



# Dell 5230n/dn and 5350dn Laser Printers

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## User's Guide

**November 2009**

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# Safety information


Connect the power cord to a properly grounded electrical outlet that is near the product and easily accessible.


Do not place or use this product near water or wet locations.


 **CAUTION—POTENTIAL INJURY:** This product uses a laser. Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.


This product uses a printing process that heats the print media, and the heat may cause the media to release emissions. You must understand the section in your operating instructions that discusses the guidelines for selecting print media to avoid the possibility of harmful emissions.

Use care when you replace a lithium battery.

 **CAUTION—POTENTIAL INJURY:** There is a danger of explosion if a lithium battery is incorrectly replaced. Replace it only with the same or an equivalent type of lithium battery. Do not recharge, disassemble, or incinerate a lithium battery. Discard used batteries according to the manufacturer's instructions and local regulations.

 **CAUTION—HOT SURFACE:** The inside of the printer might be hot. To reduce the risk of injury from a hot component, allow the surface to cool before touching.

 **CAUTION—POTENTIAL INJURY:** The printer weight is greater than 18 kg (40 lb) and requires two or more trained personnel to move it safely.


 **CAUTION—POTENTIAL INJURY:** Before moving the printer, follow these guidelines to avoid personal injury or printer damage:


- Turn the printer off using the power switch, and then unplug the power cord from the wall outlet.
- Disconnect all cords and cables from the printer before moving it.
- Lift the printer off of the optional drawer and set it aside instead of trying to lift the drawer and printer at the same time.

**Note:** Use the handholds located on both sides of the printer to lift it off the optional drawer.


Use only the power cord provided with this product or the manufacturer's authorized replacement.

Use only the telecommunications (RJ-11) cord provided with this product or a 26 AWG or larger replacement when connecting this product to the public switched telephone network.

 **CAUTION—SHOCK HAZARD:** If you are accessing the system board or installing optional hardware or memory devices sometime after setting up the printer, then turn the printer off, and unplug the power cord from the wall outlet before continuing. If you have any other devices attached to the printer, then turn them off as well, and unplug any cables going into the printer.

 **CAUTION—SHOCK HAZARD:** Make sure that all external connections (such as Ethernet and telephone system connections) are properly installed in their marked plug-in ports.

This product is designed, tested, and approved to meet strict global safety standards with the use of specific manufacturer's components. The safety features of some parts may not always be obvious. The manufacturer is not responsible for the use of other replacement parts.

 **CAUTION—POTENTIAL INJURY:** Do not twist, bind, crush, or place heavy objects on the power cord. Do not subject the power cord to abrasion or stress. Do not pinch the power cord between objects such as furniture and walls. If the power cord is misused, a risk of fire or electrical shock results. Inspect the power cord regularly for signs of misuse. Remove the power cord from the electrical outlet before inspecting it.


Refer service or repairs, other than those described in the user documentation, to a professional service person.




**CAUTION—SHOCK HAZARD:** To avoid the risk of electric shock when cleaning the exterior of the printer, unplug the power cord from the wall outlet and disconnect all cables from the printer before proceeding.

# Learning about the printer

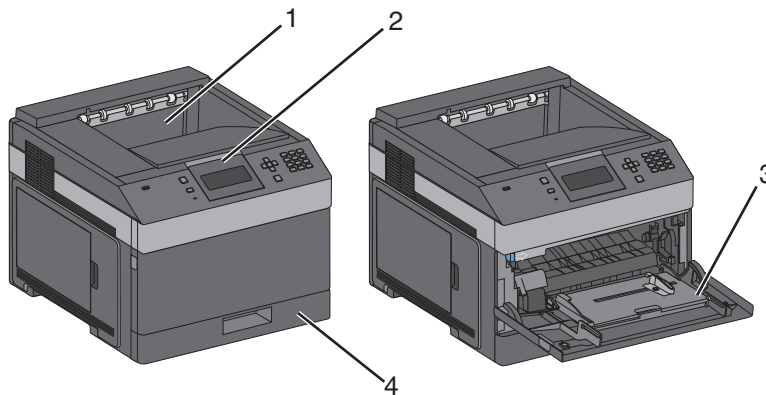
## Finding information about the printer

What are you looking for?	Find it here
Initial setup instructions: <ul style="list-style-type: none"> <li>• Connecting the printer</li> <li>• Installing the printer software</li> </ul>	Setup documentation—The setup documentation came with the printer.
Additional setup and instructions for using the printer: <ul style="list-style-type: none"> <li>• Selecting and storing paper and specialty media</li> <li>• Loading paper</li> <li>• Performing printing depending on your printer model</li> <li>• Configuring printer settings</li> <li>• Viewing and printing documents and photos</li> <li>• Setting up and using printer software</li> <li>• Setting up and configuring the printer on a network, depending on your printer model</li> <li>• Caring for and maintaining the printer</li> <li>• Troubleshooting and solving problems</li> <li>• Convenient reference sheet to keep near the printer</li> </ul>	<i>User's Guide</i> —The <i>User's Guide</i> is available on the <i>Software and Documentation CD</i> . <i>Quick Reference</i> —The <i>Quick Reference</i> is available on the <i>Software and Documentation CD</i> under "View Additional Documentation." For updates, check our Web site at <b>support.dell.com</b> .
Help using the printer software	Windows or Mac Help—Open a printer software program or application, and then click <b>Help</b> . Click  to view context-sensitive information. <b>Notes:</b> <ul style="list-style-type: none"> <li>• The Help installs automatically with the printer software.</li> <li>• The printer software is located in the printer Program folder or on the desktop, depending on your operating system.</li> </ul>
The latest supplemental information, updates, and technical support: <ul style="list-style-type: none"> <li>• Documentation</li> <li>• Driver downloads</li> <li>• Product upgrades</li> <li>• Service call and repair information</li> <li>• Order status</li> <li>• Live chat support</li> <li>• E-mail support</li> <li>• Telephone support</li> </ul>	Dell Support Web site— <b>support.dell.com</b> Support telephone numbers and hours of operation for your region or country can be found on the Support Web site. Have the following information ready when you contact support so that they may serve you faster: <ul style="list-style-type: none"> <li>• Service Tag</li> <li>• Express Service Code</li> </ul> <b>Note:</b> The Service Tag and Express Service Code appear on labels located on your printer.

What are you looking for?	Find it here
<ul style="list-style-type: none"> <li>• Software and Drivers—Certified drivers for my printer and installers for Dell printer software</li> <li>• Readme files—Last-minute technical changes, or advanced technical reference material for experienced users or technicians</li> </ul>	<i>Software and Documentation CD</i>
<ul style="list-style-type: none"> <li>• Supplies and accessories for my printer</li> <li>• Replacement cartridges</li> </ul>	Dell Printer Supplies Web site— <b>dell.com/supplies</b> You can purchase printer supplies online, by telephone, or in select retail stores.
<ul style="list-style-type: none"> <li>• Safety information for preparing to operate my printer</li> <li>• Regulatory information</li> <li>• Warranty information</li> </ul>	<i>Product Information Guide</i> <div style="text-align: center;">  </div> <p><b>Note:</b> The <i>Product Information Guide</i> may not be available in your country or region.</p>

## Printer configurations

### Basic model



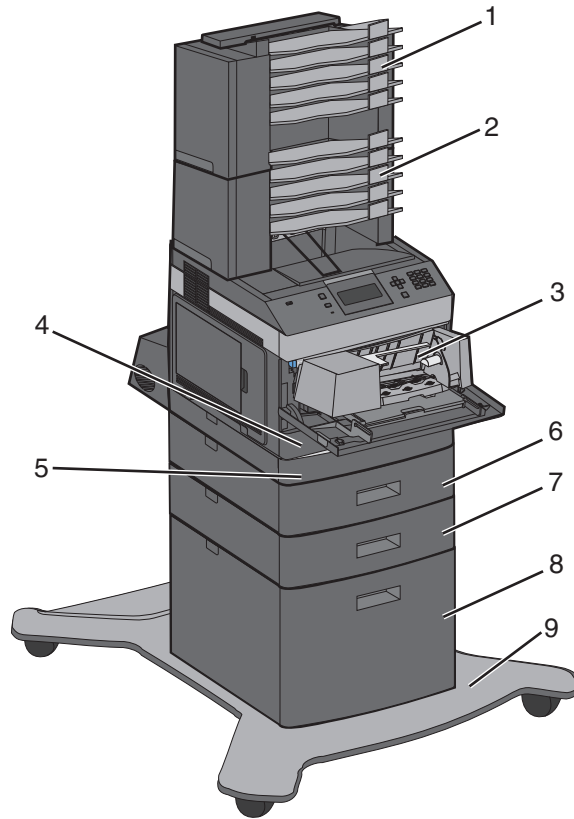
	Feature	Paper Capacity <sup>1</sup>
1	Standard exit bin	350 sheets
2	Printer control panel	Not applicable
3	Multipurpose feeder	100 sheets
4	Standard tray (Tray 1)	250 or 550 sheets

<sup>1</sup> Based on 75 g/m<sup>2</sup> (20 lb.) paper.

## Fully configured model



**CAUTION—TIPPING HAZARD:** Floor-mounted configurations require additional furniture for stability. You must use either a printer stand or printer base if you are using a high-capacity input tray, a duplex unit and an input option, or more than one input option.



	Feature/Option	Paper Capacity <sup>1</sup>
1	5-bin mailbox <sup>2</sup>	500 sheets
2	5-bin mailbox	500 sheets
3	Envelope feeder	85 envelopes
4	Standard tray (Tray 1)	250 or 550 sheets
5	Duplex unit <sup>3</sup>	Not applicable
6	Optional tray (Tray 2)	550 sheets
7	Optional tray (Tray 3)	550 sheets
8	Optional 2000-sheet tray (Tray 4)	2000 sheets
9	Caster base	Not applicable

<sup>1</sup> Based on 75 g/m<sup>2</sup> (20 lb.) paper.

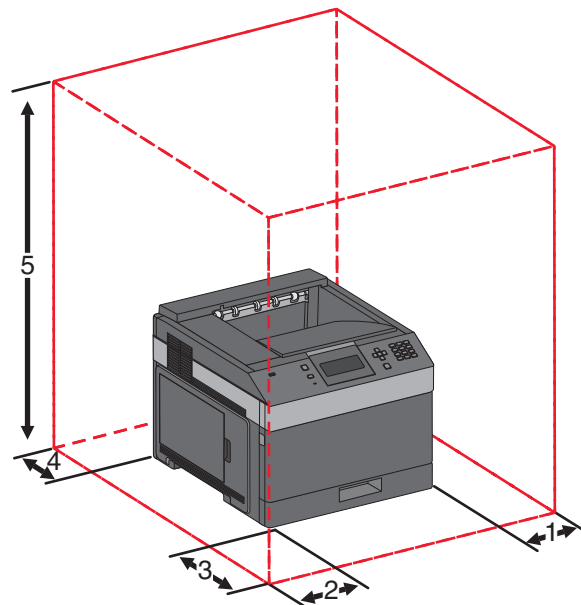
<sup>2</sup> The printer supports up to three output expander units, two 5-bin mailboxes, one high capacity output expander (not depicted), or one stapler unit (not depicted).

<sup>3</sup> Optional duplex unit available for basic model with a 250-sheet standard tray. Models with a 550-sheet standard tray may have an internal duplex unit.

# Selecting a location for the printer

When selecting a location for the printer, leave enough room to open trays, covers, and doors. If you plan to install any options, leave enough room for them also. It is important to:

- Make sure airflow in the room meets the latest revision of the ASHRAE 62 standard.
- Provide a flat, sturdy, and stable surface.
- Keep the printer:
  - Away from the direct airflow of air conditioners, heaters, or ventilators
  - Free from direct sunlight, humidity extremes, or temperature fluctuations
  - Clean, dry, and free of dust
- Allow the following recommended amount of space around the printer for proper ventilation:

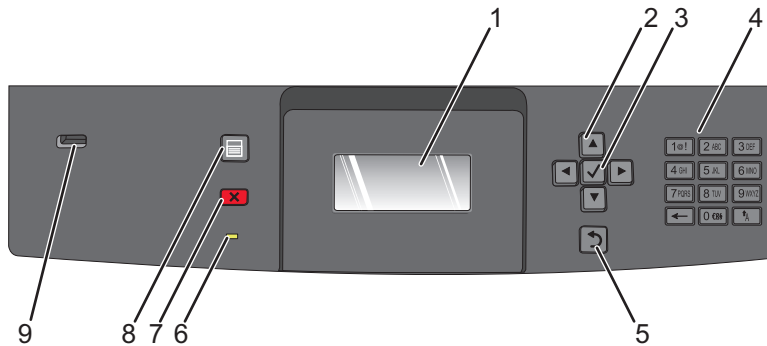


<b>1</b>	Right Side	31 cm (12 in.)
<b>2</b>	Left Side	31 cm (12 in.)
<b>3</b>	Front	51 cm (20 in.)
<b>4</b>	Rear	31 cm (12 in.)
<b>5</b>	Top <sup>1</sup>	137 cm (54 in.)



<sup>1</sup> Allows for addition of all output options.



# Understanding the printer control panel



Item	Description	
1	Display	Shows messages and pictures that communicate the status of the printer
2	Navigation buttons	<p>Press the up or down arrow buttons to scroll through menus or menu items, or to increase or decrease a value when entering numbers.</p> <p>Press the left or right arrow buttons to scroll through menu settings (also called values or options), or to scroll through text that rolls to another screen.</p>
3	Select	<ul style="list-style-type: none"> <li>Opens a menu item and displays the available values or settings. The current setting is indicated by an asterisk (*).</li> <li>Saves a displayed menu item as the new user default setting.</li> </ul> <p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>When a new setting is saved as the user default setting, it remains in effect until a new setting is saved or until factory defaults are restored.</li> <li>Settings chosen from a software program can also change or override the user default settings selected from the printer control panel.</li> </ul>
4	Keypad	Enter numbers or symbols on the display.
5	Back	Returns the display to the previous screen
6	Indicator light	<p>Indicates the printer status:</p> <ul style="list-style-type: none"> <li><b>Off</b>—The power is off.</li> <li><b>Blinking green</b>—The printer is warming up, processing data, or printing.</li> <li><b>Solid green</b>—The printer is on, but idle.</li> <li><b>Solid red</b>—Operator intervention is needed.</li> </ul>

Item		Description
7	Stop 	Stops all printer activity A list of options is offered once <b>Stopped</b> appears on the display.
8	Menu 	Opens the menu index <b>Note:</b> The menus are available only when the printer is in the <b>Ready</b> state.
9	USB port	Insert a flash drive into the front of the printer to print saved files. <b>Note:</b> Only the front USB port supports flash drives.

# Additional printer setup

## Installing internal options

**⚠ CAUTION—SHOCK HAZARD:** If you are accessing the system board or installing optional hardware or memory devices sometime after setting up the printer, then turn the printer off, and unplug the power cord from the wall outlet before continuing. If you have any other devices attached to the printer, then turn them off as well, and unplug any cables going into the printer.

## Available internal options

- Memory cards
- Firmware cards
- Printer hard disk
- Internal Solutions Ports (ISP)

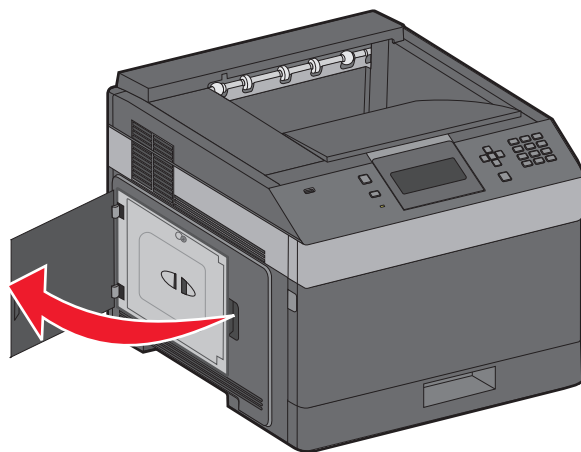
All of these options may not be available. For more information, contact the place where you purchased the printer.

## Accessing the system board to install internal options

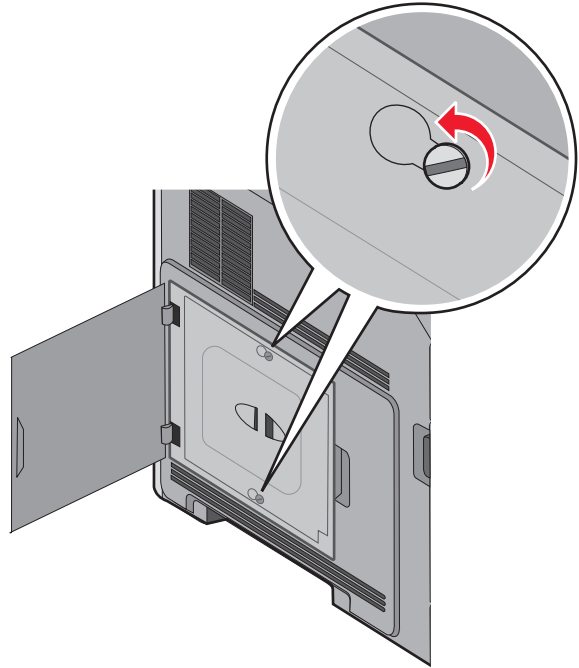
**Note:** This task requires a flathead screwdriver.

**⚠ CAUTION—SHOCK HAZARD:** If you are accessing the system board or installing optional hardware or memory devices sometime after setting up the printer, then turn the printer off, and unplug the power cord from the wall outlet before continuing. If you have any other devices attached to the printer, then turn them off as well, and unplug any cables going into the printer.

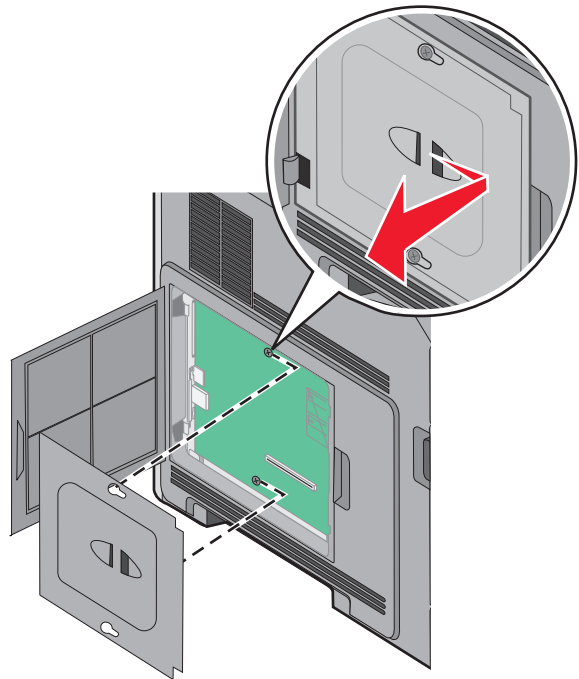
- 1 Open the system board door.



2 Loosen the screws on the system board cover.

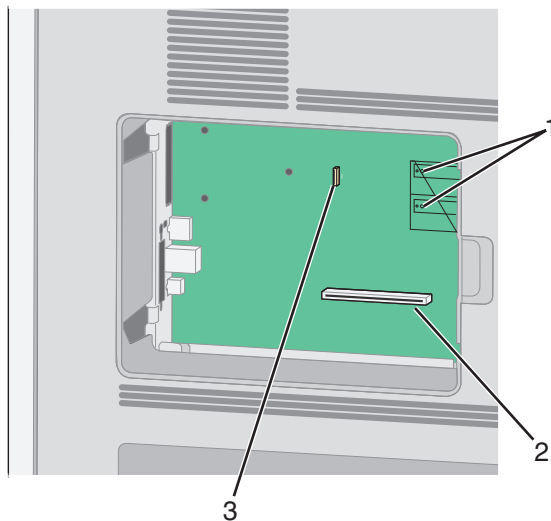


3 Remove the system board cover.



4 Use the illustration below to locate the appropriate connector.

**Warning—Potential Damage:** System board electronic components are easily damaged by static electricity. Touch something metal on the printer before touching any system board electronic components or connectors.



1	Firmware and flash memory card connectors
2	Memory card connector
3	Printer hard disk connector

## Installing a memory card

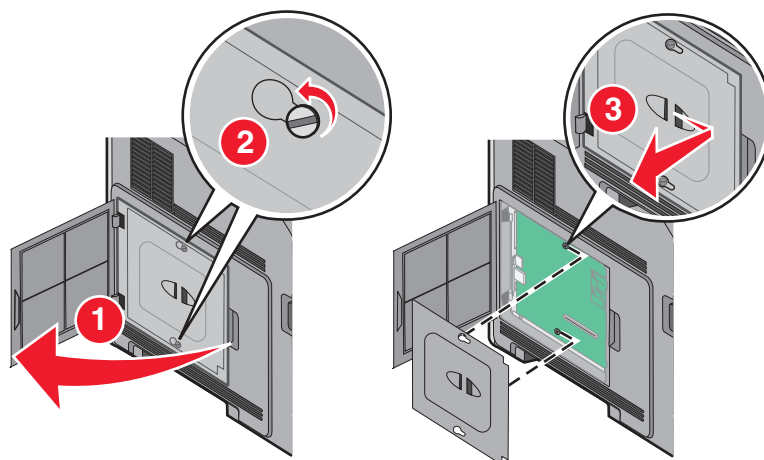
**Note:** This task requires a flathead screwdriver.

**CAUTION—SHOCK HAZARD:** If you are accessing the system board or installing optional hardware or memory devices sometime after setting up the printer, then turn the printer off, and unplug the power cord from the wall outlet before continuing. If you have any other devices attached to the printer, then turn them off as well, and unplug any cables going into the printer.

**Warning—Potential Damage:** System board electronic components are easily damaged by static electricity. Touch something metal on the printer before touching any system board electronic components or connectors.

An optional memory card can be purchased separately and attached to the system board. To install the memory card:

- 1 Access the system board.



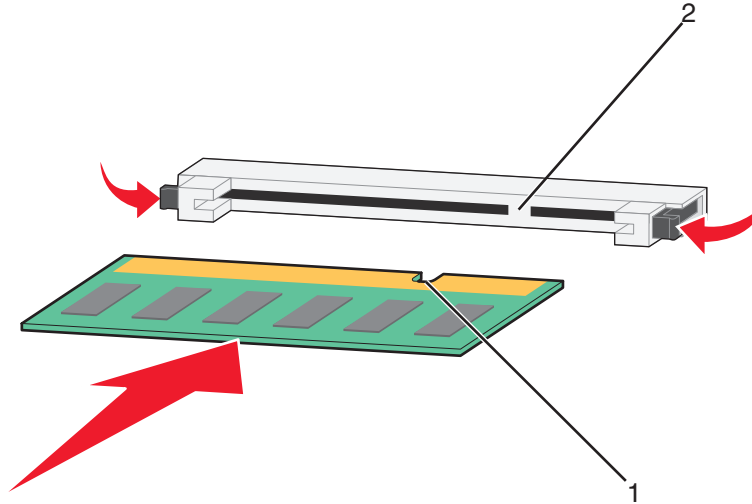
2 Unpack the memory card.

**Note:** Avoid touching the connection points along the edge of the card.

3 Open the memory card connector latches.



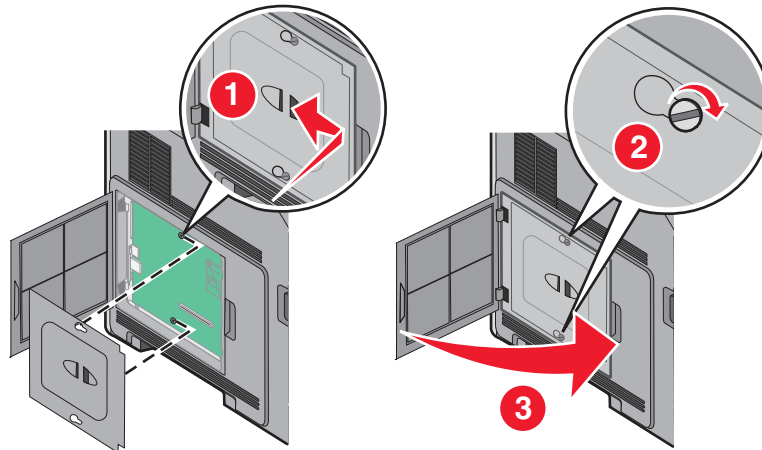
4 Align the notches on the memory card with the ridges on the connector.



1	Notches
2	Ridges

5 Push the memory card straight into the connector until it *snaps* into place.

6 Replace the system board cover and close the system board door.



## Installing a flash memory or firmware card

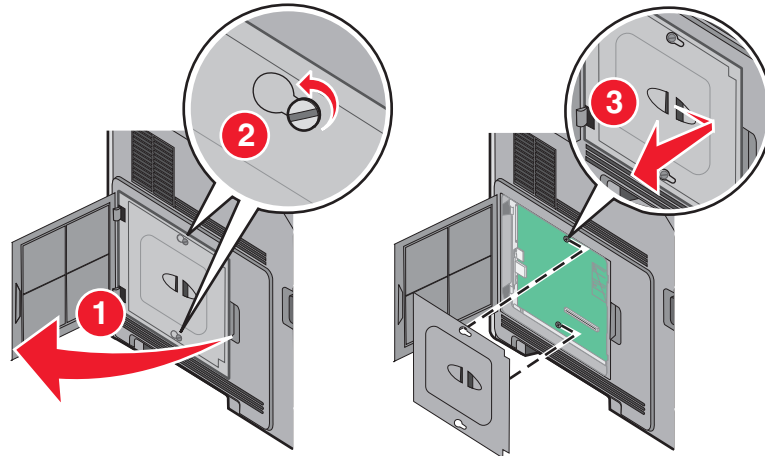
**Note:** This task requires a flathead screwdriver.

The system board has two connections for an optional flash memory or firmware card. Only one of each may be installed, but the connectors are interchangeable.

**⚠ CAUTION—SHOCK HAZARD:** If you are accessing the system board or installing optional hardware or memory devices sometime after setting up the printer, then turn the printer off, and unplug the power cord from the wall outlet before continuing. If you have any other devices attached to the printer, then turn them off as well, and unplug any cables going into the printer.

**Warning—Potential Damage:** System board electronic components are easily damaged by static electricity. Touch something metal on the printer before touching any system board electronic components or connectors.

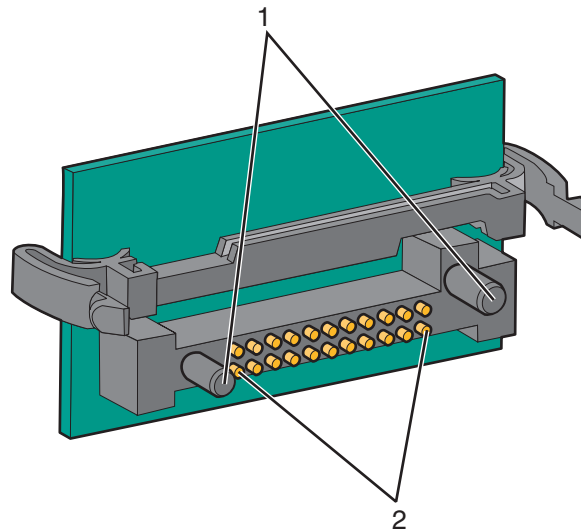
1 Access the system board.



2 Unpack the card.

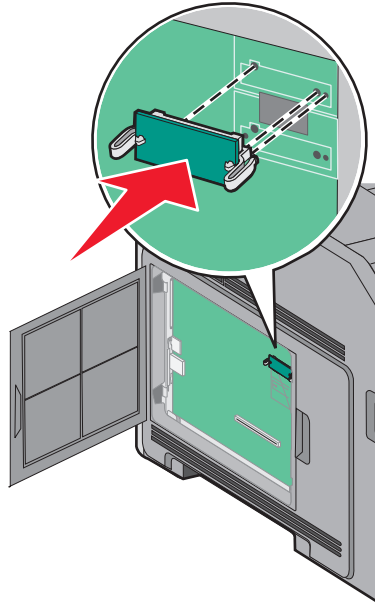
**Note:** Avoid touching any electrical components on the card.

3 Holding the card by its sides, align the plastic pins on the card with the holes on the system board.



1	Plastic pins
2	Metal pins

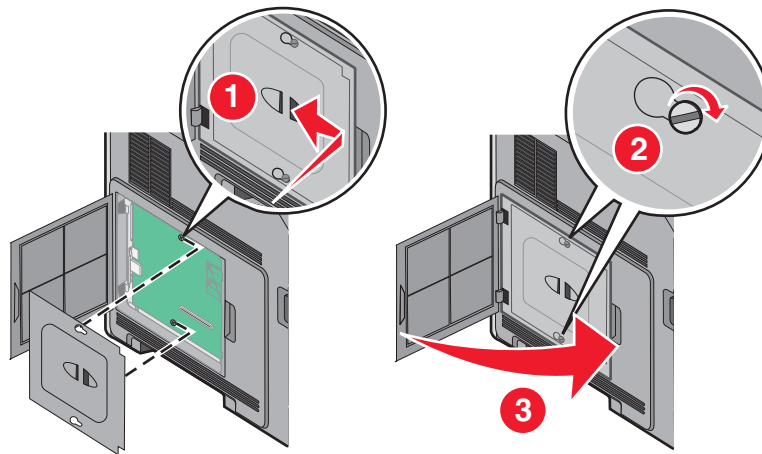
4 Push the card firmly into place.



**Notes:**

- The entire length of the connector on the card must touch and be flush against the system board.
- Be careful not to damage the connectors.

5 Replace the system board cover and close the system board door.





# Installing an Internal Solutions Port

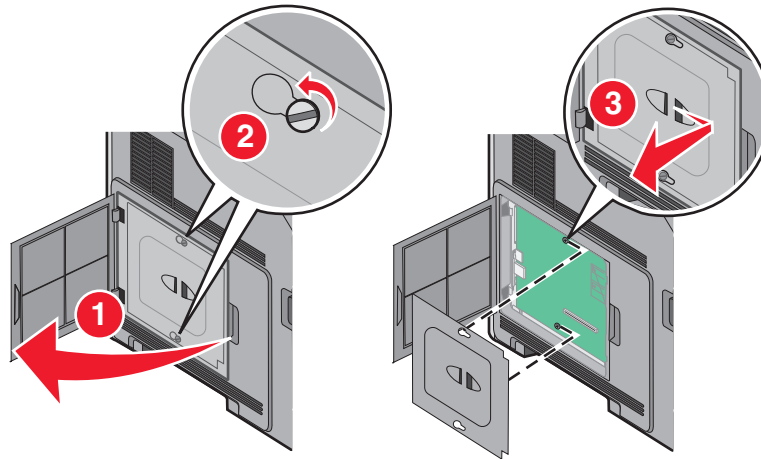
The system board supports one optional Internal Solutions Port (ISP). Install an ISP for additional connectivity options.

**Note:** This task requires a flathead screwdriver.

**CAUTION—SHOCK HAZARD:** If you are accessing the system board or installing optional hardware or memory devices sometime after setting up the printer, then turn the printer off, and unplug the power cord from the wall outlet before continuing. If you have any other devices attached to the printer, then turn them off as well, and unplug any cables going into the printer.

**Warning—Potential Damage:** System board electronic components are easily damaged by static electricity. Touch something metal on the printer before touching any system board electronic components or connectors.

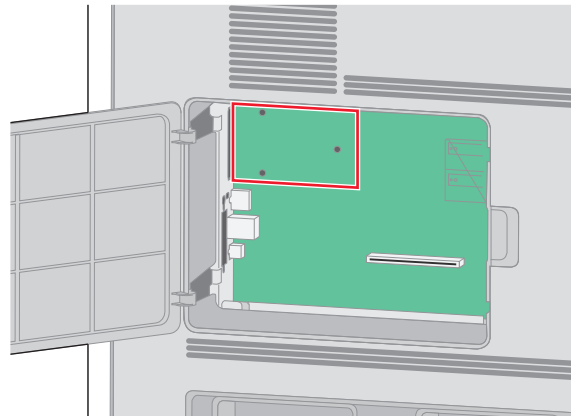
- 1 Access the system board.



- 2 Unpack the ISP and plastic tee.

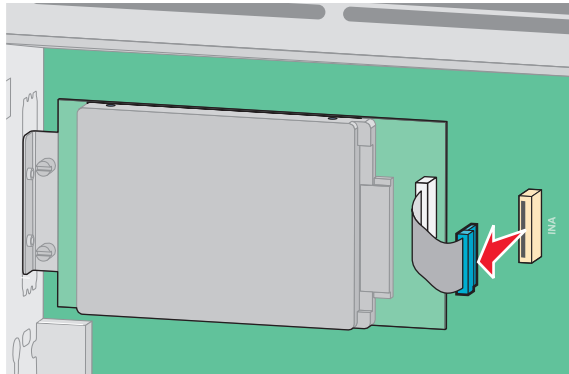
**Note:** Avoid touching the components on the card.

- 3 Locate the appropriate connector on the system board.

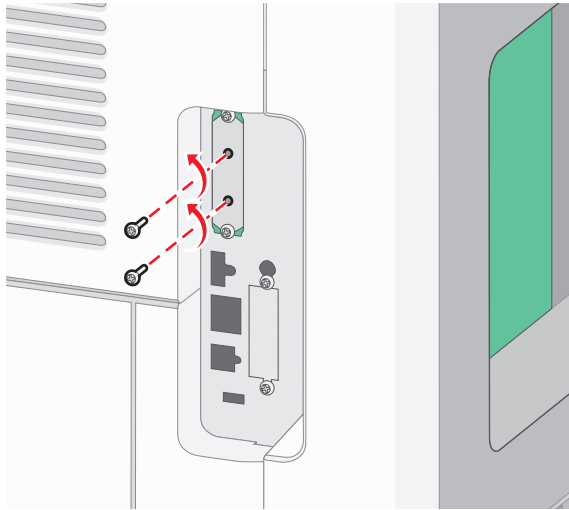


**Note:** If an optional printer hard disk is currently installed, then the printer hard disk must first be removed. To remove the hard disk:

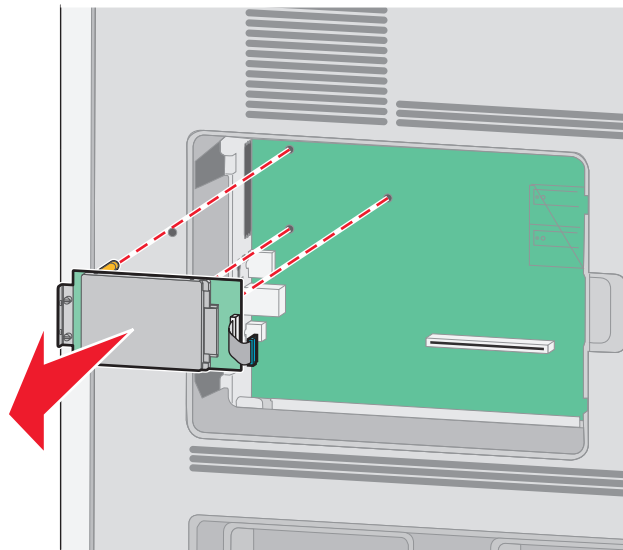
- a** Unplug the printer hard disk interface cable from the system board, leaving the cable attached to the printer hard disk. To unplug the cable, squeeze the paddle at the plug of the interface cable to disengage the latch before pulling the cable out.



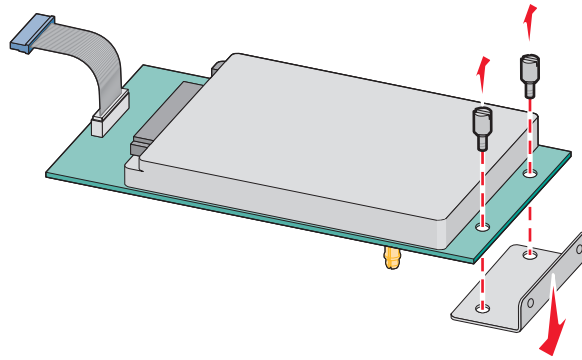
- b** Remove the screws holding the printer hard disk in place.



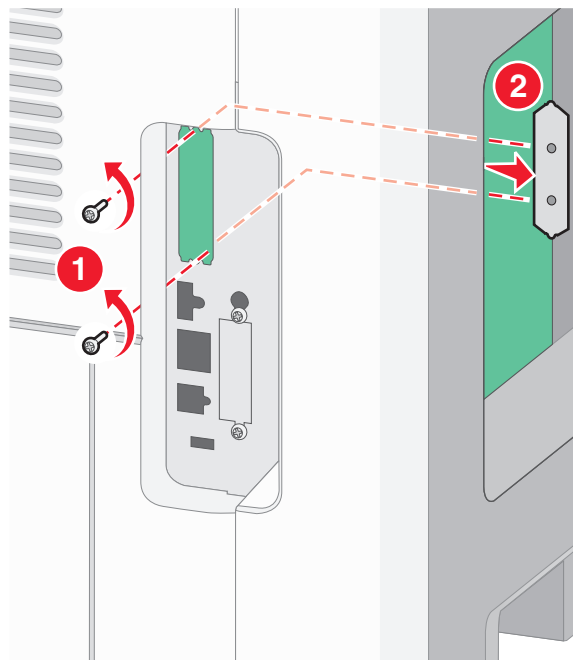
- c** Remove the printer hard disk by pulling it upward to unseat the standoffs.



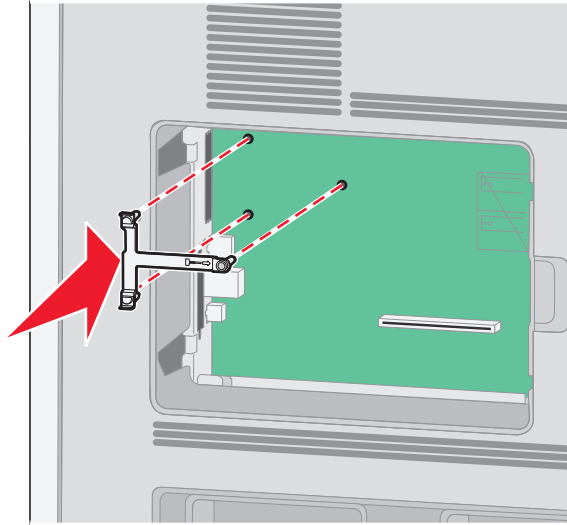
- d** Remove the thumbscrews that attach the printer hard disk mounting bracket to the printer hard disk, and then remove the bracket. Set the printer hard disk aside.



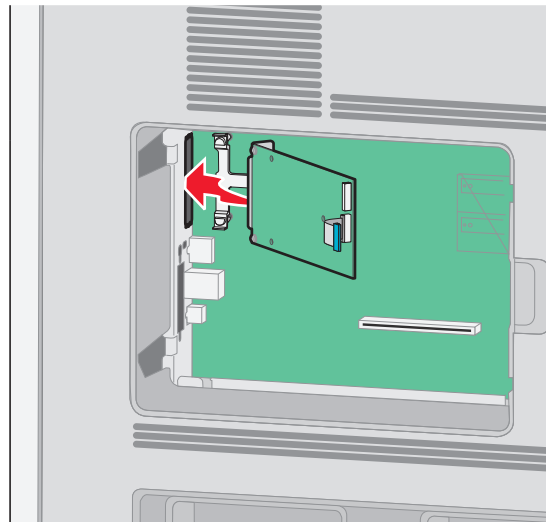
- 4** Remove the metal cover from the ISP opening.



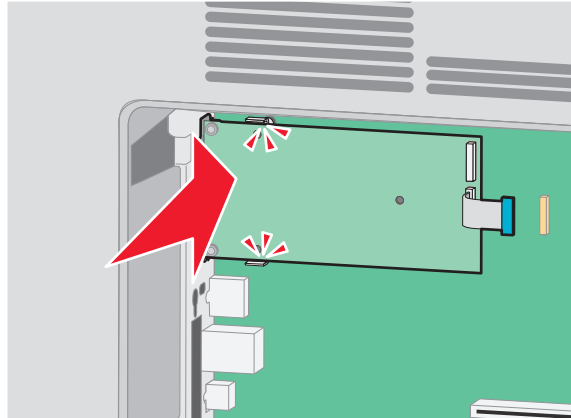
- 5** Align the posts of the plastic tee to the holes in the system board, and then press downward until the tee snaps into place. Be sure each post of the tee has latched completely, and that the tee is seated firmly onto the system board.



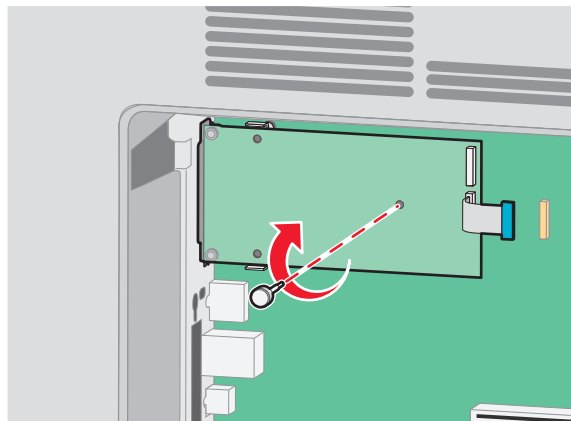
- 6** Install the ISP onto the plastic tee. Angle the ISP over the plastic tee, and then approach the plastic tee so that any overhanging connectors will pass through the ISP opening in the system board cage.



