LEXMARK™

Lexmark T650, T652, T654

User's Guide

Important: For information about T656 products, go to **http://md.lexmark.com/md/?func=publications&folder=v12721881&file=v12721881_en.pdf**.

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Safety information

Connect the power cord to an 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 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 cut, 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 any of these things happen, a risk of fire or electrical shock results. Inspect the power cord regularly for signs of such problems. 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.

CAUTION—SHOCK HAZARD: Do not use the fax feature during a lightning storm. Do not set up this product or make any electrical or cabling connections, such as the fax feature, power cord, or telephone, during a lightning storm.

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. If you purchased a multifunction printer (MFP) that scans, copies, and faxes, you may need additional furniture. For more information, see **www.lexmark.com/multifunctionprinters**.

SAVE THESE INSTRUCTIONS.

Learning about the printer

Finding information about the printer

Setup information

Description	Where to find
The *Setup* information gives you instructions for setting up the printer. Follow the set of instructions for local, network, or wireless, depending on what you need.	You can find the *Setup* information on the side of the printer box or on the Lexmark Web site at **www.lexmark.com**.

Help

Description	Where to find
The Help gives you instructions for using the software.	While in any Lexmark software program, click **Help**, **Tips > Help**, or **Help > Help Topics**.

Customer support

Description	Where to find (North America)	Where to find (rest of world)
Telephone support	Call us at • US: 1-800-332-4120 　Monday–Friday (8:00 AM–11:00 PM ET) 　Saturday (Noon–6:00 PM ET) • Canada: 1-800-539-6275 　Monday–Friday (8:00 AM–11:00 PM ET) 　Saturday (Noon–6:00 PM ET) • Mexico: 001-888-377-0063 　Monday–Friday (8:00 AM–8:00 PM ET) **Note:** Telephone numbers and support times may change without notice. For the most recent telephone numbers available, see the printed warranty statement that came with your printer.	Telephone numbers and support hours vary by country or region. Visit our Web site at **www.lexmark.com**. Select a country or region, and then select the Customer Support link. **Note:** For additional information about contacting Lexmark, see the printed warranty that came with your printer.

Description	Where to find (North America)	Where to find (rest of world)
E-mail support	For e-mail support, visit our Web site: **www.lexmark.com**. 1 Click **SUPPORT**. 2 Click **Technical Support**. 3 Select your printer type. 4 Select your printer model. 5 From the Support Tools section, click **e-Mail Support**. 6 Complete the form, and then click **Submit Request**.	E-mail support varies by country or region, and may not be available in some instances. Visit our Web site at **www.lexmark.com**. Select a country or region, and then select the Customer Support link. **Note:** For additional information about contacting Lexmark, see the printed warranty that came with your printer.

Printer configurations

Basic model
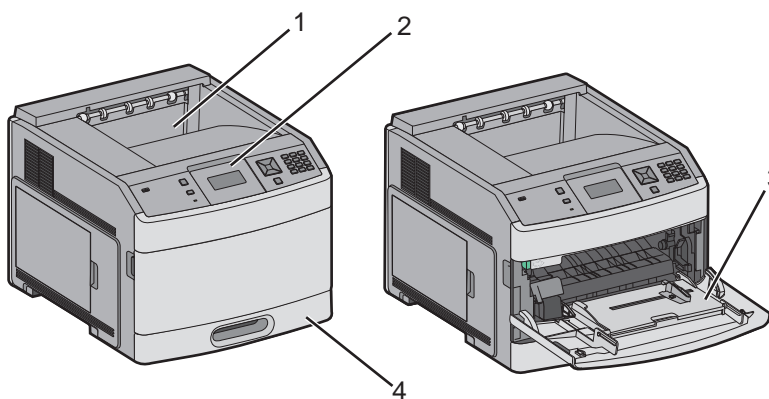
	Feature	Paper Capacity*
1	Standard exit bin	350 or 550 sheets
2	Printer control panel	Not applicable
3	Multipurpose feeder	100 sheets
4	Standard tray (Tray 1)	250 or 550 sheets

* Based on 75 g/m² (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. If you purchased a multifunction printer (MFP) that scans, copies, and faxes, you may need additional furniture. For more information, see **www.lexmark.com/multifunctionprinters**.
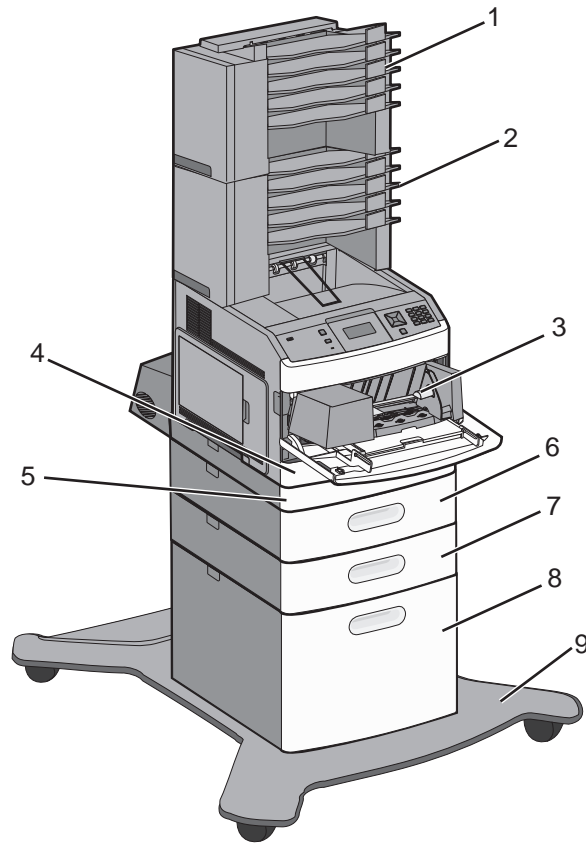
	Feature/Option	Paper Capacity[1]
1	5‑bin mailbox[2]	500 sheets
2	5‑bin mailbox	500 sheets
3	Envelope feeder	85 envelopes
4	Standard tray (Tray 1)	250 or 550 sheets
5	Duplex unit[3]	Not applicable
6	Optional tray (Tray 2)	250 or 550 sheets
7	Optional tray (Tray 3)	250 or 550 sheets
8	Optional 2000‑sheet tray (Tray 4)	2000 sheets
9	Caster base	Not applicable

[1] Based on 75 g/m² (20 lb.) paper.

[2] 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).

[3] An optional duplex unit is available for basic models 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:
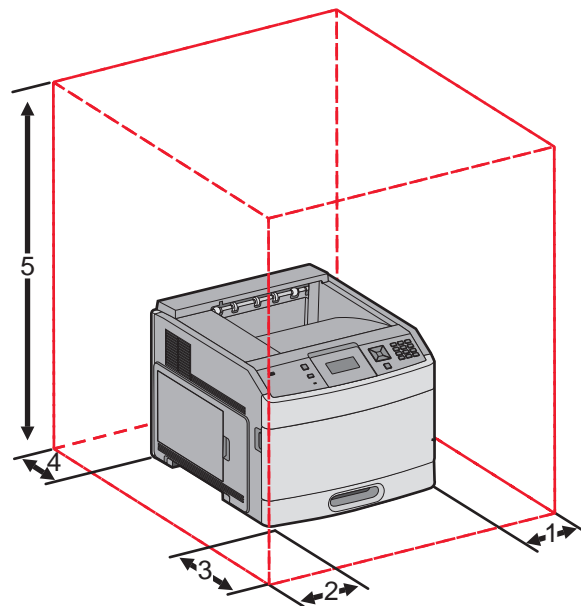
1	Right Side	31 cm (12 in.)
2	Left Side	31 cm (12 in.)
3	Front	51 cm (20 in.)
4	Rear	31 cm (12 in.)
5	Top[1]	137 cm (54 in.)
[1] Allows for addition of all output options.		

Understanding the printer control panel

Item		Description
1	Display	Shows messages and pictures that communicate the status of the printer
2	Navigation buttons	Press the up or down arrow buttons to scroll through menus or menu items, or to increase or decrease a value when entering numbers. 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.
3	Select	• Opens a menu item and displays the available values or settings. The current setting is indicated by an asterisk (*). • Saves a displayed menu item as the new user default setting. **Notes:** • 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. • Settings chosen from a software program can also change or override the user default settings selected from the printer control panel.
4	Keypad	Enter numbers or symbols on the display.
5	Back	Returns the display to the previous screen
6	Indicator light	Indicates the printer status: • **Off**—The power is off. • **Blinking green**—The printer is warming up, processing data, or printing. • **Solid green**—The printer is on, but idle. • **Solid red**—Operator intervention is needed.
7	Stop	Stops all printer activity A list of options is offered once `Stopped` appears on the display.

Item		Description
8	Menu	Opens the menu index
		Note: The menus are available only when the printer is in the `Ready` state.
9	USB port	Insert a flash drive into the front of the printer to print saved files.
		Note: 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
  - Printer memory
  - Flash memory
  - Fonts
- Firmware cards
  - Bar Code and Forms
  - IPDS and SCS/TNe
  - PrintCryption™
- Printer hard disk
- Lexmark™ Internal Solutions Ports (ISP)
  - RS-232-C Serial ISP
  - Parallel 1284-B ISP
  - MarkNet™ N8150 802.11 b/g/n Wireless ISP
  - MarkNet N8130 10/100 Fiber ISP
  - MarkNet N8120 10/100/1000 Ethernet 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.
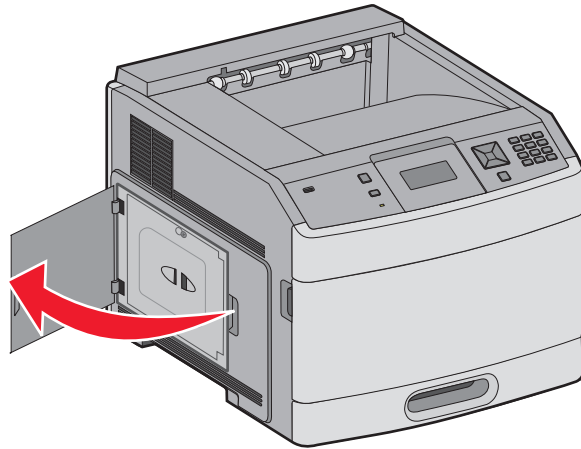
2 Loosen the screw on the system board cover.
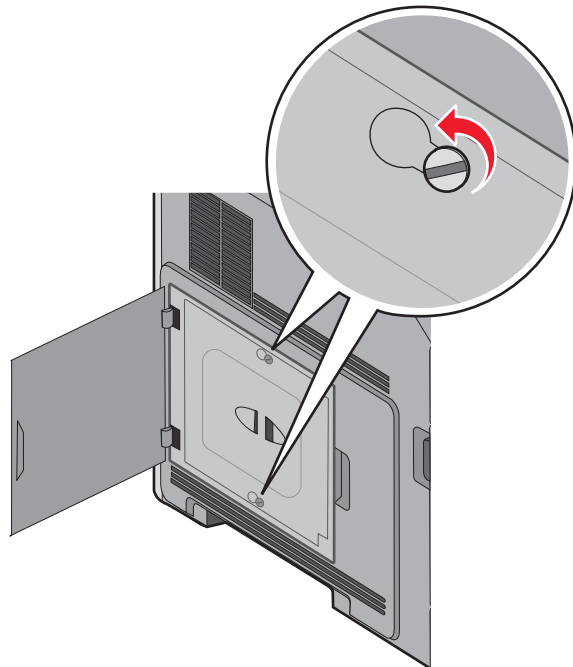
3 Remove the system board cover.

