TFG4000™

Professional Edition

Job Order Management

Users Guide

Version 1.4.5

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Welcome

The TFG4000 Professional Edition Software Series is a set of business management software applications that offer the robust functionality of an advanced management tool, yet tailored to meet the needs and budget of your growing business. Each TFG4000 Professional Edition application is integrated with other TFG4000 Professional Edition applications to provide you the optimum benefits of business management software.

TFG4000 Professional Edition is an easy-to-learn, user-friendly system that requires only minimal keystrokes for entering information. There are customizable dropdowns, font sizes, and screen colors available, as well as powerful search capabilities and built-in help features to help guide you through the system. With TFG4000 Professional Edition, you have the ability to pull up various summary screens, enter as little or as much data as you need, process a variety of reports - all of which help you save both time and money, which will add directly to your bottom line. For added convenience, TFG4000 Professional Edition also allows you to run the system in either single or multi-user mode, whichever works best for your business. Other features include optional security, as well as data import and export features, which save you the work of re-keying information. In all, TFG4000 Professional Edition is the smart source for business management. A simple solution for a complex process.

System Requirements

Microsoft Windows XP®, Microsoft Windows 2003 Server®, or Microsoft Windows 2000 Server®, with the latest Service Pack applied.

Pentium® class processor, 1 ghz or greater.

100MB free disk space.

256MB of RAM (512MB or more recommended).

Network Interface Card configured to use TCP/IP if installing in multiple user mode (client / server)

Starting TFG4000 Professional Edition

Perform the following steps to start TFG4000 Professional Edition in either Single or Multiple User Mode:

Single User

1. Open the “Start” menu, and then select the “Program” or “All Programs” option.

2. Select “TFG4000 Professional V1.4" from the program list.

3. Select “TFG4000 Professional Single V.1.4" to start.

4. The TFG4000 Professional Edition “Welcome” screen is displayed with the “Tip of the Day”. You can select “Close” to continue the start up process or select “Next Tip” to view more tips. You can also choose not to have the “Tip of the Day” appear by selecting the check box next to “Don’t show Tip of the Day at Startup” located on the Welcome screen. Select the check box again at any time to reinstate the “Tip of the Day” feature.

5. If you see a “User” and “Password” field on your screen, enter the User ID and Password that your System Administrator provided you, and either press “Enter” or click “Sign On”.

6. If your screen only displays “Welcome” without any other fields, then click the plus sign (“+”) next to the application you want to perform in the “NavTree”.

7. Click on the screen you would like to use.

Multiple Users (Not available in the Demo Version)

Server Startup

At installation, the server component is put in the Startup folder of the Program List. It will automatically start at system start up. Perform this procedure only if necessary.

1. Open the “Start” menu, and then select the “Program” or “All Programs” option.

2. Select “TFG4000 Professional V1.4” from the program list.

3. Select “TFG4000 Professional Server V1.4" to start.

4. The “TFG Web Server” screen is displayed. It will display the INI file and the TCP/IP port number being used for the server. This window will display other server messages as needed.

Client Startup

1. Open the “Start” menu, and then select the “Program” or “All Programs” option.

2. Select “TFG4000 Professional V1.4" from the program list.

3. Select “TFG4000 Professional Client V1.4" to start.

4. The TFG4000 Professional Edition “Welcome” screen is displayed with the “Tip of the Day”. You can select “Close” to continue the start up process or select “Next Tip” to view more tips. You can also choose not to have the “Tip of the Day” appear by selecting the check box next to “Don’t show Tip of the Day at Startup” located on the Welcome screen. Select the check box again at any time to reinstate the “Tip of the Day” feature.

5. If you see a “User” and “Password” field on your screen, enter the User ID and Password that your System Administrator provided you, and either press “Enter” or click “Sign On”.

6. If your screen only displays “Welcome” without any other fields, click the plus ign (“+”) next to the application you want to perform in the “NavTree”.

7. Click on the screen you would like to use.

Built-in Help

Help is available at the screen, field, and column level, as well as built-in tool tips.

Screen Level Help

To select screen level help, click “Help” on the “Menu” bar, and then select “Screen Help”. Help for the screen is then displayed.

Field Level Help

To select field level help, right click on the field, and then click “Help” from the pop-up. Help for the selected field is then displayed. You may also press the F1 key to get field help.

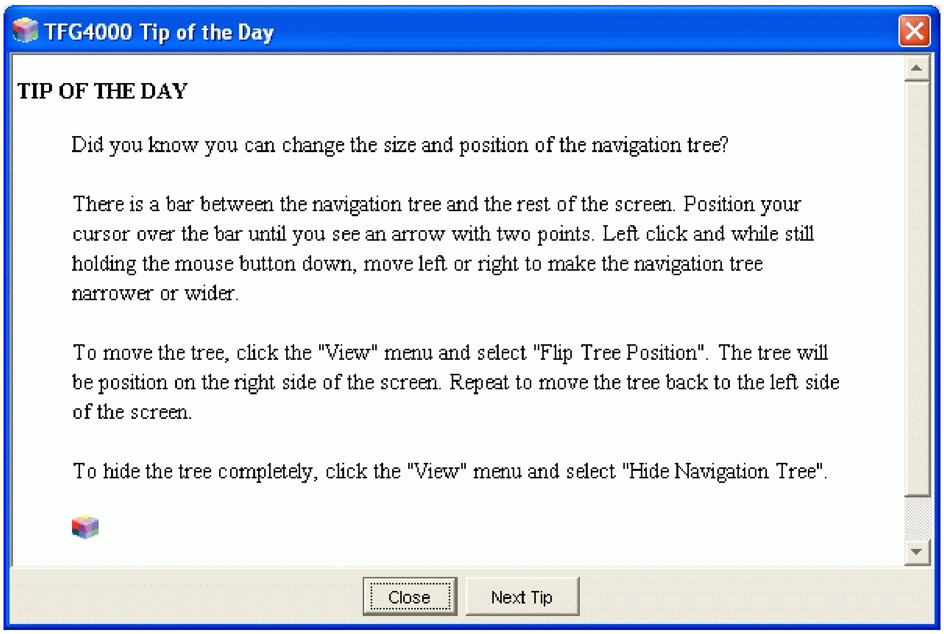
Column Level Help

To select column level help, right click on the column heading, and then click “Help” from the pop-up. Help for the selected column is then displayed.

Tip of the Day

Each time you start TFG4000 Professional Edition, there is a “Tip of the Day” pop-up displayed that describes some of the functionality that is available within the application. To close the “Tip of the Day” pop-up, click the “Close” button. To view another tip, click the “Next Tip” button. This feature can be turned off by clicking the box next to “Don’t Show Tip of the Day at Startup” on the Welcome screen. A check mark will appear in the box indicating the “Tip of the Day” should not be displayed during start up. To reinstate the “Tip of the Day” feature, click the box and the check mark will disappear indicating the “Tip of the Day” should be displayed during start up.

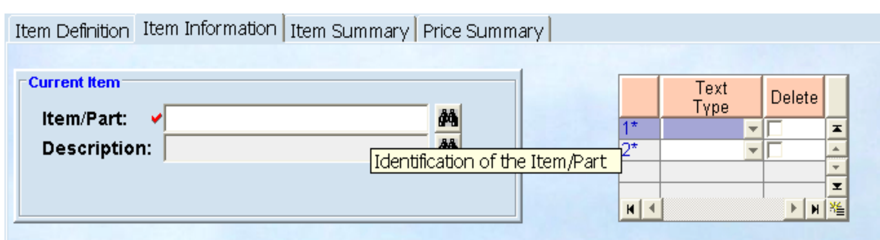
Example Only:



Tool Tips

Throughout TFG4000 Professional Edition, there are embedded tool tips that help describe certain areas on the screen. You simply roll your mouse (cursor) over the area in question, and a pop-up will describe that specific area. The tool tip pop-up will remain visible for a few seconds, then it will disappear automatically.

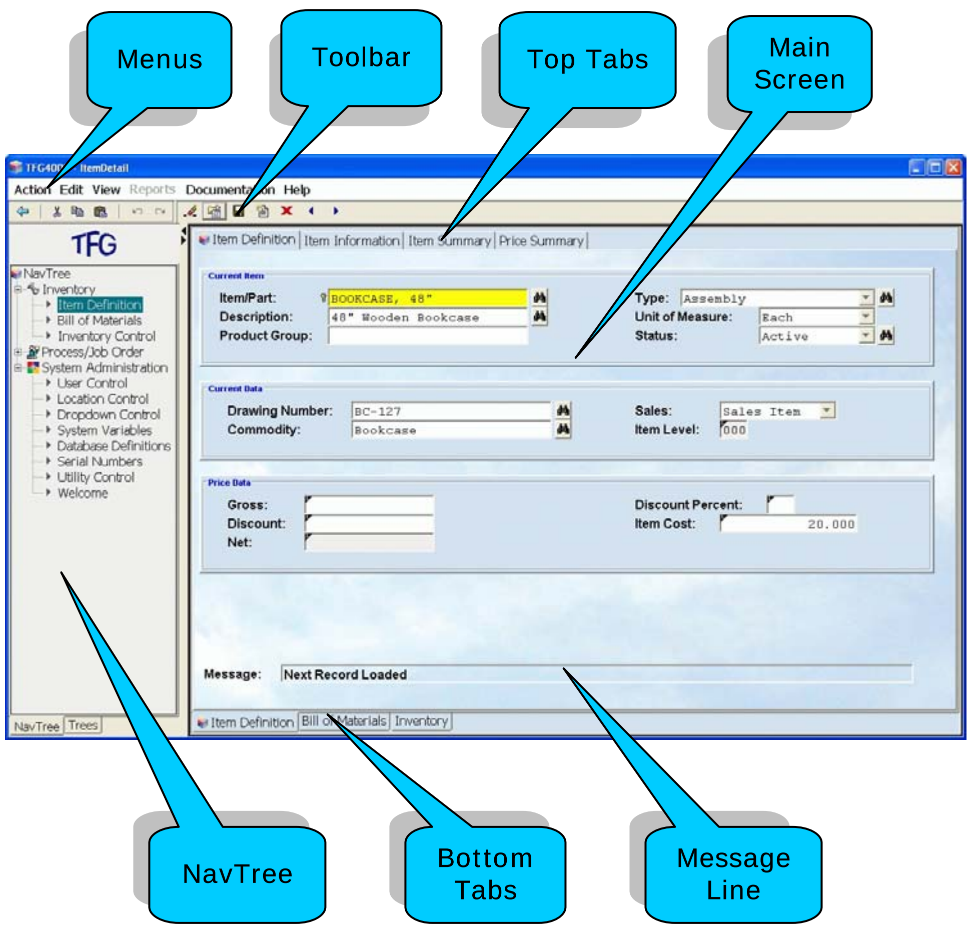
Example Only:



Using TFG4000 Professional Edition

You can navigate through the TFG4000 Professional Edition screens by using the “NavTree”, the “Goto Screen” section of the “View Menu”, and the tabs on the top and bottom of the screen. For easy use, the toolbar provides a variety of functions for you to choose from as you use the TFG4000 Professional Edition applications. There are buttons located on the toolbar that allow you to perform various functions from each screen, such as opening/displaying data, saving data, etc. The “Menu” provides useful functions as well, such as printing reports, documentation, help, etc.

Sample Screen



Menus

Each screen in TFG4000 Professional Edition has various menus available for working with your data. The following describes the purpose of each menu and special features.

Action

This menu is for printing screens and for exiting TFG4000 Professional Edition. It contains the following menu items:

Print	Prints the entire screen in either portrait or landscape mode.
Print Text	Prints only the text currently displayed on the screen in either portrait or landscape mode.
Exit	Terminates the TFG4000 Professional Edition session.

Edit

This menu is for performing cut, copy, and paste operations on data. It contains the following menu items:

Cut	When you highlight data and use this function, the data is removed from the screen and is available in a clipboard for pasting. Holding the “Ctrl” key and pressing the “X” key will perform the same operation.
Copy	When you highlight data and use this function, the data is copied into a clipboard and is available for pasting. Holding the “Ctrl” key and pressing the “C” key will perform the same operation.
Paste	When you position your cursor in a field and use this function, data you have previously put into the clipboard using the “Cut” or “Copy” operation will be pasted after your cursor. Holding the “Ctrl” key and pressing the “V” key will perform the same operation.

Note: If your keyboard is in “insert mode” the data will not overlay data that follows, but if it is not in “insert mode” it will. Press the Insert key on your keyboard to change your insert mode to whichever way you prefer.

View

This menu allows you to change the way the TFG4000 Professional Edition screens are presented and how you navigate the screens. It contains the following menu items:

Set Font Size — You can choose a font size from 10 to 18. With larger font sizes you may have to scroll to see the entire screen.

Hide Calendar Buttons — Toggles whether or not a Calendar button is displayed next to the date fields.

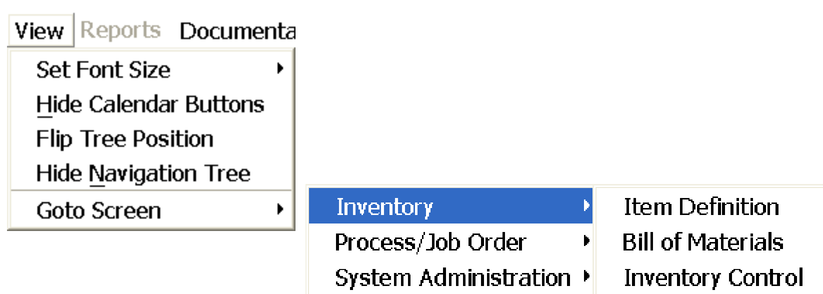
Flip Tree Position — Changes the position of the “NavTree” to either the left or the right side of the screen.

Hide Navigation Tree — Hides the “NavTree” from the screen. Click it a second time to display the “NavTree” on the screen.

Note: The dark arrows in the bar between the NavTree” and the main screen perform the same function.

Allow Word Wrap — Determines how text may be viewed. When it is checked, text may be displayed on multiple lines and can be viewed by scrolling up and down. When it is not checked, text may be viewed by scrolling right and left. Word wrap is allowed only if the system variable **Allow_Wrap** is set to **Yes**.

GoTo Screen — Displays the “NavTree” in menu format. You can use this method to navigate the screens at any time but it is particularly useful if you hide the “NavTree”.

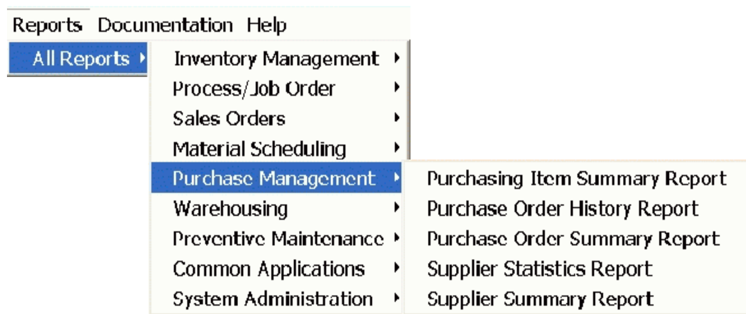


Reports

This menu shows you the reports or forms available for the screen you are on. There will be various menu items depending on the screen. There is also an "All Reports" menu available from any screen.

Note: Forms are structured documents such as Invoices, Packing Slips, Purchase Orders, etc. Though you will see forms in the Reports menu on some screens, you will not see forms in the All Reports menus.

Specific Reports	Displays reports associated with the screen you are on.
All Reports	Displays a menu of reports available for all the applications you have installed. This menu does not include Forms.



Documentation

This menu lets you select the TFG4000 Professional Edition manuals for viewing and printing.

Help

This menu provides help about the screen you are on and information about TFG4000 Professional Edition. It contains the following menu items:

Screen Help	Displays information about the screen you are on.
About	Displays information about TFG4000 Professional Edition.

Buttons & Icons

Each screen in TFG4000 Professional Edition has various buttons available for working with your data. The following describes the purpose of each button and special features. It also explains other icons you may see on the screens.

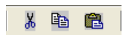
Toolbar Buttons

Use the following buttons to perform TFG4000 Professional Edition application tasks. The buttons displayed change with the screen you are working with.

Previous screens

Use this button to return to your previous screen. You can go back up to ten screens.

Cutting, copying and pasting text



You can use “Cut” and “Paste” to move selected text. You can use “Copy” and “Paste” to copy selected text and paste the copy in another place. “Cut”, “Copy”, and “Paste” can also be selected from the “Edit” menu.

Working with data

You can perform many different operations by using these buttons:

Erase	This button clears data from the screen. It does not update any data; it merely clears the data away to make it easier for you to enter something else. It is particularly useful for resetting summary screens for a new search and it may be required when adding new entries on some screens.
Open (Display)	This button retrieves data that has been previously saved for viewing and/or modifying. The **Enter** key executes this button by default.
Save	This button stores new data and modified data. If you enter new data or change existing data and do not click this button, the system prompts you to do so.
Cancel	This button reduces any remaining quantities to zero and changes statuses to “Cancelled”.
Delete	This button deletes previously saved data. On screens indicated as “definition” screens, the delete button deletes related data in addition to the data currently displayed. On all other screens only the data displayed is deleted.
Previous	This button retrieves data that alphabetically precedes the currently displayed data.

Next	This button retrieves data that alphabetically follows the currently displayed data.
Copy	This button copies data from one place to another. It can copy related data in addition to the data currently displayed.
Print	This button sends your document to the printer to be printed.
Build	This button extracts eligible data from one place to create a new definition in another place. For example, it can extract customer order data to build a new invoice.
Refresh	This button rebuilds the data on the screen.
Split	This button will take lines from one document to create a new document using the lines selected.

Screen Buttons

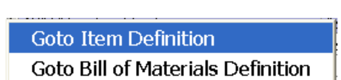
Throughout the screens are buttons that perform functions.

Search	This button is for finding data you have already entered. When you click this button a search box pops up.
Calendar	This button provides a pop-up calendar for selecting dates. You can choose the month and the year, and then double-click on the date you desire. Click “Today” to re-position the calendar on the current date. Click “Cancel” if you decide not to select a date. Dates can be entered without using the “Calendar” button if desired. Manually entered dates are verified so a pop-up appears prompting you to correct a date if it is invalid.
Dropdown	This button provides a “dropdown” list of pre-defined values from various fields that have this button next to it. If you click on one of the values from the dropdown list, that value will appear in the adjacent field.

Table Buttons

Throughout the tables are buttons that perform functions.

GoTo/Selection	This button is for either transferring to another screen or selecting data. When you right-click on this button, it displays a menu of related screens and/or a menu of selection activities. To transfer to another screen, click on the screen you desire and that screen is displayed with the appropriate keys already filled in. To select data, such as a component or inventory location, click the action you want.



