Universal Product Codes Processing

For Sage 100 ERP

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Installation Instructions and Cautions

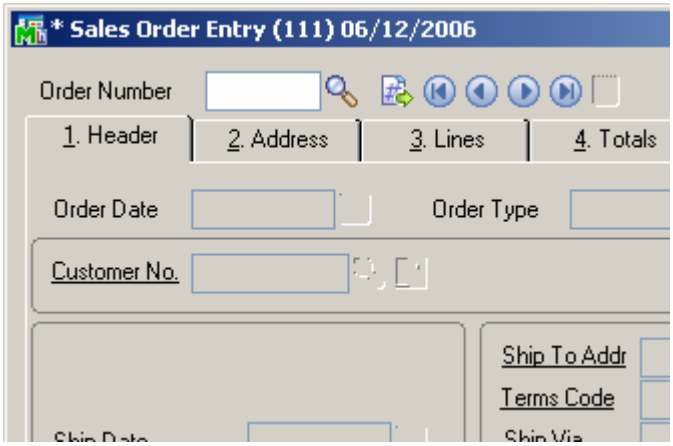
Installation Instructions and Cautions

PLEASE NOTE: SAGE 100 ERP *must already be installed on your system before installing any IIG enhancement. If not already done, perform your SAGE 100 ERP installation and setup now; then allow any updating to be accomplished automatically.*
Once SAGE 100 ERP installation and file updating is complete, you may install your IIG enhancement product by following the procedure below.

Wait! Before You Install – Do You Use CUSTOM OFFICE?

THIS IS AN IMPORTANT CAUTION: *If you have Custom Office installed,* ***and*** *if you have modified any SAGE 100 ERP screens, you must run* ***Customizer Update*** *after you do an enhancement installation.*

But wait! BEFORE *you run* ***Customizer Update****, it is* ***very important*** *that you* ***print all of your tab lists.*** *Running* ***Customizer Update*** *will clear all Tab settings; your printed tab list will help you to reset your Tabs in Customizer Update.* ***Custom Office*** *is installed on your system if there is an asterisk in the title bar of some of the screens. The asterisk indicates that the screen has been changed.*



An ***asterisk*** in a window's title bar indicates that the screen has been modified. This means that **Custom Office** is installed.

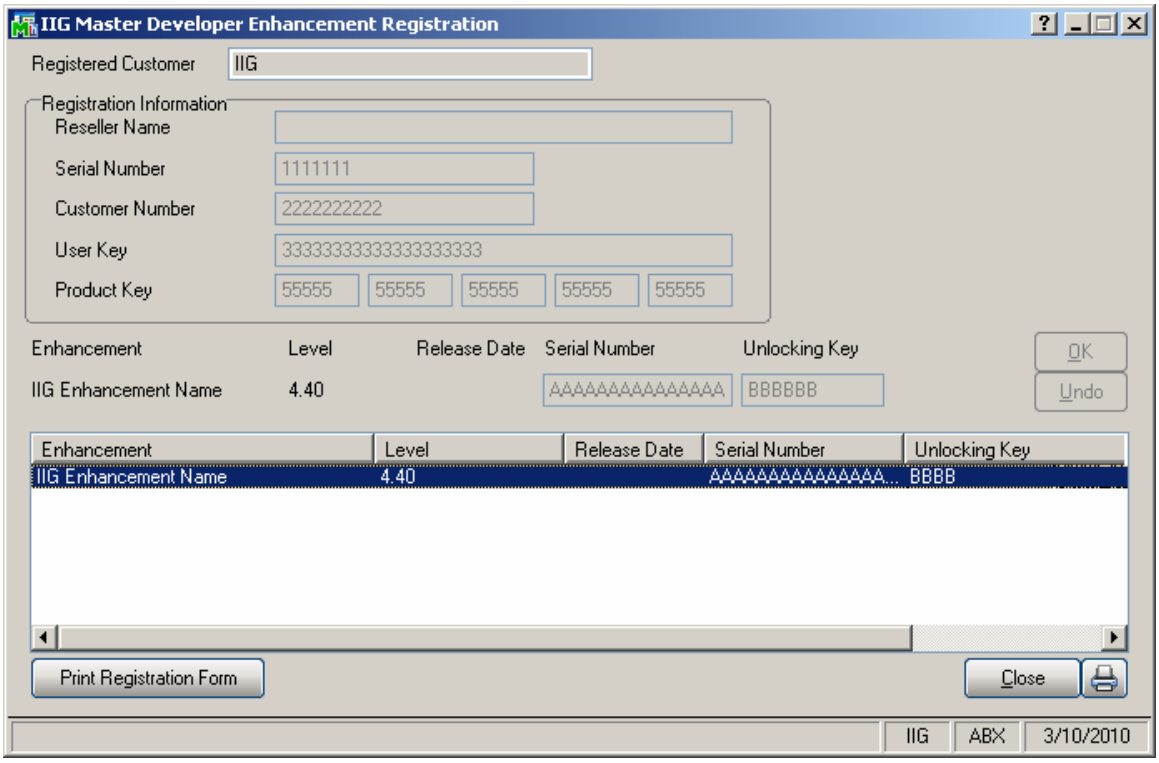
Follow all the instructions on this page before you run **Customizer Update**!

Registering IIG products

IIG Enhancement should be registered to be able to use it. If registration is not performed, the enhancement will work in a demo mode for a limited time period. The registration can be still done during the demo period.

Select the **IIG Product Registration** program under the **Library Master Setup** menu of the MAS 90.

If this option is not listed under the Library Master Setup menu, go to the main menu, and select **Run** from the **File** menu. Type in SVIIGR and click **OK**.



Enter **Serial Number** and **Unlocking Key** provided by IIG, and click **OK**.

If multiple IIG Enhancements are installed, Serial Numbers and Unlocking Keys should be entered for each enhancement.

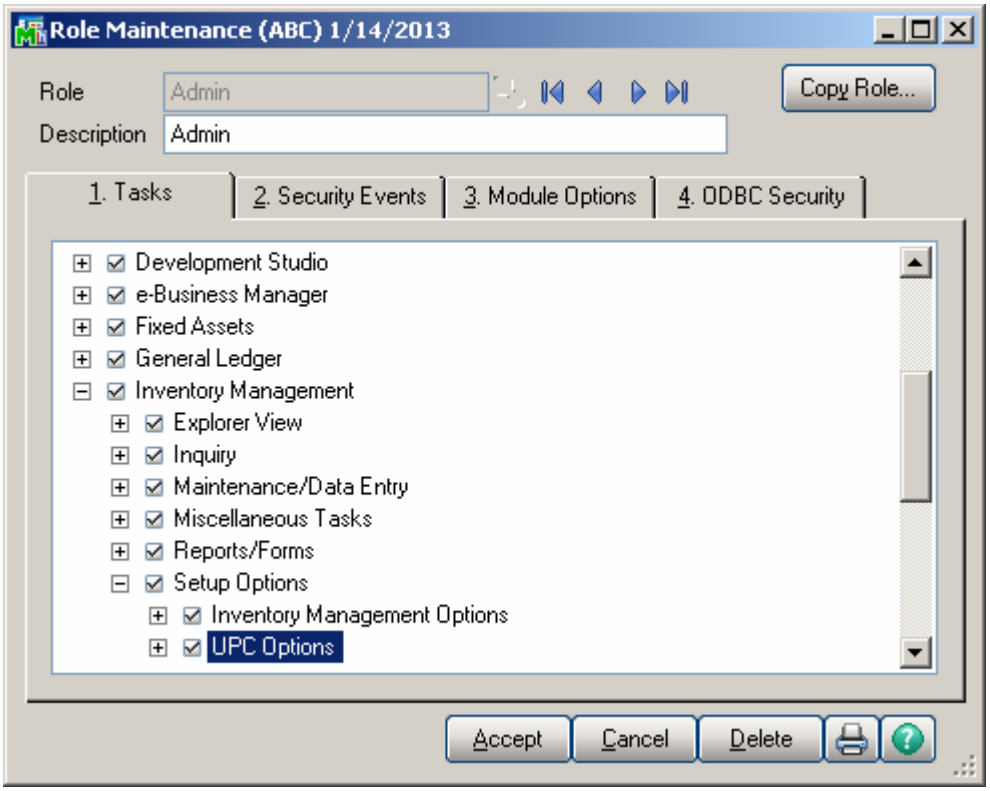
Use the **Print Registration Form** button to print IIG Registration Form.

ODBC Security

After installing an **IIG Enhancement**; it is **very important to verify** whether or not the **Enable ODBC Security within Role Maintenance** check box is selected in the **System Configuration** window of your system. If it is selected you must assign ODBC security permissions and allow access to custom data tables/fields for the Roles defined in your system.

Role Maintenance

After installing an **IIG Enhancement**, permissions must be configured for newly created Tasks and Security Events.

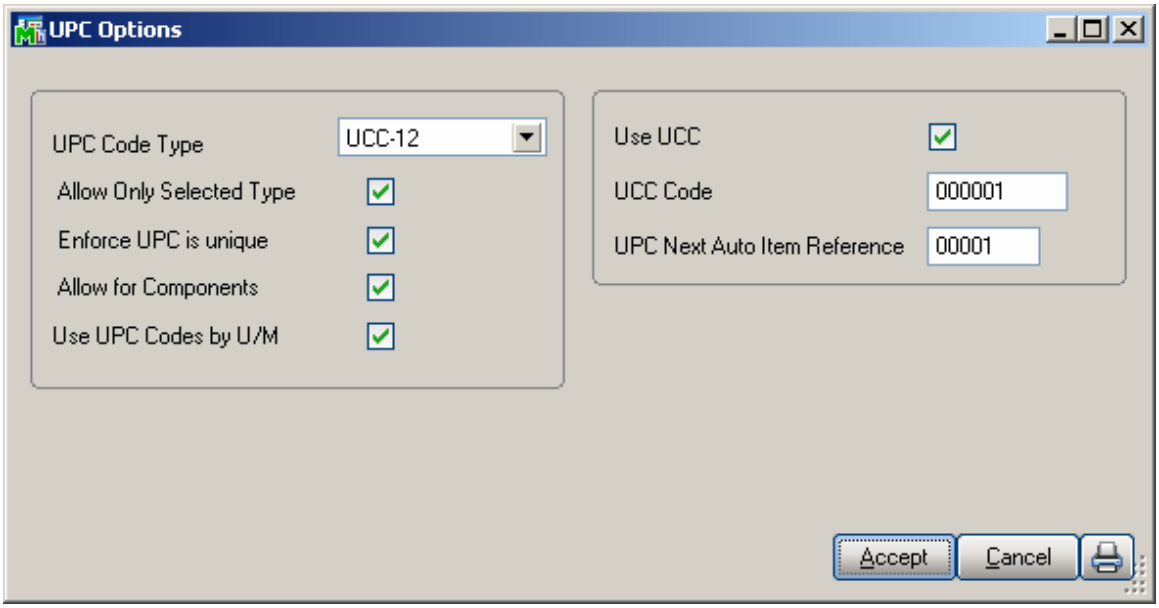


Introduction

The **UPC** enhancement enables assigning Universal Product Codes (UPC) to items and recognizing items by UPC.
You can choose your system to work with either of these codes: UCC-12, EAN/UCC-13, EAN/UCC-14.
Enhancement can check UPC codes to be unique throughout the system.
UPC codes can be assigned to items or group of items automatically.

UPC Options

The **UPC Options** program has been added under the **Inventory Management Setup** menu.

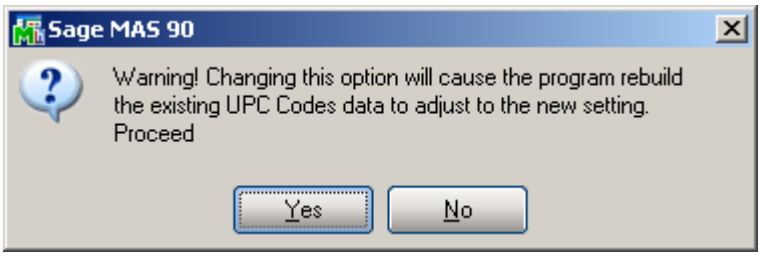


The **UPC Code Type** determines the default length to be used for the code – 12, 13 or 14 digits. The available options are UCC-12, EAN/UCC-13, EAN/UCC-14.

Check the **Allow Only Selected Type** box to force the programs to reject UPC Codes of the lengths different from the selected.

Generally, if the **Allow Only Selected Type** box is cleared, the enhancement uses 14 digits for UPC Codes. If the entered UPC Code is 13 or 12 digits long, the program adds one or two zeroes correspondingly to the beginning of the Code. The default length determines possible **UCC Code** and **Item Reference** combinations.

Changing the **Allow Only Selected Type** option after using the UPC Codes in the system, can lead to problems after rebuilding the data connected to the already entered and used UPC Codes.



Check the **Enforce UPC is unique** box if you want the program to not allow assigning already existing UPC Codes.
Note that if this option is selected after entering a number of UPC Codes, the program will start checking if the Code has already been assigned only for the newly entered Codes. Hence, there might remain duplicate UPC Codes in the system.

Check the **Allow for Components** box to allow assigning UPC Codes to components of Kits/Bills of Materials.

The **Use UPC Codes by U/M** checkbox, when selected, allows processing separate **UPC codes** by each **U/M**.

Check the **Use UCC** box, if your company manufactures inventory rather than purchasing and selling finished goods.

The **UCC Code** is the company code, which will be used as the default for the part of the UPC codes. The **UCC Code** cannot be shorter than 6 digits.

