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# LP 100R Laser Printer Operator's Guide



Revisions number	Date	Reason for update
Rev 0	Febraury 2009	Initial release
Rev 1	April 2014	USB Support
Ver. A	November 2020	SATO-Logic references, added tower light, and revised menus

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SATO America, LLC.  
10350-A Nations Ford Road  
Charlotte, NC 28273

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## Regulatory Notices

### FCC Regulations

This equipment generates and uses radio frequency and, if not installed in accordance with the instruction manual, may cause interference to radio and television reception. The equipment has been tested and found to comply within the limits for a Class A computing device in accordance with specifications in subpart J of Part 15 of the Federal Communication Commission (FCC) Rules, which are designed to provide reasonable protection against such interference in a commercial installation.

**Note:** Use a shielded and properly grounded I/O cable to ensure that this unit complies with the FCC Rules' limits.

There is no guarantee; however, that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user, at his or her own expense, will be required to take whatever measures may be necessary to correct the interference.

For more information on preventing radio frequency interference, see the [Manufacturer's Instructions](#) and [User's Responsibility](#) sections that follow.

## Manufacturer's Instructions

The user must observe the following precautions in installing and operating this device:

1. Operate the equipment in strict accordance with the manufacturer's instructions for the model.
2. Plug the printer into a properly grounded wall outlet and use, unmodified, the power cord supplied with the unit.
3. Always operate the printer with all factory-installed covers on the unit.
4. Make no modification to the equipment that would affect its meeting the specified limits of the FCC Rules.
5. Maintain the equipment in a satisfactory state of repair.
6. Use a shielded and properly grounded I/O cable to ensure compliance of this unit to the specified limits of the FCC Rules.

## User's Responsibility

The user is ultimately responsible for correcting problems arising from harmful radiofrequency emissions from equipment under their control. If this equipment does cause interference to radio or television reception (which as specified can be determined by turning the printer off and on), SATO encourages the user to try to correct the interference by changing one of the following:

- Equipment orientation
- Equipment location
- Power source

All of these responsibilities and any others not mentioned are exclusively at the user's expense.

If necessary, the user should consult SATO for additional suggestions.

**Note:** If it is determined that equipment operation is causing harmful interference, the equipment operator may be required to stop operating the equipment until the interference problem is corrected.

## DHHS

This printer is certified as a Class 1 Laser Product under the United States Department of Health and Human Services (DHHS) Radiation Standard according to the Radiation Control for Health and Safety Act of 1968. This means that the printer does not produce hazardous laser radiation.

Since radiation emitted inside the printer is wholly confined within protected housings and external covers, the laser beam cannot escape from the equipment during any phase of user operation.

## CDRH Regulations

The Center of Devices and Radiological Health (CDRH) of the United States Food and Drug Administration implemented regulations for laser products on August 2, 1976. These regulations apply to laser products manufactured from August 1, 1976. Compliance is mandatory for laser products marketed in the United States.

The following statement, which indicates compliance with the CDRH regulations, must be affixed to the laser products marketed in the United States:

**THIS PRODUCT CONFORMS WITH CDRH  
RADIATION PERFORMANCE STANDARD  
TITLE 21 CFR CHAPTER 1, SUBCHAPTER J**



# DANGER

**Use of controls or adjustments or performance of procedures  
other than those specified in this manual may result in  
hazardous radiation exposure.**

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## Overview

The LP 100R laser printer is designed to work with office computers in various business applications.

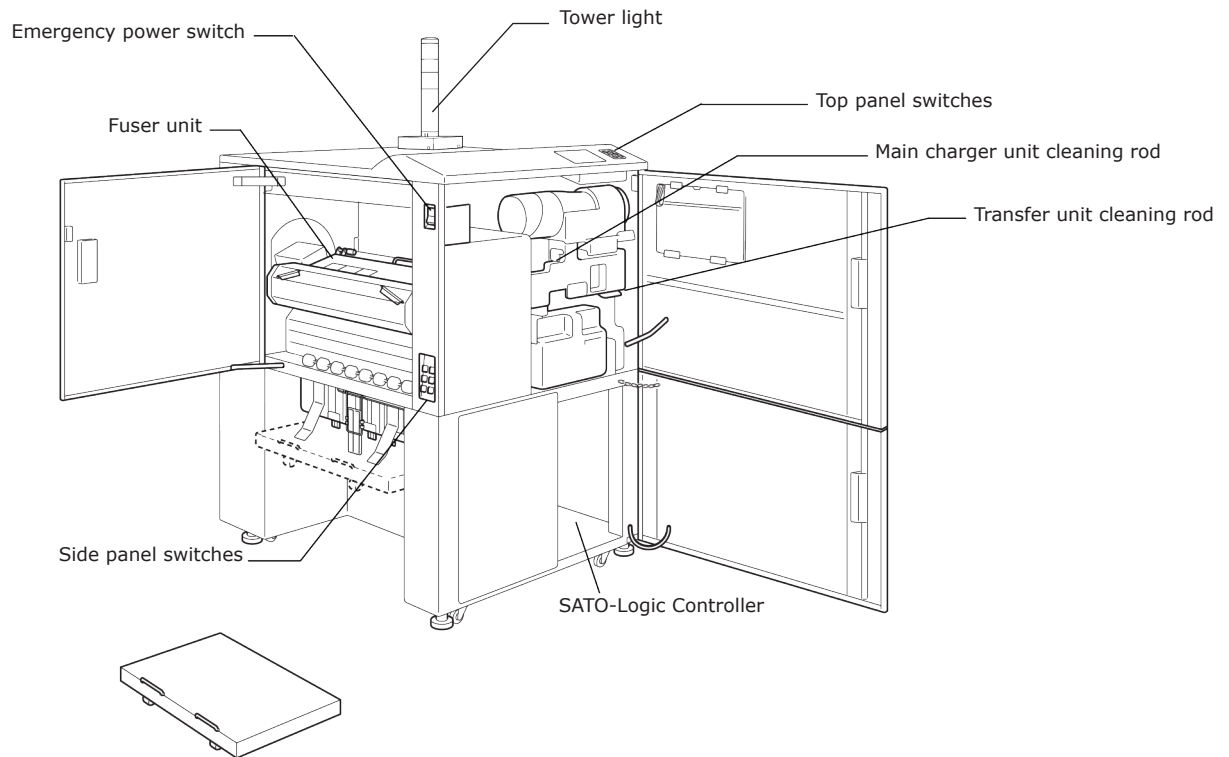
The LP 100R, which employs the latest laser imaging dry electrophotographic technology, has a high-speed print capability of 3,300 lines per minute at 6 LPI on 18" (457.2 mm) wide continuous forms.

This chapter defines the printer components relevant to both the printer operator and the supervisor responsible for the overall printing function.

The key printer components are identified in these subsections:

- [\*Printer Components: Left-Side Front – View One\*](#)
- [\*Printer Components: Left-Side Front – View Two\*](#)
- [\*Printer Components: Right-Side Rear View\*](#)

## Printer Components: Left-Side Front – View One



**Figure 2-1. Left-side front view of LP 100R laser printer.**

Components include:

- Transfer unit cleaning rod
- Main charger unit cleaning rod
- Top panel switches
- Emergency Power switch
- Fuser unit (shown in the open position)
- Tower light (optional feature)
- Side panel switches
- SATO-Logic Controller

**Note:**

This illustration shows only the **Emergency Power** switch. The **POWER LED** switch (used to power up the printer) appears to the right of the touch display unit (TDU). For more information, see [pages 2-5](#) and [3-4](#).

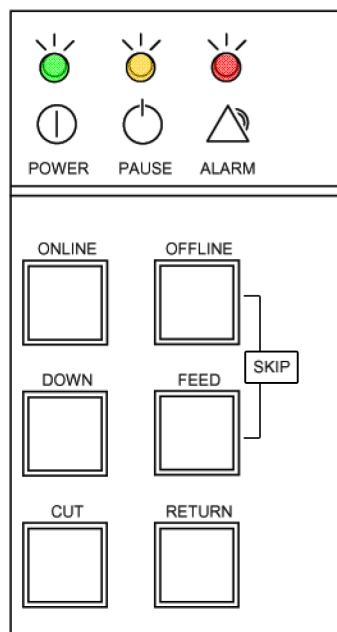
## Transfer Unit Cleaning Rod

- Cleans the transfer unit wire when pulled outward and pushed inward.
- Transfers the printed image onto the forms.

## Main Charger Unit Cleaning Rod

Cleans the main charger electrode when pulled outward and pushed inward.

## Top Panel Switches



**Figure 2-2. Top panel switches.**



### Top Panel Switch LED Functions

Switch	Description
<b>POWER LED</b> (green)	<ul style="list-style-type: none"> <li>• Illuminates continuously as a solid green light when the printer is powered up.</li> <li>• Used to power up the printer.</li> <li>• When on, this switch invokes the Soft Power circuit, which cycles power to the printer.</li> </ul>
<b>PAUSE LED</b> (amber)	<ul style="list-style-type: none"> <li>• Illuminates as a solid amber light (along with the green <b>POWER LED</b>) whenever the printer is in either the Offline Idle or Offline Print mode.</li> <li>• Extinguishes when the printer is in either the Online Idle or Online Print mode.</li> </ul>
<b>ALARM LED</b> (red)	<p>Displays as either a blinking red light or a solid red light (along with the green <b>POWER LED</b>) when any of the following conditions are detected:</p> <ul style="list-style-type: none"> <li>• If a Warning message displays on the TDU, the <b>ALARM LED</b> displays as a blinking red light. Processing, however, is not terminated. See <a href="#">page 5-17</a> for a list of Warning messages.</li> <li>• If either a Recoverable or Fatal error is detected, processing is terminated. The <b>ALARM LED</b> displays a solid red light, the <b>PAUSE LED</b> displays as a solid amber light, the <b>POWER LED</b> displays as a solid green light, and the audible alarm sounds. An application error message also displays on the TDU. See <a href="#">page 5-18</a> for a list of Operator Recoverable errors. See <a href="#">page 5-20</a> for a list of Fatal errors.</li> </ul> <p><b>Important Note:</b> Pressing the <b>BEEP</b> button on the TDU turns off the audible alarm.</p>
<b>OFFLINE</b>	Stops the print cycle
<b>ONLINE</b>	Resumes the print cycle
<b>DOWN</b>	<ul style="list-style-type: none"> <li>• The Stacker table lowers while this switch is held down.</li> <li>• This switch is available in either the Online or Offline mode.</li> </ul>
<b>FEED</b>	<ul style="list-style-type: none"> <li>• Feeds one page each time it is pressed.</li> <li>• This switch is available only in the Offline mode.</li> </ul>
<b>CUT</b>	<ul style="list-style-type: none"> <li>• When depressed, once the printer will feed, fuse, and drop the last printed page onto the stacker table, thus permitting the operator to separate the last printed page at the end of the page perforation.</li> <li>• This switch is available only in the Offline mode</li> </ul>
<b>RETURN</b>	<ul style="list-style-type: none"> <li>• When pressed after the form has been cut, the form returns to the top-of-form (TOF) position to resume the Print function.</li> <li>• This switch is available only in the Offline mode.</li> </ul>

## Emergency Power Switch

Powers the printer down in emergency conditions.

## Fuser Unit

- Houses the fuser lamp, fuser filter, and associated fans.
- In the fuser unit, the fuser lamp flashes at fixed time intervals, which causes the lamp to fuse the toner on printed documents.
- The suction feed belts and exit rollers, located beneath the fuser unit, move the printed forms past the fuser unit, out of the printer, and onto the stacker table.

## Tower Light (Optional Component)

When installed, indicate status, warning, and error conditions on a three-color light array using flashing and solid illumination. The meaning of each color Led has default meaning and may be customized at installation.

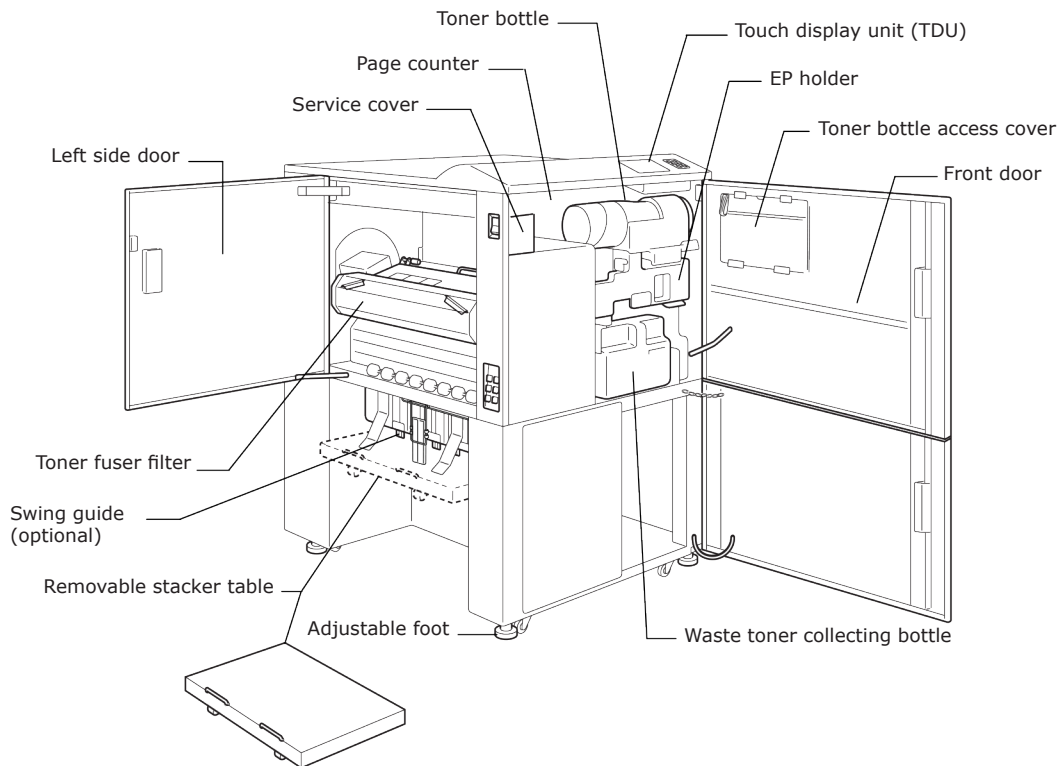
## Side Panel Switches

Are identical to top panel switches.

## SATO-Logic Controller

- Interprets data from the host computer, translating it to the image in which it is to be printed, and then controls the Print function via the switches and TDU.
- Supports the following emulations:
  - Kodescript*Plus*™
  - Kodescript™
  - HP® PCL5e®
  - Generic Line Printer
  - Hex Dump Mode
  - IGP/VGL
  - IGP/PGL
- Supports the following communications ports:
  - RS-232 (for service use only)
  - Ethernet
- Stores user's fonts, logos, and formats, which are loaded and subsequently retrieved via USB flash drive.
- Displays, via the TDU, relevant messages such as printer status, periodic maintenance requirements, and error messages.
- Includes software diagnostics for service support.

## Printer Components: Left-Side Front – View Two



**Figure 2-3. Left-side front view of LP 100R laser printer.**

### Components include:

- Front door
- Toner bottle access cover
- EP holder
- Touch display unit (TDU)
- Toner bottle
- Page counter
- Service cover
- Left-side door
- Toner fuser filter
- Swing guide (optional feature)
- Removable stacker table
- Adjustable foot
- Waste toner collecting bottle

## Front Door

- Protective cover for components housed in the front area of the printer.
- Causes an Interlock error if left open during processing.

## Toner Bottle Access Cover

- The cover swings down, providing access to the toner bottle, thereby allowing replacement of toner without interrupting processing.
- An Interlock error message is displayed if the cover is left open during processing.

## EP Holder

- Slides open, providing easy access to the main charger unit, the developer unit, and the OPC cartridge (see [Figure 2-5](#)).
- An Interlock error message is displayed if the EP holder is left open during processing.

## Touch Display Unit (TDU)

- A visual unit that displays both text and graphics.
- Includes the **Off** button (Soft Power switch), which is used to power down the printer.
- Provides the required operator control over the printing, configuration, and configuration elements.
- Used by service personnel when executing printer Setup and/or Diagnostic functions.



Figure 2-4. Touch display unit.

## Toner Bottle

Feeds toner into the chamber, which in turn supplies toner to the printer.

**Page Counter**

Seven-digit counter that counts the number of pages processed in 11" increments.

**Service Cover**

Is reserved for use by service personnel.

**Left-Side Door**

- Serves as a protective cover for the fuser unit.
- Causes an Interlock error if left open during processing.

**Toner Fuser Filter**

Filters and traps the toner accumulated as a by-product of the Fusing function.

**Swing Guide (Optional Component)**

Assists the smooth fanfolding of continuous forms as they are fed out of the printer and onto the stacker table.

**Removable Stacker Table**

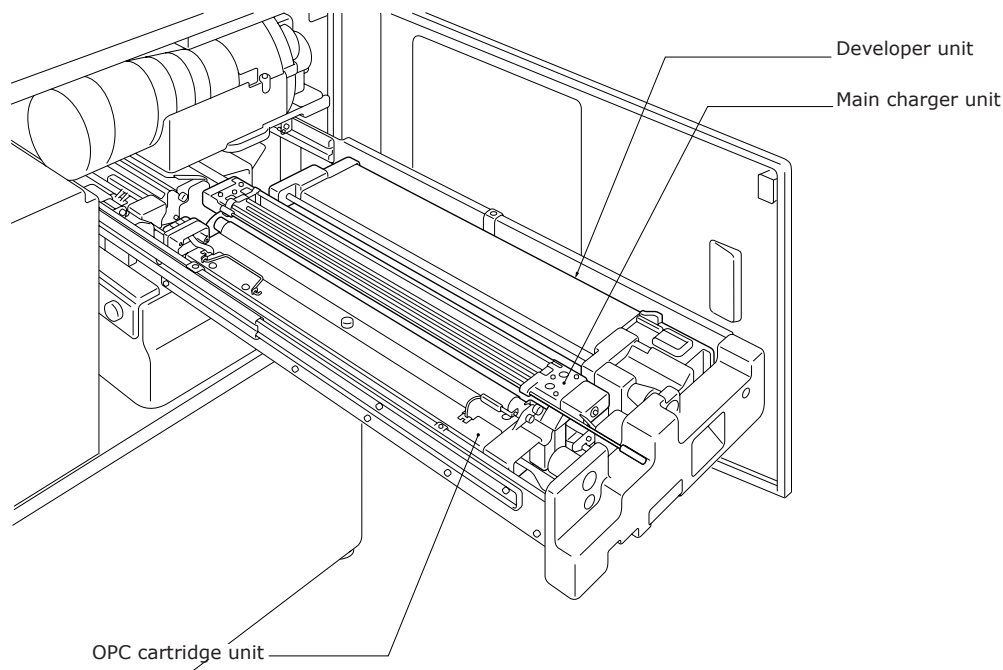
- Catches and supports printed documents in fanfold fashion as they are fed out of the printer.
- As the weight of the documents starts to build, the stacker table automatically lowers until it is full.
- When full, it prompts the operator to remove the printed documents from the table and then raise the table to its original position.
- When the stacker table is at its lowest position, it can be rolled away from the printer and moved to a more convenient location for removing the printed documents.
- It is then rolled back to its proper position and height.

**Adjustable Foot**

One of four feet that are used to level the printer as well as to prevent it from rolling.

**Waste Toner Collecting Bottle**

Collects used toner so that it can be easily and safely discarded.



**Figure 2-5. Components accessed from the EP holder.**

The components accessed from the EP holder include:

- Main charger unit
- OPC cartridge unit
- Developer unit

### **Main Charger Unit**

- It is responsible for conditioning the surface of the OPC drum, which allows the desired image to be built on the drum for subsequent transfer to the form.
- Can be readily removed from the printer to perform routine maintenance and/or for replacement as required.

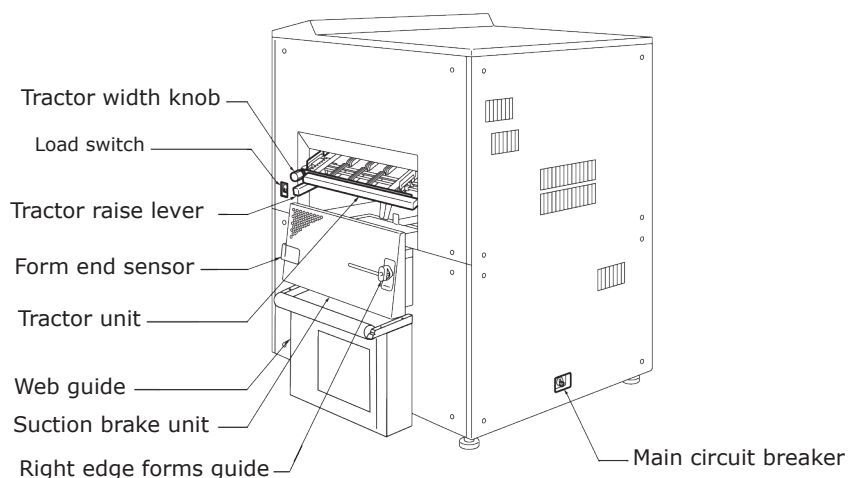
### **OPC Cartridge (Organic photo Conductor)**

- Houses the OPC drum, which produces the printed image.
- Can be readily removed from the printer to perform routine maintenance and/or for replacement as required.

### **Developer Unit**

- Deposits toner on the print drum before it is transferred to the documents.
- Can be readily removed from the printer to perform routine maintenance and/or for replacement as required.

## Printer Components: Right-Side Rear View



**Figure 2-6. Right-side rear view of LP 100R laser printer.**

### Tractor Width Knob

When rotated, adjust the tractor assembly's width to conform to the width of the documents to be printed.

### Load Switch

When pressed, automatically sets the Top of Form (TOF), advancing the form to the correct start of print position (as specified in the Configuration File).

### Tractor Raise Lever

Lifting up this lever causes the tractor unit to rise to its correct print position.

### Form End Sensor

- Detects the presence or absence of forms.
- When the end of form is detected, the Printing function suspends, the last page ejects from the printer, and a prompt to load forms displays on the TDU.

### Tractor Unit

- Guides and feeds forms through the printer, starting with the leading edge of the forms.
- When pushed down, lowers the tractor unit to the load position.
- If left down, it causes an Interlock error message to be displayed.

**Suction Brake Unit**

Sets the proper tension on the documents to be printed predicated on their thickness (as set in the Configuration File).

**Right Edge Forms Guide**

Slides to the right, which adjusts the forms' width, thus preventing the forms from either coming off the suction brake or activating the form end sensor.

**Web Guide**

Facilitates the loading of heavy stock as well as ensuring the correct positioning and left-edge alignment of all stock.

**Main Circuit Breaker**

Must be in the up position to operate the printer.



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## Overview

This chapter defines the responsibilities associated with the LP 100R printer, some of which are assigned to the printer operator and some of which may be assigned to either the key operator or the supervisor.

The customer determines the assignment of the various responsibilities to either the printer operator or a printer supervisor. However, SATO strongly recommends that more than one person be familiar with the overall printer operation.

In addition to defining the printer's responsibilities, this chapter contains the procedures necessary for the printer's operation. These include:

- Responding to the End-User License Agreement
- Powering the printer up and down
- Starting up the system
- Using the menu system options and touch display unit (TDU)
- Exiting the menu system
- Using the Advanced Menu options
- Using the Operator Express Menu options
- Recalling stored printer configurations
- Monitoring print quality, recognizing and knowing how to make the necessary adjustments
- Modifying horizontal fine adjustment
- Modifying vertical fine adjustment
- Removing printed forms from the printer
- Loading documents

## End-User License Agreement

Before using the printer for the first time, you must respond to an End-User License Agreement (EULA) related to the legal usage of the software loaded on the printer's controller.

On initial boot-up, the controller displays the End-User License Agreement screen on the TDU before the printer is activated:

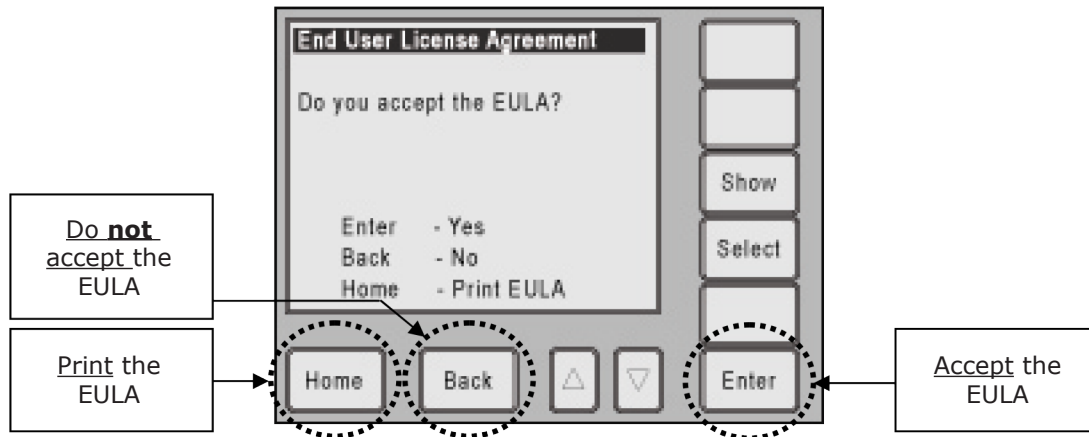


Figure 3-1. End-User License Agreement screen.

There are three options on this screen:

- Accept the EULA (**Enter** button)
- Print the EULA (**Home** button)
- Do **not** accept the EULA (**Back** button)

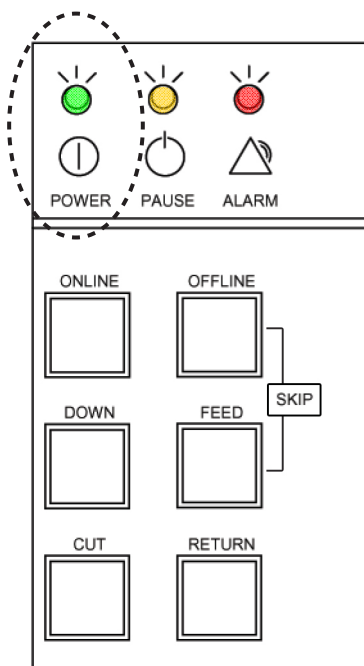
A representative of the end-user must respond to one of the three options. The result depends on the option chosen.

- If the user **accepts** the EULA (by pressing the **Enter** button), the printer continues through the boot cycle and brings the printer to the Online Idle state (see [page 3-4](#)). A note of the acceptance of the EULA appears in the Error Log and the Controller Log to prevent the acceptance screen from being displayed again. This acceptance may be reviewed or printed at a later date. Additionally, a copy of the EULA appears in [Appendix I](#) of this manual.
- If the user **prints** the EULA (by pressing the **Home** button), the printer prints the EULA on 8½" x 11" paper. The printer must be loaded with appropriate paper before selecting **Print**. Upon completion of the EULA printout, the TDU screen returns to the acceptance screen, displaying the options listed above.
- If the user **does not accept** the EULA (by pressing the **Back** button), the printer powers down. The next time the printer is powered up, the EULA screen appears again. The system will not permit you to continue until the EULA is accepted.

The EULA screen also appears whenever the controller version is changed, either by a full install or an upgrade. In all cases, the acceptance appears in the Error Log and the Controller Log for future reference. Whenever the EULA is presented, you **must** respond to the prompts.

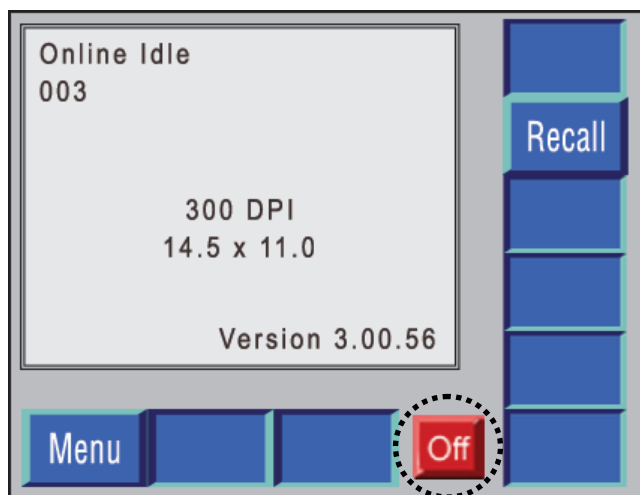
## Power Up and Down Procedures

The printer is powered up through the use of the **POWER LED** switch located to the right of the TDU.



**Figure 3-2. POWER LED switch (circled) for powering up.**

The printer is powered down through the use of the **Off** button on the TDU.



**Figure 3-3. Off button for powering down.**

For specific instructions, see the following sections.

## Power Up Procedures

When power is applied to the printer, the **POWER LED** switch (see previous page) illuminates in green.

1. If the LED is not lit, press the **POWER LED** switch for approximately 1 second and release the switch. This initiates the printer's power upcycle. During this power upcycle, it is not possible to turn the power off.
2. When the printer has completed its power upcycle, the **Off** button (i.e., power down button) appears in the lower-right side of the TDU. This allows you to turn the printer off.

**Note:** The **Off** button is also referred to as the Soft Power switch. See [Figure 3-3](#).

**Important Note:** The **Off** button appears only when the printer is in one of the following states (as shown in the example below):

- Online Idle
- Offline Idle
- Offline Print



**Figure 3-4. Offline Idle.**

In other conditions, the **Off** button is not available (i.e., it does not appear). To power down the printer, you must place the printer in one of these conditions (Online Idle, Offline Idle, Offline Print).

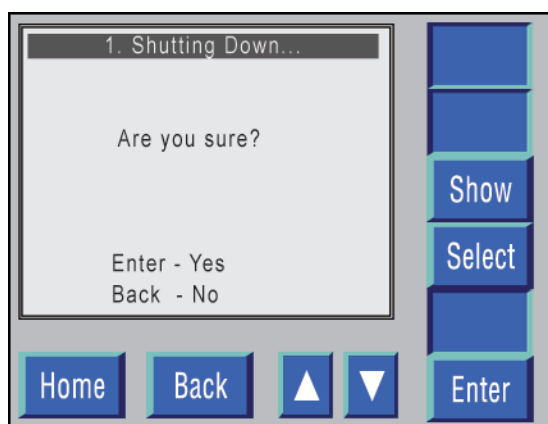
## Power Down Procedures

### Normal Power Down

1. Press the **Off** button (Soft Power switch) to initiate the power down cycle. See [Figure 3-3](#).
2. When *Are you sure?* prompt appears, do one of the following:
  - If you wish to proceed with powering down, press the **Enter** button in the lower-right corner of the display.

The power-down cycle continues with the orderly shutdown of the printer.

- If you do not wish to continue, press the Back button. This displays the previous screen.



**Figure 3-5. Powering down the printer.**

### Emergency Power Down

In case of an emergency there are two alternative methods to power down the printer.

- Press the **Emergency** Power switch on the left side of the printer cabinet. (See [Figure 2-1](#) in Chapter 2.) This switch will immediately remove power from the printer and the controller.

OR

- Press and hold the **POWER LED** switch for at least 20 seconds.

**Important Note:** Neither of these methods allows for an orderly shutdown of the devices. These methods should **only** be used in an emergency situation.

## Operator Responsibilities

The printer operator is responsible for the day-to-day maintenance and operation of the LP 100R printer. These responsibilities include:

- **Daily cleaning and maintenance** – The operator is responsible for cleaning the printer at the beginning of each shift and at each paper change.

See [Chapter 4: Printer Maintenance](#) for the necessary procedures.

- **Ordering consumable supplies** – The operator should monitor the usage of printer consumables to ensure that they are ordered and kept in stock. This includes consumables to be replaced by the operator as required and those to be used by service personnel when performing preventive maintenance.

See [Appendix D: Ordering Supplies](#) for a listing of the consumables and the frequency with which they should be replaced.

- **Scheduling maintenance** – The operator should ensure that preventive maintenance functions to be performed by service personnel are requested in a timely fashion.

See [Appendix C: Service/Technical Support](#) for the time frame and procedures for scheduling preventive maintenance.

- **Using the TDU/LP 100R menu system** – The operator must be familiar with the TDU and its use in conjunction with the LP 100R menu system.

Procedures for using the TDU and menu system are interspersed throughout this guide.

- **Recalling stored printer configurations** – The responsibility for configuring the printer to support specific print jobs is typically assigned to the printer supervisor. However, the operator should be able to identify the configuration needed for each job and recall the appropriate configuration as required.

See [page 3-19](#) for procedures for recalling stored printer configurations.

- **Loading forms** – The operator must load the appropriate continuous forms and make any adjustment for the form size to be used.

Procedures for loading forms and adjusting print registration can be found starting on [page 3-30](#).

- **Sending print data from a host computer to the printer** – In most instances, the operator initiates a print job at a host computer and monitors the printer to ensure that the print quality is satisfactory.

- **Problem-solving** – During document processing, the controller may detect a problem. If this occurs, an error message indicating the type and source of the problem displays on the TDU. Before processing can continue, the operator must resolve the issue with the key operator/supervisor's assistance, if necessary.

See [Chapter 5: Problem Solving](#) for the required procedures.

## Supervisor Responsibilities

The supervisor is directly responsible for creating and/or maintaining the configurations stored on the controller's hard drive. These include:

- Test Prints
- Interface Setup
- Configuration (Recall, Store, Remove, Edit)
- Files
- Password Enable/Change
- Time

Procedures relative to all of the above, excluding Files, are included in [Chapter 6: Supervisory Functions](#).

The File procedures are included in the following appendices.

### ***Appendix A: Installing System Software***

This appendix explains how to install the operating software for the LP 100R and how to copy and/or install the various files used by the printer to control printer operations, including the following:

- System Program
- System Menu
- User's Configurations
- System Setup

### ***Appendix B: Managing Files***

This appendix discusses the following:

- System Error Log
- Capture

It also explains how to store fonts, logos, and formats on the controller's hard drive in either of the following directories:

- Active directory (one for each type of file) – which contains the files that are available to an application when the printer is started
- Archive directory (one for each type of file) – which contains files that are not available

Once stored on the hard drive, files can be:

- Moved back and forth between the active and archive directories
- Copied from the printer's diskette drive to either directory
- Deleted from either directory
- **Note:** If password protection has been enabled, none of the direct responsibilities attributed to the supervisor can be accessed until the correct password is entered.



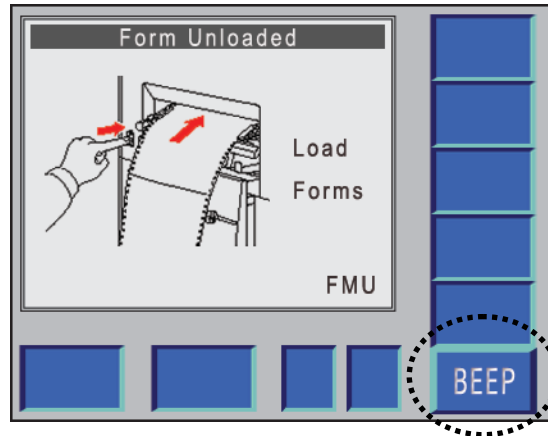
In addition to the direct responsibilities listed, the supervisor should:

- Be able to operate the printer and train new operators
- Monitor print quality to ensure that it conforms to the desired standard

The supervisor is ultimately responsible for the overall printer operation, including problem-solving. If a problem occurs that the operator believes requires a service representative's assistance, SATO recommends reviewing the problem with the operator before entering the request for service.

## System Start-up Procedures

1. If the **POWER LED** is not illuminated, press the **POWER LED** switch to power up the printer. (See [Figure 3-2](#).)
2. If no paper stock has been loaded into the printer, the audible alarm sounds, and the following screen displays:



**Figure 3-6. No paper stock loaded – BEEP button shown.**

3. Press the **BEEP** button once to turn off the audible alarm, and see the document loading procedures starting on [page 3-30](#).
4. If stock has been loaded into the printer, the controller will cycle through its self-test, load the system software, print fonts, logos, default configuration data, and cause the system start-up screen shown on [page 3-11](#) to display.

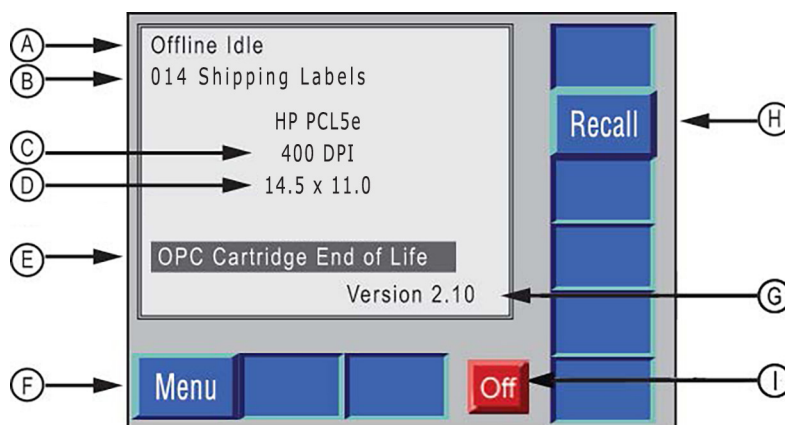


Figure 3-7. System start-up screen.

## System Start-up Screen Definitions

Item	Definition
<b>A. Mode of operation</b>	<p>The LP 100R printer is operated under four different modes:</p> <ul style="list-style-type: none"> <li>• <b>Online Idle</b> – When the printer is in the Online Idle mode, it is ready to accept print data from a host computer. <b>Note:</b> When power to the printer is turned on, the printer activates in the Online Idle mode.</li> <li>• <b>Online Print</b> – The printer is either processing or printing the data it has received.</li> <li>• <b>Offline Idle</b> – The printer must be in the Offline Idle mode to load paper, execute some maintenance functions, or recall a stored printer configuration.</li> <li>• <b>Offline Print</b> – To temporarily suspend the Online Print mode and switch the printer to the Offline Print mode, press the <b>OFFLINE</b> switch. Press the <b>ONLINE</b> switch to return the printer to the Online Print mode.</li> </ul>
<b>B. Configuration</b>	<p>The system start-up screen displays the last active User Configuration No., which can range from 001-999.</p> <p>If the User Configuration No. has not been stored or stored but not used, the default Configuration No., 000, displays.</p>

(Continued on next page)

**System Start-Up Screen Definitions (continued)**

<b>Item</b>	<b>Definition</b>
<b>C. Print resolution</b>	The print resolution (number of dots per inch) will be used when processing data according to the current configuration.
<b>D. Document size</b>	The document size that will be used when processing data in accordance with the current configuration.
<b>E. Printer maintenance</b>	<p>A Warning message may display, which indicates that one of the printer consumables needs to be replaced or preventive maintenance needs to be scheduled.</p> <p>See <a href="#">Chapter 4: Printer Maintenance</a> for the applicable corrective action.</p> <p><b>Note:</b> If corrective action is <b>not</b> taken at this time, document processing will continue. However, in some instances failure to take corrective action may result in diminished print quality.</p>
<b>F. Menu</b>	Press <b>Menu</b> to switch the printer from the Online Idle mode to the Offline Idle mode and provide access to the LP 100R menu system. See <a href="#">Menu System</a> starting on page 3-14.
<b>G. Version</b>	Specifies the software revision level currently in use by the printer. It may also display a status or error code.
<b>H. Recall</b>	<p>Press <b>Recall</b> from this screen to switch the printer from the Online Idle mode to the Offline Idle mode and provide access to the Recall Configuration menu.</p> <p>See <a href="#">Recall Configurations</a> starting on page 3-19.</p>
<b>I. Off</b>	<p>Powers down the printer.</p> <p><b>Note:</b> Printer must be in Online Idle, Offline Idle, or Offline Print for this to appear.</p>

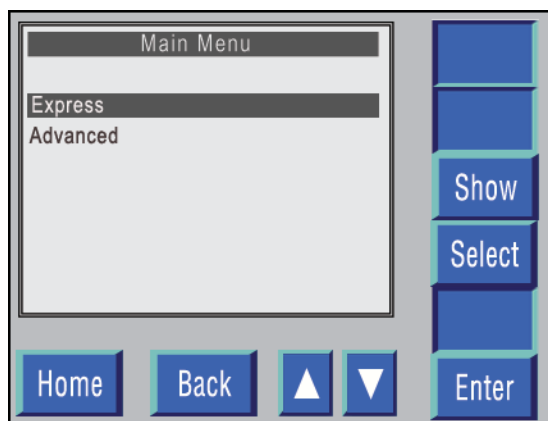
5. If the configuration number displayed is incorrect, press **Recall**. See [Recall Configurations](#) starting on page 3-19.
6. If the stock loaded into the printer is incorrect:
  - a. Tear the stock at a page perforation.
  - b. Press **Feed** to clear the stock from the printer.
  - c. See [Document Loading Procedures](#) starting on page 3-30.
7. If the configuration number and stock are correct, see the LP 100R menu system procedures that follow.

## Menu System

The complete LP 100R menu system, which is charted in [Appendix E: The Menu System](#), provides a quick reference to both the available menus and the available options.

### Main Menu

When the system start-up is complete, press **Menu** to switch the printer from the Online Idle mode to the Offline Idle mode. This initializes the menu system and causes the following screen to display:



**Figure 3-8. Main Menu.**

**Note:** The selection bar highlights the last function selected from this menu.

#### Main Menu Buttons

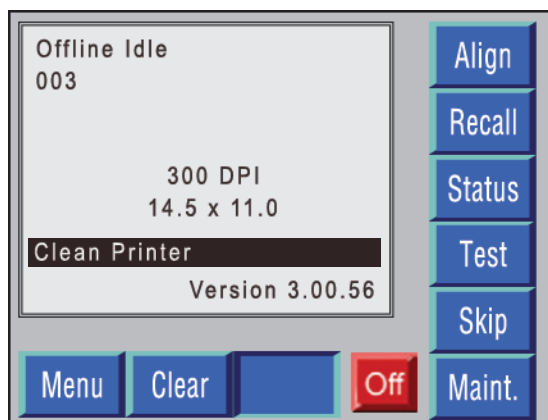
Button	Function
<b>Home</b>	Press <b>Home</b> to exit the menu system. See <a href="#">Exit Menu System Options</a> starting on page 3-16.
<b>Back</b>	Press <b>Back</b> to exit the present menu and return to the previous menu or mode. See <a href="#">Exit Menu System Options</a> starting on page 3-16.
<b>Up</b>	Moves the Selection bar up one line each pressed
<b>Down</b>	Moves the Selection bar down one line each pressed
<b>Enter</b>	Press <b>Enter</b> to select the highlighted function.
<b>Select</b>	This function is not currently available in this menu.
<b>Show</b>	When a selected item displays in an abbreviated format, press <b>Show</b> to display, in wrapped fashion, the full item description.

**Main Menu Options**

1. Press the **Up** or **Down** triangle to select the desired menu.
2. Press **Enter**.
3. If Express is selected, see [Operator Express Menu](#) starting on page 3-18.
4. If Advanced is selected, see [Advanced Menu](#) starting on page 3-17.

### Exit Menu System Options

When a key is pressed that causes the printer to exit the menu system, the following screen displays:



**Figure 3-9. Exit the menu system.**

### Exit Menu System Buttons

Button	Function
<b>Menu</b>	Press <b>Menu</b> to reinitialize the menu system and return the system to the main menu.
<b>Clear</b>	Press <b>Clear</b> to clear the input buffer.
<b>Maint.</b>	Press <b>Maint.</b> to reinitialize the menu system. The maintenance menu will display.
The following functions are reserved for use by service personnel:	
<b>Skip</b>	Press <b>Skip</b> to advance the document 1/6".
<b>Test</b>	Press <b>Test</b> to reinitialize the menu system and shortcut access to the Test Prints menu.
<b>Status</b>	Press <b>Status</b> to reinitialize the menu system and shortcut access to the Print Status procedures.
<b>Recall</b>	Press <b>Recall</b> to reinitialize the menu system and shortcut access to the Recall configuration.  See <a href="#">Recall Configurations</a> starting on page 3-19.
<b>Align</b>	Press <b>Align</b> to reinitialize the menu system and shortcut access to the Print Alignment menu, allowing adjustments to the horizontal and/or vertical fine print positions.  See <a href="#">Modify Horizontal Fine Adjustment</a> on page 3-20.



## Advanced Menu

Selecting **Advanced** from the Main menu causes the following menu to display:



**Figure 3-10. Advanced Menu.**

## Supervisor Menu

The Supervisor menu includes the functions necessary for creating and maintaining the user files stored on the controller's hard drive.

See [Chapter 6: Supervisory Functions](#) for the necessary procedures.

## Service Menu

The Service menu is reserved for use by the service representative.

See [Appendix E](#) for a listing of the service functions.

## Operator Express Menu

Selecting **Express** from the Main menu causes the following menu to display:



**Figure 3-11. Operator Express menu.**

### Operator Express Menu Buttons

Button	Function
<b>Home</b>	Press <b>Home</b> to return the system to the Exit Menu System screen. (See <a href="#">page 3-16, Figure 3-9.</a> )
<b>Back</b>	Press <b>Back</b> to return the system to the Main menu. (See <a href="#">page 3-14, Figure 3-8.</a> )

1. Press the **Up** or **Down** triangle to select the desired function.
2. Press **Enter**.

## Recall Configurations

The Recall Configurations function, which permits recalling active configurations from the controller, is accessed either by selecting **Recall** from the Exit Menu System screen, by selecting **Recall Configurations** from the Operator Express menu or by selecting **Recall** from the System Start-up menu.

Selecting this function from either the Exit Menu System screen or the Operator Express menu causes the following screen to display:



Figure 3-12. Recall Printer Configurations.

### Recall Configurations Menu Buttons

Button	Function
Home	Press <b>Home</b> to return the system to the Exit Menu System screen.
Back	Press <b>Back</b> to return the system to the Main menu.

1. Press either the **Up** or **Down** triangle to select the desired configuration number.

**Note:** Enter the desired configuration on the numeric keypad.

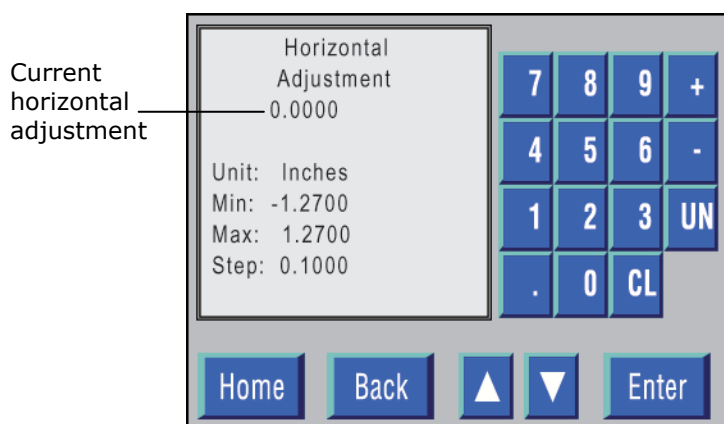
2. Press **Enter**.

A *Recall ... Adjusting Image Density* prompt displays, and the system returns to the Operator Express menu.

## Modify Horizontal Fine Adjustment

The Modify Horizontal Fine Adjustment function, which specifies the distance from the left side of the document to the start of the print area, is accessed either by selecting **Horizontal Fine Adjustment** from the Print Alignment menu or by selecting **Horizontal Fine Adj.** from the Operator Express menu.

Selecting this function from either menu causes the following screen to display:



**Figure 3-13. Modify Horizontal Fine Adjustment.**

### Horizontal Fine Adjustment Menu Buttons

Button	Function
<b>Home</b>	Press <b>Home</b> to return the system to the Exit Menu System screen.
<b>Back</b>	<ol style="list-style-type: none"> <li>1. Press <b>Back</b> to return the system to the Exit Menu System screen if this function was accessed from that screen.</li> <li>2. If this function was accessed from the Operator Express menu, press <b>Back</b> to return the system to the Main menu.</li> </ol>

1. Press **Up** to select a higher value or Press **Down** to select a lower value.

**Note:**

- You can also enter the desired value on the numeric keypad.
  - To enter a negative value, enter the value and then press the **Minus (-)** key.
2. Press **Enter** to store the new setting and return the system to the Operator Express menu.

## Modify Vertical Fine Adjustment

The Modify Vertical Fine Adjustment function, which specifies the distance from the top of the form to the top of the print area, is accessed either by selecting **Vertical Fine Adjustment** from the Print Alignment menu or by selecting **Vertical Fine Adj.** from the Operator Express menu.

Selecting this function from either menu causes the following screen to display:

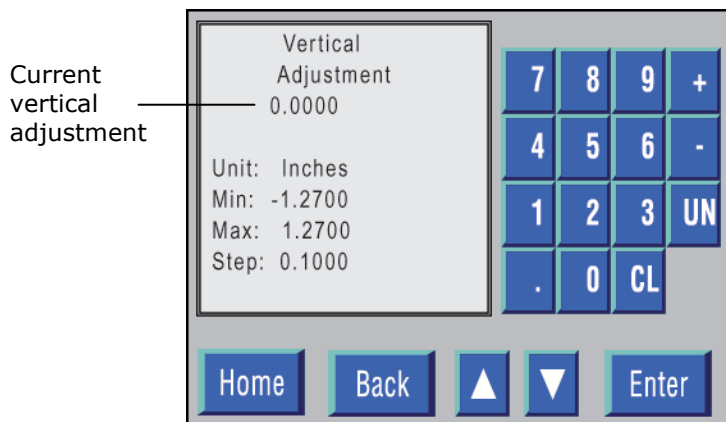


Figure 3-14. Modify Vertical Fine Adjustment.

### Vertical Fine Adjustment Menu Buttons

Button	Function
<b>Home</b>	Press <b>Home</b> to return the system to the Exit Menu System screen.
<b>Back</b>	<ul style="list-style-type: none"> <li>Press <b>Back</b> to return the system to the Exit Menu System screen if this function was accessed from that screen.</li> <li>If this function was accessed from the Operator Express menu, press <b>Back</b> to return the system to the Main menu.</li> </ul>

1. Press **Up** to select a higher value or press **Down** to select a lower value.

**Note:**

- You can also enter the desired value on the numeric keypad.
  - To enter a negative value, enter the value and then press the **Minus (-)** key.
2. Press **Enter** to store the new setting and return the system to the Operator Express menu.

## Print Configurations

The Print Configurations function produces a printout of all of the configurations stored in the printer.

**Note:** The procedures that follow assume that the default 11" (height) by 14.5" (width) form size has been loaded into the printer.

1. Select **Print Configurations** from the Operator Express menu.
2. When prompted to do so, press **Enter**.
3. After all of the configurations print, press **Feed** to clear the last printed page from the printer.

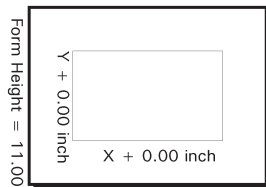
[Figure 3-15](#) shows a sample configuration page.

# MATRO-LOGIC™

## CONFIGURATION

*Stored, Default, and Current Configuration:*

**000**



Print Width = 14.50

Emulation  
Page Orientation  
Line Termination Mode  
Lines Per Inch  
Characters Per Inch  
Image Density  
Material Type  
Symbol Set  
Field Check  
KOP Control Character  
KOP Field ID Character  
KOP End of Format Character  
KOP Data Separator Character  
KOP Handle Missing Font  
Resolution  
EAS Option  
Reverse Mode  
Roll To Roll Mode  
Paper Suction  
Energy Fusion  
AIDC Mode  
Page Buffer Size  
Error Recovery  
Page Recovery Size  
Splice Detect Mode  
Pages To Skip(Splice)

Primary Font = CGTimes-Normal

**ABCDEFGHI**

Auxiliary Font = CGTimes-Bold

**ABCDEFGHI**

Kodescript Plus  
Portrait  
None  
6.000  
10.000  
Normal (1.0)  
Normal Paper  
W1:Windows 3.1 Latin 1  
On Operator Panel  
0x5E '^'  
0x5B 'I'  
0x5D 'J'  
0x2C ','  
Use Cache Font  
400 DPI  
Disabled  
Disabled  
Disabled  
Auto  
Low  
Enabled  
5  
Disabled  
2  
Disabled  
0

Printer sn E00900007

October 27, 2020  
ctl sn GBG4400075AEB

**Figure 3-15. Configuration page.**

## Print Time & Usage Report

The Time & Usage report provides a quick summary of the need for maintenance on the LP 100R printer.

**Note:** The procedures that follow assume that the default 11" (height) by 14.5" (width) form size has been loaded into the printer.

1. Select **Time & Usage** from the Operator Express menu.
2. After the report is complete, press **Feed** to clear the last printed page from the printer.

[Figure 3-16](#) shows a sample Time & Usage report.



