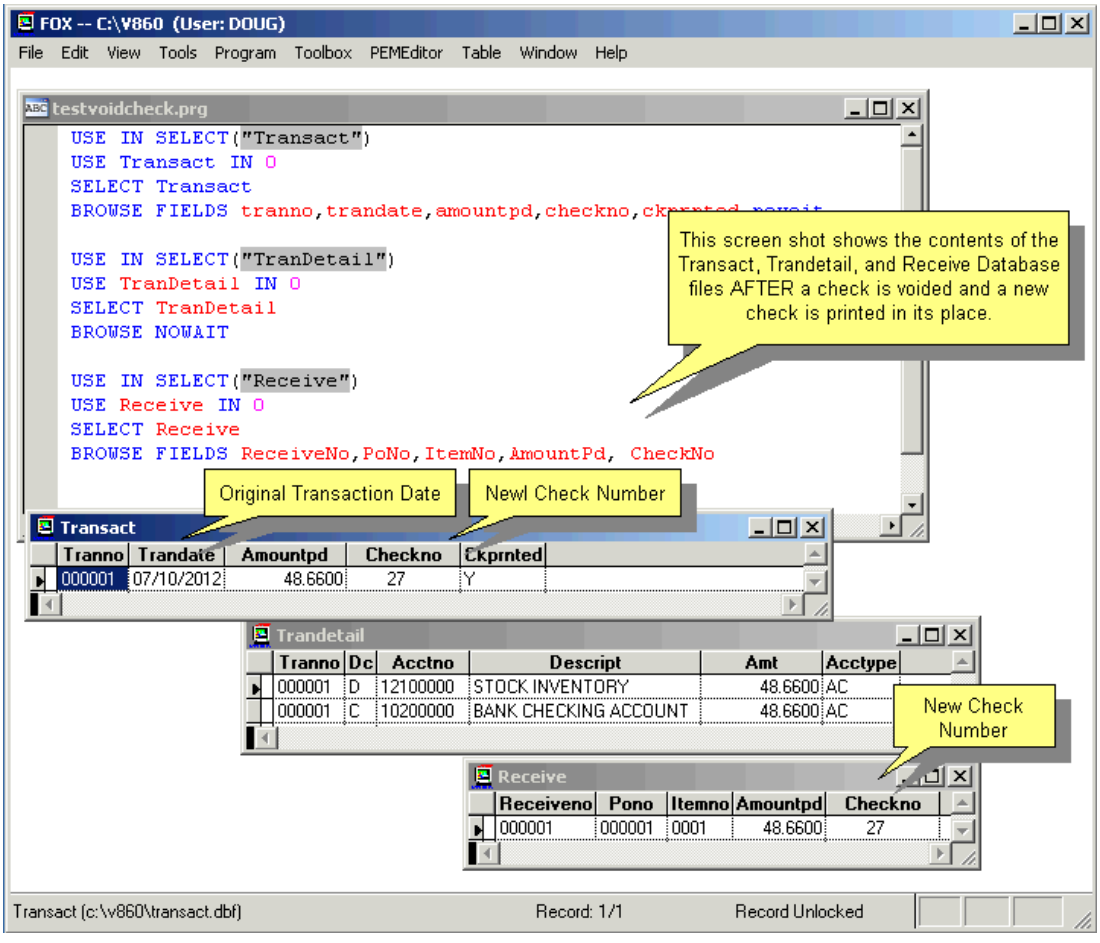



**Note:** The '**Currency**' dropdown list allows you to print checks in an alternate currency.

**Note:** These methods do not leave a record of the old check number. To leave a record of the old check number, zero out the original accounting 'E' transaction. Edit the receiver's amount paid field and enter a new 'E' type transaction with a new check number. If the check payee needs to be changed, edit the accounting transaction and change the address account ID.

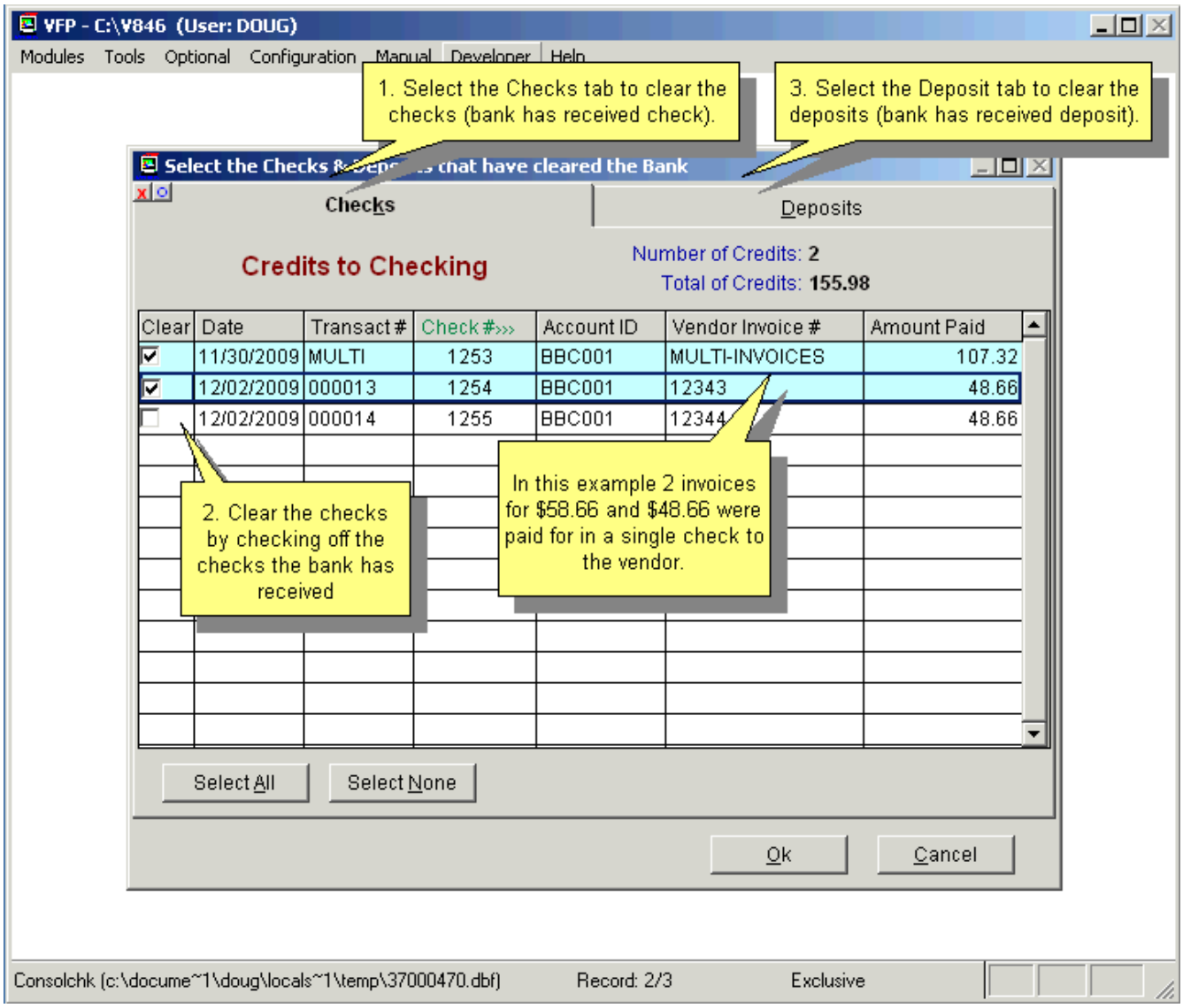
Configuration, **Option 13** will allow or prevent re-printing old checks.


FOX -- C:\V860 (User: DOUG)
Modules Tools Optional Config
Accounting Void/Reprint a Check
Print Preview
75%
TRAN# RECEIVER VENDOR-INVOICE AMOUNT PAID CHECK AMOUNT
000001 000001 48.66 48.66
New check with new check number will be printed out.
CHECK NUMBER: 27
CHECK DATE : 08/10/2012
VENDOR ACCT#: ABC001
VENDOR NAME : ARROW ELECTRONICS
COMMENT : Original Check Number 26 dated 7/10/12
TOTAL: 48.66
Date on the check will be the current date (from the computer) and not the original date
08/10/2012 48.66
EXACTLY Forty Eight and 66/100
ARROW ELECTRONICS
ATTN: JOSEPH CHEEKIN THE 3RD
1234567 SOMEWHERE MAIN STREET
HOUSTON TEXAS, CA 12345-1234
USA
COMMENT: Original Check Number 26 dated 7/10/12
Print Preview


FOX -- C:\V860 (User: DOUG)
File Edit View Tools Program Toolbox PEMEditor Table Window Help
testvoidcheck.prg
USE IN SELECT("Transact")
USE Transact IN 0
SELECT Transact
BROWSE FIELDS tranno,trandate,amountpd,checkno,ckprnted,nowait
USE IN SELECT("TranDetail")
USE TranDetail IN 0
SELECT TranDetail
BROWSE NOWAIT
USE IN SELECT("Receive")
USE Receive IN 0
SELECT Receive
BROWSE FIELDS ReceiveNo,PoNo,ItemNo,AmountPd, CheckNo
This screen shot shows the contents of the Transact, Trandetail, and Receive Database files AFTER a check is voided and a new check is printed in its place.
Original Transaction Date
Newl Check Number
Transact
Tranno Trandate Amountpd Checkno Ckprnted
000001 07/10/2012 48.6600 27 Y
Trandetail
Tranno Dc Acctno Descript Amt Acctype
000001 D 12100000 STOCK INVENTORY 48.6600 AC
000001 C 10200000 BANK CHECKING ACCOUNT 48.6600 AC
New Check Number
Receive
Receiveno Pono Itemno Amountpd Checkno
000001 000001 0001 48.6600 27
Transact (c:\v860\transact.dbf) Record: 1/1 Record Unlocked

### 14.14.4 Clear/Unclear Checking Transactions

To clear **checks** and **deposits,** select Modules, Accounting, Pay Bills, and Clear Checking Transactions. pc/MRP will then allow you to check checks and deposits that have been cleared by the bank as per the screen shown below.




This option allows you to scroll and pick from all uncleared transactions (transactions whose cleared field does not equal "Y" and debits or credits the checking chart of account number). If the transaction database file is large, you must allow quite a bit of time for it to set the filter to display only transactions that debit or credit the checking account.

Once you are finished clearing your checks and deposits, you can run a Check Reconciliation Report to see the difference between pc/MRP's and the banks checking account balances. To display or print a Check Reconciliation Report, select Modules, Accounting, Reports, and Check Reconciliation Report.

The **Unclear Checks** option will allow you to clear a check for a specified transaction number.

### 14.14.5 Remittance Reports

The Print Remittance Report option will allow you to print a check remittance report for:

- A specified transaction number.
- A check number range
- A date range
- All checks for a checking account number
- For the last check run

### 14.14.6 Ordering Checks and Envelopes

We recommend you order 8-1/2 x 11 style checks that can be printed out with a normal laser or ink jet printer. When you order checks make sure the starting check numbers starts where your last check is 1 or more greater than the last check number on your current checks. You may have to call to find out what format your check provider sends out their checks in. Stub, Check, Stub OR Check, Stub, Stub

1. pc/MRP defaults to printing checks as Stub, Check, Stub so order that style.

2. If you want to print out checks formatted as Check, Stub, Stub. Then click on the link below. Right click on the downloaded file and select Extract All and check Show Extracted Files. Copy the two extracted files cuscheck.frx and cuscheck.frt into your pc/MRP folder and from then on when you print a check, select Custom instead of Laser. If the pc/MRP folder has cuscheck.frx and .frt it will default to Custom.
https://pcmrp.com/patch/checks810.zip

In either case if the checks need adjustment with the position of the Name, Dollar Amount, and or Date it can be done using Configuration, Settings and Utilities, Option 24 and saving the modified form as CusCheck.frx. The modified format can be tested using a blank piece of paper and Reprint Old Check. Please feel free to call Software Arts at 408-226-7321 and we can remote in and make the modifications with you.
From then on, select Custom instead of Laser. If the pc/MRP folder has cuscheck.frx and .frt it will default to Custom.

### 14.14.7 Selecting a Printer for Checks

pc/MRP will automatically use the default printer to print checks. You must set the printer you wish to print checks with as your default printer. If you do wish to select a printer when printing a check, create a txt file named **MLTCHK.UMF** with Notepad and place it in your pcmrpw directory.

### 14.14.8 Check Numbers

When entering a Pay Bills E, P, or A type transaction, check numbers can only be entered and changed in the Print Check screen and not the Transaction screen. pc/MRP will display the next available check number in the Print Check screen. The user can change the check number. Please remember that pc/MRP will start the check number sequence based upon the last check number used.

When entering an E, P, or A type transaction, the check number will not be displayed.

When editing an E, P, or A type transaction, the check number will be displayed but NOT editable.

To reprint a check, use the “Reprint Check” option. You can use the original check number or a different check number. If you use a new check number, the original accounting transaction and receiver will contain the new check number. If the new check number is greater that the ‘next available check number’, pc/MRP will restart the check number sequence. If the new check number is less than the ‘next available check number’, pc/MRP will display a warning with an option to go back and change the check number or proceed.

pc/MRP does not allow more than one person to print checks at the same time.

### 14.14.9 Remittance Address

It is important to remember that a checking transaction has both a remit-to address ID and a vendor address ID. pc/MRP allows users to select a different remit to address when printing a check. The remit to address (remit_to) is not displayed in the data entry transaction screen.

# 14.15 Term Discounts

### 14.15.1 Term Discounts

Customers often ask for term discounts such as 2% Net 10, meaning a 2% discount will be given provided the customer pays within 10 days. The terms discount information is stored in the invoice's terms field and the trade discount information is stored in the invoice's discount field. (**Note:** A trade discount is a discount given to a customer regardless of the payment terms.)

Since one is never sure if a customer is going to take advantage of the payment terms offered, term discounts require some special handling as shown in the example below:

Assume a customer is invoiced, given a 20% trade discount and a 2% Net 10 terms discount on the invoice.

After the customer is invoiced, enter a general ledger transaction to "Register the accounts receivable invoice (O)". The discount field in the invoice would be 20% and the terms field would read 2% Net 10. pc/MRP will include the trade discount but not the terms discount as it has no idea if the customer will pay on time.

If the customer pays, but not within 10 days, enter a general ledger transaction to register the "Accounts Receivable Payment (R). pc/MRP will include the trade discount but not the terms discount.

If the customer pays within 10 days, taking advantage of the terms discount, edit the first line item on the invoice, add the terms discount to the trade discount (20% would be changed to 22%), save the line item and answer YES to update the header on all line items and then enter a general ledger transaction (accounts receivable payment). Enter the amount received as the amount received, Debit checking for the amount of the check, debit sales discount for the 2% difference, and credit accounts receivable for the full amount originally due.

# 14.16 Factored Invoices

### 14.16.1 Overview

The following methods of handling factored invoices assume:

- You know you are going to sell the invoice to the factoring company before you create the invoice.
- The invoice contains a remit to address to the factoring company. The remit to address could be rubber stamped onto pc/MRP's standard invoice or you could use pc/MRP's custom report writer to create a custom invoice that would contain the remit to address in the note section of the custom invoice. (For accepted names for the custom form see Section 15.4.2 in this Manual.)
- The invoice for the full AMOUNT is sent to the customer and factoring company.
- The factoring company sends a check for a portion of the invoice.
- The customer sends a check for the full amount to the factoring company.
- The factoring company notifies you that the invoice has been paid.

### 14.16.2 A simple method for handling factored invoices:

Enter the invoice for the full AMOUNT, print several copies, and send them to the customer and factoring company.

Edit the invoice and put the factoring % in the discount field. Reprint the invoice for your own copy showing the total amount and the discounted amount.

Enter an O type accounting transaction to register the accounts receivable invoice debiting AR and crediting business income for the reduced AMOUNT.

When you receive the check for the reduced AMOUNT from the factoring company, enter an R type accounting transaction. pc/MRP will credit AR and debit the checking account for the reduced amount automatically.

### 14.16.3 A more sophisticated method for handling factored invoices:

Enter the invoice for the full AMOUNT, print several copies, and send them to the customer and factoring company.

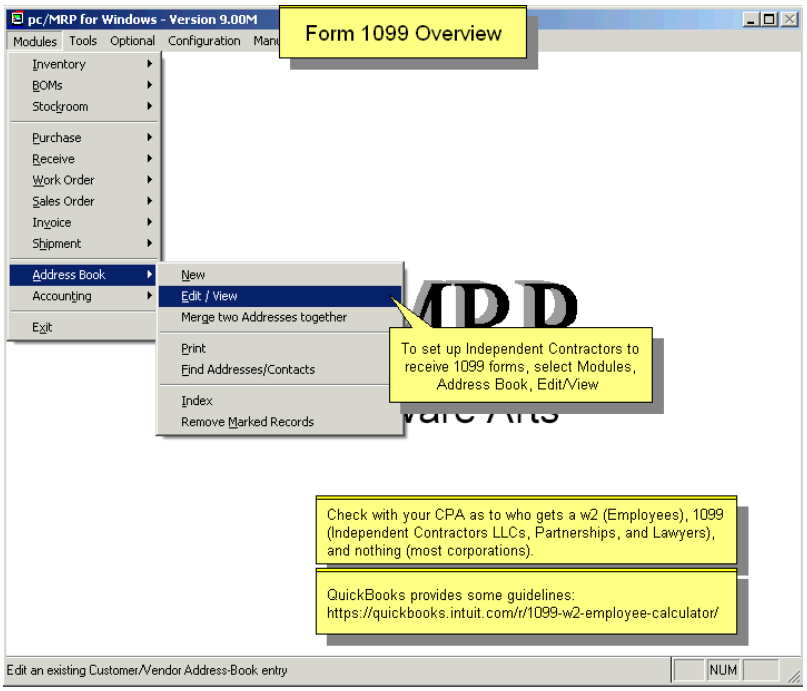
Enter an O type accounting transaction to register the accounts receivable invoice debiting AR and crediting business income for the full AMOUNT.

When you receive the check for the reduced AMOUNT from the factoring company, enter an A type accounting transaction. Credit invoice factor liability and debit checking for the reduced amount.

When you receive notification from the factoring company, that the customer has paid the invoice, enter an R type transaction for the invoice, debit invoice factor liability, debit invoice factor expense, and credit AR for the full AMOUNT of the invoice. You could open pc/MRP's or Window's calculator to subtract the reduced payment AMOUNT from the full AMOUNT to calculate and then paste in the expense AMOUNT.

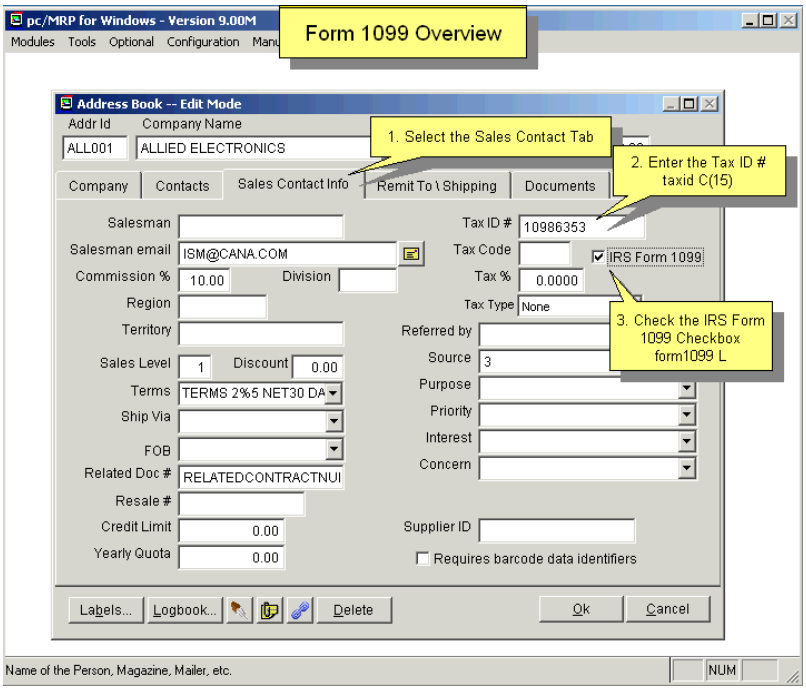
# 14.17 1099MISC and 1096 IRS Tax Forms

## 14.17.1 1099MISC and 1096 IRS Tax Forms Overview



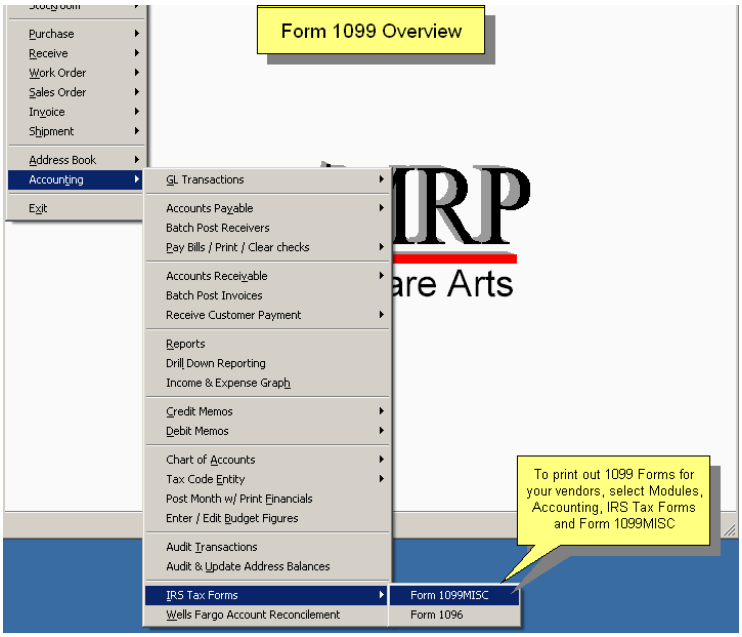

pc/MRP has the ability to print 1099MISC and 1096 IRS tax forms. This feature is accessible by selecting the Accounting Module and IRS Tax Forms. This feature allows users to define address entries that require a 1099 form, print and display the forms, define the tax year, threshold, recipient, and a number of other items. When generating the forms, pc/MRP will automatically search through all of the invoices, based on the criteria defined, and print the forms accordingly.

## 14.17.2 Defining Address Entries that Require a 1099

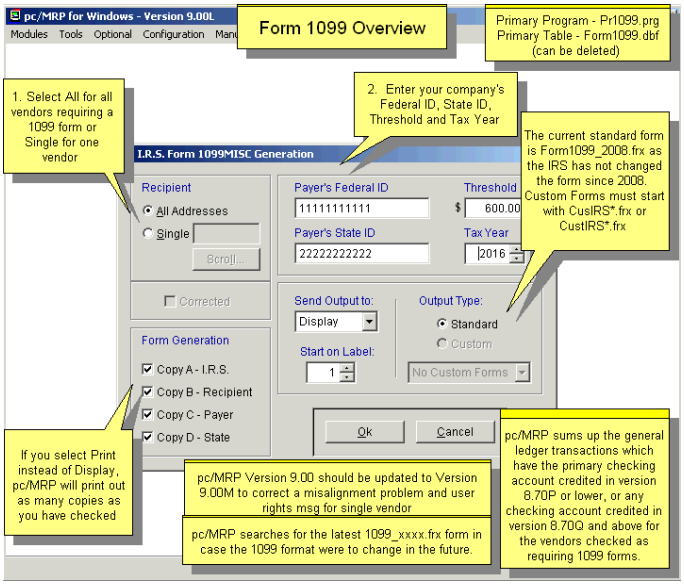


Each address entry can be defined as requiring a 1099 form. Select the address desired in the address book module, click on the **Sales Contact Info** tab, click the check box next to **IRS Form 1099** and fill in the Tax ID numbers (federal and state) for the vendor**.** The check box must be checked and Tax ID number must be populated with at least 7-digits to work correctly. Having this check box checked will flag pc/MRP to create the necessary forms based on the receivers that were posted to the GL for that vendor.

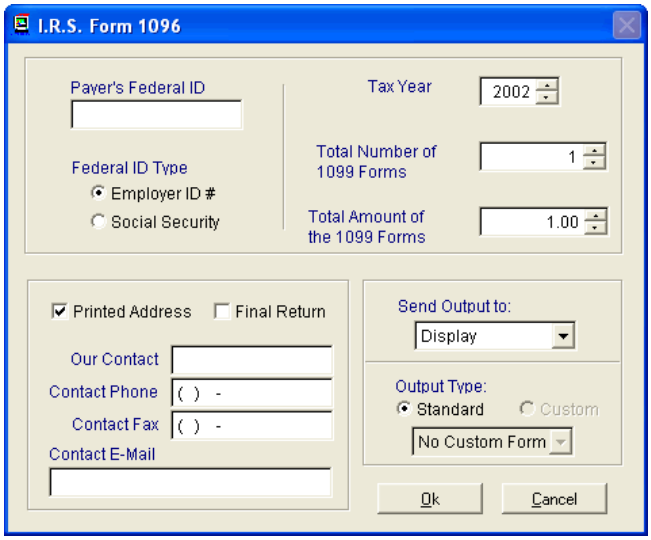
### 14.17.3 1099 MISC IRS Form




Selecting Modules, Accounting, IRS Tax Forms, Form 1099 Misc will display the below screen. Pressing the OK Button (calls Pr1099.prg) will display/print a 1099 MISC form for all vendors or a specified vendor for the selected tax year. It uses all accounting transactions for the vendor entered during the specified year that contain a credit to any checking account within the first 5 credits of each transaction. The vendor's address book 1099 Form Checkbox must be checked and the vendor's Tax ID must be 7 characters or greater. Select the forms that you want to generate. The system will prompt you to load the form before it starts to print the form.



### 14.17.4 1096 IRS Tax Form




Selecting Modules, Accounting, IRS Tax Forms, Form 1096 will display the above screen allowing users to print out one or more 1096 forms for the specified Tax Year.

### 14.17.5 Purchasing IRS Tax Forms

IRS 1099MISC and 1096 forms can be purchased at any office supply store. (Office Depot, Staples....) Be sure to purchase forms for the specific tax year that the forms are to be printed for. Tax forms do change year by year.

Changes to the IRS1099 form that do not necessitate a change in the form layout will still use the current form layout within pc/MRP regardless of what year the program says; just accept the form year. For 2016, the layout is still the same as for year 2008.

### 14.17.6 IRS Tax Forms Troubleshooting

If there are any problems having the forms match correctly to the pc/MRP 1099MISC or 1096 report be sure that the correct year was selected when printing the form. If the forms still do not match after verifying the year, contact Software Arts.

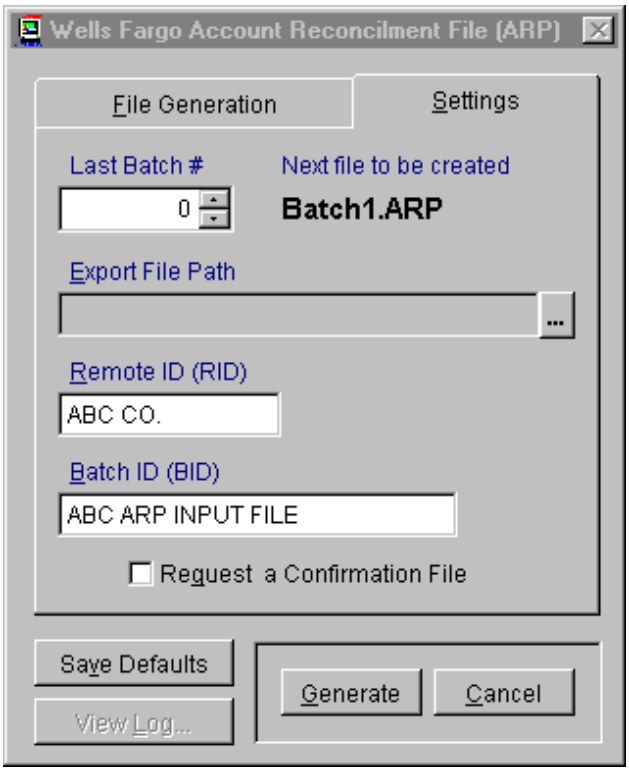
If no matching data is found, make sure the Tax ID and the 1099 check box is checked within the Address entry desired.

# 14.18 Wells Fargo Account Reconcilement (Positive Pay) Option

### 14.18.1 Wells Fargo Account Reconcilement Overview

pc/MRP contains the Wells Fargo account reconcilement (Positive Pay) option. This option allows companies to create a file containing all checks written during the date range selected. The file, named Batchxxx.arp, can then be sent over the internet to Wells Fargo. If you implement this program with Wells Fargo, Wells Fargo will only cash checks that have been registered via one of your Batchxxx.arp files. If a check is not in any of your Batchxxx.arp files or the amount of the check differs from the registered check, Wells Fargo will call your company, asking if you wish them to cash the check

### 14.18.2 Wells Fargo Account Reconcilement Settings




Prior to sending your first batch, you must enter your batch settings as follows:

**Last Batch Number** pc/MRP will automatically increment the number, you can however start at a number higher than 1. If you leave the Last Batch Number at 0 when you generate your first batch, pc/MRP will automatically name the batch file "Batch1.ARP".

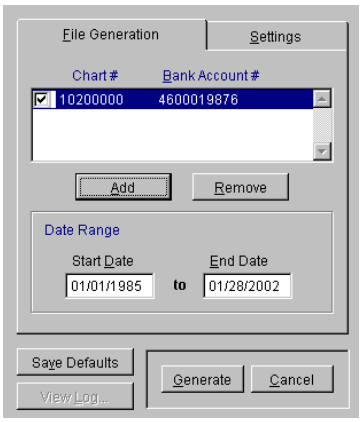
**Remote ID (RID)** Enter the Remote ID that Wells Fargo assigns your company.

**Batch ID (BID)** Enter the Batch ID that Wells Fargo assigns your company.

**Export File Path** Press the ellipsis button to the right of the Export File Path text box to locate the drive and directory you would like the Batchxxx.arp to be deposited into. The path displayed within the field will be relative to the pc/MRP main folder. An empty field means that the files will be created within the pcmrpw folder.

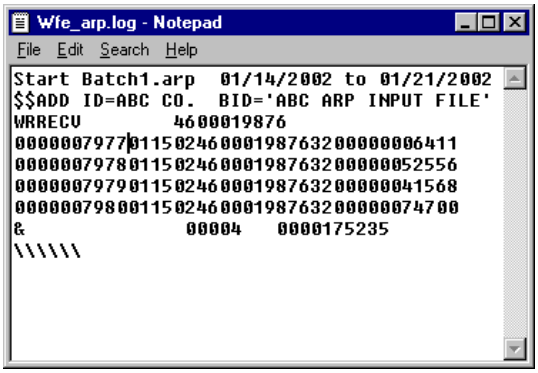
**Request a Confirmation File** Check the Request a Confirmation File check box if you wish Wells Fargo to send back a confirmation file containing the check numbers included in your batch.

### 14.18.3 Creating a Wells Fargo Account Reconcilement Batch File




1. If you have not entered the pc/MRP chart of account number for your company's checking account, do so now by pressing the add button. You can enter more than one Wells Fargo Bank account. If you have entered the Wells Fargo Account(s), select the accounts you wish to create a batch file for by checking the respective check boxes.
2. Enter the Start and End Dates (Wells Fargo's program does not mind if you accidentally send the same check number again).
3. Press the Save Defaults button to save the above settings as your default settings.
4. Press the Generate button to create the file.
5. Log into your Wells Fargo Internet account and send the file you just generated.

### 14.18.4 Viewing your Wells Fargo Account Reconcilement Log




Pressing the View Log, will bring up your Wells Fargo account reconcilement log shown above.

- The first line of any batch contains the word "Start" followed by the batch number, the starting date and ending date.
- Had you selected a confirmation file the next line would contain your confirmation record (none shown on the above example)
- The second and third lines in the above example contain your sign-on and header records.

The detail records would consist of the following:

- Characters 1 through 10 contain the check number (0000007977)
- Characters 11 through 16 contain the check date (01/15/02).
- Characters 17 through 26 contain the bank account number.
- Characters 30 through 39 contains the check amt (0000006411 = $64.11).

To view a specific batch number or check number, open up the log file, select Search and enter the batch number or check number. The individual batch files themselves can be viewed using Windows Notepad.

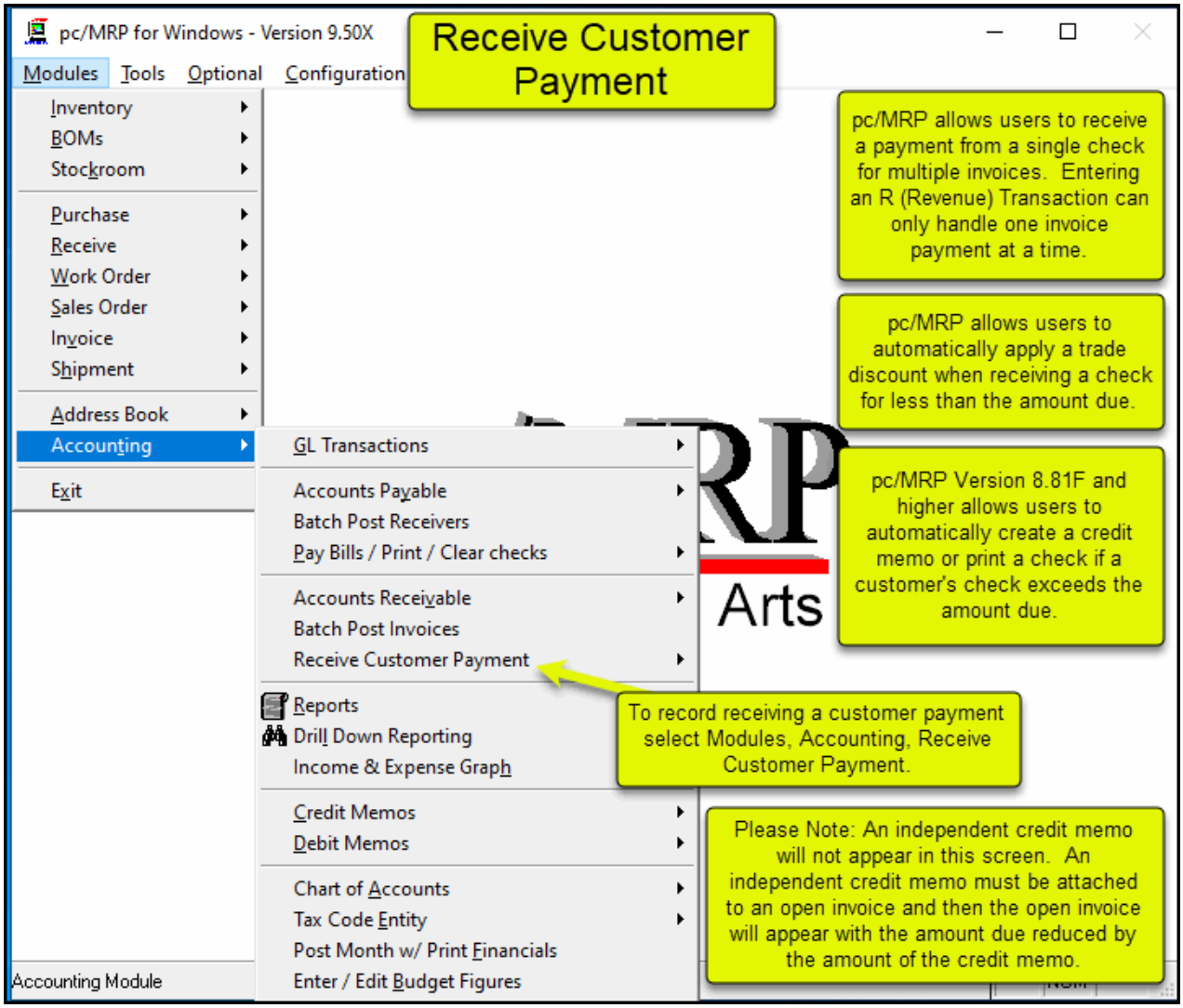
# 14.19 Receiving Customer Payments

### 14.19.1 Overview

For detailed, step-by-step instructions see http://www.pcmrp.com/mrp101/customerpaymentmenu.htm

Also see **Chapter 14.21** Processing Credit Cards.

Customer payments can be received using the 'Receive Customer Payment' menu item as shown in the following screen shots, or with 'R' type accounting transactions.

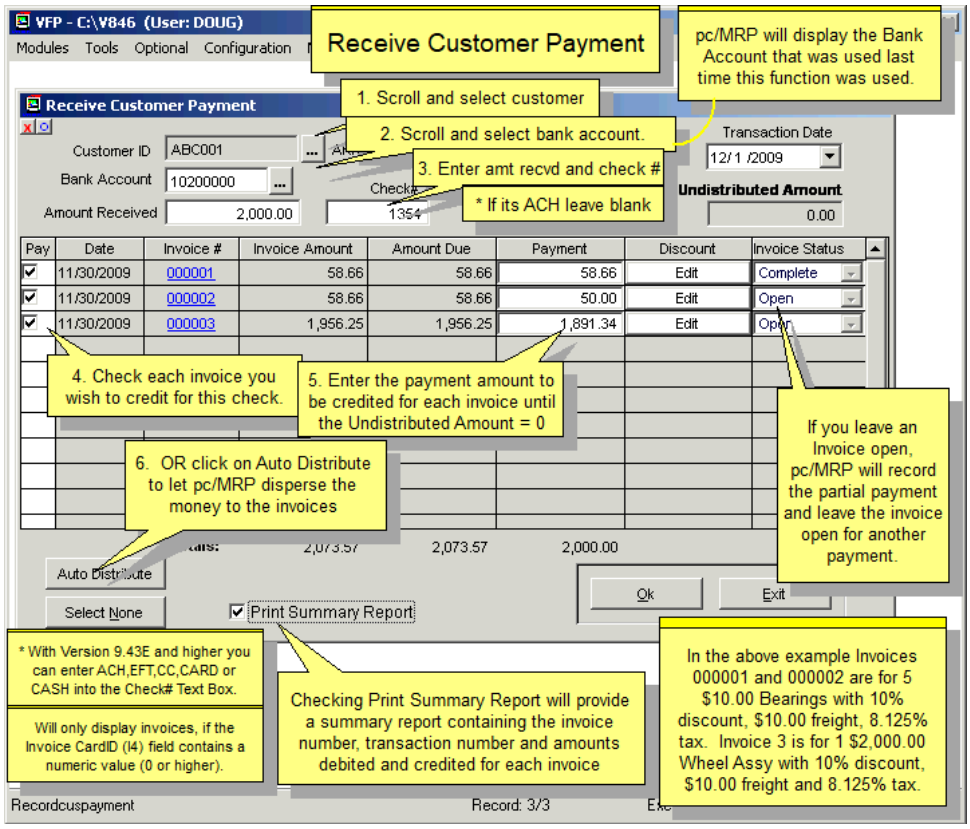



**Note:** An independent credit memo will not appear in this screen. An independent credit memo must be attached to an open invoice and then the open invoice will appear, with the amount due reduced by the amount of the credit memo.

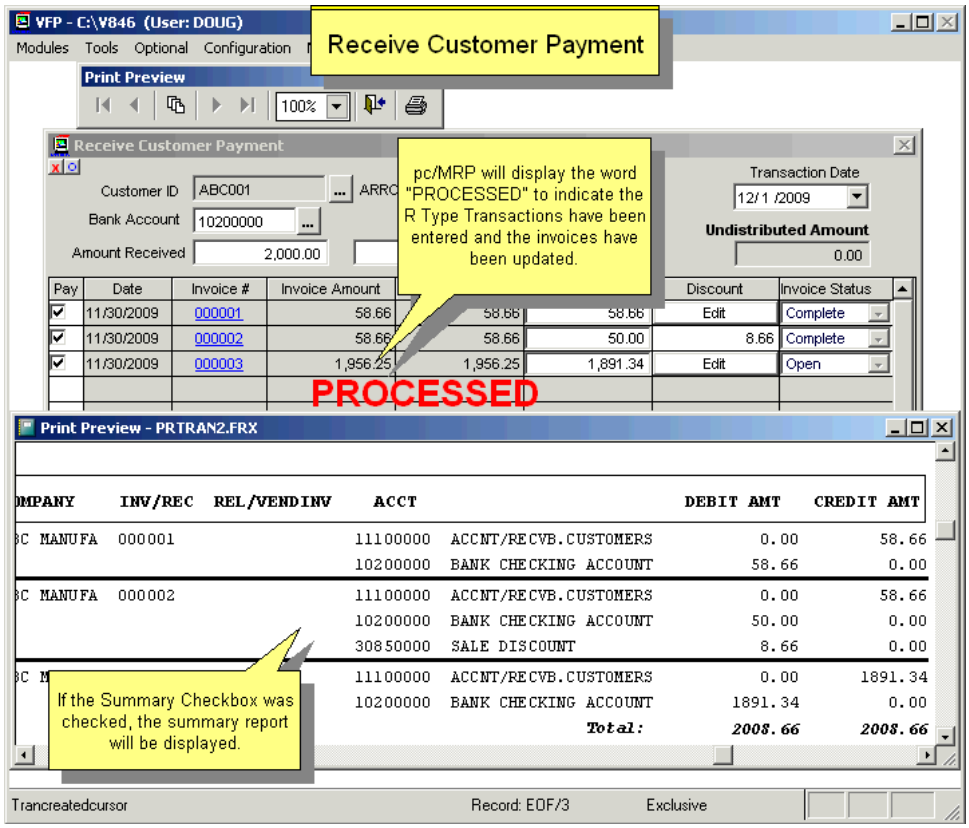
**Note:** pc/MRP allows users to automatically apply a trade discount when receiving a check for less than the amount due.

**Note:** You can receive a single check for multiple invoices. (Entering an R (Revenue) transaction can only handle one invoice payment at a time.)

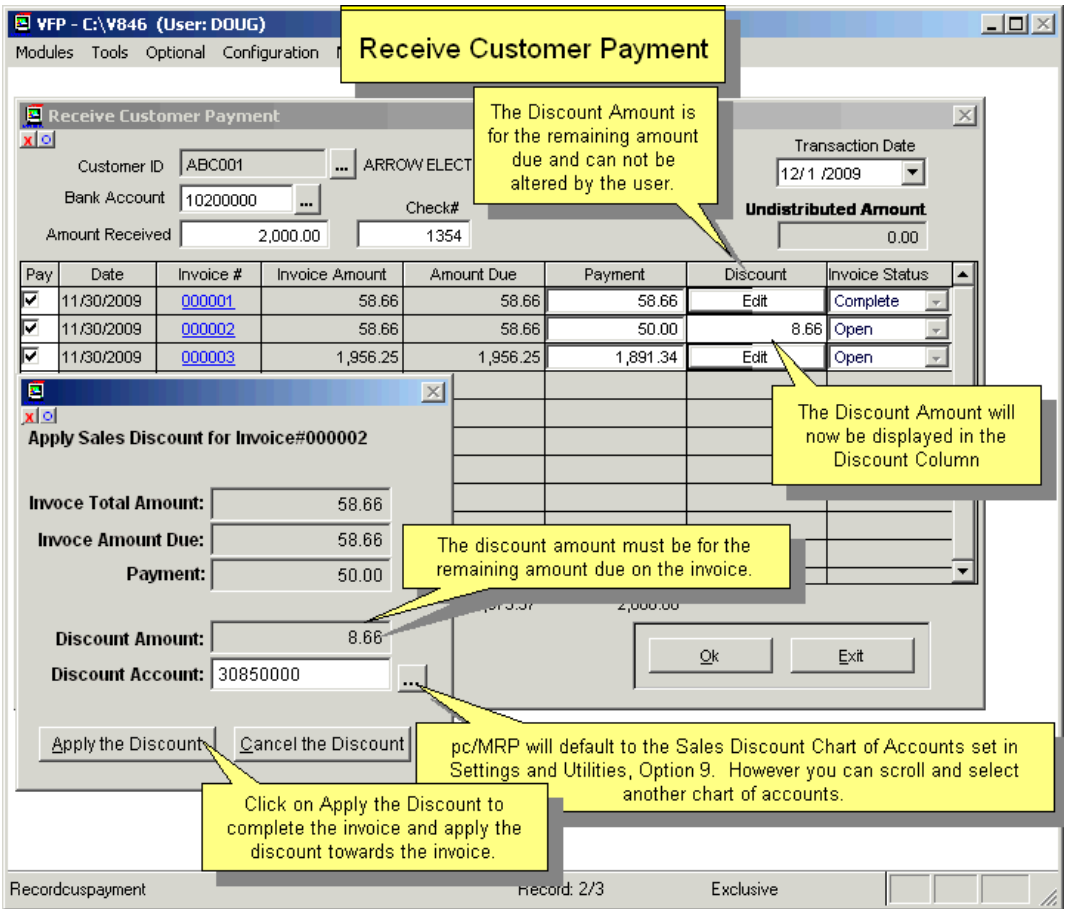
### 14.19.2 Select the customer and process the transaction

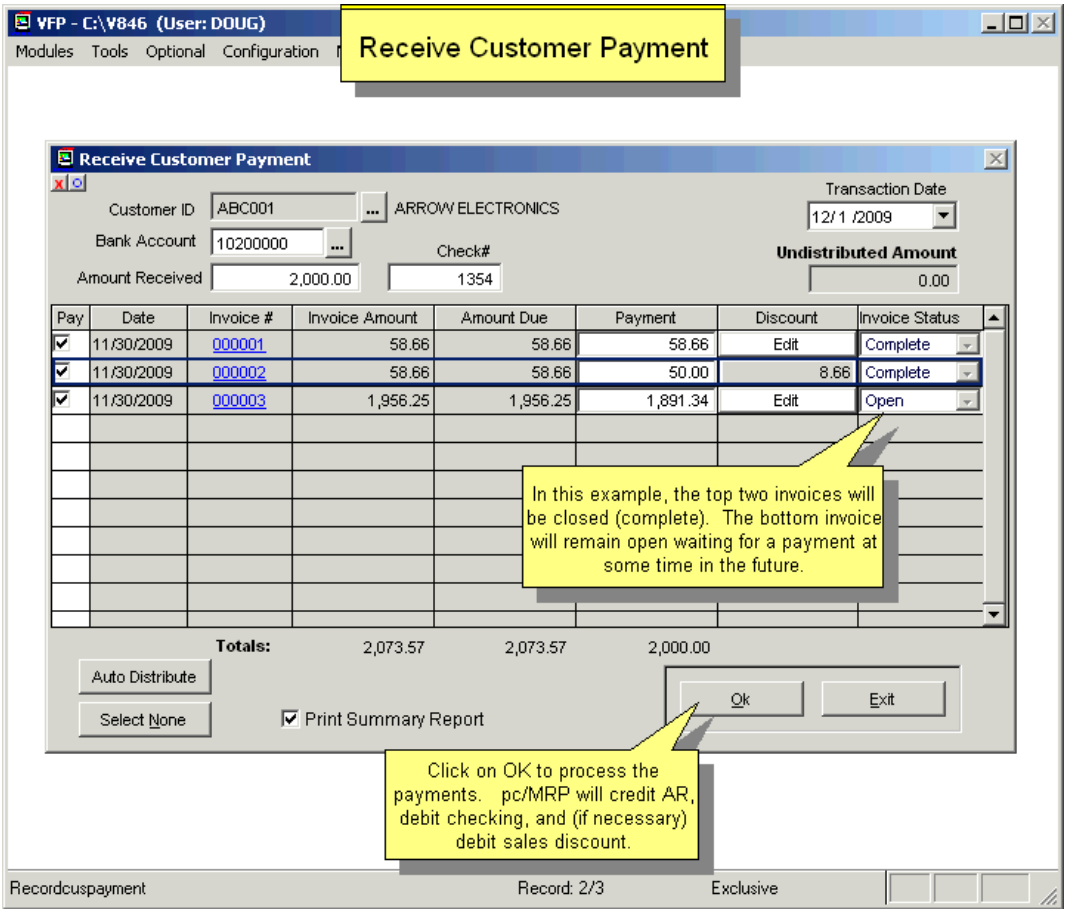



You can now deposit another check for another customer, or click on Exit if you are finished.

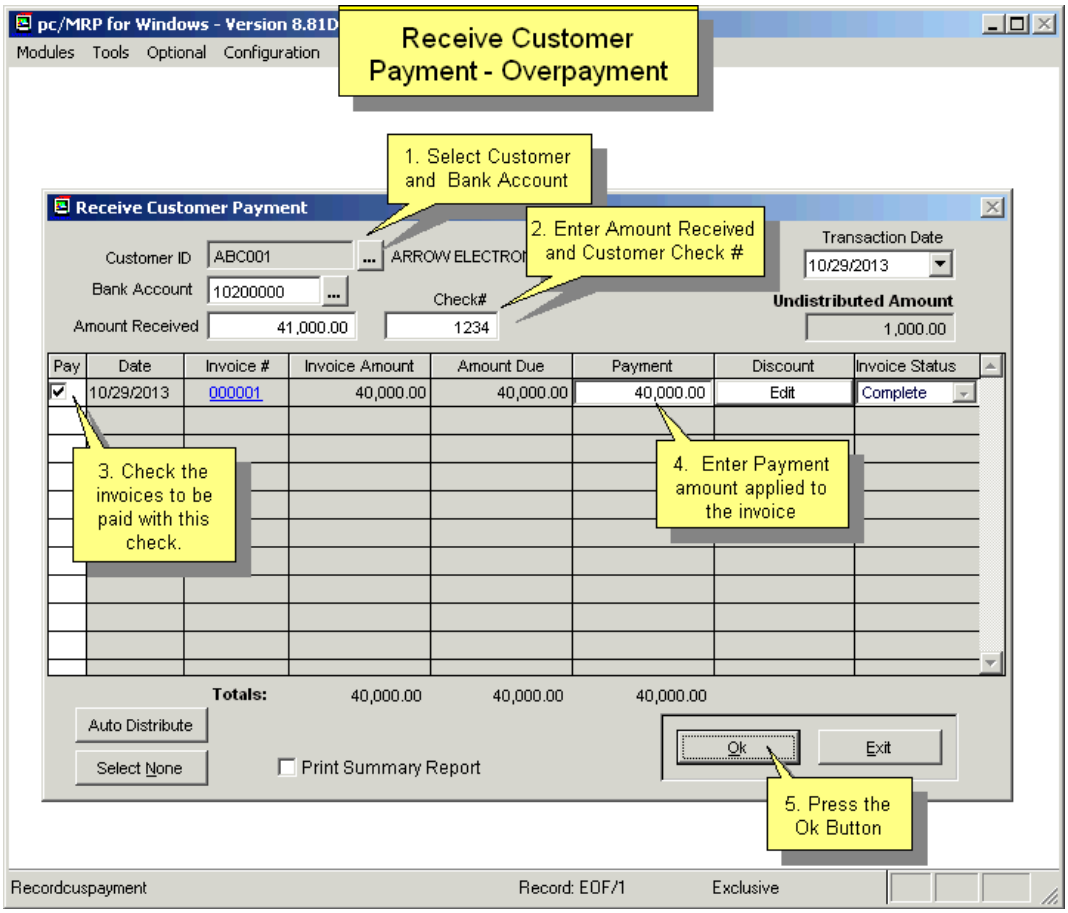


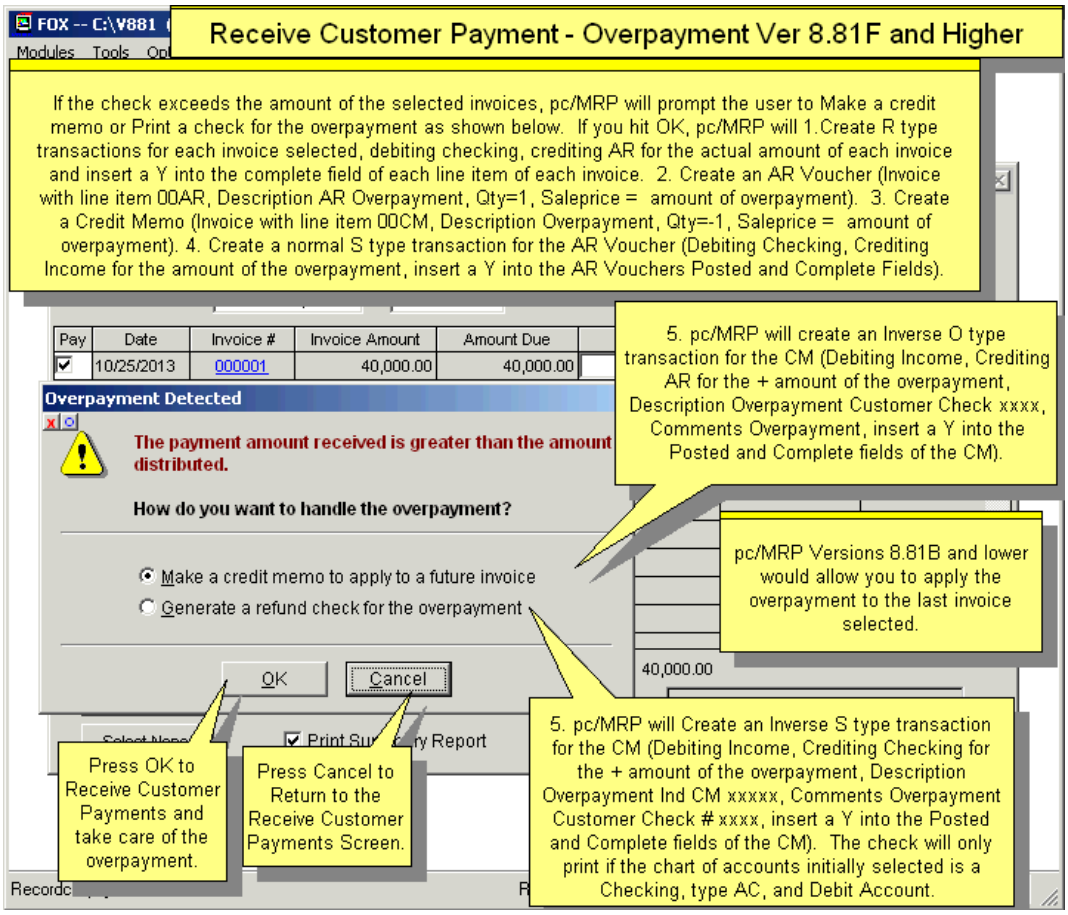
### 14.19.3 Handling discount



## 14.19.4 Handling overpayment



# 14.20 Retainer Accounts

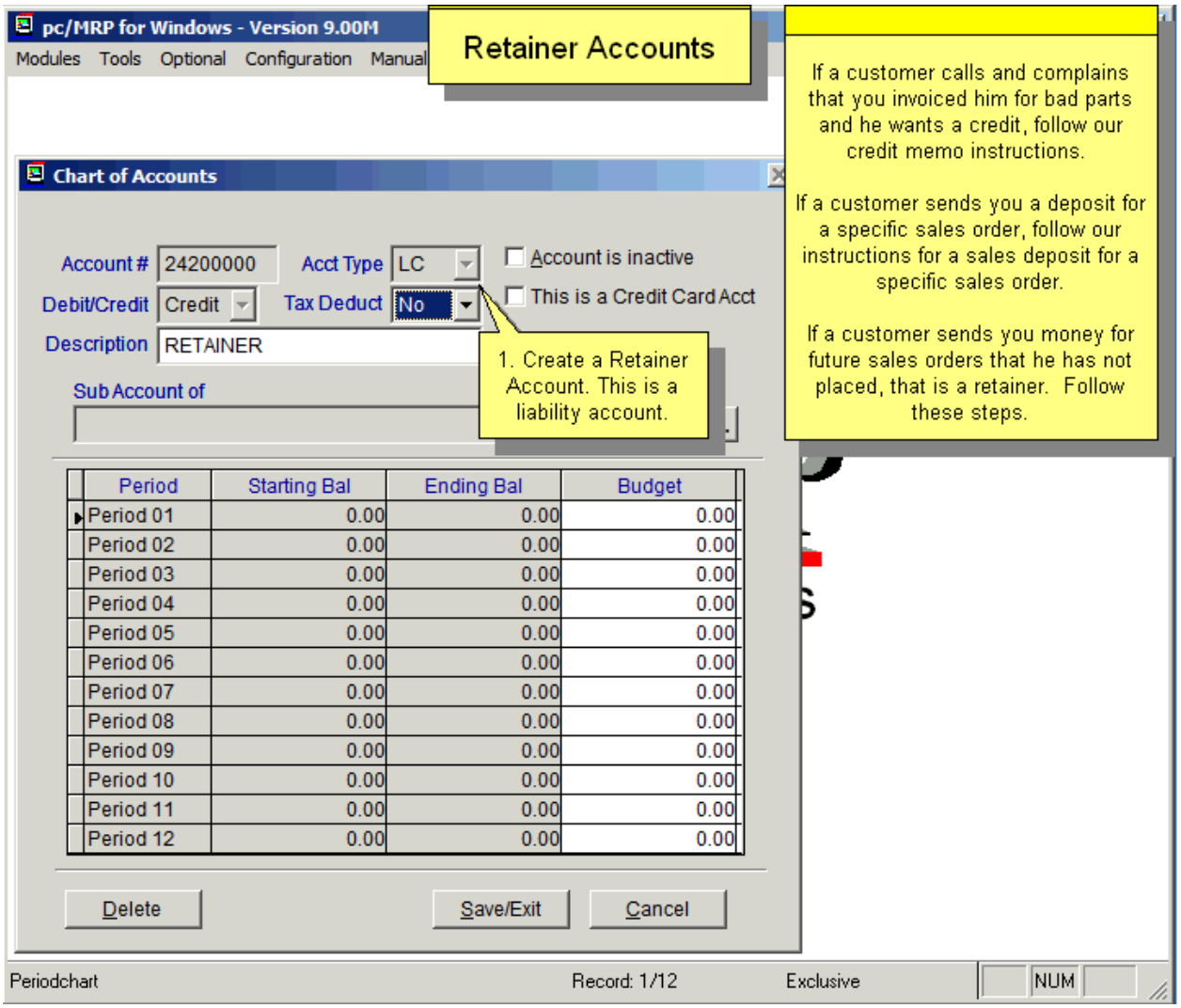
### 14.20.1 When you should use a Retainer Account

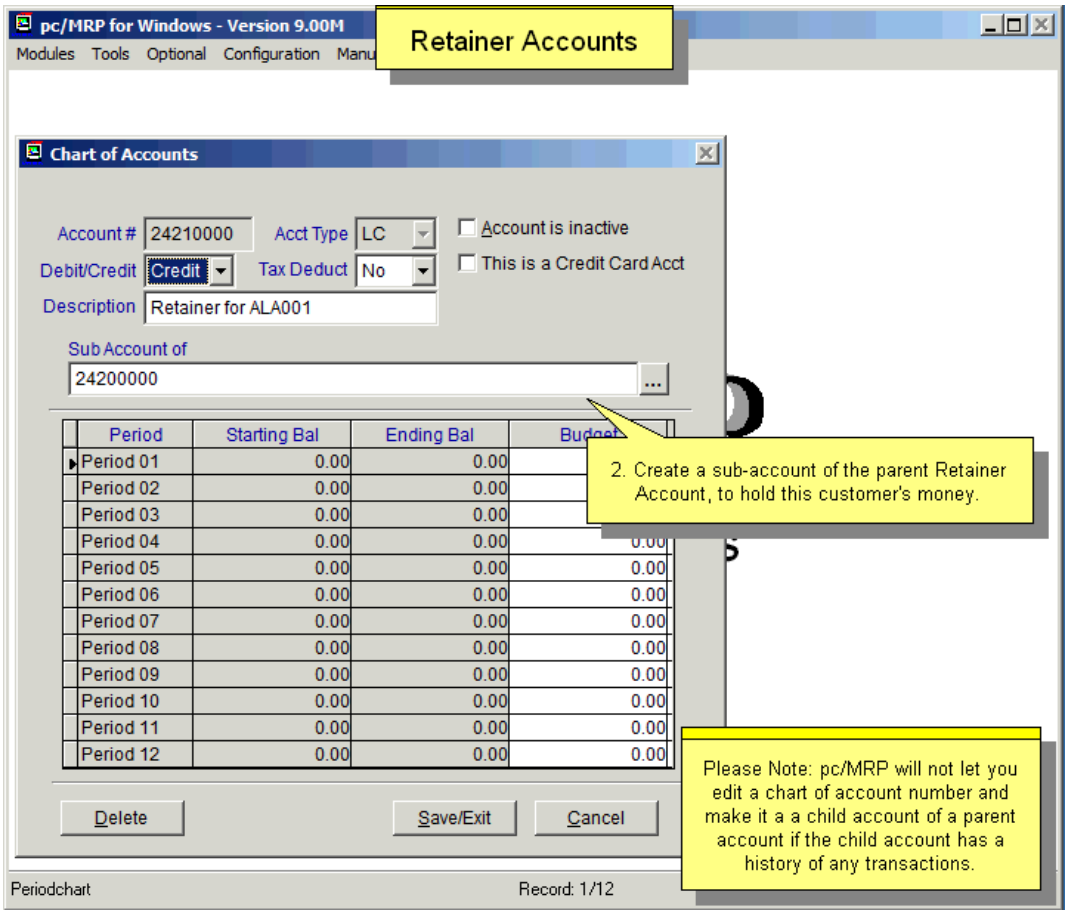
If a customer sends you money for future sales orders that he has not placed, that is a retainer. Follow the steps detailed later in this chapter.

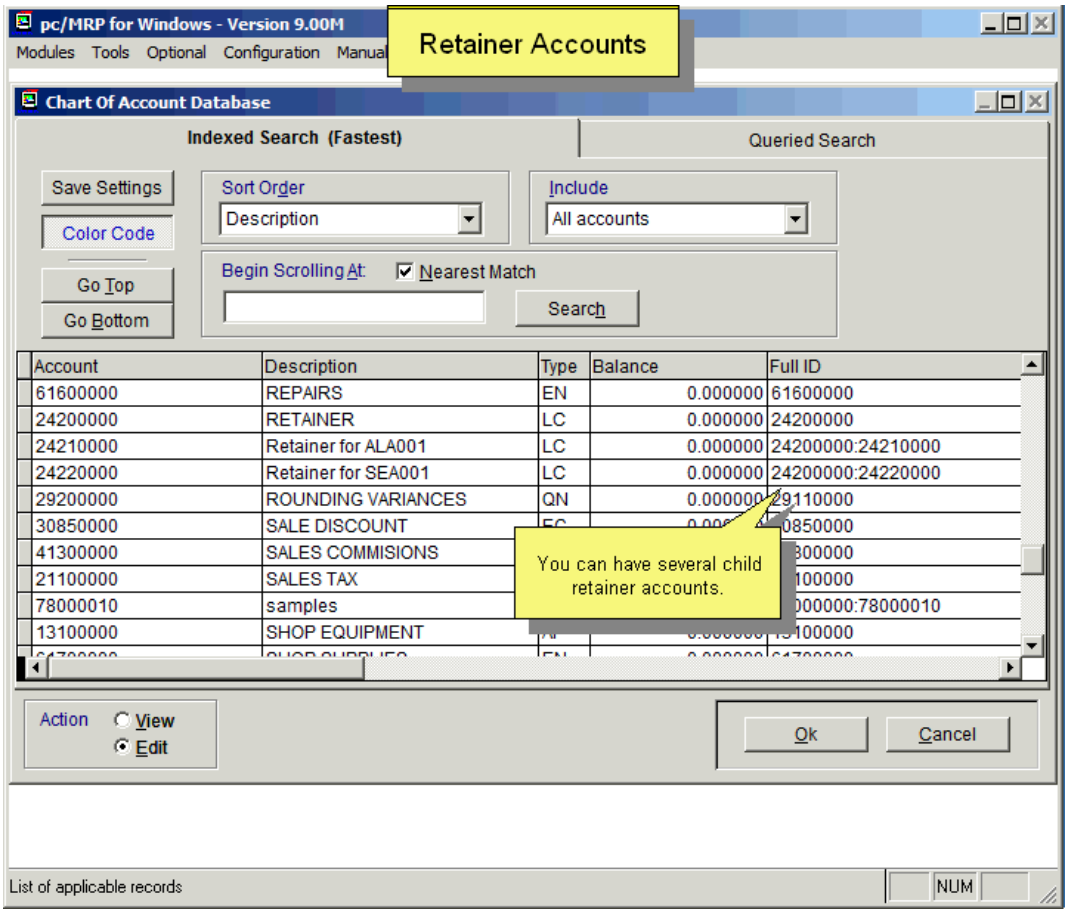
If a customer calls and complains that you invoiced him for bad parts and he wants a credit, follow our credit memo instructions, Chapter 14.10.

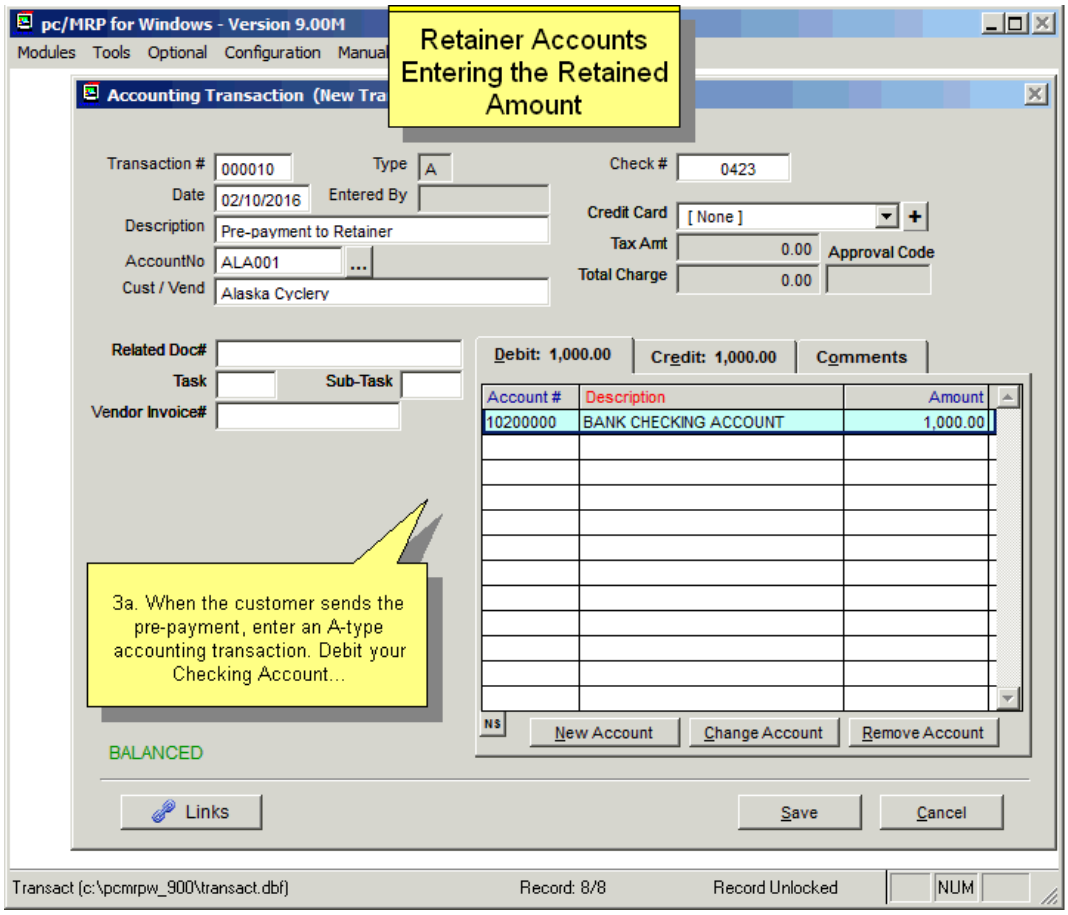
If a customer sends you a deposit for a specific sales order, follow our instructions for a sales deposit for a specific sales order, Chapter 14.12.

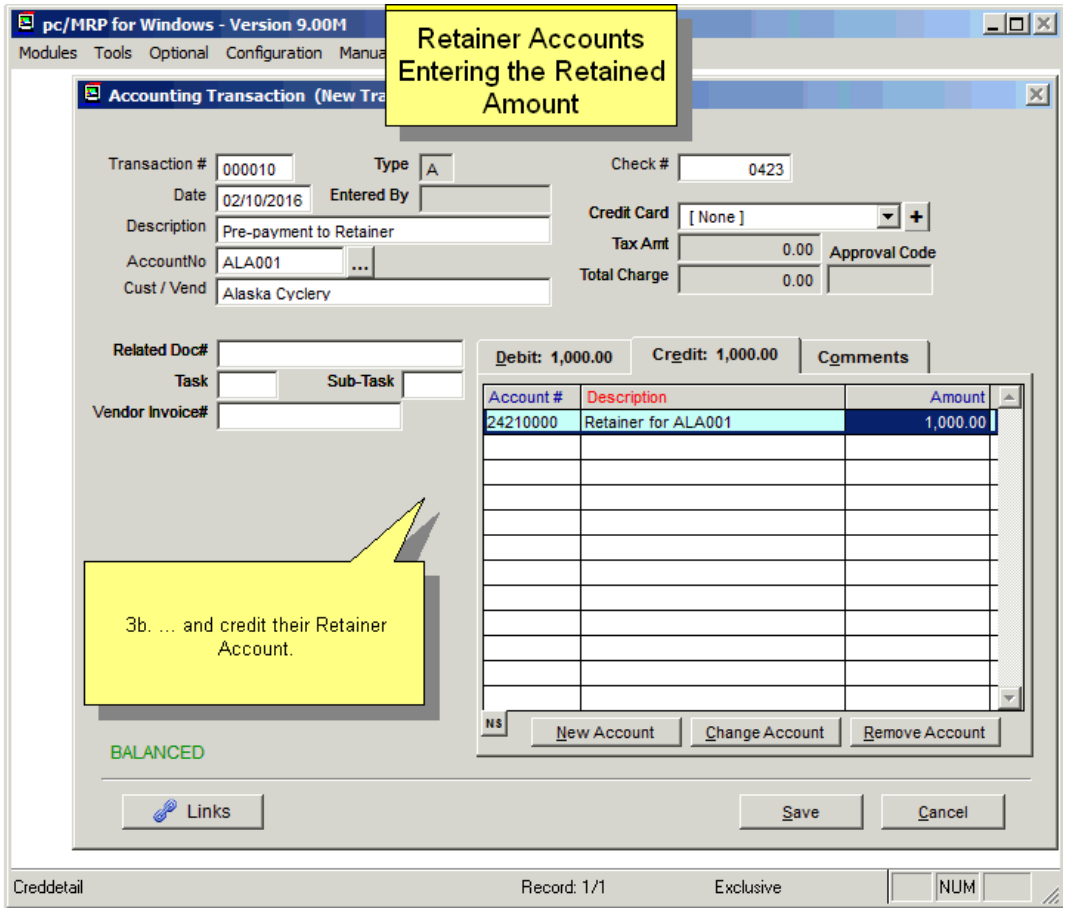
### 14.20.2 Setting up and using Retainer Accounts

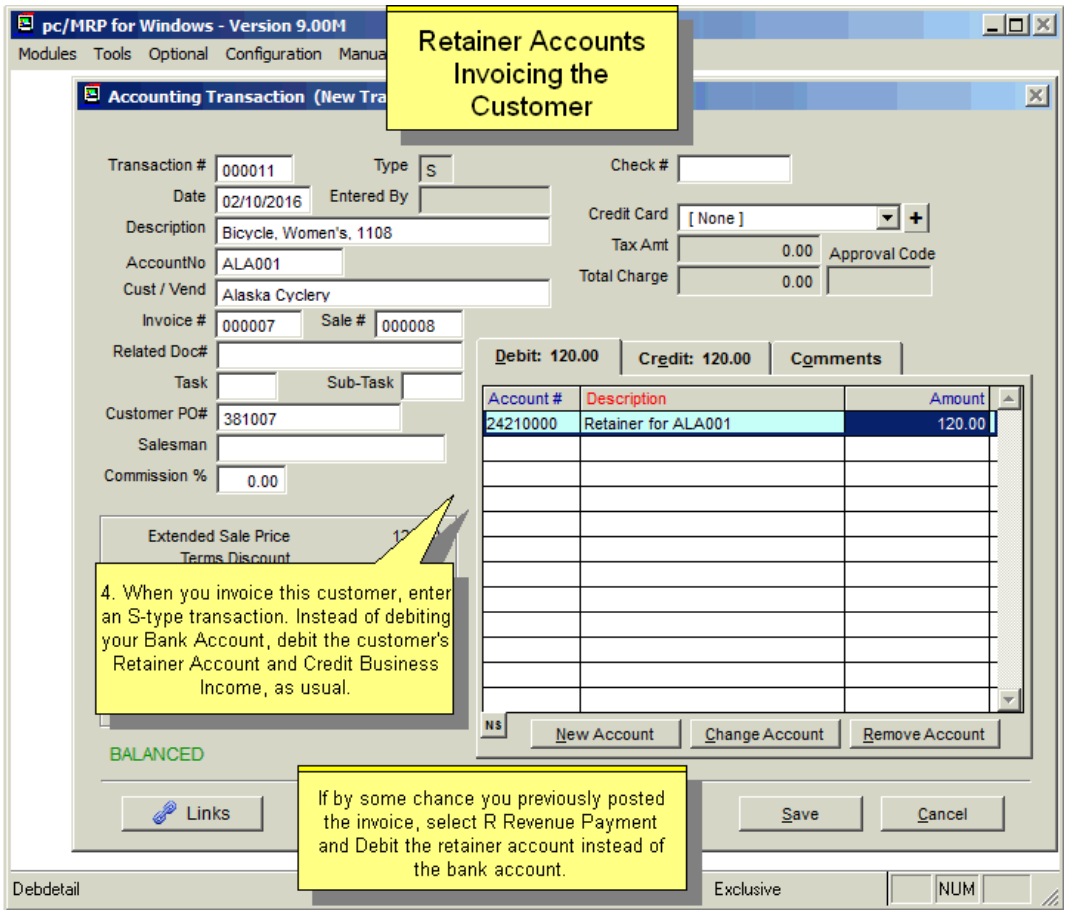


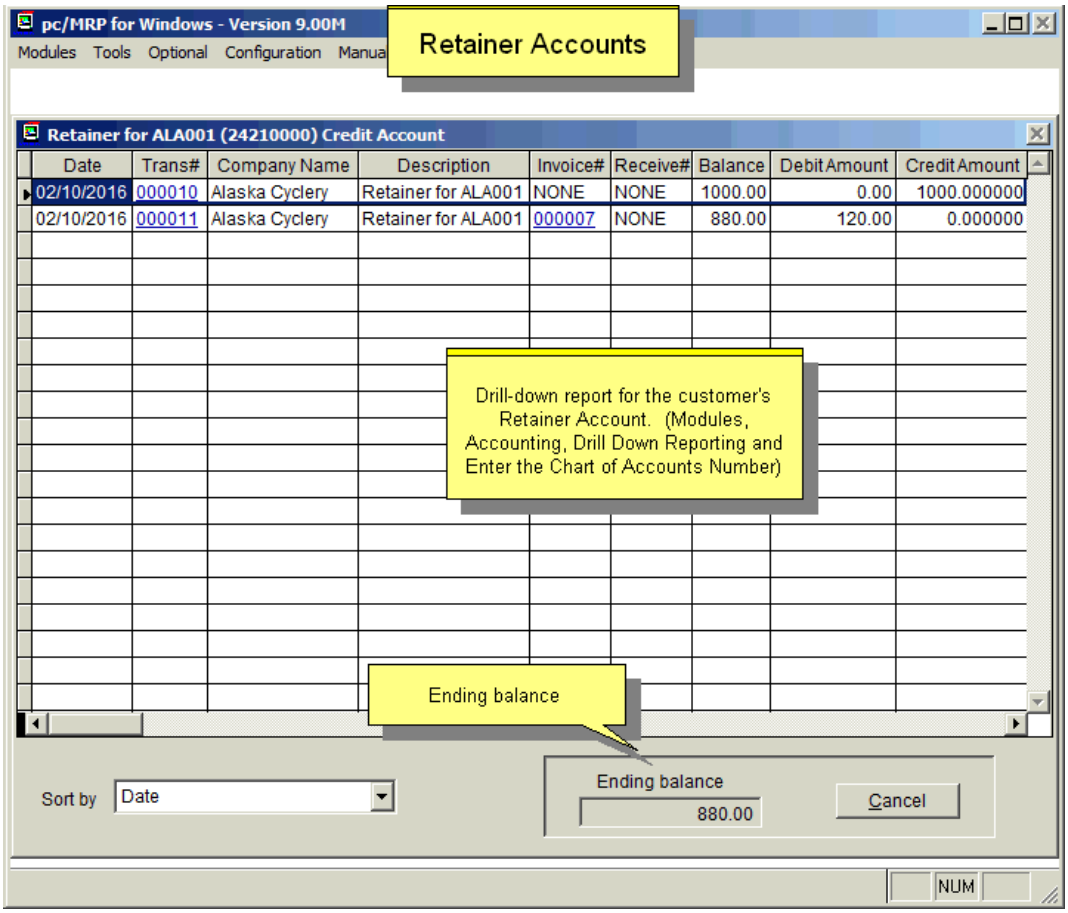

pc/MRP for Windows - Version 9.00M
Modules Tools Optional Configuration Manu
Retainer Accounts
Chart of Accounts
Account # 24210000
Acct Type LC
Account is inactive
Debit/Credit Credit
Tax Deduct No
This is a Credit Card Acct
Description Retainer for ALA001
Sub Account of
24200000
Period Starting Bal Ending Bal Budget
Period 01 0.00 0.00
Period 02 0.00 0.00
Period 03 0.00 0.00
Period 04 0.00 0.00
Period 05 0.00 0.00 0.00
Period 06 0.00 0.00 0.00
Period 07 0.00 0.00 0.00
Period 08 0.00 0.00 0.00
Period 09 0.00 0.00 0.00
Period 10 0.00 0.00 0.00
Period 11 0.00 0.00 0.00
Period 12 0.00 0.00 0.00
2. Create a sub-account of the parent Retainer Account, to hold this customer's money.
Please Note: pc/MRP will not let you edit a chart of account number and make it a a child account of a parent account if the child account has a history of any transactions.
Delete
Save/Exit
Cancel
Periodchart
Record: 1/12


pc/MRP for Windows - Version 9.00M
Modules Tools Optional Configuration Manual
Retainer Accounts
Chart Of Account Database
Indexed Search (Fastest)
Queried Search
Save Settings
Color Code
Go Top
Go Bottom
Sort Order
Description
Include
All accounts
Begin Scrolling At:
Nearest Match
Search
Account Description Type Balance Full ID
61600000 REPAIRS EN 0.000000 61600000
24200000 RETAINER LC 0.000000 24200000
24210000 Retainer for ALA001 LC 0.000000 24200000:24210000
24220000 Retainer for SEA001 LC 0.000000 24200000:24220000
29200000 ROUNDING VARIANCES QN 0.000000
30850000 SALE DISCOUNT
41300000 SALES COMMISIONS
21100000 SALES TAX
78000010 samples
13100000 SHOP EQUIPMENT
You can have several child retainer accounts.
Action View Edit
Ok
Cancel
List of applicable records
NUM


pc/MRP for Windows - Version 9.00M
Modules Tools Optional Configuration Manual
Retainer Accounts Entering the Retained Amount
Accounting Transaction (New Tra
Transaction # 000010
Type A
Check # 0423
Date 02/10/2016
Entered By
Description Pre-payment to Retainer
Credit Card [ None ]
AccountNo ALA001
Tax Amt 0.00
Approval Code
Cust / Vend Alaska Cyclery
Total Charge 0.00
Related Doc#
Task
Sub-Task
Vendor Invoice#
Debit: 1,000.00
Credit: 1,000.00
Comments
Account # Description Amount
10200000 BANK CHECKING ACCOUNT 1,000.00
3a. When the customer sends the pre-payment, enter an A-type accounting transaction. Debit your Checking Account...
BALANCED
New Account
Change Account
Remove Account
Links
Save
Cancel
Transact (c:\pcmrpw_900\transact.dbf)
Record: 8/8
Record Unlocked
NUM


pc/MRP for Windows - Version 9.00M
Modules Tools Optional Configuration Manua
Retainer Accounts Entering the Retained Amount
Accounting Transaction (New Tra
Transaction # 000010
Type A
Check # 0423
Date 02/10/2016
Entered By
Description Pre-payment to Retainer
Credit Card [ None ]
AccountNo ALA001
Tax Amt 0.00
Approval Code
Cust / Vend Alaska Cyclery
Total Charge 0.00
Related Doc#
Task
Sub-Task
Vendor Invoice#
Debit: 1,000.00
Credit: 1,000.00
Comments
Account # Description Amount
24210000 Retainer for ALA001 1,000.00
3b. ... and credit their Retainer Account.
BALANCED
New Account
Change Account
Remove Account
Links
Save
Cancel
Creddetail
Record: 1/1
Exclusive
NUM


pc/MRP for Windows - Version 9.00M
Modules Tools Optional Configuration Manua
Retainer Accounts Invoicing the Customer
Accounting Transaction (New Tra
Transaction # 000011
Type S
Check #
Date 02/10/2016
Entered By
Credit Card [ None ]
Description Bicycle, Women's, 1108
Tax Amt 0.00
Approval Code
AccountNo ALA001
Total Charge 0.00
Cust / Vend Alaska Cyclery
Invoice # 000007
Sale # 000008
Related Doc#
Task
Sub-Task
Customer PO# 381007
Salesman
Commission % 0.00
Debit: 120.00
Credit: 120.00
Comments
Account # Description Amount
24210000 Retainer for ALA001 120.00
Extended Sale Price
Terms Discount
4. When you invoice this customer, enter an S-type transaction. Instead of debiting your Bank Account, debit the customer's Retainer Account and Credit Business Income, as usual.
New Account
Change Account
Remove Account
BALANCED
Links
If by some chance you previously posted the invoice, select R Revenue Payment and Debit the retainer account instead of the bank account.
Save
Cancel
Debdetail
Exclusive
NUM

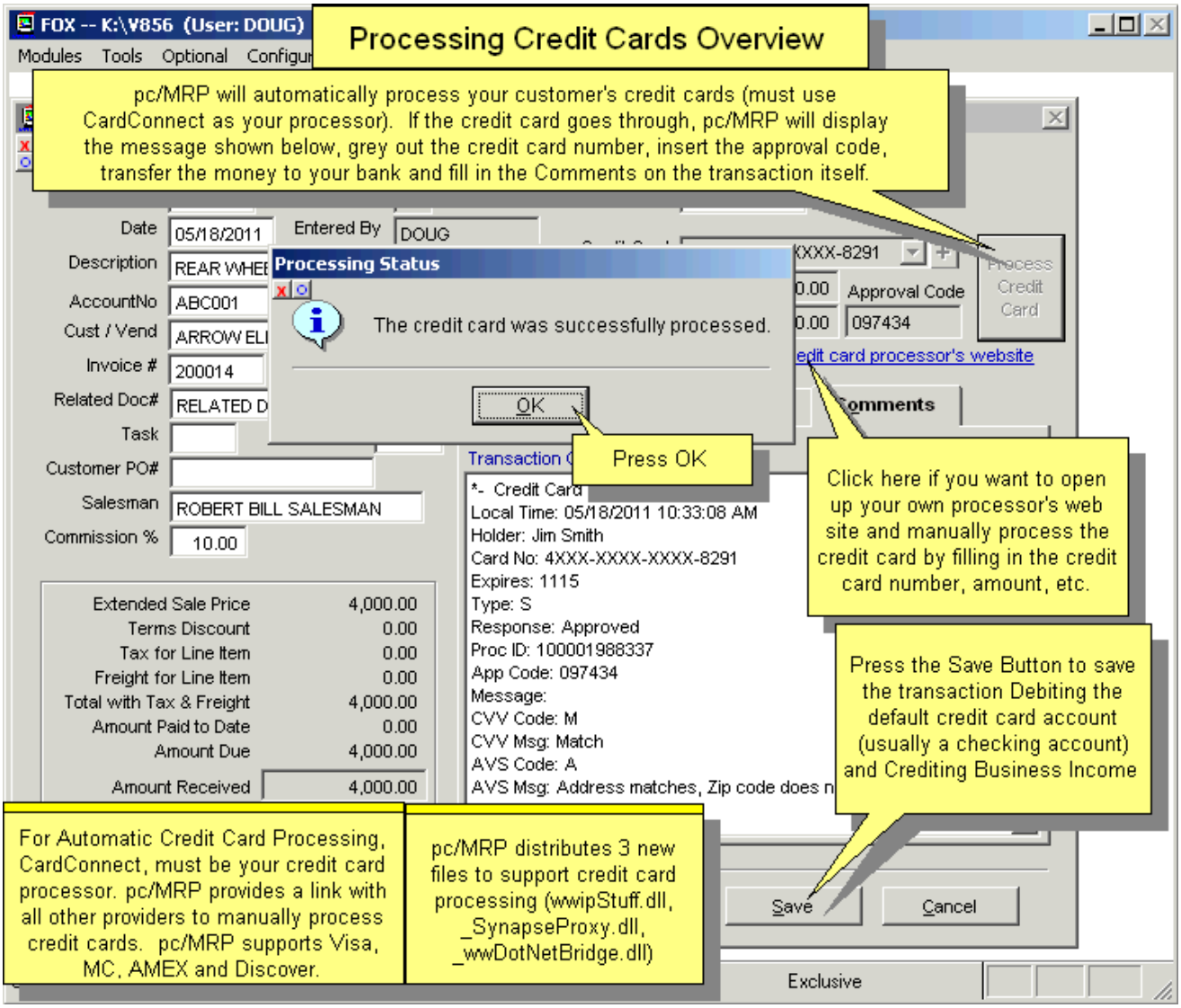

pc/MRP for Windows - Version 9.00M
Modules Tools Optional Configuration Manua
Retainer Accounts
Retainer for ALA001 (24210000) Credit Account
Date Trans# Company Name Description Invoice# Receive# Balance Debit Amount Credit Amount
02/10/2016 000010 Alaska Cyclery Retainer for ALA001 NONE NONE 1000.00 0.00 1000.000000
02/10/2016 000011 Alaska Cyclery Retainer for ALA001 000007 NONE 880.00 120.00 0.000000
Drill-down report for the customer's Retainer Account. (Modules, Accounting, Drill Down Reporting and Enter the Chart of Accounts Number)
Ending balance
Sort by Date
Ending balance
880.00
Cancel
NUM

# 14.21 Processing Credit Cards with Card Connect

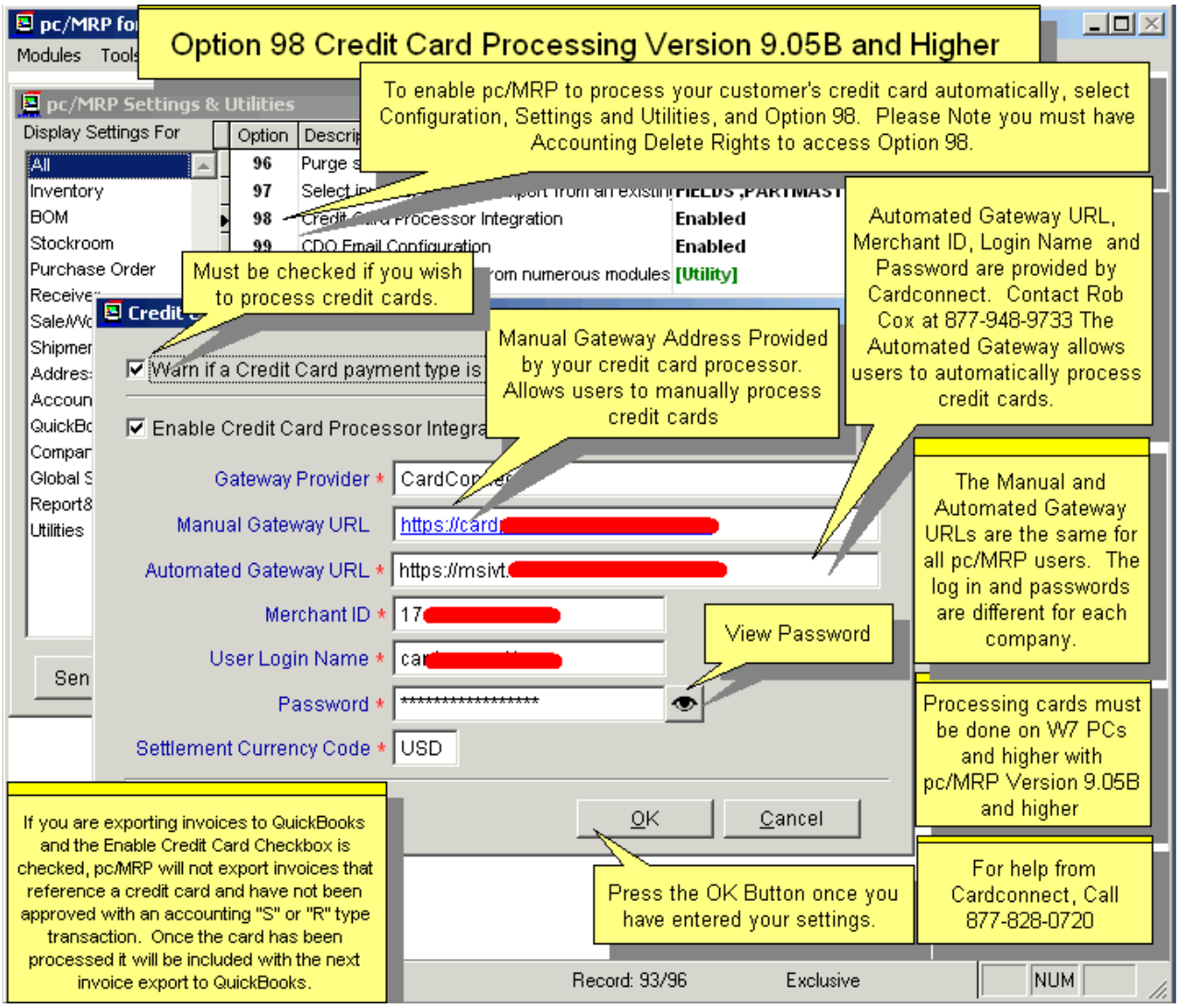
### 14.21.1 Overview/Setup

For detailed, step-by-step instructions see http://www.pcmrp.com/mrp101/ccintegrationoverview.htm

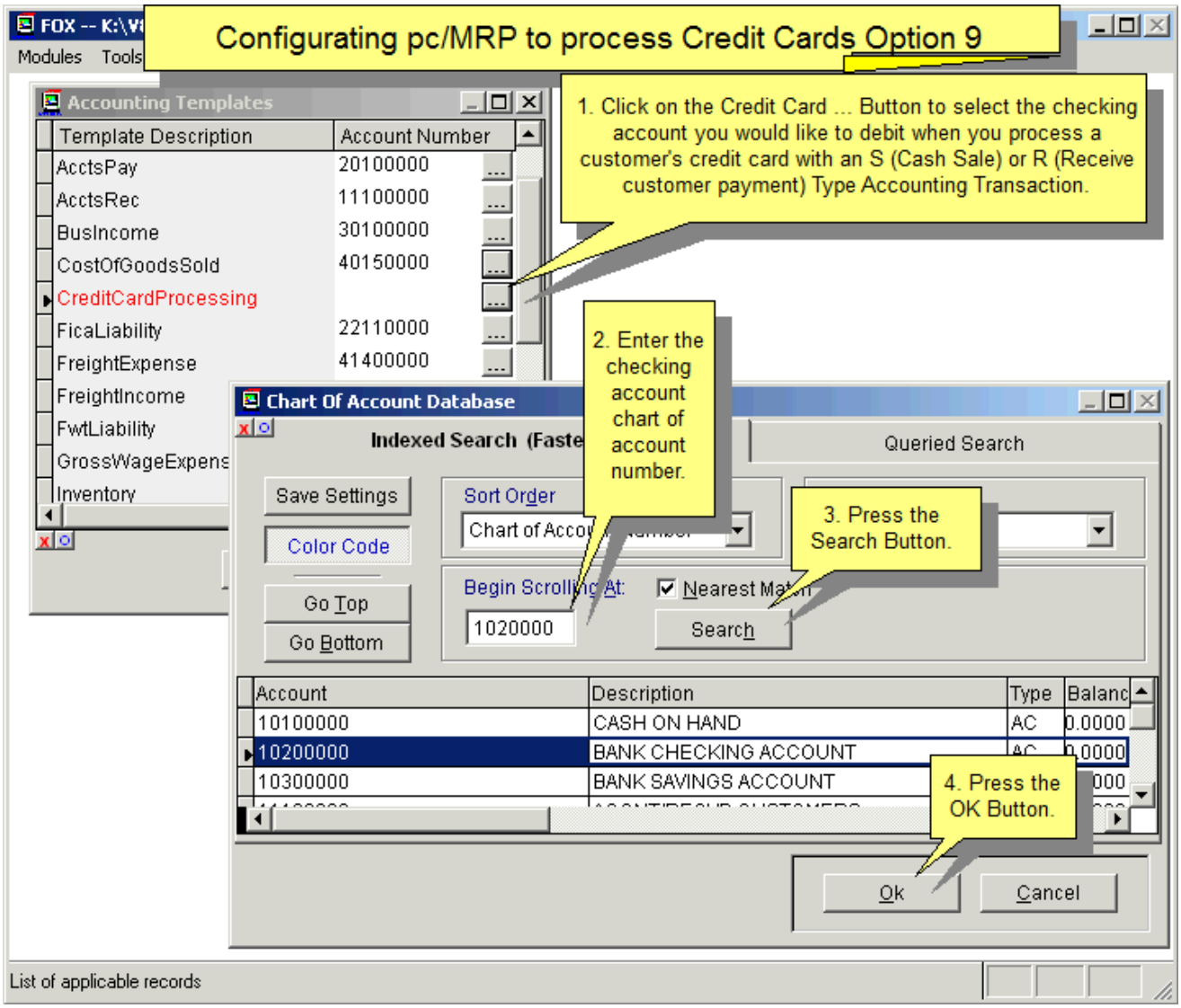
For Automatic Credit Card Processing, CardConnect, must be your credit card processor. pc/MRP provides a link with all other providers to manually process credit cards. pc/MRP supports Visa, MC, AMEX and Discover.



Use Configuration, Settings & Utilities, **Option 98** to enable credit card processor integration.



Next select Option 9 to set the default chart of account number that pc/MRP should debit when a credit card is charged. Select Edit template account numbers.

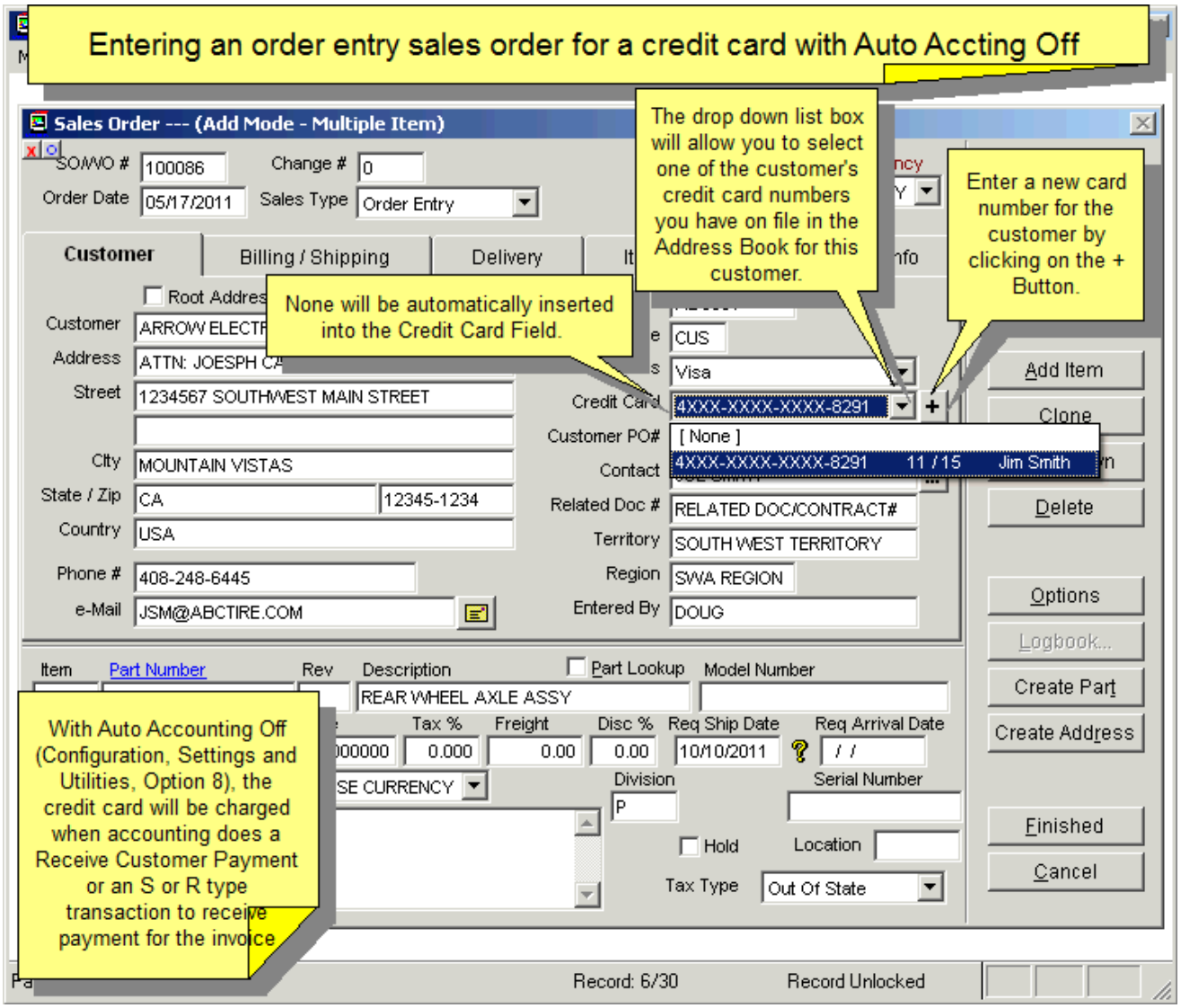



To enter or edit a credit card number for a customer into the Address Book, select Module, Address Book, Edit, enter the company name and select the Credit Cards Button. Users must have Sales, Invoice or Accounting Create Rights or higher to view the credit card screen. Use the ↷ button to quickly fill the billing address with an address you select from the Address book.

For historical purposes, once a credit card has been processed, do not edit or remove the credit card number. You can edit the Expiration Date and add new cards for the customer. Checking Inactive will cause the credit card number to not appear. The sales, invoice and accounting transactions will still display the last 4 characters of the card number. If you want the inactive card numbers to reappear, call Software Arts for a flag file.

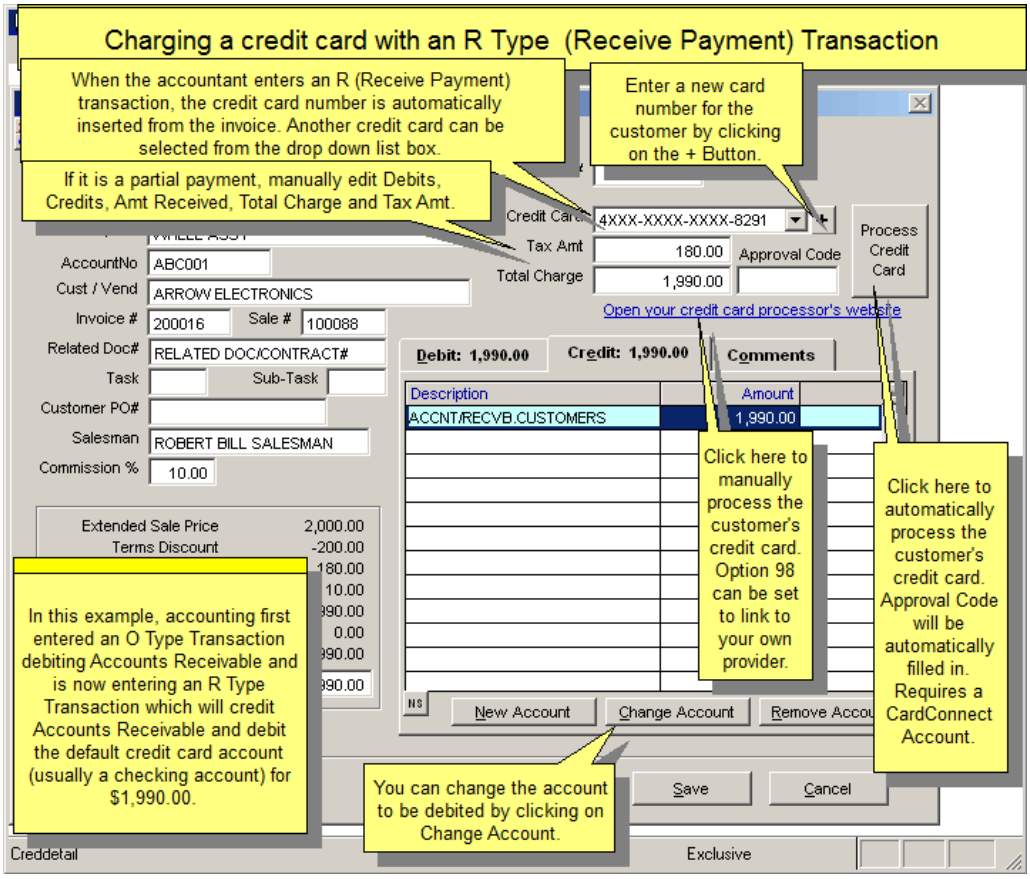
### 14.21.2 Entering Sales Orders and Invoices Paid by Credit Card

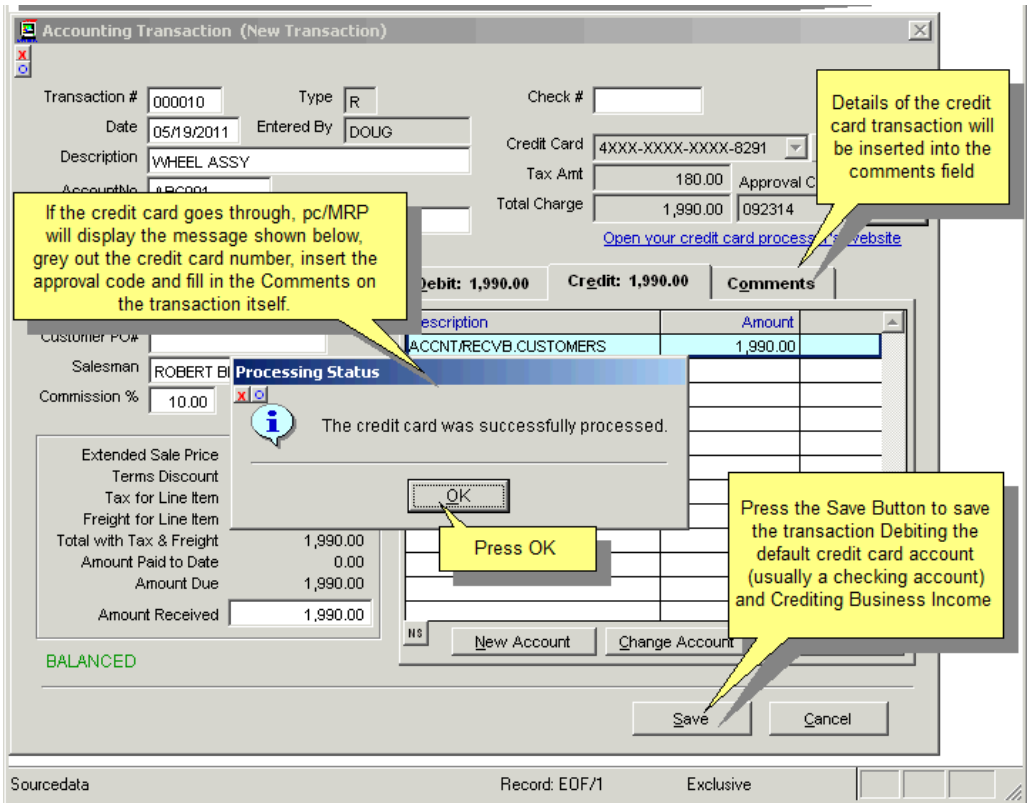
When entering an On Account an Carry or Cash and Carry Sales Order, or entering and Invoice for an existing Sales Order, you can select the desired credit card form the drop down list. You can enter a new card number for the customer by clicking on the + Button. Or you can leave the credit card information blank for now. If you selected a credit card when entering the sales order, then the credit card number will be transferred into the invoice. If you selected a credit card number for the invoice, it will be transferred into the accounting transaction.

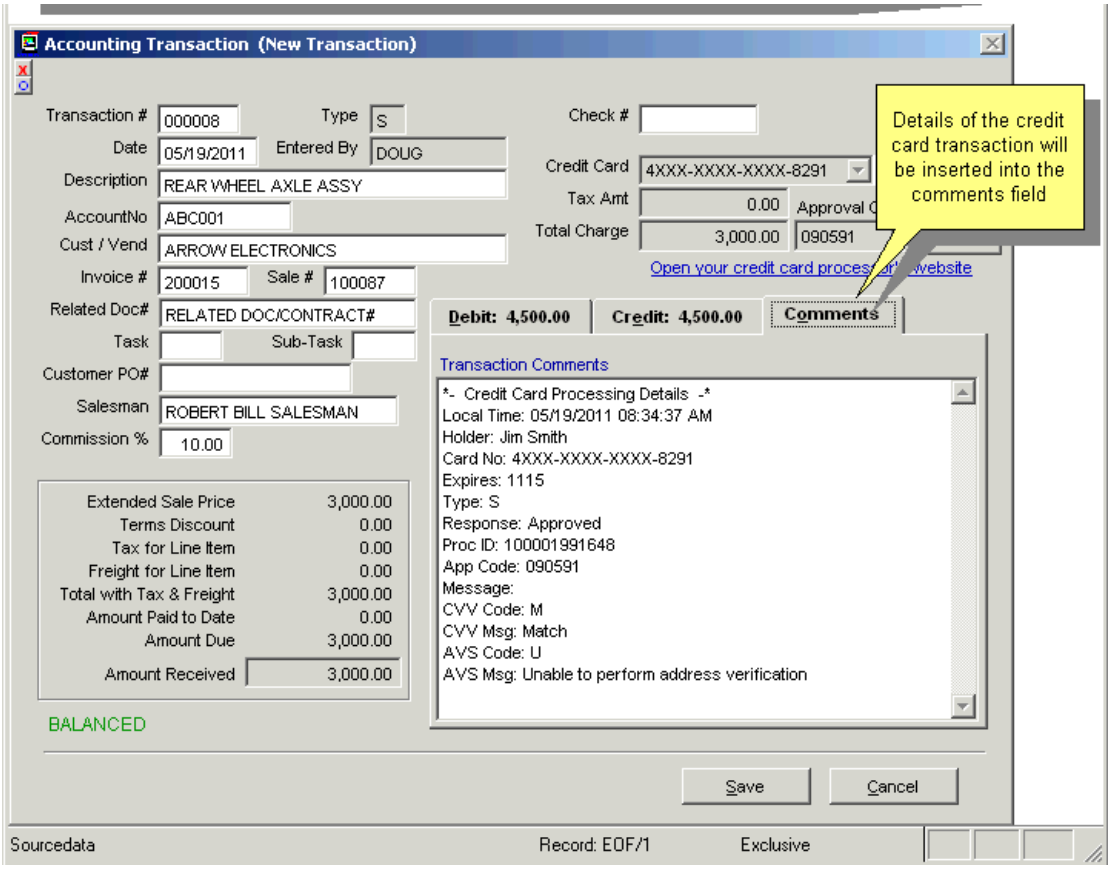


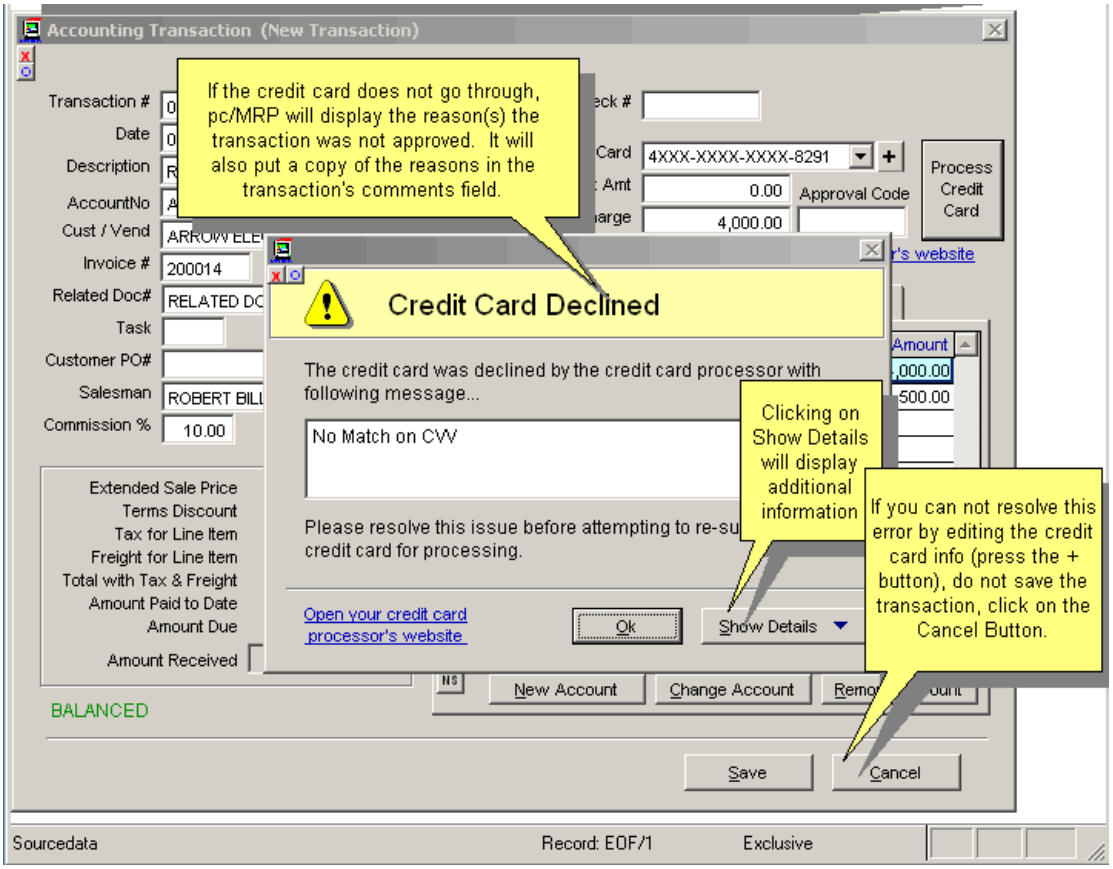
### 14.21.3 Charging a Credit Card with an S or R-type Accounting Transaction

The Accountant will enter an S or an R-type accounting transaction. For the manual process they would click on "Open your credit card processor's website". Companies who have a CardConnect account can use the automated process by simply clicking on "Process Credit Card".





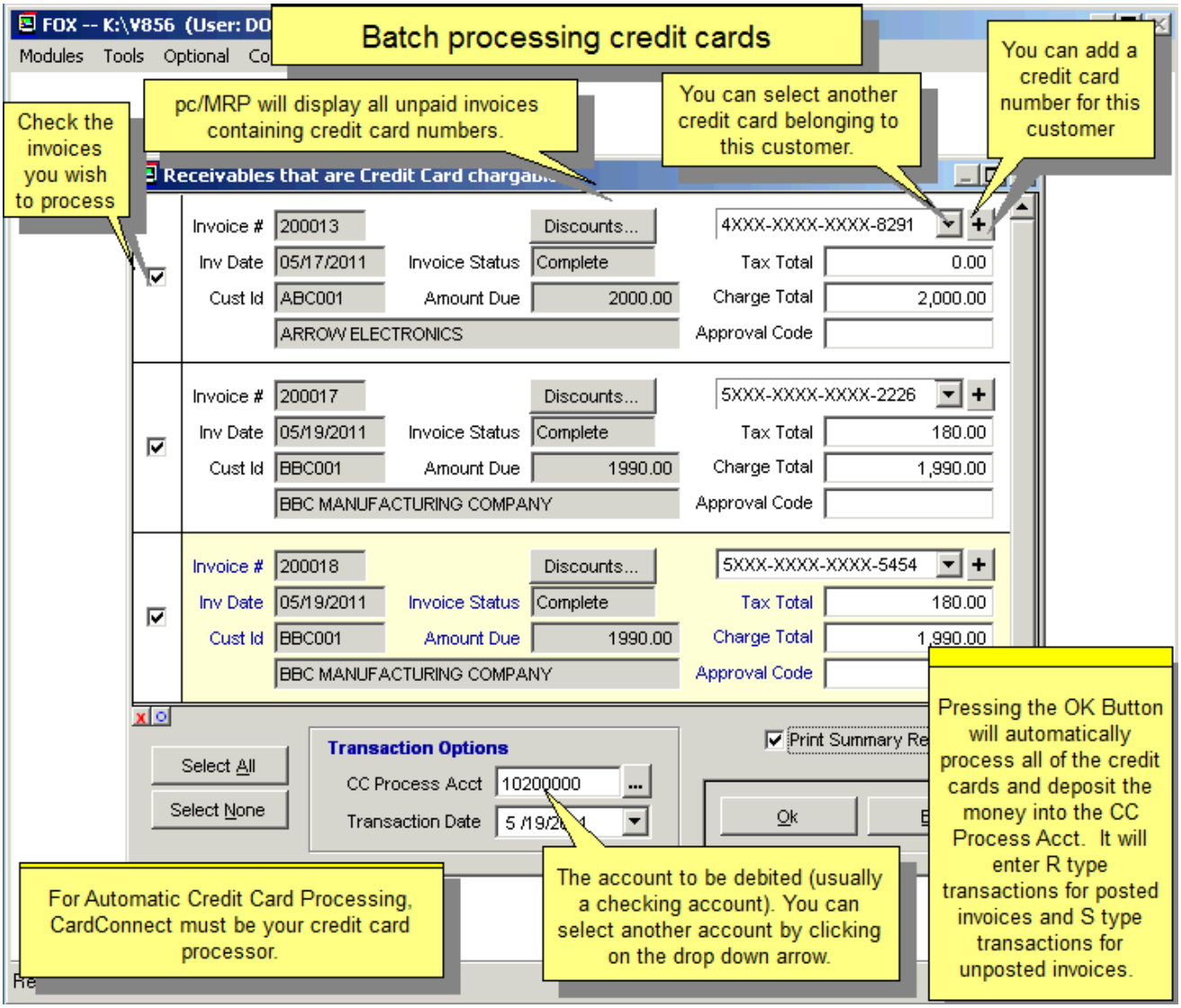




If the charge was successful then behind the scenes the invoice was marked as Complete, and the Date Paid and Amount Paid fields were filled out.

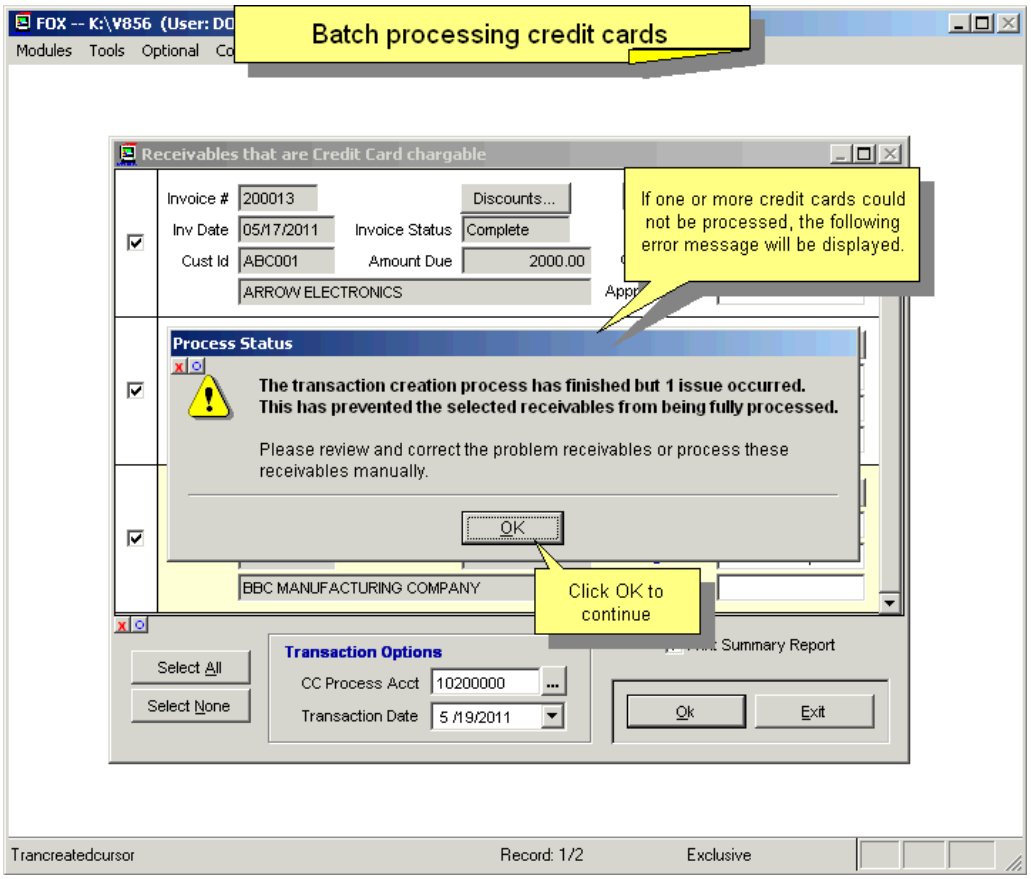
### 14.21.4 Batch Processing Credit Cards

Select Accounting, Receive Customer Payment, Credit Card Payments.

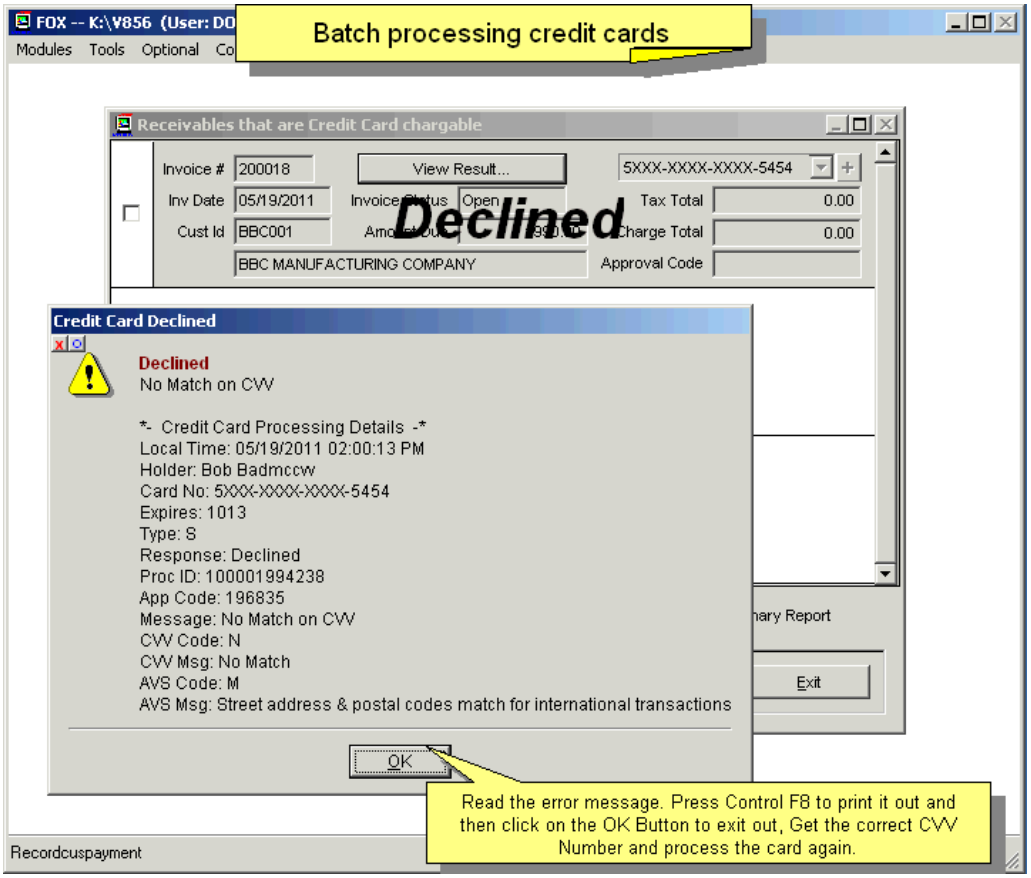
Pressing the Ok button will automatically process all of the credit cards and deposit the money into the credit card process account. It will enter R type transactions for posted invoices and S type transactions for un-posted invoices.



If any of the charges were not successful you would see the following screens:

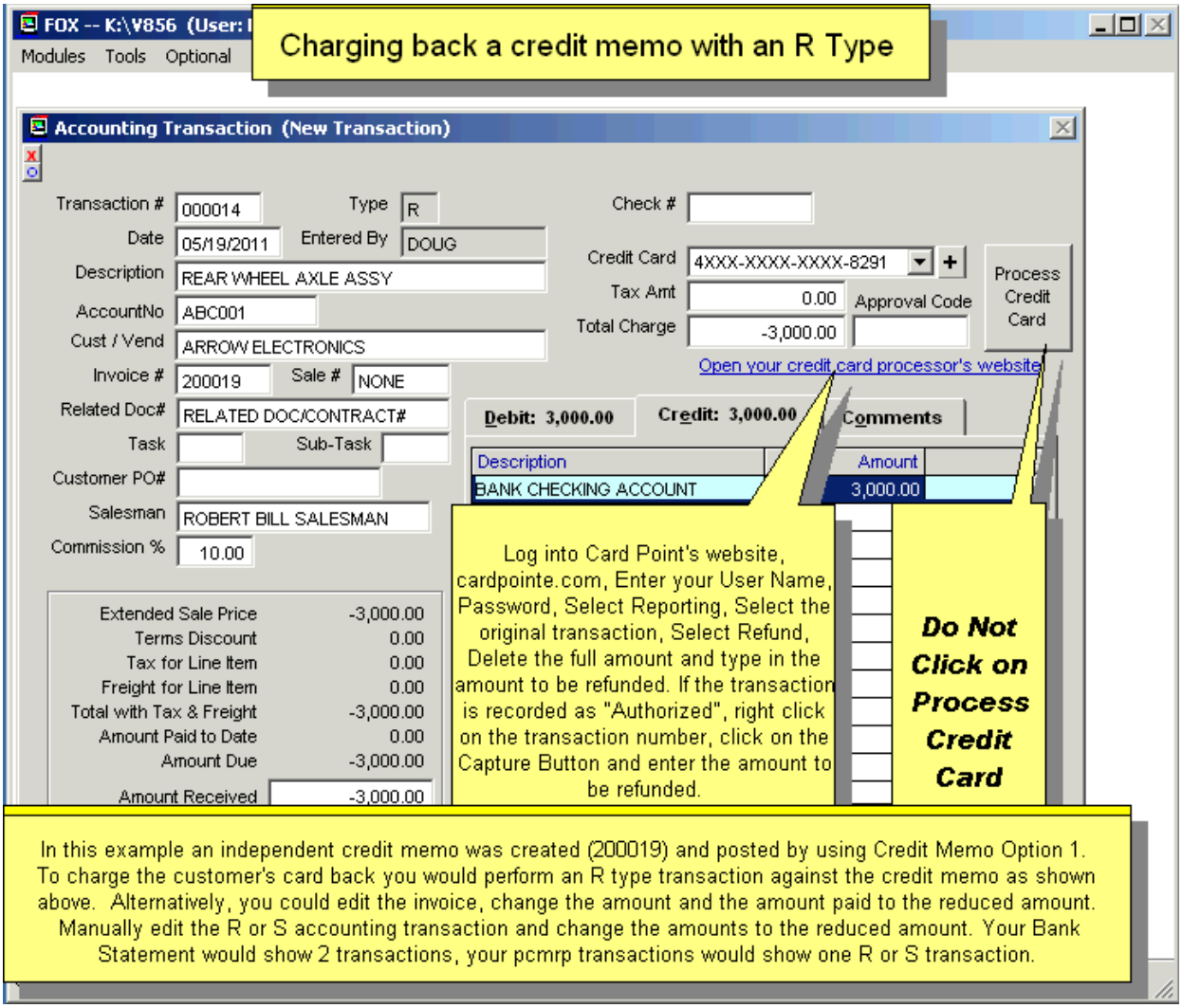



Click OK then click on View Result for each receivable listed you want to learn more about.



### 14.21.5 Issuing a Refund for a Credit Card Payment

In this example an independent credit memo was created (200019) and posted by using Credit Memo Option #1. To charge the customer's card back you would perform an R type transaction against the credit memo as shown above. Alternatively, you could edit the invoice, change the amount and the amount paid to the reduced amount. Manually edit the R or S accounting transaction and change the amounts to the reduced amount. Your Bank Statement would show 2 transactions; your pc/MRP transactions would show one R or S transaction.




### 14.21.6 Charging Back a Customer's Credit Card

For detailed, step-by-step instructions see http://www.pcmrp.com/mrp101/chargebacklogintocc.htm

Follow the slide show to refund the payment using CardPointe. Then use pc/MRP to create a credit memo, select option#2. Select Cancel when the program offers to print a check.

### 14.21.7 CardConnect Reports

To learn about running CardConnect reports, see the pc/MRP online tutorial at http://www.pcmrp.com/mrp101/ccaddmarathonaddress.htm or call CardConnect.

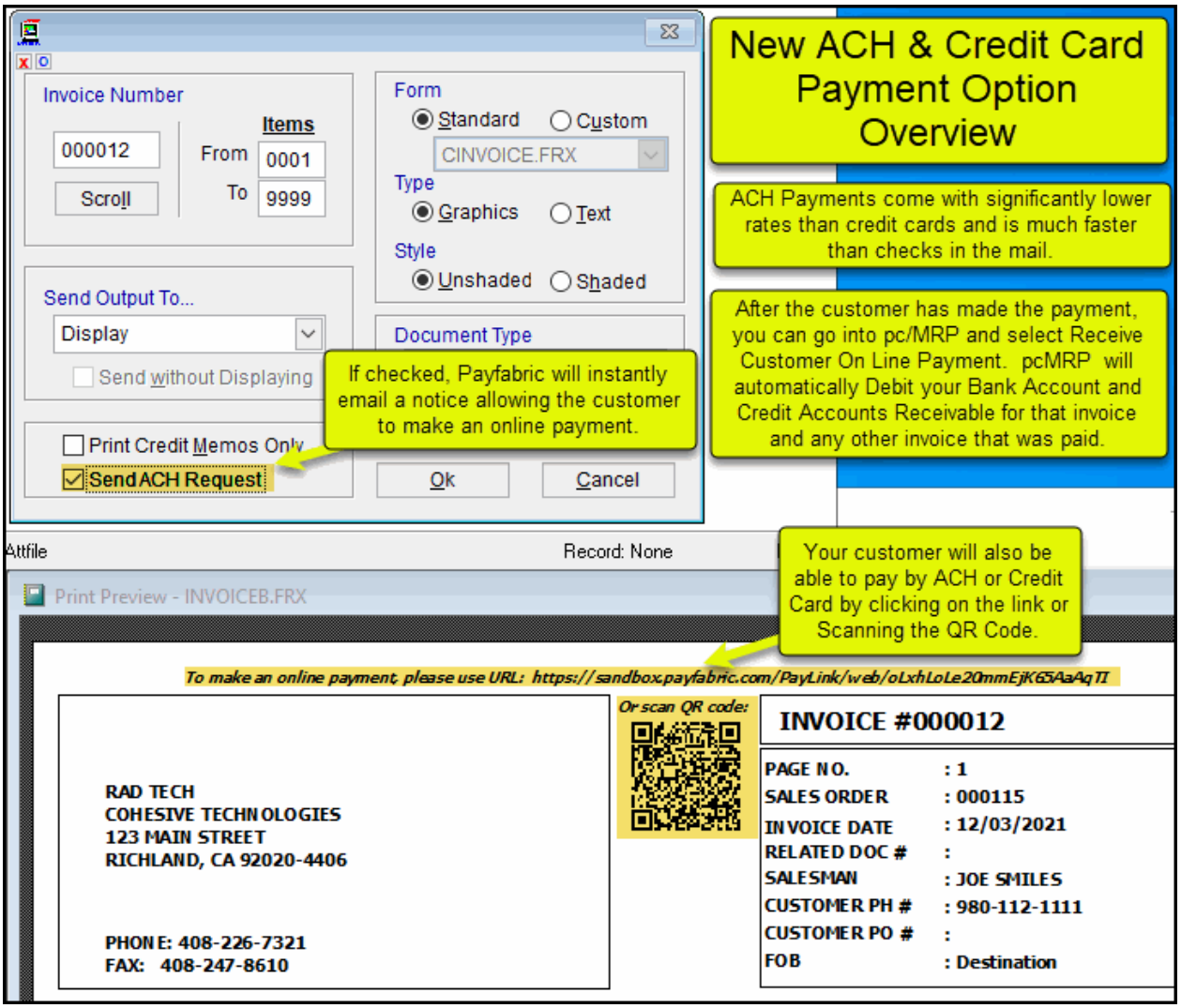
### 14.21.8 Exporting Invoices Paid By Credit Card in pc/MRP to QuickBooks

See **Chapter 16.16.3.1** in this Manual.

# 14.22 Processing Credit Cards with Evo

### 14.22.1 Overview

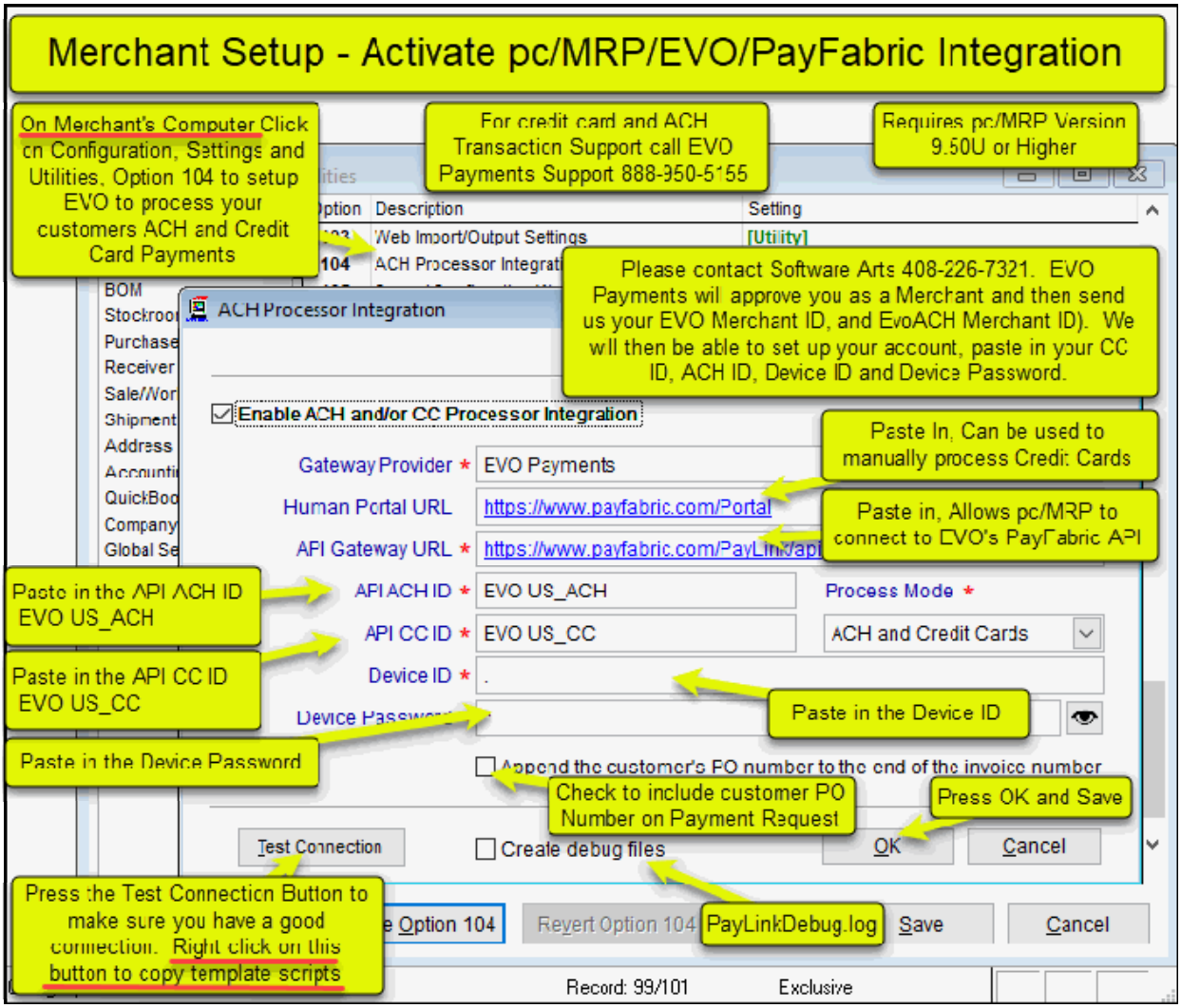
For Automatic Credit Card Processing with this method, Evo, must be your credit card processor.



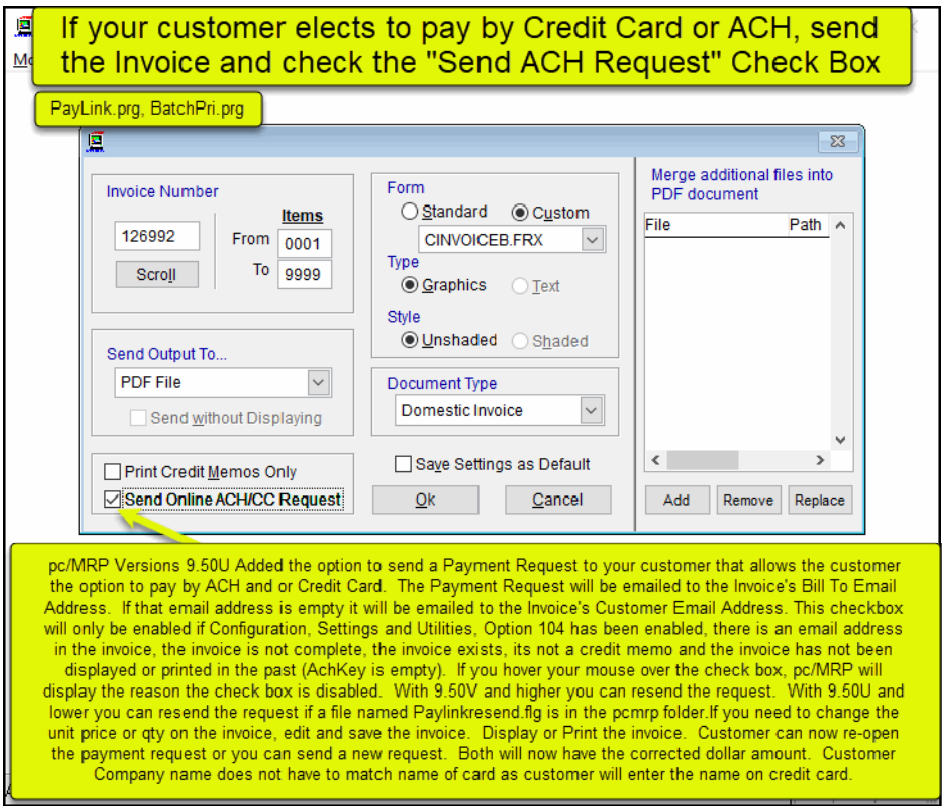

For a detailed, step-by-step slide show see https://pcmrp.com/mrp101/achinvoiceoverview.htm
For a video see https://www.youtube.com/watch?v=be_tLXT2zJY

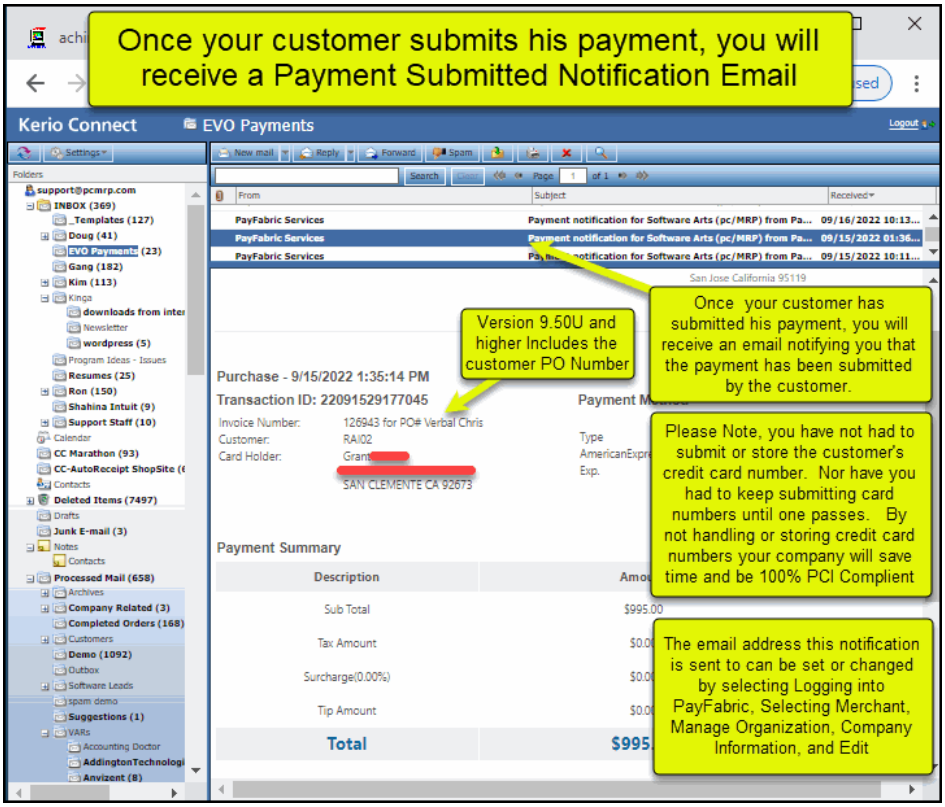
### 14.22.2 Setup

Use Configuration, Settings & Utilities, **Option 104** to enable credit card processor integration.

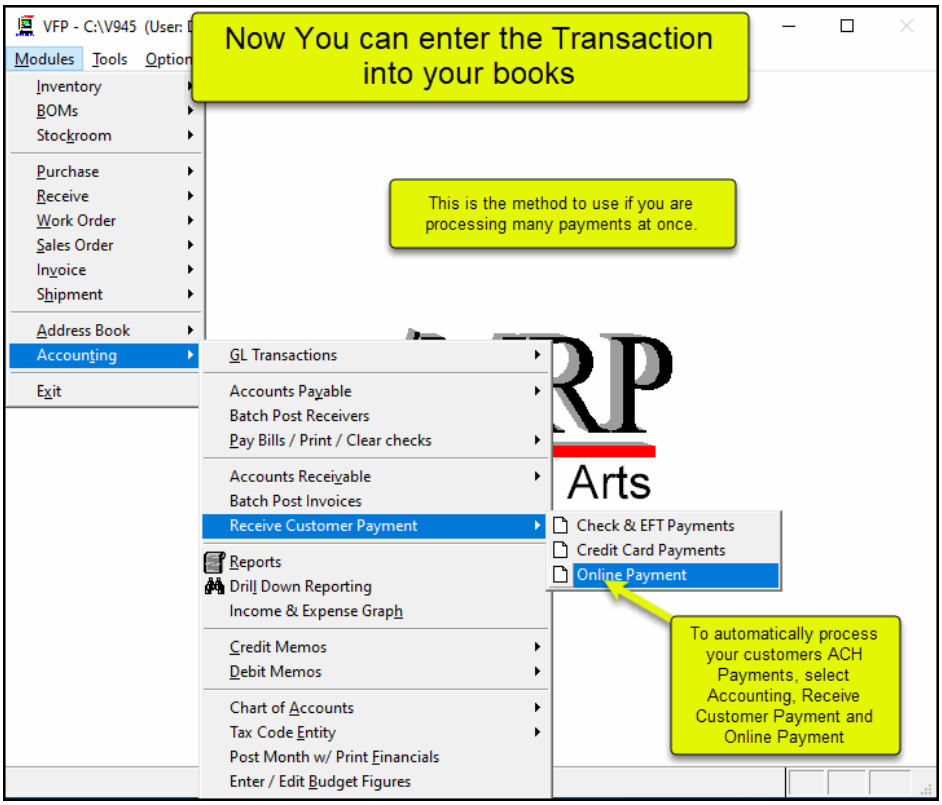


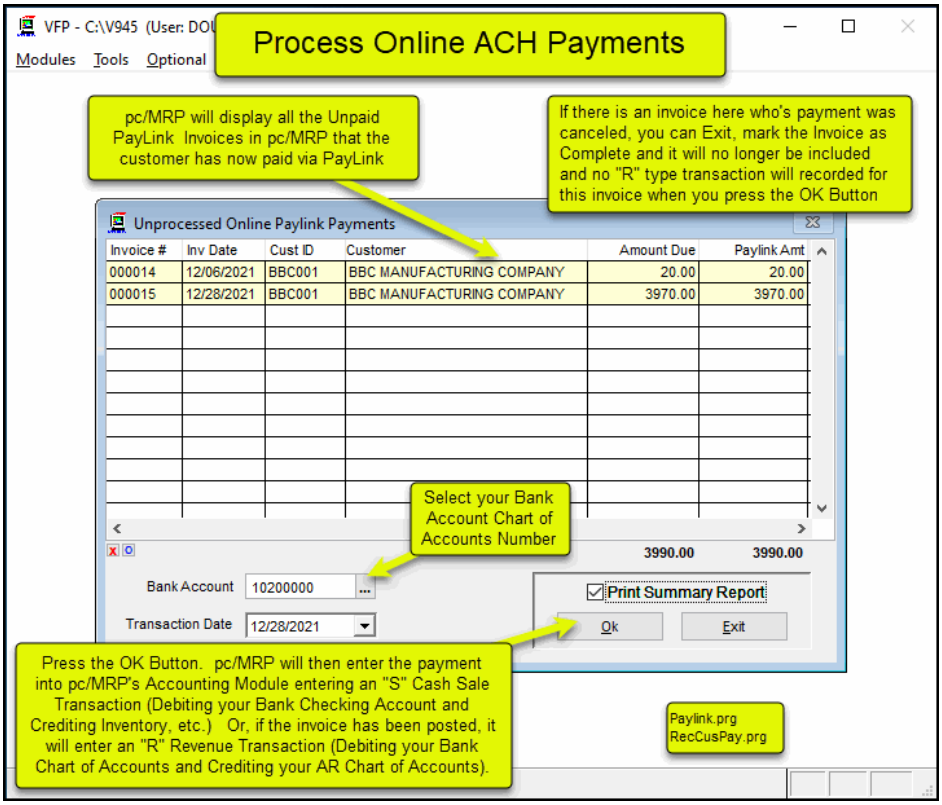
### 14.22.3 Send Customer a Payment Request

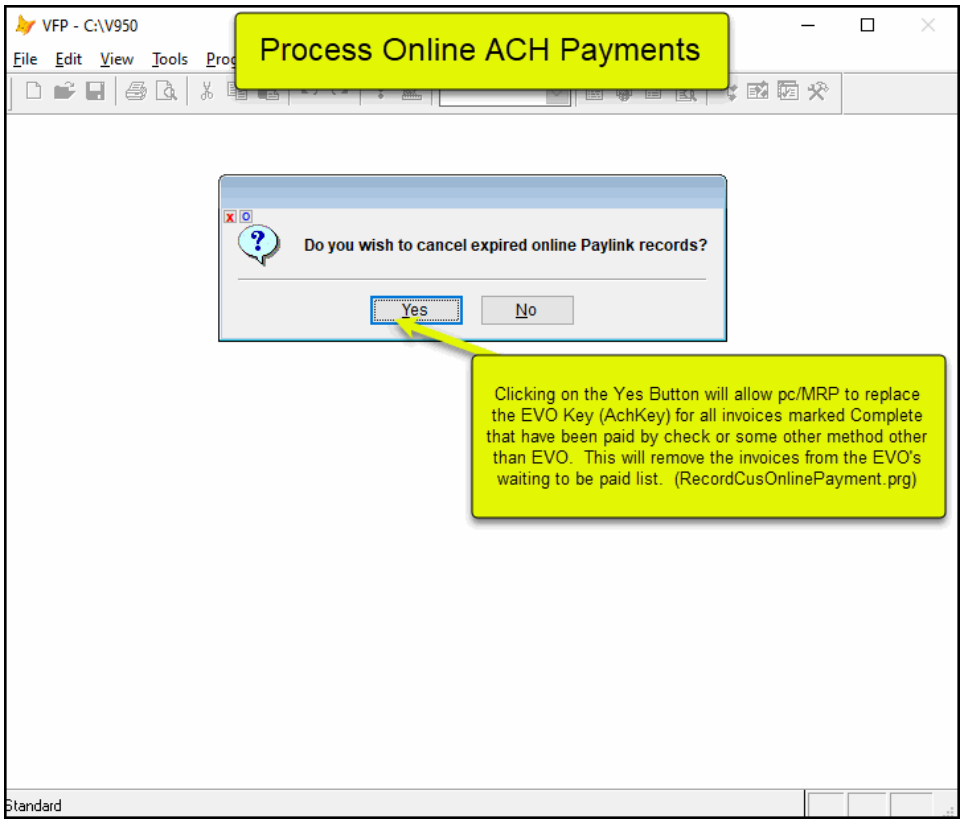


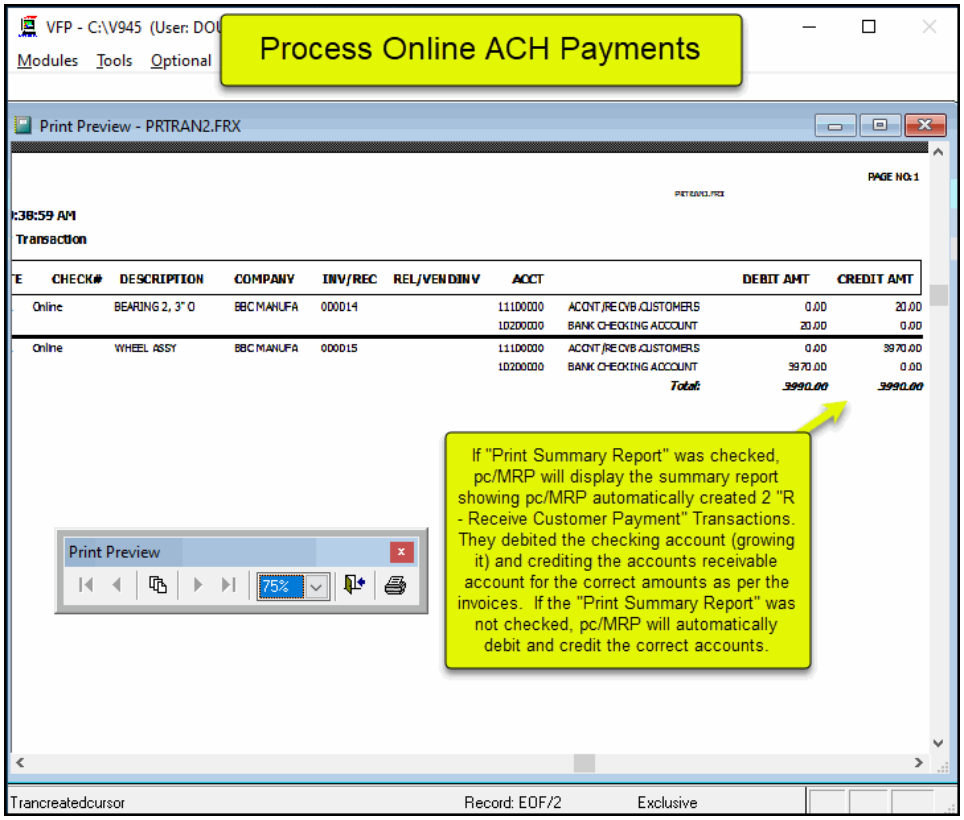



### 14.22.4 Enter the Transaction into your Books




VFP - C:\V950
File Edit View Tools Prog
Process Online ACH Payments
Do you wish to cancel expired online Paylink records?
Yes
No
Clicking on the Yes Button will allow pc/MRP to replace the EVO Key (AchKey) for all invoices marked Complete that have been paid by check or some other method other than EVO. This will remove the invoices from the EVO's waiting to be paid list. (RecordCusOnlinePayment.prg)
Standard


VFP - C:\V945 (User: DOU
Modules Tools Optional
Process Online ACH Payments
Print Preview - PRTRAN2.FRX
PAGE NO: 1
:38:59 AM
Transaction
TE CHECK# DESCRIPTION COMPANY INV/REC REL/VENDINV ACCT DEBIT AMT CREDIT AMT
Online BEARING 2, 3" O BBC MANUFA 000014 11100000 ACCNT/RECVB/CUSTOMERS 0.00 20.00
10200000 BANK CHECKING ACCOUNT 20.00 0.00
Online WHEEL ASSY BBC MANUFA 000015 11100000 ACCNT/RECVB/CUSTOMERS 0.00 3970.00
10200000 BANK CHECKING ACCOUNT 3970.00 0.00
Total: 3990.00 3990.00
Print Preview
75%
If "Print Summary Report" was checked, pc/MRP will display the summary report showing pc/MRP automatically created 2 "R - Receive Customer Payment" Transactions. They debited the checking account (growing it) and crediting the accounts receivable account for the correct amounts as per the invoices. If the "Print Summary Report" was not checked, pc/MRP will automatically debit and credit the correct accounts.
Trancreatedcursor
Record: EOF/2
Exclusive

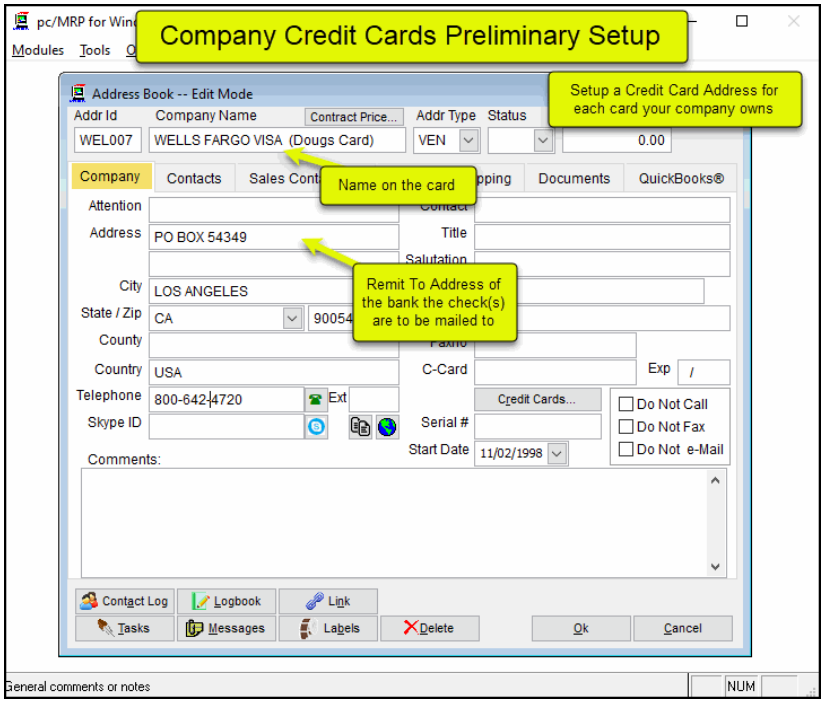
# 14.23 Paying Credit Card Bills

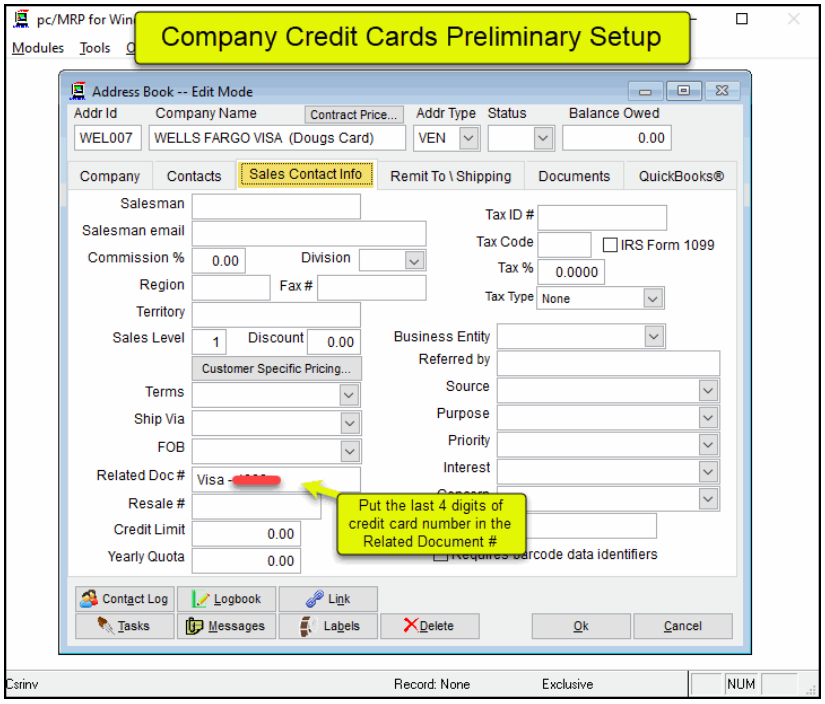
## 14.23.1 Credit Card Setup

For a detailed, step-by-step slide show see https://pcmrp.com/mrp101/achinvoiceoverview.htm

### 14.23.1.1 Credit Card Setup, Create a Credit Card Vendor Address for each Credit Card

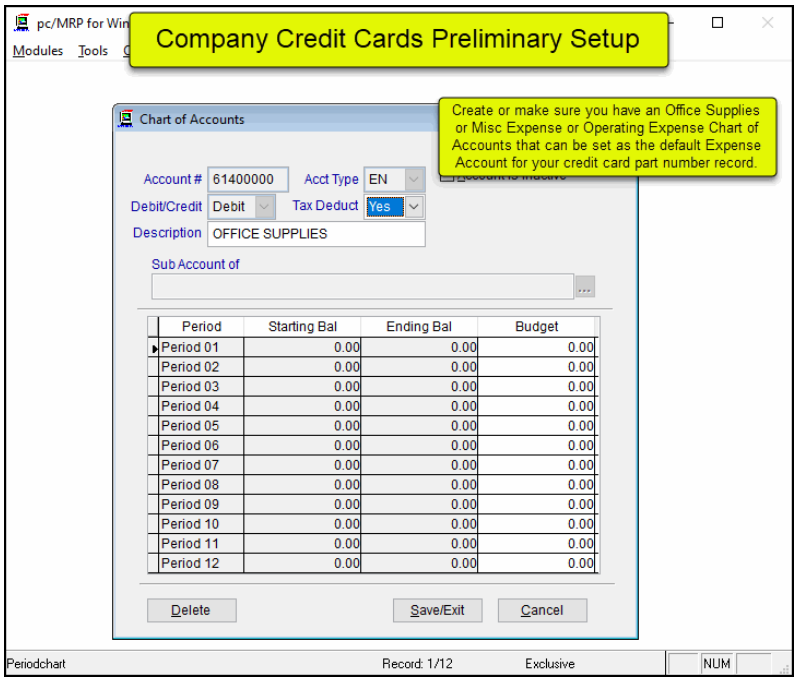
Create credit card vendor addresses for each of your company credit cards.



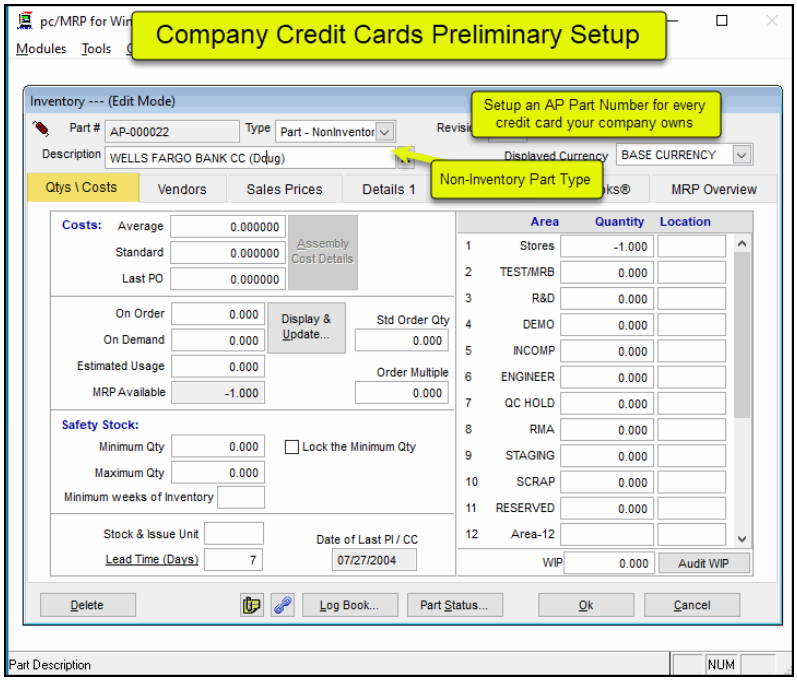
### 14.23.1.2 Credit Card Setup, Create a Default Chart of Accounts Expense Account

Create a default chart of account number to be debited when paying a credit card bill. Yu will be allowed to debit other chart of accounts when paying the bill.

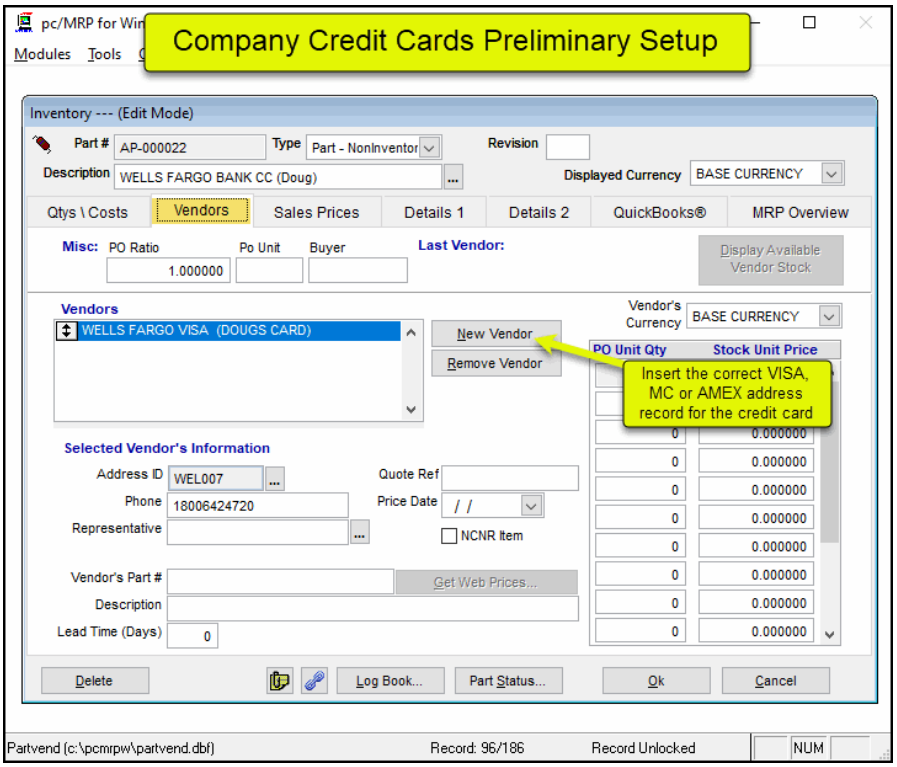



### 14.23.1.3 Credit Card Setup, Create a Default Part Number for each of your Credit Cards

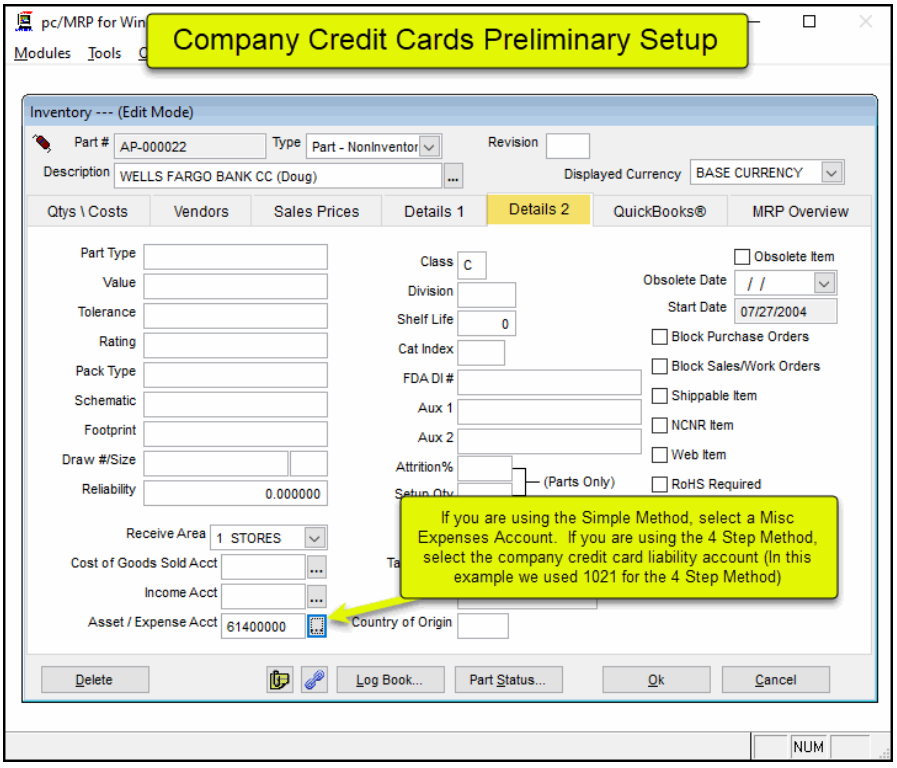
Create Credit Card Part Numbers for each of your credit cards. When they are selected to be paid, they will automatically insert the correct credit card vendor address and default expense account to be debited. Set its Part Type to Part – Non Inventory.



Insert the Credit Card Vendor Address for this credit card part number.

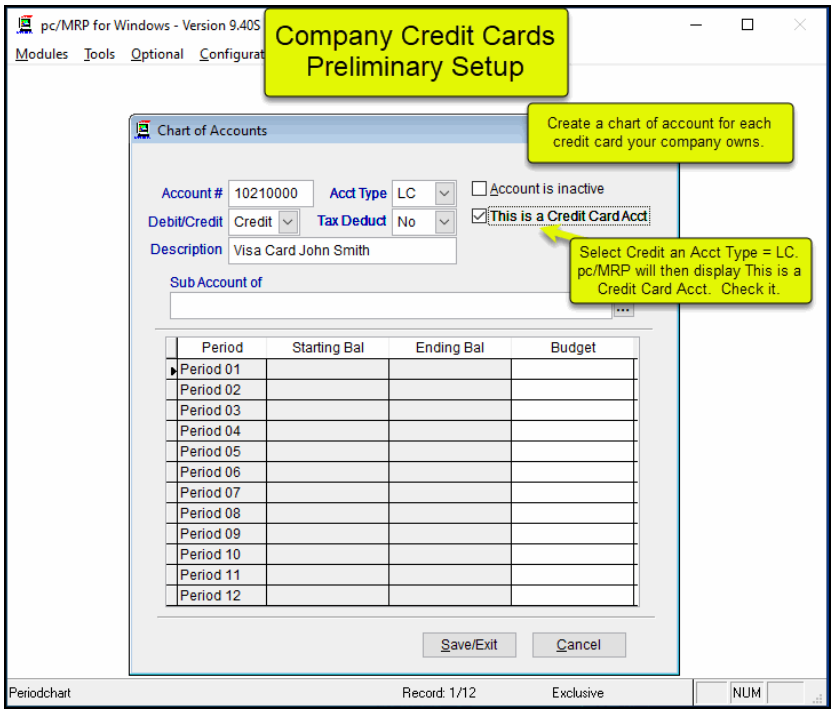



Insert the correct Asset / Expense Account Number for this credit card.



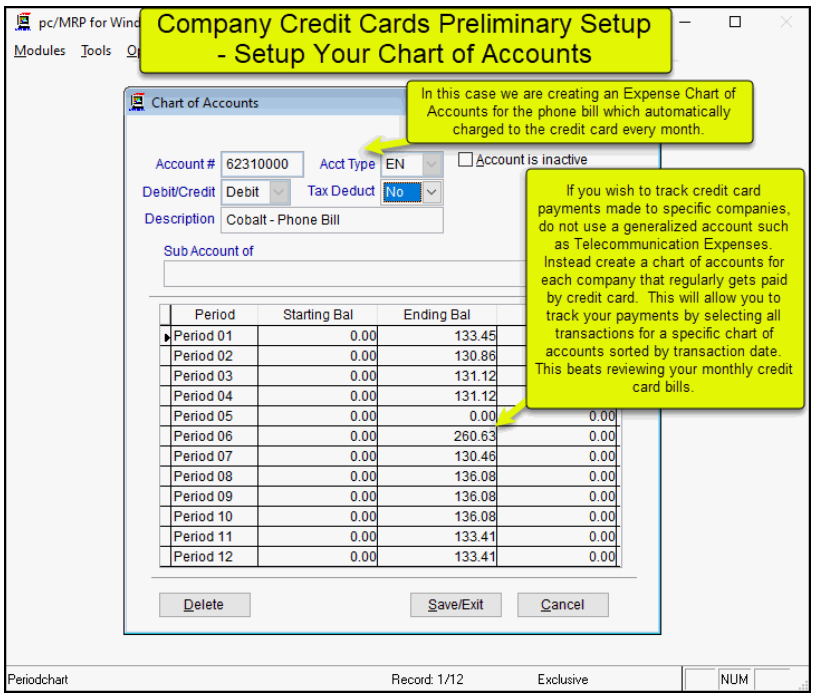
### 14.23.1.4 Credit Card Setup Create a Liability Chart of Accounts for each of your Credit Cards

Create a Liability Chart of Accounts for each of your credit cards.



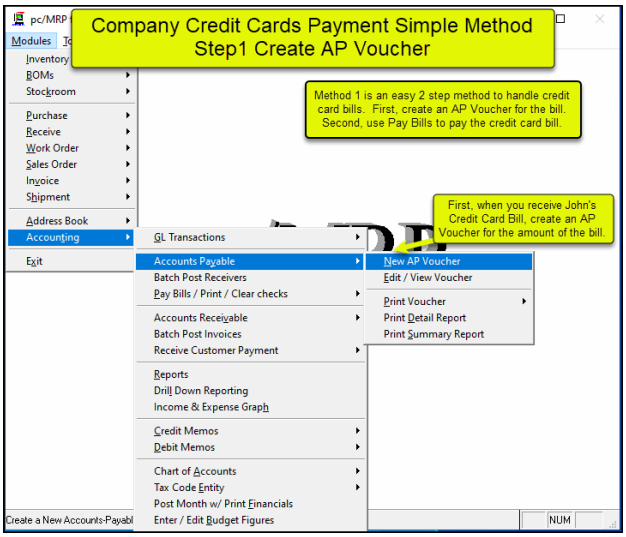

### 14.23.1.5 Credit Card Setup Credit Expense Chart of Accounts for bills that will be paid by Credit Card

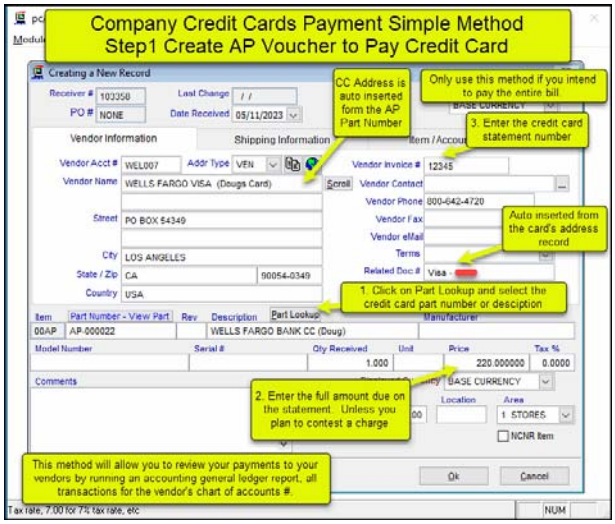
Create Expense Chart of Accounts for bills that will be paid by credit card.

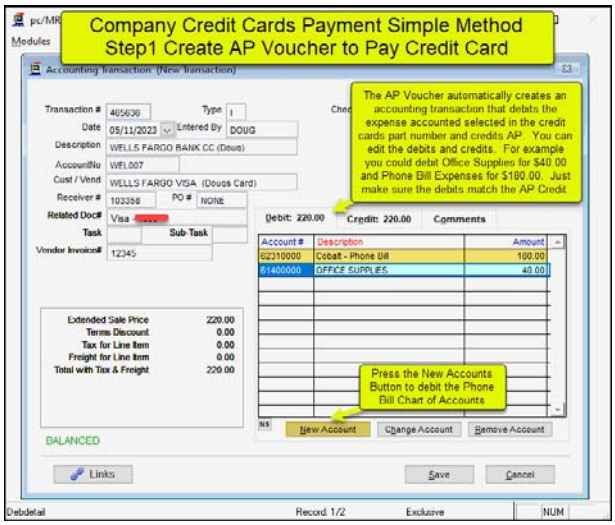


## 14.23.2 Paying a Credit Card Bill, Simple Method

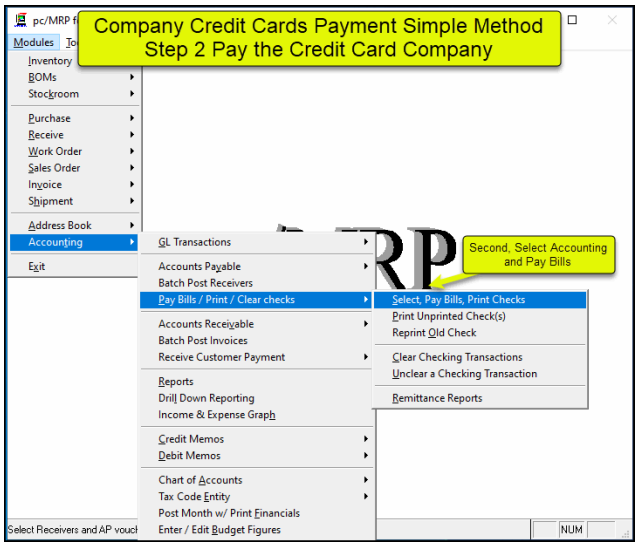
### 14.23.2.1 Paying a Credit Card Bill, Simple Method – Step 1 Create an AP Voucher

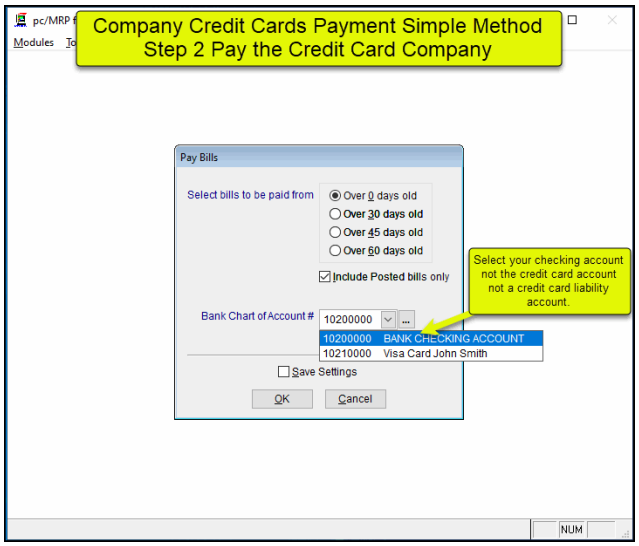


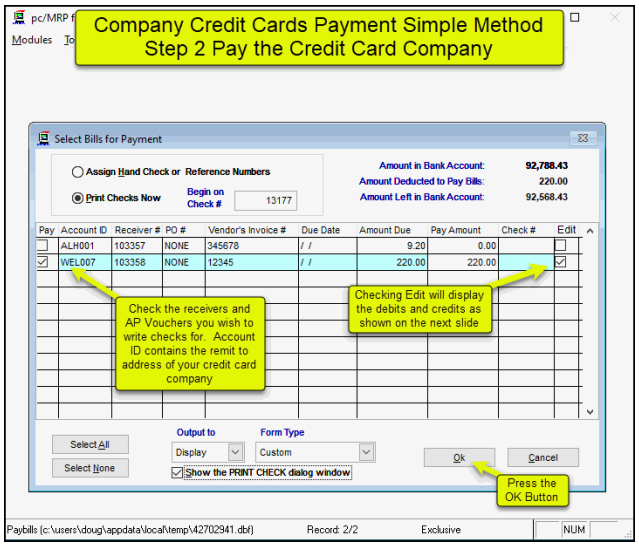



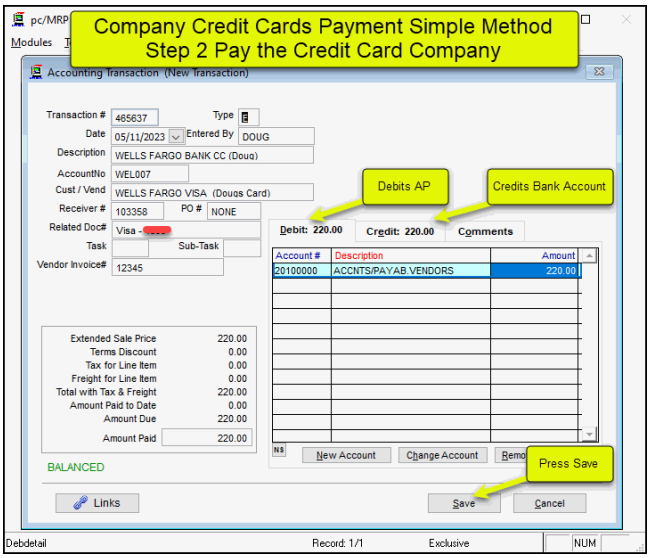



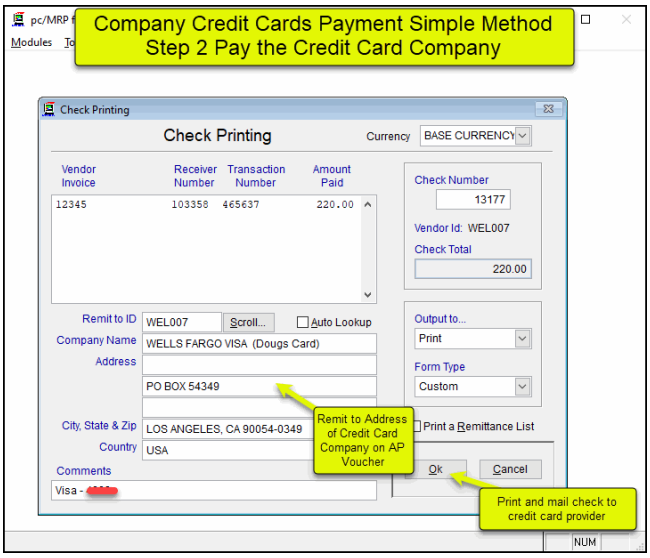
## 14.23.2.2 Paying a Credit Card Bill, Simple Method – Step 2 Pay the Credit Card Bill.

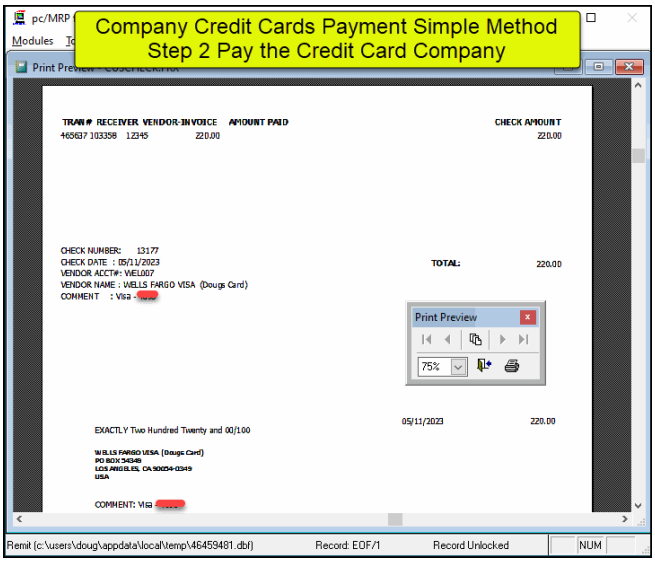


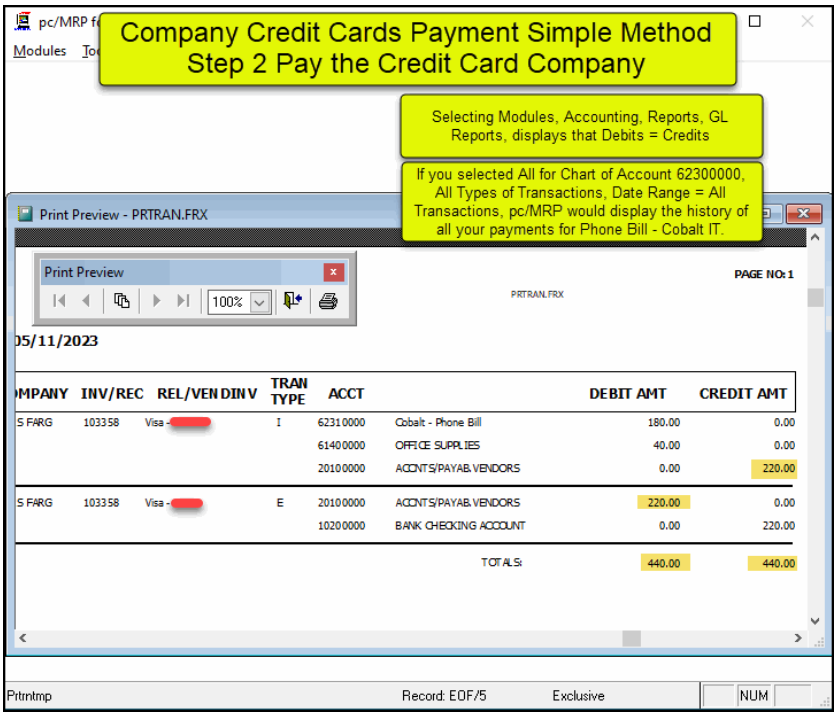




Company Credit Cards Payment Simple Method
Step 2 Pay the Credit Card Company
Accounting Transaction (New Transaction)
Debits AP
Credits Bank Account
Press Save
New Account
Change Account
Links
Save
Cancel
BALANCED

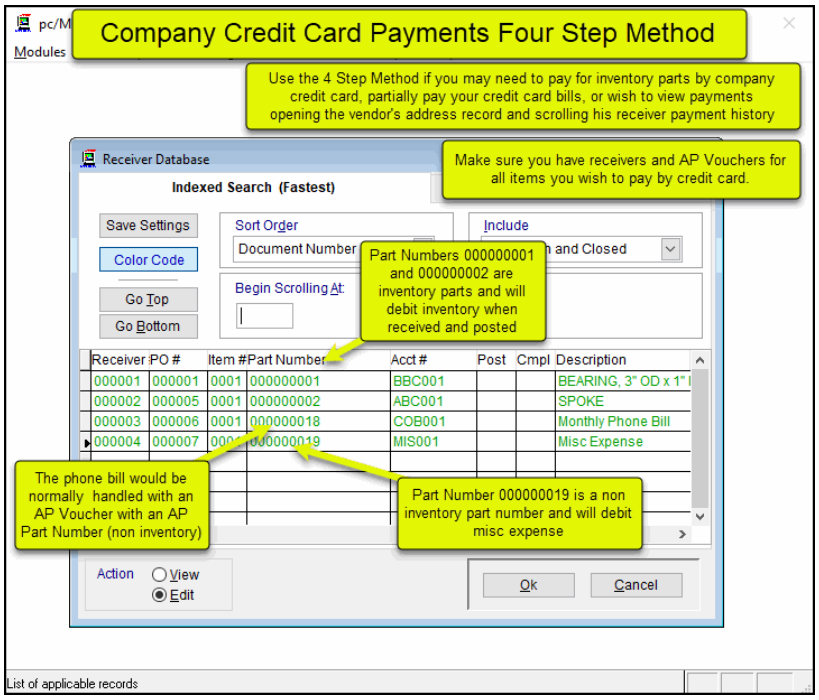

Company Credit Cards Payment Simple Method
Step 2 Pay the Credit Card Company
Check Printing
Remit to Address of Credit Card Company on AP Voucher
Print and mail check to credit card provider
Ok
Cancel


Company Credit Cards Payment Simple Method
Step 2 Pay the Credit Card Company
Print Preview
TRAN# RECEIVER VENDOR-INVOICE AMOUNT PAID
465637 103358 12345 220.00
CHECK AMOUNT
220.00
CHECK NUMBER: 13177
CHECK DATE : 05/11/2023
VENDOR ACCT#: WEL007
VENDOR NAME : WELLS FARGO VISA (Dougs Card)
TOTAL: 220.00
05/11/2023 220.00
EXACTLY Two Hundred Twenty and 00/100
WELLS FARGO VISA (Dougs Card)
PO BOX 54349
LOS ANGELES, CA 90054-0349
USA




### 14.23.3 Paying a Credit Card Bill, Four Step Method

The four step method allows you to pay a portion of the credit card bill. See the Four Step Method in the following slide show (Slides 19 – 35):
https://pcmrp.com/mrp101/creditcardcreateaddr1.htm



# 15.1 Settings and Utilities

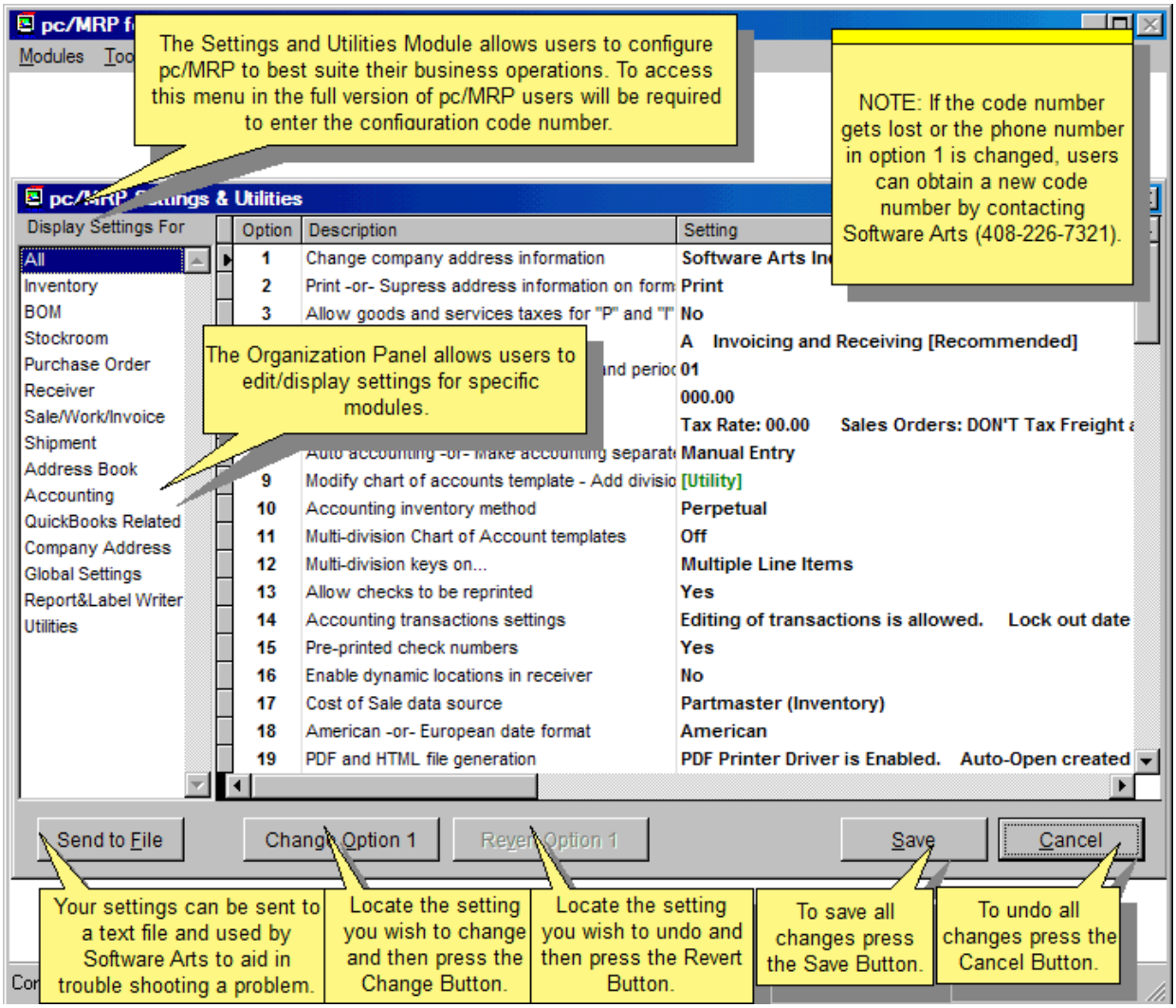
### 15.1.1 Overview

To configure pc/MRP Settings and run various Utilities, select Configuration, Settings and Utilities, and enter the Configuration Code Number supplied by Software Arts when the package was purchased.

The Settings & Utilities Module allows users to configure pc/MRP to best suit their business operations. To access this feature in the full version of pc/MRP, users will be asked to enter the company's Configuration Code Number. If the user doesn't know the configuration code number, the code number field can be left blank and the user will be given View Only access. Also, the optional Password module can be used to deny access or to grant View or Edit access to this feature on a per user basis.

**Note: If the code number gets lost or the phone number in Option 1 is changed, users can obtain the code number by contacting Software Arts (408-226-7321). This number will only be released to those individuals with administrative level authority within pc/MRP.**

The Settings & Utilities screen is shown below:

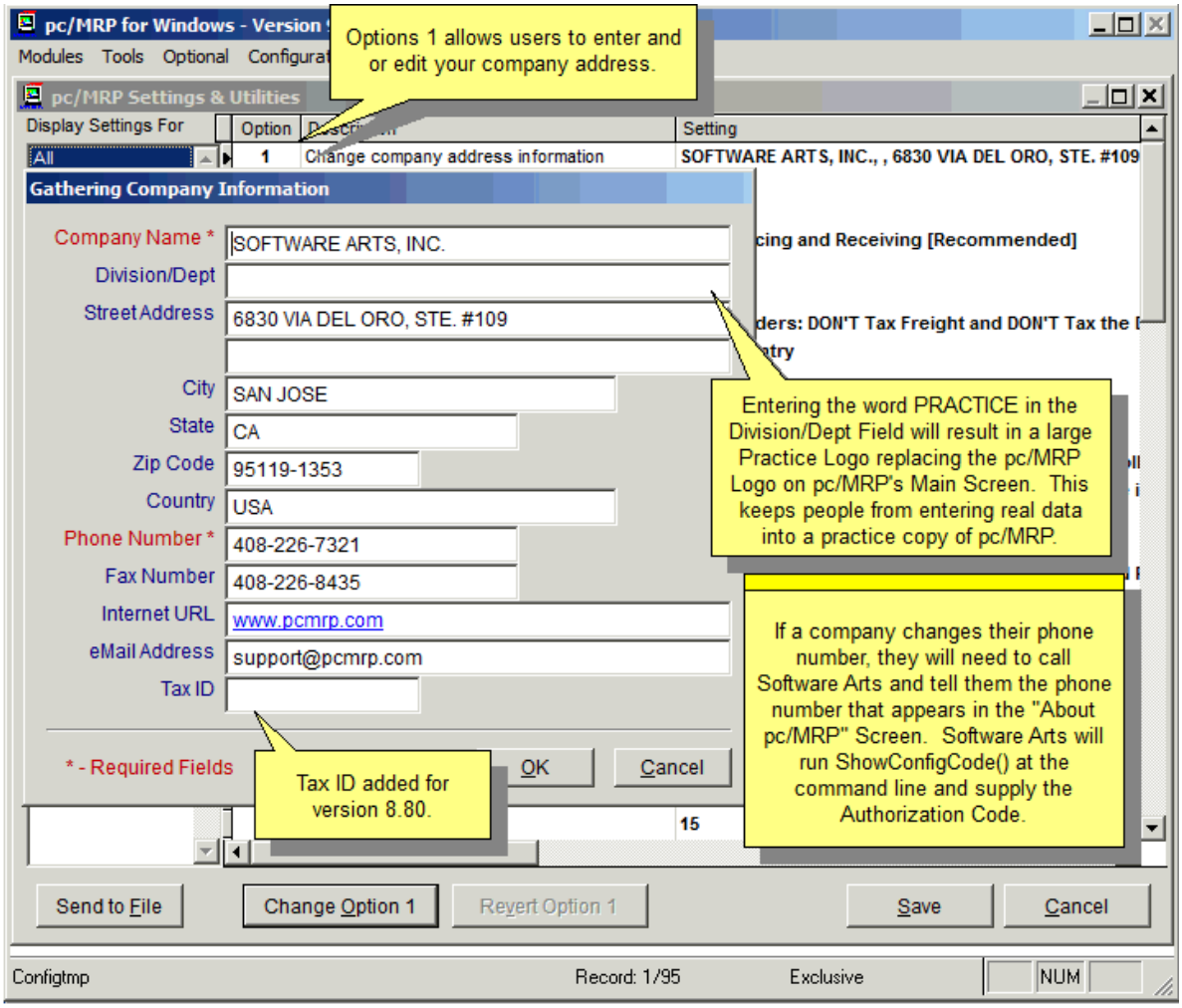



Depending on the utility/option chosen, users will be presented with a **Run Utility** or **Change Option** button. Once an option has been edited (the new values are displayed in red), users can press the **Save** button to save all changes. To undo changes to the option chosen, click the **Revert Option**. To undo all changes select **Cancel**.

### 15.1.2 List of Options

**Options 1.- 10.**

**Option 1, Change Company Address Information**




Allows you to change your company address. This is the address that appears in the upper left hand corner of your Invoices, Purchase Orders, etc. If you change the company phone number you must call Software Arts to obtain a new Configuration Code as the company phone number is one of the factors in determining the Configuration Code.

Software Arts, Inc suggests that companies create a test copy of pc/MRP for practice, testing and training purposes. To clearly distinguish between the test copy and the production copy, we suggest that you enter the word PRACTICE in the Division/Dept field of the test copy. This will result in a large red PRACTICE logo replacing the pc/MRP logo on the pc/MRP main screen, and will prevent that users confuse the two copies.

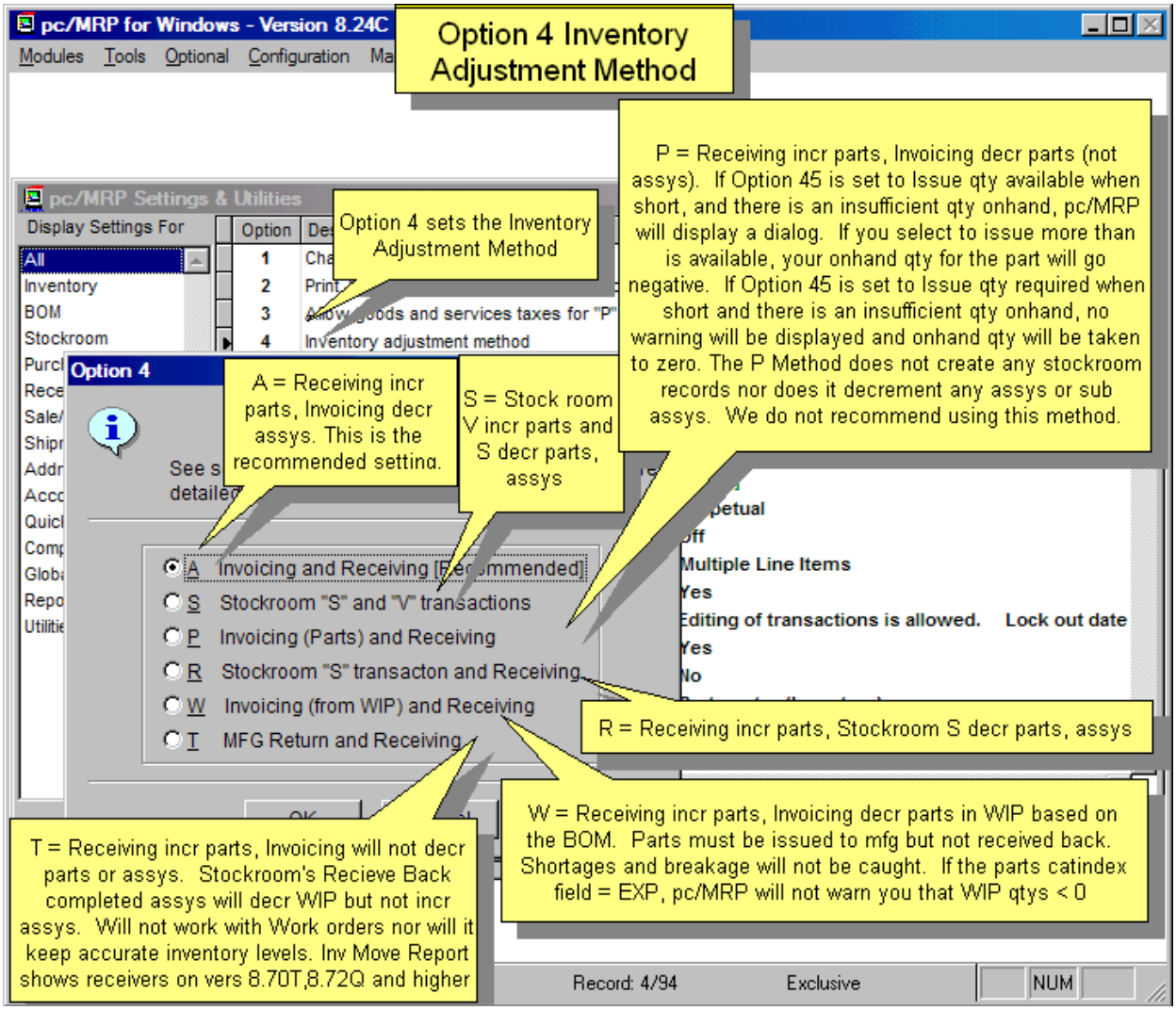
**Option 2, Print or Suppress Address Information on Forms**

Allows you to configure pc/MRP to print out or suppress your address on your invoice, purchasing, sales, shipper, and receiving forms. This option is provided for companies who desire to print on pre-printed forms containing their company logo and address.

**Option 3, Allow Goods and Services Taxes**

Option 3, if set to 'Yes', will debit the sales tax liability account when you enter an I (on account purchase) or P (cash purchase) accounting transaction.

**Option 4, Inventory Adjustment Method**




Allows you to configure the method pc/MRP uses to adjust the inventory. As a general rule, manufacturers, distributors and retailers should select A.

**A,** allows the invoice and receiving modules to adjust on hand quantities. This is the **default setting** for manufacturers and distributors and retailers. Entering an invoice or receiver will adjust the on hand quantities of the parts or assemblies entered. When entering an invoice for an assembly the on hand quantity of the assembly itself will be decreased. This setting allows manufacturing to build to stock and sell completed assemblies. **Note:** The Inventory Movement Report is only accurate when the Inventory Adjustment Method has been set to "A" during the time period covered.

**S,** allows the stock room module to adjust the onhand quantities. Issuing parts to shipping and receiving parts from receiving will adjust the onhand quantities. No stockroom transactions are created.

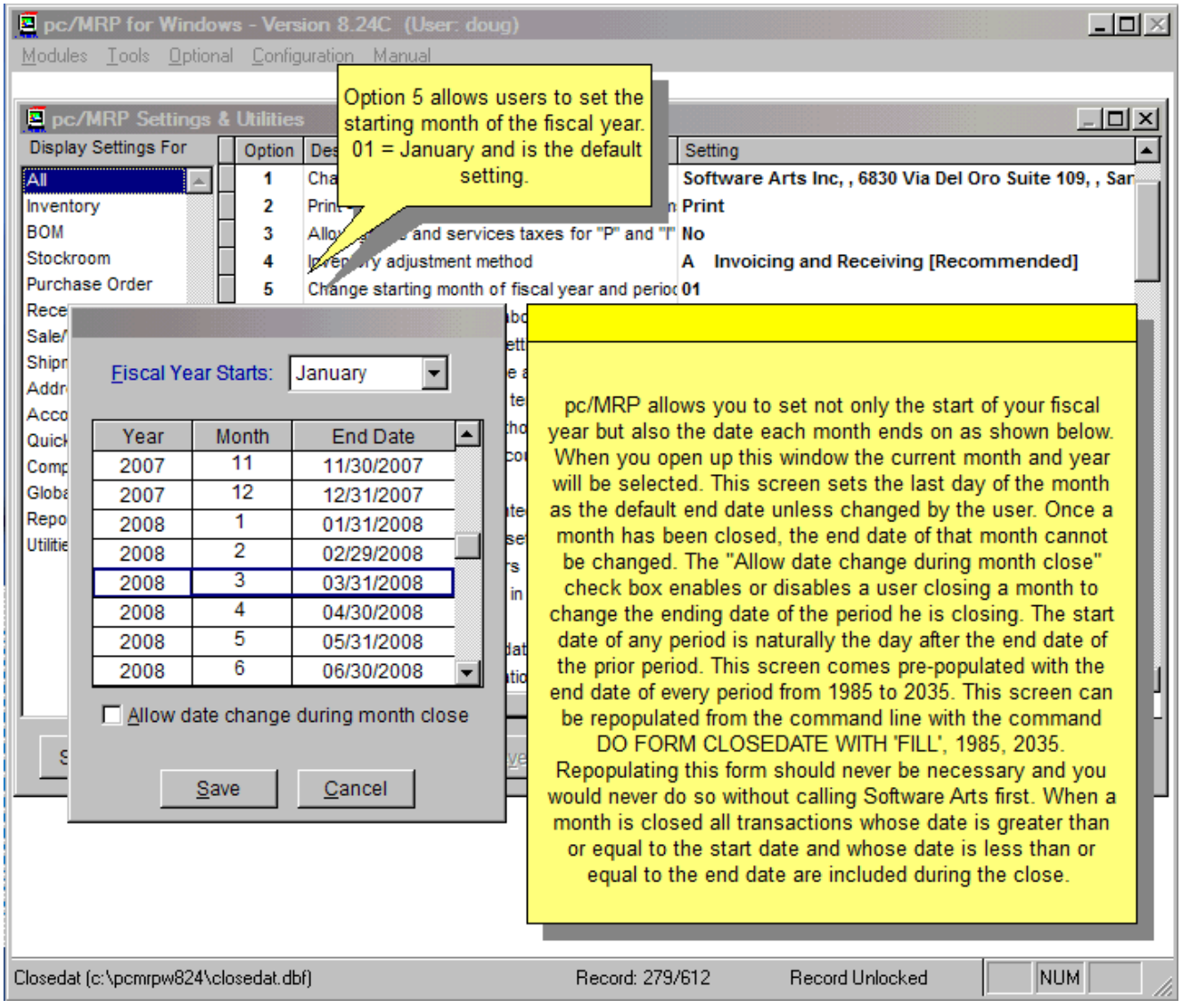
**P,** allows the invoice and receiving to adjust on hand quantities. When entering an invoice for an assembly pc/MRP will use the BOM to reduce the on hand quantity of the parts. This option can be used by restaurants

and manufacturers who do not build to stock. This option reduces the quantities of parts only and not sub-assemblies. Since this option leaves no records, the inventory movement and MRP reports will no longer be accurate.
**R,** allows receiving to increment on hand quantities and the stock room's ship to shipping to decrement onhand quantities.

**W,** allows the invoice and receiving to adjust on hand quantities. When entering an invoice for an assembly pc/MRP will use the BOM to reduce the WIP quantities of the parts within the assembly. This option requires users to issue parts to manufacturing, but not receive them back from manufacturing as completed assemblies. If you add the letters "EXP" to the catindex field for each part in the part master, pc/MRP will not stop and notify you when it reduces WIP quantities below 0. Software Arts strongly discourages using this method as breakage, shortages, etc will not be caught.

**T,** allows receiving to increment on-hand quantities and the stockroom to issue and receive from manufacturing. When the stockroom receives from manufacturing it will decrease WIP, but not increase the on-hand quantities of finished goods. Invoicing will not decrement the on-hand quantity of finished goods. This method will not work well for companies building to stock or using work orders to complete other work orders.

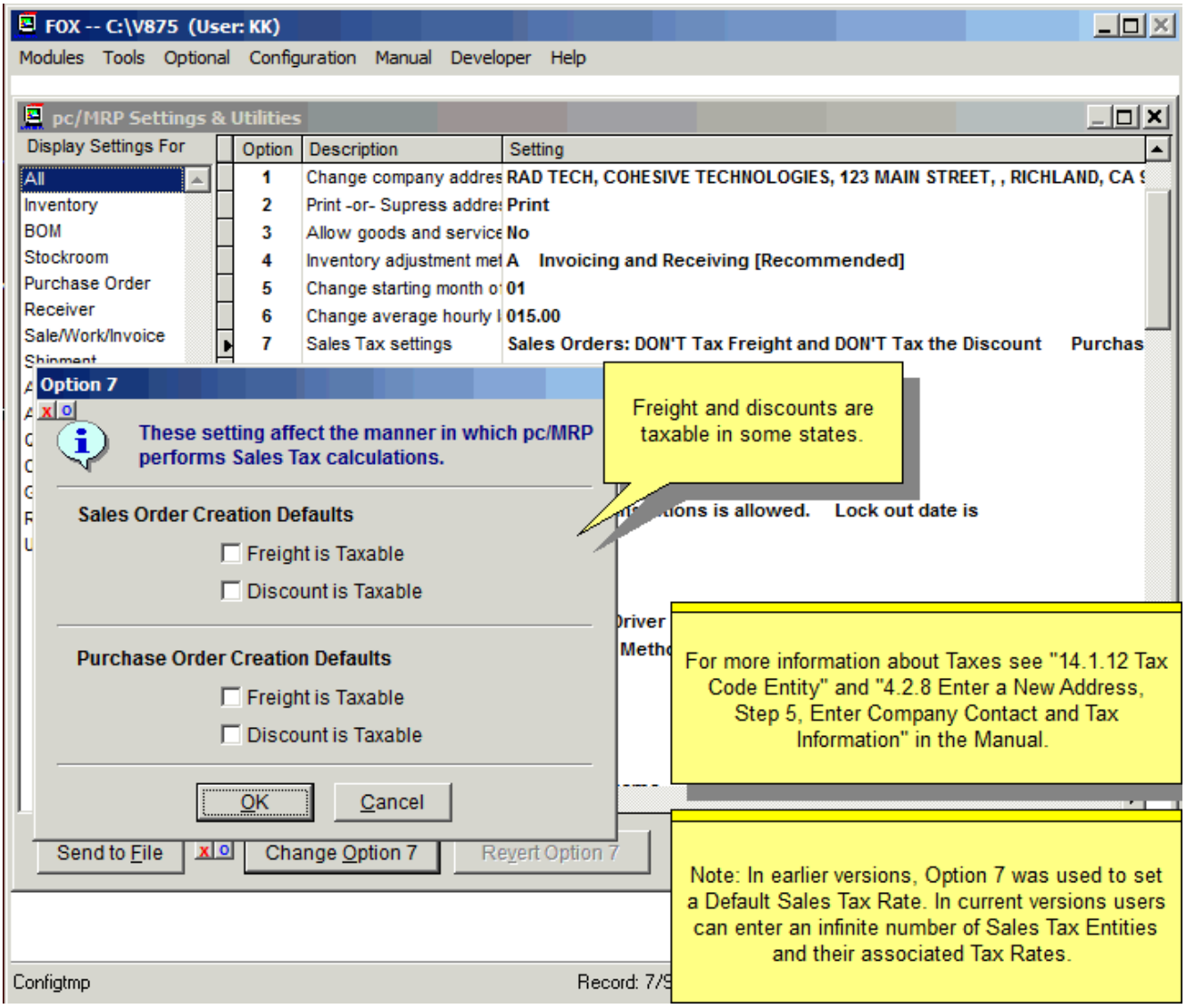
**Option 5, Change Starting Month of Fiscal Year and Period End Dates**



**Option 6, Change Average Hourly Labor Rate**

The average hourly labor rate is used by pc/MRP to determine the labor cost of a work order/sales order when it is completed and returned from the floor. Job cost reports are available from the Stockroom Report module.

**Option 7, Sales Tax Settings**




**Option 8, Select Automatic Accounting or Manual Entry**

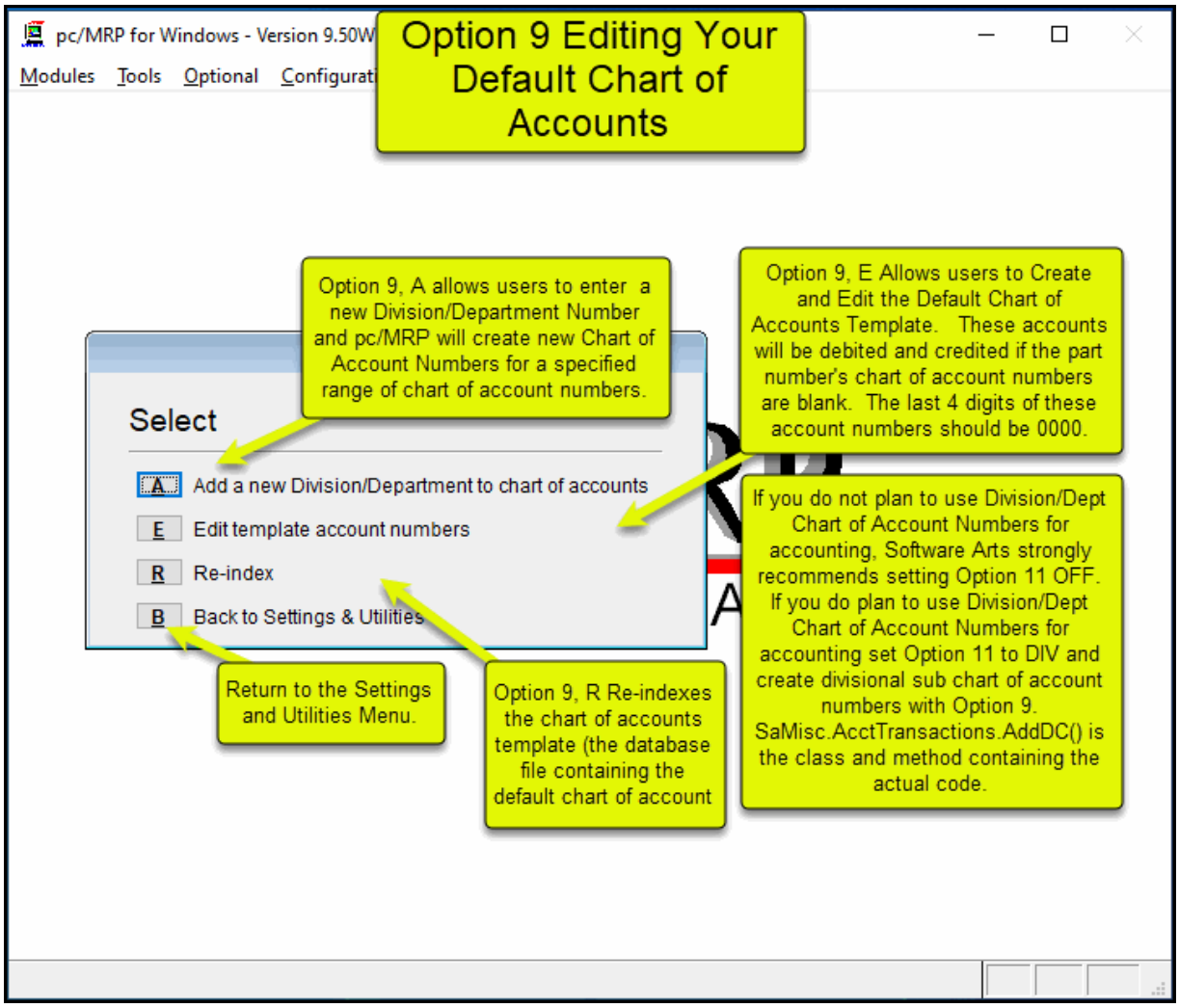
Will set Auto Accounting on or off. If auto accounting is set on, entering an invoice or receiver will automatically create the corresponding general ledger transactions. The newly entered GL transaction will be displayed for edit before it is saved.

If auto accounting is set to off, Accounting must enter the general ledger transactions by pulling up the receiver or invoice. pc/MRP will then automatically debit and credit the proper accounts.

Software Arts recommends setting auto accounting OFF so that invoice and receiver mistakes are not automatically entered into the general ledger.

Users can set auto-accounting for invoices and/or receivers.

**Option 9, Modify Chart of Accounts Template – Add Division/Department**




Option 9 allows you to:

Edit the chart of accounts template:

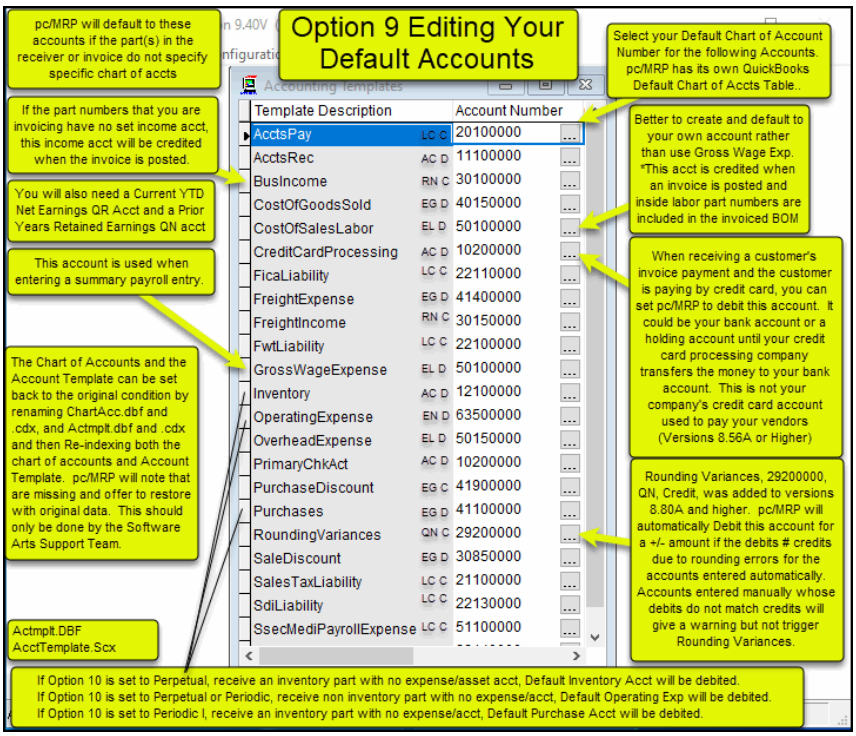
When pc/MRP needs to automatically display a chart of account number(s) for an accounting transaction, it uses the account template to determine the correct account number to bring up. As such, if you change one of the chart of account number that pc/MRP brings up automatically, you use must use Option 9 to change the default account number in the account template dbf file. Here is where you also set the default chart of account number when a credit card is charged.

Add chart of account numbers for a division and or department:

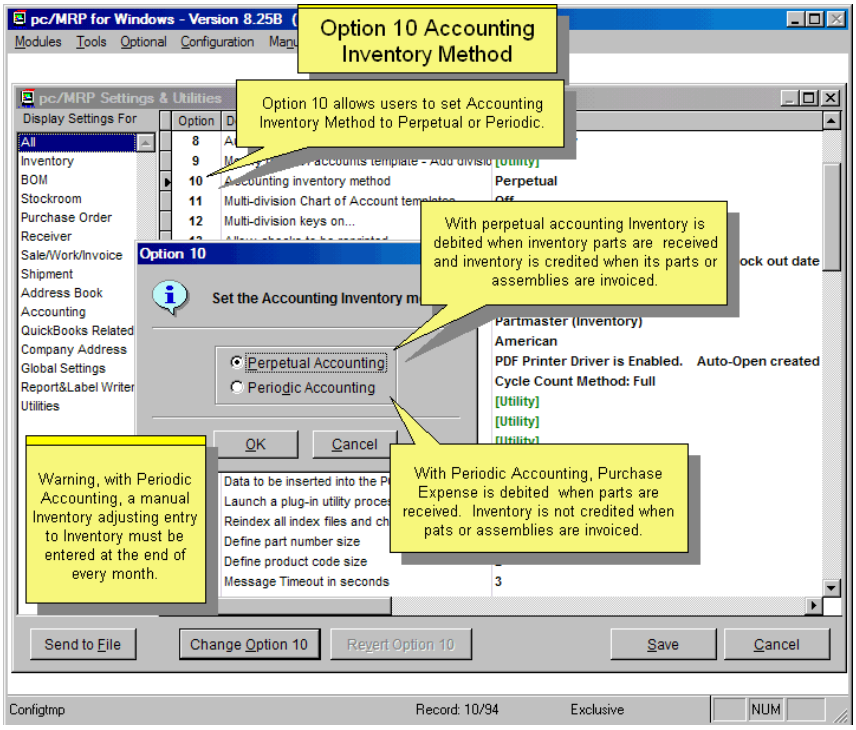
Add new div/dept chart of account numbers to the chart of accounts for all chart of account numbers greater than or equal to a specified chart of account number. This allows you to automatically create revenue and expense chart of account numbers for a specified division and or department.

Re-index the account template dbf file:

This option allows you to re-index the account template dbf file.




**Option 10, Accounting Inventory Method**




Select Option 10 to run either a perpetual inventory (usually for corporations) or periodic inventory (usually for small business owners & partnerships) accounting system. With a **perpetual** inventory method, the dollar amount of the inventory is automatically adjusted with every transaction (credit BI & Inventory, debit AR & COGS). A **periodic** inventory method requires adjustments to the inventory dollar amount at the end of each month (credit BI, debit AR). In both cases, the costs must be correct and up to date in inventory for each part and assembly.

**Options 11.- 20.**

**Option 11, Multi Division Chart of Account Template**

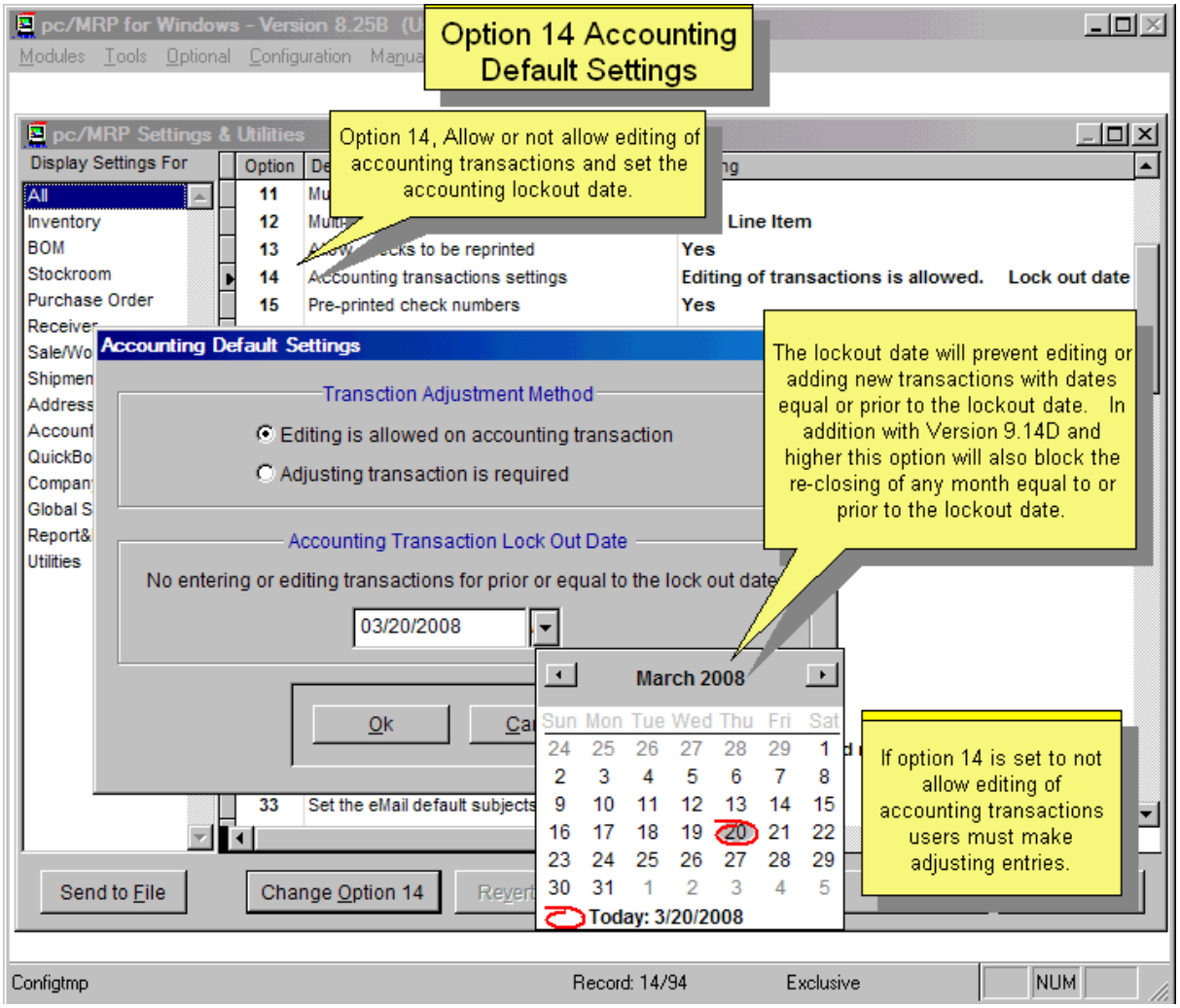
Select Option 11 if you wish to key the accounting templates on division or product code. Leave this option off unless you have a multi-division company. If you set this option to division or product code, each accounting transaction will be keyed to look for the division or the first four characters (product code) of the part number field in the invoice or receiver being processed.

**Option 12, Un-assigned**

**Option 13, Printing Checks**

Allows or disallows reprinting checks that have been printed.
Allows or suppresses printing the check number on the check (for checks that are pre-printed with the check #.)
Allows the W-type Accounting Transaction to print out a standard check (not a payroll check).

**Option 14, Accounting Transactions Settings**




Option 14 can either allow the editing of accounting transactions, or require users to enter adjusting transactions instead. No editing or entering of new transactions can be made on or prior to the lockout date.

**Option 15, Un-assigned.**

**Option 16, Enable dynamic locations in receiver.**

If set to Yes, changing the location in the receiver data entry screen will change the location in the inventory data entry screen. If the onhand qty in that area = 0, the location in the receiver data entry screen will be blank. Entering a new location will also be inserted into the inventory data entry screen.

If set to No, the location in the receiver data entry screen will be blank. Entering a new location will NOT be inserted into the inventory data entry screen.

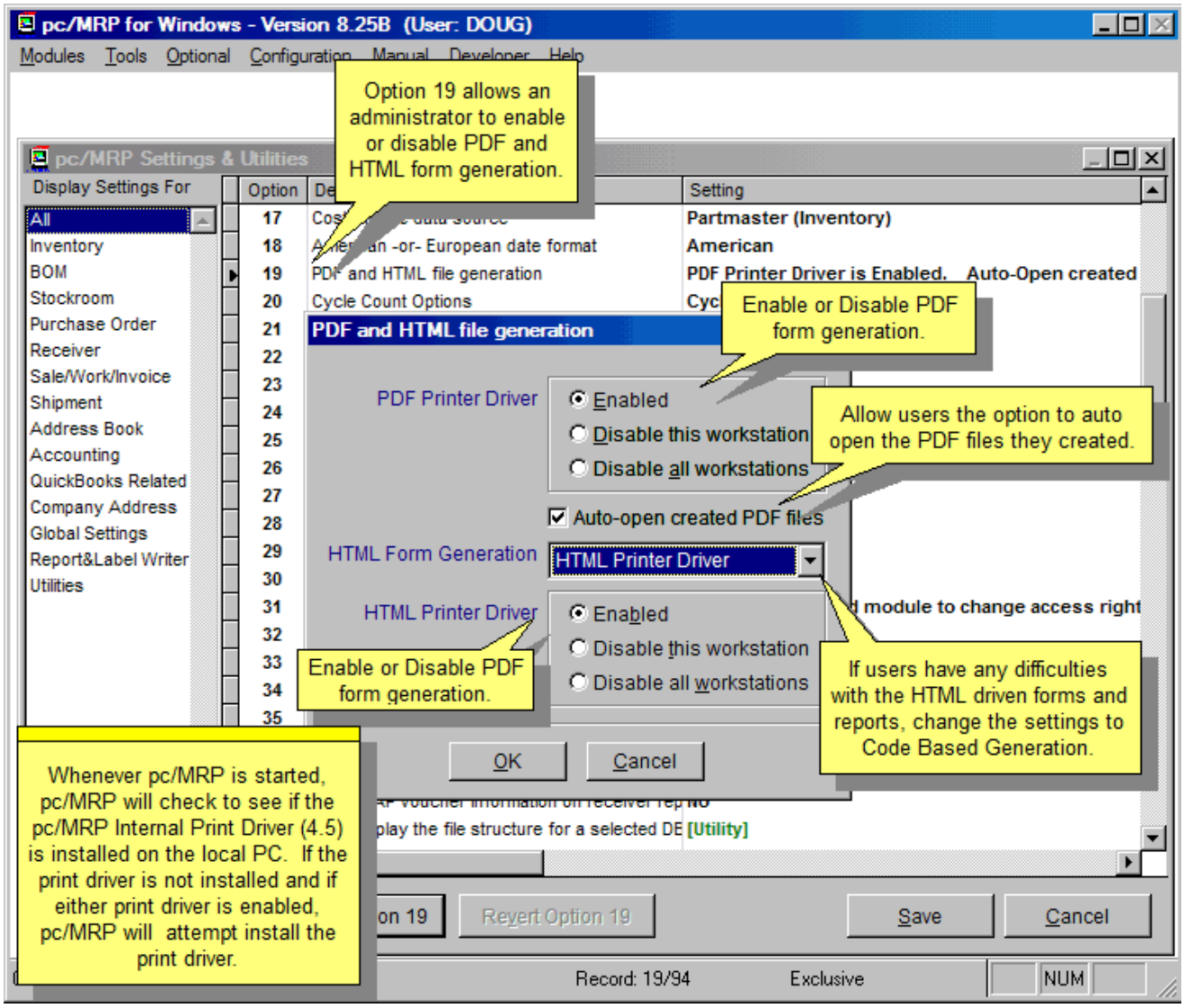
Also see Option 44.

**Option 17, Un-assigned.**

**Option 18, American or European Date Format**

Selection 18 allows pc/MRP to work with American (MM,DD,YR) or European (DD,MM,YR) dates.

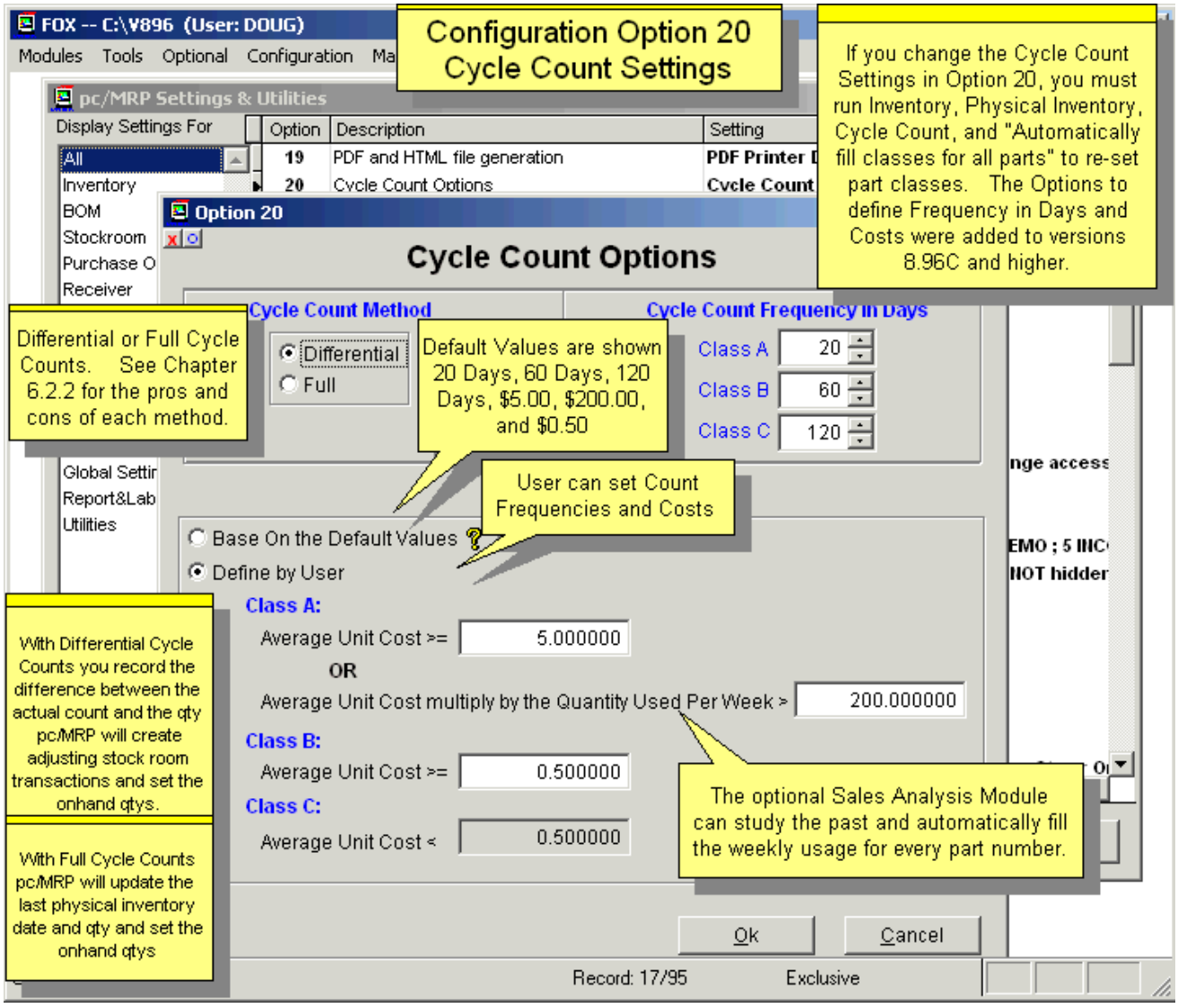
**Option 19, PDF and HTML File Generation**



Option 19 allows an administrator to “Enable”, “Disable this workstation” or “Disable all workstations” from generating PDF and HTML files. This function basically creates or deletes a flag file named c:\HTMBlock.flg. A drop down HTML Form Generation List Box allows users to select either HTML Printer Driver or Code Based HTML. This option allows an administrator to set form creation through the HTML print driver or code based generated HTML files. If users have any difficulties with the HTML driven forms and reports, change the settings to Code Based Generation. The “Auto-open created PDF files” check box allows users to automatically open the PDF files they created.

**Option 20, Cycle Count Options**

Option 20 holds the Cycle Count settings. See Chapter 6.2 for details.



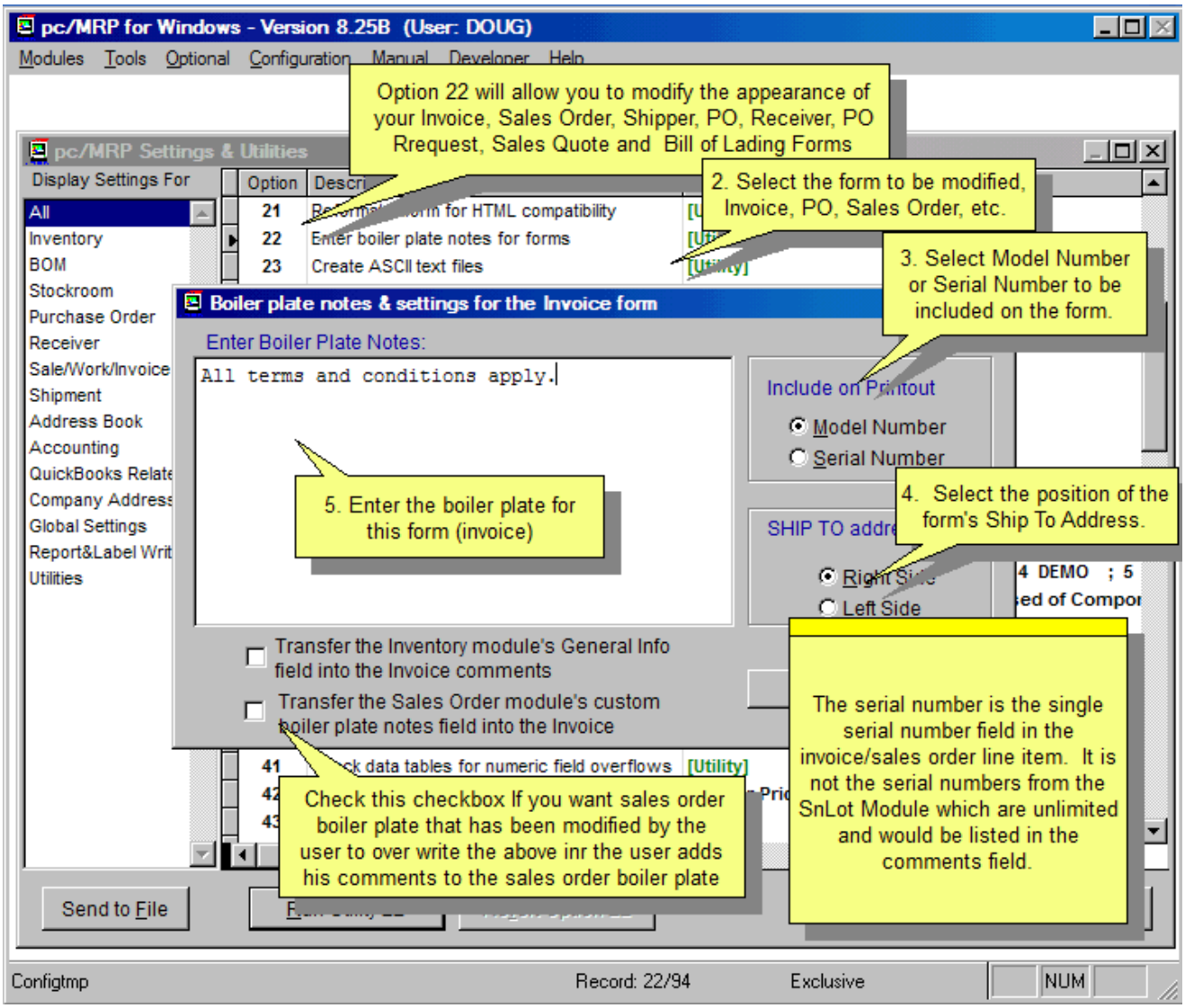

If you changed the class definitions, you must run Inventory, Physical Inventory, Cycle Count, and "Automatically fill classes for all parts" to reset part classes.

**Options 21.- 30.**

**Option 21, Reformat a Form for HTML Compatibility**

This utility can be used to alter the graphical layout of a report, form, or label to be better suited for use with HTML file generation. Backup copies of the files will be saved to the OldForms sub-folder.

**Option 22, Enter Boiler Plate Notes for Forms**




Option 22 will allow you to modify the following items on your Invoice, Purchase, Receiver, Sales Order, Shipper, Purchase Request(internal), Request for Quote(external), Sales Quote, Bill of Lading and Commercial Invoice forms: Add, delete, or modify boilerplate (notes) for each form; maximum of 9 rows of 46 characters each. Suppress or print out the model number on each form. Import the inventory memo field as part of the line item's description. Place the ship to and bill to addresses on the right or left side of the form for sales orders, invoices, and sales quote forms. Include ship-to address on purchase orders (1st line item needs ship-to address via the option button). For invoices you could enter your company's remit to address here.

If "Transfer the Sales Order module's custom boiler plate note field into the Invoice" is checked, pc/MRP will transfer the sales order boiler plate to the invoice provided the sales order boiler plate for that sales order was modified by the user and the Invoice boiler plate does not have any text.

**Option 23, Create ASCII Text Files**

Will create an ASCII text file copy of any of pc/MRP's database files. The original database files will not be changed. pc/MRP will create either an Excel file (.XLS), a dBaseIII or Visual FoxPro file (.DBF), or a comma delimited ASCII text file (.TXT). Users can select which fields they want to include. Note: The .TXT file will have a set of quote marks (" ") around every value. See Section 15.11.1 about how to prepare a file for being imported into pc/MRP.

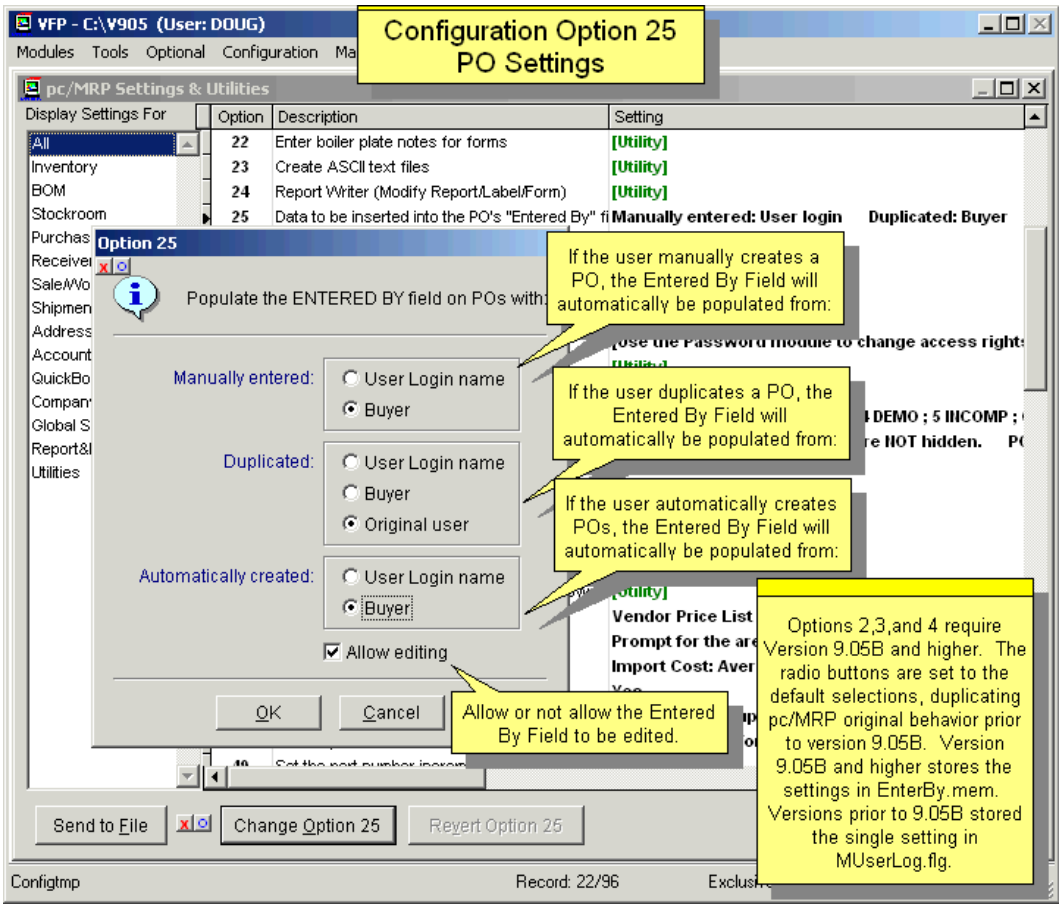
All fields can be exported, as long as the computer that runs pc/MRP has Excel installed. (If pc/MRP is run on a terminal server, Excel has to be installed on the terminal server.) If Excel is not available on the computer, pc/MRP does not offer to export the memo type fields (like the general info in inventory, the reference designators in the BOM table, the tracking number and comments in the invoice table, etc.).

**Note:** Sending memo fields into Excel significantly slows down the process. Do not include memo type fields, unless you need them. pc/MRP defaults to not include memo fields.

**Option 24, Report Writer (Modify Report/Label/Form)**

Using this Option, users can create and modify custom reports, forms, and labels. See pc/MRP Custom Report and Label Making, Section 15.4 of this Manual for detailed instructions on using the report writer.

**Option 25, Data to Be Inserted Into the PO's "Entered By" Field**




**Option 26, Launch a Plug-in Utility Process.**

Allows pc/MRP to load and launch utility plug-ins.

**Option 27, Re-index All Index Files and Check for Corruption**

Re-indexes all of pc/MRP's database files. Remember to set the Admin Lockout and wait for all to exit pc/MRP. **Note:** If during the course of re-indexing, pc/MRP had to repair a table you will get an error message stating the "Configuration Table is no longer available". If you made any changes in the Configuration Module prior to running Option 27, your changes were not saved. Press the OK Button. When the Re-index is complete you will need to make your changes again.

When users delete a file link (brake the link) the record still stays in the file links table, marked for deletion. Option 27 permanently removes these marked records, avoiding that the file grows unnecessary big.

**Option 28, Define Part Number Size**

You can choose the length of the part number from 6 to 31 characters, including dashes, product code and suffix. Also see Options 29 & 48. If you set the maximum length to 15 characters or less, when entering a new part, pc/MRP will suggest the next highest number with leading zeros. If you set the maximum length to 16 characters or more, pc/MPR will suggest the next highest number without leading zeros.

**Option 29, Define Product Code Size**

Sets the size of the product code part of the part number from 1 to 6 characters. The product code consists of the first x characters of the part number. It can be used to classify part numbers into a product code. For example, the part number of all cables could start with CAxxxxx. The product code would be CA (size 2) and consist of the first two characters of the part number. pc/MRP will be able to give you the next available part number for a cable
provided the remainder of the part number is in numeric form. Also see Options 28 & 48.

**Option 30, Un-assigned.**

**Options 31.- 40.**

**Option 31, Change Password (if you do not have the Optional Password Module)**

If you do not have pc/MRP's Optional Password Module activated, all users share the same password. Option 31 allows this password to be changed.

**Option 32, Check Inventory for Invalid Vendors**

Checks the vendor ID codes listed for every part number in inventory. It will display or print a "Vendor ID Error Log" report if it finds any vendors in the inventory records where the ID cannot be found in the Address Book. You should then edit the inventory files (and insert valid vendors).

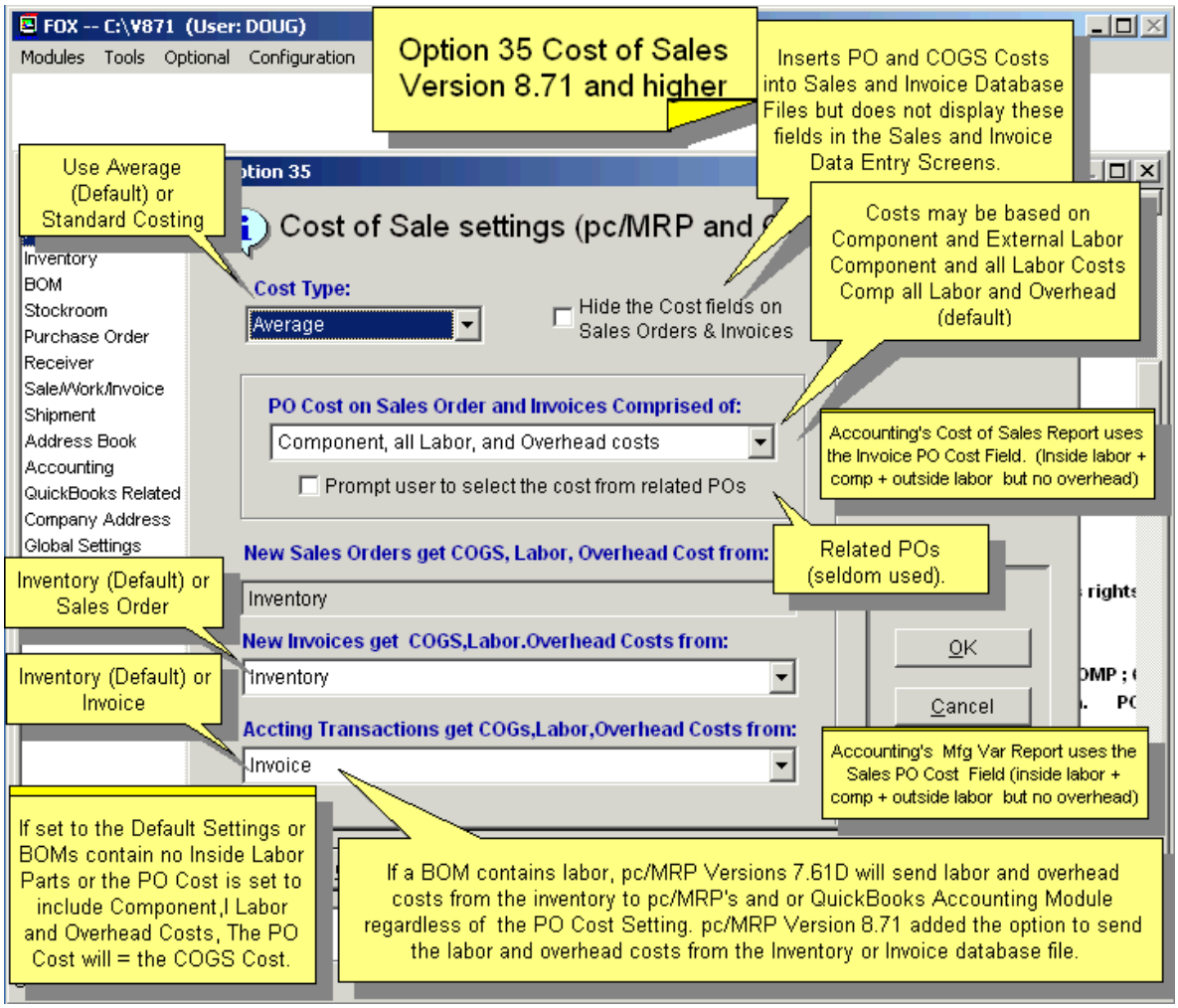
**Option 33, Set the Email Default Subjects and Messages**

This option allows users to set the default subject and message for each kind of pc/MRP e-mail.

**Option 34, Change Names of Alternate Storage Areas in Inventory**

Users can customize the names of each storage area, except of "Stores".

**Option 35, Type of Cost Imported into the Cost of Sale**

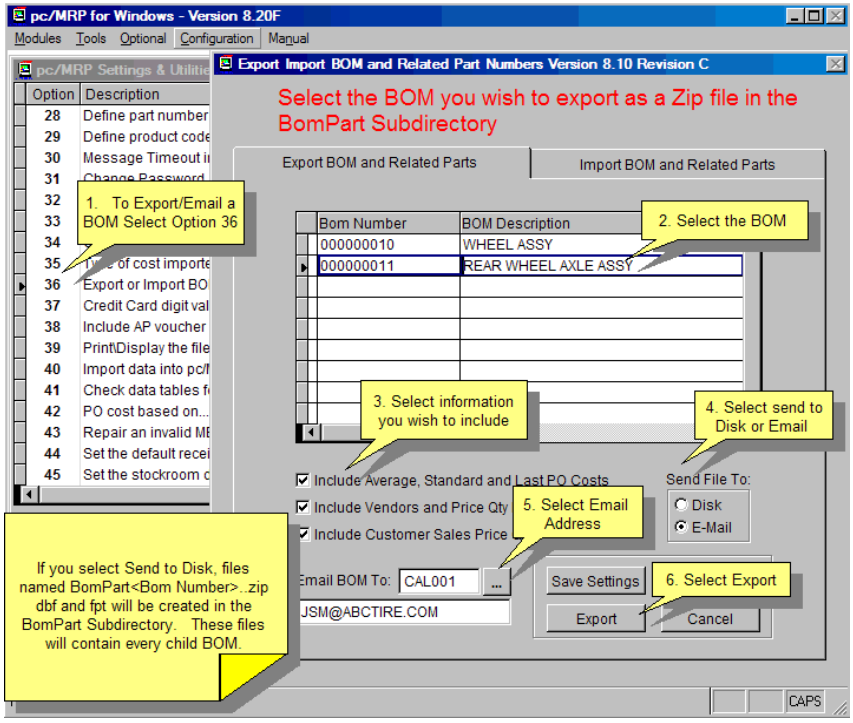


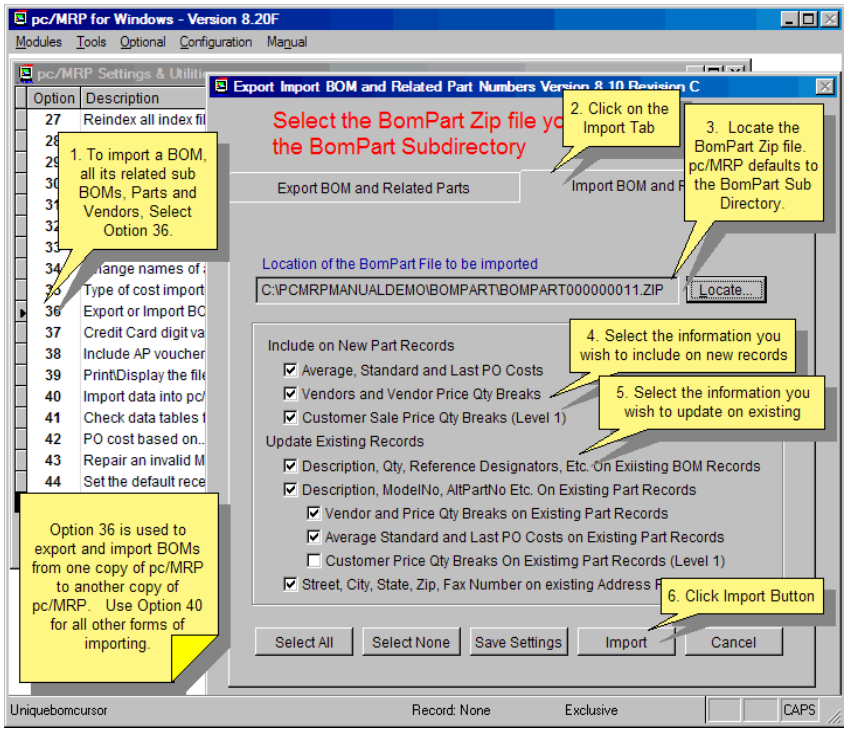

```
MSALECOST - also stored in
_Screen.QbSettings.AddProperty("SaleCostType", MSALECOST)
QB_GetValue("SaleCostType", "AYAPP")
Position - Purpose: Value (Defaults to first listed value)
-------------------------------------------------------------
1-Cost Type:                    " A"=Average, "S"=Standard
2-Update Costs when invoicing:  "Y"=Yes, "N"=No
3-PO cost comprised of...         "A" = All costs
                                "P" = Component and External Labor costs
                                "L" = Component and all Labor costs
4 - Hide cost/Prompt for Rel PO  :"P" = Show costs without prompt
     [formerly CONFIGDM-45]          "R" = Show costs with prompt
                                "O" = Hide costs
5 - Accounting gets costs from: "P"=Inventory, "I"=Invoice
```

**Note:** Option 35 added the option to get COGS, Labor and Overhead costs from the Invoice database file instead. This option to transfer costs to accounting from the date the invoice was created instead the date the transaction was created was added for a customer who did not necessarily post their accounting transactions when invoices were created.

**Option 36, Export or Import BOMs to another Copy of pc/MRP**

Option 36 will allow you to export (via email or as file attachments) a parent BOM, and all its related sub-BOMs, parts and vendor addresses to another company using pc/MRP.
See slideshow here: [http://www.pcmrp.com/mrp101/importoption36settingsandutilities.htm](http://www.pcmrp.com/mrp101/importoption36settingsandutilities.htm)




**Option 37, Credit Card Digit Validation & Formatting**

Enables validation of credit card number and (optionally) reformats the credit card # by inserting hyphens at the appropriate places. Number validation must be enabled for formatting to work.

**Option 38, Include AP Voucher Information on Receiver Reports**

Allows AP vouchers (rent, utilities, etc.) to be included or not included in the receiver reports.

**Option 39, Print/Display the file structure for a selected DBF table**

Allows the user to print out the file structure for any of pc/MRP's data base files. This is useful when creating/modifying custom reports/forms/labels.

**Option 40, Import Data into pc/MRP**

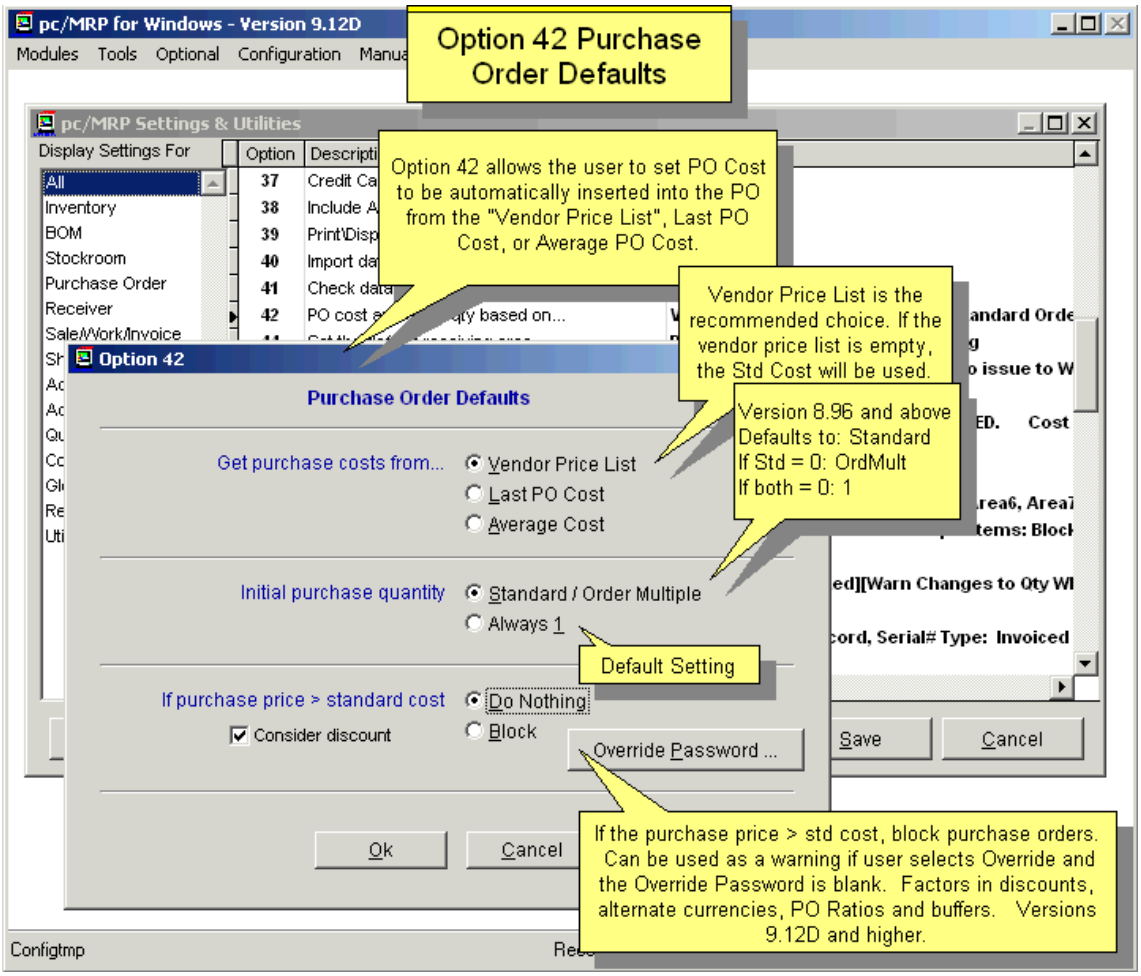
A utility for taking data from a non-pc/MRP data source and inserting the data into one of pc/MRP's database files. See Chapter 15.11, "Importing Data Files," for details.

**Options 41.- 50.**

**Option 41, Check Data Tables for Numeric Field Overflows**

If you see "*********" instead of number values on any report, this indicates numeric overflow. Option 41 checks any or all of pc/MRP's data base files for numeric overflows. Check the "Zero all overflows" check box, if you would like pc/MRP to zero out all of the overflows it encounters.

**Option 42, Purchase Order defaults**



Allows the user to set PO Cost to be automatically inserted into the PO from the "Vendor Price List", Last PO Cost, or Average PO Cost. Vendor Price List is the recommended choice. If Vendor Price List is selected and the vendor price list is empty, the Standard Cost will be used.
The order quantity on a new PO will default to 1. Option 42 can be set so that the order quantity on a new PO will default to the Standard Order Qty, if not set then to Order Multiple, if that is not set either then to 1.

**Option 43, Un-assigned**

**Option 44, Set the Default Receiving Area**

Sets the Inventory storage area that the receiving module defaults to when receiving. Also see Option 16.

**Option 45, Set the Stockroom Defaults**

- Option 45 sets the stockroom to record standard or average costs when issuing parts to manufacturing. Accounting should set the default cost.
- It also allows you to set the default action Issue Available Qty or Required Qty when issuing a component that is short. The Available Qty is the recommended setting, as this way pc/MRP will keep track of shortages. **Warning:** Issuing Required Quantities would never create a shortage in WIP and could drive onhand quantities negative.
- When receiving back from MFG, pc/MRP will display a warning if there was a shortage. Setting “Yes” will allow users receive back the required qty anyway. “No” will not allow users to receive back any more than issues would allow. Also see warning above.

**Option 46, Allow the Auto Receive Option**

Turn on/off the ability to automatically receive the remaining items on a purchase order.

**Option 47, Set the Inventory Defaults**

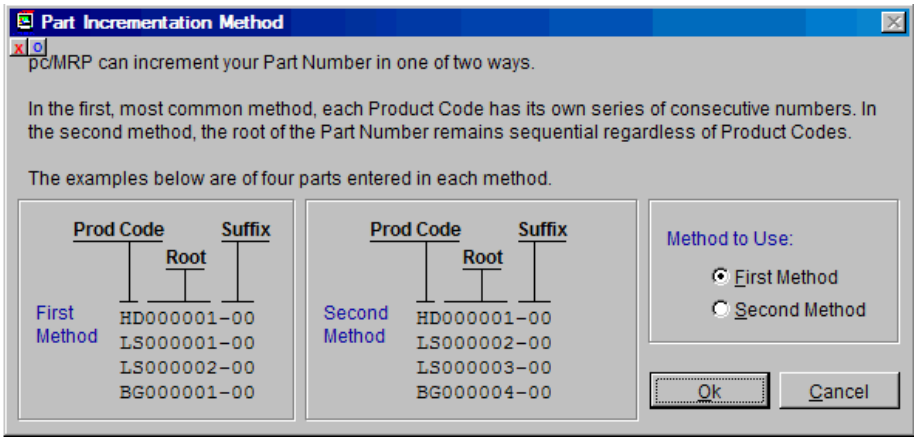
Turn on/off the ability to mark-up sale prices and roll-up assembly costs from the inventory menu.

**Option 48, Set the Part Number Suffix Size and Default Content**

Allows users to set a suffix size for the part number. Allowable sizes are dependent upon sizes used in Options 28 & 29, partnumber and product code. Dashes are considered in the count; “-01” is three characters.

**Option 49, Set the Part Number Incrementation Method**

<u>If users have part number suffixes</u>, Option 49 allows them to set the part number incrementation method.



If you would like to have dashes in the part number, they should be included in the Product Code and/or the Suffix Code. Auto numbering will look at all characters in the Product Code and Suffix to determine the uniqueness of the number to increment. For example, if you want your part numbers to have the form 1-200-0001-3, where the 0001 is the root to automatically update for the next part, you would set the Product code to 6 characters (e.g. "1-200-") and the Suffix to 2 characters ("-3"). When selecting new parts, you will want to choose the option of "Next Available Partnumber for a Part Code/Suffix Code". When entering the Part Code, you will need to input the dashes or else the system will leave the extra characters as blanks and recognize the part code as different from the one with dashes. For example, entering the part code "1-200" will generate a new number: 1-200 0000-3 (assuming "-3" was set as the default Suffix Code). This example also assumed both a Part Code and Suffix Code existed. In your application, you may use both, one, or neither of the codes.