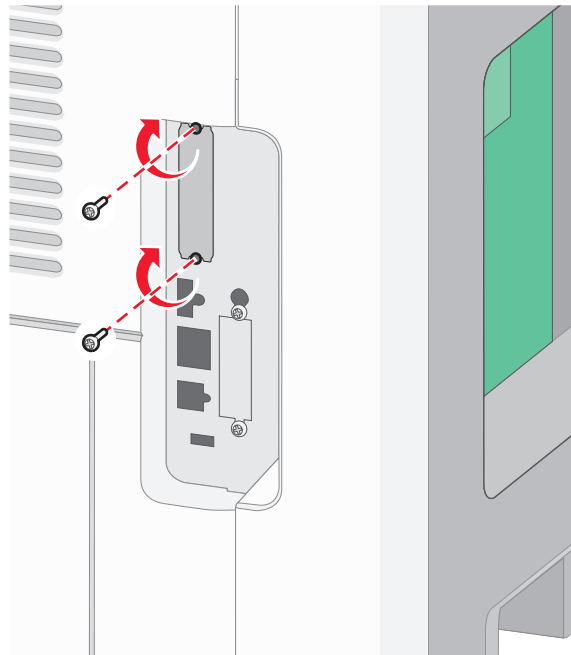
**7** Lower the ISP toward the plastic tee until the ISP is seated between the guides of the plastic tee.



**8** Insert the long thumbscrew and turn it clockwise enough to hold the ISP in place, but do not tighten the thumbscrew at this time.



9 Attach the two provided screws to secure the ISP mounting bracket to the system board cage.

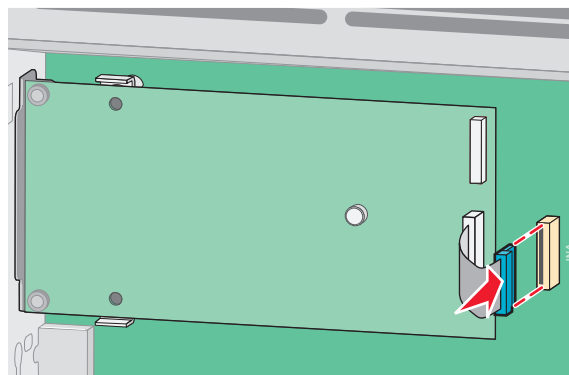


10 Tighten the long thumbscrew.

**Note:** Do not overtighten the thumbscrew.

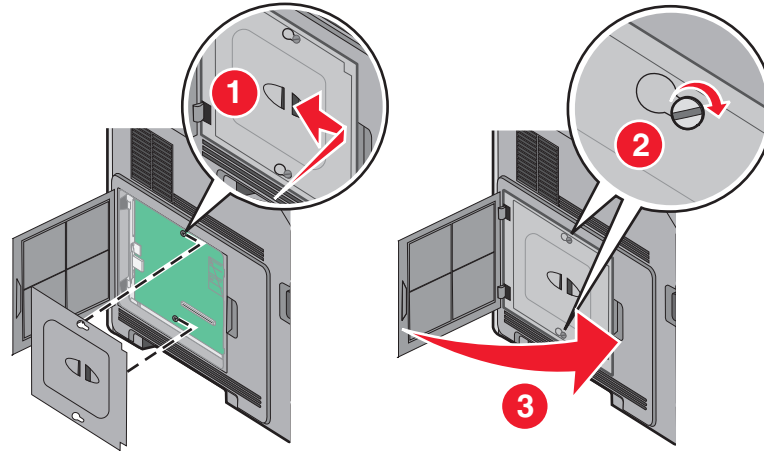
11 Insert the plug of the ISP interface cable into the receptacle of the system board.

**Note:** The plugs and receptacles are color coded.



12 If a printer hard disk was previously installed, then attach the printer hard disk to the ISP. For more information, see "Installing a printer hard disk" on page 31.

**13** Replace the system board cover and close the system board door.



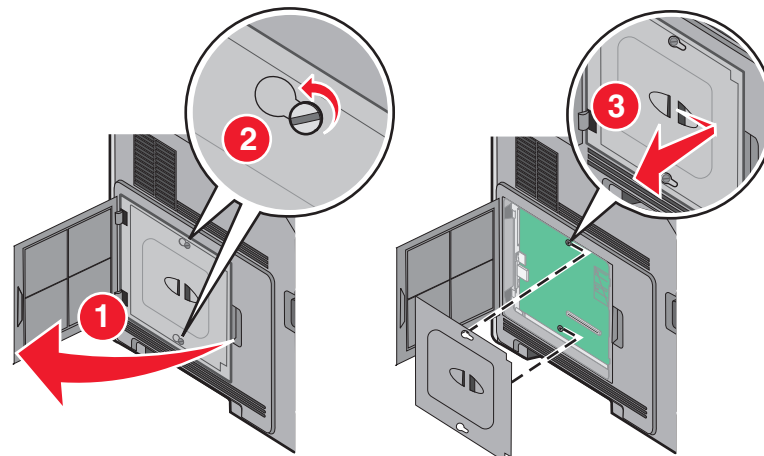
## Installing a printer hard disk

**Note:** This task requires a flathead screwdriver.

**CAUTION—SHOCK HAZARD:** If you are accessing the system board or installing optional hardware or memory devices sometime after setting up the printer, then turn the printer off, and unplug the power cord from the wall outlet before continuing. If you have any other devices attached to the printer, then turn them off as well, and unplug any cables going into the printer.

**Warning—Potential Damage:** System board electronic components are easily damaged by static electricity. Touch something metal on the printer before touching any system board electronic components or connectors.

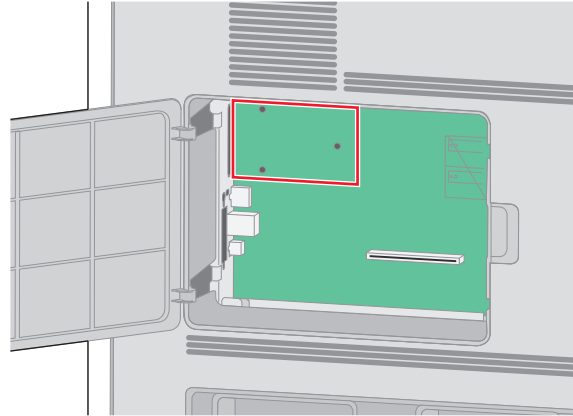
**1** Access the system board.



**2** Unpack the printer hard disk.

**Note:** Avoid touching the components on the hard disk.

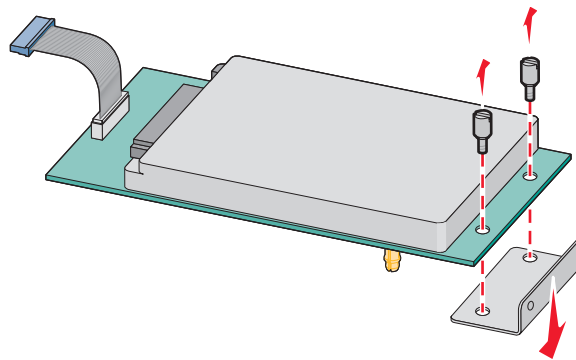
**3** Locate the appropriate connector on the system board.



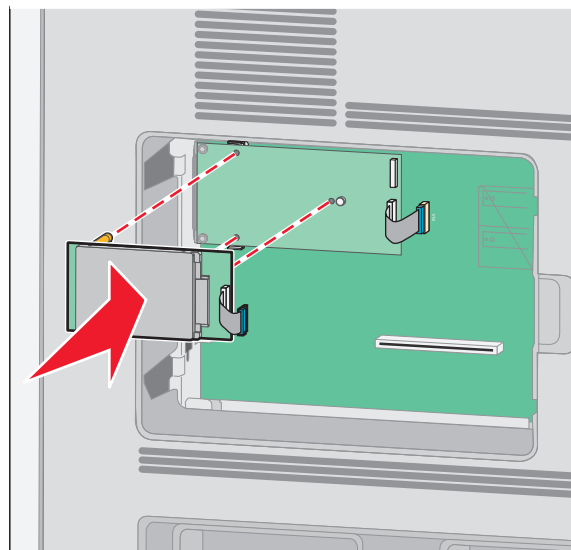
**Note:** If an optional ISP is currently installed, then the printer hard disk must be installed onto the ISP.

To install a printer hard disk onto the ISP:

- a** Using a flathead screwdriver to loosen the screws, remove the thumbscrews that attach the printer hard disk mounting bracket to the printer hard disk, and then remove the bracket.



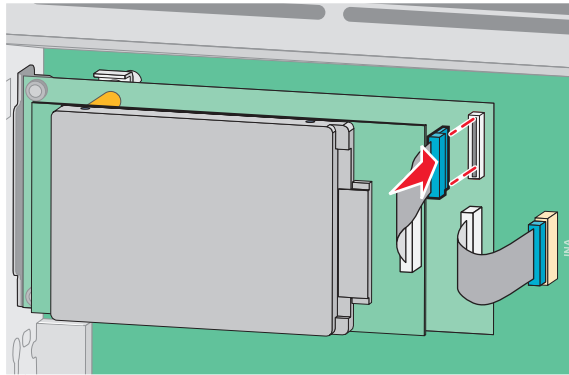
- b** Align the standoffs of the printer hard disk with the holes in the ISP, and then press downward on the printer hard disk until the standoffs have seated into place.





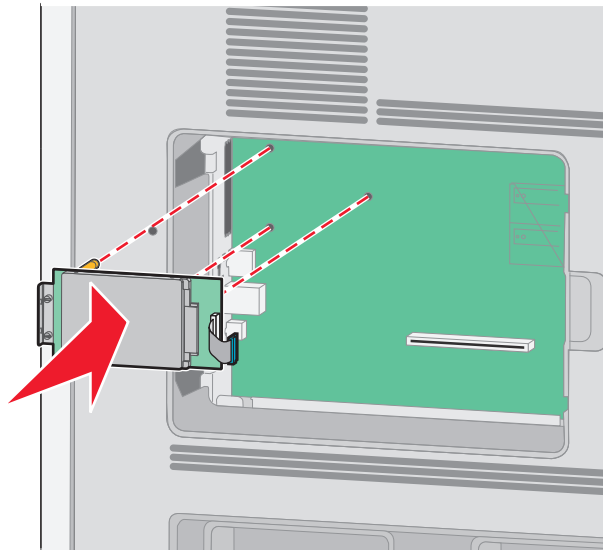
- c Insert the plug of the printer hard disk interface cable into the receptacle of the ISP.

**Note:** The plugs and receptacles are color coded.

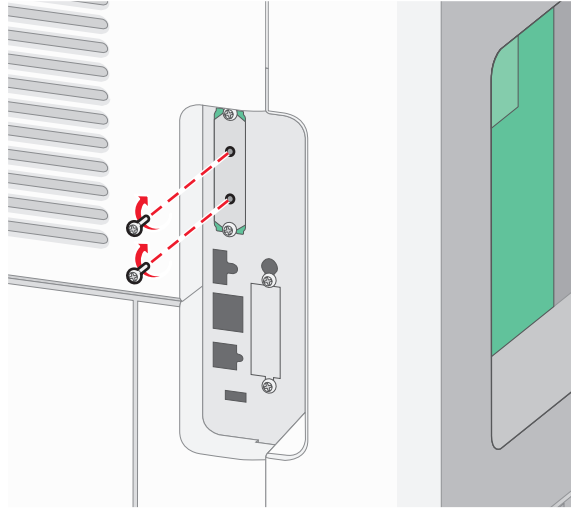


To install a printer hard disk directly onto the system board:

- a Align the standoffs of the printer hard disk with the holes in the system board, and then press downward on the printer hard disk until the standoffs have seated into place.

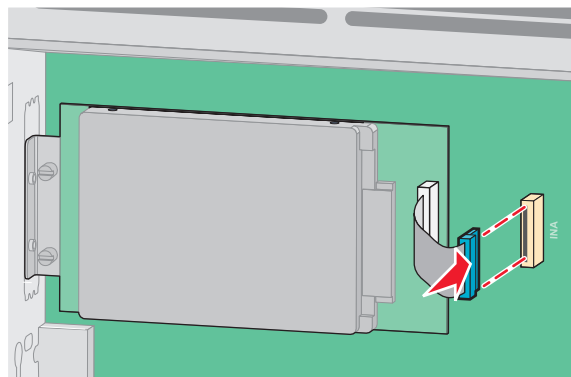


**b** Attach the two provided screws to secure the printer hard disk mounting bracket.

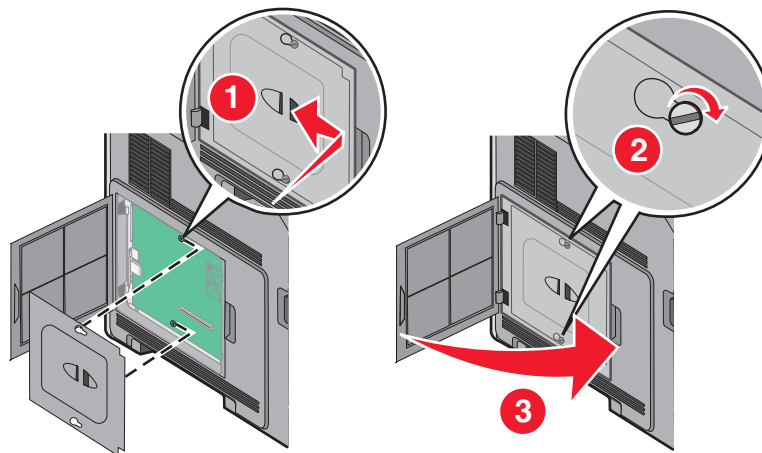


**c** Insert the plug of the printer hard disk interface cable into the receptacle of the system board.

**Note:** The plugs and receptacles are color coded.




**4** Replace the system board cover and close the system board door.




# Installing hardware options


## Order of installation

 **CAUTION—TIPPING HAZARD:** Floor-mounted configurations require additional furniture for stability. You must use either a printer stand or printer base if you are using a high-capacity input tray, a duplex unit and an input option, or more than one input option.

Install the printer and any options you have purchased in the following order:

 **CAUTION—SHOCK HAZARD:** If you are accessing the system board or installing optional hardware or memory devices sometime after setting up the printer, then turn the printer off, and unplug the power cord from the wall outlet before continuing. If you have any other devices attached to the printer, then turn them off as well, and unplug any cables going into the printer.


- Printer stand or caster base
- 2000-sheet drawer
- 550-sheet drawer
- Duplex unit
- Printer

 **CAUTION—POTENTIAL INJURY:** The printer weight is greater than 23.4 kg and requires two or more trained personnel to move it safely.

For more information on installing a printer stand, caster base, or 2000-sheet drawer, see the setup documentation that came with the option.

## Installing paper drawers


The printer supports up to four optional drawers. A drawer consists of a tray and a support unit. All drawers are installed the same way.

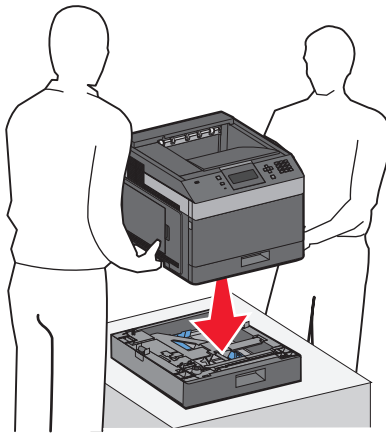
 **CAUTION—SHOCK HAZARD:** If you are accessing the system board or installing optional hardware or memory devices sometime after setting up the printer, then turn the printer off, and unplug the power cord from the wall outlet before continuing. If you have any other devices attached to the printer, then turn them off as well, and unplug any cables going into the printer.

- 1 Unpack the drawer, and then remove any packing material.
- 2 Place the drawer in the location chosen for the printer.

**Note:** If you have multiple options to install, then see the section about the recommended order of installation. The 2000-sheet drawer must be the bottom drawer.

- 3 Align the printer with the drawer, and then lower the printer into place.

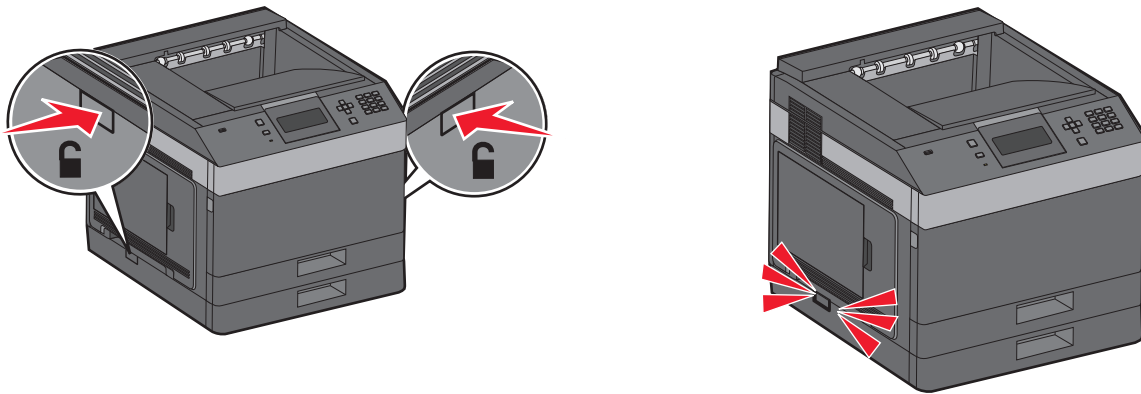
 **CAUTION—POTENTIAL INJURY:** The printer weight is greater than 18 kg (40 lb) and requires two or more trained personnel to move it safely.



## Removing an optional drawer

**Warning—Potential Damage:** Lifting the printer from a drawer without pushing in the safety latches could damage the latches.

To remove an optional drawer, push in the safety latches on both sides of the drawer until they *click* and stay recessed, and then lift the printer.



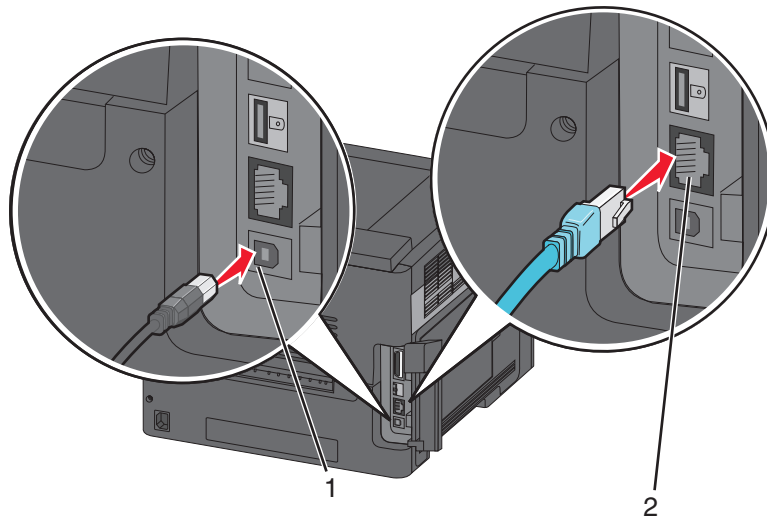
## Attaching cables

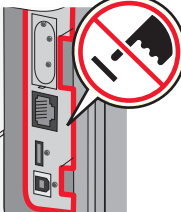
**CAUTION—POTENTIAL INJURY:** Do not set up this product or make any electrical or cabling connections, such as the power cord or telephone, during a lightning storm.

Connect the printer to the computer using a USB cable or Ethernet cable.

Be sure to match the following:

- The USB symbol on the cable with the USB symbol on the printer
- The appropriate Ethernet cable to the Ethernet port



<p><b>1</b></p>	<p>USB port</p> <p><b>Warning—Potential Damage:</b> Do not touch the USB cable, any network adapter, or the printer in the area shown while actively printing. A loss of data or a malfunction can occur.</p> 
<p><b>2</b></p>	<p>Ethernet port</p>


## Verifying printer setup





- Print a menu settings page to verify that all printer options are installed correctly. A list of installed options appears toward the bottom of the page. If an option you installed is not listed, then it is not installed correctly. Remove the option, and install it again.
- Print a network setup page to verify that your printer is correctly connected to the network. This page also provides important information that aids network printing configuration.

## Printing a menu settings page

Print a menu settings page to review the current menu settings and to verify if the printer options are installed correctly.

**Note:** If you have not made any menu item settings changes yet, then the menu settings page lists all the factory default settings. Once you select and save other settings from the menus, they replace the factory default settings as *user default settings*. A user default setting remains in effect until you access the menu again, choose another value, and save it. To restore the factory default settings, see “Restoring the factory default settings” on page 139.






- 1** Make sure the printer is on and **Ready** appears.
- 2** From the printer control panel, press .

- 3 Press the up or down arrow button until  **Reports** appears, and then press .
- 4 Press the up or down arrow button until  **Menu Settings Page** appears, and then press .

After the menu settings page prints, the printer returns to the **Ready** state.

## Printing a network setup page

If the printer is attached to a network, then print a network setup page to verify the network connection. This page also provides important information that aids network printing configuration.

- 1 Make sure the printer is on and **Ready** appears.
- 2 From the printer control panel, press .
- 3 Press the up or down arrow button until  **Reports** appears, and then press .
- 4 Press the up or down arrow button until  **Network Setup Page** appears, and then press .

**Note:** If an optional internal print server is installed, **Print Network <x> Setup Page** appears.

- 5 Check the first section on the network setup page, and confirm that Status is "Connected."

If Status is "Not Connected," the LAN drop may not be active, or the network cable may be malfunctioning. Consult a system support person for a solution, and then print another network setup page.

## Setting up the printer software

### Installing printer software

A printer driver is software that lets the computer communicate with the printer. The printer software is typically installed during the initial printer setup. If you need to install the software after setup, follow these instructions:

#### For Windows users

- 1 Close all open software programs.
- 2 Insert the *Software and Documentation* CD.
- 3 From the main installation dialog, click **Install Printer and Software**.
- 4 Follow the instructions on the screen.

#### For Macintosh users

- 1 Close all open software applications.
- 2 Insert the *Software and Documentation* CD.
- 3 From the **Finder** desktop, double-click the printer CD icon that automatically appears.
- 4 Double-click the **Install Printer and Software** icon.
- 5 Follow the instructions on the screen.


## Using the World Wide Web

Updated printer software may be available on the Dell Support Web site at [support.dell.com](http://support.dell.com).

## Updating available options in the printer driver

Once the printer software and any options are installed, it may be necessary to manually add the options in the printer driver to make them available for print jobs.

### For Windows users

- 1 Click , or click **Start** and then click **Run**.
- 2 In the Start Search or Run box, type **control printers**.
- 3 Press **Enter**, or click **OK**.  
The printer folder opens.
- 4 Select the printer.
- 5 Right-click the printer, and then select **Properties**.
- 6 Click the **Install Options** tab.
- 7 Under Available Options, add any installed hardware options.
- 8 Click **Apply**.

### For Macintosh users

#### In Mac OS X version 10.5 or later

- 1 From the Apple menu, choose **System Preferences**.
- 2 Click **Print & Fax**.
- 3 Select the printer, and then click **Options & Supplies**.
- 4 Click **Driver**, and then add any installed hardware options.
- 5 Click **OK**.

#### In Mac OS X version 10.4 and earlier

- 1 From the Finder desktop, choose **Go > Applications**.
- 2 Double-click **Utilities**, and then double-click **Print Center** or **Printer Setup Utility**.
- 3 Select the printer, and then from the Printers menu, choose **Show Info**.
- 4 From the pop-up menu, choose **Installable Options**.
- 5 Add any installed hardware options, and then click **Apply Changes**.

# Setting up wireless printing

## Information you will need to set up the printer on a wireless network

**Note:** Do not connect the installation or network cables until prompted to do so by the setup software.

- **SSID**—The SSID is also referred to as the network name.
- **Wireless Mode (or Network Mode)**—The mode will be either infrastructure or ad hoc.
- **Channel (for ad hoc networks)**—The channel defaults to auto for infrastructure networks.

Some ad hoc networks will also require the auto setting. Check with your system support person if you are not sure which channel to select.

- **Security Method**—There are three basic options for Security Method:
  - WEP key  
If your network uses more than one WEP key, enter up to four in the provided spaces. Select the key currently in use on the network by selecting the Default WEP Transmit Key.  
*or*
  - WPA or WPA2 passphrase  
WPA includes encryption as an additional layer of security. The choices are AES or TKIP. Encryption must be set for the same type on the router and on the printer, or the printer will not be able to communicate on the network.
  - No security  
If your wireless network does not use any type of security, then you will not have any security information.

**Note:** Using an unsecured wireless network is not recommended.

If you are installing the printer on an 802.1X network using the Advanced method, then you may need the following:

- Authentication type
- Inner authentication type
- 802.1X username and password
- Certificates

**Note:** For more information on configuring 802.1X security, see the *Networking Guide* on the *Software and Documentation CD*.

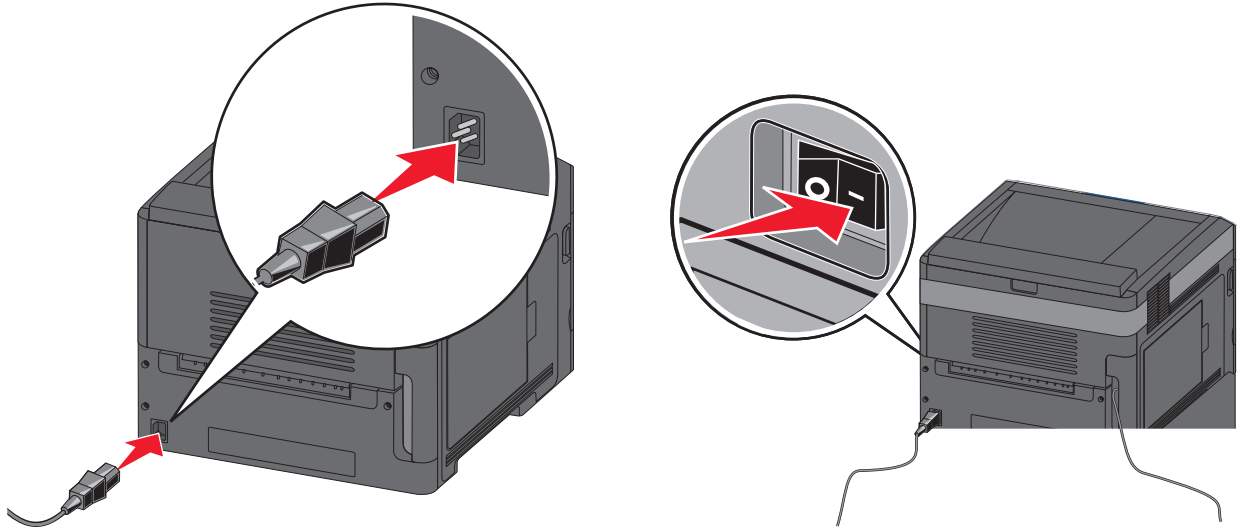
## Installing the printer on a wireless network (Windows)

Before you install the printer on a wireless network, make sure that:

- An optional wireless card is installed in your printer.
- Your wireless network is set up and working properly.
- The computer you are using is connected to the same wireless network where you want to set up the printer.



1 Connect the power cable to the printer and then to a properly grounded electrical outlet, and then turn the printer on.

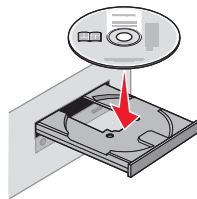


Make sure the printer and computer are fully on and ready.



Do not connect the USB cable until instructed to do so on the screen.

2 Insert the *Software and Documentation* CD.



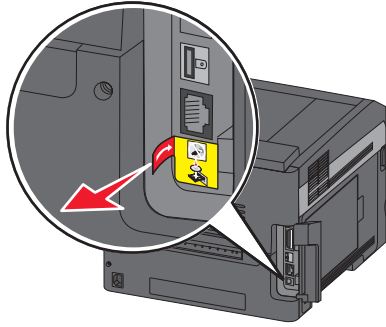
3 Click **Install Printer and Software**.

4 Click **Agree** to accept the terms of the License Agreement.

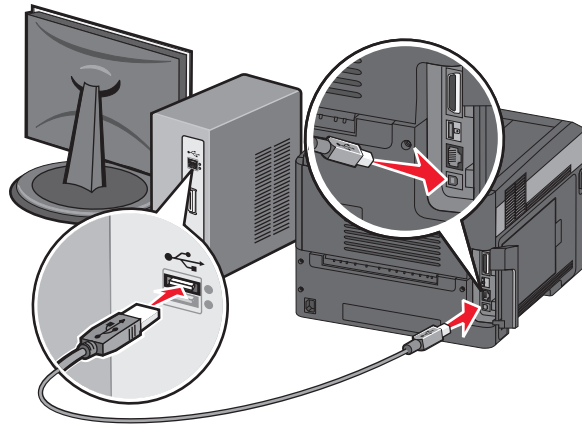
5 Select **Suggested** and then click **Next**.

6 Click **Wireless Network Attach**.

7 Remove the label covering the USB port on the back of the printer.



8 Temporarily connect a USB cable between the computer on the wireless network and the printer.



**Note:** After the printer is configured, the software will instruct you to disconnect the temporary USB cable so you can print wirelessly.

9 Follow the on-screen instructions to complete the software installation.

**Note: Basic** is the recommended path to choose. Choose **Advanced** only if you want to customize your installation.

10 To allow other computers on the wireless network to use the wireless printer, follow steps 2 through 6 for each computer.

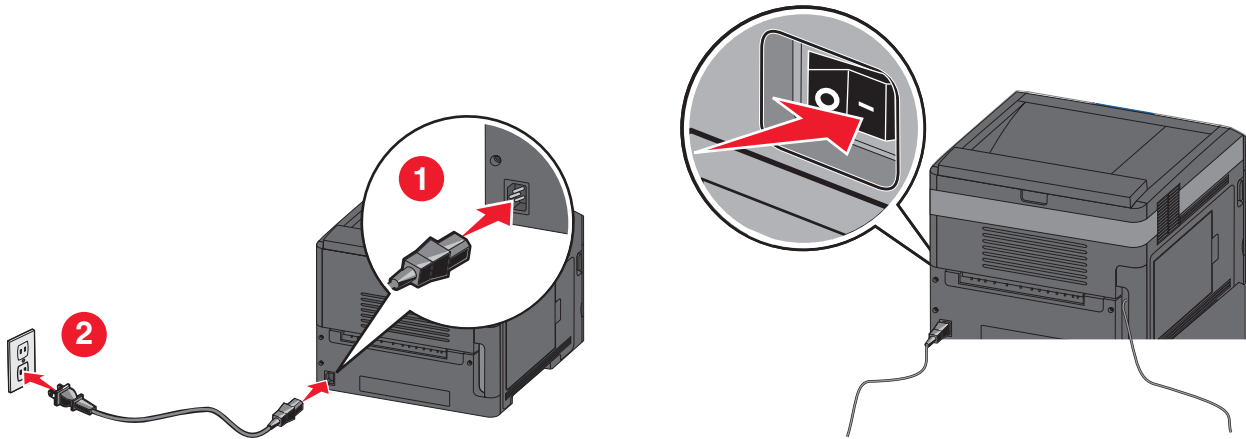
## Installing the printer on a wireless network (Macintosh)

Before you install the printer on a wireless network, make sure that:

- An optional wireless card is installed in your printer.
- Your wireless network is set up and working properly.
- The computer you are using is connected to the same wireless network where you want to set up the printer.

## Prepare to configure the printer

- 1 Locate the printer MAC address on the sheet that shipped with the printer. Write the last six digits of the MAC address in the space provided below:  
MAC address: \_\_\_\_\_
- 2 Connect the power cable to the printer and then to a properly grounded electrical outlet, and then turn the power on.



## Enter the printer information

- 1 Access the AirPort options.

### In Mac OS X version 10.5 or later

- a From the Apple menu, choose **System Preferences**.
- b Click **Network**.
- c Click **AirPort**.

### In Mac OS X version 10.4 and earlier

- a From the Finder desktop, choose **Go > Applications**.
- b From the Applications folder, double-click **Internet Connect**.
- c From the toolbar, click **AirPort**.

- 2 From the Network pop-up menu, select **print server xxxxxx**, where the x's are the last six digits of the MAC address located on the MAC address sheet.

- 3 Open the Safari browser.

- 4 From the Bookmarks drop-down menu, select **Show**.

- 5 Under Collections, select **Bonjour** or **Rendezvous**, and then double-click the printer name.

**Note:** The application is referred to as *Rendezvous* in Mac OS X version 10.3, but is now called *Bonjour* by Apple Computer.

- 6 From the main page of the Embedded Web Server, navigate to the page where the wireless settings information is stored.

## Configure the printer for wireless access

- 1 Type the name of your network (SSID) in the appropriate field.
- 2 Select **Infrastructure** as your Network Mode if you are using a wireless router.
- 3 Select the type of security you use to protect your wireless network.
- 4 Enter the security information necessary for the printer to join your wireless network.
- 5 Click **Submit**.
- 6 Open the AirPort application on your computer:

### In Mac OS X version 10.5 or later

- a From the Apple menu, choose **System Preferences**.
- b Click **Network**.
- c Click **AirPort**.

### In Mac OS X version 10.4 and earlier

- a From the Finder desktop, click **Go > Applications**.
- b From the Applications folder, double-click **Internet Connect**.
- c From the toolbar, click **AirPort**.

- 7 From the Network pop-up menu, select your wireless network.

## Configure your computer to use the printer wirelessly

To print to a network printer, each Macintosh user must install a custom *PostScript Printer Description* (PPD) file and create a printer in the Print Center or Printer Setup Utility.

- 1 Install a PPD file on the computer:
  - a Insert the *Software and Documentation* CD in the CD or DVD drive.
  - b Double-click the installer package for the printer.
  - c From the Welcome screen, click **Continue**.
  - d Click **Continue** again after viewing the Readme file.
  - e Click **Continue** after viewing the license agreement, and then click **Agree** to accept the terms of the agreement.
  - f Select a Destination, and then click **Continue**.
  - g From the Easy Install screen, click **Install**.
  - h Type the user password, and then click **OK**.  
All necessary software is installed on the computer.
  - i Click **Restart** when installation is complete.
- 2 Add the printer:
  - a For IP printing:

### In Mac OS X version 10.5 or later

- 1 From the Apple menu, choose **System Preferences**.
- 2 Click **Print & Fax**.

- 3 Click **+**.
- 4 Click **IP**.
- 5 Type in the IP address of your printer in the Address field.
- 6 Click **Add**.

### **In Mac OS X version 10.4 and earlier**

- 1 From the Finder desktop, choose **Go > Applications**.
- 2 Double-click the **Utilities** folder.
- 3 Locate and double-click **Printer Setup Utility** or **Print Center**.
- 4 From the Printer List, choose **Add**.
- 5 Click **IP**.
- 6 Type in the IP address of your printer in the Address field.
- 7 Click **Add**.

**b** For AppleTalk printing:

### **In Mac OS X version 10.5**

- 1 From the Apple menu, choose **System Preferences**.
- 2 Click **Print & Fax**.
- 3 Click **+**.
- 4 Click **AppleTalk**.
- 5 Select the printer from the list.
- 6 Click **Add**.

### **In Mac OS X version 10.4**

- 1 From the Finder desktop, choose **Go > Applications**.
- 2 Double-click the **Utilities** folder.
- 3 Locate and double-click **Print Center** or **Printer Setup Utility**.
- 4 From the Printer List, choose **Add**.
- 5 Choose the **Default Browser** tab.
- 6 Click **More Printers**.
- 7 From the first pop-up menu, choose **AppleTalk**.
- 8 From the second pop-up menu, select **Local AppleTalk zone**.
- 9 Select the printer from the list.
- 10 Click **Add**.


## **Installing the printer on a wired network**

Use the following instructions to install the printer on a wired network. These instructions apply to Ethernet connection.

Before you install the printer on a wired network, make sure that:

- You have completed the initial setup of the printer.
- The printer is connected to your network with the appropriate type of cable.

## For Windows users

- 1 Insert the *Software and Documentation* CD.  
Wait for the Welcome screen to appear.  
If the CD does not launch after a minute, then do the following:
  - a Click , or click **Start** and then click **Run**.
  - b In the Start Search or Run box, type `D:\setup.exe`, where **D** is the letter of your CD or DVD drive.
- 2 Click **Install Printer and Software**.
- 3 Click **Agree** to agree to the License Agreement.
- 4 Select **Suggested**, and then click **Next**.  
**Note:** To configure the printer using a static IP address, using IPv6, or to configure printers using scripts, select **Custom** and follow the on-screen instructions.
- 5 Select **Wired Network Attach**, and then click **Next**.
- 6 Select the printer manufacturer from the list.
- 7 Select the printer model from the list, and then click **Next**.
- 8 Select the printer from the list of printers discovered on the network, and then click **Finish**.  
**Note:** If your configured printer does not appear in the list of discovered printers, click **Add Port** and follow the on-screen instructions.
- 9 Follow the on-screen instructions to complete the installation.

## For Macintosh users

- 1 Allow the network DHCP server to assign an IP address to the printer.
- 2 Print the network setup page from the printer. For information on printing a network setup page, see “Printing a network setup page” on page 38.
- 3 Locate the printer IP address in the TCP/IP section of the network setup page. You will need the IP address if you are configuring access for computers on a different subnet than the printer.
- 4 Install the drivers and add the printer.
  - a Install a PPD file on the computer:
    - 1 Insert the *Software and Documentation* CD in the CD or DVD drive.
    - 2 Double-click the installer package for the printer.
    - 3 From the Welcome screen, click **Continue**.
    - 4 Click **Continue** again after viewing the Readme file.
    - 5 Click **Continue** after viewing the license agreement, and then click **Agree** to accept the terms of the agreement.
    - 6 Select a Destination, and then click **Continue**.
    - 7 From the Easy Install screen, click **Install**.
    - 8 Type the user password, and then click **OK**.  
All the necessary software is installed on the computer.
    - 9 Click **Restart** when installation is complete.

**b** Add the printer:

- For IP printing:

**In Mac OS X version 10.5 or later**

- 1** From the Apple menu, choose **System Preferences**.
- 2** Click **Print & Fax**.
- 3** Click **+**.
- 4** Click **IP**.
- 5** Type in the IP address of your printer in the Address field.
- 6** Click **Add**.

**In Mac OS X version 10.4 and earlier**

- 1** From the Finder desktop, choose **Go > Applications**.
- 2** Double-click **Utilities**.
- 3** Double-click **Printer Setup Utility** or **Print Center**.
- 4** From the Printer List, click **Add**.
- 5** Click **IP**.
- 6** Type in the IP address of your printer in the Address field.
- 7** Click **Add**.

- For AppleTalk printing:

**In Mac OS X version 10.5**

- 1** From the Apple menu, choose **System Preferences**.
- 2** Click **Print & Fax**.
- 3** Click **+**.
- 4** Click **AppleTalk**.
- 5** Select the printer from the list.
- 6** Click **Add**.

**In Mac OS X version 10.4 and earlier**

- 1** From the Finder desktop, choose **Go > Applications**.
- 2** Double-click **Utilities**.
- 3** Double-click **Print Center** or **Printer Setup Utility**.
- 4** From the Printer List, click **Add**.
- 5** Choose the **Default Browser** tab.
- 6** Click **More Printers**.
- 7** From the first pop-up menu, choose **AppleTalk**.
- 8** From the second pop-up menu, select **Local AppleTalk zone**.
- 9** Select the printer from the list.
- 10** Click **Add**.

**Note:** If the printer doesn't appear in the list, you may need to add it using the IP address. Contact your system support person for assistance.


# Changing port settings after installing a new network Internal Solutions Port

When a new network Internal Solutions Port (ISP) is installed in the printer, the printer is assigned a new IP address. The printer configurations on computers that access the printer must be updated with this new IP address in order to print to it over the network.

## Notes:

- If the printer has a static IP address that will stay the same, then you do not need to make any changes to the computer configurations.
- If the computers are configured to print to the printer by a network name that will stay the same, instead of by IP address, then you do not need to make any changes to the computer configurations.
- If you are adding a wireless ISP to a printer previously configured for a wired connection, then make sure the wired network is disconnected when you configure the printer to operate wirelessly. If the wired connection remains connected, then the wireless configuration will complete, but the wireless ISP will not be active. In the event that the printer was configured for a wireless ISP while still attached to a wired connection, disconnect the wired connection, turn the printer off, and then turn the printer back on again. This will enable the wireless ISP.
- Only one network connection at a time is active. If you want to switch the connection type between wired and wireless, you must first turn the printer off, connect the cable (to switch to a wired connection) or disconnect the cable (to switch to a wireless connection), and then turn the printer back on again.

## For Windows users

- 1 Print a network setup page and make a note of the new IP address.
- 2 Click , or click **Start** and then click **Run**.
- 3 In the Start Search or Run box, type **control printers**.
- 4 Press **Enter**, or click **OK**.  
The printer folder opens.
- 5 Locate the printer that has changed.  
**Note:** If there is more than one copy of the printer, then update all of them with the new IP address.
- 6 Right-click the printer.
- 7 Click **Properties**.
- 8 Click the **Ports** tab.
- 9 Locate the port in the list, and then select it.
- 10 Click **Configure Port**.
- 11 Type the new IP address in the "Printer Name or IP Address" field. You can find the new IP address on the network setup page you printed in step 1.
- 12 Click **OK**, and then click **Close**.



## For Macintosh users

- 1 Print a network setup page and make a note of the new IP address.
- 2 Locate the printer IP address in the TCP/IP section of the network setup page. You will need the IP address if you are configuring access for computers on a different subnet than the printer.
- 3 Add the printer:
  - For IP printing:

### In Mac OS X version 10.5 or later

- a From the Apple menu, choose **System Preferences**.
- b Click **Print & Fax**.
- c Click **+**.
- d Click **IP**.
- e Type in the IP address of your printer in the Address field.
- f Click **Add**.