# MATRO-LOGIC™

## TIME AND USAGE

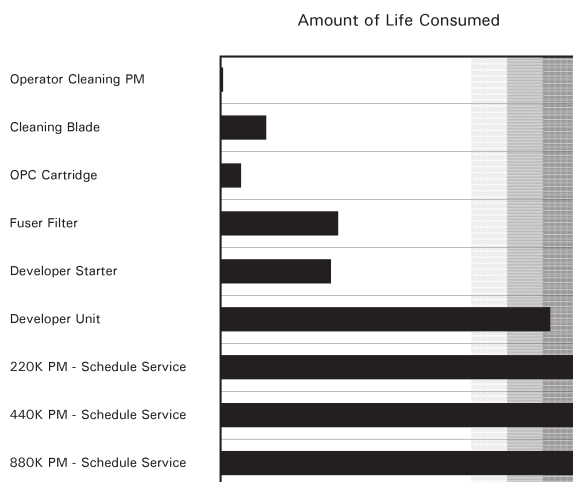
### System Usage Counts

October 27, 2020  
 ctl sn GBG4400075AEB  
 Prntr sn E00900007

Printer Operating Time: 480 Hours  
 Total Counter: 146,866 Pages

*This page is for planning purposes only. It has been developed to help track key events and to give a relative indication of upcoming PMs and consumable needs. Actual consumable yields and cleaning needs may vary and are dependent on the functions of your application.*

### Consumable & Service Life Time Charts



**Figure 3-16. Time & Usage report.**

## Print Status Page

The Status Page summarizes the operating parameters for the LP 100R printer.

**Note:** The procedures that follow assume that the default 11" (height) by 14.5" (width) form size has been loaded into the printer.

1. Select **Status Page** from the Operator Express menu.
2. When the Status Page has completed, press **Feed** to clear the last printed page from the printer.

[Figure 3-17](#) shows a sample Status Page.

SATO-LOGIC™

## STATUS PAGE

Printer sn E00900007

October 27, 2020  
ctl sn GBG4400075AEB**Hardware Information**

Printer Model:	LP 100R	OS Setup Version:	E.08-00/GB
Processor:	G4400 3.30GHz	SATO-Logic Release:	7.05.18
System Memory:	8000 MB	EIF II Version:	4.3-00
Language:	English	PIFC Board Type:	II ID 06 / EC 03
Dead Zone:	Normal	MC1 Version:	4.3-00
Job Cancel (Jam):	Disable	MC2 Version:	3.2-00
Job Cancel (FE):	Disable	SC Version:	4.1-00
AIDC Threshold:	28	TDU Panel Model:	8.5"-GOP-5084H
Line End Enable:	Enabled	TDU Firmware Version:	1.0.9
Print Redirect:	Yes	TDU Screen Data Ver:	1.0.4
Clean Engine cycle:	50000	Net Time Protocol:	Disable
Toner Warning Msg.:	Disabled	Net Time Server:	129.6.15.28
Status File:	Disabled	Time Display:	System Time
TowerLED:	Enabled	Time Zone:	GMT -5
Daylight saving:	Enabled	Job Separator Option:	Not Available
Clean Printer Message:	Enabled		

**Communication**

00:30:18:07:5A:EB	FTP :	Disabled
SAT0075AEB	Samba:	Disabled
Enabled	LPR Queue Name:	LIS_SATO
expected : Static	Max Conn.:	3
detected : static	TCP/IP timeout:	5000
Connected(static)		
IP Addr: 192.168.3.102		
Mask: 255.255.254.0		
Gateway: 192.168.2.254		
DNS: 192.168.2.4		
Socket Buffer: 16 Byte		
Raw Port No.: 9100		
Ack Char: Disabled		

**Current Configuration**

Configuration:	000 (Default)	Resolution:	400 DPI
Form Height:	11.000"	EAS Option:	Disabled
Print Width:	14.500"	Reverse Mode:	Disabled
Vertical Adjust:	0.00 inch	Energy Fusion:	Low
Horizontal Adjust:	0.00 inch	Paper Suction:	Auto
Orientation:	Portrait	AIDC Mode:	Enabled
Lines Per Inch:	6.000	Roll to Roll Mode :	Disabled
Chars Per Inch:	10.000	Splice Detect Mode :	Disabled
Symbol Set:	W1:Windows 3.1 Latin 1	Pages To Skip(Splice):	0
Primary Font:	CGTimes-Normal	Page Buffer Size:	5
Auxiliary Font:	CGTimes-Bold	Error Recovery:	Disabled
Printer Emulation:	Kodescript Plus	Page Recovery Size:	2
Line Termination:	None	Swing Mode:	Not Installed
Image Density:	Normal (1.0)		
Material Type:	Normal Paper		

**Emulation Settings**

Field Check:	On Operator Panel
Control Char:	^ (0x5E)
Field ID:	{ (0x5B)
End of Format:	} (0x5D)
Data Separator:	, (0x2C)
Missing Font:	Use Cache Font

**Figure 3-17. Status Page.**

The individual settings/parameters included in the Status Page are defined in [Chapter 6](#).

## Printer Cleaned

Selecting the **Printer Cleaned** function from the Operator Express menu causes the following screen to display:



**Figure 3-18. Printer Cleaned.**

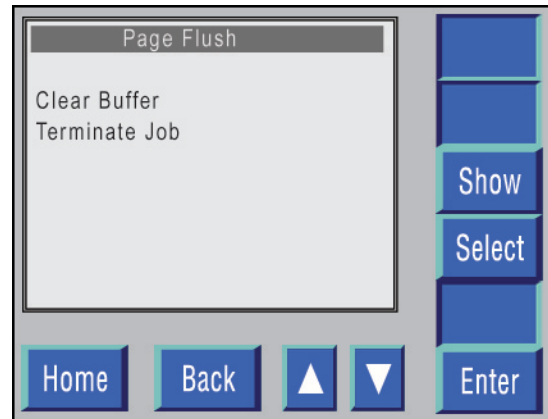
1. Press the **Up** or **Down** triangle to select the desired response.
2. Press **Enter**.
3. If **No** is selected, the system returns to the Operator Express menu.
4. If **Yes** is selected, the following message displays:

Counter Reset  
**Please Wait**

5. When the counter has been reset, the system returns to the Operator Express menu.

## Page Flush

Selecting **Page Flush** from the Operator Express menu causes the following screen to display:

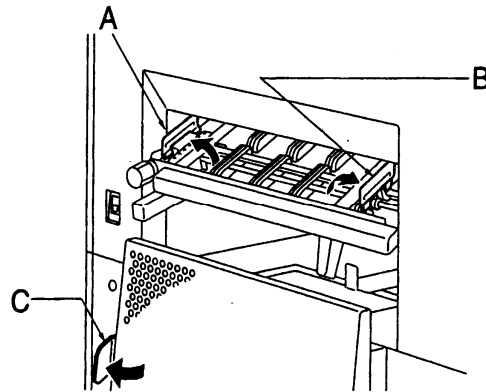


**Figure 3-19. Page Flush.**

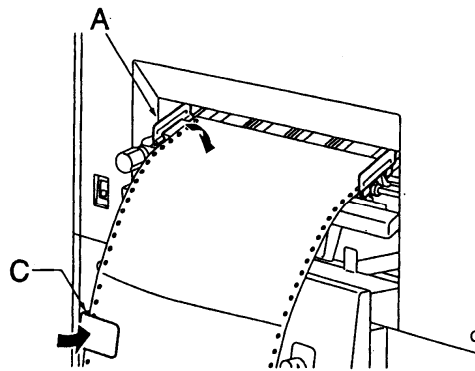
1. Press the **Up** or **Down** triangle to select the desired function.
2. If **Clear Buffer** is selected, the input buffer clears, and the system returns to the Operator Express menu.
3. If **Terminate Job** is selected, the last page prints and the system returns to the Operator Express menu.

## Document Loading Procedures

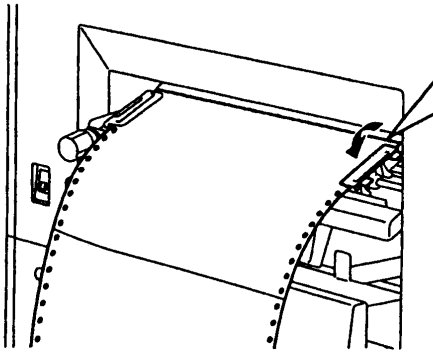
1. Open the lower tractor covers (A and B) and the form end sensor (C).



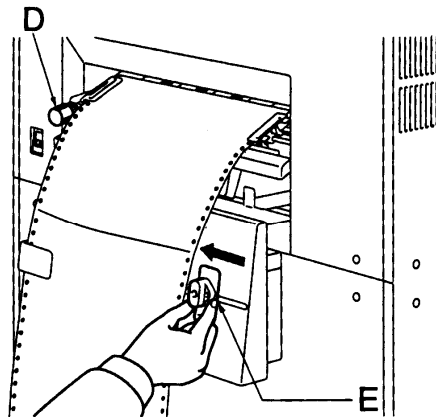
2. Load the stock on the left-side tractor (A) and close the cover.
3. Close the form sensor cover (C).



4. Load the stock on the right-side tractor (B) and close the cover.



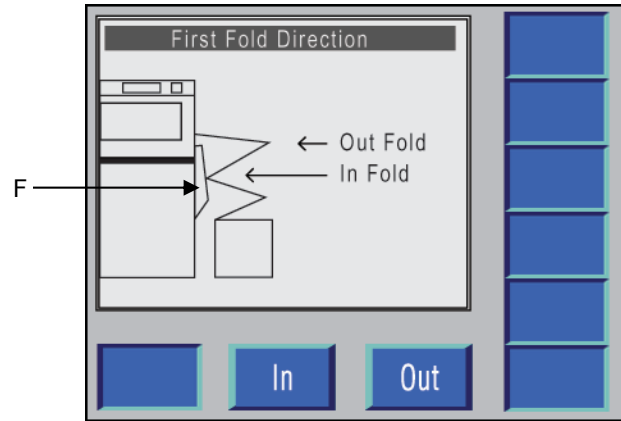
5. Adjust the width between the tractors to accommodate the form by rotating the knob D.



6. Slide the suction brake (E) to the left until it touches the paper stock's right edge.

7. Raise the tractor unit by lifting the tractor unit handle.
8. Press the **LOAD** switch (F), which advances the stock into the printer, lining it up in the top-of-form position.

**Note:** If the swing guide is enabled, pressing the **LOAD** switch causes the following screen to display:



**Figure 3-20. First Fold Direction.**

9. Depending on the direction of the first fold, press **In** or **Out**.
10. To change the configuration number displayed, press **Recall** and see [Recall Configurations](#) starting on page 3-19.



## Chapter 4: Printer Maintenance

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## Maintenance

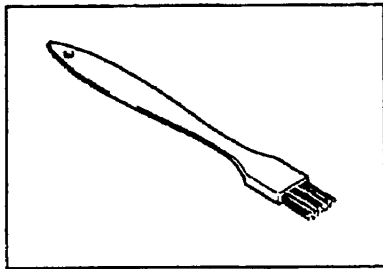
Because the printer is used almost continuously, paper dust and toner may build up on the surfaces inside the printer. To keep the printer in the optimum condition, the printer's interior surfaces, must periodically be cleaned.

**Note:** Make sure to turn power to the printer off when cleaning or servicing it.

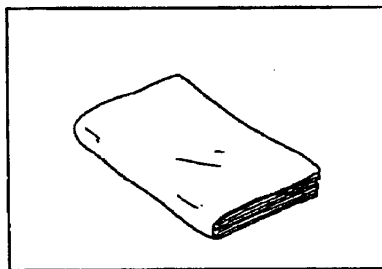
## Cleaning Tools

Use the following tools when performing the cleaning procedure in this guide.

Tool	Use
Cleaning brush	To remove paper dust and toner particles
Cleaning pad	To remove paper dust and toner particles



**Cleaning brush**



**Cleaning pad**

## Life and Cleaning Interval

Action	Name	Life/Cycle	Tool to Use
Replace	Toner bottle (contains 1 kg (2.2 lbs.))	Approximately 20,000 sheets	See <a href="#">page 4-15</a> .
	Toner collecting bottle	Approximately 200,000 sheets	See <a href="#">page 4-17</a> .
	OPC drum	440,000 sheets	See <a href="#">page 4-18</a> .
	Cleaning blade	220,000 sheets	See <a href="#">page 4-21</a> .
Clean	Fusing glass	30,000 sheets	Clean once each shift with a cloth moistened with water or dry cloth.
	Main charger cat whisker	50,000 sheets	Clean once each shift with a packaged cleaner.
	Transfer, separation and charger wire	50,000 sheets	Clean once each shift with a packaged cleaner.
	AIDC sensor	50,000 sheets	Clean once each shift with a dry cloth.

## Changing Consumables

The LP 100R informs you of the need to change consumables based on the number of pages run on the particular consumable. There are two levels of warnings:

- When 90% of a consumable life has been reached, the printer displays the message *Near End of Life*. This informs you that the item needs to be replaced in a short time.
- When the item's full life has been reached, the printer displays the message *End of Life*, which indicates that the item should be replaced as soon as possible. Continuing to use the printer with this consumable may compromise print quality.

## Toner Removal

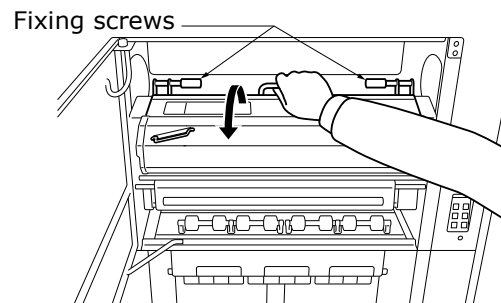
Use the following procedures to remove toner.

Location of toner	Procedure
Toner on the printer	Wipe it away with a cleaning cloth.
Toner on your hands	<ol style="list-style-type: none"> <li>1. Lightly pat your hands with a cleaning pad or dry cloth.</li> <li>2. Wash your hands with soap.</li> </ol>
Toner on your clothes	<ol style="list-style-type: none"> <li>1. Absorb the toner with a vacuum cleaner.</li> <li>2. Wash your clothes with a neutral detergent.</li> </ol>

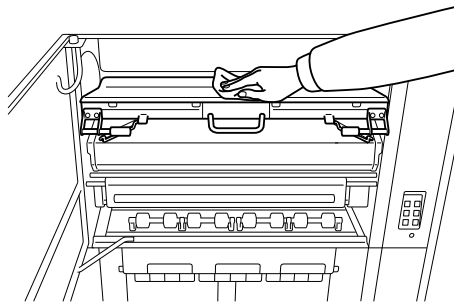
**Note:** When washing hands or clothing to remove toner, be sure to use cool water. **Do not use hot water.**

## Fuser Unit Cleaning

1. Open the left-side door.
2. Remove the fuser filter.
3. Loosen the two fixing screws and open the fusing unit by holding the handle.



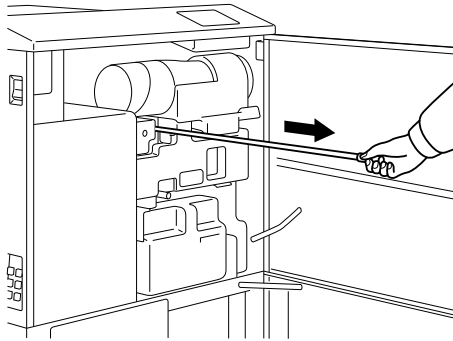
4. Use a cloth moistened with water to wipe off stains from the lens glass. If toner deposition has built up, use a neutral detergent.



5. Close the fusing unit and tighten the two fixing screws.
6. Replace the fuser filter.
7. Close the left-side door.

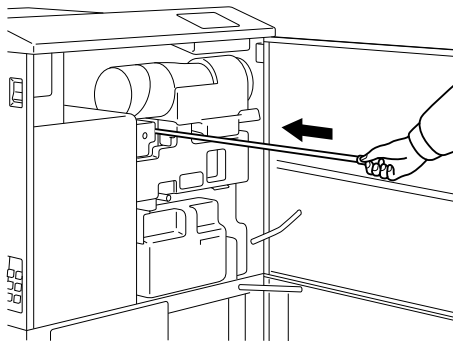
## Charger Cleaning

1. Open the front door.
2. Pull out the main charger cleaning lever (top) slowly as far as it will come.



**Note:** When pulling out or inserting the charger cleaning lever, use caution to avoid bending it.

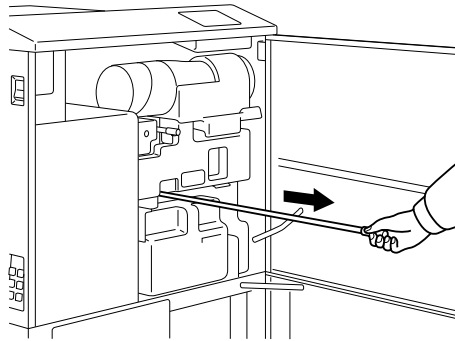
3. Insert the charger cleaning lever (top) to its original position.



**Note:** If the charger cleaning lever is not completely inserted, the print image may display black streaks.

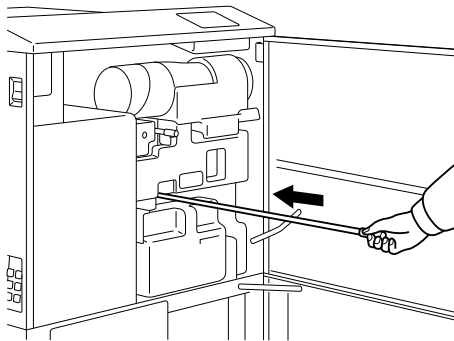
4. Repeat steps 2 and 3 several times.

5. Pull out the transfer/separator charger cleaning lever (bottom) slowly as far as it will come.



**Note:** When pulling out or inserting the transfer/separator lever, use caution to avoid bending it.

6. Insert the transfer/charger cleaning lever (bottom) to its original position.

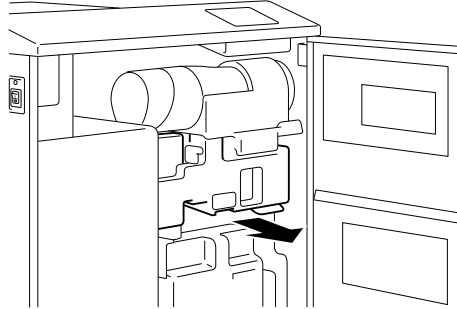


**Note:** If the transfer/charger lever is not completely inserted, the print image may be light.

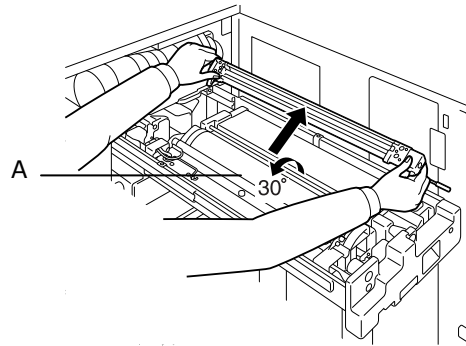
7. Repeat steps 5 and 6 several times.
8. Close the front door.

## AIDC Sensor Cleaning

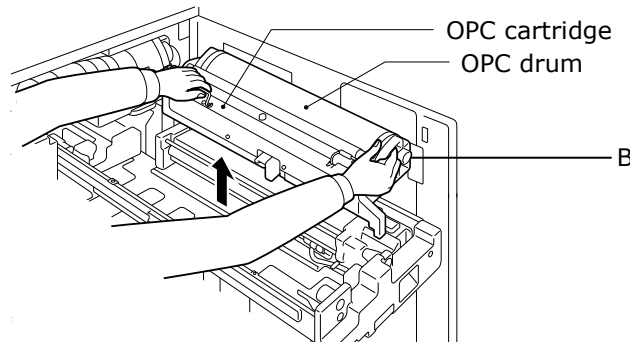
1. Open the front door.
2. Pull out the EP holder slowly as far as it will come.



3. Remove the main charger unit by lifting up the developing unit side approximately 30 degrees (marked A).

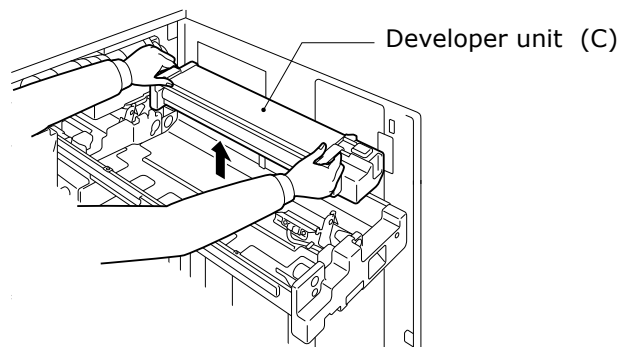


4. Remove the OPC cartridge by holding the handle and the plastic part (marked B).

**Note:**

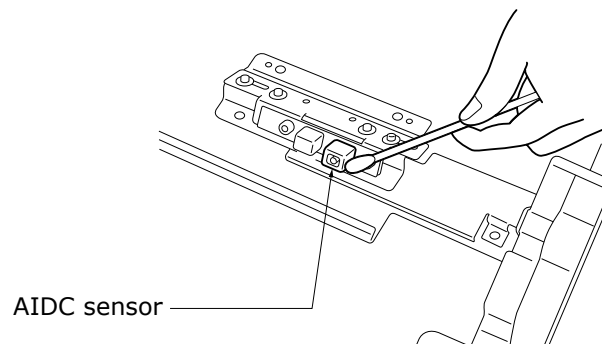
- To avoid damage, do not touch the OPC drum. Place the OPC cartridge on a level place.
- Use the cleaning pad supplied or other suitable item to shield the OPC drum. Exposing it to light for more than a brief period of time results in print degradation.

5. Remove the developer unit (marked C).

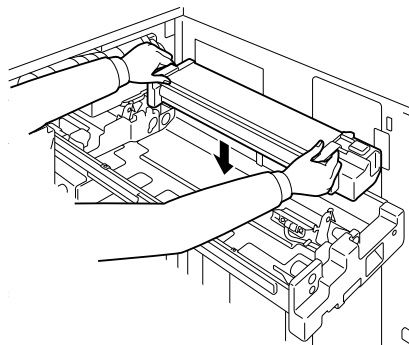


**Note:** To avoid damaging the OPC drum, make sure to remove components in this order:

- a. OPC cartridge
  - b. Developer unit
6. Use a dry cotton swab or other suitable material to wipe off stains on the AIDC sensor.

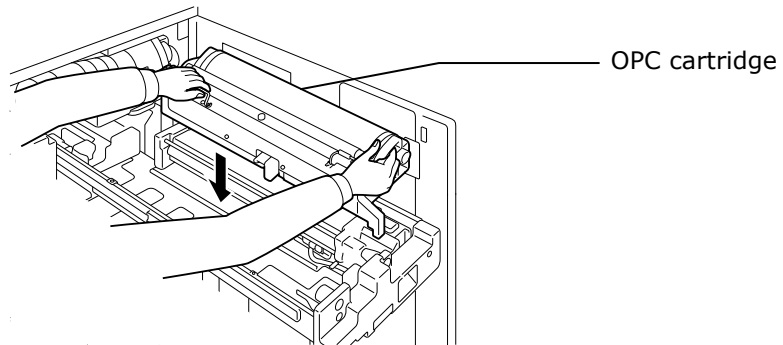


7. Re-install the developer unit to its original position.



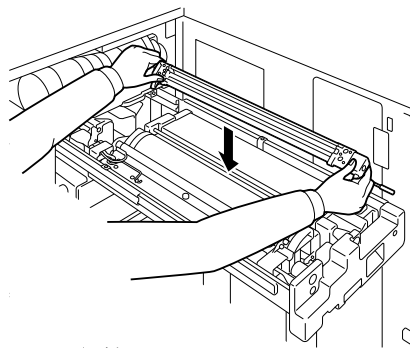


8. Re-install the OPC cartridge to its original position.

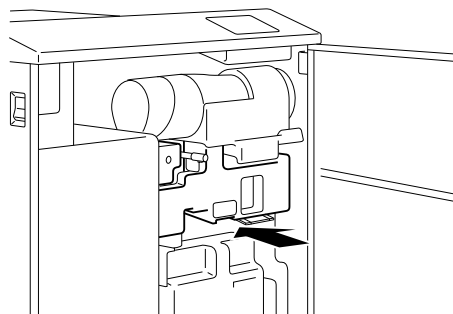


**Note:** To avoid damaging the OPC drum, make sure to re-install components in this order:

- a. Developer unit
  - b. OPC cartridge
9. Re-install the main charger unit to its original position.



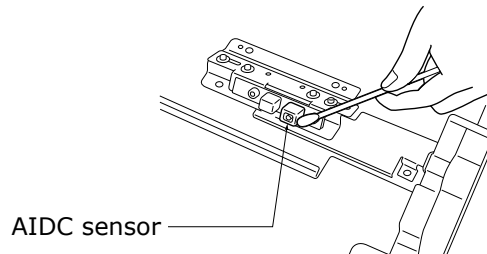
10. Push in the EP holder to its original position.
11. Close the front door.



## Daily Maintenance

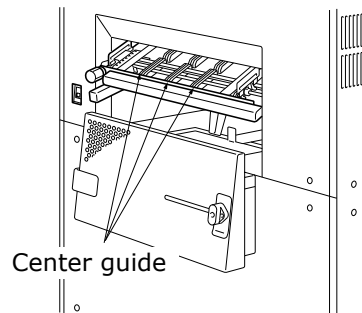
To use the printer safely and in optimum condition at all times, clean the following parts daily.

### AIDC Sensor Cleaning



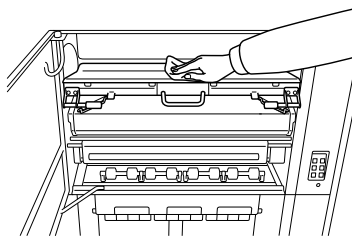
Use a dry cotton swab or other suitable material to clean the AIDC sensor.

### Tractor Unit Cleaning



- Use a dry cloth to clean the center guide side of the tractor unit.
- Use a brush to clean the paper dust around the tractor unit.

### Fusing Unit Cleaning



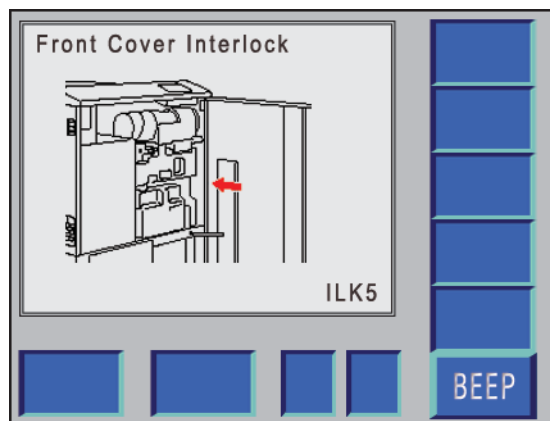
Use a cloth moistened with water to wipe off stains. If toner deposition has built up, use a neutral detergent.

## User-Replaceable Consumables

The [table](#) on the following page shows user-replaceable consumables for the LP 100R. The table shows the expected frequency of replacement for each item and the message that appears on the TDU display when you need to replace that item.

You can also print an Operator's Time and Usage page from the Operator Express menu to monitor the life of key consumables. In addition, a notation should be made in the operator's log each time a consumable is replaced.

**Note:** When the printer displays a Warning or Error message and the audible alarm sounds, press the **BEEP** button to turn off the alarm.



**Figure 4-1. Example of an Error message: Front Cover Interlock.**

- The expected life of components shown in the table on the following page is based on 5% page coverage using forms that are 11" high and 14.5" wide. The actual life of the components varies depending on printer usage.
- The customer is responsible not only for the components shown in the following table but also for stocking some consumables and components replaced by service personnel. See [Appendix D: Ordering Supplies](#) for more information.

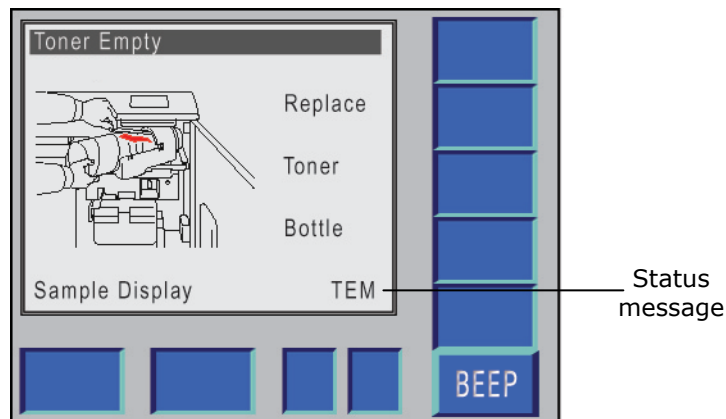
**Expected Life of User-Replaceable Consumables**

<b>Part Name/Number</b>	<b>Expected life (pages)</b>	<b>Message</b>
Toner bottle (9855011) 2 Bottles per case	20,000/per bottle	Toner Near Empty or Toner Empty
Waste toner collecting bottle (7431963)	80,000	Waste Bottle Near Full or Waste Bottle Error
Cleaning blade (supplied with OPC cartridge)	220,000	Cleaning Blade Life
OPC cartridge (9855012)	440,000	OPC End of Life
*Developer starter (shipped with developer unit)	440,000	Starter End of life
Fuser filter (7573000)	440, 000	No message
Developer unit with starter (9855013)	880, 000	Developer End of Life
Main charger unit (7048466)	880, 000	No message

\* Replace developer unit.

## Touch Display Unit

The TDU display on the LP 100R shows status, warning, or error messages when a printer component needs to be replaced. Figure 4-2 shows a status message.

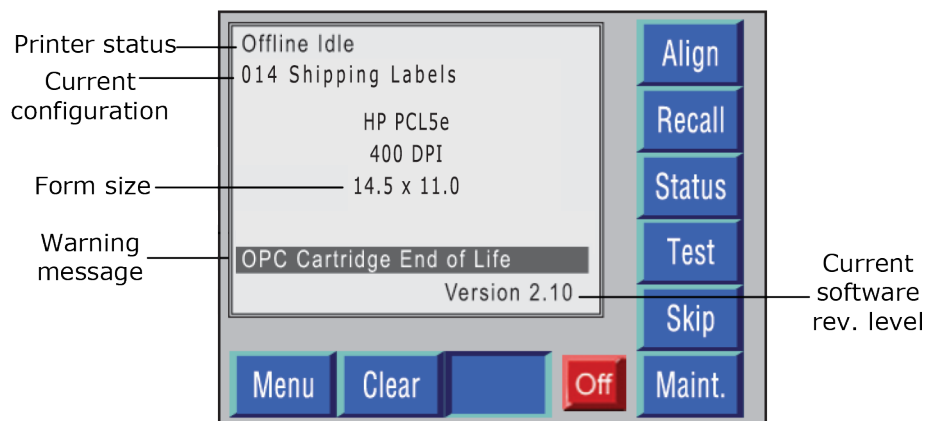


**Figure 4-2. Control panel display for a status message.**

Error messages indicate that the printer cannot operate until a component is replaced and will cause the printer to stop and the audible alarm to sound. Press the **BEEP** button to turn off the audible alarm.

Warning messages inform you of the need to change consumables based on the number of pages run on the particular consumable. There are two levels of warnings:

- When 90% of a consumable's life has been reached, the printer displays the message *Near End of Life*. This is to let you know that the item needs to be replaced in a short time
- When the item's full life has been reached, the printer displays the message *End of Life*, which indicates that the item should be replaced as soon as possible. Continuing to use the printer with this consumable may compromise print quality. (See [Figure 4-3](#) for an example.)



**Figure 4-3. Warning message.**

You should check the TDU display for warning messages whenever you change forms.

## Printer Consumable Supplies

Use the following precautions when handling printer supplies (such as toner and paper):

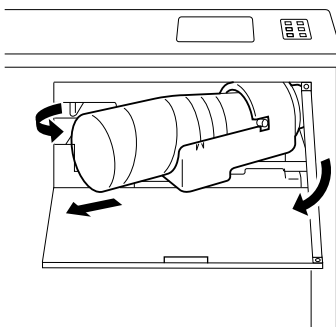
- Store paper, toner, and other supplies in a place free from direct sunlight and away from any heating apparatus. Keep them in a dry, clean environment.
- Store paper that has been removed from its wrapper but not loaded into the paper supply area in a sealed plastic bag in a cool, dark place.
- If your hands become soiled with toner, flush them with cool water to remove loose toner, then immediately wash with soap and cool water.

## Toner Bottle Replacement

If the *Toner Near Empty* warning message is displayed, it indicates that the toner bottle needs to be replaced, which can be done without stopping the printer.

If the graphic error message *Toner Empty* is displayed, the printer will stop, and the toner bottle must be replaced.

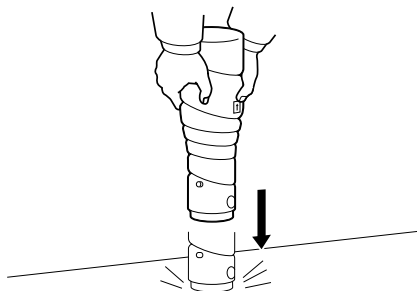
1. Open the toner bottle cover.



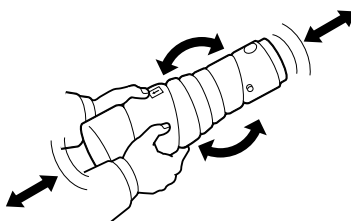
2. Make sure that the toner bottle is not rotating. Swing the toner cartridge toward you and pull the toner bottle out.

**Note:** If the toner bottle cannot be pulled out, close the toner bottle cover to resume the normal position, and then repeat the above steps.

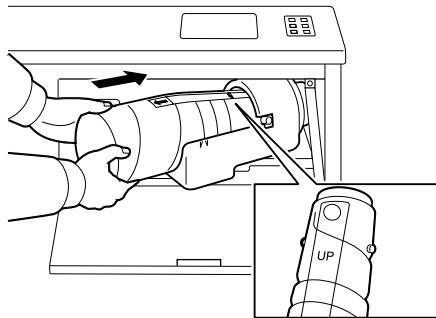
3. Hold the new toner bottle with the arrow facing upward and drop it onto a solid object (such as desk) from a height of approximately  $\frac{1}{4}$ " to  $\frac{1}{2}$ ". Then hold it with the arrow facing downward and drop it down again to a solid object (such as a desk) from a height of approximately  $\frac{1}{4}$ " to  $\frac{1}{2}$ ".



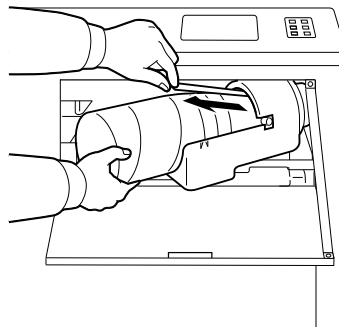
4. Turn the toner bottle upside down and repeat five times.



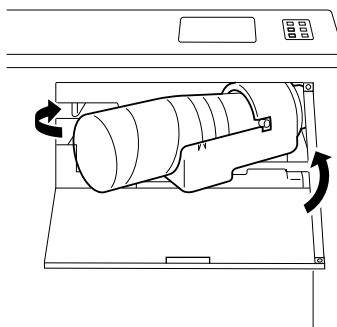
5. With the Up indicator on the toner bottle facing upward, insert the bottle into the toner bottle holder. Verify that the line on the toner bottle and the mark on the toner bottle holder are aligned with one another.



6. While holding the toner bottle in place, pull out the seal on the top face of the toner bottle.



7. Swing the toner holder back into its original position.
8. Close the toner bottle cover.





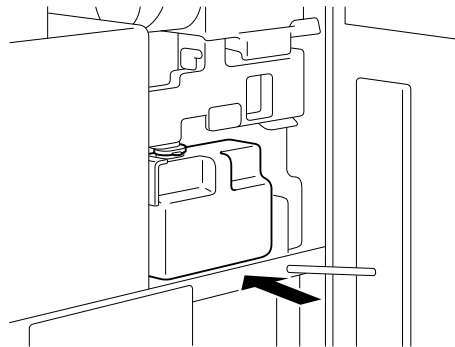
## Waste Toner Collecting Bottle Replacement

When the waste toner collecting bottle becomes full, replace it utilizing the following procedure:

1. Open the front door.
2. Remove the waste toner collecting bottle and tighten the cap so as not to spill the toner inside.



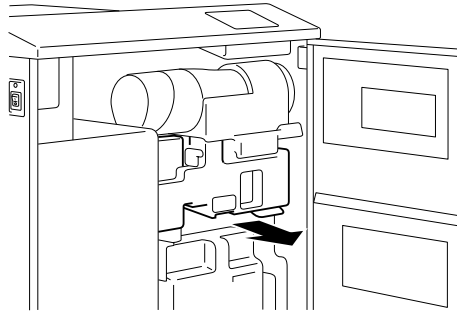
3. Remove the sealing cap from its storage position on the waste toner collecting bottle.
4. Snap the cap over the bottle opening making certain that it is securely fastened.
5. Install the new toner collecting bottle.
6. Close the front door.



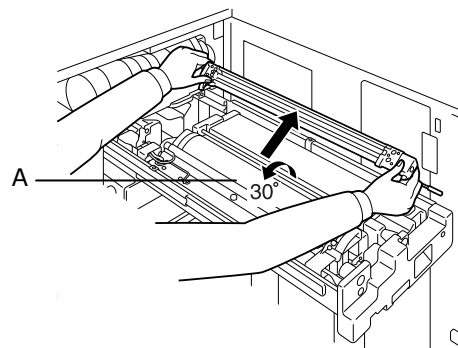
7. Discard the tightly sealed waste toner collecting bottle.

## OPC Drum/OPC Cartridge Replacement

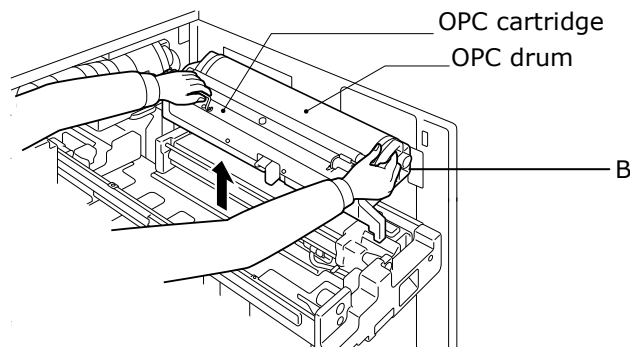
1. Open the front door.
2. Pull out the EP holder slowly as far as it will come.



3. Remove the main charger unit by rotating and swinging up the developer unit side approximately 30 degrees (position A).

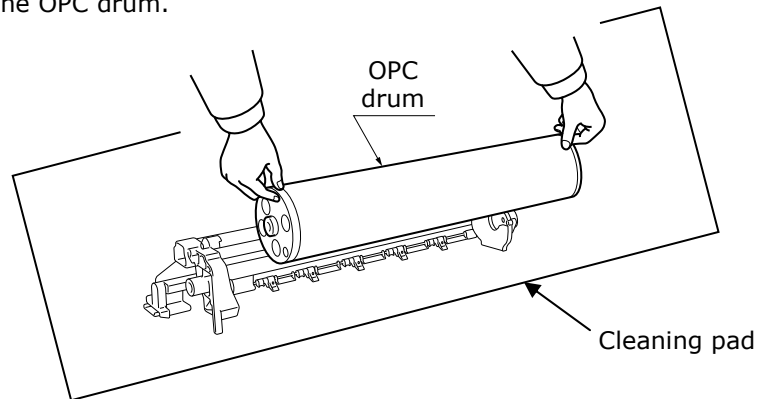


4. Remove the OPC cartridge by holding the handle and the plastic part (position B).

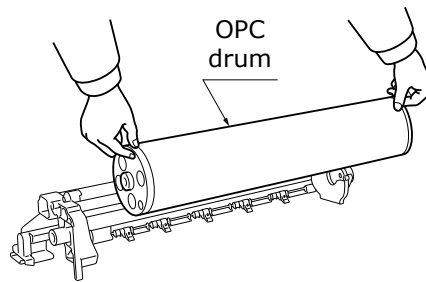


**Note:** Place the OPC cartridge on a level place, using a cleaning pad to protect the level surface and the OPC drum.

5. Remove the OPC drum.



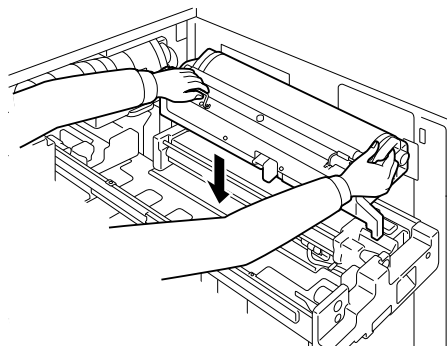
6. Install the new OPC drum.



**Note:**

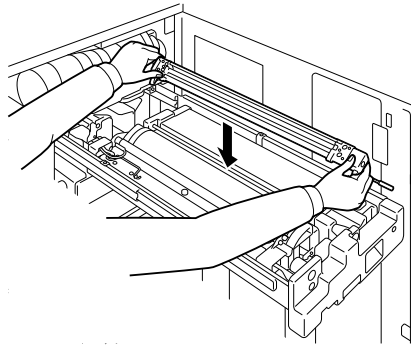
- To avoid damages, do not touch the OPC drum. (Handle only by the edges.)
- Use the supplied cleaning pad or other suitable item to shield the OPC drum. Exposing it to light for more than a brief period of time results in degradation.

7. Re-install the OPC cartridge into the original position.

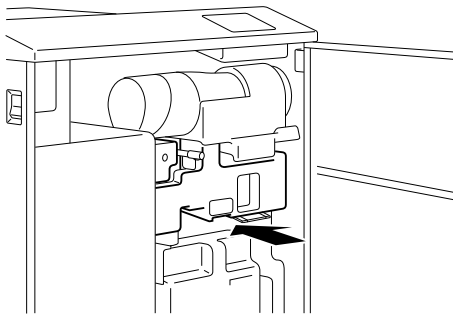


**Note:** To avoid damage, do not touch the OPC drum.

8. Re-install the main charger unit into its original position.

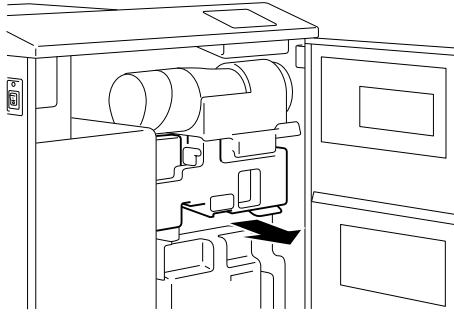


9. Press in the EP holder to the original position.
10. Close the front door.

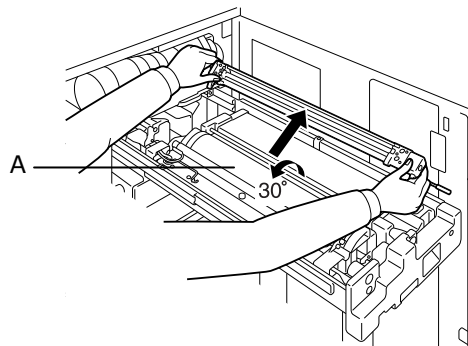


## Cleaning Blade Replacement

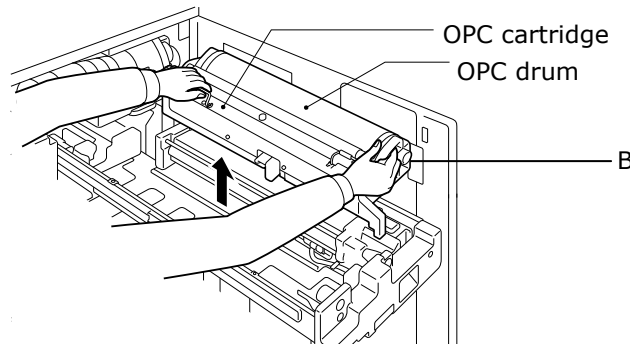
1. Open the front door.
2. Pull out the EP holder slowly as far as it will come.



3. Remove the main charger unit by lifting up the developing unit side approximately 30 degrees (position A).

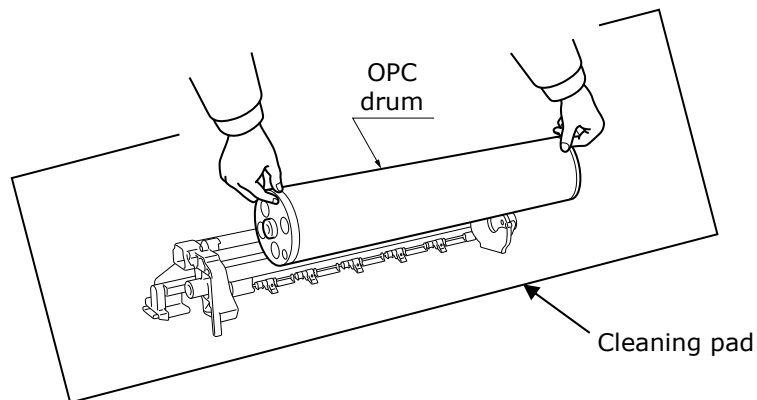


4. Remove the OPC cartridge by holding the handle and the plastic part (position B).

**Note:**

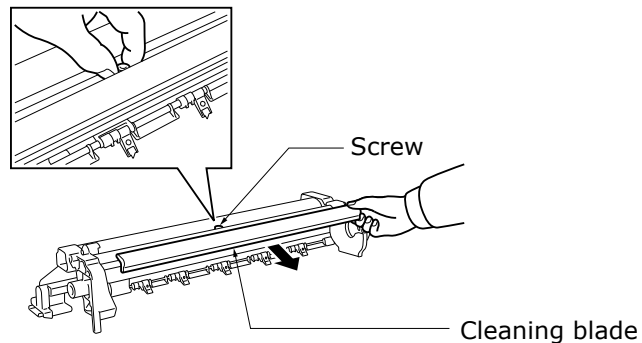
- To avoid damage, do not touch the OPC drum. Place the OPC cartridge on a level place.
- Use the supplied cleaning pad or other suitable item to shield the OPC drum. Exposing it to light for more than a brief period of time results in degradation.

5. Remove the OPC drum.



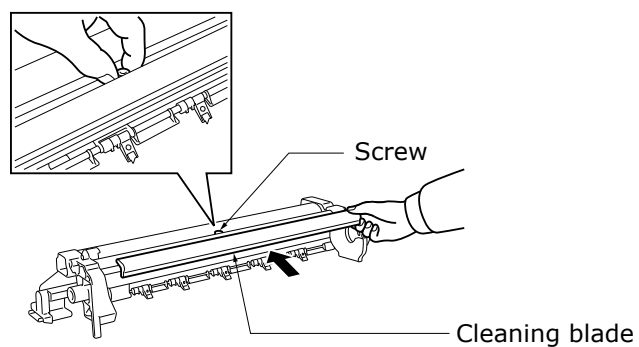
**Note:**

- To avoid damages, do not touch the OPC drum.
  - Use the supplied cleaning pad or other suitable item to shield the OPC drum. Exposing it to light for more than a brief period of time results in degradation.
6. Remove the cleaning blade by loosening one screw.



**Note:** Be careful of the edge of the paper separator fingers.

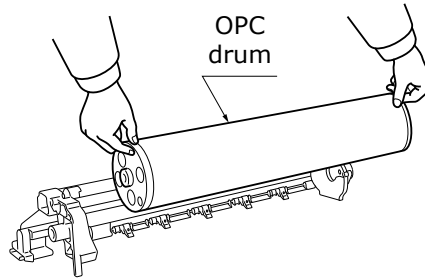
7. Install the cleaning blade by tightening one screw.



# ! CAUTION

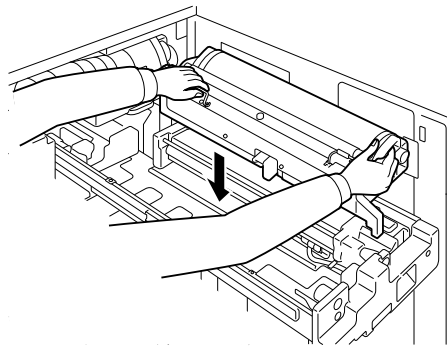
**NEVER touch the edge of the blade with your hands.  
Also, do not hit or rub the edge of the blade with a hard object.**

8. Re-install the OPC drum.



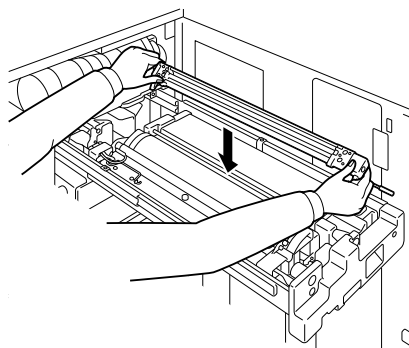
**Note:**

- To avoid damages, do not touch the OPC drum.
  - Use the supplied cleaning pad or other suitable item to shield the PC drum. Exposing it to light for more than a brief period of time results in degradation.
9. Re-install the OPC cartridge into the original position.

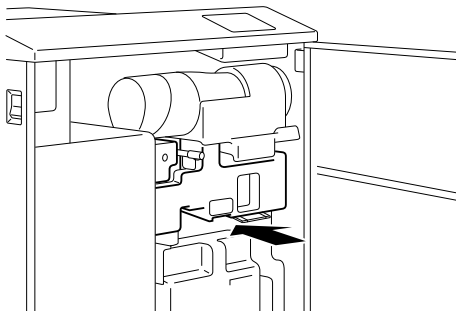


**Note:** To avoid damages, do not touch the OPC drum.

10. Re-install the main charger unit to its original position.



11. Slide in the EP holder into its original position.
12. Close the front door.





## Chapter 5: Problem Solving

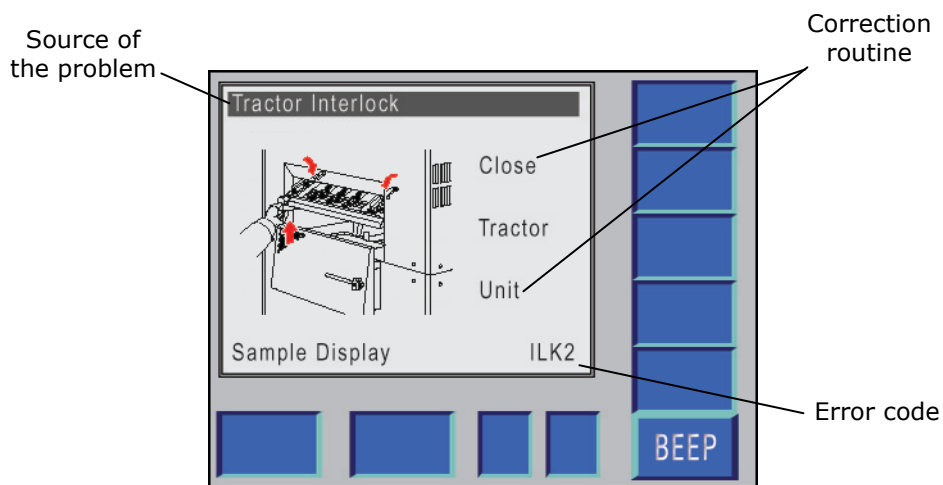
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Safety Considerations .....	5-3
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## Introduction

This chapter explains how to clear paper jams and resolve other common problems related to the LP 100R. It also provides a list of the status and error codes displayed on the touch display unit (TDU).

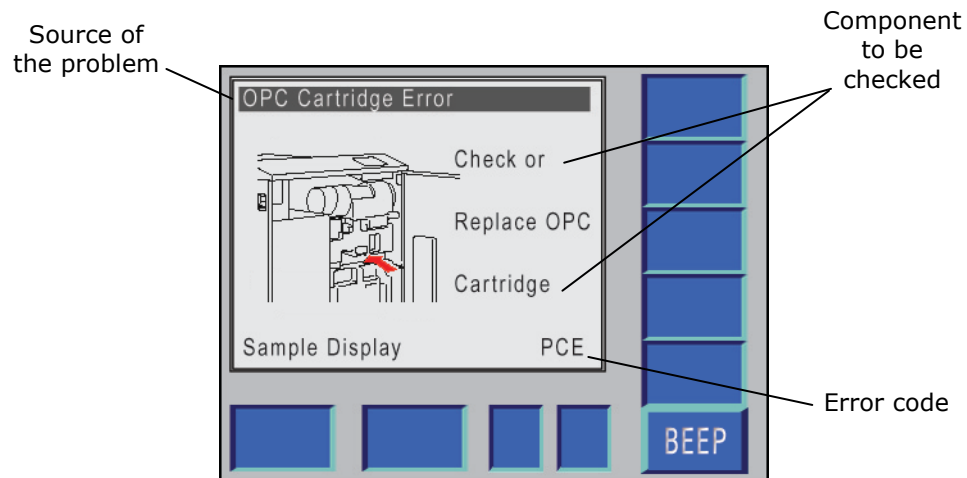
In addition to status and error codes, the TDU may display graphic error messages that identify the probable source of a problem encountered during document processing.