Properties	This button is located at the lower left corner of each table. It allows you to edit the layout of the table. You can use this button to hide or display columns in the table and to restore the original table layout.
Add Rows	This button appears in the lower right corner of modifiable tables so that you can put more empty rows on the screen for adding data to the table. If you are trying to enter another row in a table and there are not any blank rows to use, click the “Add Rows” button.
Scroll to the Left	This button allows you to scroll to the left of the table.
Scroll to the Right	This button allows you to scroll to the right of the table.
Scroll Up	This button allows you to scroll up the table.
Scroll Down	This button allows you to scroll down the table.
Scroll Bottom	This button allows you to scroll to the very bottom of the table.
Scroll Top	This button allows you to scroll to the very top of the table.
Scroll Left	This button allows you to scroll to the very left of the table.
Scroll Right	This button allows you to scroll to the very right of the table.

Information Icons

Icons on the screen show properties about the field.

Numeric	This icon in the upper left corner of a field indicates that the field is for a numeric value. You are able to enter only numbers, commas, and decimals in fields containing this icon.
Key	This icon to the left of a field indicates that the field is a key field and is required for this screen.
Required	If you try to display or save data without entering a required field, this checkmark icon is displayed next to the missing field.

Field Colors

The fields on the screens and in screen tables have three different colors that have functional significance.

Gray A gray field is display only, no entry allowed or necessary

White A white field is open for entering data

Yellow A yellow field indicates where the cursor is currently positioned

Changing Screen Table Properties

Tables that appear on screens can be modified. The columns can be re-sized, re-positioned, hidden, and un-hidden.

To re-size a column move your cursor over the column heading you want to re-size and move to the right until you see an arrow with two heads. Click, then still holding the mouse button down, move the cursor to the right until the column is as wide as you want or to the left until the column is as small as you want.

To re-position a column click on the column heading, then still holding the mouse down, move the column to the where you want it and release the mouse. Some columns are key columns and will not remain where you re-position them.

Note: Re-sizing and re-positioning remain in effect for the duration of the current session. The default sizing and positioning is restored when TFG4000 Professional Edition is restarted.

To hide or unhide a column click the Properties button located in the lower left corner of the table. A red check mark next to the column name indicates the column will be displayed. If there is not red check mark next to the column name it will not be displayed in the table. There may be multiple tabs for the table, so you must click on the tab that contains the column(s) you want. To save the changes you have made, click the “OK” button. To discard the changes you have made, click the “Cancel” button. To reset the properties back to the default properties, click the “Restore Default Visibility” button. Another pop-up will appear asking the range you wish to restore. Use the dropdown provided to select either “All Tabs”, which will restore the defaults for the entire table, or “Currently Displayed Tab Only”, which will restore the default properties only for the portion of the table indicated by the tab you are viewing. Once you have made your selection click “OK” or “Cancel”. That pop-up will disappear and the column visibility properties are reset as requested or the reset action is cancelled. Then you may click either “OK” or “Cancel” to save or discard the property changes.

Note: Property changes remain in effect even after TFG4000 Professional Edition is restarted.

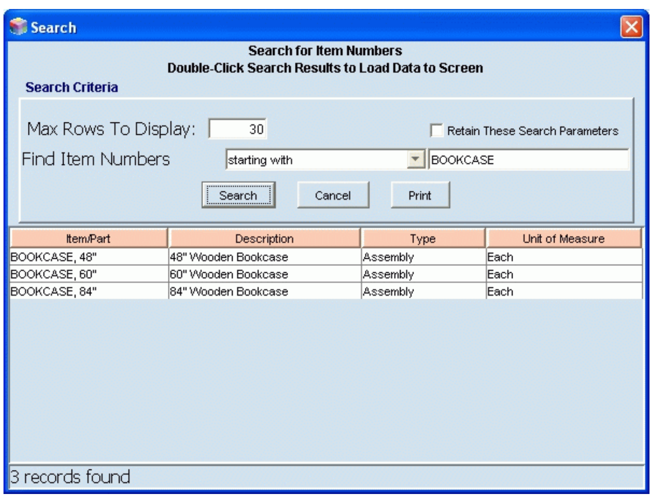
Performing Searches

There are two types of searches in TFG4000 Professional Edition that are similar in appearance, however they have different functionality. The first is a “Search” associated with a field on the screen. The second is a “Search Pop-up” which is found on tables. One of the differences between the two is that a “Search Pop-up” can load multiple table rows to the screen at one time but a “Search” will not. Another difference is that “Search” screen results can be printed but “Search Pop-up” results cannot.

Search Screen (Fields)

Below is an example of a search screen that may be used to locate information already entered into the system, and/or to automatically populate the fields on the screen that you are currently viewing or editing. When search results are displayed you can move the columns into different places on the search screen so that the values can be viewed in positions different from the default layout. Click the heading of the column you wish to move then drag and drop it into the desired position. Resize columns by moving the cursor over the heading until you see an arrow with two heads. Click, and with the mouse button still down, move the cursor right or left until the column is the desired width. The default layout is restored when the “Search” button is pressed and when you exit the search. In addition, you also have the option to retain search parameters by checking the box located next to “Retain Search Parameters”. This option allows you to save the search parameters you used for future searches.

Example Only:



Using the Search Screen

1. Click the Search button located directly next to the field you want to search.

2. Enter the maximum number of rows of data you want to display in your results. The default is “30”.

3. Select one of the search choices using the dropdown. The default is “starting with”.

4. Enter all or part of the value you want to search with. You may leave the search field blank to return all applicable records in the database. If there is a value in the screen field you are searching on, it will be copied to the search field. You can change the search field value on the “Search” screen.

5. Click the Search button .

6. Double click on the row you desire to load the information to the main screen.

Modifying the View of the Search Results

To modify the view of the search results, do the following:

1. To re-size a column move your cursor over the column heading you want to re-size and move to the right until you see an arrow with two heads. Click, then still holding the mouse button down, move the cursor to the right until the column is as wide as you want or to the left until the column is as small as you want.

2. To re-position a column click on the column heading, then still holding the mouse button down, move the column to where you want it and release the mouse. Some columns are key columns and will not remain where you re-position them.

3. To re-size the window move your cursor over the edges of the window until you see an arrow with two heads. Click, and then still holding the mouse button down, move the cursor to increase or decrease the size of the window.

Printing the Search Results

To print the search results, use these steps:

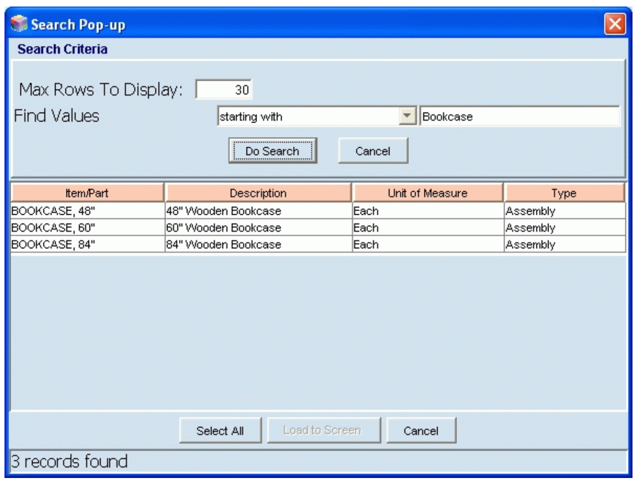
1. Click the Print button on the “Search” screen.

2. Type or select the appropriate formatting options in the dialog box and then click “OK” to print the report.

Search Pop-Up Screen (Tables)

Below is an example of a search pop-up screen that may be used to populate columns in the table on the screen that you are currently viewing or editing. When search results are displayed you can move the columns into different places on the search pop-up screen so that the values can be viewed in positions different from the default layout. Click the heading of the column you wish to move then drag and drop it into the desired position. Resize columns by moving the cursor over the heading until you see an arrow with two heads. Click, and with the mouse button still down, move the cursor right or left until the column is the desired width. The default layout is restored when the “Do Search” button is pressed and when you exit the search pop-up.

Example Only:



Using the Search Pop-Up Screen

1. Click the GoTo/Selection button in the row you want to search.

2. Enter the maximum number of rows of data you want to display in your results. The default is “30”.

3. Select one of the search choices using the dropdown. The default is “starting with”.

4. Enter all or part of the value you want to search with. You may leave the search field blank to return all applicable records in the database.

5. Click the “Do Search” button.

6. To select just one entry, double-click on it to populate the fields on your screen.

7. To select more than one entry, hold down the “Control” key while you click on the other selections with your mouse, then click “Load to Screen” to populate the information.

8. To load all of the entries to the screen table, click the “Select All” button and then click the “Load to Screen” button.

Modifying the View of the Search Results

To modify the view of the search results, do the following:

1. To re-size a column move your cursor over the column heading you want to re-size and move to the right until you see an arrow with two heads. Click, then still holding the mouse button down, move the cursor to the right until the column is as wide as you want or to the left until the column is as small as you want.

2. To re-position a column click on the column heading, then still holding the mouse button down, move the column to where you want it and release the mouse. Some columns are key columns and will not remain where you re-position them.

3. To re-size the window move your cursor over the edges of the window until you see an arrow with two heads. Click, and then still holding the mouse button down, move the cursor to increase or decrease the size of the window.

Printing the Search Results

To print the search results, use these steps:

1. Click the Print button on the “Search” screen.

2. Type or select the appropriate formatting options in the dialog box and then click “OK” to print the report.

Working with Reports

You can view, modify, and print reports by using the “Reports” menu located just above the toolbar.

To view a report, follow these steps:

1. Click on “Reports” above the toolbar. A menu will drop down indicating which reports can be generated from that screen and a selection for All Reports. Click on the report name that you want.

2. A status window will appear showing that the system is generating the report.

3. You will then see your report displayed on the screen.

To modify and/or print a report, follow these steps:

1. Click on “Reports” above the toolbar. A menu will drop down indicating which reports can be generated from that screen. Click on the report name that you want.

2. A status window will appear showing that the system is generating the report.

3. You will then see your report displayed on the screen with this toolbar at the top:

Printing Options — Allows you to set the Page Number Prefix, number of pages wide, and the Repeat Section Header/Footer settings. Adjust the settings to your specifications and then click “OK”.

Page Setup — Allows you to adjust page settings such as page orientation and margins. Once finished adjusting the settings, click “OK”.

Memorize — Allows you to save report settings under a report that you name yourself so you can run the report again with the same settings. You can save settings for a report under different names so you can have multiple versions of the same report formatted different ways. The new report names appear in the Report menu at the top of the main screen (after you go to another screen and come back) and they are available only to you, other users will not be able to see reports you memorized.

Print — Allows you to select printer settings and print your report. Once finished with settings, click “OK” to print the report.

Preview — Allows you to preview your report layout before you actually print. Once finished previewing, click “Close”.

Excel	Allows you to save your report as an Excel document. Once finished naming and specifying where to save your report, click “Save”.
Revert	Allows you to discard all layout changes and revert to default settings. Simply click either “Yes”, or “No”.
Help	Shows the Report Layout Instruction screen.
Close	Click this button to close the report and return to the main screen.

In some reports the selection criteria can be changed in the report window. Adjust the selection criteria as desired, and then click the “Refresh” button to reload the data. When you exit the report you will be asked if you want to update the screen with the refreshed data from the report. Click “Yes” to update the screen or “No” to leave the screen as it was when you started the report.

Report layouts can be modified. Columns can be re-sized, hidden, and un-hidden and sections can be hidden and un-hidden.

To re-size a column do the following:

1. Move your cursor over the column heading you want to re-size.

2. Move to the right until you see an arrow with two heads.

3. Click, then still holding the mouse button down, move the cursor to the right until the column is as wide as you want or to the left until the column is as small as you want.

To hide or unhide a column, do the following:

1. Right click in the report area or the long, thin “Edit” button on the left side of the report window to get the “Report Layout Options” window.

2. Click the “Column Visibility” tab. A red check mark next to the column name indicates the column will be displayed. If there is not red check mark next to the column name it will not be displayed in the report.

To hide or unhide a report section, do the following:

1. Click the tab for the section you want to hide or unhide.

2. Right click in the report area or the long, thin “Edit” button on the left side of the report window to get the “Report Layout Options” window.

3. Click “Do Not Print This Section”.

To save the changes you have made, click the “OK” button. To discard the changes you have made, click the “Cancel” button.

To reset the properties back to the default properties, click the “Revert” button located on the report toolbar. A dialog box will appear asking if you want to discard changes and revert back to default settings. Click either “Yes” to restore the defaults or “No” to keep the changes.

Note: Report layout changes remain in effect even after TFG4000 Professional Edition is re-started.

Logos on Forms and Reports

Special forms such as job order forms, customer order forms, packing slips, invoices, and purchase order forms have an area for a company logo. The logo is controlled by system variable **Form_Logo**.

Reports have an area for a company logo too. The logo is controlled by system variable **Report_Logo**.

See the System Administration Users Guide for more information about these system variables and how to set them.

Working with Summary Screens and Summary Reports

TFG4000 has many summary screens and reports available for locating data, listing data, and summarizing data. Each summary screen and report has various fields for search criteria that are used in combination with one another. The search criteria fields can use wildcards and other sophisticated SQL search techniques. For more information about wildcard characters that can be used for advanced searching, refer to the following Microsoft website:

http://msdn.microsoft.com/library/default.asp?url=/library/en-us/off2000/html/acconWildcardCharactersS.asp

Due to differences between Access and ANSI wildcard characters, when reading this website and using wildcards in TFG4000, substitute as follows:

% for *****
_ for **?**
is not used

Also note that these wildcards cannot be used in searches.

Initial Setup

TFG4000 Job Order Management is installed with certain features that can be changed. The features are controlled with system variables. There are a few system variables you need to understand before you start using Job Order Management. For more information about viewing and changing system variables see the System Variables screen in the System Administration User Guide included on the TFG4000 CD, which is available from the Windows "Start" menu or from the "Documentation" menu within TFG4000. The documentation is also available online.

Job_Order_Full_BOM (default is "**Yes**") – With this variable set to "**Yes**", job orders will be built using a summarized bill of materials, i.e. all components at every level of the bill will be used on the job order bill of material. With this variable set to "**No**", only the components on the first level of the bill will be used in the job order bill of materials.

Job_Order_Printer (installation default is "**HP Laserjet Printer**") – This variable indicates the default printer to be used for job order printing.

Form_Logo (installation default is **CubeIcon.gif**) – This variable contains the name of the logo file to use on special forms such as Job Order Forms, Packing Slips, and Invoices. The recommended logo size is 50x50 pixels. The logo can be smaller or larger and the system will size it to fit. If you would like your company logo to appear on forms, place your logo in .gif format in the \\Server\Images directory and set this variable to the name of the logo. (**Note:** The Report_Logo variable was used in previous releases of TFG4000 for forms, so you may need to check the setting for this variable).

Report_Logo (installation default is **CubeIcon.gif**) – This variable contains the name of the logo file to use on reports. The recommended logo size is 50x50 pixels. The logo can be smaller or larger and the system will size it to fit. If you would like your company logo to appear on reports, place your logo in .gif format in the \\Server\Images directory and set this variable to the name of the logo.

Process Definition

What is a Process?

A process is a set of discrete steps necessary to perform an action. With the Process Maintenance screen, processes can be defined to support both production and service job orders. They can be as detailed as necessary to convey the information needed. The information screens allow you to enter narrative text for both the overall process and the individual operational steps for the process. In addition, the information screens allow you to attach external references in various forms. For example, it can be in the form of text that explains where the external information can be found such as a book and the page in the book; it can be an electronic document such as a spreadsheet or diagram; it can be a URL to a website, etc.

Process Definition Screens

“Process Definition” consists of three tabbed screens that are used to enter and maintain process definition data. Each screen is used for specific purposes to aid in the entry and maintenance of processes.

Process Maintenance

Use this screen to define the process and enter the sequence of operations (steps) for the process.

Process Information

Use this screen to enter text information describing the process. This data may be any information you wish to store concerning the process, and multiple types of information can be stored. In addition, you can attach external references such as spreadsheets, word processing documents, diagrams, URL’s, even text that explains where to find external information such as a book and the page in the book. Information text can be selected to print on the job order form. External references may also be selected to print on the job order form; however, only external reference files with a .txt extension can be printed.

Operation Information

Use this screen to enter and maintain text information for operations associated with a process. This data may be any information you wish to store concerning the operations, such as safety issues, specific tools required, and unique material requirements. You can also attach external references such as diagrams, spreadsheets, URL’s, etc. Information text can be selected to print on the job order form. External references may also be selected to print on the job order form; however, only external reference files with a .txt extension can be printed.

Process Summary

This screen can be used to display a list of processes based on the selection criteria you use. Each row in the table represents one process with its associated data.

Process Definition Screens Explained

Process Definition Screen

Use this screen to define the process and enter the sequence of operations (steps) for the process, including “Run Time”, “Setup”, and “Operator Time” data. The process types are:

> **Custom (Unique)**
> **Master (Main Process)**
> **Standard (Valid for Several Processes)**

Current Process Data

Field	Explanation
Process	The name of the process. A process identifies the steps necessary to perform a service or build a product.
Type	Identifies the process type: Custom (Unique), Master (Main Process), and Standard (Valid for Several Processes).
Description	A short description of the process or its use.
Status	Identifies the process status: Active, Future, and Inactive.
Alternate Process	Process that can be substituted for the one defined here.
Alternate Type	Process type of the alternate process.

Current Process Table (Run Time, Setup Time, and Operator Time tabs)

Column	Explanation
Row	The line number of the row in the table.
Operation Sequence	The order that the operation should be performed in this process.
Type	Identifies the operation type: Custom (Unique), Master (Main Process), and Standard (Valid for Several Processes).
Description	Short description of the activity or activities involved in this operation.
Run Time	Amount of time required to complete this operation.
Run Time Unit	The measure of time used to define the operation time. The values are: Seconds, Minutes, Hours, Days and Weeks.

Run Time Quantity	Standard quantity that can be accomplished in this operation.
Setup Time	The standard time required to prepare for this operation.
Setup Time Unit	The measure of time used to define the setup time. The values are: Seconds, Minutes, Hours, Days and Weeks.
Work Center	The unique identification of the work center where the operation is to take place.
Machine	The unique identification of the machine on which the operation is to take place.
Operator Time	The manpower (operator) time needed to complete this operation.
Operator Time Unit	The measure of time used to define the operator time. The values are: Seconds, Minutes, Hours, Days and Weeks.
Operator Time Quantity	Standard quantity that can be accomplished in this operation per operator (person)
Delete	This is a checkbox to indicate you want to delete an operation from this process.

Message Line

Field	**Explanation**
Message	Displays information about the current status of the screen.

Accessing the Process Definition Screen

1. Click the plus ("+") next to "Process/Job Order" or double-click  "Process/ Job Order" in the "NavTree".

   -or-

   Click on the "View" menu. Select "Goto Screen", then select "Process/Job Order".

2. Click "Process Definition". The Process Definition screen is displayed.

3. If there is a process in the "Process" field, the process definition for that process is displayed on the main screen.

Using the Process Definition Screen

Use the following procedures to erase the screen, display, update, add, delete, display previous, display next, or copy a process and its operations.

Erasing the Screen

To erase the data from the screen click the Erase button located on the toolbar.

Note: Erasing the screen does not cause any data to be lost; it is merely a way to clean the screen in preparation for another operation.

