Bill of Materials/Kitting Guide

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This document has been prepared to conform to the current release version of OPEN SYSTEMS Accounting Software. Because of our extensive development efforts and our desire to further improve and enhance the software, inconsistencies may exist between the software and the documentation in some instances. Call your customer support representative if you encounter an inconsistency.

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CHAPTER 1

1

Introduction

Welcome to OSAS

Welcome to the Bills of Materials/Kitting application for OPEN SYSTEMS Accounting Software® (OSAS®). Bills of Materials/Kitting helps you manage assembled and kitted items in inventory by recording the components involved in these items. Bills of Materials/Kitting works with the OSAS Inventory application to calculate how many assembled items you can build from existing component quantities and with the Sales Order application to sell assemblies and kits.

Bills of Materials/Kitting plugs into Resource Manager, the foundation of OSAS. Consult the Resource Manager guide for more information on basic OSAS functionality and details on how Resource Manager works within the OSAS system.

About This Guide

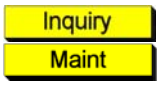
This guide describes the functions that make up the Bills of Materials/Kitting application and gives details on how Bills of Materials/Kitting fits into your existing business workflow. This guide is divided into these sections:

- Chapter 1 introduces OSAS and the Bills of Materials/Kitting application, and describes the basics of the Bills of Materials/Kitting system and how to navigate around OSAS.

- Chapter 2, Installation and Conversion, details how to install Bills of Materials/Kitting using Resource Manager and how to create or convert the data files it requires.
- Chapter 3, Getting Started, gives information and checklists on the steps you need to perform to set up Bills of Materials/Kitting.
- Chapters 4 through 12 contain function descriptions organized by menu. These chapters mirror the order that appears on the Bills of Materials/Kitting menu.
- The Appendixes contain supplementary material not directly related to Bills of Materials/Kitting functionality.
- The Index is a topical reference to the information in the rest of the chapters, and concludes this guide.

Conventions

This guide uses the following conventions to present information.



When the **Inquiry** or **Maintenance** commands (or both) are available for a field, the Inquiry and Maint flags appear in the margin. See page 1-18 and page 1-22 for more information on these commands.

When you see the phrase “use the **Proceed** (**OK**) command” in this guide, press **Page Down** in either text or graphical mode to continue. In graphical mode, you can also click **OK** to proceed.

The Bills of Materials/Kitting System

Use Bills of Materials/Kitting to account for assemblies that you manufacture (bills of materials) or take from inventory and sell (kits). The assemblies can be created from raw materials, other assemblies, or a combination of raw materials and assemblies.

For example, a computer reseller sells a computer system as a single unit made up of a monitor, a keyboard, a CPU, a printer and a printer stand. The reseller buys the monitor, the keyboard, the CPU and the printer from different companies. The business also buys raw material for the printer stand, but the reseller's business builds the stand for the customer.

The computer system is a kit. The reseller identifies the system as a kit ID (CS0001), with five types of components from inventory: one monitor, one keyboard, one CPU, one printer, and one stand. Each can be sold separately.

The stand is an assembly represented as a bill of materials. The reseller identifies it as an assembly ID (SH0001), with three types of components: five boards, two metal plates, and eighteen screws. The boards, plates, and screws are not sold separately from each other.

The parts that make up the other components are not sold separately either—for example, the **F7** key or the monitor shell is not sold separately. The difference between the stand and the other components is that the reseller is in charge of assembling the stand. The reseller does not need to assemble a keyboard, a monitor, and a CPU; they may as well be raw materials.

The example illustrates the difference between a kit and a bill of materials. Each different kind of component in a kit can be sold separately. (You must use the Sales Order application to sell kits; Bills of Materials/Kitting does not work with the Accounts Receivable application alone.) Selling a kit is no different from selling its components separately (other than saving keystrokes).

A bill of materials is composed, at least in part, of components that are not sold separately and that the user's business is in charge of building.

The final stage involving a kit is its sale through the Sales Order application (which recognizes the item as a kit). The final stage involving a bill of materials is updating the **INVExxx** (Inventory Items) file with the on-hand quantity of the finished product. After the assembly is built, it is identified as an item in the Inventory application, and you can sell it as an item through the Accounts Receivable application or the Sales Order application.

An assembly (or a built bill of materials) is identified differently from a kit. Bills of Materials/Kitting is the only OSAS application that identifies an item ID as an assembly ID. Inventory, Accounts Receivable, and Sales Order see an assembly as another item. However, Bills of Materials/Kitting and Sales Order distinguish between a kit and an item.

Inventory and Bills of Materials/Kitting check the Inventory system for the item ID if the item is an assembly. Sales Order and Bills of Materials/Kitting read the **BKMHxxx** (Master Header) and **BKMDxxx** (Master Detail) files for the item ID if the item is a kit.

If an assembly is sold as a kit, the appropriate items are subtracted from Inventory. Following the example above, if the reseller sells one kit CS0001 (the computer system), the on-hand quantities of CPUs, keyboards, monitors, printers and stands are all decreased by one.

If an assembly is sold as an item, its quantity decreases by one in Inventory; the quantities of its constituent parts decrease when the assembly is being built. Following the example above, when the computer system is sold, the number of stands decreases by one, but the number of boards, plates, and screws stays the same. Those numbers are adjusted accordingly only when you use the **Build Assembly** function.

If the reseller sells the kit and each component decreases by one, the reseller must check the quantities of each piece of equipment. If the number of monitors, keyboards, CPUs, or printers is in the negative range, the reseller orders more from the vendor. If the number of stands is in the negative range, the reseller, knowing that the stand is an assembly, sees from the bill of materials for the stand that each stand uses five boards, two plates, and eighteen screws.

The reseller checks inventory again for the bill of materials' components. If the right quantity of necessary items is not in stock, the reseller places the appropriate order. If the right quantity is in stock, the reseller supervises the assembly of the stand and then uses Bills of Materials/Kitting to enter the fact that a stand has been built.

To do this task with only the Inventory application, the reseller needs to know which items make up a stand along with any other items the business is responsible for making. Inventory can track an item's ID, description, quantity, cost, and so on, but it cannot automatically track its constituent parts or quantities of those parts.

Daily Work

Use the Daily Work functions for operations that involve building and tracking assemblies, producing the Build Assembly Journal, undoing a build, and posting transactions.

Reports

Use the Reports functions to produce summarized information about components, costs, and histories.

File Maintenance

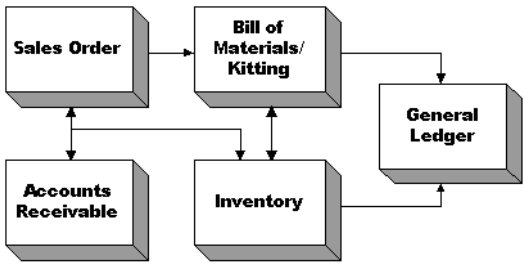
Use the File Maintenance functions to set up and maintain information about assemblies and kits.

Master File Lists

Use the Master File Lists functions to produce information about kits and bills of material.

Application Interaction

Bills of Materials/Kitting requires Inventory to run. These two applications can be used alone, but are most useful when you interface them with other applications.



Interfacing applications means that the information you enter in one application can be transferred to and used in other applications. Doing so reduces data entry time and the number of errors that might happen along the way.

Productivity Reports

Bills of Materials/Kitting includes a number of productivity reports in Microsoft Excel® format. These reports connect directly to your OSAS data via the ODBC/ JDBC driver (included with OSAS 7.5) and allow you to use spreadsheet tools to manipulate the data as you want and produce charts and graphs to visualize trends.

The spreadsheet reports are listed on the **Productivity Reports** menu. Double-click a report name to automatically launch Excel or any other spreadsheet program capable of opening an Excel-formatted spreadsheet to open the report. Use the selection boxes to filter the information that appears in the report, or use the tools within your spreadsheet software to create charts and graphs from the report's data.

Starting OSAS

OSAS runs on an operating system supported by 150 MB of permanent storage and 4 MB of RAM. You may need additional space or memory, depending on the size of your data files and the operating system you use. Consult your reseller for more information.

In Windows

To start OSAS on a computer running Windows, double-click the OSAS shortcut on the desktop or access the program from the **Start** menu.

In Other Operating Systems

To start OSAS on an operating system other than Windows, enter **osas** at the operating system prompt. If your operating system has graphical capabilities, you can also use the OSAS shortcut to start OSAS.

Using Parameters

You can use the -u, -c, -a, and -t parameters in OSAS shortcut properties or after the **osas** command so that the system automatically uses the appropriate user ID, company ID, and access code to save time logging in.

In Windows, open the OSAS shortcut's properties and enter these parameters after the path in the **Target** field (as in the example below; be sure to use the correct directories for your system).

C:\basis\bin\bbj.exe osasstrt.txt -q -tT00 **-c**D:\osas70\progrm\config.bbx **- -u**Sam **-a**apple **-c**H

Note: In Windows, the **-u**, **-c**, and **-a** parameters must follow the separation dash.

In other operating systems, enter the parameters after the osas command, as in this example:

osas **-t** T2 **-c** B **-a** apple

Note: You can enter these parameters in any order, but you must leave a space between the parameter mark (**-t**, **-c**, or **-a**) and the parameter itself.

Refer to the Resource Manager guide for more information on these parameters.

Logging In

After you start OSAS, the login screen appears.

To log in to OSAS, enter your **User ID**, the **Company ID** you want to work with, and your **Access Code**. If you want to save your access code so that you do not need to enter it again, select the **Save Password?** check box (or enter **Y** in text mode) to save your information. Finally, click **OK** or press **Enter** to log in.

This screen appears only after you have set up users and access codes for the OSAS system.

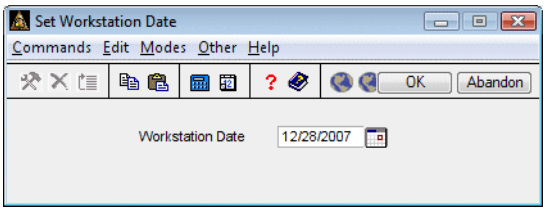
Access Codes

Access codes limit use of the system and protect sensitive information. Each code allows access to specific applications, menus, and functions. If you cannot select a menu or function, your access code is not authorized for it. Use the **Access Codes** function in Resource Manager to set up access codes.

To change access codes, select **Access code** from the **File** menu, click the **Access Code** button on the toolbar, or press **F4** on the main menu. When the Access Code box appears, enter the access code to change to and press **Enter**.

Workstation Date

To change the workstation date, select **Workstation date** from the **File** menu, click the **Change Date** button on the toolbar, or press **F6**.



When the Workstation Date box appears, use the button or your keyboard to enter the date and press **Enter**.

Navigating OSAS

OSAS menus and functions are available in two modes: graphical and text. The graphical mode allows both keyboard and mouse commands and uses data entry fields and buttons similar to those found in any graphical software program. The text mode presents information in a simpler text format and uses keyboard commands to access functions and move around the screen. If you use an operating system that does not have graphical capabilities, the text mode is the only mode available.

You can use either text or graphical function screens independently of the main menu. For example, you can use text function screens while using the graphical main menu, and vice versa. Select **GUI Functions** from the **Modes** menu or press **Shift+F6** to toggle between the text and graphical modes for function screens.

When available, press **Shift+F5** to switch between graphical and text menu modes, or press **Shift+F6** to switch between modes on function screens. You can also use the Resource Manager **Defaults** function to select the default mode to use for the main menu and function screens.

In text mode, use the **Page Up**, **Page Down**, arrow, and **Enter** keys to move between menus, select and enter functions, and move around function screens. When a list of commands appears at the bottom of a function screen, press the highlighted letter to use a command. These methods also work in graphical mode, or you can use the mouse to click on fields and command buttons.

Graphical Mode

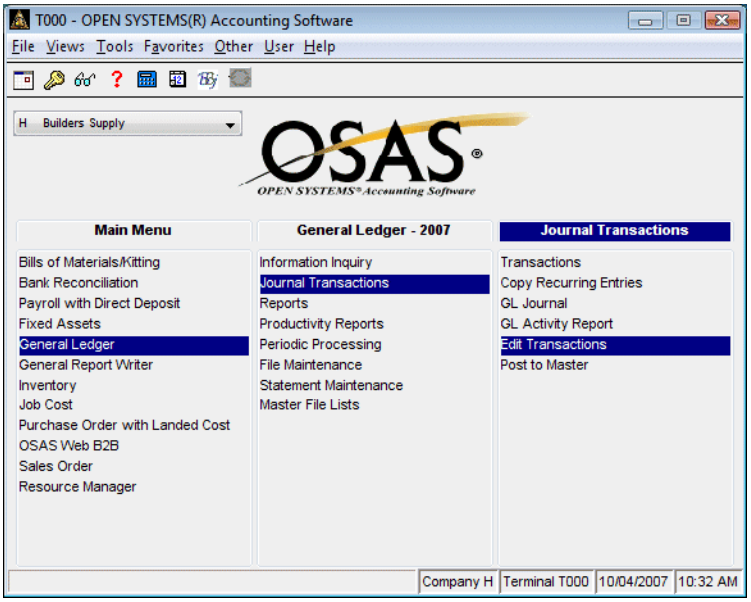
If you’re familiar with other graphical software programs, you’ll find it easy to navigate around the OSAS graphical mode, which uses buttons, toolbars, text entry boxes, and menus to help you move through your tasks.

Main Menu

If you use BBj in graphical mode, the main menu is available in two flavors: graphical and MDI. To switch between the two styles, press **Shift+F5**. If you use Visual PRO/5, the graphical main menu is the only graphical menu available.

Graphical Main Menu

The graphical main menu is shown below.

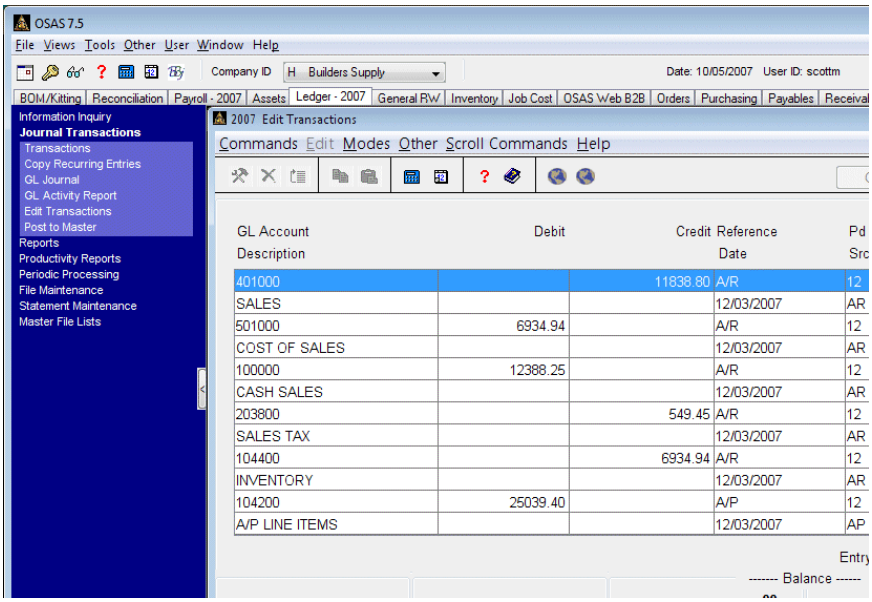


You can move around the graphical menu in these ways:

- Click an application to view that application's menu. Click a menu item to view its functions. Double-click a function name to enter that function.
- To exit from the graphical menu, click a different application or menu name or press **Tab** to return to the main menu.
- To exit from OSAS, click the **Close** box in the upper-right corner of the screen, press **F7**, or select **Exit** from the **File** menu.

MDI Main Menu

The MDI menu centralizes all OSAS functionality in one location: applications appear as tabs at the top of the screen, their menus and functions appear in a navigation pane on the left side of the screen, and function screens appear in the large pane on the right. Using this menu, you can open more than one function screen at a time and move or minimize screens as needed. However, you cannot open two functions that lock the same data file at the same time.

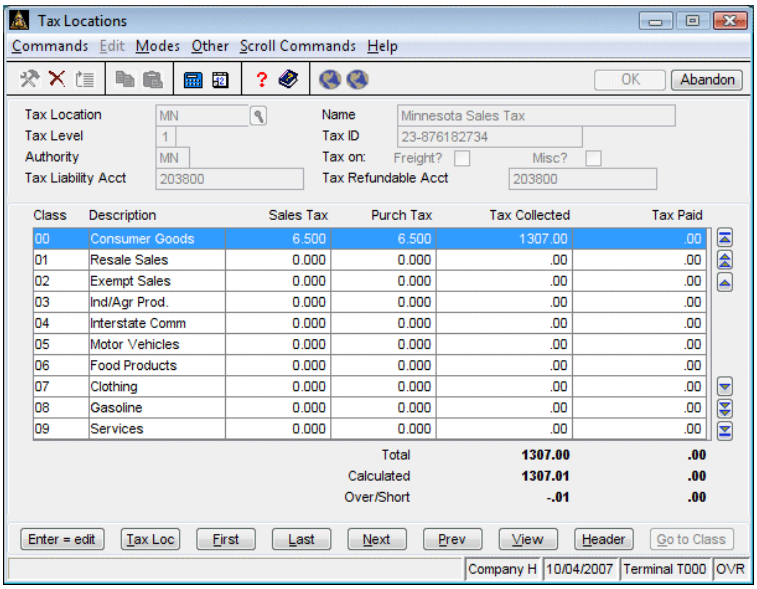


You can move around the MDI menu these ways:

- To view an application's menus, click that application's tab.
- To view the functions a menu contains, click the menu name. The menu expands to list the functions it contains. Click the function name to enter the function. The function screen appears in the right pane.
- To exit from a menu, click a different menu name or application tab. To exit from OSAS, click the **Close** box in the upper-right corner of the screen, press **F7**, or select **Exit** from the **File** menu.

Function Screens

Graphical screens contain the same functionality as text screens, presented in a graphical format that includes easy access to commands via the mouse.



You can move around the screen in these ways:

- Use the mouse or press **Tab** to move from field to field. Use the scroll buttons to move from line to line in scrolling regions.
- If a screen appears prompting for the kind of information to enter or maintain (such as on File Maintenance or Transactions screens), select the appropriate option and click **OK** to continue.
- Press **Page Down** if prompted to move to the next section.
- Click **Header** when it appears to return to the screen's header section.
- Press **F7** to exit the screen and return to the main menu.