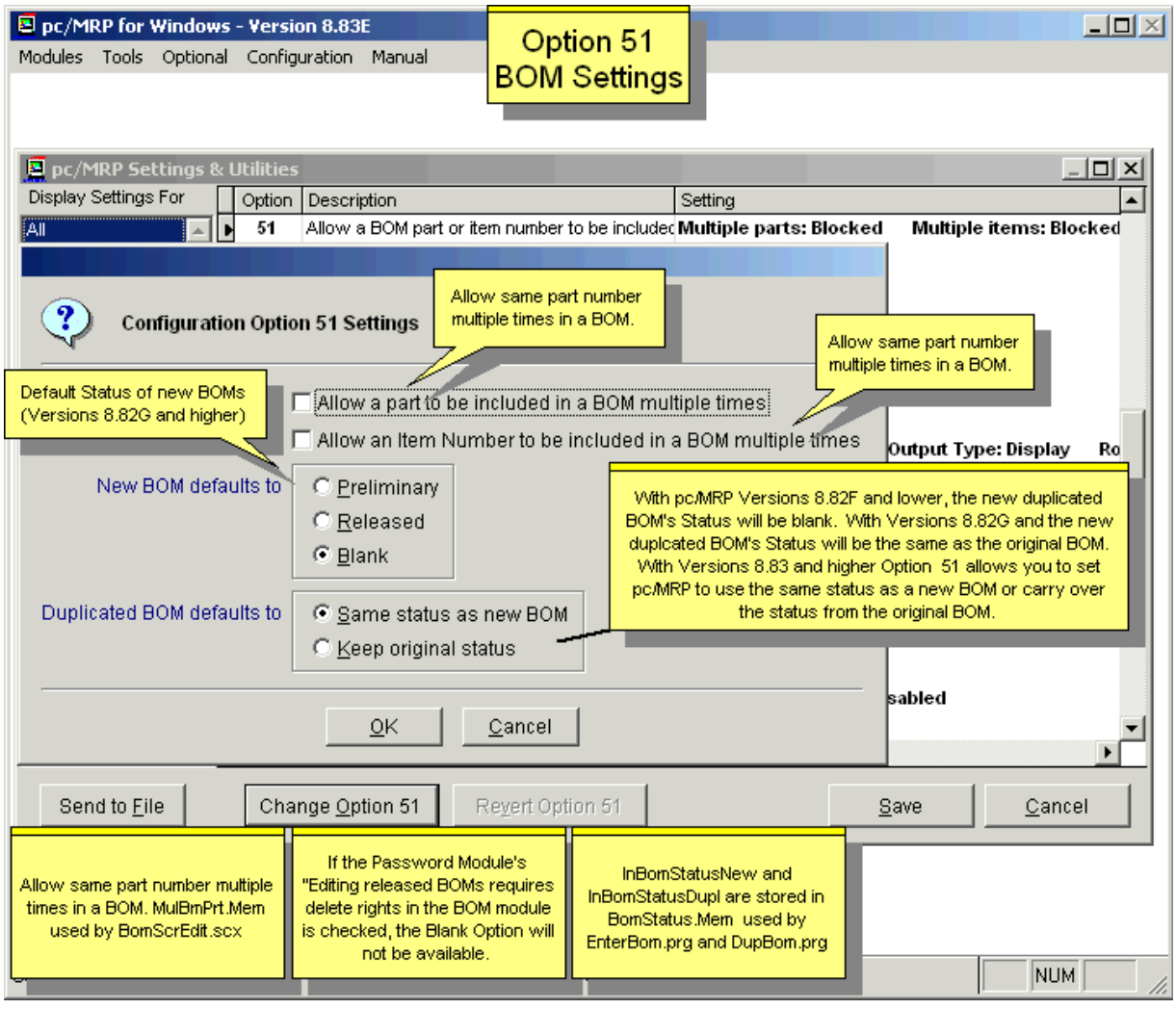
**Option 50, Set the Average Cost Calculation to Include Area(s):**

Uncheck any inventory area that should not be included in the cost averaging formula when receiving a part.

**Options 51.- 60.**

**Option 51, Allow a BOM Part or Item Number to be Included in a BOM Multiple Times; BomStatus**

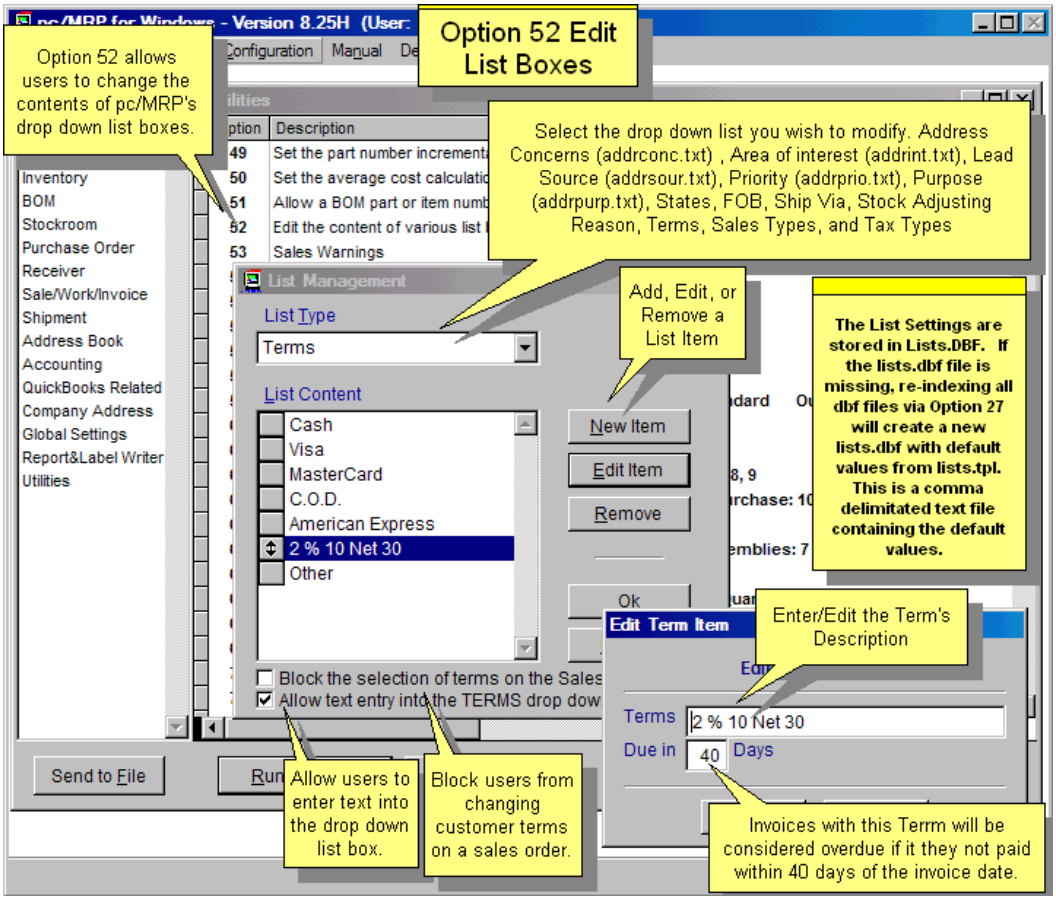
Option 51 allows users to add the same part number and/or item number to the same BOM multiple times. Users can configure the bomstatus of a new BOM that is entered as a new BOM, or created by duplicated an existing BOM.



**Option 52, Edit the Content of Various List Boxes**

Option 52 allows users to change the contents of pc/MRP's drop down list boxes. Address Concerns (addrconc.txt) , Area of interest (addrint.txt), Lead Source (addrsour.txt), Priority (addrprio.txt), Purpose (addrpurp.txt), States, FOB, Ship Via, Stock Adjusting Reason, Terms, Sales Types, and Tax Types.

Taking a look at the TERMS list in more detail:



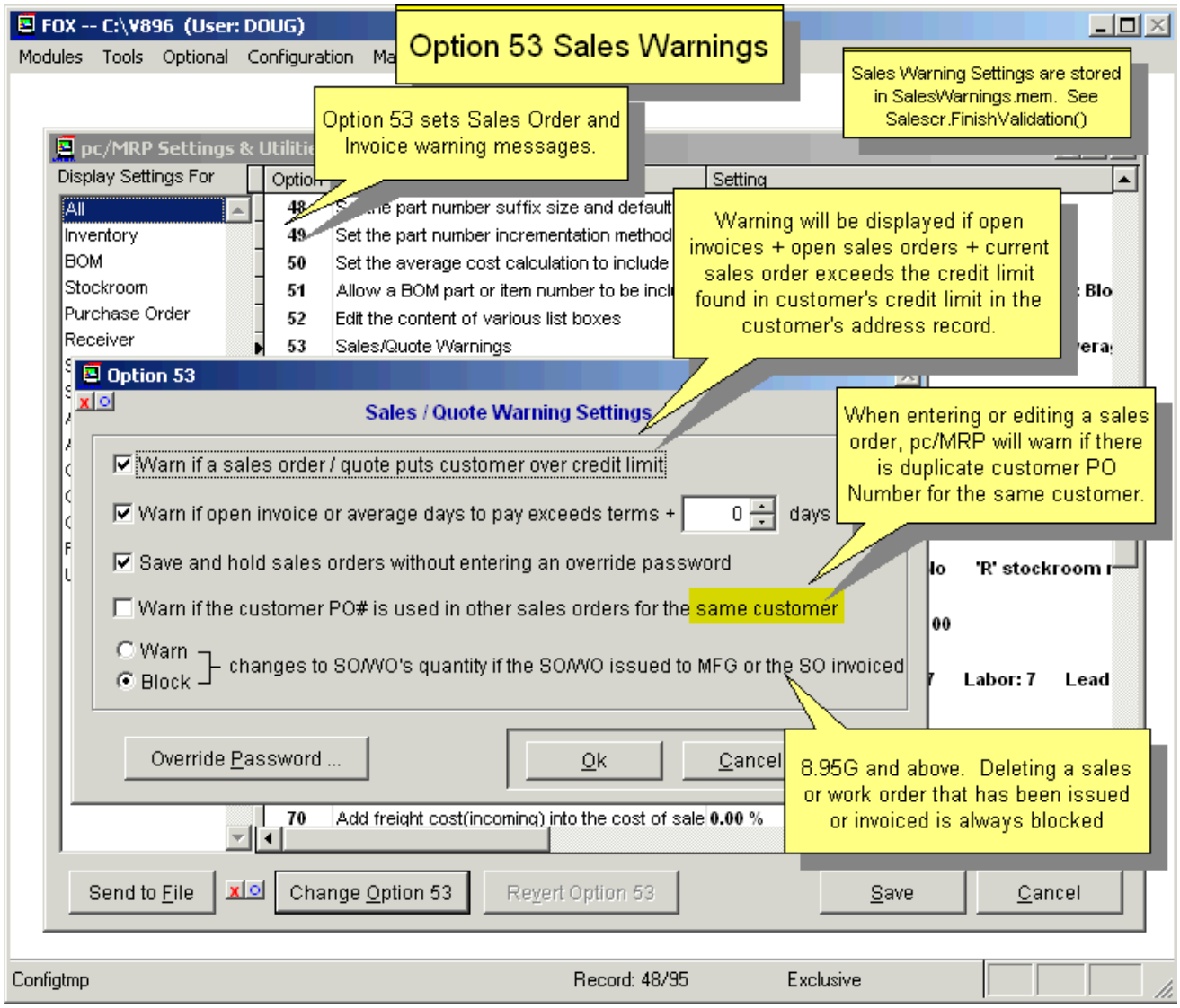

- If you are using pc/MRP's QuickBooks interface module, the terms list should match QuickBooks Terms in spelling.
- When adding or editing a term, if you put in the number of days in the "Due in Days" field, the invoice will evaluate the Due Date.
- If the address book's TERMS field is not blank, it is used as the default in the Sales Order & Purchase Order data entry screens.
- Checking the "Block the selection of terms…" checkbox will not allow a selection from the dropdown list box once you are on the Sales Order screen.
- Checking the "Allow text entry into…" checkbox, lets one highlight the default TERMS and change it to whatever they wish (20 character max). This works even if you do not allow a dropdown selection.

**Note:** Some list types offer check boxes for additional control, some don't. E.g. you can allow your users to enter terms on the fly. But a new address type can only be added using Option 52.

**Note:** When editing the Ship Via list, the UPS or FedEx words under Carrier, as these are keywords required when integrating with UPS and FedEx.

**Note:** If the **LISTS.DBF** file is missing, re-indexing all dbf files via Option 27 will create a new lists.dbf with default values from lists.tpl. This is a comma delimitated text file containing the default values.

**Option 53, Sales Warnings**




Option 53 can be set to warn if a new sales order plus any existing open invoices will exceed the customer's credit limit, etc. This option creates a file called **SALESWARNINGS.MEM**.

You can set Option 53 to block users from changing the quantity of a SO/WO that is on the manufacturing floor, and from changing the quantity of an SO that has been invoiced. The other choice is to warn users, but allow them to edit the quantity if they choose to do so. Warning is default. Deleting such SO/WO is blocked, regardless of the setting of Option 53.

**Option 54, Update Alternate Part Numbers and or Descriptions on all BOMs**

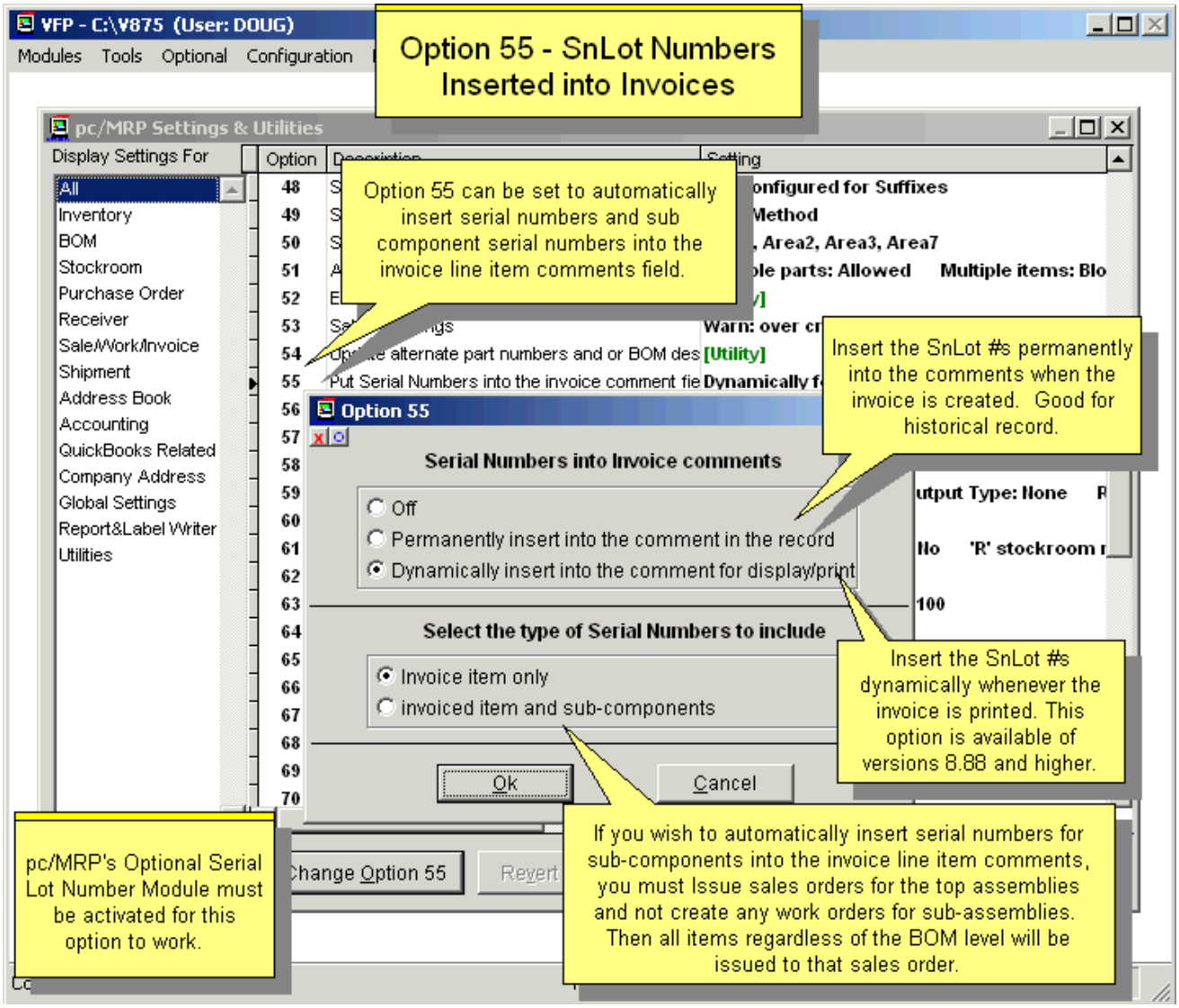
Option 54 allows users to update the alternate part numbers and/or BOM Descriptions in the BOM file with the alternate part numbers and/or part descriptions in inventory.

Both the Inventory and BOM Modules contain alternate part number fields. They can be synchronized or independent of each other. The reason for this is that HP may tell you they do not want you to use National Semi Parts in products they purchase from you. Other companies might not be as picky. If you have a picky customer the BOMs must carry their own unique alternate part numbers.

**Option 55, Put Serial Numbers into the Invoice Comment Field.**

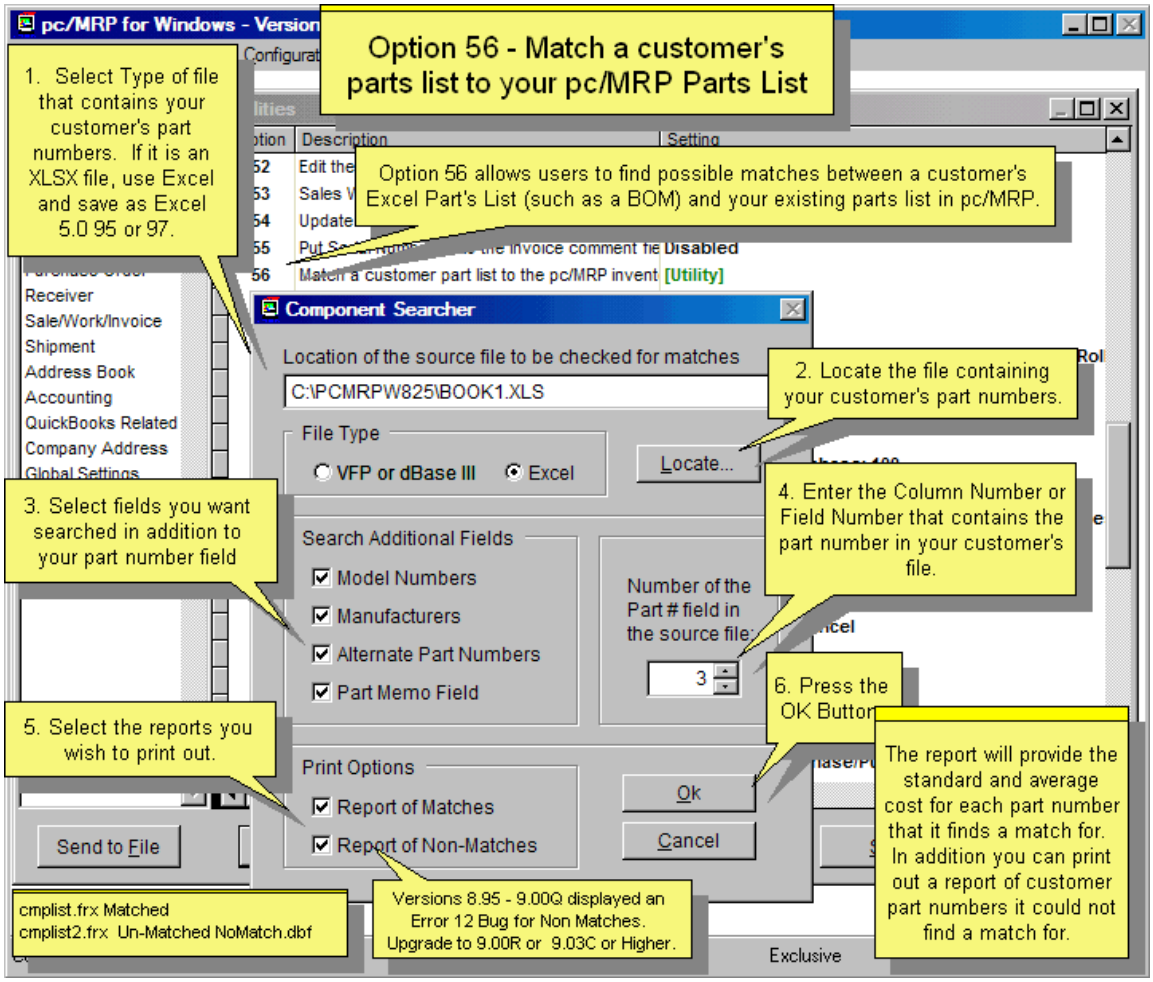
This Option will only be available if the optional Serial/Lot Number Module is activated.

Option 55 can be set to automatically insert serial numbers and sub component serial numbers into the invoice line item comments field. pc/MRP's Optional Serial Lot Number Module must be activated for this option to work. If you wish to automatically insert serial numbers for sub-components into the invoice line item comments, you must Issue sales orders for the top assemblies and not create any work orders for sub-assemblies. Then all items regardless of the BOM level will be issued to that sales order, thus their serial numbers will be listed on the invoice.



**Option 56, Match a Customer Parts List to the pc/MRP Inventory List**

Option 56 allows users to find possible matches between a customer's Excel Part's List (such as a BOM) and your existing parts list in pc/MRP. It will produce a report containing each part on the customer list and the pc/MRP part number and field where a match was detected. The report will provide the standard and average cost for each part number that it finds a match for. In addition you can print out a report for customer part numbers it could not find a match. (see 15.4.2)




**Option 57, Allow Shipper Generation Based on Sales Orders**

Option 57 can be set to allow or not allow the creation of a shipper from a sales order.

**Option 58, Modify the Part Description Templates**

Option 58 allows users to create description templates that can be used when entering part number descriptions. This helps create standard uniform descriptions for part numbers. To use the templates, click on the … button next to the Description field, when entering a new part.

**Option 59, Set the Cost Roll-up Defaults**

Option 59 allows users to set the cost roll up defaults to:

Standard Cost, Average Cost, or Last PO Cost

Roll up phantom BOMs (assemblies classified as inventory parts in the inventory module)

Send the output to display, printer or neither.

Factor in Attrition or not.

If Factor in Attrition is checked, cost roll ups will factor in attrition (parts only) rounding up to the nearest whole number. If Option 61 is set to allow Costed Exploded BOM to update costs, this Option (59), will control whether Attrition is factored into the Costed Exploded BOM or not. This setting allows Accounting to control costing. Version **9.13A** and higher.

**Option 60, Set the Labor Overhead Mark-up Percentage**

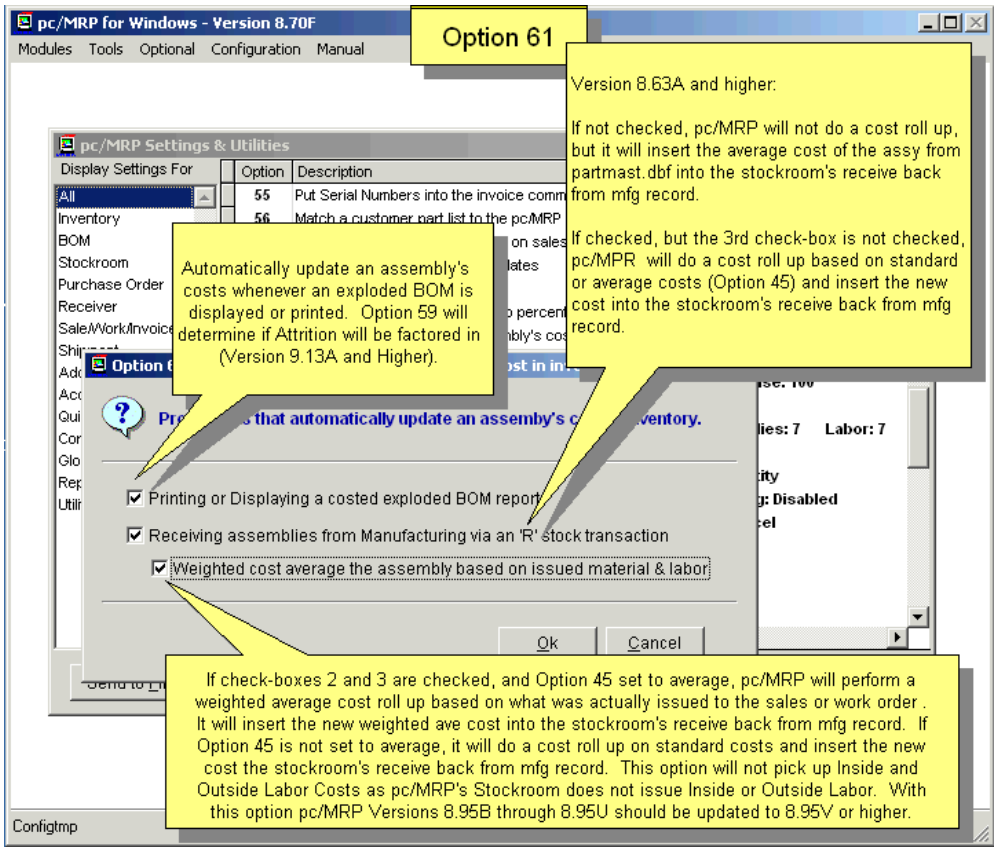
Option 60 allows users to set the labor overhead percentage. This overhead percentage would be used if labor and overhead were to be included when running a cost roll up. For example, if you have 1-hour of inside labor in a BOM at $10.00/hr, and the labor Overhead Percentage equals 10%, total labor cost in the BOM would equal $10.00+ ($10.00*10/100)=$11.00. Please note that the 'Overhead %' calculated value is also stored with the labor cost fields in the database.

**Options 61.- 70.**

**Option 61, Automatic Updating of an Assembly's Cost in Inventory**

Option 61 allows users to set the ability of pc/MRP to update inventory costs of an assembly whenever an exploded BOM is displayed or printed.

If you check the Receiving Assemblies checkbox and not the Weighted Cost Average checkbox, pc/MRP will perform a Cost-Roll-Up based on Option 45, Average or Standard Cost, whenever you receive back completed assemblies from manufacturing. If Option 45 is set to Average Cost and you check both checkboxes, pc/MRP will perform a weighted average based on what was actually issued to the sales or work order being received back from manufacturing.




Note: In Versions **8.95A-U**, pc/MRP failed to perform a cost roll-up even with the appropriate box checked. This problem was fixed with Revision 8.95V.

**Option 62, Allow Editing of Sections of the Inventory Screen**

Option 62 allows you to turn off the ability of users to edit quantity, costs, and sale price fields. Un-checking the Quantities Fields forces users to use the stockroom's "Adjust quantities" option to change quantities of parts in stock. This will leave a record of the adjustment along with a comment line explaining the adjustment. pc/MRP's "Inventory Movement Report" will only be accurate if the stockroom is used to adjust quantities and not by editing inventory. Includes inventorea area quantities from Stores to Area-20 and WIP.

Location fields: for Stores – Area-20.

Other Quantities: On Order, On Demand, Estimated Usage, Std Order Qty, Minimum Qty, Maximum Qty, Minimum weeks of Inventory, Weeks Onhand.

General Costs: Average, Standard, Last PO costs. Un-checking General Costs will protect Accounting from costs being changed by a user. pc/MRP will automatically change average costs on a weighted average whenever a part is received.

Vendor Costs: PO Unit Qty and Stock Unit Price on the Vendors tab.

Vendor Information: PO Ratio, Po Unit, Buyer, Vendor's Currency, Phone, Representative, Quote Ref, Price Date, NCNR item, Vendor's Part #, Description, Lead Time (Days), New Vendor, Remove Vendor.

Manufacturers / Model Numbers: Manufacturers, Mfg Part# (Model Numbers).

Sales Pricing: All fields under the Sales Prices tab.

General Part Information: Stock & Issue Unit, Lead Time, Order Multiple, Alternate Part#s, General Info, Type, Division, Description, and all fields under the Details 2 tab.

**Option 63, Set Document Item Limits for Sales and Purchasing**

Option 63 allows users set the maximum number of line items allowable for sales and purchase orders.

**Option 64, Set The Default Inventory Class Type**

Option 64 sets the Cycle Count Class Field to be set to "A", "B", or "C" whenever a new part number is created. Also see Option 20 and the Cycle Count section in this Manual.

**Option 65, Set Default Lead Times (in Days)**

Option 65 sets the default for inventory and assembly lead times. Only check the "Lead Times are allowed to be '0' " check box if you intend to manually enter the lead times for every part number. If the box is unchecked, MRP will use the default lead time for parts with zero lead time.

**Option 66, Set new Work Orders as Consumable**

Option 66 sets newly created work orders as Consumable by default.

**Option 67, Set the Sale Price Lookup Method**

Option 67 sets the sales price lookup method to either Sales Level Quantity or Sales Category Matrix. For information about both methods, see the Inventory Chapter. 5.1.2.8. We recommend this option be set to Sales Level Quantity as this method is more straight forward and easier to understand.

**Option 68, Allow stepping down for BOMs marked as 'P' in the inventory module**

Sub-assemblies marked as P in the inventory module are called Phantom BOMs. Companies would use phantom BOMs if they order those assemblies from vendors, but they still want to see the structure of it. (Section 12.10) Option 68 allows users to step down through phantom BOMs while editing or printing out a costed or uncosted exploded BOM.

**Option 69, Set the Physical Inventory Entry Window's Button Order**

Option 69 allows you to set the order of the Data Entry Buttons to Enter-Add-Cancel or Add-Enter-Cancel.

**Option 70, Add Freight Cost (Incoming) into the Cost of Sales**

Option 70 can be set to increase the Purchase Cost displayed on the Sales Order and Invoice Screen. We recommend leaving this option set to 0%. Setting this to say 10%, would increase the Purchase Cost by 10%. pc/MRP does not use the Invoice's Purchase Cost Field when it debits COGs and credits Inventory when posting an Invoice in pc/MRP's and QuickBooks Accounting Modules. So it has no effect on accounting.

**Options 71.- 80.**

**Option 71, Show Each Sub-assy Cost from the Partmast table for the Exploded BOM Report**

Option 71 allows sub-assembly costs to be displayed along with component costs when displaying or printing an exploded BOM. We recommend leaving this option set to No. If you set this option to No, only the component part costs are displayed on an exploded BOM. The assembly is displayed but the cost of the assembly is not displayed. If you set this option to Yes, the assembly costs would also be displayed. If one were to manually add up all the costs displayed on an exploded BOM with this option set to Yes, the total would exceed the correct total displayed on the bottom of the printout.

**Option 72, Remap (Change) Chart of Account Numbers and Propagate the Changes**

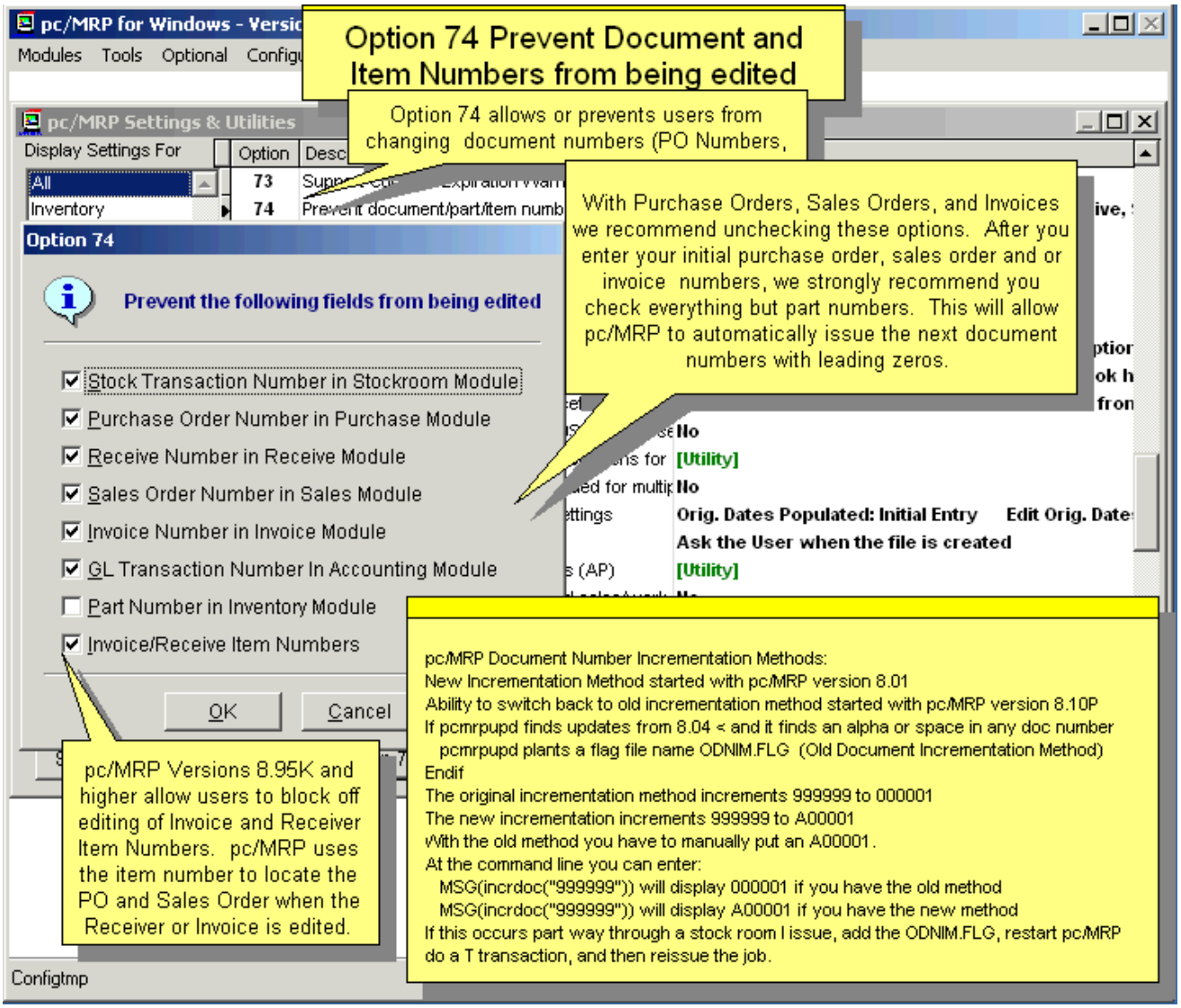
Option 72 allows users to change one ore more chart of account numbers. This utility will then propagate the change in every necessary pc/MRP table. (Historic accounting transactions, account templates, backup chart of accounts, inventory, invoice, sales, purchase orders, receivers, sales quotes and purchase quotes.)

**Option 73, Support Contract Expiration Warning in Days**

Option 73 allows you to set the numbers of days ahead you would like to be warned that your pc/MRP Support Contract is due to expire. The allowable range is -2 to 99 days.

Entering 0 will warn on the last day of your contract.
Entering -1 will warn when your contract has expired.
Entering -2 will disable the popup warning.

**Option 74, Prevent Document/Part Number from Being Edited**




**Notes:** Part numbers cannot be edited, regardless of any settings. If you need to change a part number, use Change Part Number from the Inventory menu. Checking “Part Number in Inventory Module” in Option 74 will prevent changing the next available part number when entering a new part into pc/MRP.

If you have document numbers that are less than 6 characters and you want to correct this, call Software Arts to add leading zeros to the document numbers. For the stock transaction numbers or the accounting transaction numbers, set an admin lockout, create a backup, open the table. Enter
"REPLACE ALL TRANNO WITH PADL(TRIMSTR(RECNO())),6,"0" (or stktrano for Stocktra). If you need to do this for e.g. for the Purchase table, remember to repeat the process for the Receive and the Transact tables.

If you want to completely renumber the document numbers in a table (Purchase, Receive, Sales, Invoice, Stockroom, and Accounting Transactions) call Software Arts. Enter REMOTEFORM(“RENUMBER”) (or run the renumber.scx and .sct files for older versions). See note for Option 75.

If a full update finds an alpha or space in any module document number, pc/MRP plants a flag file named ODNIM.FLG into the PCMRPW folder. The old document number incrementing method would only increment numeric values, and 99999 goes to 000001. The new method would automatically go to A000001. With the old method you have to manually enter an A00001. Another method to check the document number incrementing method is to enter msg(incrdoc(“999999”)).

**Option 75, Repair Duplicate Document Numbers**

Option 75 allows users to renumber records with duplicate document numbers. This utility supports the following tables: transact, stocktra, emptimesh, and inspect. This function searches through the selected table for duplicates. Any duplicate that are detected are renumbered to the next available number. If you want to completely renumber the document numbers in a table (Purchase, Receive, Sales, Invoice, Stockroom, and Accounting Transactions) call Software Arts to run the remoteform("renumber") utility from the command line. (Or to transfer and run the renumber.scx and .sct files from the command line.) Set an Administrative Lockout and make a backup before running these options. **Note:** The renumber utility will propagate the document number change for Receivers, Sales, and Invoices into the Serial/Lot detail records.
If renumbering the Purchase table, changes will be propagated for the Receivers and Accounting records.
If renumbering the Sales table, changes will be propagated for the Invoices and Accounting records.

**Option 76, Allow pre-seeding the Physical Inventory Counts with Current Inventory Values**

The Physical Inventory process allows users to zero out the physical inventory team count fields, or to load (pre-seed) current inventory quantities into these fields. The pre-seed selection will only be offered if Option 76 is set to yes.

**Option 77. Purge Unneeded Revision Update Folders from Disk**

Option 77 allows users to remove temporary folders and files that were created during the automatic revision updates. All folders and files are removed except for the most recent folder and associated files.

**Option 78. Select the Source for the Division Field on Purchase & Sales Orders**

Option 78 allows users to set the source for the division field for purchase orders and sales orders. In both cases uses can select to have the division field populated from the representative inventory item or address entry.

**Option 79. Get Labor Hours from Employee Time Sheets when Receiving back completed assemblies from MFG.**

This Option will only be available if the optional Employee Time Sheet Module is activated.

Option 79 allows users to enter labor hours when receiving back completed assemblies or have the labor hours populated from the (optional) Employee Time Tracking module. If you set Get Labor Hours from the Employee Time Sheet Table, you can select to get the hourly labor rate from the Employee Pay Rates or from the Average Labor Rate (Option 6). If the Employee Time Sheet Option is checked, the employee hours will be entered into the stockroom labor record. This means the employee time sheets must be complete before the sales or work order is received back from manufacturing. Please note that the Manufacturing Variance Report uses the stockroom records for employee time and cost. The Cost of Sales Report based on Stockroom Transactions can report the labor cost for a sales or work order based on Employee Time Sheet Records or Stockroom Records.

**Note**: If Option 79 is set to Get Labor Hours from the Employee Time Sheets AND Employee Pay Rates, pc/MRP will Sum the Total Cost of the Labor (from the time sheets) divided by the total number of hours (from the time sheets) to arrive at an Average Hourly Labor Rate. The Total Number of Hours will be displayed on this screen (not editable). The Total Number of Hours and the Average Hourly Labor Rate will be inserted into the Issued To Manufacturing Labor Record for this sales/work order. Overhead is NOT factored into this stockroom record. For this stockroom record to be accurate, employee time sheets must be completed for the sales/work order before receiving the sales/work order back from manufacturing. Nor there can not be multiple receive backs from manufacturing for a sales/work order.

**Option 80. Set the Logbook Options.**

Option 80 sets the file format that will be used when creating logbook files from various pc/MRP modules. The available file format options are**:** "Generic Text Document (.txt)" or "Microsoft Word Document (.doc)". The default is "Generic Text Document (.txt)".

This option also has a setting to automatically pre-insert header information about the current record into the logbook when it is created. **Note:** Logbooks cannot be created in "View" mode.

**Options 81.- 90.**

**Option 81. Salesman & Commission Source Settings for Sales Orders.**

Option 81 allows users to set where the Salesman's name and commission come from; the Address Book Module or the Inventory Module. In addition users can set where the Salesman's name and commission come from on subsequent line items.

**Option 82. Mark SO/WOs with an Issue Subs Only Assembly as Require Dedicated Work Orders.**

Option 82 can be set such that newly created Sales/Work Orders be flagged as Requiring Dedicated Work Orders if the sales or work order assembly is flagged as Issue Subs Only in the Inventory Module.

**Option 83. Add, Edit or Delete the Terms and Conditions for Purchase Orders & Purchase Requests.**

Option 83 allows the user to add, edit or delete Terms and Conditions for Purchase Orders. T&Cs that are checked as default, are included in all new purchase orders. When a user is creating a purchase order he/she can press the Options Button to select Terms and Conditions other than the default.

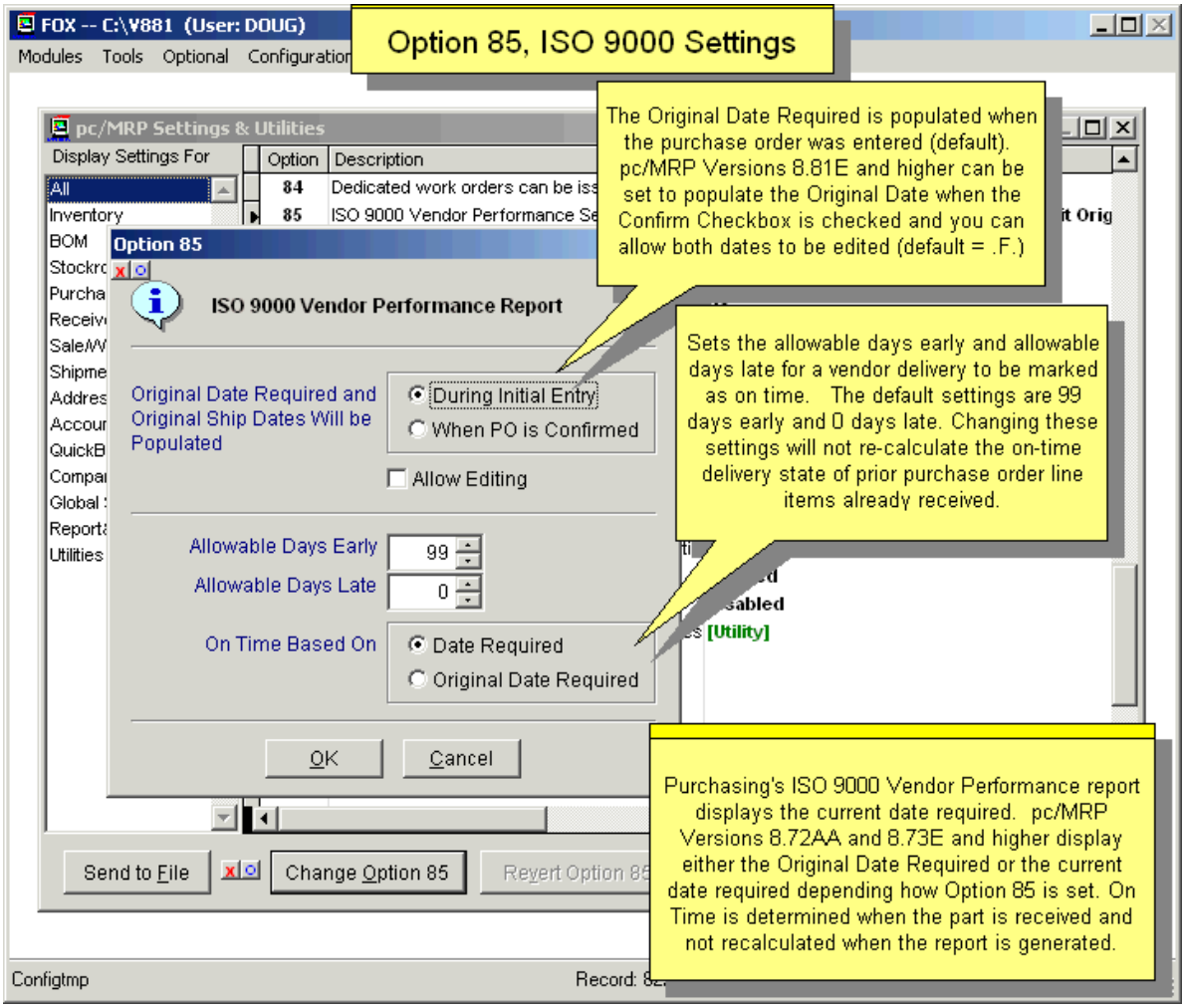
When a purchase request/quote is created in the request.dbf file it will store the default terms in its termcond memo field. If the termcond field is not empty the terms and conditions sheet will print out right after the purchase request/quote prints out. This is the same for a PO with the exception that a PO's Terms and Condition Field can be manually edited by pressing the Options button on the PO Data Entry Screen. Creating 2 files named Requestb.ef and PoQuob_Ship.ef will prevent the T&C page print out. The files should contain PCTERMCONDIDLIST = "" after the ~IN~ clause.

**Option 84. Dedicated Work Orders Can Be Issued for Multiple Levels.**

Option 84 allows users to issue sub-assemblies and or parts in that sub-assembly to a sales order that requires dedicated work orders. Under normal circumstances the default setting is No, as pc/MRP is expecting to issue completed sub-assemblies that were completed from the dedicated work orders.

**Option 85. Set ISO 9000 Vendor Performance Days allowed for On Time Delivery.**

Option 85 sets the allowable days early and allowable days late for a vendor delivery to be marked as on-time. The default settings are 99 days early and 0 days late. Changing these settings will not re-calculate the on-time delivery state of prior purchase order line items already received.

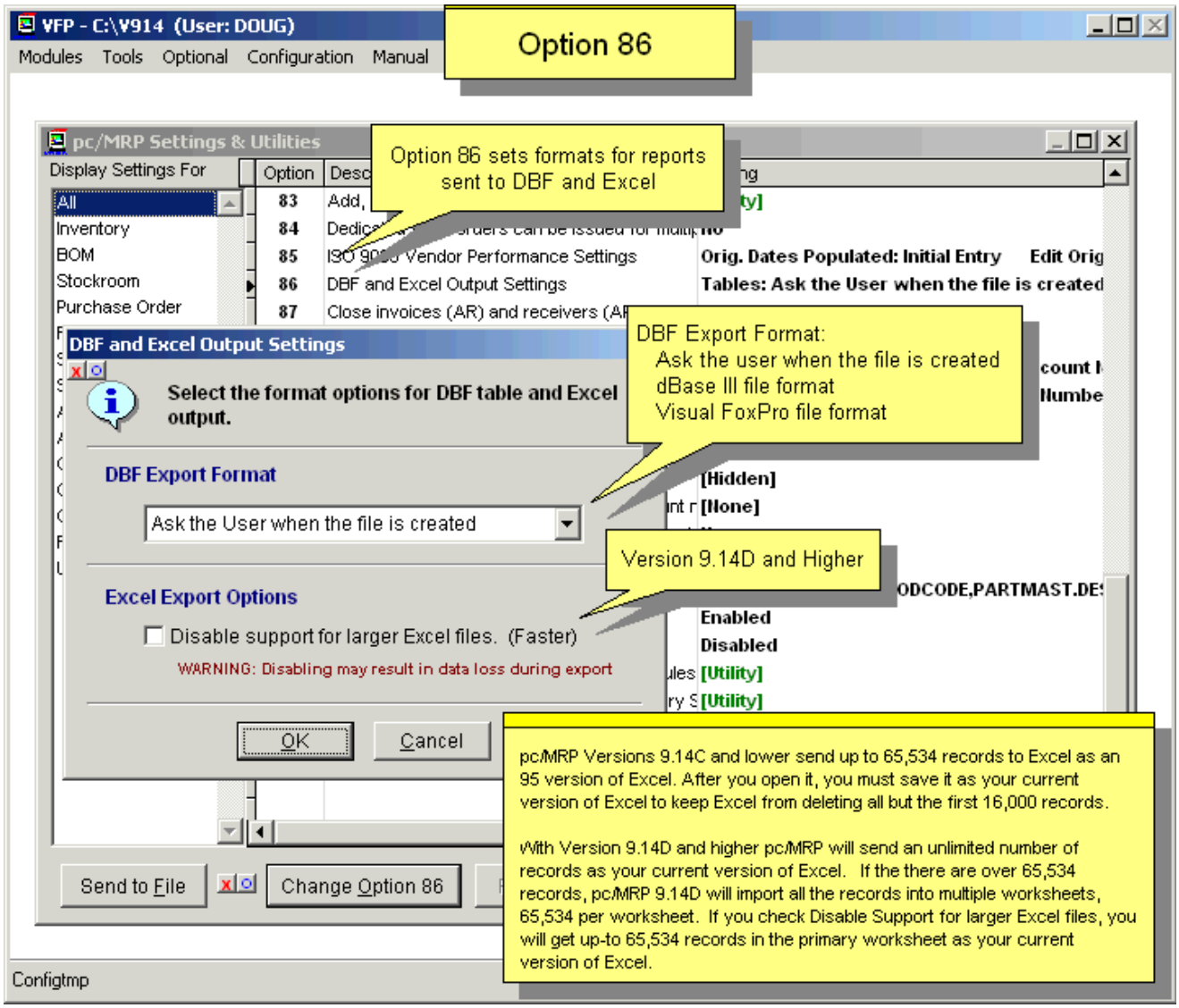



**Note:** The Original Date Required is populated when the purchase order was entered (default). pc/MRP can be set to populate the Original Date when the Confirm Checkbox is checked and you can allow both dates to be edited (default = not allowed).

Users can select vendor on time delivery based on the date required or the original date required. Purchasing's ISO 9000 Vendor Performance Report displays the current date required. On Time is determined when the part was received and not recalculated when the report is generated.

**Option 86. DBF and Excel Output Settings**

Option 86 sets the output of a report sent to DBF, to either dBase III, Visual FoxPro Format or Ask. It also allows the user to enable support for larger Excel files, or to disable this for faster results with smaller files.



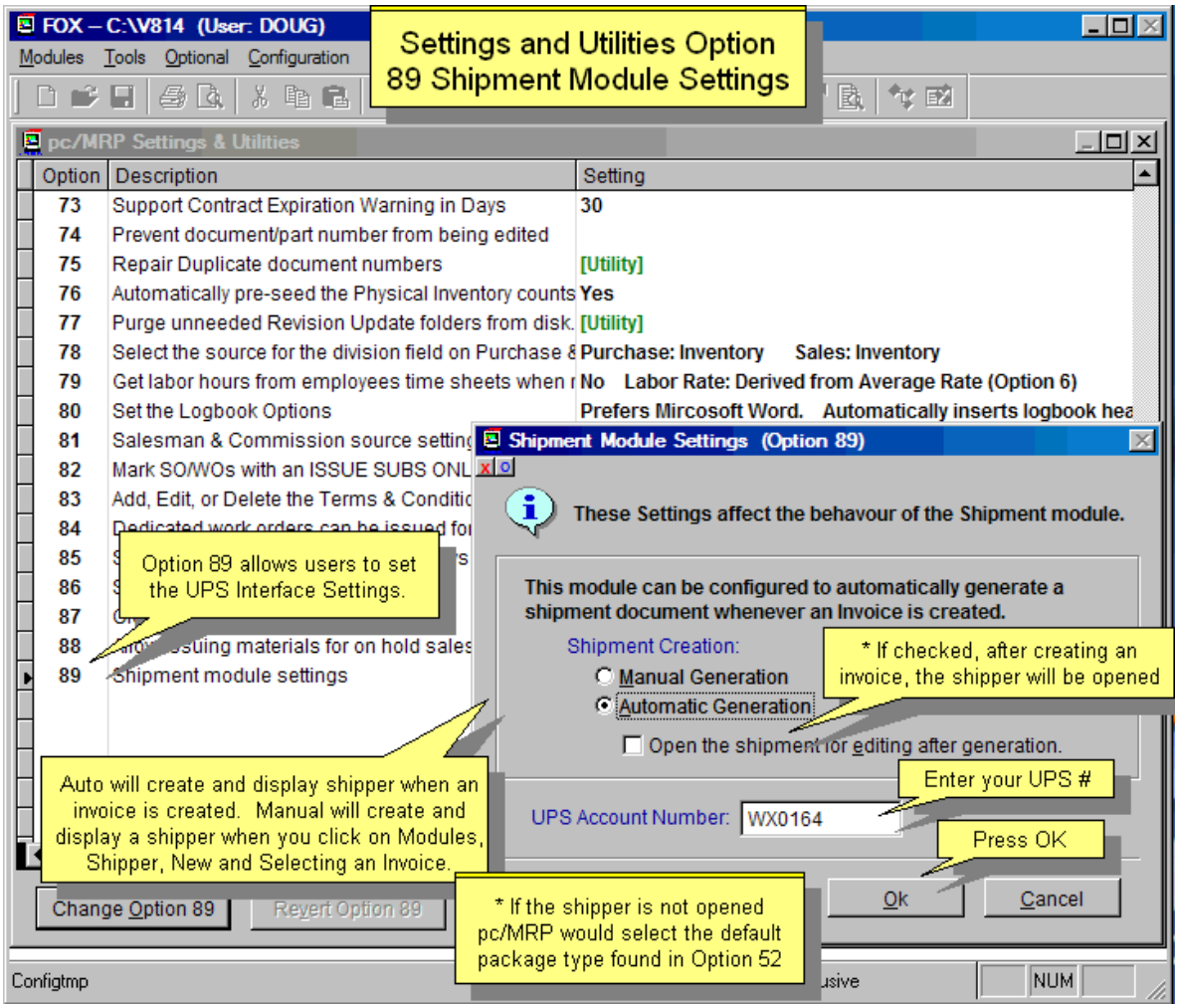

**Option 87. Close Invoices (AR) and Receivers (AP).**

Option 87 is for companies that have been using pc/MRP but have not been using pc/MRP's Accounting Module and would like to start using the accounting module. This option allows users to easily mark multiple invoices and receivers as posted (Y in the Posted field) or complete (Y in the Complete field). A "Y" in the posted field signifies the invoice or receiver has been posted (AR or AP was increased). A "Y" in the Complete field signifies the invoice or receiver has been paid. Continue to mark receivers and invoices as paid until the AR and AP are correct.

**Option 88. Allow Issuing Materials for On Hold Sales/Work Orders in the Stockroom Module**

Option 88 prevents parts from being issued to on hold sales orders.

**Option 89. Shipment Module Settings (UPS Interface)**




**Option 90. Invoice Warnings**

Option 90 can be set to (1) Require customer purchase order numbers on an invoice prior to saving the invoice. (2) Allow a credit memo to exceed the invoice amount.

**Options 91.- 100.**

**Option 91. Require Entry of REQ SHIP DATE on Sales Orders/Work Orders/Sales Quotes**

Option 91 can be set to require a date required prior to saving the sales/work order. This is needed for an **ISO 9000 Customer On-time Delivery** report or when the Overdue Only 'Include' option is selected for Sales Order reports. This setting does not affect "Cash" or "On Account" orders.

**Option 92. Require Entry of DELIVERY DATE on Purchase Orders/Purchase Requests**

Option 92 can be set to require a delivery date prior to saving the purchase order. This is needed for an **ISO 9000 Vendor Performance** report or when the Overdue Only 'Include' option is selected for Purchase Order reports.

**Option 93. Change the Configuration Code Number**

The company's Configuration Code Number is based on the company's phone number. This is sensitive information, Software Arts supplies this number at the original purchase of the software. Users can request this number from their administrator. If a company changes their phone number (in Option 1), their Configuration Code will change too. Their Administrator will need to call Software Arts to obtain the new Configuration Code.

Companies can change their Configuration Code Number if desired, however in some cases this might cause a delay in Software Arts providing technical support for the company. In case the new code is forgotten, a company changes their phone number, the Administrator will need to call Software Arts to have the original Configuration Code set back.

**Option 94. Require Users to Enter Valid Chart of Account number**

Example 1: When you enter a sales order, pc/MRP carries over any account numbers that are entered for that part. If the part has the account numbers blank, the account fields in the sales order (and later in the invoice) will be blank as well. At the time of posting the invoice, the default chart of accounts (set in Option 9) will be used.

Option 94 allows users to set which modules require valid account numbers before the records can be saved. If for example the Sales module is checked, pc/MRP will look for the account numbers entered, and users will not be able to finish entering the sales order if the account numbers don't exist in the Chart of Accounts. A checkbox allows blanks to be considered as valid.

Example 2: If Inventory is checked and you enter a new part number, pc/MRP will not let you save that new part number without valid account numbers. This is the same for the other modules. If you leave the account numbers blank and the checkbox is checked in Option 94, OR the module is unchecked, pc/MRP will use the default chart of account numbers found in Option 9.

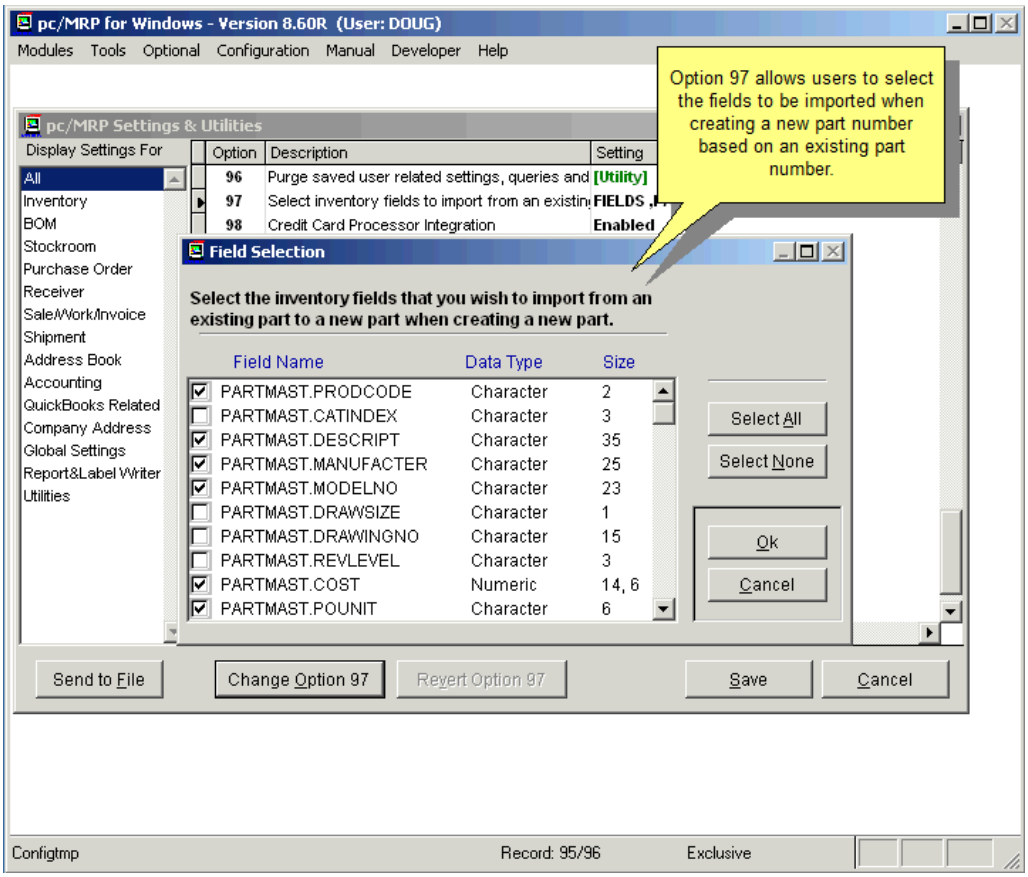
**Option 95. Allow Credit Memo Creation from the Sales Order Module.**

Option 95 can be set to allow credit memos to be created from the sales order data entry screen.

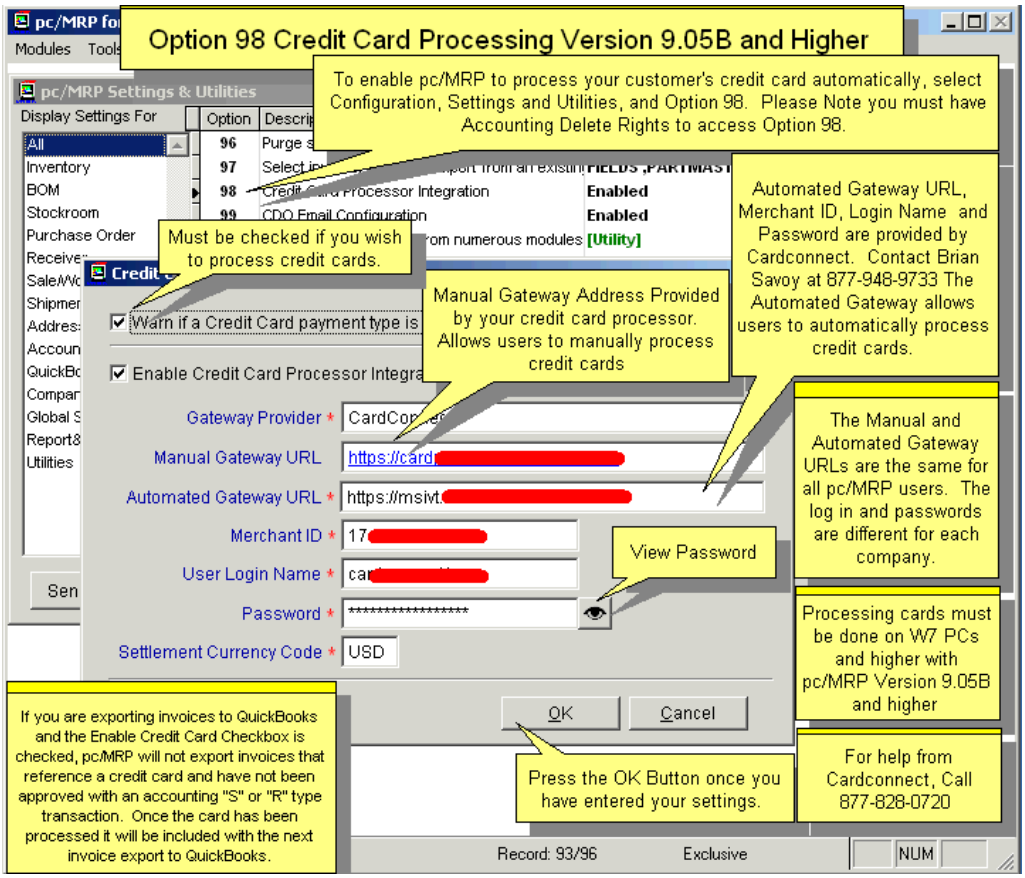
**Option 96. Purge Saved User Related Settings, Queries and Lists**

This process allows the removal of the various stored settings, query definitions, export field lists, importation maps, etc. for one or more users. This is typically performed after a user's employment has terminated. Please note that this process will not purge or alter a user's entry in the optional Password module. Removal of a user's Password access rights must be performed directly within the Password module.

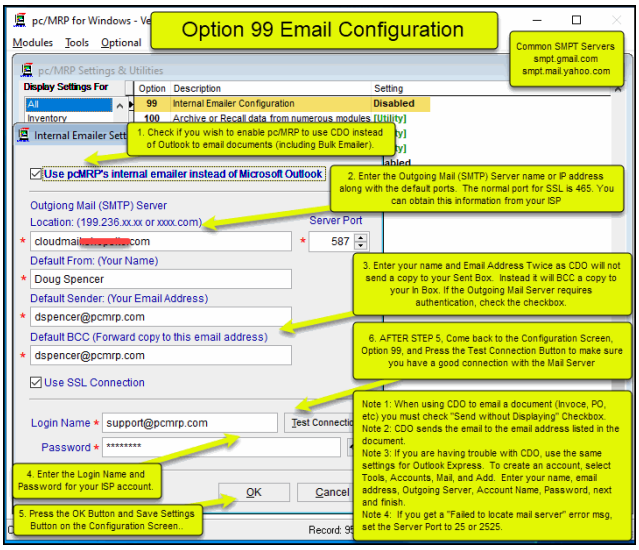
**Option 97. Select Inventory Fields to Import from an Existing Part when Creating a New Part.**



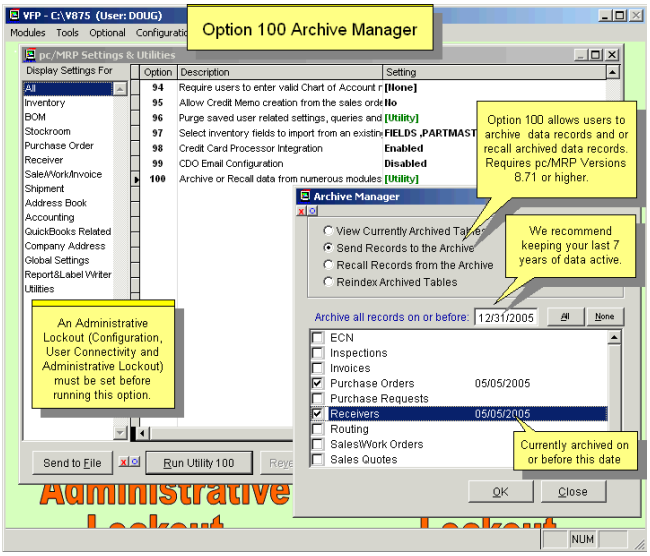

**Option 98. Credit Card Processor Integration.**

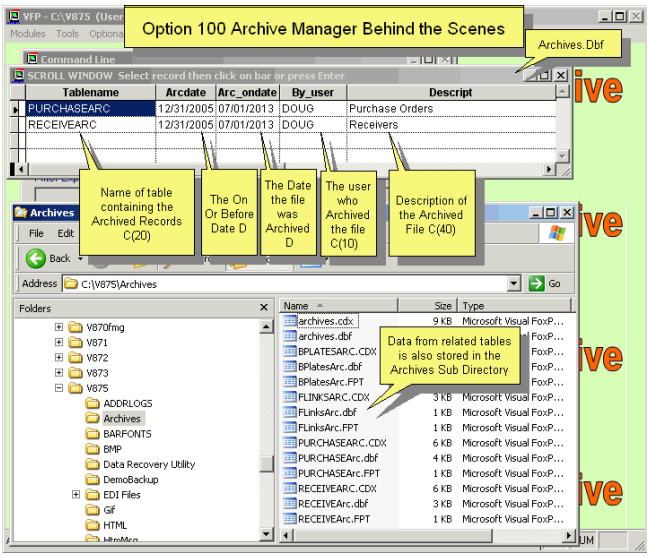


## Option 99. CDO Email Configuration



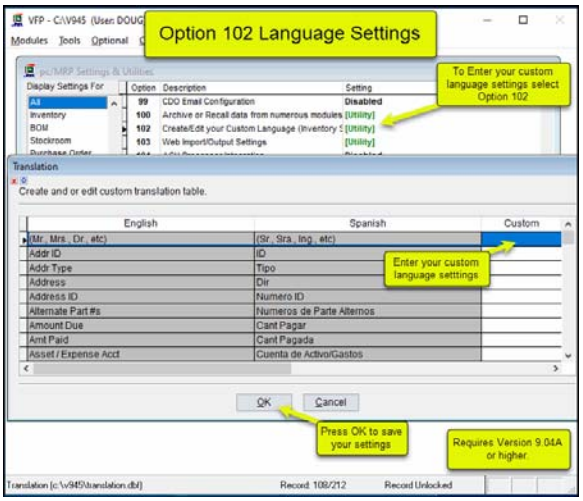

## Option 100. Archive Manager - Archive/Recall Data Records



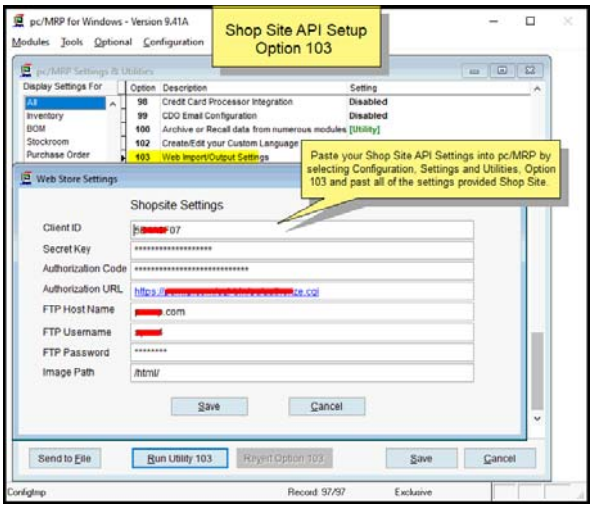



## Options 100+

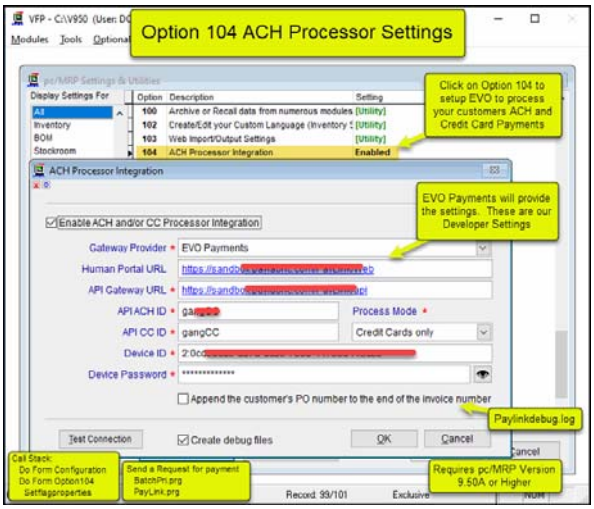
## Option 102. Language Settings



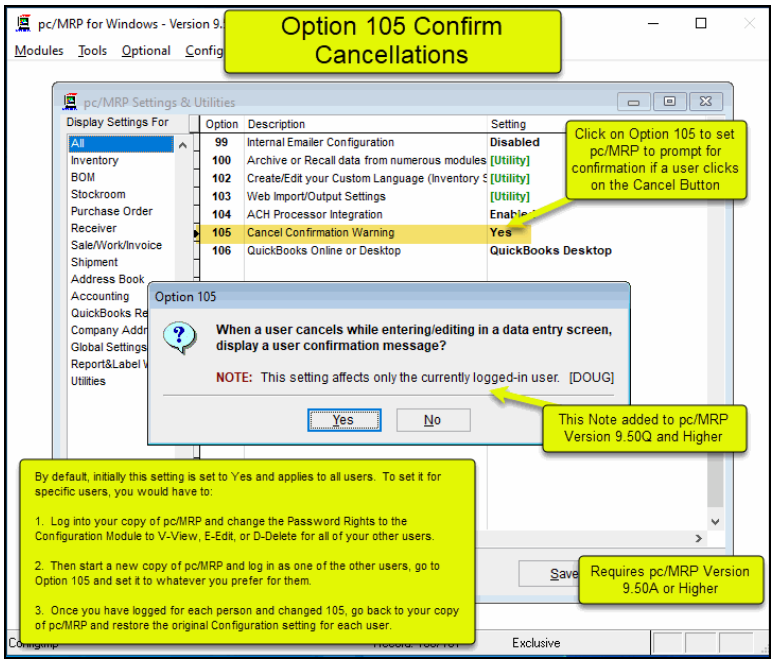

## Option 103. Shopsite API  Settings




## Option 104. ACH Processor  Settings



## Option 105. Confirm Cancellations



### 15.1.3 Modules and Related Settings

**Address Book Module (Customer and Vendor Information):**

37. Credit Card digit validation & formatting
52. Edit the content of various list boxes (U*ser definable pc/MRP dropdown lists*)
78. Select the source for the division field on Purchase & Sales Orders
81. Salesman & Commission source settings for Sales Orders

**Inventory Module (Part Item Information):**

4. Inventory adjustment methods (*A is recommended*)
20. Cycle Count Options (*Full or Differential*)
28. Define part number size (*1-15 Characters*)
29. Define product code size (Part Number Prefix 1-6 Characters)
32. Check inventory for invalid vendors
34. Change names of alternate storage areas in inventory
47. Set the inventory defaults (Allow SalePrice Markups and Cost Rollups)
48. Set the part number suffix size and default content (*0-4 Characters*)
49. Set the part number incrementation method
50. Set the average cost calculation to include area(s)
56. Match a customer part list to the pc/MRP inventory list
58. Modify the part description templates
59. Set the Cost Roll-up defaults (*Average, Standard, LastPO*)
60. Set the Labor Overhead Mark-up percentage
62. Allow editing of sections of the inventory screen (*Costs, Quantities, Etc.*)
64. Set the default inventory Class type (*Cycle Count A,B,C*)
65. Set the default lead times (in Days) (*Allow 0 days*)
67. Set the Sale Price Lookup method (*Sales Level Quantity is recommended*)
69. Set the Physical Inventory entry window's button order (*Enter Add Cancel*)
74. Prevent document/part number from being edited (*Invoice, Purchase Order, Etc*.)
76. Automatically pre-seed the Physical Inventory counts with the current Inventory value.
78. Select the source for the division field on Purchase & Sales Orders (*Address or Inventory*)
81. Salesman & Commission source settings for Sales Orders (*Address or Inventory*)
97. Select inventory fields to include when creating a new part number and copying fields from an existing part number.

**BOM Module:**

36. Export/Import BOM to another copy of pc/MRP
51. Allow a BOM part or item number to be included multiple times
54. Update the alternate part numbers on all BOMs **(***From Inventory file*)
59. Set the Cost Roll-up defaults (*Average, Standard, LastPO*)
61. Allow costed BOM reports to update the assembly cost in inventory
68. Allow stepping down for BOMs Marked as 'P' in the inventory module
71. Show each sub-assy cost from the partmast table for the Exploded BOM Report

**Stockroom Module:**

6. Change average hourly labor rate (*used in Job Cost Reports & BOM Costs*)
45. Set the stockroom defaults (Cost to use: Avg/Std; Issued Qty when short)
52. Edit the content of various list boxes (*Stock adjusting reason list*)
74. Prevent document/part number from being edited
75. Repair Duplicate document numbers
79. Get Labor from the Employee Time Sheets when Receiving back completed assemblies.
88. Allow issuing materials for on hold sales/work orders in the Stockroom module

**Purchase Order Module**

7. Sales tax rate (%) and settings
22. Enter boiler plate notes for forms
25. Data to be inserted into the PO's "Placed By" field
42. PO cost based on …. (Get PO cost from vendor price list, last PO cost, average cost)
52. Edit the content of various list boxes (U*ser definable pc/MRP dropdown lists*)
63. Set document item limits for Sales and Purchasing
74. Prevent document/part number from being edited
78. Select the source for the division field on Purchase & Sales Orders
83. Add, Edit, or Delete the Terms & Conditions for Purchase Orders
85. Set ISO 9000 Vendor Performance Days Allowed for On Time Delivery
92. Require Delivery Date on Purchase Orders

**Receiver Module:**

16. Enable dynamic location in receiver
22. Enter boiler plate notes for forms
38. Include AP voucher information on receiver reports
44. Set the default receiving area
46. Allow the Auto Receive option
50. Set the average cost calculation to include area(s)
52. Edit the content of various list boxes *(User definable pc/MRP dropdown lists)*
74. Prevent document/part number from being edited
87. Close invoices (AR) and receivers (AP)

**Sales /Work Order/Invoice Modules:**

7. Sales tax rate (%) and settings
17. Cost of sale data source.
22. Enter boiler plate notes for forms
35. Type of cost imported into the Cost of Sale
52. Edit the content of various list boxes (*User definable pc/MRP dropdown lists)*
53. Sales Warnings (Credit Limit, Save & Hold, Password setup)
55. Put Serial Numbers into the invoice comment field
57. Allow shipper generation based on sales orders
63. Set document item limits for Sales and Purchasing
66. Set the new Work Order as Consumable
67. Set the Sale Price Lookup method
70. Add freight cost (incoming) into the cost of sales for a sales order based on a % of standard costs
74. Prevent document/part number from being edited
78. Select the source for the division field on Purchase & Sales Orders
81. Salesman & Commission source settings for Sales Orders
82. Mark SO/WOs with an ISSUE SUBS ONLY assembly as REQUIRE DEDICATED WORK ORDERS.
84. Dedicated work orders can be issued for multiple levels
87. Close invoices (AR) and receivers (AP)
88. Allow issuing materials for on hold sales/work orders in the Stockroom module
90. Require Customer Purchase Order Numbers on Invoices
91. Require Date Required on Sales/Work Orders
95. Allow Credit Memo creation from the Sales Order module.
103. Shop Site API Setup

**Shipment Module:**

52. Edit the content of various list boxes *(User definable pc/MRP dropdown lists)*
89. Shipment module settings.

**Accounting Module:**

3. Allow goods and services taxes for "P" and "I" accounting transactions
5. Change starting month of fiscal year and period end dates
8. Auto Accounting-or-Make accounting separate (Manual)
9. Modify chart of account template – Add division/department to chart of accounts
10. Accounting inventory method (Perpetual recommended)
11. Multi-division chart of account templates
13. Allow checks to be reprinted
14. Accounting transactions settings (*Allow editing of transactions and Lockout Date)*
15. Pre-printed check numbers
32. Check inventory for invalid vendors
35. Type of cost imported into the Cost of Sale
50. Set the average cost calculation to include area(s)
59. Set the Cost Roll-up defaults (*Average, Standard, LastPO)*
60. Set the Labor Overhead Mark-up percentage
72. Remap (change) Chart of Account numbers and propagate the changes
74. Prevent document/part number from being edited
75. Repair Duplicate document numbers
81. Salesman & Commission source settings for Sales Orders
94. Records that require a valid Chart of Account number
98. Configuring pc/MRP to process credit cards

**QuickBooks Related Settings:**

10. Accounting inventory method
28. Define part number size (*1-15 Characters*)
35. Type of cost imported into the Cost of Sale
50. Set the average cost calculation to include area(s)
60. Set the Labor Overhead Mark-up percentage
70. Add freight cost (incoming) into the cost of sales for a sales order based on a % of standard costs
105. QuickBooks Desktop or Online

**Company Information Settings:**

1. Change company address information (*Name, Address, phone, etc.*)
2. Print or Suppress address information on forms (*Sales, Invoice, Shipper, etc.*)
93. Change Configuration Code
99. CDO Email Configuration

**Global Settings:**

18. American-or-European date format
19. PDF and HTML file generation (*Enabled & printer driver or Code based)*
30. Message Timeout in seconds (*Display time for Update messages*)
31. Change Password (pc/MRP login password if not using the Advanced Password Module)
33. Set the eMail default subjects and messages
52. Edit the content of various list boxes *(User definable pc/MRP dropdown lists)*
73. Support Contract Expiration Warning in Days (*-2 to 99)*
80. Set the Logbook Options (*Select MS Word or MS Notepad*)
86. Set DBF file output format (*DB-III or VFP or Ask User*)
105. Confirm Cancellations

**Custom Report & Label:**

24. Report Writer (Modify Report/Label/Form) (*Customer Custom Modifications*)
39. Print\Display the file structure for a selected DBF table (*Shows name & description*)

**15.1.4 Utilities**

9. Modify chart of account template – Add division/department to chart of accounts
21. Reformat a form for HTML compatibility
22. Enter boiler plate notes for forms
23. Create ASCII text files (Select the Database file to convert)
24. Report Writer (Modify Report/Label/Form) (*Customer Custom Modifications*)
26. Launch a plug-in utility process (Standalone processes purchased by customer)
27. Re-index all index files and check for corruption (*Lockout all other users*)
32. Check inventory for invalid vendors
33. Set the eMail default subjects and messages
36. Export/Import BOM to another copy of pc/MRP
39. Print\Display the file structure for a selected DBF table (*Field Names & Descriptions*)
40. Import data into pc/MRP (Various import formats; DB-III preferred)
41. Check data tables for numeric field overflows
52. Edit the content of various list boxes (U*ser definable pc/MRP dropdown lists*)
54. Update the alternate part numbers on all BOMs **(***From Inventory file*)
56. Match a customer part list to the pc/MRP inventory list
58. Modify the part description templates
72. Remap (change) Chart of Account numbers and propagate the changes
75. Repair Duplicate document numbers
77. Purge unneeded Revision Update folders from disk
83. Add, Edit, or Delete the Terms & Conditions for Purchase Orders
87. Close invoices (AR) and receivers (AP)
96. Purge saved user related settings, queries, and lists
100. Archive/recall data records
102. Language Settings
103. Shop Site API Setup
104. ACH Processor Settings
105. Confirm Cancellations
106. QuickBooks Desktop or Online

# 15.2 Backup Methods

### 15.2.1 Backup Strategy

Data that has been stolen, damaged, or is found to be corrupt can be easily recovered by simply having a backup. A strong backup method is essential to the success of every company. The question is not if you will need a backup, but when. It is just a matter of time until a hard-drive fails, data is intentionally or unintentionally erased, or a power surge simply crunches the data.

To prevent data loss from occurring, simply make a backup. pc/MRP, unlike most programs, does not write to the system registry and thus can be backed-up by copying the entire pc/MRP folder. As such, the data can be completely recovered by copying back the backup made or copying back specific files. Please call Software Arts, Inc. to determine which files to restore. By following the backup method outlined below you will have the best chances to recover data if it is necessary.

Select a good medium to store your backups. Many customers use anything from CD-RWs to Zip drives. We recommend CDs, DVDs, Zip drives, Jazz drives, or solid state USB devices. We suggest NOT to use an incremental, continuous or compressed backup method. To make a backup of pc/MRP simply copy the entire folder.

With whatever medium you select, we suggest using four different versions for backing up pc/MRP.

One backup set should be labeled <ODD DAYS> for backing up on odd days during the week.
One backup set should be labeled <EVEN DAYS> for backing up on even days during the week.
One backup set should be labeled <WEEKLY> for backing up on the last day of the week.
One backup set should be labeled <MONTHLY> for backing up on the last day of the month. This copy should be kept off site in the event of fire or theft.

Using this alternating method allows users to go back days if not weeks to recover data. This also makes sure you are not writing over your last good backup.

Simply copy and paste the whole PCMRPW folder to your backup medium. You can do this through Windows Explorer. Do not drag and drop files. Use the CTRL-C and CTRL-V (Copy and Paste) commands. Do not write over existing backup data. Always delete the existing backup and then write to that disk. Do not do incremental backups. Do not compress backups. Always shut down your computer the correct way by exiting all programs first. Always store one of your recent backups off site.

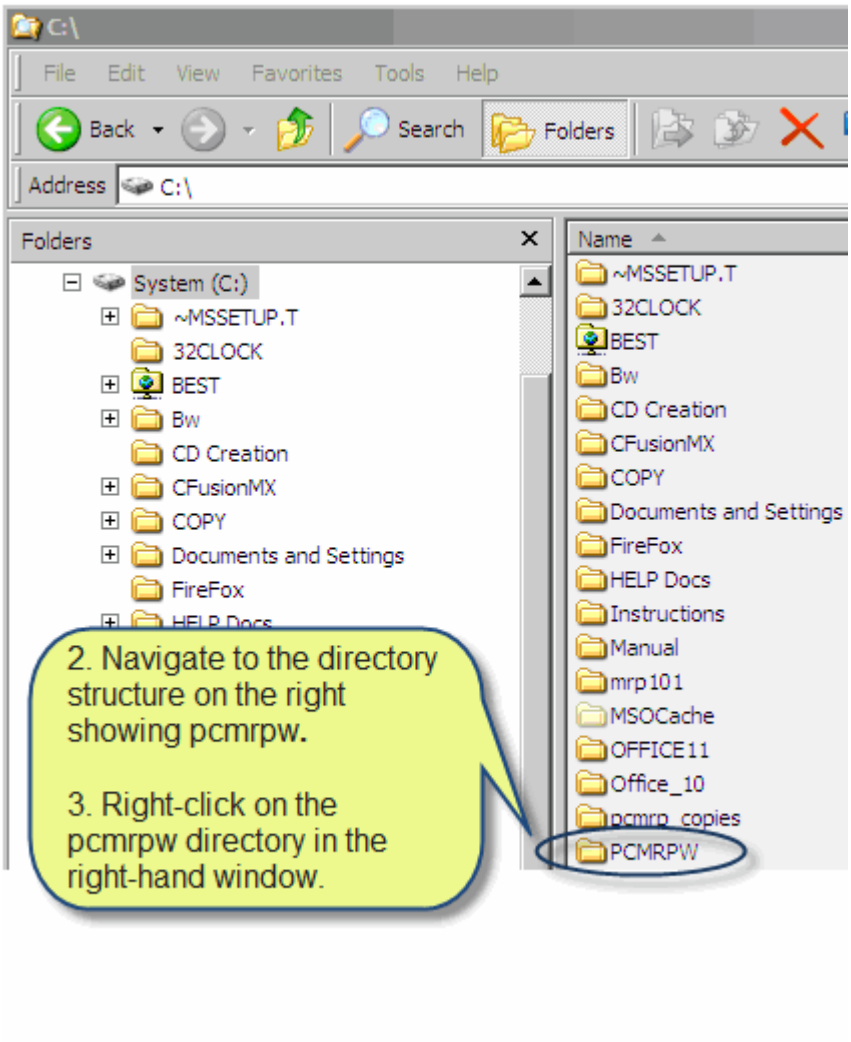
### 15.2.2 pc/MRP Back-up Suggested Procedures

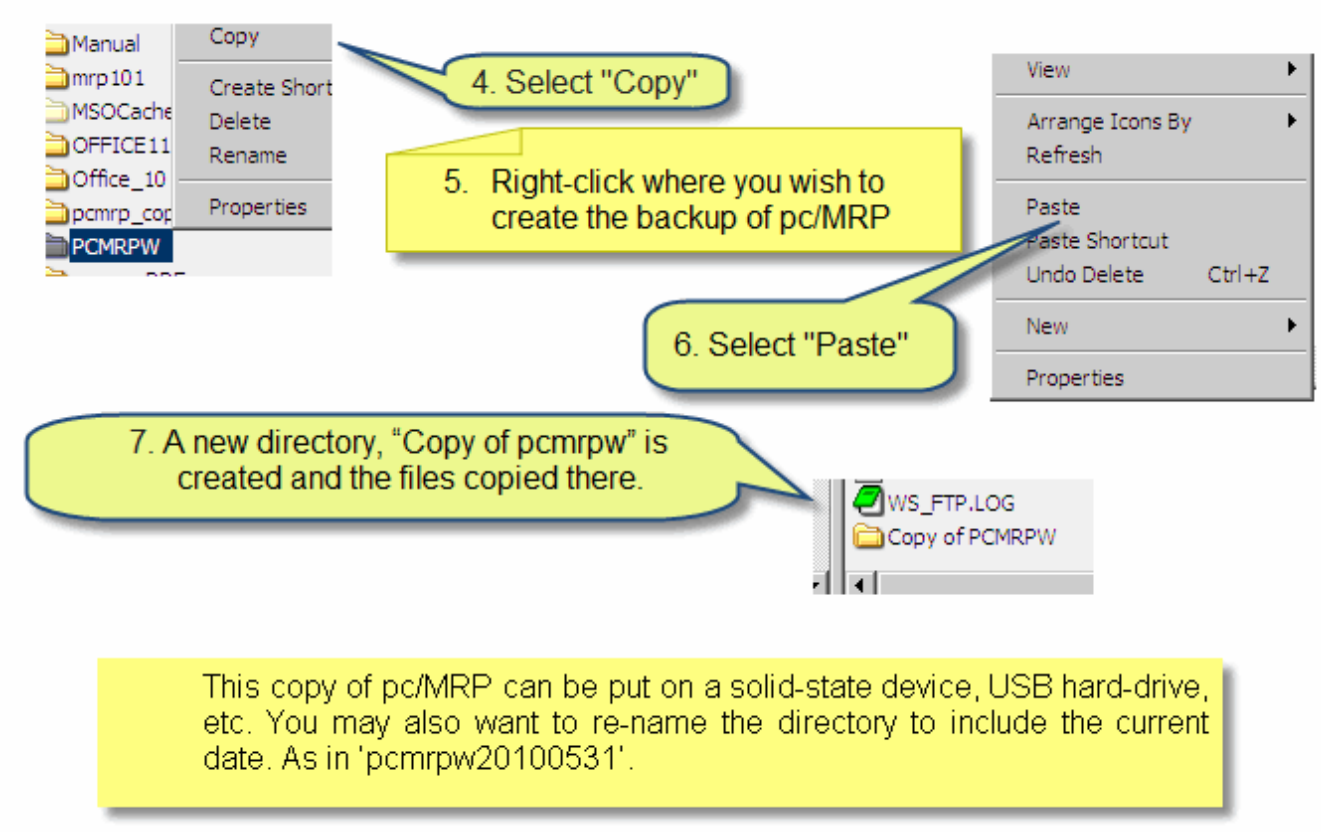
pc/MRP's directory is self contained. That is, pc/MRP runs entirely within its directory with no links to the Windows Registry or any '.ini' files. If your IT department allows you to make a backup of the pc/MRP directory, and you know where the directory is located, navigate to that directory and follow these instructions.

<u>These instructions are referencing a "C:\" drive, yours may be different!</u>

Therefore, to backup pc/MRP, just:

Go to "My Computer" (or Windows Explorer)
(You may have to: go to the menu bar and select: View, Explorer Bar, Folders to show the directory folders)






Software Arts, Inc. recommends you create a backup media for:

Even numbered days
Odd numbered days
Weekly
Monthly

And, of course, a year-end backup.

**15.2.3 Quick Backups**

pc/MRP allows users to make backups of the pc/MRP data files by using the Configuration, Scheduled Administrative Tasks option.

These options should not be used as a replacement of full rotational backups as discussed above.

**15.3 Suggestions for a Faster Backup**

If possible, create the backup at the server. The process will be considerably faster by eliminating the work station to server communication.

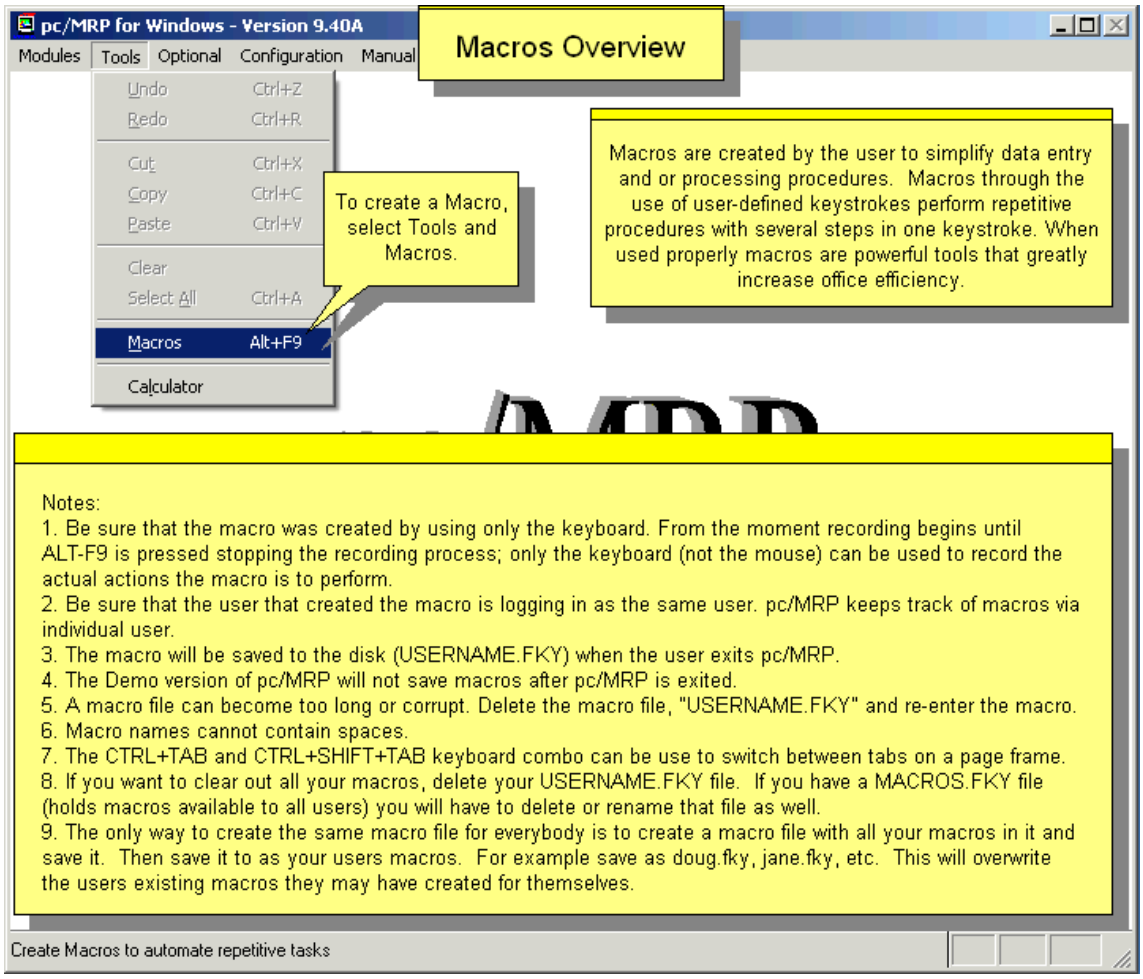
Any unneeded file in your PCMRPW folder will make your backup last longer. See a few suggestions below for files that you can remove. Please consult with your IT person or pc/MRP Administrator before removing any files from the PCMRPW folder. <u>If in any doubt, do not delete the file!</u>

- pc/MRP backups should never be placed into the PCMRPW folder. If you see a PCMRPW backup folder inside your live PCMRPW folder, it should be copied and pasted to a different place. A backup inside the PCMRPW folder makes your backups take at least twice as long.
- Every new version upgrade adds a new manual into your PCMRPW folder. E.g. the manual for Version 9.10 is PCMRP_MANUAL_910.PDF. You can delete any older manuals, like PCMRP_MANUAL_880.PDF, etc. You will gain approximately 20 MB with each. Some of your users might have a shortcut on their desktop to the old manual. In this case, change the shortcut to point to the new manual. They might not even notice they are using an old manual.
- Each revision update creates a subfolder in the REVUPDATE folder under PCMRPW. Each subfolder is approximately 40 MB. Depending on how often you perform revision updates (Section 15.13.3) these can add up to 500 MB – 1 GB. You can easily remove older, unneeded REVUPDATES subfolders using **Option 77** in the Configuration menu. See Section 15.1.2 Option 77.
- pc/MRP Support Technicians (and users who are familiar with the use of the Command Line) often create a backup of a certain table before they are making changes to it. These backup files are usually marked with the date: i.e. partmast20150814.DBF. After checking with your administrator, you can delete some of the older backups.

# 15.3 Creating Macros in pc/MRP

### 15.3.1 Purpose of Macros

Macros are created by the user to simplify procedures. Macros through the use of user-defined keystrokes perform repetitive procedures with several steps in one keystroke. When used properly macros are powerful tools that greatly increase office efficiency.




### 15.3.2 A Few Suggestions before Making the Macro

- Have a clear understanding of what you want the macro to perform and the necessary steps to complete the function. Once recording begins, every step will be recorded.
- Be sure to use only the keyboard while creating your macro. A macro will NOT be created if the mouse is being used while the macro is recording.

### 15.3.3 Creating Macros

Macros are created by selecting Tools then Macros from the main menu or by pressing ALT-F9. pc/MRP will first ask for the Macro Key Definition. This defines the keys you wish to use to perform the macro. We suggest using the Ctrl, Shift, or Alt keys in combination with other keys on the keyboard. Enter a macro name; Macro names must not contain spaces. Once the Macro Key Definition has been chosen by pressing Enter, recording of the macro begins. Use the keyboard to record from beginning to end the exact task(s) you wish the macro to perform in the exact order they are to be performed. Recording of the macro ends by pressing ALT-F9.
After pressing ALT-F9 the Stop Recording Macro screen appears. By pressing Enter, the macro is complete.

### 15.3.4 Changing Existing Macros

An existing macro can be changed by choosing the same Macro Key Definition after selecting Tools then Macro from the drop down menu or pressing ALT-F9. This will prompt the user to overwrite or append the existing macro.

### 15.3.5 Macro Notes and Trouble Shooting

- Be sure that the macro was created by using only the keyboard. From the moment recording begins until ALT-F9 is pressed stopping the recording process; only the keyboard (not the mouse) can be used to record the actual actions the macro is to perform.
- Be sure that the user that created the macro is logging in as the same user. pc/MRP keeps track of macros via individual user.
- The macro will be saved to the disk (***USERNAME*.FKY**) when the user exits pc/MRP.
- The Demo version of pc/MRP will not save macros after pc/MRP is exited.
- A macro file can become too long or corrupt. Delete the macro file, "*USERNAME*.FKY" and re-enter the macro(s).
- Macro names cannot contain spaces.
- The CTRL+TAB and CTRL+SHIFT+TAB keyboard combo can be use to switch between tabs on a page frame.
- If you want to clear out all your macros, delete your *USERNAME*.FKY file. If you have a **MACROS.FKY** file (holds macros available to all users) you will have to delete or rename that file as well.
- The only way to create the same macro file for everybody is to create a macro file with all your macros in it and save it. Then save it to as your users macros. For example save as doug.fky, jane.fky, etc. This will overwrite the users existing macros they may have created for themselves.

# 15.4 Custom Report and Label Making

### 15.4.1 Overview / Example

The configuration menu in pc/MRP contains a custom Visual FoxPro report writer that allows users to modify pc/MRP reports, forms and labels. The table below contains the name of pc/MRP's standard and custom reports/forms/labels and the dbf file used with each of these. Keeping the original (standard) files will come in handy if you make a mistake and need to restore the original files.

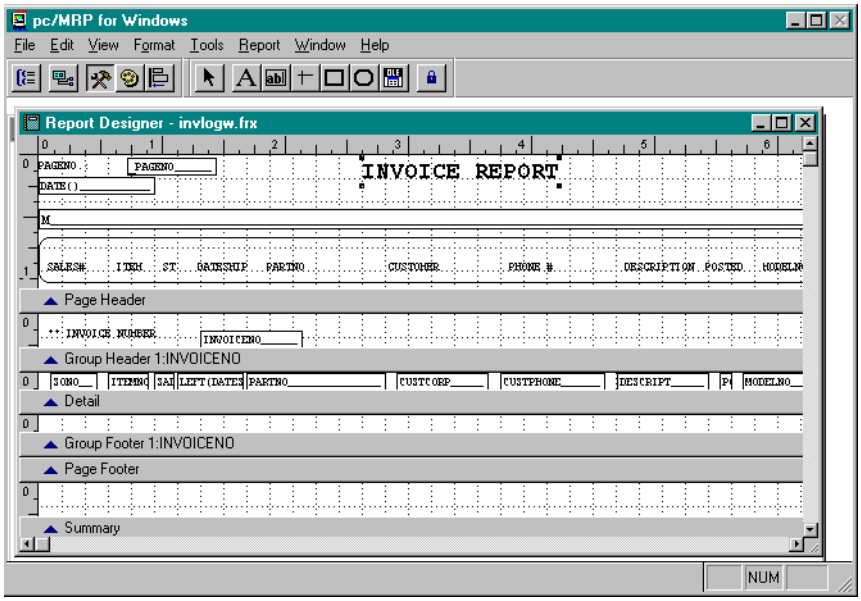
It is best to open a standard report, rename & save it to the correct custom name, and then modify the new report. When pc/MRP is updated to a newer version, standard reports are overwritten and custom reports are not overwritten.

**Note:** When you select your custom report or form, you must remember to select the original report from the dropdown list box of reports that the custom report is based upon.

A good place to start is our web site that describes report modifications:
http://www.pcmrp.com/mrp101/customtableofcontents.htm

To create a custom report in pc/MRP:

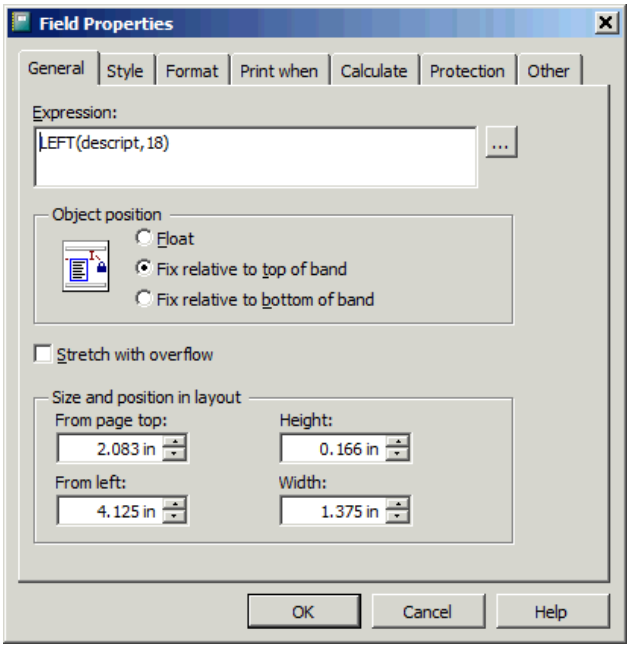
1. Select Configuration, Settings and Utilities.
2. Enter your configuration code number.
3. Select **Option 24**.
4. Select Form or Label.
5. Select the correct file you wish to use as a basis for custom report, form or label



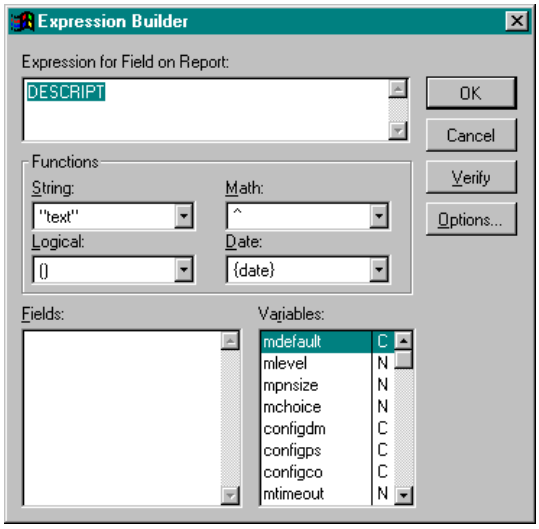

6. Click on Open
7. Select File, Save as, enter the file as a custom .frx report (see sections starting at 15.4.2.1 for correct custom file names to use for your custom reports, forms, or labels), then press Save.
8. Make your modifications
9. Select File, Close, Save Changes
10. Return to pc/MRP's Main Menu
11. Remember to first pick the Standard report that your Custom report is based upon, as the report writer needs to open and create the same files and variables for your Custom report.
12. Print out the new report selecting Custom instead of Standard for reports and then select your Custom report. You can click on Save Settings to make custom reports default.

pc/MRP's Custom Report Writer is shown above with the following icons under Report Controls:
**text A**, **field ab|**, **line**, **sq box**, **rounded box**, and **picture** (bit map). Clicking on an icon will allow you to add an object. Double clicking on any object allows you to edit and or move it.

Double clicking an object brings up the Report Expression dialog box (shown below) which allows you to edit the object.




The first box contains the expression (field, memory variable, or text) you would like to print out in that area of the report. In the example above the first 18 characters of the description would print out in the area you are editing. Clicking on the […] button will allow you to select the memory or field variable from a list rather than typing in the variable expression by hand as shown below.




In the above example the descript field was selected by double clicking on the descript field in the fields list. To print out the first 18 characters of the part number, you could type in left(descript,18) into the expression box or click on the string function list and select the function left(). The String list contains all FoxPro string functions (substr(), alltrim(), etc.). The Logical list contains all FoxPro logic functions (and, or, etc.). The Math list contains all FoxPro math functions (+, -, /, *,AVG(), SIN(), etc.). The Date list contains all FoxPro date functions (ctod(), dtoc(), month(), etc.). The Verify button will automatically verify that the expression you have built in the expression box is valid.

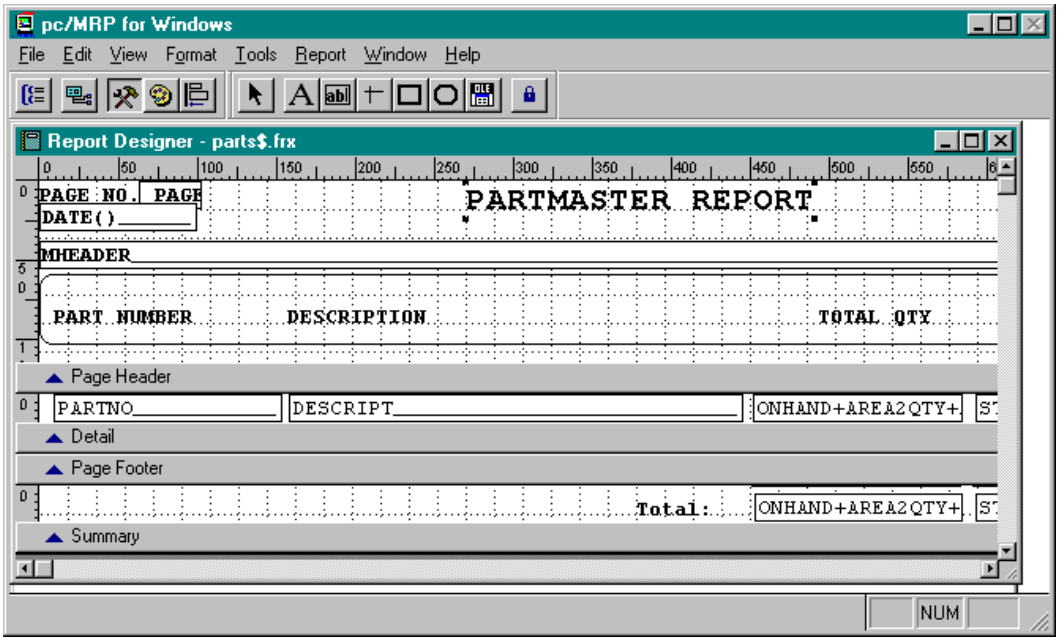
Under the Format tab you can format the data (!!!! = upper case, 999,999.99 = numeric only with thousand separator and 2 decimal places, etc.). Make sure you select the right data type: Character, Numeric or Date. The Print when tab will allow you to specify conditions that must be true for this item to print out. For example entering len(alltrim(partno)) > 0 would print out the part number only if it the length of the trimmed part number were greater than zero.

**Example of Modifying a Report**

Suppose that you wish to make some changes to an inventory report.

1. Go to the Main Menu
2. Click on Configuration
3. Click on Settings and Utilities
4. Enter you Configuration Number
5. Scroll down to find **Option 24** or simply type 24
6. Click Run Utility 24
7. Click on Custom Form
8. Select the PARTS$.FRX file by double clicking or click OPEN

Your screen should look like this:



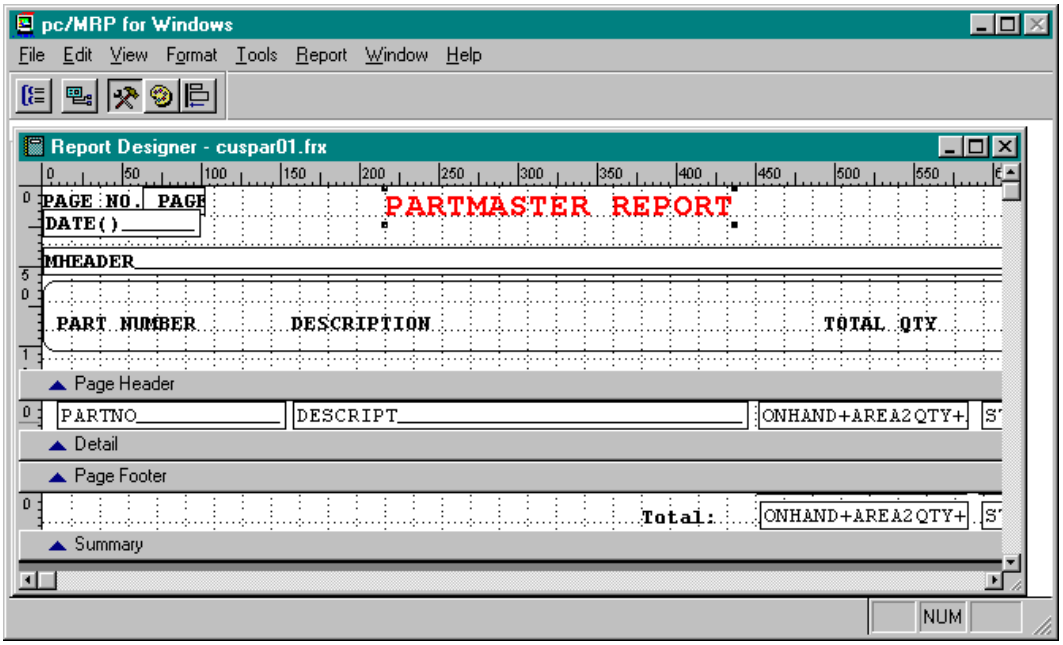

The first thing you want to do is to rename and save the file.

You want to save using the custom form name so as not to overwrite the original file.

1. Click on File
2. Click on Save As
3. The ‘Save Report As’ box should read: CUSPAR*.FRX (* means any characters you want. Keep the report names relatively short. Some reports will only have a ? or ??. This means your report name can end in any single character or double character you want.)
4. Click the Save button
5. Place your cursor over the title "Partmaster Report"
6. Hit the "delete" button on your keyboard
7. Click on the text box (A) over on the left hand side of the screen
8. Place the cursor over where "Partmaster Report" use to be and click
9. Type in "Partmaster Inquiry" and click somewhere on the screen

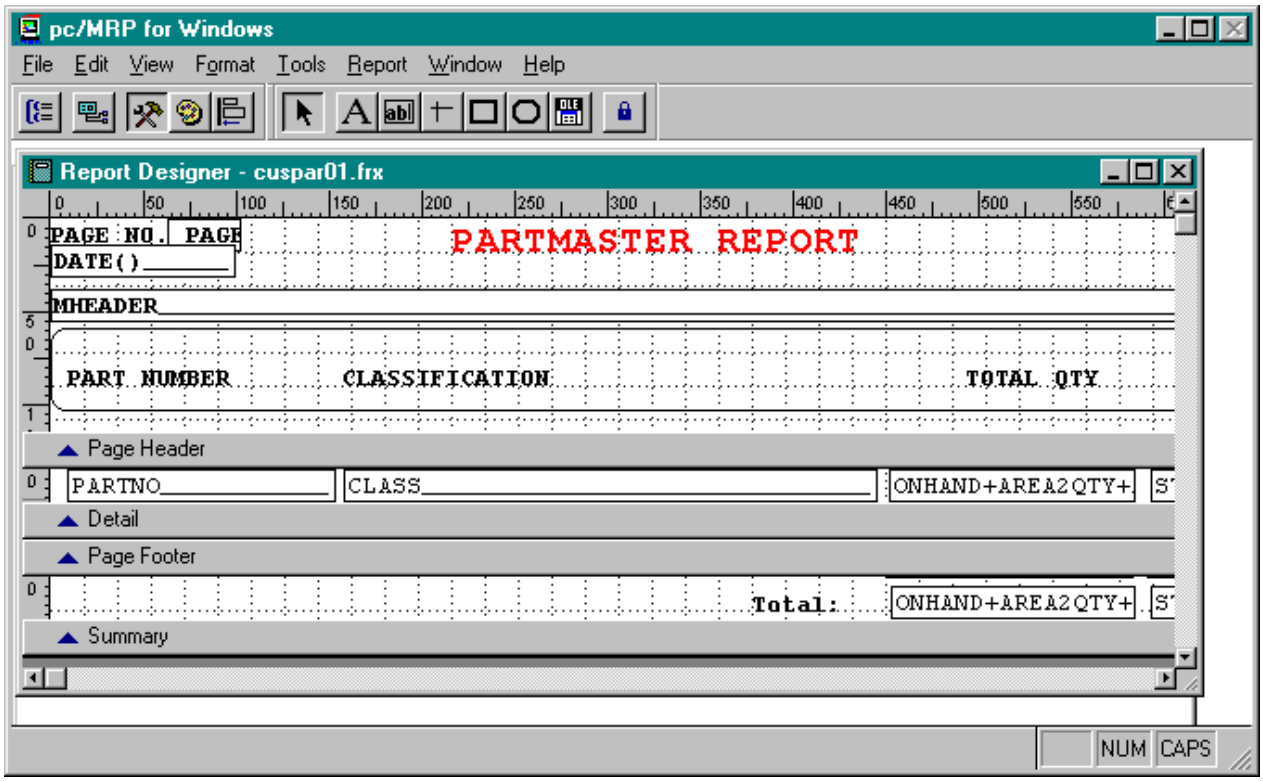
10. Click back onto your new text to highlight it with the little square boxes
11. Now go to the menu bar and click on Object
12. Click on Font; this should bring you to a font dialog box
13. The font should be Courier New, font style is Bold and size is 16; click OK
14. Click on Object again
15. Click Pen Color
16. Chose the color red

Your screen should look similar to this:




- Delete the text "DESCRIPTION" in the Page Header field
- Delete the field "DESCRIPTION" in the Detail field
- Click on the Text (A) icon
- Place the cursor where DESCRIPTION used to be in the Page Header field and click
- Type in "CLASSIFICATION" (make sure you type in capital letters)
- The font should be Courier New, bold, size 8
- Highlight CLASSIFICATION and check the font information to make sure
- Click on the Field (ab|) icon
- Place the cursor where DESCRIPT used to be the Detail field and click
- The Report Expression dialog box should pop up
- In the Expression Box type in "CLASS"
- Check the middle radio button: Top--Field Can Stretch
- Click OK
- Now you must stretch out the Field (ab|) cursor using the arrow cursor
  You will know when you can stretch out the field when you get a cursor with arrows pointing out from the middle

Your screen should look similar to this:




### 15.4.2 List of Reports

pc/MRP for Windows includes the report, forms, and labels listed below. If the last character in the report name is "w" it is the wide carriage report. For example the UNCSIN report is the report used for 8.5" x 11" print outs and the UNCSINW report is the report form used for 14" x 11" printouts.

In the custom names replace the * with any (number of) characters you like.

When viewing the displayed version of any report you can view the open tables by pressing CTRL-F12. This will open a TXT file with all of the open tables in the "select area" statement.

By example:
"Select area: 1, Table in Use:

C:\MY DOCUMENTS\PCMRPTEST\PCMRPW890\PARTMAST.DBF Alias: PARTMAST"

This means the partmast.dbf is open when running this report.

REPORT LISTINGS HAVE THE FOLLOWING FORMAT:

REPORT(.FRX) REPORT DESCRIPTION DBF FILE USED

## BOM Module

| | | |
|---|---|---|
| ***Standard BOM Reports*** | | |
| ALLBOM | standard all BOMs | bomtemp.dbf |
| AVABOM | standard parts availability report | bomtemp.dbf |
| CNVBOM | standard convert parts to assy report | bomtemp.dbf |
| EXPBOM | standard costed exploded BOM (incl comments) | bomtemp.dbf |
| PICBOM | standard pick list exploded and single level | bomtemp.dbf |
| PICBSN | standard pick list with available serial#'s | bomtemp.dbf |
| SINBOM | standard costed single level BOM | bomtemp.dbf |
| UNCEXP | standard uncosted exploded BOM (incl comments) | bomtemp.dbf |
| UNCSIN | standard uncosted single level BOM | bomtemp.dbf |
| UNCSRF | standard uncosted single level BOM w ref des | bomtemp.dbf |
| WHEBOM | standard where used | bomtemp.dbf |
| WHEBOMML | multi-level where used | wheretree(tmp) partmast, BOM |
| | | |
| ***Custom BOM Reports*** | | |
| CUSBOM*<br>CUSTBOM* | custom BOM & Convert Parts to Assembly reports | bomtemp.dbf |

**Note:** tmpb+[the first four characters of the users name].dbf instead of bomtemp.dbf for BOM reports. BOM reports automatically have a set relation into the partmast.dbf (except of where-used)

To set this relation: USE PARTMAST IN 0 ORDER FULLPN
SET RELATION TO UPPER(PARTNO) INTO PARTMAST

## Accounting Module

| | | |
|---|---|---|
| ***Standard Accounting Reports*** | | |
| ACCPAY | accts payable report | receive.dbf |
| ACCPAYW | accts payable wide carriage report | receive.dbf |
| ACCREC | accts receivable report | invoice.dbf |
| ACCRECW | accts receivable wide carriage report | invoice.dbf |
| BILL | billing statement form | billtmp.dbf |
| CASHOUT | standard cash out report | purchase.dbf |
| CHART | standard, narrow, wide carriage chart of acct | chartacc.dbf |
| CHKREC | check reconciliation report | prgltmp.dbf |
| COMMISS | commission report based on payment | transact.dbf |
| COMMISSI | commission report based on invoices issued | invoice.dbf |
| COSTSALD | cost of sale from stockroom + Employee Module | stocktra.dbf |
| COSTSALE | cost of sales report based on invoices | invoice.dbf |
| CURBAL | Std Balance for a date/time period based on the Chart of Accounts | prgltmp.dbf, acctcursor |
| FIFO | FIFO report | fifotmp.dbf |
| FORM 1096 | 1096 Form | |
| FORM 1099 | 1099 Misc. Form | Form1099.dbf |
| GLINCOME | standard current month GL income statement | chartacc.dbf |
| GLTRIAL | standard trial balance report | chartacc.dbf |
| HREC | accts receivable payment history report | billtmp.dbf |
| PPV | purchase price variation report | ppvtmp.dbf |
| PRCHECKS | single laser check form | mchktmp.dbf |
| PRCREBIT | standard liability + equity side of bal sheet | chartacc.dbf |
| PRDCHK | single dot matrix check form | mchktmp.dbf |
| PRDEBIT | standard asset side of balance sheet | chartacc.dbf |
| PRGL | t-acct,4th close Mon,curr bal,accting reports | prgltmp.dbf |
| PRGL2 | Std balance for a month, date, or all transactions | prgltmp.dbf, acctcursor |
| PRGLALL | standard balance for a time period | prgltmp.dbf, acctcursor |
| PROFITANDLOSS | YTD profit & Loss, Div/Dept YTD Exp & Revenue | Profitandloss.dbf, Chartacc.dbf |
| PRTRAN | general ledger and 5th close month gl reports | prtrntmp.dbf |
| PRYTD | year to date expense and revenue, Div/Dept YTD Exp & Revenue report | chartacc.dbf |

| | | |
|---|---|---|
| RECLOG | standard debit memo report | receive.dbf |
| RELCOSTSO | Cost of sale based upon related doc number | relcostso |
| REMIT | single check remittance report | transact.dbf |
| REMITALL | standard remittance list | transact.dbf |
| ROYALTY | standard royalty report | invoice.dbf |
| SOMANUFACTURECOST | Sales/Work Order manufacturing cost report | salescursor |
| SPAY2 | summary accts payable report | acpaytmp.dbf |
| SREC | summary accts receivable report | billtmp.dbf |
| TAXLOG | in state sales tax report | invoice.dbf |
| TAXLOGO | out of state sales tax report | invoice.dbf |

| ***Custom Accounting Reports and Checks*** | | |
|---|---|---|
| CACCPAY* | custom accts payable report | receive.dbf |
| CACCPAYW | custom accts payable wide carriage report | receive.dbf |
| CACCREC* | custom accts receivable report | invoice.dbf |
| CACCRECW | custom accts receivable wide carriage report | invoice.dbf |
| CBILL* | custom billing statement form | billtmp.dbf |
| CCASHOUT* | custom cash out report | purchase.dbf |
| CCOMMISS* | custom commission report based on payment | transact.dbf |
| CCOMMISS* | custom commission report based on invoice | invoice.dbf |
| CCOMMISS* | custom commission on payment/invoice | transact.dbf<br>invoice.dbf |
| CCOSTSAL* | custom cost of sales(invoices),Manufact Variance | invoice.dbf |
| CFIFO* | custom FIFO report | fifotmp.dbf |
| CCHKREC* | custom check reconciliation report | prgltmp.dbf |
| CGLTRIAL* | Custom current month Trial Balance report | chartacc.dbf |
| CHREC* | custom accts receivable payment history rpt | billtmp.dbf |
| CPRCREDIT*<br>CPRCRBIT* | custom Balance Sheet, Liability & Equity | chartacc.dbf |
| CPPV | custom purchase price variation report | ppvtmp.dbf |
| CPRDEBIT* | custom Balance Sheet, Assets report | chartacc.dbf |
| CPRGL* | custom t-acct,4th close mon, cur bal acct reports | prgltmp.dbf |
| CPRTRAN* | custom general ledger, 5th close month GL reports | prtrntmp.dbf |
| CPRYTD* | Custom year to date expense and revenue report | chartacc.dbf |
| CRECLOG | custom debit memo report | receive.dbf |
| CRELCOSTSO* | Custom cost of sale based upon Related doc nbr | relcostso |
| CROYALTY | custom standard royalty report | invoice.dbf |
| CSOMANUFACTURECOST | Custom SO/WO manufacturing cost report | salescursor |
| CSPAY2* | custom summary accts payable report | acpaytmp.dbf |
| CSREC* | custom summary accts receivable report | billtmp.dbf |
| CTAXLOG* | custom in state sales tax report | invoice.dbf |
| CTAXLOGO* | custom out of state sales tax report | invoice.dbf |
| CUSCHECK | custom check | mchktmp.dbf (tmp) |
| CUSIRS* | custom 1099, 1096 forms | |
| CREMITAL | Custom remittance list | Transact.dbf |
| CREMIT | Custom single check remittance report | Transact.dbf |
| CPROFITANDLOSS* | Custom profit and loss report | Chartacc.dbf |
| CGLTRIAL2* | Custom trial balance current and YTD | Chartacc.dbf |

## Inventory Module

| | | |
|---|---|---|
| ***Standard Partmaster Reports*** | | |
| AVL | Assigned vendor list | Avldata |
| BLNKINV | standard disp and pr physical/inventory form | partmast.dbf |
| BLNKINVW | standard wide carriage physical/inventory frt | partmast.dbf |
| COSTINV | physical inventory variance report | partmast.dbf |
| CYCLECNT | cycle count standard form | cyctmp.dbf |
| CYCLEDIFFCNT | Differential cycle count form | Cyctmp.dbf<br>partmast.dbf |
| DISPPART | inventory/partmaster find part report | partmast.dbf |
| PARMOV | partmaster inventory movement report | movement.dbf |
| PARMOVP | physical inventory, inventory movement report | movement.dbf |
| PART | uncosted display and print inventory report | partmast.dbf |
| PART$ | all parts costed (inventory value report) | partmast.dbf |
| PART$ | all parts costed (all other reports) | partmast.dbf |
| PARTW | standard uncosted wide inventory report | partmast.dbf |
| PARUSAGE | partmaster inventory usage report | movement.dbf |
| PIH | physical inventory history report | pih.dbf |
| PRICELIS | standard price list report | partmast.dbf |
| | | |
| ***Custom Partmaster Reports*** | | |
| CUSPAR* | custom inventory report | partmast.dbf |
| CBLNKINV* | custom physical inventory count form | partmast.dbf |
| CUSPIH* | custom physical inv history report | pih.dbf |
| CUSTCYC* | custom cycle count form (full or differential) | Cyctmp.dbf |
| CUSTPHY | custom physical inventory variance report | Partmast.dbf |

**Note:** There is also a link to the Partvend.dbf

## Sales Order/ Work Order Module

| | | |
|---|---|---|
| ***Standard Sales Report*** | | |
| ALELOG | narrow carriage and displayed sales report | sales.dbf |
| ALELOGW | wide carriage sales report | sales.dbf |
| OPER | ISO 9000 customer on time delivery report | sales.dbf |
| ALES_PO | std open SO, PO, & WO report sorted by part number | sopocursor |
| | | |
| ***tandard Sales/Shipper Form*** | | |
| ALE | shaded sales order form | sales.dbf |
| ALEB | boxed sales and Work Order form WO Includes | sales.dbf |
| WO_Enhanced | Work Order form, Include Pick List, Routing | Sales+bom.dbf,etc. |
| HIPPER | shaded shipper form | sales.dbf |
| HIPPERB | boxed shipper form | sales.dbf |
| | | |
| ***ustom Work Order/Sales/Shipper/Traveler Form*** | | |
| SO* | custom work order and sales order form | sales.dbf |
| SHIP* | custom shipper form | sales.dbf |
| OFORM1<br>OFORM2 | custom traveler forms<br>automatically printed after a single sales order | |
| | | |
| ***ustom Sales Order Reports*** | | |
| USSO*<br>USTSO* | custom sales reports | sales.dbf |
| | | |
| ***ustom Work Order Reports*** | | |
| USWO*<br>USTWO* | custom work order reports | sales.dbf |

**Note:** Sales Order reports and forms automatically have a set relation into the Partmast.dbf, Partvend.dbf, and Addrbook.dbf.

## Invoice Module

| | | |
|---|---|---|
| ***Standard Invoice Reports*** | | |
| INVLOG | narrow carriage invoice report | invoice.dbf |
| INVLOGW | wide carriage invoice report | invoice.dbf |
| | | |
| ***Standard Invoice/Shipper Form*** | | |
| INVOICE | shaded invoice form | invoice.dbf |
| INVOICEB | boxed invoice form | invoice.dbf |
| SHIPPER | shaded shipper form | invoice.dbf |
| SHIPPERB | boxed shipper form | invoice.dbf |
| CI | commercial invoice form | Invoice.dbf |
| | | |
| ***Custom Invoice Reports*** | | |
| CUSINV* | custom invoice report | invoice.dbf |
| | | |
| ***Custom Invoice/Shipper Form*** | | |
| CINV* | custom invoice form | invoice.dbf |
| CSHIP* | custom shipper form | invoice.dbf |
| CCI* | custom commercial invoice form | invoice.dbf |

**Note:** Invoice reports and forms automatically have a set relation into the Partmast.dbf, Partvend.dbf, and Addrbook.dbf.

## Shipment Module

| | | |
|---|---|---|
| ***Standard Shipment Reports & Forms*** | | |
| SHIPMENT | standard shipment report | shipment.dbf |
| BOL | Bill of Lading (BOL) form | shipment.dbf |
| | | |
| ***Custom Shipment Reports & Forms*** | | |
| CUSSHP*<br>CUSTSHP* | custom Shipment report | shipment.dbf |
| CBOL* | custom Bill of Lading (BOL) form | shipment.dbf |

**Note:** Shipment reports automatically have a relation to the Shipitem.dbf

## Receiver Module

| | | |
|---|---|---|
| ***Standard Receive Reports*** | | |
| RECLOG | narrow carriage receiver report | receive.dbf |
| RECLOGW | wide carriage receiver report | receive.dbf |
| | | |
| ***Standard Receive Forms*** | | |
| REC | shaded receiver form | receive.dbf |
| RECB | boxed receiver form | receive.dbf |
| | | |
| ***Custom Receive Reports*** | | |
| CUSTREC* | custom receiver report | receive.dbf |
| | | |
| ***Custom Receive Forms*** | | |
| CREC* | custom receiver forms | receive.dbf |

**Note:** Receiver reports and forms automatically have a set relation into the Partmast.dbf, Partvend.dbf, and Addrbook.dbf.

**Purchase Module**

| | | |
|---|---|---|
| ***Standard Purchase Report*** | | |
| LGMINREQ | standard min max report | partmast.dbf |
| LGPARREQ | standard display/print MRP report (Single Bucket) | partmast.dbf |
| PURLOG | narrow carriage purchase report | purchase.dbf |
| PURLOGW | wide carriage purchase report | purchase.dbf |
| VENPER | ISO 9000 vendor performance report | purchase.dbf<br>addrbook.dbf |
| | | |
| ***Standard Purchase Form*** | | |
| PO | shaded PO form | purchase.dbf |
| POB | boxed PO form | purchase.dbf |
| PO_SHIP | shaded PO form with shipping address | purchase.dbf |
| POB_SHIP | boxed PO form with shipping address | purchase.dbf |
| TC | standard Terms & Conditions form | termcond.dbf |
| | | |
| ***Custom Purchase Report*** | | |
| CUSPO*<br>CUSTPO* | custom purchase order report | purchase.dbf |
| CUSTMRP | custom min max report | partmast.dbf |
| CUSTCMRP | custom consolidated MRP (Single Bucket) report | partmast.dbf |
| | | |
| ***Custom Purchase Form*** | | |
| CPO* | custom PO forms | purchase.dbf |
| CTC | custom Terms & Conditions form | termcond.dbf |

**Note:** Purchase Order reports and forms automatically have a set relation into the Partmast.dbf, Partvend.dbf, and some to the Addrbook.dbf.

**Sales Quote Module**

| | | |
|---|---|---|
| ***Standard Sales Quote Report*** | | |
| QUOLOG | standard quote report | quote.dbf |
| | | |
| ***Custom Quote Report*** | | |
| CUSTQUO* | custom quote report | quote.dbf |
| | | |
| Standard Sale Quote Form | | |
| QUOTE | standard shaded sales quote form | quote.dbf |
| QUOTEB | standard boxed sales quote form | quote.dbf |
| | | |
| ***Custom Quote Form*** | | |
| CQUO* | custom sales quote form | quote.dbf |

**Note:** Sales Quote reports and forms automatically have a set relation into the Partmast.dbf, Partvend.dbf, and Addrbook.dbf.

## Infinite Bucket MRP Module

| | | |
|---|---|---|
| ***Standard MRP, Min Max, Infinite Bucket Reports*** | | |
| MRP2 | standard non-consolidated inf bucket MRP report | action.dbf, mrppart, mrpso |
| MRP2BUY | standard infinite bucket buy report | action.dbf partmast.dbf |
| MRP2CBPP | standard infinite bucket pre-shortage report | action.dbf, mrppart, purchase |
| MRP2CONS | standard consolidated inf bucket MRP report | mrp2cons.dbf |
| MRP2EXCS | standard infinite bucket excess inventory rpt | exectmp.dbf (tmp) |
| MRPSHRT2 | standard infinite bucket issued shortage rpt | tempshrt.dbf action.dbf, mrppart,mrpso, routing, mrpstock, |
| PUSHPULL | standard infinite bucket push pull report | avail.dbf, mrppart, mrpso |
| WOLOG | standard created Work Order report | salestmp.dbf |
| WPARREQ | standard wide carriage MRP report | partmast.dbf |
| | | |
| ***Custom MRP Report*** | | |
| CUSMRP* CUSTMRP* | custom MRP report found in infinite bucket | action.dbf |

**Note:** Most Infinite Bucket MRP "All for a ..." reports use the action.dbf, mrppart.dbf, and mrpso.dbf.

## Address Book Module

| | | |
|---|---|---|
| ***Standard Address Book Report*** | | |
| ADDRESS | standard address book report | addrbook.dbf |
| ADDRESSW | standard wide carriage address book report | addrbook.dbf |
| | | |
| ***Custom Address Book Report*** | | |
| CUSADR* | custom address book report | addrbook.dbf |

## Stockroom Module

| | | |
|---|---|---|
| ***Standard Stockroom Reports*** | | |
| AVABOM | standard parts available report | bomtemp.dbf |
| AVABUY | standard buy report | bomtemp.dbf |
| BOMBUILD | standard max no of BOMs that can be built | bomlist-cursor partmast.dbf bom.dbf |
| CNVSBOM | standard stockroom I transaction report | bomtemp.dbf |
| ISUSHORT | standard stockroom P and shippable report (no custom report is offered for this report) | stocktra.dbf |
| MAKEUPWO | standard stockroom P transaction by W/O | stocktra.dbf |
| SKTRCMFG | standard receive from manufacturing report | stocktra.dbf |
| STKISSSHRT_PO | Standard stock issued report with POs | stocktra.dbf |
| STOCKLOG | standard stock room transaction report | stocktra.dbf |
| SWOLOG | std stock room report subtotaled by sales/work# | stocktra.dbf |
| SWOINCDEWOLOG | All sub-totaled by SO/WO report – issued to MFG only, include dedicated WO | stkcursor |
| UNISSUE | standard stock room U transaction report | stocktra.dbf |
| CNVBOM CNVBOMFORMULBOM | Convert Parts to Assys -Version 8.80 and lower Convert Parts to Assys -Version 8.81 and higher | bomtemp.dbf parmast.dbf |
| | | |
| ***Custom Stockroom Reports*** | | |
| CUSBMB | custom max no of BOMs that can be built | bomlist-cursor |
| CUSBOM* | custom parts available report | bomtemp.dbf |
| CUSMUS* | custom stockroom P transaction report | stocktra.dbf |
| CUSSTK* CUSTSTK* | custom stock room report | stocktra.dbf |
| CUSBOM* | custom stockroom I transaction report | bomtemp.dbf |

## Sales Analysis Module

| | | |
|---|---|---|
| ***Standard Sales Analysis Report*** | | |
| MAKECONM | std consolidated multiple BOM report (no custom) | makecons.dbf |
| MAKECONS | std consolidated single BOM report (no custom) | makecons.dbf |
| SANAL | std sales analysis report | sanal.dbf |
| SANAL2 | std sales analysis report sorted by division | sanal.dbf |
| SANALCS | std cost of sales report | costsale.dbf |
| | | |
| ***Custom Sales Analysis Report*** | | |
| CUSSANA | custom sales analysis report | sanal.dbf |

## Purchase Request/Quote Module

| | | |
|---|---|---|
| ***Standard Purchase Request Forms/Reports*** | | |
| REQUESTB | standard boxed PO request form | request.dbf |
| REQUEST | standard shaded PO request form | request.dbf |
| PURLOG | standard purchase request report | request.dbf |
| | | |
| ***Standard Purchase Quote Forms/Reports*** | | |
| POQUOB | standard boxed quote form | request.dbf |
| POQUO | standard shaded PO quote form | request.dbf |
| PURLOG | standard purchase quote report | request.dbf |
| | | |
| ***Custom Purchase Request Forms/Reports*** | | |
| CREQ* | custom PO request form | request.dbf |
| CUSREQ*<br>CUSTREQ* | custom purchase request/quote report | request.dbf |
| | | |
| ***Custom Purchase Quote Forms/Reports*** | | |
| CPOQUO* | custom PO quote form | request.dbf |
| CUSREQ*<br>CUSTREQ* | custom purchase quote report | request.dbf |

**Note:** Purchase Request/Quote reports and forms automatically have a set relation into the Partmast.dbf, Partvend.dbf, and Addrbook.dbf.

## Serial/Lot Number Module

| | | |
|---|---|---|
| ***Standard Serial/Lot Number Form*** | | |
| AUDITSN | standard Serial/Lot Audit report form | auditsn.dbf |
| SNLOG | standard master serial/lot number report | snlot.dbf |
| SNDLOG | standard detail serial/lot number report | snlotdet.dbf |
| | | |
| ***Custom Serial/Lot Number Form*** | | |
| CAUDITSN | custom Serial/Lot Audit report form | auditsn.dbf |
| CUSTSN | custom master serial/lot number report | snlot.dbf |
| CUSTSN(sic!) | Custom detail serial/lot number report | snlotdet.dbf |

## Routing Module

| | | |
|---|---|---|
| ***Standard Routing Report/Form*** | | |
| ROUTE | standard Routing Module report | routing.dbf |
| ROUTEW | wide carriage Routing Module report | routing.dbf |
| ROUTES2 | Routing Module Traveler form (no custom avl.) | routechild.dbf |
| | | |
| ***Custom Routing Report*** | | |
| CUSTRTR*<br>CUSRTR* | custom Routing Module report | routing.dbf |

## Employee Time Tracking Module

| | | |
|---|---|---|
| ***Standard Employee Tracking Forms*** | | |
| EMPFRM | employee profile form | employee.dbf |
| EMPLOG | all employee form | employee.dbf |
| EMPTIMECOST | all Labor cost forms | emptimesh.dbf |
| EMPTIMESH | all time sheets forms | emptimesh.dbf |
| | | |
| ***Custom Employee Time Tracking Forms*** | | |
| CUSEMP* | custom employee report form | employee.dbf |
| CUSTIM* | custom time sheet form | emptimesh.dbf |

## Inspection Module

| | | |
|---|---|---|
| ***Standard Inspection Forms/Reports*** | | |
| INSPIL | standard inspection list report | inspect.dbf |
| INSPALL | standard all inspection report | inspect.dbf |
| INSPECT | Standard inspection form | inspect.dbf |
| | | |
| ***Custom Inspection Forms/Reports*** | | |
| CUSINS* | custom inspection report | inspect.dbf |
| CINSPECT* | Custom inspection form | inspect.dbf |

## ECN Module

| | | |
|---|---|---|
| ***Standard ECN Form*** | | |
| ECN | standard inspection list form | ecn.dbf |
| | | |
| ***Custom ECN Form*** | | |
| CECN | custom inspection form | ecn.dbf |

## QuickBooks Module

| | | |
|---|---|---|
| ***Standard QuickBooks Export Form*** | | |
| QBEXPORT | standard Invoice/Receiving Export report form | |
| | | |
| ***Custom QuickBooks Export Form*** | | |
| CUSQBEX | custom Invoice/Receiving Export report form | |

## Audit Trail Module

| | | |
|---|---|---|
| ***Standard Audit Trail Reports*** | | |
| TRAIL | Standard Component Matches report form | temp.dbf |
| RAILBOMCOST | Standard Component Un-Matched report form | temp.dbf |

**Note:** The temp.dbf for the Audit Trail reports contains the following fields:
Database, record, item, user, date, time, the_field, oldcontent, newcontent, partno, descript, & onhand

## Configuration, Settings & Utilities Reports

| | | |
|---|---|---|
| ***Option 56 (15.1.56)*** | | |
| CMPLIST | Standard Component Matches report form | matches.dbf |
| CMPLIST2 | Standard Component Un-Matched report form | nomatch.dbf |

### 15.4.3 Labels

#### 15.4.3.1 List of Labels

**Note: C**ustom shipper labels are described in Section 10.1.6 for Invoices and 8.5 for Receivers.

| LABEL(.LBX) | LABEL DESCRIPTION | DBF FILE USED |
|---|---|---|
| ***Inventory Labels (also see Section 5.1.8)*** | | |
| PARLABBAR | Standard parts labels w/barcode for one part | tmptable.dbf |
| PARLABEL | std parts labels for all,prod,div,pn dot matrix pr | partmast.dbf |
| PARLAB2X | std parts labels for all,prod,div,pn laser pr | partmast.dbf |
| SHIPPER | standard shipper label, see 10.1.6 | |
| | | |
| ***Custom Inventory Labels*** | | |
| CPARLAB | custom parts labels for all parts, prod, pn | partmast.dbf |
| CUSPAR* | custom parts labels for all parts, prod, pn | partmast.dbf |
| CUSTPAR* | custom parts labels for all parts, prod, pn | partmast.dbf |
| | | |
| ***BOM Labels*** | | |
| BOMLB | standard parts labels for an assy dot matrix | bomtemp.dbf |
| BOMLB2X | standard parts labels for an assy laser pr | bomtemp.dbf |
| | | |
| ***Custom BOM Labels*** | | |
| CUSBOMLB | custom parts labels for an assy | bomtemp.dbf |
| CUSBOM* | custom parts labels for an assy | bomtemp.dbf |
| CUSTBOM* | custom parts labels for an assy | bomtemp.dbf |
| | | |
| ***Receiver Labels*** | | |
| RECLABEL | Inventory parts labels for a receiver (dot matrix) | receive.dbf |
| RECLAB2X | Inventory parts labels for a receiver (laser) | receive.dbf |
| RECLABBOX | Receiver parts labels for a receiver RoHs Checkbox | labprnt.dbf |
| RECLABQTY | Receiver parts labels for a receiver showing qty | labprnt.dbf |
| RECLAB2X | Receiver parts labels | labprnt.dbf |
| | | |
| ***Custom Receiver Labels*** | | |
| CRECLAB | custom label for inventory and receiver module | receive.dbf |
| CUSREC* | custom label for inventory and receiver module | receive.dbf |
| CUSTREC* | custom label for inventory and receiver module | receive.dbf |
| | | |
| ***Address Book Labels*** | | |
| ADDRLBS | standard pin fed address label 15/16x3-1/2 | addrbook.dbf |
| ADDRLBM | standard mailing address label 4"x2-7/8" | addrbook.dbf |
| ADDRLBS2 | Standard laser address label 2 across 10 down | addrbook.dbf |
| | | |
| ***Custom Address Book Labels*** | | |
| CUSADRXX | custom address labels | addrbook.dbf |
| CUSTADRX | custom address labels | addrbook.dbf |
| | | |
| ***Sales/Work Order Serial Number Labels*** | | |
| LBLWO-SN | Tmptable=copy of partmast w/ModelNo=Serial#) and: | sales.dbf partmast.dbf |
| | | |
| ***Custom Sales/Work Order Serial Number Labels*** | | |
| CUSSNL* | See above for files. | |
| CUSTSNL* | See above for files. | |
| | | |
| ***Stock Issue Labels*** | | |
| STKLAB | custom stockroom labels | stocktra.dbf |
| | | |
| ***Custom Stock Issue Labels*** | | |
| CSTKLAB | custom stockroom labels | stocktra.dbf |
| CUSSTK* | custom stockroom labels | stocktra.dbf |
| CUSTSTK* | custom stockroom labels | stocktra.dbf |

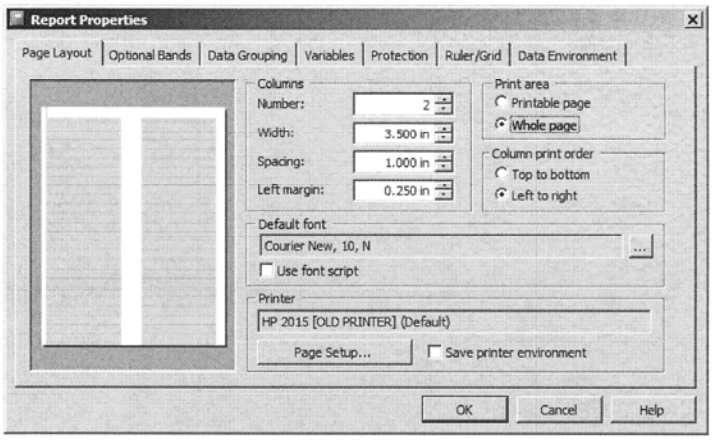
**15.4.3.2 Printing Labels**

The following sheet could be helpful when trying to arrange labels on a letter size sheet of labels. Print to a piece of paper and hold up to light when checking alignment.

Label is 3½" wide 1" tall

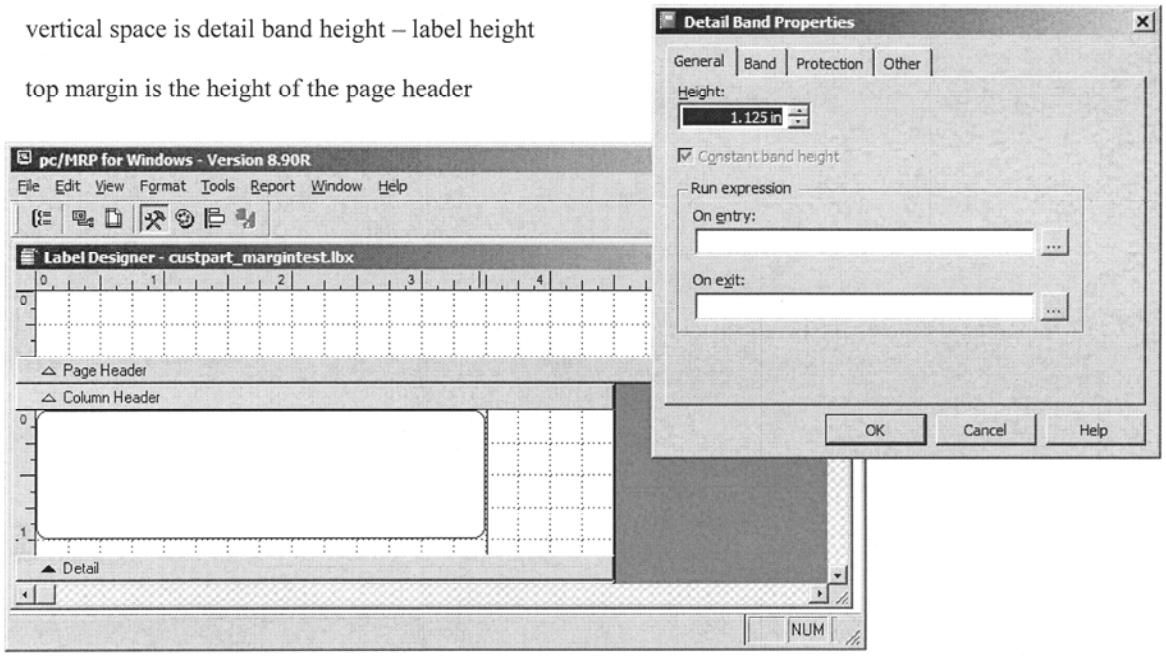
top margin: ½"
left margin: ¼"

space between labels:
horizontal: 1"
vertical: 1/8"




vertical space is detail band height – label height

top margin is the height of the page header



**15.4.3.3 Zebra printer settings**

pc/MRP can also print out pin fed labels with Zebra printers. We strongly recommend using Avery sheet fed labels and laser printers as the resolution is much higher on laser printers and they are much easier to set up. The following settings have been found to work on Zebra printers we have been called upon to help get printing correctly:
Once you have Configuration, Settings & Utilities, Option 24 open with the label, do the following steps:

1. Menu item File, Print, select the Zebra printer
2. Menu item File, Page Setup, Print Area to Whole page, printer is Zebra
3. Zebra driver Properties, Page Layout, Page Setup, Size to 4x3 & Orientation to Portrait, save all/OK
4. Check that the menu item Report, Printer Environment menu item is checked

Please note that you may have a different size label than 4"wide x 3"high and you may also have to adjust the label positioning on the Zebra's roller. You can change the height of the label but leave the width at 4" even if you are using 3" wide labels.

If you are printing out bar codes with a Zebra printer, turn down the resolution of the bar code to match that of the Zebra printer (200 dpi).

**15.4.4 Advanced Features**

**15.4.4.1 Adding a picture or logo to a report, form, or label for each Partnumber on a report.**

1. Select Configuration/Settings & Utilities
2. Enter your Configuration Code Number.
3. Select **Option 24**, click on Run Utility 24.
4. Choose either "Form" if you are adding a picture or logo to a form or report or choose "Label" if you are adding it to a label.
5. Select the '.frx' or '.lbx' file to modify. In this case, parlab2x.lbx.
6. Check the pc/MRP Manual, Section 15.4.2 for the proper prefix of a custom report. In this case, 'cusparlab2x' for example.
7. Choose 'File/Save As' and enter and save your new custom report name.
8. Click on the **OLE**(Picture/ActiveX Bound Control). Move your cursor to the position you wish to add the picture and draw a box that will contain your picture. A window for Report Picture appears.
9. If you are adding a logo or picture that appears in the page header portion of the report or form, select 'Image file name' and click the ellipse button to locate the logo or picture BMP, JPG, or GIF file (skip to #13). If you are adding pictures to the detail line where you might want a different picture for each part, select 'Expression or variable name' and type in the words 'partmast.Image_File'. This is the field name for the location of the image file for the part in the Part Master database.
10. In the section "If source and frame are different sizes", choose "Scale contents, retain shape."
11. Press the Print When Button; a 'Print When' form appears.
12. In the Print only when expression is true box, Enter Not Empty(FileChk(alltrim(Partmast.Image_File)))
13. Press 'OK', then save the file and exit the Designer.

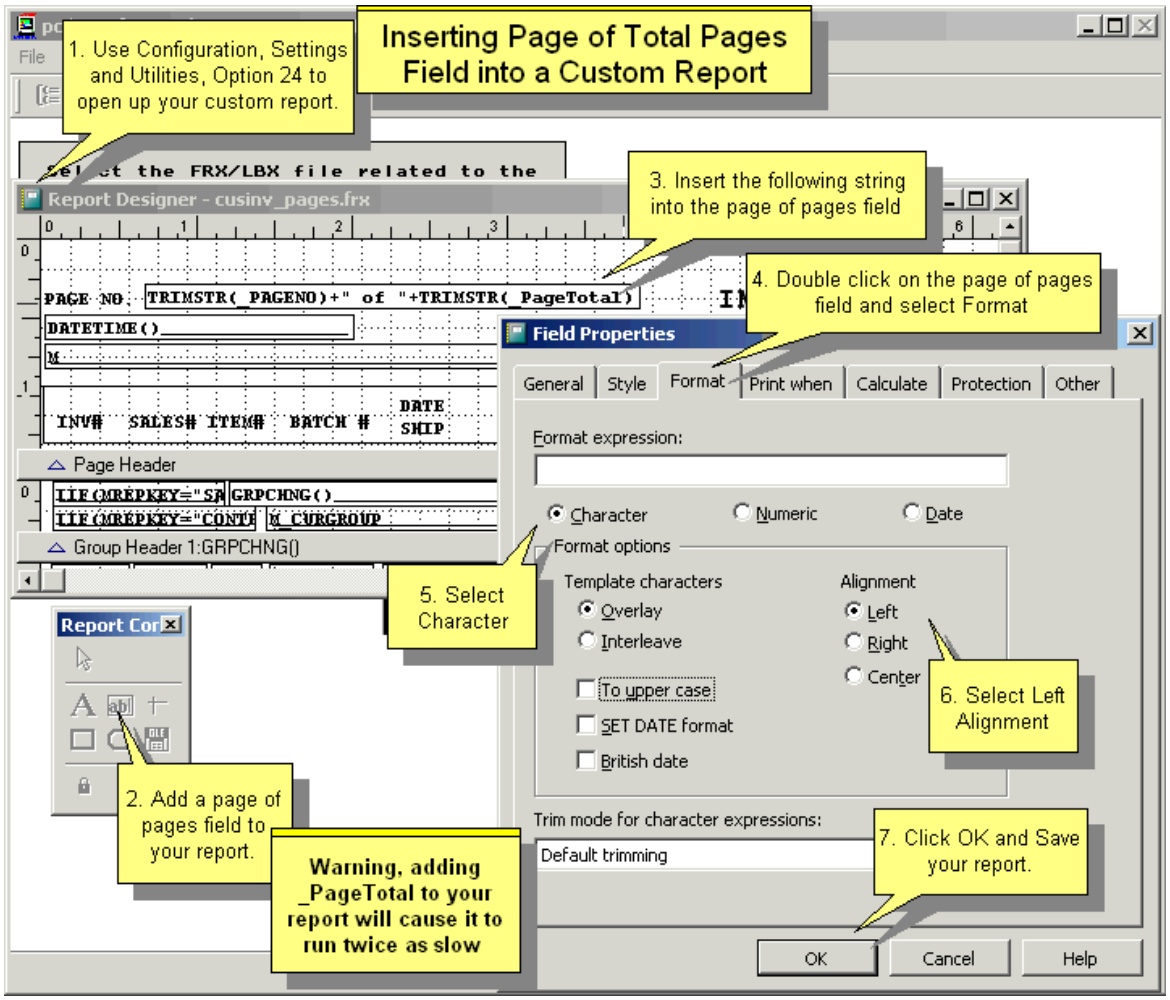
**Note:** If you are changing an **old logo to a new one**, the fastest way is to use Windows Explorer to rename the files. Let's say your forms use an image named logo.jpg. Rename logo.jpg to logo_old.jpg. Then rename logo_new.jpg to logo.jpg. You might find that even after the change, the old logo is being displayed. This means the image is still in RAM. Try to exit and re-start pc/MRP, if that doesn't help, reboot your computer.

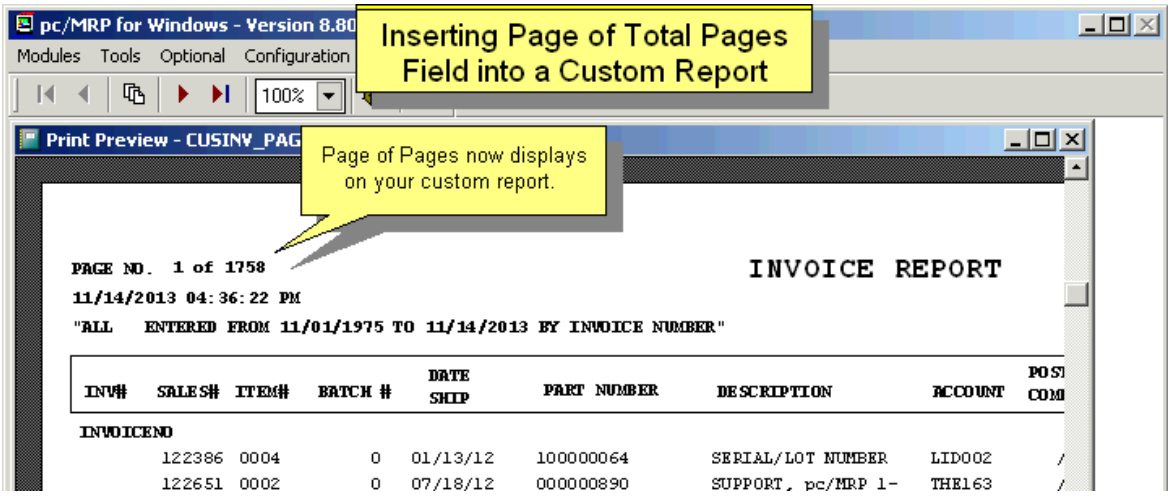
The new report/form/label is available in the drop-down area when you choose Form: Custom.

**Note:** If you added a logo to your labels, and you are printing only a few labels (e.g. starting from label #5) of a sheet of labels, you might find that all previous label positions (with the actual label already used up earlier) would be printed with the logo. To avoid this, go back to where you added the label. Edit the label, and on the "Print when" tab, under Print only when the expression is true, type the following: !EMPTY(PARTNO)

### 15.4.4.2 Inserting a "Page of Total Pages" Field into a Custom Report

To print the number of total pages (e.g. Page 2 of 6), the report has to run twice. At the first time, it simply figures out the number of pages, the second time it actually prints the report. This means if you want to see the number of total pages on your report (**_PageTotal**) your report will take twice the time of the standard report.



#### 15.4.4.3 Address information layout used for forms

Addresses in the Purchase, Receive, Sales, and Invoice forms (not reports) are stored in a long single memory variable. For example, "MVENDOR1" in the PO form has the following layout:

SUBSTR(MVENDOR1,1,41) = VENDOR NAME
SUBSTR(MVENDOR1,42,41) = CONTACT NAME
SUBSTR(MVENDOR1,83,41) = STREET ADDRESS 1
SUBSTR(MVENDOR1,124,41) = STREET ADDRESS 2
SUBSTR(MVENDOR1,165,30) = VENDOR CITY
SUBSTR(MVENDOR1,195,20) = VENDOR STATE
SUBSTR(MVENDOR1,215,10) = ZIP
SUBSTR(MVENDOR1,225,30) = COUNTRY

Therefore, the ZIP code is located 215 characters into the variable for a length of 10.

**Note:** In Excel the formula is: =MID(ZIP,215,10)

#### 15.4.4.4 Adding Bar Code Fonts to Custom Labels, Forms, and Reports

See Section 16.4.1 in this Manual.

#### 15.4.4.5 Setting an additional filter when printing/displaying a report

The following modifications should only be made by a person who is familiar with dBase and FoxPro commands.

**The new filter replaces the old filter**

If you wish to use your own filter and ignore the existing filter, you could use the Set Filter To command. Let's say you want to filter a Purchase report by a specific buyer (Anna). This information is stored in the OrderBy field.

~IN~
Set Filter To (Upper(OrderBy) = "ANNA")

**The additional filter is built is into the report**

The AddFilter() function provides a mechanism whereby a filter expression can be applied to a table without interfering with another filter that may already be applied to the table.

Let's say you wish to add a filter to an existing Purchase report that is currently filtered by Related Document Number, and you want it to be filtered by a specific buyer (Anna). This information is stored in the OrderBy field.

~IN~
AddFilter("Upper(OrderBy) = 'ANNA'", "PURCHASE", "AND")
where "Upper(OrderBy) = 'ANNA'" is the added filter condition,
"PURCHASE" is the database file
"AND" is the join condition.

### 15.4.4.6 The report prompts the user for the additional filter

This section explains how to get a custom report to prompt for an additional filter condition. For example, a user may wish to have a custom bill of materials report that lists only part numbers that start with the prefix "33-". To make the modifications follow the steps listed below:

Users can use numeric and or logical fields not just text fields. When you run the report, you will be prompted for the default filters for text, numeric, date, or logical fields as shown below unless the last parameter is other than a '1', the default.

If the filter is a text field:

1. **contains (DEFAULT)**
2. does not contain
3. start with
4. is equal to
5. is not equal to

If the filter is a numeric or date field:

1. **not equal to (DEFAULT)**
2. less than
3. less than or equal to
4. equal to
5. greater than or equal to
6. greater than

If the filter is a logical field:

1. **All (DEFAULT)**
2. No (false, unchecked)
3. Yes (true, checked)

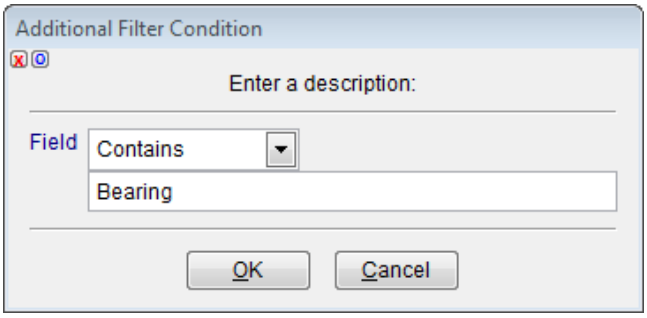
To set the defaults, users can add a default value and operator. For example users could enter:

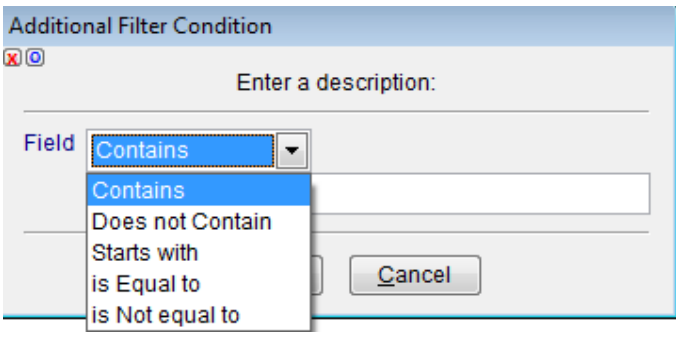
DO APNDFIL WITH "DESCRIPT", "Enter a Description", "BEARING", 1

When the report is printed pc/MRP will pop up a window asking the user to enter a description with a default entry of BEARING and the default filter value of 1 (contains).

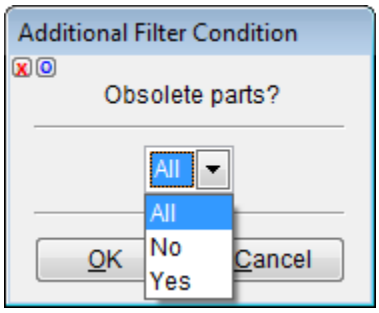
Depending upon the data type, one of the following pop-ups is presented:

For text fields:

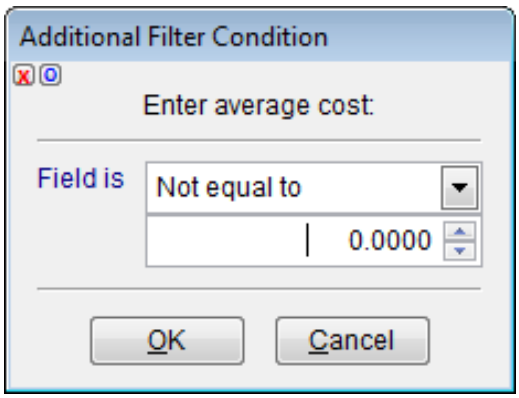


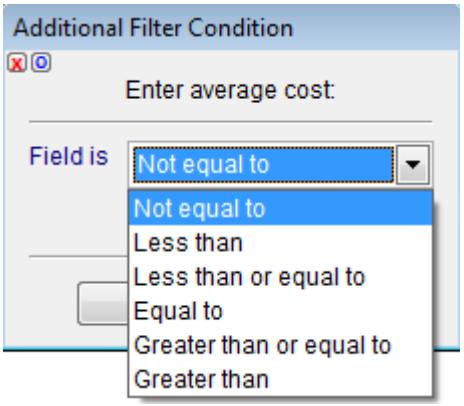



For logical fields:



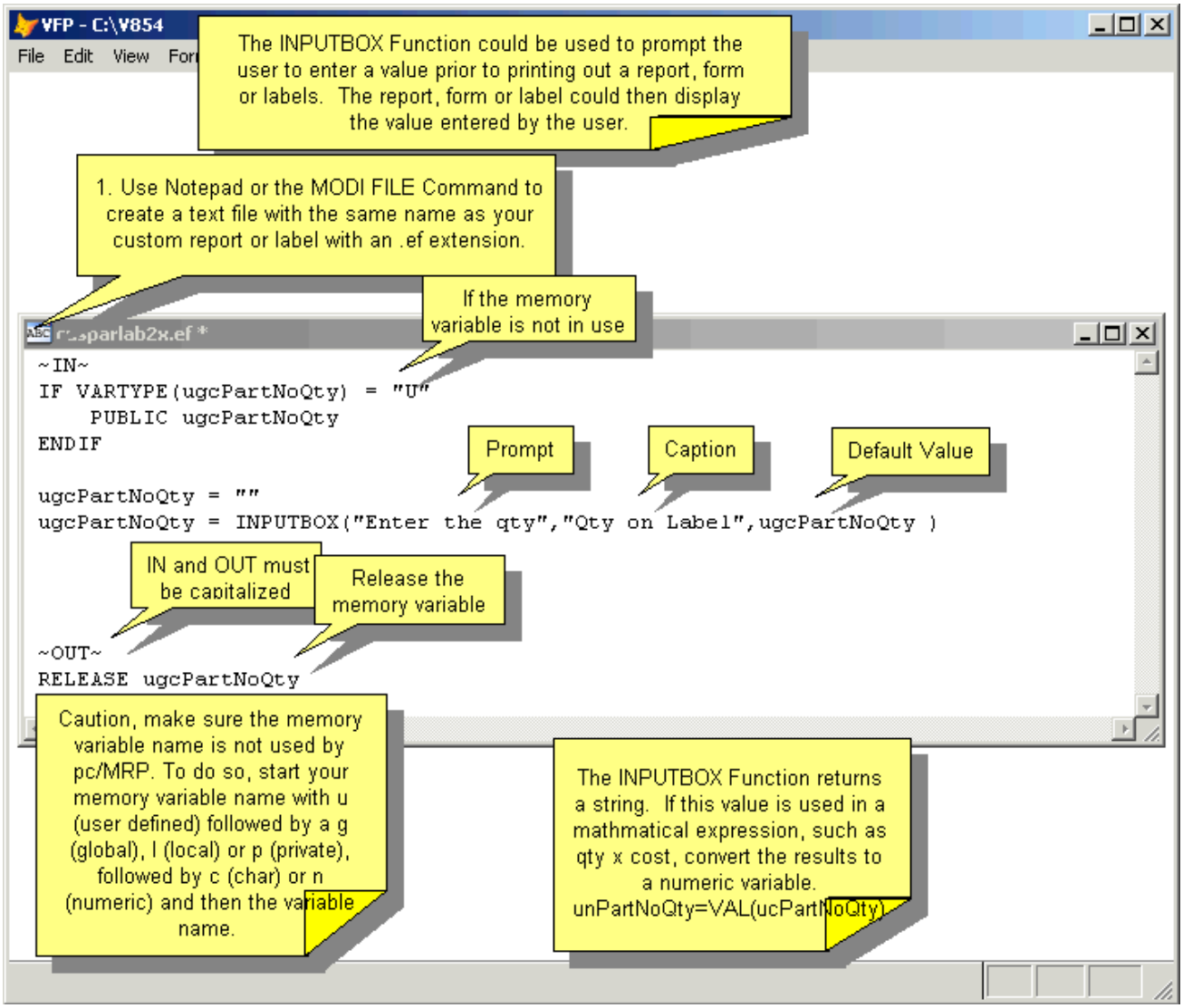

For numeric or date fields:



**15.4.4.7 Prompting the user for input**

You may also create an '.EF' file to ask the user to enter data (while printing labels as an example). Here is sample code to refer to:




**Note:** Please do not use MS Word to create '.EF' files as Word will use curly/angled quotes that the Visual FoxPro report writer does not like. If you still wish to use MS Word:

1. On the Tools menu, click AutoCorrect Options, and then click the AutoFormat As You Type tab.
2. Under Replace as you type, select or clear the "Straight quotes" with "smart quotes" check box.

**Note:** You can find and replace all instances of single or double curly quotes with straight quotes in your document. To do this, clear the "Straight quotes" with "smart quotes" check box on the 'AutoFormat As You Type' tab. On the Edit menu, click Replace. In both the Find what and Replace with boxes, type ' or ", and then click Find Next or Replace All.

### 15.4.4.8 Opening an additional related database file when printing/displaying a report

The following modifications should only be made by a person who is familiar with dBase and FoxPro commands.

This section explains how to open up another related database file when running a report for the purpose of printing out data from the original database file and the related database file. For example, a user may wish to have a custom sales order report print/display the drawing number for each sales order listed in the report. The drawing number is not in the sales.dbf, so the user must modify pc/MRP such that the partmast.dbf file is open and related to the sales.dbf file whenever that report is run. To make the modifications follow the steps listed below:

For Sales Order, Sales Quote, Invoice, Purchase, Purchase Quote, and Receiver reports, pc/MRP automatically sets a relation to the PARTMAST and ADDRBOOK database files. As such, you would simply add a field to the custom report with the name of the table (database file) as a prefix e.g. 'partmast.drawingno' or 'addrbook.resale'.

For all other reports or DBF files, you must use Window's Notepad program to create an ASCII text file with the same name as the custom report you plan on running, with the extension of ".ef". For example if you had a custom sales report named "CUSTSO1.FRX" and wanted to include data from another data base besides sales.dbf you would use Notepad to create a new file in the pcmrpw directory named "CUSTSO1.EF"

Enter the following dbase/FoxPro commands into the "CUSTSO1.EF" file. The first command, **~IN~**, tells pc/MRP to follow this set of commands before starting to print the report. The second command, THISAREA=SELECT(), stores the name of the first database file in a memory variable named THISAREA. The third through fifth commands then set relation between the two files. The last command, GO TOP, makes sure the original dbf file (in this case, sales.dbf) is initialized and ready to begin printing. **~OUT~**, begins the instruction set pc/MRP will follow after it has finished printing the report. The remaining commands after the ~OUT~ command, simply close the related dbf file and select the original dbf file as the primary dbf file.

**Note:** If you need these modifications for an .EFX file, do not create an .EF file, but enter these commands into the ~IN~ section of the .EFX file.

```
~IN~
THISAREA = SELECT ()
USE PartMast ORDER ByPartNo IN 0
SELECT (THISAREA)
SET RELATION TO UPPER(LEFT(PartNo,MpnSize)) INTO PartMast ADDITIVE
GO TOP                                    && (in some cases, "GOSAFE(RecNo())" will be needed)

~OUT~
USE IN SELECT("PartMast")
```

The above commands work for any DBF file (not just the partmast).

If you need to set a relation to the address book ("addrbook") or partmaster file ("partmast"), or ("both"), the following example code will work as well:

```
~IN~
RELATE("partmast")

~OUT~
USE IN SELECT("partmast")
```

Save the file as the report/form/label name appended with ".ef" (no quotes), e.g. "CUSTSO1.EF", in the pcmrpw directory.

Finally, one would modify the custom report (in this case, CUSTSO1.FRX), adding the fields from the related dbf file to the report (in this case, PARTMAST.DRAWINGNO). Please note, that you must preface the fields from the related dbf file with the name of the related dbf file followed by a period and the name of the field.

When viewing any report you can view the open tables by pressing CTRL-F12. This will open a TXT file with all of the open tables in the "select area" statement. By example: "Select area: 1, Table in Use: C:\MY DOCUMENTS\PCMRPTEST\PCMRPW870\PARTMAST.DBF Alias: PARTMAST" This means the Partmast.dbf is open when running this report.

#### 15.4.4.9 Code based HTML Files

Code based HTML forms can only be modified by personnel at Software Arts. Software Arts can send you a custom fxp file containing your modifications.

| Modules | Std Fxp File | Custom fxp |
|---|---|---|
| Sales/Sales Quote/Work Order | EMSO.FXP | CEMSO.FXP |
| Purchases | EMPO.FXP | CEMPO.FXP |
| Receivers | EMREC.FXP | CEMREC.FXP |
| Purchase request | EMREQ.FXP | CEMREQ.FXP |
| Invoices | EMINV.FXP | CEMINV.FXP |

The custom fxp files would be copied into the main pcmrpw directory.

#### 15.4.4.10 Adding a logical field (e.g. the RoHS information) to a report, form, or label.

The RoHS field is a logical field in the inventory database on the Misc. tab. To use in a report, form, or label, the field must be added to the report detail band and the header description band. The detail band field is defined as follows:

IIF (ROHS, "YES", "NO")  Or for a one character field, use "Y","N".

#### 15.4.4.11 Custom Comments

See an online slideshow here: http://www.pcmrp.com/mrp101/commentscustomoverview.htm

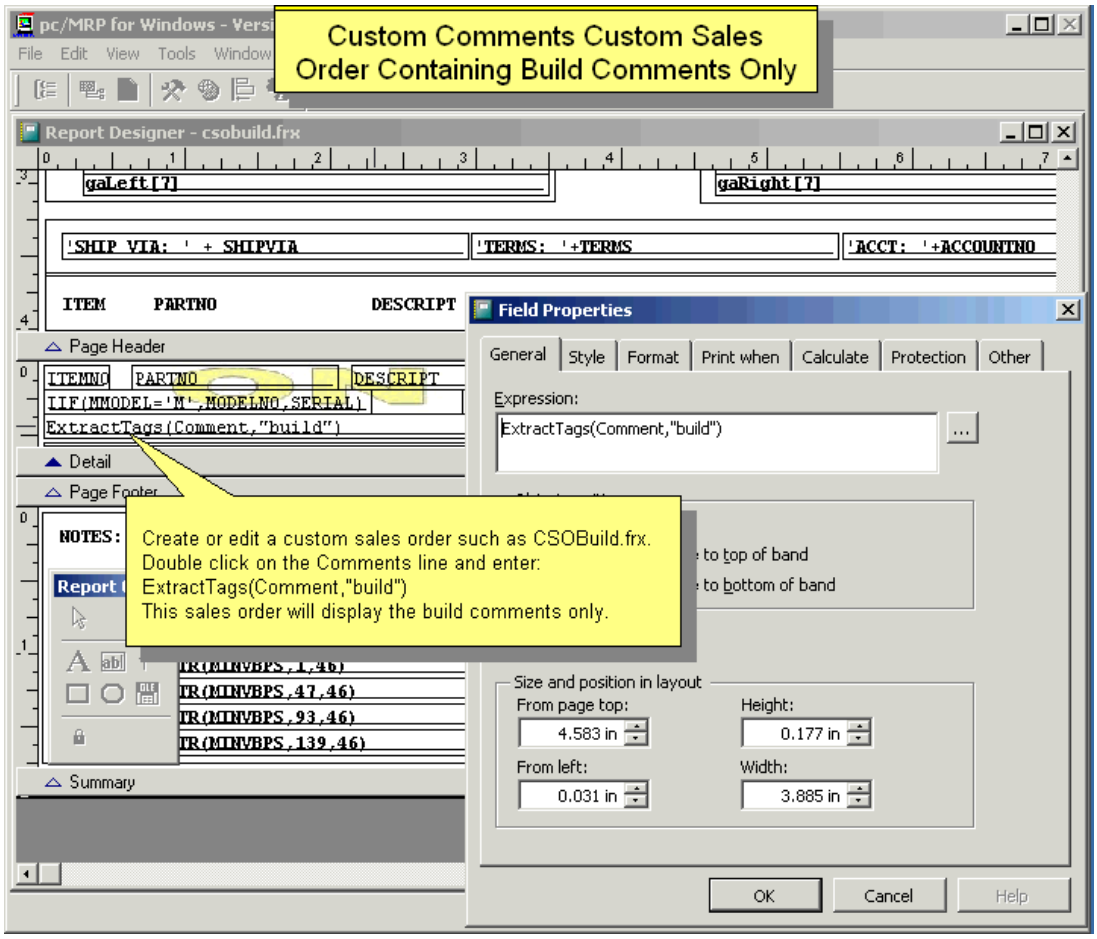
pc/MRP allows users to print out specific comments based on the situation the custom sales orders, work orders, shippers, invoices, purchase orders, etc. are going to be used for. The example shown here is for sales orders but this feature could be used for other forms as well.

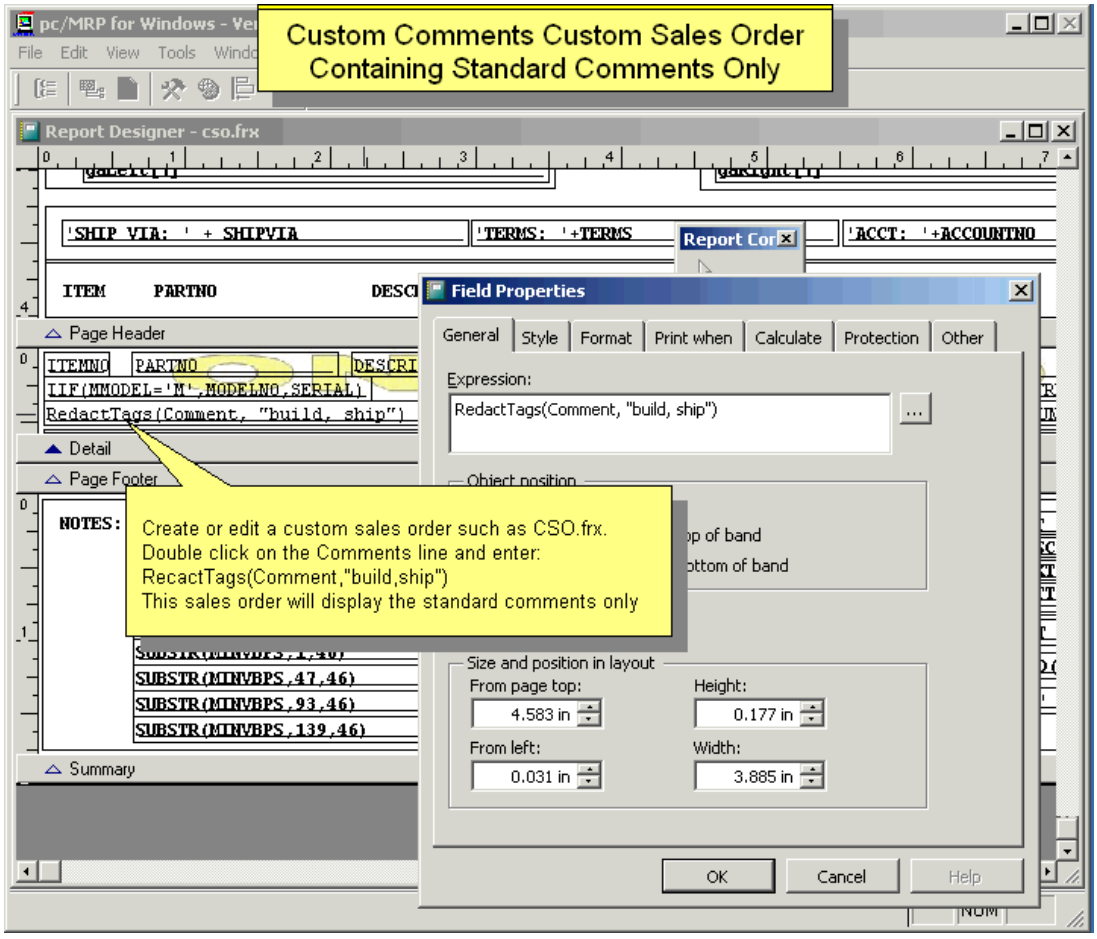
Users can enter specific comments between tags for the sales order. For example, Comments related to building the product could be contained within <Build> and </Build> Tags. Users can select any tag name, but the name for a certain purpose has to be the same in all sales orders.

Now users can create a custom sales order form for Building. This form could be named CsoBuild.frx. Change the Expression of the Comments field to ExtractTags(Comment,"build"). This custom form will only display the comment between the build tags. It will not display any comments between other tags or without tags.

If users still wish to use the standard sales order form in addition to the custom form(s), they should create a custom form (could be named Cso.frx) that will display the standard comments only. On this form, change the Expression of the Comments field to RedactTags(Comment,"build, ship") where all tags used on any sales orders are listed. If users enter tagged comments into the Inventory General Info field, they need to use RedactTags on all other forms that display the comment.

**Note:** This feature was not available for versions **8.80E** and below.


Custom Comments Custom Sales Order Containing Build Comments Only
Report Designer - csobuild.frx
'SHIP VIA: ' + SHIPVIA
'TERMS: '+TERMS
'ACCT: '+ACCOUNTNO
ITEM PARTNO DESCRIPT
Page Header
ITEMNO PARTNO DESCRIPT
IIF(MMODEL='M',MODELNO,SERIAL)
ExtractTags(Comment,"build")
Detail
Page Footer
NOTES:
Summary
Field Properties
General Style Format Print when Calculate Protection Other
Expression:
ExtractTags(Comment,"build")
Size and position in layout
From page top:
4.583 in
Height:
0.177 in
From left:
0.031 in
Width:
3.885 in
OK
Cancel
Help
Create or edit a custom sales order such as CSOBuild.frx.
Double click on the Comments line and enter:
ExtractTags(Comment,"build")
This sales order will display the build comments only.


Custom Comments Custom Sales Order Containing Standard Comments Only
Report Designer - cso.frx
'SHIP VIA: ' + SHIPVIA
'TERMS: '+TERMS
'ACCT: '+ACCOUNTNO
ITEM PARTNO
Page Header
ITEMNO PARTNO
IIF(MMODEL='M',MODELNO,SERIAL)
RedactTags(Comment, "build, ship")
Detail
Page Footer
NOTES:
Summary
Field Properties
General Style Format Print when Calculate Protection Other
Expression:
RedactTags(Comment, "build, ship")
Size and position in layout
From page top:
4.583 in
Height:
0.177 in
From left:
0.031 in
Width:
3.885 in
OK
Cancel
Help
Create or edit a custom sales order such as CSO.frx.
Double click on the Comments line and enter:
RecactTags(Comment,"build,ship")
This sales order will display the standard comments only

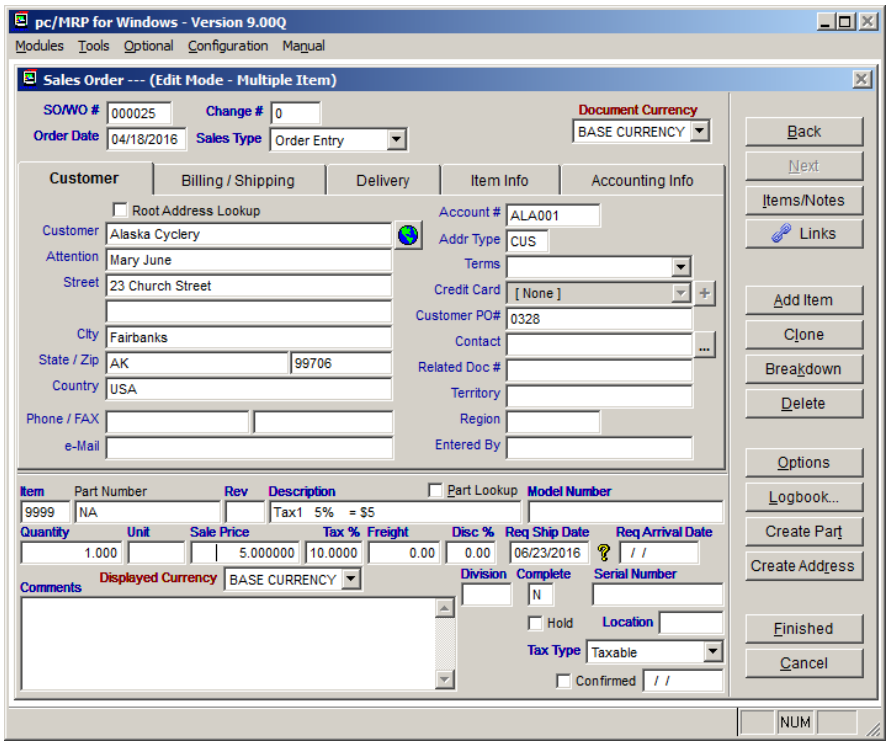
### 15.4.4.12 Special Invoice form: When Taxed Amount is Taxed

When you need to add different types of taxes (State Tax + Local Tax), the base amount for these taxes is the Subtotal Sale Price. Set the different tax rates in the Accounting module; see Chapter 14.1.12 in this Manual.

In special cases a second tax will be applied to the already taxed amount. In this case you can use the work around below.

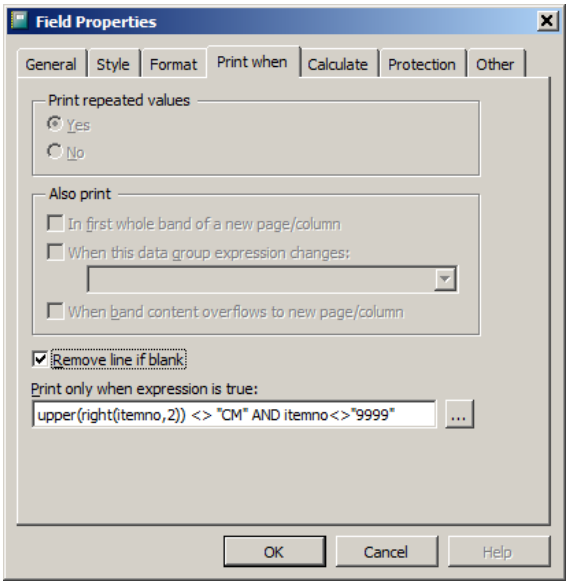
Let's name the different tax types Tax1 and Tax2. Please note that you will need to calculate Tax1 manually. Only Tax2 will be calculated automatically (and applied to the total of the Sale Subtotal and Tax1), as pc/MRP is designed to base all taxes on the Sales Subtotal. The goal is that your invoice form's look complies with your Customer's or Tax Agency's requirements.

Add a new line item to your invoice, and change the line item number to 9999. Enter part number NA. Description can be anything. Calculate Tax1 on the Total, and enter it as sales price for line item 9999.

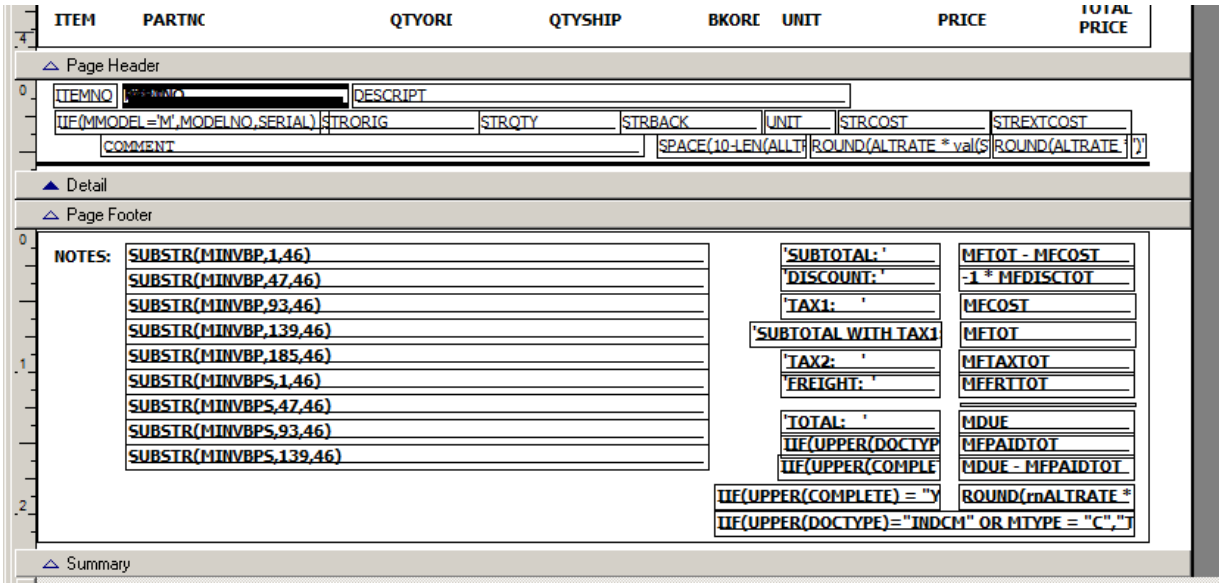



Use Configuration, Settings & Utilities, Option 24 (as described in Section 15.4.1 above) to edit the standard invoice form and save it with a custom name.

In the Detail section for every single item you need to add the following Print when condition: itemno<>"9999" (If there is already a Print when condition present, add AND itemno<>"9999" instead). Also check "Remove line if blank".




Modify the Total section as below (you can change the label texts as needed).




This is how the printed invoice looks like:

| ITEM | PARTNO | QTYORD | QTYSHIP | BKORD | UNIT | PRICE | TOTAL PRICE |
|---|---|---|---|---|---|---|---|
| 0001 | BIC-W-1108 | Bicycle, Women's, 1108 | | | | | |
| | | 1 | 1 | 0 | | 100.00 | 100.00 |

| | | |
|---|---|---|
| **NOTES:** | **SUBTOTAL:** | **100.00** |
| | **TAX1:** | **5.00** |
| | **SUBTOTAL WITH TAX1:** | **105.00** |
| | **TAX2:** | **10.50** |
| | **TOTAL:** | **115.50** |

**TOTALS FOR INVOICE 985252**

### 15.4.5 Troubleshooting

#### 15.4.5.1 Converting custom 16-bit report forms to 32-bit report forms

Installing an update to a 32-bit version of pc/MRP will copy in all new 32-bit standard report forms. Starting pc/MRP for the first time after installing the update will convert all non 32-bit reports, Custom and Standard, to 32-bit.

To individually convert a 16-bit report to 32-bit, open the command line and enter:

```
CONVERTFORM("filename.frx")
```

You could also enter:

```
CONVERTFORM()          - it will allow you to scroll and select the report to be repaired.
```

#### 15.4.5.2 Clearing the save environment feature on FoxPro for Windows reports

FoxPro for Windows reports save the name of the dbf files that were open when the report was created or last run. This feature can inhibit customizing the report if several dbf files were open when the report was last run or created. If several data base files were open at the time, the report may pick the wrong dbf file to open when you try to view your modifications. To turn off the "save environment" feature, open up the report using the modify report command in FoxPro's command window and follow the steps listed below:

1. Click on report
2. Click on page layout
3. Click on data environment
4. Click on clear
5. Click on ok
6. Click on file
7. Click on save

Reopen the report and repeat the above process, if you were successful you will see the environments clear and restore buttons are now disabled. Go ahead and click on cancel. Now you will have to enter the related dbf file manually prior to modifying the report, however it will be the correct dbf file.

#### 15.4.5.3 Clearing printer codes from all forms and labels.

Running 'frxhpfix_all()' from the pc/MRP command line removes printer codes from all forms and reports that were accidently saved with the form or report.

#### 15.4.5.4 Set Enginebehavior

The Visual FoxPro 'Select' command does not operate as a 'pure' SQL command. If the results are not what you expected and:

If an '.EF' file contains a select command with a GROUP BY or ORDER BY clause, it's behavior will vary depending upon the SET ENGINEBEHAVIOR setting. It is important to reset the enginebehavior if you change it. Add the following code to the '.EF' file or create the text file with the 'custom_report_name.EF'.

```
~IN~
PUBLIC lnOldEngine
lnOldEngine = SET("enginebehavior")
SET ENGINEBEHAVIOR 70 && could use 80 or 90
```

~OUT~
SET ENGINEBEHAVIOR lnOldEngine
RELEASE lnOldEngine

**PROGRAMMING Note:**
The scope of SET ENGINEBEHAVIOR is global.

Using SET ENGINEBEHAVIOR set to 70 might lead to ambiguous results from SQL SELECT commands when the DISTINCT and UNION clauses are used with memos and the GROUP BY clause, the HAVING clause without a GROUP BY clause, and when using the LIKE clause.

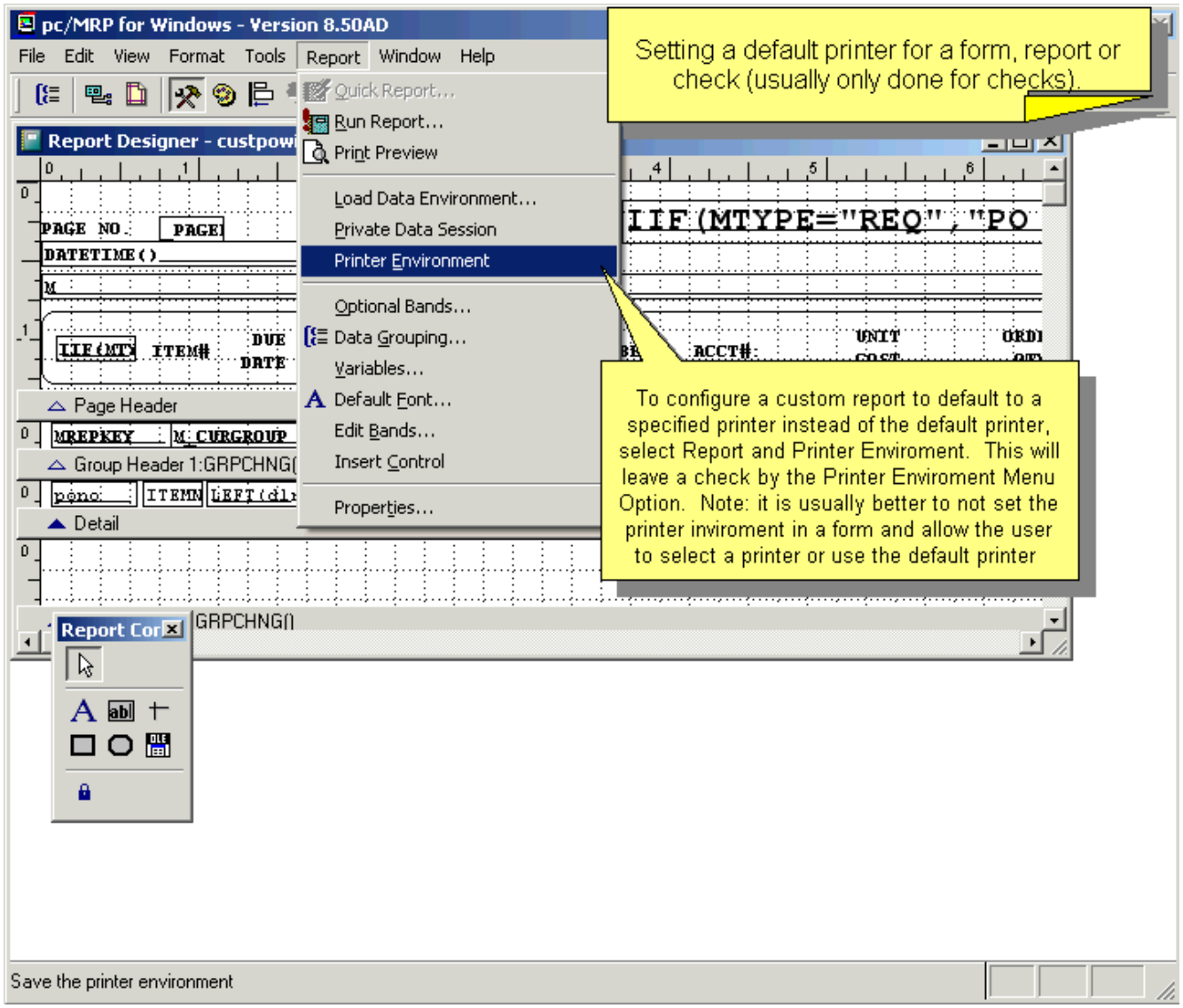
When SET ENGINEBEHAVIOR is set to 70 or 80, results from the TOP clause in the SQL SELECT command can include more than nExpr records when rows with identical values for columns specified by the ORDER BY clause exist. For example, suppose you specified 10 rows for nExpr. If more than 10 rows with identical values exist in the columns specified in the ORDER BY clause, the query result might contain more than 10 rows.

### 15.4.5.5 Creating a custom report and printing to a specific printer (usually for a check printer).

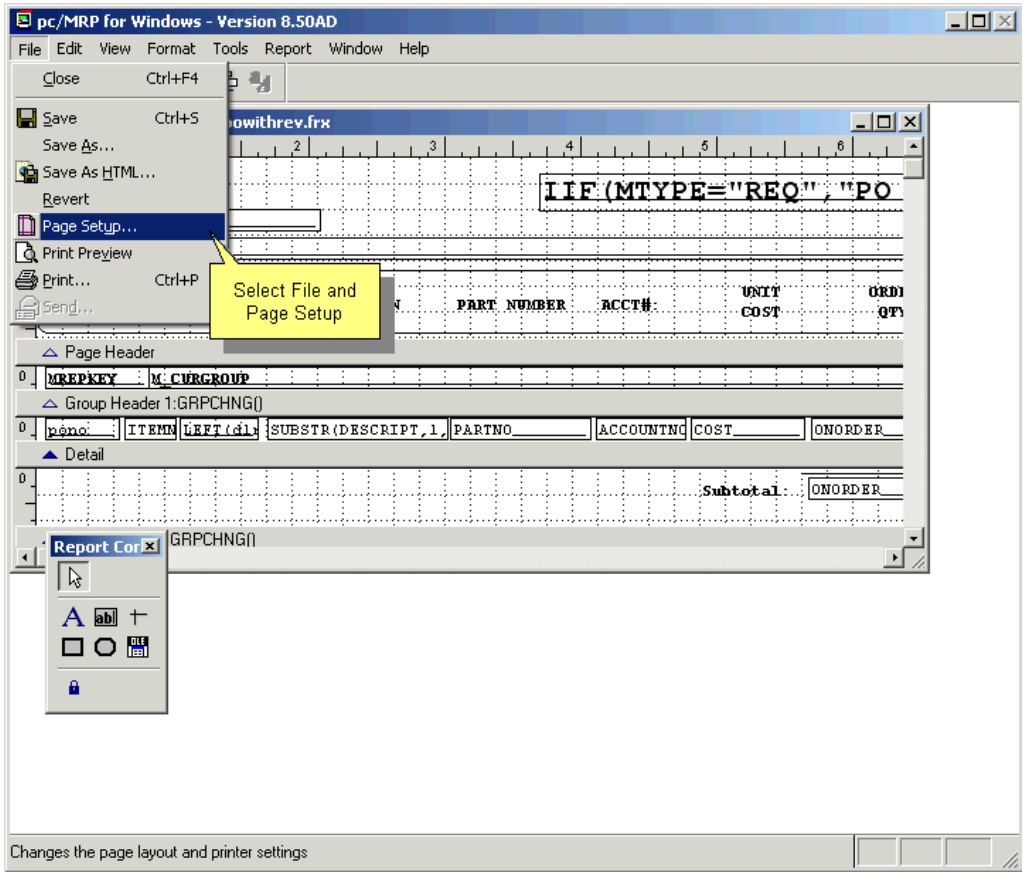
Please see the MRP101 slideshow for a more detailed look at report customization:

http://www.pcmrp.com/mrp101/customtableofcontents.htm

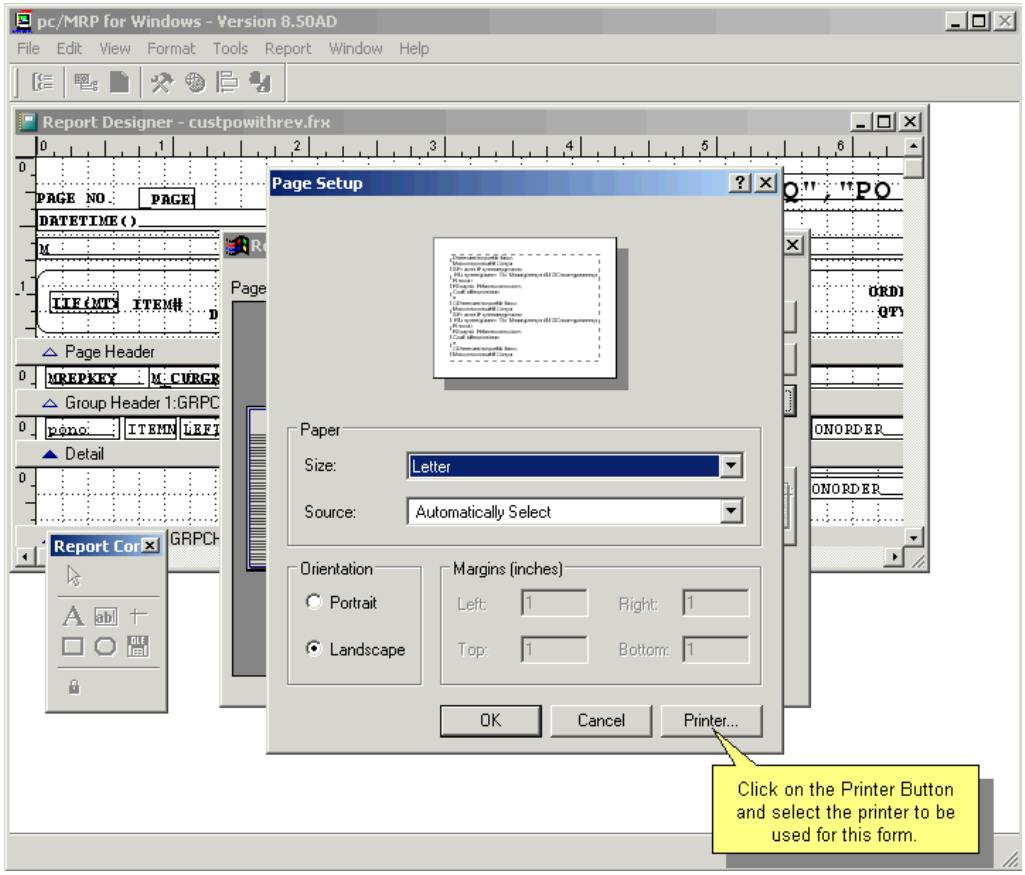
The following screen shots will demonstrate how to set this up.


pc/MRP for Windows - Version 8.50AD
File Edit View Format Tools Report Window Help
Quick Report...
Run Report...
Print Preview
Load Data Environment...
Private Data Session
Printer Environment
Optional Bands...
Data Grouping...
Variables...
Default Font...
Edit Bands...
Insert Control
Properties...
Report Designer - custpow
Page Header
Group Header 1:GRPCHNG(
Detail
GRPCHNG()
Report Cor
Setting a default printer for a form, report or check (usually only done for checks).
To configure a custom report to default to a specified printer instead of the default printer, select Report and Printer Enviroment. This will leave a check by the Printer Enviroment Menu Option. Note: it is usually better to not set the printer invirorment in a form and allow the user to select a printer or use the default printer
Save the printer environment

Select Page Setup.




And finally:



#### 15.4.5.6 Barcode problems

If the form or label contains a barcode and you get a proutput.fxp invalid path or file name error, the user may have deleted the barfonts sub-directory underneath the PCMRPW folder.

#### 15.4.5.7 Auto Attach documents to purchase order, invoices, sales orders, etc.

The .EF file would contain code such as:

```
~IN~
IF INLIST(MPrntDisp, 3, 4)
   lcAttachedFileList = lcAttachedFileList + "|PDF Folder\Attachment1.pdf|Logos Folder\Attachment2.png"
ENDIF
```

OR

```
~IN~
IF INLIST(MPrntDisp, 3, 4)
   lcAttachedFileList = lcAttachedFileList + "PDF Folder\Attachment1.pdf"
   lcAttachedFileList = lcAttachedFileList + "Logos Folder\Attachment2.png"
ENDIF
```

# 15.5 Exporting Raw Data out of pc-MRP

### 15.5.1 Overview

pc/MRP uses Visual FoxPro 9 database files. There are not many import programs that offer the option to import Visual FoxPro 9 data base files. Therefore, this chapter will outline how to export pc/MRP's data into more widely used formats such as Excel (XLS), ASCII (txt) or dBase III formats.

The following sections will cover several ways to export raw data out of pc/MRP. Finally, we will address a few rules to follow. An online slideshow is located here: http://www.pcmrp.com/mrp101/exportfilesmodules.htm

### 15.5.2 Using Option 23 to extract all data from a table of pc/MRP into XLS, ASCII, or dBase III format

First select Configuration, Settings and Utilities, and set **Option 86** to dBase III file format. Next use **Option 23** to extract the data from pc/MRP into Excel (XLS), Comma Delimited (TXT) or Data Table (dBase III DBF). Click on the … button to choose your file. Enter a name for your new file, click Save. Select the fields you wish to include and click OK.

### 15.5.3 Using a pc/MRP report to extract a subset of data from pc/MRP into XLS, ASCII, or dBase III format

First set Configuration, Settings and Utilities, and set **Option 86** to dBase III file format. Next click on Modules, select the module (purchasing, sales, parts, BOMs, etc). Select Reports, select the sort and conditions (all open, all in a date range, etc.). Send the report to ASCII, Excel or DBF. Enter a name for your new file. Select the fields you wish to include.

### 15.5.4 Extracting pc/MRP data using Microsoft's VFP ODBC

An online slideshow located at: http://www.pcmrp.com/mrp101/odbcopeninternetexplorer.htm demonstrates how to install Microsoft's VFP Driver. After that, you can use any language you prefer to establish a connection to the ODBC file and extract subsets of pc/MRP data with select statements.

### 15.5.5 Sending Reports to Excel

pc/MRP offers to send most reports to Excel. All fields can be exported, as long as the computer that runs pc/MRP has Excel installed. (If pc/MRP is run on a terminal server, Excel has to be installed on the terminal server.) If Excel is not available on the computer, pc/MRP does not offer the memo type fields (like the general info in inventory, the reference designators in the BOM table, the tracking number and comments in the invoice table, etc.).

**Note:** Sending memo fields into Excel significantly slows down the process. Do not include memo type fields, unless you need them. Versions **8.80C, 8.81D** and above default to not include memo fields.

The same is true for Configuration, Settings and Utilities, **Option 23**. This utility allows users to create an ASCII text file copy of any of pc/MRP's database files. The original database files will not be changed. pc/MRP will create either an Excel file (.XLS), a dBaseIII or Visual FoxPro file (.DBF), or a comma delimited ASCII text file (.TXT). Users can select which fields they want to include. **Note:** The .TXT file will have a set of quote marks (" ") around every value. See Section 15.11.1 about how to prepare a file for being imported into pc/MRP. See the previous paragraph about memo fields.

# 15.6 Creating Practice and What If Directories

Test copies allow users to do a number of things. New employees just getting familiar with pc/MRP will have a chance to practice entering parts, POs, accounting transactions, etc. without doing any harm to the production copy. Users can try rarely used features of pc/MRP (like merging addresses), and get familiar with new features when a new version of pc/MRP is released, without making any changes in the real copy. Also, it is often easier to see the results of your action if there are only a few (test) records in your database tables. Other times, you will prefer to use (a snapshot copy of) your real data for testing.

### 15.6.1 Generating a What If or Practice Directory for pc/MRP

What If or Practice directories are easily generated by copying pc/MRP into a different location on a local computer or server. To do this simply copy and paste the entire PCMRPW folder into an alternate location.

1. Find where pc/MRP currently resides (select Configuration, About pc/MRP, and click Ctrl-E)
2. Highlight the pcmrpw folder
3. Press CTRL-C to copy the pcmrpw folder
4. Find the desired folder/drive and double click on that folder/drive
5. Press CTRL-V to paste the pcmrpw folder into the alternate folder

Users can now start the practice copy by double clicking the pcmrpw.exe found within the alternate folder.

To create a shortcut, right-click on the pcmrpw.exe file. Select Send To, then Desktop.

**Note:** Users must be certain to not confuse themselves with the REAL copy vs. the TEST copy.

For this reason, you should modify the background of the pc/MRP logo by doing the following:

1. In the test copy, go to Configuration, Settings & Utilities, Option 1
2. Change the Division/Dept line to the word 'PRACTICE'
3. Save your changes.
4. Exit the program, then run it again.

You now have a red background for the pc/MRP logo and a warning underneath. Also change the label of the icon to e.g. pc-MRP TEST.

A test copy is often called a practice copy or a sandbox copy.

You might want to create a practice copy just for yourself – in this case you would copy the pcmrpw folder to your own C:\. If you want that all users can access the same practice copy, you could place it on the server, right next to the production folder.

Please make sure that you have your company's permission to create a practice copy.

# 15.7 Windows Server Administration

### 15.7.1 Viewing users who are logged on

The following steps will allow you to view who is logged on to the server:

1. Click on the start button
2. Select Programs
3. Select Administrative Tools
4. Select Server Manager
5. Double click on the server you want to view
6. Select Users

### 15.7.2 Viewing users and the files they are using

The following steps will allow you to view a list of files is use:

1. Click on the Start button
2. Select Control Panel
3. Select Administrative Tools
4. Select Computer Management
5. Select System Tools
6. Select Shared Folders
7. Select Sessions
8. Select Open Files

### 15.7.3 Monitoring network performance

The following steps will allow you to monitor the network traffic and performance:

1. Click on the start button
2. Select Programs
3. Select Administrative Tools
4. Select Network Monitor

Watch the % Network Utilization bar chart. Readings of 35% or less are good. Readings of 60% or more would indicate problems.

### 15.7.4 Monitoring CPU and memory performance

The following steps will allow you to monitor the CPU and memory performance:
Right click in the open space of the Start bar, then:

1. Select Task Manager
2. Select Performance

### 15.7.5 Protecting pc/MRP database files on a Windows 2000 Server

#### 15.7.5.1 The following commands will prevent users from deleting key pc/MRP database files through Windows Explorer.

Set up pcMrpUsers and pcMrpSupervisors user groups as below:

1. Click the **Start** button.
2. Select Settings, Control Panel, Administrative tools, and Computer Management.
3. Under the System Tools, expand the Local Users and Groups
4. Right click on the **Groups** folder and select the **New Group ...**
5. Enter "pcMrpUsers" for **Group Name** and "Mrp users without deletion rights" for **Description**.
6. Click the **Create** button to save the pcMrpUsers.
7. Enter the group name of the second group: "pcMrpSupervisors" and "pc/Mrp users with deletion rights to pc/Mrp database tables" for **Description**.
8. Click the **Create** button to save the pcMrpSupervisors.
9. Click **Close**.
10. Double click on the pcMrpUsers and add users into the group.
11. Double click on the pcMrpSupervisors and add users into the group.

#### 15.7.5.2 Set up PCMRPW folder access permissions for pcMrpUsers group, pcMrpSupervisors group, and administrator.

1. Start window's explorer
2. Right click on **the PCMRPW** folder and select **Properties**.
3. Select the **Security** tab.
4. Uncheck the Allow inheritable permissions from parent to propagate to this object.
5. Remove **Everyone** group.
6. Add pcMrpSupervisors, pcMrpUsers, and administrator.
7. Select administrator, check the allow check box for **Full Control**, **Modify**, **Read** & **Execute**, **List Folder Contents**, **Read**, and **Write**.
8. Select pcMrpSupervisors, check the allow check box for **Full Control**, **Modify**, **Read** & **Execute**, **List Folder Contents**, **Read**, and **Write**.
9. Select pcMrpUsers, check the allow check box for **Modify**, **Read** & **Execute**, **List Folder Contents**, **Read**, and **Write**.
10. Click on the **Advanced** button, click the Add button to add pcMrpUsers group.
11. Select "**this folder Only"** for the **Apply Onto**, and check the deny check box for the **Delete** permission.
12. Click on the **Add** button to add pcMrpUsers group.
13. Select "this folder, subfolders and file" for the Apply Onto, and check the deny check box for the Change Permission.
14. Click Ok.
15. Click Apply.

#### 15.7.5.3 Set up permissions for the following database files.

1. Double click on the **PCMRPW** folder.
2. Right click on the partmast.dbf and select properties.
3. Select the Security tab.
4. Check the **allow inheritable permissions from parent to propagate to this object**
5. Click on the **Advanced** button.
6. Click on the **Add** button and select pcMrpUsers.
7. Click on the deny check box for the Delete permission.

### 15.7.6 Clear, Delete and Refresh ARP Cache Entry

ARP (Address Resolution Protocol is the standard method for finding a host's hardware address when only its network layer address is known. In other word, in IPv4 and Ethernet network environment, Windows operating system uses ARP to translate IP addresses to Ethernet MAC addresses. However, Microsoft Windows ARP cache will occasionally become corrupt and need to be cleared and deleted so that the cache can be refreshed.

http://www.windowsnetworking.com/kbase/WindowsTips/Windows2003/AdminTips/Miscellaneous/ClearingtheARPCache.html

The Address Resolution Protocol (ARP) is very crucial for TCP/IP network communication. If you begin to notice network connectivity problems such as particular web pages not loading or not being able to ping certain IP addresses then clearing your ARP cache is a good place to start.

You can view your workstations ARP table by typing "**arp –a**" from a command prompt. Deleting the ARP cache is just as simple and can be done from a command prompt by typing "**netsh interface ip delete arpcache**".

# 15.9 Special Cases

### 15.9.1 Non-Stocking Manufacturing Reps

When the customer places an order:

- Enter a PO to manufacturing (your cost)
- Enter a sales order to you customer (your cost plus commission)

When manufacturing ships to the customer

- Enter a false receiver from the manufacturing
- Enter a false invoice to the customer

When manufacturing sends commission check

Enter general ledger transact, debit Checking credit Business Income

When the salesman is paid

Enter a general ledger transact, debiting sales commissions and crediting checking

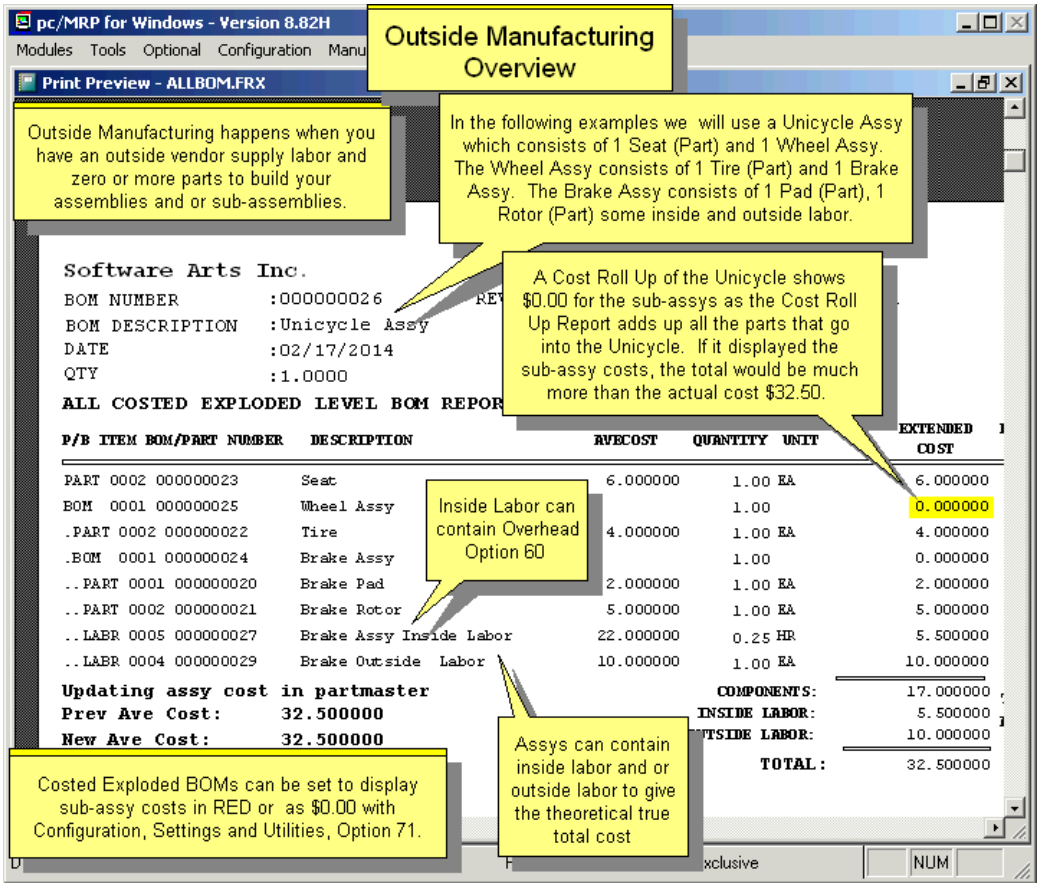
### 15.9.2 Outside Manufacturing

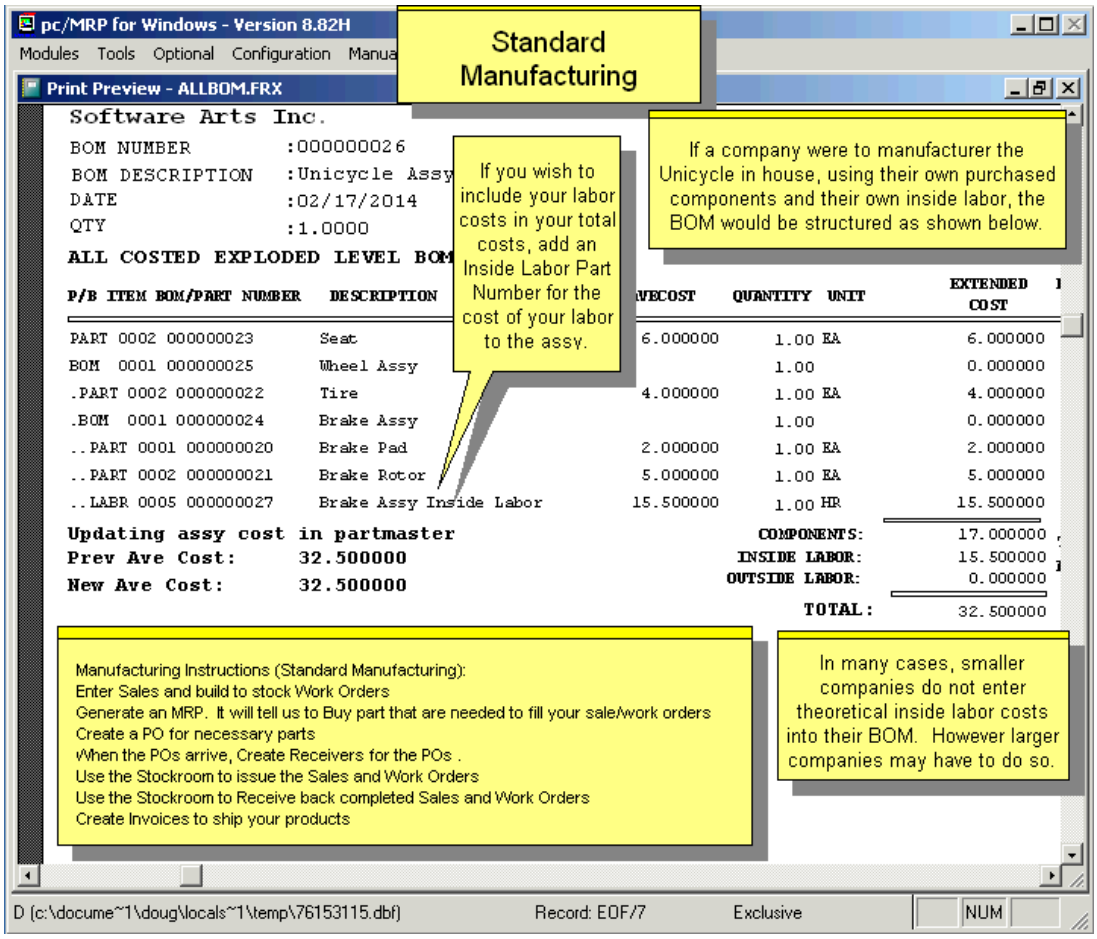
The following slides explain how to handle situations where an outside vendor provides labor or labor and parts. The illustrations go step by step from simple to more complicated situations.

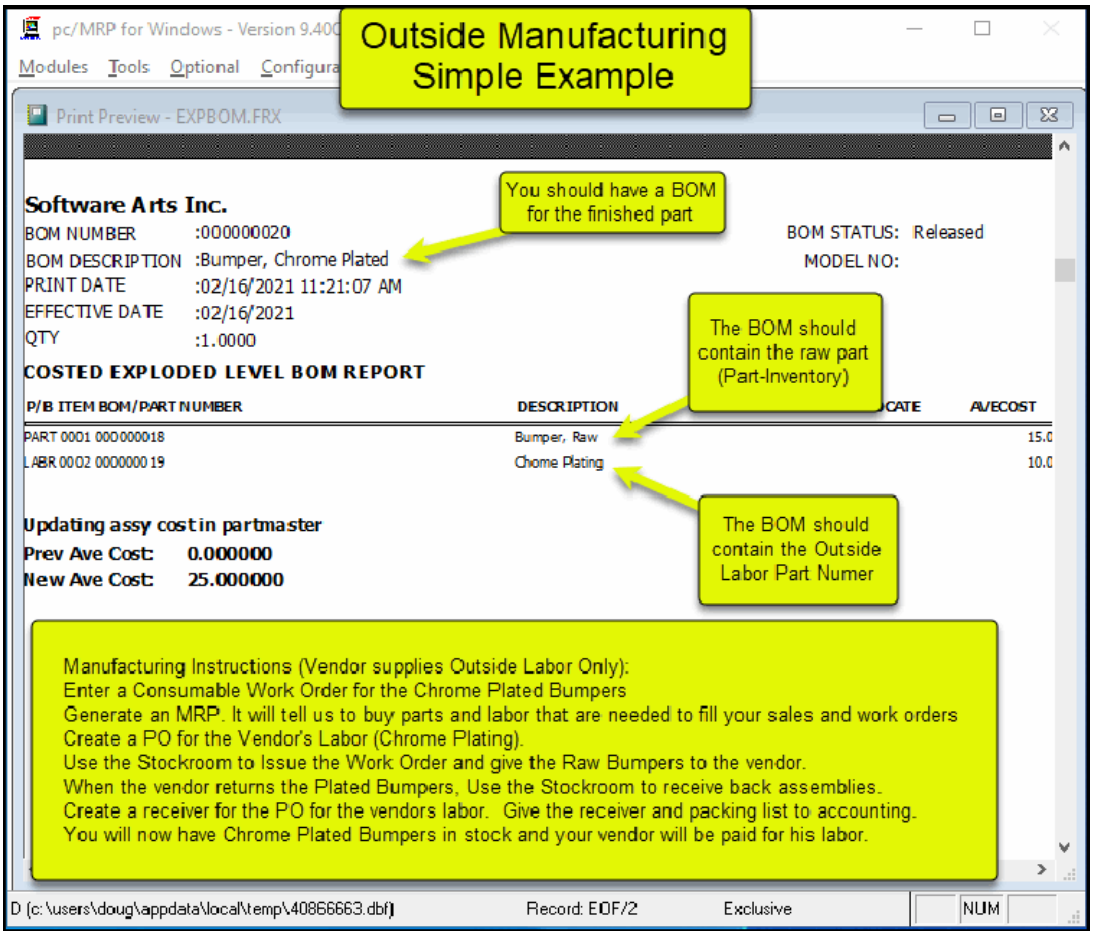
The first slide is an overview. Then as a comparison standard manufacturing is discussed (when everything is built in house).

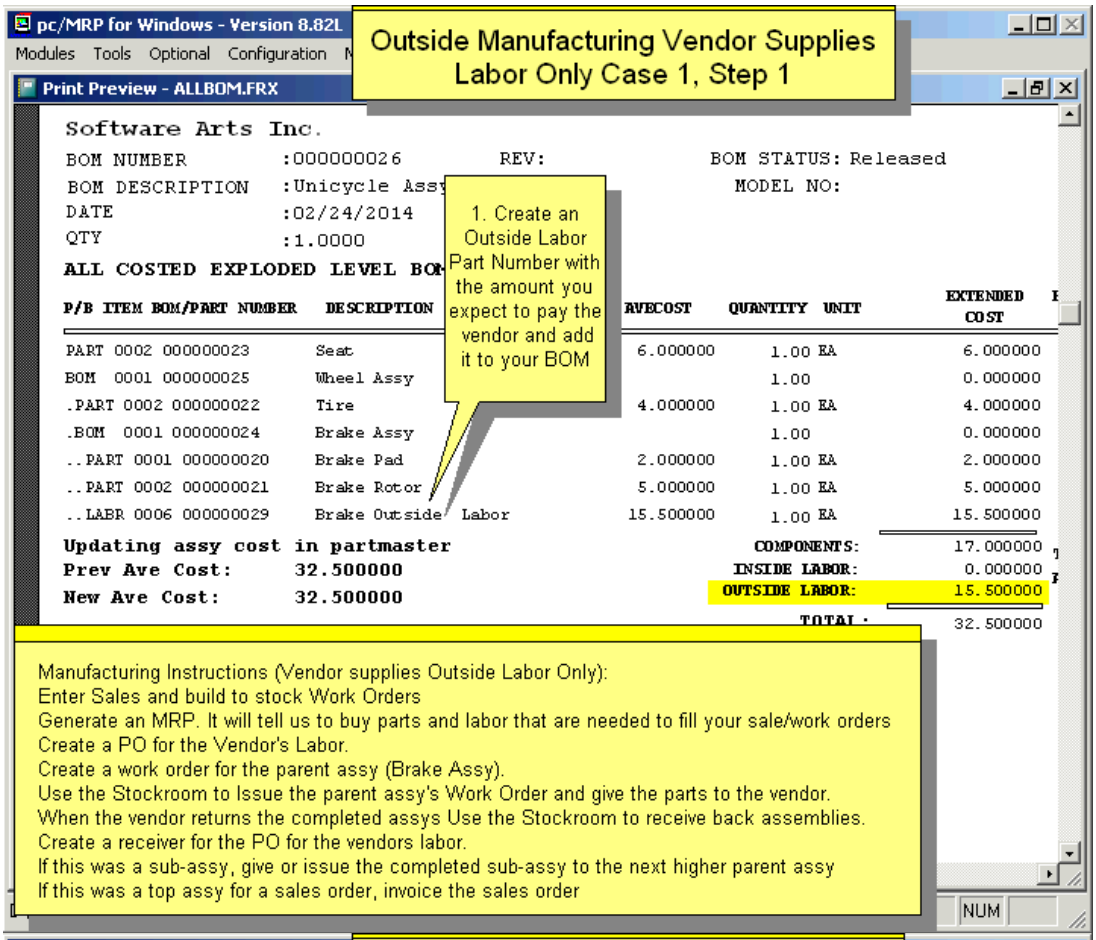
Outside Manufacturing is discussed in three different cases:

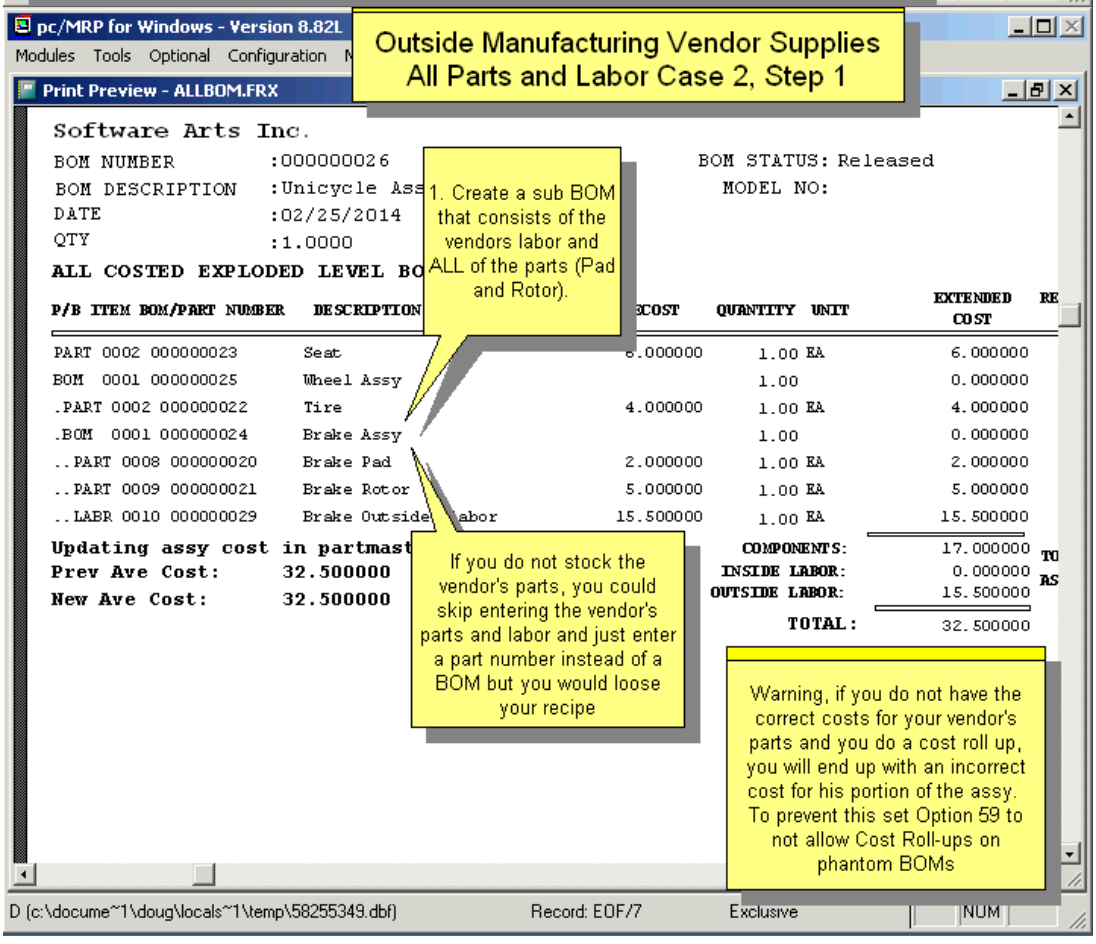
1. Vendor supplies labor only
2. Vendor supplies all parts and labor
3. Vendor supplies some parts and labor

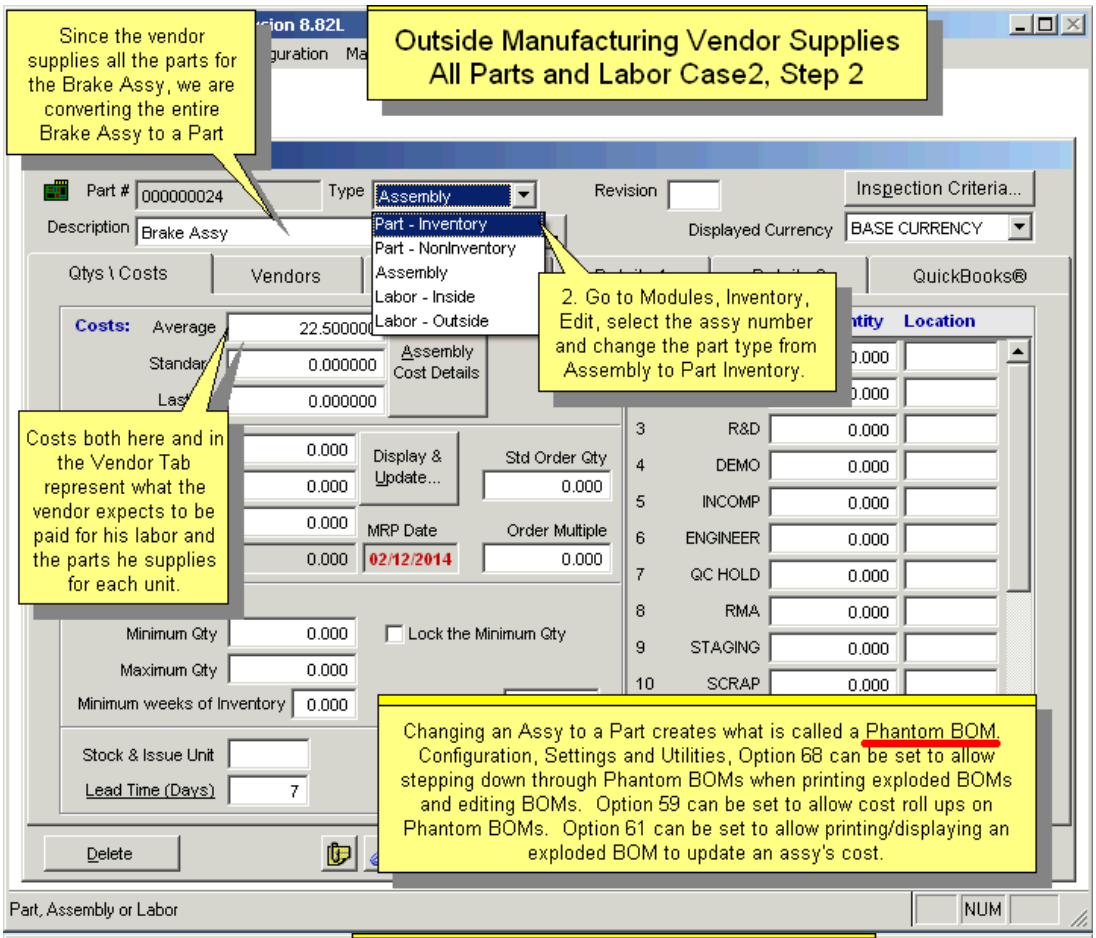


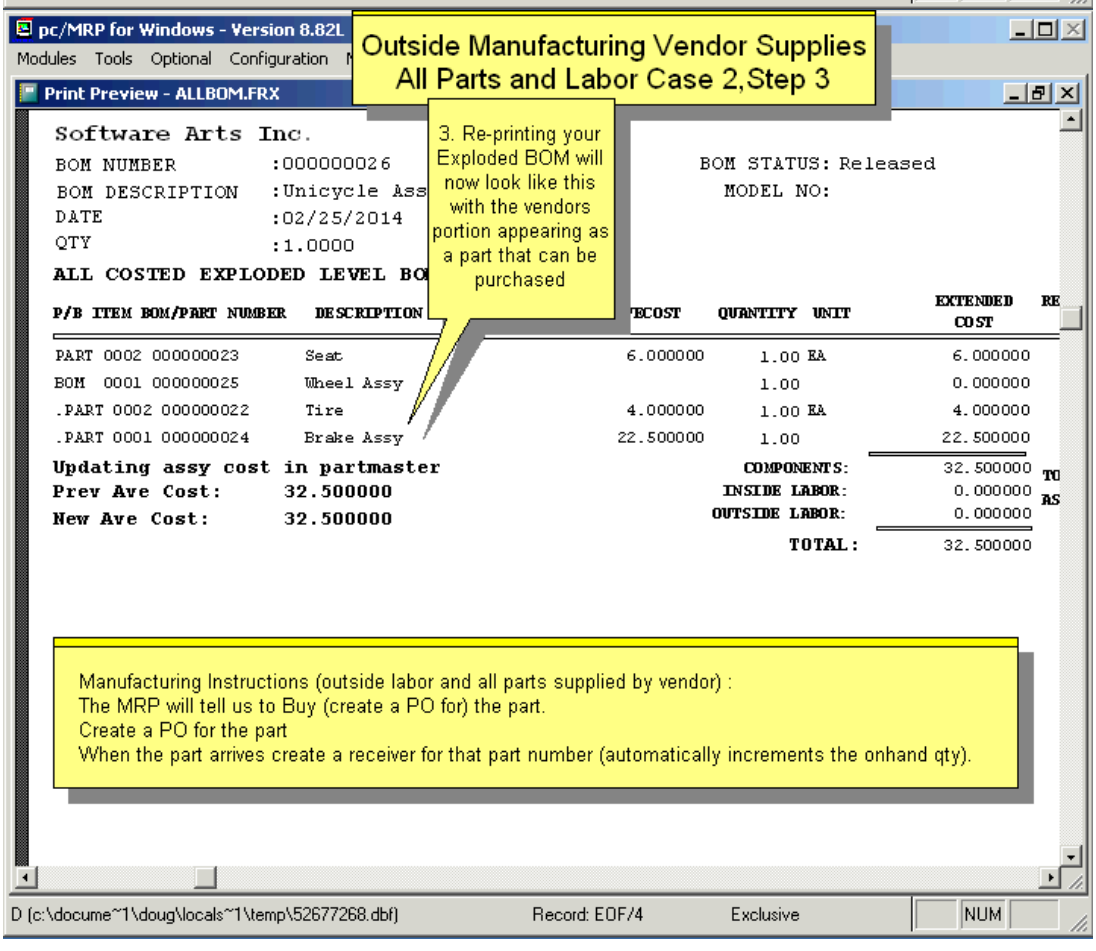

pc/MRP for Windows - Version 8.82H
Modules Tools Optional Configuration Manua
Print Preview - ALLBOM.FRX
Standard Manufacturing
Software Arts Inc.
BOM NUMBER :000000026
BOM DESCRIPTION :Unicycle Assy
DATE :02/17/2014
QTY :1.0000
ALL COSTED EXPLODED LEVEL BOM
P/B ITEM BOM/PART NUMBER DESCRIPTION AVECOST QUANTITY UNIT EXTENDED COST
PART 0002 000000023 Seat 6.000000 1.00 EA 6.000000
BOM 0001 000000025 Wheel Assy 1.00 0.000000
.PART 0002 000000022 Tire 4.000000 1.00 EA 4.000000
.BOM 0001 000000024 Brake Assy 1.00 0.000000
..PART 0001 000000020 Brake Pad 2.000000 1.00 EA 2.000000
..PART 0002 000000021 Brake Rotor 5.000000 1.00 EA 5.000000
..LABR 0005 000000027 Brake Assy Inside Labor 15.500000 1.00 HR 15.500000
Updating assy cost in partmaster
Prev Ave Cost: 32.500000
New Ave Cost: 32.500000
COMPONENTS: 17.000000
INSIDE LABOR: 15.500000
OUTSIDE LABOR: 0.000000
TOTAL: 32.500000
If you wish to include your labor costs in your total costs, add an Inside Labor Part Number for the cost of your labor to the assy.
If a company were to manufacturer the Unicycle in house, using their own purchased components and their own inside labor, the BOM would be structured as shown below.
Manufacturing Instructions (Standard Manufacturing):
Enter Sales and build to stock Work Orders
Generate an MRP. It will tell us to Buy part that are needed to fill your sale/work orders
Create a PO for necessary parts
When the POs arrive, Create Receivers for the POs .
Use the Stockroom to issue the Sales and Work Orders
Use the Stockroom to Receive back completed Sales and Work Orders
Create Invoices to ship your products
In many cases, smaller companies do not enter theoretical inside labor costs into their BOM. However larger companies may have to do so.
D (c:\docume~1\doug\locals~1\temp\76153115.dbf) Record: EOF/7 Exclusive NUM

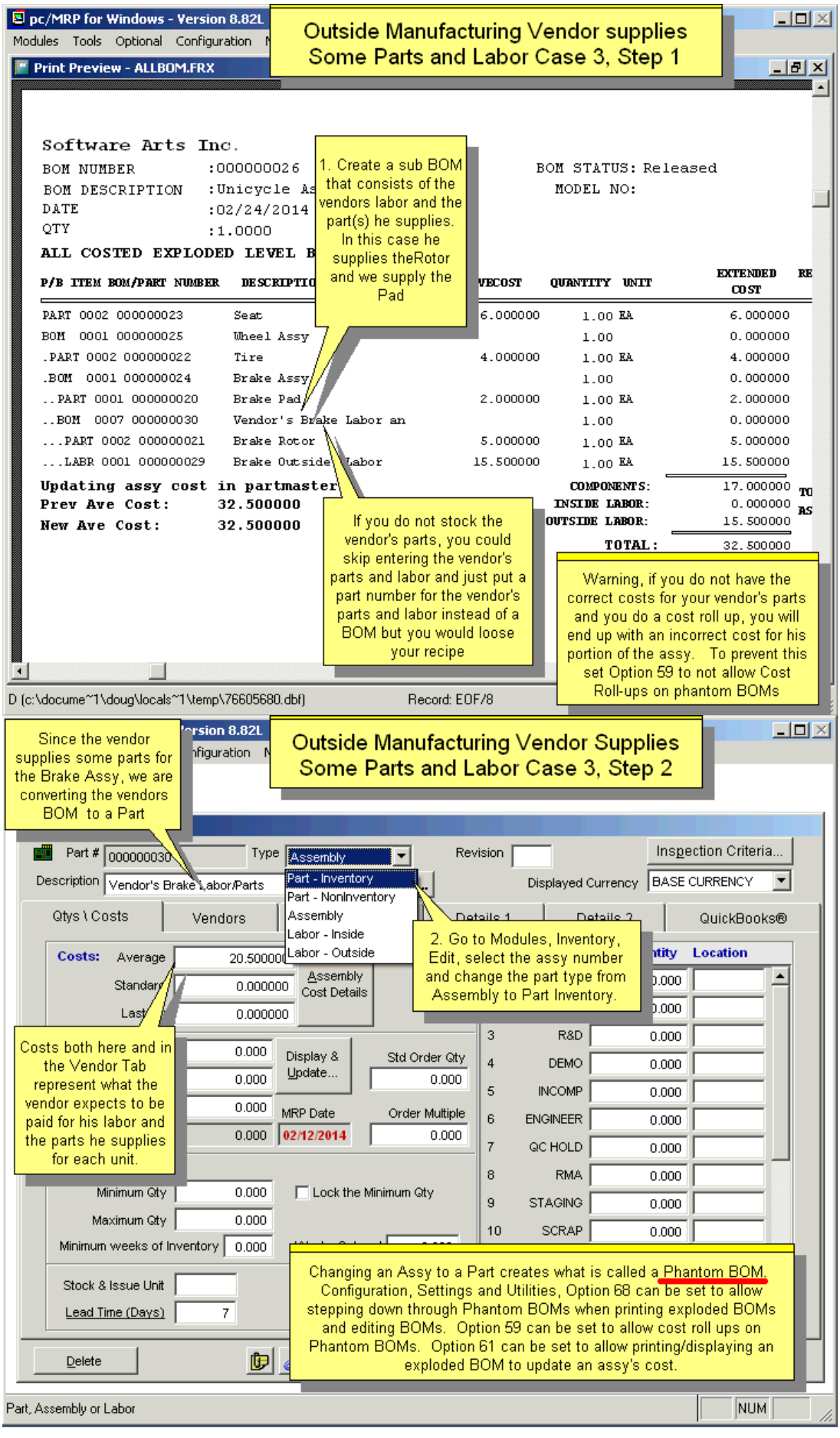

pc/MRP for Windows - Version 9.40
Modules Tools Optional Configura
Print Preview - EXPBOM.FRX
Outside Manufacturing Simple Example
Software Arts Inc.
BOM NUMBER :000000020
BOM DESCRIPTION :Bumper, Chrome Plated
PRINT DATE :02/16/2021 11:21:07 AM
EFFECTIVE DATE :02/16/2021
QTY :1.0000
BOM STATUS: Released
MODEL NO:
COSTED EXPLODED LEVEL BOM REPORT
P/B ITEM BOM/PART NUMBER DESCRIPTION AVECOST
PART 0001 000000018 Bumper, Raw 15.0
LABR 0002 0000000 19 Chome Plating 10.0
Updating assy cost in partmaster
Prev Ave Cost: 0.000000
New Ave Cost: 25.000000
You should have a BOM for the finished part
The BOM should contain the raw part (Part-Inventory)
The BOM should contain the Outside Labor Part Numer
Manufacturing Instructions (Vendor supplies Outside Labor Only):
Enter a Consumable Work Order for the Chrome Plated Bumpers
Generate an MRP. It will tell us to buy parts and labor that are needed to fill your sales and work orders
Create a PO for the Vendor's Labor (Chrome Plating).
Use the Stockroom to Issue the Work Order and give the Raw Bumpers to the vendor.
When the vendor returns the Plated Bumpers, Use the Stockroom to receive back assemblies.
Create a receiver for the PO for the vendors labor. Give the receiver and packing list to accounting.
You will now have Chrome Plated Bumpers in stock and your vendor will be paid for his labor.
D (c:\users\doug\appdata\local\temp\40866663.dbf) Record: EOF/2 Exclusive NUM

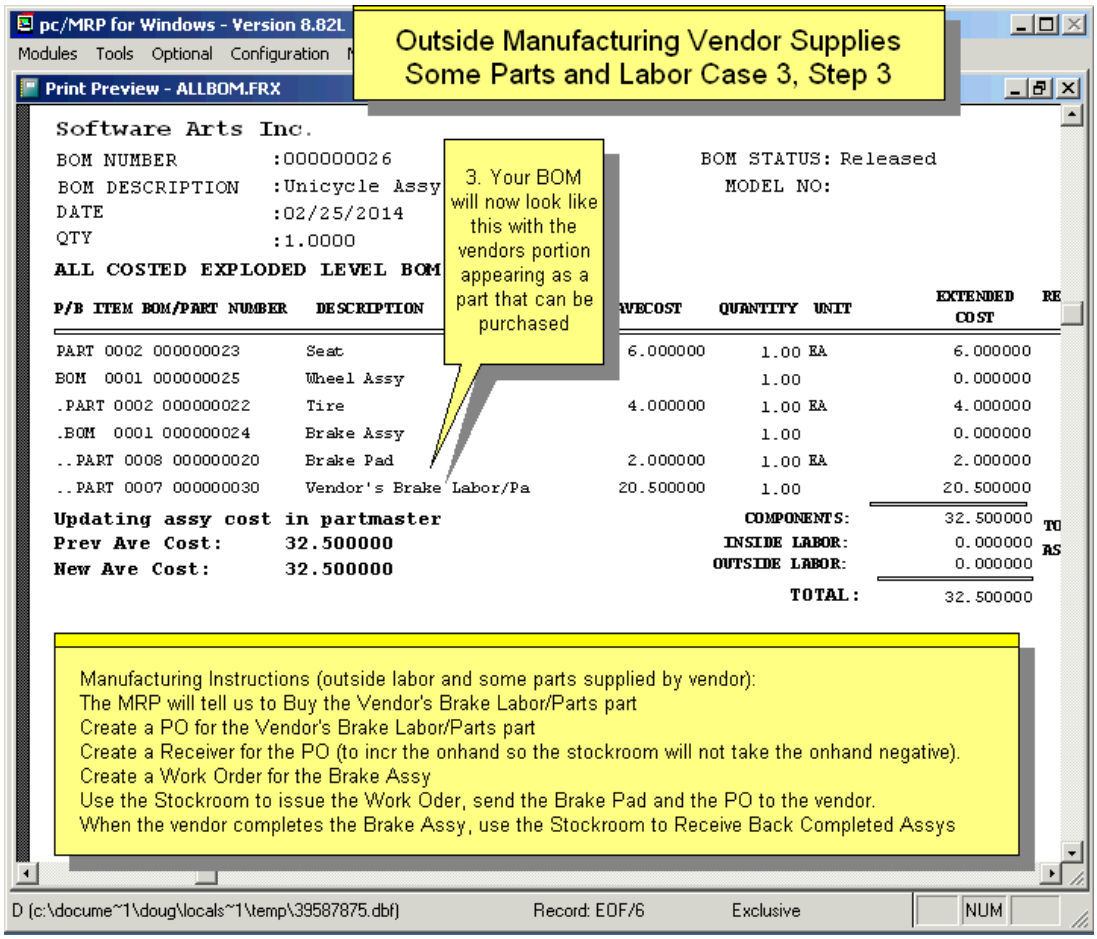

pc/MRP for Windows - Version 8.82L
Modules Tools Optional Configuration
Print Preview - ALLBOM.FRX
Outside Manufacturing Vendor Supplies
Labor Only Case 1, Step 1
Software Arts Inc.
BOM NUMBER :000000026 REV: BOM STATUS: Released
BOM DESCRIPTION :Unicycle Assy MODEL NO:
DATE :02/24/2014
QTY :1.0000
ALL COSTED EXPLODED LEVEL BOM
P/B ITEM BOM/PART NUMBER DESCRIPTION AVECOST QUANTITY UNIT EXTENDED COST
PART 0002 000000023 Seat 6.000000 1.00 EA 6.000000
BOM 0001 000000025 Wheel Assy 1.00 0.000000
.PART 0002 000000022 Tire 4.000000 1.00 EA 4.000000
.BOM 0001 000000024 Brake Assy 1.00 0.000000
..PART 0001 000000020 Brake Pad 2.000000 1.00 EA 2.000000
..PART 0002 000000021 Brake Rotor 5.000000 1.00 EA 5.000000
..LABR 0006 000000029 Brake Outside Labor 15.500000 1.00 EA 15.500000
Updating assy cost in partmaster
Prev Ave Cost: 32.500000
New Ave Cost: 32.500000
COMPONENTS: 17.000000
INSIDE LABOR: 0.000000
OUTSIDE LABOR: 15.500000
TOTAL: 32.500000
1. Create an Outside Labor Part Number with the amount you expect to pay the vendor and add it to your BOM
Manufacturing Instructions (Vendor supplies Outside Labor Only):
Enter Sales and build to stock Work Orders
Generate an MRP. It will tell us to buy parts and labor that are needed to fill your sale/work orders
Create a PO for the Vendor's Labor.
Create a work order for the parent assy (Brake Assy).
Use the Stockroom to Issue the parent assy's Work Order and give the parts to the vendor.
When the vendor returns the completed assys Use the Stockroom to receive back assemblies.
Create a receiver for the PO for the vendors labor.
If this was a sub-assy, give or issue the completed sub-assy to the next higher parent assy
If this was a top assy for a sales order, invoice the sales order
NUM


pc/MRP for Windows - Version 8.82L
Modules Tools Optional Configuration
Print Preview - ALLBOM.FRX
Outside Manufacturing Vendor Supplies
All Parts and Labor Case 2, Step 1
Software Arts Inc.
BOM NUMBER :000000026 BOM STATUS: Released
BOM DESCRIPTION :Unicycle Ass MODEL NO:
DATE :02/25/2014
QTY :1.0000
ALL COSTED EXPLODED LEVEL BO
P/B ITEM BOM/PART NUMBER DESCRIPTION COST QUANTITY UNIT EXTENDED COST
PART 0002 000000023 Seat 6.000000 1.00 EA 6.000000
BOM 0001 000000025 Wheel Assy 1.00 0.000000
.PART 0002 000000022 Tire 4.000000 1.00 EA 4.000000
.BOM 0001 000000024 Brake Assy 1.00 0.000000
..PART 0008 000000020 Brake Pad 2.000000 1.00 EA 2.000000
..PART 0009 000000021 Brake Rotor 5.000000 1.00 EA 5.000000
..LABR 0010 000000029 Brake Outside Labor 15.500000 1.00 EA 15.500000
Updating assy cost in partmast
Prev Ave Cost: 32.500000
New Ave Cost: 32.500000
COMPONENTS: 17.000000
INSIDE LABOR: 0.000000
OUTSIDE LABOR: 15.500000
TOTAL: 32.500000
1. Create a sub BOM that consists of the vendors labor and ALL of the parts (Pad and Rotor).
If you do not stock the vendor's parts, you could skip entering the vendor's parts and labor and just enter a part number instead of a BOM but you would loose your recipe
Warning, if you do not have the correct costs for your vendor's parts and you do a cost roll up, you will end up with an incorrect cost for his portion of the assy. To prevent this set Option 59 to not allow Cost Roll-ups on phantom BOMs
D (c:\docume~1\doug\locals~1\temp\58255349.dbf) Record: EOF/7 Exclusive
NUM


Outside Manufacturing Vendor Supplies
All Parts and Labor Case2, Step 2
Since the vendor supplies all the parts for the Brake Assy, we are converting the entire Brake Assy to a Part
Part # 000000024
Type Assembly
Revision
Inspection Criteria...
Description Brake Assy
Displayed Currency BASE CURRENCY
Part - Inventory
Part - NonInventory
Assembly
Labor - Inside
Labor - Outside
2. Go to Modules, Inventory, Edit, select the assy number and change the part type from Assembly to Part Inventory.
Qtys \ Costs
Vendors
QuickBooks®
Costs: Average 22.500000
Standar 0.000000
Las 0.000000
Assembly Cost Details
Location
Costs both here and in the Vendor Tab represent what the vendor expects to be paid for his labor and the parts he supplies for each unit.
Display & Update...
Std Order Qty 0.000
MRP Date 02/12/2014
Order Multiple 0.000
3 R&D 0.000
4 DEMO 0.000
5 INCOMP 0.000
6 ENGINEER 0.000
7 QC HOLD 0.000
8 RMA 0.000
9 STAGING 0.000
10 SCRAP 0.000
Minimum Qty 0.000
Lock the Minimum Qty
Maximum Qty 0.000
Minimum weeks of Inventory 0.000
Stock & Issue Unit
Lead Time (Days) 7
Changing an Assy to a Part creates what is called a Phantom BOM. Configuration, Settings and Utilities, Option 68 can be set to allow stepping down through Phantom BOMs when printing exploded BOMs and editing BOMs. Option 59 can be set to allow cost roll ups on Phantom BOMs. Option 61 can be set to allow printing/displaying an exploded BOM to update an assy's cost.
Delete
Part, Assembly or Labor
NUM


pc/MRP for Windows - Version 8.82L
Modules Tools Optional Configuration
Outside Manufacturing Vendor Supplies
All Parts and Labor Case 2,Step 3
Print Preview - ALLBOM.FRX
3. Re-printing your Exploded BOM will now look like this with the vendors portion appearing as a part that can be purchased
Software Arts Inc.
BOM NUMBER :000000026
BOM DESCRIPTION :Unicycle Ass
DATE :02/25/2014
QTY :1.0000
BOM STATUS: Released
MODEL NO:
ALL COSTED EXPLODED LEVEL BO
P/B ITEM BOM/PART NUMBER DESCRIPTION ECOST QUANTITY UNIT EXTENDED COST RE
PART 0002 000000023 Seat 6.000000 1.00 EA 6.000000
BOM 0001 000000025 Wheel Assy 1.00 0.000000
.PART 0002 000000022 Tire 4.000000 1.00 EA 4.000000
.PART 0001 000000024 Brake Assy 22.500000 1.00 22.500000
Updating assy cost in partmaster
Prev Ave Cost: 32.500000
New Ave Cost: 32.500000
COMPONENTS: 32.500000
INSIDE LABOR: 0.000000
OUTSIDE LABOR: 0.000000
TOTAL: 32.500000
Manufacturing Instructions (outside labor and all parts supplied by vendor) :
The MRP will tell us to Buy (create a PO for) the part.
Create a PO for the part
When the part arrives create a receiver for that part number (automatically increments the onhand qty).
D (c:\docume~1\doug\locals~1\temp\52677268.dbf)
Record: EOF/4
Exclusive
NUM


pc/MRP for Windows - Version 8.82L
Modules Tools Optional Configuration
Print Preview - ALLBOM.FRX
Outside Manufacturing Vendor supplies Some Parts and Labor Case 3, Step 1
Software Arts Inc.
BOM NUMBER :000000026
BOM DESCRIPTION :Unicycle As
DATE :02/24/2014
QTY :1.0000
BOM STATUS: Released
MODEL NO:
ALL COSTED EXPLODED LEVEL B
P/B ITEM BOM/PART NUMBER DESCRIPTIO VECOST QUANTITY UNIT EXTENDED COST RE
PART 0002 000000023 Seat 6.000000 1.00 EA 6.000000
BOM 0001 000000025 Wheel Assy 1.00 0.000000
.PART 0002 000000022 Tire 4.000000 1.00 EA 4.000000
.BOM 0001 000000024 Brake Assy 1.00 0.000000
..PART 0001 000000020 Brake Pad 2.000000 1.00 EA 2.000000
..BOM 0007 000000030 Vendor's Brake Labor an 1.00 0.000000
...PART 0002 000000021 Brake Rotor 5.000000 1.00 EA 5.000000
...LABR 0001 000000029 Brake Outside Labor 15.500000 1.00 EA 15.500000
Updating assy cost in partmaster
Prev Ave Cost: 32.500000
New Ave Cost: 32.500000
COMPONENTS: 17.000000
INSIDE LABOR: 0.000000
OUTSIDE LABOR: 15.500000
TOTAL: 32.500000
1. Create a sub BOM that consists of the vendors labor and the part(s) he supplies. In this case he supplies theRotor and we supply the Pad
If you do not stock the vendor's parts, you could skip entering the vendor's parts and labor and just put a part number for the vendor's parts and labor instead of a BOM but you would loose your recipe
Warning, if you do not have the correct costs for your vendor's parts and you do a cost roll up, you will end up with an incorrect cost for his portion of the assy. To prevent this set Option 59 to not allow Cost Roll-ups on phantom BOMs
D (c:\docume~1\doug\locals~1\temp\76605680.dbf)
Record: EOF/8
Outside Manufacturing Vendor Supplies Some Parts and Labor Case 3, Step 2
Since the vendor supplies some parts for the Brake Assy, we are converting the vendors BOM to a Part
Part # 000000030
Type Assembly
Revision
Inspection Criteria...
Description Vendor's Brake Labor/Parts
Part - Inventory
Part - NonInventory
Assembly
Labor - Inside
Labor - Outside
Displayed Currency BASE CURRENCY
2. Go to Modules, Inventory, Edit, select the assy number and change the part type from Assembly to Part Inventory.
Qtys \ Costs
Vendors
Details 1
Details 2
QuickBooks®
Costs: Average 20.500000
Standard 0.000000
Last 0.000000
Assembly Cost Details
Location
Costs both here and in the Vendor Tab represent what the vendor expects to be paid for his labor and the parts he supplies for each unit.
Display & Update...
Std Order Qty 0.000
MRP Date 02/12/2014
Order Multiple 0.000
3 R&D 0.000
4 DEMO 0.000
5 INCOMP 0.000
6 ENGINEER 0.000
7 QC HOLD 0.000
8 RMA 0.000
9 STAGING 0.000
10 SCRAP 0.000
Minimum Qty 0.000
Lock the Minimum Qty
Maximum Qty 0.000
Minimum weeks of Inventory 0.000
Stock & Issue Unit
Lead Time (Days) 7
Delete
Changing an Assy to a Part creates what is called a Phantom BOM. Configuration, Settings and Utilities, Option 68 can be set to allow stepping down through Phantom BOMs when printing exploded BOMs and editing BOMs. Option 59 can be set to allow cost roll ups on Phantom BOMs. Option 61 can be set to allow printing/displaying an exploded BOM to update an assy's cost.
Part, Assembly or Labor
NUM


pc/MRP for Windows - Version 8.82L
Modules Tools Optional Configuration
Print Preview - ALLBOM.FRX
Outside Manufacturing Vendor Supplies Some Parts and Labor Case 3, Step 3
3. Your BOM will now look like this with the vendors portion appearing as a part that can be purchased
Software Arts Inc.
BOM NUMBER :000000026
BOM DESCRIPTION :Unicycle Assy
DATE :02/25/2014
QTY :1.0000
BOM STATUS: Released
MODEL NO:
ALL COSTED EXPLODED LEVEL BOM
P/B ITEM BOM/PART NUMBER DESCRIPTION AVECOST QUANTITY UNIT EXTENDED COST RE
PART 0002 000000023 Seat 6.000000 1.00 EA 6.000000
BOM 0001 000000025 Wheel Assy 1.00 0.000000
.PART 0002 000000022 Tire 4.000000 1.00 EA 4.000000
.BOM 0001 000000024 Brake Assy 1.00 0.000000
..PART 0008 000000020 Brake Pad 2.000000 1.00 EA 2.000000
..PART 0007 000000030 Vendor's Brake Labor/Pa 20.500000 1.00 20.500000
Updating assy cost in partmaster
Prev Ave Cost: 32.500000
New Ave Cost: 32.500000
COMPONENTS: 32.500000
INSIDE LABOR: 0.000000
OUTSIDE LABOR: 0.000000
TOTAL: 32.500000
Manufacturing Instructions (outside labor and some parts supplied by vendor):
The MRP will tell us to Buy the Vendor's Brake Labor/Parts part
Create a PO for the Vendor's Brake Labor/Parts part
Create a Receiver for the PO (to incr the onhand so the stockroom will not take the onhand negative).
Create a Work Order for the Brake Assy
Use the Stockroom to issue the Work Oder, send the Brake Pad and the PO to the vendor.
When the vendor completes the Brake Assy, use the Stockroom to Receive Back Completed Assys
D (c:\docume~1\doug\locals~1\temp\39587875.dbf)
Record: EOF/6
Exclusive
NUM

### 15.9.3 Consignment Inventory

One method to handle consignment and your own inventory would be to assign the first 4 characters (3 letters and a hyphen) of a part number to identify the company who owns the part. You would then set the product code portion of the part number to 4 characters. The remaining characters in the part number would identify the part number.

For example:

Let's assume the name of your company is Jurong Manufacturing.
Let's assume the name of one of your customers that provides you with consignment parts, is ABC.
You could use the configuration menu, **Option 29**, to define the product code size as 4 characters.
You could use the configuration menu, to define the total length of your part number to 10 characters
You and other customers use and inventory a 5-ohm 1/4 watt resistor.
You could assign your part number for the 5-ohm resistor as JUR-000055 with a cost of 25 cents apiece
You would then assign ABC's part number for the same 5-ohm resistor as ABC-000055 with a cost of 0 cents apiece

The above method has the following advantages:

- Inventory can be printed out for a specified customer (All inventory for a specified product code)
- Customer's inventory could be tracked throughout the system by placing POs for customer inventory ($0.00 unit cost). This can then be received by receiving and issued by manufacturing to help track of inventory movements.
- When you purchase inventory that you are footing the bill for, you would purchase the JUR- part, which has a real cost which will not foul up your inventory valuation, as the JUR- parts would contain real unit costs and the customer parts would contain $0.00 unit costs.
- If you did need to borrow parts to complete a job you would know the equivalent part numbers automatically.

### 15.9.4.0 Return Material Authorizations, RMA(s)

An on-line slideshow with step-by step instructions is located here:
http://www.pcmrp.com/mrp101/rmasetupoption34.htm

This example will be useful in most cases. Please also read all the following alternate methods below to be able to select the best method for your company and your situation.

As an alternative, you could use a credit memo, instead of a PO and Receiver to receive back the assy into an Area named RMA. The credit memo module works with Serial Lot Numbers.

If your customer has not paid the original invoice and you can select option 3 and attach the credit memo to the original invoice.

If your customer has paid the original invoice but has an open invoice you can select option 3 and attach the credit memo to the open invoice.

If the customer has paid the original invoice and does not have an open invoice your would have to select option 1 and create and independent credit memo for later use.

The above method assumes the part being returned is an assembly. If the part being returned is a component part and you plan to repair and return it, use Notepad to create a file named **AllowPartIssRec.flg** in the pc/MRP directory. This will allow the stockroom module to receive back a part.

**15.9.4.1 RMA Method 1 (Stock Adj Tran into RMA Area, Sales Order Y Iss to Mfg, Stock L, R and Invoice)**

1. Use a Stockroom Adjusting Transaction to receive the part or assy back from the customer
   a. Adjust the qty up by 1 in the area named RMA. Do not include the RMA area when generating an MRP.
   b. If this is a serialized assembly and the part was at the customer's site, the master SnLot qty will = 0. pc/MRP will create an J-Adjustment SnLotDet Record and increase the SnLot Master Record by +1.
2. Create a sales order for the assy or part
   a. Use the Sales Order Module to create a sales order for the assembly for $0.00 or more. Insert a Y into the sales order's Issue to Manufacturing Field (This will allow the stockroom to issue L Lower level parts to it and shield it from MRP).
3. Scrap or Repair the assy or part
   a. Scrap
      1. Use the Stockroom Module's Adjust Qty to adjust the qty down.
      2. If this is a serialized item, this will create a J-Adjustment SnLotDet Record and decrement the SnLot Master Record by -1
      3. Go to Invoicing and invoice them for $0.00 or more for a new part or assembly
   b. Repair
      1. Use the Stockroom Module's L type issue option to issue the returned assy or part, Select the RMA Area, and issue the completed assembly. This will decrement the qty in RMA by 1 and increase the qty in WIP.
      2. If this is a serialized item, pc/MRP will create an S-Stock Issue SnLotDet Record and decrement the the master SnLot Record by -1.
      3. Issue any additional parts from the stores area required to repair the part.
      4. When you are ready to receive back the repaired part or assy
         a. Use the Stockroom Module's R-Receive Back Assys from Mfg. This will increment the RMA qty by 1 and decrement the qty in WIP by 1.
         b. If this is a serialized item, pc/MRP will create an M Received back from Mfg SnLotDet Record and increment the master Snlot Record qty by +1. Do not check the Assign Component Serial Numbers at this point.
      5. Go to Invoicing and invoice them for $0.00 or more for the same part or assembly
4. Invoicing the repaired (or new) part or assembly or part
   a. Use the Invoice Module to invoice the new or repaired part or assembly. This will decrement the onhand qty of this part in the RMA area.
   b. If this is a serialized part, pc/MRP will create a new I Invoice SnLotDet Record and decrement the SnLot Master Record qty by – 1
5. Serialization
   a. If this is a serialized part or sub-assy and it is inserted into the same parent assembly serial number that it came from do nothing.
   b. If you sent a part or sub-assy with a different serial number than the part or sub-assy that was sent back to you, use the Change Serial Number Assignments Option, enter the original Child Part # and the original Child Serial Number, pc/MRP will display the parent assy and all its serialized children with the same part number. Select the original Child Serial Number, select Swap, select Normal to scrap the original child or Disassociation if the child can be used again elsewhere, and select newly invoiced

The above method assumes the part being returned is an assembly. If the part being returned is a component part and you plan to repair and return it, use Notepad to create a file named **AllowPartIssRec.flg** in the pc/MRP directory. This will allow the stockroom module to receive back a part.