Displaying a Process and its Operations

To display a process and its operations, perform the following steps:

1. Enter a process name in the “Process” field.

2. Click the Open (Display) button located on the toolbar or hit the Enter key.

3. The process and its operations are displayed on the main screen.

-or-

1. Use the Search button next to the “Process” field or the “Description” field to select a process.

2. Double-click on the “Process” you would like to display in the “Search” screen table.

3. The process and its operations are displayed on the main screen.

Updating Operation Data for a Process Definition

To edit operation data for a process definition:

1. Display the process you wish to change. See “Displaying a Process and its Operations” above.

2. Change the operation data as needed. You cannot change the “Operation Sequence” or “Type” for existing sequence steps. When adding or inserting sequence steps, enter the operation data in the first available row in the table. You can use the Add Rows button located on the toolbar to add additional rows for entry. When the entries are saved, the operation sequences are placed in the correct sequence in the table.

3. When all of the appropriate columns are changed, click the Save button located on the toolbar.

Adding a New Process Definition

To add a new process definition:

1. Click the Erase button located on the toolbar to clear the screen.

2. Enter the name of the process in the "Process" field.

3. Select the appropriate type in the "Type" field, if desired (the default is Standard), and enter an optional process description in the "Description" field.

4. Click the Add Rows button located on the lower right corner of the table.

5. Enter the operation sequence data in the table for each of the tabs ("Run Time", "Setup Time", and "Operator Time"). You cannot change the "Operation Sequence" and "Type" entries once the data has been saved. Leave gaps in your numbering sequence to allow for the insertion of additional steps.

6. When all of the operation data has been entered, click the Save button located on the toolbar. You can also enter just the process identifier in the "Process" field, and click the Save button located on the toolbar. This allows you to create process placeholders and then come back later and complete the process detail. See the "Copying Process Definitions" procedure for more information.

Deleting Operation Data for a Process Definition

Perform the following steps to delete the operation data for a process definition:

1. Display the process you wish to change. See "Displaying a Process and its Operations" above.

2. Click the "Operator Time" tab in the table.

3. Click the "Delete" checkbox next to the row(s) you want to delete. You may select more then one row to be deleted at one time. Click the checkbox again to remove the deletion flag.

4. When all of the appropriate rows are selected, click the Save button located on the toolbar.

Deleting a Process Definition and its Associated Data

Perform the following steps to delete the process data for a process definition:

1. Display the process you wish to delete. See "Displaying a Process and its Operations" above.

2. Click the Delete button located on the toolbar.

3. Click the "Yes" button on the "Confirm Action" pop up message. If you do not want to delete the process click "No" on the "Confirm Action" pop up message.

4. The process definition, process information, process references, operations, operation information, and operation references are deleted.
   Note: Once a process is deleted, it can no longer be displayed or updated.

Displaying the Previous Process

To display the process that precedes the process currently displayed, perform the following steps:

1. Click the Previous button located on the toolbar.

2. The previous process and its operations are displayed on the main screen.

Displaying the Next Process

To display the process that follows the process currently displayed, perform the following steps:

1. Click the Next button located on the toolbar.

2. The next process and its operations are displayed on the main screen.

Tip: You can use the Next button as a convenient way to locate the first record in the database. Start by erasing the screen using the Erase button , then click the Next button .

Copying a Process

To copy a process to a new process, perform the following steps:

1. Display the process you wish to copy. See “Displaying a Process and its Operations” above.

2. Click the copy button located on the toolbar. A pop-up will appear.

3. Enter the new process in the “Copy to” field and select a “Copy To Type”.

4. Various types of process data are listed with check boxes next to them. Click a check box to check or uncheck data to be copied. A check mark means it will be copied, No check mark means it will not be copied.

5. Click the “Copy” button to complete the copy or click “Cancel” to cancel the copy operation.

Process Information Screen

Use this screen to enter text information describing the process. This data may be any information you wish to store concerning the process, and multiple types of information can be stored. Also, you can use this screen to reference any kind of external document such as spreadsheets, diagrams, books, websites, etc.

Information text can be selected to print on the job order form. External references may also be selected to print on the job order form; however, only external reference files with a .txt extension can be printed.

Current Process Data

Field	Explanation
Process	The name of the process. A process identifies the steps necessary to perform a service or build a product.
Description	A short description of the process
Type	Identifies the process type: Custom (Unique), Master (Main Process), and Standard (Valid for Several Processes).

Information Table

Column	Explanation
Row	The line number of the row in the table.
Type	A designation for the type of information stored. A dropdown list of values is provided for your convenience. You can use those values or define your own using the "Dropdown Control" screen under "System Administration".
Text Information	This is where you enter text information or view text that has already been entered.
Print Job Order	This is a checkbox to indicate whether or not you want this information text to appear on the job order form.
Delete	This is a checkbox to indicate you want to delete this text record.

Reference Table

Column	Explanation
Row	The line number of the row in the table.

Reference Type	A designation for the type of reference stored. A dropdown list of values is provided for your convenience. You can use those values or define your own using the "Dropdown Control" screen under "System Administration".
Reference	Directory and file name for an electronic reference, URL for a website, or description of where to find a physical reference. An electronic reference can be a spreadsheet, a word processor document, or a text file. A physical reference can be the name of a book with the page number.
Print Job Order	This is a checkbox to indicate whether or not you want this external reference to appear on the job order form. Only files with a .txt extension can be printed.
Delete	This is a checkbox to indicate you want to delete this reference record.

Message Line

Field	**Explanation**
Message	Displays information about the current status of the screen.

Accessing the Process Information Screen

1. Click the plus ("+") next to "Process/Job Order" or double-click "Process/Job Order" in the "NavTree".

   -or-

   Click on the "View" menu. Select "Goto Screen", then select "Process/Job Order".

2. Click "Process Definition". The Process Definition screen is displayed.

3. If there is a process in the "Process" field, the process definition for that process is displayed on the main screen.

4. Click "Process Information". The Process Information screen is displayed.

Using the Process Information Screen

Use these procedures to display, update, add, delete, display the pervious, and display the next process information and references.

Displaying Process Information and References

To display process information or references, perform the following steps:

1. Enter a process in the “Process” field and click the Open (Display) button located on the toolbar or hit the Enter key.

   -or-

   Use the Search button next to the “Process” field to select a process and double-click on the “Process” you would like to display in the “Search” screen table.

2. The information text types and references for the process are displayed on the main screen.

3. To display information text, click the Goto/Selection button in the “Text Information” column of the Information table for the row you want to display and select “Edit Information Text” on the menu that appears. Use the scroll bar on the right to display more rows if necessary.

4. The text will be displayed in a pop-up window.

5. The reference information is displayed in the Reference table. Use the scroll bar on the right to display more rows if necessary.

6. To view electronic references, right click on the reference you would like to display. Choose “Goto External Application” from the menu.

Updating Process Information

To update process information, perform the following steps:

1. Display the process you want to change. See “Displaying Process Information and References” above.

2. Click the Goto/Selection button in the “Text Information” column of the Information table for the row you want to update and select “Edit Information Text” on the menu that appears. Use the scroll bar on the right to display more rows if necessary.

3. The text will be displayed in a pop-up window.

4. Change the desired information in the pop-up window and click “Ok” when done.

5. If necessary, click the checkbox in the "Print Job Order" column to indicate if you want this information text to appear on the job order document or not. When this box is checked, the text will appear on the job order document. Click the checkbox again to remove the print flag.

6. When you have finished editing all of the entries you wish to edit, click the Save button located on the toolbar.

Note: You can update Process Information and References at the same time.

Updating Process References

To update process references, perform the following steps:

1. Display the process you want to change. See "Displaying Process Information and References" above.

2. Enter the new reference in the "Reference" column of the Reference table for the row or rows you wish to update.

   -or-

   For an electronic reference, right click the reference you want to update. Choose "Select External File". A file selection dialog will appear so you can locate the directory that contains the file you want. Select the file you want and click the "Open" button.

3. If necessary, click the checkbox in the "Print Job Order" column to indicate if you want this reference to appear on the job order document or not. When this box is checked, the reference will appear on the job order document if possible. Click the checkbox again to remove the print flag.

4. Once finished, click the Save button located on the toolbar.

Note: You can update Process Information and References at the same time.

Adding Process Information

To enter process information, perform the following steps:

1. Display the process you want to change. See "Displaying Process Information and References" above.

2. Click an empty row in the Text Type table. If there are no empty rows click the Add Rows button in the lower right corner of the table.

3. Type the first letter of the text type you want (type the letter multiple times if there is more than one type that begins with the same letter).

   -or-

   Using the dropdown list, select the Text Type in the "Text Type" column of the Information table.

4. Click the Goto/Selection button in the "Text Information" column of the Information table for the row you want and select "Edit Information Text" on the menu that appears. Use the scroll bar on the right to display more rows if necessary.

5. The text will be displayed in a pop-up window.

6. Enter the desired information in the pop-up window and click "Ok" when done.

7. If necessary, click the checkbox in the "Print Job Order" column to indicate if you want this information text to appear on the job order document. When this box is checked, the text will appear on the job order document. Click the checkbox again to remove the print flag.

8. Once finished, click the Save button located on the toolbar.

Note: You can add Process Information and References at the same time.

Adding Process References

To enter Process references, perform the following steps:

1. Display the process you want to change. See "Displaying Process Information and References" above.

2. Click an empty row in the Reference table. If there are no empty rows click the Add Rows button in the lower right corner of the table.

3. Type the first letter of the reference type you want (type the letter multiple times if there is more than one type that begins with the same letter).

   -or-

   Using the dropdown list, select the Reference Type in the "Reference Type" column of the Reference table.

4. Enter the reference in the "Reference" column.

   -or-

   For an electronic reference, right click the reference you want to update. Choose "Select External File". A file selection dialog will appear so you can locate the directory that contains the file you want. Select the file you want and click the "Open" button.

5. If necessary, click the checkbox in the "Print Job Order" column to indicate if you want this reference to appear on the job order document. When this box is checked, the reference will appear on the job order document if possible. Click the checkbox again to remove the print flag.

6. Once finished, click the Save button located on the toolbar.

Note: You can add Process Information and References at the same time.

Deleting Process Information and References

To delete process information and references, perform the following steps:

1. Display the process information and references you want to delete. See “Displaying Process Information and References” above.

2. To delete text information, click the checkbox ☐ in the “Delete” column of the Information table for the row you want to delete. You may select more then one row to be deleted at one time. Click the checkbox ☐ again to remove the deletion flag.

3. To delete reference information, click the checkbox ☐ in the “Delete” column of the Reference table for the row you want to delete. You may select more then one row to be deleted at one time. Click the checkbox ☐ again to remove the deletion flag.

4. Once finished, click the Save button located on the toolbar.

Note: Once process information is deleted, it can no longer be displayed or updated.

Displaying the Previous Process Information and References

To display the process information and references that precede the process information currently displayed, perform the following steps:

1. Click the Previous button ◀ located on the toolbar.

2. The previous process information and references are displayed on the main screen.

Displaying the Next Process Information and References

To display the process information and references that follow the process information currently displayed, perform the following steps:

1. Click the Next button ▶ located on the toolbar.

2. The next process information and references are displayed on the main screen.

Tip: You can use the Next button ▶ as a convenient way to locate the first record in the database. Start by erasing the screen using the Erase button , then click the Next button ▶.

Operation Information Screen

Use this screen to enter and maintain text information for operations associated with a process. This data may be any information you wish to store concerning the operations, such as safety issues, specific tools required, and unique material requirements. For example:

Work Center Information
Tools Required
Time Analysis Information
Material Information
Detailed Operation Information
Specific Operation Instructions

In addition, you can attach external references such as text files, spreadsheets, diagrams, URL's to websites, and text that indicates where the external information can be found such as a book and the page in the book.

Information text can be selected to print on the job order form. External references may also be selected to print on the job order form; however, only external reference files with a .txt extension can be printed.

Current Process Data

Field	Explanation
Process	The process identifies the steps necessary to perform a service or build a product.
Description	A short description of the process
Type	Identifies the process type: Custom (Unique), Master (Main Process), and Standard (Valid for Several Processes).
Operation	The operation number you want.

Information Table

Column	Explanation
Row	The line number of the row in the table.
Type	A designation for the type of information stored. A dropdown list of values is provided for your convenience. You can use those values or define your own using the "Dropdown Control" screen under "System Administration".
Text Information	This is where you enter text information or view text that has already been entered.
Print Job Order	This is a checkbox to indicate whether or not you want this information text to appear on the job order form.

Delete	This is a checkbox to indicate you want to delete this text record.

Reference Table

Column	Explanation
Row	The line number of the row in the table.
Reference Type	A designation for the type of reference stored. A dropdown list of values is provided for your convenience. You can use those values or define your own using the "Dropdown Control" screen under "System Administration".
Reference	Directory and file name for an electronic reference, URL for a website, or description of where to find a physical reference. An electronic reference can be a spreadsheet, a word processor document, or a text file. A physical reference can be the name of a book with the page number.
Print Job Order	This is a checkbox to indicate whether or not you want this external reference to appear on the job order form. Only files with a .txt extension can be printed.
Delete	This is a checkbox to indicate you want to delete this reference record.

Message Line

Field	Explanation
Message	Displays information about the current status of the screen.

Accessing the Operation Information Screen

1. Click the plus ("+") next to "Process/Job Order" or double-click "Process/Job Order" in the "NavTree".

   -or-

   Click on the "View" menu. Select "Goto Screen", then select "Process/Job Order".

2. Click "Process Definition". The Process Definition screen is displayed.

3. If there is a process in the "Process" field, the process definition for that process is displayed on the main screen.
4. Click "Operation Information". The Operation Information screen is displayed.

Using the Operation Information Screen

Use these procedures to display, update, add, delete, display the previous, and display the next operation information or references.

Displaying Operation Information and References

To display operation information or references, perform the following steps:

1. Enter a process in the “Process” field and an operation number in the “Operation” field and click the Open (Display) button located on the toolbar or hit the Enter key.

   -or-

   Use the Search button next to the “Process” field to select a process and operation number and double-click on the “Operation” you would like to display in the “Search” screen table.

2. The information text types and references for the operation are displayed on the main screen.

3. To display information text, click the Goto/Selection button in the “Text Information” column of the Information table for the row you want to display and select “Edit Information Text” on the menu that appears. Use the scroll bar on the right to display more rows if necessary.

4. The text will be displayed in a pop-up window.

5. The reference information is displayed in the Reference table. Use the scroll bar on the right to display more rows if necessary.

6. To view electronic references, right click on the reference you would like to display. Choose “Goto External Application” from the menu.

Updating Operation Information

To update operation information, perform the following steps:

1. Display the operation you want to change. See “Displaying Operation Information and References” above.

2. Click the Goto/Selection button in the “Text Information” column of the Information table for the row you want to update and select “Edit Information Text” on the menu that appears. Use the scroll bar on the right to display more rows if necessary.

3. The text will be displayed in a pop-up window.

4. Change the desired information in the pop-up window and click “Ok” when done.

5. Once finished, click the Save button located on the toolbar.

Note: You can update Operation Information and References at the same time.

Updating Operation References

To update operation references, perform the following steps:

1. Display the operation you want to change. See “Displaying Operation Information and References” above.
2. Enter the new reference in the “Reference” column of the Reference table for the row or rows you wish to update.

   -or-

   For an electronic reference, right click the reference you want to update. Choose “Select External File”. A file selection dialog box appears so you can locate the directory where the electronic reference is stored. Select the file you want and click the “Open” button.
3. If necessary, click the checkbox in the “Print Job Order” column to indicate if you want this reference to appear on the job order document or not. When this box is checked, the reference will appear on the job order document if possible. Click the checkbox again to remove the print flag.
4. Once finished, click the Save button located on the toolbar.

Note: You can update Operation Information and References at the same time.

Adding Operation Information

To enter operation information, perform the following steps:

1. Display the operation you want to change. See “Displaying Operation Information and References” above.
2. Click an empty row in the Information table. If there are no empty rows click the Add Rows button in the lower right corner of the table.
3. Type the first letter of the text type you want (type the letter multiple times if there is more than one type that begins with the same letter).

   -or-

   Using the dropdown list, select the Text Type in the “Info Type” column of the Information table.
4. Click the Goto/Selection button in the “Text Information” column of the Information table for the row you want and select “Edit Information Text” on the menu that appears. Use the scroll bar on the right to display more rows if necessary.
5. The text will be displayed in a pop-up window.
6. Enter the desired information in the pop-up window and click “Ok” when done.

7. If necessary, click the checkbox in the "Print Job Order" column to indicate if you want this information text to appear on the job order document. When this box is checked, the text will appear on the job order document. Click the checkbox again to remove the print flag.

8. Once finished, click the Save button located on the toolbar.

Note: You can add Operation Information and References at the same time.

Adding Operation References

To enter operation references, perform the following steps:

1. Display the operation you want to change. See "Displaying Operation Information and References" above.

2. Click an empty row in the Reference table. If there are no empty rows click the Add Rows button in the lower right corner of the table.

3. Type the first letter of the reference type you want (type the letter multiple times if there is more than one type that begins with the same letter).

   -or-

   Using the dropdown list, select the Reference Type in the "Reference Type" column of the Reference table.

4. Enter the reference in the "Reference" column.

   -or-

   For an electronic reference, right click the reference you want to update. Choose "Select External File". A file selection dialog will appear so you can locate the directory that contains the file you want. Select the file you want and click the "Open" button.

5. If necessary, click the checkbox in the "Print Job Order" column to indicate if you want this reference to appear on the job order document or not. When this box is checked, the reference will appear on the job order document if possible. Click the checkbox again to remove the print flag.

6. Once finished, click the Save button located on the toolbar.

Note: You can add Operation Information and References at the same time.

Deleting Operation Information and References

To delete operation information and references, perform the following steps:

1. Display the operation information and references you want to delete. See "Displaying Operation Information and References" above.

2. To delete text information, click the checkbox in the “Delete” column of the Information table for the row you want to delete. You may select more then one row to be deleted at one time. Click the checkbox again to remove the deletion flag.

3. To delete reference information, click the checkbox in the “Delete” column of the Reference table for the row you want to delete. You may select more then one row to be deleted at one time. Click the checkbox again to remove the deletion flag.

4. Once finished, click the Save button located on the toolbar.

Note: Once operation information is deleted, it can no longer be displayed or updated.

Displaying the Previous Operation Information and References

To display the operation information and references that precede the operation information currently displayed, perform the following steps:

1. Click the Previous button located on the toolbar.

2. The previous operation information and references are displayed on the main screen.

Displaying the Next Operation Information and References

To display the operation information and references that follow the operation information currently displayed, perform the following steps:

1. Click the Next button located on the toolbar.

2. The next operation information and references are displayed on the main screen.

Tip: You can use the Next button as a convenient way to locate the first record in the database. Start by erasing the screen using the Erase button, then click the Next button.

Process Summary Screen

This screen can be used to display a list of processes based on the selection criteria you use. Each row in the table represents one process with its associated data.

Selection Criteria

Field	Explanation
Process	The process identifies the steps necessary to perform a service or build a product.
Type	Identifies the process type: Custom (Unique), Master (Main Process), and Standard (Valid for Several Processes).
Description	A short description of the process.
Status	Identifies the process status: Active, Future, and Inactive.
Number of Rows to Display	Controls the number of database rows to retrieve during the query. The default value is 30. Use the selection criteria to help control the number of rows retrieved.