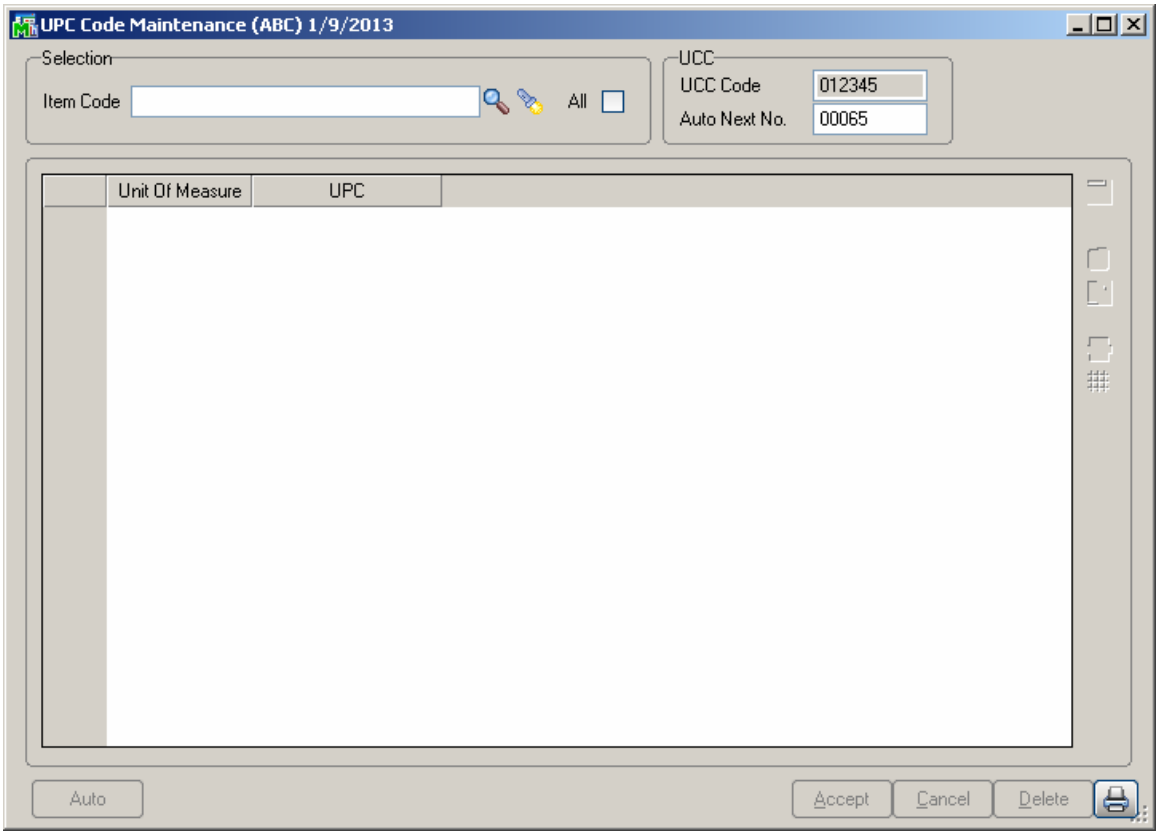
The **UPC Next Auto Item Reference** is for adding to the **UCC Code** for assigning UPC Codes automatically in the

UPC Code Maintenance program. The **Item Reference** cannot be shorter than 2 digits.

The sum of the **UCC Code** and **Item Reference** lengths is equal to the length of the **UPC Code Type** selected (12, 13, or 14).

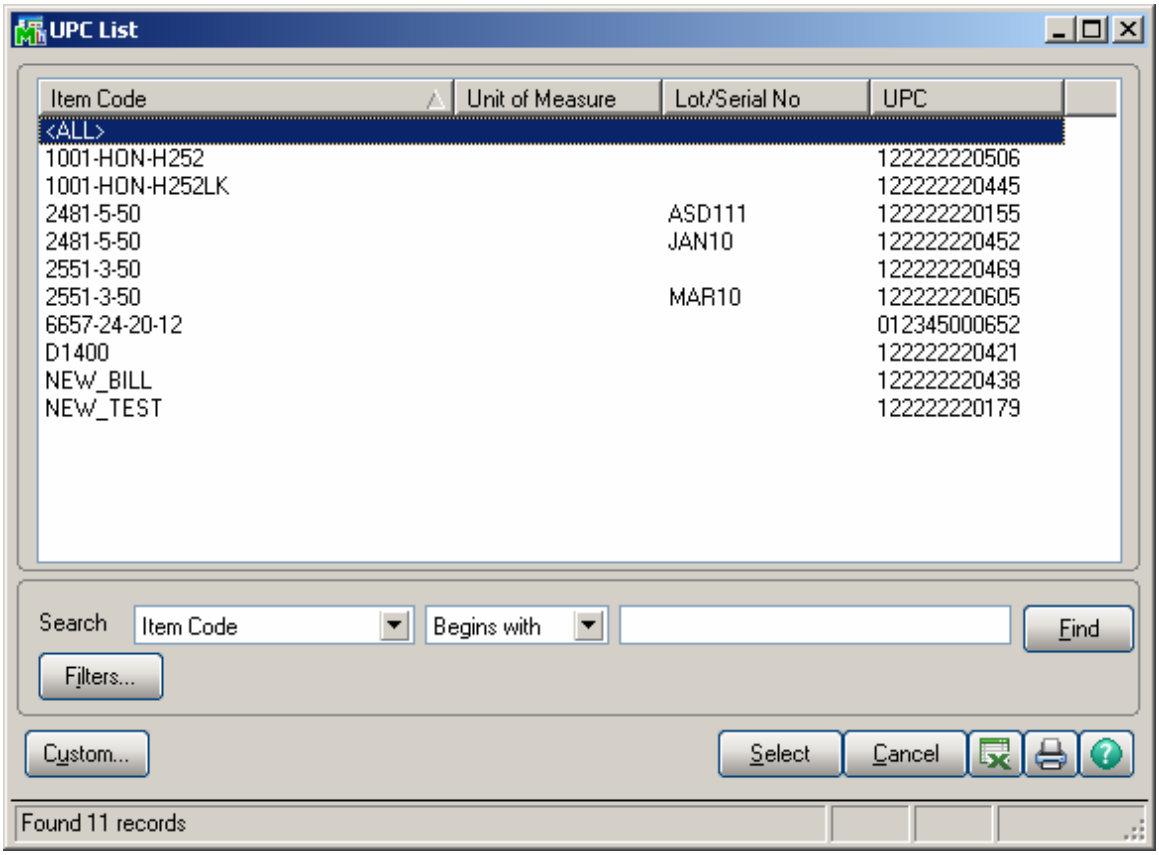
UPC Codes

The **UPC Code Maintenance** program under the **Inventory Management Setup** menu allows assigning UPC Codes to the selected items and reviewing all the UPC Codes in the system.



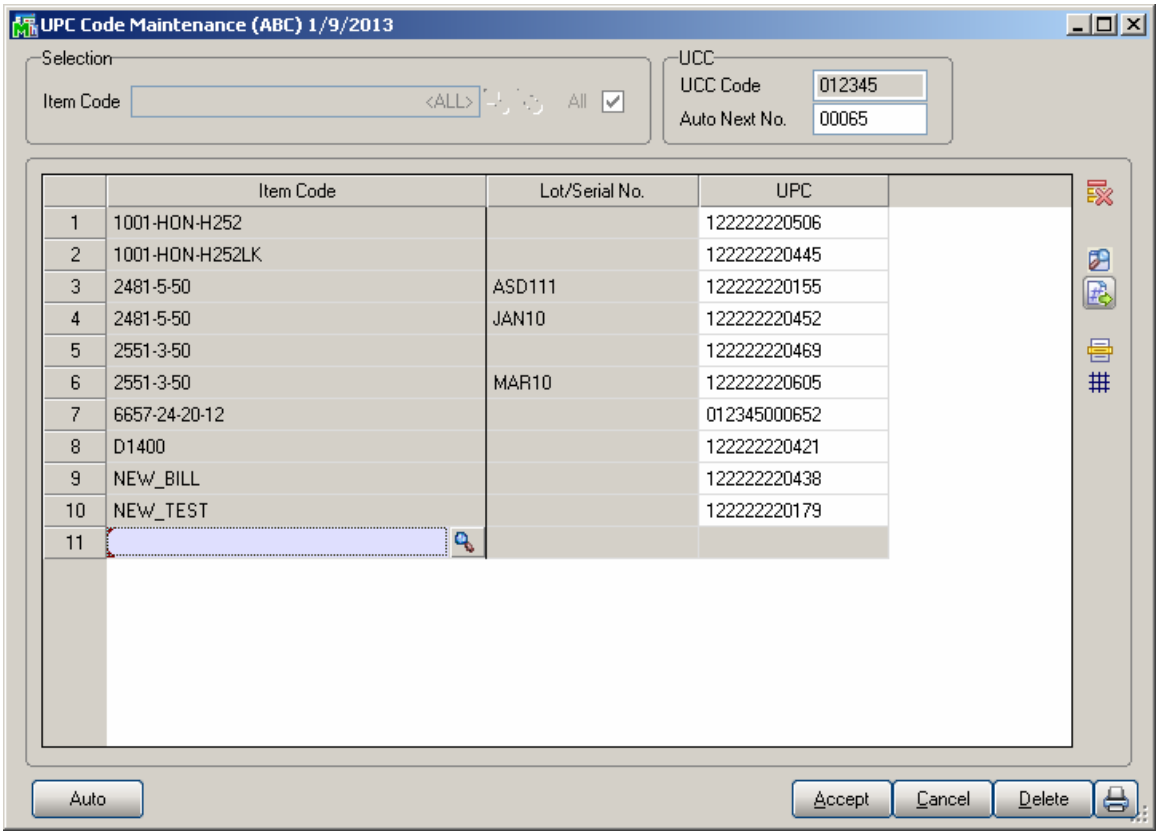
To add an item to the list, enter the **Item Code**, or select it using the **Lookup** button.

Press the Lookup button to list Items with UPC codes already assigned.



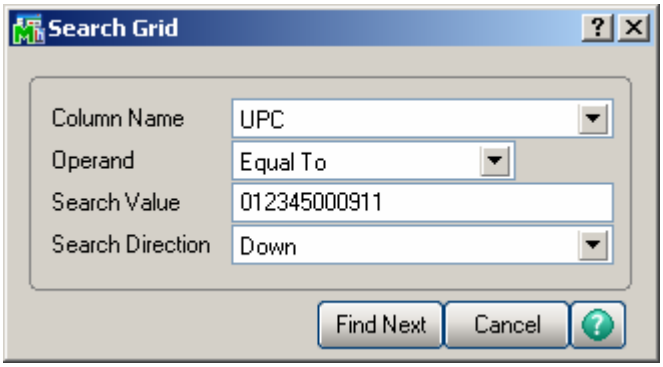
Press the Flashlight button to list all Inventory Items.

Upon selecting **All** checkbox , all Items having UPC code assigned are loaded in the grid. After the Items are loaded in the grid the user can add new Items and assign UPC code.

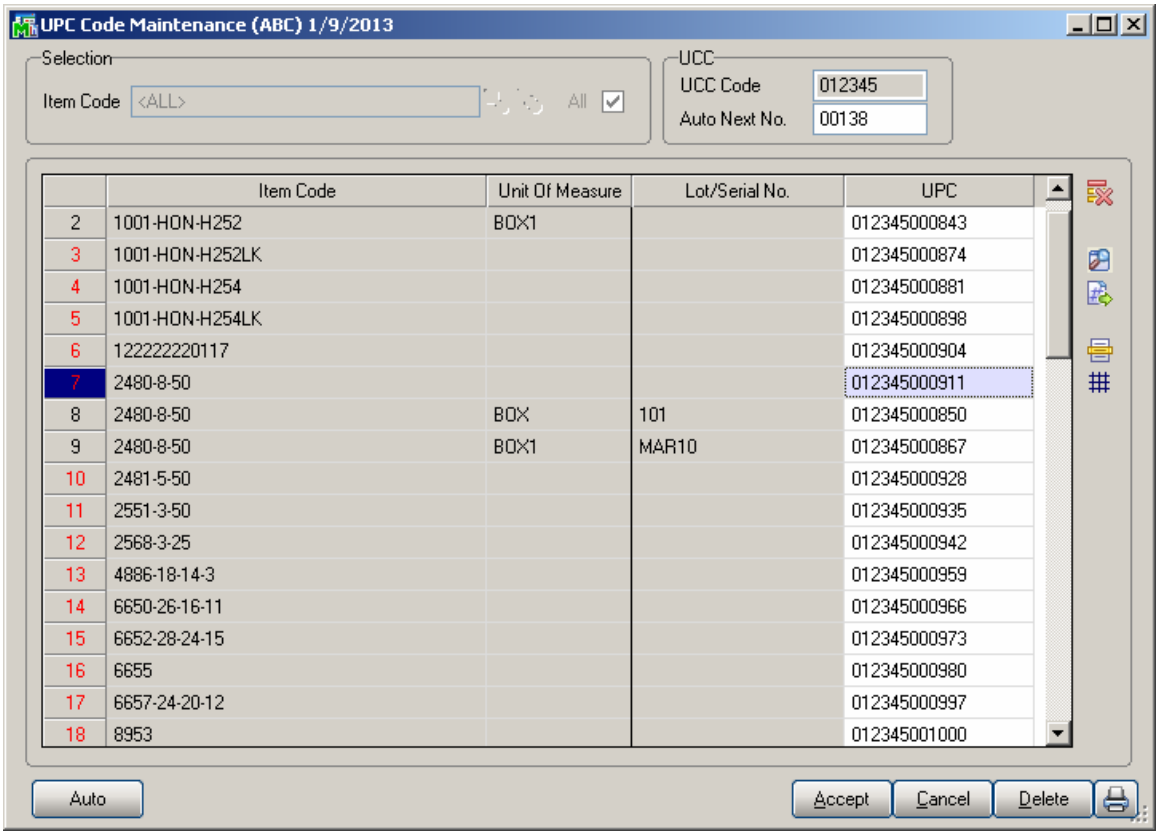


-Delete Row button allows deleting the selected row.

- **Find Row** button allows for searching a row in the Search Grid window.

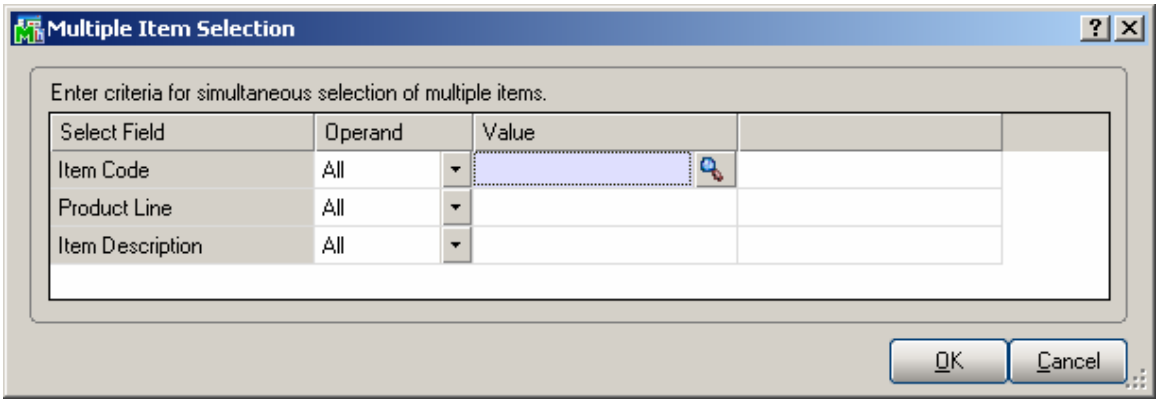


Upon pressing **Find Next** respective row in the grid is highlighted.