**15.9.4.2 RMA Method 2 (PO w Y comp,Recv to RMA Area, Sales Order w Y in Iss to Mfg, Stock L,R, Invoice)**

1. Create a PO for the assembly
   a. Use the Purchase Order Module to create a PO for the sub-assy for $0.00. Mark the PO as complete by entering a Y in the complete field (This will shield the PO from MRP).
   b. If this is a serialized assembly, the SnLot master qty will equal 0 as this assembly is at the customers site.
2. Receive the assembly
   a. Use the Receiving Module to receive the assembly. Receive the assembly into an area named RMA. Do not include the RMA area when generating an MRP. Allow pc/MRP to proceed with a cost roll up to negate the $0.00 cost. Mark the receiver as Complete.
   b. If this is a serialized assemby, pc/MRP will create an R-Receive SnLotDet Record and increase the SnLot Master Record by +1.
3. Create a sales order for the assembly
   a. Use the Sales Order Module to create a sales order for the assembly for $0.00 or more. Insert a Y into the Issued to Manufacturing Field (This will allow the stockroom to issue L Lower level parts to it and shield it from MRP).
4. Scrap or Repair the assembly
   a. Scrap
      i. Use the Stockroom Module's Adjust Qty to adjust the qty down.
      ii. If this is a serialized item, this will create a J-Adjustment SnLotDet Record and decrement the SnLot Master Record by -1
      iii. Go to Invoicing and invoice them for $0.00 or more for a new part or assembly
   b. Repair
      i. Use the Stockroom Module's L type issue option to issue the returned assembly, Select the RMA Area, and issue the completed assembly. This will decrement the qty in RMA by 1.
      ii. If this is a serialized item, pc/MRP will create an S-Stock Issue SnLotDet Record and decrement the the master SnLot Record by -1.
      iii. Issue any additional parts from the stores area required to repair the part.
      iv. When you are ready to receive back the repaired assembly
         1. Use the Stockroom Module's R-Receive Back Assys from Mfg. This will increment the RMA qty by 1
         2. If this is a serialized item, pc/MRP will create an M Receiver back from Mfg SnLotDet Record and increment the master Snlot Record qty by +1. Do not check the Assign Component Serial Numbers at this point.
      v. Go to Invoicing and invoice them for $0.00 or more for the same part or assembly.
5. Invoicing the repaired or new assembly
   a. Use the Invoice Module to invoice the new or repaired assembly. This will decrement the onhand qty of this part in the RMA area.
   b. If this is a serialized part, pc/MRP will create a new I Invoice SnLotDet Record and decrement the SnLot Master Record qty by – 1
6. Serialization
   a. If this is a serialized sub-assy and it is inserted into the same parent assembly serial number that it came from do nothing.
   b. If you sent a sub-assy with a different serial number than the sub-assy that was sent back to you, use the Change Serial Number Assignments Option, enter the original Child Part # and the original Child Serial Number, pc/MRP will display the parent assy and all its serialized children with the same part number. Select the original Child Serial Number, select Swap, select Normal to scrap the original child or Disassociation if the child can be used again elsewhere, and select newly invoiced

The above method assumes the part being returned is an assembly. If the part being returned is a component part and you plan to repair and return it, use Notepad to create a file named **AllowPartIssRec.flg** in the pc/MRP directory. This will allow the stockroom module to receive back a part.

**15.9.4.3 pc/MRP's method 3 to handle RMA(s) - An assembly is returned, rebuilt and sent back to customer**

1. This step is optional.
   a. Enter one or more RMA part numbers into pc/MRP's Inventory Module as an Assembly Type part number (e.g. 999999 & description RMA) with a unit cost of $0.00 or higher.
   b. Enter a $0.00 or higher PO for the RMA part number with the customer listed as the vendor (if you were to enter a PO for the real part number, pc/MRP's MRP Module would think the real part number is on order).
   c. When you receive the RMA part back from the customer, enter a receiver for that PO with the RMA part number (if you were to receive back the real part number, pc/MRP would perform a cost average on the real part number). For all remaining instructions use the "real" part number.
2. Enter a sales order for $0.00 or more to the customer for the "real" part or assembly number. Click on the Item Info Tab and put a capital "Y" in the Issued to MFG text box. If you do not enter the 'Y', pc/MRP's MRP Module would think you have demand for that assembly and create buy action items for the components.
3. If you skipped step 1:
   a. When the part arrives, enter a new Stockroom 'A' - Adjusting transaction for the real part number. This will increase the quantity on hand for that part number.
   b. If the part is a serialized item, pc/MRP will prompt "Enter Serial/Lot Numbers for this part number". Click on No as we do not want this serial number to be available to another sales order until it is repaired.

   If you did not skip step 1:
   a. Enter a new Stockroom 'L' type transaction and issue the part number that you received back, as an "Assembly", to the sales order. This will decrease the quantity on hand for that part number and increase the quantity in WIP.
   b. If the part is a serialized item, Press the Skip button and do not select a serial number.
4. **Note:** Including step 3 requires more work but would have the advantage of creating a serial lot number record of the part being received in the form of an adjusting transaction and another serial lot number record showing it being issued immediately to manufacturing for repair. If you use step 3, set **Option 55** to "Off" and "Invoiced item and sub-components".
5. If you need to issue parts to repair the returned assembly, use the Stockroom's 'L' type transactions to issue parts to the sales order. **Note:** Time spent repairing the item can be entered into pc/MRP's Employee Time Sheet module.
6. After the repair is complete use the Stockroom's 'R' type transaction to return the completed assembly back from manufacturing. This will reduce the quantity of parts in WIP and increase the quantity on hand of the repaired assembly. If you did not simply add parts but also removed (exchanged) parts, enter an A type stockroom transaction to add those parts back into Stores (or Scrap if that's what you need to do). If the part is a serialized item, enter the serial number. This will create a "Receive from Manufacturing" Serial Lot Number detail record and increase the on hand quantity for that serial number
7. Create an Invoice for the original sales order. This will close the sales order decrease the quantity on hand. If the part is a serialized item, select the serial number you plan to ship. This will create an "Invoice" Serial Lot Number detail record and decrease the on hand quantity for that serial number. The serial number(s) will print out on the invoice if **Option 55** is set to do so.
8. If the invoice has an amount other than $0.00, Accounting would enter an 'O' type transaction to post the invoice. (Charging for fixing, e.g. labor & parts)

   DEBIT A/R $0.00 or amount of charge.
   DEBIT COGS or RMA cost of goods sold for the $ amount of the parts.

   CREDIT Business Income $0.00
   CREDIT Inventory for $ amount of parts

pc/MRP's Stockroom and Employee Time Sheet Module would provide time and material costs for each the RMA sales order. pc/MRP's Accounting Reports, Cost of Sales Report, would provide combined material and time costs for RMA sales orders.

You can set the stockroom's issue 'L' type transactions to automatically insert a 'Y' into the sales order's Issued To Manufacturing Field, by creating a file named **LIssuPWo.Flg** in the pc/MRP Directory. We do not recommend creating this file as it prevents a safety check against people accidentally entering 'L' type transactions and no initial 'I' type transactions for standard sales and work orders.

The above method assumes the part being returned is an assembly. If the part being returned is a component part and you plan to repair and return it, use Notepad to create a file named **AllowPartIssRec.flg** in the pc/MRP directory. This will allow the stockroom module to receive back a part

**15.9.4.4 pc/MRP's method 4 to handle RMA(s) - An assembly is returned, rebuilt and sent back to customer**

(Courtesy of John Lee, Focus Medical)

1. Create a purchase order using the following information:
   a.) Purchase Vendor is RMA001.
   b.) Use the address lookup function to set the "ship to" as the customer's Business.
   Use CP as the part number of the item.
   Modify the description to put the actual item information for example
   "IPL returned for repair" or
   "Hand Piece for Lamp replacement".
2. Receive the customer owned goods using a standard receiver.
   a.) Create a Sales Order to the customer.
   Place the CP item on the Sales order with the same description.
   b.) Create an In House Repair Record (a paper document that will be attached to the device) with the customer's information.
   c.) Evaluate the returned goods to provide an estimate of the costs and a recommendation for the customer as to the next steps.
   d.) Call the customer to ask for approval for the work to be performed.
   e.) Repeat the above steps if needed for secondary work.
   f.) Use the in house repair record to add work done and parts used to the sales order as separate line items.
   Note that all parts used must be added to the sales order even if we are not charging for the work or the parts (warranty situation).
   g.) Call the customer and determine the payment method, shipping method and shipping charges.
3. Invoice the sales order and ship the goods back to the customer.

The RMA process is now complete for this item.

**15.9.4.5 pc/MRP's method 5 to handle RMA(s) - Repair an assembly that you do not build**

1. Create a Sales Order with line item 0001 as an "NA" partnumber and a description of the item being repaired. Add to the comments area any parts you already know you will need.
2. Print out and give the Sales Order to the person making the repairs.
3. Add line items of parts you use to repair the unit listed in line 0001. Also add the repair labor (which is an inside labor part number).
4. When you are finished repairing the unit and have entered the last Sales Order line item, invoice the Sales Order.

**Note:** No need to 'Issue' to WIP. Watch out for the fact that parts in inventory are not reduced until you Invoice the Sales Order. To alleviate this situation, you could, right before entering a Sales Order line item, create a Stockroom 'B' transaction moving the qty to a different storage area (this area could be named 'RMA'). Then when you Invoice the Sales Order to ship the repaired item, you would invoice from the RMA area instead of the normal 'Stores' area.

**15.9.4.6 pc/MRP's method 6 to handle RMA(s) - Create a custom BOM**

**1. Create a new BOM consisting of just the parts that will be required to repair the assembly.**
**2. Create a new sales order for that customer and that BOM for $0.00 or more.**
**3. Use pc/MRP's Stockroom Module's I Issue option to issue the BOM to the sales order.**
**4. Use the Stockroom Module's L option to issue additional unexpected parts to the sales order.**
**5. When the unit is rebuilt use the Stockroom Module's R Receive Back Option to receive back the sales order.**
**6. Invoice and ship the sales order for $0.00 or more.**

**15.9.4.7 pc/MRP's method 7 to handle RMA(s) - Companies using no serialization (also see 15.9.4.9)**

**Note:** If using average costs, make sure that in the Configuration Menu, in Option 61, the Receiving Assemblies checkbox is unchecked. If you still wish to leave these boxes checked call Software Arts, Inc. before performing this process or see Section 15.9.4.8 below.

Enter a PO (customer is vendor in this case) for the real part number. The cost can be $0.00 unit cost.
When the part arrives receive it. (increments the on hand qty)
Enter a sales order for $0.00 or more for the "real" part number. Put a Y in the sales order Issued to MFG Field.
Use Stockroom's L transactions to issue the returned part and other parts to the sales order (dcr onhand,incr wip).
Once it is repaired, use Stockroom's R Transaction to receive back the part back (incrs on hand qty, dcrs wipqty)
Invoice the sales order for $0.00 or more (decrements on hand qty).

**15.9.4.8 pc/MRP's method to handle re-work (also see 15.9.4.9)**

This method is for handling re-work on an assembly that for example did not pass inspection. **Note:** If using average costs, make sure that in the Configuration Menu, Option 61, the Receiving Assemblies from Manufacturing checkbox is unchecked. If you still wish to leave these boxes checked call Software Arts, Inc. before performing this process or see Section 15.9.4.8 below.

1. If there is a sales order for this assembly, check the Hold check box on that sales order.
2. Create a work order for this assembly. Before saving it, on the Item Info tab change "Issued to MFG" to a Y.
3. Enter an L-type (not I-type!) stockroom transaction to issue this top assembly to the new WO. When asked, select to issue the complete assembly.
4. Issue additional parts using L-type transactions, as needed.
5. Enter R-type stock transaction to receive back WO from MFG.
6. Uncheck the Hold check box on the sales order.

**15.9.4.9 If performing the processes described in section 7 or 8**

If using average costs, make sure that in the Configuration Menu, in Option 61, the Receiving Assemblies checkbox is unchecked. If you still wish to leave these boxes checked call Software Arts, Inc. before performing this process. In this process the top assembly itself is being issued to the work order. The top assembly cost already includes any outside labor cost, and receiving it back from MFG via an "R" stock transaction doubles up on the outside labor cost, making the average cost erroneously higher. To prevent this, BEFORE receiving back from MFG, edit the stockroom transaction that issued the top-assembly to the WO. Decrease the assembly cost by the outside labor cost the BOM includes. Explain in a comment.

**15.9.5 Issuing Tools to Manufacturing**

One method to handle tools would be to use the stockroom to do an "L" type issue to issue the tool(s) to a sales or work order. However, you must remember to do a "U", return unused parts to inventory, before your do the "R" to receive the completed assembly or your tools will be consumed in the build.

### 15.9.6 Advanced Replacement for Customer Return

An advanced replacement is when a customer requests a part prior to sending in the same part for repair or replacement.

1. Create generic or specific RMA partnumber(s) for $0.00 cost (must be an assy if real part is an assy).
2. Create a PO for the RMA partnumber, not the actual partnumber, at $0.00 to the Customer returning the part.
3. Create a SO for the actual partnumber to the customer at current price or $0, on account and carry so that an invoice is created. Enter the serial number if needed. Do not post invoice if there is a dollar amount on it!
4. Receive the PO for the RMA partnumber from customer into a stores area noting serial number if needed.
5. If the invoice has a dollar amount, enter a credit memo against the received items and post the invoice and credit memo.
6. Create a WO for the RMA partnumber.
7. Use a Stockroom 'L' type transaction for the parts needed to repair the RMA partnumber, or an 'L' type transaction if a Repair Kit is used.
8. Create a Stockroom 'R' type transaction to receive back the RMA partnumber. PCMRPW directory must contain a file named LIssUpWo.flg (can be created with Notepad but avoid giving a .txt extension). This will put a Y in the isstomfg field in the WO allowing it to be received back.
9. If the part is repaired, do a Stockroom 'A' type transaction to increase the onhand quantity of the 'real' partnumber sent to the customer in step 3. If the RMA partnumber is scrapped and you have a scrap stores area, the 'A' type description for the real partnumber should increase the Scrap area quantity. If no scrap area, do not do an 'A' type transaction.

### 15.9.7 Advanced Shipment of Sub-assemblies

An advanced shipment of sub-assemblies is when a customer requests the sub-assemblies shipped prior to shipping the top-level assembly listed on the sales order.

First create a stores area called "PRESHP".

1) Create the Sales Order (Order Entry sale type) for the Top Level Assembly with a date required.
2) Create a Work Order for the Sub-assembly
    a. For a quantity required by the Top Level Assembly
    b. A date required prior to the date required of Top Level Assembly
    c. Check the box for consumable.
3) Generate the MRP Infinite Bucket to get the dates needed for issuing and building both the Sales Order & Work Order. Do not include the PRESHP area.
4) Issue the Work Order from STORES and receive back into PRESHP.
5) When you are shipping the Sub-assembly:
    a. Create a Sales Order (On Account & Carry sale type) for a part number of "NA"
    b. A description of the Sub-assembly
    c. Quantity you are shipping (this will not reduce the quantity of the Sub-assembly in PRESHP as you have a "NA" part number)
    d. Use a zero Sale Price on the line item and a zero Purchase Cost on the Accounting tab
    e. Include comments noting this is a pre-shipment of Sub-assemblies for the final Top Level Assembly Sales Order "XXXXXX"
6) Prior to issuing the Top Level Assembly to manufacturing:
    a. Create a stockroom "B" type transaction, moving the Sub-assembly (quantity from PRESHP to STORES
    b. Create a Stockroom "I" type transaction, remember to select the choice for "Assembly (If available), then Component Parts" (this is default). This will issue the Sub-assemblies previously built and reduce the Sub-assembly quantity in STORES.
7) Receive back the completed Top Level Assembly and invoice the customer, reducing the quantity of the Top Level Assembly in STORES.

**15.9.8 Alternate part numbers**

The alternate part numbers listed in the Inventory module and in the BOM are (at this point) for your reference only. Here is an example how you can issue alternate part numbers.

Let's say the assembly calls for part number CAP-0001. We have a sales order for 15 assemblies. We have 5 of CAP-0001 left in stock, and then we want to use CAP-0002 on the BOM instead.

Here is what to do: Issue the 5 caps when you issue the sales or work order (the stock room record will show 15 required 5 issued for CAP-0001). Enter an L type stockroom issue for 10 of CAP-0002. Edit the original stockroom record and change the Qty Req to 5 (to match the issued qty).

**15.9.9 Disassembly of an assembly**

If you want to disassemble an assembly for the component parts, it must exist as a one level assembly (contains just parts no sub-assemblies) and the on hand qty must be equal or greater than the qty you wish to disassemble. Select Modules, Stockroom, Convert Parts to Assemblies, and enter the BOM number and a negative amount for the quantity you wish to disassemble. Pc/MRP will increment the component parts and decrement the number of assemblies on hand. One of our customers purchases and receives an assembly with the purpose of disassembling it for the component parts.

If this is an assembly for a sales or work order that has been issued to manufacturing and you want to bring everything back into stock, select Modules, Stockroom, New, T – return all parts/assys issued to a sales/work order. This option should not be used if you have invoiced (shipped) any of the sales order.

**15.9.10 Handling Fabricated Parts**

Handling fabricated parts is a little more difficult than just issuing components to a work or sales order.

**Example 1:**

If you purchase sheet stock by the pound and issue by the sq ft:
Enter a part number for a 4'x8' sheet.
Issue unit = sq ft
All Costs in $ / sq ft
PO Unit = lbs
PO Ratio: 1 sq ft / lb

The PO will automatically be in lbs and the cost will automatically be in $ / lb.
When received your inventory will automatically increase by sq ft.

Create a BOM for 2'x2' Door Panel
.83333 hours (5 mins) Shearing Labor (Optional)
4 sq ft of sheet.

In this case:
You would make a work order for 8 2'x2' panels
You would use the stockroom to issue the work order to mfg. It will issue a total of 32 sq ft (one 4x8 sheet).
You would use the stockroom to receive back the work order from mfg. It would receive back 8 2x2 panels.

If you have another part number called Hood (it is now an assy)
.83333 hours (5 mins) Shearing Labor (Optional)
16 sq ft of sheet.

In this case (mixed use):
You would issue 2 work orders, one for the hood and one for 4 panels
The stockroom would issue both work orders but hand out one sheet which they would share and cut up.

The stockroom would then receive back both work orders for one hood and 4 panels.

From then on the panel and hood could be added to a regular BOM, like a 4 door car consisting of 1 hood and 4 door panels.

**Example 2:**

An on-line slideshow with step-by step instructions is located here:
http://www.pcmrp.com/mrp101/fab1overview.htm
This example shows how the fabrication instructions can be included with the BOM.

**Example 3:**

An on-line slideshow with step-by step instructions is located here:
http://www.pcmrp.com/mrp101/fab2partscreen1.htm
In this example we cut up a 4'x8' sheet of oak veneer into 24"x12" panels, to be bottom panels for drawers.

# 15.10 Transferring Data from Peachtree or QuickBooks into pcMRP

### 15.10.1 Exporting data from Peachtree into pc/MRP

- From the file menu, select Import/Export.
- For the Customer List select: Accounts Payable and Customer List.
- For the Vendor List select: Accounts Receivable and Vendor List.
- Click on the export button
- Click on the layout Tab and select the fields you wish to export. For best results keep a written record of the order and the contents of each field you wish to export. Example:
    - Field 1 Customer ID
    - Field 2 Customer Name
- Select options and make sure the "Include Headings" box is NOT checked. Write down the name and location of the file to be exported.
    - C:\customer.csv
    - C:\vendor.csv
    - C:\inventory.csv
- Click on the OK button to create the file
- Within pc/MRP go to the Data Import Program, **Option 40** in the pc/MRP configuration mode. Importing data into pc/MRP is covered within in Section 15.11.1 of this Manual.

### 15.10.2 Exporting parts and addresses from QuickBooks into pc/MRP

See Sections 16.16.2.8 and 16.16.2.10.

# 15.11 Importing Data Files

### 15.11.1 Overview

In essence, what we need to do is change your existing data into a readable format for pc/MRP. To do this we will use Excel and perhaps Access to manipulate your data. Your existing data will have to be exportable into Excel or other spreadsheet readable formats. If you feel more comfortable with Lotus or a different spreadsheet program than Excel you are welcome to use that instead. The instructions are however written specifically for manipulating Excel files, saving them as a CSV file, and importing them into pc/MRP. To begin this process we will first address how your data is stored in pc/MRP. The lesson will continue with how to manipulate your existing data so pc/MRP will recognize it as an acceptable format. We will then address how to import this data into pc/MRP.

It is a good idea to try the import in a practice copy first, and only proceed with the live version when the person is comfortable with the process.

Please note that Software Arts feels that you have the best chance of a successful import if you always save the Excel file as a CSV file, preferably with the exact pc/MRP column headings.

Always set an Administrative Lockout before importing data into pc/MRP.

This chapter is specifically written for importing data in this order:

1. Settings & Utilities, **Option 39** and **Option 40** overview

2. ADDRBOOK for customer and vendor information
   http://pcmrp.com/mrp101/importcsvaddroverview.htm

3. PARTMAST for inventory parts and costs, etc.
   http://pcmrp.com/mrp101/importcsvpartoption39.htm

4. PARTVEND to relate an inventory part with one or more vendor's price and quantity breaks
   http://pcmrp.com/mrp101/importpartvendvendorstab.htm

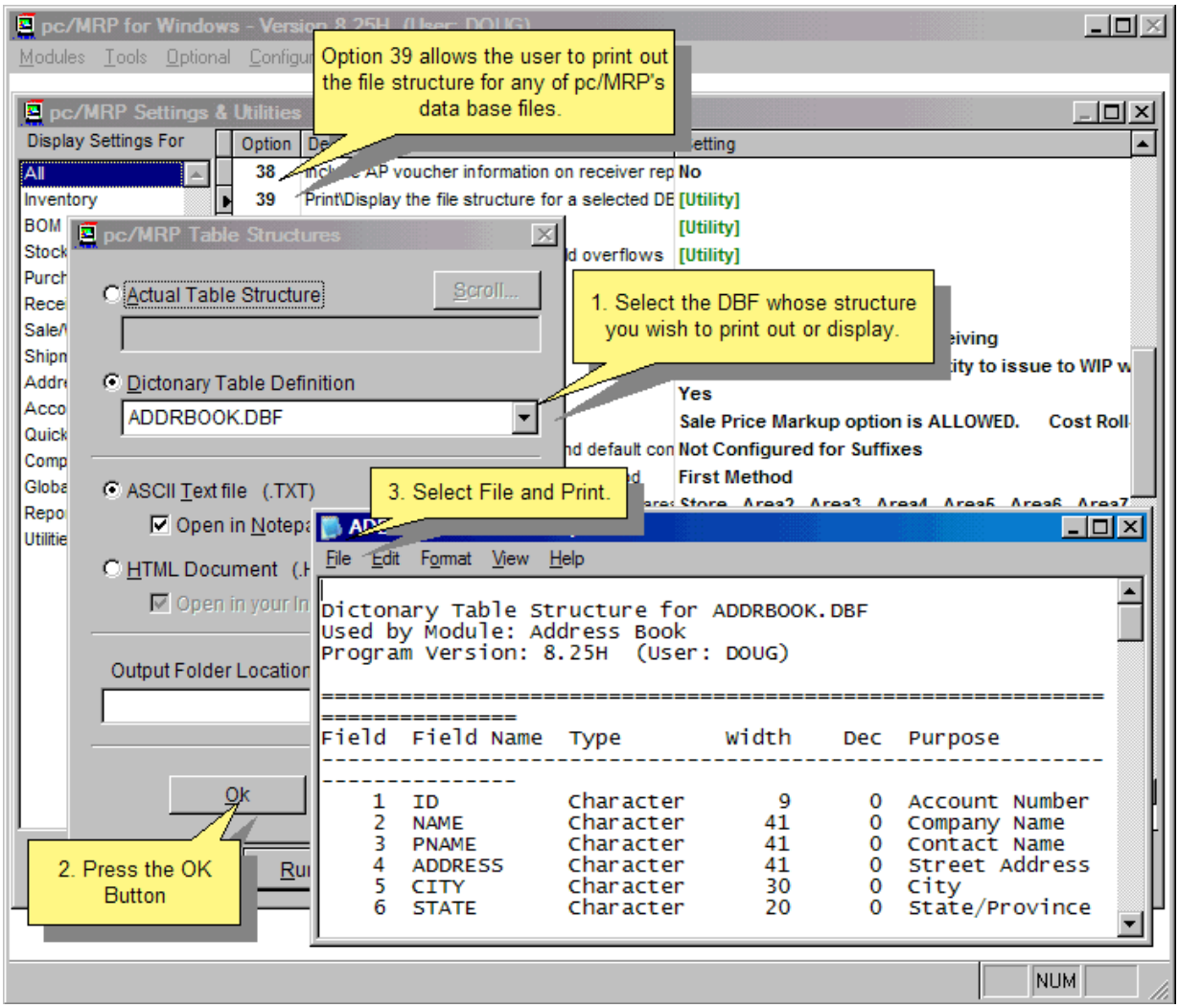
5. BOM for defining an assembly and sub-assembly structure using the previously entered inventory parts
   http://pcmrp.com/mrp101/importcsvbomoverview.htm

6. SALES to add current open and closed sales orders
   http://pcmrp.com/mrp101/importcsvsaleoverview.htm

Most of the steps and recommendations however are applicable for every module. If you follow the steps, study the data structure, manipulate your legacy file as needed, and import using **Option 40,** you should be successful every time.

**Settings & Utilities, Option 39 overview**

**Option 39** in Settings & Utilities will allow you to print out file structures for any of pc/MRP's data tables. Use these names and field lengths when creating the import data file. (See the address book example below.)




Please note that the 'TYPE' column should be the same in Excel as listed in the Option listing. Also, the Excel column width should be the same as listed in the Option 39 listing.

Types consist of:

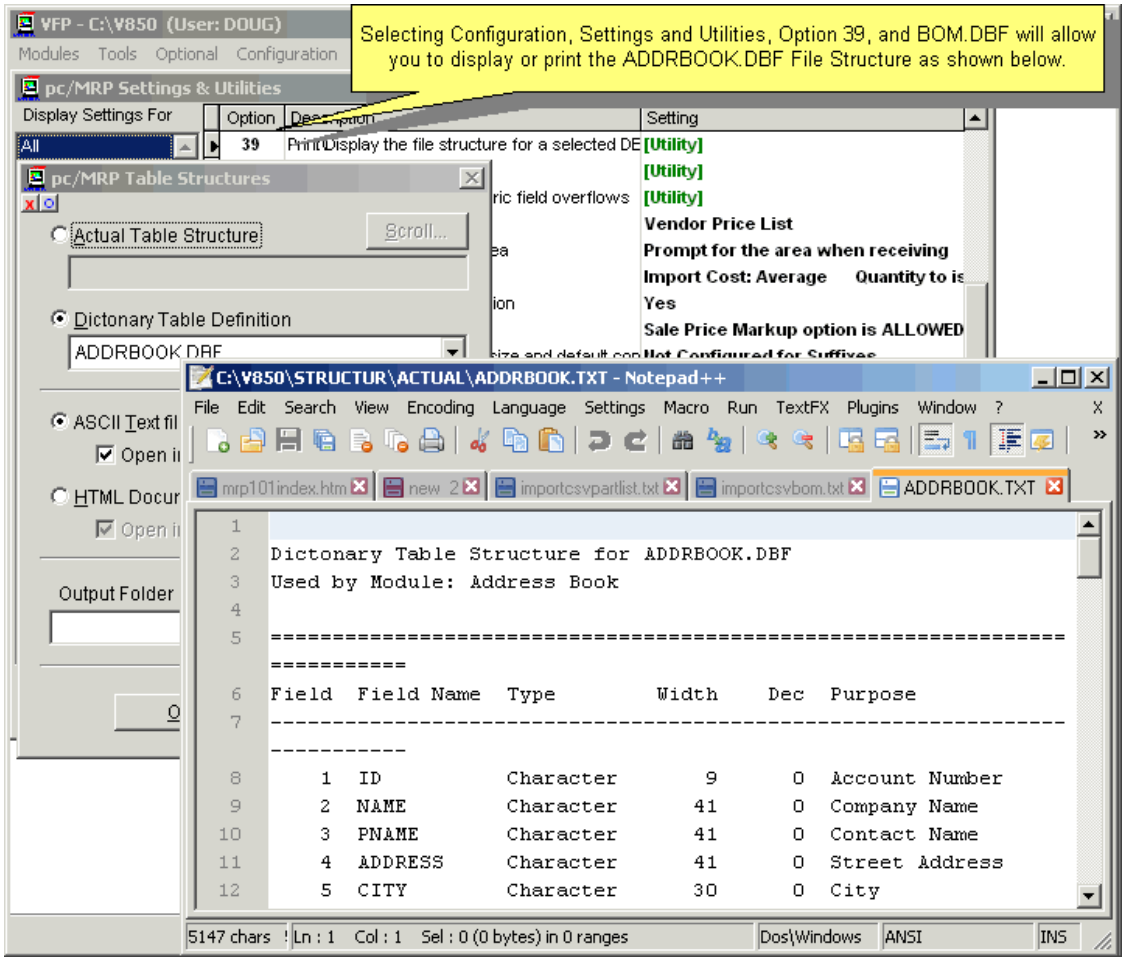
- Character
- Numeric
- Logical
- Date
- Memo (only for saving as dBase III files)

**Settings & Utilities, Option 40 overview**

- Character fields are automatically left-justified.
- Automatically removes blank records in resultant pc/MRP DFB table.
- Automatically prompts to remove duplicate records (original or new).
- Prompts for BOM number and BOM Description if missing.
- When importing new BOMs, new parts and BOMs are added to pc/MRP's Inventory file (partmast.dbf) if the new parts and BOMs do not exist in the partmast.dbf file. PARTDESC is used for the partnumber description when adding a new part while importing the BOM.
- Adds BOM number and BOM description to partmast.dbf file when importing a BOM.
- Adding a file named **NOPARTSFROMBOM.FLG** will prevent pc/MRP from adding parts not in the partmaster from a BOM being imported into pc/MRP.
- Option to import 2003 XML files from Excel.
- Option to import Sales Orders from a ShopSite shopping cart.
- Option for each user to save their importer settings.
- Importing Sales, Purchases, Invoices or Receivers will insert address information from the AddressBook.
- Import as a CSV (comma separated values) file.
- Save the Option 40 import mapping as a template.

**15.11.2 Address Book**

**Step 1 Use Settings & Utilities, Option 39 to print out the address book file structure.**

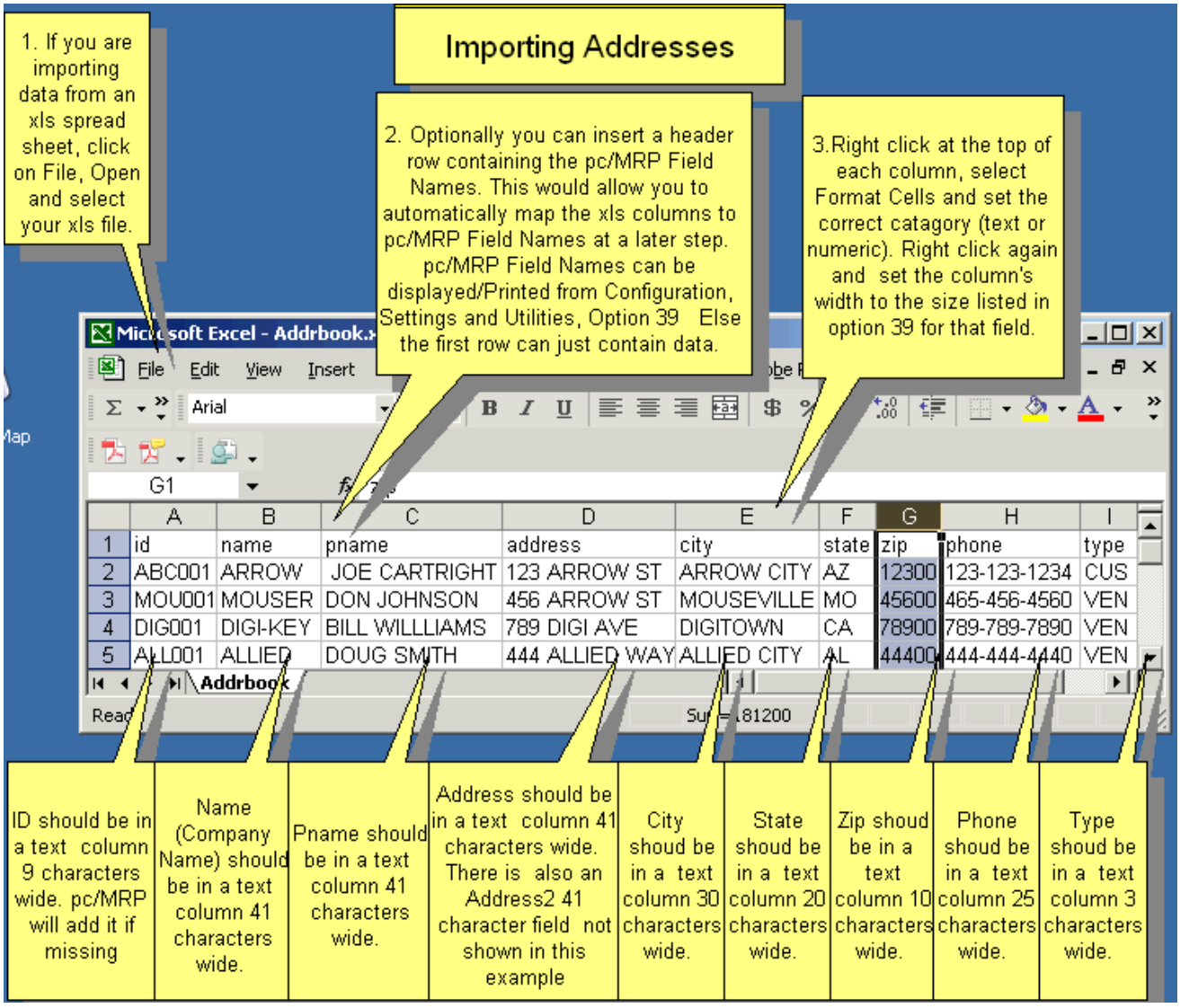


**Step 2 Format the Address Excel worksheet and save as a CSV File with or without column headers**

In Excel, you can right-click on a column to set the data character width and whether the data is numeric, text, logical (TRUE or FALSE), or a date. Using the same column names as our item names allows you to sync the fields without manual mapping when importing via Settings & Utilities, **Option 40**. (See example below.)

If your Excel file does not contain an ID field, pc/MRP will automatically generate an ID for each customer/vendor. This ID will usually consist of the first three letters of the Name, followed by a three digit number.

This is an example where the first row contains field names:



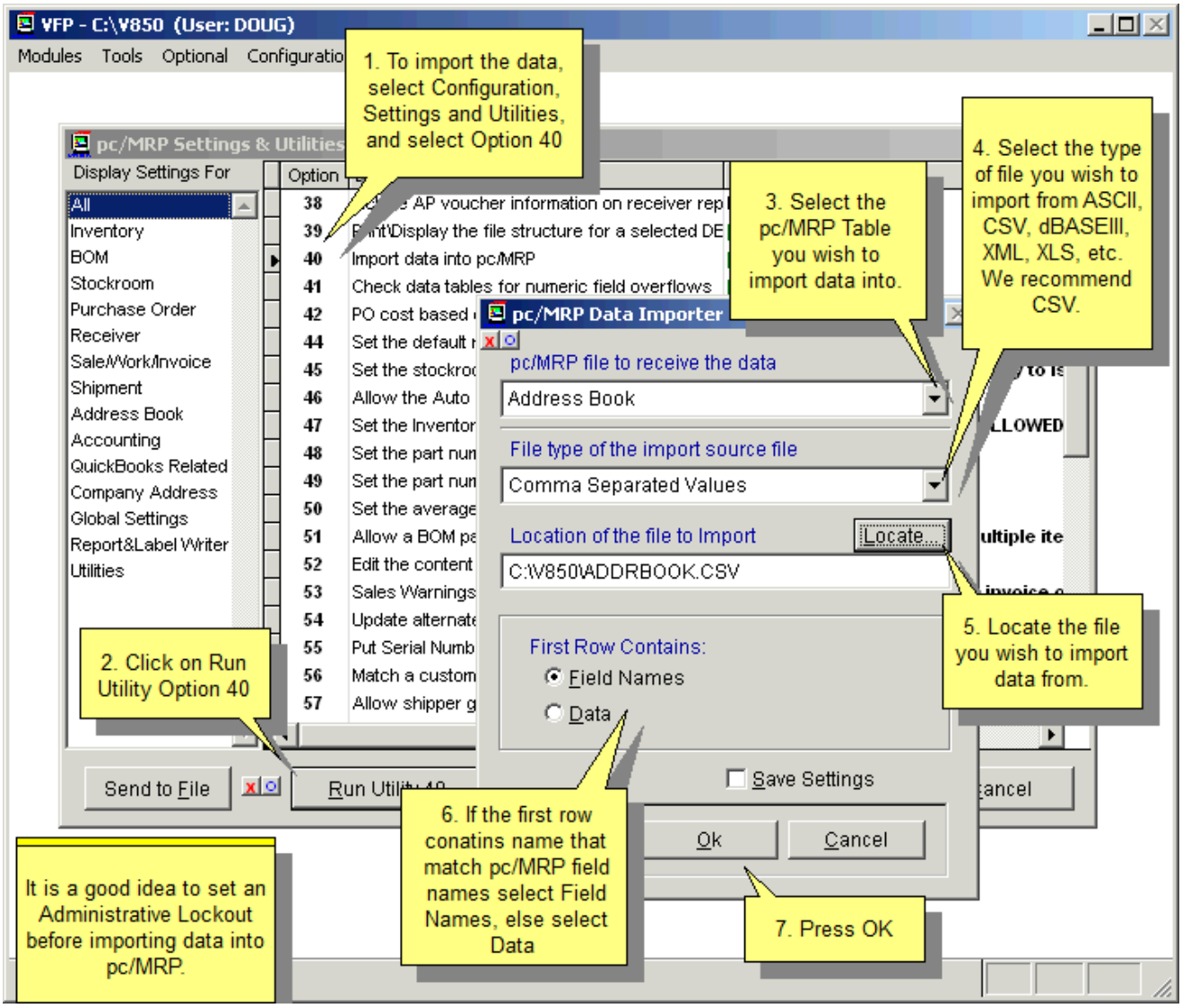

Please ensure that the data type and width are followed to ensure a successful import. Now save this file as a "CSV", comma separated file, file such as ADDRBOOK.CSV.

When you save an Excel file as a .CSV file, Excel gives you several warnings, that you will lose the formatting, It is OK to just select "YES" each time, as that is exactly why we are saving as a CSV file: to discard the formatting and only keep the data.

**Step 3 Use Option 40 to import the address book information.**

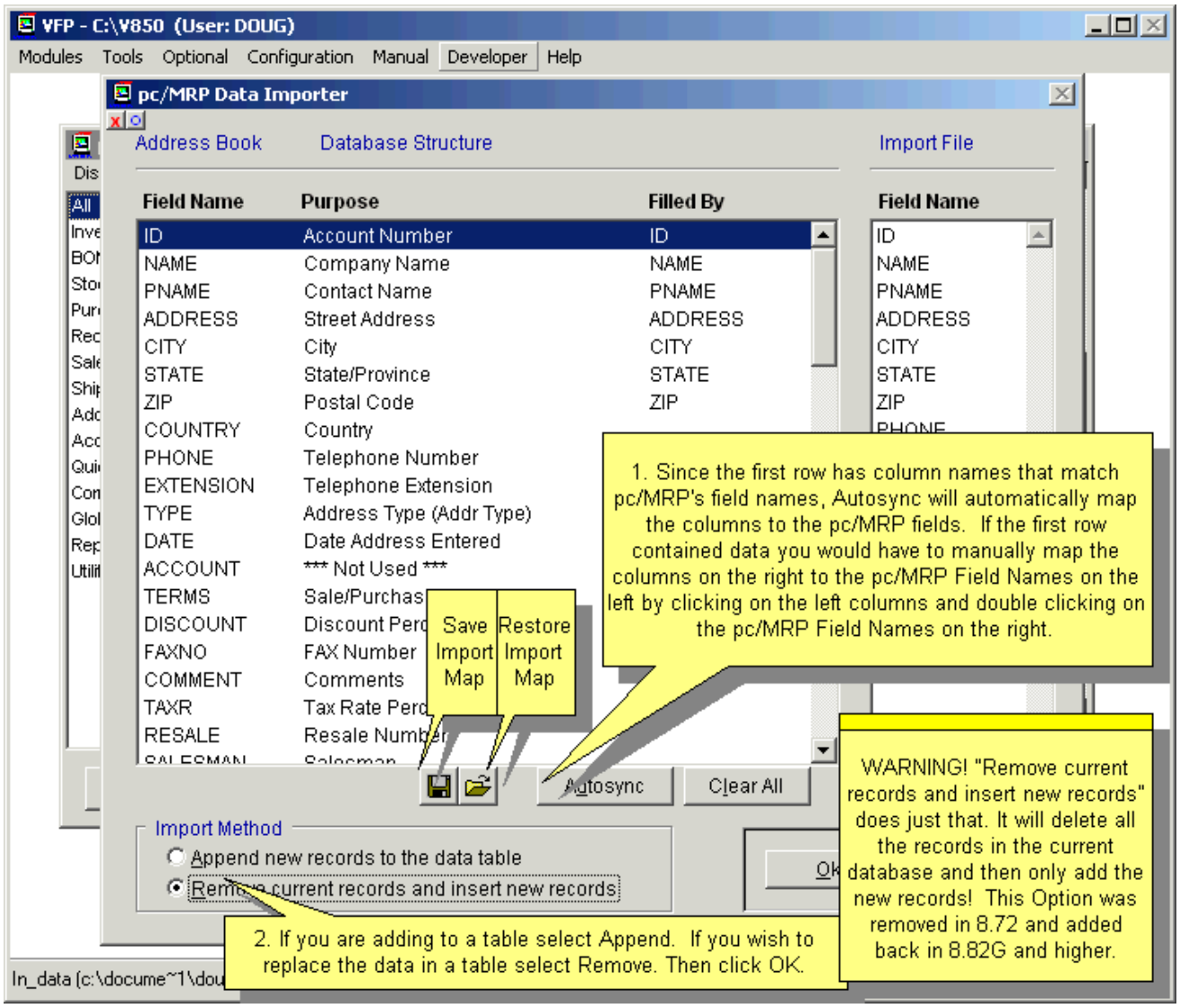
It is good practice to set an Administrative Lockout before importing data into pc/MRP.

Locate the **ADDRBOOK.CSV** file you just saved:




Make sure that you have selected Field Names for “First Row Contains”. Now press the OK button.

**Step 4 Import the data into pc/MRP's Address Book.**

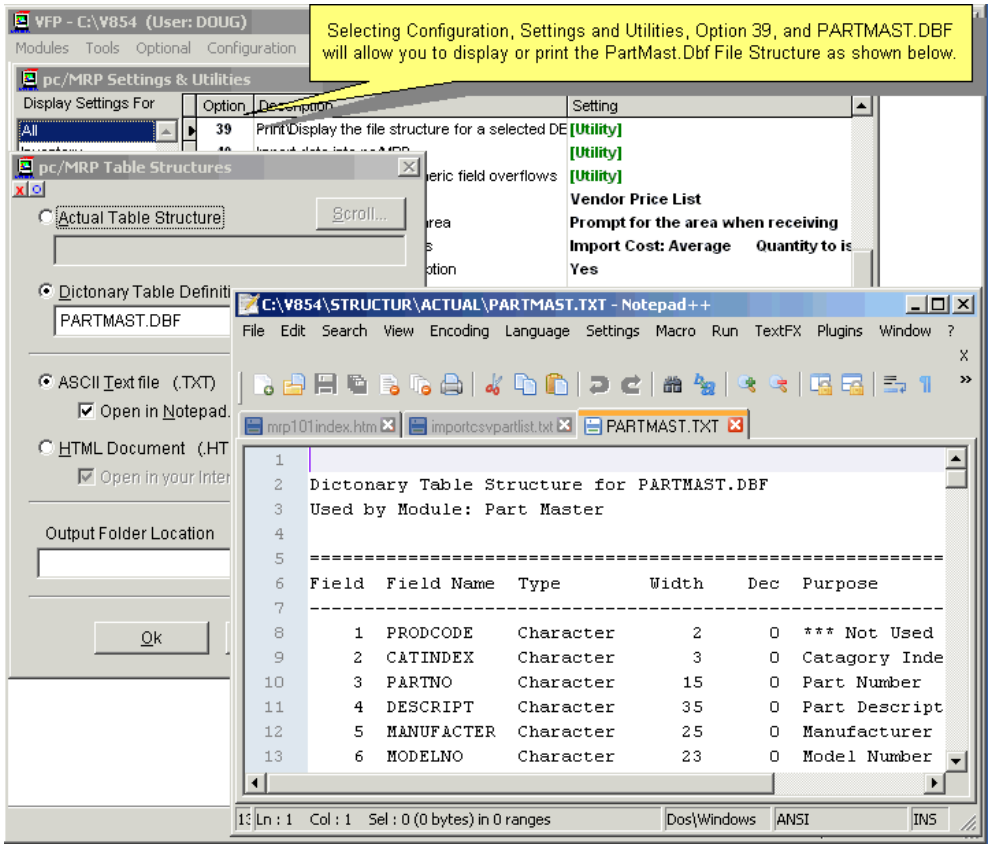



Remember that you can press **Autosync** if the field names in the CSV file are the same as the field names that pc/MRP uses. If not, you must manually map the field names by selecting the names in both columns and pressing the **Select** button. **PLEASE Note: The Import Method "Remove current records and insert new records" does just that. It will delete all the records in the current database and then only add the new records!** This option is intended for companies in the process of implementing pc/MRP, in case the user made a mistake when importing, and needs to start from the beginning. If you select Remove, pc/MRP will create a backup in the Importer subfolder. The application defaults to "Append".

Press the OK button and the data will be imported. If any duplicates are found, you will be asked to either keep the new records or the ones already in the database.

### 15.11.3 Inventory (Partmast)

**Step 1 Use Settings & Utilities, Option 39 to print out the inventory file structure.**




The Inventory Module is simple to understand. Everything that deals with inventory data is stored here. The BOM module stores the 'recipe' while the Inventory module stores the 'ingredients'. For complete details about the Inventory Module, see the chapter on the Inventory Module. When importing data into the inventory module, there is really only one required key field, the part number. However, users should try to import as many fields as possible to save time. Listed below are a few of the most important fields in Inventory and their use.

**PARTNO**: This is your part number field. KEY FIELD (Limited and truncated to 31 characters)
**DESCRIPT**: This field is your inventory part description (Limited and truncated to 35 characters).
**MANUFACTER**: The part manufacturer name (Limited and truncated to 25 characters).
**MODELNO**: The part manufacturer's part number (Limited and truncated to 23 characters).
**PART_ASSY**: This one character field defines this part as a Part or Assembly as described below. KEY FIELD
**OUTSOURCE**: This logical field is used in conjunction with the PART_ASSY field as described below.

Part – Inventory: (part_assy = P, outsource = .F. or False in Excel)
Part – Non Inventory: (part_assy = P, outsource = .T. or True in Excel)
Assembly: (part_assy = A, outsource = .F. or False in Excel)
Labor Inside: (part_assy = L, outsource = .F. or False in Excel)
Labor Outside: (part_assy = L, outsource = .T. or True in Excel)

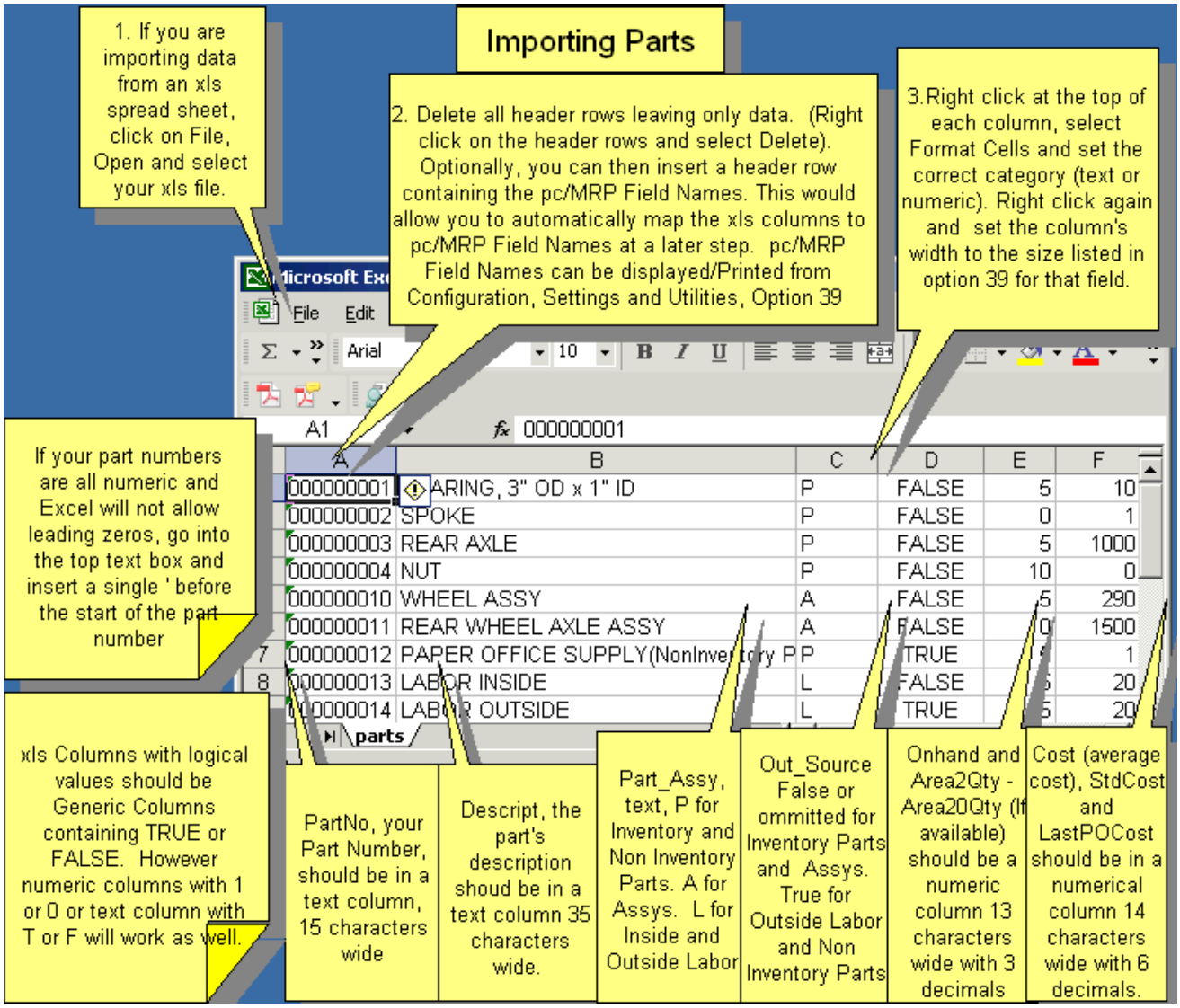
**ALTPARTNO**: Titled as General info on the inventory screen. This is a Memo field and is unlimited in length.

The rest of the fields can be imported if the data exists but they are not essential fields.

**Note:** If there is no "Shippable" field in the import file, the default value is .T. (**8.73** and above).

**Step 2 Format the Inventory Excel sheet and save as a CSV file with or without column headers**

This is an example where the first row contains data (not a header row).

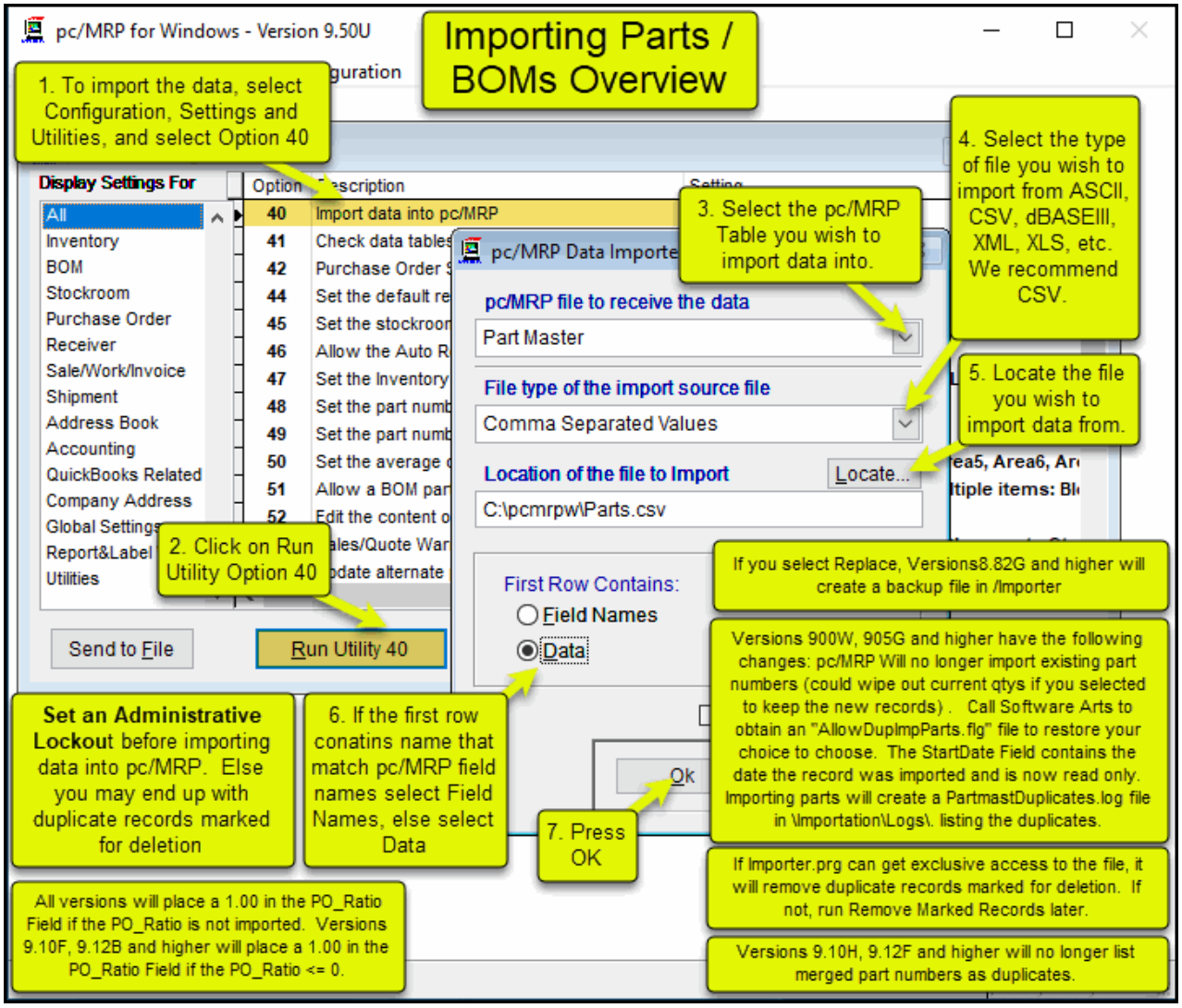



When you save an Excel file as a CSV file, Excel gives you warnings about features that are not compatible with CSV. Just select "YES" each time, as our goal with saving as CSV is exactly that: to get rid of Excel's formatting and just to keep the data.

**Step 3 Use Option 40 to import part number information.**

It is a good idea to set an Administrative Lockout before importing data into pc/MRP.

In this screen, you would need to select the **Data** as the option for **First Row Contains**.

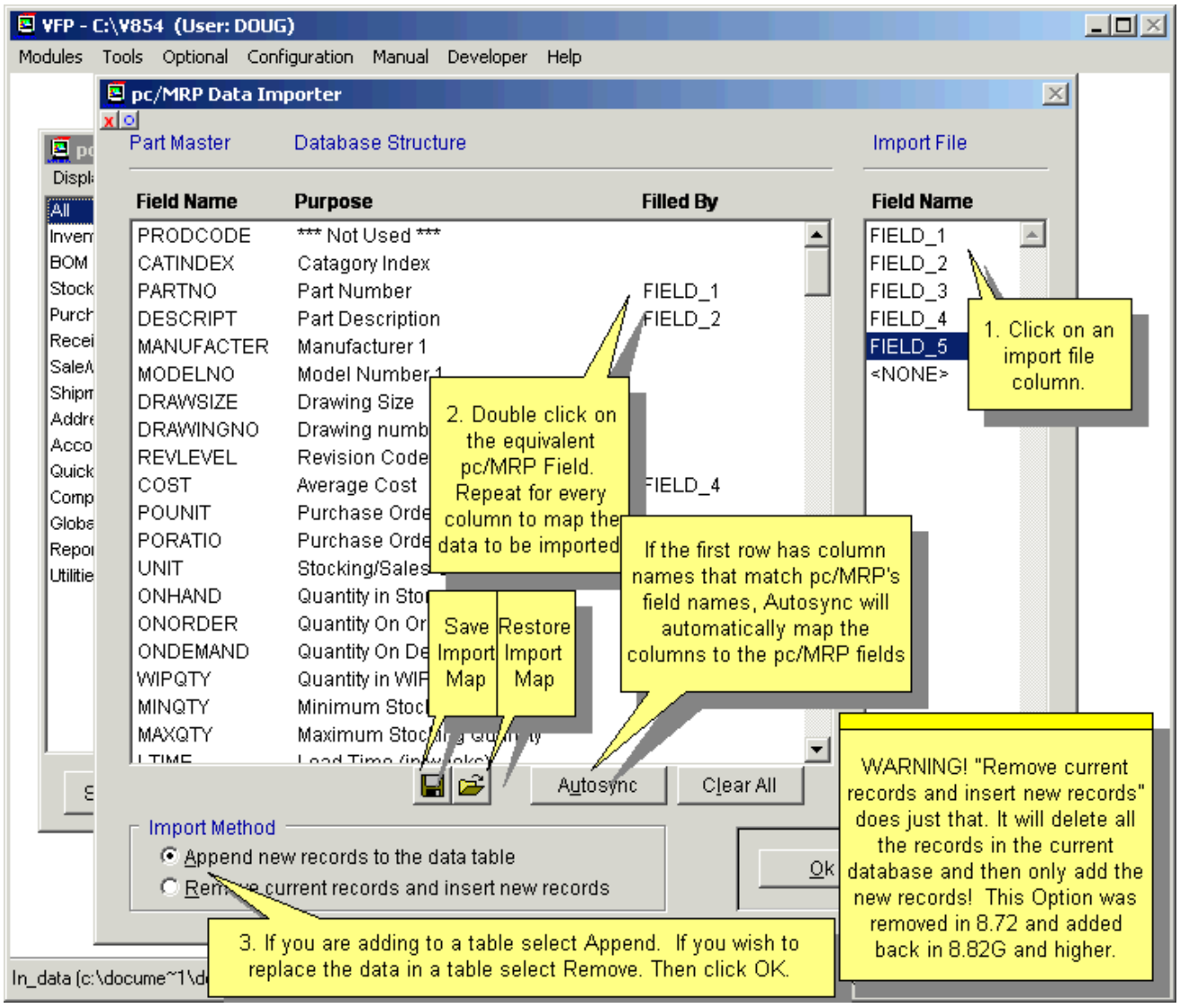



Press OK to continue to the next screen for Option 40 import.

Remember that file structure may change with newer versions of pc/MRP and you should always print out the layout for your version. As an example, additional fields (in the password table) for PO approval are only available in pc/MRP versions 8.96 and higher.

**Step 4 This screen shows importing with the first row containing data**

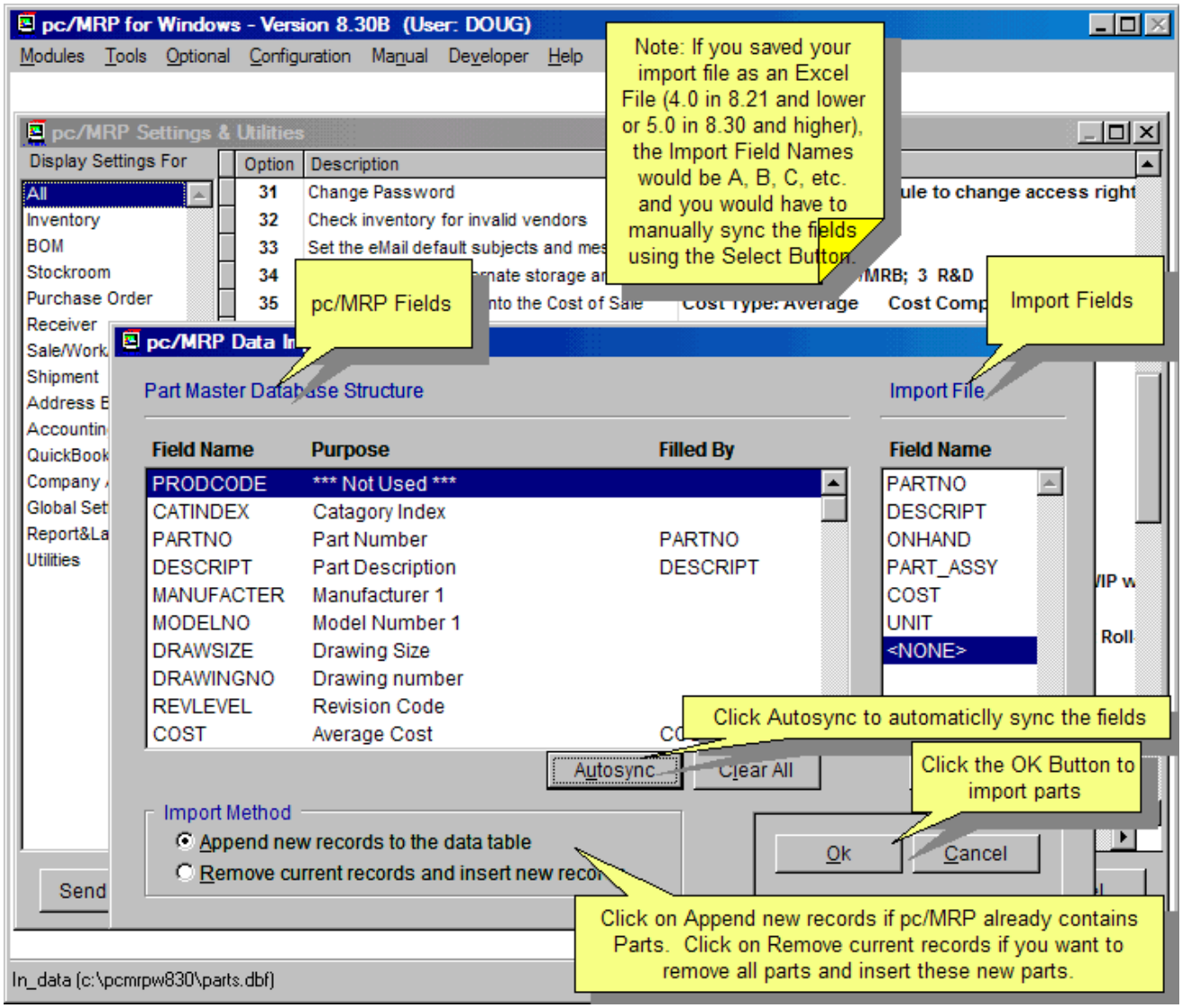
This screen shows the names of the columns as 'FIELD_1', etc. as the spreadsheet did not contain column headings; you can save the match-up for use another time if the Excel sheet has the data columns in the same order.




**PLEASE Note: The Import Method "Remove current records and insert new records" does just that. It will delete all the records in the current database and then only add the new records!** This option is intended for companies in the process of implementing pc/MRP, in case the user made a mistake when importing, and needs to start from the beginning. If you select Remove, pc/MRP will create a backup in the Importer subfolder. The application defaults to “Append”.

**This screen is Step 4 if you are importing with field names in the first row**

The screen below shows that the CSV file has column headings and in this case you can select the **Autosync** button and then manually match any names that are different spellings for the same data.

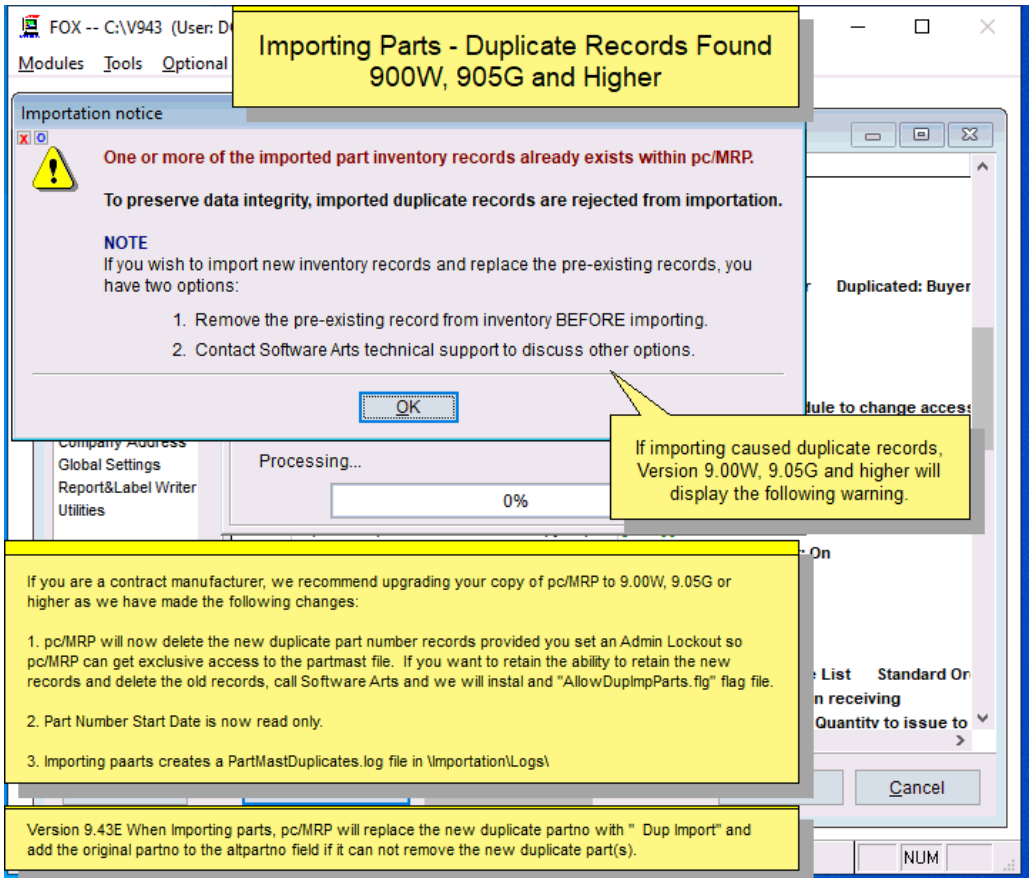


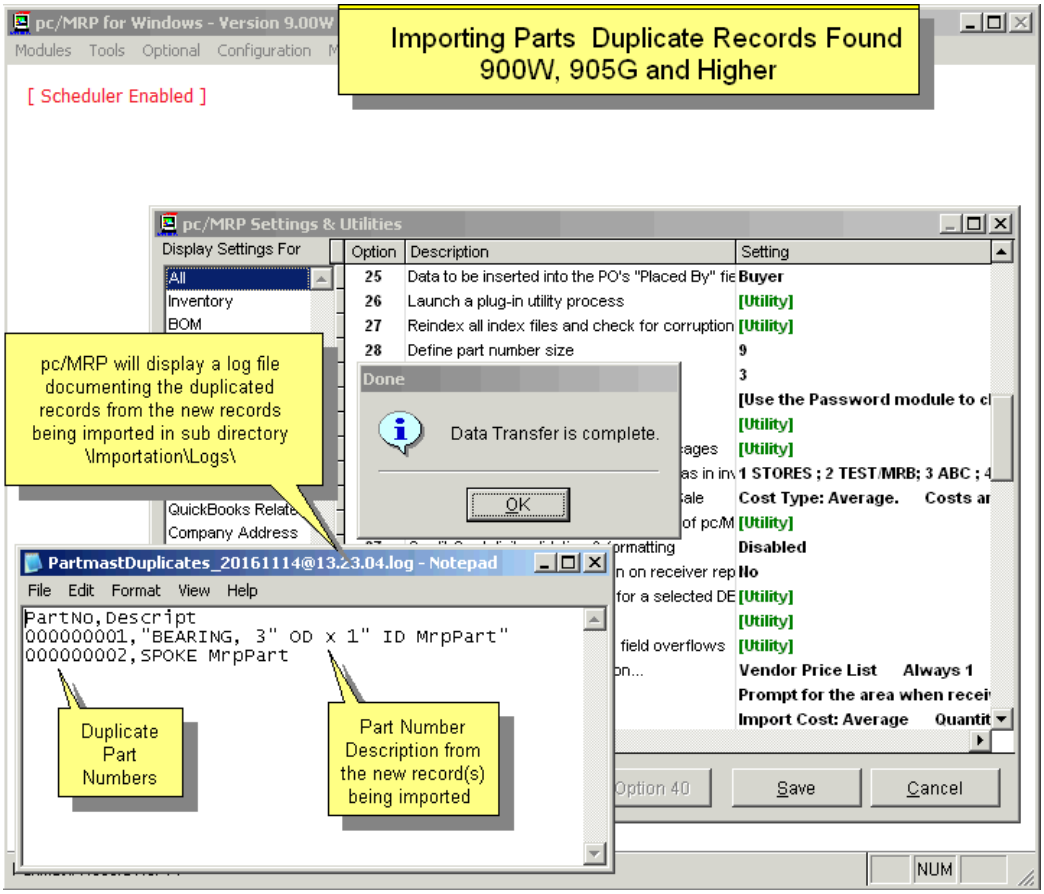

**PLEASE Note: The Import Method "Remove current records and insert new records" does just that. It will delete all the records in the current database and then only add the new records!** This option is intended for companies in the process of implementing pc/MRP, in case the user made a mistake when importing, and needs to start from the beginning. If you select Remove, pc/MRP will create a backup in the Importer subfolder. The application defaults to “Append”.

Press the OK button and the data will be imported. \Importation\Logs\PartmastDuplicates.log will store information about the import.

**Note:** See Section 15.11.8 if you also import the **General info (Altpartno)** field.

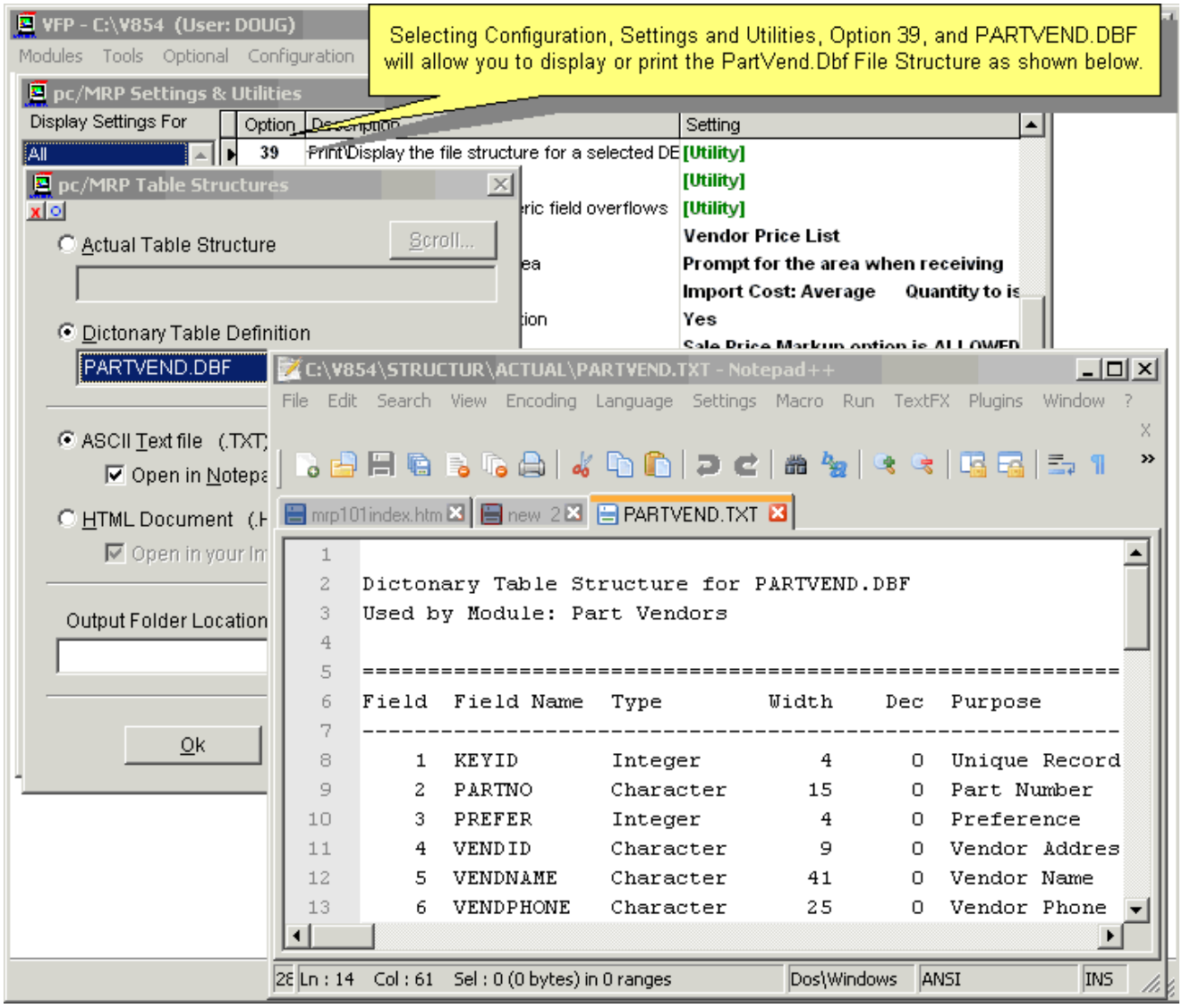
pc/MRP does not import part numbers that already exist. If any duplicates are found, the program will disregard the new record and keep the record that is already in the database. **Note:** pc/MRP versions **9.00U**, **9.05F** and lower offered to keep the old or the new records. Adding the file **AllowDupImpParts.FLG** will restore the old behavior.


Importing Parts - Duplicate Records Found
900W, 905G and Higher
Importation notice
One or more of the imported part inventory records already exists within pc/MRP.
To preserve data integrity, imported duplicate records are rejected from importation.
NOTE
If you wish to import new inventory records and replace the pre-existing records, you have two options:
1. Remove the pre-existing record from inventory BEFORE importing.
2. Contact Software Arts technical support to discuss other options.
OK
If importing caused duplicate records, Version 9.00W, 9.05G and higher will display the following warning.
If you are a contract manufacturer, we recommend upgrading your copy of pc/MRP to 9.00W, 9.05G or higher as we have made the following changes:
1. pc/MRP will now delete the new duplicate part number records provided you set an Admin Lockout so pc/MRP can get exclusive access to the partmast file. If you want to retain the ability to retain the new records and delete the old records, call Software Arts and we will instal and "AllowDupImpParts.flg" flag file.
2. Part Number Start Date is now read only.
3. Importing paarts creates a PartMastDuplicates.log file in \Importation\Logs\
Version 9.43E When Importing parts, pc/MRP will replace the new duplicate partno with " Dup Import" and add the original partno to the altpartno field if it can not remove the new duplicate part(s).
Processing...
0%
Cancel


Importing Parts Duplicate Records Found
900W, 905G and Higher
[ Scheduler Enabled ]
pc/MRP Settings & Utilities
Done
Data Transfer is complete.
OK
pc/MRP will display a log file documenting the duplicated records from the new records being imported in sub directory \Importation\Logs\
PartmastDuplicates_20161114@13.23.04.log - Notepad
File Edit Format View Help
PartNo,Descript
000000001,"BEARING, 3" OD x 1" ID MrpPart"
000000002,SPOKE MrpPart
Duplicate Part Numbers
Part Number Description from the new record(s) being imported
Save
Cancel

### 15.11.4 PartVend

**Step 1 Use Settings & Utilities, Option 39 to print out the partvend file structure.**



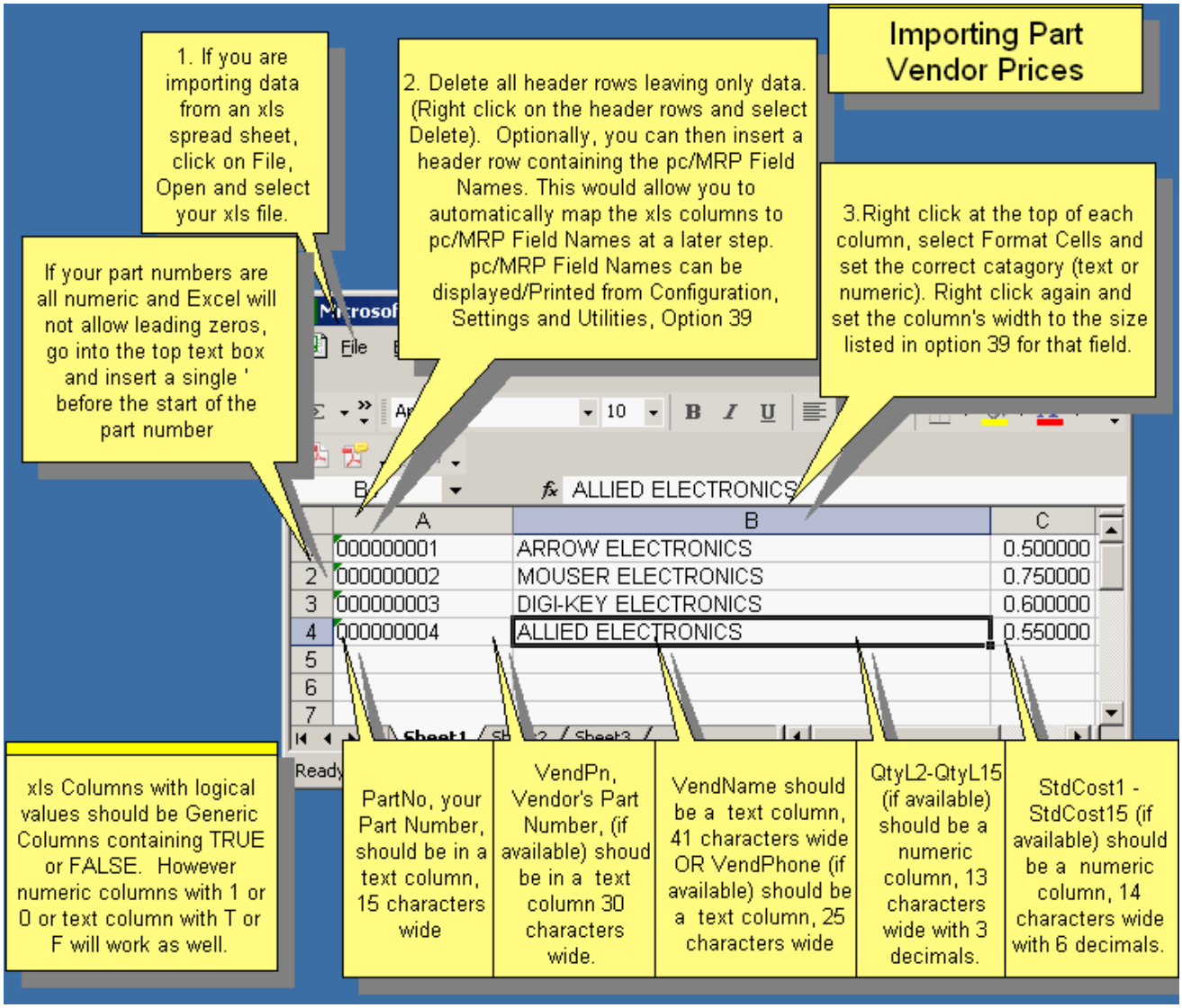

The **PartVend** table allows for an unlimited number of vendor and price quantity breaks. These versions will use the vendor name or phone number to insert into the vendor fields of the partvend table. The PARTVEND table contains KeyId, PartNo, VendId, StdCost1-15, QtyL2-15. The KeyId field need not be included in the import as it is automatically filled in by the importer.

Please note the field names as they are useful when selecting the Autosync option when importing with **Option 40**.

**Step 2 Format the PartVend Excel sheet and save as a CSV file with or without column headers**

This screen shot does not show a header row for column data names.

You always have an option to use or not use column headings. If not, you will not be able to autosync the data and must manually map the Excel columns to the pc/MRP data field names. Use **Option 39** to get field names for the PARTVEND table and **Option 40** to import.

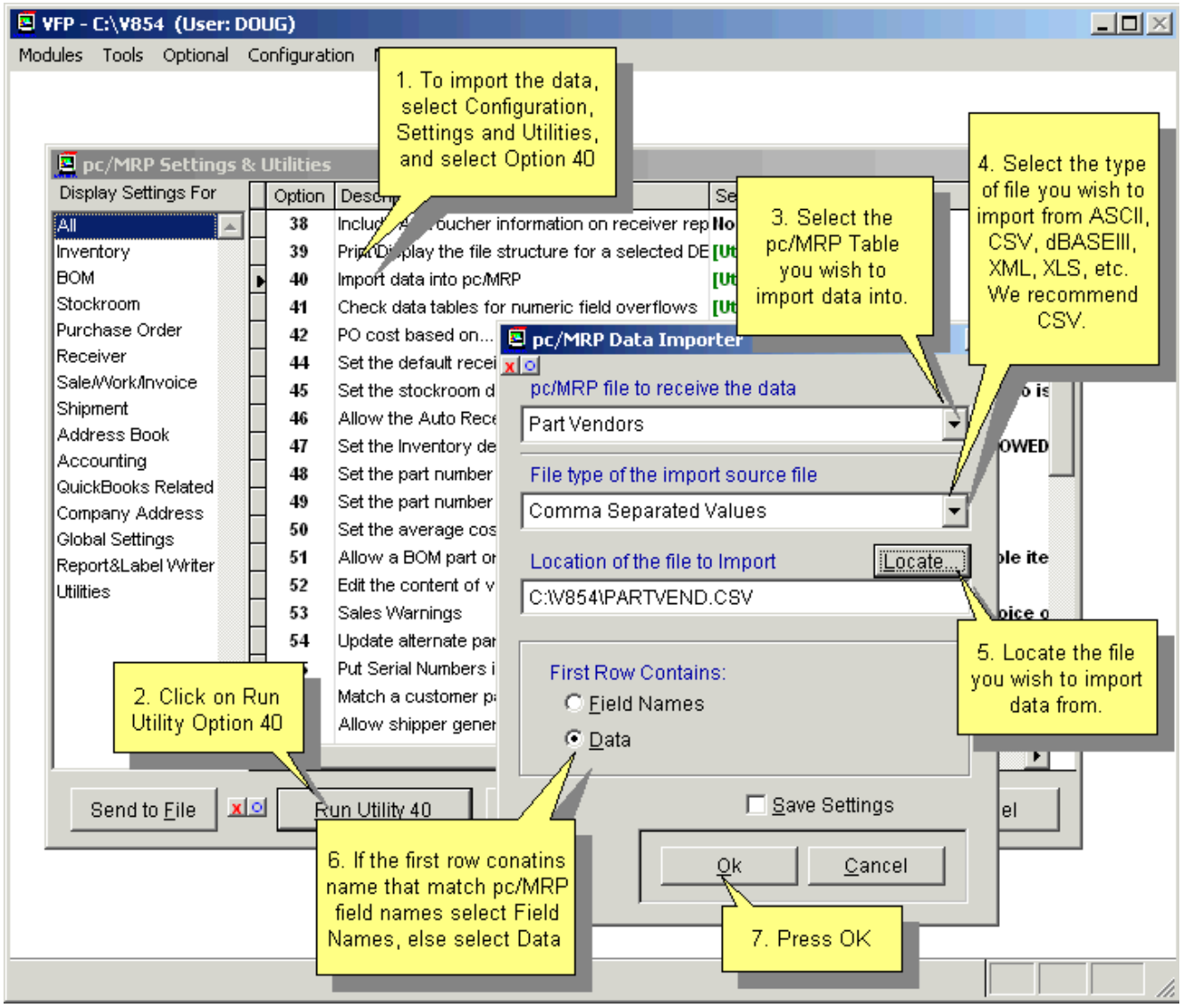



When you save an Excel file as a CSV file, Excel gives you warnings about features that are not compatible with CSV. Just select "YES" each time, as our goal with saving as CSV is exactly that: to get rid of Excel's formatting and just to keep the data.

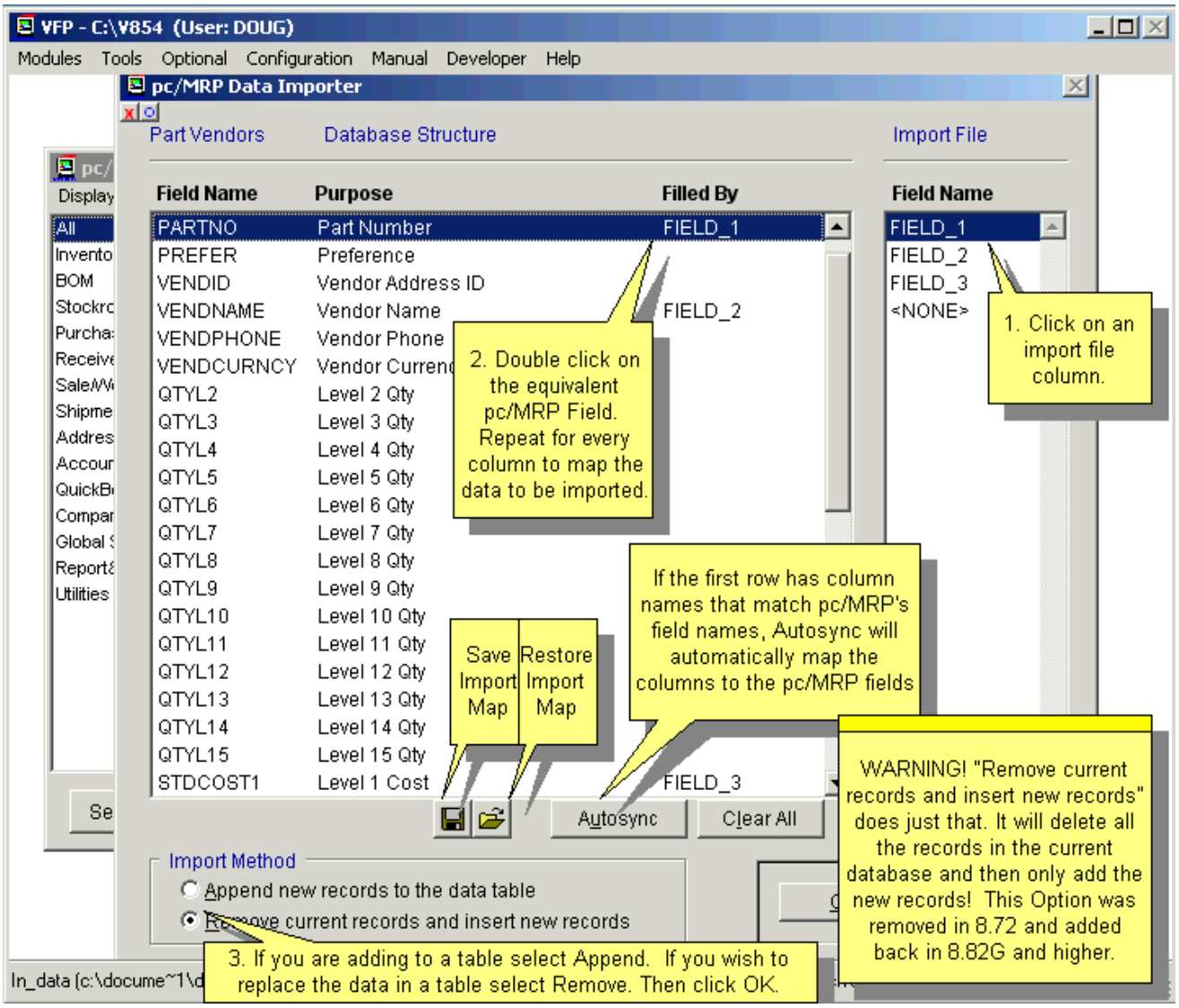
**Step 3 Use Option 40 to import the data.**

It is a good idea to set an Administrative Lockout before importing data into pc/MRP.

Since the first row of the Excel spreadsheet does not contain column headers, you will select **Data**, for "**First Row Contains**".



**Step 4 This screen shows importing with the first row containing data**



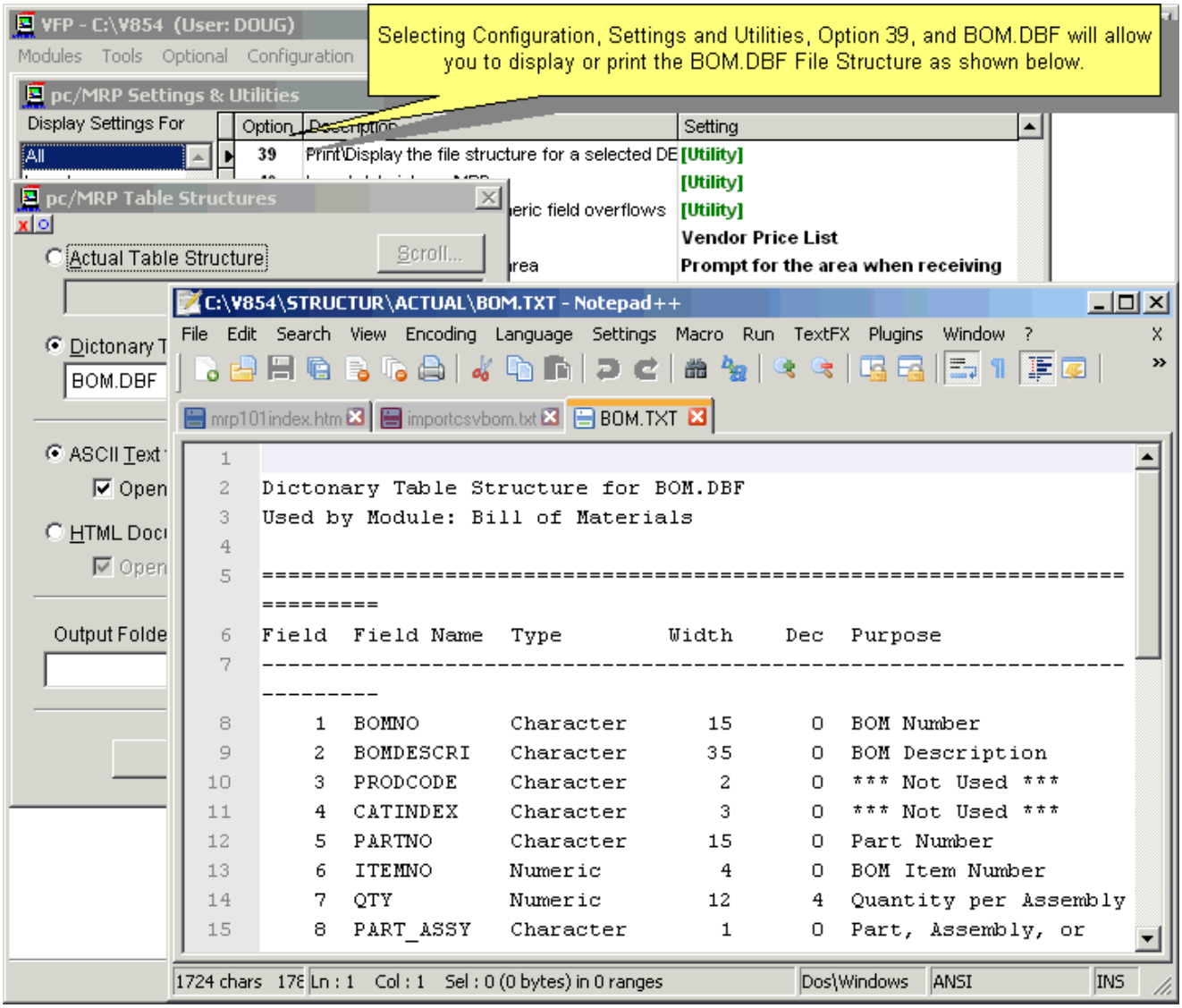

**PLEASE Note: The Import Method "Remove current records and insert new records" does just that. It will delete all the records in the current database and then only add the new records!** This option is intended for companies in the process of implementing pc/MRP, in case the user made a mistake when importing, and needs to start from the beginning. If you select Remove, pc/MRP will create a backup in the Importer subfolder. The application defaults to “Append”.

Press the OK button and the data will be imported. If any duplicates are found, you will be asked to either keep the new records or the ones already in the database.

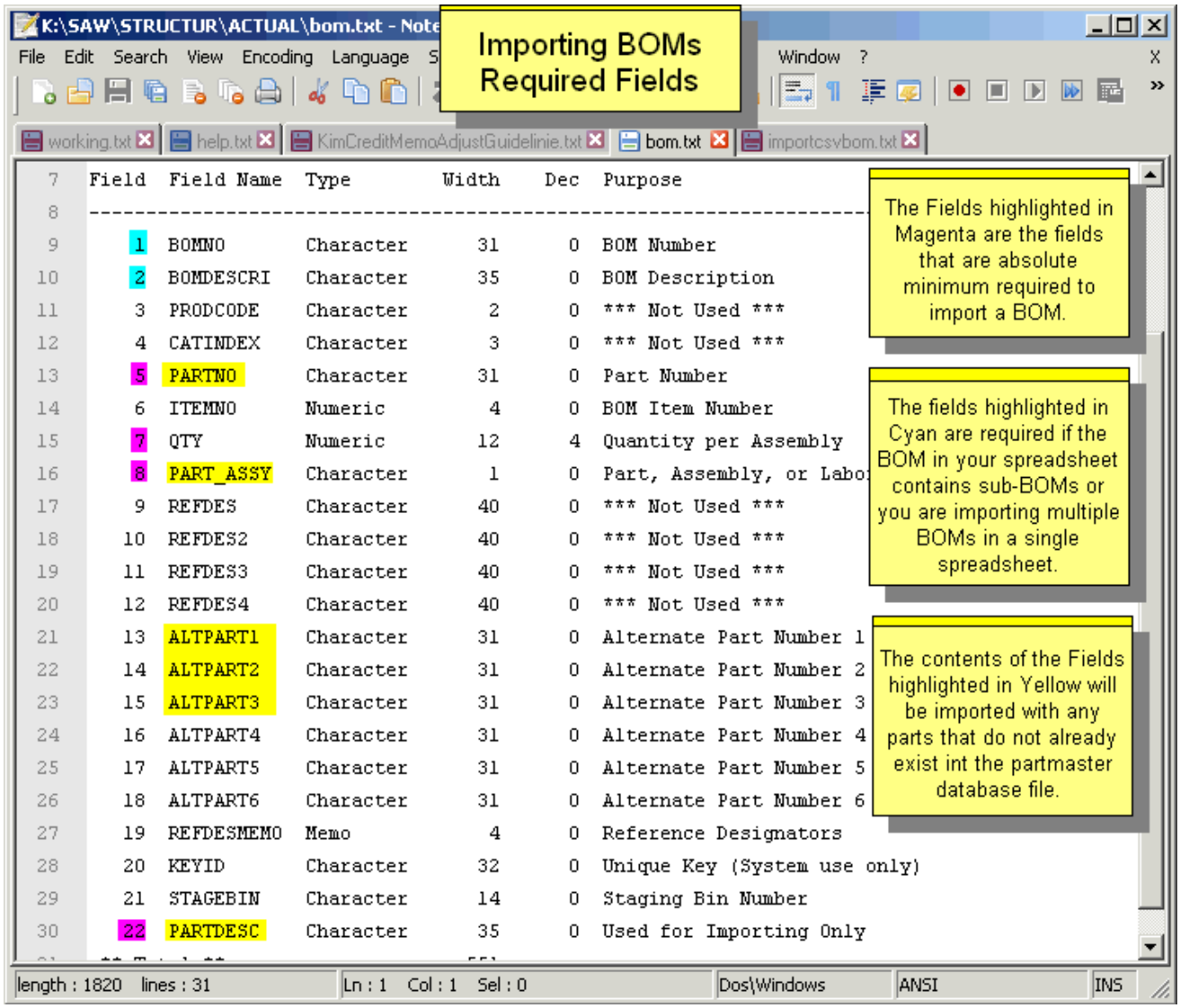
**15.11.5 BOMs**

**Step 1 Use Settings & Utilities, Option 39 to print out the BOM file structure.**

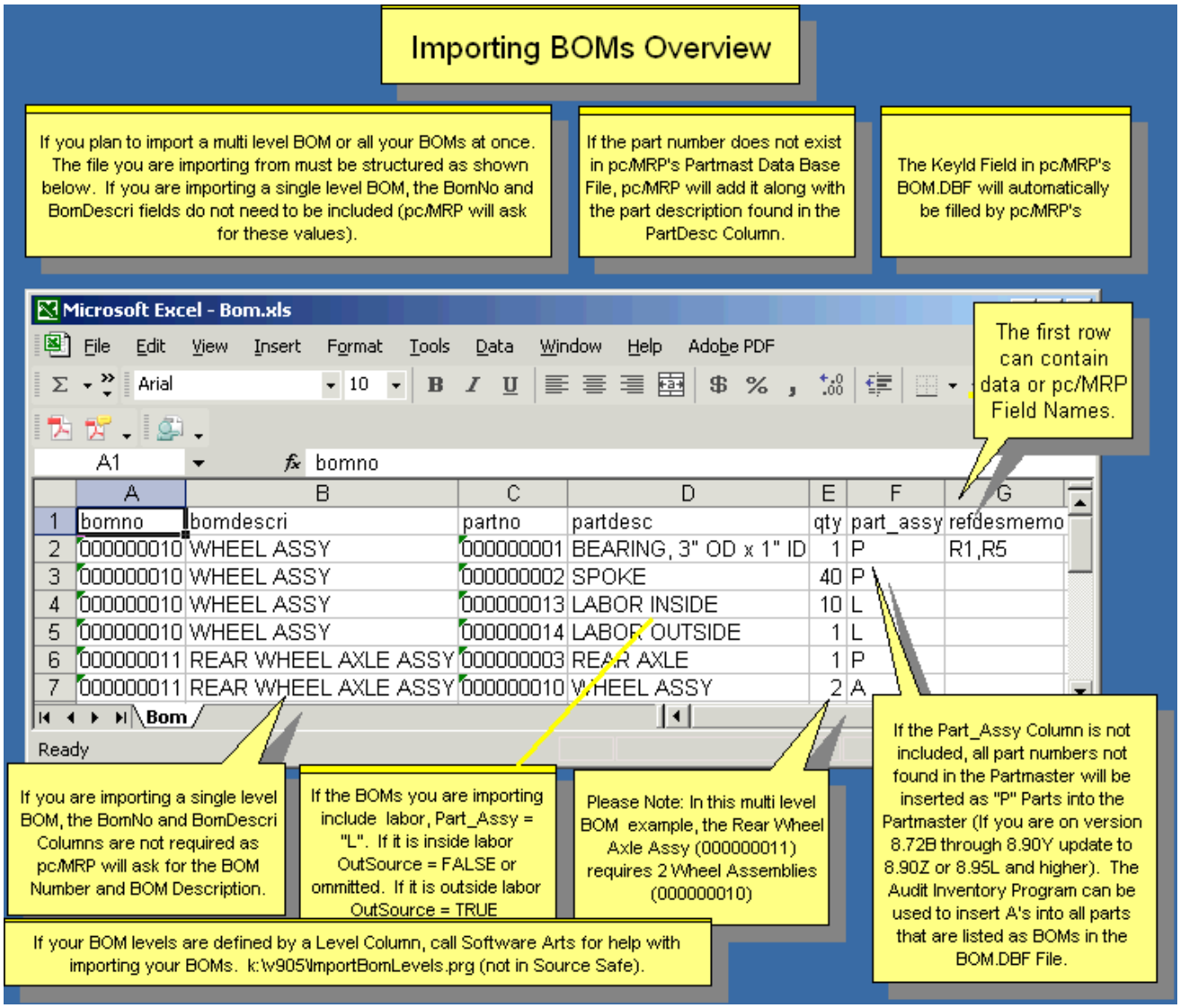
pc/MRP uses a very simple system to organize the Bill of Materials. Take a moment to view the picture below. The picture below depicts a simple bike assembly and the fields necessary to import a BOM into pc/MRP. (The reference designator field, Refdesmemo, is optional but will receive some special attention later.)




Please note the field names as they are useful when selecting the Autosync option when importing with **Option 40**.


K:\SAW\STRUCTUR\ACTUAL\bom.txt - Note
File Edit Search View Encoding Language S
Window ?
working.txt
help.txt
KimCreditMemoAdjustGuidelinie.txt
bom.txt
importcsvbom.txt
Importing BOMs Required Fields
Field Field Name Type Width Dec Purpose
1 BOMNO Character 31 0 BOM Number
2 BOMDESCRI Character 35 0 BOM Description
3 PRODCODE Character 2 0 *** Not Used ***
4 CATINDEX Character 3 0 *** Not Used ***
5 PARTNO Character 31 0 Part Number
6 ITEMNO Numeric 4 0 BOM Item Number
7 QTY Numeric 12 4 Quantity per Assembly
8 PART_ASSY Character 1 0 Part, Assembly, or Labo
9 REFDES Character 40 0 *** Not Used ***
10 REFDES2 Character 40 0 *** Not Used ***
11 REFDES3 Character 40 0 *** Not Used ***
12 REFDES4 Character 40 0 *** Not Used ***
13 ALTPART1 Character 31 0 Alternate Part Number 1
14 ALTPART2 Character 31 0 Alternate Part Number 2
15 ALTPART3 Character 31 0 Alternate Part Number 3
16 ALTPART4 Character 31 0 Alternate Part Number 4
17 ALTPART5 Character 31 0 Alternate Part Number 5
18 ALTPART6 Character 31 0 Alternate Part Number 6
19 REFDESMEMO Memo 4 0 Reference Designators
20 KEYID Character 32 0 Unique Key (System use only)
21 STAGEBIN Character 14 0 Staging Bin Number
22 PARTDESC Character 35 0 Used for Importing Only
The Fields highlighted in Magenta are the fields that are absolute minimum required to import a BOM.
The fields highlighted in Cyan are required if the BOM in your spreadsheet contains sub-BOMs or you are importing multiple BOMs in a single spreadsheet.
The contents of the Fields highlighted in Yellow will be imported with any parts that do not already exist int the partmaster database file.
length : 1820 lines : 31
Ln : 1 Col : 1 Sel : 0
Dos\Windows
ANSI
INS

**This picture shows an Excel spreadsheet with the first row containing column headings.**

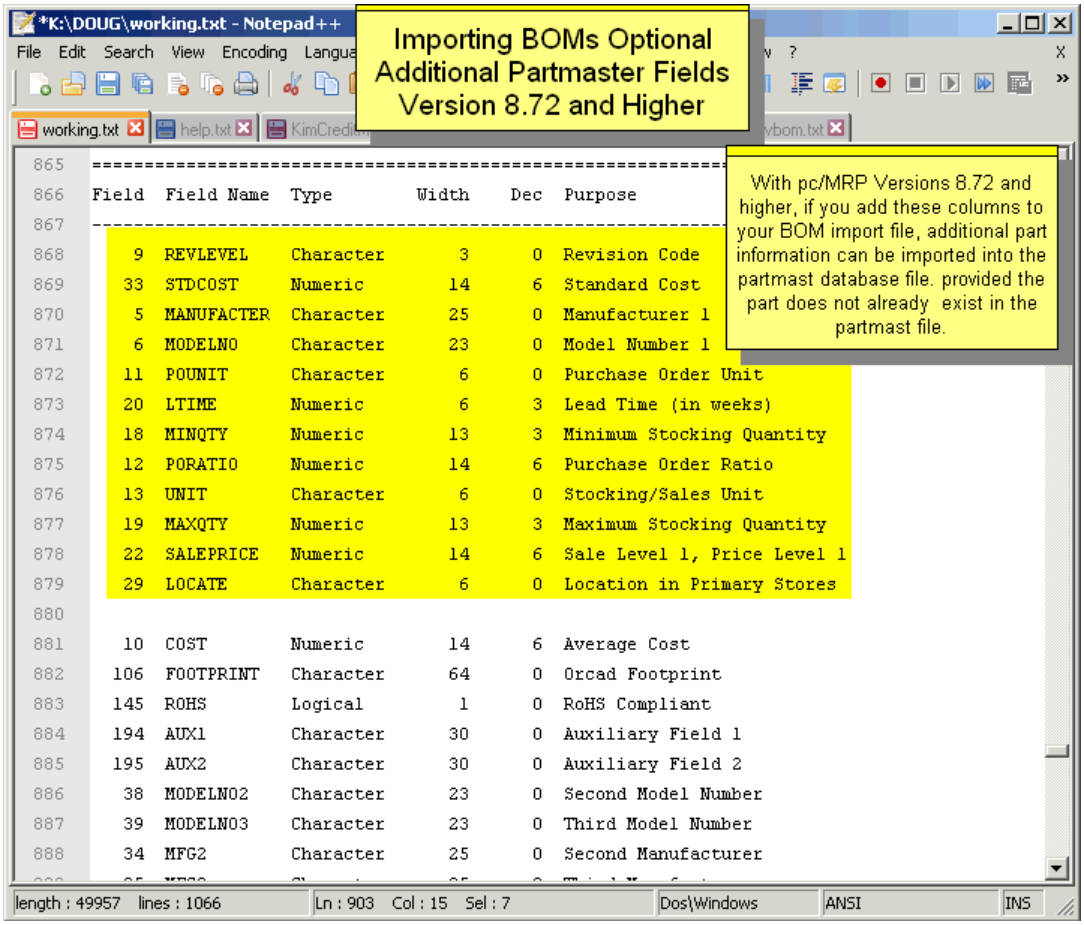


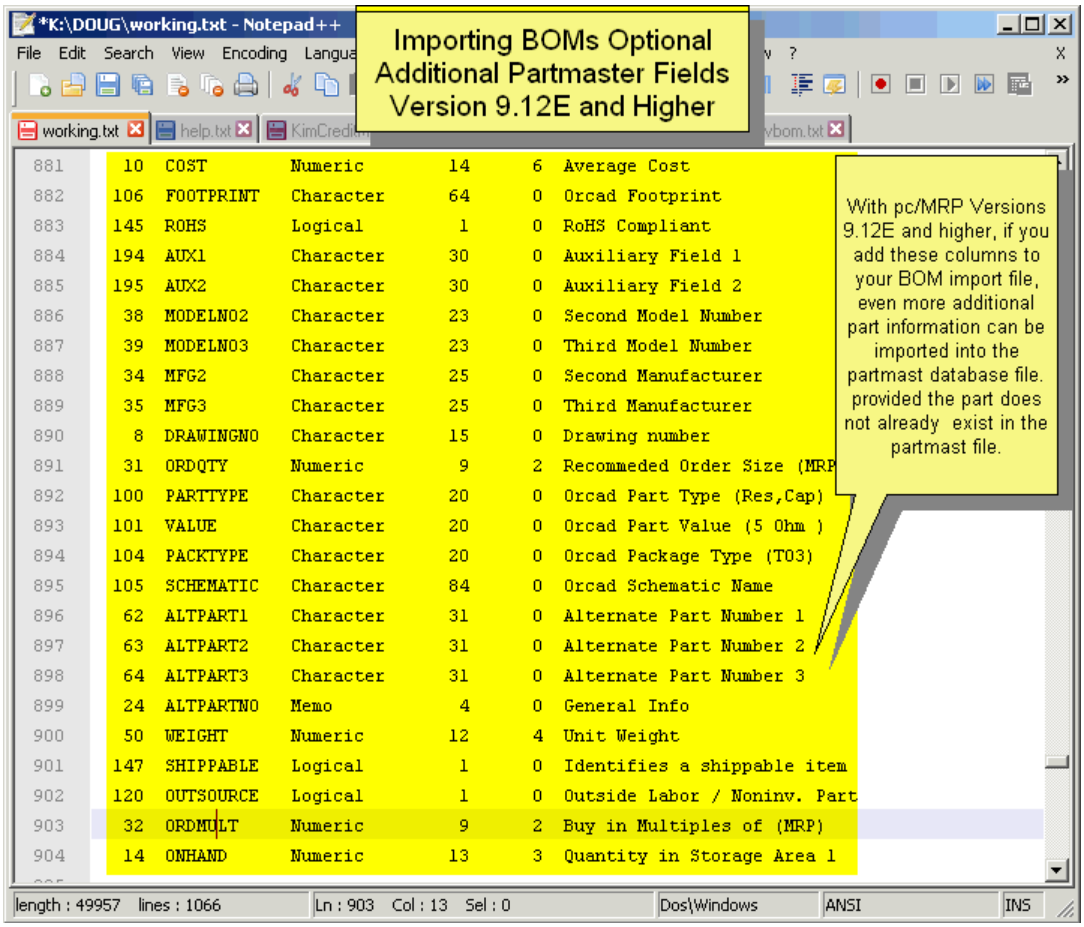

Note that in a multi-level BOM, the BOM number (**BOMNO**) and description (**BOMDESCRI**) must be repeated for each item in that BOM. If a single level BOM, you do not need to include the BOM number or Description.

When you save an Excel file as a CSV file, Excel gives you several warnings. It is OK to just select "YES" each time as our goal is actually to get rid of all the formatting in the Excel file, and only keep the data.

If the part_assy field is omitted or not completely filled out, some of the part_assy data will be blank in both the Inventory and the BOM tables. You can run “Audit Inventory” (5.1.13) and then “Audit BOM” (12.10) to automatically fill out the data (except for labor items), however the best is to include the part_assy field data in the import.

The Part_Assy field will contain a "P" if it is empty when creating parts via importing BOM.
Call Software Arts and ask the support person to enter a short script that will change the part_assy field to “A” for all BOMs in your Part Master. Do not perform this if you have phantom BOMs.


*K:\DOUG\working.txt - Notepad++
File Edit Search View Encoding Langua
working.txt
help.txt
Importing BOMs Optional Additional Partmaster Fields Version 8.72 and Higher
With pc/MRP Versions 8.72 and higher, if you add these columns to your BOM import file, additional part information can be imported into the partmast database file. provided the part does not already exist in the partmast file.
Field Field Name Type Width Dec Purpose
9 REVLEVEL Character 3 0 Revision Code
33 STDCOST Numeric 14 6 Standard Cost
5 MANUFACTER Character 25 0 Manufacturer 1
6 MODELNO Character 23 0 Model Number 1
11 POUNIT Character 6 0 Purchase Order Unit
20 LTIME Numeric 6 3 Lead Time (in weeks)
18 MINQTY Numeric 13 3 Minimum Stocking Quantity
12 PORATIO Numeric 14 6 Purchase Order Ratio
13 UNIT Character 6 0 Stocking/Sales Unit
19 MAXQTY Numeric 13 3 Maximum Stocking Quantity
22 SALEPRICE Numeric 14 6 Sale Level 1, Price Level 1
29 LOCATE Character 6 0 Location in Primary Stores
10 COST Numeric 14 6 Average Cost
106 FOOTPRINT Character 64 0 Orcad Footprint
145 ROHS Logical 1 0 RoHS Compliant
194 AUX1 Character 30 0 Auxiliary Field 1
195 AUX2 Character 30 0 Auxiliary Field 2
38 MODELNO2 Character 23 0 Second Model Number
39 MODELNO3 Character 23 0 Third Model Number
34 MFG2 Character 25 0 Second Manufacturer
length : 49957 lines : 1066
Ln : 903 Col : 15 Sel : 7
Dos\Windows
ANSI
INS


*K:\DOUG\working.txt - Notepad++
File Edit Search View Encoding Langua
working.txt
help.txt
Importing BOMs Optional Additional Partmaster Fields Version 9.12E and Higher
With pc/MRP Versions 9.12E and higher, if you add these columns to your BOM import file, even more additional part information can be imported into the partmast database file. provided the part does not already exist in the partmast file.
10 COST Numeric 14 6 Average Cost
106 FOOTPRINT Character 64 0 Orcad Footprint
145 ROHS Logical 1 0 RoHS Compliant
194 AUX1 Character 30 0 Auxiliary Field 1
195 AUX2 Character 30 0 Auxiliary Field 2
38 MODELNO2 Character 23 0 Second Model Number
39 MODELNO3 Character 23 0 Third Model Number
34 MFG2 Character 25 0 Second Manufacturer
35 MFG3 Character 25 0 Third Manufacturer
8 DRAWINGNO Character 15 0 Drawing number
31 ORDQTY Numeric 9 2 Recommeded Order Size (MRP
100 PARTTYPE Character 20 0 Orcad Part Type (Res,Cap)
101 VALUE Character 20 0 Orcad Part Value (5 Ohm )
104 PACKTYPE Character 20 0 Orcad Package Type (TO3)
105 SCHEMATIC Character 84 0 Orcad Schematic Name
62 ALTPART1 Character 31 0 Alternate Part Number 1
63 ALTPART2 Character 31 0 Alternate Part Number 2
64 ALTPART3 Character 31 0 Alternate Part Number 3
24 ALTPARTNO Memo 4 0 General Info
50 WEIGHT Numeric 12 4 Unit Weight
147 SHIPPABLE Logical 1 0 Identifies a shippable item
120 OUTSOURCE Logical 1 0 Outside Labor / Noninv. Part
32 ORDMULT Numeric 9 2 Buy in Multiples of (MRP)
14 ONHAND Numeric 13 3 Quantity in Storage Area 1
length : 49957 lines : 1066
Ln : 903 Col : 13 Sel : 0
Dos\Windows
ANSI
INS

**This picture shows a BOM exploded report of the BOM structure within pc/MRP.**

Another way of showing how pc/MRP organizes entries in the BOM module is to see a report. Take a moment to view the example report below. The report below is the exact same information as pictured above simply presented in a different format.

```
BOM NUMBER         :000000011          REV:              BOM STATUS: Released
BOM DESCRIPTION    :REAR WHEEL AXLE ASSY                   MODEL NO:
DATE               :04/05/2011 02:18:03 PM
QTY                :1.0000
UNCOSTED EXPLODED LEVEL BOM REPORT

P/B ITEM BOM/PART NUMBER                          DESCRIPTION
=================================================================
PART 0002 000000003                               REAR AXLE
BOM  0001 000000010                               WHEEL ASSY
.PART 0001 000000001                              BEARING, 3" OD x 1" ID
.PART 0002 000000002                              SPOKE
.LABR 0003 000000013                              LABOR INSIDE
.LABR 0004 000000014                              LABOR OUTSIDE
=================================================================
```

Now in the process of comparing the two reports, notice that BOMNO 000000011 contains one sub-assembly and one part. Within BOMNO 000000011, BOM 0000000010 exists. This BOM contains 2 parts and two labor items. We distinguish between parts and assemblies by using the Part_Assy field using an A for assembly, L for labor, and P for parts. As you can see, a BOM can call an assembly. This BOMNO calling an assembly (and later the assembly calling additional assemblies) allows pc/MRP to have infinite levels for an indented Bills of Materials.

Stated in a different way, the Bicycle's TOP ASSEMBLY calls for several parts, one being an assembly. The assembly it calls for is 000000010. We know 000000010 is an assembly because it has an A in the Part_Assy field. Further down on the BOMNO column 0000000010 is called. This BOMNO calls for a few more parts, 000000001 and 000000002 (we know that these are parts because they have a P in the Part_assy field) and labor items 000000013 and 000000014.

If your intention is to import BOM data with multiple levels, you will need to format your bills of materials and subassemblies in the format exactly as described above. If you plan to import your BOM data into pc/MRP with only one level, pc/MRP can use the same BOMNO for each PARTNO.

The BOM module uses three different files: partmast.dbf (Inventory), BOM.DBF, and BOM.DBT. In inventory this part can be only listed once. In the BOM module this part can be listed as many times as needed. All inventory data is stored in the partmast.dbf. All BOM data or recipe data is stored in the BOM.DBF and BOM.DBT. A BOM number is also stored in the inventory database table.

Below is a list of the required field names and use for each record of a BOM in the BOM DBF. Key fields are fields that must exist and have contents for a successful import.

KEYID – Do not include this field as pc/MRP will automatically fill this field
BOMNO - BOM Number KEY FIELD (15 char max). If left blank, pc/MRP will ask for a value. If a multi-level BOM import, this field is required to have data.
BOMDESCRI - BOM description KEY FIELD (35 char max). If left blank, pc/MRP will ask for a value. If a multi-level BOM import, this field is required to have data.
PARTNO - Part Number KEY FIELD (15 char max)

ITEMNO - pc/MRP organizes everything in lists. This numerically orders each item in a given level of a BOMNO key field. (numeric integer field)

QTY - The quantity of the item needed in that specific level to finish that specific level. KEY FIELD (numeric, 8.4, 12 total)

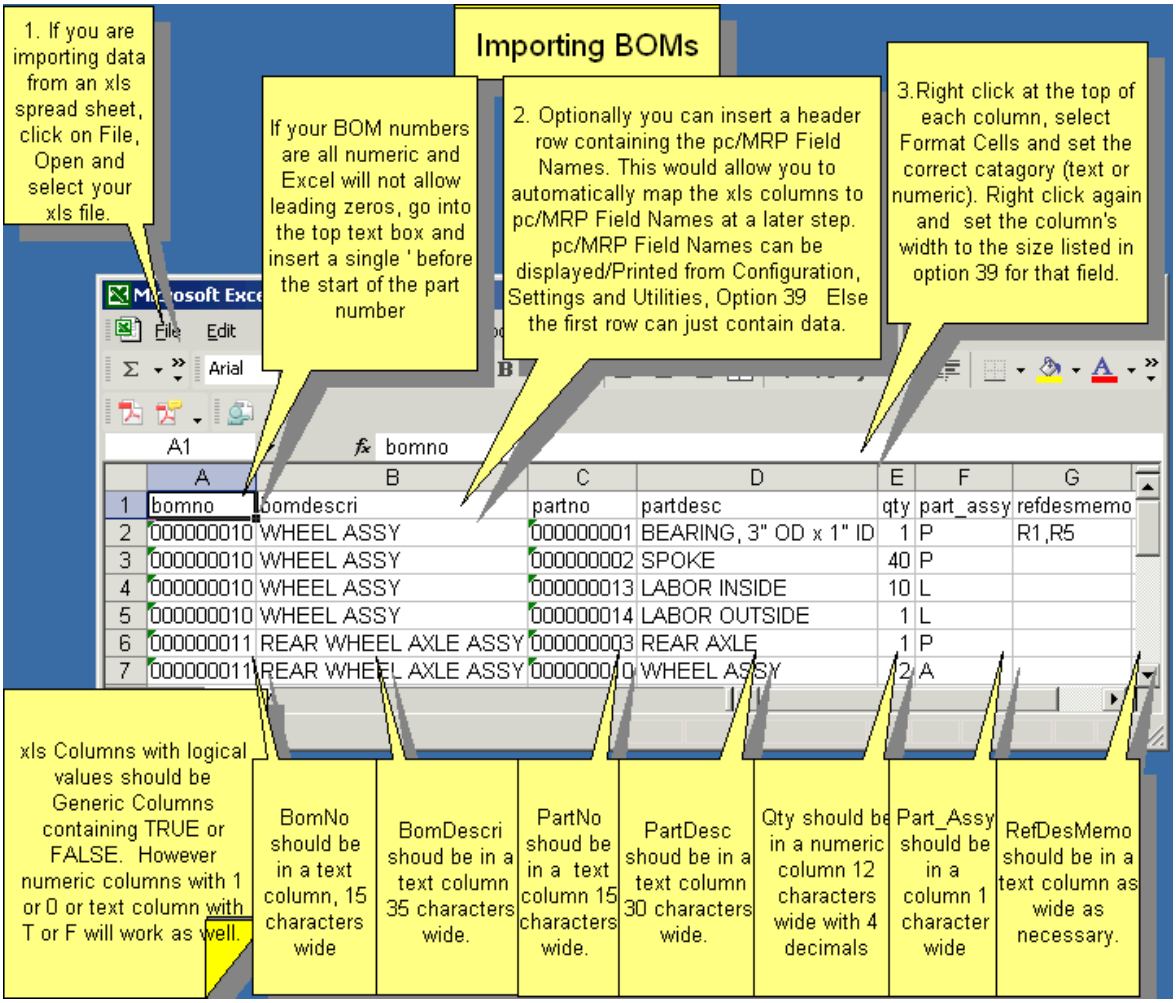
PART_ASSY - This field labels this line item as a Part, Assembly or Labor. KEY FIELD (1 char). Will default to "P" if omitted or invalid.

REFDESMEMO - This field uses the BOM.DBT file and stores the reference designators or locators. This field in Excel is a char field; max length is what your version of Excel supports per cell.
If your reference designators exceed 254 characters, see Section 8 "Importing large fields into pc/MRP" later in this chapter

PARTDESC - field contains the name for the part and is used when added to the partmaster if it does not already exist in the partmaster table. (35 char max)

**Step 2, Format the BOM spreadsheet and save as a CSV file with or without column headers**

After performing your edits, your spreadsheet should look similar to the picture below.



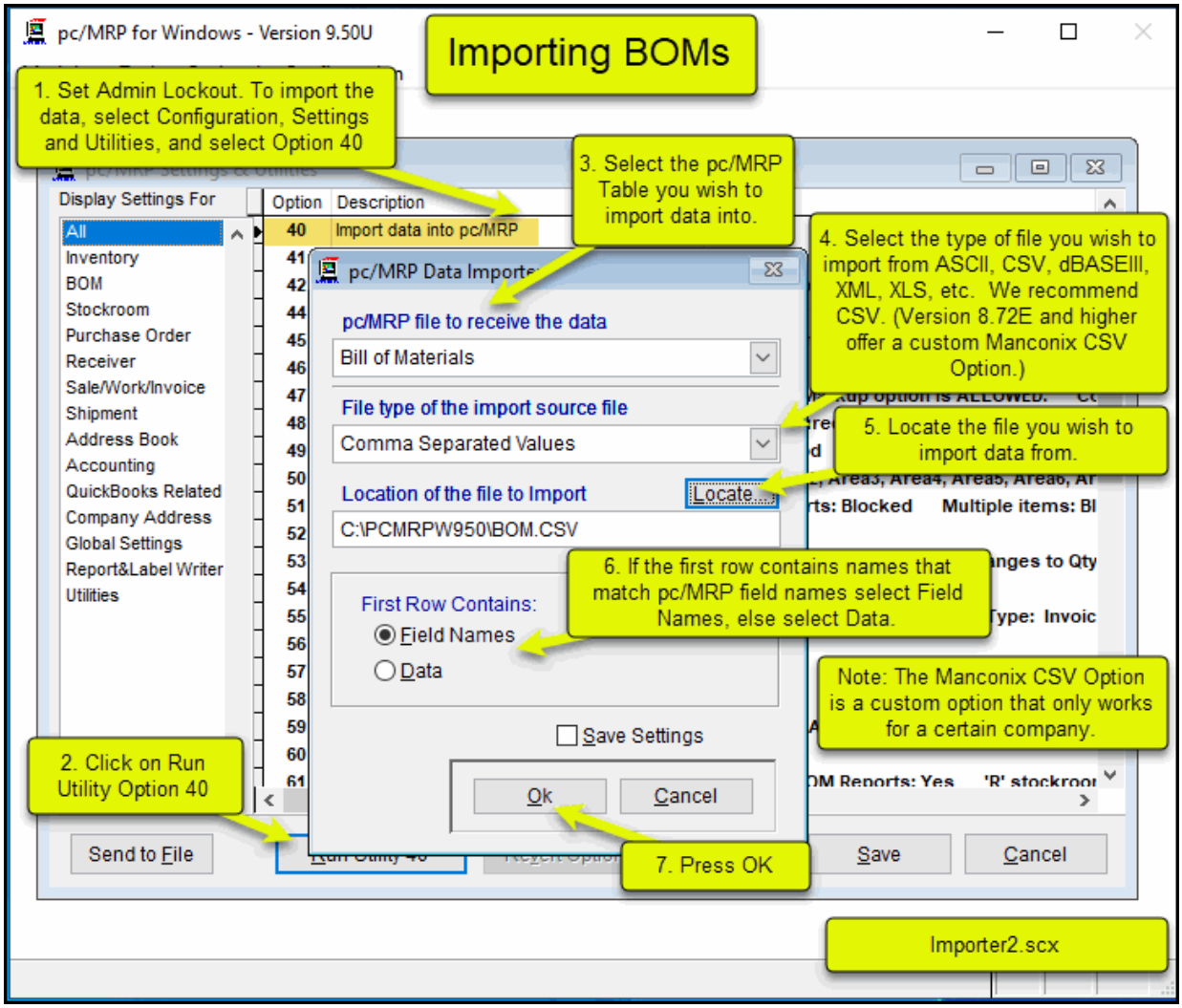

**Note**: The Excel file should NOT have any hidden columns or frozen panes.

Now save as a .CSV (comma separated values) file for import.

When you save an Excel file as a CSV file, Excel gives you warnings about features that are not compatible with CSV. Just select "YES" each time, as our goal with saving as CSV is exactly that: to get rid of Excel's formatting and just to keep the data.

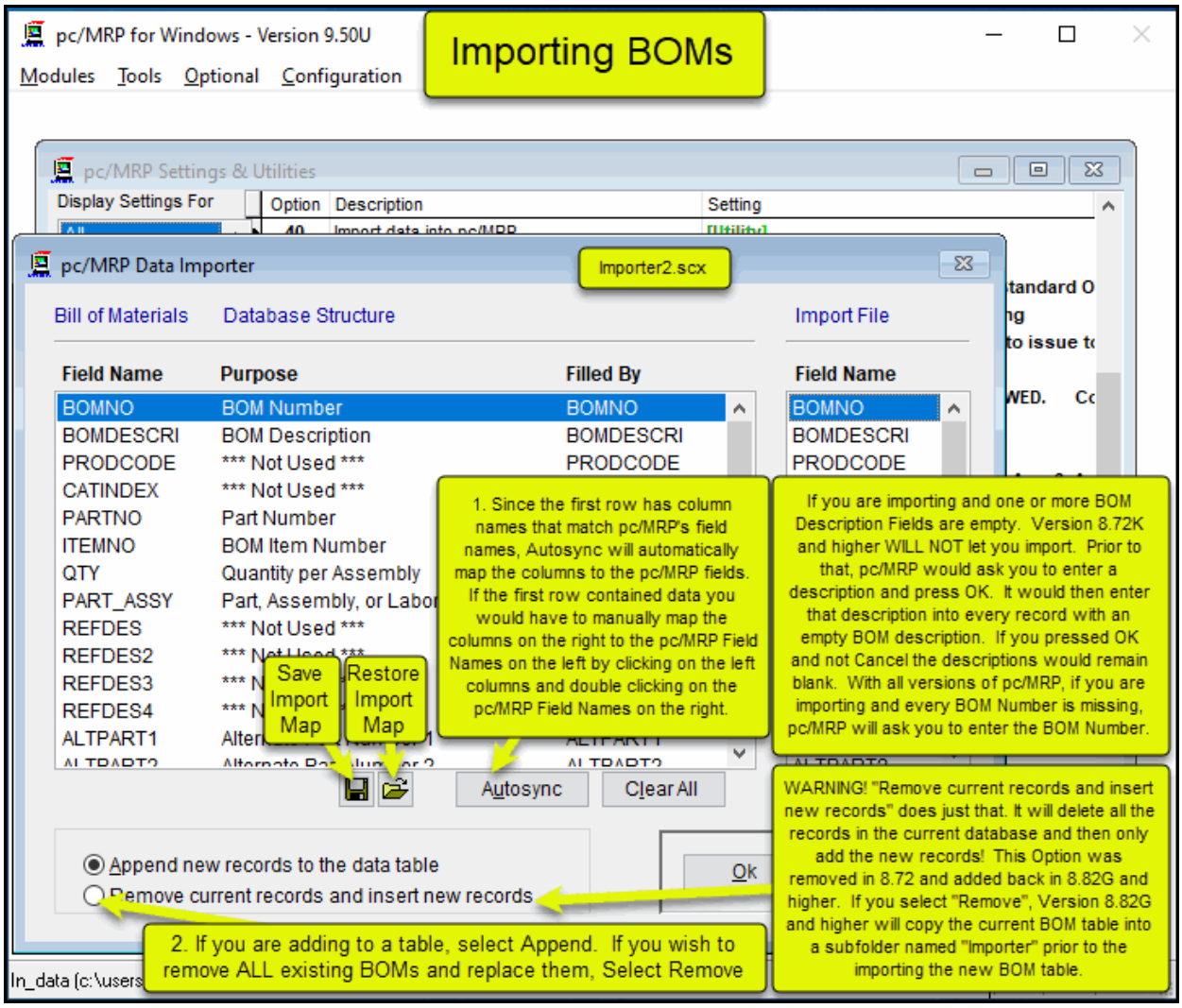
**Step 3, Finishing up with Option 40:**

It is a good idea to set an Administrative Lockout before importing data into pc/MRP.



**Step 4 Import the data into the BOM database**

The first row contains header information so select "Field Names" for the "First Row Contains" selection.

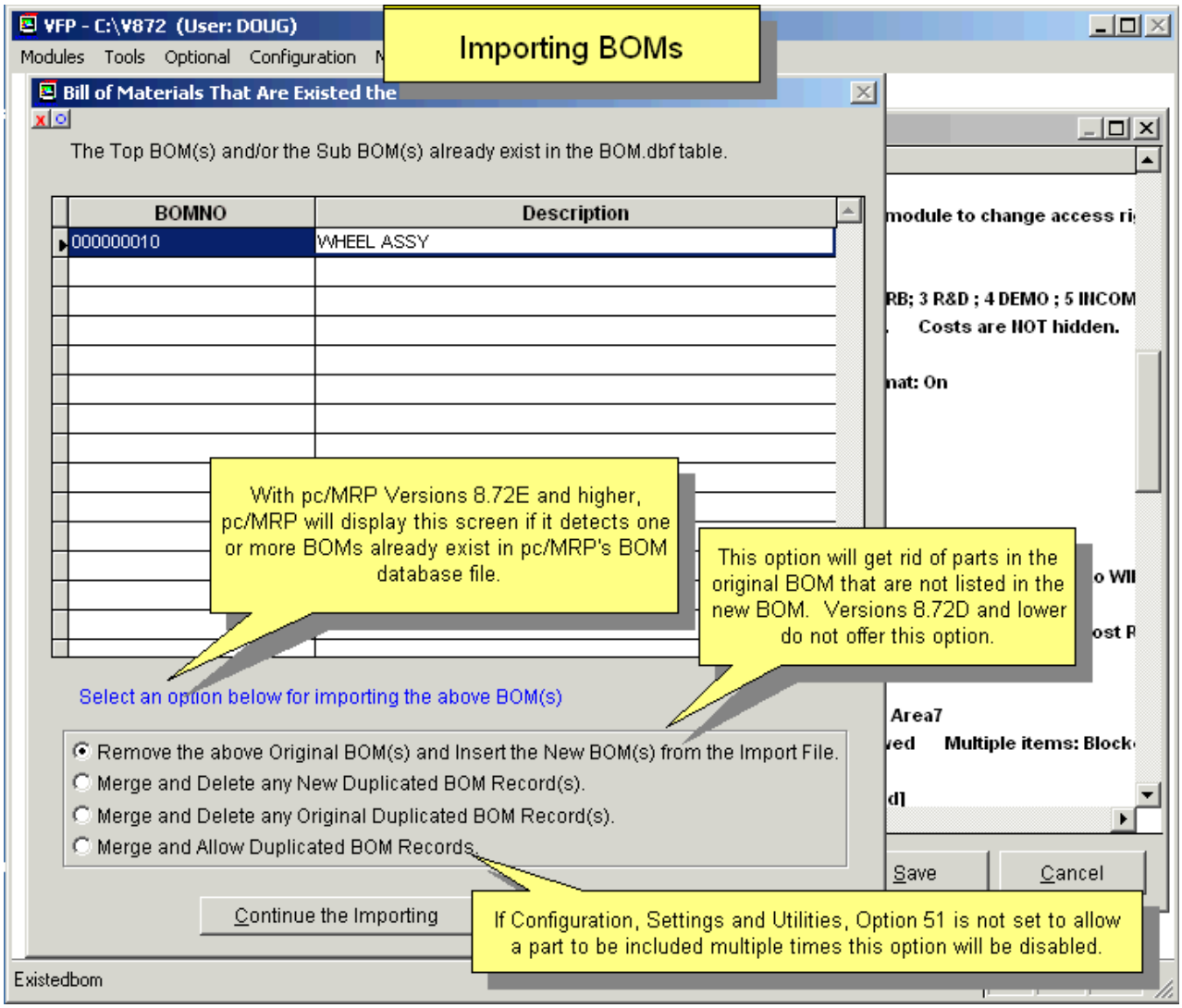



**PLEASE Note: The Import Method "Remove current records and insert new records" does just that. It will delete all the records in the current database and then only add the new records!** This option is intended for companies in the process of implementing pc/MRP, in case the user made a mistake when importing, and needs to start from the beginning. If you select Remove, pc/MRP will create a backup in the Importer subfolder. The application defaults to “Append”.

**Note:** See Section 8 “Importing large fields into pc/MRP” later in this chapter if you also import **Reference Designators**.

**Note:** Users can import data into several fields of the Partmast table, along with the BOM import. See the list of the fields above. This part information will only be imported if the part does not already exist in the Partmast table. If it does, pc/MRP will ignore the part data (will not import the part data, and will not ask whether you want to keep the old or new parts).

**If One or More BOMs Already Exist in pc/MRP**




**Example**:
Bom# TESTBOM has 3 parts: y1, y2 and y3. We want to change it to have y3, y4 and y5.

Some fields might have different values in the new y3 than they had in the original y3. The new BOM also has y3, but maybe with a different quantity per assy.

pc/MRP detects that the BOM# TESTBOM already exists, so it asks you what you want to do.

Here are the results for the different selections:

(1) remove and insert: y3, y4, y5 y3 will be the new version

(2) merge, delete new: y1, y2, y3, y4, y5 y3 will be the old version

(3) merge, delete original: y1, y2, y3, y4, y5 y3 will be the new version

(4) merge, allow duplicates: y1, y2, y3, y3, y4, y5 y3 will be listed twice, old and new

This last selection is only available if Option 51 is set to allow duplicates.

**Note**: Manconix CSV Option only

The Manconix Option expects a custom Manconix XLS file saved as CSV file. This option will automatically select Bills of Materials and use a custom template. It expects to find the Top BOM No at row column 1,7 and the Top BOM Description at 2,7. It then deletes first 5 rows. It will continue to delete rows until it finds a row where the first character of the first column is a digit as this represents the level number within the BOM.

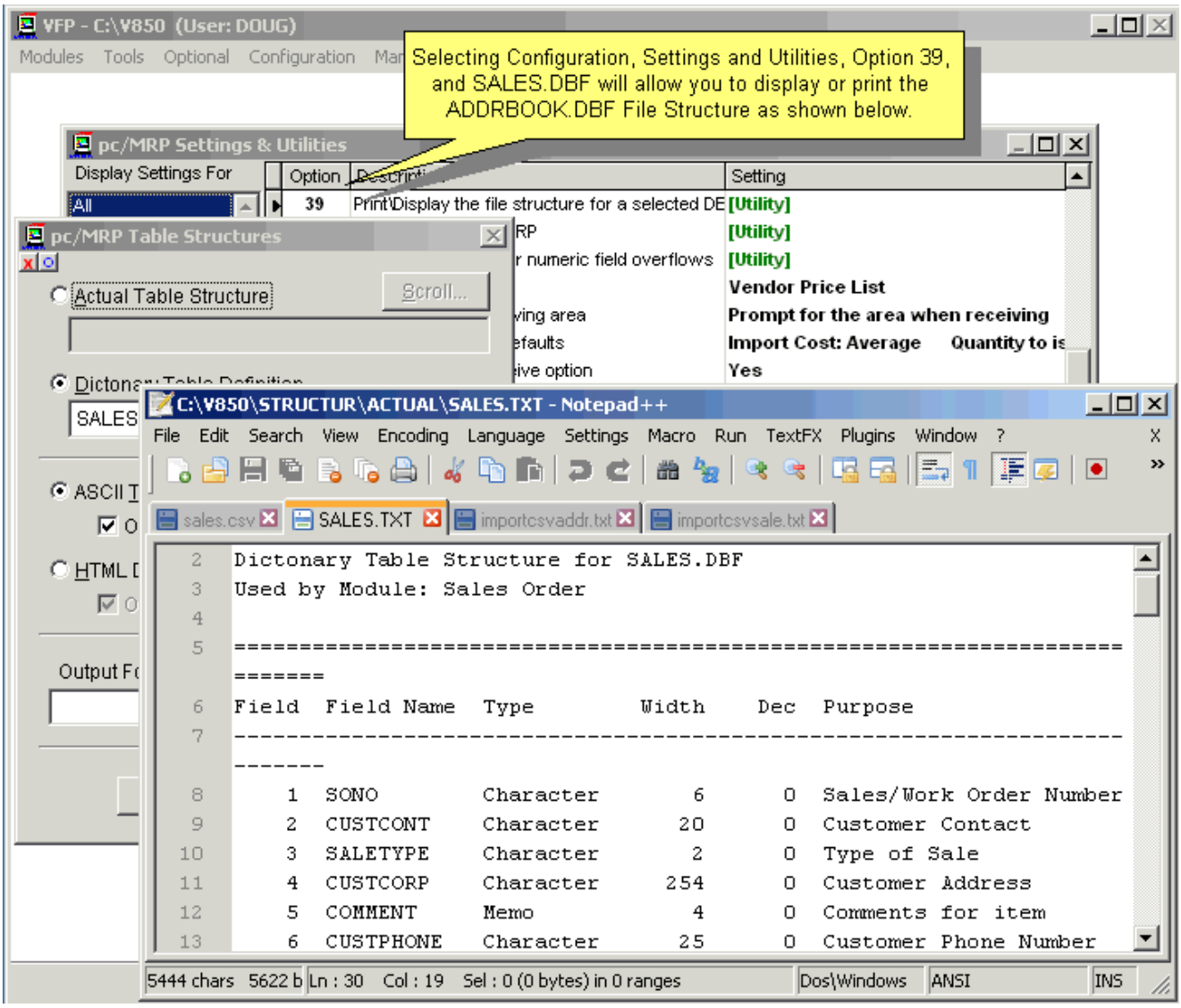
The code found in Importer2.scx AutoSyn_Manconix automatically creates the manconix mapping template.

Column Field Contents
1. BOM Level
2. Item No
3. PartNo
4. RevLevel
5.
6. Part Description
7. Manufacter
8. ModelNo
9. VendName
10. VendID
11. PoUnit
12. Qty
13. RefDesMemo
14 Part_Assy
15. StdCost
16.
17.
18. LTime
19. MinQty

### 15.11.6 Sales Orders

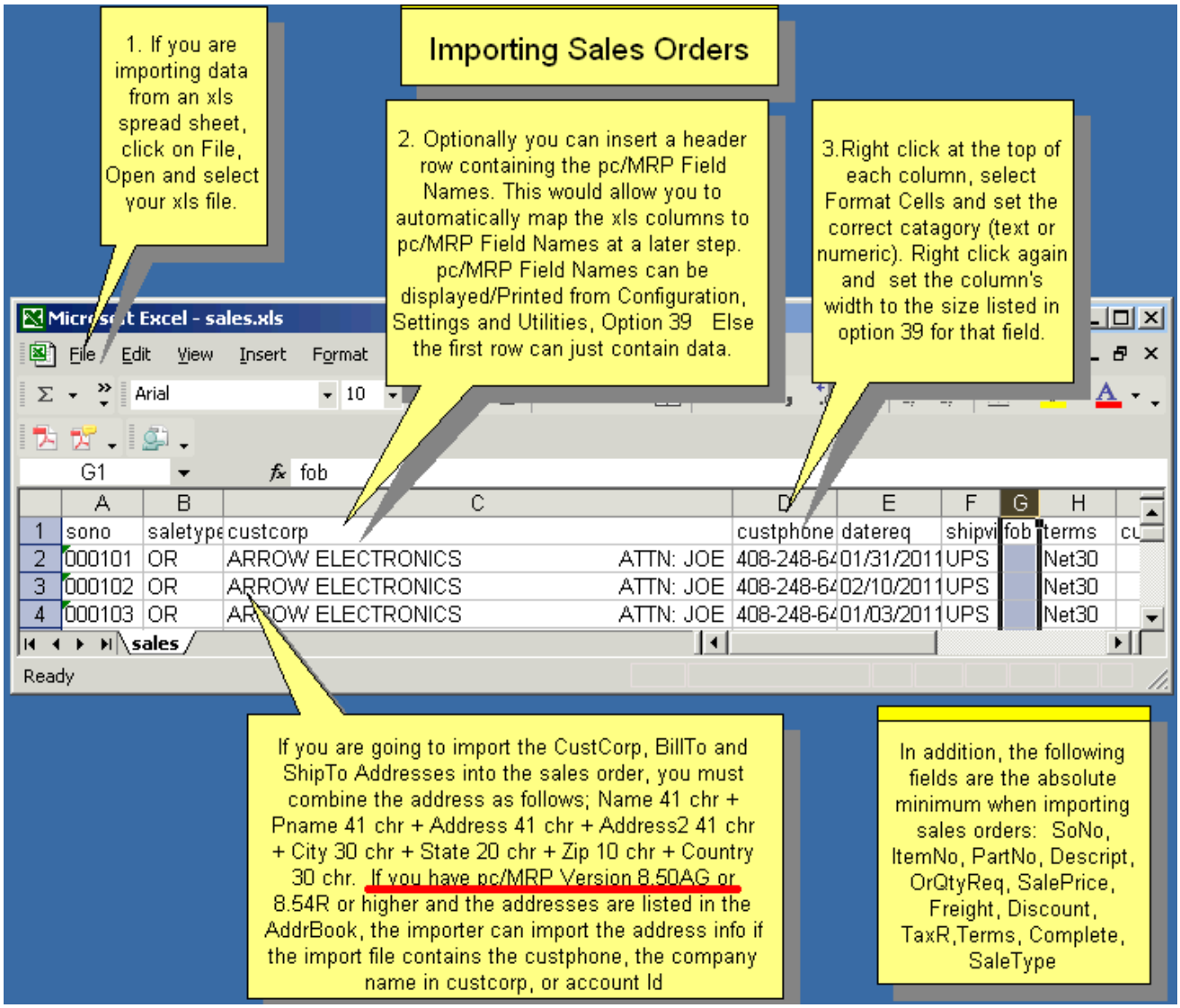
Importing POs would be very similar.

**Step 1 Use Option 39 to print out the sales.dbf file structure.**




Please note the field names as they are useful when selecting the Autosync option when importing with **Option 40**.

**Step 2 Format the Sales Excel file data and save as a CSV file with or without column headers**

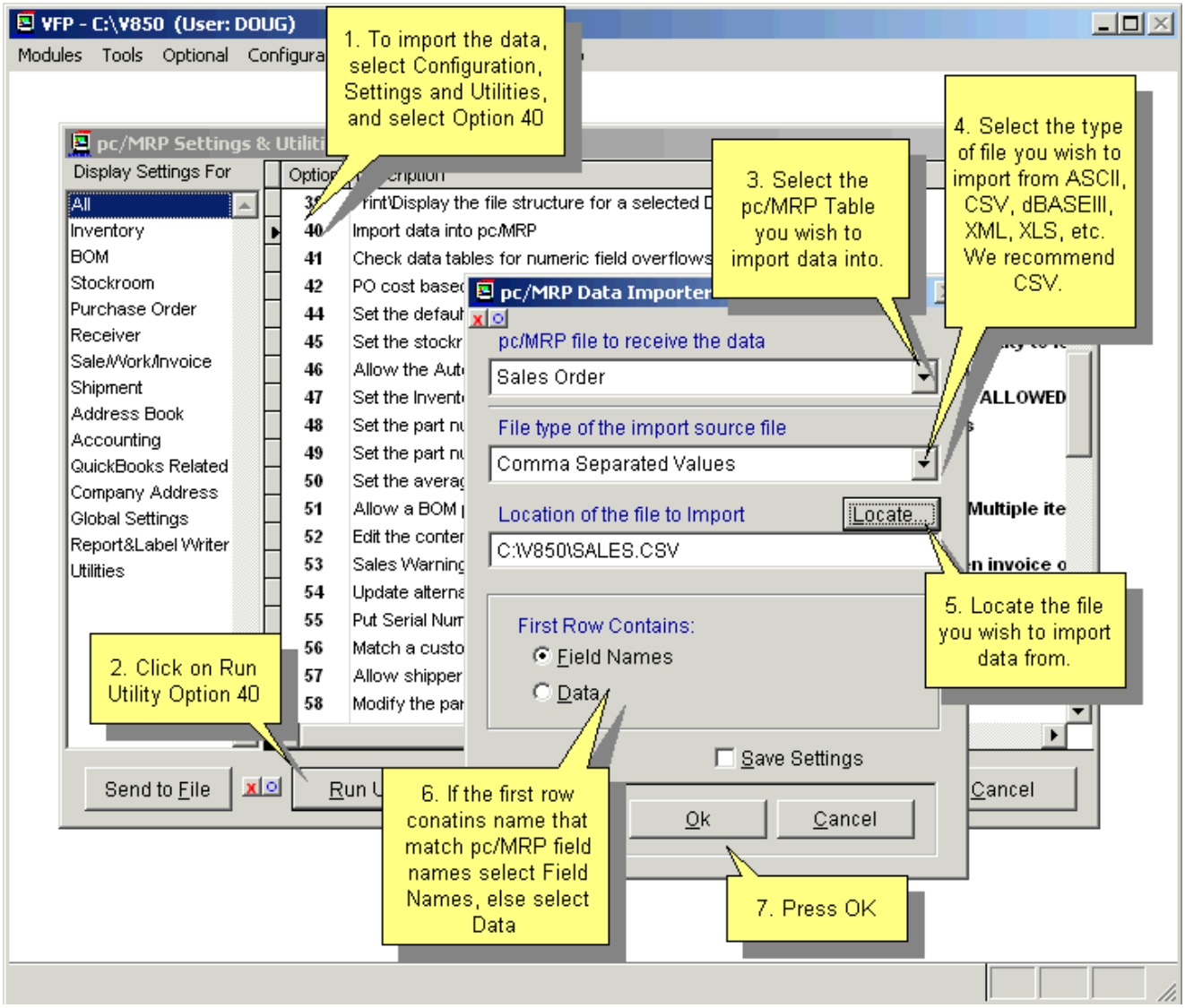



Please note that the structure of the CustCorp, BillTo, & ShipTo fields are concatenated fields described in Section 15.4.4.2.

When you save an Excel file as a CSV file, Excel gives you warnings about features that are not compatible with CSV. Just select "YES" each time, as our goal with saving as CSV is exactly that: to get rid of Excel's formatting and just to keep the data.

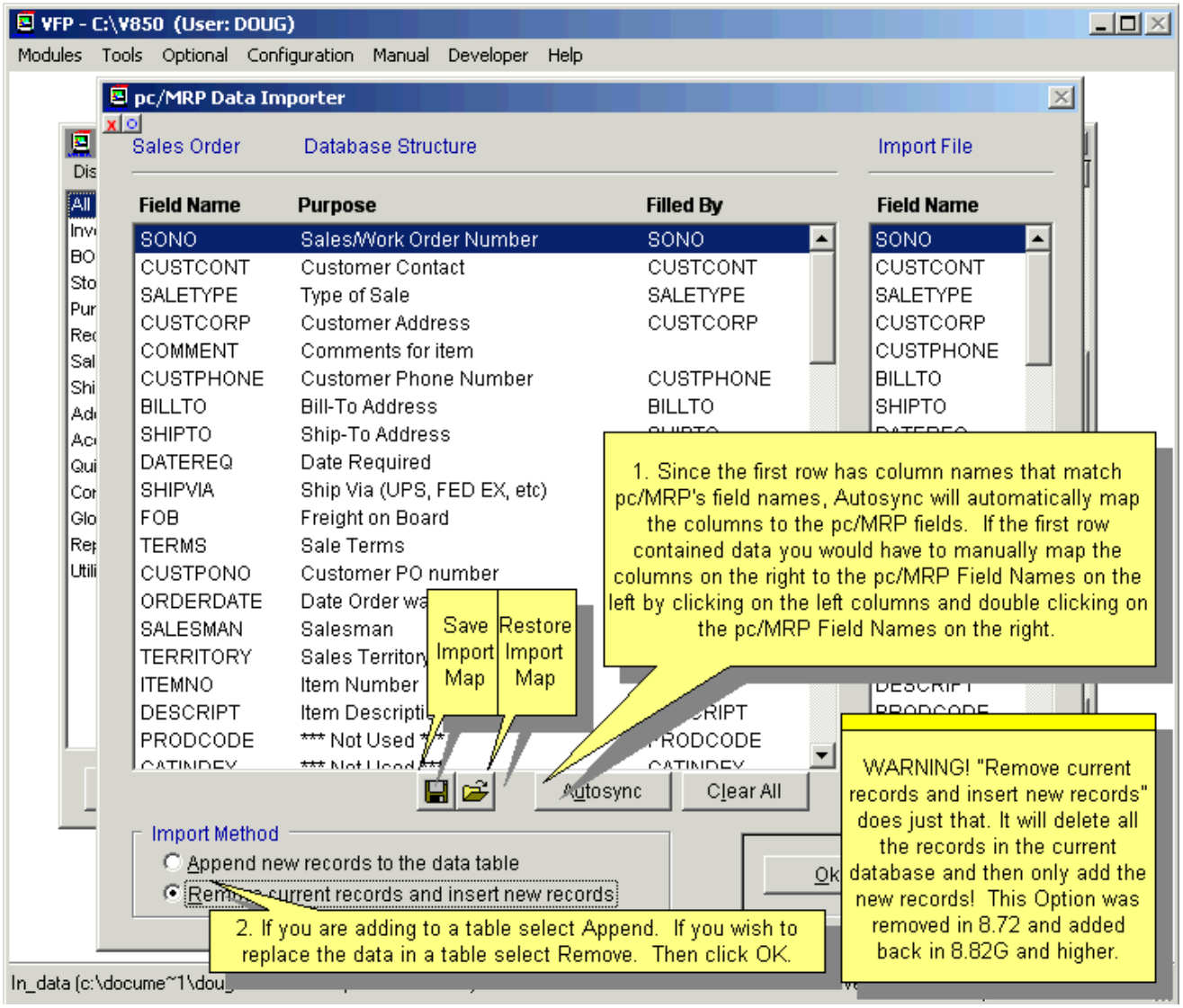
**Step 3 Using Option 40 to Import Sales Order Data from the CSV file**

It is a good idea to set an Administrative Lockout before importing data into pc/MRP.




Remember to select the **FIELD NAMES** for the "First Row Contains" selection.

**Step 4 Finishing up the Import with Option 40**




**PLEASE Note: The Import Method "Remove current records and insert new records" does just that. It will delete all the records in the current database and then only add the new records!** This option is intended for companies in the process of implementing pc/MRP, in case the user made a mistake when importing, and needs to start from the beginning. The application defaults to “Append”.

The import will automatically update the Inventory’s On Demand Quantities. Importing POs will automatically update the Inventory’s On Order Quantities. **Note:** versions **9.10C** and below did not update On Order Quantities.

### 15.11.7 Saving as a DB-III file from Excel 2003 and earlier.

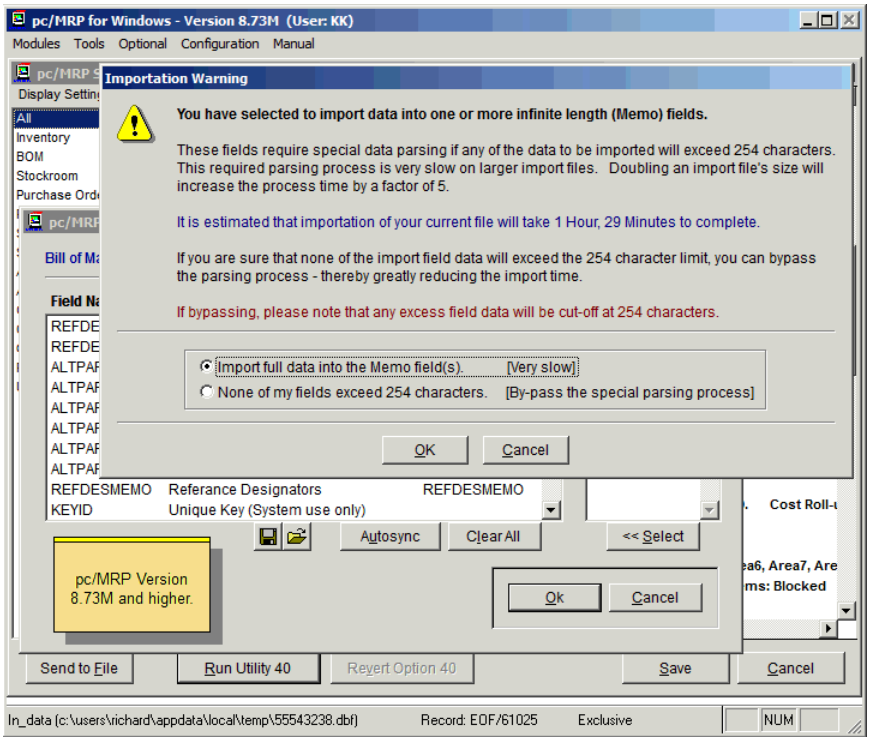
1. Enter the data to be imported into an Excel spreadsheet.
2. In Excel, you must have the first row containing the column headings.
3. Select File, Save As, and select the DB-III or DB-IV file format.
4. In Option 40, select the "pc/MRP Data file to receive the data" from the dropdown list
5. Select the DB-III import file for "File Type of the Import Source File"
6. "Locate" the dBase file to import
7. Select Field Names for the "First Row Contains" selection
8. Press OK and continue to the second screen
9. Press "Autosync" to match the column headings with the pc/MRP field names. If the names are spelled different or named differently, you will have to manually map the data by clicking both sides that are to match and pressing "Select"
10. Select "Append…" or "Remove…"
11. Press OK to import the data

**PLEASE Note: The Import Method "Remove current records and insert new records" does just that. It will delete all the records in the current database and then only add the new records!** This option is intended for companies in the process of implementing pc/MRP, in case the user made a mistake when importing, and needs to start from the beginning. The application defaults to “Append”.

### 15.11.8 Importing large fields into pc/MRP.

Follow the steps below if you are importing large fields like **Reference Designators** into the BOM module or the **General Info** field into the Inventory module.

**Note:** Since Versions **8.72E** and higher pc/MRP can import more than 254 characters into the REFDESMEMO field. **8.72AD** and higher includes a progress bar. If you are importing a very large number of BOMs at the same time and some of your reference designators are longer than 254 characters, the import can take a long time. **8.73K** and higher displays the estimated time to import your file. The following example resulted from attempting to import over 60,000 records. You might want to import your BOMs in batches, rather than all at once.



**15.11.9 Possible Problems with Importing Excel Files**

- Your Excel file contains hidden columns.
    - To display the hidden columns, press Ctrl-A. Select File, click on New, select Edit, select Special Paste, and select Values. All of the hidden columns will now be displayed. The new columns can now be edited or deleted.
- Your dates are not right.
    - Make sure that the Excel file contains dates in a MM/DD/YYYY format. You might need to create a custom format in Excel for that.
- Your text fields are truncated.
    - Any char field that exceeds the length of the field in pc/MRP will be truncated to the length accepted in pc/MRP.
- You get an error that pc/MRP needs exclusive assess to the file that is going to be imported.
    - The file is still open in Excel or another program.
    - You have not selected the correct file type to import.

You are done. You should understand by now that this is complicated. Importing however is easy to do if you follow the rules. The most important rule is to have back-ups. If you have questions or would rather have Software Arts import your data, call. Reading this is free. Having us walk you through this or do this ourselves requires the use of support time.

# 15.12 Tracking Serial Numbers

### 15.12.1 Overview

pc/MRP comes **standard** with the ability to track one serial or lot number per Sales Order line item.

The **optional** Serial/Lot Number Tracking Module allows users to track an infinite number of serial numbers per line item. For companies with the need for an advanced serial/lot number tracking method, Software Arts, Inc suggests to use the Optional Serial/Lot Number Module, covered in detail in Ch. 16.10 in this Manual. The optional Serial/Lot Number module allows the user to issue, invoice, receive, and track an infinite number of serial or lot numbers per line item. In fact, each item in inventory can have a serial number and be issued, received, and shipped by serial number.

### 15.12.2 Tracking Methods (with the standard module)

Either or both of the methods listed below can be used.

- The Address Book, Sales Order, Receiver and Invoice Modules can record the serial number of an item by entering the serial number into the 15 character Serial Number field. Sales Orders, Invoices, and Shippers can be configured to print out the Serial Number or the Model Number using the Configuration Menu's Change Boiler Plate Option. (If you need both, you can create a custom report.) You can print out All Receivers, Sales Orders and Invoices for a Serial Number.

- The Stock Transaction Module can be used to track serial numbers by answering "Y" to tracking lot numbers and then entering the serial number into the lot number field. The Stock Room Reporting Module will provide a record of all transactions for a specified lot number (serial number).

# 15.13 Updating pc/MRP

### 15.13.1 Overview

There are two kinds of updates.

A new pc/MRP **version** has changes in a database structure. Software Arts, Inc releases a new version about once a year. You will see a number change, like from 9.10 to 9.11 or from 9.00 to 9.10. At the time of the releasing this Manual, these updates are only available (and they are free) for our customers on a Support Contract. These updates require an administrative lockout, a full backup, and a total of about 25 minutes of time.

A **revision** update goes for example from 9.10D to 9.10E. These contain no database structure changes, and they can be done from the configuration menu by the user, just about any time. Software Arts, Inc recommends users perform a revision update about once a month. These contain minor improvements, and mostly bug fixes. You do need to set an admin lockout before the update, but the backup is optional. The total downtime is usually 2-3 minutes.

Users can learn about the changes in pc/MRP from Software Arts' web site:
http://www.pcmrp.com/910update.htm

### 15.13.2 Version Updating Instructions

1. Call Software Arts if you have any difficulties in following the procedures below.
2. If you have a multi-user copy of pc/MRP, make sure everybody has logged off pc/MRP before starting this update.
3. Select Configuration, User Connectivity and Administrative Lockout. Click "Set administrative lockout". Wait until the "You are the only user currently accessing the pc/MRP Application" message appears.
4. Exit from pc/MRP.
5. Make a back-up copy of the current production pc/MRP directory and all of its contents (usually named '…\PCMRPW').
6. Make sure that no files in the pc/MRP directory are attributed read only.
7. Single click on the URL in the email containing the update .exe file.
8. When prompted select Save As.
9. Browse and select your desktop to store the update .exe file.
10. Once the download is complete, double click on the new update .exe file.
11. The update program will ask you to browse and locate the pc/MRP directory.
12. Clicking Next will extract and copy files into the pc/MRP directory.
13. Click on Finish to exit from the update program.
14. Start pc/MRP, it will detect that it has been updated and make any necessary changes to pc/MRP to apply the update.
15. Verify the pc/MRP data.
16. Remove the Admin lock you set in step 3.
17. Now you can delete the update .exe file from your desktop.

**Note:** To minimize downtime, perform the backup from the server. Download the .exe file ahead of time.

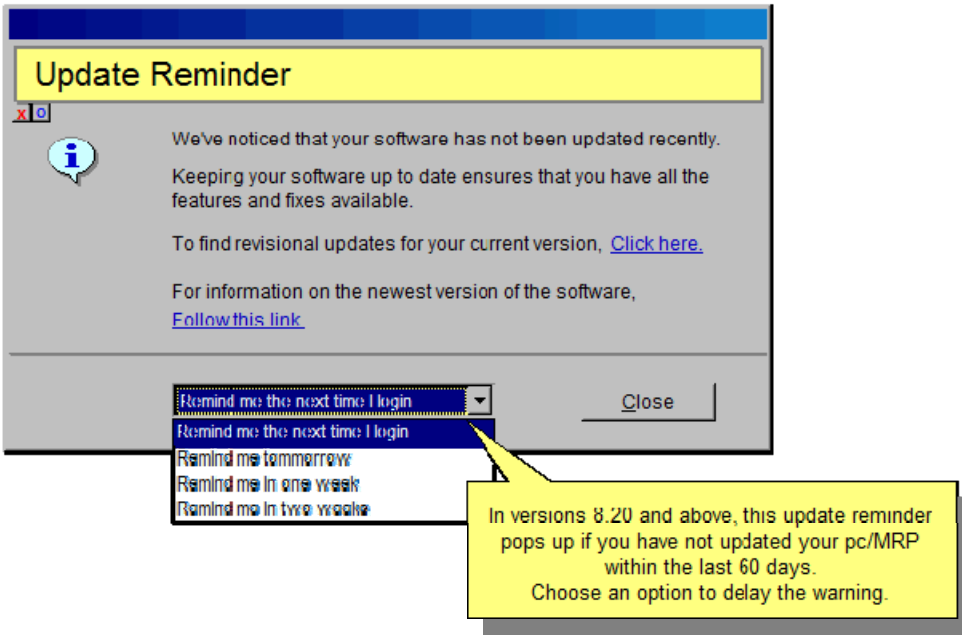
### 15.13.3 Revision Updating Instructions

See a detailed slide show at http://www.pcmrp.com/mrp101/uconnintro.htm.

1. Set Admin Lockout as in Step 3 above.
2. Exit pc/MRP.
3. Create a copy of the current production pc/MRP directory and all of its contents (Usually named '…\PCMRPW').
4. Re-start pc/MRP and select Configuration, Download & install a new revision.
5. pc/MRP will re-start and finish the update if needed.
6. Verify the pc/MRP data.
7. Remove the Admin lock you set in step 1.

### 15.13.4 Revision Update Reminder

The following window will appear if you have not updated pc/MRP in 60 days.




### 15.13.5 Possible Installation Errors (for version update)

- While installing the update from the update.exe file, the update program asks for disk two. Recover from the back up, and re-download the update EXE file. This time, once the download is complete, make sure the file size of the update .exe file is equal to the file size next to the URL link within your e-mail.
- While installing the update from the update EXE file, an error is generated. Either a file is attributed read only or a user is still using pc/MRP. Recover from the backup and start over. If this error persists, call Software Arts with the error on the screen.
- After installing the update EXE file and starting pc/MRP, pc/MRP does not detect an update is in progress. The update files were installed in the wrong location. Re-install the update. This time, after browsing for the path, visually verify that the path is correct.

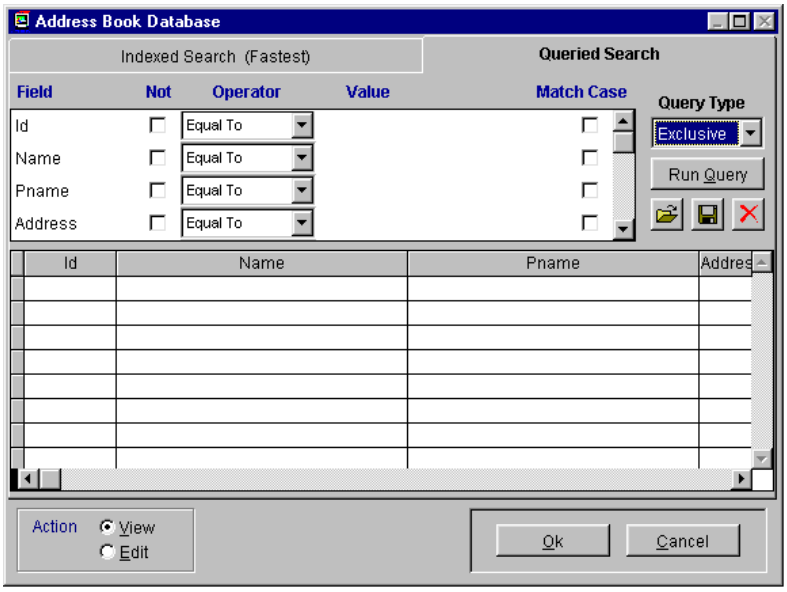
Also see **Chapter 17.7.**

# 15.14 Common pc/MRP Functions

**Note**: pc/MRP offers the usual Right Click – Cut – Copy – Paste functions.

### 15.14.1 Queried Searches

The **Queried Search** tab in most scroll screens allows users to build, run, save and load queries. The query can be run against any field in that specific module including the comments of each record.




#### 15.14.1.1 Creating and Running a New Queried Search

The Queried Search tab screen is the same for every module. Only the list of fields change according to the fields available in each module. The above example is from the Address Book Database.

Click on the Queried Search tab. The top window has each **Field** in the table. In that window, users can scroll up or down to view additional fields of that table. Each row is the queried value of that Field. Within each row, users can define:

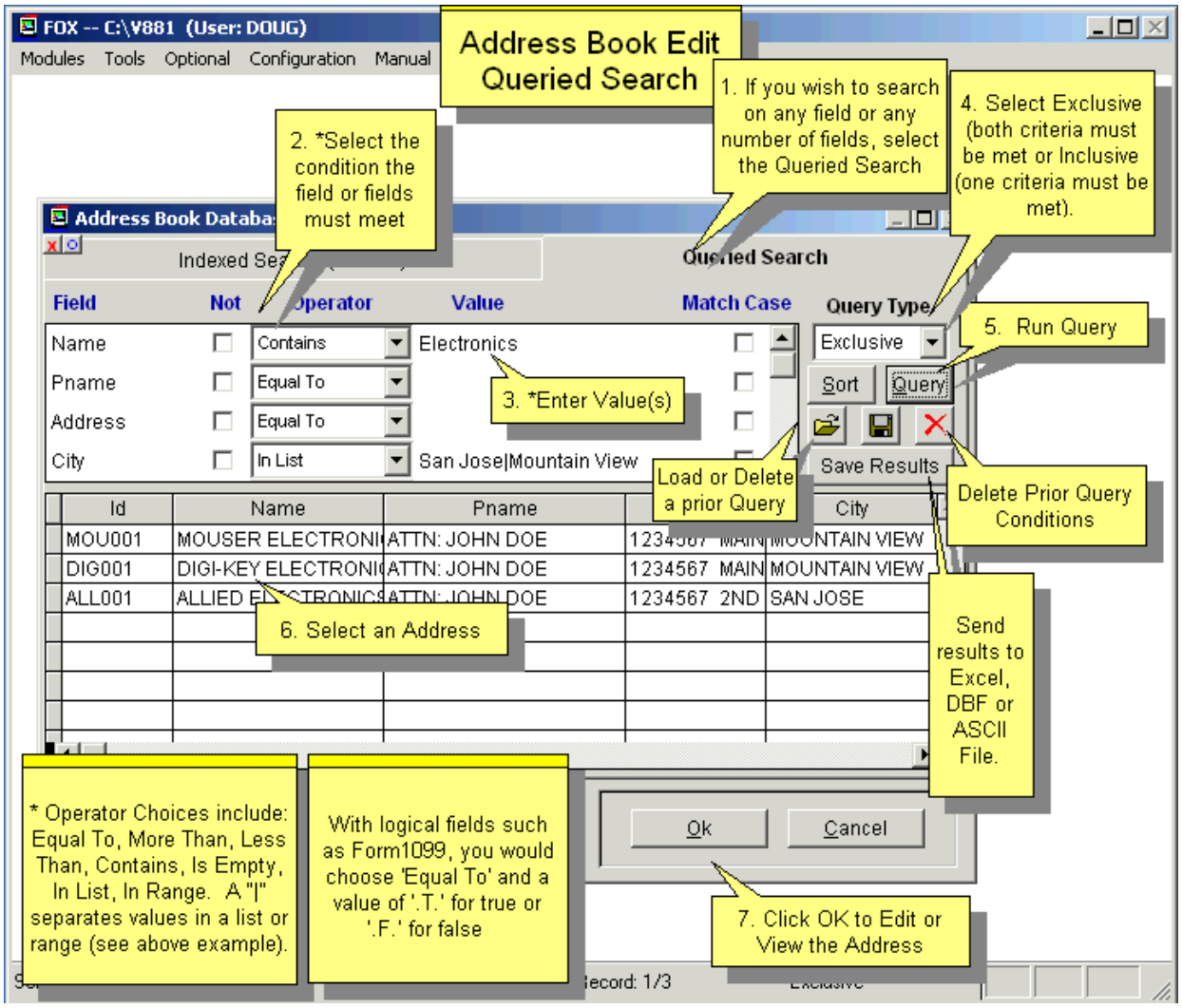
- **Not**: check box
- **Operator**: Equal To, More Than, Less Than, Contains, Is Empty, In List, In Range (a "|" separates values in a list or range). 'Contains' is not valid for date fields such as OBSDATE or DATEREQ.
- **Value**: the actual search value
- **Match Case**: matches upper, lower, or mixed case.

When the query is ready to run, simply press the **Run Query** button. The bottom window contains the results of the query after it is run.

**Notes:**
**Equal To'** is actually a 'Begins with' operator.
**'Contains'** does not use the "|" as there is only one value that 'Contains' looks for in the field. You can even have a value of "this and that" and it will find the exact data string wherever it is located in the field.
**'In a Range'** is for from/to values; e.g. Name, In a Range, "adj|ann". Will return all starting values from adj thru ann. Notice, no spaces.
**'In List'** is for an exact beginning; e.g. selecting Name, In List, "eng|con" will only return values beginning with 'eng' and 'con'. Again, no spaces.

As you can see, 'In List' and 'Equal To' are very similar.

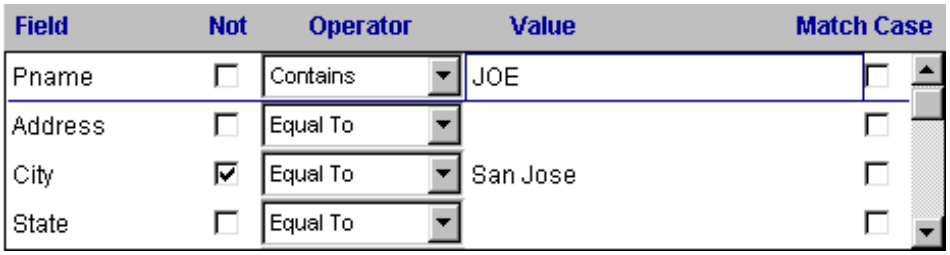
Example 1: If you wanted to search for a customer name of ELECTRONICS, you could set the query to search for a NAME of ELECTRONICS. If NAME only started ELECTRONICS, the operator could be left as Equal To, however we may have last names or multiple names in the NAME field. Thus, change the Operator to Contains. Click on the Query button to run the query.




Every Address Book entry that contains a NAME of ELECTRONICS will then be listed in the scroll screen.

Every field can contain a query value to further build specific constrains for the query. The ability to enter multiple constrains allows users to further narrow the search down to the criteria specifically desired.

Example 2: If we were to want to see all Address Book entries for the PNAME of JOE that do not reside in the City of San Jose, we could scroll to the City field, enter a check in the Not field, an Operator of Equal To, and a Value of San Jose. For LOGICAL fields such as Form 1099, you would choose Equal To and a value of '.T.' for true or '.F.' for false. A date field is entered as mm/dd/yyyy.



Users can further define multiple constrains through the **Query Type** field. The Query Type allows users to define the query as **Exclusive** or **Inclusive**. A query with multiple constraints that is Exclusive must meet all of the criteria to be listed in the scroll window. A query with multiple constraints that is Inclusive must meet only one constraint to be listed in the scroll window.

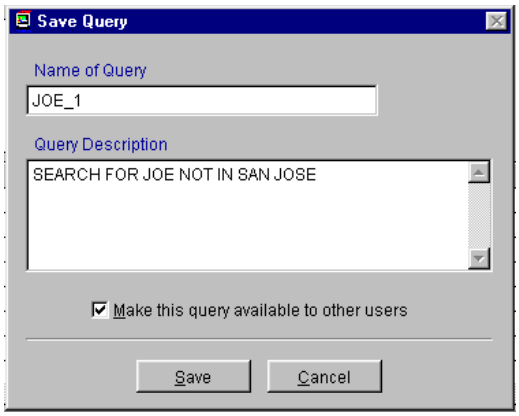
By example, if we were to search for an Address Entry that either has a PNAME of JOE or resides in San Jose, the Query Type would need to be set to Inclusive.

### 15.14.1.2 Saving, Loading, and Deleting a Queried Search

Once the query has been built, it can be saved for future use by pressing the disk save button.



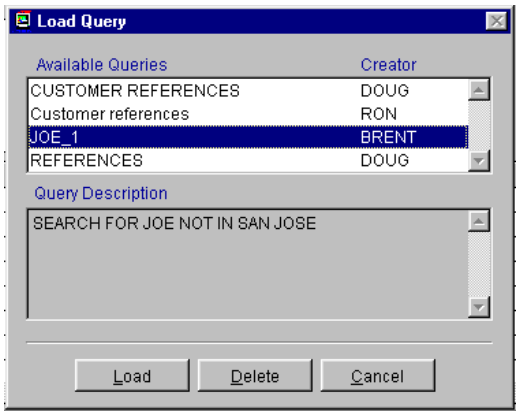
A name and description can be defined per query. Queries can also be saved and made available to all users or just the user that created the query.




To load a previously created Queried Search press the load from folder button.

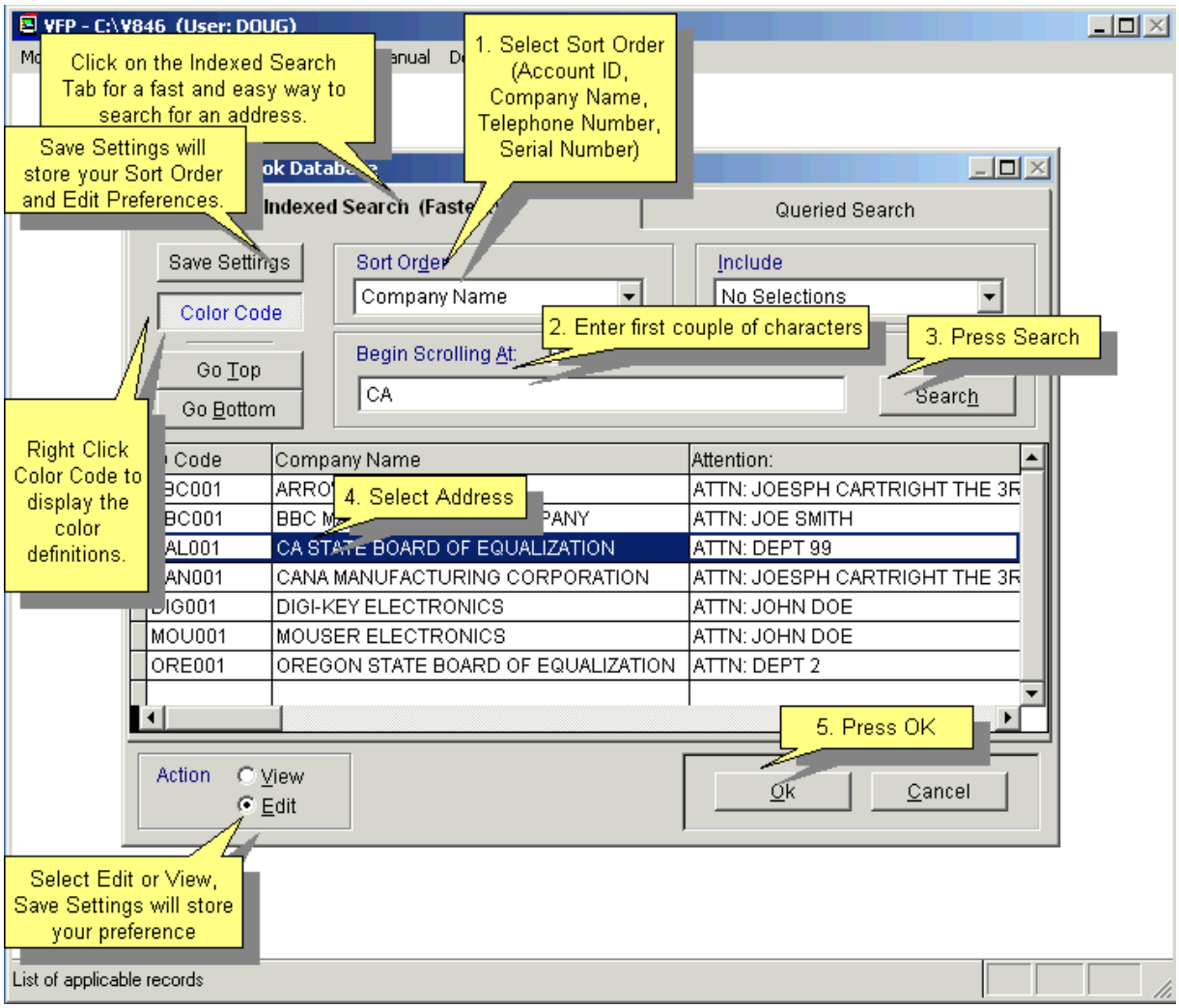


Once a user presses the load from folder button, all that are available to that user will be viewable.




From this screen, queries can be loaded or deleted.
**Note:** Only the user logon that created the query can delete it. However, Configuration, Settings and Utilities, Option 96 can be used to delete all of a user's edit, report, import lists.

### 15.14.2 Indexed Searches




Selecting an Indexed Search allows users to search on indexed fields. This allows pc/MRP to find the information much faster. To perform an Indexed Search, select the following:

1. Select the Indexed Search tab
2. Select the desired **Sort Order** from the dropdown list.
3. Enter the search data in the **Begin Scrolling at:** field.
4. Select the desired action, **View** or **Edit**
5. At this time, you can press the **Save Settings** button which saves the selected settings for your logon name.
6. Press **Search**

pc/MRP will automatically scroll to the desired record or the nearest match. Select the correct record by scrolling and press OK to proceed to the edit or view screen for that record.

**Note:** Some modules will have an **Include** dropdown list to select from.

### 15.14.3 Re-index a Database Table

Re-creates the Index Files to the associated module. pc/MRP automatically updates its index files under normal operation. However, if you ever get a "record out of range" error message, re-indexing the index file is usually the cure. Re-indexing is wise to do after a heavy editing session or after adding many transactions simply as a precautionary step. It is important to set an **administrative lockout** before re-indexing.

### 15.14.4 Remove Marked Records

Removes from the disk all of the records that were previously marked for deletion (in the associated module). It is important to set an **administrative lockout** before removing marked records.

pc/MRP will automatically create backup files of the databases in the PACK directory prior to any removal of records. pc/MRP does this in case any hardware problems occur during the removal process.

**Note:** Since Sales Orders and Work Orders are stored in the same database table, removing marked Work Order records will also remove marked Sales Orders records, and vice versa. If you want to keep all records in one module and only want to remove marked records in the other module, call Software Arts for assistance.

### 15.14.5 Remove Over X Years

Applies to:

- Stockroom data
- Purchase data
- Receiver data
- Work Order and Sales Order data
- Invoice data
- Shipment data
- GL Transactions

Deletes and removes from the disk all records in the associated module(s) over a specified number of years old. It is important to set an **administrative lockout** before removing records.

pc/MRP will automatically create backup files of the databases in the PACK directory prior to any removal of records. pc/MRP does this in case any hardware problems occur during the removal process.

**Note:** Since Sales Orders and Work Orders are stored in the same database table, removing Work Orders over X years will also remove Sales Orders over X years, and vice versa. If you want to keep all data in one module and only want to delete old data in the other module, call Software Arts for assistance.

### 15.14.6 Sending Reports to Excel.

pc/MRP offers to send most reports to Excel. However, often you would see a different set of fields than on the printed report. The printed reports need to be formatted to fit a Portrait or Landscape page. They might pull data from several tables. They might use calculated fields, subtotals, totals.

The Excel report will include all the fields of the table that is the primary table behind the printed report. No more, no less.

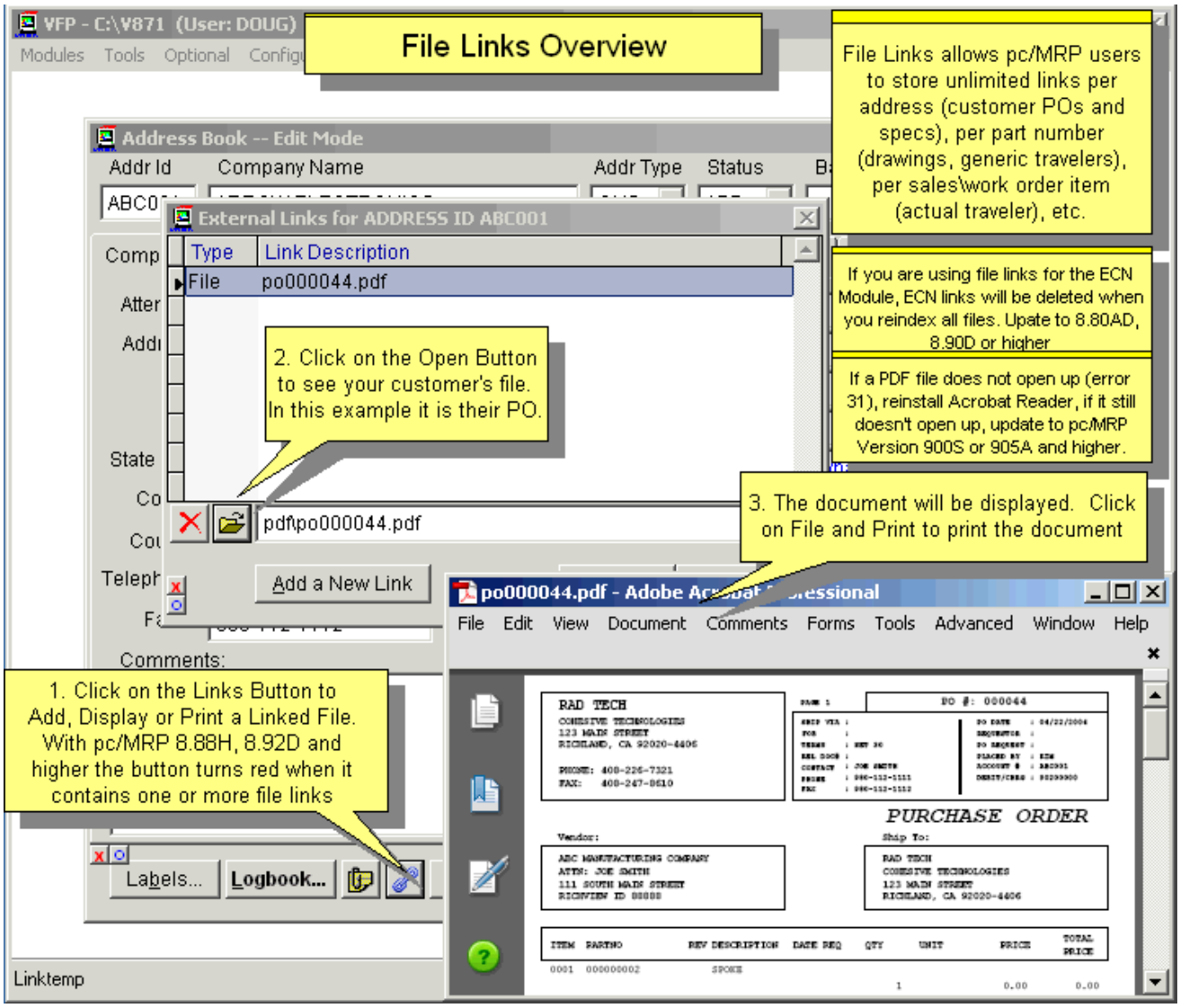
All these fields can be exported, as long as the computer that runs pc/MRP has Excel installed. (If pc/MRP is run on a terminal server, Excel has to be installed on the terminal server.) If Excel is not available on the computer, pc/MRP does not offer to select the memo type fields (like the general info in inventory, the reference designators in the BOM table, the tracking number and comments in the invoice table, etc.).

**Note:** Sending memo fields into Excel significantly slows down the process. Do not include memo type fields, unless you need them. The Excel output defaults to not include memo fields.

### 15.14.7 File Links

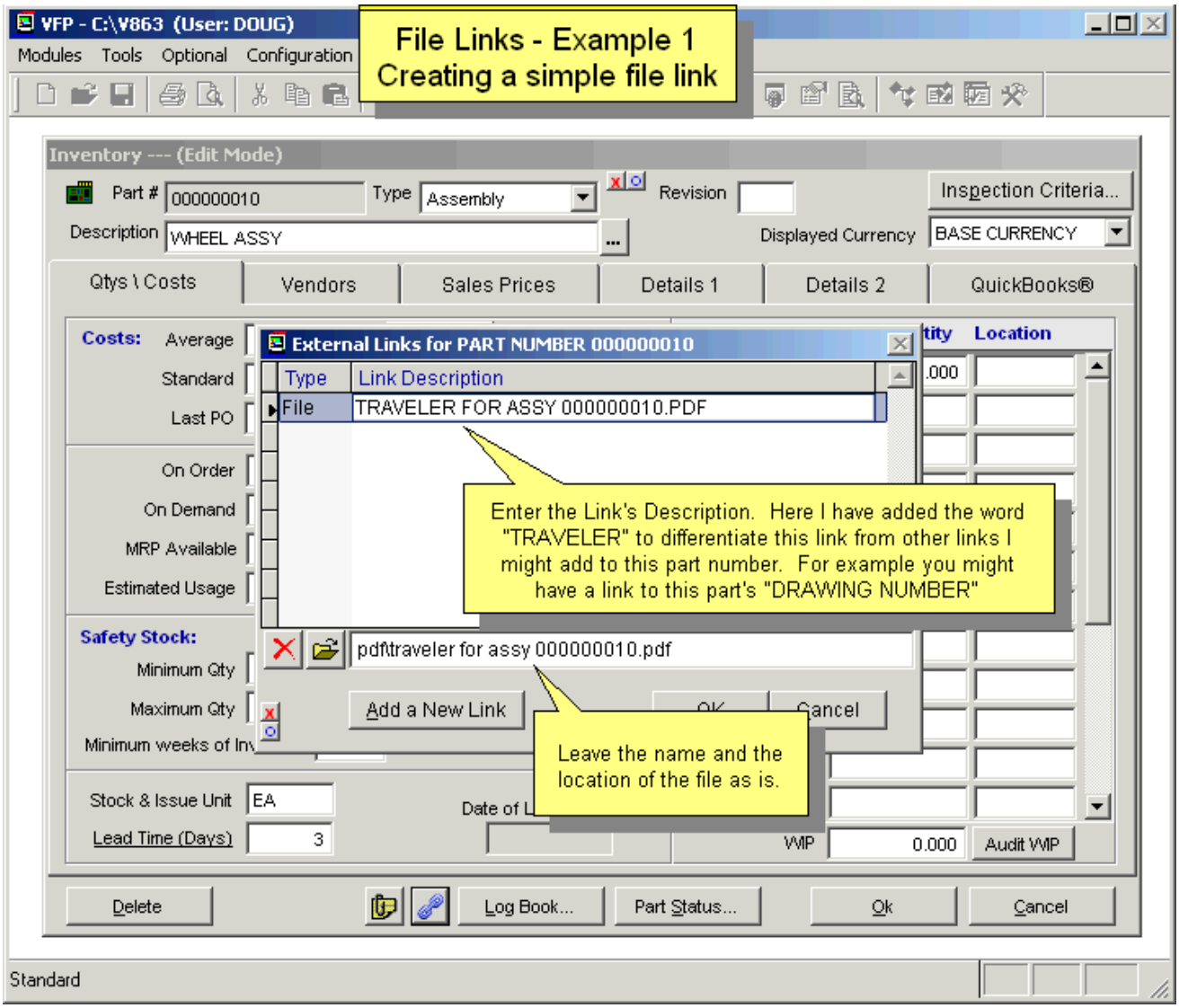
File Links allows pc/MRP users to store unlimited links per address (customer POs, specs), per part number (drawings, generic travelers), per sales/work order (actual traveler), etc. Please note that the files are linked to the entire document (sales order, invoice), not to a specific line item.

Click on the Links button to add, display or print a linked file. The button turns red when it contains any file links. Click on Add a New Link, then select the link type: file, folder or URL.




Browse for the file/folder. If linking a URL, copy&paste, drag&drop or manually type in the URL into the field.

The Link Description defaults to the path+filename, but you might want to change it to a more user friendly description of the item you linked.




**15.14.7.1 File Links - Advanced**

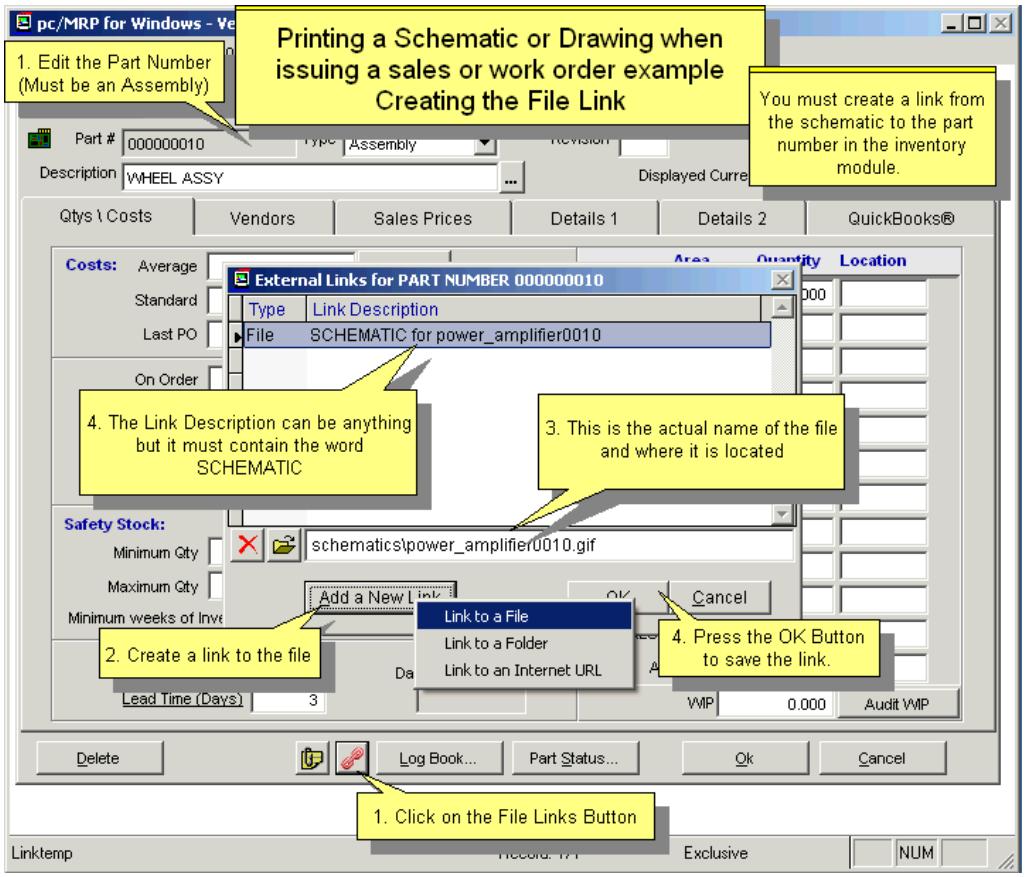
The following sections are for programmers who want to utilize the Flinks table and VFP commands to get even more out of pc/MRP.

Linked documents can be automatically opened after displaying a custom pc/MRP report/form. Create a custom form that can simply be a copy of the standard form/report, with no changes. Use Notepad to create a text file with the name of the custom report and the extension .EF.

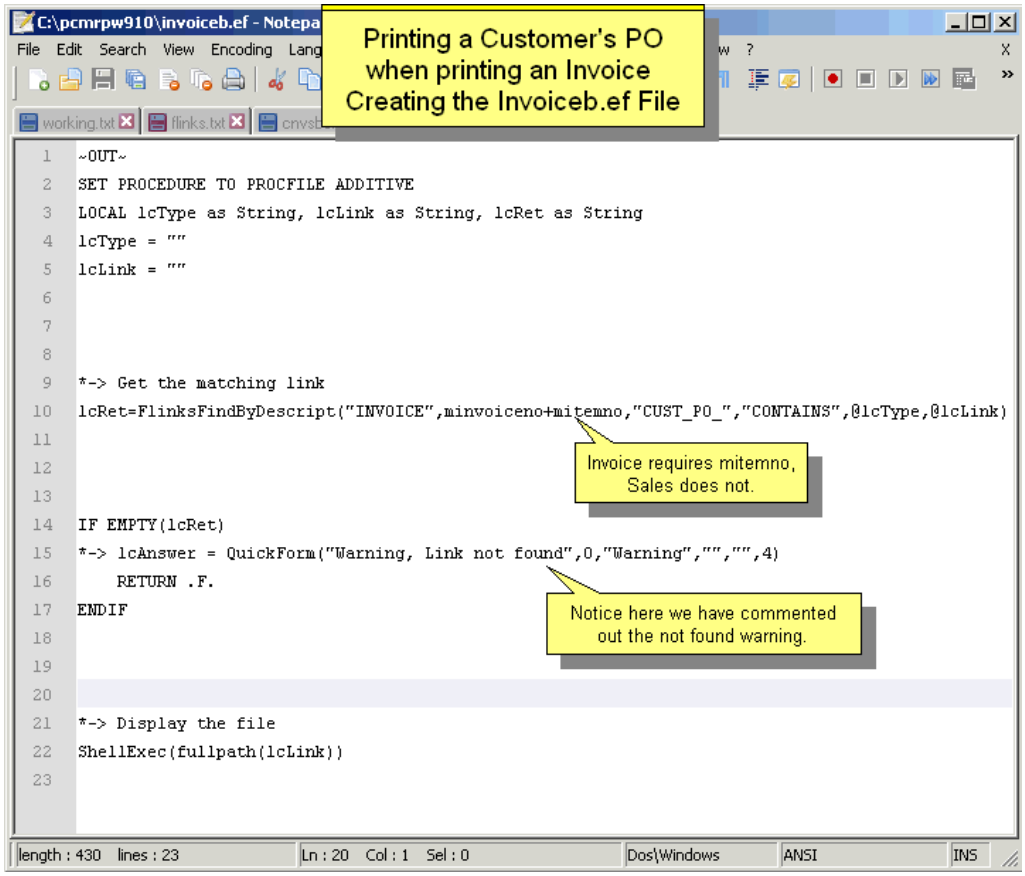
Below see examples for the use of file links in several different situations.

For details on each topic and to see the contents of the EF files, please see the pc/MRP online tutorial about File Links: http://pcmrp.com/mrp101/flinksoverview.htm

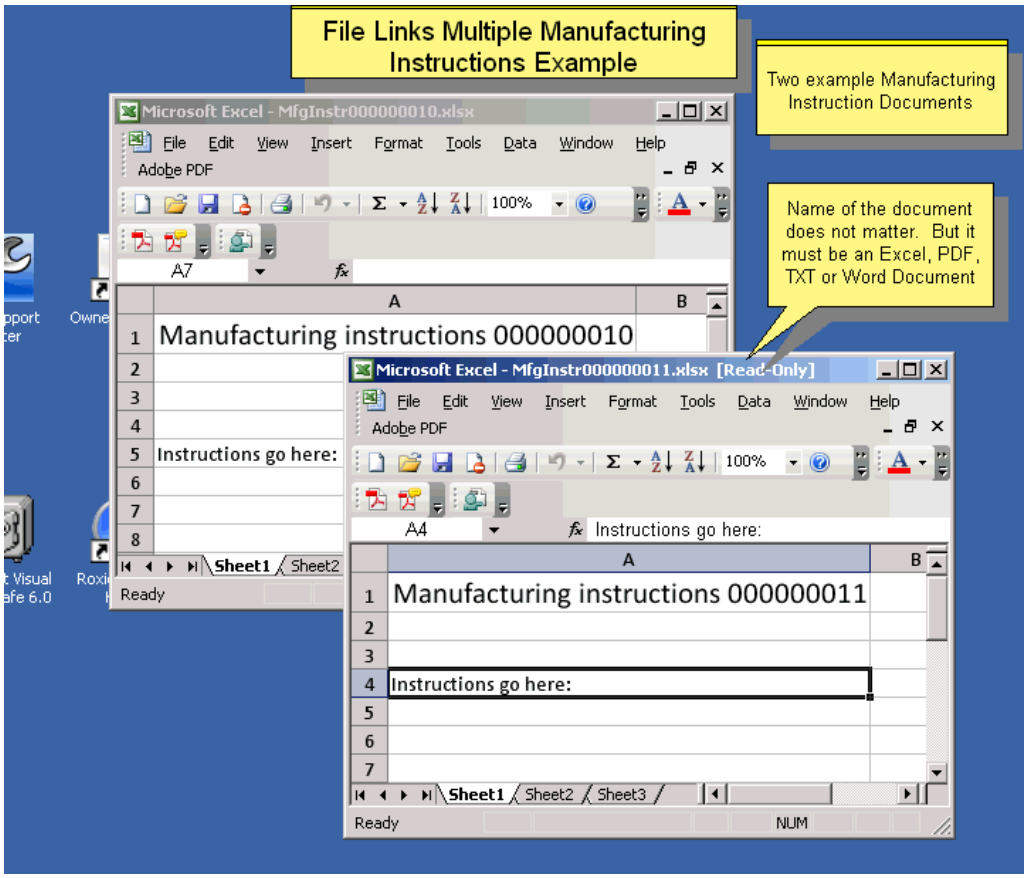
Printing a Schematic or Drawing when issuing a SO/WO



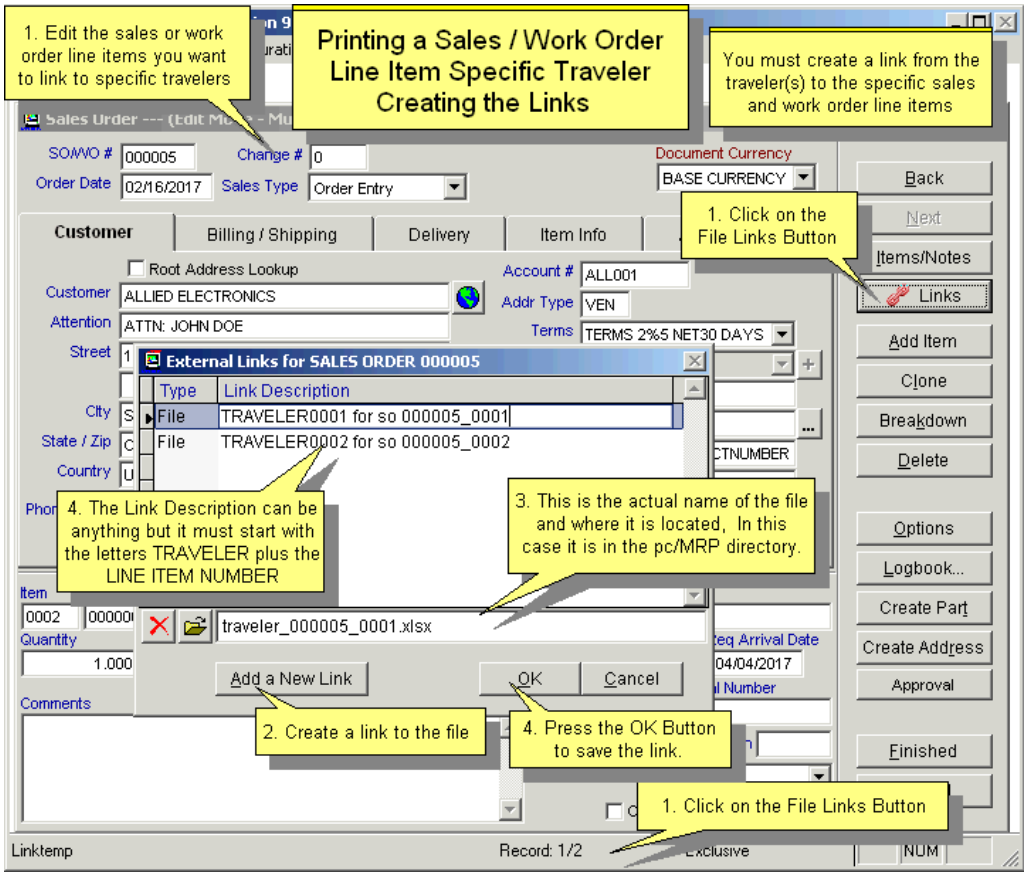

Printing a Customer's PO when printing an invoice.



File Links multiple Manufacturing Instructions

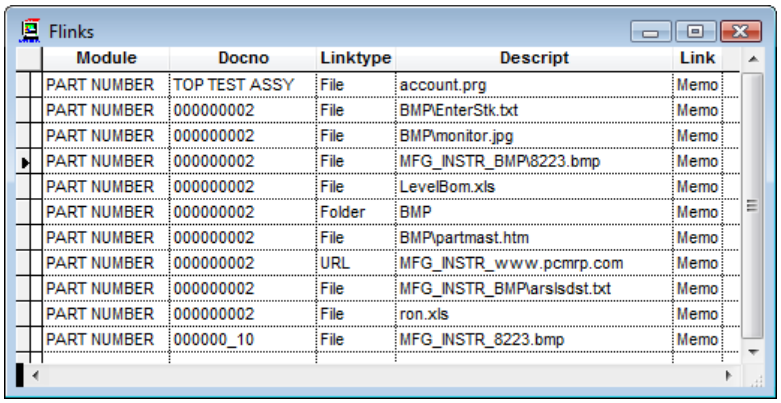



Printing a SO/WO line item specific traveler



```
*****************************************************************************************************
*           New function ProcFile.prg::FlinksOpen()
FUNCTION FlinksOpen(lcModule, lcDocNo, lcLinkType, lcFileType, lcFindStr, lcSearchType)
*#*************************************************************************************
*#          Function..: FlinksOpen()                                          Author: Ron
*#
*#          Purpose...: Opens Files, Folders and/or URLs associated with a passed Module/DocNo
*#                      combination.   The function can be limited to specific link types
*#                      or document File types.   It can be further limited to links
*#                      which have specific text content within the description.
*#
*#          Returns...: Numeric -  The number of documents that were opened.
*#
*#          Parameters:         lcModule   - [Required] The document's module.
*#                                           "SALES ORDER, INVOICE, etc"
*#                              lcDocNo    - [Required] The document number to be sought.
*#                              lcLinkType - [Optional] The type of links to be opened.
*#                                           Allowable values are: File, URL, Folder, All
*#                                           If not passed, ALL will be assumed.
*#                              lcFileType  - [Optional] The type of Files to be opened.
*#                                           Example values are: DOC, DOCX, TXT, PDF
*#                                           Only one file type can be used at a time
*#                                           If not passed, all file types will be assumed.
*#                              lcFindStr    - [Optional] The string to be found in the description.
*#                                           Only links that have this string will be opened.
*#                              lcSearchType- The type of string search to be performed.
*#                                           Allowable values are: CONTAINS, START, EXACT
*#                                           If not passed, CONTAINS will be assumed.
*#
*#          Notes.....: The linked files MUST have an application installed and associated
*#                                  with the file extension on the local computer for files to be opened.
*#
*#          History...: 02/14/2017 - Initial Creation
*#*************************************************************************************
```

*All tests were performed using this data set.*
The content of the LINK field is the same as the description without the MFG_INSTR_ if present.




| Module | Docno | Linktype | Descript | Link |
|---|---|---|---|---|
| PART NUMBER | TOP TEST ASSY | File | account.prg | Memo |
| PART NUMBER | 000000002 | File | BMP\EnterStk.txt | Memo |
| PART NUMBER | 000000002 | File | BMP\monitor.jpg | Memo |
| PART NUMBER | 000000002 | File | MFG_INSTR_BMP\8223.bmp | Memo |
| PART NUMBER | 000000002 | File | LevelBom.xls | Memo |
| PART NUMBER | 000000002 | Folder | BMP | Memo |
| PART NUMBER | 000000002 | File | BMP\partmast.htm | Memo |
| PART NUMBER | 000000002 | URL | MFG_INSTR_www.pcmrp.com | Memo |
| PART NUMBER | 000000002 | File | MFG_INSTR_BMP\arslsdst.txt | Memo |
| PART NUMBER | 000000002 | File | ron.xls | Memo |
| PART NUMBER | 000000_10 | File | MFG_INSTR_8223.bmp | Memo |

*FLinksOpen("PART NUMBER", "000000002")*
*Opens 7 files, one URL and one folder*
Files: ARSLSDST.TXT, ENTERSTK.TXT, 8223.BMP, MONITOR.JPG, PARTMAST.HTM, RON.XLS,
LEVELBOM.XLS
URL: www.pcmrp.com
Folder: c:\v912\BMP\

*FLinksOpen("PART NUMBER", "000000002", "File")*
*Opens 7 files only*
Files: ARSLSDST.TXT, ENTERSTK.TXT, 8223.BMP, MONITOR.JPG, PARTMAST.HTM, RON.XLS,
LEVELBOM.XLS

*FLinksOpen("PART NUMBER", "000000002", "File", "XLS")*
*Opens 2 files only*
Files: RON.XLS, LEVELBOM.XLS

*FLinksOpen("PART NUMBER", "000000002", "Folder")*

*Opens one folder only*

Folder: c:\v912\BMP\

*FLinksOpen("PART NUMBER", "000000002", "", "JPG")*

*Opens one file, one URL and one folder* (since there is no restriction to open just files)

Files: MONITOR.JPG

URL: www.pcmrp.com

Folder: c:\v912\BMP\

*FLinksOpen("PART NUMBER", "000000002", , , "MFG_INSTR_")*

*Opens 2 files and one URL*

Files: ARSLSDST.TXT, 8223.BMP

URL: www.pcmrp.com

*FLinksOpen("PART NUMBER", "000000002", "File", , "MFG_INSTR_")*

*Opens 2 files only*

Files: ARSLSDST.TXT, 8223.BMP

# 15.15 User Connectivity & Administrative Lockout

### 15.15 User Connectivity & Administrative Lockout Overview

This is the area you first visit for doing any kind of exclusive administrative work such as backing up your pc/MRP system or running exclusive processes. You will need to set an Administrative Lockout before re-indexing a database table, removing marked records, removing records over X years old, running audits, etc.

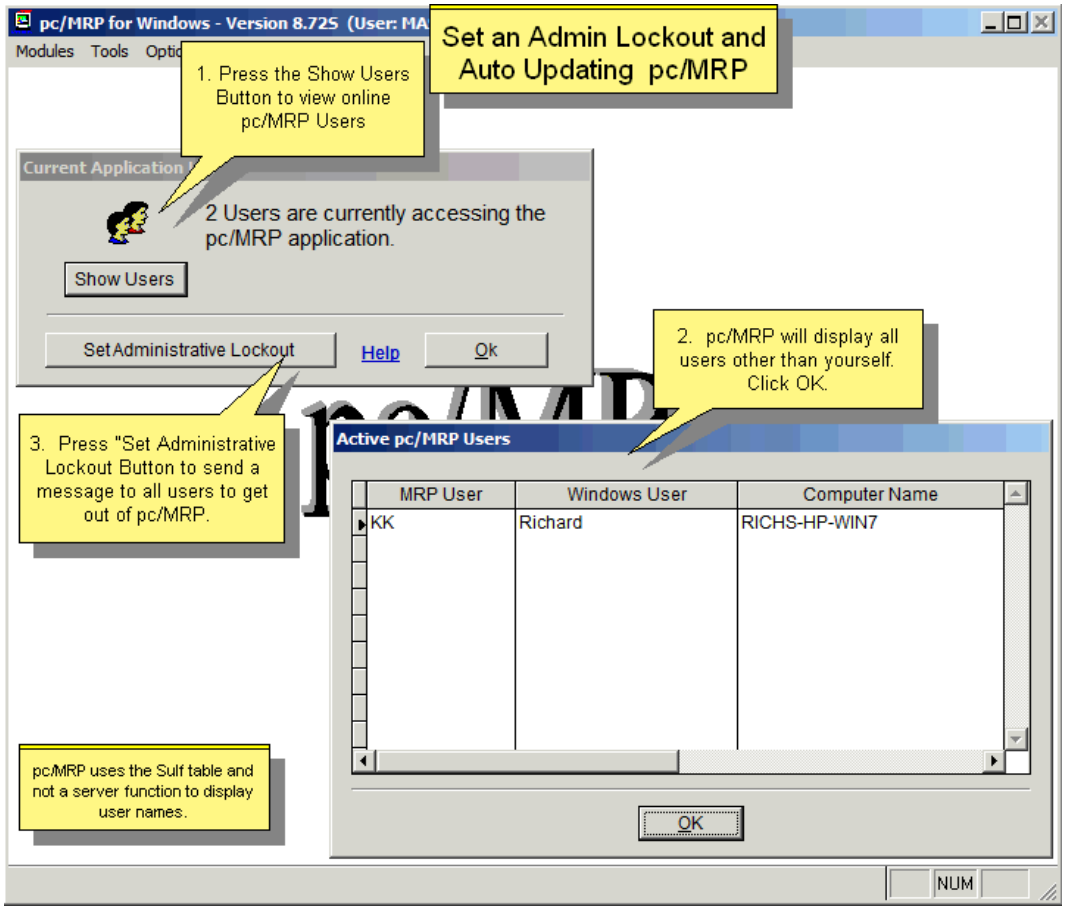
If the system is not locked down and scheduled tasks need to start (see Section 15.16), these tasks will produce an error, stop processing, and wait to re-start according to their schedules.

You can also get a list of the users currently accessing pc/MRP.

Setting or removing an Administrative Lockout requires Delete rights to the Configuration Module (if the Advanced Password Module has been activated).

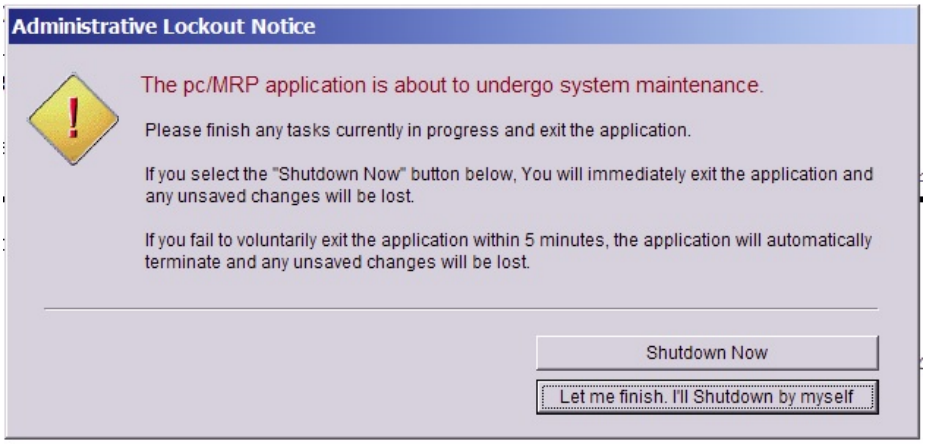
### 15.15.1 Click the Set Administrative Lockout Button

Press the Show Users Button to display who besides yourself is presently using pc/MRP. Click the Set Administrative Lockout button to send a message to those users to log out of pc/MRP.




### 15.15.2 Wait for users to log off of pc/MRP

The admin lock will prevent users from starting a new session in pc/MRP. Users already in will get the message below asking them to finish their work and log off pc/MRP. They can select “Let me finish.”, but if they do not respond, they will be logged out from the program after a wait period of 5 minutes. Any unsaved changes will be lost.




While you are waiting for users to log off (or be logged off) you will see the screen on the left below. You can still click on Show Users and maybe call them or walk over to their computers. Once all users of pc/MRP except you have logged off, the screen on the right appears. Click OK. You can now proceed with your administrative tasks.




### 15.15.3 Remove the Admin Lockout

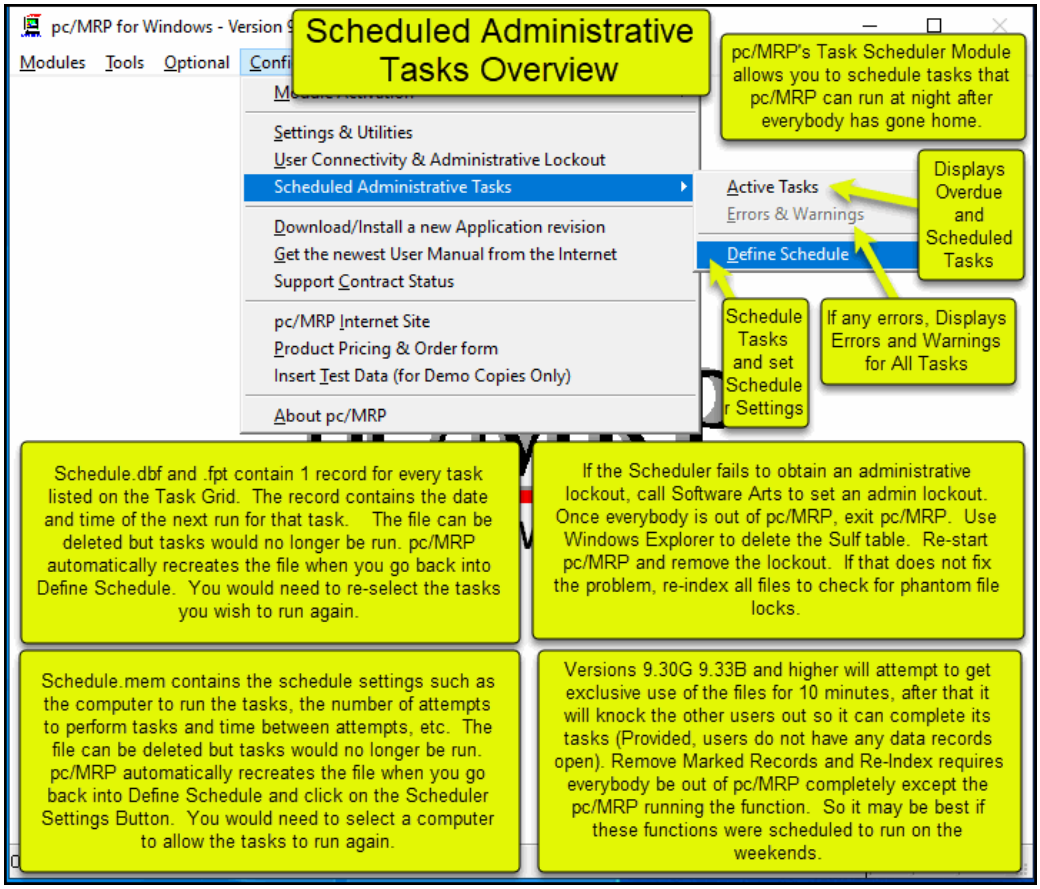
Once you are finished with your administrative tasks, you should return to this module and press the Remove Administrative Lockout Button. If the person setting the lockout logs out of pc/MRP, they must log back into pc/MRP at the same computer, in order to remove the lockout. If they cannot log back into pc/MRP, contact your system administrator to remove the file **MRPBUSY.FLG** from the pcmrpw directory.

### 15.15.4 Troubleshooting a "Ghost user"

In rare cases pc/MRP cannot log off users after 5+ minutes passed. Look up the user's login name and especially the computer name. Confirm and double check that pc/MRP is not running on that computer. Make sure you exit pc/MRP, so that there are no "real users". Open the pcmrpw folder in Windows Explorer and delete the SULF.DBF file. If you cannot delete it, ask your IT person to remove phantom file locks (i.e. close any open files) in the PCMRPW folder on the server. http://www.pcmrp.com/it101/2003closeopenfilestart.htm and http://www.pcmrp.com/it101/rdsmanagermenu.htm If that doesn't work, reboot the server.

# 15.16 Scheduled Tasks

### 15.16 Scheduled Tasks Overview




There are numerous tasks you can set to run automatically, during the night when users are gone:

- Export Invoices to QuickBooks
- Export Receivers to QuickBooks
- Infinite Bucket MRP Generation
- Perform a Rollup of Average costs on assemblies
- Perform a Rollup of Last PO costs on assemblies
- Perform a Rollup of Standard costs on assemblies
- Regenerate index tags for all application tables
- Remove records marked for deletion from all application tables
- Rollup the Mean Time Between Failure (MTBF) on assemblies
- Update Alternate Part Numbers on BOMs
- Update Customer account balances in the Address Book
- Update the On-Demand quantities in inventory
- Update the On-Order quantities in inventory

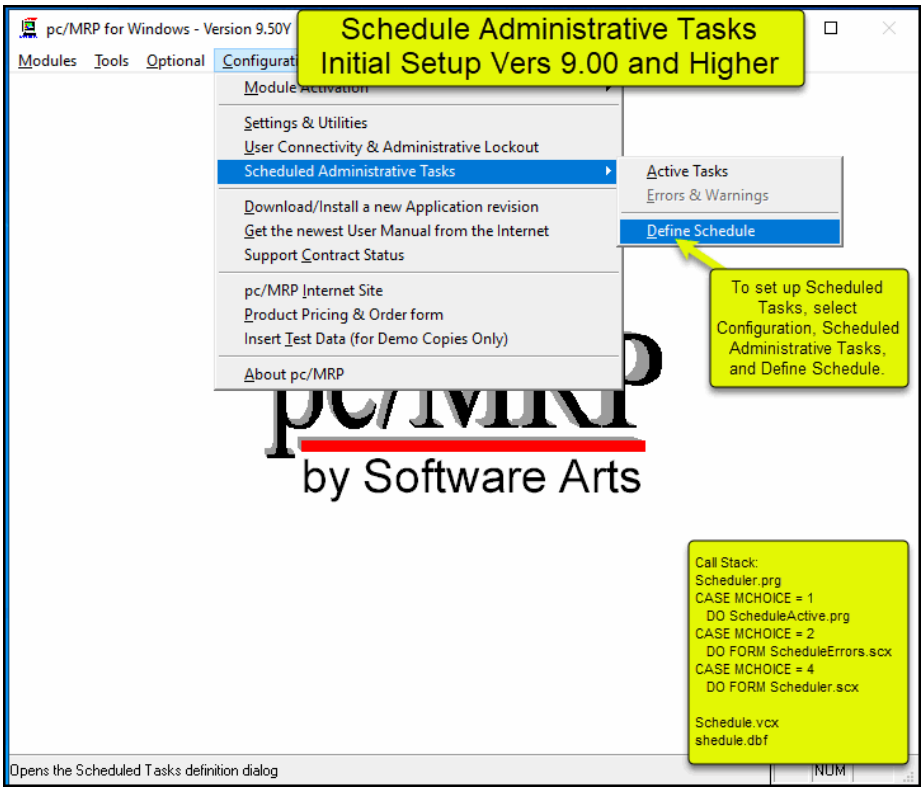
You must leave the computer that is scheduled to run these tasks, logged into pc/MRP, with no modules open (“neutral screen”) so that the tasks can be executed.

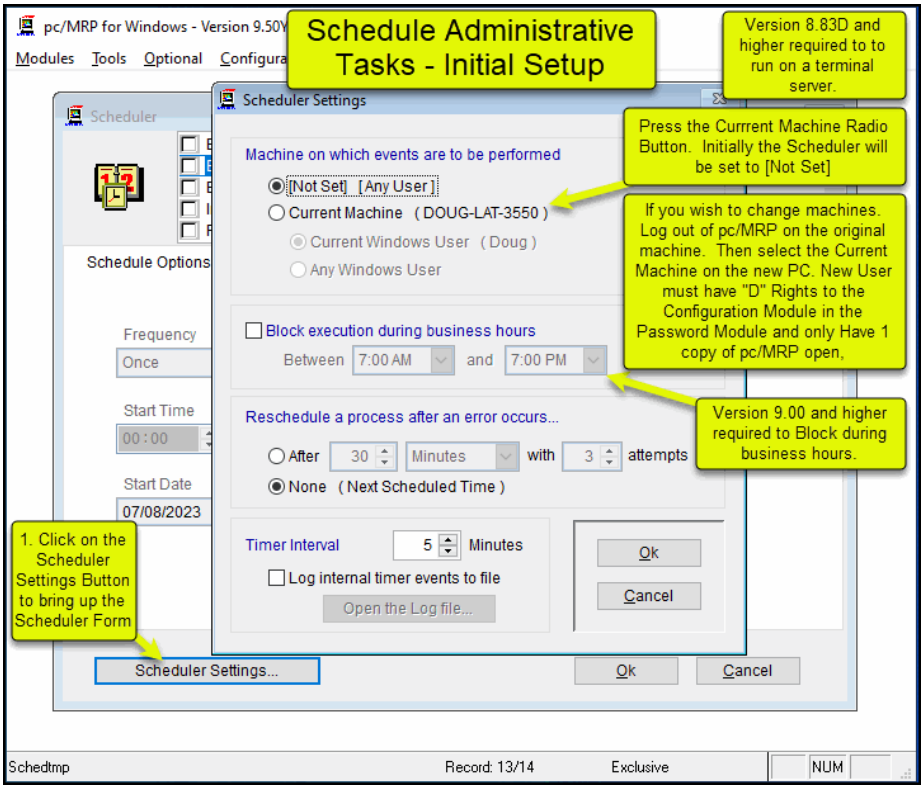
With the **Password module** implemented, the user must have ‘Delete’ privileges to the Configuration menu to define schedules. We suggest companies create a user named e.g. ‘Scheduler’, with no rights to any modules (for data safety reasons). Now log into pc/MRP as the user ‘Scheduler’ on the computer set to run the tasks and

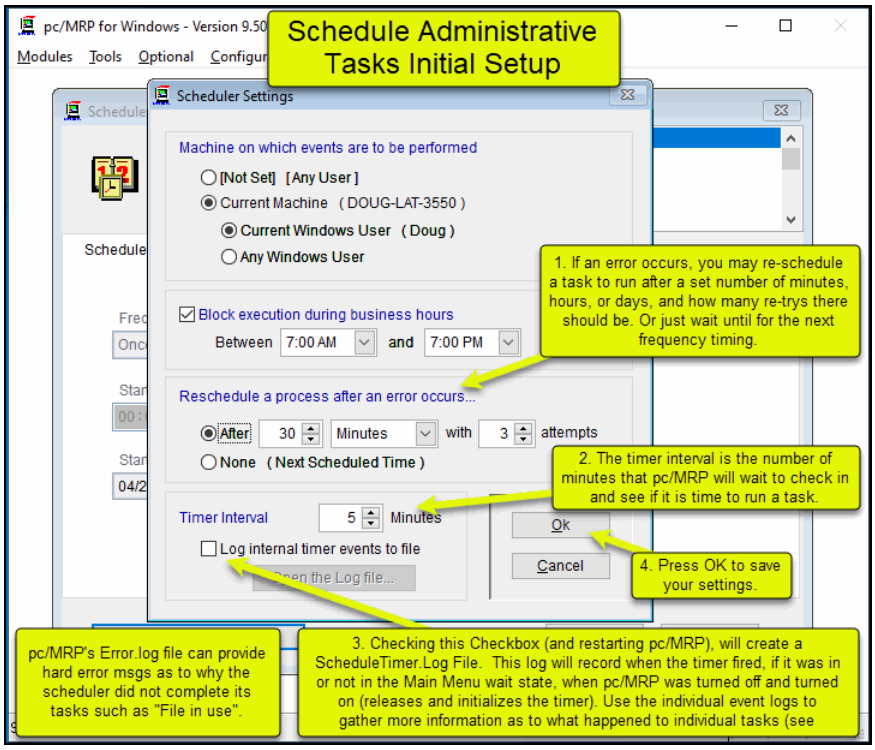
leave the computer logged in and turned on during the night. Scheduled tasks always run with Admin authority, and then the computer goes back to its original rights.

### 15.16.1 Set PC, Schedule Tasks and Interval Settings

To Set the Schedule PC, Tasks and Interval Settings follow the slides below: If you want to change the scheduler computer and user to a new computer and user, the original computer and user must be logged out of pc/MRP.

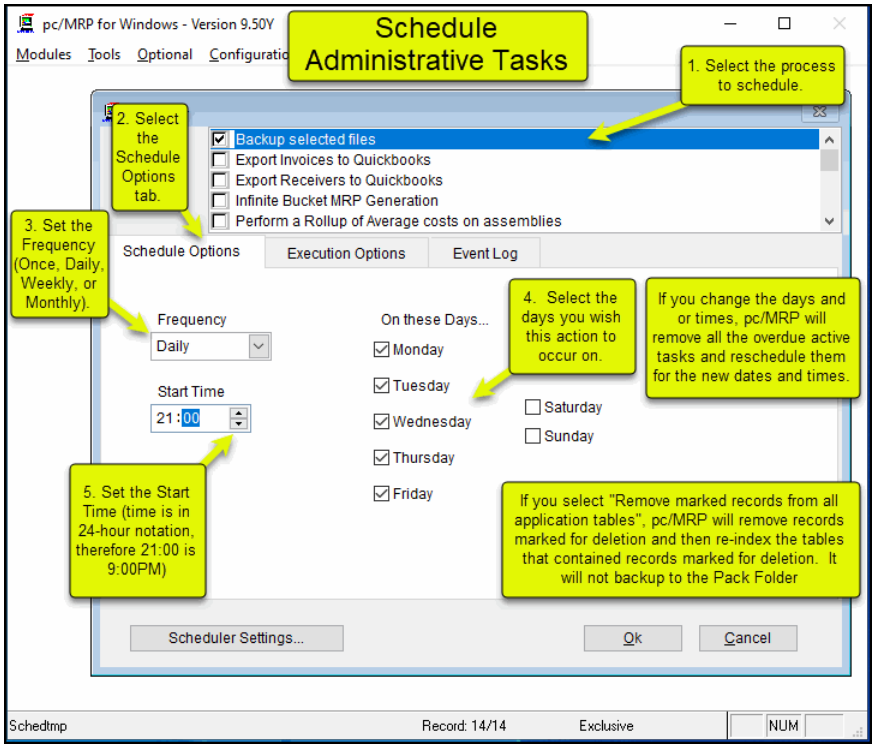




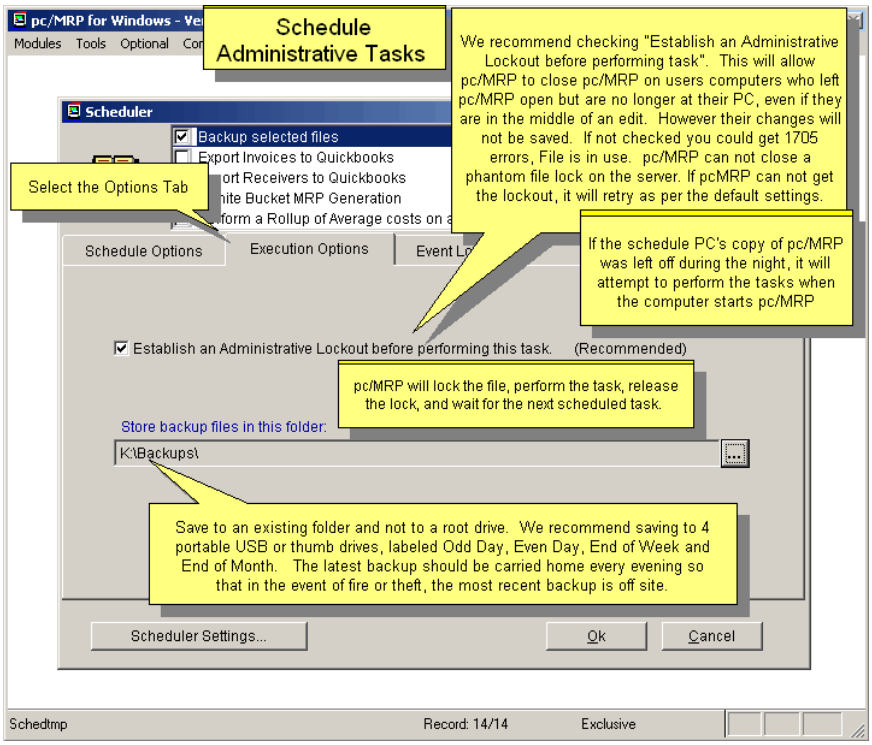

### 15.16.2 Select and Schedule a Task

First select the process to schedule. Then select the Schedule Options tab and set up the Frequency (Once, Daily, Weekly, or Monthly), the Start Time (time is in 24-hour notation, therefore 9:00PM is 21:00), and the Start Date.



### 15.16.3 Select Execution Options

A task execution options will vary by task. Please note each task's options carefully. As an example:

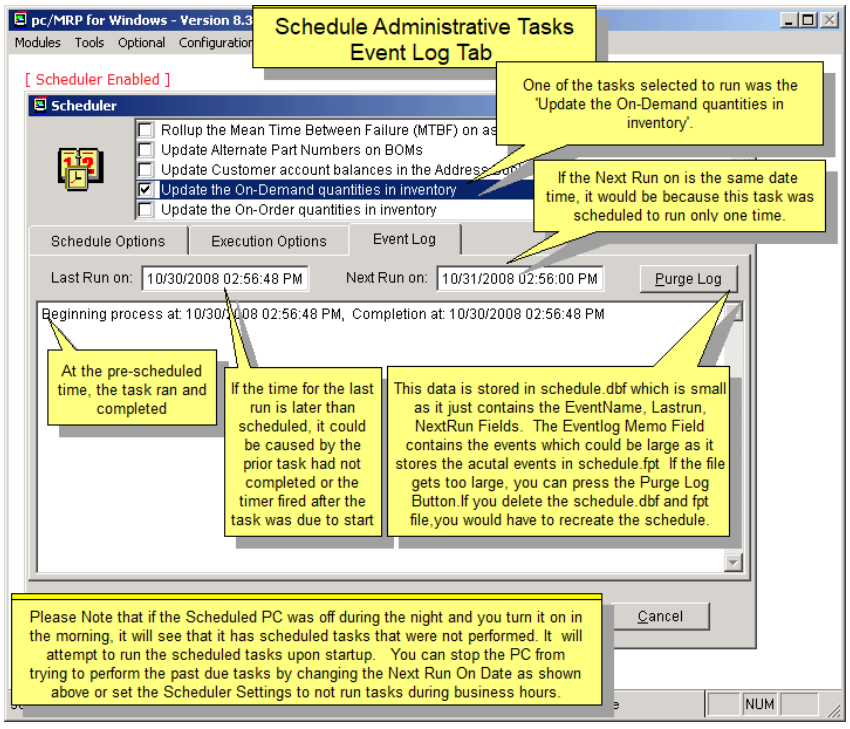



Conversely, the 'Update the On-Order quantities in inventory', has no configuration options.

### 15.16.4 Scheduled Task's Event Log

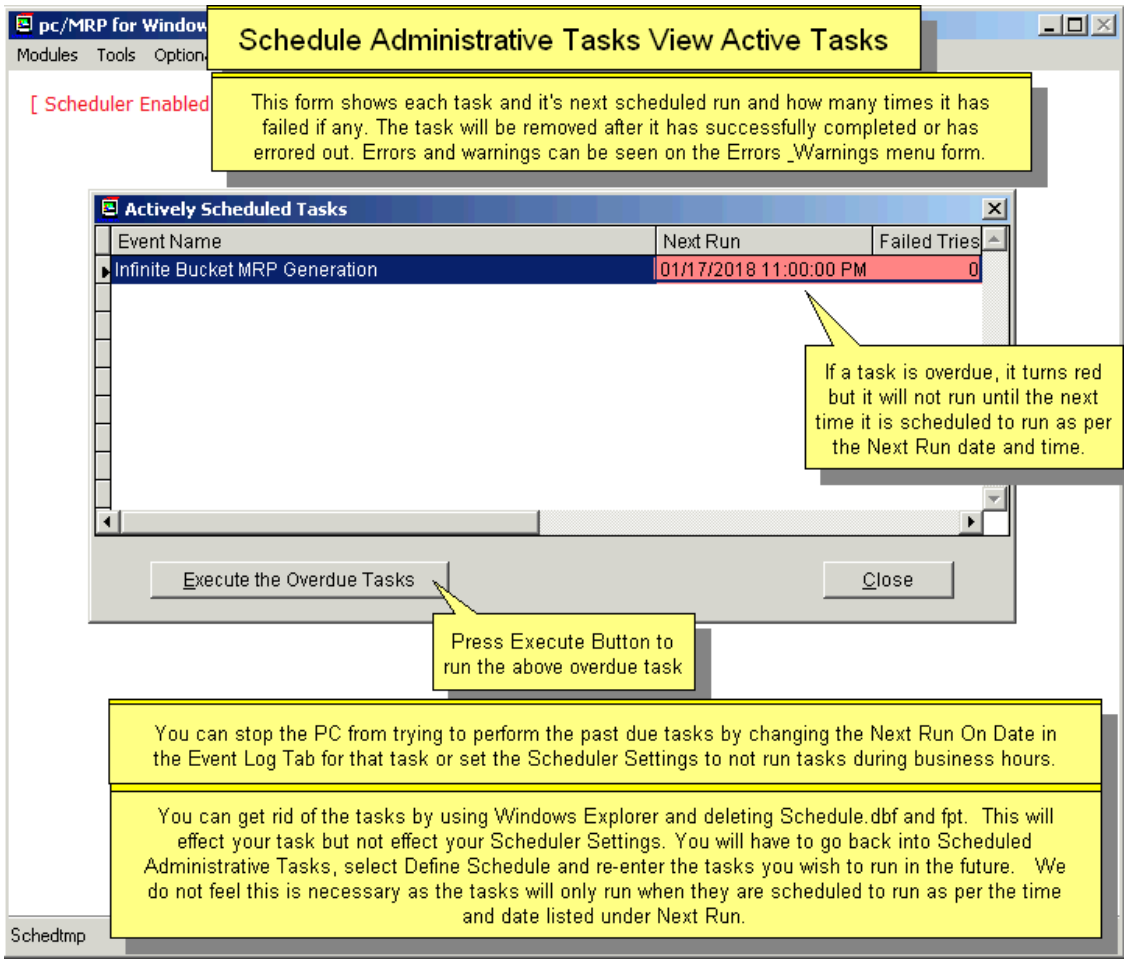
Note the [Scheduler Enabled] label at the top left corner of the screen.

Users can use the event log to see if and when tasks were performed. Each task has its own log.



### 15.16.5 Active Tasks

Select Active Tasks on the Menu to see currently scheduled tasks.




### 15.16.6 Errors & Warnings

The log shows information about currently scheduled tasks that did not complete for some reason.

If you get an error message, “Another back-up was in progress” and there is no back-up in progress, delete a file named “**BACKUPINPROGRESS.FLG**” in the pcmrpw directory and re-run the back-up.

Check the "Log internal timer events to file" checkbox to record an internal event log into the **SCHEDULETIMER.LOG** file.

The ScheduleTimer.log is basically a process trouble shooting file with entries such as:

- Administrative Lockout has been set by another user
- Begin loading next event
- Administrative lockout successful
- Setting Administrative rights
- Removing Administrative rights
- Removing Administrative lockout
- Finished loading nest event

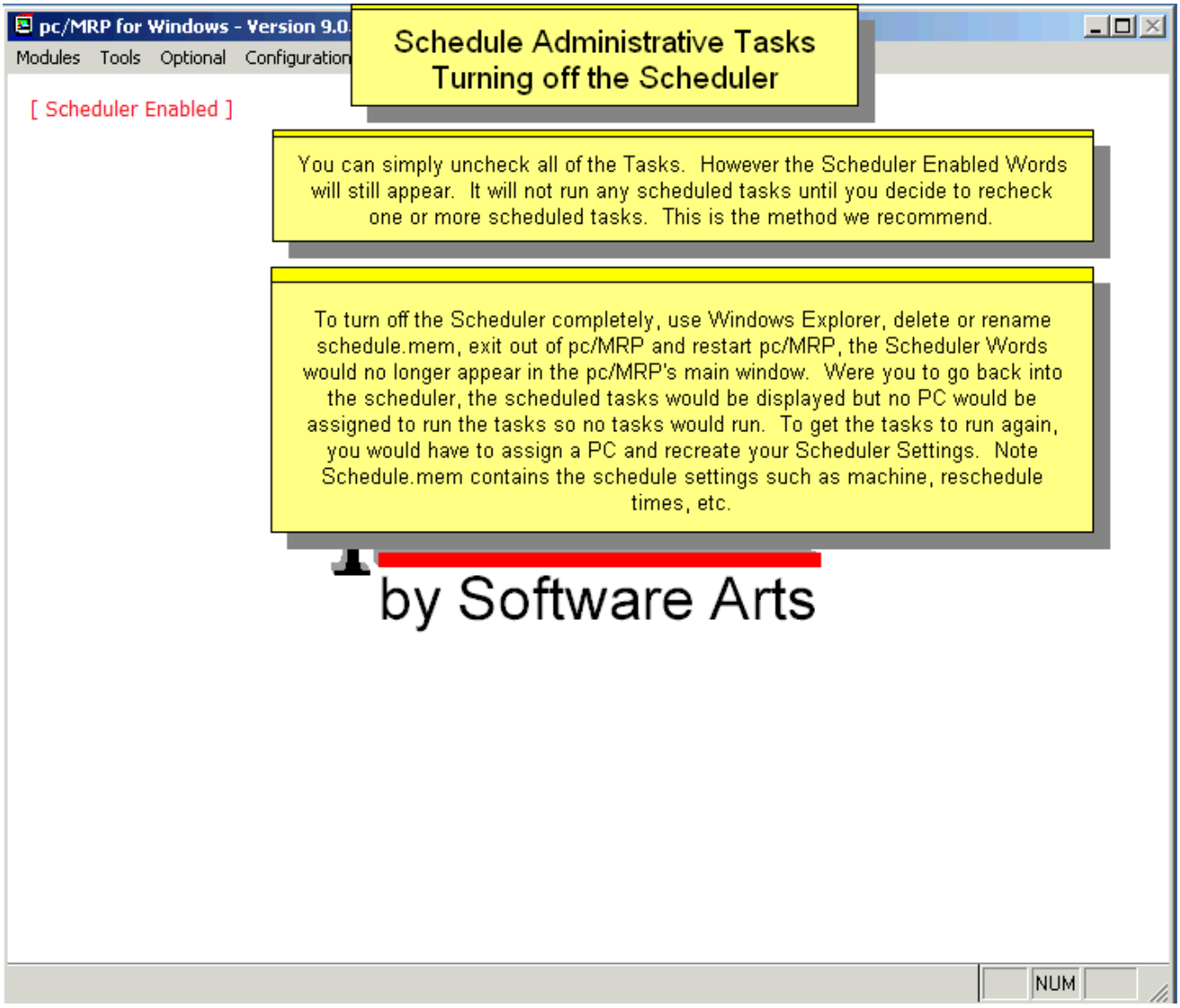
In addition, pc/MRP's **ERROR.LOG** file can provide clues as to why the scheduler did not complete its tasks.

If you find that a task is overdue but has 0 failed tries, this can happen if the scheduler computer was turned off for the night, or pc/MRP was not running, or it was running but not left at the neutral screen.

If the scheduler label does not appear in the upper left corner of the pc/MRP screen on the scheduler PC, or the scheduler refuses to run, set an admin lockout, exit pc/MRP and use Windows Explorer to delete the **SULF.DBF** file in the PCMRPW folder.

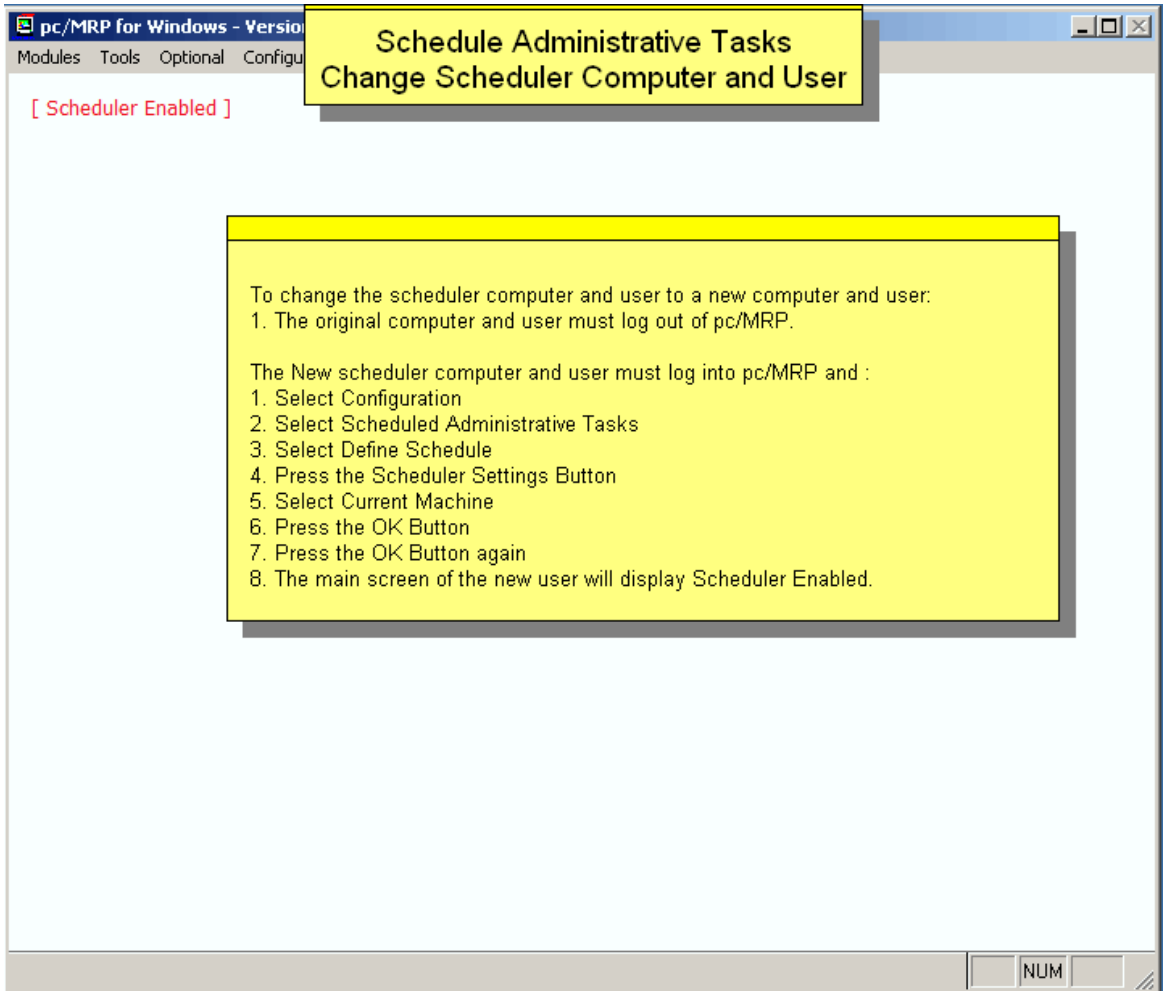
### 15.16.7 Turning off the Scheduler

If you wish to remove the Scheduler Enabled text from appearing in the upper left of the PC selected as the scheduler PC, uncheck all tasks and delete the **SCHEDULE.MEM** file in the pc/MRP directory.



### 15.16.8 Changing the Scheduler PC

If you wish to change the PC the scheduler is scheduled to run on follow the steps below:



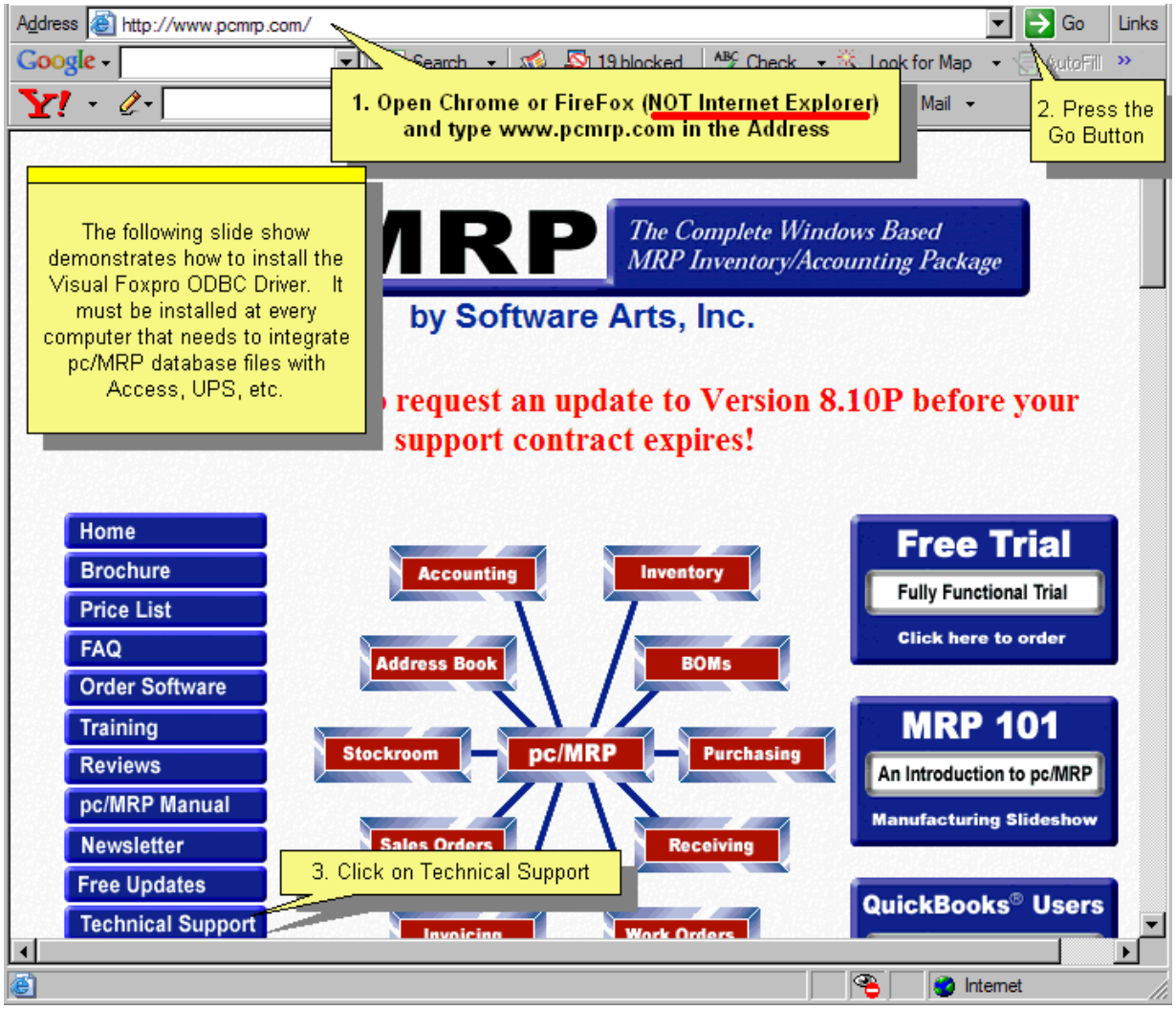
# 15.17 Creating a pc/MRP VFP ODBC DSN

### 15.17 Overview

A slideshow is available at:
[http://www.pcmrp.com/mrp101/odbcopeninternetexplorer.htm](http://www.pcmrp.com/mrp101/odbcopeninternetexplorer.htm)

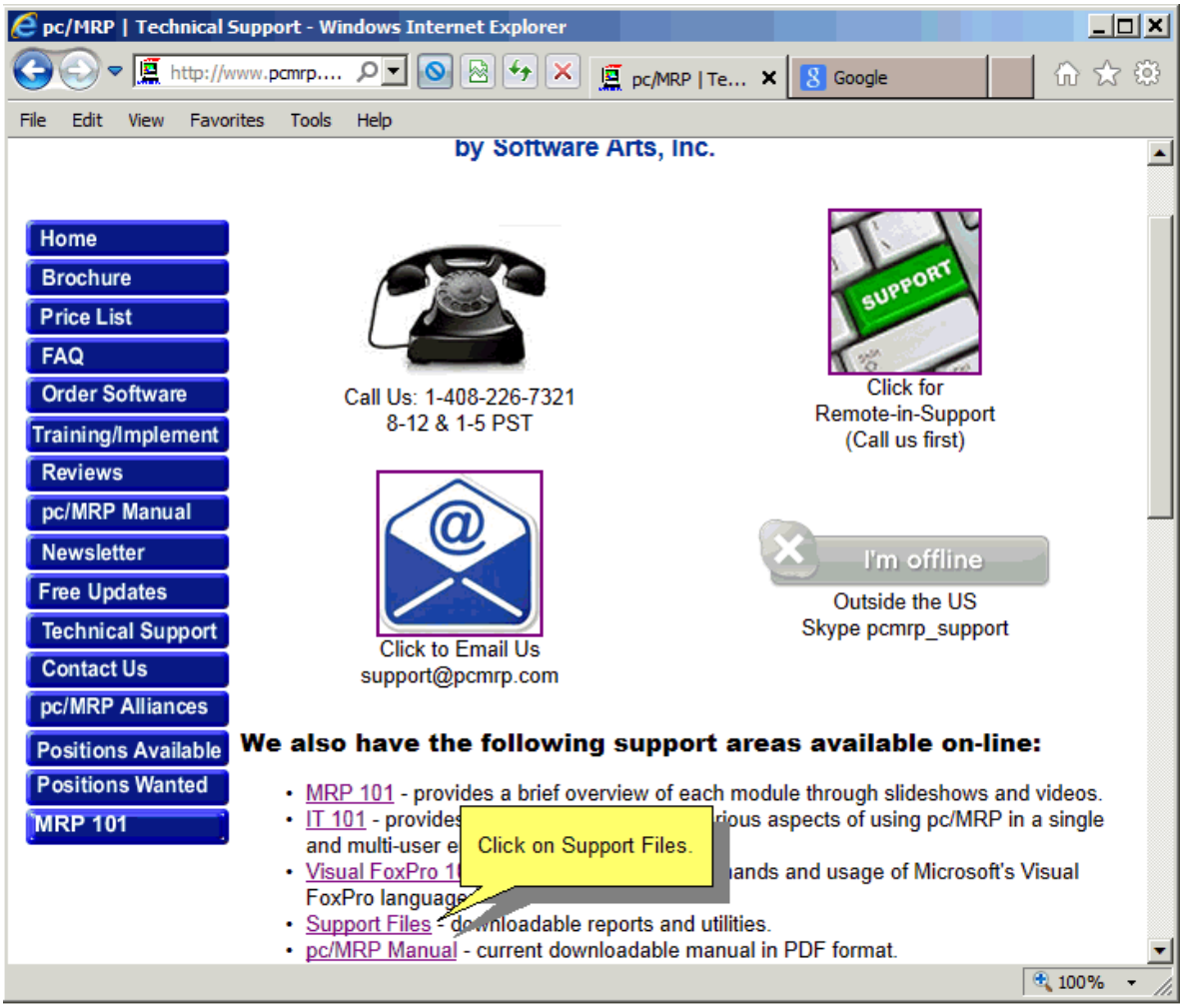
pc/MRP product is written with Microsoft's Visual FoxPro. For better security and data reliability, pc/MRP uses the native Visual FoxPro database structure instead of a dBase-III structure. This requires the use of the Microsoft ODBC drivers for Visual FoxPro tables if you use a program such as Excel, Access, Crystal Reports, etc. to read the pc/MRP data.

### 15.17.1 Step 1 Access the pc/MRP web site.



### 15.17.2 Step 2 Navigate to the Technical Support page.

Scroll down the page and select the Support Files link.




### 15.17.3 Step 3 Find the file download page.

Scroll down to and click on the Visual FoxPro ODBC Driver link. There is another link in the same paragraph with instructions like these in a MS Word document; it also contains the ODBC link.

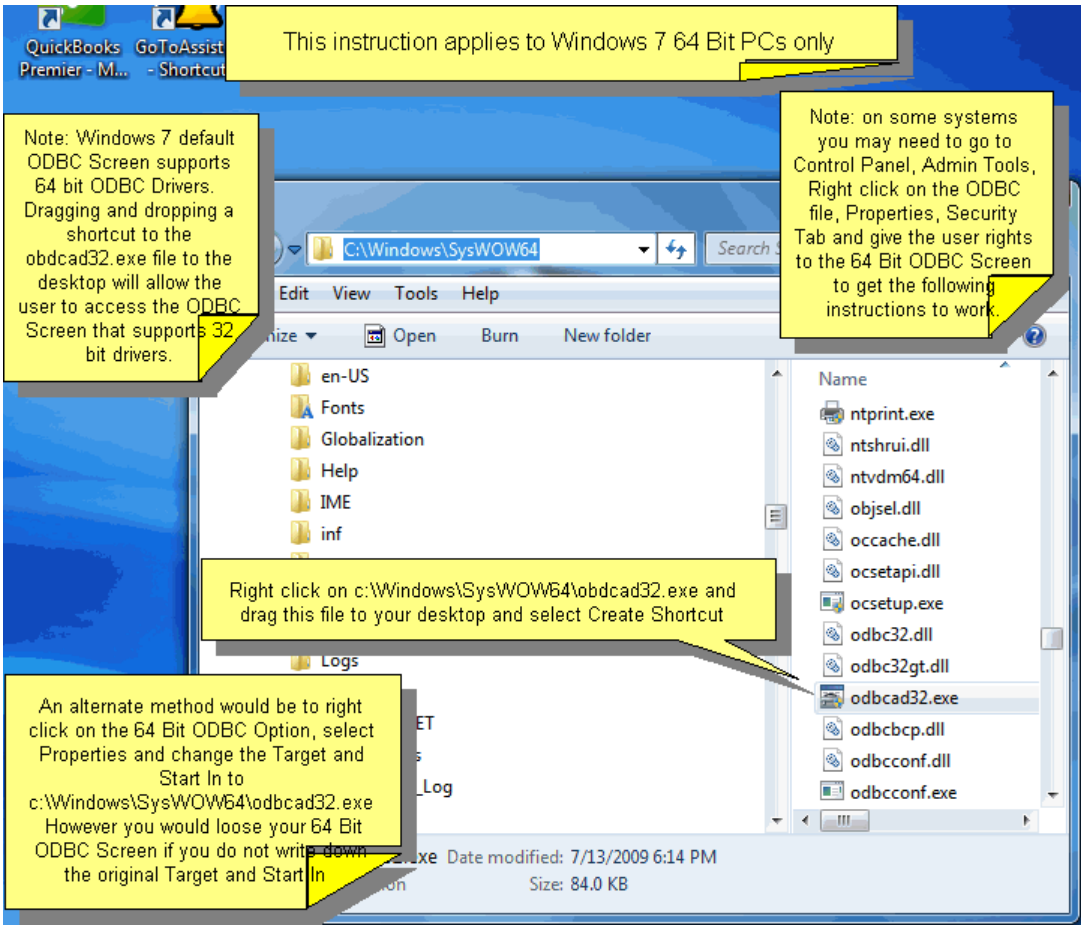
This downloads the English version of the VFPODBC.MSI driver.

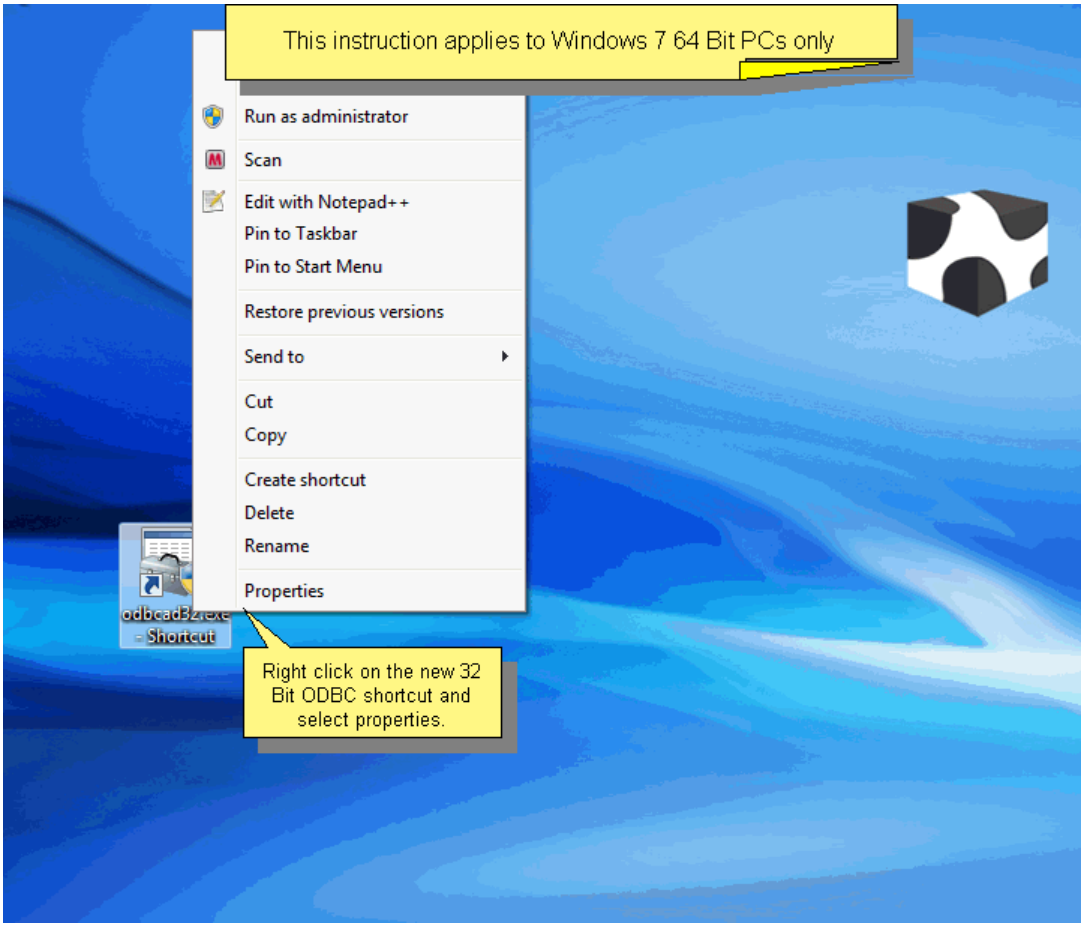
Your computer may have already installed the Visual FoxPro ODBC drivers as a part of the operating system. You can verify this by going to Step 5 (Section 15.17.5).