Some of the graphic error messages will include simple instructions for clearing the problem and others will direct you to a specific component that should be checked and possibly replaced.



**Figure 5-1. Graphic error message I.**

**Note:** The error correction routine is included in this display.



**Figure 5-2. Graphic error message II.**

**Note:** The specific component to be checked is included in this display.

## Audible Alarm

Most printer errors will cause an audible alarm to sound until the error is cleared. To turn off the alarm while resolving the problem, press the **BEEP** button.

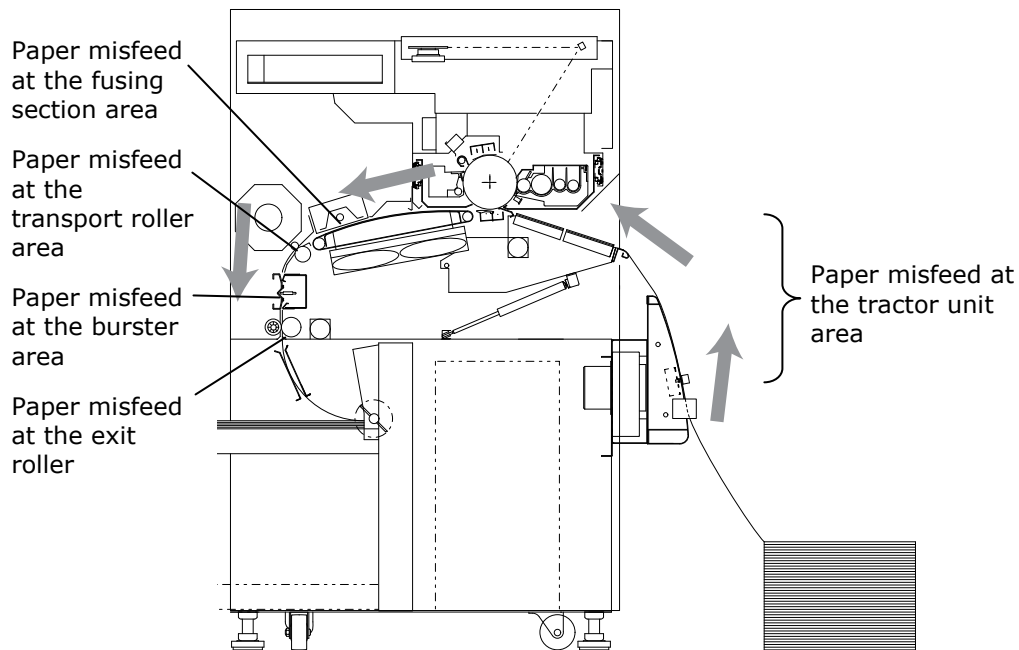
## Safety Considerations

Before working on the printer, make certain that the printer is installed as described in [Appendix G: Operating/Environmental Requirements](#).

## Paper Jams

### Paper Jams – General

The following schematic indicates the path taken by documents as they are fed through the printer and the general areas where document jams can occur.



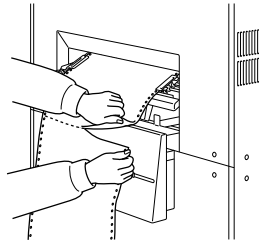
**Figure 5-3. Paper feed path.**

If a paper jam occurs, a graphic error message indicates the area of the printer in which the jam has occurred.

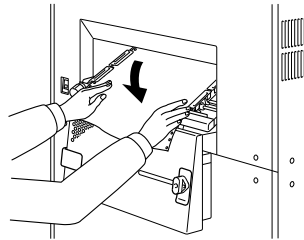
If the optional swing guide component is installed and a jam occurs in this unit, a graphic error message displays.

## Paper Jams – In the Tractor Unit

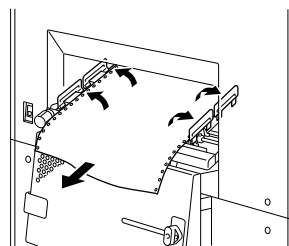
1. Separate the undamaged and crumpled documents from one another at the perforation.



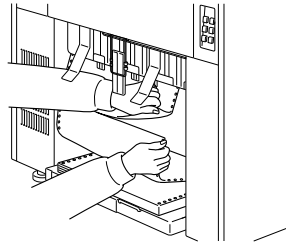
2. Press down on the tractor unit with both hands.



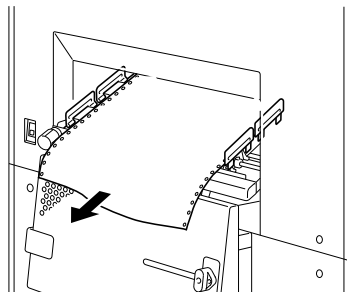
3. Open the lower tractor covers (and upper covers if used), remove the documents from the belt, and pull the jammed document out of the printer if the jam has occurred in this area.



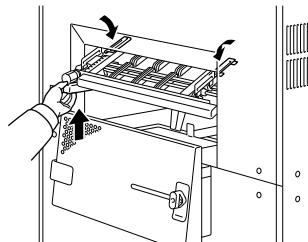
4. If the jam occurred at the exiting end of the tractor unit, separate the last usable printed page at the perforation, allowing it to drop onto the stacker table.



5. Remove the jammed document from the printer.



6. Close all open tractor covers. Raise the tractor unit by lifting up on the tractor unit handle.

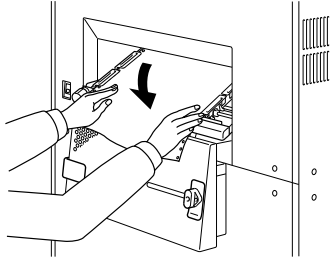


**Note:**

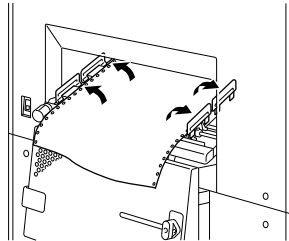
- Raising the tractor unit before closing the tractor cover will damage the cover.
  - If the paper printed after eliminating the paper jam is dirty, pull out the EP holder and clean the bottom plate.
  - When you clean the bottom plate, be careful of the edge of paper separator fingers on the OPC cartridge.
7. Press **Clear** and release the forms.

## Paper Jams – At the Fusing and Exit Areas

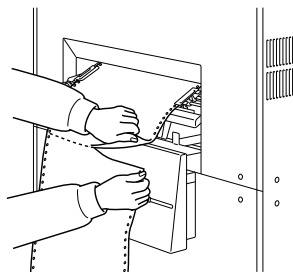
8. Press down on the tractor unit with both hands.



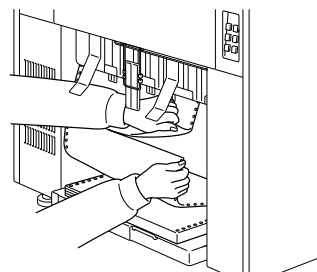
9. Open the lower tractor cover (and upper covers if used) and remove the documents from the belt.



10. Separate the unloaded form, ejected form, and the form left inside the printer by cutting it along the perforation immediately before the tractor unit and after the exit area.



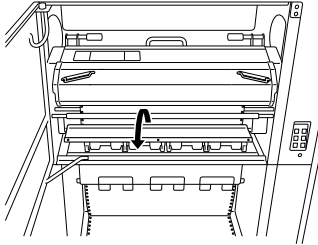
Tractor unit



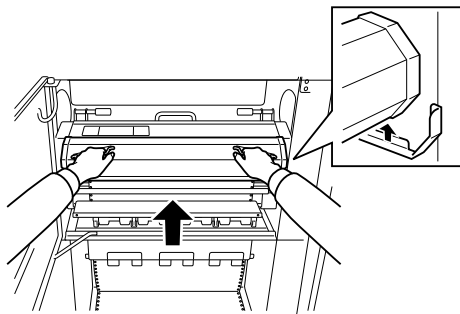
After the ejection area

**Note:** When removing the jammed form, always pull it out in the feeding direction. Unfixed toner on the form can contaminate the interior of the printer.

11. Open the left-side door.
12. Open the exit roller area.

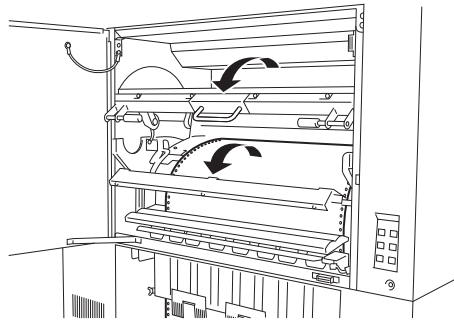


13. Remove the toner fuser filter and open the transport roller.



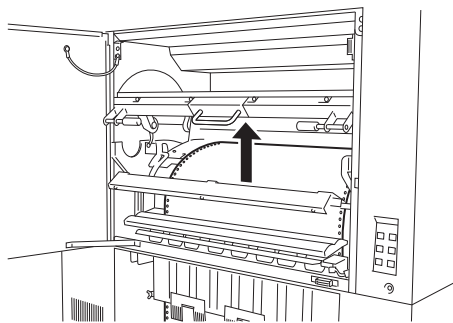


15. Open the fuser unit.



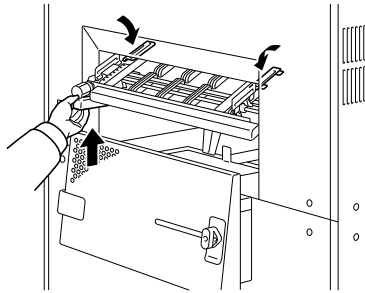
**Note:** When removing the form, do not contaminate the fusing glass with toner. Clean the fusing glass if it becomes contaminated.

16. Remove the jammed form.



**Note:** Always pull forms in the feed direction.

17. Close all areas, and re-install the fusing toner filter.
18. Close the left-side door.
19. Close all open tractor covers. Raise the tractor unit by lifting up on the tractor unit handle.



**Note:** Raising the tractor unit before closing the tractor covers will damage the covers.

20. Press **Clear** and reload the forms.

## Interlock Errors

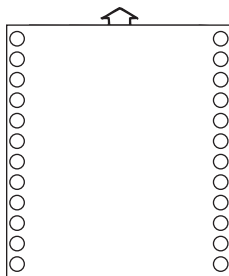
Interlock error messages, along with their recovery procedure are included as part of the graphic error messages.

Error recovery from Interlock errors is automatic when the Interlock problem is resolved. The error graphic is extinguished and the printer returns to the Offline mode. See the error message list on [page 5-18](#).

## Print Quality Problems

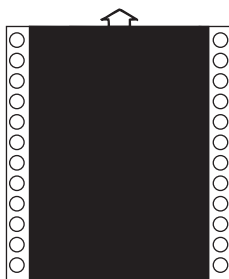
If a print image is ejected because of a printer problem, take the following actions. If these remedies do not restore the print image, contact your nearest dealer or representative for assistance.

### Blank Print



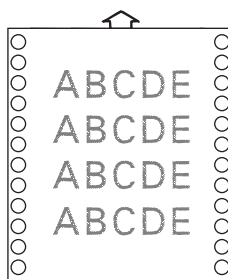
	Checking item	Result	Remedy
1	Is the OPC drum set?	No	Set
2	Is the developer set?	No	Set
3	Is the image transfer corona unit set?	No	Set

### Black Print



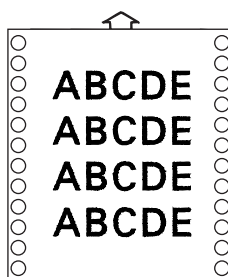
	Checking item	Result	Remedy
1	Is the OPC main charger set?	No	Set

## Light Image



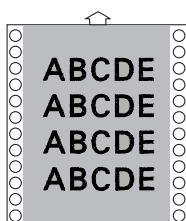
	Checking item	Result	Remedy
1	Is the printing form damp?	Yes	Replace
2	Is the OPC drum exhausted in service life?	Yes	Replace
3	Is the image density setting correct?	No	Correct
4	Is the fusing glass dirty?	Yes	Clean
5	Is the AIDC sensor dirty?	Yes	Clean
6	Is the fusing lamp exhausted in service life?	Yes	Replace
7	Is the OPC Drum completely grounded?	Yes	Clean or replace the OPC drum ground plate

## Dark Image



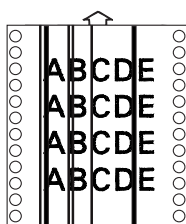
	Checking item	Result	Remedy
1	Is the OPC drum exhausted in service life?	Yes	Replace
2	Is the image density setting correct?	No	Correct

## Background Haze



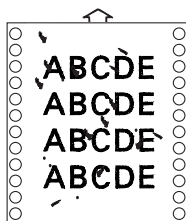
	Checking item	Result	Remedy
1	Is external light, such as the direct rays of the sun, entering the machine?	Yes	Shut off the external light
2	Is the OPC drum exhausted in service life?	Yes	Replace

## Black Stripe



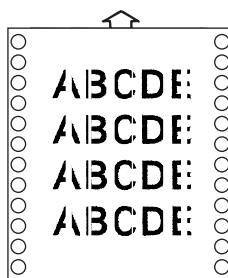
	Checking item	Result	Remedy
1	Is the main charger clean?	No	Clean the charger
2	Is the OPC drum damaged or stained?	Yes	Clean or replace
3	Is the cleaning blade peeled or degraded?	Yes	Replace

## Black Specks



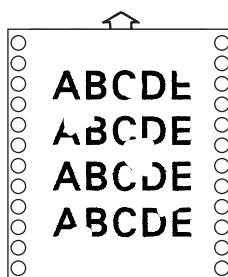
	Checking item	Result	Remedy
1	Is the OPC drum damaged, or is there foreign matter on the OPC drum?	Yes	Clean or replace

## White Stripe



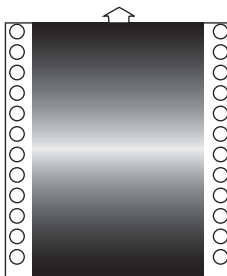
	Checking item	Result	Remedy
1	Is the image transfer charger clean?	No	Clean or replace
2	Is the OPC drum damaged, or is there foreign matter on the OPC drum?	Yes	Clean or replace

## Print Voids



	Checking item	Result	Remedy
1	Is the tractor's paper width position correctly set?	No	Adjust to the correct positioning
2	Is the form moisturized?	Yes	Replace
3	Is the form type correctly set?	No	Correct the setting
4	Is the image transfer corona unit correctly set?	No	Correct the setting

## Uneven Image Density



	Checking item	Result	Remedy
1	Is the form damp?	Yes	Replace
2	Is the developing unit correctly set?	No	Correct the setting
3	Is the OPC cartridge correctly set?	No	Correct the setting

**Note:** When the label form is printed, paste may come out (and stick to the label form surface). This glue may be transferred to the drum, causing an image noise.

- Discard documents on which glue has accumulated.
- If an image noise occurs, clean the cleaner blade.



## Warning Messages

Warning messages are displayed when specified maintenance functions are to be executed by either the printer operator or a SATO service representative.

In most cases the printer will continue to run after displaying one of the following messages. To delay taking the suggested action, however, may cause some degradation of the print quality.

Message	Suggested action
220K PM – Schedule Maintenance	Call service to schedule maintenance (200,000 pages have been run).
440K PM – Schedule Maintenance	Call service to schedule maintenance (400,000 pages have been run).
880K PM – Schedule maintenance	Call service to schedule maintenance (800,000 pages have been run).
Cleaning Blade End of Life	Replace the cleaning blade (see <a href="#">page 4-21</a> ).
Cleaning Blade Near End of Life	Cleaning blade has a limited number of pages left. Make preparations to replace the unit.
Developer Unit End of Life	<ul style="list-style-type: none"> <li>If a “prepped” standby developer unit is available:               <ol style="list-style-type: none"> <li>Remove the old unit from the printer.</li> <li>Install the new developer unit in the printer.</li> </ol> </li> <li>If a “prepped” standby developer unit is <b>not</b> available, call service to schedule maintenance.</li> </ul>
Developer Unit Near End of Life	Developer unit has a limited number of pages left. Make preparations to replace the unit.
Starter End of Life	<ol style="list-style-type: none"> <li>If a “prepped” standby developer unit is available, remove the old unit from the printer and retain it for the SATO service representative.</li> <li>Insert the replacement developer unit in the printer.</li> </ol>
Starter End of Life (Developer Powder)	If a “prepped” standby developer unit is not available, call service to schedule maintenance.
Starter Near End of Life	Starter has a limited number of pages left. Make preparations to replace the unit.
Toner Near Empty	Replace the toner bottle (see <a href="#">page 4-15</a> ).
Waste Toner Collecting Bottle Near Full	Replace the waste toner collecting bottle (see <a href="#">page 4-17</a> ).

## Error Messages Requiring Operator Intervention

When displayed, the printer error messages listed below will require operator intervention.

Code	Message	Suggested Action
AIH	AIDC High	<ul style="list-style-type: none"> <li>• Clean AIDC sensor (see <a href="#">page 4-7</a>).</li> <li>• Check or replace:               <ul style="list-style-type: none"> <li>- Charger unit (see <a href="#">page 4-5</a>)</li> <li>- Developer unit</li> <li>- OPC cartridge (see <a href="#">page 4-18</a>)</li> </ul> </li> </ul>
AIL	AIDC Low	
AHO	AIDC High (Out of Table)	
ALO	AIDC Low (Out of Table)	
ATH	ATDC High	Check or replace developer unit.
ATL	ATDC Low	
BUE	Burster Error	Clear forms from fuser and exit roller area (see <a href="#">page 5-7</a> ).
DUE	Developer Error	Check or replace developer unit.
FME	Form End	Load an additional supply of forms.
FMU	Form Unloaded	Load new forms into the printer.
IFS	Illegal Form Size	Check page length setting.  <b>Note:</b> When the swing guide is used, the page length cannot be less than 10" or more than 12".
ILK1	EP Holder Interlock	Close EP drawer.
ILK2	Tractor Interlock	Close tractor unit.
ILK3	Fuser Interlock	Close fuser unit.
ILK4	Left Cover Interlock	Close left-side door.
ILK5	Front Cover Interlock	Close front door.
JAM1	Separator Jam	Clear jam in EP drawer.
JAM2	Fuser Jam	Clear jam in fuser unit.
JAM3	Stacker Jam	Clear jam in stacker unit.
JAM4	Tractor Jam	Clear jam in tractor unit.
JAM5	Exit Roller Area Jam	Clear jam in exit roller area.

*Continued on next page*

**Error Messages Requiring Operator Intervention  
(continued)**

Code	Message	Suggested action
NST	Stacker Table Unlocked	Verify that the stacker table is locked into position.
NTM	No Toner Mark	<ul style="list-style-type: none"><li>• Clean AIDC sensor (see <a href="#">page 4-7</a>).</li><li>• Check or replace:<ul style="list-style-type: none"><li>– Charger unit (see <a href="#">page 4-5</a>)</li><li>– Developer unit</li><li>– OPC cartridge (see <a href="#">page 4-18</a>)</li></ul></li></ul>
ODE	Roll To Roll Output Error	Check output device.
PCE	OPC Cartridge Error	Check or replace OPC cartridge (see <a href="#">page 4-18</a> ).
SDE	Roll To Roll Supply Error	Check supply device.
SGE	Swing Guide Error	Check swing guide for correct positioning (see <a href="#">page 3-32</a> ).
TBP	Toner Bottle Position	Insert or replace toner bottle (see <a href="#">page 4-15</a> ).
STF	Stacker Full	Remove forms from stacker table.
TEM	Toner Empty	Replace toner bottle (see <a href="#">page 4-15</a> ).

## Printer Hardware Messages

Some printer hardware problems may require entering a call for service.

If this becomes necessary, be prepared to supply the applicable error code to the SATO service contact when making the call.

Code	Message	Suggested action
BSH	Bias Short	Cycle power to the printer (by pressing and holding down the <b>POWER LED</b> switch for 20 seconds) and retry. If the problem persists, call service.
DMM	Developer Motor Malfunction	
EFM	Exhaust Fan Malfunction	
ELM	Eraser Lamp Malfunction	
FCH	Flash Charging Error	
FHT	Fuser High Temperature	
FPM	Flash Motor Malfunction	
IFE	Interface Error	
MCS	Main Charger Short	
MFL	Mis-Flash	
OFM	Ozone Fan Malfunction	
PDM	OPC Drive Motor Malfunction	
PMM	P/H Motor Malfunction	
PSM	Phase Sensor Malfunction	

*Continued on next page*

**Printer Hardware Messages (continued)**

Code	Message	Suggested action
RTM	Retraction Malfunction	Cycle power to the printer (by pressing and holding down the <b>POWER LED</b> for 20 seconds) and retry. If the problem persists, call service.
SCS	Separator Charger Short	
SFM	Suction Fan Malfunction	
SMM	Suction Motor Malfunction	
SOS	SOS Error	
TCS	Transfer Charger Short	
TFM	Toner Fan Malfunction	
U29	Unknown Error Bit 29	
U30	Unknown Error Bit 30	
U31	Unknown Error Bit 31	

## Controller Errors

Message	Explanation
Out of Memory	The printer has requested more memory than the operating system can provide at the present time.
FIFO Underrun	Fatal error. Call service.
GPF	General Protection Fault. Fatal error. Write down the number at the bottom of the display screen (example: EIP=000E4932) and notify service.

## Communication Errors

Message	Explanation	Action
Overflow Error	The receive buffer of the printer is full and the printer could not stop the host from sending more print data.	Reset the host and printer.
Unknown Error	Indicates that an unidentifiable communication error has occurred.	Reset the host and printer.

## Emulation Errors

### Kodescript™ Errors

Code	Description	Explanation
F1	Not in Kodescript Mode	The printer controller received data before receiving the Kodescript on (^PY^-) command. This error will clear when the (^PY^-) command is received.
F2	Unknown Command	The printer controller has received data that it cannot interpret as a Kodescript command.
F3	Unsupported Command	The printer controller has received data that it cannot interpret as a Kodescript command.
F4	Communications Buffer Overflow	The printer's communications buffer has overflowed, usually due to incorrect flow control between host and printer.
F5	Too Many Fields	The Kodescript program has too many fields in it.
F6	Illegal Conversion	An incorrect hex conversion of a high-level ASCII character is present.
FC	Too Many Characters in a Field	When using the (^f01^-) command, the number of data characters in a field must not exceed the maximum number of characters specified for that field.
FE	Wrong Number of Data Fields	The number of data fields in the program does not match the number of data fields in the Repeat command.

## Kodescript*Plus*™ Status and Error Codes

All Kodescript*Plus* code numbers appear in the lower right corner of the printer's display. In addition, an explanation of status and error codes will be sent to the monitor, COM2, or the display, as long as Field Check is set to on and the output is set to one of the above devices.

The following groupings apply to Kodescript*Plus* codes:

### Codes 01-15

These codes are Status codes, which indicate the stage of processing currently active in the printer controller.

### Codes 16-50

These are warning codes. An illegal procedure or invalid data was encountered during processing. The controller continues processing and printing the file, but one warning beep sounds, and the code number is displayed on the printer.

### Codes 51-80

These are error codes. An error code indicates that an incorrect series of commands has been encountered or a command has been omitted. The controller stops processing until the operator intervenes, and three warning beeps sound. The printer will remain in the offline state until the operator presses the **ONLINE** switch.

### Codes 81-99

These are fatal codes. A significant error has occurred that causes the controller to abort. The printer beeps continuously, and the controller no longer functions correctly. Reset the printer by turning it off, waiting 20 seconds, and turning it on again.



**Kodescript*Plus* Status Messages**

Code	Description	Explanation
01	Start Kodescript <i>Plus</i>	The SATO-Logic Controller is being set to use Kodescript <i>Plus</i> emulation.
02	Start Parsing Format	The SATO-Logic Controller is interpreting the Kodescript <i>Plus</i> page format.
03	Sorting Field Numbers	The SATO-Logic Controller is sorting the field numbers specified by the Variable Field Data command (^[ffcccc).
04	Fetch Repeat Count	The SATO-Logic Controller is determining the number of times data is to be printed.
05	Start Parsing Data	The SATO-Logic Controller is formatting the data for printing.
06	Start Printing Process	The printer is beginning to print the data formatted by the SATO-Logic Controller.
07	Freeing Memory	The SATO-Logic Controller is releasing areas of memory that it is no longer using.
08	Processing Complete	The processing designated by the Kodescript <i>Plus</i> program is complete.

**KodescriptPlus Warnings**

<b>Code</b>	<b>Description</b>	<b>Explanation</b>
16	Unknown/Unsupported KodescriptPlus Format command	Either an unknown or an unsupported Format command has been included in the KodescriptPlus program.
17	Unknown/Unsupported KodescriptPlus Data command	Either an unknown or unsupported Data command has been included in the KodescriptPlus program.
18	Incorrect KodescriptPlus Format command syntax	The syntax for a KodescriptPlus Format command contains the wrong number of characters.
19	Incorrect KodescriptPlus Data command syntax	The syntax for a KodescriptPlus Data command contains the wrong number of characters.
20	Incorrect KodescriptPlus Hard Data command syntax	The syntax for a KodescriptPlus Hard Data command contains the wrong number of characters.
21	Unknown parameter	An unknown parameter was included in the syntax for a command.
22	Illegal character encountered during program processing	The program includes a character other than a white (transparent) character.
23	Illegal Hex Conversion	The Hex Conversion command ( <b>~?</b> ) was followed by an invalid hexadecimal value.
24	Invalid Filename	The Filename does not conform to the KodescriptPlus document Filename conventions.
25	Filename must follow	The Filename either was not entered or was entered out of sequence.
26	Maximum font name length has been exceeded	The font name was longer than the maximum permitted length (49 characters).
27	Interchangeable print font	The Interchangeable Print Font command ( <b>^Df</b> ) was coded without entering the name of the print font selected. The previously called font will be used.
28	Image file requested not found	The requested PCX Image file or stored in the specified directory or exceeds the maximum number of 10 Image files allowed.
30	Data exceeded field's defined length	The number of characters printed in a field exceeds the maximum number of characters permitted for that field. The remaining characters will be truncated.

*Continued on next page*

**KodescriptPlus Warnings (continued)**

<b>Code</b>	<b>Description</b>	<b>Explanation</b>
31	Incorrect bar code data length	The number of characters to be encoded in the bar code exceeds the maximum number of characters permitted for that bar code.
32	Specified value not in range	The command includes a value outside the valid range of values for the command.
33	Horizontal Spread not terminated	The Buffer Store Variable Data command ( <b>^J</b> ), which must be used in conjunction with the Horizontal Spread command ( <b>^Snniip^-</b> ), was not detected.
34	Column value exceeded range	While using the ( <b>^Cnn^-</b> ) command, the KodescriptPlus document includes a column number that exceeds the maximum number of columns permitted for the document.
35	Invalid KodescriptPlus Data Terminator command	The command includes a Data Terminator command other than ( <b>^FF^-</b> ), ( <b>^Fn^-</b> ), ( <b>^FR^-</b> ), ( <b>^G^-</b> ), or ( <b>^Rnnnnnn^-</b> ).
36	Data Terminator command – illegal character	The Data Terminator command includes a character other than a white (transparent) character or a control character.
37	Sectional Increment/Decrement command ( <b>IDSaCb±c</b> ) error	Either an illegal parameter value has been detected or the maximum number of 5 incremental/decremental sections has been exceeded.
38	An unknown format type has been coded	The format type specified by the Modify Data command ( <b>^Mdaa</b> ) cannot be found in the list of format types available.
39	Incorrect/Unknown multi-functional bar code command error	The "S" parameter of the ( <b>^Mbaa</b> ) ( <b>Hbbb</b> ) ( <b>Wccc</b> ) ( <b>Od</b> ) ( <b>Re</b> ) ( <b>Nf</b> ) ( <b>Fg</b> ) ( <b>Ihi</b> ) ( <b>Ej</b> ) ( <b>Ck1</b> ) ( <b>Bm</b> ) ( <b>S</b> ) either contains an unsupported bar code type or is incorrectly formatted.

**KodescriptPlus Errors**

<b>Code</b>	<b>Description</b>	<b>Explanation</b>
51	Excessive number of fields	The number of defined fields exceeds the maximum number permitted (499).
52	Excessive number of Hard Data fields	The number of defined Hard Data fields exceeds the maximum number permitted (99).
53	Excessive number of Line fields	The number of Line fields exceeds the maximum number permitted (99).
54	Excessive number of Reverse Image fields	The number of Reverse Image fields exceeds the maximum number permitted (49).
55	Excessive number of link fields within a field	The number of fields being linked within a field exceeds the maximum number permitted (5).
56	Undetermined link field Hard Data length	The terminating Hard Data Delimiter was not detected, which means that the length cannot be determined.
57	Cannot open file for reading	Occurs when a PCX file is specified in a KodescriptPlus file but is not found in the controller.
58	Cannot open file for writing	An error has occurred while writing a PCX file to the controller. This file will be corrupted.
59	Unable to write to file	The file created by the program is corrupted.
60	Distorted PCX file	The PCX file is corrupt. One possible cause is the use of a color PCX file.
61	Number of defined fields greater than supplied data	The number of fields coded as part of the KodescriptPlus program is greater than the number of printed data fields.
62	Defined fields less than supplied data	The amount of data supplied exceeds the number of fields coded as part of the KodescriptPlus program.
63	Command/data not correctly terminated	The buffer does not contain an appropriate terminating character.
64	Invalid Field Number character	The Field Number includes an invalid character.
65	Invalid Repeat Count	The Repeat Count includes an invalid character.
66	Data Condensing error	The number of characters to be printed in a field that is associated with the Data Condensing On command ( <b>^f01^-</b> ) exceeds the number of characters specified for that field.

*Continued on next page*

**Kodescript*Plus* Errors (continued)**

<b>Code</b>	<b>Description</b>	<b>Explanation</b>
67	Link field data length.	The amount of data supplied for a specific link field exceeds the amount of data specified.
68	Field number being linked does not exist.	The program cannot find a field number that was to be linked.
69	Maximum number of AIs (Application Identifications) has been exceeded.	The data stream for a UCC/EAN 128 bar code contains more than four allowable AIs.
70	Maximum length allowed for a variable-length AI has been exceeded.	A variable-length AI that contains more than the maximum number of characters allowed has been included in a UCC/EAN 128 bar code.
71	Maximum Length allowed for a fixed-length AI has been exceeded.	A variable-length AI that contains less than or more than the maximum number of characters allowed has been included in a UCC/EAN 128 bar code.
72	An invalid or unrecognized AI has been detected.	The data stream for a UCC/EAN 128 bar code contains an AI that cannot be found in the bar code specification list.

**KodescriptPlus Fatal Errors**

Code	Description	Explanation
81	Invalid Format command.	The data includes an invalid Format command.
82	Column Print command.	The Column Print command ( <b>^Cnn^-</b> ) should be used in conjunction with the Horizontal Spread command ( <b>^Snnip^-</b> ).
83	Repeat command should follow.	No Repeat command ( <b>^Rnnnnnn^-</b> ) follows the Buffer Store Variable Data command ( <b>^J</b> ).
84	Invalid tag/label length.	The Tag/Label length specified for the document exceeds the current form height setting for the printer.
86	Controller memory.	The SATO-Logic Controller does not contain sufficient memory for the function requested.
87	Invalid data has been specified for a customized text field.	The customized data to be printed in a text field does not pass the validation check required by the user-specified format type.
88	Invalid data has been detected in a specified bar code type.	The bar code to be printed does not pass the validation check required by the user-specified bar code type.

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## Introduction

This chapter explains the Supervisor Menu, which is used to create the printer's configuration parameters.

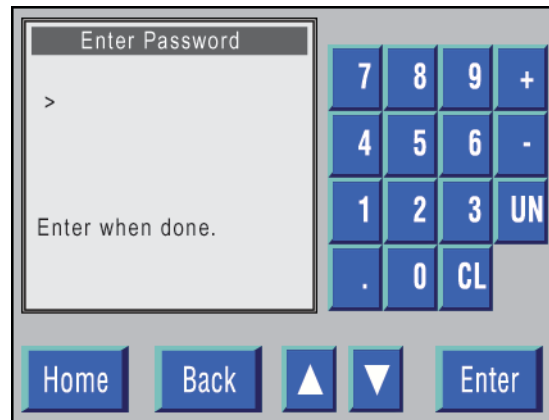
The printer uses fonts, logos, and formats created externally and then stored on the printer's hard drive. The print data, which includes information about the fonts, logos, and page format to be used, is sent to the LP 100R from a host computer.

Configuration parameters, however, must be set in the TDU before initiating a print job.

## Supervisor Menu

### Supervisor Menu Access

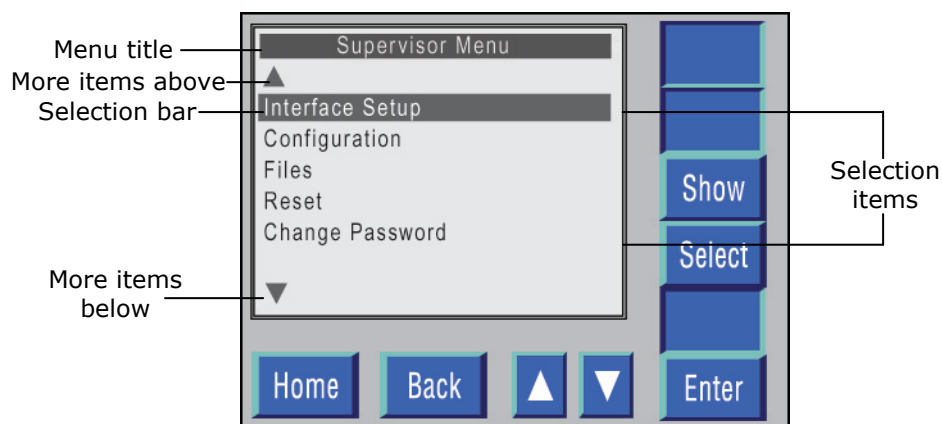
1. If the **POWER LED** is **not** green, press it for approximately 1 second and release.
2. Press **Menu** to display the Main Menu.
3. Select **Advanced** from the Main Menu.
4. Select **Supervisor** from the Advanced Menu.
5. If password protection is enabled, the following screen displays, and it will be necessary to enter a valid password on the numeric keypad to gain access to the Supervisor Menu:



**Figure 6-1. Password-protection enabled.**

If you do not have access to the required password, see your supervisor.

6. If password protection is not enabled, or if a valid password is entered, the following Supervisor Menu displays:



**Figure 6-2. Supervisor Menu.**

7. Each LP 100R menu includes a menu title and up to 5 selection items.
8. The **Up** and **Down** triangles indicate whether more selection items are available above or below the items displayed on the menu.
9. The currently selected item is highlighted by the selection bar.
10. Pressing **Up** or **Down** moves the selection bar either up or down 1 line each time-pressed.
11. The following functions can be selected from the Supervisor Menu:
- **Test Prints** – Evaluates the print quality and tests printer configurations before they are saved.
  - **Interface Setup** – Controls the operation of the printer's host communication interfaces.

- **Configuration** – Enables you to recall a previously created configuration, store a new configuration (using a numeric identifier), remove an existing configuration (by removing the identifier without removing the configuration), or edit the currently active configuration.  
**Important Note:** The **Edit** option provides access to all printer configuration elements (via the **Printer Setup** menu). By editing the currently active configuration, you can create a new configuration and (if desired) save it as a new stored configuration.
- **Files** – Enables you to manipulate fonts, logos, and formats stored on the printer's hard drive.  
It also allows you to install updated user files on the printer's hard drive from USB flash drives.  
Files procedures are contained in [Appendix B: Managing Files](#).
- **Reset** – Resets the printer and the SATO-Logic Controller.  
**Note:** Although included as part of the Supervisor Menu, this function is reserved for use by service personnel when troubleshooting a potential printer problem.
- **Cancel Job On Jam** – Allows you to specify how a job is handled in the event a jam occurs during processing.
- **Cancel Job On Field Error** – Allows you to specify how a job is handled in the event a field error is detected during processing.
- **Password Enable** – Allows you to either enable a password to protect the printer settings that you (the supervisor) are responsible for maintaining or to disable password protection if it is no longer desired.
- **Change Password** – If password protection is enabled, it allows you to change the current password to protect the printer settings you (the supervisor) are responsible for maintaining.
- **Time** – Time allows you to specify the time to be displayed on the TDU as either System Time, Up-Time (the length of time power to the printer has been turned on), Daylight Savings Time, or GMT (Greenwich Mean Time).
- **Network Time** – Tells the controller whether to use its Local System Time or synchronize with a Time server.

- **Define Overlay** – This option is not available at the present time.

**Note:** The printer should be in the Offline Idle mode when any supervisory functions are executed.

If the printer is not in the Offline Idle mode, a screen indicating the following displays:

Function Failure

Emulation Active

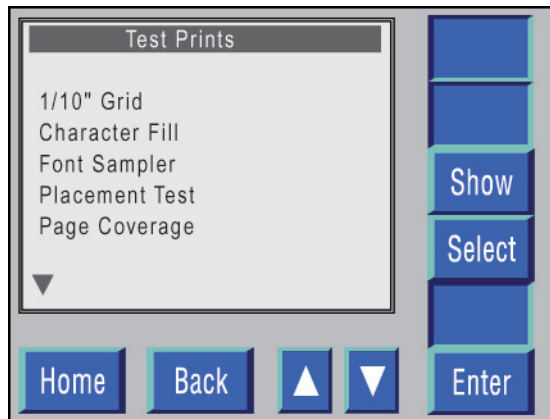
Printer must be Idle

## Test Prints Function

This function allows you to evaluate print quality and test printer configurations before they are saved.

### Test Prints Function Access

1. When the Supervisor Menu displays, press either the **Up** or **Down** triangle to move the selection bar to the **Test Prints** function.
2. Press **Enter**, which causes the following Test Prints menu to display:



**Figure 6-3. Test Prints menu.**

3. The functions that can be selected from the Test Prints menu include:

- 1/10" Grid
- Character Fill
- Font Sampler
- Placement Test
- Page Coverage
- User Files
- Font Detail

**Note:** Test Prints can **not** be printed on paper that is less than 8½" wide.

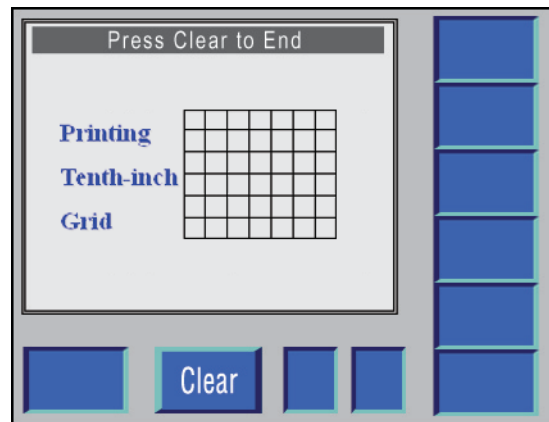
Because some Test Print patterns extend across standard 14½" paper when printed, we recommend 14½" paper be used when printing **any** test pattern to avoid missing part of the print data for that pattern.

## $\frac{1}{10}$ " Grid

The  $\frac{1}{10}$ " Grid test pattern is a printout of a graph paper pattern of 0.1" squares using the current form size. This test page allows you to evaluate the print quality, verify the form size, and check the horizontal and vertical alignment for the current configuration.

**Note:**  $\frac{1}{10}$ " Grid patterns can **not** be printed when a print job is in progress.

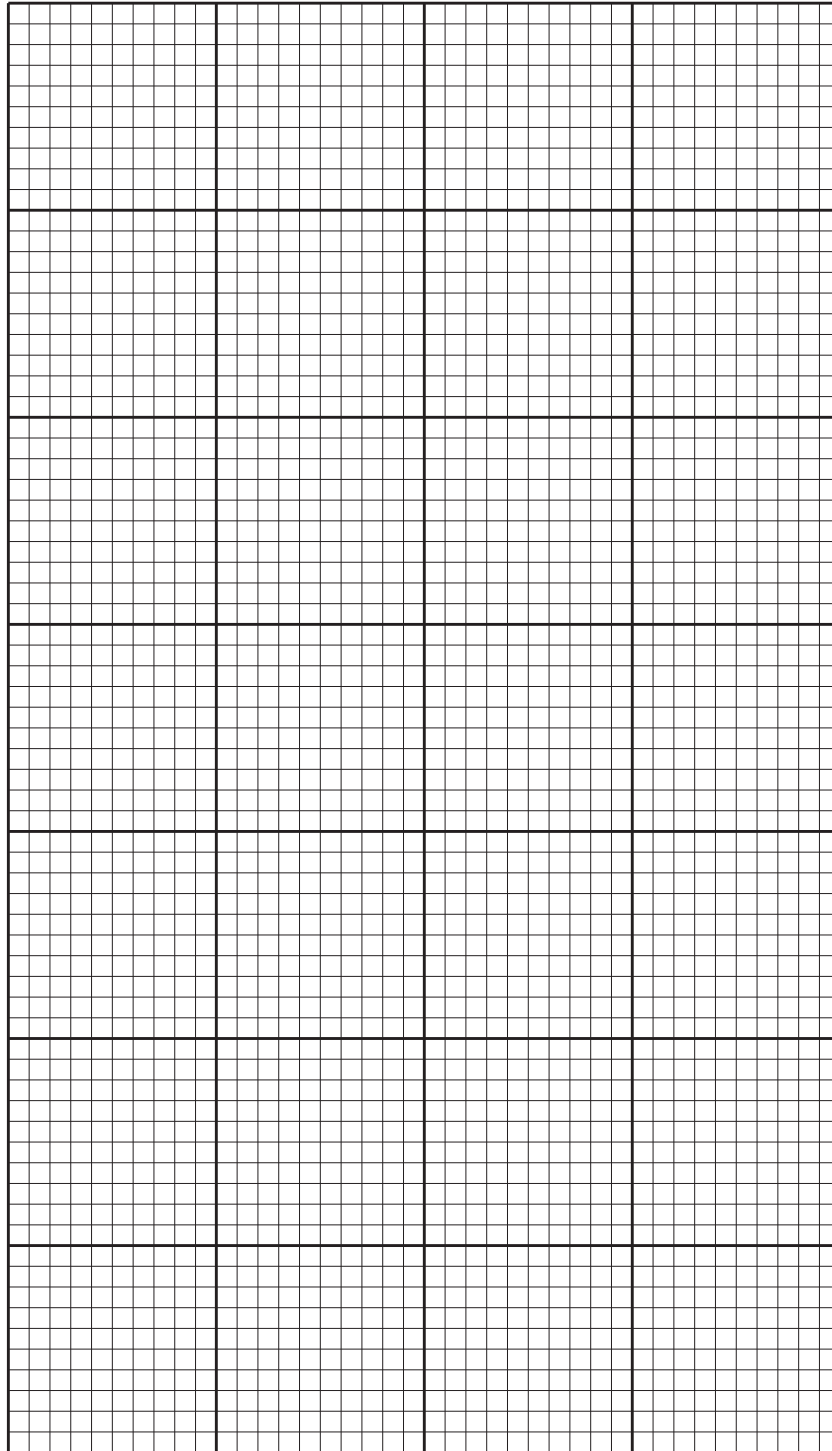
1. Press the **Up** or **Down** triangle on the Test Prints menu to move the selection bar to the  $\frac{1}{10}$ " Grid function.
2. Press **Enter**, which causes the following screen to display while the Grid is printing:



**Figure 6-4.**  $\frac{1}{10}$ " Grid test pattern.

3. To terminate printing, press **Clear**, which causes a *Cancelling Test Print* message to display.
4. When printing is terminated, the system returns to the Supervisor Menu.
5. Press **Feed** until the printed form completely ejects from the printer.





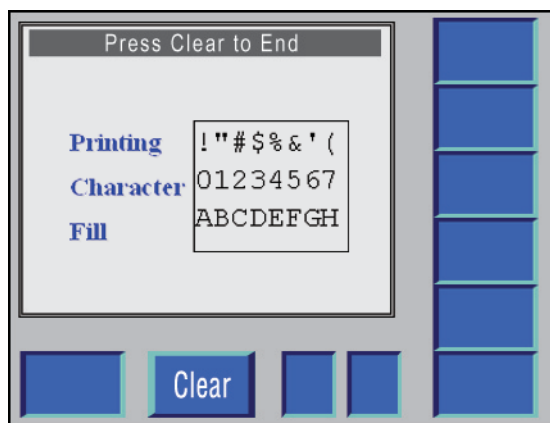
**Figure 6-5.  $\frac{1}{10}$ " Grid test pattern page.**

## Character Fill

The Character Fill test pattern selection prints a sliding alphanumeric character test in Courier font across the current form width and height, using the lines per inch and characters per inch settings for the printer. This selection lets you evaluate print quality and verify the printer's PostScript® Font Scaler operation.

**Note:** The Character Fill test pattern can **not** be printed when a print job is in progress.

1. Press the **Up** or **Down** triangle on the Test Prints menu to move the selection bar to the **Character Fill** function.
2. Press **Enter**, which causes the following screen to display while the Character Fill test pattern is printing:



**Figure 6-6. Character Fill test pattern.**

3. To terminate printing, press **Clear**, which causes a *Cancelling Test Print* message to display.
4. When printing is terminated, the system returns to the Supervisor Menu.
5. Press **Feed** until the printed form completely ejects from the printer.

```
) *+, -. /0123456789: ;<=>?@ABCDEFGHIJKLMNO
*+, -. /0123456789: ;<=>?@ABCDEFGHIJKLMNOP
+, -. /0123456789: ;<=>?@ABCDEFGHIJKLMNOPQ
-, -. /0123456789: ;<=>?@ABCDEFGHIJKLMNOPQR
-. /0123456789: ;<=>?@ABCDEFGHIJKLMNOPQRS
. /0123456789: ;<=>?@ABCDEFGHIJKLMNOPQRST
/0123456789: ;<=>?@ABCDEFGHIJKLMNOPQRSTU
'0123456789: ;<=>?@ABCDEFGHIJKLMNOPQRSTUVA
0123456789: ;<=>?@ABCDEFGHIJKLMNOPQRSTUVW
23456789: ;<=>?@ABCDEFGHIJKLMNOPQRSTUVWX
3456789: ;<=>?@ABCDEFGHIJKLMNOPQRSTUVWXY
456789: ;<=>?@ABCDEFGHIJKLMNOPQRSTUVWXYZ
56789: ;<=>?@ABCDEFGHIJKLMNOPQRSTUVWXYZ [
6789: ;<=>?@ABCDEFGHIJKLMNOPQRSTUVWXYZ [\
789: ;<=>?@ABCDEFGHIJKLMNOPQRSTUVWXYZ [\]
'89: ;<=>?@ABCDEFGHIJKLMNOPQRSTUVWXYZ [\]^
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@ABCDEFGHIJKLMNOPQRSTUVWXYZ [\]^
ABCDEFGHIJKLMNOPQRSTUVWXYZ [\]^
BCDEFGHIJKLMNOPQRSTUVWXYZ [\]^
CDEFGHIJKLMNOPQRSTUVWXYZ [\]^
DEFGHIJKLMNOPQRSTUVWXYZ [\]^
EFGHIJKLMNOPQRSTUVWXYZ [\]^
FGHIJKLMNOPQRSTUVWXYZ [\]^
GHIJKLMNOPQRSTUVWXYZ [\]^
HIJKLMNOPQRSTUVWXYZ [\]^
IJKLMNOPQRSTUVWXYZ [\]^
JKLMNOPQRSTUVWXYZ [\]^
KLMNOPQRSTUVWXYZ [\]^
LMNOPQRSTUVWXYZ [\]^
MNOPQRSTUVWXYZ [\]^
NOPQRSTUVWXYZ [\]^
OPQRSTUVWXYZ [\]^
PORSTUVWXYZ [\]^
```

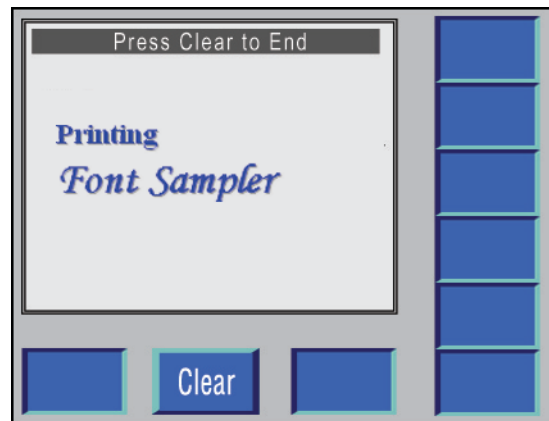
**Figure 6-7. Character Fill test pattern page.**

## Font Sampler

The Font Sampler page shows the name of each active font stored on the printer, including all base printer fonts and all user-installed PostScript and TrueType fonts stored in the active font directory. The page also shows the index number used by the LP 100R to track each font (on the left edge of the printout) and a sample of the font (on the right side of the printout).

**Note:** The Font Sampler can **not** be printed when a print job is in progress.

1. Press the **Up** or **Down** triangle on the Test Prints menu to move the selection bar to the **Font Sampler** function.
2. Press **Enter**, which causes the following screen to display while the Font Sampler is printing:



**Figure 6-8. Font Sampler screen.**

3. To terminate printing, press **Clear**.
4. Printing is terminated, and the system returns to the Supervisor Menu.
5. Press **Feed** until the printed form completely ejects from the printer.

When the page has printed, press **Feed** until the printed page is completely ejected from the printer.

<b>SATO-Logic Font Summary, Page 1</b>	
000	Coronet-Normal Path: SATO-Logic Base Font PCL.F 59007 0123456789; < = > ? @ ABCDEFGHIJKLMNOPQRSTUVWXYZ _ `abcdefghijklmnopqrstuvwxyz
100	Clarendon-Condensed Path: SATO-Logic Base Font PCL.F 59008 0123456789; < = > ? @ ABCDEFGHIJKLMNOPQRSTUVWXYZ _ `abcdefghijklmnopqrstuvwxyz
200	AntiqueOlive-Bold Path: SATO-Logic Base Font PCL.F 59009 0123456789; < = > ? @ ABCDEFGHIJKLMNOPQRSTUVWXYZ _ `abcdefghijklmnopqrstuvwxyz
300	AntiqueOlive-Normal Path: SATO-Logic Base Font PCL.F 59010 0123456789; < = > ? @ ABCDEFGHIJKLMNOPQRSTUVWXYZ _ `abcdefghijklmnopqrstuvwxyz
400	Garamond-Antiqua Path: SATO-Logic Base Font PCL.F 59011 0123456789; < = > ? @ ABCDEFGHIJKLMNOPQRSTUVWXYZ _ `abcdefghijklmnopqrstuvwxyz
500	Garamond-Kursiv Path: SATO-Logic Base Font PCL.F 59012 0123456789; < = > ? @ ABCDEFGHIJKLMNOPQRSTUVWXYZ _ `abcdefghijklmnopqrstuvwxyz
600	Garamond-Halbfett Path: SATO-Logic Base Font PCL.F 59013 0123456789; < = > ? @ ABCDEFGHIJKLMNOPQRSTUVWXYZ _ `abcdefghijklmnopqrstuvwxyz
700	Garamond-KursivHalbfett Path: SATO-Logic Base Font PCL.F 59014 0123456789; < = > ? @ ABCDEFGHIJKLMNOPQRSTUVWXYZ _ `abcdefghijklmnopqrstuvwxyz
800	AntiqueOlive-Italic Path: SATO-Logic Base Font PCL.F 59015 0123456789; < = > ? @ ABCDEFGHIJKLMNOPQRSTUVWXYZ _ `abcdefghijklmnopqrstuvwxyz
900	CGTimes-Normal Path: SATO-Logic Base Font PCL.F 59016 0123456789; < = > ? @ ABCDEFGHIJKLMNOPQRSTUVWXYZ _ `abcdefghijklmnopqrstuvwxyz
1000	CGTimes-Italic Path: SATO-Logic Base Font PCL.F 59017 0123456789; < = > ? @ ABCDEFGHIJKLMNOPQRSTUVWXYZ _ `abcdefghijklmnopqrstuvwxyz
1100	CGTimes-Bold Path: SATO-Logic Base Font PCL.F 59018 0123456789; < = > ? @ ABCDEFGHIJKLMNOPQRSTUVWXYZ _ `abcdefghijklmnopqrstuvwxyz
1200	CGTimes-BoldItalic Path: SATO-Logic Base Font PCL.F 59019 0123456789; < = > ? @ ABCDEFGHIJKLMNOPQRSTUVWXYZ _ `abcdefghijklmnopqrstuvwxyz
1300	CGOmega Path: SATO-Logic Base Font PCL.F 59020 0123456789; < = > ? @ ABCDEFGHIJKLMNOPQRSTUVWXYZ _ `abcdefghijklmnopqrstuvwxyz
1400	CGOmega-Italic Path: SATO-Logic Base Font PCL.F 59021 0123456789; < = > ? @ ABCDEFGHIJKLMNOPQRSTUVWXYZ _ `abcdefghijklmnopqrstuvwxyz
1500	CGOmega-Bold Path: SATO-Logic Base Font PCL.F 59022 0123456789; < = > ? @ ABCDEFGHIJKLMNOPQRSTUVWXYZ _ `abcdefghijklmnopqrstuvwxyz
1600	CGOmega-BoldItalic Path: SATO-Logic Base Font PCL.F 59023 0123456789; < = > ? @ ABCDEFGHIJKLMNOPQRSTUVWXYZ _ `abcdefghijklmnopqrstuvwxyz
1700	Albertus-Medium Path: SATO-Logic Base Font PCL.F 59024 0123456789; < = > ? @ ABCDEFGHIJKLMNOPQRSTUVWXYZ _ `abcdefghijklmnopqrstuvwxyz
1800	Albertus-Extrabold Path: SATO-Logic Base Font PCL.F 59025 0123456789; < = > ? @ ABCDEFGHIJKLMNOPQRSTUVWXYZ _ `abcdefghijklmnopqrstuvwxyz

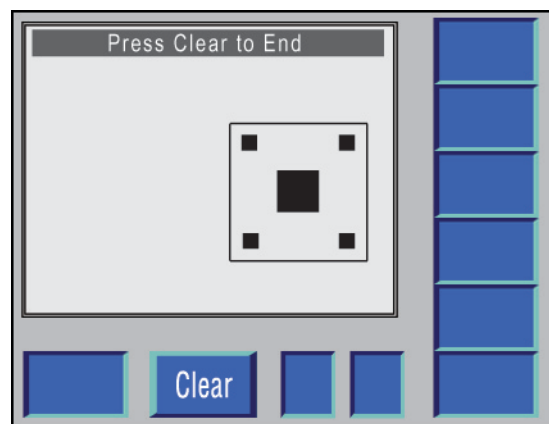
Figure 6-9. Font Sampler page.