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.
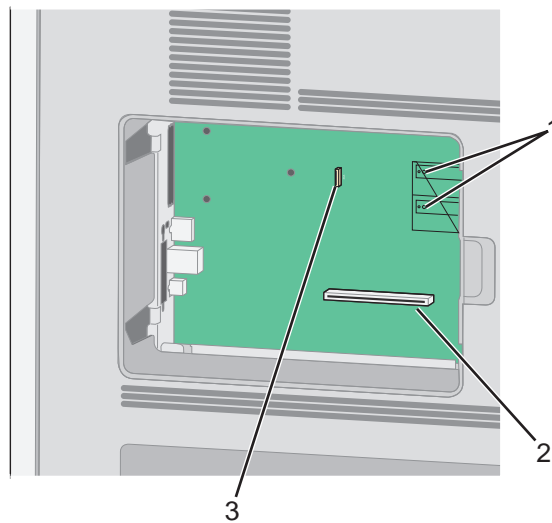
1	Firmware and flash memory card connectors
2	Memory card connector
3	Lexmark Internal Solutions Port or printer hard disk connector

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.
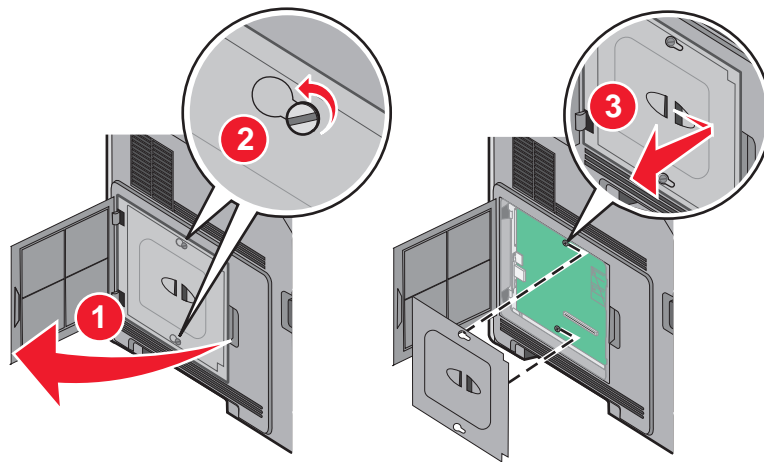
2 Unpack the memory card.

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

3 Open the memory card connector latches.
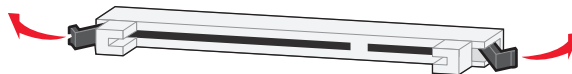
4 Align the notches on the memory card with the ridges on the connector.
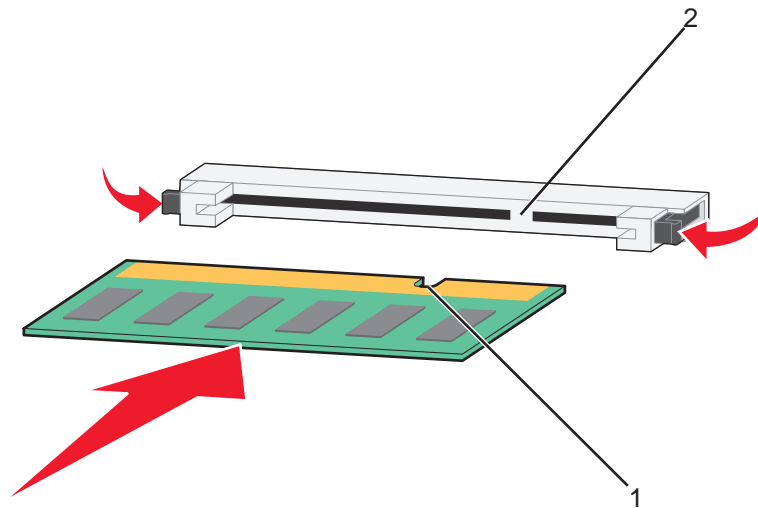
1	Notches
2	Ridges

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.
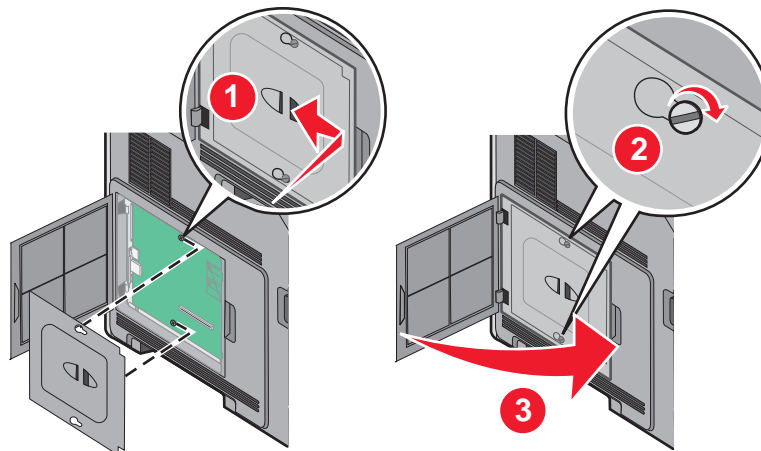
Installing a flash memory or firmware card

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.
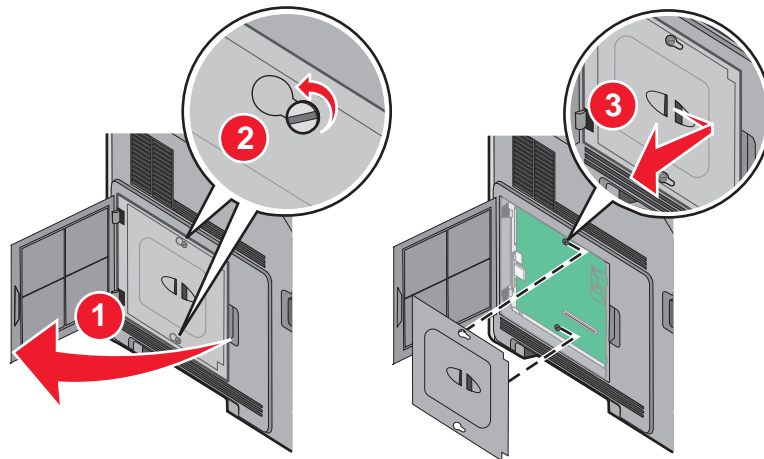
2 Unpack the card.

   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.
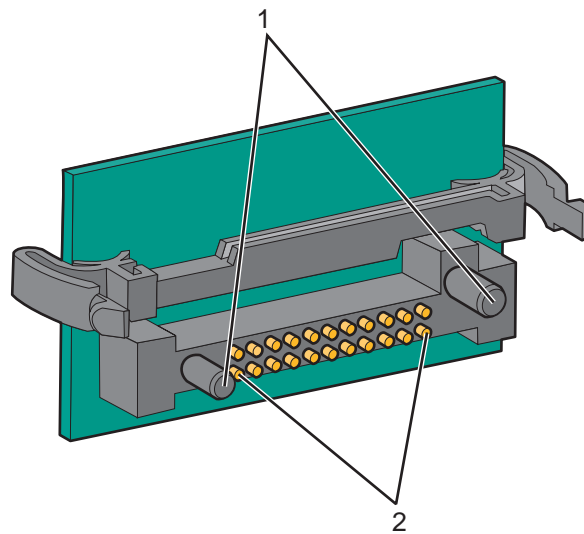
1	Plastic pins
2	Metal pins

4 Push the card firmly into place.
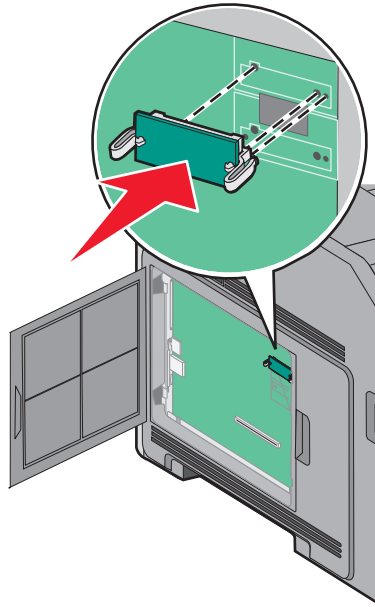
Notes:

- 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.
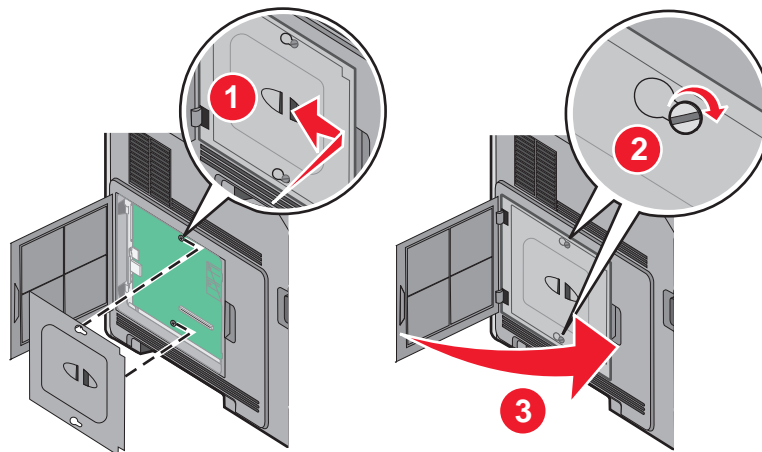
Installing an Internal Solutions Port

The system board supports one optional Lexmark 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.
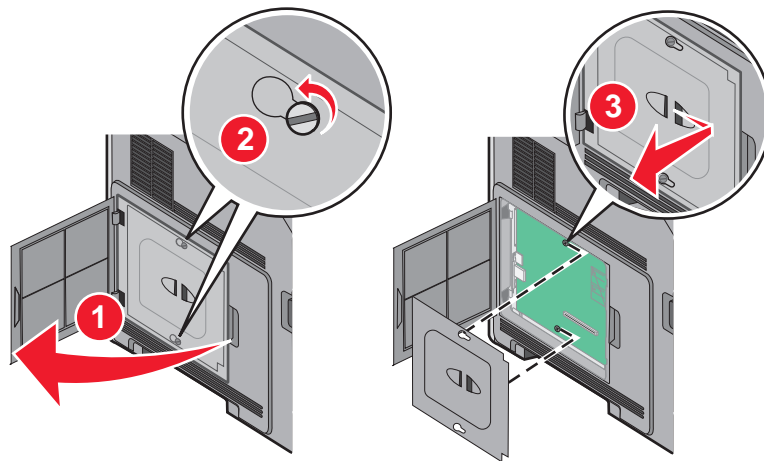
2 Unpack the ISP and plastic tee.

   Note: Avoid touching the components on the card.

3 Locate the appropriate connector on the system board.
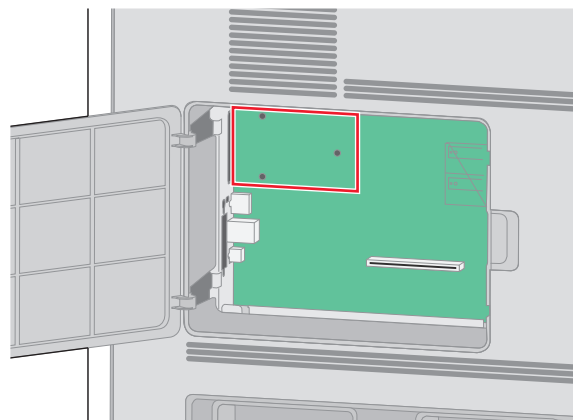
   Note: If an optional printer hard disk is currently installed, then the printer hard disk must first be removed. To remove the hard disk:

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.
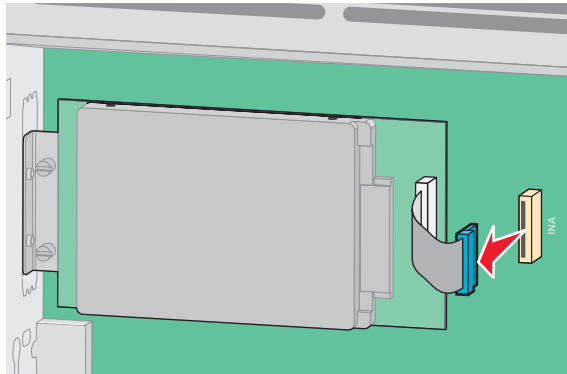
b Remove the screws holding the printer hard disk in place.
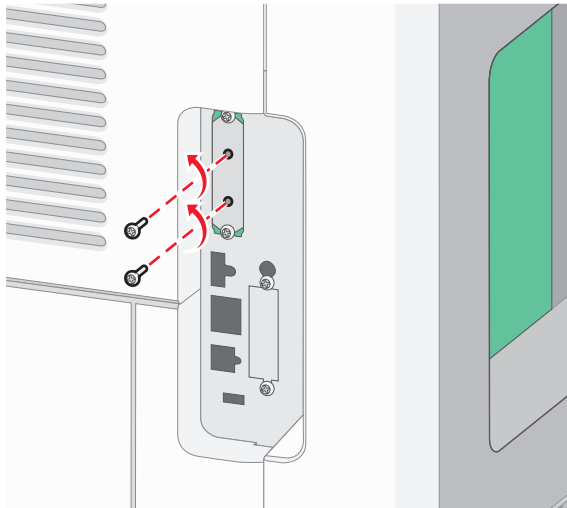
c Remove the printer hard disk by pulling it upward to unseat the standoffs.
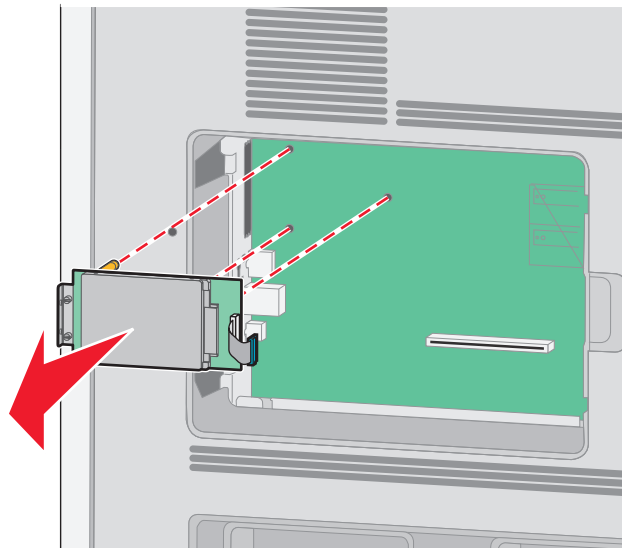
d Remove the thumbscrews that attach the printer hard disk mounting bracket to the printer hard disk, and then remove the bracket. Set the printer hard disk aside.
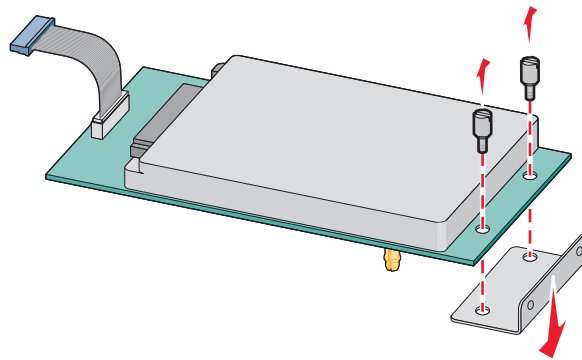
4 Remove the metal cover from the ISP opening.
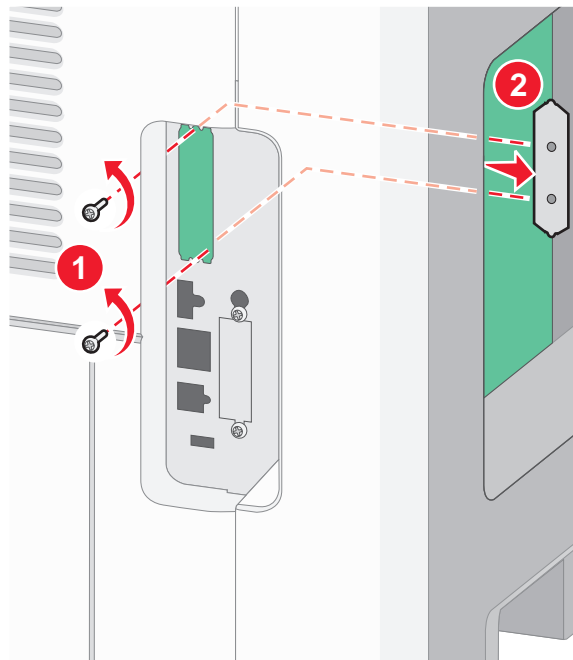
5 Align the posts of the plastic tee to the holes in the system board, and then press downward until the tee snaps into place. Be sure each post of the tee has latched completely, and that the tee is seated firmly onto the system board.
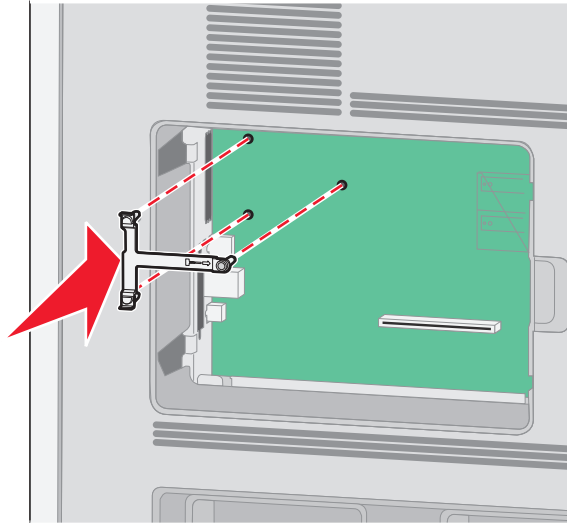
6 Install the ISP onto the plastic tee. Angle the ISP over the plastic tee, and then approach the plastic tee so that any overhanging connectors will pass through the ISP opening in the system board cage.
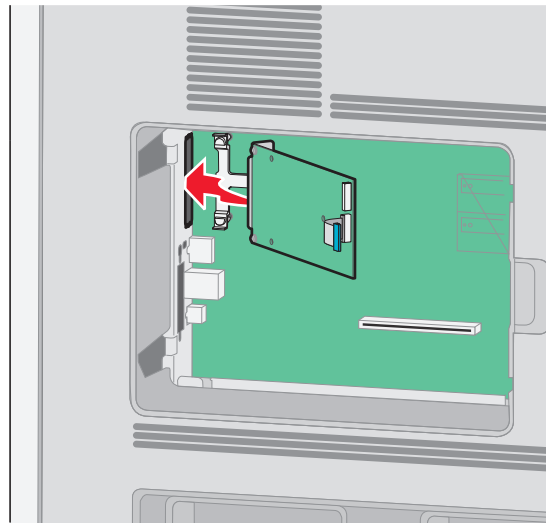
7 Lower the ISP toward the plastic tee until the ISP is seated between the guides of the plastic tee.
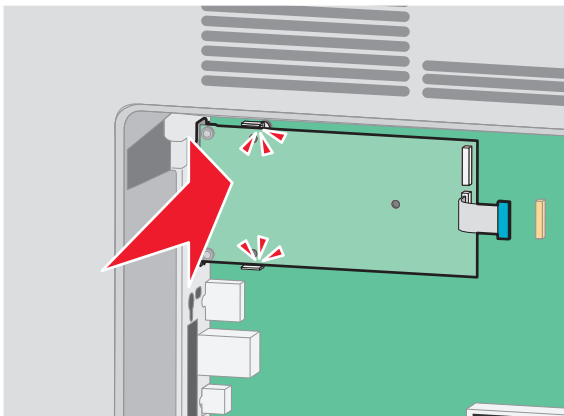
8 Insert the long thumbscrew and turn it clockwise enough to hold the ISP in place, but do not tighten the thumbscrew at this time.
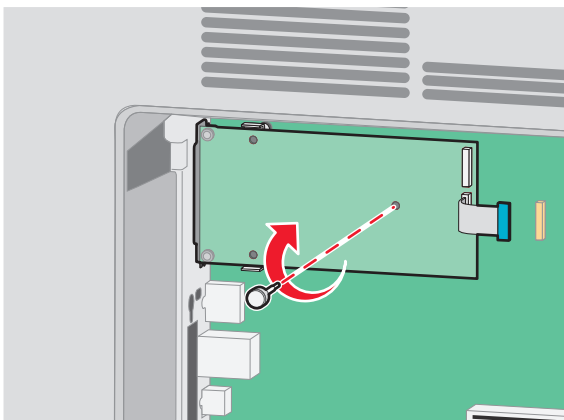
9 Attach the two provided screws to secure the ISP mounting bracket to the system board cage.
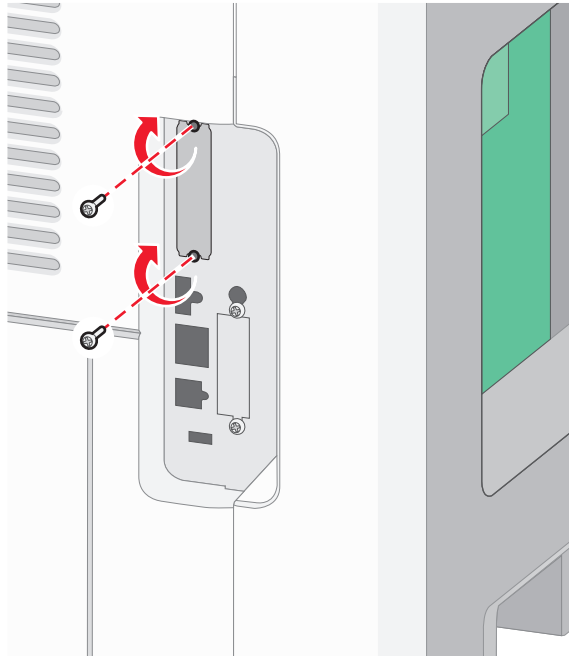
10 Tighten the long thumbscrew.

   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.
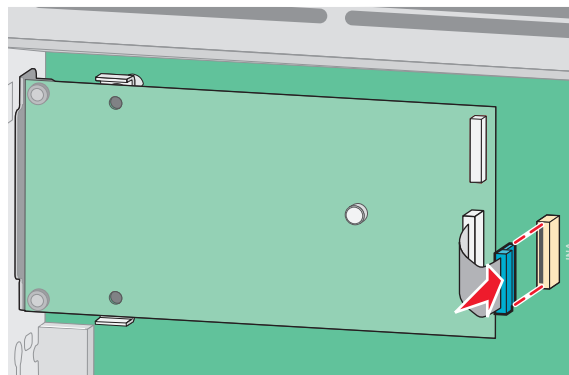
12 If a printer hard disk was previously installed, then attach the printer hard disk to the ISP. For more information, see "Installing a printer hard disk" on page 29.

13 Replace the system board cover and close the system board door.
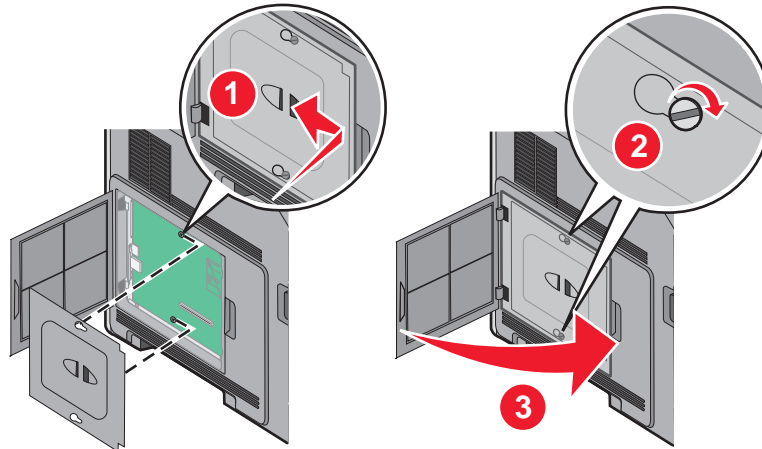
Installing a printer hard disk

The optional printer hard disk can be installed with or without a Lexmark Internal Solutions Port (ISP).

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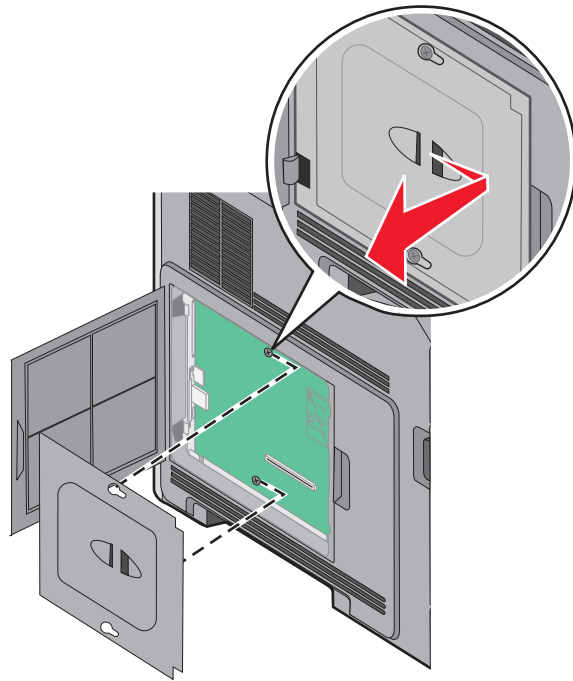
Warning—Potential Damage: System board electronic components are easily damaged by static electricity. Touch something metal on the printer before touching any system board electronic components or connectors.