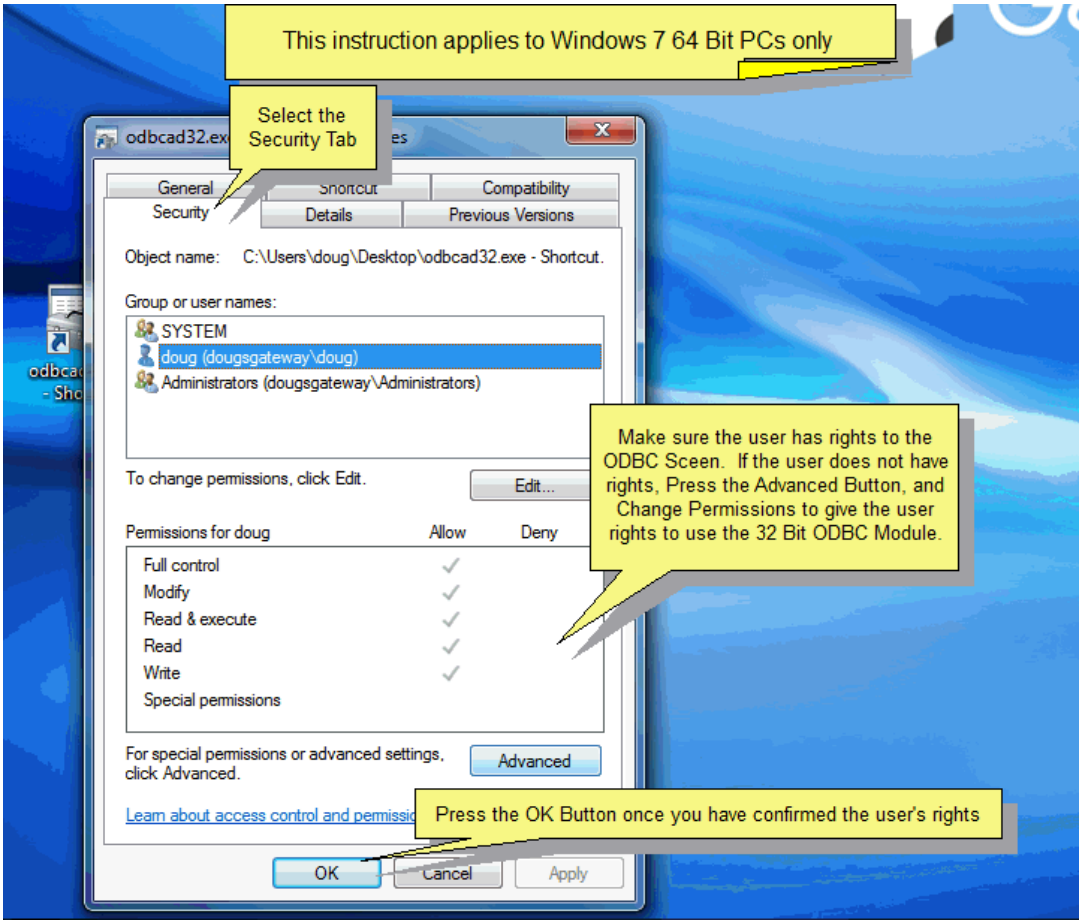
### 15.17.4 Step 4 Download the file and run it.

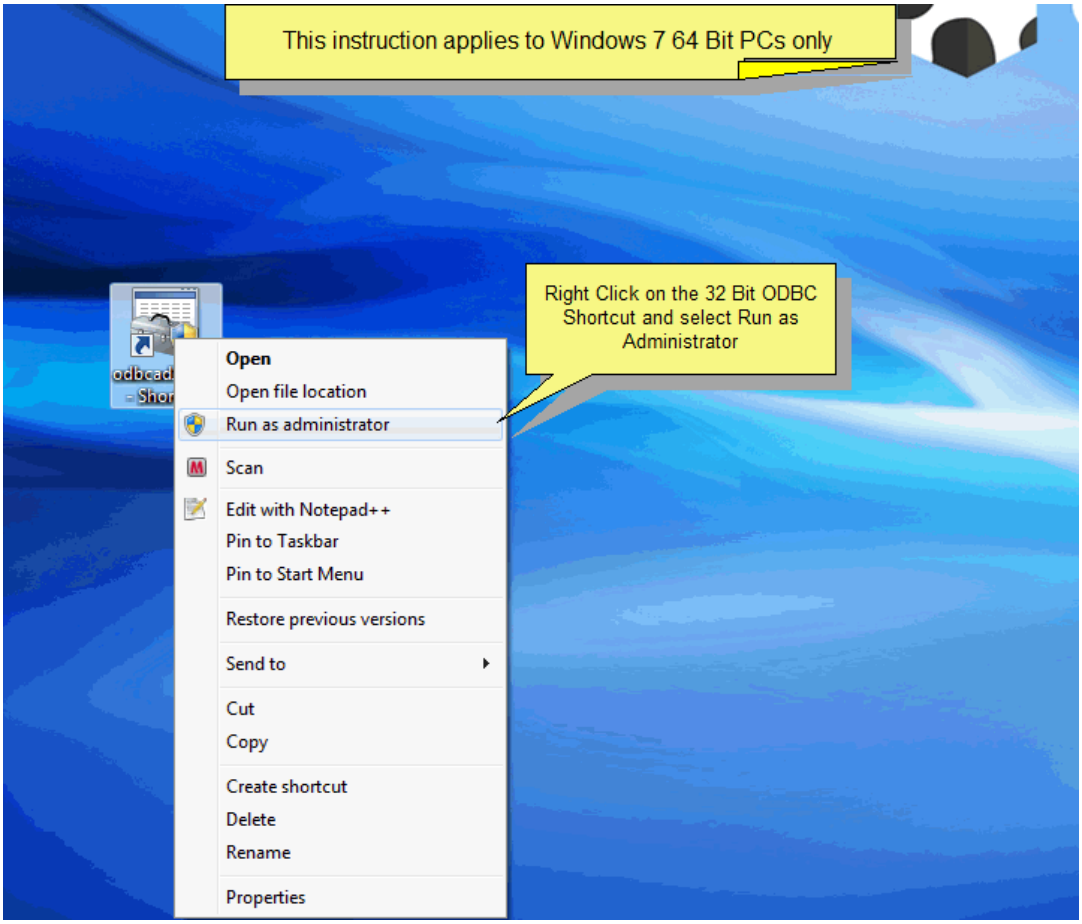
Double-clicking in the **VFPODBC.msi** file will automatically start the install process.

**Note:** The next 2 pages apply to **Windows 7 64 bit computers** only.


This instruction applies to Windows 7 64 Bit PCs only
Note: Windows 7 default ODBC Screen supports 64 bit ODBC Drivers. Dragging and dropping a shortcut to the obdcad32.exe file to the desktop will allow the user to access the ODBC Screen that supports 32 bit drivers.
Note: on some systems you may need to go to Control Panel, Admin Tools, Right click on the ODBC file, Properties, Security Tab and give the user rights to the 64 Bit ODBC Screen to get the following instructions to work.
C:\Windows\SysWOW64
Edit View Tools Help
Open Burn New folder
en-US
Fonts
Globalization
Help
IME
inf
Logs
Name
ntprint.exe
ntshrui.dll
ntvdm64.dll
objsel.dll
occache.dll
ocsetapi.dll
ocsetup.exe
odbc32.dll
odbc32gt.dll
odbcad32.exe
odbcbcp.dll
odbcconf.dll
odbcconf.exe
Right click on c:\Windows\SysWOW64\obdcad32.exe and drag this file to your desktop and select Create Shortcut
An alternate method would be to right click on the 64 Bit ODBC Option, select Properties and change the Target and Start In to c:\Windows\SysWOW64\odbcad32.exe However you would loose your 64 Bit ODBC Screen if you do not write down the original Target and Start In
Date modified: 7/13/2009 6:14 PM
Size: 84.0 KB

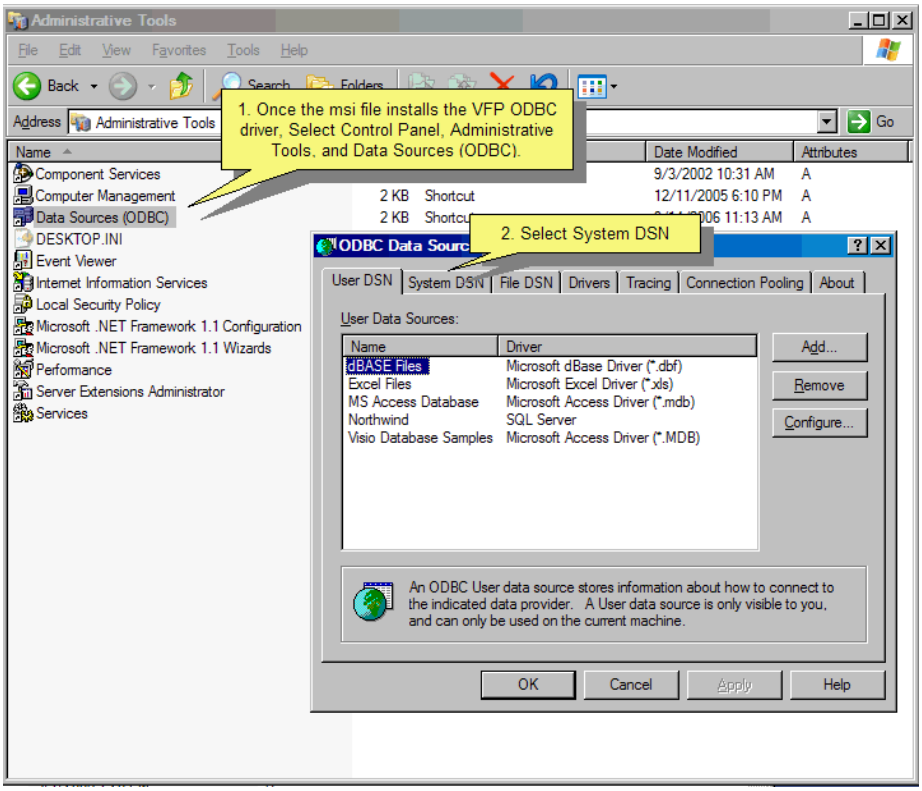

This instruction applies to Windows 7 64 Bit PCs only
Run as administrator
Scan
Edit with Notepad++
Pin to Taskbar
Pin to Start Menu
Restore previous versions
Send to
Cut
Copy
Create shortcut
Delete
Rename
Properties
odbcad32.exe - Shortcut
Right click on the new 32 Bit ODBC shortcut and select properties.


This instruction applies to Windows 7 64 Bit PCs only
Select the Security Tab
odbcad32.ex
General
Shortcut
Compatibility
Security
Details
Previous Versions
Object name: C:\Users\doug\Desktop\odbcad32.exe - Shortcut.
Group or user names:
SYSTEM
doug (dougsgateway\doug)
Administrators (dougsgateway\Administrators)
To change permissions, click Edit.
Edit...
Make sure the user has rights to the ODBC Sceen. If the user does not have rights, Press the Advanced Button, and Change Permissions to give the user rights to use the 32 Bit ODBC Module.
Permissions for doug
Allow
Deny
Full control
Modify
Read & execute
Read
Write
Special permissions
For special permissions or advanced settings, click Advanced.
Advanced
Learn about access control and permissio
Press the OK Button once you have confirmed the user's rights
OK
Cancel
Apply

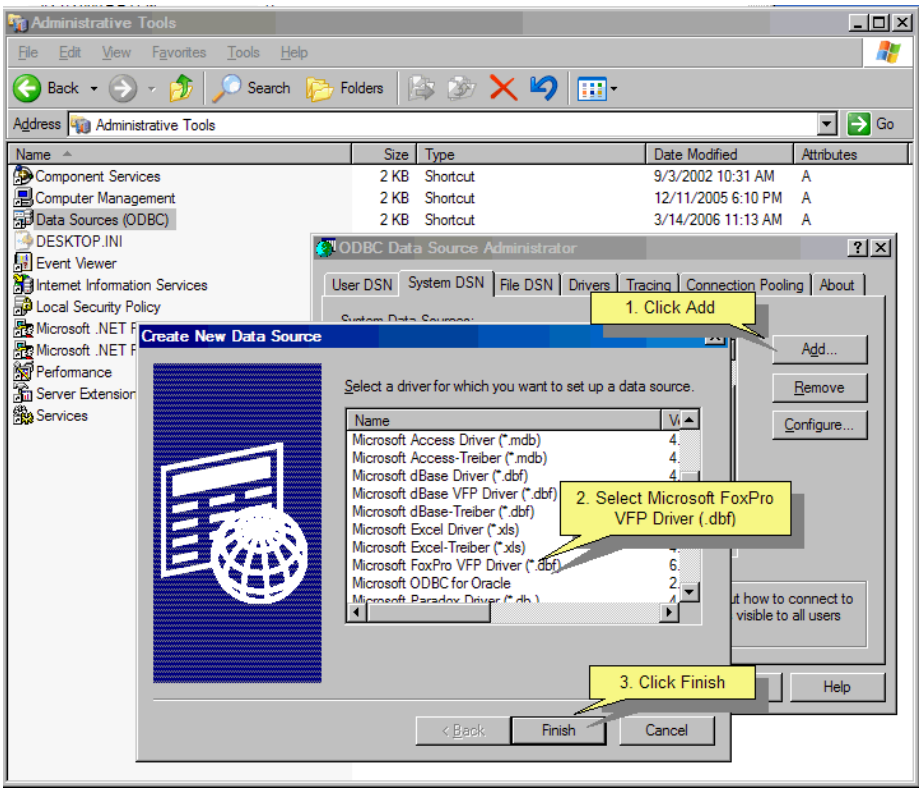

This instruction applies to Windows 7 64 Bit PCs only
Right Click on the 32 Bit ODBC Shortcut and select Run as Administrator
Open
Open file location
Run as administrator
Scan
Edit with Notepad++
Pin to Taskbar
Pin to Start Menu
Restore previous versions
Send to
Cut
Copy
Create shortcut
Delete
Rename
Properties

### 15.17.5 Step 5 After the install is complete, start the Data Sources (ODBC) menu.

Select Control Panel, Administrative Tools, Data Sources. Select **System DSN** as that allows any logon user of this computer to use this pc/MRP Data Source to access pc/MRP.

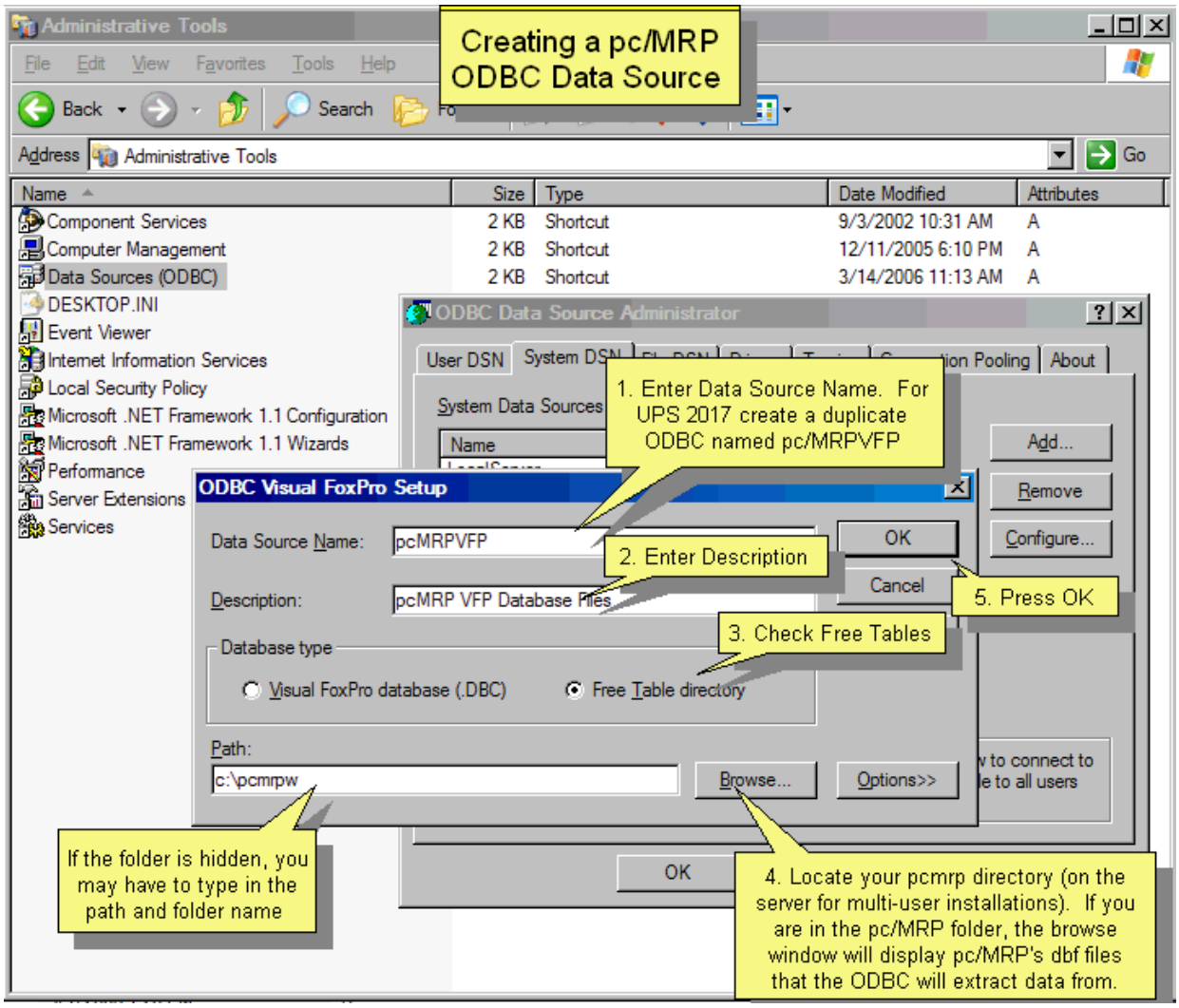



### 15.17.6 Step 6 Clicking Add presents the following screen to select an ODBC driver to configure.




There may be more FoxPro drivers listed. Be sure to select the **Microsoft FoxPro VFP Driver (*.dbf).**

**15.17.7 Step 7 After selecting the VFP driver and clicking 'Finish' you need to connect to pc/MRP.**




The Data Source Name must be 'pcMRPVFP' if you are connecting pc/MRP to UPS shipping.

The Description field is your choice.

You must choose **Free Table directory** as the Database type.

Browse to your pc/MRP directory to select the Path to the pc/MRP files. Single-user versions of pc/MRP are usually located at 'C:\pcmrpw' whereas a multi-user version is on a server and you need to browse to that directory for pc/MRP.

In some cases you won't be able to use your mouse to select the pcmrpw folder. Click on the drive, then use your keyboard arrow keys to navigate to the pcmrpw folder. Your database files will be listed on the left side of the screen when you have the right folder.

Some customers have a Peer-to-Peer network and the pc/MRP directory may be on that workstation. You would just browse to that workstation instead of a server.

Now press 'OK' twice to end the ODBC setup for pc/MRP.

# 15.18 pc/MRP Integration with UPS WorldShip

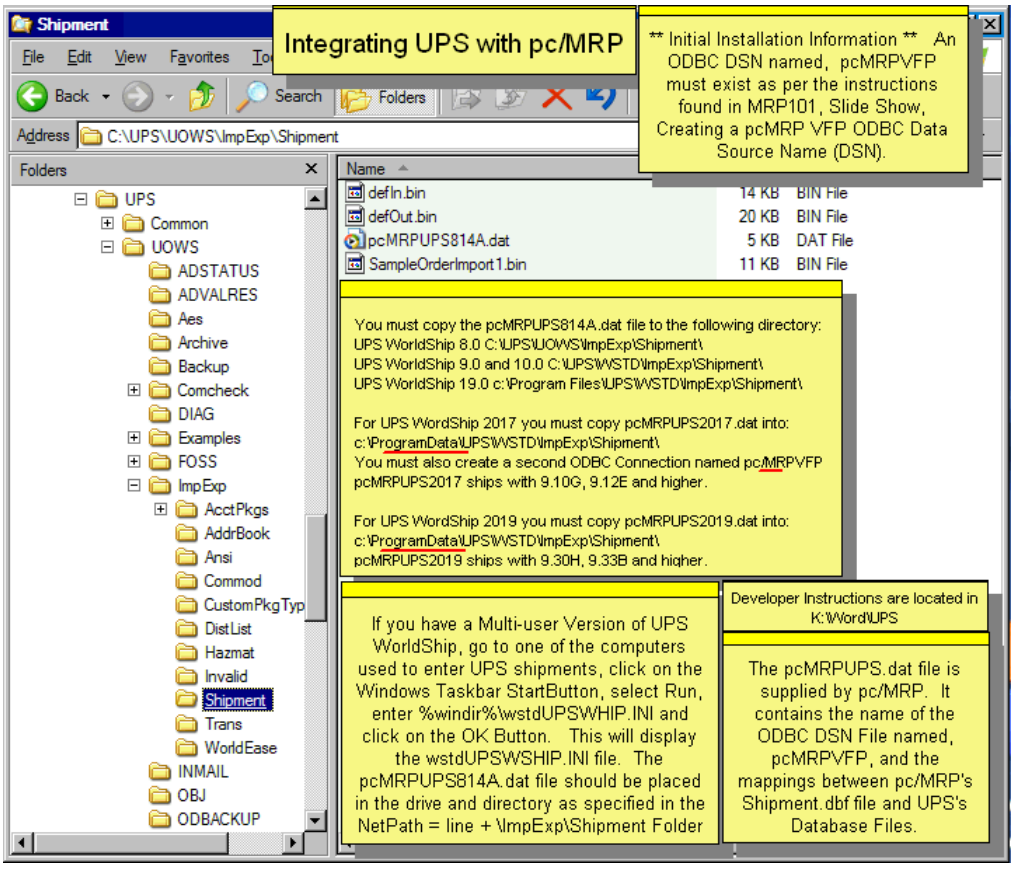
## 15.18 Overview

**Note:** For UPS WordShip 2017 you must copy pcMRPUPS2017.dat into:
c:\ProgramData\UPS\WSTD\ImpExp\Shipment\

A slideshow of the UPS Import/Export Wizard is available at:
http://www.pcmrp.com/mrp101/ups2integrateconfigurationsettings.htm

The UPS Import/Export Wizard is available for pc/MRP versions **8.73** and higher. These versions have a ShipLog table and code to extract data from this file.

For older versions see the slideshow and the following explanation:
http://www.pcmrp.com/mrp101/upspcmrpupsmappingfile.htm



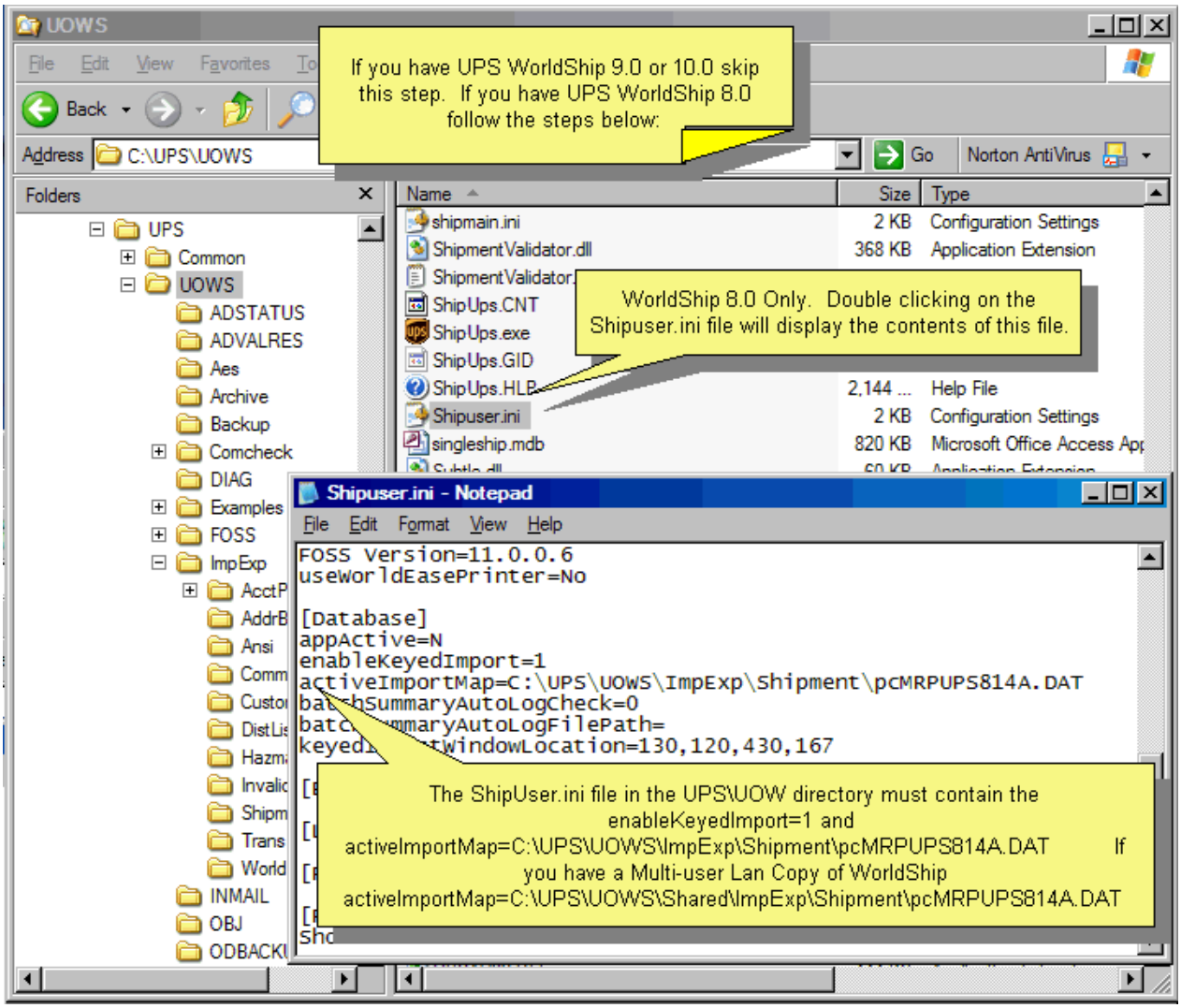

**Note:** You must have already created your ODBC connection to pc/MRP (see Section 15.17).
UPS WorldShip version 8.0 or above must be installed on your computer or accessible via the LAN.

**UPS WorldShip version 8.0**: The pcMRPUPS814A.dat file must be copied to the \UPS\UOWS\ImpExp\Shipment directory of your UPS software.

**UPS WorldShip version 9.0**: The pcMRPUPS814A.dat file must be copied to the \UPS\WSTD\ImpExp\Shipment directory of your UPS software.

**Note:** The number '814A' on the dat file supplied by Software Arts, Inc. refers to the minimum version of pc/MRP supported by the UPS interface.

### 15.18.1 Step 1 Modify the Shipuser.ini file of UPS.




Windows '.ini' files are normally associated with Windows Notepad. The configuration for this is located in Windows Explorer, Tools, Folder Options. Scroll down to the '.ini' extension and you should see Notepad in the "Opens with:" area. If not, and it is not a different text reader, change to a text reader like Microsoft Notepad.

Now note the two changes that must be present to interface with pc/MRP.

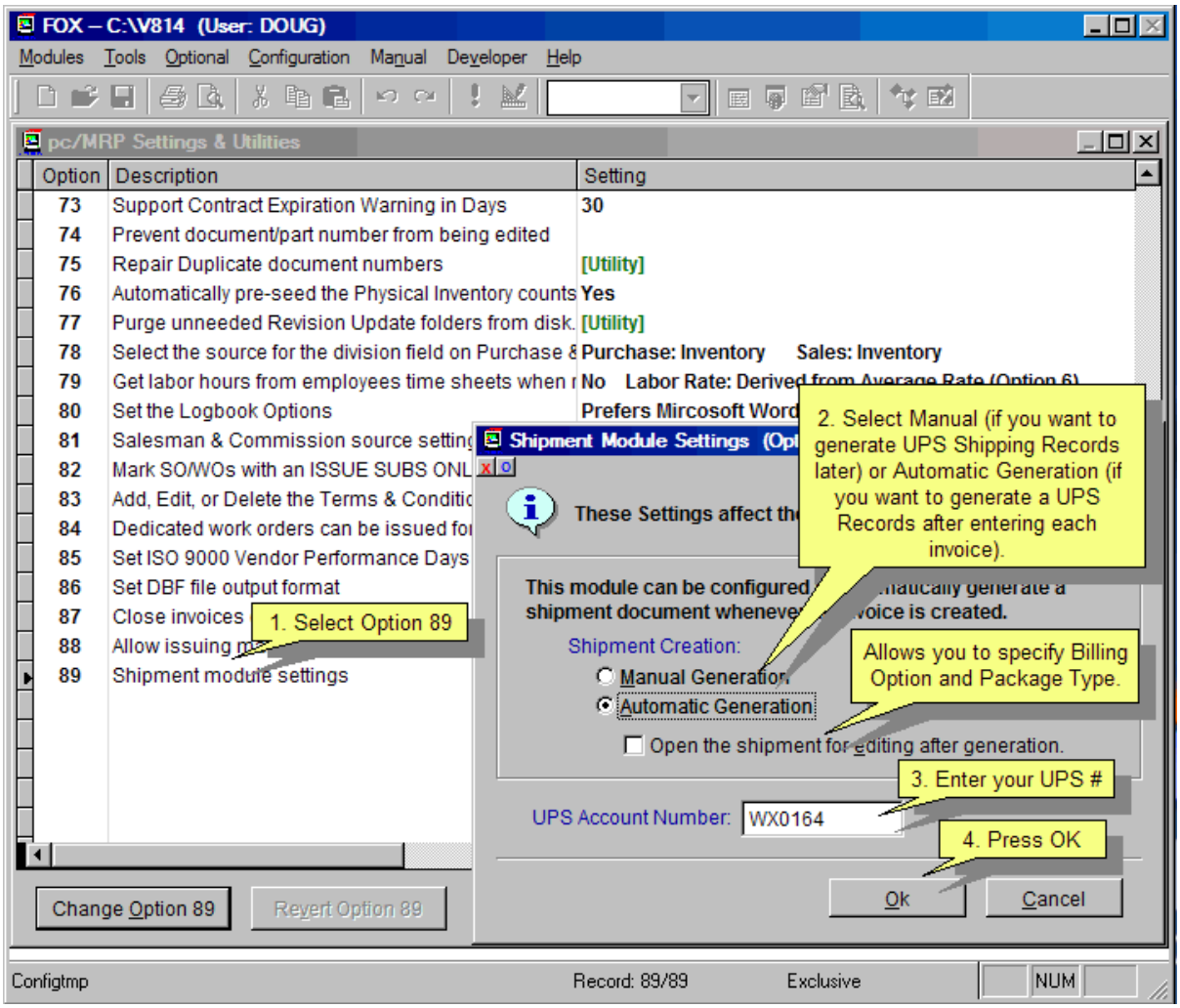
The 'enabledKeyedImport=1' and
the 'activeImportMap='. (\UPS\UOWS\ImpExp\Shipment -directory of your UPS software) (or WSTD)

Save this file and continue to Step 2.

### 15.18.2 Step 2 Set up the pc/MRP Interface to UPS WorldShip.

Select Configuration, Settings & Utilities menu. You must have modify rights to the Configuration menu in a multi-user environment with the Optional Password module. See your pc/MRP administrator if you need and do not have the rights to the Configuration menu.

### 15.18.3 Step 3 Modify the Shipment Module Settings.




Type 89 to select **Option 89**, Shipment module settings.

**Manual Generation** allows you to create an Invoice record without a shipment record. You will have to create the Shipment record manually.

**Automatic Generation** will create a Shipment record immediately after the Invoice record.

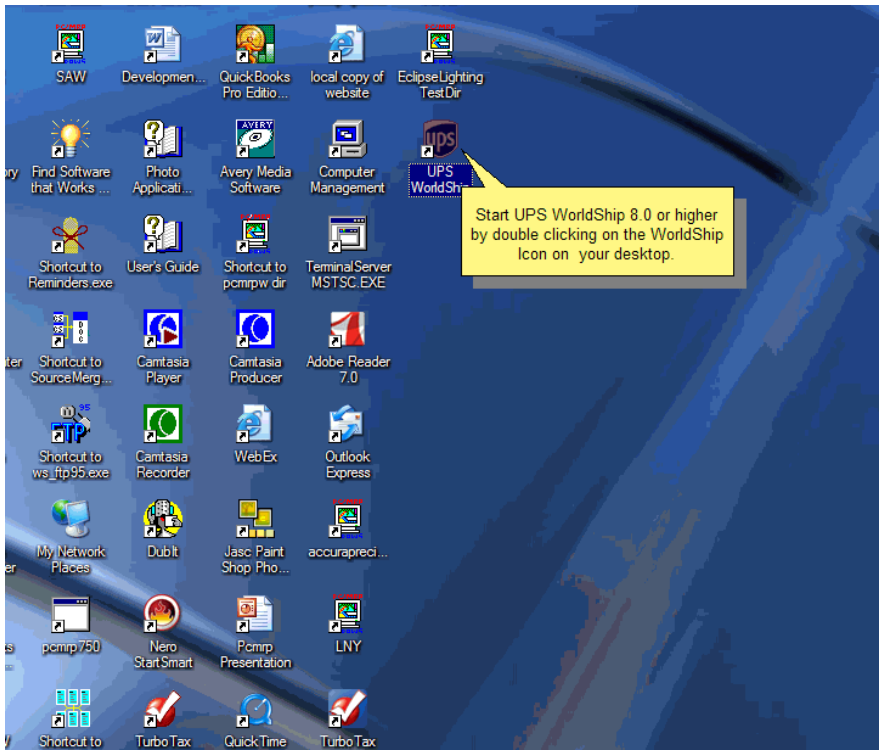
**Note:** No Shipment record will be created if there are no line items marked as Shippable. A shippable line item will have a check in the **Shippable item** checkbox on the line item's Delivery tab of the Invoice. The Shippable item's checkbox is automatically carried forward from the Inventory item's Miscellaneous tab's Shippable item checkbox, to the Sales Order, and then to the Invoice.

You can also open or not open the Shipment record for editing automatically.

Enter your company's UPS number in the space provided.

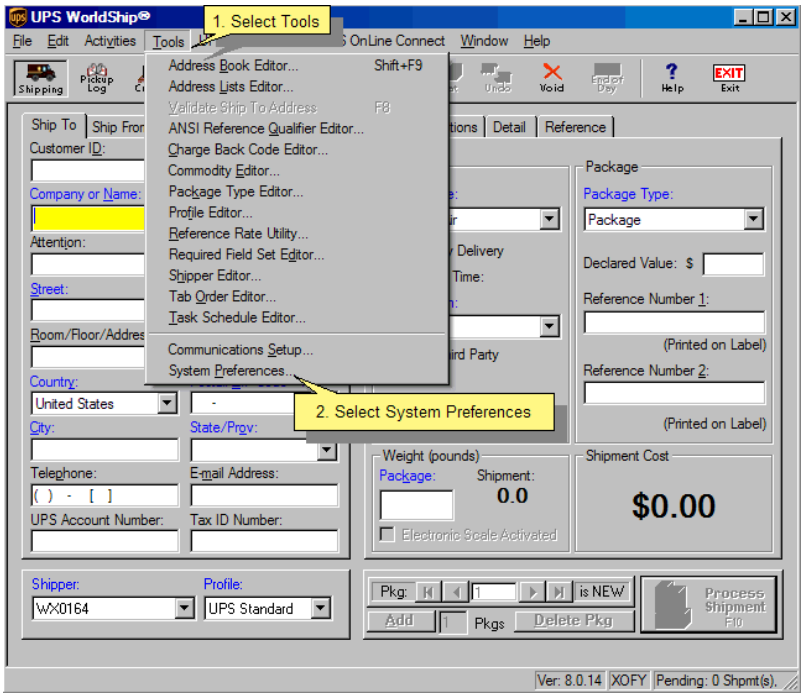
Pressing OK saves the settings.

### 15.18.4 Step 4 Navigate to your UPS WorldShip program



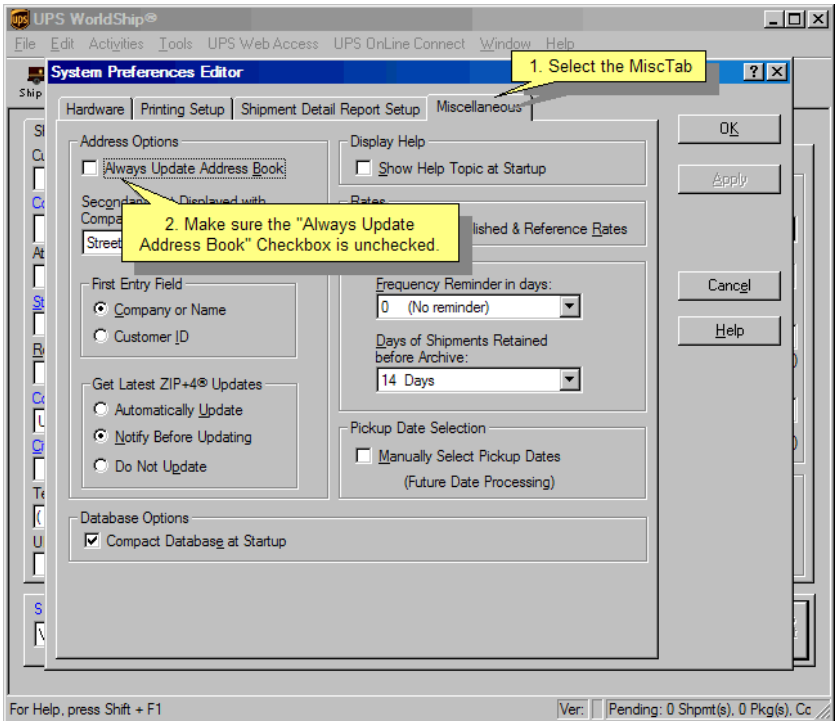

Double-click on the UPS WorldShip icon, or navigate to the UPS WorldShip program via the Start menu of your desktop and run the UPS WorldShip program.

### 15.18.5 Step 5 Set up the UPS WorldShip System Preferences.



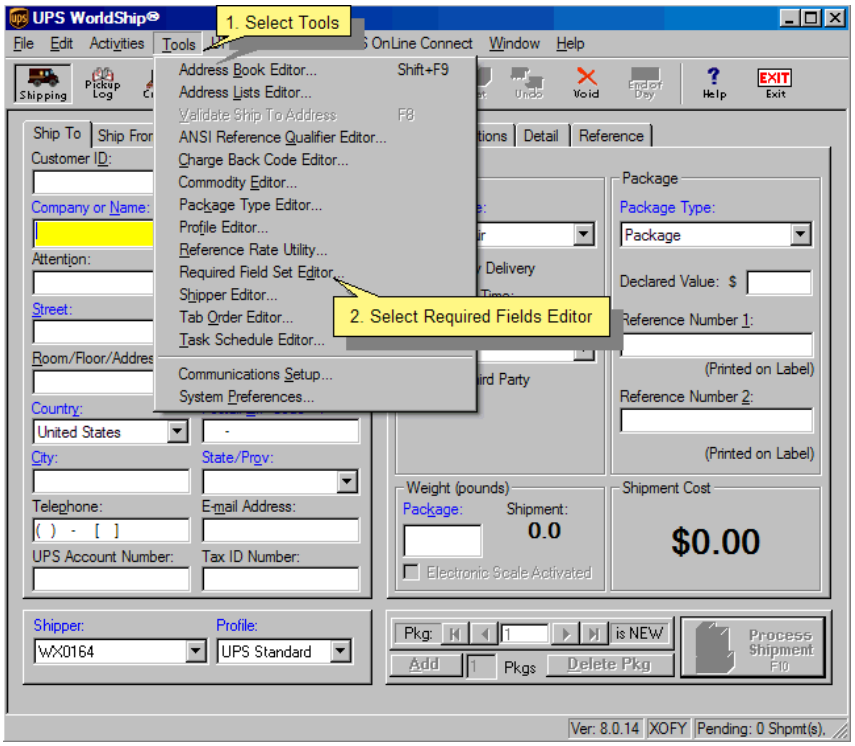

Select Tools and System Preferences and follow the setup instructions starting in Step 7.

### 15.18.6 Step 6 The UPS WorldShip System Preferences screen.




Select the **Miscellaneous** tab and ensure the **Address Options** for **Always Update Address Book** is not checked. Click the OK button.

### 15.18.7 Step 7 Set the required fields in UPS WorldShip.

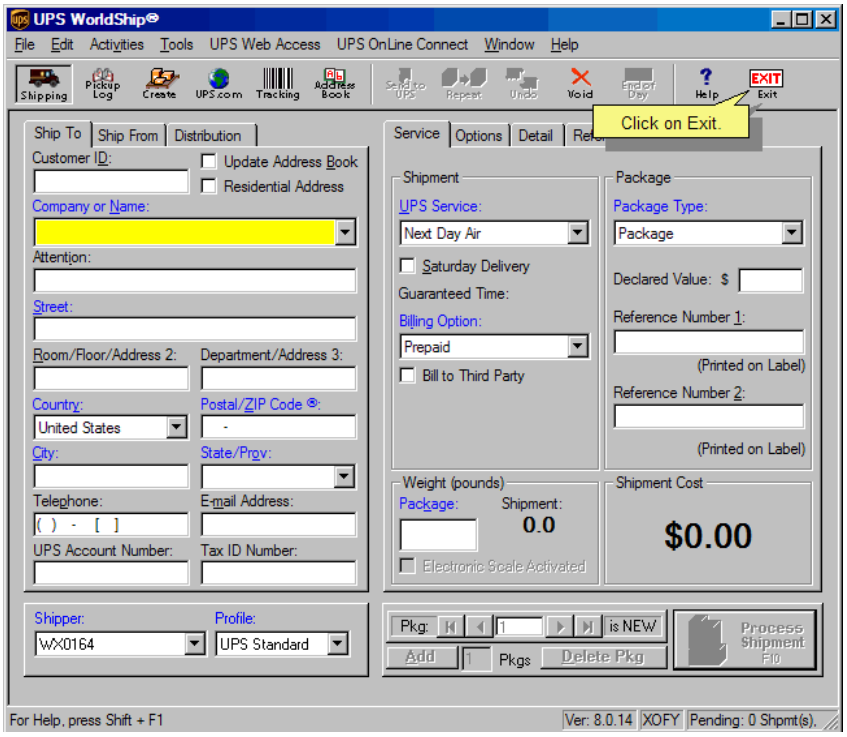



Select the **Tools, Requiree Field Set Editor** as you will be verifying the fields in the next screen.

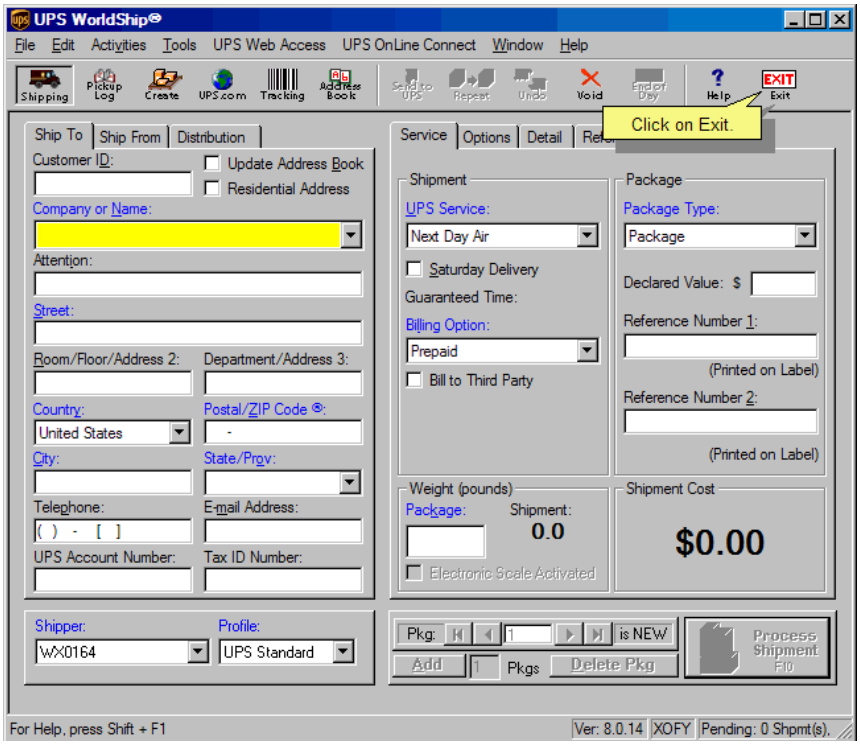
### 15.18.9 Step 9 Required Field Set Editor.

UPS WorldShip requires the 'Ship To Customer ID' field NOT listed in the '**Optional Fields Now Required**' list box on the right side of the screen.

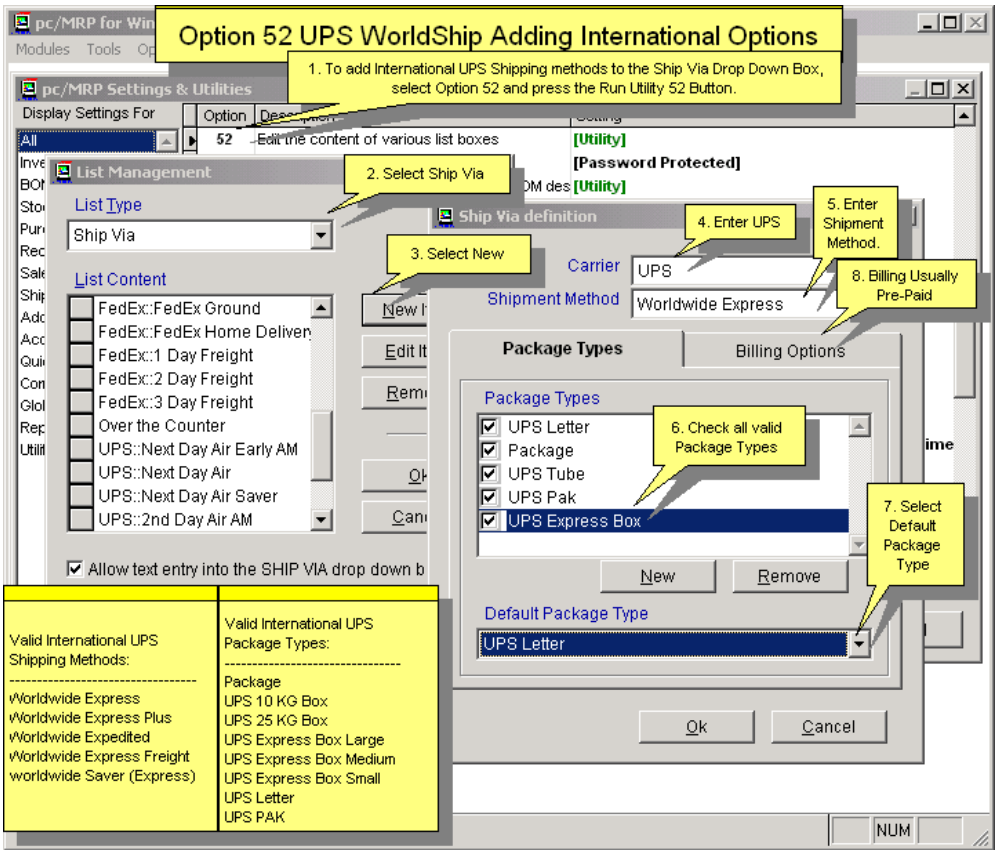
Click the 'Save' button to save the changes and exit the Editor screen.



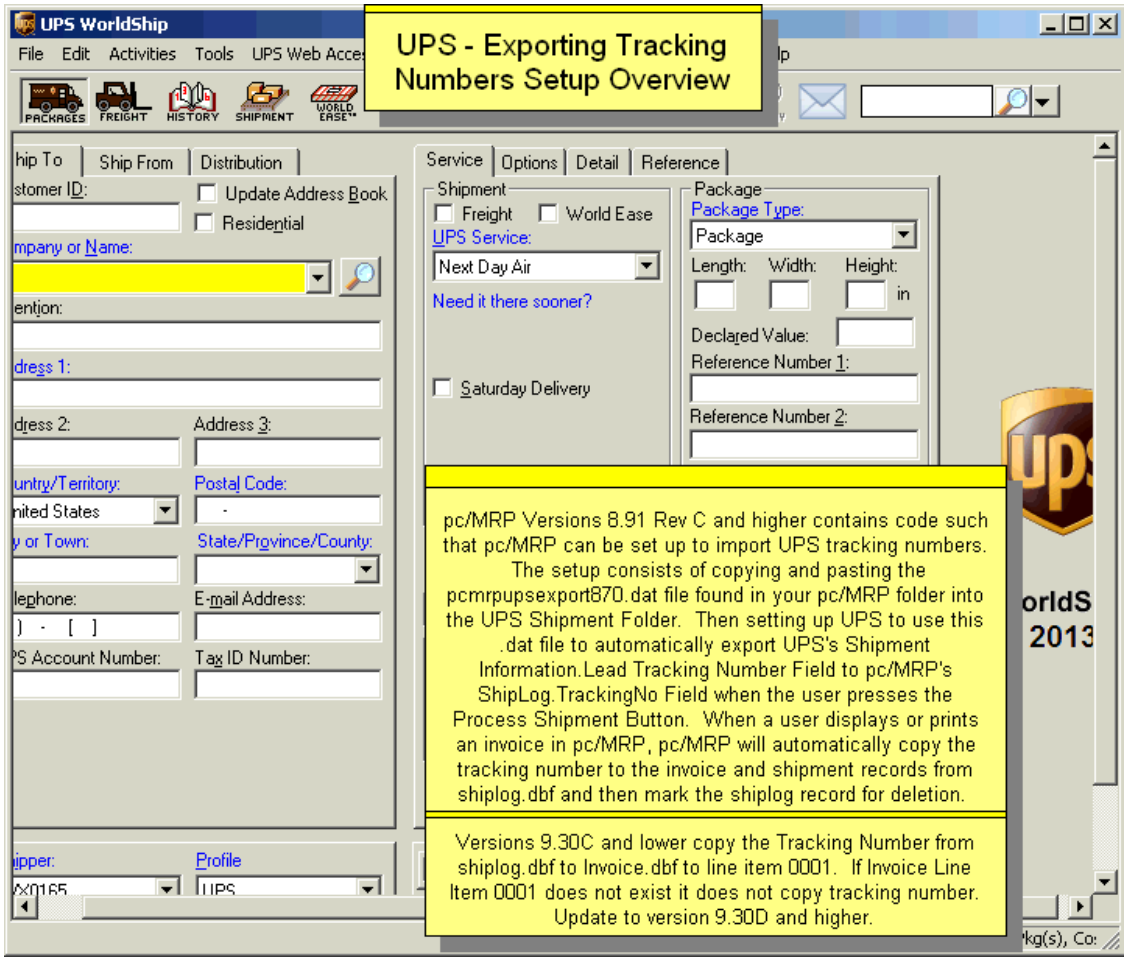

### 15.18.10 Step 10 UPS Set Up is Finished, Click 'Exit'.

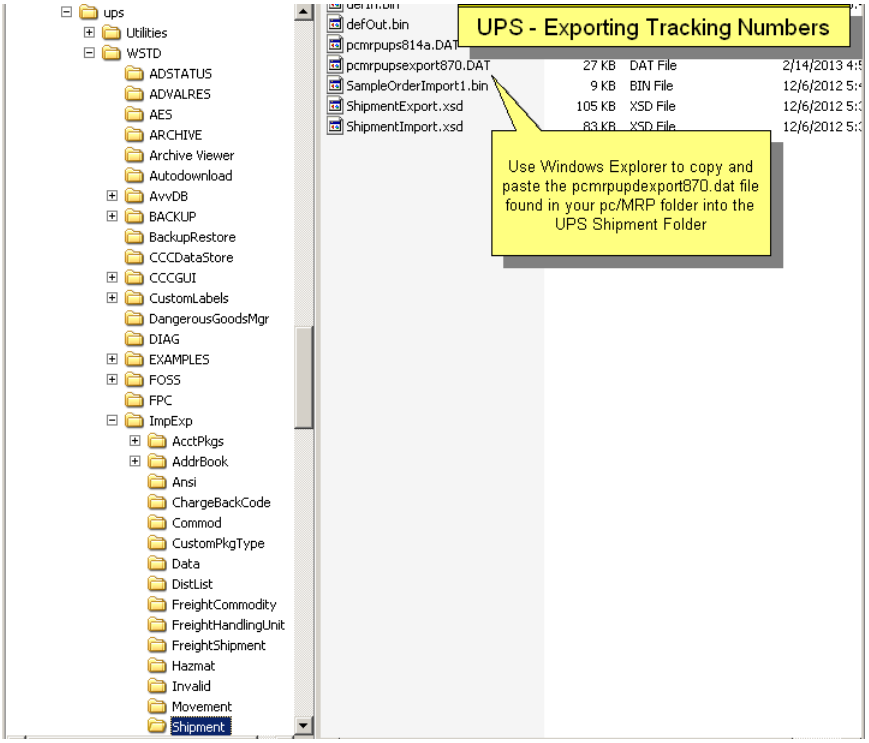


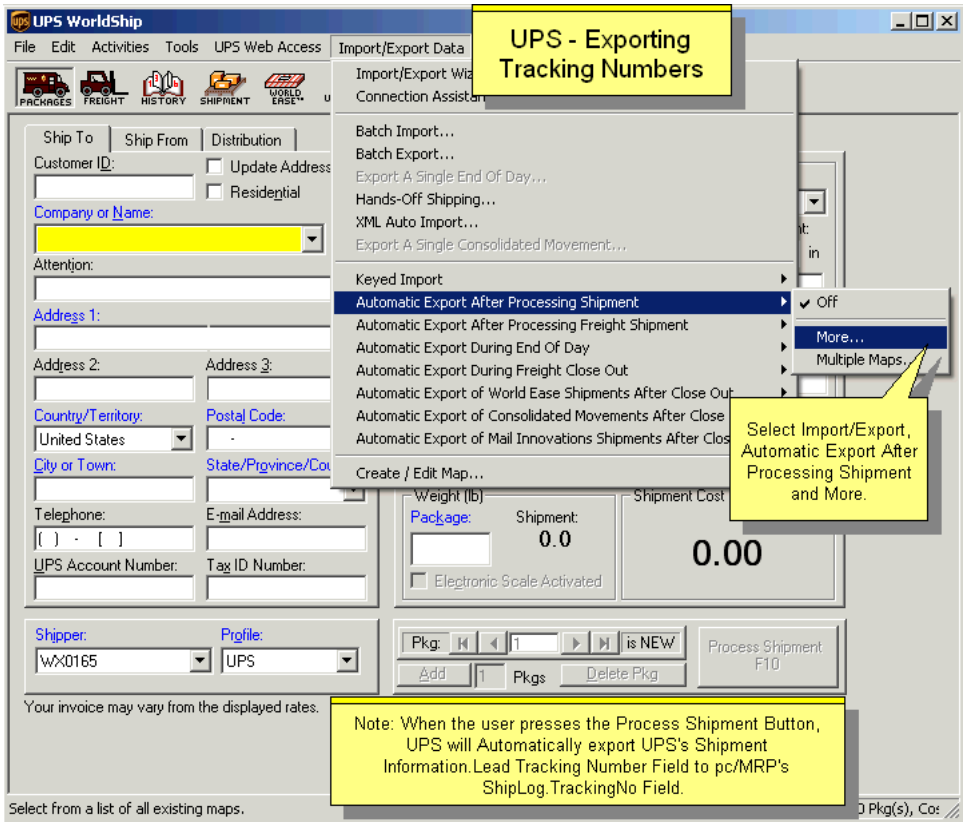
## 15.18.11 To add international UPS shipping methods to the 'Ship Via' Drop Down Box.

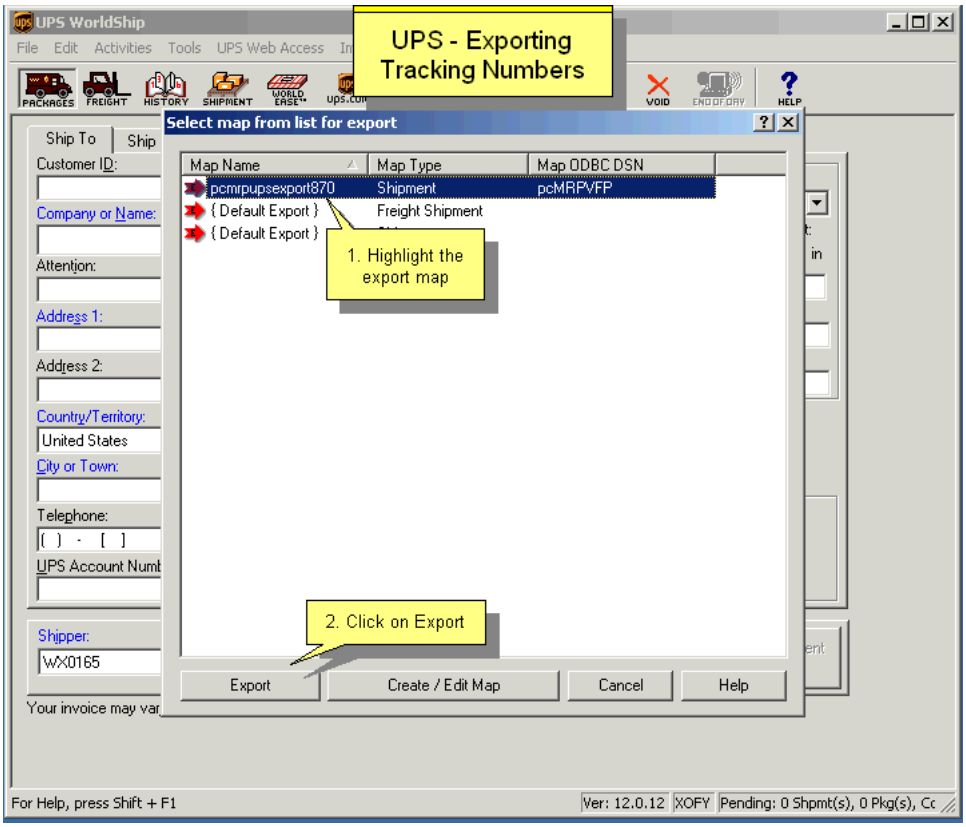


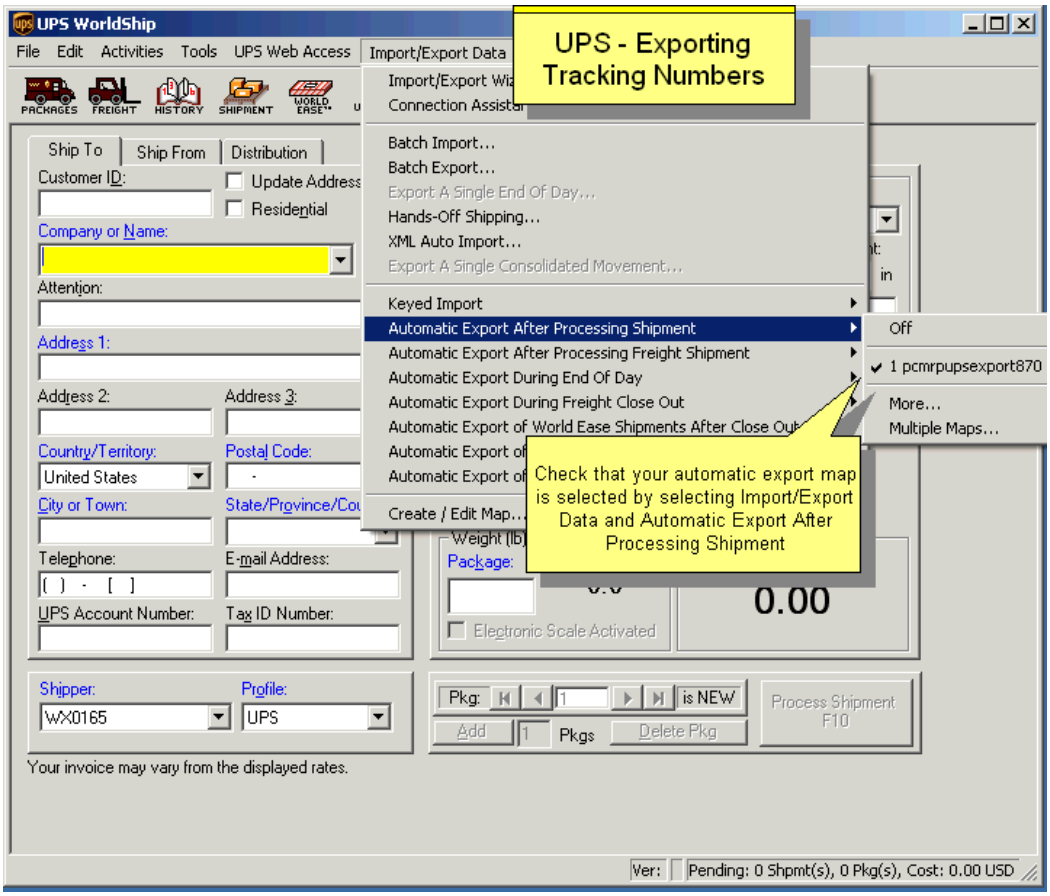
**15.18.12 To set up pc/MRP to import UPS tracking numbers follow the instructions below**

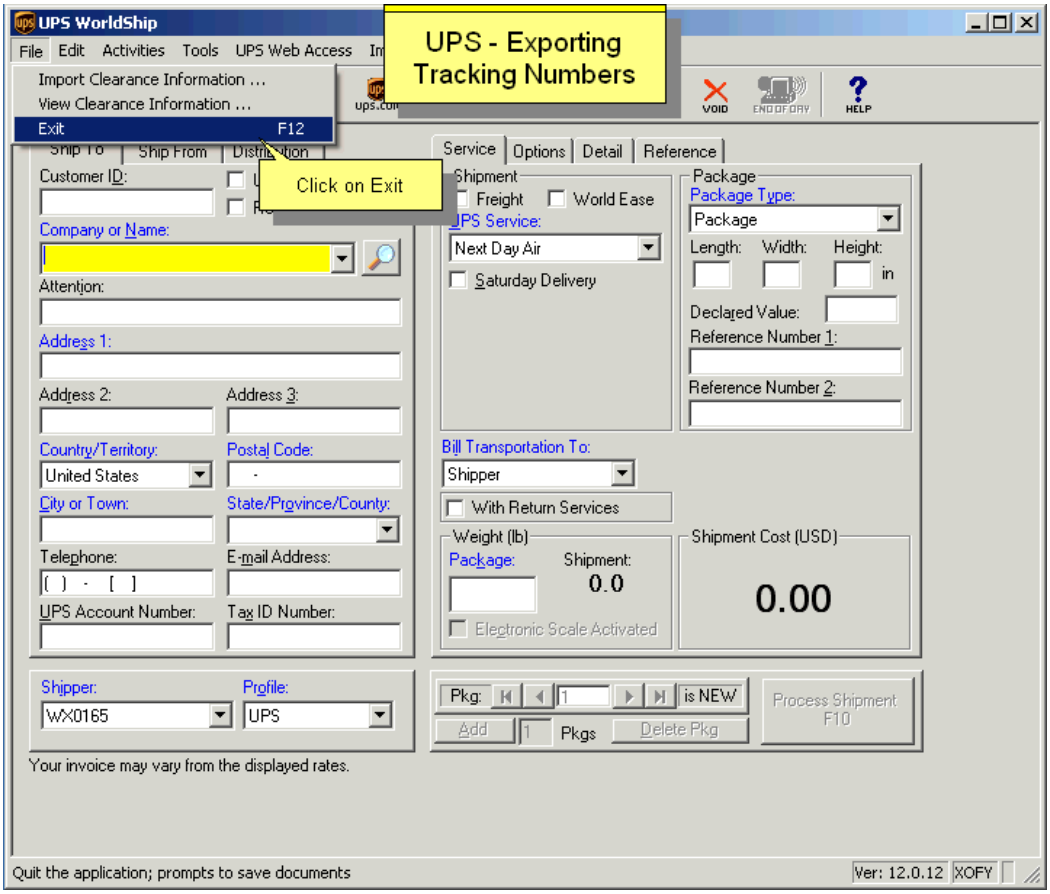



UPS - Exporting Tracking Numbers
UPS WorldShip
File Edit Activities Tools UPS Web Access Import/Export Data
Import/Export Wiz
Connection Assistan
Batch Import...
Batch Export...
Export A Single End Of Day...
Hands-Off Shipping...
XML Auto Import...
Export A Single Consolidated Movement...
Keyed Import
Automatic Export After Processing Shipment
Automatic Export After Processing Freight Shipment
Automatic Export During End Of Day
Automatic Export During Freight Close Out
Automatic Export of World Ease Shipments After Close Out
Automatic Export of Consolidated Movements After Close
Automatic Export of Mail Innovations Shipments After Clos
Create / Edit Map...
Off
More...
Multiple Maps...
Select Import/Export, Automatic Export After Processing Shipment and More.
Ship To
Ship From
Distribution
Customer ID:
Update Address
Residential
Company or Name:
Attention:
Address 1:
Address 2:
Address 3:
Country/Territory:
United States
Postal Code:
City or Town:
State/Province/Cou
Telephone:
E-mail Address:
UPS Account Number:
Tax ID Number:
Weight (lb)
Package:
Shipment:
0.0
Shipment Cost
0.00
Electronic Scale Activated
Shipper:
WX0165
Profile:
UPS
Pkg:
is NEW
Add
Pkgs
Delete Pkg
Process Shipment F10
Your invoice may vary from the displayed rates.
Note: When the user presses the Process Shipment Button, UPS will Automatically export UPS's Shipment Information.Lead Tracking Number Field to pc/MRP's ShipLog.TrackingNo Field.
Select from a list of all existing maps.


UPS - Exporting Tracking Numbers
UPS WorldShip
File Edit Activities Tools UPS Web Access
Select map from list for export
Map Name
Map Type
Map ODBC DSN
pcmrpupsexport870
Shipment
pcMRPVFP
{ Default Export }
Freight Shipment
{ Default Export }
1. Highlight the export map
2. Click on Export
Export
Create / Edit Map
Cancel
Help
Ship To
Customer ID:
Company or Name:
Attention:
Address 1:
Address 2:
Country/Territory:
United States
City or Town:
Telephone:
Shipper:
WX0165
For Help, press Shift + F1
Ver: 12.0.12
XOFY
Pending: 0 Shpmt(s), 0 Pkg(s), Co


UPS WorldShip
File Edit Activities Tools UPS Web Access Import/Export Data
UPS - Exporting Tracking Numbers
Import/Export Wiz
Connection Assistar
Batch Import...
Batch Export...
Export A Single End Of Day...
Hands-Off Shipping...
XML Auto Import...
Export A Single Consolidated Movement...
Keyed Import
Automatic Export After Processing Shipment
Automatic Export After Processing Freight Shipment
Automatic Export During End Of Day
Automatic Export During Freight Close Out
Automatic Export of World Ease Shipments After Close Out
Automatic Export of
Automatic Export of
Create / Edit Map...
Off
1 pcmrpupsexport870
More...
Multiple Maps...
Check that your automatic export map is selected by selecting Import/Export Data and Automatic Export After Processing Shipment
Ship To
Ship From
Distribution
Customer ID:
Update Address
Residential
Company or Name:
Attention:
Address 1:
Address 2:
Address 3:
Country/Territory:
United States
Postal Code:
City or Town:
State/Province/Cou
Telephone:
E-mail Address:
UPS Account Number:
Tax ID Number:
Weight (lb)
Package:
Electronic Scale Activated
0.00
Shipper:
WX0165
Profile:
UPS
Pkg:
is NEW
Add
Pkgs
Delete Pkg
Process Shipment F10
Your invoice may vary from the displayed rates.
Ver:
Pending: 0 Shpmt(s), 0 Pkg(s), Cost: 0.00 USD


UPS WorldShip
File Edit Activities Tools UPS Web Access
UPS - Exporting Tracking Numbers
Import Clearance Information ...
View Clearance Information ...
Exit F12
Click on Exit
VOID
END OF DAY
HELP
Ship To
Ship From
Distribution
Customer ID:
Company or Name:
Attention:
Address 1:
Address 2:
Address 3:
Country/Territory:
United States
Postal Code:
City or Town:
State/Province/County:
Telephone:
E-mail Address:
UPS Account Number:
Tax ID Number:
Service
Options
Detail
Reference
Shipment
Freight
World Ease
UPS Service:
Next Day Air
Saturday Delivery
Package
Package Type:
Package
Length:
Width:
Height:
in
Declared Value:
Reference Number 1:
Reference Number 2:
Bill Transportation To:
Shipper
With Return Services
Weight (lb)
Package:
Shipment:
0.0
Electronic Scale Activated
Shipment Cost (USD)
0.00
Shipper:
WX0165
Profile:
UPS
Pkg:
is NEW
Add
Pkgs
Delete Pkg
Process Shipment F10
Your invoice may vary from the displayed rates.
Quit the application; prompts to save documents
Ver: 12.0.12
XOFY

# 16.1 pc/MRP Optional Modules

## Optional Modules

There are several optional modules available in pc/MRP. Most of these are testable in the trial version of pc/MRP, and available for a free trial in the full (purchased) version as well. Below is a brief description of each optional module. For further information you can refer to the specific chapter for each optional module.

### Optional Module Activation

Optional Modules can be activated by following the instructions below.

For users on the trial, simply select Configuration, Module Activation, and the desired module. Then Click '**Activate**'. Now from the drop down menu Optional you will see that applicable optional module activated. Modules activated while on pc/MRP's demo version do not expire. When the software is converted to a **full version**, they will simply be turned off until they are purchased.
Users that have a full version of pc/MRP can activate optional modules for ten (calendar) days by following the instructions above and selecting **Ten-Day** trial. After the 10 day trial period has expired, the modules will appear enabled. To purchase an optional module and receive the activation code for that module contact Software Arts.

Once an optional module is activated, it can be de-activated at any time by navigating to the Configuration, Module Activation, selecting the optional module, pressing the De-Activate button and re-entering the activation code.

### Advanced Password Module

pc/MRP comes standard with one password, shared by all users. The optional Advanced Password Module allows the administrator to define usernames, passwords, and individual rights per module for users of pc/MRP.

### Infinite Bucket MRP Module (Scheduling)

pc/MRP comes standard with a single bucket MRP. The Single Bucket MRP does not schedule buy, issue, and make commands. The Optional Infinite Bucket MRP Module schedules buy, issue, make and sale action items according to due dates, lead times for assembly, and lead times from vendors.

### Barcode Module

This package adds the ability to print Barcodes on reports or labels. You receive numerous barcode fonts as well a builder that guides the user through the process. Ask your sales representative for a current list of supports formats.

### ECN Module

This optional module allows users to keep track of Engineering Change Notices.

### Sales Analysis Module

This optional module has several reports that are not available through the standard reports found in pc/MRP.

### Sales Quote Module

This optional module allows users to provide sales quotes to potential customers and convert these quotes over to real sales orders as desired. The Infinite Bucket MRP can consider the sales quotes with a probability %.

**Audit Trail Module**

This optional module allows administrators to track all edits made in pc/MRP (excluding Accounting). Once this module is activated all edits and deletes made will have a Name, Date, Time and Old Content, New Content record.

**Purchase Request Module**

This optional module allows users to create external RFQs or internal purchase requests and convert them to real purchase orders as desired.

**Serial/Lot Number Tracking Module**

pc/MRP comes standard with the ability to track one serial or lot number per line item. The optional Serial/Lot Number Tracking Module allows users to track an infinite number of serial numbers per line item. Users can print Advanced Tracking and Composition Reports and can assign subassembly serial numbers to topassembly serial numbers.

**Employee Time Tracking Module**

This optional module allows users to create labor records per employee, sales order, or work order.

**Alternate Currency Module**

This optional module allows users to create and print documents (SO, PO, invoice, etc.) in different currencies.

**Inspection Module**

This optional module allows users to define and enter inspection criteria, perform inspections, and run inspection reports.

**Routing Module**

This optional module allows users to have 25 Workstations in WIP. A Routing Template can be created for each BOM.

**Customer Bulk E-Mailer Module**

This optional module utilizes the address book to allow users to send newsletters, advertisements, or other types of documents in bulk to specified address types. (Customers, Vendors, Employees)

**QuickBooks Export Module**

This optional module allows users routinely export AP, AR, inventory and address data out of pc/MRP and import into QuickBooks.

**Corporate Enterprise Reporting Module**

The Corporate Enterprise Module allows companies to:

- Select one of three methods to have their parts list and BOMs automatically synchronized (including all indexes) across the world in real time.
- Switch from one division to another by selecting that division from the drop down menu.
- Print out consolidated financial reports for all divisions, business units, and the entire corporation. Currencies are automatically reconciled if pc/MRP's Alternate Currency Module is active.

**User Task Manager & Tickler Module**

The User Task Manager & Tickler Module allows companies to:

- Quickly enter a tickler and reminder date/time for notification.
- Enter detailed information about a task or project to track.

**Integrated Web Sales Site Interface**

This optional module allows users to manage orders created on a web sales site (currently ShopSite) by downloading and uploading the orders into pc/MRP's Sales Order module.

**Electronic Data Exchange (EDI) Module Overview**

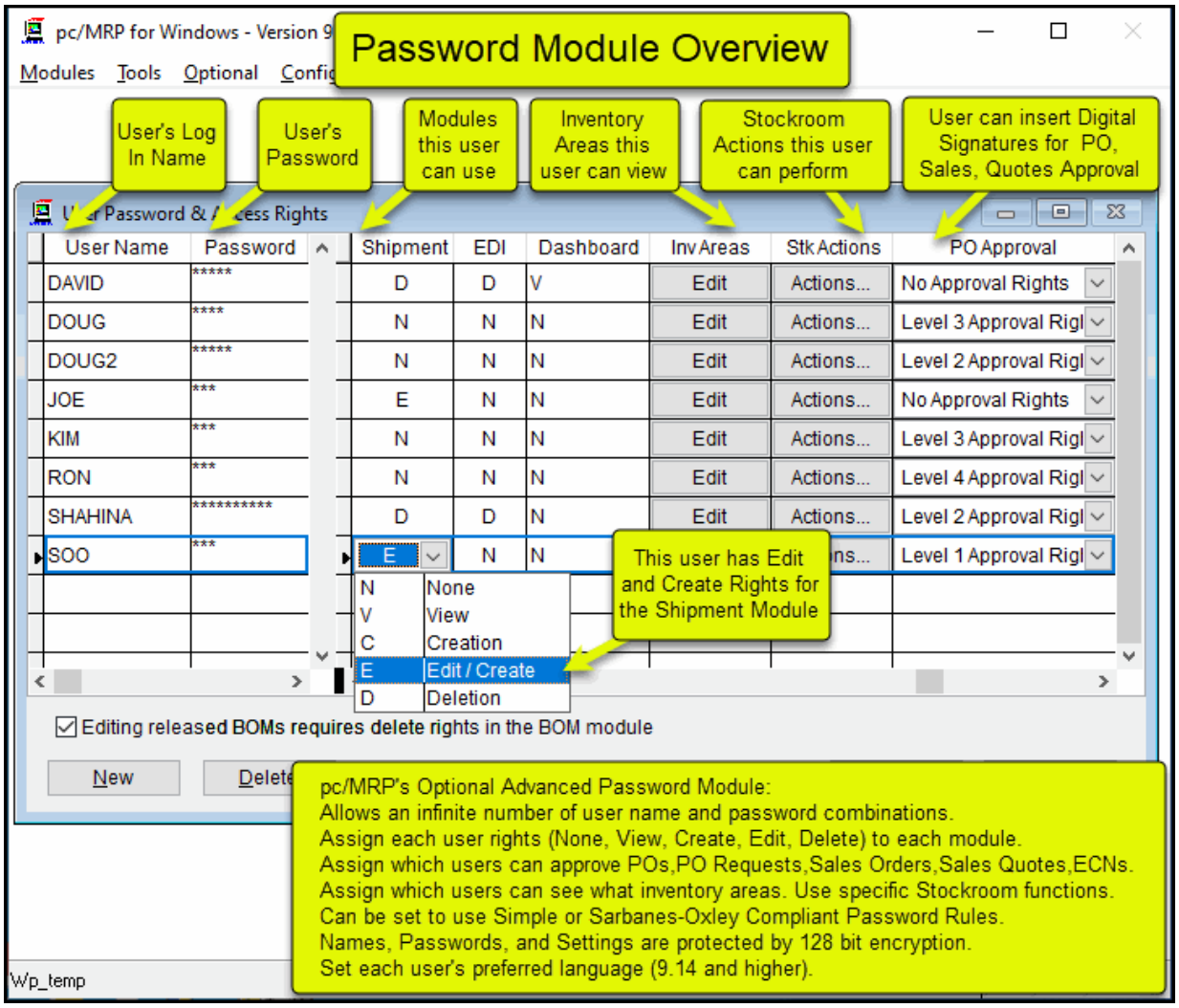
The Electronic Data Exchange (EDI) Module allows companies to have electronic data exchange between you, your customers and vendors.

# 16.2 Optional Advanced Password Module

### 16.2.1 Overview

pc/MRP's Advanced Password Module allows an infinite number of user name and password combinations. Each name and password combination can be assigned individual rights to each pc/MRP module. A user can have **N** No Access, **V** View only rights, **C** Create rights, **E** Edit rights, or **D** deletion rights to a module. pc/MRP encrypts the password database file.

An online slideshow is located here: http://www.pcmrp.com/mrp101/pw1.htm




If a text file named **CSTHDR.FLG** is present in the pcmrpw directory, the password module will allow both upper and lower case **e** and **v** to be entered. Using lower case letters will hide some of the cost fields in the inventory, stockroom and receiving modules. This feature is not supported or guaranteed.

Individual users have the ability to change their own passwords by selecting **Change Password of the Current User**. The user will be prompted to enter the current password, enter the new password, and confirm the new password.

To delete a user, select the user name and press the **Delete** button. The user's entry will turn red. Pressing the OK button will remove the marked user(s) and exit the Password module.

### 16.2.2 Installing the Advanced Password Module

To install PASSWORD, select Configuration, Module Activation, and then Password from the menu. Call Software Arts for the special activation number (Software Arts will invoice your company). Enter the special activation number when prompted. Exit pc/MRP and then re-enter pc/MRP using the name MASTER and the password MASTER. You might want to change the master password right away.

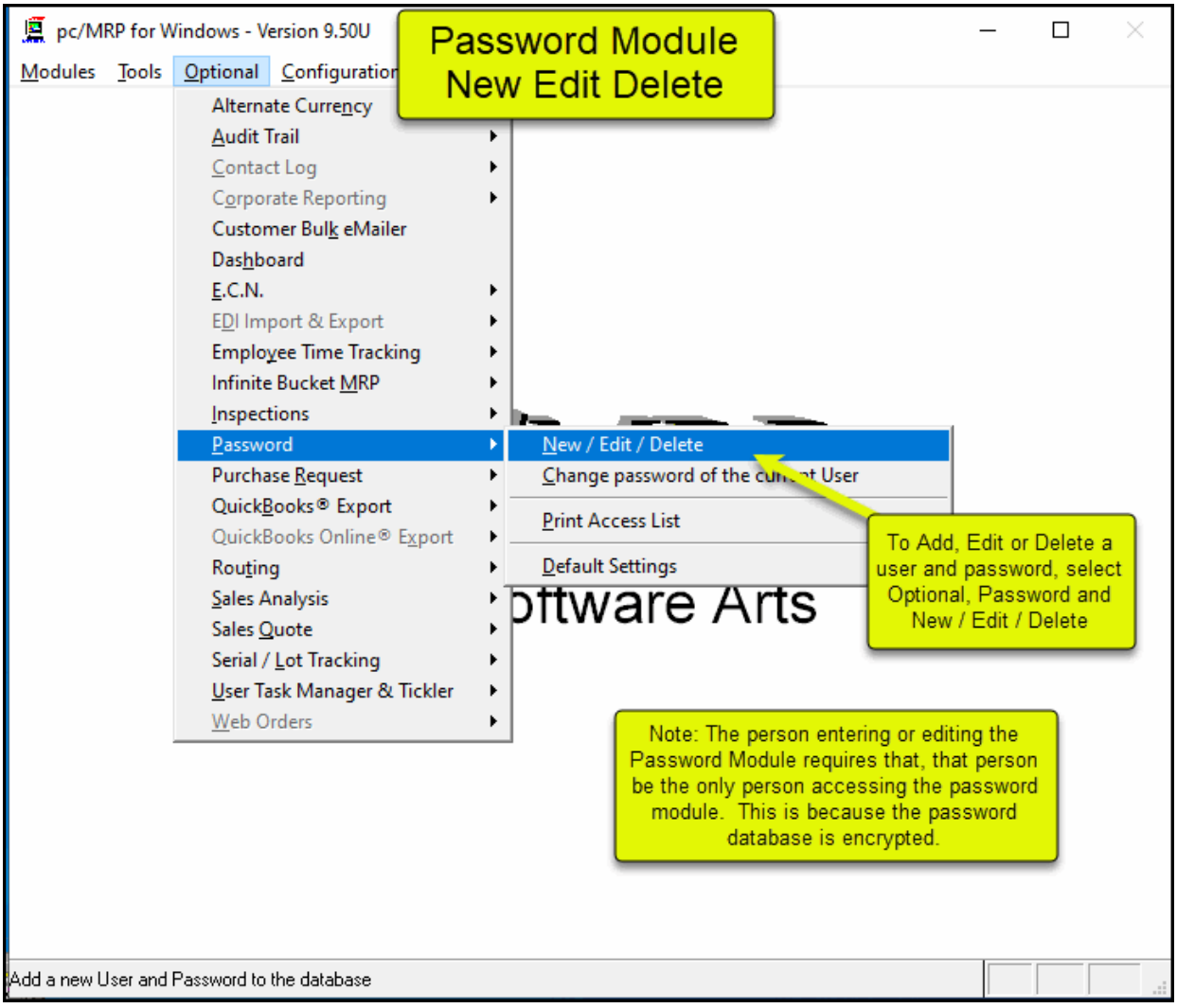
MASTER has all access rights to all modules including the password module. You can change the name of MASTER; however, you should leave one username/password with access rights to all modules including the password module. This will allow the network supervisor to be able to change the passwords in the future if necessary.

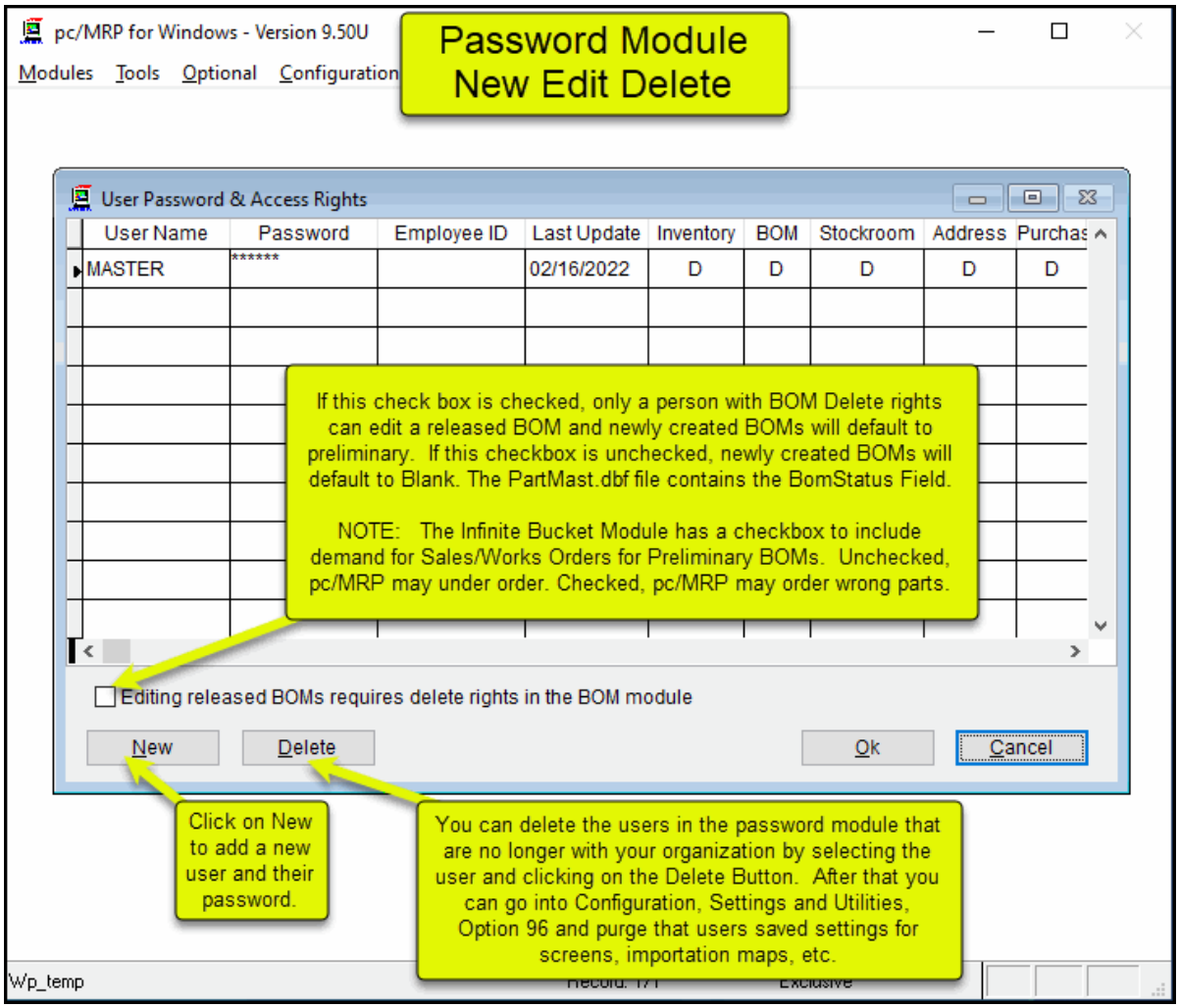
If a user's password is lost/forgotten, the user can ask the pc/MRP network supervisor to give them a new password. If no one can log in, call Software Arts. We will only give access to pc/MRP for a person on an administrative level.

After you activated the Password Module, your old (common) password will not work any more. You need to add each of your users to the Password module so that your users can enter pc/MRP.

### 16.2.3 Adding, Editing and Deleting within the Advanced Password Module

Select New to enter a new user.



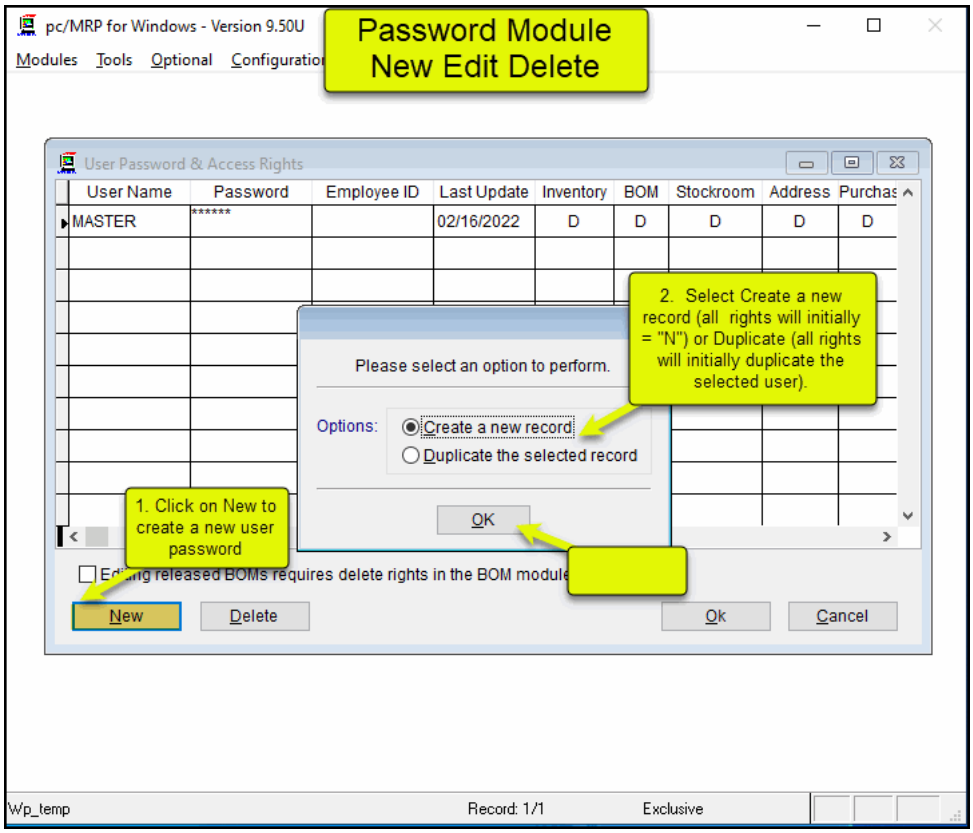


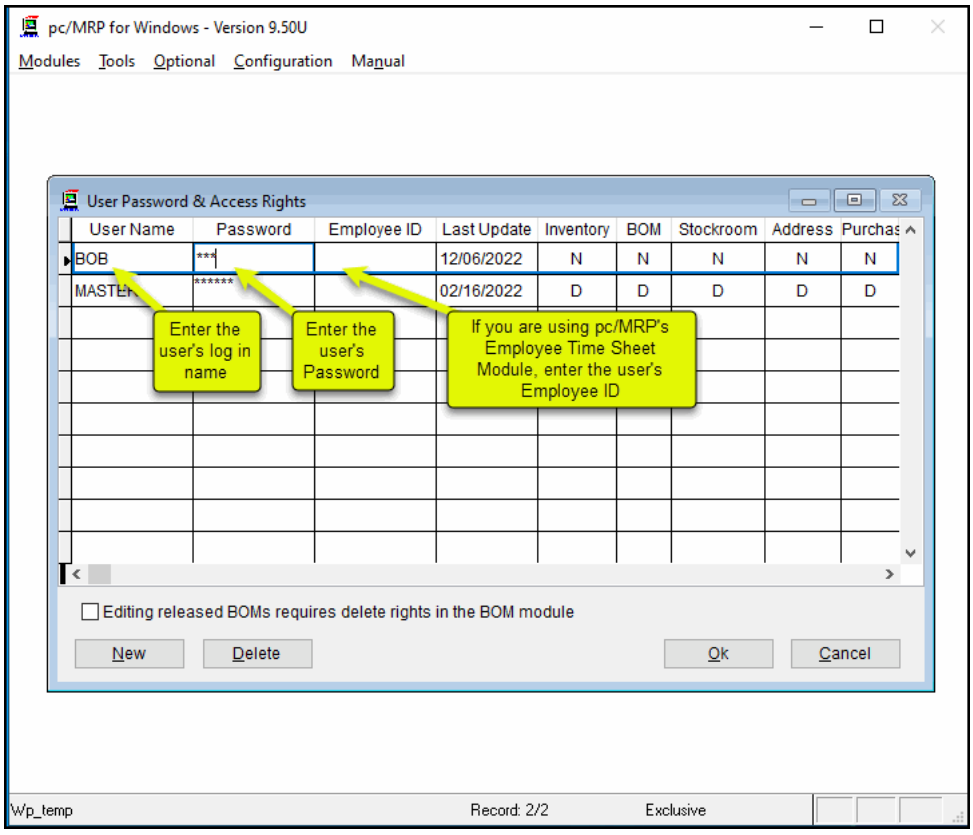

Checking the '**Editing released BOMs requires Delete rights in the BOM module**' checkbox this box will require a user editing a released BOM to have Delete rights to the BOM Module. Please see Section 12.1.8 for more information.

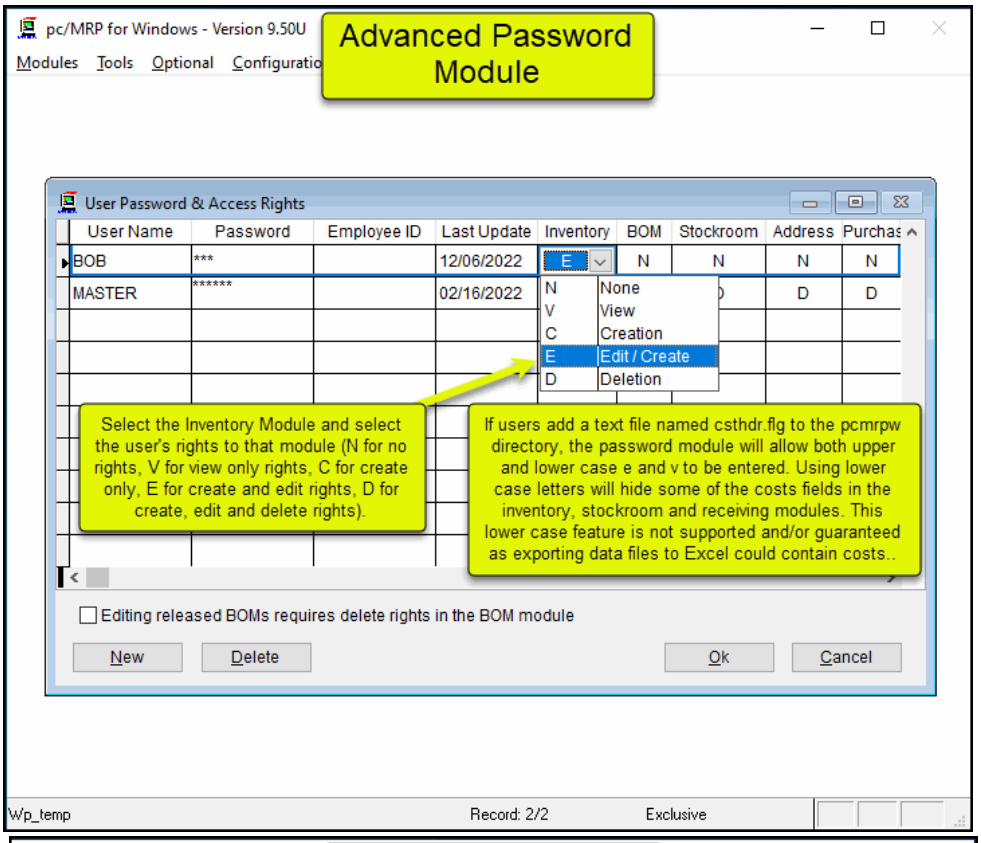
**Note:** If this box is checked, the BOM status can be set only to Preliminary or Released (not Blank). For newly created BOMs Preliminary will be default. Already existing BOMs with a Blank status will remain Blank. Once changed to either Preliminary or Released, the status can not be changed back to Blank. Only users with BOM Delete rights will be able to edit Released BOMs.

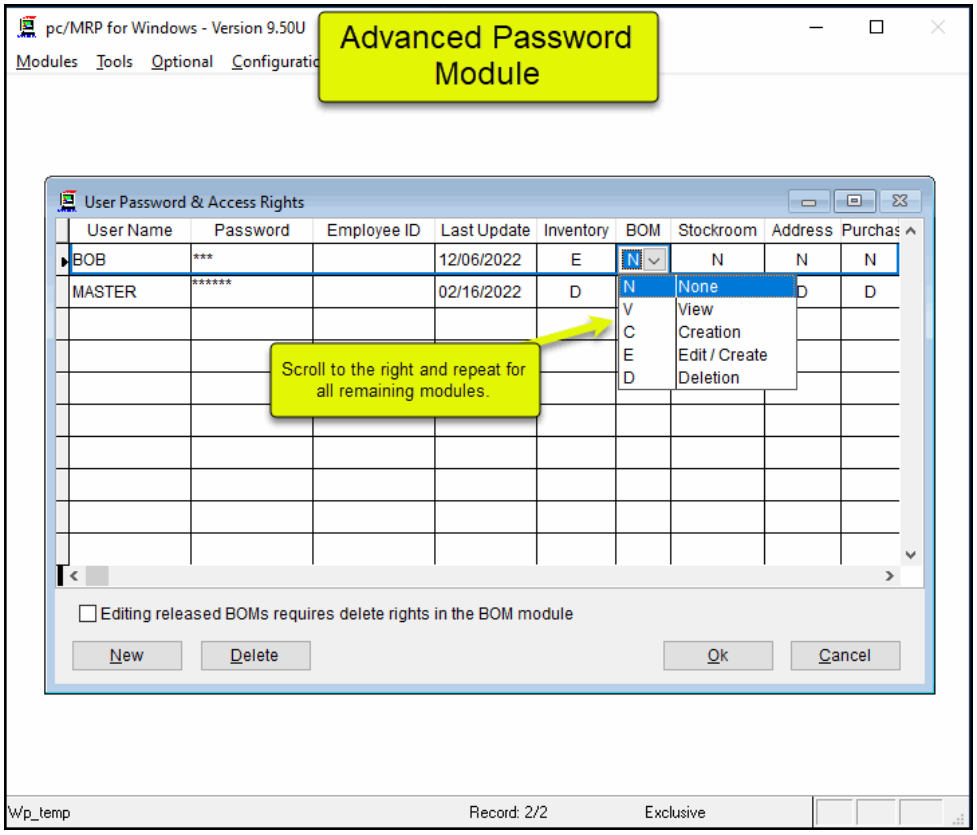
**Note:** The optional Infinite Bucket module has a checkbox to include demand for Sales/Works Orders for Preliminary BOMs. Unchecked, pc/MRP may under order. Checked, pc/MRP may order the wrong parts.

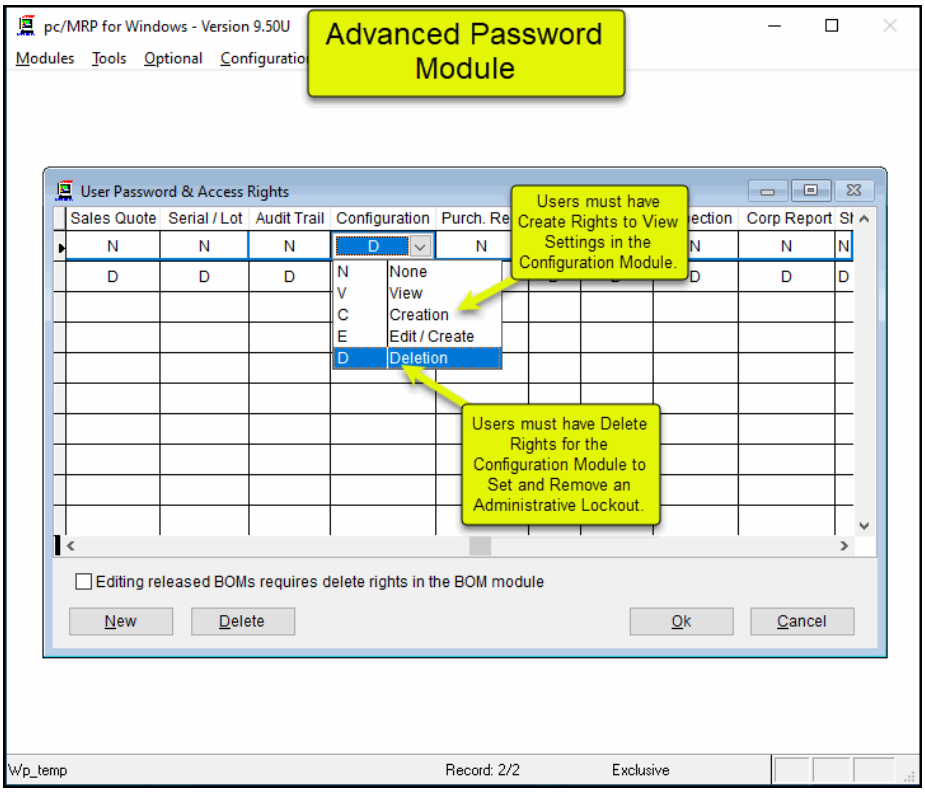
**Create a New Record** with all rights initially as “N”, or select an existing user who’s settings are similar to the user you are about to enter, and **Duplicate the Selected Record** to start with.



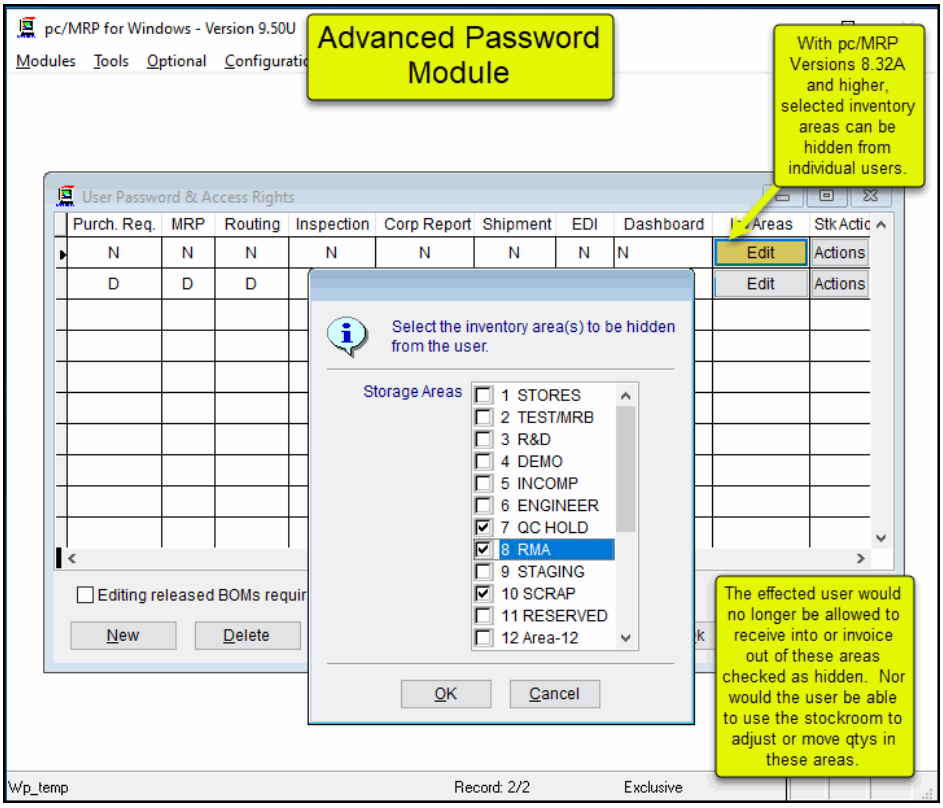




pc/MRP for Windows - Version 9.50U
Modules Tools Optional Configuratio
Advanced Password Module
User Password & Access Rights
User Name | Password | Employee ID | Last Update | Inventory | BOM | Stockroom | Address | Purchas
BOB | *** | 12/06/2022 | E | N | N | N | N
MASTER | ****** | 02/16/2022 | | | | D | D
N None
V View
C Creation
E Edit / Create
D Deletion
Select the Inventory Module and select the user's rights to that module (N for no rights, V for view only rights, C for create only, E for create and edit rights, D for create, edit and delete rights).
If users add a text file named csthdr.flg to the pcmrpw directory, the password module will allow both upper and lower case e and v to be entered. Using lower case letters will hide some of the costs fields in the inventory, stockroom and receiving modules. This lower case feature is not supported and/or guaranteed as exporting data files to Excel could contain costs..
Editing released BOMs requires delete rights in the BOM module
New
Delete
Ok
Cancel
Wp_temp
Record: 2/2
Exclusive

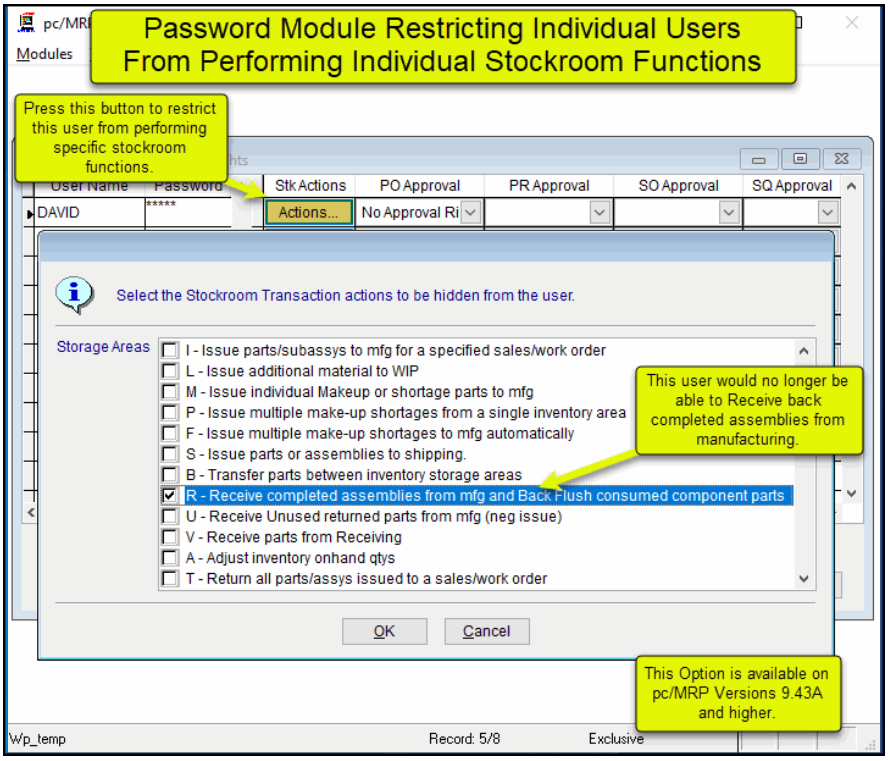

pc/MRP for Windows - Version 9.50U
Modules Tools Optional Configuratio
Advanced Password Module
User Password & Access Rights
User Name | Password | Employee ID | Last Update | Inventory | BOM | Stockroom | Address | Purchas
BOB | *** | 12/06/2022 | E | N | N | N | N
MASTER | ****** | 02/16/2022 | D | | | D | D
N None
V View
C Creation
E Edit / Create
D Deletion
Scroll to the right and repeat for all remaining modules.
Editing released BOMs requires delete rights in the BOM module
New
Delete
Ok
Cancel
Wp_temp
Record: 2/2
Exclusive



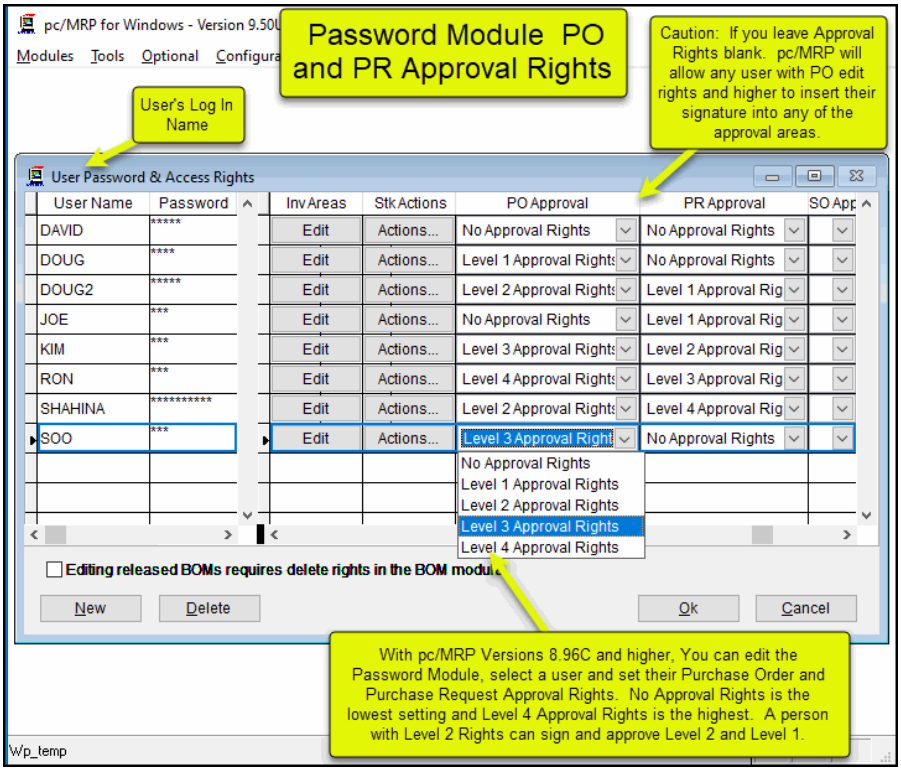

pc/MRP Versions 8.32A and Higher added the option to hide inventory area from specifict users...

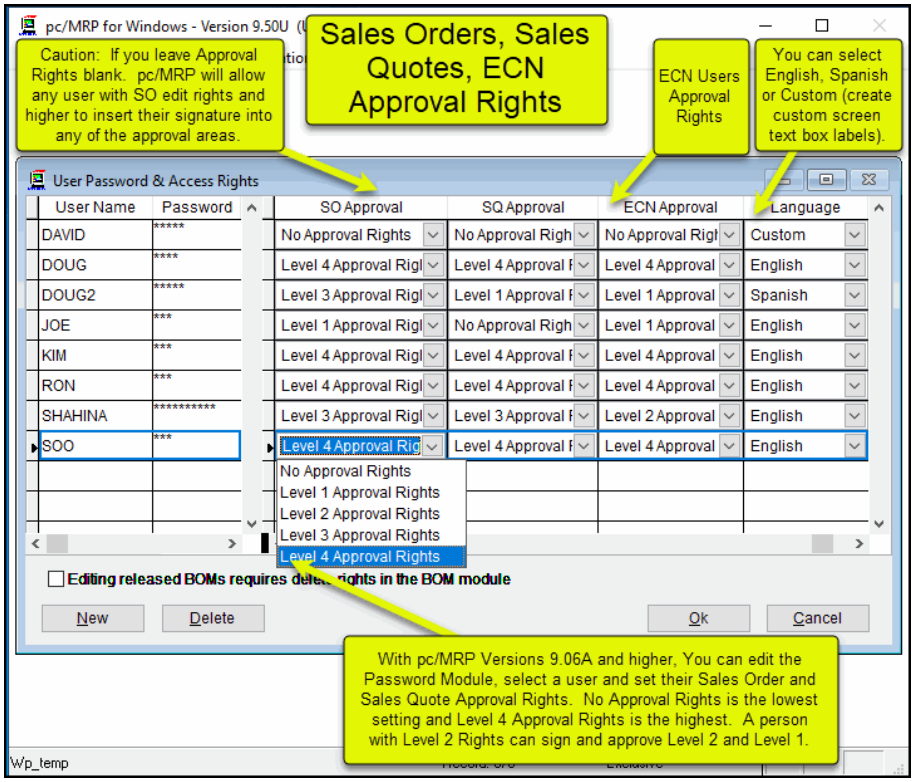


pc/MRP Versions 9.43A and Higher added the option to restrict users from accessing specific stockroom functions..



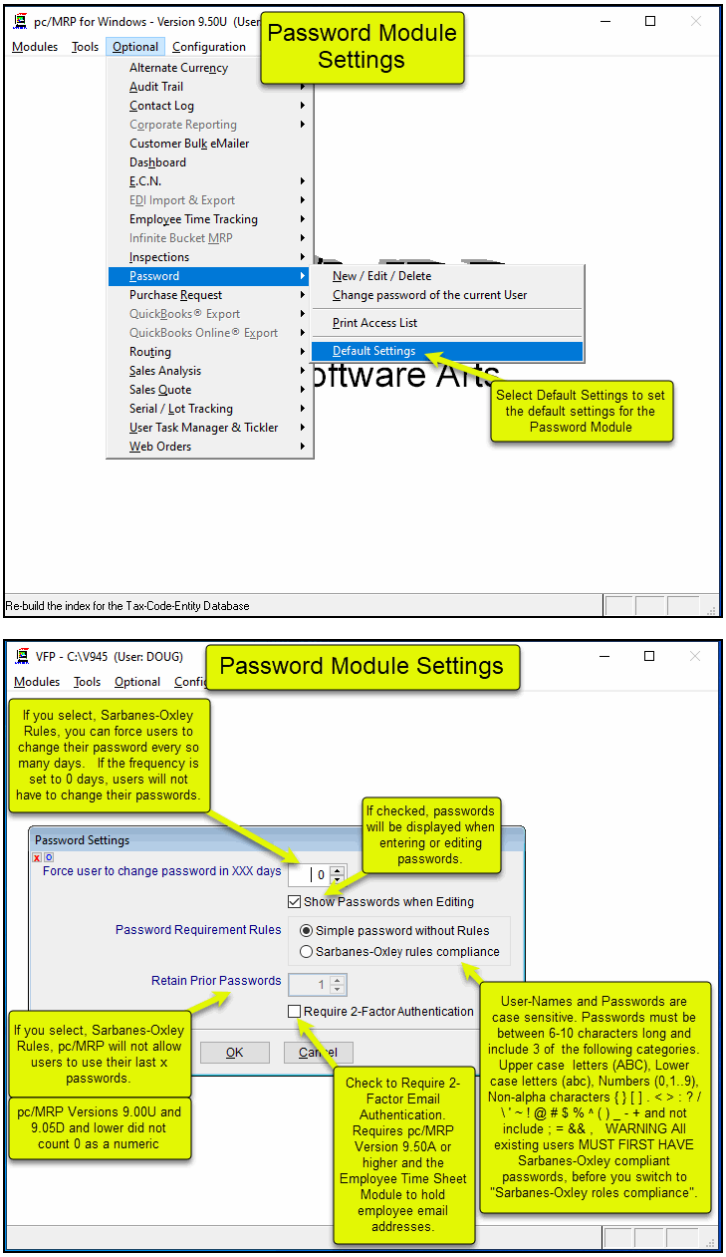

pc/MRP offers users to have rights to approve a purchase order, a purchase request, a sales order or a sales quote. Please see the Purchase/Sales chapters for more details.




pc/MRP for Windows - Version 9.50U
Sales Orders, Sales Quotes, ECN Approval Rights
Caution: If you leave Approval Rights blank. pc/MRP will allow any user with SO edit rights and higher to insert their signature into any of the approval areas.
ECN Users Approval Rights
You can select English, Spanish or Custom (create custom screen text box labels).
User Password & Access Rights
User Name
Password
SO Approval
SQ Approval
ECN Approval
Language
DAVID
DOUG
DOUG2
JOE
KIM
RON
SHAHINA
SOO
No Approval Rights
Level 1 Approval Rights
Level 2 Approval Rights
Level 3 Approval Rights
Level 4 Approval Rights
Editing released BOMs requires dele rights in the BOM module
New
Delete
Ok
Cancel
With pc/MRP Versions 9.06A and higher, You can edit the Password Module, select a user and set their Sales Order and Sales Quote Approval Rights. No Approval Rights is the lowest setting and Level 4 Approval Rights is the highest. A person with Level 2 Rights can sign and approve Level 2 and Level 1.
Wp_temp

### 16.2.4 Password Settings

pc/MRP supports Sarbanes-Oxley password rules (Optional, Password, Default Settings):




You can set up a password **refresh frequency**. If the password refresh frequency is set to 1 or more days, users will be prompted to enter a new password when they exceed the number of days allowed or the lastupdate field is empty for the user.

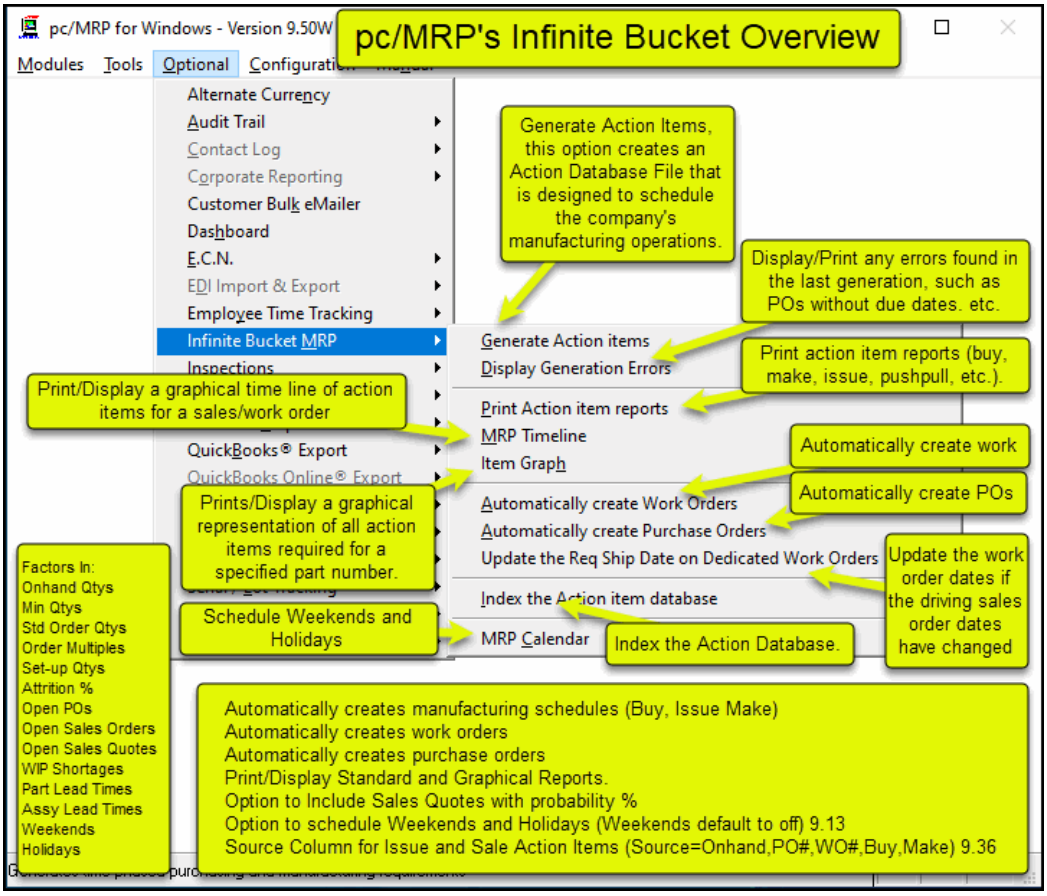
You can set whether passwords will be **displayed or hidden** when editing passwords.

pc/MRP Versions 9.50A and higher contain an option to **require 2-Factor Authentication** when logging into pc/MRP. This option requires that the optional Password and Employee modules have been activated. When a user logs in, pc/MRP will email the user a security code number. The user will have up to 10 minutes to enter the security code number. The users email address is stored in pc/MRP's employee's record in the pc/MRP's Employee Module.

| Action to be performed | Rights needed | |
|---|---|---|
| Cost Roll-up (if set by Option 47) | **E** | Accounting |
| Edit an invoice or a receiver that has been posted or paid | **E** | Accounting |
| Credit Memos, New \| Credit Memos, Attach | | Accounting |
| Create an Independent credit memo and print a refund check | | Accounting |
| Display general ledger transaction report | **V** | Accounting |
| Auto update the GL when entering an invoice/receiver (if auto accting on) | **E** | Accounting |
| Alternate Currency Module | | Accounting |
| Employee/Time sheet module | | Accounting |
| Convert purchase request to purchase order | **E** | Purchase |
| QuickBooks Module | **E** | Accounting |
| Viewing, Creating or Editing BOMs same/higher rights as Inventory module | | BOM, Inventory |
| Edit released BOMs (released BOMs requires Delete rights in the BOM) | **D** | BOM module |
| Activate an Optional Module (full or trial) | **C** | Configuration menu |
| View Configuration settings | **C** | Configuration menu |
| Edit Configuration settings / Run Utilities | **E** | Configuration menu |
| Set or remove Administrative Lockout | **D** | Configuration menu |
| Task Manager – view Active Tasks | **N** | Configuration menu |
| Task Manager - change settings or schedules | **D** | Configuration menu |
| Perform Auto Update (revision update) | **D** | Configuration menu |
| Physical Inventory: update OH qty and zero out team counts | **D** | Inventory |
| Access to the Command Line | **D** | Password |
| Inspection Module, Criteria Templates: Allow Exemptions, Admin only | **D** | Password |
| Adding a new user to the Password module | **E** | Password |
| Routing Module: Allow Deletions/Editing of Fields, Admin only | | Password |
| Inf Bkt:: Automatically create purchase orders (PO MRP Parts Req – 9.50Z) | **D** | Purchase |
| MRP, Push-Pull Report: Update PO dates and zero out cancelled POs | **E** | Purchase, MRP |
| Create credit memo from the Sales module (if set by Option 95) | **C** | Sales |
| Reindex a file | **D** | the effected module |
| View credit card numbers and add new ones | **C** | Sales/Invoice/Accting |
| Entering Cycle Counts | **E** | Inventory |
| Approve PO, RFQ needs approval right for that module on that level or higher | | |
| Access the Command Line | **D** | Password Module |

# 16.3 Optional Infinite Bucket MRP Module

### 16.3.1 Overview




pc/MRP's Infinite Bucket MRP module generates an ACTION.DBF file containing dated action items (buy, make, issue, etc.). Once the action.dbf file has been generated, the data can be used to print out various purchasing and manufacturing scheduling reports. All action items are pegged (contains the driving sales/work order number). An online slideshow is located here: http://www.pcmrp.com/mrp101/mrpoverview.htm

The MRP reports are only up to date right after the MRP was generated. The longer the time between the MRP generations, the more outdated your reports will be. pc/MRP displays the date the MRP was last run. To learn about how to schedule automatic MRP runs, see the pc/MRP Scheduled Tasks in Chapter 15.16 of this Manual.

You can generate an MRP during the day. When you generate an MRP, Mrp2Gen.prg tries to get exclusive access to the MRP dbf files (Action, Avail, and MrpError). If it can not get exclusive access to those files because somebody else is generating an MRP or running an MRP Report, it will display an error message saying the files are in use. If it can get exclusive access to those files, it creates a lock (MrpInProgress.plf) which will keep others from generating an MRP or running an MRP Report while the new MRP databases are being generated. The MRP generation usually takes about 5 minutes. Once the MRP is generation is complete it will delete the lock.

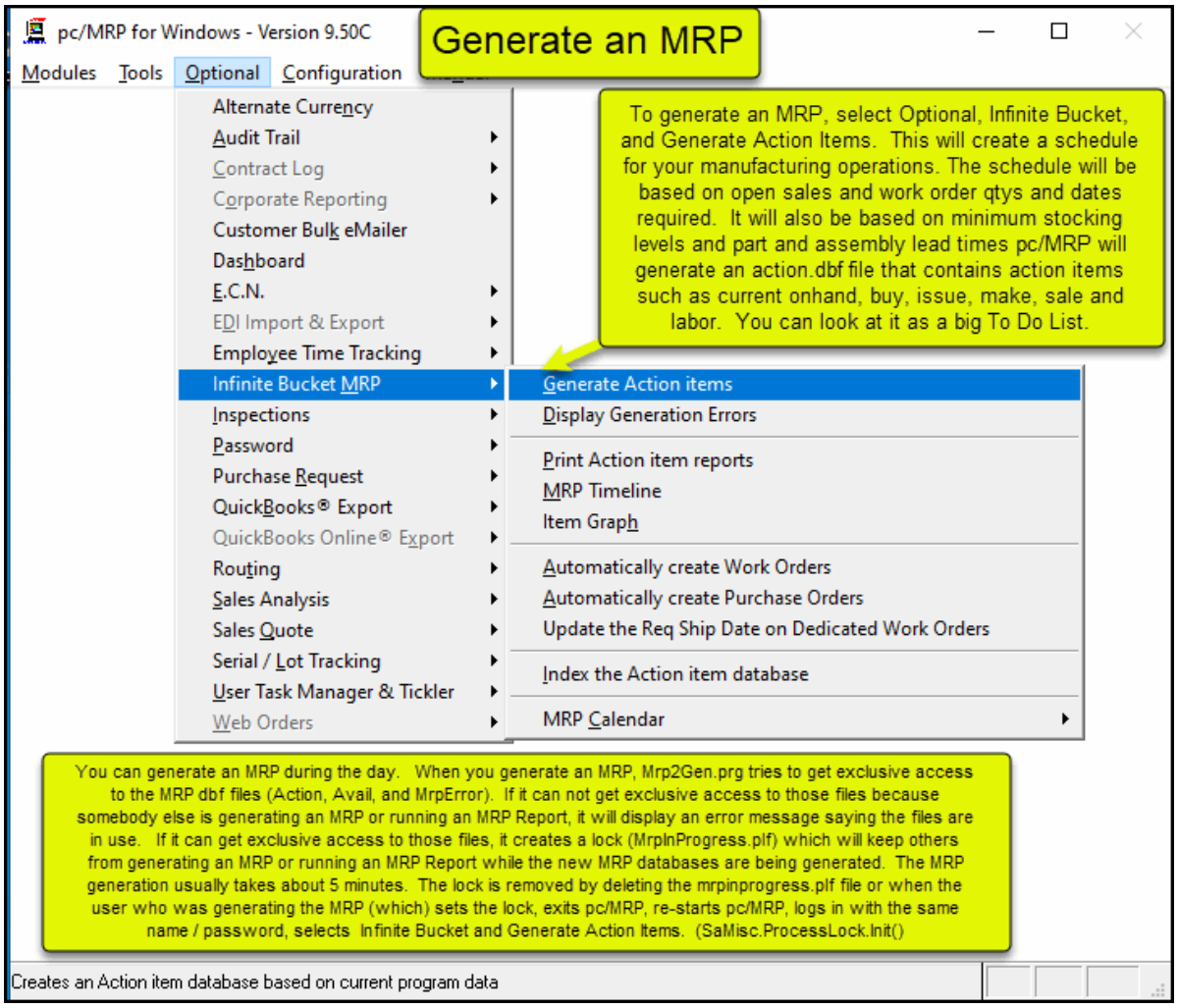
pc/MRP's Infinite Bucket MRP module can be activated over the phone by contacting Software Arts at 408-226-7321 and obtaining the activation code number for this module. Click on the Configuration Option in pc/MRP's top menu bar, select Module Activation, Infinite Bucket MRP, and enter the activation code number when prompted.

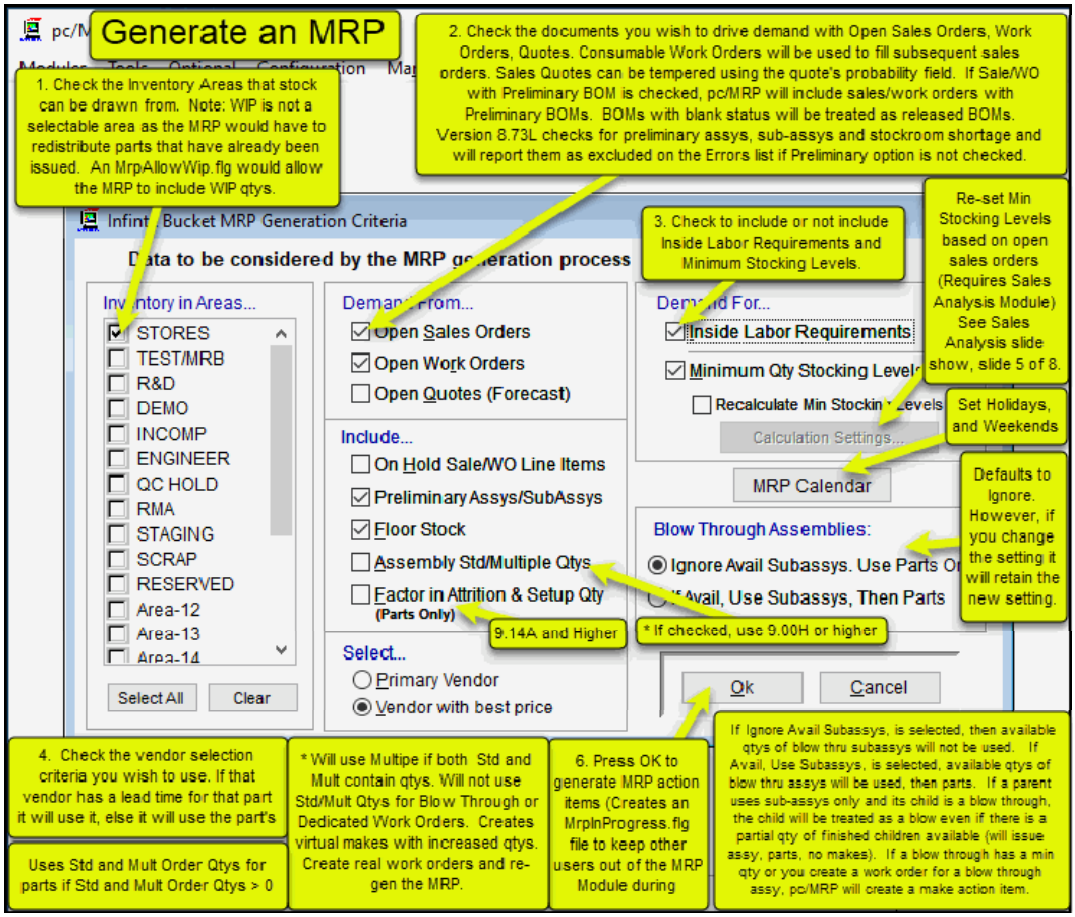
**Using pc/MRP for Capacity Planning for Labor and Workstations (Machine Control)**

To implement capacity planning for labor and workstations, you must associate inside labor parts with their respective workstations. In others words, you could have an inside labor part called “Wire Crimping Labor”. Another inside labor part might be called “Wave Soldering Labor”. Each inside labor part would have a unit of one hour and a cost for one hour of labor. Add these inside labor parts to your BOMs. For example, one specific cable assembly may require .05 hours of crimping labor. After you generate an MRP, print a weekly consolidated MRP Report. This report will display the number of labor hours required per week for each workstation.

### 16.3.2 Generating MRP Action Items

To generate MRP requirements, select "Optional" from pc/MRP's top menu bar. Select "Infinite Bucket MRP". Select "Generate MRP Action Items" as shown in the slide below. The second slide shown below will allow you to select the inventory areas (stores and area2-area20) to fill the requirements.






Recommendations for companies that use the stock room's "I" type issue method to issue stock to manufacturing, "L" type issues to cover breakage and items missing on the BOM: Do not include WIP. The items in WIP have already been issued to existing sales and work orders on the floor and do not need to be reissued. If you use the default (do not include WIP), pc/MRP will generate action items to fill shortages for sales and work orders that
have already been issued to manufacturing. The BUY and ISSUE action item dates for shortages for sales/work orders that have been issued to the manufacturing floor will be time phased from the date the report was run and not based on when the sales order is due. The reason for this is to get the parts in as early as possible since the sales/work order is on the manufacturing floor being built.

Recommendations for companies that use the stock room's "L" type issue method instead of the "I" type, to issue stock to manufacturing: Select the "Include WIP" option. This is the only method that will work for those companies using the "L" type issues only. Selecting Include WIP has the drawback of creating issue action items for parts and assemblies that have already been issued. If you do "Include WIP", pc/MRP will generate action items to reissue sales and work orders that have already been issued to manufacturing.
You must also select the items that will drive the demand open sales, open work orders and/or open sales quotes. Sales quotes can be tempered using the probability field.

<u>You do not need to create work orders for sales orders</u> as the stockroom can issue parts directly to sales orders.

<u>If you do create work orders to fill existing or future sales orders</u>, create work orders for sub-assemblies and check the work orders as consumable. (See Configuration, Settings and Utilities, **Option 66**.) Make sure the work order's date required is prior to the sales order's date required. Check both Sales Orders and Work Orders to drive demand, when generating the MRP.

If work orders are meant to keep the plant busy and not to fill existing sales orders, do not check the work orders as consumable. Check both Sales Orders and Work Orders to drive demand. (Examples would be building for R&D or Demo.)

If sales orders are checked as requiring dedicated work orders, pc/MRP will expect to find dedicated work orders for all the sub-assemblies that go into that sales order. It will display an error list if the dedicated work orders are missing or have incorrect quantities.

If "Sale/WO with Preliminary BOM" is checked, pc/MRP will include SOs/WOs for Preliminary BOMs (as the top assembly) (according to whether the first and/or the second box is checked). (Blank is *not* Preliminary.)

In addition, you can generate your labor requirements, if you check the labor requirements box and you have labor entered into your BOMs.

When generating an MRP, pc/MRP proceeds as follows:

- Enters ONHAND records in the action and available dbf files.
- Enters PO records in the action and available dbf files.
- Allocates completed work and sales orders that have not shipped.
- Allocates parts below min from avail and enters BUY records if not available.
- Processes all open sales orders, work orders and sales quotes in date required order creating BUY, ISSUE, MAKE, and SALE action items based on available quantities (after allocation), BOMs, and lead times.

When generating an MRP, pc/MRP will generate the following types of action records.

- ONHAND...Existing on hand quantity - minqty of a part/assembly number
- PO.....Existing open purchase order for a part number
- BUY.....Computer generated buy requirement for a part number
- ISSUE....Computer generated stock issue requirement for a part/assembly number
- MAKE.....Computer generated make assembly/subassembly requirement for an assembly
- LABOR....Computer generated labor requirement generated after on hand quantity has been allocated
- SALE.....Existing open sales/work order for a part/assembly number

**Note:** If pc/MRP generates a "MAKE" action item for an assembly and the driving sales/work order is listed as "MINQTY", you should create a consumable work order for that assembly and rerun the MRP with the new work order(s). To see what action items are driven by BOM minimum quantities, enter 'MINQTY' in the selection box for SO/WO# when you select the All for a Sales/Work Order Number. For more details see Section 16.3.3.1.1. When generating a "BUY" action item, pc/MRP will use the standard order quantity (for part numbers) if the standard order quantity is greater than the quantity required. It will place the excess in the avail.dbf file to fill additional purchase requirements.

If you select Include Labor, when you generate your MRP, pc/MRP will generate LABOR action items once the onhand quantity and purchasing quantity of action items has been allocated. To see your total labor requirements, make sure the on hand quantity of labor action items in the partmaster is equal to 0.

Once the Infinite Bucket Module has finished generating the action items, it will update the **MRP Available** field for each part in the part master. The MRP Available field will contain the quantity available after allocation (onhand+POs−issues and sales action items-minqty******). A negative quantity in this field indicates that the part needs to be purchased and BUY action items were generated. However, please note that the BUY action items may not equal the qty available as the BUY action items can be increased by the standard order qty. If the total onhand quantity of the selected areas is negative, pc/MRP will consider the total quantity of the selected areas to be 0 when calculating the new quantity available. When pc/MRP re-calculates the quantity available field for assemblies and sub-assemblies it does not increase the quantity available for make action items. It simply takes the total quantity of the selected areas (or 0 if negative) and subtracts the quantity of the SALE action items. It

does not increase the available quantity from MAKE action items as these assemblies are consumed by higher-level assemblies reporting directly to a sales or work order. If it is a top-level assembly for a sales or work order, it does not increase the quantity available as the sales or work order is not available until it is returned from stock as finished assembly. **The minimum quantity will not be factored in if you were running the IB-MRP and did not include demand for Minimum Quantities. **Note:** When pc/MRP creates the action items, it always respects the minqty checkbox, regardless of version.

pc/MRP will assign the driving sales/work order to existing PO action items based on the earliest sales/work order that needs to allocate parts from that PO. pc/MRP does not carry over the related document number into the avail database file. As such, the Infinite Bucket reports may indicate that a sales order with an earlier due date requires this PO.

Sales Quotes with a date required earlier than the current date would not be used for the MRP run (quote expired). pc/MRP will insert the sales quote into the error file notifying you that the MRP run did not use this sales quote.

pc/MRP will create a **MRPINPROGRESS.FLG** file whenever an MRP is generated. This file will keep others from using the Infinite Bucket Module while the flag file is in existence. The MrpInProgress.flg file is automatically deleted after the mrp generation is complete or the MrpInProgress file is over an hour old and a user tries to access the Infinite Bucket Module.

pc/MRP checks for exclusive use of the ACTION.DBF file prior to allowing a person to generate an MRP. If the person trying to generate the MRP gets a message indicating the action.dbf file is in use, it means another user is printing or displaying an MRP report. The person trying to generate an MRP must wait until the user printing an MRP report is finished.

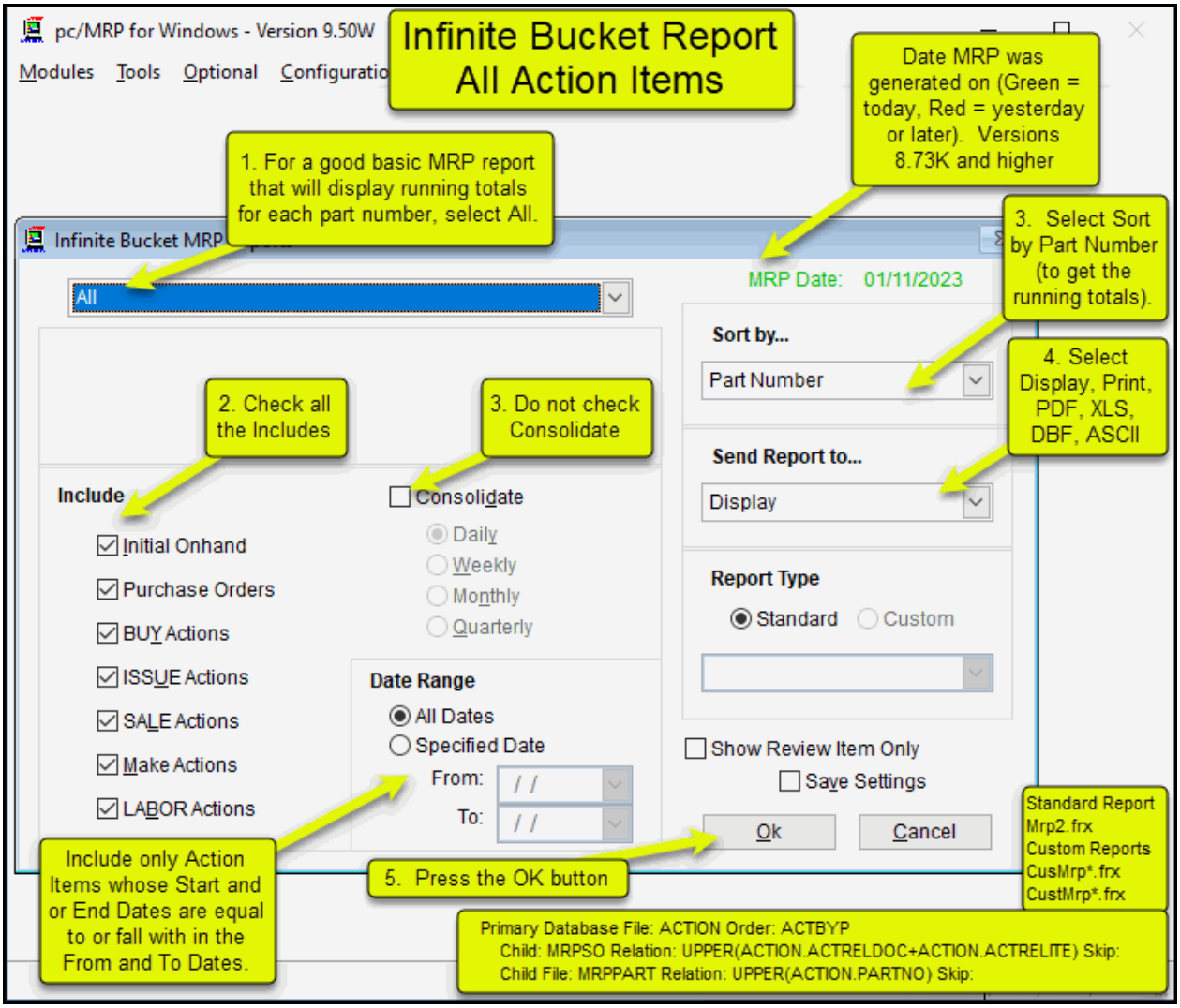
pc/MRP checks to ensure that sales order line item qtys that have been assembled but not shipped are still available. If assemblies are missing, it adds the error message “Error, sales orders for part number xxx were assembled but not shipped. Please create a consumable work order for xxx units and re-generate the MRP.”

The MRP will go through the Stockroom records to find shortages. Shortages take precedence: they should be filled as soon as possible. If a subassembly is preliminary and is listed as a shortage, it will not be included, and will be reported as excluded on the error list. When processing the open sales and work orders, is the sales or work order contains a preliminary assembly or top assembly, it will not be included, and will be reported as excluded on the error list.

The MRP generation will respect assemblies’ **Std Order Qty and Order Multiple** quantity, if you check the Assembly Std/Multiple Qtys button. If both are filled out, Order Multiple will be used. This feature doesn’t apply to Blow Through assemblies or Dedicated Work Orders. Normally, when pc/MRP creates Virtual Make action items, those are only for your information, and you don’t have to enter real work orders for them. In this case, since you are building more items than required by the higher level SO/WO, you do have to enter real work orders for the virtual work orders. Otherwise you won’t be able to issue the required quantity of parts/subassys.

### 16.3.3 Print/Display Action Item Reports

Selecting Print/Display Action Item Reports brings up the following screen:

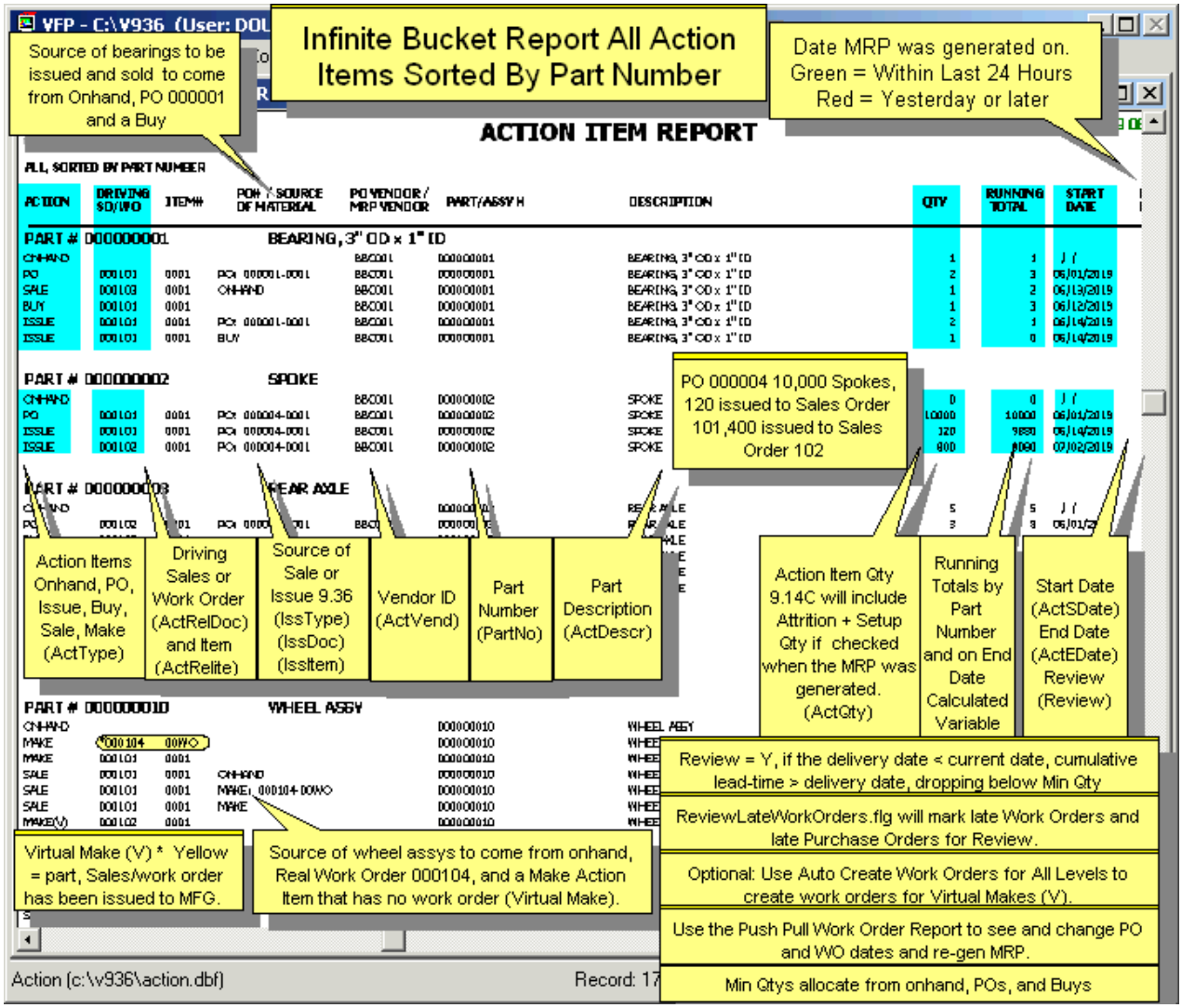



**Note:** When creating an action item report for a Sales Quote, select All for a Sales/Work Order Number. You must type in the quote number and the line item number starting with a Q as pc/MRP would only scroll for sales and work order records. For sales quote 000002 line item 0001 you would type in 000002 and Q001. pc/MRP will display all the action items for that sales quote line item number including buy action items.

**Note:** The date the MRP was last generated is displayed in green if the MRP was last generated on the current day. The date is displayed in red and bold, if the MRP is older than that. Each report displays this time stamp.

### 16.3.3.1 Non-Consolidated Reports

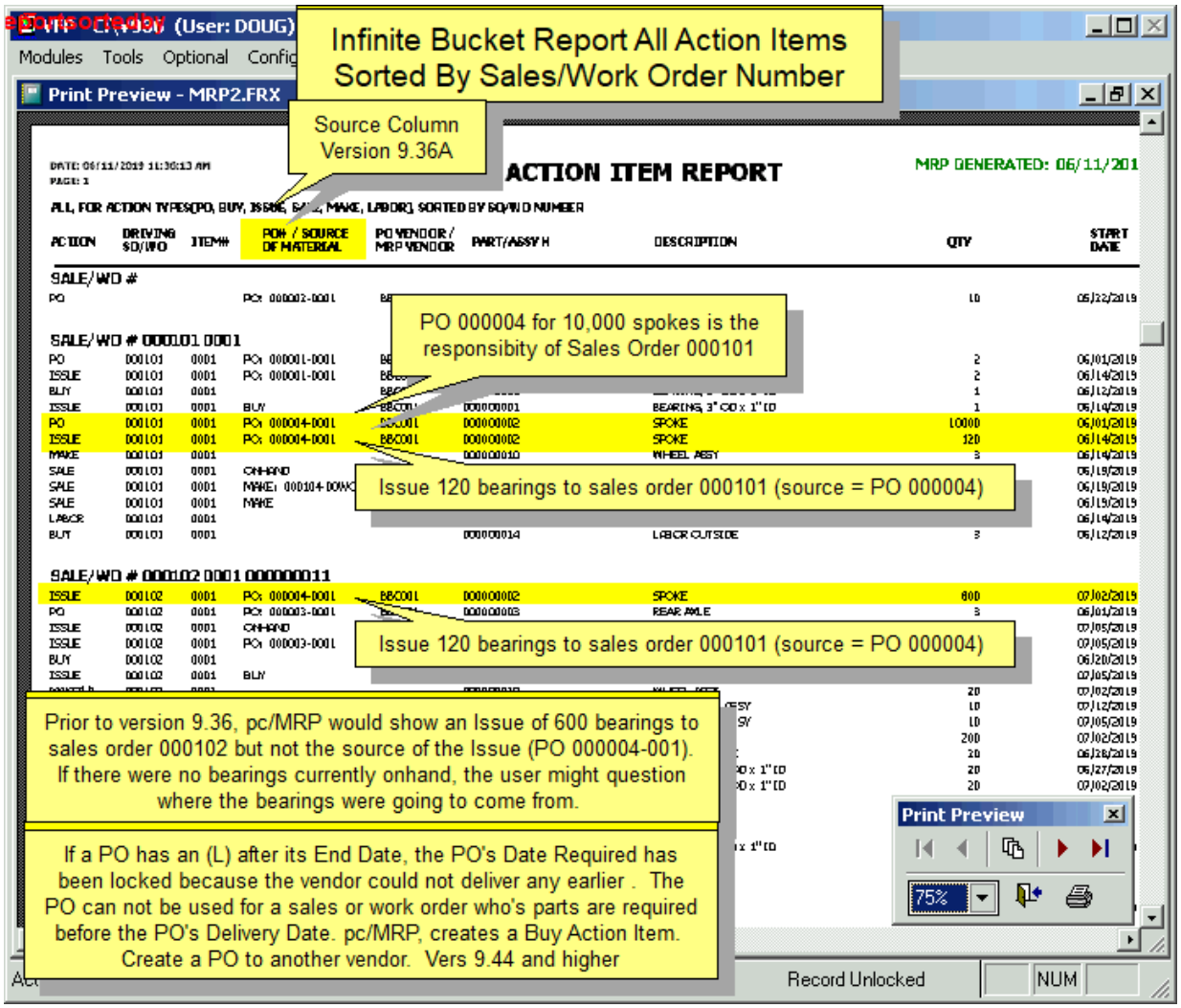
Not checking the "Consolidation" check box will print/display all individual action items. The non-consolidated reports can provide daily lists or schedule of action items. This type of report can be used to see exactly what is going on for a particular part number or sales order. An example of a non-consolidated MRP report follows:

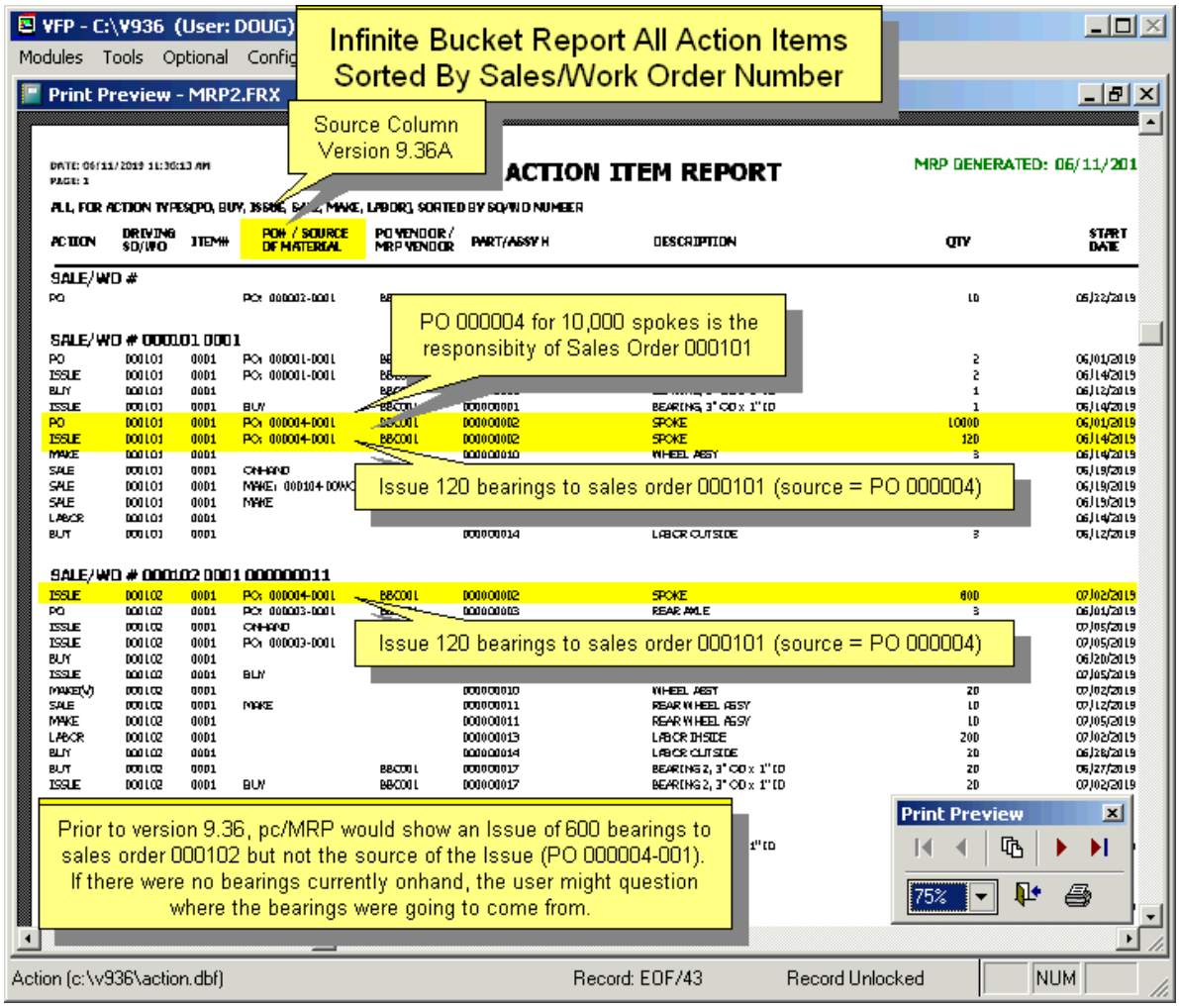


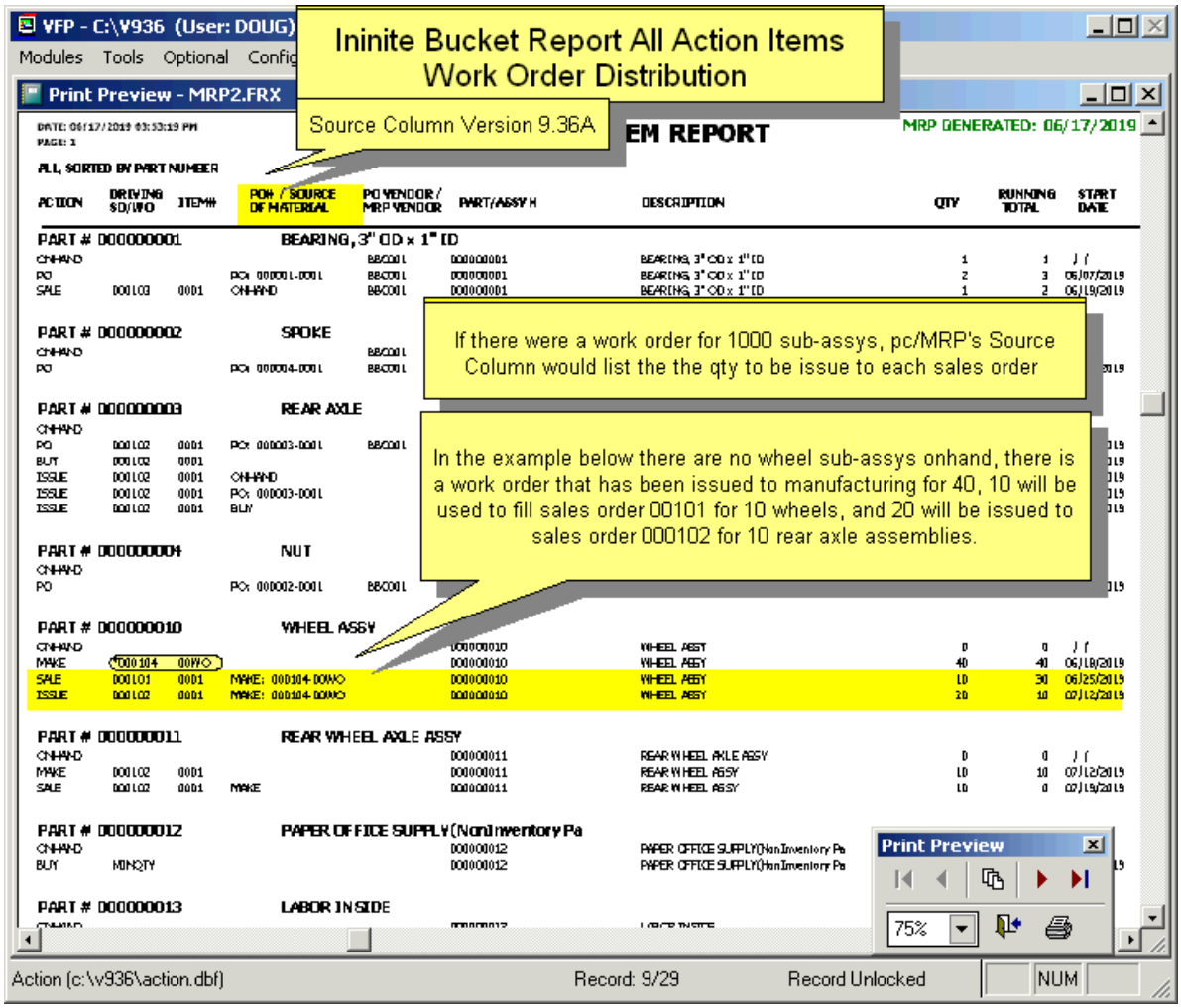

The non-consolidation report MRP (mrp2.frx) uses the action.dbf and includes the following columns:

- Action SALE, PO, ONHAND, BUY, ISSUE, MAKE (ActType)
- Driving Sales/WO (ActReldoc)
- Driving Sale/WO item # (ActRelIte)
- PO# , only used for PO action items (ActDoc)
- PO / Source of Material (IssType, IssDoc, IssItem) Source of Issue, Sale Version 9.36
- Vendor ID (ActVend)
- Part/Assy # (PartNo)
- Part/Assy Description (ActDescr)
- Action Quantity (ActQty)
- Running Total (only if all items are included and the following is true)
    - Running Part Total (all action items for a part number sorted by date)
    - Running Total (all action items or all for a part sorted by part number)

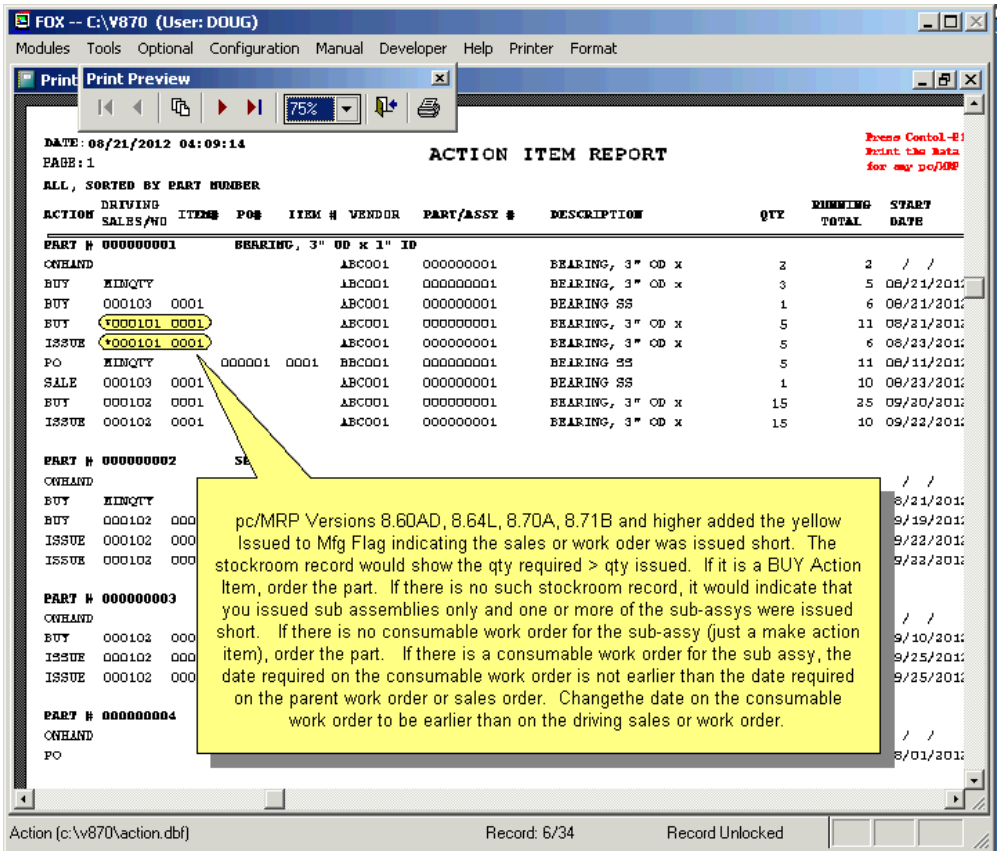
- Start Date (ActSDate) PO date, BUY ‘place on date’, or MAKE start date (back calculated from SO/WO date required minus assy, sub-assy, and component lead times)
- End Date (ActEDate) PO date required, BUY due date, MAKE finish date (back calculated from SO/WO due date minus assy and sub-assy lead times)
- Review (Review)
  - Will contain a Y if the scheduled delivery date is less than the current date or the lead-time exceeds the scheduled delivery date.
  - Will contain a Y for late work orders if **REVIEWLATEWORKORDERS.FLG** exists.
  - Will contain an S if it is a shortage on the mfg floor for a sales/work order that has already been issued.
- Action.Dbf fields not included on the Mrp2.frx Report
  - Dedicated Sales Order Number (RelSoNo)
  - Dedicated Sales Order Item Number (RelItemNo)
  - Division (Division) inserted from partmaster
  - Top Assembly listed on the driving sales/work order number (TopAssy)
  - Parent Assembly (ParAssy) not currently used.
  - (SourceIss), not used at this point.



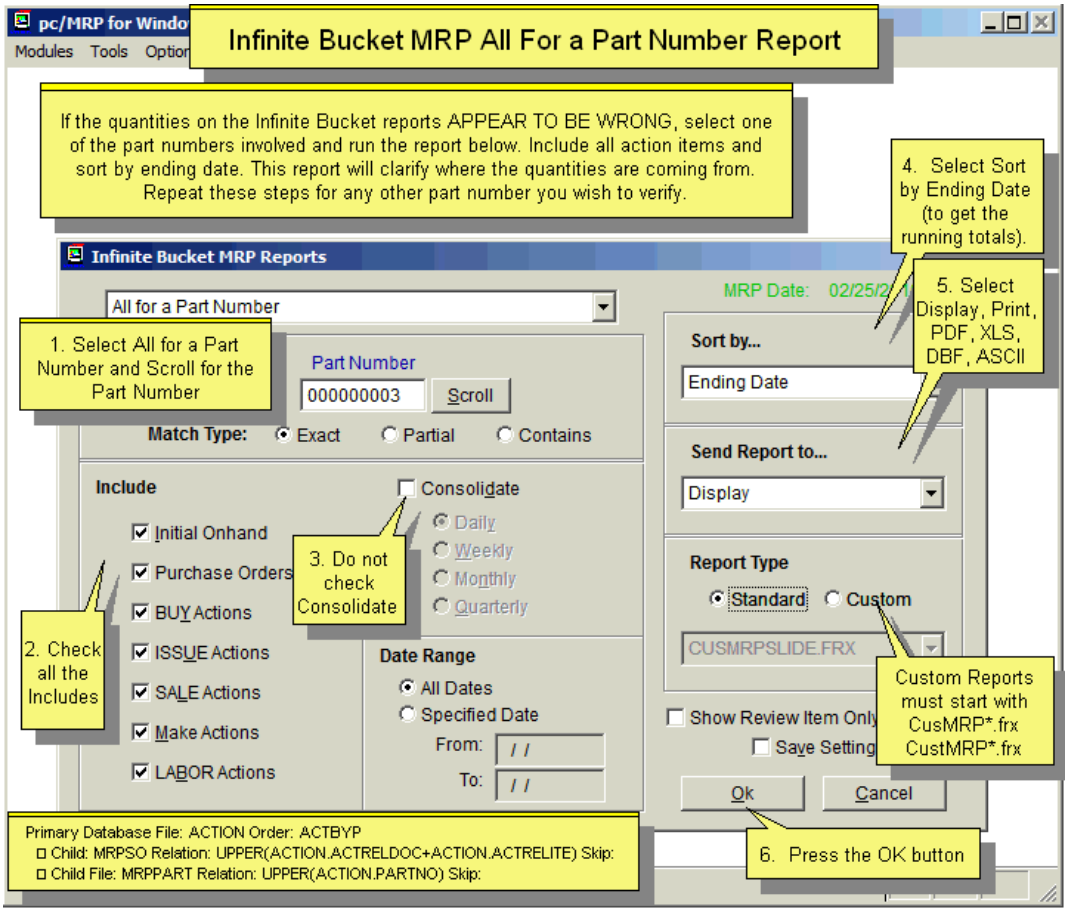

VFP - C:\V936 (User: DOUG)
Modules Tools Optional Config
Print Preview - MRP2.FRX
Infinite Bucket Report All Action Items Sorted By Sales/Work Order Number
Source Column Version 9.36A
ACTION ITEM REPORT
MRP GENERATED: 06/11/201
ACTION
DRIVING SO/WO
ITEM#
PO# / SOURCE OF MATERIAL
PO VENDOR / MRP VENDOR
PART/ASSY #
DESCRIPTION
QTY
START DATE
SALE/WO #
SALE/WO # 000101 0001
PO 000004 for 10,000 spokes is the responsibity of Sales Order 000101
Issue 120 bearings to sales order 000101 (source = PO 000004)
SALE/WO # 000102 0001 00000011
Issue 120 bearings to sales order 000101 (source = PO 000004)
Prior to version 9.36, pc/MRP would show an Issue of 600 bearings to sales order 000102 but not the source of the Issue (PO 000004-001). If there were no bearings currently onhand, the user might question where the bearings were going to come from.
Print Preview
75%
Action (c:\v936\action.dbf)
Record: EOF/43
Record Unlocked
NUM

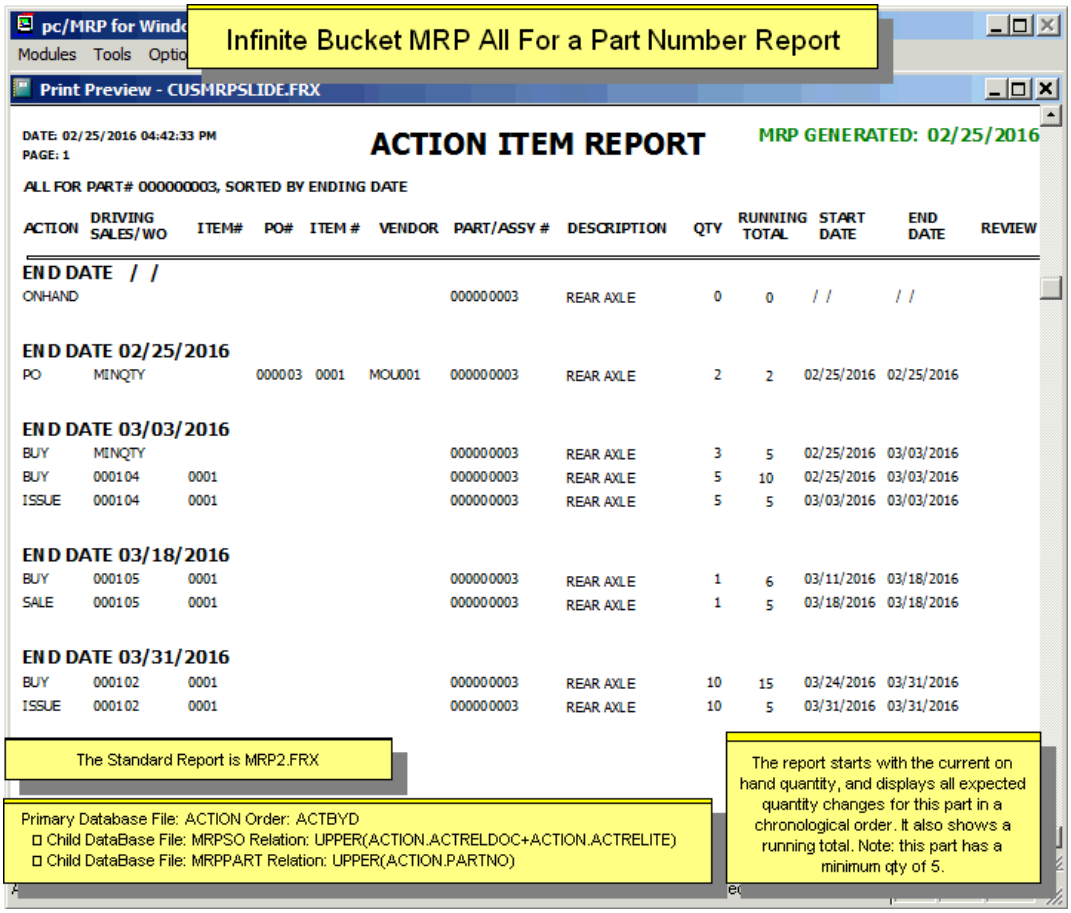

Ininite Bucket Report All Action Items
Work Order Distribution
Source Column Version 9.36A
If there were a work order for 1000 sub-assys, pc/MRP's Source Column would list the the qty to be issue to each sales order
In the example below there are no wheel sub-assys onhand, there is a work order that has been issued to manufacturing for 40, 10 will be used to fill sales order 00101 for 10 wheels, and 20 will be issued to sales order 000102 for 10 rear axle assemblies.
VFP - C:\V936 (User: DOUG)
Modules Tools Optional Config
Print Preview - MRP2.FRX
EM REPORT
MRP GENERATED: 06/17/2019
ALL, SORTED BY PART NUMBER
ACTION DRIVING SO/WO ITEM# PO# / SOURCE OF MATERIAL PO VENDOR / MRP VENDOR PART/ASSY # DESCRIPTION QTY RUNNING TOTAL START DATE
PART # 000000001 BEARING, 3" OD x 1" ID
PART # 000000002 SPOKE
PART # 000000003 REAR AXLE
PART # 000000004 NUT
PART # 000000010 WHEEL ASSY
PART # 000000011 REAR WHEEL AXLE ASSY
PART # 000000012 PAPER OFFICE SUPPLY(Non Inventory Pa
PART # 000000013 LABOR INSIDE
Print Preview
75%
Action (c:\v936\action.dbf)
Record: 9/29
Record Unlocked
NUM

Software Arts recommends printing the following non-consolidated report after generating an MRP. Do not check the Consolidated check box. Select all action items to include, (Initial Onhand Quantity, Purchase Orders, Buy, Issue, Sale, Make, and Labor) sorted by part number (sub-sorts by date). This provides a list of to do action items for each part number with a running onhand total since the part number sort is sub sorted by date.



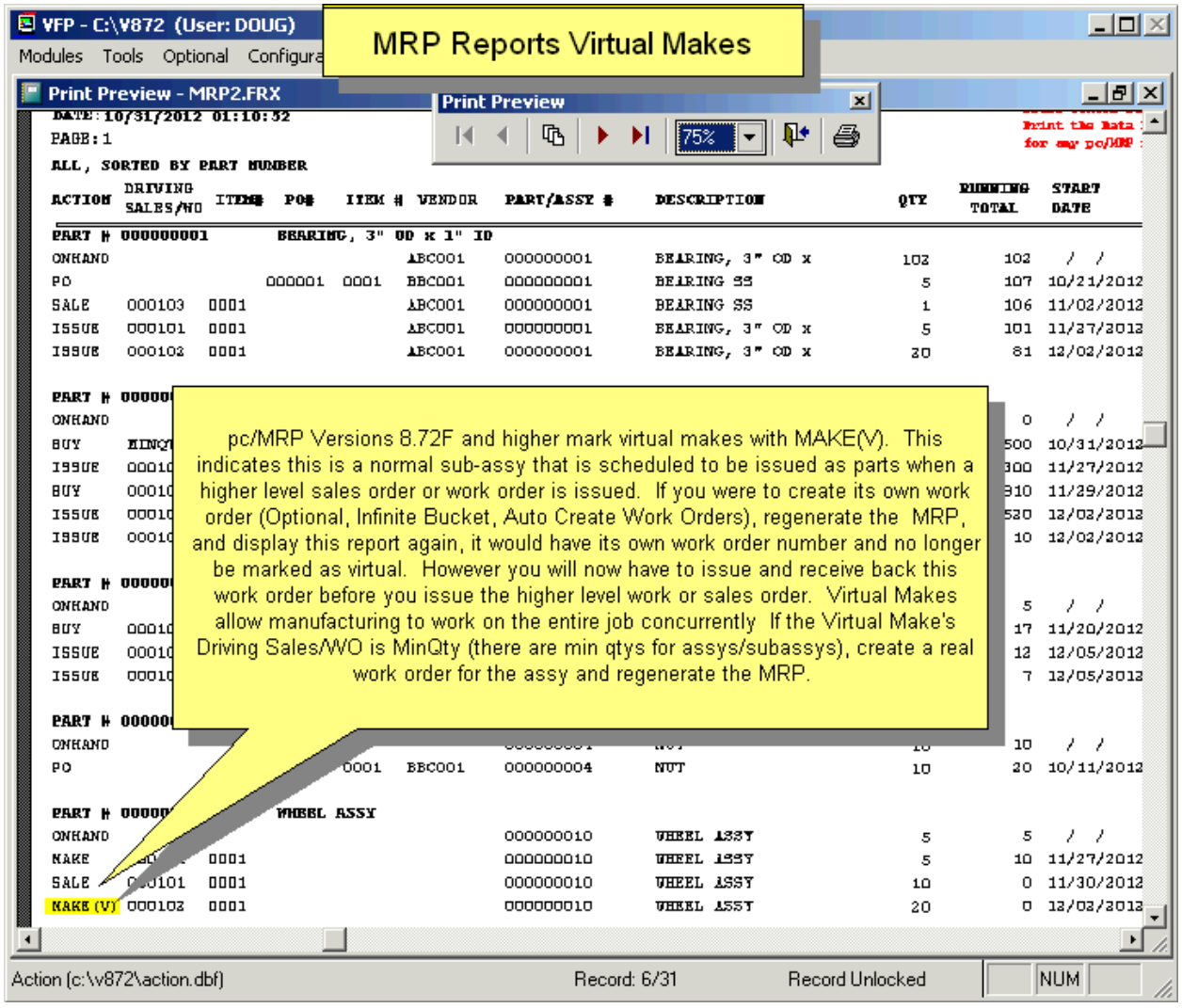

If there is a question about a certain part number's action item quantities, run the following report. Select "All for a part number" and include all action items sorted by date. Do not check the Consolidated check box. This provides a list of to do action items for that part number with a running onhand since the action items are sorted by date.


pc/MRP for Windo
Modules Tools Optior
Infinite Bucket MRP All For a Part Number Report
If the quantities on the Infinite Bucket reports APPEAR TO BE WRONG, select one of the part numbers involved and run the report below. Include all action items and sort by ending date. This report will clarify where the quantities are coming from. Repeat these steps for any other part number you wish to verify.
Infinite Bucket MRP Reports
All for a Part Number
1. Select All for a Part Number and Scroll for the Part Number
Part Number
000000003
Scroll
Match Type: Exact Partial Contains
Include
Initial Onhand
Purchase Orders
BUY Actions
ISSUE Actions
SALE Actions
Make Actions
LABOR Actions
2. Check all the Includes
Consolidate
Daily
Weekly
Monthly
Quarterly
3. Do not check Consolidate
Date Range
All Dates
Specified Date
From: / /
To: / /
MRP Date: 02/25/2
Sort by...
Ending Date
4. Select Sort by Ending Date (to get the running totals).
5. Select Display, Print, PDF, XLS, DBF, ASCII
Send Report to...
Display
Report Type
Standard Custom
CUSMRPSLIDE.FRX
Custom Reports must start with CusMRP*.frx CustMRP*.frx
Show Review Item Only
Save Setting
Ok
Cancel
6. Press the OK button
Primary Database File: ACTION Order: ACTBYP
Child: MRPSO Relation: UPPER(ACTION.ACTRELDOC+ACTION.ACTRELITE) Skip:
Child File: MRPPART Relation: UPPER(ACTION.PARTNO) Skip:


pc/MRP for Windc
Modules Tools Optio
Infinite Bucket MRP All For a Part Number Report
Print Preview - CUSMRPSLIDE.FRX
DATE: 02/25/2016 04:42:33 PM
PAGE: 1
ACTION ITEM REPORT
MRP GENERATED: 02/25/2016
ALL FOR PART# 000000003, SORTED BY ENDING DATE
ACTION DRIVING SALES/WO ITEM# PO# ITEM # VENDOR PART/ASSY # DESCRIPTION QTY RUNNING TOTAL START DATE END DATE REVIEW
END DATE / /
ONHAND 000000003 REAR AXLE 0 0 / / / /
END DATE 02/25/2016
PO MINQTY 000003 0001 MOU001 000000003 REAR AXLE 2 2 02/25/2016 02/25/2016
END DATE 03/03/2016
BUY MINQTY 000000003 REAR AXLE 3 5 02/25/2016 03/03/2016
BUY 000104 0001 000000003 REAR AXLE 5 10 02/25/2016 03/03/2016
ISSUE 000104 0001 000000003 REAR AXLE 5 5 03/03/2016 03/03/2016
END DATE 03/18/2016
BUY 000105 0001 000000003 REAR AXLE 1 6 03/11/2016 03/18/2016
SALE 000105 0001 000000003 REAR AXLE 1 5 03/18/2016 03/18/2016
END DATE 03/31/2016
BUY 000102 0001 000000003 REAR AXLE 10 15 03/24/2016 03/31/2016
ISSUE 000102 0001 000000003 REAR AXLE 10 5 03/31/2016 03/31/2016
The Standard Report is MRP2.FRX
Primary Database File: ACTION Order: ACTBYD
Child DataBase File: MRPSO Relation: UPPER(ACTION.ACTRELDOC+ACTION.ACTRELITE)
Child DataBase File: MRPPART Relation: UPPER(ACTION.PARTNO)
The report starts with the current on hand quantity, and displays all expected quantity changes for this part in a chronological order. It also shows a running total. Note: this part has a minimum qty of 5.

Running totals are incremented by Onhand, PO, and Buy action items. Running totals are decremented by Issue and Sale action items. Running totals are NOT incremented for Make action items driven by a higher-level sales/work orders (Virtual Makes) as these subassys go into the higher-level assemblies for the driving sales/work order and not into inventory. If a sales or work order is created for a Make action item, the running total will be increased as that item must go back into stock and will be issued to another sales or work order later.

pc/MRP marks **virtual makes** with **MAKE(V)**. This indicates this assembly is scheduled to be issued as parts when a higher level sales order or work order is issued. If you were to create its own work order (Optional, Infinite Bucket, Auto Create Work Orders), regenerate the MRP, and display this report again, it would have its own work order number and no longer be marked as virtual. However you will now have to issue and receive back this work order before you issue the higher level work or sales order. Virtual Makes allow manufacturing to work on the entire job concurrently.



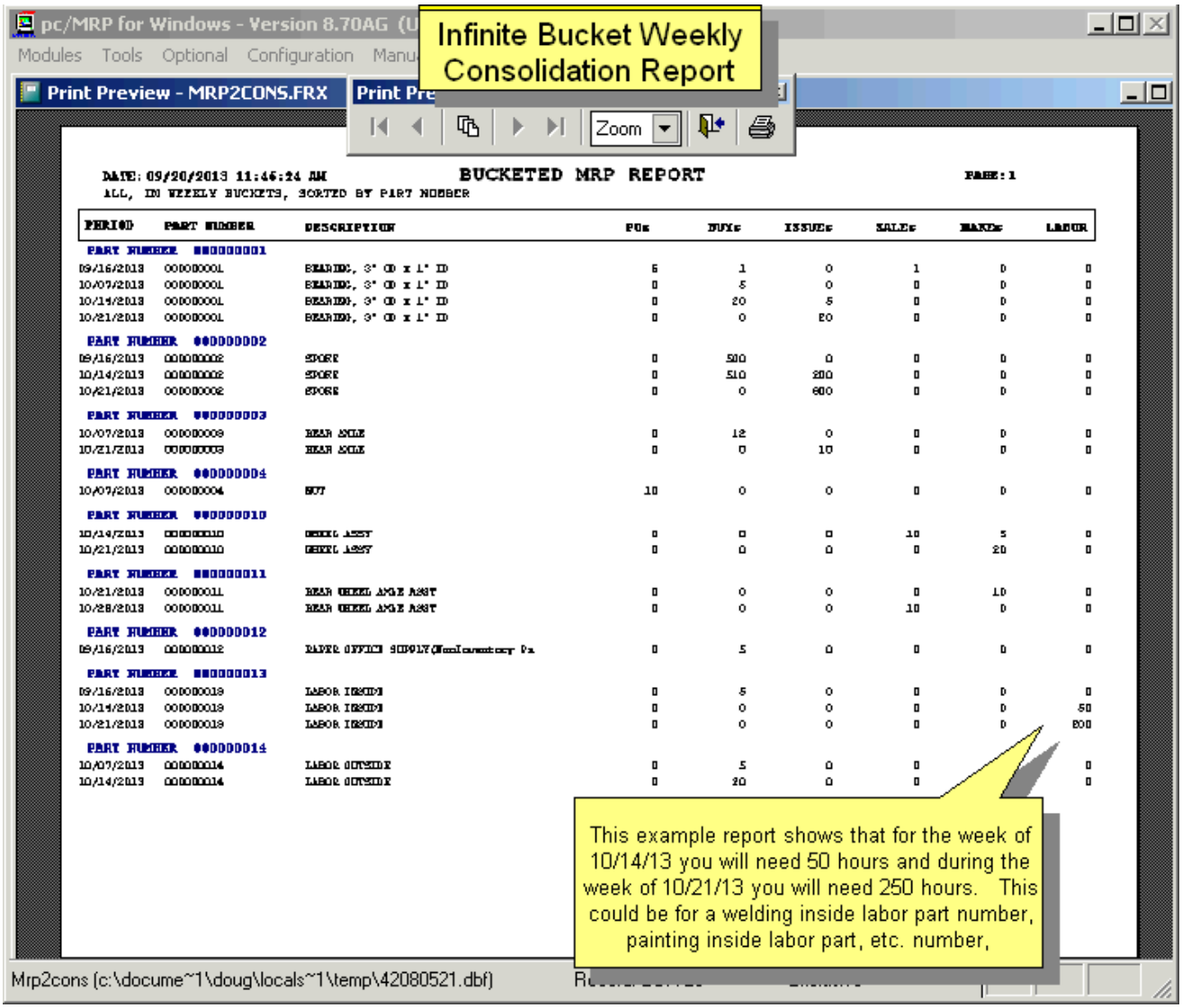

### 16.3.3.1.1 Minimum Quantities Set for Assemblies

An online slideshow is located here: http://www.pcmrp.com/mrp101/assymingtyssetminqty.htm

If a minimum quantity is set for an assembly and the IB generation is set to include demand for minimum quantity, then the IB will create a virtual MAKE action for any insufficient quantity of the assembly. You can manually or automatically create the WO for the assembly. Make sure you allow enough time to purchase material and assemble the product. Now run the IB generation again to see the real WO for the assembly and the BUY items for the parts.

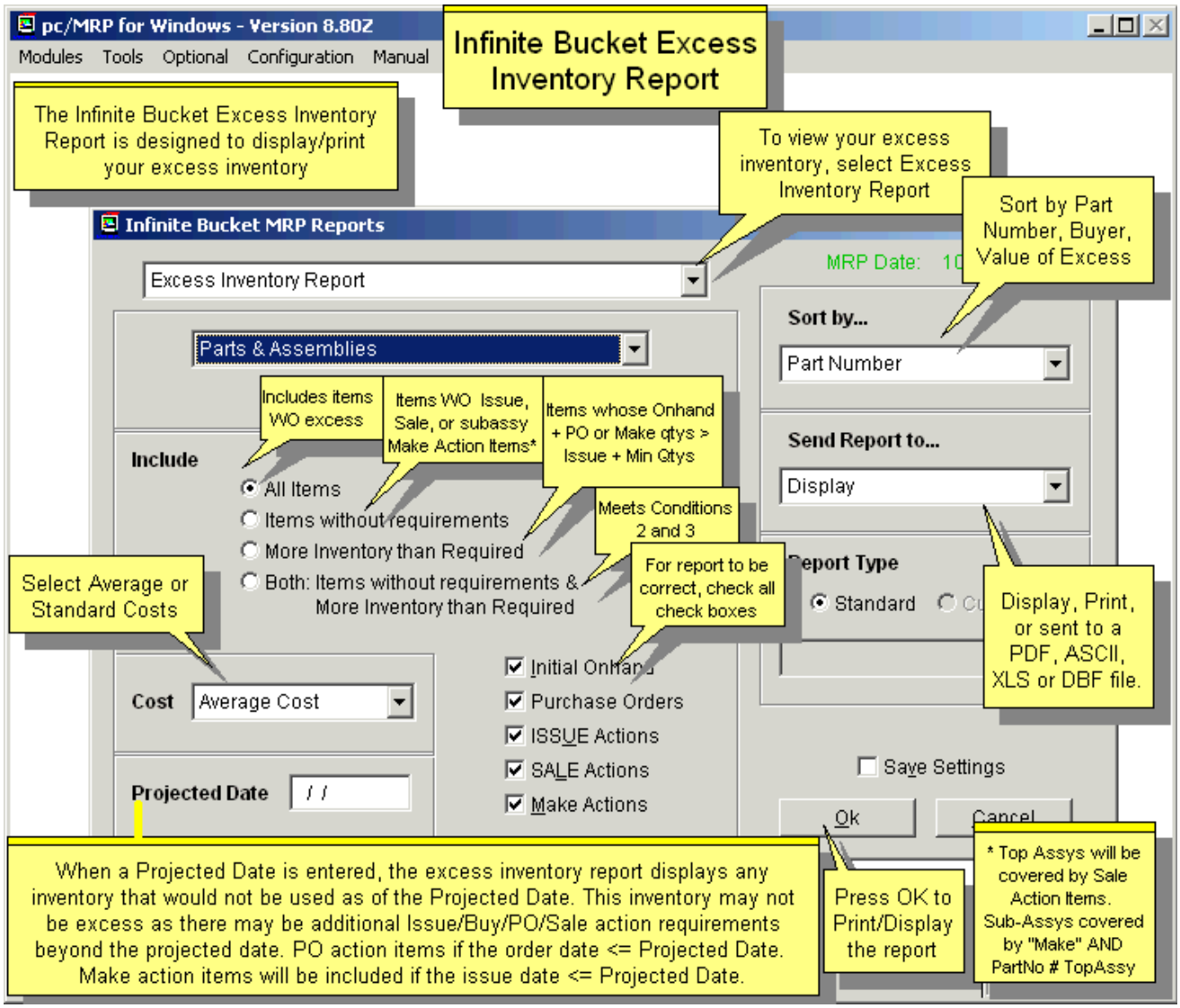
### 16.3.3.2 Consolidated Reports

Check the "Consolidated" check box. These reports will consolidate and sub-total the action items based on the consolidation period selected. As a result, the consolidated reports are shorter than the non-consolidated reports but they are not as detailed. If you wanted to create work orders for sub-assemblies, you could run a monthly consolidation report, create consumable work orders for every sub-assemblies make action item whose due date was the first of the month, and then regenerate your MRP. Please note, that it is not necessary to create a work order for every sub-assembly with pc/MRP. An example of a consolidation report follows:

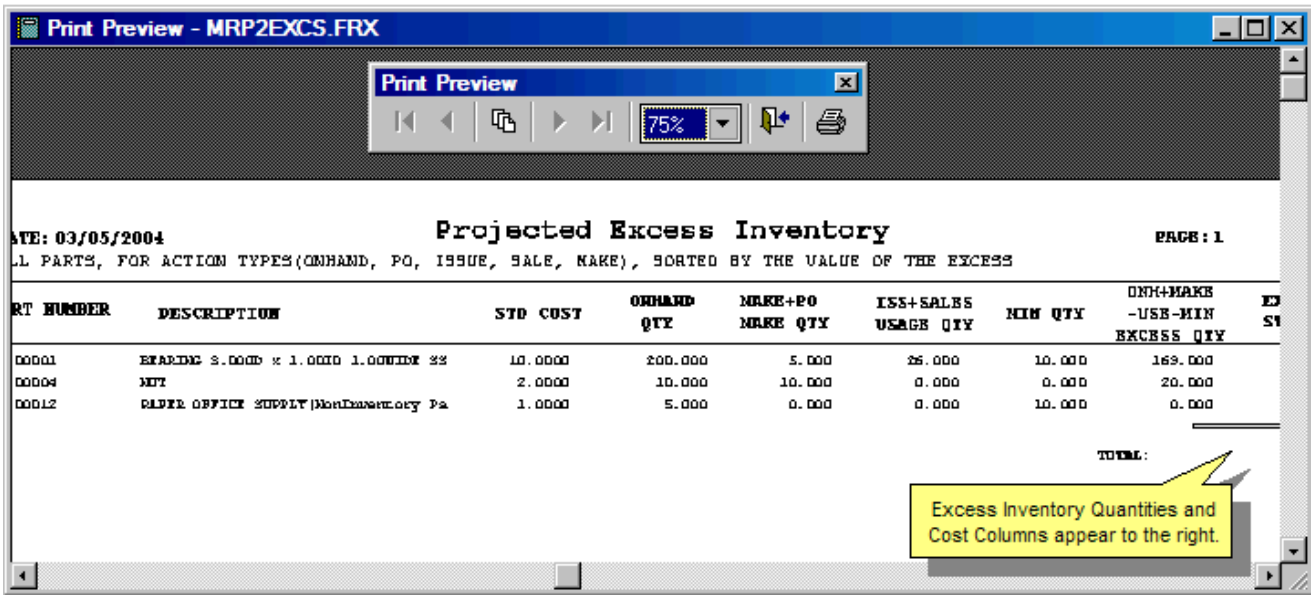



The consolidated MRP report (mrp2cons.frx) uses the mrp2cons.dbf file and includes the columns shown above. The Weekly Consolidation Report will display consolidated buy requirements and consolidated machine/labor required hours for each week.

### 16.3.3.3 Excess Inventory Report



Selecting the Excess Inventory Options will print/display a report similar to the report shown below.




The above columns consist of the following action item quantities

- The onhand action item qty into onhand qty column
- The sum of the make and PO action item quantities (but not the BUY actions) into the make qty column
- The sum of the issue and sale action item quantities into the usage qty column
- The minimum qty into the minimum qty column
- The onhand + make - usage - min quantities into the excess qty column

This report uses action.dbf (parent) and partmast.dbf (child) to create an exectmp.dbf file. It then uses this file and the mrp2execs form to create the report. This report uses program code (and not report code) to total up the column quantities.

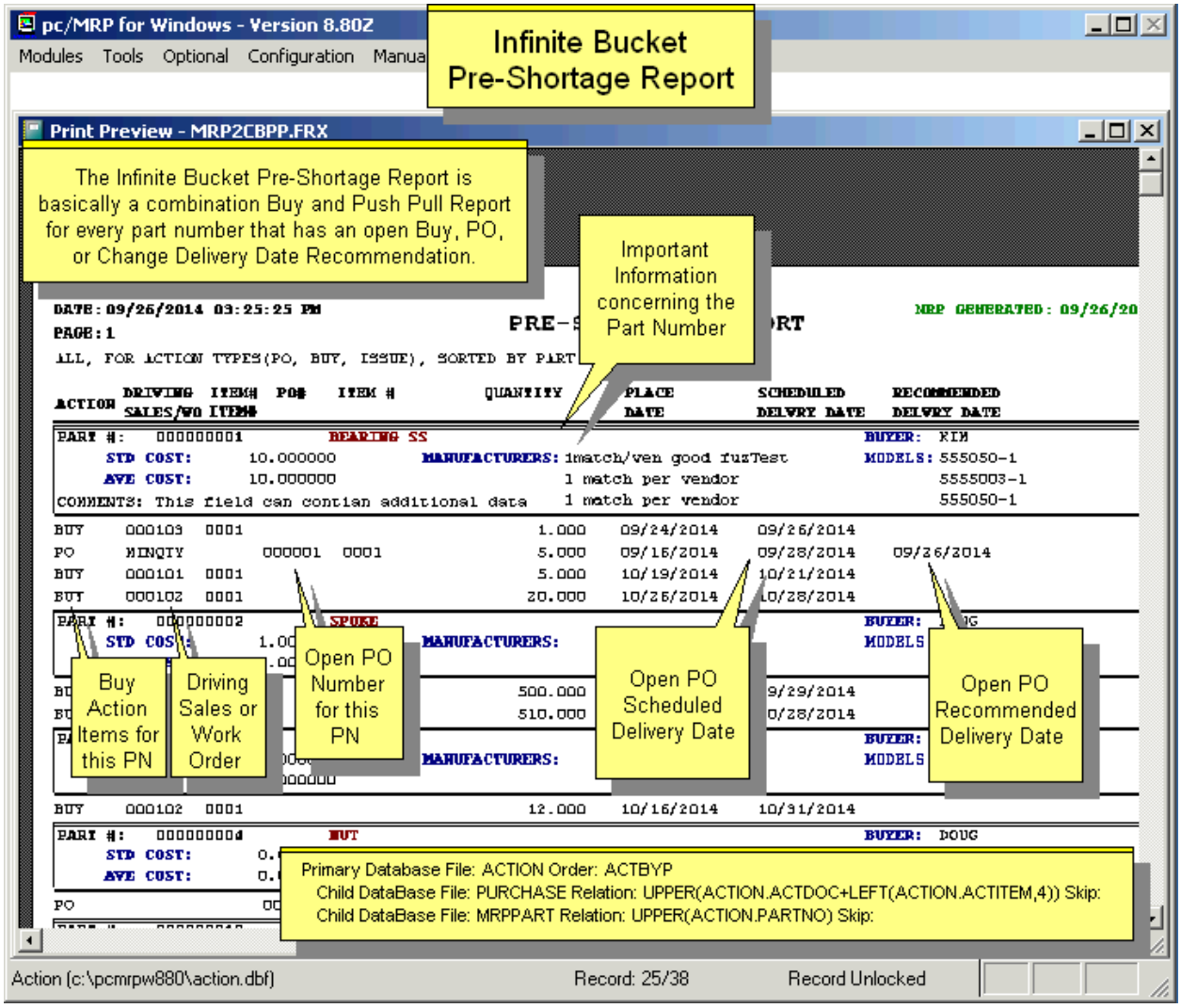
This report adds an additional issue transaction for make transaction types when the part number does not equal the top assembly number. This keeps subassemblies for sales and work order subassemblies from showing up as excess. The excess inventory report does not print/display parts or assemblies that are not in excess. Checking the include checkboxes to include initial onhand quantities, purchase orders, etc. will make sure these action items are included in the above quantity calculations.

When a Projected Date is entered, the excess inventory report displays any inventory that would not be used as of the Projected Date. This inventory may not be excess as there may be additional Issue/Buy/PO/Sale action requirements beyond the projected date. (PO action items will be included if the order date is on or before the date specified, MAKE items will be included if the issue date is on or before the projected date.)

pc/MRP will display items without excess inventory if you select, “Include All Items”. The Excess Inventory for items without excess inventory will be $0.00.

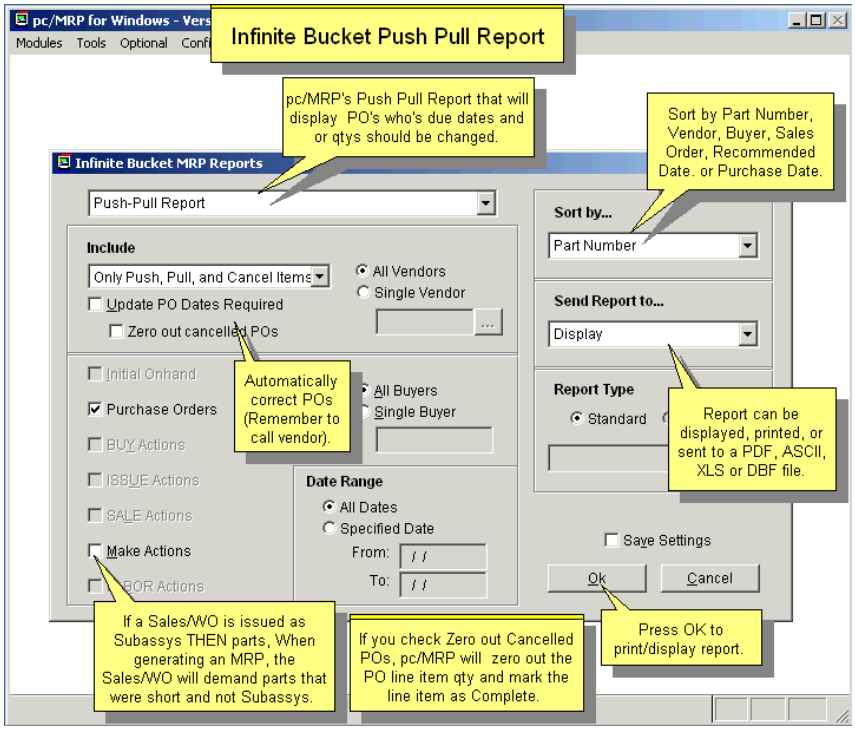
### 16.3.3.4 Pre-Shortage Report

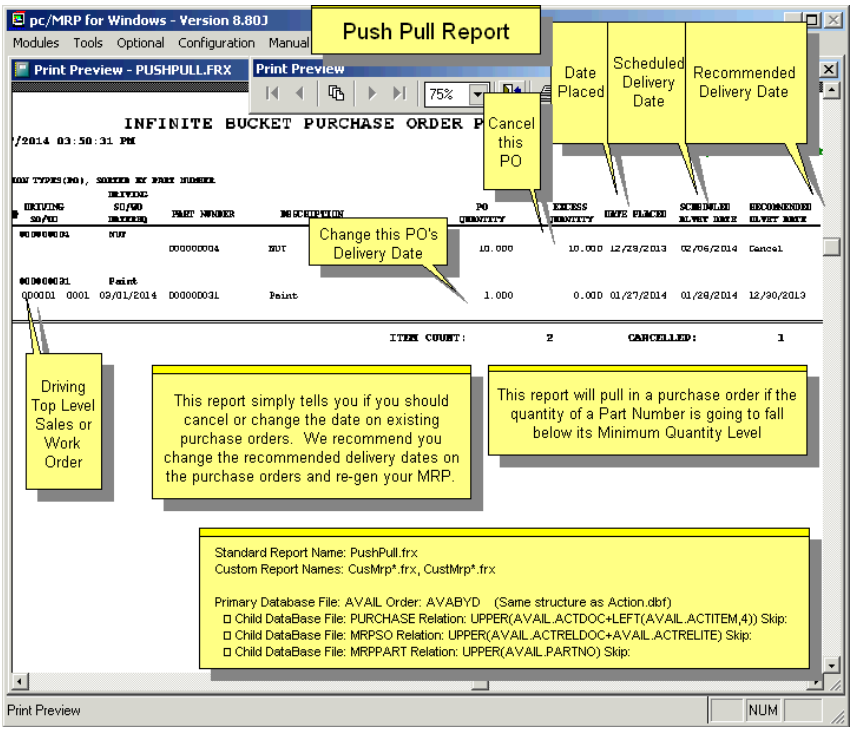
This report lists all Buy and PO action items including the push pull dates for the Purchase Order action items. This report (mrp2cbpp.frx) uses the action.dbf as the parent database file and purchase.dbf and mrppart.dbf are the child dbf files of the action.dbf file. The Issue action items will only be displayed if there is a problem with the issue (a capital "Y" in the review field).



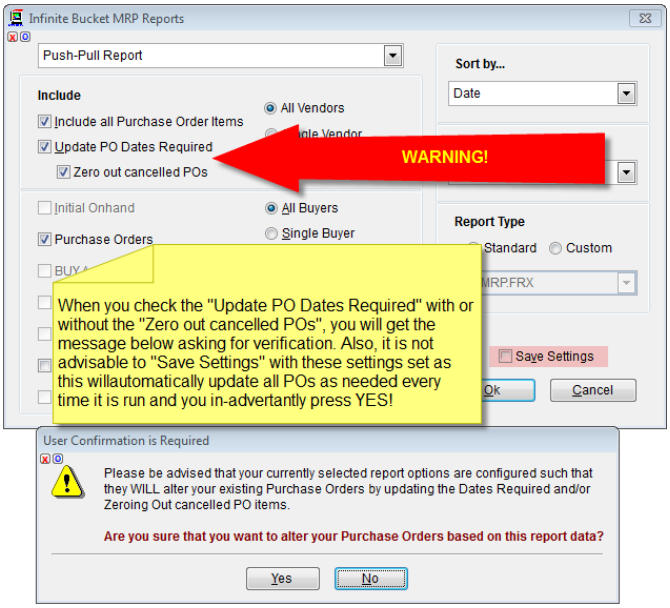
### 16.3.3.5 Push Pull Report

The Infinite Bucket Push Pull Report lists each PO with its scheduled delivery date and pc/MRP's recommended delivery date. This report is available after an MRP generation and has the option to modify the PO date required as well as zero-out cancelled POs. This report (pushpull.frx) uses avail.dbf as the parent database with mrpso.dbf and mrppart.dbf as child database files. You must have PO & MRP "Edit" rights to enable "Update PO Dates" and "Zero out Cancelled POs." It is always advisable to produce a report first before updating the dates & quantities, to help your buyers call the vendors about the modifications.

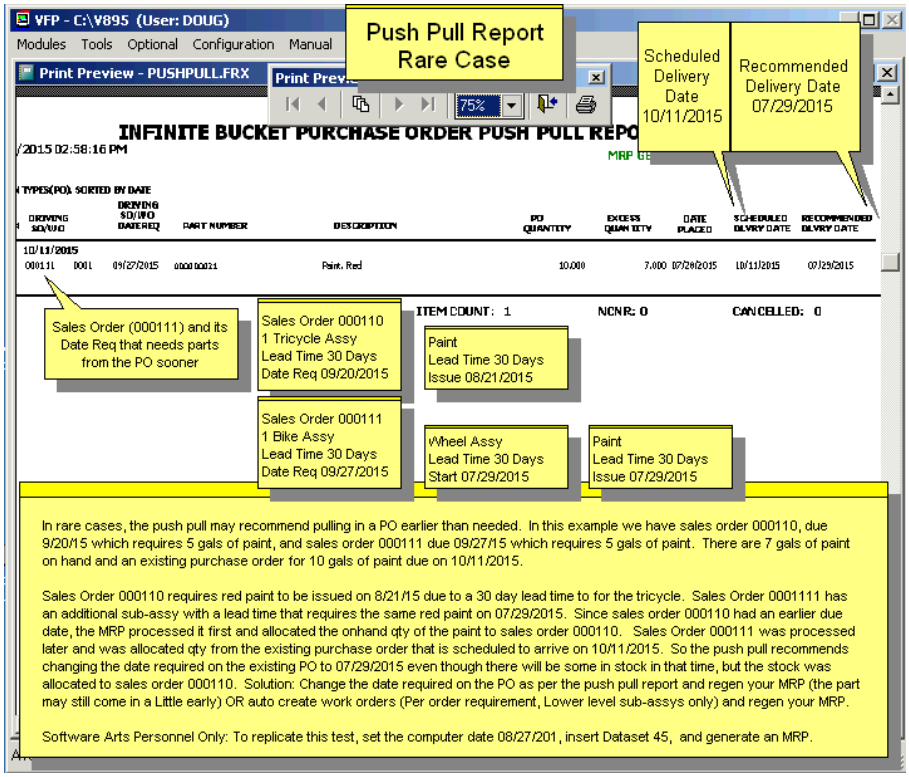


If you select to update the PO dates and quantities, please heed the warnings below.




In rare cases pc/MRP might suggest that you pull a purchase order to an earlier date, when you really don't have to. The following slide shows an example. The SO that is due later, needs the same paint earlier than the other SO. The onhand qty of the paint will be allocated to the SO that needs it later (simply because the SO due date is earlier than for the other SO). The push-pull report will suggest to move the PO early, to satisfy the demand of the other SO. If you spot this scenario, run an action report, all for a part (the paint), check all include choices and sort by ending date. The diving SO/WO Datereq value from the push-pull report will help identifying the SO that uses the current onhand qty (but wouldn't need it until a later point in time). If you confirm that the onhand quantity never goes to negative, and you are facing the above descried rare scenario, you can ignore the suggestion of the push-pull report.

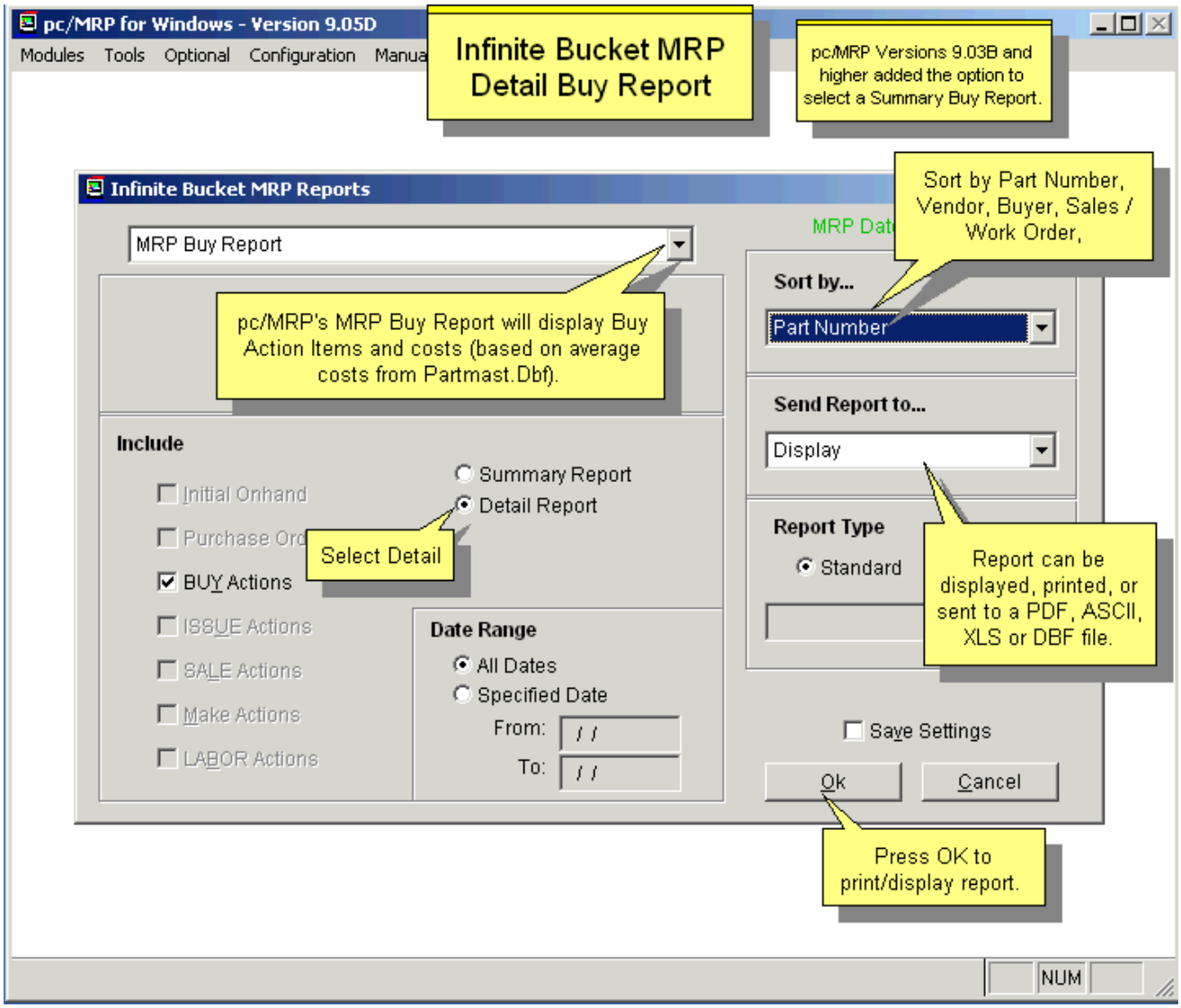


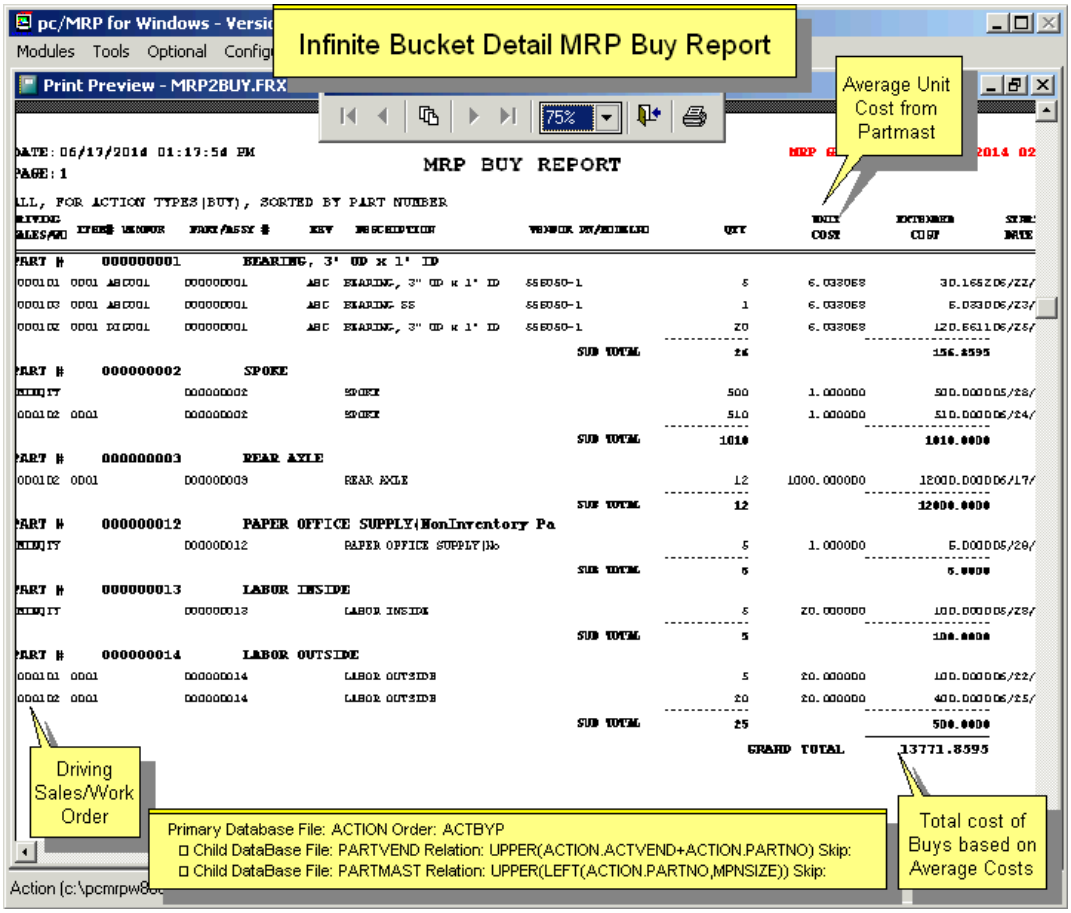
### 16.3.3.6 Issued Shortage Report

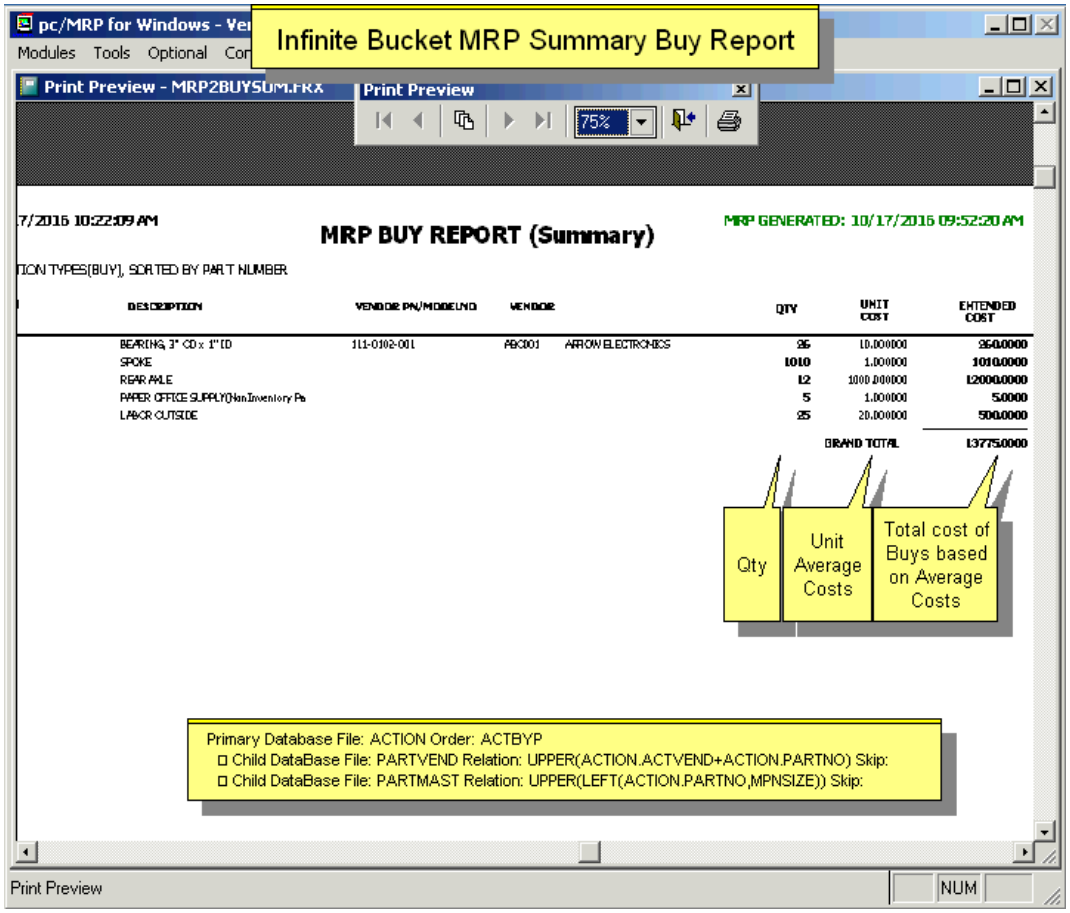
pc/MRP's Issued Shortage Report lists all issued stockroom shortages. It uses the Action Item data base file, action.dbf. It sets both mrpstock and mrpso as children database files. When it locates a make action item for the top assembly of a sales/work order, it will insert a record into TempShrt.dbf for every stockroom part number issued to that sales/work order. The TempShrt.dbf record contains the sales order's mrpso.issuedtmf, mrpso.orqtyreq, mrpso.qtyassm fields and the stockroom's mrpstock.qtyissued, mrpstock.qtyreq fields. The routing.dbf is a child of the TempShrt.dbf. The report MrpShrt2.frx will use the tempshrt.dbf and display all stock room shortage records where the qtyissued < qtyreq. This report must be run right after an MRP run and not days later as it captures the shortages on the day the MRP is run. If sufficient inventory exists to cover the MAKE action item for a sales order, the sales order will not appear on the report (SOs that have not been issued yet).

### 16.3.3.7 MRP Buy Report

The MRP Buy Report uses the action database file with the partmast.dbf as the child file. It displays buy action items (MRP2BUY.FRX) and uses the average cost from the partmaster. You can run a detail or a summary report.

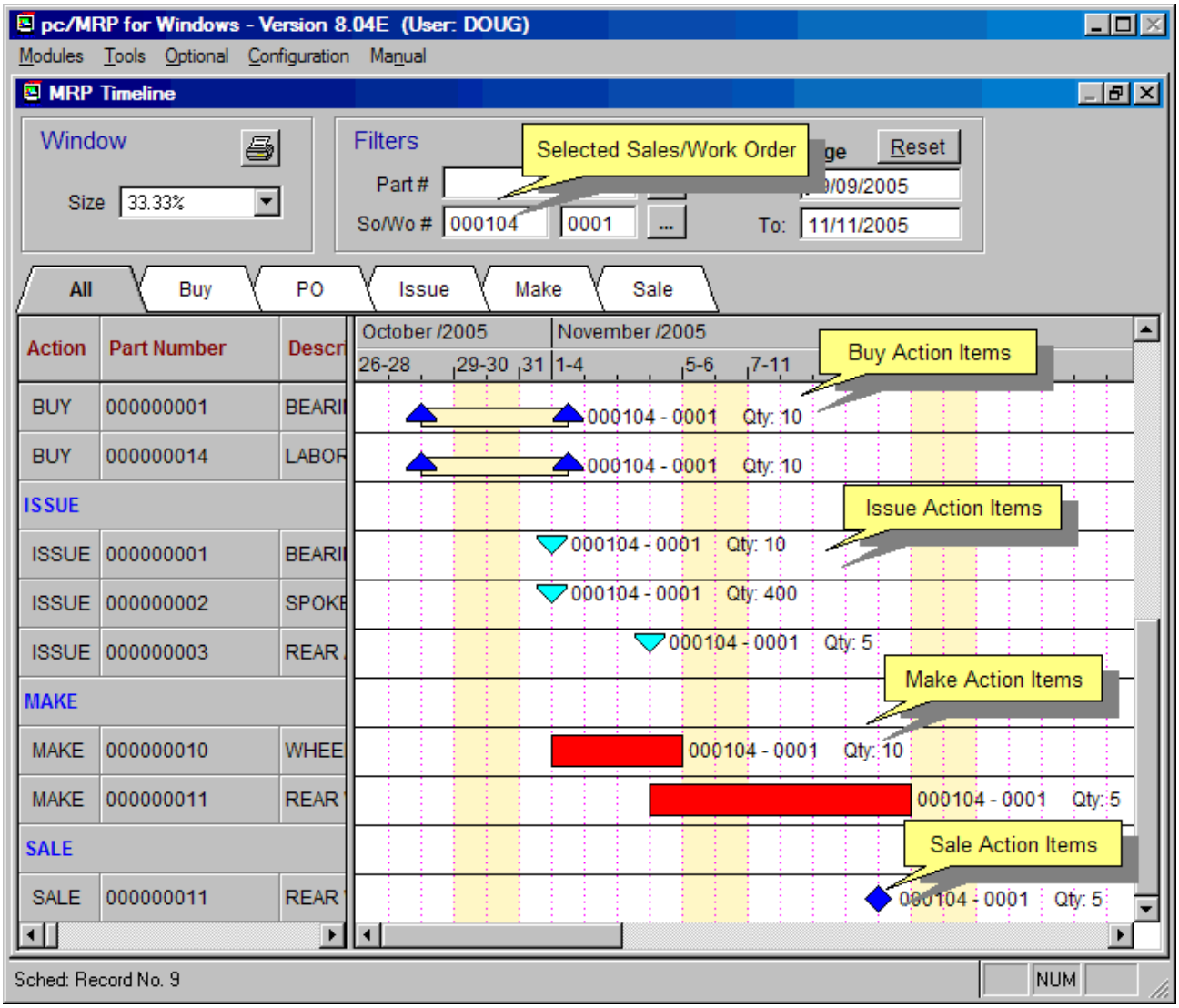



Infinite Bucket Detail MRP Buy Report
pc/MRP for Windows - Versi
Modules Tools Optional Config
Print Preview - MRP2BUY.FRX
75%
Average Unit Cost from Partmast
MRP BUY REPORT
ALL, FOR ACTION TYPES(BUY), SORTED BY PART NUMBER
PART # 000000001 BEARING, 3" OD x 1" ID
PART # 000000002 SPOKE
PART # 000000003 REAR AXLE
PART # 000000012 PAPER OFFICE SUPPLY(NonInventory Pa
PART # 000000013 LABOR INSIDE
PART # 000000014 LABOR OUTSIDE
SUB TOTAL
GRAND TOTAL 13771.8595
Driving Sales/Work Order
Primary Database File: ACTION Order: ACTBYP
Child DataBase File: PARTVEND Relation: UPPER(ACTION.ACTVEND+ACTION.PARTNO) Skip:
Child DataBase File: PARTMAST Relation: UPPER(LEFT(ACTION.PARTNO,MPNSIZE)) Skip:
Total cost of Buys based on Average Costs


Infinite Bucket MRP Summary Buy Report
pc/MRP for Windows - Ver
Modules Tools Optional Cor
Print Preview - MRP2BUYSUM.FRX
Print Preview
75%
MRP BUY REPORT (Summary)
MRP GENERATED: 10/17/2016 09:52:20 AM
DESCRIPTION VENDOR PN/MODEL NO VENDOR QTY UNIT COST EXTENDED COST
BEARING, 3" OD x 1" ID 111-0102-001 ABC001 ARROW ELECTRONICS 26 10.000000 260.0000
SPOKE 1010 1.000000 1010.0000
REAR AXLE 12 1000.000000 12000.0000
PAPER OFFICE SUPPLY(NonInventory Pa 5 1.000000 5.0000
LABOR OUTSIDE 25 20.000000 500.0000
GRAND TOTAL 13775.0000
Qty
Unit Average Costs
Total cost of Buys based on Average Costs
Primary Database File: ACTION Order: ACTBYP
Child DataBase File: PARTVEND Relation: UPPER(ACTION.ACTVEND+ACTION.PARTNO) Skip:
Child DataBase File: PARTMAST Relation: UPPER(LEFT(ACTION.PARTNO,MPNSIZE)) Skip:
Print Preview
NUM

### 16.3.3.8 MRP Timeline

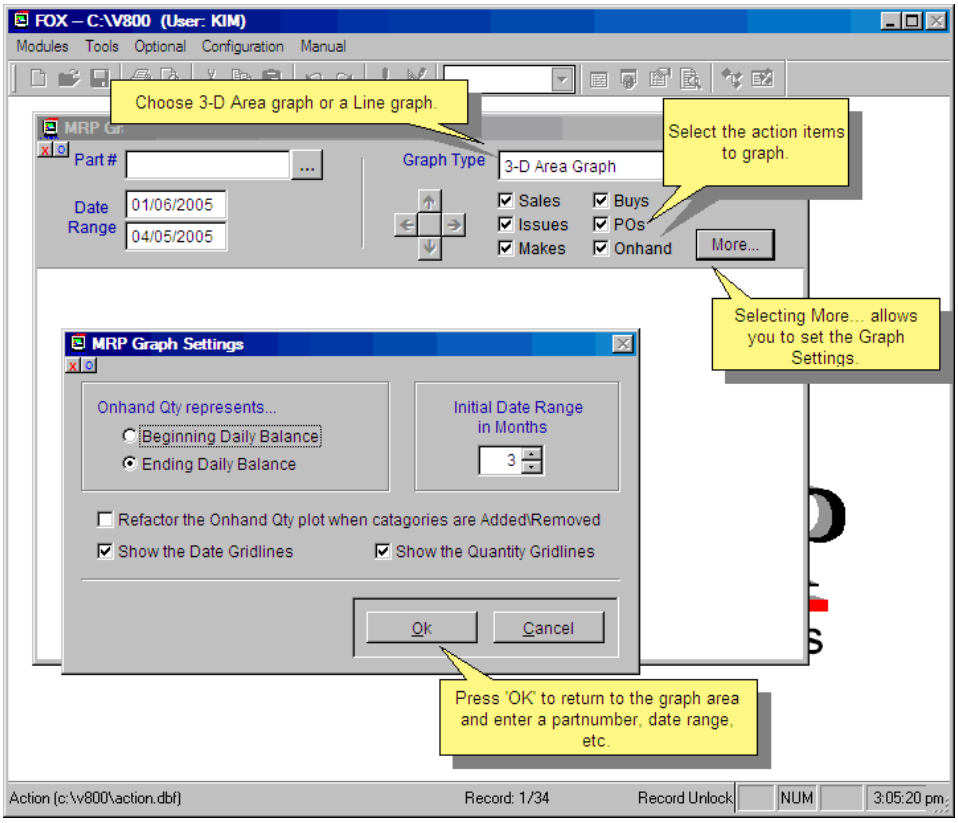
The MRP Timeline can be used to display or print a graphical representation of the MRP requirements.



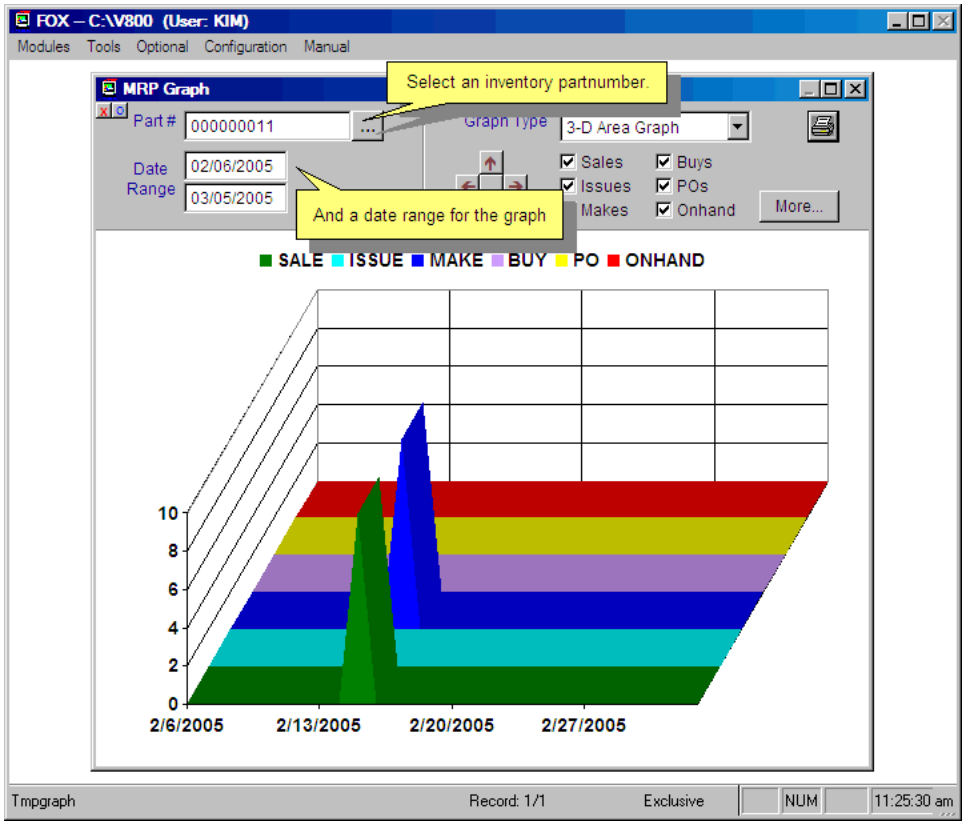

The MRP Timeline can display All actions, or just Buys, open Purchase Orders (PO), Issues, Makes, or Sales. Actions can be further filtered by specific part numbers, sales or work order numbers, and specific date ranges.

### 16.3.3.9 MRP Item Graph

Choosing Item Graph from the menu will present a graph similar to the one show below.



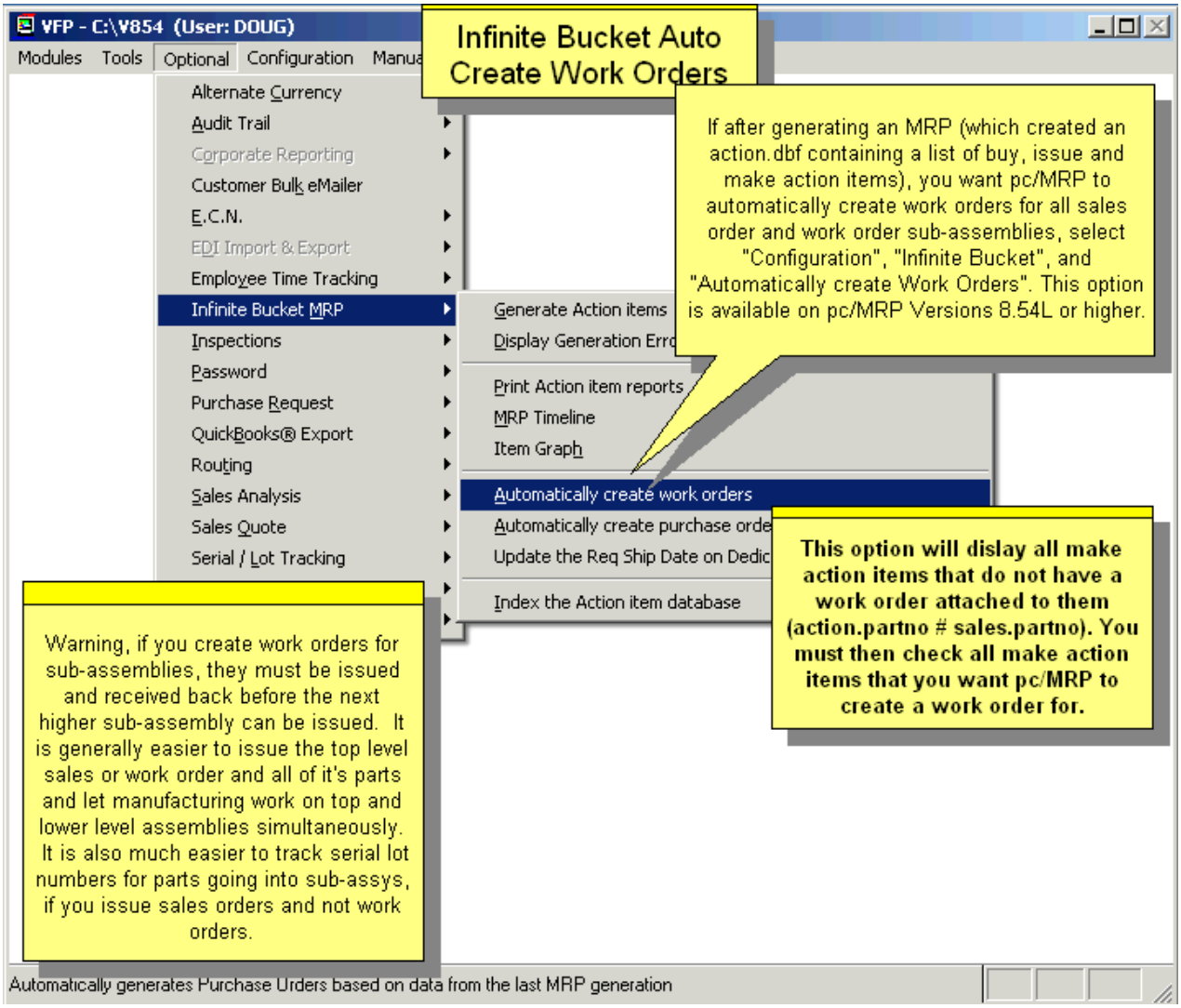

Now, as you set up your graph parameters, the graph appears. The print button in the upper right corner allows printing of the graph and / or data.

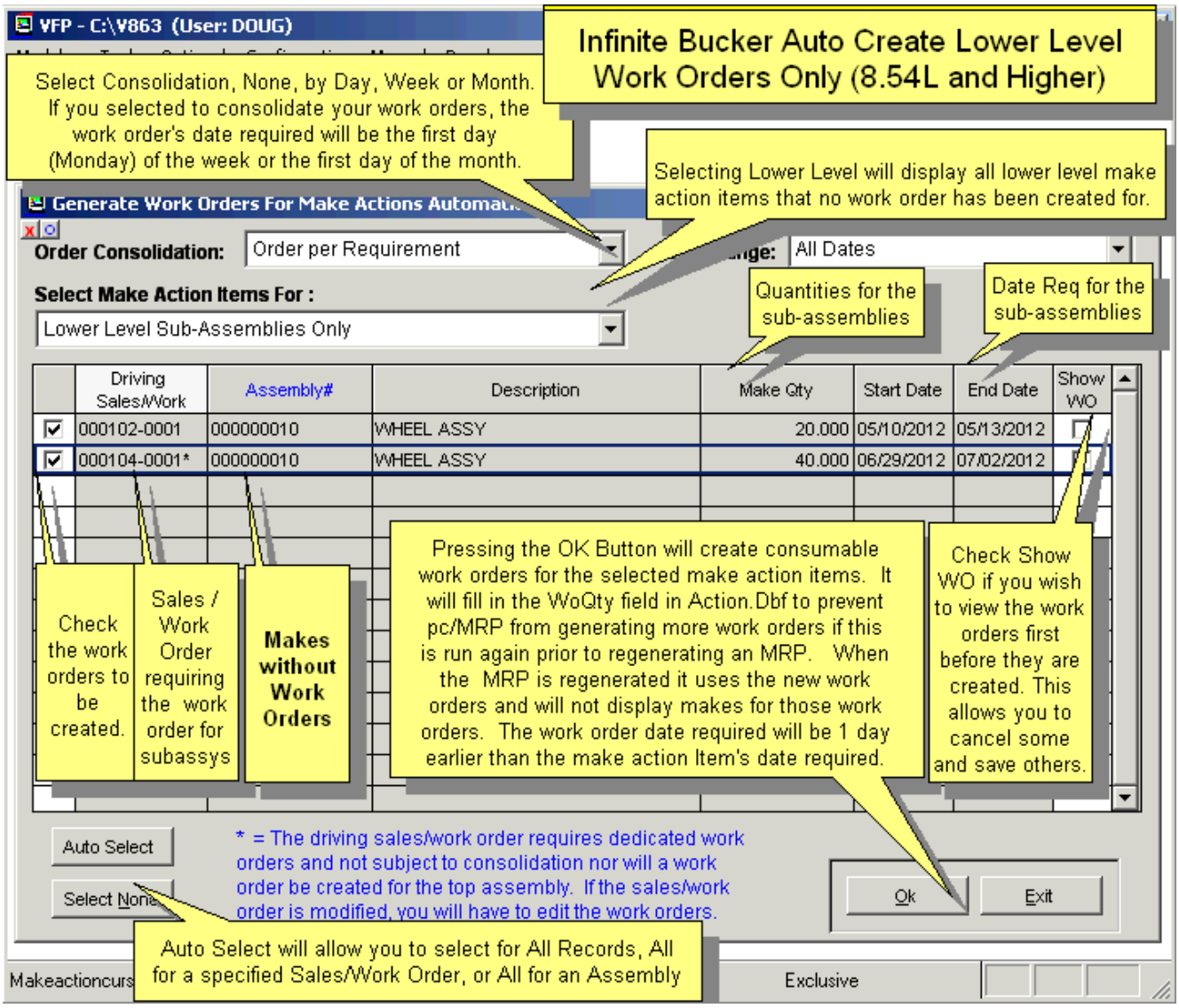


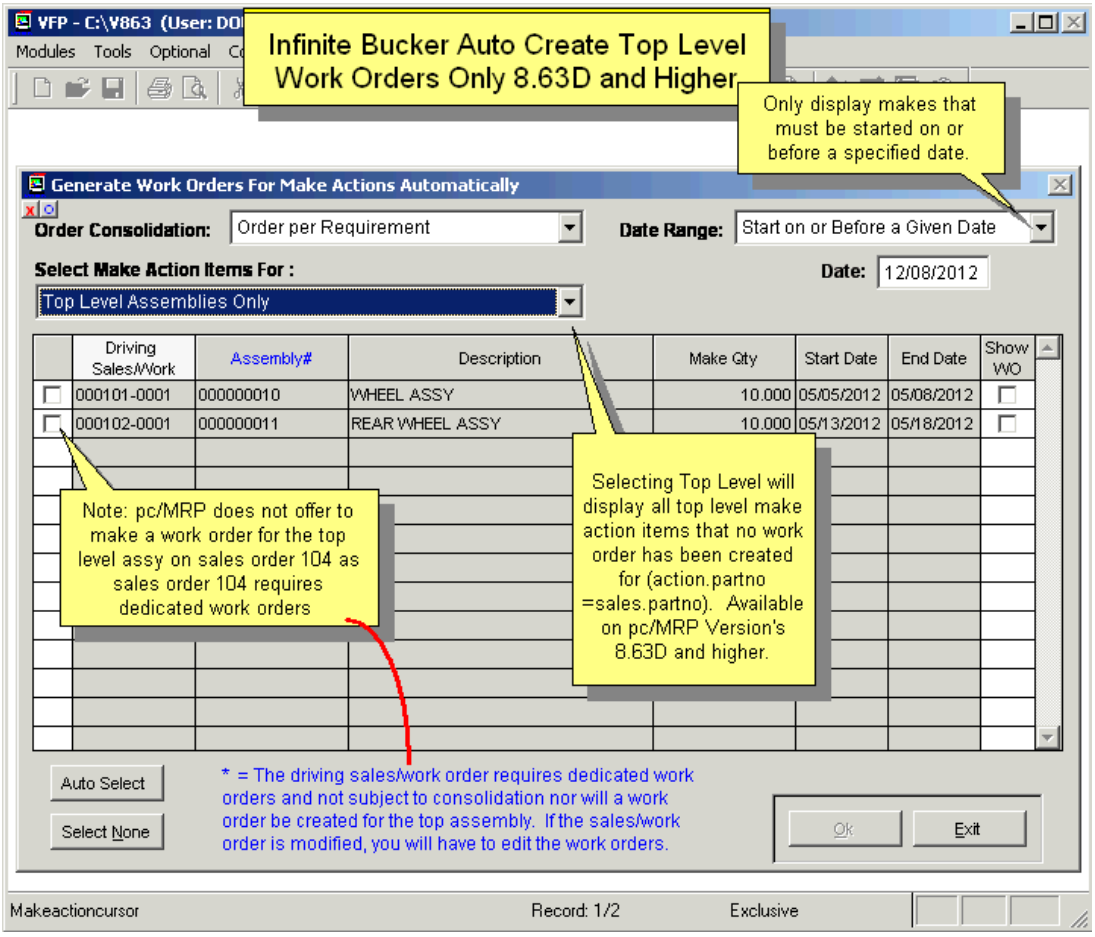
### 16.3.4 Automatically Create Work Orders

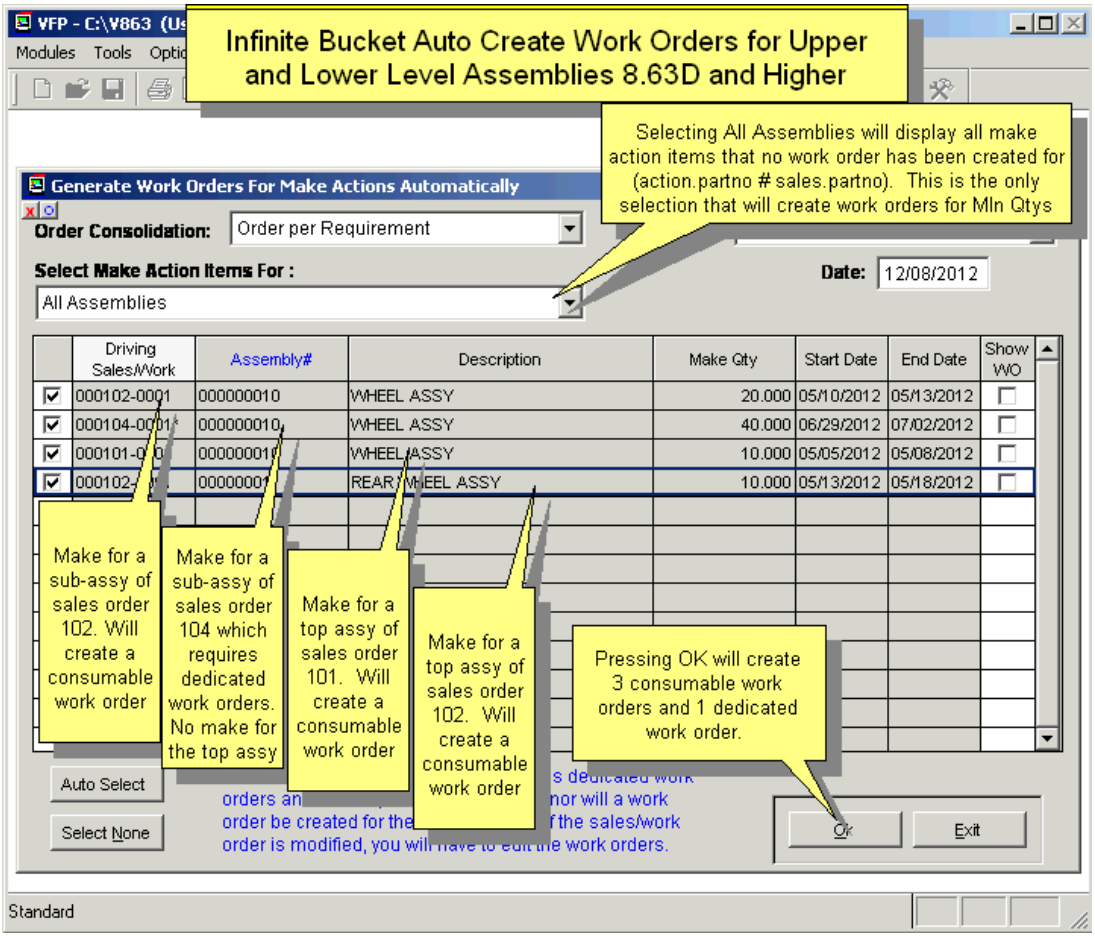
http://www.pcmrp.com/mrp101/mrpmenuautocreatewos.htm

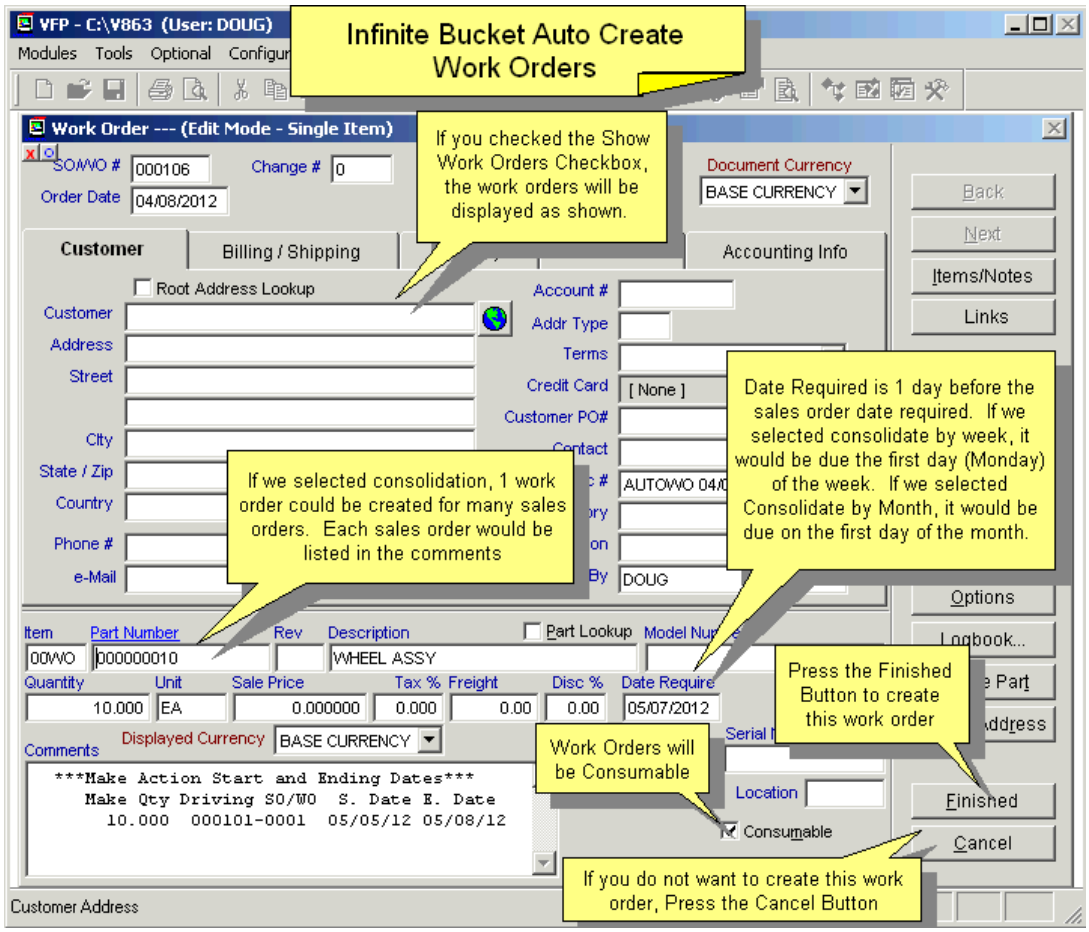
Please note that you are 'micro-managing' your MRP when you select this option.

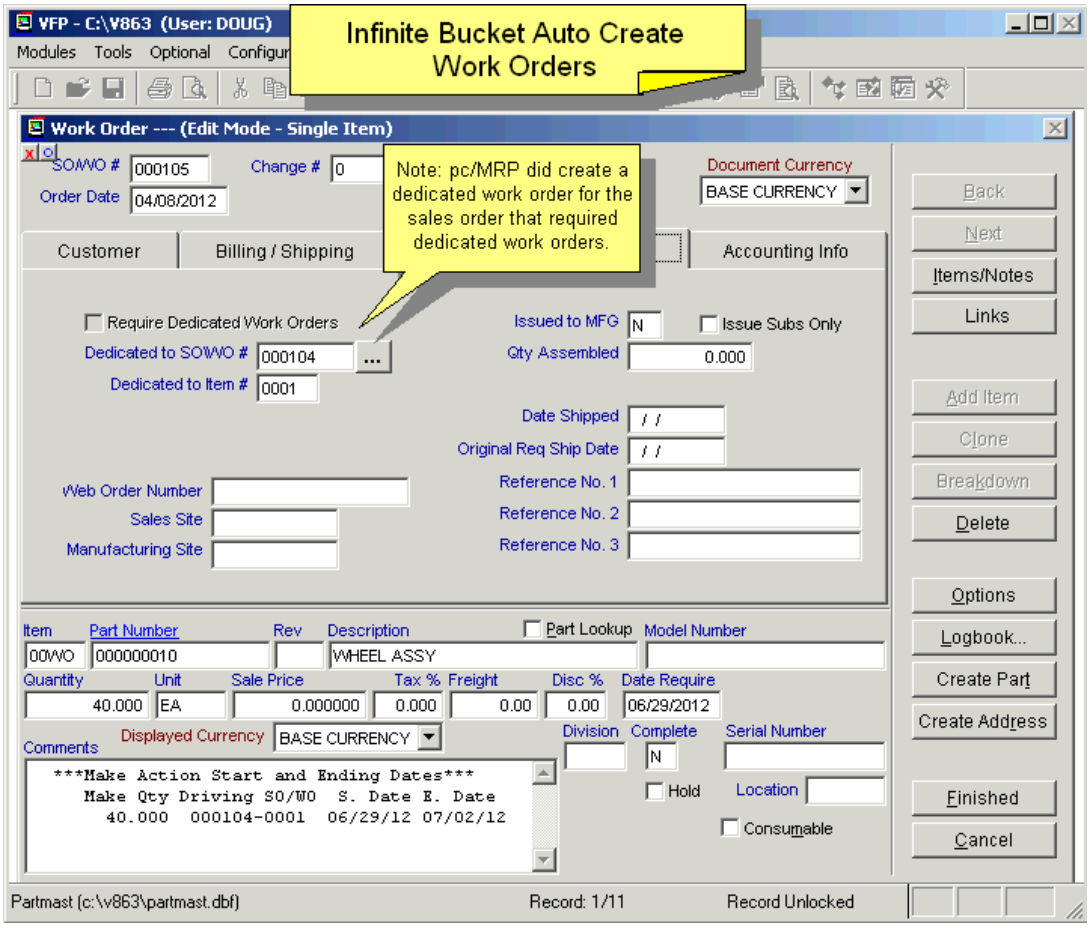


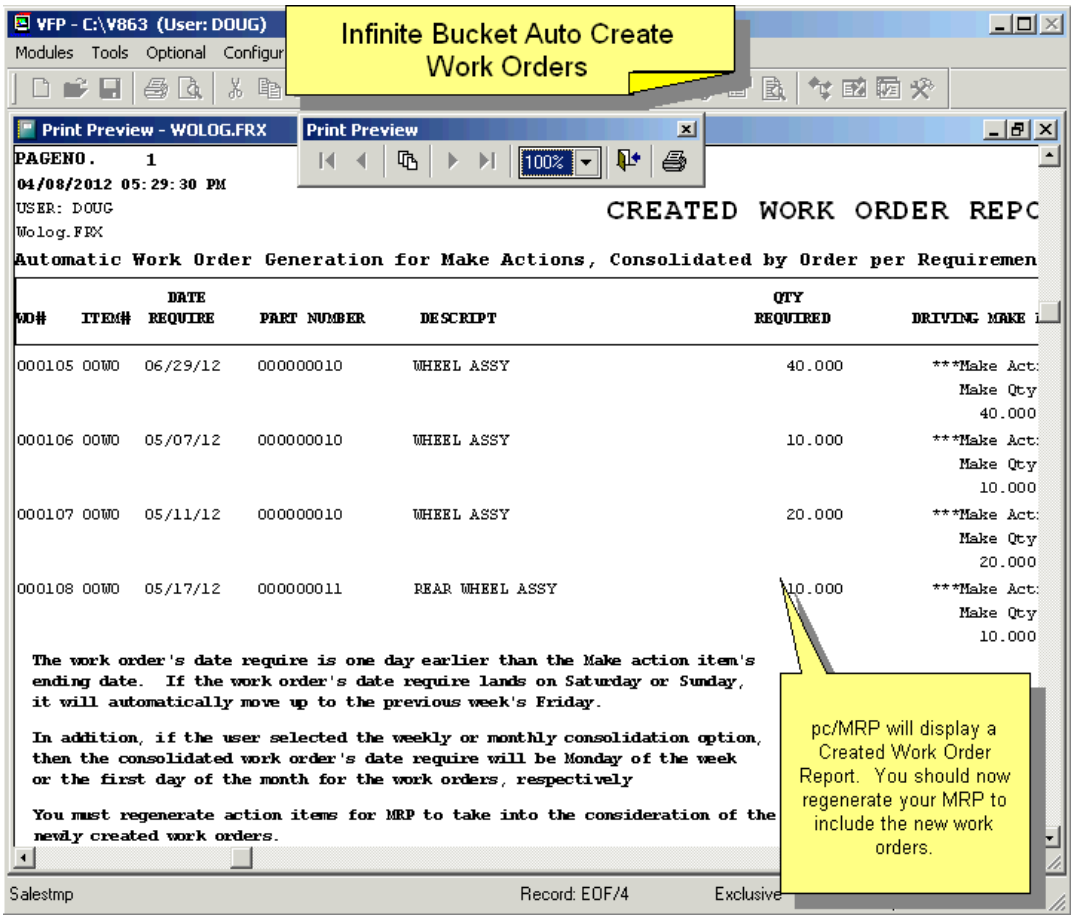

VFP - C:\V863 (User: DOUG)
Infinite Bucker Auto Create Lower Level Work Orders Only (8.54L and Higher)
Select Consolidation, None, by Day, Week or Month. If you selected to consolidate your work orders, the work order's date required will be the first day (Monday) of the week or the first day of the month.
Selecting Lower Level will display all lower level make action items that no work order has been created for.
Generate Work Orders For Make Actions Automat
Order Consolidation:
Order per Requirement
All Dates
Select Make Action Items For :
Lower Level Sub-Assemblies Only
Quantities for the sub-assemblies
Date Req for the sub-assemblies
Driving Sales/Work
Assembly#
Description
Make Qty
Start Date
End Date
Show WO
000102-0001
000000010
WHEEL ASSY
20.000
05/10/2012
05/13/2012
000104-0001*
000000010
WHEEL ASSY
40.000
06/29/2012
07/02/2012
Check the work orders to be created.
Sales / Work Order requiring the work order for subassys
Makes without Work Orders
Pressing the OK Button will create consumable work orders for the selected make action items. It will fill in the WoQty field in Action.Dbf to prevent pc/MRP from generating more work orders if this is run again prior to regenerating an MRP. When the MRP is regenerated it uses the new work orders and will not display makes for those work orders. The work order date required will be 1 day earlier than the make action Item's date required.
Check Show WO if you wish to view the work orders first before they are created. This allows you to cancel some and save others.
Auto Select
Select None
* = The driving sales/work order requires dedicated work orders and not subject to consolidation nor will a work order be created for the top assembly. If the sales/work order is modified, you will have to edit the work orders.
Ok
Exit
Auto Select will allow you to select for All Records, All for a specified Sales/Work Order, or All for an Assembly
Makeactioncurs
Exclusive

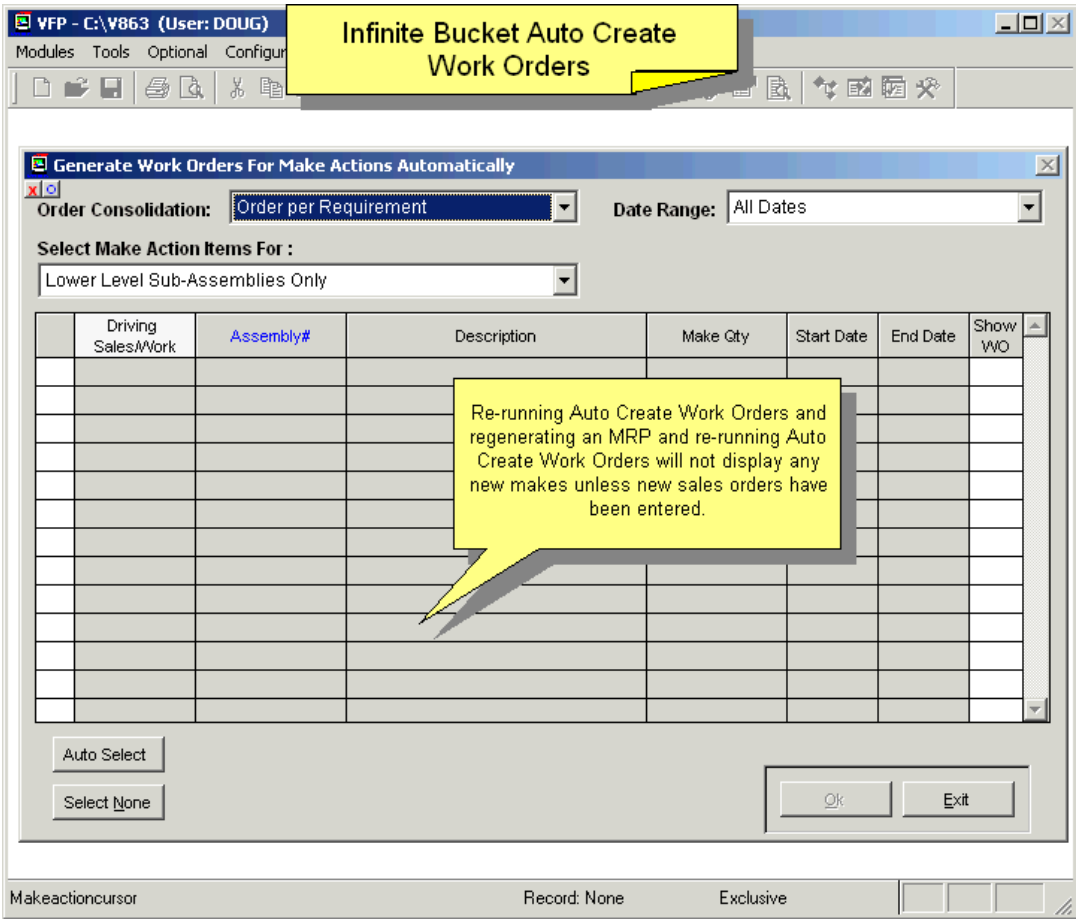

Infinite Bucker Auto Create Top Level Work Orders Only 8.63D and Higher
Only display makes that must be started on or before a specified date.
Generate Work Orders For Make Actions Automatically
Order Consolidation: Order per Requirement
Date Range: Start on or Before a Given Date
Select Make Action Items For :
Top Level Assemblies Only
Date: 12/08/2012
Driving Sales/Work
Assembly#
Description
Make Qty
Start Date
End Date
Show WO
000101-0001 000000010 WHEEL ASSY 10.000 05/05/2012 05/08/2012
000102-0001 000000011 REAR WHEEL ASSY 10.000 05/13/2012 05/18/2012
Note: pc/MRP does not offer to make a work order for the top level assy on sales order 104 as sales order 104 requires dedicated work orders
Selecting Top Level will display all top level make action items that no work order has been created for (action.partno =sales.partno). Available on pc/MRP Version's 8.63D and higher.
Auto Select
Select None
* = The driving sales/work order requires dedicated work orders and not subject to consolidation nor will a work order be created for the top assembly. If the sales/work order is modified, you will have to edit the work orders.
Ok
Exit
Makeactioncursor
Record: 1/2
Exclusive


Infinite Bucket Auto Create Work Orders for Upper and Lower Level Assemblies 8.63D and Higher
Selecting All Assemblies will display all make action items that no work order has been created for (action.partno # sales.partno). This is the only selection that will create work orders for Mln Qtys
Generate Work Orders For Make Actions Automatically
Order Consolidation: Order per Requirement
Select Make Action Items For :
All Assemblies
Date: 12/08/2012
Driving Sales/Work
Assembly#
Description
Make Qty
Start Date
End Date
Show WO
000102-0001 000000010 WHEEL ASSY 20.000 05/10/2012 05/13/2012
000104-0001 000000010 WHEEL ASSY 40.000 06/29/2012 07/02/2012
000101-0001 000000010 WHEEL ASSY 10.000 05/05/2012 05/08/2012
000102-0001 000000011 REAR WHEEL ASSY 10.000 05/13/2012 05/18/2012
Make for a sub-assy of sales order 102. Will create a consumable work order
Make for a sub-assy of sales order 104 which requires dedicated work orders. No make for the top assy
Make for a top assy of sales order 101. Will create a consumable work order
Make for a top assy of sales order 102. Will create a consumable work order
Pressing OK will create 3 consumable work orders and 1 dedicated work order.
Auto Select
Select None
Ok
Exit
Standard

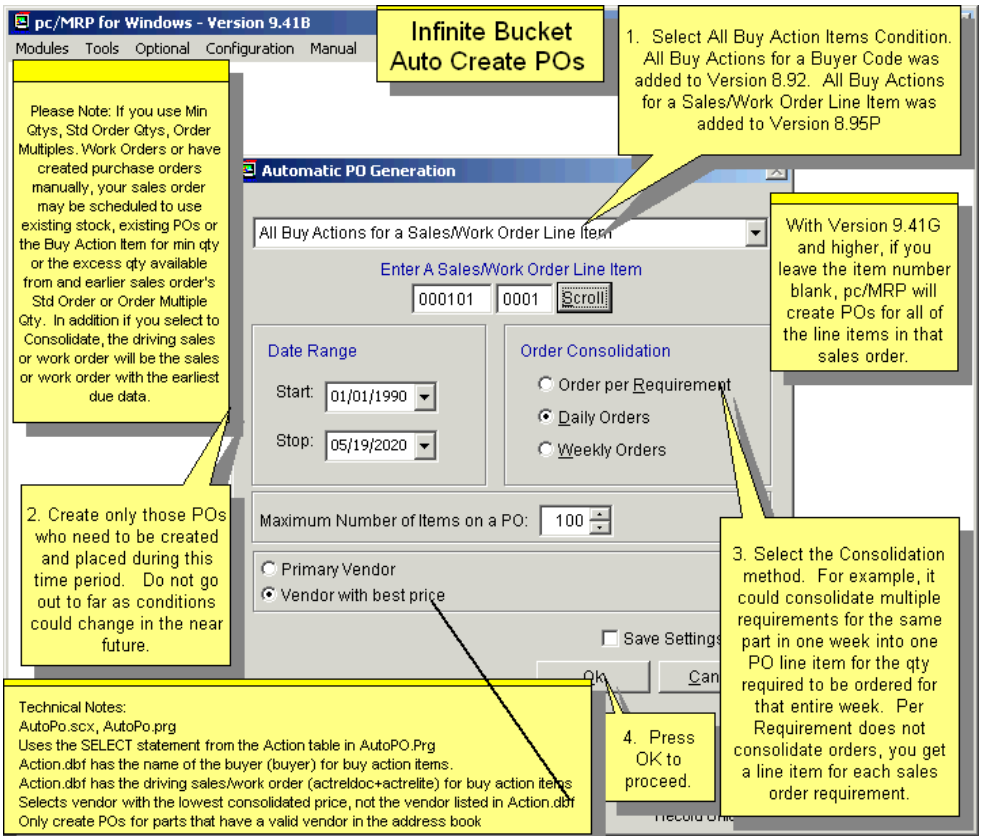

VFP - C:\V863 (User: DOUG)
Infinite Bucket Auto Create Work Orders
Work Order --- (Edit Mode - Single Item)
If you checked the Show Work Orders Checkbox, the work orders will be displayed as shown.
SO/WO # 000106
Change # 0
Order Date 04/08/2012
Document Currency BASE CURRENCY
Customer
Billing / Shipping
Accounting Info
Root Address Lookup
Customer
Address
Street
City
State / Zip
Country
Phone #
e-Mail
Account #
Addr Type
Terms
Credit Card [ None ]
Customer PO#
Contact
AUTOWO 04/0
DOUG
If we selected consolidation, 1 work order could be created for many sales orders. Each sales order would be listed in the comments
Date Required is 1 day before the sales order date required. If we selected consolidate by week, it would be due the first day (Monday) of the week. If we selected Consolidate by Month, it would be due on the first day of the month.
Item Part Number Rev Description Part Lookup Model Number
00WO 000000010 WHEEL ASSY
Quantity Unit Sale Price Tax % Freight Disc % Date Require
10.000 EA 0.000000 0.000 0.00 0.00 05/07/2012
Comments
Displayed Currency BASE CURRENCY
***Make Action Start and Ending Dates***
Make Qty Driving SO/WO S. Date E. Date
10.000 000101-0001 05/05/12 05/08/12
Work Orders will be Consumable
Serial Number
Location
Consumable
Press the Finished Button to create this work order
If you do not want to create this work order, Press the Cancel Button
Back
Next
Items/Notes
Links
Options
Logbook...
Finished
Cancel
Customer Address


VFP - C:\V863 (User: DOUG)
Infinite Bucket Auto Create Work Orders
Work Order --- (Edit Mode - Single Item)
Note: pc/MRP did create a dedicated work order for the sales order that required dedicated work orders.
SO/WO # 000105
Change # 0
Order Date 04/08/2012
Document Currency BASE CURRENCY
Customer
Billing / Shipping
Accounting Info
Require Dedicated Work Orders
Dedicated to SO/WO # 000104
Dedicated to Item # 0001
Issued to MFG N
Issue Subs Only
Qty Assembled 0.000
Date Shipped / /
Original Req Ship Date / /
Web Order Number
Sales Site
Manufacturing Site
Reference No. 1
Reference No. 2
Reference No. 3
Item Part Number Rev Description Part Lookup Model Number
00WO 000000010 WHEEL ASSY
Quantity Unit Sale Price Tax % Freight Disc % Date Require
40.000 EA 0.000000 0.000 0.00 0.00 06/29/2012
Comments
Displayed Currency BASE CURRENCY
***Make Action Start and Ending Dates***
Make Qty Driving SO/WO S. Date E. Date
40.000 000104-0001 06/29/12 07/02/12
Division Complete Serial Number
Hold Location
Consumable
Back
Next
Items/Notes
Links
Add Item
Clone
Breakdown
Delete
Options
Logbook...
Create Part
Create Address
Finished
Cancel
Partmast (c:\v863\partmast.dbf) Record: 1/11 Record Unlocked


VFP - C:\V863 (User: DOUG)
Modules Tools Optional Configur
Infinite Bucket Auto Create Work Orders
Print Preview - WOLOG.FRX
Print Preview
100%
PAGENO. 1
04/08/2012 05:29:30 PM
USER: DOUG
Wolog.FRX
CREATED WORK ORDER REPC
Automatic Work Order Generation for Make Actions, Consolidated by Order per Requiremen
WO# ITEM# DATE REQUIRE PART NUMBER DESCRIPT QTY REQUIRED DRIVING MAKE I
000105 00W0 06/29/12 000000010 WHEEL ASSY 40.000 ***Make Act: Make Qty 40.000
000106 00W0 05/07/12 000000010 WHEEL ASSY 10.000 ***Make Act: Make Qty 10.000
000107 00W0 05/11/12 000000010 WHEEL ASSY 20.000 ***Make Act: Make Qty 20.000
000108 00W0 05/17/12 000000011 REAR WHEEL ASSY 10.000 ***Make Act: Make Qty 10.000
The work order's date require is one day earlier than the Make action item's ending date. If the work order's date require lands on Saturday or Sunday, it will automatically move up to the previous week's Friday.
In addition, if the user selected the weekly or monthly consolidation option, then the consolidated work order's date require will be Monday of the week or the first day of the month for the work orders, respectively
You must regenerate action items for MRP to take into the consideration of the newly created work orders.
pc/MRP will display a Created Work Order Report. You should now regenerate your MRP to include the new work orders.
Salestmp
Record: EOF/4
Exclusive


VFP - C:\V863 (User: DOUG)
Modules Tools Optional Configur
Infinite Bucket Auto Create Work Orders
Generate Work Orders For Make Actions Automatically
Order Consolidation: Order per Requirement
Date Range: All Dates
Select Make Action Items For :
Lower Level Sub-Assemblies Only
Driving Sales/Work
Assembly#
Description
Make Qty
Start Date
End Date
Show WO
Re-running Auto Create Work Orders and regenerating an MRP and re-running Auto Create Work Orders will not display any new makes unless new sales orders have been entered.
Auto Select
Select None
Ok
Exit
Makeactioncursor
Record: None
Exclusive

### 16.3.5 Automatically Create POs




If the purchase buy report looks good, selecting "Automatically Create Purchase Orders" will automatically generate the POs required to fill the buy requirements. Users can select a date range for generating POs. Selecting **Order per Requirement** will generate a PO for every buy action item generated. Selecting "**Daily Orders**" will consolidate all POs for the same part number required for the same day into one PO line item. Selecting "**Weekly Orders**" will consolidate all POs for the same part number required for the week into one PO line item.