## Placement Test

The Placement Test pattern page prints an array of filled boxes on the current form size. You can use this test page to verify the correct positioning of the image on the form.

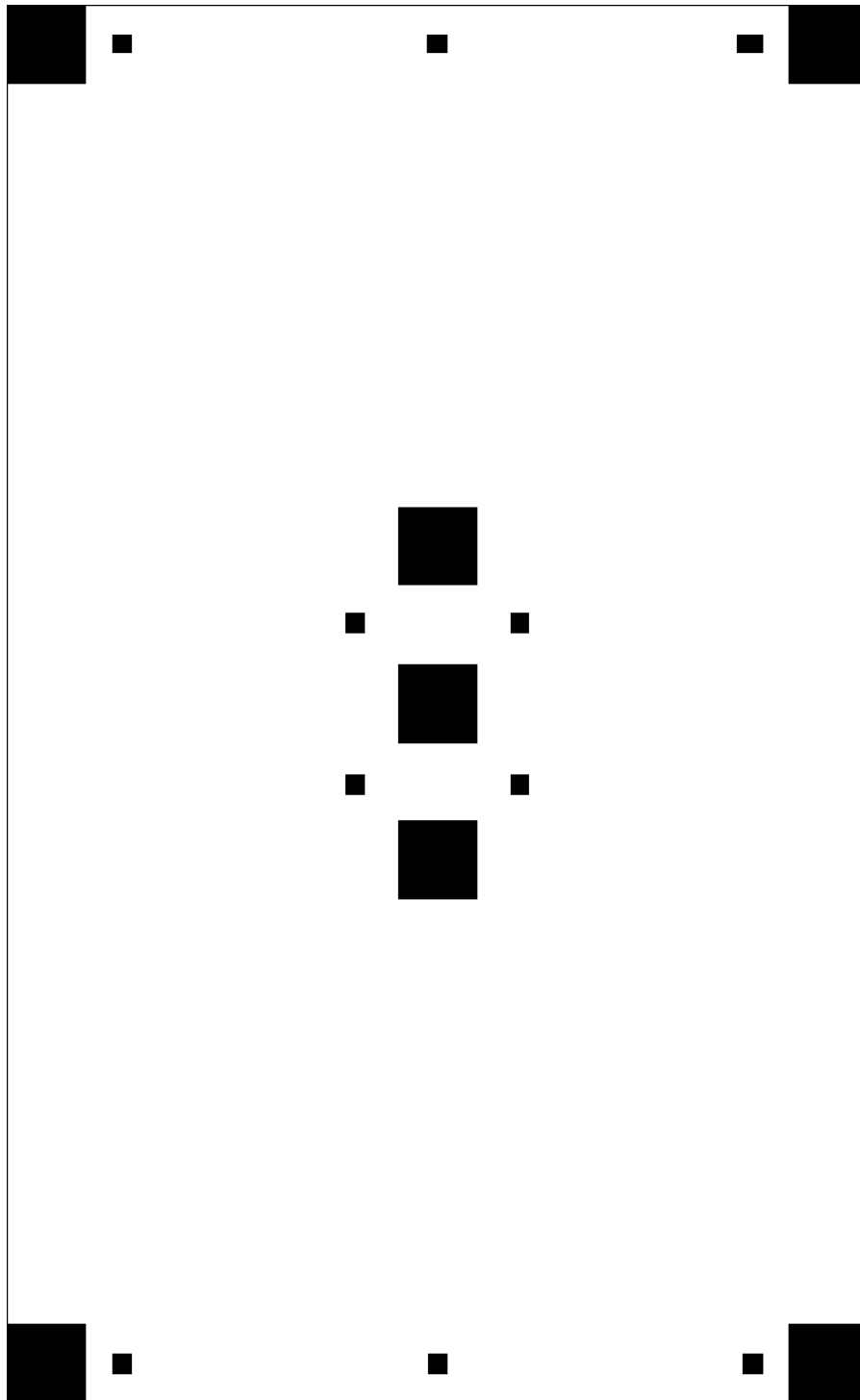
**Note:** The Placement Test pattern can **not** be printed when a print job is in progress.

1. Press the **Up** or **Down** triangle on the Test Prints menu to move the selection bar to the **Placement Test** function.
2. Press **Enter**, which causes the following screen to display while the Placement Test pattern is printing:



**Figure 6-10. Placement Test pattern.**

3. To terminate printing, press **Clear**, which causes a *Cancelling Test Print* Message to display.
4. When printing is terminated, the system returns to the Supervisor Menu.
5. Press **Feed** until the printed form completely ejects from the printer.



**Figure 6-11. Placement Test pattern.**

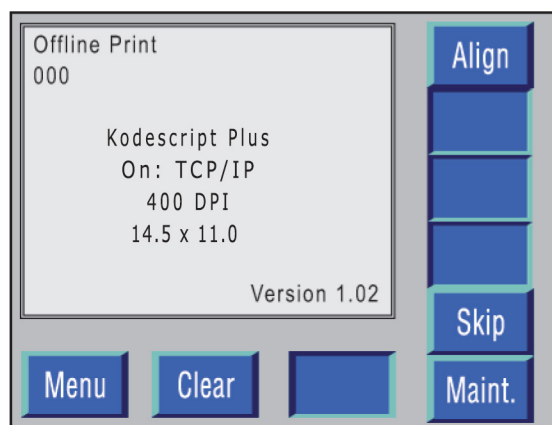
## Page Coverage

The Page Coverage display calculates the coverage of black pixels on the current bit-mapped page in the printer's memory. To get an accurate reading for page coverage, make sure you send an entire page of print data. The maximum page coverage supported by the LP 100R printer is 20%.

**Note:** The Display Page Coverage function should be executed only when the printer is in the Online Print mode and a print job is in progress.

Executing this function when the printer is in the Offline Idle mode will cause a *Coverage = 0%* message to be displayed.

1. Press the **OFFLINE** switch to change the printer from the Online Print mode to the Offline Print mode.
2. The following screen displays:

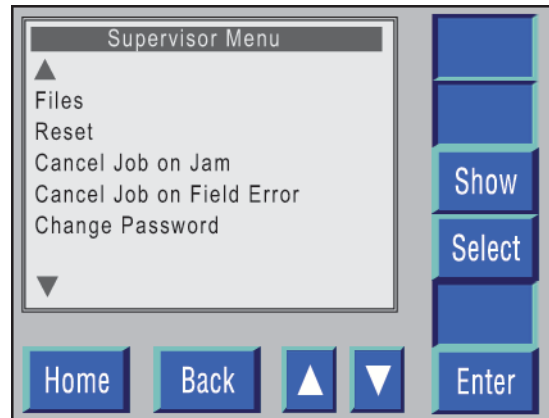


**Figure 6-12. Offline Print screen.**

3. Press **Menu**, which causes the Main Menu to display.
4. Press the **Up** or **Down** triangle to move the selection bar to the **Advanced** function.



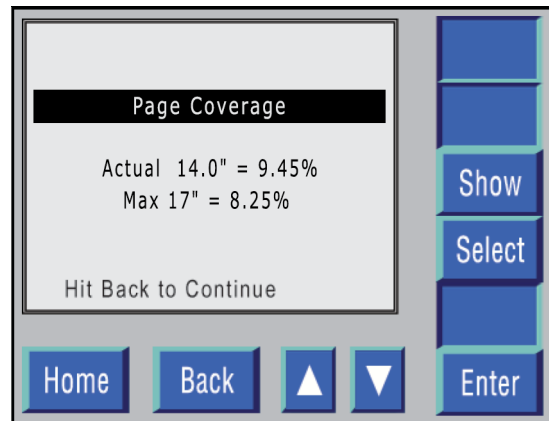
5. Press **Enter**, which causes the Advanced Menu to display.
6. Press the **Up** or **Down** triangle to move the selection bar to the **Supervisor** function.
7. Press **Enter**, which causes the following screen to display:



**Figure 6-13. Supervisor Menu screen.**

8. Press the **Up** or **Down** triangle to move the selection bar to the **Test Prints** function.
9. Press **Enter**, which causes the Test Prints menu to display.

10. Press the **Up** or **Down** triangle on the Test Prints menu to move the selection bar to the **Page Coverage** function.
11. Press **Enter**, which causes the following screen to display:



**Figure 6-14. Page Coverage Percentage.**

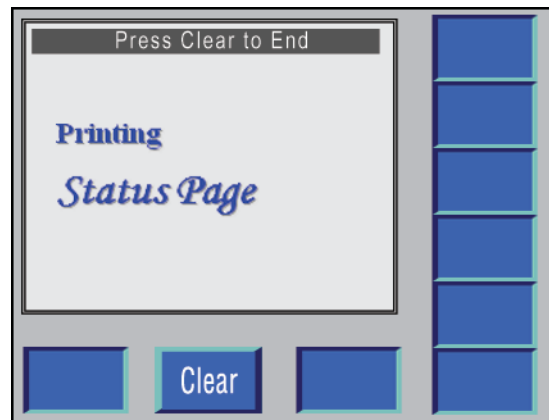
12. Press **Back** to return to the Supervisor Menu.
13. When the Supervisor Menu displays, press **Home** to return to the Offline Print screen.
14. When the Offline Print screen displays, press the **ONLINE** switch, which restarts the printing operation.

## User Files

The User Files function prints a list of the user-installed files on the printer's hard drive, including files in both the archive and active directories.

**Note:** The User Files can **not** be printed while a print job is in progress.

1. Press the **Up** or **Down** triangle on the Test Prints menu to move the selection bar to the **Print User Files** function.
2. Press **Enter**, which causes the following screen to display while the User Files are printing:



**Figure 6-15. User Files.**

3. To terminate printing, press **Clear**.
4. When printing is terminated, the system returns to the Supervisor Menu.
5. Press **Feed** until the printed form completely ejects from the printer.

User-Installed Active Font Files			
EURSNM__.PFB	EuroSansITC-Medium		51166 bytes
User-Installed Archived Font Files			
HVB____.PFB	Helvetica-Bold		29276 bytes
User-Installed Active Logo Files			
2DR54.PCX	462 x 261 pixels	400 x 400 dpi	20945 bytes
User-Installed Archived Logo Files			
2DR52.PCX			5321 bytes
User-Installed Active Format Files			
MUSIC.KOD			2329 bytes
User-Installed Archived Format Files			
METO.KOD			2329 bytes

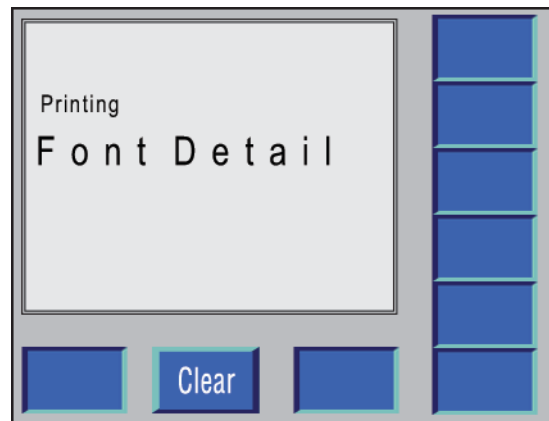
Figure 6-16. User Files printout.

## Font Detail

The Font Detail selection prints a sample of every character available when the Symbol Set and Primary Font are used in conjunction with one another. This can be very helpful when you want to verify the symbols that can be printed in the higher ASCII character set.

**Note:** A Font Detail can **not** be printed while a print job is in progress.

1. Press the **Up** or **Down** triangle on the Test Prints menu to move the selection bar to the **Font Detail** function.
2. Press **Enter**, which causes the following screen to display while the Font Detail is printing:



**Figure 6-17. Font Detail screen.**

3. To terminate printing, press **Clear**.
4. When printing is terminated, the system returns to the Supervisor Menu.
5. Press **Feed** until the printed form completely ejects from the printer.

[illegible]

## Interface Setup Function

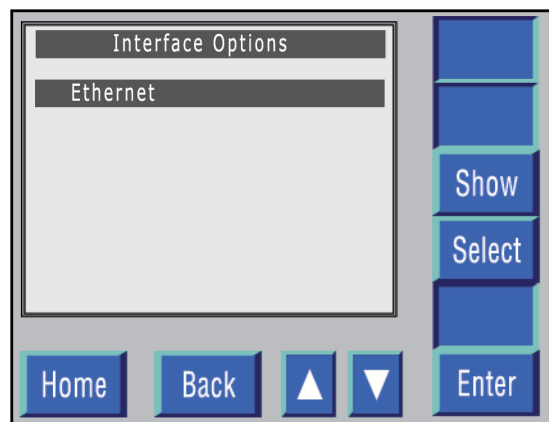
This function controls the operation of the printer's host communication interfaces (RS-232, Parallel, and Ethernet).

### Interface Setup Function Access

The Interface Setup menu, which controls communications interfaces' operation, displays all interfaces supported by the LP 100R printer regardless of whether each interface is installed. If you configure an interface that is not installed, the change will not affect the operation of the printer; but if that interface is installed at a later date, it may not work correctly.

**Note:** Interface settings can **not** be changed when a print job is in progress.

1. Press the **Up** or **Down** triangle when the Supervisor Menu displays to move the selection bar to the **Interface Setup** function.
2. Press **Enter**, which causes the following Interface Setup menu to display:



**Figure 6-19. Interface Setup menu.**

3. The functions that can be selected from the Interface Setup menu include:
  - RS-232
  - Ethernet

**Note:** To print a copy of the interface settings installed in your printer, see the procedure for printing a Status Page contained on [page 3-26](#).

## **RS-232 Interface**

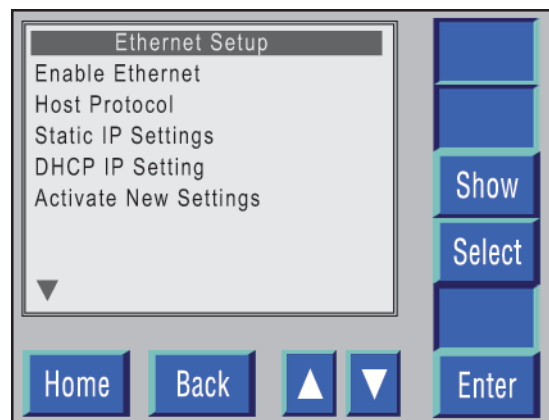
The serial port is a service aid and not intended for data transmission to the printer.



## Ethernet Setup

**Note:** The Ethernet settings can **not** be changed when a print job is in progress.

1. Press the **Up** or **Down** triangle on the Interface Setup menu to move the selection bar to the **Ethernet** function.
2. Press **Enter**, which causes the following Ethernet Setup menu to display:



**Figure 6-20. Ethernet Setup menu.**

3. The functions that can be selected from this menu include:
  - Enable Ethernet
  - Host Protocol
  - Static IP Settings
  - DHCP IP Settings
  - Activate New Settings
  - Job Trace
  - Windows Network Printing
  - Raw Printing

### Enable Ethernet (Enable/Disable Ethernet)

All computers on Ethernet networks share a common medium using an access method known as Carrier Sense Multiple Access with Collision Detect (CSMA/CD), which determines when a computer is free to transmit data to the access medium.

When CSMA/CD is used, all computers monitor the transmission medium and wait until the line is available before transmitting. Should two computers try to transmit simultaneously, a collision occurs that causes the computers to stop, wait for a random time interval, and then attempt to transmit again.

**Note:**

- Be very careful when modifying settings for a communication interface. Incorrect settings can result in the printer receiving garbled, incomplete, or extra data, causing the printer to operate poorly, print corrupted data, or "hang" indefinitely.
- When you press **Enter** to accept a setting for an interface, the changes are applied immediately. You do not need to reset or restart the printer.

The following options are available for the Ethernet Interface:

#### Enable/Disable Ethernet

- When the Ethernet setting is **enabled**, the Ethernet port is available for use.
- When the Ethernet setting is **disabled**, the Ethernet port is not available for use.

### Host Protocol

- **Static Routing** – Requires the network administrator to manually enter the Static IP routing information including the Static IP Address, Subnet Mask, and Gateway Address.
- **Dynamic Host Configuration Protocol (DHCP)** – Enables computers to receive TCP/IP configurations automatically. The DHCP IP address can be stored only. It cannot be changed.
- **BootP (Boot Prom)** – The BootP Protocol, which starts as the computer is powered on, loads an operating system into the computer by reading it from a network server instead of a local disk drive. The operating system located on the server is pre-built for a specific IP address.

### Activate New Settings

If a change is made to any of the options indicated below, the Activate New Settings option must be executed for the change or changes to be recognized:

- Enable/Disable Ethernet
- Host Protocol
- Static IP Settings

**Job Trace Enable/Disable**

- When Job Trace is **enabled**, whatever print job goes into the printer's print server will be archived into a directory that is File Transfer Protocol (FTP) accessible.
- When the Job Trace is **disabled**, print jobs going into the printer's print server will not be saved in the FTP folder.

**Windows Network Printing – Enable/Disable**

- When Windows Network Printing is **enabled**, data can be printed through Windows.
- When Windows Network Printing is **disabled**, data cannot be printed through Windows.

**Raw Printing (TCP/IP Setup)**

- **Port** – A port is a predefined internal address that serves as a pathway from the application to the transport layer or from the transport layer to the application.
- **Timeout** – The predefined length of wait time between the end of the first job and the start of the second job, before a determination is made that there are no more jobs in the print queue, causes a timeout to occur.

## Configuration Function

This function allows you to recall a previously created configuration, store a new configuration (using a numeric identifier), remove an existing configuration (by removing the identifier without removing the configuration), or edit the currently active configuration.

The **Edit** option in the Configuration function provides access to all printer configuration elements (via the **Printer Setup** menu). By editing the currently active configuration, you can create a new configuration and (if desired) save it as a new stored configuration.

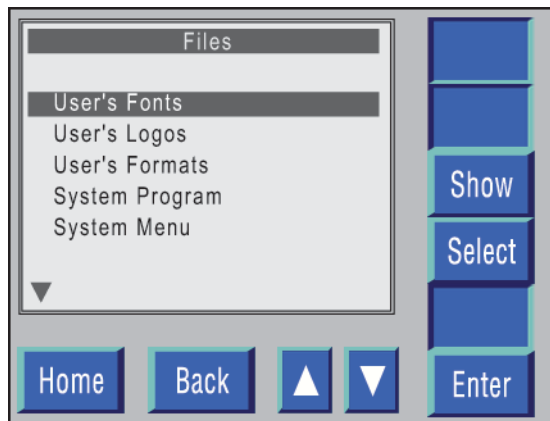
For detailed information on the Configuration function, see [Configuration Procedures](#) on page [6-57](#).

## Files Function

This function enables you to manipulate fonts, logos, and formats stored on the printer's hard drive.

### Files Function Access

1. When the Supervisor Menu displays, press either the **Up** or **Down** triangle to move the selection bar to the **Files** function.
2. Press **Enter**, which causes the following Files menu to display:



**Figure 6-21. Files menu.**

3. The functions that can be selected from the Files menu include:
  - User's Fonts
  - User's Logos
  - User's Formats
  - System Program
  - System Menu
  - User's Configuration
  - System Setup
  - System Error Log

**Note:**

- The Files menu has been included in this section only as a point of reference. See [Appendix B: Managing Files](#) for the procedures necessary for executing the Files function.
- You can also load fonts, logos, formats, system programs, and menu programs through a telnet session with a host system.

## Reset Function

This option resets the printer and the SATO-Logic Controller.

**Note:** The Reset menu has been included in this section only as a point of reference. Its use is limited to service personnel when troubleshooting a potential printer problem.

### Reset Function Access

1. When the Supervisor Menu displays, press either the **Up** or **Down** triangle to move the selection bar to the **Reset** function.
2. Press Enter, which causes the following menu to display:



**Figure 6-22. Reset menu.**

3. The functions that can be selected from the Reset menu include:
  - Reset SATO-Logic
  - Reset Engine
  - Reset All
  - Reset Defaults

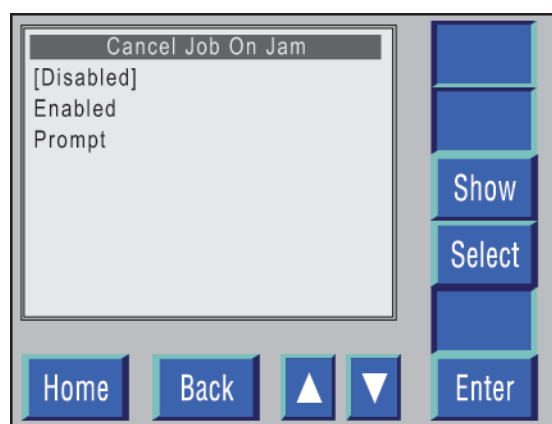
## Cancel Job On Jam Function

The Cancel Job On Jam function defines the corrective options available if a jam occurs during processing.

### Cancel Job On Jam Function Access

**Note:** Cancel Job On Jam settings can **not** be changed when a print job is in progress.

1. Press the **Up** or **Down** triangle when the Supervisor Menu displays to move the selection bar to the **Cancel Job On Jam** function.
2. Press **Enter**, which causes the following Cancel Job On Jam menu to display:



**Figure 6-23. Cancel Job On Jam menu.**

3. The functions that can be selected from the Cancel Job On Jam menu include:
  - **Disabled** – Causes the balance of the job to be printed when the jam has been cleared.
  - **Enabled** – Causes the balance of the job to be canceled when the jam has been cleared.
  - **Prompt** – Allows you to selectively determine, on a job-by-job basis, whether to cancel the balance of the job or print the balance of the job when the jam has been cleared.

## Disabled/Enabled (Cancel Job On Jam)

This causes the balance of the job to be printed (if **Disabled** is selected) or canceled (if **Enabled** is selected) when the jam has been cleared.

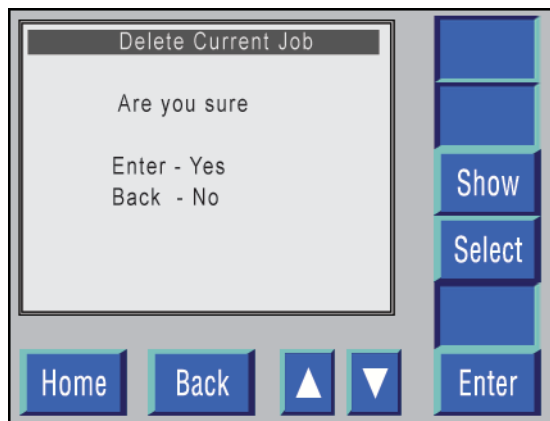
1. The audible alarm sounds indicating that a jam has occurred.
2. A relevant jam error message displays on the TDU.
3. Press the **BEEP** button to turn off the alarm.
4. Clear the jam from the printer.
5. Press **Clear**.
6. The system returns to the Main Menu and indicates, in the upper left, that it is in the Offline Print mode.
7. Reload the appropriate stock in the printer and set the correct top of form.
8. Press the **ONLINE** switch.
9. If the **Disabled** function was set, the balance of the current job will be printed, followed by the next job in the print queue.
10. If the **Enabled** function was set, the balance of the current job has been canceled, and the next job in the print queue will print.



## Prompt (Cancel Job On Jam)

This function allows you to selectively determine, on a job-by-job basis, whether to cancel the balance of the job or print the balance of the job when the jam has been cleared.

1. The audible alarm will sound indicating that a jam has occurred.
2. A relevant jam error message displays on the TDU.
3. Press the **BEEP** button to turn off the alarm.
4. Clear the jam from the printer.
5. Press **Clear**.
6. The following screen displays:



**Figure 6-24. Cancel Job On Jam – Prompt function selected.**

7. If the balance of the current job is to be canceled, press **Enter**.
8. If the balance of the current job is to be printed, press **Back**.
9. The system returns to the Main Menu and indicates, in the upper left, that it is in the Offline Print mode.
10. Reload the appropriate stock in the printer and set the correct top of form.
11. Press the **ONLINE** switch.
12. If **Back** was selected, the balance of the current job will be printed, followed by the next job in the print queue.
13. If **Enter** was selected, the balance of the current job has been canceled, and the next job in the print queue will print.

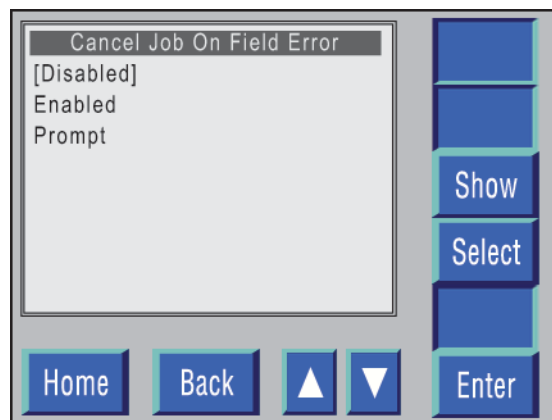
## Cancel Job On Field Error Function

The Cancel Job On Field Error function defines the corrective options available in the event a field error is detected during processing.

### Cancel Job On Field Error Function Access

**Note:** Cancel Job On Field Error settings can **not** be changed when a print job is in progress.

1. Press the **Up** or **Down** triangle when the Supervisor Menu displays to move the selection bar to the **Cancel Job On Field Error** function.
2. Press **Enter**, which will cause the following Cancel Job On Field Error menu to display:



**Figure 6-25. Cancel Job On Field Error menu.**

3. The functions which can be selected from the Cancel Job On Field Error menu include:
  - **Disabled** – If the Disabled function is selected, the errors will be printed, and the balance of the current job will be printed, followed by the next job in the print queue.
  - **Enabled** – If the Enabled function is selected, no errors are printed, the balance of the current job is canceled, and the next job in the print queue will start to print.
  - **Prompt** – Allows you to selectively determine, on a job-by-job basis, whether to cancel the balance of the job or print the balance of the job when the field error is detected.

### Disabled/Enabled (Cancel Job On Field Error)

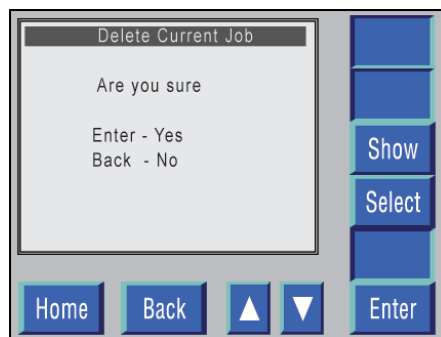
This causes the balance of the job to be printed (if **Disabled** is selected) or canceled (if **Enabled** is selected) when the field error has been cleared.

1. The audible alarm will sound indicating that a field error has been detected.
2. The system returns to the Main Menu and indicates, in the upper left, that it is in the Offline Print mode.
3. Press the **ONLINE** switch.
4. If the **Disabled** function was set, the errors and balance of the current job will be printed, followed by the next job in the print queue.
5. If the **Enabled** function was set, the balance of the current job will be canceled, and the next job in the print queue will print.

### Prompt (Cancel Job On Field Error)

Allows you to selectively determine, on a job-by-job basis, whether to cancel the balance of the job or print the balance of the job when the field error is detected.

1. The audible alarm will sound, indicating that a field error has occurred.
2. The system returns to the Main Menu and indicates, in the upper left, that it is in the Offline Print mode.
3. Press the **ONLINE** switch.
4. The following screen displays:



**Figure 6-26. Cancel Job On Field Error – Prompt function selected.**

5. If the balance of the current job is to be canceled, press **Enter**.
6. If the balance of the current job is to be printed, press **Back**.
7. If **Back** was selected, the balance of the current job will be printed, followed by the next job in the print queue.
8. If **Enter** was selected, the balance of the current job has been canceled, and the next job in the print queue will print.

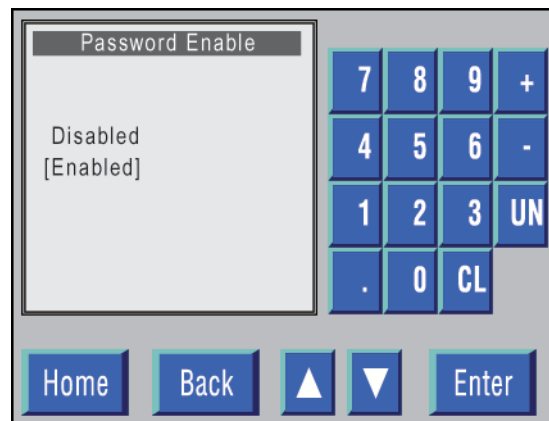
## Password Enable Function

The Password Enable function allows you to either initiate or terminate password protection.

If password protection is enabled, access to the Supervisor Menu is inhibited until a valid password is entered.

### Password Enable Function Access

1. Press the **Up** or **Down** triangle on the Supervisor Menu to move the selection bar to the **Password Enable** function.
2. Press **Enter**, which causes the following Password Enable screen to display:



**Figure 6-27. Password Enable menu.**

**Note:**

- Brackets ( [ ] ) around either Disabled or Enabled indicate that it is the default configuration password status.
- An arrow (→) pointing to either Enabled or Disabled indicates the status assigned to the current configuration.

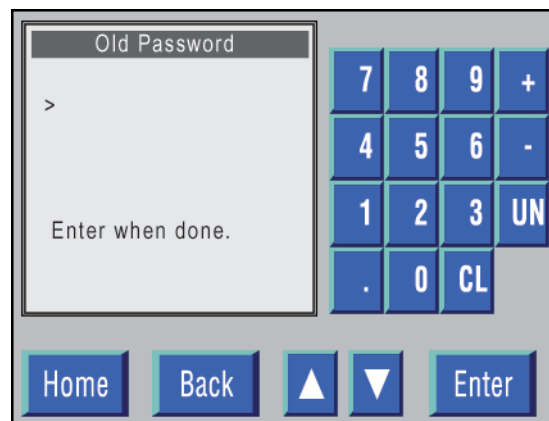
3. Press the **Up** or **Down** triangle to move the selection bar to the desired status, either **Disabled** or **Enabled**.
4. Press **Enter**, which stores the status selected and returns the system to the Supervisor Menu.

## Change Password Function

The Change Password function allows you to change the current password to a new number.

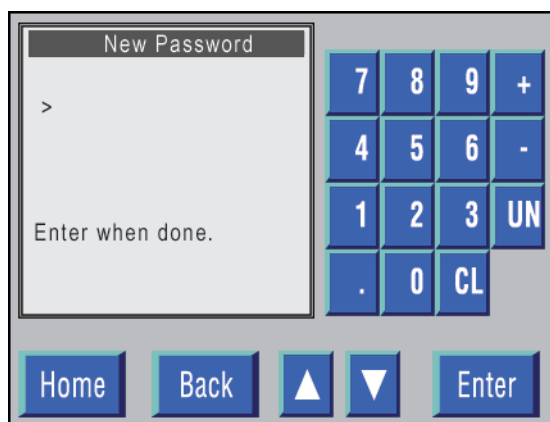
### Change Password Function Access

1. Press the **Up** or **Down** triangle on the Supervisor Menu to move the selection bar to the **Change Password** function.
2. Press **Enter**, which causes the following screen to display:



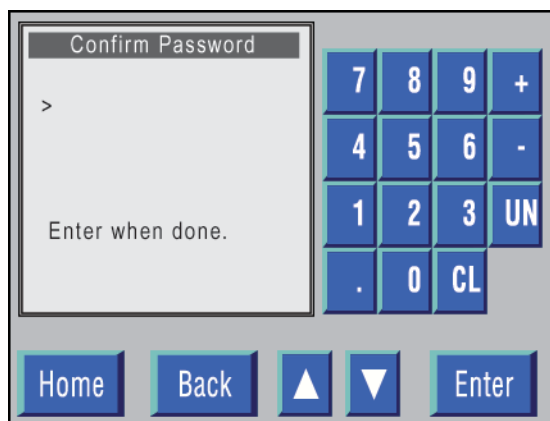
**Figure 6-28. Change Old Password.**

3. Enter the current password and press **Enter**, which causes the following screen to display:



**Figure 6-29. New Password.**

4. Enter the new password and press **Enter**, which causes the following screen to display:



**Figure 6-30. Confirm Password.**

5. Re-enter the new password and press **Enter**.
6. The new password is stored, and the system returns to the Supervisor Menu.

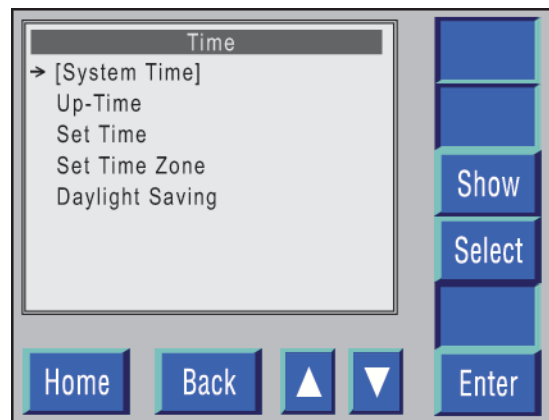
## Time Function

The Time menu allows you to select the time configuration that is most compatible with your system requirements.

**Note:** Time settings can **not** be changed when a print job is in progress.

### Time Function Access

1. When the Supervisor Menu displays, press either the **Up** or **Down** triangle to move the selection bar to the **Time** function.
2. Press **Enter**, which causes the following Time menu to display:



**Figure 6-31. Time menu.**

3. The following functions can be selected from the Time menu:
  - **System Time** – System Time as HH:MM:SS, with the HH position expressed in military time (i.e., 1:00 P.M. through midnight is displayed as 13:00–24:00).

- **Up-Time** – The length of time that power to the printer has been turned on, expressed as either HH:MM: SS if less than 24 hours or DDD:HH: MM if more than 24 hours.

**Note:** Up-Time cannot be changed. It is, however, negated when power to the printer is turned off.

- **Set Time** – Allows you to change the System Time to either an earlier or later time.
- **Set Time Zone** – Allows you to set the GMT (Greenwich Mean Time) to the applicable GMT Offset Time.
- **Daylight Saving** – Allows the automatic start and discontinuance of Daylight Savings Time when the System Time is in effect.

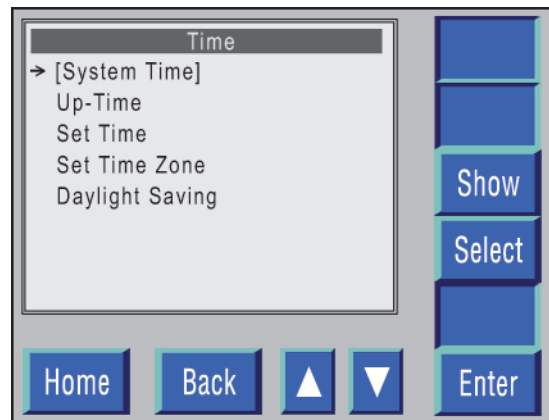
**Note:** The Daylight Saving function does **not** work in conjunction with GMT Time.



## System Time

This sets the system time clock as HH:MM:SS, with the HH position expressed in military time (i.e., 1:00 P.M. through midnight is displayed as 13:00–24:00).

1. Press the **Up** or **Down** triangle on the Supervisor Menu to move the selection bar to the **Time** function.
2. Press **Enter**, which causes the following Time menu to display:



**Figure 6-32. Time menu.**

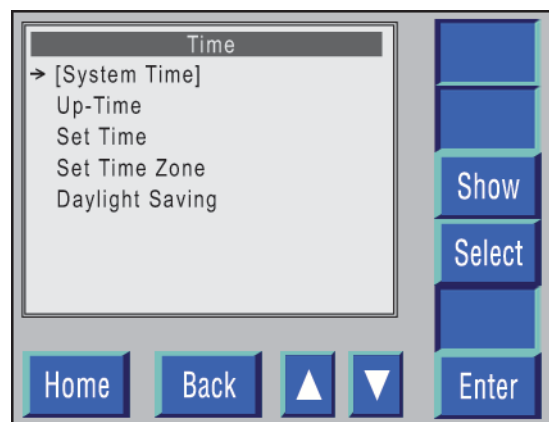
3. Press the **Up** or **Down** triangle to move the selection bar to the system **Time** function.
4. Press **Enter**, which sets the System Time clock and returns the system to the Supervisor Menu.

## Up-Time

The sets the up-time clock to the length of time that power to the printer has been turned on. It is expressed as either HH:MM: SS if less than 24 hours or DDD:HH: MM if more than 24 hours.

**Note:** Up-Time cannot be changed. It is, however, negated when power to the printer is turned off.

1. Press the **Up** or **Down** triangle on the Supervisor Menu to move the selection bar to the **Time** function.
2. Press **Enter**, which causes the following Time menu to display:



**Figure 6-33. Time menu.**

3. Press the **Up** or **Down** triangle to move the selection bar to the **Up-Time** function.
4. Press **Enter**, which sets the Up-Time clock and returns the system to the Supervisor Menu.

## Set Time

This allows you to change the System Time to either an earlier or later time.

1. Press the **Up** or **Down** triangle on the Supervisor Menu to move the selection bar to the **Up-Time** function.
2. Press **Enter**, which causes the following Time menu to display:

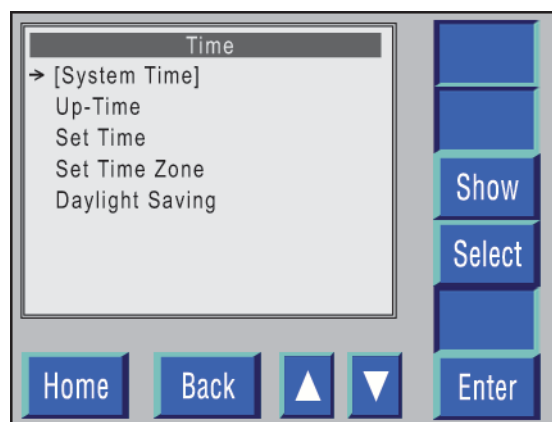


Figure 6-34. Time menu.

3. Press the **Up** or **Down** triangle to move the selection bar to the **Set Time** function.
4. Press **Enter**, which causes the following screen to display:

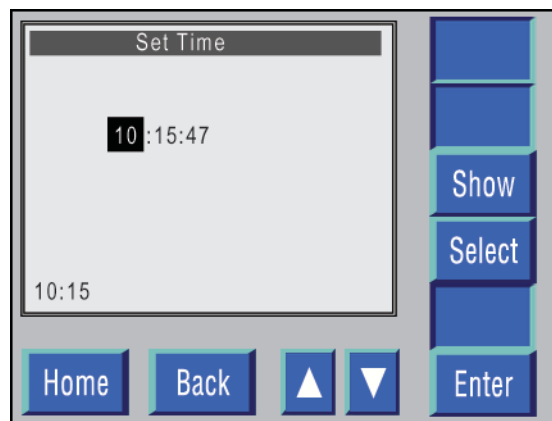


Figure 6-35. Set Time.

5. Each segment of System Time (HH:MM:SS) is set by:
  - a. Pressing the **Down** triangle to change the time segments to an earlier time or pressing the **Up** triangle to change the time segments to a later time.
  - b. Press **Enter** after each change to advance to the next segment.
6. Pressing **Enter**, after the SS time segment has been entered, sets the new System Time and returns the system to the Supervisor Menu.

## Set Time Zone

This allows you to set the GMT (Greenwich Mean Time) to the applicable GMT Offset Time.

1. Press the **Up** or **Down** triangle on the Supervisor Menu to move the selection bar to the **Time** function.
2. Press **Enter**, which causes the following Time menu to display:

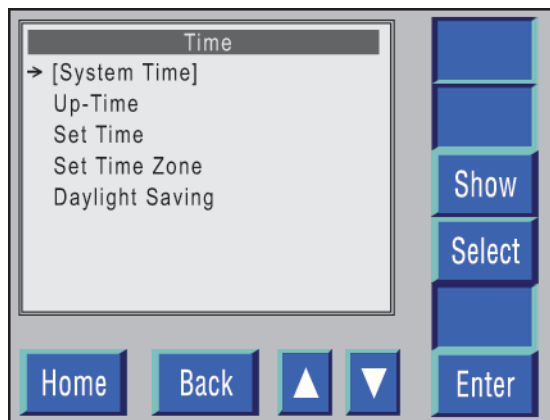


Figure 6-36. Time menu.

3. Press the **Up** or **Down** triangle on the Supervisor Menu to move the selection bar to the **Set Time Zone** function.
4. Press **Enter**, which causes the following Set Time Zone screen to display:

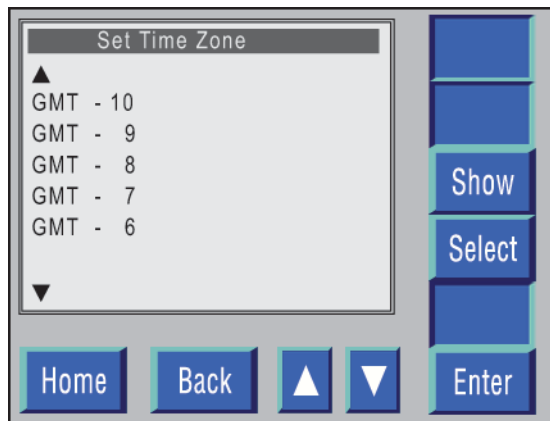


Figure 6-37. Set Time Zone screen.

5. Press **Enter**, which sets the GMT Offset Time and returns the system to the Supervisor Menu.

**Standard Time Zones**

GMT	Civilian
GMT	GMT: Greenwich Mean
	UT: Universal
	UTC: Universal Coordinate
	WET: Western European

**East of Greenwich Time Zone**

GMT	Civilian
+ 1	CET: Central European
+ 2	EET: Eastern Europe
+ 3	BT: Baghdad
+ 4	
+ 5	
+ 6	
+ 7	
+ 8	CCT: China Coast
+ 9	JST: Japan Standard
+10	GST: Guam Standard
+11	
+12	Idle International Date Line East NZST: New Zealand Standard

**West of Greenwich Time Zone**

GMT	Civilian
- 1	WAT: West Africa
- 2	Mid-Atlantic
- 3	
- 4	AST: Atlantic Standard
- 5	EST: Eastern Standard
- 6	CST: Central Standard
- 7	MST: Mountain Standard
- 8	PST: Pacific Standard
- 9	YST: Yukon Standard
-10	AHST: Alaska-Hawaii Standard
	CAT: Central Alaska
	HST: Hawaii Standard
-11	NT: Nome
0	GMT: Greenwich Mean

**Figure 6-38. GMT offset tables.**

## Daylight Saving

This allows the automatic start and discontinuance of Daylight Savings Time when the System Time is in effect.

**Note:** The Daylight Saving function does **not** work in conjunction with GMT Time.

1. Press the **Up** or **Down** triangle on the Supervisor Menu to move the selection bar to the **Daylight Saving** function.
2. Press **Enter**, which causes the following Time menu to display:

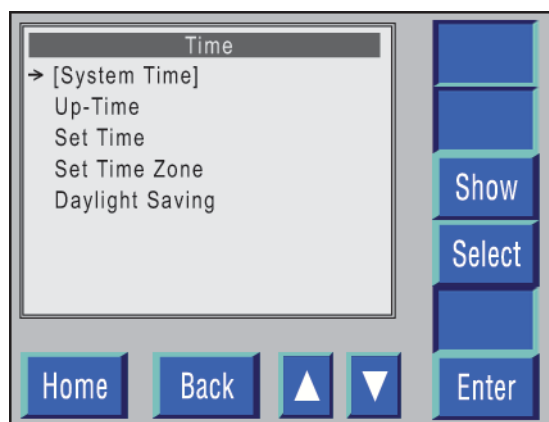


Figure 6-39. Time menu.

3. Press the **Up** or **Down** triangle to move the selection bar to the **Daylight Saving** function.
4. Press **Enter**, which causes the following screen to display:



Figure 6-40. Daylight Saving screen.

5. If Daylight Saving Time is **not** to be used:
  - a. Press the **Up** or **Down** triangle to move the selection bar to **Disabled**.
  - b. Press **Enter**, which inhibits Daylight Saving Time and returns the system to the Supervisor Menu.
6. If Daylight Saving Time is to be used:
  - a. Press the **Up** or **Down** triangle to move the selection bar to **Enabled**.
  - b. Press **Enter**, which selects Daylight Saving and returns the system to the Supervisor Menu.



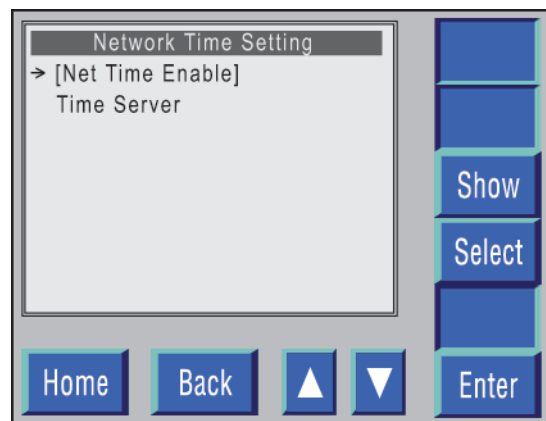
## Network Time Setting Function

The Network Time Setting function defines whether the SATO-Logic Controller is to use the Local System Time or whether it is to synchronize the time with a Time Server.

**Note:** Network Time Settings can **not** be changed when a print job is in progress.

### Network Time Setting Function Access

1. Press the **Up** or **Down** triangle when the Supervisor Menu displays to move the selection bar to the **Network Time Setting function**.
2. Press **Enter**, which causes the following Network Time Setting menu to display:



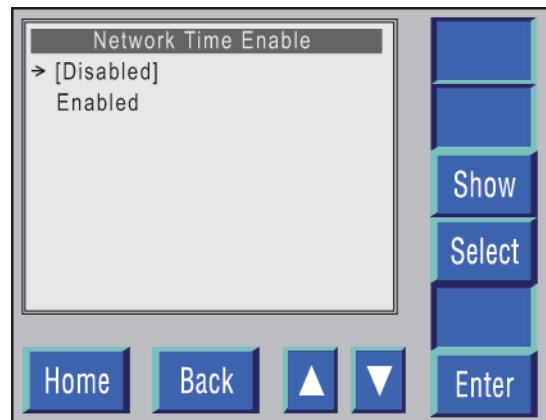
**Figure 6-41. Network Time Setting menu.**

3. The functions that can be selected from the Network Time Setting Menu include:
  - **Net Time Enable** – Specifies whether or not the Local System Time will be used.
  - **Time Server** – Permits changing the Server Time IP address if Server Time will be used.

## Network Time Enable (Select Local System Time)

This allows you to specify whether or not the Local System Time will be used.

1. Press the **Up** or **Down** triangle on the Network Time Setting menu to move the selection bar to the **Net Time Enable** function.
2. Press **Enter**, which causes the following screen to display:



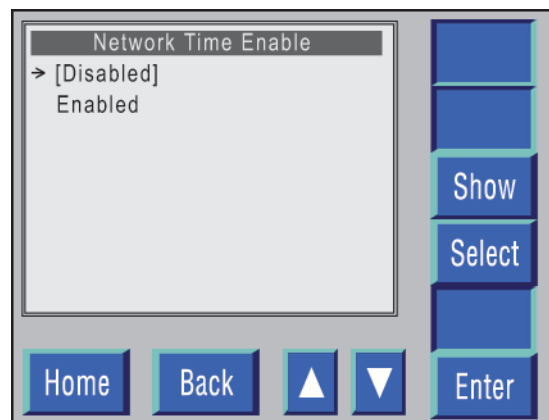
**Figure 6-42. Network Time Enable menu.**

3. Press the **Up** or **Down** triangle on the Network Time Enable menu to move the selection bar to the **Disabled** function.
4. Press **Enter**, which selects the Local System Time as the time to be used, and return the system to the Network Time menu.

## Network Time Enable (Select Server Time)

This permits changing the Server Time IP address if Server Time will be used.

1. Press the **Up** or **Down** triangle on the Network Time Setting menu to move the selection bar to the **Network Time Enable** function.
2. Press **Enter**, which causes the following screen to display:

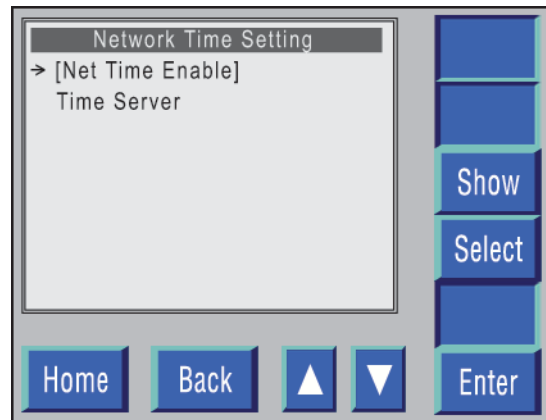


**Figure 6-43. Network Time Enable menu.**

3. Press the **Up** or **Down** triangle on the Network Time Enable menu to move the selection bar to the **Enabled** function.
4. Press **Enter**, which selects the Server Time as the time to be used.
5. A *Synchronization Successful* message displays and the system returns to the Network Time Setting menu.

## Time Server (Enter/Change Time Server IP Address)

1. When the Supervisor Menu displays, press the **Up** or **Down** triangle to move the selection bar to the **Network Time Setting** function.
2. Press **Enter**, which causes the following screen to display:



**Figure 6-44. Network Time Setting menu.**

3. Press the **Up** or **Down** triangle to move the selection bar to the **Time Server** function.

- Press **Enter**, which causes the following screen to display:

Time  
Server  
192118000001

Unit: None  
Min: 0  
Max: 999999999999  
Step: 1

7 8 9 +  
4 5 6 -  
1 2 3 UN  
. 0 CL

Home Back ▲ ▼ Enter

**Figure 6-45. Time Server.**

- Enter the desired IP address.
- If the IP address entered is valid, a *Synchronization Successful* message displays, and the system returns to the Network Time menu.
- If the IP address entered is not valid, a *Synchronization Failed* message displays, and the system returns to the Network Time menu.

## Configuration Procedures

### Configuration Introduction

You can use the LP 100R TDU to create up to 999 printer configurations, each identified by a numeric value from 001 to 999. The factory default configuration is identified as Configuration 000.

To set up or change configurations, you access the [Configuration function](#) (from the Supervisor menu). See [page 6-60](#).

**Note:** The factory default configuration, which must be available to control printing if no configuration or an invalid configuration has been loaded, can **not** be modified. However, it can be recalled and assigned a new configuration number that, in effect, provides two copies of the default configuration. The original copy is retained as 000, and the second copy that has been assigned the new number is used as the basis for creating new configurations.