Menus

Both the graphical main menu and graphical function screens contain drop-down menus that give you access to additional commands without using the function keys. While you can use the function keys to access commands in graphical mode, you may find it easier to access command through these menus.

To access a menu's commands, click a menu title. The commands for that menu appear, followed by any associated hot key combinations in brackets < >. To use a command, click the command name or press the hot key combination.

Refer to the Resource Manager guide for more information on the menus available in OSAS and their commands.

Shortcut Menu

OSAS gives you quick access to commands relating to the screen you're using via a shortcut menu. The commands that are available depend on the function and the field you are currently using. To use these commands, click the right mouse button and select the command from the menu that appears.

On the main menu, the shortcut menu gives you access to commands that help you manage your **Favorites** menu, switch between sample and live data, perform certain setup tasks, and view function information. On function screens, this menu helps you access help documentation, move around the function screen, work with EIS dashboards, and so on.

Other Commands Menu

The **Other Commands** (or **F4**) menu is available on both graphical and text menu and function screens and gives you access to additional utilities and commands not directly related to the function you're currently using. Among other things, these commands open calculators or allow you to view or enter additional information. In text mode, press **F4** twice on the menu or once on function screens to access this menu.

Consult Appendix A in the Resource Manager guide for more information on the commands available on the **Other Commands** menu.

Information Menu

The **Information** (or **Shift+F2**) menu is available in some graphical or text function screens in certain applications and gives you access to additional information about a customer, vendor, item, job, bill of material, or employee. The commands available on the **Information** menu are determined by the applications you have installed, and can include:

- General Information
- Comments
- History
- Documents
- Address Lookup

Not all of the commands above appear on every **Information** menu; instead, commands are available only as they are relevant to the task you are performing. For example, if you are entering a transaction in Accounts Receivable, you can access comments or documents about items or customers but not about employees or vendors.

Consult Appendix A in the Resource Manager guide for more information on how to use the functions on the **Information** menu.

Favorites Menu

The **Favorites** menu gives you quick access to the OSAS functions you use most by allowing you to add selections for entire menus or particular functions to a custom menu. After you've set up the menu, select **Change to Favorites** from the graphical **Favorites** menu or press **F2** to access the functions.

The **Favorites** menu saves you time by eliminating the need to switch between applications. You can add functions from several different applications to the **Favorites** menu and access them all there rather than switching between applications on the main menu to access the functions you need.

To add a function to the **Favorites** menu, select the function you want to add and press **F10**. Press **F2** to switch to the **Favorites** menu to confirm that your selection was added.

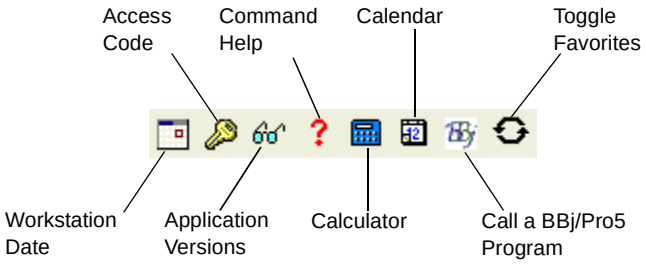
To remove a function from the menu, select the function on the **Favorites** menu that you want to remove and press **F10** again.

Toolbars

As with menus, graphical screens also contain toolbars that give you fast access to the most frequently used OSAS commands. The toolbar for the main menu differs slightly from that of function screens.

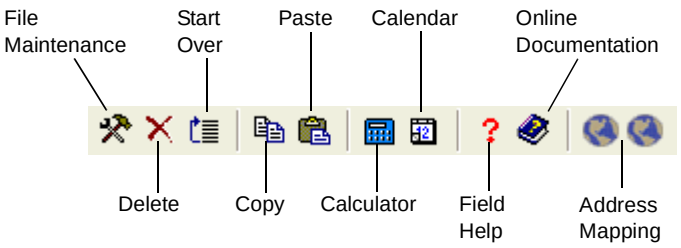
Main Menu Toolbar

The toolbar for the main menu is shown below. Click a button to access that command.



Function Screen Toolbar

The toolbar for function screens is shown below. Click a button to access that command.



Date Fields

If you use BBj in graphical mode, click the **Calendar** button when it appears next to date fields to open a calendar so that you can select the date you want to enter into that field.

Browse

If you use BBj in graphical mode, you can use the **Browse** button when it appears next to fields to navigate to directories and files and automatically enter file paths into that field. Click the **Browse** button to open the Select Directory/ File screen, then navigate to the directory or file and click **Open** to automatically enter the file path in the field.

Inquiry

The Inquiry command helps you look up and select valid entries for fields that are connected to master file records. For example, when you use the Inquiry command in a **Batch ID** field, OSAS lists all batches you have set up so that you can select the one you want to enter in that field. When the **Inquiry** button appears next to a field, you can either click the button or press **F2** to open the Inquiry screen and search for valid entries.

Maintenance

The Maintenance command allows you to enter or edit master file records on the fly from within functions. For example, you can use the Maintenance command to add a new customer or item from within the **Transactions** function. The Maintenance command is available when the **Maintenance** button appears on the toolbar. Click the button or press **F6** to open the File Maintenance function associated with that field and enter or edit a new master file record.

Address Mapping

When you are working with a screen that contains an address, you can use the **Address Mapping** command to view a map of that address. This command combines address information with the URL and search variables in the Resource Manager **Web Setup** function and the **Map Lookup ID** in the **Company Setup** function to direct your web browser to a mapping website and generate the map.

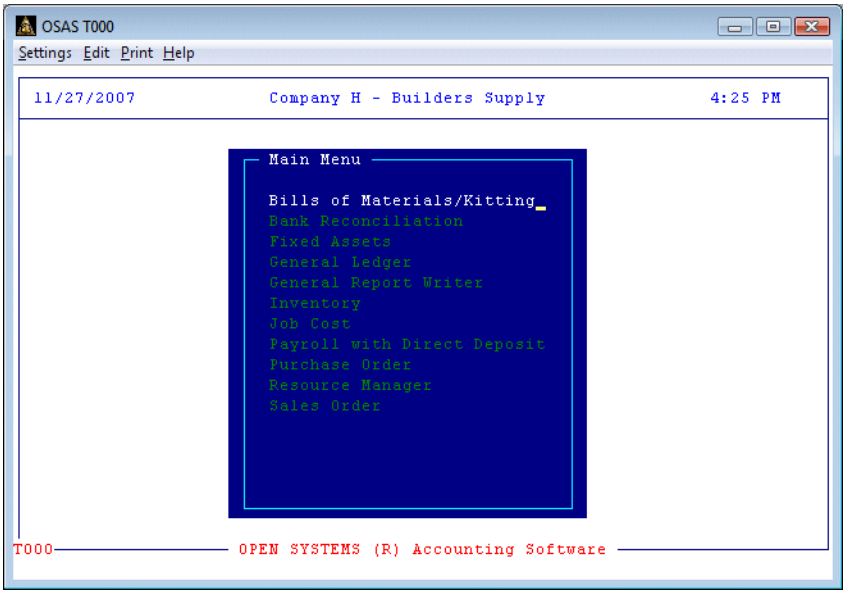
Note: Before you can view maps, you must set up mapping website information in the Resource Manager **Web Setup** function, select the **Map Lookup ID** to use in the Resource Manager **Company Information** function, and enter the path to your workstation's web browser in the Resource Manager **Defaults** function.

Text Mode

The OSAS text mode is available on all operating systems. If you use OSAS on an operating system that does not have graphical capabilities, the text mode is the only mode available. In text mode, all screens are presented in an easy-to-use textual interface that you navigate through using keyboard commands.

Main Menu

The text main menu is shown below.



When you select an application, the application's menu is superimposed over the main menu. Selecting an entry on an application menu opens a function screen or a submenu.

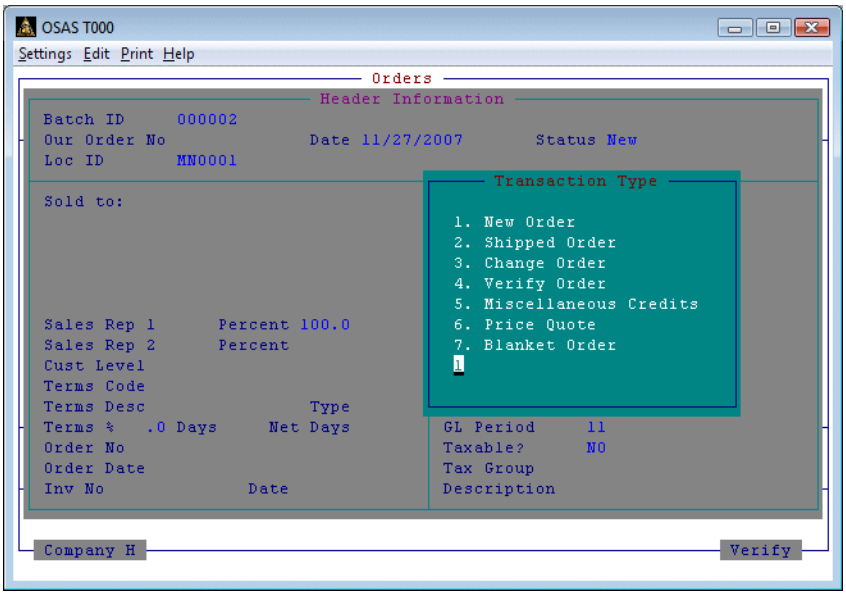
You can move around the text main menu in these ways:

- Use the arrow keys to move the cursor up and down to highlight the application you want. Then press **Enter** to select it.

- Press the first letter of the application you want to move the cursor to the first application beginning with that letter. Continue to press the letter key or the down arrow until the application you want is highlighted, then press **Enter** to select it.
- Use the mouse to click an application to view that application's menu.
- To move to the first application on the menu, press **Home**. To move to the last application on the menu, press **End**.
- On an application menu, press **Page Up** to move to the menu immediately behind it. If you are several levels away from the main menu, you can return to the main menu by pressing **Page Up** repeatedly or by pressing **Tab** once.
- To exit from OSAS, press **F7**.

Function Screens

Like the text menu, OSAS text function screens can be used on all operating systems and in combination with graphical menus.



You can move around the screen these ways:

- Press **Enter** or the down arrow to move from field to field.
- To use a command that is listed in the command bar, press the highlighted letter.
- Use hot key commands to access information screens or to toggle commands on and off. Refer to Appendix B in the Resource Manager guide for more information on these commands and their corresponding hot keys.
- If a screen contains more than one section, press **Page Down** when prompted to move to the next section.
- If a menu appears prompting you for the kind of information to enter or maintain (such as in the example and on Transaction and File Maintenance screens), select the appropriate option and press **Enter**.
- To exit the screen and return to the menu, press **F7**.

Menus

Like the graphical mode, the text mode also includes menus that give you access to commands that open additional utilities, show additional information about the task at hand, or set up a custom menu that contains frequently-used commands.

Refer to Appendix A in the Resource Manager guide for full details about the menus available in OSAS.

Other Commands

The **Other Commands** (or **F4**) menu gives you access to additional utilities and commands not directly related to the function you're currently using. In text mode, press **F4** twice on the menu or once on function screens to access this menu. See page 1-15 for more information on this menu.

Information Menu

The **Information** (or **Shift+F2**) menu gives you access to additional information about a customer, vendor, item, job, bill of material, or employee. In text mode, this menu is available when the Info flag appears at the bottom of a function screen.

The commands on the menu are available only as they are relevant to the task you are performing. For example, if you are entering a transaction in Accounts Receivable, you can access comments or documents about items or customers but not about employees or vendors. See page 1-15 for more information.

Favorites Menu

The **Favorites** menu allows you add the OSAS menus or functions you use most frequently to a custom menu. After you've set up the menu, select **Change to Favorites** from the graphical **Favorites** menu or press **F2** to access the functions.

To add a function to the **Favorites** menu, select the function you want to add from the main menu and press **F10**. To remove a function from the menu, select the function on the **Favorites** menu that you want to remove and press **F10** again. See page 1-16 for more information on this menu.

Commands and Flags

Both the text menu and text function screens let you use commands to drill down to more information, change companies or access codes, switch to sample data, and perform tasks related to the function you are using. These commands are analogous to the commands contained on drop-down menus in graphical mode.

You access commands by pressing the hot key combination for the command you want to use. If you're working with a keyboard that lacks function keys (labeled with an **F** followed by a number) or if you're working with an emulator in UNIX (which can cause function keys to become unavailable), press the appropriate alternate key combination to access the command.

Refer to Appendix B in the Resource Manager guide for a list of all OSAS commands and their associated hot keys.

Not all commands are available for every function or field; when a command is available, a flag appears at the bottom of the function screen. Common flags include **Quick**, **Info**, **Maint**, **Inquiry**, and **Verify**.

- The **Quick** flag reminds you that you are using the Quick Entry mode to skip fields that are not required. Press **Ctrl+F** to toggle quick entry on and off.
- When the **Info** flag appears, press **Shift+F2** to access the **Information** menu to access additional information about a customer, vendor, item, job, bill of material, or employee. See page 1-15 for more information on this menu.

- When the **Maint** flag appears, press **F6** to launch the appropriate File Maintenance function to edit a master file record or enter a new one "on the fly." When you finish, press **F7** to return to the function you were using.

- When the **Inquiry** flag appears, press **F2** to use the **Inquiry** command to look up additional information and select valid entries for the field you are in.

- The **Verify** flag reminds you that you are using verification. When this flag appears, you must provide verification when you press **Page Down** or use the **Proceed** (**OK**) command. Press **Ctrl+V** to toggle verification on and off.

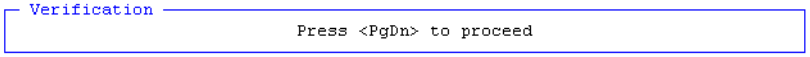
Command Bar

The command bar appears at the bottom of function screen and gives you access to commands that allow you to move around the screen, add or edit information, change settings for selected lines, or select output devices.

The commands that are available depend upon the function you are using, and are analogous to the command buttons available on graphical screens. Press the highlighted key to use a command.

Messages

Messages appear at the bottom of the screen when a command is unavailable or when OSAS needs information to continue.



Address Mapping

When you are working with a screen that contains an address, you can use the **Address Mapping** command menu to view a map of that address. This command combines address information with the URL and search variables in the Resource Manager **Web Setup** function and the **Map Lookup ID** in the **Company Setup** function to direct your web browser to a mapping website and generate the map.

The **Address Mapping** command is available when the **Map** flag appears at the bottom of the screen. To view a map of the first address on the screen, press **Shift+F4**. To view a map of the second address (if present), press **Shift+F5**. The second command is not available when there is only one address.

Note: Before you can view maps, you must set up mapping website information in the Resource Manager **Web Setup** function, select the **Map Lookup ID** to use in the Resource Manager **Company Information** function, and enter the path to your workstation's web browser in the Resource Manager **Defaults** function.

Reports

All OSAS applications contain a variety of reports to help you view and analyze your business data. Each report function includes a selection screen that allows you to select the range of information to include in the report, which appears in alphabetical order when the report is produced. After you select the information to include, use one of these options to output the report:

- Select **Printer** (or enter **P** in text mode) to send the report to a printer, then select the printer to use.
- Select **Print Preview** (or enter **R**) to view the report in a preview window, from which you can print the report later. This option is only available on Windows or graphical Linux workstations running BBj.
- Select **File** (or enter **F**) to save the report to a file, then change the directory path and file name (followed by the .txt extension), if necessary. Directory paths and file names must be less than 35 characters in length.

  Note: To preserve formatting, view the reports you save to a text file with a fixed-width or monospaced font (Courier or Lucida Console, for example).
- In text mode, enter **S** to view the report directly in an OSAS function screen, then select whether to view it in Standard or Compressed width.
- When available, select **Email** (or enter **M**) to e-mail the report, then enter the e-mail address to sent the message to, the subject for the message, and whether to include the report as an attachment to the message.

Generally, reports or forms that make up part of your audit trail cannot be e-mailed. You also must set up your e-mail system in Resource Manager before you can e-mail reports.

Note: To preserve formatting, view e-mailed reports (or attachments) with a fixed-width or monospaced font (Courier or Lucida Console, for example).

Consult the Resource Manager guide for more information about reports.

CHAPTER 2

2

Installation and Conversion

Installation

Before You Install Bills of Materials/Kitting

Make sure your system meets these minimum requirements before you install Bills of Materials/Kitting.

The Bills of Materials/Kitting system needs a minimum of 3 megabytes (3 MB) of disk space to work correctly with programs, sample data, data dictionaries, system files, and graphics files. Having more disk space available is necessary for the data files you create and maintain.

The OSAS system requires at least one megabyte (1 MB) of main memory to run. More memory may be necessary in certain environments and operating systems.

Installing Bills of Materials/Kitting

Use the **Install Applications** function in Resource Manager (see the *Resource Manager User's Manual*) to install Inventory. Then use the same function to install Bills of Materials/Kitting.

Setting up Bills of Materials/Kitting

Once you have Bills of Materials/Kitting installed on your system, you must prepare your data files for everyday use.

You can prepare files for use with Bills of Materials/Kitting in one of two ways: you can create and set up your files manually on a new system, or you can convert your old files when you upgrade from an earlier version. To create files on a new system, use the **Data File Creation** function on the **Company Setup** menu in Resource Manager (see the *Resource Manager User's Manual*). For instructions on converting your files, see the "Conversion" section later in this chapter.

You must install and set up Inventory before you set up Bills of Materials/Kitting. If you plan to use General Ledger or Sales Order with Bills of Materials/Kitting, you must install and set up those applications before you set up Bills of Materials/Kitting.

Conversion

If you use an earlier version of OSAS Bills of Materials/Kitting, you can convert your files from the older version to the current version.

When you are ready to convert files, use the **Data File Conversion** function on the **Company Setup** menu in Resource Manager (see the *Resource Manager User's Guide*) to upgrade Bills of Materials/Kitting data files. You can upgrade from version 4.xx, 5.xx, 6.xx, or 7.0x.

Follow the guidelines to convert to version 7.5:

You must install the new version of Bill of Materials/Kitting before you convert files. You can replace and update the programs properly only by using the **Install Applications** function in Resource Manager.

