



Universal Product Codes Processing For Sage 100 ERP

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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.

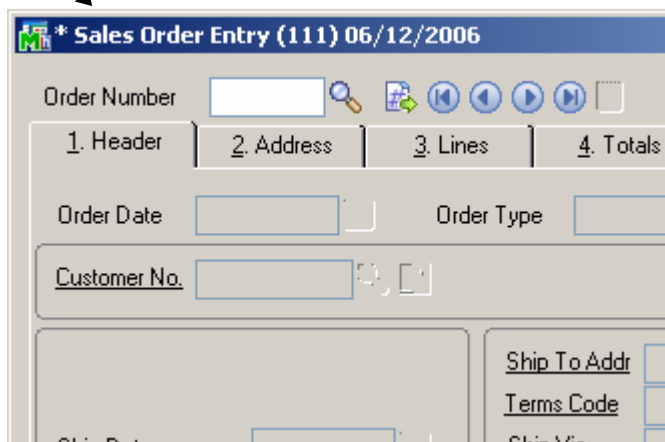
Wait! Before You Install – Do You Use CUSTOM OFFICE?

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 SAGE 100 ERP.

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**.

Enhancement	Level	Release Date	Serial Number	Unlocking Key
IIG Enhancement Name	4.50		AAAAAAAAAAAAAAAAAAAA	BBBBBB

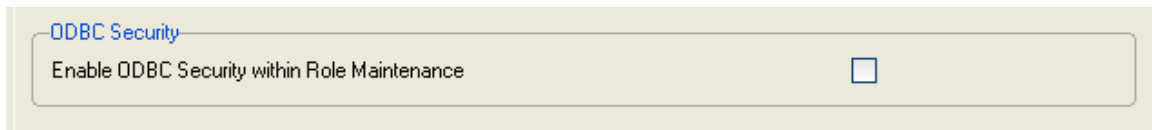
Enter **Serial Number** and **Unlocking Key** provided by IIG, and click **OK**.

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.

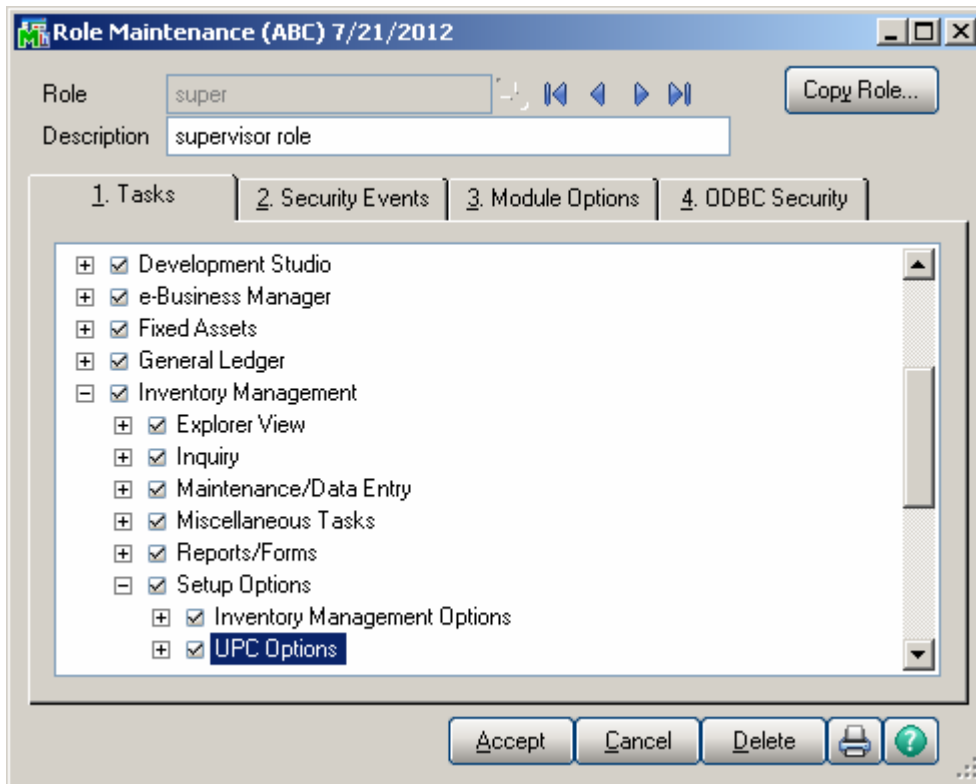
ODBC Security

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.

This enhancement checks the UPC codes to be unique throughout the system.

UPC codes can be assigned to each item manually or to group of items automatically.

UPC Options

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

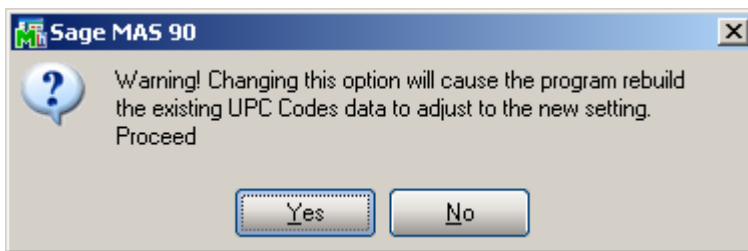
The screenshot shows the 'UPC Options' dialog box. The 'UPC Code Type' is set to 'UCC-12'. The following options are checked: 'Allow Only Selected Type', 'Enforce UPC is unique', 'Allow for Components', and 'Use UPC Codes by U/M'. The 'Use UCC' checkbox is also checked. The 'UCC Code' field contains '12222222' and the 'UPC Next Auto Item Reference' field contains '040'. The dialog includes 'Accept', 'Cancel', and a printer icon at the bottom right.

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.