1 Access the system board.
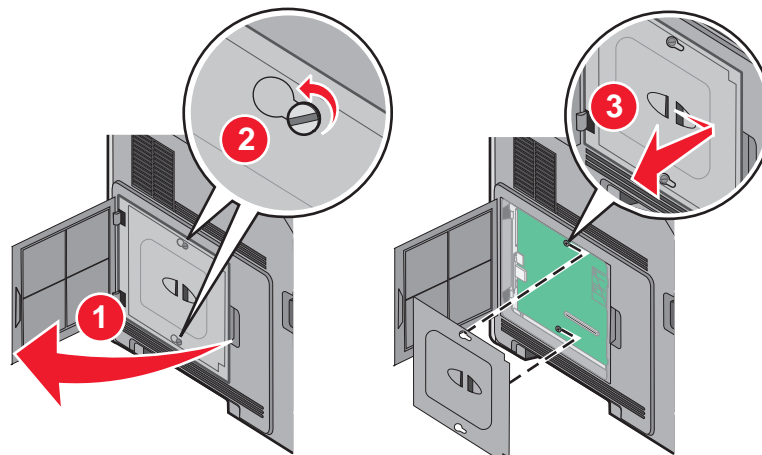
2 Unpack the printer hard disk.

Note: Avoid touching the components on the card.

3 Locate the appropriate connector on the system board.
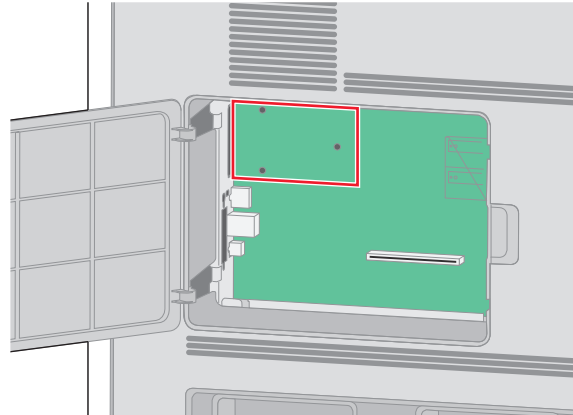
Note: If an optional ISP is currently installed, then the printer hard disk must be installed onto the ISP.

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.
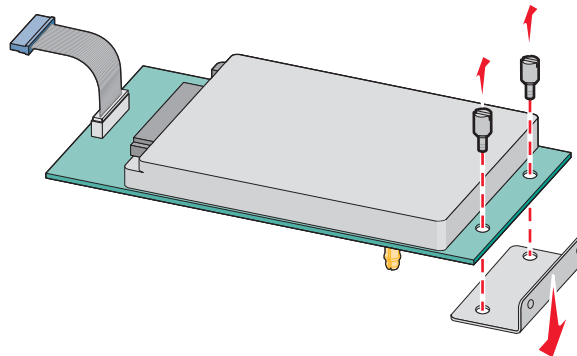
b Align the standoffs of the printer hard disk with the holes in the ISP, and then press downward on the printer hard disk until the standoffs have seated into place.
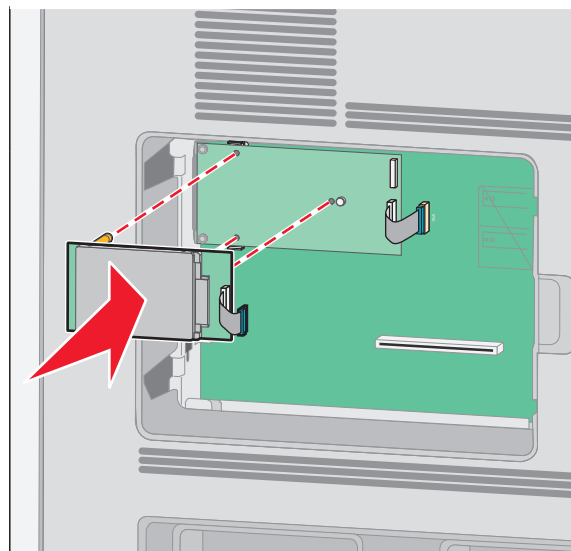
c Insert the plug of the printer hard disk interface cable into the receptacle of the ISP.

> **Note:** The plugs and receptacles are color coded.
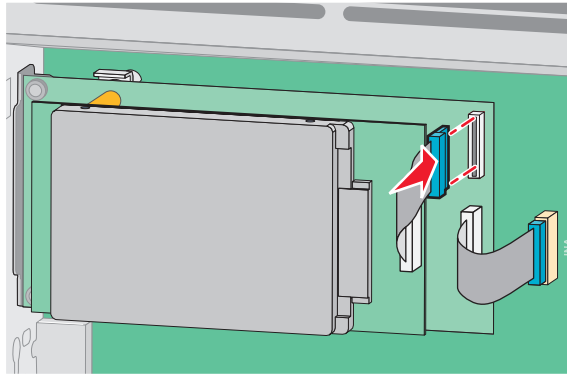
To install a printer hard disk directly onto the system board:

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.
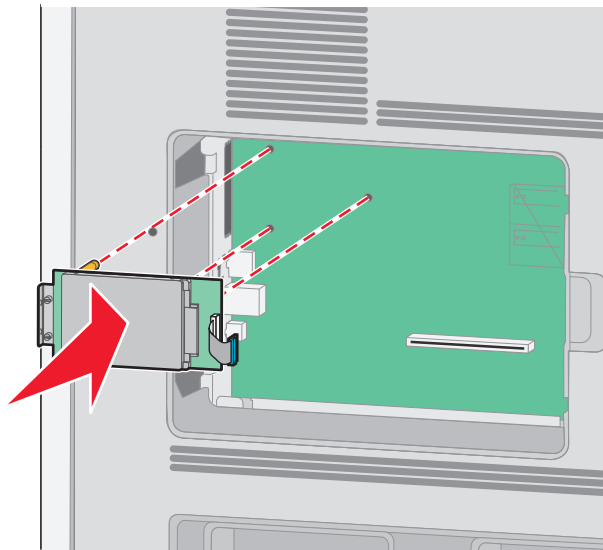
b Attach the two provided screws to secure the printer hard disk mounting bracket.
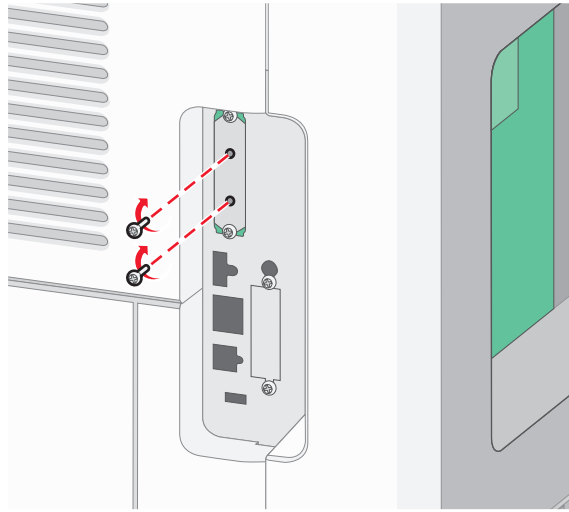
c Insert the plug of the printer hard disk interface cable into the receptacle of the system board.

   Note: The plugs and receptacles are color coded.
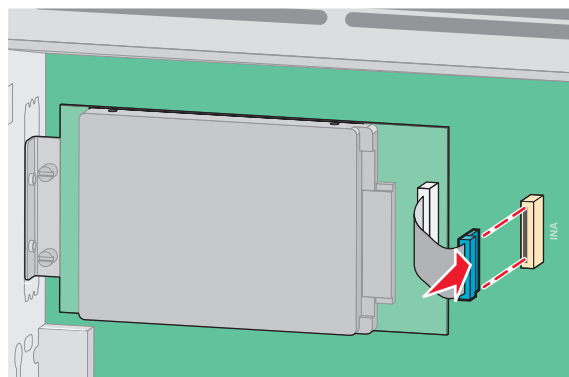
4 Replace the system board cover and close the system board door.
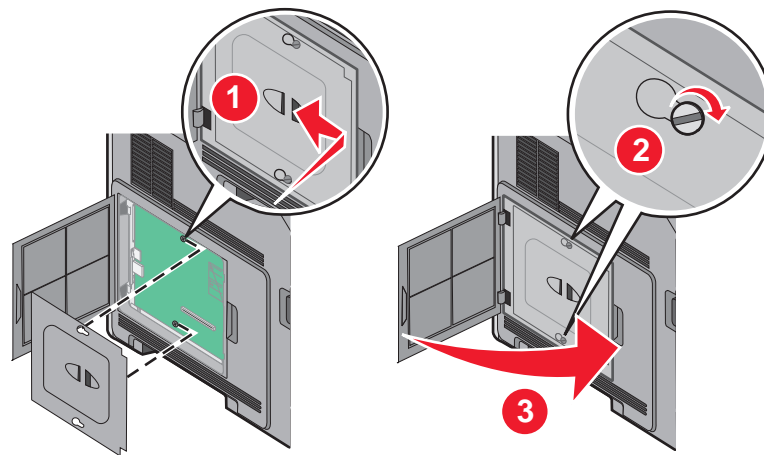
Installing hardware options

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. If you purchased a multifunction printer (MFP) that scans, copies, and faxes, you may need additional furniture. For more information, see **www.lexmark.com/multifunctionprinters**.

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
- 2,000-sheet dual trays and high capacity feeder
- Standard or optional 500-sheet trays
- Duplex unit
- 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.

For more information on installing a printer stand, caster base, or 2,000-sheet tray, 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.
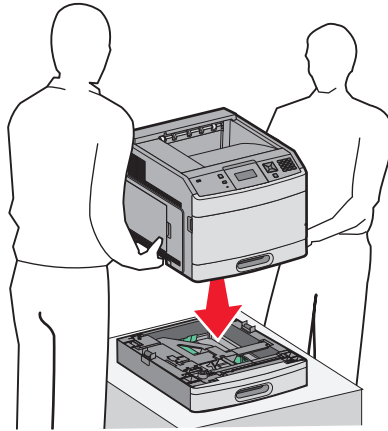
Removing an optional drawer

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.
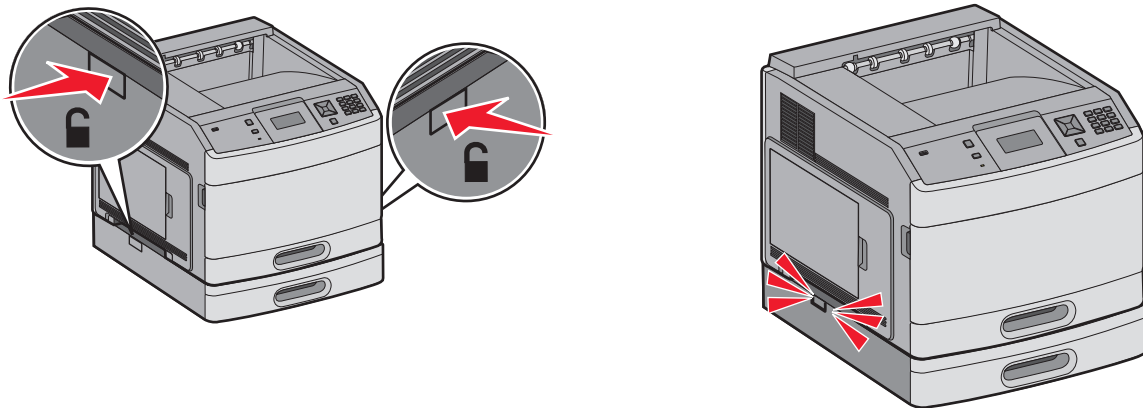
Installing an optional duplex unit (T650 only)

The optional duplex unit for the T650 model attaches under the printer, below the standard tray and above any optional drawers.