Summary Table (Primary and Secondary tabs)

Column	Explanation
Row	The line number of the row in the table.
Process	The Process identifies the steps necessary to perform a service or build a product.
Description	Short description of the activity or activities involved in this operation.
Type	Identifies the process type: Custom (Unique), Master (Main Process), and Standard (Valid for Several Processes).
Status	Identifies the Status of the process: Active, Future, and Inactive.
Alternate Process	Process that can be substituted for the one listed.
Alternate Type	Process type of the alternate process.

Message Line

Field	Explanation
Message	Displays information about the current status of the screen.

Accessing the Process Summary Screen

1. Click the plus ("+") next to "Process/Job Order" or double-click "Process/Job Order" in the "NavTree".

   -or-

   Click on the "View" menu. Select "Goto Screen", then select "Process/Job Order".

2. Click "Process Definition". The Process Definition screen is displayed.

3. If there is a process in the "Process" field, the process definition for that process is displayed on the main screen.

4. Click "Process Summary". The Process Summary screen is displayed.

Using the Process Summary Screen

Displaying the Process Summary

To view the summary, perform the following steps (Steps 1 and 2 are optional):

1. Enter all or part of a process in the "Process" field, or use the Search button next to the "Process" field to select a process.

2. Enter the number of rows you wish to view in the "Number of Rows to Display" field.

3. Click the Open (Display) button located on the toolbar.

4. View the Process Summary information displayed on the screen.

Job Order

What is a Job Order (Work Order)?

A job order identifies the need to perform some work. It can be used for both production and services. A job order can also be described as a work order. Within the job order you can identify the materials needed and the process needed to perform the task.

Job Order Screens

"Job Order" consists of seven tabbed screens that are used to enter job orders and track the job order activity. Each individual screen is used for specific purposes of maintaining job order functions.

Order

This screen is used to enter and maintain job order data. This includes the basic information about the job order such as the description, quantity, start date, due date, status, and quantity complete. It also contains the item to be built (or service to be provided), the job order bill of materials (BOM) item number, and the job order process.

If TFG4000 Inventory Management is installed and the "Full BOM" checkbox is selected, the "Parts" screen displays a summary of the items contained in a multi-level bill of material. Each item is listed once with the total quantity needed. Maintenance of the original bill of materials must be done using the Inventory Management "Bill of Materials" screen.

Very Important! If you maintain inventory for sub-assemblies and you select "Full BOM" you will have to issue components individually. Otherwise, if you use the "Pick All" function on the picking screen, you may over-issue components for a sub-assembly because you will be issuing the sub-assembly **plus** its components.

If TFG4000 Inventory Management is installed the components required for the job order (as defined in the job order parts list) will be updated to reflect the reserved quantity.

Note: The reserve quantity **does not** restrict the usage of the components by another job order or inventory transaction.

Information

This screen is used to create and maintain job order text information. This data may be any information you wish to store concerning the job order, including external references such as text documents, spreadsheets, diagrams, URL's, etc. Information text can be selected to print on the job order form. External references may also be selected to print on the job order form; however, only external reference files with a .txt extension can be printed.

Parts

This screen is used to maintain job order bill of material component data. A bill of materials is used to list the parts needed to build an item in a production job order, or the items needed to complete a service job order. You can add components to the list, change data for existing components, or delete components from the table. Any changes made to the bill of materials are for this job order only and do not affect an existing bill of material (in TFG4000 Inventory Management).

Items/components can be pre-defined using the Item Definition screen in Shared Applications.

If TFG4000 Inventory Management is installed, the items and bills of materials can be pre-defined and accessed from any job order, but if it is not installed, each BOM is associated with a specific job order. To use the BOM in other job orders it must be copied into the other job orders.

If TFG4000 Inventory Management is installed, and the “Full BOM” checkbox is selected on the “Order” screen, the “Parts” screen displays a summary of the items needed in a multi-level bill of material including any lower level bill of materials. Each item is listed once with the total quantity needed. If the “Full BOM” checkbox is not selected on the “Order” screen, the “Parts” screen displays only the items needed for the selected bill of material (single level).

Process

This screen is used to maintain process operations for the displayed job order. You can change process information specific to the displayed job order. Operation data for the process is displayed in a table. Changes made to the source process (using Process Definition) are not reflected in the job order process unless the process is refreshed in the job order. Also, changes made to the process using the “Process” screen are not reflected in the source process.

Process Info

Use this screen to enter additional text information concerning the displayed job order. The data may be any information you wish to store concerning the job order process, and multiple types of information can be stored. Changes made to the source process information (using Process Definition) are not reflected in the job order process information, unless the process is deleted from the job order and then re-accessed. Also, changes made to the job order process information using the “Process Info” screen are not reflected in the source process information.

The Reference table provides a means to attach or view external documents. You can either view the documents by using the appropriate application or select the path to the file and place it in the Reference table. You can also enter references to physical documents such as books and maps, for example “Book A, page 45".

Information text can be selected to print on the job order form. External references may also be selected to print on the job order form; however, only external reference files with a .txt extension can be printed.

Operation Info

Use this screen to enter text information for operation steps associated with a job order process. This data may be any information you wish to store concerning the operation, such as safety issues, specific tools required, and unique material requirements. Changes made to the source operation information (Using Process Definition) are not reflected in the job order operation information, unless the process is refreshed on the job order. Also, changes made to the job order process information using the “Operation Info” screen are not reflected in the source operation information.

The Reference table provides a means to attach or view external documents. You can either view the documents by using the appropriate application or select the path to the file and place it in the Reference table. You can also enter references to physical documents such as books and drawings, for example “Drawing 828-1B".

Information text can be selected to print on the job order form. External references may also be selected to print on the job order form; however, only external reference files with a .txt extension can be printed.

Summary

This screen is used to display a list of job orders based on selection criteria entered.

Job Order Screens Explained

Order Screen

This screen is used to enter and maintain job order data. This includes the basic information about the job order such as the description, quantity, start date, due date, status, and quantity complete. It also contains the item to be built (or service to be provided), job order bill of material (BOM) item, and the job order process.

Current Job Order Data

Field	Explanation
Job Order	A manually entered or system generated number that identifies a job order.
Description	A short description of the job order or its use.
Quantity	The total quantity of the job order Item/Part required to complete this job order.
Job Order Status	The current job order status: Active, Closed, or Released.
Required Start	The calendar date that determines when materials are required for the job order. It is the date when the job order should be started.
Job Order Type	Indicates what kind of job order this is – for example Production or Service.
Due Date	The calendar date on which the job order is planned to be completed.
Quantity Complete	The quantity of the job order Item/Part that has been completed for the job order.
Customer	Customer number of the customer associated with this job order.
Customer Name	Customer name of the customer associated with this job order.
Customer Order	Customer order number of the customer order associated with this job order.
Warehouse	Field for indicating the inventory warehouse to use when reporting completed.
Line Number	Customer order line number of the customer order associated with this job order.
Zone	Field for indicating the inventory zone to use when reporting completed.

Completed	Field for reporting the quantity of the job order item completed. The quantity entered is used to update the “Quantity Complete” in the Current Job Order Data section at the top of the screen and to update inventory for the job order item.
Location	Field for indicating the inventory location to use when reporting completed quantities. This location will be updated with the quantity reported in the “Completed” field (see “Completed” field above).

Note: Reporting job order item quantity completed **does not** update the inventory for the individual **components** on the job order bill of materials. Component inventory is managed with the “Picking” screen under Job Activity.

Job Order Item/Part

Field	**Explanation**
Item/Part	Unique identification of a service, assembly, purchased part, component, facility, tool, material, etc.
Type	Defines the job order Item/Part type for example: Assembly, Commodity, Consumable, Fabricated, Industrial Supplies, Office Supplies, Purchased Assembly, Purchased Part, Purchased Tool, Raw Material, Service, Subassembly, or Tool.
Description	A short description of the job order or its use.
Unit of Measure	Defines how the item is counted or measured. A dropdown list of values is provided for your convenience. You can use those values or define your own using the "Dropdown Control" screen under "System Administration". Some examples of units of measure are "Ounce", "Pound", and “Hour".

Bill of Materials

Field	**Explanation**
Item/Part	The item number for the Bill of Material to be used for the job order. This item number may or may not be the same as the job order item. If TFG4000 Inventory Management is installed the item does not have to exist on the Item Master and the Bill of Material can be modified on the job order if necessary without affecting the original Bill of Material. If TFG4000 Inventory Management is not installed, the bill of material must be entered manually using the “Parts” screen.

Type	Defines the Bill of Material Item/Part type. The type helps further define an item by giving it a classification. A dropdown list of values is provided for your convenience. You can use those values or define your own using the "Dropdown Control" screen under "System Administration". Some examples of types are: "Assembly" something you build, "Service" for a service you provide, "Tool" for something you use in your operation.
Description	The description of the Bill of Material item number to be used for this job order.
Unit of Measure	Defines how the item is counted or measured. A dropdown list of values is provided for your convenience. You can use those values or define your own using the "Dropdown Control" screen under "System Administration". Some examples of units of measure are "Ounce", "Pound", and “Hour".
Full BOM	If TFG4000 Inventory Management is installed and the “Full BOM” checkbox is selected, the “Parts” screen displays a summary of the items contained in a multi-level bill of material. Each item is listed once with the total quantity needed. Maintenance of the original bill of materials must be done using the TFG4000 Inventory Management “Bill of Materials” screen.

Very Important! If you maintain inventory for sub-assemblies and you select “Full BOM” you will have to issue components individually. Otherwise, if you use the “Pick All” function on the picking screen, you may over-issue components for a sub-assembly because you will be issuing the sub-assembly **plus** its components.

Process

Field	**Explanation**
Process	The process identifies the steps necessary to perform a service or build a product.
Type	Identifies the process type: Custom (Unique), Master (Main Process), and Standard (Valid for Several Processes).
Description	A short description of the process or its use.

Message Line

Field	**Explanation**
Message	Displays information about the current status of the screen.

Accessing the Order Screen

1. Click the plus ("+") next to "Process/Job Order" or double-click  "Process/Job Order" in the "NavTree".

   -or-

   Click on the "View" menu. Select "Goto Screen", then select "Process/Job Order".

2. Click "Job Order". The Order screen is displayed.

3. If there is a job order in the "Job Order" field, the job order definition for that job order is displayed on the main screen.

Using the Order Screen

The Job Order number can be entered manually or assigned by the system using the next available job order number.

If TFG4000 Inventory Management is not installed, the bill of material (if defined) is only for the associated job order. You must copy the job order using the Copy button to use the bill of material in other job orders. Once you copy the job order, you can change the bill of material information for the specific job order.

If TFG4000 Inventory Management is installed, the source bill of material can be defined in the database using the Inventory Management “Bill of Materials” screen, and referenced from multiple job orders. Any maintenance to the source bill of material needs to be performed using the Inventory Management “Bill of Materials” screen.

If TFG4000 Sales Order Management is installed, job orders can be built from customer orders.

Full BOM

If TFG4000 Inventory Management is installed, and the “Full BOM” checkbox is selected on the “Job Order” screen, a multi-level bill of material is displayed as a summarized bill of material on the “Parts” screen. A summarized bill of material displays a list of all of the components in the multi-level bill of material, regardless of level, with the total quantity of each component needed. See the “Inventory Management User’s Guide” for more information about multi-level bills of material and summarized bills of material.

Very Important! If you maintain inventory for sub-assemblies and you select “Full BOM” you will have to issue components individually. Otherwise, if you use the “Pick All” function on the picking screen, you may over-issue components for a sub-assembly because you will be issuing the sub-assembly **plus** its components.

Reserve Material

If TFG4000 Inventory Management is installed, the components required for the job order (as defined in the job order parts list) will be updated to reflect the quantity needed to complete this job order. Reserve Material does not in any way restrict the use of that material for any reason.

To fully understand the intended use of Reserve Material, it is best to review the Job Order Shortage screen and its usage. Two main concepts to grasp: 1) the “Reserve Quantity” column is the total quantity of that component reserve material system wide; 2) the “Required Quantity” column is the quantity needed only for the job order being analyzed.

Example of Reserve Material usage: you are manufacturing a customized product. You have defined a Bill of Materials with all of the components needed for this product. You receive an order for the product, so you create a Job Order using the Bill of Materials you defined. Now assume another order is being considered for the same product. A second job order may be created with the same bill of materials. By reviewing the Job Order Shortage screen you will be in a position to perform a manual analysis of component requirements.

Note: The reserve quantity **does not** restrict the usage of the components by another job order or inventory transaction.

Procedures

Use these procedures to erase the screen, display, update, add, delete, view previous, view next, copy, build job orders from a customer order, and print job orders.

Erasing the Screen

To erase the data from the screen click the Erase button located on the toolbar.

Note: Erasing the screen does not cause any data to be lost; it is merely a way to clean the screen in preparation for another operation.

Displaying a Job Order

To display a job order, perform the following steps:

1. Enter a job order in the “Job Order” field.
2. Click the Open (Display) button located on the toolbar or hit the Enter key.
3. The job order data is displayed on the main screen.

   -or-

1. Use the Search button next to the “Job Order” field, “Description” field, “Status” field, “Required Start” field, or the “Type” field to select a job order.
2. Double-click on the “Job Order” you would like to display in the “Search” screen table.
3. The job order data is displayed on the main screen.

Searching for Job Orders by Job Order Item

To search for job orders by the job order item, perform the following steps:

1. Use the <u>second</u> Search button next to the “Item/Part” field in the Job Order Item/Part section of the screen.
2. Select the type of search you want using the dropdown provided. The default is to search for orders with job order item numbers “starting with” the value you entered.
3. Enter the item number you want to use in the field provided or make it blank to search by all item numbers.
4. Click the “Search” button. The results of your search are displayed in the pop-up.
5. You can re-size the columns and re-size the search window by moving the cursor until a double-headed arrow appears, then clicking and while holding the mouse button down, move the cursor to re-size. You can re-position columns by clicking on them and while holding the mouse button down, move the cursor right or left.
6. Print results by clicking the “Print” button. A standard print dialog box is displayed so you can choose the printer and other print options; click “OK” to print.

7. Double-click an order to display that order on the main screen.

Searching for Job Orders by Job Order Item Description

To search for job orders by the job order item description, perform the following steps:

1. Use the second Search button next to the “Description” field in the Job Order Item/Part section of the screen.

2. Select the type of search you want using the dropdown provided. The default is to search for orders with job order item descriptions “starting with” the value you entered.

3. Enter the item description you want to use in the field provided or make it blank to search by all item descriptions.

4. Click the “Search” button. The results of your search are displayed in the pop-up.

5. You can re-size the columns and re-size the search window by moving the cursor until a double-headed arrow appears, then clicking and while holding the mouse button down, move the cursor to re-size. You can re-position columns by clicking on them and while holding the mouse button down, move the cursor right or left.

6. Print results by clicking the “Print” button. A standard print dialog box is displayed so you can choose the printer and other print options; click “OK” to print.

7. Double-click an order to display that order on the main screen.

Searching for Job Orders by Bill of Material Item

To search for job orders by bill of material item, perform the following steps:

1. Use the second Search button next to the “Item/Part” field in the Select Bill of Material Item and Process section of the screen.

2. Select the type of search you want using the dropdown provided. The default is to search for orders with bill of material item numbers “starting with” the value you entered.

3. Enter the item number you want to use in the field provided or make it blank to search by all item numbers.

4. Click the “Search” button. The results of your search are displayed in the pop-up.

5. You can re-size the columns and re-size the search window by moving the cursor until a double-headed arrow appears, then clicking and while holding the mouse button down, move the cursor to re-size. You can re-position columns by clicking on them and while holding the mouse button down, move the cursor right or left.

6. Print results by clicking the “Print” button. A standard print dialog box is displayed so you can choose the printer and other print options; click “OK” to print.

7. Double-click an order to display that order on the main screen.

Searching for Job Orders by Bill of Material Item Description

To search for job orders by bill of material item description, perform the following steps:

1. Use the second Search button next to the "Description" field just below the "Item/Part" field in the Select Bill of Material Item and Process section of the screen.

2. Select the type of search you want using the dropdown provided. The default is to search for orders with bill of material item descriptions "starting with" the value you entered.

3. Enter the item description you want to use in the field provided or make it blank to search by all item descriptions.

4. Click the "Search" button. The results of your search are displayed in the pop-up.

5. You can re-size the columns and re-size the search window by moving the cursor until a double-headed arrow appears, then clicking and while holding the mouse button down, move the cursor to re-size. You can re-position columns by clicking on them and while holding the mouse button down, move the cursor right or left.

6. Print results by clicking the "Print" button. A standard print dialog box is displayed so you can choose the printer and other print options; click "OK" to print.

7. Double-click an order to display that order on the main screen.

Searching for Job Orders by Process

To search for job orders by the process used, perform the following steps:

1. Use the second Search button next to the "Process" field in the Select Bill of Material Item and Process section of the screen.

2. Select the type of search you want using the dropdown provided. The default is to search for orders with process names "starting with" the value you entered.

3. Enter the process you want to use in the field provided or make it blank to search by all process names.

4. Click the "Search" button. The results of your search are displayed in the pop-up.

5. You can re-size the columns and re-size the search window by moving the cursor until a double-headed arrow appears, then clicking and while holding the mouse button down, move the cursor to re-size. You can re-position columns by clicking on them and while holding the mouse button down, move the cursor right or left.

6. Print results by clicking the "Print" button. A standard print dialog box is displayed so you can choose the printer and other print options; click "OK" to print.

7. Double-click an order to display that order on the main screen.

Searching for Job Orders by Process Description

To search for job orders by the process description, perform the following steps:

1. Use the second Search button next to the "Description" field just below the Process field in the Select Bill of Material Item and Process section of the screen.

2. Select the type of search you want using the dropdown provided. The default is to search for orders with process descriptions "starting with" the value you entered.

3. Enter the process description you want to use in the field provided or make it blank to search by all process descriptions.

4. Click the "Search" button. The results of your search are displayed in the pop-up.

5. You can re-size the columns and re-size the search window by moving the cursor until a double-headed arrow appears, then clicking and while holding the mouse button down, move the cursor to re-size. You can re-position columns by clicking on them and while holding the mouse button down, move the cursor right or left.

6. Print results by clicking the "Print" button. A standard print dialog box is displayed so you can choose the printer and other print options; click "OK" to print.

7. Double-click an order to display that order on the main screen.

Updating a Job Order

To update a job order, perform the following steps:

1. Display the job order number you want to change. See "Displaying a Job Order" above.

2. Change the desired information on the main screen.

3. Once finished, click the Save button located on the toolbar.

4. If "Full BOM" is changed (checked/unchecked) or if the Bill of Material Item/Part has been changed and there is already a parts list on the job order, the parts on the job order are deleted and replaced with parts from the new parts list. If either TFG4000 Inventory Management is not installed or the Bill of Material Item/Part does not have a bill of material, the job order parts list is deleted.

5. If the Process has been changed and there are already job order operations on the job order, the job order operations are deleted and the new operations are added. If the new Process does not have any operations, the job order operations are deleted.