### In Mac OS X version 10.4 and earlier

- a From the Go menu, choose **Applications**.
  - b Double-click **Utilities**.
  - c Double-click **Printer Setup Utility** or **Print Center**.
  - d From the Printer List, click **Add**.
  - e Click **IP**.
  - f Type in the IP address of your printer in the Address field.
  - g Click **Add**.
- For AppleTalk printing:

### In Mac OS X version 10.5

- a From the Apple menu, choose **System Preferences**.
- b Click **Print & Fax**.
- c Click **+**.
- d Click **AppleTalk**.
- e Select the printer from the list.
- f Click **Add**.

### In Mac OS X version 10.4 and earlier

- a From the Go menu, choose **Applications**.
- b Double-click **Utilities**.
- c Double-click **Print Center** or **Printer Setup Utility**.
- d From the Printer List, click **Add**.
- e Choose the **Default Browser** tab.
- f Click **More Printers**.
- g From the first pop-up menu, choose **AppleTalk**.
- h From the second pop-up menu, select **Local AppleTalk zone**.

- i Select the printer from the list.
- j Click **Add**.

## Setting up serial printing


In serial printing, data is transferred one bit at a time. Although serial printing is usually slower than parallel printing, it is the preferred option when there is a great deal of distance between the printer and computer or when an interface with a better transfer rate is not available.

After installing the serial port or communication (COM) port, you will need to configure the printer and the computer so they can communicate. Make sure you have connected the serial cable to the COM port on your printer.

### 1 Set the parameters in the printer:

- a From the printer control panel, navigate to the menu with port settings.
- b Locate the submenu with serial port settings.
- c Make any necessary changes to the serial settings.
- d Save the new settings.
- e Print a menu settings page.


### 2 Install the printer driver:

- a Insert the *Software and Documentation CD*. It launches automatically.  
If the CD does not launch automatically, then do the following:
  - 1 Click , or click **Start** and then click **Run**.
  - 2 In the Start Search or Run box, type `D:\setup.exe`, where **D** is the letter of your CD or DVD drive.
- b Click **Install Printer and Software**.
- c Click **Agree** to accept the Printer Software License Agreement.
- d Click **Custom**.
- e Make sure **Select Components** is selected, and then click **Next**.
- f Select the printer model from the menu, and then click **Add Printer**.
- g Click the **+** beside the printer model under **Select Components**.
- h Make sure the correct COM port is available under **Select Components**. This is the port where the serial cable attaches to the computer (example: COM1).
- i Make sure the box next to the selected printer model is checked.
- j Select any other optional software you want to install, and then click **Next**.
- k Click **Finish** to complete the printer software installation.

### 3 Set the COM port parameters:

After the printer driver is installed, you must set the serial parameters in the COM port assigned to the printer driver.

The serial parameters in the COM port must match the serial parameters you set in the printer.



- a Open the Device Manager.
  - 1 Click , or click **Start** and then click **Run**.
  - 2 In the Start Search or Run box, type `devmgmt.msc`.

- 3** Press **Enter**, or click **OK**.  
The Device Manager opens.
- b** Click **+** to expand the list of available ports.
- c** Select the communications port where you attached the serial cable to your computer (example: COM1).
- d** Click **Properties**.
- e** On the Port Settings tab, set the serial parameters to the same serial parameters in the printer.  
Look for the printer settings under the serial heading on the Menu Settings page you printed earlier.
- f** Click **OK**, and then close all the windows.
- g** Print a test page to verify printer installation. When a test page prints successfully, printer setup is complete.

# Loading paper and specialty media

This section explains how to load the 250-, 550-, and 2000-sheet trays, and the multipurpose feeder. It also includes information about paper orientation, setting the Paper Size and Paper Type, and linking and unlinking trays.

## Setting the paper size and type

- 1 Make sure that the printer is on and **Ready** appears.
- 2 From the printer control panel, press .
- 3 Press the up or down arrow button until  **Paper Menu** appears, and then press .
- 4 Press the up or down arrow button until  **Paper Size/Type** appears, and then press .
- 5 Press the up or down arrow button until the correct tray appears, and then press .
- 6 Press the up or down arrow button until  appears next to the correct size, and then press .
- 7 Press the up or down arrow button until  appears next to the correct paper type, and then press . **Submitting Selection** appears. The printer returns to the **Paper Size/Type** menu.
- 8 Press  three times to return to the **Ready** state.



## Setting the printer to detect the paper size loaded in a tray

Size sensing disables or enables auto-size sensing on trays. Size sensing also lets the printer detect the difference between similar paper sizes that it otherwise cannot.

The printer trays *cannot* distinguish the paper size when both A5 and Statement sizes or B5 and Executive sizes are loaded in the printer trays. From the Size Sensing menu, specify which size you want the printer to detect.

**Note:** The multipurpose feeder does not use auto-size sensing and can support both A5- and Statement-size or B5- and Executive-size print jobs. The Size Sensing setting does not affect the multipurpose feeder settings.

- 1 Turn the printer off.
- 2 Press and hold  and the right arrow button while turning the printer on.
- 3 Release the buttons when the screen with the clock animation appears.  
The printer performs a power-on sequence, and then **Config Menu** appears.
- 4 Press the up or down arrow button until  **Size Sensing** appears, and then press .  
A screen listing the Size Sensing settings appears.
- 5 Press  to select the desired Tray Sensing setting.  
**Submitting Selection** appears, followed by the **Size Sensing** menu.

6 Press  once, and then press the left or right arrow button until  **Exit Config Menu** appears.

7 Press .

The printer performs its power-on sequence, and then **Ready** appears.

## Configuring Universal paper settings

The Universal Paper Size is a user-defined setting that lets you print on paper sizes that are not preset in the printer menus. Set the Paper Size for the specified tray to Universal when the size you want is not available from the Paper Size menu. Then, specify all of the following Universal size settings for your paper:

- Units of measure (millimeters or inches)
- Portrait Width
- Portrait Height
- Feed Direction

**Note:** The smallest supported Universal size is 98.4 x 89 mm (3.9 x 3.5 in.); the largest is 297 x 431.8 mm (11.7 x 17 in.).



### Specify a unit of measurement



1 Make sure the printer is on and **Ready** appears.

2 From the printer control panel, press .

3 Press the up or down arrow button until  **Paper Menu** appears, and then press .

4 Press the up or down arrow button until  **Universal Setup** appears, and then press .



5 Press the up or down arrow button until  **Units of Measure** appears, and then press .


6 Press the up or down arrow button until  appears next to the correct unit of measure, and then press .

**Submitting Selection** appears, followed by the **Universal Setup** menu.

### Specify the paper height and width


Defining a specific height and width measurement for the Universal paper size (in the portrait orientation) allows the printer to support the size, including support for standard features such as duplex printing and printing multiple pages on one sheet.

1 From the Universal Setup menu, press the up or down arrow button until  **Portrait Width** appears, and then press .

2 Press the up or down arrow button to change the paper width setting, and then press .

**Submitting Selection** appears, followed by the **Universal Setup** menu.

3 Press the up or down arrow button until  **Portrait Height** appears, and then press .

4 Press the up or down arrow button to change the paper height setting, and then press .

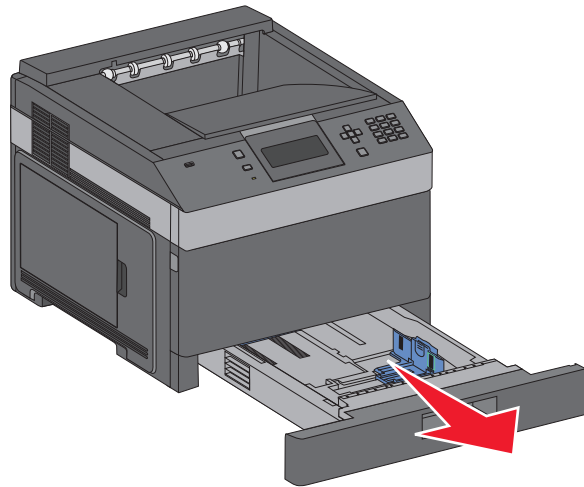
**Submitting Selection** appears, followed by the **Universal Setup** menu.

# Loading the standard or optional 250-sheet or 550-sheet tray

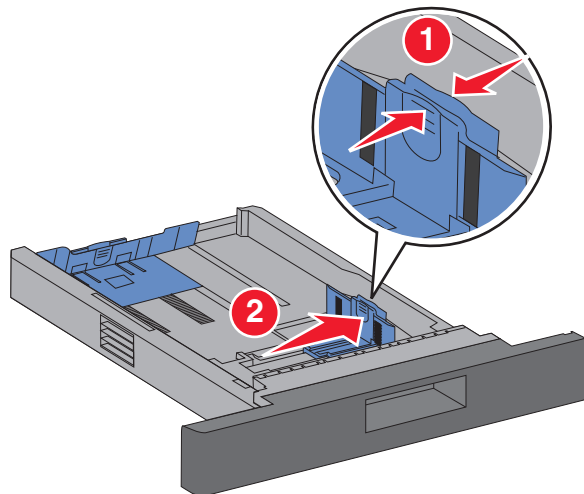
Although the 250-sheet tray and the 550-sheet tray are different in appearance, they require the same process for loading paper. Use these instructions to load paper in either tray:

- 1 Pull the tray out.

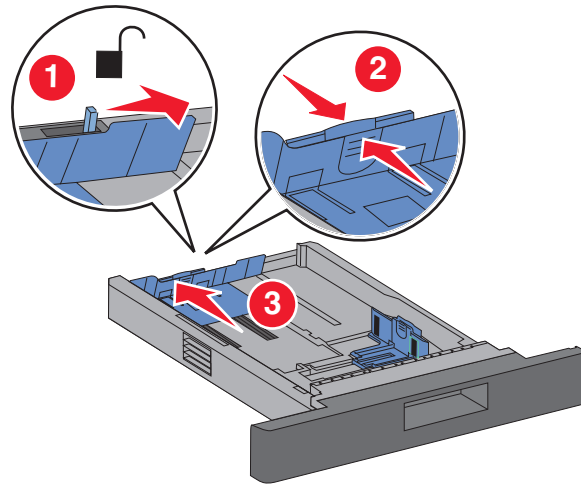
**Note:** Do not remove trays while a job prints or while **Busy** appears on the display. Doing so may cause a jam.



- 2 Squeeze the width guide tab inward as shown, and move the width guide to the correct position for the paper size being loaded.



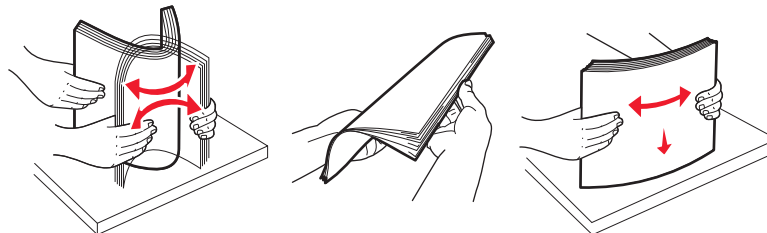
- 3 Unlock the length guide, squeeze the length guide tab inward as shown, and slide the guide to the correct position for the paper size being loaded.



**Notes:**

- Use the size indicators on the bottom of the tray to help position the guides.
- For standard paper sizes, lock the length guide.

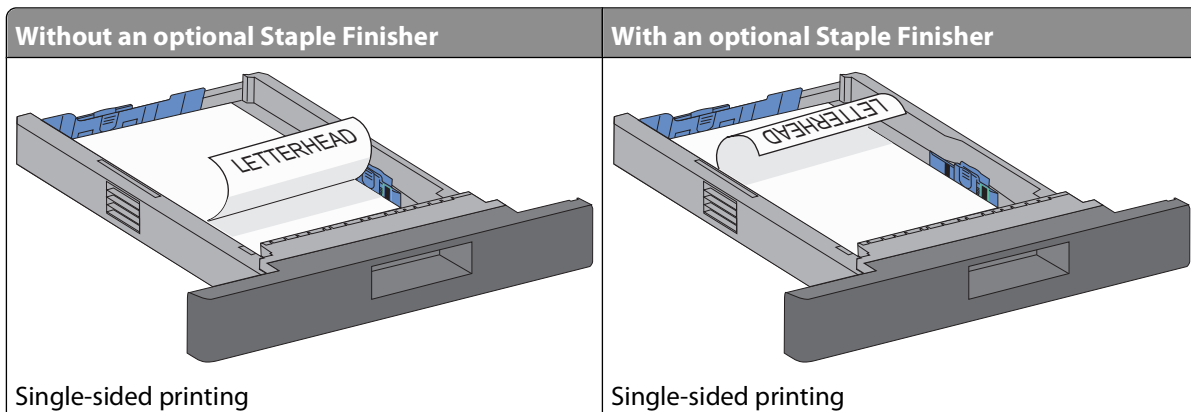
- 4 Flex the sheets back and forth to loosen them, and then fan them. Do not fold or crease the paper. Straighten the edges on a level surface.

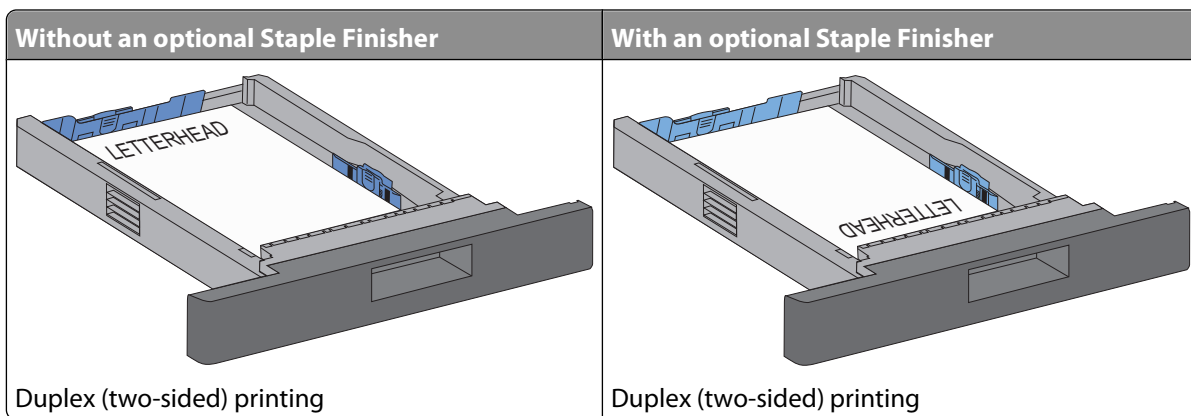


- 5 Load the paper stack:

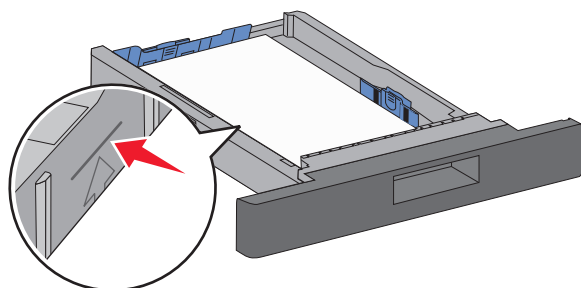
- Print side facedown for single-sided printing
- Print side faceup for duplex printing

**Note:** Paper must be loaded differently in the trays if an optional Staple Finisher is installed.

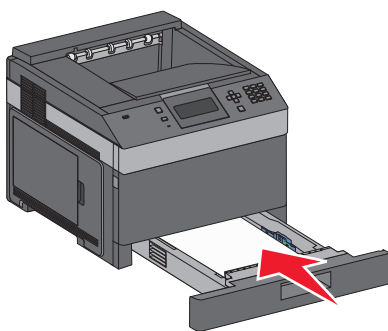




**Note:** Notice the maximum fill line on the side of the tray which indicates the maximum height for loading paper. Do not overload the tray.



- 6 If necessary, adjust the paper guides to lightly touch the sides of the stack, and lock the length guide for the paper sizes indicated on the tray.
- 7 Insert the tray.

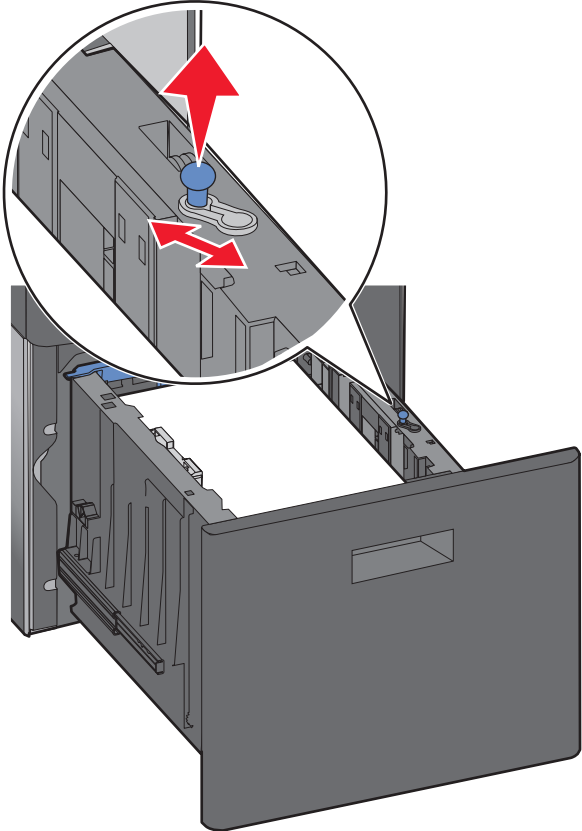


- 8 If a different type of paper was loaded than the type previously loaded in the tray, then change the Paper Type setting for the tray from the printer control panel.

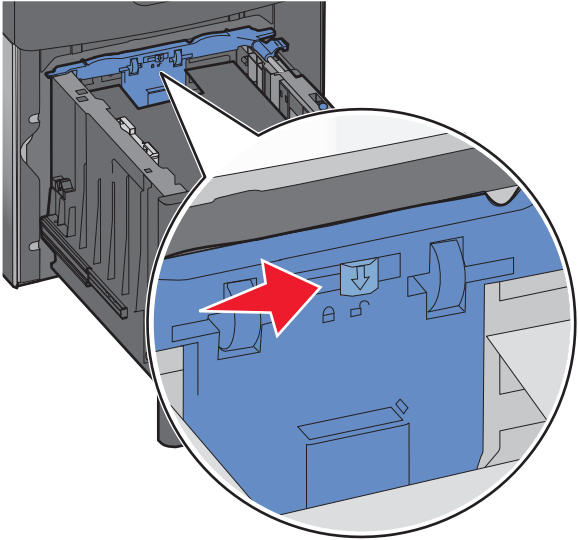


# Loading the 2000-sheet tray

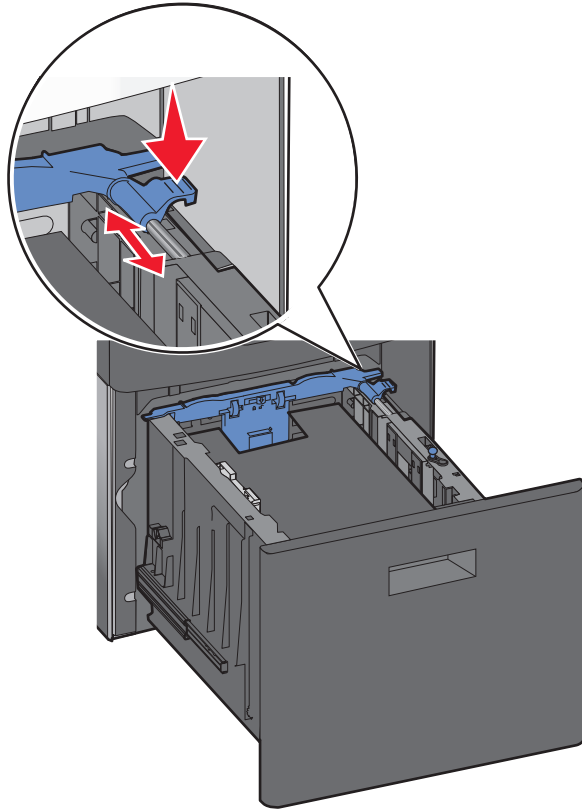
- 1 Pull the tray out.
- 2 Pull up and slide the width guide to the correct position for the paper size being loaded.



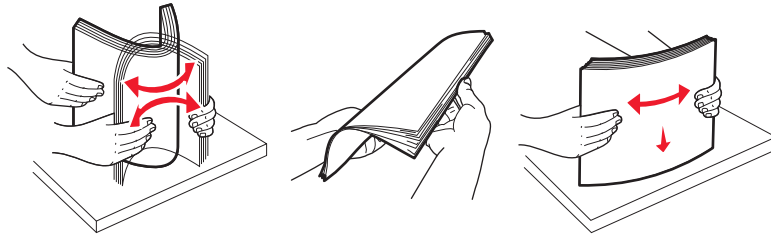
- 3 Unlock the length guide.



- 4 Push the length guide release latch to raise the length guide, slide the guide to the correct position for the paper size being loaded, and then lock the guide.



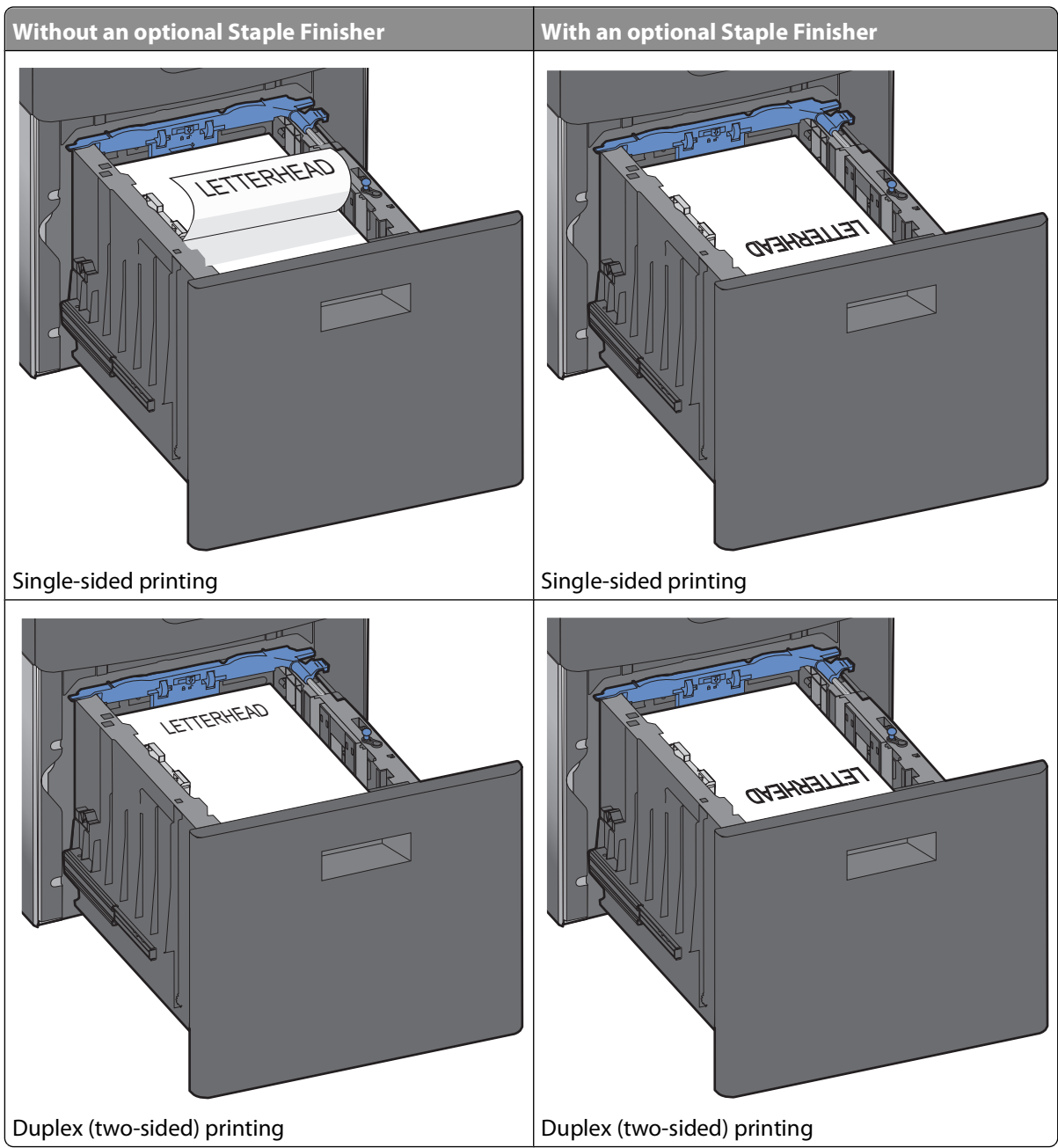
- 5 Flex the sheets back and forth to loosen them, and then fan them. Do not fold or crease the paper. Straighten the edges on a level surface.



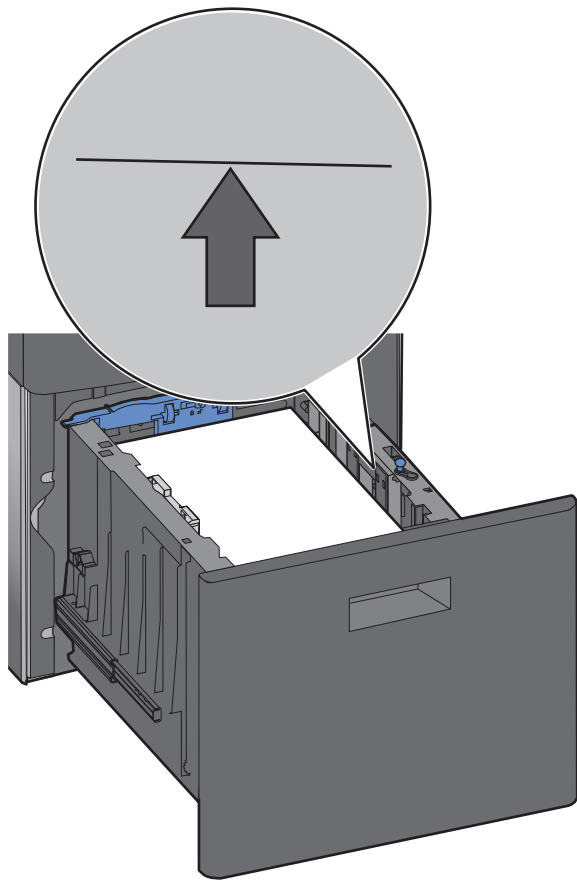
- 6 Load the paper stack:

- Print side facedown for single-sided printing
- Print side faceup for duplex printing

**Note:** Paper must be loaded differently in the trays if an optional Staple Finisher is installed.



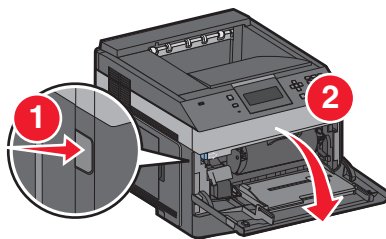
**Note:** Notice the maximum fill line on the side of the tray which indicates the maximum height for loading paper. Do not overload the tray.



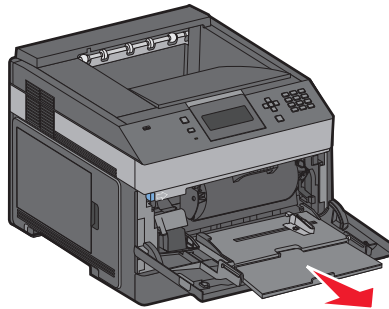
**7** Insert the tray.

## Loading the multipurpose feeder

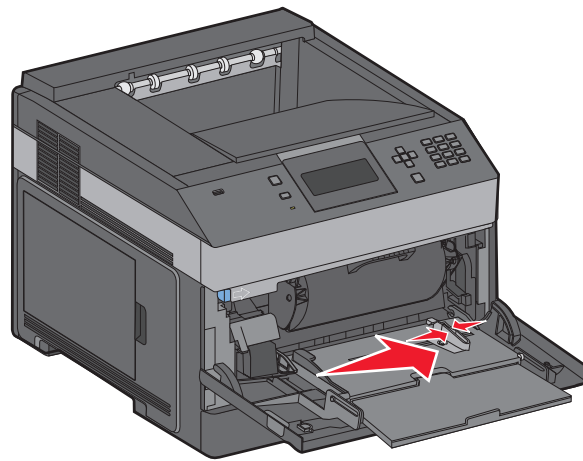
**1** Press the release latch, and then pull down the multipurpose feeder door.



2 Pull out the extension until it is fully extended.



3 Squeeze and slide the width guide to the far right.

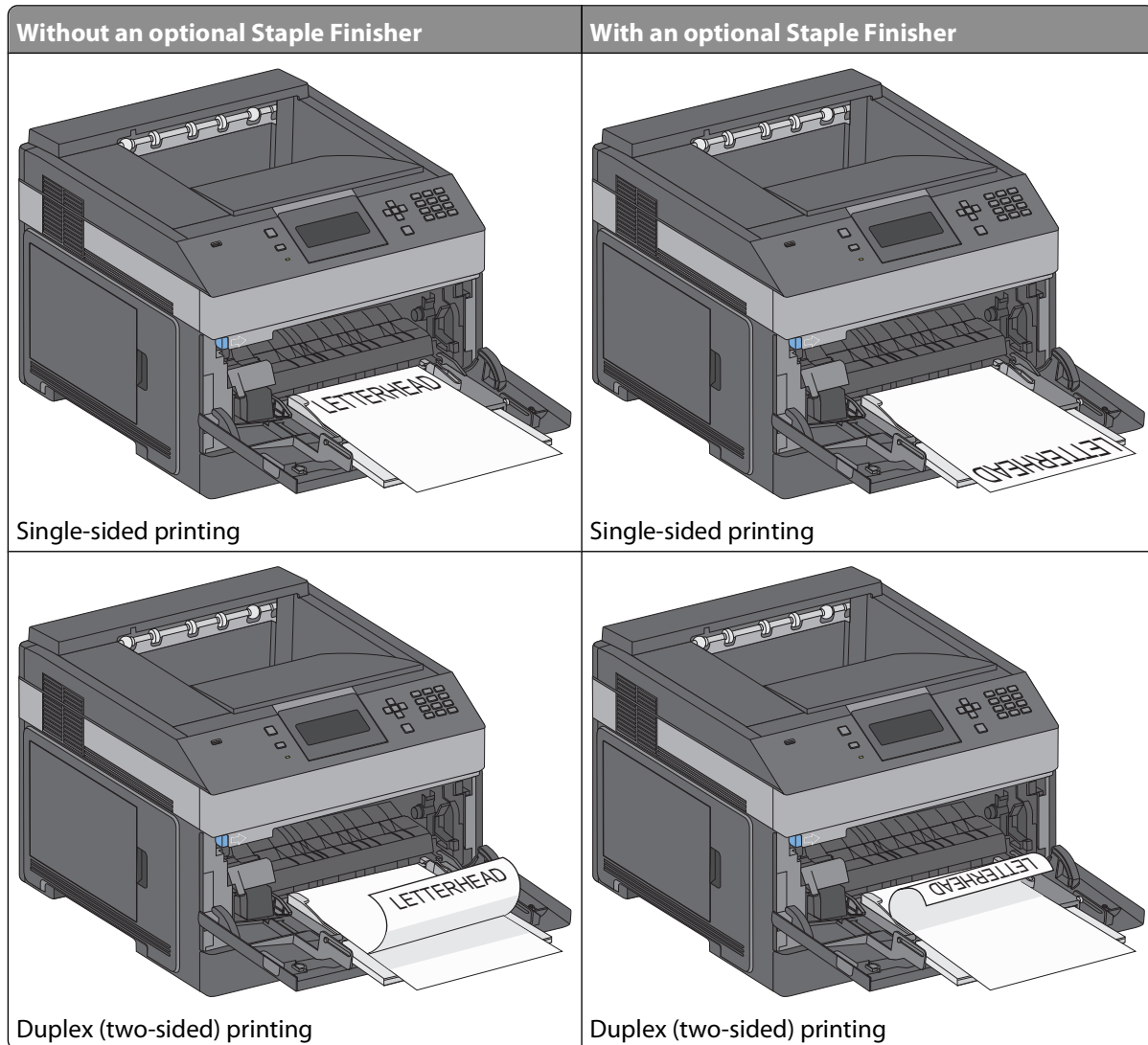


4 Flex the sheets of paper or specialty media back and forth to loosen them, and then fan them. Do not fold or crease them. Straighten the edges on a level surface.

Paper	A hand holds a stack of paper, flexing it back and forth. Red arrows indicate the direction of movement.	A hand fans out a stack of paper. Red arrows indicate the fanning motion.	A hand straightens the edges of a stack of paper on a level surface. Red arrows indicate the straightening motion.
Envelopes	A hand holds a stack of envelopes, flexing them back and forth. Red arrows indicate the direction of movement.	A hand fans out a stack of envelopes. Red arrows indicate the fanning motion.	A hand straightens the edges of a stack of envelopes on a level surface. Red arrows indicate the straightening motion.
Transparencies*	A hand holds a stack of transparencies, flexing them back and forth. Red arrows indicate the direction of movement.	A hand fans out a stack of transparencies. Red arrows indicate the fanning motion.	A hand straightens the edges of a stack of transparencies on a level surface. Red arrows indicate the straightening motion.

\* Avoid touching the print side of transparencies. Be careful not to scratch them.

5 Load the paper or specialty media. Slide the stack gently into the multipurpose feeder until it comes to a stop.



**Notes:**

- Do not exceed the maximum stack height by forcing paper under the stack height limiter.
- Do not load or close the printer while a job is printing.
- Load only one size and type of media at a time.
- Load envelopes with the flap side down and to the left as shown on the tray.

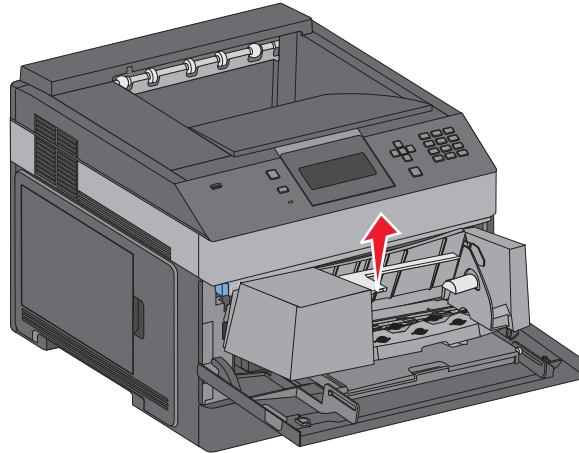
**Warning—Potential Damage:** Never use envelopes with stamps, clasps, snaps, windows, coated linings, or self-stick adhesives. These envelopes may severely damage the printer.

6 Adjust the width guide to lightly touch the edge of the paper stack. Make sure the paper fits loosely in the multipurpose feeder, lies flat, and is not bent or wrinkled.

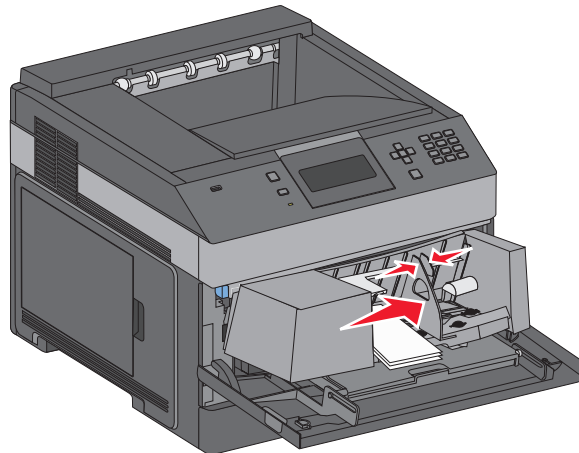
7 From the printer control panel, set the Paper Size and Paper Type.

# Loading the envelope feeder

- 1 Adjust the envelope support for the length of envelope you are loading:
  - **Short envelopes**—Fully close the envelope support.
  - **Medium-length envelopes**—Extend the envelope support to the middle position.
  - **Long envelopes**—Fully open the envelope support.
- 2 Lift the envelope weight back toward the printer.

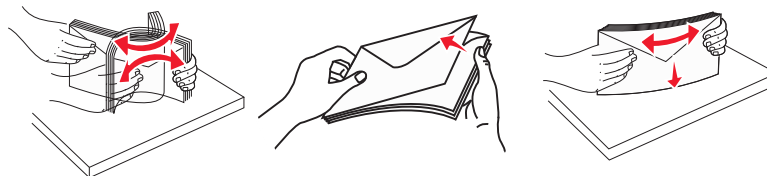


- 3 Slide the width guide to the right.



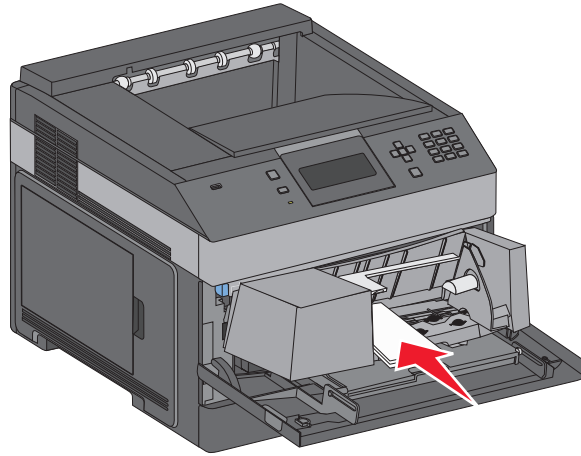
- 4 Prepare the envelopes for loading.

Flex the envelopes back and forth to loosen them, and then fan them. Do not fold or crease the paper. Straighten the edges on a level surface.



- 5 Load the stack of envelopes flap side down.

**Warning—Potential Damage:** Never use envelopes with stamps, clasps, snaps, windows, coated linings, or self-stick adhesives. These envelopes may severely damage the printer.



**Note:** Do not exceed the maximum stack height by forcing paper under the stack height limiter.

- 6 Adjust the width guide to lightly touch the edge of the paper stack.
- 7 Lower the envelope weight to touch the paper stack.
- 8 From the printer control panel, set the Paper Size and Paper Type.

## Linking and unlinking trays

### Linking trays

Tray linking is useful for large print jobs or multiple copies. When one linked tray is empty, paper feeds from the next linked tray. When the Paper Size and Paper Type settings are the same for any trays, the trays are automatically linked.

The printer automatically senses the Paper Size setting according to the position of the paper guides in each tray except the multipurpose feeder. The printer can sense A4, A5, JIS B5, Letter, Legal, Executive, and Universal paper sizes. The multipurpose feeder and trays using other paper sizes can be linked manually using the Paper Size menu available from the Paper Size/Type menu.

**Note:** To link the multipurpose feeder, Configure MP must be set to Cassette in the Paper menu in order for MP Feeder Size to appear as a menu item.

The Paper Type setting must be set for all trays from the Paper Type menu available from the Paper Size/Type menu.

### Unlinking trays

Unlinked trays have settings that are *not* the same as the settings of any other tray.



To unlink a tray, change the following tray settings so that they do not match the settings of any other tray:

- Paper Type (for example: Plain Paper, Letterhead, Custom Type <x>)  
Paper Type names describe the paper characteristics. If the name that best describes your paper is used by linked trays, assign a different Paper Type name to the tray, such as Custom Type <x>, or define your own custom name.
- Paper Size (for example: letter, A4, statement)  
Load a different paper size to change the Paper Size setting for a tray automatically. Paper Size settings for the multipurpose feeder are not automatic; they must be set manually from the Paper Size menu.











**Warning—Potential Damage:** Do not assign a Paper Type name that does not accurately describe the type of paper loaded in the tray. The temperature of the fuser varies according to the specified Paper Type. Paper may not be properly processed if an inaccurate Paper Type is selected.

## Linking exit bins

The standard exit bin holds up to 350 sheets of 64–216 g/m<sup>2</sup> (17–58 lb) paper. If you need additional output capacity, you can purchase other optional exit bins.





**Note:** Not all exit bins support every paper size and type.

Linking exit bins lets you create a single output source so the printer can automatically switch output to the next available exit bin.

- 1 Make sure the printer is on and **Ready** appears.
- 2 From the printer control panel, press .
- 3 Press the up or down arrow button until  **Paper Menu** appears, and then press .
- 4 Press the up or down arrow button until  **Bin Setup** appears, and then press .
- 5 Press the up or down arrow button until the correct tray appears, and then press .
- 6 Press the up or down arrow button until  **Configure Bins** appears, and then press .
- 7 Press the up or down arrow button until  **Link** appears, and then press .

## Assigning a Custom Type <x> name

Assign a Custom Type <x> name to a tray to link or unlink it. Associate the same Custom Type <x> name to each tray that you want to link. Only trays with the same custom names assigned will link.

- 1 Make sure the printer is on and **Ready** appears.
- 2 From the printer control panel, press .
- 3 Press .  
The Paper Menu appears.
- 4 Press .  
The Paper Size/Type menu appears.
- 5 Press the down arrow button once.  
 appears next to the name of the tray.

- 6 Press . The Paper Size menu appears.
- 7 Press  again. The Paper Type menu appears.
- 8 Press the left or right arrow button until  **Custom Type <x>** or another custom name appears, and then press . **Submitting selection** appears, followed by **Paper Menu**.
- 9 Verify that the correct Paper Type is associated with the custom name.  
**Note:** Plain Paper is the factory default Paper Type associated with all Custom Type <x> names and user-defined custom names.
  - a From the Paper menu, press the up or down arrow button until  **Custom Types** appears, and then press .
  - b Press the up or down arrow button until  appears next to the custom paper type name, and then press .
  - c Press the up or down arrow button until  appears next to the Paper Type setting you want, and then press . **Submitting selection** appears.