Notes:

- T652dn and T654dn models have an internal duplex unit installed in the printer.

- T652n and T654n models do not support an optional duplex unit.

⚠ 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 duplex unit, and then remove any packing material.

2 Place the duplex unit 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.

3 Align the printer with the duplex unit, 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.
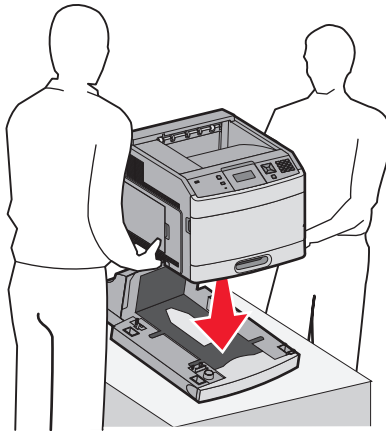
Removing an optional duplex unit

Warning—Potential Damage: Lifting the printer from the duplex unit without pushing in the safety latches could damage the latches.

To remove the duplex unit, push in the safety latches on both sides of the duplex unit until they *click* and stay recessed, and then lift the printer.
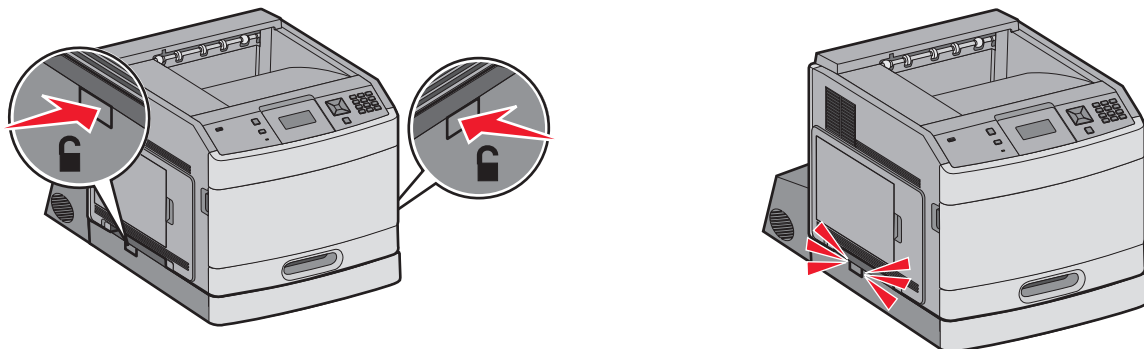
Attaching cables
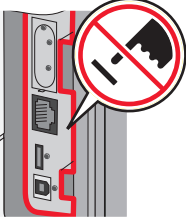
⚠️ **CAUTION—POTENTIAL INJURY:** Do not use the fax feature during a lightning storm. Do not set up this product or make any electrical or cabling connections, such as the fax feature, power cord, or telephone, during a lightning storm.

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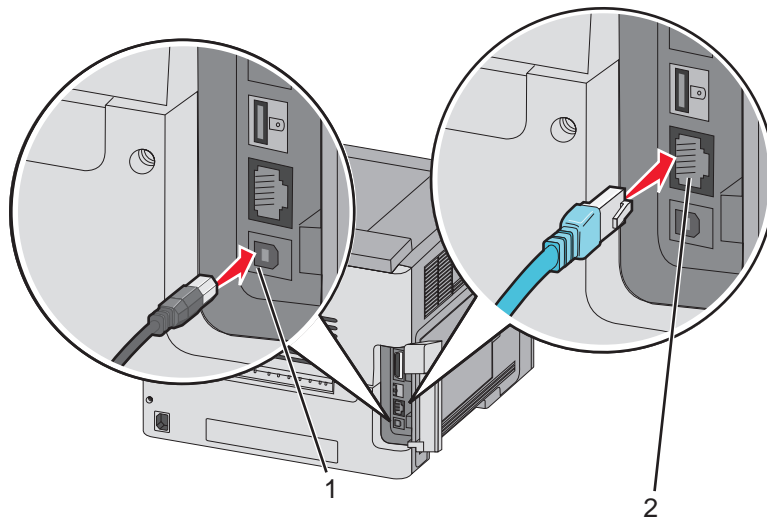
1	USB port
	Warning—Potential Damage: Do not touch the USB cable, any network adapter, or the printer in the area shown while actively printing. A loss of data or a malfunction can occur.
2	Ethernet port

Verifying printer setup

Once all hardware and software options are installed and the printer is turned on, verify that the printer is set up correctly by printing the following:

- **Menu settings page**—Use this 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.
- **Network setup page**—If your printer is a network model and is attached to a network, print a network setup page to verify the network connection. 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 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 176.

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

2 From the printer control panel, press ⊙.

3 Press the arrow buttons until √ `Reports` appears, and then press √.

4 Press the arrow buttons until √ `Menu Settings Page` appears, and then press √.

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 arrow buttons until √ `Reports` appears, and then press √.

4 Press the arrow buttons 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**.

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** icon.

5 Follow the instructions on the screen.

Using the World Wide Web

1 Go to the Lexmark Web site at **www.lexmark.com**.

2 From the Drivers & Downloads menu, click **Driver Finder**.

3 Select your printer, and then select your operating system.

4 Download the driver and install the printer software.

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, and then turn the printer on.
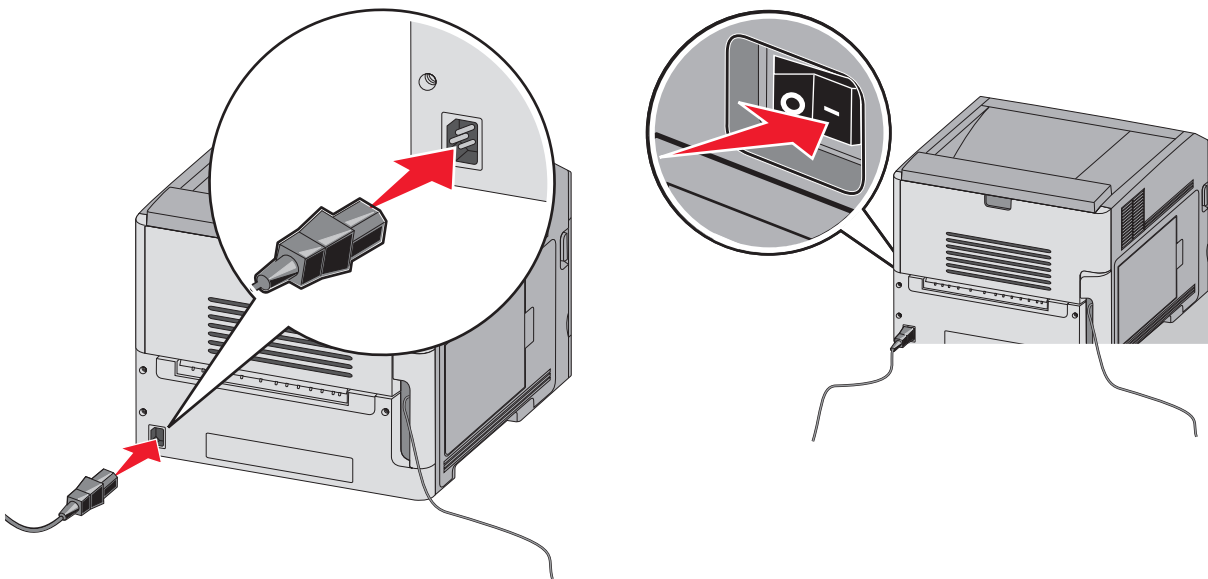
Make sure the printer and computer are fully on and ready.

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

2 Insert the *Software and Documentation* CD.
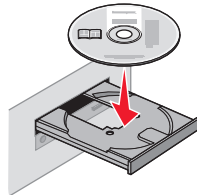
3 Click **Install**.

4 Click **Agree**.

5 Click **Suggested**.

6 Click **Wireless Network Attach**.

7 Connect the cables in the following order:

a Temporarily connect a USB cable between the computer on the wireless network and the printer.
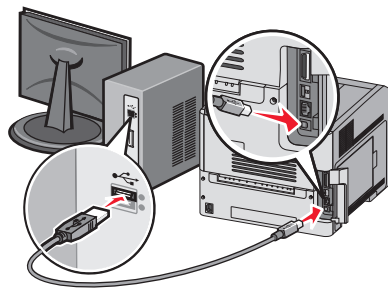
Note: After the printer is configured, the software will instruct you to disconnect the temporary USB cable so you can print wirelessly.

b If your printer has faxing capabilities, then connect the telephone cable.

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

9 To allow other computers on the wireless network to use the wireless printer, follow steps 2 through 6 and step 8 for each computer.

Installing the printer on a wireless network (Macintosh)

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.
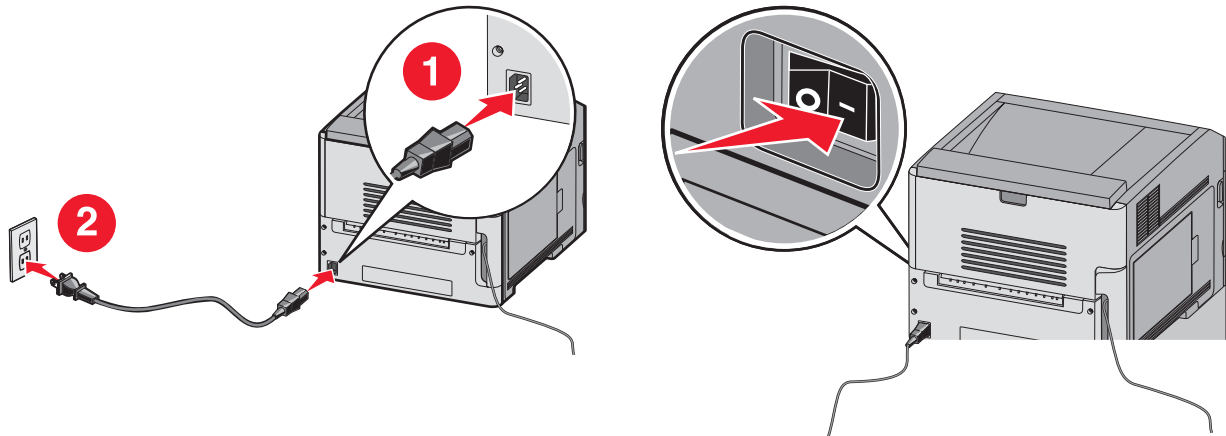
Enter the printer information

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 popup 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, choose **Go** > **Applications**.

b From the Applications folder, double-click **Internet Connect**.

c From the toolbar, click **AirPort**.

7 From the Network popup 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 **Close** 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 Select the printer from the list.

5 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 Select the printer from the list.

     6 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 and earlier

     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 and fiber optic network connections.

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 37.

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 show up 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 Lexmark Internal Solutions Port (ISP) is installed in the printer, the printer configurations on computers that access the printer must be updated because the printer will be assigned a new IP address. All 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 ![icon], 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, you will need to configure the printer and the computer so they can communicate. Make sure you have connected the serial cable to the serial 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 Make sure Local is selected, and then click **Next**.

   g Select the manufacturer of the printer from the menu.

   h Select the printer model from the menu, and then click **Add Printer**.

   i Click the **+** beside the printer model under Select Components.

   j Make sure the correct port is available under Select Components. This is the port where the serial cable attaches to the computer. If the correct port is not available, select the port under the Select Port menu, and then click **Add Port**.

   k Make any configuration changes necessary in the Add a New Port window. Click **Add Port** to finish adding the port.

   l Make sure the box next to the selected printer model is checked.

   m Select any other optional software you want to install, and then click **Next**.

   n 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 communications (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 Paper Type

The Paper Size setting is determined by the position of the paper guides in the tray for all trays except the multipurpose feeder. The Paper Size setting for the multipurpose feeder must be set manually. The factory default Paper Type setting is Plain Paper. The Paper Type setting must be set manually for all trays that do not contain plain paper.

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

2 From the printer control panel, press ⊶.

3 Press the arrow buttons until √`Paper Menu` appears, and then press √.

4 Press the arrow buttons until √`Paper Size/Type` appears, and then press √.

5 Press the arrow buttons until the correct tray appears, and then press √.

6 Press the arrow buttons until √ appears next to the correct size, and then press √.

7 Press the arrow buttons until the correct Paper Type setting appears, and then press √.

`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 70 x 127 mm (2.8 x 5 in.); the largest is 216 x 356 mm (8.5 x 14 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 arrow buttons until √`Paper Menu` appears, and then press √.