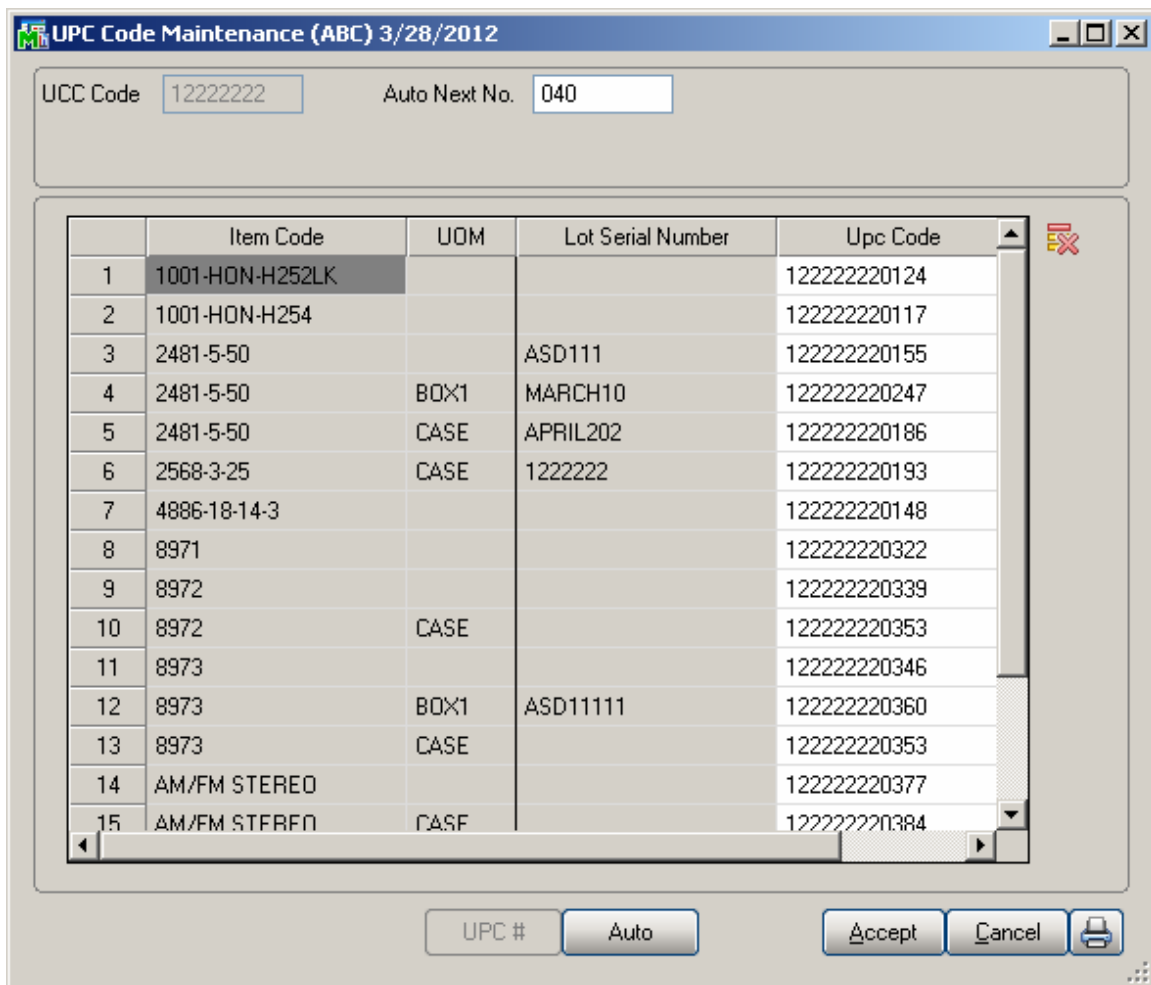
The **UPC Next Auto Item Reference** is for adding to the **UCC Code** for assigning UPC Codes automatically in the

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.

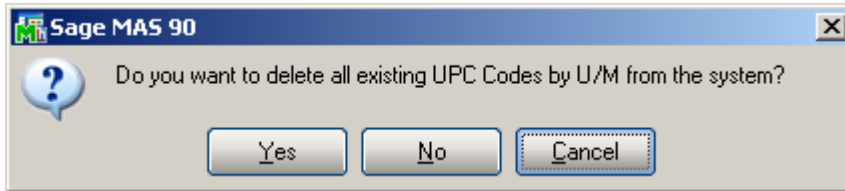


To add an item to the list, enter the **Item Code**, or select it using the **Lookup** button.

The **UPC #** and **Auto** buttons are available only in the case when **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**.

If the **Use UPC Codes by U/M** box is unchecked in the **UPC Options** screen, the following dialog screen appears:



Click **Yes**, if you want to delete all **UPC codes** by **UOM**. When clicking **No**, the items having the **UPC Codes** by the **UOM** are not displayed in the **UPC Code Maintenance** and the **UOM** field is hidden in this screen. And when the **Use UPC Codes by U/M** box is checked again in the **UPC Options**, the **UPC Codes by UM** are displayed on the **UPC Code Maintenance** 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.

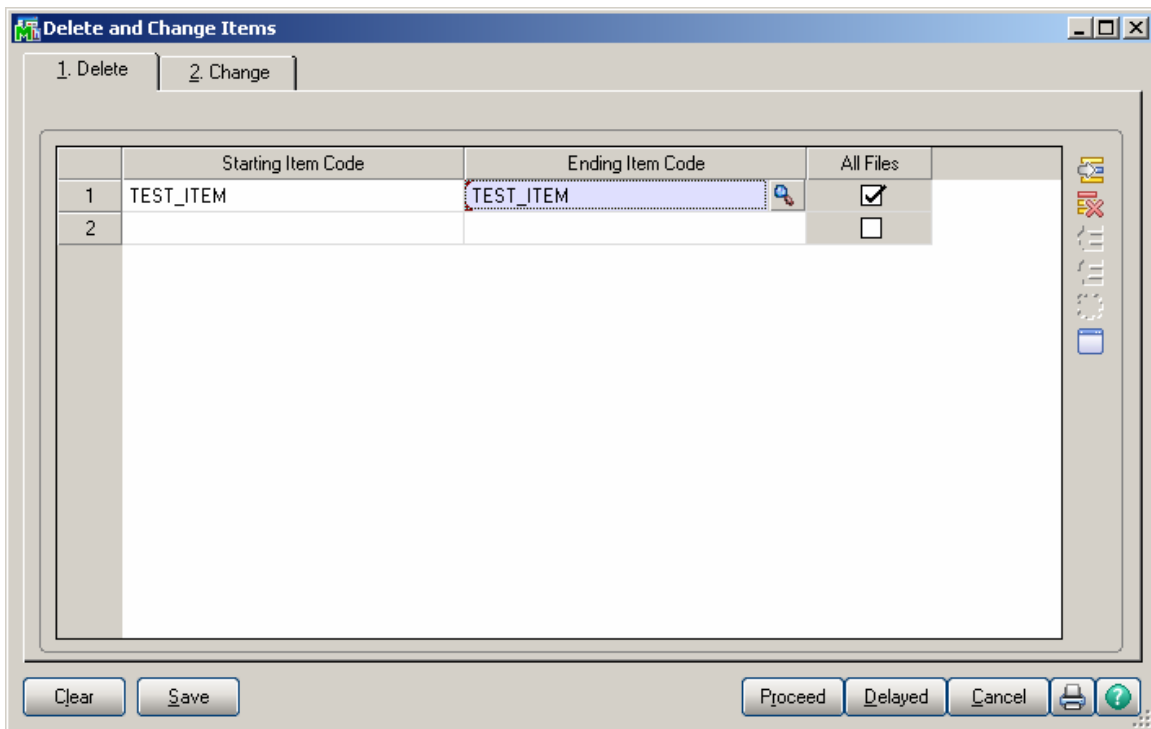
Click the **Auto** button to assign codes automatically to all the listed Items not having UPC Codes yet.