Selecting "**Set Process Defaults**" will allow you to set the defaults for the above screen. When the "**Create POs**" function generates a PO, it puts a Y in the PO_MAKE field for that BUY action item in the action data base file. This allows you to use the date range function without worrying about creating duplicate POs. The function that automatically created purchase orders is limited to 100 line items. pc/MRP will create multiple purchase orders if the limit of 100 limit is exceeded.

The user has to have Edit rights to the Purchase module to be able to “Automatically Create Purchase Orders”.

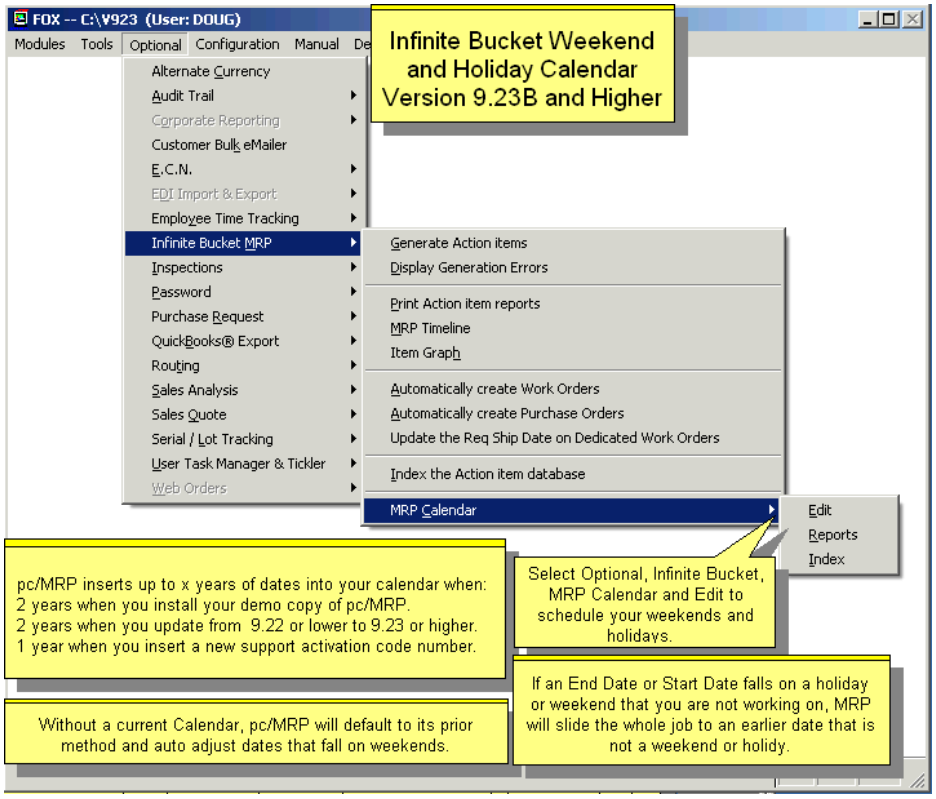
Automatically create Purchase Orders" should only be run if:
You have "Generated Action Items" and do not plan to create work orders, OR;
You have "Generated Action Items", created work orders automatically or manually, and then "Generated Action Items" again to take into account the new work orders.

pc/MRP is only able to automatically create purchase orders for parts that have at least one associated vendor listed. The user will be able to print a list of these buy requirements; these POs will have to be entered manually.

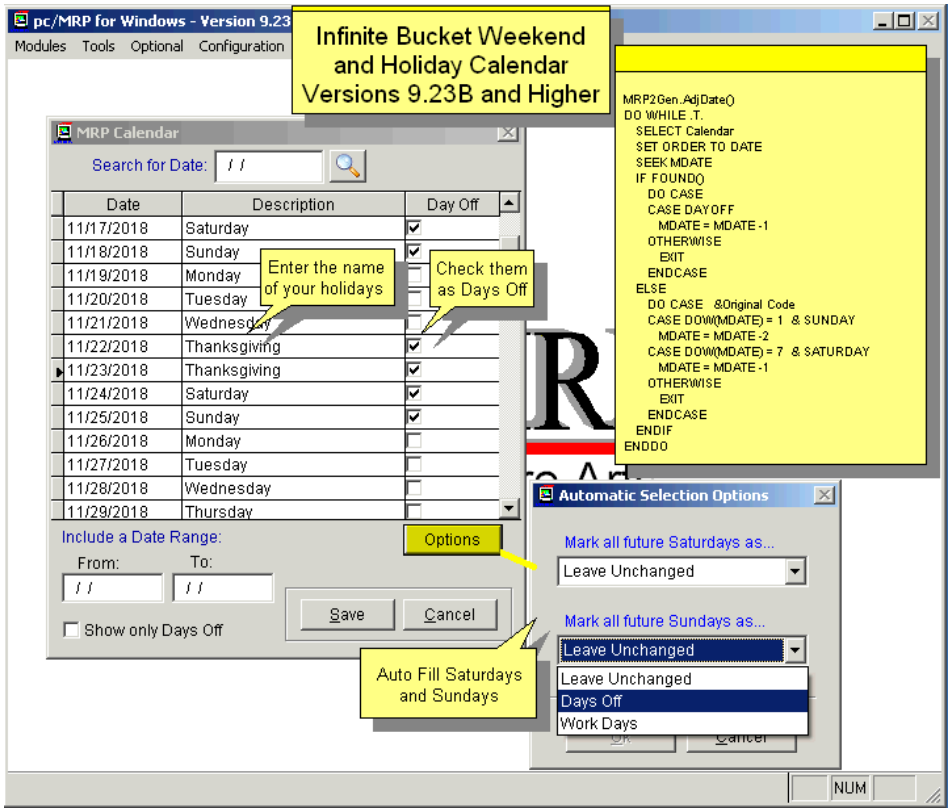
pc/MRP will insert the vendor’s related document number field into the PO for that vendor. Buyer can be the current user login, or the buyer for the part, set by Configuration, **Option 25**. (**Note:** In versions **9.04** and lower buyer was always the buyer for the part.)

pc/MRP will allow you to select VENDOR 1 or the vendor with the BEST PRICE for the quantity ordered. This option is NOT available for users having only ‘View’ options for the MRP module.

### 16.3.6 MRP Calendar




p/MRP's Calendar allows users to schedule weekends and holidays as days off . The Infinite Bucket Program will then back off those days when creating your schedule.



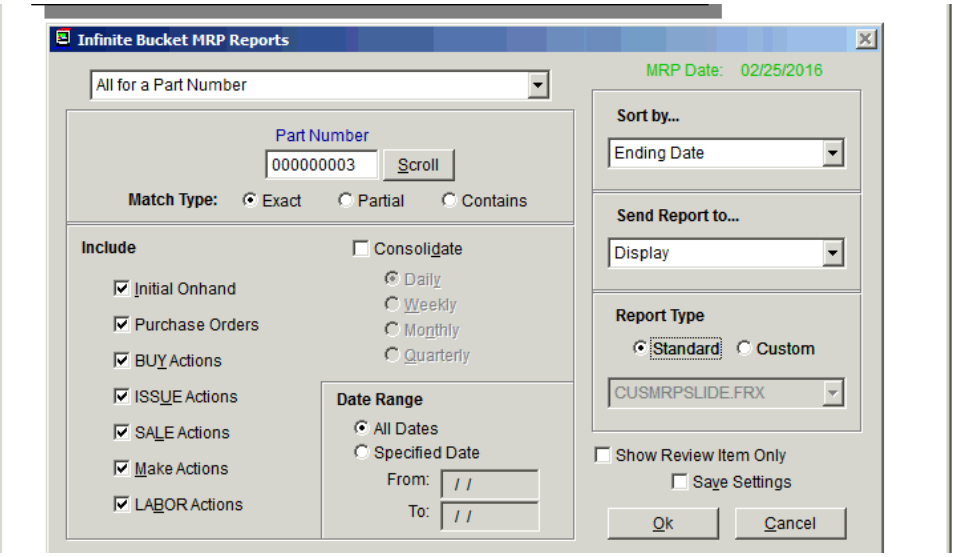
### 16.3.7 Troubleshooting

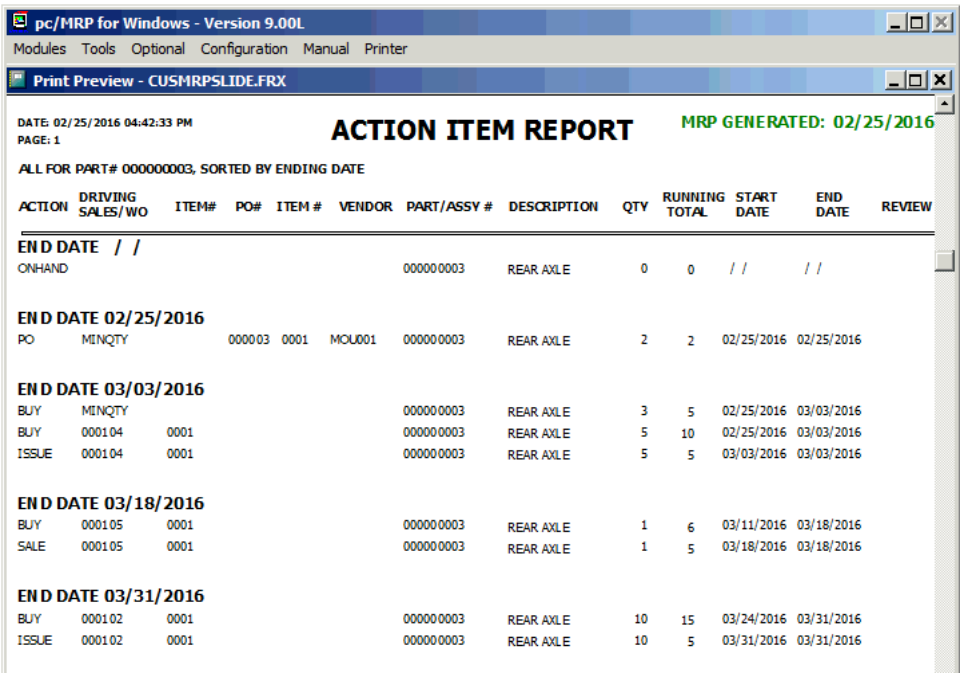
#### 16.3.7.1 Infinite Bucket reports appear to be wrong

If the quantities in the Infinite Bucket reports appear to be wrong, please do the following:

A good plan can only be based on good data. If pc/MRP reported any errors/problems in your data after the MRP was generated, correct the errors and re-generate the MRP. These errors could be missing due dates, non-existing parts, etc. For details see Section 16.3.2 above. To view the errors found select **Display Generation Errors** from the Infinite Bucket menu.

If the quantities still seem wrong, select one of the part numbers involved and run the report below. Include all action items and sort by ending date. This report will clarify where the quantities are coming from. Repeat these steps for any other part number you wish to verify.



#### 16.3.7.2 Error message: Allowed DO nesting level exceeded

While generating an Infinite Bucket MRP, you get the error message: **Allowed DO nesting level exceeded**. This means that you have a recursive BOM structure (a BOM that is calling itself). See Section 17.3.17.

#### 16.3.7.3 A sales or work order does not display any action items

If a sales or work order does not display any action items (All Action Items for a Sales/Work Order)

- The sales/work order contains a preliminary BOM and **Include Preliminary BOMs** was not checked when the MRP was generated.
- The sales/work order was complete when the MRP was generated.

#### 16.3.7.4 The action item report shows multiple BUILD and SALE items for an assembly for the same SO/WO number and line item.

Check the inventory module for duplicate part numbers by going to Modules, Inventory, Audit Inventory Data, and only check' Invalid Part Numbers'. Do not check 'Fix' at this time. Verify that for each duplicated part number, the first one is the one to keep. Then you can check the 'Fix' checkbox when you run the Audit Inventory Data again. You can now re-run the Create Action Items process again.

If the ones you wish to keep are not always the first partnumbers, please call Software Arts before you proceed!

#### 16.3.7.5 Component parts not showing any demand.

pc/MRP shows demand only for parts & assemblies for which there are work/sales orders. The demand for component parts contained solely in assemblies is indicated in the "MRP Available" field of the "Qty/Costs" tab of the Inventory Add/Edit form (negative values indicate buy actions). Run your MRP to update this number.

The component part may not show as required if its parent assembly is on hand.

Also see 16.3.6.7.

#### 16.3.7.6 The action item report does not calculate with existing work orders that are in manufacturing.

Check is the work order is marked as consumable. (See Configuration, Settings and Utilities, **Option 66**.) Check whether the work order due date is at least one day before the sales order / work order due date, that should be using it.

#### 16.3.7.7 The action item reports do not show any results, not even onhand.

If you just updated from a pc/MRP version lower than 8.95 (and did not re-generate the MRP since the update) then simply re-generate the MRP.

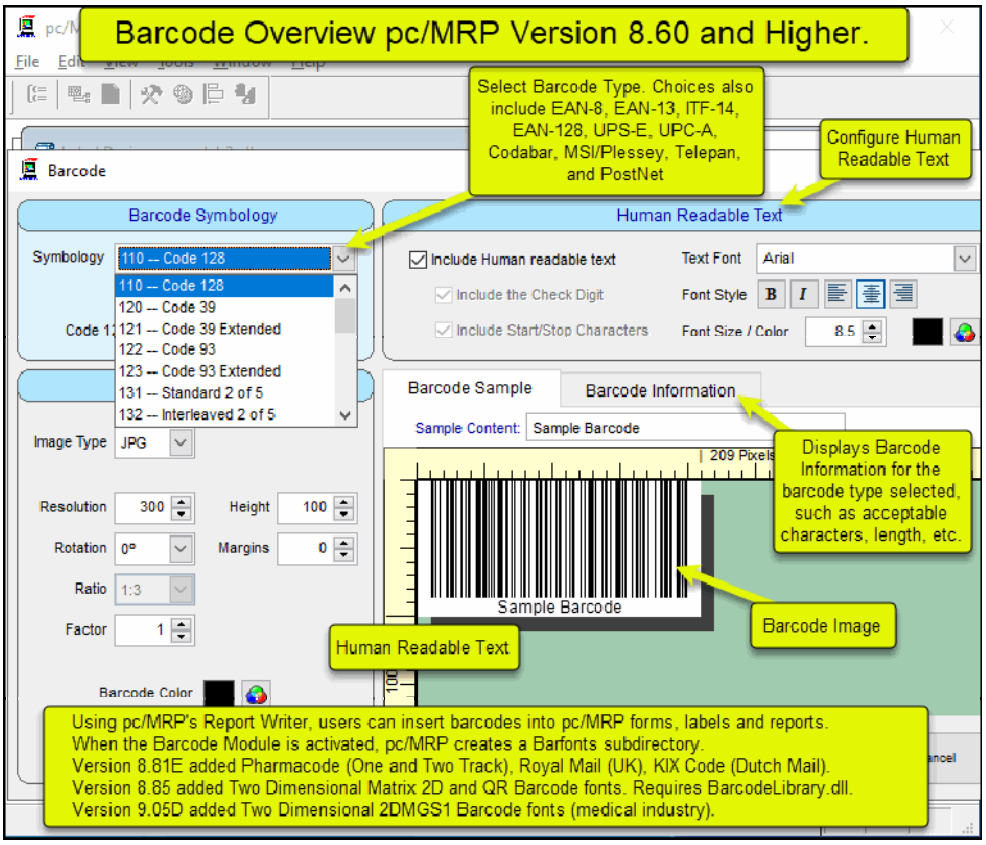
#### 16.3.7.8 pc/MRP is displaying a Buy Action Item even though an open PO exists for that part

If there is a (L) next to the end date of the PO action item, the PO has been locked by a user because the vendor cannot move in his delivery date. If possible, create a Purchase Order to another vendor or move out the delivery date on your sales order.

# 16.4 Optional Barcode Module

### 16.4.1 Overview

Software Arts offers an optional Barcode Builder that accommodates numerous barcode styles and options and guides the user through the successful implementation in their custom reports. Barcoding can increase efficiency and inventory control accuracy. You can print Linear, QR or Data Matrix barcodes in pc/MRP.




### Activating and Installing Software Arts Barcode Font Option

Select Configuration, About pc/MRP. Press Ctrl-B. Enter your activation code.

The file **C39BCF.EXE** will be installed in a subdirectory named **BARFONTS**. The next time you start pc/MRP, it will automatically run this program which will install the barcode fonts on your local workstation.

**Note C39BCF.exe is a font installer and not a .dll:**
If the fonts do not install, right click on the pc/MRP shortcut on your desktop and select, Run as Administrator.

If the fonts still do not install, use Windows Explorer to locate the C39BCF.exe in your pcmrpw directory. Right click on the C39BCF.exe and select "Run As Administrator".

If the fonts still do not install, right click on the C39BCF.EXE, drag it to your desktop, select copy and then right click and run as administrator.

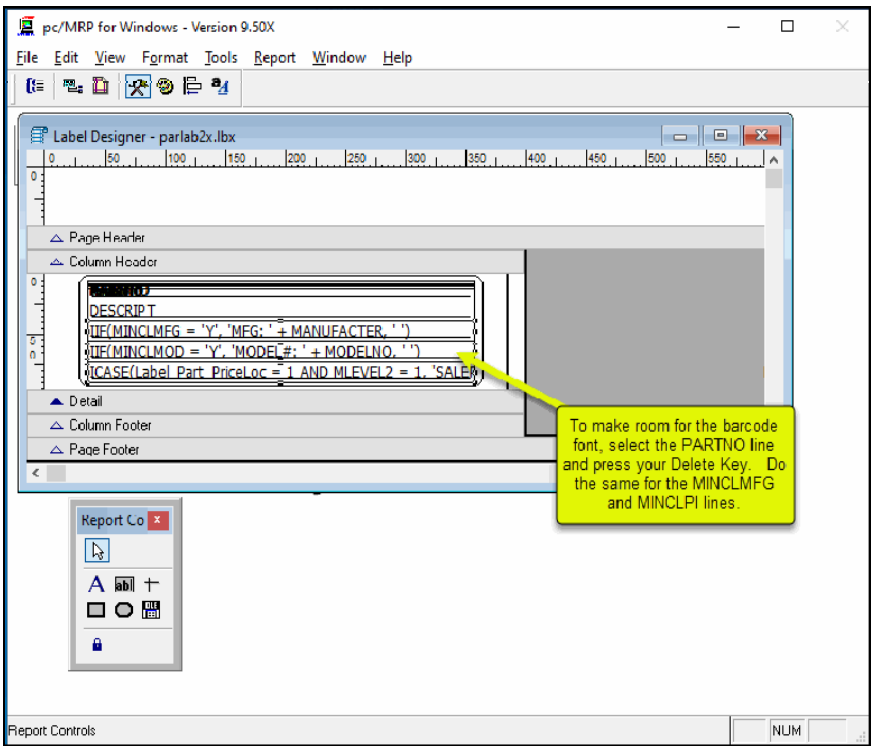
If the fonts still do not install copy the TTF fonts from a developer BARFONTS dir to the user's pcmrpw/barfonts folder or to a folder on the desktop. Then right click on each font and select Install. Then restart pc/MRP to get pc/MRP to recognize the fonts.

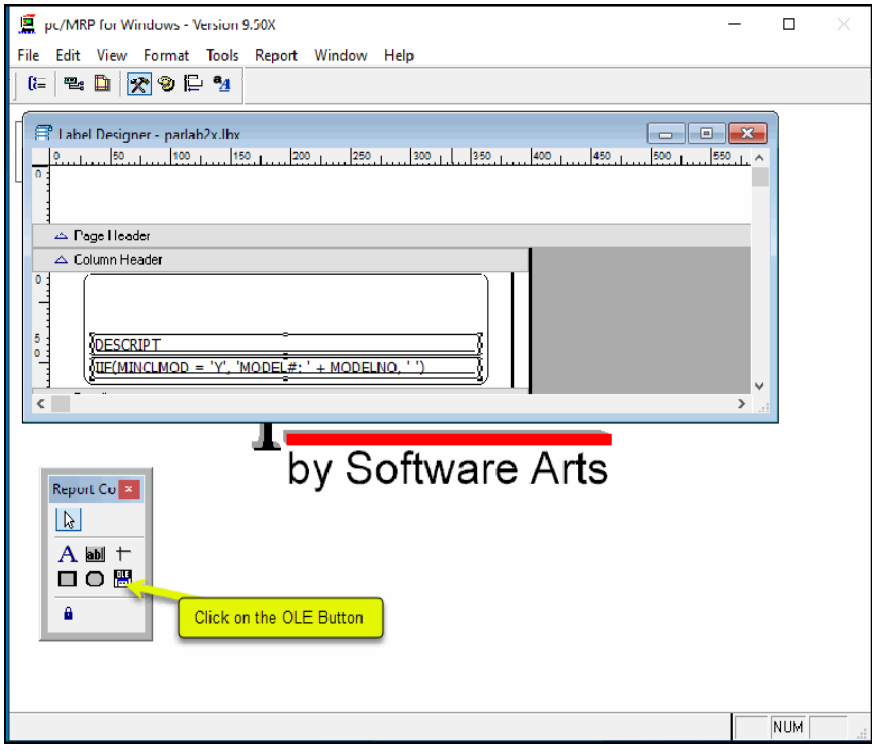
If you are using a terminal server, installation must take place directly on the terminal server by the Network Administrator.

### 16.4.2 Modifying a Report or Label to Use Barcodes

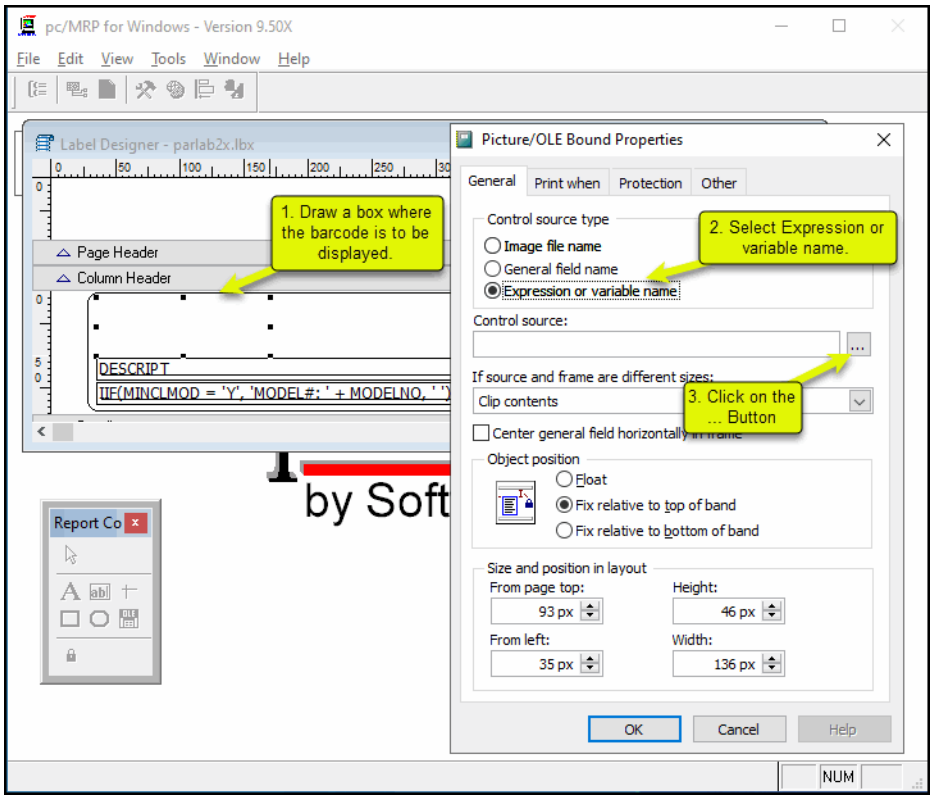
To modify a report or label, use pc/MRP's report generator, Configuration, Settings & Utilities, **Option 24**. Select the form or label to modify. Select the report or label file name.

In the Report Writer, delete a few lines to make room for the new barcode object, following the illustration below. Then move the SUBSTR line all the way down.

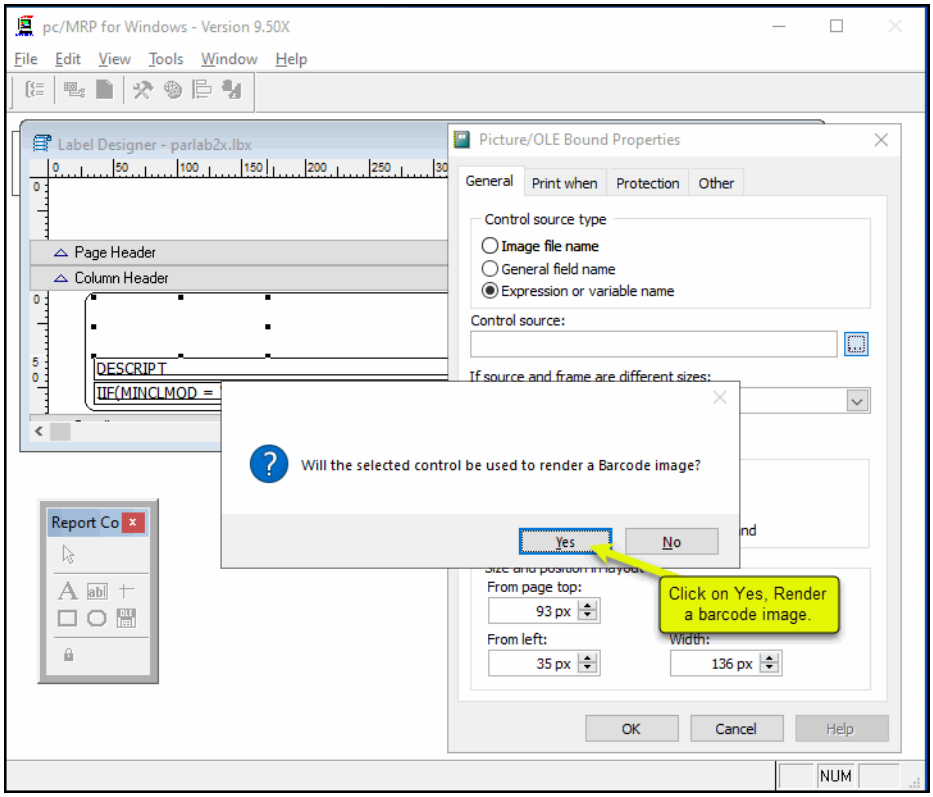


Then draw a box in the report area where the barcode image is to be displayed:

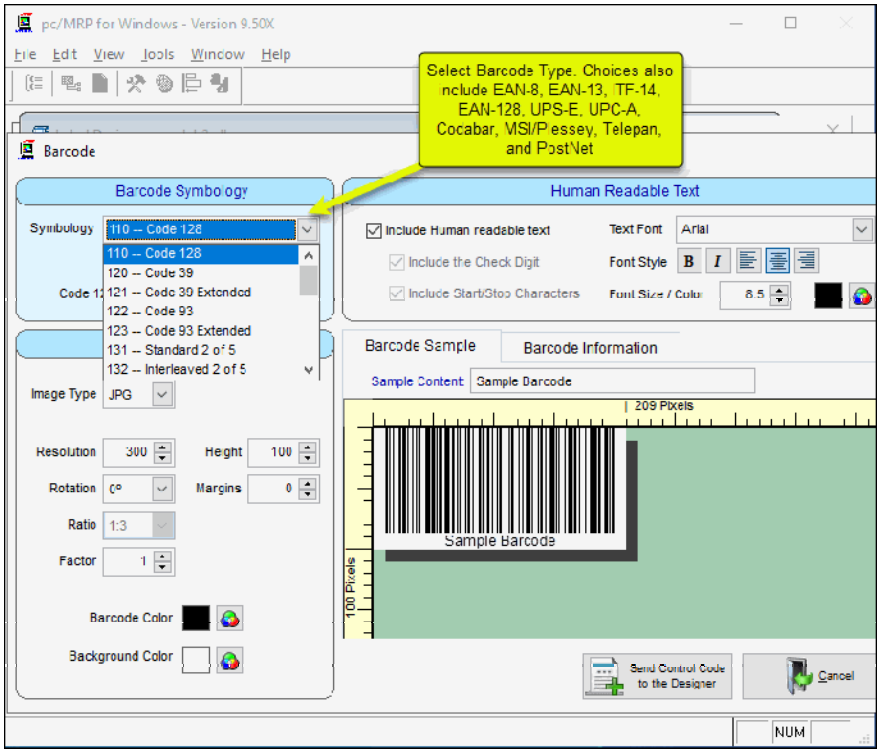



You will be presented with "Picture/OLE Bound Properties" dialog. Select "Expression or variable name" then click on the […] button. Select Yes, render a barcode image.

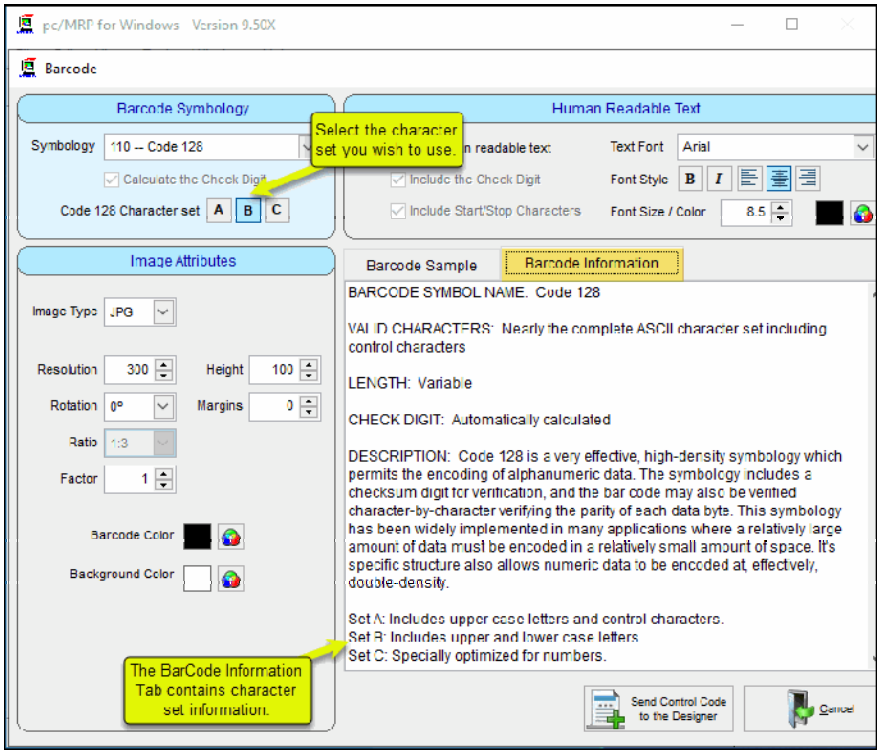


You will then be presented with the Barcode Builder screen to guide you through the process of selecting the options needed to display your barcode.

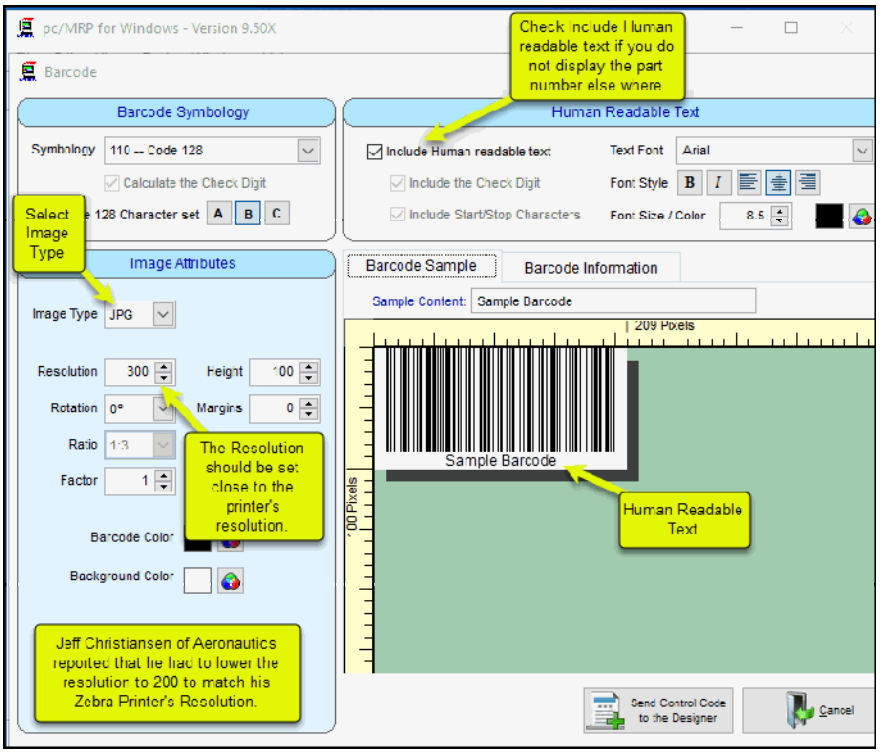
First select your barcode type:




If appropriate, select the character set required:

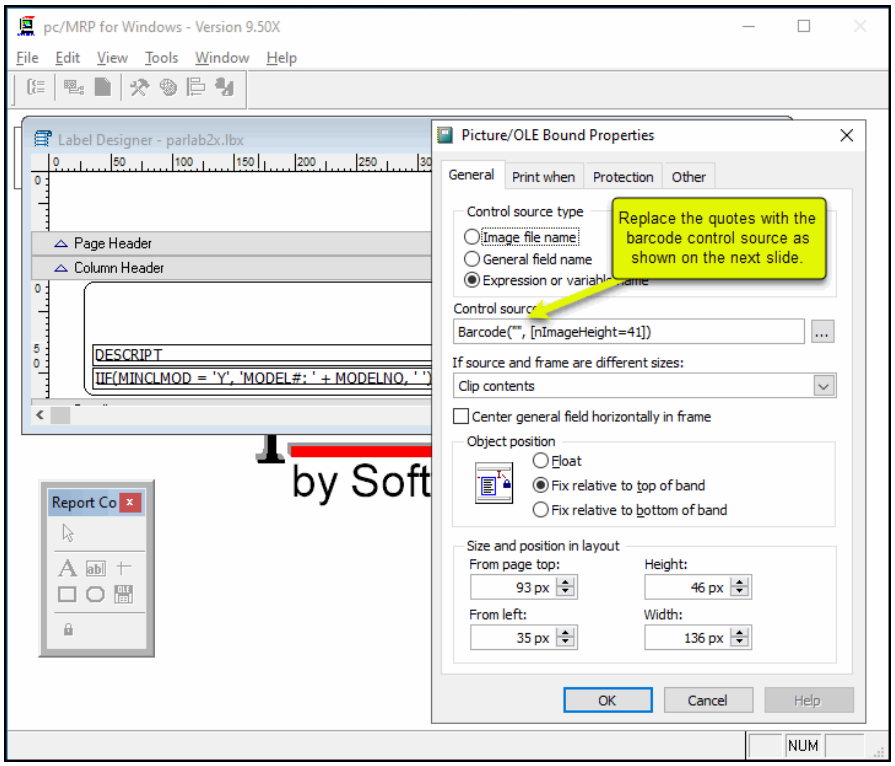


If your requirement specifies the barcode should also display human readable text, check the appropriate box:

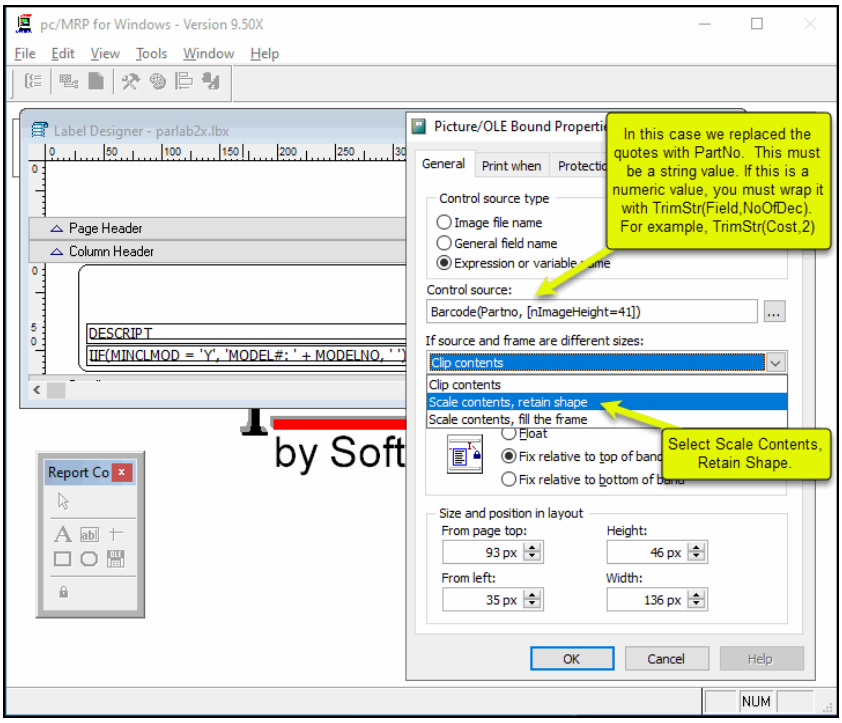



After the appropriate settings for your particular barcode application have been set, click the button at the bottom of the Barcode Builder screen ("Send Control Code..."). This will close the Barcode Builder application and return you to the Report Writer.

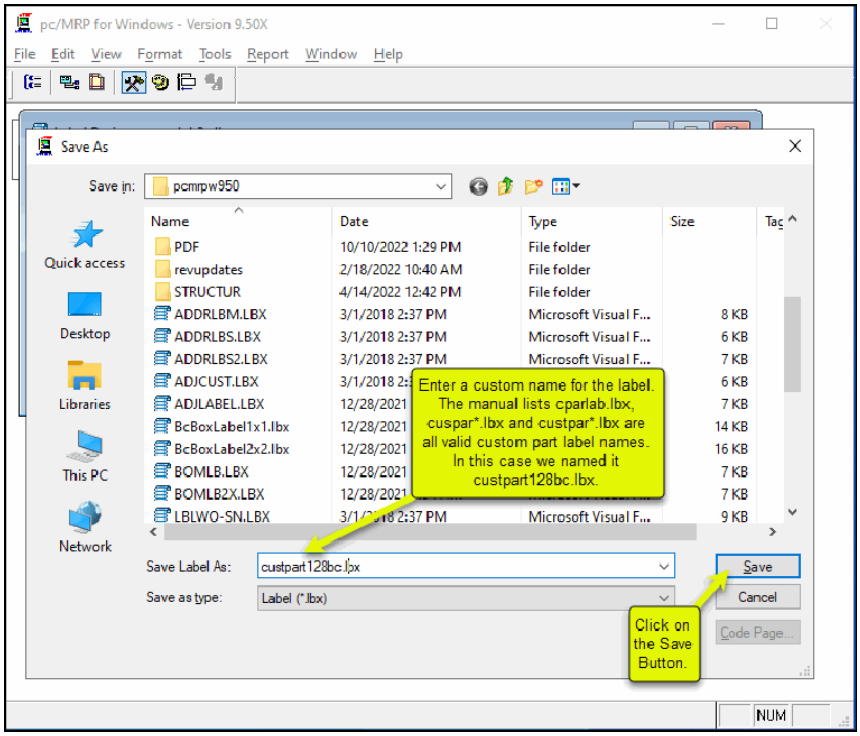
The "Control source" of the "Picture/OLE Bound Properties" dialog should now be filled with values set by the Barcode Builder:



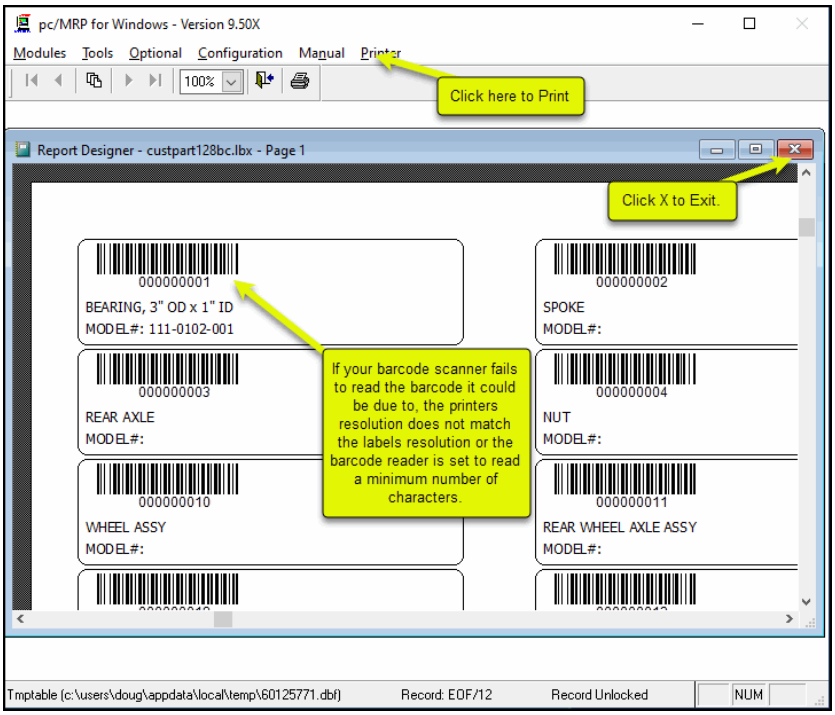
Replace the double-quotes in the "Control source" textbox with the name of the field that holds the data that is to be displayed as a barcode. This must to be a string value, e.g. TrimStr(Cost,2).




In the “If source and frame are different sizes” checkbox, select “Scale contents, retain shape”. Then click the [OK] button to close the property sheet. Click on File\Save As… to save your modified report. Refer to the Manual to determine the expected custom file name prefix for your particular report/label file.



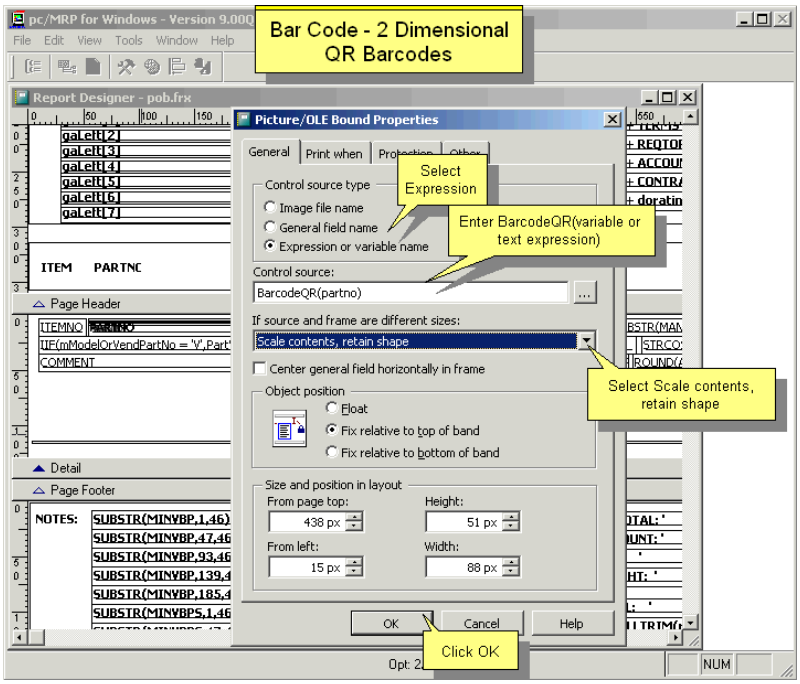
Close the Report Writer application. Run your particular report to view your work:



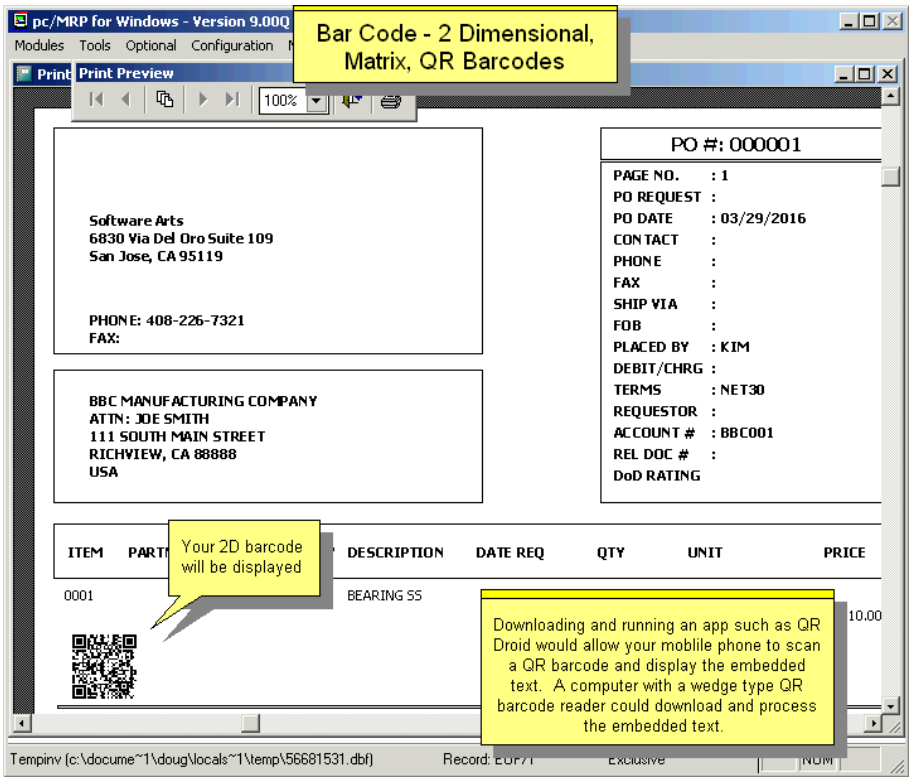

**Note**: If your barcode scanner fails to read the barcode, possible solutions are: the printer resolution doesn't match the label's resolution, or the barcode reader is set to read a minimum number of characters.

**QR Barcode Fonts**

pc/MRP offers the option to print out QR Barcode Fonts. These contain a string or URL. This function requires the file named **BARCODELIBRARY.DLL**. In the example below, we entered BarcodeQR(partno) into the Control Source field.

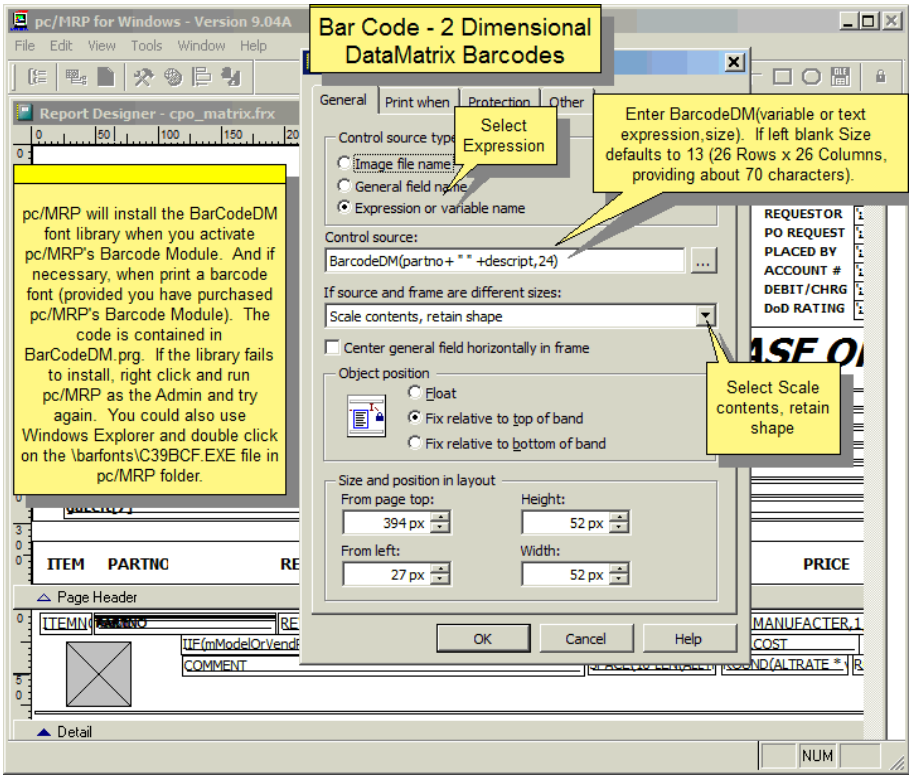


Downloading and running an app such as QR Droid would allow your mobile phone to scan a QR barcode and display the embedded text.  A computer with a wedge type QR barcode reader could download and process the embedded text.

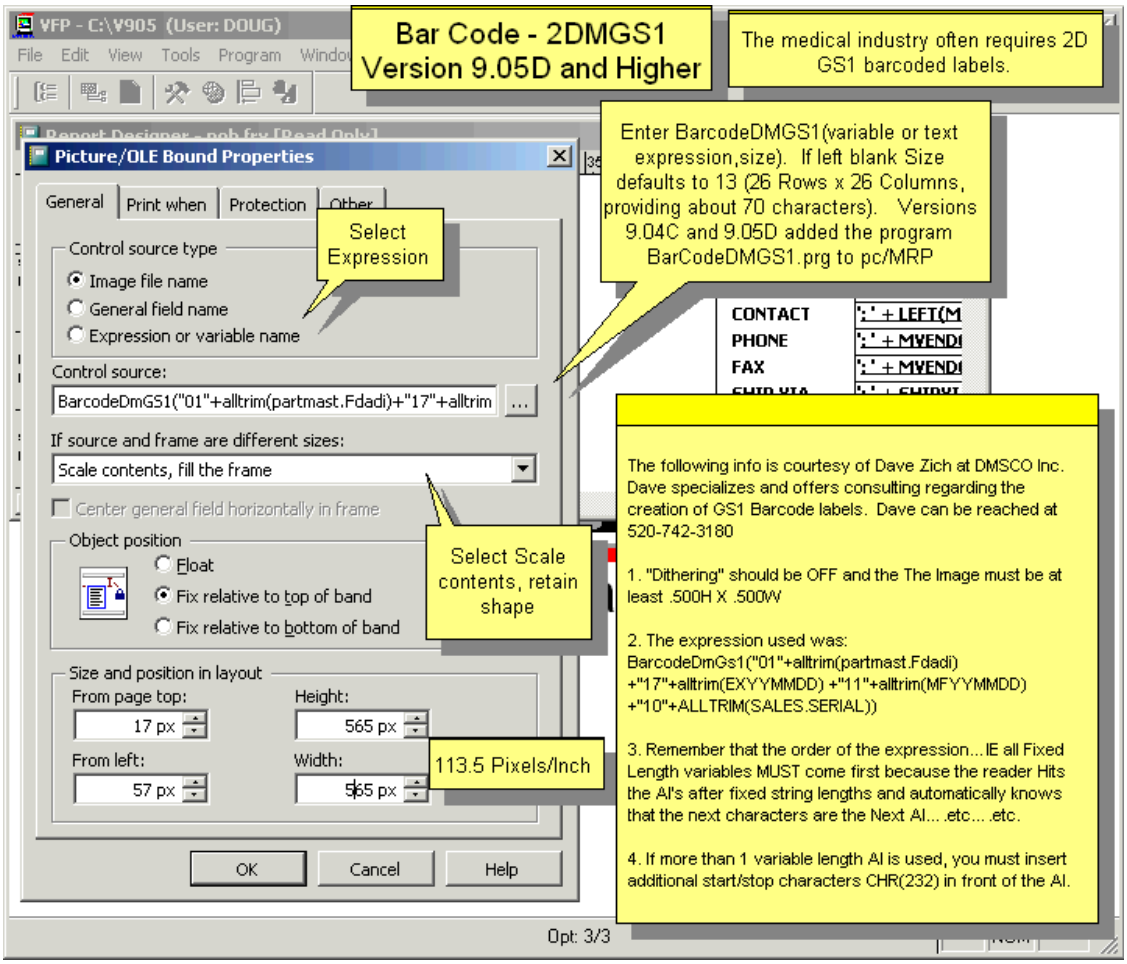



**Data Matrix Barcode Fonts**

pc/MRP offers the option to print out QR Barcode Fonts. These contain a string or URL. In the example below, we entered BarcodeDM(partno+ " " +descript) into the Control Source field.



**2D GS1 Fonts**




**16.4.3 Scanners and Downloading Data**

**Wedge Type Barcode Wands**

pc/MRP will work out of the box with any wedge type barcode reader. A wedge type barcode reader is defined as a barcode reader that inserts itself in between the computer key board and the CPU unit (i.e. the keyboard plugs into the wedge barcode reader and the wedge is plugged into the computer's keyboard connector). The computer will then read any input from either the wand or the keyboard. You could use a simple inexpensive model like the Unitech MS250 or MS180.

**Portable Barcode Wands**

Portable barcode wands can be used to take a physical inventory and then later download the part numbers and quantities from the portable barcode wand's docking station into pc/MRP's physical inventory program. The portable barcode wand must be programmed that it can download a comma delimited text file into the pcmrpw directory. The file must consist of part numbers and quantities separated by commas and line returns as shown below:

000000001,47.00
000000010,53.00
890000000,40.00

The Unitech HT630 comes with a built-in program. A video about how to program the HT360 to create such file can be seen at http://www.youtube.com/watch?v=6sbYUrtgMcw (a video posted by UnitechEurope).

**Downloading data from a Unitech's HT630 Barcode Scanner**

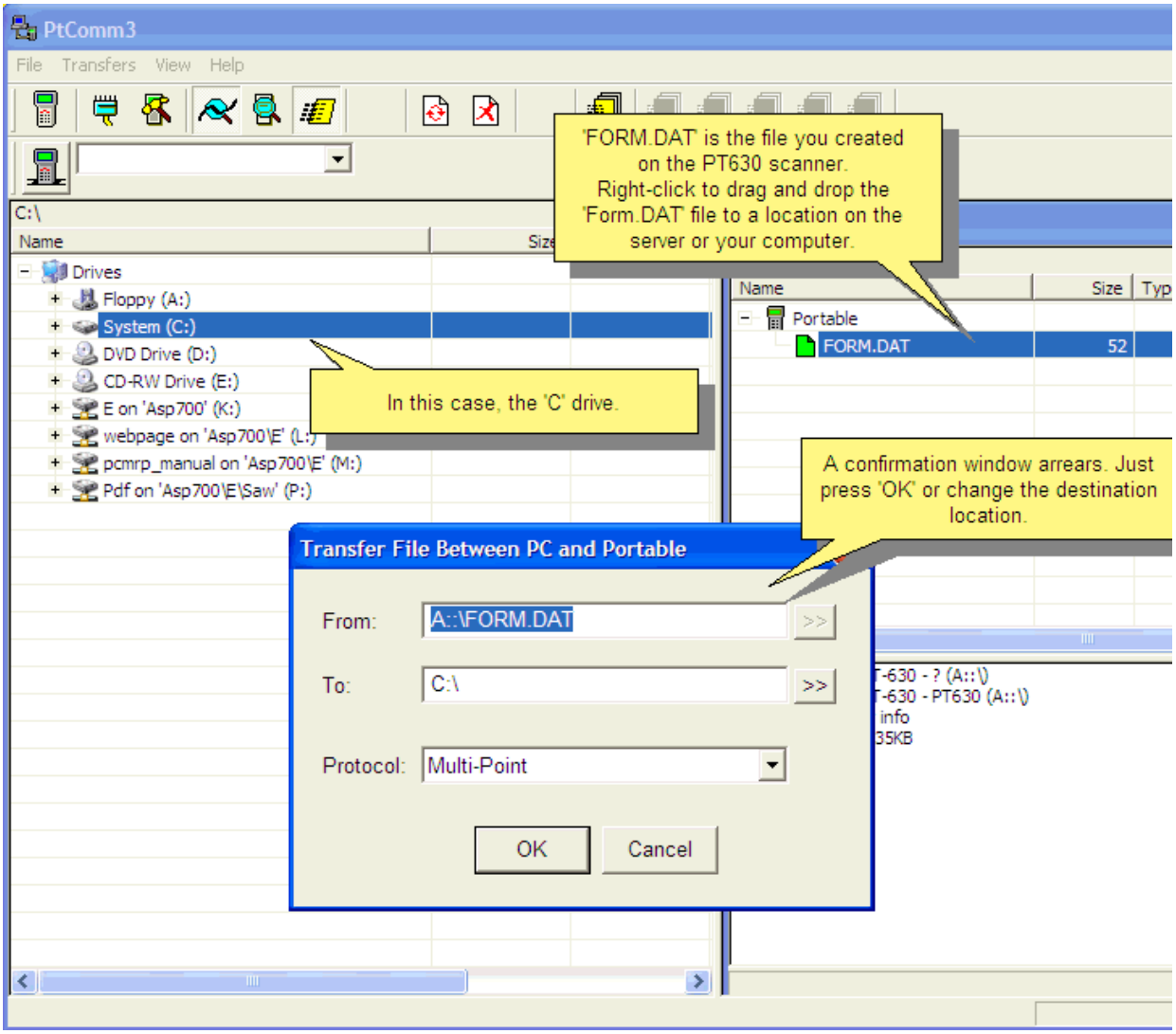
Unitech's HT630 (800-861-8648) comes with a program for pc/MRP built in. To take an inventory with the HT630 follow the steps listed below:

1. Turn on the HT630
2. Press and hold 'CMD'
3. Select Option 2 for Terminal from the Menu
4. Select Option 2 again for Form caching
5. At Item:, scan the barcoded parts or bin boxes
6. At Qty:, scan or enter the quantities
7. After you are finished, press 'Esc' to exit.
8. Screen clears to operating mode

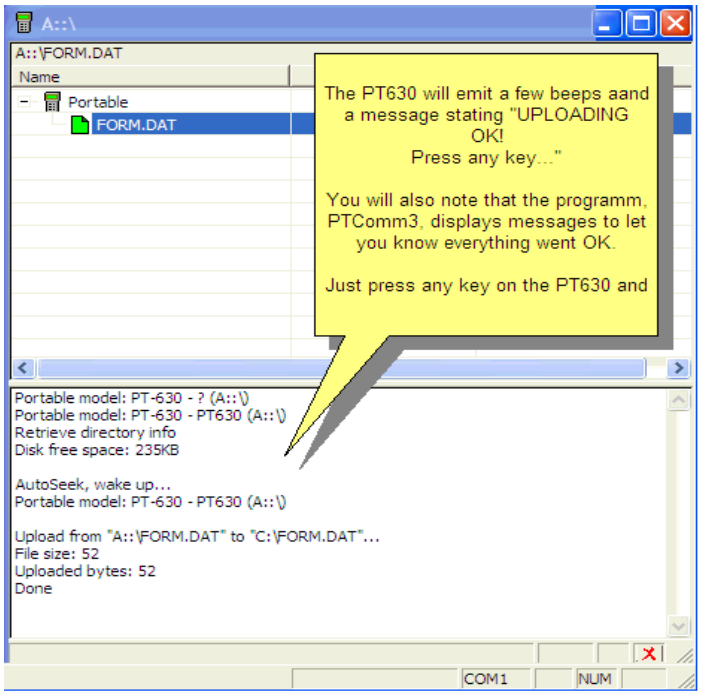
To download the physical inventory count follow the steps listed below:

1. Set the HT630 into its cradle attached to the PC or connect the cable directly to the serial port.
2. Go into Start, Programs, and run PTComm3

The following screen appears:



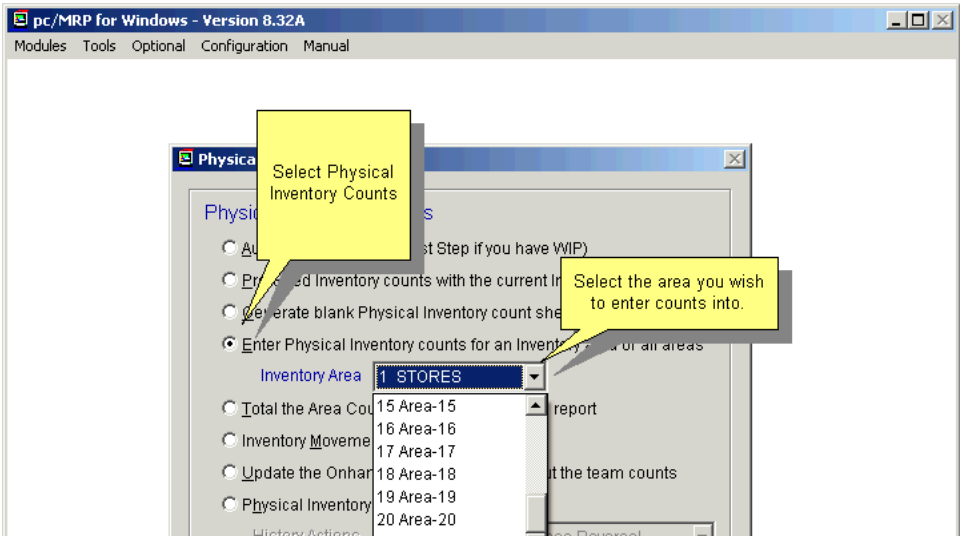

The program recognizes the Barcode reader and displays the Form data file with the inventory data in the reader. Left-click on the file name and drag it to the directory structure you wish to save the file in. This can be a server directory or your computer. Remember where you saved the data file. After you release the mouse button, this screen appears to show that the transfer went OK.




**Import the downloaded data**

To import the data with the Physical Inventory or Cycle Count by going to Modules, Inventory, Physical Inventory. For this example, choose Full Physical Inventory.

Select the area to receive the inventory counts and click OK.




Select “Import” to get the inventory data from the data file you created.
Then

1. Select the saved inventory data file
2. Choose to append or replace counts
3. Press ‘OK’

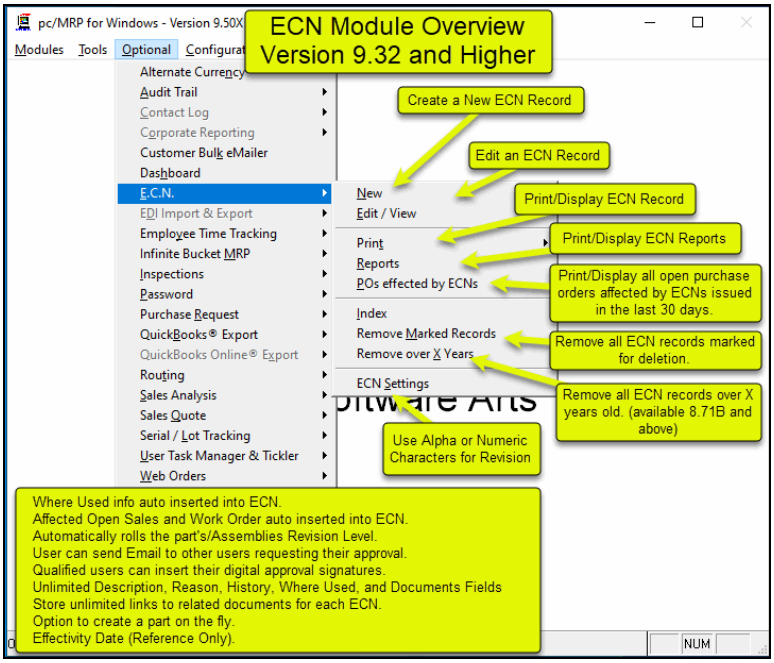
Most times, you will be replacing the previous inventory counts. A situation to “Append” would be where there are multiple storage areas for a part within a single ‘STORES’ area.

You either get the message “The importation has completed. No errors were detected.”, or you get a message that tells you how many “errors were detected during the import”. Print out the report and fix the errors before continuing with more counts and areas. Correct any errors and re-process individually or in the next import.

You may now continue as described in Section 6.5 for Physical Inventory.

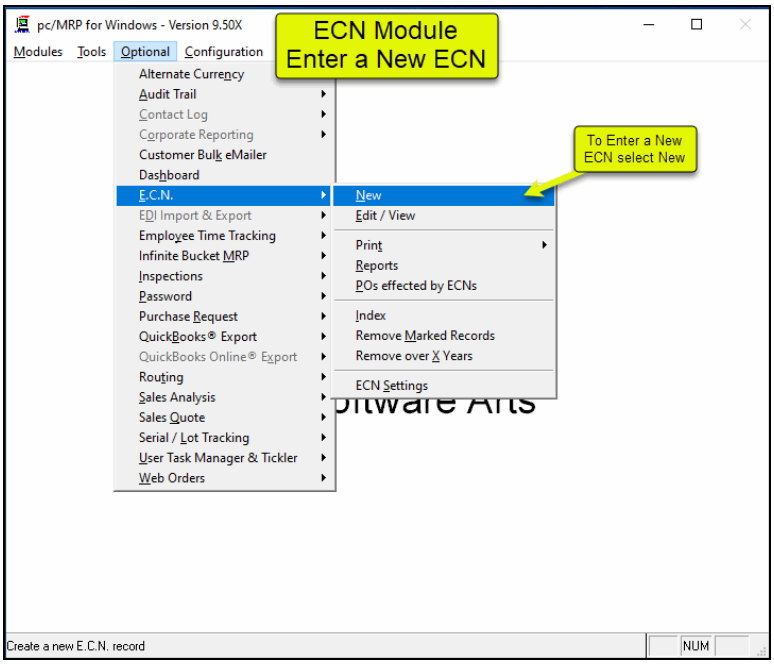
# 16.5 Optional ECN Module

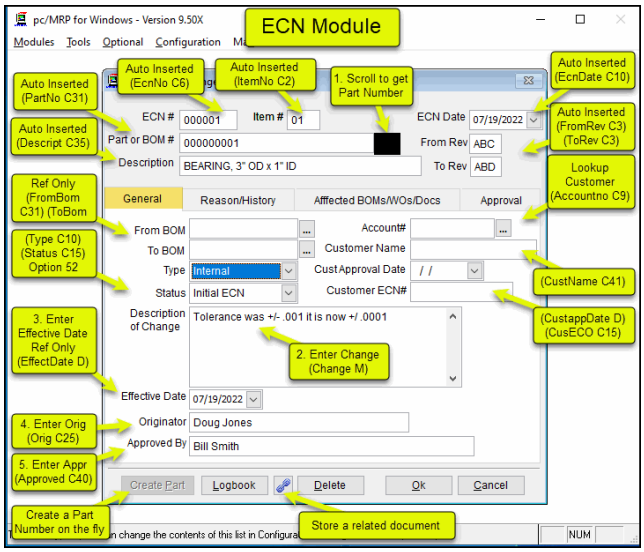
## 16.5.1 Engineering Change Notice Module Overview

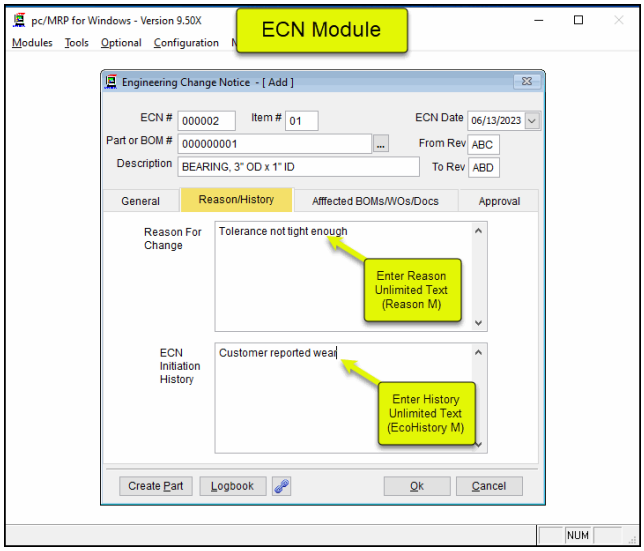


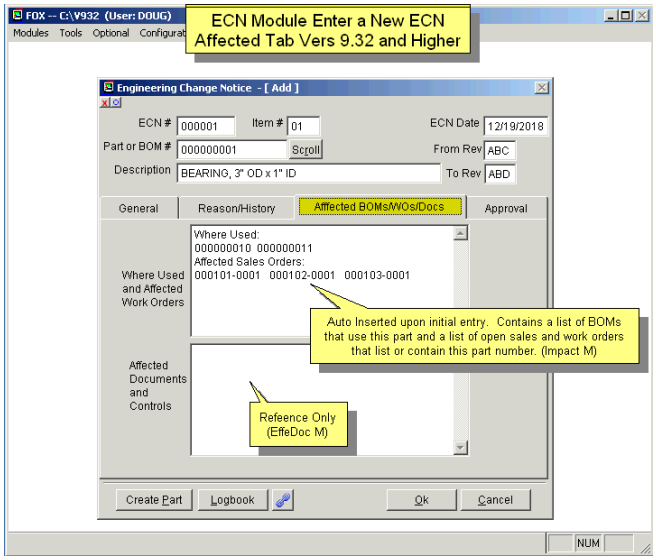

The Engineering Change Notice Module creates, edits, and prints out ECNs and ECN Reports. In addition, it will also print out ECN reports that notify purchasing of all open purchase orders that contain part numbers that are affected by ECNs issued in the last 30 days.

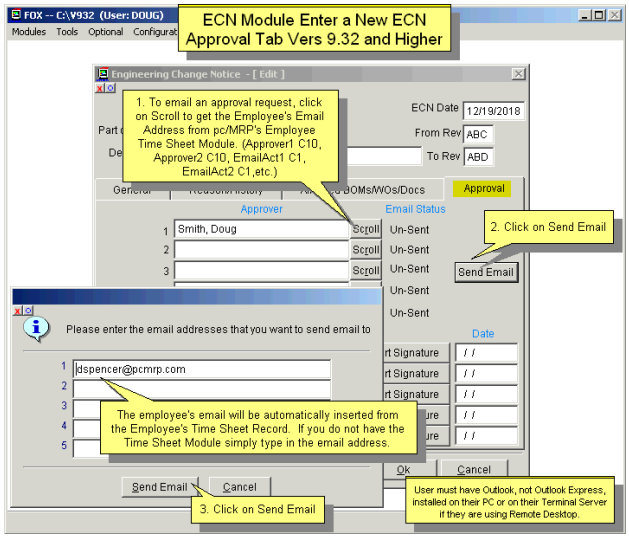
## 16.5.2 New (Add an Engineering Change Notice)

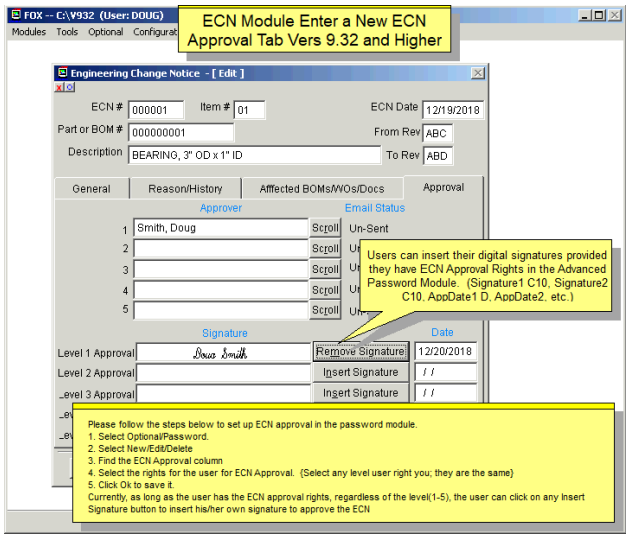


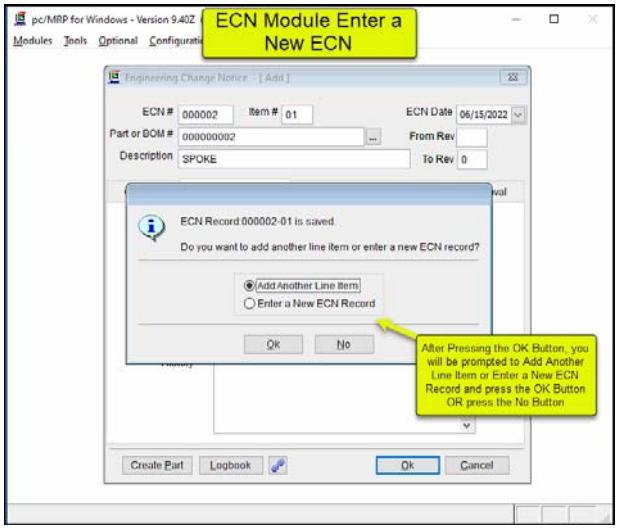

ECN Module
pc/MRP for Windows - Version 9.50X
Modules Tools Optional Configuration
Auto Inserted (PartNo C31)
Auto Inserted (EcnNo C6)
Auto Inserted (ItemNo C2)
1. Scroll to get Part Number
Auto Inserted (EcnDate C10)
Auto Inserted (Descript C35)
Auto Inserted (FromRev C3) (ToRev C3)
Lookup Customer (Accountno C9)
Ref Only (FromBom C31) (ToBom
(Type C10) (Status C15) Option 52
(CustName C41)
(CustappDate D) (CusECO C15)
3. Enter Effective Date Ref Only (EffectDate D)
2. Enter Change (Change M)
4. Enter Orig (Orig C25)
5. Enter Appr (Approved C40)
Create a Part Number on the fly
Store a related document
ECN # 000001
Item # 01
ECN Date 07/19/2022
Part or BOM # 000000001
From Rev ABC
Description BEARING, 3" OD x 1" ID
To Rev ABD
General
Reason/History
Affected BOMs/WOs/Docs
Approval
From BOM
To BOM
Type Internal
Status Initial ECN
Account#
Customer Name
Cust Approval Date
Customer ECN#
Description of Change
Tolerance was +/- .001 it is now +/ .0001
Effective Date 07/19/2022
Originator Doug Jones
Approved By Bill Smith
Create Part
Logbook
Delete
Ok
Cancel
NUM


ECN Module
pc/MRP for Windows - Version 9.50X
Modules Tools Optional Configuration
Engineering Change Notice - [ Add ]
ECN # 000002
Item # 01
ECN Date 06/13/2023
Part or BOM # 000000001
From Rev ABC
Description BEARING, 3" OD x 1" ID
To Rev ABD
General
Reason/History
Affected BOMs/WOs/Docs
Approval
Reason For Change
Tolerance not tight enough
Enter Reason Unlimited Text (Reason M)
ECN Initiation History
Customer reported weai
Enter History Unlimited Text (EcoHistory M)
Create Part
Logbook
Ok
Cancel
NUM


FOX -- C:\V932 (User: DOUG)
ECN Module Enter a New ECN Affected Tab Vers 9.32 and Higher
Engineering Change Notice - [ Add ]
ECN # 000001
Item # 01
ECN Date 12/19/2018
Part or BOM # 000000001
Scroll
From Rev ABC
Description BEARING, 3" OD x 1" ID
To Rev ABD
General
Reason/History
Affected BOMs/WOs/Docs
Approval
Where Used and Affected Work Orders
Where Used:
000000010 000000011
Affected Sales Orders:
000101-0001 000102-0001 000103-0001
Auto Inserted upon initial entry. Contains a list of BOMs that use this part and a list of open sales and work orders that list or contain this part number. (Impact M)
Affected Documents and Controls
Refeence Only (EffeDoc M)
Create Part
Logbook
Ok
Cancel
NUM


ECN Module Enter a New ECN Approval Tab Vers 9.32 and Higher
1. To email an approval request, click on Scroll to get the Employee's Email Address from pc/MRP's Employee Time Sheet Module. (Approver1 C10, Approver2 C10, EmailAct1 C1, EmailAct2 C1,etc.)
2. Click on Send Email
Please enter the email addresses that you want to send email to
dspencer@pcmrp.com
The employee's email will be automatically inserted from the Employee's Time Sheet Record. If you do not have the Time Sheet Module simply type in the email address.
3. Click on Send Email
User must have Outlook, not Outlook Express, installed on their PC or on their Terminal Server if they are using Remote Desktop.


ECN Module Enter a New ECN Approval Tab Vers 9.32 and Higher
Users can insert their digital signatures provided they have ECN Approval Rights in the Advanced Password Module. (Signature1 C10, Signature2 C10, AppDate1 D, AppDate2, etc.)
Please follow the steps below to set up ECN approval in the password module.
1. Select Optional/Password.
2. Select New/Edit/Delete
3. Find the ECN Approval column
4. Select the rights for the user for ECN Approval. (Select any level user right you; they are the same)
5. Click Ok to save it.
Currently, as long as the user has the ECN approval rights, regardless of the level(1-5), the user can click on any Insert Signature button to insert his/her own signature to approve the ECN


ECN Module Enter a New ECN
ECN Record 000002-01 is saved.
Do you want to add another line item or enter a new ECN record?
Add Another Line Item
Enter a New ECN Record
After Pressing the OK Button, you will be prompted to Add Another Line Item or Enter a New ECN Record and press the OK Button OR press the No Button

### 16.5.3 Edit/View (Delete, Undelete) an Engineering Change Notice

This option allows users to scroll, edit, delete, undelete or run queries against ECN records.

Selecting an **Indexed Search** allows users to search on indexed fields. This allows pc/MRP to find the information much faster. To perform an Indexed Search select the Indexed Search tab and the desired Sort Order, ECN Number, Part Number and Date. Enter the applicable data in the Begin Scrolling At: field. Select the desired Action, View or Edit. Press Search.

pc/MRP will automatically scroll to the desired record or the nearest match. Select the correct record by scrolling and press Ok to proceed to the edit screen for that record.

Selecting to run a **Queried Search** allows users to build, run, save, and load queries for the ECN table. For further details see Chapter 15.14.

Once the record has been marked for deletion you must set an administrative lockout, and then select ECN, Remove Marked Records. Deleting an ECN will not reverse its effect.

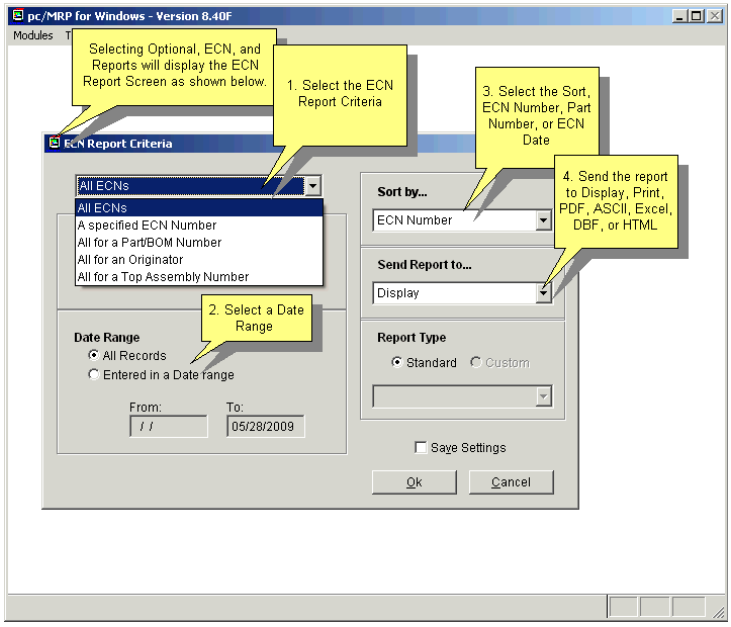
### 16.5.4 Reports (Print/Display Engineering Change Notices)

Allows you to print out or display Engineering Change Notices. Your options are as follows:

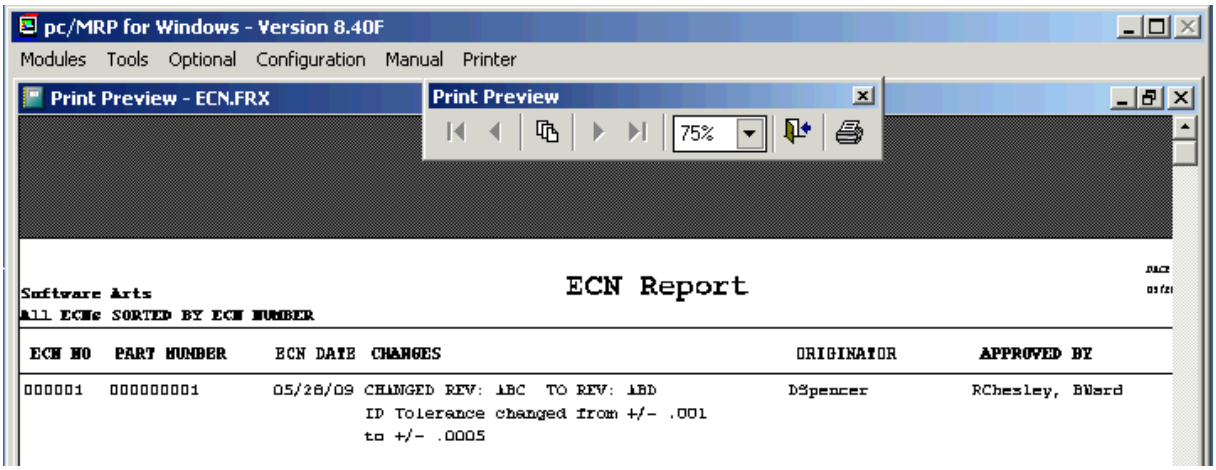
- All engineering change notices
- A specified engineering change notice
- All engineering change notices for a specified part/BOM number
- All engineering change notices for a specified top assembly number
- All engineering change notices for a specified originator

Any of the above may be sorted by: ECN Number, Part Number, Date.

Any of the above may be listed for a specified date range, or for all records.

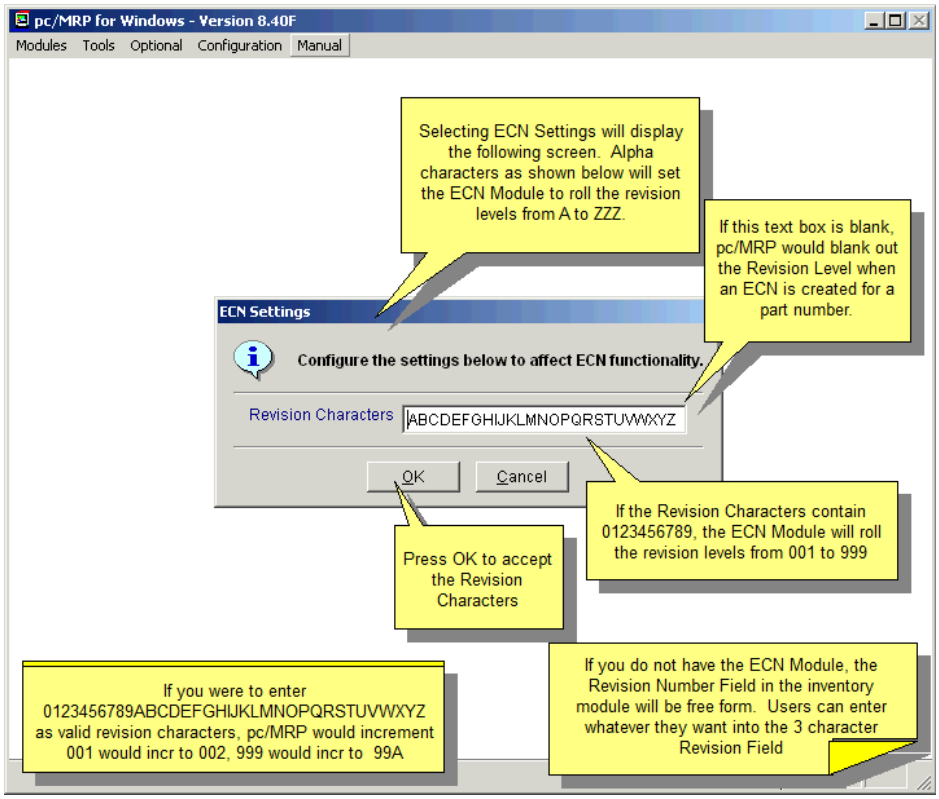


Sample report:




The POs affected by ECNs report lists all ECN records in the past 30 days, which list a change in a part that has an open PO.

### 16.5.5 ECN Settings




### 16.5.6 Purchase Orders Affected By ECNs

This feature will allow you to print/display all open purchase orders affected by ECNs issued in the last 30 days.

### 16.5.7 Index (see 15.14.3)

### 16.5.8 Remove Marked Records (see 15.14.4)

### 16.5.9 Remove Over X Years (see 15.14.5)

# 16.6 Optional Sales Analysis Module

### 16.6.1 Overview

Sales Analysis will offer the following five functions:

**The Book to Bill Reports** can analyze sales by territory and customer. Bookings and Billings for each customer and territory are reported for the month specified complete with a YTD % of goal figure.

**The Consolidated BOM Reports** will consolidate parts within various levels of a BOM and print each part number once with its consolidated quantity. Multiple BOMs can be consolidated and printed out in spreadsheet fashion to analyze the purchasing requirements and costs for each part required to fabricate the multiple BOMs analyzed.

The **Cost of** S**ales Report** will generate a report sorted on Part number and subtotaled on product codes. The report can be displayed, sent to a printer or to a disk as an ASCII or DBF file. You can select the starting date and ending dates to be analyzed.

**The Estimated Usage and Min Qty Reports** will calculate, print out and replace the estimated usage and minimum quantities based on invoice history. Safety stock can be set by percentage or by number of weeks of safety stock you wish to maintain. The reports provide an option to print out all trace calculations allowing the user to track the basis for all stocking levels. Individual parts whose minimum quantity level should not be changed regardless of estimated usage could be maintained by entering "SAV" into that part's CATINDEX field.

**The Sales Trend Reports** can be used to spot sales trends. Sales data can be subtotaled in up to four user defined time periods. In addition, the report can be subtotaled by part number, vendor, or customer. Sorting options include by Part Number, Vendor, $ amount, or Quantity.

### Activating the Sales Analysis Module

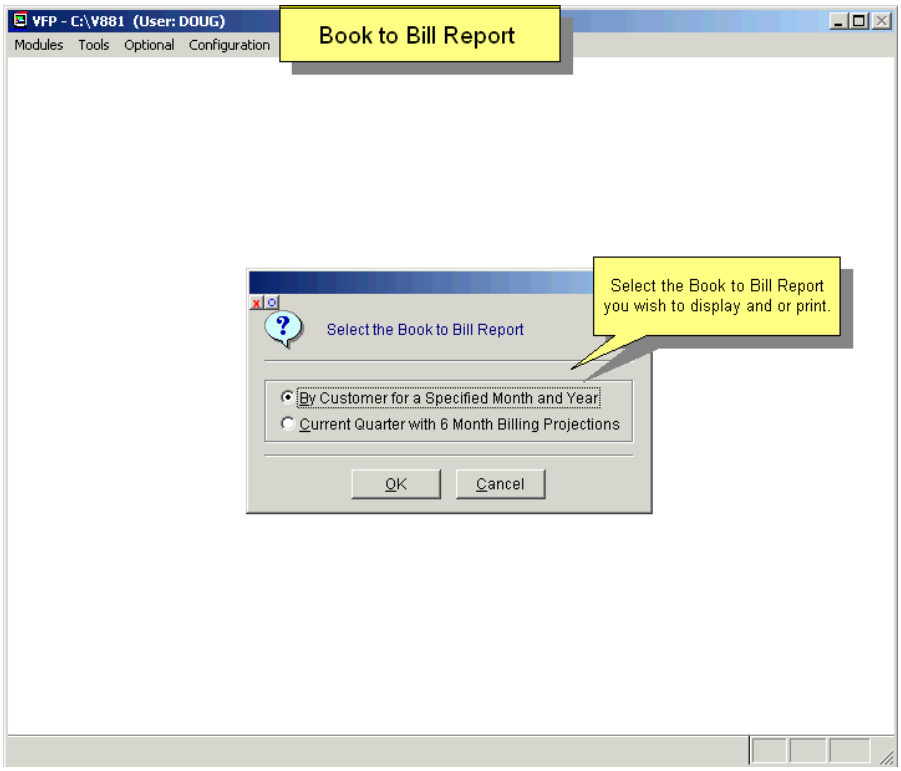
To activate the Sales Analysis module, call Software Arts (408-226-7321) to get your Sales Analysis activation code number.

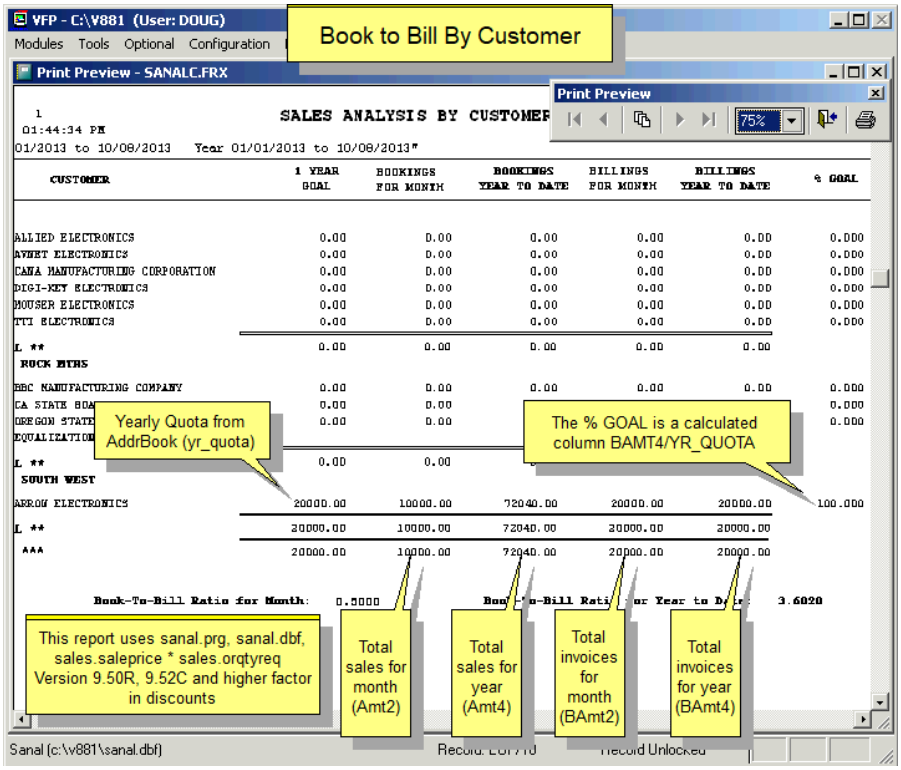
### Inventory Fields Used by the Sales Analysis Module

**MinQty**(minqty) (5 per week x 2 weeks = 10). Set by hand or auto set with Sales Analysis. Min weeks of inventory will allow entry of the desired number of weeks of safety stock to be used when recalculating the MinQty. **Weeks Onhand** will be updated at the end of the first pass. The new value will be based on the inventory available divided by the ave weekly usage. The calculation settings screen has a “Consider components already consumed by built assemblies to be available” check box that will “deconstruct” all inventories assys into their components for the purpose of calculating the weeks onhand.
WeeksOnhand = MinMax(WeeksOfInv/Usage,0,999)

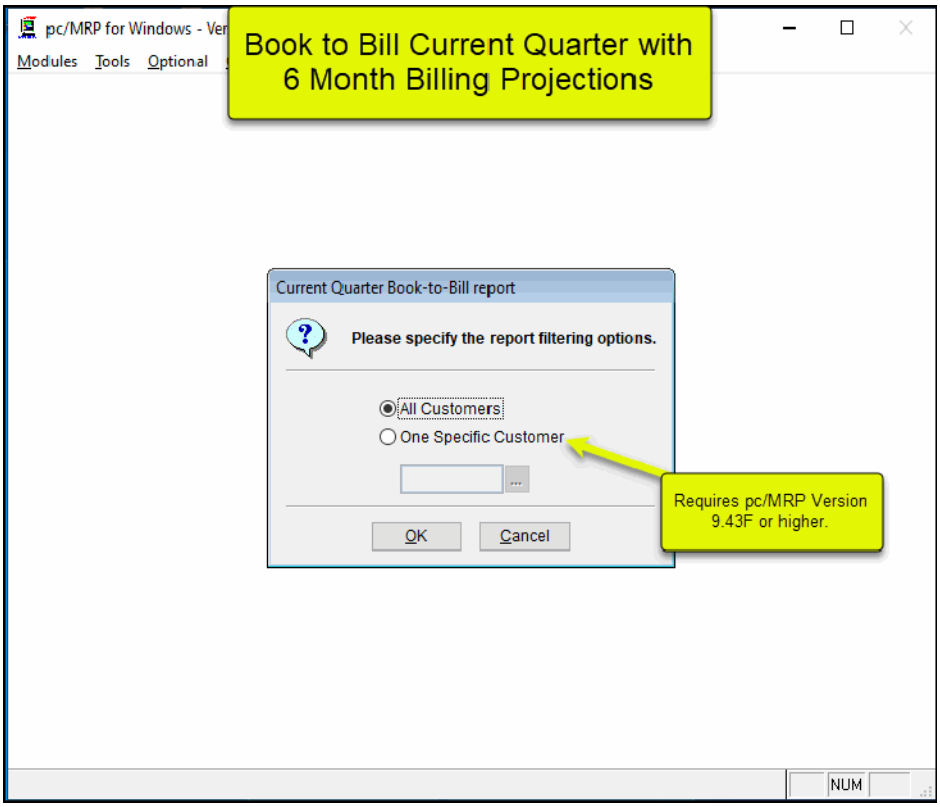
### 16.6.2 Book to Bill

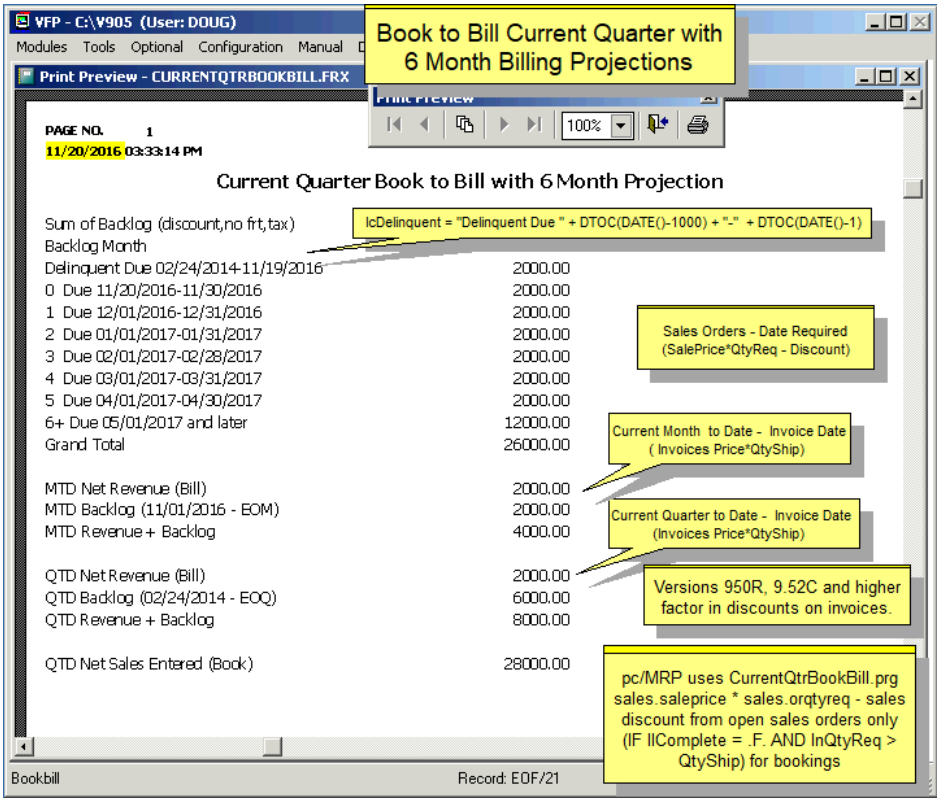
The Book to Bill report can be generated to analyze sales by territory and customer. The report can include all customers, customers with sales, or customers with no sales. The report can be displayed, sent to a printer or to a disk as an ASCII, DBF, PDF or HTML file, or sent to Excel. The report can be generated for any month and year desired. Bookings and Billings for the month selected are sorted and subtotaled by territory and customer including the YTD % of goal. The report uses the quota field in pc/MRP's Address Book to determine the % of goal.



## Book to Bill Current Quarter with 6 Months Billing Projection



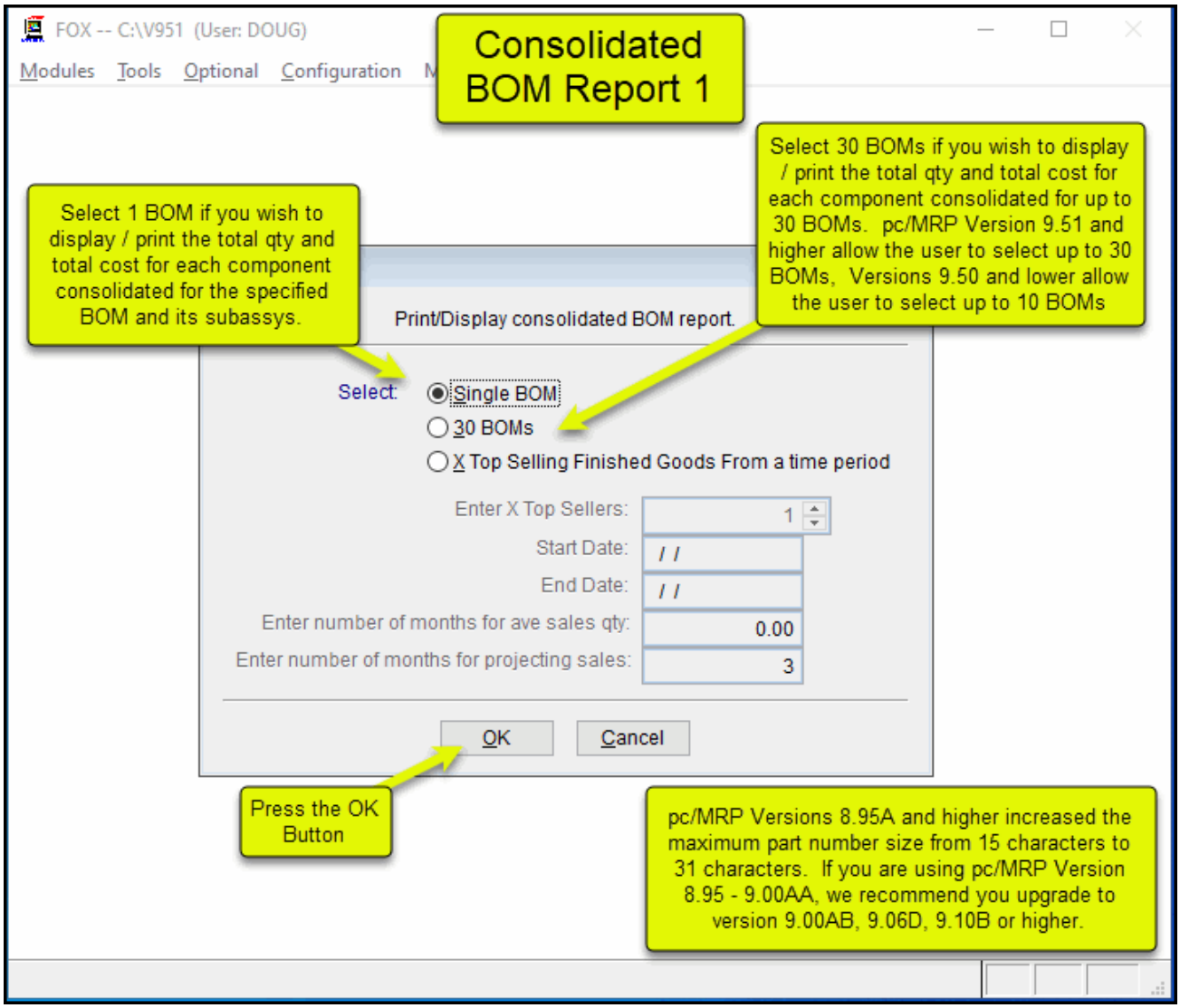
### 16.6.3 Consolidated BOM Reports

Selecting Consolidated BOM Reports will allow you to print/display Consolidated BOMs. Enter S or M for a single or multiple consolidated BOM printout or display. Enter the consolidated BOM number(s) and quantity(s). Choose the Costed or Uncosted report format.

If you select costed, choose between average or standard cost. If you select standard cost, the price/quantity fields in inventory will be used to select the correct unit price according to the consolidated total quantity for each part number.

If you select a single consolidated report to be printed out, you will be prompted to include a 9 month PO history report for each part number. Please note: the Total Cost in a Costed Single Consolidated Report is 0 if the there are enough parts on hand and on order to cover the total quantity required.

The Total Cost will equal: *unit cost * (qtyreq - onhand - onorder)* *if qtyreq > onhand + onorder*.



**SINGLE CONSOLIDATED COSTED DISPLAY FORMAT:**

```
PART NUMBER     DESCRIPTION            TOTAL QTY   TOTAL COST
000000001       BEARING 3"               60        30.00
000000002       SPOKES                   90        180.00
000000004       HUB SS                   40        20.00

                          TOTAL COST     230.00
```

## SINGLE CONSOLIDATED UNCOSTED DISPLAY FORMAT:

```
 PART NUMBER     DESCRIPTION            TOTAL QTY
 000000001       BEARING 3"               60
 000000002       SPOKES                   90
 000000004       HUB SS                   40
```

**SINGLE CONSOLIDATED COSTED PRINTOUT FORMAT:**

```
PART NUMBER   MODEL NUMBER    DESCRIPTION         MANUFACTURER     QTY REQ     COST
000000001     B30304          BEARING 3"          GENIS CORP       60.00     30.00
              EII444444                           STANFORE INC.
000000002     SS 95495        SPOKES              ALLBRIGHT        90.00    180.00
              SS 95495                            BRETTE  MFG
              40R-E-A                             MANES INC
000000004     RR - 89         HUB SS              FENWAY MFG       40.00     20.00
                                                  TOTAL COST       230.00
```

**SINGLE CONSOLIDATED UNCOSTED PRINTOUT FORMAT:**

```
PART NUMBER   MODEL NUMBER      DESCRIPTION          MANUFACTURER     QTY REQ
000000001     B30304            BEARING 3"           GENIS CORP       60.00
              EII444444                              STANFORE INC.
000000002     SS 95495          SPOKES               ALLBRIGHT        90.00
              SS 95495                               BRETTE  MFG
              40R-E-A                                MANES INC
000000004     RR - 89           HUB SS               FENWAY MFG       40.00
```

**SINGLE CONSOLIDATED COSTED W PO HISTORY FORMAT:**

```
PART NUMBER   DESCRIPTION  LOCATE    ONORDER   ONHAND   QTY REQ  STATUS  TOTAL COST
000000001     BEARING 3"   1A2         0.00    0.00     60.00  -60.00       0.00
              PO NUM VENDOR ID  PO DATE  ORDER QTY  QTY RECVD   UNIT COST
              000103 VMARS      06/06/93    400.00     400.00      0.5000
000000002     SPOKES       3A4        180.00    0.00     90.00     OK       0.00
              PO NUM VENDOR ID  PO DATE  ORDER QTY  QTY RECVD   UNIT COST
              000505 SDI009     07/06/93    200.00     200.00      0.5000
000000004     HUB SS       R5B1        50.00   50.00     40.00     OK       0.00
                                       TOTAL COST       30.00
```

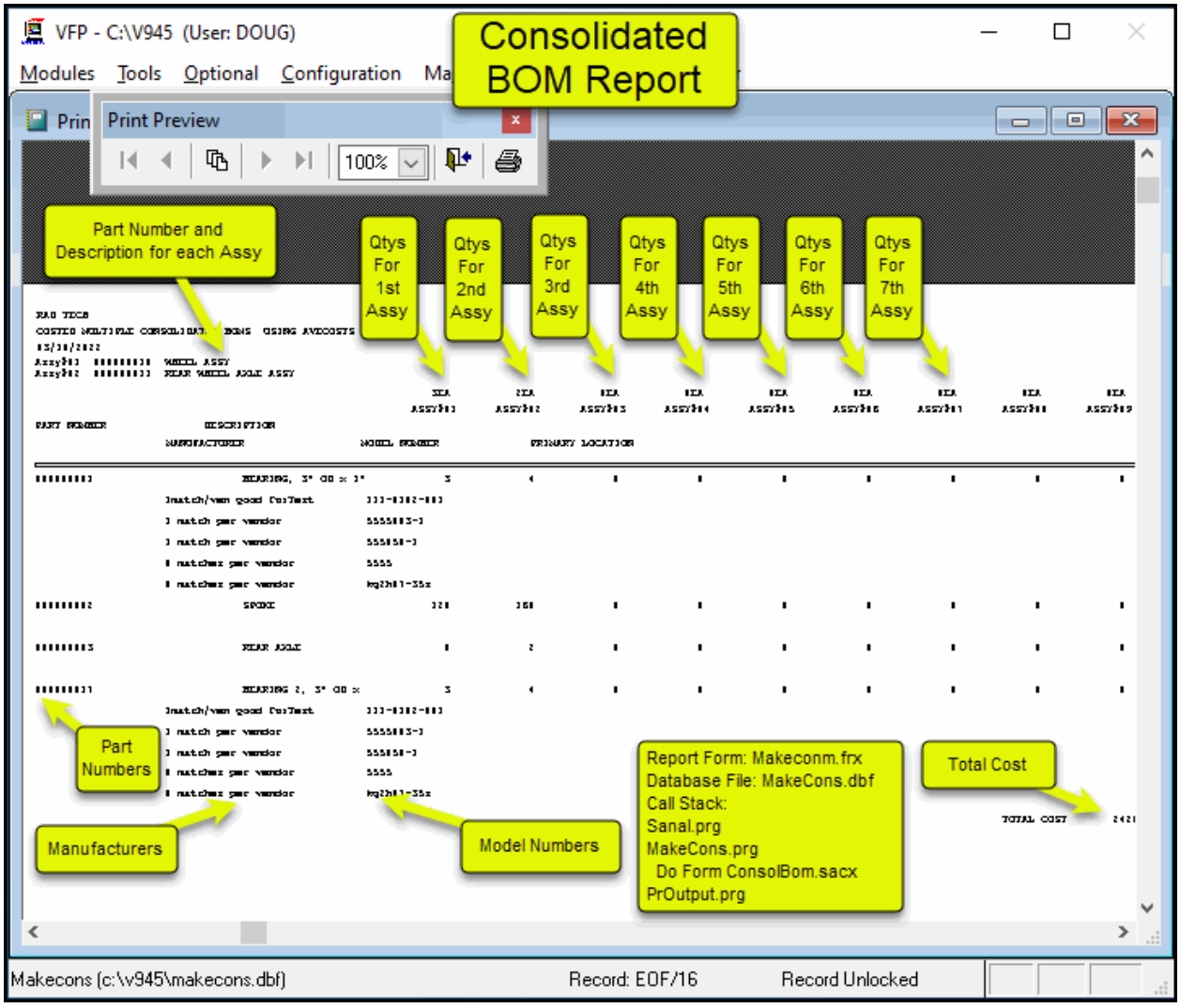
## MULTIPLE CONSOLIDATED PRINTOUT FORMAT:

```
BOM QTY      2 EA   2 EA   2 EA  2 EA   2 EA
          ASSY # ASSY # ASSY # ASSY # ASSY # TOTAL PRICE BREAK  TOTAL  ONORDER ONHAND
PART #  DESC 000010 000015 000034 000235 003310  QTY   UNIT COST    COST     QTY    QTY
00001 WHEEL   2      5     30     20      3      60        .50  30.00      5      5
00002 SPOKES 40     10     10     20     10      90       2.00 180.00      0     10
00004 HUB SS  5      5     10     10     10      40        .50  20.00     23     10

                                    TOTAL COST         230.00
                                    TOTAL PER UNIT COST  115.00
```

**Notes:**

The maximum number of BOMs that can be consolidated in one report is 30. The price break costs are automatically entered from the inventory price break table. BOM quantities can be different for each BOM. Select Column headings by Description if your assembly number exceeds 10 characters in length. Selecting "Description columns" prints the first 10 characters of each Assembly Description. If you select "Assy Number columns" and your part numbers are larger than 10 characters, the total width of the columns could exceed the width of the page.


VFP - C:\V945 (User: DOUG)
Modules Tools Optional Configuration
Consolidated BOM Report
Print Preview
100%
Part Number and Description for each Assy
Qtys For 1st Assy
Qtys For 2nd Assy
Qtys For 3rd Assy
Qtys For 4th Assy
Qtys For 5th Assy
Qtys For 6th Assy
Qtys For 7th Assy
Part Numbers
Manufacturers
Model Numbers
Report Form: Makeconm.frx
Database File: MakeCons.dbf
Call Stack:
Sanal.prg
MakeCons.prg
Do Form ConsolBom.sacx
PrOutput.prg
Total Cost
Makecons (c:\v945\makecons.dbf)
Record: EOF/16
Record Unlocked

### 16.6.4 Cost of Sales Report

Selecting Cost of Sales will allow you to generate a cost of sales report sorted by Part number and subtotaled on product codes. The report can include all parts, parts with sales, or parts with no sales. The report can be displayed, sent to a printer or to a disk as an ASCII, DBF, PDF or HTML file, or sent to Excel. You can select the starting date and ending date (first and last date of the month in question) and the starting and ending date of the year in question. The cost comes from the PO_Cost field in the invoice database table.

**Sample Cost of Sales Report:**

ACUDYNE, INC
DATE XX-XX-XX
COST OF SALES FROM XX/XX/XX TO XX/XX/XX

| BOM/PART # | UNITS | TOTAL SALES$ | TOTAL COSTS $ | % MARGIN | YTDUNITS | YTDSALES | YTDCOSTS | % MARGIN |
|---|---|---|---|---|---|---|---|---|
| PRODUCT CODE TF- | | | | | | | | |
| TF-C | 14 | 490.00 | 49.00 | 10.00 | XX.XX | XXXX.XX | XXXXXX.XX | XX.XX |
| TF-CW | 10 | 550.00 | 39.00 | 7.09 | XX.XX | XXXX.XX | XXXXXX.XX | XX.XX |
| TF-HC | 5 | 200.00 | 25.00 | 12.50 | XX.XX | XXXX.XX | XXXXXX.XX | XX.XX |
| SUB-TOTAL | 29 | 1240.00 | 223.00 | 9.71 | XX.XX | XXXX.XX | XXXXXX.XX | XX.XX |
| PRODUCT CODE SA- | | | | | | | | |
| SA-2 | 8 | 360.00 | 45.00 | XXX.XX | XX.XX | XXXX.XX | XXXXXX.XX | XX.XX |
| SUB-TOTAL | 8 | 360.00 | 45.00 | XXX.XX | XX.XX | XXXX.XX | XXXXXX.XX | XX.XX |
| TOTAL | 37 | 1600.00 | 158.00 | XXX.XX | XX.XX | XXXX.XX | XXXXXX.XX | XX.XX |

**16.6.5 Estimated Usage and Min Qty Reports**

See slide show at : http://www.pcmrp.com/mrp101/autocalcestuseoverview.htm

**(selection 'I')**

This option will automatically calculate and fill every part's usage and minimum quantity fields based on:
Invoices and their related BOMs or Stockroom and Invoice Issues

Select the method to set minimum quantities: (Invoices and Related BOMs Only)

- Parts only, infinite levels deep (sets minimum quantities for parts that are listed on an invoice and parts required for the assemblies listed in the invoices) - This is the recommended default setting.
- Top level parts and assemblies only (sets minimum quantities for parts and assemblies directly listed on invoices)
- First level parts and sub assemblies only (sets minimum quantities for parts one level down from the main assemblies listed on the invoices, and for parts listed on the invoices)

Select the method to set the safety stock:

- Percentage of the minimum quantity amount. If you enter 1.10 the new min quantities will keep your stock at 10% when the new stock arrives. Entering 1.20 will keep your stock at 20% when the new stock arrives. Entering 1.00 will allow the stock to run out just as the new stock arrives. Entering 0.00 will zero out your minimum quantities
- Number of Wks of stock left when new stock arrives If you enter 1 the new min quantities keep your stock at 1 week's worth of safety stock when the new stock arrives. Entering 2 will keep your stock at 2 weeks worth of safety stock when the new stock arrives. Entering 0 will allow the stock to run out just as the new stock arrives.

Select the time period to be studied

- The date range can be set by the user.

If you have certain part numbers or assemblies whose min quantities you do not want changed regardless of usage figures, check he "**Lock the Minimum Qty**" checkbox in inventory. (For versions **8.62** and older, enter "SAV" into that part or assemblies CATINDEX field in inventory. The upgrade to a higher version automatically carries over these settings.)

Users can set the "**Minimum weeks of Inventory**" on the Inventory screen. If greater than 0, the Sales Analysis Program will use this value for Number of weeks of Safety Stock instead of the default Number of Weeks of Safety stock on the Estimated Usage screen.

**Weeks Onhand:**

If you leave the "**Update Min Qty Values in Inventory**" checkbox unchecked, pc/MRP will not update the minimum quantity values in the inventory module. This checkbox is available in the Stockroom and Invoice modules only.

Below is a comparison between the 3 options. The time period has two invoices, one for 000000011 (that calls for 000000003 and 000000010, where 000000010 calls for 000000001 and 000000002), and one for part 000000004. (These are the usual parts/BOMs from test dataset 16.)

| Invoice # | Sales # | Item # | Part Number | Acct # | Post | Cmpl | Date Due | Description |
|---|---|---|---|---|---|---|---|---|
| 000012 | 000027 | 0001 | 000000011 | TRA001 | | | 06/08/2017 | REAR WHEEL AXLE ASS |
| 000013 | 000028 | 0001 | 000000004 | TTT001 | | | 06/08/2017 | |

```
Totaling qtys from invoices using parts only method


P/B ITEM BOM/PART NUMBER                          INVOICE     QTY USED    NEW USAGE
PART 0002 000000003                        000012       3.0000        3.0000
.PART 0001 000000001                        000012       6.0000        6.0000
.PART 0002 000000002                        000012     240.0000      240.0000

P/B ITEM BOM/PART NUMBER                          INVOICE     QTY USED    NEW USAGE
PART      000000004                         000013       1.0000        1.0000
```

```
Totaling qtys from invoices using top level parts & assys only


P/B ITEM BOM/PART NUMBER                          INVOICE     QTY USED    NEW USAGE
BOM       000000011                         000012       3.0000      3.0000

P/B ITEM BOM/PART NUMBER                          INVOICE     QTY USED    NEW USAGE
PART      000000004                         000013       1.0000        1.0000
```

```
Totaling qtys from invoices using first level parts & assys only


P/B ITEM BOM/PART NUMBER                          INVOICE     QTY USED    NEW USAGE
PART 0002 000000003                        000012       3.0000        3.0000

P/B ITEM BOM/PART NUMBER                          INVOICE     QTY USED    NEW USAGE
PART      000000004                         000013       1.0000        1.0000
```

The Estimated Usage Option uses estuse.prg, estuse.scx, makecons.frx and estusew.frx.

## Sample Estimated Usage Calculation Report:

Replacing new usage fields with 0
Filtering invoices for the specified time period
Totaling quantities from invoices using the parts only method

| P/B ITEM | BOM/PART NUMBER | INVOICE | QTY USED | NEW USAGE |
|---|---|---|---|---|
| PART 001 | 00000001 | 000001 | 24.0000 | 24.00 |
| PART 002 | 00000002 | 000001 | 960.0000 | 960.00 |

| P/B ITEM | BOM/PART NUMBER | INVOICE | QTY USED | NEW USAGE |
|---|---|---|---|---|
| PART 001 | 00000001 | 000002 | 24.0000 | 48.00 |

| P/B ITEM | BOM/PART NUMBER | INVOICE | QTY USED | NEW USAGE |
|---|---|---|---|---|
| PART 002 | 00000003 | 000003 | 48.0000 | 48.00 |
| PART 001 | 00000001 | 000003 | 48.0000 | 96.00 |
| PART 002 | 00000002 | 000003 | 1920.0000 | 2880.00 |

Dividing all usage quantities by 25.71 weeks

Replacing usage with new usage figures (units/wk)

| PART NUMBER | DESCRIPTION | NEW USAGE | OLD USAGE | CHANGE |
|---|---|---|---|---|
| 000000001 | BEARING 3" ID | 4 | 4 | 0 |
| 000000002 | SPOKES 10" | 112 | 102 | 10 |
| 000000003 | SPINDLE ALLOY | 2 | 5 | - 3 |

Replacing min quantities with new min qtys + safety factor for usage > 0
min qty = (usage x ldtime) + (usage x safety)'

min qty = units usage = units/wk ldtime = wks'
safety factor = 1 wks

| PARTNUMBER | DESCRIPT | NEW EST USAGE | LTIME | ONHANDQTY | WIPQTY | NEW MINQTY | OLD MINQTY | CHANGE |
|---|---|---|---|---|---|---|---|---|
| 000000001 | BEARING 3" ID | 4 | 1 | 100 | 50 | 8 | 8 | 0 |
| 000000002 | SPOKES 10" X .125 | 112 | 2 | 200 | 60 | 336 | 306 | 30 |
| 000000003 | SPINDLE ALLOY | 2 | 1 | 40 | 30 | 4 | 6 | -2 |

### 16.6.6 Sales Trends

Selecting Sales Trends will allow you to generate a sales trend report sorted on Part number, Vendor, Qty, or $ Amount. If you select Vendor as your sort and a wide carriage print out, the report is subtotaled by vendor. The report can include all parts, parts with sales, or parts with no sales. The report can be displayed, sent to a printer or to a disk as an ASCII, DBF, PDF or HTML file, or sent to Excel. You can select up to three different time periods you wish to compare (month 1, 2, 3, total, or qtr 1,2,3,4 or yr 1, 2, 3, total).

**Sample Sales Trend Report:**

Page No. 1 Period 1 = 09/01/92 to 09/30/92 Period 2 = 10/01/92 to 10/31/92 Period 3 = 11/01/92 to 11/18/92

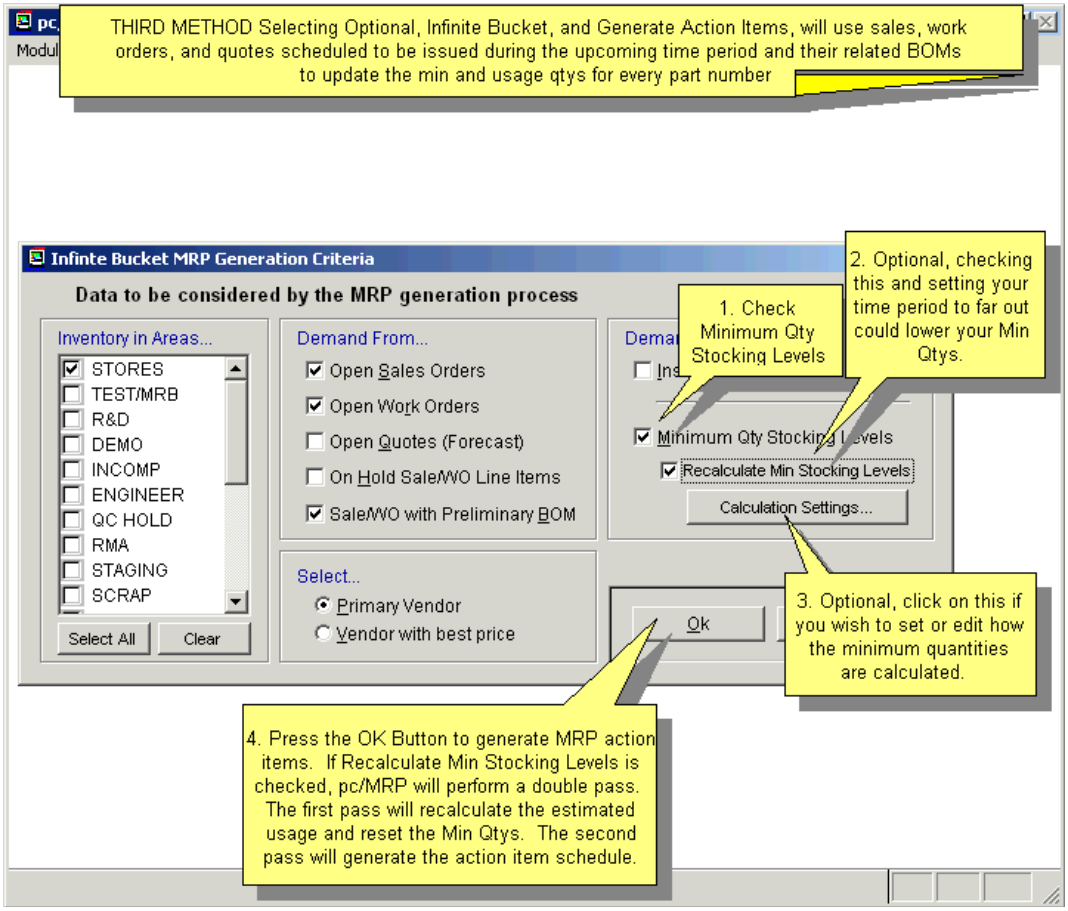
SALES ANALYSIS

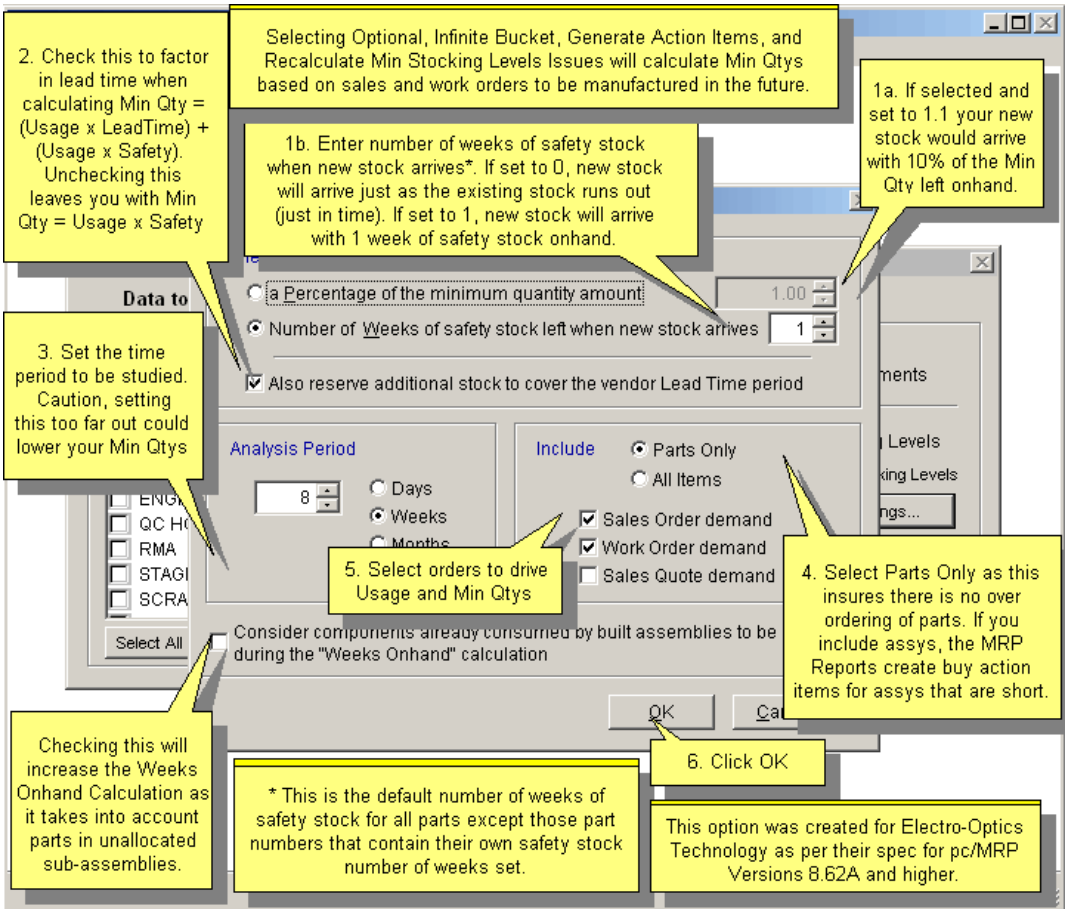
| PARTNO | DESCRIPT | QTY PER1 | QTY PER2 | QTY PER3 | TOTAL QTY | AMT PER1 | AMT PER2 | AMT PER3 | TOTAL AMOUNT |
|---|---|---|---|---|---|---|---|---|---|
| 000000001 | BEARING 3" | 5 | 10 | 30 | 45 | 50.00 | 99.90 | 297.00 | 446.90 |
| 000000002 | SPOKES 10" | 0 | 1 | 0 | 1 | 0.00 | 1.50 | 0.00 | 1.50 |
| 000000003 | SPINDLE ST | 0 | 1 | 0 | 1 | 0.00 | 38.50 | 0.00 | 38.50 |
| 000000010 | WHEEL BASE | 0 | 0 | 20 | 20 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | | | 67 | 50.00 | 139.90 | 297.00 | 486.90 |

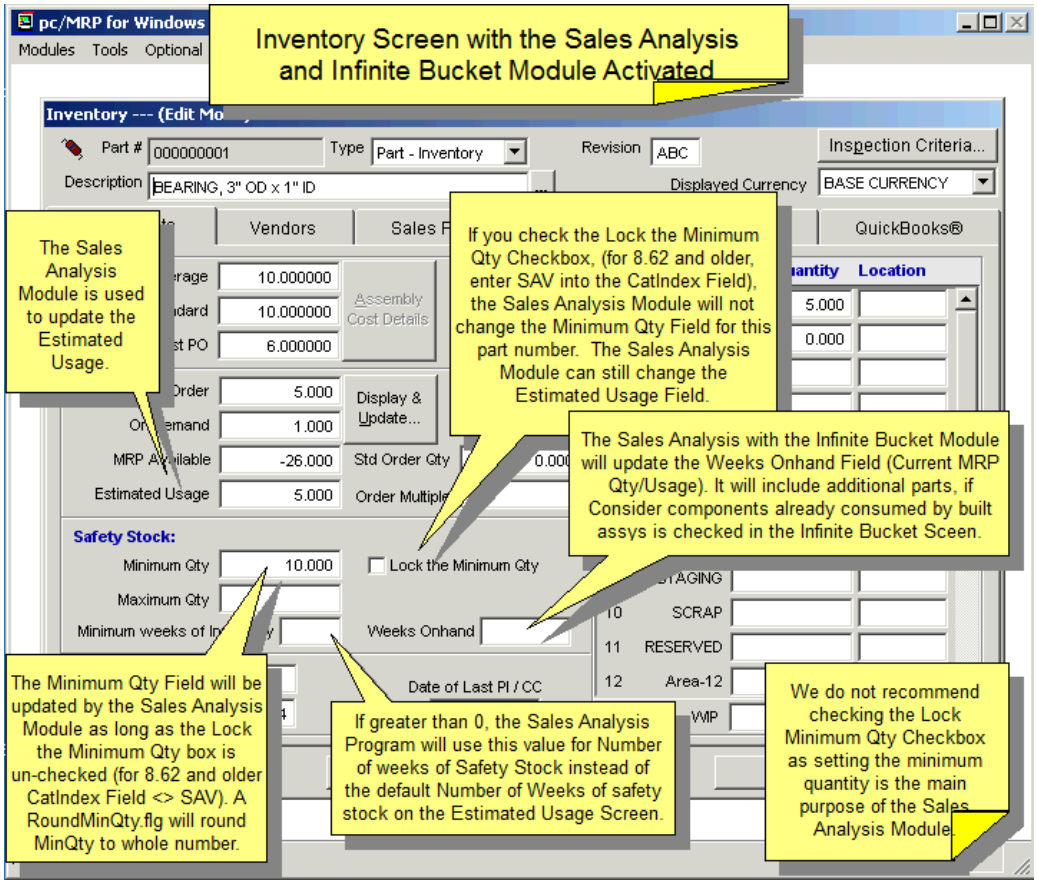
To Print/Display the Work Order Usage Report you would select Optional, Sales Analysis, Sales Trend, Sort on Division + Part Number, All Work Orders and enter the starting and ending date for all work orders entered in that date range. The resulting report (componentusage.frx) consists of two parts. The first part of the report would list all the top assemblies for the work orders entered in the specified date range and the total quantity assembled for each top assembly. The second part of the report would consist of all the parts and their total quantities issued from the stockroom to manufacturing for those work orders. For Battery Tech only, the second part of the report will also include invoice component items that were sold during that time period.

If you selected "All for a specified division", the second list would contain only parts issued that belong to that division. For example, if you were to edit that part you would see its division field would contain the same division you specified.

## 16.6.7 Sales Analysis with the optional Infinite Bucket module






### 16.6.8 Output Consolidated BOM to Excel

Select up to 10 BOMs and their quantities. Select the inventory areas you want to include. Type in a name for the newly created Excel file.

The Excel file will display the following COLUMNS:

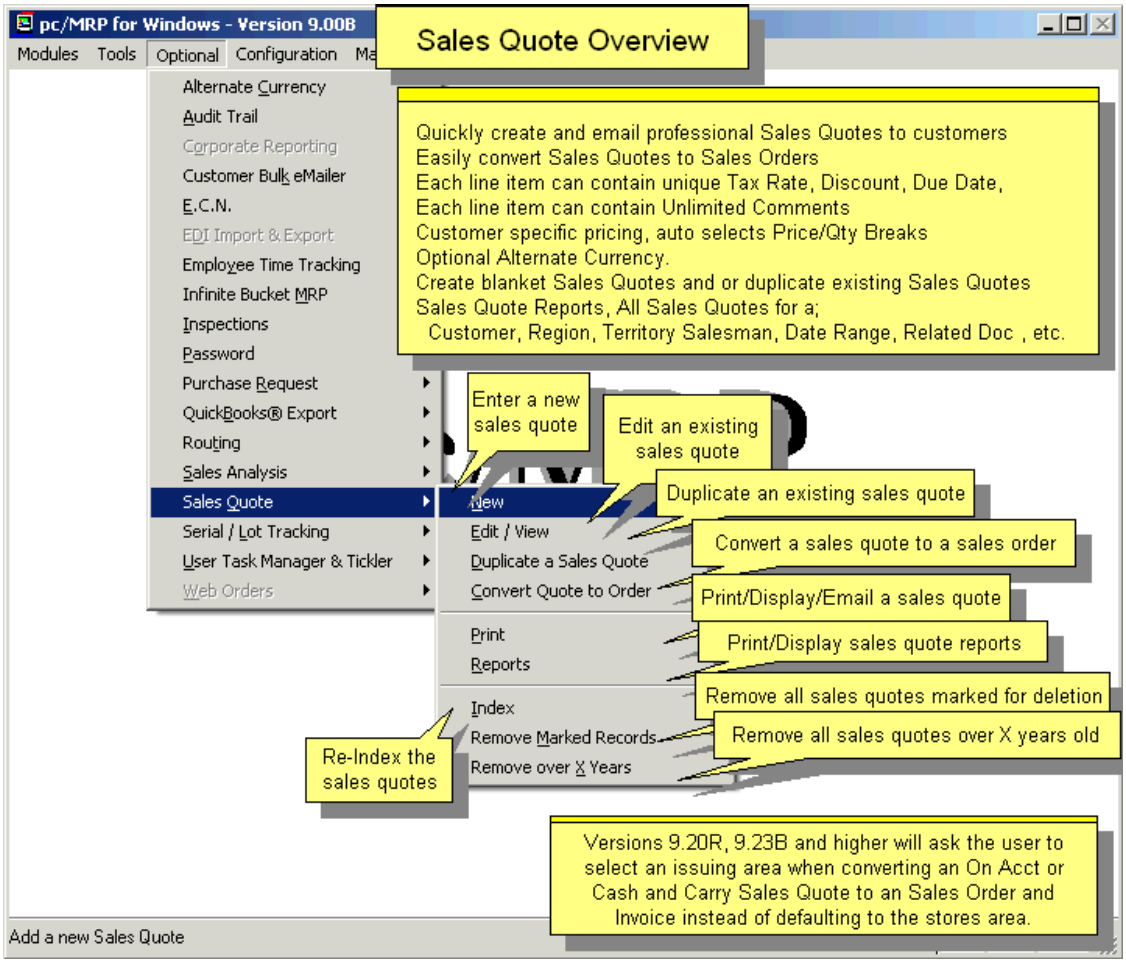
Lead Time (in week)
Std Cost
Part Number
Description
<BOM 1>
<BOM 2>
..... (depending on your selections)
Usage
Stores
<Area 2>
..... (depending on your selections)
Wip
Open PO
Total On Hand
Short
Vendors
Quantity (these are up to 5 open POs for that part)
Due
Quantity
Due
Quantity
Due
Quantity
Due
Quantity
Due

# 16.7 Optional Sales Quote Module

### 16.7.1 Quote Module Overview

The Sales Quote Module creates, edits, approves, and prints out sales quotes. In addition it can also convert sales quotes to sales orders and print out a tickler quote report for all open quotes exactly 30, 60, and 90 days old. Please see Chapter 9, Sales Orders, for more detail.

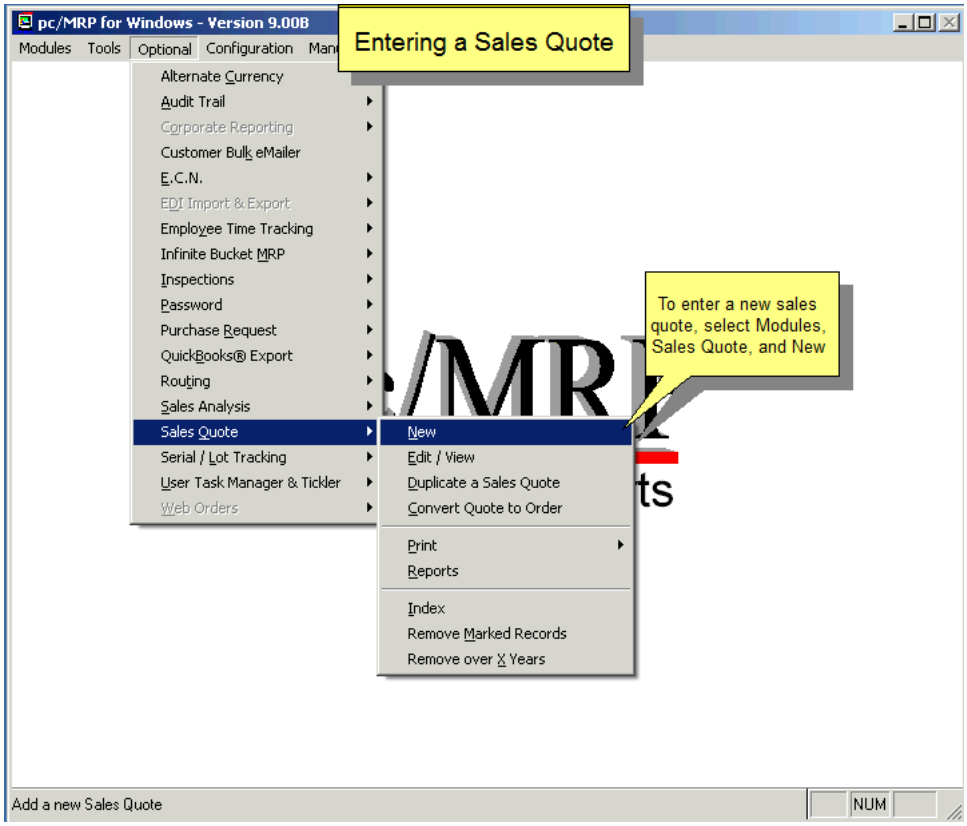
An online slideshow is located here: http://www.pcmrp.com/mrp101/sqoverview.htm

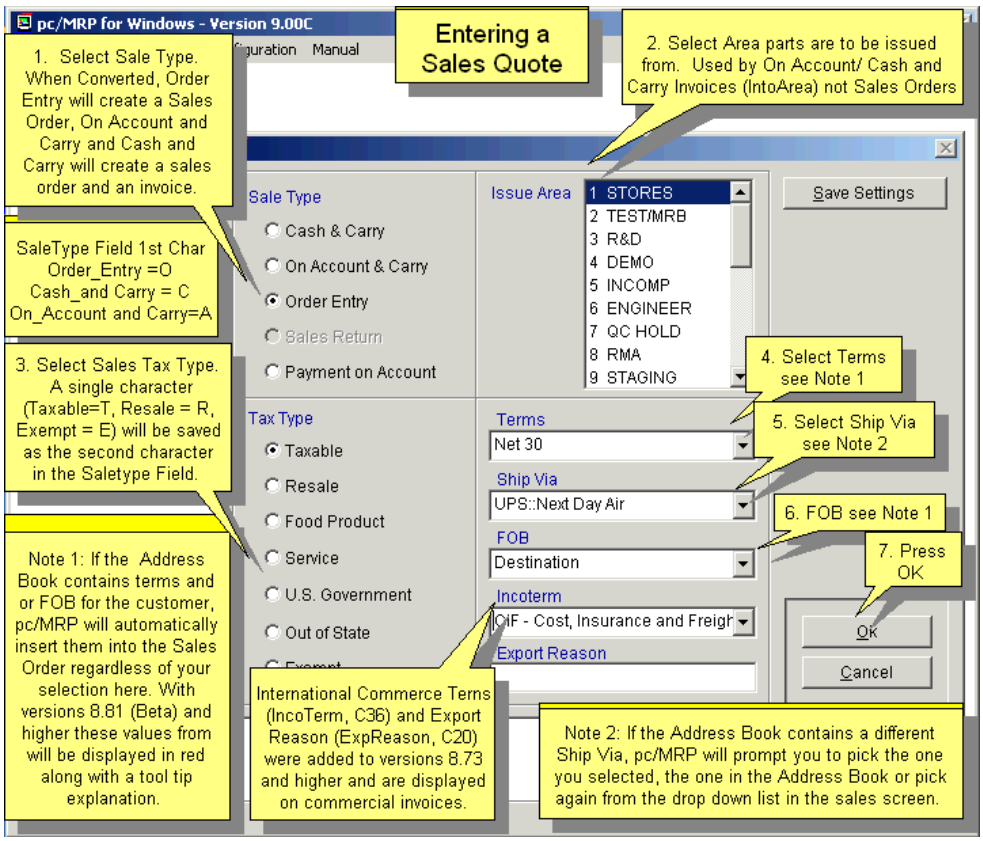


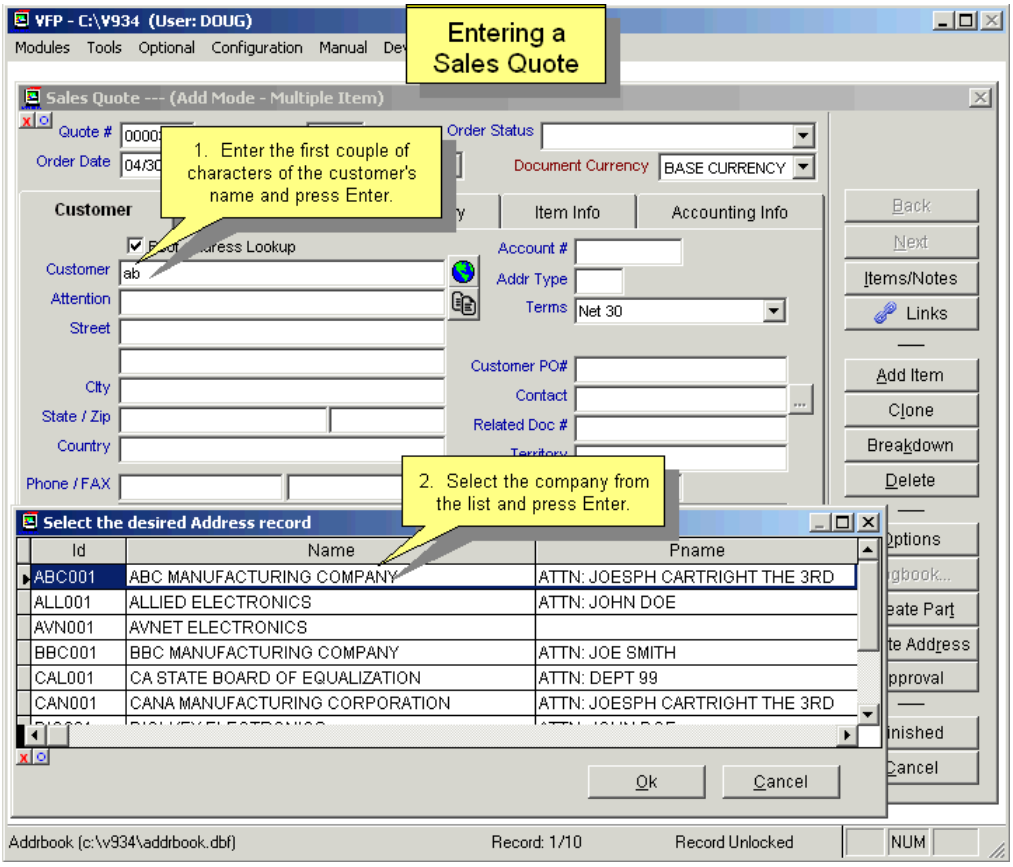

### 16.7.2 Activating the Sales Quote Module

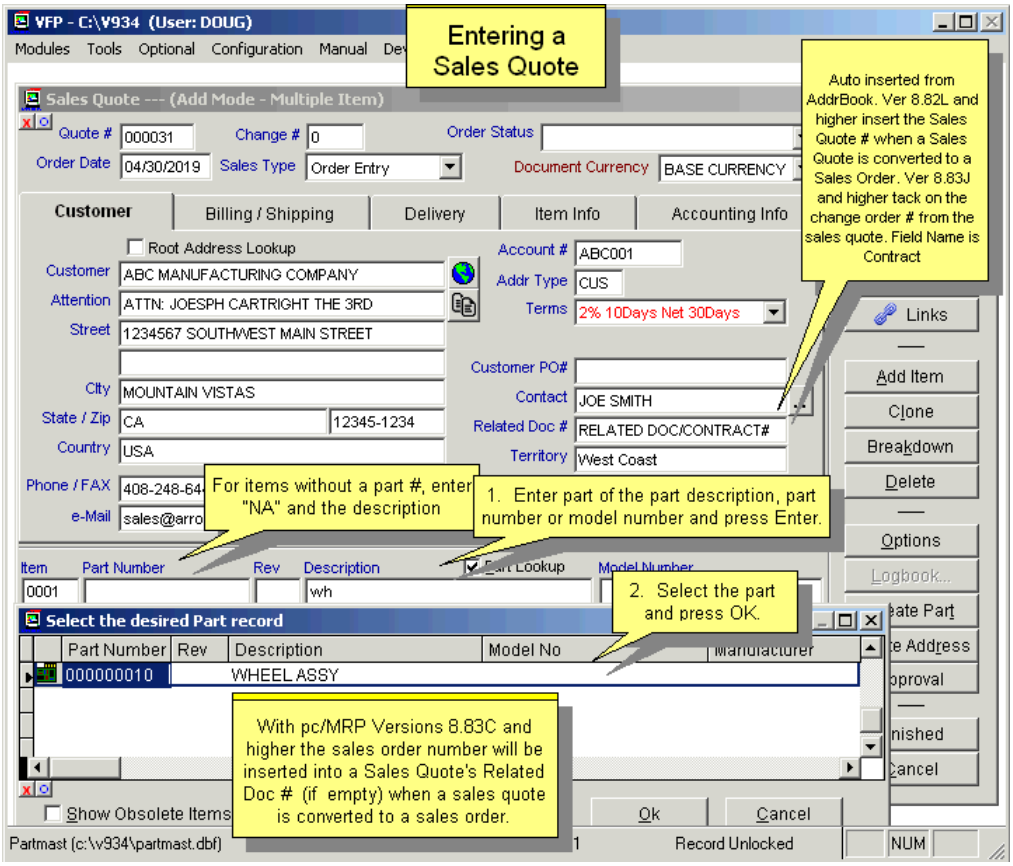
To activate the module, select Configuration, Module Activation, and then Sales Quote from the menu, and enter the activation number obtained from Software Arts.

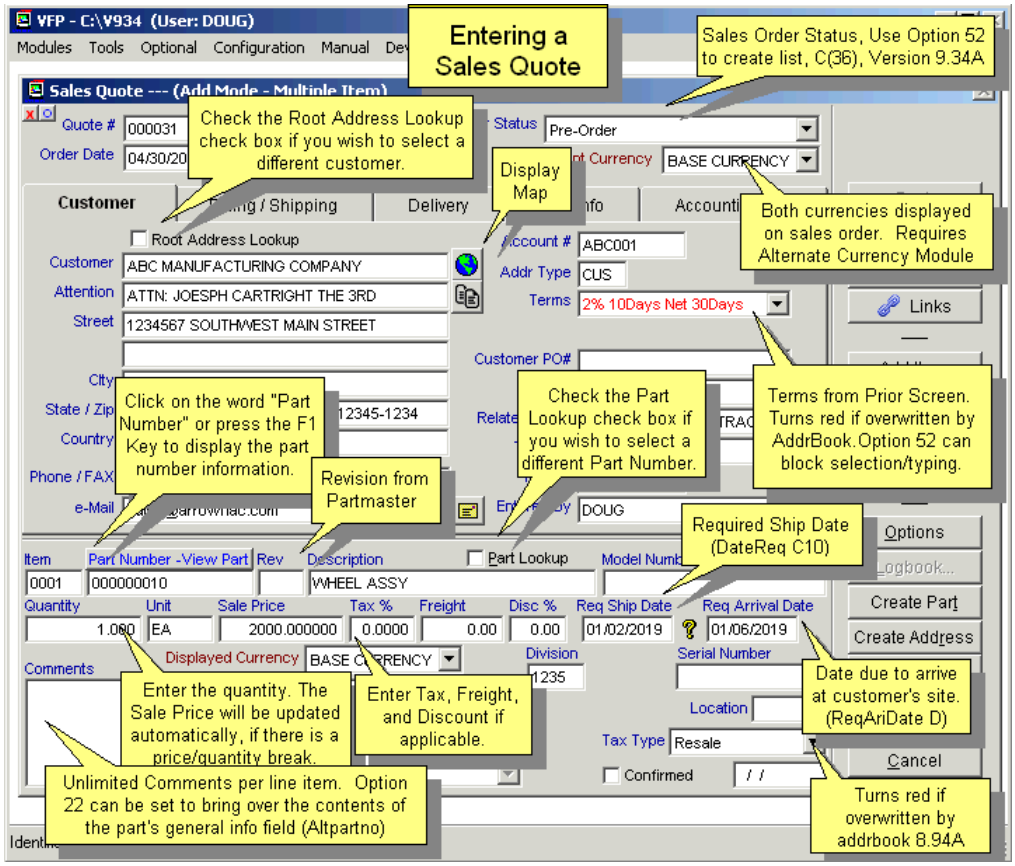
## 16.7.3 Entering a Sales Quote with Probabilities

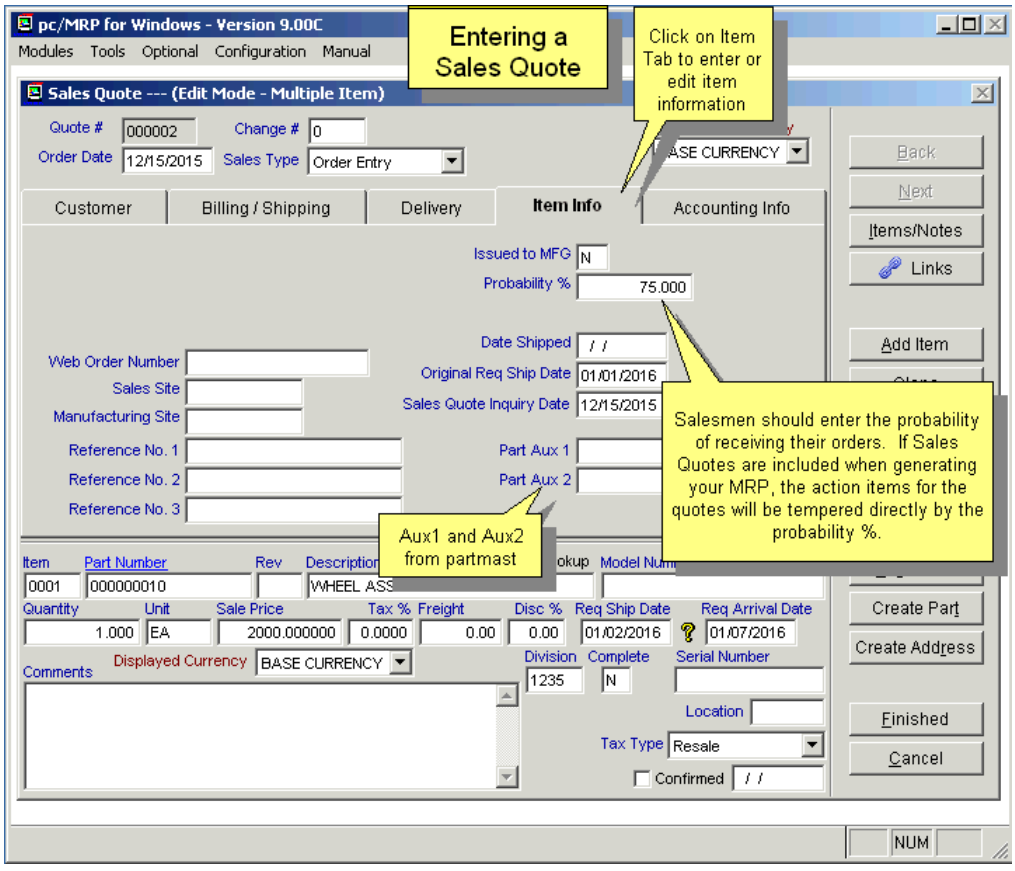



Entering a Sales Quote
1. Enter the first couple of characters of the customer's name and press Enter.
2. Select the company from the list and press Enter.
Select the desired Address record
Id
Name
Pname
ABC001
ABC MANUFACTURING COMPANY
ATTN: JOESPH CARTRIGHT THE 3RD
ALL001
ALLIED ELECTRONICS
ATTN: JOHN DOE
AVN001
AVNET ELECTRONICS
BBC001
BBC MANUFACTURING COMPANY
ATTN: JOE SMITH
CAL001
CA STATE BOARD OF EQUALIZATION
ATTN: DEPT 99
CAN001
CANA MANUFACTURING CORPORATION
ATTN: JOESPH CARTRIGHT THE 3RD
Ok
Cancel


Entering a Sales Quote
Auto inserted from AddrBook. Ver 8.82L and higher insert the Sales Quote # when a Sales Quote is converted to a Sales Order. Ver 8.83J and higher tack on the change order # from the sales quote. Field Name is Contract
For items without a part #, enter "NA" and the description
1. Enter part of the part description, part number or model number and press Enter.
2. Select the part and press OK.
Select the desired Part record
Part Number
Rev
Description
Model No
000000010
WHEEL ASSY
With pc/MRP Versions 8.83C and higher the sales order number will be inserted into a Sales Quote's Related Doc # (if empty) when a sales quote is converted to a sales order.
Ok
Cancel


Entering a Sales Quote
Sales Order Status, Use Option 52 to create list, C(36), Version 9.34A
Check the Root Address Lookup check box if you wish to select a different customer.
Display Map
Both currencies displayed on sales order. Requires Alternate Currency Module
Terms from Prior Screen. Turns red if overwritten by AddrBook.Option 52 can block selection/typing.
Click on the word "Part Number" or press the F1 Key to display the part number information.
Revision from Partmaster
Check the Part Lookup check box if you wish to select a different Part Number.
Required Ship Date (DateReq C10)
Enter the quantity. The Sale Price will be updated automatically, if there is a price/quantity break.
Enter Tax, Freight, and Discount if applicable.
Date due to arrive at customer's site. (ReqAriDate D)
Unlimited Comments per line item. Option 22 can be set to bring over the contents of the part's general info field (Altpartno)
Turns red if overwritten by addrbook 8.94A

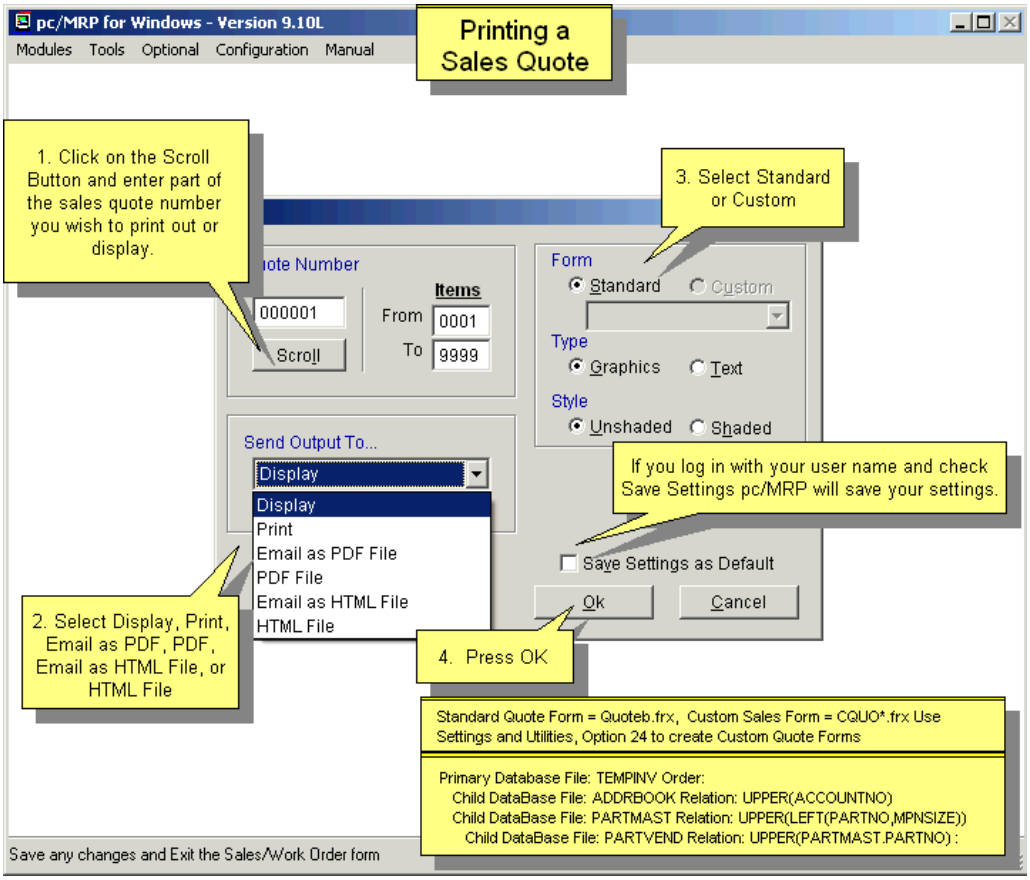

Entering a Sales Quote
Click on Item Tab to enter or edit item information
Salesmen should enter the probability of receiving their orders. If Sales Quotes are included when generating your MRP, the action items for the quotes will be tempered directly by the probability %.
Aux1 and Aux2 from partmast

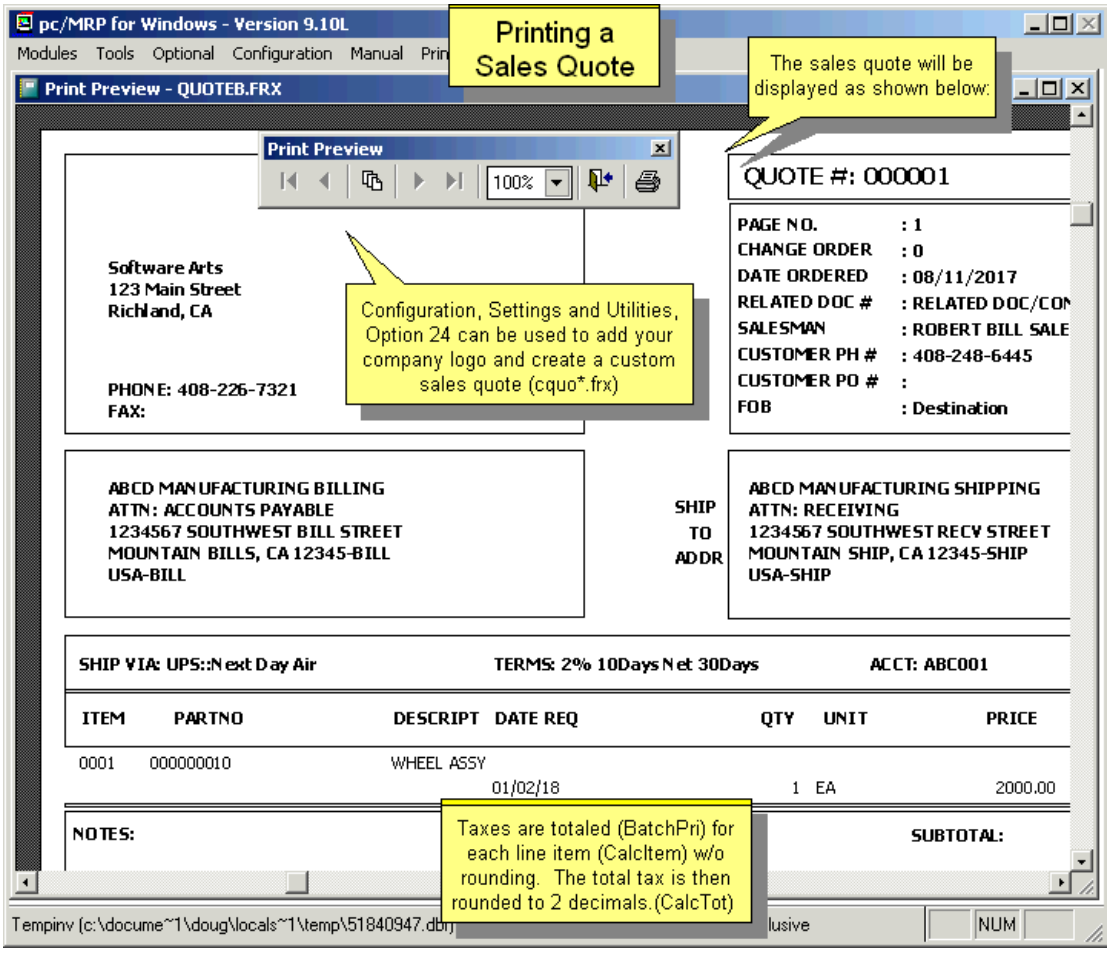
A % probability can be assigned to each line item of a Sales Quote. This probability is the likelihood of this line item becoming a real sales order. Through the use of the **Infinite Bucket** module Sales Quotes can then be added for planning and parts from these sales orders will be required according the % probability.

### 16.7.4 Print/Email Sales Quotes

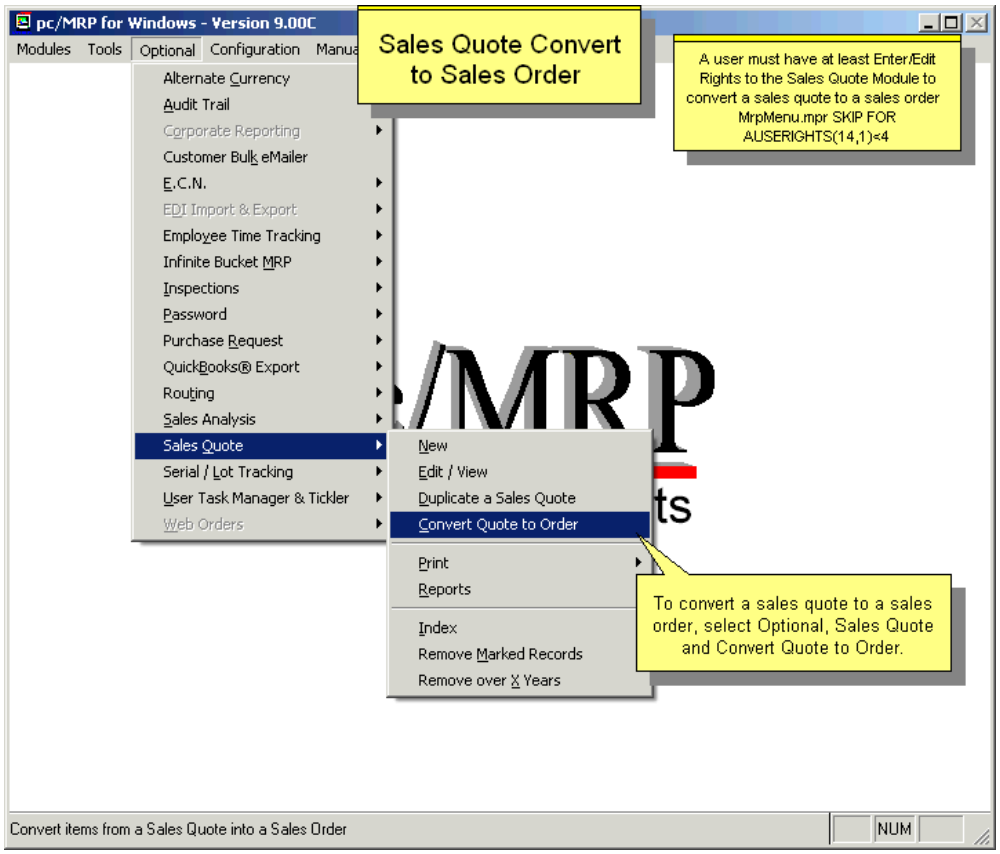
The Sales Quote report engine is exactly the same as the sales order report engine. After you have selected the criteria for your report, you also have the opportunity to print, display, and fax or send the actual quote to e-mail, or an HTML document to attach the quote to an e-mail. Through the use of programs like WINFAX users can also directly fax from pc/MRP. If you print to .pdf, the file name will include the revision number.

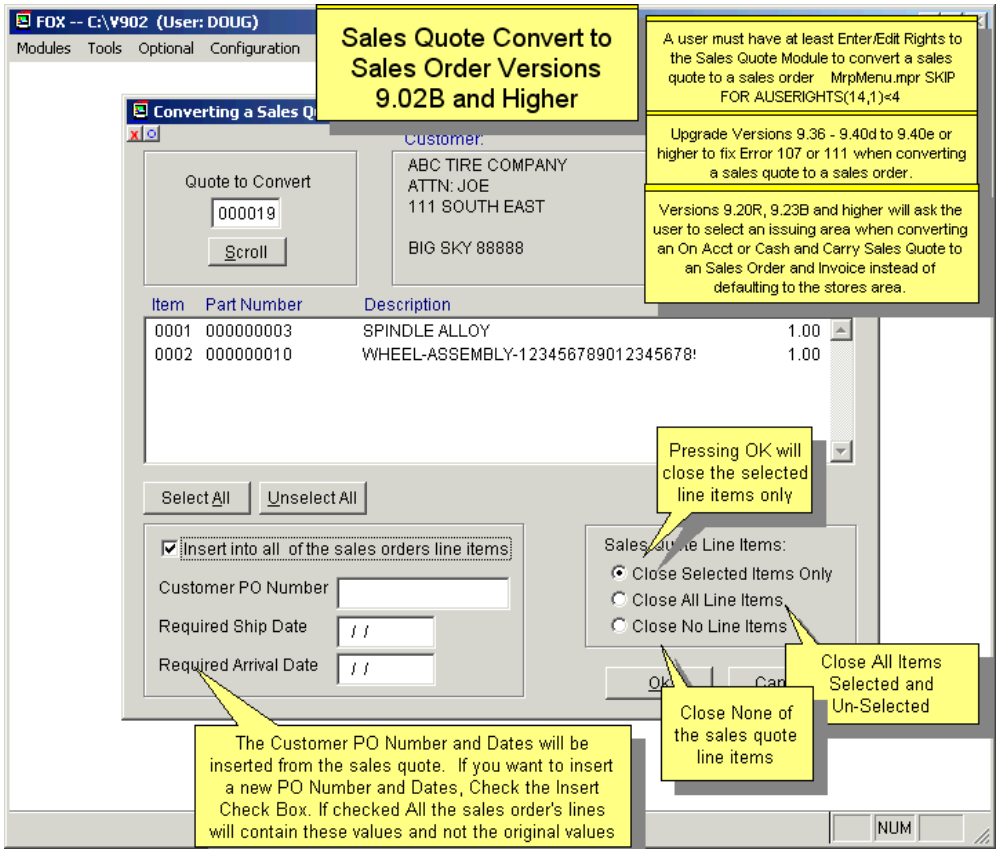
**Note:** If you send an e-mail directly from pc/MRP, you can use MS Outlook, or pc/MRP's own email program, CDO. The e-mail address in MS Outlook will automatically be populated from the e-mail entry in the pc/MRP Address Book. If you create an HTML or PDF document, you can save this document and attach it to an e-mail created in your existing e-mail program.




pc/MRP for Windows - Version 9.10L
Modules Tools Optional Configuration Manual
Printing a Sales Quote
The sales quote will be displayed as shown below:
Print Preview - QUOTEB.FRX
Print Preview
100%
QUOTE #: 000001
Software Arts
123 Main Street
Richland, CA
PHONE: 408-226-7321
FAX:
Configuration, Settings and Utilities, Option 24 can be used to add your company logo and create a custom sales quote (cquo*.frx)
PAGE NO. : 1
CHANGE ORDER : 0
DATE ORDERED : 08/11/2017
RELATED DOC # : RELATED DOC/CON
SALESMAN : ROBERT BILL SALE
CUSTOMER PH # : 408-248-6445
CUSTOMER PO # :
FOB : Destination
ABCD MANUFACTURING BILLING
ATTN: ACCOUNTS PAYABLE
1234567 SOUTHWEST BILL STREET
MOUNTAIN BILLS, CA 12345-BILL
USA-BILL
SHIP TO ADDR
ABCD MANUFACTURING SHIPPING
ATTN: RECEIVING
1234567 SOUTHWEST RECV STREET
MOUNTAIN SHIP, CA 12345-SHIP
USA-SHIP
SHIP VIA: UPS::Next Day Air
TERMS: 2% 10Days Net 30Days
ACCT: ABC001
ITEM PARTNO DESCRIPT DATE REQ QTY UNIT PRICE
0001 000000010 WHEEL ASSY
01/02/18 1 EA 2000.00
NOTES:
SUBTOTAL:
Taxes are totaled (BatchPri) for each line item (CalcItem) w/o rounding. The total tax is then rounded to 2 decimals.(CalcTot)
Tempinv (c:\docume~1\doug\locals~1\temp\51840947.dbf)
lusive
NUM

## 16.7.5 Convert Sales Quotes to Sales Orders



Users can scroll the Sales Quote table to select a sales quote, and then select the line items the new Sales Order will include. The user can then select to close all line items, only the selected (converted) line items, or no line items at all. (In Version **9.02A** and lower, the selected line items were always closed.)

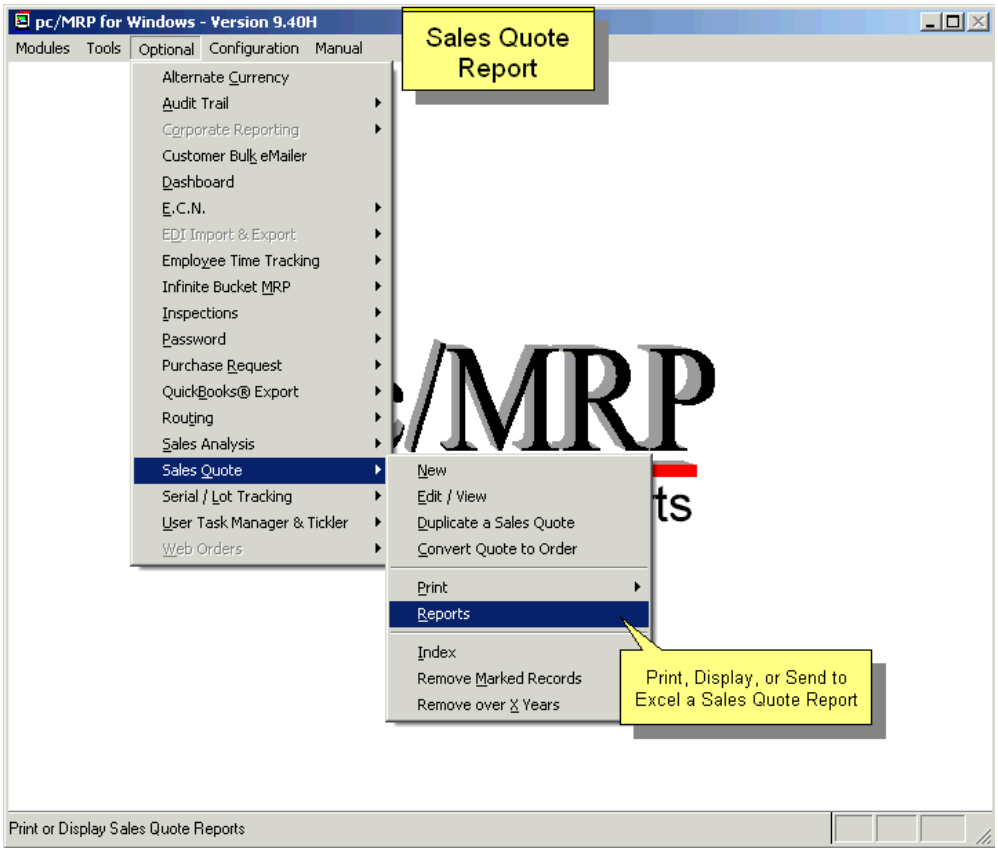
The Customer PO Number and Dates will be inserted from the sales quote. If you want to insert a new PO Number and Dates, check the "Insert into all of the sales orders line items" check box. If checked, all the sales order's line items will contain these values and not the original values (**9.02** and above).

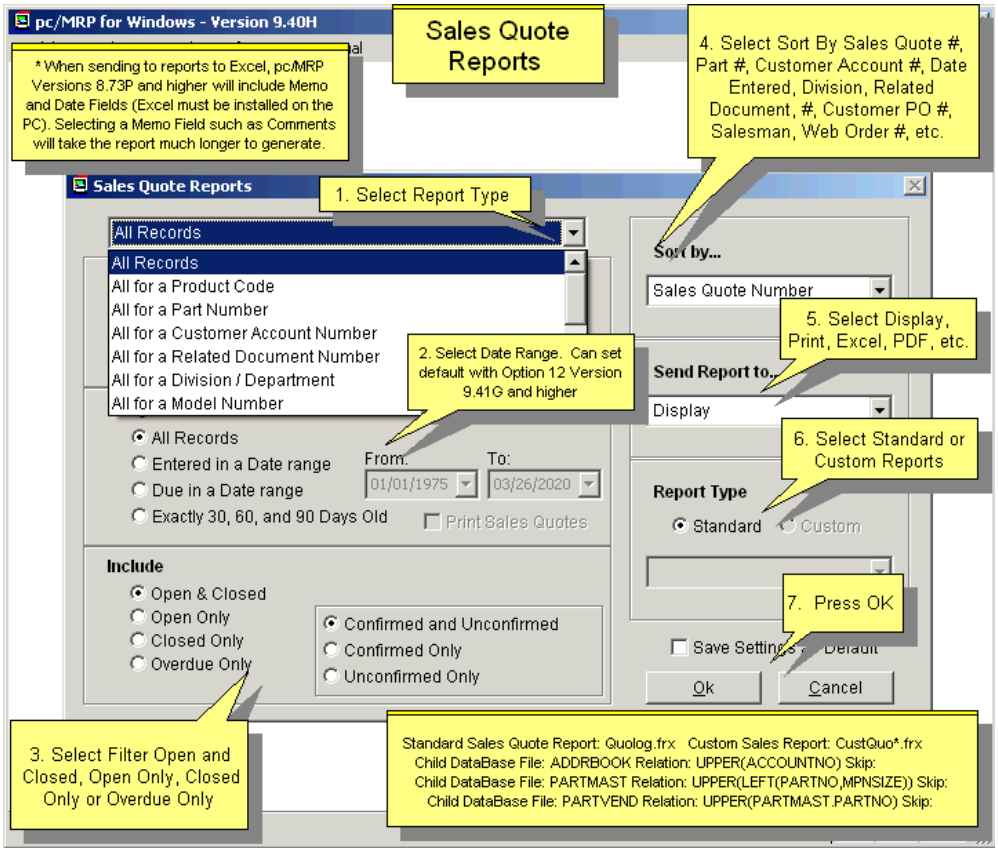
If there is an invalid part number in the Sales Quote, pc/MRP will offer to convert this part to an "NA" part number, or to exclude it from the list of items to convert.

The **Related Document Number** (Contract) is a 21 character scrollable field. It can be used to enter a related contract number, serial number, or document number. If the customer has a Related Document Number in the Address Book, it will be carried over into the Sales Quote. If/when the Sales Quote is being converted to a Sales Order, the Sales Quote's Related Document Number will be carried over into the Sales Order. If the Sales Quote doesn't have a Related Document Number, then the Sales Quote's number itself will be inserted into the Sales Order Related Document Number field (Version **8.82L** and above), followed by a dash (-) and the change order number (**8.83J** and above, **8.88A** and above).

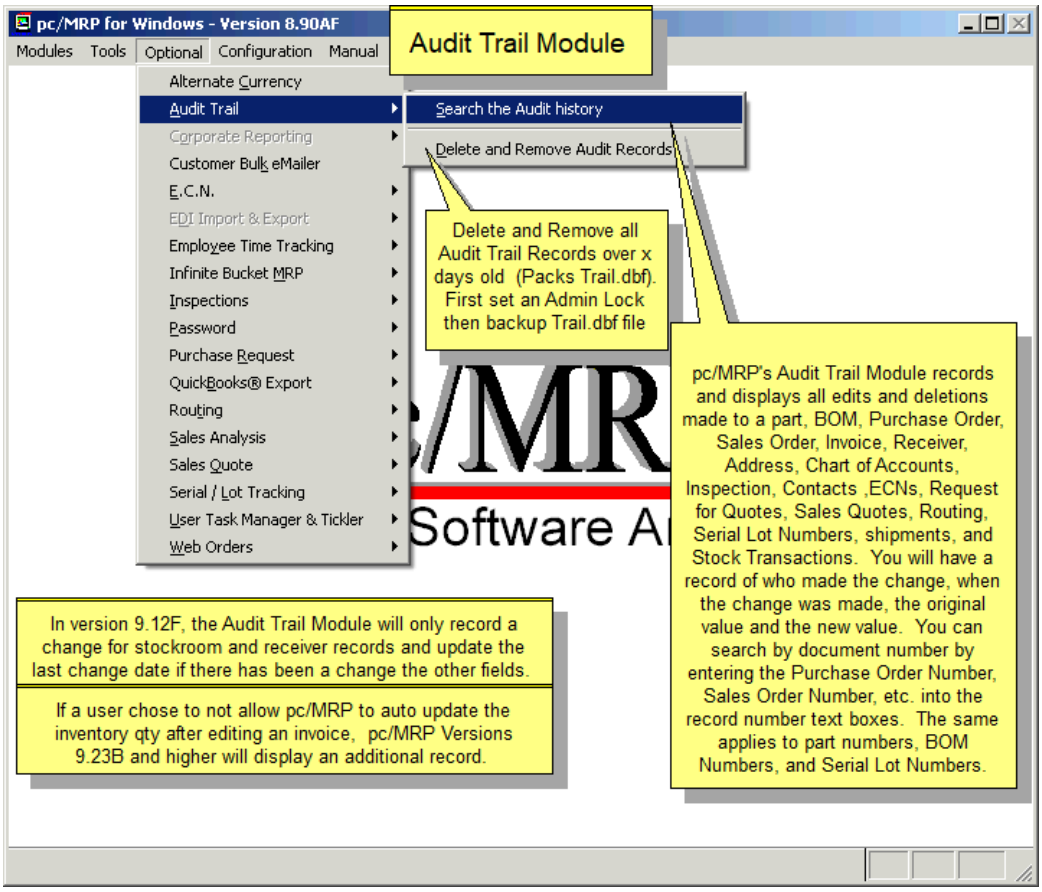
The Sales Order will have the same Sale Type as a Sales Quote. When users convert an Order Entry SQ to a SO, an Order Entry SO will be created. When the SQ is Cash and Carry or On Acct & Carry, a Cash and Carry or On Acct & Carry SO will be created, along with an invoice.

### 16.7.6 Print / Display a Sales Quote Report



# 16.8 Optional Audit Trail Module




### 16.8.1 Audit Trail Overview

The Audit Trail Module provides a means of tracing edit changes made in any of the pc/MRP modules with the exception of accounting. Whenever a change to a record occurs during an editing session, the Audit Trail module will record the Date, Database, Time, User, and Field Name as well as the Record & Item numbers, Part/BOM number, or Address ID number. A flexible search feature allows retrieval of the recorded change based upon a variety of criteria.

The Audit Trail will keep track of edit and deletion changes, like changing quantity ordered or due date on a PO, marking a SO for deletion, or changing the standard cost of a part item. The Audit Trail will not keep track of actions like entering a new PO, adding a new part item to the inventory, or the change of a part's average cost due to entering a new receiver. The Audit Trail will not keep track of changes in the Accounting module, nor of those in the Configuration menu.

An online slideshow is located here: http://www.pcmrp.com/mrp101/trailsearch.htm

### 16.8.2 Module Activation

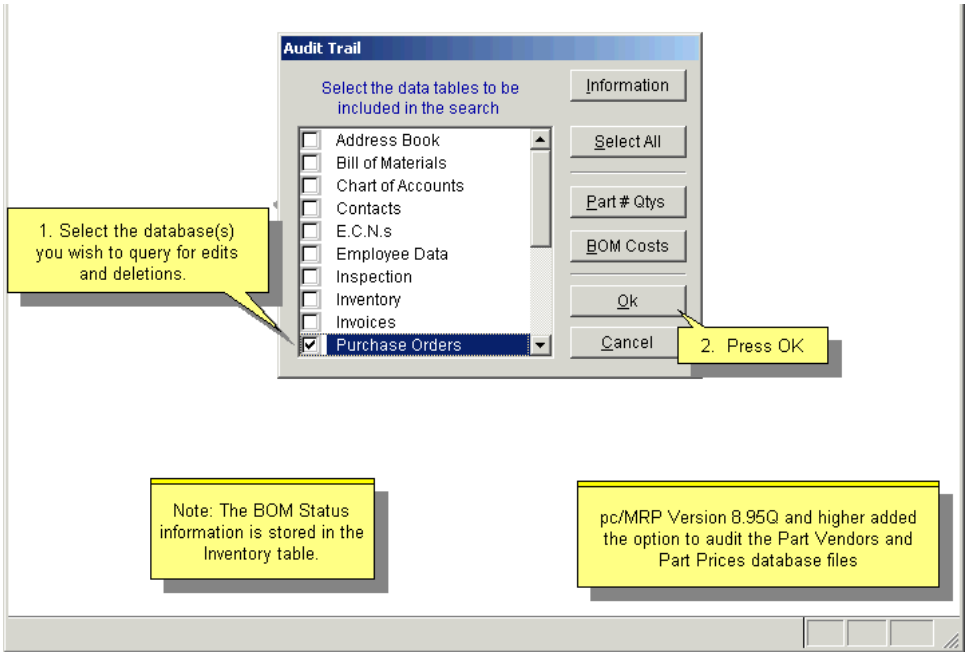
The Audit Trail Module is an optional module. To activate the Audit Trail Module, select Configuration, Module Activation, and then Audit Trail from the menu. To initiate this module Select Free Ten Day Trial, or call Software Arts (408-226-7321) to purchase this optional module, obtain your activation number and select Full Activation.

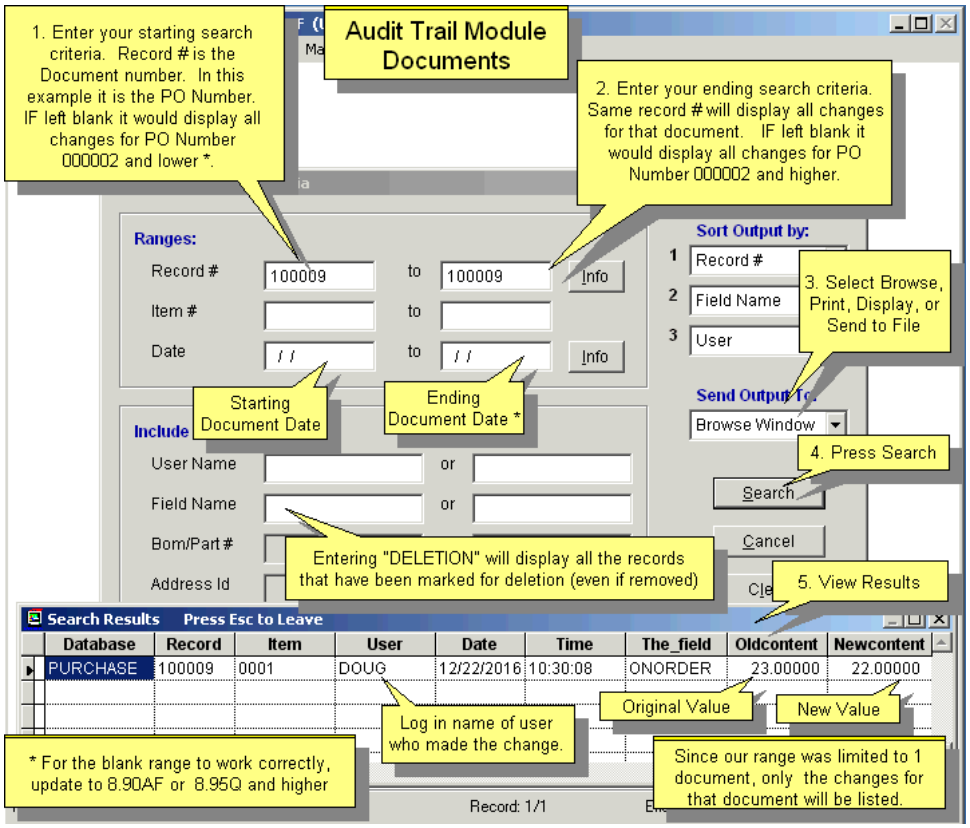
**Note:** The Audit Trail will not contain records of changes that happened before the module has been activated. (Otherwise pc/MRP would accumulate a large amount of data, without the users being able to periodically delete some of it, see Section 16.8.6 below)

### 16.8.3. Searching Audit History for any or all edits or deletions

To view prior edits and deletions made to Inventory, BOM, POs, etc., Select Optional, Audit Trail, Search Audit History and the Audit Trail Screen shown below will be displayed. A search can be conducted which returns as much or as little information as the user requires. Selecting all databases while leaving all other criteria blank, would return every change that has been made everywhere. Scroll to the right to see the Newcontent field.

If you select more than one table, the resulting records will have a change in (at least) one of these tables, not in all of them. I.e. if Purchase Orders and Inventory are selected and you enter a part number to search for, the resulting list will include all the changes for that part number in Inventory, and all the changes in the Purchase table whether or not they are for this particular part number.



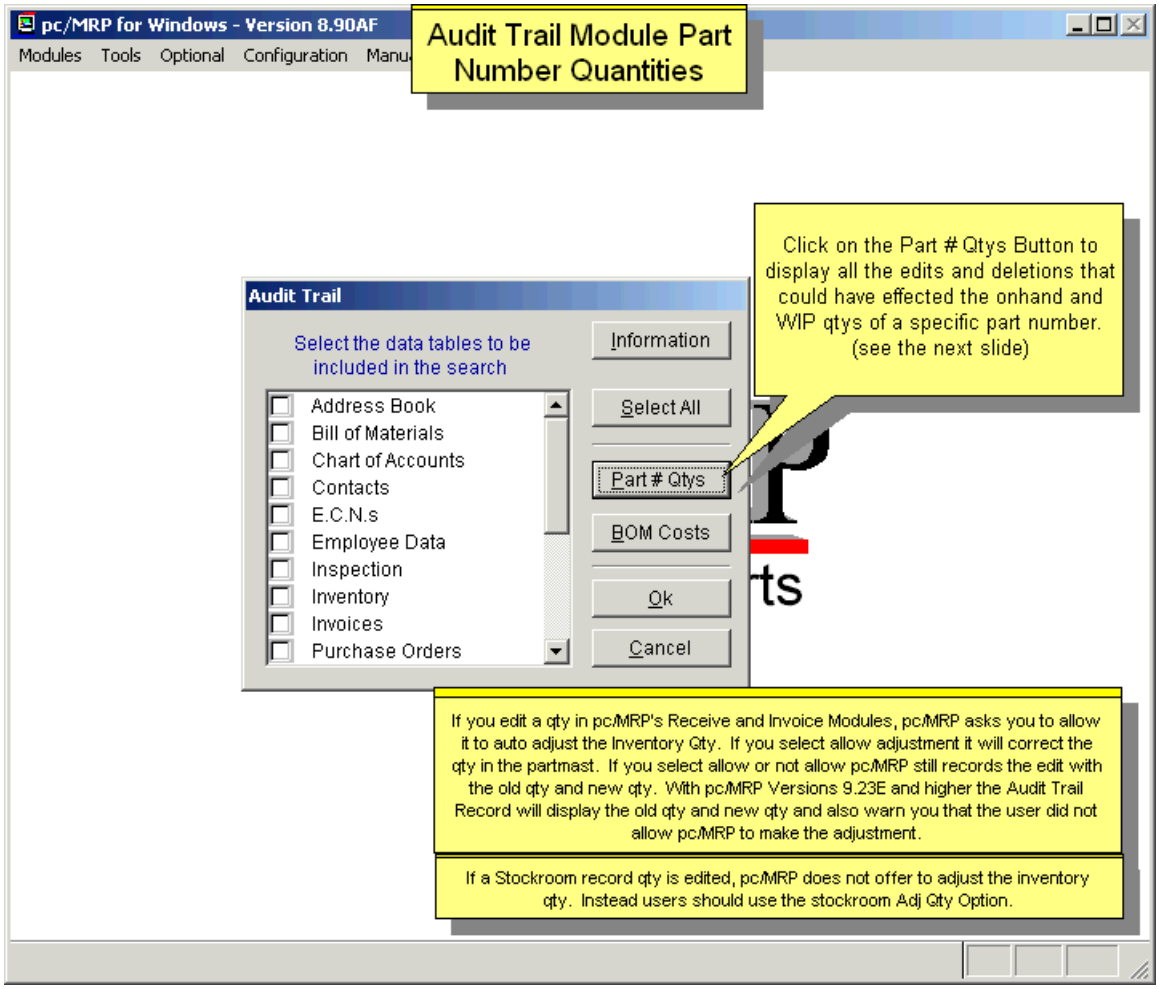
You can limit the Query to return only those that meet a specified Date by entering the same date into the first and the second field. You can return all records within a Date range by entering the start date into the first field, and the stop date into the second field. To return all records from a specified Date enter the start date into the first field. To return all records up to a specified Date enter the stop date into the second field.

Similarly, you can limit the Query to return results for a certain document number, a document number range, or from / up to a specified point in the document numbers.

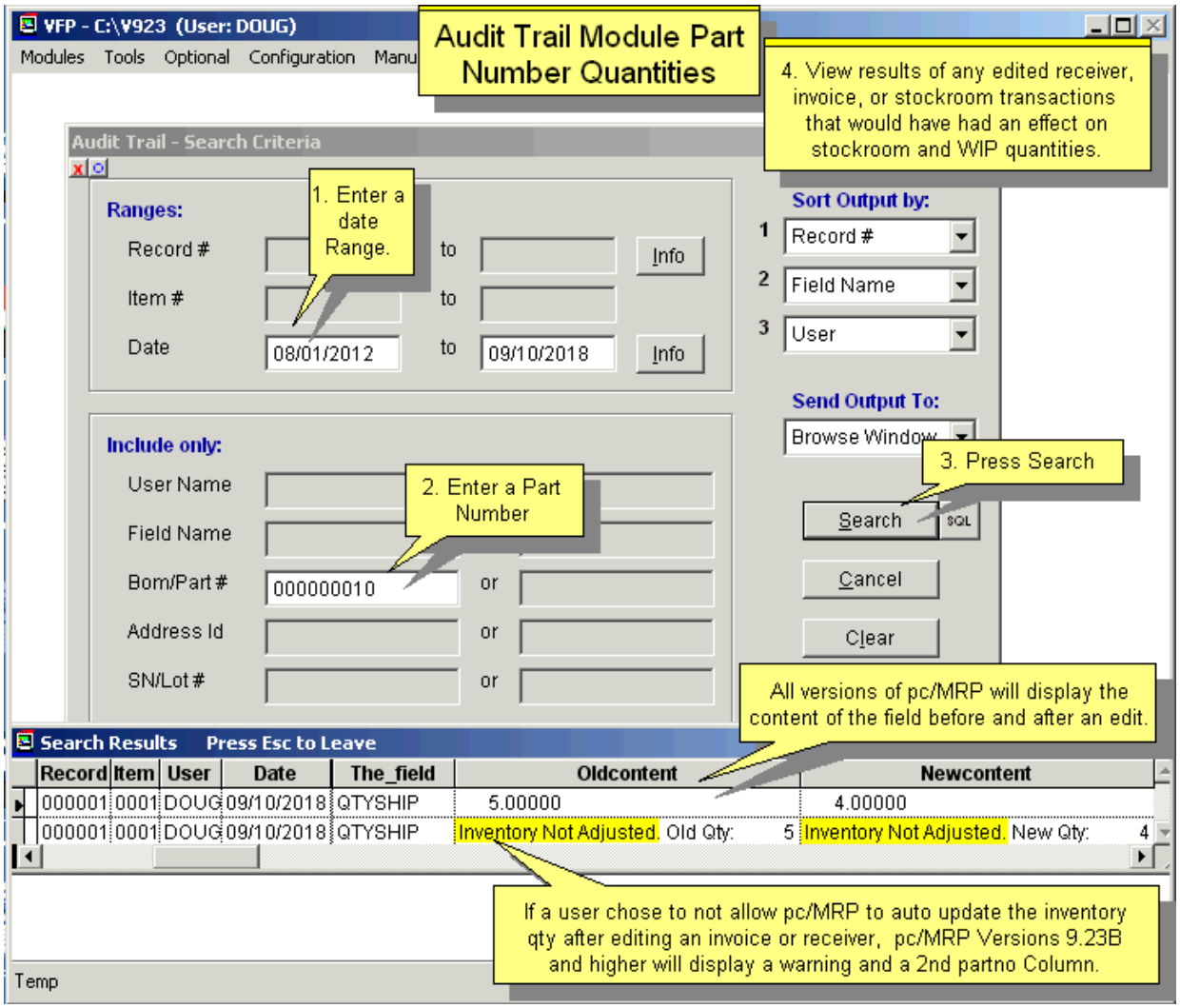
**Note:** In versions below **9.12F** and **9.20** if the user opened a Stockroom or Receiver record and then clicked Ok without actually changing anything, then the Audit Trail recorded a change in the LASTCHANGE field.

### 16.8.4. Searching Audit History for changes in Onhand or WIP Quantities

To find edits or deletions to receiver, invoice and stockroom records that could have affected stockroom and WIP quantities, click on the Part # Quantities Button as shown below. Please recall that editing the quantities on stockroom transactions does not change the quantities in the inventory file (these will have to be edited manually). Editing the quantities on receivers or invoices will change the quantities in the inventory file, as long as the receiver's date is <u>after</u> the date of the last physical inventory for that part.

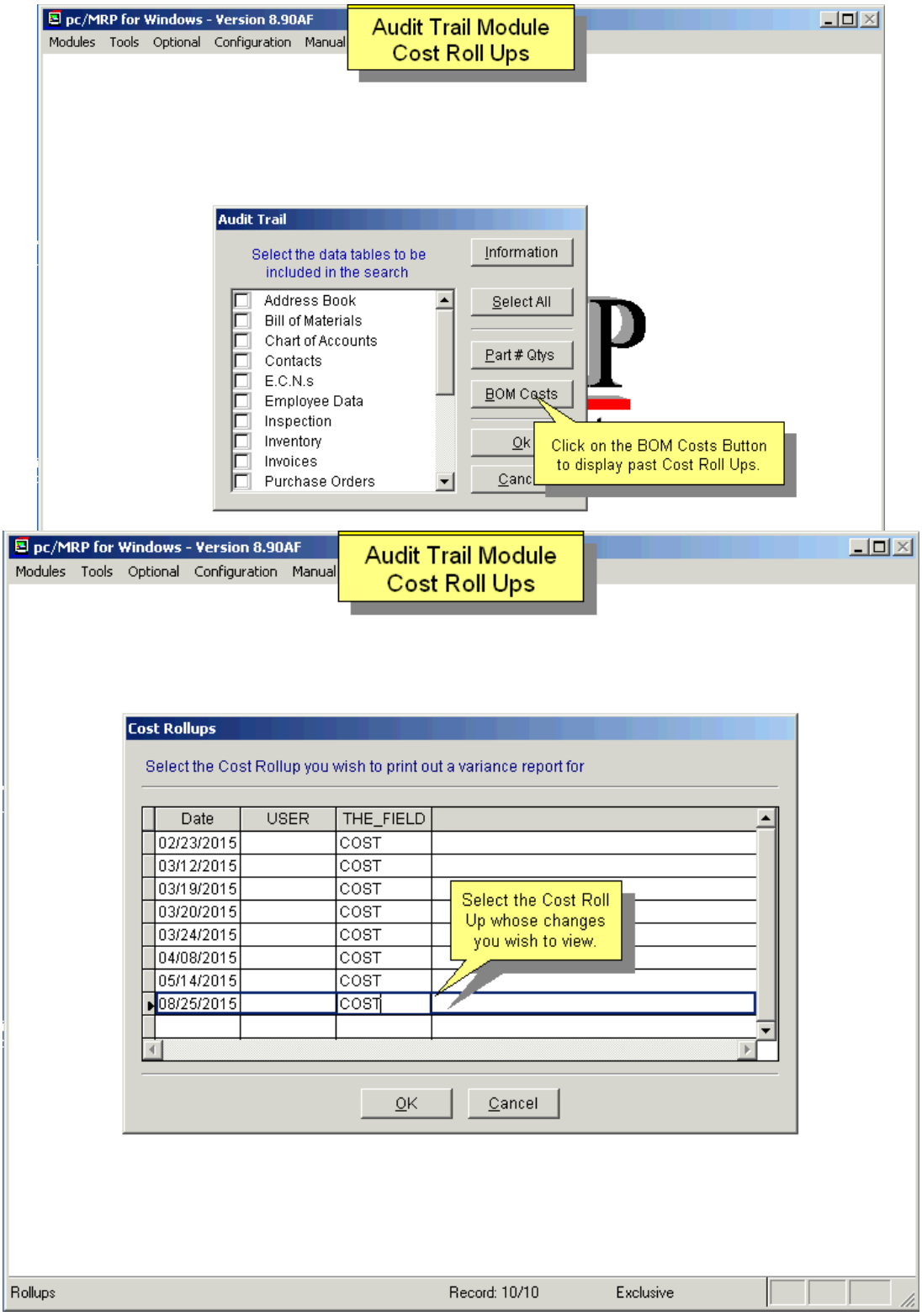


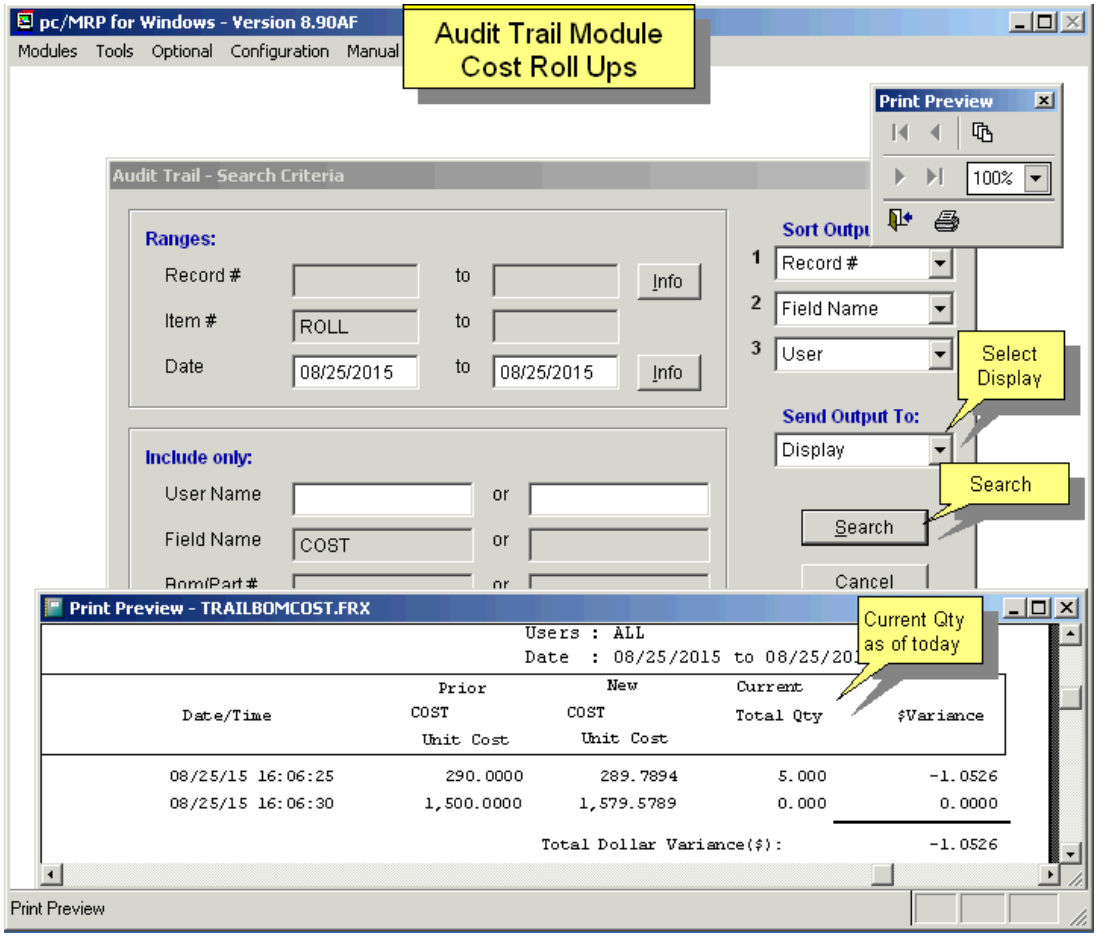

Whenever a receiver, invoice, or stockroom quantity is edited or deleted, the partno field in the TRAIL.DBF file is filled with the part number. This is the only time the partno field is filled in with the part number. The 'Part Number Quantities' report keys on the part number field.


VFP - C:\V923 (User: DOUG)
Modules Tools Optional Configuration Manu
Audit Trail Module Part Number Quantities
4. View results of any edited receiver, invoice, or stockroom transactions that would have had an effect on stockroom and WIP quantities.
Audit Trail - Search Criteria
Ranges:
1. Enter a date Range.
Record #
Item #
Date
08/01/2012
to
09/10/2018
Info
Sort Output by:
1 Record #
2 Field Name
3 User
Send Output To:
Browse Window
Include only:
User Name
Field Name
Bom/Part #
000000010
2. Enter a Part Number
Address Id
SN/Lot #
or
3. Press Search
Search
SQL
Cancel
Clear
All versions of pc/MRP will display the content of the field before and after an edit.
Search Results Press Esc to Leave
Record Item User Date The_field Oldcontent Newcontent
000001 0001 DOUG 09/10/2018 QTYSHIP 5.00000 4.00000
000001 0001 DOUG 09/10/2018 QTYSHIP Inventory Not Adjusted. Old Qty: 5 Inventory Not Adjusted. New Qty: 4
If a user chose to not allow pc/MRP to auto update the inventory qty after editing an invoice or receiver, pc/MRP Versions 9.23B and higher will display a warning and a 2nd partno Column.
Temp

### 16.8.5. Searching Audit History for Cost Roll-ups

To print a variance report for a previous cost roll up, click BOM Costs, and select a previous cost roll up.





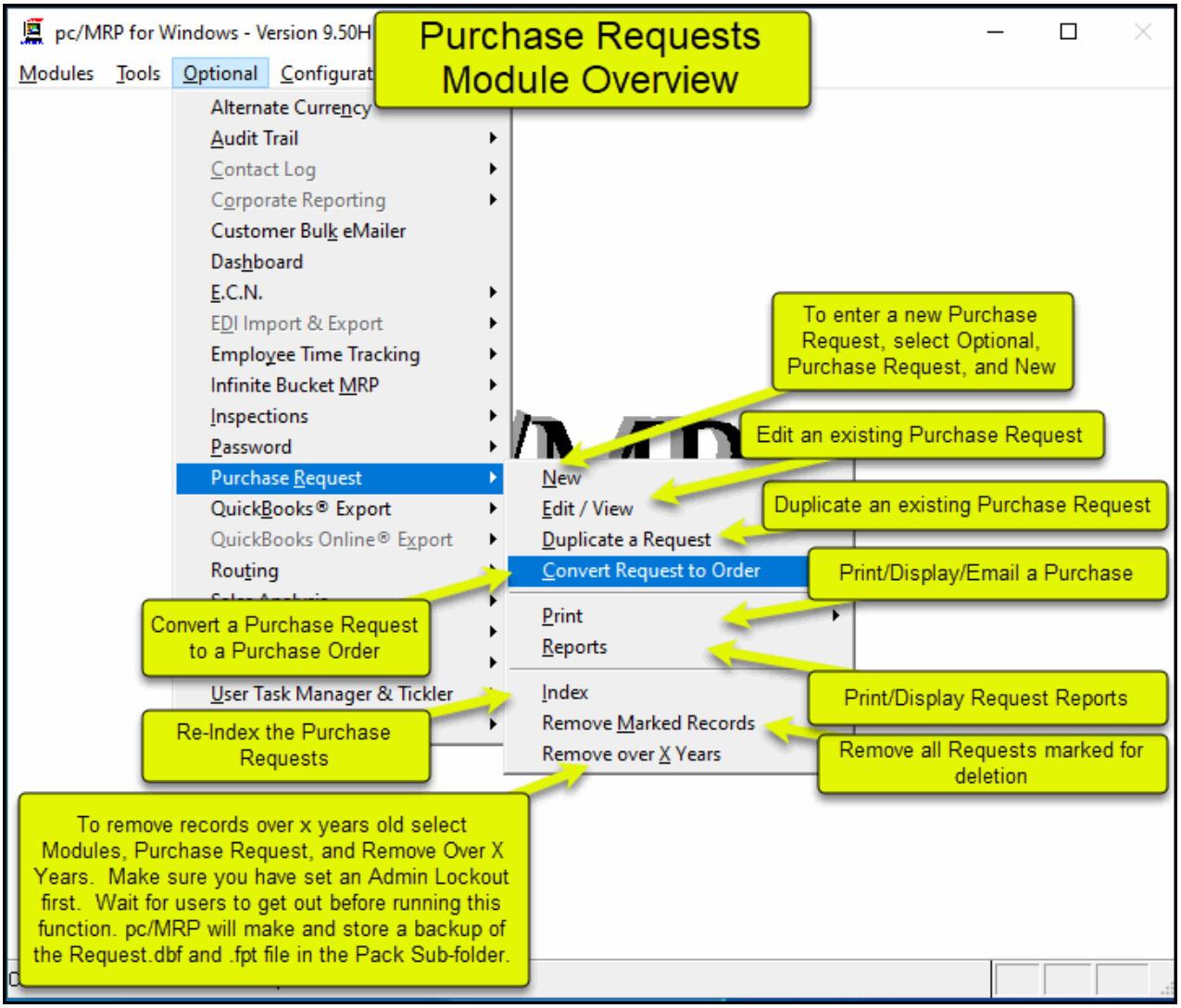

### 16.8.6 Deleting Audit Trail Records

Since the Audit Trail module makes a record of each change made, it tends to grow very rapidly. It, therefore, becomes necessary to remove obsolete records on a regular basis. How often these records are removed would vary depending upon your situation and the nature of your business.

To delete Audit Trail records, you should first ensure that a backup is made for archival purposes. Then Select Optional, Audit Trail, Delete and Remove Audit Records. You will be asked to enter a number representing the number of day's worth of records that you want to retain. All others will be deleted. The default is 90 days, but you may enter anything from 30 days to 9999 days.

# 16.9 Optional Purchase Request (RFQ) Module

### 16.9.1 Purchase Request Module Overview




The Purchase Request Module creates, edits, and prints out Purchase Requests. It can also be printed out as a **Request for Quote** to request pricing information from a vendor. The Purchase Request can easily be converted into a Purchase Order by selecting the Request items to be included in the conversion. Please see Chapter 7, Purchase Orders, for more detail.

### 16.9.2 Activating the Purchase Request Module

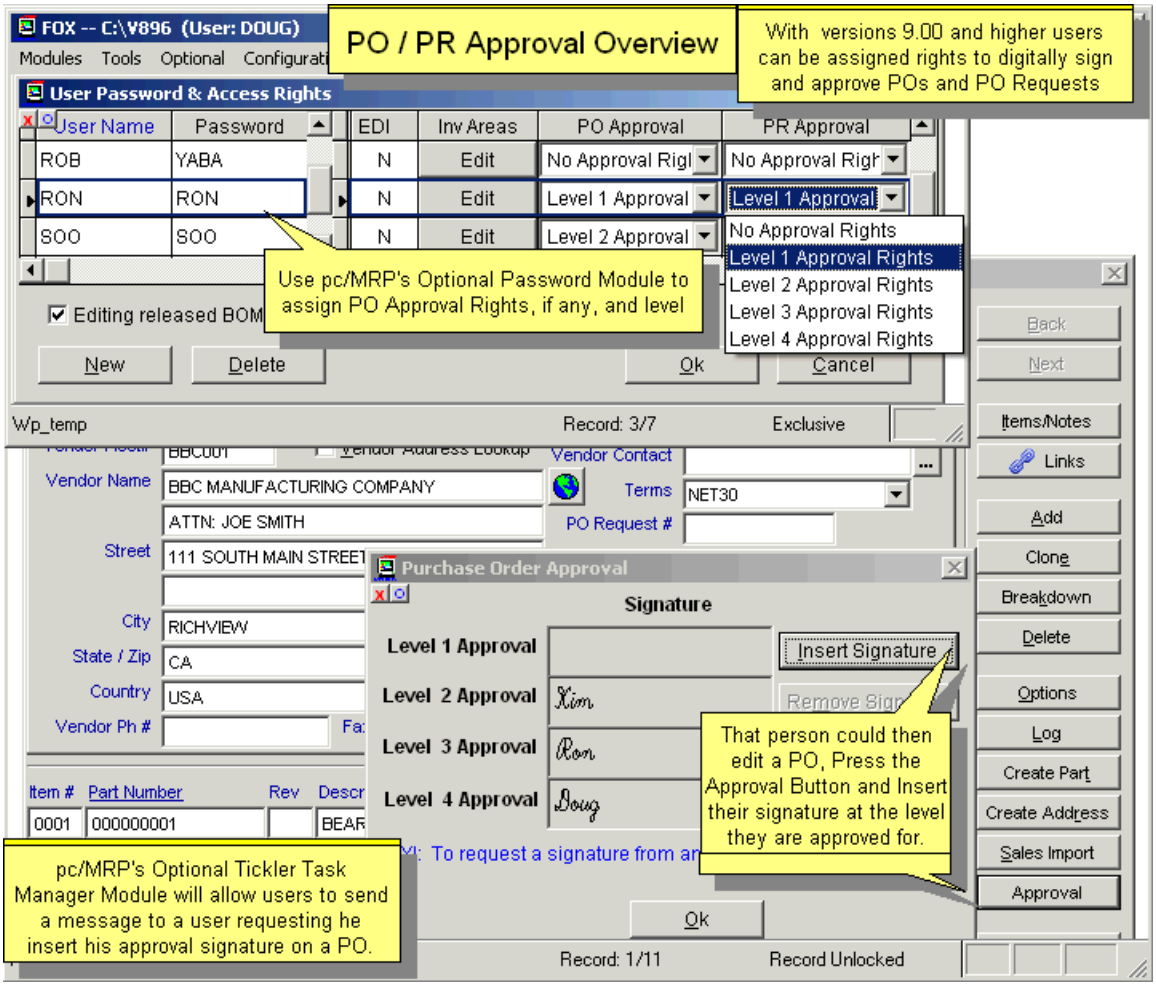
To activate the module, select Configuration, Module Activation, Purchase Request from the menu, and enter the activation number obtained from Software Arts, Inc.

### 16.9.3 Creating and Editing a Purchase Request

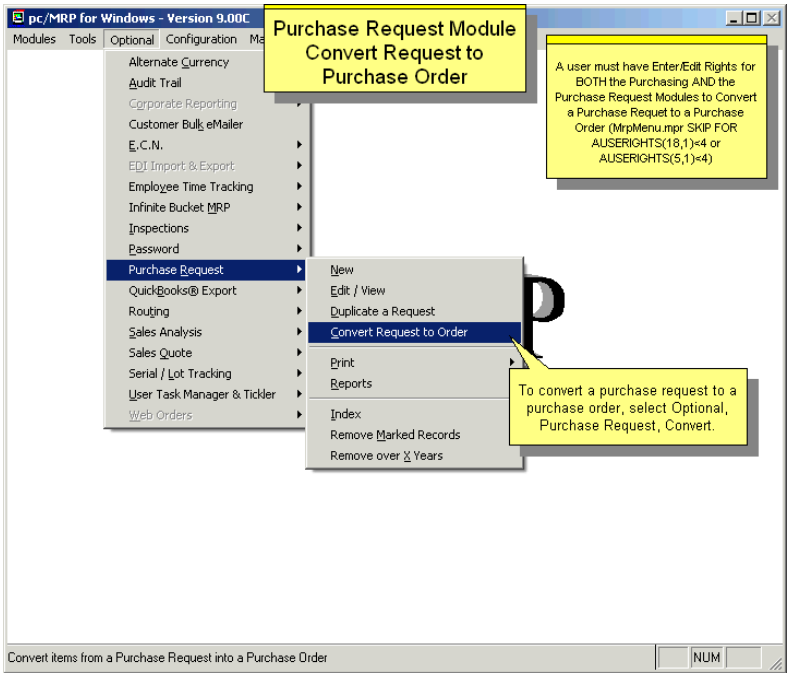
Select Optional, Purchase Request. The process of creating or editing a Purchase Request is the same as creating and editing a Purchase Order. Refer to Section 7.1 of this Manual for a detailed explanation of the process.

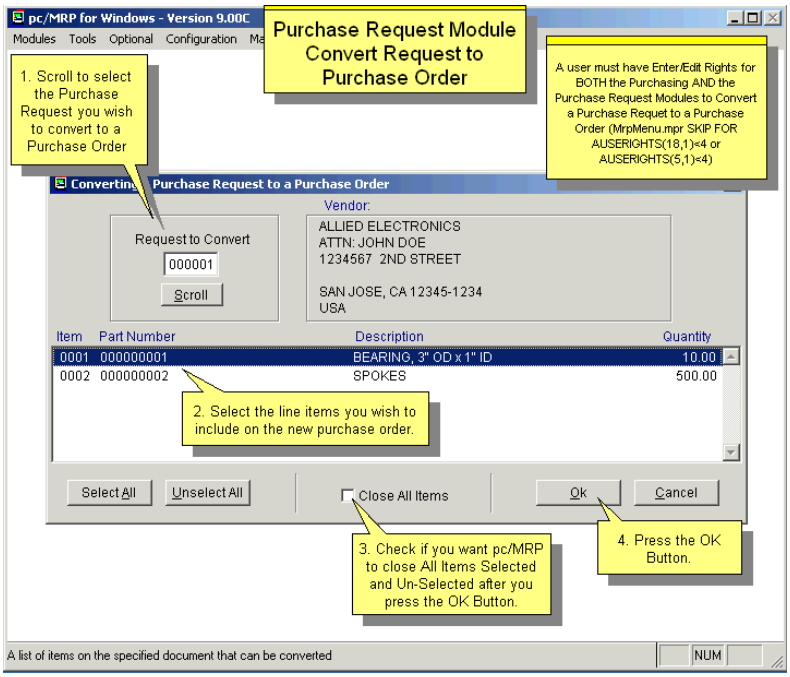
### 16.9.4 Purchase Request Approval Process

Companies that own the optional Advanced Password Module, can utilize the PR Approval feature below. The optional User Task Manager & Tickler Module adds an additional feature, but is not essential. For details please see Section 7.3 of this Manual.



### 16.9.5 Converting a Purchase Request to a Purchase Order

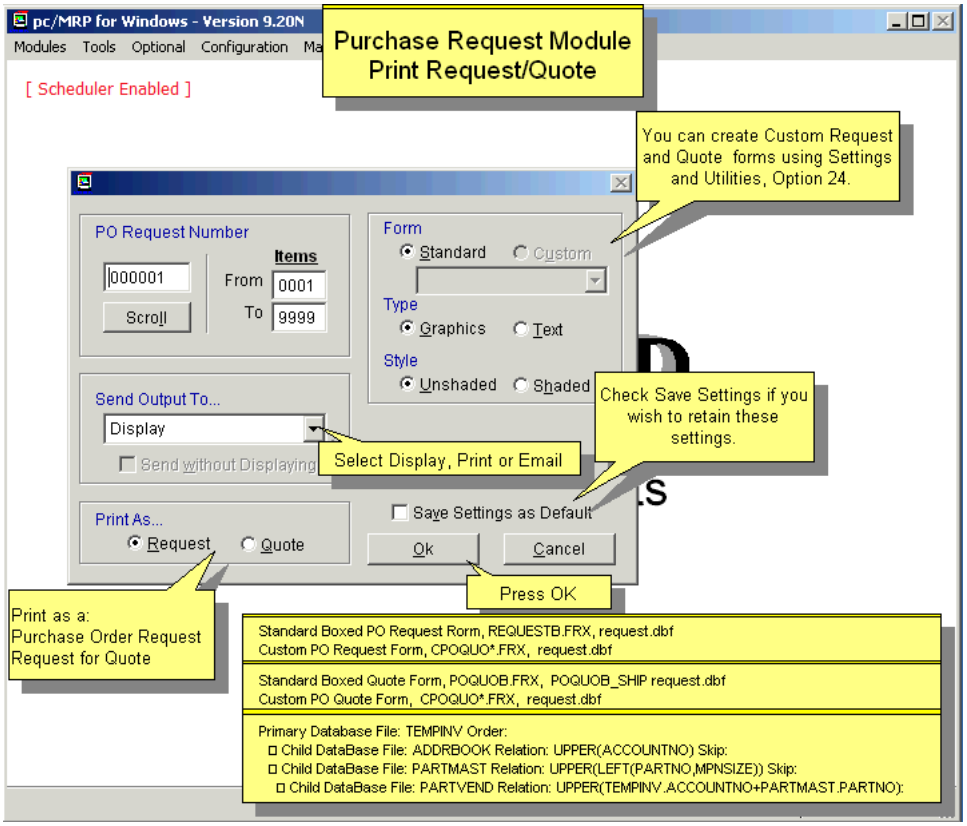



Selecting "Convert Request to Order" will open a dialog window where the user may select the items of the Purchase Request that are to be converted into a Purchase Order. Multiple items can be selected by holding down the [Ctrl] key on the keyboard while clicking on the items with the mouse. Only those items selected will be converted. After the PO is generated, those items selected will be marked as "Complete" on the Purchase Request. If the "Close all items" check box is selected, the Purchase Request items not selected for conversion will also be marked as "Complete." If there is an invalid part number in the Purchase Request, pc/MRP will offer to convert this part to an “NA” part number, or to exclude it from the list of items to convert.

If the Advanced Password Module is activated, a person must have Enter/Edit or Deletion rights to the PO Module and Enter/Edit or Deletion rights to the Accounting Module.

### 16.9.6 Print/Email Purchase Quotes




The Purchase Quote report engine is the same as the purchase order report engine. After you have selected the criteria for your report, you also have the opportunity to print, display, fax, or send the actual quote via e-mail, using a PDA or HTML document to attach the purchase quote to an e-mail.

**Note:** If you send an e-mail directly from pc/MRP, we use MS Outlook. The e-mail address in MS Outlook will automatically be populated from the e-mail entry in the pc/MRP Address Book and the PDF of HTML file will be attached. If you create a PDF or HTML document, you can save this document and attach it to an e-mail created in your existing e-mail program.

**Option 83** allows the user to add, edit or delete Terms and Conditions for Purchase Orders. Terms that are checked as default terms are included in all new purchase orders. When a user is creating a purchase order he/she can press the Options Button to select Terms and Conditions other than the default Terms and Conditions.

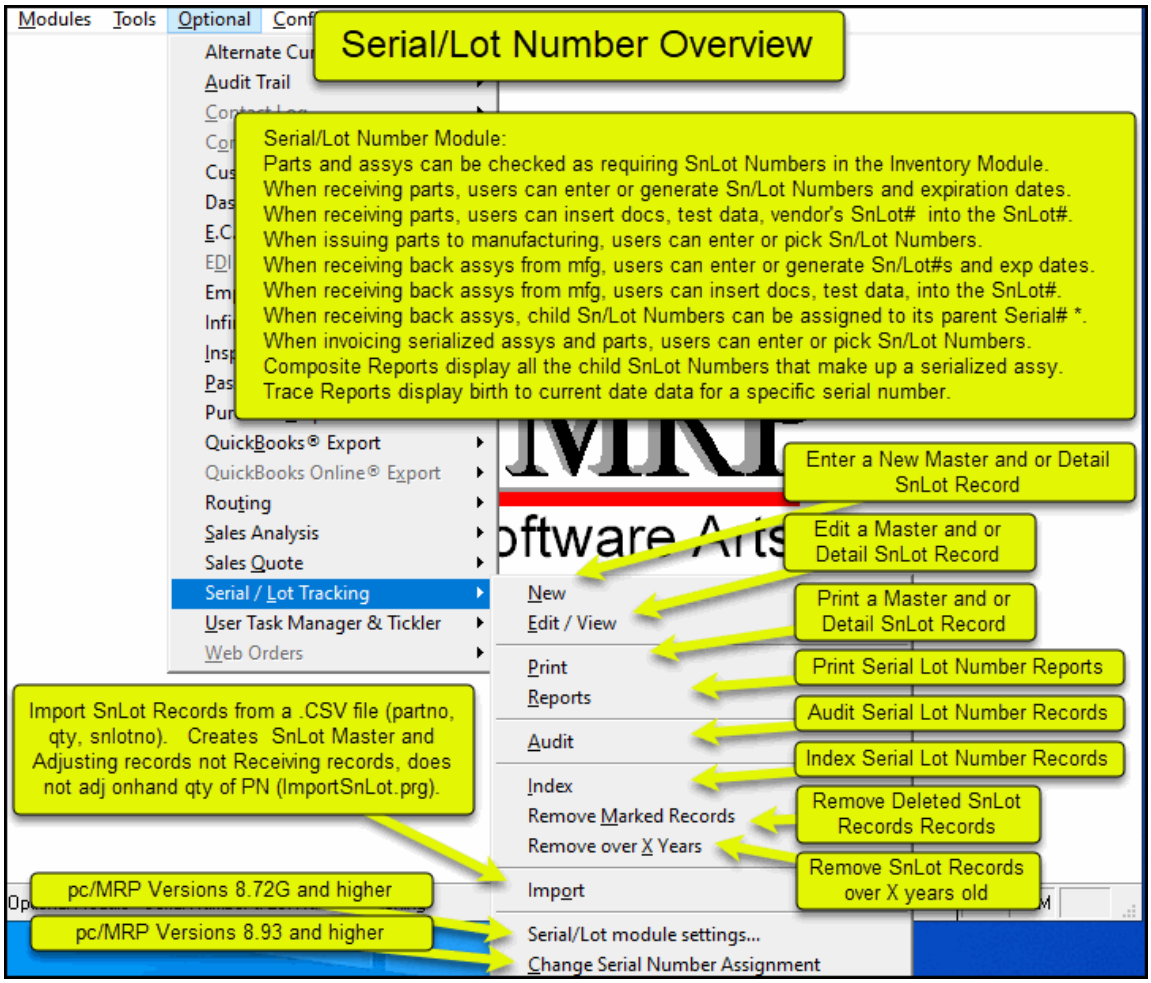
When a purchase request/quote is created in the REQUEST.DBF file it will store the default terms in its termcond memo field. If the termcond field is not empty the terms and conditions sheet will print out right after the purchase request/quote prints out. This is the same for a PO with the exception that a PO's Terms and Condition Field can be manually edited by pressing the Options button on the PO Data Entry Screen. Creating 2 files named REQUESTB.EF and POQUOB_SHIP.EF will prevent the T&C page print out. The files should contain PCTERMCONDIDLIST = "" after the ~IN~ clause.

The standard Terms and Conditions form is stored as TC.FRX. If you need to customize this form (for example change font or font size), save the modified form as CTC.FRX. pc/MRP will automatically print the custom Terms and Conditions form, if it exists in the PCMRPW folder.

# 16.10 Optional Serial/Lot Number Module

## 16.10.1 Overview and Settings

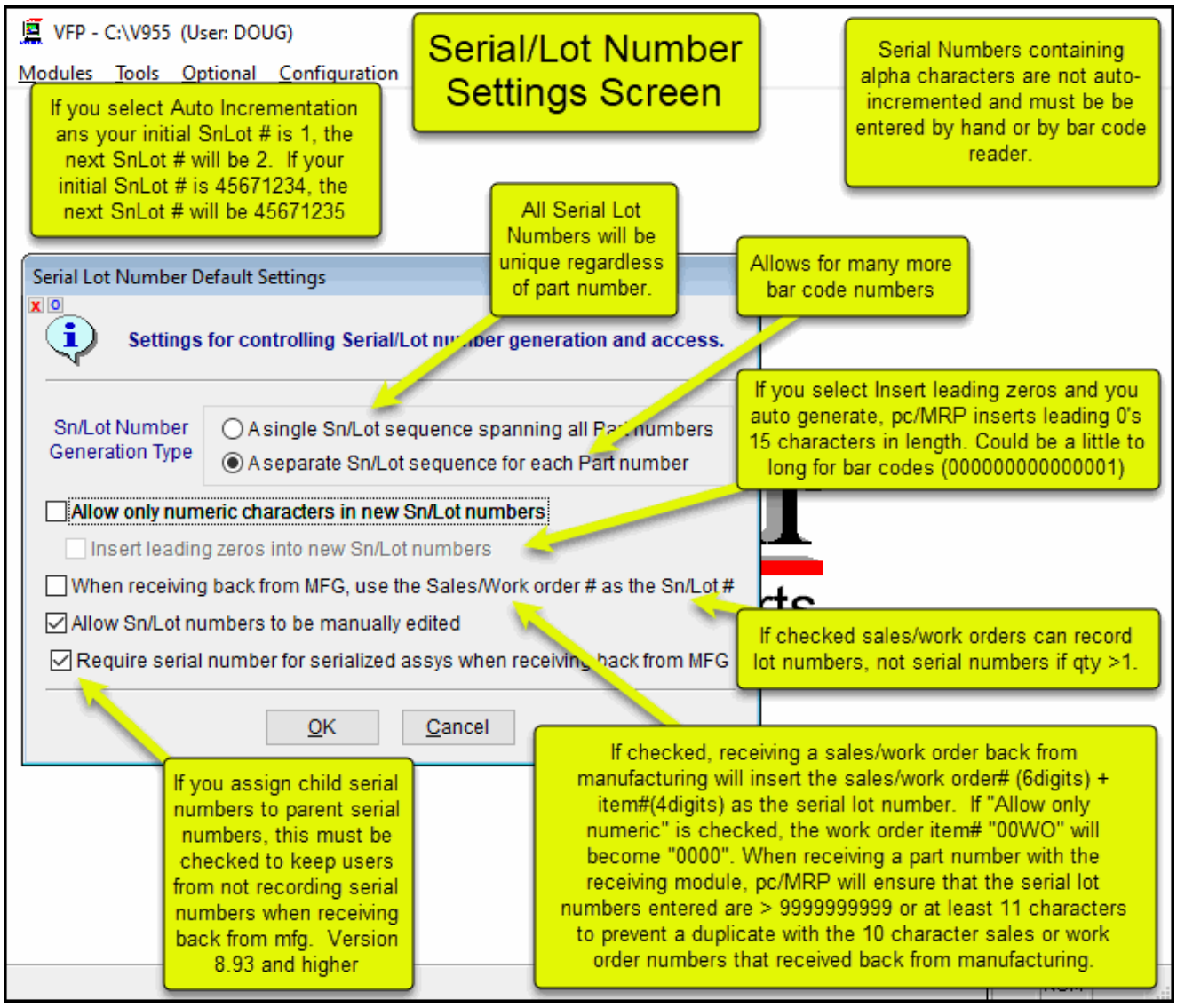
A set of online slideshows with step-by-step description of several scenarios is located here: http://www.pcmrp.com/mrp101/snlot101index.htm Due to the high volume of images, many of the examples are only available online.




If you have the Optional Serial/Lot Number module and the **Serialized Item** (serialitem) check box is checked on the MISC tab of the part's Inventory screen, pc/MRP will display a window allowing you to enter or pick serial numbers when receiving, issuing, receiving back from MFG, or invoicing for this part number.

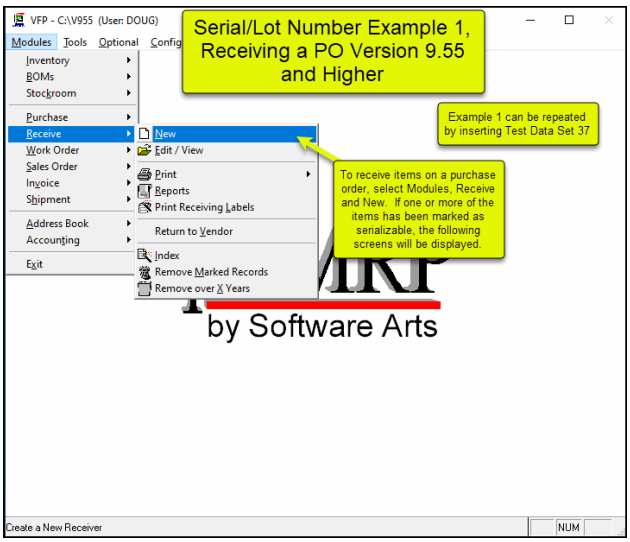
pc/MRP's optional Serial/Lot Number module will store current on hand quantities of each serial/lot number in its snlot.dbf file. It also keeps records of all transactions adjusting the serial/lot number quantities in its snlotdet.dbf file. Entering invoices (this module refers to these transactions as I type transactions), or issuing parts to manufacturing (S type transactions), will decrease the on hand quantity of the serial/lot number. Entering receivers (R type transactions), receive back completed assemblies (M type transactions) or entering new serial lot numbers (initial, J type transactions) will increase the on hand quantity of the serial/lot number.

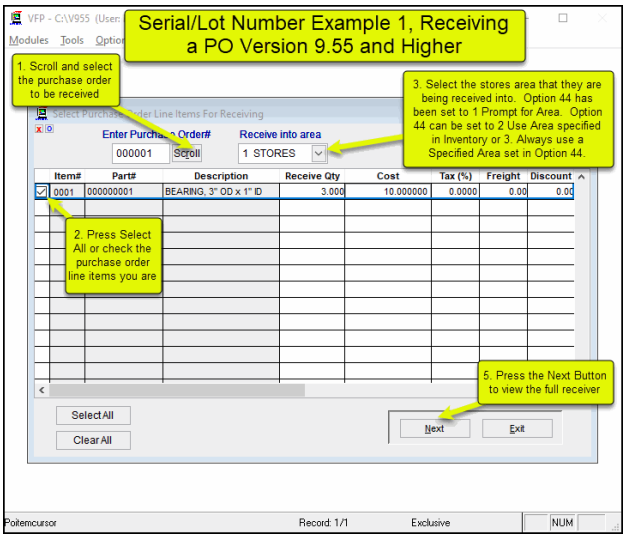
The master snlot.dbf contains one record for every serial/lot number – part number combination, along with its current on hand quantity. The detail snlotdet.dbf contains one record for every transaction that would affect the on hand quantity of a serial/lot number. The file structure for these two databases can be printed/displayed using Settings and Utilities, **Option 39**.

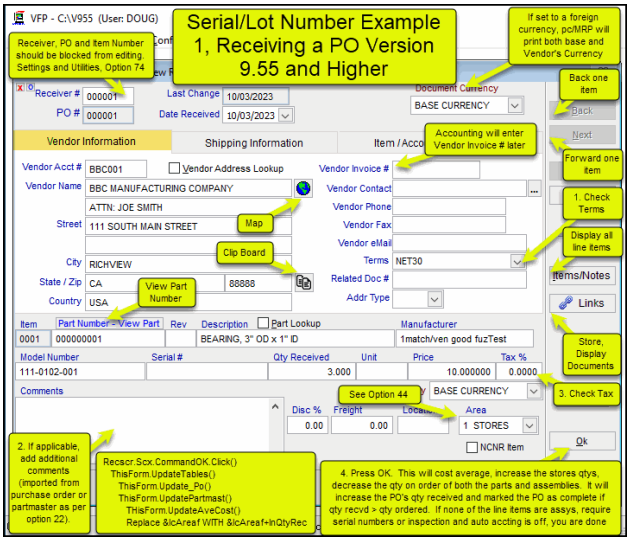


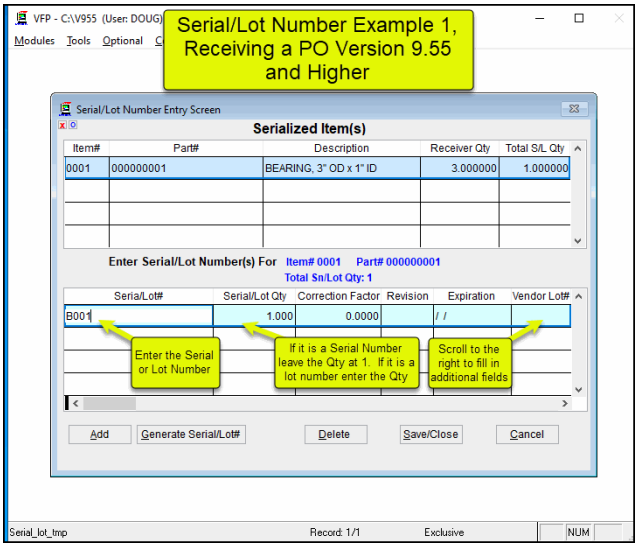

**Sn/Lot Number Generation Type:** Users can configure how pc/MRP generates the next available serial number.
Option 1: All serial/lot numbers will be unique, regardless of part number.
Option 2: Serial/lot numbers will only be unique for each part number. This is the default setting, and this is the setting for versions below **8.72G**.

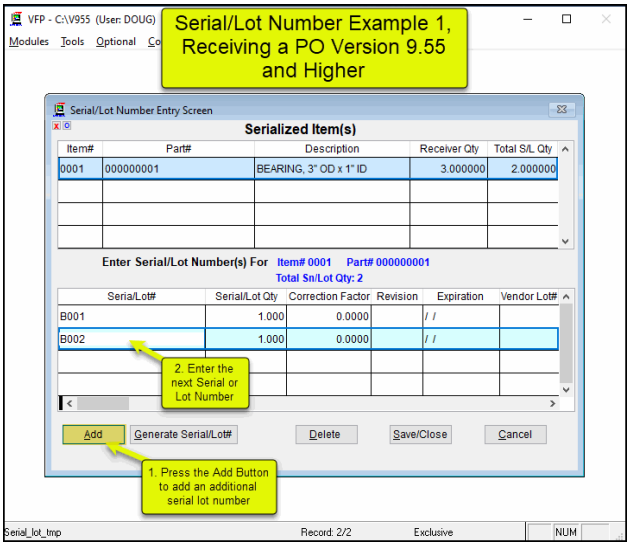
# 16.10.2 Receiving Parts

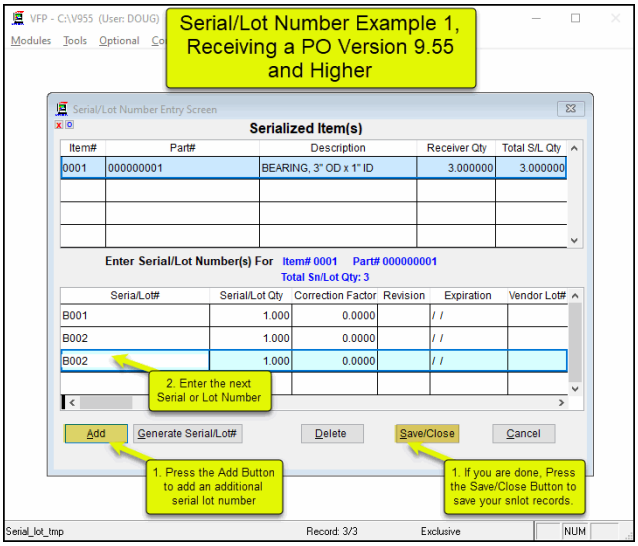


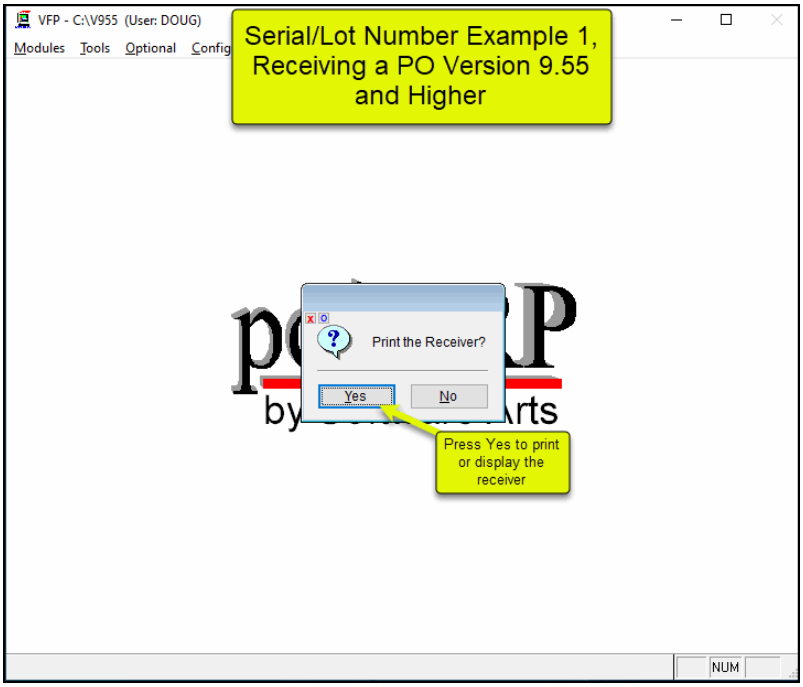



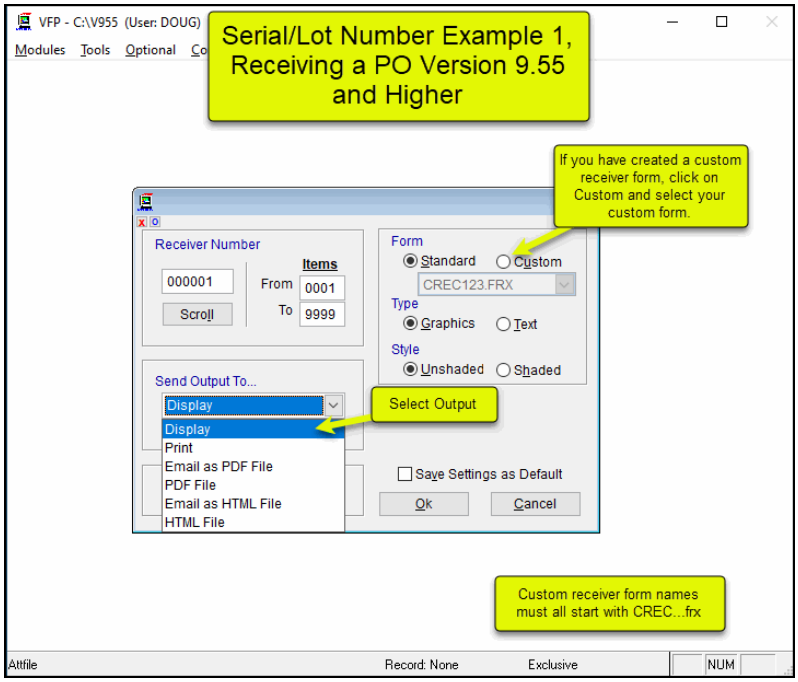



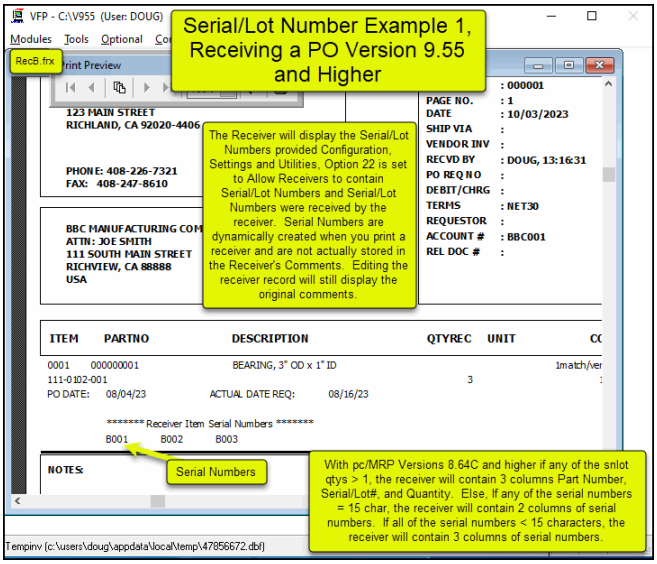
The part number, document type (R for receiver), document number (receiver number), **vendor id** number, date received, and revision level will be inserted automatically. If you are recording lot numbers, enter your lot number, the quantity in the lot, the vendor's lot number, and the expiration date (if any). If you are recording serial numbers, enter your serial number, the quantity as 1, vendor's serial number, and expiration date (if any). If there is more than one lot or serial number, press ok and answer "Y" to enter additional serial or lot numbers. This will create a serial lot number detail record in the snlotdet.dbf with the vendor's id code in the **SNCV** field, **R** (receiver) in the **DOCTYPE** field, and the receiver number in the **DOCNO** field.

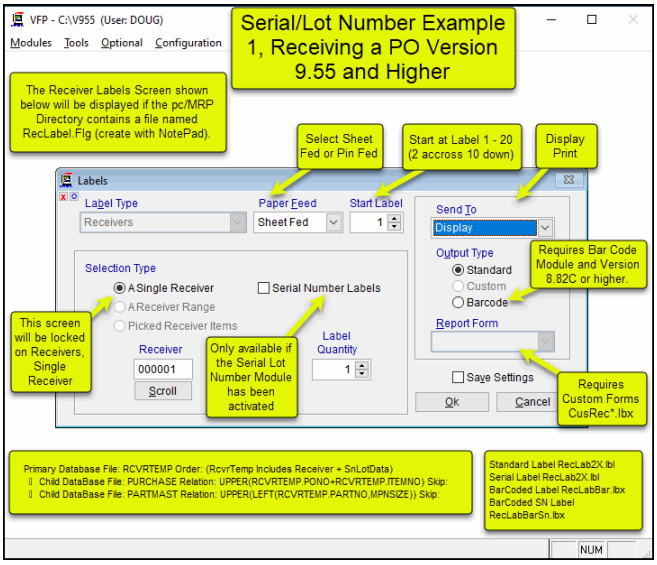
## 16.10.2A Printing out Receivers and Labels with Serial Numbers.

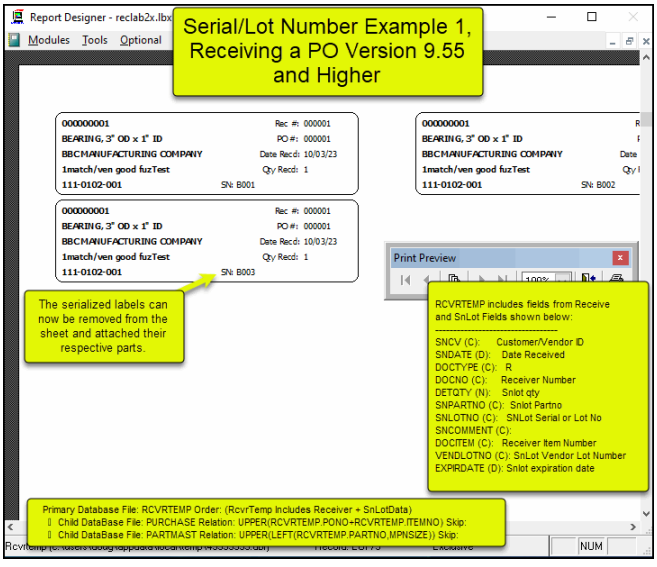


Use **Option 22** to set the receiver to include Serial Numbers as shown on the screen below:

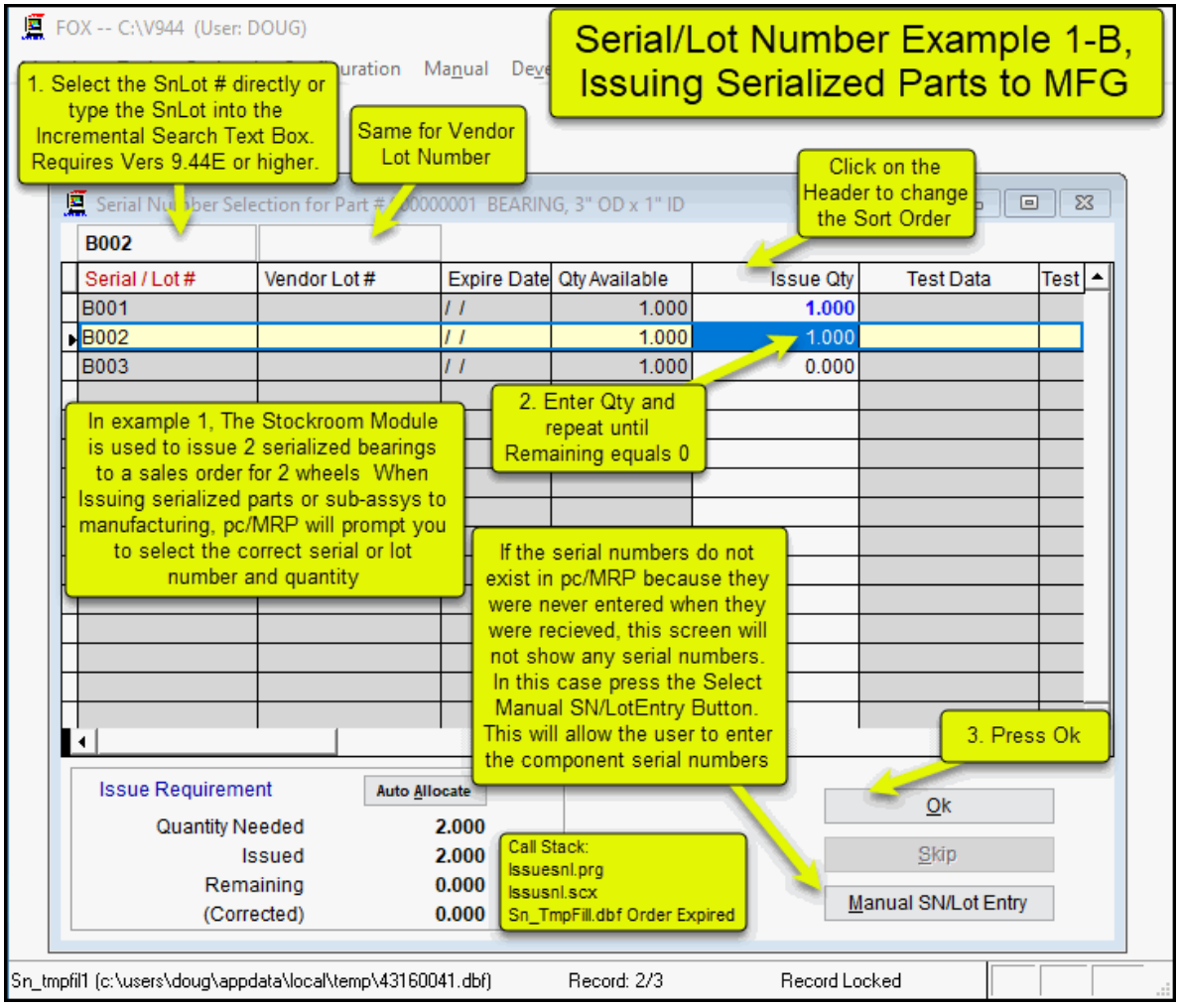


**16.10.3 Issuing Parts to Manufacturing**
**(Example 1B on the Online Slide Show)**

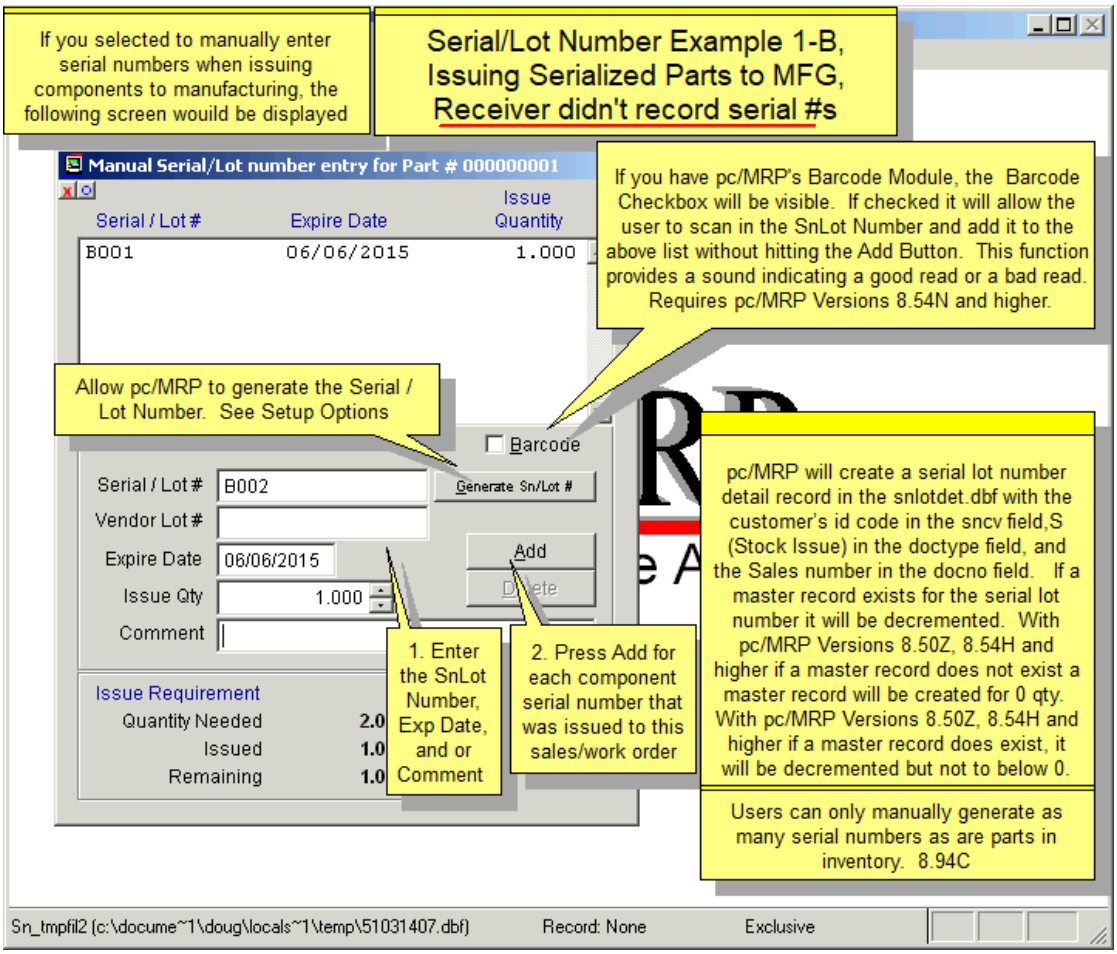
When issuing parts from the stockroom to manufacturing for a sales order, you will be asked if you wish to record serial numbers. If you answer "Yes", a screen displaying the serial/lot numbers available for that part number will allow you to select the serial/lot numbers of the part(s) you are issuing.



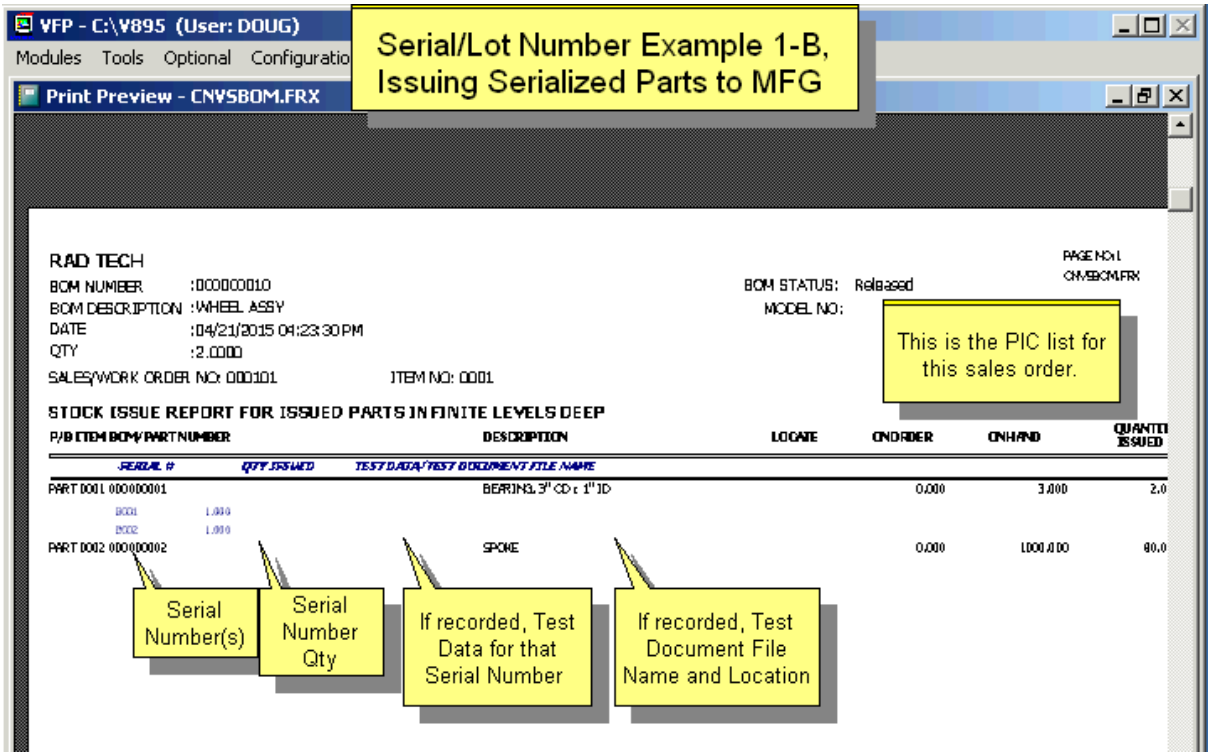

Select the serial/lot number and enter the quantity required. Select Manual, to manually enter serial numbers that do not presently exist in pc/MRP. If a serial/lot number is selected that is past its expiration date pc/MRP will display a warning and allow you to deselect or use that serial lot number. This will create a serial/lot number detail record in the snlotdet.dbf with the customer's ID code in the sncv field, S (for Stockroom) in the doctype field, and the sales order number in the docno field. Select Skip, to not issue any serial numbers. If you were issuing a lot number to manufacturing that has a correction factor, you would issue the corrected amount instead of the exact amount required by the BOM. The corrected amount would appear at the bottom of the issue screen. The code for the above screen and correction formula is located in prsndscr.prg. The corrected amount is: (Required qty - Total corrected qty issued)/ (1-(The correction factor/100)).