### Printer Start-up

When the printer successfully completes the start-up procedure, the last configuration used, either default or user-defined, automatically loads.

### Modifying or Creating a New Configuration

When modifying an existing configuration or creating a new configuration, it is helpful to know the current settings to ensure that all of the settings are correct. To identify these current settings:

- Print out a Status Page, which shows the current settings active on the printer and the current active configuration number.
- Print out the Stored and Default Configuration, which shows those configuration numbers that are already defined on the printer and the settings for each of these configurations.

An example of the Status Page and the Stored and Default Configuration follows.

## Status Page

The Status Page defines the parameters of the configuration currently loaded in the printer as indicated in the example that follows:

# SATO-LOGIC™

## STATUS PAGE

Printer sn E00900007


October 27, 2020

ctl sn GBG4400075AEB

Hardware Information

Printer Model:	LP 100R	OS Setup Version:	E.08-00/GB
Processor:	G4400 3.30GHz	SATO-Logic Release:	7.05.18
System Memory:	8000 MB	EIF II Version:	4.3-00
Language:	English	PIFC Board Type:	II ID 06 / EC 03
Dead Zone:	Normal	MC1 Version:	4.3-00
Job Cancel (Jam):	Disable	MC2 Version:	3.2-00
Job Cancel (FE):	Disable	SC Version:	4.1-00
AIDC Threshold:	28	TDU Panel Model:	8.5"-GOP-5084H
Line End Enable:	Enabled	TDU Firmware Version:	1.0.9
Print Redirect:	Yes	TDU Screen Data Ver:	1.0.4
Clean Engine cycle:	50000	Net Time Protocol:	Disable
Toner Warning Msg.:	Disabled	Net Time Server:	129.6.15.28
Status File:	Disabled	Time Display:	System Time
TowerLED:	Enabled	Time Zone:	GMT -5
Daylight saving:	Enabled	Job Separator Option:	Not Available
Clean Printer Message:	Enabled		

Communication



Ethernet

00:30:18:07:5A:EB

SATO075AEB

Enabled

expected : Static

detected : static

Connected(static)

IP Addr: 192.168.3.102

Mask: 255.255.254.0

Gateway: 192.168.2.254

DNS: 192.168.2.4

Socket Buffer: 16 Byte

Raw Port No.: 9100

Ack Char: Disabled

FTP :

Samba:

LPR Queue Name:

Max Conn.:

TCP/IP timeout:

Disabled

Disabled

LIS\_SATO

3

5000

Current Configuration

Configuration:	000 (Default)	Resolution:	400 DPI
Form Height:	11.000"	EAS Option:	Disabled
Print Width:	14.500"	Reverse Mode:	Disabled
Vertical Adjust:	0.00 inch	Energy Fusion:	Low
Horizontal Adjust:	0.00 inch	Paper Suction:	Auto
Orientation:	Portrait	AIDC Mode:	Enabled
Lines Per Inch:	6.000	Roll to Roll Mode :	Disabled
Chars Per Inch:	10.000	Splice Detect Mode :	Disabled
Symbol Set:	W1:Windows 3.1 Latin	IPages To Skip(Splice):	0
Primary Font:	CGTimes-Normal	Page Buffer Size:	5
Auxiliary Font:	CGTimes-Bold	Error Recovery:	Disabled
Printer Emulation:	Kodescript Plus	Page Recovery Size:	2
Line Termination:	None	Swing Mode:	Not Installed
Image Density:	Normal (1.0)		
Material Type:	Normal Paper		

Emulation Settings

Field Check:	On Operator Panel
Control Char:	^ (0x5E)
Field ID:	[ (0x5B)
End of Format:	] (0x5D)
Data Separator:	, (0x2C)
Missing Font:	Use Cache Font

**Figure 6-46. Status Page.**

**Note:** See [Print Status Page](#) in Chapter 3 for the procedures required to print the SATO-Logic Status Page.

## Stored and Default Configuration

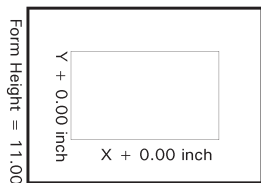
The Stored and Default Configuration defines the functional elements of each configuration, including the Default Configuration, stored on the printer hard drive.

# M10-LOGIC™

## CONFIGURATION

**Stored, Default, and Current Configuration:**

**000**



Emulation  
Page Orientation  
Line Termination Mode  
Lines Per Inch  
Characters Per Inch  
Image Density  
Material Type  
Symbol Set  
Field Check  
KOP Control Character  
KOP Field ID Character  
KOP End of Format Character  
KOP Data Separator Character  
KOP Handle Missing Font  
Resolution  
EAS Option  
Reverse Mode  
Roll To Roll Mode  
Paper Suction  
Energy Fusion  
AIDC Mode  
Page Buffer Size  
Error Recovery  
Page Recovery Size  
Splice Detect Mode  
Pages To Skip(Splice)

Primary Font = CGTimes-Normal

**ABCDEFGHI**

Auxiliary Font = CGTimes-Bold

**ABCDEFGHI**

Kodescript Plus  
Portrait  
None  
6.000  
10.000  
Normal (1.0)  
Normal Paper  
W1:Windows 3.1 Latin 1  
On Operator Panel  
0x5E '^'  
0x5B '['  
0x5D ']'  
0x2C ','  
Use Cache Font  
400 DPI  
Disabled  
Disabled  
Disabled  
Auto  
Low  
Enabled  
5  
Disabled  
2  
Disabled  
0

Printer sn E00900007

October 27, 2020  
ctl sn GBG4400075AEB

**Figure 6-47. Default Configuration.**

**Note:** See [Print Configurations](#) in Chapter 3 for the procedures used to print the Default Configuration.



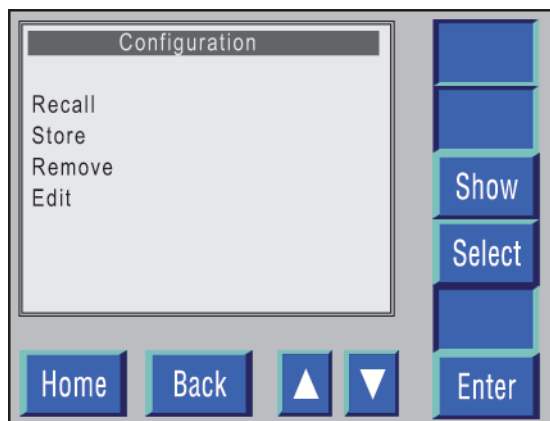
## Configuration Function Menu

The Configuration function on the Supervisor menu is where you recall a previously created configuration, store a new configuration (using a numeric identifier), remove an existing configuration (by removing the identifier without removing the configuration), or edit the currently active configuration.

**Important Note:** The **Edit** option in the Configuration function provides access to all printer configuration elements (via the [Printer Setup menu](#) - see [page 6-69](#)). By editing the currently active configuration, you can create a new configuration and (if desired) save it as a new stored configuration.

### Configuration Function Menu Access

1. When the Supervisor Menu displays, press the **Up** or **Down** triangle to move the selection bar to the **Configuration** function.
2. Press **Enter**, which causes the following screen to display:



**Figure 6-48. Configuration menu.**

3. The functions that can be selected from the Configuration menu include:
  - Recall
  - Store
  - Remove
  - Edit

## Recall Configuration

The Recall function is used to load a stored configuration into the printer. Once loaded, the configuration can be used to print the related documents, or it can be modified for subsequent use.

**Note:** A stored Print Configuration cannot be recalled when a print job is in progress.

1. Press the **Up** or **Down** triangle on the Configuration menu to move the selection bar to the **Recall** function.
2. Press **Enter**.
3. The following screen displays:



**Figure 6-49. Recall Configuration screen.**

4. If the current configuration is to be recalled, press **Enter**.
5. To select a different configuration, you can either:
  - Press the **Up** or **Down** triangle to move the selection bar to the desired configuration, and then press **Enter** to load it.
  - or**
  - Enter the desired configuration number on the numeric keypad, and then press **Enter**, which will load it.

6. When **Enter** is pressed, a *Recalling ... Adjusting Image Density* message displays followed by an *Adjusting Resolution* message.
7. After both messages have been displayed, the system returns to the Configuration menu.

## Store Configuration

The Store setting is used to either store a new configuration on the printer's hard drive or store updates to an existing configuration already stored on the printer's hard drive.

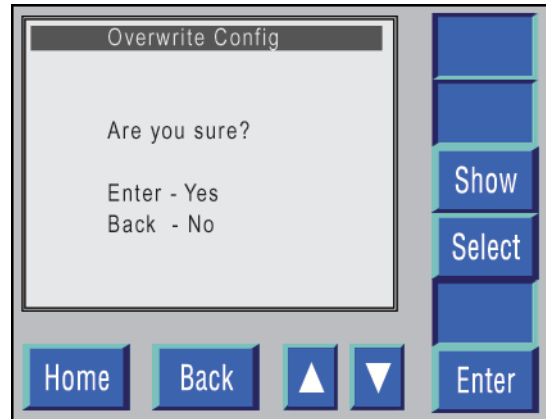
**Note:** The Store setting can **not** be executed when a print job is in progress.

1. Press the **Up** or **Down** triangle on the Configuration menu to move the selection bar to the **Store** function.
2. Press **Enter**, which causes the following Store Configuration screen to display:



**Figure 6-50. Store Configuration screen.**

3. If updates to the current configuration are to be stored:
  - a. Press **Enter**, which causes the audible alarm to sound and the following screen to display:

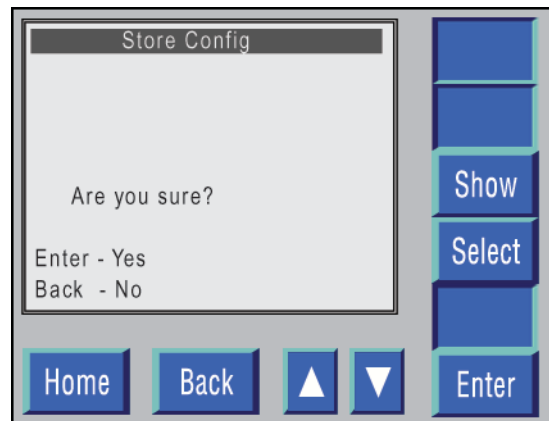


**Figure 6-51. Overwrite Configuration screen.**

**Note:** The Default Configuration (000) can **not** be overwritten.

- b. If **Enter** is pressed, the updated changes will overwrite the old data stored on the printer's hard drive, and the system will return to the Configuration menu.
- c. If **Back** is pressed, the system will return to the Configuration menu without storing the updated changes.

4. If a new configuration is to be stored:
  - a. Enter the desired configuration number on the numeric keypad.
  - b. Press **Enter**, which causes the audible alarm to sound and the following screen to display:



**Figure 6-52. Store Configuration screen.**

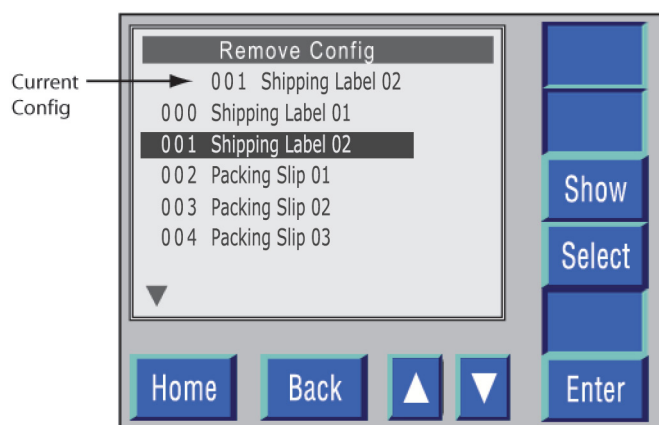
- c. If **Enter** is pressed, the configuration will store on the printer's hard drive, and the system returns to the Configuration menu.
- d. If **Back** is pressed, the System returns to the Configuration menu without storing the configuration.

## Remove Configuration

The Remove setting lets you remove a configuration.

**Note:** A stored Print Configuration can **not** be removed when a print job is in progress.

1. Press the **Up** or **Down** triangle on the Configuration menu to move the selection bar to the **Remove** function.
2. Press **Enter**, which causes the following Remove Config screen to display:

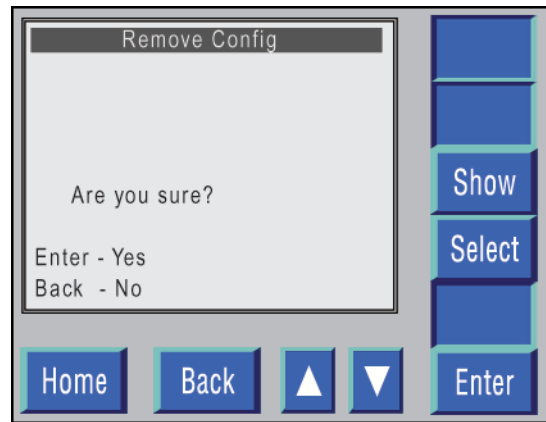


**Figure 6-53. Remove Config screen.**

3. Select the Configuration number to be deleted by either pressing the **Up** and/or **Down** triangle or by entering the number on the numeric keypad.

**Note:** The Default Configuration (000) can **not** be deleted.

4. Press **Enter**, which causes the audible alarm to sound and the following screen to display:



**Figure 6-54. Remove Configuration.**

5. If **Enter** is pressed, the configuration is deleted from the printer's hard drive, and the system returns to the Configuration menu.
6. If **Back** is pressed, the system returns to the Configuration menu without deleting the configuration from the printer.



## Edit

The Edit function provides access to the [Printer Setup menu](#) (see the next page), which contains functions that let you execute or modify an existing configuration or specify a new configuration.

The settings available through the Printer Setup menu affect only current printer settings. To associate these settings with a stored configuration, you must use the Configuration menu to save the settings after you have modified and tested them.

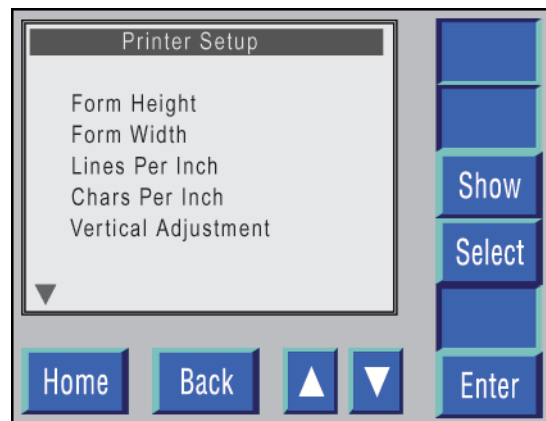
**Note:** No change can be made to the Default Configuration (000).

## Printer Setup Menu

This menu lets you execute or modify an existing configuration or specify a new configuration.

### Printer Setup Menu Access

1. Press the **Up** or **Down** triangle on the Configuration menu to move the selection bar to the **Edit** function.
2. Press **Enter**, which causes the following Printer Setup menu to display:



**Figure 6-55. Printer Setup menu.**

3. The following functions can be selected from this menu:

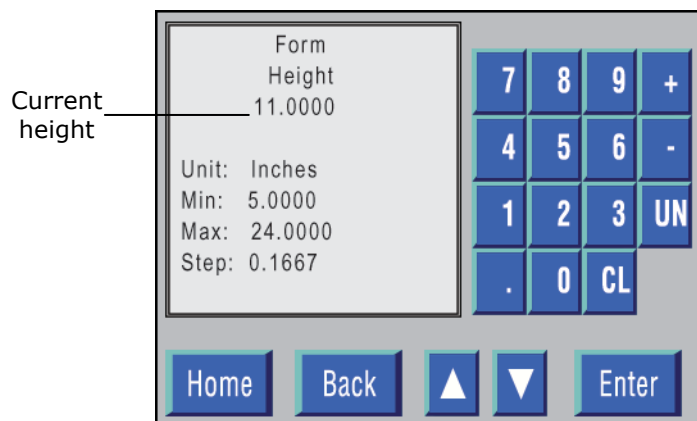
- Form Height
- Print Width
- Lines Per Inch
- Characters Per Inch
- Vertical Adjustment
- Horizontal Adjustment
- Image Density
- Material Type
- Orientation
- Emulation
- Primary Font
- Auxiliary Font
- Symbol Set
- Line Termination
- Error Recovery
- Emulation Settings
- Overlay (not available at this time)
- Page Buffer Limit
- Resolution
- EAS
- Swing Mode
- Reverse Mode
- Roll To Roll Mode
- Paper Suction
- Energy Fusion
- AIDC Mode

## Form Height

The Form Height setting specifies, in inches, the height of the document to be printed.

**Note:** The Form Height setting can **not** be changed when a print job is in progress.

1. Press the **Up** or **Down** triangle on the Printer Setup menu to move the selection bar to the **Form Height** function.
2. Press **Enter**, which causes the following Form Height screen to display:



**Figure 6-56. Form Height.**

**Note:**

- Pressing **UN** permits changing the units and all associated numeric data to any one of the following:
    - inches
    - mm
    - 7200/inch
    - Scan lines
    - Dots 1/400
  - Pressing **CL** after entering numeric data deletes one digit each time-pressed.
3. The form height can be either increased or decreased in 0.1667" increments, from a minimum of 5.0000" to a maximum of 24.0000".

4. The height can be increased or decreased in 2 different ways:
  - Enter the new height on the numeric keypad and then press **Enter**.
  - or**
  - Move the **Up** or **Down** triangle (to increase or decrease the height) and then press **Enter**.

**Note:**

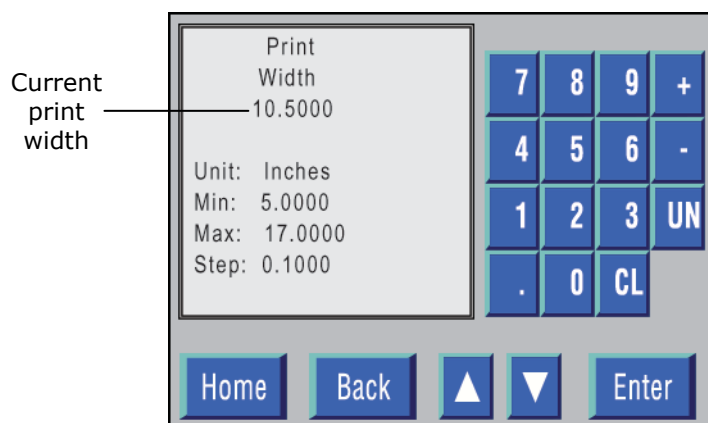
- Pressing **Enter** after any Printer Setup function has been executed saves the function. However, it does not store the function.
- When the configuration completes, press **Back** until the Store Configuration screen displays, and then follow the procedures for executing the Store function (see [page 6-63](#)).

## Print Width

The Print Width setting specifies, in inches, the print width of the document to be printed.

**Note:** The Print Width setting can **not** be changed when a print job is in progress.

1. Press the **Up** or **Down** triangle on the Printer Setup menu to move the selection bar to the **Print Width** function.
2. Press **Enter**, which causes the following Print Width screen to display:



**Figure 6-57. Print Width screen.**

**Note:**

- Pressing **UN** permits changing the units and all associated numeric data to any one of the following:
    - inches
    - mm
    - 7,200/Inch
    - Scan lines
    - Dots 1/400
  - Pressing **CL** after entering numeric data deletes 1 digit each time pressed.
3. The print width can be either increased or decreased in 0.1000" increments, from a minimum of 5.0000" to a maximum of 17.0000".

4. The print width can be increased or decreased in 2 different ways:
  - Enter the new print width on the numeric keypad and then press **Enter**.
  - or**
  - Move the **Up** or **Down** triangle (to increase or decrease the print width) and then press **Enter**.

**Note:**

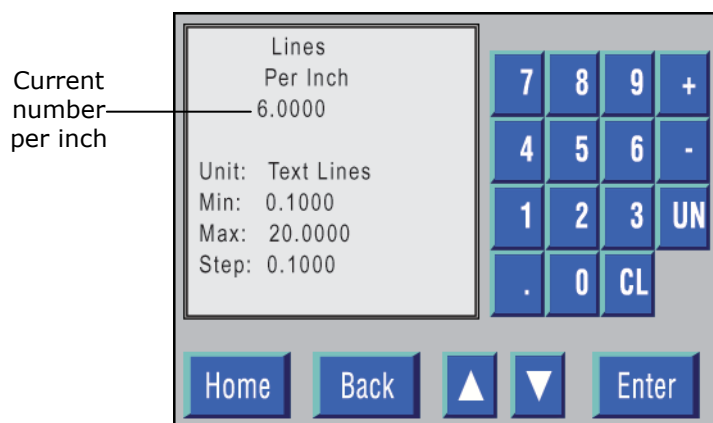
- Pressing **Enter** after any Printer Setup function has been executed saves the function. However, it does not store the function.
- When the configuration completes, press **Back** until the Store Configuration screen displays, and then follow the procedures for executing the Store function (see [page 6-63](#)).

## Lines Per Inch

The Lines Per Inch setting specifies, in-text lines, the number of lines per inch and character height per line to be printed on the document.

**Note:** The Lines Per Inch setting can **not** be changed when a print job is in progress.

1. Press the **Up** or **Down** triangle on the Printer Setup menu to move the selection bar to the **Lines Per Inch** function.
2. Press **Enter**, which causes the following Lines Per Inch screen to display:



**Figure 6-58. Lines Per Inch screen.**

**Note:**

- Pressing **CL** after entering numeric data deletes one digit each time it is pressed.
- The number of lines per inch can be expressed only in Text Lines.



3. The number of lines per inch can be increased in 0.1000" increments, from a minimum of 0.1000" to a maximum of 20.0000".
4. The number of lines per inch can be increased or decreased in 2 different ways:
  - Enter the desired number of lines on the numeric keypad and then press **Enter**.
  - or**
  - Move the **Up** or **Down** triangle (to increase or decrease the number of lines) and then press **Enter**.

**Note:**

Pressing **Enter** after any Printer Setup function has been executed saves the function. However, it does not store the function.

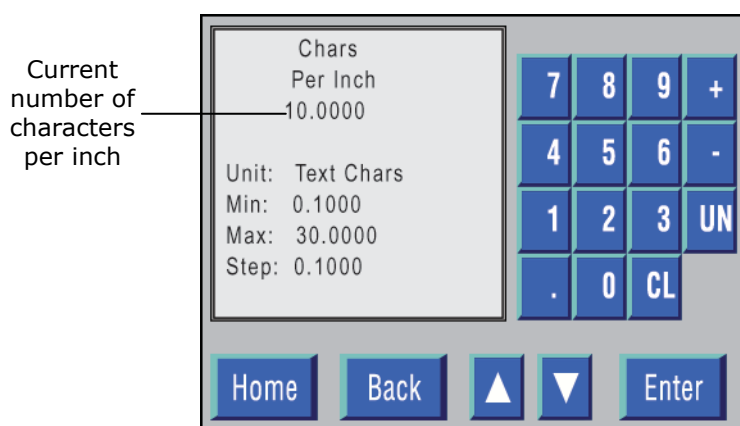
When the configuration completes, press **Back** until the Store Configuration screen displays, and then follow the procedures for executing the Store function (see [page 6-63](#)).

## Characters Per Inch

The Characters Per Inch setting specifies the character width and horizontal spacing to be used by the printer. Increasing the number of characters to be printed per inch causes a corresponding decrease in character width.

**Note:** The Characters Per Inch setting can **not** be changed when a print job is in progress.

1. Press the **Up** or **Down** triangle on the Printer Setup menu to move the selection bar to the **Characters Per Inch** function.
2. Press **Enter**, which causes the following Characters Per Inch screen to display:



**Figure 6-59. Characters Per Inch screen.**

**Note:**

- Pressing **CL** after entering numeric data deletes one digit each time it is pressed.
- The number of characters per inch can be expressed only in Text Characters.

3. The number of characters per inch can be increased in 0.1000" increments, from a minimum of 0.1000" to a maximum of 30.0000".
4. The number of characters per inch can be increased or decreased in 2 different ways:
  - Enter the desired number of characters on the numeric keypad and then press **Enter**.
  - or**
  - Move the **Up** or **Down** triangle (to increase or decrease the number of characters) and then press **Enter**.

**Note:**

- Pressing **Enter** after any Printer Setup function has been executed saves the function. However, it does not store the function.
- When the configuration completes, press **Back** until the Store Configuration screen displays, and then follow the procedures for executing the Store function (see [page 6-63](#)).

## Vertical Adjustment

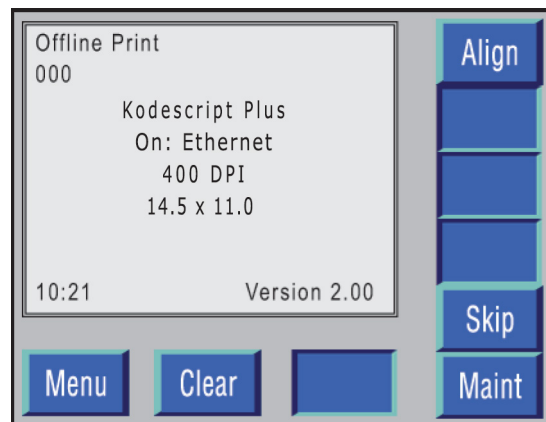
The Vertical Adjustment setting specifies the distance from the top of the form to the top of the print area in either inch, mm, 7200/inch, scan lines, or DPI (dots per inch) as defined by the Unit Field.

**Note:**

- The Vertical Adjustment setting can be changed when either a print job is in progress or the printer is idle.
- If the Vertical Adjustment is changed, the software automatically stores the change negating the need to execute the Store function.

### When a Print Job Is in Progress

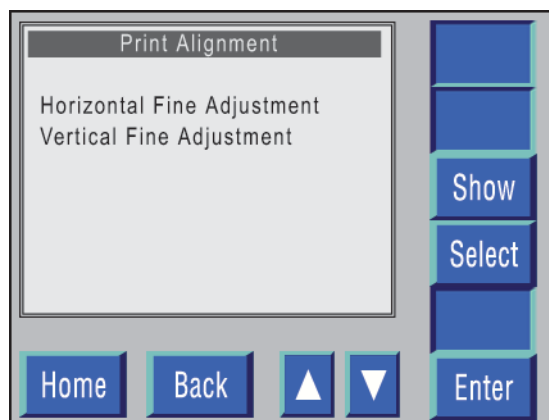
1. Press the **OFFLINE** switch, which causes the following Offline Print menu to display:



**Figure 6-60. Offline Print menu.**

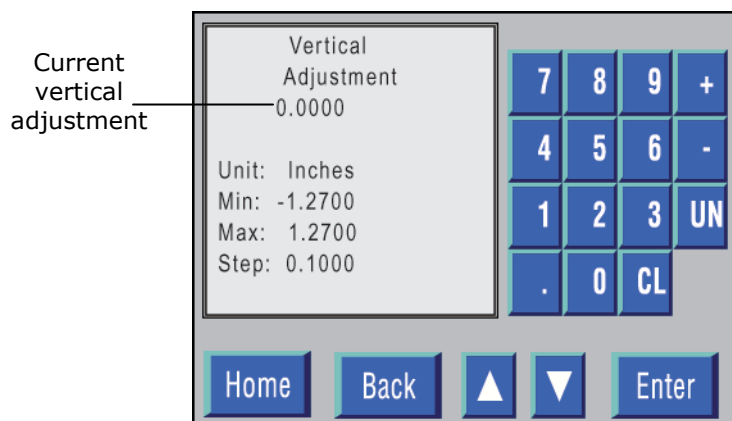
**Note:** The system has switched from the Online Print mode to the Offline Print mode.

2. Press **Align**, which causes the following Print Alignment menu to display:



**Figure 6-61. Print Alignment menu.**

3. Press the **Up** or **Down** triangle on the Printer Setup menu to move the selection bar to the **Vertical Fine Adjustment** function.
4. Press **Enter**, which causes the following Vertical Adjustment screen to display:



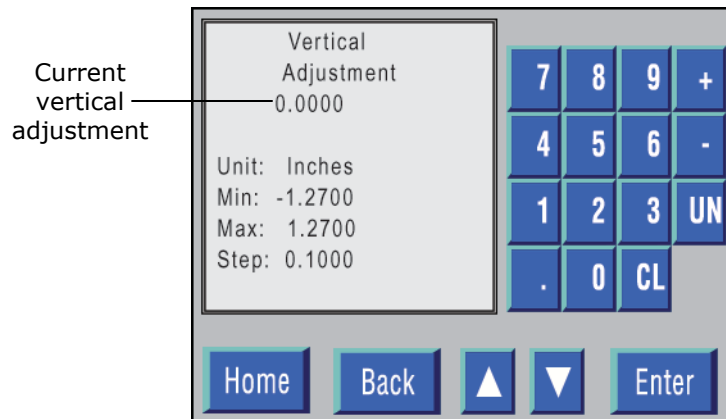
**Figure 6-62. Vertical Print Adjustment screen.**

**Note:** The Vertical Adjustment can **not** be changed on the Default Configuration.

5. The Vertical Adjustment can be increased or decreased in 2 ways:
  - Enter the new adjustment on the numeric keypad and then press **Enter**.
  - or**
  - Move the **Up** or **Down** triangle (to increase or decrease the alignment) and then press **Enter**.
6. Pressing **Enter** after the change has been made stores the change and returns the system to the Offline Print menu.
7. Press the **ONLINE** switch to restart document printing.

**When the Printer Is Idle**

1. Press the **Up** or **Down** triangle on the Printer Setup menu to move the selection bar to the **Vertical Adjustment** function.
2. Press **Enter**, which causes the following Vertical Adjustment screen to display:



**Figure 6-63. Vertical Adjustment screen.**

3. The Vertical Adjustment can be either increased or decreased in 0.1000" increments, from a minimum of -1.2700" to a maximum of 1.2700".
4. The Vertical Adjustment can be increased or decreased in 2 different ways:
  - Enter the change on the numeric keypad and then press **Enter**.
  - or**
  - Move the **Up** or **Down** triangle (to increase or decrease the Vertical Adjustment) and then press **Enter**.
5. Pressing **Enter** after the change has been made stores the change and returns the system to the Offline Print menu.
6. Press the **ONLINE** switch to restart document printing.

## Horizontal Adjustment

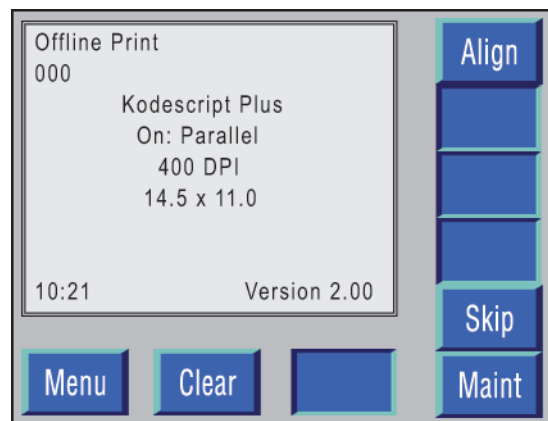
The Horizontal Adjustment setting specifies the distance from the left edge of the document to the start of the print area either in inches, mm, 7200/inch, or DPI as defined by the Unit field.

### Note:

- The Horizontal Adjustment setting can be changed when either a print job is in progress or the printer is idle.
- If the Horizontal Adjustment is changed, the software automatically stores the change, negating the need to execute the Store function.

### When a Print Job Is in Progress

1. Press the **OFFLINE** switch, which causes the following Offline Print menu to display:



**Figure 6-64. Offline Print menu.**

**Note:** The System switched from the Online Print mode to the Offline Print mode.

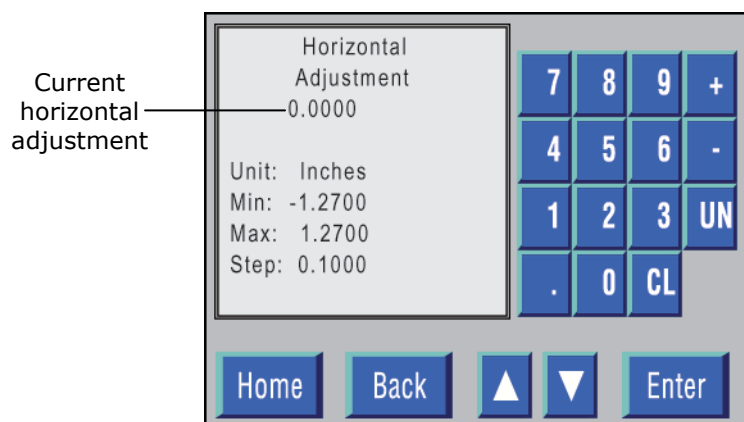


2. Press **Align**, which causes the following Print Alignment menu to display:



**Figure 6-65. Print Alignment menu.**

3. Press the **Up** or **Down** triangle on the Printer Setup menu to move the selection bar to the **Horizontal Fine Adjustment** function.
4. Press **Enter**, which causes the following Horizontal Alignment screen to display:



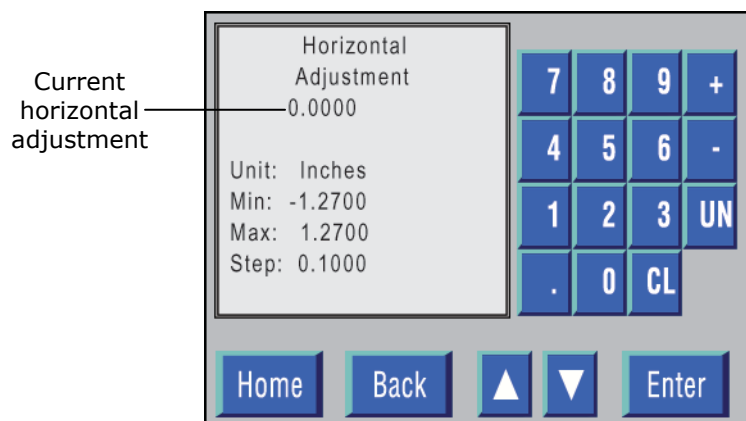
**Figure 6-66. Horizontal Adjustment screen.**

**Note:** The Horizontal Adjustment can **not** be changed on the Default Configuration.

5. The Horizontal Adjustment can be increased or decreased in 2 different ways:
  - Enter the new adjustment on the numeric keypad and then press **Enter**.
  - or**
  - Move the **Up** or **Down** triangle (to increase or decrease the alignment) and then press **Enter**.
6. Pressing **Enter** after the change has been made stores the change and returns the system to the Offline Print menu.
7. Press the **ONLINE** switch to restart document printing.

**When the Printer Is Idle**

1. Press the **Up** or **Down** triangle on the Printer Setup menu to move the selection bar to the **Horizontal Adjustment** function.
2. Press **Enter**, which causes the following Horizontal Adjustment screen to display:



**Figure 6-67. Horizontal Adjustment screen.**

3. The Horizontal Adjustment can be either increased or decreased in 0.1000" increments, from a minimum of -1.2700" to a maximum of 1.2700".
4. The Horizontal Adjustment can be increased or decreased in 2 different ways:
  - Enter the change on the numeric keypad and then press **Enter**.
  - or**
  - Move the **Up** or **Down** triangle (to increase or decrease the Horizontal Adjustment) and then press **Enter**.

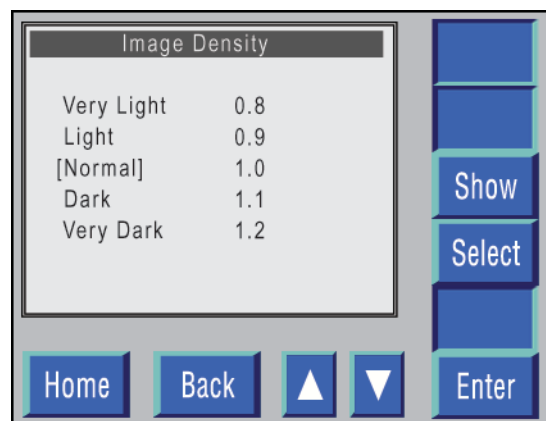
Pressing **Enter** after the change has been made stores the change and returns the system to the Offline Print menu.
5. Press the **ONLINE** switch to restart document processing.

## Image Density

The Image Density setting specifies the relative darkness of the image produced by the printer. The higher the value specified, the darker the image.

**Note:** The Image Density setting can **not** be changed when a print job is in progress.

1. Press the **Up** or **Down** triangle on the Printer Setup menu to move the selection bar to the **Image Density** function.
2. Press **Enter**, which causes the following Image Density screen to display:



**Figure 6-68. Image Density screen.**

**Note:**

- Brackets ( [ ] ) around a specific density indicate that it is the Default Configuration Image Density.
- An arrow (→) pointing to a specific density indicates that it is the density assigned to the currently displayed configuration.

3. Press the **Up** or **Down** triangle to move the selection bar to the desired density.
4. Press **Enter** to save the density selected.

**Note:**

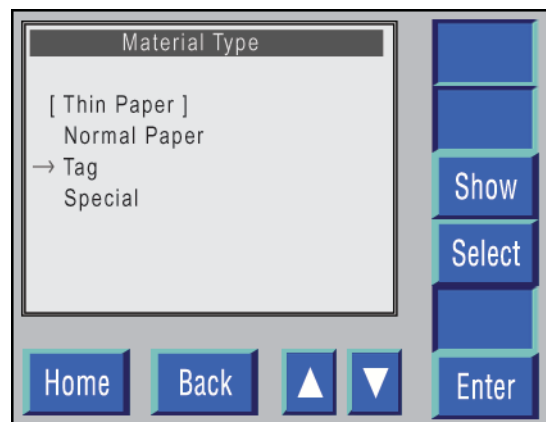
- Pressing **Enter** after any Printer Setup function has been executed saves the function. However, it does not store the function.
- When the configuration completes, press **Back** until the Store Configuration screen displays, and then follow the procedures for executing the Store function (see [page 6-63](#)).

## Material Type

The Material Type setting defines the type of material to be used by the printer. The type used affects the energy applied in transferring the print image to the output documents.

**Note:** The Material Type setting can **not** be changed when a print job is in progress.

1. Press the **Up** or **Down** triangle on the Printer Setup menu to move the selection bar to the **Material Type** function.
2. Press **Enter**, which causes the following Material Type screen to display:



**Figure 6-69. Material Type screen.**

**Note:**

- Brackets ( [ ] ) around a specific Material Type indicate the Default Configuration Material Type.
- An arrow (→) pointing to a specific Material Type indicates that it is the type assigned to the currently displayed configuration.

3. Press the **Up** or **Down** triangle to move the selection bar to the desired Material Type.
4. Press **Enter** to save the type selected.

**Note:**

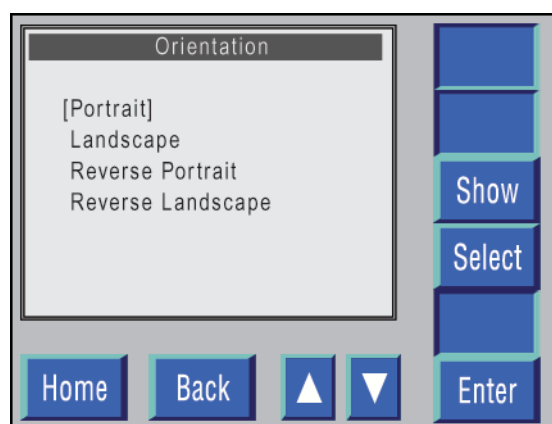
- Pressing **Enter** after any Printer Setup function has been executed saves the function. However, it does not store the function.
- When the configuration completes, press **Back** until the Store Configuration screen displays, and then follow the procedures for executing the Store function (see [page 6-63](#)).

## Orientation

In clockwise rotation, the orientation setting specifies the image as it is to be printed on the document.

**Note:**

- The Orientation setting can **not** be changed when a print job is in progress.
  - This function is not used in Kodescript or Kodescript*Plus*.
1. Press the **Up** or **Down** triangle on the Printer Setup menu to move the selection bar to the **Orientation** function.
  2. Press **Enter**, which causes the following Orientation screen to display:



**Figure 6-70. Orientation screen.**

**Note:**

- Brackets ( [ ] ) around a specific Orientation indicate that it is the Default Configuration Orientation.
- An arrow (→) pointing to a specific Orientation indicates that it is the type assigned to the currently displayed configuration.



3. Press the **Up** or **Down** triangle to move the selection bar to the Orientation desired.
4. Press **Enter** to save the Orientation selected.

**Note:**

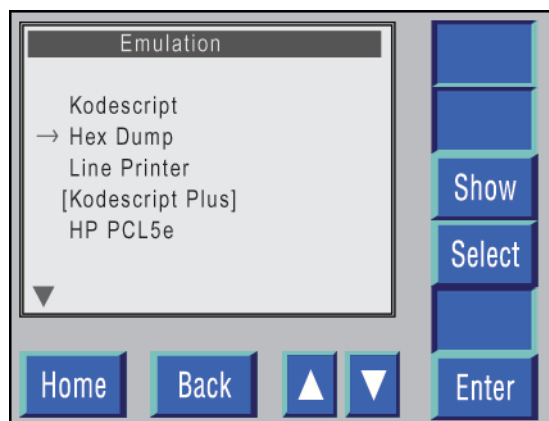
- Pressing **Enter** after any Printer Setup function has been executed saves the function. However, it does not store the function.
- When the configuration completes, press **Back** until the Store Configuration screen displays, and then follow the procedures for executing the Store function (see [page 6-63](#)).

## Emulation

The Emulation setting is the interpretation of the commands contained in the data stream received by the Data Communication Port.

**Note:** The Emulation setting can **not** be changed when a print job is in progress.

1. Press the **Up** or **Down** triangle on the Printer Setup menu to move the selection bar to the **Emulation** function.
2. Press **Enter**, which causes the following Emulation screen to display:



**Figure 6-71. Emulation screen.**

3. The following functions can be selected from the Emulation screen:
  - Kodescript
  - Hex Dump
  - Line Printer
  - KodescriptPlus
  - HP PCL5e
  - IGP/PGL
  - IGP/VGL
  - IPDS (optional)

**Note:**

- Brackets ( [ ] ) around a specific Emulation indicate that it is the Default Configuration Emulation.
  - An arrow (→) pointing to a specific page Emulation indicates that it is the type assigned to the currently displayed configuration.
4. Press the **Up** or **Down** triangle to move the selection bar to the Emulation desired.
  5. Press **Enter** to save the Emulation selected.

**Note:**

- Pressing **Enter** after any Printer Setup function has been executed saves the function. However, it does not store the function.
- When the configuration completes, press **Back** until the Store Configuration screen displays, and then follow the procedures for executing the Store function (see [page 6-63](#)).

## Primary Font

The Primary Font setting specifies the Primary Font used by the printer for print data that does not specify a font.

**Note:** The Primary Font setting can **not** be changed when a print job is in progress.

1. Press the **Up** or **Down** triangle on the Printer Setup menu to move the selection bar to the **Primary Font** function.
2. Press **Enter**, which causes the following Primary Font screen to display:



**Figure 6-72. Primary Font screen.**

**Note:**

- Brackets ( [ ] ) around a specific Primary Font indicate the Default Configuration Primary Font.
- An arrow (→) pointing to a specific Primary Font indicates that it is the Primary Font assigned to the currently displayed configuration.

3. Press the **Up** or **Down** triangle to move the selection bar to the Primary Font desired.
4. Press **Enter** to save the font selected.

**Note:**

- Pressing **Enter** after any Printer Setup function has been executed saves the function. However, it does not store the function.
- When the configuration completes, press **Back** until the Store Configuration screen displays, and then follow the procedures for executing the Store function (see [page 6-63](#)).

## Auxiliary Font

The Auxiliary Font specifies the font to be used for print data that is different from that specified by the primary Print Font.

**Note:** The Auxiliary Font setting can **not** be changed when a print job is in progress.

1. Press the **Up** or **Down** triangle on the Printer Setup menu to move the selection bar to the **Auxiliary Font** function.
2. Press **Enter**, which causes the following Auxiliary Font screen to display:



**Figure 6-73. Auxiliary Font screen.**

**Note:**

- Brackets ( [ ] ) around a specific Symbol Set indicate the Default Configuration Symbol Set.
- An arrow (→) pointing to a specific Symbol Set indicates the Symbol Set assigned to the currently displayed configuration.

3. Press the **Up** or **Down** triangle to move the selection bar to the Auxiliary Font desired.
4. Press **Enter** to save the font selected.

**Note:**

- Pressing **Enter** after any Printer Setup function has been executed saves the function. However, it does not store the function.
- When the configuration completes, press **Back** until the Store Configuration screen displays, and then follow the procedures for executing the Store function (see [page 6-63](#)).

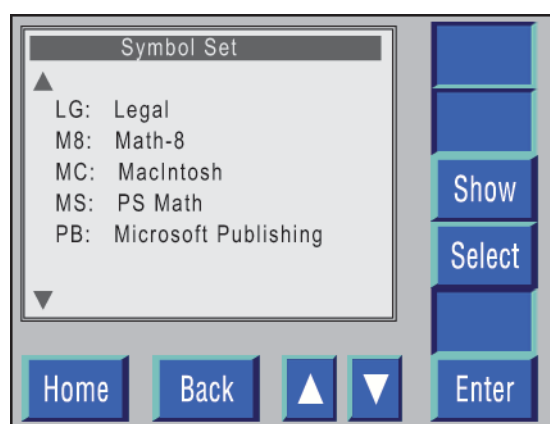
## Symbol Set

The Symbol Set determines the Character Set used by the Printer Character data in the print stream.

Executing the Font Detail option included as part of the Test Prints function will provide a graphic copy of the complete Character Set for the font printed. (See [page 6-23](#).)

**Note:** The Symbol Set setting can **not** be changed when a print job is in progress.

1. Press the **Up** or **Down** triangle on the Printer Setup menu to move the selection bar to the **Symbol Set** function.
2. Press **Enter**, which causes the following Symbol Set screen to display:



**Figure 6-74. Symbol Set screen.**

**Note:**

- Brackets ( [ ] ) around a specific Symbol Set indicate the Default Configuration Symbol Set.
- An arrow (→) pointing to a specific Symbol Set indicates the Symbol Set assigned to the currently displayed configuration.



3. Press the **Up** or **Down** triangle to move the selection bar to the Symbol Set desired.
4. Press **Enter** to save the Symbol Set selected.

**Note:**

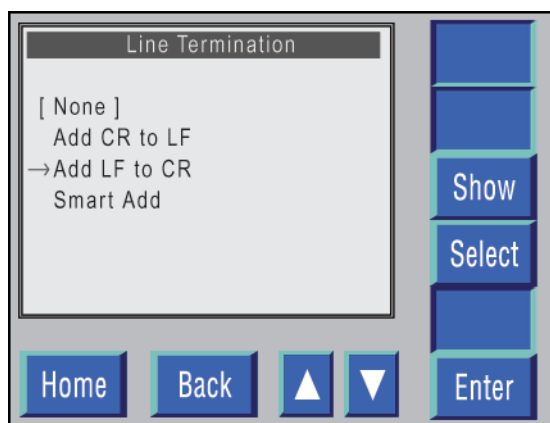
- Pressing **Enter** after any Printer Setup function has been executed saves the function. However, it does not store the function.
- When the configuration completes, press **Back** until the Store Configuration screen displays, and then follow the procedures for executing the Store function (see [page 6-63](#)).

## Line Termination

The Line Termination setting specifies how the printer should interpret the end-of-line characters included in the print data it receives. This setting affects the printer **only** when the Line Printer or PCL5e Emulation is used.

**Note:** The Line Termination setting can **not** be changed when a print job is in progress.

1. Press the **Up** or **Down** triangle on the Printer Setup menu to move the selection bar to the **Line Termination** function.
2. Press **Enter**, which causes the following Line Termination Screen to display:



**Figure 6-75. Line Termination screen.**

**Note:**

- Brackets ( [ ] ) around a specific Line Termination indicate that it is the Default Configuration Line Termination setting.
- An arrow (→) pointing to a specific Line Termination indicates that it is the Line Termination setting assigned to the currently displayed configuration.

3. Press the **Up** or **Down** triangle to move the selection bar to the Line Termination desired.

**Note:** If **Smart Add** is selected, the software automatically inserts a CR/LF after 80 characters.

4. Press **Enter** to save the Line Termination setting selected.

**Note:**

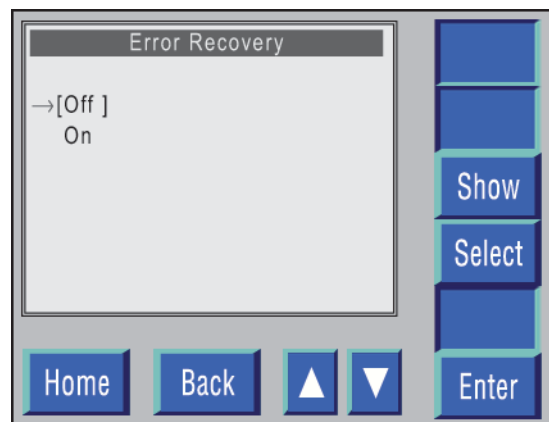
- Pressing **Enter** after any Printer Setup function has been executed saves the function. However, it does not store the function.
- When the configuration completes, press **Back** until the Store Configuration screen displays, and then follow the procedures for executing the Store function (see [page 6-63](#)).

## Error Recovery

The Error Recovery setting indicates whether the printer should try to reprint a page that was not successfully printed (e.g., because of a paper jam).

**Note:** The Error Recovery setting can **not** be changed when a print job is in progress.

1. Press the **Up** or **Down** triangle on the Printer Setup menu to move the selection bar to the **Error Recovery** function.
2. Press **Enter**, which causes the following Error Recovery screen to display:



**Figure 6-76. Error Recovery screen.**

**Note:**

- Brackets ( [ ] ) around a specific Error Recovery indicate that it is the Default Configuration Error Recovery mode.
- An arrow (→) pointing to a specific Error Recovery indicates that the Error Recovery mode is assigned to the currently displayed configuration.

3. Press the **Up** or **Down** triangle to move the selection bar to the Error Recovery mode desired.
4. Press **Enter** to save the Error Recovery mode selected.

**Note:**

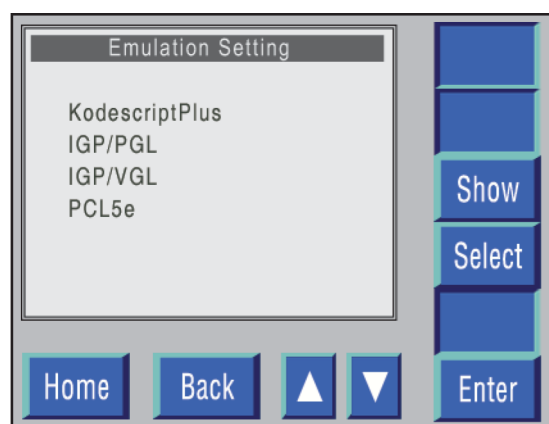
- Pressing **Enter** after any Printer Setup function has been executed saves the function. However, it does not store the function.
- When the configuration completes, press **Back** until the Store Configuration screen displays, and then follow the procedures for executing the Store function (see [page 6-63](#)).

## Emulation Settings

The Emulation settings contain the parameters specific to each emulation and tell the printer how to interpret these parameters' content as they appear in the print data stream.

**Note:** The Emulation settings can **not** be changed when a print job is in progress.

1. Press the **Up** or **Down** triangle on the Printer Setup menu to move the selection bar to the **Emulation Setting** function.
2. Press **Enter**, which causes the following Emulation Setting menu to display:



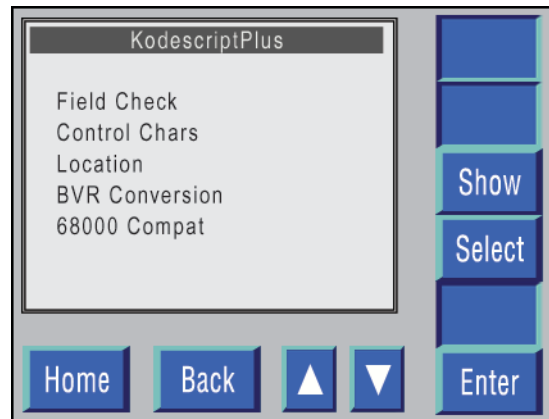
**Figure 6-77. Emulation Setting menu.**

3. The Emulations that can be selected from this menu include:
  - KodescriptPlus
  - IGP/PGL (not currently available)
  - IGP/VGL (not currently available)
  - PCL5e

**Note:** IPDS is an optional feature, so it is not available for general use. If the IPDS Emulation is required, a manual relative to its functionality will be furnished.