Reporting Quantity Completed for a Job Order

To report quantity completed for a job order, perform the following steps:

1. Display the job order number you need. See "Displaying a Job Order" above.

2. Enter the quantity completed in the "Completed" field.

3. Use the Search button next to the "Location" field to select the location where you want the completed inventory to be stored.

4. Click the Save button located on the toolbar.

5. The quantity you entered in step 2 above will be subtracted from the quantity in the "Quantity" field, added to the quantity in the "Quantity Complete" field and, if TFG4000 Inventory Management is installed, it will be added to the inventory in the location you chose.

Note: Reporting job order item quantity completed **does not** update the inventory for the individual **components** on the job order bill of materials. Component inventory is managed with the "Picking" screen under Job Activity.

Backing out a Quantity Completed for a Job Order

To back out quantity completed for a job order, perform the following steps:

1. Display the job order number you need. See "Displaying a Job Order" above.

2. Enter the quantity you want to back out as a negative quantity in the "Completed" field.

3. Use the Search button next to the "Location" field to select the location where you want the inventory to be removed.

6. Click the Save button located on the toolbar.

7. The quantity you entered in step 2 above will be subtracted from the quantity in the "Quantity" field (since the value is negative it is effectively subtracted), added to the quantity in the "Quantity Complete" field (effectively subtracted) and, if TFG4000 Inventory Management is installed, it will be posted as a negative receipt in the location you chose.

Adding a New Job Order

To add a new job order:

1. Click the Erase button located on the toolbar to clear the screen.

2. Enter any of the optional job order data you want. (If you do not enter a job order number the system will generate one for you.)

3. When all of the data has been entered, click the Save button located on the toolbar.

Deleting a Job Order and its Associated Data

Perform the following steps to delete a job order and all of the data associated with it:

1. Display the job order you wish to delete. See "Displaying a Job Order" above.

2. Click the Delete button located on the toolbar.

3. Click the "Yes" button on the "Confirm Action" pop up message. If you do not want to delete the job order click "No" on the "Confirm Action" pop up message.

4. The job order definition, job order information, job order parts, job order process, job order process information, job order process references, job order operations, job order operation information, job order operation references, job order picking data, and job order component history are deleted.

Note: Once a job order is deleted, it can no longer be displayed or updated.

Displaying the Previous Job Order

To display the job order that precedes the job order currently displayed, perform the following steps:

1. Click the Previous button located on the toolbar.

2. The previous job order is displayed on the main screen.

Displaying the Next Job Order

To display the job order that follows the job order currently displayed, perform the following steps:

1. Click the Next button located on the toolbar.

2. The next job order is displayed on the main screen.

Tip: You can use the Next button as a convenient way to locate the first record in the database. Start by erasing the screen using the Erase button , then click the Next button .

Copying a Job Order

To copy a job order to a new job order, perform the following steps:

1. Display the job order you wish to copy. See "Displaying a Job Order" above.

2. Click the copy button located on the toolbar. A pop-up will appear.

3. Enter the new job order number in the "Copy to Order" field or leave this field blank to let the system generate a job order number for you.

4. Various types of job order data are listed with check boxes next to them. Click a check box to check or uncheck data to be copied. A check mark means it will be copied, No check mark means it will not be copied.

5. Click the “Copy” button to complete the copy or click “Cancel” to cancel the copy.

Building Job Orders from a Sales Order

To build job orders for selected lines from a sales order, perform the following steps:

1. Click the **Build Job Order** button located on the toolbar.

2. Enter or select the customer order you want.

3. Click the **Order** button.

4. All of the lines on the order that are eligible to have job orders built for them are displayed. If job order(s) and/or purchase order(s) already exist for a line that line will not be displayed in the pop-up. If only part of a line was used to build a job order or purchase order, the remaining quantity is eligible for another build.

5. Check the box in the column “Build” for each line you want.

6. Enter a job order number and job order type or leave these columns blank for the next job order number available and job order type “Production”

7. Click the **Build** button.

A new job order will be built for each line selected. Job orders can be located and viewed with the search button next to the “Customer Order” field.

Note: This feature is available only if TFG4000 Sales Order Management is installed.

Printing a Job Order

To print a job order form, perform the following steps:

1. Display the job order you wish to print. See “Displaying a Job Order” above.

2. Click the “Reports” menu located on the menu bar at the top of the screen. A menu will appear.

3. Click one of the job order forms listed.

4. A report window will be displayed. Follow the instructions there for printing the form.

Note: The logo on the job order form is controlled by system variable **Report_Logo**. See the “Initial Setup” section of this manual or the **System Administration Users Guide** for more information about this variable and how to change it.

Job Order Information Screen

This screen is used to create and maintain job order information text. This data may be any information you wish to store concerning the job order. Also, you can use this screen to reference any kind of external document such as spreadsheets, diagrams, books, websites, etc.

Information text can be selected to print on the job order form. External references may also be selected to print on the job order form; however, only external reference files with a .txt extension can be printed.

Current Job Order

Field	Explanation
Job Order	A manually entered or system generated number that identifies a job order.
Description	A short description of the job order or its use.
Status	Identifies the job order status: Active, Closed, or Released.

Information Table

Column	Explanation
Row	The line number of the row in the table.
Type	Indicates the type of text information. A dropdown list of values is provided for your convenience. You can use those values or define your own using the "Dropdown Control" screen under "System Administration".
Text Information	This is where you enter text information or view text that has already been entered.
Print Job Order	This is a checkbox to indicate whether or not you want this information text to appear on the job order form.
Delete	This is a checkbox to indicate you want to delete this text record.

Reference Table

Column	Explanation
Row	The line number of the row in the table.
Reference Type	Indicates the type of external reference information. A dropdown list of values is provided for your convenience. You can use those values or define your own using the "Dropdown Control" screen under "System Administration".

Reference	Directory and file name for an electronic reference, URL for a website, or description of where to find a physical reference. An electronic reference can be a spreadsheet, a word processor document, or a text file. A physical reference can be the name of a book with the page number.
Print Job Order	This is a checkbox to indicate whether or not you want this external reference to appear on the job order form. Only files with a .txt extension can be printed.
Delete	This is a checkbox to indicate you want to delete this reference record.

Message Line

Field	**Explanation**
Message	Displays information about the current status of the screen.

Accessing the Job Order Information Screen

1. Click the plus ("+") next to "Process/Job Order" or double-click  "Process/Job Order" in the "NavTree".

   -or-

   Click on the "View" menu. Select "Goto Screen", then select "Process/Job Order".

2. Click "Job Order". The Order screen is displayed.

3. If there is a job order in the "Job Order" field, the job order definition for that job order is displayed on the main screen.

4. Click "Information". The Job Order Information screen is displayed.

Using the Information Screen

Use these procedures to display, update, add, delete, display the previous, and display the next job order information and references.

Displaying Job Order Information and References

To display job order information and references, perform the following steps:

1. Enter a job order in the "Job Order" field and click the Open (Display) button located on the toolbar or hit the Enter key.

   -or-

   Use the Search button next to the "Job Order" field, "Description" field or the "Status" field to select a job order and double-click on the "Job Order" you would like to display in the "Search" screen table.

2. The information text types and references for the job order number are displayed on the main screen.

3. To display information text, click the Goto/Selection button in the "Text Information" column of the Information table for the row you want to display and select "Edit Information Text" on the menu that appears. Use the scroll bar on the right to display more rows if necessary.

4. The text will be displayed in a pop-up window.

5. The reference information is displayed in the Reference table. Use the scroll bar on the right to display more rows if necessary.

6. To view electronic references, right click on the reference you would like to display. Choose "Goto External Application" from the menu.

Updating Job Order Information

To update job order information, perform the following steps:

1. Display the job order number that has the data you want to change. See "Displaying Job Order Information and References" above.

2. Click the Goto/Selection button in the "Text Information" column of the Information table for the row you want to update and select "Edit Information Text" on the menu that appears. Use the scroll bar on the right to display more rows if necessary.

3. The text will be displayed in a pop-up window.

4. Change the desired information in the pop-up window and click "Ok" when done.

5. If necessary, click the checkbox in the "Print Job Order" column to indicate if you want this information text to appear on the job order document or not. When this box is checked, the text will appear on the job order document. Click the checkbox again to remove the print flag.

6. Once finished, click the Save button located on the toolbar.

Note: You can update Information and References at the same time.

Updating Job Order References

To update job order references, perform the following steps:

1. Display the job order number that has the data you want to change. See "Displaying Job Order Information and References" above.

2. Enter the new reference in the "Reference" column of the Reference table for the row or rows you wish to update.

   -or-

   For an electronic reference, right click the reference you want to update. Choose "Select External File". A file selection dialog will appear so you can locate the directory that contains the file you want. Select the file you want and click the "Open" button.

3. If necessary, click the checkbox in the "Print Job Order" column to indicate if you want this reference to appear on the job order document or not. When this box is checked, the reference will appear on the job order document if possible. Click the checkbox again to remove the print flag.

4. Once finished, click the Save button located on the toolbar.

Note: You can update Job Order Information and References at the same time.

Adding Job Order Information

To enter job order information, perform the following steps:

1. Display the job order number you want. See "Displaying Job Order Information and References" above.

2. Click an empty row in the Information table. If there are no empty rows click the Add Rows button in the lower right corner of the table.

3. Type the first letter of the text type you want (type the letter multiple times if there is more than one type that begins with the same letter).

   -or-

   Using the dropdown list, select the Text Type in the "Info Type" column of the Information table.

4. Click the Goto/Selection button in the "Text Information" column of the Information table for the row you want and select "Edit Information Text" on the menu that appears. Use the scroll bar on the right to display more rows if necessary.

5. The text will be displayed in a pop-up window.
6. Enter the desired information in the pop-up window and click “Ok” when done.

7. If necessary, click the checkbox in the “Print Job Order” column to indicate if you want this information text to appear on the job order document. When this box is checked, the text will appear on the job order document. Click the checkbox again to remove the print flag.

8. Once finished, click the Save button located on the toolbar.

Note: You can add Job Order Information and References at the same time.

Adding Job Order References

To enter job order references, perform the following steps:

1. Display the job order number you want. See “Displaying Job Order Information and References” above.

2. Click an empty row in the Reference table. If there are no empty rows click the Add Rows button in the lower right corner of the table.

3. Type the first letter of the reference type you want (type the letter multiple times if there is more than one type that begins with the same letter).

   -or-

   Using the dropdown list, select the Reference Type in the “Reference Type” column of the Reference table.

4. Enter the reference in the “Reference” column.

   -or-

   For an electronic reference, right click the reference you want to update. Choose “Select External File”. A file selection dialog will appear so you can locate the directory that contains the file you want. Select the file you want and click the “Open” button.

5. If necessary, click the checkbox in the “Print Job Order” column to indicate if you want this reference to appear on the job order document. When this box is checked, the reference will appear on the job order document if possible. Click the checkbox again to remove the print flag.

6. Once finished, click the Save button located on the toolbar.

Note: You can add Job Order Information and References at the same time.

Deleting Job Order Information and References

To delete job order information and references, perform the following steps:

1. Display the job order number that has the data you want to delete. See "Displaying Information and References" above.
2. To delete text information, click the checkbox in the "Delete" column of the Information table for the row you want to delete. You may select more then one row to be deleted at one time. Click the checkbox again to remove the deletion flag.
3. To delete reference information, click the checkbox in the "Delete" column of the Reference table for the row you want to delete. You may select more then one row to be deleted at one time. Click the checkbox again to remove the deletion flag.
4. Once finished, click the Save button located on the toolbar.

Note: Once job order information is deleted, it can no longer be displayed or updated.

Displaying the Previous Job Order Information and References

To display the job order information and references that precede the job order information and references currently displayed, perform the following steps:

1. Click the Previous button located on the toolbar.
2. The previous job order information and references are displayed on the main screen.

Displaying the Next Job Order Information and References

To display the job order information and references that follow the job order information and references currently displayed, perform the following steps:

1. Click the Next button located on the toolbar.
2. The next job order information and references are displayed on the main screen.

Tip: You can use the Next button as a convenient way to locate the first record in the database. Start by erasing the screen using the Erase button , then click the Next button .

Job Order Parts Screen

This screen is used to maintain job order bill of materials (BOM) component data. A bill of materials is used to list the parts needed to build an item in a production job order, or the items needed to complete a service order. You can add components to the list, change data for existing components, delete components from the list, and refresh the entire list. Any changes made to the bill of materials on this screen are for this job order only.

Items (parts/components) can be pre-defined using the Item Definition screen in Shared Applications.

If TFG4000 Inventory Management is installed, the bills of materials can be pre-defined and accessed from any job order. Changes made to the source bill of material in TFG4000 Inventory Management are not reflected in existing job orders; however, the job order bill of materials can be replaced with the updated source bill by using the refresh button located on the toolbar.

If TFG4000 Inventory Management is not installed, each bill of materials exists only on a specific job order. To use the bill of materials on other orders the job order itself must be copied to a new job order.

If TFG4000 Inventory Management is installed, and the “Full BOM” checkbox is selected on the “Job Order” screen, the “Job Order BOM” screen displays a summary of the items needed in a multi-level bill of material including any lower level bill of materials. Each item is listed once with the total quantity needed. If the “Full BOM” checkbox is not selected on the “Job Order” screen, the “Job Order BOM” screen displays the items needed for the selected bill of materials.

Current Job Order Data

Field	**Explanation**
Job Order	A manually entered or system generated number that identifies a job order.
Description	A short description of the job order or its use.
Required Start	The calendar date that determines when materials are required for the job order. It is the date when the job order should be started.
Required Complete	The calendar date on which the job order is required to be completed.
Type	Defines the job order type – for example Production or Service.
Status	Indicates the job order status: Active, Closed, or Released.

BOM Item/Part

Field	Explanation
Item/Part	The Bill of Materials item to be used for the job order. Even if TFG4000 Inventory Management is installed, the item does not have to exist on the Item Master and the Bill of Material can be modified on the job order if necessary without affecting the original Bill of Materials.
Description	The description of the Bill of Material item number to be used for this job order.

Components Table (Components, Description, Change Order, and Reference Designator tabs)

Column	Explanation
Row	The line number of the row in the table.
Prefix	Unique identification of a component in this Bill of Materials. The Prefix may be used to sequence the component within the Bill of Materials or to allow multiple entries for the same component.
Component	Unique identification of a service, assembly, purchased part, component, facility, tool, material, etc.
Suffix	Unique identification of a component in this Bill of Materials. The Suffix may be used to sequence the component within the Bill of Materials or to allow multiple entries for the same component.
Unit Quantity	This field is the quantity required to produce one unit of the parent Item/Part.
Unit of Measure	Defines how the item is counted or measured. A dropdown list of values is provided for your convenience. You can use those values or define your own using the "Dropdown Control" screen under "System Administration". Some examples of units of measure are "Ounce", "Pound", and “Hour".
Component Type	Defines the component type. The type helps further define an item by giving it a classification. A dropdown list of values is provided for your convenience. You can use those values or define your own using the "Dropdown Control" screen under "System Administration". Some examples of types are: "Assembly" something you build, "Service" for a service you provide, "Tool" for something you use in your operation.
Delete	This is a checkbox to indicate you want to delete a component from the job order bill of material.

Description	Contains information describing the item. This description can be as short as an abbreviation or a long detailed description of the item.
Manufacture Status	Status of the Manufacturing Bill of Material for the component, either Active or Inactive.
Engineering Status	Status of the Engineering Bill of Material for the component, either Active or Inactive.
Change Order	Most current engineering change number for this item. User entered; informational only.
Engineering Revision	Most current engineering revision level for this item. User entered; informational only.
Start Date	Date this component will become effective on this bill of material.
End Date	The last date this component will be effective on this bill of material.
Reference Designator	Indicates where this component is used on the parent item. For example, it can refer to a number or letter on a diagram or it can be the name of a component on a printed circuit board. You can enter multiple reference designators separated by commas in this field.

Note: Components can be pre-defined using Item definition in Shared Applications so the component information does not have to be entered each time you use the component on a job order.

Message Line

Field	Explanation
Message	Displays information about the current status of the screen.

Accessing the Parts Screen

1. Click the plus ("+") next to "Process/Job Order" or double-click "Process/Job Order" in the "NavTree".

   -or-

   Click on the "View" menu. Select "Goto Screen", then select "Process/Job Order".

2. Click "Job Order". The Order screen is displayed.

3. If there is a job order in the "Job Order" field, the job order definition for that job order is displayed on the main screen.

4. Click "Parts". The Parts screen is displayed.

Using the Parts Screen

Use these procedures to display, update, add, delete, display previous, display next, and refresh parts on the job order.

Displaying Parts on the Job Order

To display parts for a job order, perform the following steps:

1. Enter a job order in the "Job Order" field.

2. Click the Open (Display) button located on the toolbar or hit the Enter key.

3. The parts for the job order number are displayed on the main screen.

   -or-

1. Use the Search button next to the "Job Order" field, "Description" field, "type" field or the "Status" field to select a job order in the "Current Job Order" area at the top of the screen or use the Search Button next to the "Item/Part" field or "Description" field to select a job order in the "BOM/Item Part" area of the screen.

2. Double-click on the "Job Order" you would like to display in the "Search" screen table.

3. The parts for the job order number are displayed on the main screen.

Updating Parts on the Job Order

To update parts on the job order, perform the following steps:

1. Display the job order number you want to change. See "Displaying Parts on the Job Order" above.

2. Make changes to the part information in the Components table

3. Once finished, click the Save button located on the toolbar.

Adding Parts to a Job Order

To enter parts on a job order, perform the following steps:

1. Display the job order number you want to change. See "Displaying Parts on the Job Order" above.

2. Click an empty row in the Components table. If there are no empty rows click the Add Rows button in the lower right corner of the table.

3. In the Components table, enter or select the desired information. If TFG4000 Inventory Management is installed, you can use the Goto/Selection button to select a component. The "Description", "Unit of Measure", and "Component Type" columns are filled in when you select an item.

4. Once finished, click the Save button located on the toolbar.

Deleting Parts on the Job Order

To delete parts from the job order, perform the following steps:

1. Display the job order number you want to delete. See "Displaying Parts on the Job Order" above.

2. To delete component information, click the checkbox in the "Delete" column of the Components table for the row you want to delete. You may select more then one row to be deleted at one time. Click the checkbox again to remove the deletion flag.

3. Once finished, click the Save button located on the toolbar.

Deleting All of the Parts on the Job Order

To delete all of the parts from the job order, perform the following steps:

1. Display the job order number parts list you want to delete. See "Displaying Parts on the Job Order" above.

2. Click the Delete button located on the toolbar.

3. Click the "Yes" button on the "Confirm Action" pop up message. If you do not want to delete the parts list, click "No" on the "Confirm Action" pop up message.

Note: Once the parts list is deleted, it can no longer be displayed or updated.

Displaying the Previous Parts List

To display the parts on the job order that precedes the job order currently displayed, perform the following steps:

1. Click the Previous button located on the toolbar.

2. The previous job order parts are displayed on the main screen.

Displaying the Next Parts List

To display the parts on the job order that follows the job order currently displayed, perform the following steps:

1. Click the Next button located on the toolbar.
2. The next job order parts are displayed on the main screen.

Tip: You can use the Next button as a convenient way to locate the first record in the database. Start by erasing the screen using the Erase button, then click the Next button.