## Changing a Custom Type <x> name

If the printer is on a network, you can use the Embedded Web Server to define a name other than Custom Type <x> for each of the custom paper types that are loaded. When a Custom Type <x> name is changed, the menus display the new name instead of Custom Type <x>.

To change a Custom Type <x> name:

- 1 Type the printer IP address into the address field of your Web browser.  
**Note:** If you do not know the IP address of the printer, print a network setup page and locate the address in the TCP/IP section.
- 2 Click **Settings**.
- 3 Click **Paper Menu**.
- 4 Click **Custom Name**.
- 5 Type a name for the paper type in a Custom Name <x> box.  
**Note:** This custom name will replace a custom type <x> name under the Custom Types and Paper Size and Type menus.
- 6 Click **Submit**.
- 7 Click **Custom Types**.  
**Custom Types** appears, followed by your custom name.
- 8 Select a Paper Type setting from the pick list next to your custom name.
- 9 Click **Submit**.

# Paper and specialty media guidelines

## Paper guidelines

### Paper characteristics

The following paper characteristics affect print quality and reliability. Consider these characteristics when evaluating new paper stock.

#### Weight

The printer can automatically feed paper weights from 60–176 g/m<sup>2</sup> (16–47 lb bond) grain long. Paper lighter than 60 g/m<sup>2</sup> (16 lb) might not be stiff enough to feed properly, causing jams. For best performance, use 75 g/m<sup>2</sup> (20 lb bond) grain long paper. For paper smaller than 182 x 257 mm (7.2 x 10.1 in.), we recommend 90 g/m<sup>2</sup> (24 lb) or heavier paper.

#### Curl

Curl is the tendency for paper to curl at its edges. Excessive curl can cause paper feeding problems. Curl can occur after the paper passes through the printer, where it is exposed to high temperatures. Storing paper unwrapped in hot, humid, cold, or dry conditions, even in the trays, can contribute to paper curling prior to printing and can cause feeding problems.

#### Smoothness

Paper smoothness directly affects print quality. If paper is too rough, then toner cannot fuse to it properly. If paper is too smooth, then it can cause paper feeding or print quality issues. Always use paper between 100 and 300 Sheffield points; smoothness between 150 and 250 Sheffield points produces the best print quality.

#### Moisture content

The amount of moisture in paper affects both print quality and the ability of the printer to feed the paper correctly. Leave paper in its original wrapper until it is time to use it. This limits the exposure of paper to moisture changes that can degrade its performance.

Condition paper before printing by storing it in its original wrapper in the same environment as the printer for 24 to 48 hours before printing. Extend the time several days if the storage or transportation environment is very different from the printer environment. Thick paper may also require a longer conditioning period.

#### Grain direction

Grain refers to the alignment of the paper fibers in a sheet of paper. Grain is either *grain long*, running the length of the paper, or *grain short*, running the width of the paper.

For 60–176 g/m<sup>2</sup> (16–47 lb bond) paper, grain long paper is recommended. For paper heavier than 176 g/m<sup>2</sup>, grain short is recommended.

## Fiber content

Most high-quality xerographic paper is made from 100% chemically treated pulped wood. This content provides the paper with a high degree of stability resulting in fewer paper feeding problems and better print quality. Paper containing fibers such as cotton can negatively affect paper handling.

For detailed information on paper with recycled fiber content, see “Using recycled paper and other office papers” on page 69.

## Unacceptable paper

The following paper types are not recommended for use with the printer:

- Chemically treated papers used to make copies without carbon paper, also known as carbonless papers, carbonless copy paper (CCP), or no carbon required (NCR) paper
- Preprinted papers with chemicals that may contaminate the printer
- Preprinted papers that can be affected by the temperature in the printer fuser
- Preprinted papers that require a registration (the precise print location on the page) greater than  $\pm 2.3$  mm ( $\pm 0.9$  in.), such as optical character recognition (OCR) forms

In some cases, registration can be adjusted with a software application to successfully print on these forms.

- Coated papers (erasable bond), synthetic papers, thermal papers
- Rough-edged, rough or heavily textured surface papers, or curled papers
- Recycled papers that fail EN12281:2002 (European)
- Paper weighing less than  $60 \text{ g/m}^2$  (16 lb)
- Multiple-part forms or documents

## Selecting paper

Using appropriate paper prevents jams and helps ensure trouble-free printing.

To help avoid jams and poor print quality:

- *Always* use new, undamaged paper.
- Before loading paper, know the recommended print side of the paper. This information is usually indicated on the paper package.
- *Do not* use paper that has been cut or trimmed by hand.
- *Do not* mix paper sizes, types, or weights in the same source; mixing results in jams.
- *Do not* use coated papers unless they are specifically designed for electrophotographic printing.

## Selecting preprinted forms and letterhead

Use these guidelines when selecting preprinted forms and letterhead:

- Use grain long for  $60\text{--}90 \text{ g/m}^2$  (16–24 lb) paper.
- Use only forms and letterhead printed using an offset lithographic or engraved printing process.
- Avoid papers with rough or heavily textured surfaces.

Use papers printed with heat-resistant inks designed for use in xerographic copiers. The ink must be able to withstand temperatures up to  $230^\circ\text{C}$  ( $446^\circ\text{F}$ ) without melting or releasing hazardous emissions. Use inks that are not affected by the resin in toner. Inks that are oxidation-set or oil-based generally meet these requirements; latex inks might not. When in doubt, contact the paper supplier.

Preprinted papers such as letterhead must be able to withstand temperatures up to 230°C (446°F) without melting or releasing hazardous emissions.

## Using recycled paper and other office papers

- Low moisture content (4–5%)
- Suitable smoothness (100–200 Sheffield units, or 140–350 Bendtsen units, European)

**Note:** Some much smoother papers (such as premium 24 lb laser papers, 50–90 Sheffield units) and much rougher papers (such as premium cotton papers, 200–300 Sheffield units) have been engineered to work very well in laser printers, despite surface texture. Before using these types of paper, consult your paper supplier.

- Suitable sheet-to-sheet coefficient of friction (0.4–0.6)
- Sufficient bending resistance in the direction of feed

Recycled paper, paper of lower weight (<60 g/m<sup>2</sup> [16 lb bond]) and/or lower caliper (<3.8 mils [0.1 mm]), and paper that is cut grain-short for portrait (or short-edge) fed printers may have lower bending resistance than is required for reliable paper feeding. Before using these types of paper for laser (electrophotographic) printing, consult your paper supplier. Remember that these are general guidelines only and that paper meeting these guidelines may still cause paper feeding problems in any laser printer (for example, if the paper curls excessively under normal printing conditions).

## Storing paper

Use these paper storage guidelines to help avoid jams and uneven print quality:

- For best results, store paper where the temperature is 21°C (70°F) and the relative humidity is 40%. Most label manufacturers recommend printing in a temperature range of 18 to 24°C (65 to 75°F) with relative humidity between 40 and 60%.
- Store paper in cartons when possible, on a pallet or shelf, rather than on the floor.
- Store individual packages on a flat surface.
- Do not store anything on top of individual paper packages.

# Supported paper sizes, types, and weights

The following tables provide information on standard and optional paper sources and the types of paper they support.

**Note:** For an unlisted paper size, select the closest *larger* listed size.

## Paper sizes supported by the printer

Paper size	Dimensions	250- or 550-sheet trays (standard or optional)	Optional 2000- sheet tray	Multi-purpose feeder	Duplex unit	Envelope feeder
<b>A4</b>	210 x 297 mm (8.3 x 11.7 in.)	✓	✓	✓	✓	X
<b>A5</b>	148 x 210 mm (5.8 x 8.3 in.)	✓	X	✓	X	X
<b>A6<sup>1,2</sup></b>	105 x 148 mm (4.1 x 5.8 in.)	✓	X	✓	X	X
<b>JIS B5</b>	182 x 257 mm (7.2 x 10.1 in.)	✓	X	✓	X	X
<b>Letter</b>	216 x 279 mm (8.5 x 11 in.)	✓	✓	✓	✓	X
<b>Legal</b>	216 x 356 mm (8.5 x 14 in.)	✓	✓	✓	✓	X
<b>Executive</b>	184 x 267 mm (7.3 x 10.5 in.)	✓	X	✓	✓	X
<b>Oficio<sup>1</sup></b>	216 x 340 mm (8.5 x 13.4 in.)	✓	X	✓	✓	X
<b>Folio<sup>1</sup></b>	216 x 330 mm (8.5 x 13 in.)	✓	X	✓	✓	X
<b>Statement<sup>1</sup></b>	140 x 216 mm (5.5 x 8.5 in.)	✓	X	✓	X	X

<sup>1</sup> This size appears in the Paper Size menu only when the paper source does not support size sensing or when size sensing is turned off.

<sup>2</sup> Only the standard exit bin supports this size.

<sup>3</sup> This size setting formats the page for 216 x 356 mm (8.5 x 14 in.) unless the size is specified by the software application.

<sup>4</sup> To support duplexing, the Universal width must be between 210 mm (8.267 in.) and 215.9 mm (8.5 in.); Universal length must be between 279.4 mm (11 in.) and 355.6 mm (14 in.).

Paper size	Dimensions	250- or 550-sheet trays (standard or optional)	Optional 2000-sheet tray	Multi-purpose feeder	Duplex unit	Envelope feeder
<b>Universal</b> <sup>3,4</sup>	138 x 210 mm (5.5 x 8.3 in.) up to 216 x 356 mm (8.5 x 14 in.)	✓	X	✓	X	X
	70 x 127 mm (2.8 x 5 in.) up to 216 x 356 mm (8.5 x 14 in.)	X	X	✓	X	X
	148 x 182 mm (5.8 x 7.7 in.) up to 216 x 356 mm (8.5 x 14 in.)	✓	X	✓	✓	X
<b>7 3/4 Envelope (Monarch)</b>	98 x 191 mm (3.9 x 7.5 in.)	X	X	✓	X	✓
<b>9 Envelope</b>	98 x 225 mm (3.9 x 8.9 in.)	X	X	✓	X	✓
<b>10 Envelope</b>	105 x 241 mm (4.1 x 9.5 in.)	X	X	✓	X	✓
<b>DL Envelope</b>	110 x 220 mm (4.3 x 8.7 in.)	X	X	✓	X	✓
<b>C5 Envelope</b>	162 x 229 mm (6.4 x 9.1 in.)	X	X	✓	X	✓
<b>B5 Envelope</b>	176 x 250 mm (6.9 x 9.8 in.)	X	X	✓	X	✓
<b>Other Envelope</b>	98 x 162 mm (3.9 x 6.4 in.) to 176 x 250 mm (6.9 x 9.8 in.)	X	X	✓	X	✓

<sup>1</sup> This size appears in the Paper Size menu only when the paper source does not support size sensing or when size sensing is turned off.

<sup>2</sup> Only the standard exit bin supports this size.

<sup>3</sup> This size setting formats the page for 216 x 356 mm (8.5 x 14 in.) unless the size is specified by the software application.

<sup>4</sup> To support duplexing, the Universal width must be between 210 mm (8.267 in.) and 215.9 mm (8.5 in.); Universal length must be between 279.4 mm (11 in.) and 355.6 mm (14 in.).

**Note:** An optional 250-sheet Universally Adjustable Tray is available for sizes smaller than A5, such as index cards.

## Paper types and weights supported by the printer

The printer engine supports 60–176 g/m<sup>2</sup> (16–47 lb) paper weights. The duplex unit supports 63–170 g/m<sup>2</sup> (17–45 lb) paper weights.

Paper type	250- or 550-sheet trays (standard or optional)	Optional 2000-sheet tray	Multipurpose feeder	Duplex unit
<b>Paper</b> <ul style="list-style-type: none"> <li>• Plain</li> <li>• Bond</li> <li>• Colored</li> <li>• Custom</li> <li>• Letterhead</li> <li>• Light</li> <li>• Heavy</li> <li>• Preprinted</li> <li>• Rough/Cotton<sup>1</sup></li> <li>• Recycled</li> </ul>	✓	✓	✓	✓
<b>Card stock</b>	✓	✓	✓	X
<b>Envelopes</b>	X	X	✓	X
<b>Labels</b> <ul style="list-style-type: none"> <li>• Paper<sup>1</sup></li> <li>• Vinyl</li> </ul>	✓	✓	✓	✓
<b>Transparencies</b>	✓	✓	✓	X
<sup>1</sup> This option is not supported by the duplex unit.				



# Software overview

Use the *Software and Documentation* CD that came with your printer to install a combination of software applications, depending on your operating system.

**Note:** If you purchased your printer and computer separately, you must use the *Software and Documentation* CD to install these software applications.

**Note:** These software applications are not available with Macintosh®.

## Status Monitor Center

**Note:** For the local Status Monitor Center to work properly, bidirectional communication support must be in place so the printer and computer can communicate. The Status Monitor Center works when the printer is connected to a network or to a computer locally through a USB cable.

Use the Status Monitor Center to manage multiple Status Monitors.

- Double-click a printer name to open its Status Monitor, or select **Run** to open a Status Monitor for a particular printer.
- Select **Update** to change the appearance of the list of printers.

## Driver Profiler

Use the Driver Profiler to create driver profiles that contain custom driver settings. A driver profile can contain a group of saved printer driver settings and other data for such things as:


- Print orientation and N-Up (document settings)
- Installation status of an output tray (printer options)
- User-defined paper sizes (custom papers)
- Simple text and watermarks
- Overlay references
- Font references
- Form associations

## Dell Printer Alert Utility


**Note:** This application is not available with Windows 2000 or earlier.

The Dell Printer Alert Utility informs you when there are errors requiring your intervention on your printer. When there is an error, a bubble appears telling you what the error is, and points you to the appropriate recovery information.


**Note:** For the Dell Printer Alert Utility to work properly, bidirectional communication support must be in place so the printer and computer can communicate. An exception is added to the Windows Firewall to allow this communication.

If you opted to install the Dell Printer Alert Utility with your printer software, the utility automatically launches when the software installation is completed. The utility is active if you see  in the System Tray.

To disable the Dell Printer Alert Utility:

- 1 From the System Tray, right click the  icon.
- 2 Select **Exit**.

To re-enable the Dell Printer Alert Utility:

- 1 *In Windows Vista or later:*
  - a Click  → **Programs**.
  - b Click **Dell Printers**.
  - c Click **Dell 5230n/dn or 5350dn Laser Printer**.

*In Windows XP:*

Click **Start** → **Programs** or **All Programs** → **Dell Printers** → **Dell 5230n/dn or 5350dn Laser Printer**.

- 2 Click **Printer Alert Utility**.

## Dell Toner Management System

### Printing Status Window

**Note:** For the Printing Status Window to work properly, bidirectional communication support must be in place so the printer and computer can communicate. An exception is added to the Windows® Firewall to allow this communication.

The Printing Status window displays the status of the printer (Printer Ready, Printer Offline, and Error-Check Printer) and the name of the job when you send a job to print.

The Printing Status window also displays the level of toner so you can:


- Monitor the toner level for your printer.
- Click **Order Supplies** to order replacement toner cartridges.

### Dell Printer Supplies Reorder Application

The Order Supplies dialog box can be launched from the Printing Status window, the Programs window, or the desktop icon.

You can order toner by phone or from the Web.

- If ordering online, launch the Dell Printer Supplies Reorder Application:

- 1 *In Windows Vista or later:*
  - a Click  → **Programs**.
  - b Click **Dell Printers**.
  - c Click **Dell 5230n/dn or 5350dn Laser Printer**.

*In Windows XP and 2000:*

Click **Start** → **Programs** or **All Programs** → **Dell Printers** → **Dell 5230n/dn or 5350dn Laser Printer**.

- 2 Click **Dell Printer Supplies Reorder Application**.

The **Order Supplies** dialog box opens.

- 3** If **Multiple Printers Found** launches, select the printer you are ordering the supplies for.
- 4** Follow the instructions on the screen.
- If ordering from the Web, click the link under the **Order Online** heading.
  - If ordering by phone, call the number that appears under the **Order by Phone** heading.

# Printing

This chapter covers printing, printer reports, and job cancelation. Selection and handling of paper and specialty media can affect how reliably documents print. For more information, see “Avoiding jams” on page 140 and “Storing paper” on page 69.

## Printing a document

- 1 Load paper into a tray or feeder.
- 2 From the printer control panel Paper menu, set the Paper Type and Paper Size to match the loaded paper.
- 3 Do one of the following:

### For Windows users

- a With a document open, click **File** → **Print**.
- b Click **Properties**, **Preferences**, **Options**, or **Setup**, and then adjust the settings as needed.  
**Note:** To print on a specific size or type of paper, adjust the paper size or type settings to match the loaded paper, or select the appropriate tray or feeder.
- c Click **OK**, and then click **Print**.

### For Macintosh users

- a Customize the settings as needed in the Page Setup dialog:
  - 1 With a document open, choose **File** > **Page Setup**.
  - 2 Choose a paper size or create a custom size to match the loaded paper.
  - 3 Click **OK**.
- b Customize the settings as needed in the Print dialog:
  - 1 With a document open, choose **File** > **Print**.  
If necessary, click the disclosure triangle to see more options.
  - 2 From the Print dialog and pop-up menus, adjust the settings as needed.  
**Note:** To print on a specific paper type, adjust the paper type setting to match the loaded paper, or select the appropriate tray or feeder.
  - 3 Click **Print**.

## Printing on specialty media

### Tips on using letterhead

- Use letterhead designed specifically for laser printers.
- Print samples on the letterhead being considered for use before buying large quantities.
- Before loading letterhead, fan the stack to prevent sheets from sticking together.

- Page orientation is important when printing on letterhead. For information on how to load letterhead, see:
  - “Loading the standard or optional 250-sheet or 550-sheet tray” on page 54
  - “Loading the 2000-sheet tray” on page 57
  - “Loading the multipurpose feeder” on page 60

## Tips on using transparencies

Print samples on the transparencies being considered for use before buying large quantities.

When printing on transparencies:

- Feed transparencies from a 250-sheet tray, a 550-sheet tray, or the multipurpose feeder.
- Use transparencies designed specifically for laser printers. Check with the manufacturer or vendor to ensure transparencies are able to withstand temperatures up to 230°C (446°F) without melting, discoloring, offsetting, or releasing hazardous emissions.
- Use transparencies that are 138–146 g/m<sup>2</sup> (37–39 lb. bond) in weight.
- To prevent print quality problems, avoid getting fingerprints on the transparencies.
- Before loading transparencies, fan the stack to prevent sheets from sticking together.

## Tips on using envelopes

Print samples on the envelopes being considered for use before buying large quantities.

When printing on envelopes:

- Feed envelopes from the multipurpose feeder or the optional envelope feeder.
- Set the Paper Type to Envelope, and select the envelope size.
- Use envelopes designed specifically for laser printers. Check with the manufacturer or vendor to ensure the envelopes can withstand temperatures up to 230°C (446°F) without sealing, wrinkling, curling excessively, or releasing hazardous emissions.
- For the best performance, use envelopes made from 90 g/m<sup>2</sup> (24 lb bond) paper. Use up to 105 g/m<sup>2</sup> (28 lb bond) weight for envelopes as long as the cotton content is 25% or less. All-cotton envelopes must not exceed 90 g/m<sup>2</sup> (24 lb bond) weight.
- Use only new envelopes.
- To optimize performance and minimize jams, do not use envelopes that:
  - Have excessive curl or twist
  - Are stuck together or damaged in any way
  - Have windows, holes, perforations, cutouts, or embossing
  - Have metal clasps, string ties, or folding bars
  - Have an interlocking design
  - Have postage stamps attached
  - Have any exposed adhesive when the flap is in the sealed or closed position
  - Have bent corners
  - Have rough, cockle, or laid finishes
- Adjust the width guide to fit the width of the envelopes.

**Note:** A combination of high humidity (over 60%) and the high printing temperature may wrinkle or seal envelopes.

## Tips on using labels

**Note:** This printer is intended for occasional paper label printing only.

- Do not load labels together with paper or transparencies in the same source; mixing media can cause feeding problems.
- From the Paper menu, set the Paper Type to Labels.
- Do not use labels with slick backing material.
- Use labels that can withstand temperatures of 230°C (446°F) without sealing, excessive curling, wrinkling, or releasing hazardous emissions.
- Use full label sheets. Partial sheets may cause labels to peel off during printing, resulting in a jam. Partial sheets also contaminate the printer and the cartridge with adhesive, and could void the printer and cartridge warranties.
- Do not use labels with exposed adhesive.
- Do not print within 1 mm (0.04 in.) of the edge of the label, of the perforations, or between die-cuts of the label.
- Be sure adhesive backing does not reach to the sheet edge. Zone coating of the adhesive at least 1 mm (0.04 in.) away from edges is recommended. Adhesive material contaminates the printer and could void the warranty.
- If zone coating of the adhesive is not possible, remove a 1.6 mm (0.06 in.) strip on the leading and driver edge, and use a non-oozing adhesive.
- Portrait orientation works best, especially when printing bar codes.

## Tips on using card stock

Card stock is heavy, single-ply specialty media. Many of its variable characteristics, such as moisture content, thickness, and texture, can significantly impact print quality. Print samples on the card stock being considered for use before buying large quantities.

When printing on card stock:

- Feed card stock from a 250-sheet tray, a 550-sheet tray, or the multipurpose feeder.
- Make sure the Paper Type is Card Stock.
- Select the appropriate Paper Texture setting.
- Be aware that preprinting, perforation, and creasing may significantly affect the print quality and cause jams or other paper handling problems.
- Check with the manufacturer or vendor to ensure the card stock can withstand temperatures up to 230°C (446°F) without releasing hazardous emissions.
- Do not use preprinted card stock manufactured with chemicals that may contaminate the printer. Preprinting introduces semi-liquid and volatile components into the printer.
- Use grain short card stock when possible.

## Printing confidential and other held jobs

### Holding jobs in the printer

When sending a job to the printer, you can specify that you want the printer to hold the job in memory until you start the job from the printer control panel. All print jobs that can be initiated by the user at the printer are called *held jobs*.











**Note:** Confidential, Verify, Reserve, and Repeat print jobs may be deleted if the printer requires extra memory to process additional held jobs.

Job type	Description
Confidential	When you send a Confidential print job to the printer, you must create a PIN from the computer. The PIN must be four digits using the numbers 0–9. The job is held in printer memory until you enter the PIN from the printer control panel and choose to print or delete the job.
Verify	When you send a Verify print job, the printer prints one copy and holds the remaining copies in printer memory. Verify lets you examine the first copy to see if it is satisfactory before printing the remaining copies. Once all copies are printed, the job is automatically deleted from printer memory.
Reserve	When you send a Reserve print job, the printer does not print the job immediately. It stores the job in memory so you can print the job later. The job is held in memory until you delete it from the Held Jobs menu.
Repeat	When you send a Repeat print job, the printer prints all requested copies of the job <i>and</i> stores the job in memory so you can print additional copies later. You can print additional copies as long as the job remains stored in memory.

## Printing confidential and other held jobs

Confidential and Verify print jobs are automatically deleted from memory after they print. Repeat and Reserve jobs continue to be held in the printer until you choose to delete them.

### For Windows Users

- 1 With a document open, click **File → Print**.
- 2 Click **Properties, Preferences, Options, or Setup**.
- 3 Click **Other Options**, and then click **Print and Hold**.
- 4 Select your job type (Confidential, Reserve, Repeat, Verify, profiles, forms from a kiosk, bookmarks, or a parked job), and then assign a user name. For a confidential job, also enter a four-digit PIN.
- 5 Click **OK** or **Print**, and then go to the printer to release the job.
- 6 From the printer control panel, press the down arrow button until  **Held jobs** appears, and then press .
- 7 Press the down arrow button until  appears next to your user name, and then press .
- 8 Press the down arrow button until  appears next to the job type or job name, and then press .  
If you selected a job name, proceed to step 11 on page 80.
- 9 After selecting your job type, use the keypad to enter your PIN.  
If you enter an invalid PIN, the Invalid PIN screen appears.
  - To re-enter the PIN, make sure  **Try again** appears, and then press .
  - To cancel the PIN, press the down arrow button until  **Cancel** appears, and then press .

- 10 Press the down arrow button until ✓ appears next to the job you want to print, and then press [✓].
- 11 Press the down arrow button until ✓ appears next to the number of copies you want to print, and then press [✓].

**Note:** Use the keypad to enter a number if necessary.

## For Macintosh users

- 1 With a document open, choose **File > Print**.  
If necessary, click the disclosure triangle to see more options.
- 2 From the print options pop-up menu, choose **Job Routing**.
- 3 Choose your job type (Confidential, Reserve, Repeat, Verify, profiles, forms from a kiosk, bookmarks, or a parked job), and then assign a user name. For a confidential job, also enter a four-digit PIN.
- 4 Click **Print**, and then go to the printer to release the job.
- 5 From the printer control panel, press the down arrow button until ✓ **Hold jobs** appears, and then press [✓].
- 6 Press the down arrow button until ✓ appears next to your user name, and then press [✓].
- 7 Press the down arrow button until ✓ appears next to your job, and then press [✓].
- 8 For confidential jobs, use the numeric keypad to enter your PIN.  
If you enter an invalid PIN, the Invalid PIN screen appears.
  - To re-enter the PIN, make sure ✓ **Try again** appears, and then press [✓].
  - To cancel the PIN, press the down arrow button until ✓ **Cancel** appears, and then press [✓].
- 9 Press the down arrow button until ✓ appears next to the job you want to print, and then press [✓].



# Printing from a flash drive

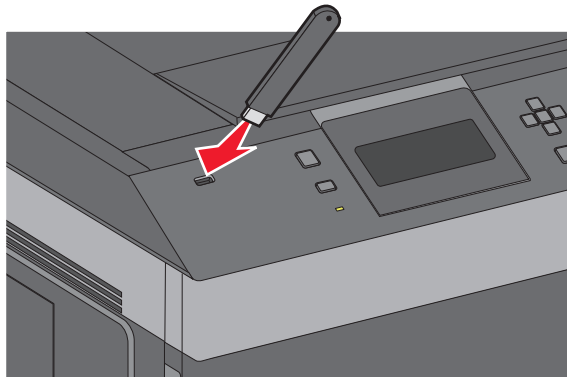
A USB port is located on the printer control panel. Insert a flash drive to print supported file types. Supported file types include: .pdf, .gif, .jpeg, .jpg, .bmp, .png, .tiff, .tif, .pcx, .xps, and .dcx.

## Notes:

- High-speed flash drives must support the full-speed USB standard. Flash drives supporting only USB low-speed capabilities are not supported.
- Flash drives must support the FAT (*File Allocation Tables*) system. Flash drives formatted with NTFS (*New Technology File System*) or any other file system are not supported.
- Before printing an encrypted .pdf file, enter the file password from the printer control panel.
- You cannot print files for which you do not have printing permissions.

**1** Make sure the printer is on and **Ready** appears.

**2** Insert a flash drive into the front USB port.



## Notes:

- If you insert the flash drive when the printer requires attention, such as when a jam has occurred, then the printer ignores it.
- If you insert the flash drive while the printer is printing other jobs, then **Printer Busy** appears. After the other jobs are processed, you may need to view the held jobs list to print documents from the flash drive.

**3** Press the up or down arrow button until  appears next to the document you want to print, and then press .

**Note:** Folders found on the flash drive appear as folders. File names are appended by the extension type (for example, .jpg).

**4** Press  to print one copy, or enter the number of copies using the keypad, and then press  to initiate the print job.








**Note:** Do not remove the flash drive from the printer until the document has finished printing.

If you leave the flash drive in the printer after leaving the initial USB menu screen, you can still print .pdf files from the flash drive as held jobs.

# Printing information pages

## Printing a font sample list






To print samples of the fonts currently available for your printer:

- 1 Make sure the printer is on and **Ready** appears.
- 2 From the printer control panel, press .
- 3 Press the up or down arrow button until  **Reports** appears, and then press .
- 4 Press the up or down arrow button until  **Print Fonts** appears, and then press .
- 5 Press the up or down arrow button until  appears next to **PCL Fonts, PostScript Fonts, or PPDS Fonts**, and then press .

After the font sample list prints, **Ready** appears.

## Printing a directory list






A directory list shows the resources stored in flash memory or on the hard disk.

- 1 Make sure the printer is on and **Ready** appears.
- 2 From the printer control panel, press .
- 3 Press the up or down arrow button until  **Reports** appears, and then press .
- 4 Press the up or down arrow button until  **Print Directory** appears, and then press .

After the directory list prints, the printer returns to the **Ready** state.

## Printing the print quality test pages




Print the print quality test pages to isolate print quality problems.




- 1 Turn the printer off.
- 2 Hold down  and the right arrow button while turning the printer on.
- 3 Release the buttons when the clock appears, and wait for **CONFIG MENU** to appear.
- 4 Press the up or down arrow button until  **Prt Quality Pgs** appears, and then press .  
The print quality test pages print.
- 5 Press the up or down arrow button until  **Exit Config Menu** appears, and then press .  
**Resetting the Printer** appears briefly, followed by a clock, and then **Ready** appears.

# Canceling a print job

## Canceling a print job from the printer control panel

If the job is formatting or already printing, and **Cancel a job** appears on the first line of the display:


- 1 Press the up or down arrow button until  **Cancel** appears.  
A list of jobs appears.
- 2 Press the up or down arrow button until  appears next to the job you want to cancel, and then press .

**Note:** Once a print job is sent, to easily cancel a job, press . The **Stopped** screen appears. Press the up or down arrow button until  **Cancel a job** appears, and then press .

## Canceling a print job from the computer

To cancel a print job, do one of the following:

### For Windows users

- 1 Click , or click **Start** and then click **Run**.
- 2 In the Start Search or Run box, type **control printers**.
- 3 Press **Enter**, or click **OK**.  
The printer folder opens.
- 4 Double-click the printer icon.
- 5 Select the job to cancel.
- 6 From the keyboard, press **Delete**.

From the Windows taskbar:

When you send a job to print, a small printer icon appears in the right corner of the taskbar.

- 1 Double-click the printer icon.  
A list of print jobs appears in the printer window.
- 2 Select a job to cancel.
- 3 From the keyboard, press **Delete**.

### For Macintosh users

In Mac OS X version 10.5 or later:

- 1 From the Apple menu, choose **System Preferences**.
- 2 Click **Print & Fax**, and then double-click the printer icon.
- 3 From the printer window, select the job to cancel.
- 4 From the icon bar at the top of the window, click the **Delete** icon.

In Mac OS X version 10.4 and earlier:

- 1** From the Go menu, choose **Applications**.
- 2** Double-click **Utilities**, and then double-click **Print Center** or **Printer Setup Utility**.
- 3** Double-click the printer icon.
- 4** From the printer window, select the job to cancel.
- 5** From the icon bar at the top of the window, click the **Delete** icon.

# Understanding printer menus

## Menus list

### Paper Menu

Default Source  
Paper Size/Type  
Configure MP  
Envelope Enhance<sup>1</sup>  
Substitute Size  
Paper Texture  
Paper Weight  
Paper Loading  
Custom Types  
Universal Setup  
Bin Setup

### Security

Miscellaneous Security Settings  
Confidential Print  
Security Audit Log  
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### Reports

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Device Statistics  
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Profiles List  
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### Settings

General Settings  
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Finishing Menu  
Quality Menu  
Utilities Menu  
XPS Menu  
PDF Menu  
PostScript Menu  
PCL Emul Menu  
PPDS Menu  
HTML Menu  
Image Menu  
Flash Drive Menu

### Network/Ports

Active NIC  
Standard Network<sup>4</sup>  
Standard USB Menu  
Parallel Menu  
Serial <x>  
SMTP Setup

### Help

Print All  
Print Quality  
Printing Guide  
Media Guide  
Print Defects  
Menu Map  
Information Guide  
Connection Guide  
Moving Guide  
Supplies Guide

<sup>1</sup> Only appears if Envelope Feeder is supported and installed.

<sup>2</sup> Depending on the printer setup, this menu item appears as Network Setup Page or Network <x> Setup Page.

<sup>3</sup> Only appears if there is an installed or mounted flash device.

<sup>4</sup> Depending on the printer setup, this menu item appears as Standard Network or Network <x>.

# Paper menu

## Default Source menu

Menu item	Description
<b>Default Source</b> Tray <x> MP Feeder Envelope Feeder Manual Paper Manual Env	Sets a default paper source for all print jobs <b>Notes:</b> <ul style="list-style-type: none"><li>• Tray 1 (standard tray) is the factory default setting.</li><li>• Only an installed paper source will appear as a menu setting.</li><li>• A paper source selected by a print job will override the Default Source setting for the duration of the print job.</li><li>• If the same size and type of paper are in two trays and the Paper Size and Paper Type settings match, then the trays are automatically linked. When one tray is empty, the job prints using the linked tray.</li><li>• From the Paper menu, Configure MP must be set to Cassette in order for MP Feeder to appear as a menu setting.</li></ul>

## Paper Size/Type menu

Menu item	Description
<b>Tray &lt;x&gt; Size</b> A4 A5 A6 JIS B5 Letter Legal Executive <sup>1</sup> Oficio <sup>1</sup> Folio Statement <sup>1</sup> Universal	Specifies the paper size loaded in each tray <b>Notes:</b> <ul style="list-style-type: none"><li>• A4 is the international factory default setting. Letter is the US factory default setting.</li><li>• For trays with automatic size sensing, only the size detected by the hardware appears.</li><li>• Use this menu item to configure automatic tray linking. If the same size and type of paper are in two trays and the Paper Size and Paper Type settings match, then the trays are automatically linked. When one tray is empty, the job prints using the linked tray.</li><li>• Automatic size sensing is not supported for Oficio, Folio, or Statement paper sizes.</li><li>• The 2000-sheet tray supports A4, Letter, and Legal paper sizes.</li></ul>

<sup>1</sup> Appears only if Tray Size Sensing is turned off.  
**Note:** Only installed trays, drawers, and feeders are listed in this menu.

Menu item	Description
<p><b>Tray &lt;x&gt; Type</b></p> <ul style="list-style-type: none"> <li>Plain</li> <li>Transparency</li> <li>Bond</li> <li>Letterhead</li> <li>Preprinted</li> <li>Colored Paper</li> <li>Light Paper</li> <li>Heavy Paper</li> <li>Rough/Cotton</li> <li>Recycled</li> <li>Custom Type &lt;x&gt;</li> </ul>	<p>Specifies the type of paper loaded in each tray</p> <p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>• Plain Paper is the factory default setting for Tray 1. Custom Type &lt;x&gt; is the factory default setting for all other trays.</li> <li>• If available, a user-defined name will appear instead of Custom Type &lt;x&gt;.</li> <li>• Use this menu item to configure automatic tray linking. If the same size and type of paper are in two trays and the Paper Size and Paper Type settings match, then the trays are automatically linked. When one tray is empty, the job prints using the linked tray.</li> </ul>
<p><b>MP Feeder Size</b></p> <ul style="list-style-type: none"> <li>A4</li> <li>A5</li> <li>A6</li> <li>JIS B5</li> <li>Letter</li> <li>Legal</li> <li>Executive</li> <li>Oficio</li> <li>Folio</li> <li>Statement</li> <li>Universal</li> <li>7 3/4 Envelope</li> <li>9 Envelope</li> <li>10 Envelope</li> <li>DL Envelope</li> <li>C5 Envelope</li> <li>B5 Envelope</li> <li>Other Envelope</li> </ul>	<p>Specifies the paper size loaded in the multipurpose feeder</p> <p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>• From the Paper menu, Configure MP must be set to Cassette in order for MP Feeder Size to appear as a menu item.</li> <li>• A4 is the international factory default setting. Letter is the US factory default setting.</li> <li>• The multipurpose feeder does not automatically sense paper size. The paper size value must be set.</li> </ul>
<p><sup>1</sup> Appears only if Tray Size Sensing is turned off.</p>	
<p><b>Note:</b> Only installed trays, drawers, and feeders are listed in this menu.</p>	

Menu item	Description
<p><b>MP Feeder Type</b></p> <ul style="list-style-type: none"> <li>Plain</li> <li>Card Stock</li> <li>Transparency</li> <li>Bond</li> <li>Envelope</li> <li>Rough Envelope</li> <li>Letterhead</li> <li>Preprinted</li> <li>Colored Paper</li> <li>Light Paper</li> <li>Heavy Paper</li> <li>Rough/Cotton</li> <li>Recycled</li> <li>Custom Type &lt;x&gt;</li> </ul>	<p>Specifies the type of paper loaded in the multipurpose feeder</p> <p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>• From the Paper menu, Configure MP must be set to Cassette in order for MP Feeder Type to appear as a menu item.</li> <li>• Plain Paper is the factory default setting.</li> </ul>
<p><b>Envelope Feeder Size</b></p> <ul style="list-style-type: none"> <li>7 3/4 Envelope</li> <li>9 Envelope</li> <li>10 Envelope</li> <li>DL Envelope</li> <li>C5 Envelope</li> <li>B5 Envelope</li> <li>Other Envelope</li> </ul>	<p>Specifies the envelope size loaded in the envelope feeder</p> <p><b>Note:</b> DL Envelope is the international factory default setting. 10 Envelope is the US factory default setting.</p>
<p><b>Envelope Feeder Type</b></p> <ul style="list-style-type: none"> <li>Envelope</li> <li>Rough Envelope</li> <li>Custom Type &lt;x&gt;</li> </ul>	<p>Specifies the type of envelope loaded in the envelope feeder</p> <p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>• Envelope is the factory default setting.</li> <li>• The Custom Type setting can be used to store up to six types of envelopes.</li> </ul>
<p><b>Manual Paper Size</b></p> <ul style="list-style-type: none"> <li>A4</li> <li>A5</li> <li>A6</li> <li>JIS B5</li> <li>Letter</li> <li>Legal</li> <li>Executive</li> <li>Oficio</li> <li>Folio</li> <li>Statement</li> <li>Universal</li> </ul>	<p>Specifies the size of the paper being manually loaded</p> <p><b>Note:</b> A4 is the international factory default setting. Letter is the US factory default setting.</p>

<sup>1</sup> Appears only if Tray Size Sensing is turned off.

**Note:** Only installed trays, drawers, and feeders are listed in this menu.



Menu item	Description
<b>Manual Paper Type</b> Plain Card Stock Transparency Bond Letterhead Preprinted Colored Paper Light Paper Heavy Paper Rough/Cotton Recycled Custom Type <x>	Specifies the type of paper being manually loaded <b>Note:</b> Plain Paper is the factory default setting.
<b>Manual Envelope Size</b> 7 3/4 Envelope 9 Envelope 10 Envelope DL Envelope C5 Envelope B5 Envelope Other Envelope	Specifies the size of the envelope being manually loaded <b>Note:</b> DL Envelope is the international factory default setting. 10 Envelope is the US factory default setting.
<b>Manual Envelope Type</b> Envelope Rough Envelope Custom Type <x>	Specifies the type of envelope being manually loaded <b>Note:</b> Envelope is the factory default setting.
<sup>1</sup> Appears only if Tray Size Sensing is turned off. <b>Note:</b> Only installed trays, drawers, and feeders are listed in this menu.	

## Configure MP menu

Menu item	Description
<b>Configure MP</b> Cassette Manual	Determines when the printer selects paper from the multipurpose feeder <b>Notes:</b> <ul style="list-style-type: none"> <li>• Cassette is the factory default setting.</li> <li>• The Cassette setting configures the multipurpose feeder as an automatic paper source.</li> <li>• When Manual is selected, the multipurpose feeder can be used only for manual feed print jobs.</li> </ul>

## Envelope Enhance

The envelope conditioner significantly reduces the wrinkling of some envelopes.

Menu item	Description
<b>Envelope Enhance</b> Off 1 (Least) 2 3 4 5 6 (Most)	Enables or disables the envelope conditioner <b>Notes:</b> <ul style="list-style-type: none"><li>• The factory default setting is 5.</li><li>• If noise reduction is more important than wrinkle reduction, then decrease the setting.</li></ul>

## Substitute Size menu

Menu item	Description
<b>Substitute Size</b> Off Statement/A5 Letter/A4 All Listed	Substitutes a specified paper size if the requested paper size is not available <b>Notes:</b> <ul style="list-style-type: none"><li>• All Listed is the factory default setting. All available substitutions are allowed.</li><li>• The Off setting indicates no size substitutions are allowed.</li><li>• Setting a substitution lets the job print without a Change Paper message appearing.</li></ul>

## Paper Texture menu

Menu item	Description
<b>Plain Texture</b> Smooth Normal Rough	Specifies the relative texture of the paper loaded in a specific tray <b>Note:</b> Normal is the factory default setting.
<b>Card Stock Texture</b> Smooth Normal Rough	Specifies the relative texture of the card stock loaded in a specific tray <b>Notes:</b> <ul style="list-style-type: none"><li>• Normal is the factory default setting.</li><li>• Settings appear only if card stock is supported.</li></ul>
<b>Transparency Texture</b> Smooth Normal Rough	Specifies the relative texture of the transparencies loaded in a specific tray <b>Note:</b> Normal is the factory default setting.

Menu item	Description
<b>Recycled Texture</b> Smooth Normal Rough	Specifies the relative texture of the recycled paper loaded in a specific tray <b>Note:</b> Normal is the factory default setting.
<b>Labels Texture</b> Smooth Normal Rough	Specifies the relative texture of the labels loaded in a specific tray <b>Note:</b> Normal is the factory default setting.
<b>Vinyl Labels Texture</b> Smooth Normal Rough	Specifies the relative texture of the vinyl labels loaded in a specific tray <b>Note:</b> Normal is the factory default setting.
<b>Bond Texture</b> Smooth Normal Rough	Specifies the relative texture of the paper loaded in a specific tray <b>Note:</b> Rough is the factory default setting.
<b>Envelope Texture</b> Smooth Normal Rough	Specifies the relative texture of the envelopes loaded in a specific tray <b>Note:</b> Normal is the factory default setting.
<b>Rough Envelope Texture</b> Smooth Normal Rough	Specifies the relative texture of the rough envelopes loaded in a specific tray <b>Note:</b> Rough is the factory default setting.
<b>Letterhead Texture</b> Smooth Normal Rough	Specifies the relative texture of the paper loaded in a specific tray <b>Note:</b> Normal is the factory default setting.
<b>Preprinted Texture</b> Smooth Normal Rough	Specifies the relative texture of the paper loaded in a specific tray <b>Note:</b> Normal is the factory default setting.
<b>Colored Texture</b> Smooth Normal Rough	Specifies the relative texture of the paper loaded in a specific tray <b>Note:</b> Normal is the factory default setting.
<b>Light Texture</b> Smooth Normal Rough	Specifies the relative texture of the paper loaded in a specific tray <b>Note:</b> Normal is the factory default setting.