**KodescriptPlus**

1. Press the **Up** or **Down** triangle on the Emulation Settings menu to move the selection bar to the KodescriptPlus function.
2. Press **Enter**, which causes the following menu to display:



**Figure 6-78. KodescriptPlus menu.**

- **Field Check** – Indicates how KodescriptPlus Field Check information should be displayed:
  - **OFF**  
Do not display Field Check information
  - **ON** the TDU  
Default: [**ON** Panel]  
Display Field Check information on the TDU
  - **ON** RS-232  
Send Field Check information to the RS-232 Port
  - **ON** Monitor  
Display Field Check information on a monitor connected to the SATO-Logic Controller

- **Control Characters (Kodescript and Kodescript*Plus* Emulation)**

- Control Characters  
CTRL: ^5a  
Default: ^5e
- Field ID  
FNIN: [ 5b  
Default: [ 5b
- End of Format  
FEND: ] 5f  
Default: ] 5d
- Data Separator  
DSEP: 2a  
Default: , 2c

- **BVR Conversion (Kodescript and Kodescript*Plus* Emulation)** – Automatically converts 240 DPI to 400 DPI, negating the necessity of changing current customer files.
- **68000 Compatible (Kodescript and Kodescript*Plus* Emulation)**– Accepts Kode/Kode*Plus* Programs from the LIS-1100 and LIS-1500 series printers.

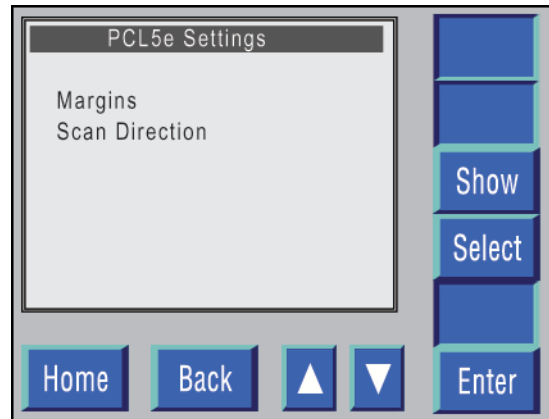
**Note:**

- Pressing **Enter** after any Printer Setup function has been executed saves the function. However, it does not store the function.
- When the configuration completes, press **Back** until the Store Configuration screen displays, and then follow the procedures for executing the Store function (see [page 6-63](#)).



### PCL5e Options

1. Press the **Up** or **Down** triangle on the Emulation Settings menu to move the selection bar to PCL5e function.
2. Press **Enter**, which causes the following menu to display:



**Figure 6-79. PCL5e Settings menu.**

- **Margins** – Indicates how the print margins should be used:
  - Standard:  
The PCL5e Emulation should normally be configured to operate using this setting, which enforces the defined PCL5e unprintable area and maximizes laser jet compatibility.
  - Extended:
    - This setting should be used when the application demands that the PCL5e Emulation place print data outside the defined printable area.
    - This setting remains the unprintable area around the page that permits an application to print edge-to-edge and top-to-bottom (excluding the Dead Zone).

- **Scan Direction** – Indicates the print orientation available to the PCL5e Emulation:

Style	Orientation
Portrait	No rotation
Landscape	90° rotation (clockwise)
Reverse portrait	180° rotation (clockwise)
Reverse landscape	270° rotation (clockwise)

**Note:**

- Pressing **Enter** after any Printer Setup function has been executed saves the function. However, it does not store the function.
- When the configuration completes, press **Back** until the Store Configuration screen displays, and then follow the procedures for executing the Store function (see [page 6-63](#)).

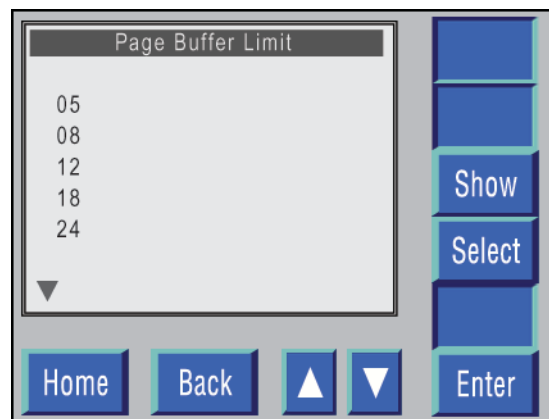
## Page Buffer Limit

The Page Buffer Limit setting defines the number of pages stored for reprinting if an error occurs during document processing.

The number of pages that can be stored is based on the documents' page size and the amount of memory available. The lower the setting selected, the lower the number of pages that can be stored; the higher the setting, the higher the number of pages that can be stored. The higher setting speeds processing if an error occurs

**Note:** The Page Buffer Limit setting can **not** be changed when a print job is in progress.

1. Press the **Up** or **Down** triangle on the Printer Setup menu to move the selection bar to the **Page Buffer Limit** function.
2. Press **Enter**, which causes the following Page Buffer Limit screen to display:



**Figure 6-80. Page Buffer Limit screen.**

3. The following page numbers can be selected from the Page Buffer Limit screen:

- 05
- 08
- 12
- 18
- 24
- 32

**Note:**

- Brackets ( [ ] ) around a specific Page Buffer Limit indicate that it is the Default Configuration Page Buffer Limit.
  - An arrow (→) pointing to a specific Page Buffer Limit indicates that the Error Recovery mode is assigned to the currently displayed configuration.
4. Press the **Up** or **Down** triangle to move the selection bar to the Page Buffer Limit desired.
  5. Press **Enter** to save the Page Buffer Limit selected.

**Note:**

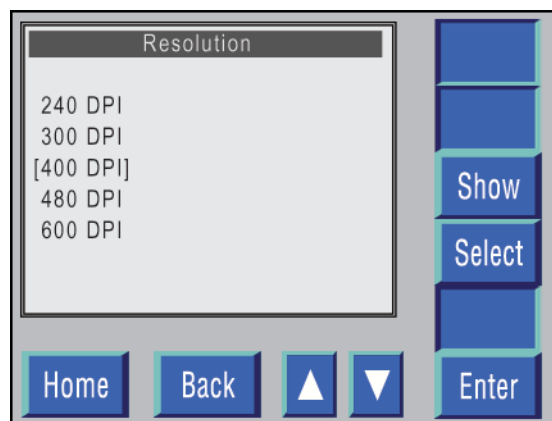
- Pressing **Enter** after any Printer Setup function has been executed saves the function. However, it does not store the function.
- When the configuration completes, press **Back** until the Store Configuration screen displays, and then follow the procedures for executing the Store function (see [page 6-63](#)).

## Resolution

The Resolution setting specifies, in DPI, the print resolution to be used by the printer.

**Note:** The Resolution setting can **not** be changed when a print job is in progress.

1. Press the **Up** or **Down** triangle on the Printer Setup menu to move the selection bar to the **Resolution** function.
2. Press **Enter**, which causes the following Resolution screen to display:



**Figure 6-81. Resolution screen.**

**Note:**

- Brackets ( [ ] ) around a specific print Resolution indicate that it is the Default Configuration Print Resolution.
  - An arrow (→) pointing to a specific print Resolution indicates that it is the Resolution assigned to the current configuration.
3. Press the **Up** or **Down** triangle to move the selection bar to the Print Resolution desired.
  4. Press **Enter** to save the Print Resolution selected.

**Note:**

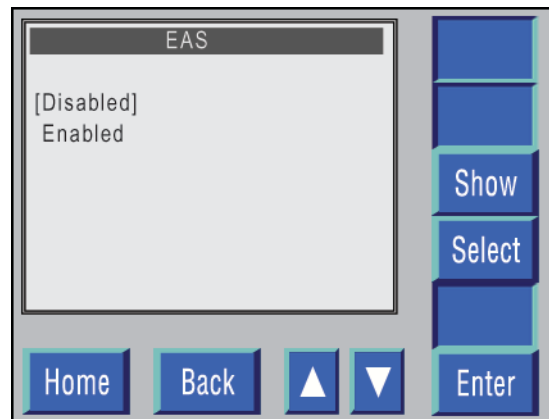
- Pressing **Enter** after any Printer Setup function has been executed saves the function. However, it does not store the function.
- When the configuration completes, press **Back** until the Store Configuration screen displays, and then follow the procedures for executing the Store function (see [page 6-63](#)).

## EAS (Electronic Article Surveillance)

When enabled, the Electronic Article Surveillance (EAS) setting changes the energy used to transfer the printed image to documents that contain metal.

**Note:** The EAS setting can **not** be changed when a print job is in progress.

1. Press the **Up** or **Down** triangle on the Printer Setup menu to move the selection bar to the **EAS** function.
2. Press **Enter**, which causes the following EAS screen to display:



**Figure 6-82. EAS screen.**

**Note:**

- Brackets ( [ ] ) around a specific EAS mode indicate that it is the Default EAS Configuration.
  - An arrow (→) pointing to a specific EAS mode indicates the EAS mode assigned to the current configuration.
3. Press the **Up** or **Down** triangle to move the selection bar to the EAS mode desired.
  4. Press **Enter** to save the EAS mode selected.

**Note:**

- Pressing **Enter** after any Printer Setup function has been executed saves the function. However, it does not store the function.
- When the configuration completes, press **Back** until the Store Configuration screen displays, and then follow the procedures for executing the Store function (see [page 6-63](#)).



## Swing Mode (Optional Unit)

The swing guide assists the smooth fanfolding of continuous forms as they are fed out of the printer. It is accessed by means of the Swing Mode screen. **The swing guide can NOT be used with a page length that is less than 7" or greater than 12".**

When the Swing Mode is enabled, the TDU will display a prompt requesting the orientation (in or out) of the fanfold when either loading forms or recovering from a paper jam.

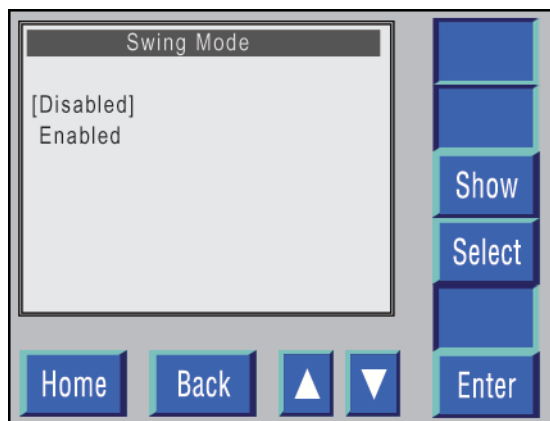
When a current configuration is changed to enable or disable the swing guide, the following message appears if paper has not already been unloaded from the printer:

### *Unload/Reload Forms to Change Swing Guide Status*

If this message appears, the printer will not continue loading or changing the configuration until the unload/reload procedure has been completed. At this point the printer will continue to service your request.

Before changing the configuration, avoid this message, unload the current stock, and reload the printer with the next stock. The configuration change will be completed without delay.

1. Press the **Up** or **Down** triangle on the Printer Setup menu to move the selection bar to the **Swing Mode** function.
2. Press **Enter**, which causes the following Swing Mode screen to display:



**Figure 6-83. Swing Mode screen.**

**Note:**

- Brackets ( [ ] ) around a specific Reverse Mode indicate the Default Reverse Mode setting.
  - An arrow (→) pointing to a specific Reverse Mode indicates the setting assigned to the current configuration.
3. Press the **Up** or **Down** triangle to move the selection bar to the Swing Mode desired.
  4. Press **Enter** to save the Swing Mode selected.

**Note:**

- Pressing **Enter** after any Printer Setup function has been executed saves the function. However, it does not store the function.
- When the configuration completes, press **Back** until the Store Configuration screen displays, and then follow the procedures for executing the Store function (see [page 6-63](#)).

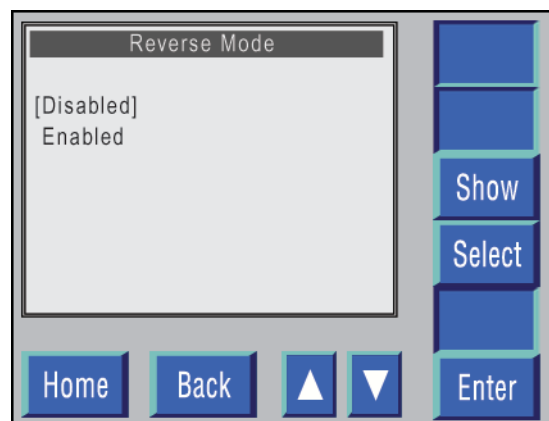
## Reverse Mode

The Reverse setting, when Enabled, feeds blank forms ejected from the printer at the end of a print job back into the printer to minimize wasting unprinted tag/label stock. Some forms are constructed such that they are not able to be fed back into the printer.

The Reverse Mode, when Enabled, takes longer to start and stop, which adds overall time and reduces the effective throughput.

**Note:** The Reverse setting can **not** be changed when a print job is in progress.

1. Press the **Up** or **Down** triangle on the Printer Setup menu to move the selection bar to the **Reverse** function.
2. Press **Enter**, which causes the following Reverse Mode screen to display:



**Figure 6-84. Reverse Mode screen.**

**Note:**

- Brackets ( [ ] ) around a specific Reverse Mode indicate the Default Reverse Mode setting.
  - An arrow (→) pointing to a specific Reverse Mode indicates the setting assigned to the current configuration.
3. Press the **Up** or **Down** triangle to move the selection bar to the Swing Mode desired.
  4. Press **Enter** to save the Swing Mode selected.

**Note:**

- Pressing **Enter** after any Printer Setup function has been executed saves the function. However, it does not store the function.
- When the configuration completes, press **Back** until the Store Configuration screen displays, and then follow the procedures for executing the Store function (see [page 6-63](#)).

## **Roll To Roll Mode**

This mode permits the connection of external devices.

For additional information, contact Technical Support.

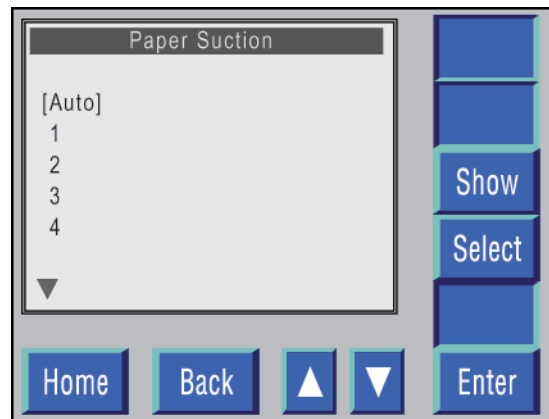
## Paper Suction

The Paper Suction setting adjusts the tension on the documents to be printed to maximize print quality and minimize paper jams.

If the Auto setting (the preferred setting) is selected, the energy applied is determined by the Material Type. If a numeric setting is selected, the lowest number will apply the least energy, and the highest number will apply the most energy.

**Note:** The Paper Suction setting can **not** be changed when a print job is in progress.

1. Press the **Up** or **Down** triangle on the Printer Setup menu to move the selection bar to the **Paper Suction** function.
2. Press **Enter**, which causes the following Paper Suction screen to display:



**Figure 6-86. Paper Suction screen.**

3. The following Paper Suction number settings (in addition to the Auto setting) can be selected from this screen.
  - 1
  - 2
  - 3
  - 4
  - 5
  - 6
  - 7
  - 8

**Note:**

- Brackets ( [ ] ) around a specific Paper Suction setting indicate the Default Paper Suction setting.
  - An arrow (→) ( ) pointing to a specific Paper Suction setting indicates the setting assigned to the current configuration.
3. Press the **Up** or **Down** triangle to move the selection bar to the desired Paper Suction setting.
  4. Press **Enter** to save the Paper Suction setting selected.

**Note:**

- Pressing **Enter** after any Printer Setup function has been executed saves the function. However, it does not store the function
- When the configuration completes, press **Back** until the Store Configuration screen displays, and then follow the procedures for executing the Store function (see [page 6-63](#)).

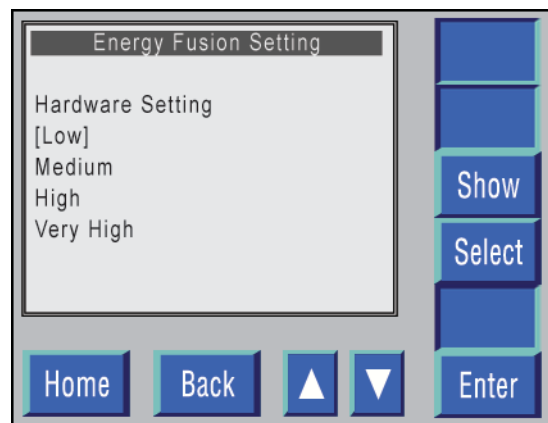
## Energy Fusion

The Energy Fusion setting changes power to the fuser lamp to optimize the fusing of the printed image.

The Low setting (the preferred setting) maximizes the life of the fuser lamp and other replaceable components. The higher settings may be required when printing specialized documents.

**Note:** The Energy Fusion setting can **not** be changed when a print job is in progress.

1. Press the **Up** or **Down** triangle on the Printer Setup menu to move the selection bar to the **Energy Fusion** function.
2. Press **Enter**, which causes the following Energy Fusion Setting screen to display:



**Figure 6-87. Energy Fusion Setting screen.**

**Note:**

- Brackets ( [ ] ) around a specific Energy Fusion setting indicate that it is the Default Energy Fusion setting.
- An arrow (→) pointing to a specific Energy Fusion setting indicates the setting assigned to the current configuration.



3. Press the **Up** or **Down** triangle to move the selection bar to the desired Energy Fusion setting.
4. Press **Enter** to save the Energy Fusion setting selected.

**Note:**

- Pressing **Enter** after any Printer Setup function has been executed saves the function. However, it does not store the function.
- When the configuration completes, press **Back** until the Store Configuration screen displays, and then follow the procedures for executing the Store function (see [page 6-63](#)).

## AIDC Mode

The AIDC Mode permits adjustment of the image.

**Note:** The AIDC Mode setting can **not** be changed when a print job is in progress.

1. Press the **Up** or **Down** triangle on the Printer Setup menu to move the selection bar to the **AIDC Mode** function.
2. Press **Enter**, which causes the following AIDC Mode screen to display:



**Figure 6-88. AIDC Mode screen.**

**Note:**

- Brackets ( [ ] ) around a specific AIDC Mode setting indicate that it is the Default AIDC Mode setting.
- An arrow (→) pointing to a specific AIDC Mode setting indicates the setting assigned to the current configuration.

3. Press the **Up** or **Down** triangle to move the selection bar to the desired AIDC Mode setting:
  - **Enabled (Standard Mode)** – Constantly monitors every printed page and automatically adjusts the image density.
  - **Disabled (No Toner Mark is displayed)** – Prints the data as is without checking the image density.
  - **Power On (No Toner Mark is displayed)** – The printer checks print quality and makes adjustments to match the selected ID. These settings are used until the next Power On.
  - **Job Start (No Toner Mark is displayed)** – Checks and adjusts the image density at the beginning of each new job.
  - **Form End (No Toner Mark is displayed)** – Checks and adjusts the image density at the start of each new job.
4. Press **Enter** to save the AIDC Mode Setting selected.

**Note:**

- Pressing **Enter** after any Printer Setup function has been executed saves the function. However, it does not store the function.
- When the configuration completes, press **Back** until the Store Configuration screen displays, and then follow the procedures for executing the Store function (see [page 6-63](#)).

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# Appendix A: Installing System Software

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## Introduction

This appendix explains how to install the operating software for the LP 100R.

The following procedures are defined in this appendix:

- Installing a full factory-defined SATO-Logic operating system from a USB Flash Drive.
- Installing a System Program upgrade from a USB Flash Drive, which updates the operating system and necessary supporting files without changing user-defined settings such as Configurations and Communications parameters.

**Note:** The above functions should be executed **only** when the printer is in the Offline Idle mode and no print jobs are active.

## Copying the Operating System

If it is necessary to copy the operating system, see the Copy functions included in [Appendix B: Managing Files](#).

## System Program – Full Installation

**Note:** Before installing a full system, it is vital that you print a Status page and the Configuration pages of the current file, which can be used as a backup reference to the current file.

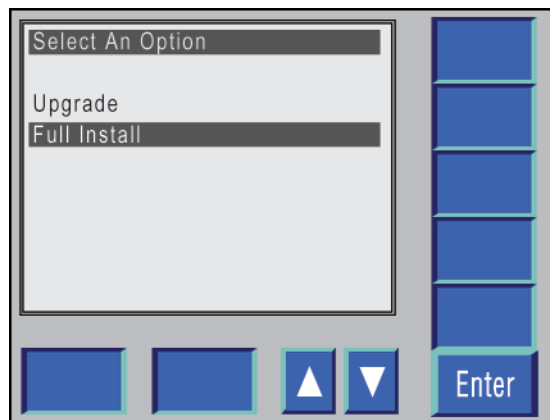
See [Chapter 3: Printer Operation](#) for the procedures relevant to printing Status and Configuration pages.

1. Verify that the **POWER LED** switch is illuminated in green.
2. Open the front door on the printer.

**NOTE:** Opening the front door causes the audible alarm to sound, and a Front Cover Interlock graphic error message displays.

3. Press the **BEEP** button to turn off the alarm.
4. Insert the USB Flash Drive into the USB port.
5. Close the front door on the printer.
6. Reboot the system.

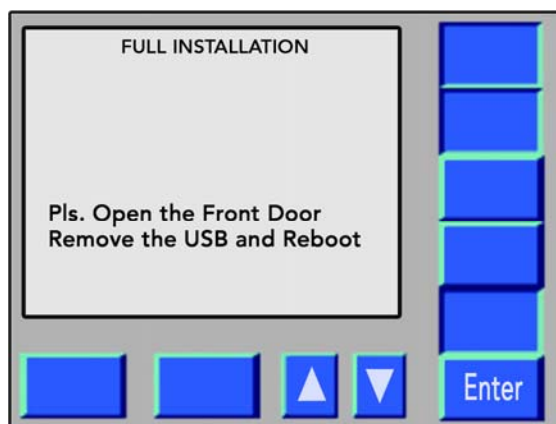
7. The following screen displays:



**Figure A-1. Full Install selected.**

**Note:** If any new screens are included in the system program being installed, there will be a slight delay before the above screen displays.

8. Select **Full Install** and press **Enter**.
9. When the installation of the software is complete, the audible alarm sounds continuously and the following screen displays:



**Figure A-2. System Program – FULL INSTALLATION completed.**



10. Open the front door on the printer.

**Note:** Opening the front door causes the audible alarm to turn off.

11. Remove the USB Flash Drive from the USB port.

12. Wait while printer reboots and will return to the Online Idle screen.

13. Verify that the software has been correctly loaded by visually verifying that the software rev. level displayed in the lower right-hand corner of the screen is correct.

14. File the USB Flash Drive in a safe place.

## System Program – Software Upgrade

The System Program upgrade will update all files except User's Configuration and System Setup files.

The current customer settings in the User's Configuration and System Setup files will not be altered. Any new Configuration and/or Setup file features will be added at the end of their respective files.

**Note:** Before installing a System Program upgrade, it is important that you print a Status page and the Configuration pages of the current file, which can be used as a backup reference to the current file.

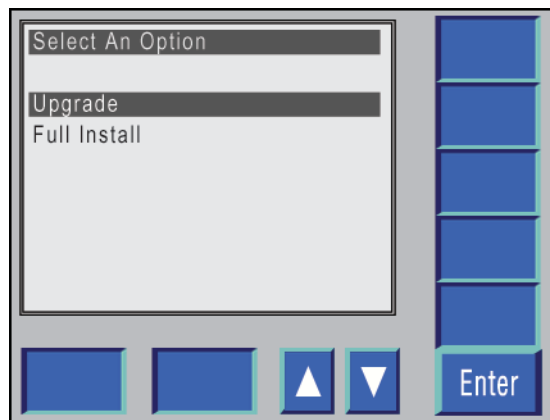
See [Chapter 3: Printer Operation](#) for the procedures relevant to printing the Status and Configuration pages.

1. Verify that the **POWER LED** switch on the printer is in the on position and that the printer is in the Offline Idle mode.
2. Open the front door on the printer.

**Note:** Opening the front door causes the audible alarm to sound and a Front Cover Interlock graphic error message to display.

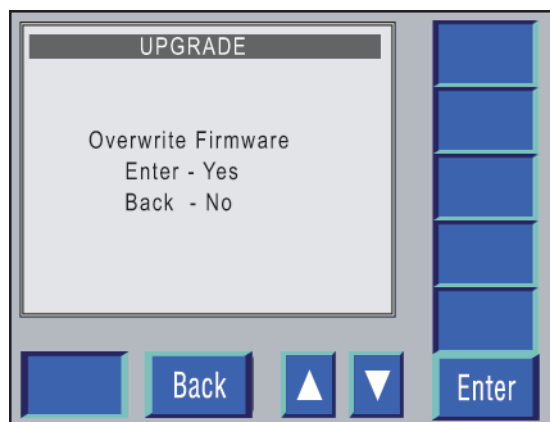
3. Press the **BEEP** button to turn off the alarm.
4. Insert the USB Flash Drive into the USB port.
5. Close the front door on the printer.
6. Reboot the system.

7. The following screen displays:



**Figure A-4. System Program – Upgrade selected.**

8. Select **Upgrade** and press **Enter**.
9. When the installation of the software is complete, the audible alarm sounds continuously and the following screen displays:



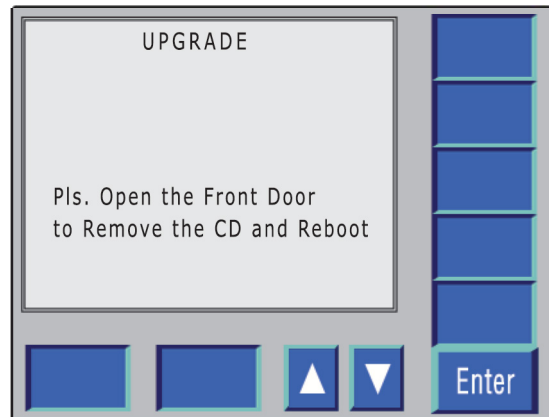
**Figure A-5. Overwrite Firmware selection.**

10. If **No** is selected, an Upgrade Complete message displays.

If **Yes** is selected, the firmware is overwritten, followed by the display of the Upgrade Complete message.

11. When the installation of the upgrade software is complete, an *Upgrading Complete* message displays.

12. The audible alarm sounds continuously and the following screen displays:



**Figure A-6. System Program – Upgrade completed.**

13. Open the front door on the printer.

**Note:** Opening the front door causes the audible alarm to turn off.

14. Remove the USB Flash Drive from the USB port.

15. Wait while the printer reboots and will return to the Online Idle screen.

## Appendix B: Managing Files

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## Introduction

This appendix includes:

- Managing Fonts, Logos, and Formats
- Installing updated files on the hard drive of the printer and/or copying files from the hard drive to a Flash Drive:
  - System Program
    - Installing the System Program
    - Copying the System Program to a Flash Drive
  - System Menu
    - Installing an Updated System Menu
    - Copying an Updated System Menu to a Flash Drive
  - User's Configuration File
    - Installing an Updated User's Configuration File
    - Copying an Updated User's Configuration File to a Flash Drive
  - System Setup File
    - Installing an Updated System Setup File
    - Copying an Updated System Setup File to a Flash Drive
  - System Error Log
    - Installing the System Error Log
    - Copying the System Error Log
  - Capturing a File to a Flash Drive

Each topic is covered in detail in its section.

## Managing Fonts, Logos, and Formats

The LP 100R laser printer's hard drive can store files containing PostScript®, Intellifont™, TrueType™ fonts, and KodescriptPlus™ (stored as PCX images) and KodescriptPlus™ formats. Each of the above can be stored in:

- An **active directory** containing the individual files that are available to an application when the printer is started.
- **or**
- An **archive directory** containing the individual files that are **not** available.

Fonts	Logos	Formats
<ul style="list-style-type: none"><li>• PostScript®</li><li>• Intellifont™</li><li>• TrueType™</li></ul>	PCX images used only with KodescriptPlus™ or Kodescript	KodescriptPlus™

The LP 100R menu system is used to execute the following functions:

- Move files between the active and archive directories
- Copy files from the printer's flash drive to either directory
- Delete files from either directory

When any of the above functions are executed, and you exit the Manage Fonts, Manage Logos, or Manage Formats menu, the printer automatically resets to ensure that the changes are immediately reflected in the printer's operation.

**Note:** Because the procedures for managing fonts, logos, and formats are identical, the instructions that follow are predicated on the Managing Fonts menu. However, logos and formats can be substituted at any time.

## Managing User's Fonts

### Note:

- The Manage User's Fonts functions should be executed only when the printer is in the Offline Idle mode and no print jobs are active.
- If you move fonts to or from the active directory, check the primary and auxiliary font settings in any stored Configurations to ensure that they have not been misplaced.

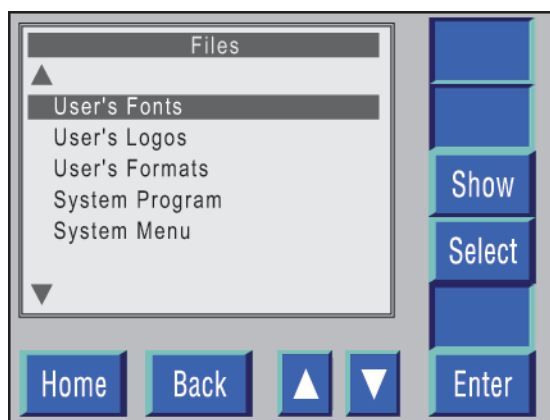
### Procedures

1. If the **POWER LED** is **not** green, press it for approximately 1 second and release.
1. When the System Start-up screen displays, press the **OFFLINE** switch to change the printer from the Online Idle mode to the Offline Idle mode.
2. Press **Menu** to display the Main System Menu.
3. Select **Advanced** from the Main System Menu and press **Enter**.
4. Select **Supervisor** from the Advanced Menu and press **Enter**.

**Note:** If access to the software is password protected, an *Enter Password* prompt displays. See [page 6-39](#) for the rules governing password protection.



5. Select **Files** from the Supervisor Menu and press **Enter**.
6. The following screen displays:



**Figure B-1. Files menu selected.**

7. Select **User's Fonts** and press **Enter**.
8. The following screen displays:



**Figure B-2. Manage Fonts menu selected.**

## Functional Capability

- **USB To Active** – Adds new fonts to the active directory.
- **Active To USB** – Copies active fonts to a flash drive.
- **Delete Active** – Deletes fonts from the active directory.
- **Manage Archive** – Accesses the Manage Archive Fonts menu, where you can move files between the active and archive directories, either adding them to or deleting them from the archive directory.

## USB To Active

1. Select **USB To Active** from the Fonts menu. Press **Enter**.
2. The following screen displays:



**Figure B-3. Accept/Abort USB To Active selected.**

3. If the USB To Active function is to be aborted, press **Back**, which causes the system to return to the Manage Fonts menu without executing the USB To Active function.
4. If the USB To Active function is not to be aborted:
  - a. Open the front door on the printer.
  - b. Insert the flash drive into the USB port on the front of the controller.
  - c. Close the front door on the printer.

5. Press **Enter**.
6. The following screen displays:



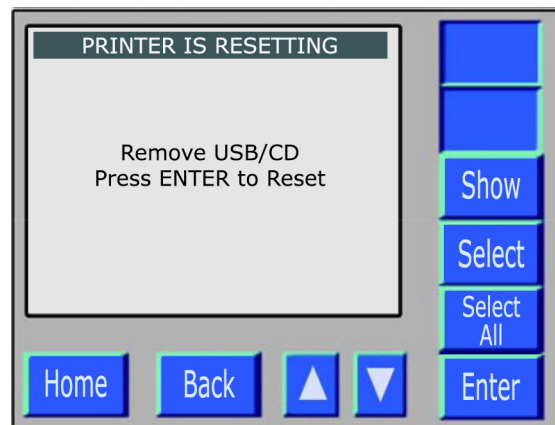
**Figure B-4. Reading new fonts.**

7. When the flash drive has been read, the following screen displays:



**Figure B-5. Copying new fonts to the active directory.**

8. Using the **Up** and **Down** buttons, select each font to be added to the active directory, pressing **Select** after each font selected.  
**Note:** When **Select** is pressed, an asterisk (\*) displays to the left of the font selected.
9. If any font selected to be added to the active directory is **not** to be included:
  - a. Reselect that font.
  - b. Press **Select**.
  - c. The asterisk (\*) to the left of the font name is erased, and the font is not added to the active directory.
10. When all fonts to be added to the active directory have been selected, press **Enter**.
11. The fonts selected are stored in the active directory, and the system returns to the Manage Fonts menu.
12. Press **Home**.
13. The following screen displays:

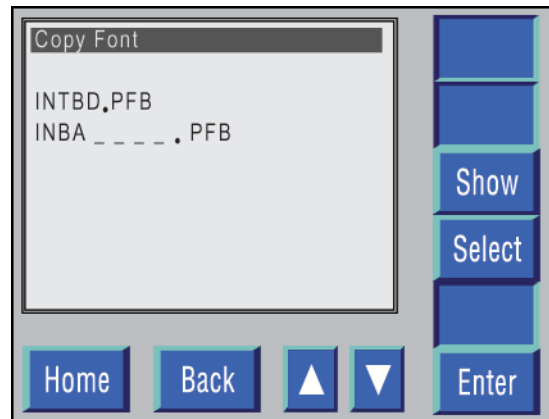


**Figure B-6. Resetting SATO-Logic (system program).**

14. When **Enter** is pressed, a *Please Wait...* message displays until the Reset function is completed.
15. When the Reset function is completed, the System Startup screen displays and the printer will be in the Online Idle mode.

## Active To USB

1. Select **Active To USB** from the Fonts menu and press **Enter**.
2. The following screen displays:



**Figure B-7. Copy Font To USB selected.**

3. Using the **Up** and **Down** buttons, select each font to be copied to a flash drive, pressing **Select** after each font selected.  
**Note:** When **Enter** is pressed, an asterisk (\*) displays to the left of the font selected.
4. If any font that has been selected is **not** to be copied:
  - a. Reselect the font.
  - b. Press **Select**.
  - c. The asterisk (\*) is erased, and the font is not copied to the flash drive.

5. When all fonts to be copied to the flash drive have been selected, press **Enter**.
6. The following screen displays:



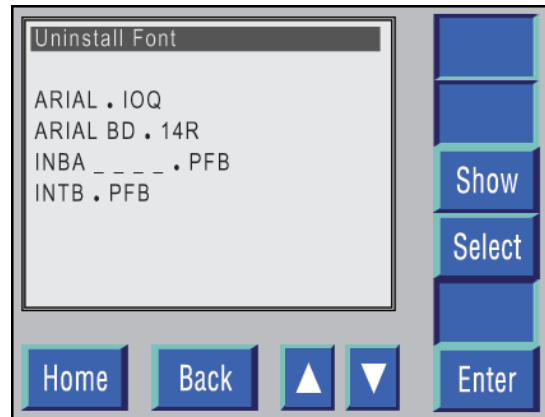
**Figure B-8. Accept/Abort Active To USB selected.**

7. If the Active To USB function is to be aborted, press **Back**, which causes the system to return to the Manage Fonts menu without executing the Active To USB function.
8. If the Active To USB function is not to be aborted:
  - a. Open the front door on the printer.
  - b. Insert the flash drive into the USB port on the front of the controller.
  - c. Close the front door on the printer.
9. Press **Enter**.
10. A *Copying...* message displays while the fonts are recorded on the flash drive.
11. When the Copy function is completed, the system returns to the Manage Fonts menu.
12. Open the front door on the printer.
13. Remove the flash drive from the USB port
14. Close the front door on the printer.
15. Label the flash drive and file as required.



## Delete Active

1. Select **Delete** from the Fonts menu and press **Enter**.
2. The following screen displays:



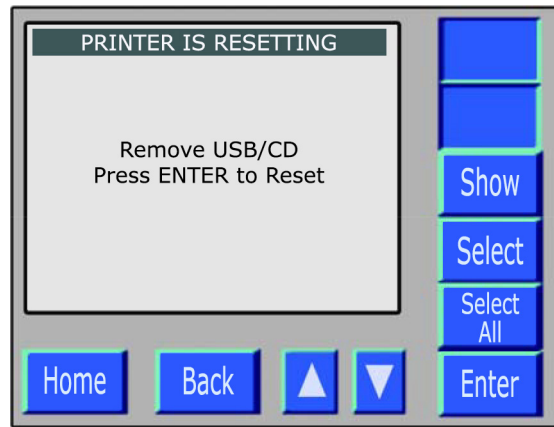
**Figure B-9. Delete Active fonts.**

3. Using the **Up** and **Down** buttons, highlight and press **Select** for each font to be deleted.

**Note:** When **Select** is pressed, an asterisk (\*) displays to the left of the font selected for deletion.

4. If any font selected for deletion is **not** to be deleted:
  - a. Reselect the font.
  - b. Press **Select**.
  - c. The asterisk (\*) is erased, and the font is not deleted.
5. When all fonts to be deleted have been selected, press **Enter**.
6. The system returns to the Manage Fonts menu.

7. Press **Home**.
8. The following screen displays:



**Figure B-10. Resetting SATO-Logic (system program).**

**Note:** There should be no flash drive in the USB port.

9. Press **Enter**.
10. When **Enter** is pressed, a *Please Wait...* message displays until the Reset function is complete.
11. When the Reset function is completed, the System Start-up screen displays, and the printer will be in the Online Idle mode.

## Manage Archive

1. Select **Manage Archive** from the Fonts menu and press **Enter**.
2. The following screen displays:



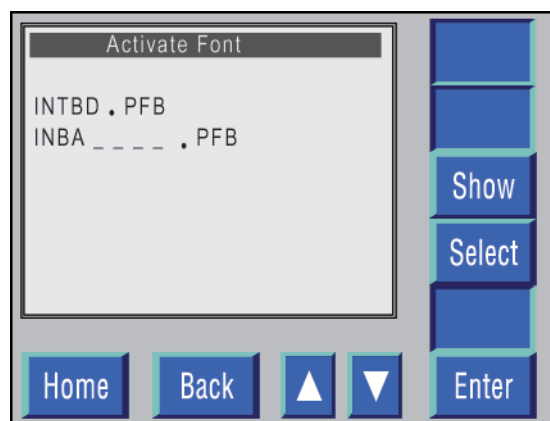
**Figure B-11. Manage Archive Fonts selected.**

## Functional Capability

- **To Active** – Moves fonts from the archive directory to the active directory
- **To Archive** – Moves fonts from the active directory to the archive directory
- **USB To Active** – Adds new fonts to the archive directory
- **Archive To USB** – Copies archive fonts to a flash drive
- **Delete Archive** – Deletes fonts from the archive directory

**To Active**

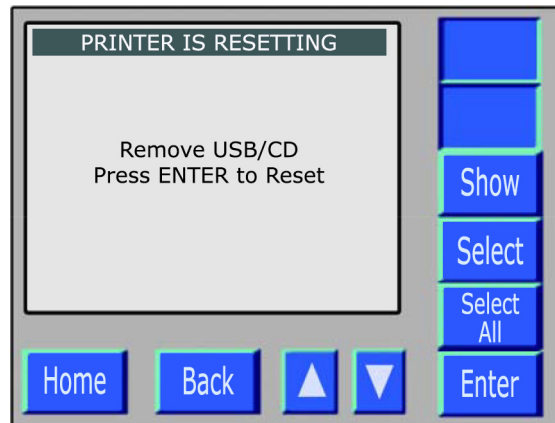
1. Select **To Active** from the Manage Archive Fonts menu and press **Enter**.
2. The following screen displays:



**Figure B-12. Move fonts from archive to active directory.**

3. Using the **Up** and **Down** buttons, select each font to be moved from the archive directory to the active directory, pressing **Select** after each font selected.  
**Note:** When **Select** is pressed, an asterisk (\*) displays to the left of the font selected for deletion.
4. If any font selected to move to the active directory is **not** to be moved:
  - a. Reselect the font.
  - b. Press **Select**.
  - c. The asterisk (\*) to the left of the font name is erased, and the font is not moved to the active directory.
5. When all fonts to be moved from the archive directory to the active directory have been selected, press **Enter**.

6. A *Moving...* message displays.
7. When the Move function is complete, the system returns to the Manage Archive Fonts menu.
8. Press **Home**.
9. The following screen displays:

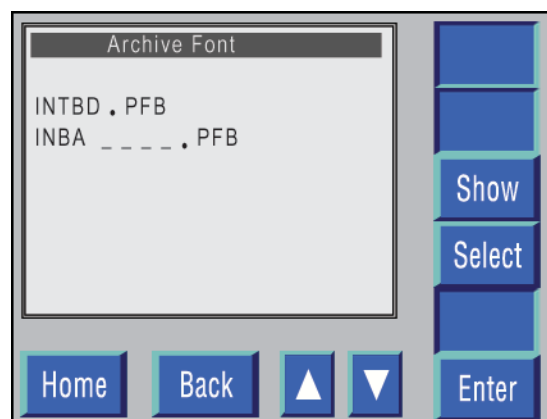


**Figure B-13. Resetting SATO-Logic (system program).**

10. When **Enter** is pressed, a *Please Wait...* message displays until the Reset function is complete.
11. When the Reset function is complete, the System Start-up screen displays and the printer will be in the Online Idle mode.

### To Archive

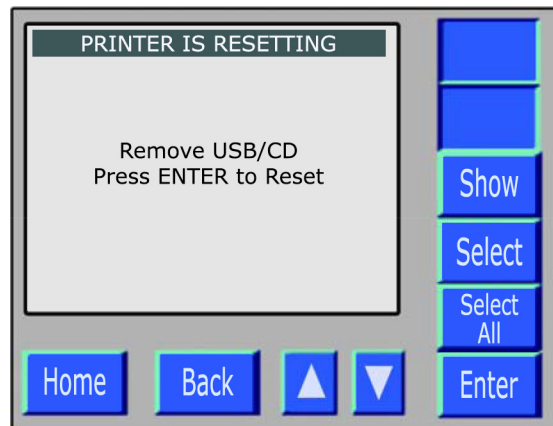
1. Select **To Archive** from the Manage Archive Fonts menu and press **Enter**.
2. The following screen displays:



**Figure B-14. Move fonts from active to the Archive Directory.**

3. Using the **Up** and **Down** buttons, select each font to be moved from the active directory to the archive directory, pressing **Select** after each font selected.  
**Note:** When **Select** is pressed, an asterisk (\*) displays to the left of the font selected for deletion.
4. If any font selected for movement from the active directory to the archive directory is **not** to be moved:
  - a. Reselect the font.
  - b. Press **Select**.
  - c. The asterisk (\*) is deleted, and the font is not moved to the archive directory.
5. When all fonts to be moved from the active directory to the archive directory have been selected, press **Enter**.

6. A *Moving...* message displays.
7. When the Move function is complete, the system returns to the Manage Archive Fonts menu.
8. Press **Home**.
9. The following screen displays:

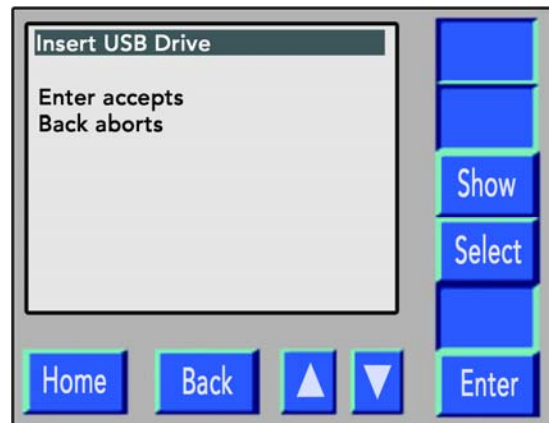


**Figure B-15. Resetting SATO-Logic (system program)**

10. When **Enter** is pressed, a *Please Wait...* message displays until the Reset function is complete.
11. When the Reset function is complete, the System Start-up screen displays and the printer will be in the Online Idle mode.

## USB To Archive

1. Select **USB To Archive** from the Manage Archive Fonts menu and press **Enter**.
2. The following screen displays:



**Figure B-16. Accept/Abort USB To Archive selected.**

3. If the USB To Archive function is to be aborted, press **Back**, which causes the system to return to the Manage Archive Fonts menu without executing the USB To Archive function.
4. If the USB To Archive function is not to be aborted:
  - a. Open the front door on the printer.
  - b. Insert the flash drive, whichever is to be used, into the appropriate USB port on the controller's front panel.
  - c. Close the front door on the printer.
5. Press **Enter**.



6. The following screen displays:



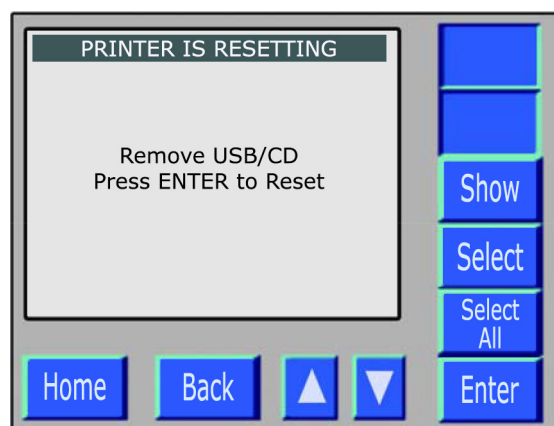
**Figure B-17. Reading new fonts.**

7. When the flash drive has been read the following screen displays:



**Figure B-18. Copying new fonts to the archive directory.**

8. Using the **Up** and **Down** buttons, select each font to be added to the archive directory, pressing **Select** after each font selected.  
**Note:** When **Select** is pressed, an asterisk (\*) displays to the left of the font selected.
9. If any font selected to be added to the archive directory is **not** to be included:
  - a. Reselect that font.
  - b. Press **Select**.
  - c. The asterisk (\*) to the left of the font name is erased, and the font is not added to the archive directory.
10. When all fonts to be added to the archive directory have been selected, press **Enter**.
11. The fonts selected will be stored in the archive directory, and the system returns to the Manage Archive Fonts menu.
12. Press **Home**.
13. The following screen displays:

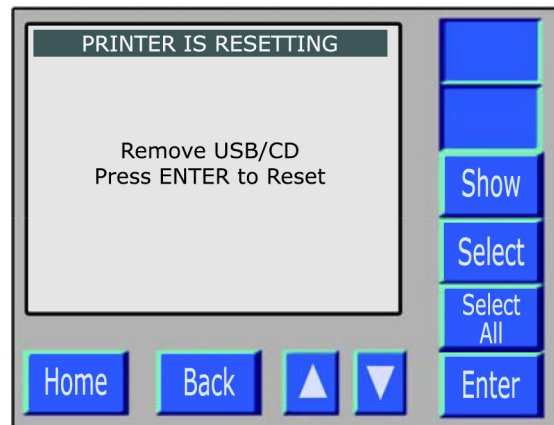


**Figure B-19. Resetting SATO-Logic (system program).**

14. When **Enter** is pressed, a *Please Wait...* message displays until the Reset function is complete.
15. When the Reset function is complete, the System Start-up screen displays and the printer will be in the Online Idle mode.

### Archive To USB

1. Select **Archive To USB** from the Manage Archive Fonts menu and press **Enter**.
2. The following screen displays:



**Figure B-20. Copy font Archive To USB selected.**

3. Using the **Up** and **Down** buttons, select each font to be copied to a flash drive, pressing **Select** after each font selected.  
**Note:** When **Select** is pressed, an asterisk (\*) displays to the left of the font selected.
4. If any font selected to be copied is **not** to be copied:
  - a. Reselect that font.
  - b. Press **Select**.
  - c. The asterisk (\*) is erased, and the font is not copied to the flash drive.
5. When all fonts to be copied to the flash drive have been selected, press **Enter**.

6. The following screen displays:

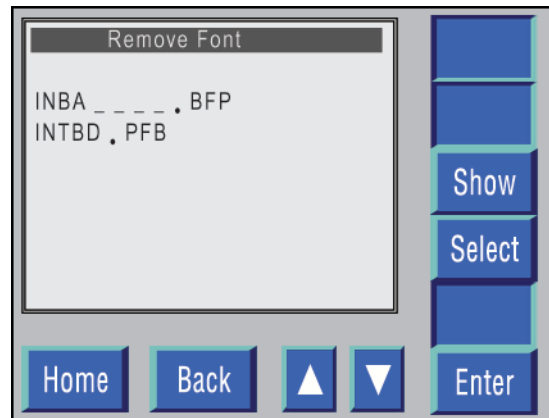


**Figure B-21. Accept/Abort Archive To USB selected.**

7. If the Archive To USB function is to be aborted, press **Back**, which causes the system to return to the Manage Archive Fonts menu without executing the Archive To USB function.
8. If the Archive To USB function is not to be aborted:
  - a. Open the front door on the printer.
  - b. Insert the flash drive into the USB port on the front of the controller.
  - c. Close the front door on the printer.
9. Press the **Enter** button.
10. A *Copying...* message displays while the fonts are being recorded on the flash drive.
11. When the Copy function is complete, the system returns to the Manage Archive Fonts menu.
12. Open the front door on the printer.
13. Remove the flash drive from the USB port.
14. Close the front door on the printer.
15. Label the flash drive and file as required.

### Delete Archive

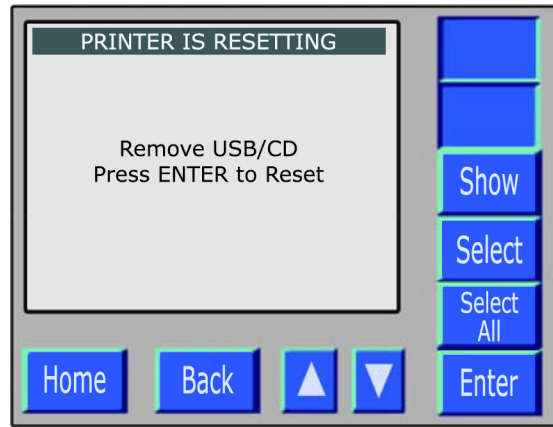
1. Select **Delete Archive** from the Manage Archive Fonts menu and press **Enter**.
2. The following screen displays:



**Figure B-22. Delete Archive fonts.**

3. Using the **Up** and **Down** buttons, select each font to be deleted, press **Select** after each font selected.  
**Note:** When **Select** is pressed, an asterisk (\*) displays to the left of the font selected for deletion.
4. If any font selected for deletion is **not** to be deleted:
  - a. Reselect the font.
  - b. Press **Select**.
  - c. The asterisk (\*) is erased, and the font is not deleted.
5. When all fonts to be deleted have been selected, press **Enter**.
6. The system returns to the Manage Archive Fonts menu.

7. Press **Home**.
8. The following screen displays:



**Figure B-23. Resetting SATO-Logic (system program).**

**Note:** There should be no flash drive in the USB port.

9. Press **Enter**.
10. When Enter is pressed, a *Please Wait...* message displays until the Reset function is complete.
11. When the Reset function is complete, the System Start-up screen displays and the printer will be in the Online Idle mode.

## System Program

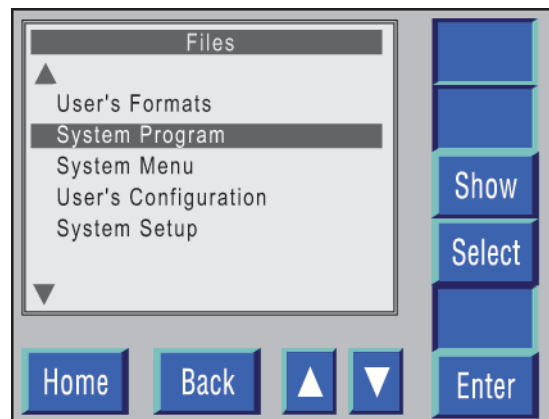
### Installing the System Program

**Note:** Do not attempt to execute this function unless you are guided by SATO or your printer representative either by telephone or in-person.

1. If the **POWER LED** is **not** green, press it for approximately 1 second and release.
2. When the System Start-up screen displays, press the **OFFLINE** switch to change the printer from the Online Idle mode to the Offline Idle mode.
3. Press **Menu** to display the Main Menu.
4. Select **Advanced** from the Main Menu and press **Enter**.
5. Select **Supervisor** from the Advanced Menu and press **Enter**.

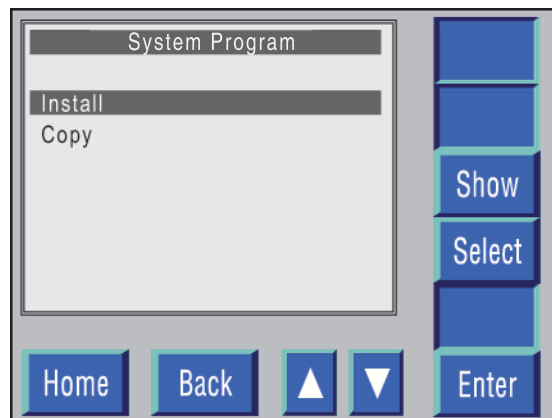
**Note:** If access to the software is password protected, an Enter Password prompt displays. See [page 6-39](#) for the rules governing password protection.