Click the **UPC #** button to assign a UPC Code to the selected line.

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 Maintenance** button allows processing **UPC Codes by U/M**.

The screenshot shows the 'Item Maintenance (ABC) 3/28/2012' window. The 'Main' tab is selected. The 'UPC' field is highlighted with a blue box and contains the value '12222220124'. The 'UPC Code Maintenance' button is also visible next to the field. The window displays various fields for item information, including Product Line, Product Type, Valuation, Procurement, Price Code, Default Whse, Primary Vendor, Warranty Code, Sales, Purchases, and Last Costs.

*Note: The **UPC Code Maintenance** is displayed on the **Main** tab of the **Item Maintenance** screen if the **Use UPC Codes by U/M** box is checked in the **UPC Options** program.*

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

	UOM	Lot Serial Number	Upc Code
1			12222220124
2	BOX		12222220407
3			

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.

The **UPC** field and the Next button are disabled for Components of a Kit or Bill of Materials, if the **Allow for Components** box is not checked in the **UPC Options**.

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

The **Next UPC** and **UPC Code Maintenance** buttons are disabled if the **UPC Code Maintenance** is in use while the Item Maintenance is launched.

Item Inquiry

The UPC Codes are supported in the Item Inquiry. Enter/Scan the UPC Code and respective Item Code information will be loaded in the Inventory Inquiry screen.

Item Inquiry (ABC) 3/28/2012

Item Code: 1001-HON-H252LK
 Description: HON 2 DRAWER LETTER FILE W/ LCK

1. Main | 2. Additional | 3. Quantity | 4. History | 5. Transactions | 6. Orders | 7. Cost Detail

Product Line: WF&A WORKSTATION FURN & ACCES
 Product Type: Finished Good Weight: 2
 Valuation: FIFO Volume: 0.0000
 Procurement: Buy Inventory Cycle:

Unit of Measure
 Standard: EACH
 Purchases: EACH No. of EACH: 1
 Sales: EACH No. of EACH: 1

Price Code: STD STANDARD QUANTITY PRICING
 Default Whse: 000 CENTRAL WAREHOUSE
 Primary Vendor: 01-CONT Container Corporation Of Usa
 Warranty Code: 60 DAY 60 days from shipment

Allow Back Orders
 Allow Trade Discount
 Allocate Landed Cost
 Inactive Item
 UPC: 12222220445

Sales		Purchases		Last Costs	
Retail Price	87.000	Standard Cost	35.750	Item	37.150
Standard Price	87.000	Average Cost	37.117	Allocated	.000
Last Sold	5/15/2010	Last Receipt	5/1/2010	Total	37.150

OK [Print] [Help]

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/scan the **UPC Code** for an item.

Order Number: 0000177

1. Header | 2. Address | 3. Lines | 4. Totals | User: useriig

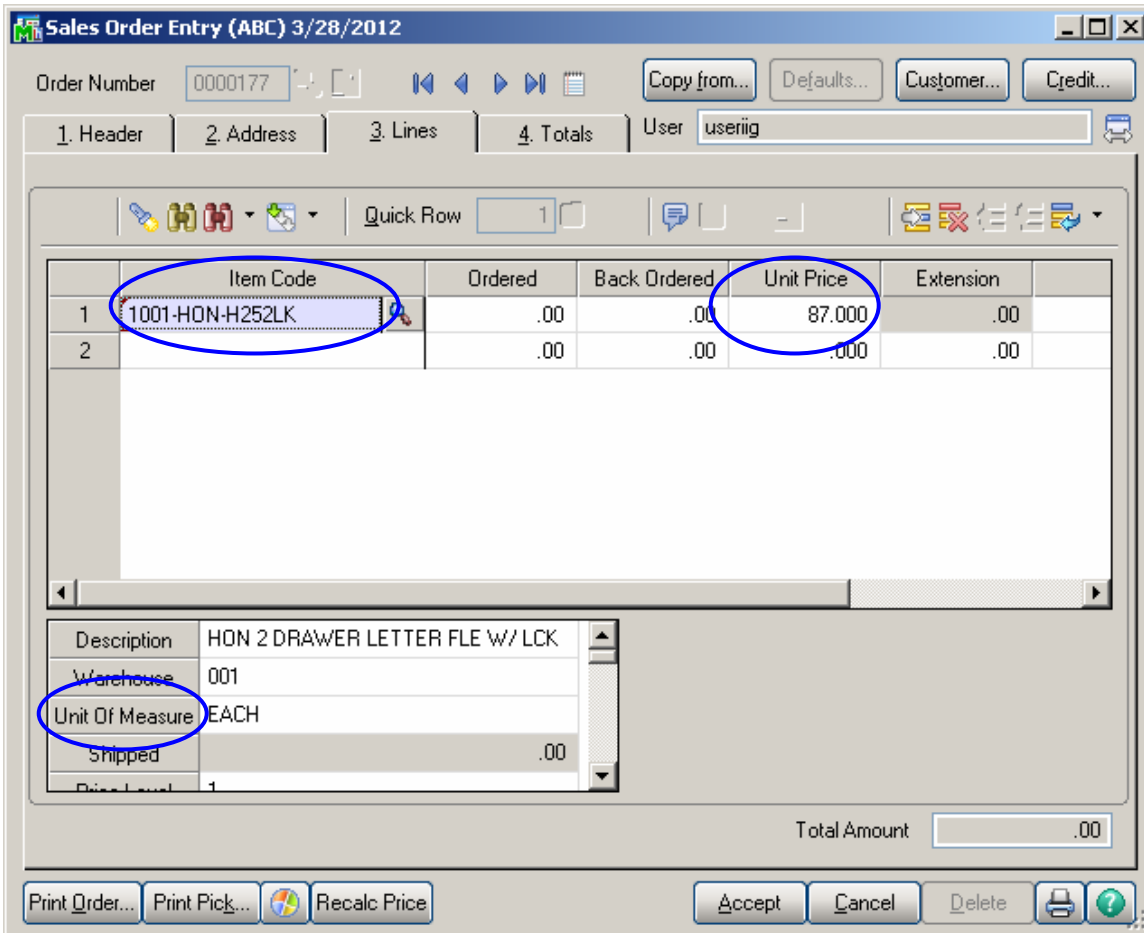
	Item Code	Ordered	Back Ordered	Unit Price	Extension
1	122222220124	.00	.00	87.000	.00
2		.00	.00	.000	.00