Menu item	Description
<b>Heavy Texture</b> Smooth Normal Rough	Specifies the relative texture of the paper loaded in a specific tray <b>Note:</b> Normal is the factory default setting.
<b>Rough Texture</b> Smooth Normal Rough	Specifies the relative texture of the paper loaded in a specific tray <b>Note:</b> Rough is the factory default setting.
<b>Custom &lt;x&gt; Texture</b> Smooth Normal Rough	Specifies the relative texture of the custom paper loaded in a specific tray <b>Note:</b> Normal is the factory default setting.

## Paper Weight menu

Menu item	Description
<b>Plain Weight</b> Light Normal Heavy	Specifies the relative weight of the paper loaded in a specific tray <b>Note:</b> Normal is the factory default setting.
<b>Card Stock Weight</b> Light Normal Heavy	Specifies the relative weight of the card stock loaded in a specific tray <b>Note:</b> Normal is the factory default setting.
<b>Transparency Weight</b> Light Normal Heavy	Specifies the relative weight of the paper loaded in a specific tray <b>Note:</b> Normal is the factory default setting.
<b>Recycled Weight</b> Light Normal Heavy	Specifies the relative weight of the recycled paper loaded in a specific tray <b>Note:</b> Normal is the factory default setting.
<b>Labels Weight</b> Light Normal Heavy	Specifies the relative weight of the labels loaded in a specific tray <b>Note:</b> Normal is the factory default setting.
<b>Vinyl Labels Weight</b> Light Normal Heavy	Specifies the relative weight of the vinyl labels loaded in a specific tray <b>Note:</b> Normal is the factory default setting.

Menu item	Description
<b>Bond Weight</b> Light Normal Heavy	Specifies the relative weight of the paper loaded in a specific tray <b>Note:</b> Normal is the factory default setting.
<b>Envelope Weight</b> Light Normal Heavy	Specifies the relative weight of the envelopes loaded in a specific tray <b>Note:</b> Normal is the factory default setting.
<b>Rough Envelope Weight</b> Light Normal Heavy	Specifies the relative weight of the rough envelopes loaded in a specific tray <b>Note:</b> Normal is the factory default setting.
<b>Letterhead Weight</b> Light Normal Heavy	Specifies the relative weight of the paper loaded in a specific tray <b>Note:</b> Normal is the factory default setting.
<b>Preprinted Weight</b> Light Normal Heavy	Specifies the relative weight of the paper loaded in a specific tray <b>Note:</b> Normal is the factory default setting.
<b>Colored Weight</b> Light Normal Heavy	Specifies the relative weight of the paper loaded in a specific tray <b>Note:</b> Normal is the factory default setting.
<b>Light Weight</b> Light	Specifies the relative weight of the paper loaded in a specific tray
<b>Heavy Weight</b> Heavy	Specifies the relative weight of the paper loaded in a specific tray
<b>Rough Weight</b> Light Normal Heavy	Specifies the relative weight of the paper loaded in a specific tray <b>Note:</b> Normal is the factory default setting.
<b>Custom &lt;x&gt;</b> Light Normal Heavy	Specifies the relative weight of the custom paper type loaded in a specific tray <b>Notes:</b> <ul style="list-style-type: none"> <li>• Normal is the factory default setting.</li> <li>• Settings appear only if the custom type is supported.</li> </ul>

## Paper Loading menu

Menu item	Description
<b>Recycled Loading</b> Duplex Off	Determines whether 2-sided printing occurs for all jobs that specify Recycled as the paper type <b>Note:</b> Off is the factory default setting.
<b>Card Stock Loading</b> Duplex Off	Determines whether 2-sided printing occurs for all jobs that specify Card Stock as the paper type <b>Note:</b> Off is the factory default setting.
<b>Labels Loading</b> Duplex Off	Determines whether 2-sided printing occurs for all jobs that specify Labels as the paper type <b>Note:</b> Off is the factory default setting.
<b>Vinyl Labels Loading</b> Duplex Off	Determines whether 2-sided printing occurs for all jobs that specify Vinyl Labels as the paper type <b>Note:</b> Off is the factory default setting.
<b>Bond Loading</b> Duplex Off	Determines whether 2-sided printing occurs for all jobs that specify Bond as the paper type <b>Note:</b> Off is the factory default setting.
<b>Letterhead Loading</b> Duplex Off	Determines whether 2-sided printing occurs for all jobs that specify Letterhead as the paper type <b>Note:</b> Off is the factory default setting.
<b>Preprinted Loading</b> Duplex Off	Determines whether 2-sided printing occurs for all jobs that specify Preprinted as the paper type <b>Note:</b> Off is the factory default setting.
<b>Colored Loading</b> Duplex Off	Determines whether 2-sided printing occurs for all jobs that specify Colored as the paper type <b>Note:</b> Off is the factory default setting.
<b>Light Loading</b> Duplex Off	Determines whether 2-sided printing occurs for all jobs that specify Light as the paper type <b>Note:</b> Off is the factory default setting.
<b>Heavy Loading</b> Duplex Off	Determines whether 2-sided printing occurs for all jobs that specify Heavy as the paper type <b>Note:</b> Off is the factory default setting.
<b>Notes:</b> <ul style="list-style-type: none"> <li>• Duplex sets the printer default to 2-sided printing for every print job unless 1-sided printing is selected from Print Properties in Windows or the Print dialog in Macintosh.</li> <li>• If Duplex is selected, then all print jobs are sent through the duplex unit, including 1-sided jobs.</li> </ul>	

Menu item	Description
<b>Custom &lt;x&gt; Loading</b> Duplex Off	Determines whether 2-sided printing occurs for all jobs that specify Custom <x> as the paper type  <b>Notes:</b> <ul style="list-style-type: none"> <li>Off is the factory default setting.</li> <li>Custom &lt;x&gt; Loading is available only if the custom type is supported.</li> </ul>
<b>Notes:</b> <ul style="list-style-type: none"> <li>Duplex sets the printer default to 2-sided printing for every print job unless 1-sided printing is selected from Print Properties in Windows or the Print dialog in Macintosh.</li> <li>If Duplex is selected, then all print jobs are sent through the duplex unit, including 1-sided jobs.</li> </ul>	

## Custom Types menu

Menu item	Description
<b>Custom Type &lt;x&gt;</b> Paper Card Stock Transparency Rough/Cotton Labels Vinyl Labels Envelope	Associates a paper or specialty media type with a factory default <b>Custom Type &lt;x&gt;</b> name or a user-defined Custom Name created from the Embedded Web Server or MarkVision™ Professional  <b>Notes:</b> <ul style="list-style-type: none"> <li>Paper is the factory default setting.</li> <li>The custom media type must be supported by the selected tray or multipurpose feeder in order to print from that source.</li> </ul>
<b>Recycled</b> Paper Card Stock Transparency Rough/Cotton Labels Vinyl Labels Envelope	Specifies a paper type when the Recycled setting is selected in other menus  <b>Notes:</b> <ul style="list-style-type: none"> <li>Paper is the factory default setting.</li> <li>The custom media type must be supported by the selected tray or multipurpose feeder in order to print from that source.</li> </ul>

## Universal Setup menu

These menu items are used to specify the height, width, and feed direction of the Universal Paper Size. The Universal Paper Size is a user-defined paper size setting. It is listed with the other paper size settings and includes similar options, such as support for duplex printing and printing multiple pages on one sheet.

Menu item	Description
<b>Units of Measure</b> Inches Millimeters	Identifies the units of measure  <b>Notes:</b> <ul style="list-style-type: none"> <li>Inches is the US factory default setting.</li> <li>Millimeters is the international factory default setting.</li> </ul>

Menu item	Description
<b>Portrait Width</b> 3–14 inches 76–360 mm	Sets the portrait width <b>Notes:</b> <ul style="list-style-type: none"> <li>• If the width exceeds the maximum, the printer uses the maximum width allowed.</li> <li>• 8.5 inches is the US factory default setting. Inches can be increased in 0.01-inch increments.</li> <li>• 216 mm is the international factory default setting. Millimeters can be increased in 1-mm increments.</li> </ul>
<b>Portrait Height</b> 3–14 inches 76–360 mm	Sets the portrait height <b>Notes:</b> <ul style="list-style-type: none"> <li>• If the height exceeds the maximum, the printer uses the maximum height allowed.</li> <li>• 14 inches is the US factory default setting. Inches can be increased in 0.01-inch increments.</li> <li>• 356 mm is the international factory default setting. Millimeters can be increased in 1-mm increments.</li> </ul>
<b>Feed Direction</b> Short Edge Long Edge	Specifies the feed direction if the paper can be loaded in either direction <b>Notes:</b> <ul style="list-style-type: none"> <li>• Short Edge is the factory default setting.</li> <li>• Long Edge appears only if the longest edge is shorter than the maximum width supported in the tray.</li> </ul>

## Bin Setup menu

Menu Item	Description
<b>Output Bin</b> Standard Bin Bin <x>	Specifies the default output bin <b>Note:</b> Standard Bin is the factory default setting.
<b>Configure Bins</b> Mailbox Link Mail Overflow Link Optional Type Assignment	Specifies configuration options for output bins <b>Notes:</b> <ul style="list-style-type: none"> <li>• Mailbox is the factory default setting.</li> <li>• Bins assigned the same name are automatically linked unless Link Optional is selected.</li> <li>• The Mailbox setting treats each bin as a separate mailbox.</li> <li>• The Link setting links together all available output bins.</li> <li>• The Link Optional setting links together all available output bins except the standard bin and only appears when at least two optional bins are installed.</li> <li>• The Type Assignment setting assigns each paper type to an output bin or linked bin set.</li> </ul>



Menu Item	Description
<b>Overflow Bin</b> Mailbox Link Mail Overflow Link Optional Type Assignment	Specifies an alternate output bin when a designated bin is full <b>Note:</b> Standard Bin is the factory default setting.
<b>Assign Type/Bin</b> Plain Paper Bin Card Stock Bin Transparency Bin Recycled Bin Labels Bin Vinyl Labels Bin Bond Bin Envelope Bin Rough Envelope Bin Letterhead Bin Preprinted Bin Colored Bin Light Paper Bin Heavy Paper Bin Rough/Cotton Bin Custom <x> Bin	Selects an output bin for each supported paper type Available selections for each type are: Disabled Standard Bin Bin <x> <b>Note:</b> Standard Bin is the factory default setting.

## Reports menu

Menu item	Description
<b>Menu Settings Page</b>	Prints a report containing information about paper loaded into trays, installed memory, the total page count, alarms, timeouts, the printer control panel language, the TCP/IP address, the status of supplies, the status of the network connection, and other information
<b>Device Statistics</b>	Prints a report containing printer statistics such as supply information and details about printed pages
<b>Network Setup Page</b>	Prints a report containing information about the network printer settings, such as the TCP/IP address information <b>Note:</b> This menu item appears only for network printers or printers connected to print servers.

Menu item	Description
<b>Network &lt;x&gt; Setup Page</b>	Prints a report containing information about the network printer settings, such as the TCP/IP address information  <b>Notes:</b> <ul style="list-style-type: none"> <li>• This menu item is available when more than one network option is installed.</li> <li>• This menu item appears only for network printers or printers connected to print servers.</li> </ul>
<b>Profiles List</b>	Prints a list of profiles stored in the printer
<b>NetWare Setup Page</b>	Prints a report containing NetWare-specific information about the network settings  <b>Note:</b> This menu item appears only for printers with an internal print server installed.
<b>Print Fonts</b> PCL Fonts PostScript Fonts PPDS	Prints a report in English of all the fonts available for the printer language currently set in the printer  <b>Note:</b> A separate list is available for PCL and PostScript emulations. Each emulator report contains print samples and information about the language's available fonts.
<b>Print Directory</b>	Prints a list of all the resources stored on an optional flash memory card or printer hard disk  <b>Notes:</b> <ul style="list-style-type: none"> <li>• Job Buffer Size must be set to 100%.</li> <li>• The optional flash memory or printer hard disk must be installed correctly and working properly.</li> </ul>
<b>Asset Report</b>	Prints a report containing asset information including the printer serial number and model name. The report contains text and UPC bar codes that can be scanned into an asset database.

## Network/Ports menu

### Active NIC menu

Menu item	Description
<b>Active NIC</b> Auto <list of available network cards>	<b>Notes:</b> <ul style="list-style-type: none"> <li>• Auto is the factory default setting.</li> <li>• This menu item appears only if an optional network card is installed.</li> </ul>

## Standard Network or Network <x> menus

Menu item	Description
<b>PCL SmartSwitch</b> On Off	Sets the printer to automatically switch to PCL emulation when a print job requires it, regardless of the default printer language  <b>Notes:</b> <ul style="list-style-type: none"> <li>• On is the factory default setting.</li> <li>• When the Off setting is used, the printer does not examine incoming data.</li> <li>• When the Off setting is used, the printer uses PostScript emulation if PS SmartSwitch is set to On. It uses the default printer language specified in the Setup menu if PS SmartSwitch is set to Off.</li> </ul>
<b>PS SmartSwitch</b> On Off	Sets the printer to automatically switch to PS emulation when a print job requires it, regardless of the default printer language  <b>Notes:</b> <ul style="list-style-type: none"> <li>• On is the factory default setting.</li> <li>• When the Off setting is used, the printer does not examine incoming data.</li> <li>• When the Off setting is used, the printer uses PCL emulation if PCL SmartSwitch is set to On. It uses the default printer language specified in the Setup menu if PCL SmartSwitch is set to Off.</li> </ul>
<b>NPA Mode</b> Off Auto	Sets the printer to perform the special processing required for bidirectional communication following the conventions defined by the NPA protocol  <b>Notes:</b> <ul style="list-style-type: none"> <li>• Auto is the factory default setting.</li> <li>• Changing this setting from the printer control panel and then exiting the menus causes the printer to restart. The menu selection is updated.</li> </ul>
<b>Network Buffer</b> Auto 3K to <maximum size allowed>	Sets the size of the network input buffer  <b>Notes:</b> <ul style="list-style-type: none"> <li>• Auto is the factory default setting.</li> <li>• The value can be changed in 1K increments.</li> <li>• The maximum size allowed depends on the amount of memory in the printer, the size of the other link buffers, and whether Resource Save is set to On or Off.</li> <li>• To increase the maximum size range for the Network Buffer, disable or reduce the size of the parallel and USB buffers.</li> <li>• Changing this setting from the printer control panel and then exiting the menus causes the printer to restart. The menu selection is updated.</li> </ul>
<b>Mac Binary PS</b> On Off Auto	Sets the printer to process Macintosh binary PostScript print jobs  <b>Notes:</b> <ul style="list-style-type: none"> <li>• Auto is the factory default setting.</li> <li>• The Off setting filters print jobs using the standard protocol.</li> <li>• The On setting processes raw binary PostScript print jobs.</li> </ul>

Menu item	Description
<b>Std Network Setup</b> Reports Network Card TCP/IP IPv6 Wireless AppleTalk NetWare <b>Net &lt;x&gt; Setup</b> Reports Network Card TCP/IP IPv6 Wireless Apple Talk NetWare	For descriptions and settings of the network setup menus, see the following: <ul style="list-style-type: none"> <li>• “Reports menu (under the Network/Ports menu)” on page 100</li> <li>• “Network Card menu” on page 100</li> <li>• “TCP/IP menu” on page 101</li> <li>• “IPv6 menu” on page 102</li> <li>• “Wireless menu” on page 103</li> <li>• “AppleTalk menu” on page 103</li> <li>• “NetWare menu” on page 104</li> </ul> <p><b>Note:</b> The Wireless menu appears only when the printer is connected to a wireless network.</p>

## Reports menu (under the Network/Ports menu)

The Reports menu item is available from the Network/Ports menu:

**Network/Ports → Standard Network or Network <x> → Std Network Setup or Net <x> Setup → Reports**

Menu item	Description
<b>Print Setup Page</b> <b>Print NetWare Setup Page</b>	Prints a report containing information about the current network setup <b>Notes:</b> <ul style="list-style-type: none"> <li>• The Setup Page contains information about the network printer settings, such as the TCP/IP address.</li> <li>• The NetWare Setup Page menu item appears only on models that support NetWare and shows information about NetWare settings.</li> </ul>

## Network Card menu

This menu is available from the Network/Ports menu:

**Network/Ports → Standard Network or Network <x> → Std Network Setup or Net <x> Setup → Network Card**

Menu item	Description
<b>View Card Status</b> Connected Disconnected	Lets you view the connection status of the Network Card
<b>View Card Speed</b>	Lets you view the speed of a currently active network card
<b>Network Address</b> UAA LAA	Lets you view the network addresses

Menu item	Description
<b>Job Timeout</b> 0-225 seconds	Sets the amount of time in seconds that a network print job can take before it is canceled  <b>Notes:</b> <ul style="list-style-type: none"> <li>• 90 seconds is the factory default setting.</li> <li>• A setting value of 0 disables the timeout.</li> <li>• If a value of 1–9 is selected, then the setting is saved as 10.</li> </ul>
<b>Banner Page</b> Off On	Allows the printer to print a banner page  <b>Note:</b> Off is the factory default setting.

## TCP/IP menu

Use the following menu items to view or set the TCP/IP information.

**Note:** This menu is available only for network models or printers attached to print servers.

This menu is available from the Network/Ports menu:

**Network/Ports → Standard Network or Network <x> → Std Network Setup or Net <x> Setup → TCP/IP**

Menu item	Description
<b>Activate</b> On Off	Activates TCP/IP  <b>Note:</b> On is the factory default setting.
<b>View Hostname</b>	Lets you view the current TCP/IP hostname  <b>Note:</b> This can be changed only from the Embedded Web Server.
<b>IP Address</b>	Lets you view or change the current TCP/IP Address  <b>Note:</b> Manually setting the IP address sets the Enable DHCP and Enable Auto IP settings to Off. It also sets Enable BOOTP and Enable RARP to Off on systems that support BOOTP and RARP.
<b>Netmask</b>	Lets you view or change the current TCP/IP Netmask
<b>Gateway</b>	Lets you view or change the current TCP/IP Gateway
<b>Enable DHCP</b> On Off	Specifies the DHCP address and parameter assignment setting  <b>Note:</b> On is the factory default setting.
<b>Enable RARP</b> On Off	Specifies the RARP address assignment setting  <b>Note:</b> On is the factory default setting.
<b>Enable BOOTP</b> On Off	Specifies the BOOTP address assignment setting  <b>Note:</b> On is the factory default setting.

Menu item	Description
<b>Enable Auto IP</b> Yes No	Specifies the Zero Configuration Networking setting <b>Note:</b> Yes is the factory default setting.
<b>Enable FTP/TFTP</b> Yes No	Enables the built-in FTP server, which allows you to send files to the printer using the File Transfer Protocol. <b>Note:</b> Yes is the factory default setting.
<b>Enable HTTP Server</b> Yes No	Enables the built-in Web server (Embedded Web Server). When this is enabled, the printer can be monitored and managed remotely using a Web browser. <b>Note:</b> Yes is the factory default setting.
<b>WINS Server Address</b>	Lets you view or change the current WINS Server Address
<b>Enable DDNS</b> Yes No	Lets you view or change the current DDNS setting <b>Note:</b> Yes is the factory default setting.
<b>Enable mDNS</b> Yes No	Lets you view or change the current mDNS setting <b>Note:</b> Yes is the factory default setting.
<b>DNS Server Address</b>	Lets you view or change the current DNS Server Address

## IPv6 menu

Use the following menu items to view or set the Internet Protocol version 6 (IPv6) information.

**Note:** This menu is available only for network models or printers attached to print servers.

This menu is available from the Network/Ports menu:

**Network/Ports → Standard Network or Network <x> → Std Network Setup or Net <x> Setup → IPv6**

Menu item	Description
<b>Enable IPv6</b> On Off	Enables IPv6 in the printer <b>Note:</b> On is the factory default setting.
<b>Auto Configuration</b> On Off	Specifies whether the network adapter accepts the automatic IPv6 address configuration entries provided by a router <b>Note:</b> On is the factory default setting.
<b>View Hostname</b> <b>View Address</b> <b>View Router Address</b>	Lets you view the current setting <b>Note:</b> These settings can be changed only from the Embedded Web Server.
<b>Enable DHCPv6</b> On Off	Enables DHCPv6 in the printer <b>Note:</b> On is the factory default setting.

## Wireless menu

Use the following menu items to view or configure the wireless internal print server settings.

**Note:** This menu is available only for models connected to a wireless network.

This menu is available from the Network/Ports menu:

**Network/Ports → Network <x> → Net <x> Setup → Wireless**

Menu item	Description
<b>Network Mode</b> Infrastructure Ad hoc	Specifies the network mode  <b>Notes:</b> <ul style="list-style-type: none"> <li>• Infrastructure mode lets the printer access a network using an access point.</li> <li>• Ad hoc is the factory default setting. Ad hoc mode configures the printer for wireless networking directly between it and a computer.</li> </ul>
<b>Compatibility</b> 802.11n 802.11b/g 802.11b/g/n	Specifies the wireless standard for the wireless network
<b>Choose Network</b> <list of available networks>	Lets you select an available network for the printer to use
<b>View Signal Quality</b>	Lets you view the quality of the wireless connection
<b>View Security Mode</b>	Lets you view the encryption method for the wireless connection. "Disabled" indicates that the wireless network is not encrypted.

## AppleTalk menu

This menu is available from the Network/Ports menu:

**Network/Ports → Standard Network or Network <x> → Std Network Setup or Net <x> Setup → AppleTalk**

Menu item	Description
<b>Activate</b> Yes No	Activates AppleTalk support  <b>Note:</b> Yes is the factory default setting.
<b>View Name</b>	Shows the assigned AppleTalk name  <b>Note:</b> The name can be changed only from the Embedded Web Server.
<b>View Address</b>	Shows the assigned AppleTalk address  <b>Note:</b> The address can be changed only from the Embedded Web Server.
<b>Set Zone</b> <list of zones available on the network>	Provides a list of AppleTalk zones available on the network  <b>Note:</b> The default setting is the default zone for the network. If no default zone exists, the zone marked with an * is the default setting.

## NetWare menu

This menu is available from the Network/Ports menu:

**Network/Ports → Standard Network or Network <x> → Std Network Setup or Net <x> Setup → NetWare**

Menu item	Description
<b>Activate</b> Yes No	Activates NetWare support <b>Note:</b> No is the factory default setting.
<b>View Login Name</b>	Lets you view the assigned NetWare login name <b>Note:</b> This can be changed only from the Embedded Web Server.
<b>Print Mode</b>	Lets you view the assigned NetWare print mode <b>Note:</b> This can be changed only from the Embedded Web Server.
<b>Network Number</b>	Lets you view the assigned NetWare network number <b>Note:</b> This can be changed only from the Embedded Web Server.
<b>Select IPX Frame Types</b> Ethernet 802.2 Ethernet 802.3 Ethernet Type II Ethernet SNAP	Enables the Ethernet frame type setting <b>Note:</b> On is the factory default setting for all menu items.
<b>Packet Burst</b> Yes No	Reduces network traffic by allowing the transfer and acknowledgement of multiple data packets to and from the NetWare server <b>Note:</b> Yes is the factory default setting.
<b>NSQ/GSQ Mode</b> Yes No	Specifies the NSQ/GSQ Mode setting <b>Note:</b> Yes is the factory default setting.

## USB menu

Menu item	Description
<b>PCL SmartSwitch</b> On Off	Sets the printer to automatically switch to PCL emulation when a print job received through a USB port requires it, regardless of the default printer language <b>Notes:</b> <ul style="list-style-type: none"> <li>• On is the factory default setting.</li> <li>• When the Off setting is used, the printer does not examine incoming data.</li> <li>• When the Off setting is used, the printer uses PostScript emulation if the PS SmartSwitch setting is On. It uses the default printer language specified in the Setup menu if the PS SmartSwitch setting is Off.</li> </ul>



Menu item	Description
<b>PS SmartSwitch</b> On Off	Sets the printer to automatically switch to PS emulation when a print job received through a USB port requires it, regardless of the default printer language  <b>Notes:</b> <ul style="list-style-type: none"> <li>• On is the factory default setting.</li> <li>• When the Off setting is used, the printer does not examine incoming data.</li> <li>• When the Off setting is used, the printer uses PCL emulation if the PCL SmartSwitch setting is On. It uses the default printer language specified in the Setup menu if the PCL SmartSwitch setting is Off.</li> </ul>
<b>NPA Mode</b> On Off Auto	Sets the printer to perform the special processing required for bidirectional communication following the conventions defined by the NPA protocol  <b>Notes:</b> <ul style="list-style-type: none"> <li>• Auto is the factory default setting.</li> <li>• Changing this setting from the printer control panel and then exiting the menus causes the printer to restart. The menu selection is updated.</li> </ul>
<b>USB Buffer</b> Disabled Auto 3K to <maximum size allowed>	Sets the size of the USB input buffer  <b>Notes:</b> <ul style="list-style-type: none"> <li>• Auto is the factory default setting.</li> <li>• The Disabled setting turns off job buffering. Any jobs already buffered on the disk are printed before normal processing is resumed.</li> <li>• The USB buffer size value can be changed in 1-K increments.</li> <li>• The maximum size allowed depends on the amount of memory in the printer, the size of the other link buffers, and whether the Resource Save setting is On or Off.</li> <li>• To increase the maximum size range for the USB Buffer, disable or reduce the size of the parallel, serial, and network buffers.</li> <li>• Changing this setting from the printer control panel and then exiting the menus causes the printer to restart. The menu selection is updated.</li> </ul>
<b>Mac Binary PS</b> On Off Auto	Sets the printer to process Macintosh binary PostScript print jobs  <b>Notes:</b> <ul style="list-style-type: none"> <li>• Auto is the factory default setting.</li> <li>• The Off setting filters print jobs using the standard protocol.</li> <li>• The On setting processes raw binary PostScript print jobs.</li> </ul>
<b>USB With ENA</b> ENA Address ENA Netmask ENA Gateway	Sets the network address, netmask, or gateway information for an external print server that is attached to the printer using a USB cable.  <b>Note:</b> This menu item is available only if the printer is attached to an external print server through the USB port.

## Parallel menu

This menu appears only if an optional parallel card is installed.

Menu item	Description
<b>PCL SmartSwitch</b> On Off	Sets the printer to automatically switch to PCL emulation when a print job received through a parallel port requires it, regardless of the default printer language  <b>Notes:</b> <ul style="list-style-type: none"> <li>• On is the factory default setting.</li> <li>• When the Off setting is used, the printer does not examine incoming data.</li> <li>• When the Off setting is used, the printer uses PostScript emulation if PS SmartSwitch is set to On. It uses the default printer language specified in the Setup menu if PS SmartSwitch is set to Off.</li> </ul>
<b>PS SmartSwitch</b> On Off	Sets the printer to automatically switch to PS emulation when a print job received through a parallel port requires it, regardless of the default printer language  <b>Notes:</b> <ul style="list-style-type: none"> <li>• On is the factory default setting.</li> <li>• When the Off setting is used, the printer does not examine incoming data.</li> <li>• When the Off setting is used, the printer uses PCL emulation if PCL SmartSwitch is set to On. It uses the default printer language specified in the Setup menu if PCL SmartSwitch is set to Off.</li> </ul>
<b>NPA Mode</b> On Off Auto	Sets the printer to perform the special processing required for bidirectional communication following the conventions defined by the NPA protocol  <b>Notes:</b> <ul style="list-style-type: none"> <li>• Auto is the factory default setting.</li> <li>• Changing this setting from the printer control panel and then exiting the menus causes the printer to restart. The menu selection is updated.</li> </ul>
<b>Parallel Buffer</b> Disabled Auto 3K to <max size allowed>	Sets the size of the parallel input buffer  <b>Notes:</b> <ul style="list-style-type: none"> <li>• Auto is the factory default setting.</li> <li>• The Disabled setting turns off job buffering. Any jobs already buffered on the disk are printed before normal processing is resumed.</li> <li>• The parallel buffer size setting can be changed in 1K increments.</li> <li>• The maximum size allowed depends on the amount of memory in the printer, the size of the other link buffers, and whether Resource Save is set to On or Off.</li> <li>• To increase the maximum size range for the Parallel Buffer, disable or reduce the size of the USB, serial, and network buffers.</li> <li>• Changing this setting from the printer control panel and then exiting the menus causes the printer to restart. The menu selection is updated.</li> </ul>
<b>Advanced Status</b> On Off	Enables bidirectional communication through the parallel port  <b>Notes:</b> <ul style="list-style-type: none"> <li>• On is the factory default setting.</li> <li>• The Off setting disables parallel port negotiation.</li> </ul>

Menu item	Description
<b>Protocol</b> Standard Fastbytes	Specifies the parallel port protocol <b>Notes:</b> <ul style="list-style-type: none"> <li>Fastbytes is the factory default setting. It provides compatibility with most existing parallel ports and is the recommended setting.</li> <li>The Standard setting tries to resolve parallel port communication problems.</li> </ul>
<b>Honor Init</b> On Off	Determines whether or not the printer honors printer hardware initialization requests from the computer <b>Notes:</b> <ul style="list-style-type: none"> <li>Off is the factory default setting.</li> <li>The computer requests initialization by activating the Init signal from the parallel port. Many personal computers activate the Init signal each time the computer is turned on.</li> </ul>
<b>Parallel Mode 2</b> On Off	Determines whether the parallel port data is sampled on the leading or trailing edge of strobe <b>Notes:</b> <ul style="list-style-type: none"> <li>On is the factory default setting.</li> <li>This menu appears only if a standard or optional parallel port is available.</li> </ul>
<b>Mac Binary PS</b> On Off Auto	Sets the printer to process Macintosh binary PostScript print jobs <b>Notes:</b> <ul style="list-style-type: none"> <li>Auto is the factory default setting.</li> <li>The Off setting filters print jobs using the standard protocol.</li> <li>The On setting processes raw binary PostScript print jobs.</li> </ul>
<b>Parallel With ENA</b> ENA Address ENA Netmask ENA Gateway	Sets the network address, netmask, or gateway information for an external print server that is attached to the printer using a parallel cable. <b>Note:</b> This menu item is available only if the printer is attached to an external print server through a parallel port.

## Serial <x> menu

This menu appears only if an optional serial card is installed.

Menu item	Description
<b>PCL SmartSwitch</b> On Off	Sets the printer to automatically switch to PCL emulation when a print job received through a serial port requires it, regardless of the default printer language <b>Notes:</b> <ul style="list-style-type: none"> <li>On is the factory default setting.</li> <li>When the Off setting is used, the printer does not examine incoming data.</li> <li>When the Off setting is used, the printer uses PostScript emulation if PS SmartSwitch is set to On. It uses the default printer language specified in the Setup menu if PS SmartSwitch is set to Off.</li> </ul>

Menu item	Description
<b>PS SmartSwitch</b> On Off	Sets the printer to automatically switch to PS emulation when a print job received through a serial port requires it, regardless of the default printer language <b>Notes:</b> <ul style="list-style-type: none"> <li>• On is the factory default setting.</li> <li>• When the Off setting is used, the printer does not examine incoming data.</li> <li>• When the Off setting is used, the printer uses PCL emulation if PCL SmartSwitch is set to On. It uses the default printer language specified in the Setup menu if PCL SmartSwitch is set to Off.</li> </ul>
<b>NPA Mode</b> On Off Auto	Sets the printer to perform the special processing required for bidirectional communication following the conventions defined by the NPA protocol <b>Notes:</b> <ul style="list-style-type: none"> <li>• Auto is the factory default setting.</li> <li>• When the On setting is used, the printer performs NPA processing. If the data is not in NPA format, it is rejected as bad data.</li> <li>• When the Off setting is used, the printer does not perform NPA processing.</li> <li>• When the Auto setting is used, the printer examines data, determines the format, and then processes it appropriately.</li> <li>• Changing this setting from the printer control panel and then exiting the menus causes the printer to restart. The menu selection is updated.</li> </ul>
<b>Serial Buffer</b> Disabled Auto 3K to <maximum size allowed>	Sets the size of the serial input buffer <b>Notes:</b> <ul style="list-style-type: none"> <li>• Auto is the factory default setting.</li> <li>• The Disabled setting turns off job buffering. Any jobs already buffered on the disk are printed before normal processing is resumed.</li> <li>• The serial buffer size setting can be changed in 1-K increments.</li> <li>• The maximum size allowed depends on the amount of memory in the printer, the size of the other link buffers, and whether Resource Save is set to On or Off.</li> <li>• To increase the maximum size range for the Serial Buffer, disable or reduce the size of the parallel, USB, and network buffers.</li> <li>• Changing this setting from the printer control panel and then exiting the menus causes the printer to restart. The menu selection is updated.</li> </ul>
<b>Serial Protocol</b> DTR DTR/DSR XON/XOFF XON/XOFF/DTR XON/XOFF/DTRDSR	Selects the hardware and software handshaking settings for the serial port <b>Notes:</b> <ul style="list-style-type: none"> <li>• DTR is the factory default setting.</li> <li>• DTR/DSR is a hardware handshaking setting.</li> <li>• XON/XOFF is a software handshaking setting.</li> <li>• XON/XOFF/DTR and XON/XOFF/DTR/DSR are combined hardware and software handshaking settings.</li> </ul>

Menu item	Description
<b>Robust XON</b> On Off	Determines whether or not the printer communicates availability to the computer <b>Notes:</b> <ul style="list-style-type: none"> <li>Off is the factory default setting.</li> <li>This menu item applies only to the serial port if Serial Protocol is set to XON/XOFF.</li> </ul>
<b>Baud</b> 1200 2400 4800 9600 19200 38400 57600 115200 138200 172800 230400 345600	Specifies the rate at which data can be received through the serial port <b>Notes:</b> <ul style="list-style-type: none"> <li>9600 is the factory default setting.</li> <li>138200, 172800, 230400, and 345600 baud rates are displayed only in the Standard Serial menu. These settings do not appear in the Serial Option or Serial Option 2 menus.</li> </ul>
<b>Data Bits</b> 7 8	Specifies the number of data bits that are sent in each transmission frame <b>Note:</b> 8 is the factory default setting.
<b>Parity</b> Even Odd None Ignore	Sets the parity for serial input and output data frames <b>Note:</b> None is the factory default setting.
<b>Honor DSR</b> On Off	Determines whether the printer uses the DSR Signal. DSR is a handshaking signal used by most serial cables. <b>Notes:</b> <ul style="list-style-type: none"> <li>Off is the factory default setting.</li> <li>The serial port uses DSR to distinguish data sent by the computer from data created by electrical noise in the serial cable. The electrical noise can cause stray characters to print. Select <b>On</b> to prevent stray characters from printing.</li> <li>This menu item appears only if Serial RS-232/RS-422 is set to RS 232.</li> </ul>

## SMTP Setup menu

Use the following menu to configure the SMTP server.

Menu item	Description
<b>Primary SMTP Gateway</b> <b>Primary SMTP Gateway Port</b> <b>Secondary SMTP Gateway</b> <b>Secondary SMTP Gateway Port</b>	Specifies SMTP server port information <b>Note:</b> 25 is the default SMTP gateway port. Range is 1-65536.
<b>SMTP Timeout</b> 5-30	Specifies the amount of time in seconds before the server stops trying to send the e-mail <b>Note:</b> 30 seconds is the factory default setting.
<b>Reply Address</b>	Specifies a reply address of up to 128 characters in e-mail sent by the printer
<b>Use SSL</b> Disabled Negotiate Required	Sets the printer to use SSL for increased security when connecting to the SMTP server <b>Notes:</b> <ul style="list-style-type: none"> <li>• Disabled is the factory default setting for Use SSL.</li> <li>• When the Negotiate setting is used, your SMTP server determines if SSL will be used.</li> </ul>
<b>SMTP Server Authentication</b> No authentication required Login/Plain CRAM-MD5 Digest-MD5 NTLM Kerberos 5	Specifies the type of user authentication required <b>Note:</b> "No authentication required" is the factory default setting.
<b>Device-Initiated E-mail</b> None Use Device SMTP Credentials <b>Device Userid</b> <b>Device Password</b> <b>Kerberos 5 Realm</b> <b>NTLM Domain</b>	Specifies what credentials will be used when communicating to the SMTP server. Some SMTP servers require credentials in order to send e-mail. <b>Notes:</b> <ul style="list-style-type: none"> <li>• None is the factory default setting for Device-Initiated E-mail.</li> <li>• Device Userid and Device Password are used to log in to the SMTP server when "Use Device SMTP Credentials" is selected.</li> </ul>

# Security menu

## Miscellaneous menu

Menu item	Description
<b>Login Restrictions</b> Login failures 1-10 (3 attempts) Failure time frame 1-60 (5 minutes) Lockout time 1-60 (5 minutes) Panel Login Timeout 1-900 (3 seconds) Remote Login Timeout 1-120 (10 minutes)	Limits the number and time frames of failed login attempts from the printer control panel before <i>all</i> users are locked out <b>Notes:</b> <ul style="list-style-type: none"><li>• “Login failures” specifies the number of failed login attempts before users are locked out. 3 attempts is the factory default setting.</li><li>• “Failure time frame” specifies the time frame during which failed login attempts can be made before users are locked out. 5 minutes is the factory default setting.</li><li>• “Lockout time” specifies how long users are locked out after exceeding the login failures limit. 5 minutes is the factory default setting.</li><li>• “Panel Login Timeout” specifies how long the printer remains idle on the Home screen before automatically logging the user off. 3 seconds is the factory default setting.</li><li>• “Remote Login Timeout” specifies how long a remote interface (for example, the Web page) can remain idle before automatically logging the user off. 10 minutes is the factory default setting.</li></ul>

## Confidential Print menu

Menu item	Description
<b>Max Invalid PIN</b> Off 2-10	Limits the number of times an invalid PIN can be entered <b>Notes:</b> <ul style="list-style-type: none"><li>• Off is the default setting.</li><li>• This menu item appears only if a printer hard disk is installed.</li><li>• Once a limit is reached, the jobs for that user name and that PIN are deleted.</li></ul>
<b>Job Expiration</b> Off 1 hour 4 hours 24 hours 1 week	Limits the amount of time a confidential job stays in the printer before it is deleted <b>Notes:</b> <ul style="list-style-type: none"><li>• Off is the default setting.</li><li>• If the Job Expiration setting is changed while confidential jobs reside on the printer RAM or printer hard disk, the expiration time for those print jobs does not change to the new default value.</li><li>• If the printer is turned off, all confidential jobs held in printer RAM are deleted.</li></ul>

## Security Audit Log menu

Menu item	Description
<b>Export Log</b>	Enables an authorized user to export the security log <b>Notes:</b> <ul style="list-style-type: none"> <li>To export the log from the printer control panel, a flash drive must be attached to the printer.</li> <li>From the Embedded Web Server, the log can be downloaded to a computer.</li> </ul>
<b>Delete Log</b> Delete now Do not delete	Specifies whether audit logs are deleted <b>Note:</b> Delete Now is the factory default setting.
<b>Configure Log</b> Enable Audit Yes No Enable Remote Syslog Yes No Remote Syslog Facility 0-23 Severity of events to log 0-7	Specifies whether and how the audit logs are created <b>Notes:</b> <ul style="list-style-type: none"> <li>Enable audit determines if events are recorded in the secure audit log and remote syslog. No is the factory default setting.</li> <li>Enable remote syslog determines if logs are being sent to a remote server. No is the factory default setting.</li> <li>Remote syslog facility determines the value used to send logs to the remote syslog server. 4 is the factory default setting.</li> <li>With the security audit log activated, the severity value of each event is recorded. 4 is the factory default setting.</li> </ul>

## Set Date/Time menu

Menu item	Description
<b>View Date/Time</b>	Lets you view the current date and time settings for the printer
<b>Set Date/Time</b> <input date/time>	<b>Note:</b> Date/Time is set in YYYY-MM-DD HH:MM format.
<b>Time Zone</b> <list of time zones>	<b>Note:</b> GMT is the factory default setting.
<b>Observe DST</b> On Off	<b>Note:</b> On is the factory default setting and uses the applicable Daylight Saving Time associated with the Time Zone setting.
<b>Enable NTP</b> On Off	Enables Network Time Protocol, which synchronizes the clocks of devices on a network <b>Note:</b> On is the factory default setting.