Refreshing All of the Parts on the Job Order

This procedure can be used only if TFG4000 Inventory Management is installed. To delete all of the parts on the job order and replace them with parts from the original bill of materials, perform the following steps:

1. Display the job order number parts list you want to refresh. See “Displaying Parts on the Job Order” above.

2. Click the Refresh button located on the toolbar.

3. Click the “Yes” button on the “Confirm Action” pop up message. If you do not want to refresh the parts list, click “No” on the “Confirm Action” pop up message.

Note: TFG4000 Inventory Management must be installed, the original bill of material must exist in TFG4000 Inventory Management, and it must be referenced by the job order on the “Job Order Maintenance” screen as the “Bill of Material Item/Part” before the parts list can be refreshed. If TFG4000 Inventory Management is not installed and the bill of materials does not exist or it is not referenced on the job order, the job order parts will be deleted and no parts will be added to replace them.

When a job order bill of materials is refreshed, the quantity required on the pick list is re-calculated based on the new bill of material quantities and the current job order quantity. If you have already issued components from the pick list make sure you report the quantity completed for the job order using the “Order” screen, field “Completed” before you refresh the job order bill of materials.

Job Order Process Screen

This screen is used to maintain process operations for the displayed job order. You can change process information specific to the displayed job order. Operation data for the job order process is displayed in a table. Changes made to the source process (using Process Definition) are not reflected in the job order process unless the job order process is refreshed. Also, changes made to the process using the “Job Order Process” screen are not reflected in the source process.

Current Job Order Data

Field	Explanation
Job Order	A manually entered or system generated number that identifies a job order.
Description	A short description of the job order or its use.
Required Start	The calendar date that determines when materials are required for the job order. It is the date when the job order should be started.
Required Complete	The calendar date on which the job order is required to be completed.
Type	Defines the job order type – for example Production or Service.
Status	Indicates the job order status: Active, Closed, or Released.

Process

Field	Explanation
Process	The process identifies the steps necessary to perform a service or build a product.
Type	Identifies the process type: Custom (Unique), Master (Main Process), and Standard (Valid for Several Processes).

Operations Table (Primary and Secondary tabs)

Column	Explanation
Row	The line number of the row in the table.
Operation	The order/sequence that the operation should be performed in this process. This is also referred to as the operation number.
Type	Identifies the operation type: Custom (Unique), Master (Main Process), and Standard (Valid for Several Processes).

Status	The current status of the operation: Open, Running, or Completed.
Description	Short description of the activity or activities involved in this operation.
Run Time	Amount of time required to complete this operation.
Run Time Unit	The measure of time used to define the operation time. The values are: Seconds, Minutes, Hours, Days and Weeks.
Run Time Quantity	Standard quantity that can be accomplished in this operation.
Work Center	The unique identification of the work center where the operation is to take place.
Delete	This is a checkbox to indicate you want to delete an operation record.
Setup Time	The standard time required to prepare for this operation.
Setup Time Unit	The measure of time used to define the setup time. The values are: Seconds, Minutes, Hours, Days and Weeks.
Operator Time	The manpower (operator) time needed to complete this operation.
Operator Time Unit	The measure of time used to define the operator time. The values are: Seconds, Minutes, Hours, Days and Weeks.
Operator Time Quantity	Standard quantity that can be accomplished in this operation per operator (person)
Machine	The unique identification of the machine on which the operation is to take place.

Message Line

Field	**Explanation**
Message	Displays information about the current status of the screen.

Accessing the Process Screen

1. Click the plus ("+") next to "Process/Job Order" or double-click "Process/Job Order" in the "NavTree".

   -or-

   Click on the "View" menu. Select "Goto Screen", then select "Process/Job Order".

2. Click "Job Order". The Order screen is displayed.

3. If there is a job order in the "Job Order" field, the job order definition for that job order is displayed on the main screen.

4. Click "Process". The Job Order Process screen is displayed.

Using the Job Order Process Screen

Use these procedures to display, delete, view the previous, view the next, and refresh job order processes; and to display, update, add, and delete operations on a job order process.

Displaying a Job Order Process and its Operations

To display a job order process and its operations, perform the following steps:

1. Enter a job order in the "Job Order" field.

2. Click the Open (Display) button located on the toolbar or hit the Enter key.

3. The job order process and its operations are displayed on the main screen.

4. The job order operations are displayed in the Operations table. Use the scroll bar on the right to display more rows if necessary.

   -or-

1. Use the Search button next to the "Job Order" field, "Description" field, "Type" field or the "Status" field to select a job order.

2. Double-click on the "Job Order" you would like to display in the "Search" screen table.

3. The job order process and its operations are displayed on the main screen.

4. The job order operations are displayed in the Operations table. Use the scroll bar on the right to display more rows if necessary.

Adding Job Order Operations

To add operations to a job order:

1. Display the job order process you wish to change. See "Displaying a Job Order Process and its Operations" above.

2. Select the appropriate type in the “Type” field, if desired (the default is Standard), and enter an optional process description in the “Description” field.

3. Enter the operation sequence data in the table for each of the tabs (“Run Time”, “Setup Time”, and “Operator Time”). You cannot change the “Operation Sequence” and “Type” entries once the data has been saved. Leave gaps in your numbering sequence to allow for the insertion of additional steps.

4. Click the Add Rows button located on the lower right corner of the table to add more rows for operations if necessary.

5. When all of the operation data has been entered, click the Save button located on the toolbar.

Deleting Job Order Operations

Perform the following steps to delete job order operations:

1. Display the job order process you wish to change. See “Displaying a Job Order Process and its Operations” above.

2. Click the “Delete” checkbox next to the row(s) you want to delete. You may select more then one row to be deleted at one time. Click the checkbox again to remove the deletion flag.

3. When all of the appropriate rows are selected, click the Save button located on the toolbar.

Deleting a Job Order Process Definition and its Associated Data

Perform the following steps to delete the job order process including job order operations, job order process information, job order process references, job order operation information, and job order operation references:

1. Display the job order process you wish to delete. See “Displaying a Job Order Process and its Operations” above.

2. Click the Delete button located on the toolbar.

3. Click the “Yes” button on the “Confirm Action” pop up message. If you do not want to delete the job order process click “No” on the “Confirm Action” pop up message.

4. The job order process, job order process information, job order process information, job order process references, job order operations, job order operation information, and job order operation references are deleted.

Note: Once job order process data is deleted, it can no longer be displayed or updated.

Displaying the Previous Job Order Process

To display the job order process that precedes the job order process currently displayed, perform the following steps:

1. Click the Previous button ◀ located on the toolbar.

2. The previous job order process and its operations are displayed on the main screen.

Displaying the Next Job Order Process

To display the job order process that follows the job order process currently displayed, perform the following steps:

1. Click the Next button ▶ located on the toolbar.

2. The next job order process and its operations are displayed on the main screen.

Tip: You can use the Next button ▶ as a convenient way to locate the first record in the database. Start by erasing the screen using the Erase button, then click the Next button ▶.

Refreshing Job Order Operations

To delete the operations on the job order and replace them with the operations from the original process, perform the following steps:

1. Display the job order process you wish to refresh. See “Displaying a Job Order Process and its Operations” above.

2. Click the Refresh button located on the toolbar.

3. Click the “Yes” button on the “Confirm Action” pop up message. If you do not want to refresh the operations, click “No” on the “Confirm Action” pop up message.

Note: The process and operations must be defined with the “Process Definition” screen for the job order operations to be refreshed. If the process and/or operations do not exist, the job order operations will be deleted and will not be replaced.

Job Order Process Information Screen

Use this screen to enter additional text information concerning the displayed job order process. The data may be any information you wish to store concerning the job order process, and multiple types of information can be stored. Changes made to the source process information (using Process Definition) are not reflected in the job order process information, unless the job order process is refreshed. Also, changes made to the job order process information using the “Job Order Process Information” screen are not reflected in the source process.

The Reference table provides a means to attach or view external documents. You can either view the documents by using the appropriate application or select the file and place it in the Reference table.

Information text can be selected to print on the job order form. External references may also be selected to print on the job order form; however, only external reference files with a .txt extension can be printed.

Current Job Order

Field	Explanation
Job Order	A manually entered or system generated number that identifies a job order.
Description	A short description of the job order or its use.
Status	Indicates the job order status: Active, Closed, or Released.

Information Table

Column	Explanation
Row	The line number of the row in the table.
Type	Indicates the type of text information. Additional text types may be added using the Dropdown Control screen.
Text Information	This is where you enter text information or view text that has already been entered.
Print Job Order	This is a checkbox to indicate whether or not you want this information text to appear on the job order form.
Delete	This is a checkbox to indicate you want to delete this text record.

Reference Table

Column	Explanation
Row	The line number of the row in the table.

Reference Type	A designation for the type of reference stored. A dropdown list of values is provided for your convenience. You can use those values or define your own using the "Dropdown Control" screen under "System Administration".
Reference	Directory and file name for an electronic reference, URL for a website, or description of where to find a physical reference. An electronic reference can be a spreadsheet, a word processor document, or a text file. A physical reference can be the name of a book with the page number.
Print Job Order	This is a checkbox to indicate whether or not you want this reference to appear on the job order form. Only files with a .txt extension can be printed.
Delete	This is a checkbox to indicate you want to delete this reference record.

Message Line

Field	**Explanation**
Message	Displays information about the current status of the screen.

Accessing the Job Order Process Information Screen

1. Click the plus ("+") next to "Process/Job Order" or double-click "Process/Job Order" in the "NavTree".

   -or-

   Click on the "View" menu. Select "Goto Screen", then select "Process/Job Order".

2. Click "Job Order". The Order screen is displayed.

3. If there is a job order in the "Job Order" field, the job order definition for that job order is displayed on the main screen.

4. Click "Process Info". The Job Order Process Information screen is displayed.

Using the Job Order Process Information Screen

Use these procedures to display, update, add, delete, display the previous, and display the next job order process information or references.

Displaying Job Order Process Information and References

To display job order process information and references, perform the following steps:

1. Enter a job order in the "Job Order" field and click the Open (Display) button located on the toolbar or hit the Enter key.

   -or-

   Use the Search button next to the "Job Order" field, "Description" field or the "Status" field to select a job order and double-click on the "Job Order" you would like to display in the "Search" screen table.

3. The information text types and references for the job order process are displayed on the main screen.

4. To display information text, click the Goto/Selection button in the "Text Information" column of the Information table for the row you want to display and select "Edit Information Text" on the menu that appears. Use the scroll bar on the right to display more rows if necessary.

5. The text will be displayed in a pop-up window.

6. The reference information is displayed in the Reference table. Use the scroll bar on the right to display more rows if necessary.

7. To view electronic references, right click on the reference you would like to display. Choose "Goto External Application" from the menu.

Updating Job Order Process Information

To update job order process information, perform the following steps:

1. Display the job order process you want to change. See "Displaying Job Order Process Information and References" above.

2. Click the Goto/Selection button in the "Text Information" column of the Information table for the row you want to update and select "Edit Information Text" on the menu that appears. Use the scroll bar on the right to display more rows if necessary.

3. The text will be displayed in a pop-up window.

4. Change the desired information in the pop-up window and click "Ok" when done.

5. If necessary, click the checkbox in the "Print Job Order" column to indicate if you want this information text to appear on the job order document or not. When this box is checked, the text will appear on the job order document. Click the checkbox again to remove the print flag.

6. Once finished, click the Save button located on the toolbar.

Note: You can update Job Order Process Information and References at the same time.

Updating Job Order Process References

To update job order process references, perform the following steps:

1. Display the job order process you want to change. See “Displaying Job Order Process Information and References” above.

2. Enter the new reference in the “Reference” column of the Reference table for the row or rows you wish to update.

   -or-

   For an electronic reference, right click the reference you want to update. Choose “Select External File”. A file selection dialog will appear so you can locate the directory that contains the file you want. Select the file you want and click the “Open” button.

4. If necessary, click the checkbox in the “Print Job Order” column to indicate if you want this reference to appear on the job order document or not. When this box is checked, the reference will appear on the job order document if possible. Click the checkbox again to remove the print flag.

5. Once finished, click the Save button located on the toolbar.

Note: You can update Job Order Process Information and References at the same time.

Adding Job Order Process Information

To enter job order process information, perform the following steps:

1. Display the job order process you want to change. See “Displaying Job Order Process Information and References” above.

2. Click an empty row in the Information table. If there are no empty rows click the Add Rows button in the lower right corner of the table.

3. Type the first letter of the text type you want (type the letter multiple times if there is more than one type that begins with the same letter).

   -or-

   Using the dropdown list, select the Text Type in the “Info Type” column of the Information table.

4. Click the Goto/Selection button in the "Text Information" column of the Information table for the row you want and select "Edit Information Text" on the menu that appears. Use the scroll bar on the right to display more rows if necessary.
5. The text will be displayed in a pop-up window.
6. Enter the desired information in the pop-up window and click "Ok" when done.
7. If necessary, click the checkbox in the "Print Job Order" column to indicate if you want this information text to appear on the job order document. When this box is checked, the text will appear on the job order document. Click the checkbox again to remove the print flag.
8. Once finished, click the Save button located on the toolbar.

Note: You can add Job Order Process Information and References at the same time.

Adding Job Order Process References

To enter job order process references, perform the following steps:

1. Display the job order process you want to change. See "Displaying Job Order Process Information and References" above.
2. Click an empty row in the Reference table. If there are no empty rows click the Add Rows button in the lower right corner of the table.
3. Type the first letter of the reference type you want (type the letter multiple times if there is more than one type that begins with the same letter).

   -or-

   Using the dropdown list, select the Reference Type in the "Reference Type" column of the Reference table.
4. Enter the reference in the "Reference" column.

   -or-

   For an electronic reference, right click the reference you want to update. Choose "Select External File". A file selection dialog will appear so you can locate the directory that contains the file you want. Select the file you want and click the "Open" button.
5. If necessary, click the checkbox in the "Print Job Order" column to indicate if you want this reference to appear on the job order document. When this box is checked, the text will appear on the job order document if possible. Click the checkbox again to remove the print flag.
6. Once finished, click the Save button located on the toolbar.

Note: You can add Process Information and References at the same time.

Deleting Job Order Process Information and References

To delete job order process information and references, perform the following steps:

1. Display the job order reference you want to delete. See "Displaying Job Order Process Information and References" above.

2. To delete text information, click the checkbox in the "Delete" column of the Information table for the row you want to delete. You may select more then one row to be deleted at one time. Click the checkbox again to remove the deletion flag.

3. To delete reference information, click the checkbox in the "Delete" column of the Reference table for the row you want to delete. You may select more then one row to be deleted at one time. Click the checkbox again to remove the deletion flag.

4. Once finished, click the Save button located on the toolbar.

Note: Once job order process information is deleted, it can no longer be displayed or updated.

Displaying the Previous Job Order Process Information and References

To display the job order process information and references that precede the job order process currently displayed, perform the following steps:

1. Click the Previous button located on the toolbar.

2. The previous job order process information and references are displayed on the main screen.

Displaying the Next Job Order Process Information and References

To display the job order process information and references that follow the job order process currently displayed, perform the following steps:

1. Click the Next button located on the toolbar.
2. The next job order process information and references are displayed on the main screen.

Tip: You can use the Next button as a convenient way to locate the first record in the database. Start by erasing the screen using the Erase button, then click the Next button .

Job Order Operation Information Screen

Use this screen to enter text information for operation steps associated with a job order process. This data may be any information you wish to store concerning the operation, such as safety issues, specific tools required, and unique material requirements. Changes made to the source operation information (Using Process Definition) are not reflected in the job order operation information, unless the process is refreshed from the original process. Also, changes made to the job order process information using the “Job Order Operation Information” screen are not reflected in the source operation information.

The Reference table provides a means to attach or view external documents. You can either view the documents by using the appropriate application or select the file and place it in the Reference table.

Information text can be selected to print on the job order form. External references may also be selected to print on the job order form; however, only external reference files with a .txt extension can be printed.

Current Job Order

Field	Explanation
Job Order	A manually entered or system generated number that identifies a job order.
Description	A short description of the job order or its use.
Operation	The sequence in which the task should be performed in this process. Also referred to as operation number.
Status	Indicates the job order status: Active, Closed, or Released.

Information Table

Column	Explanation
Row	The line number of the row in the table.
Type	Indicates the type of text information. Additional text types may be added using the Dropdown Control screen.
Text Information	This is where you enter text information or view text that has already been entered.
Print Job Order	This is a checkbox to indicate whether or not you want this information text to appear on the job order form.
Delete	This is a checkbox to indicate you want to delete this text record.

Reference Table

Column	Explanation
Row	The line number of the row in the table.
Reference Type	A designation for the type of reference stored. A dropdown list of values is provided for your convenience. You can use those values or define your own using the "Dropdown Control" screen under "System Administration".
Reference	Directory and file name for an electronic reference, URL for a website, or description of where to find a physical reference. An electronic reference can be a spreadsheet, a word processor document, or a text file. A physical reference can be the name of a book with the page number.
Print Job Order	This is a checkbox to indicate whether or not you want this reference to appear on the job order form. Only files with a .txt extension can be printed.
Delete	This is a checkbox to indicate you want to delete this reference record.

Message Line

Field	Explanation
Message	Displays information about the current status of the screen.

Accessing the Operation Information Screen

1. Click the plus ("+") next to "Process/Job Order" or double-click "Process/Job Order" in the "NavTree".

   -or-

   Click on the "View" menu. Select "Goto Screen", then select "Process/Job Order".

2. Click "Job Order". The Order screen is displayed.

3. If there is a job order in the "Job Order" field, the job order definition for that job order is displayed on the main screen.

4. Click "Operation Info". The Job Order Operation Information screen is displayed.

Using the Job Order Operation Information Screen

Use these procedures to display, update, add, delete, display the previous, and display the next job order operation information and references.

Displaying Job Order Operation Information and References

To display job order operation information and references, perform the following steps:

1. Enter a job order in the “Job Order” field and a job order operation number in the “Operation” field then click the Open (Display) button located on the toolbar or hit the Enter key.

   -or-

   Use the Search button next to the “Job Order” field, “Description” field or the “Status” field to select a job order. In the search screen table, double-click on the “Job Order” you would like to display. Then enter a job order operation number in the “Operation” field.

2. The information text types and references for the job order operation are displayed on the main screen.

3. To display information text, click the Goto/Selection button in the “Text Information” column of the Information table for the row you want to display and select “Edit Information Text” on the menu that appears. Use the scroll bar on the right to display more rows if necessary.

4. The text will be displayed in a pop-up window.

5. The reference information is displayed in the Reference table. Use the scroll bar on the right to display more rows if necessary.

6. To view electronic references, right click on the reference you would like to display. Choose “Goto External Application” from the menu.

Updating Job Order Operation Information

To update job order operation information, perform the following steps:

1. Display the job order operation you want to change. See “Displaying Job Order Operation Information and References” above.

2. Click the Goto/Selection button in the “Text Information” column of the Information table for the row you want to update and select “Edit Information Text” on the menu that appears. Use the scroll bar on the right to display more rows if necessary.