If you selected to manually enter serial numbers when issuing components to manufacturing (because the serial number was not recorded at the time of receiving), the following screen will be displayed. You will be able to manually enter serial numbers for as many parts as are available to issue.

If the STKLAB.FLG file exists in the PCMRPW folder, pc/MRP will offer to print out labels for the parts just issued. These labels do not contain the serial numbers. Users can print out serialized labels when receiving the parts, as described in Example 1A.




After issuing parts to manufacturing, pc/MRP will offer to include serial lot number Test Data and/or Test Document File Name on the Stock Issue Report.

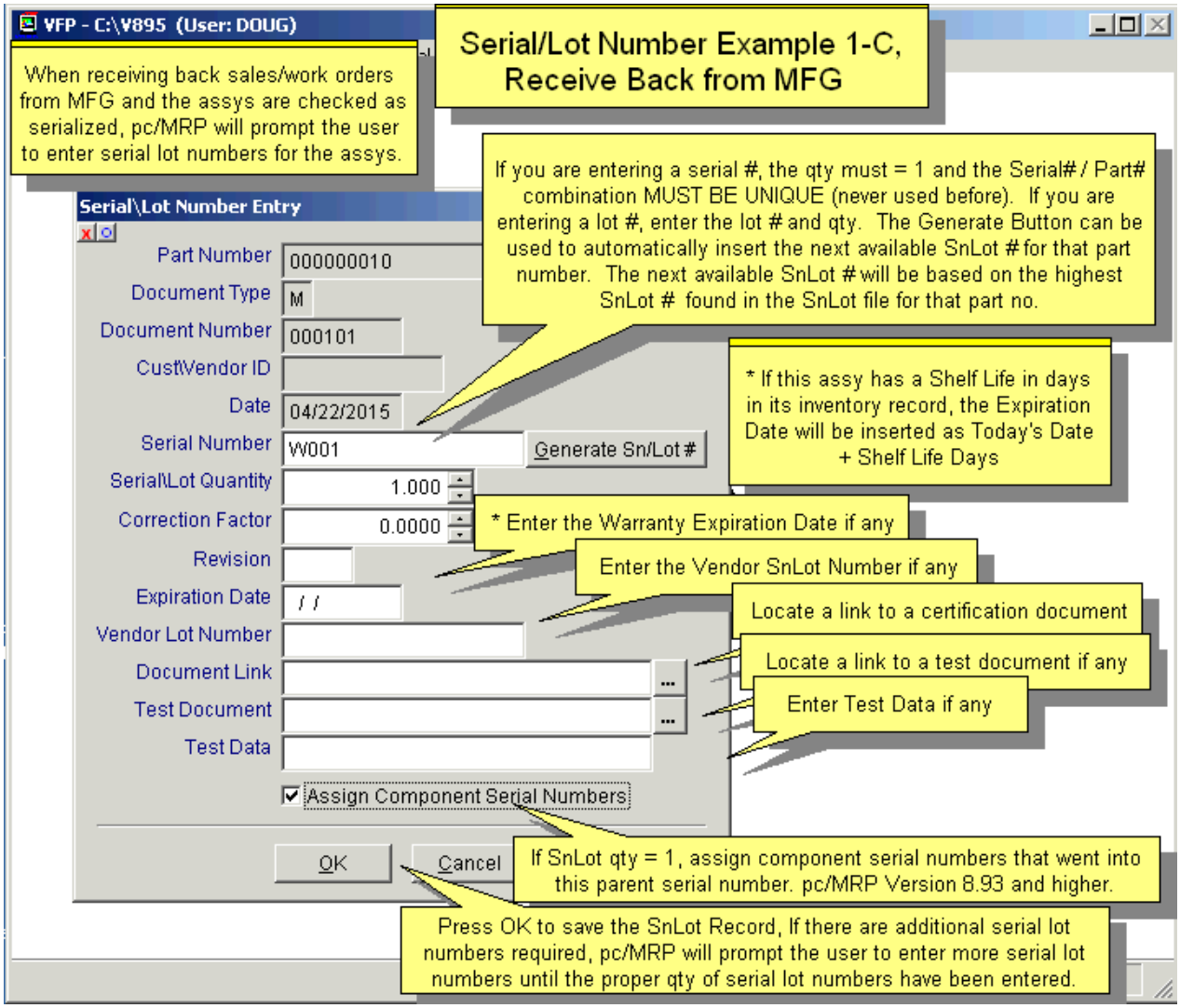


**16.10.4 Receiving Back Completed Assemblies from Manufacturing**
**(Example 1C on the Online Slide Show)**

**Note:** If you TEST your assy(s) and perform U Un-Issue stockroom and L Lower Level Replacement Issues BEFORE Receiving the Sales/Work Order assy(s) back from manufacturing, managing serial numbers will be much easier. IE, Once everything has been tested and swapped out, THEN Receive Back From Manufacturing and assign the serial numbers that were actually used to their parent serial numbers.

If you need to swap out parts and serial numbers after the sales order has been received back and invoiced, you must use the Serial Lot Number's Swap function as demonstrated later in Example 2.

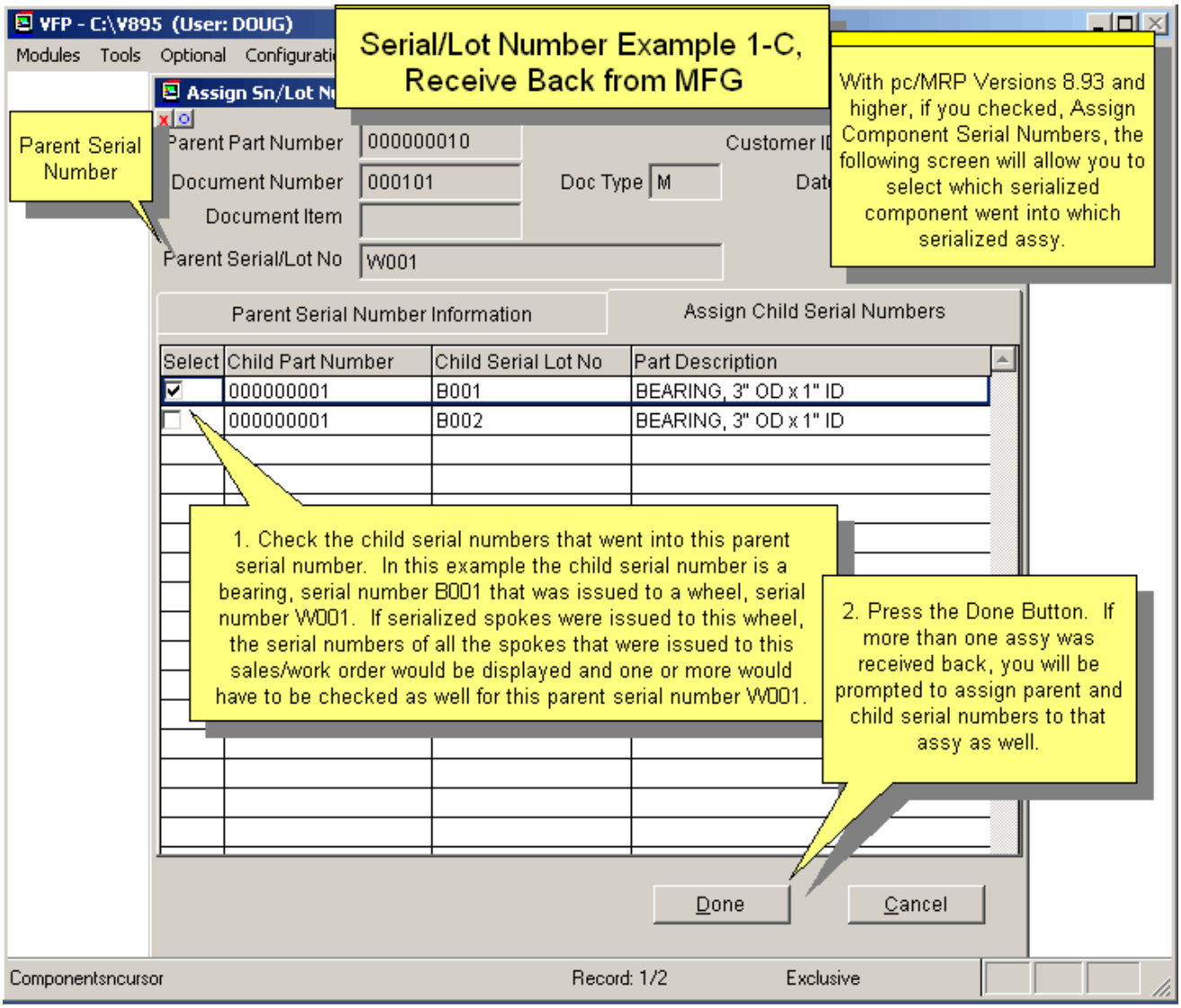
If you need to swap out parts and serial numbers after the sales order has been received back, but not invoiced, you must use the Serial Lot Number's Swap function as demonstrated later in Example 3.




After receiving back completed assemblies from manufacturing, pc/MRP will prompt, "Enter a serial/lot number for this part number". If you answer "Y", the above screen will be displayed. Expiration date will be automatically entered if the assembly has a shelf life filled in in Inventory.

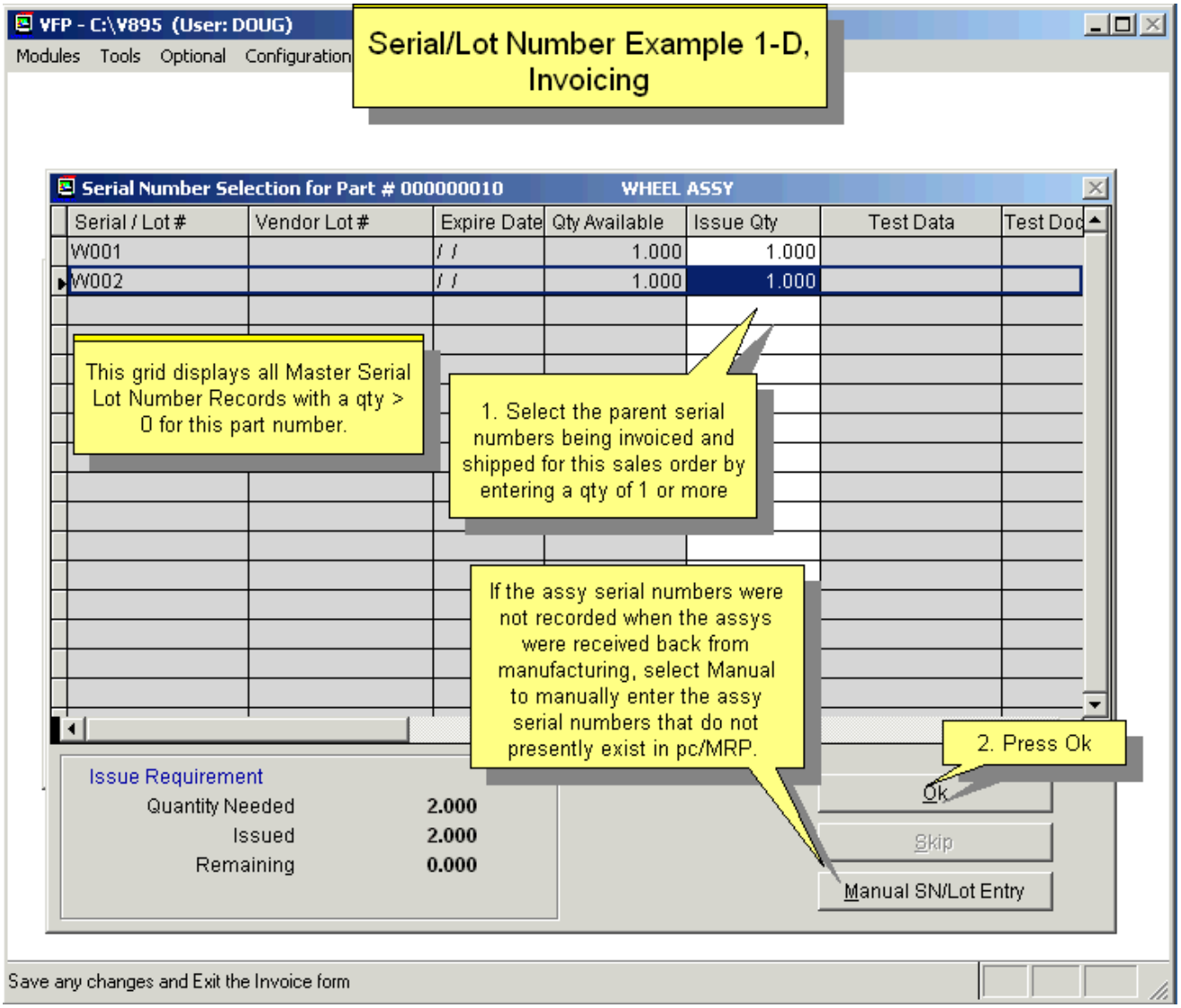
pc/MRP allows the user to assign individual child serial numbers to parent serial numbers. For example, this allows pc/MRP to track which bearing went into which bike where as before pc/MRP could only report these 20 bearing were issued to those 10 bikes on this sales order. In the previous versions you would have had to have a sales order with 10 line items qty of 1each to track which 2 bearings went into one particular bike.

For **reports**, see Section 16.10.9.



**16.10.5 Invoicing**
**(Example 1D on the Online Slide Show)**

When invoicing parts marked as serialized (in the inventory module), you will be asked if you wish to record serial numbers. If you answer "Yes", a screen displaying the serial/lot numbers available for that part number will allow you to invoice the part(s) by serial/lot numbers.

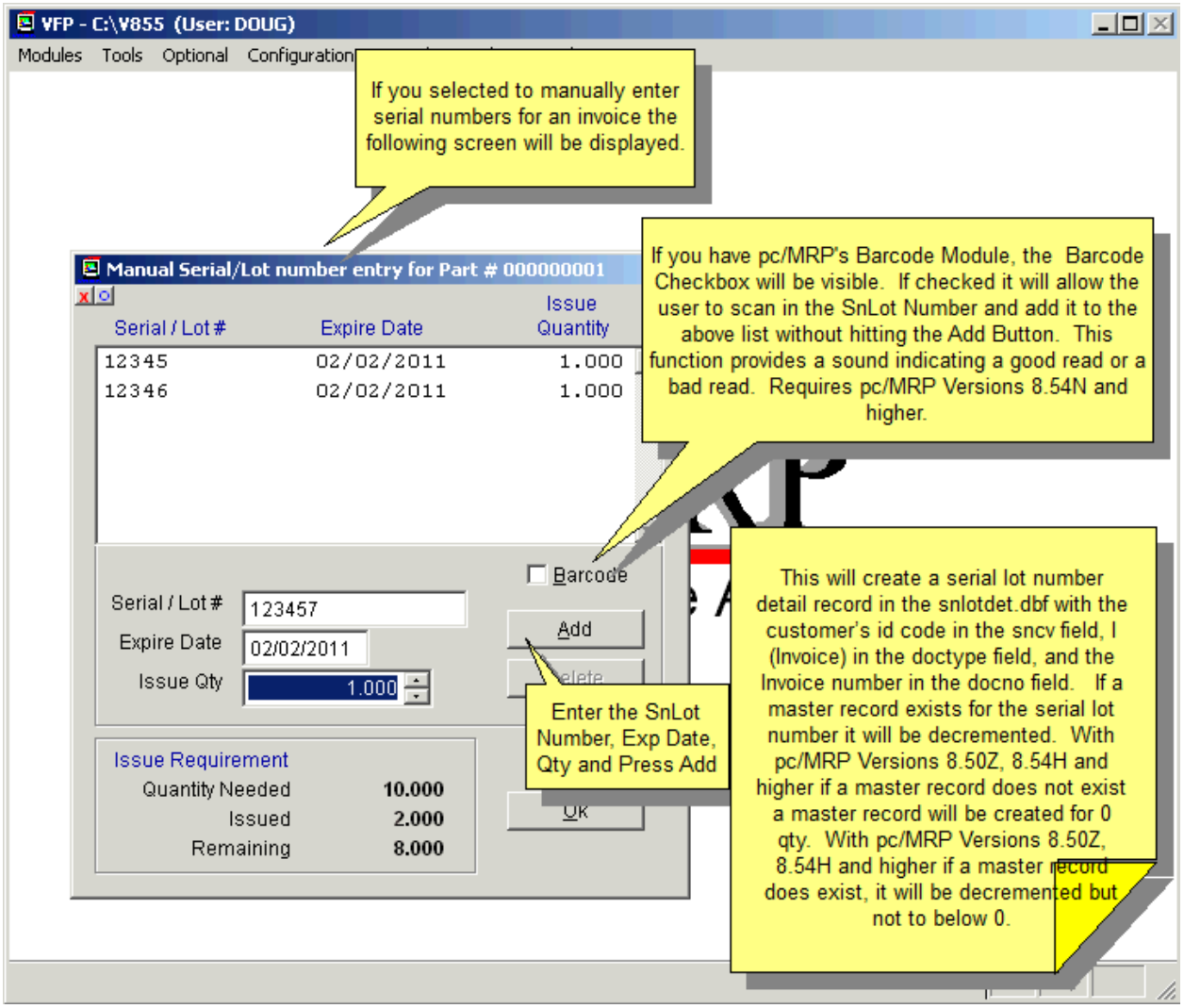



Select the serial/lot number and enter the quantity required. If a serial/lot number is selected that is past its expiration date pc/MRP will display a warning and allow you to deselect that serial lot number or use it anyway.

Select **Skip** to not issue any serial numbers if you do not have any available serial number for this part and need to enter them manually.

**Manually entering serial/lot numbers when invoicing.**

Select **Manual** to manually enter serial numbers that do not presently exist in pc/MRP.




This will create a serial lot number detail record in the snlotdet.dbf with the customer's id code in the **sncv** field, I (Invoice) in the **doctype** field, and the Invoice number in the **docno** field. If a master record exists for the serial lot number it will be decremented.

If a master record does not exist a master record will be created for 0 qty. If a master record does exist, it will be decremented but not to below 0.

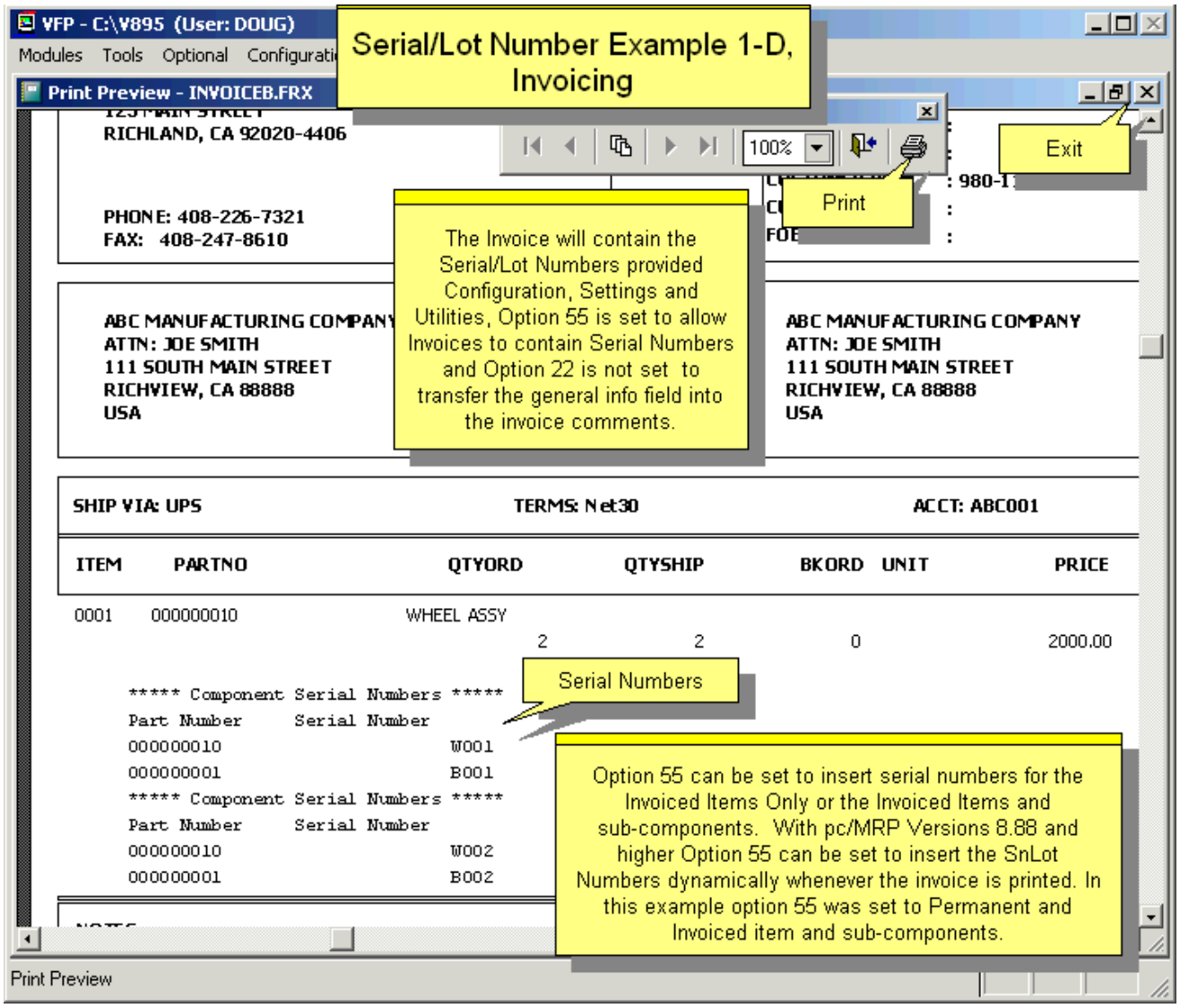
**Printing out Invoices with Serial Numbers.**

The invoice can be set to include Serial Numbers as shown on the screen below:

pc/MRP will print out all serial/lot numbers issued to this sales order and all serial lot numbers created when entering this invoice in the invoice's comment field provided:

**Option 22** in the configuration settings and utilities menu is not set to automatically insert the inventory memo field into the invoice.

**Option 55** in the configuration settings and utilities menu has been set to import "Invoiced items only" or "Invoiced items and sub-components".



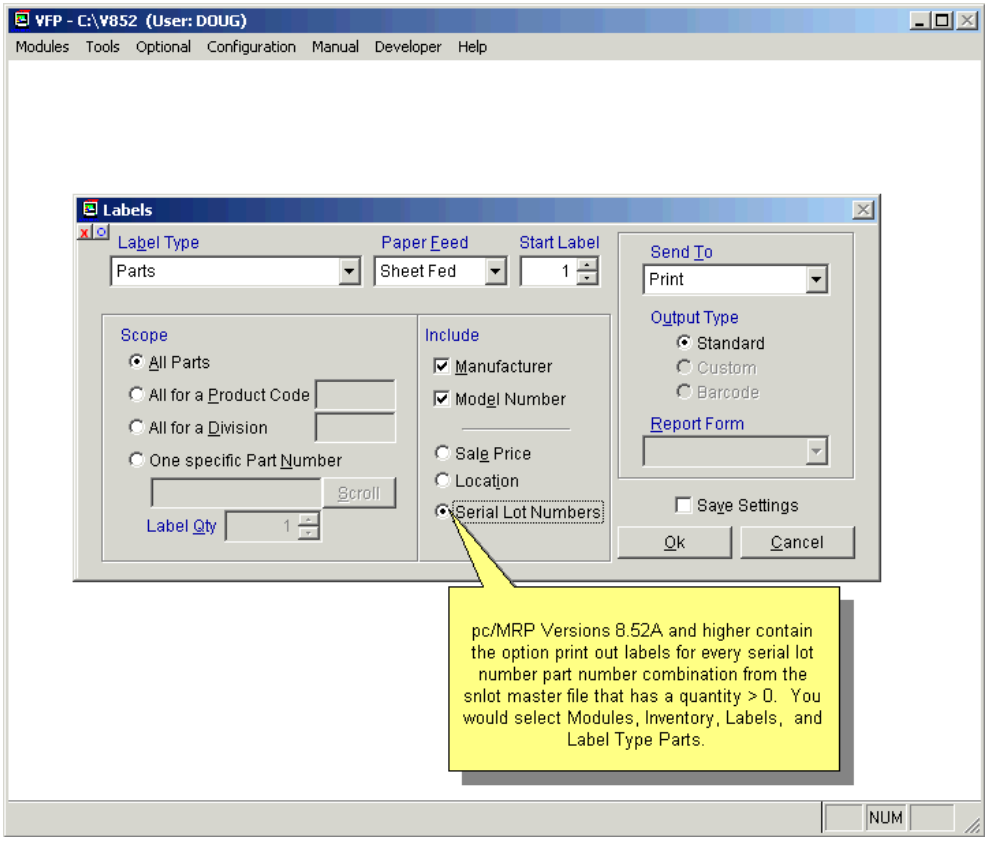
### 16.10.6 Special Cases – Step-by-Step Examples

See the online slide shows at http://www.pcmrp.com/mrp101/snlot101index.htm for detailed examples of the following situations.

Example 2 - Swapping Out a Serialized Part on an Invoiced Assy
Example 3 - Swapping Out a Serialized Part on an Assy received back from mfg but not invoiced
Example 4a - Assigning serialized parts to an Assy that was Received Back without assignment
Example 4b - Assigning serialized parts to an Assy that was Invoiced without assignment
Example 5 - Receive back unused serialized parts
Example 6 - Issue Additional serialized parts
Example 7 - Negative Adjustment to scrap a serialized part
Example 8 - Pick Shortages for serialized parts
Example 9 - Issuing Work Orders with serialized parts
Example 10 - Swapping Out a Serialized Sub-assy on an Invoiced Assy
Example 11a - Option T-Returning all parts and assys Issued to MFG and
Example 11b - Option T-Returning all parts and assys Received Back from MFG
Example 12 - Manually entering Detail and Master Serial/Lot Number Records
Example 13 - Manually entering Detail and editing Master Serial/Lot Number Records

### 16.10.7 Printing Labels

Select Modules, Inventory, Labels, Label Type of 'Parts'.



### 16.10.8 Edit, View, Scroll and Query Serial/Lot Tracking Records

This option allows users to scroll, edit, delete, undelete, or run queries against Serial/Lot Tracking records.

Selecting an **Indexed Search** allows users to search on indexed fields. This allows pc/MRP to find the information much faster. To perform an Indexed Search:
select the Indexed Search tab
Select the desired **Sort Order:** Lot/Serial Number, Part Number, Customer/Vendor #, Document #, and Vendor Lot Number
Enter the applicable data in the **Begin Scrolling At:** field
Select the desired Action: **View** or **Edit**
Press **Search**

pc/MRP will automatically scroll to the desired record or the nearest match. Select the correct record by scrolling and press Ok to proceed to the edit screen for that record.

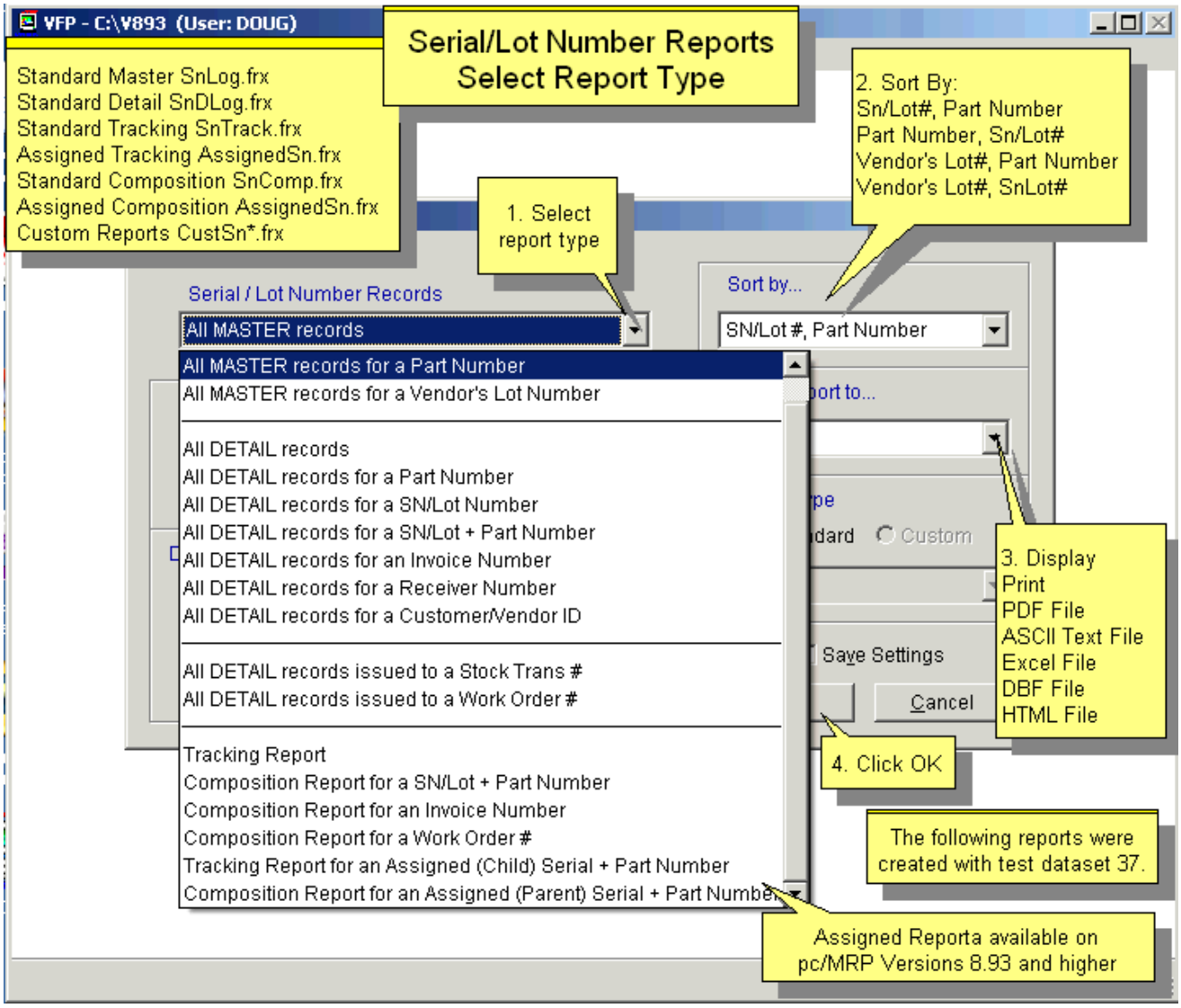
Selecting to run a Queried Search allows users to build, run, save, and load queries for the Serial/Lot Tracking tables. For further details, see Chapter 15.14 in this Manual.

Every field within the Serial/Lot Tracking tables is editable. Users must understand several key things before editing Serial/Lot Tracking data.

**Note:** If the quantity field is edited in a Serial/Lot Tracking record, inventory quantities are not automatically changed. Users would have to also manually change the inventory quantity if applicable.

### 16.10.9 Reports

For a detailed online slide show on reports, see http://www.pcmrp.com/mrp101/snreportmenu.htm



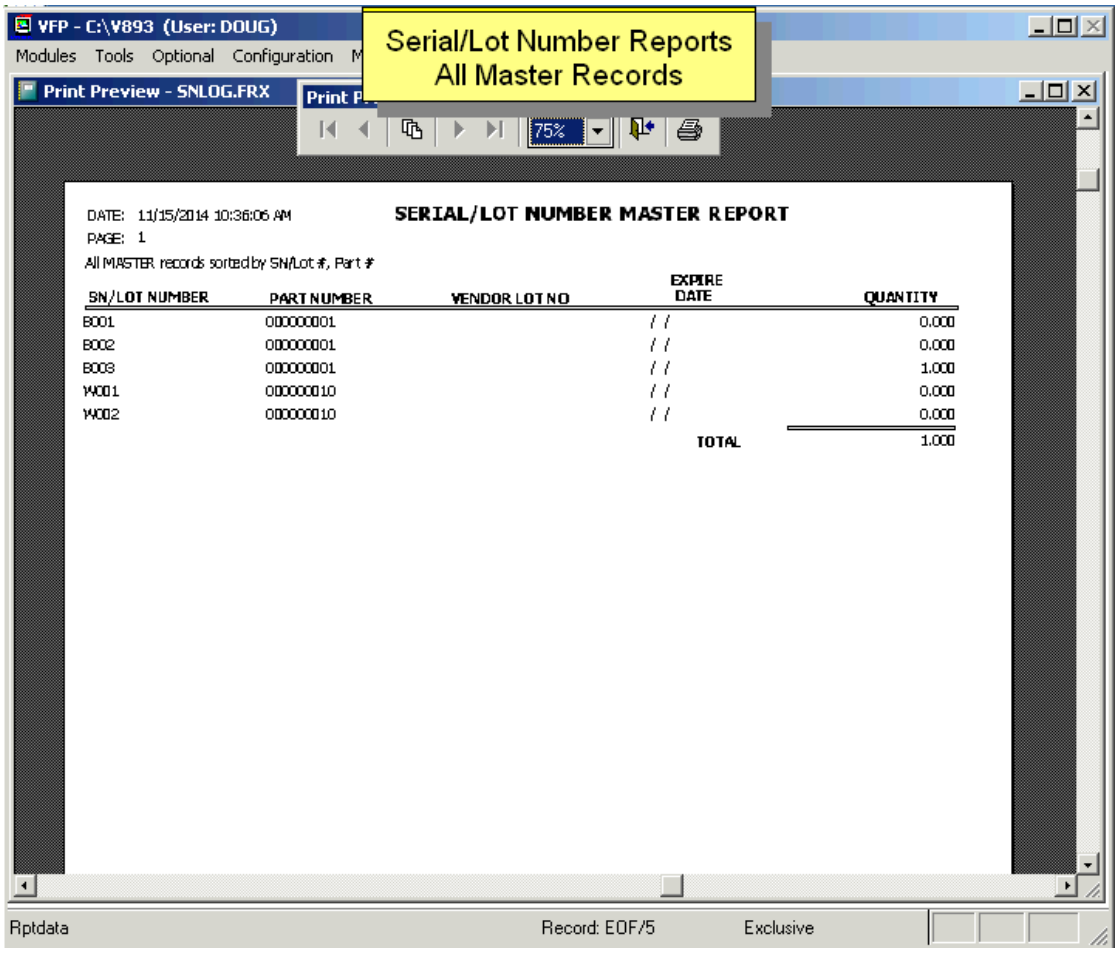

### 16.10.9.1 Master and Detail Reports

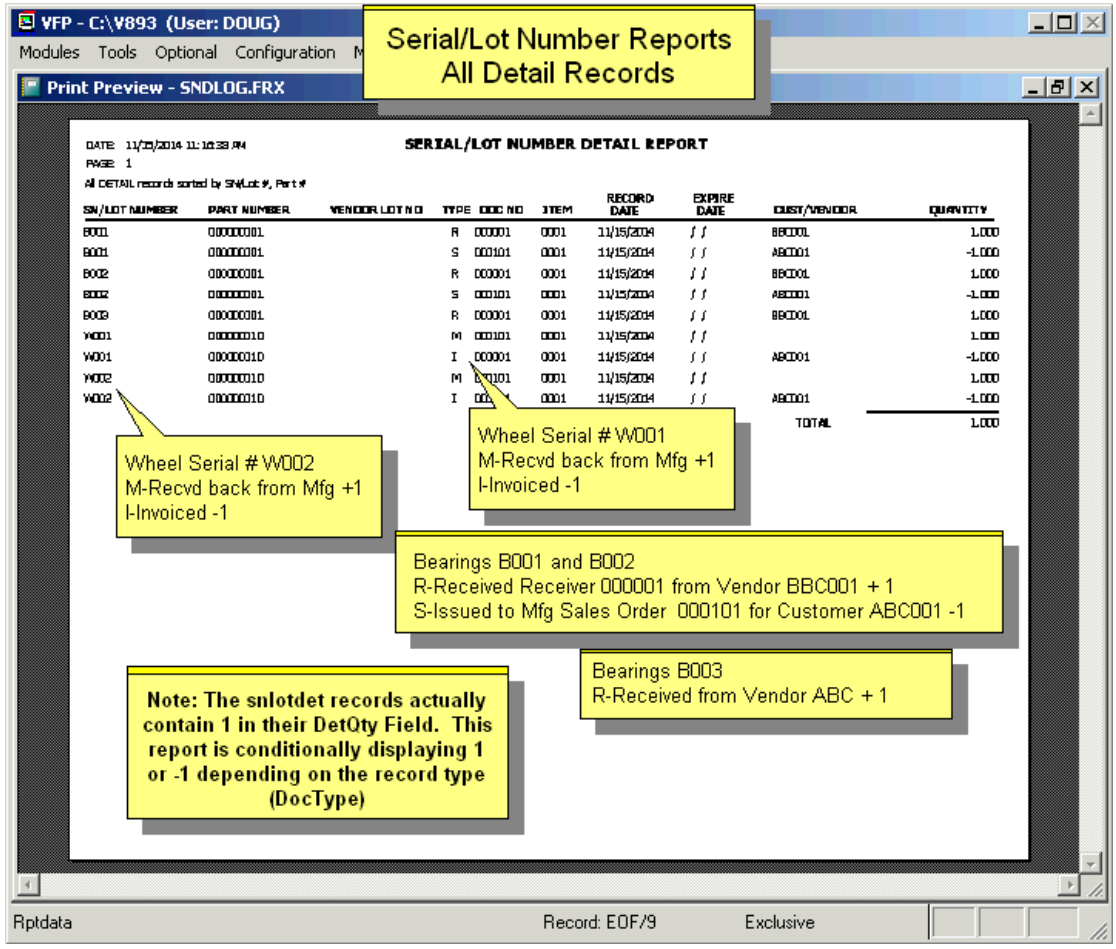
The are two types of basic SN/Lot number reports in pc/MRP's optional Serial/Lot Number module, Master Reports (keeps total quantity on hand for each serial/lot number) and Detail Reports (prints/displays transactions that adjusted the on hand quantity of the serial/lot number on hand quantity).

The Detail Reports list the sn/lot#, part#, document # (sales order, receiver, etc), document date, customer/vendor, id, document, quantity, and type of activity (R = receiver, S = stockroom issue, M = receive back completed assembly from manufacturing, I = invoice, J = SN/L # manual adjusting and or and initial entries).

The two images below show a Master and the Detail Report, respectively.

The Serial Lot Number Report can filtered to include only records that are “Within an Expiration or Document Date Range”. You can also check to “Only show items currently in inventory”. These options are hidden behind the Drop Down List Box in the above screen shot.


VFP - C:\V893 (User: DOUG)
Modules Tools Optional Configuration
Print Preview - SNLOG.FRX
75%
Serial/Lot Number Reports
All Master Records
DATE: 11/15/2014 10:36:06 AM
PAGE: 1
SERIAL/LOT NUMBER MASTER REPORT
All MASTER records sorted by SN/Lot #, Part #
SN/LOT NUMBER PART NUMBER VENDOR LOT NO EXPIRE DATE QUANTITY
B001 000000001 / / 0.000
B002 000000001 / / 0.000
B003 000000001 / / 1.000
W001 000000010 / / 0.000
W002 000000010 / / 0.000
TOTAL 1.000
Rptdata
Record: EOF/5
Exclusive


VFP - C:\V893 (User: DOUG)
Modules Tools Optional Configuration
Print Preview - SNDLOG.FRX
Serial/Lot Number Reports
All Detail Records
SERIAL/LOT NUMBER DETAIL REPORT
Wheel Serial # W002
M-Recvd back from Mfg +1
I-Invoiced -1
Wheel Serial # W001
M-Recvd back from Mfg +1
I-Invoiced -1
Bearings B001 and B002
R-Received Receiver 000001 from Vendor BBC001 + 1
S-Issued to Mfg Sales Order 000101 for Customer ABC001 -1
Bearings B003
R-Received from Vendor ABC + 1
Note: The snlotdet records actually contain 1 in their DetQty Field. This report is conditionally displaying 1 or -1 depending on the record type (DocType)
Rptdata
Record: EOF/9
Exclusive

### 16.10.9.2 Advanced Serial/Lot Number Reports

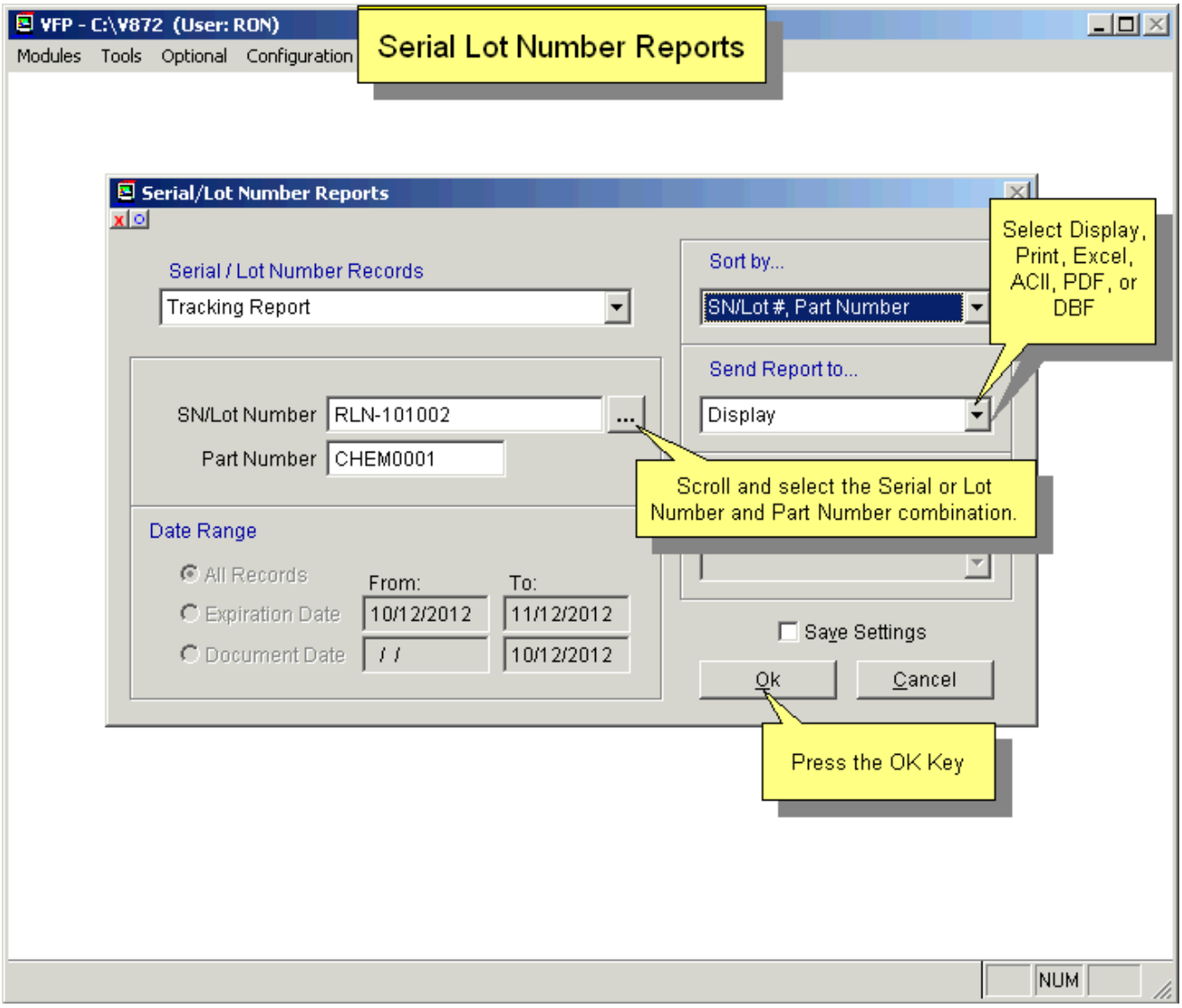
To track where a serial lot number exist (in Inventory, in WIP, or invoiced and sent to your Customer), select the **Tracking Report**.

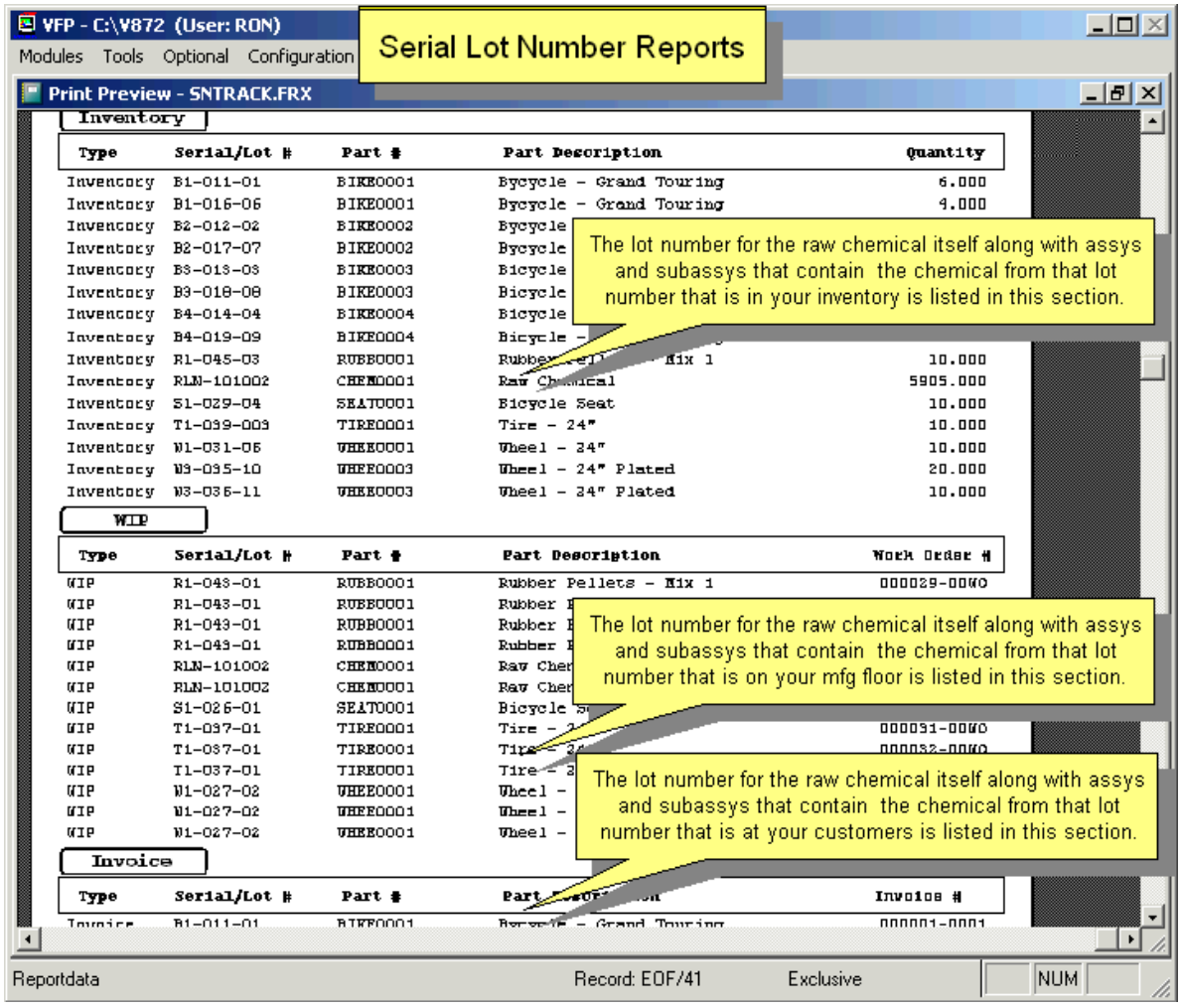
This is a standard tracking report for Bearing B001. The Tracking report does not use assigned serial numbers. The tracking report determines that bearing B001 was issued to sales order 000101 which built 2 wheels W001 and W002. Therefore Bearing B001 is in either Wheel W001 or Wheel W002. Both wheels were invoiced to the customer listed on Invoice 000001. Also see the more advanced assigned tracking report.

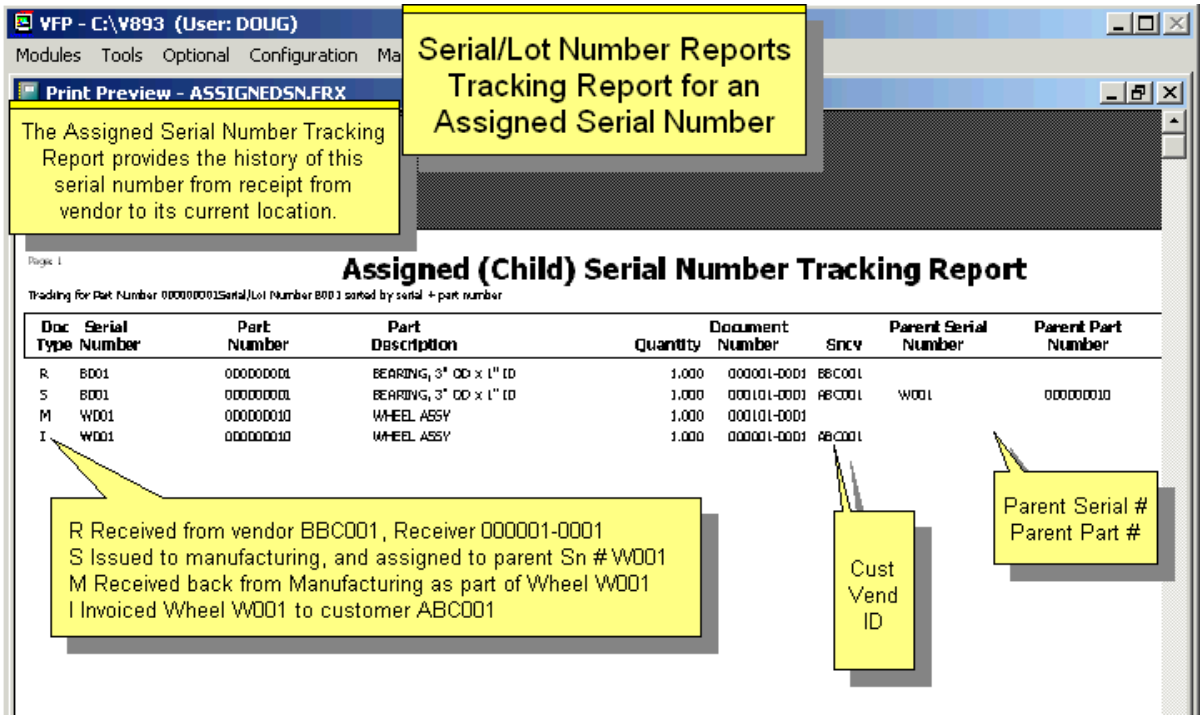
To see what serial/lot numbers went into a finished assembly, select a **Composition Report** for a SN/Lot # + Part Number combination, for an Invoice, or for a Work Order.

This is a standard composition report for Wheel W001. The standard composition report does not use assigned serial numbers. The standard composition determines that bearings B001 and B002 was issued to sales order 000101 for 2 wheels W001 and W002. Since this report does not check assignments it shows that Wheel W001 could contain Bearing B001 or B002. Also see the more advanced assigned composition report.

**Tracking Report**

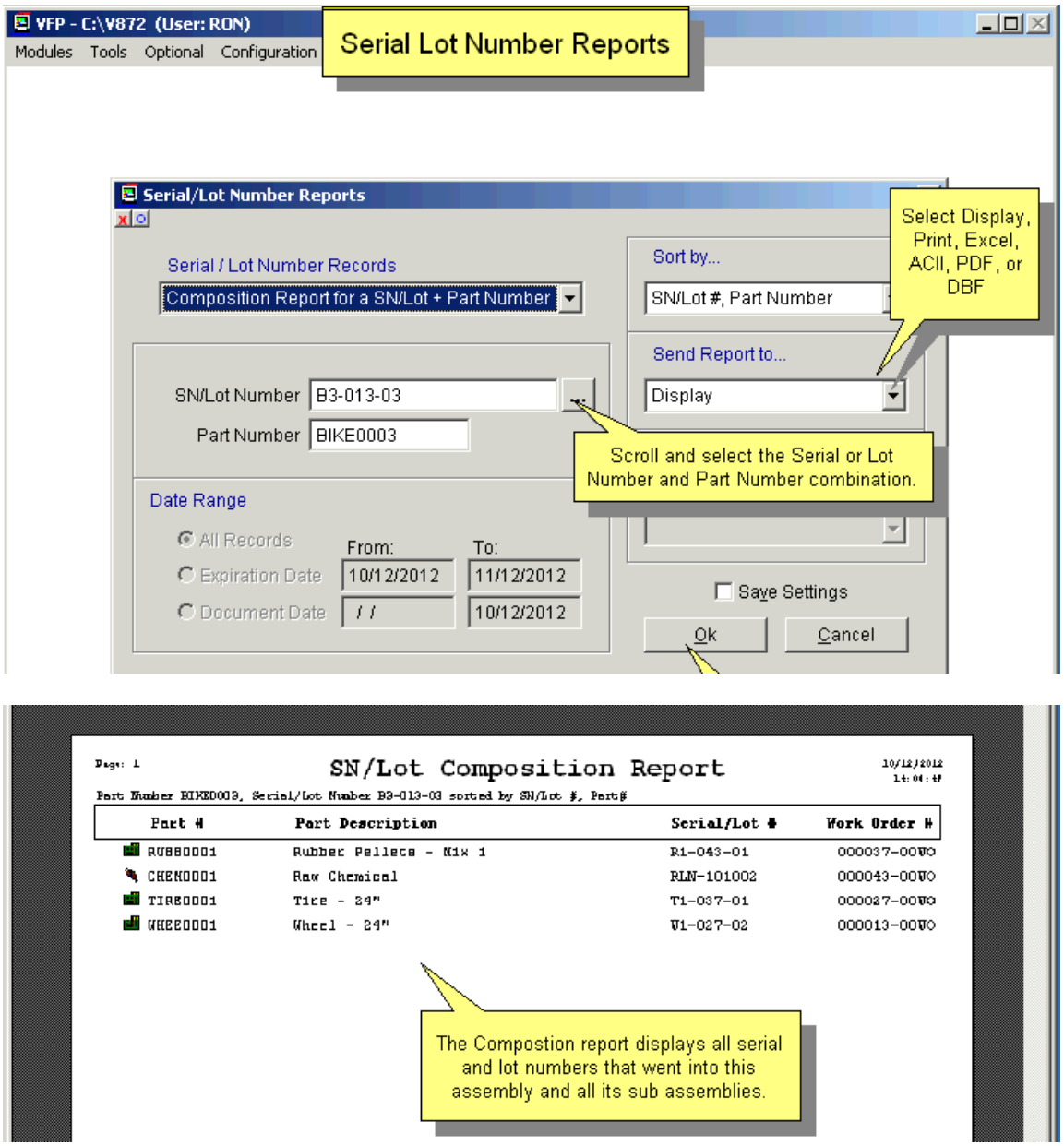




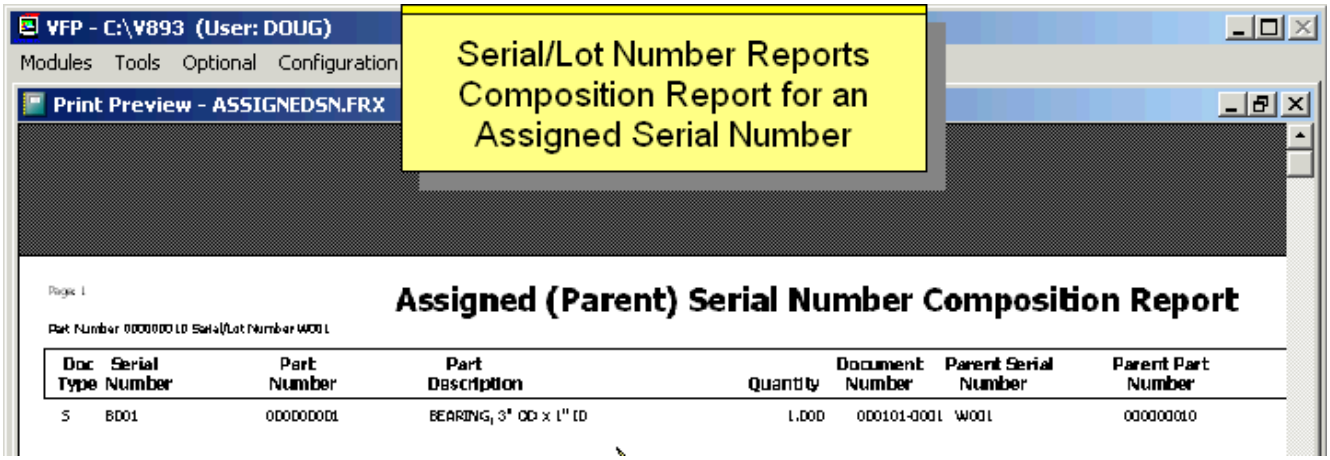




If an Assigned tracking report is run for a serial number for a finished top assembly that was manufactured and invoiced, the Assigned Sn/Lot Tracking Report will not show any records because top level assys are not assigned to parent serial numbers. The Standard Tracking Report (previous section) will show the invoice detail record.

**Composition Report**



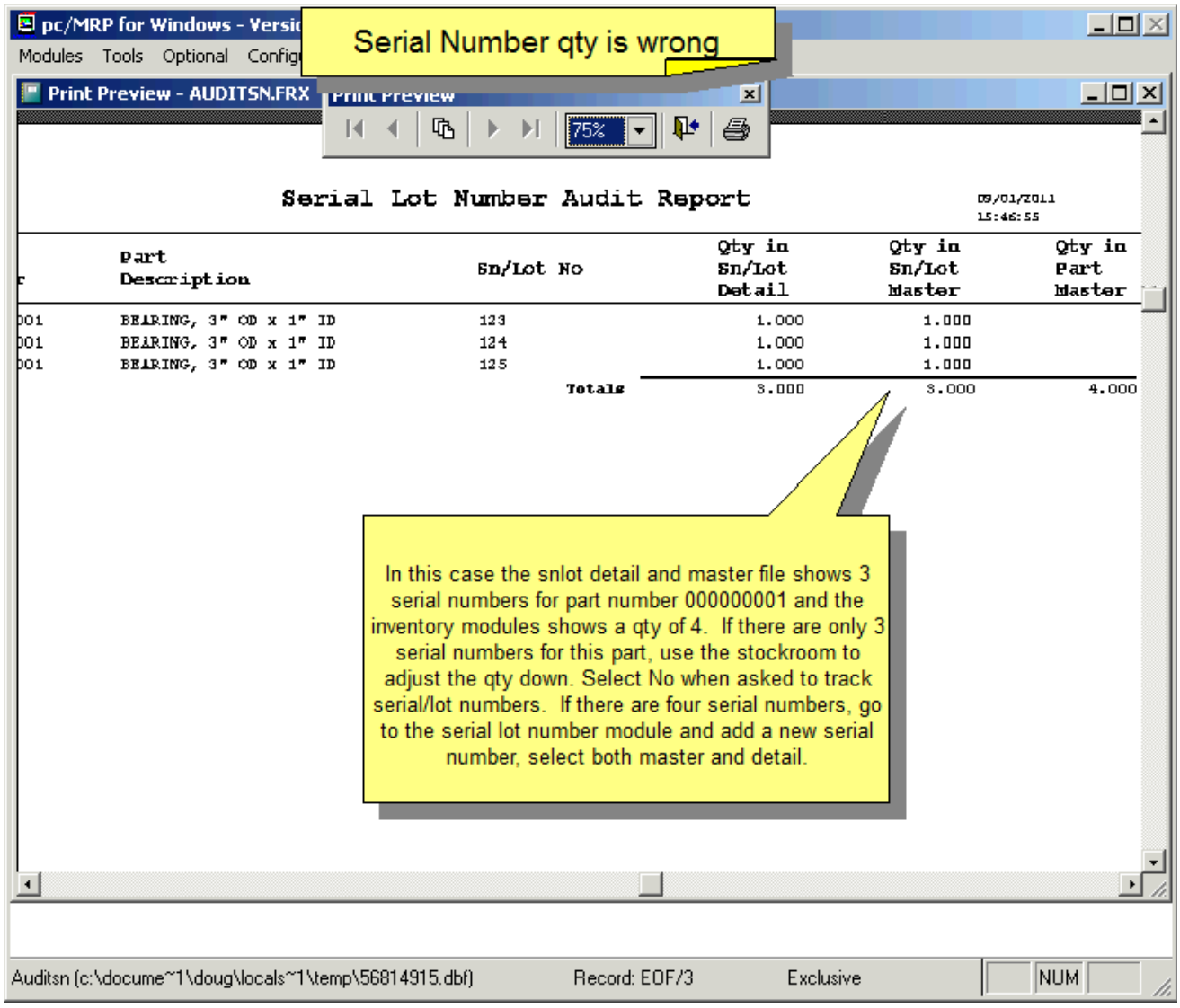

This is an assigned composition report for Wheel W0001. It shows that Bearing 001 was assigned to Wheel 001.

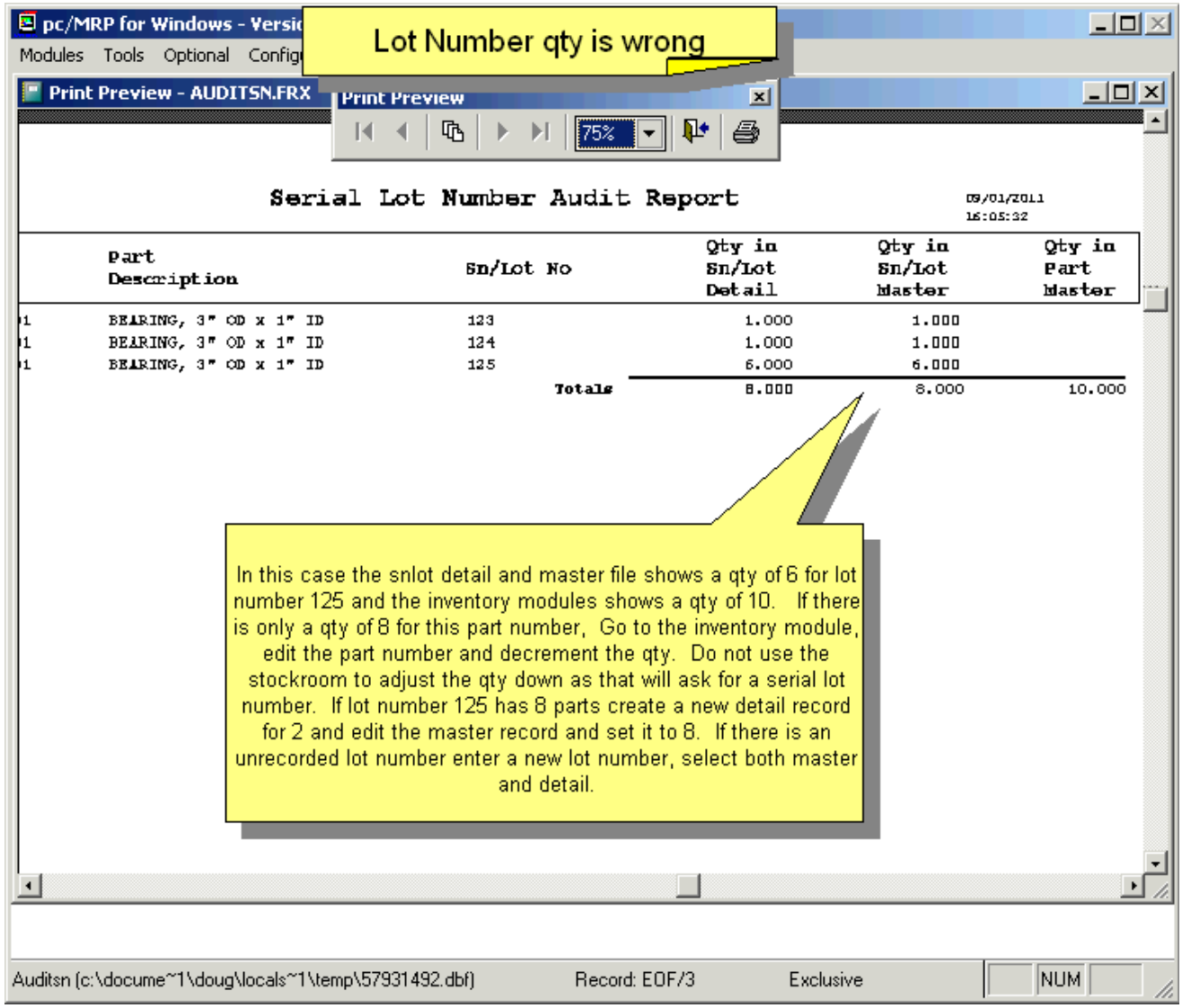


**16.10.10 Audit Serial/Lot Numbers**

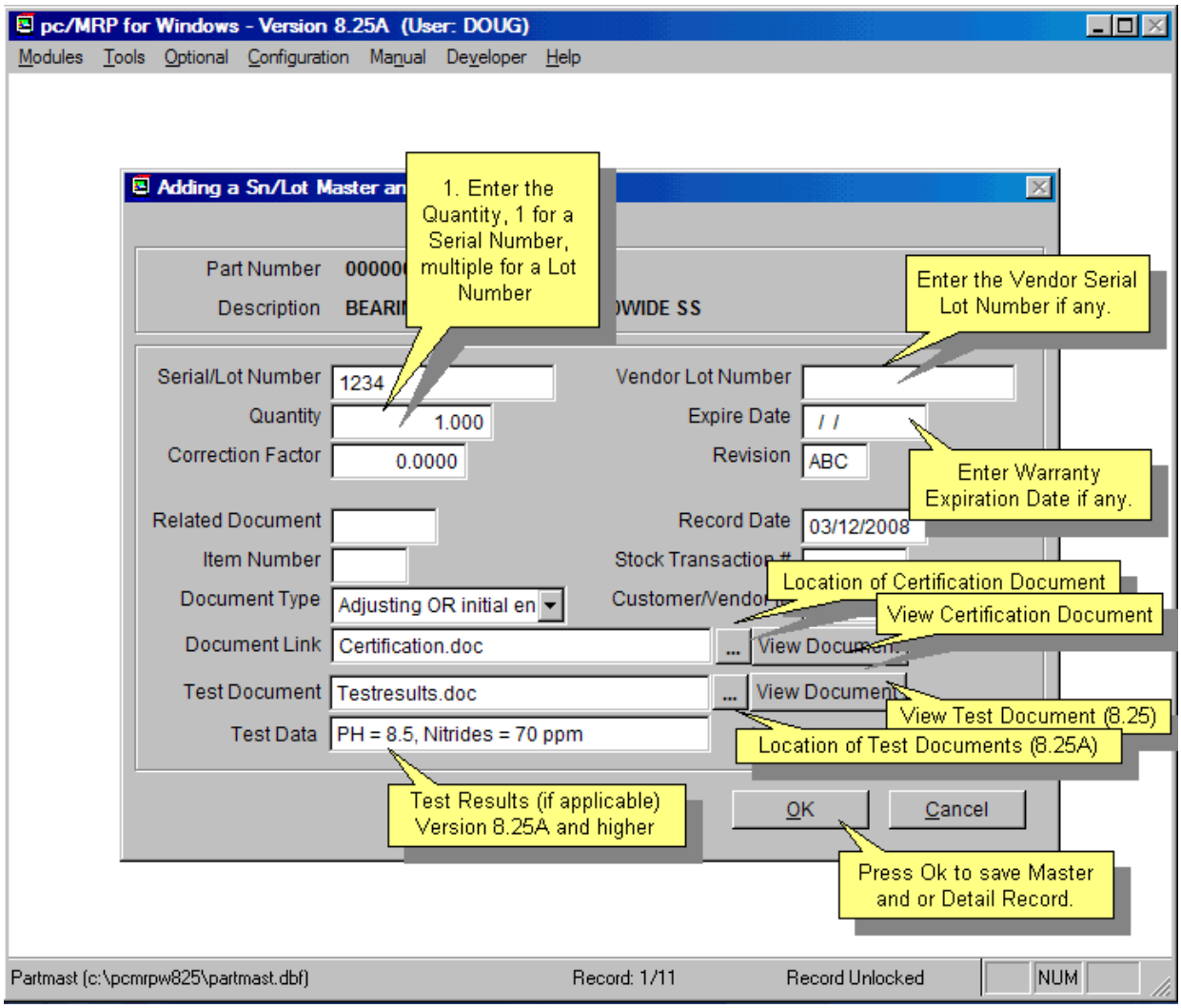
The purpose of Serial Lot Number Audit report is to compare the quantities of the part numbers and serial/lot numbers based on the serial/lot number detail database file, the serial/lot number master database file, and the inventory file.

The Audit Serial Number option creates a temporary database file containing a record for every part and the quantity found in the master serial/lot database file. It then goes through each serial/lot number detail record and decreases the detail quantity field for each "I" (Invoice) or "S" (Stockroom) issue record and it will add the quantity for all other types of transactions. A negative adjustment record will decrease the detail quantity field. It then sets a one-to-one relationship into the inventory report to print out the standard (auditsn.frx) or custom (cauditsn.frx) report. The quantity in the inventory column is the sum of the quantity in stores (onhand), and area2 through area20 (area2qty-area20qty).




pc/MRP for Windows - Versi
Modules Tools Optional Config
Lot Number qty is wrong
Print Preview - AUDITSN.FRX
Print Preview
75%
Serial Lot Number Audit Report
09/01/2011
16:05:32
Part Description
Sn/Lot No
Qty in Sn/Lot Detail
Qty in Sn/Lot Master
Qty in Part Master
1 BEARING, 3" OD x 1" ID 123 1.000 1.000
1 BEARING, 3" OD x 1" ID 124 1.000 1.000
1 BEARING, 3" OD x 1" ID 125 6.000 6.000
Totals 8.000 8.000 10.000
In this case the snlot detail and master file shows a qty of 6 for lot number 125 and the inventory modules shows a qty of 10. If there is only a qty of 8 for this part number, Go to the inventory module, edit the part number and decrement the qty. Do not use the stockroom to adjust the qty down as that will ask for a serial lot number. If lot number 125 has 8 parts create a new detail record for 2 and edit the master record and set it to 8. If there is an unrecorded lot number enter a new lot number, select both master and detail.
Auditsn (c:\docume~1\doug\locals~1\temp\57931492.dbf)
Record: EOF/3
Exclusive
NUM

**16.10.11 Manual Entry**
**(For Existing Inventory that has not been serialized)**




You would follow this method when starting out with the optional Serial/Lot Number module. You would have to enter serial/lot data for your existing parts in inventory. After the initial entries, you will use receivers and invoices to update your serial/lot data, along with updating the inventory quantities of those serialized parts and assemblies.

You can use this option to create serial/lot numbers on the fly. The Enter Serial/Lot Number option will prompt, "Enter a Master record only, Detail record only, or Both". If you wish to create a record in the master data base file, and no initial quantity, select Master record only. If you wish to enter a transaction record, select Detail only. A master record contains the total on hand quantity for that serial/lot number. A transaction record contains the transaction record adjusting the on hand quantity of that serial number.

In most cases you will want to enter a serial number and initial quantity for a part or assembly, 'Both Master and Detail'. pc/MRP will create a record of that part and serial number in the master file making it available for invoicing or issuing. It will also create a detail record of how and when this serial number was created.

Entering both a master record and a detail transaction record will prompt for the part number and then display the next available serial/lot number. pc/MRP will automatically create the next available 15-character serial/lot number or users can type in their own serial/lot number. However, if users choose to enter alphanumeric characters pc/MRP will no longer be able to automatically generate the next available serial/lot number. Users consequently would be required to manually enter unique serial/lot numbers.

**If you were to enter historical Serial/Lot records:** You would first enter a manual record by selecting Optional, Serial/Lot Tracking, New, and Both Master & Detail; enter the serial number and a qty of 1 (or invoice qty). Repeat for each serial number. This will create both a Master and Detail record putting the serial number in stock. To create a historical Invoice record, select Optional, Serial/Lot Tracking, New, and Detail Only. Enter the same serial# and a qty of 1 (or invoice qty), Document Type of 'Invoice', and enter the invoice# in the Related Document field. Now you must edit the Master record for the serial number to a quantity of 0. Repeat for each historical serial number.

When this record is entered, pc/MRP will create a master record consisting of the Lot/Serial No, Partno, and Quantity. It will also create a detail record consisting of the fields shown below:

The **Part Number** field (partno) contains the part number of the for that serial/lot number.

The **Serial/Lot Number** field (snlotno) contains your serial/lot number.

The **Quantity** field (detqty) contains the quantity issued, invoiced, adjusted, or received.

The **Revision** field (revision) contains the revision level of that part number when the serial/lot number was received or created.

The **Correction Factor** was created for Inhale Therapeutics. It was designed to automatically adjust stock room BOM issue quantities based on concentration of serialized lot numbers. Unless you are Inhale Therapeutics, leave the correction factor setting at 0. If a chemical were 90% pure, you would enter 10 as the correction factor. If a chemical were 95% pure, you would enter 5 as the correction factor. If you were issuing a lot number to manufacturing that has a correction factor, you would issue the corrected amount instead of the exact amount required by the BOM. The corrected amount would appear at the bottom of the issue screen.
The formula used when issuing compounds to manufacturing is as follows:

$$SnRet = SnRet + SnRet(-1*(QtyToIssue - (QtyToIssue/(1 - CorrectionFactor/100))))$$

With this formula, if a BOM required 100 lb of a compound, but the compound was 90% pure (CorrectionFactor = 10%), an extra 11.111 lb will be issued. The "SaRet +" is in the formula in case the compound is from multiple lots with different correction factors. If you wish to have correction factors taken into account when printing out generic pick lists from the BOM module, call Software Arts, Inc. to create a special flag file.

The **Document Number** field contains the related document number for this detail record. It would contain the receiver number if this record were created when this serial/lot number was received. It would contain the sales order number if this record were created when this serial/lot number was issued to MFG. It would contain the invoice number if this record were created when this serial/lot number was invoiced. It would be blank if this record was created manually.

The **Doc Type** field (doctype) contains the document type; J type in this case indicates an adjusting entry. Other Doc Types include, I for Invoice, R for Receiver, M for Receive back completed assemblies from manufacturing, and S for an issued to manufacturing stock transaction.

The **Cust/Vendor** field (sncv) contains the customer/vendor's ID code.

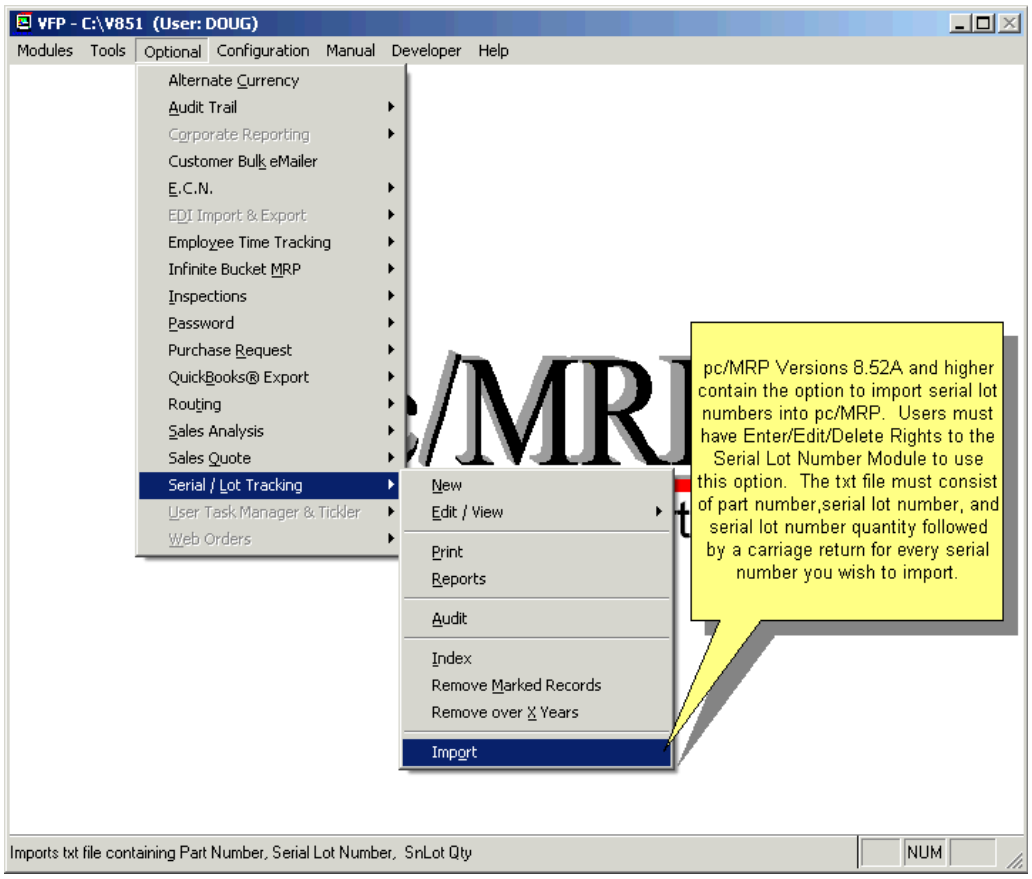
The **Date** field contains the date of the transaction.

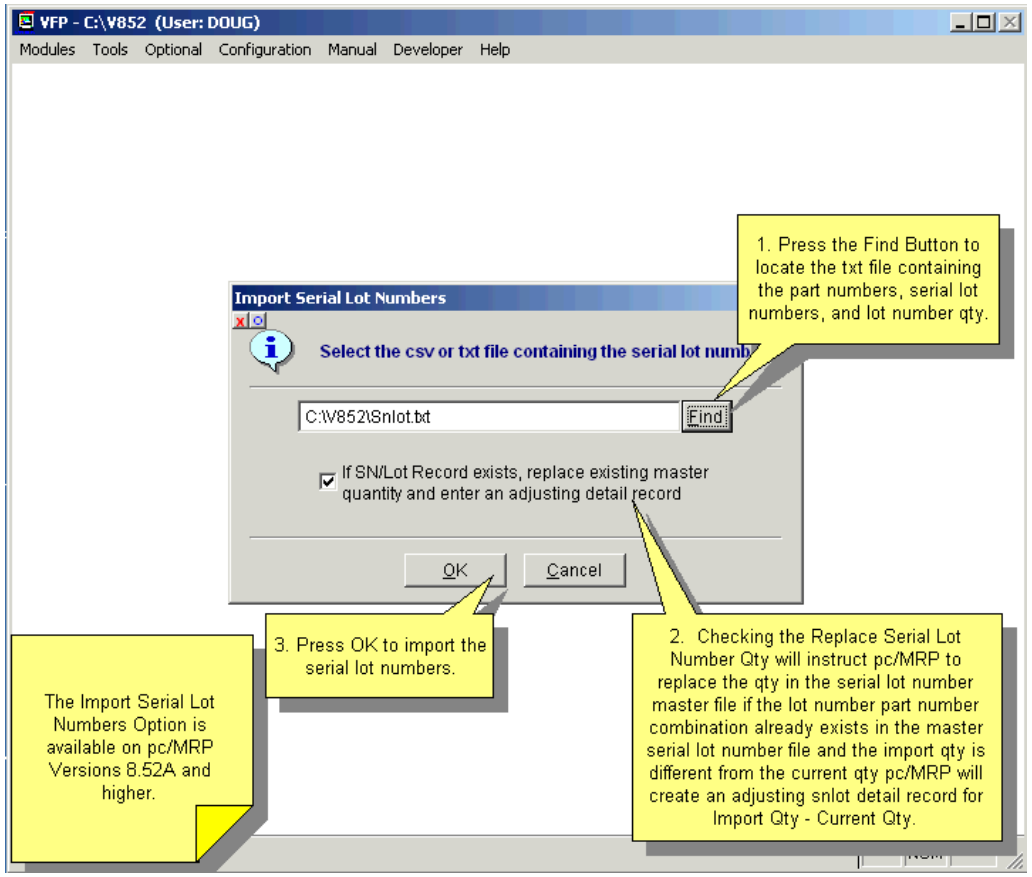
The **Vendor Lot Number** field (vendlotno) contains the vendor's serial/lot number, which may or may not be the same as your serial/lot number.

The **Expiration Date** field (expirdate) contains the date when this serial/lot number is set to expire. Leave this field blank if there is no expiration date.

The **Documentation Link** contains the location and name of any document related to this serial/lot number. For example, the serial or lot number certification document could be stored here.

**Importing Serial/Lot numbers from a .TXT or .CSV file.**

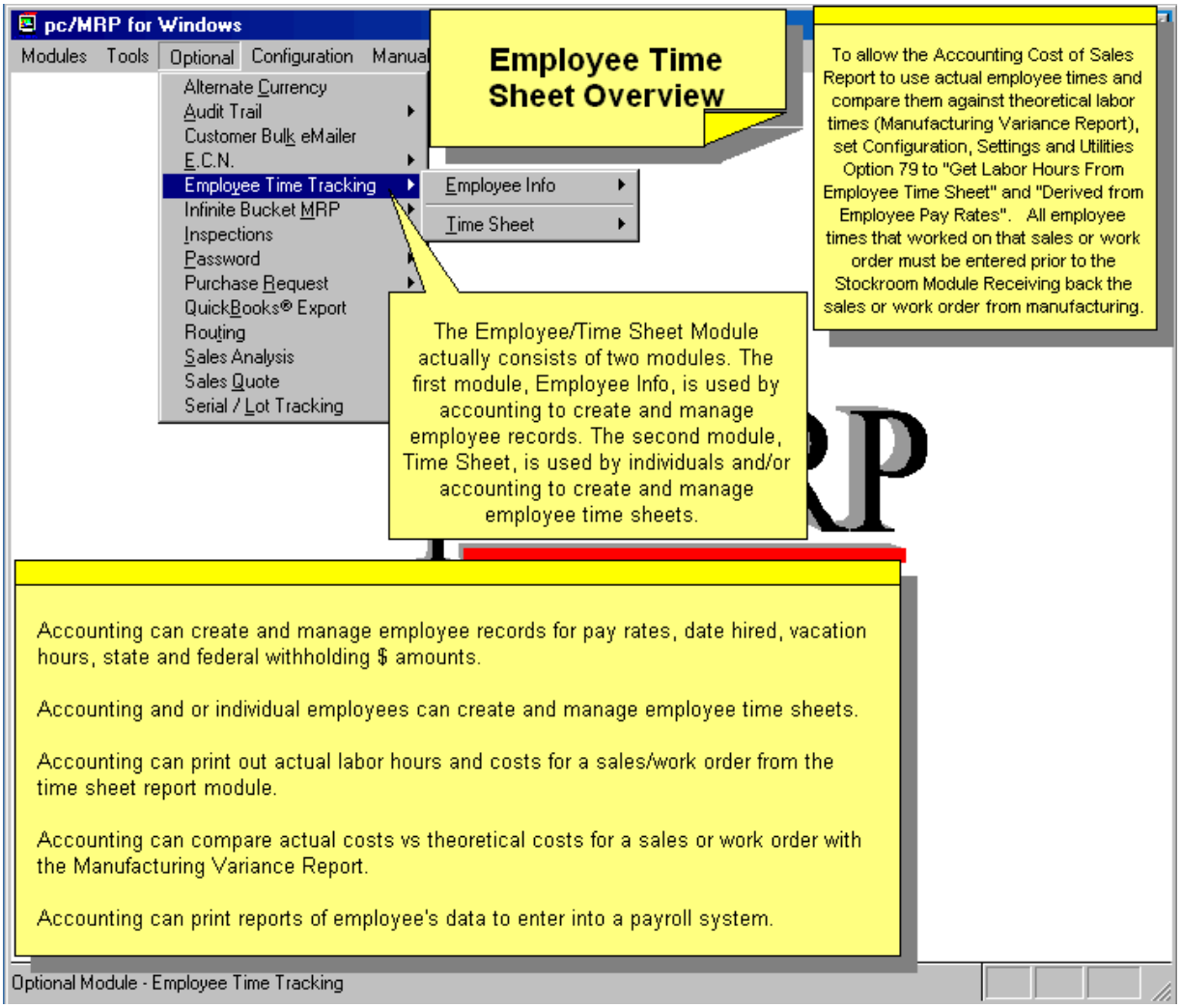



**Note:** The .TXT or .CSV file should not have a header row of column names.

# 16.11 Optional Employee Time Tracking Module

### 16.11.1 Overview

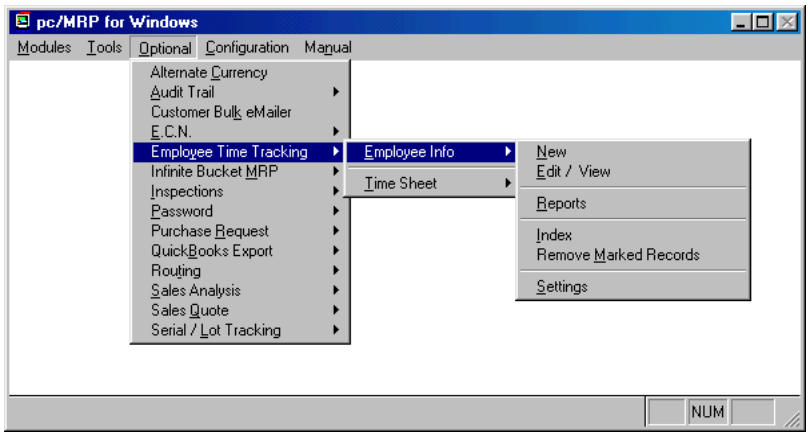



The Employee Time Tracking Module shown above actually consists of two modules. The first module, Employee Info, is used by Accounting to create and manage employee records. The second module, Time Sheet, is used by individuals and/or Accounting to create and manage employee time sheets.
An online slideshow is located here: http://www.pcmrp.com/mrp101/emptimeoverview.htm

Configuration, Settings and Utilities, **Option 79** has to be set to “Get Labor Hours from Employee Time Sheet” and “Derived from Employee Pay Rates”. This will allow Accounting Cost of Sales Report to use actual employee times and compare them against theoretical labor times (Manufacturing Variance Report).

**Please note** that if you have the Optional Password module, only users with rights to pc/MRP’s Accounting module will be able to access the Employee Time Tracking Module (except users entering their own times).

### 16.11.2 Employee Information Module



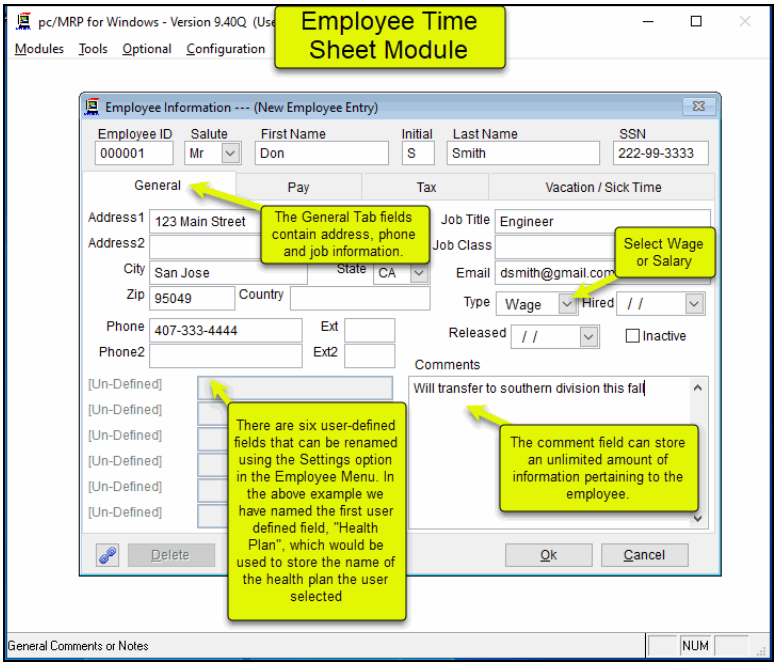

The Employee Information Module shown above allows users with accounting rights to create new employee records, edit/view employee records, print out/display employee reports, index the employee data base file, remove employee records marked for deletion and create custom fields (settings) for employee records. If pc/MRP's Optional Password Module has been activated, only users with accounting rights will be allowed into the Employee Information Module.

### 16.11.2.1 Enter a New Employee Record

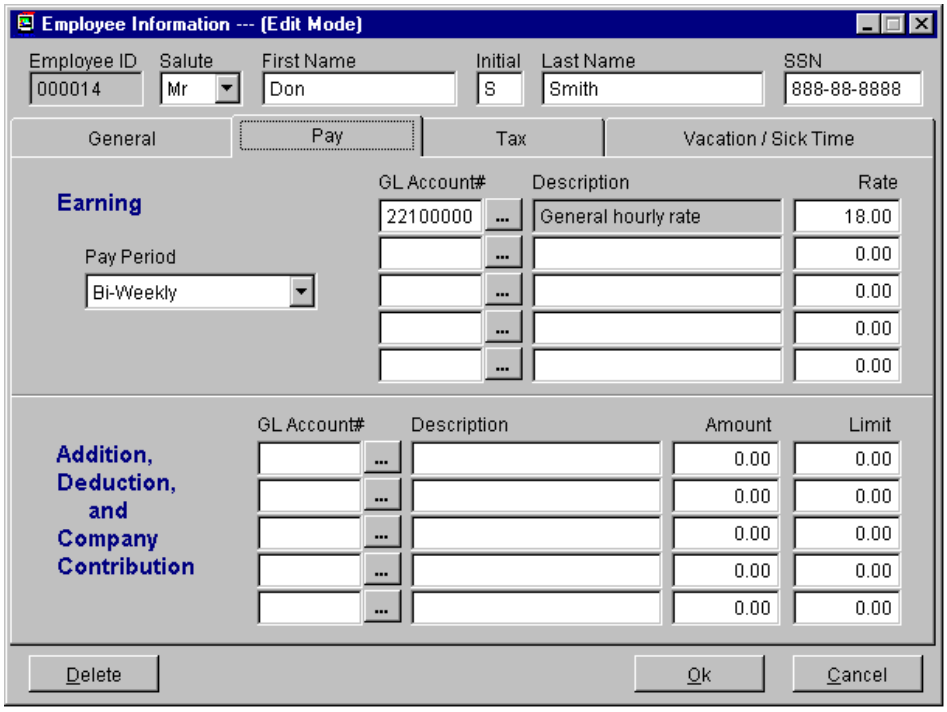
Selecting Optional, Employee Time Tracking, Employee Information, and New will allow users with accounting enter/edit and higher rights in the password module to enter new employee records as shown below.

The top row of fields contains the primary key fields for an employee record. The **Employee ID** field is automatically filled with the next available employee number whenever a new employee record is created. The Employee ID field is a six-character field filled with leading zeros that can only be edited during the initial entry.

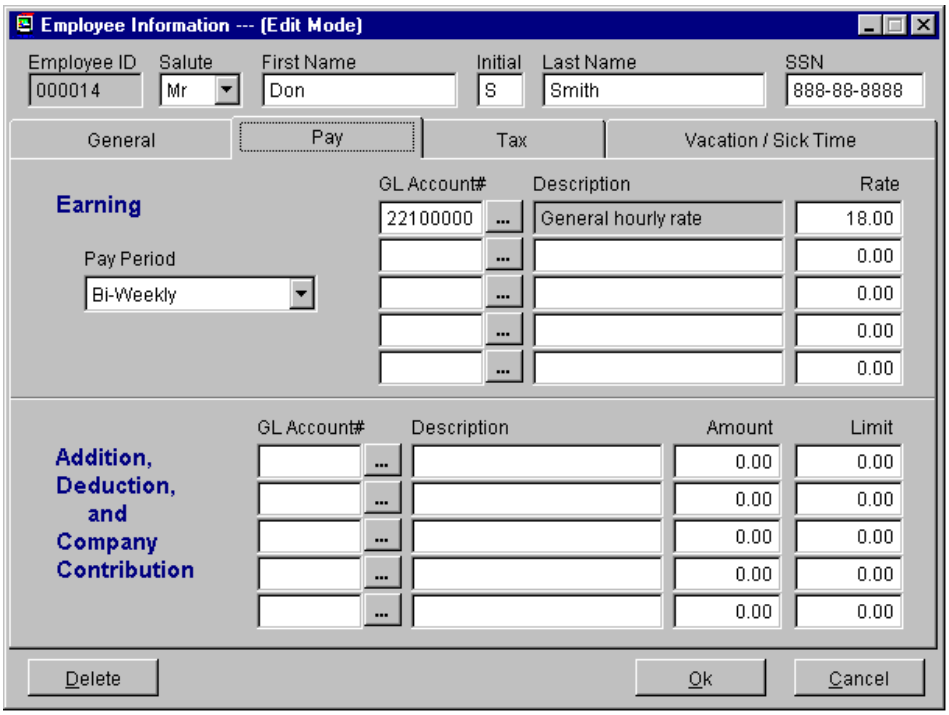
The **General Tab** fields contain address, phone and job information. Six user-defined fields can be renamed using the Settings option in the Employee Menu. In the example below, we have named the first user defined field "Health Plan", which would be used to store the name of the health plan the user selected. The comment field can store an unlimited amount of information pertaining to the employee.

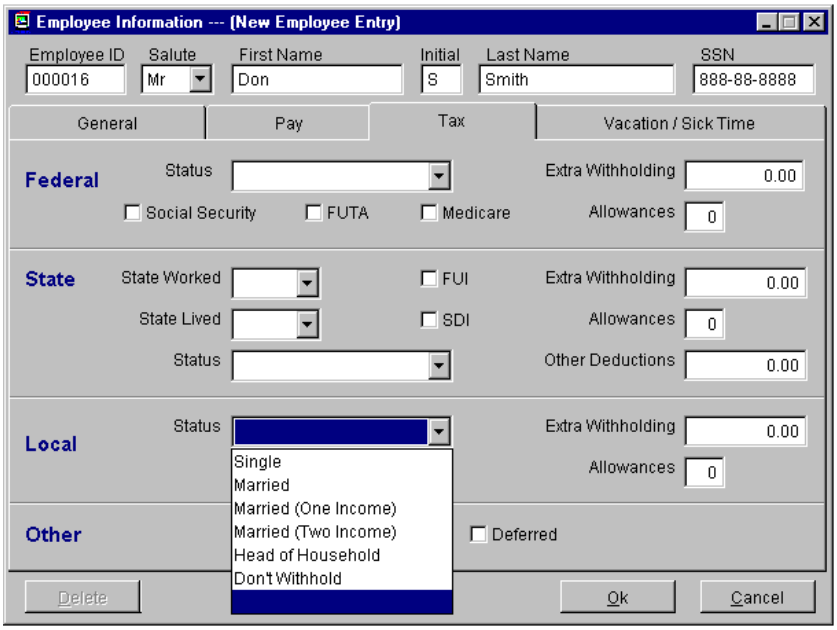


The **Pay Tab** screen contains fields for Pay Period, Payroll Chart of Account Numbers, Pay Description, and Pay Rates to be used for deductions and additions on that employee's payroll checks. It is important for you to enter every employee's General Hourly Rate if you would like pc/MRP to track labor cost. The ellipsis button to the right of GL Chart of Account # text boxes allow the user to browse and select a payroll chart of account number from pc/MRP's Chart of Accounts data base file. User must have Accounting Delete Rights to view/edit this page (Version 9.30B or Higher).

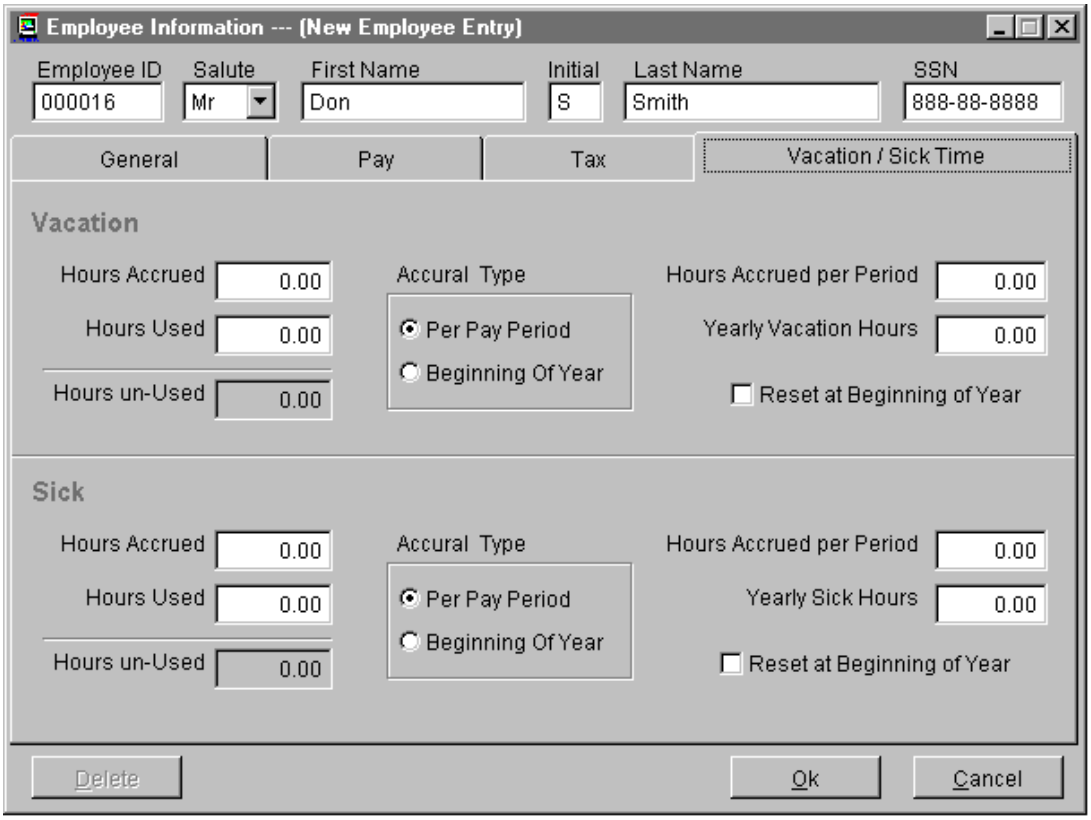



The **Tax Tab** screen contains fields for federal, state, and local allowances (number of exemptions declared on the employee's W4 form) and any extra withholding requested per pay period. User must have Accounting Delete Rights to view/edit this page (Version 9.30B or Higher).






The **Vacation/Sick Time Tab** screen contains fields for accrued and used hours for vacation and sick time.



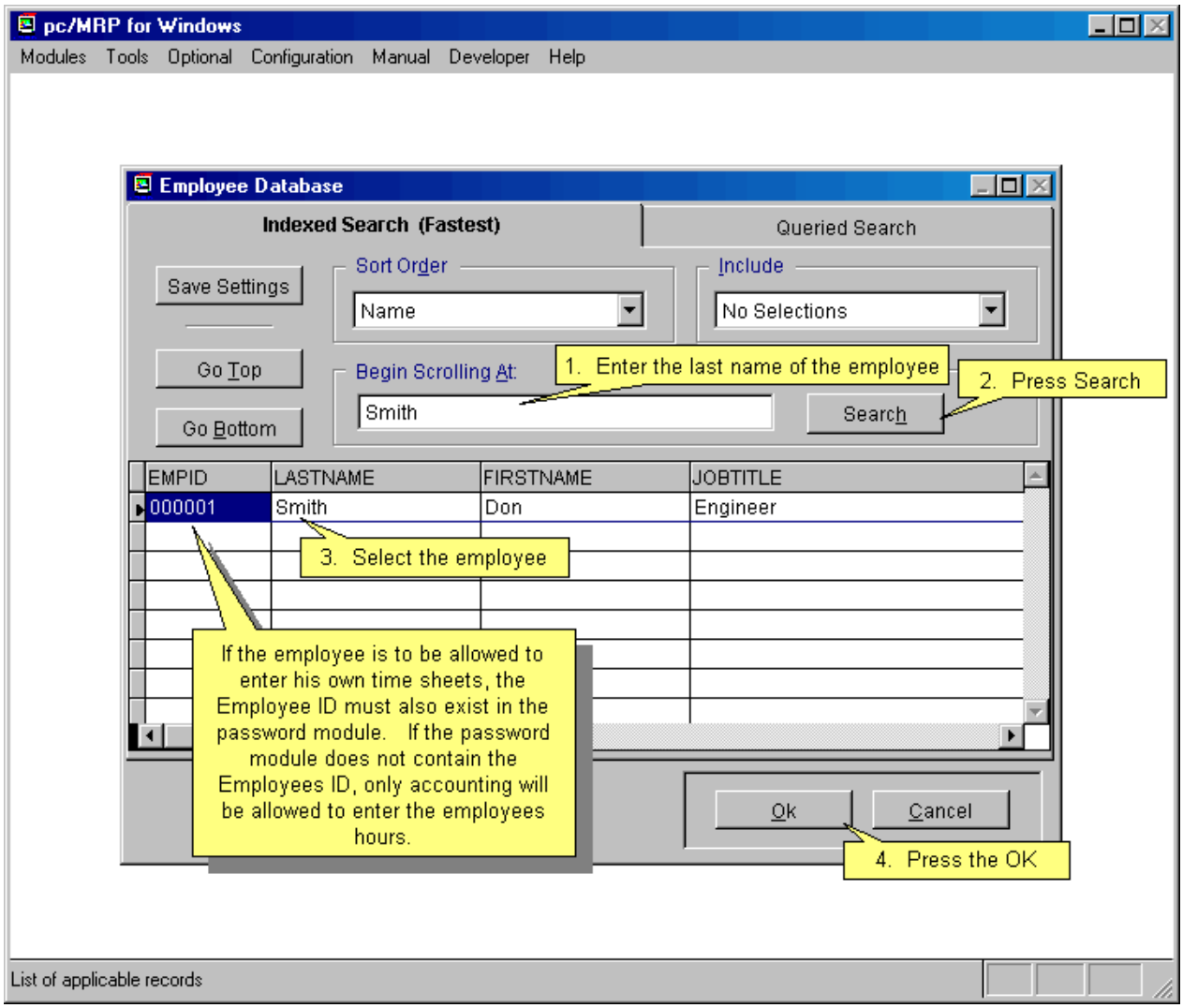
### 16.11.2.2 Edit/View (Scroll/Delete/Undelete Employee Information)

This option allows users to scroll, edit, delete, undelete or run queries against Employee Information records.

Selecting an **Indexed Search** allows users to search on indexed fields. This allows pc/MRP to find the information much faster. To perform an **Indexed Search**:

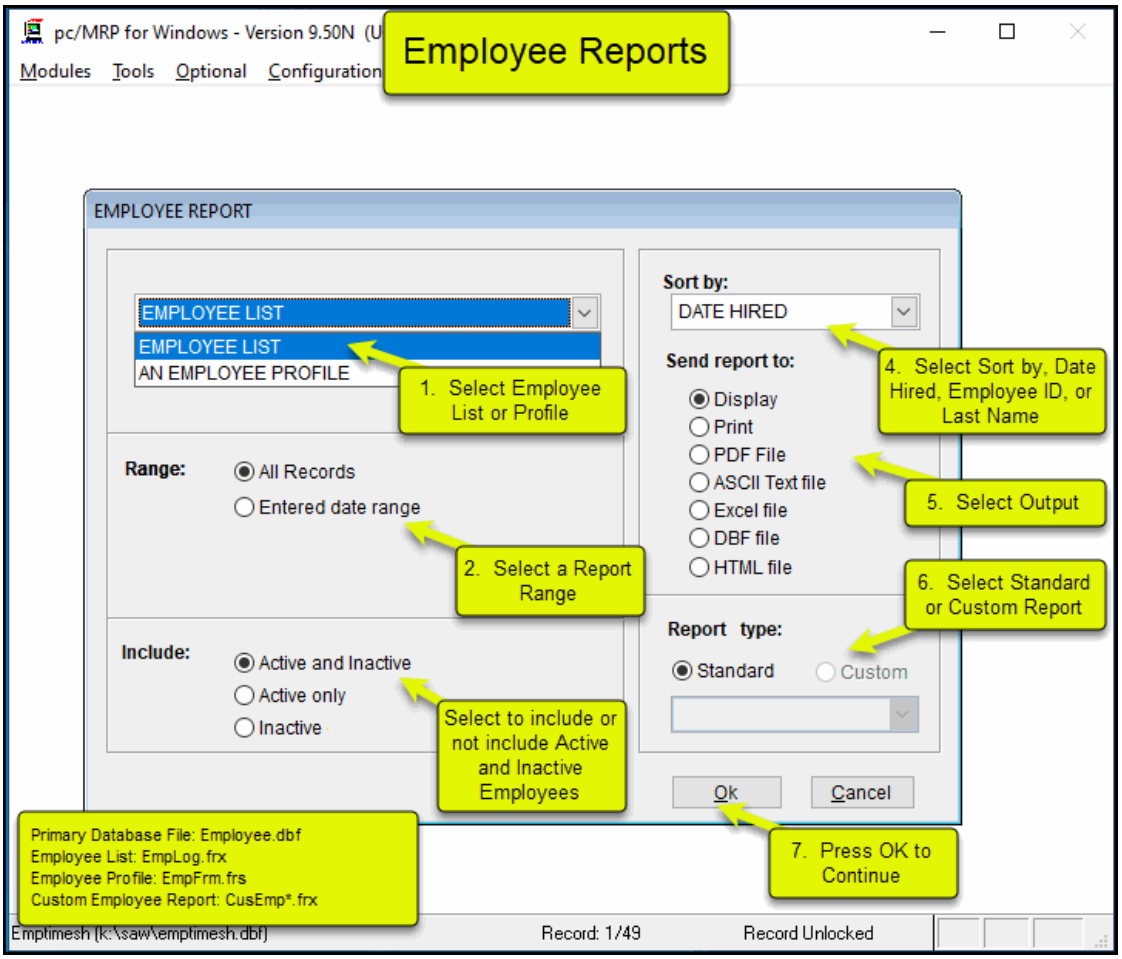
- Select the **Indexed Search** tab
- Desired **Sort Order,** Employee Number and Name
- Enter the applicable data in the **Begin Scrolling At:** field
- Select the desired action: **View** or **Edit**
- Press **Search**

pc/MRP will automatically scroll to the desired record or the nearest match. Select the correct record by scrolling and press **Ok** to proceed to the edit screen for that record.




Selecting to run a **Queried Search** allows users to build, run, save, and load queries for the Employee Information table. For further details, see Chapter 15.14.

### 16.11.2.3 Print/Display Employee Records




Selecting **Reports** from the employee menu will allow you to print out the following reports:

- All Employee List (emplog.frx, employee.dbf)
- An Employee Profile (empfrm.frx, employee.dbf)

The report can be sent to Display, Print, PDF File, ASCII Text file, Excel file, DBF file, HTML file.

### 16.11.2.4 Employee Records Settings

Selecting Settings from the employee menu will allow you to name 1-6 user-defined fields in the employee data entry screen.

### 16.11.2.5 Employee Module Technical Information

- Formset: Employee.scx
- Free Table: Employee.dbf
- Indexes File: Employee.cdx
- Tags:
  - BYEMPID=UPPER(EMPID)
  - BYNAME=UPPER(LASTNAME + FIRSTNAME)
  - BYHIRDT=DTOS(HIRED)

### 16.11.3 Time Sheet Module

The Time Sheet Module allows qualified users to enter, edit and print out employee time sheet records. If the Optional Password Module is active, only users with accounting rights are allowed into the Time Sheet Module. In addition, an employee is allowed to enter a time sheet record for himself, provided his employee ID number has been entered into the password module. The employee will need to use the same ID number when entering a time sheet record for themselves.

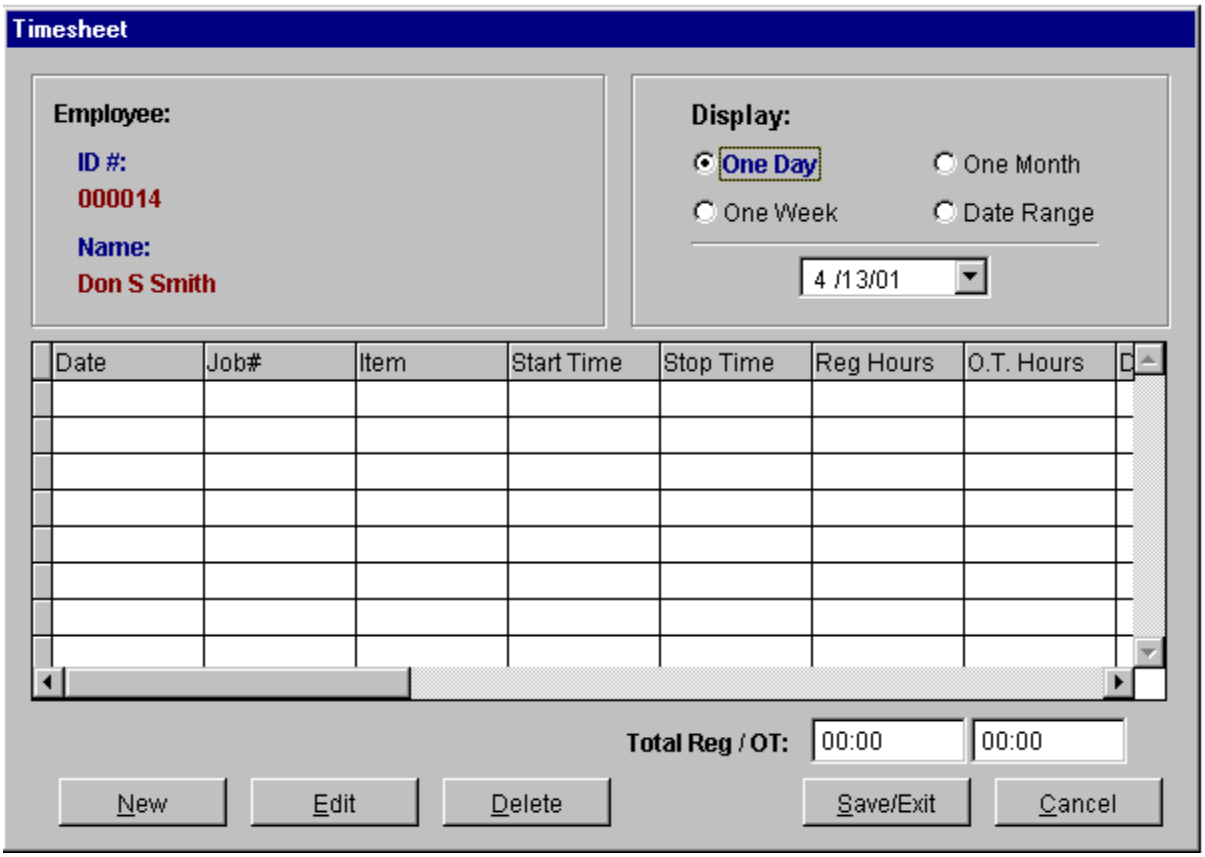
**Note:** Employees with accounting rights can enter employee times for any employee.

#### 16.11.3.1 Enter/Edit/Delete Time Sheet Record

Clicking on the **New/Edit/Delete** button will bring up the Employee Scroll Screen. After you have selected the employee, pc/MRP will display the Time Sheet Scroll Screen shown below. The **Display** radio buttons allow the user to control which Time Sheet Records for the selected employee will be displayed. The user can then select the time sheet record he or she wishes to edit or delete. The **One Day** radio button and the current date are this screen's default settings.

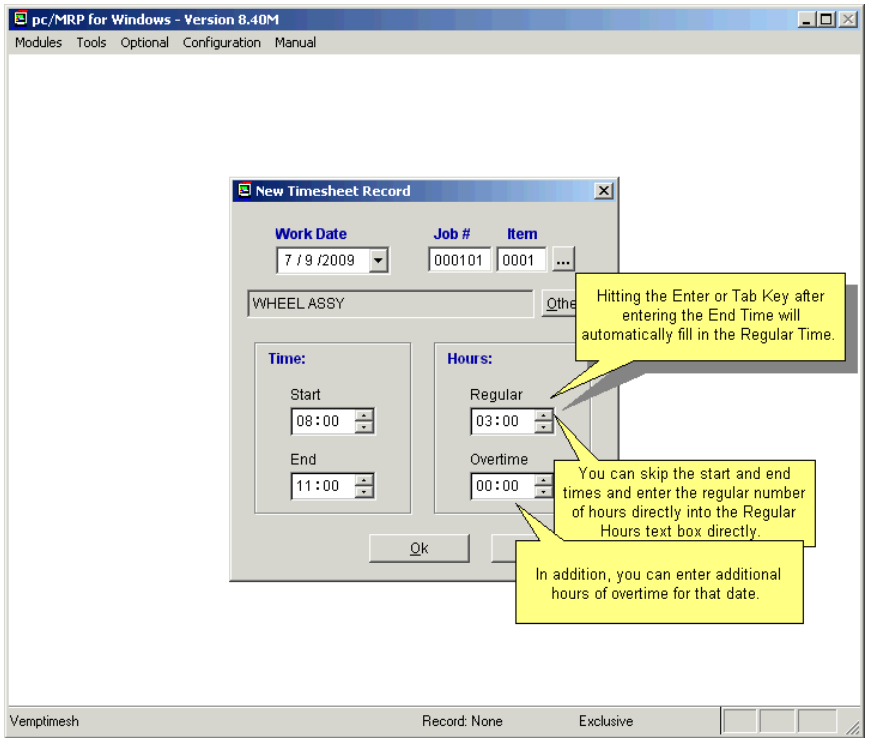
If the employee is allowed to enter his/her own time sheets, the Employer ID must also exist in the Password Module. If the Password Module does not contain the employee's ID, only Accounting will be allowed to enter the employee's hours.

The Display radio buttons allow the user to control which time sheet records for the selected employee will be displayed. The user can then select the time sheet record that he or she wishes to edit or delete.



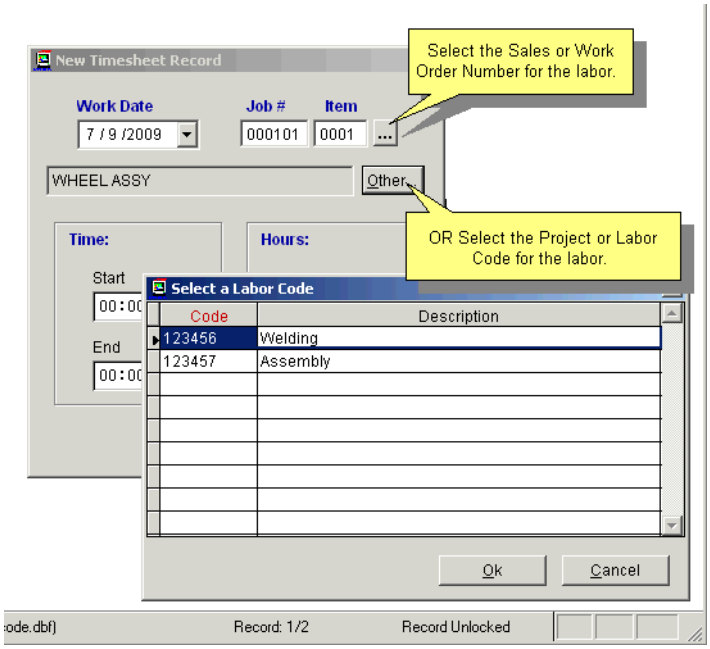
### 16.11.3.2 Enter a New Time Sheet Record

To enter a new time sheet record for a specified day, click on the **New** button. The new time sheet data entry screen shown below will pop up.




Select the **Work Date** that the job was worked on. If you click on the down arrow in the Work Date drop down list box, a calendar will be displayed allowing you to select any date available. The **Job#** and **Item** represent the pc/MRP sales/work order and item number or a Job Code. A valid job code or SO/WO number has to be entered. pc/MRP won't accept this field left blank (Versions **8.83C** and below would allow this field as blank). The sales/work order number can be looked up via the ellipsis button to the right of the Job # Item text boxes. The 'Other' text field shows the description of the line item selected.

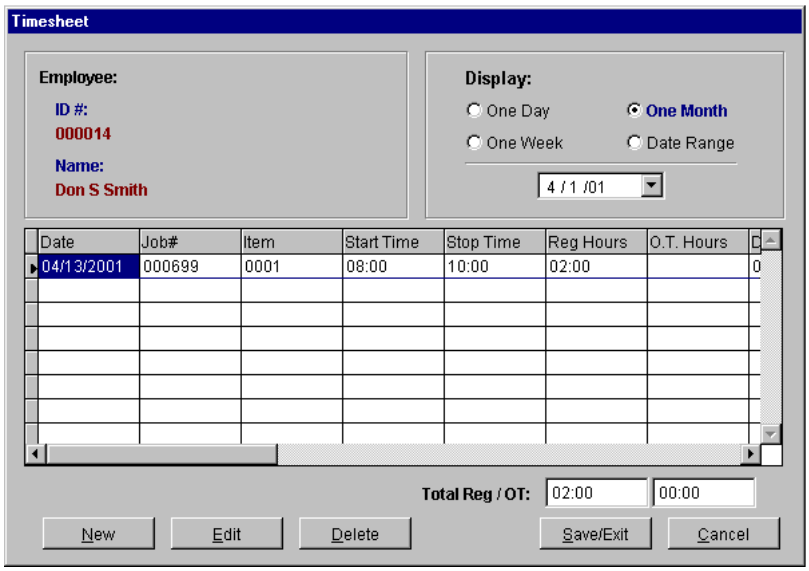
Clicking on the 'Other' button allows you to replace the work/sales order with a list of predefined labor codes previously defined via the menu option for TIME SHEET, DEFAULT SETTINGS as shown in 16.11.2.12.



You can enter the **Start Time** and **End Time** with your keyboard and/or by clicking on the spinners with your mouse. The start and end times represent a 24 hour clock, i.e. 16:00 would represent 4:00 PM. pc/MRP will automatically insert the total number of hours into the **Regular Hours** text box based on the start and end times. You can skip the start and end times, and enter the regular number of hours directly into the Regular Hours text box directly (you must do this if the work day or shift spans two calendar days). In addition, you can enter additional hours of overtime for that date. pc/MRP won't accept a record if both Regular and Overtime are 00:00 (Versions **8.83D** and above**)**.

Pressing the **Ok** button will bring you back to the Time Sheet Screen.
You must click on the **Save/Exit** button to save the time sheet record.

### 16.11.3.3 Edit a Time Sheet Record

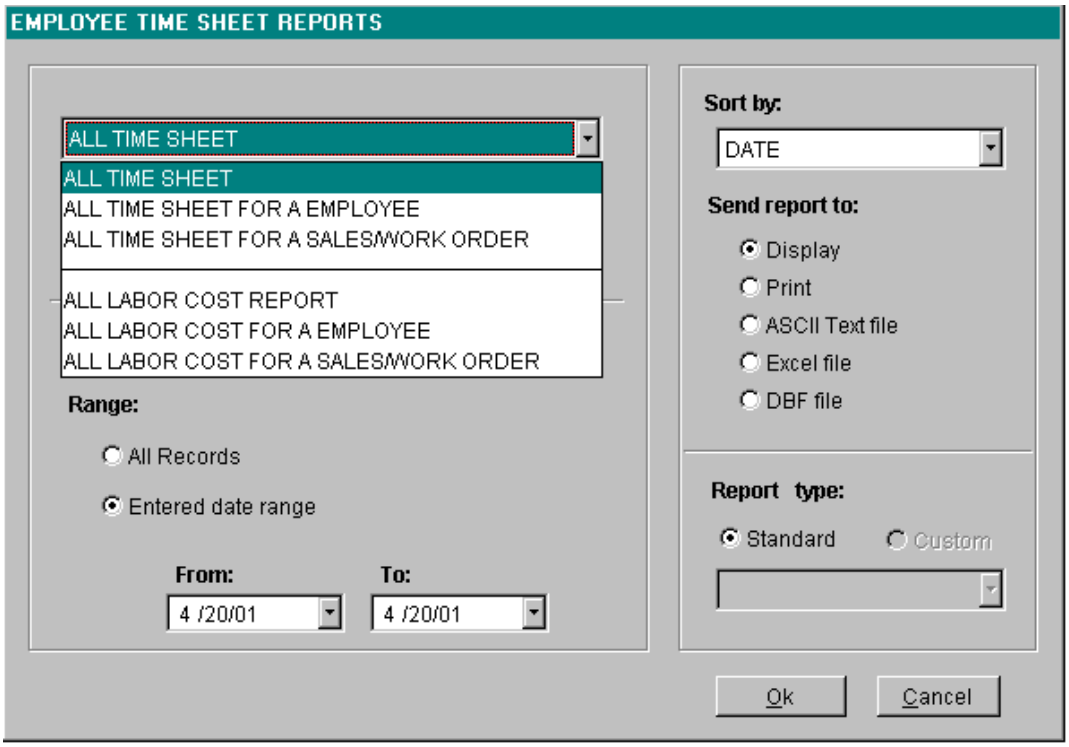



To edit a time sheet record, select the time sheet record you wish to edit from the scrollable browse window on the screen shown above and click on the **Edit** button.

### 16.11.3.4 Delete a Time Sheet Record

To delete a time sheet record, select the time sheet record you wish to delete from the scrollable browse window on the screen shown above and click on the **Delete** button.

### 16.11.3.5 Print/Display Time Sheet Reports




Selecting **Report** from the time sheet menu will allow you to print out the following reports:

- All Time Sheets (emptimesh.frx, emptimesh.dbf)
- All Time Sheets for an employee(emptimesh.frx, emptimesh.dbf)
- All Time Sheets for a sales or work order (emptimesh.frx, emptimesh.dbf)
- All Labor Costs (emptimesh.frx, emptimecost.dbf)
- All Labor Costs for an employee (emptimecost.frx, emptimesh.dbf)
- All Labor Costs for a sales or work order (emptimecost.frx, emptimesh.dbf)
- Labor Hour and Material Cost for open sales/work orders issued to manufacturing (emplabor_cost.frx, sales.dbf)

You can select the **Sort** for any of the above reports:

- Date
- Employee Number
- Sales/Work Order Number

You can select All Records, or Enter a Date Range.

All custom reports listed in the drop down custom employee report list box must use the following naming convention, CUSTIM*.FRX.

### 16.11.3.6 Cost of Sales Report on Invoices with Component Costs from the Stockroom and Labor Costs from the Time Sheets.

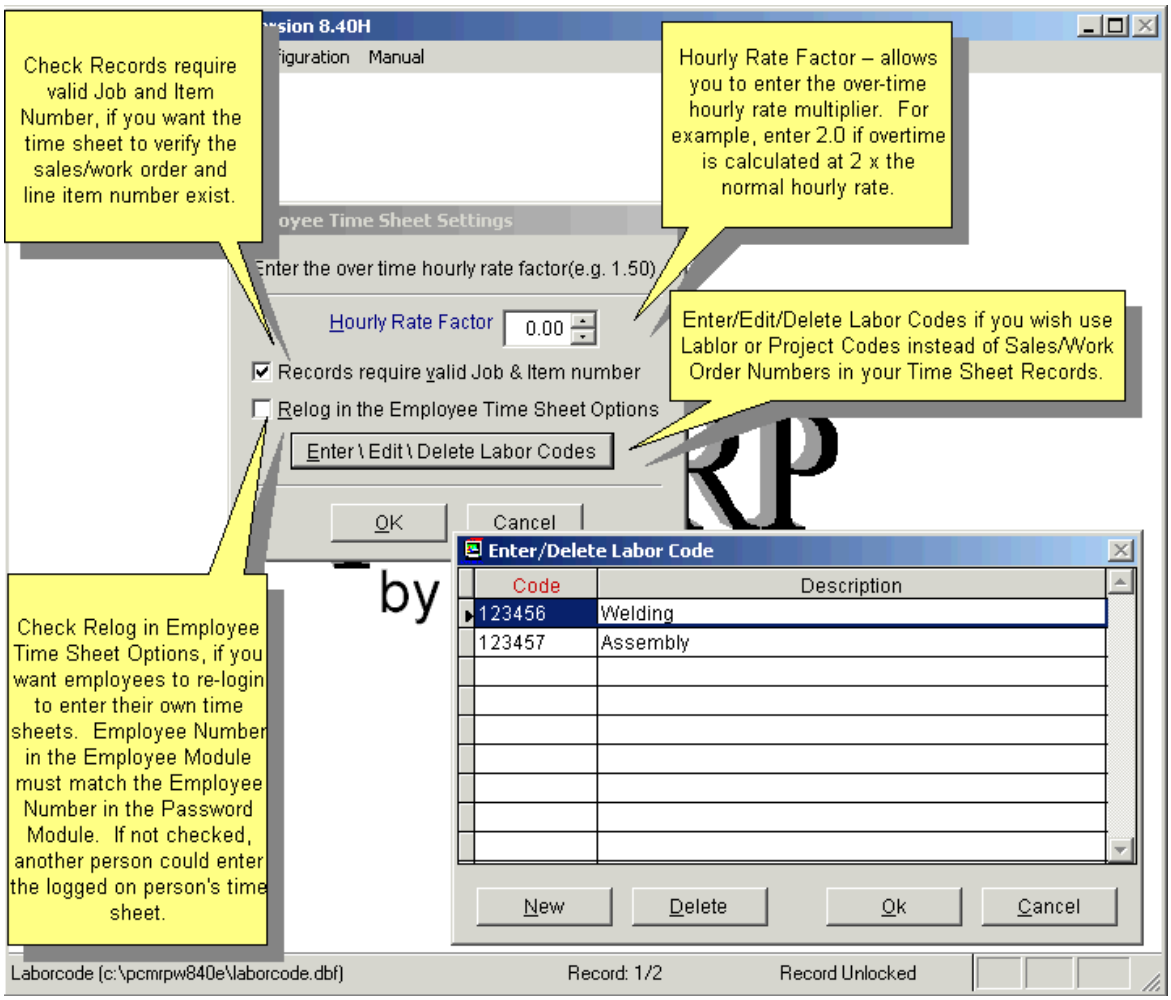
This report (COSTSALD.FRX) totals the actual inventory and labor costs for sales and work orders. The invoice.dbf file provides the selling price and the parent file for both the emptimesh.dbf and stockrta.dbf.

### 16.11.3.7 Time Sheet Module Technical Information

Overtime pay rate factor is used to calculate the average labor cost in the stockroom module.
Re-log into the Employee Time Sheet. This option allows users to enter time sheet in a sharing console environment.

- Formset: Emptimesh.scx
- View: Vemptimesh
- Data base: MRPVIEWS.DBC
- Buffering Method: Table buffered
- Table Update Method: Uses formset's Commitchange() method
- Free Tables:Employee.dbf, EmpTimeSh.dbf
- Indexes File: Emptimesh.cdx
- Tags:
  - BYENOTIM=UPPER(EMPID+DTOS(ENTRYDATE)+STARTTIME)
  - BYDATETIM=UPPER(DTOS(ENTRYDATE)+STARTTIME)
  - BYSONOTIM=UPPER(SONO+ITEMNO)
  - BYPRIMEKEY=UPPER(PRIMEKEY)
  - BYENO=UPPER(EMPID)
  - BYDOCNO=UPPER(DOCNO)

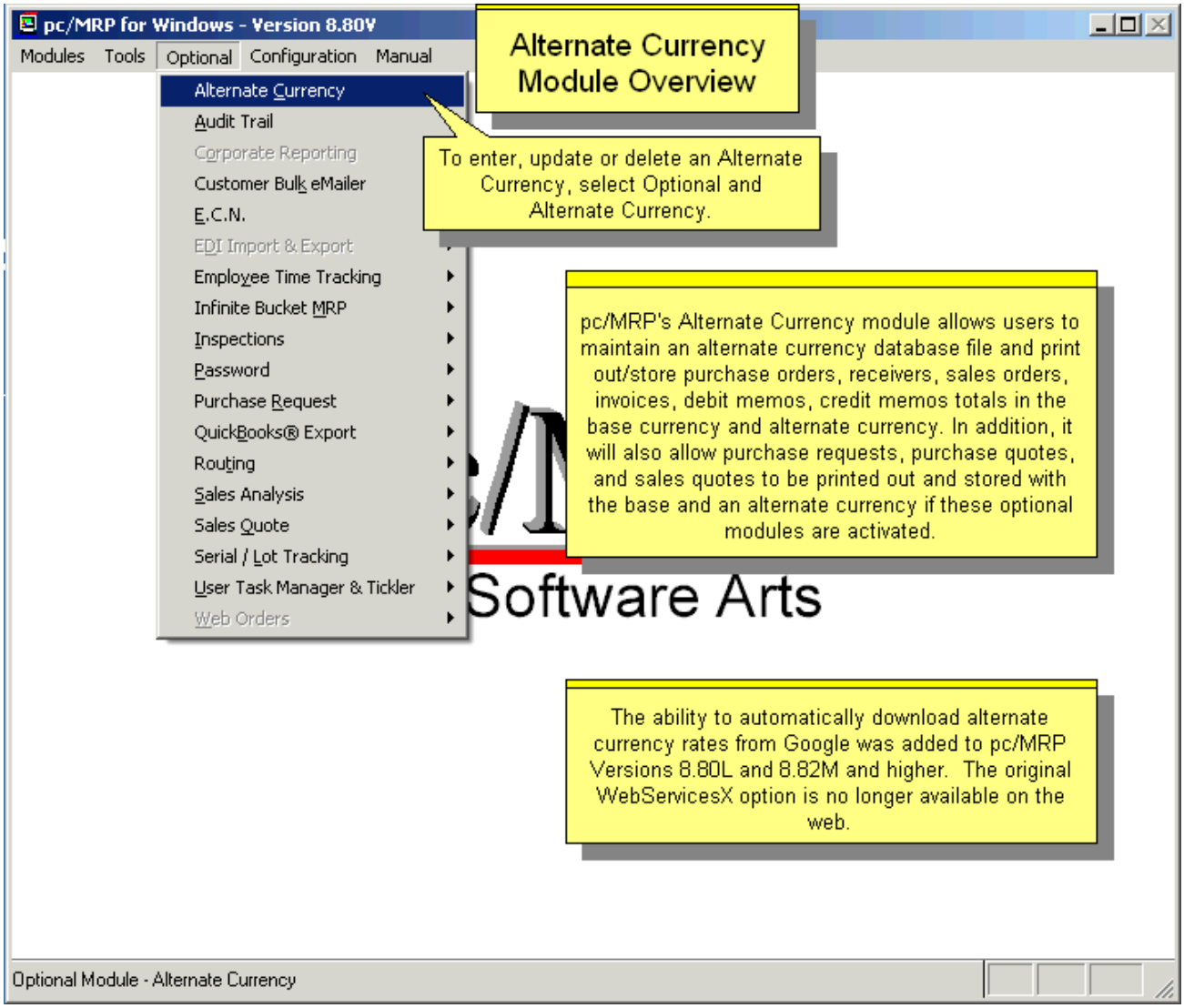
### 16.11.3.8 Time Sheet Module Default Settings




- Hourly Rate Factor – allows you to enter the over-time hourly rate multiplier. Defaults to 1.00.
- Set-up for validating Job and Line Item number.
- Re-login of Employee Time Sheet module to enter data.
- Enter/Edit/Delete Other Labor Codes.

# 16.12 Optional Alternate Currency Module

### 16.12.1 Overview. Create Currencies, Update Rates.




pc/MRP's Alternate Currency module allows users to maintain an alternate currency database file and print out/store purchase orders, receivers, sales orders, invoices, debit memos, credit memos totals in the base currency and alternate currency. In addition, it will also allow Purchase Requests, Purchase Quotes, and Sales Quotes to be printed out and stored with the base currency and an alternate currency if these optional modules are activated. The Alternate Currency module uses Microsoft SOAP. Vista, Windows 7, 8 and 10 do not come with SOAP. You can download SOAP from our website, www.pcmrp.com. Select Technical Support, Support Files, and scroll down to the bottom of the page to "Microsoft SOAP Toolkit".

An online slideshow is located here: http://www.pcmrp.com/mrp101/altcurselectoptional.htm

**Activating pc/MRP's Alternate Currency Module**

pc/MRP's Alternate Currency module can be activated by the phone by contacting Software Arts at 408-226-7321 and obtaining the activation code number for this module. Once you have obtained the activation code number, click on the Configuration Option in pc/MRP's top menu bar, selection Module Activation, and enter the activation code number when prompted.

**Entering, Editing, Deleting Alternate Currencies**

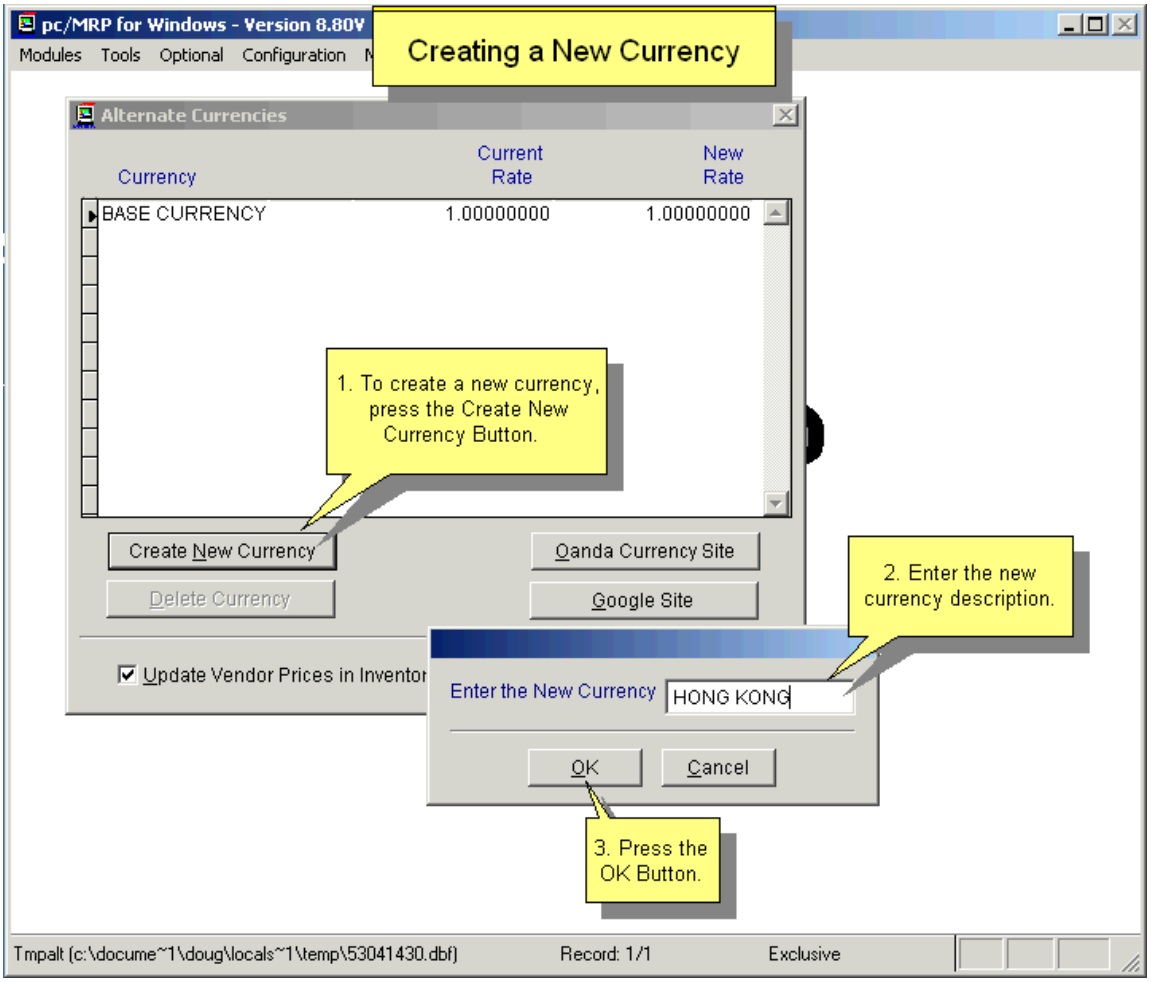
The alternate currency rate is the amount of alternate currency required to purchase one unit of your base currency. For example, if your base currency is U.S. dollars and it takes 1.25 Canadian dollars to purchase one U.S. dollar, the alternate currency rate for Canadian dollars would be 1.2500.

**Please note** that if you have the Optional Password module, only users with rights to pc/MRP's Accounting module will be able to access the Optional Alternate Currency module.

Selection of **Alternate Currency** from the **Optional** menu will present the dialog box shown below. This window allows the creation of new currency exchange rates, the alteration of existing currency exchange rates or the deletion of currencies that are no longer needed.

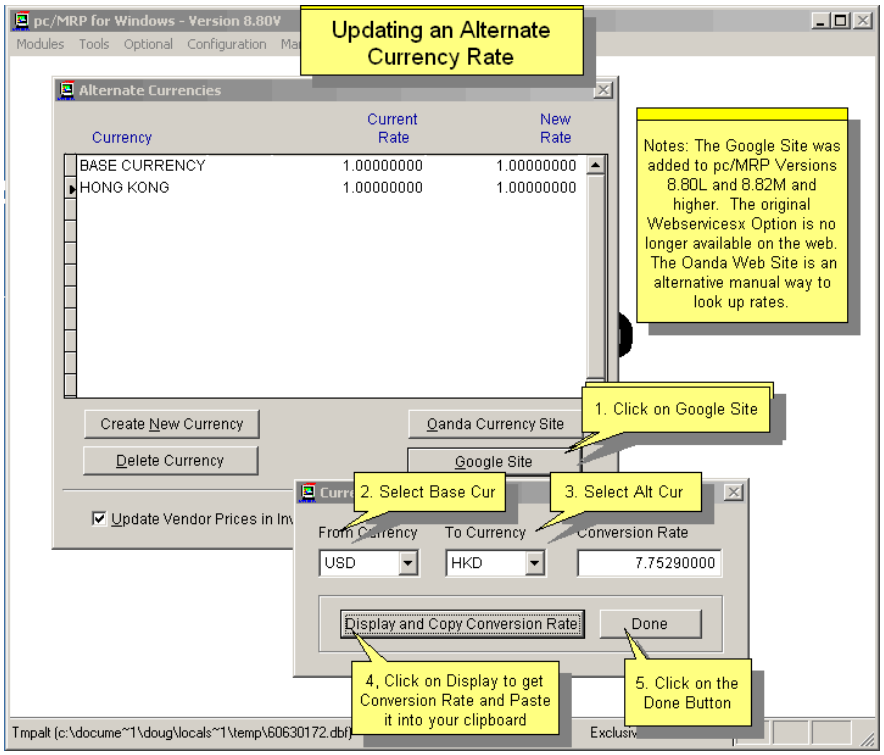
The currency list will display all the currencies along with the current exchange rate and the new exchange rate (if the user just updated the rate).

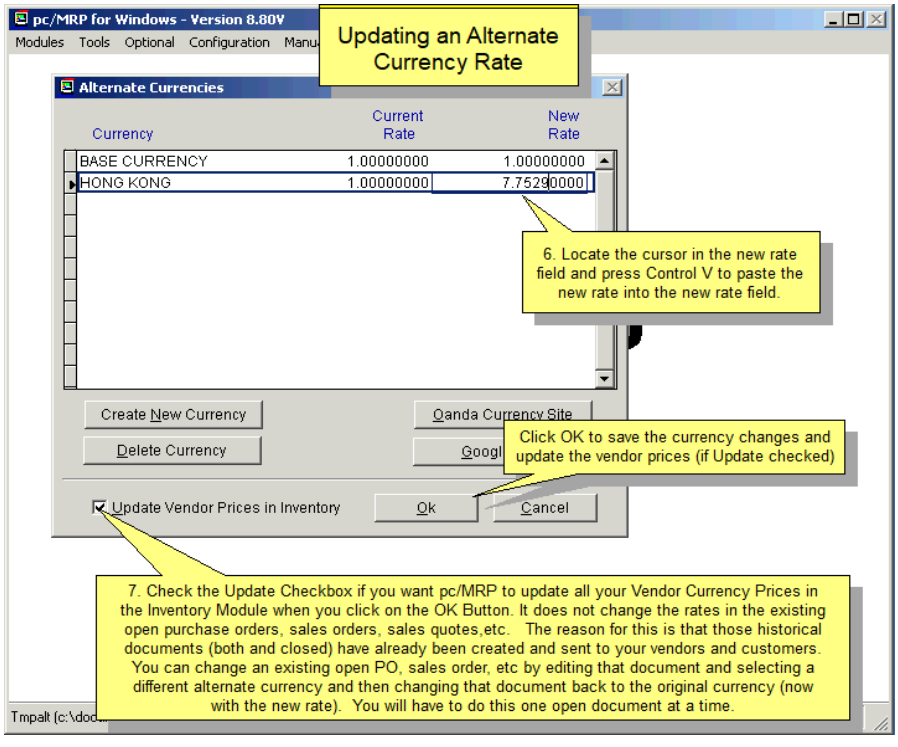
**Creating/Entering a new Currency Rate**

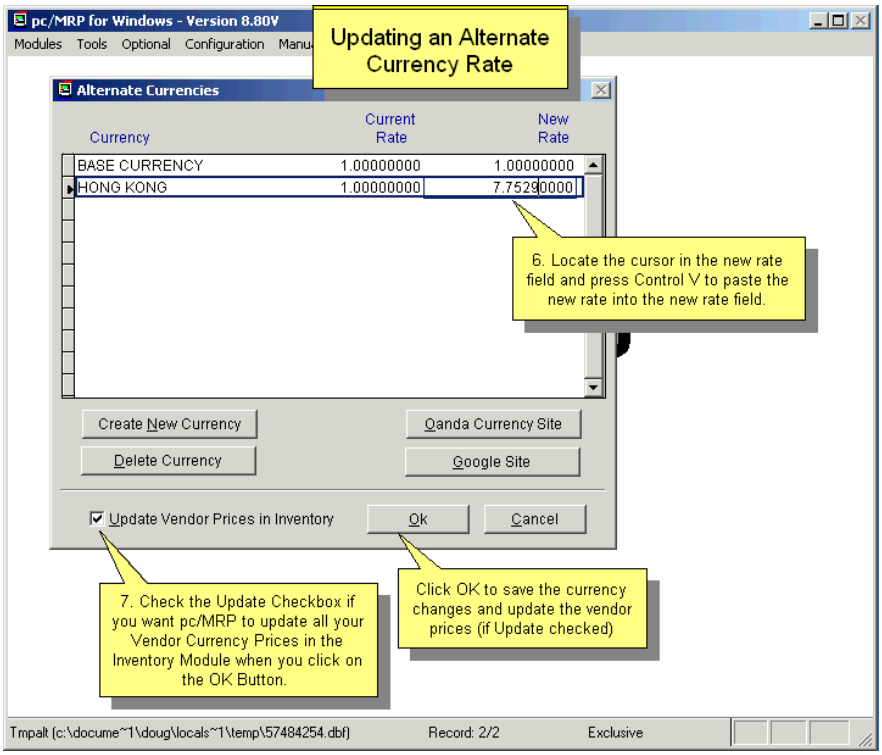



A new currency can be added to the database by pressing the **Create New Currency** button.

## Updating/Deleting an Alternate Currency Rate



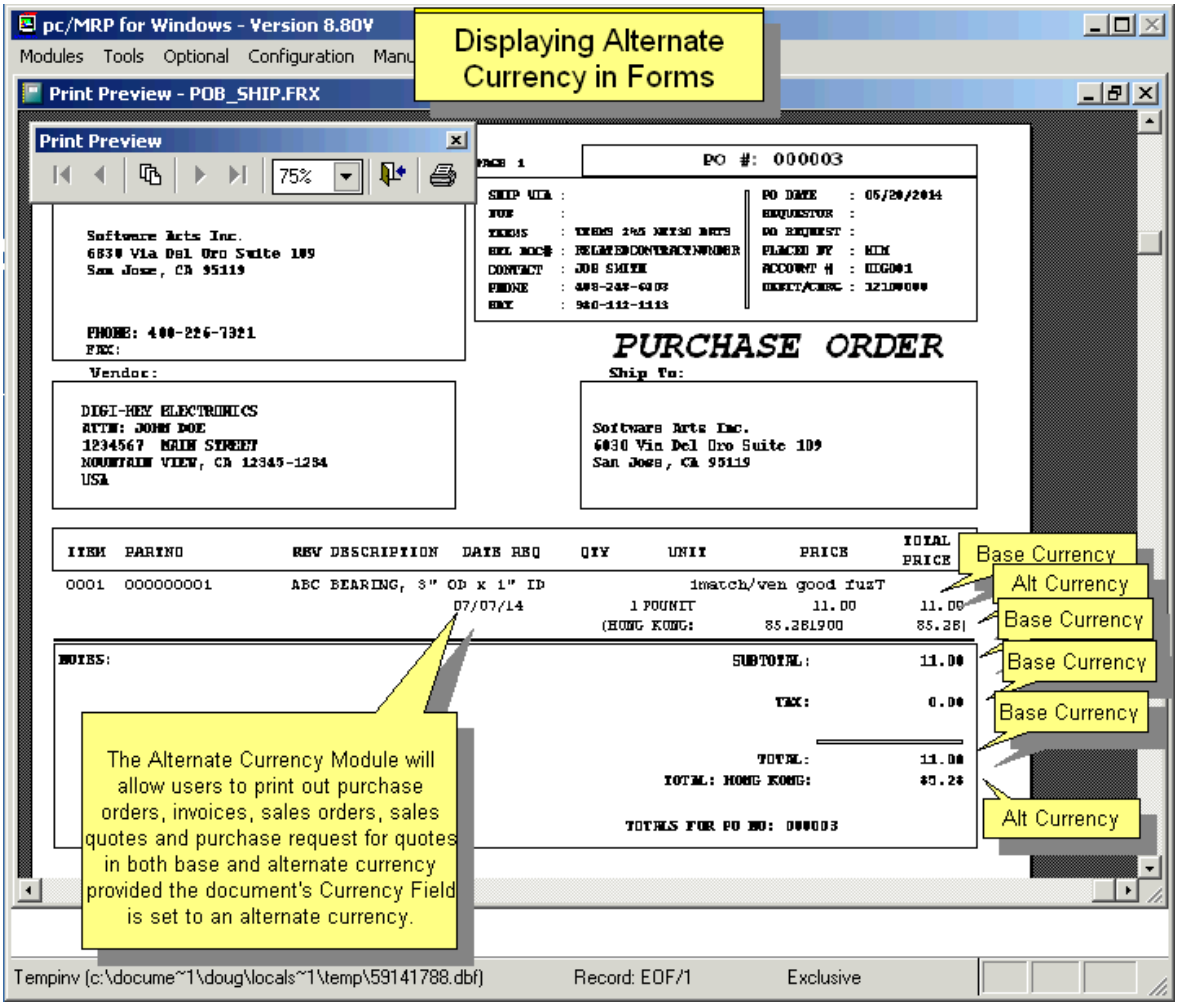



The vendor price fields will be updated for each part in the inventory that is set to track the costs based on the vendor's currency instead of the base currency. The vendor price fields will not be updated if the **Update Vendor Prices** box in the alternate currency module is un-checked. (Logically there are only a few reasons why this check box would not be checked. Under most circumstances you will want the prices updated, thus you will want the Update Vendor Prices checked.)

The highlighted currency can be deleted from the database by pressing the **Delete Currency** button. The user will be asked to confirm that deletion of the currency is desired.

**Adding an Alternate Currency to a PO, Invoice, etc.**

An alternate currency can be added to (and edited on) purchase orders, sales orders, invoices, etc. by selecting the desired currency from the **Document Currency** list box located on the respective data entry screen. Once an alternate currency has been added to a document, the total amount due will print out in your base currency as well as the alternate currency. See screen below:




**Note:**
The 'Sale Price' field will not allow an entry greater than 7 digits to the left of the decimal point. In some cases, when using the Alternate Currency module, more digits are needed. An example would be using JPN as Document Currency.

To solve this challenge:

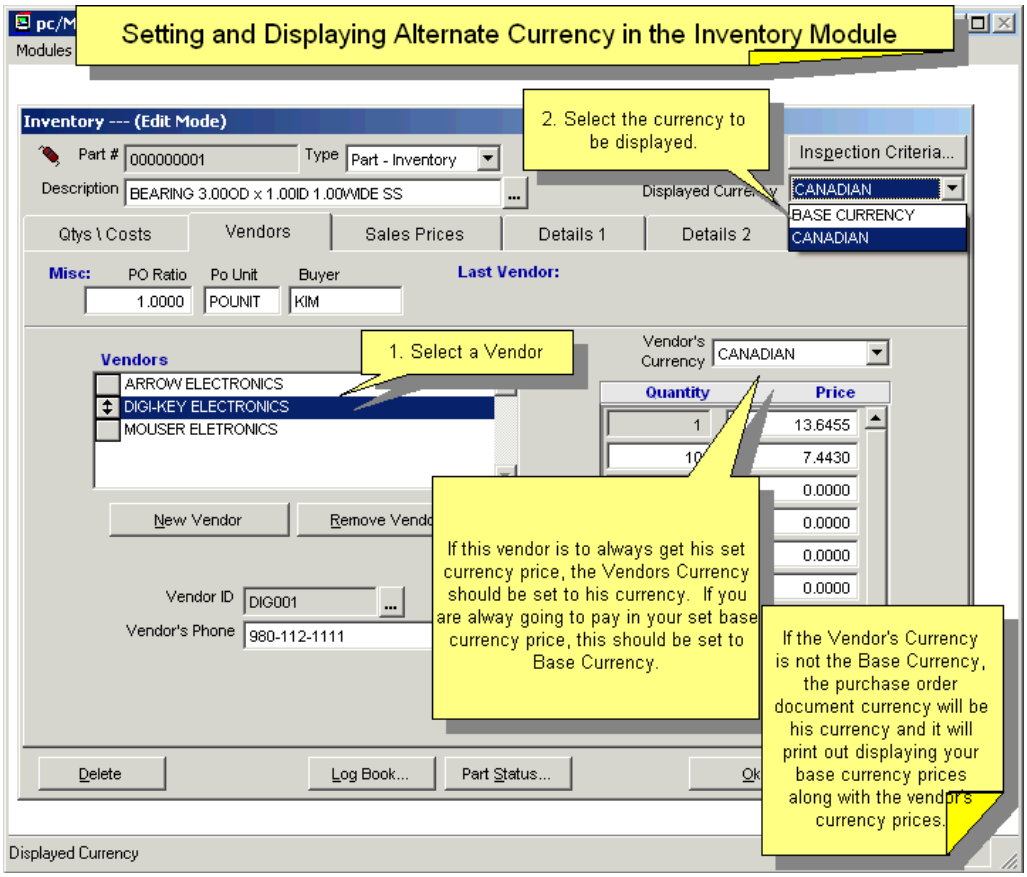
1. Set the Document Currency as ‘JPN’ (as an example)
2. Set the line item ‘Display’ to ‘Base Currency’
3. Convert the JPN value into base currency and use that value in the sale price field
4. Continue with the rest of the document
5. Save the document

The document will print accurately providing that the Alternate Currency field in the document is modified to handle the larger value.

**Alternate Currency and the Inventory**

The Alternate currency drop down list box on the first page of the inventory screen allows you to display the costs in the currency selected. The costs being displayed are based on the alternate currency rate * cost stored in the base currency.

The purchase price screen contains two drop down alternate currency list boxes (**Displayed Currency** and **Vendor Currency**).




The "**Displayed Currency**" drop down list box controls what currency <u>all</u> of the vendor prices are displayed in. The Displayed Currency list box will default to the currency currently being displayed on the main inventory screen.

The "**Vendor's Currency**" list boxes store the currency the price is based on for each vendor. This allows you to change an alternate currency's rate and if you check the **Update Prices** check box, pc/MRP will go into the inventory and adjust your base currency costs of all items whose price is based on the alternate currency (your base currency price will be adjusted but the alternate currency price will remain the same).

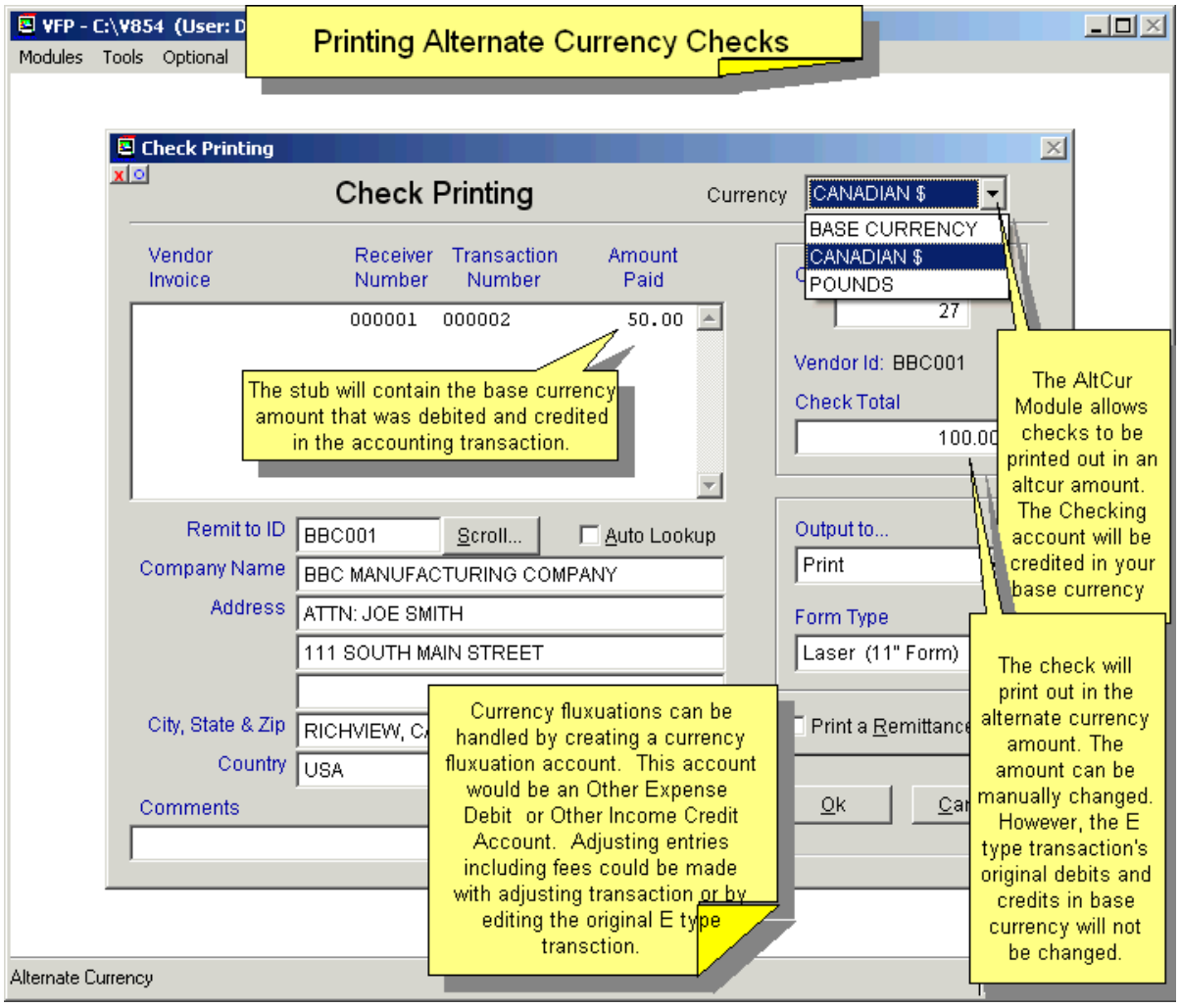
Example 1 - If a vendor from another country keeps his price the same but the currency rate changes and you select update costs/prices when recording the change, the alternate currency price will not change. However, the base currency price will change for all parts based on that currency.

Example 2 - If a vendor from another country changes his price and the price of the part is based on his currency, you would edit the part number, select purchase prices, (the vendor currency should be set to his currency), set display currency to his currency and change the price. When you set the displayed price to your base currency, your new price in your currency will be displayed.

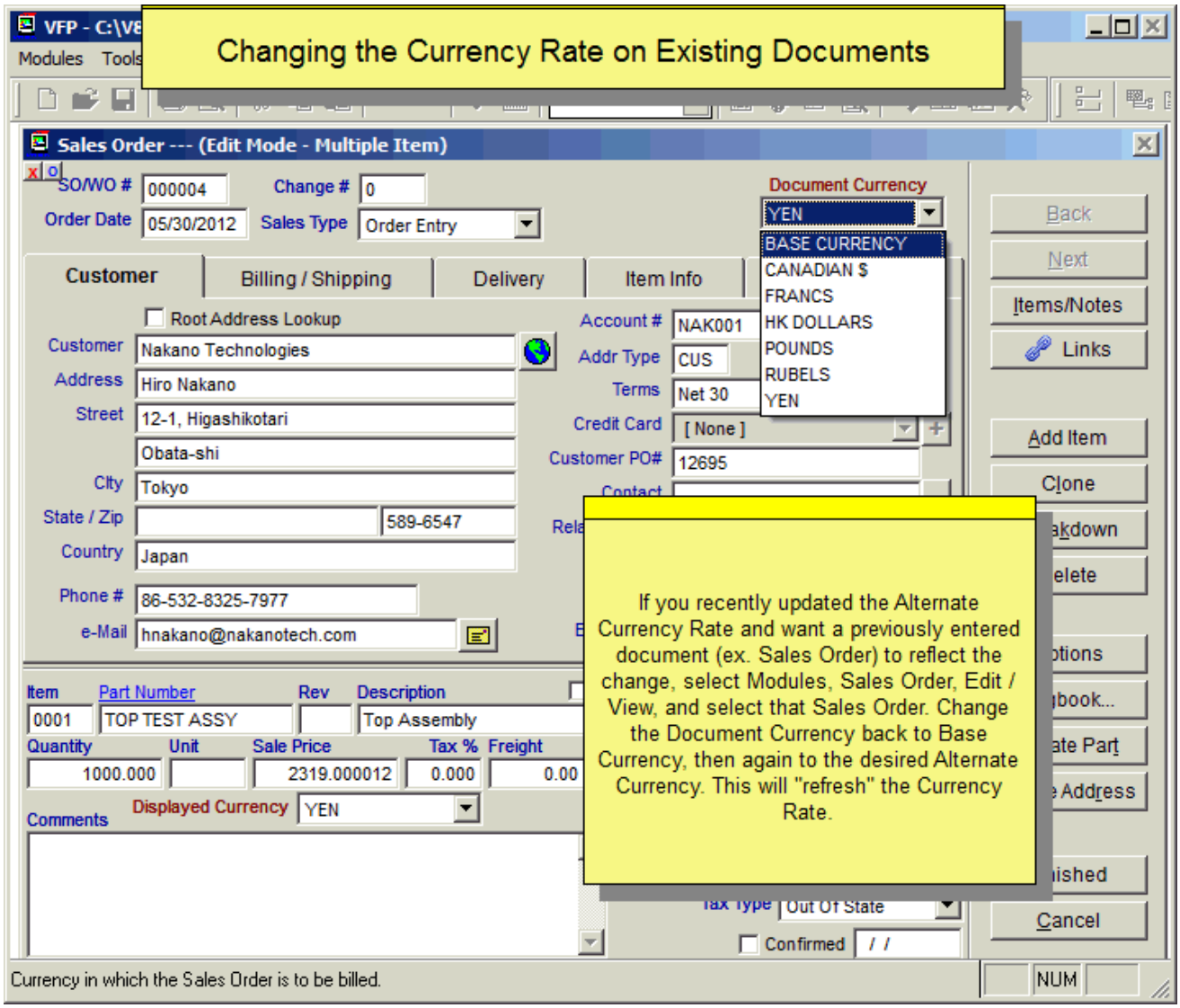
Example 3 - If you have vendors submitting bids based on different alternate currencies, setting displayed currency to the base currency will show the equivalent prices in your base currency.

**Printing Alternate Currency Checks**

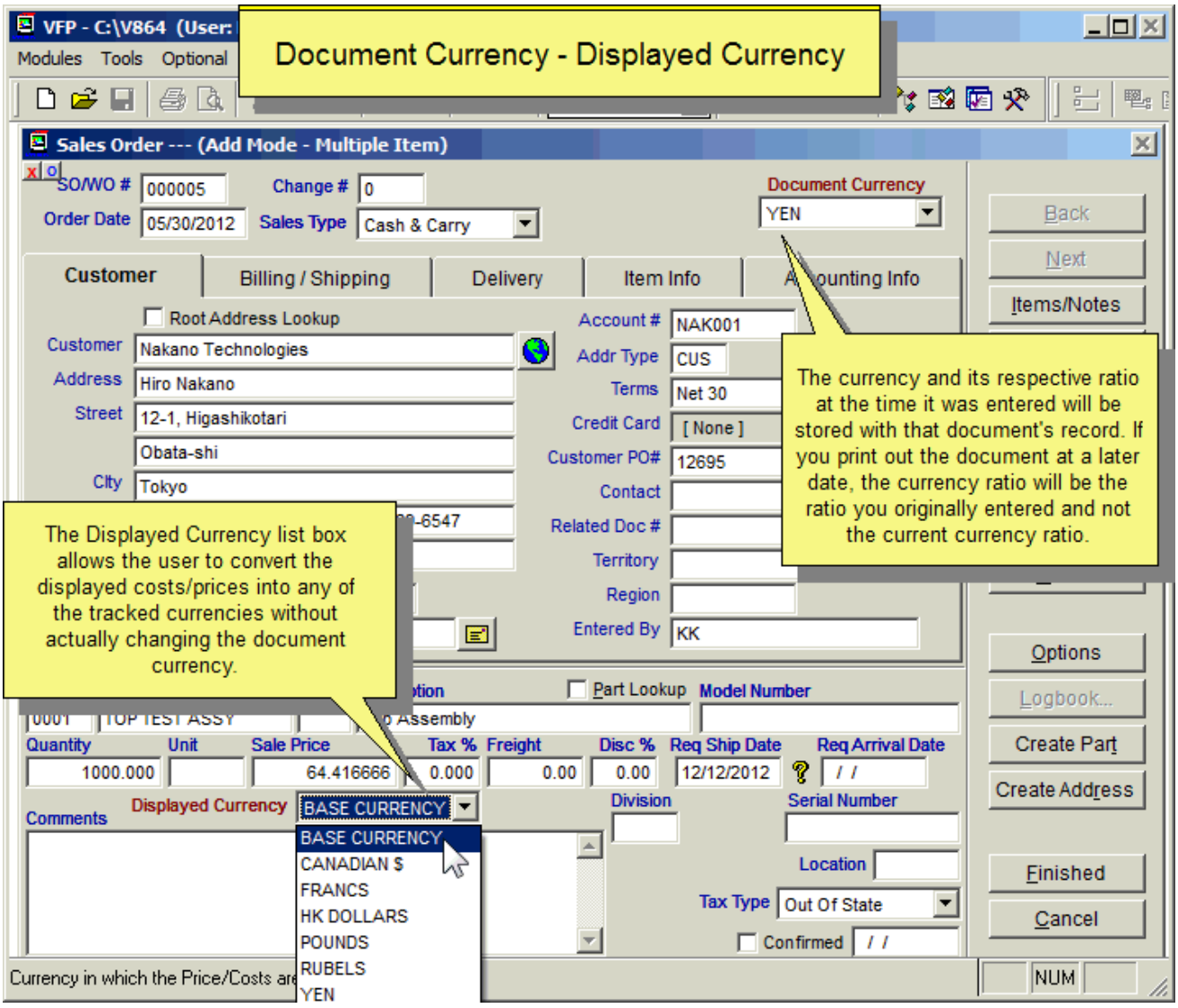
When you are in Accounting, Print Checks or re-printing old checks, the following screen allows you to select the currency in which to print the check.



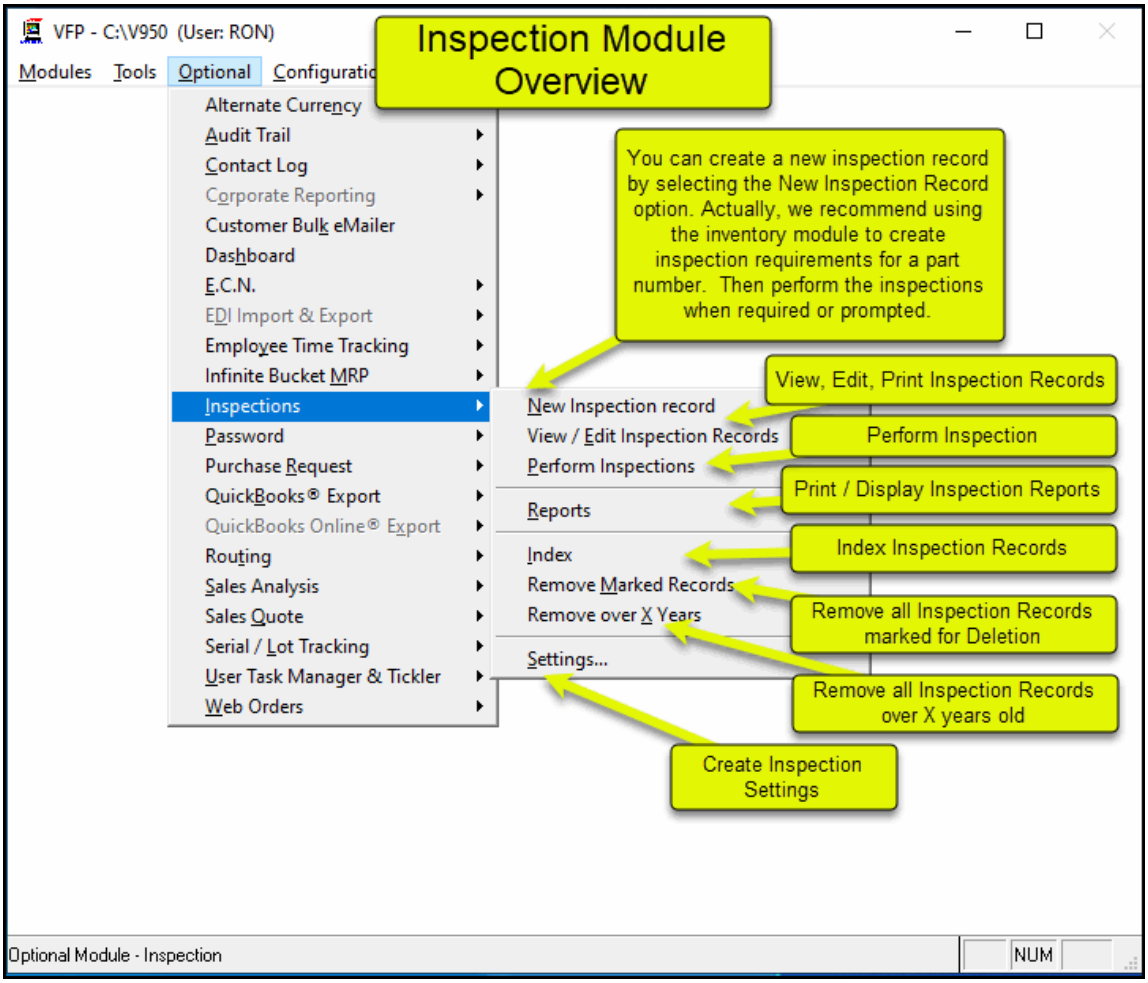
**Changing Alternate Currency Rate on Existing Documents**



**Difference between Document Currency and Displayed Currency**



# 16.13 Optional Inspection Module




### 16.13.1 Overview

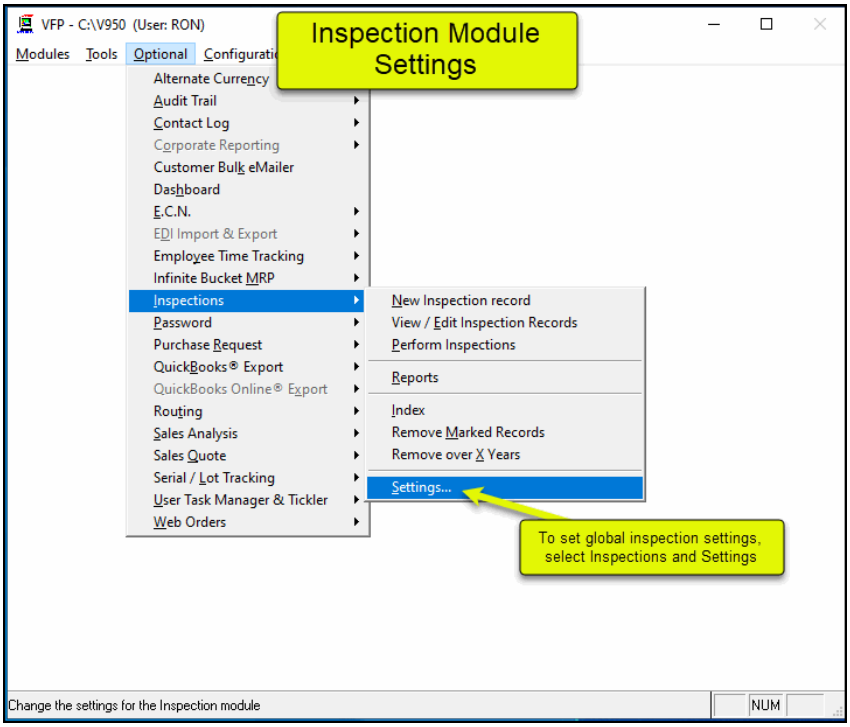
pc/MRP's Inspection Module allows users to:

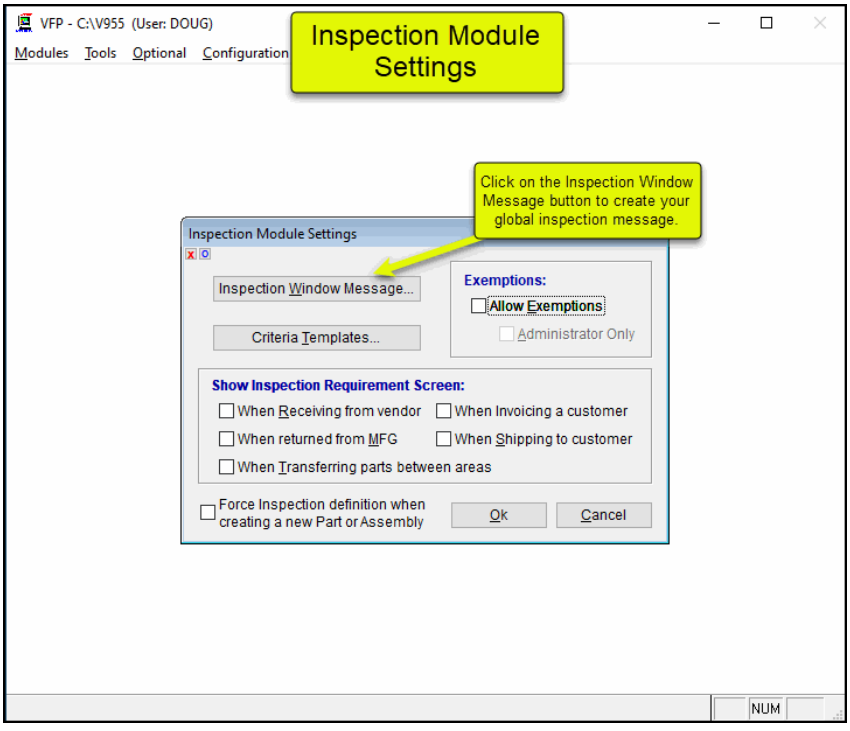
- Create global inspection requirements applying to all inspection records by selecting the **Settings** option.
- Use pc/MRP's Inventory module to create inspection requirements for specific part numbers and assemblies by editing the part number and clicking on the Inspection Criteria button. You can specify when an inspection record will be created and displayed (received, manufactured, invoiced, or shipped) and what criteria will be used to inspect it.
- Manually enter a new inspection record by selecting the **New Inspection Record** option. Normally you would not use this function, as the inventory module will allow you to automatically enter a new inspection record when you receive, manufacture, invoice, and or ship a specific part or assembly as specified in the above paragraph.
- View, edit, and print inspection records (regardless of status) by selecting the **View/Edit Inspection Records** option.
- View, edit, and print open inspection records (inspection records whose status was left at Not Inspected) by selecting the **Perform Inspections** option.
- Print and or display inspection reports by selecting the **Reports** option.

An online slideshow is located here: [http://www.pcmrp.com/mrp101/inspectionnewoverview.htm](http://www.pcmrp.com/mrp101/inspectionnewoverview.htm)

### 16.13.2 Defining Global Settings and Criteria

Inspection criteria and settings can be defined globally and for each individual part. By selecting Optional, Inspection, and Settings users can access the inspection settings. The Inspection Module Settings window is listed below. This window allows users to input a standard inspection message (Inspection Window Message...), create standard inspection criteria through the Criteria Templates, allow Exemptions, and define when inspections can be performed.



### 16.13.2.1 Inspection Window Settings

Users can allow Exemptions to be entered as a valid part status by selecting the Allow Exemptions check box. The Allow Exemptions can be further protected by checking Administrator Only. With this check box selected, only users with D rights in the Password Module will be allowed to mark the inspection as exempt.

For each part/assy that needs to be inspected at one point (receiving, invoicing, etc.), select Inventory, Edit, and click on the Inspection Criteria button. Check all the stages of the manufacturing process, where the part/assy needs to be inspected. (E.g. "When receiving from vendor".)

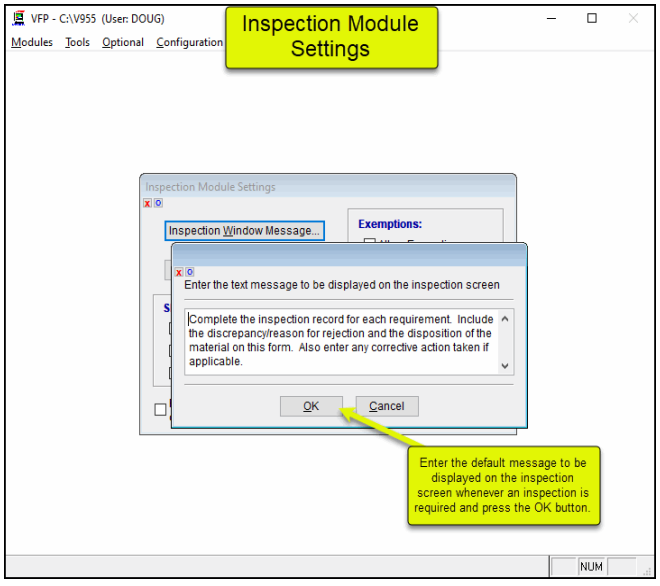
There are two methods that will allow users to perform an inspection of parts/assys that were marked as needing inspection by the above method.

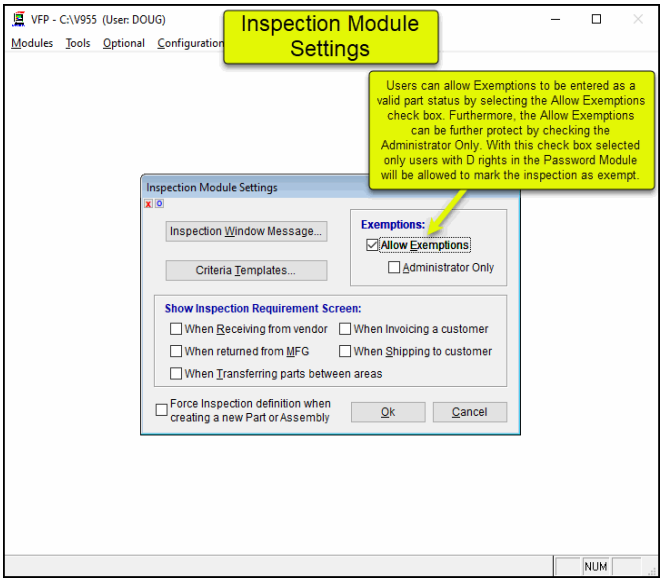
1. If you want the user (person doing the receiving, invoicing, etc.) to perform the inspection:

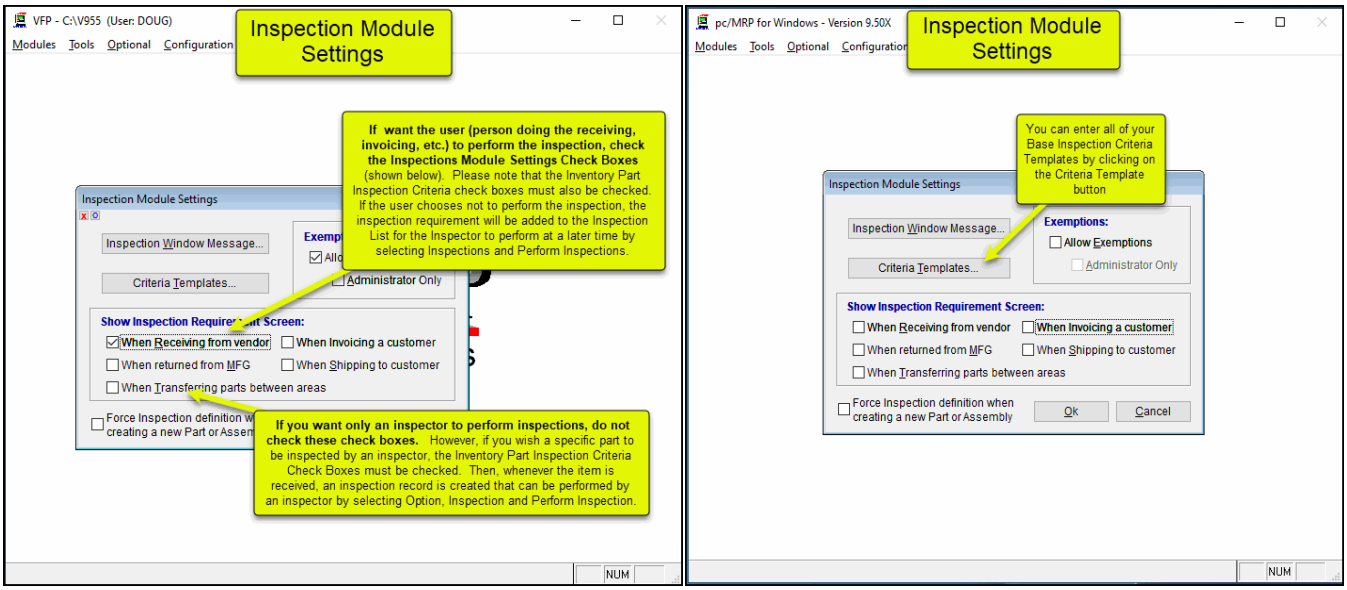
Select Optional, Inspections, Settings. Check as many of the "Show Inspection Requirement Screen" checkboxes as you wish. When (for example) "When receiving from vendor" is checked, and you are receiving parts that were checked as needing inspection when receiving, the inspection screen will pop up to perform the inspection while actually receiving. If the user chooses not to perform the inspection, the inspection requirement will be added to the Inspection List for the Inspector to perform at a later time.

2. If you want only an inspector to perform inspections:

Do not check the check boxes in the Settings. Then, whenever the item is received, an inspection record is created that can be performed by an inspector at a later time. The inspector will select Optional, Inspections and Perform Inspections, and create a list of parts they wish to inspect.

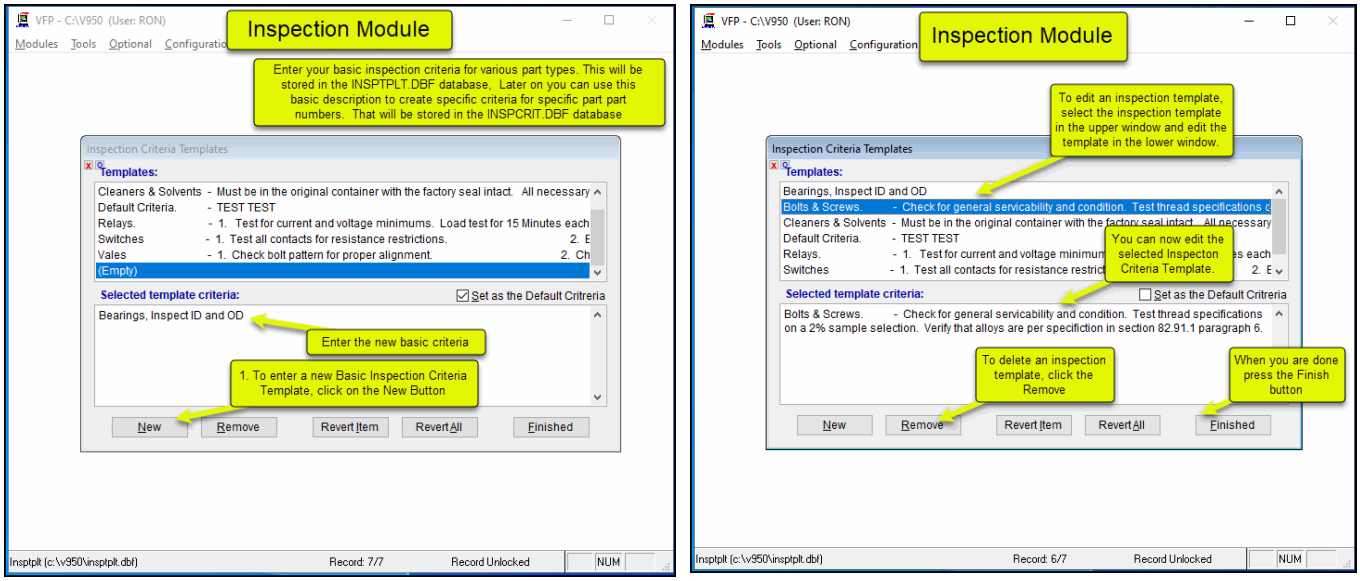


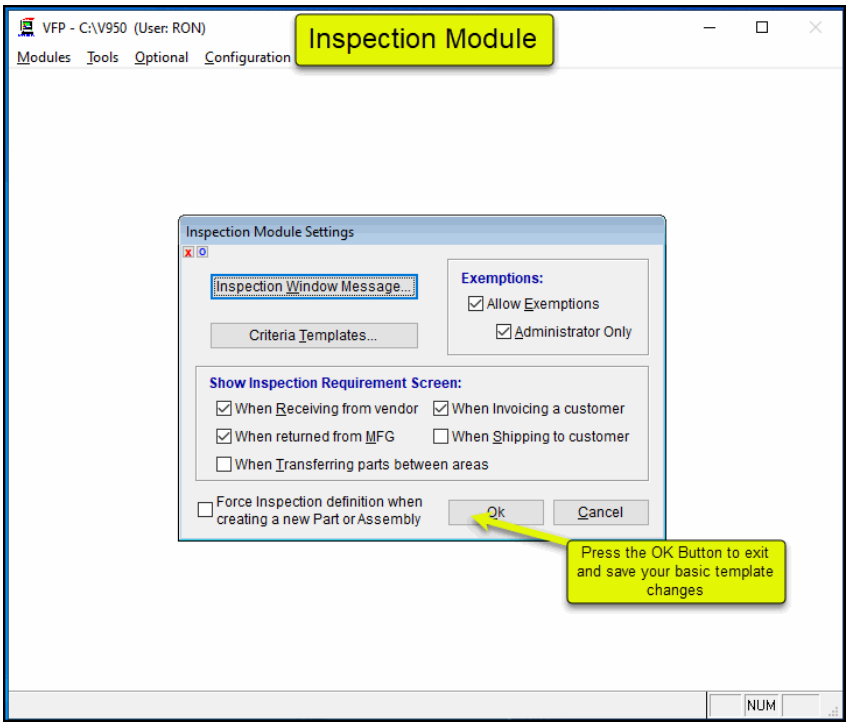



### 16.13.2.2 Criteria Templates

Inspection Criteria can be entered per inventory part or defined within the Inspection Settings using the Criteria Templates.

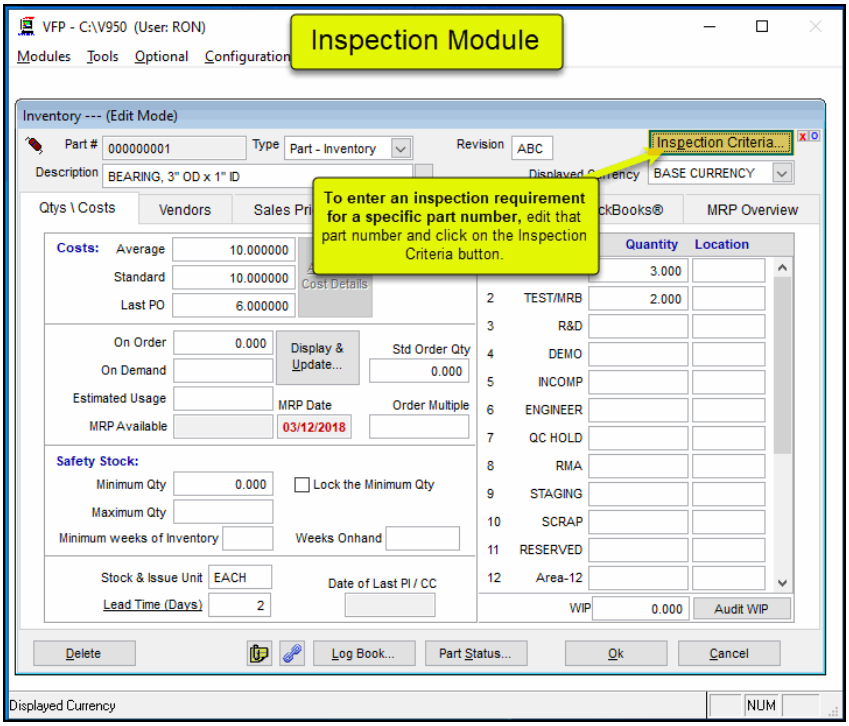



The Criteria Templates screen allows users to create, edit, and remove inspection criteria from the templates. To enter a new template, select the New button. To remove an existing entry select Remove. To edit an existing entry select the desired template from the top Templates window then edit as needed in the bottom Selected template criteria window. To undo and edits created while the Inspection Criteria Templates window is open select either the specific criteria and Revert Item or Revert All. To set specific criteria as the default criteria, select the Set as Default Criteria check box. When finished with any Criteria Template modification(s) select Finished.

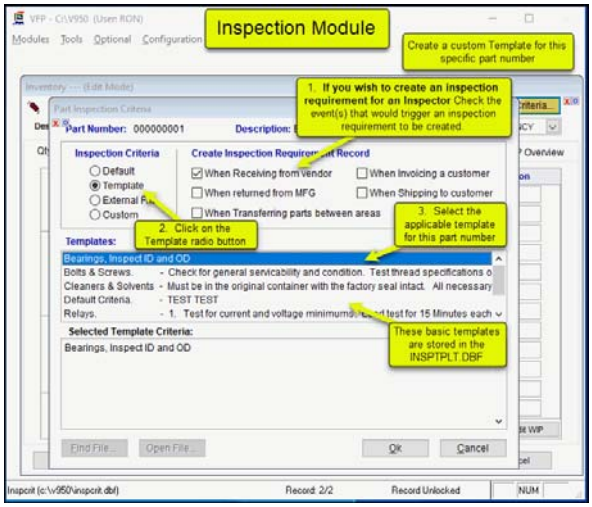



### 16.13.3 Defining Inspection Settings for Specific Inventory Items.

Once the Inspection module has been activated a new button, the Inspection Criteria... button, will be present on each inventory entry screen. This button will open the Part Inspection Criteria screen. This screen allows users to enter Inspection Criteria and Create Inspection Requirements.



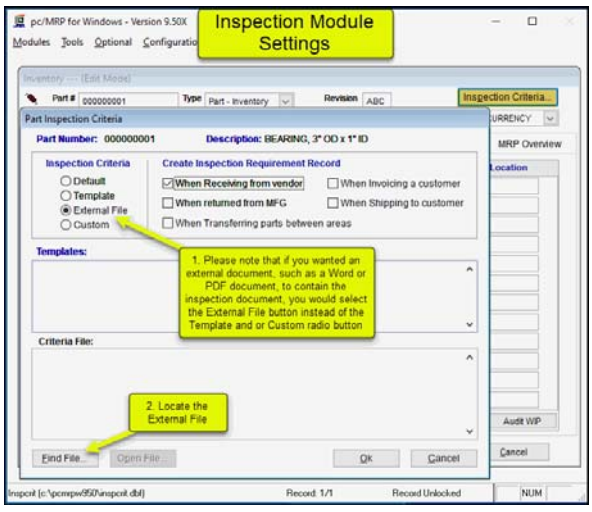
### 16.13.3.1 Selecting a Template for a Specific Inventory Item.




Inspection Criteria can be entered using three different methods. The first method is via a criteria template, where users can select from the Default or Template list (both created within the Inspection Module settings). The second method allows users to create a Custom requirement. This is created here within the Part Inspection Criteria screen. Finally, users can also link an External File to pc/MRP containing the inspection criteria. (File types like DOC, XLS, and PDF...) The Templates element of the Part Inspection Criteria screen lists all of the available criteria templates. The Selected Template Criteria element of the Part Inspection Criteria screen contains the actual full list of inspection criteria for that specific template.

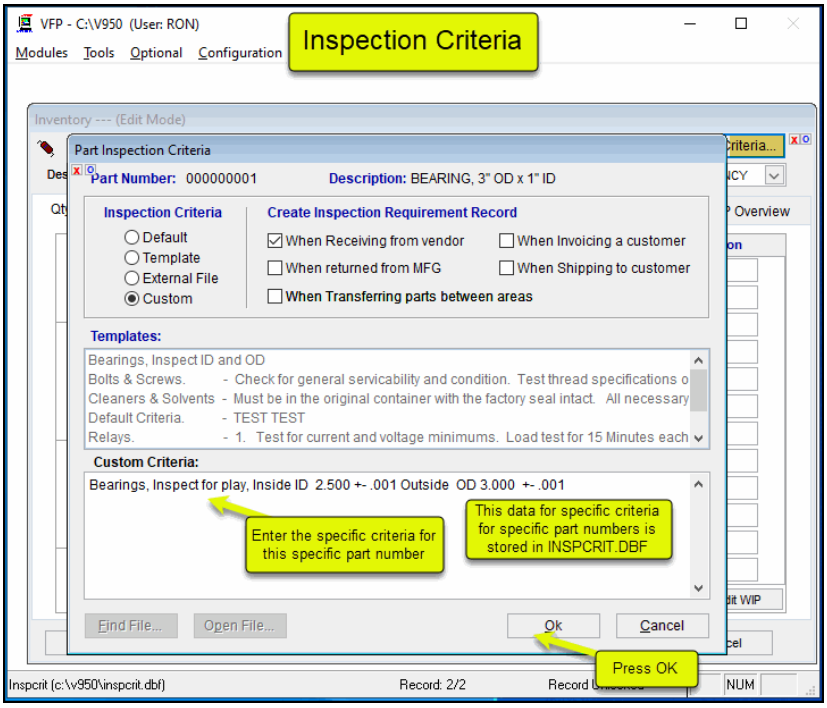
### 16.13.3.2 Selecting aa External File for a Specific Inventory Item.

Default and Template Setup - instruction on how to set up the default template and template criteria is discussed above in Section 16.13.2 Defining Inspection Global Settings and Criteria. To select the Default template or from the Template list simply select the desired radio button and template from the template list.



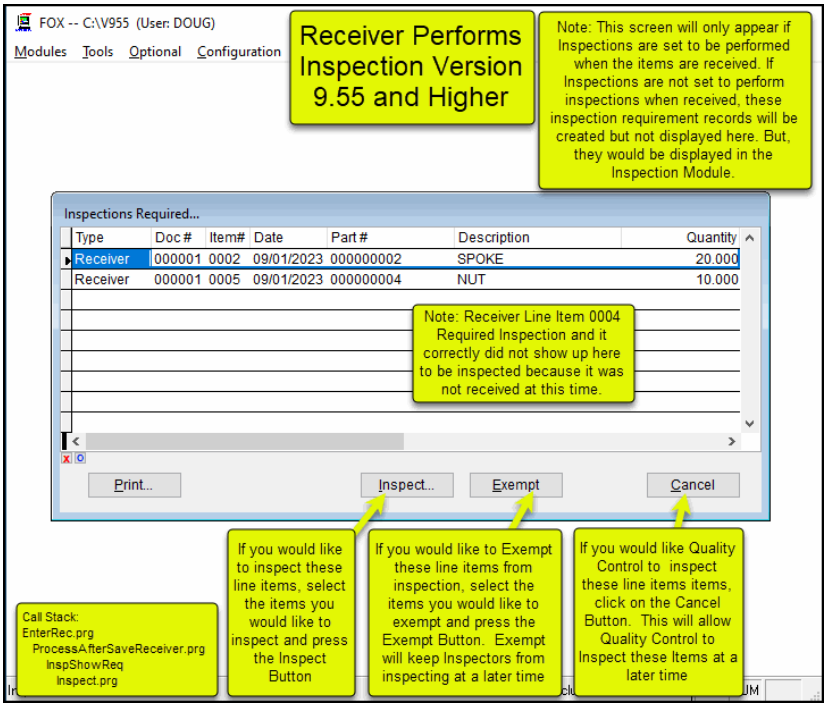

External File - to utilize an external file, simply select the External File radio button. This will add a Find File button on the bottom left of the Part Inspection Criteria screen. Press the Find File button and select to open the desired file.

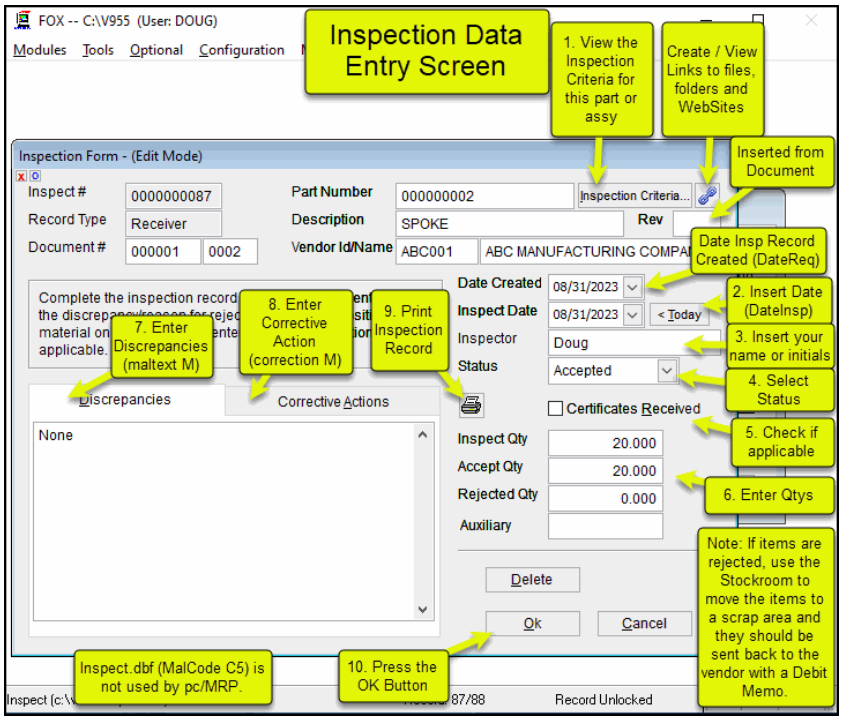
### 16.13.3.3 Selecting a Custom Criteria File for a Specific Inventory Item.




Custom - to define custom criteria press the Custom radio button. This will allow users to enter custom criteria into the Selected Template Criteria element of the Part Inspection Criteria screen. To use a template or the default setting as a true template and then alter the template to be more specific for this part simply select the Default or Template radio button then press the Custom radio button. This will automatically import the inspection criteria into the Selected Template Criteria element of the Part Inspection Criteria screen. Users can then edit the inspection criteria as needed.

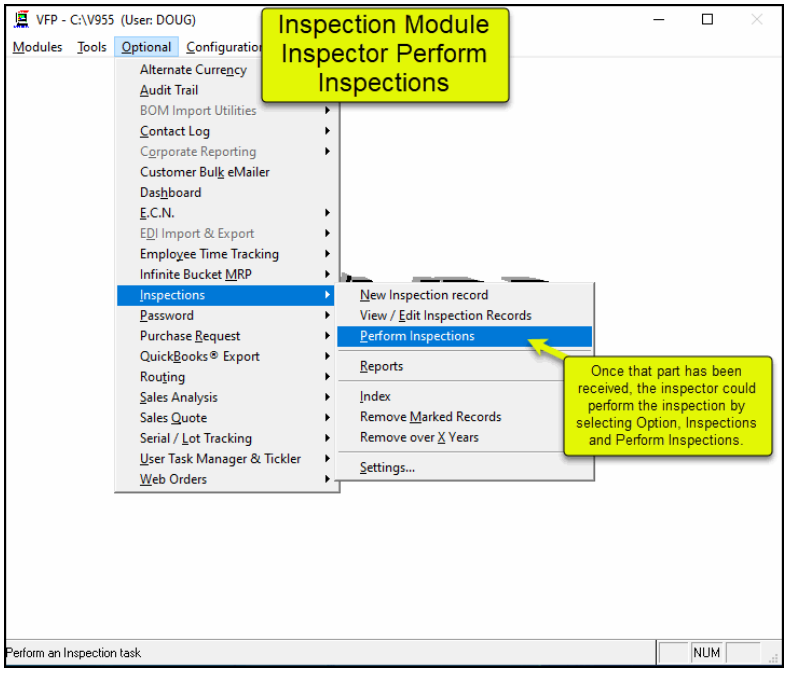
### 16.13.4 User (Receiver) Performs Inspection – Version 9.55 and higher



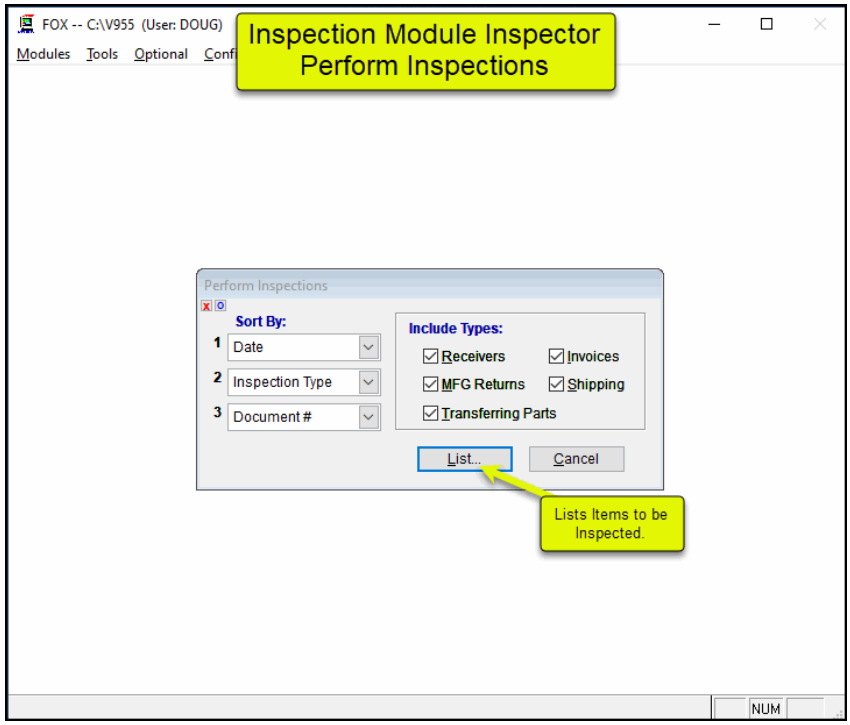


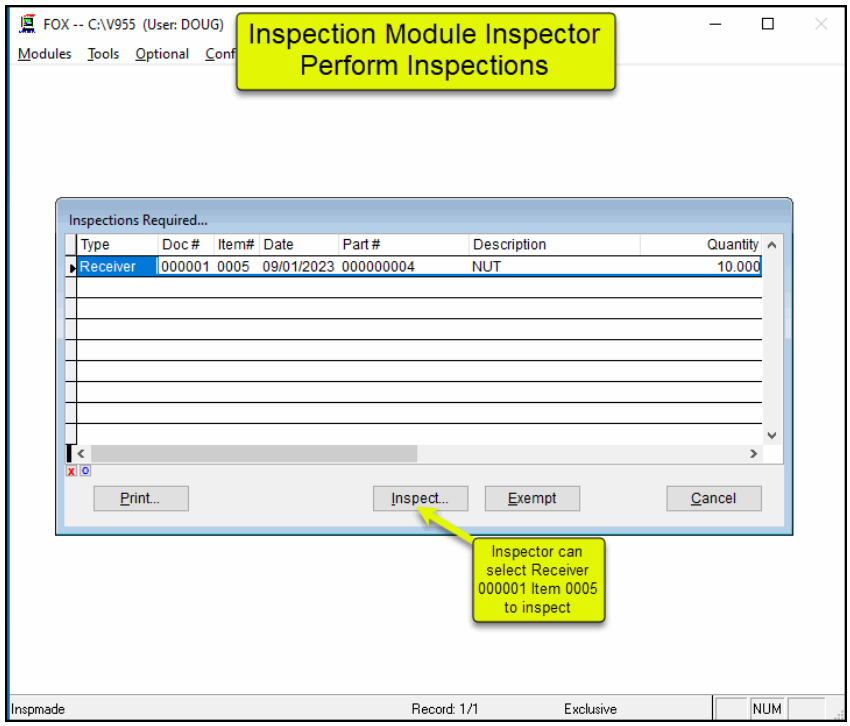

### 16.13.4 Inspector Performs Inspection

When the inspector selects Perform Inspections from the Inspection module menu the following screen will be created. This screen allows the inspector to select the desired grouping of inspections to perform.

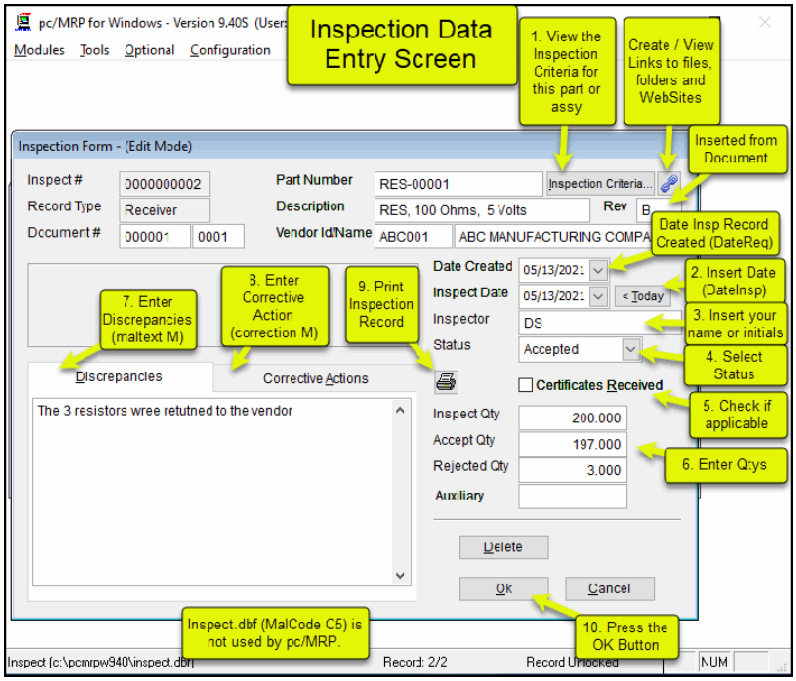


By pressing List, a list of all currently pending inspections will be created.



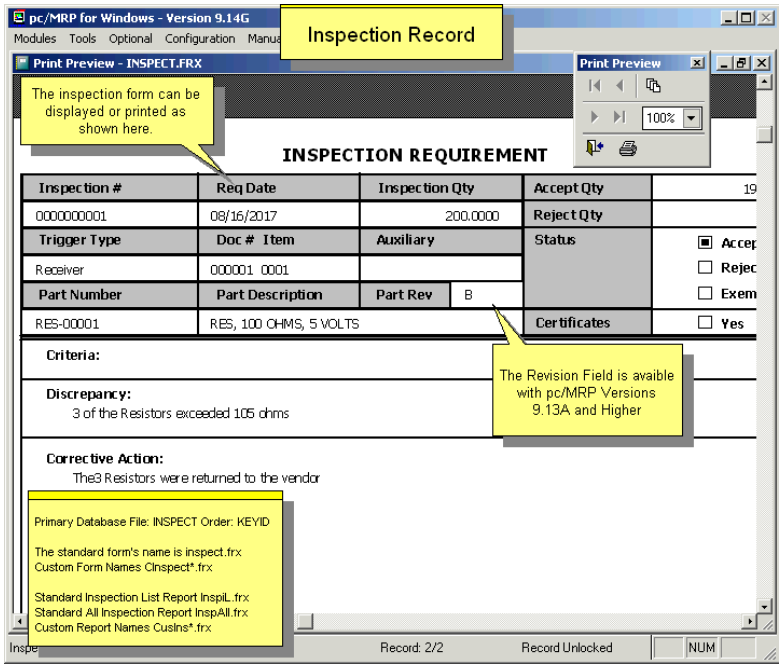

If users select Inspect... the Inspection Form will be created. This is where the actual inspection takes place.




The part number, record type, document number description, and vendor information will automatically be populated. To view the inspection criteria for this individual part select Inspection Criteria... Enter the date, inspector, and status of this record, and quantities that were accepted and/or rejected. Furthermore, users can enter Discrepancies and Corrective Actions by selecting the applicable tab and typing in the provided comments area. When the inspection is complete, press OK.

### 16.13.5 Displaying an Inspection Record

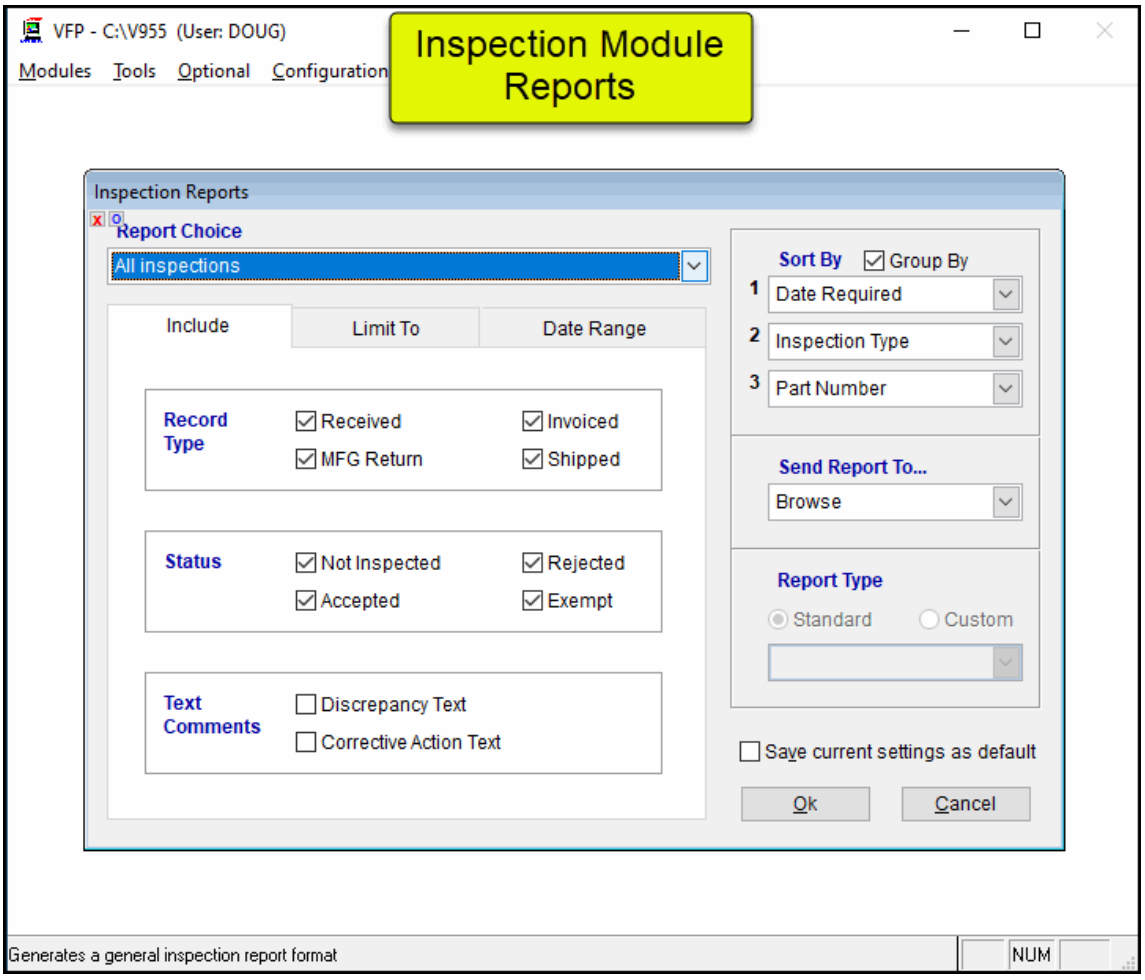
Pressing the Print Inspection Record Button shown in the previous window will display or print the Inspection Record as shown below.



### 16.13.6 Inspection Reports

There are two inspection reports that can be run, All Inspections and Inventory Inspection List. Both report types can be sent to a variety of different display types and users can create custom Inspection reports.

- All Inspections allow users to select from three different tabs to further parse the data. Under the Include tab several different records types, status, and text comments can be chosen. The Limit tab allows users to select a specific part, vendor, inspector, or record number. The Date Range allows users to select a specific date range for when either the inspection requirement was created or when the inspection was performed.
- Inventory Inspection List allows users to print a report that will list all parts with inspection requirements. The tabs can also be used in this report to further specify specific groupings of parts.

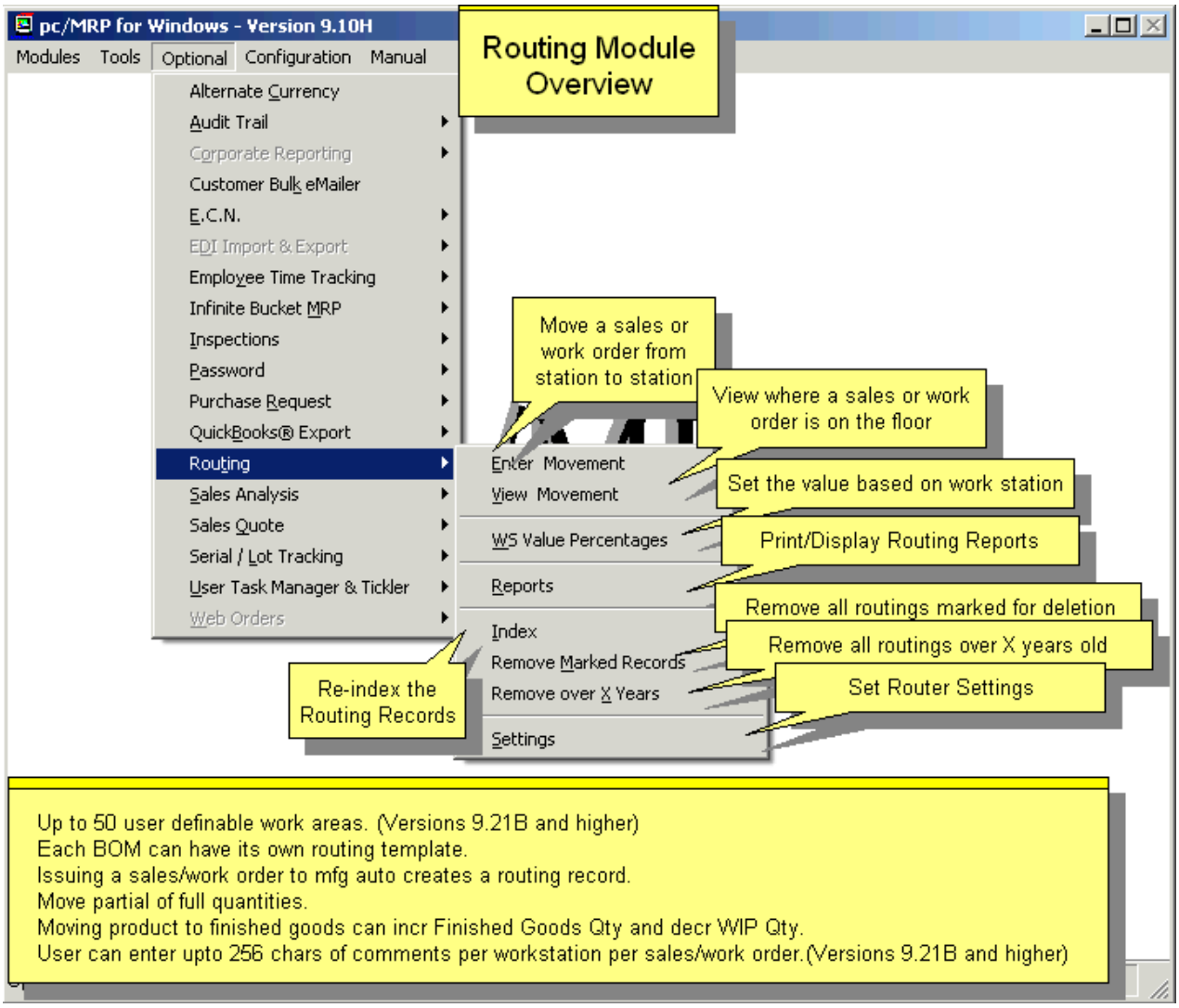


# 16.14 Optional Routing Module

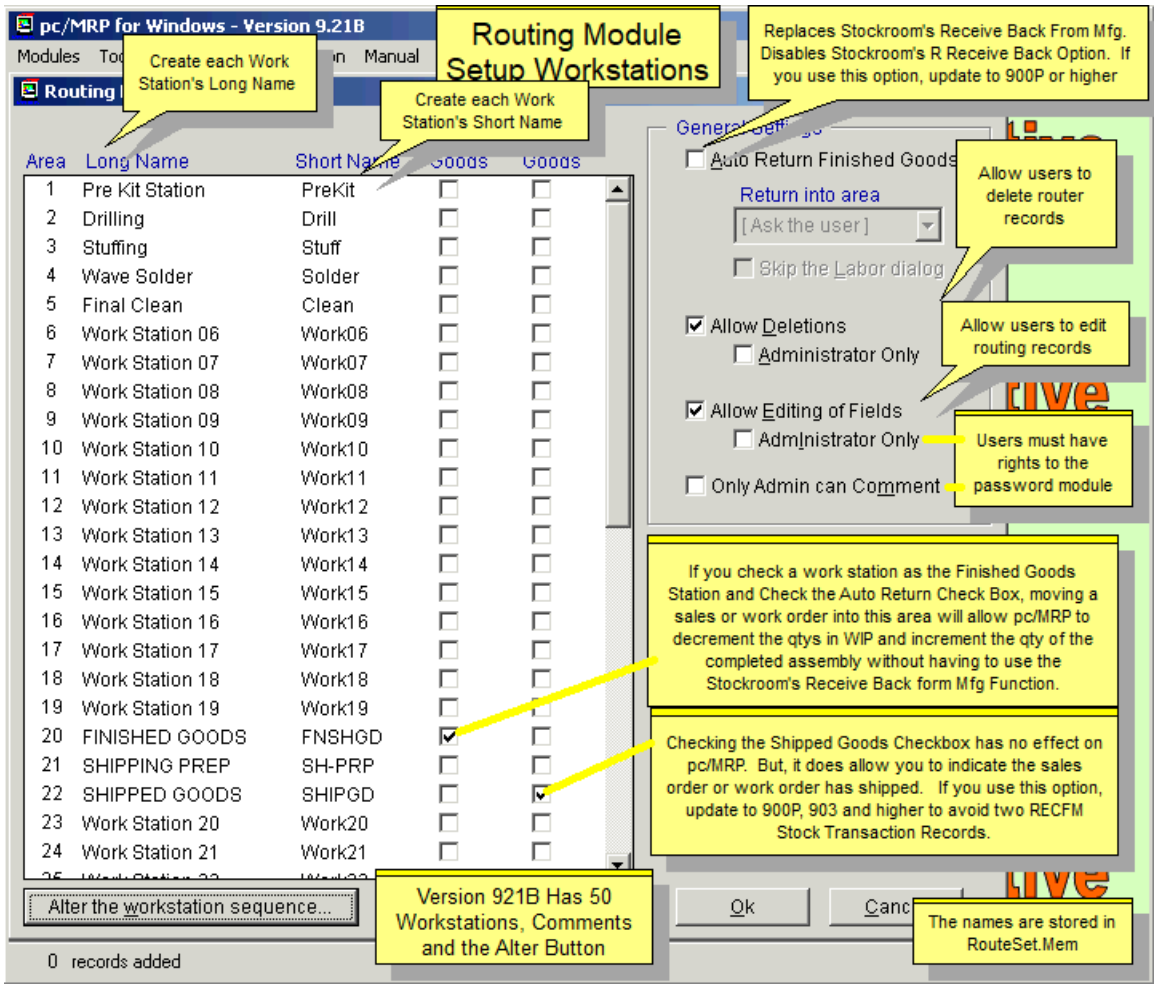
### 16.14.1 Overview

pc/MRP's Routing Module allows you to create routing records. You can then move and track Work Orders and Sales Orders through the factory floor from Work Station to Work Station.

To activate the module, select Configuration, Module Activation, Routing from the menu, and enter a special configuration number obtained from Software Arts.



**Setting up the Routing Module**

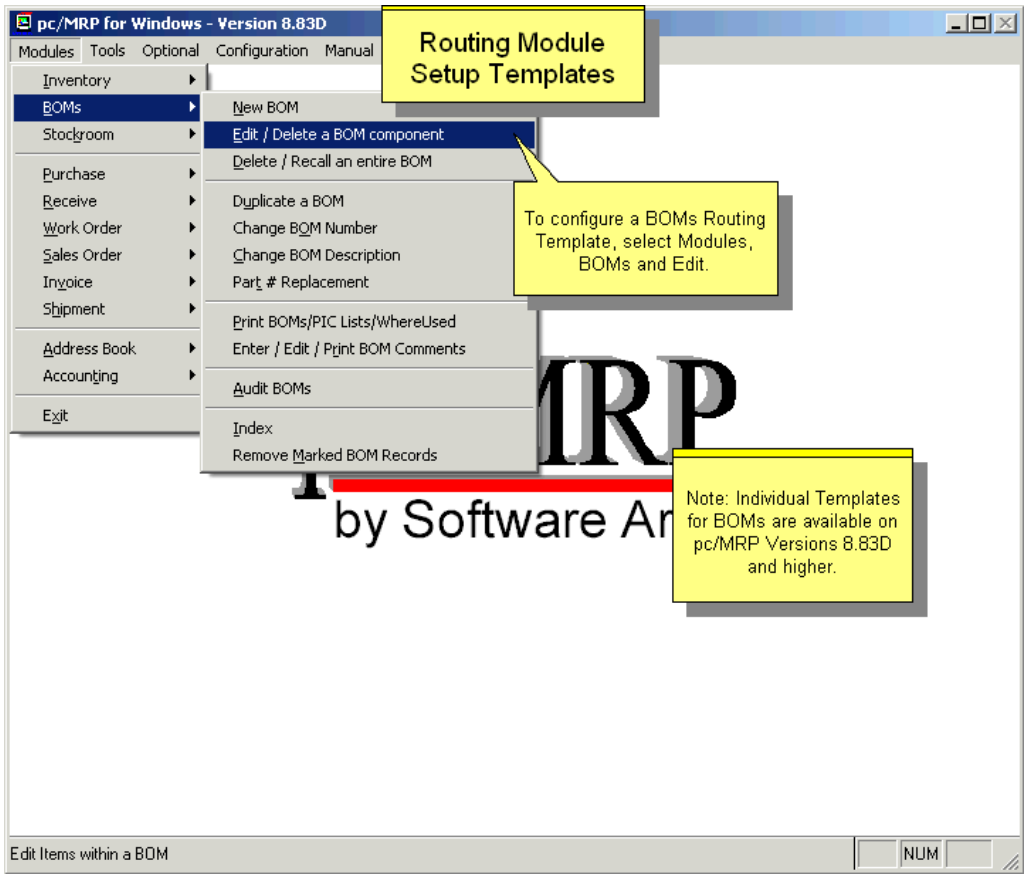


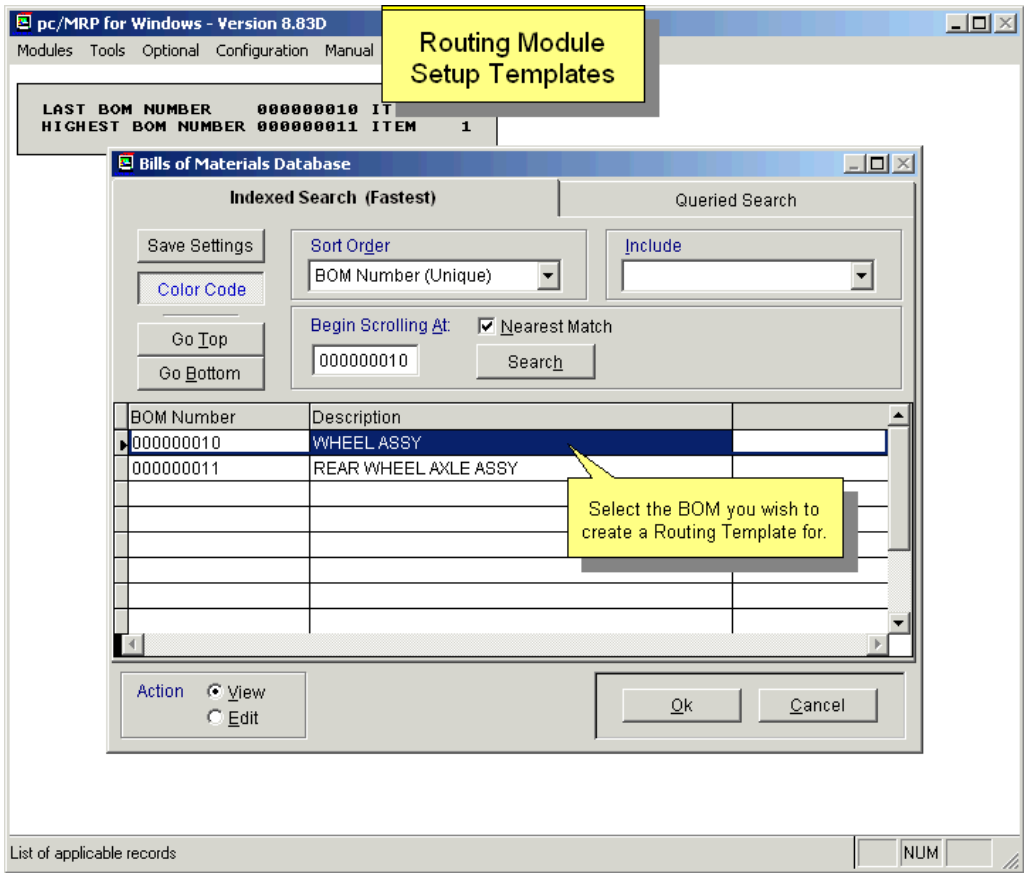

Select Optional, Routing, Settings to open the "Router Module Settings Screen". This screen allows you to setup your routing module as follows:

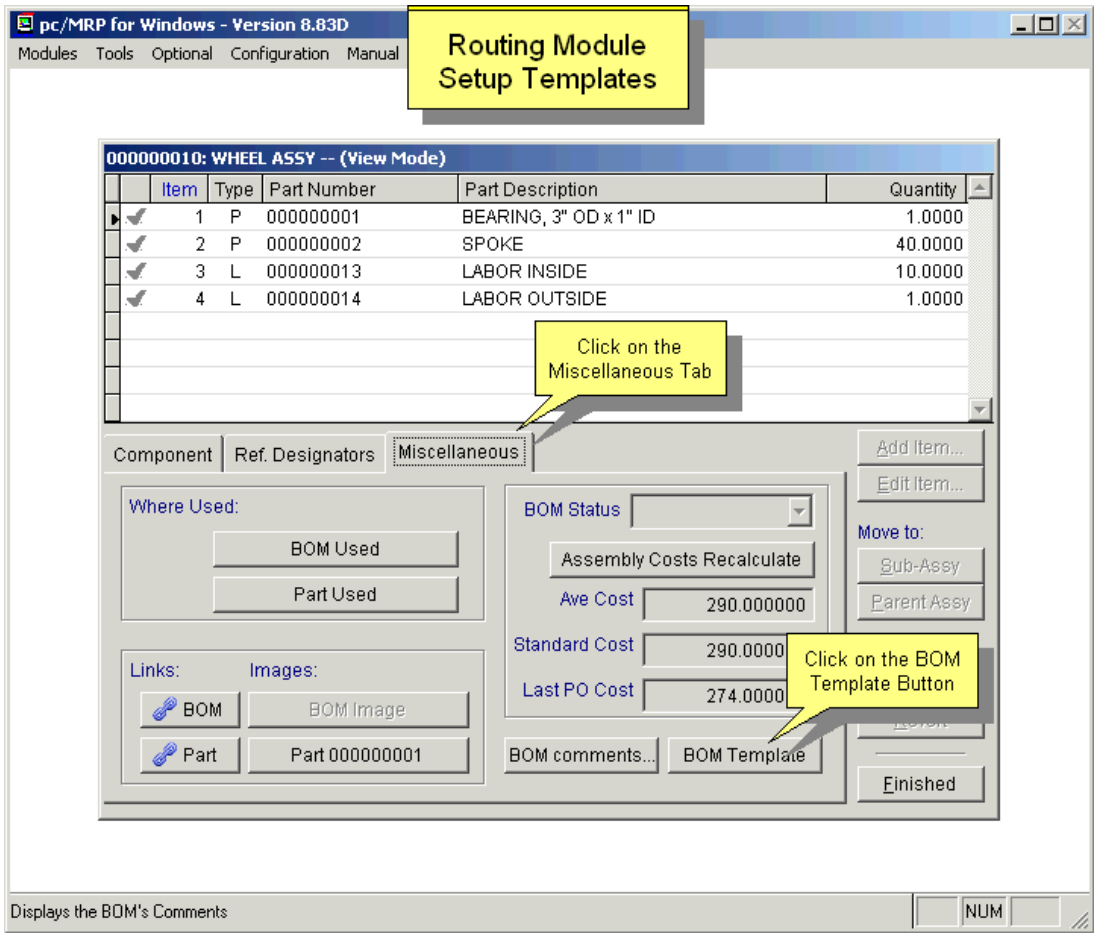
- Select each area and enter a long name (15 char) and a short name (6 char) for each workstation on your factory floor. For example, you could enter Milling Station as the long name and Mill as the short name for area 06. The short name is used for report headings.
- If you select one of your areas as the finished goods area and you check the "Auto Return Finished Goods" check box, pc/MRP will automatically initiate the stock rooms "R, Returned completed assemblies from manufacturing back into finished goods stock". Checking this box will disable the stock room module from running an "R" type transaction, as only one module can be responsible for this function.
- One area can be set as "Shipped Goods Area". This area stores the quantity finished and returned to stock but not shipped to the customer yet. Whenever finished goods are shipped, you can decrement the quantity in this area using the router's “Enter Movement" option. The shipped Goods Area allows the user to see how many items are ready for shipment. It does not provide any external functions such as the Finished Goods area which can initiate the stockroom’s R (receive back finished assemblies) transaction.
- Check the "Allow Deletions" checkbox if you wish to allow users to delete router records. Actually, this will zero out the quantities in the router record for that sales/work order. If you check the "Administrator Only" check box, only users with rights to the password module will be allowed to delete (zero out) routing records.
- Checking the "Allow Editing of Fields" will allow users to edit routing record header fields containing sales/work order information. If you check the "Administrator Only" check box, only users with rights to the password module will be allowed to edit the routing record header fields.

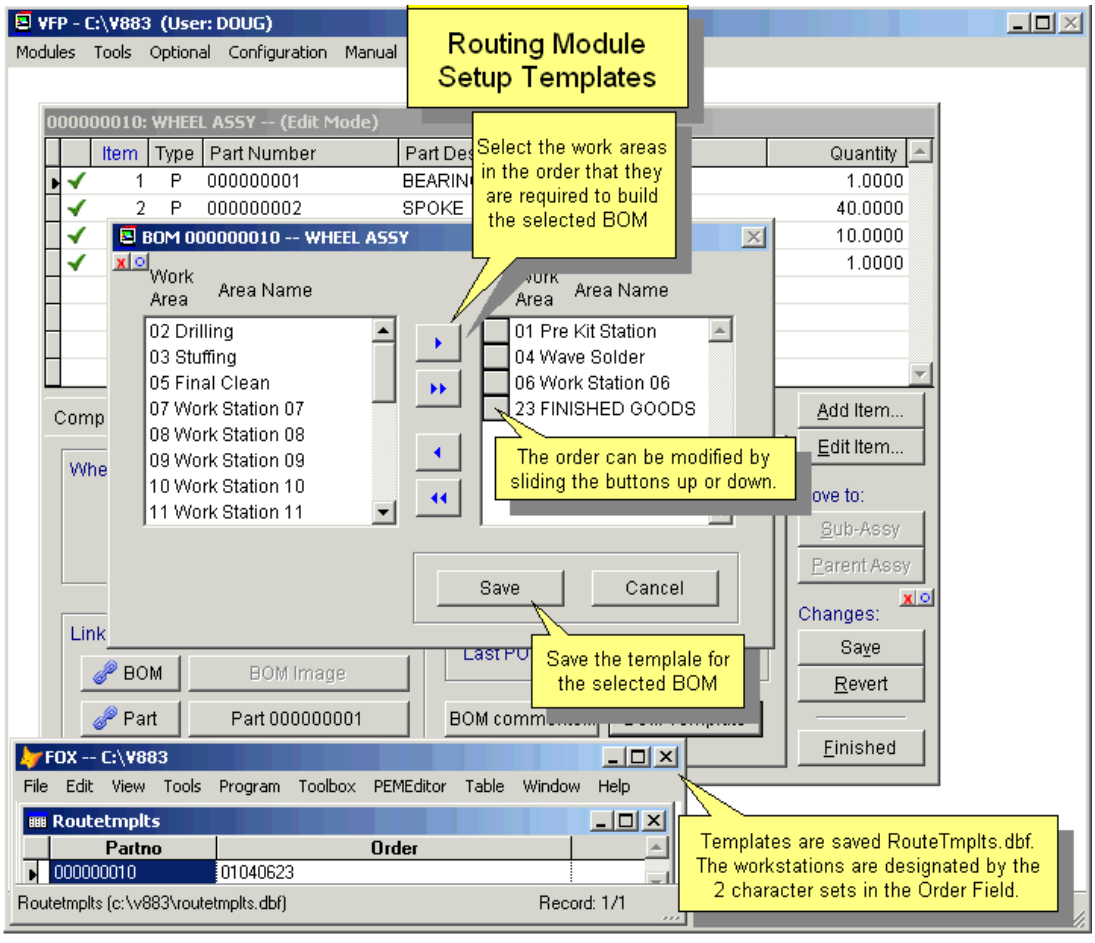
### 16.14.2 Setting up BOM Templates

**Note:** This feature was added to pc/MRP versions **8.83D** and higher.



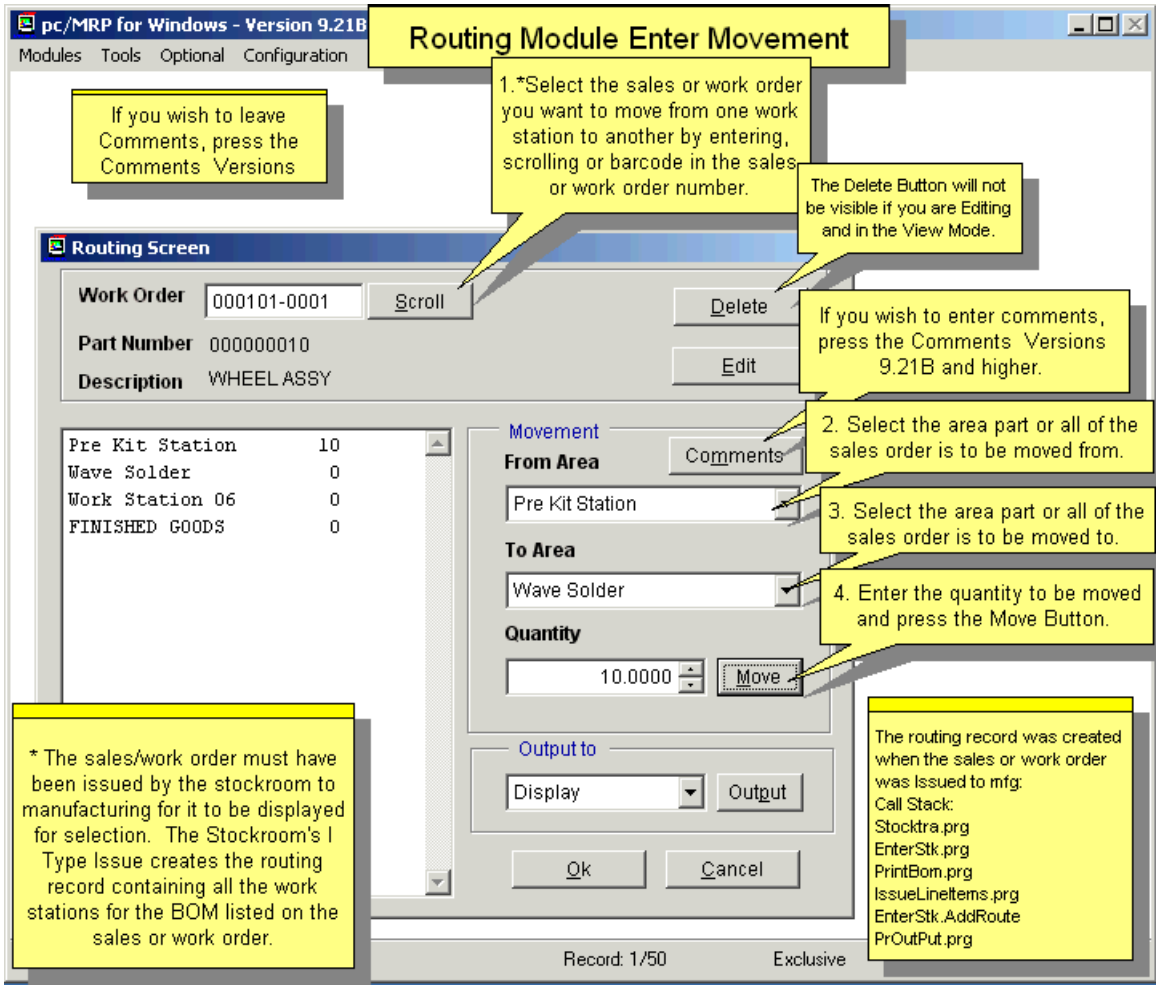

pc/MRP for Windows - Version 8.83D
Modules Tools Optional Configuration Manual
Routing Module Setup Templates
000000010: WHEEL ASSY -- (View Mode)
Item Type Part Number Part Description Quantity
1 P 000000001 BEARING, 3" OD x 1" ID 1.0000
2 P 000000002 SPOKE 40.0000
3 L 000000013 LABOR INSIDE 10.0000
4 L 000000014 LABOR OUTSIDE 1.0000
Click on the Miscellaneous Tab
Component Ref. Designators Miscellaneous
Add Item...
Edit Item...
Where Used:
BOM Used
Part Used
BOM Status
Assembly Costs Recalculate
Move to:
Sub-Assy
Parent Assy
Ave Cost 290.000000
Standard Cost 290.0000
Last PO Cost 274.0000
Click on the BOM Template Button
Links: Images:
BOM
BOM Image
Part
Part 000000001
BOM comments...
BOM Template
Finished
Displays the BOM's Comments
NUM


VFP - C:\V883 (User: DOUG)
Modules Tools Optional Configuration Manual
Routing Module Setup Templates
000000010: WHEEL ASSY -- (Edit Mode)
Item Type Part Number Quantity
1 P 000000001 1.0000
2 P 000000002 SPOKE 40.0000
10.0000
1.0000
Select the work areas in the order that they are required to build the selected BOM
BOM 000000010 -- WHEEL ASSY
Work Area Area Name
02 Drilling
03 Stuffing
05 Final Clean
07 Work Station 07
08 Work Station 08
09 Work Station 09
10 Work Station 10
11 Work Station 11
01 Pre Kit Station
04 Wave Solder
06 Work Station 06
23 FINISHED GOODS
The order can be modified by sliding the buttons up or down.
Save
Cancel
Save the templale for the selected BOM
Add Item...
Edit Item...
Sub-Assy
Parent Assy
Changes:
Save
Revert
Finished
BOM
BOM Image
Part
Part 000000001
FOX -- C:\V883
File Edit View Tools Program Toolbox PEMEditor Table Window Help
Routetmplts
Partno Order
000000010 01040623
Templates are saved RouteTmplts.dbf. The workstations are designated by the 2 character sets in the Order Field.
Routetmplts (c:\v883\routetmplts.dbf)
Record: 1/1

### 16.14.3 Routing Records and Movements

(See the slideshow here: http://www.pcmrp.com/mrp101/routingsettingsmenu.htm)

Whenever a sales or work order is issued to manufacturing using the stockroom's "I" type "Issue to manufacturing" option, a routing record for that sales/work order is created. The quantity in work area 1 is the same as the quantity on the sales/work order.



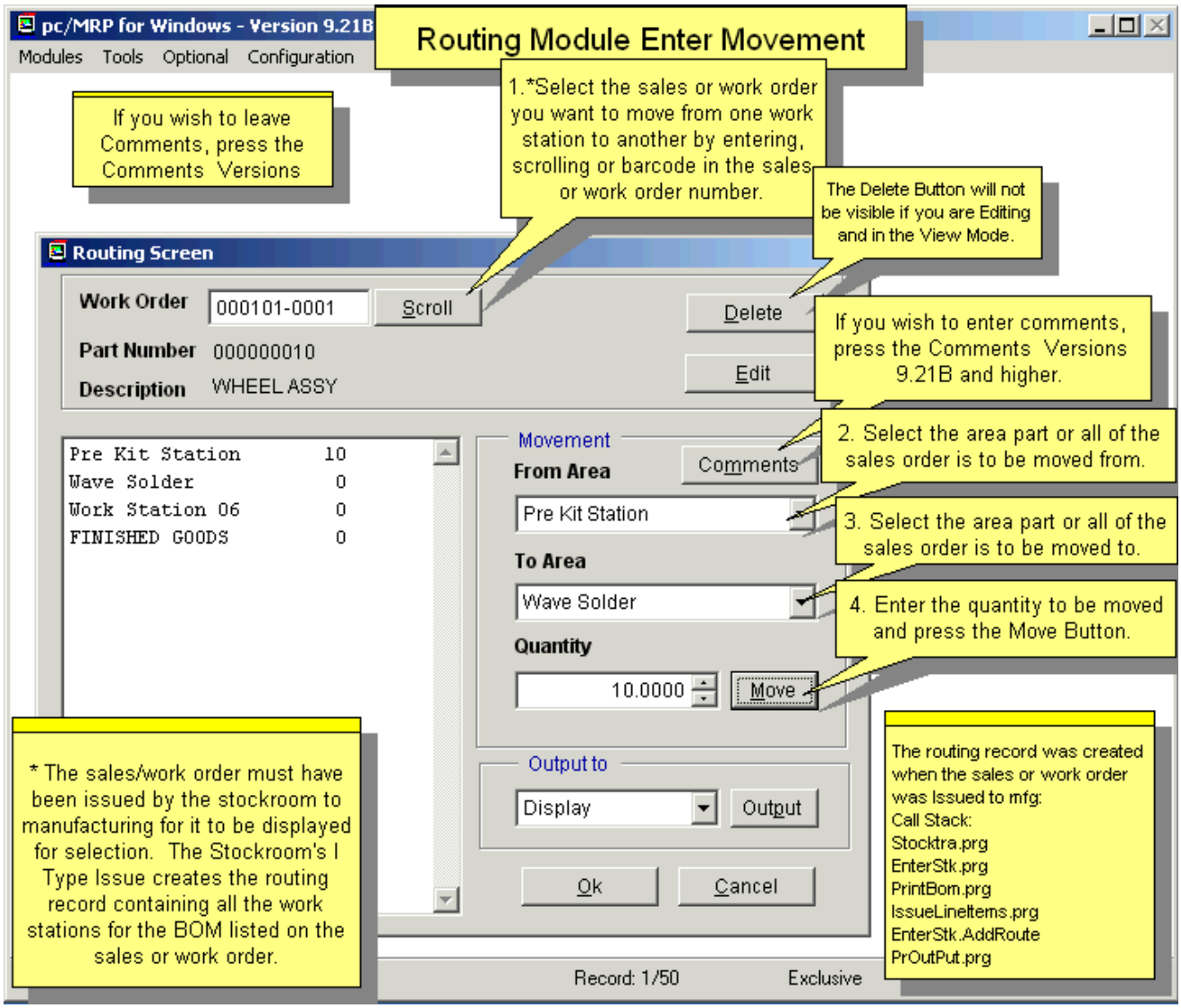

You can display a routing record for a sales/work order by selecting the "Enter Movement" option on the routing menu. Enter or "Scroll" for the sales/work order you wish to display. The "Enter Movement" screen provides the following options:

- The "Delete" button will mark the entire routing record for deletion (not only the movement(s) entered).
- The "Edit" button will display additional sales/work order information for that routing record. Note: for versions **8.83D** and higher the quantity can no longer be edited.
- The "From Area" drop down list box, "To Area" drop down list box, "Quantity" spinner, and "Move" button can be used to move a quantity of that sales/work order from one area to another area.
- The "Output" controls can be used to display, print, or send a copy of the routing record to an ASCII, Excel, or DBF file.
- The "OK" button will save your changes.
- The "Cancel" button will not save your changes.

Behind the scenes, a routing record stores the following information: SO/WO#, Item#, Part number, Description, Related document number, Date the SO/WO was issued (startdate), Date of the last movement (lastdate), Quantity in each Work Area (work01, work02, ...).

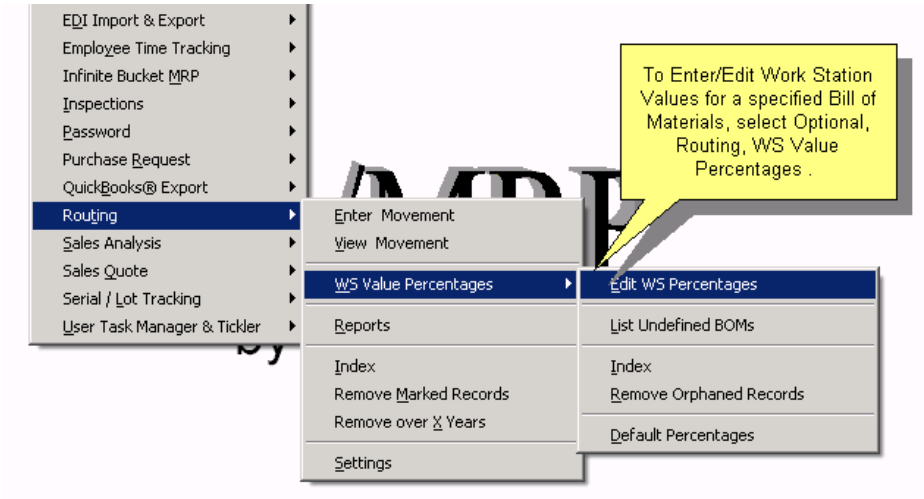
### 16.14.4 Routing Comments

Pressing the Comments Button will allow you to enter upto 256 characters of comments per workstation per work order.



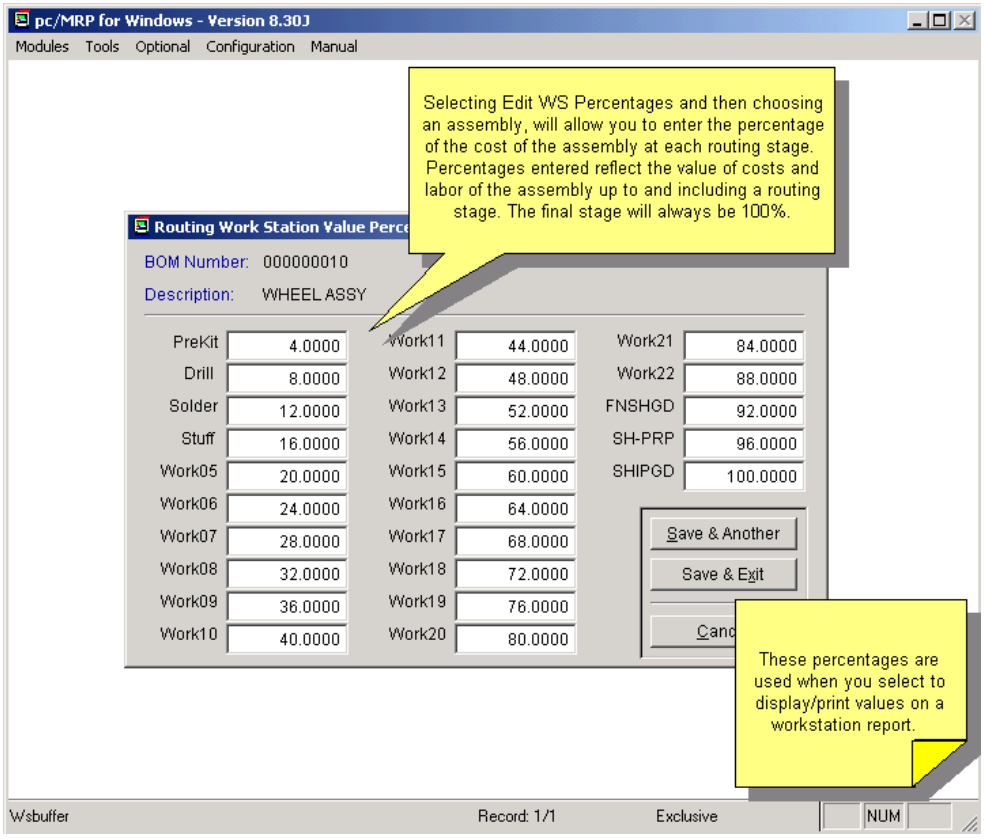
### 16.14.5 Work Station Value Percentages

Selecting Optional, Routing, and WS Value Percentages brings up the following screen:




Selecting **Edit WS Percentages** and then choosing an assembly will allow you to enter the percentage of the cost of the assembly at each routing stage. See Report Type 'Value' defined in Section 16.14.7.

Percentages entered reflect the value of costs and labor of the assembly up to and including a routing stage. The final stage will always be 100%. See the image below.

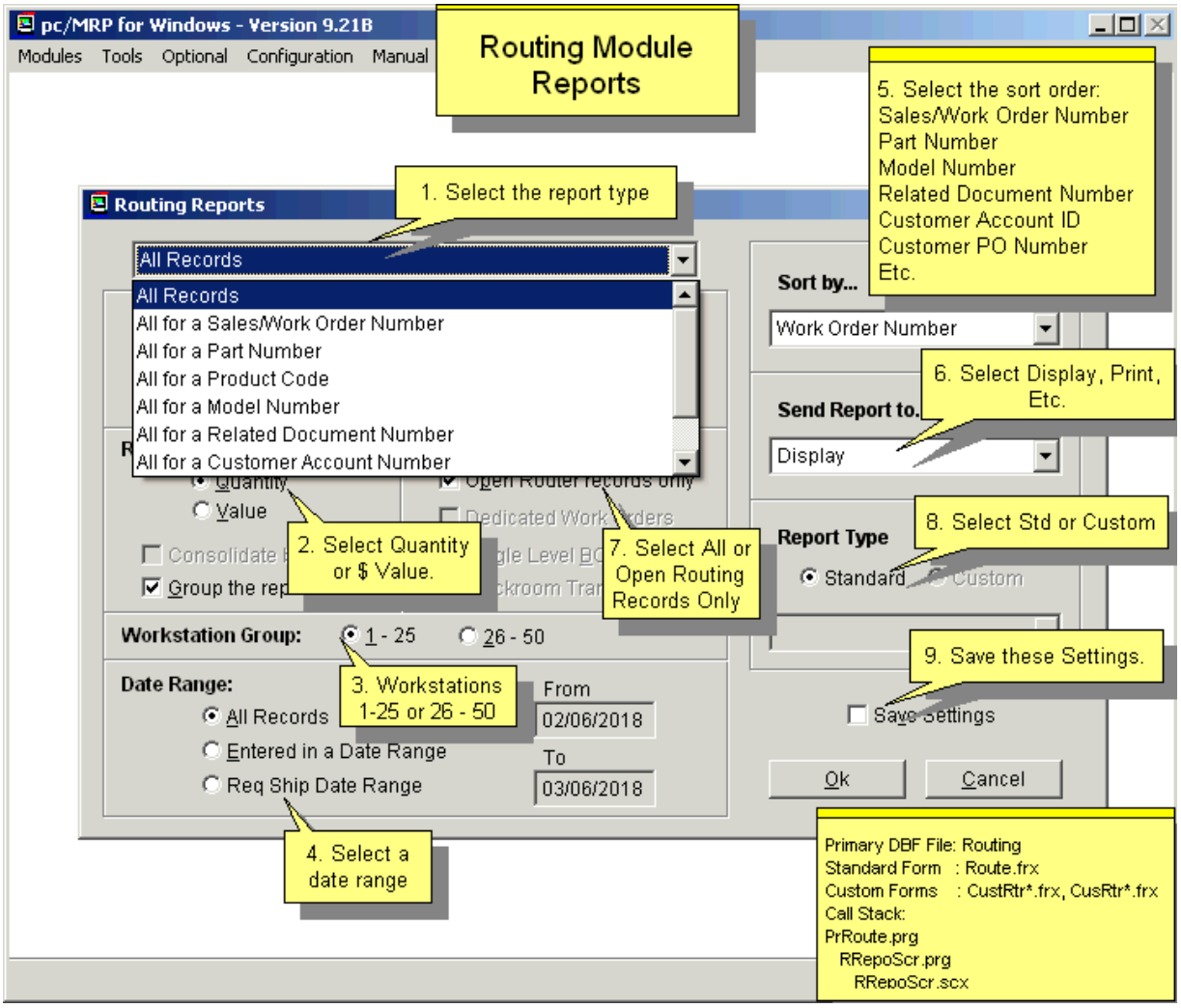



Selecting **List Undefined BOMs** will generate a listing (genericp.frx) of all BOMs that do not have a WS Percentage record and will use the default percentage record set up via the Default Percentages menu option.

Selecting **Default percentages** allows you to set global percentage defaults if you do not wish to enter specific percentages for a BOM. See Report Type 'Value' defined in the next section.

**16.14.6 Reports**

Selecting Optional, Routing, and Reports brings up the following screen:



The following reports are available in the routing module:

- All Records
- All for a Sales Order
- All for a Part Number
- All for a Product Code
- All for a Model Number
- All for a Related Document #
- All for a Customer Account #
- All for a Customer PO #
- All for a Salesman

Report Type

- Quantity
- Value – the outstanding value of the report is the sum of all the values which is calculated by the station's quantity * the assembly's standard cost * % value set in the WS Value Percentage menu option.

The reports can be parsed by a Date Range:

- All records
- Entered On a Date Range
- Required On a Date Range

Reports can also include or be grouped by:

- Open Router Records Only
- Group the Report Results by Work Order

Sorted By:

- Work Order Number
- Part Number
- Description
- Model Number
- Related Document #
- Customer Account ID
- Customer PO Number
- Salesman
- Start Date
- Date Required

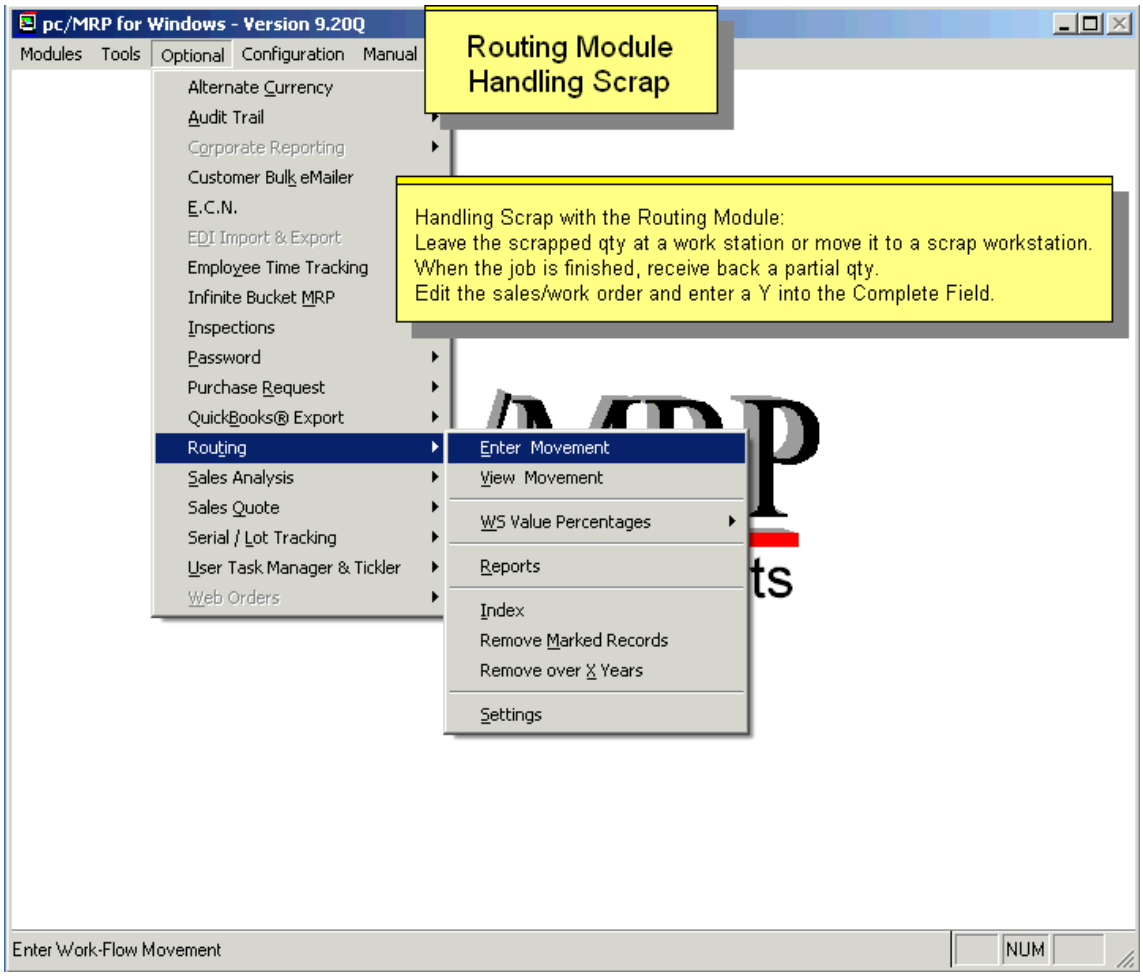
The report output options include:

- Displayed
- Printed
- Wide carriage print out
- ASCII TXT to disk
- XLS to disk
- DBF (DB-III or VFP DB-III) to disk

The report utilizes the **ROUTING.DBF** and format options include:
Standard format **ROUTE.FRX**
Custom format **CUSTRTR*.FRX** and **CUSRTR*.FRX** (see custom report Section 15.4.1 for more details)

### 16.14.7 Handling Scrap with the Routing Module

Scrap can be handled as per the illustration below:

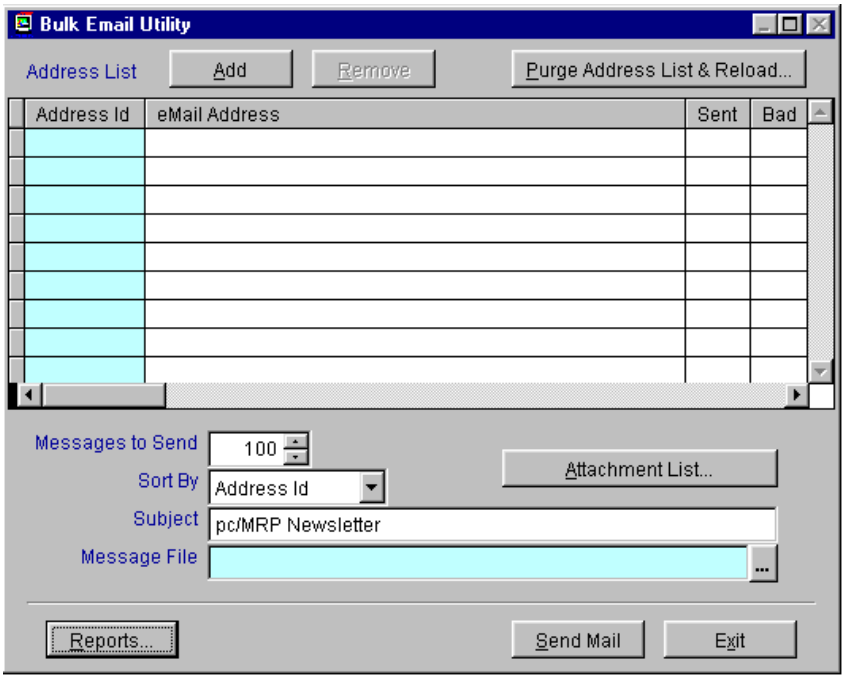



Handling Scrap with the Routing Module:
Leave the scrapped qty at a work station or move it to a scrap workstation.
When the job is finished, receive back a partial qty.
Edit the sales/work order and enter a Y into the Complete Field.

# 16.15 Optional Customer Bulk E-mailer

### 16.15.1 Overview

The Customer Bulk E-mailer module allows customers to utilize the pc/MRP Address Book to send e-mails to customers or vendors via MS Outlook or pc/MRP's CDO. The Customer Bulk E-Mailer allows users to send individual e-mails from the pc/MRP Address Book or build a list based on address types to send an e-mail in bulk. When choosing to send e-mails in bulk, users can define the message content, message subject, file attachments, and the number of e-mails to send at one time. The Customer Bulk E-Mailer also allows users to keep track of which e-mails have been sent, which e-mails are bad, and offers a variety of reporting options.