4 Press the arrow buttons until √`Universal Setup` appears, and then press √.

5 Press the arrow buttons until **Units of Measure** appears, and then press ☑.

6 Press the arrow buttons 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 arrow buttons until **Portrait Width** appears, and then press ☑.

2 Press the arrow buttons to change the paper width setting, and then press ☑.

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

3 Press the arrow buttons until **Portrait Height** appears, and then press ☑.

4 Press the arrow buttons 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.
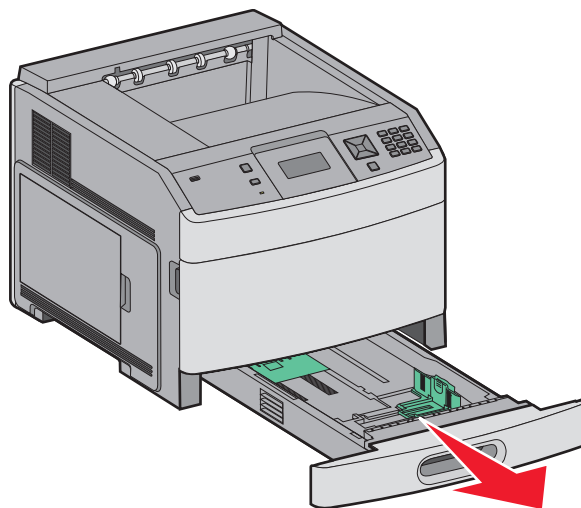
2 Squeeze the width guide tab inward as shown, and move the width guide to the correct position for the paper size being loaded.
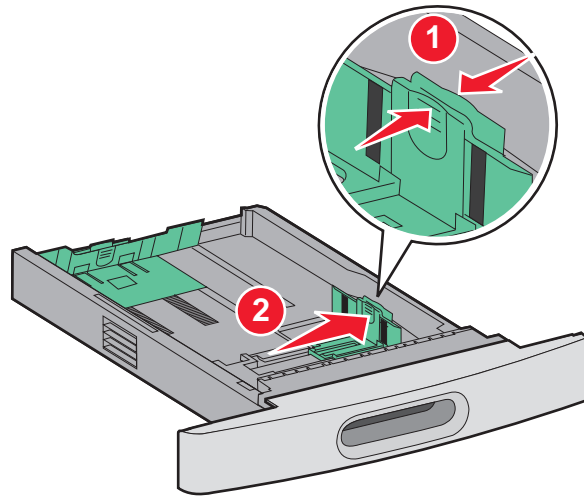
3 Unlock the length guide, squeeze the length guide tab inward as shown, and slide the guide to the correct position for the paper size being loaded.
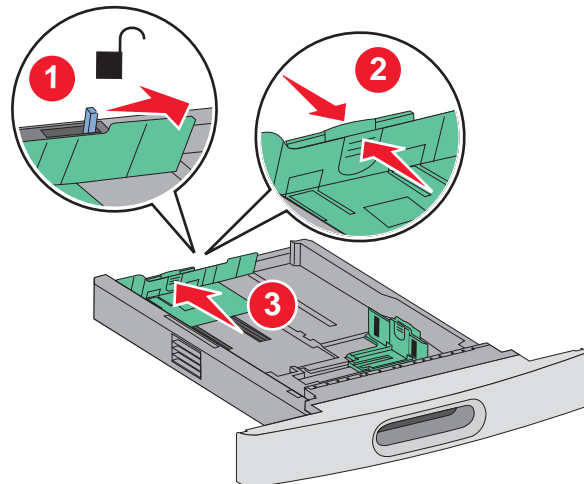
Notes:

- 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 StapleSmart™ II Finisher is installed.
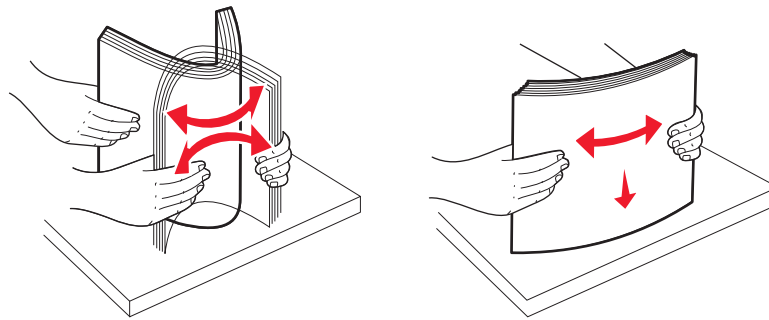
Without an optional StapleSmart II Finisher	With an optional StapleSmart II Finisher
Single-sided printing	Single-sided printing
Duplex (two-sided) printing	Duplex (two-sided) printing
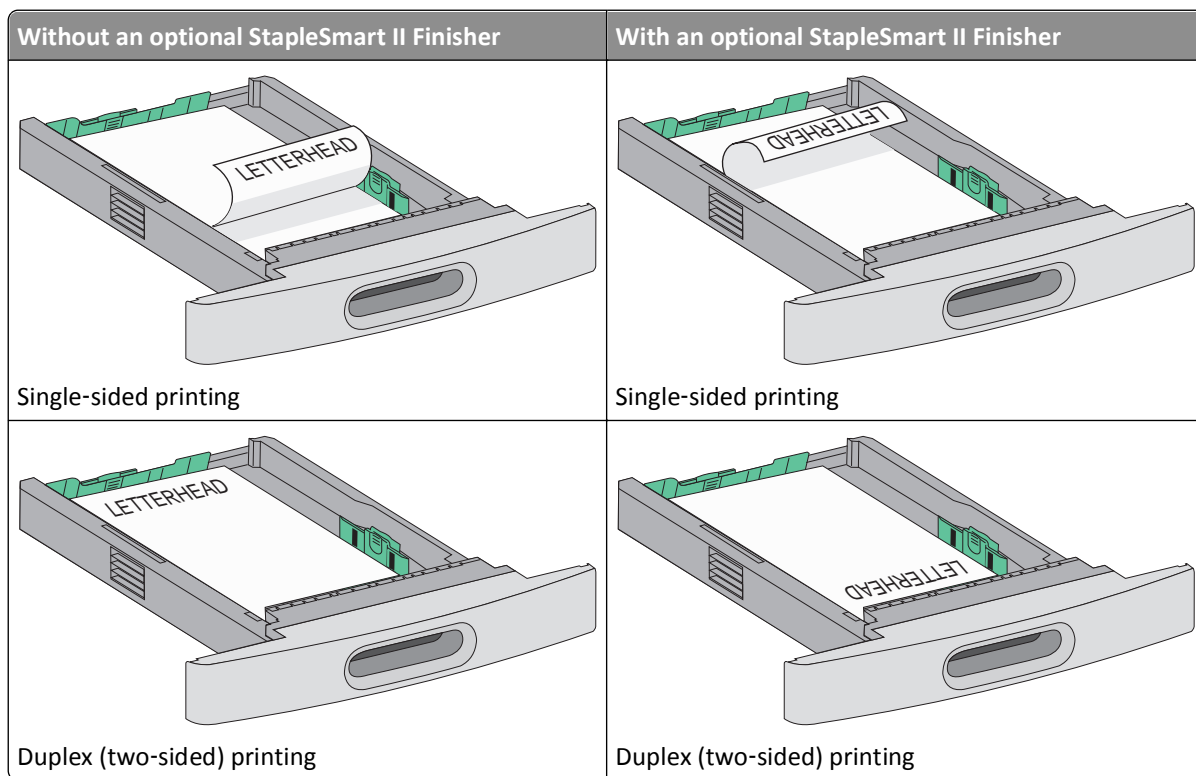
Note: Notice the maximum fill line on the side of the tray which indicates the maximum height for loading paper. Do not overload the tray.
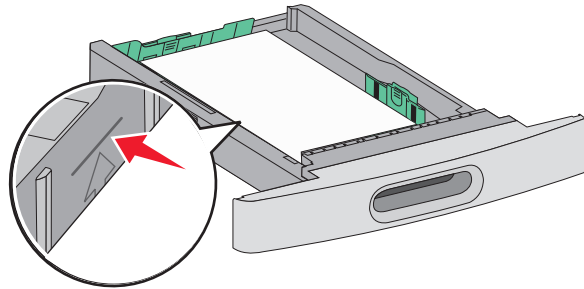
6 If necessary, adjust the paper guides to lightly touch the sides of the stack, and lock the length guide for the paper sizes indicated on the tray.

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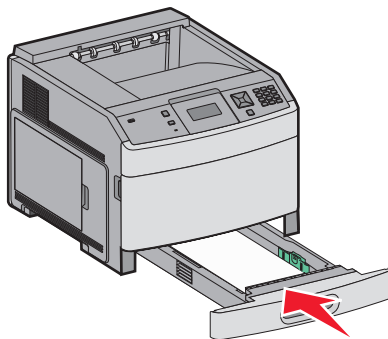
8 If a different type of paper was loaded than the type previously loaded in the tray, then change the Paper Type setting for the tray from the printer control panel.

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.
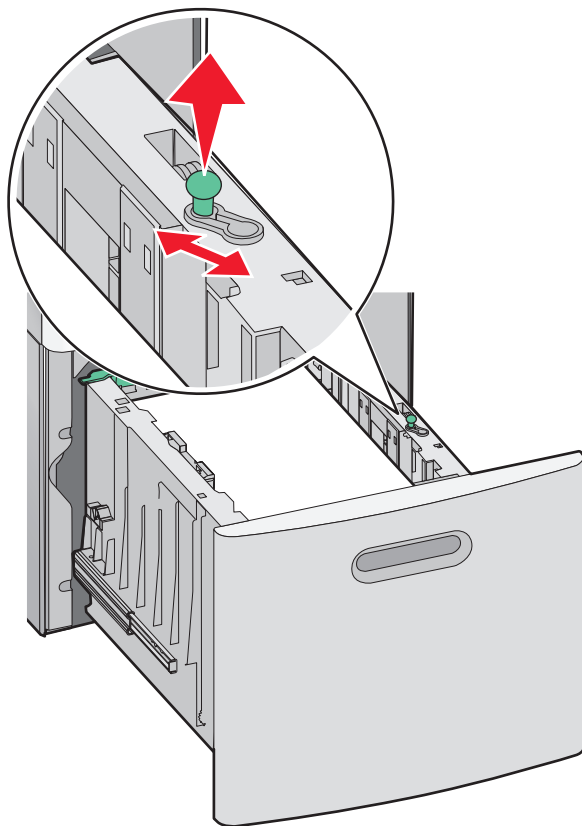
3 Unlock the length guide.
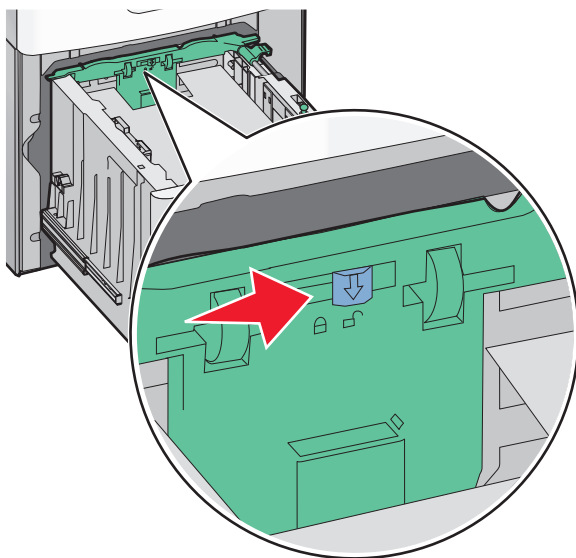
4 Push the length guide release latch to raise the length guide, slide the guide to the correct position for the paper size being loaded, and then lock the guide.
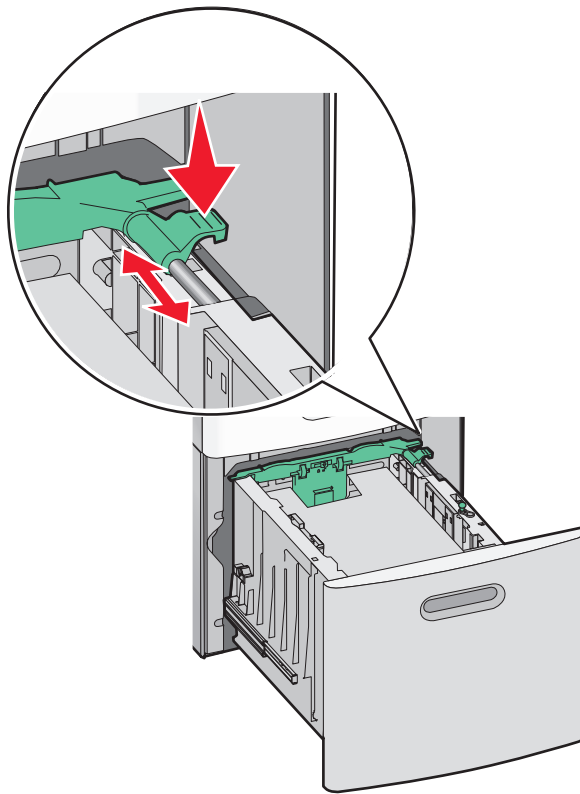
5 Flex the sheets back and forth to loosen them, and then fan them. Do not fold or crease the paper. Straighten the edges on a level surface.