Description: HON 2 DRAWER LETTER FLE W/ LCK
 Warehouse: 001
 Unit Of Measure: EACH
 Shipped: .00

Total Amount: .00

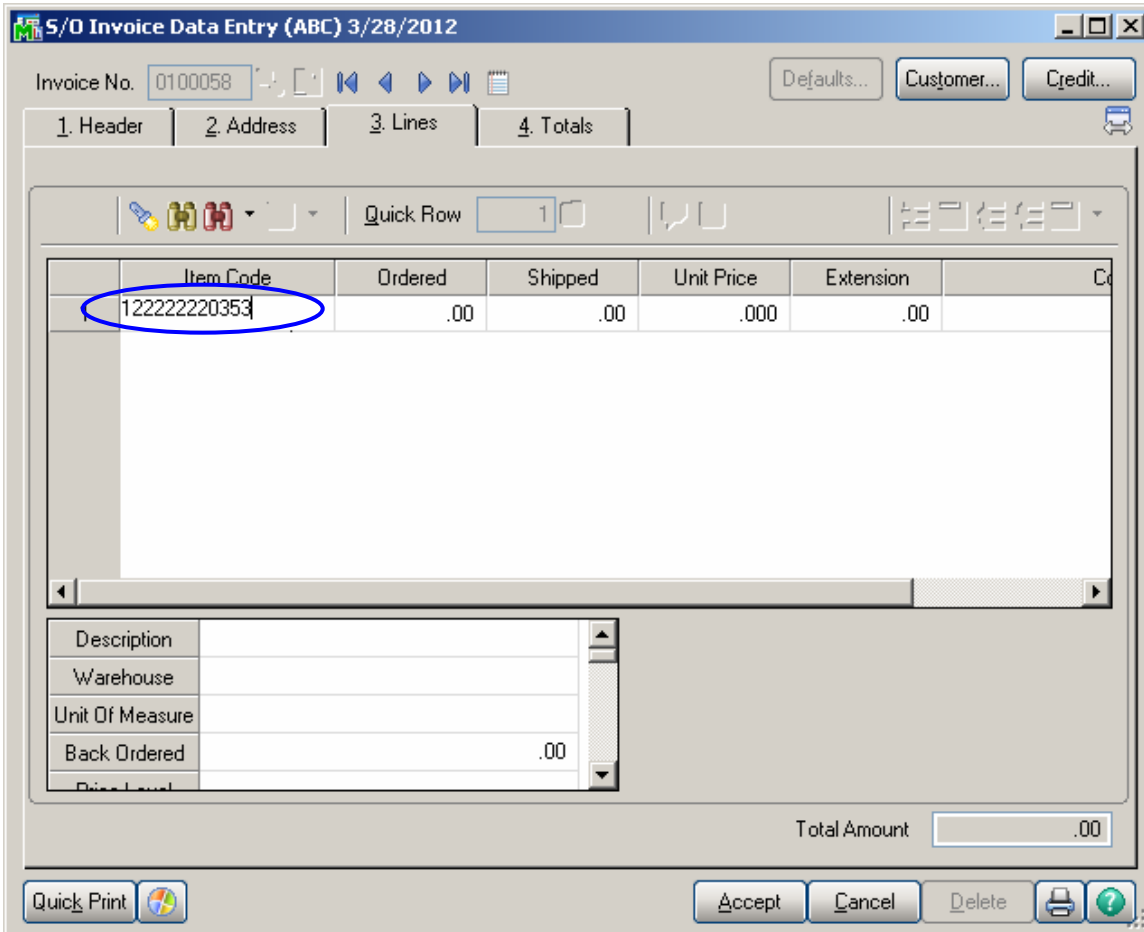
Buttons: Print Order..., Print Pick..., Recalc Price, Accept, Cancel, Delete, Help

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.

5/O Invoice Data Entry (ABC) 3/28/2012

Invoice No. 0100058 Defaults... Customer... Credit...

1. Header 2. Address 3. Lines 4. Totals

Quick Row 1

	Item Code	Ordered	Shipped	Unit Price	Extension	Co
1	8972	.00	.00	295.000	.00	
2		.00	.00	.000	.00	

Description: UNIVERSAL 5 1/4" DSDD FLEX DSK
Warehouse: 001
Unit Of Measure: CASE
Back Ordered: .00