# Settings menu

## General Settings menu

Menu item	Description
<b>Display Language</b> English Francais Deutsch Italiano Espanol Dansk Norsk Nederlands Svenska Portuguese Suomi Russian Polski Magyar Turkce Cesky Simplified Chinese Traditional Chinese Korean Japanese	Sets the language of the text appearing on the display <b>Note:</b> All languages may not be available for all printers.
<b>Eco-Mode</b> Off Energy Energy/Paper Paper	Minimizes the use of energy, paper, or specialty media <b>Notes:</b> <ul style="list-style-type: none"><li>• Off is the factory default setting. Off resets the printer to its factory default settings.</li><li>• The Energy setting minimizes the power used by the printer. Performance may be affected but not print quality.</li><li>• Paper minimizes the amount of paper and specialty media needed for a print job. Performance may be affected but not print quality.</li><li>• Energy/Paper minimizes the use of power and of paper and specialty media.</li></ul>
<b>Quiet Mode</b> Off On	Reduces the amount of noise produced by the printer <b>Notes:</b> <ul style="list-style-type: none"><li>• Off is the factory default setting.</li><li>• On configures the printer to produce as little noise as possible.</li></ul>

Menu item	Description
<b>Run Initial setup</b> Yes No	Instructs the printer to run the setup wizard <b>Notes:</b> <ul style="list-style-type: none"> <li>• Yes is the factory default setting.</li> <li>• After completing the setup wizard by selecting Done at the Country select screen, the default becomes No.</li> </ul>
<b>Paper Sizes</b> US Metric	<b>Notes:</b> <ul style="list-style-type: none"> <li>• Initial setting is determined by your Country selection in the initial setup wizard.</li> <li>• Changing this setting also changes the Units of Measurement setting in the Universal Setup menu and the default for each input source in the Paper Size/Paper Type menu.</li> </ul>
<b>Output Lighting</b> Normal/Standby Mode <ul style="list-style-type: none"> <li>• Bright</li> <li>• Dim</li> <li>• Off</li> </ul> Power Saver <ul style="list-style-type: none"> <li>• Bright</li> <li>• Dim</li> <li>• Off</li> </ul>	Sets the amount of light from an optional output bin <b>Notes:</b> <ul style="list-style-type: none"> <li>• In Normal/Standby Mode, the factory default is Bright.</li> <li>• In Power Saver Mode, the factory default is Dim.</li> </ul>
<b>Alarms</b> Alarm Control Cartridge Alarm Staple Alarm	Sets an alarm to sound when the printer requires operator intervention Available selections for each alarm type are: Off Single Continuous <b>Notes:</b> <ul style="list-style-type: none"> <li>• Single is the factory default setting for Alarm Control. Single sounds three quick beeps.</li> <li>• Off is the factory default setting for Cartridge Alarm and Staple Alarm. Off means no alarm will sound.</li> <li>• Continuous repeats three beeps every 10 seconds.</li> <li>• Staple Alarm is available only when the finisher is installed.</li> </ul>

Menu item	Description
<p><b>Timeouts</b> Power Saver 1–240 min</p>	<p>Sets the amount of time the printer waits after a job is printed before it goes into a reduced power state</p> <p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>• 30 minutes is the factory default setting.</li> <li>• Lower settings conserve more energy, but may require longer warm-up times.</li> <li>• Select the lowest setting if the printer shares an electrical circuit with room lighting or you notice lights flickering in the room.</li> <li>• Select a high setting if the printer is in constant use. Under most circumstances, this keeps the printer ready to print with minimum warm-up time.</li> </ul>
<p><b>Timeouts</b> Screen Timeout 15–300 sec</p>	<p>Sets the amount of time in seconds the printer waits before returning the printer display to a <b>Ready</b> state</p> <p><b>Note:</b> 30 seconds is the factory default setting.</p>
<p><b>Timeouts</b> Print Timeout Disabled 1–255 sec</p>	<p>Sets the amount of time in seconds the printer waits to receive an end-of-job message before canceling the remainder of the print job</p> <p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>• 90 seconds is the factory default setting.</li> <li>• When the timer expires, any partially printed page still in the printer is printed, and then the printer checks to see if any new print jobs are waiting.</li> <li>• Print Timeout is available only when using PCL emulation. This setting has no effect on PostScript emulation print jobs.</li> </ul>
<p><b>Timeouts</b> Wait Timeout Disabled 15–65535 sec</p>	<p>Sets the amount of time in seconds the printer waits for additional data before canceling a print job</p> <p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>• 40 seconds is the factory default setting.</li> <li>• Wait Timeout is available only when the printer is using PostScript emulation. This setting has no effect on PCL or PPDS emulation print jobs.</li> </ul>
<p><b>Print Recovery</b> Auto Continue Disabled 5–255 sec</p>	<p>Lets the printer automatically continue printing from certain offline situations when not resolved within the specified time period</p> <p><b>Note:</b> Disabled is the factory default setting.</p>

Menu item	Description
<p><b>Print Recovery</b></p> <p>Jam Recovery</p> <p>Auto</p> <p>On</p> <p>Off</p>	<p>Specifies whether the printer reprints jammed pages</p> <p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>• Auto is the factory default setting. The printer reprints jammed pages unless the memory required to hold the pages is needed for other printer tasks.</li> <li>• On sets the printer to always reprint jammed pages.</li> <li>• Off sets the printer to never reprint jammed pages.</li> </ul>
<p><b>Print Recovery</b></p> <p>Page Protect</p> <p>Off</p> <p>On</p>	<p>Lets the printer successfully print a page that may not have printed otherwise</p> <p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>• Off is the factory default setting. Off prints a partial page when there is not enough memory to print the whole page.</li> <li>• On sets the printer to process the whole page so that the entire page prints.</li> </ul>
<p><b>Factory Defaults</b></p> <p>Do Not Restore</p> <p>Restore Now</p>	<p>Returns the printer settings to the factory default settings</p> <p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>• Do Not Restore is the factory default setting. Do Not Restore keeps the user-defined settings.</li> <li>• Restore Now returns all printer settings to the factory default settings except Network/Ports menu settings. All downloads stored in RAM are deleted. Downloads stored in flash memory or on a printer hard disk are not affected.</li> </ul>
<p><b>Custom Home Message</b></p> <p>Off</p> <p>IP Address</p> <p>Hostname</p> <p>Contact Name</p> <p>Location</p> <p>Zero Configuration Name</p> <p>Custom Text 1</p>	<p>Sets a pre-configured or customized message to appear on the display beside <b>Ready</b></p> <p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>• Off is the factory default setting.</li> <li>• IP address and Hostname are pre-configured messages.</li> <li>• Contact Name, Location, Zero Configuration Name, and Custom Text 1 are messages that can be customized by a system support person.</li> </ul>

## Setup menu

Menu item	Description
<p><b>Printer Language</b></p> <ul style="list-style-type: none"> <li>PCL Emulation</li> <li>PS Emulation</li> <li>PPDS Emulation</li> </ul>	<p>Sets the default printer language</p> <p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>• PCL emulation uses a PCL interpreter for processing print jobs. PostScript emulation uses a PS interpreter for processing print jobs.</li> <li>• PCL is the factory default printer language.</li> <li>• Setting a printer language as the default does not prevent a software program from sending print jobs that use another printer language.</li> </ul>
<p><b>Print Area</b></p> <ul style="list-style-type: none"> <li>Normal</li> <li>Whole Page</li> </ul>	<p>Sets the logical and physical printable area</p> <p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>• This menu does not appear if Edge to Edge is enabled in the printer Setup menu.</li> <li>• Normal is the factory default setting. When attempting to print data in the non-printable area defined by the Normal setting, the printer clips the image at the boundary.</li> <li>• The Whole Page setting allows the image to be moved into the non-printable area defined by the Normal setting, but the printer will clip the image at the Normal setting boundary.</li> <li>• The Whole Page setting only affects pages printed using a PCL 5e interpreter. This setting has no effect on pages printed using the PCL XL or PostScript interpreter.</li> </ul>
<p><b>Download Target</b></p> <ul style="list-style-type: none"> <li>RAM</li> <li>Flash</li> </ul>	<p>Sets the storage location for downloads</p> <p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>• RAM is the factory default setting.</li> <li>• Storing downloads in flash memory places them in permanent storage. Downloads remain in flash memory even when the printer is turned off.</li> <li>• Storing downloads in RAM is temporary.</li> <li>• This menu appears only if a flash option is installed.</li> </ul>
<p><b>Resource Save</b></p> <ul style="list-style-type: none"> <li>On</li> <li>Off</li> </ul>	<p>Specifies how the printer handles temporary downloads, such as fonts and macros stored in RAM, when the printer receives a job that requires more memory than is available</p> <p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>• Off is the factory default setting. Off sets the printer to retain the downloads only until memory is needed. Downloads are deleted in order to process print jobs.</li> <li>• The On setting retains the downloads during language changes and printer resets. If the printer runs out of memory, <b>38 Memory Full</b> appears, and downloads are not deleted.</li> </ul>

Menu item	Description
<b>Print All Order</b> Alphabetical Oldest First Newest First	Specifies the order in which held and confidential jobs are printed when Print All is selected  <b>Notes:</b> <ul style="list-style-type: none"> <li>• Alphabetical is the factory default setting.</li> <li>• Print jobs always appear in alphabetical order on the printer control panel.</li> </ul>

## Finishing menu

Menu item	Description
<b>Sides (Duplex)</b> 1 sided 2 sided	Specifies whether duplex (2-sided) printing is set as the default for all print jobs  <b>Notes:</b> <ul style="list-style-type: none"> <li>• 1 sided is the factory default setting.</li> <li>• To set 2-sided printing from the software program: for Windows users, click <b>File → Print</b>, and then click <b>Properties, Preferences, Options, or Setup</b>; for Macintosh users, choose <b>File &gt; Print</b>, and then adjust the settings from the Print dialog and pop-up menus.</li> </ul>
<b>Duplex Binding</b> Long Edge Short Edge	Defines the way duplexed pages are bound and how the printing on the back of the page is oriented in relation to the printing on the front of the page  <b>Notes:</b> <ul style="list-style-type: none"> <li>• Long Edge is the factory default setting.</li> <li>• Long Edge specifies that binding be placed on the left edge of portrait pages and the top edge of landscape pages.</li> <li>• Short Edge specifies that binding be placed on the top edge of portrait pages and the left edge of landscape pages.</li> </ul>
<b>Copies</b> 1–999	Specifies a default number of copies for each print job  <b>Note:</b> 1 is the factory default setting.
<b>Blank Pages</b> Do Not Print Print	Specifies whether blank pages are inserted in a print job  <b>Note:</b> Do Not Print is the factory default setting.
<b>Collate</b> Off (1,1,1,2,2,2) On (1,2,1,2,1,2)	Stacks the pages of a print job in sequence when printing multiple copies  <b>Notes:</b> <ul style="list-style-type: none"> <li>• Off is the factory default setting. No pages will be collated.</li> <li>• The On setting stacks the print job sequentially.</li> <li>• Both settings print the entire job the number of times specified by the Copies menu setting.</li> </ul>

Menu item	Description
<b>Separator Sheets</b> None Between Copies Between Jobs Between Pages	Specifies whether blank separator sheets are inserted <b>Notes:</b> <ul style="list-style-type: none"> <li>• None is the factory default setting.</li> <li>• Between Copies inserts a blank sheet between each copy of a print job if Collation is set to On. If Collation is set to Off, a blank page is inserted between each set of printed pages, such as after all page 1's and after all page 2's.</li> <li>• Between Jobs inserts a blank sheet between print jobs.</li> <li>• Between Pages inserts a blank sheet between each page of the print job. This setting is useful when printing transparencies or inserting blank pages in a document for notes.</li> </ul>
<b>Separator Source</b> Tray <x> Multi-Purpose Feeder	Specifies the paper source for separator sheets <b>Notes:</b> <ul style="list-style-type: none"> <li>• Tray 1 (standard tray) is the factory default setting.</li> <li>• From the Paper menu, Configure MP must be set to Cassette in order for Multi-Purpose Feeder to appear as a menu setting.</li> </ul>
<b>N-up (pages-side)</b> Off 2-Up 3-Up 4-Up 6-Up 9-Up 12-Up 16-Up	Specifies that multiple-page images be printed on one side of a sheet of paper <b>Notes:</b> <ul style="list-style-type: none"> <li>• Off is the factory default setting.</li> <li>• The number selected is the number of page images that will print per side.</li> </ul>
<b>N-up Ordering</b> Horizontal Reverse Horizontal Reverse Vertical Vertical	Specifies the positioning of multiple-page images when using N-up (pages-sides) <b>Notes:</b> <ul style="list-style-type: none"> <li>• Horizontal is the factory default setting.</li> <li>• Positioning depends on the number of images and whether the images are in portrait or landscape orientation.</li> </ul>
<b>Orientation</b> Auto Landscape Portrait	Specifies the orientation of a multiple-page sheet <b>Note:</b> Auto is the factory default setting. The printer chooses between portrait and landscape.
<b>N-up Border</b> None Solid	Prints a border around each page image when using N-up (pages-sides) <b>Note:</b> None is the factory default setting.
<b>Staple Job</b> Off On	Specifies whether print jobs are stapled <b>Notes:</b> <ul style="list-style-type: none"> <li>• This menu item is available only when the Staple Finisher is installed.</li> <li>• Off is the factory default setting. Print jobs are not stapled.</li> <li>• Envelopes are not stapled.</li> </ul>

Menu item	Description
<b>Offset Pages</b> None Between Jobs Between Copies	Stacks copies or print jobs into staggered sets in an output bin <b>Notes:</b> <ul style="list-style-type: none"> <li>• This menu item appears only when the Staple Finisher is installed.</li> <li>• None is the factory default setting. No pages are offset during the print job.</li> <li>• Between Jobs offsets each print job.</li> <li>• Between Copies offsets each copy of a print job.</li> </ul>

## Quality menu

Menu item	Description
<b>Print Resolution</b> 300 dpi 600 dpi 1200 dpi 1200 Image Q 2400 Image Q	Specifies the printed output resolution <b>Note:</b> 600 dpi is the factory default setting. The printer driver default is 1200 IQ.
<b>Pixel Boost</b> Off Fonts Horizontally Vertically Both Directions	Enhances the printed quality of small fonts and graphics <b>Notes:</b> <ul style="list-style-type: none"> <li>• Off is the factory default setting.</li> <li>• Fonts applies this setting only to text.</li> <li>• Horizontally darkens horizontal lines of text and images.</li> <li>• Vertically darkens vertical lines of text and images.</li> <li>• Both Directions darkens horizontal and vertical lines on text and images.</li> </ul>
<b>Toner Darkness</b> 1–10	Lightens or darkens the printed output <b>Notes:</b> <ul style="list-style-type: none"> <li>• 8 is the factory default setting.</li> <li>• Selecting a smaller number can help conserve toner.</li> </ul>
<b>Enhance Fine Lines</b> On Off	Enables a print mode preferable for files such as architectural drawings, maps, electrical circuit diagrams, and flow charts <b>Notes:</b> <ul style="list-style-type: none"> <li>• Off is the factory default setting.</li> <li>• To set Enhance Fine Lines using the Embedded Web Server, type the network printer IP address in a browser window.</li> </ul>
<b>Gray Correction</b> Auto Off	Adjusts the gray value of printed output <b>Note:</b> Auto is the factory default setting.



Menu item	Description
<b>Brightness</b> -6 to +6	Adjusts or darkens printed output and conserves toner <b>Notes:</b> <ul style="list-style-type: none"> <li>• 0 is the factory default setting.</li> <li>• A negative value will darken text, images, and graphics. A positive value will lighten them and conserve toner.</li> </ul>
<b>Contrast</b> 0-5	Adjusts the degree of difference between levels of gray in printed output <b>Notes:</b> <ul style="list-style-type: none"> <li>• 0 is the factory default setting.</li> <li>• Higher settings show more difference between levels of gray.</li> </ul>

## Utilities menu

Menu item	Description
<b>Format Flash</b> Yes No	Formats the flash memory. Flash memory refers to the memory added by installing a flash memory option card in the printer. <b>Warning—Potential Damage:</b> Do not turn off the printer while the flash memory is formatting. <b>Notes:</b> <ul style="list-style-type: none"> <li>• A flash memory option card must be installed in the printer and operating properly for this menu item to be available. The flash memory option card must not be Read/Write or Write protected.</li> <li>• Selecting Yes deletes all data stored in flash memory.</li> <li>• No cancels the format request.</li> </ul>
<b>Defragment Flash</b> Yes No	Prepares the flash memory to receive new data by retrieving lost storage space <b>Warning—Potential Damage:</b> Do not turn off the printer while the flash memory is defragmenting. <b>Notes:</b> <ul style="list-style-type: none"> <li>• A optional flash memory card must be installed in the printer and operating properly for this menu item to be available. The flash memory card must not be Read/Write or Write protected or defective.</li> <li>• No cancels the defragment request.</li> <li>• Selecting Yes reformats the flash memory after transferring all downloads to regular printer memory. When formatting is complete, the downloads are loaded back into flash memory.</li> </ul>
<b>Hex Trace</b> Activate	Assists in isolating the source of a print job problem <b>Notes:</b> <ul style="list-style-type: none"> <li>• When Activate is selected, all data sent to the printer is printed in hexadecimal and character representation and control codes are not executed.</li> <li>• To exit or deactivate Hex Trace, turn the printer off or reset the printer.</li> </ul>

Menu item	Description
<b>Coverage Estimator</b> Off On	Provides an estimate of the percentage coverage of black on a page. The estimate is printed on a separate page at the end of each print job. <b>Note:</b> Off is the factory default setting.
<b>LCD Contrast</b> 1–10	Adjusts the contrast lighting of the display <b>Notes:</b> <ul style="list-style-type: none"> <li>• 5 is the factory default setting.</li> <li>• A higher setting makes the display appear lighter.</li> <li>• A lower setting makes the display appear darker.</li> </ul>
<b>LCD Brightness</b> 1–10	Adjusts the brightness of the backlight on the display <b>Notes:</b> <ul style="list-style-type: none"> <li>• 5 is the factory default setting.</li> <li>• A higher setting makes the display appear lighter.</li> <li>• A lower setting makes the display appear darker.</li> </ul>

## XPS menu

Menu item	Description
<b>Print Error Pages</b> Off On	Prints a page containing information on errors, including XML markup errors <b>Note:</b> Off is the factory default setting.

## PDF menu

Menu item	Description
<b>Scale to Fit</b> Yes No	Scales page content to fit the selected paper size <b>Note:</b> No is the factory default setting.
<b>Annotations</b> Do Not Print Print	Prints annotations in a PDF <b>Note:</b> Do Not Print is the factory default setting.

## PostScript menu

Menu item	Description
<b>Print PS Error</b> On Off	Prints a page containing the PostScript error <b>Note:</b> Off is the factory default setting.

Menu item	Description
<b>Font Priority</b> Resident Flash	Establishes the font search order  <b>Notes:</b> <ul style="list-style-type: none"> <li>• Resident is the factory default setting.</li> <li>• A formatted optional flash memory card must be installed in the printer and operating properly for this menu item to be available.</li> <li>• The optional flash memory card cannot be Read/Write, Write, or password protected.</li> <li>• Job Buffer Size must not be set to 100%.</li> </ul>

## PCL Emul menu

Menu item	Description
<b>Font Source</b> Resident Download Flash All	Specifies the set of fonts available  <b>Notes:</b> <ul style="list-style-type: none"> <li>• Resident is the factory default setting. It shows the factory default set of fonts downloaded into RAM.</li> <li>• Download appears only if downloaded fonts exist. It shows all the fonts downloaded into RAM.</li> <li>• Flash appears only if an optional flash memory card containing fonts is installed.</li> <li>• An optional flash memory card must be properly formatted and cannot be Read/Write, Write, or password protected.</li> <li>• All shows all fonts available to any option.</li> </ul>
<b>Font Name</b> <list of fonts>	Lets you view or change the setting from a selection list
<b>Symbol Set</b> <list of symbol sets>	Lets you view or change the setting from a selection list
<b>PCL Emulation Settings</b> Point Size 1.00–1008.00	Changes the point size for scalable typographic fonts  <b>Notes:</b> <ul style="list-style-type: none"> <li>• 12 is the factory default setting.</li> <li>• Point Size refers to the height of the characters in the font. One point equals approximately 1/72 of an inch.</li> <li>• Point sizes can be increased or decreased in 0.25-point increments.</li> </ul>
<b>PCL Emulation Settings</b> Pitch 0.08–100	Specifies the font pitch for scalable monospaced fonts  <b>Notes:</b> <ul style="list-style-type: none"> <li>• 10 is the factory default setting.</li> <li>• Pitch refers to the number of fixed-space characters per inch (cpi).</li> <li>• Pitch can be increased or decreased in 0.01-cpi increments.</li> <li>• For nonscalable monospaced fonts, the pitch appears on the display but cannot be changed.</li> </ul>

Menu item	Description
<b>PCL Emulation Settings</b> Orientation Portrait Landscape	Specifies the orientation of text and graphics on the page <b>Notes:</b> <ul style="list-style-type: none"> <li>• Portrait is the factory default setting.</li> <li>• Portrait prints text and graphics parallel to the short edge of the page.</li> <li>• Landscape prints text and graphics parallel to the long edge of the page.</li> </ul>
<b>PCL Emulation Settings</b> Lines per Page 1–255	Specifies the number of lines that print on each page <b>Notes:</b> <ul style="list-style-type: none"> <li>• 60 is the US factory default setting. 64 is the international factory default setting.</li> <li>• The printer sets the amount of space between each line based on the Lines per Page, Paper Size, and Orientation settings. Select the desired Paper Size and Orientation before setting Lines per Page.</li> </ul>
<b>PCL Emulation Settings</b> A4 Width 198 mm 203 mm	Sets the printer to print on A4-size paper <b>Notes:</b> <ul style="list-style-type: none"> <li>• 198 mm is the factory default setting.</li> <li>• The 203-mm setting sets the width of the page to allow the printing of eighty 10-pitch characters.</li> </ul>
<b>PCL Emulation Settings</b> Auto CR after LF On Off	Specifies whether the printer automatically performs a carriage return (CR) after a line feed (LF) control command <b>Note:</b> Off is the factory default setting.
<b>PCL Emulation Settings</b> Auto LF after CR On Off	Specifies whether the printer automatically performs a line feed (LF) after a carriage return (CR) control command <b>Note:</b> Off is the factory default setting.
<b>Tray Renumber</b> Assign MP Feeder Off None 0–199 Assign Tray <x> Off None 0–199 Assign Manual Paper Off None 0–199 Assign Man Env Off None 0–199	Configures the printer to work with printer software or programs that use different source assignments for trays, drawers, and feeders <b>Notes:</b> <ul style="list-style-type: none"> <li>• Off is the factory default setting.</li> <li>• None is not an available selection. It is displayed only when it is selected by the PCL 5 interpreter.</li> <li>• None ignores the Select Paper Feed command.</li> <li>• 0–199 allows a custom setting to be assigned.</li> </ul>

Menu item	Description
<b>Tray Renumber</b> View Factory Def Multipurpose feeder default = 8 Tray 1 default = 1 Tray 2 default = 4 Tray 3 default = 5 Tray 4 default = 20 Tray 5 default = 21 Envelope default = 6 Manual paper default = 2 Manual envelope default = 3	Lets you view the factory default setting assigned to each tray, drawer, or feeder <b>Notes:</b> <ul style="list-style-type: none"> <li>• The printer supports one standard 250-sheet tray and can have only one optional drawer installed, either the 250- or 550-sheet drawer. Therefore, only Tray 1 and Tray 2 of the Tray values apply to your printer</li> <li>• The factory default settings appear even if the source is not installed.</li> </ul>
<b>Tray Renumber</b> Restore Defaults Yes No	Returns all tray, drawer, and feeder assignments to the factory default settings

## PPDS menu

Menu item	Description
<b>Orientation</b> Portrait Landscape	Sets the orientation of the text and graphics on the page <b>Notes:</b> <ul style="list-style-type: none"> <li>• Portrait is the factory default setting.</li> <li>• Settings are duplicated in the PCL Emulation menu.</li> </ul>
<b>Lines per Page</b> 1–255	Sets the number of lines that print on each page <b>Notes:</b> <ul style="list-style-type: none"> <li>• 64 is the factory default setting.</li> <li>• The printer sets the amount of space between each line based on the Lines per Page, Paper Size, and Orientation settings. Select the desired Paper Size and Orientation before setting Lines per Page.</li> </ul>
<b>Lines per Inch</b> 0.25–30.00	Sets the number of lines that print per inch <b>Notes:</b> <ul style="list-style-type: none"> <li>• 6 is the factory default setting.</li> <li>• Lines per Inch can be increased or decreased in 0.25-inch increments</li> </ul>
<b>Page Format</b> Print Whole	Sets the logical and physical printable area of the page <b>Notes:</b> <ul style="list-style-type: none"> <li>• Print is the factory default setting. Print data maintains its position with respect to edge of the paper.</li> <li>• When Whole is selected, document margins are calculated from the top left corner of the physical edge of the page.</li> <li>• Printing does not occur outside the printable area.</li> </ul>

Menu item	Description
<b>Character Set</b> 1 2	Specifies a default character set for PPDS print jobs <b>Notes:</b> <ul style="list-style-type: none"> <li>• 2 is the factory default setting. Character Set 2 is composed of printable characters and symbols used in non-US English languages.</li> <li>• When Characters Set 1 is selected, values given to the printer are interpreted as printer commands.</li> </ul>
<b>Best Fit</b> On Off	Replaces a missing font with a similar font <b>Note:</b> On is the factory default setting. If the requested font is not found, the printer will use a similar font.
<b>Tray 1 Renumber</b> Off Tray 2	Configures the printer to work with printer software or programs that use different source assignments for trays, drawers, and feeders <b>Notes:</b> <ul style="list-style-type: none"> <li>• Off is the factory default setting.</li> <li>• Tray 2 is displayed only when it is installed.</li> </ul>
<b>Auto CR after LF</b> On Off	Specifies whether the printer automatically performs a carriage return (CR) after a line feed (LF) control command <b>Notes:</b> <ul style="list-style-type: none"> <li>• Off is the factory default setting.</li> <li>• Settings are duplicated in the PCL Emulation menu.</li> </ul>
<b>Auto LF after CR</b> On Off	Specifies whether the printer automatically performs a line feed (LF) after a carriage return (CR) control command <b>Notes:</b> <ul style="list-style-type: none"> <li>• Off is the factory default setting.</li> <li>• Settings are duplicated in the PCL Emulation menu.</li> </ul>

## HTML menu

Menu item		Description
<b>Font Name</b> Antique Olive Apple Chancery Arial MT Avant Garde Bodoni Bookman Chicago Clarendon Cooper Black Copperplate Coronet Courier Eurostile Garamond Geneva Gill Sans Goudy Helvetica Hoefler Text	Intl CG Times Intl Courier Intl Univers Joanna MT Letter Gothic Lubalin Graph Marigold MonaLisa Recut Monaco New CenturySbk New York Optima Oxford Palatino StempelGaramond Taffy Times TimesNewRoman Univers Zapf Chancery	Sets the default font for HTML documents  <b>Notes:</b> <ul style="list-style-type: none"> <li>• The Times font will be used in HTML documents that do not specify a font.</li> <li>• The following fonts appear only if the appropriate DBCS font card is installed: HG-GothicB, MSung-Light, MD_DotumChe, and MingMT-Light.</li> </ul>

Menu item	Description
<b>Font Size</b> 1–255 pt	Sets the default font size for HTML documents  <b>Notes:</b> <ul style="list-style-type: none"> <li>• 12 pt is the factory default setting.</li> <li>• Font size can be increased in 1-point increments.</li> </ul>
<b>Scale</b> 1–400%	Scales the default font for HTML documents  <b>Notes:</b> <ul style="list-style-type: none"> <li>• 100% is the factory default setting.</li> <li>• Scaling can be increased in 1% increments.</li> </ul>
<b>Orientation</b> Portrait Landscape	Sets the page orientation for HTML documents  <b>Note:</b> Portrait is the factory default setting.
<b>Margin Size</b> 8–255 mm	Sets the page margin for HTML documents  <b>Notes:</b> <ul style="list-style-type: none"> <li>• 19 mm is the factory default setting.</li> <li>• Margin size can be increased in 1-mm increments.</li> </ul>

Menu item	Description
<b>Backgrounds</b> Do Not Print Print	Specifies whether to print backgrounds on HTML documents <b>Note:</b> Print is the factory default setting.

## Image menu

Menu item	Description
<b>Auto Fit</b> On Off	Selects the optimal paper size, scaling, and orientation <b>Notes:</b> <ul style="list-style-type: none"> <li>• On is the factory default setting.</li> <li>• The On setting overrides scaling and orientation settings for some images.</li> </ul>
<b>Invert</b> On Off	Inverts bi-tonal monochrome images <b>Notes:</b> <ul style="list-style-type: none"> <li>• On is the factory default setting.</li> <li>• The font size can be increased in 1-point increments.</li> <li>• This setting does not apply to GIF or JPEG images.</li> </ul>
<b>Scaling</b> Anchor Top Left Best Fit Anchor Center Fit Height/Width Fit Height Fit Width	Scales the image to fit the selected paper size <b>Notes:</b> <ul style="list-style-type: none"> <li>• Best Fit is the factory default setting.</li> <li>• When Auto Fit is set to On, Scaling is automatically set to Best Fit.</li> </ul>
<b>Orientation</b> Portrait Landscape Rev Portrait Rev Landscape	Sets the image orientation <b>Note:</b> Portrait is the factory default setting.

## Help menu

The Help menu consists of Help pages that are stored in the printer as PDFs. They contain reference information about using the printer and performing tasks. You may select to print each one individually, or select **Print all guides** to print all of them at one time.

English, French, German, and Spanish translations are stored in the printer. Other translations are available on the *Software and Documentation CD*.



# Maintaining the printer

Periodically, certain tasks are required to maintain optimum print quality.

## Cleaning the exterior of the printer

- 1 Make sure that the printer is turned off and unplugged from the wall outlet.



**CAUTION—SHOCK HAZARD:** To avoid the risk of electric shock when cleaning the exterior of the printer, unplug the power cord from the wall outlet and disconnect all cables to the printer before proceeding.

- 2 Remove paper from the standard exit bin.

- 3 Dampen a clean, lint-free cloth with water.

**Warning—Potential Damage:** Do not use household cleaners or detergents, as they may damage the finish of the printer.

- 4 Wipe only the outside of the printer, making sure to include the standard exit bin.

**Warning—Potential Damage:** Using a damp cloth to clean the interior may cause damage to your printer.

- 5 Make sure the paper support and standard exit bin are dry before beginning a new print job.

## Storing supplies

Choose a cool, clean storage area for the printer supplies. Store supplies right side up in their original packing until you are ready to use them.

Do not expose supplies to:

- Direct sunlight
- Temperatures above 35°C (95°F)
- High humidity above 80%
- Salty air
- Corrosive gases
- Heavy dust

## Conserving supplies

There are some settings you can change from the printer control panel that will help you conserve toner and paper. For more information, see “Supplies menu,” “Quality menu,” and “Finishing menu.”

If you need to print several copies, you can conserve supplies by printing the first copy and checking it for accuracy before printing the remaining copies.

# Checking the status of supplies

A message appears on the display when a replacement supply item is needed or when maintenance is required.

## Checking the status of supplies from the printer control panel

- 1 Make sure the printer is on and **Ready** appears.
- 2 From the printer control panel, press the up or down arrow button until **√ Status/Supplies** appears, and then press **√**.
- 3 Press the up or down arrow button until **√ view supplies** appears, and then press **√**.  
The status of each supply appears.

## Checking the status of supplies from a network computer

**Note:** The computer must be connected to the same network as the printer.

- 1 Type the printer IP address into the address field of your Web browser.  
**Note:** If you do not know the IP address of the printer, print a network setup page and locate the IP address in the TCP/IP section.
- 2 Click **Device Status**. The Device Status page appears, displaying a summary of supply levels.


# Ordering supplies

**Note:** All life estimates for printer supplies assume printing on letter- or A4-size plain paper.

## Printer attached to a network

- 1 Type your printer IP address in your Web browser to launch the Dell Configuration Web Tool.
- 2 Click [www.dell.com/supplies](http://www.dell.com/supplies).

## Printer attached locally to a computer

- 1 Click  or **Start**.
- 2 Click **All Programs** or **Programs**, and then select the printer program folder from the list.
- 3 Select **Printer Home**.
- 4 Choose your printer from the printer drop-down list.
- 5 Click **Dell Printer Supplies Reorder Application**.  
The **Order Toner Cartridges** window opens.
- 6 Choose your printer model from the list.

7 Enter your Dell printer Service Tag number.

**Note:** Your Service Tag number is located inside the front cover of your printer.

8 Click **Visit Dell's cartridge ordering website**.

## Replacing supplies

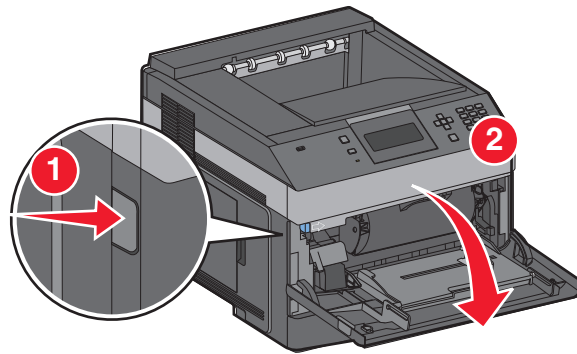
### Replacing the toner cartridge

When **88 Cartridge low** appears, or when you experience faded print, remove the toner cartridge. Firmly shake it side-to-side and front-to-back several times to redistribute the toner, and then reinsert it and continue printing. When shaking the cartridge no longer improves the print quality, replace the toner cartridge.

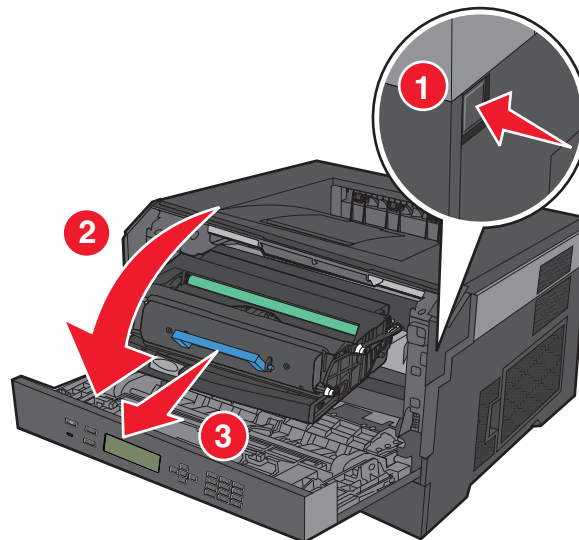
**Note:** You can check to see approximately how much toner is left in your cartridge by printing a menu settings page.

To replace the toner cartridge:

1 Open the front door by pressing the button on the left side of the printer and lowering the door.



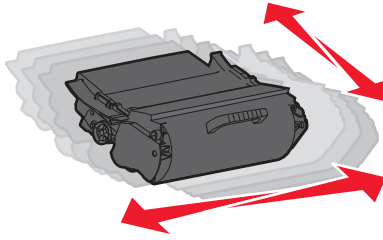
2 Press the button on the base of the photoconductor kit, and then pull the toner cartridge out using the handle.



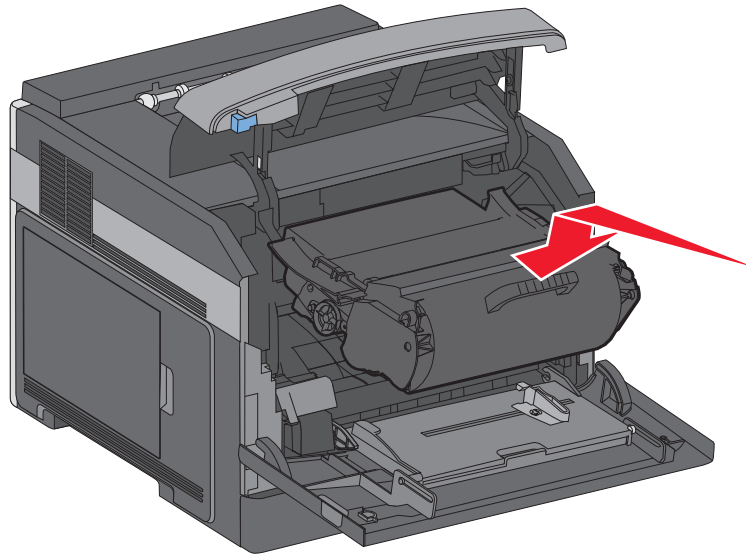
3 Unpack the new toner cartridge.

**Warning—Potential Damage:** When replacing a toner cartridge, do not leave the photoconductor kit exposed to direct light for an extended period of time. Extended light exposure can cause print quality problems.

4 Rotate the cartridge in all directions to distribute the toner.



5 Install the new toner cartridge by aligning the rollers on the toner cartridge with the arrows on the tracks of the photoconductor kit. Push the toner cartridge in as far as it will go. The cartridge *clicks* into place when correctly installed.



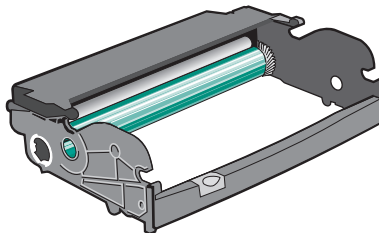
6 Close the front door.

## Replacing the photoconductor kit

The printer automatically notifies you before the photoconductor kit reaches a page maximum by showing **84 PC Kit life warning** or **84 Replace PC Kit** on the display. You can also see the status of the photoconductor kit by printing a menu settings page.

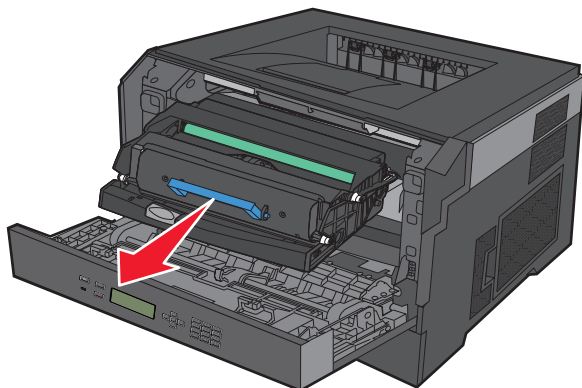
When **84 PC Kit life warning** or **84 Replace PC Kit** first appears, you should immediately order a new photoconductor kit. While the printer may continue to function properly after the photoconductor kit has reached its official end-of-life, print quality significantly decreases.

**Note:** The photoconductor kit is one item only.

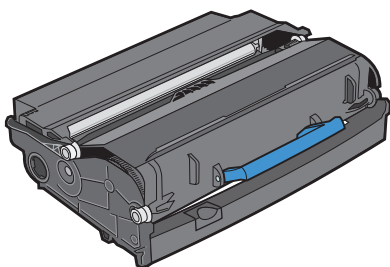


- 1 Open the front door by pressing the button on the left side of the printer and lowering the front door.
- 2 Pull the photoconductor kit and toner cartridge out of the printer as a unit by pulling on the toner cartridge handle.

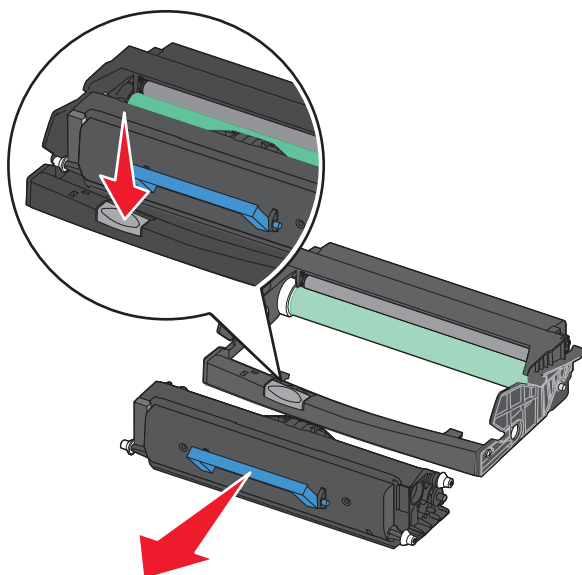
**Note:** The photoconductor kit and toner cartridge form a unit.



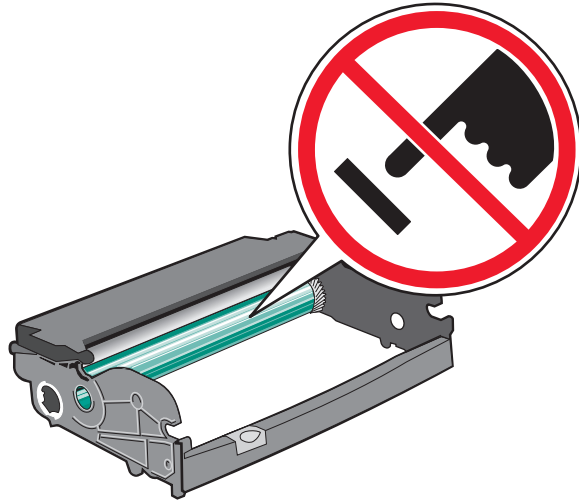
Place the unit on a flat, clean surface.



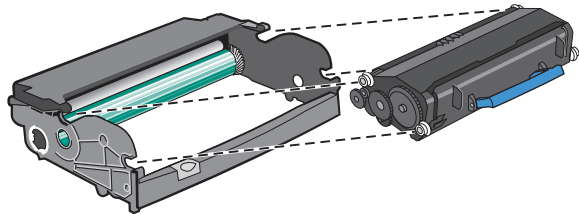
- 3 Press the button on the base of the photoconductor kit. Pull the toner cartridge up and out using the handle.



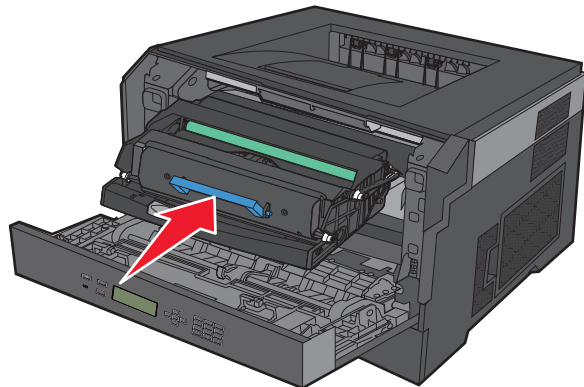
4 Unpack the new photoconductor kit. Be careful not to touch the photoconductor drum.