Before you convert an application's files, make note of the version number of the application from which you are converting. The **Data File Conversion** function has no way of determining the information from within the function.

Because tables are also converted when you convert data files, any changes made (including those in **Options and Interfaces**) since the initial set up may be lost. Check table settings and verify your options and interfaces selections after converting all companies. If you need to reconvert a company, either reset your options after conversion or back up the **xxTB** files before converting.

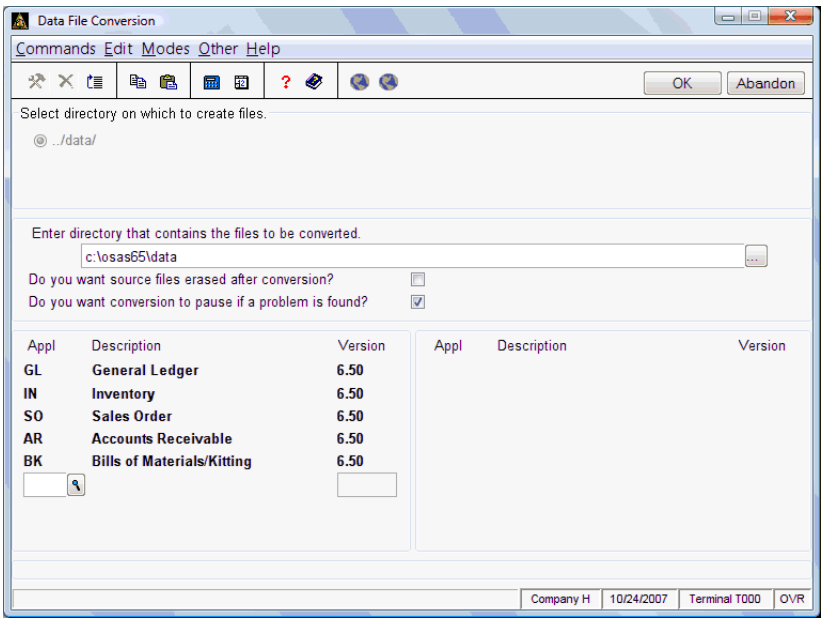
Before you convert an application's files, back up your data files.

Consider Your Setup

Before you try to convert from your version of Bill of Materials/Kitting, consider the exact setup of your system. Since OSAS code can be customized, modifications to your system might be lost if you install a new version of a program or update a file. If you are not sure if your system is ready for conversion, consult your value-added reseller.

Converting to Version 7.5

Select **Data File Conversion** from the **Company Setup** menu in Resource Manager. The function screen appears.



1. The system displays all valid OSAS data paths. Select the destination directory where your new data files will reside.

2. Enter the path (drive and directory) that has the files you want to convert. You cannot enter the same path as the path you selected as the destination.

3. If you want source files to be erased after conversion, select the check box (or enter **Y** in text mode); if not, clear the box (or enter **N** in text mode).

4. If you want the conversion process to pause if a problem occurs, select the box (or enter **Y** in text mode); if not, clear the box (or enter **N** in text mode). The system considers file corruption or evidence of data not converting correctly a problem.

5. Enter **BK** in the **Appl** column; Bills of Materials/Kitting appears.

6. Enter your earlier version number of Bills of Materials/Kitting, and press **Enter**. (You can determine the version by looking at the copyrights screen when you start OSAS, or in most versions, by using the Application Information tool button on the menu screen in graphical mode or by pressing **Shift+F2** in text mode.

7. If data files already exist for Bills of Materials/Kitting in the intended destination path, the **BK data files exist. Do you want this task to erase them?** prompt appears. If you want to erase the existing files and convert the files from the version in the source path, select **Yes** (or enter **Y** in text mode); if not, select **No** (or enter **N** in text mode). If you elect not to erase existing files, you must change your directory choices so that no conflict exists.

8. To convert, use the **Proceed** (**OK**) command.

9. The **Do you want a printout of error log after each application?** prompt appears. If you want the error log to be produced after files are converted for each application, select **Yes** (or enter **Y** in text mode); if you want the log to be produced after files for all applications are converted, select **No** (or enter **N** in text mode). If you are converting only Bills of Materials/Kitting files, your answer to this prompt makes no difference.

10. Answer the questions that appear relating to the conversion of the employee history and last-year files.

11. If a problem occurs and you indicated that you want the system to pause when a problem occurs, a prompt alerts you. To stop the conversion process, select **Yes** (or enter **Y** in text mode). To let the conversion run its course and investigate later, select **No** (or enter **N** in text mode).

12. When the process is finished, the files are converted. Select the output device for the error log.

    After conversion is finished and the error log is produced, the main menu—with Bills of Materials/Kitting added—appears.

CHAPTER 3

3

Set Up and Work Flow

Setting Up Bills of Materials/Kitting: Determining Options and Interfaces

Setting up the options and interfaces is a standard part of installation. The selections you make determine the way Bills of Materials/Kitting runs.

Interfaces

Bills of Materials/Kitting can be directly interfaced only with General Ledger. However, it gets most of its information from Inventory, which can be interfaced with several other applications. See the *Inventory User's Manual* and other user's manuals for information about other interfaces that could have an indirect effect on Bills of Materials/Kitting.

Bills of Materials/Kitting version 6.1 does not work with any version of Inventory, Accounts Receivable, or Sales Order lower than 6.10. Bills of Materials/Kitting performs a specific operation: it tracks the building of a bill of materials. This operation involves the creation of a retail item from other inventory items (and needs the Inventory application).

Assemblies involve only Bills of Materials/Kitting and Inventory. You can sell an assembly through Accounts Receivable or Sales Order, but its constituent parts are not directly taken into account at the point of sale.

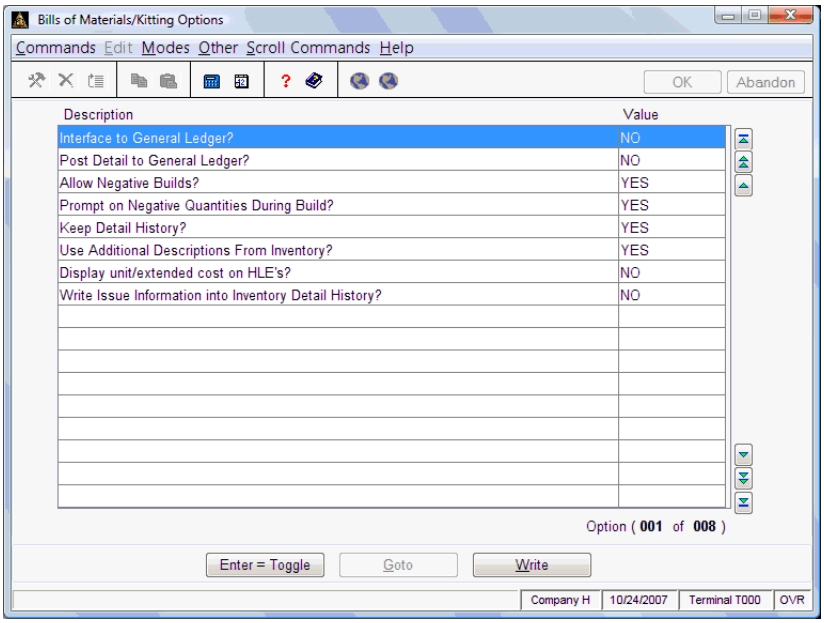
Building and selling kits involves grouping and selling items as a single item that can be sold only through Sales Order. If Sales Order is not interfaced with Bills of Materials/Kitting but Inventory is, you can take advantage only of the functions that pertain to assemblies; you can still build assemblies, but you cannot sell them as kits.

If you sell a kit through Sales Order, the constituent parts of the kit are taken into account. If Sales Order interfaces with Bills of Materials/Kitting and General Ledger, kit information is sent to the **GLJRxxx** file when you post.

If Bills of Materials/Kitting interfaces with General Ledger, information about builds is sent to the **GLJRxxx** file through the **BKJRxxx** (Transaction/Journal) file. If Bills of Materials/Kitting does not interface with General Ledger, no information is sent to the **GLJRxxx** file when you post.

Options

To begin setting up each company's options and interfaces, use the Resource Manager **Options and Interfaces** function (see the *Resource Manager User's Manual*). **BK** is the application ID. This screen appears:



Your answers to the following questions determine how the system works and how information flows through it.

1. Toggle to **YES** to interface Bills of Materials/Kitting with General Ledger. When you interface Bills of Materials/Kitting with General Ledger, the **BKJRxxx** (Transaction/Journal) file sends information about an assembly to the **GLJRxxx** (Journal) file when you post.

2. If you track the building of an assembly and one of its component's quantities falls into the negative range, you have a negative build.

   Toggle to **YES** if you want to allow a negative build or track the assembly of a bill of materials before you get the parts for it; otherwise, toggle to **NO**. You might want to select **YES** if you usually sell items before you build them.

3. Toggle to **YES** if you indicated that you allow negative builds and you want the system to warn you when you try to build an assembly that uses an item with a quantity of zero. Toggle to **NO** if you want the system to proceed tracking such a build without warning you first.

4. Toggle to **YES** if you want to keep history about each item in each kit; otherwise, toggle to **NO**. You must select **YES** if you want the Detail History Report in Sales Order to take kits into account.

5. Toggle to **YES** if the items involved with the assemblies and kits carry additional descriptions and you want to use them in Bills of Materials/ Kitting; otherwise, toggle to **NO**. If the items involved with the assemblies and kits do not carry additional descriptions from Inventory, your entry does not have an effect.

6. Toggle to **YES** if you want to display unit and extended costs on the build screens. Toggle to **NO** if you want to exclude the cost information from the screens during builds and inquiries.

7. Toggle to **YES** if you want detailed information about component movement written to the Inventory Transaction History file, or to **NO** if you do not want to save this information.

8. When you finish setting options, press **W** to save your changes and return to the Options and Interfaces screen where you can select another application or exit to the main menu.

Preparing Your Data

Follow these steps to prepare your data:

1. Organize your lists of components that constitute a kit or a bill of materials and the quantities for each. (Components, kits, and assemblies must be set up in Inventory first because Inventory must recognize each item.)

2. Prepare the information specified in Chapter 2 in the *Inventory User's Manual*.

3. Build tables (see page 6-23).

4. Define bills of materials (see page 6-9).

5. Define kits (see page 6-3).

6. Set up access codes.

You should establish valid kits and bills of materials immediately after you install Bills of Materials/Kitting.

Tables

Before you define bills of materials and kits, you must set up the system tables.

- The Terminology (**TRMBK**) table holds labels of the user-defined fields used in the **Kits** and **Bill of Materials** functions.

- The General Ledger (**BKGLxxx**) table assigns the general ledger accounts you specify to the amounts entered for the three user-defined fields.

Access Codes

To restrict access to data files, menus, and functions that provide confidential information or are sensitive to change, use the Resource Manager **Access Codes** function to set up access codes on your system.

Access codes are company-specific. When you set up an access code for a user, the code is assigned the company you are in. After you set up your access codes, print a list of them and store it in a safe place.

Creating a Backup Schedule

Back up your Bills of Materials/Kitting data files whenever they change and before you run these functions:

- Build Assembly
- Components
- Multilevel Cost Rollup
- Purge Bill of Materials History
- Post Transactions
- Undo Build

Back up your programs once a month as insurance against media damage or deterioration.

Use the **Backup** function on the Resource Manager **Data File Maintenance** menu to back up files.

> You must back up all the files in the data path for a particular list of companies at once to ensure that you have up-to-date copies of the system files. Do not try to use operating system commands to back up only a few files that have changed; if you do, your system may not work after you restore them. The **Backup** function backs up all the data files for a specified company in a data path at one time.

Work Flow

Your work flow is divided into daily and periodic tasks. After the kits and bills of materials are established, you can use the File Maintenance functions to update information about kits or assemblies, substitute components among several kits and assemblies, and remove unnecessary data from history.

Daily Tasks

You can use the functions on the **Daily Work** menu only if you have established bills of materials.

Adding Kits

To add a kit, you must use an ID of an existing inventory item that has been marked as a kit in Inventory, provided that it is not already a bill of materials. The reason is that when you sell the kit, Sales Order gets kit information from Inventory files. Sales Order cannot recognize it except as an inventory item.

The best way to add a kit is to use the **Items** function in Inventory. When you use the **Items** function, you know that the inventory item has been established to be used as a kit. Sales Order recognizes the inventory item, and you can change an established kit in the **Kits** function.

Deleting Kits

To delete a kit from the **BKMHxxx** (Master Header) and **BKMDxxx** (Master Detail) files, use the **Delete** (**F3**) command in the **Kits** function. You cannot undo this action.

Adding Assemblies

To add an assembly, you must use an ID of an existing inventory item, provided that it is not already an assembly or a kit. The reason is that when you sell the assembly, Accounts Receivable and Sales Order get assembly information from the Inventory system. Accounts Receivable and Sales Order cannot recognize it except as an inventory item.

The best way to add an assembly is to use the **Items** function in Inventory. When you use the **Items** function, you know that the inventory item has been established to be used as an assembly. Accounts Receivable and Sales Order recognize the inventory item, and you can change an established assembly in the **Bill of Materials** function.

Deleting Assemblies

To delete an assembly, use the **Delete** (**F3**) command in the **Bill of Materials** function. The assembly record is deleted from the **BKMHxxx** and **BKMDxxx** files, but an assembly of which the deleted assembly was a part is not deleted. For example, if assembly 100 is part of assembly 450 and you delete assembly 100, the record for assembly 100 is gone; the record for assembly 450 and the components that make it up are still intact.

Whether you keep the deleted subassembly as part of the definition of assemblies is up to you. When a component is marked as a subassembly, the component is considered as another assembly. When a component is marked as an item, it is considered only as an inventory item. When you use the **Delete** (**F3**) command, the system checks for other occurrences of the assembly's use as a subassembly (Sub).

If the subassembly is not part of another assembly's definition, the subassembly's record is deleted and the task is complete. If the subassembly is part of another assembly's definition, a prompt appears:

Change Sub *ID* **to Item Everywhere?**

To change the definition of all the other assemblies that use the ID from a subassembly (assembly) to an item (nonassembly from the Inventory file), select **Yes** (or enter **Y** in text mode). To leave the other assemblies' definitions alone, select **No** (or enter **N** in text mode).

If you elected not to change other assemblies and you try to build an assembly that involves a deleted subassembly, you are not allowed to build the deleted subassembly.

Monthly Tasks

At the end of every month, complete the daily work and print the period-to-date reports.

Periodic Tasks

Periodic tasks comprise tracking the occurrences of building assemblies and posting transactions.

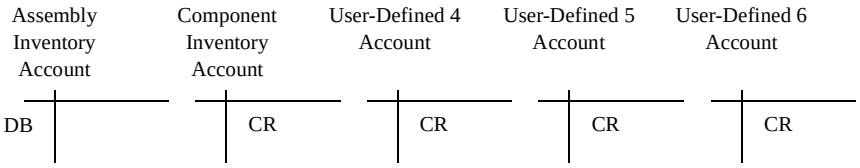
Produce the reports on the **Reports** menu periodically as a backup before you purge information and as a safeguard against circumstances that might harm your data.

Posting Transactions

If Bills of Materials/Kitting interfaces with General Ledger, entries and transactions associated with a general ledger account are transferred from the **BKJRxxx** (Transaction/Journal) file to the **GLJRxxx** (Journal) file for accurate tracking of the individual inventory general ledger accounts and the user-defined accounts in the **BKJRxxx** file.

Each component's inventory account is credited for the cost amount and each user-defined account. The assembly's inventory account is debited for the sum of the components' costs and the user-defined amounts.

If detail is to be posted, information about each component in the **BKJRxxx** file is sent to the **GLJRxxx** file. If only summary information is to be posted, information in the **BKJRxxx** file is accumulated for each general ledger account and the sum total is transferred to the **GLJRxxx** file.



If General Ledger does not interface, no information is sent to the **GLJRxxx** file, but the posting log is still produced to show what would have been posted.

Before you post, complete these tasks:

- If you have a multiuser system, make sure that no one else is using the Bills of Materials/Kitting system. You cannot post if someone else is using the Bills of Materials/Kitting files.
- Print the Build Assembly Journal.
- Back up all the data files.

CHAPTER 4

4

Daily Work

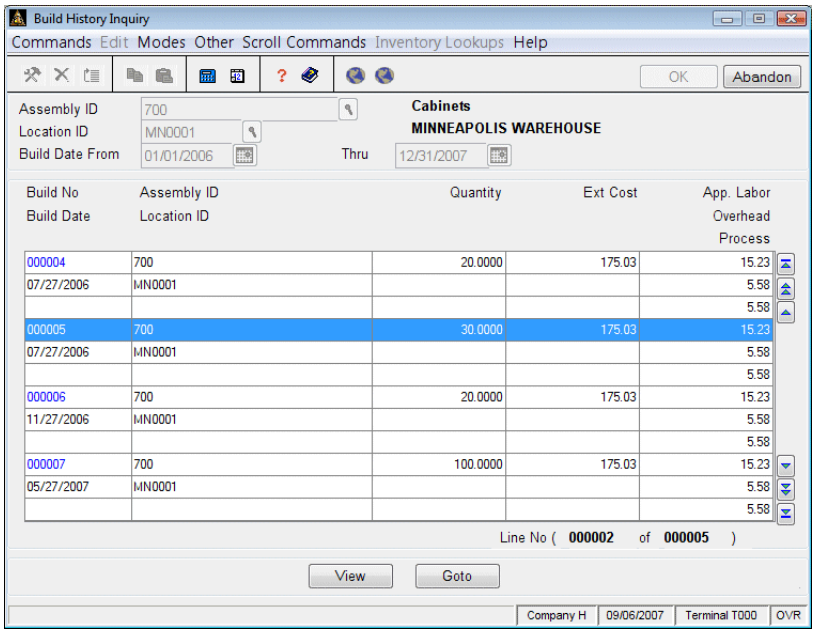
Introduction

This chapter explains the features and uses of the screens and processes in the Bills of Materials/Kitting application.

Build History Inquiry

Use the **Build History Inquiry** function on the **Daily Work** menu to look up specific build information.

Select **Build History Inquiry** from the **Daily Work** menu. The Assembly Inquiry screen appears.