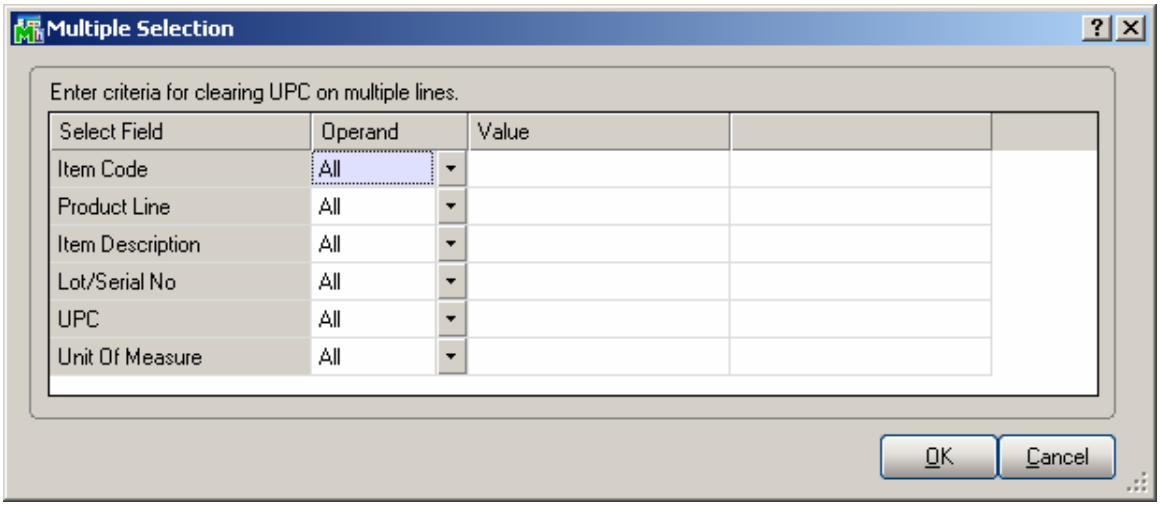


-Assign UPC, Alt-X button allows for assigning a UPC Code to the selected line.

- Multiple Item Selection- allows for adding in the grid multiple Items at once. Upon pressing this button Multiple Item Selection screen is opened allowing the user to add Items by certain selection criteria.



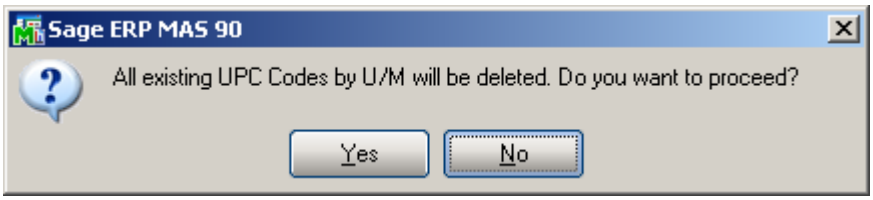
- **Multiple Selection for UPC Clearing.** This button allows for deleting UPC codes only for Items selected by certain selection criteria.



The **UCC Code** and **Auto next No** fields are available only if the **Use UCC** option is checked in the **UPC Options**.

The **UOM** column is available only if the **Use UPC Codes by U/M** checkbox is selected in the **UPC Options**.

Upon unchecking the **Use UPC Codes by U/M** box in the **UPC Options** screen, the following dialog appears:



Click **Yes**, if you want to delete all **UPC codes** by **UOM**. When clicking **No** the **UOM** field is hidden in this screen.

Component of a Kit or Bill of Materials cannot be assigned UPC Code, if the **Allow for Components** box is not checked in the **UPC Options**.

UCC Code and **Auto Next Number** are defaulted to the **UPC Options** settings.

Click the **Auto** button to assign codes automatically to all the listed Items not having UPC Codes yet.

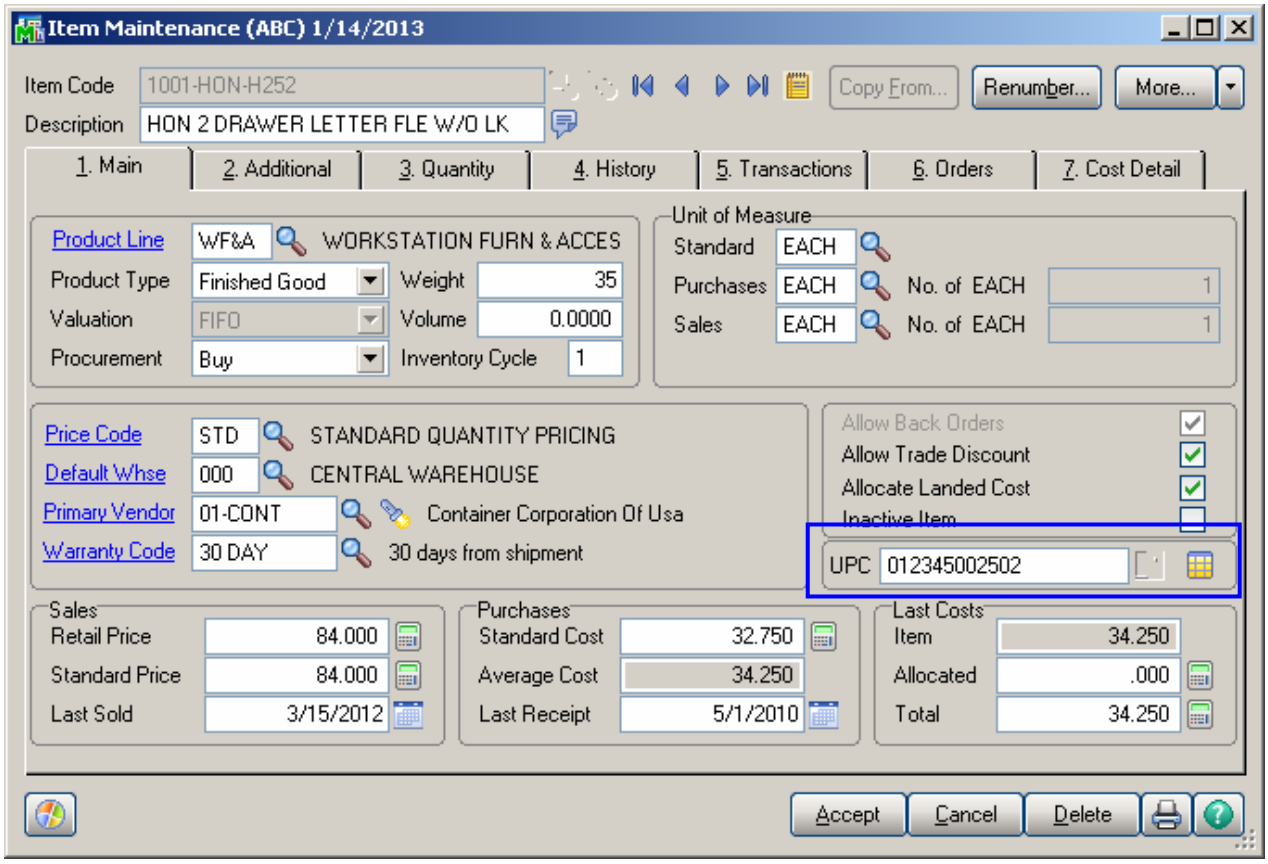
If the **Allow Only Selected Type** box is cleared in the **UPC Options**, any valid UPC Code may be entered. The length can be 12, 13 or 14 digits. If the entered UPC Code is 13 or 12 digits long, the program adds one or two zeroes correspondingly to the beginning of the Code. The Checking Digit is checked to be valid. If the Use UCC option is set in the UPC Options, you may enter only Item Reference (the length must correspond to the Options). In this case the program will use the UCC Code and calculate the Checking Digit to form complete UPC Code.

When changing or deleting an Item through the **Delete and Change Items** program opened from the **Inventory Management Utilities** menu, the item will be respectively deleted or changed in UPC Master file.

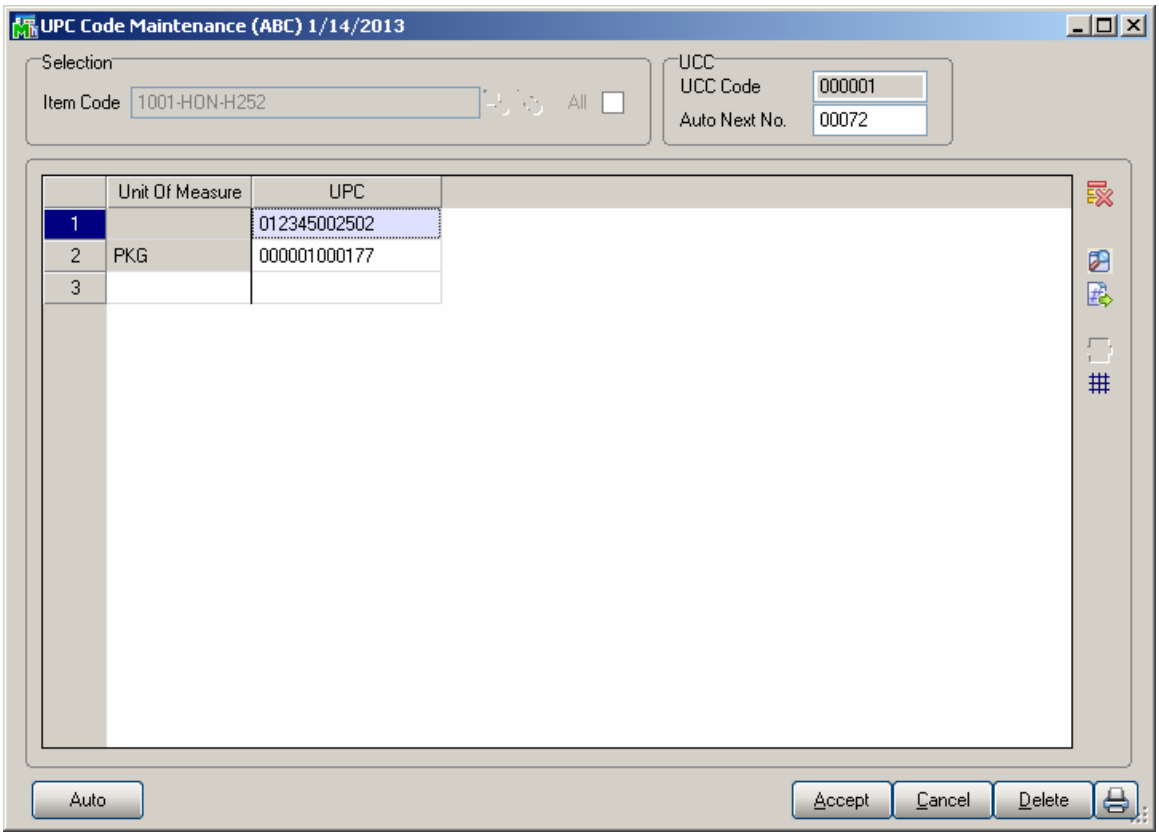
Item Maintenance

The **UPC** field and the **UPC Code Maintenance** button have been added to the **Main** tab of the **Item Maintenance** screen.

The **UPC Code** button allows processing **UPC Codes.**



Click the **UPC Code Maintenance** button to display corresponding screen for the selected item.



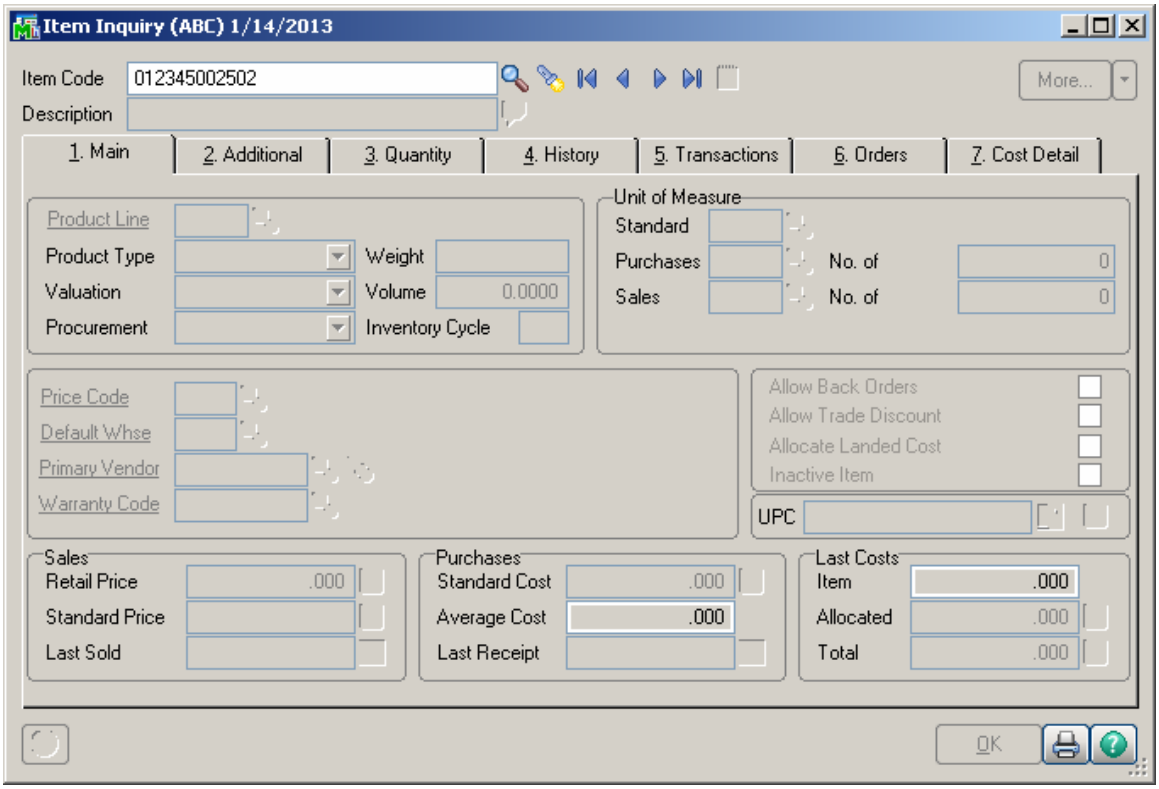
The **UPC Code** without any UM specified is defaulted to the **UPC** field.