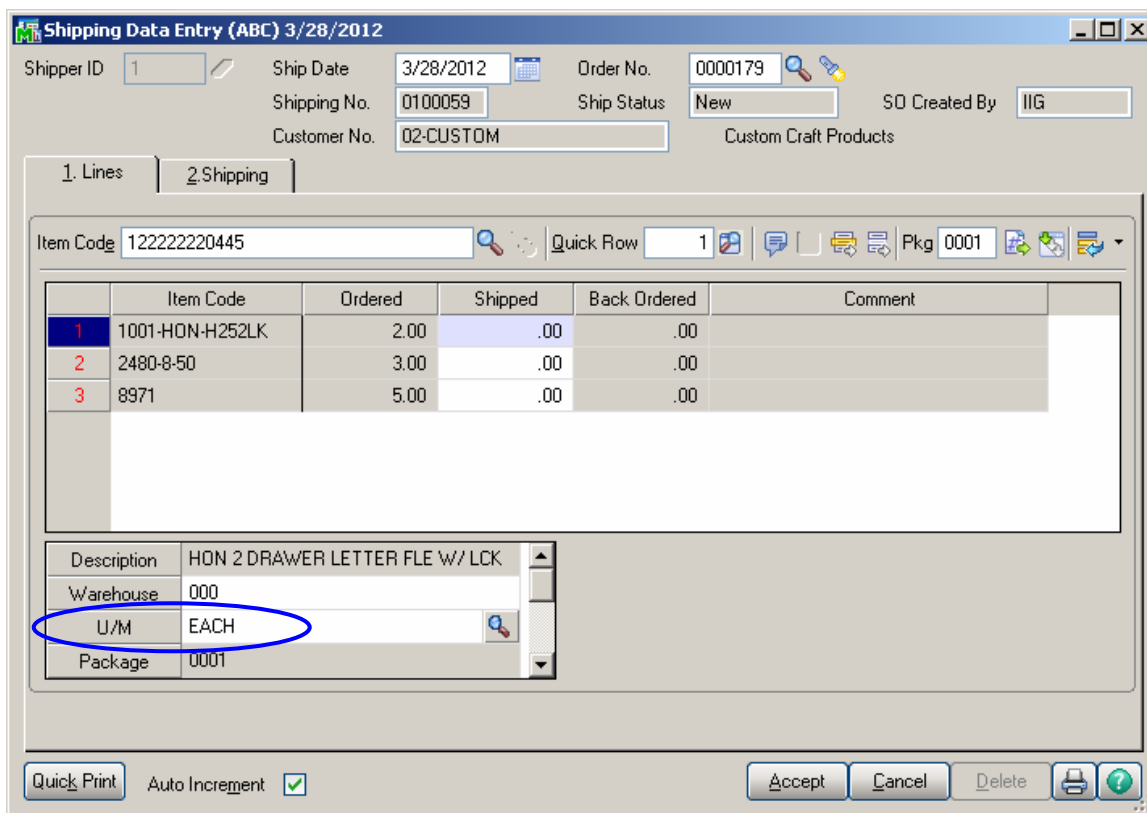
Total Amount .00

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.

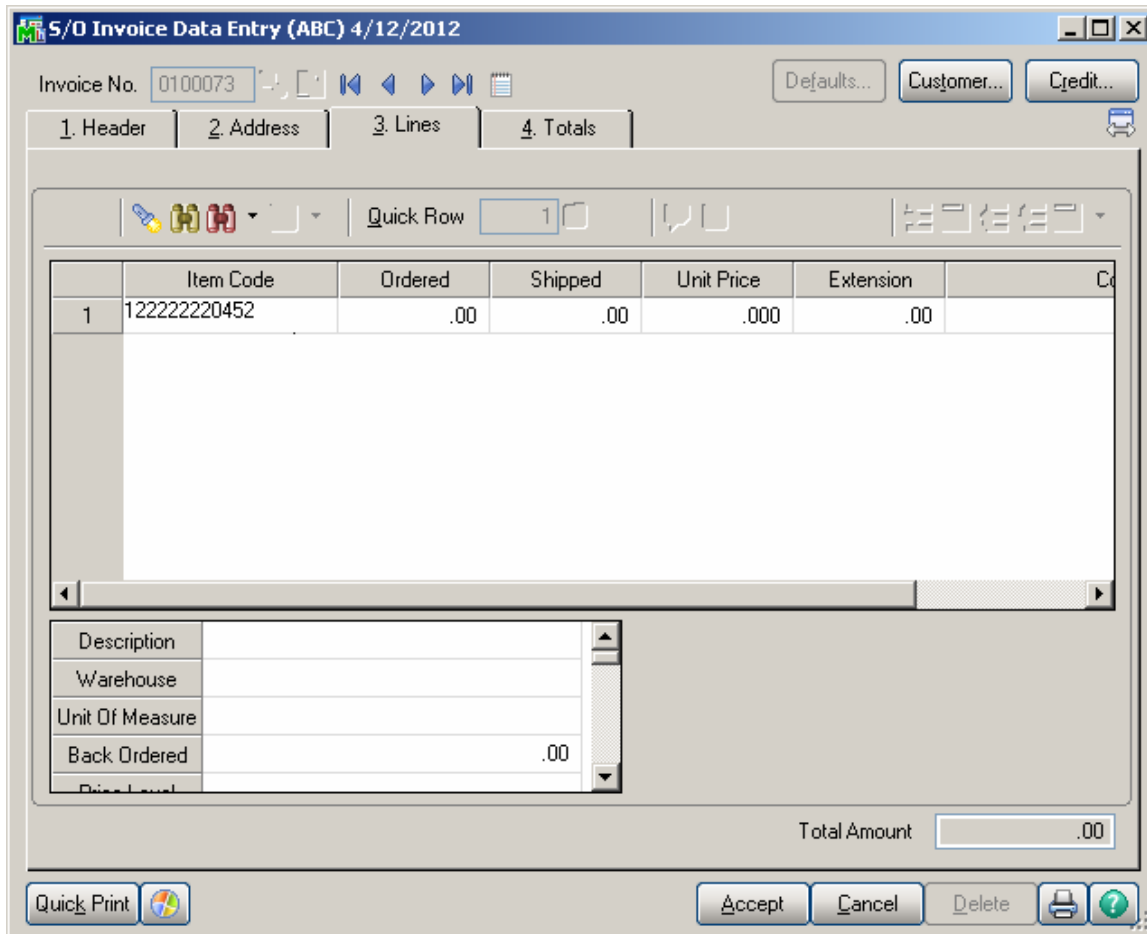
Note: If there is no U/M specified for the scanned UPC Code the Sales Unit of Measure from the Inventory Master