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 StapleSmart II Finisher is installed.
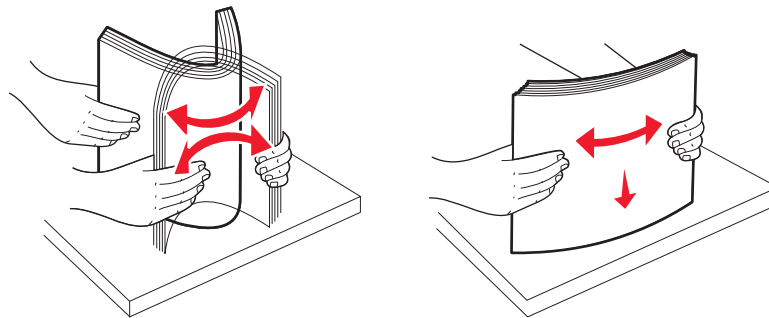
Without an optional StapleSmart II Finisher	With an optional StapleSmart II Finisher
Single-sided printing	Single-sided printing
Duplex (two-sided) printing	Duplex (two-sided) printing
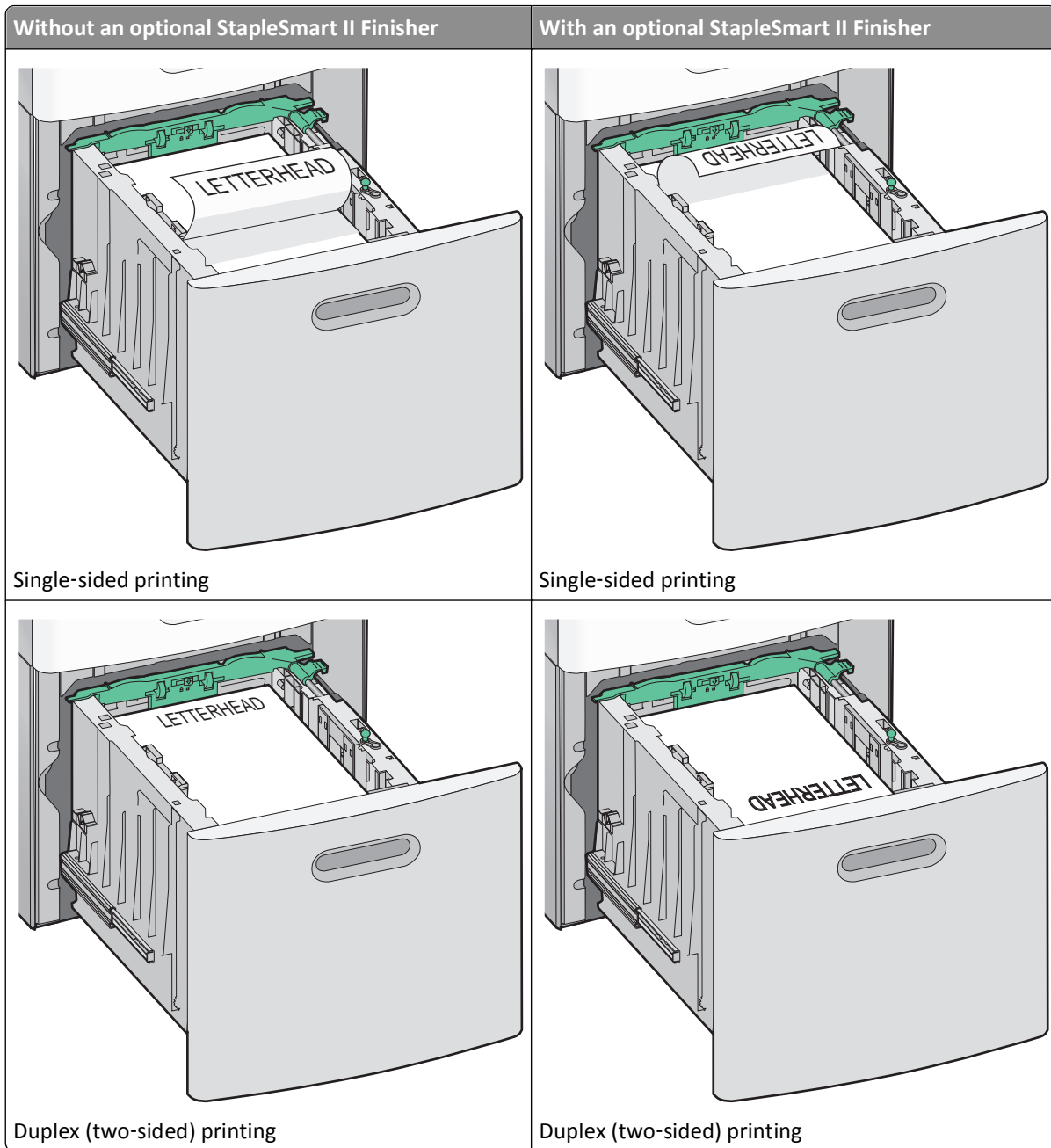
Note: Notice the maximum fill line on the side of the tray which indicates the maximum height for loading paper. Do not overload the tray.
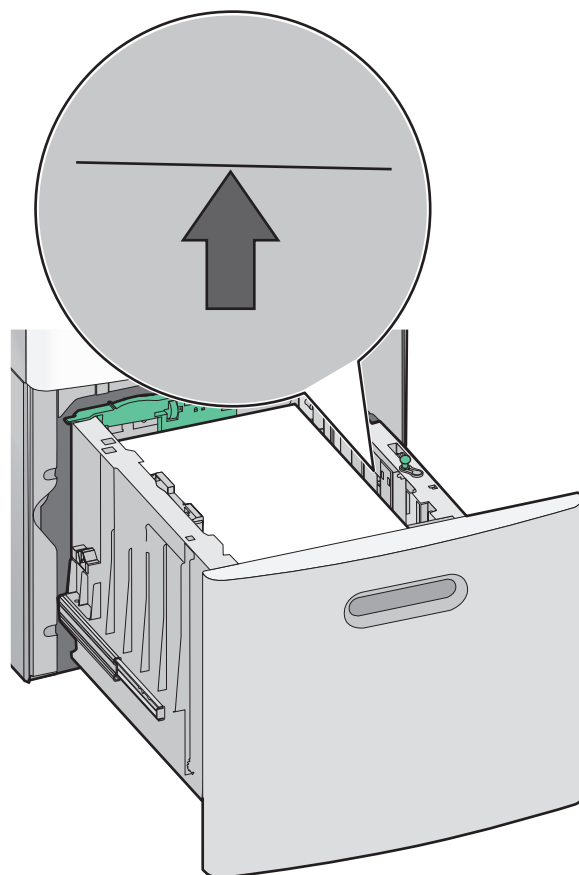
7 Insert the tray.

Loading the multipurpose feeder

1 Press the release latch, and then pull down the multipurpose feeder door.
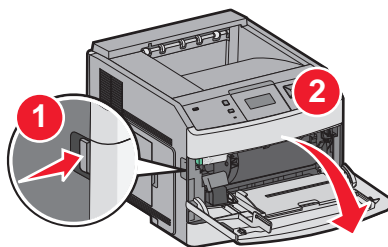
2 Pull out the extension until it is fully extended.
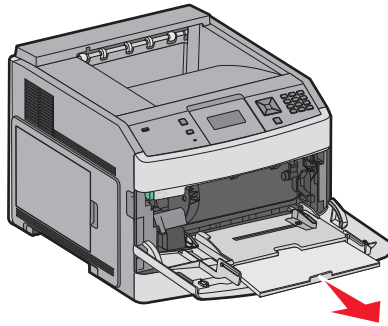
3 Squeeze and slide the width guide to the far right.
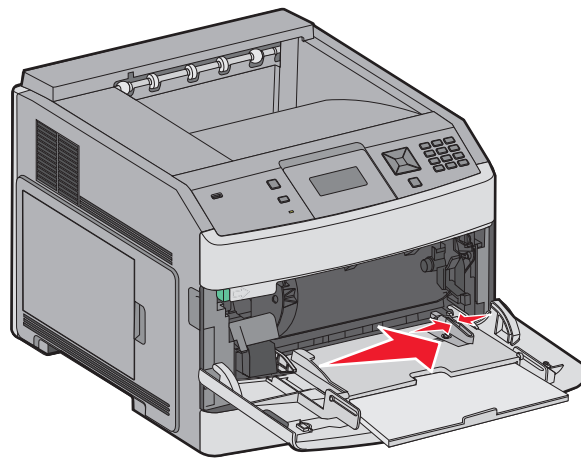
4 Flex the sheets of paper or specialty media back and forth to loosen them, and then fan them. Do not fold or crease them. Straighten the edges on a level surface.

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

Transparencies*	
* Avoid touching the print side of transparencies. Be careful not to scratch them.	
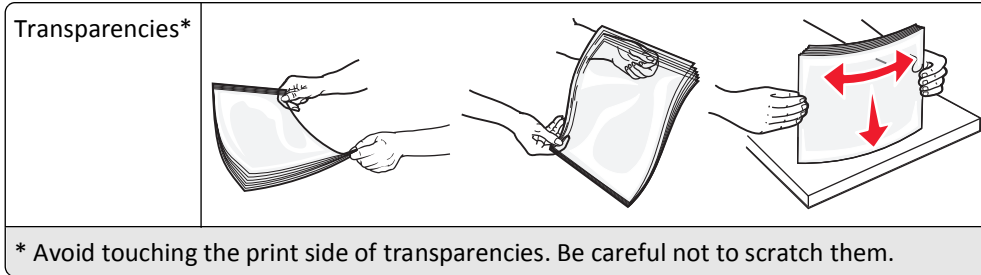
5 Load the paper or specialty media. Slide the stack gently into the multipurpose feeder until it comes to a stop.