6. Select **Files** from the Supervisor Menu and press **Enter**.
7. The following screen displays:



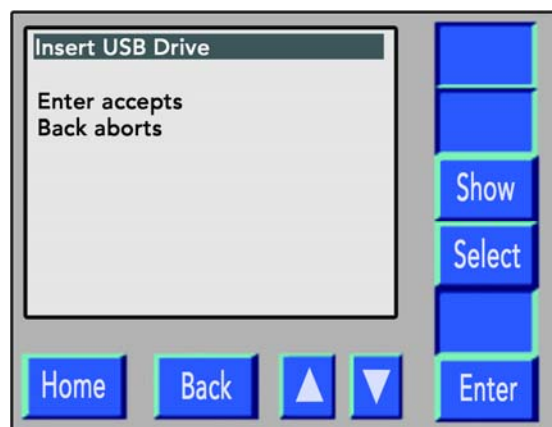
**Figure B-24. Files System Program selected.**

8. Select System Program and press **Enter**.
9. The following screen displays:



**Figure B-25. System Program Install option selected.**

10. Select **Install** and press **Enter**.
11. The following screen displays:



**Figure B-26. Accept/Abort Install system program selected.**



12. If the Install function is to be aborted, press **Back**, which causes the system to return to the Files menu without executing the Install function.
13. If the Install function is not to be aborted:
  - a. Open the front door on the printer.
  - b. Insert the flash drive into the USB port on the front of the controller.
  - c. Close the front door on the printer.
14. Press the **Enter** button to start the Install function.
15. When the Install function is complete, the system returns to the Files menu.
16. Open the front door on the printer.
17. Remove the flash drive from the appropriate port on the controller.
18. Close the front door on the printer.
19. Power down the printer by pressing the **Off** button.

**Note:** If the printer's power is not turned off, the new software will not be recognized and will not replace the old software.
20. Store the flash drive in a safe place.

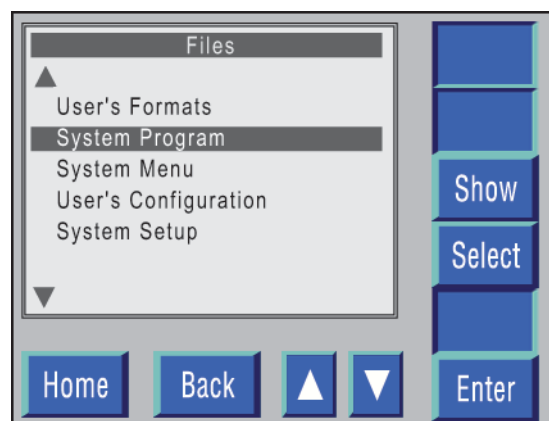
## Copying the System Program

**Note:** If this Copy function is selected, the System Program will be copied. However, none of the system program supporting files will be copied.

1. If the **POWER LED** is **not** green, press it for approximately 1 second and release.
2. When the System Start-up screen displays, press the **OFFLINE** switch to change the printer from the Online Idle mode to the Offline Idle mode.
3. Press **Menu** to display the Main Menu.
4. Select **Advanced** from the Main Menu and press **Enter**.
5. Select **Supervisor** from the Advanced Menu and press **Enter**.

**Note:** If access to the software is password protected, an *Enter Password* prompt displays. See [page 6-39](#) for the rules governing password protection.

6. Select **Files** from the Supervisor Menu and press **Enter**.
7. The following screen displays:



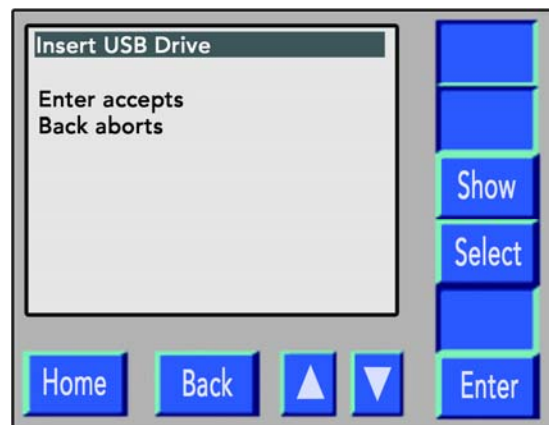
**Figure B-27. Files System Program selected.**

8. Select System Program and press **Enter**.
9. The following screen displays:



**Figure B-28. SATO-Logic Program copy option selected.**

10. Select Copy and press **Enter**.
11. The following screen displays:



**Figure B-29. Accept/Abort Copy System Program selected.**

12. If the Copy function is to be aborted, press **Back**, which causes the system to return to the Files menu without executing the Copy function.
13. If the Copy function is not to be aborted:
  - a. Open the front door on the printer.
  - b. Insert the flash drive into the USB port on the front of the controller.
  - c. Close the front door on the printer.
14. Press **Enter** to start the Copy function.
15. When the Copy function is complete, the system returns to the Files menu.
16. Open the front door on the printer and remove the flash drive from the USB port.
17. Close the front door on the printer.
18. Label the flash drive with the file name and software version.
19. Store the flash drive in a safe place.

## System Menu

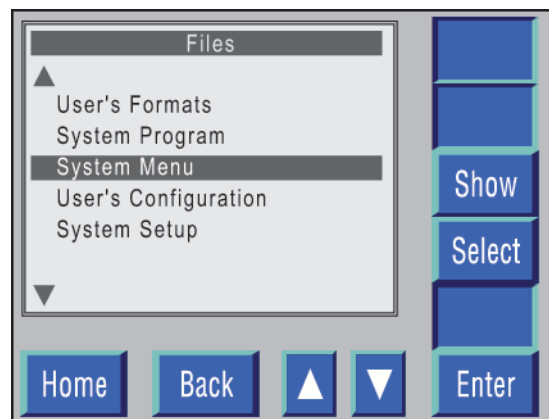
### Installing the Updated System Menu

**Note:** Do not attempt to execute this function unless you are guided by SATO or your printer representative either by telephone or in-person.

1. If the **POWER LED** is **not** green, press it for approximately 1 second and release.
2. When the System Start-up screen displays, press the **OFFLINE** switch to change the printer from the Online Idle mode to the Offline Idle mode.
3. Press **Menu** to display the Main Menu.
4. Select **Advanced** from the Main Menu and press **Enter**.
5. Select **Supervisor** from the Advanced Menu and press **Enter**.

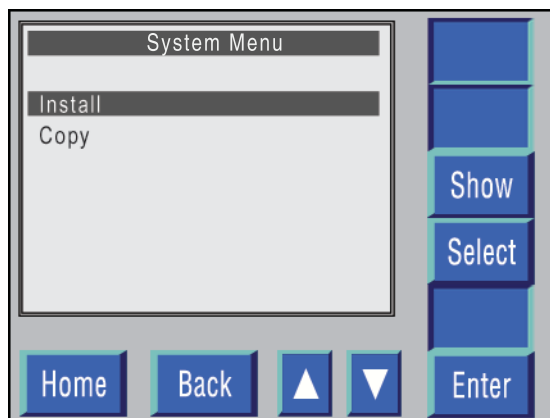
**Note:** If access to the software is password protected, an Enter Password prompt displays. See [page 6-39](#) for the rules governing password protection.

6. Select **Files** from the Supervisor Menu and press **Enter**.
7. The following screen displays:



**Figure B-30. Files System Menu selected.**

8. Select System Menu and press **Enter**.
9. The following screen displays:



**Figure B-31. System Menu Install option selected.**

10. Select Install and press **Enter**.
11. The following screen displays:



**Figure B-32. Accept/Abort Install System Menu selected.**

12. If the Install function is to be aborted, press **Back** which causes the system to return to the Files menu without executing the Install function.
13. If the Install function is not to be aborted:
  - a. Open the front door on the printer.
  - b. Insert the flash drive into the USB port on the front of the controller.
  - c. Close the front door on the printer.
14. Press **Enter** to start the Install function.
15. When the Install function is complete, the system returns to the Files menu.
16. Open the front door on the printer.
17. Remove the flash drive from the appropriate USB port on the controller.
18. Close the front door on the printer.
19. Power down the printer by pressing the **Off** button.

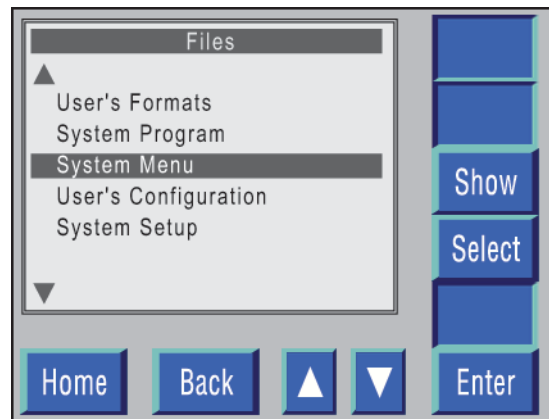
**Note:** If the printer's power is not turned off, the new software will not be recognized and will not replace the old software.
20. Store the flash drive in a safe place.

## Copying the Updated System Menu

1. If the **POWER LED** is **not** green, press it for approximately 1 second and release.
2. When the System Start-up screen displays, press the **OFFLINE** switch to change the printer from the Online Idle mode to the Offline Idle mode.
3. Press **Menu** to display the Main Menu.
4. Select **Advanced** from the Main Menu and press **Enter**.
5. Select **Supervisor** from the Advanced Menu and press **Enter**.

**Note:** If access to the software is password protected, an *Enter Password* prompt displays. See [page 6-39](#) for the rules governing password protection.

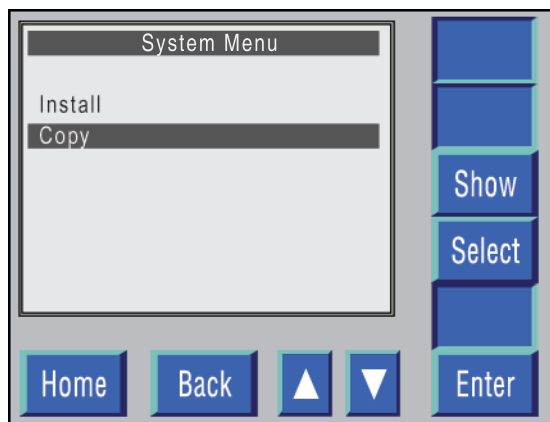
6. Select **Files** from the Supervisor Menu and press **Enter**.
7. The following screen displays:



**Figure B-33. Files System Menu selected.**

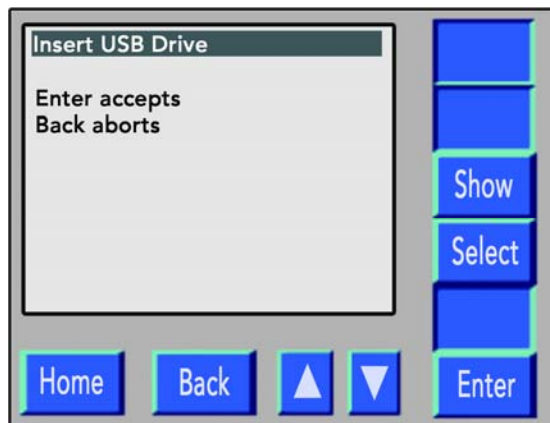


8. Select System Menu and press **Enter**.
9. The following screen displays:



**Figure B-34. System Menu Copy option selected.**

10. Select Copy and press **Enter**.
11. The following screen displays:



**Figure B-35. Accept/Abort Copy System Menu option selected.**

12. If the Copy function is to be aborted, press **Back**, which causes the system to return to the Files menu without executing the Copy function.
13. If the Copy function is not to be aborted:
  - a. Open the front door on the printer.
  - b. Insert the flash drive into the USB port on the front of the controller.
  - c. Close the front door on the printer.
14. Press **Enter** to start the Copy function.
15. When the Copy function is complete, the system returns to the Files menu.
16. Open the front door on the printer and remove the flash drive from the USB port.
17. Close the front door on the printer.
18. Label the flash drive with the file name and software version.
19. Store the flash drive in a safe place.

## User's Configuration File

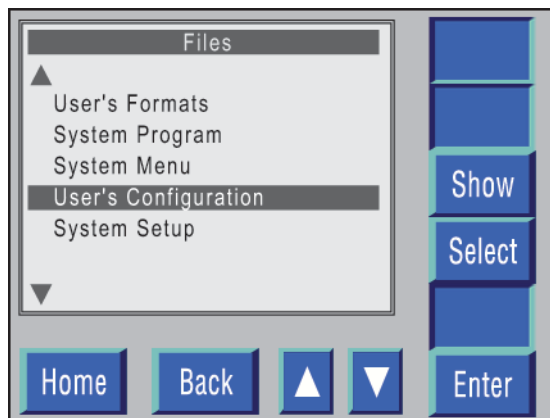
### Installing the Updated User's Configuration File

**Note:** Executing this function allows you to move the Configuration files from one printer to another printer without having to re-enter all of the Configuration data.

1. Set the **POWER** switch on the printer to the on position.
2. When the System Start-up screen displays, press the **OFFLINE** switch to change the printer from the Online Idle mode to the Offline Idle mode.
3. Press **Menu** to display the Main Menu.
4. Select **Advanced** from the Main Menu and press **Enter**.
5. Select **Supervisor** from the Advanced Menu and press **Enter**.

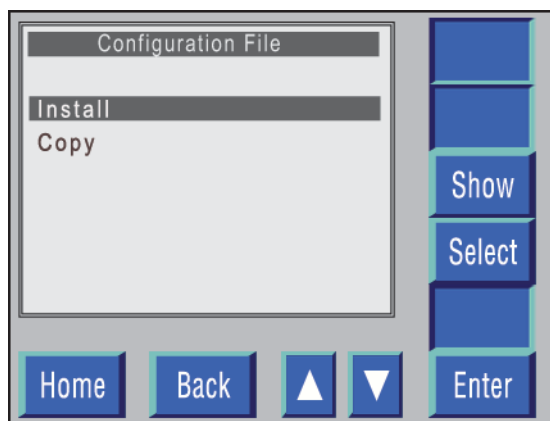
**Note:** If access to the software is password protected, an *Enter Password* prompt displays. See [page 6-39](#) for the rules governing password protection.

6. Select **Files** from the Supervisor Menu and press **Enter**.
7. The following screen displays:



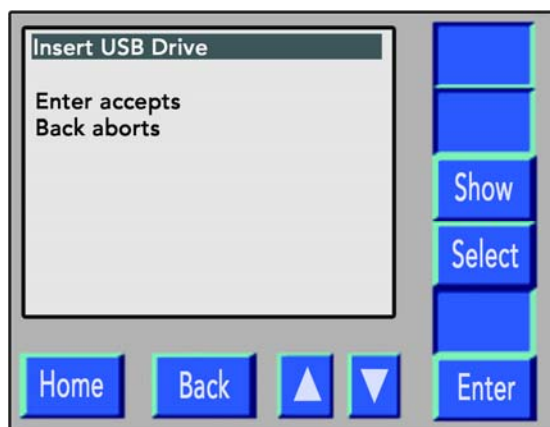
**Figure B-36. Files User's Configuration selected.**

8. Select **System Menu** and press **Enter**.
9. The following screen displays:



**Figure B-37. Configuration File Install option selected.**

10. Select **Install** and press **Enter**.
11. The following screen displays:



**Figure B-38. Accept/Abort Install Configuration File option selected.**

12. If the Install function is to be aborted, press **Back**, which causes the system to return to the Files menu without executing the Install function.
13. If the Install function is not to be aborted:
  - a. Open the front door on the printer.
  - b. Insert the flash drive into the USB port on the front of the controller.
  - c. Close the front door on the printer.
14. Press **Enter** to start the Install function.
15. When the Install function is complete, the system returns to the Files menu.
16. Open the front door on the printer.
17. Remove the flash drive from the appropriate USB port on the controller.
18. Close the front door on the printer.
19. Power down the printer by pressing the **Off** button.

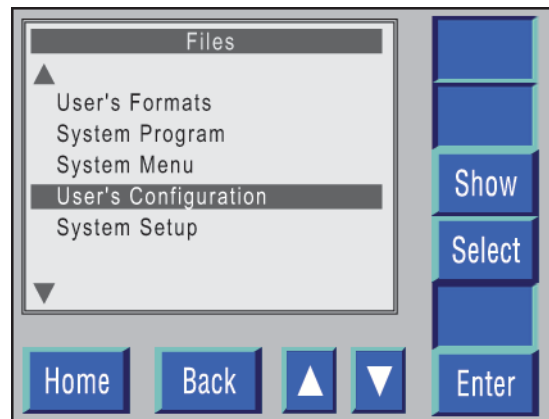
**Note:** If the printer's power is not turned off, the new software will not be recognized and will not replace the old software.
20. Store the flash drive in a safe place.

## Copying the Updated User's Configuration File

1. If the **POWER LED** is **not** green, press it for approximately 1 second and release.
2. When the System Start-up screen displays, press the **OFFLINE** switch to change the printer from the Online Idle mode to the Offline Idle mode.
3. Press **Menu** to display the Main Menu.
4. Select **Advanced** from the Main Menu and press **Enter**.
5. Select **Supervisor** from the Advanced Menu and press **Enter**.

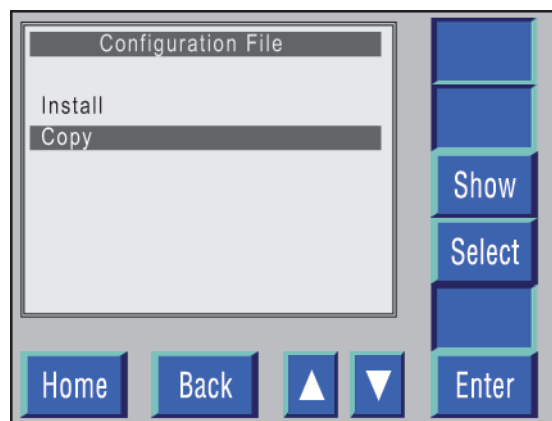
**Note:** If access to the software is password protected, an *Enter Password* prompt displays. See [page 6-39](#) for the rules governing password protection.

6. Select **Files** from the Supervisor Menu and press **Enter**.
7. The following screen displays:



**Figure B-39. Files User's Configuration selected.**

8. Select **User's Configuration** and press **Enter**.
9. The following screen displays:



**Figure B-40. Configuration File Copy option selected.**

10. Select **Copy** and press **Enter**.
11. The following screen displays:



**Figure B-41. Accept/Abort Configuration File Copy option selected.**

12. If the Copy function is to be aborted, press **Back**, which will cause the system to return to the Files menu without executing the Copy function.
13. If the Copy function is not to be aborted:
  - a. Open the front door on the printer.
  - b. Insert the flash drive into the USB port on the front of the controller.
  - c. Close the front door on the printer.
14. Press **Enter** to start the Copy function.
15. When the Copy function is complete, the System returns to the Files menu.
16. Open the front door on the printer and remove the flash drive from the USB port.
17. Close the front door on the printer.
18. Label the flash drive with the file name and software version.
19. Store the flash drive in a safe place.



## System Setup File

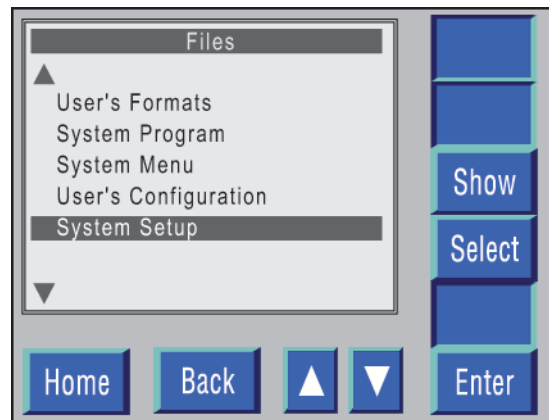
### Installing the Updated System Setup File

This function controls the interface parameters and printer options (i.e., swing guide, burster unit, and passwords):

1. If the **POWER LED** is **not** green, press it for approximately 1 second and release.
2. When the System Start-up screen displays, press the **OFFLINE** switch to change the printer from the Online Idle mode to the Offline Idle mode.
3. Press **Menu** to display the Main Menu.
4. Select **Advanced** from the Main Menu and press **Enter**.
5. Select **Supervisor** from the Advanced Menu and press **Enter**.

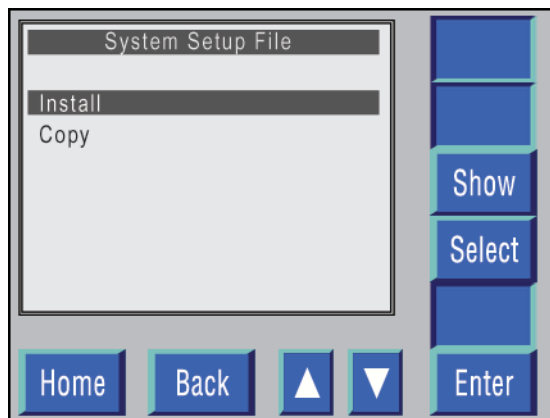
**Note:** If access to the software is password protected, an *Enter Password* prompt displays. See [page 6-39](#) for the rules governing password protection.

6. Select **Files** from the Supervisor Menu and press **Enter**.
7. The following screen displays:



**Figure B-42. Files System Setup selected.**

8. Select **System Menu** and press **Enter**.
9. The following screen displays:



**Figure B-43. System Setup File Install option selected.**

10. Select **Install** and press **Enter**.
11. The following screen displays:



**Figure B-44. Accept/Abort System Setup Install option selected.**

12. If the Install function is to be aborted, press **Back**, which causes the system to return to the Files menu without executing the Install function.
13. If the Install function is not to be aborted:
  - a. Open the front door on the printer.
  - b. Insert the flash drive, whichever is to be used, into the appropriate USB drive on the controller's front panel.
  - c. Close the front door on the printer.
14. Press **Enter** to start the Install function.
15. When the Install function is complete, the system returns to the Files menu.
16. Open the front door on the printer.
17. Remove the flash drive from the appropriate USB port on the controller.
18. Close the front door on the printer.
19. Power down the printer by pressing the **Off** button.

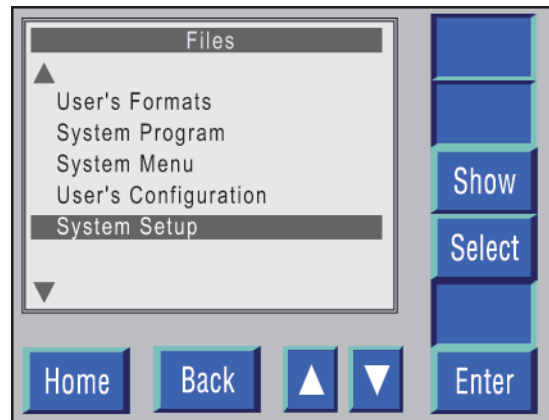
**Note:** If the printer's power is not turned off, the new software will not be recognized and will not replace the old software.
20. Store the flash drive in a safe place.

## Copying the System Setup File

1. If the **POWER LED** is **not** green, press it for approximately 1 second and release.
2. When the System Start-up screen displays, press the **OFFLINE** switch to change the printer from the Online Idle mode to the Offline Idle mode.
3. Press **Menu** to display the Main Menu.
4. Select **Advanced** from the Main Menu and press **Enter**.
5. Select **Supervisor** from the Advanced Menu and press **Enter**.

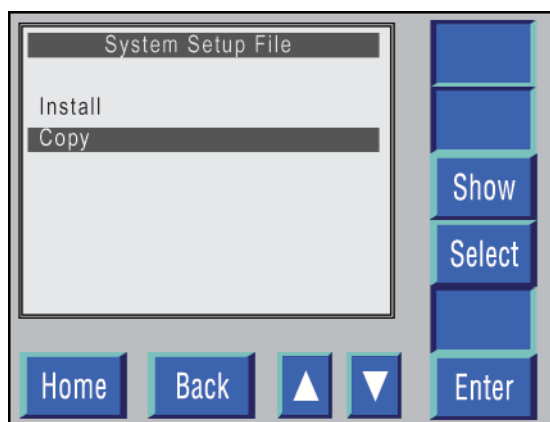
**Note:** If access to the software is password protected, an *Enter Password* prompt displays. See [page 6-39](#) for the rules governing password protection.

6. Select **Files** from the Supervisor Menu and press **Enter**.
7. The following screen displays:



**Figure B-45. Files System Setup selected.**

8. Select System Setup and press **Enter**.
9. The following screen displays:



**Figure B-46. System Setup File Copy option selected.**

10. Select Copy and press **Enter**.
11. The following screen displays:



**Figure B-47. Accept/Abort System Setup Copy option selected.**

12. If the Copy function is to be aborted, press **Back**, which will cause the system to return to the Files menu without executing the Copy function.
13. If the Copy function is not to be aborted:
  - a. Open the front door on the printer.
  - b. Insert the flash drive into the USB port on the front of the controller.
  - c. Close the front door on the printer.
14. Press **Enter** to start the Copy function.
15. When the Copy function is complete, the system returns to the Files menu.
16. Open the front door on the printer and remove the flash drive from the USB port.
17. Close the front door on the printer.
18. Label the flash drive with the file name and software version.
19. Store the flash drive in a safe place.

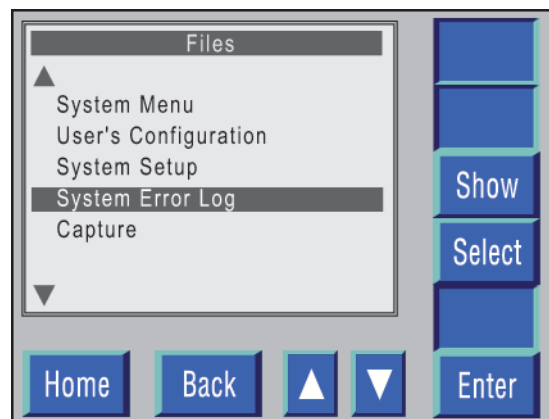
## System Error Log

### Installing the System Error Log

1. If the **POWER LED** is **not** green, press it for approximately 1 second and release.
2. When the System Start-up screen displays, press the **OFFLINE** switch to change the printer from the Online Idle mode to the Offline Idle mode.
3. Press **Menu** to display the Main Menu.
4. Select **Advanced** from the Main Menu and press **Enter**.
5. Select **Supervisor** from the Advanced Menu and press **Enter**.

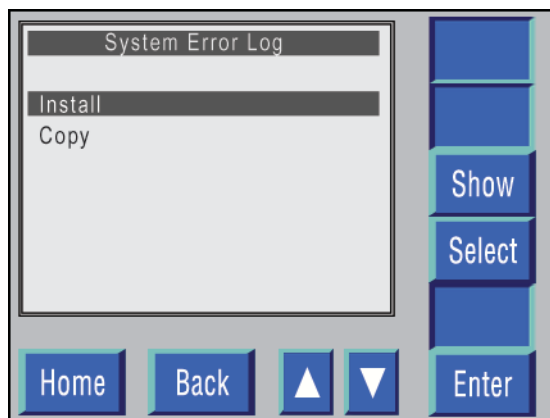
**Note:** If access to the software is password protected, an *Enter Password* prompt displays. See [page 6-39](#) for the rules governing password protection.

6. Select **Files** from the Supervisor Menu and press **Enter**.
7. The following screen displays:



**Figure B-48. Files System Error Log selected.**

8. Select **System Error Log** and press **Enter**.
9. The following screen displays:



**Figure B-49. System Error Log Install option selected.**

10. Select **Install** and press **Enter**.
11. The following screen displays:



**Figure B-50. Accept/Abort System Error Log Install option selected.**



12. If the Install function is to be aborted, press **Back**, which causes the system to return to the Files menu without executing the Install function.
13. If the Install function is not to be aborted:
  - a. Open the front door on the printer.
  - b. Insert the flash drive into the USB port on the front of the controller.
  - c. Close the front door on the printer.
14. Press **Enter** to start the Install function.
15. When the Install function is complete, the system returns to the Files menu.
16. Open the front door on the printer.
17. Remove the flash drive from the appropriate USB port on the controller.
18. Close the front door on the printer.
19. Power down the printer by pressing the **Off** button.

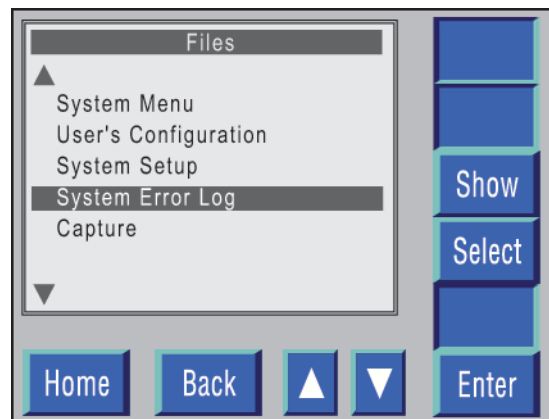
**Note:** If the printer's power is not turned off, the new software will not be recognized and will not replace the old software.
20. Store the flash drive in a safe place.

## Copying the System Error Log

1. If the **POWER LED** is **not** green, press it for approximately 1 second and release.
2. When the System Start-up screen displays, press the **OFFLINE** switch to change the printer from the Online Idle mode to the Offline Idle mode.
3. Press **Menu** to display the Main Menu.
4. Select **Advanced** from the Main Menu and press **Enter**.
5. Select **Supervisor** from the Advanced Menu and press **Enter**.

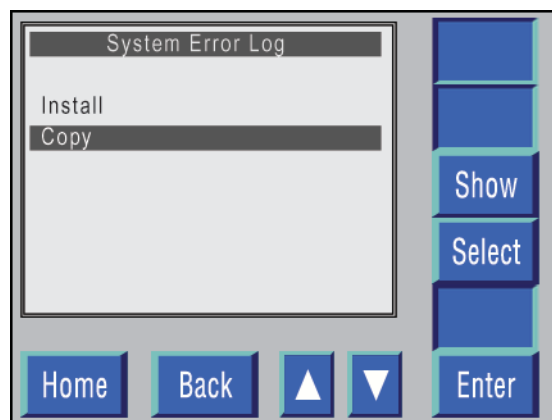
**Note:** If access to the software is password protected, an *Enter Password* prompt displays. See [page 6-39](#) for the rules governing password protection.

6. Select **Files** from the Supervisor Menu and press **Enter**.
7. The following screen displays:



**Figure B-51. Files System Error Log selected.**

8. Select **System Error Log** and press **Enter**.
9. The following screen displays:



**Figure B-52. System Error Log Copy option selected.**

10. Select **Copy** and press **Enter**.
11. The following screen displays:



**Figure B-53. Accept/Abort System Error Log Copy option selected.**

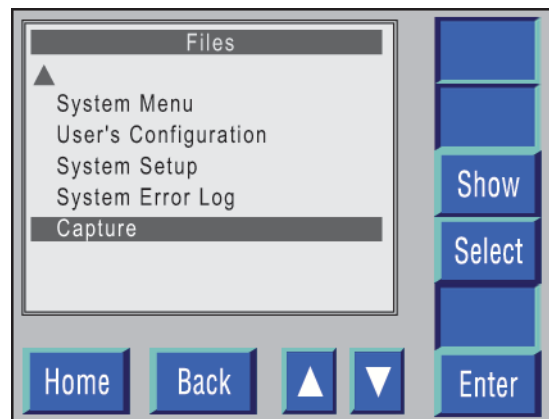
12. If the Copy function is to be aborted, press **Back**, which causes the system to return to the Files menu without executing the Copy function.
13. If the Copy function is not to be aborted:
  - a. Open the front door on the printer.
  - b. Insert the flash drive into the USB port on the front of the controller.
  - c. Close the front door on the printer.
14. Press **Enter** to start the Copy function.
15. When the Copy function is complete, the system returns to the Files menu.
16. Open the front door on the printer and remove the flash drive from the USB port.
17. Close the front door on the printer.
18. Label the flash drive with the file name and software version.
19. Store the flash drive in a safe place.

## Capturing a File to a Flash Drive

1. If the **POWER LED** is **not** green, press it for approximately 1 second and release.
2. When the System Start-up screen displays, press the **OFFLINE** switch to change the printer from the Online Idle mode to the Offline Idle mode.
3. Press **Menu** to display the Main Menu.
4. Select **Advanced** from the Main Menu and press **Enter**.
5. Select **Supervisor** from the Advanced Menu and press **Enter**.

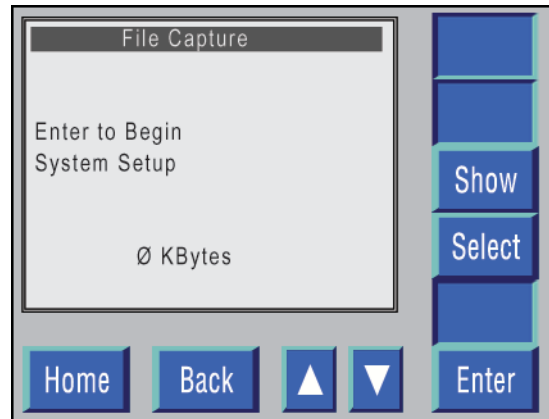
**Note:** If access to the software is password protected, an *Enter Password* prompt displays. See [page 6-39](#) for the rules governing password protection.

6. Select **Files** from the Supervisor Menu and press **Enter**.
7. The following screen displays:



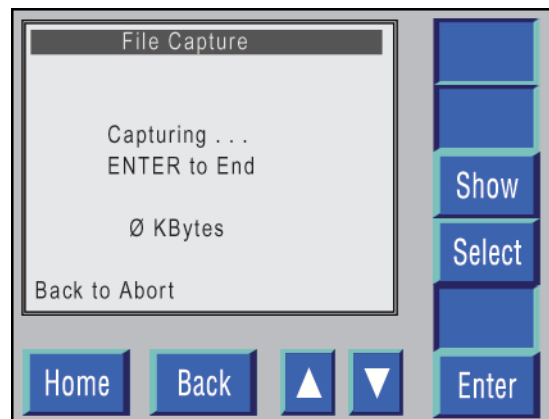
**Figure B-54. Files Capture selected.**

8. Select **Capture** and press **Enter**.
9. The following screen displays:



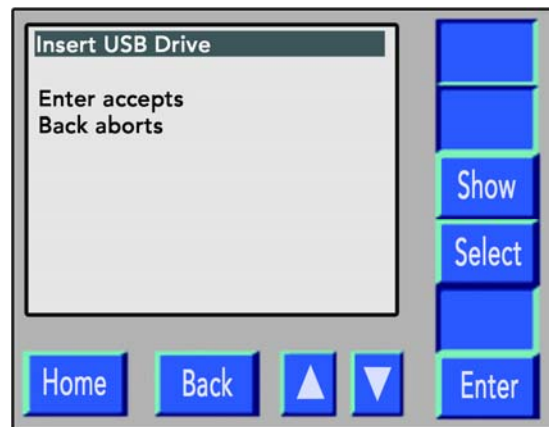
**Figure B-55. File Capture.**

10. To discontinue the File Capture when the above screen displays, press **Back**, which will cause the system to return to the Supervisor Menu.
11. To continue the File Capture, press **Enter**.
12. The following screen displays:



**Figure B-56. File capturing in process.**

13. When the above screen displays, transmit the File from the host computer to the printer.  
**Note:** During File Capture, the number of KBytes, as the printer receives them, are continuously being incremented until the File Capture is complete.
14. During File Capture the capture process may be:
  - a. Aborted by pressing **Back**, which will return the system to the Supervisor Menu.
  - b. Terminated by pressing **Enter** if the full file being captured is not needed.
  - c. Continued until the complete file being transmitted has been received.
15. When the File Capture has been completed, press **Enter**.
16. The following screen displays:



**Figure B-57. File Capture selected.**

17. If the File Capture has not been aborted:
  - a. Open the front door on the printer.
  - b. Insert the flash drive into the USB port on the front of the controller.
  - c. Close the front door.
  - d. Press **Enter**, which causes the file to be compressed and transferred to the flash drive.
  - e. When the File Capture to flash drive is complete, remove the flash drive from the printer.
18. Affix a label to the flash drive identifying its contents.
19. Forward the completed flash drive to the appropriate support group to isolate the source of any problems.

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## Appendix C: Service/Technical Support

Service .....	C-2
Technical Support .....	C-2

## Service

SATO America, LLC. ("SATO"), recommends that you call for preventive maintenance at the end of every 220,000 pages of printing. (i.e., 220,000 pgs., 440,000 pgs., 660,000 pgs., 880,000 pgs., 1,100,000 pgs., etc.)

Service on the LP 100R printer is provided either directly by SATO or by an authorized SATO outlet. There are three convenient methods to place a service call with Sato Customer Service listed below:

### By Phone

To place a call by telephone, call **1-800-524-0029**

- During business hours, you will speak directly to a customer service representative. They will take the necessary information and initiate a service request to assign the call to the appropriate field technician. You will receive the reference number for tracking.
- During off-hours: you can leave a message with the above information.

### By E-Mail

To place a call by e-mail, send the above information to **servicedesk-sai@sato-global.com**. A customer service representative will take the necessary information and enter a field service request which assigns and notifies the appropriate field technician.

### By Web

To place a service call via our web site; go to the following URL:  
**<https://www.satoamerica.com/sato-service/laser-service.aspx>**

Enter the necessary information online and click the submit button. A customer service representative will log the information provided to create a call incident ticket, which assigns the call to the appropriate field technician. Have the following information available when the call is placed:

- Model no. and serial no. of the printer
- A description of the problem
- The name and telephone number of the person to be contacted within your organization

## Technical Support

For technical support, call the following SATO service number and select the technical support option:

- **800-524-0029**

As an alternative, you may email the Technical Support Group at:

- **[LaserSupport@SATO-Global.com](mailto:LaserSupport@SATO-Global.com)**

Technical support is available Monday through Friday from 9 A.M. to 5 P.M. Eastern Standard Time.

# Appendix D: Ordering Supplies

Ordering ..... D-2

Supplies ..... D-2

    Available Supplies ..... D-2

## Ordering

To order parts and consumables for the LP 100R printer, call SATO customer service at the following number:

- **800-645-3290**

You can also reach SATO customer service by selecting that option when you call the SATO service number, **800-524-0029**.

## Supplies

The following table shows part names, numbers, and the expected life of the available parts and consumables you should keep in stock.

### Note:

- The expected life of components shown in the table below is based on 10% page coverage using forms that are 11 inches high and 17 inches wide. The actual life of components varies depending on printer use.
- In addition to components that are replaced by the operator, there are some consumables and components replaced by service personnel that you are responsible for stocking. See below.

### Available Supplies

Part name	Part number	Expected life (pages)
Cleaning pads (100)	9130-0-0027-000	As required
Head and disc cleaner	9010-0-0006-000	As required
Toner kit (2 per case)	9855011	20,000/bottle
Waste toner collecting bottle	7431963	220,000 pages
OPC cartridge	9855012	440,000 pages
Fuser filter (assembly)	7573000	440,000 pages
Developer unit with starter	9855013	880,000 pages
Transfer charger unit	9855015	880,000 pages
Main charger unit	7048466	880,000 pages

# Appendix E: The Menu System

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Printer Setup .....E-6

Emulation Settings – KodePlus .....E-8

Emulation Settings – IGP/VGL .....E-9

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Emulation Settings – PCL5e .....E-11

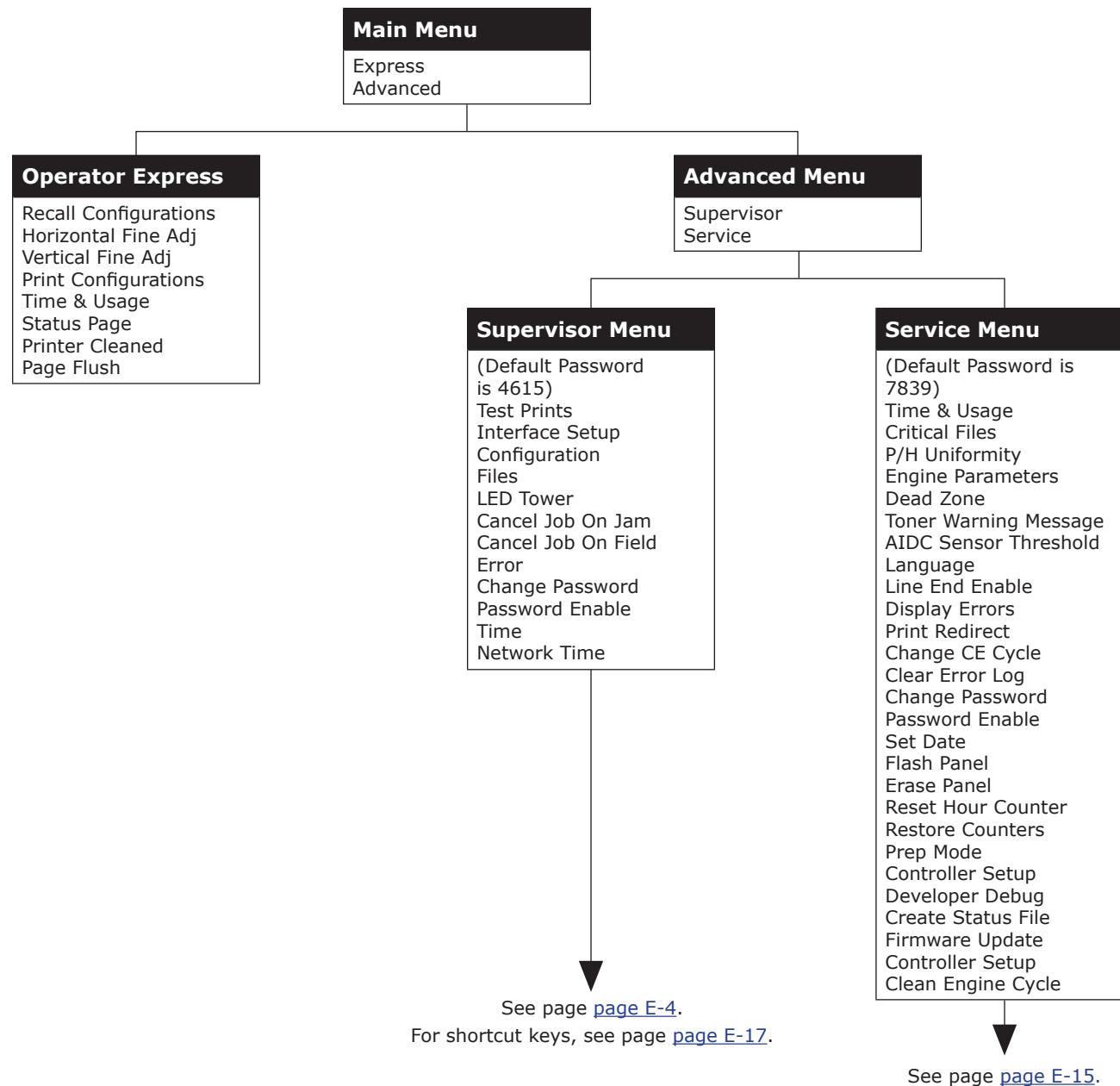
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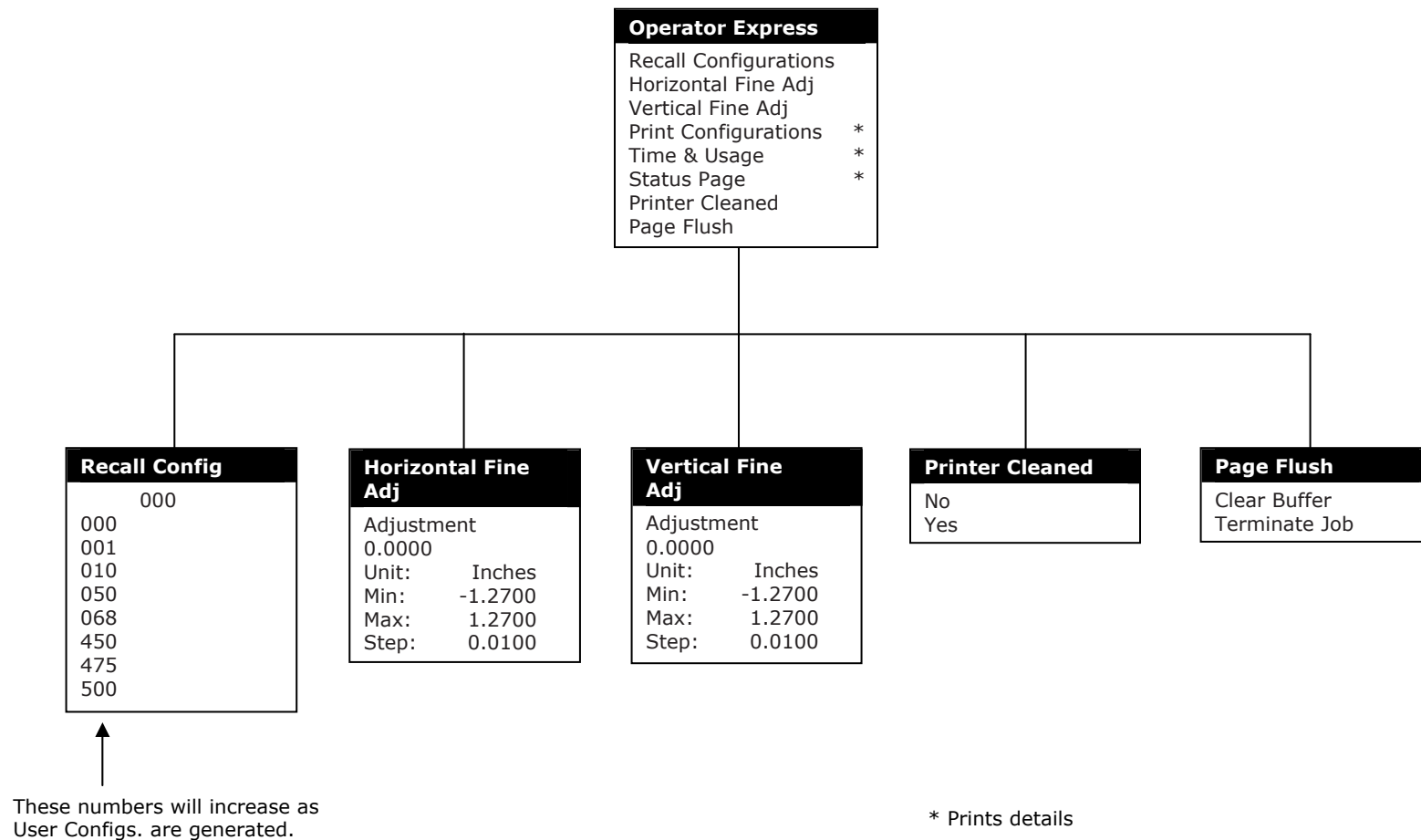
Ethernet Setup.....E-13

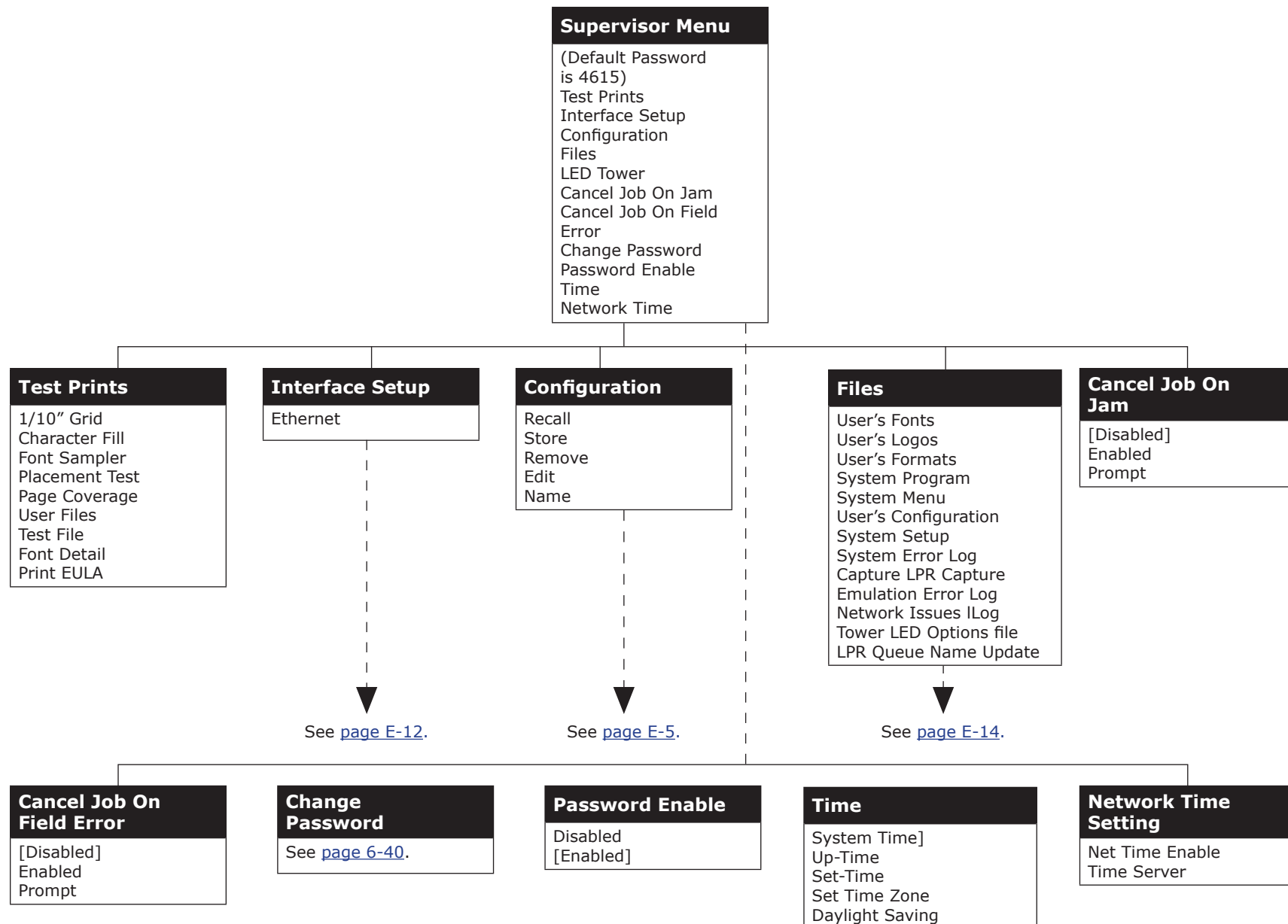
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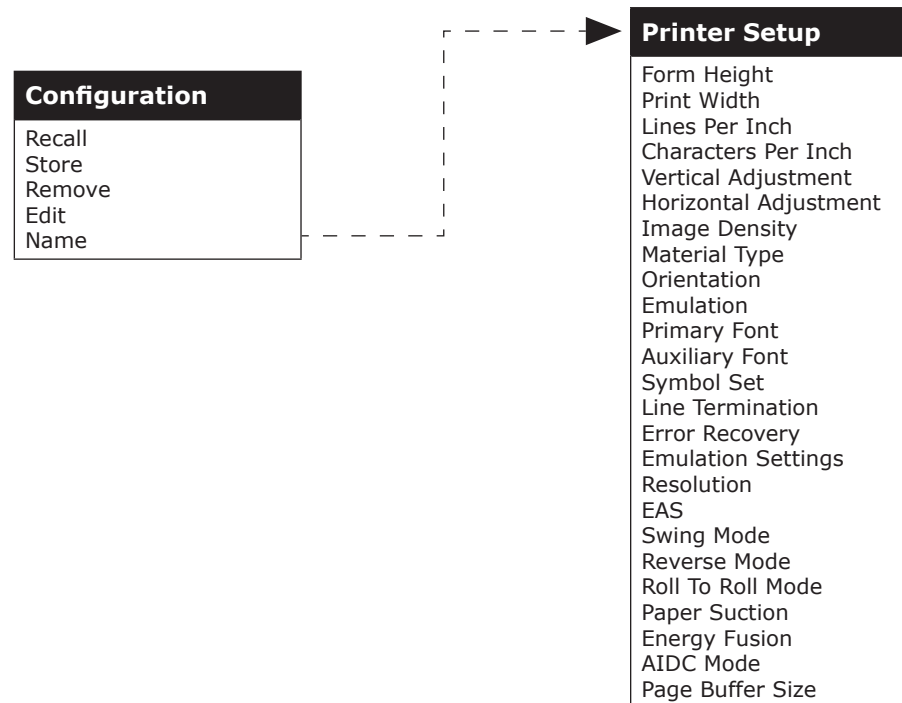






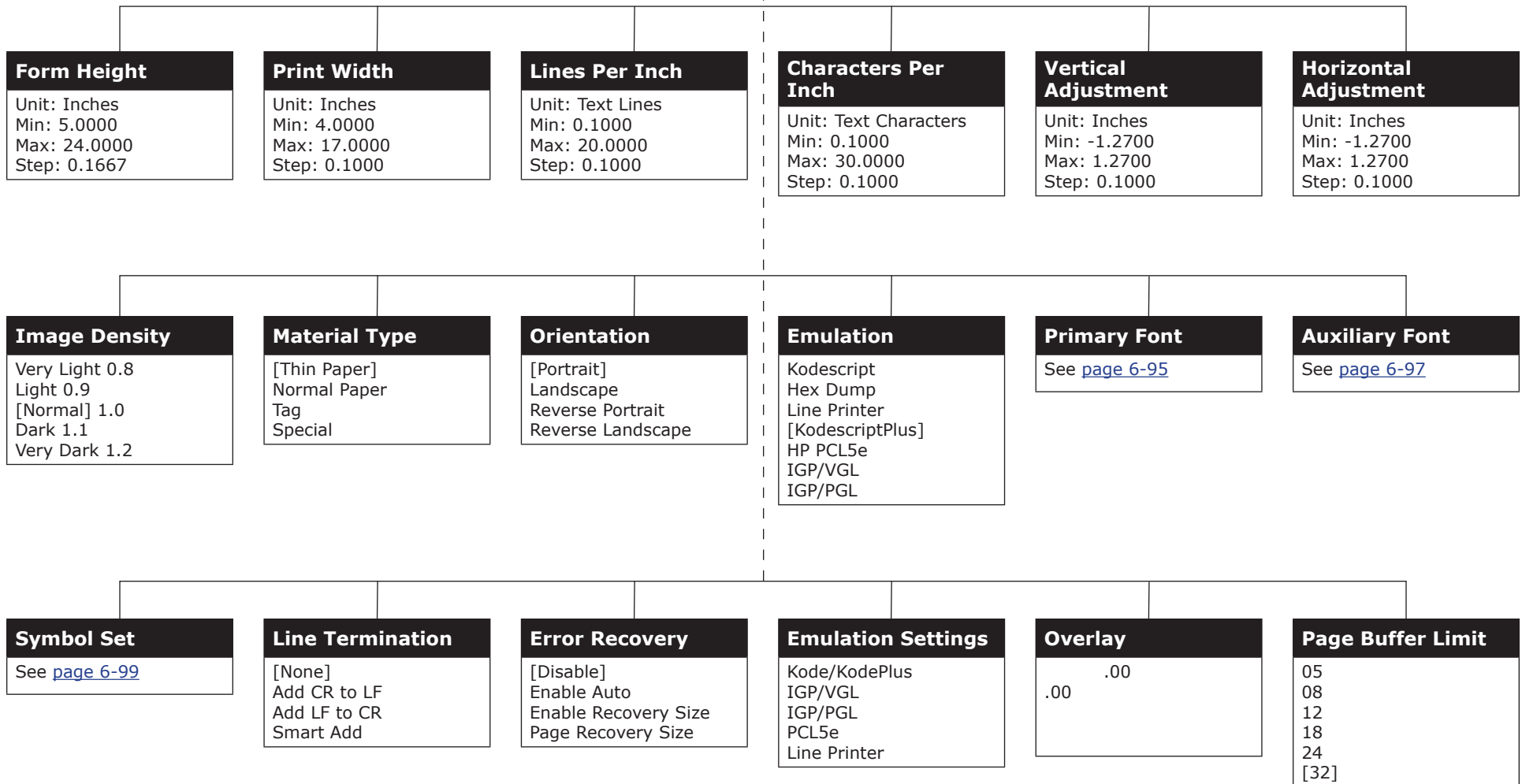
[ ] = Default setting





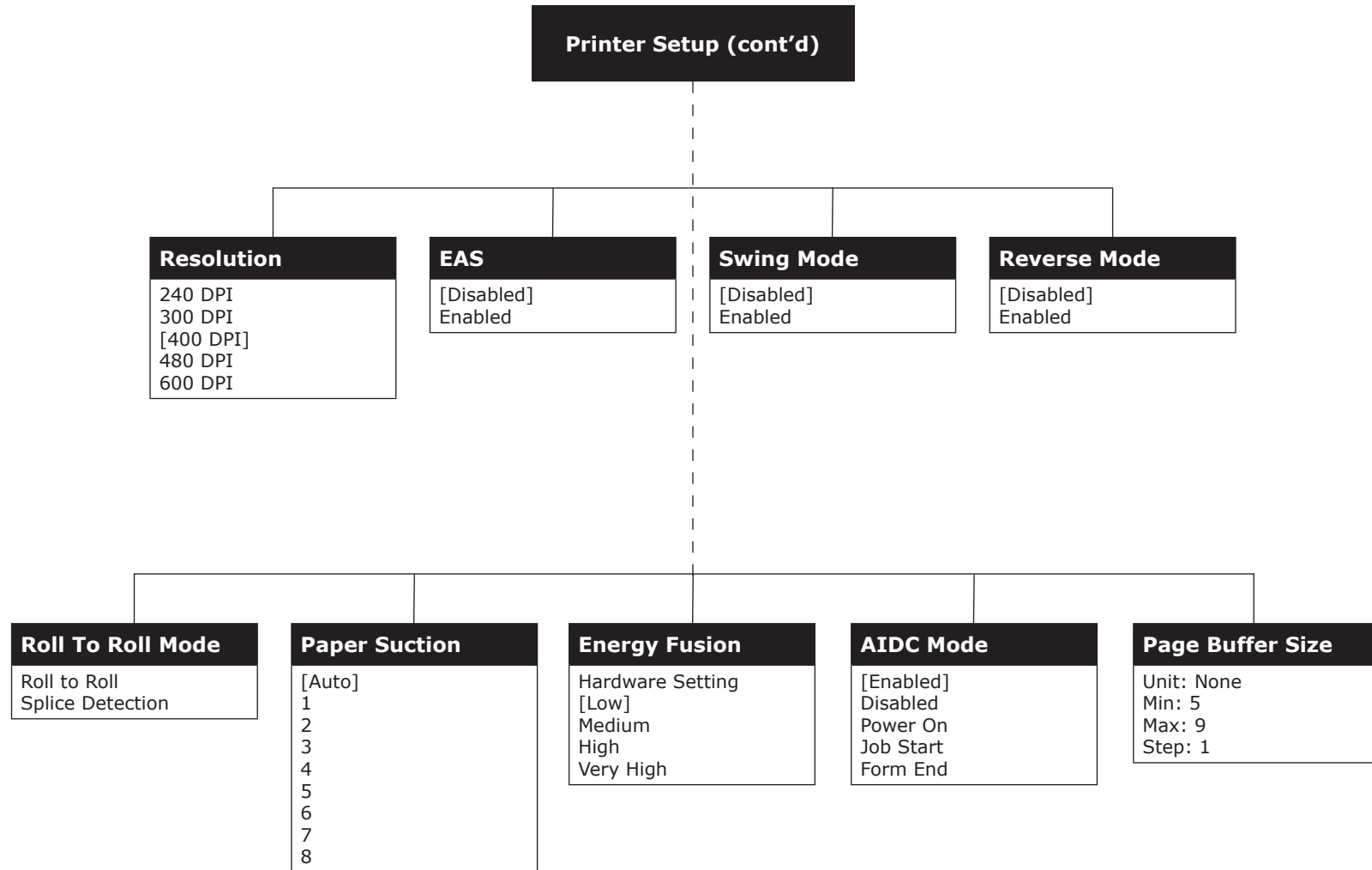
See [pages E-6 through E-7](#) for Printer Setup Detail.