If the **Use UCC** option is checked in the UPC Options, the **Auto** and **UPC #** buttons becomes visible. It is available for the items not having **UPC Code** yet. The Code will be formed from the **UCC Code** and the **Next Auto Item Reference** set in the **UPC Options**. The Checking Digit will be calculated automatically. To view UPC Code for a particular UM press the **UPC #** button.

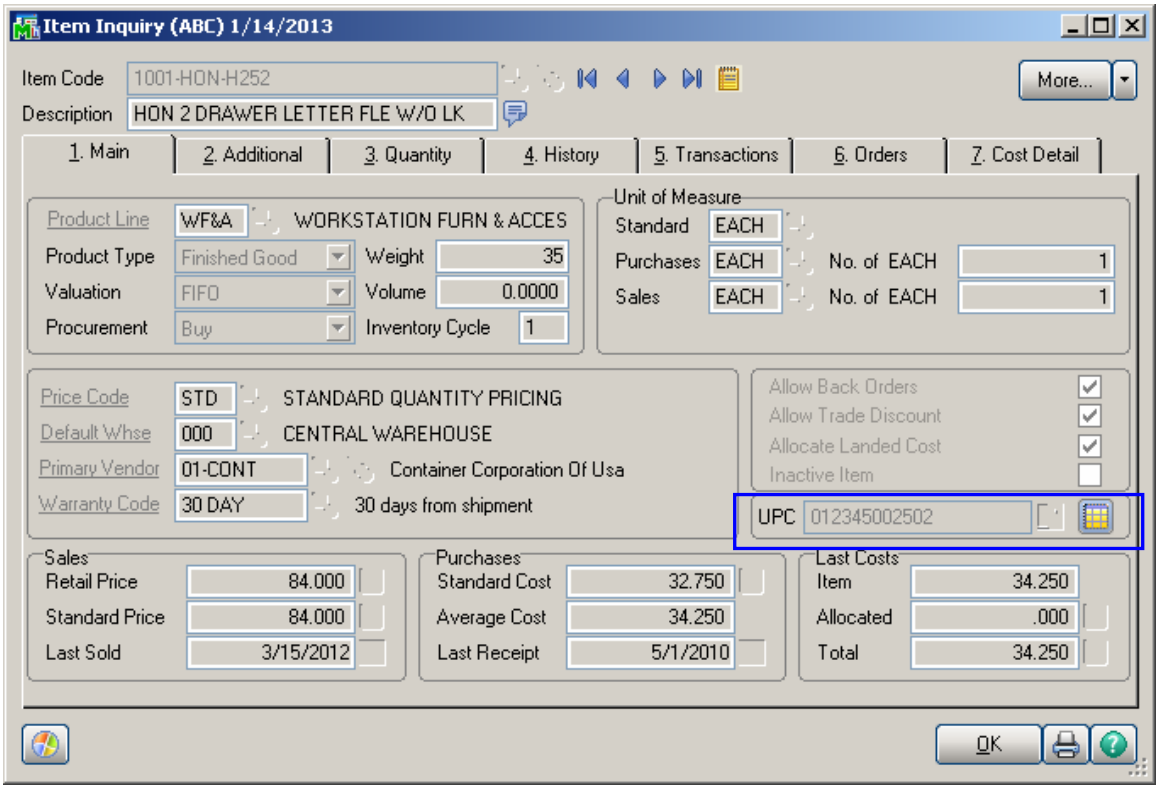
When Deleting or Renumbering, the Item will be correspondingly deleted or renumbered in UPC Master file.

Item Inquiry

The **Inventory Inquiry** program has been modified to support UPC Codes.



The user may Enter/Scan the UPC Code and respective Item Code information will be loaded in the Inventory Inquiry screen.

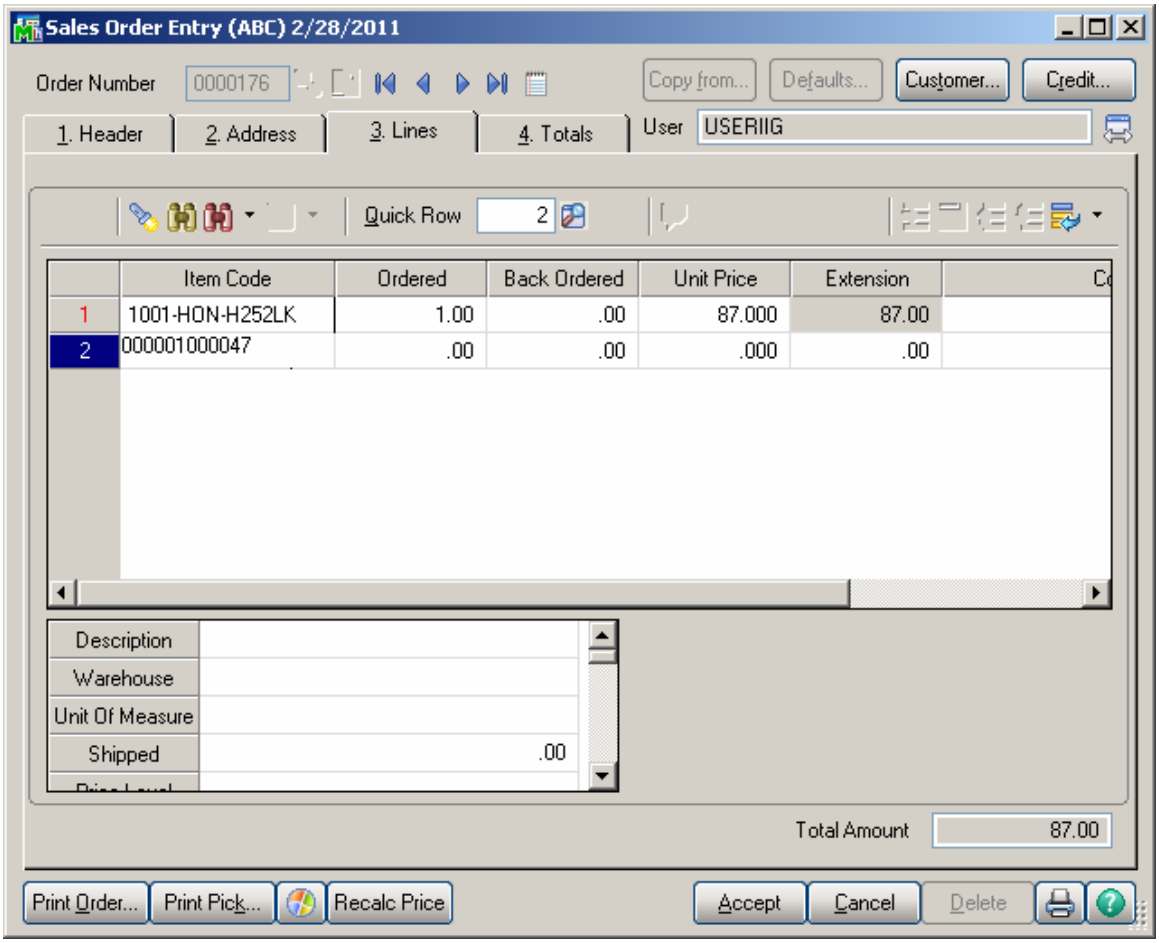


UPC Code Processing

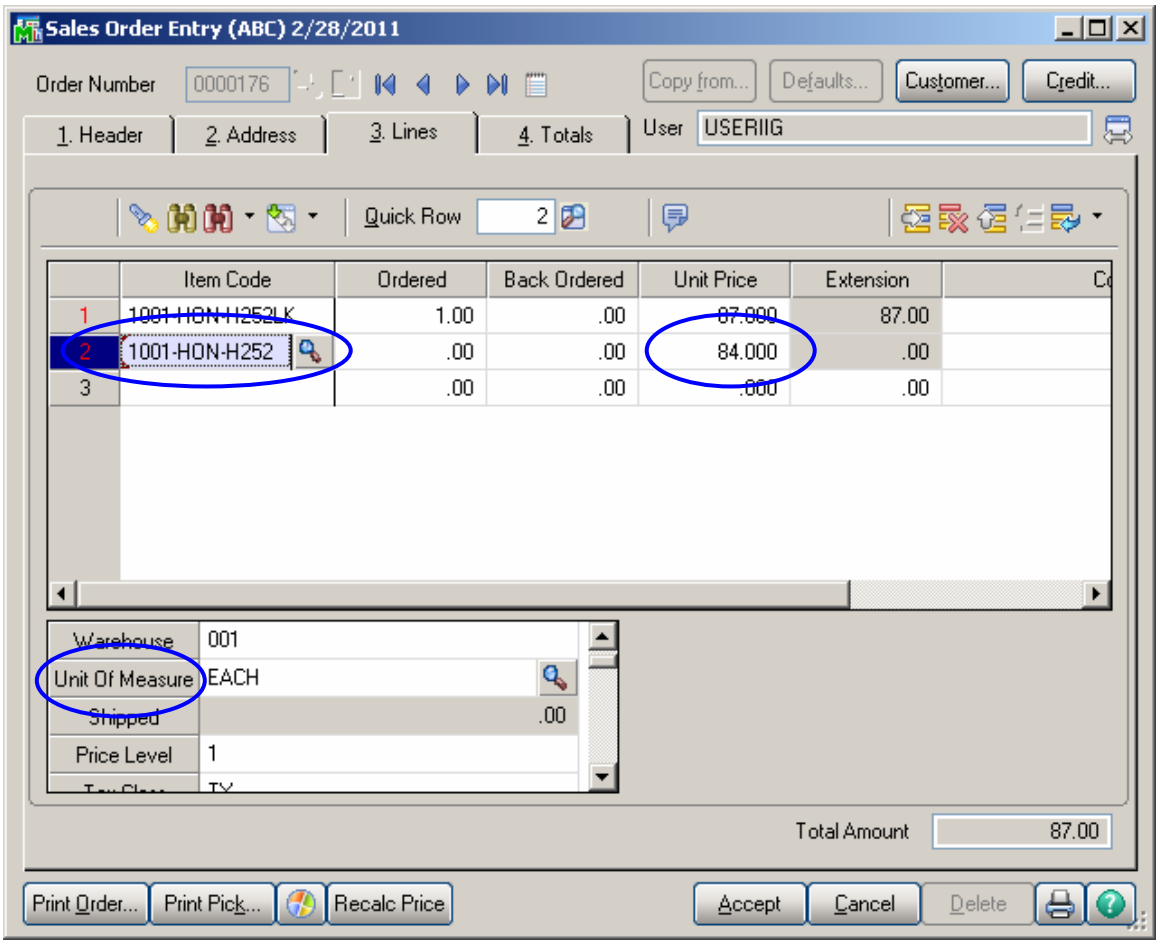
Sales Order Entry

The **Sales Order Entry** program displays the **Item Code, U/M**, and **Unit Price** when entering a **UPC Code** of an item in the **Item Code** field on the **Lines** tab.

Enter the **UPC Code** for an item.

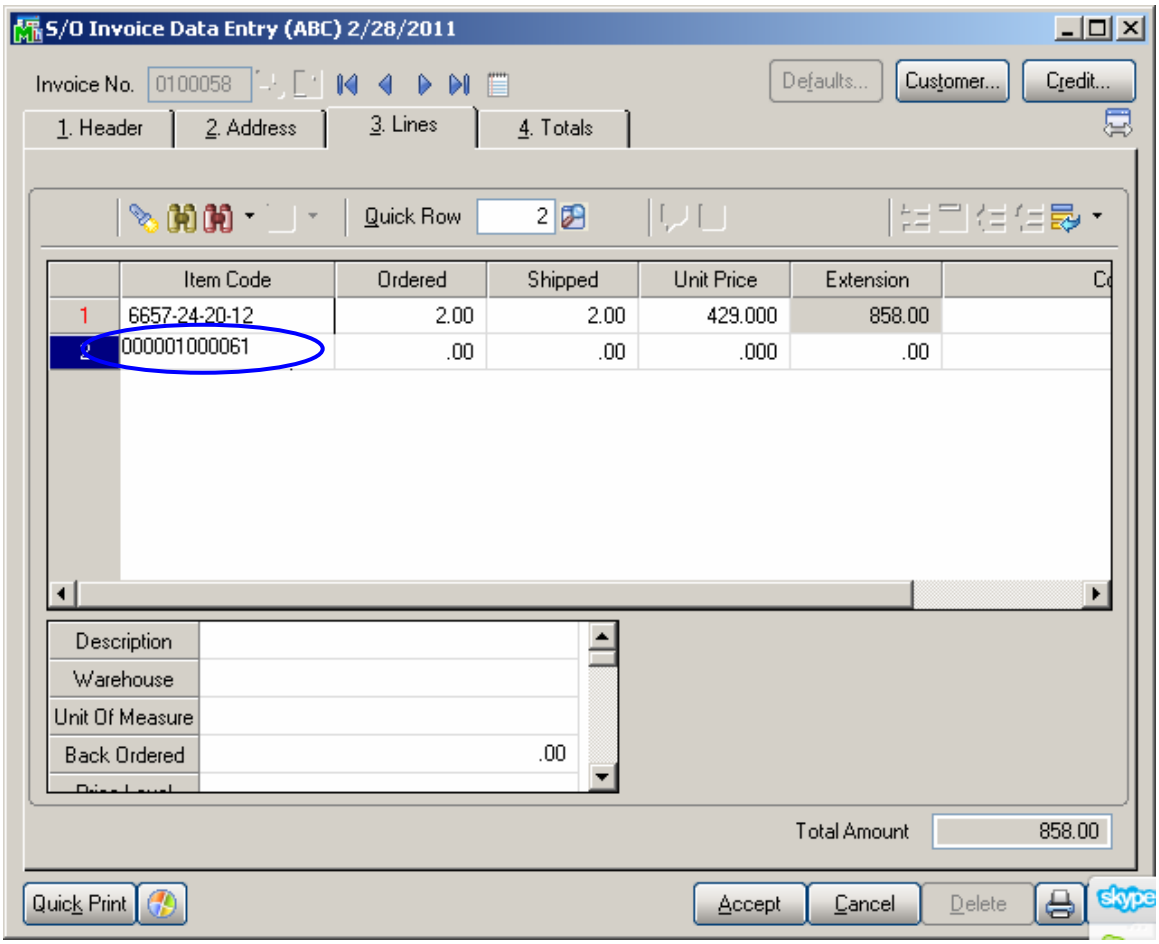

Sales Order Entry (ABC) 2/28/2011
Order Number
0000176
Copy from...
Defaults...
Customer...
Credit...
1. Header
2. Address
3. Lines
4. Totals
User
USERIIG
Quick Row
2
Item Code
Ordered
Back Ordered
Unit Price
Extension
1
1001-HON-H252LK
1.00
.00
87.000
87.00
2
000001000047
.00
.00
.000
.00
Description
Warehouse
Unit Of Measure
Shipped
.00
Total Amount
87.00
Print Order...
Print Pick...
Recalc Price
Accept
Cancel
Delete

The corresponding Item Code, Description, U/M (associated with that UPC Code) and Unit Price will be displayed.