5 Insert the toner cartridge into the photoconductor kit by aligning the rollers on the toner cartridge with the tracks. Push the toner cartridge until it *clicks* into place.



6 Install the unit into the printer by aligning the arrows on the guides of the unit with the arrows in the printer. Push the unit as far as it will go.



7 After you replace the photoconductor kit, reset the photoconductor counter. To reset the counter, see the instruction sheet that came with the new photoconductor kit.

**Warning—Potential Damage:** Resetting the photoconductor counter without replacing the photoconductor may damage your printer and void your warranty.

8 Close the front door.

# Recycling Dell products


To return Dell products for recycling:

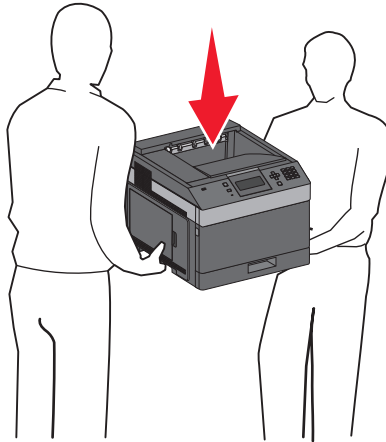
- 1 Visit our Web site at [www.dell.com/recycling](http://www.dell.com/recycling).
- 2 Select your country from the list.
- 3 Follow the instructions on the computer screen.


## Moving the printer

### Before moving the printer

Remove all printer options before moving the printer.

 **CAUTION—POTENTIAL INJURY:** The printer weight is greater than 18 kg (40 lb) and requires two or more trained personnel to move it safely.



 **CAUTION—POTENTIAL INJURY:** Before moving the printer, follow these guidelines to avoid personal injury or printer damage:

- Turn the printer off using the power switch, and then unplug the power cord from the wall outlet.
- Disconnect all cords and cables from the printer before moving it.
- Lift the printer off of the optional drawer and set it aside instead of trying to lift the drawer and printer at the same time.

**Note:** Use the handholds located on both sides of the printer to lift it off the optional drawer.

**Warning—Potential Damage:** Damage to the printer caused by improper moving is not covered by the printer warranty.

### Moving the printer to another location

The printer and options can be safely moved to another location by following these precautions:

- Any cart used to move the printer must have a surface able to support the full footprint of the printer. Any cart used to move the options must have a surface able to support the dimensions of the options.
- Keep the printer in an upright position.

- Avoid severe jarring movements.

## **Shipping the printer**

When shipping the printer, use the original packaging or call the place of purchase for a relocation kit.



# Administrative support

## Using the Embedded Web Server

If the printer is installed on a network, the Embedded Web Server is available for a range of functions including:

- Viewing a virtual display of the printer control panel
- Checking the status of the printer supplies
- Configuring printer settings
- Configuring network settings
- Viewing reports

To access the Embedded Web Server, type the printer IP address into the address field of your Web browser.

## Checking the device status

From the Device Status page of the Embedded Web Server, it is possible to see tray settings, the level of toner in the toner cartridge, the percentage of life remaining in the photoconductor kit, and capacity measurements of certain printer parts. To access the device status:

- 1 Type the printer IP address in the address field of your Web browser.

**Note:** If you do not know the IP address of the printer, print a network setup page and locate the IP address in the TCP/IP section.

- 2 Click the **Device Status** tab.

## Setting up e-mail alerts

You can have the printer send you an e-mail when the supplies are getting low or when the paper needs to be changed, added, or unjammed.

To set up e-mail alerts:

- 1 Type the printer IP address into the address field of your Web browser.

**Note:** If you do not know the IP address of the printer, then print a network setup page and locate the IP address in the TCP/IP section.

- 2 Click **Settings**.
- 3 Under Other Settings, click **E-mail Alert Setup**.
- 4 Select the items for notification, and type in the e-mail addresses.
- 5 Click **Submit**.

**Note:** See your system support person to set up the e-mail server.

# Viewing reports

You can view some reports from the Embedded Web Server. These reports are useful for assessing the status of the printer, the network, and supplies.

To view reports from a network printer:

- 1 Type the printer IP address into the address field of your Web browser.  
**Note:** If you do not know the IP address of the printer, then print a network setup page and locate the IP address in the TCP/IP section.
- 2 Click **Reports**, and then click the type of report you want to view.

# Adjusting Power Saver











Available settings range from 1–240 minutes. The factory default setting is 30 minutes.

To increase or decrease the number of minutes before the printer enters Power Saver mode, do one of the following:

## Using the Embedded Web Server

- 1 Type the printer IP address into the address field of your Web browser.  
**Note:** If you do not know the IP address of the printer, then print a network setup page and locate the IP address in the TCP/IP section.
- 2 Click **Settings**, and then click **General Settings**.
- 3 Click **Timeouts**.
- 4 In the Power Saver box, increase or decrease the number of minutes you want the printer to wait before it enters Power Saver mode.
- 5 Click **Submit**.


## Using the printer control panel

- 1 Make sure the printer is on and **Ready** appears.
- 2 Press .
- 3 Press the up or down arrow button until  **Settings** appears, and then press .
- 4 Press the up or down arrow button until  **General Settings** appears, and then press .
- 5 Press the up or down arrow button until  **Timeouts** appears, and then press .
- 6 Press the up or down arrow button until  **Power Saver** appears, and then press .
- 7 Press the up or down arrow button to increase or decrease the number of minutes before the printer enters Power Saver mode, and then press .

# Restoring the factory default settings

If you want to retain a list of the current menu settings for reference, then print a menu settings page before you restore the factory default settings. For more information, see “Printing a menu settings page” on page 37.

**Warning—Potential Damage:** Restore Now returns most printer settings to the original factory default settings. Exceptions include the display language, custom sizes and messages, and Network/Port menu settings. All downloads stored in RAM are deleted. Downloads stored in flash memory are unaffected.

- 1 From the printer control panel, press .
- 2 Press the down arrow button until **Settings** appears, and then press .
- 3 Press the down arrow button until **General Settings** appears, and then press .
- 4 Press the down arrow button until **Factory Defaults** appears, and then press .
- 5 Press the down arrow button until **Restore Now** appears, and then press .

Wait for **Submitting selection** to appear momentarily, followed by **Restoring Factory Defaults**, before the printer returns to **Ready**.

# Clearing jams

Jam error messages appear on the control panel display and include the area of the printer where the jam occurred. When there is more than one jam, the number of jammed pages is displayed.

## Avoiding jams

The following hints can help you avoid jams.

### Paper tray recommendations

- Make sure the paper lies flat in the tray.
- Do not remove trays while the printer is printing.
- Do not load trays, the multipurpose feeder, or the envelope feeder while the printer is printing. Load them prior to printing, or wait for a prompt to load them.
- Do not load too much paper. Make sure the stack height does not exceed the indicated maximum height.
- Make sure the guides in the paper trays, multipurpose feeder, or envelope feeder are properly positioned and are not pressing too tightly against the paper or envelopes.
- Push all trays in firmly after loading paper.

### Paper recommendations

- Use only recommended paper or specialty media. For more information, see “Paper types and weights supported by the printer” on page 72.
- Do not load wrinkled, creased, damp, bent, or curled paper.
- Flex, fan, and straighten paper before loading it.
- Do not use paper that has been cut or trimmed by hand.
- Do not mix paper sizes, weights, or types in the same stack.
- Make sure all sizes and types are set correctly in the printer control panel menus.
- Store paper per the manufacturer's recommendations.

### Envelope recommendations

- To reduce wrinkling, use the Envelope Enhance menu in the Paper menu.
- Do not feed envelopes that:
  - Have excessive curl or twist
  - Have windows, holes, perforations, cutouts, or embossing
  - Have metal clasps, string ties, or folding bars
  - Have an interlocking design
  - Have postage stamps attached
  - Have any exposed adhesive when the flap is in the sealed or closed position
  - Have bent corners
  - Have rough, cockle, or laid finishes
  - Are stuck together or damaged in any way

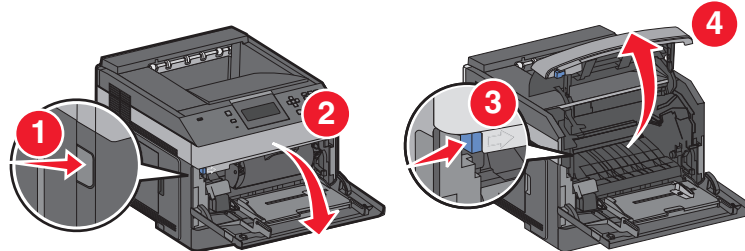
# Understanding jam numbers and locations

When a jam occurs, a message indicating the jam location appears on the display. Open doors and covers and remove trays to access jam locations. To resolve any paper jam message, you must clear all jammed paper from the paper path and then press .

Jam numbers	Area
200–203, 230	Printer
231–239	Optional external duplex unit
241–245	Paper trays
250	Multipurpose feeder
260	Envelope feeder
271–279	Optional output bins
280–282	Staple finisher
283	Staple cartridge

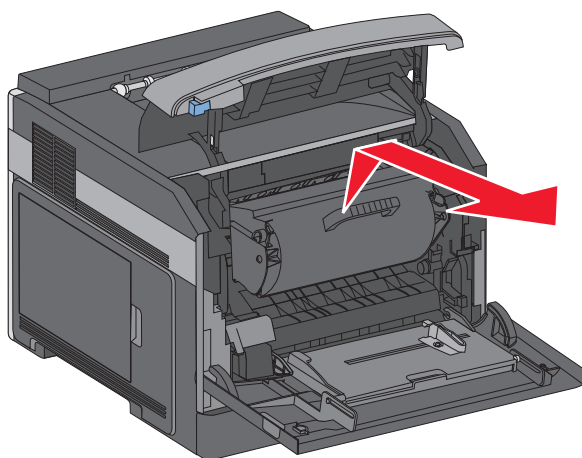
## 200 paper jam

- 1 Push the release latch, and then lower the multipurpose feeder door.
- 2 Push the release latch, and then open the front cover.



- 3 Lift and pull the toner cartridge out of the printer.

**Warning—Potential Damage:** Do not touch the photoconductor drum on the underside of the cartridge. Use the cartridge handle whenever you are holding the cartridge.




4 Place the toner cartridge aside on a flat, smooth surface.

**Warning—Potential Damage:** Do not leave the cartridge exposed to light for extended periods.

**Warning—Potential Damage:** The jammed paper may be covered with unfused toner which can stain garments and skin.

5 Remove the jammed paper.

 **CAUTION—HOT SURFACE:** The inside of the printer might be hot. To reduce the risk of injury from a hot component, allow the surface to cool before touching.

**Note:** If the paper is not easy to remove, then open the rear door and remove the paper from there.

6 Align and reinstall the toner cartridge.

7 Close the front cover.

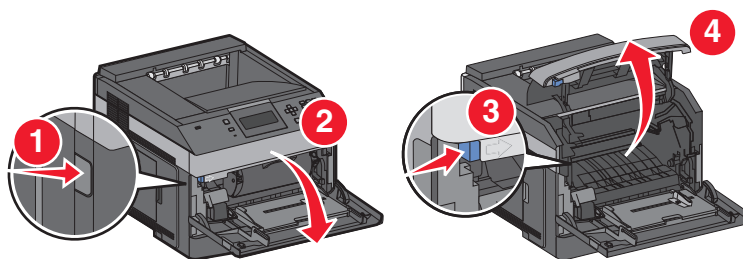
8 Close the multipurpose feeder door.

9 Press .

## 201 paper jam

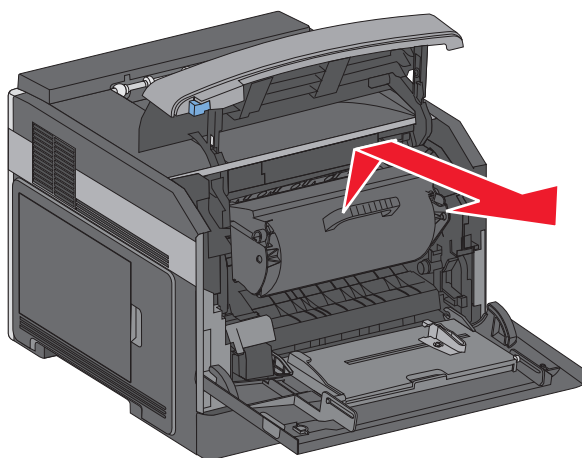
1 Push the release latch, and then lower the multipurpose feeder door.

2 Push the release latch, and then open the front cover.



3 Lift and pull the toner cartridge out of the printer.

**Warning—Potential Damage:** Do not touch the photoconductor drum on the underside of the cartridge. Use the cartridge handle whenever you are holding the cartridge.



4 Place the toner cartridge aside on a flat, smooth surface.

**Warning—Potential Damage:** Do not leave the cartridge exposed to light for extended periods.

**Warning—Potential Damage:** The jammed paper may be covered with unfused toner which can stain garments and skin.

5 Remove the jammed paper.



**CAUTION—HOT SURFACE:** The inside of the printer might be hot. To reduce the risk of injury from a hot component, allow the surface to cool before touching.

**Note:** If the paper is not easy to remove, then open the rear door and remove the paper from there.

6 Align and reinstall the toner cartridge.

7 Close the front cover.

8 Close the multipurpose feeder door.

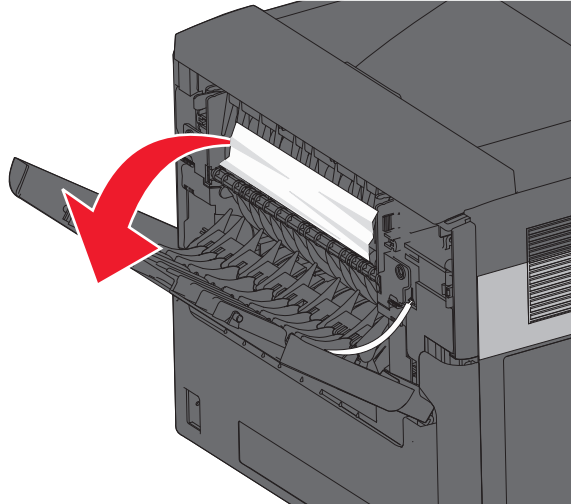
9 Press

## 202 and 203 paper jams

If the paper is exiting the printer, then pull the paper out, and then press .

If the paper is not exiting the printer:

- 1 Pull down the top rear door.

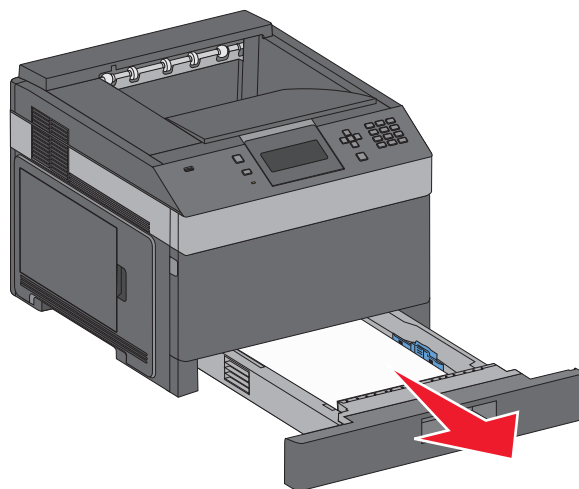


- 2 Slowly remove the jammed paper to avoid tearing it.
- 3 Close the top rear door.
- 4 Press .

## 230 paper jam

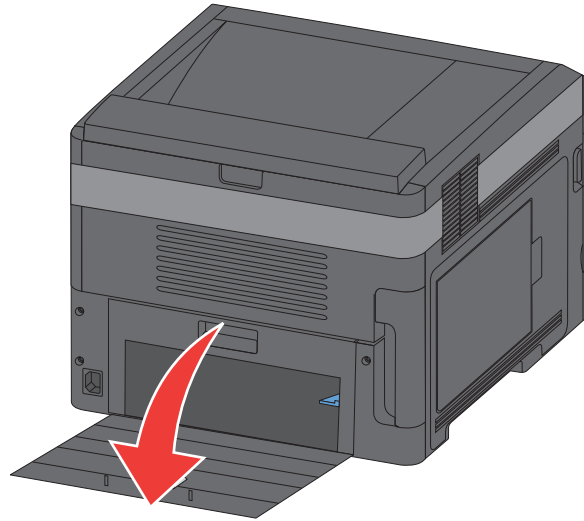
### Rear paper jams

- 1 Remove the standard tray from the printer.

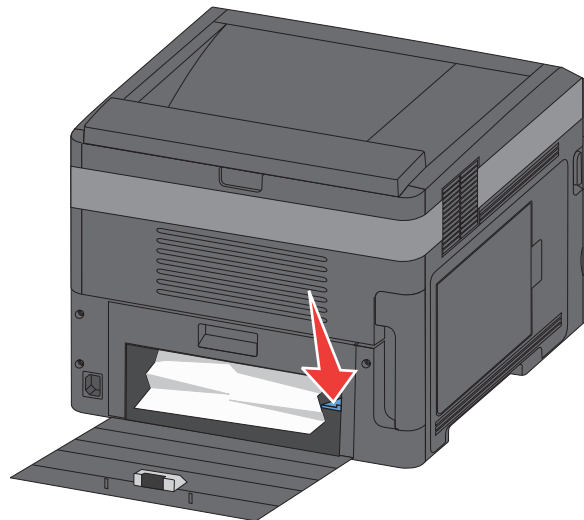




**2** Pull down the bottom rear door.



**3** Push the tab down.



**4** Remove the jammed paper.

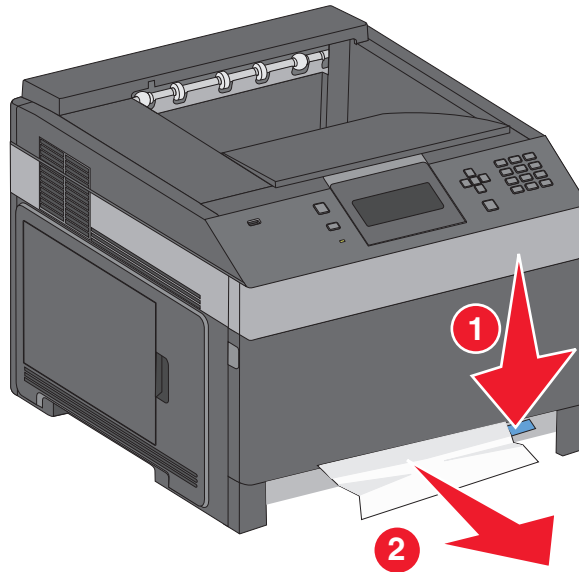
**5** Close the bottom rear door.

**6** Insert the standard tray.

**7** Press .

## Front paper jams

- 1 Remove the standard tray from the printer.
- 2 Push the tab down.

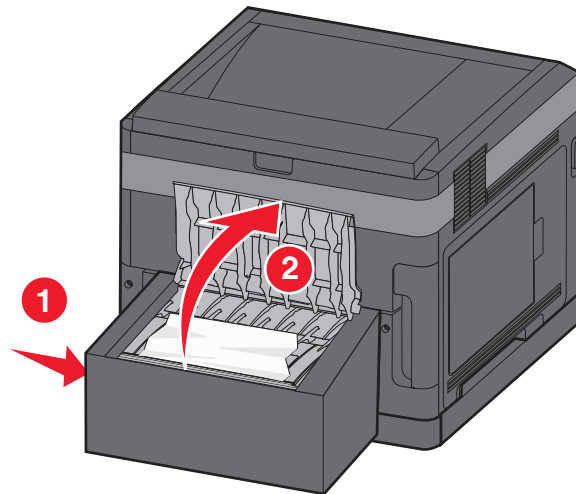


- 3 Remove the jammed paper.
- 4 Insert the standard tray.
- 5 Press .

## 231–239 paper jams (optional external duplex unit)

### Rear paper jams

- 1 Push in and hold the latch while pulling up the rear duplex door.



- 2 Remove the jammed paper.

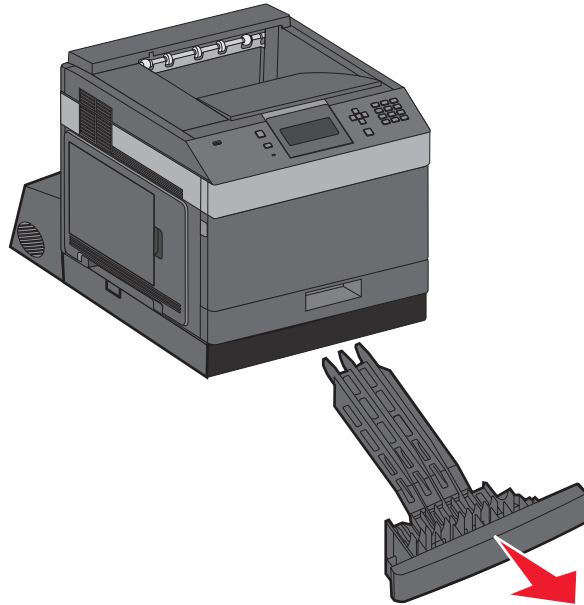
3 Close the rear duplex door.

4 Press .

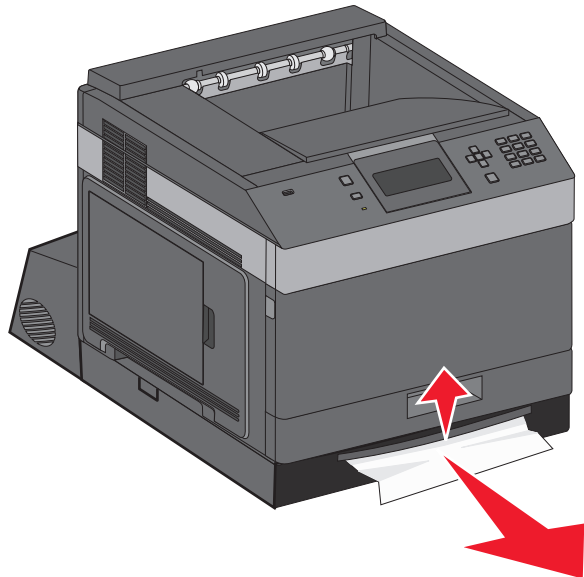
## Front paper jams

1 Remove the standard tray from the printer.

2 Remove the duplex jam access tray.



3 Raise the recessed duplex bar.



4 Remove the jammed paper.

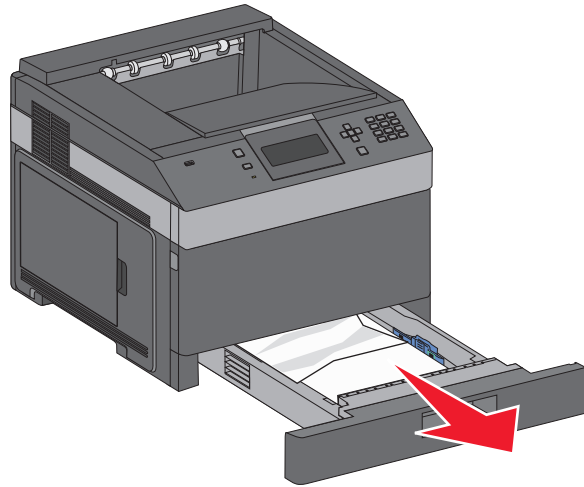
5 Replace the duplex jam access tray.

6 Insert the standard tray.

7 Press .

## 241–245 paper jams

1 Pull out the tray indicated on the display.



2 Remove any jammed paper, and then insert the tray.

3 Press .

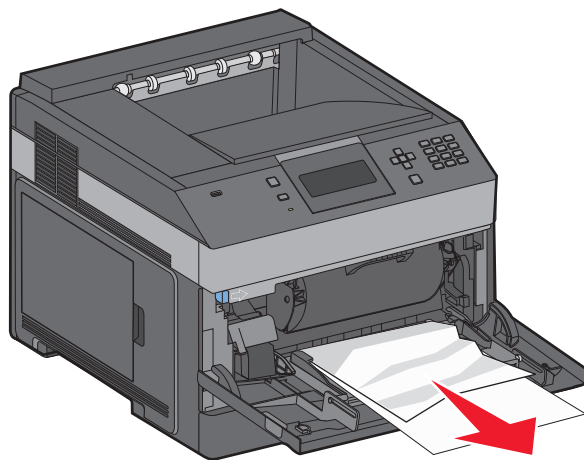
4 If the jam message persists for a 250-sheet or 550-sheet tray, then remove the tray from the printer.

5 Remove the jammed paper, and then insert the tray.

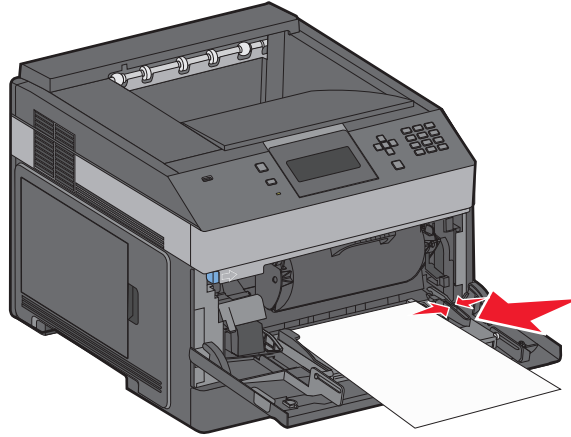
6 Press .

## 250 paper jam

1 Remove the paper from the multipurpose feeder.



- 2 Flex the sheets of paper back and forth to loosen them, and then fan them. Do not fold or crease the paper. Straighten the edges on a level surface.
- 3 Load the paper into the multipurpose feeder.
- 4 Slide the paper guide toward the inside of the tray until it lightly rests against the edge of the paper.

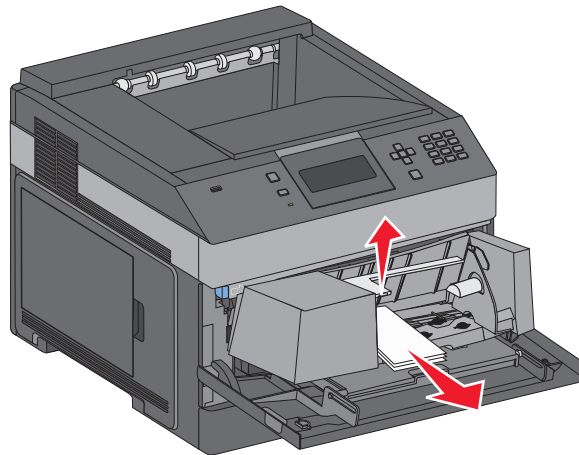


- 5 Press .

## 260 paper jam

The envelope feeder feeds envelopes from the bottom of the stack. The bottom envelope is jammed.

- 1 Lift the envelope weight, and then remove all the envelopes.



- 2 If the jammed envelope cannot be pulled out, lift the envelope feeder up and then out of the printer, and then set it aside.
- 3 Remove the envelope from the printer.  
**Note:** If you cannot remove the envelope, then the toner cartridge will have to be removed. For more information, see "200 paper jam" on page 141.
- 4 Reinstall the envelope feeder. Make sure it *clicks* into place.
- 5 Flex and stack the envelopes.

- 6 Load the envelopes in the envelope feeder.
- 7 Adjust the paper guide.
- 8 Lower the envelope weight.
- 9 Press .

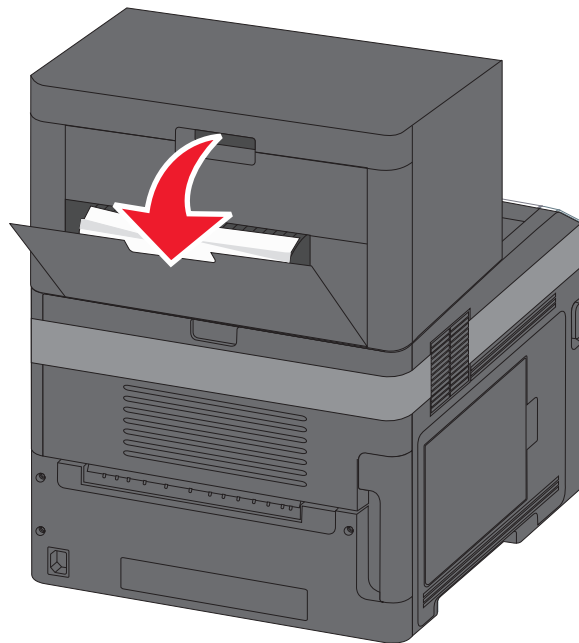
## 271–279 paper jams

To clear a jam in the output expander, high-capacity output stacker, the 5-bin mailbox, or the staple finisher:

- 1 If the paper is exiting into a bin, then pull the paper straight out, and then press .  
If not, then continue with step 2.
- 2 Pull down the output bin door or doors.
- 3 Remove the jammed paper.
- 4 Close the output bin door or doors.
- 5 Press .

## 280 paper jams

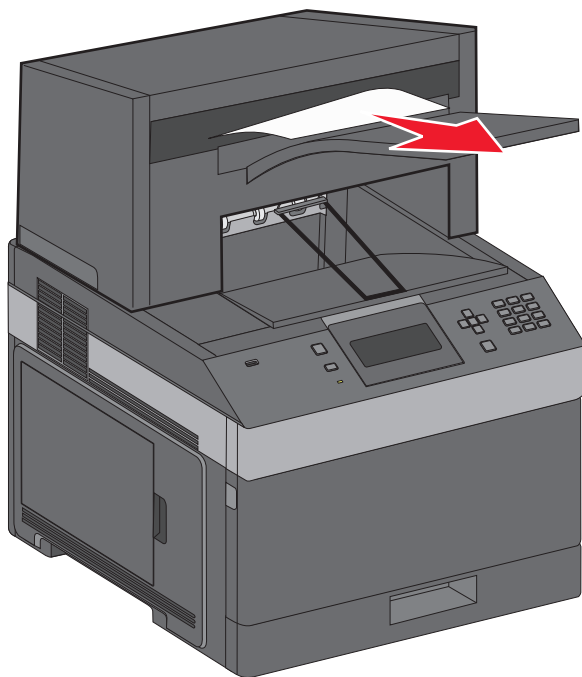
- 1 Pull down the staple finisher door.



- 2 Remove the jammed paper.
- 3 Close the staple finisher door.
- 4 Press .

## 281 paper jam

- 1 Clear the jam from the stapler output bin.

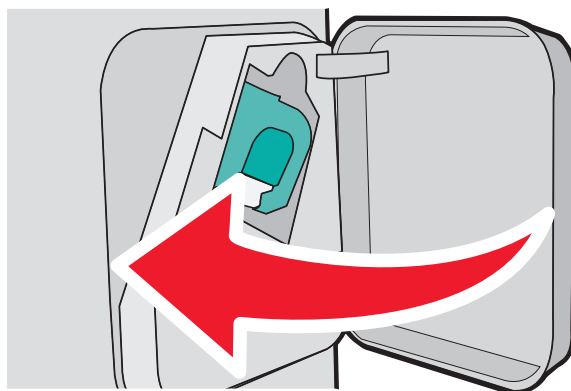


- 2 Press .

## 282 paper jam

To prevent paper jams, the stapler motor does not run when the stapler door is open.

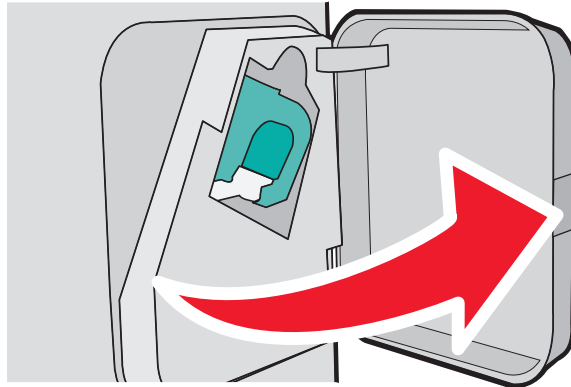
- 1 Close the stapler door until it *clicks* into place.



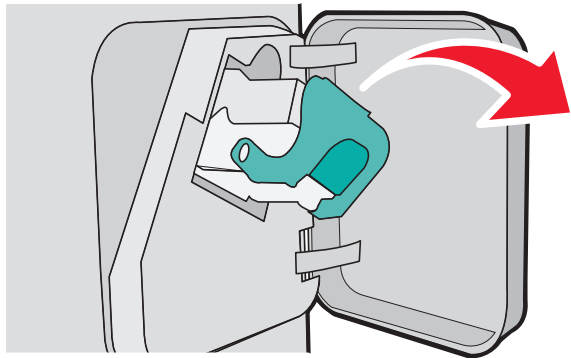
- 2 Press .

## 283 staple jam

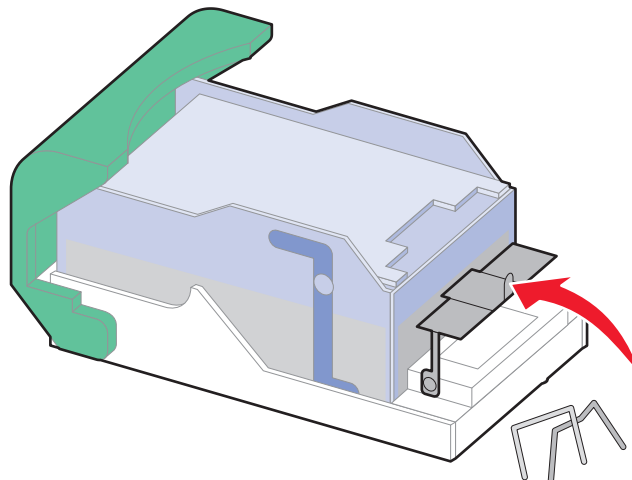
1 Press the latch to open the stapler door.



2 Pull the latch of the staple cartridge holder down, and then pull the holder out of the printer.

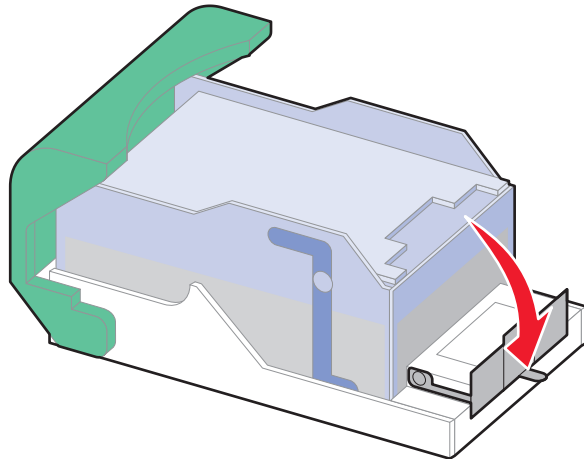


3 Use the metal tab to lift the staple guard, and then remove any loose staples.





**4** Press down on the staple guard until it *snaps* into place.



**5** Push the cartridge holder firmly back into the stapler unit until the cartridge holder *clicks* into place.

**6** Close the stapler door.

**7** Press .

# Troubleshooting

## Solving basic problems

### Solving basic printer problems

If there are basic printer problems, or the printer is unresponsive, make sure:

- The power cord is plugged into the printer and a properly grounded electrical outlet.
- The electrical outlet is not turned off by any switch or breaker.
- The printer is not plugged into any surge protectors, uninterrupted power supplies, or extension cords.
- Other electronic equipment plugged into the outlet is working.
- The printer is turned on. Check the printer power switch.
- The printer cable is securely attached to the printer and the host computer, print server, option, or other network device.
- All options are properly installed.
- The printer driver settings are correct.

Once you have checked each of these possibilities, turn the printer off, wait for about 10 seconds, and then turn the printer back on. This often fixes the problem.

### Embedded Web Server does not open

These are possible solutions. Try one or more of the following:

#### CHECK THE NETWORK CONNECTIONS

Make sure the printer and computer are turned on and connected to the same network.

#### CHECK THE NETWORK SETTINGS

Depending on the network settings, you may need to type `https://` instead of `http://` before the printer IP address to access the Embedded Web Server. For more information, see your system administrator.

# Understanding printer messages

When **Manual Feeder** appears on the display, it refers to the multipurpose feeder.

## Change <input src> to <Custom Type Name>

You can change the current paper source for the remainder of the print job. The formatted page will print on the paper loaded in the selected tray. This may cause clipping of text or images. Try one or more of the following:

- To select the paper tray with the correct paper size or type, press the up or down arrow button until **✓ Paper Changed, Continue** appears, and then press .
- To ignore the message and print from the tray selected for the print job, press the up or down arrow button until **✓ Use Current <Src>** appears, and then press .
- To cancel the current print job, press the up or down arrow button until **✓ Cancel job** appears, and then press .
- For more information, press the up or down arrow button until **✓ Show me** or **✓ Tell me more** appears, and then press .

## Change <input src> to <Custom String>

You can change the current paper source for the remainder of the print job. The formatted page will print on the paper loaded in the selected tray. This may cause clipping of text or images. Try one or more of the following:

- To select the paper tray with the correct paper size or type, press the up or down arrow button until **✓ Paper Changed, Continue** appears, and then press .
- To ignore the message and print from the tray selected for the print job, press the up or down arrow button until **✓ Use Current <Src>** appears, and then press .
- To cancel the current print job, press the up or down arrow button until **✓ Cancel job** appears, and then press .
- For more information, press the up or down arrow button until **✓ Show me** or **✓ Tell me more** appears, and then press .

## Change <input src> to <size>

You can change the current paper source for the remainder of the print job. The formatted page will print on the paper loaded in the selected tray. This may cause clipping of text or images. Try one or more of the following:

- To select the paper tray with the correct paper size or type, press the up or down arrow button until **✓ Paper Changed, Continue** appears, and then press .
- To ignore the message and print from the tray selected for the print job, press the up or down arrow button until **✓ Use Current <Src>** appears, and then press .

- To cancel the current print job, press the up or down arrow button until **✓ Cancel job** appears, and then press .
- For more information, press the up or down arrow button until **✓ Show me** or **✓ Tell me more** appears, and then press .

## Change <input src> to <type> <size>

You can change the current paper source for the remainder of the print job. The formatted page will print on the paper loaded in the selected tray. This may cause clipping of text or images. Try one or more of the following:

- To select the paper tray with the correct paper size or type, press the up or down arrow button until **✓ Paper Changed, Continue** appears, and then press .
- To ignore the message and print from the tray selected for the print job, press the up or down arrow button until **✓ Use Current <Src>** appears, and then press .
- To cancel the current print job, press the up or down arrow button until **✓ Cancel job** appears, and then press .
- For more information, press the up or down arrow button until **✓ Show me** or **✓ Tell me more** appears, and then press .

## Check duplex connection

Try one or more of the following:

- Turn the printer off and then back on.

If the error occurs a second time:

- 1 Turn the printer off.
- 2 Unplug the power cord from the wall outlet.
- 3 Remove the duplex unit.
- 4 Reattach the duplex unit.
- 5 Connect the power cord to a properly grounded outlet.
- 6 Restart the printer.

If the error occurs again:

- 1 Turn the printer off.
  - 2 Unplug the power cord from the wall outlet.
  - 3 Remove the duplex unit.
  - 4 Contact Customer Support.
- Press the up or down arrow button until **✓ Continue** appears, and then press  to clear the message and print without using the duplex unit.

## Check tray <x> connection



Try one or more of the following:

- Turn the printer off and then back on.

If the error occurs a second time:

- 1 Turn the printer off.
- 2 Unplug the power cord from the wall outlet.
- 3 If an optional duplex unit is installed, then remove it.
- 4 Remove the indicated tray.
- 5 Reattach the tray.
- 6 Connect the power cord to a properly grounded outlet.
- 7 Restart the printer.

If the error occurs again:

- 1 Turn the printer off.
  - 2 Unplug the power cord from the wall outlet.
  - 3 Remove the tray.
  - 4 Contact Customer Support.
- Press the up or down arrow button until  **Continue** appears, and then press  to clear the message and print without using the tray.

## Close door <x>

Close the specified door.

## Close door or insert cartridge

The cartridge is missing or not installed correctly. Insert the cartridge, and then close all doors and covers.


## Close finisher side door

Close the finisher side door to clear the message.

## Close finisher top cover

Close the finisher top cover to clear the message.

## Disk Corrupted

The printer attempted to recover a disk, but was not able to do so. **Format Disk** appears. Press  to reformat the disk.

**Note:** Reformatting the disk deletes all the files currently stored on the disk.

## Insert tray <x>

Insert the specified tray into the printer.



## Install output bin <x> or cancel print job

Try one or more of the following:

- Install the specified bin:
  - 1 Turn the printer off.
  - 2 Unplug the power cord from the wall outlet.
  - 3 Install the specified bin.
  - 4 Connect the power cord to a properly grounded outlet.
  - 5 Restart the printer.
- Cancel the current job.



## Install duplex unit or cancel print job

Try one or more of the following:

- Install the duplex unit:
  - 1 Turn the printer off.
  - 2 Unplug the power cord from the wall outlet.
  - 3 Install the duplex unit.
  - 4 Connect the power cord to a properly grounded outlet.
  - 5 Restart the printer.
- Cancel the print job. Press the up or down arrow button until  **Cancel** job appears, and then press .

## Install envelope feeder or cancel print job



Try one or more of the following:

- Install the envelope feeder:
  - 1 Turn the printer off.
  - 2 Unplug the power cord from the wall outlet.
  - 3 Install the envelope feeder.
  - 4 Connect the power cord to a properly grounded outlet.
  - 5 Restart the printer.
- Cancel the print job. Press the up or down arrow button until  **Cancel** job appears, and then press .

## Install Tray <x> or Cancel Print Job

The printer is requesting that a specified device be installed so it can print a job.

Try one or more of the following:

- Insert the specified tray.
- Cancel the print job. Press the up or down arrow button until  **Cancel** job appears, and then press .