## Printer Setup

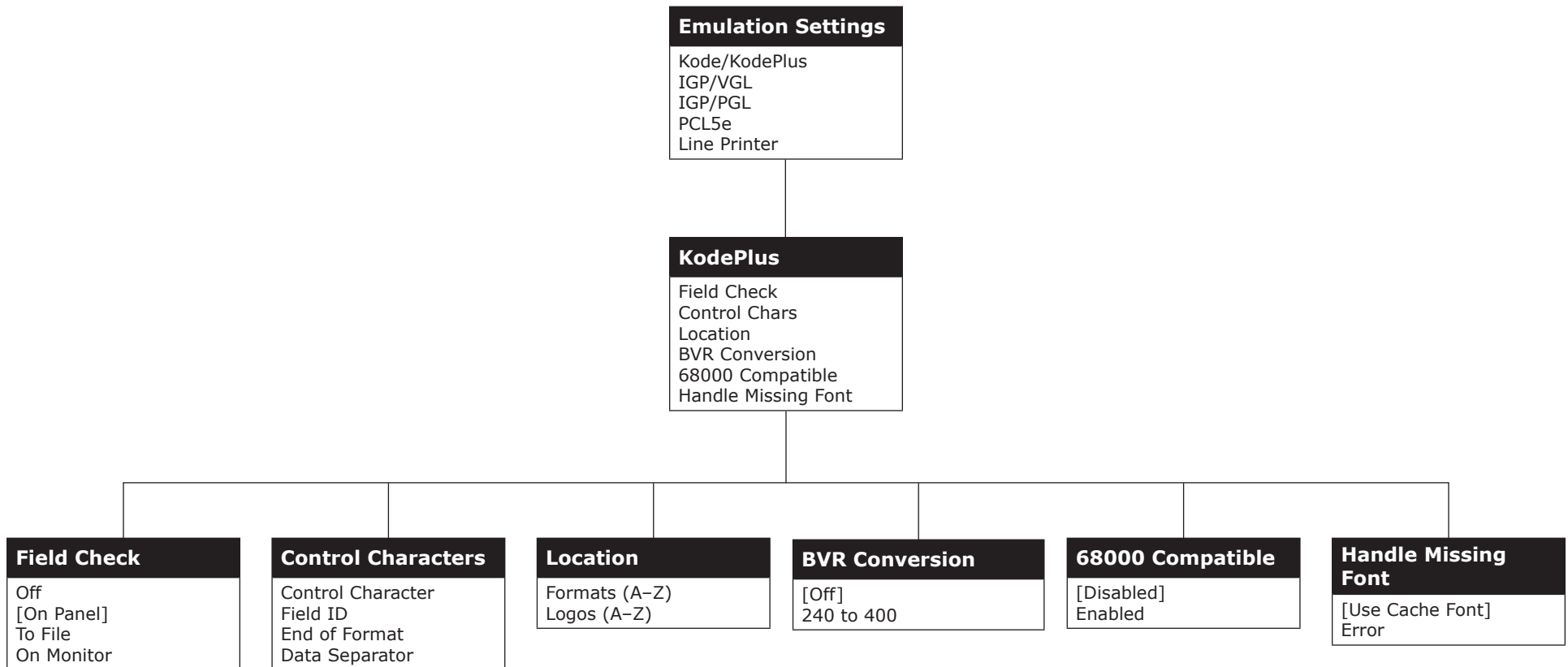


[ ] = Default setting

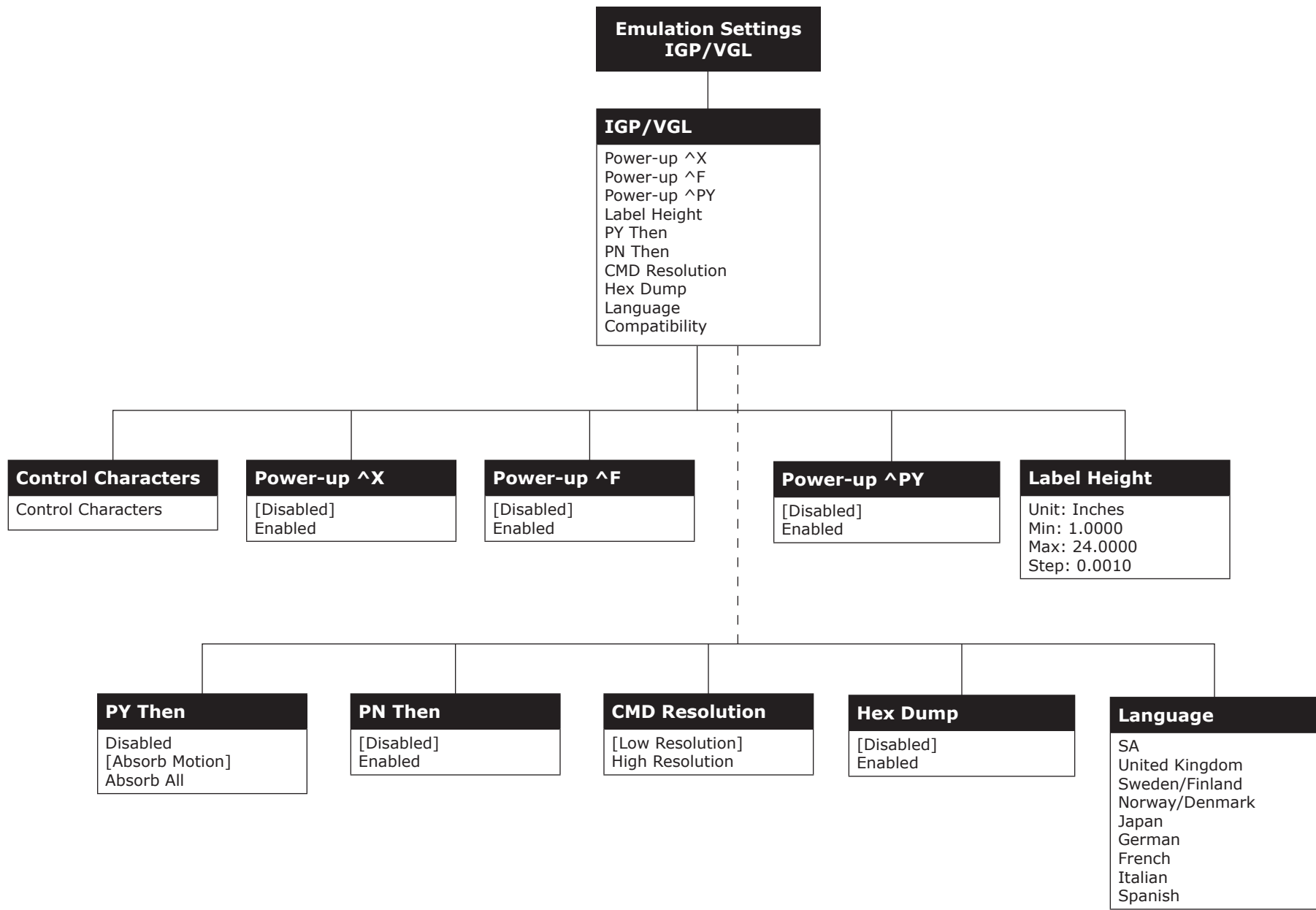
Emulation Settings Detail – See [pages E-8 through E-11](#).

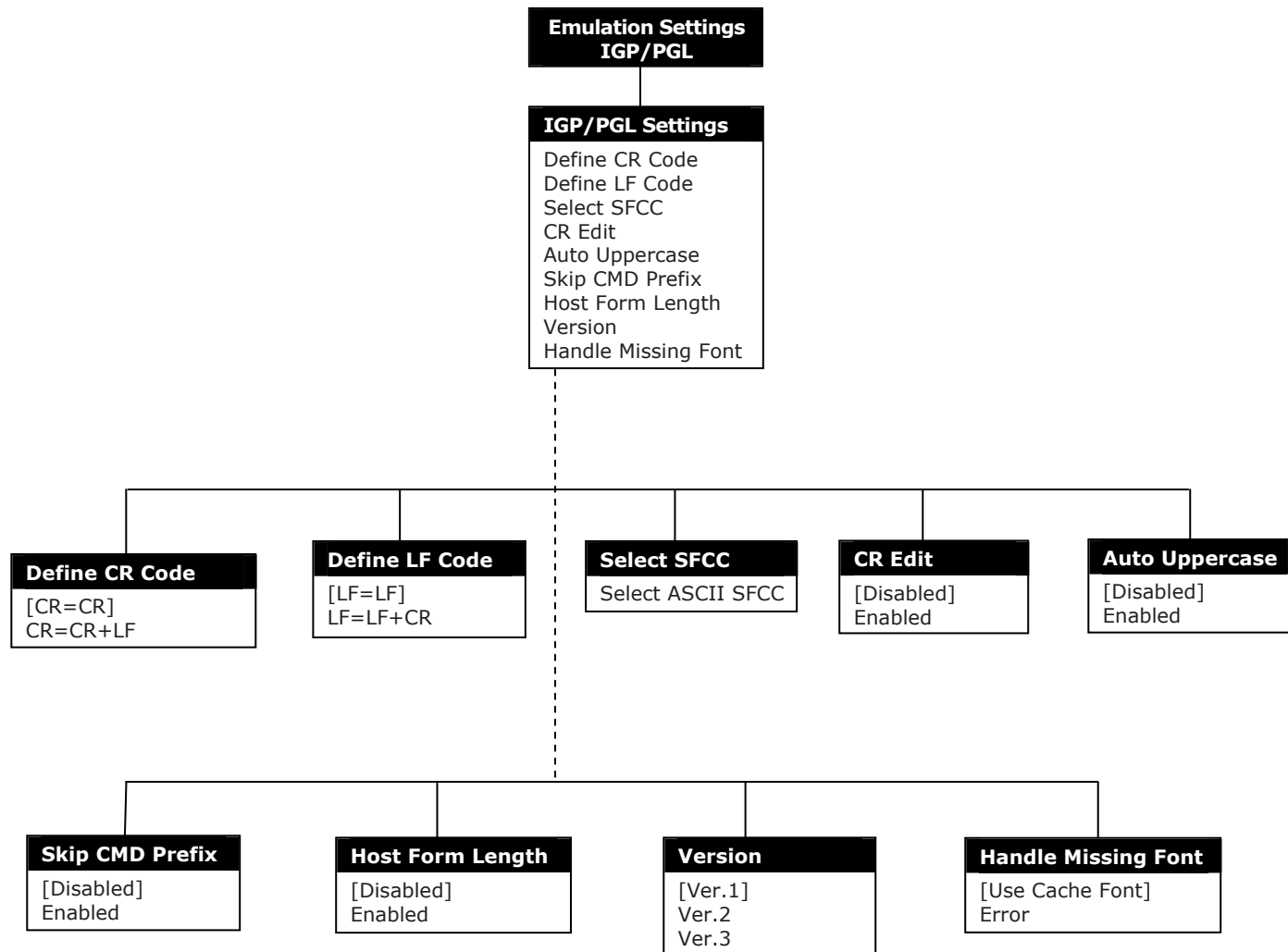


[ ] = Default setting

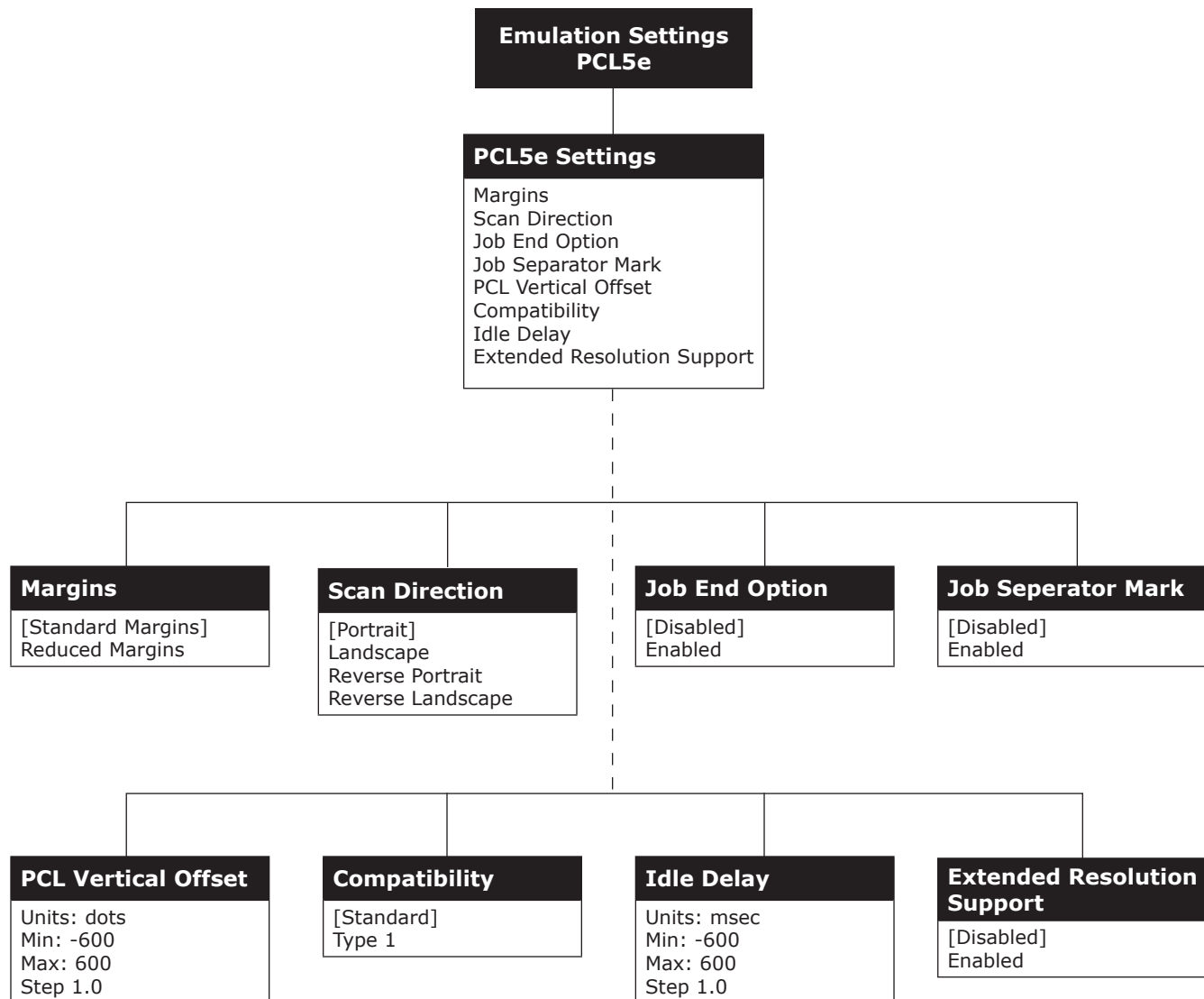


[ ] = Default setting  
IGP/VGL See [page E-9](#).  
IGP/PGL See [page E-10](#).  
PCL5e See [page E-11](#).





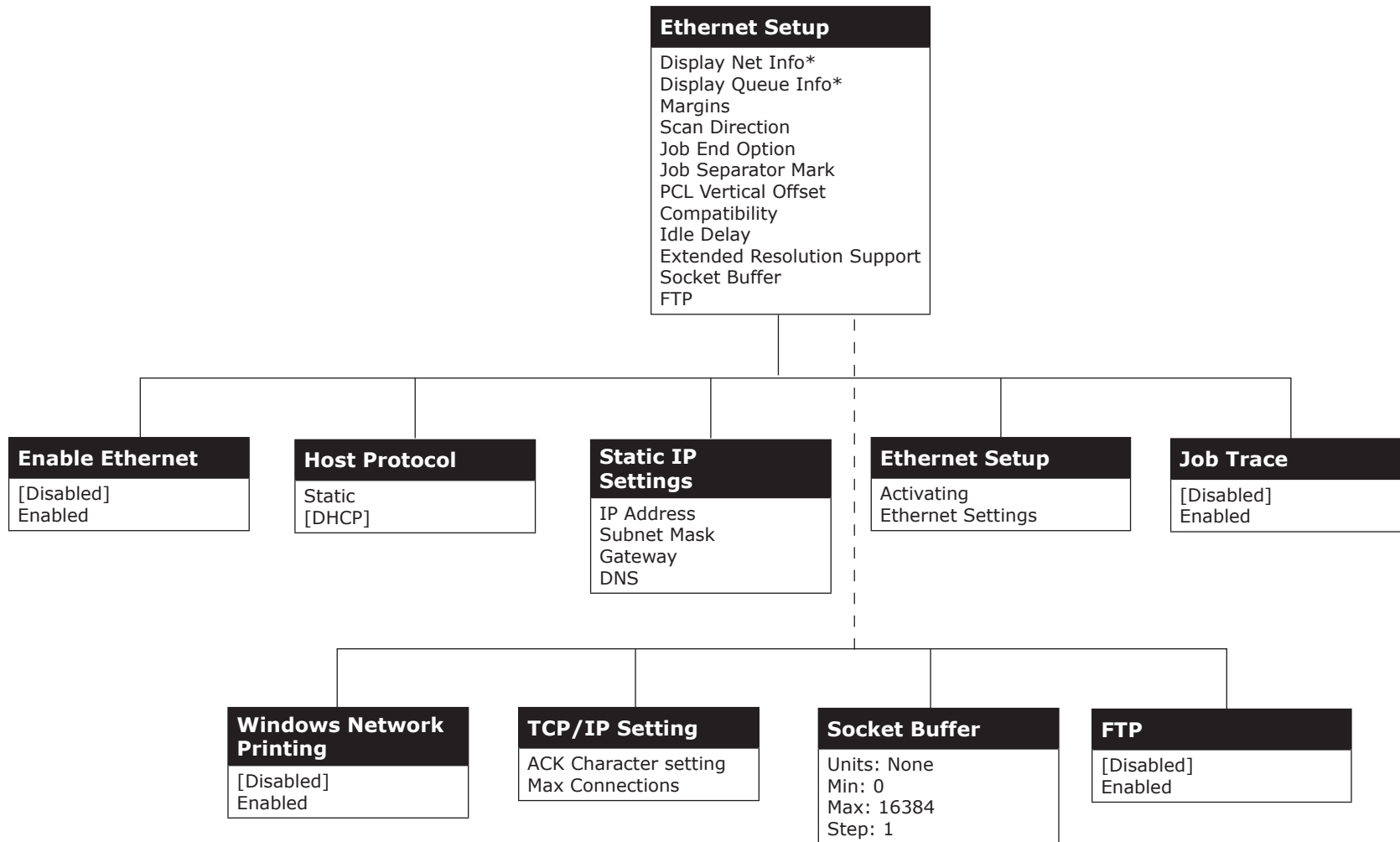
[ ] = Default setting



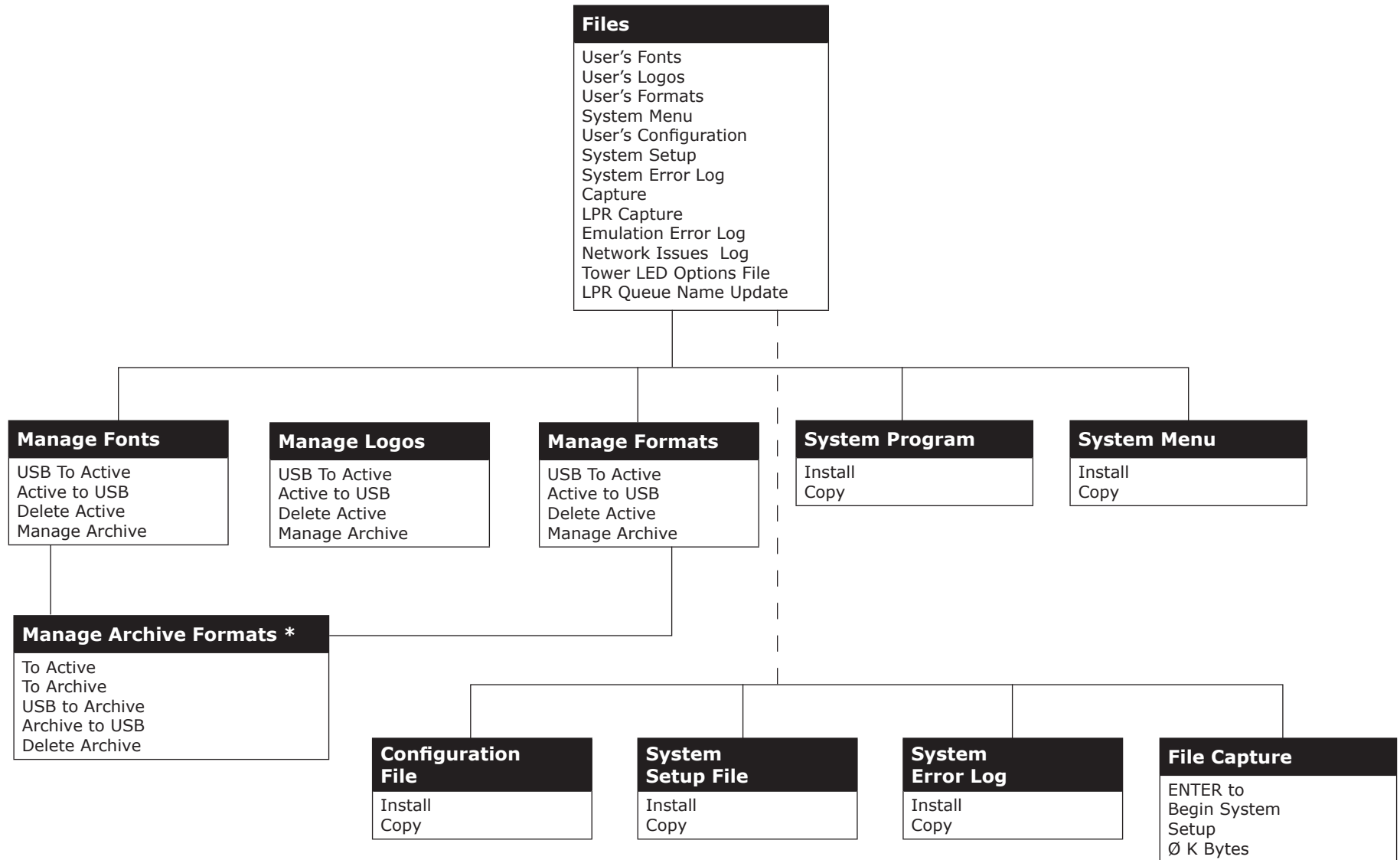


\* = info displayed on the Display

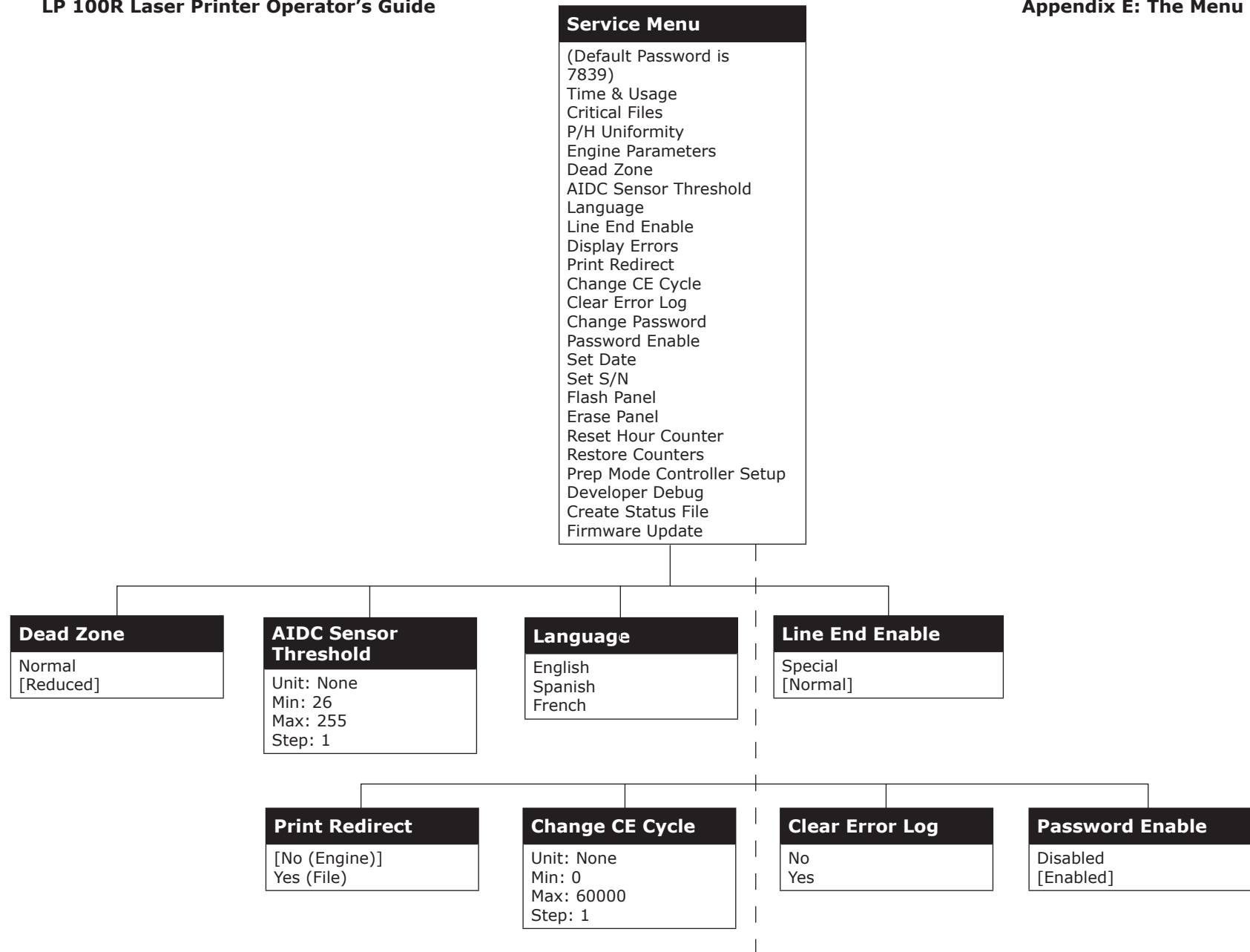




\* = info displayed on the Display

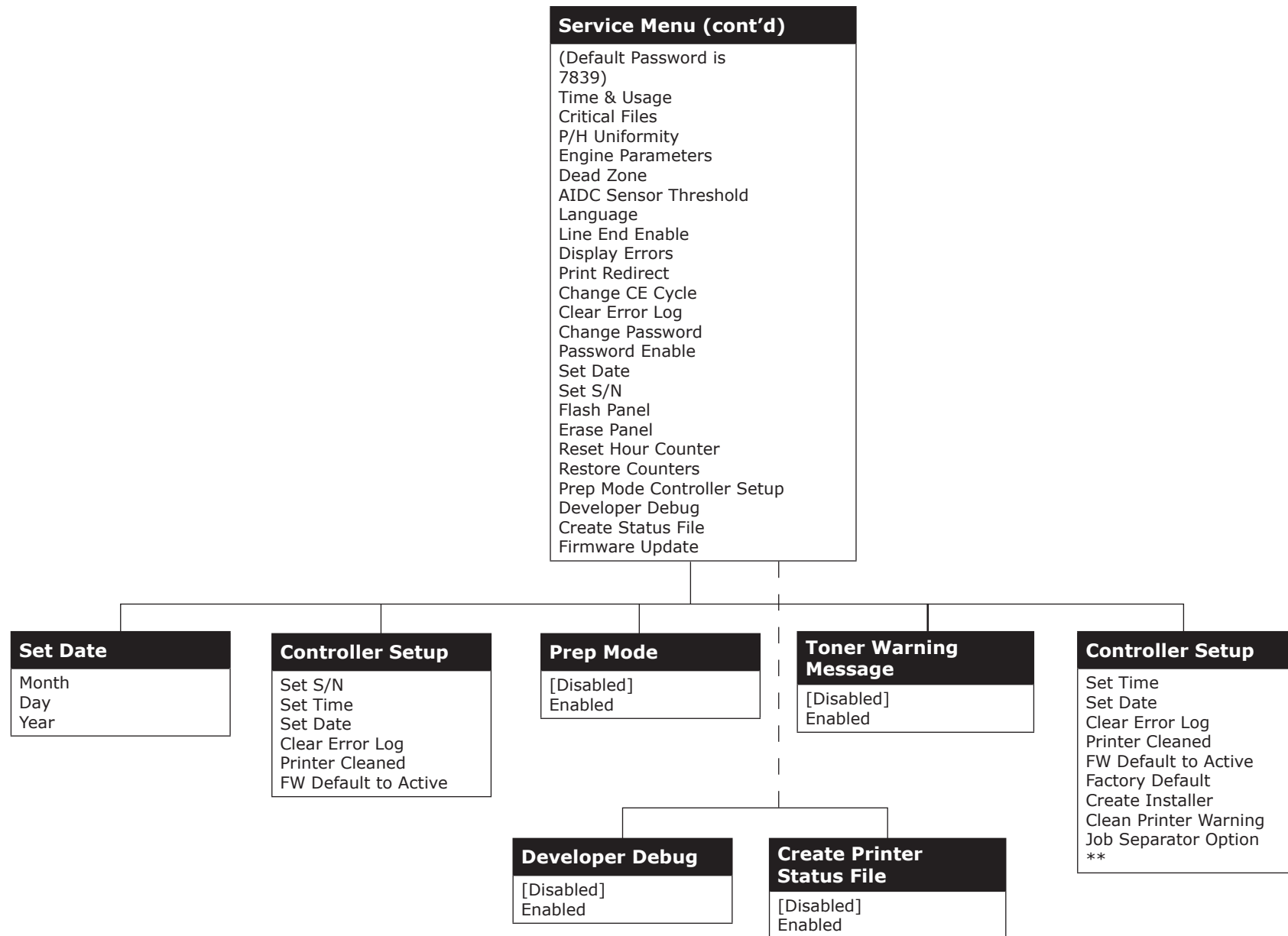


\* = info displayed on the Display



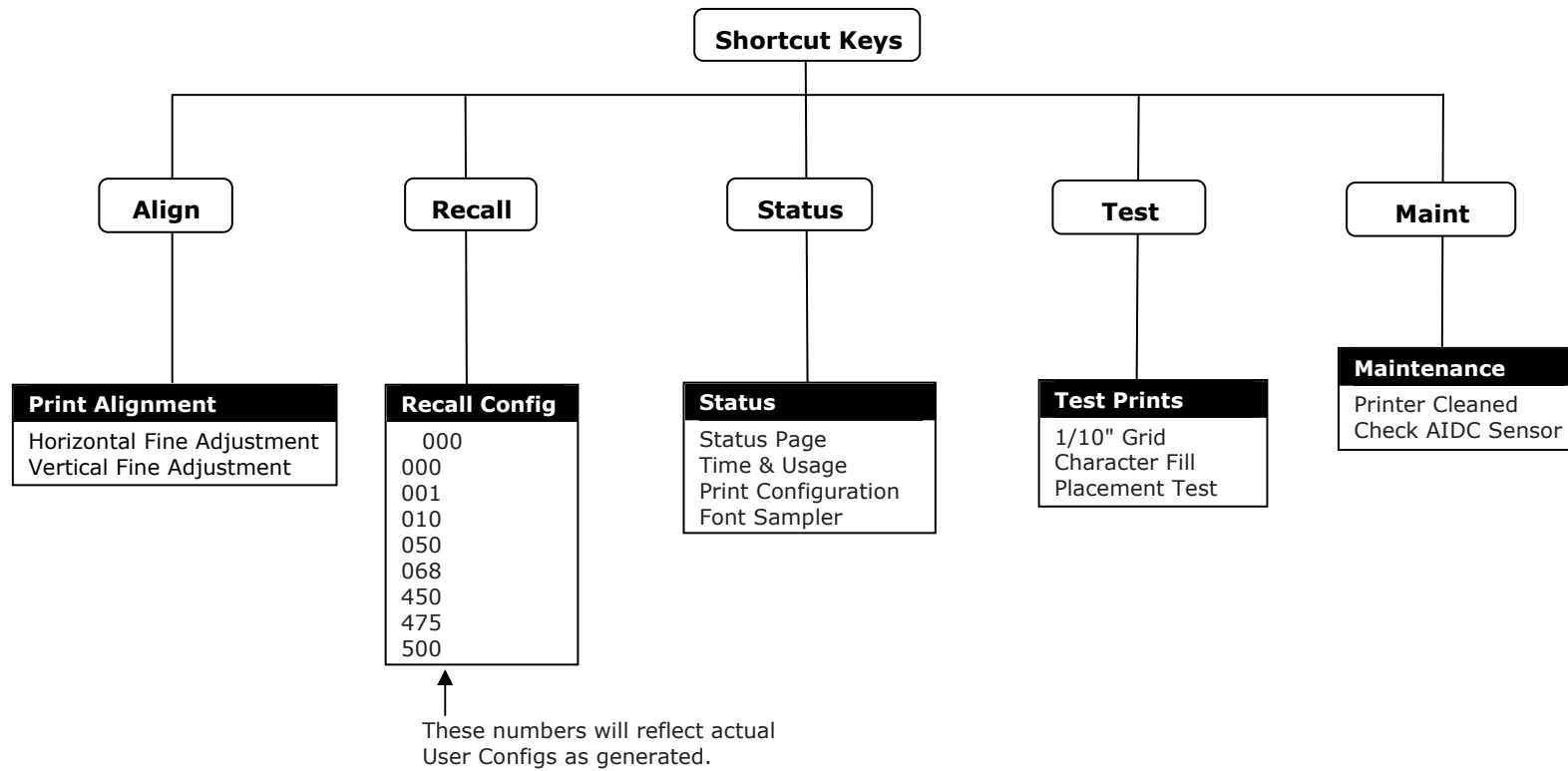
[ ] = Default setting

Continued on [Page E-16](#).



[ ] = Default setting

NOTE \*\*\* password protected



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## Appendix F: Product Specifications

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## Print Method

Laser exposure-type electric image printer

## Print Speed

- 3,300 lines per minute (6 lines per 1"/25.4 mm)

## Print Resolution

- 240/300/400/480/600
- 400 is standard
- Can be switched by command

## Interfaces

- RS-232 (for service only)
- Ethernet

## Emulations

- Kodescript
- Hex Dump
- Line Printer
- KodescriptPlus
- HP PCL5e
- IBM 5256
- IGP/VGL
- IGP/PGL



## Document Width

- 6–18" (152.4–457.2 mm)
- 17" (431.8 mm) print image

## Document Length

- 5–24" (152.4–609.6 mm)
- 23<sup>3</sup>/<sub>4</sub>" (592.24 mm) print image maximum print area

## Print Area

17" (431.8 mm)

## Maximum Ejection Size

- 18" (457.2 mm) width x 16" (406.4 mm)
- Standard stacker table is 12" (304.8 mm)

## Document Thickness

6.5–20 mil (0.1651–0.508 mm)

## Hopper Capacity

Maximum carton height is 14" (355.6 mm). The total number of pages is contingent on document thickness.

## Stacker Capacity

Maximum height is 11.7" (296 mm)

## Image Density

Standard 1.0 (can be changed between 0.8–1.2)

## Fusing Method

Quiet-type flash fusing method

## Environmental Temperature

50°–95°F (10°–35°C)

## Humidity

35%–80% RH

## Input Voltage

AC 200-240V, 30 Amps, 50/60Hz (Single Phase)

## Dimensions

- 36" x 37" x 47" (w x d x h)
- 720 mm x 940 mm x 1,185 mm (w x d x h)

## Weight

Approximately 570 lb (260 kg)

## User Features

- Straight through paper path
- Color TDU screen display with graphics
- Two operator panels
- Operator-replaceable consumables that are environmentally friendly and RoHS compliant

## File Management

Files are easy to maintain and equally easy to update as required or desired.

## Printer Options

Tower light

Swing guide

Job Separation, Edge Mark Feature

IPDS (optional emulation)

Multiple stacker tables

Interface to external devices (i.e., Roll To Roll)

# Appendix G: Operating/Environmental Requirements

Space Requirements ..... G-2

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Operating Conditions..... G-4

Precautions When Operating the Printer..... G-5

Moving the Printer ..... G-5

## Space Requirements

The following diagram shows the amount of space required to house the printer and provide adequate working space:

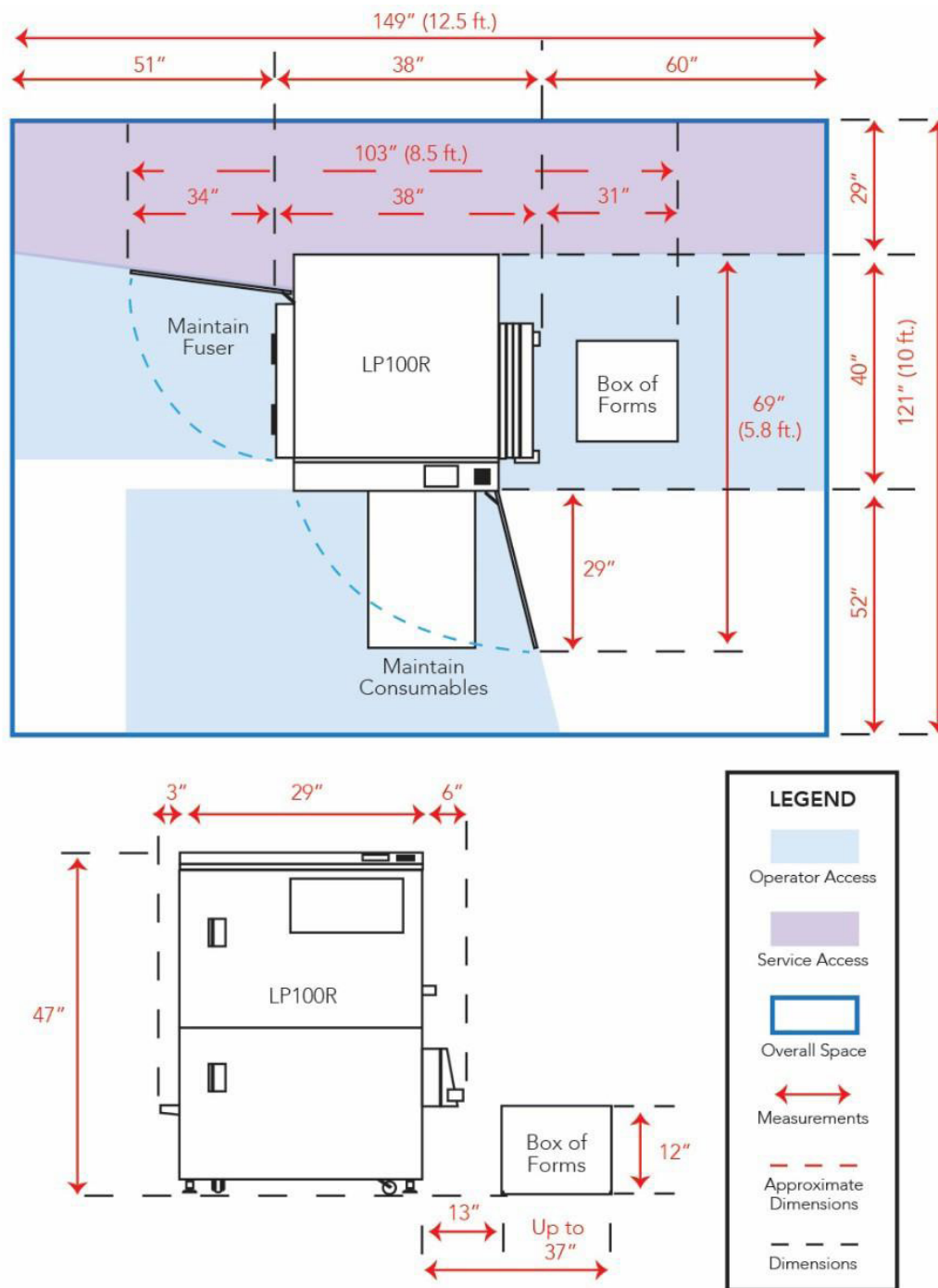


Figure G-1. Diagram of printer space requirements.

## Power Requirements

- 200-240 AC volts
- 30 Amps
- 50/60 Hz
- Single-phase
- Termination
  - The United States requires a NEMA L6-30R (Twist Lock).
  - Other countries should replace the line cord at the Connector Panel Input Power Supply to match that country's electrical codes.

## Power Source

The power source should not exceed the voltage/frequency fluctuations as indicated below:

- **Voltage fluctuations** – 200 to 240 VAC  $\pm$  10%
- **Frequency fluctuation** – 50/60 Hz  $\pm$  3%

## Temperature/Relative Humidity

The following environment is required for consistent printer performance:

- **Temperature** – 50°–95°F (10°–35°C) with a temperature variation not exceeding 18°F (10°C)
- **Relative humidity** – 35% to 80% with a humidity variation not exceeding 20% to RH per hour

## Operating Conditions

To ensure the safe operation of, and peak performance by, the printer, you must observe the following:

- Do not install the printer:
  - Near curtains or other objects that catch fire and easily burn.
  - Where there is a possibility of its being splashed with any liquids.
  - In the direct air stream from an air conditioner, heater and/or ventilator.
  - Where organic gas such as ammonia is generated.
  - Adjacent to heat-generating equipment.
- The printer should be installed:
  - In an area free from direct sunlight.
  - In a well-ventilated place.
  - In a dry place.
  - In a dust-free location.
  - In an area not subject to undue vibration.
  - In a stable and level place.

## Precautions When Operating the Printer

To ensure the optimum performance by the printer, you must observe the following precautions:

- Do not power down the printer or open any doors (printer) while the printer is being operated.
- Never bring any magnetized object or use flammable sprays/liquids near the printer.
- Make certain that the power plug is securely fastened in the power outlet.
- Do not conceal an outlet for the power plug with the printer or any other object.
- The room should be ventilated whenever a large volume of documents is being printed.

### Note:

- Although the printer generates ozone while in use, the level generated is insufficient to affect the human body.
- An odor may be noticed when the printer is operated in a poorly ventilated room for long periods of time.

## Moving the Printer

Call the SATO service department before moving the printer over a long distance.

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## Appendix H: Default Passwords

Default Passwords .....	H-2
-------------------------	-----

## Default Passwords

By default, you can use the following passwords to access supervisor passwords for the LP 100R printer:

- Supervisor password: 4615
- Override password: contact the service department

To change the supervisor password, see *Password Enable Function* on [page 6-39](#).

If you need to access the service menu or lose your new supervisor password, see the *LP 100R Maintenance Guide* or call your service provider.

# Appendix I: End-User License Agreement

End-User License Agreement for SATO Controller Software..... I-2

## End-User License Agreement for SATO Controller Software

**Important: Please read the terms and conditions of this license agreement carefully before continuing with this program install.**

SATO America, LLC., End-User License Agreement ("EULA") is a legal agreement between you (either an individual or a single entity) and SATO America, LLC., for the SATO America, LLC., software product(s) identified above which may include associated software components, media, printed materials, and "online" or electronic documentation SATO Controller Software. By installing, copying, or otherwise using the SATO Controller Software, you agree to be bound by this EULA terms. Any use of the SATO Controller Software will automatically constitute your agreement to this license. This license agreement represents the entire agreement concerning the program between you and SATO America, LLC. (referred to as "licensor"), and it supersedes any prior proposal, representation, or understanding between the parties. If you do not agree to the terms of this EULA, **do not install or use the SOFTWARE PRODUCT.**

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SATO America, LLC., grants you the non-exclusive right to install and use copies of SATO Controller Software on your printer controller running a validly licensed copy of the operating system for which the SATO Controller Software was designed.

#### b) Backup Copies.

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In no event shall SATO America, LLC., be liable for any damages (including, without limitation, lost profits, business interruption, or lost information) rising out of 'Authorized Users' use of or inability to use the SATO Controller Software, even if SATO America, LLC., has been advised of the possibility of such damages. In no event will SATO America, LLC., be liable for loss of data or indirect, special, incidental, consequential (including lost profit), or other damages based in contract, tort, or otherwise. SATO America, LLC., shall have no liability with respect to the content of the SATO Controller Software or any part thereof, including but not limited to errors or omissions contained therein, libel, infringements of rights

of publicity, privacy, trademark rights, business interruption, personal injury, loss of privacy, moral rights, or the disclosure of confidential information.

Should you have any questions concerning this EULA, or if you desire to contact SATO America, LLC., for any reason, use the address information enclosed in this Software to contact:

**SATO America, LLC.  
10350A Nations Ford Road  
Charlotte NC 28273  
USA**

**or visit SATO America, LLC.,  
at <http://www.satoamerica.com>.**

#### FRANCAIS

Pour une version de ce EULA en FRANCAIS s'il vous plait contacter:

SATO America, LLC  
10350A Nations Ford Road  
Charlotte, NC 28273  
USA

ou visitez SATO America, LLC.,  
at <http://www.satoamerica.com>.

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10350A Nations Ford Road  
Charlotte NC 28273  
USA

o visite SATO America, LLC.,  
at <http://www.satoamerica.com>.

Ver. A Published November 20, 2020

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## **LP 100R Laser Printer Operator's Guide**

Part No. 9855063

Ver. A      November 2020