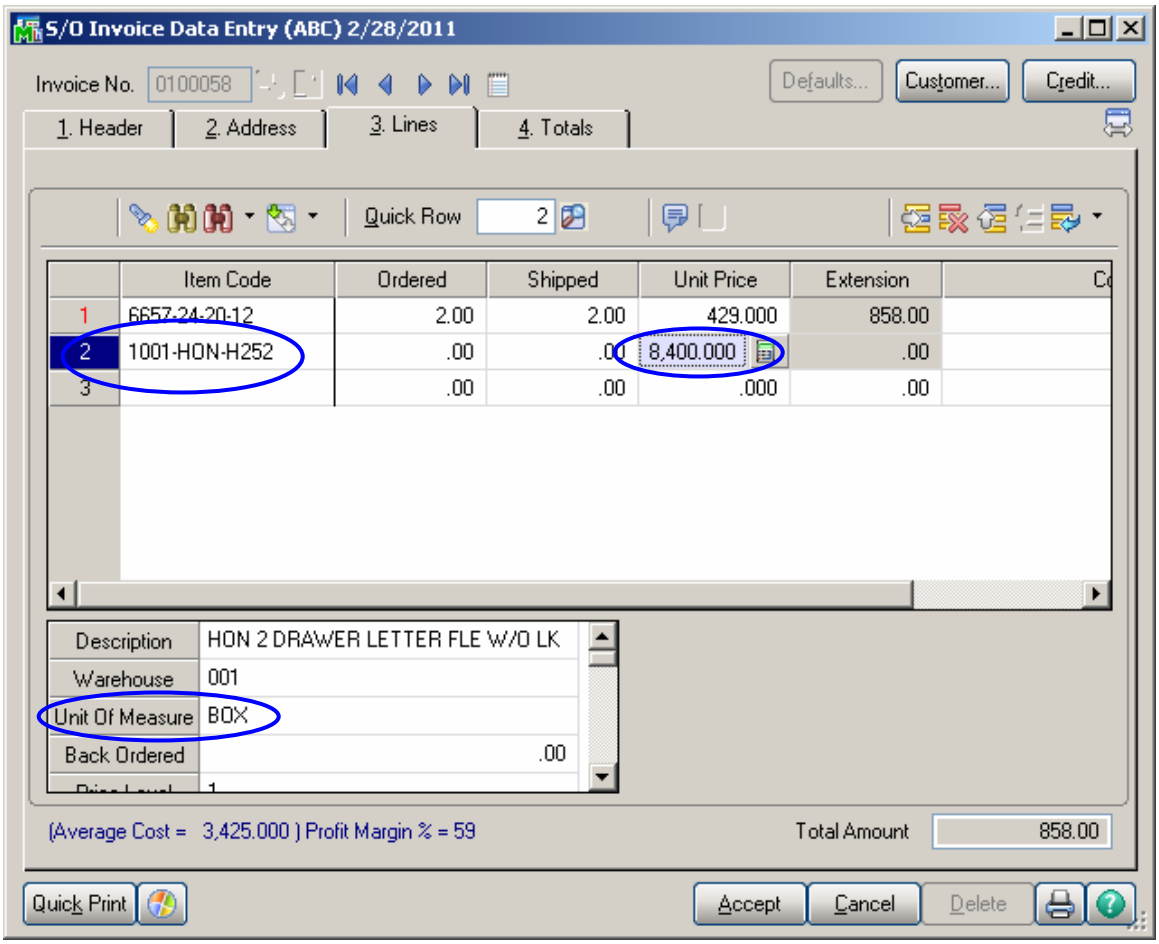


Invoice Data Entry

The **Invoice Date Entry** program displays the **Item Code, U/M**, and **Unit Price** when entering a **UPC Code** of an item in the **Item Code** field on the **Lines** tab. Enter the **UPC Code** for an item.



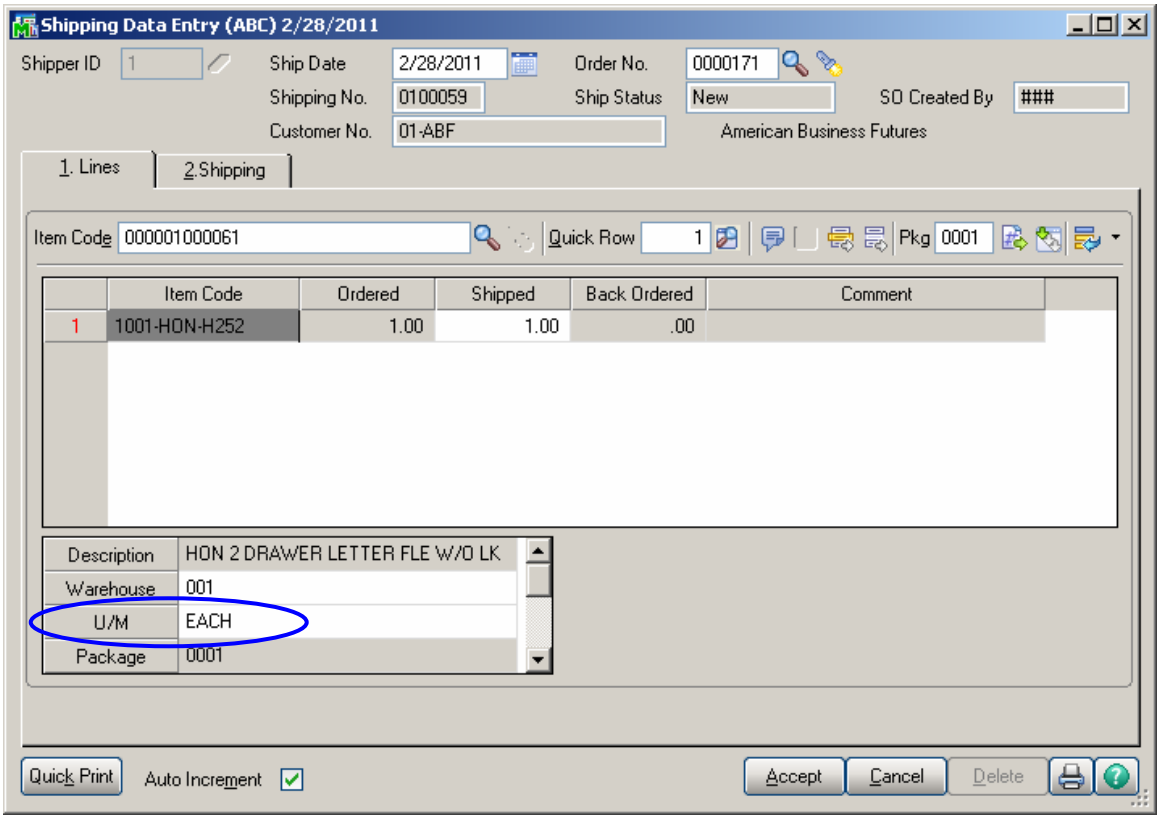
The corresponding Item Code, Description, U/M (associated with that UPC Code) and Unit Price are displayed.


S/O Invoice Data Entry (ABC) 2/28/2011
Invoice No. 0100058
Defaults...
Customer...
Credit...
1. Header
2. Address
3. Lines
4. Totals
Quick Row 2
Item Code
Ordered
Shipped
Unit Price
Extension
1 6657-24-20-12 2.00 2.00 429.000 858.00
2 1001-HON-H252 .00 .00 8,400.000 .00
3 .00 .00 .000 .00
Description HON 2 DRAWER LETTER FLE W/O LK
Warehouse 001
Unit Of Measure BOX
Back Ordered .00
(Average Cost = 3,425.000) Profit Margin % = 59
Total Amount 858.00
Quick Print
Accept
Cancel
Delete

Shipping Data Entry

The **Shipping Data Entry** program has been modified to allow automatically selecting the line with an item coupled with a **UPC Code by U/M**, when entering that **UPC Code** in the **Item Code** field on the **Lines** tab.

Select **Order No.** containing the Line Item that has UPC Code assigned. When entering that UPC Code in the **Item Code** field, the line item, for which that UPC Code is set, will be automatically selected.



Selecting the **Auto Increment** check box will automatically increment the shipped quantity by 1 if the U/M of scanned/entered UPC code is matching with the U/M of the line. Otherwise the Auto Increment check box will not automatically increment the shipped quantity by 1 and the Quantity will be increased taking into consideration the U/M of the line and the conversion factor.

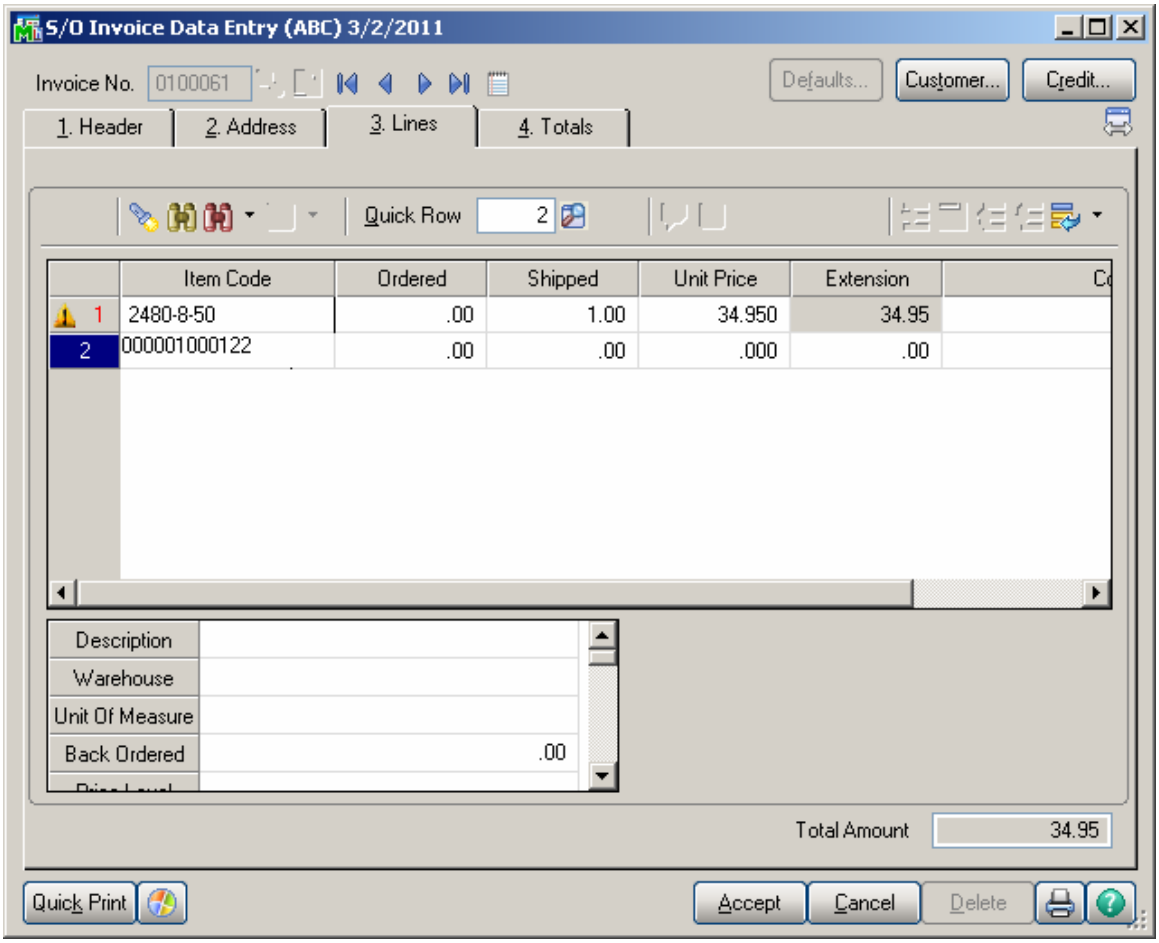
Note: If there is no U/M specified for the scanned UPC Code the Sales Unit of Measure from the Inventory Master

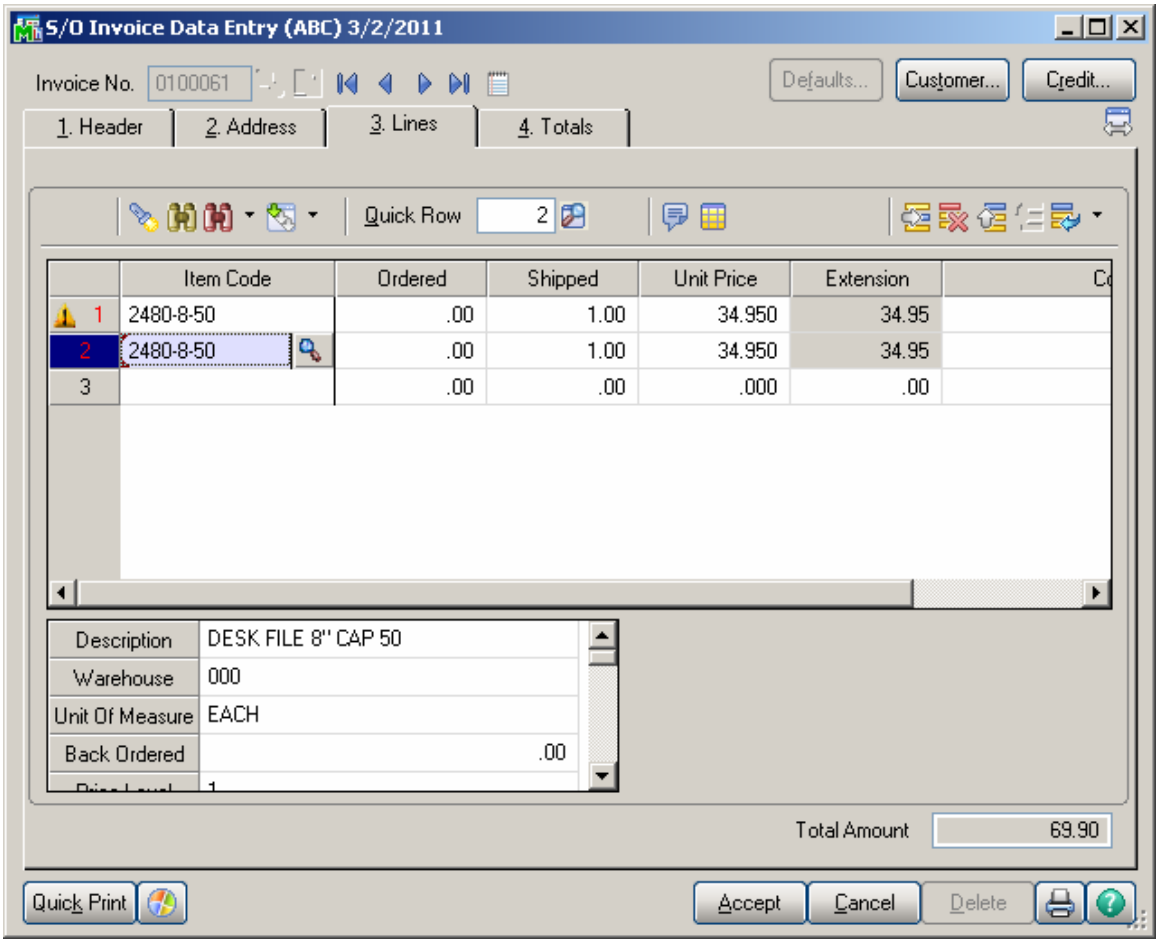
file will be taken into account when increasing the quantity of the line.