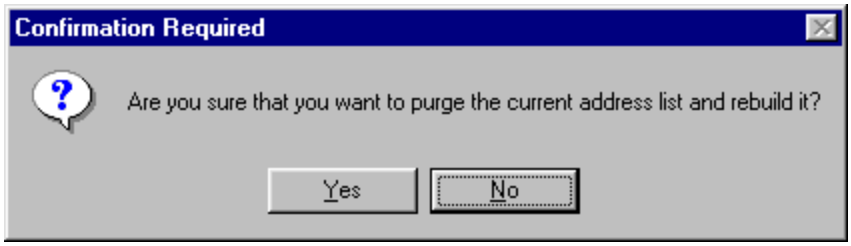



Select Configuration from the pc/MRP menu, Module Activation, Customer Bulk E-mailer, Activate, and select the radio button for either a Ten Day Trial or call Software Arts for the full activation number and enter the activation number.

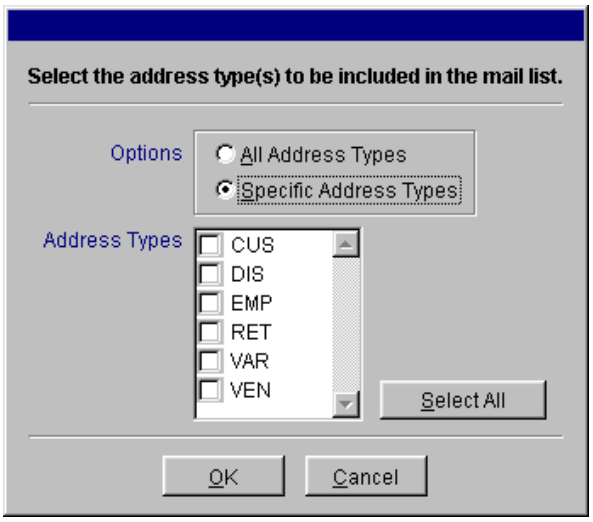
### 16.15.2 Building an Address List to be E-mailed

To build a list of e-mail addresses from within the Customer Bulk E-mailer module select the **Purge Address List & Reload** button from the Bulk E-mail Utility screen.

This button will warn users they are about to rebuild the entire list. If the list is rebuilt, the existing list with existing bad and sent history will be removed. (Be sure to run a report if you wish to keep the history of the previous e-mail list).



Select the Yes button to build a new list. The following Address Type Selection screen will pop up.




From this screen, users can select **All Address Types** or **Specific Address Types** to be included in the bulk list. (Address Types are defined through **Option 52** in the Settings and Utilities Menu.)

If you wish to automatically create a list, simply select the desired address type or all addresses, and press the OK button.

If you wish to just purge the existing list and select individual addresses, select Specific Address Types and do not check any of the Address Types checkboxes. The existing list will simply be purged.

Upon pressing OK, users will be returned to the Bulk E-mail Utility screen and the list will be created according to the specifications entered.

### 16.15.3 Viewing and Editing the Bulk E-mail List

Once the address list has been created, users can further define the list by editing entries and pressing the **Add** and **Remove** buttons. To edit an individual e-mail address simply use the mouse to scroll to and click on the **E-mail Address** field. From there the address can be edited accordingly.

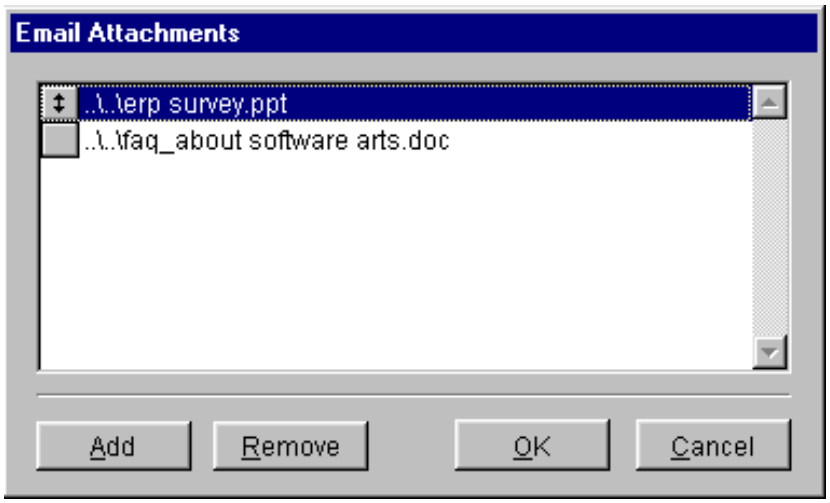
To remove an entire address from the list select the address entry, and press the Remove button.

To add an additional address press the Add button and manually add the e-mail.

### 16.15.4 Building the e-mail to be sent

The Customer Bulk E-Mailer module allows customers to define the e-mail subject, attach files to the e-mail, and embed a file into the e-mail. To define the subject of the e-mail, enter the subject into the **Subject** field. The **Attachment List** is simply a list of files that can be of any type (.pdf, .doc, .mpeg…). Files listed in the Attachment List will be attached to the e-mail. Files linked through the **Message File** option will be embedded in the email.

To set File Attachments press the Attachment List button.




From within the E-mail Attachments screen users can Add and Remove attachments as needed. Once you finish creating the attachment list, press OK.

To embed a file into the e-mail, press the **Message File** ellipsis button (…) and define the path to where the file exists. If a user chooses to embed a text file there are no special instructions. However if a user chooses to embed a file that contains pictures there are a few issues that need to be addressed when choosing to embed a file.

To view an embedded document via e-mail that contains pictures the recipient must be able to view HTML documents within their e-mail program. Some e-mails programs do not allow this. Outlook, Outlook Express, and Netscape do allow this but recipients might have to change their settings to view the attached document correctly.

Users can use any Word document and save it as an **OTF** file type. If users are using **MS Outlook 2000** or higher, the file must be saved as an **HTML** document.

### 16.15.5 Sending the E-mails

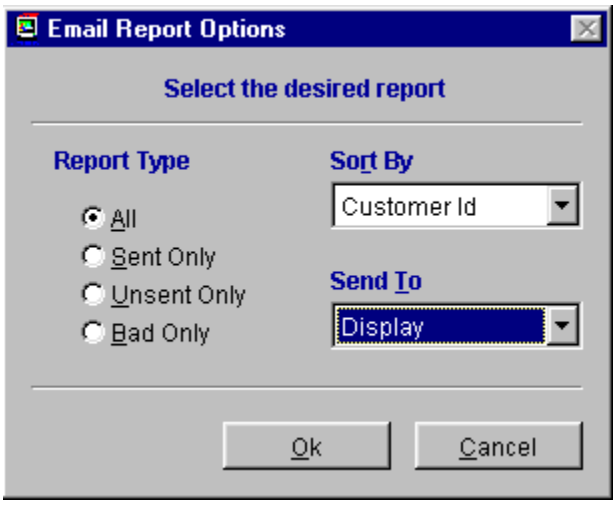
To send the e-mails press the **Send Mail** button. When this button is pressed pc/MRP will automatically send the list of e-mails to your **Outbox** within MS Outlook.

If an error is generated during this process, Outlook may be unable to find the attached files or read the embedded file. Double-check the attached file paths and make sure you are using the correct file type for that version of Outlook.

Once the e-mails are sent, the **Sent** checkbox will automatically be checked. If the e-mail is returned, check the **Bad** checkbox to help with reporting.

### 16.15.6 Customer Bulk E-mailer Reports

By pressing the Reports button, users can print and display reports based on the current e-mail list.



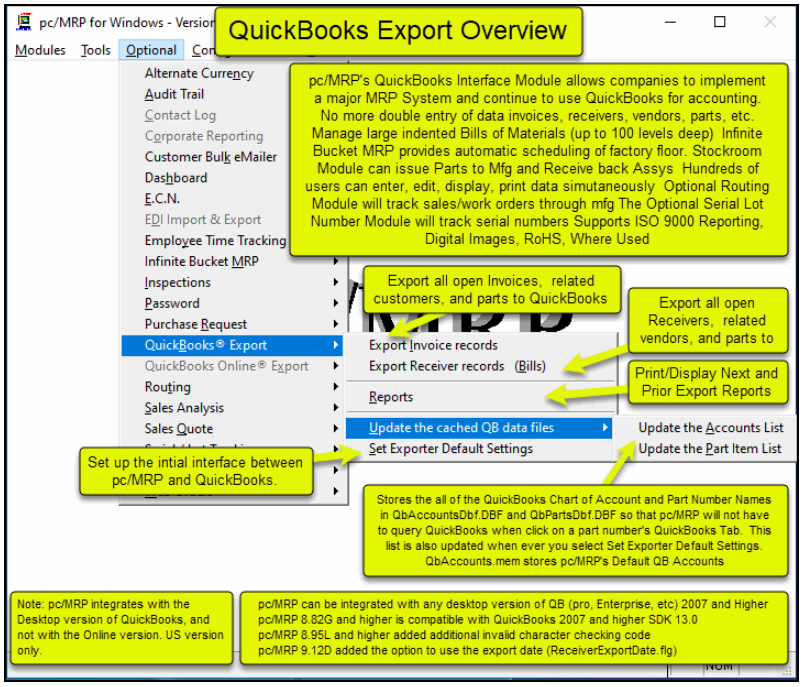

### 16.15.7 Sending an Individual E-mail from the Address Book

Once the Customer Bulk E-mailer program is activated, within each address entry next to the e-mail field, users can press the icon of the letter to send an e-mail with that specific e-mail address.



# 16.16 Optional QuickBooks API Export Module

### 16.16.1 Overview




pc/MRP's **QuickBooks API Export Module** exports invoice and receiver (bill) data directly into all U.S. (desktop) versions of QuickBooks 2003 and higher, Pro and higher. This module allows pc/MRP and QuickBooks to be used together eliminating the need for double entry of invoices and receivers into both systems. pc/MRP is used to enter parts, multilevel BOMs, sales orders, purchase orders, receivers, stockroom transactions, invoices, and generate material requirement planning reports. Customers would export all open invoices(AR) and receivers (AP) to QuickBooks on a daily basis. QuickBooks is used to pay bills, make deposits, and generate financial reports.

If you are using a normal LAN server:
1. pc/MRP is installed on the server only
2. QuickBooks exe is installed on each work station
3. The company's QuickBooks .QBW file is installed on the server only
4. Each work station must contain a desktop shortcut to the servers pcmrpw.exe file
5. pc/MRP and QB must access the .qbw file using the same mapped drive or UNC Address

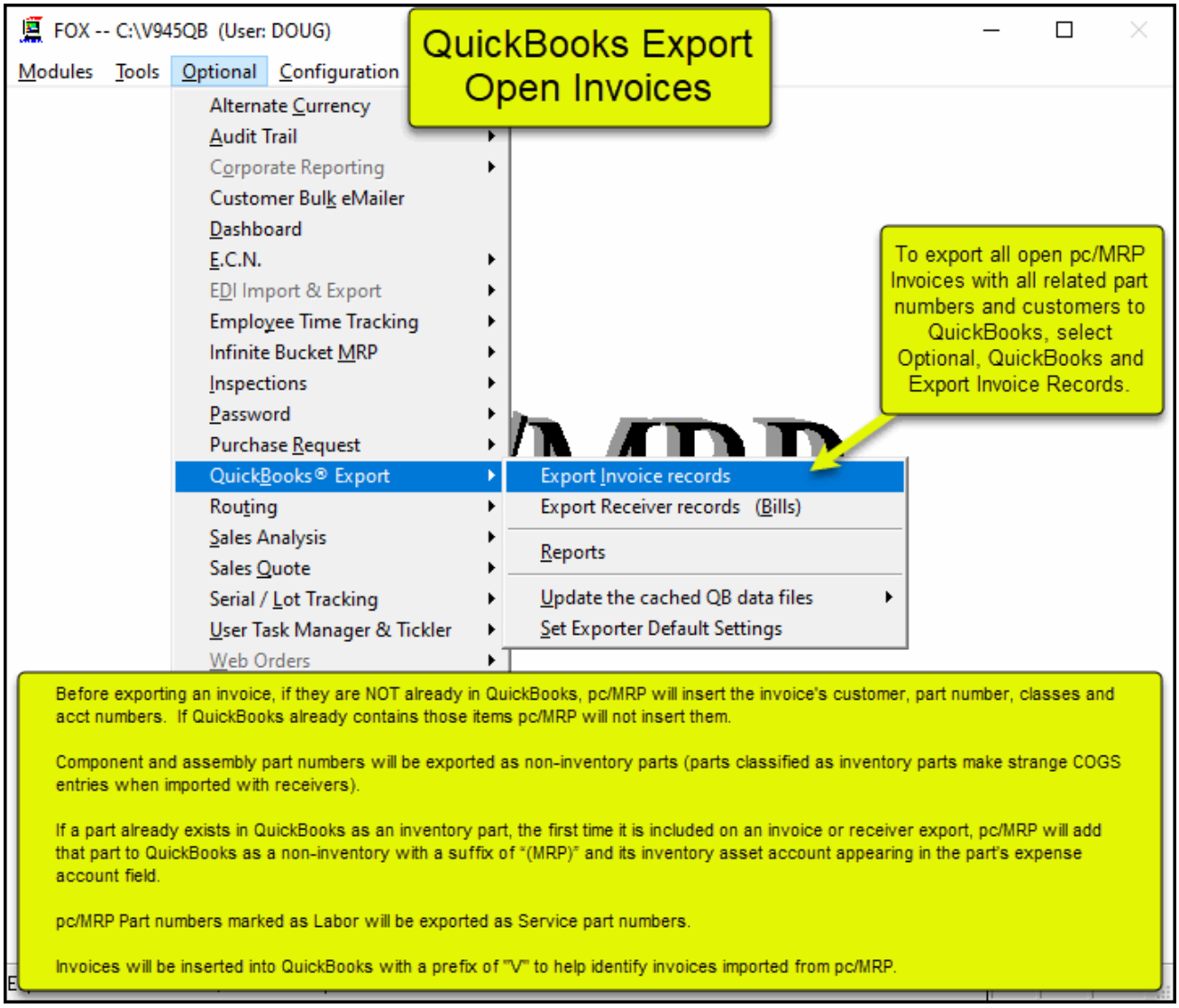
If you use a terminal server:
1. pc/MRP is installed on the terminal server only
2. QuickBooks exe is installed on the terminal server only
3. The company's QuickBooks .QBW file is installed on the terminal server only
4. pc/MRP and QB must be able to access the .QBW file using the same drive/folder/file location.

As the menu above shows you, the following options are provided:

- You can export invoice records and all related customers and part numbers on a daily basis.
- You can export receiver records and all related customers and part numbers on a daily basis.

You can use the report option to review the list of invoices/receivers that would be exported prior to exporting the data. In addition, the Reports option allows you to print or display the receivers that would not be included (receivers that the accountant has not inserted the vendor invoice number into).

**Note:** pc/MRP **8.82G** and higher uses **QBFC 13.0** and is compatible with QuickBooks 2007 and higher.
pc/MRP **8.82D** and lower used **QBFC2** and was compatible with QuickBooks 2003 - 2011.



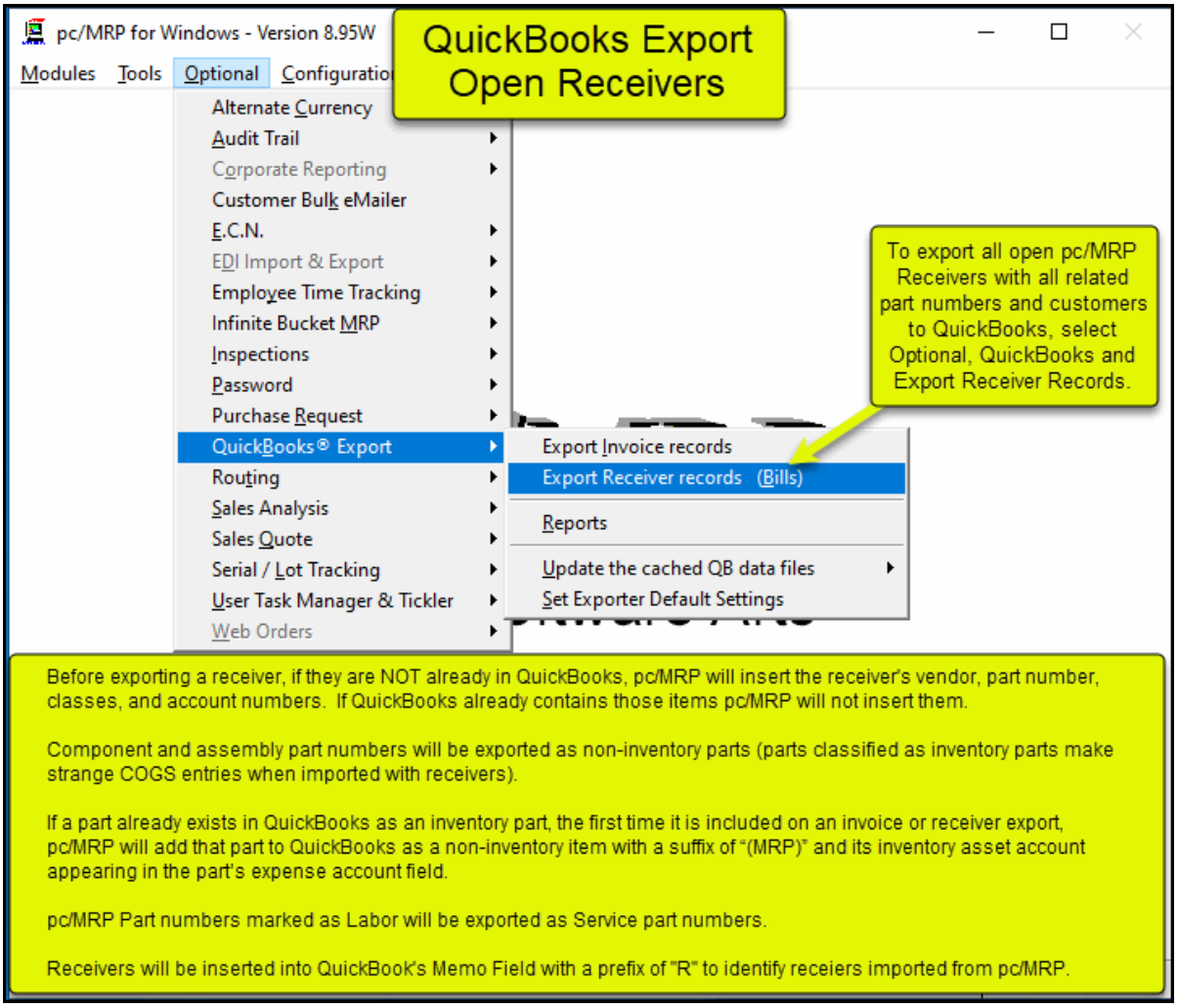

Before exporting an invoice, pc/MRP will insert the invoice's customer, part number, classes and acct numbers, if they are NOT already in QuickBooks. If QuickBooks already contains those items pc/MRP will not insert them again.

Component and assembly part numbers will be exported as non-inventory parts. (That is because parts classified as inventory parts make strange COGS entries when imported with receivers).

If a part already exists in QuickBooks as an inventory part, the first time it is included on an invoice or receiver export, pc/MRP will add that part to QuickBooks as a non-inventory with a suffix of “(MRP)” and its inventory asset account appearing in the part’s expense account field.

pc/MRP Part numbers marked as Labor will be exported as Service part numbers.

Invoices will be inserted into QuickBooks with a prefix of "V" to help identify invoices imported from pc/MRP.




Before exporting a receiver, pc/MRP will insert the receiver's vendor, part number, classes, and account numbers, if they are NOT already in QuickBooks.. If QuickBooks already contains those items pc/MRP will not insert them again.

Component and assembly part numbers will be exported as non-inventory parts. (That is because parts classified as inventory parts make strange COGS entries when imported with receivers).

If a part already exists in QuickBooks as an inventory part, the first time it is included on an invoice or receiver export, pc/MRP will add that part to QuickBooks as a non-inventory item with a suffix of “(MRP)” and its inventory asset account appearing in the part’s expense account field.

pc/MRP Part numbers marked as Labor will be exported as Service part numbers.

If a file named ReceiverExportDate.flg exists in the pc/MRP folder, the current computer date is used on the exported receiver records to QuickBooks rather than the Receiver’s date.

Receivers will be inserted into QuickBook's Memo Field with a prefix of "R" to identify receivers imported from pc/MRP.

To export Receivers as Bills and Invoices as Invoices, QuickBooks does not need to be open; pc/MRP will open it as an administrator in single user mode. However it will run faster if QuickBooks is already open in single user mode.

Please note the following features:

- pc/MRP allows a Cost of Goods Sold Account to be selected for the default gross wage and or default overhead expense accounts (customer requested).
- For faster export, pc/MRP populates the drop down chart of accounts lists from its own QbAccountsDbf.dbf instead of populating the chart of accounts lists from QuickBooks. pc/MRP creates a fresh copy of QbAccountsDbf.dbf and QbPartsDbf.dbf whenever invoices or receivers are exported.
- Chart of Account Fields are 159 characters.
- Option to assign liability accounts to parts.
- pc/MRP allows users to use periodic accounting methods.
- Option to import QB BOMs.
- Option to remove the '**V'** from invoices by adding a "**REMOVE_V_FOR_INVOICENUMBER.FLG**" file to the pcmrpw directory.
- pc/MRP allows QuickBooks 'Other Charge' part type to be imported as Inside Labor.
- Inventory & Assembly items in QuickBooks will default to shippable when imported into pc/MRP.

Before you can export invoice and receiver data to QuickBooks you must follow the setup instructions below. Once the initial setup has been completed, the daily or weekly export from pc/MRP to QuickBooks only takes a few minutes.

### 16.16.2 Setup Instructions

#### Step 1 Backup your current copy of pc/MRP and QuickBooks

If you are presently using QuickBooks for accounting, make a backup of your QuickBooks data by selecting File and Backup from within QuickBooks.

If you are presently using pc/MRP, make a backup of your pc/MRP directory by copying the pcmrpw directory to a USB drive or other back-up medium after everyone has logged off pc/MRP.

#### Step 2 Activate QuickBooks Export Module

Select Configuration from the pc/MRP menu, Module Activation, QuickBooks Export, Activate, select the radio button for either a Ten Day Trial or call Software Arts for the full activation number, and enter the activation number.

Activating the QuickBooks Export module will enable the fields on the QuickBooks tab on the pc/MRP Inventory screen. This tab contains the following fields:

- QuickBooks Inventory Id (this field will contain the pc/MRP part number)
- QuickBooks Cost of Goods Sold Account (this field will be blank)
- QuickBooks Income Account (this field will be blank)
- QuickBooks Asset/Expense Account (this field will be blank)

In addition, activating the QuickBooks Export module will enable the fields on the QuickBooks tab on the pc/MRP Address Book screen. This tab contains the following fields:

- Customer ID field (will contain company name + " - Cust - " + the Address ID)
- Vendor ID field. (will contain company name + " - Vend - " + the Address ID)

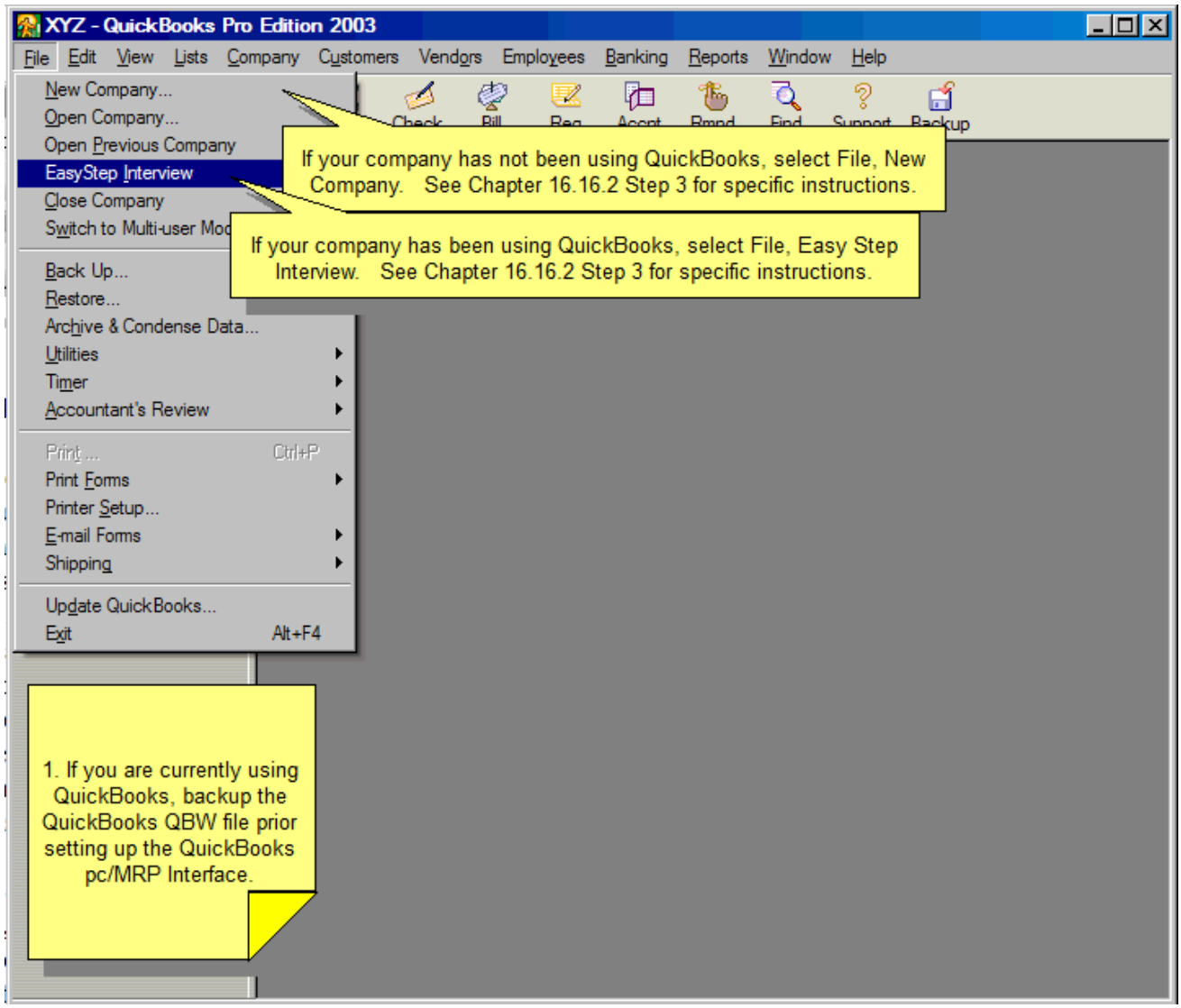
For now, leave the part numbers and addresses as they are and move on to step 3.

**Step 3. Set-up/Check QuickBooks Settings**

If your company has not been using QuickBooks follow steps 1-22 listed below:

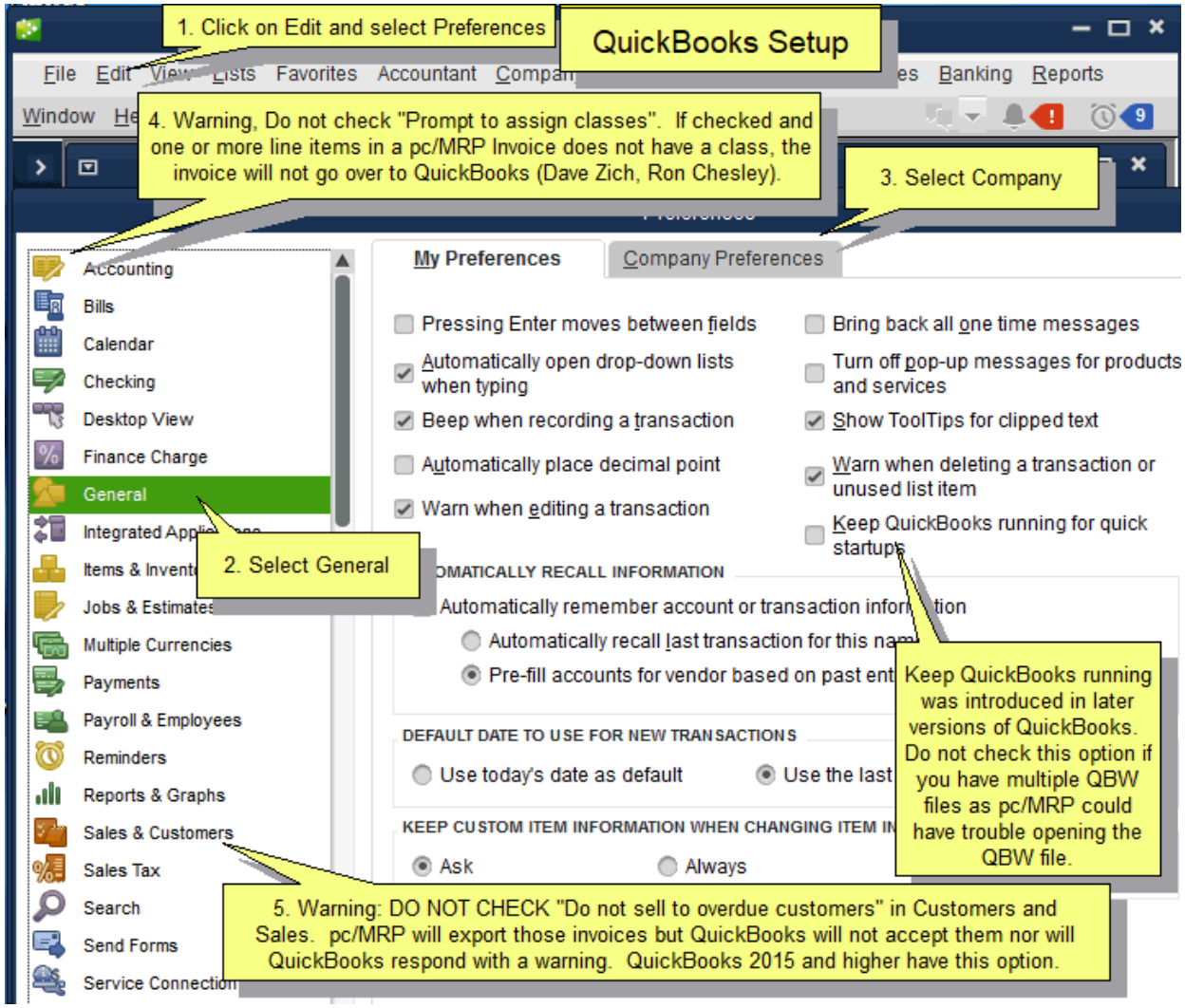
1. Start QuickBooks (a copy of QuickBooks must reside on this computer)
2. Select "File" and "New Company".
3. Click on the Next button 7 times.
4. Enter your company's name and address.
5. Enter your company's Tax ID # and start of fiscal year.
6. Pick the income tax form that your company uses (Corporation, Sole Proprietor, etc.).
7. Select a business type (usually pc/MRP customers select Manufacturing).
8. Enter your company name. Keep the QBW extension and click "Save."
9. Select "No" when prompted to have QuickBooks automatically create your chart of accounts.
10. Enter the number of QuickBooks users and continue to step 11.

If your company has been using QuickBooks, follow the steps 11-22 listed below:



11. Select File, Easy Step Interview, Preferences
12. Click Next, to get to the Inventory screen. Select Yes, to maintain inventory.
13. Select Yes on “Do you want to turn on the inventory features". You need the Inventory Option to show up under the Activity so that you can import the pc/MRP receivers as Bill type.
14. Select, "Yes", if your company collects sales tax.
15. If you select Yes on collecting sales tax, on the next screen you will get two options shown below:
    - I collect single tax rate paid to a single tax agency.
    - I collect multiple tax rates OR have multiple tax agencies.
      If you choose to collect single tax rate paid to a single tax agency, you would need to fill out the tax name, tax description, tax rate, and tax agency on the next screen.
16. Select "Product" for the invoice format on the next screen.
17. Select “No” for sales order tracking (pc/MRP will contain all future sales orders)
18. Select, "Yes", if you wish to use the QuickBooks Payroll and time tracking features.
19. Select, "No" for written or verbal estimates for customers. Use the pc/MRP Sales Quote module to provide quotes for customers as all of the costing and sales prices exist in pc/MRP.
20. Select "Yes," if you wish to use classes for divisions and or departments.
21. Select "Enter the bills first and then enter the payment later."
22. You may now choose to leave the Easy Set-up Interview.

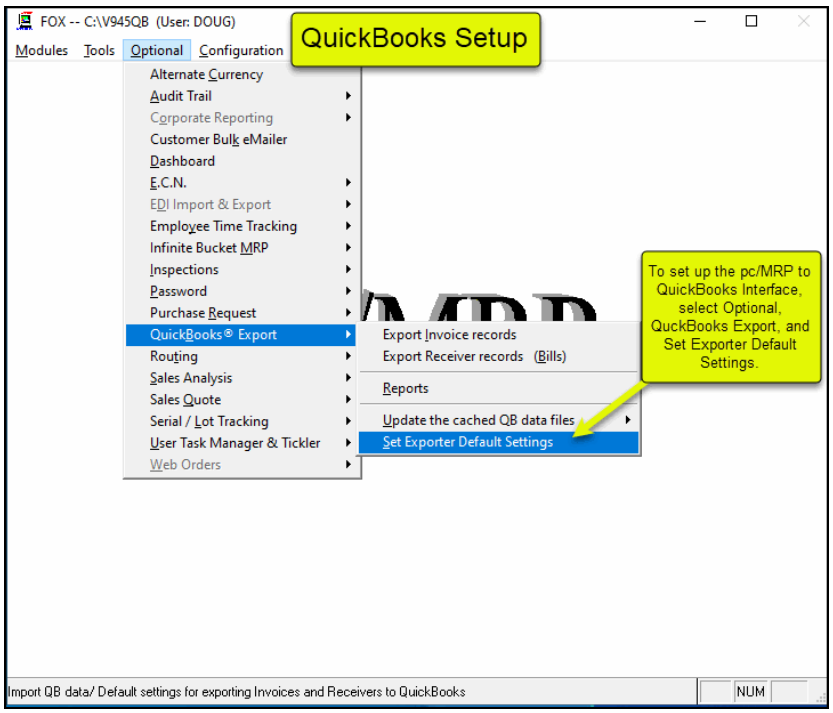
**Note:** Select Edit, and Preferences then check the following settings:

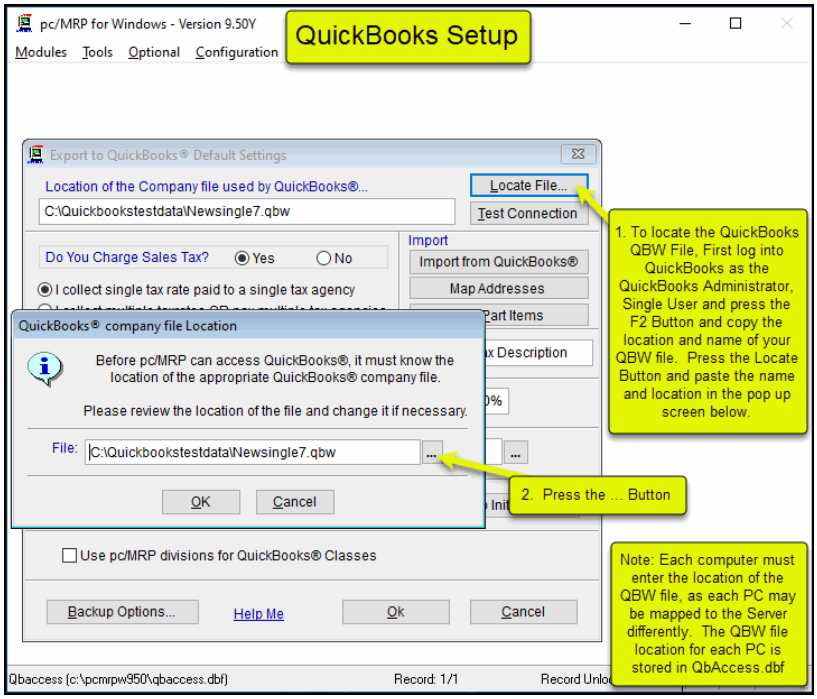


**Step 4. Locate your default QuickBooks Company**

(see slideshow here: http://www.pcmrp.com/mrp101/qbexportoverview.htm)

Select Options from the pc/MRP main menu, select QuickBooks Export and Set Default Settings to display the Export to QuickBooks Default Settings Screen shown below.



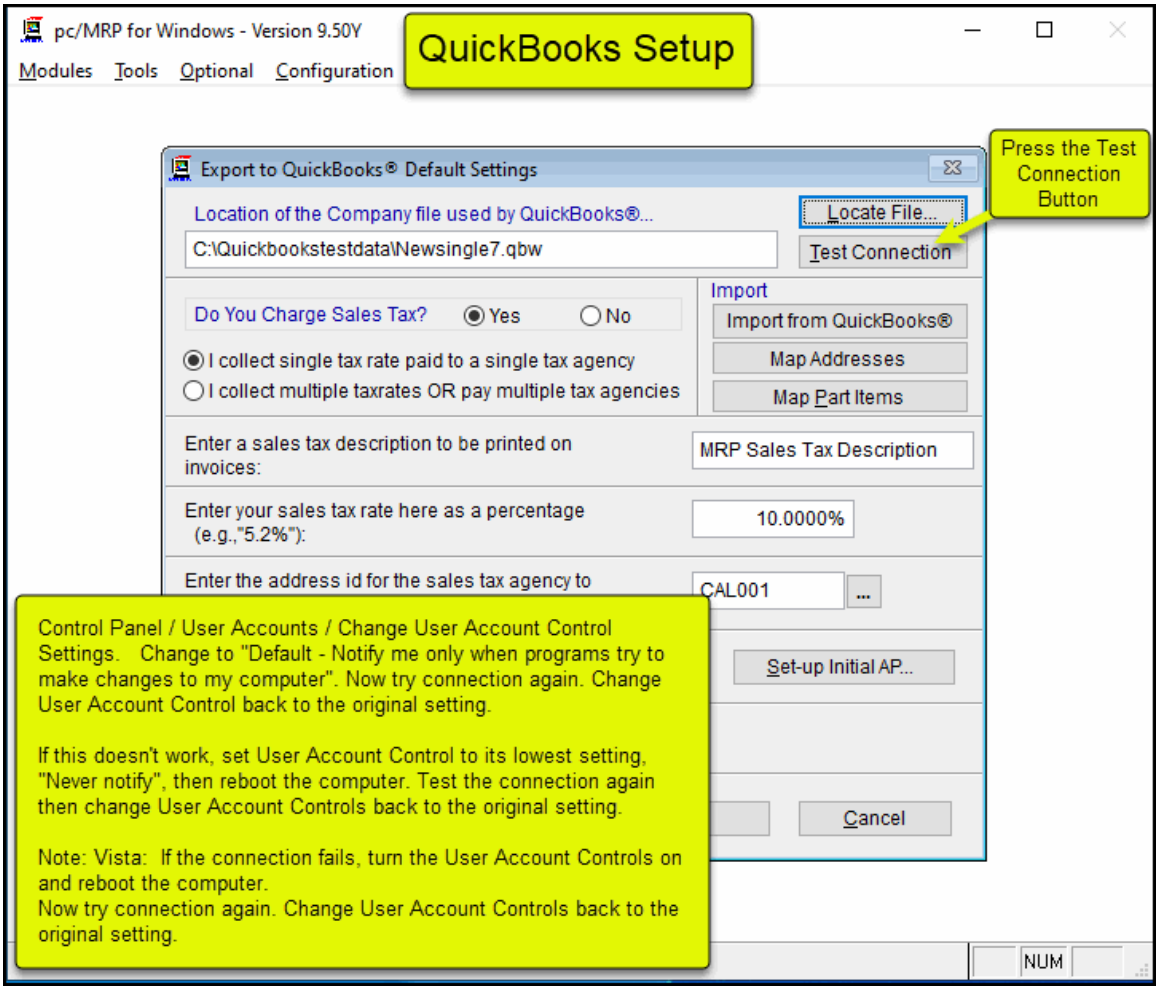




Click the “Locate” button to locate your company’s existing QuickBooks .qbw file or your company’s new QuickBooks .qbw file that you created in step 4.

**Step 5. Test the service connection from pc/MRP to QuickBooks**

Follow the steps listed below to fully connect pc/MRP to QuickBooks.

1. Open the copy of QuickBooks that resides on your computer.
2. Open your company's .QBW file (File and Open)
3. Make sure no other users are using that QBW file.
4. Set your local copy of QuickBooks to Single User mode by selecting "File" and "Switch to Single User Mode" within QuickBooks.
5. Make sure you are logged on as the Administrator by selecting "Company" and "Setup Users" from within QuickBooks
6. Now press the "Test Connection" button from within pc/MRP to establish and verify pc/MRP's service connection to QuickBooks.




Minimize your pc/MRP window.

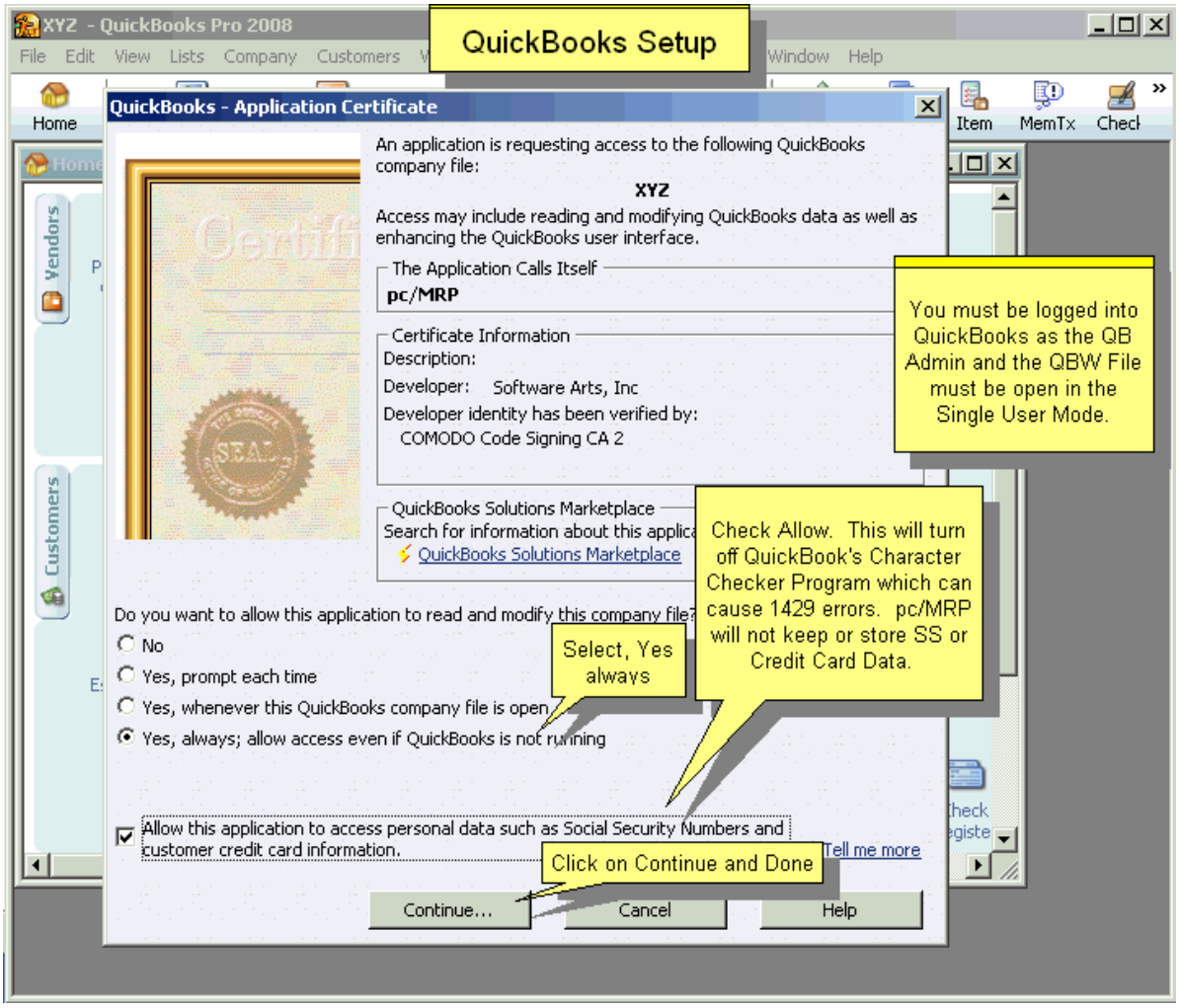
**Note**: Windows 7, 8 and 10: If the connection fails, select Control Panel / User Accounts / Change User Account Control Settings. Change to "Default – Notify me only when programs try to make changes to my computer". Now try connection again. Change User Account Control back to the original setting.

If this doesn't work, set User Account Control to its lowest setting, "Never notify", then reboot the computer. Test the connection again then change User Account Controls back to the original setting.

**Note**: Vista: If the connection fails, turn the User Account Controls on and reboot the computer.
Now try connection again. Change User Account Controls back to the original setting.

**Step 6. Configure QuickBooks to allow pc/MRP to log in automatically**

Restore your QuickBooks window




Under "Do you want to allow this application to read and modify this company file?" select "Yes, always".

Check “Allow this application to access...” This will turn off QuickBook's Character Checker program which can cause 1429 errors. pc/MRP will not keep or store SS or Credit Card Data. **Note:** This recommendation is different from our recommendations for earlier pc/MRP versions. The change is due to recent updates in both QuickBooks and pc/MRP. Click on Continue and Done.

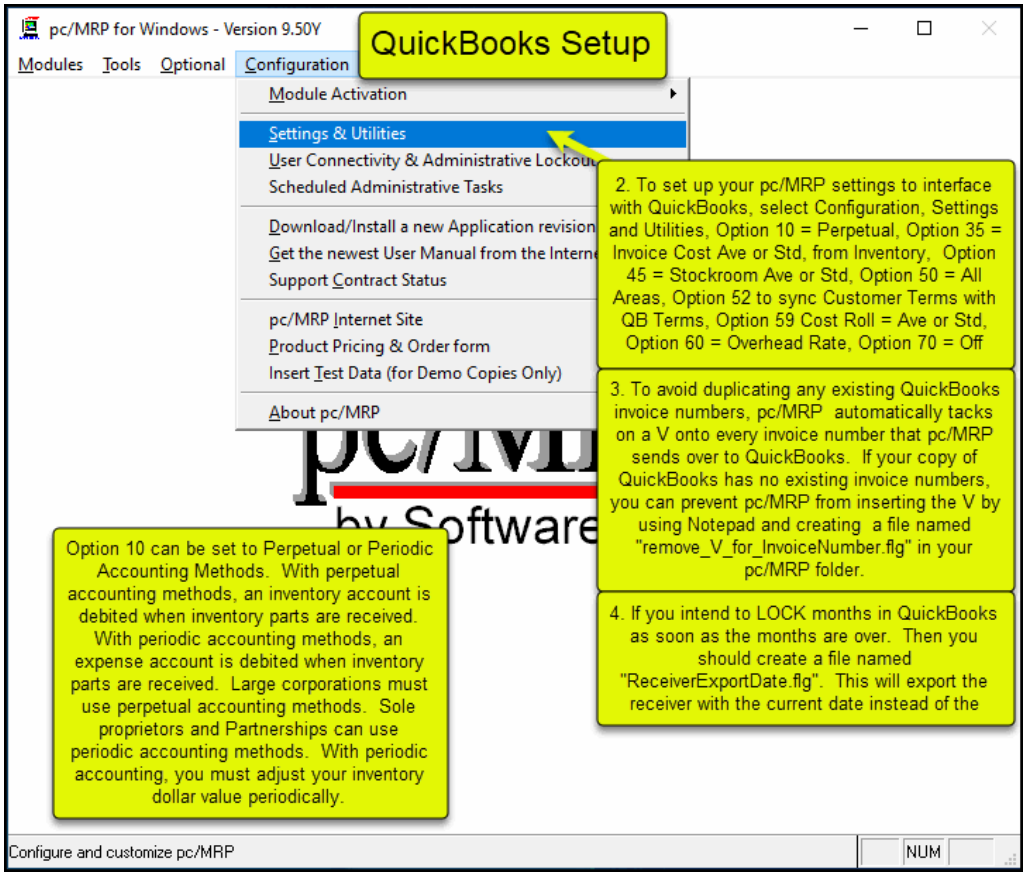
In the above instructions, pc/MRP will log in as the QuickBooks Administrator. If you are running a multi-user copy of QuickBooks, you may want pc/MRP to log in under its own user name, as QuickBooks will not allow pc/MRP to log in, if the administrator is already logged into QuickBooks. To force pc/MRP to log in under its own user name follow the instructions listed below.

**If you are using QuickBooks 2003 – 2005:**
Go into QuickBooks and select Company, Set up Users, Press Cancel (no need to change the administrator’s name and password), and Add User. Enter **PcmrpProgram** as the User Name. Enter a Password and click Next. Select All areas of QuickBooks. Now that a new user has been added to QuickBooks, return to the screen shown above and click the Properties Button. Make sure the Allow this application to login automatically check box is checked and select PcmrpProgram from the Login Drop Down List Box.

**If you are using QuickBooks 2006 or higher:**
It appears that pc/MRP must register as the Administrator and not under another name.

**Step 7. Set-up/Check pc/MRP Settings**

(see slideshow here: [http://www.pcmrp.com/mrp101/qboverview.htm](http://www.pcmrp.com/mrp101/qboverview.htm))

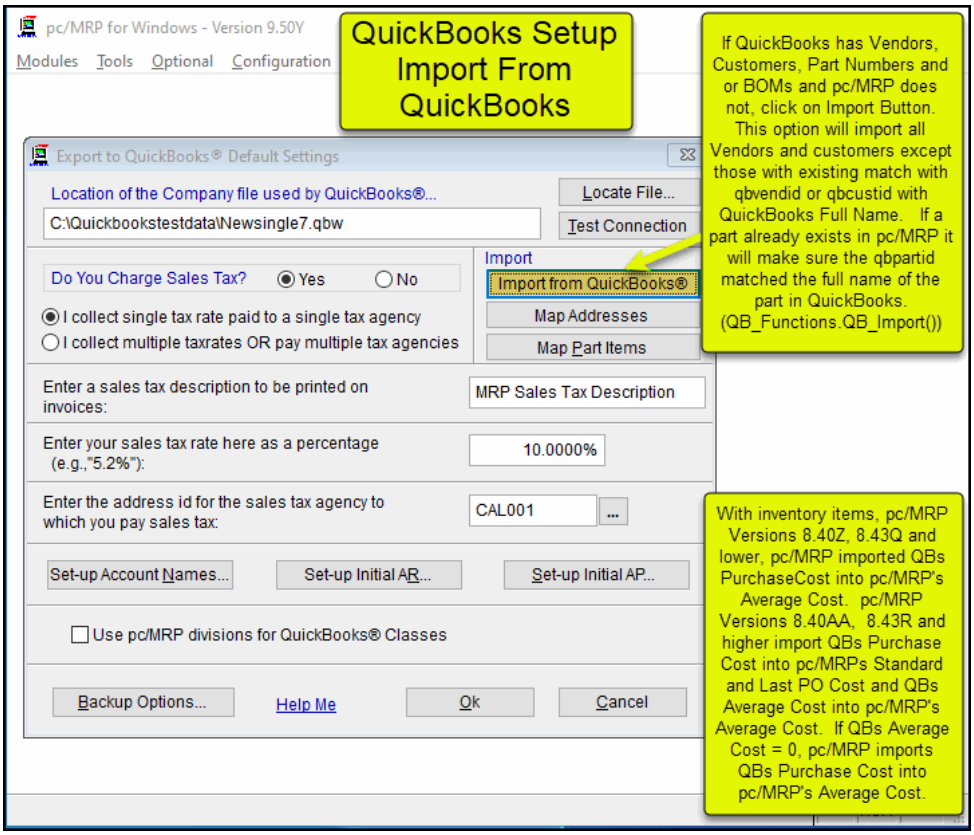



From within pc/MRP, select Configuration, Settings & Utilities. pc/MRP's settings must be changed as follows:

- pc/MRP will allow either **Perpetual** or **Periodic** accounting method for **Option 10**. With **Perpetual** accounting, (recommended), you debit Inventory when you receive inventory into Stores. With **Periodic** accounting, you debit an expense account when receiving inventory into stores month.
- If you have not set the size of your part numbers, select **Option 28** to set your maximum part number size. pc/MRP part number size may be set from 6 to 15 characters. If QuickBooks already contains your part numbers and you plan to import your part numbers from QuickBooks into pc/MRP, set the part number size to 15 characters.
- Set **Option 35** to use average or standard cost for cost of sales. pc/MRP will retrieve the current average or standard cost to export to QuickBooks. pc/MRP includes component, labor, and overhead costs when exporting costs of sales for Bills of Materials. If you do not want to see wages included in your COGS account, do not add labor items to your Bills of Materials.
- Set **Option 50** to configure the cost averaging formula. We recommend including all areas, even WIP.
- Set **Option 45**, Stockroom Defaults, and **Option 59**, Cost Roll-Up Defaults to use Average or Standard cost.
- Use **Option 52** and make sure your list of terms matches the Term Names in QuickBooks item list. If this is a term not listed in QuickBooks, you must enter the term in pc/MRP and edit the Net Due field, etc.
- Set **Option 60** to establish your labor overhead rate (%). If you do not want to see overhead included in your COGS account, leave the labor overhead rate set at 0
- Set **Option 70**, Setting freight as % of cost to off.

For more detailed information regarding the various settings listed above, refer to Section 15.1 of the pc/MRP Manual.

**Step 8. Import QuickBooks Item List into pc/MRP**

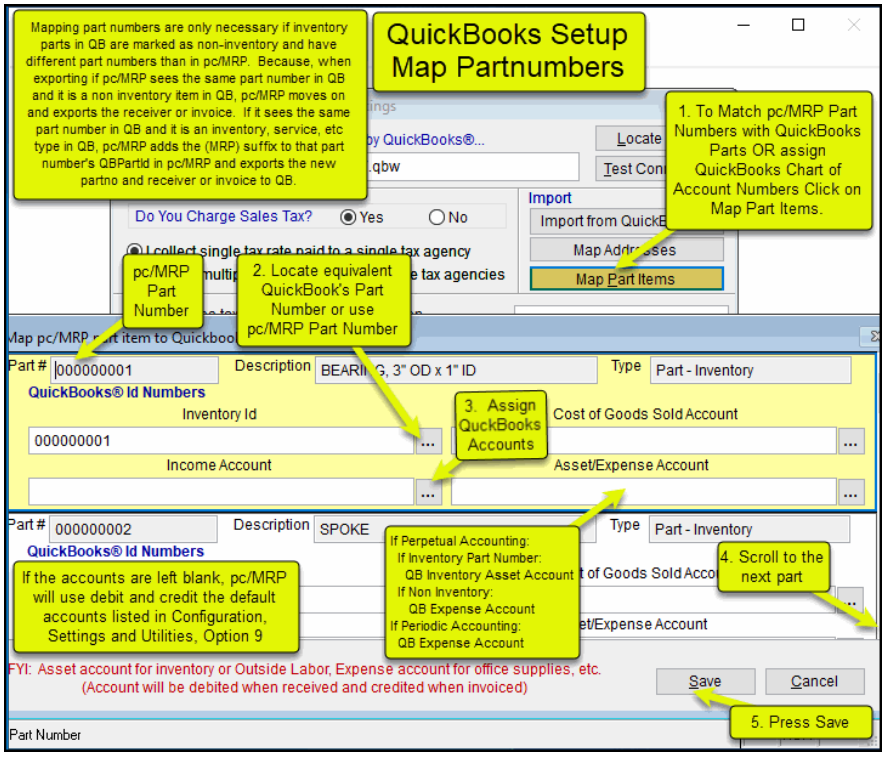



If QuickBooks does not have your parts list, you are done with this step. pc/MRP will automatically export part(s) the first time they are included on an invoice or receiver exported from pc/MRP to QuickBooks.

If Quick Books has your parts list and pc/MRP does not**,** import the QuickBooks Items into pc/MRP by clicking on the Import Parts button shown above as per the following instructions:

1. Make sure pc/MRP's part number size is set to match the largest part number size in QuickBook.
2. Please note that items classified as "Other", "Discount", "Tax", and "Inactive" types will not be imported.
3. Edit each item in QuickBooks such that no item's "Item Name/Number" field contains a name/number greater than 15 characters. pc/MRP imports the "Item Name/Number" field into pc/MRP's part number field. pc/MRP imports the Parent Item plus a ":" plus the "Item Name/Number" field into pc/MRP's "Inventory ID" field (QbPartID).
4. Start up pc/MRP, select Optional, select QuickBooks, select Set Default Settings, and click on the Import QuickBooks Parts button.
   - Each part's pc/MRP part number field will be populated by its QuickBooks name field.
   - Each part's pc/MRP QB_PartID field will be populated by its QuickBooks FullName field ; '(MRP)' is not added at this time.
   - Each part's pc/MRP Income Account Field will be populated by the account in its QuickBooks Income Account Name Field. If the Income Account Name Field is empty, pc/MRP will use the account in the QuickBooks Account Name Field.
   - Each part's pc/MRP Asset/Expense Account Field will be populated by the account in its QuickBooks Asset Account Name Field. If the Asset Account Name Field is empty, pc/MRP will use the account in the QuickBooks Account Name Field.
   - If the item being imported is a service item and pc/MRP detects an account in its QuickBooks Expense Account Name Field or its Account Name Field, pc/MRP will import it as an outside labor item (since it can be purchased). Otherwise, pc/MRP will import the item as an inside labor item (a service item that can be sold).

If both QuickBooks and pc/MRP have your part numbers, follow the directions below.




Whenever an invoice or receiver is exported to QuickBooks, pc/MRP will see if QuickBooks has the part listed on the receiver or invoice. pc/MRP compares the part name in the Inventory ID Field with the part's Name Field in QuickBooks. If QuickBooks does not have the part, pc/MRP will export the part to QuickBooks as a non inventory part. If QuickBooks has the part as an inventory part, pc/MRP will attach the suffix (MRP) to the part name and export it to QuickBooks as a non inventory part.

Since pc/MRP automatically inserts the part number into the QuickBooks Inventory ID Field and QuickBooks really has no part number (it has a part name), one strategy could be to just let pc/MRP automatically insert the new part number into QuickBooks whenever an invoice or receiver containing that part number is exported. In other words you would not need to do anything.

Since past versions of QuickBooks had item limits (14,700 for Pro and 29,000 for Enterprise), some accountants have preferred to put the same generic part number in the Inventory ID Field for every part number. This strategy will prevent QuickBooks from loading up on its item limit. You could implement this strategy by using the Map Part Items as shown above and inserting the same generic QB Inventory Id for every pc/MRP part number.

Another strategy would be to click on the Map Part Items Button and match the pc/MRP part numbers with the QuickBooks' Part Numbers as shown in the screen above.

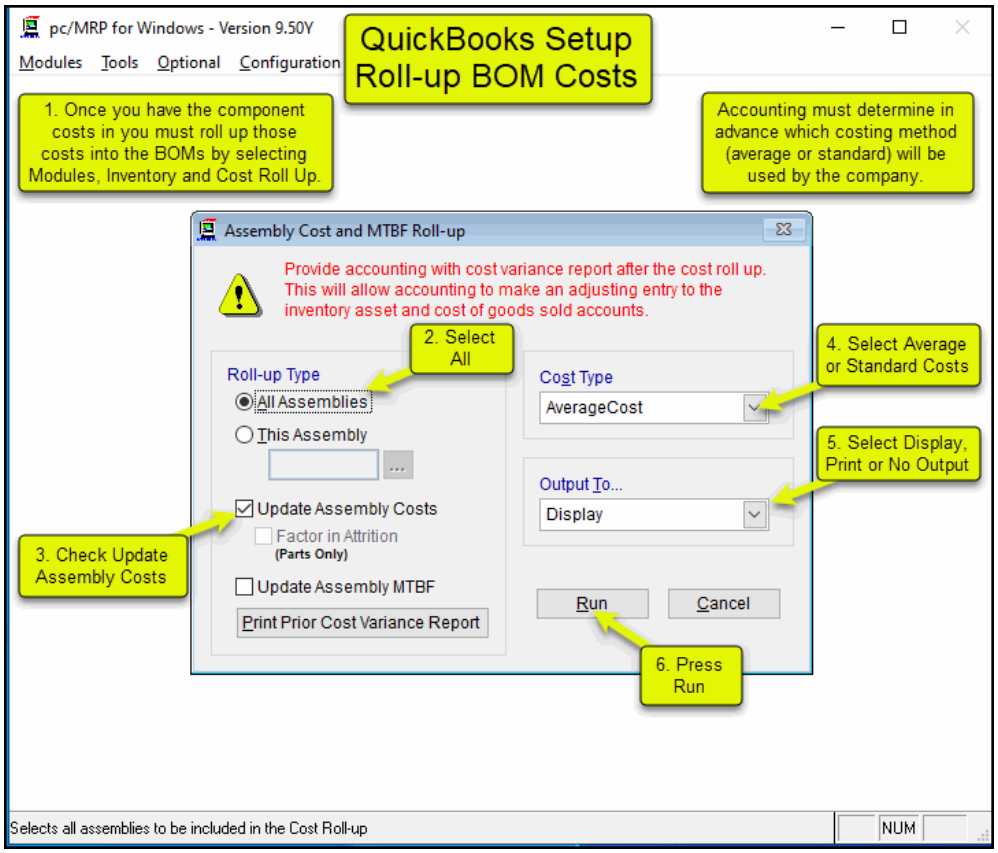
**In the future**, enter new part numbers into pc/MRP only. pc/MRP will export the part numbers to QuickBooks as necessary as "non inventory parts."

**Additional Notes on pc/MRP's Inventory ID (QBPartId) Field:**

pc/MRP automatically populates the QBPartID Field with pc/MRP's part number when:

- Importing part numbers form another file using Settings and Utilities **Option 40**.
- Entering a new part number (even if QuickBooks Option has not been activated).

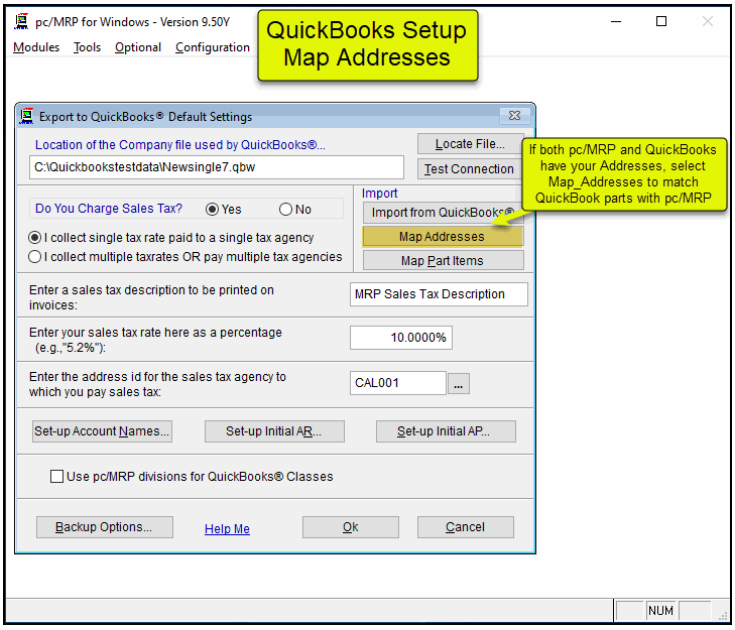
**Step 9. Set-up/Check your Component and Assembly Costs in pc/MRP**




Since pc/MRP will be importing costs into QuickBooks, follow the instructions below.

- If you standardized on average costs, make sure all component part numbers in pc/MRP contain an average unit cost.
- If you standardized on standard costs, make sure all component part numbers in pc/MRP contain a standard unit cost.
- Make sure all Bills of Materials contain the latest totals by **performing a cost-roll-up** for all Bills of Materials based on average or standard costs (Select Modules, Inventory, and Cost Roll Up).

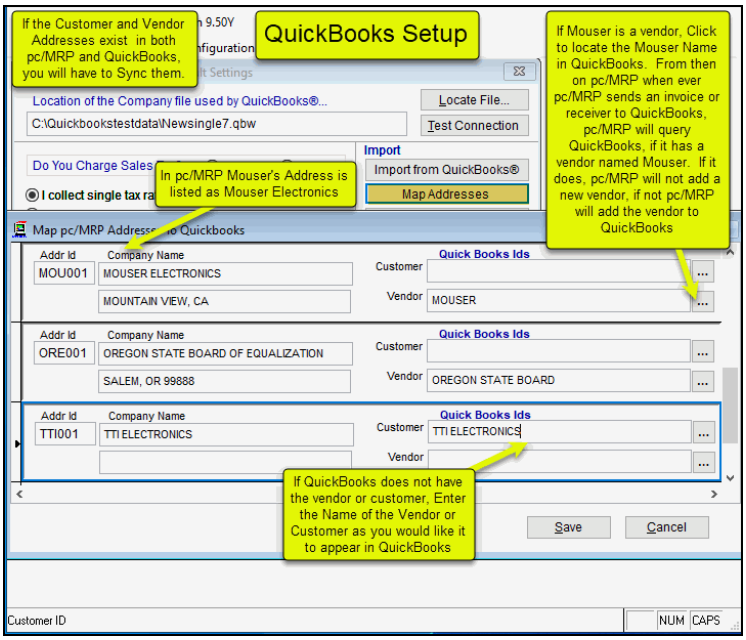
**Step 10. Import QuickBooks Address List into pc/MRP**




<u>If QuickBooks doesn't have your addresses</u>, you are done with this step, pc/MRP will automatically export the customer and vendor addresses the first time they are included on an invoice or receiver exported from pc/MRP to QuickBooks.

<u>If QuickBooks has your addresses and pc/MRP does not</u>, import the QuickBooks Address List into pc/MRP by clicking on the Import from QuickBooks Button as shown above.

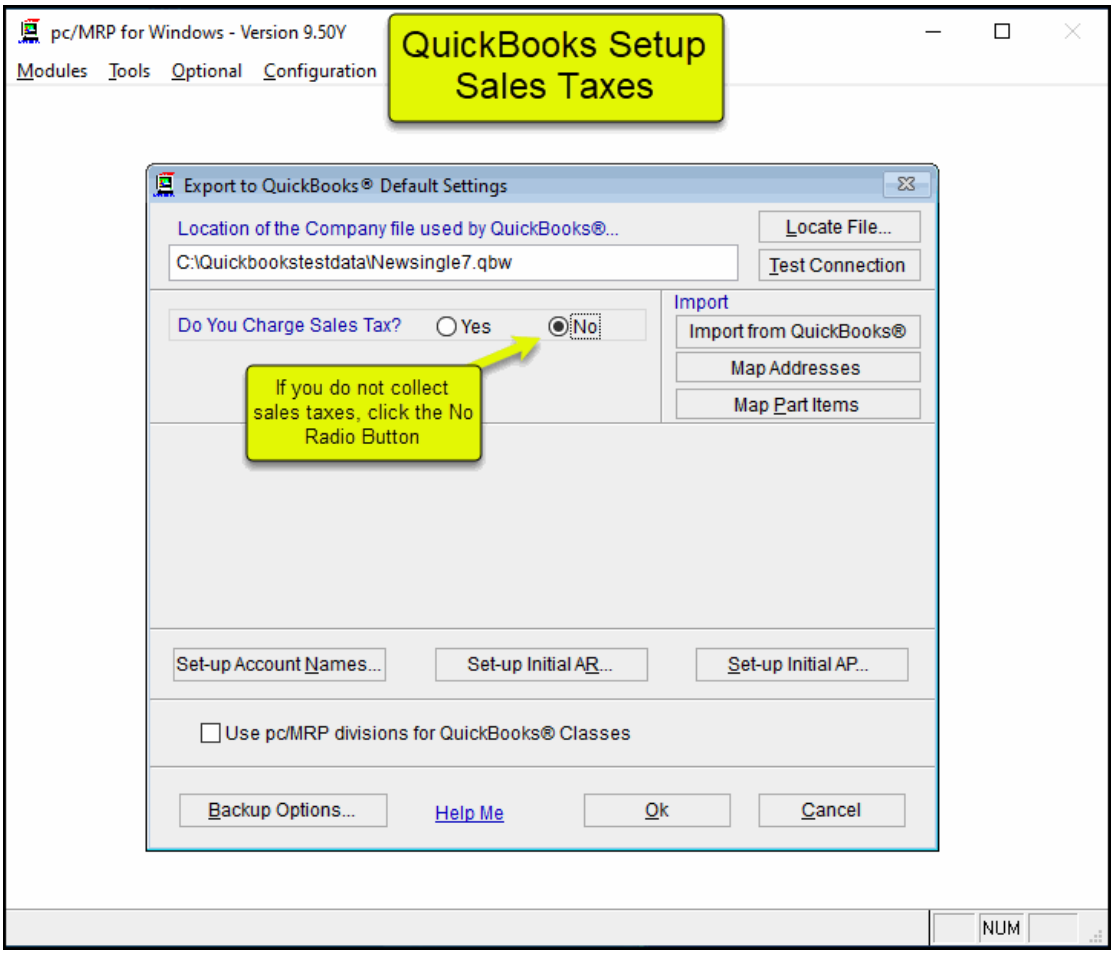
<u>If both QuickBooks and pc/MRP have your customer and vendor addresses</u>, you must match the QuickBooks addresses with the equivalent pc/MRP addresses as shown on the screen below.




**In the future,** enter new customer and vendor addresses into pc/MRP only; pc/MRP will export the addresses to QuickBooks as necessary.

**Step 11. Setup Sales Taxes**

If you collect sales tax for a single tax entity, skip to step 12
If you collect sales tax for multiple tax entities (counties or states), skip to step 13
If you do not collect sales tax, follow the instructions below:
Restore your pc/MRP window

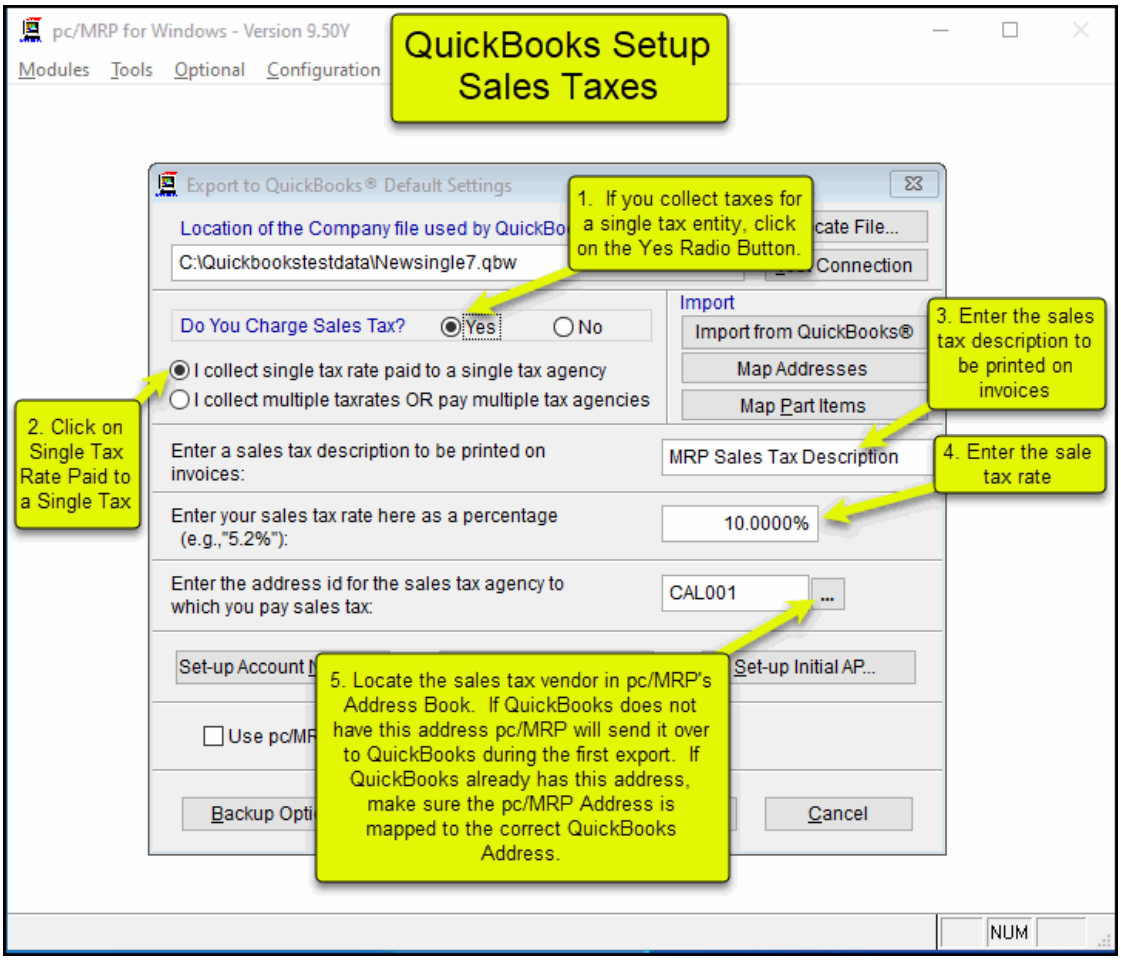



Click on the No radio button.

You are done with sales tax; skip to step 14.

**Step 12. Setup Sales Taxes (sales taxes are collected for a single tax entity)**

Restore your pc/MRP window.




Click on the Yes “Do you Charge Sales Tax” radio button.

Click on the “Single tax entity” radio button

The Export to QuickBooks Default Settings Screen will change as shown below allowing you to fill in the:

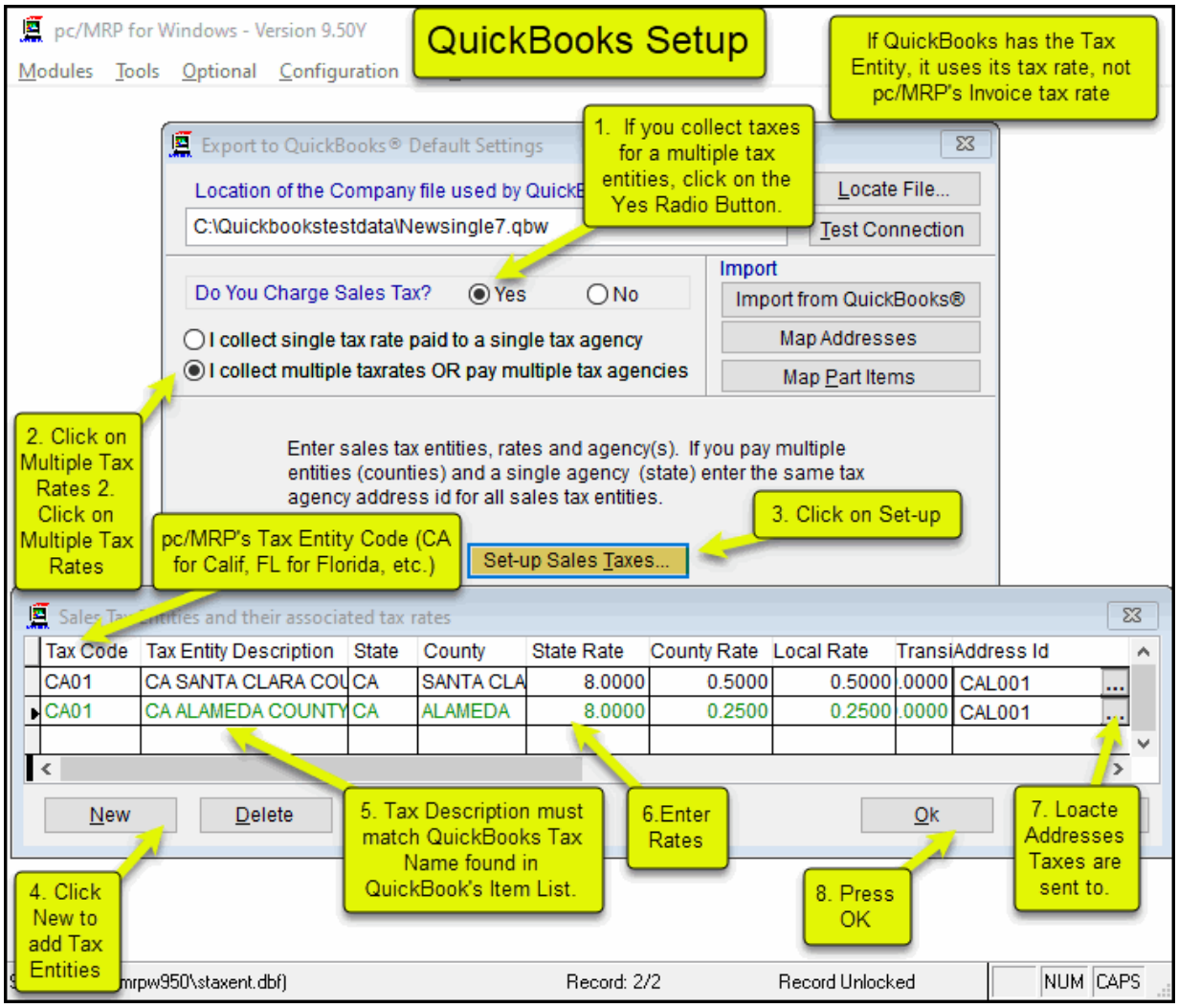
- sales tax description that will appear on invoices
- sales tax rate
- address id for your sales tax vendor (state agency that collects sales tax).

Be sure to scroll and pull up the sales tax agency from the pc/MRP address book by clicking on the ellipsis (…) button to the right of the sales tax agency address id field. The address id should contain the address of the sales tax agency

You are done with sales tax; skip to step 14.

**Step 13. Setup Sales Taxes (sales taxes are collected for multiple tax entities)**

Enter the sale tax agencies and their respective addresses into the address book within pc/MRP. Then, return to the QuickBooks Default Settings screen, click the Multiple Tax Rate radio button, and press the Set-up Sales Taxes button.




Pressing the **Set-up Sales Taxes** button will allow the sales tax entity screen shown below to pop up. Enter a tax code and description for each sales tax entity. Enter the state, county, state sales tax rate, county sales tax rate, local sales tax rate (if any), transit authority sales tax rate (if any) and the pc/MRP address ID. The address ID can be located by clicking the ellipsis button and selecting the correct address from the scroll window that appears.

When an invoice is exported to QuickBooks, pc/MRP checks to see if QuickBooks has a Sales Tax Item with the same name as pc/MRP's Tax Code. If QuickBooks does not have a sales tax item name that matches pc/MRP's tax code, pc/MRP inserts a new sales tax item name with the tax code as the sales tax item name in QuickBooks.

If QuickBooks has the tax item already, QuickBooks will use its own tax rate, not pc/MRP's invoice tax rate.

**Step 14. Enter 11 base accounts into QuickBooks**

If you have already established a chart of accounts in QuickBooks and your copy of QuickBooks has equivalent accounts for the 11 accounts shown below, move on to the next step.

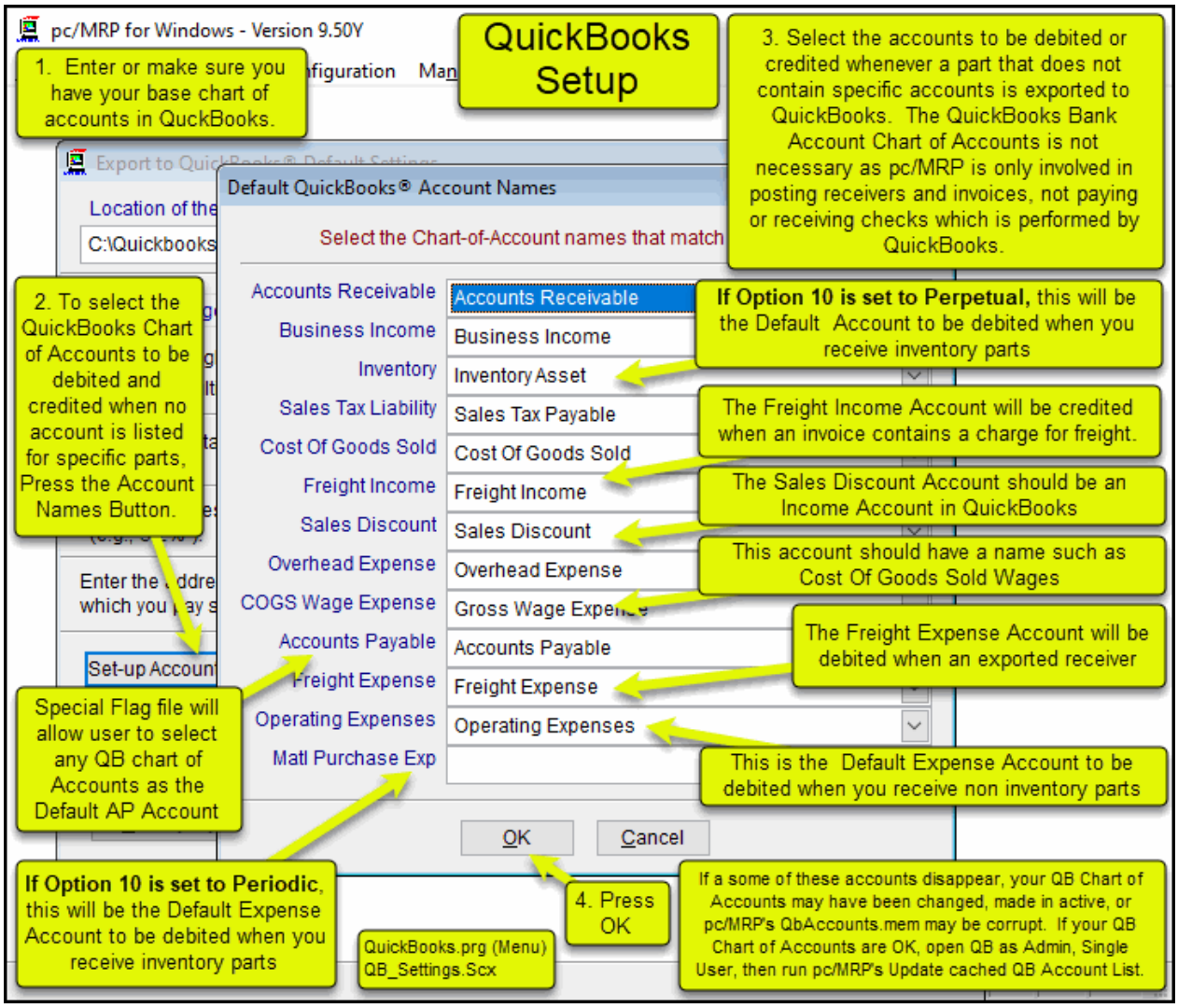
If your copy of QuickBooks does not contain a chart of accounts or is missing some of the accounts shown below, you must create the accounts shown below. To add these accounts to your QuickBooks chart of accounts, start QuickBooks, select "Accounts", and "New".

The account types must match the account types shown below.

| **Base Account** | **Account Type** |
|---|---|
| Accounts Receivable | Accounts Receivable |
| Business Income | Income |
| Inventory Asset | Other Current Asset |
| Sales Tax Liability | Other Current Liability |
| Cost of Goods Sold | Cost of Goods Sold |
| Freight Income | Income |
| Sales Discount | Income |
| Overhead Expense | Other Expense |
| COGS Wage Expense | Expense |
| Accounts Payable | Accounts Payable |
| Freight Expense | Expense |
| Operating Expenses | Expense |

After entering these accounts into QuickBooks, the next step will require you to enter these accounts into pc/MRP as your default base chart of accounts for QuickBooks. If a part being invoiced or received does not contain its own asset, income, or COGS account, pc/MRP will debit and credit the default accounts listed above.

**Step 15. Enter the QuickBooks default chart of accounts into pc/MRP**




Select “Options”, “QuickBooks”, “Set QuickBooks Exporter Default Settings” and press the “Set-up Default Account Numbers” button to display the screen shown below. pc/MRP will display a drop down list of all legal accounts and account types that could be used for that particular account.

pc/MRP will automatically debit and credit the above QuickBooks accounts (provided the part being invoiced or received does not contain its own account numbers) when you export invoices and receivers into QuickBooks. An account must be selected for each account category.

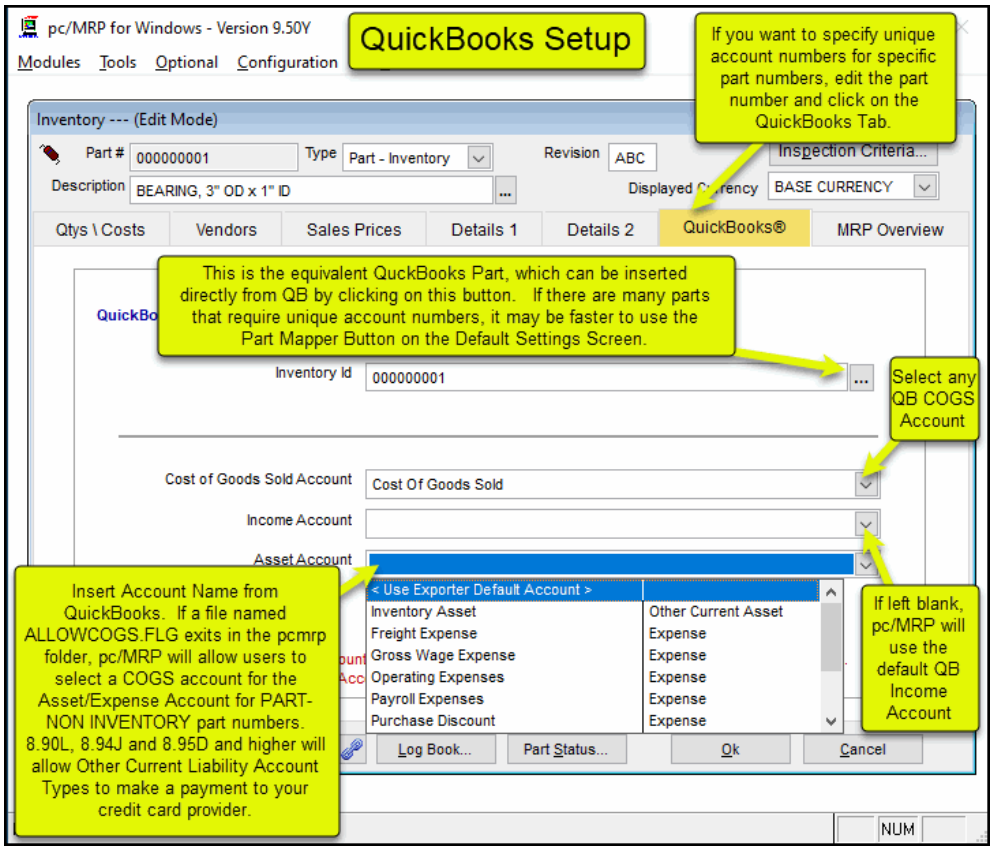
Call Software Arts for the name of the flag file to allow users to select any QuickBooks chart of accounts as the QuickBooks Default Accounts Payable Account (hint QbApO).

**Step 16. Enter unique chart of accounts numbers into pc/MRP partnumbers**

<u>If you do not wish to enter unique chart of account numbers for individual pc/MRP part numbers</u> skip this step.

<u>If you wish to assign unique chart of account numbers to one or more pc/MRP part numbers</u> follow the steps below.

To give a part or assembly number a unique account number, start pc/MRP, select Modules, select Inventory, select Edit, select the part number, select the QuickBooks tab, select the Asset, COGS, and or Income account numbers you wish to associate with this part number.




The drop down list boxes contain valid QuickBooks account numbers. Please note that these account numbers must exist in QuickBooks prior to running this option.

If the part is a component part that you sell or it goes into an assembly that you sell, select an asset account in the Asset/Expense Account Field. If it is not for resale, such as an office supply or shop supply, select an expense account.

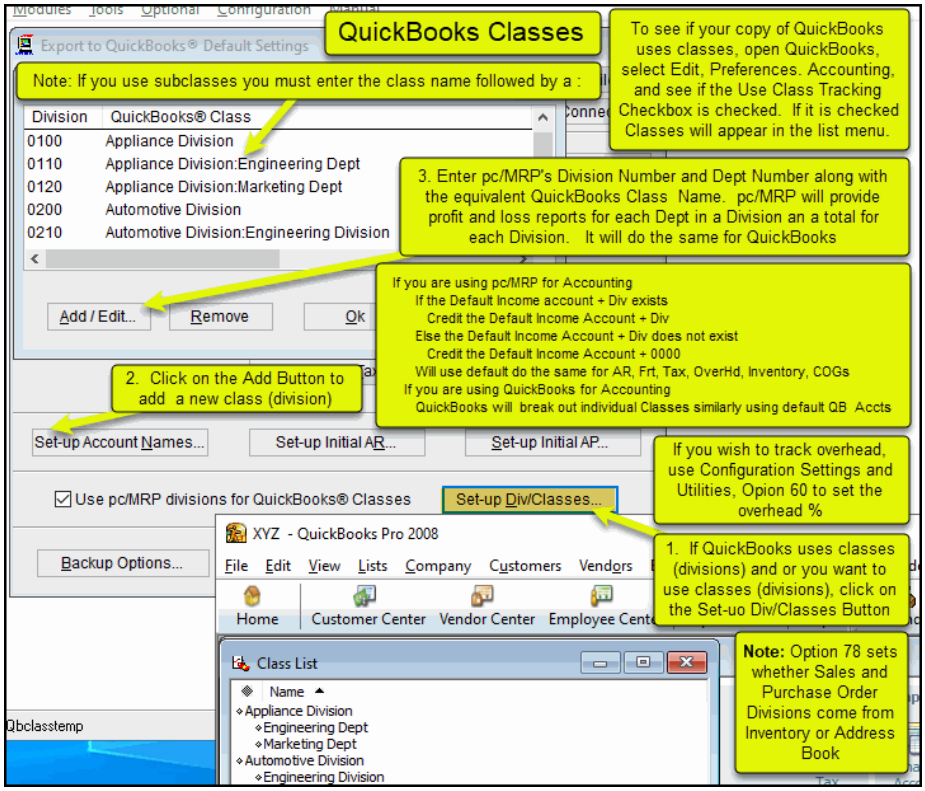
If the part is an outside labor part and it has been added to a BOM, select an inventory asset account for the Asset/Expense Account Field. If the outside labor part has not been added to a BOM, select an expense or COGs account for the Asset/Expense Account Field.

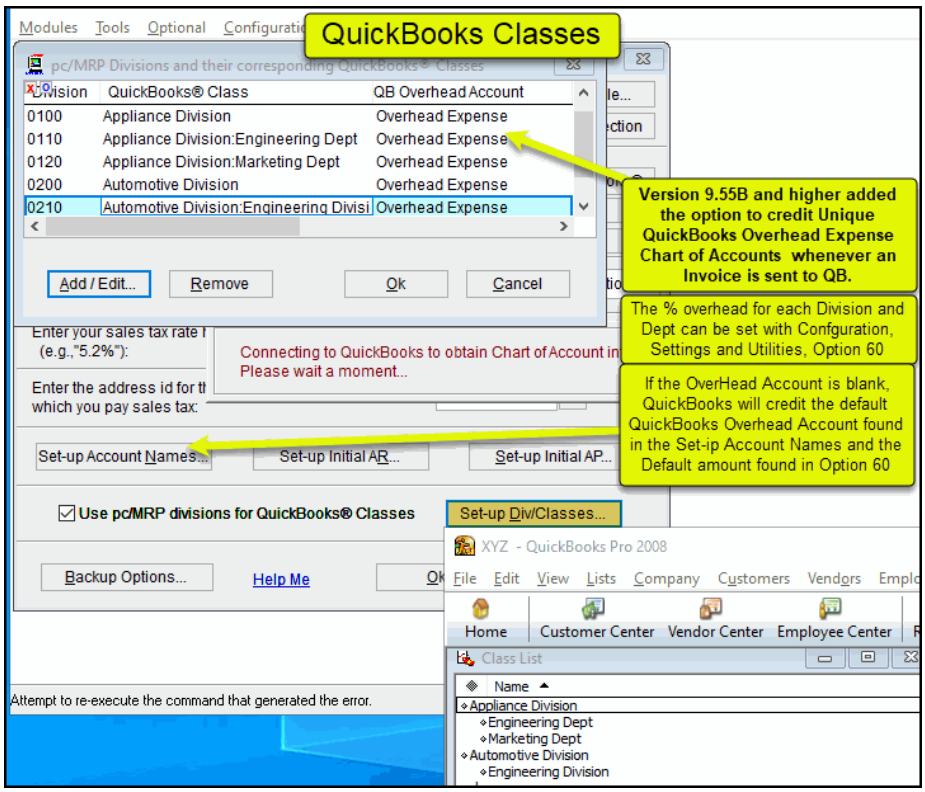
If there are many parts that require unique account numbers, it may be faster to use the Part Mapper Button on the Default Settings Screen.

Clicking on the QuickBooks Tab is much faster than in the early versions of pc/MRP. This is because pc/MRP now populates the drop down chart of accounts lists from its own QbAccountsDbf.dbf instead of populating the chart of accounts lists from QuickBooks. pc/MRP creates a fresh copy of **QbAccountsDbf.dbf** if it needs the file and the file does not exist. It also creates a fresh copy of this file whenever invoices ore receivers are exported to QuickBooks.

**Step 17. Set-up Divisions and Corresponding Classes in QuickBooks**

<u>If you do not use divisions and/or departments</u>, uncheck the Use Divisions for QuickBooks Classes Checkbox. You are done with this step; continue to step 18. If you do decide to use divisions and/or departments in the future, you can always add divisions later.



If you do use divisions and/or departments, go to the QuickBooks Default Settings screen, check the Use Divisions for QuickBooks Classes checkbox and click the Set-up Divisions Check Button to enter divisions/classes.

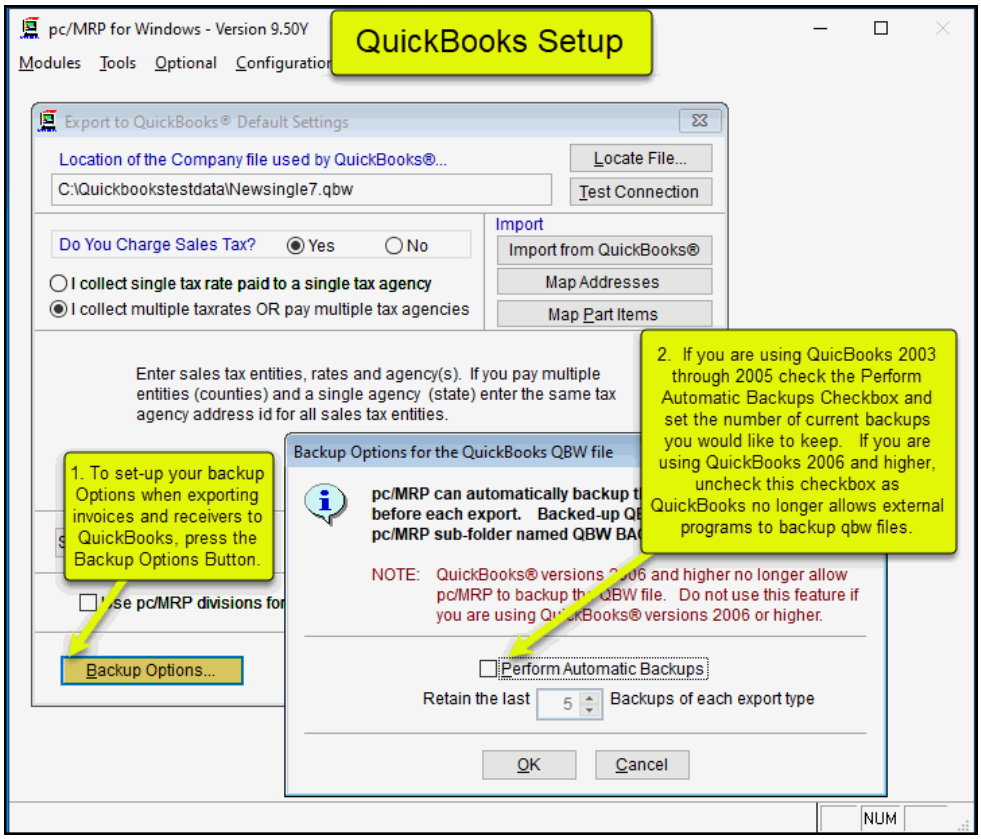
pc/MRP uses a 4-character division field for divisions and departments. The first two characters are reserved for divisions and the second two characters are reserved for department. QuickBooks uses a much larger class field for divisions and/or departments. If you already have classes in QuickBooks, the description for the class must match the description you are using in QuickBooks or QuickBooks will enter it as a new class.

pc/MRP invoice and receiver line items have a field for division. When the invoices and receivers are exported to QuickBooks, the pc/MRP export routine will scan through all the invoices and receivers being exported and validate the division fields as follows:

If the div field in the invoice or receiver is not empty and the use div checkbox is checked
Case the Division is not found in the above pc/MRP table (Qbclass)
Write an error message and do not export the invoices or receivers
Case the Class is not found in QuickBooks (QbClasses)
Insert the class into QuickBooks

**Step 18. Set Backup Options**

Click on the Backup Options button. If you are using QuickBooks 2006 and higher, uncheck this checkbox as QuickBooks 2006 will not allow pc/MRP to make QBW file backups. You must perform the QBW file backup from within QuickBooks prior to exporting. If you are using QuickBooks 2003 – 2005, check the 'Perform Automatic Backup' option checkbox and set the number of QBW file backups to keep.



**Step 19. Run Set-up AR (Mark all invoices paid before the transfer date as complete)**

If there are no invoices in pc/MRP and you have been entering invoices into QuickBooks, continue to step 21.

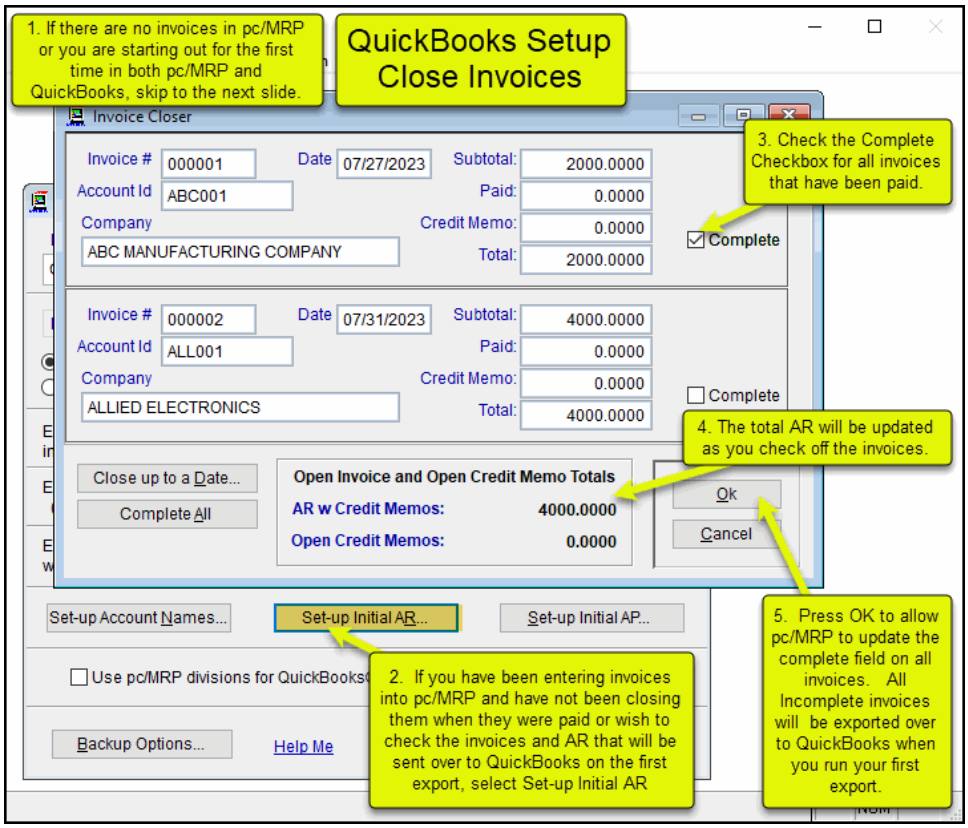
If you are starting out for the first time with both pc/MRP and QuickBooks, continue to step 21.

If you have entered invoices into pc/MRP and have been closing them when they are paid, run this step as a double check on your AR. It will also open up any invoice with a partial payment so that the entire invoice will be exported over to QuickBooks (without the payment).

If you have entered invoices into pc/MRP and have not been closing them when they were paid and are just starting with QuickBooks, run this step to close all invoices that have been paid.

If you have entered invoices into both pc/MRP and QuickBooks and have not closed your pc/MRP invoices, run this step to close all open pc/MRP invoices that already exist in QuickBooks. If QuickBooks has all the open invoices as of the transfer date, run this step to close all invoices in pc/MRP.

Press the Set-up Initial AR button from within the QuickBooks Default Settings screen to display the Invoice Closer screen shown below.




This screen does not export invoices to QuickBooks. It allows you to set up the invoices (AR) for the initial export into QuickBooks.

The AR total is equal to the amount due - amount paid ((SalePrice*QtyShip*(1-(Discount/100))*(1+(TaxR/100.0000))+Freight)-AmtPaid) for the following invoice line items and credit memos:

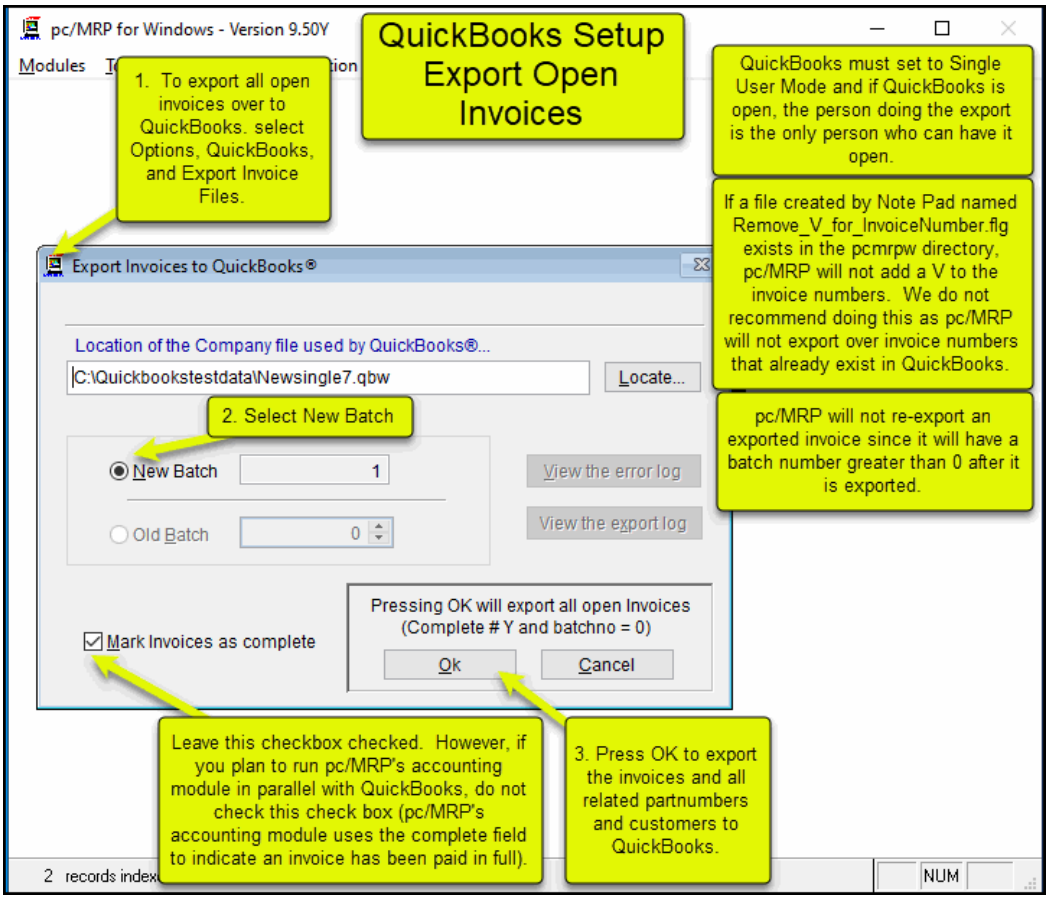
- All open invoices and credit memos.
- If one or more line items in an invoice/credit memo are marked as open, all the line items and associated credit memos are temporarily marked as open and are included in the AR total.

Scroll the invoices and check the **complete** check box for all paid invoices and credit memos until the AR with Credit Memo Total is correct. If you check an invoice as complete, the entire invoice will be marked as complete by inserting a capital Y into the complete field of every line item for that invoice. This reduces the AR amount by the entire amount of the invoice (unless the amount due - amount paid equals 0). Invoices marked as complete will never be exported to QuickBooks.

Pressing the Cancel button will leave the invoices unchanged. The invoice complete and posted fields will remain as they were prior to entering this screen.

Pressing the OK button will not export the invoices. Pressing the OK button will change the invoice complete fields as per the changes you made with the closer. All invoices that are not marked as complete and have a batch number of 0 will be exported in the next step.

**Step 20. Export pc/MRP Open Invoices (AR)**




To export all open invoices, sales tax entities, divisions/classes, related part numbers, related vendors, and customers that are not in QuickBooks from pc/MRP, start pc/MRP, select Optional, QuickBooks Export, and Export Invoice records.

Press OK to export all open pc/MRP invoices. pc/MRP will only export invoices where the batch number is 0 (zero) and the invoice is not complete (complete ≠ Y). Partial payments and credit memos will not be exported. Once pc/MRP has completed the export, it will insert the batch number into the pc/MRP invoices that were exported and any open credit memos to prevent them from being exported again. To re-export a batch you would select Old Batch instead of New Batch.

If any of the invoices exported contained partial payments or credit memos, pc/MRP will display a warning message asking you to open up the export log. Within the export log, scroll to the bottom of the file for a list of partial payments and credit memos. Print this list out by selecting File and Print, as you will need this list on the next step. Enter the credit memos and partial payments by hand into QuickBooks. The total amount displayed on the Export Log Report is a sum of the following calculation:

Round(SalePrice*QtyShip*(1-(Discount/100))*(1+(TaxR/100.00))+Freight, 2)

If you get an exceeded credit limit in pc/MRP error message, temporarily raise the customer's credit limit in pc/MRP and export again. If the error message indicates the customer's credit limit was exceeded from QuickBooks, temporarily raise the credit limit in QuickBooks and export again. . Vendor or Customer's Name in pc/MRP started with a space. Edit the Name in pc/MRP and remover the space

In the future:

Use pc/MRP to enter all invoices and export them to QuickBooks once a day or once a week.
Use QuickBooks to enter all credit memos and invoice payments.

**Step 21. Run Set-up AP (Mark all receivers paid before the transfer date as complete)**

If there are no receivers in pc/MRP and you have been entering receivers into QuickBooks, do not run this step and continue to step 23.

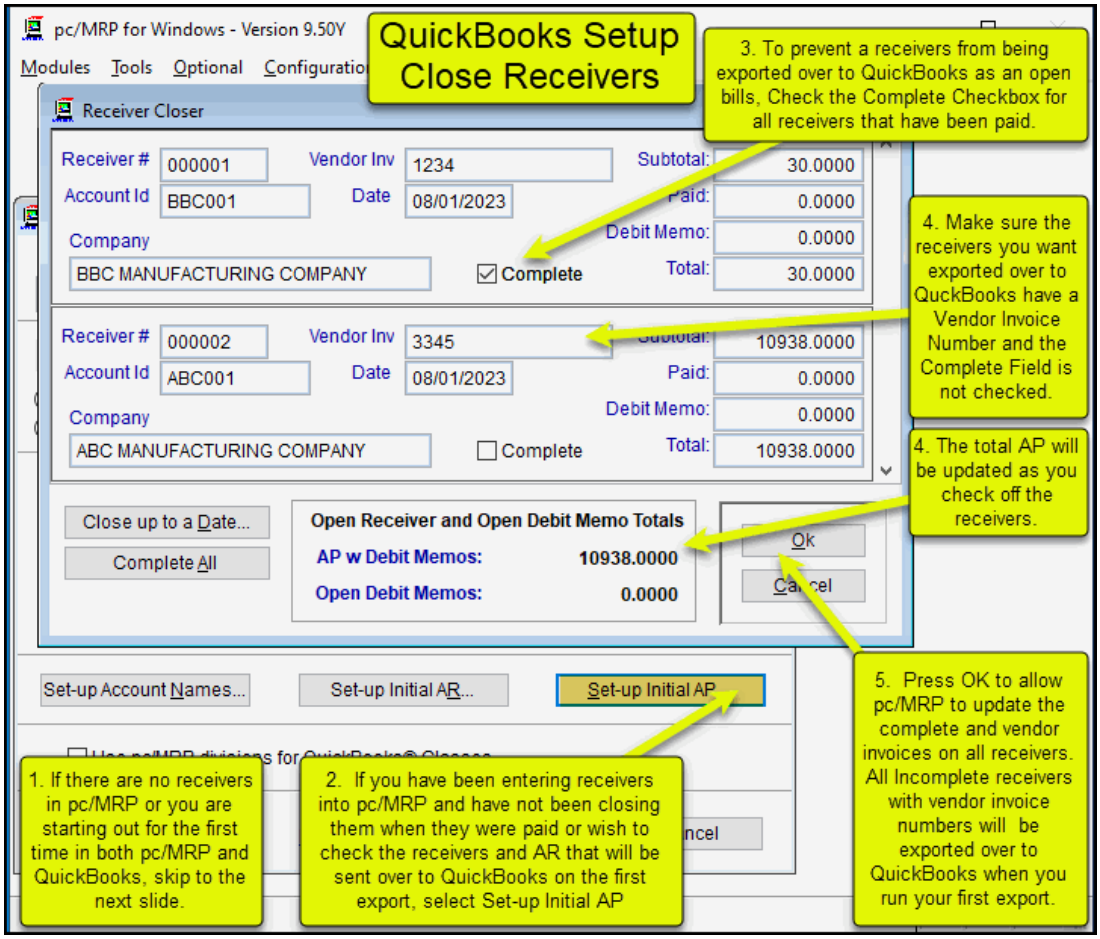
If you are starting out for the first time with both pc/MRP and QuickBooks, do not run this step and continue to step 23.

If you have entered receivers into pc/MRP and have been closing them when they are paid, run this step as a double check on your AP. It will also open up any receiver with a partial payment so the entire receiver will be exported over to QuickBooks.

If you have entered receivers into pc/MRP and have not been closing them when they were paid, and are just starting with QuickBooks, run this step to close all receivers that have been paid.

If you have entered receivers into both pc/MRP and QuickBooks and not closing your pc/MRP receivers, run this step to close all open pc/MRP receivers that already exist in QuickBooks. If QuickBooks has all the open receivers as of the transfer date, run this step to close all receivers in pc/MRP.

Pressing the Set-up Initial AP button on the QuickBooks Default Settings screen from within pc/MRP will display the Receiver Closer screen shown below.



This screen allows you to set-up the initial export of open (unpaid) receivers with vendor invoice number into QuickBooks. Only receivers that are not marked complete and have a vendor invoice number will be exported and included in the AP w Debit Memos Total. This screen will display the first vendor invoice number it finds in a receiver. If you enter a vendor invoice number into a receiver or it already has a vendor invoice number, every line item on that receiver will be populated with that vendor invoice number when you press the OK button.

This screen does not export the open receivers into QuickBooks. It allows you to set up the receivers for the initial export into QuickBooks.

Clicking on the Set-up AP button scans each receiver to determine the AP total and displays the above AP screen. The AP total is equal to the amount due - amount paid for the following receiver line items and debit memos:

- All open receivers and debit memos with vendor invoice numbers.
- If one or more line items in a receiver /debit memos are marked as open, all the line items and associated debit memos are temporarily marked as open and are included in the AP total. They will be returned to original state after the export if you did not specify that exported receivers be marked as complete, (if amount paid - amount due >= 0 replace complete with "Y")

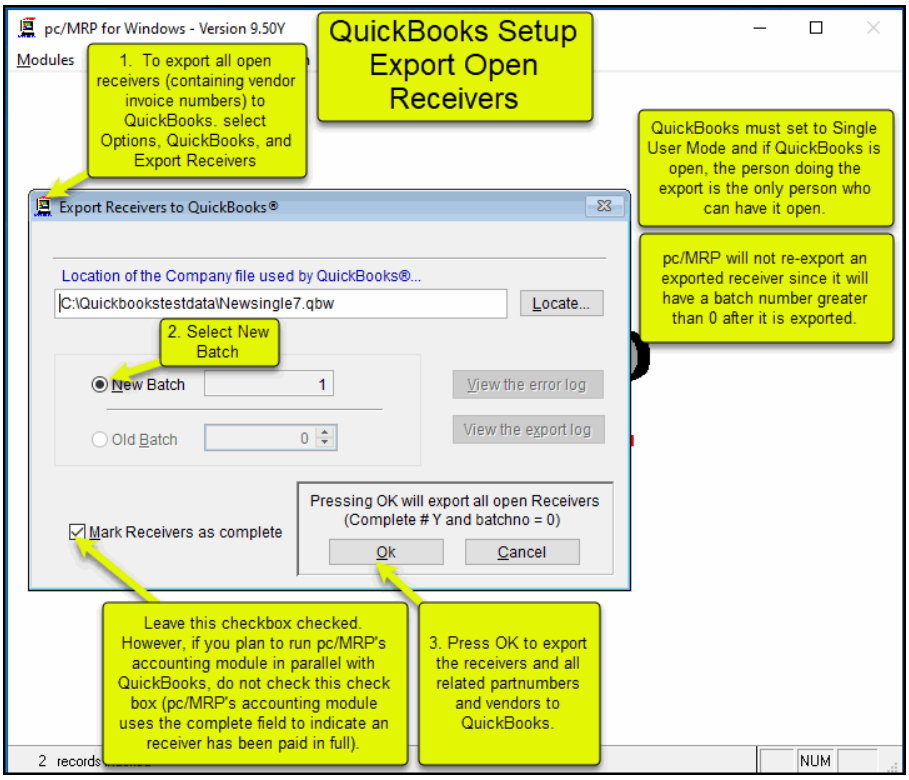
Scroll the receivers and check the complete check box for all paid receivers and debit memos and add the vendor invoice number to all receivers that you wish to export, until the AP with Debit Memo Total is correct.

If you check a receiver as complete, the entire receiver will be marked as complete by inserting a capital Y into the complete field of every line item on that receiver. This reduces the AP amount by the entire amount of the receiver (unless the amount due - amount paid equals 0). Receivers marked as complete will never be exported to QuickBooks.

Pressing the Cancel button will leave the receivers unchanged. The receiver complete and posted fields will remain as they were prior to entering this screen.

Pressing the OK button will not export the receivers. Pressing the OK button will temporarily change the receiver complete fields as per the changes you made with the closer. Once the receivers have been exported in the next step, if the "Marked Receivers as complete checkbox is checked, pc/MRP will enter a "Y" into the complete field of all receivers and debit memos associated with the export.

**Step 22. Export pc/MRP Open Receivers (AP)**




To export all open receivers, sales tax entities, divisions/classes, related part numbers, and related vendors that are not in QuickBooks, start pc/MRP, select Optional, QuickBooks Export, and Export Receiver records (Bills).

Select New Batch. If you wish to mark every receiver exported as complete, check the "Mark Receivers as complete" checkbox. If you have been running the pc/MRP accounting module and wish to continue to run in parallel with QuickBooks, do not check this check box (pc/MRP accounting uses the complete field to indicate a receiver has been paid in full).

Press OK, to export all open pc/MRP receivers. Only receivers that have a batch number of 0 (zero), are not complete (complete ≠ Y), and have a vendor invoice number in at least one line item, will be exported. Debit memos and partial payments will not be exported.

Once the export has been completed, pc/MRP will insert the batch number into the receivers that were exported and any open debit memos to prevent them from being exported again. To re-export a batch you would select Old Batch instead of New Batch.

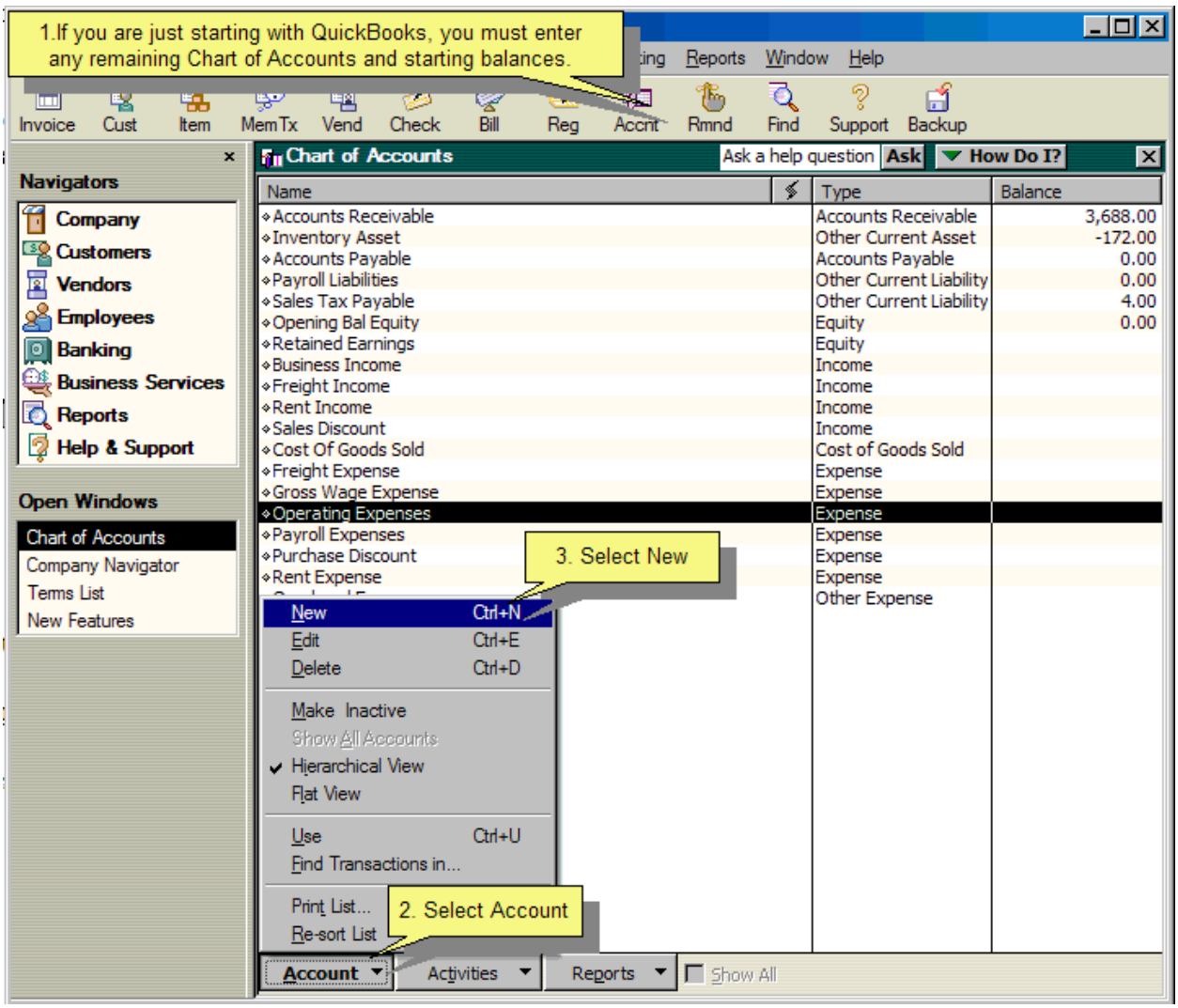
If any open receivers or debit memos were detected, pc/MRP will display a warning message asking you to open up the export log and scroll to the bottom of the file for a list of partial payments and debit memos. Print this list out by selecting File and Print, as you will need this list on the next step. Enter the debit memos and partial payments by hand into QuickBooks. The total amount displayed on the Export Log Report is a sum of the following calculation:

Round(Cost*QtyRec*(1-(Discount/100))*(1+(TaxR/100.00))+Freight, 2)

pc/MRP receiver numbers will have a suffix of R and will be listed in QuickBooks Memo column. Vendor invoice numbers appear under QuickBooks Number column. In the future:

- Use pc/MRP to enter all receivers, add vendor invoice number to the first line item of the receiver, and export them to QuickBooks once a day.
- Use QuickBooks to enter all vendor payments and debit memos.

**Step 23. Enter the Remaining Chart of Accounts and Balances into QuickBooks**

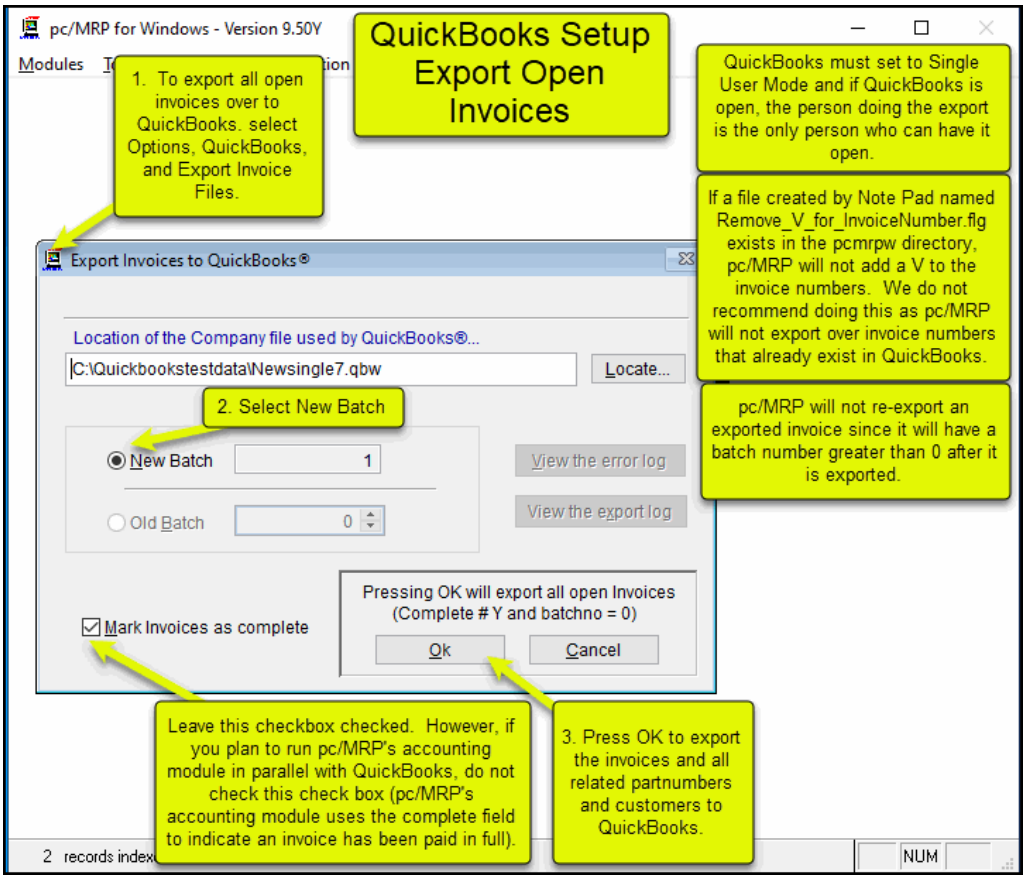



<u>If you have been running QuickBooks prior to this implementation</u>, you can skip this step.

<u>If are just starting with QuickBooks</u> you must enter the remaining chart of accounts and their balances into QuickBooks as of the day of the initial transfer.

### 16.16.3 Exporting Invoices to QB on a Daily Basis

Once you have completed the initial implementation steps (1 - 23), you can export invoices from pc/MRP into QuickBooks on a daily basis. Before exporting, make a backup of the pc/MRP database files and your QuickBooks .qbw file as per Step 1. To export, from within pc/MRP, select Optional, QuickBooks Export, and Export Invoice.




Select New Batch. If you wish to mark every invoice exported as complete, check the "Mark Invoices as complete" checkbox. If you have been running the pc/MRP accounting module and wish to continue to run in parallel with QuickBooks, do not check this check box (pc/MRP accounting uses the complete field to indicate an invoice has been paid in full). If you do run in parallel, you must export invoices before you receive payment for them.

Press OK to export all open pc/MRP invoices. pc/MRP will only export invoices where the batch number is 0 (zero) and the invoice is not complete (complete ≠ Y). Credit memos and partial payments will not be exported.

pc/MRP invoice numbers will have a prefix of V and will be listed in QuickBooks Number column. The V prefix is intended to help identify invoices imported from pc/MRP.

**Note:** If a flag file, '**REMOVE_V_FOR_INVOICENUMBER.FLG**' is present, the 'V" will not be prefixed to the invoice number. This option is only recommended for companies just starting with QuickBooks.

The export will insert all customers, part numbers, classes, account numbers, etc related to the exported invoices into QuickBooks, if QuickBooks does not contain those items. If QuickBooks contains those items, the export will not update the items.

Component and assembly part numbers will be exported as non-inventory parts (parts classified as inventory parts make strange COGS entries when imported with receivers)

pc/MRP Part numbers marked as Labor will be exported as Service part numbers.

If a part exists in QuickBooks as an inventory part, the first time it is included in an invoice or receiver, pc/MRP will add that part back into QuickBooks as a non-inventory with a suffix of "(MRP)" and its inventory asset account appearing in the part's expense account field.

If you get an exceeded credit limit in pc/MRP error message, temporarily raise the customer's credit limit in pc/MRP and export again. If the error message indicates the customer's credit limit was exceeded from QuickBooks, temporarily raise the credit limit in QuickBooks and export again. Vendor or Customer's Name in pc/MRP started with a space. Edit the Name in pc/MRP and remover the space

To re-export a batch you would select Old Batch instead of New Batch. If you select this option, pc/MRP will export all invoices in that batch that QuickBooks does not have on the basis of invoice number.

The following paragraphs describe how pc/MRP exports various invoiced item types

**Inside Labor/Service Items**

Inside Labor/Service Items can be sold but not purchased
The Income account field must contain a QuickBooks income account
Use an income account for services provided to your customers (such as field maintenance)
When Invoiced:
If the item does not exist in QuickBooks
    pc/MRP will export the item with its income account to QuickBooks
    If the income account is empty, pc/MRP will use the default income account
If the item does exist in QuickBooks
    pc/MRP will check the account type in QuickBooks is an income account
The default AR account found in pc/MRP will be debited
The item's income account found in QuickBooks will be credited*
If the discount does not equal $0.00
    The default Sales Discount account will be credited for the amount of the tax
If the freight does not equal $0.00
    The default Freight Income account will be credited
The default Sales Tax Liability account will be credited

**Non-Inventory Items**

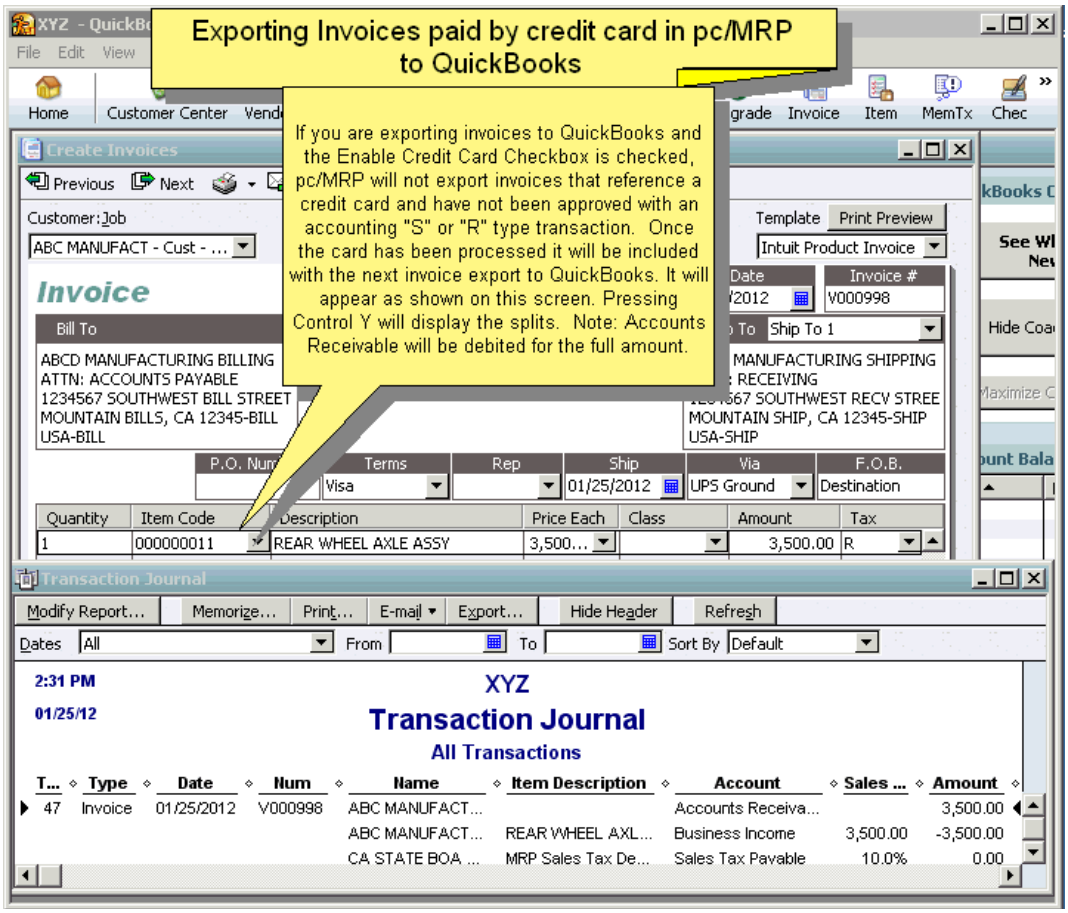
A Non Inventory Item can be purchased and sold
The Asset/Expense account field must contain a QuickBooks expense account
The Income account field must contain a QuickBooks income account
Use an expense account for supplies (office and shop)
Use an income account for income
When Invoiced:
If item does not exist in QuickBooks
    pc/MRP will export the item with its income and expense accounts to QuickBooks
    If the part number of the invoice being exported is NA
        Pc/MRP will use the default operating expense account
    Else
        pc/MRP will create an error message if the asset/expense account is empty
    If the income account is empty, pc/MRP will use the default income account
If item does exist in QuickBooks
    pc/MRP will check the account type in QuickBooks is an income account
The default AR account found in pc/MRP will be debited
The item's income account found in QuickBooks will be credited*
If the discount does not equal $0.00
    The default Sales Discount account will be credited for the amount of the tax
If the freight does not equal $0.00
    The default Freight Income account will be credited
The default Sales Tax Liability account will be credited

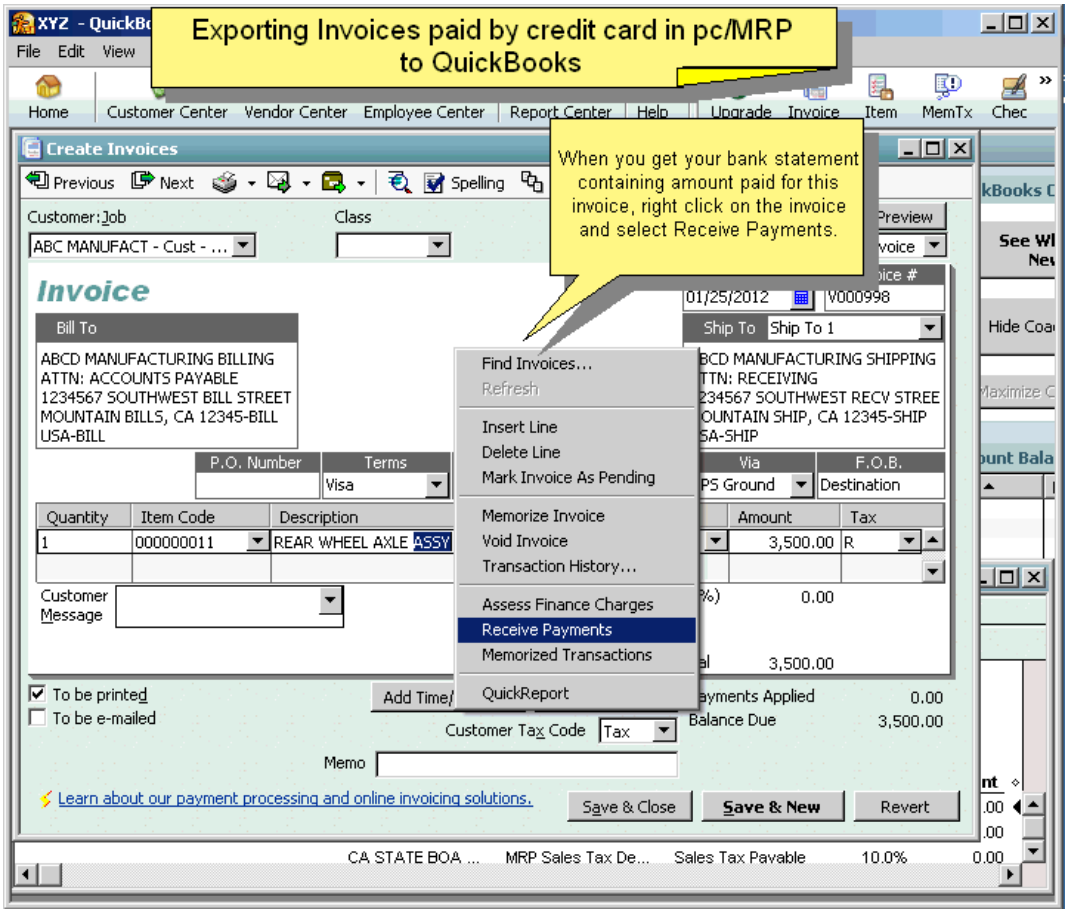
**Inventory Part and Assembly Items**

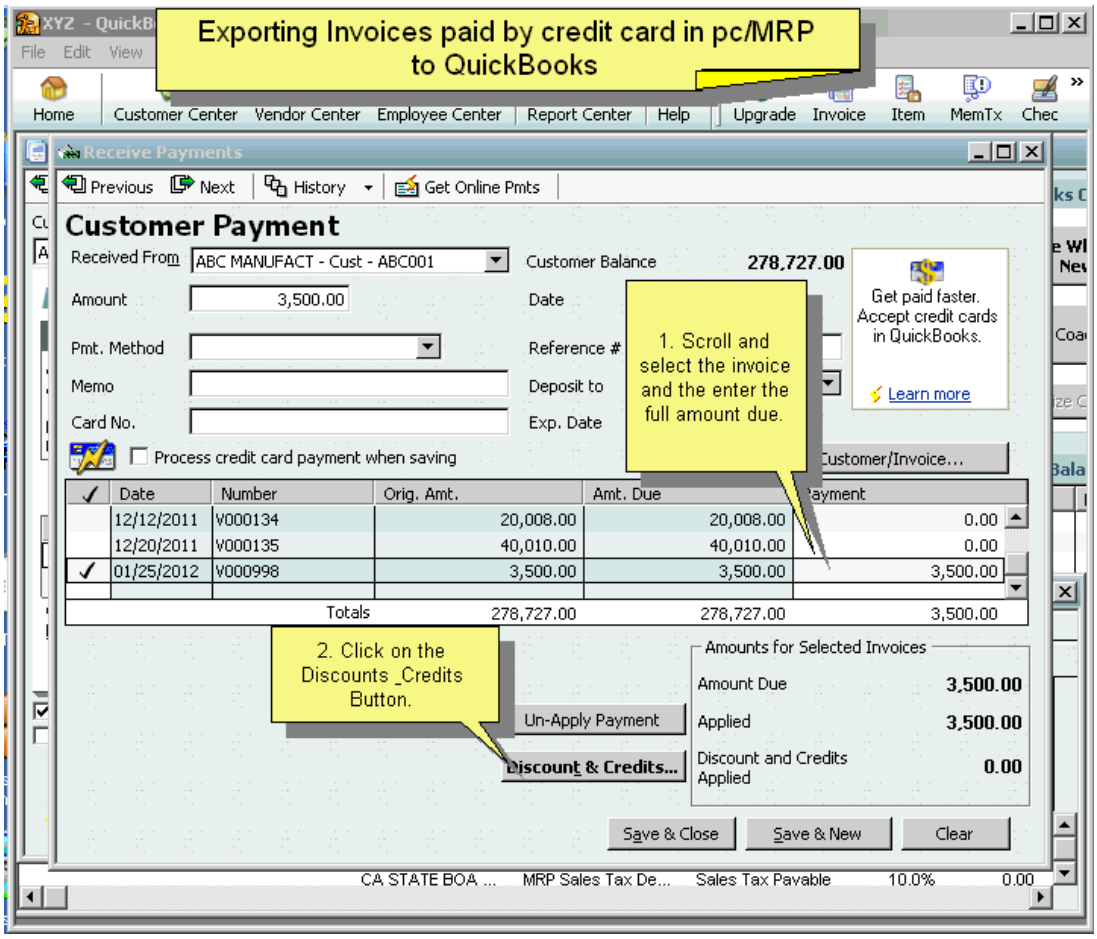
A Part and Assembly Item can be purchased and sold
The Asset/Expense account field should be filled with a QuickBooks inventory asset account
The COGs account field should be filled with a QuickBooks COGs account
The Income account field should be filled with a QuickBooks Income Account
If any of the above fields are not filled out pc/MRP will use its default QB accounts
When Invoiced:
If the item does not exist in QuickBooks
    pc/MRP will export the item with its expense and income accounts to QuickBooks
    If the accounts are empty, pc/MRP will use the default Inventory and income accounts
If item does exist in QuickBooks
    pc/MRP will check that the expense account exists and is active in QuickBooks
    pc/MRP will check that the income account exists and is active in QuickBooks
The default AR account found in pc/MRP will be debited
The item's income account found in QuickBooks will be credited*
If the discount does not equal $0.00
    The default Sales Discount account will be credited for the tax
If the freight does not equal $0.00
    The default Freight Income account will be credited
The default Sales Tax Liability account will be credited
If the item's COGs (comp+outlabor+inlabor+ovrhd) amount is greater than $0.00
    The item's COGs acct or default COGs acct will be debited for that amount
If the item's component amount is greater than $0.00
    The item's asset/exp acct or default Inventory acct will be credited for that amt
If the item is inside labor amount is greater than $0.00
    The default gross wage account will be credited for that amount
If the item's overhead amount is greater than $0.00
    The default overhead account will be credited for that amount

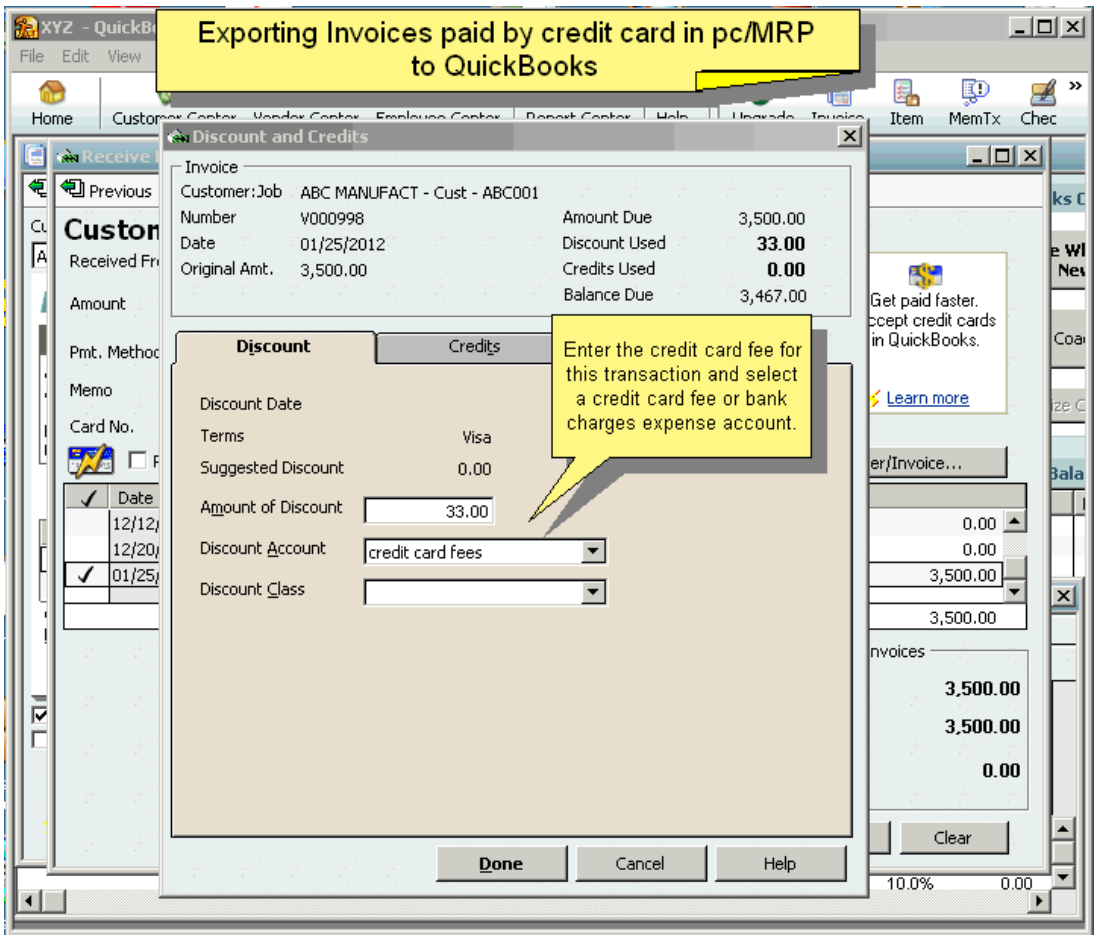
* It is important to note, that once QuickBooks has the part, it will credit the income account found in QuickBooks. Therefore, if you wanted to change the account to be credited when an item is invoiced or received and that part exists in QuickBooks, you would change the income account in QuickBooks instead of the income account in pc/MRP.

## 16.16.3.1 Exporting Invoices paid by credit card in pc/MRP to QuickBooks



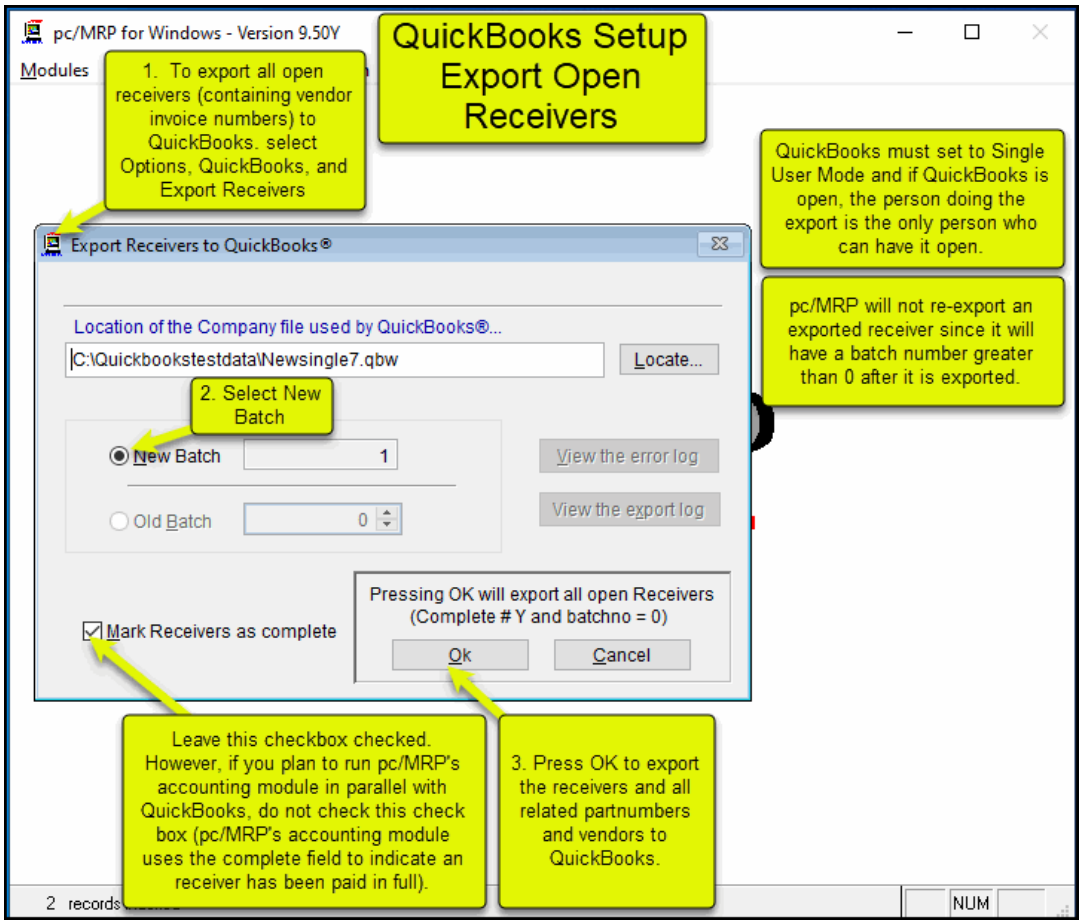




Exporting Invoices paid by credit card in pc/MRP to QuickBooks
Receive Payments
Previous
Next
History
Get Online Pmts
Customer Payment
Received From
ABC MANUFACT - Cust - ABC001
Customer Balance
278,727.00
Amount
3,500.00
Date
Pmt. Method
Reference #
Memo
Deposit to
Card No.
Exp. Date
Process credit card payment when saving
Customer/Invoice...
Get paid faster. Accept credit cards in QuickBooks.
Learn more
1. Scroll and select the invoice and the enter the full amount due.
Date
Number
Orig. Amt.
Amt. Due
Payment
12/12/2011
V000134
20,008.00
20,008.00
0.00
12/20/2011
V000135
40,010.00
40,010.00
0.00
01/25/2012
V000998
3,500.00
3,500.00
3,500.00
Totals
278,727.00
278,727.00
3,500.00
2. Click on the Discounts _Credits Button.
Amounts for Selected Invoices
Amount Due
3,500.00
Applied
3,500.00
Discount and Credits Applied
0.00
Un-Apply Payment
Discount & Credits...
Save & Close
Save & New
Clear
CA STATE BOA ...
MRP Sales Tax De...
Sales Tax Payable
10.0%
0.00


Exporting Invoices paid by credit card in pc/MRP to QuickBooks
Discount and Credits
Invoice
Customer:Job
ABC MANUFACT - Cust - ABC001
Number
V000998
Date
01/25/2012
Original Amt.
3,500.00
Amount Due
3,500.00
Discount Used
33.00
Credits Used
0.00
Balance Due
3,467.00
Discount
Credits
Enter the credit card fee for this transaction and select a credit card fee or bank charges expense account.
Discount Date
Terms
Visa
Suggested Discount
0.00
Amount of Discount
33.00
Discount Account
credit card fees
Discount Class
Done
Cancel
Help

### 16.16.4 Exporting Receivers to QB on a Daily Basis

Once you have completed the initial implementation steps (1 - 23), you can export receivers from pc/MRP into QuickBooks on a daily basis. Accounting should receive a copy of each receiver and packing list from the receiving dock. When the vendor invoices arrive, accounting must edit the receivers and add the vendor invoice numbers, so that the new receivers with vendor invoice numbers and batch number 0 will be included in the next export. Before exporting, make a backup of the pc/MRP database files and your QuickBooks company .qbw file as per Step 1. From within pc/MRP select Optional, QuickBooks Export, and Export Receiver files.




Select New Batch. If you wish to mark every receiver exported as complete, check the "Mark Receivers as complete" checkbox. If you have been running the pc/MRP accounting module and wish to continue to run in parallel with QuickBooks, do not check this check box (pc/MRP accounting uses the complete field to indicate a receiver has been paid in full). If you do run in parallel you must export receivers before you receive payment for them.

Press OK, to export all open pc/MRP receivers. Only receivers that have a batch number of 0 (zero), are not complete (complete ≠ Y) and have a vendor invoice number in at least one line item will be exported. Debit memos and partial payments will not be exported.
Receivers that have a batch number of 0, are not marked complete, and do not have a vendor invoice number in them will be listed as receivers to be exported in a future batch.

pc/MRP receiver numbers will have a prefix of R an will be listed in QuickBooks Memo column. Vendor invoice numbers appear under QuickBooks Number column.

The export will insert all vendors, part numbers, classes, account numbers, etc related to the exported receivers into QuickBooks, if QuickBooks does not contain those items. If QuickBooks contains those items, the export will not update the items.

Component and assembly part numbers will be exported as non-inventory parts (parts classified as inventory parts make strange COGS entries when imported with receivers)
pc/MRP Part numbers marked as Labor will be exported as Service part numbers.

If a part exists in QuickBooks as an inventory part, the first time it is included in an invoice or receiver, pc/MRP will add that part back into QuickBooks as a non-inventory with a suffix of "(MRP)" and its inventory asset account appearing in the part's expense account field.

To re-export a batch you would select Old Batch instead of New Batch. If you select this option, pc/MRP would re-export the receivers that QuickBooks does not have on the basis of vendor name and vendor invoice number.

The following paragraphs describe how pc/MRP exports various received item types:

**Outside Labor/Service Items**

Outside Labor/Service Items can be purchased but not sold
The Asset/Expense account field must be filled in with a QB asset, COGs, or expense account
Use an inventory asset account for outside labor that is included in your BOMs
Use a COGs account for outside labor that is not included in your BOMs
Use an expense account for outside labor not related to BOMs (IT services, etc.)
Use an equity account for services rendered by an owner of the company
When Received
If item does not exist in QuickBooks
pc/MRP will create an error message if the asset/expense account is empty
If not empty, pc/MRP will export the item with its asset/expense account
pc/MRP will use the default operating expense account
If the item does exist in QuickBooks
pc/MRP will check the account type in QuickBooks is an asset or expense account
The item's expense account found in QuickBooks will be debited*
The default AP account found in pc/MRP will be credited
If the freight does not equal $0.00
The default Freight Expense account found in pcmrp will be credited

**Non-Inventory Items**

A Non Inventory Item can be purchased and sold
The Asset/Expense account field must contain a QuickBooks expense account
The Income account field must contain a QuickBooks income account
Use an expense account for supplies (office and shop)
Use an income account for income
When Received
If the item does not exist in QuickBooks
pc/MRP will export the item with its income and expense accounts to QuickBooks
If the part number of the receiver being exported is NA
pc/MRP will use the default operating expense account
If the part number of the receiver being exported is not NA
pc/MRP will create an error message if the asset/expense account is empty
If the item does exist in QuickBooks
pc/MRP will check the account type in QuickBooks is an expense account
The item's expense account found in QuickBooks will be debited*
The default AP account found in pc/MRP will be credited
If the freight does not equal $0.00
The default Freight Expense account found in pcmrp will be credited

**Inventory Part and Assembly Items**

A Part and Assembly Item can be purchased and sold
The Asset/Expense account field should be filled with a QuickBooks inventory asset account
The COGs account field should be filled with a QuickBooks COGs account
The Income account field should be filled with a QuickBooks Income Account
If any of the above fields are not filled out pc/MRP will use its default QB accounts
When Received
If the item does not exist in QuickBooks
    pc/MRP will export the item with its expense and income accounts to QuickBooks
    If the accounts are empty, pc/MRP will use the default Inventory and income accounts
If the item does exist in QuickBooks
    pc/MRP will check that the expense account in QuickBooks is an asset account
The item's expense account found in QuickBooks will be debited*
The default AP account found in pc/MRP will be credited
If the freight does not equal $0.00
    The default Freight Expense account found in pcmrp will be credited

* It is important to note, that once QuickBooks has the part, it will debit the expense account found in QuickBooks. Therefore, if you wanted to change the account to be debited when an item is received and that part exists in QuickBooks, you would change the expense account in QuickBooks instead of the expense account in pc/MRP.

** pc/MRP will allow you to insert a COGS type account in a non-inventory part's Asset/Expense field, provided you create a text file named "ALLOWCOGS.FLG" in the pcmrpw directory. The COGS account will be debited when the non-inventory item is received. WE DO NOT RECOMMEND USING THIS OPTION AND BELIEVE IT REPRESENTS POOR ACCOUNTING PRACTICES AT THE LEAST.

**Assigning a Chart of Account number to a non-inventory expense item with or without a part number in a Purchase Order.**

Solution 1, without a part number:

1. Go to Optional, QuickBooks Export, Set Exporter Default Settings, Set-up Account Names, and select a QuickBooks Chart of Account for Operating Expense.
2. From then on, use 'NA' as a part number in the Purchase Order and edit the description to describe what you are ordering. QuickBooks will create an 'NA' part number in QuickBooks if one does not exist already.

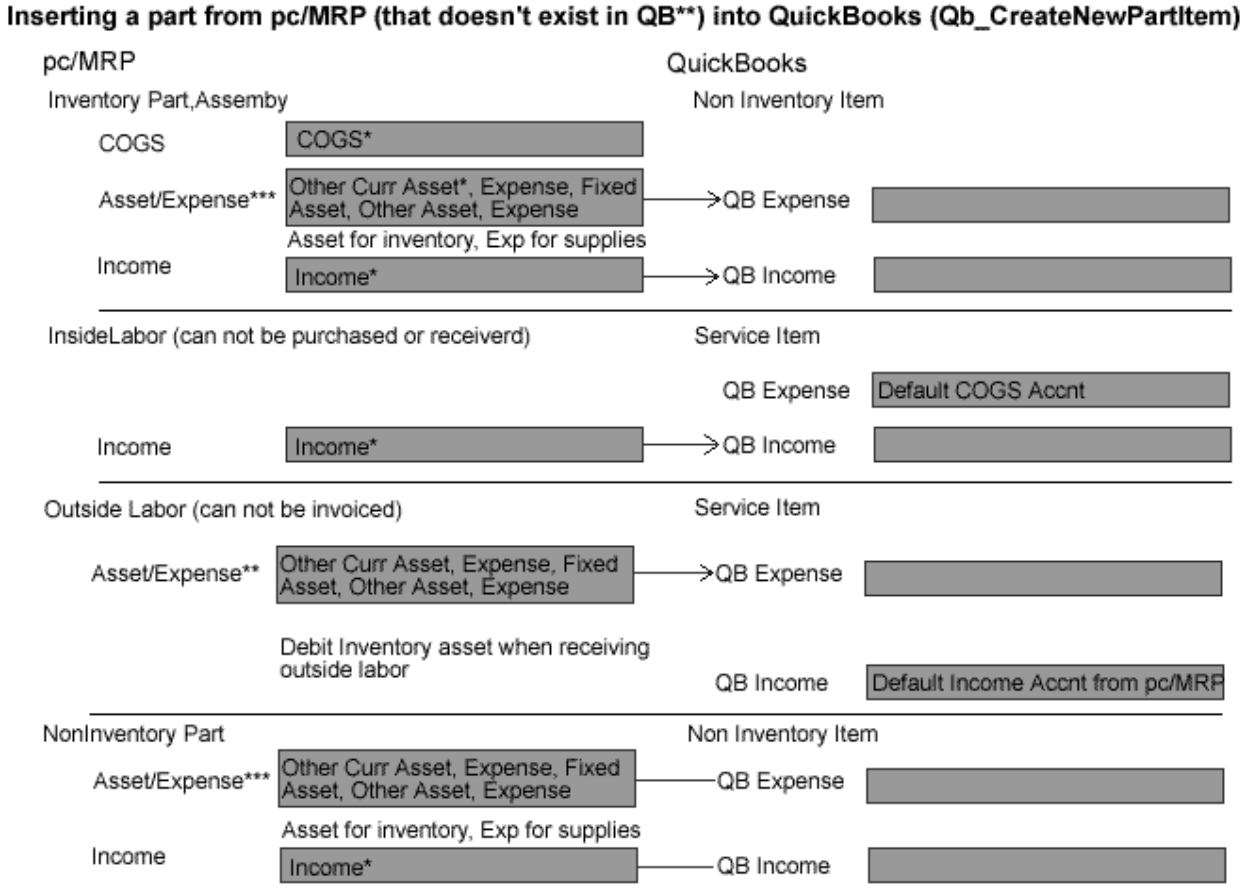
Solution 2, with part numbers:

1. Create a couple of generic part numbers in pc/MRP such as 'Shop Supplies', 'Office Supplies', etc.
2. Edit the new generic part numbers, select the QuickBooks tab, and select the QuickBooks expense account to be debited. Repeat for each generic part number.
3. When using a generic non-inventory part number in a Purchase Order, edit the description to describe what you are ordering.

### 16.16.5 pc/MRP's Logic

#### 16.16.5.1 Inserting a Part Number into QuickBooks

The diagram below illustrates how pc/MRP exports a part to QuickBooks if that part does not exist in QuickBooks or it exists in QuickBooks as an inventory type part.




* If there is no account or an invalid account in the part's account field, pc/MRP will insert a default account number into QuickBooks.
** If the part exists in QB as an inventory part, but not as a non inventory part, pc/MRP will insert it as a new non-inventory item with an (MRP) suffix attached to the name or the part's parent's name.
*** The Asset/Expense account should contain an asset account if it is an inventory part or an expense account if it is a non inventory part number(office supplies, etc.)

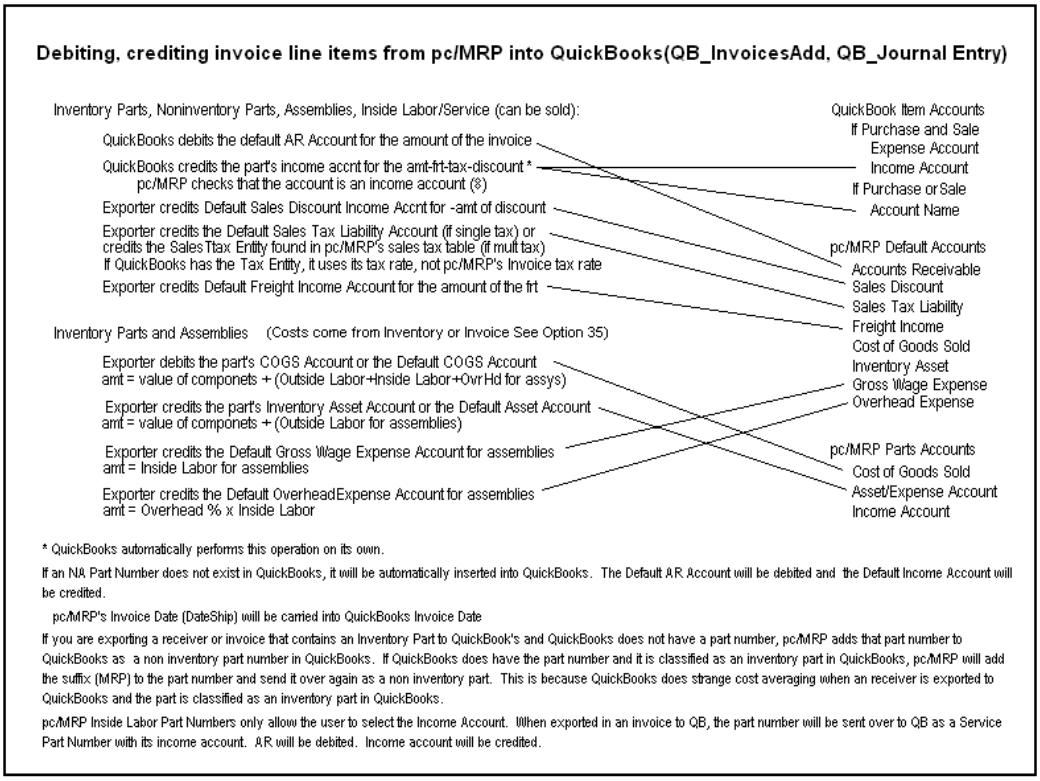
If a NA part number exists in an invoice or receiver that is being exported to QuickBooks, and QuickBooks does not contain a NA part number, pc/MRP will insert the NA partnumber into QuickBooks as a non-inventory item with the default income and expense accounts.

Inserting the Same Part Number into QuickBooks (to overcome QB's item limit)

Currently QuickBooks Pro has a limit of 14,500 total items (parts, vendors, customers, employees, terms, chart of account numbers). QuickBooks Enterprise expands the limit to 30,000 items. For this reason, you may want to give the same QB Inventory ID (QbPartID) to all of your pc/MRP part numbers. Once this part is imported into QuickBooks, QuickBooks will credit its Income Account whenever it's invoiced and debit its expense account whenever it is received as per the following diagrams.

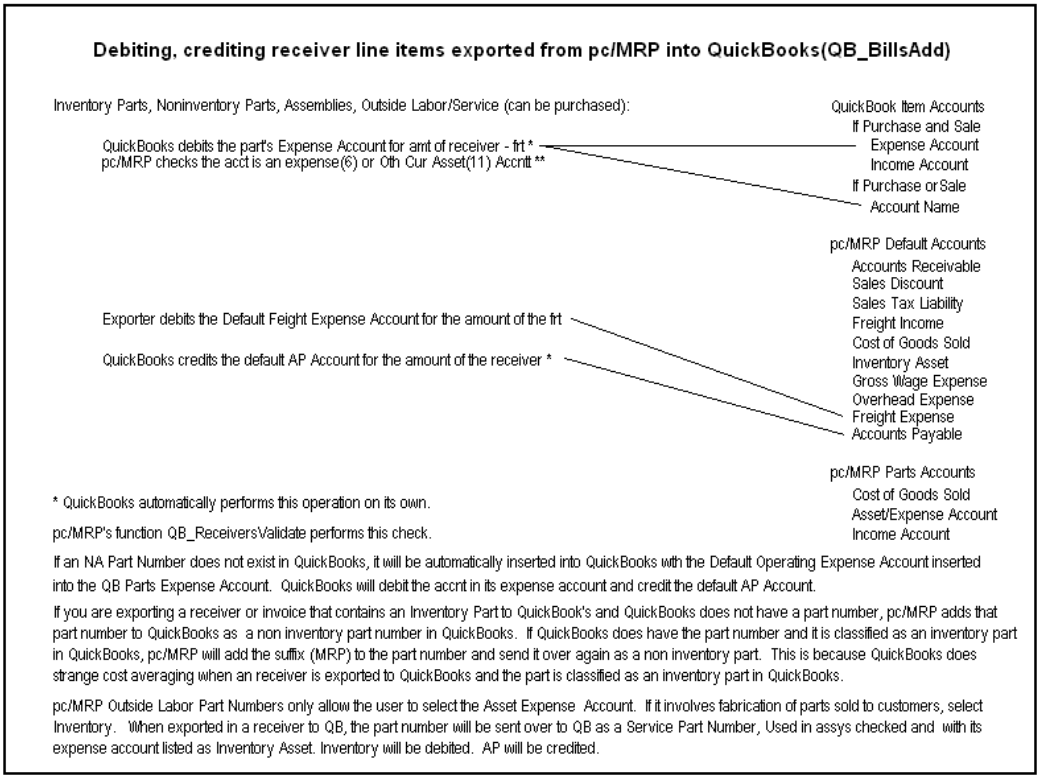
### 16.16.5.2 Debiting and Crediting Invoice Logic

The diagram below illustrates where pc/MRP's export invoice gets its debits and credits




### 16.16.5.3 Debiting and Crediting Receiver Logic

The diagram below illustrates where pc/MRP's export receiver gets its debits and credits.



### 16.16.5.4 Exporting Invoices to QuickBooks Pseudo Code

The following pseudo code describes how pc/MPR exports invoices to QuickBooks. Credit Card logic is shaded. QuickBooks Module activation sets Invoice.BatchNo to -1 for Complete = Y and BatchNo = 0. This keeps pc/MRP from exporting over invoices that have been marked as complete and have CreditCard in the CheckNo field (this is historical data and should not be exported to QB.

**Function QB_Export**
Creates a CreditProvider Object
Calls QB_BuildPcmrpCursors()
Calls QB_InvoicesValidate()
Calls QB_CreditCardExclude()
Calls QB_InvoicesAdd()
If SchedulerInProcess()
  Calls QB_ReportGenerate()

**Function QB_BuildPcmrpCursors()**
If exporting invoices
  Creates an ExportCursor with all invoices whose Batchno=0, not deleted, not complete, not a CM
  If Option 98, Credit Card Integration is enabled
    Include invoice that were charged and complete, BatchNo = 0 AND CheckNo = "CreditCard"
  Creates a cursor, CcExclude, to contain invoice numbers that have not been processed (approved).

**Function QB_InvoicesValidate()**
Scan the Invoice records in the ExportCursor
  If Option 98 Credit Card Enabled and references a credit card and credit card was not charged
    Insert the invoice into the CcExclude cursor
  Case the part number = "NA" and an item named "NA" does not exist in QuickBooks
    Add an NA non-inv item to QuickBooks with the default expense and income accounts
  Case the part number exists in QuickBooks and is an Inventory Item
    **Qb_CreateNewPartItem()** Adds part number to QB, see Qb_CreateNewPartItem section
  Case the part exists in QuickBooks and the QuickBooks Account Type is not an income account
    If we are adding the part to QuickBooks for the first time
      (Invoice# Item#) The pc/MRP part (Partno) does not credit an Income type account
    If we are not adding the part to QuickBooks
      (Invoice# Item#)The QuickBooks part(Partmast.QbPartId)does not credit an Income acct
  Case the part exists in QuickBooks and the QuickBooks Expense Account is not active
    (Invoice# Item#)The QuickBooks acct (QbParts.IncomeAccnt) has been marked as inactive in QB
  Case the part number does not exist in QuickBooks
    **Qb_CreateNewPartItem()** Adds the part number to QB, see Qb_CreateNewPartItem section.

**Function QB_CreditCardExclude()**QB_CreditCardExclude
Excludes Invoices found in ccExclude cursor by setting pcmrp_header.DupSkip to .T.

**Function QB_InvoicesAdd()**
Debits the default Accounts Receivable Account for the full amount of the invoice
Credits the parts income account found in QuickBooks
If you collect sales tax and the sales tax ≠ 0, credits the default sales tax liability acct for the amt of the tax
If the discount ≠ 0, credits the default sales discount account for the amount of the discount
If the freight ≠ 0, credits the default freight income account for the amount of the freight

**Function QB_ReportGenerate()**
Creates a CcExclude cursor if it doesn't already exist.
If Option 98, Credit Card Enabled
  Alters the query expression to (Complete ≠ Y OR CheckNo = "CreditCard")
Set relation into the CcExclude Cursor
If Option 98, Credit Card Enabled
  Scan the Exports Cursor, add any invoice whose CheckNo ≠ "CreditCard" to CcExclude Cursor
The QbExportNext.frx will not show any invoice found in the CcExclude Cursor

If the part is not an NA part and it is an inventory part or assembly
  **QB_JournalEntryAddCOGS()** Credit COGS,debit inventory, labor,overhead using default accts.

**Note:** pc/MRP gets the inventory and COGs sold dollar amount from the partmaster. Option 35 determines if the average or standard cost is sent to QuickBooks.

### 16.16.5.5 Exporting Receivers to QuickBooks Pseudo Code

The following pseudo code describes how pc/MPR exports receivers to QuickBooks. The error messages are displayed in the same text as this sentence.

**Function QB_BuildPcmrpCursors()**
If exporting receivers
  Creates an ExportCursor with all receivers whose Batchno=0, not deleted, not complete, not a DM and contains a vendor invoice number

**Function QB_ReceiversValidate()**
Scan the Invoice records in the ExportCursor
Case the part number = "NA" and an item named "NA" does not exist in QuickBooks
  Add an NA non-inv item to QuickBooks with the default expense and income accounts
Case the part number exists in QuickBooks and is an Inventory Item
  **Qb_CreateNewPartItem()** Adds the part number to QuickBooks, see Qb_CreateNewPartItem section
Case the part exists in QuickBooks and the QuickBooks Account Type is not an Expense or Asset Acct
  If we are adding the part to QuickBooks for the first time
    (Receive# Item#) The pc/MRP part(Partno) does not expense an Asset or Expense acct
  If we are not adding the part to QuickBooks
    (Receive# Item#) The QuickBooks part(Partno) does not expense an Asset or Exp acct
Case the part exists in QuickBooks and the QuickBooks Expense Account is not active
    (Receive# Item#)The QuickBooks acct (QbParts.ExpenseAccnt) has been marked as inactive in QB
Case the part number does not exist in QuickBooks
  **Qb_CreateNewPartItem()** Adds the part number to QuickBooks, see Qb_CreateNewPartItem section

**Function QB_BillsAdd()**
Credits the default Accounts Payable Account for the full amount of the receiver
Debits the part's expense account or account name account found in QuickBooks
If the freight ≠ 0, debits the default freight expense account for the amount of the freight

### 16.16.5.6 Exporting Parts to QuickBooks Pseudo Code - Qb_CreateNewPartItem()

The following pseudo code describes how pc/MPR exports parts to QuickBooks. The error messages are displayed in the same text as this sentence.

**Function Qb_CreateNewPartItem()**

If part is a labor part (Partmast.Part_assy = “L”)
  QuickBooks Item Type = “Service” (lcItemType = "Service")
  If it is Outside Labor part (PartMast.Outsource = .T.)
    QuickBooks Expense Account = the part’s pc/MRP’s Asset/Expense account
  If it is an Inside Labor part (Partmast.Outsource = .F.)
    If the part’s pc/MRP’s Asset/Expense Account is empty
      QuickBooks Expense Account = pc/MRP’s default COGs Account
    If the part’s pc/MRP’s Asset/Expense Account is not empty
      QuickBooks Expense Account = the part’s pc/MRP’s COGs Account
If the part is a part or assembly
  QuickBooks Item Type = “Non Inventory” (lcItemType = "Non Inventory")
  If the part is a Non Inventory part in pc/MRP (Part_Assy = "P" AND OutSource = .T.)
    QuickBooks Expense Account = the part’s pc/MRP’s Asset/Expense account
  If the part is an Inventory Part or an Assembly
    If the part’s pc/MRP’s Asset/Expense Account is empty
      QuickBooks Expense Account = pc/MRP’s default Inventory Asset Account
    If the part’s pc/MRP’s Asset/Expense Account is not empty
      QuickBooks Expense Account = the part’s pc/MRP’s Asset/Exp Account
If the parts pc/MRP QB Income Account is empty
  QuickBooks Income Account = pc/MRP’s default Income Account
If the parts pc/MRP QB Income Account is not empty
  QuickBooks Income Account = the part’s pc/MRP’s Income Account
Select QbAccounts and check the above accounts
Case the parts pc/MRP Asset/Exp account is empty
  If it is a labor part
    Partno is an outside labor item that cannot be exported to QuickBooks because it does not have an asset/expense account set in inventory.
  If it is a non-labor part
    Partno is a non-inventory part that cannot be exported to QuickBooks because it does not have an asset/expense account set in inventory
Case the expense account not found in QuickBooks:
  Partno: (Partno) references an asset/expense account (lcExpense) that does not exist in QuickBooks.
Case the expense account is not active in QuickBooks
  Partno: (Partno) references an account (lcExpense) that exists in QuickBooks but is not active
Case the income account is not found in QuickBooks
  PartNo: (Partno) references an account (lcIncome) that does not exist in QuickBooks.
Case the expense account is empty
  PartNo: (ExportCursor.Partno) does not reference a valid asset/expense account.

**16.16.5.7 QuickBooks Tab on the Partmaster Screen Pseudo Code -**

pc/MRP Version 8.15A and higher no longer query QuickBooks for a list of accounts from QuickBooks every time you click on pc/MRP's Inventory Module's QuickBooks Tab. Instead it uses a permanent copy of QuickBooks Chart of Accounts named QbAccountsDbf.dbf that is created whenever it does not exist; invoices are exported to QuickBooks, receivers are exported to QuickBooks, or pc/MRP's Default Chart of Account Settings are accessed.

Advantages creating a dbf file for the partmaster screen
- Faster, no need to establish a connection to QB
- Computers without a copy of QuickBooks can access QB Account Info

Advantages of continuing to use cursors in all other instances
- No concurrency issues

**Partmaster screen QuickBooks() (Code for cached copy of QB parts and accounts in yellow)**

```
PartScr.Page6.Activate()
IF !USED("QbAccounts")
    IF(!FILE2("QbAccountsDbf.dbf") OR !FILE2("QbPartsDbf.dbf"))
        QbAccountsPopulate()
        QbPartsPopulate()
    ELSE
        Create QbParts cursor and QbAccounts cursor from dbfs
        Creates AcctType Index for QbAccounts cursor
    ENDIF
ENDIF
    QbAccountsCombobox.Vcx
            LoadList()
            Select QbAccount
            Set Order to AcctType
    PartScr.Release()
    Closes QbAccounts and QbParts
```

**QbAccountsPopulate():**

```
If QbAccounts is not used
        Create a new QbAccounts Cursor
If this function is called by Qb_Export()
        Create a new QbAccountDbf.dbf file
Closes QbAcccountsDbf
```

**QbPartsPopulate()**

```
If QbParts is not used
        Create a new QbParts Cursor
If this function is called by Qb_Export()
        Create a new QbPartsDbf.dbf file
Closes QbPartsDbf
```

### 16.16.6 Troubleshooting

Creating response and request logs (when asked to by Software Arts, Inc.)

pc/MRP can fill an XML request log file if a blank file is created with Notepad exists in the pcmrpw directory with the same name as the function that produced the error with a .txt extension. To fill a response log file, create a blank file with the name QB_SubmitRequest.xml . See QB_Functions.QB_WriteResponseLog(). The following is a list of functions that can fill a log:

QB_AccountsPopulate
QB_BillsAdd
QB_ClassesPopulate
QB_CustomersPopulate
QB_DuplicateDetect
QB_EmployeesPopulate
QB_EXPORT
QB_HostQuery
QB_InvoicesAdd
QB_OtherNamesPopulate
QB_SalesTaxCodesPopulate
QB_ShipMethodsPopulate
QB_TermsPopulate
QB_VendorsPopulate

The command to render the .txt or .xml in indented XML would be entered into the command line as follows:
STRTOFILE(INDENTXML(FILETOSTR("qb_export.txt")),"qb_export.txt")

#### 16.16.6.1 QuickBooks did not export the invoice, receiver or general ledger entry.

The invoice, receiver or GL entry had a cost of $0.00. "Do not sell to Overdue Customers" is checked in QB, Edit, Preferences, Sales and Customers. Un-check this setting. Find the invoice, set batch number to 0, Complete to blank and send invoice over in next export.

#### 16.16.6.2 Member FullName did not evaluate to an object

An item such as a preferred vendor or sale tax code for the part was deleted; however, the part kept the link to the vendor (QuickBooks does not display the link field). Simply add a preferred vendor or sale tax code to the part or update to the latest version of pc/MRP.

#### 16.16.6.3 Multiple users cannot log into QuickBooks

1. Make sure you are in multi-user mode (select File and switch to multi-user mode).
2. Everybody, including pc/MRP, must login with a unique user name. Check user names: Select Company, Set-up Users.
3. Un-select Automatic Update by selecting, File, Update Quickbooks, Options.

#### 16.16.6.4 List element is already in use . Error Code 3100

pc/MRP is trying to export an element (term, discount, item, customer, or vendor) that already exists in QuickBooks. If it is the same element type QuickBooks has and that element is marked as in-active. Edit that list and check the "Show All" checkbox. Change the name of the element or mark it as Active. If it is in another list, change either the QuickBooks or pc/MRP name.

**16.16.6.5 The vendor invoice numbers on the receivers listed here already exist in QuickBooks and cannot be exported.**

The vendor invoice numbers on receivers should be unique for each vendor from batch to batch (different vendors can have the same invoice number).

**16.16.6.6 Address exceeds 5-lines of 41-characters per line.**

If necessary (because all first 4 lines of address are used), QuickBooks will attempt to put the city, state, zip, and country into the 5th line. These 4 fields with the spaces and commas that QuickBooks adds cannot exceed 41-characters. Or, use only 3 of the first 4 lines.

**16.16.6.7 Bill's due date not incrementing properly.**

pc/MRP sends over 'NET 30' as one of its items to get it to increment properly in QuickBooks. Select 'Lists', Customer Vendor Profile, Terms, double-click on 'NET 30', and set the net due to 30.

**16.16.6.8 Error QB foundation class library not found.**

If QBFC 13.0 is installed, remove it by going to the Windows Control Panel, selecting Add or Remove programs. Once it is removed, re-install it within pc/MRP by selecting Optional, QuickBooks Default Settings or run QBFC13_0installer.exe in the pcmrpw directory. If all else fails, double-click on C:\Program Files\Intuit\QuickBooks Premier\re-boot.bat (your QuickBooks directory may be different).

**16.16.6.9 Error exporting receiver, duplicate invoice number in QB.**

pc/MRP export to QuickBooks allows one Vendor Invoice number for one Receiver number.
Two scenarios may crop up:

- Multiple invoice numbers for a multiple line receiver requires you to find the last receiver number (Modules, Receiver, Edit/View, scroll to bottom of list), add one to it and modify the receiver number and line number of the line item in question. **Option 74** must be set to allow modifying the Receiver number.
- Multiple receiver numbers for an invoice in the same batch requires you do #1 above and append a suffix, e.g. 'B', to the Vendor Invoice number of the receiver.

**16.16.6.10 The QuickBooks Application has refused to allow access because the specified QuickBooks company file is already in use by another user.**

- Start QuickBooks, select File and Switch to Single User Mode, then re-connect try the export again.
- pc/MRP stores the QBW path and name in a mapped drive or UNC mapped format and QuickBooks 'F2' function will show the QBW location in either mapped drive or UNC mapping format. Both locations must be the same. We recommend using the UNC drive format.
- QuickBooks is set to not close. Go to Edit, Preferences, General, and uncheck Keep QuickBooks running.
- As a last resort, rebuild the QuickBooks executable. Go to Control panel, Programs, QuickBooks, Remove, Rebuild.

**16.16.6.11 Error accessing QuickBooks. The QuickBooks application could not be started and may be damaged.**

- If you have a Windows Vista computer, click on the Start Button, Control Panel, User Accounts, and Turn User Account control On or Off, then reboot. After successfully accessing QuickBooks, change the setting back.
- Right-click on the pc/MRP desktop shortcut, select properties and ensure that the target and startup fields use UNC locations and not mapped drive locations. UNC locations are established by going through "Network" or "My Network Places" and not mapped drives.
- Replace the computer
- Reinstall QuickBooks.exe
- Use the QuickBooks Tool Hub, Program Problems

**16.16.6.12 The pc/MRP application has not accessed this QuickBooks company data file before.**

Follow the instructions in this Manual regarding initializing a connection to a QuickBooks file (16.16.2.7). You may have to remove pc/MRP from QB's integrated apps and reconnect pc/MRP.

**16.16.6.13 QBFC 13.0 cannot be removed because it is not listed in the ADD/REMOVE program list, yet pc/MRP will not re-install QBFC@ when selecting Optional, QuickBooks, and Default Settings.**

Click on the Windows Start button, select Run, enter 'REGEDIT ', select Menu Item EDIT, select FIND, enter QBFC 13.0, only check the 'Keys' checkbox, click the NEXT button. Select the QBFC 13.0.QBSessionManager, Select Menu Item File, Export, select a folder and give it a name to export the reg information (if something goes wrong, you can just double-click the reg file to merge it back into the registry). Rename the 'QBFC13_0.QBSessionManager' to 'xQBFC13_0.QBSessionManager'. Please note that there may be a 'QBFC13_0.QBSessionManager.1' and this must be exported and renamed as well. Exit the Regedit program and run pc/MRP. Select Optional Modules, QuickBooks Export, Default Settings an pc/MRP will re-install the correct QBFC 13.0 program.

**16.16.6.14 Starting QuickBooks gives the following error message: "You must log into Windows as a user with administrative privileges (error code (-6098,5).**

Your copy of QuickBooks is not registered as Multi-user. With QuickBooks open, click on menu item Help, Support, and contact Intuit support..

**16.16.6.15 QuickBooks Export Log (quickbooksexport.log) and / or QuickBooks Export Error Log (exportqberror.log) does not display.**

This happens if the '.log' files are not associated with MS Notepad. To associate '.log' files with MS Notepad.

1. use Windows Explorer,
2. right-click on one of the '.log' files,
3. select Properties,
4. select Change,
5. select Notepad,
6. select OK.

**16.16.6.16 Error extracting information from the external accounting application.**

- Validate the QBW file. In QuickBooks, File, Utilities, Validate.
- Remove the QBFC 13.0 in Windows Control Panel, Add/Remove Programs. Let pc/MRP re-install it by selecting Optional, QuickBooks, Default Settings.
- QBPartsdbf.dbf is corrupt. Use Windows Explorer to delete this file in the pcmrpw directory and run the export again.

**16.16.6.17 Export Anomaly, the Export was unable to update the cache file.**

QBPartsdbf.dbf or QBAccountsdbf.dbf could be locked or corrupt. Delete these two files in the pcmrpw directory. They will be re-created the next time an export is performed.

**16.16.6.18 Invalid characters were detected in the pc/MRP data as described below.**

- This error occurs when pc/MRP is validating new parts (QBPARTS), Addresses (QBADDRESSES), and divisions (QBCLASSES) to be added to QuickBooks from pc/MRP. You will find that the field in the error message contains an illegal character, which could include a 'carriage return'. Simply edit the part's partnumber, address, or division in pc/MRP to delete the illegal character.

- If the error message lists the DESCRIPTION field, hard carriage returns were entered into QuickBooks' Part Descriptions and were imported into pc/MRP. If so, you can remove the carriage returns by entering the following commands at pc/MRP's Command Line screen:

```
USE PARTMAST
REPLACE ALL DESCRIPT WITH CHRTRAN(DESCRIPT,CHR(10)," ")
USE RECEIVE
REPLACE ALL DESCRIPT WITH CHRTRAN(DESCRIPT,CHR(10)," ")
USE INVOICE
REPLACE ALL DESCRIPT WITH CHRTRAN(DESCRIPT,CHR(10)," ")
```

**16.16.6.19 Unable to switch to single-user mode in QuickBooks.**

Files on the server may be locked and/or not able to release a link between applications. QuickBooks support suggests re-booting the server.

**16.16.6.20 The QuickBooks application can not be started and may be damaged.**

Validate the QBW file in QuickBooks: While in QuickBooks, select File, Utilities, and Validate.

**16.16.6.21 PackageFromTheWeb Error Message**

If you get this error message the QBFC 13.0.exe file has been corrupt (most likely by a virus). Call Software Arts, Inc and allow them to transfer QBFC13_0installer.exe to your pcmrp directory and double click on it to install a new QBFC 13.0.exe file. If you can not delete the original QBFC13_0installer, you may need to rename it to QBFC13_0installer2.exe and double click on it.

**16.16.6.22 QuickBooks does not contain the invoice, receiver or GL entry**

- The invoice, receiver or GL entry was valued at a cost of $0.00.
- In one case, the customer's zip code was repeated in the country field. After the duplicate zip code was removed the invoice could be exported successfully.
- Invoice or Receiver was exported to another QuickBooks company QBW file. Hand enter the Invoice or Bill into QuickBooks
- Un-check Do not see to overdue customers in Preferences, Sales and Customers.

**16.16.6.23 QuickBooks cannot start because it is already running**

- Set the User Account Control to Off, reboot the PC and try again.
- In QuickBooks select Edit, Preferences, General, My Preferences, and uncheck Keep QuickBooks running. Do this for every PC that uses QuickBooks. Reboot and try again.

**16.16.6.24 Can not view QB accounts when setting default QB accounts**

- pc/MRP is not logged into QB with admin rights or full rights.

**16.16.6.25 User does not have permission for this feature**

If you are running 8.90z, 8.95K or lower: update for the latest revision, or return to Main Menu, go to a scroll window, then try to access this feature again.

**16.16.6.26 Error Accessing QuickBooks; pc/MRP is not allowed to automatically log into the selected QuickBooks company data file.**

If you are trying to establish a pc/MRP QuickBooks Connection, Turn off User Account Control (Control Panel, Change User Account Settings, drag the bar down to Never Notify" and reboot the PC). Try to establish the connection again. You can then return the User Account Control Setting back to its original setting.

**16.16.6.27 When testing the connection you get the message: This pc/MRP application has not accessed this QuickBooks company data file before. Follow the instructions in the pcmrp manual regarding initializing a connection to a QuickBooks file.**

You might not be logged in as Admin into QuickBooks.

**16.16.6.28 Can not open company file.**

You may have 2 copies of QuickBooks installed on your work station. pc/MRP will bind to the newest version of QuickBooks. If your QBW file is installed on the server and it is formatted for the older version, pc/MRP will not be able to connect to the QBW file formatted for the older version of QuickBooks. Install or update the New QuickBooks Database Server Manager (QBDBSM) on the server containing the older version QBW file. QuickBooks Database Server Manager is responsible for creating Network Data files (*.nd) for any company files stored on the host computer. Your new desktop version of QuickBooks will use the new QuickBooks Database Server Manager to access the .nd and .QBW files on the server. From then on everybody must use the new version of QuickBooks.

The folllowing link will explain how to:
1. Install OR update QuickBooks Database Server Manager
2. Setup the QuickBooks Database Server Manager to scan and monitor QB folders

https://community.intuit.com/articles/1502079-install-update-and-set-up-the-quickbooks-database-server-manager

**16.16.6.29 Error ##ID_STRING7## when trying to install the QBFC File**

You have a copy of Install Shield on your computer. Use another computer or rename or delete the InstallShield Folder and rung a known good commercial registry cleaner (not an online free registry cleaner). This folder may exist C:\Program Files (x86)\Common Files\InstallShield

**16.16.6.30 Error QuickBooks already has the company file open.**

Do not set both pc/MRPs and Quickbooks Shortcut to "Always run as

**16.16.6.31 Error Exceeded Credit Limit**

- Vendor or Customers name in pc/MRP starts with a blank character. Delete the space in pc/MRP and re-export to QuickBooks.
- If the customer or vendor in exceeded their credit limit in pc/MRP or QuickBooks, increase the credit limit and re-export to QuickBooks.

**16.16.6.32 pc/MRP's Default Chart of Accounts no longer display but the accounts are still in QuickBooks**

- Log into QuickBooks as the QuickBooks Administrator. Switch to single user. Use pc/MRP's Update the cached QB data files function to restore pc/MRP's default QB Accounts. QbAccounts.mem contain the QB Default Accounts. QbAccountsDbf.dbf contains all of the QB accounts.

**16.16.6.33 pc/MRP fails to connect or is very slow connect to QuickBooks**

- You are remotely connecting through a VPN. Connect using Terminal Server or Terminal Server + VPN.

**16.16.6.1000 Warning, Response Status Code = 1000**

This error message displays when exporting to QuickBooks or selecting the QuickBooks tab in the Address Book module.

- Reboot the computer that pc/MRP and QuickBooks is installed on.
- Call QuickBooks's support representative at 1-888-859-4056 and request the technical support person to process the Microsoft.Net Removal Fix procedures. (Microsoft.Net and QuickBooks need to be removed and re-installed) See solution at: http://support.quickbooks.intuit.com/support/pages/knowledgebasearticle/1008898.

**16.16.6.1924 LO Response is not an object (error 1924)**

You do not have QuickBooks set to allow pc/MRP to login. Repeat step 7 (16.16.2.7).

**16.16.6.1426 or 1429 OLE error**

- Occurs after a un-install and re-install of QB or a QB upgrade.
  1. Must un-install QBFC 13.0 via the Windows Control Panel, Add or Remove Programs.
  2. Run QBFC13_0Installer.exe from the pcmrpw directory. Or, restart pc/MRP, select Optional, QuickBooks, Default Settings and allow pc/MRP to re-install QBFC 13.0
- If it is none of the reasons listed below, be sure to note the name of the .fxp file, the line number and message prior to calling Software Arts
- If the error message says 'String too long', the phone number in pc/MRP exceeds 21 characters. If you have an extension for the phone number, the phone number and the extension must not exceed 19 characters as a space and an 'x' are inserted. This is a limitation for the QuickBooks interface only. Do a Controll-F12 while the error message is displayed to find the address book id for the phone number to fix.
- Trying to export a receiver or invoice into QuickBooks whose date is prior to the QuickBooks close date found in Preferences, Accounting, and Company Preferences.
- Receiver contains a quantity of 0.
- QuickBooks Administrator is already logged into QuickBooks and pc/MRP is trying to log in as the Administrator.
- If error occurs when testing the QB connection and all else fails, remove the pc/MRP connection from QB and set up the connection again as per Section 16.16.2 Steps 6 and 7.
- If the error message includes the words Idispatch qbxml ole the .qbw file may be corrupt. Call QuickBooks Technical Support to verify your qbw file. If you have a qbwin.log in the QuickBooks directory, rename it.

Start QuickBooks, select File, Backup, select Verify. When the backup and verify option is done, Press Control 1, Press Control 2, select the Open File Tab, open the qbwin.log file. See if you have any broken links such as an invoice whose customer was deleted. If you receive a message that the verification has failed (The Verify Data Utility returns a b-check error), select Utilities and Rebuild.

- Error connecting to QuickBooks with a Vista computer. Go into the Computer's Control Panel, select Users, turn the User Account Controls ON and re-boot the computer.
- If the error message includes the words "QB_SubmitRequest" and you are at Step 2 of 26, press Ctl-F12, search for invoice or receiver number and look at that document for any non-ASCII characters such as boxes, smiley faces, etc. Delete those characters and re-export.
- If the error message includes QB_CustomersPopulate, and contains the words "**unexpected agg tag**",
  1) The .QBW file's Sale Tax Code no longer functions due to the 2009-R7 QB patch.You can no longer add a new customer. The fix is to:
     a. Start QB, select Vendors,Sales Tax, Manage Sales Tax.
     b. Add a new taxable Sales Tax Code
     c. Add a new non-taxable Sales Tax code.
     d. Delete both of the new codes you just entered.
     e. The problem will have now resolved itself.
  2) There are foreign characters in the QB customer address. Export the QB customers to Excel or to an IIF file (cust.iif). Call Software Arts.
     The allowable ASCII characters for Addresses, Part numbers, Phone numbers, and Description fields are: upper & lowercase alpha 65(A)-90(Z), 97(a)-122(z), numeric 0-9,
     and these special characters:
     ,./<>?;':()[]{}-=_+!@#$%^&*"/
     The IIF file can be mined for special characters by using the Developer Menu Toolbox, File Tools, Character Counter, Find Characters by line and output the identified lines to a separate file. Now you can delete the foreign characters in QB customer records.
     If you found the bad character, grab it with Ctrl-C. At the command line type ? ASCII(_cliptext). Then use the following (or a similar) command (assuming that the field is partno and the ascii code is 233): REPLACE ALL partno WITH CHRTRAN(partno, CHR(233), "") This will solve the QB export problem. To change the bad partno in every module, use the Change Part Number function, scroll for the bad part number and type in the part number.
- If the error message involves QB_DUPLICATEDETECT, check the 'qbsdklog.txt' file. Verify the QBW file by selecting File, Utilities, and Verify. If the file is corrupt, contact Intuit for help re-building your QBW file.
- If the error message includes the words "Class VendorRef got **unexpected agg tag id**-1()…", and you have QB 2009 R3 or higher (*press F2 to get the version release information screen*), one or more vendors have accounts prefilled that must be cleared.
- If the error message includes the words "QB_EMPLOYEESPOPULATE…classEmployeePayrollInfo got **unexpected tag id** -1 ()…", and you have QB 2008 R6 or higher (*press F2 to get the version release information screen*), in QuickBooks, select Edit, Preferences, "Integrated Applications", "Company Preferences" tab, delete the first connection to pc/MRP, select the second pc/MRP connection, click the "Properties" button, and uncheck the "Include Social Security Number" checkbox. Click "OK" twice.
- If the error message indicates an invalid Certificate or invalid Digital Signature, the pcmrp.exe file is corrupt (most likely by a virus). To check this, use Windows Explorer and right click to on the pcmrp.exe file. Select Properties, select Digital Signature. Update to the latest revision or version of pc/MRP or replace the pcmrp.exe file from a back-up.
- If you are exporting invoices or receivers and are at step 25, and the error message includes the words '**OLE Dispatch**' and '**qb submit request**', create a file named **qb_invoicesadd.txt** or **qb_billsadd.txt** in the pcmrpw directory, export invoices again, open up the 'txt' file and look for the bad characters causing the problem. pc/MRP will display the problem invoice or receiver number and the 'txt' file will automatically contain the bad characters.
- If the error message says "OLE IDispatch exception code 0 from QBFC13_0.QBSessionManager.1: qbXML components have not been installed..." (also see 16.16.6.1928):

1. Uninstall and reinstall the QBFC 13.0 file according to the first bullet in this section. If that doesn't help:
2. Try to find any .TLG files in the C:\users\public\public documents\intuit\quickbooks\company files folder and rename them to have an .XXX extension. If this does not help
3. You might need to uninstall then reinstall QuickBooks. Select Control Panel, and start uninstalling QuickBooks. If it offers to "repair" or "uninstall", try repair first.

- If the error message says "OLE IDispatch exception code 0 from QBXMLRP2.RequestProcessor.2: This application is unable to log into this QuickBooks company data file automatically: Try to log into QuickBooks in a single user mode.
- If the error message is "PROCEDURE QB_OPENSESSION QB_FUNCTIONS.FXP" and says "OLE IDispatch exception code 0 from QBXMLRP2.: Recent changes to your configuration require you (the QuickBooks Administrator) to go into the Integrated Applications preferences and re-authorize your integrated application...": This error will happen if the QB admin password has been changed. Reconnect the two programs the usual way.
- If the error message is "PROCEDURE QB_PARTSPOPULATE QB_FUNCTIONS.FXP" and says "OLE IDispatch exception code 0 from QBXMLRP2.RequestProcessor.2: There is not enough memory to complete the request...": On one occasion a reboot solved the problem.
- If the error message says "PROCEDURE QB_EXPORT QB_FUNCTIONS.FXP OLE IDispatch exception code 0 from QBFC13_0.QBSessionManager.1: Request[0]: ItemNonInventoryAddRq ItemNonInventoryAdd Name: required field is missing End of ItemNonInventoryAdd" then make sure that only one copy of pc/MRP is trying to export into a QB file. The same invoice/bill document number might already exist in QB.

**16.16.6.1928 QBFC…**

- If the message contains: QBFC… The ticket parameter is invalid and you need to re-boot the computer. If that still does not work, back up the QBW file, then run the Utility Option, Re-build.

**16.16.6.1943 Member Account does not evaluate to an object**

- Error message states vendor reference does not evaluate to an object. Press Ctl-F12 and see what 'lcitem' has as a 'Bill Number' in QB. Vendor name may be missing or invalid. Add the vendor to the 'Bill' in QB.
- Error message states Member does not evaluate to an object, Verify the QuickBooks Data.

**16.16.6.3090 Error 3090, Names in this list cannot contain a colon.**

Delete the colon ( : ) in the QuickBooks Vendor and/or QuickBooks Customer fields on the QuickBooks tab of the Address Book.16.16.6.3100 Error 3100 Name already exists as a different list item.
The vendor name, customer name, or partnumber name used in a pc/MRP Invoice or Receiver that you are trying to export into QuickBooks already exists in QuickBooks in a list (Item, Vendor, Customer) other than the list pc/MRP is trying to import it into. For example, you cannot export a part with a QuickBooks part id of 'DELL Computer' if QuickBooks already contains a vendor address with the name 'DELL Computer'. It could also be marked as in-active in QuickBooks.

**16.16.6.3100 Error 3100, List element is already in use.**

pc/MRP is trying to export an element (term, discount, item, customer, or vendor) that already exists in QuickBooks. If it is the same element type QuickBooks has and that element is marked as in-active. Edit that list and check the "Show All" checkbox. Change the name of the element or mark it as Active. If it is in another list, change either the QuickBooks or pc/MRP name.

**16.16.6.3140 Error 3140, There is an invalid reference to a QB account.**

Save and/or print out the XML error message and call Software Arts. The contents of the name field may exist in a list other than the list pc/MRP is expecting.

**16.16.6.3181 Error 3181, Could not add item to list. List contains the maximum number of items.**

In QuckBooks press F2, this will show you the number of items entered.
QuickBooks Pro and Premiere have a maximum number of 14,500 items (part and BOM records).
QuickBooks Enterprise has a maximum number of 100,000 items
QuickBooks Enterprise 2017 has a maximum number of 1,000,000 items
Select File, Utilities, Verify Data
If it finds a problem
Select File, Utilities, Rebuild Data
If there is still a problem, call QuickBooks you can either:
They may suggest updating to Enterprise or condensing your data with their Condense Utility.

**16.16.6.3260 Error 3260, Insufficient permission level to perform this action**

Make sure pc/MRP is set to log in as QB admin. Set QB to single user. Exit QB. Start pc/MRP. Export invoices and/or receivers.

**16.16.7 Special Cases**

**16.16.7.1 Entering Customer Deposits in QuickBooks**

Start QuickBooks, select Customer, select Receive Payments, and select a specific Customer. Enter the deposit amount. Do not apply the payment to an invoice. When the invoice is exported over to QuickBooks, apply the deposit. You must create a custom invoice template that displays amount paid and balance due by selecting Invoice, Customize, New, Footer, and check Payments and Balance Due.

**16.16.7.2 Entering Purchase Deposits in QuickBooks**

Step 1 In QB, create a Purchase Deposit chart of account
Type = Other Current Asset

Step 2 In pc/MRP, create a Purchase Deposit Part Number
Type = Non Inventory
QuickBooks Tab Asset/Expense Account = Purchase Deposit

From then on, whenever you need to include a deposit on a purchase order

In pc/MRP...

<u>Purchasing:</u>
1. Make a purchase order line item one contains the part number, qty and unit cost.
2. Add a second line item for a positive qty of 1 and a negative dollar amount of the deposit
3. Add a third line item for a positive qty of 1 and positive dollar amount for the deposit

<u>Accounting:</u>
4. Accounting will receive the third line item (Modules, Receive, New, select 3rd line item) and enter unique vendor invoice number
5. Accounting will export the 3rd line item to QB as a Bill
6. Accounting will cut the check in QB for the deposit

<u>Receiving:</u>
7. Receiving will receive line items 1 and 2

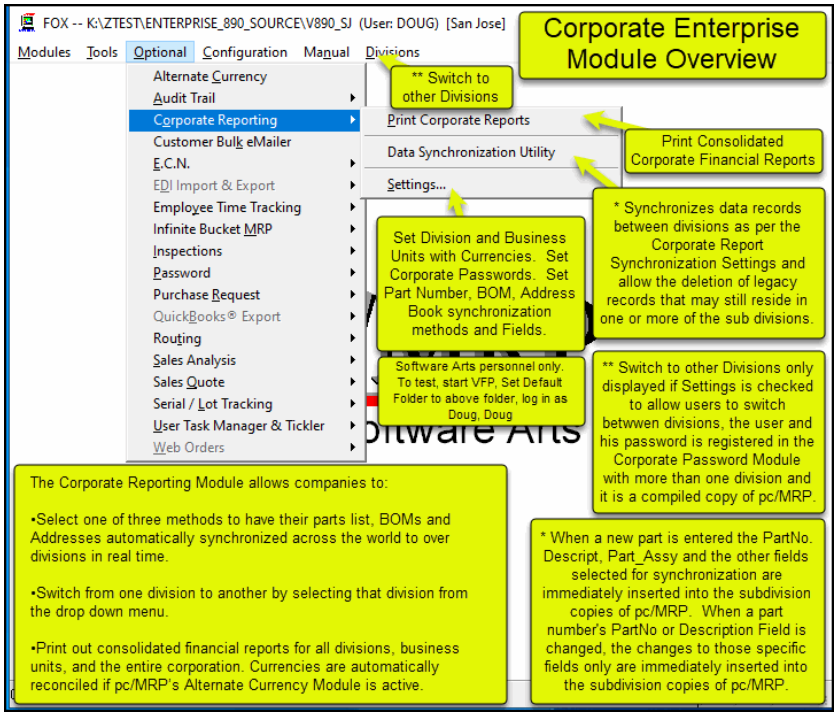
<u>Accounting:</u>
8. Accounting will add the vendor invoice number to the receiver and export it to QB as a bill
9. Accounting will cut a second check in QB for the amount of the goods minus the deposit.

# 16.17 Optional Corporate Enterprise Reporting Module

### 16.17.1 Overview

The Corporate Reporting Module allows companies to:

- Select one of three methods to have their parts list, BOMs and Addresses automatically synchronized across the world in real time.
- Switch from one division to another by selecting that division from the drop down menu.
- Print out consolidated financial reports for all divisions, business units, and the entire corporation. Currencies are automatically reconciled if pc/MRP's Alternate Currency Module is active.




The consolidated reports include:

- Profit and Loss (current period and YTD with variance to budget for current period and YTD for all divisions)
- YTD Expense and Revenue (current period and YTD with variance to budget for current period and YTD for all divisions)
- Trial Balance (current month and YTD for all reporting divisions)
- Balance Sheet (for all reporting divisions)
- General Ledger (for the period for all reporting divisions)
- GL Transactions (for the period for all reporting divisions)

An online slideshow is located here: http://www.pcmrp.com/mrp101/corporateoverview.htm

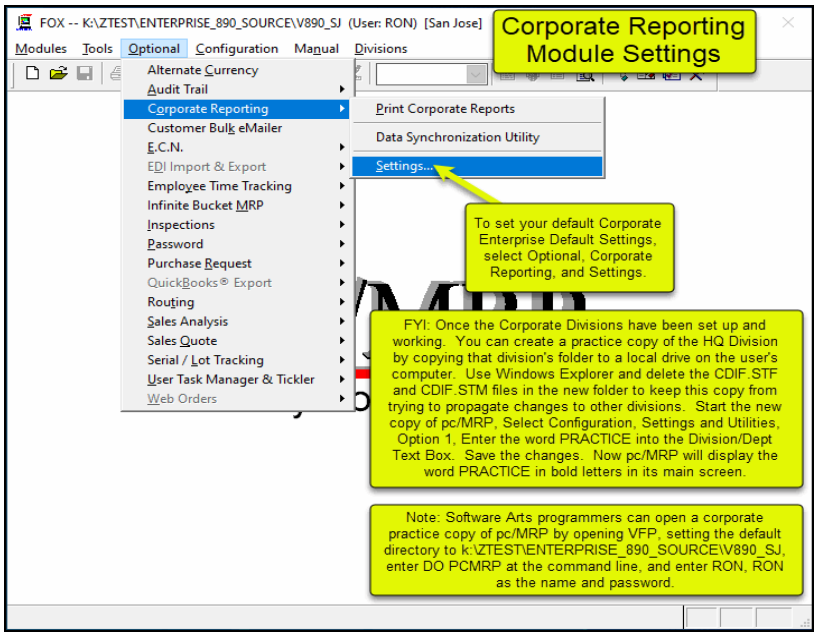
Select Configuration, Module Activation, and then Corporate Reporting Module from the menu. To activate this module, select Configuration, Module Activation, and Corporate Reporting. Then select "Free 10 day trial" or "Full activation" and enter the activation code number supplied by Software Arts.

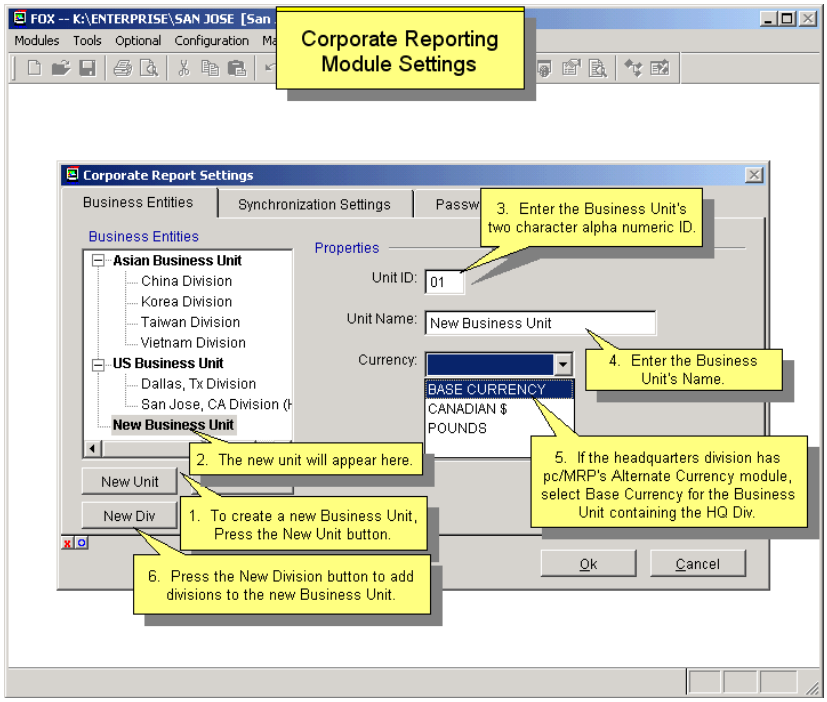
Only the Corporate Headquarters' copy of pc/MRP is activated. The divisional copies of pc/MRP do not need to activate the Corporate Reporting Module.

To set your **Corporate Enterprise default settings**, select Optional, Corporate Reporting, and Settings.

**16.17.2 Setup**

**Step 1. Creating Business Units**



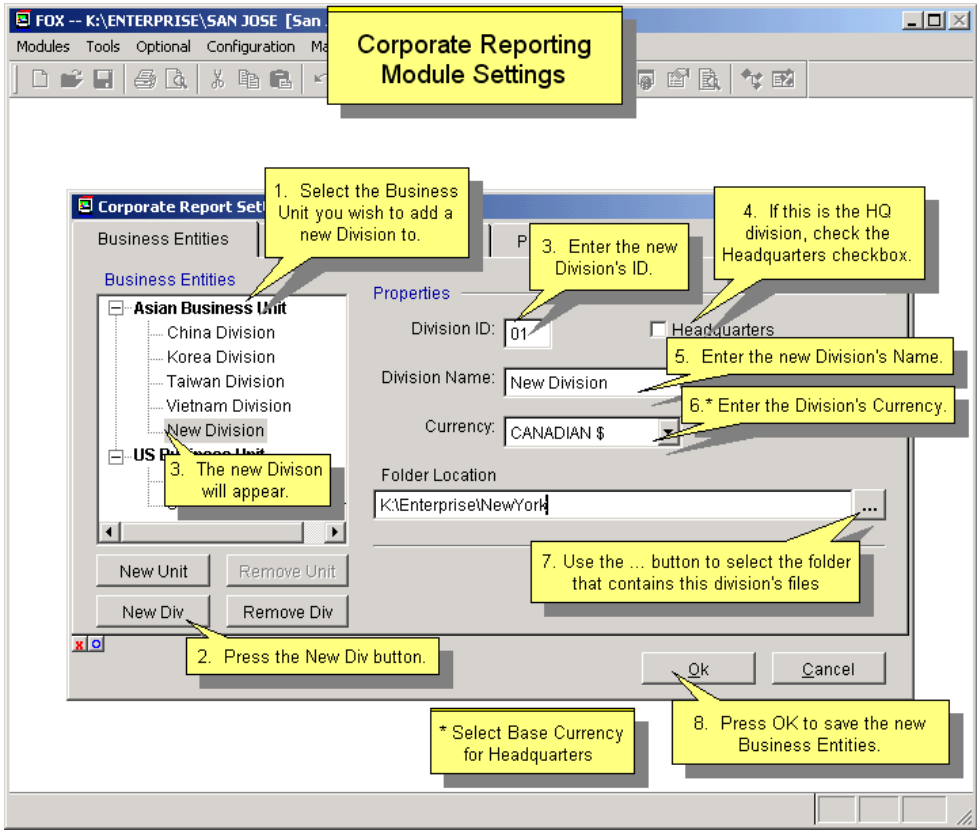




A company must create one or more Business Units. Business Unit(s) report to the entire corporation. Divisions report to the Business Unit(s).

To enter a new Business Unit, click on the "New Unit" button. Enter the two-character Unit ID field and the Business Unit Name. If the Headquarters Division has pc/MRP's Alternate Currency Module, select the currency for the new Business Unit. The Base Currency is the currency used by the Headquarters division. The 2-character Unit ID field must be unique among both Divisions and Business Units.

To remove a Business Unit, select the Business Unit and then click on the "Remove Unit" button. All Divisions reporting to that Business unit will be removed as well.

**Step 2, Creating Divisions**




Divisions report to Business Units. One division must be checked as the Headquarters Division. This division is the only division that will contain an active Corporate Report Module. This division must exist in the current default directory when it is created.

To enter a new Division, click on a Business Unit and then click on the New Division button. Enter the 2-character Division ID field and the Division Name. The 2-character Unit ID field must be unique among both Divisions and Business Units.

You can scroll through your network to get a UNC path or a mapped drive to get a drive path to the folder containing the division's pc/MRP files. The UNC path is preferable because not all computers may have similar mapped drives.

If the Headquarters Division has pc/MRP's Alternate Currency Module, select the currency for that division. The Headquarters Division must select "Base Currency". If other divisions work in the same currency as the Headquarters Division, you must select "Base Currency" as their currency.

You cannot create more divisions that you are licensed for. To increase your division license count you must call Software Arts to purchase an additional copy of pc/MRP and an additional enterprise license. Software Arts will give you a new activation code number. You can then increase your division count by following one of the two methods below:

Method 1 - Open the HQ division. Select Configuration, Module Activation, select Corporate Report module, and select Deactivate. Then reactivate the Corporate Report module with your new activation code number by selecting Configuration, Module Activation, Corporate Report, Activate, and enter your new activation code number.

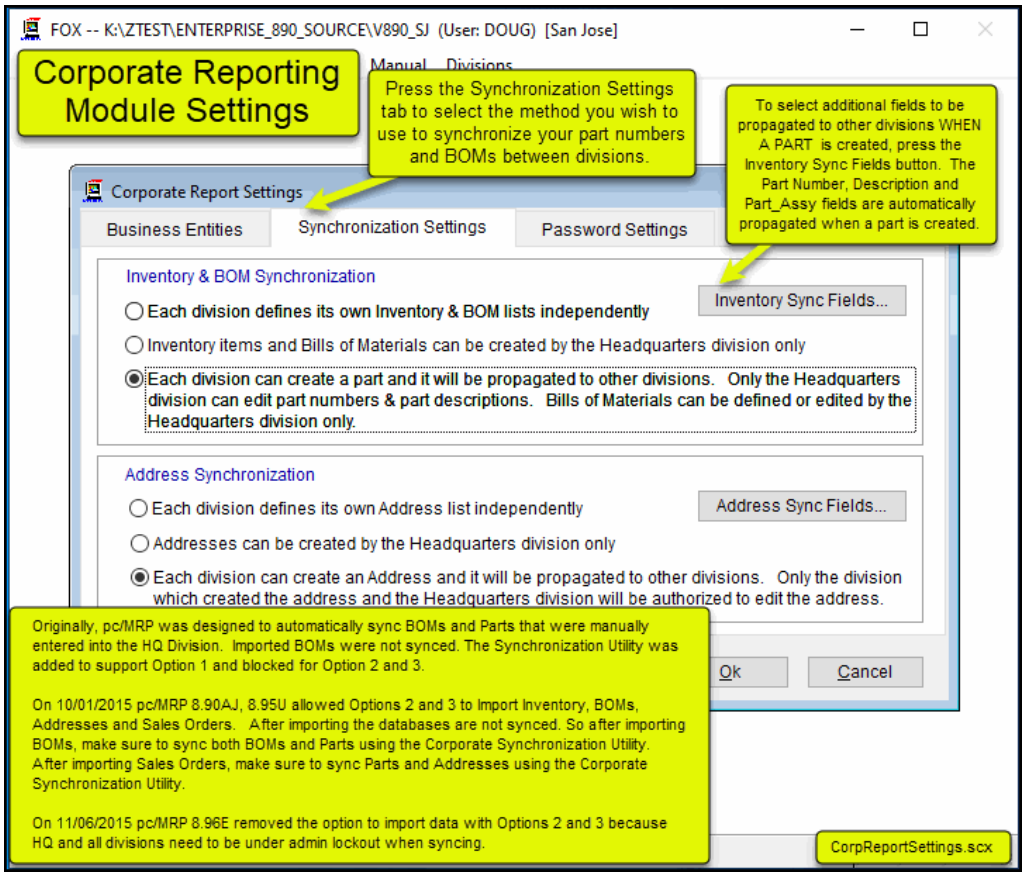
Method 2 - Open the HQ division. Select Optional, Corporate Reporting, and Settings, Select the HQ division, double click on the word Properties, and enter your new activation code number.

To get the activation code, Software Arts personnel must set the Seat Count to the total number of divisions and check the Corporate Reporting checkbox.

If none of your divisions use alternate currency, there is no need to purchase pc/MRP's Alternate Currency Module.

If one or more of the divisions use a different currency than the HQ division, the HQ division should purchase pc/MRP's Alternate Currency module. The HQ division and all divisions using the same currency as the HQ division must be set to Base Currency. Divisions using alternate currency must be set to that currency. These alternate currency divisions do not need to purchase pc/MRP's base currency module, unless they have vendors and or customers that use alternate currencies. The alternate currency divisions would always set their own currency as their base currency in their own copy of pc/MRP's Alternate Currency module.

**Step 3, Part and BOM synchronization settings**




Select the “Synchronization Settings” tab and select the method you wish to use to synchronize your part numbers, BOMs and Addresses between divisions.

Inventory and BOM:

Selecting the top radio button will allow each division to control their own partmaster and BOM database files with no synchronization between divisions.

Selecting the middle radio button will allow only the HQ division to create part numbers and BOMs. If HQ edits a part, the Part Number and Description fields are propagated. The new and edited part numbers and BOMs will be propagated to all other divisions within seconds. The other divisions can edit all of the fields for a part with the exception of the part number and description fields. Other divisions are not allowed to edit BOMs.

Selecting the third radio button will allow all divisions to create part numbers. The new part numbers will be propagated to all other divisions within seconds. Only the HQ division can create and edit BOMs.

**Note:** If the second or third option is selected, only HQ will be able to import parts and BOMs (using Configuration, Option 40). After importing parts, make sure you use the Synchronization Utility to synchronize Inventory. After importing BOMs, you will need to synchronize both BOMs and Inventory.

Addresses:

Selecting the top radio button will allow each division to control their own addresses with no synchronization between divisions.

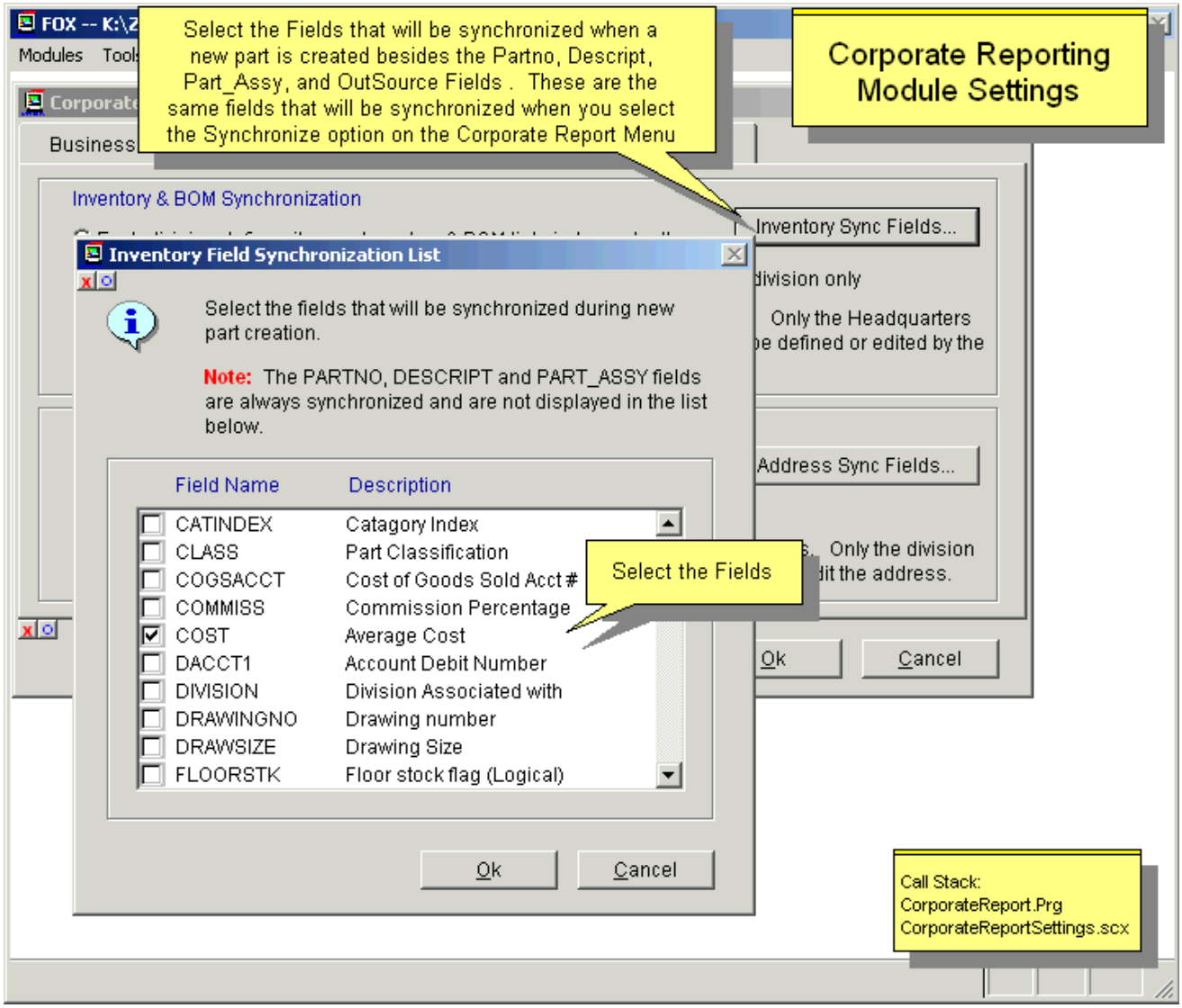
Selecting the middle radio button will allow only the HQ division to create address records. If HQ edits an address, the ID, Name, Start Date, Division fields are propagated. The new and edited addresses will be propagated to all other divisions within seconds. Other divisions are not allowed to edit addresses.

Selecting the third radio button will allow all divisions to create address records. The Division will be filled out automatically, and will identify the creator division. The new address will be propagated to all other divisions within seconds. Only the creator and the HQ can edit addresses.

**Note:** If the second or third option is selected, only HQ will be able to import addresses (using Configuration, Option 40). After importing addresses, make sure you use the Synchronization Utility to synchronize the Address Book.

**Note:** If either divisions import e.g. Sales Orders, HQ will need to synchronize Inventory and the Address Book, as new addresses and/or parts might have been added.

**Step 4, Propagating Additional Partmaster or Address Fields**




Select the Inventory Sync Fields button to check the fields you want propagated. The Part Number, Description, Part_Assembly and Outsource fields are propagated to the other divisions automatically when a part is created. The fields selected by the Inventory Sync List are propagated when a part is created but not when a part is edited. If you edit a part, the Part Number and Description fields are propagated.

Select the Address Sync Fields button to check the fields you want propagated. The ID, Name, Start Date and Division fields are propagated to the other divisions automatically when an address is created. The fields selected by the Address Sync List are propagated when an address is created OR when an address is edited.

**Note:** Synchronizing Inventory/BOMs or Addresses (along with the Sync Fields buttons) are disabled for Synchronization Setting # 1.

**Synchronization rules for Setting #3**

Address Book

Each Division can create an address, it will be propagated to other divisions. Only the Division that created the address and HQ can edit the address.

HQ and or DIV Creates new Address
ID,Name,StartDate,Division + checked fields are propagated to DIVs. * ^
Division will contain the Unit+Div Number to identify the creator DIV

HQ and or DIV Edits an address
Name,Start Date + checked fields are propagated to DIVs. * DIV can only edit addresses it created.

HQ and or DIV marks an address for deletion
Deletion will be propagated
DIV can only mark addresses for deletion that it created.

HQ and or DIV removes marked addresses
Records will be removed regardless of who created them. Removals will not be propagated

* Currency amounts (CredLim, YR_Quota) if checked, will be propagated to each unit's base currency
^ If checked, Contact fields will be included

Inventory

Each Division can create parts, Only HQ can edit part numbers and part descriptions

HQ Creates new part
PartNo,Descript,Part_Assy,OutSource+checked fields propagate to DIVs *
DIV Creates new part
PartNo,Descript,Part_Assy,OutSource+checked fields propagate to HQ and DIVs *

HQ Edits a part
PartNo,Descript propagate to DIVs. Remaining fields do not propagate to DIVs.
DIV Edits a part
No propagation to HQ or other DIVs, DIV can not edit PartNo, Descript or mark a part for Deletion

HQ Marks or un-marks a part for deletion
Part will be marked or un-marked for deletion in DIVs DIV can not mark a part for deletion

HQ Removes part records marked for deletion - Records removed in HQ but not in DIV
DIV Removes part records marked for deletion - Records removed from DIV but not in HQ or other DIVs

* Costs, (ave, std, etc) if checked, will be propagated to each unit's base currency

BOMS:

Bills of Materials can be defined and or edited by Headquarters only.

HQ creates a new BOM
Everything will be propagated to the DIV, including BOM costs
DIV cannot create a new BOM

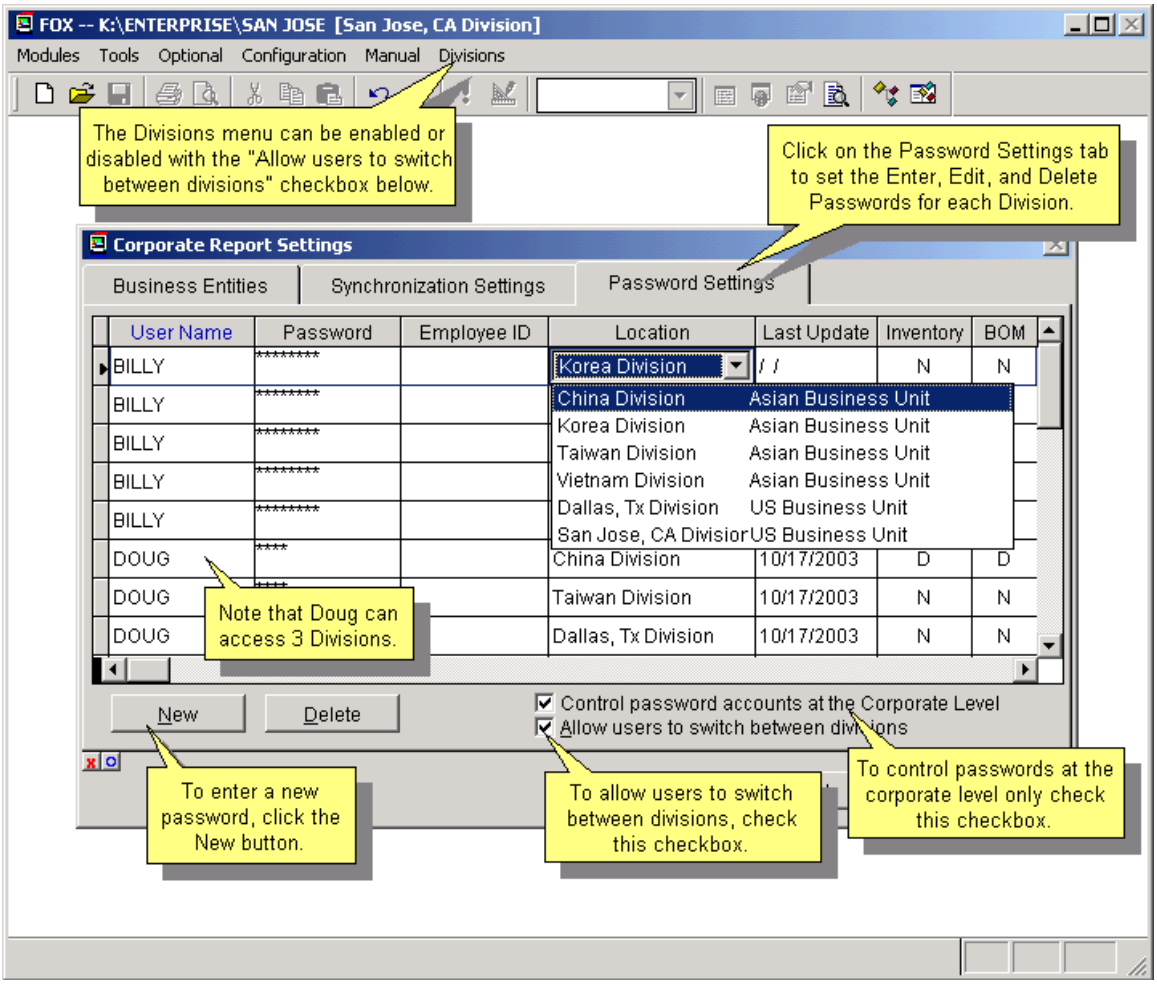
HQ edits a BOM
New item, qty change, deleted (marked) item – propagate to DIVs
Changing HQ inventory cost or BOM cost will not propagate
HQ deletes (marks) an entire BOM - BOM records in DIV will be marked for deletion

DIV cannot edit a BOM. DIV can not delete (marks) an entire BOM

HQ recalls entire BOM - BOM records in DIV will be un-marked - DIV can not recall an entire BOM

HQ removes marked BOM records - Records get removed from HQ only
DIV removes marked BOM records - Records get removed from DIV only

**Step 5, Setting up Passwords**



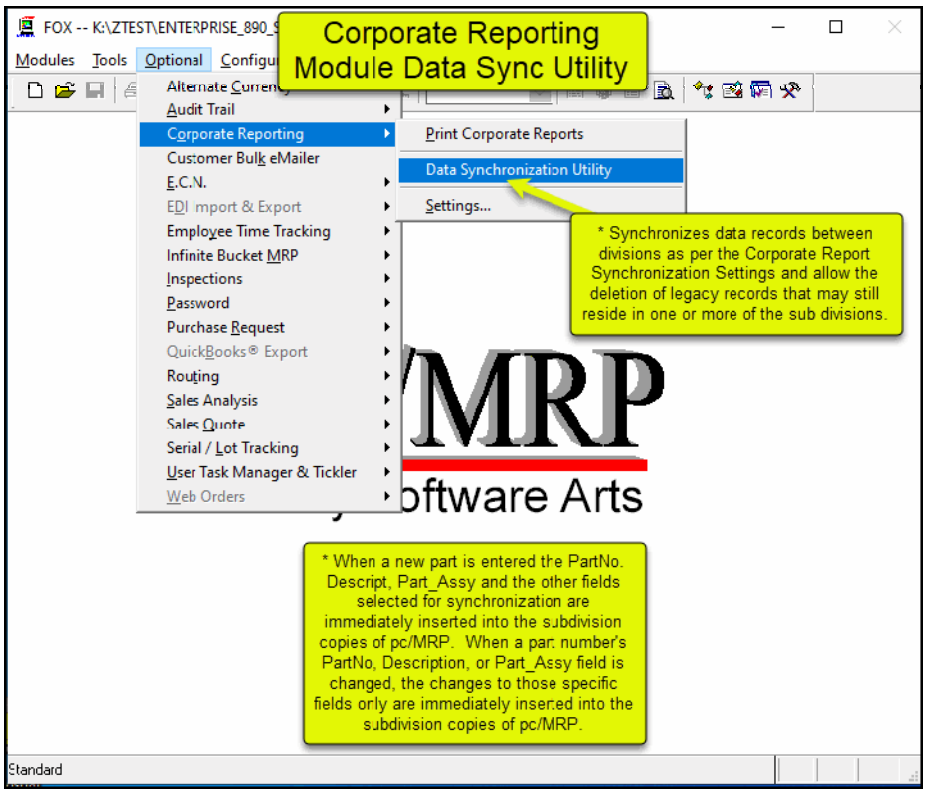

Select the “Password Settings” tab to enter and edit passwords for the entire corporation. Each division must have their own pc/MRP password module. The above passwords are simply a consolidation of each division’s Password Module.

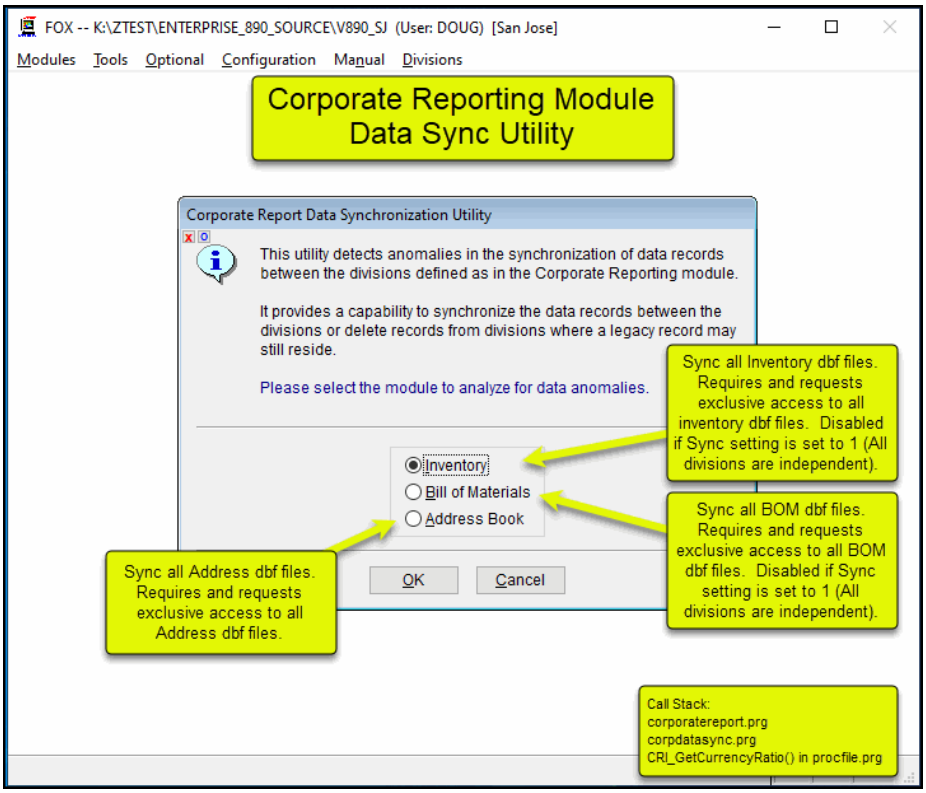
If the “Control password accounts at the Corporate Level” checkbox is not checked, passwords are managed at the division level. If it is checked, all passwords are controlled at the HQ division.

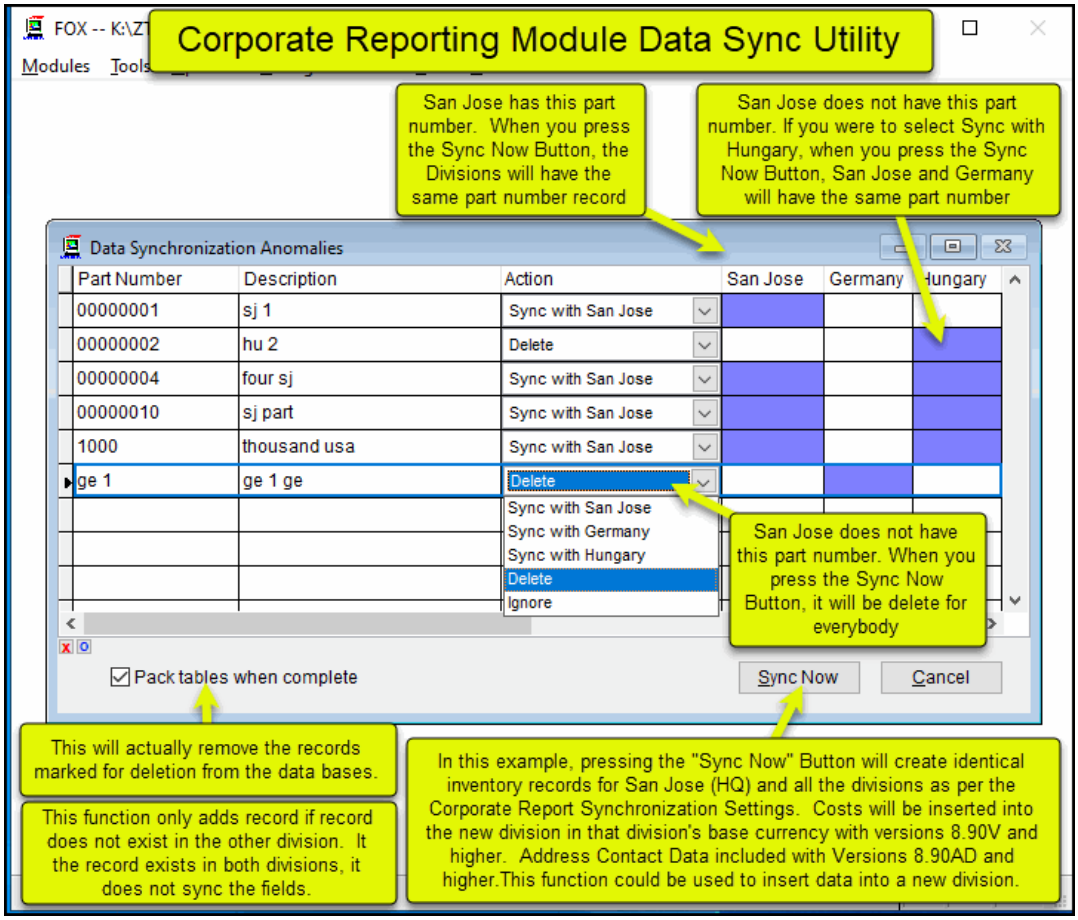
To enter a new password, click the “New” button. If the password’s Location references another division, that division’s password module will be updated.

If a person is to have access to multiple divisions, you should set up the same name and password for each division. That way if a user changes his password, it is automatically propagated to all divisions and he will be allowed to switch from division to division without re-logging in.

### 16.17.4 Data Synchronization Utility

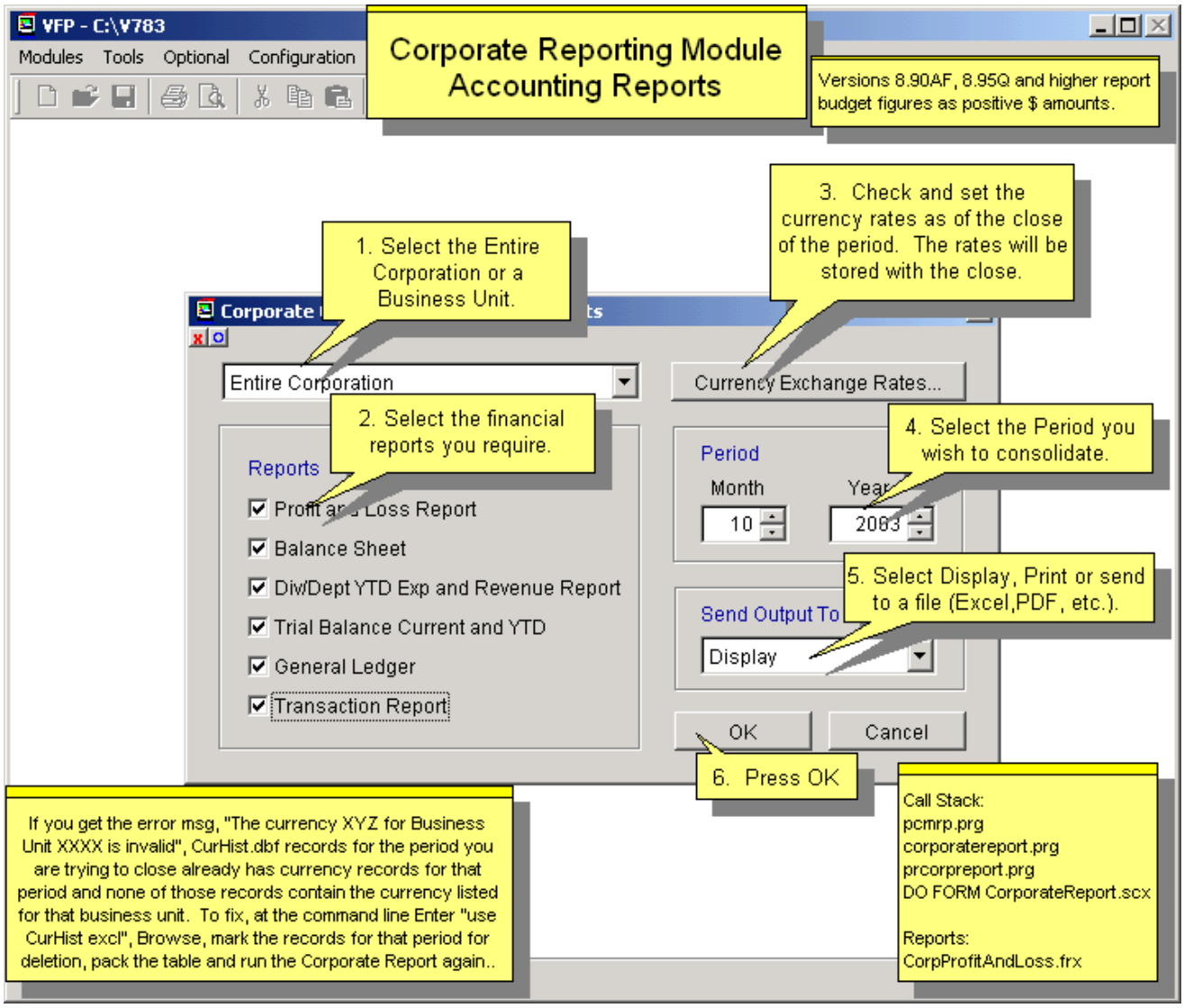



Corporate Reporting Module Data Sync Utility
Modules
Tools
San Jose has this part number. When you press the Sync Now Button, the Divisions will have the same part number record
San Jose does not have this part number. If you were to select Sync with Hungary, when you press the Sync Now Button, San Jose and Germany will have the same part number
Data Synchronization Anomalies
Part Number
Description
Action
San Jose
Germany
Hungary
00000001
sj 1
Sync with San Jose
00000002
hu 2
Delete
00000004
four sj
Sync with San Jose
00000010
sj part
Sync with San Jose
1000
thousand usa
Sync with San Jose
ge 1
ge 1 ge
Delete
Sync with San Jose
Sync with Germany
Sync with Hungary
Delete
Ignore
San Jose does not have this part number. When you press the Sync Now Button, it will be delete for everybody
Pack tables when complete
Sync Now
Cancel
This will actually remove the records marked for deletion from the data bases.
This function only adds record if record does not exist in the other division. It the record exists in both divisions, it does not sync the fields.
In this example, pressing the "Sync Now" Button will create identical inventory records for San Jose (HQ) and all the divisions as per the Corporate Report Synchronization Settings. Costs will be inserted into the new division in that division's base currency with versions 8.90V and higher. Address Contact Data included with Versions 8.90AD and higher.This function could be used to insert data into a new division.

**16.17.5 Reports**

**Consolidated Corporate Enterprise Reports**

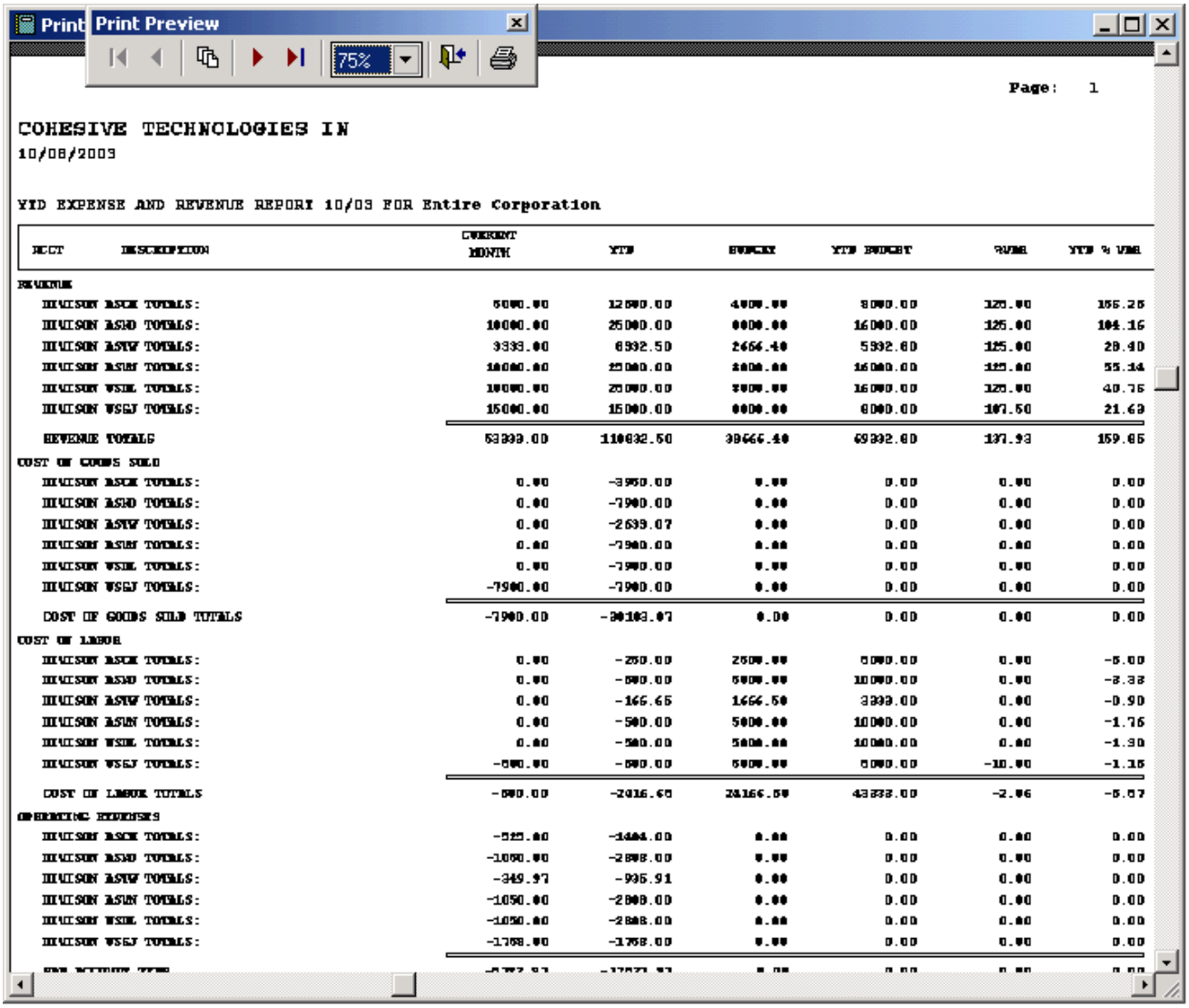



To print consolidated corporate financial reports, select the “Print Corporate Reports” option on the “Corporate Reports” menu. pc/MRP will display the “Corporate Consolidated Financial Reports” window shown above. Select the Entire Corporation or one of the Business Units. Check which reports you want to display and or print. Select the report period.

If you have the Alternate Currency Module, press the “Currency Exchange Rates” button to check and or set the currency rate as of the last date of the period being consolidated. The rates are stored along with the consolidation data. If you were to reprint this period’s consolidation reports, the stored rates would be used again, unless you were to adjust the rates again.

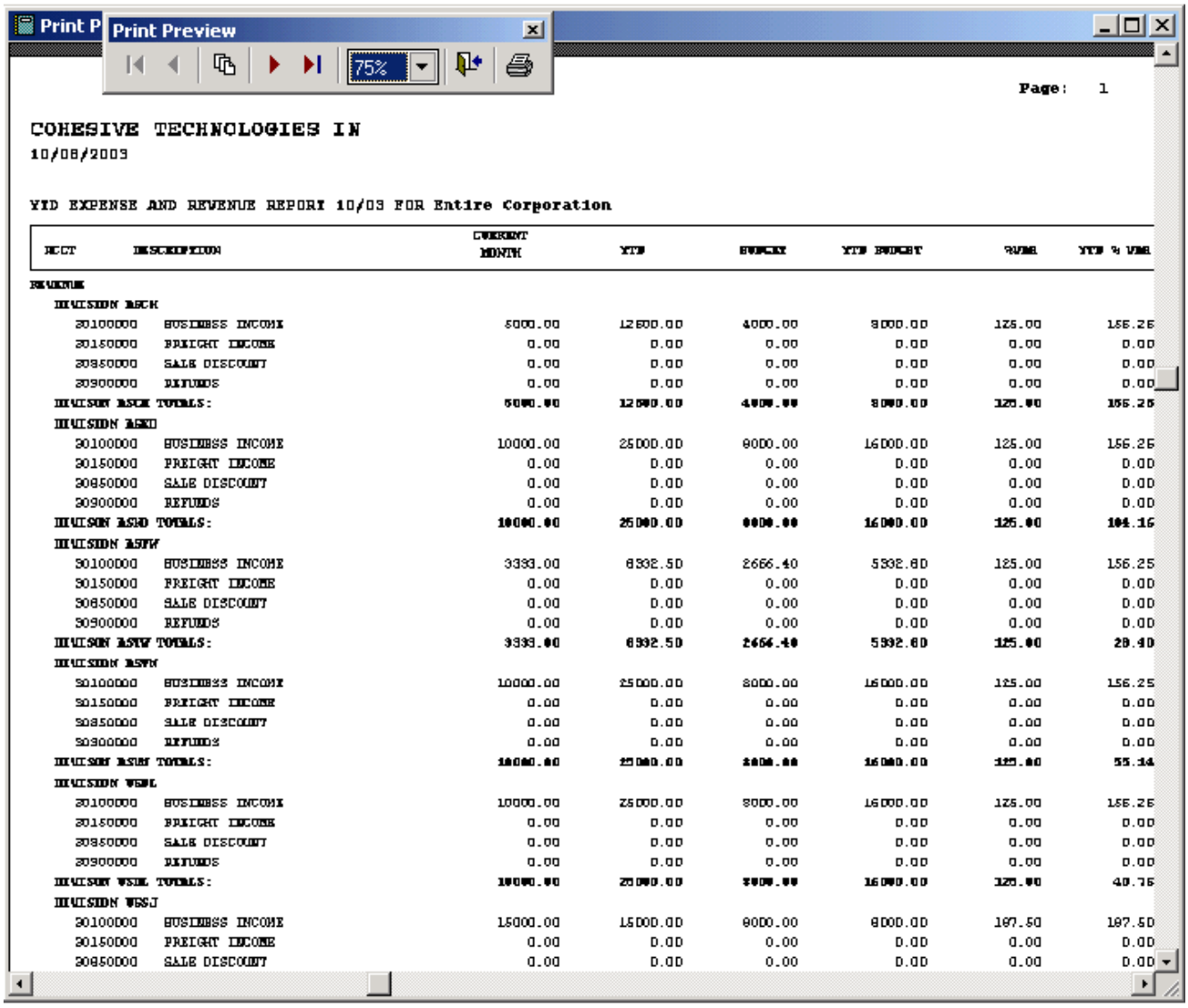
All divisions must have the same start of fiscal year. Not all divisions have to close on the same date. A warning message will be displayed if one or more of the divisions do not have a close for that period, however, pc/MRP will give you the option to print or display consolidated reports without those divisions. Select Display or Print output and press the OK button.

**Corporate Profit and Loss Report**




The Corporate Profit and Loss report includes revenue and expense totals for the Current Month, YTD, Budget, YTD Budget, Variance, and YTD Variance for every division reporting to the Business Unit selected or the entire corporation.

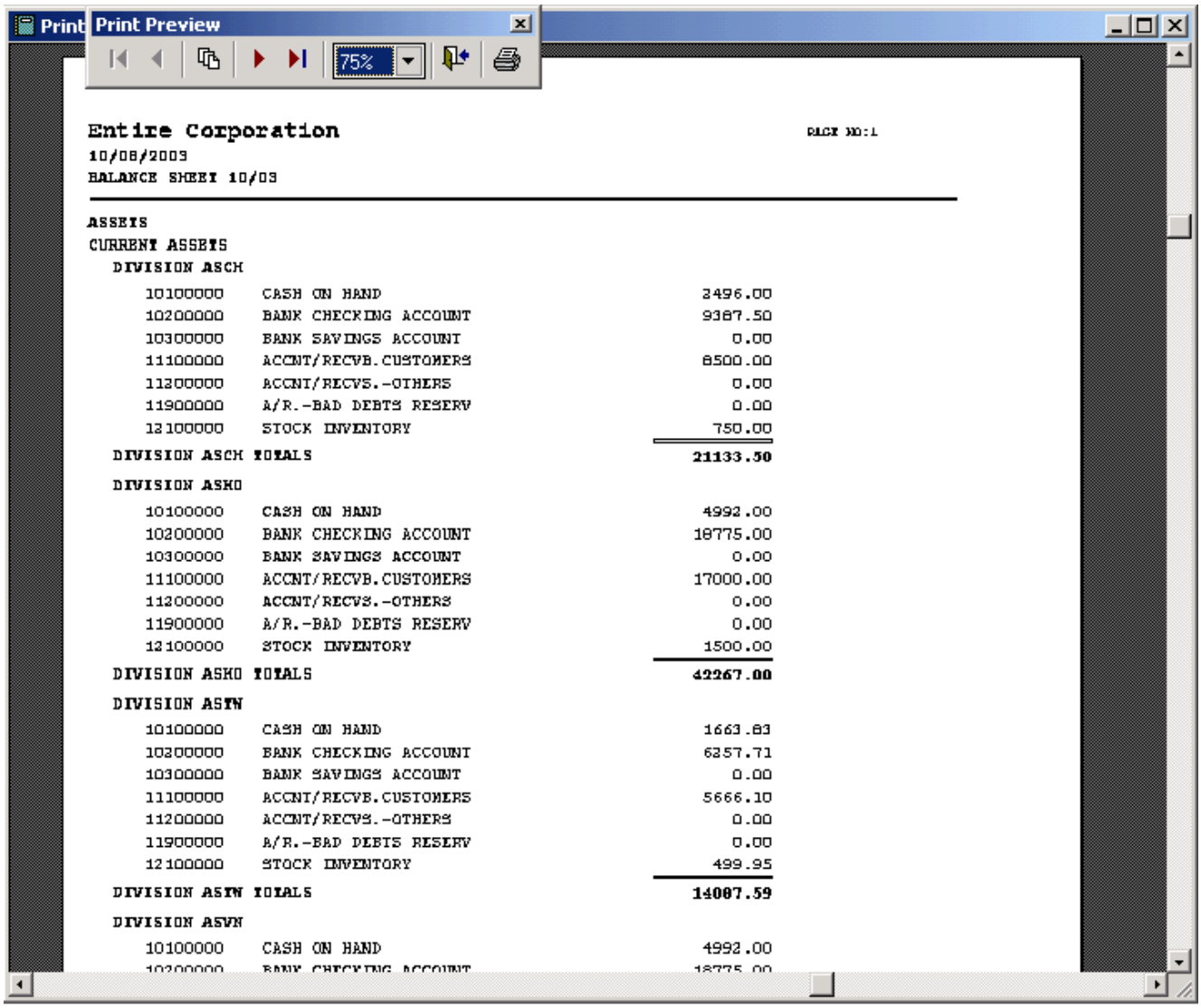
**Corporate YTD Expense and Revenue Report**




| ACCT | DESCRIPTION | CURRENT MONTH | YTD | BUDGET | YTD BUDGET | %VAR | YTD % VAR |
|---|---|---|---|---|---|---|---|
| REVENUE | | | | | | | |
| DIVISION BSCH | | | | | | | |
| 30100000 | BUSINESS INCOME | 5000.00 | 12500.00 | 4000.00 | 8000.00 | 125.00 | 156.25 |
| 30150000 | FREIGHT INCOME | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 30850000 | SALE DISCOUNT | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 30900000 | REFUNDS | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| DIVISION BSCH TOTALS: | | 5000.00 | 12500.00 | 4000.00 | 8000.00 | 125.00 | 156.25 |
| DIVISION BSKD | | | | | | | |
| 30100000 | BUSINESS INCOME | 10000.00 | 25000.00 | 9000.00 | 16000.00 | 125.00 | 156.25 |
| 30150000 | FREIGHT INCOME | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 30850000 | SALE DISCOUNT | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 30900000 | REFUNDS | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| DIVISION BSKD TOTALS: | | 10000.00 | 25000.00 | 9000.00 | 16000.00 | 125.00 | 104.16 |
| DIVISION BSVW | | | | | | | |
| 30100000 | BUSINESS INCOME | 3333.00 | 8332.50 | 2666.40 | 5332.80 | 125.00 | 156.25 |
| 30150000 | FREIGHT INCOME | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 30850000 | SALE DISCOUNT | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 30900000 | REFUNDS | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| DIVISION BSVW TOTALS: | | 3333.00 | 8332.50 | 2666.40 | 5332.80 | 125.00 | 28.40 |
| DIVISION BSWN | | | | | | | |
| 30100000 | BUSINESS INCOME | 10000.00 | 25000.00 | 8000.00 | 16000.00 | 125.00 | 156.25 |
| 30150000 | FREIGHT INCOME | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 30850000 | SALE DISCOUNT | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 30900000 | REFUNDS | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| DIVISION BSWN TOTALS: | | 10000.00 | 25000.00 | 8000.00 | 16000.00 | 125.00 | 55.14 |
| DIVISION WSHL | | | | | | | |
| 30100000 | BUSINESS INCOME | 10000.00 | 25000.00 | 8000.00 | 16000.00 | 125.00 | 156.25 |
| 30150000 | FREIGHT INCOME | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 30850000 | SALE DISCOUNT | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 30900000 | REFUNDS | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| DIVISION WSHL TOTALS: | | 10000.00 | 25000.00 | 8000.00 | 16000.00 | 125.00 | 40.76 |
| DIVISION WSSJ | | | | | | | |
| 30100000 | BUSINESS INCOME | 15000.00 | 15000.00 | 9000.00 | 8000.00 | 187.50 | 187.50 |
| 30150000 | FREIGHT INCOME | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 30850000 | SALE DISCOUNT | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

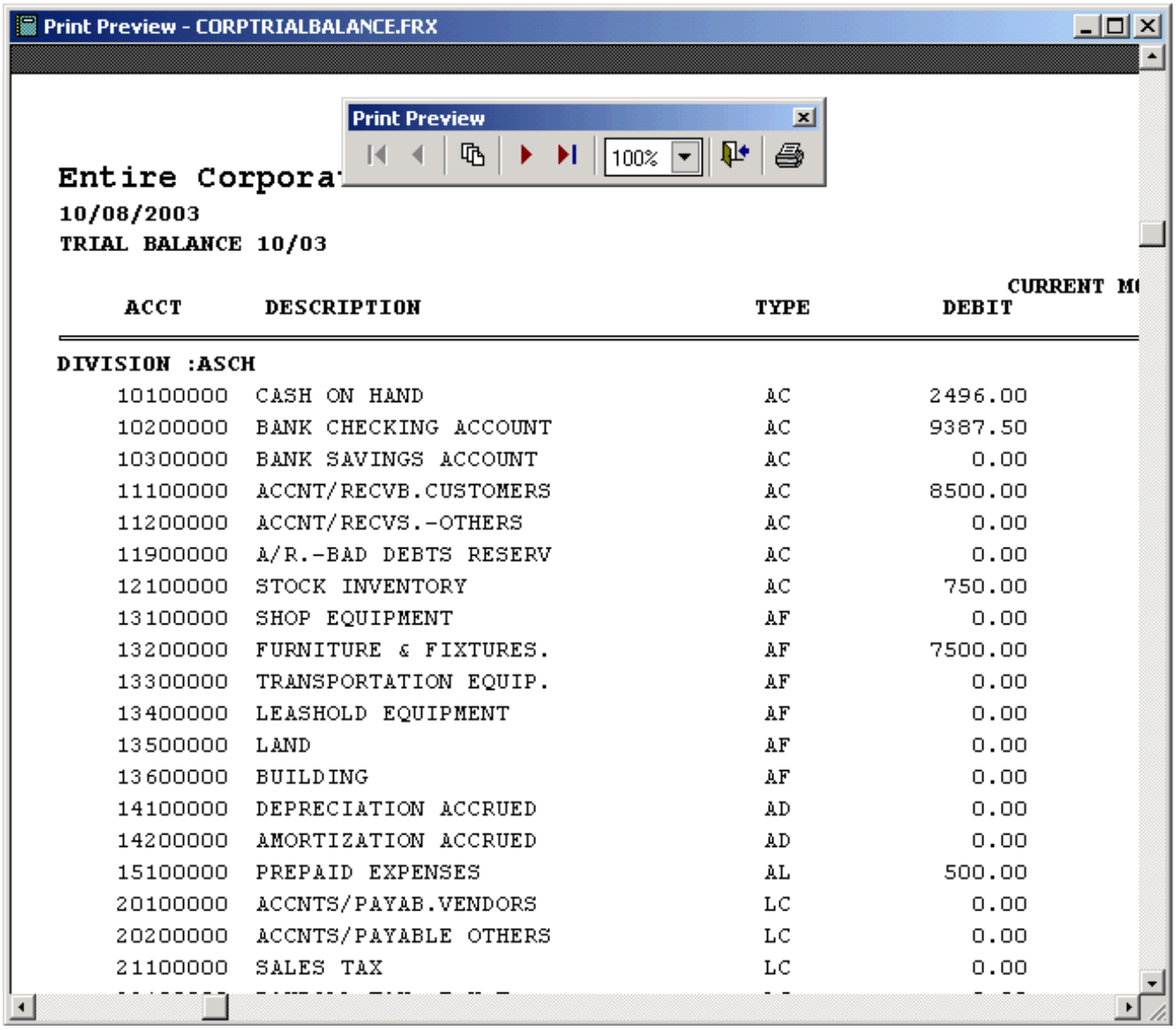
The YTD Expense and Revenue report includes all revenue and expense charts of accounts and totals for the Current Month, YTD, Budget, YTD Budget, Variance, and YTD Variance for every division reporting to the Business Unit selected or the entire corporation.

**Corporate Balance Sheet Report**




The Corporate Balance Sheet report includes all the asset, liability, and equity accounts for all the divisions belonging to the Business Unit selected or for the entire corporation.