Inquiry

1. Enter the ID of the assembly you want to view.

Inquiry

2. Enter the location ID for the assembly you want to view.

3. Enter the **Build Date** range for the builds you want to view. Leave the fields blank to view information for all possible dates.

4. Select a command button.

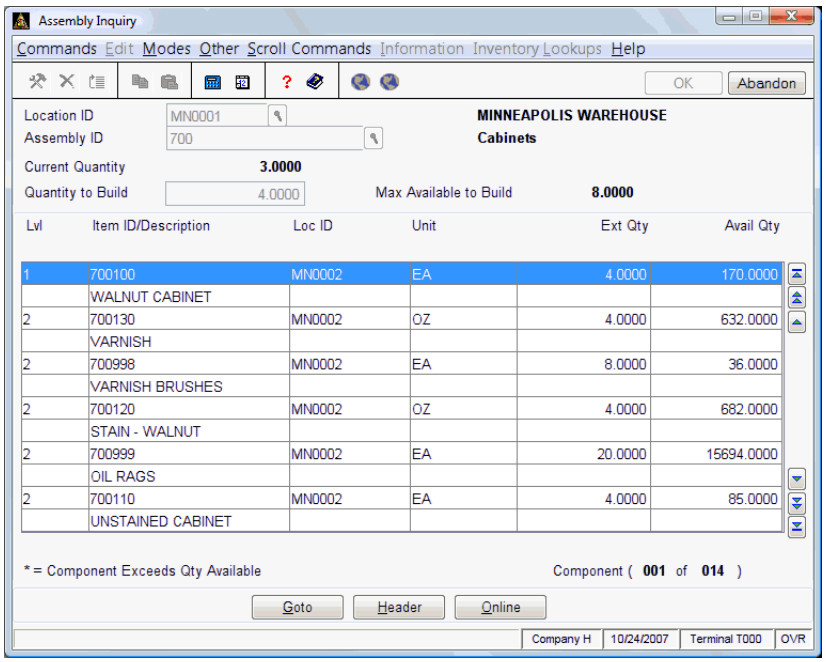
   - Press **V** to view details for a specific line.
   - Press **G** and then enter the line number to go to a particular line item.

5. Use the **Exit** (**F7**) command to exit to the **Daily Work** menu.

Assembly Inquiry

Use the **Assembly Inquiry** function on the **Daily Work** menu to inquire about assemblies that your business produces.

Select **Assembly Inquiry** from the **Daily Work** menu. The Assembly Inquiry screen appears.



Inquiry

1. Enter the location ID for the assembly you want to view.

Inquiry

2. Enter the ID of the assembly you want to view.

3. The **Do you want to calculate the maximum available?** prompt appears when you enter the assembly ID. If you want to calculate the available number of assemblies that you can build with the available components in the specified locations, select **Yes** (or enter **Y** in text mode); if not, select **No** (or enter **N** in text mode).

   The available quantity of the assembly appears.

4. Enter the number of assemblies you want to build. This information appears:

   - The maximum available quantity to build.
   - The level of the component or material.
   - The component or item ID. An asterisk (*****) before an item ID indicates that the quantity of the component in inventory is below the quantity needed to build the assembly.
   - The location ID.
   - The units by which the quantities are measured.
   - The quantities required to build the requested amounts.
   - The quantities available in inventory appear. This number is based on the specified components in the **Bill of Materials** function.

5. Select a command button.

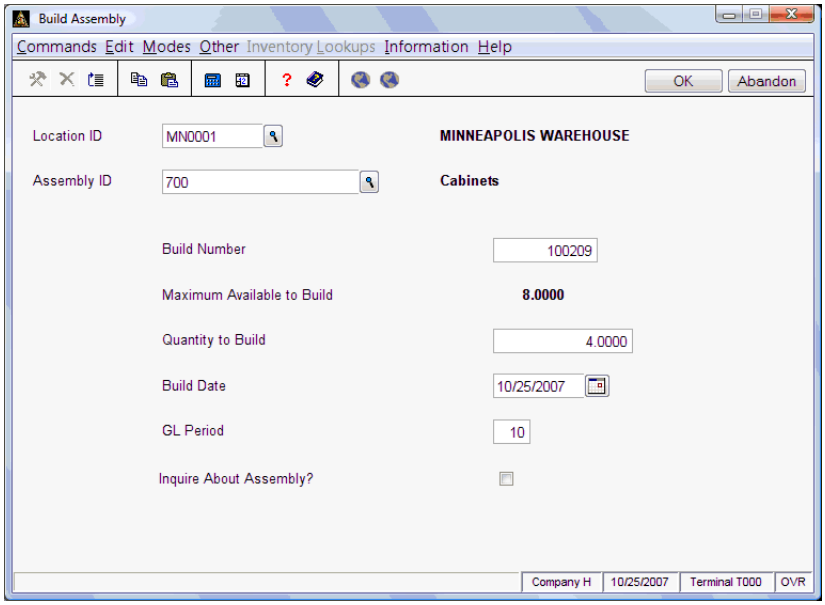
   - Press **G** and then enter the line number to go to a particular line item. (This command appears only if there is more than one screen of items.)
   - Press **H** to edit the fields in the header.
   - Press **O** to send the information to an output device. Then select the output device to print the breakdown of necessary components.

6. Use the **Exit** (**F7**) command to exit to the **Daily Work** menu.

Build Assembly

Use the **Build Assembly** function on the **Daily Work** menu to track the assembly of one bill of materials or many of the same assembly. You can also build an established serialized or non serialized assembly.

Select **Build Assembly** from the **Daily Work** menu. This screen appears:



Inquiry

1. Enter the ID of the location that will hold the assembly you want to build.

Inquiry

2. Enter the ID of the assembly you want to build.

3. The **Do you want to calculate the maximum available?** prompt appears when you enter the assembly ID. If you want the system to calculate the maximum number of assemblies you can build from inventory, select **Yes** (or enter **Y** in text mode); if not, select **No** (or enter **N** in text mode).

4. Enter or change the build number.

5. The maximum number of assemblies that you can build with the available components in the specified locations appears.

6. Enter the number of assemblies you want to build.

7. Enter or change the date for the assemblies to be recorded as built.

8. Enter or change the general ledger period for the date of the build.

9. If you want to view the Assembly Inquiry screen, select the check box (or enter **Y** in text mode); if not, clear the box (or enter **N** in text mode).

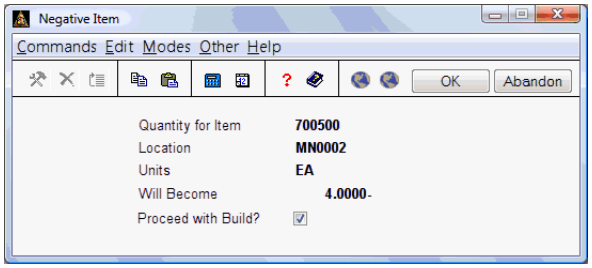
10. To save your work, use the **Proceed** (**OK**) command.

    If you entered more assemblies to build than the maximum available to build, the Negative Item screen appears. See “Negative Item” on page 4-9 for more information.

    If the assembly involves lotted, serialized, or lotted and serialized items, a screen appears where you can enter or edit the lot, serial, or lot and serial numbers for that item. See “New/Existing Lot/Serial Number Entry” on page 4-10 for more information.

Negative Item

Use this dialog box to instruct the system to track a build that makes the involved item quantity a negative number.



1. The item ID and the location for the item appears.

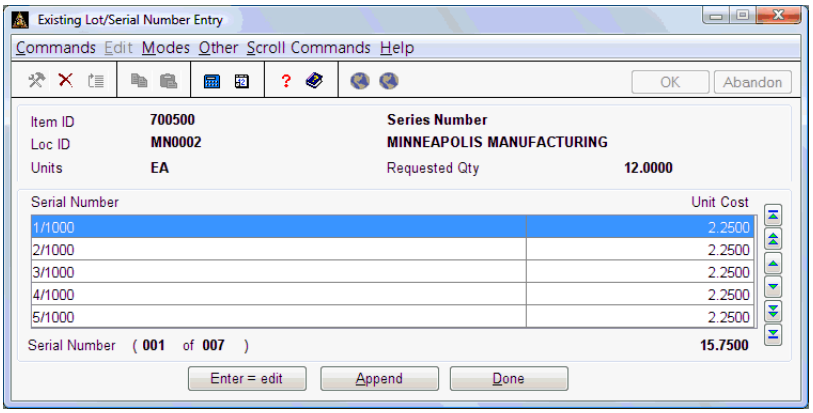
2. The negative quantity created when you entered the quantity to build is displayed. You cannot include serialized items in negative builds. You must have enough serialized items on hand in order to build an assembly. If not enough serialized items are on hand, the system will not continue with the build.

3. To continue building the specified number of assemblies, select the check box (or enter **Y** in text mode). To discontinue the build, clear the box (or enter **N** in text mode).

4. Use the **Proceed** (**OK**) command to continue with the build. When the build is complete, enter another assembly ID to build or use the **Exit** (**F7**) command to return to the **Daily Work** menu.

New/Existing Lot/Serial Number Entry

If the assembly contains lotted items, the Existing Lot Number Entry screen appears after you enter build information on the Build Assembly screen. If the assembly contains serialized items, the Existing Serial Number Entry screen appears. If the assembly contains lotted and serialized items, the Existing Lot/Serial Number Entry screen (shown below) appears. Use this screen to enter lot, serial, or lot and serial numbers for components.

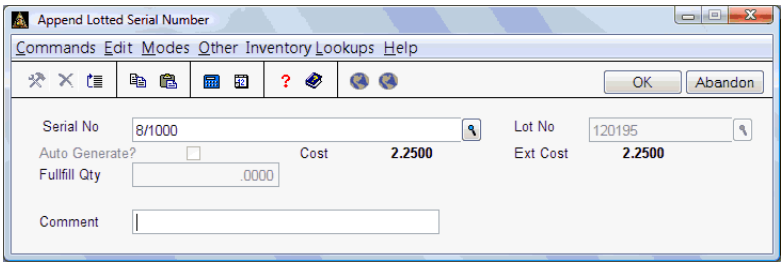


The Item ID, Loc ID, Units, Requested Quantity, Serial Number, Unit Cost and Price for the item appear. Use this screen to track the lot and serial number of each serialized item.

- Press **Enter** to edit a lot or serial number.
- Press **A** to append a lot or serial number.
- Press **D** to exit to the Build Assembly screen.
- To save your entries and continue building the assembly, use the **Proceed** (**OK**) command.

Append Lotted Serial Number

The Append/Edit Lot Number screen appears when you add or edit a lot number. The Append/Edit Serial Number screen appears when you add or edit a serial number. The Append Lotted Serial Number screen (shown below) appears when you add or edit a lotted serial number. Use this screen to add information about lotted and serialized items to the assembly.



Inquiry

1. Enter the lot or serial number for the item.

   If the item is lotted and serialized, the lot number associated with that serial number for the item appears and cannot be changed. The cost of the item and the extended cost of the item appear.

2. Enter or change the quantity that is removed from inventory. You can access this field only if you are working with a lotted, non-serialized item.

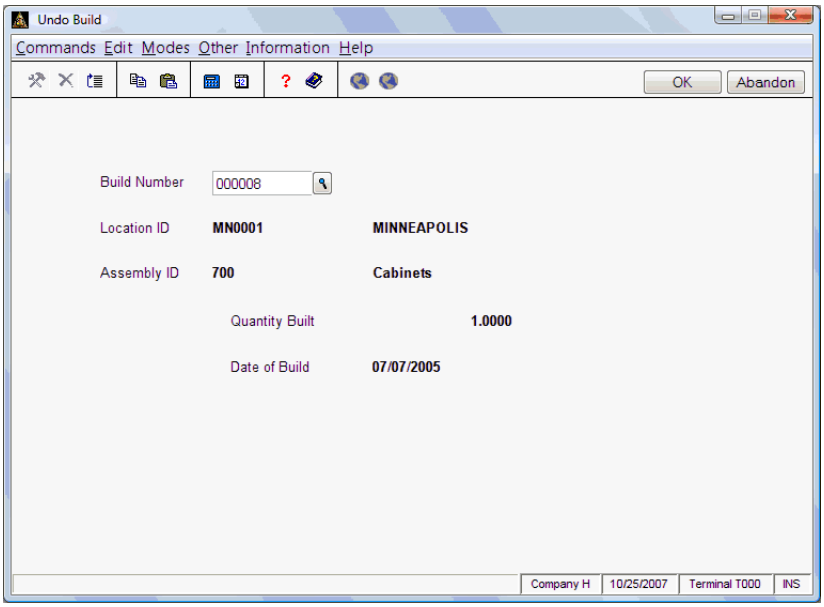
3. Enter an additional comment about the item, if necessary.

4. To save your entries and continue building the assembly, use the **Proceed** (**OK**) command.

Undo Build

Use the **Undo Build** function on the **Daily Work** menu to back out unposted bills of materials and return component parts to inventory.

Select **Undo Build** from the **Daily Work** menu. The Undo Build screen appears.



Inquiry

1. Enter the number of the build you want to undo. The location ID and description, and the assembly ID and description appear. The quantity built and the date of the build appear.

2. Select the output device to print the Undo Build Error Log. See “Reports” on page 1-24 for more information. After the list is produced, the **Daily Work** menu appears.

3. To undo the build and return to the **Daily Work** menu, use the **Proceed** (**OK**) command.

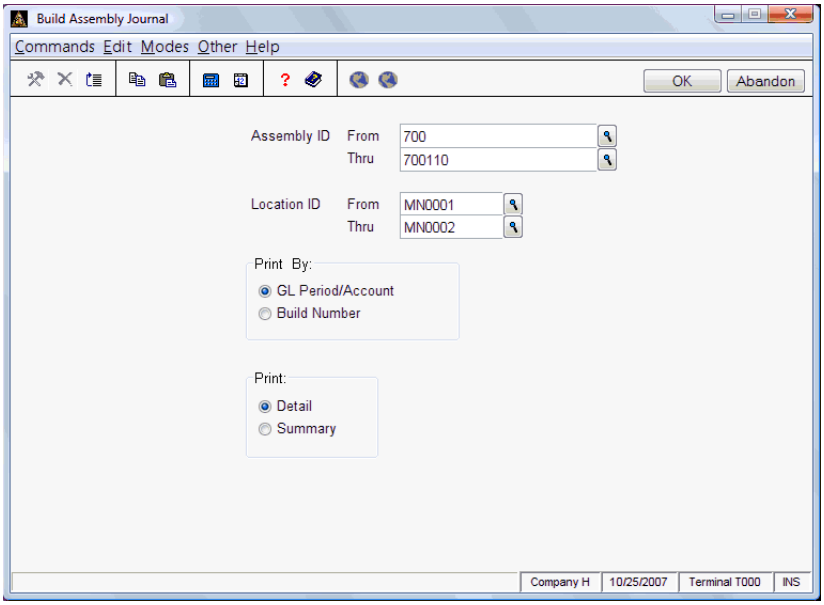
Undo Build Error Log

```
08/22/2005                      Builders Supply                      Page    1
1:44 PM                      Undo Build Error Log
Company H

Undo Build 000009 was successful.

End of Report
```

Build Assembly Journal

Use the **Build Assembly Journal** function on the **Daily Work** menu to produce a summary of the assemblies you have instructed Bills of Materials/Kitting to track. This function is useful if you want to see a list, before you post, of the assemblies that are to be built or that have been built. After you post to General Ledger, you can compare the Build Assembly Journal with the Audit Log.

Select **Build Assembly Journal** from the **Daily Work** menu. The Build Assembly Journal screen appears.



Inquiry

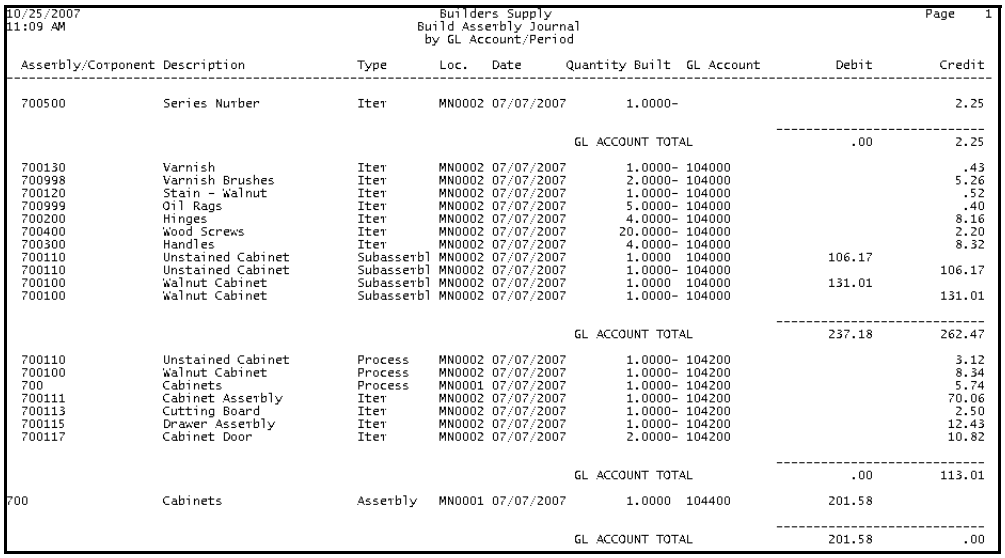
1. Enter the range of assembly IDs and location IDs you want to include in the journal, or leave the fields blank to include all.

2. Select the order in which you want to organize the report.

3. Select whether you want to include detail information in the report.

4. Select the output device to begin printing the journal. See “Reports” on page 1-24 for more information. After the list is produced, the **Daily Work** menu appears.