3. The text will be displayed in a pop-up window.

4. Change the desired information in the pop-up window and click “Ok” when done.

5. If necessary, click the checkbox in the “Print Job Order” column to indicate if you want this information text to appear on the job order document or not. When this box is checked, the text will appear on the job order document. Click the checkbox again to remove the print flag.

6. Once finished, click the Save button located on the toolbar.

Note: You can update Job Order Operation Information and References at the same time.

Updating Job Order Operation References

To update job order operation references, perform the following steps:

1. Display the job order operation you want to change. See “Displaying Job Order Operation Information and References” above.

2. Enter the new reference in the “Reference” column of the Reference table for the row or rows you wish to update.

   -or-

   For an electronic reference, right click the reference you want to update. Choose “Select External File”. A file selection dialog will appear so you can locate the directory that contains the file you want. Select the file you want and click the “Open” button.

3. If necessary, click the checkbox in the “Print Job Order” column to indicate if you want this reference to appear on the job order document or not. When this box is checked, the reference will appear on the job order document if possible. Click the checkbox again to remove the print flag.

4. Once finished, click the Save button located on the toolbar.

Note: You can update Job Order Operation Information and References at the same time.

Adding Job Order Operation Information

To enter job order operation information, perform the following steps:

1. Display the job order operation you want to change. See “Displaying Job Order Operation Information and References” above.

2. Click an empty row in the Information table. If there are no empty rows click the Add Rows button in the lower right corner of the table.

3. Type the first letter of the text type you want (type the letter multiple times if there is more than one type that begins with the same letter).

   -or-

   Using the dropdown list, select the Text Type in the “Info Type” column of the Information table.

4. Click the Goto/Selection button in the “Text Information” column of the Information table for the row you want and select “Edit Information Text” on the menu that appears. Use the scroll bar on the right to display more rows if necessary.

5. The text will be displayed in a pop-up window.

6. Enter the desired information in the pop-up window and click “Ok” when done.

7. If necessary, click the checkbox in the “Print Job Order” column to indicate if you want this information text to appear on the job order document. When this box is checked, the text will appear on the job order document. Click the checkbox again to remove the print flag.

8. Once finished, click the Save button located on the toolbar.

Note: You can add Job Order Operation Information and References at the same time.

Adding Job Order Operation References

To enter job order operation references, perform the following steps:

1. Display the job order operation you want to change. See “Displaying Job Order Operation Information and References” above.

2. Click an empty row in the Reference table. If there are no empty rows click the Add Rows button in the lower right corner of the table.

3. Type the first letter of the reference type you want (type the letter multiple times if there is more than one type that begins with the same letter).

   -or-

   Using the dropdown list, select the Reference Type in the “Reference Type” column of the Reference table.

4. Enter the reference in the “Reference” column.

   -or-

   For an electronic reference, right click the reference you want to update. Choose “Select External File”. A file selection dialog will appear so you can locate the directory that contains the file you want. Select the file you want and click the “Open” button.

4. If necessary, click the checkbox in the “Print Job Order” column to indicate if you want this reference to appear on the job order document. When this box is checked, the reference will appear on the job order document if possible. Click the checkbox again to remove the print flag.

5. Once finished, click the Save button located on the toolbar.

Note: You can add Job Order Operation Information and References at the same time.

Deleting Job Order Operation Information and References

To delete job order operation information and references, perform the following steps:

1. Display the job order operation information and references you want to delete. See "Displaying Job Order Operation Information and References" above.

2. To delete text information, click the checkbox in the "Delete" column of the Information table for the row you want to delete. You may select more then one row to be deleted at one time. Click the checkbox again to remove the deletion flag.

3. To delete reference information, click the checkbox in the "Delete" column of the Reference table for the row you want to delete. You may select more then one row to be deleted at one time. Click the checkbox again to remove the deletion flag.

4. Once finished, click the Save button located on the toolbar.

Note: Once job order operation information is deleted, it can no longer be displayed or updated.

Displaying the Previous Job Order Operation Information and References

To display the job order operation information and references that precede the job order operation currently displayed, perform the following steps:

1. Click the Previous button located on the toolbar.

2. The previous job order operation information and references are displayed on the main screen.

Displaying the Next Job Order Operation Information and References

To display the job order operation information and references that follow the job order operation currently displayed, perform the following steps:

1. Click the Next button located on the toolbar.

2. The next job order operation information and references are displayed on the main screen.

Tip: You can use the Next button as a convenient way to locate the first record in the database. Start by erasing the screen using the Erase button, then click the Next button.

Job Order Summary Screen

This screen is used to display a list of job orders based on the selection criteria used.

Selection Criteria

Field	Explanation
Job Order	This field is for entering all or part of a Job Order Number to select the orders to be displayed. Leave this field blank to select all job orders.
Job Order Type	This field is for choosing the type of job orders to be displayed. Leave this field blank to select all order types. A dropdown list of values is provided for your convenience.
Description	This field is for entering all or part of a Job Order Description to select the orders to be displayed. Leave this field blank to select all descriptions.
Job Order Status	This field is for choosing the job orders to be displayed by job order status. Leave this field blank to select all statuses. A dropdown list of values is provided for your convenience.
Item/Part	Enter all or part of an item number here to view job orders that have this item as the “Job Order Item/Part” (not bill of material item)
Number of Rows to Display	Controls the number of database rows to retrieve during the query. The default value is 30. The more rows retrieved, the longer it takes the query to complete. Use the selection criteria to help control the number of rows retrieved.

Summary Table (Job Order, Quantity, and Customer tabs)

Column	Explanation
Row	The line number of the row in the table.
Job Order	A manually entered or system generated number that identifies a job order.
Item/Part	Job Order Item/Part. It is a unique identification of a service, assembly, purchased part, component, facility, tool, material, etc.
Job Order Description	A short description of the job order or its use.
Job Order Type	The type helps further define a job order by giving it a classification. Some examples of types are: "Production and "Service".

Job Order Status	Indicates the status of the job order. The values are: "Active", "Closed", or "Released".
Current Quantity	The total quantity of the Job Order Item/Part required to complete this job order.
Completed Quantity	The total quantity of the Job Order Item/Part that has already been completed.
Release Date	Date this job order should be released for processing.
Due Date	Date this job order should be completed.
Unit of Measure	Defines how the item is counted or measured. Some examples of units of measure are Bag", "Carton" and "Feet".
Customer #	Customer number of the customer associated with this job order.
Customer	Customer name of the customer associated with this job order.
Order #	Customer order number associated with this job order.
Customer Line	Line number of the customer order associated with this job order.

Message Line

Field	**Explanation**
Message	Displays information about the current status of the screen.

Accessing the Job Order Summary Screen

1. Click the plus ("+") next to "Process/Job Order" or double-click "Process/Job Order" in the "NavTree".

   -or-

   Click on the "View" menu. Select "Goto Screen", then select "Process/Job Order".

2. Click "Job Order". The Order screen is displayed.

3. If there is a job order in the "Job Order" field, the job order definition for that job order is displayed on the main screen.

4. Click "Summary". The Summary screen is displayed.

Using the Job Order Summary Screen

Displaying the Job Order Summary

To view the job order summary, perform the following steps (Steps 1, 2, 3, 4, and 5 are optional):

1. Enter all or part of a job order number in the "Job Order" field, or use the Search button next to the "Job Order" field to select a job order number or leave this field blank for all job order numbers.

2. Enter all or part of a job order description in the "Description" field, or use the Search button next to the "Description" field to select a job order number or leave this field blank for all job orders regardless of description.

3. Select the type of job order you want to display in the "Job Order Type" field or leave that field blank to select any type of job order.

4. Select the status of the job orders you want to display in the "Job Order Status" field or leave that field blank to select job orders with any status.

5. Enter all or part of an item number in the "Item/Part" field, or use the Search button next to the "Item Part" field to select an item number or leave this field blank to view job orders regardless of job order item.

6. Enter the maximum number of rows you wish to view in the "Number of Rows to Display" field.

7. Click the Open (Display) button located on the toolbar.

8. View the Job Order Summary information displayed on the screen.

Job Activity

What is Job Activity?

The job activity part of TFG4000 Job Order Management contains the screens that help you process job orders, maintain component inventory, report cost, and analyze potential component shortages.

Job Activity Screens

“Job Activity” consists of six tabbed screens that are used to perform job order activity. Each individual screen is used for specific purposes of maintaining job order functions.

Picking

This screen is used to issue the quantity of a component used for the job order. Each component needed in the job order is displayed in a table. The “Quantity Required” field shows the remaining quantity needed for the job order. When the “Issue Quantity” field is used, the “Quantity Required” field is decremented by the value in the “Issue Quantity” field and a component history audit trail record is written. Also, if TFG4000 Inventory Management is installed, the on hand inventory for the component is updated and an inventory transaction audit trail record is written.

Feedback

This screen is used to view and report employee related cost for a job order.

Cost

This screen is used to view and report job order cost.

Component History

This screen is used to display the history information for components used in a job order. It shows the activity that has occurred for each component on the job order.

Shortage

This screen is used to display the components for a job order along with current inventory and reserve so you can determine if you have enough inventory available to satisfy the job order. Applicable only if TFG4000 Inventory Management is installed and used.

Item Shortage

This screen is used to display the orders for a component along with current inventory and reserve so you can determine if you have enough inventory available to satisfy the job orders. Applicable only if TFG4000 Inventory Management is installed and used.

Picking Screen

This screen is used to display what is still needed to complete the job order and to issue the quantity of a component used for the job order. Each component needed in the job order is displayed in a table. The “Quantity Required” field shows the remaining quantity needed for the job order. When the “Issue Quantity” field is used, the “Quantity Required” field is decremented by the value in the “Issue Quantity” field and a component history audit trail record is written. Also, if TFG4000 Inventory Management is installed, the on hand inventory for the component is updated and an inventory transaction audit trail record is written.

Current Job Order Data

Field	Explanation
Job Order	A manually entered or system generated number that identifies a job order.
Description	A short description of the job order or its use.
Quantity	The total quantity of the Job Order Item/Part required to complete this job order.
Status	Indicates the job order status: Active, Closed, or Released.
Required Start	The calendar date that determines when materials are required for the job order. It is the date when the job order should be started.
Type	Defines the job order type – for example Production or Service.
Due Date	The calendar date on which the job order is planned to be completed.
Quantity Complete	The quantity of the Job Order Item/Part that has been completed for a job order.

Picking Table (Picking, Location, Return/Scrap, and Description tabs)

Column	Explanation
Row	The line number of the row in the table.
Prefix	Unique identification of a component in this Bill of Materials. The Prefix may be used to sequence the component within the Bill of Materials or to allow multiple entries for the same component.
Component	Unique identification of a service, assembly, purchased part, component, facility, tool, material, etc.

Suffix	Unique identification of a component in this Bill of Materials. The Suffix may be used to sequence the component within the Bill of Materials or to allow multiple entries for the same component.
Quantity Required	The number of units of the component remaining to be picked, retrieved, or selected (issued) for this job order.
Onhand Quantity	The number of units that are on hand in this inventory location for this Component. (Displayed only if TFG4000 Inventory Management is installed.)
Issue Quantity	Place to enter a quantity to be picked (issued) from inventory for this component (subtracted from the inventory location on the row where you enter the Issue Quantity).
Pick From Warehouse	Identification of the inventory warehouse where inventory is stored for this Component. (Displayed only if TFG4000 Inventory Management is installed.)
Pick From Zone	Identification of the inventory zone where inventory is stored for this Component. (Displayed only if TFG4000 Inventory Management is installed.)
Pick From Location	Identification of the inventory location where inventory is stored for this Component. (Displayed only if TFG4000 Inventory Management is installed.)
Type	Defines the component type. The type helps further define an item by giving it a classification. Some examples of types are: "Assembly" something you build, "Service" for a service you provide, "Tool" for something you use in your operation.
Return Quantity	Place to enter a quantity to be returned to inventory for this component (added to the inventory location on the row where you enter the return quantity).
Scrap Quantity	Place to enter a quantity to be scrapped for this component (does not affect inventory).
Job Quantity	The total quantity of the component required to complete this job order.
Description	Short description of the item needed to be picked, retrieved, or selected (issued) for this job order.
Unit of Measure	Defines how the item is counted or measured. Some examples of units of measure are "Ounce", "Pound", and “Hour".

Stock Item	Indicates if the component is a Stock Item or not. Components that have Stock Item = “No” can be issued regardless of the on hand balance in inventory and whether or not the inventory balance would go negative. Components that have Stock Item = “Yes” must pass inventory rules before they can be issued.

Message Line

Field	Explanation
Message	Displays information about the current status of the screen.

Accessing the Picking Screen

1. Click the plus (“+”) next to “Process/Job Order” or double-click “Process/Job Order” in the “NavTree”.

   -or-

   Click on the “View” menu. Select “Goto Screen”, then select “Process/Job Order”.

2. Click “Job Activity”. The Job Order Picking screen is displayed.

3. If there is a job order in the “Job Order” field, the job order picking information for that job order is displayed on the main screen.

Using the Picking Screen

Use these procedures to display job order picking data, pick (issue) components for a job order, display the previous job order pick list, and display the next job order pick list.

Displaying Job Order Picking Data

To display job order picking data, perform the following steps:

1. Enter a job order in the “Job Order” field.

2. Click the Open (Display) button located on the toolbar or hit the Enter key.

3. The job order picking data displayed on the main screen.

   -or-

1. Use the Search button next to the “Job Order” field, “Description” field, “Type” field or the “Status” field to select a job order.

2. Double-click on the “Job Order” you would like to display in the “Search” screen table.

3. The job order picking data displayed on the main screen.

Picking Components

To pick (issue) components for a job order, perform the following steps:

1. Display the job order number you need. See “Displaying Job Order Picking Data” above.

2. Enter the quantity you wish to pick for a component in the “Issue Quantity” column of the Picking table

   -or-

   Click the “Pick All” button to issue the remaining quantity for all components.

3. Once finished, click the Save button located on the toolbar.

4. The quantity required for this component will be reduced by the quantity issued and if TFG4000 Inventory Management is installed, inventory will be reduced by the quantity issued.

Note: Some components may be issued even when they do not have enough inventory. This can happen if the component is defined as Stock Item = No. Also, it can happen if the system variable **Allow_Negative_Inventory** is set to **Yes**.

Very Important! If the “Full BOM” feature on the job order was selected, the bill of materials represented by the picklist may contain sub-assemblies. If you are use the “Full BOM” feature and you maintain sub-assembly inventory, **do not** use the “Pick All” button! Issue components individually. Otherwise, you may over-issue inventory because you will be issuing the sub-assembly **plus** the components for the sub-assembly!

Returning Components

To return components back to inventory, perform the following steps:

1. Display the job order number you need. See “Displaying Job Order Picking Data” above.

2. In the row that contains the inventory location where you want to return the inventory, enter the quantity you wish to return in the “Return Quantity” column of the Picking table (located on the “Return/Scrap” tab).

3. Once finished, click the Save button located on the toolbar.

4. The quantity required for this component will be increased by the quantity returned and if TFG4000 Inventory Management is installed, inventory will be increased by the quantity returned.

Returning Components When there are no Inventory Locations Displayed

To return components back to inventory when there are no locations displayed on the picking screen, perform the following steps:

1. Display the job order number you need. See “Displaying Job Order Picking Data” above.

2. In the row that contains item you wish to return, click the Goto/Selection button located in the Component column.

3. Select “Goto Inventory Control”. The Inventory Control screen is displayed for that component.

4. Select “Return” in the Transaction Type

5. Enter the quantity you wish to return in the Transaction Quantity column

6. Select the location where you want the inventory to be returned

7. Click the “Order/Shelf Life” tab and enter the Job Order Number in the Order Number column

8. Select Job in the “Order Type” column

9. Click the Save button located on the toolbar.

10. The quantity required for this component will be increased by the quantity returned and inventory will be increased by the quantity returned.

Note: This process works only if TFG4000 Inventory is installed.

Scrapping Components

To scrap components, perform the following steps:

1. Display the job order number you need. See “Displaying Job Order Picking Data” above.

2. In any row for the component, enter the quantity you wish to scrap in the “Scrap Quantity” column of the Picking table (located on the “Return/Scrap” tab).

3. Once finished, click the Save button located on the toolbar.

4. The quantity required for this component will be increased by the quantity scrapped. Inventory is not affected.

Displaying the Previous Job Order Picking Data

To display the job order picking data that precedes the job order picking data currently displayed, perform the following steps:

1. Click the Previous button located on the toolbar.

2. The previous job order picking data is displayed on the main screen.

Displaying the Next Job Order Picking Data

To display the job order picking data that follows the job order picking data currently displayed, perform the following steps:

1. Click the Next button located on the toolbar.

2. The next job order picking data is displayed on the main screen.

Tip: You can use the Next button as a convenient way to locate the first record in the database. Start by erasing the screen using the Erase button, then click the Next button .

Recalculating Pick Quantities

Refreshing the job order bill of materials may affect the quantity required on the pick list. The quantity required is recalculated based on the quantities on the new job order bill of materials and the current job order quantity. The current job order quantity represents the quantity remaining to complete the job order. When completed quantities are reported they are subtracted from the current job order quantity.

The following conditions may occur after a job order bill of materials has been refreshed or replaced:

1. If you did not report completed quantities before refreshing the bill, but you already issued components, the quantity required may be more than the quantity actually needed to complete the order.

2. You may also encounter a situation where the quantity required is less than the quantity actually required to complete the order.

If either condition occurs do the following:

1. Verify the job order quantity completed. Make sure you have reported all quantity completed. See the Order screen for more information about reporting quantity completed.

2. Click the Refresh button located on the toolbar to recalculate pick list quantities.

3. The quantity of the component needed for one unit of the final item (see the Parts screen for more information about the component Unit Quantity) is multiplied by the current job order quantity which represents the quantity remaining to complete the job order (see the Order screen for more information about the Quantity field). The resulting quantities will be the quantity of each component currently required to complete the order.

Feedback Screen

This screen is used to report additional material and labor hours by employee for a particular job order.

Current Job Order Data

Field	Explanation
Job Order	A manually entered or system generated number that identifies a job order.
Description	A short description of the job order or its use.
Required Start	The calendar date that determines when the job order should be started.
Due Date	The calendar date that determines when the job order should be completed.
Completed Date	Date this job order was completed.
Type	Defines the job order type; for example, Production or Service.
Quantity Complete	The quantity of the Job Order Item/Part that has been completed.
Status	Indicates the job order status: Active, Closed, or Released.

Feedback Table (Material & Hours and Description tabs)

Column	Explanation
Row	The line number of the row in the table.
Cost Date	Date the feedback was reported.
Employee	The employee identification of the person reporting.
Name	The employee’s name.
Material Cost	Additional material cost report by this employee.
Regular Time	Number of regular hours this employee worked on this job on the date indicated. Labor cost reported for the job is calculated using the hours reported here times the employee’s regular time rate.
Overtime Time	Number of overtime hours this employee worked on this job on the date indicated. Labor cost reported for the job is calculated using the hours reported here times the employee’s overtime rate.