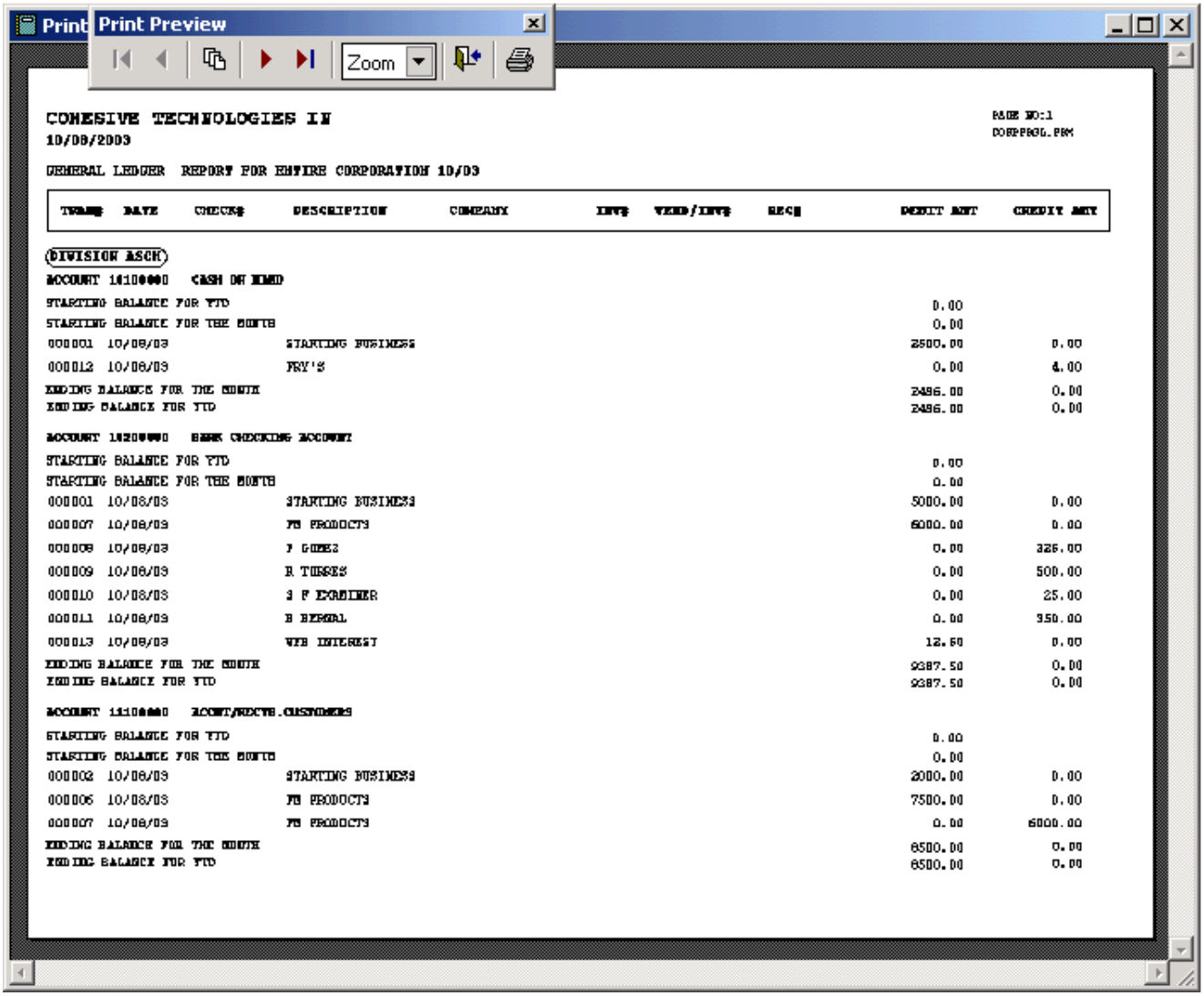
**Corporate Trial Balance Sheet Report**




| ACCT | DESCRIPTION | TYPE | CURRENT M<br>DEBIT |
|---|---|---|---|
| DIVISION :ASCH | | | |
| 10100000 | CASH ON HAND | AC | 2496.00 |
| 10200000 | BANK CHECKING ACCOUNT | AC | 9387.50 |
| 10300000 | BANK SAVINGS ACCOUNT | AC | 0.00 |
| 11100000 | ACCNT/RECVB.CUSTOMERS | AC | 8500.00 |
| 11200000 | ACCNT/RECVS.-OTHERS | AC | 0.00 |
| 11900000 | A/R.-BAD DEBTS RESERV | AC | 0.00 |
| 12100000 | STOCK INVENTORY | AC | 750.00 |
| 13100000 | SHOP EQUIPMENT | AF | 0.00 |
| 13200000 | FURNITURE & FIXTURES. | AF | 7500.00 |
| 13300000 | TRANSPORTATION EQUIP. | AF | 0.00 |
| 13400000 | LEASHOLD EQUIPMENT | AF | 0.00 |
| 13500000 | LAND | AF | 0.00 |
| 13600000 | BUILDING | AF | 0.00 |
| 14100000 | DEPRECIATION ACCRUED | AD | 0.00 |
| 14200000 | AMORTIZATION ACCRUED | AD | 0.00 |
| 15100000 | PREPAID EXPENSES | AL | 500.00 |
| 20100000 | ACCNTS/PAYAB.VENDORS | LC | 0.00 |
| 20200000 | ACCNTS/PAYABLE OTHERS | LC | 0.00 |
| 21100000 | SALES TAX | LC | 0.00 |

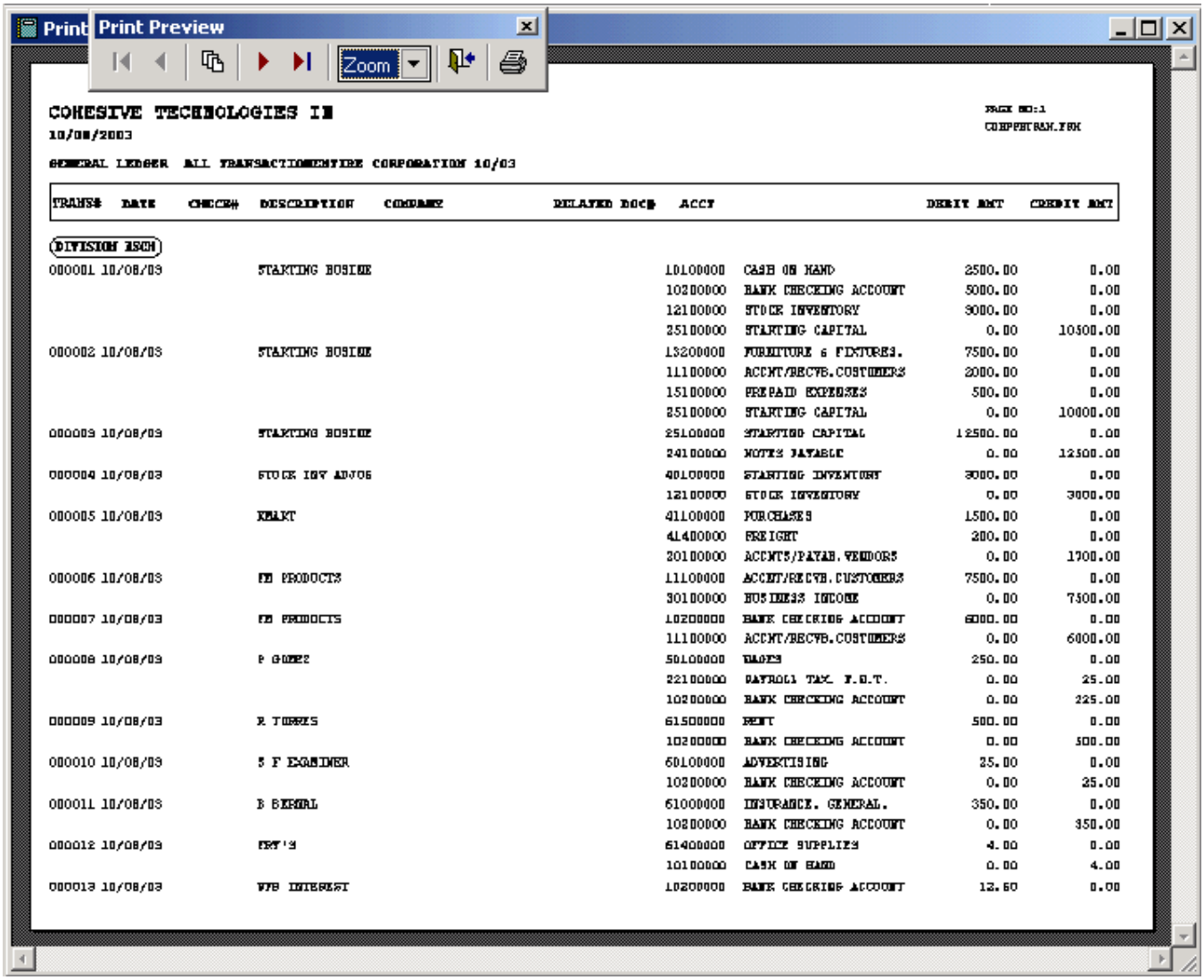
The Corporate Trial Balance report includes the trial balances for the current month and YTD for every division belonging to the Business Unit selected or all divisions for the entire corporation.

**Corporate General Ledger Report**




The Corporate General Ledger report contains the starting balance for the year, the starting balance for the month, all transactions for the period, the ending balance for the month, and the ending balance for the year for every division belonging to the Business Unit selected or all divisions for the entire corporation.

**Corporate Transaction Report**




COHESIVE TECHNOLOGIES IN

10/08/2003

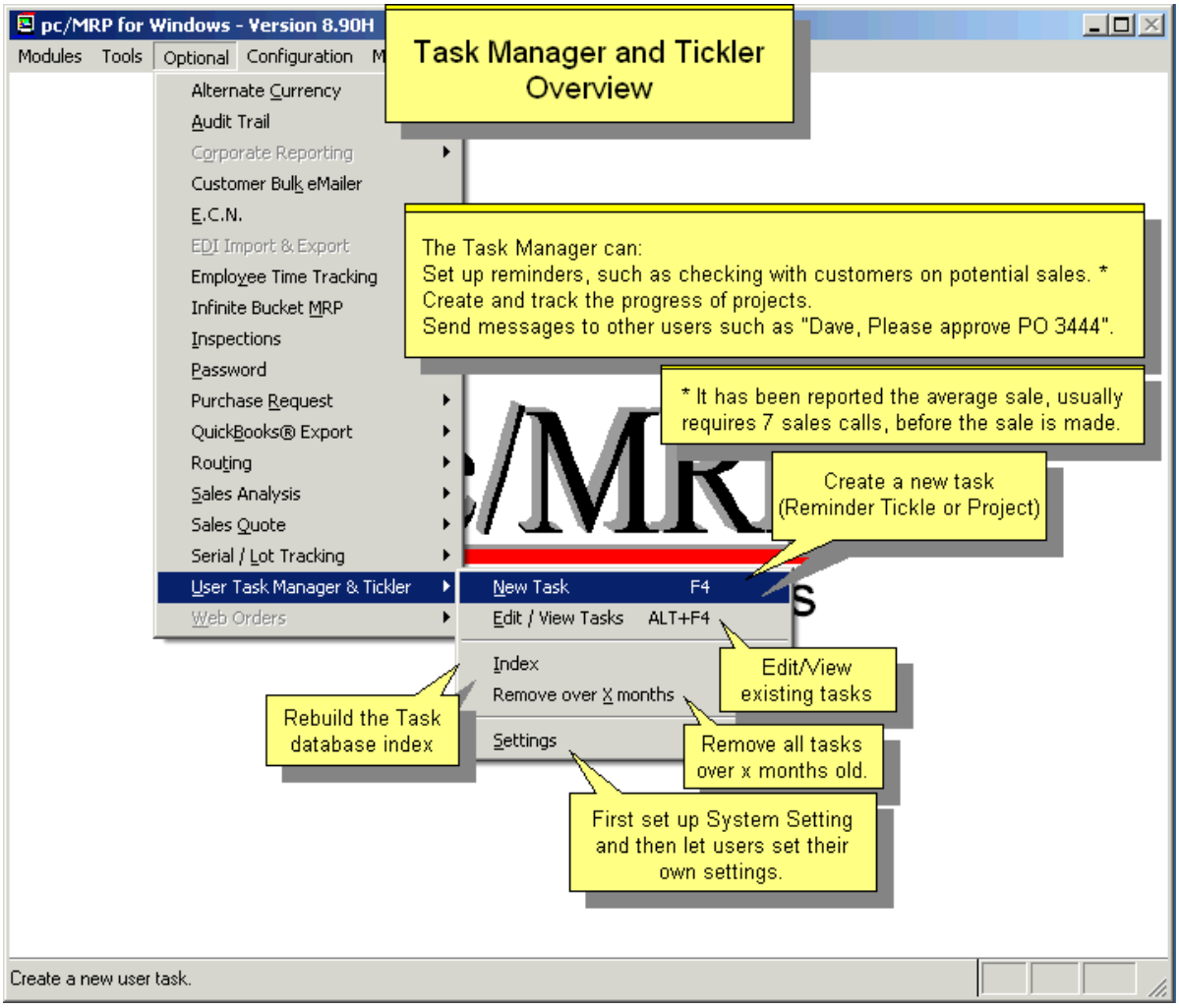
GENERAL LEDGER ALL TRANSACTIONSENTIRE CORPORATION 10/03

| TRANS# | DATE | CHECK# | DESCRIPTION | COMPANY | RELATED DOC# | ACCT | | DEBIT AMT | CREDIT AMT |
|---|---|---|---|---|---|---|---|---|---|
| DIVISION ESCH | | | | | | | | | |
| 000001 | 10/08/03 | | STARTING BUSINE | | | 10100000 | CASH ON HAND | 2500.00 | 0.00 |
| | | | | | | 10200000 | BANK CHECKING ACCOUNT | 5000.00 | 0.00 |
| | | | | | | 12100000 | STOCK INVENTORY | 9000.00 | 0.00 |
| | | | | | | 35100000 | STARTING CAPITAL | 0.00 | 10500.00 |
| 000002 | 10/08/03 | | STARTING BUSINE | | | 13200000 | FURNITURE & FIXTURES. | 7500.00 | 0.00 |
| | | | | | | 11100000 | ACCNT/RECVB.CUSTOMERS | 2000.00 | 0.00 |
| | | | | | | 15100000 | PREPAID EXPENSES | 500.00 | 0.00 |
| | | | | | | 35100000 | STARTING CAPITAL | 0.00 | 10000.00 |
| 000003 | 10/08/03 | | STARTING BUSINE | | | 25100000 | STARTING CAPITAL | 12500.00 | 0.00 |
| | | | | | | 24100000 | NOTES PAYABLE | 0.00 | 12500.00 |
| 000004 | 10/08/03 | | STOCK INV ADJUS | | | 40100000 | STARTING INVENTORY | 3000.00 | 0.00 |
| | | | | | | 12100000 | STOCK INVENTORY | 0.00 | 3000.00 |
| 000005 | 10/08/03 | | KMART | | | 41100000 | PURCHASES | 1500.00 | 0.00 |
| | | | | | | 41400000 | FREIGHT | 200.00 | 0.00 |
| | | | | | | 20100000 | ACCNTS/PAYAB.VENDORS | 0.00 | 1700.00 |
| 000006 | 10/08/03 | | FB PRODUCTS | | | 11100000 | ACCNT/RECVB.CUSTOMERS | 7500.00 | 0.00 |
| | | | | | | 30100000 | BUSINESS INCOME | 0.00 | 7500.00 |
| 000007 | 10/08/03 | | FB PRODUCTS | | | 10200000 | BANK CHECKING ACCOUNT | 6000.00 | 0.00 |
| | | | | | | 11100000 | ACCNT/RECVB.CUSTOMERS | 0.00 | 6000.00 |
| 000008 | 10/08/03 | | P GOMEZ | | | 50100000 | WAGES | 250.00 | 0.00 |
| | | | | | | 22100000 | PAYROLL TAX. F.U.T. | 0.00 | 25.00 |
| | | | | | | 10200000 | BANK CHECKING ACCOUNT | 0.00 | 225.00 |
| 000009 | 10/08/03 | | R TORRES | | | 61500000 | RENT | 500.00 | 0.00 |
| | | | | | | 10200000 | BANK CHECKING ACCOUNT | 0.00 | 500.00 |
| 000010 | 10/08/03 | | S F EXAMINER | | | 60100000 | ADVERTISING | 25.00 | 0.00 |
| | | | | | | 10200000 | BANK CHECKING ACCOUNT | 0.00 | 25.00 |
| 000011 | 10/08/03 | | B BERNAL | | | 61000000 | INSURANCE. GENERAL. | 350.00 | 0.00 |
| | | | | | | 10200000 | BANK CHECKING ACCOUNT | 0.00 | 350.00 |
| 000012 | 10/08/03 | | PET'S | | | 61400000 | OFFICE SUPPLIES | 4.00 | 0.00 |
| | | | | | | 10100000 | CASH ON HAND | 0.00 | 4.00 |
| 000013 | 10/08/03 | | WFB INTEREST | | | 10200000 | BANK CHECKING ACCOUNT | 12.50 | 0.00 |

The Corporate Transaction report contains the every transaction entered during the period for every division belonging to the Business Unit selected or all divisions for the entire corporation.

# 16.18 Optional User Task Manager & Tickler Module

### 16.18.1 Overview and Setup




See our slideshows here: http://www.pcmrp.com/mrp101/tickleroverview.htm and here: http://www.pcmrp.com/mrp101/crmoverview.htm

The User Task Manager & Tickler Module allows companies to

- Quickly set reminders.
- Manage and assign tasks of a project.
- Multiple task reports with various sort and group options.

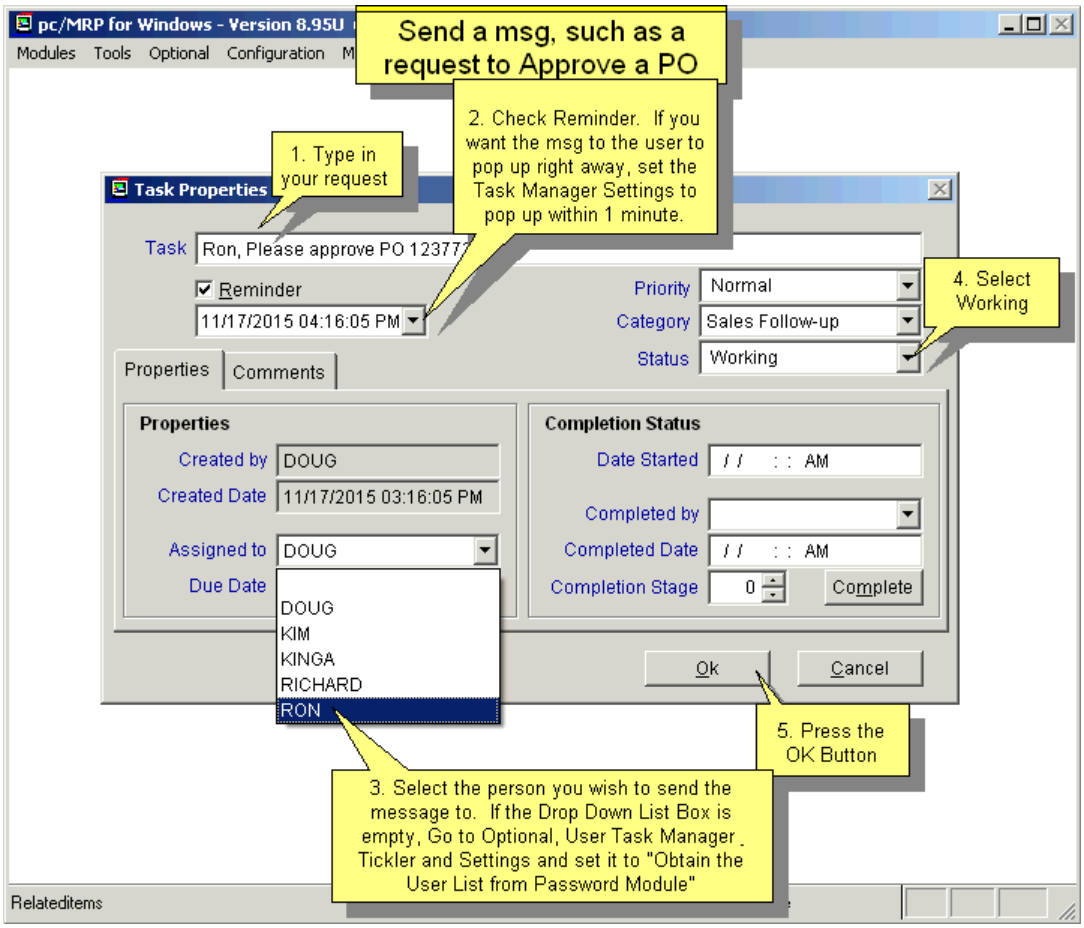
The reports include:

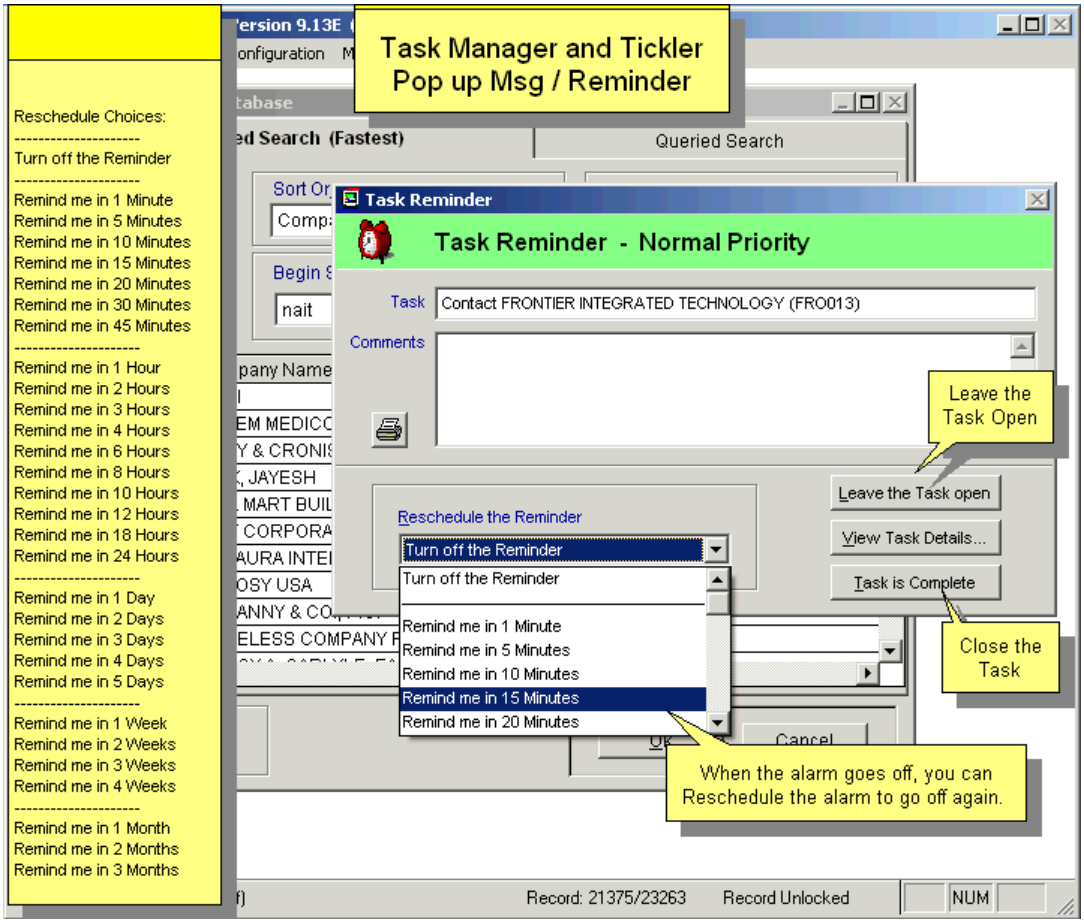
- All displayed Tasks in List format.
- Just the selected Task in item format.
- All the displayed Tasks in item format.

To activate this module: Call Software Arts (408-226-7321) to obtain your activation code number. Select Configuration, Module Activation, and then User Task Manager & Tickler Module from the menu. Press the "Activate" button and enter your activation code number.

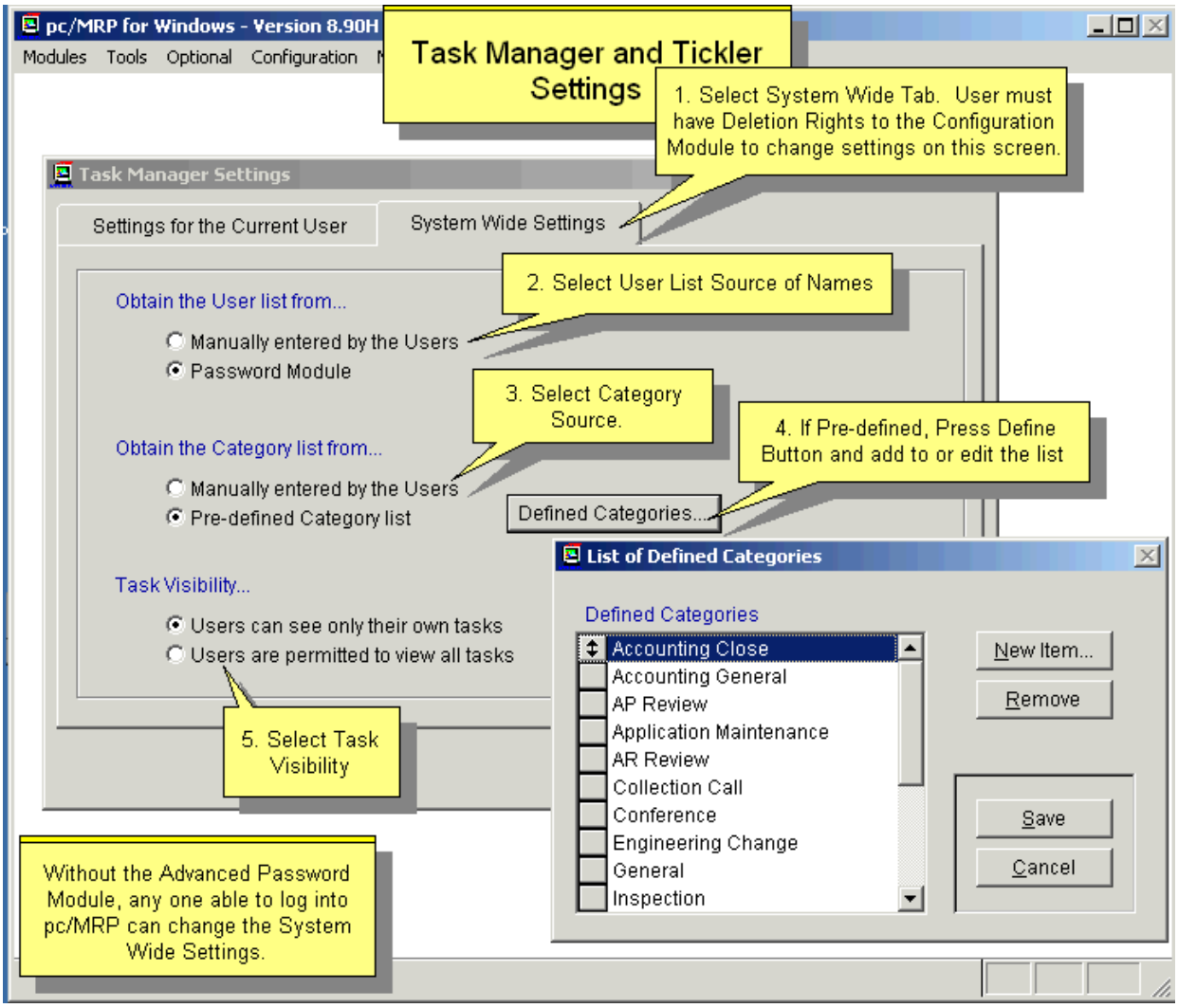
**Example**

Companies that own the Advanced Password Module can send requests for PO Approval.


pc/MRP for Windows - Version 8.95U
Modules Tools Optional Configuration M
Send a msg, such as a request to Approve a PO
1. Type in your request
2. Check Reminder. If you want the msg to the user to pop up right away, set the Task Manager Settings to pop up within 1 minute.
Task Properties
Task
Ron, Please approve PO 123777
Reminder
11/17/2015 04:16:05 PM
Priority
Normal
Category
Sales Follow-up
Status
Working
4. Select Working
Properties
Comments
Properties
Created by
DOUG
Created Date
11/17/2015 03:16:05 PM
Assigned to
DOUG
Due Date
DOUG
KIM
KINGA
RICHARD
RON
Completion Status
Date Started
Completed by
Completed Date
Completion Stage
0
Complete
Ok
Cancel
5. Press the OK Button
3. Select the person you wish to send the message to. If the Drop Down List Box is empty, Go to Optional, User Task Manager Tickler and Settings and set it to "Obtain the User List from Password Module"
Relateditems


Reschedule Choices:
Turn off the Reminder
Remind me in 1 Minute
Remind me in 5 Minutes
Remind me in 10 Minutes
Remind me in 15 Minutes
Remind me in 20 Minutes
Remind me in 30 Minutes
Remind me in 45 Minutes
Remind me in 1 Hour
Remind me in 2 Hours
Remind me in 3 Hours
Remind me in 4 Hours
Remind me in 6 Hours
Remind me in 8 Hours
Remind me in 10 Hours
Remind me in 12 Hours
Remind me in 18 Hours
Remind me in 24 Hours
Remind me in 1 Day
Remind me in 2 Days
Remind me in 3 Days
Remind me in 4 Days
Remind me in 5 Days
Remind me in 1 Week
Remind me in 2 Weeks
Remind me in 3 Weeks
Remind me in 4 Weeks
Remind me in 1 Month
Remind me in 2 Months
Remind me in 3 Months
Task Manager and Tickler Pop up Msg / Reminder
Queried Search
Task Reminder
Task Reminder - Normal Priority
Task
Contact FRONTIER INTEGRATED TECHNOLOGY (FRO013)
Comments
Leave the Task Open
Reschedule the Reminder
Turn off the Reminder
Leave the Task open
View Task Details...
Task is Complete
Close the Task
When the alarm goes off, you can Reschedule the alarm to go off again.
Record: 21375/23263
Record Unlocked
NUM

**System Wide Settings**

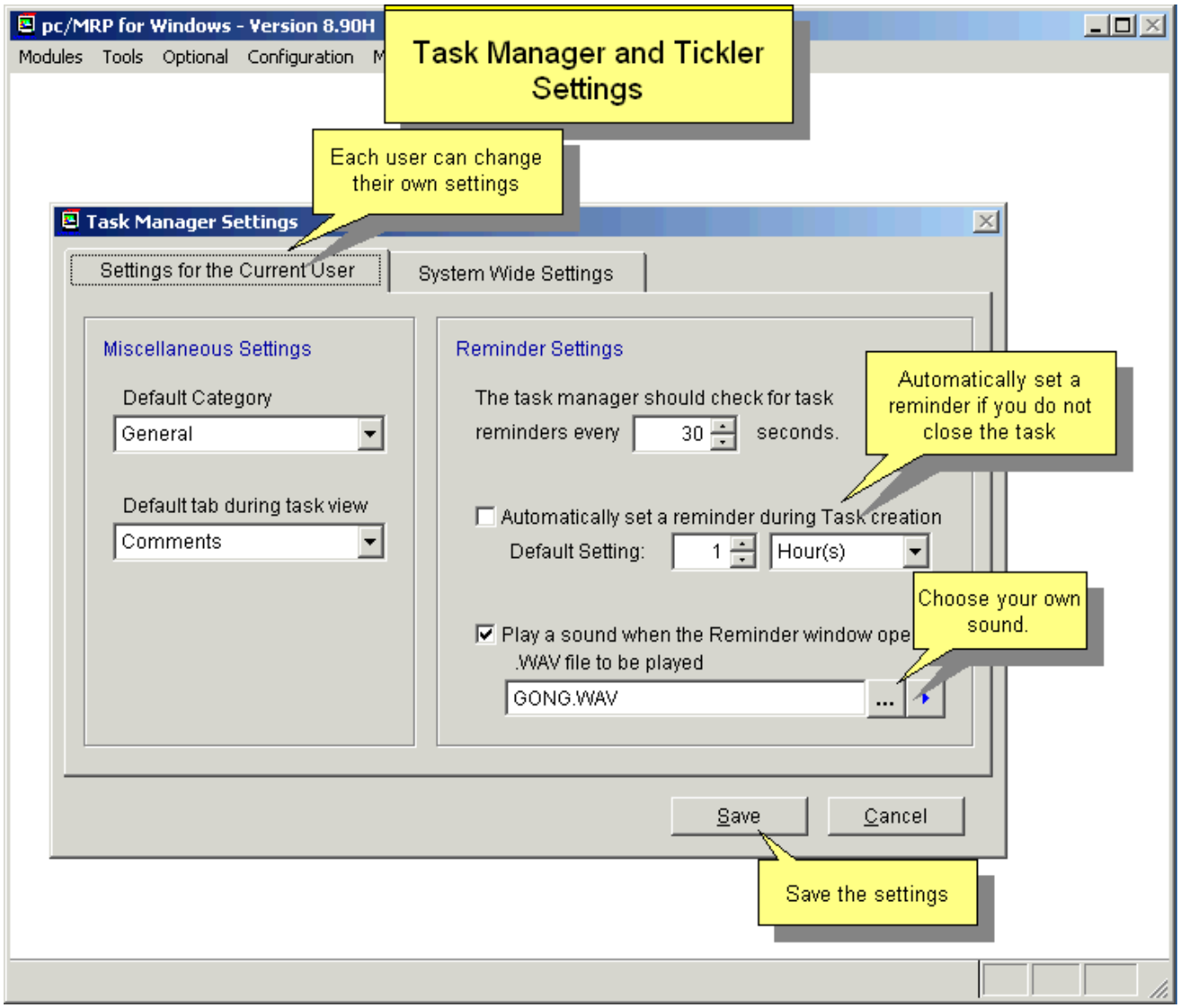



**Obtain the User list from…** Choose 'Manually entered by the Users' if you do not have the Advanced Password Module or wish the user to enter a name known not to be in the password module.

**Obtain the Category List from…** Choose 'Manually entered by the Users' if you do not want to control by a predefined category list. Pressing the 'Defined Categories' button will allow editing of the Defined Categories as seen in the screen above.

**Task Visibility** This is self explanatory; usually you will only want the user to see his tasks. He will still be able to see tasks he has assigned to other people.

**Settings for the Current User**

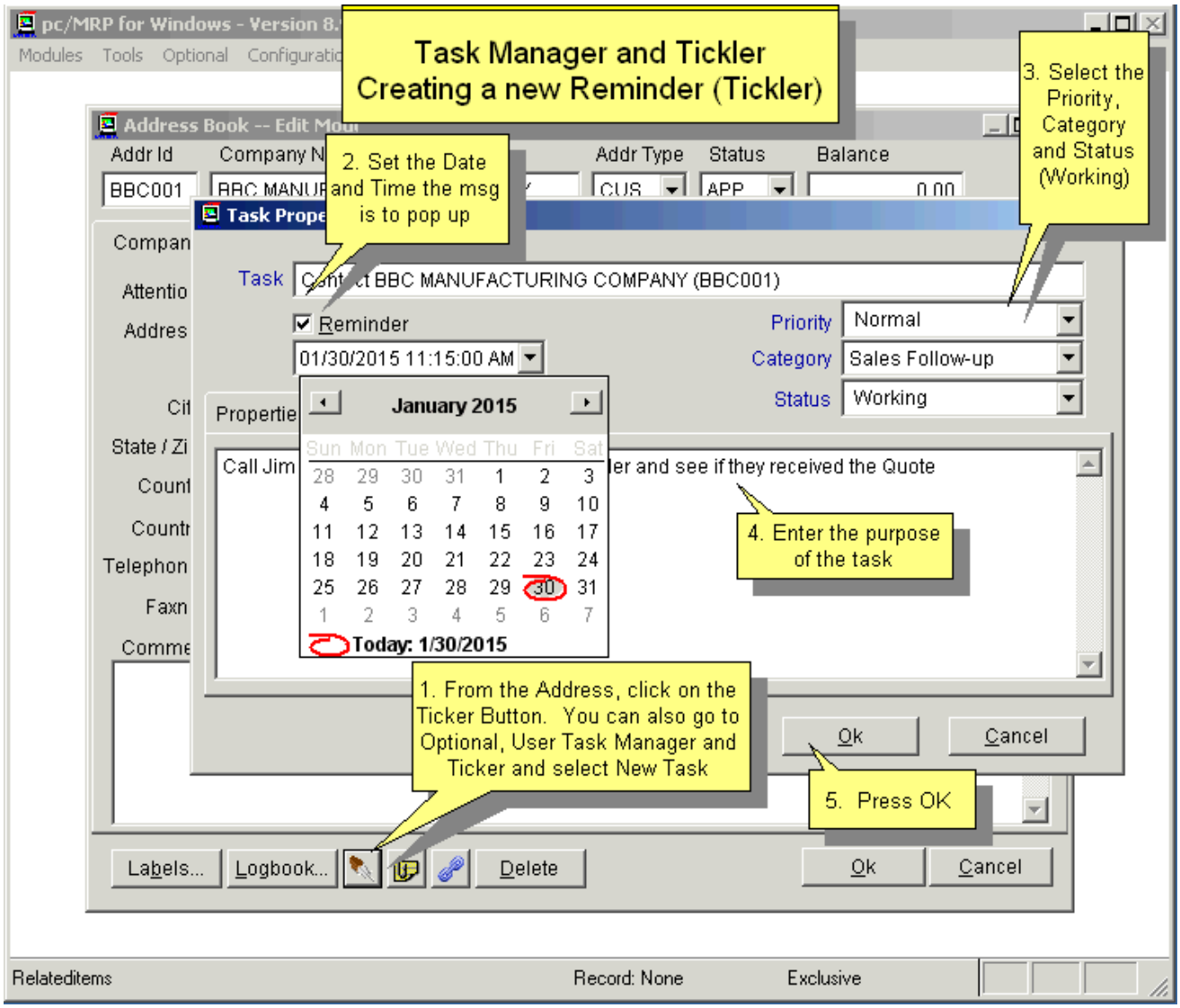



Default Category and Default Tab for Comments or Properties can be changed by each user logon. Categories may be added if allowed by the system administrator. If additions are allowed by the administrator, only a 'General' category is supplied to start with. The user may enter one here or on the task screen.

**16.18.2 Enter a New Task or Tickler**

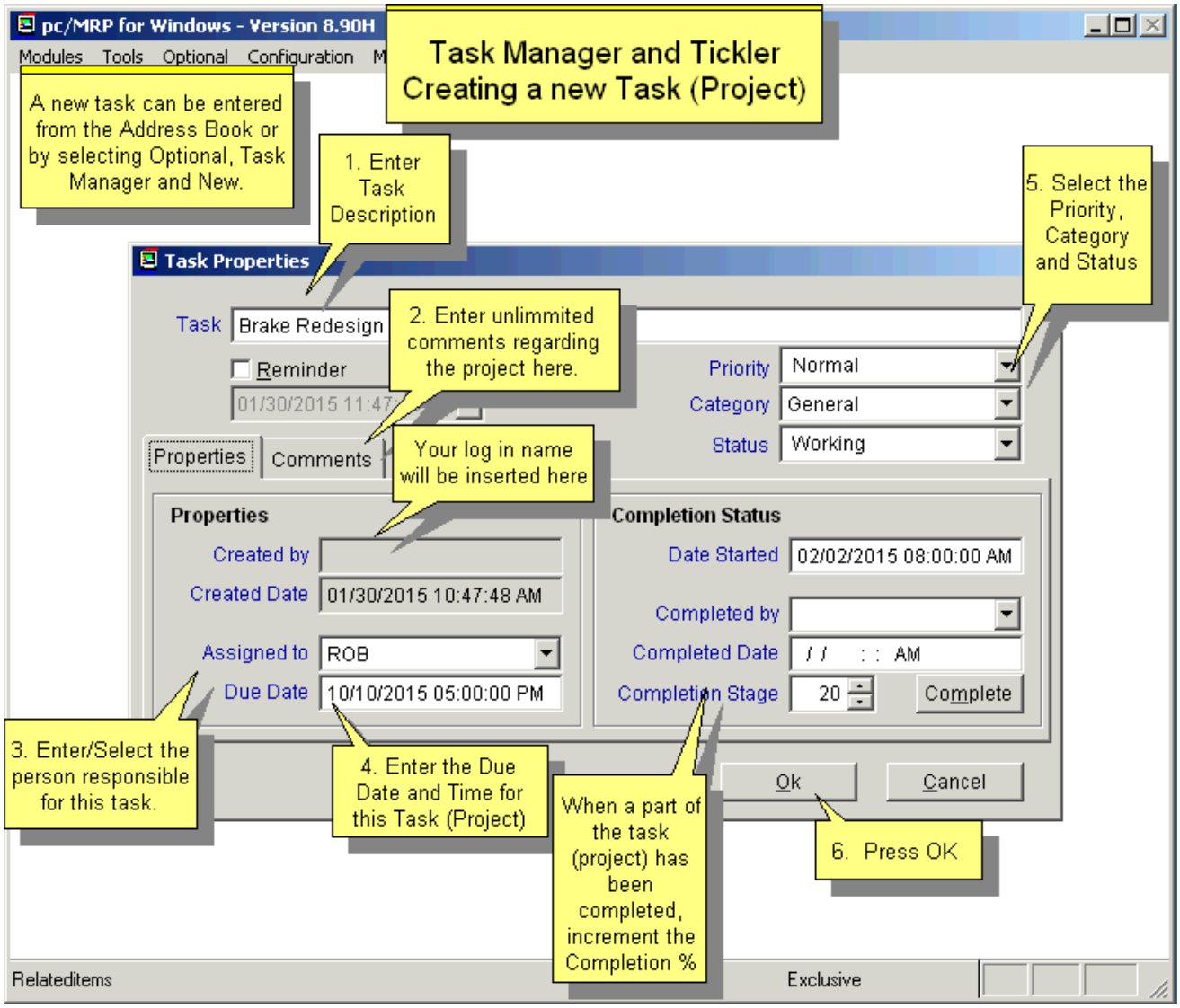
**Step 1.**

When selecting 'New Task' from the menu, you will be presented with the following screen.




Default Priority, Category, and Status are filled in for the user. Abbreviated Task description, Reminder, and Comments are all that is needed for the basic Tickler. Comments can be unlimited.

**Step 2, Properties tab**

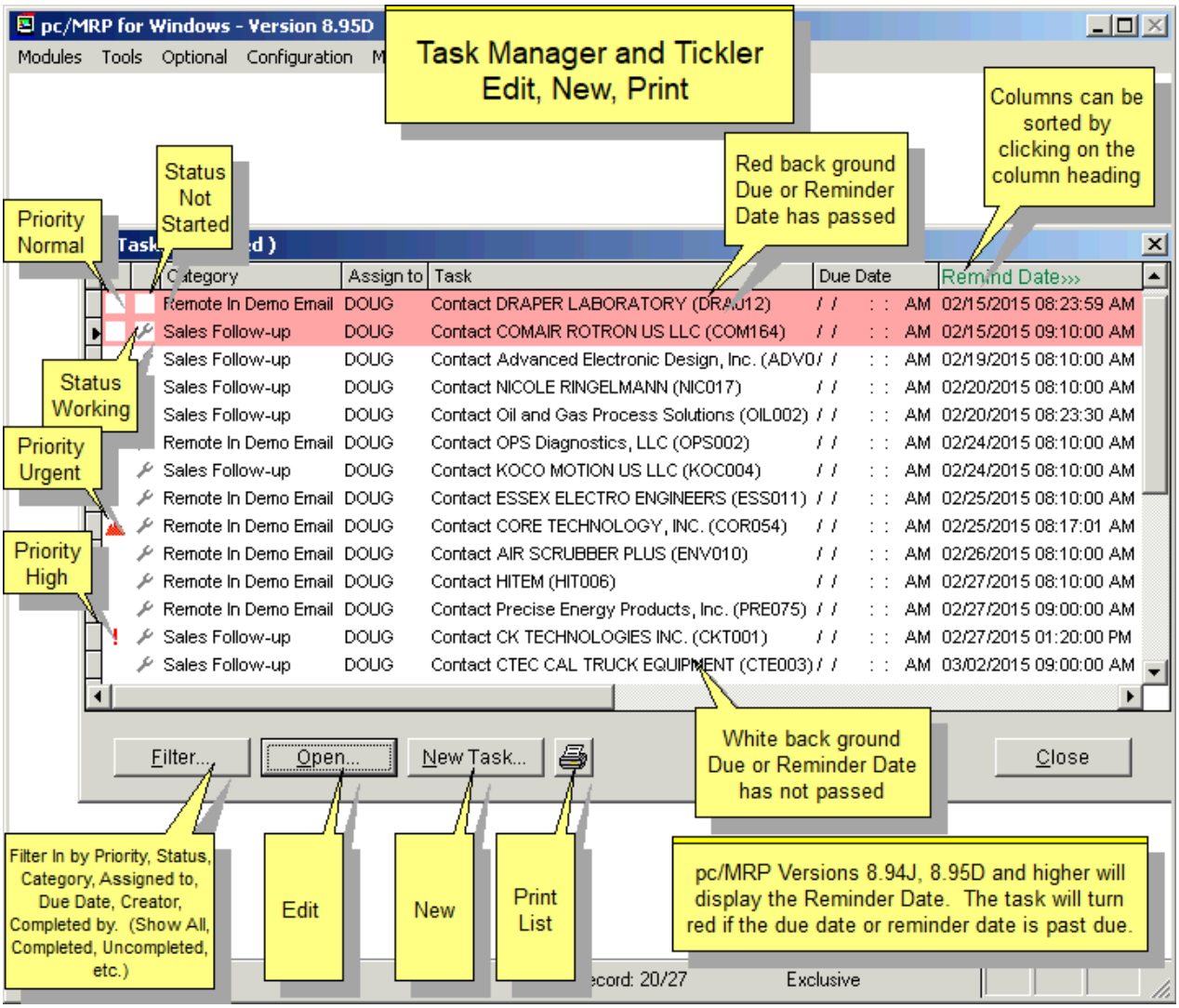



More detailed information is available for entry of the Properties tab. 'Created by' and 'Created Date' are not modifiable. 'Assigned to' can be selected from the drop-down list or, if the Administrator allowed, you can enter a name yourself just like the Category field.

**Note:** Due Date and Date Started (and Completed Date) are not validated against one another.

### 16.18.3 Edit/Complete/Print

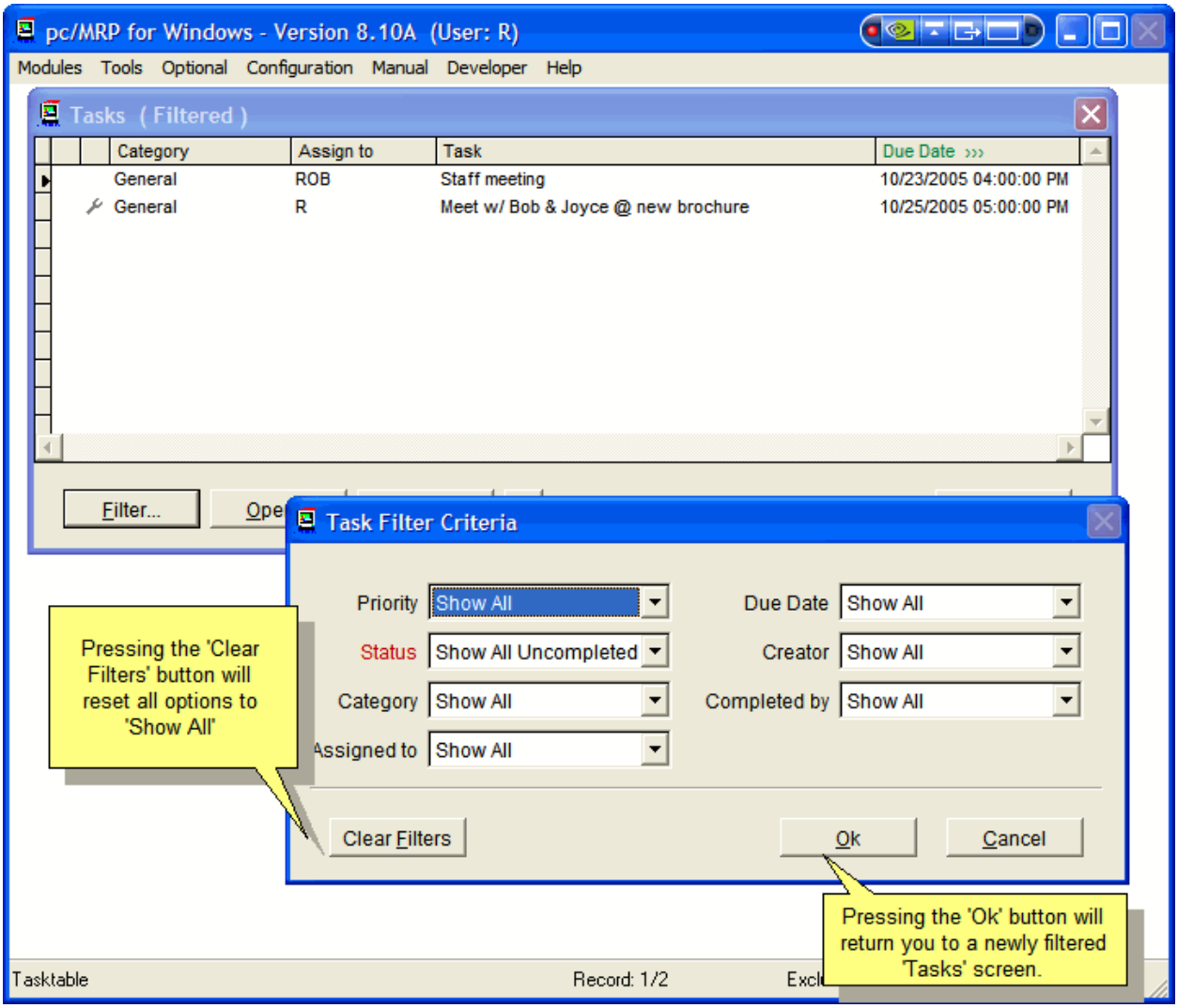
Selecting 'Edit/View Tasks' from the User Task Manager & Tickler menu will bring up the following screen.




Selecting 'Open' button will open the details for the selected task, in this case, 'Staff meeting'.

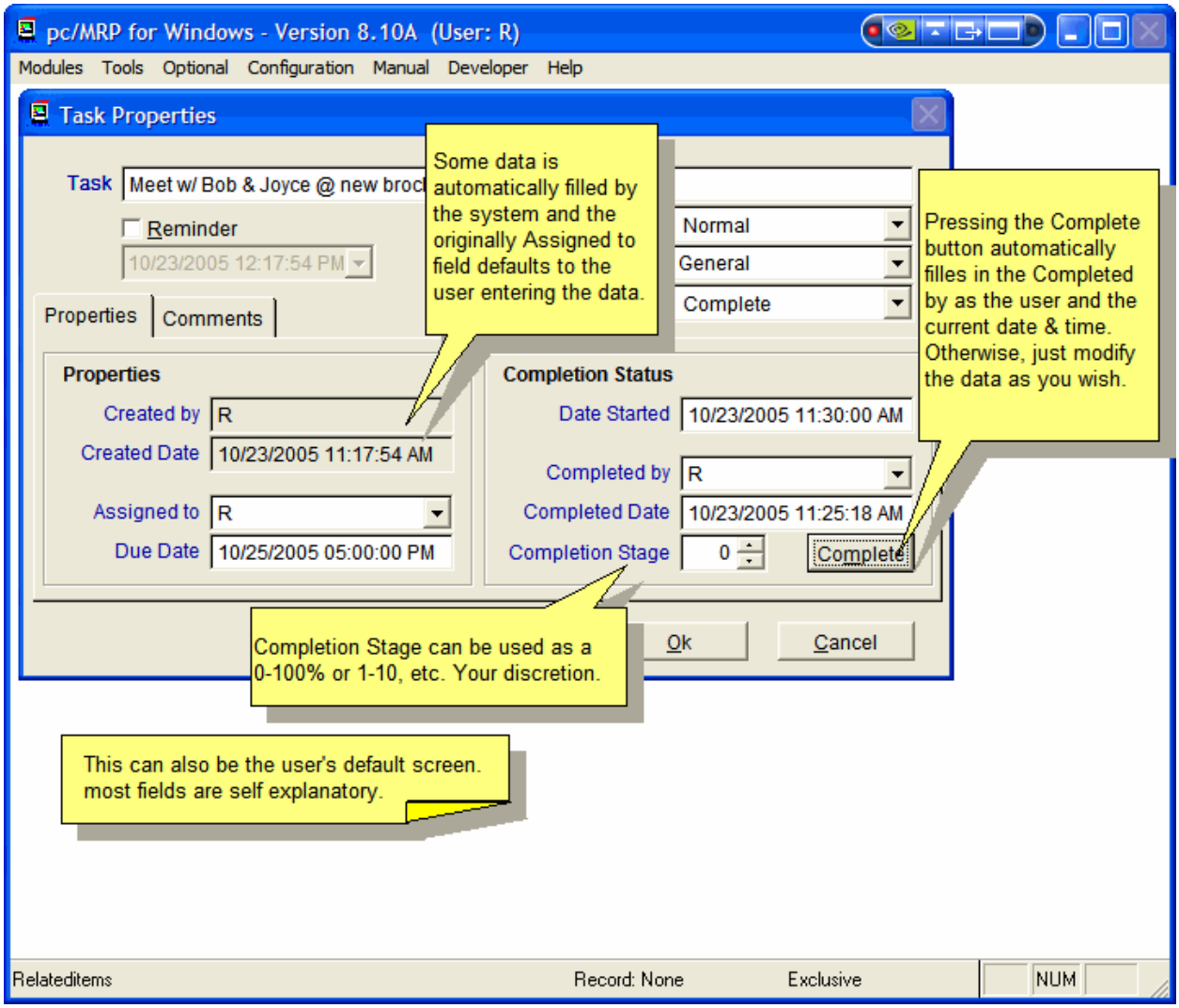
Pressing the **Filter** button on the Tasks window presents this screen.

Changing any of the filter criteria changes the filter label to red. There are numerous filter criteria the user can set up. The default settings are shown below.



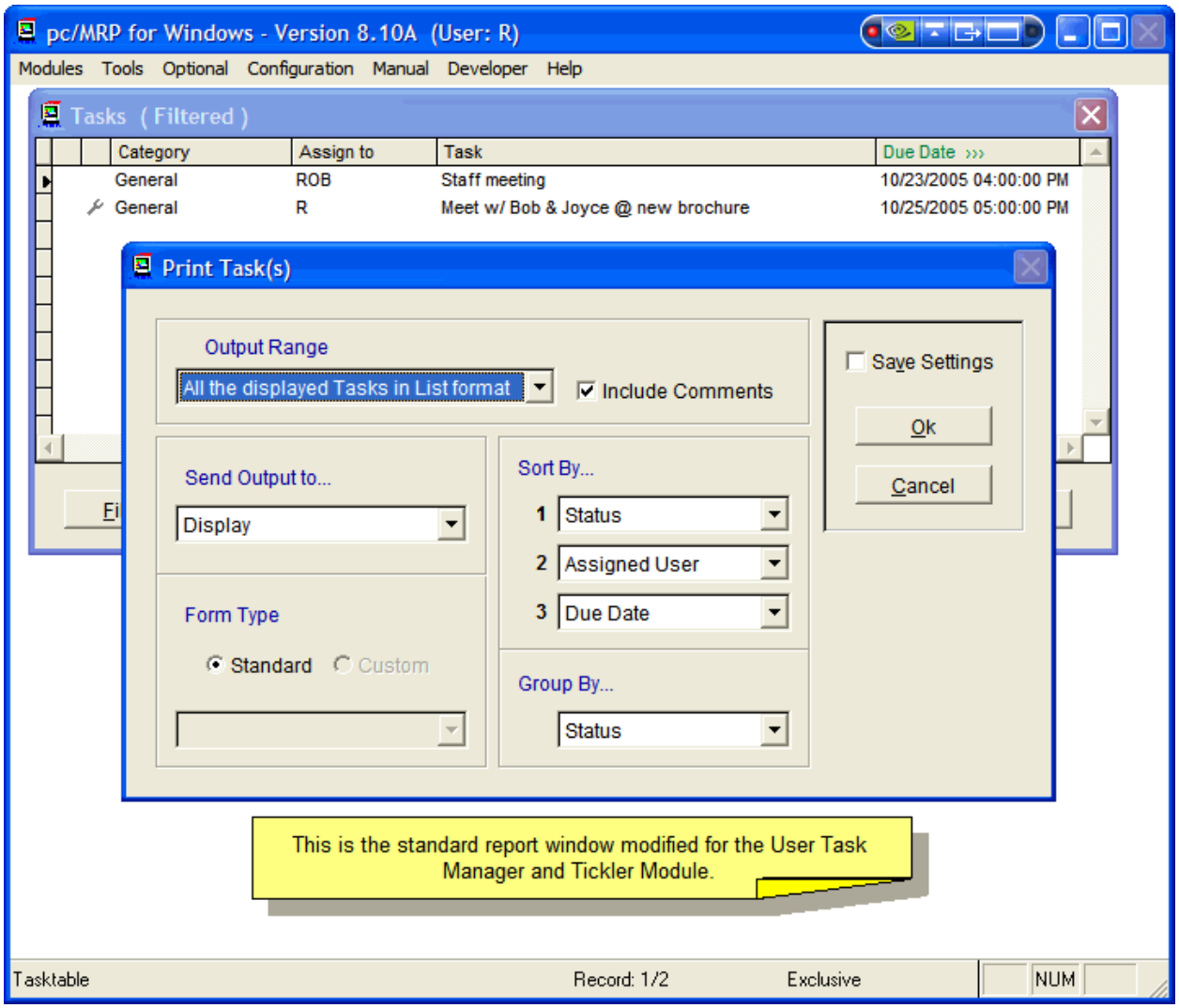
If you do not use the Properties tab, you may just adjust the 'Status' box in the upper window area to '**Complete**'.

For the Project tasks, the 'Properties' tab offers more options to complete the task.




If all you need to do is mark the task complete, just press the 'Complete' button on the Properties tab and adjust the Completion Stage if required. 'Status', Completed by, Date and Time are automatically filled in for you. You may also need to adjust the 'Completed by' box if you did not do the work.

Pressing the **Print** button on the Tasks detail window brings up the following screen.




Choose the Output Range, where to send the report, how to sort the report and whether or not to include Comments.

The Save Settings checkbox will save your report settings to your login file to allow the same criteria to be used as default for the next report run.

**Remove Over X Months.**

Selecting menu item 'Remove Over X Months' is a two step process.

It is imperative that the date be today's date and that you have a back-up of the production pcmrpw directory.

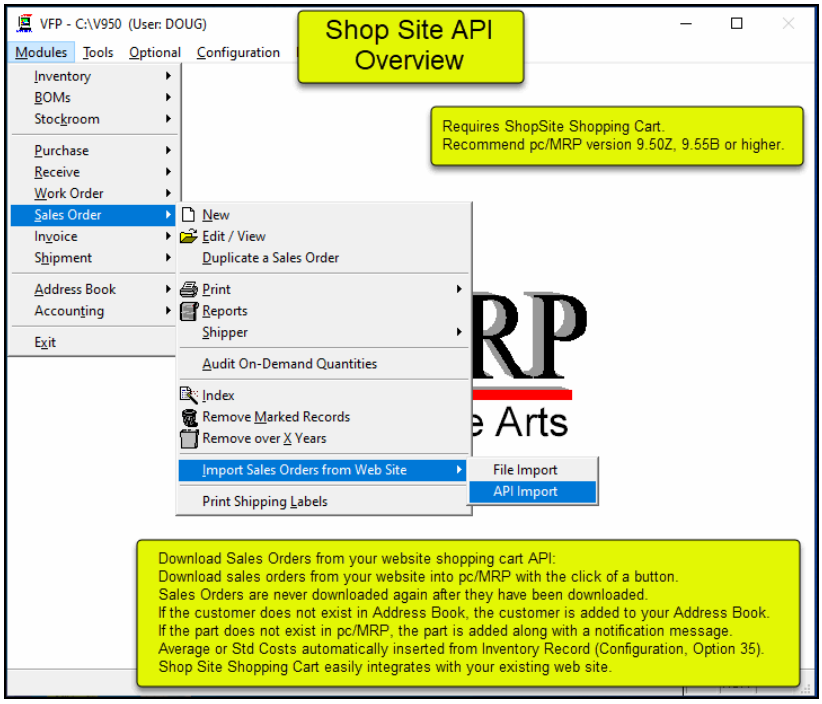
If you want to keep the last year's worth of Task & Tickler records, you would enter 12 as the age in months.

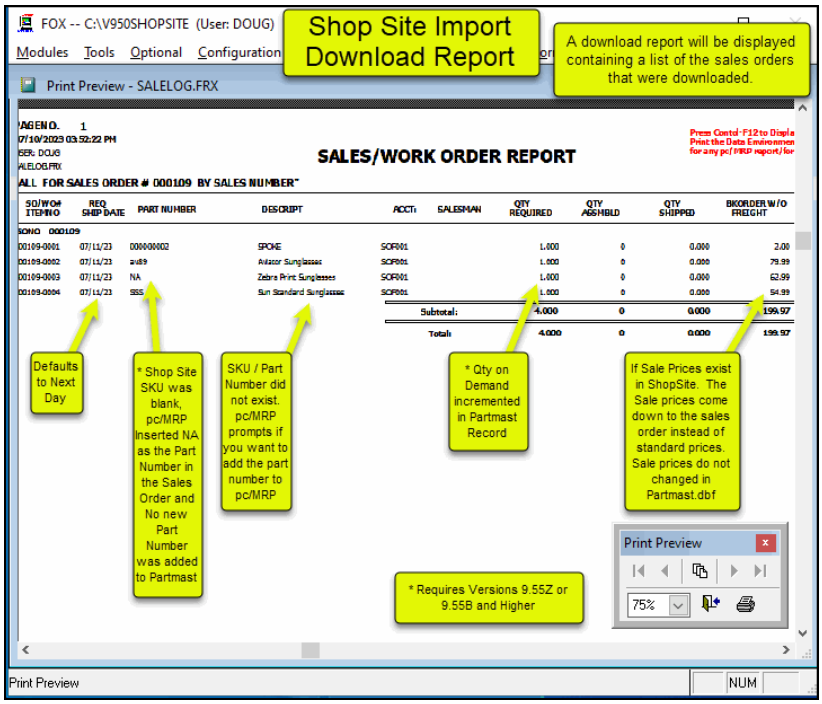
# 16.19 Optional Integrated Web Sales Site Interface

An online slideshow is located here: [https://pcmrp.com/mrp101/shopsiteapioverview.htm](https://pcmrp.com/mrp101/shopsiteapioverview.htm)

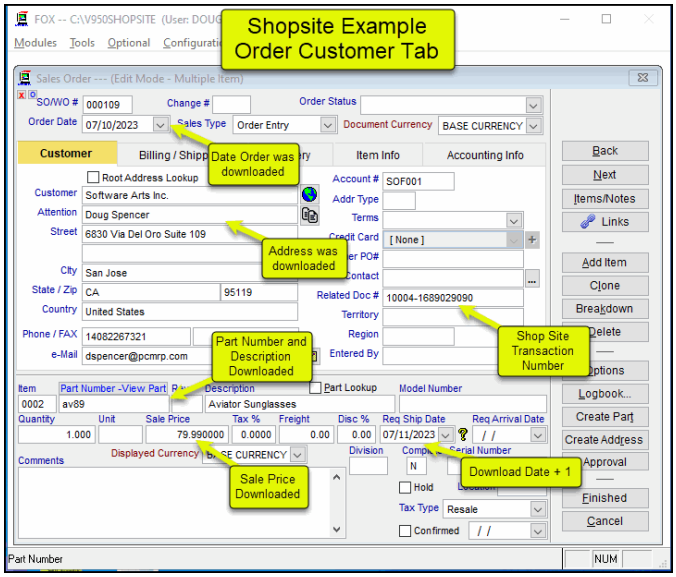
### 16.19.1 Overview

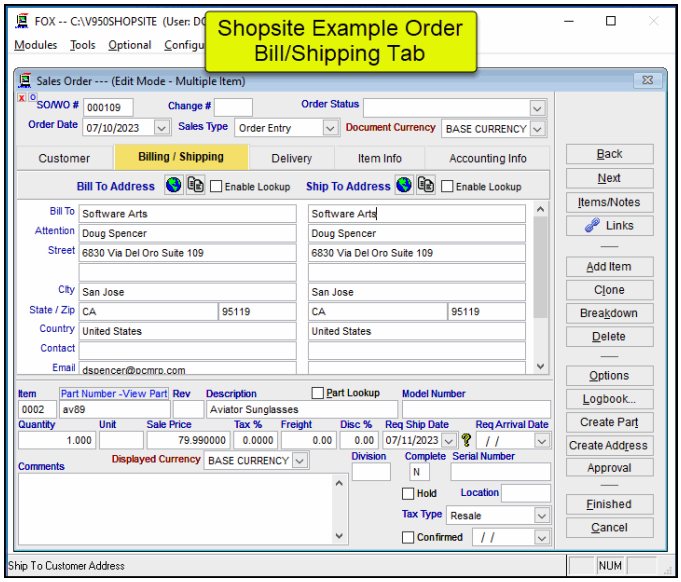
This optional module allows users to manage orders created on a web sales site (currently ShopSite) by downloading and uploading the orders into pc/MRP's Sales Order module.

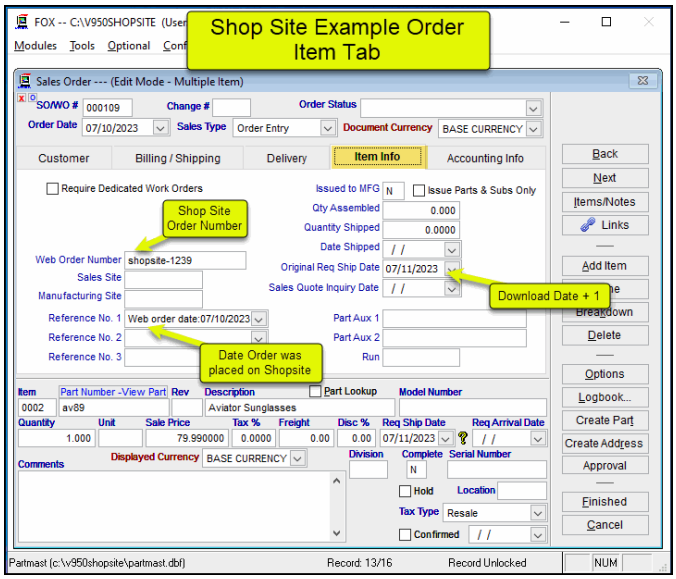


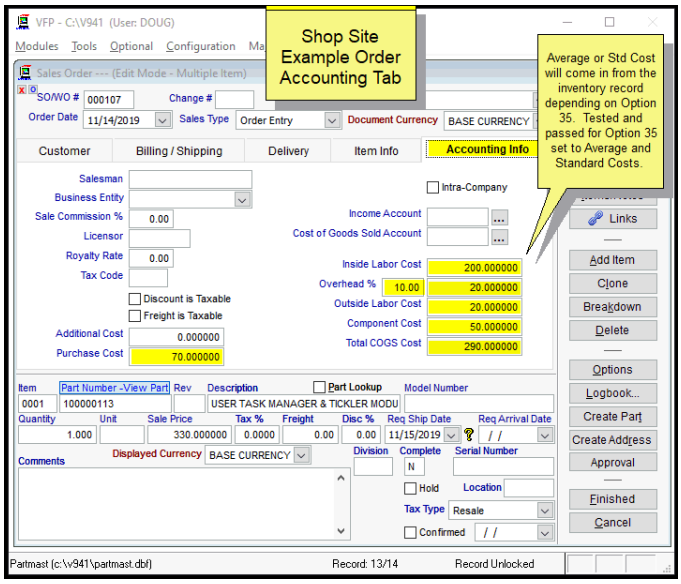



If you were to edit one of the sales orders you would see the following data on the sales orders

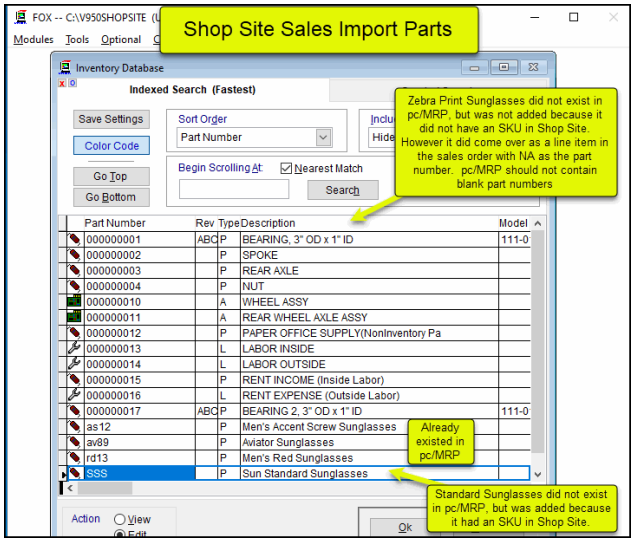


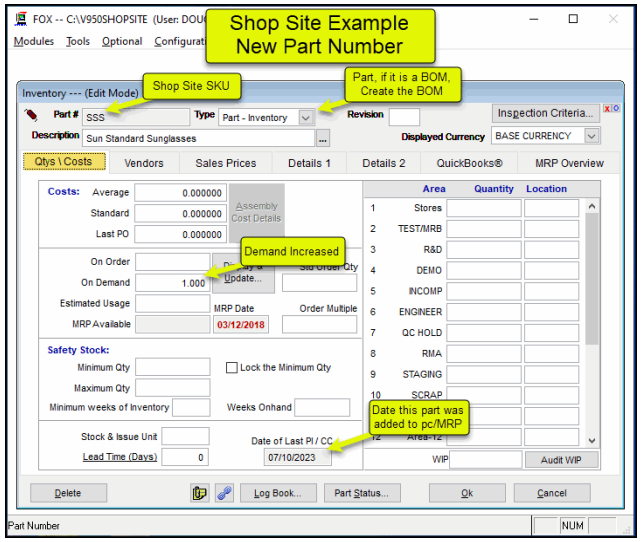



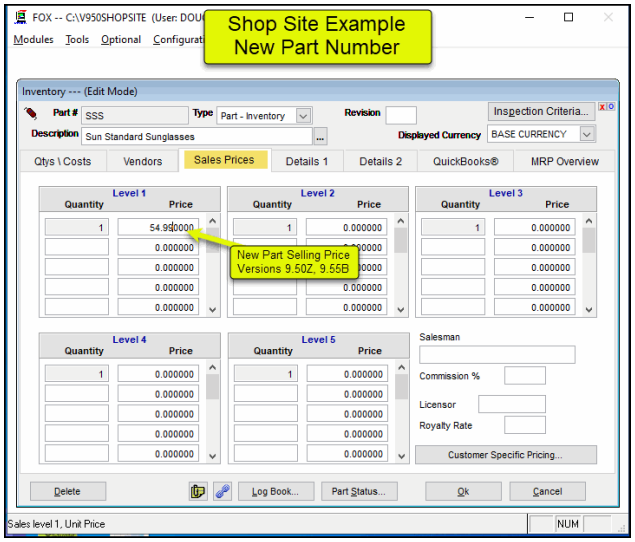



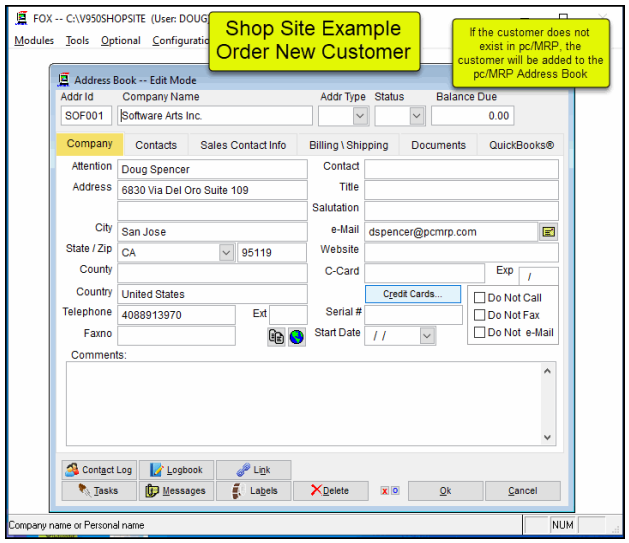



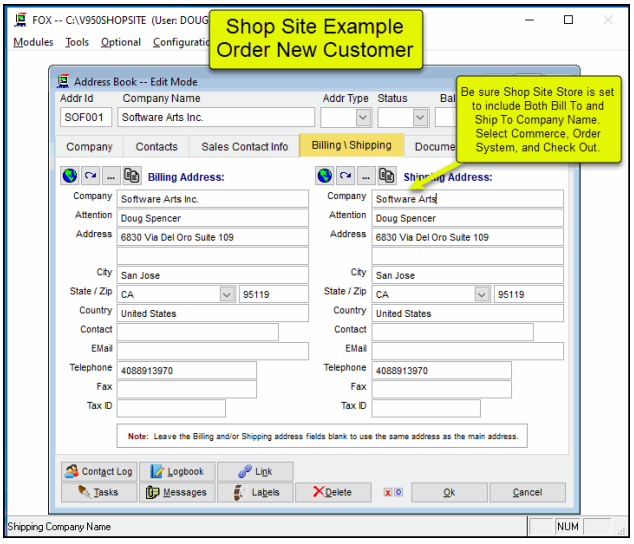
If a customer or part number did not exist in pc/MRP, Shops Site will insert the new parts and customers into pc/MRP



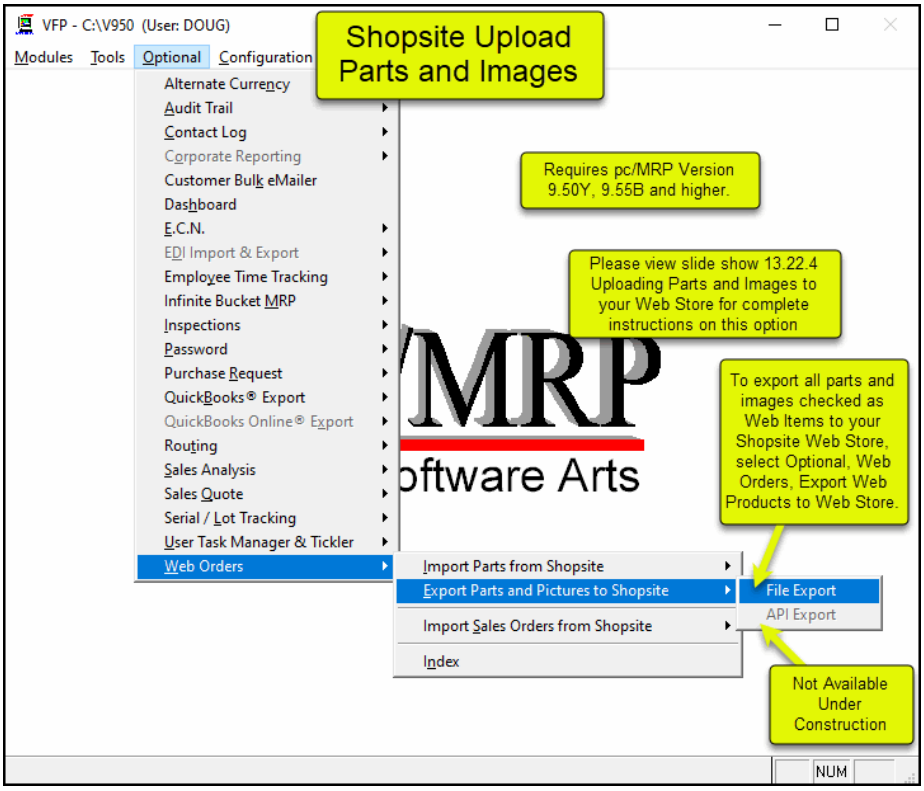



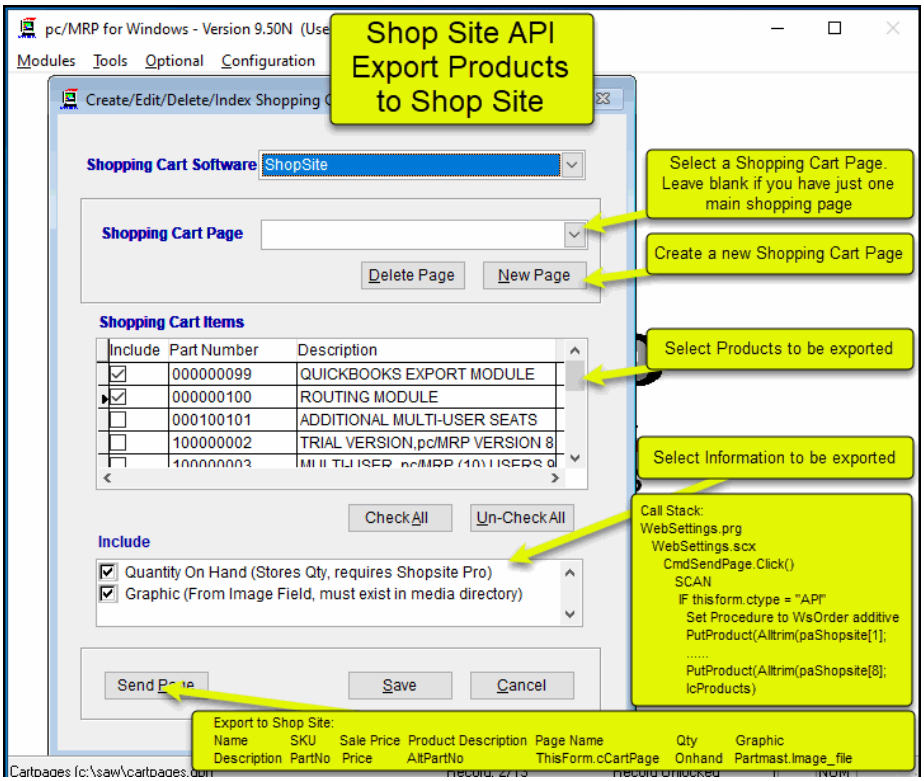



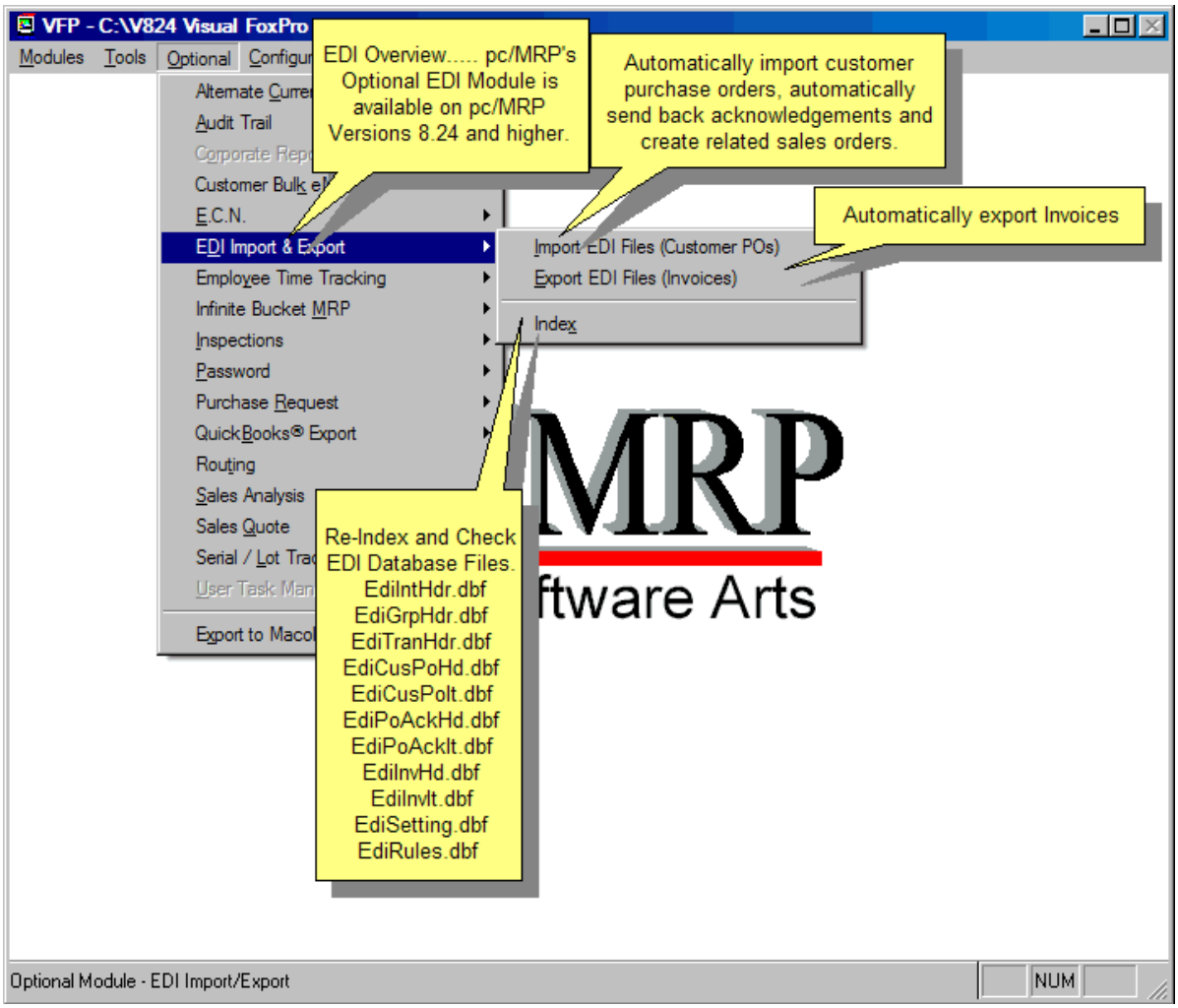



Upload Parts and Images to Shop Site



# 16.20 Optional EDI Import-Export




**Overview**

The Optional EDI Import-Export module allows electronic data exchange between you and your customers and vendors.

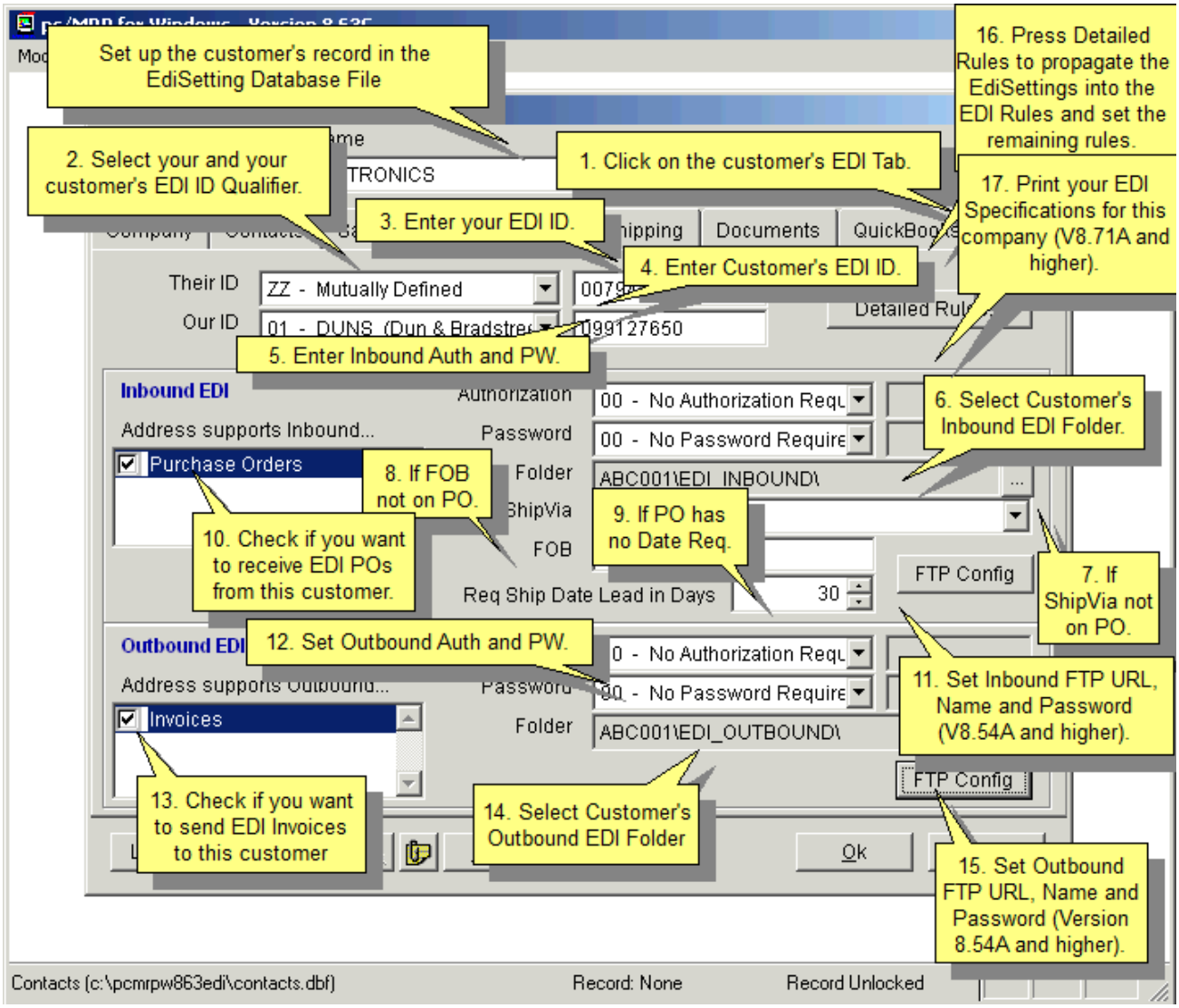
The EDI Module allows users to import Customer EDI Purchase Orders. pc/MRP will automatically create pc/MRP Sales Orders and if requested send an EDI Acknowledgement. Once the Invoice(s) have been created, pc/MRP will allow users to automatically create EDI Invoices. However, it is up to the user to receive and send the EDI Files through email or FTP. The EDI module currently conforms to EDI spec 4010.

The on-line slideshow can be viewed here:

http://www.pcmrp.com/mrp101/edioverview.htm

**EDI Setup Screen**

pc/MRP's new optional EDI Module allows users to created unique EDI Rules for each customer as shown in the Modules, Address Book, EDI tab screen shot below. Please see the detailed slideshow for instructions.



# 17.2 pc/MRP Trouble Shooting Tricks

### 17.2.1 System Information

**CTRL F12**

Pressing CTRL F12 will display

- the forms methods and the settings for each of its properties
- the call stack
- the current status of the program's tables
- CDXs
- index tags in use
- the current contents of all of the memory variables

**CTRL F10**

Pressing CTRL F10 will toggle between Maximize and Restore Down.

**System Information**

System information, DLL's, operating system, memory, etc. can be viewed by selecting configuration, About pc/MRP, and System Information.

**Start Up Programs and Processes**

Click on the Start button, select Run, type in msconfig.exe. Select Start-up then look for programs that can cause start-up and or run problems. Such as: scheduling agent, printer monitors, virus checkers, etc.

**Device Properties**

Right click on my computer, select properties, click on device manager, select your device, click on properties, and then select the properties tab.

**Taking Screen Shots within pc/MRP**

You can click Ctrl-F8 if you want to print the screenshot or save it as a BMP file.

Alt-PrintScrn will place the screenshot on your clipboard, so you can Paste (Ctrl-V) it into an MS Word file.

**Finding your pc/MRP home folder**

A simple way to open up Explorer in the pc/MRP home directory would be to select "Configuration," "About pc/MRP," and press "Ctrl-E." This is the best way to find where pc/MRP resides on your computer.

**Pressing F1 from the About pc/MRP screen**

Displays information about the location of your pcmrp directory, the location of your Temp directory, the status of your Optional Modules, and the names of key files (.dbf, .ocx, .efx, .ef, .dll, .frx, .fxp) located in your pcmrp directory. Clicking the Send to File button will create a MS Notepad file that may be printed or emailed to Software Arts, Inc.

**SFS() Server File Status**

Entering SFS() in pc/MRP's command line displays all the open files and their status on the server.

**Verifying 'READ ONLY' files attributes (a tri-mode flag)**

What the grayed-out and checked Read-only checkbox is telling you is that subfolders and files of the folder may have the read-only attribute and not the folder itself.

If you go through the motions of removing the read-only attribute not only from a parent folder but also select the option to remove the attribute from all subfolders and files, then the read-only tri-mode flag should no longer be set.

If it is still set, the bottom line with the read-only attribute when viewed as the properties of a folder is that seeing the tri-mode flag set for the read-only attribute does not mean that the folder (or any subfolders or files) have the read-only attribute. Instead, it may imply that the folder is deemed a "special folder." For example, folders that support customized views are special folders.

The best way to ensure that the read-only attribute is removed from all subfolders and files in a folder is to navigate to the folder from the command prompt and then run the command **attrib –r /s /d**. This removes the read-only attribute from all files and folders within the target folder, as well as its subfolders.

If you want to query for the presence of any files or folders marked as read-only, you can navigate to the folder from the command prompt and run **dir /ar /s**. If the command does not return any files as read-only, then you know that there are no longer any read-only files contained in the folder or any of its subfolders. Note that with customized folders, removing the read-only attribute from the folder may result in the customizations being lost.

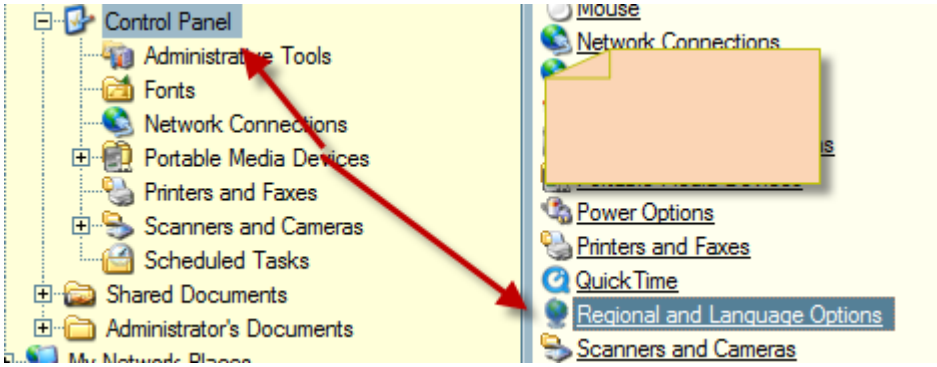
**Viewing Security / User Rights**

With Windows XP Professional or Windows 7, click on Control Panel, Administrative Tools, Local Security Settings Policy, Local Policies, Security Options, and make sure that Network Access: Sharing and security model for local accounts is set to 'Classic'.

### 17.2.2 Setting the Code Page Language in Windows

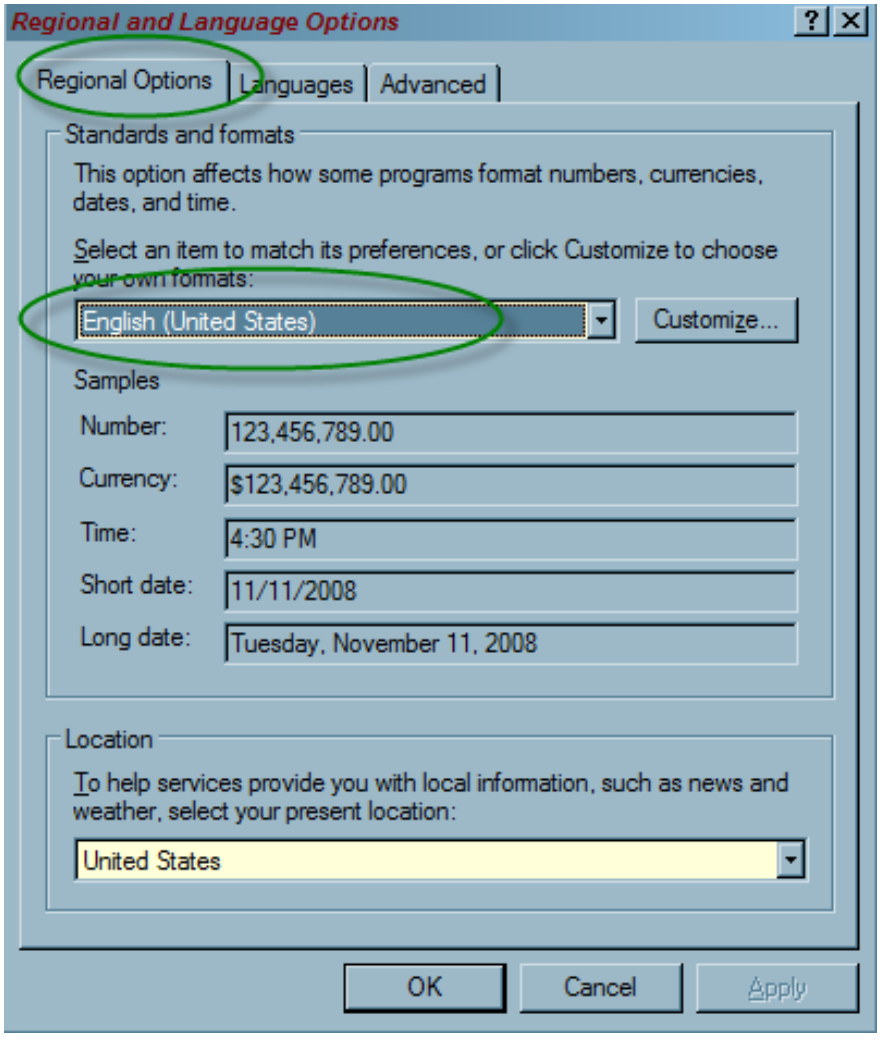
**Step 1 Navigate to your Control Panel**

Select the **Regional and Language Options.**



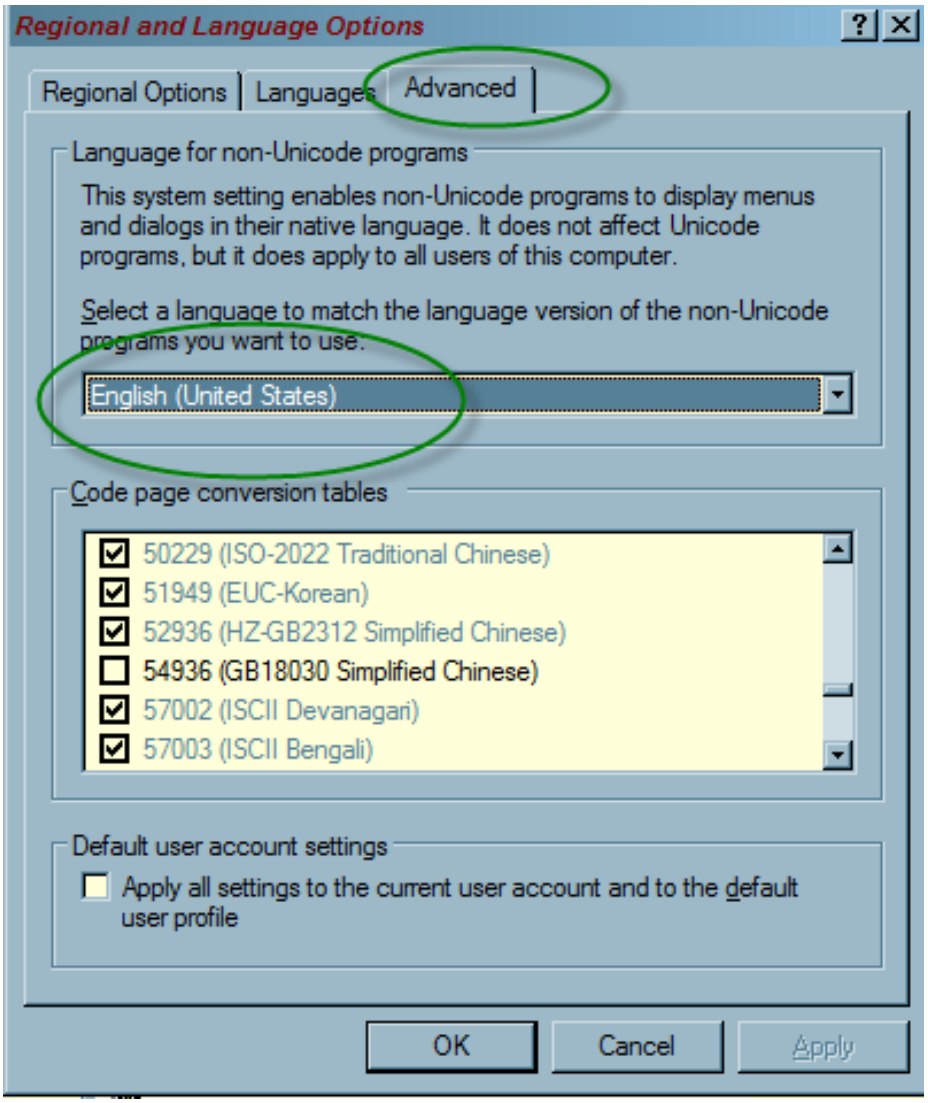

**Step 2 Select the "Regional Options" tab**

Make sure that under "**Standards and formats**", "**English (United States)**" from the drop down list is selected.



**Step 3 Select the "Advanced" tab**

Again, make sure you select "**English (United States**)" from the drop down list is selected.




Now click the OK button to finish and save the settings.

# 17.3 General Protection Fault and Freeze-up Problems (C5 Errors)

**17.3.1 General protection fault errors and freeze up problems can be caused by:**

Insufficient RAM memory
Insufficient hard disk space
Insufficient swap file size
Hard disk corruption
Too many programs running at the same time or two programs are conflicting
Insufficient Resources
Memory leakage
Poorly written drivers (screen, print, etc.)
Conflicting hardware addresses and interrupts
Video driver conflict
Driver and or program conflicts in upper memory
Marginal network hardware
Invalid temp directory
Corrupt program or database files (exe, dbf, fpt, cdx, mem, frx, frt)
Fragmented hard disk (local and or remote)
Print Spooler is turned off
Continuous backup programs

**17.3.2 Insufficient RAM Memory**

pc/MRP for Windows requires a minimum of 8 Megs of RAM. To check how much RAM your PC has, go to the Start Button, select settings, select control panel, select help and then select about Windows.

**17.3.3 Drive Space is critically low, insufficient hard disk space, has only 0 Bytes Remaining**

You can check how much RAM your PC has by going to the MSDOS prompt and entering the command CHKDSK, then hitting Enter. Your screen will indicate the amount of bytes on your hard disk available to your PC. If your PC has less then 20,000,000 bytes available on disk, delete non-essential files on the hard disk to increase the space available on your hard disk. Else, reboot the workstation, make sure the user has modify or higher sharing and security rights to the pcMRP folder, and check user's disk quota.

**17.3.4 Insufficient swap file size**

Windows 95 requires at least 20 Megs of hard disk space for a swap file. To check and or set your swap file size with Windows 95 you would select start, select settings, select control panel, select systems, select performance, and select virtual memory. If the free hard disk space is less than 20 Megabytes, you should remove unnecessary files from your hard disk to free up a minimum of 20 Megabytes. Be sure the radio button allowing Windows to manage memory is selected.

**17.3.5 Hard disk corruption**

You can use Microsoft's program called SCANDISK to check for hard disk corruption. If SCANDISK finds errors it can correct the errors, unfortunately in some cases the damage may have already been done (cross-linked files), and one or more files may be permanently damaged. Only re-installing the damaged file would correct the problem.

To run SCANDISK from Windows 95, exit Windows and go to the DOS prompt. Change to the Windows command directory by entering CD\WINDOWS\COMMAND [Enter] and then SCANDISK [Enter].

### 17.3.6 Too many programs running at the same time or two programs are conflicting

Windows can crash if too many programs are running at the same time taking up additional resources. Users have a tendency to load up programs (anti-virus, screen savers, office, etc.) in their start up file and run them in the background. Try running pc/MRP by itself to see if the frequency of crashing and or freeze ups is reduced. When programs are placed in the startup menu, these programs are drawing valuable resources even though they are not being used. Remove all programs from your startup menu and see if the frequency of crashes and freeze ups are reduced.

To check the number of programs running with Windows, press the Control ALT and DEL buttons, select Task Manager, and Applications.

Virus checkers that remain active during normal activation can cause problems. Deactivate the file system protection but not the email and internet protection to see if that solves the problem. If it does, set it to exclude checking the .DBF, .FPT, .FRX, .CDX, DBT, .DCT, & .DCX file types or better yet exclude the pc/MRP folder from real time protection.

### 17.3.7 Memory leakage

Some Windows programs display memory leakage. Going into and out of various programs will result in Windows losing memory resources as most programs do not give back the original amount of memory they used after they have been run for awhile. If crashes are occurring in the afternoon, check the computers resources, if they are down, consider rebooting at lunchtime as a matter of routine precaution to recover lost memory.

### 17.3.8 Conflicting hardware addresses and interrupts

PC devices that occupy the same address or interrupt as another device can cause general protection fault and freeze up problems.

To check for hardware device conflicts with Windows, select start, select settings, select control panel, select system, select device manager. If any of the devices display a ! in a yellow triangle, click on properties to see the conflict.

### 17.3.9 Video driver conflict

Non-standard OEM video drivers can cause problems with FoxPro for Windows. Install Window's standard 16-color VGA driver and see if that fixes the problem.

To install the standard 16-color VGA driver in Windows 95 select settings, select setup, select options, select change system settings, select display, select VGA. If that clears up the problem, use the standard VGA or SVGA driver in the future.

Try running Window 95 in a "safe" mode (no program is allowed to use upper memory). Turn on the PC and press the F8 key when you see the words "Starting Windows 95". Select the "Safe mode". The safe mode does not use config.sys, autoexec.bat, command.com, windows drivers, print drivers, network drivers, or the start up programs. It uses Window's own generic 16-color VGA driver.

### 17.3.10 Driver and or program conflicts in upper memory

Drivers and or programs can conflict with other drivers and or programs in the upper memory area.

Try running Window 95 in a "safe" mode (no program is allowed to use upper memory). Turn on the PC and press the F8 key when you see the words "Starting Windows 95". Select the "Safe mode". The safe mode does not use config.sys, autoexec.bat, command.com, windows drivers, print drivers, network drivers, or the start up programs. It uses Window's own generic 16-color VGA driver.

### 17.3.11 Marginal network hardware

Marginal network cards and or cables can cause intermittent crashes. To stress test the network, go to each workstation and copy the contents of a large directory from the server to the workstation. The directory copy should take at least 5 minutes to test the network card, hub and cable adequately. As a final test, copy (not move) a directory on the server to another directory on the server. If the last test fails, the network card on the server may be bad.

### 17.3.12 Invalid 'temp' or hidden local directory

At the command prompt, type ?SYS(2023), MSG(GETTEMPPATH()), or Select Configuration, About pc/MRP, and press F1. See if the TEMP variable points to a valid (existing) directory.

The BEST method would to run Windows Explorer and enter %temp% in the address bar and press GO. This method will give you the full path name.

You must then create such a directory if it does not exist.

The local temp directory file could be hidden. To unhide the file, open Windows Explorer, click on options, view, and un-check “Hide protected operating system files”. You may need to work your way up the chain of folders containing the "temp" folder.

### 17.3.13 Corrupt program files or data base files

Corrupt index files can cause general protection, illegal operation errors. Use the Configuration menu and select, "Re-index all files", to see if that corrects the problem. If you get a **stack fault error** or **Internal Inconsistency Error** message, delete the associated idx files and re-index.

Data base files can become corrupt by exporting the dbf file to Excel, editing the data and importing the Excel file back into pc/MRP. (Excel can change the structure of a column on its own based on the contents of the column.)

### 17.3.14 Sleep Mode

Disable.

### 17.3.15 Fragmented Hard Disk

Defrag your local hard drive.

### 17.3.16 Print Spooler is turned off

Select Control Panel, Printers (and Faxes), right-click on the default printer, and select Properties. Select “Print to spooler”, not “Printer”.

### 17.3.17 Allowed DO nesting level exceeded

While generating an Infinite Bucket MRP, you get the error message: Allowed DO nesting level exceeded. This means that you have a recursive BOM structure (a BOM that is calling itself). (Also see 12.9)

1. Go to Configuration, User Connectivity, select Set Admin Lockout.
2. When everyone has logged off pc/MRP.
3. Create a backup of the pcmrpw directory.
4. Select Modules, BOMs, Audit BOMs, Yes, Compile, do not step-thru.
5. Select Yes to check for recursive BOM structures.
6. A report will be generated if there are recursive BOM structures (BOMs calling themselves).
7. Remove the Admin Lockout.
8. Fix the affected BOM structure and re-run the Infinite Bucket Generate Action Items process.

### 17.3.18 Continuous backup programs

Using a continuous backup program might cause frequent crashes in pc/MRP. The reason is that every time a file (e.g. the Purchase database table) changes, the program tries to back up that file. With many concurrent users the file might change again and again. The continuous backup program might not be ready with a previous saving process while the file changed again and again. Instead of a continuous backup program, use the backup method suggested in Chapter 15.2.

# 17.4 Error Messages with Numbers

**Note**: The Error.log and VFP9RERR.log files in the pc/MRP folder can be extremely valuable when trouble shooting errors. Both files can be opened using Notepad. The Error.log file contains error messages captured by pc/MRP. VFP9RERR.log contains operating system error messages captured by Visual FoxPro.

**17.4.1 File does not exist (error 1), File Access Denied (Error 1705), Alias 'some file name, not found', Invalid path or filename (Error 202)**

- The file pc/MRP is trying to find does not exist in Windows Explorer. Call Software Arts.
- You have selected a custom printout that does not exist instead of a standard printout.
- If you are running the Audit BOM program and the missing file is BOMUPD.MEM, run the cost roll up option in inventory to generate a new BOMUPD.MEM.
- If you are trying to enter or edit the address logbook and get this error msg, someone has deleted a file named BLKEDIT.WRI and you must restore this file to the pcmrpw directory. Another file often deleted is BOMTEMP.DBF. This file is necessary to print out BOMs and can be restored from a backup.
- The pcmrpw.exe file is broken or corrupt. Copy in a recent (same version and revision!) pcmrpw.exe file from a backup copy or pcmrpupd directory.
- Name of .FXP file that is causing the error msg starts with FIND indicating pc/MRP cannot find an index file. Re-index the data base table that pc/MRP is working with or use pc/MRP's Configuration Module and run the re-index all files option.
- If the error message says CCARD.DBF doesn't exist, open the sales or invoice form and change the initial value of the rcCardNo variable to "".
- If you are trying to run an update, pc/MRP's CONFIG.MEM file may contain extra variables or invalid variables such as local.mem or an invalid drive reference. Contact Software Arts, Inc. for a copy of the program CLRCONFG.EXE. Run CLRCONFG.EXE from Windows Explorer to clean up your config.mem file before you perform the update. Check to see if the pcmrpw directory contains remote.mem and local.mem if so, rename them and run the update again
- If the error is "CLEANPATH DOES NOT EXIST", a library was not loaded or is corrupt. Reboot your computer and start again.
- If the error is because of a missing .fxp or .prg file, reboot the computer. If that does not work, restore the pcmrpw.exe from a backup.
- See: **17.4.2091** if you have reason to believe that the database is corrupted.
- If the path to the file is located in your temp folder, your temp folder could be hidden. To unhide the file, open Windows Explorer, click on options, view, and un-check "Hide protected operating system files". Now you must go to properties of the hidden folder and un-hide it and any parent folders so pc/MRP can see the temp directory.
- **Disable the local workstation's virus checker. If that solves the problem, exclude the pcmrp folder from real** time virus scans. If you have **McAfee** and can not exclude the pcrmp folder, launch the McAfee app and click Manage Security and then click on Virus & Spyware Protection Real-Time Scanning. On the next screen click on Real-Time Scanning link. Finally, click on Settings -> Scan these files -> and change from All Files to Programs and documents only. Click on the Apply Button. You may need to reboot your system. It could be that McAfee was uninstalled but is still running. Reboot. If that doesn't help, you might need to go to Control Panel, Program Files, and repair or go to a restore point (very risky). If you are running McAfee Endpoint Security and Terminal Services, exclude c:\users*\appdata\local\
- You may not have rights to your temp folder. Allow Software Arts to download to the users PC and Run as Administrator a batch file named pcMRPTempFolder.bat which is located in k:\v910, K:\v914 and higher. This will restore the users rights to his temp and temp\pcMRP folders.
- If the file is arryrecno and you are on a single user 9.20 version of pc/MRP, auto upgrade to version 9.20P or higher.
- If this error occurs while using pc/MRPs Task Scheduler, upgrade to 9.40J or higher
- If starting pc/MPR or doing a Cost Roll Up and it prompts for a database file, restore trail.dbf by emtering checkdbf("trail".3)

- This might be caused by a phantom lock on the server. Call Software Arts, Inc, or follow the instructions at http://www.pcmrp.com/it101/2003closeopenfilestart.htm or as a last resort reboot the server.
- If generating and Infinite Bucket, reboot your PC and regenerate the Infinite Bucket.
- Make sure that none of the files in the pc/MRP folder have been checked out as offline:
  Use the server's Windows Explorer to view the pcmrp files in the pcmrp folder
  Right click on the Name Attribute Bar, select More, and Check Offline Status
  Scroll down though pc/MRP's files and folders and make sure no file or folder is Offline

  If a file or sub-folder in the pc/MRP folder is Offline:
  Select the Control Panel
  Select Sync Center
  Select Manage Offline Files
  If Offline Files is currently disabled
    You are good, Press the Cancel Button
  Else
    Click on Manage Offline Files
    Disable Offline Files in the pcmrp folder
    Apply
    OK
    Reboot the computer
  Endif
  You may need to check every work station
- **See Run Time Error (Error 53) in this chapter**
- **See File in use by another (Error 108) in this chapter**
- **See Invalid Path or File Name (Error 202) in this chapter**

### 17.4.3 File in use (error 3)

- Two users have logged in with the same name or no name and are printing or displaying a BOM. Logging in with the same name or no name causes both users to use the same temporary BOM file.
- If you are the one who caused the file in use error message, returning to the "Main Menu" will close the file and fix the problem.
- If you get this error when trying to modify a custom report/form using Option 24: Make sure that the .FRX and the corresponding .FRT file have the same name. If you rename one of these, you must rename the other one the same name.
- This might be caused by a phantom lock on the server. Call Software Arts, Inc, or follow the instructions at http://www.pcmrp.com/it101/2003closeopenfilestart.htm or as a last resort reboot the server.
- If user is trying to import a Cycle Count.CSV file stored in Drop Box. Copy file to the pc/MRP folder and then import it.

### 17.4.4 End of file encountered (error 4)

Re-index the related data base file(s)
If you got error 4 right after deleting and removing a part from Inventory and then clicked Next; you can ignore this error, the part was probably the last record in the database and there is no next record.

### 17.4.5 Record out of range (error 5)

- The index file that pc/MRP is trying to use needs to be re-indexed. Go to pc/MRP's Configuration Menu and select "Re-index all files".
- The index file may be broken in such a manner that re-indexing does not help. In that case, the index file must be deleted. Call Software Arts for help in determining the name of the .idx file to delete. (suspend with tag() in debug window)
- This error message can occur if you have an apostrophe or a quote character in your part number.
- If this occurs when saving an invoice, replace area.mem and rename the areas, or use Option 34 and rename one or more areas then save the changes.

- pc/MRP is stored under a Program Files (x86) folder. Move the pc/MRP to its own folder under the c:drive on the server.

**17.4.7 File you are attempting to rename already exists (error 7)**

If you are removing records marked for deletion, you do not have deletion rights or another user has ownership of the file or folder.

**17.4.9. Data Type Mismatch**

Call Software Arts.

**17.4.10 Syntax Error (error 10)**

- If this message appears when you are trying to scroll a data base file, the field you are trying to scroll on is blank in every record in that data base file. Edit a record in that data base file and enter some data in the field you are trying to scroll on.
- If this error appears during a cost roll up or an audit BOM, search for and delete an inventory and or BOM record with a blank part or BOM number.
- If this error message occurs when you are scrolling, and it does not display the scroll window, it could be caused by an older version MSG.DBF. Call Software Arts and they will walk you through installing the correct MSG.DBF file.
- pcmrpw.bmp is corrupted; restore from backup.
- For versions **8.90S** and lower, could be caused by a double quote (“) in the bomno field. Please upgrade.

**17.4.11 Invalid Function (error 11)**

- Database file structure has been altered by Excel. Delete the dbf file, restore from a backup then re-index.
- When creating a custom report or form, the user used a function for the wrong field type (e.g. a string function on a date or numeric field).
- If this error occurs while you are running an exploded BOM, MRP, or cost roll up report, check for a BOM that calls itself, by setting an admin lock and running the "Audit BOM" report. See Section 17.3.17.
- If a BOM has a part number without an A, P or L in its part_assy field and you are running a check availability report, this error can occur. Edit the part and add an A, P or L to its part_assy field.
- Control Panel, Regional and Language not set to English US (must be set in 2 places).
- If converting a sales quote to a sales order and changing the date required, update to 9.40E or higher.

**17.4.12 Variable not found (error 12)**

This message will appear if pc/MRP cannot find a memory variable. Call Software Arts if this message appears.

- If the error occurs when you run a custom report, try to run the standard report instead. If the standard report does not give an error, you probably run the wrong custom report for the selected option.
- If the missing variable is the name of an index file, set the admin lock and reindex that file. If pc/MRP can not recreate the .CDX file except at the command line, use Windows File Explorer to rename SAEIU.dll to SAEIU_OLD.dll and re-index.
- If the missing memory variable is LEV, the BOMTEMP.DBF file has been overwritten and must be restored from a backup copy of BOMTEMP.DBF. The BOMTEMP.DBF file's first field is LEV.
- This error msg can appear if the data base file structure version does not match the pc/MRP's program version.
- If you are trying to print out a BOM, set an admin lock and run the Audit BOM procedure and then fix any errors it may have reported.
- Could be an alpha character mismatch, update to the newest revision level, or call Software Arts.
- If the error occurs when you are entering or editing the address module, you may have to delete one or more of the drop down address lists. Use Configuration, Settings and Utilities to re-enter any blank lists.
- If the variable ByPWUser is not found, copy the wp.dbf file from a back-up copy of pc/MRP into your current production pcmrpw directory.

- If you install a newer version of pc/MRP over an older version of pc/MRP (this is NOT the same as updating an older version) re-install the new version of pc/MRP in a different directory.
- You are doing an Accounting, GL Transactions, New, "A" type, trx# and get an error. #12, line 123, proc transcr.init .../transcr.sct Variable (account lockout date is not found). The file 'acctdefault.mem' may be damaged. Restore from a current backup or delete the file. If you choose to delete the file, you must go to Configuration, Settings & Utilities, Option 14 to reset the lockout date. Please work with your accounting department to do this fix.
- A computer crashed while accessing a database file causing the index file (databasename.CDX) to become LOCKED. Verify by going to the pcmrpw directory and trying to rename the 'databasename.CDX' file. If not able to, follow the instructions listed above to remove the file's LOCK.
- Error process ENTERTRA.FXP, Variable 'CABYDESC' is not found. Reindex via Accounting, GL trx, index.
- Kaspersky Anti Virus program on the server or any workstation can cause this problem. Turn off Kaspersky and install a different anti virus program, or add the entire pcmrpw folder to Kaspersky's list of trusted applications/folders.
- If the variable is MRPPARTP in PRMRP2.FXP: Generating an MRP should correct the problem. If the error occurs when generating the MPR, reindex first. Or delete MRPPART.DBF .CDX .FPT and run the MRP.
- If the variable is paCategorypre, rename tasks.clf to tasks.bad or restore tasks.clf from a backup.
- If your pc/MRP folder is under a program files folder, copy and paste the pc/MRP folder to the c:drive.
- If the error message includes MDEFAULT, set an admin lockout and re-index the Inventory file, partmast.dbf.
- If FR_CHECK1B Not Found occurs when merging a part number, update to version 9.50R or 9.52C or higher.
- Variable Partno2 Not Found, exclude pc/MRP form the virus checker

**17.4.13 Alias (file name) (error 13)**

- If the error message is ALIAS SULF not found, and you are on version **8.90**, upgrade to the latest revision.
- If the error message is "Alias is not found" from PROCEDURE INVOICESCR.UPDSOQTYSHIP and you are trying to edit an invoice, then check if the sales order line item really exists.

**17.4.15 Not a table/dbf file (error 15) Also see Sections 17.4.2091 and 17.5.53**

- If the dbf file is a pc/MRP main data file (ACTMPLT, ADDRBOOK, BOM, CHARTACC, ECN, INVOICE, LABOR, PARTMAST, PURCHASE, REQUEST, RECEIVE, RTMPLATE, SALES, QUOTE, SNLOTDET, SNLOT, STAXENT, STOCKTRA, TRAIL, TRANSACT, ALTCUR, USERSETS, ROUTING) call software Arts, or restore from a backup.
- If the dbf file is your password data file, restore from a backup or you can call Software Arts for an authorization code to re-create the file with one user MASTER, with a password of MASTER. If you choose to re-create the file, you will have to re-enter all of your user names, passwords, and module rights.
- The Software Arts technician may ask you to press Ctrl-F12 and look for a memory variable named mdbfname that contains the name of the corrupt dbf file.
- Many of the database files can be deleted (pc/MRP will automatically recreate them): For a list see http://www.pcmrp.com/vfp101/pcmrpsdatabasefilestemporary.htm

**17.4.24 Alias name is already in use (error 24)**

- Right click the pc/MRP shortcut and select Properties. If the shortcut is a UNC address, change the shortcut to the equivalent mapped drive address in both Target and Start in.

**17.4.26 Table is not ordered (error 26)**

- RAM memory has become corrupt or network delivered a corrupt exe file. Reboot the computer and try again.
- Re-index using Option 27 in the settings and utilities.
- If the error is for 'process scroll4.sct', delete the file 'msg.dbf' from the pcmrpw directory and re-log-in.

**17.4.30 Position is off screen (error 30) Not**

- The **foxfont.fon** file is missing or corrupt. Restore the foxfont.fon file.
  1. Click on Start, Control Panel, Fonts
  2. On the File menu, choose Install New Font

3. Browse to the pcmrpw directory
4. Select the foxfont.fon that is listed
5. Press OK

- Another FoxPro application is active and is using the pc/MRP foxfont.fon font.
- Make sure this is not Error Code -30, see section 17.11.6

**17.4.31 Invalid Subscript Reference (error 31)**

- Reboot the computer.
- Document being edited has an invalid document number (maybe a lower case letter exists in the document number). Call Software Arts to change the document number from the command line.
- The **area.mem** file contains quote marks in one of the area names. Remove the quote marks via Option 34.
- Re-index using Option 27 in the Settings and Utilities module.

**17.4.39 Numeric Overflow (error 39)**

- Data has been added to a pc/MRP dbf file from another program such as Excel causing numeric overflow in one of the fields in that file. Use Option 41 in the Settings and Utilities to find the overflow. If you click "Reset overflows to Zero" that will fix the error, but you won't know which item was causing the problem. It is better to just indentify the record/field and change it to a valid value.
- A BOM is calling itself. Set an admin lockout, backup the Partmast and BOM tables, then run 'Audit BOM' and print the report to find the BOM.
- There is no true default print driver.

**17.4.41 Invalid or missing memo file (Error 41)**

- **Also see: 17.4.2091** if you have reason to believe that the database is corrupted.
- Another option is to copy the pcmrpw directory to the local C: drive, run pc/MRP, go to modules, re-index the affected database file, and copy the database file's .dbf, .fpt, & .cdx files back to the server.
- If this error message is displayed when generating an MRP, and it involves an ALTER TABLE command, the partmaster.altpartno or sales.comment fields may have illegal characters in them. Call Software Arts, Inc.
- If this error message is displayed when generating an MRP and involves e.g. MRPBOM.FPT, then delete all 3 MRPBOM files. If that did not help, try to use DRU to repair the original BOM file.
- A last case option would be to call Software Arts for directions on restoring a backup copy of the DBF, FPT and CDX files and re-entering lost data.
- If the memo file name is USERSETS, call Software Arts to set an admin lock and run "FIXUSERSETS()" from the command line. This is a procedure file (procfile.prg). It scans the userset.dbf file and restores the settings. If it finds a users settings are corrupt it deletes that user's settings.
- Check and make sure all the computers have zeroed out their SMB2 cache time and then repair the file.
- If you get this error message and you can not replace the memo file because it is in use, call Software Arts, Inc. The support person will open the Command Line (from the error window) and enter the following:
    - set datasession to 1
    - use

  Transfer a new copy of the table from the Software Arts development folder with the same version number. Then enter into the command line:
    - use <name of database>
    - set datasession to 2

  If this occurs in the middle of an update, you can now press the Continue button.
- If you get this error sporadically, test the RAM as it might be unreliable.
- May be a broken index; if so, Option 27 Reindex All will fix it.

**17.4.43 Insufficient memory (Error 43)**

- Insufficient RAM memory

- If this error occurs while editing a PO or sales order, the PO or sales order has too many line items. Increase the RAM memory on that workstation and/or add the line 'me limit=60' (no quotes) to your config.fpw file using notepad. To limit the number of line items per PO or SO select Option 63 in the settings and utilities.
- If this error occurs while running a cost roll up or generating an MRP, set an admin lock and run the "Audit BOM" option. (Modules, Bill of Materials, Audit BOM) The audit option will check the BOM module for a BOM that calls itself. It will display a list of errors in the Bill of Materials module. Correct the errors and the cost roll up or MRP should run correctly.
- You are running too many programs at the same time, close all programs, reboot, and re-start pc/MRP.
- Index may be broken. Re-index the affected database table.
- Restore the related database file(s) from a backup.
- Also see: **17.4.2091** Table 'tablename.dbf' has become corrupted (error 2091), if you have reason to believe that the database is corrupted.

**17.4.50 Report file invalid (Error 50)**

- Report file was not updated or updated incorrectly. Call Software Arts for the name of the report file. Then copy over the correct .FRX and .FRT file from the PCMRPUPD directory to the PCMRPW directory.
- Related index files may need re-indexing.
- If you get this error when you are attempting to modify a report using Option 24, this may be a 16-bit report. Call Software Arts to run: CONVERTFORM () from the command line. This function will allow you to pick individual forms to convert to 32-bit.
- pc/MRP directory is missing RPTCON60.EXE file; call Software Arts.
- Call Software Arts to clear the printer codes in all forms by running 'frxhpfix_all()' at the command line.

**17.4.52 No database file in use (Error 52)**

If you are running an MRP report and a BOM exists in the partmaster but not in the BOM file and you hit continue after the warning msg you can get this error.

**17.4.43 Run-time error '53' File not Found.**

- The pcmrp.exe file may be missing. Restore from a backup with the same version and revision (check config.fpw with Notepad) or call Software Arts.
- If this happens during an auto update, pcmrp.exe may be missing. Copy pcmrp.exe from original update sub-folder into the pcmrpw folder. Run pc/MRP as Admin and rerun the auto update option.
- Reboot the server, rename the pcmrp.exe file, copy in the new pcmrp.exe file, and modify the config.fpw file to match the new pcrmp.exe file version along with the .frx, .frt,lbx, and .lbt files from that version.
- Malware Bytes determined the pcmrp.exe file is compromised. Turn off Malware Bytes and re-start pc/MRP. If it works set Malware Byte's Allow List to include the pcmrp folder, pcmrp.exe and pcmrpw.exe files.

**17.4.55 Memory variable file is invalid (Error 55)**

.mem file is broken or corrupt. Call Software Arts to get the name of the file and copy in a new .mem file from a recent backup or the pcmrpupd directory. If the file is a local.mem file, it can be deleted. pc/MRP will create a new file. If the file is USERSETS.FXP (contains user scroll and report settings), you can call Software Arts, Inc. to set an admin lock and run DO FIXUSERSETS from the command line.

**17.4.56 There is not enough disk space for [path]:\pcmrpw\filename.fpt (Error 56)**

- Check the disk space and quota allocation on the server.
- Check the user access rights to the pcmrpw directory on the server.

**17.4.107 Operator/Operand type mismatch (Error 107)**

- A character field was imported as a numeric field or a numeric field was imported as a character field. Correct the field type and import the data again.
- The user's USM file and/or the default USM file is corrupt. Delete both files and log back into pc/MRP with the user's name and password.

- If you are using version 9.10, editing a sales order and adding a new line item, update to the latest revision.

**17.4.108 File in use by another (Error 108)**

- You have attempted a 'USE', 'DELETE', or 'RENAME' command on a file that is in use by another person on the network.
- File with same name in another directory connected by the path statement is in use. This can happen with pc/MRP's .USR files. Assign the user another name for logging into pc/MRP.
- Your server has a phantom file or record lock on the file. Call Software Arts, Inc.
- Rename the .dbf, .fpt, .cdx files, index the file (pc/MRP will create a new empty file). Append from the renamed file.
- Give the person who runs the scheduler a new name and password. Then delete their original name and password in the password module.
- Document Numbers have odd characters causing pc/MRP to hunt for the next available number.

**17.4.109 Record in use by another (Error 109)**

You have attempted to write to a file that is locked by another user. Go to the server and see who is using the file. (Section 17.4.1705)

**17.4.110 Exclusive open of file is required (Error 110)**

- Someone else has opened the file and you require exclusive use of the file (re-indexing or removing marked records). Wait until they are finished. You may be the someone else if you have two or more copies of pc/MRP open.
- File was left open when a user shut off power to their PC. Get everyone off the network and reboot the server or use Computer Management to close the open files.

**17.4.111 Cannot write to a read only file (Error 111)**

- File has been attributed read only. In the PCMRPW folder no files should be attributed read only.
- Another program, such as Excel is using the .DBF file pc/MRP is trying to access. Close down the program.
- The user does not have network permissions to modify the related file. Go to the server, right-click on the pcmrpw folder, select Properties, Sharing tab, click on the Permissions button and make sure everyone accessing pc/MRP has Modify or Full Control rights. This can also be caused by a phantom lock that will have to be released as per Section **17.4.1705** error write-up.
- Right click on the PCMRPW folder, select properties, remove the 'user' group from the pc/MRP folder and then add the 'user' group back to the PCMRPW folder.
- Cannot update the cursor SULF, since it is read-only. The user does not have MODIFY rights to the pc/MRP directory. It is also possible that the security settings had been lost. Try setting sharing and security rights to modify for the everyone group.
- Cannot update the cursor SULF, since it is read-only. If you recently restored pc/MRP from a backup, and the backup was in a .zip file (not recommended) then several files might get attributed as blocked. In this case the SULF table might get read-only even if you unchecked the read-only box. Make sure all files are unblocked (you can download a Microsoft tool from the Internet) and then mark all files (including all files in the subfolders) <u>not</u> read-only.
- Cannot update the cursor SULF, since it is read-only. If you get this error right after starting the program, and the pc/MRP icon looks unusual: Open Windows Explorer and try to run the application by double clicking the pcmrpw.exe file. If this works, delete and replace the shortcut.
- If this is a DBF file, you can rebuild the file using Software Arts' Data Recovery Utility.
- In one case (TRAIL.DBF) rebooting the server helped.
- If the file in use is TempInv, this file is stored in your local temp folder. Go to the command line and enter "SET DATASESSION TO 1", "_CLIPTEXT(DBF("TempInv")), you can then go to Windows Explorer and paste the contents of the your clipboard into the URL text box. It will locate the actual file in your temp folder. Try to delete an older file to make sure you have full rights to your temp folder. If you are using Trend Micro switch to Windows Defender for your Anti-virus program. Other solutions we are looking at would be to put

a 1 second delay after the file is created to give the virus checker time or create a pcmrp2 subfolder in the temp folder and exclude that folder from the virus checker.

- Backup software such as One Drive is locking the file when backing up to the cloud. Do not backup during working hours.

**17.4.112 Invalid key length (Error 112)**

The product code size and suffix size equal or exceed the length of the entire part number. Decrease the product code and or suffix size.

**17.4.114 Index does not match table file (Error 114)**

- Try to hit Retry to see if that will display the Address book (in chronological order). Still call Software Arts for repair.
- Index is broken. Rebuild the affected table index by **re-indexing**.
- If this is affecting the address book, and it seems that re-indexing only solves the problem temporarily, but the error occurs again, perform the following at each computer that uses pc/MRP: Click the Start button, select Control Panel,Computer Management, then Languages. Make sure the computer is set to English(US) (two places to set).
- If the file affected is not the Password file (WP.DBF), and re-indexing does not fix the problem, call Software Arts, Inc. for re-sorting or restore the .dbf, .dbt, .fpt, & .cdx files from a current back-up and re-index. Please note that you will lose any data entered into this file since the back-up file date. Example:
    1. rename addrbook.* to addrbookbu.*
    2. use addrbookbu
    3. sort to addrbook on id
    4. Modules, Address Book, Index.
- Another option, (not the preferred option, because it would have to be performed at each work station), is to call Software Arts and have them send a file named pcmrp_external_indexer.exe (found in K:\Toolbox\Visual\ExternalIndex\Distribution). Place the file in the pcmrpw directory. Double-clicking it will extract the following 6 files into the pcmrpw directory (if different, select the correct production directory): saeiu.dll, saeiu.log, saeiu.tlb, saeiu.vbr, vfp6r.dll, vfp6renu.dll.
  This will allow VFP6 code to re-index the files. pc/MRP will use these drivers whenever a file is indexed. On some computers, the computer administrator must log into the user's computer and then “regsvr32 {pc/MRP path}\DLLNAME.dll" from the Windows "Start, Run” window.
  An easier way to register the re-indexing “.DLL” files is to go to the Windows 'Run' dialog window and enter:
    - regsvr32 {pc/MRP path}\vfp6r.dll
    - regsvr32 {pc/MRP path}\vfp6renu.dll
    - regsvr32 {pc/MRP path}\saeiu.dll

    It is easier if you drag and drop the filenames, one at a time, onto the command line after the regsvr32. Remember to leave a space after the word regsvr32.

  If saeiu.dll exists in the pcmrpw directory, pc/MRP will use the external indexer with or without the flag file and an indexing.log file will log all indexing events if it is in the pcmrpw directory. If an indexing.log file exists in the pcmrpw directory, opening it with notepad will tell you if pc/MRP used the internal or external indexer and what was indexed.
  If you want to use the VFP9 index dlls, get everybody out of pc/MRP, rename saeiu.dll to saeiu _orig.dll, reboot the PC, and reindex all files.
- Go to the command line (set an admin lock and create a backup) and type “tablerandomize()”, press execute, and choose the table, like addrbook.dbf for example. **This is the preferred method to fix this problem.** If the first attempt doesn’t work, try tablerandomize() 2-3 times, reindexing after each time. The external indexer cannot index character date fields correctly if option 18 is set to European. In this case, rename the saeiu.dll to saeiu-orig.dll, which will keep the VFP6 re-indexer from running.
- Re-build the DBF file using pc/MRP's data recovery utility. (found in: K:\Toolbox\Visual\Data Recovery\Installer App). **This is the second preferred method to fix this problem.**
- Last resort, add a space to the index command. For example:
  USE snlot EXCL

MODI STRU
SnLot.SnBySn = UPPER(SNLOTNO+SUBSTR(PARTNO,1,15))+" "
(type right into the index name, do not use expression builder)
For Versions **8.60AA, 8.63F** and **8.64A** and higher add file named IndexEXP.FLG containing just the modified index expression.

- To examine what PC and user is causing re-indexing problem, create a blank text file named **INDEXING.LOG**. This file records whenever somebody indexes and will fill up fast so delete it once it has served its purpose.
- If tablerandomize() and the Data Recovery Utility don't help, create a file containing the name of the file(s) that need to be indexed (for example partmast carriage return sales). Save this in the pc/MRP folder with the name HardIndex.LST (not .txt). Now when you index that file or index all, pc/MRP will 1. Create a backup of the database file in a sub-folder named Indexer BU, 2. Delete the original dbf file, 3. Create an empty copy of the dbf file, 4. Append the records from the backup into the new database file. This will rebuild the indexes in a different manner than the normal index command that may be having problems with illegal characters in the data base file.
- If the error displays while posting a month, it could be due to a broken historical chartmmyy.dbf file. Use Ctrl-F12 to determine the name of the broken dbf file. The variable MPRIORTABLE will contain the name. Use the command line to open up the prior historical accounts. If it is good, delete the bad dbf and copy the prior dbf and cdx and save them with the bad dbf and cdx files' name. Reclose the month again. If you were to reindex the chart of accounts table answered yes to reindex the historic chart of accounts, the historic chart of accounts would be reindexed.
- This error may be due to a child table. Reindex all to fix or find the table causing the problem.

**17.4.125 Error 125 Printer not ready**

Printer is configured as a network printer when it is actually a local printer. Reconfigure the printer as a local printer.

**17.4.202 Invalid path or filename (Error 202)**

- pcmrpw directory is hidden.
- Network has lost connection with the server.
- BOMUP.MEM contains the wrong default directory. Delete the BOMUP.MEM, or do a cost roll-up.
- Check to see if the pcmrpw directory contains remote.mem or local.mem if so, rename them.
- CONFIG.MEM file contains the wrong default directory. Transfer the users Config.mem file to K:\v800. Run CLRCONFIG.EXE in that folder, Transfer the Config.mem file back to the user's pcmrp folder. This can occur when trying to update very old copies of pc/MRP such as version 680.
- If your computer does not have a C: drive (windows terminal workstation) select main menu and continue to use pc/MRP.
- Image file no longer exists for the partnumber.
- If the program line is using an index, reindex that database file.
- If it involves a barcode, somebody deleted the barcode folder, re-install pc/MRP's Barcode Module.
- User does not have the rights to a sub-folder such as PDF
- The document number (PO, Receiver, Sales Order number, etc.) contains a "\". Call Software Arts to run a command like the following:

  Replace all ReceiveNo with strtran(ReceiveNo, "\", "R")

**17.4.356 Invalid Macro Key File Format (error 356)**

An attempt has been made to use a macro file with invalid data. Delete the user's macro file (<username>.FKY). If that did not help delete all files with an ".fky" extension except the macro.fky. If that does not fix the problem, restore the macro.fky file from a backup.

**17.4.1000 Internal inconsistency error (error 1000)**

Go to the Settings and Utilities Module and run Option 27 to Re-index all files.

**17.4.1098 API function UserError(1098) was called**

If this error occurred during a revision update, make sure everybody is out of pc/MRP and repeat the revision update. A file named RevUpdate.log in the pcmrpw directory will display which file was not restored.

**17.4.1102 Cannot Create File (error 1102)**

- pc/MRP may be trying to install a barcode font, the foxfont.fon, or the SAHTML driver. Try logging into this computer as an administrator. If this error occurs with the barcode fonts, go to the control panel and select to add/remove fonts. Then select the fonts from the pcmrpw\barfont folder. Administration rights may be needed to download and install these fonts.
- If this occurs when you are exporting to QuickBooks and you are using QuickBooks 2006 and higher: These QB versions do not allow pc/MRP to backup the QBW file before exporting (you must do this from within QuickBooks itself before exporting). In pc/MRP, select Optional, QuickBooks, Set Exporter Default Settings, Backup Options, and uncheck the Perform Backups checkbox.
- File is locked by the server, see error 1705, somebody may have turned off their computer while a file was still open.
- Cannot create file ....\revload.exe. If you get this error during an auto-update from a work station, you might not have the rights to do the update on the server. Run the update from the sever, logged in as Admin.

**17.4.1103 Invalid Seek Offset (error 1103)**

See Section 17.5.33

**17.4.1104 Can not read file (error 1104)**

- File is sitting on a bad sector. Use Microsoft's Scandisk to move data and mark out bad sector. Call your IT person. Go to the PC or server that actually contains the pc/MRP production directory. Start Windows Explorer, right-click on the drive that contains the pcmrpw directory. Select Properties and Check now. Check the disk without fixing or recovering errors. If it spots errors, copy the pcmrpw directory to another drive and then repeat the previous steps this time allowing the errors to be fixed.
- If this is a .CDX file, rename the file then reindex the table. Renaming the index file locks in the bad sector and allows the new index file to be placed somewhere else. The archives can be reindexed with Option 100.
- In some cases repairing the file can solve the problem (see error 2091).
- Exclude the PCMRPW folder from your virus checker.
- Use an Ethernet connection rather than a wireless connection or install a repeater.
- Use UNC Addresses not mapped drive addresses in your pc/MRP desktop shortcuts. This is especially true if a domain controller is controlling your network.

**17.4.1105 File write error. (error 1105)**

- Hard disk is full.
- User does not have modify rights to the pc/MRP directory; usually 'pcmrpw'.

**17.4.1108 Picture too big or wrong format (error 1108)**

- A picture has been loaded into memory and is corrupt. Reboot computer. If clrmem2.fxp is displayed it could be the pcmrpw.bmp file.

**17.4.1109 File is to large (error 1109)**

- Database file is too large, get an Admin Lockout and run Remove records over xx years old. If it is the Stocktra database run the Renumber Function from the command line. With pc/MRP versions 9.22B and higher will automatically allow pc/MRP to auto increment stockroom records from 999999 to A00001, etc.

**17.4.1156 Duplicate field names (error 1156)**

- Call Software Arts. The table might be corrupted or it's structure modified by an external application.

**17.4.1234 Subscript out of bounds (error 1234)**

- RAM may have caused error; exit pc/MRP and Windows, then reboot and try again.

- pc/MRP has a bad .USM user file. Delete the broken user file (it will have the person's login name followed by the extension .USM. Also, delete the default.usm file so that pc/MRP will recreate the default.usm file. Re-enter pc/MRP under that person's login name and pc/MRP will automatically create a new user file. If this error occurs when updating to a higher version of pc/MRP and the error message references Upd814code.fxp, Press Ctrl-F12 and the variable lcUserFile will equal the name of the bad .USM file.
- PCMRPW.EXE file has been corrupted; install a new copy of PCMRPW.EXE (must be from same version).
- Database file has been modified. Select configuration then select settings and utilities, press the next button, select **Option 39**, print out the file structure of the database file involved and call Software Arts.
- For version **8.83D** only: If you use the scheduler and get this error right after startup, call Software Arts and have them enter the following at the command line:
  RESTORE FROM schedule.mem
  DIMENSION laSchedSets[8]
  laSchedSets = ""
  SAVE TO schedule.mem ALL LIKE laSchedSets

**17.4.1282 Insufficient memory (error 1282)**

- Windows does not have enough memory left to run pc/MRP for Windows.
- Make sure your workstation has at least 8 megabytes of RAM
- Close any programs that are running concurrently with pc/MRP
- Make sure your hard disk has a large permanent swap file (10-30MB)
- Your computer may not contain enough RAM. Add the line “memlimit=60” (without quotes) to the config.fpw file. Config.fpw is a text file that can be modified with Notepad.

**17.4.1298 Summary band is too large to fit on page (error 1298)**
**or: Page header is too large to fit on page**

- Workstation has a label printer selected as its default printer. Select a standard printer as the default printer.
- If you are using a Zebra Printer and a custom label, get the size of the custom label by editing the label. Select Configuration, Settings and Utilities, Option 24, right click on the label, select Page Layout and get the width inches. Estimate the height by looking at the grid, 1 Column. Go to Control Panel, Devices and Printer, Zebra Printer, Properties, Preferences and set the height and width to match.

**17.4.1405 Run Command Failed (error 1405)**

- The directory is mapped as a drive. pc/MRP current update programs do not have this problem.
- If you are running the update through pcAnywhere and this error occurs, first run pcmrpupd.exe directly from explorer and then pcmrpw.exe.

**7.4.1410 Unable to create temporary work files (error 1410)**

- If you get this error while Removing Marked Records, make sure the hard disk that contains your pcmrpw directory and files is not full.
- Select Configuration, About pc/MRP, and press F1 to see the location of the temporary directory or enter %temp% into the Windows Explorer address line. Make sure that the directory exists and that you have ‘MODIFY’ rights to it and the pcmrpw directory.
- Files are attributed READ ONLY.
- The user’s temp directory is checked as “Hidden”. Or a directory above in the path is checked “Hidden’.

**17.4.1426 Class Not Registered (error 1426)**

- If this error occurs when updating from a previous version of pc/MRP to 8.20 and above, the computer you are updating from does not have MSXML3.0 installed. Either install from a newer computer that may have XML3 installed or get the MSXML3.MSI file from the Microsoft website to install.
- Process MRPMAIL.FXP OLE error. Contact Software Arts. Open Outlook (not Outlook Express), File, Settings, Trust Center, Macros, Enable All Macros, Apply Macro Security Settings. Close all programs. Reboot PC.

Run msg(chkserver("outlook.application")). Now try to email as PDF with Outlook closed and then try again with Outlook Open. It may only work if Outlook open or closed .

- Also see Error 1429 about the '.OCX' files.
- If you receive the error when using an .EFX file, check for any date fields being sent to Excel. For example partmast.startdate should be dtoc(partmast.startdate) instead.
- pc/MRP cannot open up Internet Explorer or Outlook or Excel. Reboot, or at the pc/MRP command line enter msg(chkserver("internetexplorer.application")) or "outlook.application" or "excel.application". If chkserver returns.F. you may have to repair Office or activate the Microsoft program. To repair Internet Explorer, start In Private Browsing, select Internet Options, Advanced Tab, Reset, and restart your computer.
- If you are sending a report or a table to Excel and the error message says OLE error code 0x800a03ec: Unknown COM status code: Your might have more records than your Excel version can handle (65,536 for Excel 2003).You would also get this error if you are including memo fields and one value starts with an "=".
- If you get this error when sending a report to Excel, try the same report without any memo fields. If it works this time, your Excel might not be able to accept infinite length fields.
- If error message refers to ProfitAndLoss.Scx, Office or Word is not installed on users PC or the Terminal Server (if they are using Remote Desktop. Install Office or Word. msg(ChkServer("msgraph.chart")) will display .F. at the command line.
- If you get the error msg "System shutdown already scheduled", open IE, Tools, Internet Options, General, Uncheck "Delete browsing history on exit." Close all applications and reboot PC.
- If you get this error message when downloading price qty breaks, run pc/MRP as Administrator. After that you can run pc/MRP as normal.

**17.4.1429 OLE Error (error 1429)**

- If a QuickBooks error, see Section 16.16.6.1429.
- If the message mentions 'DTPicker' and 'date not within range' while attempting Option 14 in the Settings & Utilities module, delete the file 'acctdefault.mem' in the pc/MRP directory and do Option 14 again.
- pc/MRP contains two files named 'SAOCX.EXE' & 'SAIBTLC.EXE' in the pcmrpw directory. Locating these files in Windows Explorer and double-clicking on them it will register all of the '.ocx' files required by pc/MRP. (You need to be the computer administrator.) (If not able to run the files on the server, copy them to the workstation's desktop, and try to run there.)
- Otherwise call Software Arts, Inc with the name of the fxp file, the line number and the error message.
- Excel Trust Center File Block Settings is blocking Excel 97 2003 Work Books and Templates, see 17.11.4
- Excel file has no records/rows in it.

**17.4.1435 XML Parse Error (error 1435)**

- Caused by an improperly formatted XML file passed to XMLTOCURSOR() function.
- If displayed when updating and adding list items for 'Ship Via', delete the 'lists.tpx' prior to re- running the update program as the update program is unable to overwrite the original 'lists.tpx' file.

**17.4.1691 Library file is invalid (error 1691)**

- Library file has become corrupt in memory, exit pc/MRP and restart your computer.
- Check the network for hub collisions. The hub light will go yellow or red when it is being used if there is a collision. Disconnect the workstation causing the collisions from the hub.

**17.4.1705 File Access Denied (error 1705)**

- Somebody else is using the file, the operation you are running requires exclusive use of the files, get everybody out of the file and try again.
- File is protected as Read/Only. Use Windows Explorer to remove protection.
- File is protected as Encrypted (listed in green color). Use Windows Explorer to remove protection.
- Exit out of windows, and re-enter windows
- If you have a NET.CFG = or SHELL.CFG, make sure the FILE HANDLES statement reads FILE HANDLES = 99
- Another application or program has opened the file for exclusive use

- You are trying to run a single user version of pc/MRP on a network as a multi-user product and either you have a second copy of pc/MRP open or another user has a copy of pc/MRP open.
- Somebody turned off the computer power while in pc/MRP and after a file or record was locked. Users can either Reboot the server or close the locked file through accessing the server. The quick fix is to reboot the server. Make sure however, everyone is logged off the server. Then and only then, shut off the server and power it back up again. The file and or record will be unlocked.
  Follow the instructions detailed at http://www.pcmrp.com/it101/2003closeopenfilestart.htm and also listed below:
    - Go to the server. Start pc/MRP, set an Admin Lock, wait until you are the only user, then exit pc/MRP. There are no users at all in pc/MRP now. Make sure that no one else (UPS Shipping, Access, etc.) is using pc/MRP files.
    - Select Control Panel, Administrative Tools, Computer Management, System tools, Shared folders, Open files.
    - Find the PCMRPW folder. Since no one is using the program, no files in this folder should be in use. Select any pc/MRP resource file(s) that is(are) listed, right-click and select “Close the open file”.

  If that does not fix this error then you will have to reboot the server. Once again, make sure everyone is logged off the server if you choose to reboot.
- With the BOM module, if two people try to print out a BOM at the same time and both have logged in with the same name, the second person will get an error 1705. To prevent this, have everybody log in under a different name (mikes and mikeh instead of mike and mike)
- If error 1705 occurs with an index file, delete the index file and then rebuild it by re-indexing that file.
- You do not have modify rights (read, write, delete) to the pcmrpw directory. The pcmrpw directory and or the directory(s) above the pcmrpw directory have not been shared as full. Although the drive containing the pcmrpw directory may show modify control to everyone, the pcmrpw directory itself may have less than modify control rights to some files. To correct this situation open explorer and right click on the pcmrpw directory, select properties, select security (available on NTSF formatted drives only), select permissions, select modify control, check both the "Replace permissions on sub directories" and "Replace existing permissions" check boxes. Click on the OK button and Windows will give full control to all users for all files within pc/MRP.
- If you get this error when starting up, delete a file called local.mem and reboot.
- If you get this error while trying to scan for your browser, you do not have rights to write to your local windows directory.
- Somebody has taken over local ownership of a pc/MRP directory or file. To remove the local ownership of the pc/MRP directory, open Windows Explorer, right-click on the pcmrpw directory, select Properties, Security, Advance, make sure everyone has Allow All permissions checked, click OK, check Reset Permissions on all child objects, and click OK
- If the error process is 'Procedure reindex2_openreindex2.fxp' then check that all users have modify rights or higher. If these rights are inherited, you must grant the same rights in the parent directories or change the rights to this folder, subfolders, and files. See IT101 Slide show #2 or #3 depending on your server.
- If this occurs during an AutoUpdate and the file is REVLOAD.EXE, try the update again. The server got busy and did not release the file handle soon enough.
- You do not have full access rights to the pc/MRP directory or there is another copy of pc/MRP open. At the user’s command line, enter “modi file revupdate.log” to view the name of the file causing the problem.
- If you not find this file with Windows Explorer, reboot your PC.
- If you get this error due to a charxxx.dbf file rename the dbf and cdx file and reclose the prior month
- If you get Access Denied, Calendar.dbf when inserting a new support contract code number, somebody is using the Infinite Bucket Calendar, wait and try again later
- On some workstations but not all the file is invisible (even in Windows Explorer), make a copy of pcmrp on the server and repoint all the desktop shortcuts to the pcmrpw.exe file new copy of pc/MRP or if it occurred after an update and the file is pcmrp.exe, remove Malware Bytes and then reinstall Malware Bytes on the workstation

**17.4.1707 Structural .CDX file not found (error 1707)**

- User has created a .CDX index file for a .DBF file. Delete the associated .CDX file and re-index.
- A .DBF or a .CDX file is marked as hidden or as a system file on the server. Remove those attributes for these files on the server. No files in the PCMRPW folder should be marked as hidden or system files.

**17.4.1712 Field name is duplicate or invalid (error 1712)**

- If using AR report, delete billtmp.dbf., close all programs and reboot the PC.
- If mrppart is the file, the pcmrp folder may be "Replicated" on another server or a program named "Comodo" is running in task manager. You could also deleted the mrppart.dbf file and regenerate the Infinite Bucket which will create a new MrpPart.dbf and. cdx file

**17.4.1718 File is marked as READ ONLY (error 1718)**

- Temp folder is marked as READ ONLY. Try creating and deleting a text file in this directory using MS Notepad.
- Entering %temp% at window address bar will return the temp dir address.
- Kaspersky Anti Virus program on the server or any workstation can cause this problem. Turn off Kaspersky and install a different anti virus program, or add the entire pcmrpw folder to Kaspersky's list of trusted applications/folders.
- Show hidden files and folders and uncheck hide protected operating system files using Windows Explorer Tools Folder Options and View.
- If you are generating an Infinite Bucked and get the error message Avail.dbf is read only, remove an anti-virus program named "Comodo" from that workstation. Or, the pc/MRP folder on the server may be "replicating" to another server.

**17.4.1733 Application not found (error 1733)**

- Run pc/MRP as Administrator

**17.4.1734 Property ALIST is not found (error 1734)**

- A dropdown list may be empty. Use the Configurations & Settings menu, Option 52 to enter at least one item.
- If you are updating pc/MRP see 17.7.5.2

**17.4.1915 Collating sequence "name" is not found (error 1915)**

- An index file is broken. Call Software Arts, Inc. to delete the index file. This can be caused by a computer using a collating sequence for a different language causing the index to become useless for other computers. Delete the named index file (.idx) and add the line COLLATE = "MACHINE" to the config.fpw text file in the pcmrpw directory. You should also ensure that all users' computers are set to use "English(United States)" as the language option. Go to Control Panel, Regional and Language Options. On the Regional Options and the Advanced tabs, ensure that "English(United States)" is selected in the drop down boxes.

**17.4.1925 Unknown member "name" (error 1925)**

- If you get this error msg while updating the partmaster file, change all semi-colons(;) to colons(,) in partmast descriptions. Command Line: Replace all descript with chrtran(descript, ";" , ",").
- If this message contains the word OLE, see Section 17.5.24 Class not registered.

**17.4.1943 Unknown Member "recipients" (error 1943)**

- Outlook must be running when emailing documents (like POs, etc) as pc/MRP uses MS Outlook to attach the document to the email (pc/MRP does NOT use Outlook Express).
- In some cases a reboot will help.

**17.4.1951 Cannot clean the object UPDATEREMINDER because it is in use. (error 1951)**

You can either:

1. Run the auto update from the configuration menu instead of from the pop-up message saying you have not updated in a while.
2. Do a manual update by downloading from the FREE UPDATES page on our website.
3. Call Software Arts, Inc to help resolve this error.

**17.4.1957 Error Accessing Printer Spooler (error 1957)**

- Clear and or Delete the pc/MRP printer driver from your computer's printer list and then re-login to pc/MRP so the program can re-install the pc/MRP printer driver.
- Run pc/MRP as administrator. If that fixes it, try to find the local Security Policy that is forcing you to run the print driver as the administrator Control Panel, Admin Tools, Computer Management, Local Security.
- Default printer is corrupt. Set your PCs default printer to a good laser or inkjet printer.

**17.4.1958 Error Loading Print Driver (error 1958)**

- Try rebooting the client PC. If the error persists, reboot the server and/or un-install and re-install the print driver as in 17.4.1957.
- Type FRXHPFIX() at pc/MRP's command line and select the '.frx' file from which you want to remove the stored printer codes. To remove the printer codes from ALL the forms, enter FRXHPFIX_ALL() at the command line.
- Rename the print driver. Re-install the print driver with a different name, make sure to set it to the correct port USB or LPT1.
- See Section 17.11.1 & 2.
- Repair or Re-install Acrobat Reader

**17.4.1960 Illegal definition of a variable (error 1960)**

Press 'Main Menu' button and continue to exit pc/MRP. Re-start pc/MRP and continue.

**17.4.1961 File already existse (error 1961)**

Use Windows Explorer. Trace the file back through the folders, If a folder is faded, right click on the folder, select Prooerties, and Un-hide the folder.

**17.4.1976 Cannot resolve backlink (error 1976)**

Run (clear.table backlink("database filename")) will return 1 if backlink removed, 0 if it did not have a backlink or table is invalid, and -1 if it could not access the file.

**17.4.2005 Error loading file (error 2005)**

- Can be caused by a phantom file lock.
- Try rebooting the client PC. If the error persists, re-install pc/MRP from a manual update on our website for your version. This is possibly caused by a bad uncompress of the update files.
- Can be caused by a corrupted database file, see **error 2091**.
- Can be caused by a space in the Windows user's name, update to 9.10P, 9.20J or higher
- Index tag not found, re-index all files.

**17.4.2005 API call caused an exception (error 2028)**

- If this error occurs when entering or editing a credit card number for a specific address ID, browse the credit card database (it may be the last (most recent record in the database). Disassociate this record with any address by entering "xxxxxxxxx" or some other strange address ID into the AddId field and see if this fixes the problem.

**17.4.2062 Invalid Key (error 2062)**

The receiver, sales order, invoice, or purchase order has a duplicate item number.

**17.4.2066 Index file is corrupted (error 2066)**

Index file "….cdx" tag "…" is corrupted. Reindex the module.

**17.4.2091 Table 'tablename.dbf' has become corrupted (error 2091)**

If the file is a temporary DBF file, such as auditmp.dbf, you can simply use Windows Explorer to delete (or re-name the dbf file and its index if your wish), and then retry the program that was displaying the error message. pc/MRP automatically re-creates the temporary DBF files it needs if they do not exist.

If the dbf file is your password data file, restore from a backup. Or, you can call Software Arts for an authorization code to re-create the file with one user MASTER, with a password of MASTER. If you choose to re-create the file, you will have to re-enter all of your user names, passwords, and module rights.

If you are starting pc/MRP and the error message includes Trail.dbf, call Software Arts to run the data recovery program.

The the database file has an invalid record count in the database header or has a corrupted data record. Call Software Arts, Inc. to have the support person transfer the data recovery utility to fix the database file and then re-index the database.

**Note:** pc/MRP includes auto-repair of simple table corruption caused by record count mismatch.

**NOTE: Software Arts, Inc. does NOT suggest you attempt this repair without Software Arts, Inc's help.**

1. On the computer with the error message, you can determine the corrupt file by pressing **Ctrl-F12** when the error is on the screen. This opens a .txt file. Here search for the "**Currently Selected Table**" The .DBF file listed directly under this heading is the corrupt file.
2. Set the ADMIN LOCKOUT and wait for everyone to exit pc/MRP.
3. To backup the affected database files at the pc/MRP command line:
   As an example, enter '**copy file addrbook.* to addrbook20160718.***'
4. Exit pc/MRP.
5. Transfer the self-executable file, "**K:\Toolbox\Visual\Data Recovery\Installer App\pcMrpDRU_1.2.exe**" to the customer's **pcmrpw** directory. If you right-click on the pc/MRP shortcut and select Properties, you will see the location of pc/MRP.
6. Double-click on the **pcMrpDRU_1.2.exe**. This will extract the needed files (9) into a newly created sub-directory named "Data Recovery Utility".
7. Using Windows Explorer, navigate to the "**Data Recovery Utility**" directory and run (double-click) on the program file "**DataRecovery.EXE**"
8. Follow the slideshow instructions in the MRP101 section of the pc/MRP's website at: http://www.pcmrp.com/mrp101/filefixclickondatarecovery.htm In the majority of cases, the file will be recovered after step 2 of the slide show, and steps 3-7 will be skipped.
9. When finished with the data recovery utility, log back into pc/MRP using the same computer & logon name you used to set the admin lockout in step #1.
10. **Re-index** the affected database by going to Modules, select the module e.g. Addresses, and then Index.
11. Test that the database is no longer corrupt by checking the data using the process that created the error.
12. Check with the user to determine if all the data is there or that they may have to re-enter the data.
13. Remove the Admin lockout you set in step #1.

# 17.5 Error Messages without Numbers

**Note**: The Error.log and VFP9RERR.log files in the pc/MRP folder can be extremely valuable when trouble shooting errors. Both files can be opened using Notepad. The Error.log file contains error messages captured by pc/MRP. VFP9RERR.log contains operating system error messages captured by Visual FoxPro.

### 17.5.1 Watcom WIN386 not running on a 386 DPI implementation error msg appears

Try starting Windows with WIN/D:X command instead of WIN. If that works modify the emm386 line in your config.sys file to read: DEVICE=C:\WINDOWS\EMM386 NOEMS I=E000-EFFF

### 17.5.2 pc/MRP says Record does not exist

Item you are searching for has one or more blank characters. Scroll to the top of the screen to see if it is there. Once you have found it, correct the error by editing the item you are searching for; find where it should be and or what it should be and change it so there are no blank characters.

### 17.5.3 pc/MRP says Can not save record, record has been edited by another

The pc/MRP dbf file has a numeric overflow in one of the fields. Use Option 42 in Configuration, Settings and Utilities to zero out the overflow. This is usually caused by a PO ration of 0 (Zero) that has been imported into the Inventory.

### 17.5.4 Cannot edit a document.

- User selected View instead of Edit under Action.
- The Advanced Password module is activated and the user does not have edit rights to the module.

### 17.5.5 Cannot delete a document.

- User selected View rather than Edit.
- The Advanced Password module is activated and the user does not have delete rights to the module.

### 17.5.6 Highlighting a part in a BOM displays another partnumber.

The BOM has duplicate part numbers. Edit the BOM and change the item number of one of the effected parts.

### 17.5.7 Address and PO logbook files keep asking if you wish to convert the files

When you get to the save window, select save as WRI files.

### 17.5.8 Variable not found

If pc/MRP for Windows is closing the month and the variable not found is MDUMMY, the chart of accounts has a record in it with an illegal account type code. The chart of account record number will be displayed at the bottom of the screen. Edit the record and fill in the account type field with a legal account type code.

### 17.5.9 Dialog box asks "Overwrite invalid foxuser file"

Answer Yes to this question as a new empty foxuser file will not hurt anything.

### 17.5.10 Internal Inconsistency Error Message

- Video driver is incompatible with FoxPro for Windows, change to a standard VGA driver and see if that solves the problem.
- Reindex the database file that is being used when the error occurs.

### 17.5.11 Stack Fault Error Message

This message can be caused by a broken index file. Re-index the database file that is being used when the error occurs.

**17.5.12 Macro Overflow.**

Macro file has become corrupt or too long, delete the macro file "username.fky" or re-enter the macro you are running.

**17.5.13 Library file is invalid**

Library file has become corrupt in memory, exit pc/MRP and restart your computer.

**17.5.14 Record has been edited by another.**

- Somebody has edited and saved the record since the last time you opened the record for editing. Edit the record again.
- One of the fields has a numeric overflow (all stars in the field). Run Option 41 in the configuration settings and utilities menu to zero out the fields that have overflowed.

**17.5.15 Cost roll-up and exploded BOMs contain incorrect dollar amounts.**

If you are using a language other than English, use note pad to add the line: Point = "." to the config.fpw file in the pcmrpw directory.

**17.5.16 MSG.DBF does not have an entry for <name of menu item>**

pc/MRP's MSG.IDX file has become corrupt. Exit pc/MRP and use Windows Explorer to locate and delete the MSG.IDX file. Re-enter. pc/MRP will recreate the MSG.IDX file automatically.

**17.5.17 pc/MRP field contains nothing but asterisks or stars (numeric overflow).**

Use Configuration, Settings and Utilities, Option 41. This program allows the user to select a DBF field and zero out the overflow. Call Software Arts for instructions on running this program.
This can also be caused by not having a true default printer driver.

**17.5.18 When scrolling for something (Inventory or BOMs), pressing enter does not open the selected file.**

The user FKY file has been corrupted. Find the user FKY file, their login name with an .FKY extension and delete this file. All macros and personal save settings will be deleted for this user.

**17.5.19 Insufficient memory when editing Address Book.**

Go to the Configuration, Settings & Utilities Option 52 to edit every text files. If a message comes up indicating the file is too big to open in Notepad, that is the file causing the problem. Use Windows Explorer to rename the file to another file name and go back to Option 52 to recreate the file.

**17.5.20 Part number in a BOM is not Issued when Running the Stockroom Issue Function.**

The partnumber in inventory is checked as being floor stock. Un-check the floor stock check box.

**17.5.21 When printing a BOM an incorrect part number displays or prints out in every BOM.**

The BOMTEMP.DBF contains a record with this part number in it. Call Software Arts for instructions on how to empty the BOMTEMP.dbf file.

**17.5.22 Browser location changes for everybody when individual user changes his browser location.**

Browser location is stored in local windows directory on workstation in a file named BROWSMRP.UMF. Network maybe setup such that server contains the windows directory. Mark the BROWSMRP.UMF file read only in the server's windows directory. You can change the browser used to open the module. You can also open the BROWSMRP.UMF file with notepad but do not change it.

**17.5.23 Cannot open or locate Visual FoxPro Library File**

Restore VFP9R.DLL, VFP9T.DLL and or VFP9RENU.DLL from a backup copy if either of these files is missing.

**17.5.24 Version Mismatch**

pc/MRP has detected a version type mismatch. This occurs if a manual update is downloaded from our website and applied to the wrong version of pc/MRP. Restore from a back-up or call Software Arts, Inc. Software Arts will use Notepad to edit the config.fpw file to match the original version of pc/MRP prior to running the manual update. Software Arts then will run a full update to the newer version. By modifying the config.fpw file the update will know what version it is updating from.

**17.5.25 Class not registered error message**

- When pc/MRP needs to use a class library .DLL or .OCX file, the operating system will first look in the registry, if it finds an entry in the registry pointing to where the .DLL or .OCX file is located and that file does not exist, the operating system will throw an error message. If it does not find an entry in the registry, it will look in pc/MRP's home directory. If it does not find the .DLL or .OCX file there, it will look in the system folders. If it does not find it in the system folders, it will throw an error message.
- To fix the problem you could do the following. (1) Copy the missing file into the directory the registry indicates it should be in. (2) Copy the missing file into the System32 folder or the System folder (Win 98 and 98). (3) Open up Explorer, find the file, leave the Explorer window open, Click on the Start button, Select Run and register it by typing in REGSVR32 and drag and drop the file from explorer into the run command line one space after the word REGSVR32. Be aware, if you move this file, your computer may not be able to find it. If you are going to delete some of the registry entries, make a backup of the registry by selecting export and giving it a name to import it back in from if necessary.
- pc/MRP contains two files named '**SAOCX.EXE**' & '**SAIBTLC.EXE**' in the pcmrpw directory. Locating these files in Windows Explorer and double-clicking on them it will register all of the '.ocx' files required by pc/MRP. (You need to be the computer administrator.) (If not able to run the files on the server, copy them to the workstation's desktop, and try to run there.)
- Other cures might include disabling a virus checker that is not allowing un-registered DLLs to run or an operating system doing the same.

**17.5.26 Alias config.tmp is not found.**

Select ignore, then Cancel. Go back into pc/MRP and the problem should be fixed.

**17.5.27 Cannot change quantities, costs, and locations when adding part numbers.**

Change Option 62 to allow editing of these fields.

**17.5.28 Microsoft Visual FoxPro cannot load Resources.**

1) re-boot the computer if this is the only computer affected.
2) delete foxuser.dbf & .fpt if they exist.
3) config.fpw should have a line: dataresources = off
4) Copy all DLL, OCX, FLL, and EXE files from a backup copy of pc/MRP containing the same version & revision number of pc/MRP into the pcmrpw directory, eg. "9.20B".

**17.5.29 The configuration table used to check configuration changes is no longer available.**

- The table was closed by a sub-process during the repair of an invalid table structure. Any changes made to application data have not been saved.
- Click the OK button when you get this message and re-enter your changes (if any) into the config menu.

**17.5.30 Indexing hangs during Option 27 or during a full update or you get an "Unable to access the data table" error message.**

- pc/MRP was unable to obtain exclusive access to the named table. Get everybody off the table and try again or see error 1705 (Section 17.4.1705) for solutions if it is a phantom file lock.
- If pc/MRP hangs at a certain DBF file, it is possible that the next file in the reindex-list is the one that is damaged.

**17.5.31 Attempting to obtain Administrative Lockout will not allow cancel.**

If pc/MRP was not successful in running a scheduled task, and that task needed an Administrative lockout, pc/MRP will continue to try and obtain an Administrative Lockout in order to run the task. Click Cancel. You can then re-evaluate the scheduler's re-try options and then remove the Administrative Lockout.

**17.5.32 Consolidated Infinite Bucket Report contains erroneous data.**

Call Software Arts, Inc. to clean up the MRP2CONS.dbf file.

**17.5.33 An essential program file has generated an error API00??**

A software error has occurred; call Software Arts.

**17.5.34 Invalid Seek Offset (With or without an 1103 error number)**

- Network disconnect. Set your computer power save settings (disk and network card) sleep to NEVER.
- A general fault protection error may have occurred. Exit Windows, shut down the computer, restart the computer and pc/MRP.
- The computer logon may not have MODIFY rights to the pcmrpw directory.
- If the computer is using a mapped drive in its pcmrp desktop shortcut and you have a domain controller in your network, Use a UNC address in is target and start in instead of a mapped drive OR set the domain controller to Refresh or Update the mapped drives - never set it to Replace the mapped drive.
- If Invalid Seek Offset Error Message is a system error message (no 1103 error number), it cannot be trapped by pc/MRP's VFP Error Logs (Error.log and Vfp9Rerr.log). This is an error in RAM which could be caused by bad RAM, printer drivers, indexes, NIC card, Hard Disk (run scan disk), cable, switch, auto defrag, auto backup, power saving (NIC,HD) etc. The error will be trapped in the event history system logs and the program/application log may reveal activity leading up to the error. See IT101 on the pc/MRP website: http://www.pcmrp.com/it101/w7reliabilityselectcontrolpanel.htm for W7/2008 – 2011
- Start pc/MRP on the all of the company's computers. If you get an SMB2 error message, restart pc/MRP by right clicking on the pc/MRP desktop shortcut, select run as Administrator, and allow pc/MRP to correct the SMB2 Setting.

**17.5.35 Cannot import Excel 2007 files into pc/MRP**

Running Office 2007 Excel on a Vista computer. Save the Excel files as 'Excel 5.0/95' workbooks and then it will import into pc/MRP. When you go to Properties of the 5.0/95 Excel file, it will say '97-2003 workbook' even though you saved it as a 95-97 workbook.

**17.5.36 Delayed Write Failed error message**

Windows 2000 requires SP4, XP requires SP2.

**17.5.37 Reports Display zero totals**

It could be a numeric overflow problem. Use Option 41 in the Configuration, Settings & Utilities menu to repair the data in the database table. See Section 15.1.41.

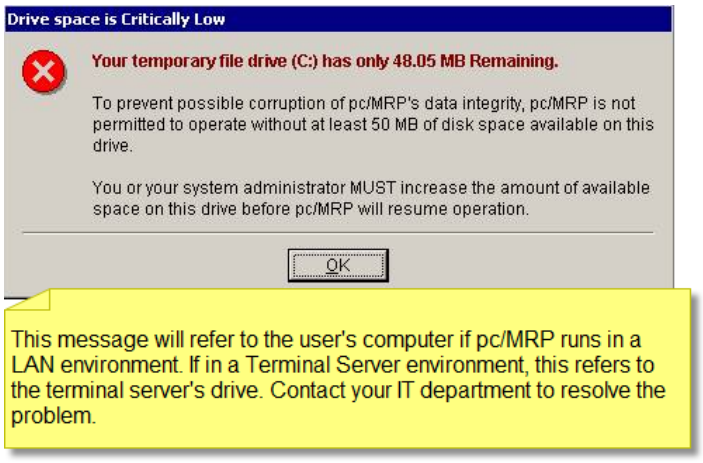
**17.5.38 On order quantity not adjusted correctly**

A PO was deleted without first zeroing out the quantity ordered. Click on Display and Update next to the On order quantity. You can run the Audit Onorder Quantities from the Purchase module. You can set this up as a nightly task in Configuration, Scheduled Administrative Tasks.

**17.5.39 Entering a receiver does not adjust the inventory's onhand quantity correctly.**

- The PO ratio for that part number was imported with a value of 0. If the issue unit is the same as the purchase unit change the PO ratio to 1.
- The quantity was increased in the wrong part number. The inventory index file is broken. Re-index the inventory file (partmast.dbf). You need to set an Admin Lock before reindexing.
- The PO has already received the full quantity on a prior receiver, and the user overrode the warning.
- Browse the Receive table to see the Orgareaqty for the part: the user might not be correct about what the onhand qty was before receiving.

### 17.5.40 Drive space is Critically Low, insufficient hard disk space, has only 0 Bytes Remaining




Reboot the workstation, make sure the user has modify or higher sharing and security rights to the pcMRP folder. On the server, right click on the drive, select properties, and then quotas (CheckDiskSpace.prg)

### 17.5.41 Indexing files is extremely slow

If you have a file named SAEIU.DLL in the PCMRPW directory rename it to SAEIU_ORIG.DLL. This will allow pc/MRP to use VFP 9's indexing DLLs.

### 17.5.42 File sadel.fll is invalid

That pc is missing MSVCP71.DLL. Call Software Arts, Inc and have them transfer MSVCP71.DLL from their developer directory to the PCMRP folder.

### 17.5.43 File Access Denied or Error Reading File (also see the next section)

- Turn off Kaspersky antivirus program at server and workstations. If the problem goes away uninstall Kaspersky and install a different antivirus program, or exclude Kaspersky from checking the PCMRPW folder. This same error could be due to a virus checker other than Kaspersky. This error can be caused by a firewall/security change.
- If the file it is trying to run is in a user's temp directory (especially but not limited to users Kim, Ron, Doug, Richard), make sure your computer and your network card is not powering down, or (if on a wireless connection) it is not becoming disconnected. Also set your anti-virus program to exclude the pcmrp folder. As a last resort, change your network switch mode from static port trunking to LACP.
- If pc/MRP is installed on a Terminal Server, reboot the terminal server.
- Error reading file <*path*>\errwind.sct: This could be caused by an earlier network disconnect. Reboot.
- At the workstation switch the pc/MRP shortcut from a mapped drive to a UNC Drive (Network)
- On Windows 10 workstations and possibly group settings on the domain controller:
- Windows Settings->Security Settings->Local Policies/Security Options->Microsoft Network Client->Policy:
- Microsoft network client: Digitally sign communications (always) – Disabled
- Microsoft network client: Digitally sign communications (if server agrees) – Disabled
- Windows Settings->Security Settings->Local Policies/Security Options->Microsoft Network Server->Policy:
- Microsoft network server: Digitally sign communications (always) – Disabled
- Microsoft network server: Digitally sign communications (if server agrees) - Disabled

### 17.5.44 Windows Exception Code Errors

Possible solutions:

**C000001D** can be caused if something did not install correctly. If you get this error when trying to print to PDF, then first reboot, then if that did not help, uninstall and reinstall the pc/MRP Internal Printer Driver.

**C0000005** is indicative of a RAM problem, reboot PC, recursive BOM, see Memory Diagnostic Slide Show.

For C0000005 also see Chapter 17.3.

**C0000006** is indicative of a network disconnect situation, check wireless signal, NIC card, hub and cables.

**C0000006** can also be caused by a shortcut on the TS Screen referencing a mapped drive and not a real drive.

**C0000020** delayed write, data made it to buffer but not hard disk, reboot workstation, replace NIC card(s).

**80000002** when editing BOMs. In one case running the Data Recovery Utility on BOMs helped.

**C0000094** RAM is corrupt. Reboot PC another less likely option Select Control Panel, System, Advanced Performance, Settings, Data Execution, Turn on DEP for all programs except those I have selected, Apply, OK, Reboot

### 17.5.45 pc/MRP runs extremely slow and/or has frequent Data Corruption

This could be an SMB2 protocol problem. See IT101 slide show #27.
http://www.pcmrp.com/it101/w7regeditstart.htm

### 17.5.46 User settings are not saved

User settings (like the size of the windows) are not saved: The USERSETS table might be corrupted, or there is a phantom lock on it. Call Software Arts.

### 17.5.47 "Allowed DO nesting or expression evaluation level exceeded"

If you receive this error message when generating an infinite bucket MRP, you have a BOM that is calling for itself (or one of its subassemblies is calling for itself). Set an admin lockout, backup the Partmast and BOM tables, then run 'Audit BOM', select 'Compile' and print the report to find any such BOMs.

### 17.5.48 "auserrights.prg doesn't exist"

If you see this error message, this is probably not the first error message that was displayed. Try the same key strokes (you might need to start the Windows Task Manager and end the pc/MRP application task first). Then look for the first error message to better trouble shoot the problem.

### 17.5.49 Copyfield or Import Inventory Counts gives errors or doesn't update one or more records

Look for partnumbers that have a space as the first character. Sort the source Excel data by part number. Look for duplicates where the second value would overwrite the first one.

### 17.5.50 Error msg: Part is listed as an assembly, but is not found in the BOM table as an assy

If Audit Inventory and/or Generate an MRP state the above, but you confirm that the part does exist in the BOM table: Sort inventory by Part number and click Go Top. Look for any duplicate part numbers that are similar but start with a space. If there is such a part number and it is classified as an assy, that will cause the above error message.

### 17.5.51 Process Interruption

If you used Option 27 to reindex all database tables you might get the following message: "The configuration table used to track configuration changes is no longer available. It was closed by a sub-process during the repair of an invalid table structure. Any changes made to application settings have NOT been saved."

This is just a message to inform you that pc/MRP is unable to display your configuration settings at this point. This happens when during the course of re-indexing pc/MRP had to repair a table.

Simply click Ok. You successfully re-indexed all database tables. If you edited any configuration settings in this last session working in Settings and Utilities, your changes have not been saved.

**17.5.52 Error.dbf is not a table**

If you get this message right after starting up pc/MRP, the program is trying to display an error message but cannot use the table that lists the error numbers and error descriptions (error.dbf). Rename the error.dbf file to error_bad.dbf and the error.fpt file to error_bad.fpt. Then try to start pc/MRP again. Error.dbf has automatically been recreated, and you might see the real error message now. If this is error 15: not a table, for another database file (e.g. wp.dbf) you might have a virus that is destroying your tables. Turn off all computers and disconnect from the network. Run virus scans. Important: keep your last good backup away from the system to avoid infecting the backup. Call Software Arts for additional help.

**17.5.53 Stockroom I type issue or Check Availability Report lists a subassembly AND the part it calls for**

In rare circumstances the report would show a subassembly AND the part it calls for, both being issued. This would happen if the next subassembly (when printing an exploded BOM) calls for the same part. The first subassembly had sufficient quantity on hand. That's why we see it being issued. The second subassembly did not have any quantity on hand, so pc/MRP issued parts instead. When looking at the report, someone might get to the conclusion (erroneously) that the part was issued for the first assembly, and think that extra material has been issued.

**17.5.54The Action.dbf file is in use**

The MRP can not be generated until all other users exit the Infinite Bucket Module.
Other possible causes (if you verified that no one is using the IB module and still get this error message):
The Action.dbf table is damaged. Simply delete both Action.dbf and Action.cdx (if existing). If you can not delete the file, it could indicate a phantom file lock; call your IT department or Software Arts.
The Action.dbf table exists, but Action.cdx is missing or damaged. Simply delete both Action.dbf and Action.cdx (if existing). If you can not delete the file, it could indicate a phantom file lock; call your IT department or Software Arts.

**17.5.55 Using ODBC queries, you get an ODBC Visual FoxPro Driver Error**

Example: Microsoft ODBC Visual FoxPro Driver Error: Column 3 (cost)
If the column that causes the error is a numeric field, the error might be caused by a numeric overflow. Use pc/MRP Configuration, Option 41 to check for a numeric overflow.

**17.5.56 Edit function (for any module) just hangs**

If the View mode works, it is possible that the Trail.dbf file is corrupt. Run **Option 27** to verify.

**17.5.57 The currency XYZ for Business Unit ABC is invalid**

CurHist.dbf already has currency records for the period you are trying to close and none of those records contain the currency listed for that business unit. To fix, at the command line Enter "use CurHist excl", browse, mark the records for that period for deletion, pack the table and run the Corporate Report again.

**17.5.58 pc/MRP asks you to select a database file when you edit an address**

See section 17.4.1 and follow the instructions regarding your virus checker configuration.

**17.5.59 Windows can not access pcmrpw.exe**

pc/MRP's sharing and security rights have not completely registered on the server. Wait an hour then try again.

**17.5.60 Visual FoxPro has stopped working , pc/MRP main application has stopped working**

- This can be a network disconnect.
- Close pc/MRP. Select Control Panel, System, Advanced, Performance Settings, Data Execution Prevention. Turn ADEP on for all programs and services except those I have selected. Click Apply, Ok, Ok. Then test.
- Reboot your PC (You should turn off your computer every night to refresh your RAM)

**17.5.61 Running price per quantity brakes for a part number displays the price per qty brakes but does not load them into that part number. Instead it zeroes out the price per quantity brakes for that part number and loads those price per quantity brakes into the first part number associated with that vendor.**

This was a bug in versions 9.00Z and 9.06C. To fix the problem, auto-update to a higher revision. Call Software Arts so that they can locate the first part number for that vendor in partvend.dbf and reload the correct prices.

**17.5.62 Entering a PO or PR brings up the first address based on address ID.**

Click the Option button, reset the Auto Lookup Option from <blank> to Whole Database.

**17.5.63 Cannot enter a new part number**

This might be caused by a part number starting with ZZZ. Renumber any such part numbers to Z0001, Z0002, or similar.

**17.5.64 At startup, you get the message: <path>\PCMRPW.EXE The version of this file is not compatible with the version of Windows you're running.**

Check the date and time of the PCMRPW.EXE file. Compare it to what it should be based on CONFIG.FPW. If the date and time are wrong, replace the file from another copy of pc/MRP.

**17.5.63 Your report parameters did not produce any results**

If this is the stockroom's Issue to Manufacturing Report, all of the parts in the BOM are classified as Floor Stock or Labor.

**17.5.64 A Sales Order or PO is duplicated by another user with another document number**

The other user was attempting to duplicate a sales or purchase order but accidently selected the last sales or purchase order. The Duplicate function creates the duplicate and then opens it up for editing even if the user selects Cancel, the duplicate was created.

**17.5.65 Authentication error has occurred. The function request is not supported.**

On W7 and Server2008 Use Control Panel, "Add or Remove Programs" OR "Program and Features", to remove Security Update kB4103718 and reboot the computer.
https://www.youtube.com/watch?v=HNR7lt7z42E

Alternatively, install the drivers for the network card by right-clicking the device and choosing **Update**. Then choose **Search automatically for updated driver software** or **Browse my computer for driver software**.
https://support.microsoft.com/en-us/help/4103718/windows-7-update-kb4103718

**17.5.66 pc/MRP can not save the Excel File.**

Excel Trust Center File Block Setting is blocking Excel 97 2003 Workbooks and Templates. See 17.11.

**17.5.67 Can not create pcmrp.exe file.**

See Section 17.7.61

**17.5.68 Can not activate pc/MRP's Technical Support Contract**

If you are entering a support contract code activation number and you get a "**The activation code that you entered is invalid**." error message, and the new Expiration Date is in 2021, and your phone number matches our phone number for your company, and you are on version 9.40E or lower, Call Software Arts and allow them to do a full update to version 9.40F or 9.41C which validates dates to 2050.

**17.5.69 MrpError.dbf file is in use**

Set an Admin Lockout. Once everybody is out of pc/MRP, use Windows Explorer to delete the mrperror.dbf and mrperror.cdx files in the pcmrp folder. If you cannot delete the files, get out of pc/MRP, go to the Server's Control Panel, Admin Tools, Computer Management, and close all open sessions in the pcmrp folder. If that doesn't fix the problem, reboot the server. Select Options, Infinite Bucket and Generate Action Items

**17.5.70 Your import file contains one or more empty BOM Numbers**

- Your import file does contain empty BOM Numbers,
- Your imort file has carriage returns or line feeds in the middle of a text or memo field. Use Notepad or Notepad ++ to view the CSV file, turn off word wrap, turn on Show Characters and delete the carriage returns and line feeds in the middle of those fields.

**17.5.71 A blank index screen appears whenever you click on a menu iteem Entering a receiver does not adjust the inventory's onhand quantity correctly.**

- If possible set an Admin Lockout, get out of pc/MRP, use Windows File Explorer to Rename formsets.dbf to formsets.bad, re-start pc/MRP, and remove the Admin Lockout.

**17.5.72 Your System fails to create a CDX file when you re-index but you can create the CDX file at the command line.**

- Use Windows File Explorer to rename the SAEIU.DLL file to SAEIU_OLD.DLL and re-index the normal way.

**17.5.73 pc/MRP opens but does not display a menu**

- Reboot your PC
- Call Software Arts and use pc/MRP's Data Repair Utility to repair Trail.dbf
- Copy in msg.dbf from a recent backup from the same version.
- Copy in config.mem from a recent backup from the same version

**17.5.74 Cannot edit specific part number(s) in the Inventory Module, pc/MRP just hangs at that record**

- The part contains a link to an image file that no longer exists or has been moved. Call Software Arts. Software Arts can use the command window to remove the link or use code such as shown below to transfer the location of the links in mass.
- Use partmast
- Copy to partmastYYYMMDD
- replace all Image_file with STRTRAN(Image_file, "\\its-fs2\", "\\sv-nas\")

**17.5.75 VFP9R.DLL is missing or invalid**

- If you are trying to start pc/MRP in a Windows 2022 Server, locate the pcmrpw.exe file, right click, select properties, Compatibly Tab, set it to Windows 7.

**17.5.76 pc/MRP crashes everytime you go to a sizable scroll window**

- Formsets.dbf which holds size and position of users windows is corrupt. Delete formsets.dbf. pc/MRP will recreate the dbf file.

# 17.6 Print or Display Problems

### 17.6.1 Reports do not print out or display incorrectly

- You do not have a default printer driver installed. Prints ********** or has bad margins.
  Go to Control Panel, select Printers, select Add Printer or make one of the existing printers your default printer.

- You have a label printer set as default printer.

- You do not have the correct printer driver installed as your default printer.
  Install the most recent printer driver from Microsoft and/or the manufacturer for your printer using Control Panel, Printer Screen.

- You have an Apple Post Script laser writer installed as your default printer.
  Select a printer that can handle Windows True Type Fonts or modify the setup on your printer to handle True Type instead of Post Script.

- You are using the printer setup routine to change the printer orientation format in a manner that the report was not designed to print out in. Wide carriage reports , "W", were designed to print out on a wide carriage dot matrix printer in portrait orientation using fan fold 14x11 paper. Narrow carriage reports "P" were designed to print out in on a laser, dot matrix, or inkjet printer using 8-1/2x11 paper in landscape orientation. pc/MRP's reports will default to portrait if you select "W" and landscape if you select "P". If you change the orientation with the printer setup screen when running the report the printout may be cut off. If you want to get a wide carriage printout with a laser printer, read the instructions below.

- Your printer cannot print Courier New True Type Fonts (make sure you have Courier New True Type Fonts installed). Set the printer settings to True Type as Graphics. Try printing a Write file with Courier New True-Type Fonts. If it cannot, call PC manufacturer. With certain versions of Windows, you must select the Apply instead of the OK button when changing True Types to graphics.

- pc/MRP prints and displays little square boxes in place of normal characters because of conflicting fonts such as those used by Corel Draw. Make sure the PC has courier new font installed. If that does not correct the problem delete the conflicting fonts (Corel Draw).

- In some cases with certain HP printers you can install smart fonts with the HP printer driver. Select Printers, select the HP printer driver, and click on the "Install Smart Fonts" button.

- The hard disk is full not allowing print manager to place the file on the hard disk. Go to program manager, select main, select print, and uncheck print manager if it is checked and try to print out again. If you are able to print out without print manager on you should clean out some of the files on your hard disk to allow print manager to work.

- The network print buffer timeout time is not set correctly. Set the print buffer time out time to 10 to 30 seconds. On some networks setting this value to zero will actually set the time out time to infinite time out.

- Some HP printers include printer monitoring software that remains active at all times, informing you of low paper, no toner, etc. In some cases this software must set such that is does not display (icon is visible) at all times as it will not allow a time out page eject signal.

- If the form totals print out with ********** instead of totals you probably are using a generic print driver. Change to a valid print driver for that printer.

- If the form totals are 0 while detail values are other than zero, you might have a numeric overflow, maybe in the average cost of a part. Use **Option 41** in the Configuration, Settings & Utilities menu.

- If the left portion of the printout is missing and you have a postscript printer, change the margin to none.

- Make sure your print spooler is turned on. (see Section 17.4.1915)

- Turn off the printer, wait 60 seconds, turn the printer back on and reprint the form or report.

- Item Number is not in a printable range of 0001-9999.

- Document Number contains a lower case alpha characters (upper case alpha characters are OK) Edit Document Number OR upgrade to 9.30L, 9.36E and higher.

- Call Software Arts and have them send you a fresh copy of the report or form's .frx &.frt files.

- Custom reports that used to work in an earlier version, now display ***** in certain fields. Make sure that the data type (Character, Numeric or Date) is correct for the field displayed.

### 17.6.2 Windows version of pc/MRP appears in a small window in upper left portion of screen

pc/MRP is designed to completely fill an SVGA screen (800x600). Running pc/MRP in higher resolution modes will allow pc/MRP to appear in a smaller screen in the upper left portion of the screen. Change your display setting to a smaller resolution. If you are not sure how to do this, contact your IT personnel.

### 17.6.3 Cursor jumps around when scrolling a data base file

Re-index the data base file that is being scrolled. You need to set an administrative lockout first.

### 17.6.4 pc/MRP only displays the top menu until you click on a top menu item

Open up the config.fpw file with Notepad and remove the line BITMAP = OFF.

### 17.6.5 HP DeskJet printer does not print out multiple copies

You are not using an up to date HP DeskJet print driver. Call HP (not Microsoft) and order the latest HP DeskJet print driver version 6.1 or higher.

### 17.6.6 Detail Band too large to fit page

The name of the printer in the Expr Column does not match the actual printer's name in the printer's properties. Change the name in the lbx or frx file Expr Column to match the name of the printer to the same name as the printer's properties. We usually do not set a form or label to use a specific printer

### 17.6.7 pc/MRP locks up when trying to print/display a form.

- Check the related database file for blank records. Mark the blank records for deletion and remove them.
- Enter another record, print it out, then print out the previous record that would not print out.
- Clear the print queue and reboot the computer

### 17.6.8 Barcode printout cannot be read by a bar code wand

The bar code font should be 26 points or higher and should not be printed out in bold. The 3 of 9 font requires that the variable be entered as (example is for the variable PARTNO):

"*" + UPPER(ALLTRIM(PARTNO)) + "*" *or* BAR39STR(PARTNO)

### 17.6.9 Totals do not print out on the bottom of forms (POs, Invoices, etc.)

Recreate the boilerplate for those forms using **Option 22** in the configuration menu.

### 17.6.10 Numeric values do not print out on form

If you have leading blank spaces in the invoice number, edit and fill the blank spaces with leading 0s. Or call Software Arts to mass-edit your document numbers.

### 17.6.11 Form contains fields from another record

Remove the database reference for the field. For example purchase.modelno should be just modelno.

### 17.6.12 Line items no longer are in order or exist after entering a PO or Sales Order

Create a pcmrpw directory in a workstation, copy all of the files from the server's pcmrpw directory into the workstation's pcmrpw directory. If the workstation can create multiple line item POs and Sales Orders, the network must be carefully examined.

### 17.6.13 Printouts and editing BOMs take a long time.

Eliminate other programs running in the background such as screen savers etc.

### 17.6.14 Buttons are missing from screen.

Foxfont.fon is missing, corrupt, or not marked read only. Locate the foxfont.fon make sure it is attributed read only. If it is missing restore this file from a backup. If after locating and attributing the file read only, pc/MRP still does not work, restore foxfont.fon from a backup.

### 17.6.15 BOM report displays more parts than are in the BOM.

Some BOM and partnumbers are longer than the partnumber length set in the Settings and Utilities. Change the partnumber length in the Settings and Utilities to be large enough to include the longest partnumber.

### 17.6.16 BarCode fonts do not print out.

Bar Code Fonts are not installed, see Section 16.4.2.

### 17.6.17 Displaying or printing a report, form, or, label gives you an "Alias not found" error message.

The report or form contains a reference to a file (.bmp or .dbf) that does not exist. This error can occur when pc/MRP interprets file names because the 16-bit version only accepted 8 character names while the 32-bit version accepts larger names. To fix this, open the report form that has this error using **Option 24** in the settings and utilities. Then, remap the image or table to the form. This will save the full true mapping.

**17.6.18 Reports print with large fonts.**

Do not print from the display window tool bar icon. Instead, select print from the menu bar. You may need to close the display window to see the print dialog window.

**17.6.19 Running 16-bit report with 32-bit version of pc/MRP.**

See Section 17.4.50 Report file invalid.

**17.6.20 Selecting display or print just doesn't do anything.**

- If you find that some Sales Order (or PO, etc) records will not display and/or print, while other records of the same table display/print fine, the reason could be that the bad record's line item number is blank or not numeric, or has less than 4 numbers.

- Re-install printer driver

**17.6.21 Print to Excel loses report columns that were availabble on the displayed/PDF/printed reports.**

This is not an error. Other than the primary database table, linked database tables used in reports are not exported to Excel, DBF, or TXT files.

**17.6.22 Printer icon in Print Display toolbar does not print to or sends the report to the wrong printer.**

Click on "Printer" in the menu instead. This will allow you to select the printer to send the print job to. The printer icon in the toolbar is designed to send the Form (report) to the default printer. When a user creates a custom form, that form points to the default printer for that user. The reference to his printer can be removed by entering '**FRXHPFIX()**' at pc/MRP's command line and selecting the form he wishes to remove the printer settings from. If you wish to remove printer settings for all your forms, run FRXHPFIX_ALL() from the pc/MRP command line. Please contact Software Arts, Inc. for instructions on accessing pc/MRP's command line.

**17.6.23 PDF file doesn't open correctly for user receiving the file.**

See Section 17.11. 2

**17.6.24 Error Loading Printer Driver OR "Printer not activated, error code -30"**

Try to reboot first. Uninstalling and reinstalling the pc/MRP print driver might help. Also see sections 17.11.2 and 17.11.6.

**17.6.25 Printing reports shows the red Ctrl-F12 information in the upper right corner.**

Do not print from the display window tool bar icon. Instead, select print from the menu bar.

**17.6.26 Displaying or printing a report, form or label pops up a window looking for a picture file.**

The report/form/label contains a reference to a file picture file (.BMP, .JPG, .GIF, etc) that does not exist at the referenced location. To fix this, first copy the image (usually the company logo) directly into the PCMRPW folder. Then open the report/form/label that has this error using **Option 24** in Settings and Utilities. The editor will try to open an image file, select the logo you just copied into the PCMRPW folder. You can save the file; the path to the image is corrected now.

**17.6.27 No longer prints to PDF or prints to the wrong printer.**

If you are on a Windows 10 workstation, select Start, Settings, Devices and scroll down and turn off Let Windows manage my default printer.

**17.6.28 Zebra Printer not printing individual labels**

- Set the Zebra printer as your default printer. Select Properties and set the label size. Use Option 24 to open the label. Make sure the label size matches the Zebra label size. Save the printer Enviroment. Make sure the label prints out OK. Set the default printer to a standard printer.
- Set the height of the label and save the printer environment. If this does not work, browse the label.lbx file the Enviro Memo field containing the height.

### 17.6.29 Label or Form does not print out correctly

Replace the .lbx, .lbt or the .frx, .frt files from a backup copy.

### 17.6.30 Ole error 0X80080005 Server execution failed

You may not have printing rights with your Windows Log in. Try printing out with a different user account. Try running pc/MRP as Administrator

### 17.6.31 Cannot un-install a print driver

Go to Control Panel, Device Manager, Print Queues, pcMRP Internal Printer 4.5, Right Click and Un-install Device.

# 17.7 Start-up and Update Problems

### 17.7.1 pc/MRP having trouble starting up and or installing

- The computer you are trying to install pc/MRP has a virus. One customer was getting an error msg VER.DL_ not found. Running a directory on disk one after an installation had been attempted revealed a new file with the letters IBM in the new file's name. The latest version of McAfee (408-988-3832) anti virus software was used to locate and clean out the virus called ANTIEXE.
- *Config.mem* file has an invalid memory variable in it. Run: *clrconfg.exe*, which is found in your pcmrpw folder.
- If you are trying to run pc/MRP from an internet download and it asks for disk two, files are missing. Download pc/MRP again.
- If your anti-virus programming is crashing pc/MRP. Disable your anti-virus program or disable the virus check when "running" a program. Kaspersky is known to cause pc/MRP problems.
- Cannot create workspace. Change user rights to allow the creation of files.
- If the shortcut points to an IP address, change it to go through a mapped drive or UNC address.
- Reboot the workstation.
- Trouble updating, could be invalid image file names that no longer exist in their original location

### 17.7.2 pc/MRP update fails to go through

- The display driver is incompatible with pc/MRP. Switch to a Windows Standard display driver or update from a different computer.
- One of the database files is corrupt. Start the backup copy, reindex all to find the corrupt file. OR, find the most recently modified file in the pcmrpw folder. pcMRPUpd.prg contains the order the files are updated in. Search for UpdatePrimary. Repair the broken database file. Restore from the backup (delete the contents of the production copy folder and copy in the contents of the backup folder, in order to keep the production folder's sharing and security settings). Update again.

### 17.7.3 "User does not have modify rights" message appears

Reinstall display driver or install standard display driver.

### 17.7.4 "FOXTOOLS.FLL DOES NOT EXIST" error message appears

- Recreate shortcut.
- Make sure pc/MRP is being run from a mapped drive and not through network neighborhood.

### 17.7.5 Error 1705 message appears

- You do not have full access rights to the pc/MRP directory or there is another copy of pc/MRP open. At the user's command line, enter "modi file revupdate.log" to view the name of the file causing the problem.

### 17.7.6 "Microsoft Product in Use by Another" error appears

- Workstation has not been mapped to the server.

### 17.7.7 "Unable to find the remote location" error appears.

- The *remote.mem* file containing the path to the server is invalid or non-executable. Delete the *remote.mem* file in the pcmrpw directory.

### 17.7.8 "Can not locate support library" error appears.

- Recreate shortcut.
- The foxtools.fll file has been attributed as a read-only file. Using Windows Explorer, right click the foxtools.fll file, and uncheck the read-only box.

### 17.7.9 Invalid library file

- Close all programs and reboot the computer displaying this message.

**17.7.10 "The file containing the user rights is not present. Should the file be recreated?" error message appears**

- The password database file has been deleted. Call Software Arts for the password authorization code number. The password database will be recreated with a single Master/Master entry. Names and passwords must be re-entered into pc/MRP's password module. Or, recover the database file from a backup.

**17.7.11 pc/MRP's opening screen displays a different version number than pc/MRP's "About pc/MRP" screen**

- Config.fpw file is missing or corrupt (contains version number). Update will not go through. Call Software Arts to receive a config.fpw file that matches your original version and revision number.

**17.7.12 "Version Mismatch" error message appears.**

- You have installed a manual update of a newer version over an older version of pc/MRP. Call Software Arts. Software Arts will examine the config.fpw file and send your company a full update that matches the config.fpw file.

**17.7.13 "Enter the password recreation authorization code" error message appears**

- pc/MRP's advanced password database file has been deleted. Restore the file from a backup copy of your pcmrp directory or call Software Arts for the Password Recreation Authorization Code. The authorization code is based on the user's telephone number. Call Software Arts for the Password Recreation Authorization Code (will be displayed after the words "WP.DBF Recreation"). If the Password Recreation Authorization Code is used, the password database file will be recreated with a single "Master"/"Master" administrator entry in it. All the user passwords and rights will have to be re-entered.

**17.7.14 User has forgotten his password**

- Ask the pc/MRP administrator to get or change your password if you have the Optional Password Module.
- If the user does not have the advanced password program. Press Control-F12 at the Incorrect Password window. A window will appear that requires an authorization code. The authorization code is based on the user's telephone number. Call Software Arts for the Password Recreation Authorization Code (will be displayed after the words "Show Password").

**17.7.15 Error Rendering Drive K**

- If drive K is your CD drive, put any CD into drive K or assign your CD drive another drive letter.

**17.7.16 "Install Disk 2" message appears.**

- The internet download is not complete. Try to download pc/MRP again.

**17.7.17 "Error Occurred when attempting to connect to HTML driver" error message appears.**

- pc/MRP failed to activate an HTML class. This class allows the user to generate an HTML form instead of a printed form. The network administrator might have locked out the user's right to install a print driver. If you do not need to generate HTML files, you can turn off this option in "Configuration", "Settings and Utilities", **Option 19**.

**17.7.18 "Visual FoxPro can not Create Program Work Space Temp File" error message appears.**

- User has read only rights, or the PC's temp folder does not exist. To find your computer's Temp folder select, Control Panel, System, and Advanced or Environment. If the displayed temp folder does not exist, create it. If it does exist, make sure it is not marked as a system or hidden folder. You can remove the system attribute using Windows Explorer.

**17.7.19 "Invalid Resource File" error message.**

- User does not have 'Modify Rights' for the foxuser.dbf file in the pcmrpw directory on the server's hard drive.
- SULF.DBF file may be attributed as READ ONLY.

**17.7.20 pc/MRP tries to start then disappears and may try to re-start many times.**

- Your computer may not have FoxFont installed or your computer may be configured to use only True Type fonts. First ensure that FoxFont is installed (foxfont.fon is in the Fonts directory), then under the menu for Tools, Folder Options, True Type Fonts, make sure the checkbox for "Show only True Type fonts…" is NOT checked.
- Desktop shortcut properties' Shortcut tab for "Target:" must point to pcmrpw.exe, not pcmrp.exe. For example: G:\pcmrp\pcmrpw.exe (note the 'w' in the filename)
- Desktop shortcut properties' Shortcut tab for "Start In:" must point to the location where pcmrpw.exe resides. For example: G:\pcmrpw.
- Reboot workstation.
- Download a copy of pc/MRP to the workstation. If that runs, it may be a network 'rights' issue.

**17.7.21 MSVBVM60.dll is missing.**

- Use Window's Explorer to locate the MSVBVM60.DLL file. If you can not locate this file you can download it from our website; click on Technical Support and Support Files. Copy and paste this file into the C:\WINDOWS\SYSTEM32 folder.
- Leave this window open.
- Click on Start, Run, type in regsvr32
- Drag & drop the file MSVBVM60.DLL after the word regsvr32.
- Press OK. A response will come back saying the DLL was registered successfully.

**17.7.22 You get a Fatal error 171 while attempting to report error 171**

- You have a language other than English (United States)-US installed on your computer. Select Start, Control Panel, Regional & Language Options, Select the Language tab, Details, and make sure your default language is English(United States)-US. In one case the user's computer was set to Hebrew and they could make that work with pc/MRP by installing and older (2003 or 2007) version of Microsoft Office in addition to their 2016 Microsoft Office package.

**17.7.24 You get a message similar to: "Undergoing maintenance" or "Undergoing maintanance" when you attempt to login to pc/MRP.**

- An administrative lockout is set and can only be removed by the user and computer that set the lock.
- If you confirmed that the administrative lockout is not intentionally set, use Windows Explorer to delete the file "MRPBUSY.FLG" from the pcmrpw directory.

**17.7.25 Everyone logging in gets an "Incorrect Password" error message.**

- One or more of the work station PCs are using a code page other than English (1252) or one or more of the work stations are not using English-United States as their Regional Setting. Change the Regional Settings to English by selecting Control Panel, Regional Settings, Advanced and select English-United States from the Regional Settings drop down list box.

**17.7.26 You get a message "Variable ByPWUser can not be found"**

- Entering an incorrect password and leaving the login screen open, or a phantom file lock can result in simultaneous re-indexing of the WP.CDX. This in turn can cause the CDX file to become malformed (missing its index tags). When you get the "Incorrect Password" error message, press Control I to force a re-index of the WP.DBF field

**17.7.28 You get a message "Variable MRPUser" not found.**

- User may have installed a new demo copy of pc/MRP into an older version of pc/MRP. Restore the pcmrpw directory from a backup of pc/MRP.

**17.7.29 pc/MRP's start up window does not open in the maximized mode**

- pc/MRP's Start up window is not set to open in the maximized mode. However, you can force this mode by using Notepad to create a file named PCMRPSCR.MAX in the pcmrpw directory.

**17.7.30 You get an error message: 'Startkey.prg not found' or Insufficient Memory**

- You have a corrupt pcmrp.exe file in memory or on the disk. Re-boot the PC and try to start pc/MRP again. If this does not work: Restore the pcmrp.exe file from a backup directory of the same revision, or manually update to the latest revision from the pc/MRP website; must be the same major version number. This might solve the problem even if it seems that the pcmrp.exe size and date are right. OR: You are running pc/MRP offline. Right-click on the monitor icon in the system tray on the right. Select 'Offline Status', Check the work Online without synchronization. On Windows 10 go to Control Panel, select Sync Center, select Manage, and select Disable. NEVER WORK OFFLINE WITH pc/MRP!

**17.7.31 Updating pc/MRP errors out when populating Closedat with default data**

- Restore from a backup and delete a file named LASTCLOS.MEM in the pcmrpw directory before applying the update again.

**17.7.32 Updating pc/MRP errors out when Spawning QuickBook files**

- Restore from a backup and double-check that a file named CLRCONFIG.EXE is in the pcmrpw directory before updating again.

**17.7.33 You get a syntax error message when you start pc/MRP**

- You have corrupt .dll files in memory. Re-boot your local computer and try again.
- You have corrupt .dll files on your server. Copy over all the .dll files from a current pc/MRP backup. (Must be the same main version of pc/MRP; e.g. from 9.00 to 9.00)

**17.7.34 You get an Unable to load the "pc/MRP Internal Printer v4.5" or PDF printer driver installation failed when starting pc/MRP**

- See Section 17.11.1 & 2

**17.7.35 Download and Install a New Revision Progress Bar freezes when it hits 100%**

- Your computer is having trouble with the FTP Protocol. Call Software Arts and have them send you a full update for that version.
- As a last resort, try removing all print drivers, run pc/MRP, reinstall all print drivers.

**17.7.36 Max number of users reached**

- You will have to order more seats for more users to access pc/MRP.
- Ask some users to logout of some of their sessions of pc/MRP if they have more than one running.
- Make sure that users logout of pc/MRP when they are finished so others can login to pc/MRP.
- A user may have turned off his computer without logging off or his computer crashed. Either of these actions may corrupt or lock the SULF.DBF table in the pcmrpw directory.
- Turn on the Administrative Lockout and force all users logout of pc/MRP
- Call Software Arts to unlock (see Section 17.4.1705) and delete the sulf.dbf table. This will allow the sulf.dbf table to be re-created the next time pc/MRP is run.

**17.7.37 You get a "VFP9.dll is invalid or damaged" when starting pc/MRP**

- pc/MRP is compiled using VFP9 and requires the GDIPLUS.dll file. Make sure that this file is in the production pcmrpw directory.

**17.7.38 pc/MRP displays a "The pc/MRP application is currently having the index files for all tables rebuilt by another user"**

- Someone is performing an update; do nothing and try again later. If you confirmed that this is not the case: Someone quit while pc/MRP was re-indexing the files after an update. Use Windows Explorer to delete the file "UPDREINDEX2.flg" from the production pcmrpw directory.

**17.7.39 Runtime Error 62 input path EOF()**

- Use Windows Explorer to delete the file "MRPBUSY.flg" from the pcmrpw directory.
- Replace pcmrpw.exe and pcmrp.exe. If that does not help bypass the pcmrpw.exe file by changing the shortcut target to c:\pcmrpw\pcmrp.exe StartKey (uppercase S and K).

**17.7.40 Error Message "pc/MRP is waiting for the ActiveX controls needed for use on numerous application forms to be installed. Please continue to wait until component installation is complete."**

- Windows7 and Vista computers require an installer file, SAOCX.EXE and SAIBTL.EXE (Infinite Bucket Timeline reports).
- pc/MRP is trying to install MSCOMCT2.OCX (Date Picker) and MSCOMCTL.OCX (ListView). Check and see if the date picker was installed by selecting Modules, Accounting, Pay Bills, Remittance, Date Range. If Date Range displays, the Date Picker does not need to be registered but MSCOMCTL.OCX does. Go to pc/MRP's command line and enter: registerocx() and select the ocx file to be registered.
- If that does not work go to Windows Explorer, locate the pcmrp directory and double click on "SAOCX.EXE" or SAIBTL.EXE to run it directly. If not available, call Software Arts for the file. (These files are already installed in the pcmrpw directory)

**17.7.41 Library file fllintf450.fll is invalid**

- Ensure that you have administrative privileges for your login. If your login does not have administrative privileges and you cannot login as the computer administrator, you need to inform your IT department that you need this capability or they need to login for you.
- Open the pcMRP Internal Printer listed in the Printers and Scanners System Settings. Make sure there is not a print job in the que. Remove the pc/MRP Print Driver. Reboot the workstation. Run pc/MRP as Administrator. pc/MRP will re-install its print driver. If needed, you can now exit pc/MRP and re-login to your computer as normal without administrative privileges.
- Or re-install the fllintf450.fll from the nightly backup.
- Or first update to the latest pc/MRP version. Go to each computer's Control Panel, select Printers, and delete the pc/MRP Internal Printer Driver. Then start pc/MRP on each workstation to load the new printer driver.
- Copy in a new pcmrp.exe file.

**17.7.42 pc/MRP takes a long time to start. Numerous file access error and file corruption.**

- There is a bad pc or network card in a workstation on the network. Disconnect that computer from the hub. This computer can be identified from the server as it will have a phantom lock on one or more files under Computer Management, System Tools, Shared Folders, Open Files.

**17.7.43 Run-time error '53' File not Found.**

- The pcmrp.exe file may be missing. Restore from a backup with the same version and revision (check config.fpw with Notepad) or call Software Arts.

**17.7.44 Not enough room to install update.**

- pc/MRP checks to ensure that there is enough disk space to perform an update or upgrade. Contact your IT department or Software Arts, Inc. for help.
- The work station doesn't have the rights to install a program on the server. Possible solutions are:
    - Use UNC mapping.
    - Instead of copy-paste, browse for the pcmrpw folder
    - Run the update from the server.

**17.7.45 Download and install a new revision fails**

- Make sure HTTP port 80 and FTP port 21 are open on the router and the host computer's firewall is open.

**17.7.46 pc/MRP hangs when trying to enter a new partnumber.**

- The user has set his default product code and suffix lengths via **Options 29, 29, & 48**, and the resulting number for pc/MRP to auto–increment is very small. Example: (leaves only 1 digit to auto-increment): Option 28 is set to 12, Option 29 is set to 6, Option 48 is set to 5.

**17.7.47 API library not found.**

- Get the CDINTF250.dll, FLLINTF250.dll, SADEL.fll and FLLINTF450.dll files (and possibly all .fll files) from the same version of pc/MRP located in the K:\ztemp directory and transfer them to their pcmrpw folder.
- Remove the older PDF print driver (select Control Panel, Devices and Printers, delete the old pc/MRP printer driver) and reboot the computer, then start pc/MRP and it will automatically install the newer PDF print driver. If you have a W7 workstation, start pc/MRP by right clicking on the pc/MRP shortcut and select Run as Administrator. (This could also happen if you have an old version of pc/MRP and you just downloaded a trial copy of the current version. It is OK to remove the old printer driver; the new printer driver is compatible with your old pc/MRP copy.)
- Check the shortcut: it should have "Target" and "Start in" filled out.

**17.7.48 Run-time error '53': File not found**

- The pc/MRP.exe file might be missing. Call Software Arts for a replacement. You can also replace it from a backup copy (not recommended), but make sure you are using the exact same version and revision of the file. Otherwise you would end up with a version mismatch.

**17.7.49 pc/MRP will not update**

- You are trying to install over an older version.
- User has modified the Title in his Config.fpw file. For example the Title should contain the line e.g. TITLE = pc/MRP for Windows – Version 9.10M (the line should reference the version and revision you need to update).

**17.7.50 Run-time error '5', Invalid procedure call or argument**

- If only one work station is getting the error message: hard reboot that work station.
- If each work station is getting the error message: hard reboot the server. If that doesn't help, call Software Arts to replace the pcmrpw.exe file (or replace it from a backup with the exact same version and revision). If that doesn't help, call Software Arts to run a full upgrade (to replace all the dll files).
- This can happen if during an update the MrpBusy.flg file was manually deleted and then recreated as a text file with no (or bad) content. Restore the MrpBusy.flg file from the Recycle Bin instead.
- One user reported restoring his computer to an earlier restore point fixed the problem. This should be a last resort.
- Un-install the virus checker

**17.7.51 At start-up you get a message: Error.dbf is not a table**

It is very likely that your system has a virus. Call Software Arts, the Support Technician will replace the Error.dbf table; or replace from a backup of the same version and revision. Try to start the program again. You might get an error "not a table" about another dbf file. After replacing that file, you might get the same error about a third dbf file. At this point it is extremely likely that you are dealing with a virus (ransomware). Call your IT department or Software Arts to discuss further actions.

**17.7.52 Windows can not access pcmrpw.exe**

- pc/MRP's sharing and security rights have not completely registered on the server. Wait an hour then try again.
- Reboot the server. If that does not fix it replace the pcmrpw.exe file and re-boot the server..

**17.7.53 Unable to open output file – when installing ActiveX controls on a new work station**

- Disable McAfee.

**17.7.54 Cannot create file ....\revload.exe.**

If you get this error during an auto-update from a work station, you might not have the rights to do the update on the server. Run the update from the sever, logged in as Admin.

**17.7.55 Error 1734 Property not found lUseOldDocIncrementation – when updating (for older versions only)**

Your copy of pc/MRP has a blank or duplicate accounting transaction numbers. Restore your original copy of pc/MRP and update again. This error will not happen when you update to version 9.00Q or 9.03B or higher.

**17.7.56 Error installing Bar Code Module – Data Segment Not Found**

Get everybody out of pc/MRP and call Software Arts. The Technician will copy the C39BF.exe file from a development static files folder to the user's pcmrpw/barfonts folder. If that does not solve the problem, copy the C39BF.exe file to the user's desktop and run as administrator.

**17.7.57 You get the message: <path>\PCMRPW.EXE The version of this file is not compatible with the version of Windows you're running. Check your computer's system information to see whether you need an x86(32-bit) or x64(64-bit) version of the program, and then contact the software publisher.**

Check the date and time of the PCMRPW.EXE file. Compare it to what it should be based on CONFIG.FPW. If the date and time are wrong, replace the file from another copy of pc/MRP.

**17.7.58 Error 111 Can not update the cursor Sulf.dbf**

User does not have share and or access rights to the pc/MRP folder.

**17.7.59 Error 12 Variable paCategoryPre not found**

Contents of the Task Manager's Default Categories are missing. Rename Tasks.clf to Tasks.clfbad and restore Tasks.clf from a backup copy of pc/MRP.

**17.7.60 Update Installer can not locate the pcmrp on the server due to a strange naming convention on the server**

Copy and paste the pc/MRP folder from the server to the the c:drive on a work station. Make one copy your backup copy and update the other copy on the c:\drive. Delete the contents of pc.MRP folder on the server and copy the contents of the updated copy on the c:drive to the pc/MRP folder on the server.

**17.7.61 Cannot create file pcmrp.exe**

If you are performing an auto update and pcmrp.exe is not in the pcmrp folder, copy and paste the files in the appropriate RevUpdate/Update Files folder except FileList.dbf into the pcmrp folder. Use Notepad to manually change the rev in the config.fpw file.

**17.7.62 Temporary File Drive and only xxx megabytes remaining.**

Go to Configuration, About pc/MRP and press F1. It will confirm the space available and the location of the temporary memory. Increase the amount of disk space on the server or reboot the server to reclaim temporary memory.

# 17.8 Accounting Problems

**17.8.1 pc/MRP cannot close the month**

- pc/MRP cannot finish closing the month because it is stuck on two or more transactions with the same transaction number or blank transaction numbers. Edit the first transaction and change the transaction number to the next available transaction number.
- **Command contains unrecognized phrase or keyword or Error Loading File Error 2005**. User's login name has a space in it. Remove space from login name or update to version 9.10P, 9.20J or higher.

**17.8.2 Entering a partial payment into accounting shows the full amount paid on Invoices and Receivers**

- Edit invoices and receivers and put the correct amount paid in full and mark the complete field N if the item has not been paid in full.

**17.8.3 Variable not found**

- If pc/MRP is closing the month and the variable not found is MDUMMY, the chart of accounts has a record in it with an illegal account type code. The chart of account record number will be displayed at the bottom of the screen. Edit the record and fill in the account type field with a legal account type code.

**17.8.4 End of year and or end of month balances are incorrect**

- Try to re-close the month again or re-close the month on another computer.
- Re-index the chart of accounts and re-close the month

**17.8.5 Check reconciliation report does not make sense**

- Both checks and deposits must be cleared using the clear checks program in the accounting menu. Clearing checks only will cause the uncleared balance to go negative.

**17.8.6 Trial Balance does not balance by the amount of the profit for the month**

- User has created two or more YTD retained earning accounts (QR chart of accounts records). Edit the chart of accounts and delete the extra QR accounts or change the extra QR accounts to QN accounts. There can only be one QR account in the chart of accounts data base file.

**17.8.7 Trial Balance YTD Retained Earnings does not match YTD Returned Earnings in the Balance Sheet and YTD Retained Earnings in the Expense and Revenue Report**

- The YTD retained earnings amount in the Balance Sheet and the Expense and Revenue report are correct and include the profit (revenue - expenses) for the current month. The YTD retained earnings amount in the Trial Balance Report contains the retained earnings amount from the prior month, as the profit from the current month is already included by totaling the revenue and expense amounts for the current month. In addition in the YTD Trial Balance report the YTD retained earning for the year will always be zero since the YTD Revenues and Expenses are included in this report.

**17.8.8 Accounts Payable Report prints out date with first 2 digits of the year causing everything to appear over 90-day column.**

- Delete the ACPAYTMP.DBF file. A new ACPAYTMP.DBF file will be formed from the RECEIVE.DBF with the correct date format containing the last 2 digits of the year.

**17.8.9 Checks take a long time to print out.**

- The transaction DBF file has alpha characters in the transaction numbers. Manually edit the alpha transaction numbers with the next available transaction number, or call Software Arts, Inc to renumber. See Section 17.8.14.

**17.8.10 Check number is not retained when you do an E or P type accounting transaction.**

- You are selecting no when asked if you want to print checks. pc/MRP assumes by this you have decided not to print the check. Therefore there is no check. If you are handwriting checks, select print or display and answer yes to retain the check number. If you select print simply print the check on a plain sheet of paper. To correct past omissions select Modules, Accounting, Pay Bills/Print/Clear Checks, and Print Unprinted Check(s).

**17.8.11 Pay bills option does not display any bills to be paid.**

- The receiver index is broken, re-index the receiver file.

**17.8.12 Entering an I, E, O, R, P, or S transaction displays an error message: "NOT FOUND IN ACTMPLT.DBF FILE."**

- One or more of the primary chart of accounts number(s) found in the account actmplt.dbf does not exist in the chart of accounts DBF.
- Somebody has changed a primary chart of accounts description in the account actmplt.dbf. pc/MRP does not allow the user to change this description.

**17.8.13 Cannot reprint checks.**

- **Option 13** in the Settings and Utilities menu is set to off.

**17.8.14 YTD Retained Earnings Amount in the Balance Sheet do not match the YTD Retained Earnings Total in the YTD Expense and Revenue Report.**

- The YTD Retained Earnings Chart of Accounts (QR Account) was not debited and credited against an Undistributed Retained Earnings Account to zero out the QR Account at the beginning of a new year or somebody accidentally debited or credited the QR Account. If possible re-close the last month of the previous fiscal year. Then make an entry into your GL with a date of the first month and day of the beginning of the current fiscal year. In that entry debit out the YTD totals from the balance sheet and credit the prior year retained earnings account (QRC). Finally, re-close the first month in the current fiscal year and all months up to the current close.

**17.8.15 Transaction numbers have jumped to a higher number or a weird number.**

- Somebody typed in a different transaction number and pc/MRP incremented the next transaction numbers from them. Edit and renumber the affected transaction numbers or call Software Arts to automatically renumber all transactions using the command REMOTEFORM(“RENUMBER”). You must be aware that all prior printed accounting transactions in reports and checks will contain the old transaction numbers.

**17.8.16 Summary Accounts Receivable report displays "Error- Unma".**

- The invoice in question has $0.00 or a negative amount due and the invoice complete field does not contain "Y".

**17.8.17 Transaction number shows up twice in your GL report.**

- Edit the transaction number, it has debited or credited the same chart of accounts number twice. Edit the transaction such that it only has one debit or credit entry for the difference of the amount.
- Print out your chart of accounts, you may have duplicate chart of accounts numbers. Call Software Arts if this is the case.

**17.8.18 Incorrect Financial Statements when closing a month.**

- The user edited a transaction in the prior year and re-closes that month.
- Re-close month prior to edit date.

**17.8.19 Unable to proceed (accounting transactions)**

- When performing an accounting close process and there is a network failure, computer crash, computer turned off, power loss, or some other problem with the computer running the close process, all users will get the message "'username' is closing a month. No accounting transactions can be created while a month is being closed.", when they try to do any accounting transactions. If no one is actually closing, go to the pc/MRP production directory and delete the flag file named: **CLOSEINPROGRESS.FLG**.

**17.8.20 Accounting AR report shows a different amount due than the Address Book screen; the invoice report agrees with the Address Book screen.**

- There is an invoice where the "Complete" field does not contain a capital "Y" and there is an overpayment on the invoice.

**17.8.21 pc/MRP's Inventory Value Report does not match the dollar amount in the Inventory Asset Account**

- The Inventory Value Report will contain parts that have been received. However, some of those receivers may not have yet been posted to the general ledger so the Inventory Asset Account would have a lower $ amount.
- When component parts are received, the inventory value in pc/MRP is increased by the quantity received x average or std cost. However the Inventory Asset Account is increased by the actual cost. Accounting's Purchase Price Variation Report will show this difference.
- When assemblies are shipped, the inventory value in pc/MRP is decreased by the average or standard cost and the Inventory Asset Account is automatically debited by the same amount. However if the assembly being invoiced does not have an accurate cost roll up or no cost roll up at all the inventory dollar amount in the general ledger may be decreased by as little as $0.00.
- If somebody adjusts stock, decreasing the quantity in pc/MRP, the inventory value goes down in pc/MRP. However, if accounting does not make an adjusting entry decreasing the value of inventory, the two values will not agree. It is best to use **Option 62** to block editing of quantities and costs in the inventory screen. Instead force users to use the stockroom and new adjusting entries to adjust quantities, accounting can then use the stockroom's report Adjusting Transactions Only for a specified time period to make one adjusting entry for the period.
- If somebody rolls up costs for one or more assemblies and there is a change in value, pc/MRP's Inventory Value Report will contain the new costs. However, if an adjusting entry is not made, this change will not be reflected in the Inventory Asset Account. pc/MRP contains a Prior Cost Roll-up report that will allow accounting to print out or display prior cost roll up variances.
- pc/MRP's Inventory Value Report must be run at the end of the day on the last day of the reporting period (preferably to PDF). This is the gold standard. Make an adjusting entry debiting and crediting Inventory and Cost of Goods Sold to bring the Inventory Asset Account into alignment with pc/MRP's Inventory Value Report.
- Additional parts may have been issued to WIP than what is listed in the BOM Accountings Manufacturing Variance Report will show this variance.
- Purchased capital equipment is listed as an inventory part.

**17.8.22 You are not able to edit the Account Type in pc/MRP's Chart of Account structure.**

- Once you have selected an **Account Type**, and have entered accounting transactions for the account, you cannot change the Account Type. Call Software Arts, Inc. if this is a necessity.

- Before Software Arts, Inc. can change Account Type, we must determine that there are NO:
  - Existing transactions
  - Existing sub-accounts
  - Twin division/department accounts

  If any of the above mentioned conditions exist, please call Software Arts, Inc. before trying to modify on your own.

**17.8.23 You are reprinting a check and the program lists more receiver numbers than expected.**

- If you have been using pc/MRP for a very long time, or maybe your company was acquired by another company, it is possible that you had to start re-using the same check numbers. If this is the case, when you enter the number of the check you want to print, next to the recent transaction, a very old transaction (for a different vendor) might show up. Call Software Arts to solve this problem. The support person can change the old checks (all checks before a given date) by e.g. adding an "x" in front of the check number in both the Receiver and the Accounting modules.

**17.8.24 Accounts seem to switch themselves to inactive and active.**

- If you reclose a month, the old chart of accounts will be restored along with the account's active/inactive status. Any account that was deleted since the original close. Please note that accounts created since the original close will not be removed.

**17.8.23 Accounts seem to switch themselves active/inactive**

- If you reclose a month then the old chart of accounts will be restored along with the accounts' active/inactive status. Any accounts that were deleted since the original close will reappear. Please note that accounts that were created since the original close will not be removed.

**17.8.24 If you have pc/MRP version 8.50A – 8.50S and the current AR Summary report based upon invoices does not match the Chart of Accounts report based upon the Balance for a Date/Time Period.**

- You are creating 'R' type accounting transactions against a credit memo or you have manually attached a credit memo to a closed invoice (both of these methods should not be used and are **NOT** supported by pc/MRP). Please refer to the Credit Memo slide show on our website in MRP101, for the correct methods for handling credit memos in pc/MRP.
  http://www.pcmrp.com/mrp101/creditmemooverview.htm

  To correct the past errors, look for 'R' type accounting transactions that debit 'income' and credit 'checking'. Edit these transactions and debit AR instead of 'income'.

  Then update to pc/MRP version 8.50T or higher and in the

**17.8.25 Post a Moint, select Profit and Loss and get a "Bad Account Type" error message**

- Check Show Sub Accounts when selecting the Profit and Loss Report.

# 17.10 pc/MRP is Running Slow

**17.10 pc/MRP is too slow.**

**Overview**

- Call pc/MRP's Support Line. They will run NetworkTest() from pc/MRP's Command Line. If this test has network speeds of 1100 transactions or greater per second, your network is OK for that work station. Proceed to the next work station. If all work stations test higher than 1100 transactions per second, the problem is most likely listed in the pc/MRP portion of this chapter.

**Work Stations** (*run NetWorkTest(), make the change, run NetWorkTest() again, if the speed did not improve restore the setting and move on to the next test, repeat for each workstation*)

- Reboot the workstation. If that helps, you might have had too many programs or a heavy duty program running.
- Disable the workstation's virus checker. If that helps, turn the virus checker back on, exclude the PCMRPW folder from the virus checker and test again. If that helps, leave the virus checker disabled or better yet, install another virus checker. If you have certain versions of Kaspersky or Avast you may need to switch to another virus checker. In one case Norton had to be removed from two computers, in other cases Norton is fine.
- If you start pc/MRP and it detects the SMB2 Protocol has not been zeroed out, restart pc/MRP by right clicking on the pcmrp.exe shortcut, select "Run as Administrator", and answer YES to zero out the SMB2 cache time. One work station that has not been zeroed out can slow down all work stations.
- Turn off the work station firewall. Always keep the firewall on the router on.
- If the work station is connecting to the server via wireless, change to an Ethernet connection.
- Change the network card settings to a fixed setting instead of "Auto Detect", disable Interrupt Moderation and turn off power savings. See slide show about Troubleshooting a Network Card:
  For XP/2003: http://www.pcmrp.com/it101/xpnetworkcardspressstartbutton.htm
  For W7/2008: http://www.pcmrp.com/it101/w7networkcardspressstartbutton.htm
- Right click on My Computer, select Properties, Advanced, Performance Settings, Data Execution Prevention, Turn on DEP for Essential Windows Programs and Services Only.
- If you are using a Windows 7 Home workstation, update to Windows 7 Pro.
- Check you computer's power plan in Control Panel, Power Settings, Change plan settings, Advanced, Processor power management, Minimum processor state. If it is set to very low (5%) change it to high.
- If you are remoting in and using a re-directed printer, print to PDF.

**Server** (*run NetWorkTest()from a work station, make the change on the server, run NetWorkTest() on the work station again, if the speed did not improve restore the setting and move on to the next test*)

- Reboot the server.
- Check that the server is not overloaded using the server's task manager. Another program that uses SQL Server could overload your server.
- If you have a Windows 2008 server upgrade the latest version of pc/MRP.
- Disable the server's virus checker. If that helps, turn the virus checker back on, exclude the PCMRPW folder from the virus checker and test again. If that helps, leave the virus checker disabled or better yet, install another virus checker. If you have certain versions of Kaspersky or Avast you may need to switch to another virus checker. In one case Norton had to be removed from two computers, in other cases Norton is fine. Try disabling/removing Bit Defender (Ben Klaehn).

- Turn off continuous back up programs such as Double Take. See Chapter 15.2 for the recommended backup method. Turn off programs such and Sandboxie on the server and at work stations.
- Remove any screen savers on the server.
- Store pc/MRP on a physical drive inside the server and not on an external NAS drive.
- If pc/MRP is on a Terminal Server the shortcut to pc/MRP should point to the actual physical drive inside the server and not to a virtual or mapped drive.
- Copy the pcmrpw folder to another server; re-point the workstation shortcuts to the new server and the "pcmrpw.exe" file.

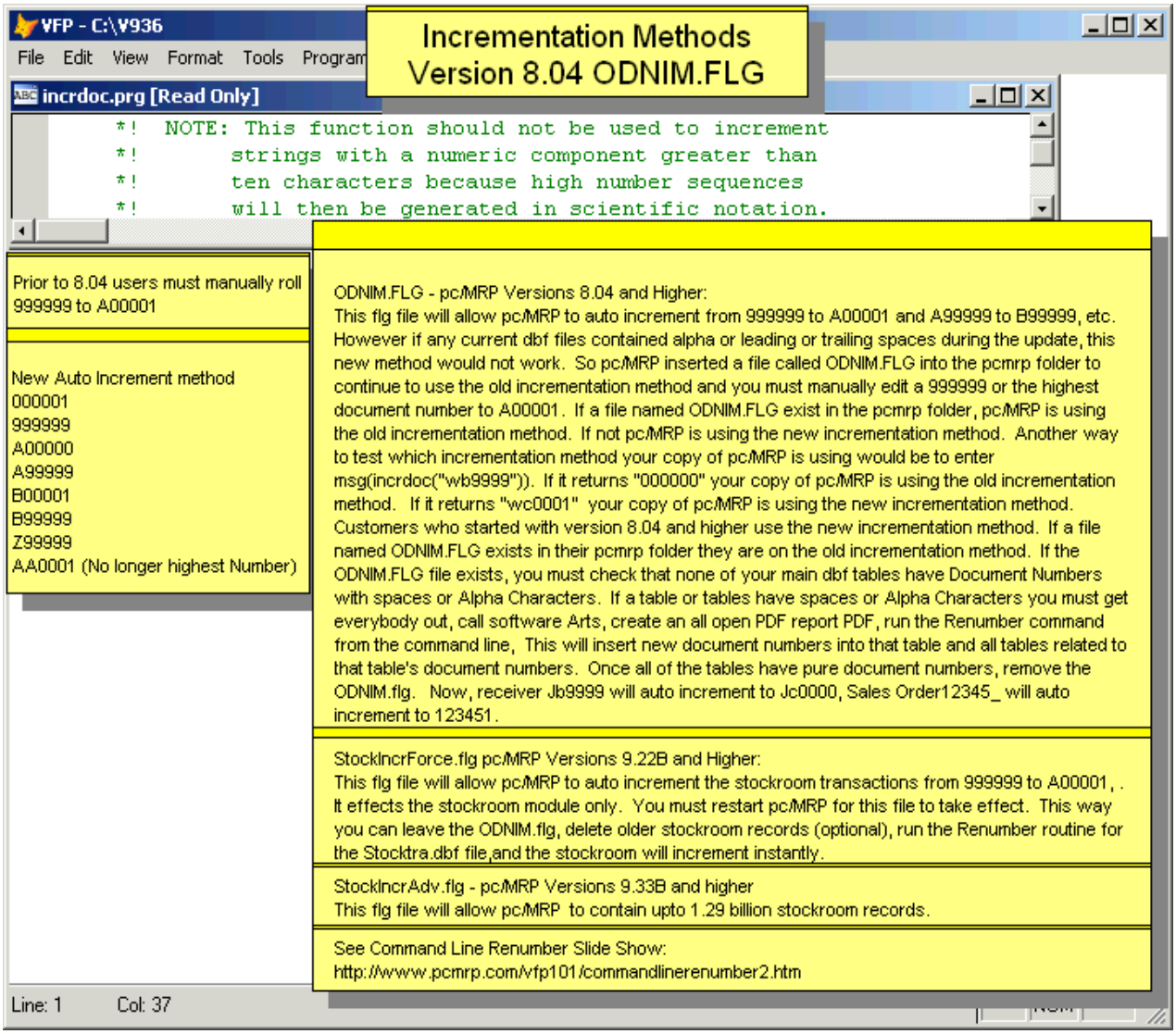
**Network** (*run NetWorkTest()from a work station, make the change, run NetWorkTest() again, if the speed did not improve the problem is elsewhere*)

- If you have a Giga Bit Router and Network cards, upgrade to Cat 6 cables
- If you have a program named HP Sure Sense, disable it and see if that solves the problem Dave Clark PMC, Precision Micro Control Corp.

**pc/MRP**

- Upgrade to the latest Version of pc/MRP as Version 8.80 and higher will produce significantly faster reports.
- If sending reports to Excel is very slow, check if you have any Memo fields in the list of selected fields. If you don't specifically need these on your report, uncheck them (and save the list if desired).
- Pictures in the Inventory Module referencing a path that does not exist will delay the inventory part's "EDIT" screen from displaying.
- If you are scrolling for a filtered list of records, e.g. in the Sales Order scroll window you are listing Open Records Only, change the setting to Both Open and Closed. Even though the "open only" list is shorter it actually takes much longer for pc/MRP to display than the longer full list. This is because when you filter the list for "open only" pc/MRP needs to look at every single record and decide whether or not it is open.
- If a certain report seems to be slower than expected, check if the report displays the "page of pages" information (e.g. Page 8 of 14). This feature considerably slows down reports.
- If re-indexing is running slow and there is a file named SAEIU.DLL, start pc/MRP with Run as Administrator. Reboot your computer. If that does not fix the problem, rename SAEIU.DLL to SAEIU_ORIG.DLL. If you open up Task Manager you will see many regserv processes running at the same time.
- If a certain action in pc/MRP (e.g. entering a new sales order or entering an accounting transaction) is significantly slower than others, check your document numbers.

  If you have invalid (less than 6 digits) document numbers like 00 or blank, or if the document numbers include alpha characters, pc/MRP is taking a long time trying to increment that "number". E.g. A00318 is good, but 2SEP15 is not. Call Software Arts. View the Command Line Renumber Slide Show: http://www.pcmrp.com/vfp101/commandlinerenumber2.htm, the Incrementation Slide Show: http://www.pcmrp.com/vfp101/incrementation804.htm, and the picure on the following page.


VFP - C:\V936
File Edit View Format Tools Program
Incrementation Methods
Version 8.04 ODNIM.FLG
incrdoc.prg [Read Only]
*! NOTE: This function should not be used to increment
*! strings with a numeric component greater than
*! ten characters because high number sequences
*! will then be generated in scientific notation.
Prior to 8.04 users must manually roll 999999 to A00001
New Auto Increment method
000001
999999
A00000
A99999
B00001
B99999
Z99999
AA0001 (No longer highest Number)
ODNIM.FLG - pc/MRP Versions 8.04 and Higher:
This flg file will allow pc/MRP to auto increment from 999999 to A00001 and A99999 to B99999, etc. However if any current dbf files contained alpha or leading or trailing spaces during the update, this new method would not work. So pc/MRP inserted a file called ODNIM.FLG into the pcmrp folder to continue to use the old incrementation method and you must manually edit a 999999 or the highest document number to A00001. If a file named ODNIM.FLG exist in the pcmrp folder, pc/MRP is using the old incrementation method. If not pc/MRP is using the new incrementation method. Another way to test which incrementation method your copy of pc/MRP is using would be to enter msg(incrdoc("wb9999")). If it returns "000000" your copy of pc/MRP is using the old incrementation method. If it returns "wc0001" your copy of pc/MRP is using the new incrementation method. Customers who started with version 8.04 and higher use the new incrementation method. If a file named ODNIM.FLG exists in their pcmrp folder they are on the old incrementation method. If the ODNIM.FLG file exists, you must check that none of your main dbf tables have Document Numbers with spaces or Alpha Characters. If a table or tables have spaces or Alpha Characters you must get everybody out, call software Arts, create an all open PDF report PDF, run the Renumber command from the command line, This will insert new document numbers into that table and all tables related to that table's document numbers. Once all of the tables have pure document numbers, remove the ODNIM.flg. Now, receiver Jb9999 will auto increment to Jc0000, Sales Order12345_ will auto increment to 123451.
StockIncrForce.flg pc/MRP Versions 9.22B and Higher:
This flg file will allow pc/MRP to auto increment the stockroom transactions from 999999 to A00001, . It effects the stockroom module only. You must restart pc/MRP for this file to take effect. This way you can leave the ODNIM.flg, delete older stockroom records (optional), run the Renumber routine for the Stocktra.dbf file,and the stockroom will increment instantly.
StockIncrAdv.flg - pc/MRP Versions 9.33B and higher
This flg file will allow pc/MRP to contain upto 1.29 billion stockroom records.
See Command Line Renumber Slide Show:
http://www.pcmrp.com/vfp101/commandlinerenumber2.htm
Line: 1 Col: 37

# 17.11 HTML, PDF Email as PDF and Excel Problems

### 17.11.1 Trying to print to PDF or Email as PDF does not work

- Regardless of the problem the first step is to try to print to PDF first (see Section 17.11.2), using a standard form. Once that is corrected you can try to use Email as PDF (see Section 17.11.3).

### 17.11.2 Print to PDF/HTML Problems (including PDF missing or disabled in the drop down menu)

- There are three versions of the Amyuni PDF/HTML Print drivers, pcMRP Internal Printer v2.50**,** pcMRP Internal Printer v3.02 and pcMRP Internal Printer 4.5**.** Version 2.50 is included with pc/MRP Versions 8.20AC, 8.23H and 8.24D and lower. Version 2.50 does not support Windows Vista nor does it support 64 bit computers. Version 3.02 is included with pc/MRP Version 8.20AD, 8.23J, and 8.24E and higher. Version 3.02 supports Windows Vista and or 64 bit computers but does not work on Windows 95 machines and may have to be installed manually on Windows 2000 machines. pc/MRP Internal printer 4.5 is included in pc/MRP Versions 8.50Z and 8.54H and higher. If you are running pc/MRP on a W7, W8 or W10 computer (32 bit), you should be using pc/MRP 8.50Z or 8.54H or higher. pc/MRP **Internal Printer 4.5** (a revision different than the previous one) is included in pc/MRP Versions 8.70K and 8.72B and higher. If you are running pc/MRP on a W7 or W8 64 bit computer, or on a Windows 10 computer, you should be using this print driver on every work station.
- **Option 19** must be set to allow the installation of the PDF and HTML print drivers.
- If you are trying to print to PDF but you get a printer printed copy instead or if Outlook opens up but there are no attachments, the form has been dedicated to a specific printer through modifying the report by selecting "File, Page Setup, Print Setup" (or by checking "**Report, Printer Environment**"). To remove the printer settings uncheck this setting, or call Software Arts to run the FRXHPFIX() program, select the form with the problem. If you wish to remove printer settings from all your forms, run **FRXHPFIX_ALL()** from the command line (this will NOT remove printer codes from the PRCHECKS or CUSCHECK forms) .
- With Vista and some XP computers, you must be logged onto the computer as the computer administrator. To find out if you are the computer administrator right click on Windows Start Button, if you see the option "Explore all Users", you are this Computer's administrator (not necessarily the network administrator). Try starting pc/MRP by right-clicking on the pc/MRP shortcut and selecting "Run as administrator". (XP and Vista home do not have this option)
- Make sure your security settings allow you to install a printer driver by clicking on the Windows Start, Control Panel, Administrative Tools, Local Security Policy, Security Options, Devices: and Disable "Prevent Users from installing print drivers".
- If you are accessing pc/MRP through Microsoft Terminal Server, the PDF Print Driver must be installed on the Terminal Server itself. To do this, you must remote into pc/MRP on the Terminal Server or start pc/MRP at the Terminal server itself.
- If you are using Windows Vista, set **User Account Control to Off** by pressing the Windows Start Button, Control Panel, User Accounts Settings and turn User Account Control Off and reboot (make sure you have saved any data in any open programs first!). You can later turn this option back on if you wish, or your IT department requires it turned on. If the above conditions are met, restarting pc/MRP will automatically install the print driver and you are done
- The user does not have modify rights to the PDF subdirectory.
- Remove the current pc/MRP printer driver, reboot the computer, restart pc/MRP by right clicking on the pc/MRP shortcut and running as Administrator. If pc/MRP has no trouble with installing the printer driver do not bother with the manual install instructions.
- If you have trouble removing the printer driver, search for printmanagement.msc in the Start button. Select Custom Filters, All Printers. Find the pc/MRP Internal Printer Driver 4.5. If it has jobs in the queue, cancel all jobs. Another way is to print a report (to a real printer), right click the pc/MRP printer driver, select Cancel all Documents. Then reboot the computer.

- If you are running pc/MRP on a 64bit **W7, W8 or a W10** computer (you should be running pc/MRP's latest 4.5 print driver) and you get the error message Operation could not be completed (error 0x800f024b). The hash for the file is not present in the specified catalog file you need to do the following. If your computer has a pc/MRP Internal Print Driver (Control Panel, Printer and Faxes), right click and delete it. Then you must reboot your computer. If your computer does not have pc/MRP's Internal Printer Driver or you have removed it, Call Software Arts and request they download and install a copy of pc/MRP's latest Printer Driver Installer, **SaPdfDi.azf** into your pc/MRP directory (answer "Copy and Replace" if prompted). The file size (not size on disk) is 7,089,282 bytes. Restart pc/MRP by right clicking on the pc/MRP shortcut and running as Administrator. You can also reinstall all exe and dll files by doing a full update.
- If pc/MRP can not install the printer driver automatically, you can **install the 4.5 print driver manually** by making sure the above conditions are met and by following the directions listed below
    1. Locate the SaPdfDi.AZF file in the pcrmpw folder.
    2. Create a folder named SaPdf. In the users local C:\ drive
    3. Copy this file into the new folder.
    4. Rename the file to PdfDrive.Zip.
    5. Extract the file into the new folder by right clicking on the file and selecting Extract All
    6. Double click on Install.exe file the new folder
    7. Go to Printers and Faxes
    8. Select the Amyuni Document Converter 450
    9. Select the General Tab and change the printer driver name to: **pcMRP Internal Printer 4.5**.
    10. Select the Sharing Tab and click on the "Do not share this printer" radio button.
    11. Exit out of the Properties screen.
    12. On the Printer Sharing screen, select the "Do not share this printer" radio button.
- Modify the print driver's properties.
  Solution:
  Try the following:
  1. Go to Control Panel, Printers & Faxes
  2. Right click on the pcMRP Internal Printer 4.5 or v3.02 and select Properties
  3. Click on the Port tab
  4. Click on Add Port, select the 'Local' Port type, and press the 'NEW PORT' button.
  5. Name this port PDF1 (as an example)
  6. If not already checked, check the check box near the PDF1: port that you just created
  7. Click 'Apply'
  8. Re-boot the computer
  9. Test the PDF print option.
  10. If this does not work select the NULL (if available in W7 or W8 as the port)
  11. If this does not work select Start printing immediately instead of spooling the documents.
- In one case the pc/MRP printer driver was not listed under Devices and Printers, but the automatic install did not start when running pc/MRP as administrator. Logging in as a different Windows user revealed that the pc/MRP printer driver and a regular HP printer driver were "tangled" into one "hybrid" printer driver. (The name showed one and the hardware the other.) Deleting the "hybrid" and reinstalling both printer drivers helped.
- Created PDF files contain unreadable characters when opened or read by a different computer. The other computer may not have the fonts installed that the PDF needs. You have two options: Install the missing fonts on the other computer (preferred). Or add a text file named "pdfembed.flg" in the pcmrpw directory. Note that the PDF file will be larger due to imbedding the fonts within the PDF file.
- **Adobe Acrobat displays an error msg "File in use by another**" Delete the pc/MRP Internal Printer driver and PDF1 port. Reinstall the printer and PDF1 port.

**17.11.2.1 Error code -30**

Microsoft has programmed Windows 10 to update not only the Windows 10 operating system but many other components such as print drivers. Unfortunately Windows Update will update the pc/MRP PDF Printer Driver from Amyuni to a Print Driver from Amyuni which we have not purchased a license for.

If you have a Windows 10 PC, please follow the steps listed below:

Reboot your PC to clear the print driver from memory
Click on the Windows Start Button
Select Settings, looks like a gear
Select Printers and Scanners
Uncheck "Let Windows manage my default Settings"
Click on the pc/MRP Internal Printer 4.5
Open queue and clear any pending print jobs
Select Remove/Un-install the pc/MRP print driver
Right click on your pc/MRP Desktop Shortcut
Select Run as Administrator
Allow pc/MRP to re-install its print driver
Exit pc/MRP and log back into pc/MRP as the user by double clicking on the pc/MRP shortcut
Login using the user's name and password and test sending the offending document to PDF
http://www.pcmrp.com/it101/reintallpdfstart.htm

If the above does not work you may have to:
Select Windows Search Icon (Magnifying Glass)
Type in the words "Control Panel"
Select Control Panel App
Select Devices and Printers
follow the instructions above

In some cases you may have to:
Enter the words "Default Apps" in the Windows Search Text Box
Select Default Apps by file type
Set PDF to default to Microsoft Edge

In some cases you may have to:
Go to Control Panel
Select Administrative Tools
Select Local Security Policy
Select Local Policies
Select Security Options
Disable Devices Prevent users from installing printer drivers

In very rare cases you may have to:
Open Windows File Explorer
Select your c:drive
Select Windows
Select System 32
delete or rename all of the cdinf*.dll files
repeat the first steps above
pc/MRP will automatically reinstall
xmlite.dll
xmlite64.dll
cdinf.dll
cdinf64.dll

**17.11.2.2 When reviewing PDF documents the Adobe tool bar is not displaying in Google Chrome.**

Google Chrome now has a built in PDF viewer which is default. To go back to using Adobe plug-in, enter "about:plugins" in the address bar, press enter, and disable Chrome PDF Viewer.

**17.11.2.3 PDF is created but does not display.**

Eventually you get an "Adobe Acrobat failed to connect to a DDE server" error message. Open up Task Manager and close all Adobe background processes. If you are on a Windows 10 computer use Windows Search Option, enter Default Apps and set PDF to be opened by default by Windows Edge. If that does not work and you are on a Windows 10 computer, right click on the pc/MRP shortcut, select Properties, select Compatibility, and Set compatibility to Windows 8. You might need to reboot the computer.

**17.11.2.4 No longer prints to PDF or prints to the wrong printer.**

If you are on a Windows 10 workstation, left click on the Start Button, select Settings (graphic), Devices and scroll down and turn off Let Windows manage my default printer. You might need to reboot the computer.

**17.11..2.5 You cannot install the printer driver, it gives a 0x800... error**

In one case closing phantom file locks or rebooting the server solved this problem. You might need to reboot the computer.

**17.11.2.6 Cannot open a PDF file (error 31)**

- Save the PDF file to the main pc/MRP Folder or one of its subfolders or a mapped drive instead of a UNC Address (all workstations must have the same mapped drive).
- Remove and Re-install Acrobat.
- Open Acrobat Reader, select Edit, Preferences, Trust Manager and check settings
- Make MS Edge the default program to open up PDF files.

**17.11.2.7 You cannot open a PDF file by right clicking on it**

Remove and reinstall Acrobat Reader.

**17.11.2.8 Cannot remove the pc/MRP internal printer driver**

At the Windows search text box, enter printer management. Select All Printers, right click on the pc/MRP internal printer driver, select Cancel All Jobs.

**17.11.2.9 You cannot save a PDF file to pc/MRP's PDF folder**

If you are on a Windows 10 computer, right click on the Start button, select Control Panel, Network and Sharing Center, make sure the Network is set to Private.

**17.11.2.10 Your PDF file displays and prints in black and white but not color**

When the form was modified, and if may have saved the default printer settings to that form. Call Software Arts to run the FRXHPFIX() program from the command line and select the form with the problem.

**17.11.2.11 Visual Foxpro stopped working or C0000094 Error Message**

Default Print Driver not set to a real printer.

**17.11.3 Email as PDF - Problems**

- Once you have PDF working, you can move onto trouble shooting Email as PDF.
- If the option to Email as PDF does not appear as a print option have Software Arts run the command msg(chkserver("Outlook.Application") ) at the command line to see if Outlook is set to allow outside programs to open Outlook. If it returns .F., open Outlook, select Outlook Options, Trust Center, Macro Settings, Enable all Macros (courtesy of Josh at Flow MD). With W7 workstations select Outlook Help, Privacy, Trust Center, Macros, Enable all Macros.
- If you wish to email PDF documents directly, Microsoft Outlook and NOT Outlook Express must be installed on your computer as an automation server. If it is not, contact your network administrator. As an alternative, you can save the PDF file and attach it manually later or set **Option 19** to 'Code Base HTML'. Select 'HTML' when printing a document and manually attach the saved file to an email.
- MS Outlook must be open on some computers and closed on other computers. Test to see which setting works. The error message might say "**RECIPIENT is not an object**". Configure both pc/MRP and Outlook to always run as administrator (right click on both shortcuts, select Properties, Shortcut, Advanced, Always run as Administrator, reboot, and try again. In many cases Email as PDF will now works Outlook open and closed.
- Windows 10, Control Panel, Default Programs, Microsoft Outlook, Choose Defaults, select Email
- Reboot the work station
- Try running Outlook as Administrator
- See if Adobe can email a PDF file. If it can not, you may need to Repair Outlook using Control Panel, small icons, Programs and Features.
- You may have accidently set Configuration, Settings and Utilities, Option 99 to CDO Email and not entered the email server settings. Turn off CDO so pc/MRP will use Outlook
- If you are running a W8 or W10 machine, get an **error -41 "printer not activated"** and the above suggestions don't help, try the following: Right click the pc/MRP shortcut, select the Compatibility tab, select W7 compatibility (courtesy of Dan at IT Secure Services).
- If you are using MS Terminal Server, you must log into the terminal Server and start your copy of MS Outlook. This may appear as **Unknown Member "recipients" (error 1943).**
- Install the local desktop version of Outlook not the internet version of Excel.
- This behavior can occur if the following registry keys are missing or incomplete (Regedit, Find, Keys OutLook.Application):
  HKEY_CLASSES_ROOT\Outlook.Application
  HKEY_CLASSES_ROOT\Interface\{000C0339-0000-0000-C000-000000000046}
  Note, on machines with a 32-bit version of Office and a 64-bit version of Windows, the above keypath is instead:
  HKEY_CLASSES_ROOT\Wow6432Node\Interface\{000C0339-0000-0000-C000-000000000046}

**17.11.4 pc/MRP can send a file to Excel**

- At the command line run msg(chkserver("Excel.Application"))
- This error occurs when you save a Microsoft Office file type blocked by File Block settings in the Trust Center. To enable this file type, do the following: Click the File tab, Click Options, Click Trust Center, and then click Trust Center Settings. In the Trust Center, click File Block Settings. Uncheck Excel 97 2003 Work Books and Templates. Also select Macro Settings, Enable all macros and Reboot
- Set user Account Control to OFF and reboot
- You may have 2 copies of Excel, remove one of the copies.
- Run a full update to get new pcmrp.exe file, .flls and .dlls
- Configure both pc/MRP and Excel to always run as administrator (right click on both shortcuts, select Properties, Shortcut, Advanced, Always run as Administrator, reboot, and try again
- Install the local desktop version of Excel not the internet version of Excel
- Save the file to the desktop or a real folder not to a folder in the cloud

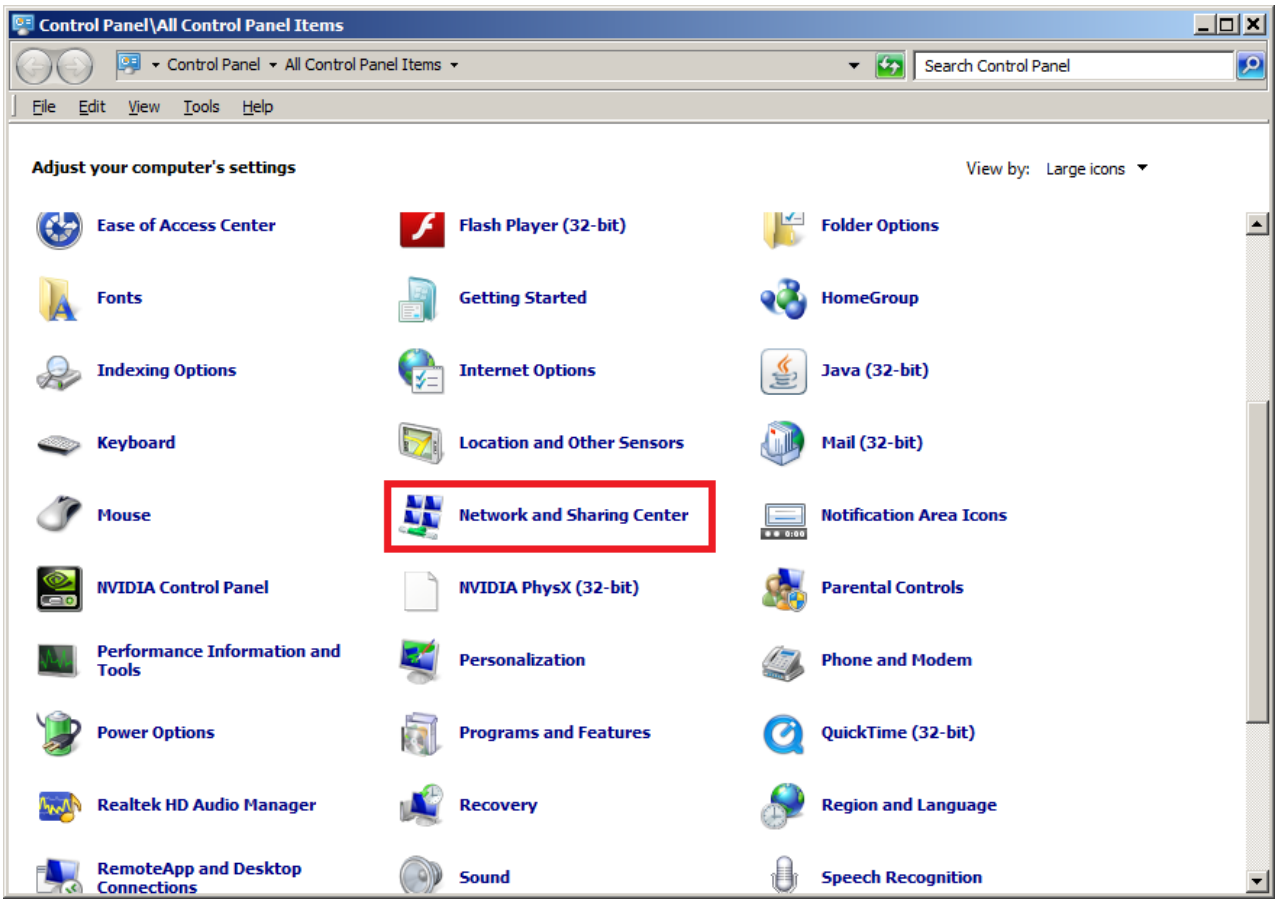
# 17.12 Credit Card Connectivity Issues

### 17.12.1 Credit card processing software can't connect to synapsegateway.net.

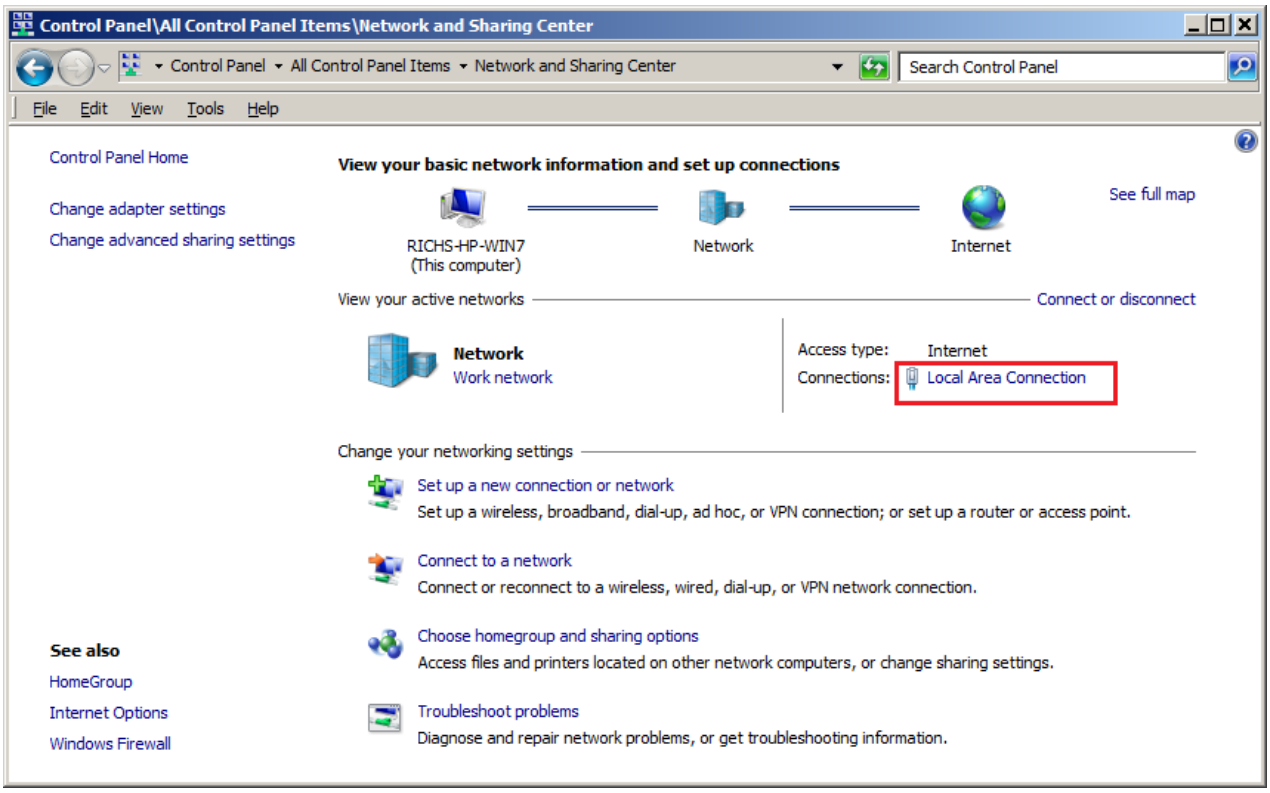
- Disable the computer's firewall. If that works, configure the firewall to allow the connection.
- Problem: The credit card processing software can't connect to synapsegateway.net.
  Message: "There was a disruption while communicating with the credit card processor. The credit card information was NOT submitted.
  Connectivity error - The remote name could not be resolved:
  Connect14.synapsegateway.net"

  Solution: Change the user's DNS server settings.

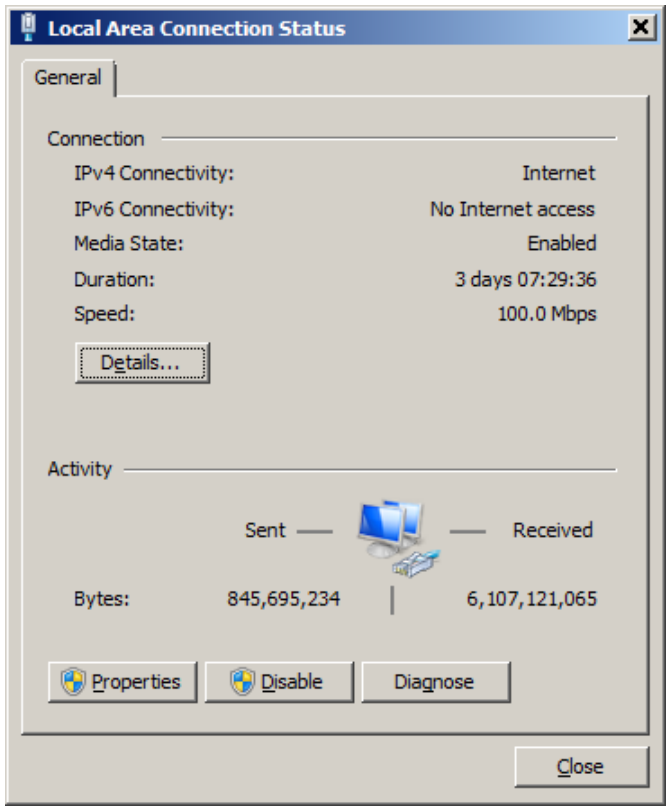
  1. Go to Control Panel, Click on "Network Sharing Center"



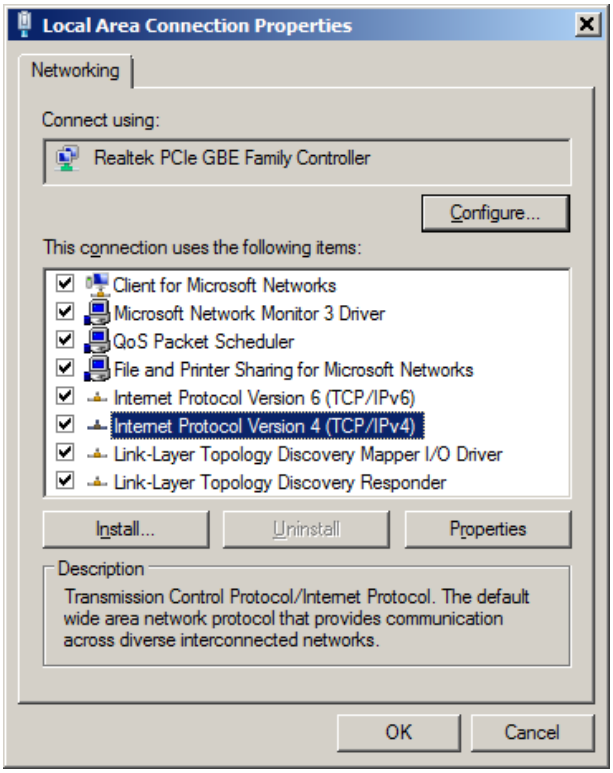
2. Click on link "Local Area Connection"




3. Click on [Properties]



4. Select line item "Internet Protocol Version 4 (TCP/IPv4) then click on [Properties]




5. Change values in textbox "Preferred DNS server" to "8.8.8.8"
Change values in textbox "Alternate DNS server" to "8.8.8.8"