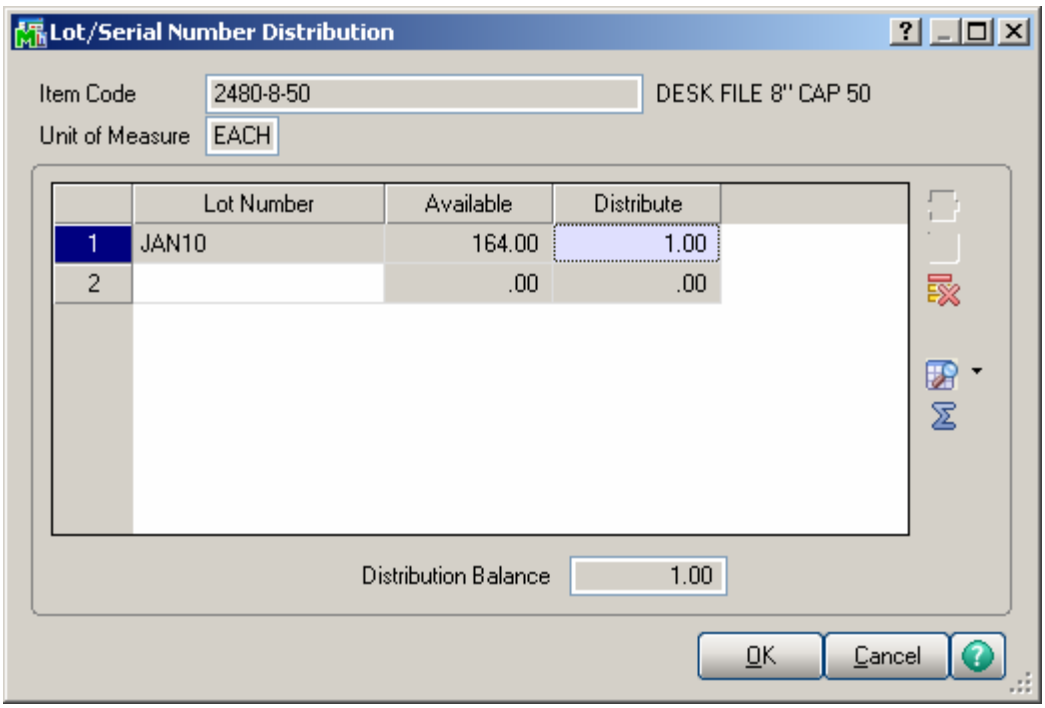
For example, if the item is sold on the sales order as EACH, and the UPC code scanned for this item is for a 6PK (six pack), then the quantity incremented will be 6, which is the unit of measure conversion factor. This allows you to have a different UPC code for the each item, the inner pack, the master pack, the pallet, and even a shipping container, yet be specific to the item. This way, the operator does not have to open the box to scan the items when they are sold in a case or master pack when there will be case or multiple cases shipped. An example would be an order for 240 widgets, sold as EACH, which are packaged as CS24 (24 per case) with a UPC code for this unit of measure. In this example, the operator would only have to scan 10 cases, not 240 items.

UPC Code Processing for Lot Items in Invoice Data Entry and Shipping Data Entry

If Lot Serial Number has been specified for a UPC Code in the **UPC Code Maintenance** program, then when entering that UPC Code in Invoice Date Entry and Shipping Data Entry programs' lines, Shipped quantity will be incremented by one and auto distribution will be done. If in current warehouse there is no corresponding lot for the lot/serial item, auto distribution will not be done.



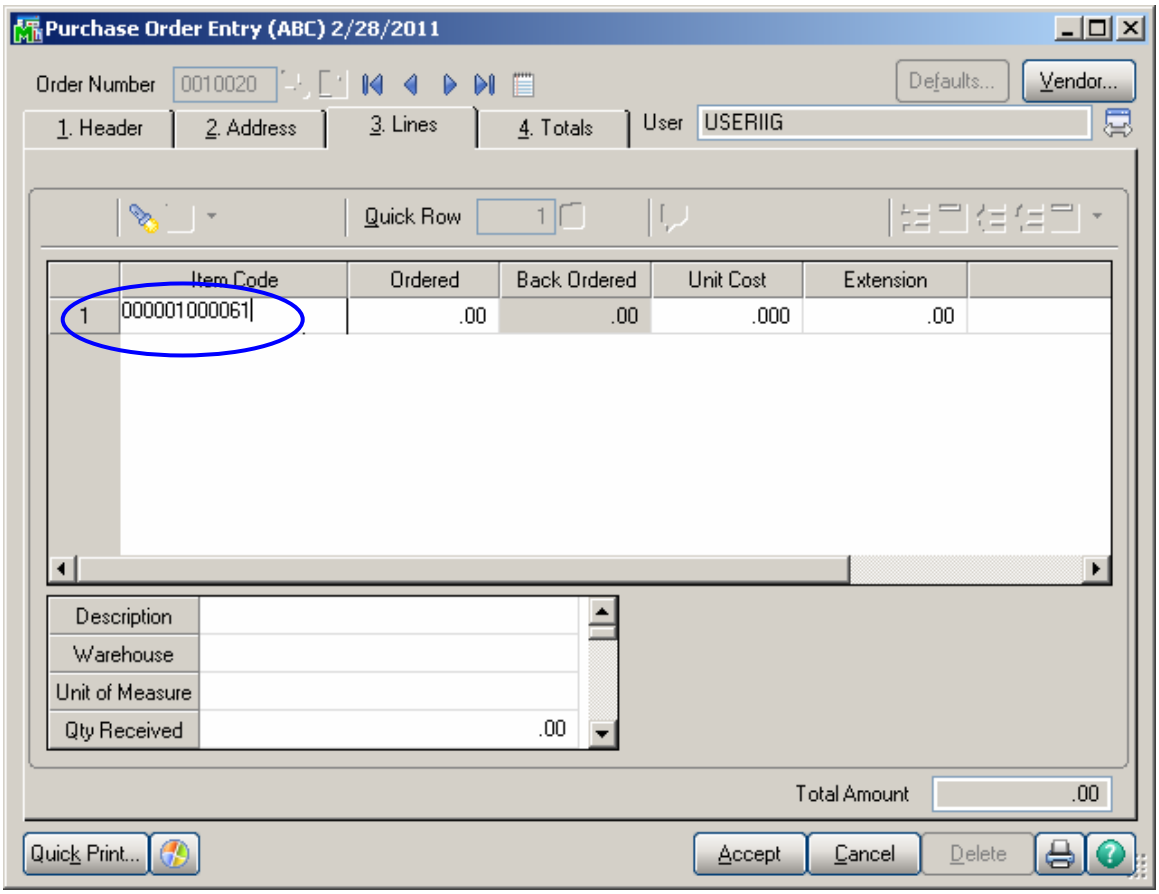

S/O Invoice Data Entry (ABC) 3/2/2011
Invoice No. 0100061
Defaults...
Customer...
Credit...
1. Header
2. Address
3. Lines
4. Totals
Quick Row 2
Item Code
Ordered
Shipped
Unit Price
Extension
1 2480-8-50 .00 1.00 34.950 34.95
2 2480-8-50 .00 1.00 34.950 34.95
3 .00 .00 .000 .00
Description DESK FILE 8" CAP 50
Warehouse 000
Unit Of Measure EACH
Back Ordered .00
Total Amount 69.90
Quick Print
Accept
Cancel
Delete

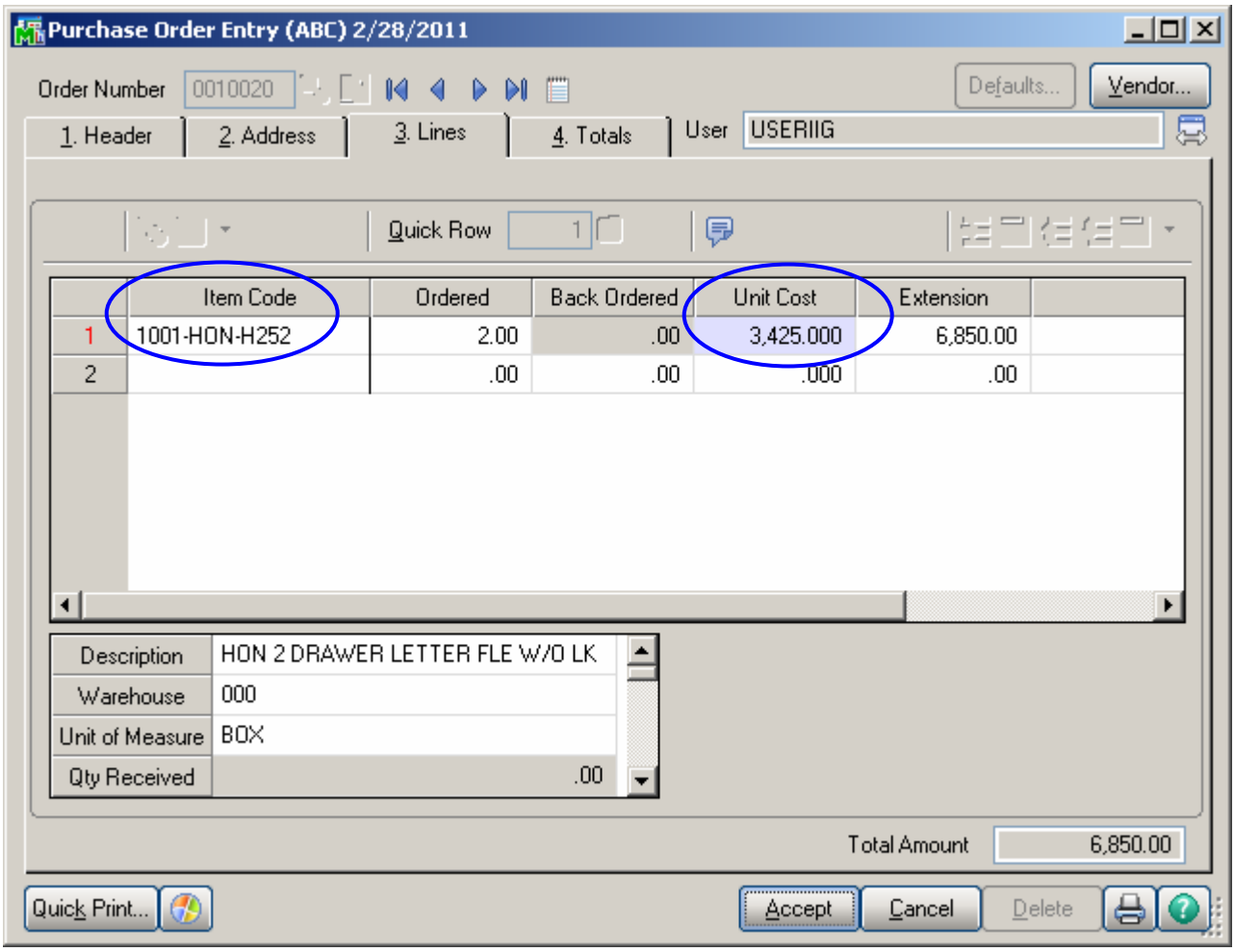

Lot/Serial Number Distribution
Item Code 2480-8-50 DESK FILE 8" CAP 50
Unit of Measure EACH
Lot Number
Available
Distribute
1 JAN10 164.00 1.00
2 .00 .00
Distribution Balance 1.00
OK
Cancel

Purchase Order Entry

The **Purchase Order Entry** program has been modified to display the **Item Number, U/M**, and **Unit Price** when entering a **UPC Code** of an item in the **Item Number** field on the **Lines** tab.

Enter the **UPC Code**. The corresponding Item Number, Description, U/M (associated with that UPC Code) and Unit Cost are displayed.