## Install MICR Cartridge

The printer does not have a MICR cartridge installed. Install a MICR cartridge to continue printing.

## Load <input src> with <Custom Type Name>

Try one or more of the following:

- Load the specified paper into the specified source to clear the message and continue printing.
- Cancel the print job. Press the up or down arrow button until **✓ Cancel job** appears, and then press .

## Load <input src> with <Custom String>

Try one or more of the following:

- Load the specified paper into the specified source to clear the message and continue printing.
- Cancel the print job. Press the up or down arrow button until **✓ Cancel job** appears, then press .

## Load <input src> with <size>

Try one or more of the following:

- Load the specified paper into the specified source to clear the message and continue printing.
- Cancel the print job. Press the up or down arrow button until **✓ Cancel job** appears, then press .

## Load <input src> with <type> <size>

Try one or more of the following:

- Load the specified paper into the specified source to clear the message and continue printing.
- Cancel the print job. Press the up or down arrow button until **✓ Cancel job** appears, and then press .

## Load Manual Feeder with <Custom Type Name>

Try one or more of the following:

- Load the multipurpose feeder with the correct paper type and size.  
If the printer finds a tray that has paper of the correct type, it uses the paper from that tray. If the printer cannot find a tray with the correct paper type, it prints on the paper that is loaded in the default paper source.
- Press the up or down arrow button until **✓ Cancel job** appears, and then press  to cancel the print job.

## Load Manual Feeder with <Custom String>

Try one or more of the following:

- Load the multipurpose feeder with the correct paper type and size.
- Ignore the request and print on paper that is already being used in one of the trays. Press the up or down arrow button until **✓ Automatically select paper** appears, and then press .

If the printer finds a tray that has paper of the correct type, it uses the paper from that tray. If the printer cannot find a tray with the correct paper type, it prints on the paper that is installed in the default paper source.

- Cancel the print job. Press the up or down arrow button until **✓ Cancel job** appears, and then press .

## Load Manual Feeder with <size>

Try one or more of the following:

- Load the multipurpose feeder with the correct paper size.  
If there is no paper in the multipurpose feeder, then feed a sheet of paper to clear the message.
- Ignore the request and print on paper that is already being used in one of the input sources. Press the up or down arrow button until **✓ Automatically select** appears, and then press .  
If the printer finds a source that has paper of the correct type, it uses the paper from that source. If the printer cannot find a source with the correct paper type, it prints on the paper that is installed in the default paper source.
- Cancel the print job. Press the up or down arrow button until **✓ Cancel job** appears, and then press .

## Load Manual Feeder with <type> <size>

Try one or more of the following:

- Load the correct paper type and size in the multipurpose feeder.
- Ignore the request and print on paper that is already being used in one of the input sources. Press the up or down arrow button until **✓ Automatically select** appears, and then press . The current job may not print correctly.  
If the printer finds a source that has paper of the correct type, it uses the paper from that source. If the printer cannot find a source with the correct paper type, it prints on the paper that is installed in the default paper source.
- Cancel the print job. Press the up or down arrow button until **✓ Cancel job** appears, and then press .

## Load staples

Try one or more of the following:

- Replace the specified staple cartridge in the finisher.
- Press the up or down arrow button until **✓ Continue** appears, and then press  to clear the message and continue printing.
- Cancel the print job. Press the up or down arrow button until **✓ Cancel job** appears, and then press .

## Reattach bin <x>

Try one or more of the following:

- Turn the printer off and then back on.



If the error occurs a second time:

- 1 Turn the printer off.
- 2 Unplug the power cord from the wall outlet.
- 3 Remove the specified bin.
- 4 Reattach the bin.



- 5 Connect the power cord to a properly grounded outlet.
- 6 Restart the printer.

If the error occurs again:

- 1 Turn the printer off.
  - 2 Unplug the power cord from the wall outlet.
  - 3 Remove the specified bin.
  - 4 Contact Customer Support.
- Press the up or down arrow button until  **Continue** appears, and then press  to clear the message and print without using the specified bin.

## Reattach bin <x> – <y>



Try one or more of the following:

- Turn the printer off and then back on.

If the error occurs a second time:

- 1 Turn the printer off.
- 2 Unplug the power cord from the wall outlet.
- 3 Remove the specified bins.
- 4 Reattach the bins.
- 5 Connect the power cord to a properly grounded outlet.
- 6 Restart the printer.

If the error occurs again:

- 1 Turn the printer off.
  - 2 Unplug the power cord from the wall outlet.
  - 3 Remove the specified bins.
  - 4 Contact Customer Support.
- Press the up or down arrow button until  **Continue** appears, and then press  to clear the message and print without using the specified bins.

## Reattach envelope feeder

Try one or more of the following:

- Turn the printer off and then back on.

If the error occurs a second time:

- 1 Turn the printer off.
- 2 Unplug the power cord from the wall outlet.
- 3 Remove the envelope feeder.
- 4 Reattach the envelope feeder.
- 5 Connect the power cord to a properly grounded outlet.
- 6 Restart the printer.

If the error occurs again:

- 1 Turn the printer off.
  - 2 Unplug the power cord from the wall outlet.
  - 3 Remove the envelope feeder.
  - 4 Contact Customer Support.
- Press the up or down arrow button until **✓ Continue** appears, and then press  to clear the message and print without using the envelope feeder.

## Remove paper from standard output bin

Remove the stack of paper from the standard exit bin.

## Remove paper from bin <x>

Remove the paper from the specified bin. The printer automatically senses paper removal and resumes printing.

If removing the paper does not clear the message, then press the up or down arrow button until **✓ Continue** appears, and then press .

## Remove paper from all bins

Output bins have reached their capacity. Remove paper from all output bins to clear the message and continue printing.

## Remove paper from <linked set bin name>

Remove the paper from the specified bin. The printer automatically senses paper removal and resumes printing.

If removing the paper does not clear the message, then press the up or down arrow button until **✓ Continue** appears, and then press  to clear the message.

## Unsupported disk

An unsupported printer hard disk has been installed. Remove the unsupported device, and then install a supported one.

## 30.yy Invalid refill, change cartridge

An unsupported, refilled toner cartridge is installed. Remove the toner cartridge, and then install a new one.

## 31.yy Replace defective or missing cartridge

The toner cartridge is either missing or not functioning properly.

Try one or more of the following:

- Remove the toner cartridge, and then reinstall it.
- Remove the toner cartridge, and then install a new one.

## 32.yy Cartridge part number unsupported by device

Remove the toner cartridge, and then install a supported one.

## 34 Short paper

Try one or more of the following:

- Load the appropriate paper in the tray.
- Press the up or down arrow button until **✓ Continue** appears, and then press  to clear the message and print the job using a different paper tray.
- Check tray length and width guides and make sure the paper is properly loaded in the tray.
- For Windows users, check the Print Properties settings to make sure the print job is requesting the correct paper size and type.  
For Macintosh users, check the Print dialog settings to make sure the print job is requesting the correct paper size and type.
- Check that the paper size is correctly set. For example, if the MP Feeder Size is set to Universal, make sure the paper is large enough for the data being printed.
- Cancel the current print job. Press the up or down arrow button until **✓ Cancel job** appears, and then press .

## 35 Insufficient memory to support Resource Save feature

Try one or more of the following:

- Press the up or down arrow button until **✓ Continue** appears, and then press  to disable Resource Save and continue printing.
- To enable Resource Save after receiving this message, make sure the link buffers are set to Auto, and then exit the menus to activate the link buffer changes. When **Ready** appears, enable Resource Save.
- Install additional memory.

## 37 Insufficient memory to collate job

Try one or more of the following:

- Press the up or down arrow button until **✓ Continue** appears, and then press  to print the portion of the job already stored and begin collating the rest of the print job.
- Cancel the current print job. Press the up or down arrow button until **✓ Cancel job** appears, and then press .

## 37 Insufficient memory for Flash Memory Defragment operation

Try one or more of the following:

- Press the up or down arrow button until **✓ Continue** appears, and then press  to stop the defragment process and continue printing.
- Delete fonts, macros, and other data in printer memory.
- Install additional printer memory.

## 37 Insufficient memory, some held jobs were deleted

The printer deleted some held jobs in order to process current jobs.

Press the up or down arrow button until  $\checkmark$  **Continue** appears, and then press  to clear the message.

## 38 Memory full

Try one or more of the following:

- Press the up or down arrow button until  $\checkmark$  **Continue** appears, and then press  to clear the message.
- Cancel the current print job. Press the up or down arrow button until  $\checkmark$  **Cancel job** appears, and then press .
- Install additional printer memory.

## 39 Complex page, some data may not have printed

Try one or more of the following:

- Press the up or down arrow button until  $\checkmark$  **Continue** appears, and then press  to clear the message and continue printing.
- Cancel the current print job. Press the up or down arrow button until  $\checkmark$  **Cancel job** appears, and then press .
- Install additional printer memory.

## 50 PPDS font error

Try one or more of the following:

- Press the up or down arrow button until  $\checkmark$  **Continue** appears, and then press  to clear the message and continue printing.
- The printer cannot find a requested font. From the PPDS menu, select **Best Fit**, and then select **On**. The printer will find a similar font and reformat the affected text.
- Cancel the current print job. Press the up or down arrow button until  $\checkmark$  **Cancel job** appears, and then press .



## 52 Not enough free space in flash memory for resources

Try one or more of the following:

- Press the up or down arrow button until  $\checkmark$  **Continue** appears, and then press  to stop the defragment operation and continue printing.  
Downloaded fonts and macros not previously stored in flash memory are deleted.
- Delete fonts, macros, and other data stored in flash memory.
- Upgrade to a larger capacity flash memory card.



## 53 Unformatted flash detected

Try one or more of the following:

- Press the up or down arrow button until  **CONTINUE** appears, and then press  to stop the defragment operation and continue printing.
- Format the flash memory. If the error message remains, the flash memory may be defective and require replacing.

## 54 Standard network software error

Try one or more of the following:

- Press the up or down arrow button until  **CONTINUE** appears, and then press  to clear the message
- Turn the printer off and then back on to reset the printer.
- Upgrade (flash) the network firmware in the printer or print server.

## 55 Unsupported option in slot <x>



<x> is a slot on the printer system board.

Try one or more of the following:

- 1 Turn the printer power off.
- 2 Unplug the power cord from the wall outlet.
- 3 Remove the unsupported option card from the printer system board.
- 4 Connect the power cord to a properly grounded outlet.
- 5 Turn the printer power back on.



## 56 Standard USB port disabled

Try one or more of the following:

- Press the up or down arrow button until  **CONTINUE** appears, and then press  to clear the message.  
The printer discards any data received through the USB port.
- Make sure the USB Buffer menu item is not set to Disabled.

## 56 Standard parallel port disabled

Try one or more of the following:

- Press the up or down arrow button until  **CONTINUE** appears, and then press  to clear the message.  
The printer discards any data received through the parallel port.
- Make sure the Parallel Buffer menu item is not set to Disabled.

## 58 Too many disks installed



- 1 Turn the printer off.
- 2 Unplug the power cord from the wall outlet.

- 3 Remove the extra disks.
- 4 Connect the power cord to a properly grounded outlet.
- 5 Turn the printer back on.

## 58 Too many flash options installed

Too many optional flash memory cards or too many optional firmware cards are installed on the printer.

Try one or more of the following:

- Press the up or down arrow button until  **Continue** appears, and then press  to clear the message and continue printing.
- Remove extra flash options:
  - 1 Turn the printer off.
  - 2 Unplug the power cord from the wall outlet.
  - 3 Remove extra flash options.
  - 4 Connect the power cord to a properly grounded outlet.
  - 5 Turn the printer back on.



## 58 Too Many Trays Attached

- Turn the printer off.
- Unplug the power cord from the wall outlet.
- Remove the excess trays.
- Turn the printer back on.

## 59 Incompatible Duplex

Only options designed specifically for this printer are supported.


Try one or more of the following:

- Remove the duplex unit.
- Press the up or down arrow button until  **Continue** appears, and then press  to clear the message and continue printing without using the duplex unit.

## 59 Incompatible envelope feeder

Only options designed specifically for this printer are supported.



Try one or more of the following:

- Remove the envelope feeder.
- Press  to clear the message and continue printing without using the envelope feeder.

## 59 Incompatible output bin <x>

Only options designed specifically for this printer are supported.



Try one or more of the following:

- Remove the specified output bin.
- Press the up or down arrow button until  **Continue** appears, and then press  to clear the message and continue printing without using the specified output bin.

## 59 Incompatible tray <x>

Only options designed specifically for this printer are supported.

Try one or more of the following:

- Remove the specified tray.
- Press the up or down arrow button until  **Continue** appears, and then press  to clear the message and continue printing without using the specified tray.

## 61 Defective disk

Install a different hard disk before performing any operations that require a hard disk.



## 80 Routine maintenance needed

The printer needs to have routine maintenance done. Order a maintenance kit, which contains all the items necessary to replace the pick rollers, the charge roll, the transfer roller, and the fuser.

## 84 PC Kit life warning

The photoconductor kit is near exhaustion.



Try one or more of the following:

- Replace the photoconductor kit.
- Press the up or down arrow button until  **Continue** appears, and then press  to clear the message and continue printing.

## 84 Replace PC Kit



The photoconductor kit is exhausted. Install a new photoconductor kit.

## 88 Cartridge low

The toner is low. Replace the toner cartridge, and then press the up or down arrow button until  **Continue** appears, and then press  to clear the message and continue printing.

## 88.yy Replace cartridge

The toner cartridge is exhausted.

- 1 Replace the toner cartridge.
- 2 Press the up or down arrow button until  **Continue** appears, and then press  to clear the message.

## 1565 Emulation error, load emulation option

The printer automatically clears the message in 30 seconds and then disables the download emulator on the firmware card.

## Solving printing problems

### Multiple-language PDFs do not print

The documents contain unavailable fonts.

- 1 Open the document you want to print in Adobe Acrobat.
- 2 Click the printer icon.  
The Print dialog appears.
- 3 Select **Print as image**.
- 4 Click **OK**.

### Printer control panel display is blank or displays only diamonds

The printer self test failed. Turn the printer off, wait about 10 seconds, and then turn the printer back on. If the clock graphic and **Ready** do not appear, then turn the printer off and contact Customer Support.

### Jobs do not print

These are possible solutions. Try one or more of the following:

#### **MAKE SURE THE PRINTER IS READY TO PRINT**

Make sure **Ready** or **Power Saver** appears on the display before sending a job to print.

#### **CHECK TO SEE IF THE STANDARD EXIT BIN IS FULL**

Remove the stack of paper from the standard exit bin.

#### **CHECK TO SEE IF THE PAPER TRAY IS EMPTY**

Load paper in the tray.

#### **MAKE SURE THE CORRECT PRINTER SOFTWARE IS INSTALLED**

- Verify that you are using the correct printer software.
- If you are using a USB port, make sure you are running a supported operating system and using compatible printer software.



## **MAKE SURE THE INTERNAL PRINT SERVER IS INSTALLED PROPERLY AND WORKING**

- Make sure the internal print server is properly installed and that the printer is connected to the network.
- Print a network setup page and check that the status shows **Connected**. If the status is **Not Connected**, check the network cables, and then try printing the network setup page again. Contact your system support person to make sure the network is functioning correctly.

## **MAKE SURE YOU ARE USING A RECOMMENDED USB, SERIAL, OR ETHERNET CABLE**

### **MAKE SURE PRINTER CABLES ARE SECURELY CONNECTED**

Check the cable connections to the printer and print server to make sure they are secure.

For more information, see the setup documentation that came with the printer.

## **Confidential and other held jobs do not print**

These are possible solutions. Try one or more of the following:

### **PARTIAL JOB, NO JOB, OR BLANK PAGES PRINT**

The print job may contain a formatting error or invalid data.

- Delete the print job, and then print it again.
- For PDF documents, recreate the PDF and then print it again.

### **MAKE SURE THE PRINTER HAS SUFFICIENT MEMORY**

Free up additional printer memory by scrolling through the list of held jobs and deleting some of them.








## **Job takes longer than expected to print**

These are possible solutions. Try one or more of the following:

### **REDUCE THE COMPLEXITY OF THE PRINT JOB**

Eliminate the number and size of fonts, the number and complexity of images, and the number of pages in the job.

### **CHANGE THE PAGE PROTECT SETTING TO OFF**

- 1 From the printer control panel, press .
- 2 Press the up or down arrow button until  **Settings** appears, and then press .
- 3 Press the up or down arrow button until  **General Settings** appears, and then press .
- 4 Press the up or down arrow button until  **Print Recovery** appears, and then press .

5 Press the up or down arrow button until  $\surd$  **Page Protect** appears, and then press  $\surd$ .

6 Press the up or down arrow button until  $\surd$  **Off** appears, and then press  $\surd$ .

## Job prints from the wrong tray or on the wrong paper

### CHECK THE PAPER TYPE SETTING

Make sure the paper type setting matches the paper loaded in the tray:

- 1 From the printer control panel Paper menu, check the Paper Type setting.
- 2 Before sending the job to print, specify the correct type setting:
  - For Windows users, specify the type from Print Properties.
  - For Macintosh users, specify the type from the Print dialog.

## Incorrect characters print

### MAKE SURE THE PRINTER IS NOT IN HEX TRACE MODE

If **Ready Hex** appears on the display, then you must exit Hex Trace mode before you can print your job. Turn the printer off and back on to exit Hex Trace mode.

## Tray linking does not work

These are possible solutions. Try one or more of the following:

### LOAD THE SAME SIZE AND TYPE OF PAPER

- Load the same size and type of paper in each tray to be linked.
- Move the paper guides to the correct positions for the paper size loaded in each tray.

### USE THE SAME PAPER SIZE AND PAPER TYPE SETTINGS

- Print a menu settings page and compare the settings for each tray.
- If necessary, adjust the settings from the Paper Size/Type menu.

**Note:** The multipurpose feeder does not automatically sense the paper size. You must set the size from the Paper Size/Type menu.

## Large jobs do not collate

These are possible solutions. Try one or more of the following:

### MAKE SURE COLLATE IS SET TO ON

From the Finishing menu or Print Properties, set Collate to On.

**Note:** Setting Collate to Off in the software overrides the setting in the Finishing menu.

## REDUCE THE COMPLEXITY OF THE PRINT JOB











Reduce the complexity of the print job by eliminating the number and size of fonts, the number and complexity of images, and the number of pages in the job.

## MAKE SURE THE PRINTER HAS ENOUGH MEMORY

Add printer memory or an optional hard disk.

## Unexpected page breaks occur

Increase the Print Timeout value:

- 1 From the printer control panel, press .
- 2 Press the up or down arrow button until  **Settings** appears, and then press .
- 3 Press the up or down arrow button until  **General Settings** appears, and then press .
- 4 Press the up or down arrow button until  **Timeouts** appears, and then press .
- 5 Press the up or down arrow button until  **Print Timeout** appears, and then press .
- 6 Press the up or down arrow button until the value you want appears, and then press .

## Solving option problems

Settings chosen from the software program or application can change or override settings chosen from the printer control panel. If an option is not functioning, then make sure it is selected in the software as well as the printer control panel.

## Option does not operate correctly or quits after it is installed

These are possible solutions. Try one or more of the following:

### RESET THE PRINTER

Turn the printer off, wait about 10 seconds, and then turn the printer on.

### CHECK TO SEE IF THE OPTION IS CONNECTED TO THE PRINTER

- 1 Turn the printer off.
- 2 Unplug the printer.
- 3 Check the connection between the option and the printer.

### MAKE SURE THE OPTION IS INSTALLED CORRECTLY

## **MAKE SURE THE OPTION IS SELECTED**

From the computer you are printing from, select the option. For more information, see “Updating available options in the printer driver” on page 39.

## **Paper trays**

These are possible solutions. Try one or more of the following:

### **MAKE SURE THE PAPER IS LOADED CORRECTLY**

- 1 Open the paper tray.
- 2 Check for paper jams or misfeeds.
- 3 Make sure paper guides are aligned against the edges of the paper.
- 4 Make sure the paper tray closes properly.

### **RESET THE PRINTER**

Turn the printer off, wait about 10 seconds, and then turn the printer on.

### **MAKE SURE THE PAPER TRAY IS INSTALLED CORRECTLY**

## **Solving 2,000-sheet drawer problems**

Try one or more of the following:

### **THE ELEVATOR TRAY IS NOT WORKING PROPERLY**

- Make sure the printer is properly connected to the 2,000-sheet drawer.
- Make sure the printer is turned on.
- Make sure that the power cord is plugged firmly into the back of the 2,000-sheet drawer.
- If the tray is empty, then load paper in the tray.
- Clear any jams.

### **THE PAPER FEED ROLLERS DO NOT TURN TO ADVANCE PAPER**

- Make sure the printer is properly connected to the 2,000-sheet drawer.
- Make sure the printer is turned on.

### **THE PAPER CONSISTENTLY JAMS IN THE DRAWER**

- Flex the paper.
- Make sure the drawer is properly installed.
- Make sure paper is loaded correctly.
- Make sure the paper or specialty media meets specifications and is not damaged.
- Make sure the guides are positioned correctly for the paper size loaded.

## Envelope feeder

These are possible solutions. Try one or more of the following:

### RESET THE PRINTER

Turn the printer off, wait about 10 seconds, and then turn the printer on.

### MAKE SURE THE ENVELOPES ARE LOADED CORRECTLY

- 1 Adjust the envelope support for the length of envelope you are using.
- 2 For more information, see "Loading the envelope feeder" on page 63.

### CHECK THE PAPER TYPE AND PAPER SIZE SETTINGS

Make sure the paper type and paper size settings match the envelopes you are using:

- 1 From the printer control panel Paper menu, check the settings for the envelope feeder.
- 2 Before sending the job to print, specify the correct settings from the computer:
  - For Windows users, specify the settings from Print Properties.
  - For Macintosh users, specify the settings from the Print dialog.

### MAKE SURE THE ENVELOPE FEEDER IS INSTALLED CORRECTLY

## Memory card

Make sure the memory card is securely connected to the printer system board.

## Flash memory card

Make sure the flash memory card is securely connected to the printer system board.

## Hard disk with adapter

Make sure the hard disk is securely connected to the printer system board.

## Internal Solutions Port

If the Internal Solutions Port (ISP) does not operate correctly, then these are possible solutions. Try one or more of the following:

### CHECK THE ISP CONNECTIONS

- Make sure the ISP is securely attached to the printer system board.
- Make sure the cable is securely connected to the correct connector.

### CHECK THE CABLE

Make sure you are using the correct cable and that it is securely connected.

## MAKE SURE THE NETWORK SOFTWARE IS CONFIGURED CORRECTLY

For information about installing software for network printing, see the *Networking Guide on the Software and Documentation CD*

# Solving paper feed problems

## Paper frequently jams

These are possible solutions. Try one or more of the following:

### CHECK THE PAPER

Use recommended paper and specialty media. For more information, see the chapter about paper and specialty media guidelines.

### MAKE SURE THERE IS NOT TOO MUCH PAPER IN THE PAPER TRAY

Make sure the stack of paper you load does not exceed the maximum stack height indicated in the tray or on the multipurpose feeder.



### CHECK THE PAPER GUIDES

Move the guides in the tray to the correct positions for the paper size loaded.

### THE PAPER MAY HAVE ABSORBED MOISTURE DUE TO HIGH HUMIDITY








- Load paper from a fresh package.
- Store paper in its original wrapper until you use it.

## Paper jam message remains after jam is cleared

- 1 Clear jammed paper from the entire paper path.
- 2 Press the up or down arrow button until  **Continue** appears, and then press .

## Page that jammed does not reprint after you clear the jam

Jam Recovery is set to Off. Set Jam Recovery to Auto or On:

- 1 Press .
- 2 Press the up or down arrow button until  **Settings** appears, and then press .
- 3 Press the up or down arrow button until  **General Settings** appears, and then press .
- 4 Press the up or down arrow button until  **Print Recovery** appears, and then press .

- 5 Press the up or down arrow button until  $\sqrt{\text{Jam Recovery}}$  appears, and then press  $\square\checkmark$ .
- 6 Press the up or down arrow button until  $\sqrt{\text{On}}$  or  $\sqrt{\text{Auto}}$  appears, and then press  $\square\checkmark$ .

## Solving print quality problems

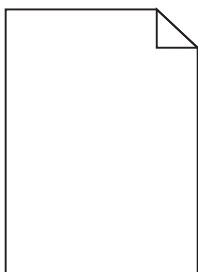
### Isolating print quality problems

To help isolate print quality problems, print the print quality test pages:

- 1 Turn the printer off.
- 2 From the printer control panel, press and hold  $\square\checkmark$  and the right arrow button while turning the printer on.
- 3 Release both buttons when the clock animation appears.  
The printer performs its power-on sequence, and then **Config Menu** appears.
- 4 Press the up or down arrow button until  $\sqrt{\text{Prt Quality Pgs}}$  appears, and then press  $\square\checkmark$ .  
The pages are formatted, **Printing Quality Test Pages** appears, and then the pages print. The message remains on the printer control panel display until all the pages print.
- 5 After the print quality test pages print, press the up or down arrow button until  $\sqrt{\text{Exit Config Menu}}$  appears, and then press  $\square\checkmark$ .

The information in the following topics may help you solve print quality problems. If these suggestions still do not correct the problem, then call for service. You may have a printer part that requires adjustment or replacement.

### Blank pages



These are possible solutions. Try one or more of the following:

#### **P**ACKING MATERIAL MAY BE ON THE TONER CARTRIDGE

Remove the toner cartridge and make sure the packing material is properly removed. Reinstall the toner cartridge.

#### **T**HE TONER MAY BE LOW

When **88 Cartridge Low** appears, order a new toner cartridge.

If the problem continues, the printer may need to be serviced. For more information, contact Customer Support.

## Clipped images

Try one or more of the following:

### CHECK THE GUIDES

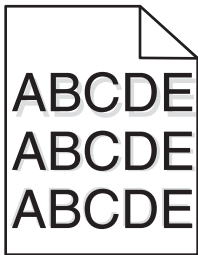
Move the width and length guides in the tray to the correct positions for the paper size loaded.

### CHECK THE PAPER SIZE SETTING

Make sure the paper size setting matches the paper loaded in the tray:

- 1 From the printer control panel Paper menu, check the Paper Size setting.
- 2 Before sending the job to print, specify the correct size setting:
  - For Windows users, specify the size from Print Properties.
  - For Macintosh users, specify the size from the Page Setup dialog.

## Ghost images

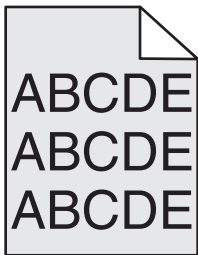


### CHECK THE PAPER TYPE SETTING

Make sure the paper type setting matches the paper loaded in the tray:

- 1 From the printer control panel Paper menu, check the Paper Type setting.
- 2 Before sending the job to print, specify the correct type setting:
  - For Windows users, specify the type from Print Properties.
  - For Macintosh users, specify the type from the Print dialog.

## Gray background



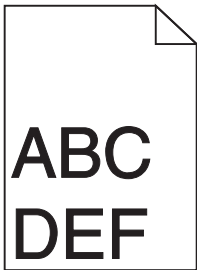


## CHECK THE TONER DARKNESS SETTING

Select a lighter Toner Darkness setting:

- From the printer control panel Quality menu, change the setting.
- For Windows users, change the setting from Print Properties.
- For Macintosh users, change the setting from the Print dialog.

## Incorrect margins



These are possible solutions. Try one or more of the following:

### CHECK THE PAPER GUIDES

Move the guides in the tray to the correct positions for the paper size loaded.

### CHECK THE PAPER SIZE SETTING

Make sure the paper size setting matches the paper loaded in the tray:

- 1 From the printer control panel Paper menu, check the Paper Size setting.
- 2 Before sending the job to print, specify the correct size setting:
  - For Windows users, specify the size from Print Properties.
  - For Macintosh users, specify the size from the Page Setup dialog.

## Paper curl

These are possible solutions. Try one or more of the following:

### CHECK THE PAPER TYPE SETTING

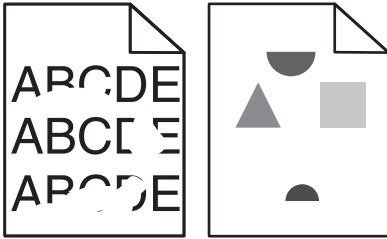
Make sure the paper type setting matches the paper loaded in the tray:

- 1 From the printer control panel Paper menu, check the Paper Type setting.
- 2 Before sending the job to print, specify the correct type setting:
  - For Windows users, specify the type from Print Properties.
  - For Macintosh users, specify the type from the Print dialog.

### THE PAPER HAS ABSORBED MOISTURE DUE TO HIGH HUMIDITY

- Load paper from a fresh package.
- Store paper in its original wrapper until you use it.

## Print irregularities



These are possible solutions. Try one or more of the following:

### THE PAPER MAY HAVE ABSORBED MOISTURE DUE TO HIGH HUMIDITY

- Load paper from a fresh package.
- Store paper in its original wrapper until you use it.

### CHECK THE PAPER TYPE SETTING

Make sure the paper type setting matches the paper loaded in the tray:

- 1 From the printer control panel Paper menu, check the Paper Type setting.
- 2 Before sending the job to print, specify the correct type setting:
  - For Windows users, specify the type from Print Properties.
  - For Macintosh users, specify the type from the Print dialog.

### CHECK THE PAPER

Avoid textured paper with rough finishes.

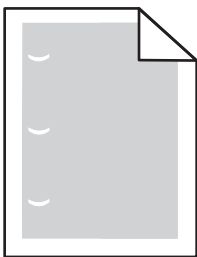
### THE TONER MAY BE LOW

When **88 Cartridge Low** appears or when the print becomes faded, replace the toner cartridge.

### THE FUSER MAY BE WORN OR DEFECTIVE

Replace the fuser.

## Repeating defects



These are possible solutions. Try one or more of the following:

Replace the transfer roller if the defects occur every:

58.7 mm (2.31 in.)

Replace the photoconductor if the defects occur every:

44 mm (1.73 in.)

Replace the fuser if the defects occur every:

- 78.5 mm (3.09 in.)
- 94.2 mm (3.71 in.)

## Skewed print

These are possible solutions. Try one or more of the following:

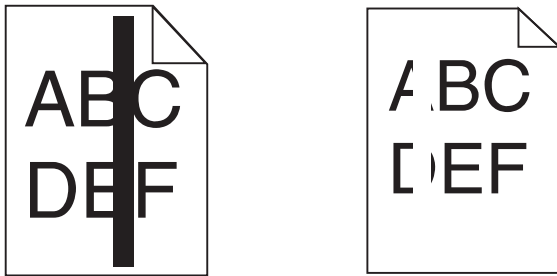
### CHECK THE PAPER GUIDES

Move the guides in the tray to the correct positions for the paper size loaded.

### CHECK THE PAPER

Make sure you are using paper that meets the printer specifications.

## Solid black or white streaks appear on transparencies or paper



These are possible solutions. Try one or more of the following:

### ENSURE THAT THE FILL PATTERN IS CORRECT

If the fill pattern is incorrect, choose a different fill pattern from your software program.

### CHECK THE PAPER TYPE

- Try a different type of paper.
- Use only the recommended transparencies.
- Ensure that the Paper Type setting matches what is loaded in the tray or feeder.
- Ensure that the Paper Texture setting is correct for the type of paper or specialty media loaded in the tray or feeder.

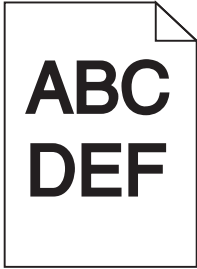
### ENSURE THAT THE TONER IS DISTRIBUTED EVENLY WITHIN THE TONER CARTRIDGE

Remove the toner cartridge and shake it from side to side to redistribute the toner, and then reinstall it.

## **THE TONER CARTRIDGE MAY BE DEFECTIVE OR LOW ON TONER**

Replace the used toner cartridge with a new one.

## **Print is too dark**



These are possible solutions. Try one or more of the following:

### **CHECK THE DARKNESS, BRIGHTNESS, AND CONTRAST SETTINGS**

The Toner Darkness setting is too dark, the Brightness setting is too dark, or the Contrast setting is too high.

- Change these settings from the printer control panel Quality menu.
- For Windows users, change these settings from Print Properties.
- For Macintosh users, change these settings from the Print dialog and pop-up menus.

### **THE PAPER HAS ABSORBED MOISTURE DUE TO HIGH HUMIDITY**

- Load paper from a fresh package.
- Store paper in its original wrapper until you use it.

### **CHECK THE PAPER**

Avoid textured paper with rough finishes.

### **CHECK THE PAPER TYPE SETTING**

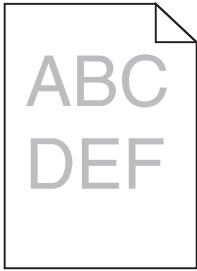
Make sure the paper type setting matches the paper loaded in the tray:

- 1** From the printer control panel Paper menu, check the Paper Type setting.
- 2** Before sending the job to print, specify the correct type setting:
  - For Windows users, specify the type from Print Properties.
  - For Macintosh users, specify the type from the Print dialog.

### **THE TONER CARTRIDGE MAY BE DEFECTIVE**

Replace the toner cartridge.

## Print is too light



These are possible solutions. Try one or more of the following:

### CHECK THE DARKNESS, BRIGHTNESS, AND CONTRAST SETTINGS

The Toner Darkness setting is too light, the Brightness setting is too light, or the Contrast setting is too low.

- Change these settings from the printer control panel Quality menu.
- For Windows users, change these settings from Print Properties.
- For Macintosh users, change these settings from the Print dialog and pop-up menus.

### THE PAPER HAS ABSORBED MOISTURE DUE TO HIGH HUMIDITY

- Load paper from a fresh package.
- Store paper in its original wrapper until you use it.

### CHECK THE PAPER

Avoid textured paper with rough finishes.

### CHECK THE PAPER TYPE SETTING

Make sure the paper type setting matches the paper loaded in the tray:

- 1 From the printer control panel Paper menu, check the Paper Type setting.
- 2 Before sending the job to print, specify the correct type setting:
  - For Windows users, specify the type from Print Properties.
  - For Macintosh users, specify the type from the Print dialog.

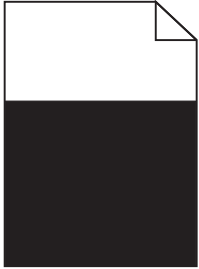
### THE TONER IS LOW

When **88 Cartridge Low** appears, order a new toner cartridge.

### THE TONER CARTRIDGE MAY BE DEFECTIVE

Replace the toner cartridge.

## Solid color pages



These are possible solutions. Try one or more of the following:

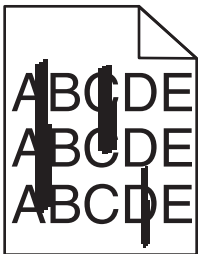
### **MAKE SURE THE TONER CARTRIDGE IS PROPERLY INSTALLED**

Remove the toner cartridge and shake it from side to side to redistribute the toner, and then reinstall it.

### **THE TONER CARTRIDGE MAY BE DEFECTIVE OR LOW ON TONER**

Replace the used toner cartridge with a new one. If the problem continues, the printer may need to be serviced. For more information, contact Customer Support.

## Streaked vertical lines



These are possible solutions. Try one or more of the following:

### **THE TONER IS SMEARED**

Select another tray or feeder to feed paper for the job:

- From the printer control panel Paper Menu, select the Default Source.
- For Windows users, select the paper source from Print Properties.
- For Macintosh users, select the paper source from the Print dialog and pop-up menus.

### **THE TONER CARTRIDGE IS DEFECTIVE**

Replace the toner cartridge.

### **THE PAPER PATH MAY NOT BE CLEAR**

Check the paper path around the toner cartridge.



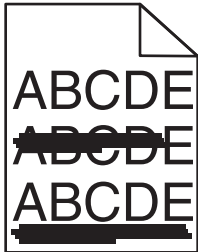
**CAUTION—HOT SURFACE:** The inside of the printer might be hot. To reduce the risk of injury from a hot component, allow the surface to cool before touching.

Clear any paper you see.

## **THERE IS TONER IN THE PAPER PATH**

Contact Customer Support.

## **Streaked horizontal lines**



These are possible solutions. Try one or more of the following:

### **THE TONER IS SMEARED**

Select another tray or feeder to feed the paper for the job:

- From the printer control panel Paper Menu, select the Default Source.
- For Windows users, select the paper source from Print Properties.
- For Macintosh users, select the paper source from the Print dialog and pop-up menus.

### **THE TONER CARTRIDGE MAY BE DEFECTIVE**

Replace the toner cartridge.

### **THE PAPER PATH MAY NOT BE CLEAR**

Check the paper path around the toner cartridge.



**CAUTION—HOT SURFACE:** The inside of the printer might be hot. To reduce the risk of injury from a hot component, allow the surface to cool before touching.

Clear any paper you see.

## **THERE IS TONER IN THE PAPER PATH**

Contact Customer Support.

## **Toner fog or background shading appears on the page**

These are possible solutions. Try one or more of the following:

### **THE TONER CARTRIDGE MAY BE DEFECTIVE**

Replace the toner cartridge.

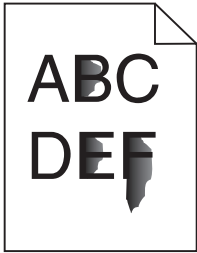
## THE CHARGE ROLLS MAY BE DEFECTIVE

Replace the charge rolls.

## THERE IS TONER IN THE PAPER PATH

Contact Customer Support.

## Toner rubs off



These are possible solutions. Try one or more of the following:

### CHECK THE PAPER TYPE SETTING

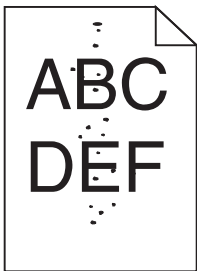
Make sure the paper type setting matches the paper loaded in the tray:

- 1 From the printer control panel Paper menu, check the Paper Type setting.
- 2 Before sending the job to print, specify the correct type setting:
  - For Windows users, specify the type from Print Properties.
  - For Macintosh users, specify the type from the Print dialog.

### CHECK THE PAPER TEXTURE SETTING

From the printer control panel Paper menu, make sure the Paper Texture setting matches the paper loaded in the tray.

## Toner specks



These are possible solutions. Try one or more of the following:

## THE TONER CARTRIDGE MAY BE DEFECTIVE

Replace the toner cartridge.



## THERE IS TONER IN THE PAPER PATH

Contact Customer Support.

## Transparency print quality is poor

Try one or more of the following:

### CHECK THE TRANSPARENCIES

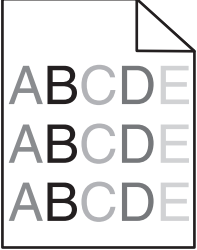
Use only transparencies that meet the printer specifications.

### CHECK THE PAPER TYPE SETTING

Make sure the paper type setting matches the paper loaded in the tray:

- 1 From the printer control panel Paper menu, check the Paper Type setting.
- 2 Before sending the job to print, specify the correct type setting:
  - For Windows users, specify the type from Print Properties.
  - For Macintosh users, specify the type from the Print dialog.

## Uneven print density

Example	Cause	Solution
	Toner cartridge is worn or defective.	Replace the toner cartridge.
	Photoconductor is worn or defective.	Replace the photoconductor.

## Contacting Technical Support

When you call Technical Support, describe the problem you are experiencing, the message on the display, and the troubleshooting steps you have already taken to find a solution.

You need to know your printer model type and the Service Tag number or Express Service Code. For more information, see the label on the inside top front cover of the printer. The Service Tag number is also listed on the menu settings page.

For additional technical support, check the Dell Support Web site at [support.dell.com](http://support.dell.com).

# Appendix

## Dell Technical Support Policy

Technician-assisted technical support requires the cooperation and participation of the customer in the troubleshooting process and provides for restoration of the Operating System, application software and hardware drivers to the original default configuration as shipped from Dell, as well as the verification of appropriate functionality of the printer and all Dell-installed hardware. In addition to this technician assisted technical support, online technical support is available at Dell Support. Additional technical support options may be available for purchase.

Dell provides limited technical support for the printer and any Dell-installed software and peripherals. Support for third-party software and peripherals is provided by the original manufacturer, including those purchased and/or installed through Software & Peripherals (DellWare), ReadyWare, and Custom Factory Integration (CFI/DellPlus).

## Contacting Dell

You can access Dell Support at **support.dell.com**. Select your region on the WELCOME TO DELL SUPPORT page, and fill in the requested details to access help tools and information.

You can contact Dell electronically using the following addresses:

- World Wide Web

**www.dell.com/**

**www.dell.com/ap/** (Asian/Pacific countries only)

**www.dell.com/jp/** (Japan only)

**www.euro.dell.com** (Europe only)

**www.dell.com/la/** (Latin American and Caribbean countries)

**www.dell.ca** (Canada only)

- Anonymous file transfer protocol (FTP)

**ftp.dell.com**

Log in as user: anonymous, and use your email address as your password.

- Electronic Support Service

**mobile\_support@us.dell.com**

**support@us.dell.com**

**la-techsupport@dell.com** (Latin America and Caribbean countries only)

**apsupport@dell.com** (Asian/Pacific countries only)

**support.jp.dell.com** (Japan only)

**support.euro.dell.com** (Europe only)

- Electronic Quote Service

**apmarketing@dell.com** (Asian/Pacific countries only)

**sales\_canada@dell.com** (Canada only)

## **Warranty and Return Policy**

Dell Inc. ("Dell") manufactures its hardware products from parts and components that are new or equivalent to new in accordance with industry-standard practices. For information about the Dell warranty for your printer, refer to the *Product Information Guide*.

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