Build Assembly Journal



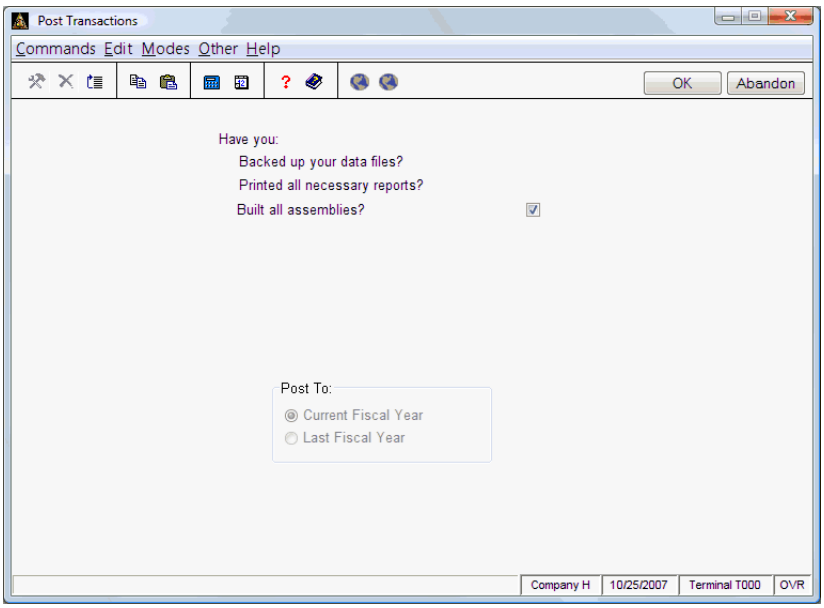
10/25/2007 Builders Supply Page 1
11:09 AM Build Assembly Journal
by GL Account/Period

Assembly/Component	Description	Type	Loc.	Date	Quantity Built	GL Account	Debit	Credit
700500	Series Number	Item	MN0002	07/07/2007	1.0000-			2.25
						GL ACCOUNT TOTAL	.00	2.25
700130	Varnish	Item	MN0002	07/07/2007	1.0000-	104000		.43
700998	Varnish Brushes	Item	MN0002	07/07/2007	2.0000-	104000		5.26
700120	Stain - Walnut	Item	MN0002	07/07/2007	1.0000-	104000		.52
700999	Oil Rags	Item	MN0002	07/07/2007	5.0000-	104000		.40
700200	Hinges	Item	MN0002	07/07/2007	4.0000-	104000		8.16
700400	Wood Screws	Item	MN0002	07/07/2007	20.0000-	104000		2.20
700300	Handles	Item	MN0002	07/07/2007	4.0000-	104000		8.32
700110	Unstained Cabinet	Subassembl	MN0002	07/07/2007	1.0000	104000	106.17	
700110	Unstained Cabinet	Subassembl	MN0002	07/07/2007	1.0000-	104000		106.17
700100	Walnut Cabinet	Subassembl	MN0002	07/07/2007	1.0000	104000	131.01	
700100	Walnut Cabinet	Subassembl	MN0002	07/07/2007	1.0000-	104000		131.01
						GL ACCOUNT TOTAL	237.18	262.47
700110	Unstained Cabinet	Process	MN0002	07/07/2007	1.0000-	104200		3.12
700100	Walnut Cabinet	Process	MN0002	07/07/2007	1.0000-	104200		8.34
700	Cabinets	Process	MN0001	07/07/2007	1.0000-	104200		5.74
700111	Cabinet Assembly	Item	MN0002	07/07/2007	1.0000-	104200		70.06
700113	Cutting Board	Item	MN0002	07/07/2007	1.0000-	104200		2.50
700115	Drawer Assembly	Item	MN0002	07/07/2007	1.0000-	104200		12.43
700117	Cabinet Door	Item	MN0002	07/07/2007	2.0000-	104200		10.82
						GL ACCOUNT TOTAL	.00	113.01
700	Cabinets	Assembly	MN0001	07/07/2007	1.0000	104400	201.58	
						GL ACCOUNT TOTAL	201.58	.00

Post Transactions

Use the **Post Transactions** function on the **Daily Work** menu to post the transactions related to building the assemblies to General Ledger.

Select **Post Transactions** from the **Daily Work** menu. The Post Transactions screen appears.



1. If you have backed up your data files, printed all the necessary reports, and built all assemblies, select the box (or enter **Y** in text mode); if not, clear the box (or enter **N**), exit to the **Daily Work** menu, and do so before posting.

2. Select the year to which you want to post entries. You can post to the current fiscal year or to the last fiscal year.

3. Select the output device for the post log to begin the posting process. See “Reports” on page 1-24 for more information. After posting is complete and the log is produced, the **Daily Work** menu appears.

Posting Log

10/22/2007 Builders Supply Page 1
1:49 PM Bill Of Materials
Company H Post to GL
Detail

Transactions Posted to GL Period 7

Item ID	Description	Ref ID	GL Account	Debit	Credit
700500	Item	07070008			2.25
700130	Item	07070008	104000		.43
700998	Item	07070008	104000		5.26
700120	Item	07070008	104000		.52
700999	Item	07070008	104000		.40
700200	Item	07070008	104000		8.16
700400	Item	07070008	104000		2.20
700300	Item	07070008	104000		8.32
700110	Subassembly	07070008	104000	106.17	
700110	Subassembly	07070008	104000		106.17
700100	Subassembly	07070008	104000	131.01	
700100	Subassembly	07070008	104000		131.01
700110	Process	07070008	104200		3.12
700100	Process	07070008	104200		8.34
700	Process	07070008	104200		5.74
700111	Item	07070008	104200		70.06
700113	Item	07070008	104200		2.50
700115	Item	07070008	104200		12.43
700117	Item	07070008	104200		10.82
700	Assembly	07070008	104400	201.58	
700110	App. Labor	07070008	520000		12.35
700100	App. Labor	07070008	520000		20.29
700	App. Labor	07070008	520000		15.23
700110	Overhead	07070008	523000		2.76
700100	Overhead	07070008	523000		4.82
700	Overhead	07070008	523000		5.58
			BUILD NUMBER 8 TOTAL	438.76	438.76
			PERIOD 7 TOTAL	438.76	438.76

CHAPTER 5

5

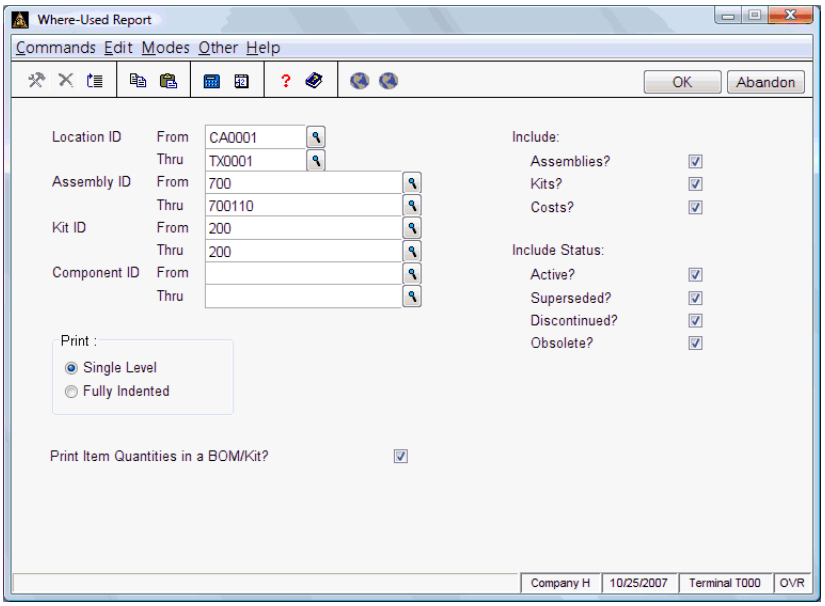
Reports

Print a Report

All reports are produced in the same way. Use the instructions below to print a report, modifying the procedure as necessary for the report you want to print. For example, if the screen for the report you want to print does not contain check box options, ignore that step and continue to the next.

Follow these steps to print a report:

1. Select the report you want to print from the **Reports** menu. The selection screen for that list appears. The Where-Used Report screen is shown below as an example.



Inquiry

2. Select the range of values to print on the report in the list boxes.

   Leave these fields blank to select all values, or enter values into a combination of fields to select specific information to print on the list. The **Inquiry** (**F2**) command is usually available with these list boxes.

3. If the screen contains selection options such as print **Single Level** or **Fully Indented**, select **Single Level** to print top level assemblies and one level of detail. Select **Fully Indented** to print assemblies and all components including subassemblies.

4. If the screen contains selection options for sorting and printing the report (such as **Sort By** or **Print By**), select the option to use when printing the list. You can select only one option.

5. If the screen contains check boxes, select the check box (or press **Y** in text mode) to include that type of information in the report. Clear the check box (or press **N** in text mode) if you do not want to include that type of information in the list.

6. Select the output device to begin printing the report. See “Reports” on page 1-24 for more information. After the report is produced, the **Reports** menu appears.

Where-Used Report

Use the **Where-Used Report** to review assemblies that contain components you specify. This report is useful if you want to know which components are used where and how important each one is so that you can easily make substitutions.

Sample Report

10/25/2007 Builders Supply Page 1
11:32 AM Where-Used Report
Company H Fully Indented/Costed

Level/Inventory ID	Description	Status	Type	Loc. ID	Unit	Quantity	Unit Cost	Ext Cost
1-200100	Furnace	A	Item	CA0001	EA	1.0000	379.4400	379.4400
0-200	Heating/Cooling Package	A	Kit	CA0001				1286.9700
1-200100	Furnace	A	Item	MD0001	EA	1.0000	379.4400	379.4400
0-200	Heating/Cooling Package	A	Kit	MD0001				1286.9700
1-200100	Furnace	A	Item	MN0001	EA	1.0000	379.4400	379.4400
0-200	Heating/Cooling Package	A	Kit	MN0001				1286.9700
1-200100	Furnace	A	Item	TX0001	EA	1.0000	379.4400	379.4400
0-200	Heating/Cooling Package	A	Kit	TX0001				1286.9700
1-200200	Water Heater	A	Item	CA0001	EA	1.0000	227.5300	227.5300
0-200	Heating/Cooling Package	A	Kit	CA0001				1286.9700
1-200200	Water Heater	A	Item	MD0001	EA	1.0000	227.5300	227.5300
0-200	Heating/Cooling Package	A	Kit	MD0001				1286.9700
1-200200	Water Heater	A	Item	MN0001	EA	1.0000	227.5300	227.5300
0-200	Heating/Cooling Package	A	Kit	MN0001				1286.9700
1-200200	Water Heater	A	Item	TX0001	EA	1.0000	227.5300	227.5300
0-200	Heating/Cooling Package	A	Kit	TX0001				1286.9700
1-200300	Air Conditioner	A	Item	CA0001	EA	1.0000	429.9500	429.9500
0-200	Heating/Cooling Package	A	Kit	CA0001				1286.9700
1-200300	Air Conditioner	A	Item	MD0001	EA	1.0000	429.9500	429.9500
0-200	Heating/Cooling Package	A	Kit	MD0001				1286.9700
1-200300	Air Conditioner	A	Item	MN0001	EA	1.0000	429.9500	429.9500
0-200	Heating/Cooling Package	A	Kit	MN0001				1286.9700
1-200300	Air Conditioner	A	Item	TX0001	EA	1.0000	429.9500	429.9500
0-200	Heating/Cooling Package	A	Kit	TX0001				1286.9700
1-200400	Water Softener	A	Item	CA0001	EA	1.0000	127.4000	127.4000
0-200	Heating/Cooling Package	A	Kit	CA0001				1286.9700
1-200400	Water Softener	A	Item	MD0001	EA	1.0000	127.4000	127.4000
0-200	Heating/Cooling Package	A	Kit	MD0001				1286.9700
1-200400	Water Softener	A	Item	MN0001	EA	1.0000	127.4000	127.4000
0-200	Heating/Cooling Package	A	Kit	MN0001				1286.9700
1-200400	Water Softener	A	Item	TX0001	EA	1.0000	127.4000	127.4000
0-200	Heating/Cooling Package	A	Kit	TX0001				1286.9700
1-200500	Sump Pump	A	Item	CA0001	EA	1.0000	47.5000	47.5000
0-200	Heating/Cooling Package	A	Kit	CA0001				1286.9700

Available Components Report

Use the **Available Components Report** to determine the maximum quantity of an assembly that you can build with the inventory on hand. You can also check the available quantity of each assembly and each component.

Sample Report

10/25/2007 Builders Supply Page 1
11:34 AM Available Corponents Report
Company H by Location ID

Level/Inventory	Description	Loc. ID	Bin	Unit	Quantity Each	Available Qty.	Max. to Build
0-700	CABINETS	MN0001	I-16	SET	1.0000		
1-700100	WALNUT CABINET	MN0002	I-15	EA	1.0000		
1-700300	HANDLES	MN0002	I-13	EA	4.0000	90.0000	22.5000
1-700500	SERIES NUMBER	MN0002	E-25	EA	1.0000	8.0000	8.0000
					MAXIMUM AVAILABLE TO BUILD		8.0000
0-700100	WALNUT CABINET	MN0002	I-15	EA	1.0000		
1-700130	VARNISH	MN0002	I-12	OZ	1.0000	632.0000	632.0000
1-700998	VARNISH BRUSHES	MN0002	I-17	EA	2.0000	36.0000	18.0000
1-700120	STAIN - WALNUT	MN0002	1-12	OZ	1.0000	682.0000	682.0000
1-700999	OIL RAGS	MN0002	I-17	EA	5.0000	15694.0000	3138.8000
1-700110	UNSTAINED CABINET	MN0002		EA	1.0000		
					MAXIMUM AVAILABLE TO BUILD		18.0000
0-700110	UNSTAINED CABINET	MN0002		EA	1.0000		
1-700111	CABINET ASSEMBLY	MN0002	I-1	EA	1.0000	525.0000	525.0000
1-700113	CUTTING BOARD	MN0002	I-7	EA	1.0000	3.0000	3.0000
1-700115	DRAWER ASSEMBLY	MN0002	I-8	EA	1.0000	15.0000	15.0000
1-700117	CABINET DOOR	MN0002	I-9	EA	2.0000	4.0000	2.0000
1-700200	HINGES	MN0002	I-13	EA	4.0000	91.0000	22.7500
1-700400	WOOD SCREWS	MN0002	I-13	EA	20.0000	4961.0000	248.0500
					MAXIMUM AVAILABLE TO BUILD		2.0000

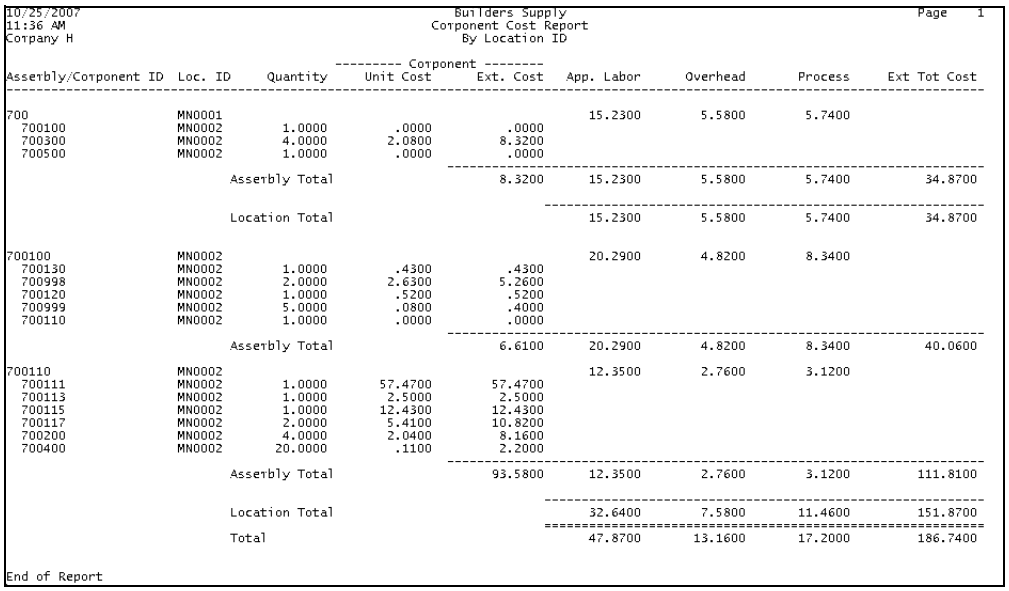
End of Report

Component Cost Report

The **Component Cost Report** is a list of assemblies in particular locations. It shows the level-1 components of those assemblies and every cost (including the user-defined costs) associated with each component and assembly.

This report is helpful when you plan a budget and want to see how to allocate components most effectively.

Sample Report



10/25/2007 Builders Supply Page 1
11:36 AM Component Cost Report
Company H By Location ID

Assembly/Component ID	Loc. ID	Quantity	Component Unit Cost	Component Ext. Cost	App. Labor	Overhead	Process	Ext Tot Cost
700	MN0001				15.2300	5.5800	5.7400	
700100	MN0002	1.0000	.0000	.0000				
700300	MN0002	4.0000	2.0800	8.3200				
700500	MN0002	1.0000	.0000	.0000				
	Assembly Total			8.3200	15.2300	5.5800	5.7400	34.8700
	Location Total				15.2300	5.5800	5.7400	34.8700
700100	MN0002				20.2900	4.8200	8.3400	
700130	MN0002	1.0000	.4300	.4300				
700998	MN0002	2.0000	2.6300	5.2600				
700120	MN0002	1.0000	.5200	.5200				
700999	MN0002	5.0000	.0800	.4000				
700110	MN0002	1.0000	.0000	.0000				
	Assembly Total			6.6100	20.2900	4.8200	8.3400	40.0600
700110	MN0002				12.3500	2.7600	3.1200	
700111	MN0002	1.0000	57.4700	57.4700				
700113	MN0002	1.0000	2.5000	2.5000				
700115	MN0002	1.0000	12.4300	12.4300				
700117	MN0002	2.0000	5.4100	10.8200				
700200	MN0002	4.0000	2.0400	8.1600				
700400	MN0002	20.0000	.1100	2.2000				
	Assembly Total			93.5800	12.3500	2.7600	3.1200	111.8100
	Location Total				32.6400	7.5800	11.4600	151.8700
	Total				47.8700	13.1600	17.2000	186.7400

End of Report

Bill of Materials History Report

The **Bill of Materials History Report** shows the date assemblies were built, how many were built, the unit cost of each, and the user-defined cost of each on that date.

This report is helpful when you plan a marketing strategy and want to see when assemblies are in peak demand.