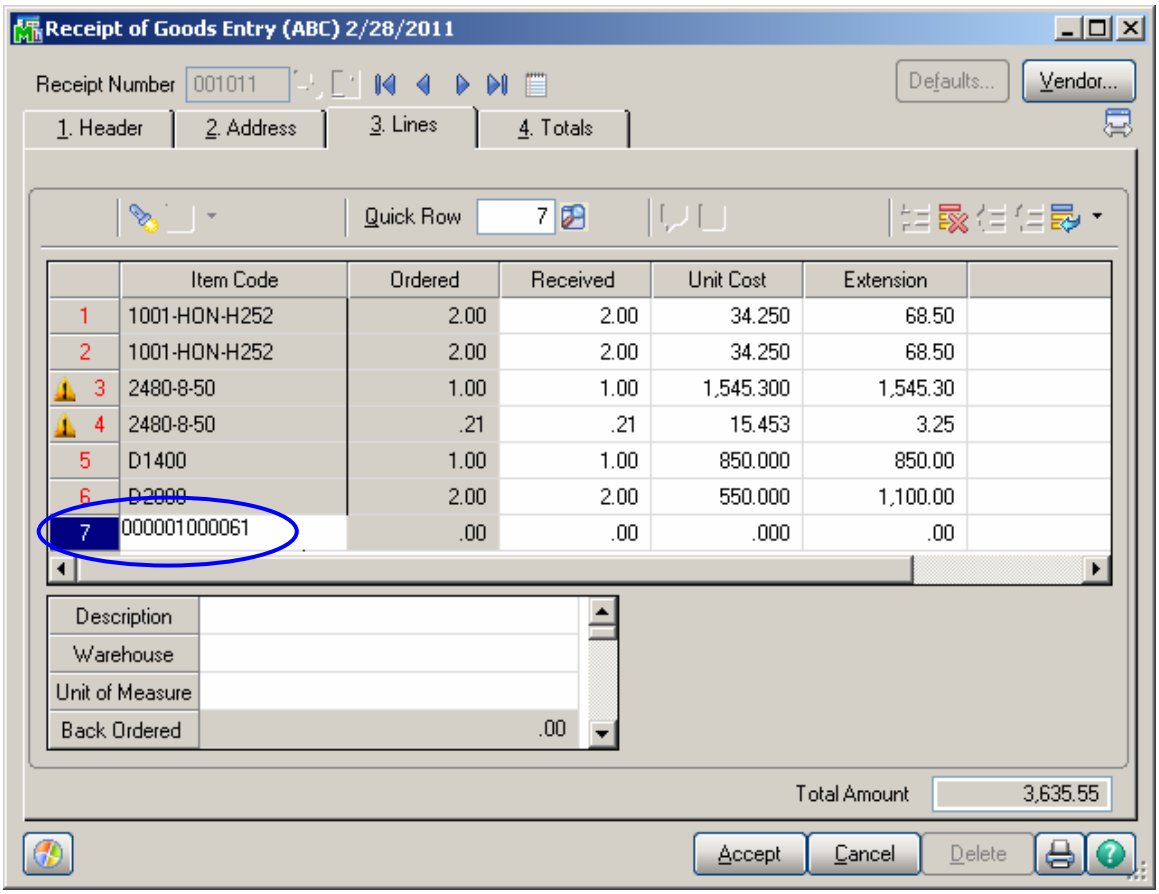


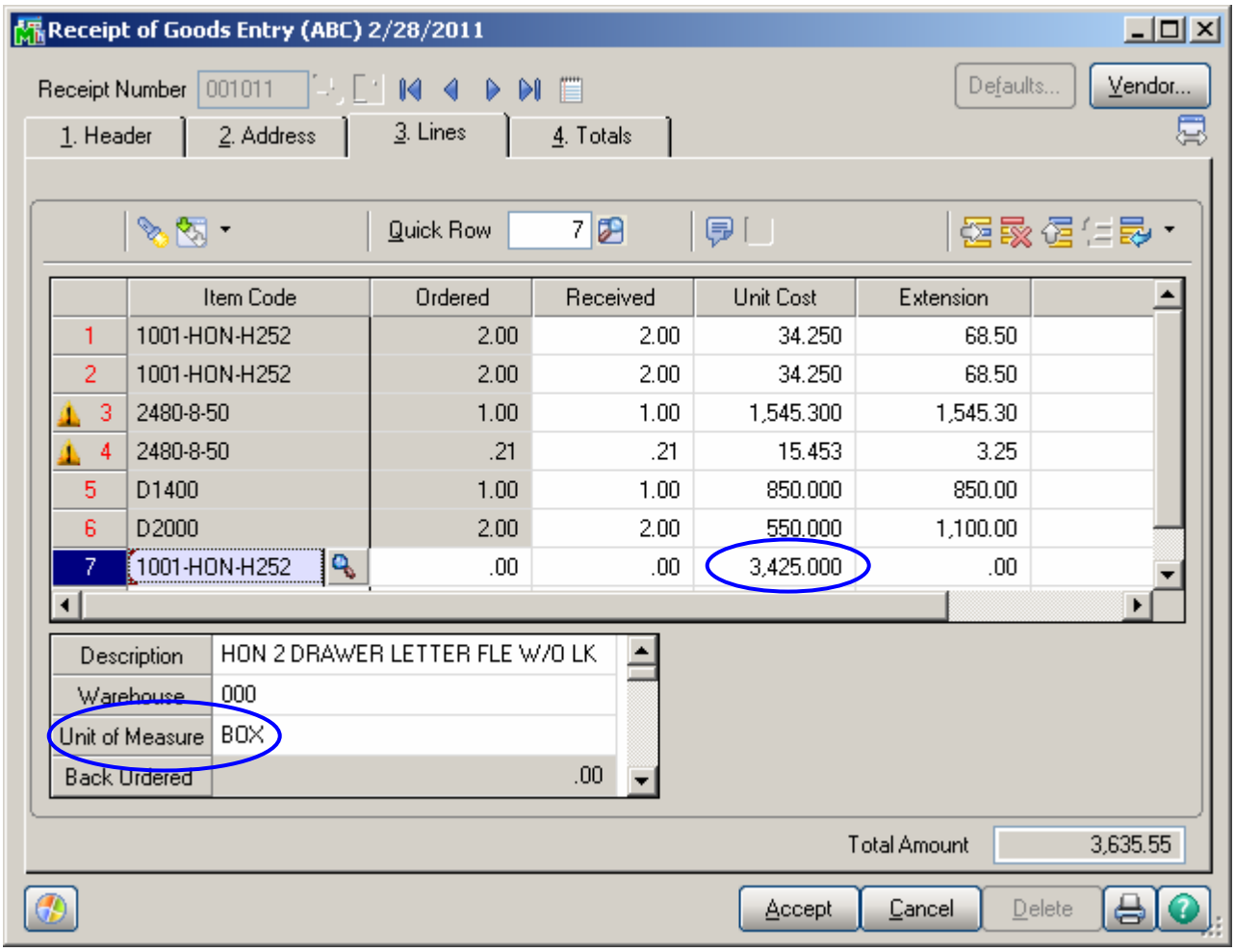

Purchase Order Entry (ABC) 2/28/2011
Order Number
0010020
Defaults...
Vendor...
1. Header
2. Address
3. Lines
4. Totals
User
USERIIG
Quick Row
1
Item Code
Ordered
Back Ordered
Unit Cost
Extension
1
1001-HON-H252
2.00
.00
3,425.000
6,850.00
2
.00
.00
.000
.00
Description
HON 2 DRAWER LETTER FLE W/O LK
Warehouse
000
Unit of Measure
BOX
Qty Received
.00
Total Amount
6,850.00
Quick Print...
Accept
Cancel
Delete

Receipt of Goods Entry

The **Receipt of Good Entry** program has been modified to display the **Item Number, U/M**, and **Unit Price** when entering a **UPC Code** of an item in the **Item Number** field on the **Lines** tab.

Enter the **UPC Code**. The corresponding Item Number, Description, U/M (associated with that UPC Code) and Unit Cost are displayed.

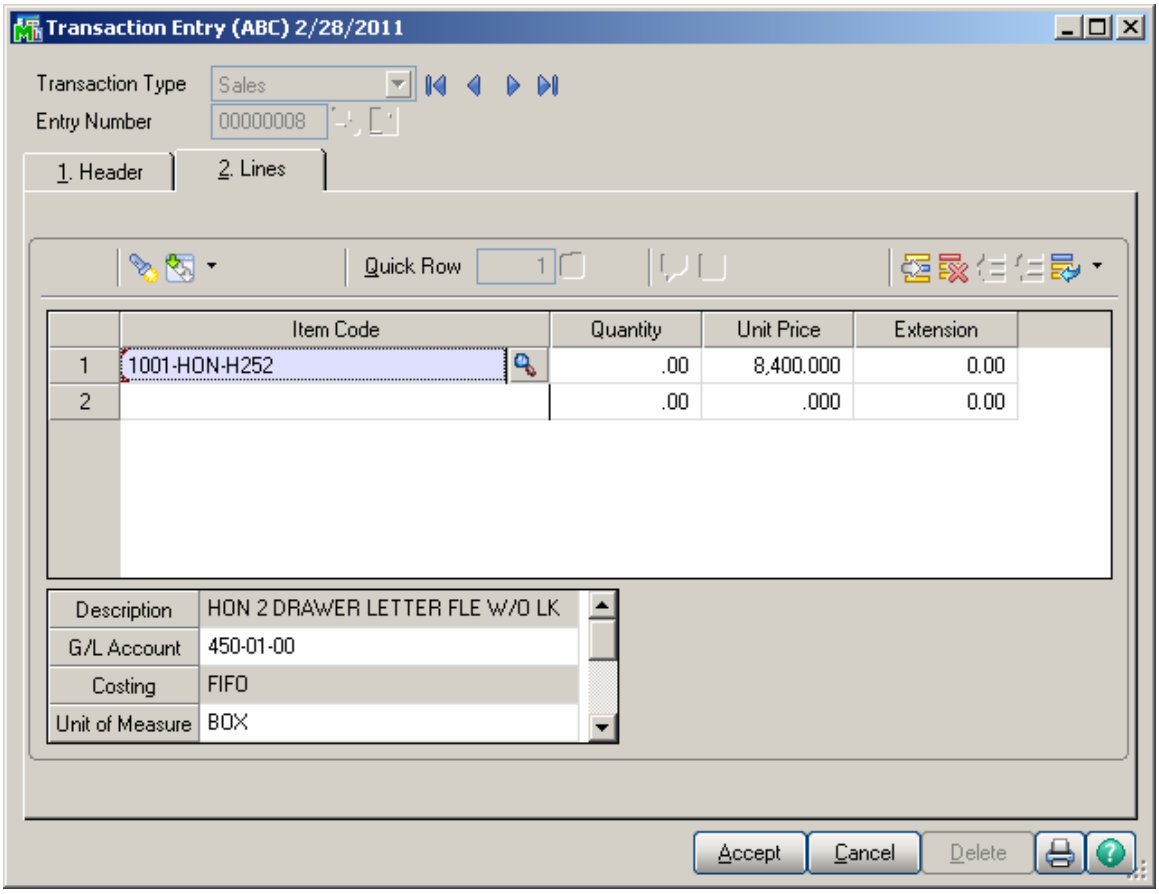



Receipt of Goods Entry (ABC) 2/28/2011
Receipt Number 001011
Defaults...
Vendor...
1. Header
2. Address
3. Lines
4. Totals
Quick Row 7
Item Code
Ordered
Received
Unit Cost
Extension
1 1001-HON-H252 2.00 2.00 34.250 68.50
2 1001-HON-H252 2.00 2.00 34.250 68.50
3 2480-8-50 1.00 1.00 1,545.300 1,545.30
4 2480-8-50 .21 .21 15.453 3.25
5 D1400 1.00 1.00 850.000 850.00
6 D2000 2.00 2.00 550.000 1,100.00
7 1001-HON-H252 .00 .00 3,425.000 .00
Description HON 2 DRAWER LETTER FLE W/O LK
Warehouse 000
Unit of Measure BOX
Back Ordered .00
Total Amount 3,635.55
Accept
Cancel
Delete

Transaction Entry

The **Transaction Entry** program under the **Main** menu of **I/M** module has been modified to allow automatically loading the **Item Number** when entering a **UPC Code** of that item in the **Item Number** field on the **Lines** tab. If a **U/M** is associated with a **UPC Code** (in the **UPC Code Maintenance**), that **U/M** will be loaded automatically.

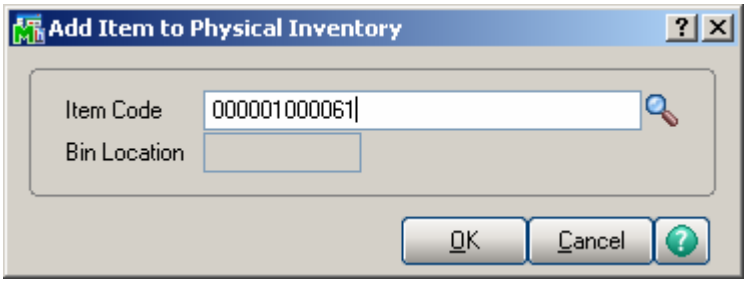
Enter the **UPC** code. The corresponding Item Number, U/M (associated with that UPC Code) and other related information will be displayed.

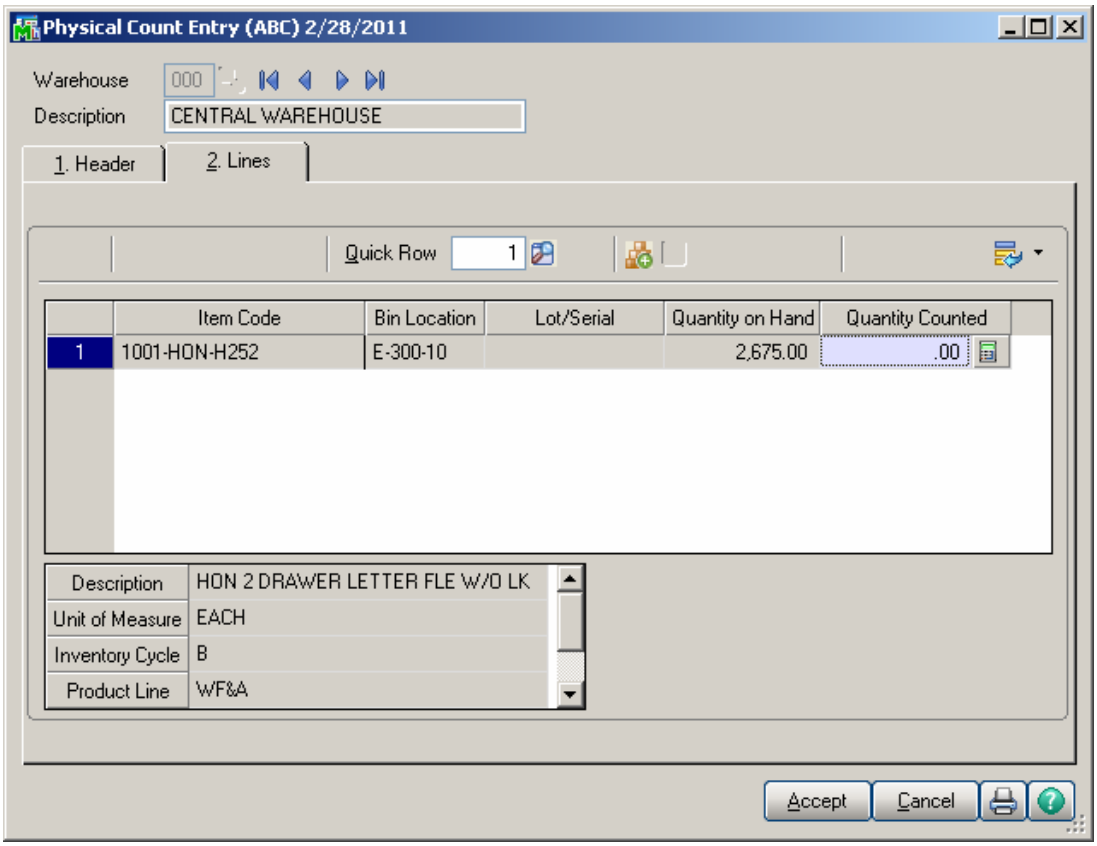


Note: UPC processing works for all transaction types.