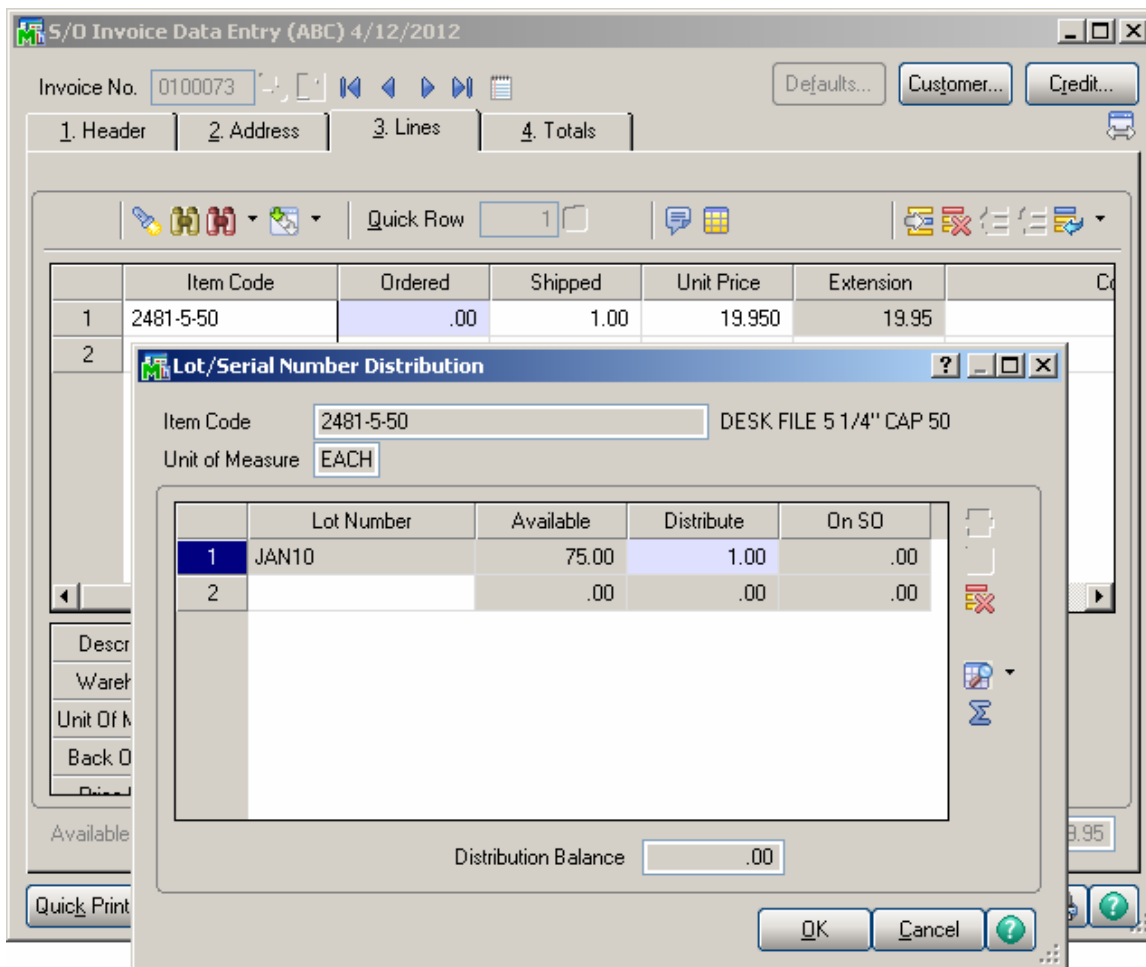
file will be taken into account when increasing the quantity of the line.

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 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, when entering/scanning that UPC Code in the Item Code field of the Invoice Date Entry and Shipping Data Entry lines, Shipped quantity will be incremented by one and auto distribution will be done by the scanned Lot number. If in current warehouse there is not a lot number matching the scanned one auto distribution will not be done and the Lot/Serial Number Distribution screen will popup.





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) 3/28/2012

Order Number 0010018 Defaults... Vendor...

1. Header 2. Address 3. Lines 4. Totals User useriig

Quick Row 1

	Item Code	Ordered	Back Ordered	Unit Cost	Extension	
1	12222220247	.00	.00	240.660	.00	
2		.00	.00	.000	.00	

Description: DESK FILE 5 1/4" CAP 50
Warehouse: 000
Unit of Measure: BOX1
Qty Received: .00

Total Amount .00

Quick Print... Accept Cancel Delete

Purchase Order Entry (ABC) 3/28/2012

Order Number: 0010018 Defaults... Vendor...

1. Header 2. Address 3. Lines 4. Totals User: useriig

Quick Row: 1

	Item Code	Ordered	Back Ordered	Unit Cost	Extension
1	2481-5-50	.00	.00	240.660	.00
2		.00	.00	.000	.00

Description: DESK FILE 5 1/4" CAP 50
 Warehouse: 000
 Unit of Measure: BOX1
 Qty Received: .00

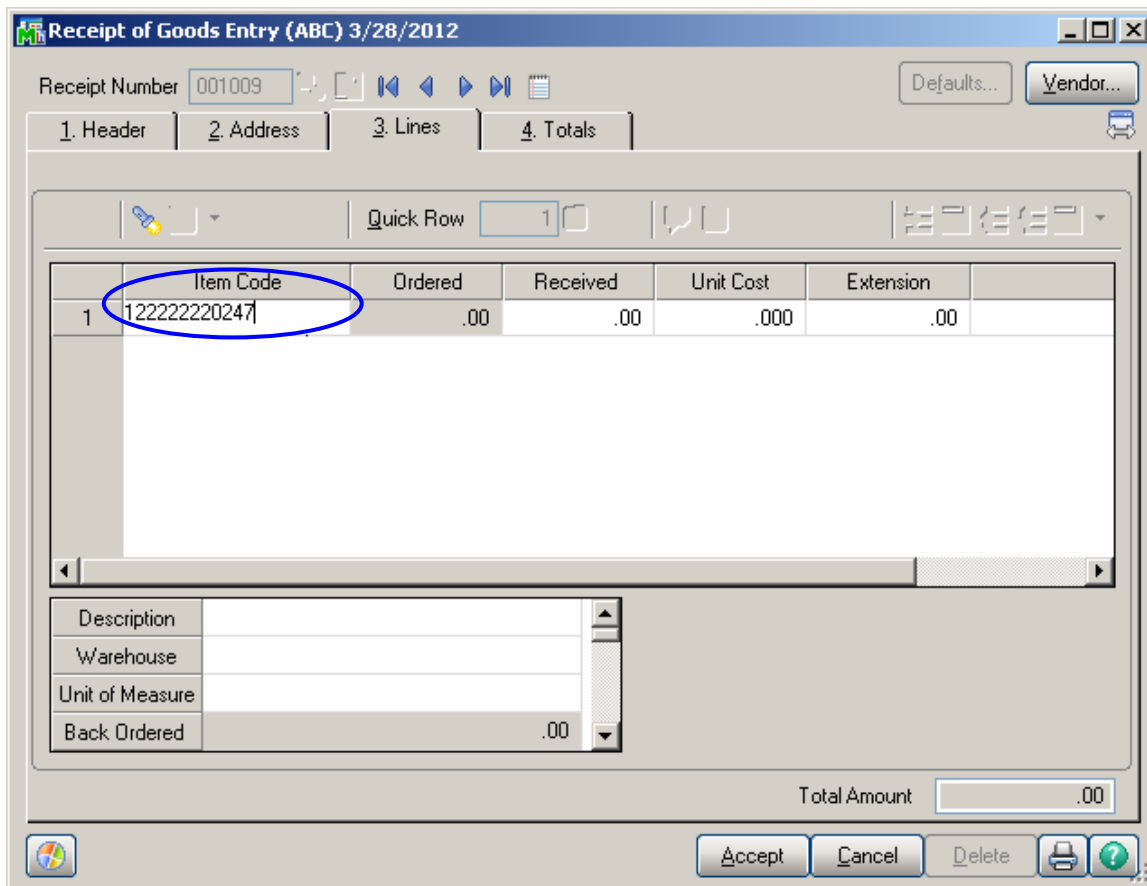
Enter Unit of Measure (EACH,CASE) Total Amount: .00