Holiday Time	Number of holiday hours this employee worked on this job on the date indicated. Labor cost reported for the job is calculated using the hours reported here times the employee’s holiday rate.
Cost Description	A brief description or explanation of the feedback reported.

Note: (Total labor cost reported is the sum of the Regular, Overtime, and Holiday time hours multiplied by their respective rates as defined on the Employee screen in Shared Applications.)

Message Line

Field	**Explanation**
Message	Displays information about the current status of the screen.

Accessing the Feedback Screen

1. Click the plus (“+”) next to “Process/Job Order” or double-click  “Process/Job Order” in the “NavTree”.

   -or-

   Click on the “View” menu. Select “Goto Screen”, then select “Process/Job Order”.

2. Click “Job Activity”. The Job Order Picking screen is displayed.

3. If there is a job order in the “Job Order” field, the job order picking information for that job order is displayed on the main screen.

4. Click “Feedback”. The Feedback screen is displayed.

5. If there is a job order in the “Job Order” field, the job order feedback for that job order is displayed on the main screen.

Using the Feedback Screen

Use these procedures to display job order feedback data, enter feedback for a job order, display the previous job order feedback data, and display the next job order feedback data.

Displaying Job Order Feedback Data

To display job order feedback data, perform the following steps:

1. Enter a job order in the "Job Order" field.

2. Click the Open (Display) button located on the toolbar or hit the Enter key.

3. The job order feedback data is displayed on the main screen.

-or-

1. Use the Search button next to the "Job Order" field, "Description" field, "Type" field or the "Status" field to select a job order.

2. Double-click on the "Job Order" you would like to display in the "Search" screen table.

3. The job order feedback data is displayed on the main screen.

Reporting Feedback

To report feedback for a job order, perform the following steps:

1. Display the job order number you need. See "Displaying Job Order Feedback Data" above.

2. Enter or select the Employee.

3. Enter the information you wish to report.

4. Once finished, click the Save button located on the toolbar.

Displaying the Previous Job Order Feedback Data

To display the job order feedback data that precedes the job order feedback data currently displayed, perform the following steps:

1. Click the Previous button located on the toolbar.

2. The previous job order feedback data is displayed on the main screen.

Displaying the Next Job Order Feedback Data

To display the job order feedback data that follows the job order feedback data currently displayed, perform the following steps:

1. Click the Next button located on the toolbar.
2. The next job order feedback data is displayed on the main screen.

Tip: You can use the Next button as a convenient way to locate the first record in the database. Start by erasing the screen using the Erase button, then click the Next button.

Cost Screen

This screen is used to report additional material and other costs not directly associated with a particular employee.

Current Job Order Data

Field	Explanation
Job Order	A system generated number that identifies a job order.
Description	A short description of the job order or its use.
Required Start	The calendar date that determines when the job order should be started.
Required Complete	The calendar date that determines when the job order should be completed.
Type	Defines the job order type; for example Production or Service.
Status	Indicates the job order status: Active, Closed, or Released.

Cost Table (Cost, Material & Labor and Overhead, Setup & External tabs)

Column	Explanation
Row	The line number of the row in the table.
Cost Date	Date the cost was reported.
Total Cost	Sum of all costs reported for the date indicated.
Cost Level	Defaulted to “Actual”
Cost Description	A brief description or explanation of the cost reported.
Material Cost	Cost of materials used on this job order on the date indicated.
Labor Cost	Cost of labor needed for this job order on the date indicated.
Labor Time	Number of labor hours expended on this job on the date indicated.
Time Unit	Defaulted to hours.
Fixed Overhead	The cost of overhead attributed to a cost source that does not change reported for this job on the date indicated.

Variable Overhead	The cost of overhead attributed to a cost source that is not consistent reported for this job on the date indicated.
Setup	Cost incurred preparing for the work to be done on this job reported for this job on the date indicated.
External Cost	Cost incurred for this job on the date indicated attributed to an entity not considered part of the internal organization.

Message Line

Field	**Explanation**
Message	Displays information about the current status of the screen.

Accessing the Cost Screen

1. Click the plus ("+") next to "Process/Job Order" or double-click "Process/Job Order" in the "NavTree".

   -or-

   Click on the "View" menu. Select "Goto Screen", then select "Process/Job Order".

2. Click "Job Activity". The Job Order Picking screen is displayed.
3. If there is a job order in the "Job Order" field, the job order picking information for that job order is displayed on the main screen.
4. Click "Cost". The Cost screen is displayed.
5. If there is a job order in the "Job Order" field, the job order cost data for that job order is displayed on the main screen.

Using the Cost Screen

Use these procedures to display job order cost data, enter cost for a job order, display the previous job order cost data, and display the next job order cost data.

Displaying Job Order Cost Data

To display job order cost data, perform the following steps:

1. Enter a job order in the “Job Order” field.
2. Click the Open (Display) button located on the toolbar or hit the Enter key.
3. The job order cost data is displayed on the main screen.

   -or-

1. Use the Search button next to the “Job Order” field, “Description” field, “Type” field or the “Status” field to select a job order.
2. Double-click on the “Job Order” you would like to display in the “Search” screen table.
3. The job order cost data is displayed on the main screen.

Reporting Cost

To report cost for a job order, perform the following steps:

1. Display the job order number you need. See “Displaying Job Order Cost Data” above.
2. Enter the information you wish to report.
3. Once finished, click the Save button located on the toolbar.

Displaying the Previous Job Order Cost Data

To display the job order cost data that precedes the job order cost data currently displayed, perform the following steps:

1. Click the Previous button located on the toolbar.
2. The previous job order cost data is displayed on the main screen.

Displaying the Next Job Order Cost Data

To display the job order cost data that follows the job order cost data currently displayed, perform the following steps:

1. Click the Next button ▶ located on the toolbar.
2. The next job order cost data is displayed on the main screen.

Tip: You can use the Next button ▶ as a convenient way to locate the first record in the database. Start by erasing the screen using the Erase button, then click the Next button ▶.

Component History Screen

This screen is used to display the history information for components used in a job order.

Current Job Order Data

Field	Explanation
Job Order	A manually entered or system generated number that identifies a job order.
Description	A short description of the job order or its use.
Quantity	The total quantity of the Job Order Item/Part required to complete this job order.
Status	Indicates the job order status: Active, Closed, or Released.
Required Start	The calendar date that determines when materials are required for the job order. It is the date when the job order should be started.
Type	Defines the job order type – for example Production or Service.
Due Date	The calendar date on which the job order is planned to be completed.
Quantity Complete	The quantity of the Job Order Item/Part that has been completed for a job order.

Component Table (Component, Status, and Description tabs)

Column	Explanation
Row	The line number of the row in the table.
Component	Unique identification of a service, assembly, purchased part, component, facility, tool, material, etc.
Issued Quantity	The number of units of the component that were used or consumed (issued) for this job order.
Returned Quantity	The number of units of the component that were returned to inventory for this job order.
Scrapped Quantity	The number of units of the component that were not usable and could not be returned to inventory for this job order.
Job Quantity	The total quantity of the Component required to complete this job order.

Status	The most recent activity for this component on this job order. For example: Issued, Returned, Scrapped, Deleted or Updated.
Date Changed	The last date activity occurred for this component.
User ID	Identification of the person who affected the last change to this component for this job order.
Unit of Measure	Defines how the item is counted or measured. Some examples of units of measure are Bag", "Carton" and "Feet".
Description	A short description of the component.

Message Line

<u>**Field**</u>	<u>**Explanation**</u>
Message	Displays information about the current status of the screen.

Accessing the Component History Screen

1. Click the plus ("+") next to "Process/Job Order" or double-click  "Process/Job Order" in the "NavTree".

   -or-

   Click on the "View" menu. Select "Goto Screen", then select "Process/Job Order".

2. Click "Job Activity". The Job Order Picking screen is displayed.

3. If there is a job order in the "Job Order" field, the job order picking information for that job order is displayed on the main screen.

4. Click "History". The Component History screen is displayed.

Using the Component History Screen

Displaying Component History

To view component history, perform the following steps:

1. Enter a job order in the “Job Order” field.

2. Click the Open (Display) button located on the toolbar or hit the Enter key.

3. The job order component history is displayed on the main screen.

   -or-

1. Use the Search button next to the “Job Order” field, “Description” field, “Type” field or the “Status” field to select a job order.

2. Double-click on the “Job Order” you would like to display in the “Search” screen table.

3. The job order component history is displayed on the main screen.

Shortage Screen

This screen is used to display the components on a job order with current inventory and reserve quantities so you can determine if you have enough inventory available to complete the job order.

Note: This screen is applicable only if TFG4000 Inventory Management is installed and used.

Selection Criteria

Field	Explanation
Job Order	A system generated number that identifies a job order.
Description	A short description of the job order or its use.
Quantity	The total quantity of the job order Item/Part required to complete this job order.
Status	Identifies the job order status: Active, Closed, or Released.
Required Start	The calendar date that determines when materials are required for the job order. It is the date when the job order should be started.
Type	Defines the job order type – for example Production or Service.
Due Date	The calendar date on which the job order is planned to be completed.
Quantity Complete	The quantity of the job order Item/Part that has been completed for the job order.

Summary Table (Component and Description tabs)

Column	Explanation
Row	The line number of the row in the table.
Component	Unique identification of a service, assembly, purchased part, component, facility, tool, material, etc.
Onhand Quantity	Current inventory level for this item.
Required Quantity	The number of units of this component remaining to be picked for this job order.
Reserve Quantity	Total quantity of the component reserved by all currently outstanding job orders.

Available/Short	How much of the on hand quantity may be available for this job order. If the quantity is negative, there may be a shortage. Calculated as Onhand Quantity minus Reserve Quantity.
Component Description	Contains information describing the component item.
Component Type	Defines the component type. The type helps further define an item by giving it a classification. Some examples of types are: "Assembly" something you build, "Service" for a service you provide, "Tool" for something you use in your operation.
Component Quantity	Quantity of this component needed to produce one unit of the job order item.
Job Quantity	The number of units of this component needed to complete the job order.
Unit of Measure	Defines how the item is counted or measured. Some examples of units of measure are "Ounce", "Pound", and “Hour".

Message Line

Field	**Explanation**
Message	Displays information about the current status of the screen.

Accessing the Shortage Screen

1. Click the plus (“+”) next to “Process/Job Order” or double-click “Process/Job Order” in the “NavTree”.

   -or-

   Click on the “View” menu. Select “Goto Screen”, then select “Process/Job Order”.

2. Click “Job Activity”. The Job Order Picking screen is displayed.

3. If there is a job order in the “Job Order” field, the job order picking information for that job order is displayed on the main screen.

4. Click “Shortage”. The Shortage screen is displayed.

Using the Shortage Screen

Erasing the Screen

To erase the data from the screen click the Erase button located on the toolbar.

Note: Erasing the screen does not cause any data to be lost; it is merely a way to clean the screen in preparation for another operation.

Displaying Job Order Shortage Information

To view job order shortage information, perform the following steps:

1. Enter a job order in the “Job Order” field.
2. Click the Open (Display) button located on the toolbar or hit the Enter key.
3. View the job order shortage information displayed on the screen.

-or-

1. Use the Search button next to the “Job Order” field, “Description” field, “Status” field, or the “Type” field to select a job order.
2. Double-click on the “Job Order” you would like to display in the “Search” screen table.
3. View the job order shortage information displayed on the screen.

Interpreting Shortage Information

The information presented on the shortage screen is for a single job order. It displays each component needed to complete the job order with inventory information about each component.

Reading across one row you will see the component (Component), the total quantity of that component you have in inventory (OnHand Quantity), the quantity of the component you currently need to complete this order (Required Quantity), the quantity of the component needed by all job orders including this one (Reserve Quantity) and the net of on hand minus reserve (Available/Short).

If the Available/Short quantity is negative it indicates there is a potential shortage since you need more of the component for orders (Reserve Quantity) than you have on hand (OnHand Quantity).

That does not necessarily mean you cannot complete the order you are analyzing now. There may be enough inventory for some orders but not all orders so you can decide which orders to complete. It is also true that there may not be enough on hand to complete any of the orders. This screen provides the information for you to analyze. It does not tell you which order can be completed and which cannot.

Displaying Shortage Reports

There are two reports available to view job order shortages:

By Job Order “Job Order Shortage Report”. This report displays potential inventory shortages for parts needed for a particular job order.

By Job Order With Pending Purchase Orders “Job Order Shortage with Purchase Order Report”. This report displays job orders based on report selection criteria with item requirements, available inventory, and pending purchase orders.

Displaying Shortage Information for the Previous Job Order

To display the shortage information for the job order that precedes the job order currently displayed, perform the following steps:

1. Click the Previous button ◀ located on the toolbar.

2. Shortage information for the previous job order is displayed on the main screen.

Displaying Shortage Information for the Next Job Order

To display the shortage information for the job order that follows the job order currently displayed, perform the following steps:

1. Click the Next button ▶ located on the toolbar.

2. Shortage information for the next job order is displayed on the main screen.

Item Shortage Screen

This screen is used to display a component and all of the job orders which need that component along with current inventory and reserve quantities so you can determine if you have enough inventory available to complete the orders.

Note: This screen is applicable only if TFG4000 Inventory Management is installed and used.

Selection Criteria

Field	Explanation
Item/Part	The component you want to analyze.
Type	Defines the component (Item) type.
Description	A short description of the component.
Status	Identifies the current status of the component (Active/Inactive)
On Hand	The quantity of this component currently in inventory.

Summary Table (Shortages tab)

Column	Explanation
Row	The line number of the row in the table.
Required Start	The date processing must begin for the job order. Results are sorted by this date with the oldest date displayed first.
Job Order	Job Order that needs this component.
Required Quantity	The current number of units of this component needed to complete the job order (some of the quantity needed may have been issued/picked already)
Available/Short	Quantity calculated by first taking the On Hand at the top of the screen and subtracting the first required quantity. Subsequent Available/Short values are calculated by taking the Available/Short quantity from the row immediately above and subtracting the Required Quantity in the current row. A negative value indicates a potential shortage.
Unit Quantity	Quantity of this component needed to produce one unit of the job order item.
Job Quantity	The original number of units of this component needed to complete the job order (before any picking was performed).

Message Line

Field	**Explanation**
Message	Displays information about the current status of the screen.

Accessing the Item Shortage Screen

1. Click the plus ("+") next to "Process/Job Order" or double-click "Process/Job Order" in the "NavTree".

   -or-

   Click on the "View" menu. Select "Goto Screen", then select "Process/Job Order".

2. Click "Job Activity". The Job Order Picking screen is displayed.

3. If there is a job order in the "Job Order" field, the job order picking information for that job order is displayed on the main screen.

4. Click "Item Shortage". The Item Shortage screen is displayed.

Using the Item Shortage Screen

Erasing the Screen

To erase the data from the screen click the Erase button located on the toolbar.

Note: Erasing the screen does not cause any data to be lost; it is merely a way to clean the screen in preparation for another operation.

Displaying Item Shortage Information

To view item shortage information, perform the following steps:

1. Enter an item number in the "Item/Part" field.

2. Click the Open (Display) button located on the toolbar or hit the Enter key.

3. View the item shortage information displayed on the screen.

   -or-

1. Use the Search button next to the "Item/Part" field, "Type" field, "Description" field, or the "Status" field to select an item.

2. Double-click on the "Item/Part" you would like to display in the "Search" screen table.

3. View the item shortage information displayed on the screen.

Interpreting Shortage Results

The first Available/Short quantity displayed is calculated by taking the On Hand quantity at the top of the screen and subtracting the Required Quantity in the first row.

Subsequent Available/Short quantities are calculated by taking the Available/Short quantity from the prior row and subtracting Required Quantity in the current row.

If the Available/Short quantity is negative for a job order, you may have an inventory shortage when you try to complete that job order. Since the orders are listed by required start date, you can project a potential shortage and try to prevent it.

Displaying Shortage Reports

There are three reports available to view item shortages:

For Selected Items	"Job Order Item Shortage Report". Similar to the item shortage screen but you can choose multiple items to display with report selection criteria.
For All Items	"Job Order Item Shortage Summary Report". This report lists all items that may have a potential inventory shortage based on the current job order demand
With Pending Purchase Orders	"Job Order Item Shortage with Purchase Order Report". This report displays items based on report selection criteria and includes pending job orders, available inventory, and pending purchase orders applied against job order demand based on due dates.

Displaying Shortage Information for the Previous Job Item

To display the shortage information for the item that precedes the item currently displayed, perform the following steps:

1. Click the Previous button located on the toolbar.
2. Shortage information for the previous item is displayed on the main screen.

Displaying Shortage Information for the Next Item

To display the shortage information for the item that follows the item currently displayed, perform the following steps:

1. Click the Next button located on the toolbar.
2. Shortage information for the next item is displayed on the main screen.

Advanced Installation

TFG4000 Professional Edition provides some advanced installation functionality such as: font sizes, system variables, server start up options, BAT file options for single user and multi user modes.

Please refer to the System Administration User Guide for more information.

Documentation

TFG4000 documentation (in PDF format) is available online at www.tfg4000.com, through the "Documentation" menu on each screen, and from the Windows "Start" menu. Simply click "Start", then "Programs", then "TFG4000 Professional V1.4", and then "Documentation".

Note: PDF files require Adobe® Acrobat® Reader. The reader is available at www.adobe.com free of charge.

Registration

Quick & Easy Online: After installation, you can go to our web page at www.tfg4000.com to register the product. Click on "Register" and follow the instructions.

Suggestions

We are eager to improve TFG4000 Professional Edition, and we urge you to tell us what you think of the software and how it could be improved to better suit your needs. We have taken many suggestions from our customers and incorporated them into our products. If you have suggestions or comments, please send an e-mail to tfg4000@fredrickgroup.com. We want to hear from you!

Services

The Fredrick Group, Inc. offers assistance in data conversion. For more information, contact The Fredrick Group, Inc. directly by either:

E-mail Send an e-mail to tfg4000@fredrickgroup.com, with 'Services' in the subject line.

Phone Call **770-844-8516** between 9:00 AM - 5:00 pm Eastern Time Monday through Friday (except holidays)

Support

Note: You must be registered in order to receive support.

Initial Installation Support

The Fredrick Group, Inc. provides free initial installation support via e-mail. Installation support is available for 30 days, and is activated when you send your first message. You may also receive installation support by calling, but you must pay the cost of the call. Technicians are available on a limited basis Monday through Friday (except holidays) from 9:00 am to 5:00 pm Eastern time. The TFG4000 Professional Edition product technical support number is **770-844-8516**.

Pay-As-You-Go Support

Additional fee-based support is available. You pay the cost of the call plus an additional fee. Credit card information must be provided and confirmed before a call is accepted. Technicians are available on a limited basis Monday through Friday (except holidays) from 9:00 am to 5:00 pm Eastern time. The TFG4000 Professional Edition product technical support number is **770-844-8516**.

Contact The Fredrick Group, Inc. at tfg4000@fredrickgroup.com for more details.

Other Support Options

Other support options are available.

Contact The Fredrick Group, Inc. at tfg4000@fredrickgroup.com for more details.

Note: Support plans and fees are subject to change without notice.

For more information go to www.tfg4000.com.