Physical Count Entry

The **Physical Count Entry** program under the **Physical** menu of the **I/M** module has been modified to allow automatically loading the **Item Code** when entering the **UPC Code** of that item in the **Item Code** field.

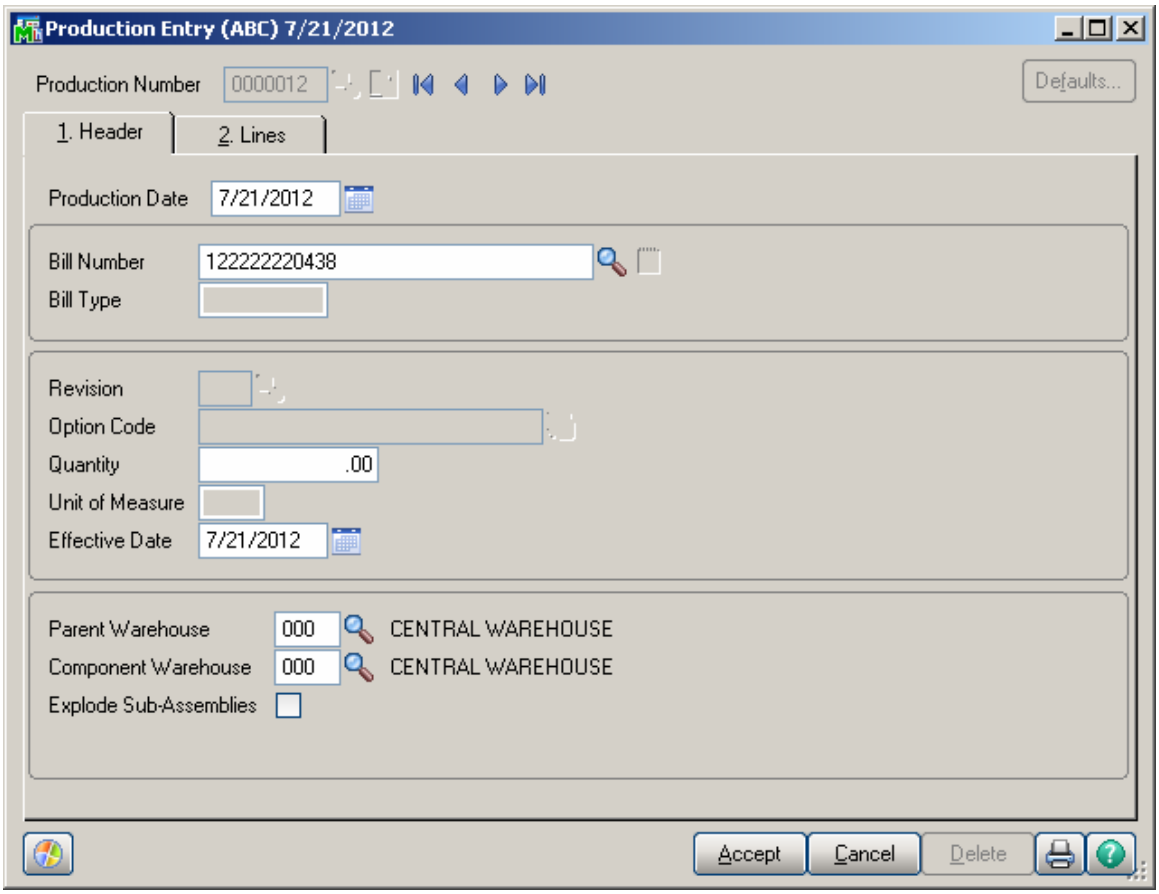


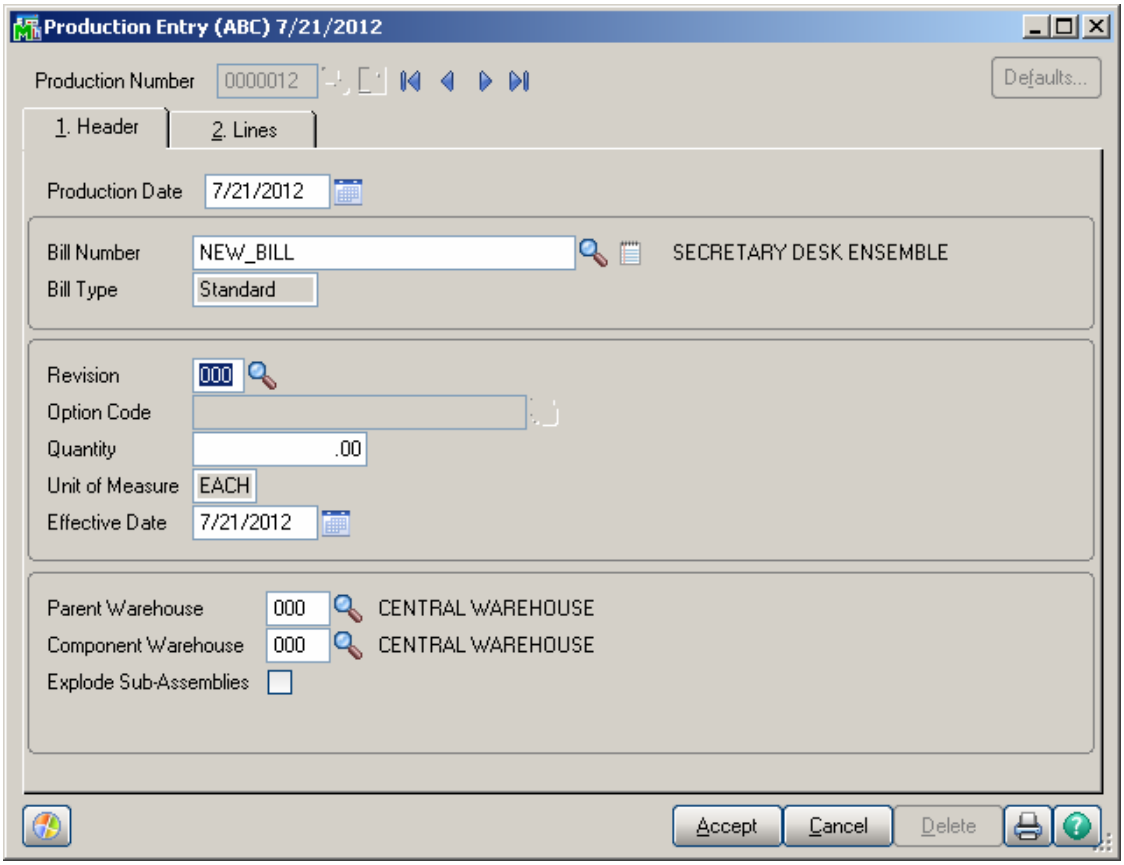


The Alias Numbers are also supported in the **Physical Count Entry** and **Transaction Entry**. When the Alias Number is entered in the **Item Number** field respective item is loaded in the grid.

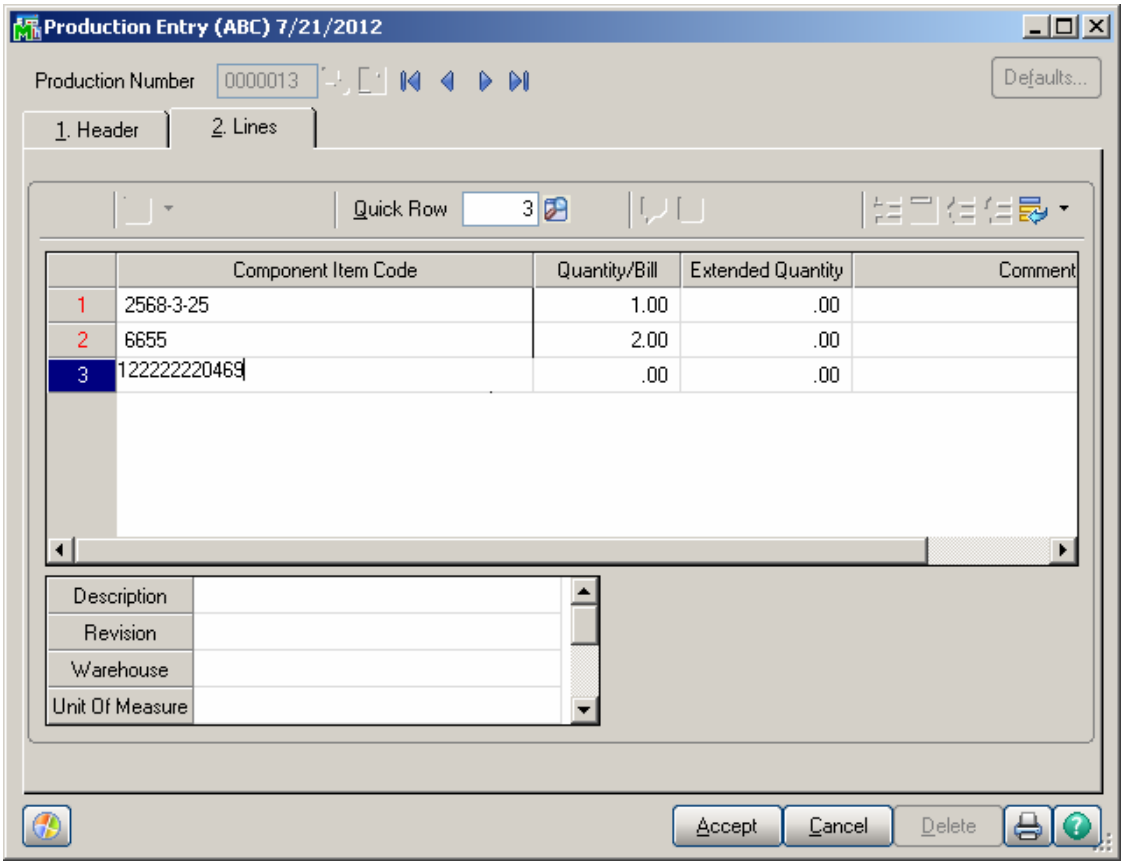
B/M Production Entry

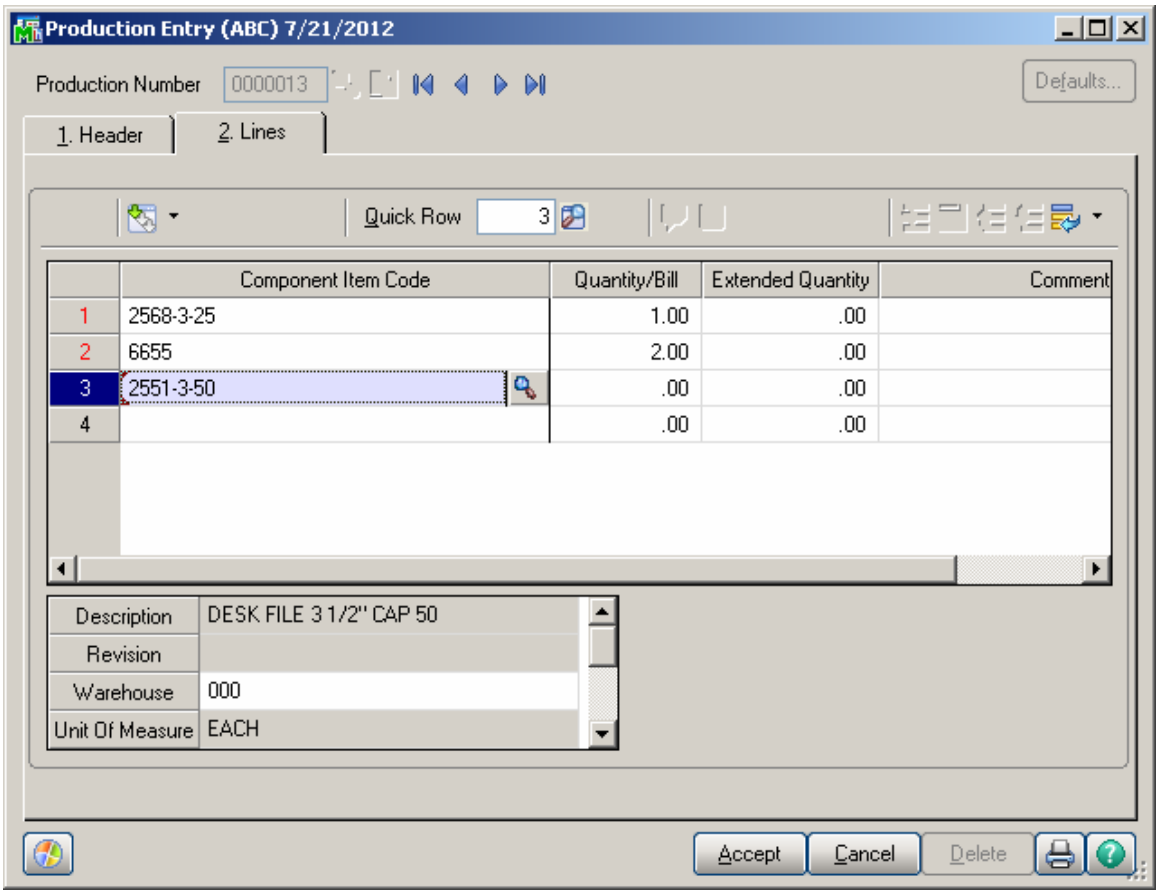
The **B/M Production Entry** program has been modified to support **UPC Code** scanning on the Header tab. When the UPC code is scanned on the Header of the Production Entry the program translates it to the Item Code and automatically loads the lines of the items for the item you are building the kit for.





The UPC codes are supported also for Component Items.


Production Entry (ABC) 7/21/2012
Production Number
0000013
Defaults...
1. Header
2. Lines
Quick Row
3
Component Item Code
Quantity/Bill
Extended Quantity
Comment
1
2568-3-25
1.00
.00
2
6655
2.00
.00
3
122222220469
.00
.00
Description
Revision
Warehouse
Unit Of Measure
Accept
Cancel
Delete



The UPC functionality is provided also in the **B/M Disassembly Entry.**