Quick Print... Accept Cancel Delete [Print Icon] [Help Icon]

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) 3/28/2012

Receipt Number 001009

1. Header | 2. Address | 3. Lines | 4. Totals

	Item Code	Ordered	Received	Unit Cost	Extension
1	2481-5-50	.00	.00	240.660	.00
2		.00	.00	.000	.00

Quick Row 1

Description	DESK FILE 5 1/4" CAP 50
Warehouse	000
Unit of Measure	BOX1
Back Ordered	.00

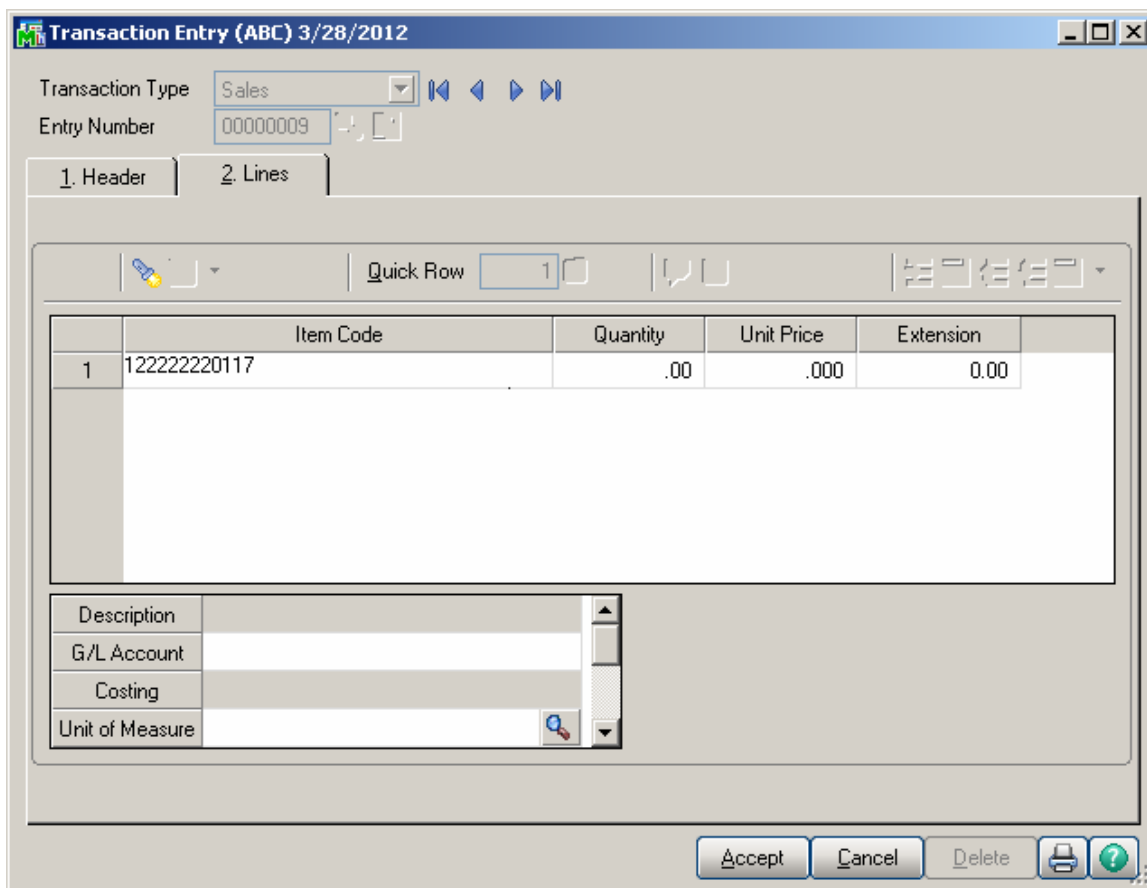
Enter Unit of Measure (EACH,CASE) Total Amount .00

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.



Transaction Entry (ABC) 3/28/2012

Transaction Type: Sales

Entry Number: 00000009

1. Header | 2. Lines

Quick Row: 1

	Item Code	Quantity	Unit Price	Extension
1	1001-HON-H254	2.00	131.000	262.00
2		.00	.000	0.00

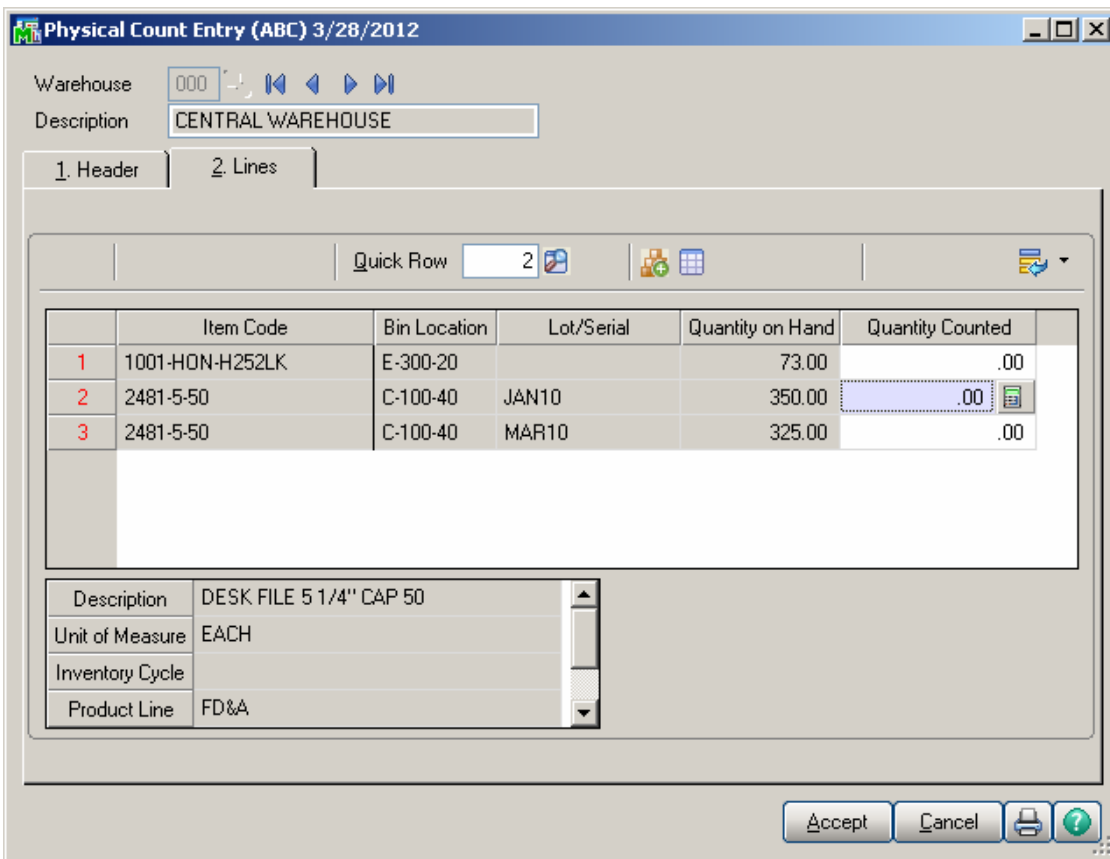
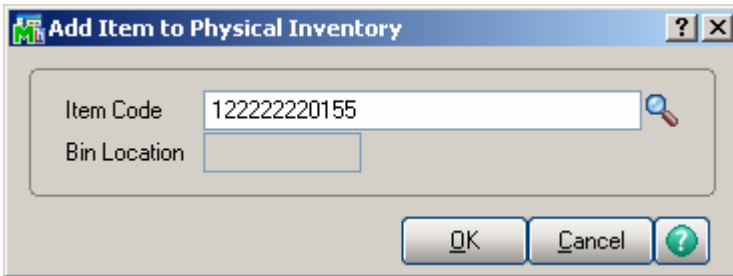
Description	HON 4 DRAWER LETTER FLE W/O LK
G/L Account	450-01-01
Costing	FIFO
Unit of Measure	EACH