Sample Report

10/25/2007 Builders Supply Page 1
11:40 AM Bill of Materials History Report
by Location ID

Inventory ID / Description / Build Number	Loc ID	Build Date	Revision # / Drawing # / Version #	Quantity	Unit	Unit Cost	App. Labor / Overhead / Process	Extended Cost
700100	MN0002		J3	20.0000	EA	131.0100	20.2900	3289.2000
WALNUT CABINET			WK-700100				4.8200	
000004		07/27/2006	305-700100				8.3400	
700100	MN0002		J3	20.0000-	EA	131.0100	20.2900-	3289.2000-
WALNUT CABINET			WK-700100				4.8200-	
000004		07/27/2006	305-700100				8.3400-	
700100	MN0002		J3	30.0000	EA	131.0100	20.2900	4933.8000
WALNUT CABINET			WK-700100				4.8200	
000005		07/27/2006	305-700100				8.3400	
700100	MN0002		J3	30.0000-	EA	131.0100	20.2900-	4933.8000-
WALNUT CABINET			WK-700100				4.8200-	
000005		07/27/2006	305-700100				8.3400-	
700100	MN0002		J3	20.0000	EA	131.0100	20.2900	3289.2000
WALNUT CABINET			WK-700100				4.8200	
000006		11/27/2006	305-700100				8.3400	
700100	MN0002		J3	20.0000-	EA	131.0100	20.2900-	3289.2000-
WALNUT CABINET			WK-700100				4.8200-	
000006		11/27/2006	305-700100				8.3400-	
700100	MN0002		J3	100.0000	EA	131.0100	20.2900	16446.0000
WALNUT CABINET			WK-700100				4.8200	
000007		05/27/2007	305-700100				8.3400	
700100	MN0002		J3	100.0000-	EA	131.0100	20.2900-	16446.0000-
WALNUT CABINET			WK-700100				4.8200-	
000007		05/27/2007	305-700100				8.3400-	
700100	MN0002		J3	1.0000	EA	131.0100	20.2900	164.4600
WALNUT CABINET			WK-700100				4.8200	
000008		07/07/2007	305-700100				8.3400	
700100	MN0002		J3	1.0000-	EA	131.0100	20.2900-	164.4600-
WALNUT CABINET			WK-700100				4.8200-	
000008		07/07/2007	305-700100				8.3400-	
700110	MN0002		B5	20.0000	EA	106.1700	12.3500	2488.0000
UNSTAINED CABINET			HG-700110				2.7600	
000004		07/27/2006	165-700110				3.1200	

CHAPTER 6

6

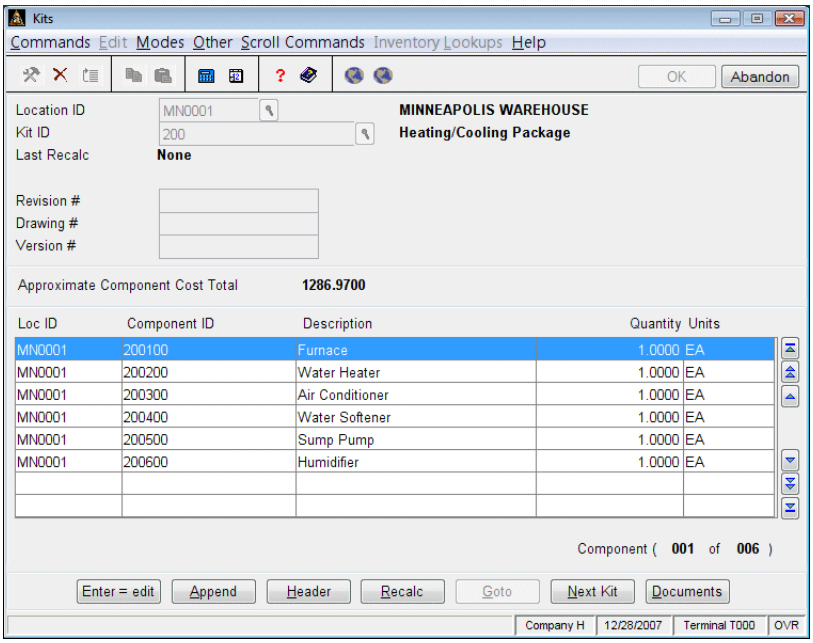
File Maintenance

Kits

Use the **Kits** function on the **File Maintenance** menu to establish and update information about kits. This function is useful if you sell many items at once and want to group them as one item. Kits can be sold only through Sales Order.

To produce a list of the information entered in this function, use the **Kits List** function on the **Master File Lists** menu.

Select **Kits** from the **File Maintenance** menu. The Kits screen appears.



Inquiry

1. Enter the ID of the location that stores the kit.

Inquiry
Maint

2. Enter the ID of the kit you want to add or change. The date of the last recalculation appears.

3. Enter or change the information in your user-defined fields, or blank out the boxes. The approximate component, assembly totals, and the location ID for the components that make up the kit appear.

   The ID for each component in the kit, the description for the component, the quantity of each component needed for the kit, and the unit of measure for the component appear.

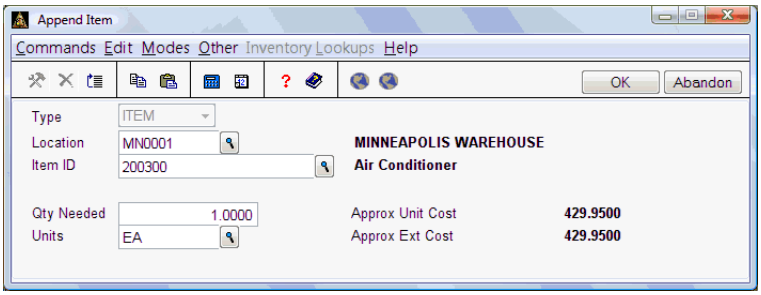
4. Select a command.

   - Press **Enter** to edit a line item.
   - Press **A** to append a line item.
   - Press **H** to move the cursor to the header region.
   - Press **R** to recalculate the approximate cost for the kit and update the **Last Recalc** field.
   - Press **G** and then enter the line number to go to a particular line item. (This command appears only if there is more than one screen of line items.)
   - Press **N** to work with the next kit.
   - Press **D** to add or change documents attached to the kit record.

5. To exit to the **File Maintenance** menu, use the **Exit** (**F7**) command.

Append/Edit Item

Use the Append/Edit Item dialog box to add or change a component in a kit.



The type of inventory item appears.

Inquiry

1. Enter or change the location ID. The description of the location appears.

Inquiry

2. Enter or change the item ID. The description of the item appears.

Maint

3. Enter or change the item quantity the kit requires.

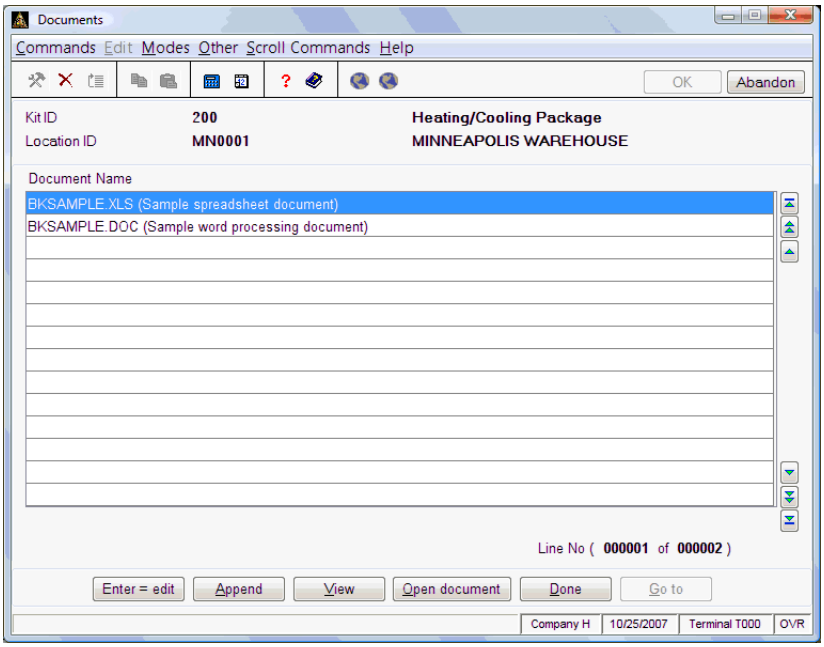
Inquiry

4. Enter or change the unit of measure used in the kit. The unit cost and extended cost of the item appear.

5. To save your entries and return to the **File Maintenance** menu, use the **Proceed** (**OK**) command.

Documents

The Documents screen appears when you use the Documents command on the Kits screen. Use this screen to add or change documents attached to a kit record.



Note: You must set up file types in Resource Manager before you can attach documents. See the *Resource Manager User's Manual* for more information.

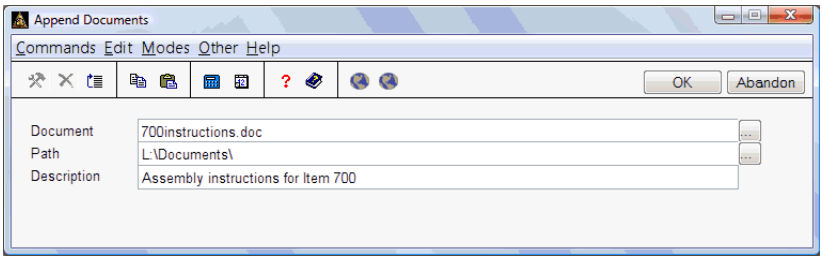
Press **D** to return to the Kits screen.

Press **G** and then enter the document name to move directly to that document. (This command appears only if you have more than one screen of attached documents.)

Attach a Document

Do the following to attach a document to a master file record:

1. Click **Append** or enter **A** to attach a document. The Append Documents dialog box appears.



2. Enter the document file name and extension, the full file path, and a description of the file you want to attach to the master file record.

   You can use the **DocumentShare** directory (as specified in the Resource Manager **Directories** function) to simplify entering document information. To use this directory, make sure all users have access to the **DocumentShare** directory, then store document attachments in that directory. When you enter document information in the Append Documents screen, enter **(DOC)** in the **Path** field (remember to include the parenthesis).

   When you use this convention with the **Open** command to open an attachment, OSAS automatically replaces the **(DOC)** variable with the appropriate path and opens the attachment from that directory.

   If you do not store the file in the **DocumentShare** directory, do not use the **(DOC)** variable. Instead, enter the full file path in the **Path** field. OSAS will not be able to locate the file to open it if you enter an incorrect path.

3. Use the **Proceed** (**OK**) command to attach the file.

Edit Attached Document File Information

To edit file information about attached documents, select the document and then press **Enter**. Edit the file information in the Edit Documents dialog box, then click **OK** or press **F7** to save your changes.

To view the file information about attached documents, select the document and then press **View** (or **V** in text mode). The View Documents dialog box appears. Press any key to exit.

To edit the document itself, click **Open document** or press **O** to launch the appropriate application and open the file.

Note: If you have problems opening a document, press **Enter** to change the direction of the slashes used in the attachment's directory path. If the directory path contains backward slashes (\), change them to forward slashes (*/*) and vice versa.

Delete Attached Documents

To remove a document attachment, select the attached document you wish to delete and press **F3**. When the confirmation message appears, press **Y** to delete the attachment or **N** to return to the Documents screen. Keep in mind that this procedure only removes the attachment from the master file record; it does not delete the file from its storage location.

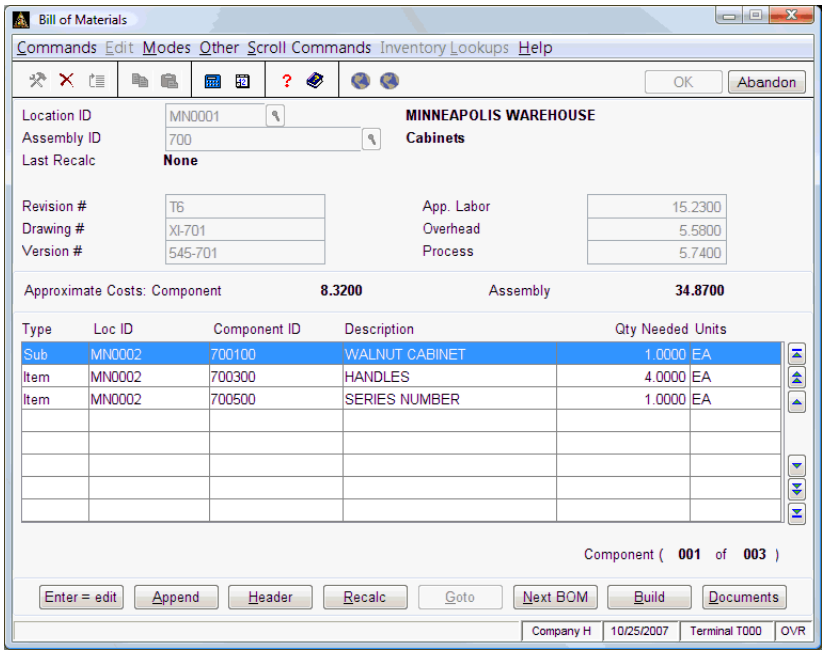
After you finish working with the Documents screen, use the **Exit** (**F7**) command to return to the Kits selection screen. Enter another Kit ID, or use the **Exit** (**F7**) command again to return to the **File Maintenance** menu.

Bill of Materials

Use the **Bill of Materials** function on the **File Maintenance** menu to establish and update information about assemblies. This function is useful if you often sell items that you assemble yourself.

To produce a list of the information entered in this function, use the **Bill of Materials List** function on the **Master File Lists** menu.

Select **Bill of Materials** from the **File Maintenance** menu. The Bill of Materials screen appears.



Inquiry

1. Enter the ID of the location that stores the assembly.

Inquiry
Maint

2. Enter the ID of the assembly you want to add or change. The date of the last recalculation appears.

3. Use the first three fields to enter alphanumeric information you set up in the **Tables** function. Use the last three fields to enter numeric information you set up in the **Tables** function.

   The cost of the components appears.

   The total cost of the assembly (including costs in the user-defined fields), type of component for the bill of materials, location ID of the component, component ID for the bill of materials, description of the component, quantity needed to make one assembly, and the component's unit of measure appear.

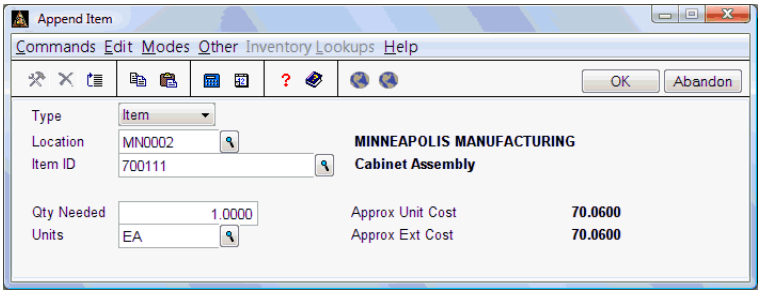
4. Select a command.

   - Move to the line you want to edit and press **Enter**. Then see "Append/ Edit Item" on page 6-11 for more information.
   - Press **A** to add an inventory item to the bill of materials.
   - Press **H** to edit the user-defined fields.
   - Press **R** to recalculate the cost of the bill of materials. If you use the Standard costing method in Inventory, these costs are updated in Inventory.
   - Press **G** and then enter the line number to go to a particular line item. (This command appears only if there is more than one screen of line items.)
   - Press **N** to enter and update information about the next bill of materials.
   - Press **B** to build the current assembly.
   - Press **D** to add or change documents attached to a master file record in OSAS.

5. To exit to the **File Maintenance** menu, use the **Exit** (**F7**) command.

Append/Edit Item

Use the Append/Edit dialog box to add or edit bill of material, sub-assemblies, or component items.



1. Press **S** if the item is set up as a subassembly. Press **I** if the item is not an assembly.

Inquiry

2. Enter or change the location ID.

Inquiry
Maint

3. You must enter an item ID for a component to add it to an assembly. Enter or change the component or subassembly ID. The description appears.

4. Enter or change the quantity of the item the assembly requires. The quantity must be greater than zero.

5. Enter or change the unit of measure the item requires.

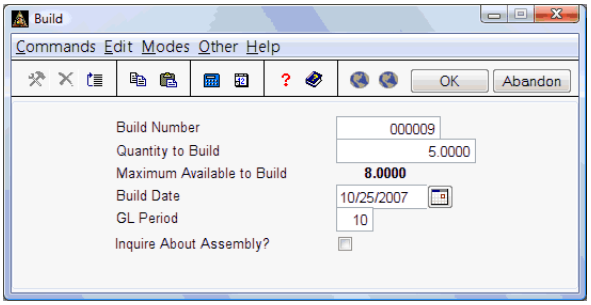
   The item's approximate unit cost and extended cost defaults in from the **Items** function in Inventory.

6. To continue with building the assembly, use the **Proceed** (**OK**) command, or use the **Exit** (**F7**) command to exit to the Bill of Materials screen.

7. After the assembly is built, the **File Maintenance** menu appears. To exit from the **Bill of Materials** function without building, use the **Exit** (**F7**) command.

Build

Before the Build dialog box appears, the **Do you want to calculate the maximum available?** prompt appears when you enter the assembly ID. If you want the system to calculate the maximum number of assemblies you can build from inventory, select **Yes** (or enter **Y** in text mode); if not, select **No** (or enter **N** in text mode).



Use the build dialog box to track an assembly.

1. Enter or change the build number and the number of assemblies you want to build.

2. If the system calculated the number available to build based on the components that make up the assembly, that number appears. If the system did not do the calculation, zero appears.

3. The system date appears. If the assembly is done on a different date, change the date.

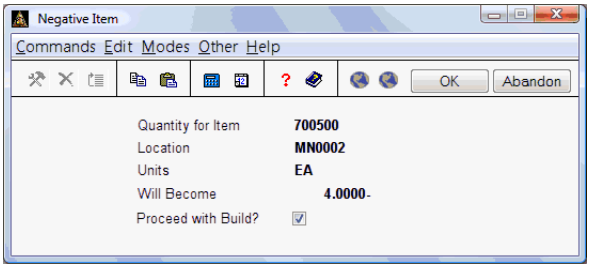
4. Enter or change the general ledger period for the date of build.

5. If you want more information about the assembly before you build it, select the check box (or enter **Y** in text mode); if not, clear the box (or enter **N** in text mode).

6. To continue building the assembly, use the **Proceed** (**OK**) command, or use the **Exit** (**F7**) command to exit to the Bill of Materials screen.

Negative Item

Use the Negative Item dialog box to track a build that makes the involved item quantity a negative number.



The item ID and the location for the item appears.