Accept Cancel Delete

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 the corresponding item is loaded in the grid.

Note. If the UPC Code and the Alias Number of an Item coincide then the preference is given to the Alias Number.

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.

Production Entry (ABC) 7/21/2012

Production Number: 0000012

1. Header | 2. Lines

Production Date: 7/21/2012

Bill Number: 12222220438

Bill Type:

Revision:

Option Code:

Quantity: .00

Unit of Measure:

Effective Date: 7/21/2012

Parent Warehouse: 000 CENTRAL WAREHOUSE

Component Warehouse: 000 CENTRAL WAREHOUSE

Explode Sub-Assemblies:

Accept Cancel Delete

Production Entry (ABC) 7/21/2012

Production Number 0000012 Defaults...

1. Header 2. Lines

Production Date 7/21/2012

Bill Number NEW_BILL SECRETARY DESK ENSEMBLE

Bill Type Standard

Revision 000

Option Code

Quantity .00

Unit of Measure EACH

Effective Date 7/21/2012

Parent Warehouse 000 CENTRAL WAREHOUSE

Component Warehouse 000 CENTRAL WAREHOUSE

Explode Sub-Assemblies

Accept Cancel Delete

The UPC codes are supported also for Component Items.

Production Entry (ABC) 7/21/2012

Production Number 0000013

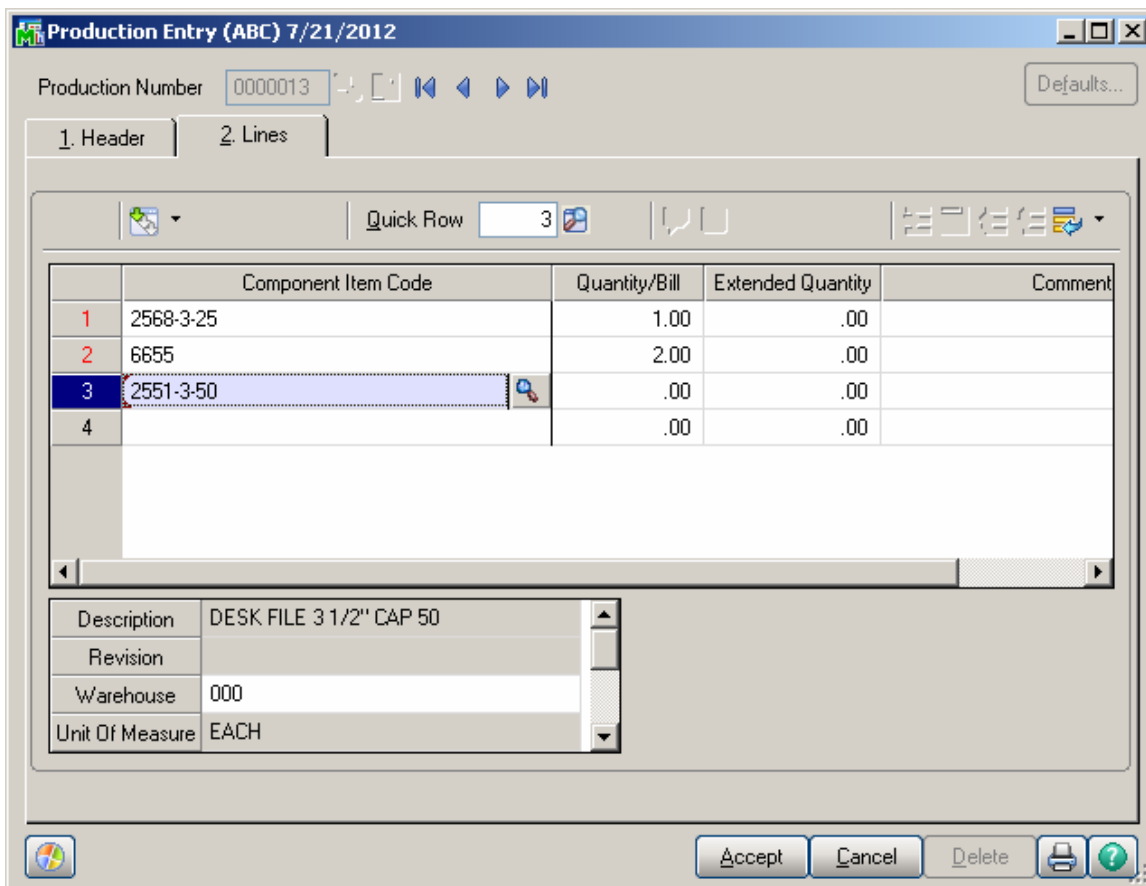
1. Header 2. Lines

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**.