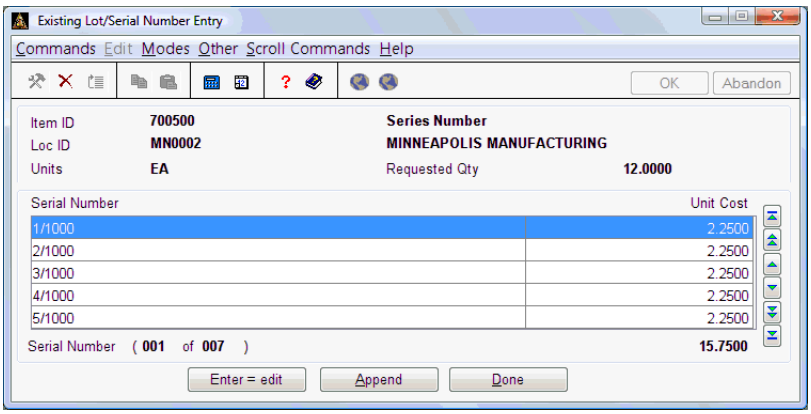
The negative quantity created when you entered the quantity to build appears. You cannot include serialized items in negative builds. You must have enough serialized items on hand in order to build an assembly. If not enough serialized items are on hand, the system does not continue with the build.

To continue building the specified number of assemblies, select the check box (or enter **Y** in text mode). To terminate the build, clear the box (or enter **N** in text mode).

Use the **Proceed** (**OK**) command to continue with the build. When the build is complete, enter another assembly ID to build or use the **Exit** (**F7**) command to return to the Bills of Material screen.

New/Existing Lot/Serial Number Entry

If the assembly contains lotted items, the Existing Lot Number Entry screen appears after you enter build information on the Build Assembly screen. If the assembly contains serialized items, the Existing Serial Number Entry screen appears. If the assembly contains lotted and serialized items, the Existing Lot/Serial Number Entry screen (shown below) appears. Use this screen to enter lot, serial, or lot and serial numbers for components.



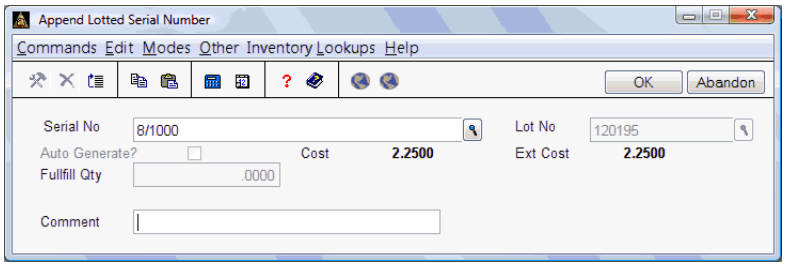
Information about the item, such as location ID, unit number, and unit cost appear.

Select a command:

- Move to the line you want to edit and press **Enter**. Then see “Append/Edit Lotted Serial Number” on page 6-15 for more information.
- Press **A** to append a bill of materials. Then see “Append/Edit Lotted Serial Number” on page 6-15 for more information.
- When you finish entering lot and serial data, use the **Done** (**D**) command to save your changes, or use the **Exit** (**F7**) command to exit to the **File Maintenance** menu.

Append/Edit Lotted Serial Number

The Append/Edit Lot Number screen appears when you add or edit a lot number. The Append/Edit Serial Number screen appears when you add or edit a serial number. The Append Lotted Serial Number screen (shown below) appears when you add or edit a lotted serial number. Use this screen to add information about lotted and serialized items to the assembly.



Inquiry

1. Enter the serial number for the item.

Inquiry

2. Enter or change the lot number for the item. The cost of the item and the extended cost of the item appear.

3. If you are building a serialized item, the **Auto Generate** check box appears. If you select the box, the system automatically generates serial numbers based on the starting serial number you supply.

4. Enter or change the quantity to remove from inventory. You can access this field only if you are working with a lotted non-serialized item.

5. Enter additional information about the item.

6. When you finish entering lot and serial information, use the **Proceed** (**OK**) command.

Documents

Use the Documents dialog box to add or change documents attached to a master file record in OSAS. See “Documents” on page 6-6 for more information.

Note: You must set up file types in Resource Manager before you can attach documents. See the *Resource Manager User’s Manual* for more information.

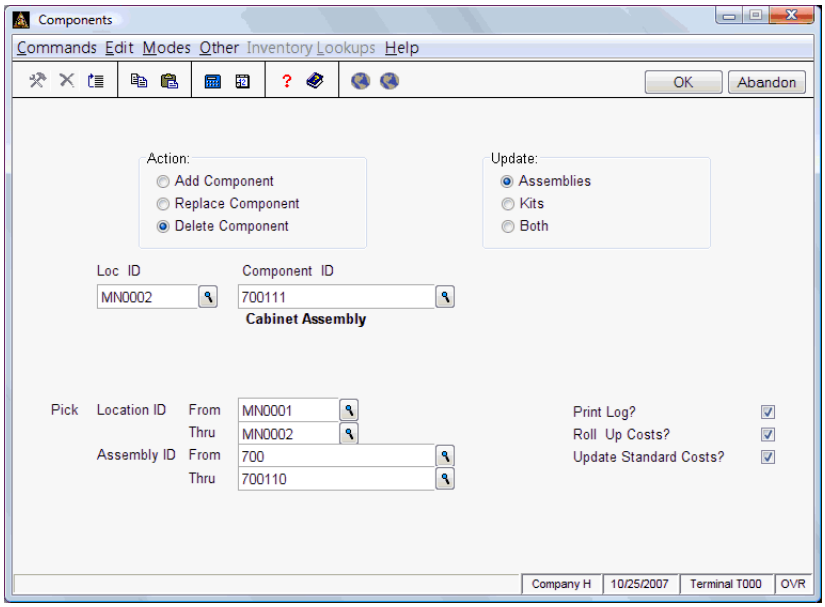
Press **D** to return to the Bill of Materials screen.

Components

Use the **Components** function on the **File Maintenance** menu to update the components used in several different assemblies at once. This function is useful if an item is discontinued and you need to replace it with a different item or a different quantity of items. You cannot use this function for location transfers.

You can produce a verification log of all the bills of materials that have been added, replaced, or deleted.

Select **Components** from the **File Maintenance** menu. The Components screen appears.



1. Select the action you want to perform. You can add a component, replace a component, or delete a component.

2. Select whether to apply the component update to items in **Assemblies**, items in **Kits**, or items in **Both** assemblies and kits.

Inquiry 3. Enter the location ID of the component you want to change.

Inquiry 4. Enter the ID of the component you want to change. The component description appears.

The quantity of the component appears.

Inquiry 5. The unit of measure for the component appears. Change it, if necessary.

6. The **Old** section appears if you are replacing a component. Enter the information about the component you are replacing in the **Loc ID**, **Component ID**, **Quantity**, and **Units** fields.

7. The **New** section appears if you are replacing a component. Enter the information about the replacement component in the **Loc ID**, **Component ID**, **Quantity**, and **Units** fields.

Inquiry 8. Enter the range of locations for which you want to change components in the **Pick Location ID** boxes.

Inquiry 9. If you elected to change components in assemblies, enter the range of assemblies for which you want to change components in the **Pick Assembly ID** boxes.

Inquiry 10. If you elected to change components in kits, enter the range of kits for which you want to change components in the **Pick Kit** boxes.

11. If you want to print a log of changed components, select the check box (or enter **Y** in text mode); if not, clear the box (or enter **N** in text mode).

12. If you want costs to be rolled up for the range of kits and/or assemblies, select the box (or enter **Y** in text mode); if not, clear the box (or enter **N** in text mode).

13. If you want standard costs in Inventory to be updated, select the box (or enter **Y** in text mode); if not, clear the box (or enter **N** in text mode).

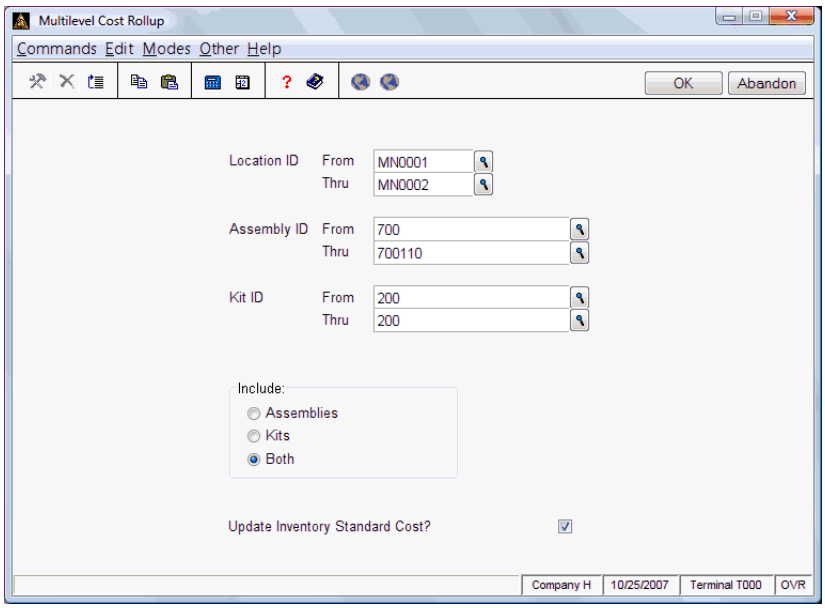
14. This field appears if you are adding a component. If the component already exists and you want the system to increase quantities for the component, select **Yes** (or enter **Y** in text mode); if not, select **No** (or enter **N** in text mode).

15. Select the output device to begin printing the update log. See “Reports” on page 1-24 for more information. When the log is printed, the **File Maintenance** menu appears.

Multilevel Cost Rollup

Use the **Multilevel Cost Rollup** function on the **File Maintenance** menu to recalculate the cost for kits and assemblies. If Bill of Materials interfaces with Inventory, and you use the standard cost method, this function recalculates the standard cost makeup for each assembly or kit.

Select **Multilevel Cost Rollup** from the **File Maintenance** menu. The Multilevel Cost Rollup screen appears.



Inquiry

1. Enter the range of location, assembly, and kit IDs for which you want to recalculate costs, or leave the boxes blank to include all.

2. Select whether to apply the rollup to **Assemblies**, to **Kits**, or to **Both** assemblies and kits.

3. If you want to update standard costs in Inventory, select the box (or enter **Y** in text mode); if not, clear the box (or enter **N** in text mode).

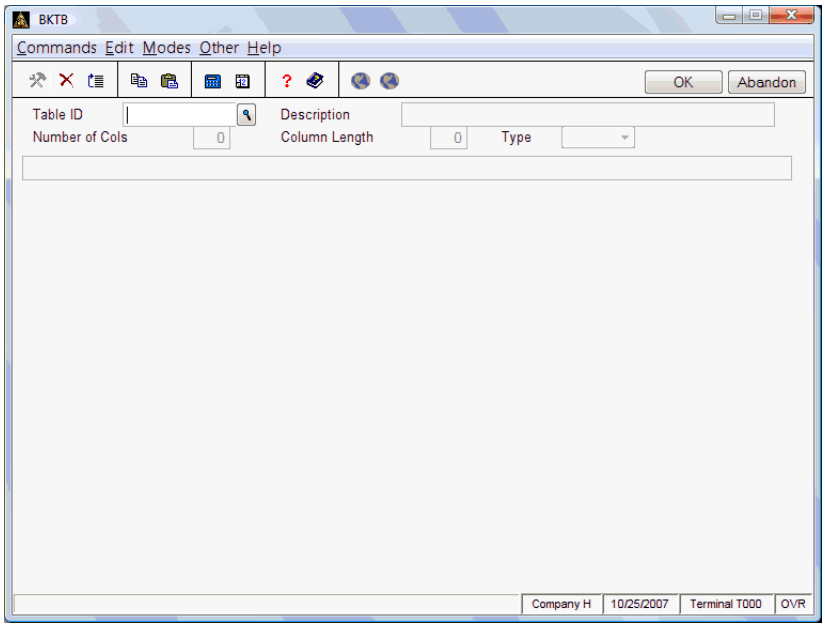
4. To save your entries, use the **Proceed** (**OK**) command.

Tables

Use the **Tables** function on the **File Maintenance** menu to maintain the **TRMBK** and **BKGLxxx** tables. Tables store information about the system, data, options, and default settings for other applications.

To produce a list of the information entered for each table, use the **Tables List** function on the **Master File Lists** menu.

Select **Tables** from the **File Maintenance** menu. The BKTB screen appears.



Inquiry

1. Enter or change the table ID. To set up a company-specific table, enter the table ID plus the one- to three-character company ID. To set up a terminal-specific table, enter the table ID plus the four-character terminal ID.

Inquiry

2. The **Copy From** field appears if you entered a new table ID. To copy a company-specific or a terminal-specific table, enter the table ID plus the company and terminal ID.

3. Enter or change the description of the table. The number and length of columns in the table appears.

4. The type of characters you can enter in the table appears:

   - **A** – Alphanumeric
   - **N** – Numeric with two decimals
   - **3** – Numeric with three decimals
   - **4** – Numeric with four decimals

   Although you can change the type, you cannot enter any other type of character than the table originally specified.

5. To save your entries and exit to the **File Maintenance** menu, use the **Proceed** (**OK**) command.

TRMBK Table

The **TRMBK** table holds six fields that appear on other function screens. The first three fields are alphanumeric and appear on the Bill of Materials screen and the Kits screen; their values are for reference only and are not used in any calculations. The last three fields are numeric and appear on the Bill of Materials screen; their values are included in the cost of each assembly built.

Enter the table ID **TRMBK**. Then enter a label for each field. The first three fields hold miscellaneous information you might want to associate with an assembly or a kit—for example, a version number or a revision number.

BKGLxxx Table

The **BKGLxxx** table holds three general ledger accounts whose labels you can define and numbers you can specify when you use the **Bill of Materials** function. The values you enter in the fields with these labels are sent to these general ledger accounts.

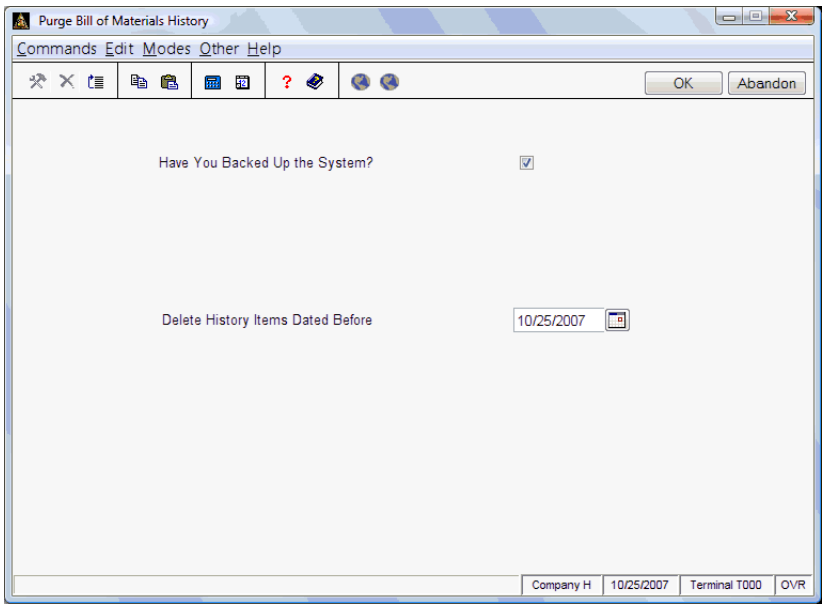
Enter the table ID **BKGLxxx** (*xxx* is the company ID). The description of fields 4–6 should be the same as user-defined fields 4–6 in the **TRMBK** table.

Enter the general ledger account number you want the values from fields 4–6 to be sent.

Purge Bill of Materials History

Use the **Purge Bill of Materials History** function on the **File Maintenance** menu to delete records of assemblies from the **BKHIxxx** (History) file. Use it when you want to free disk space. Before you use this function, produce the **Bill of Materials History Report**. You cannot recover historical data after you purge it.

Select **Purge Bill of Materials History** from the **File Maintenance** menu. The Purge Bill of Material History screen appears.



1. If you have backed up the information you want to purge, select the check box (or enter **Y** in text mode); if not, clear the box (or enter **N** in text mode), exit to the **File Maintenance** menu, and do so before continuing.

2. If you want to delete historical information about items built before the system date, press **Enter**. To delete historical information about items built before a different date, enter that date.

3. To save your entries, use the **Proceed** (**OK**) command. To return to the **File Maintenance** menu, use the **Exit** (**F7**) command.

CHAPTER 7

7

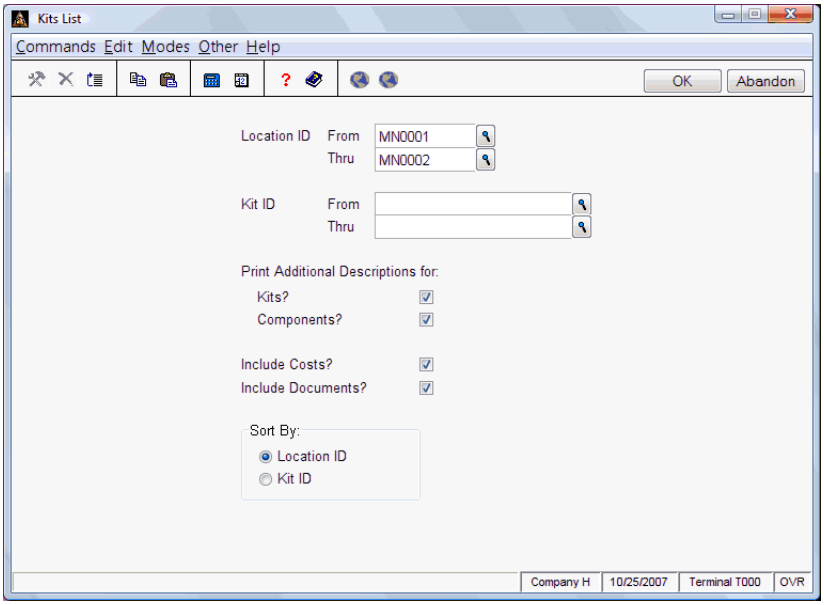
Master File Lists

Printing a Master File List

All master file lists are produced in the same way. Use the instructions below to print a master file list, modifying the procedure as necessary for the list you want to print. For example, if the screen for the list you want to print does not contain check box options, ignore that step and continue to the next.

Follow these steps to print a master list:

1. Select the list you want to print from the **Master File Lists** menu. The selection screen for that list appears. The Kits List screen is shown below as an example.



Inquiry

2. Select the range of values to print on the report in the list boxes.

   Leave these fields blank to select all values, or enter values into a combination of fields to select specific information to print on the list. The **Inquiry** (**F2**) command is usually available with these list boxes.

3. If the screen contains check boxes, select the check box (or press **Y** in text mode) to print that type of information in the list. Clear the check box (or press **N** in text mode) if you do not want to print that type of information in the list.

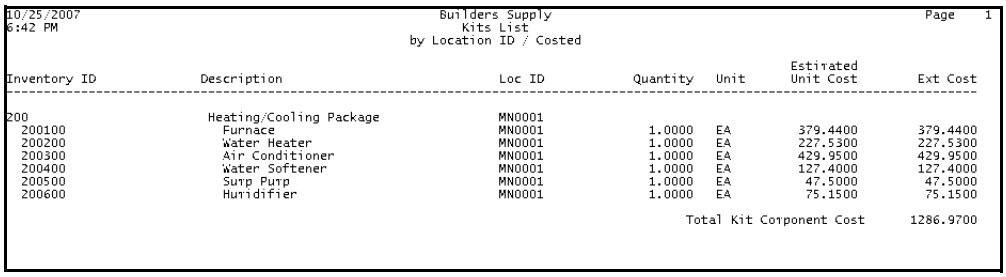
4. If the screen contains selection options that control how the system sorts the list (as in the **Sort By** box in the example), select the option to use when printing the list. You can select only one option.

5. Select the output device to begin printing the report. See “Reports” on page 1-24 for more information. After the list is produced, the **Master File Lists** menu appears.

Kits List

The **Kits List** shows the components that are in each kit and the cost of each component and each kit. This list is helpful when you plan a budget and want to see how to allocate components most effectively.

Sample List



10/25/2007 Builders Supply Page 1
6:42 PM Kits List
by Location ID / Costed

Inventory ID	Description	Loc ID	Quantity	Unit	Estimated Unit Cost	Ext Cost
200	Heating/Cooling Package	MN0001				
200100	Furnace	MN0001	1.0000	EA	379.4400	379.4400
200200	Water Heater	MN0001	1.0000	EA	227.5300	227.5300
200300	Air Conditioner	MN0001	1.0000	EA	429.9500	429.9500
200400	Water Softener	MN0001	1.0000	EA	127.4000	127.4000
200500	Sump Pump	MN0001	1.0000	EA	47.5000	47.5000
200600	Humidifier	MN0001	1.0000	EA	75.1500	75.1500
					Total Kit Component Cost	1286.9700

Bill of Materials List

The **Bill of Materials List** shows the components that are in each assembly and the cost of each component and assembly.

Sample List

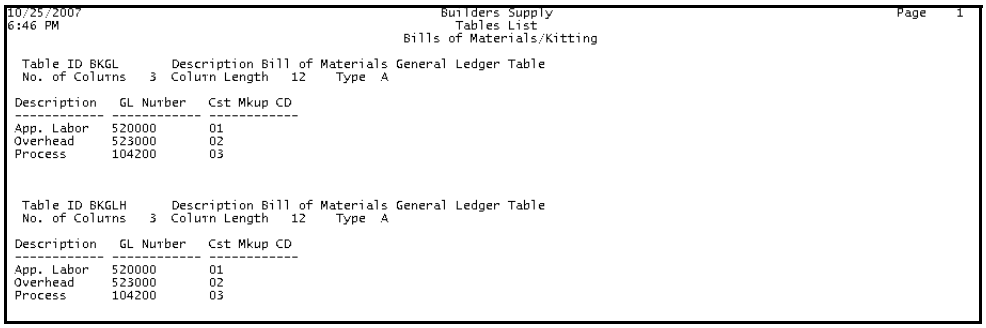
10/25/2007 6:44 PM — Builders Supply — Bill of Materials List by Location ID / Costed — Page 1

Inventory ID	Description	Loc ID	Type	Quantity	Unit	Estimated Unit Cost	Ext Cost
700	Cabinets Made up of parts 700100, 700300 and 700500	MN0001					
700100	WALNUT CABINET	MN0002	Sub	1.0000	EA	.0000	.0000
700300	HANDLES	MN0002	Iter	4.0000	EA	2.0800	8.3200
700500	SERIES NUMBER	MN0002	Iter	1.0000	EA	.0000	.0000
						Total Assembly Component Cost	8.3200
700100	WALNUT CABINET	MN0002					
700130	VARNISH	MN0002	Iter	1.0000	OZ	.4300	.4300
700998	VARNISH BRUSHES	MN0002	Iter	2.0000	EA	2.6300	5.2600
700120	STAIN - WALNUT	MN0002	Iter	1.0000	OZ	.5200	.5200
700999	OIL RAGS	MN0002	Iter	5.0000	EA	.0800	.4000
700110	UNSTAINED CABINET	MN0002	Sub	1.0000	EA	.0000	.0000
						Total Assembly Component Cost	6.6100
700110	UNSTAINED CABINET	MN0002					
700111	CABINET ASSEMBLY	MN0002	Iter	1.0000	EA	57.4700	57.4700
700113	CUTTING BOARD	MN0002	Iter	1.0000	EA	2.5000	2.5000
700115	DRAWER ASSEMBLY	MN0002	Iter	1.0000	EA	12.4300	12.4300
700117	CABINET DOOR	MN0002	Iter	2.0000	EA	5.4100	10.8200
700200	HINGES	MN0002	Iter	4.0000	EA	2.0400	8.1600
700400	WOOD SCREWS	MN0002	Iter	20.0000	EA	.1100	2.2000
						Total Assembly Component Cost	93.5800

Tables List

The **Tables List** provides information about the table you select. It is helpful when you plan to change a table and want a list to compare it against.

Sample List



10/25/2007 Builders Supply Page 1
6:46 PM Tables List
Bills of Materials/Kitting

Table ID BKGL Description Bill of Materials General Ledger Table
No. of Columns 3 Column Length 12 Type A

Description	GL Number	Cst Mkup CD
App. Labor	520000	01
Overhead	523000	02
Process	104200	03

Table ID BKGLH Description Bill of Materials General Ledger Table
No. of Columns 3 Column Length 12 Type A

Description	GL Number	Cst Mkup CD
App. Labor	520000	01
Overhead	523000	02
Process	104200	03

GL Account Audit Report

The **GL Account Audit Report** List shows Bills of Material/Kitting tables and data files with invalid or missing GL account numbers.

Sample List

```
10/10/2007                                   Builders Supply                                          Page     1
4:02 PM                                   GL Account Audit Report

Application  Description                       Interfaced to GL?
-----------------------------------------------------------------------------------------------------------------
BK           Bills of Materials/Kitting        Yes

  Table      Table Name                              Row  Column   Description            GL Account    Reason
  ---------------------------------------------------------------------------------------------------------------
  BKGLH      Bill of Materials General Ledger Table    1       2   App. Labor             520001        Not Found

End of Report
```

APPENDIX A

A

System Messages

***{ID}* Already sold.**

The serialized item you are trying to work with has been sold and the sale has been posted.

***{ID}* Currently in use.**

The serialized item you are trying to work with has been sold or is committed. The sale has not been posted, but it is no longer available.

***{ID}* Is a BOM.**

You cannot use the ID of an existing assembly for a kit or a different assembly.

***{ID}* Is a Kit.**

You cannot use the ID of an existing kit for an assembly or a different kit.

***{Item ID}* Is not on file.**

You cannot use an item that is not in the **INVExxx** (Items) file. You may have deleted an item from inventory without deleting it from the definition of an assembly or a kit.

***{Location ID}* Is not on file.**
***{Location ID}* Not found.**
***{Location ID}* Is not a valid location.**

The location ID you entered does not exist. You cannot add locations in Bills of Materials/Kitting; you must use the **Locations** function in Inventory (see the *Inventory User's Manual*).

***{table ID}* Table not found.**

This table is not on file, probably because it was deleted. Try to reconstruct the table.

A *{BOM/Kit}* cannot contain itself.

A BOM or a kit cannot carry its own ID as part of its definition.

Already sold.

You cannot commit an item (assembly or kit) that has already been sold.

Amount entered causes assembly cost to be too large.

A cost cannot be larger than $999,999.9999. The amount you entered pushes the cost over this amount.

Build abandoned after record in use message.

If you try to build an assembly that involves an item someone else is using, the **Record in Use** message appears, and the building operation stops.

Build cancelled. Assembly contains no components.

You cannot build an assembly that does not have any components. One reason the assembly does not have components might be that the components' (items') IDs were deleted from Inventory since the assembly was defined in the BOM.

Build cancelled. Assembly *{assembly ID}* not on file.

You cannot build an assembly that is not on file. One reason it is not on file might be that the assembly (item) ID was deleted from Inventory since it was defined in the BOM.

Build cancelled. Fractional quantities found for serialized items.

You cannot build an assembly that has a fractional quantity for at least one serialized item.

Build cancelled. The maximum of *{number}* levels has been reached.

You have too many levels of assemblies or kits. You cannot track more than 10 levels.

Build request is above maximum available.

When you send instructions to build more assemblies than your inventory is capable of supporting, you can proceed only if the **Allow Negative Builds** option is set to **YES** in the **Options and Interfaces** function in Resource Manager (see the *Resource Manager User's Manual*; the code is **BK**).

Cannot delete last component of a *{Assembly/Kit}*.
Cannot delete last line of a *{Assembly/Kit}*.

You cannot delete the last line of an assembly or a kit; if you could, you would delete the assembly or kit.

Changing line type to 'KIT' will clear all values.

The values in the line-item entry area disappear when you enter the letter **K** to declare the item as a kit.

Component already exists for this *{Assembly/Kit}*.

You cannot assign the same component to an assembly or a kit more than once.

Component *{item ID}* in location *{location ID}* not on file.

The specified component is not in the specified location. Perhaps a user used the **Location Transfers** function in Inventory to move the component (item) to a different location since you defined the component as part of the assembly in Bills of Materials/Kitting.

Cost update aborted.

You cannot update cost information about a kit or an assembly which involves an inventory item which is not in the **INVExxx** (Items) file. You must first define all items in the **Items** function in Inventory (see the *Inventory User's Manual*).

Currently in use.

You cannot commit an item (assembly or kit) that is being used.

Detail history not selected in Options table.

You cannot work with detail history of an assembly or a kit unless the **Keep Detail History** option in the Resource Manager **Options and Interfaces** function is set to **YES**.

Fractional quantities not allowed for *{serialized items/material items}*.

You must enter whole numbers for quantities of serialized items and material items.

GL account for *{user-defined field}* does not exist.

You cannot build an assembly when the **BKGLxxx** table has a general ledger account label without an account number.

If you use General Ledger, you must enter an account number. If you do not use General Ledger, go to the **BKGLxxx** table and either add a number to the label or remove the label without the number.

GL account table *{ID}* not found.

You cannot use a function which involves General Ledger accounts from a **BKGLxxx** table which does not exist. The table may have been deleted from the system with the **Delete** (**F3**) command on the table itself.

Invalid unit of measure.

You must enter a valid unit of measure. Valid options appear at the bottom of the screen.

Inventory item: *{item ID}*, Loc ID *{location ID}*, not found.

The specified item is not in the specified location. Perhaps a user used the **Location Transfers** function in Inventory to move the component (item) to a different location since you defined the component as a part of the assembly in Bills of Materials/Kitting.

Inventory update for this component aborted.

The update for the quantity of the component in inventory has been stopped because you cancelled the instruction to build an assembly.

Item already exists on this assembly.

You cannot add an item twice to the same assembly. You can update the quantity of the item to increase the number of the item the assembly requires.

Item *{item ID}* does not have a materials list.

The specified item does not have any materials assigned to it; you cannot build it. Use the Bill of Materials function to assign materials to it.

Item *{item ID}* is an assembly.
Item *{item ID}* is not a bill of material.
Item *{item ID}* is not a component.

An item cannot be an assembly and a kit at the same time.

To work with a kit, you must enter an item that is not already an assembly. To work with an assembly, you must enter an item that is not already a kit.

Item *{item ID}* is not an inventory item.

Items you enter, either as assemblies, kits, or components, must already be in inventory.

Item *{item ID}* is not in location *{location ID}*.
Item *{item ID}* is not on file.
Item *{item ID}* not found in location.

The specified item is not in the specified location. Perhaps a user used the **Location Transfers** function in Inventory to move the component (item) to a different location since you defined the component as part of the assembly.

Kit *{ID}* is not on file.

You must enter the ID of an existing kit. To define a kit, use the **Kits** function.

A kit cannot contain itself.

You cannot include a kit as part of the definition of itself.

Location *{location ID}* is not on file.

The location ID you entered is not on file. Enter an ID that is on file in Inventory.

Material List: *{list}*, Loc ID *{location ID}*, not found.

The specified list of materials is not in the specified location. Perhaps a user used the **Location Transfers** function in Inventory to move the component (item) to a different location since you defined the component as part of the assembly in Bills of Materials/Kitting.

Maximum number of lines reached.
Maximum number of lines reached. Cannot insert.

You can assign only 999 items to a kit or an assembly.

Must enter *I* or *K* or *J*.

The type of item you enter must be specified as either an item, a kit, or a job. Depending on which applications are interfaced, not all these choices may be available.

Negative quantities discovered—Press Enter to back out build.

The **Allow Negative Builds** option is set to **NO** in the **Options and Interfaces** function in Resource Manager. Press **Enter** to abort.

If you want to build an assembly that will drive the quantity of one of your items below zero, you must set the **Allow Negative Builds** option to **YES** in Resource Manager.

No bills of material on file.

You have not defined any BOMs. Define a BOM (assembly) in the **Bill of Materials** function.

Press any key to continue with Recalc.

To recalculate the number of assemblies to build, press any key.

Press F3 to delete the entire *{ID}*.

When you try to delete an assembly or a kit, this message appears for verification. If you do not want to delete, use the **Abandon** (**F5**) command.

Quantity must be greater than zero.

You must enter a positive quantity. A quantity of zero would mean that you do no want to build, and a negative quantity would mean that you want to take assemblies apart.

Quantity will become *{n}* for inventory.

You have instructed the system to push the quantity of the assembly larger than 999,999.9999 or smaller than -999,999.9999. Reduce or increase the quantity to fit within the range.

Recalculate cost total?

Information about the item (assembly or kit) has changed, probably because of a change in the **INVExxx** (Items) file with one of the items involved. To enter the instruction to recalculate the cost, use the **Proceed** (**OK**) command; to cancel, use the **Abandon** (**F5**) command.

Record in use.

Because someone else is using the item (assembly or kit) you are trying to work with, you cannot change the record, and can read it only when the other user is finished using the record.

Restoring item: *{ID}*.

The items that were being assembled are restored when you enter **NO** in the **Proceed with Build** field for one of the assembly's items after giving the instruction to build the assembly or when the **Negative Quantities Discovered** message appears and you press **Enter**.

Serialized components must have integer quantities.

You must enter whole numbers for quantities of serialized items.

Serialized kits are not allowed.
Serialized items are not allowed in kits.

You cannot involve serialized items with kits, either as kit IDs or as components of kits.

Serial number *{serial number}* found under item *{item ID}*.

You must assign a serial number to the item involved with the assembly or kit. A user may have made this item serialized since the assembly or kit was defined.

Service items are not allowed in bills of material.

You cannot include a service item in a bill of materials.

Terminology table *{ID}* not found.

You cannot use a function which involves user-defined fields from a **TRMBKxxx** table which does not exist. The table may have been deleted from the system with the **Delete** (**F3**) command on the table itself.

Thru value cannot be less than from value.

The **Thru** value must be greater than or equal to the **From** value.

A valid *{item/location}* is required.

You must enter an item or a location that is already in inventory.

Valid units of measure are:

You must enter one of the units of measure listed at the bottom of the screen.

You must build the CNVTxxx table first.

You must build the **CNVTxxx** table before you build assemblies or assign transactions to periods. If General Ledger is installed, you can interface Bills of Materials/Kitting with General Ledger and use the **Period Setup** function in Resource Manager to build the **CNVTxxx** table.

APPENDIX B

B

File Descriptions

BKHIxxx (History) file

When you build, information is sent from a scratch file to the **BKJRxxx** and **BKHIxxx** files and to the Inventory system.

The **BKHIxxx** file holds historical information about each assembly built: quantity and cost of the assembly, date of the assembly, and information in the user-defined fields.

The file holds information until you remove it. Use the **Purge Bill of Materials History** function to remove information from the **BKHIxxx** file, based on the date it was built.

BKJRxxx (Transaction/Journal) file

When you build, information is sent from the scratch file to the **BKHIxxx**, **BKJRxxx**, **BKTRxxx**, and **BKLSxxx** files and to the Inventory system.

The **BKJRxxx** file is sent account information about each component: general ledger period, account number, assembly ID and date of assembly, entry type and amount, sequence number, description, and reference number. This information is held in the file until you post, when it is transferred to the **GLJRxxx** file.

BKLSxxx (Transaction Lot/Serial Numbers) file

The **BKLSxxx** file stores quantities and lot and serial information from builds.

BKMDxxx (Master Detail) file

The **BKMDxxx** file stores information about assemblies, components, and general ledger account numbers.

BKMHxxx (Master Header) file

The **BKMHxxx** file stores information about assemblies and user-defined fields.

BKTB (Tables) file

The **BKTB** file stores information about the **TRMBK** and **BKGLxxx** tables.

The **TRMBK** table stores information about user-defined fields that you can assign to the header section of the **Kits** function and the **Bill of Materials** function. Refer to the **Tables** function for information about how the information is used.

The **BKGLxxx** table stores General Ledger accounts for user-defined fields. You can assign these accounts to user-defined fields 4 to 6 in the header section of the **Bill of Materials** function.

When you build an assembly or a kit, information about which components are involved comes from the **BKMDxxx** file. Information about each component comes from the Inventory system. Information for user-defined fields comes from the **BKTB** file.

BKTRx (Build Assembly Transaction) file

The **BKTRx** file stores information about assemblies, components, levels, units of measure, general ledger account numbers, quantities, and costs from builds.

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