Without an optional StapleSmart II Finisher	With an optional StapleSmart II Finisher
Single-sided printing	Single-sided printing
Duplex (two‑sided) printing	Duplex (two‑sided) printing
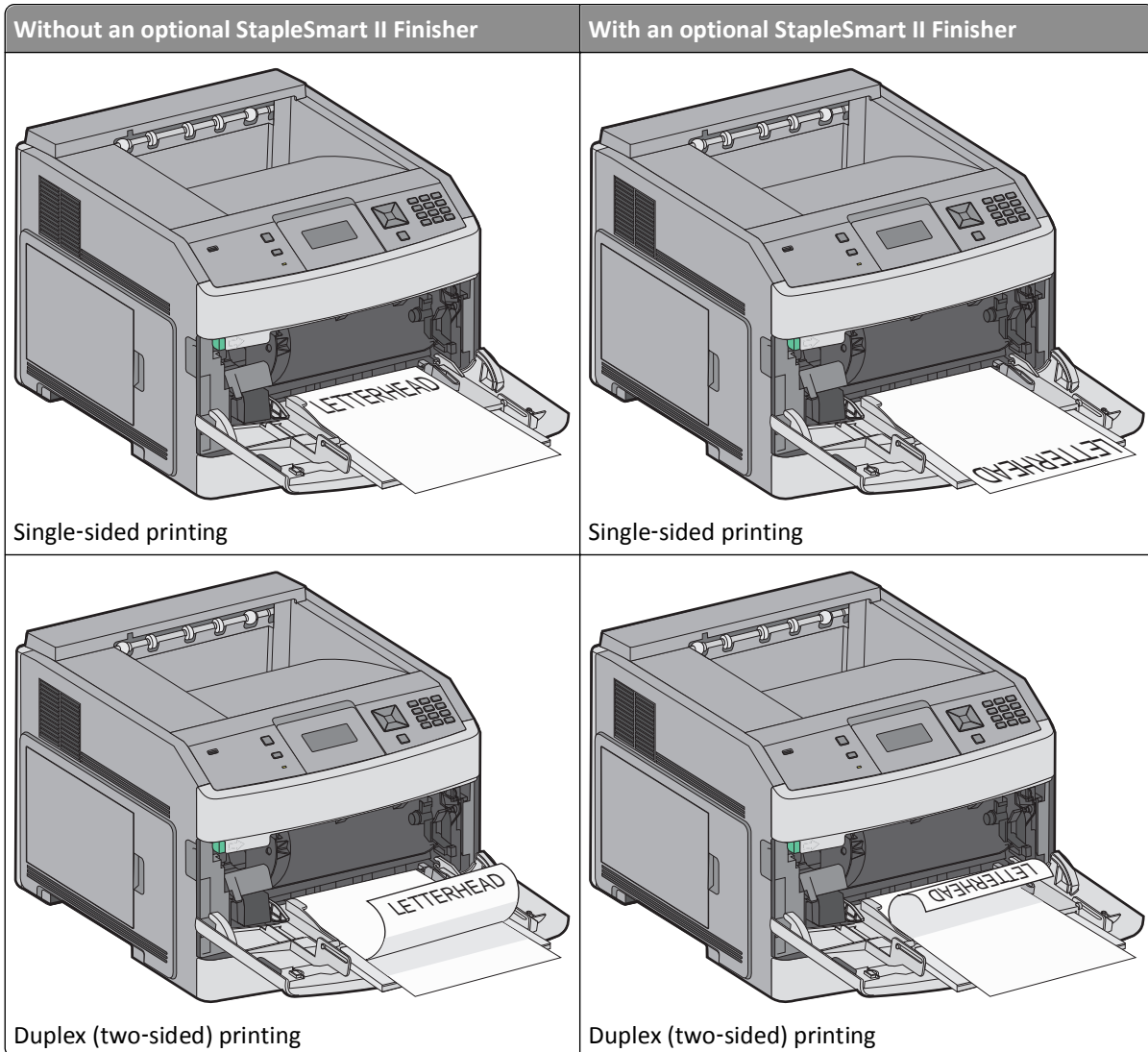
Notes:

- 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.
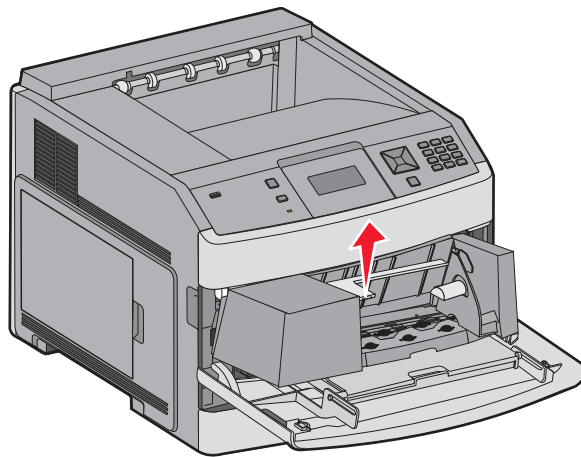
3 Slide the width guide to the right.
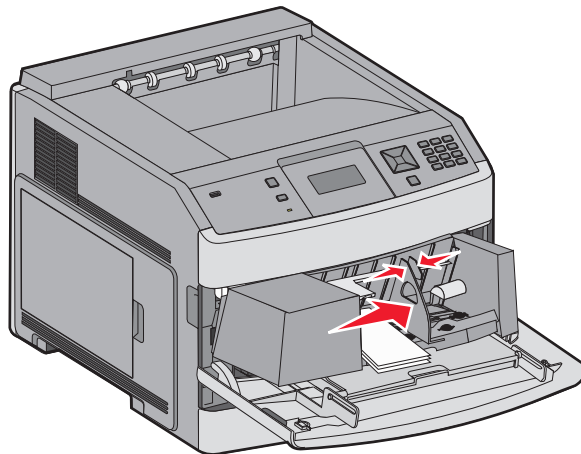
4 Prepare the envelopes for loading.

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.
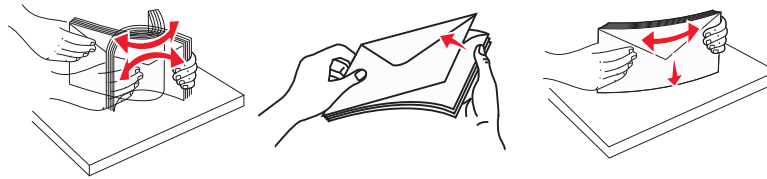
5 Load the stack of envelopes flap side down.

> **Warning—Potential Damage:** Never use envelopes with stamps, clasps, snaps, windows, coated linings, or self-stick adhesives. These envelopes may severely damage the printer.
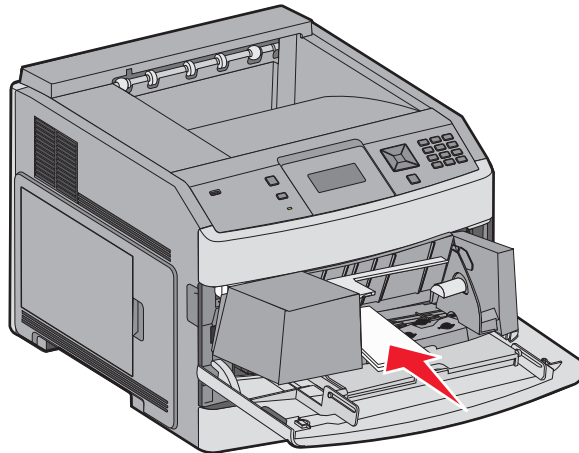
> **Note:** Do not exceed the maximum stack height by forcing paper under the stack height limiter.

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 or 550 sheets of 20 lb paper, depending on the printer model. 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 arrow buttons until √ **Paper Menu** appears, and then press √.

4 Press the arrow buttons until √ **Bin Setup** appears, and then press √.

5 Press the arrow buttons until the correct tray appears, and then press √.

6 Press the arrow buttons until √ **Configure Bins** appears, and then press √.

7 Press the arrow buttons until √ **Link** appears, and then press √.

Changing a Custom Type <x> name

You can use the Embedded Web Server or MarkVision™ 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 from 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**.

3 Under Default Settings, click **Paper Menu**.

4 Click **Custom Names**.

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/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 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.

Note: For detailed information on card stock and labels, see the *Card Stock & Label Guide* available on the Lexmark Web site at **www.lexmark.com/publications**.

Weight

The printer can automatically feed paper weights from 60–176 g/m^2 (16–47 lb bond) grain long. Paper lighter than 60 g/m^2 (16 lb) might not be stiff enough to feed properly, causing jams. For best performance, use 75 g/m^2 (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^2 (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^2 (16–47 lb bond) paper, grain long paper is recommended. For paper heavier than 176 g/m^2, 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" on page 68.

Unacceptable paper

Test results indicate that the following paper types are at risk for use with laser printers:

- Chemically treated papers used to make copies without carbon paper, also known as *carbonless papers*
- Preprinted papers with chemicals that may contaminate the paper
- Preprinted papers that can be affected by the temperature in the printer fuser
- Preprinted papers that require a registration (the precise location on the page) greater than ± 2.3 mm (± 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 testing)
- Paper weighing less than 60 g/m^2 (16 lb)
- Multiple part forms or documents

For more information about Lexmark, visit **www.lexmark.com**. General sustainability‑related information can be found at the **Environmental Sustainability** link.

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 60–90 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°C (446°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

As an environmentally conscientious company, Lexmark supports the use of recycled paper produced specifically for use in laser (electro-photographic) printers.

While no blanket statement can be made that all recycled paper will feed well, Lexmark consistently tests papers that represent recycled cut size copier papers available on the global market. This scientific testing is conducted with rigor and discipline. Many factors are taken into consideration both separately and as a whole, including the following:

- Amount of post-consumer waste (Lexmark tests up to 100% post-consumer waste content.)
- Temperature and humidity conditions (Testing chambers simulate climates from all over the world.)
- Moisture content (Business papers should have low moisture: 4–5%.)
- Bending resistance and proper stiffness means optimum feeding through the printer.
- Thickness (impacts how much can be loaded into a tray)
- Surface roughness (measured in Sheffield units, impacts print clarity and how well toner fuses to the paper)
- Surface friction (determines how easily sheets can be separated)
- Grain and formation (impacts curling, which also influences the mechanics of how the paper behaves as it moves through the printer)
- Brightness and texture (look and feel)

Recycled papers are better than ever; however, the amount of recycled content in a paper affects the degree of control over foreign matter. And while recycled papers are one good path to printing in an environmentally responsible manner, they are not perfect. The energy required to de-ink and deal with additives such as colorants and "glue" often generates more carbon emissions than does normal paper production. However, using recycled papers enables better resource management overall.

Lexmark concerns itself with the responsible use of paper in general based on life cycle assessments of its products. To gain a better understanding of the impact of printers on the environment, the company commissioned a number of life cycle assessments and found that paper was identified as the primary contributor (up to 80%) of carbon emissions caused throughout the entire life of a device (from design to end-of-life). This is due to the energy-intensive manufacturing processes required to make paper.

Thus, Lexmark seeks to educate customers and partners on minimizing the impact of paper. Using recycled paper is one way. Eliminating excessive and unnecessary paper consumption is another. Lexmark is well-equipped to help customers minimize printing and copying waste. In addition, the company encourages purchasing paper from suppliers who demonstrate their commitment to sustainable forestry practices.

Lexmark does not endorse specific suppliers, although a converter's product list for special applications is maintained. However, the following paper choice guidelines will help alleviate the environmental impact of printing:

1 Minimize paper consumption.

2 Be selective about the origin of wood fiber. Buy from suppliers who carry certifications such as the Forestry Stewardship Council (FSC) or The Program for the Endorsement of Forest Certification (PEFC). These certifications guarantee that the paper manufacturer uses wood pulp from forestry operators that employ environmentally and socially responsible forest management and restoration practices.

3 Choose the most appropriate paper for printing needs: normal 75 or 80 g/m² certified paper, lower weight paper, or recycled paper.

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.

For information on card stock and labels, see the *Card Stock & Label Guide* on the Lexmark Web site.

Paper sizes supported by the printer

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

Paper size	Dimensions	250- or 550-sheet trays (standard or optional)	Optional 2000-sheet tray	Multipurpose feeder	Duplex unit
A4	210 x 297 mm (8.3 x 11.7 in.)	✓	✓	✓	✓
A5	148 x 210 mm (5.8 x 8.3 in.)	✓	X	✓	✓
A6[1,2]	105 x 148 mm (4.1 x 5.8 in.)	X	X	✓	X
JIS B5	182 x 257 mm (7.2 x 10.1 in.)	✓	X	✓	✓
Letter	216 x 279 mm (8.5 x 11 in.)	✓	✓	✓	✓

[1] This size appears in the Paper Size menu only when Tray Size Sensing is turned off. For more information, contact Customer Support.

[2] Only the standard exit bin supports this size.

[3] 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.

[4] To support duplexing, the Universal width must be between 148 mm (5.8 in) and 216 mm (8.5 in); Universal length must be between 182 mm (7.2 in) and 356 mm (14 in).

Paper size	Dimensions	250- or 550-sheet trays (standard or optional)	Optional 2000-sheet tray	Multipurpose feeder	Duplex unit
Legal	216 x 356 mm (8.5 x 14 in.)	✓	✓	✓	✓
Executive	184 x 267 mm (7.3 x 10.5 in.)	✓	X	✓	✓
Oficio[1]	216 x 340 mm (8.5 x 13.4 in.)	✓	X	✓	✓
Folio[1]	216 x 330 mm (8.5 x 13 in.)	✓	X	✓	✓
Statement[1]	140 x 216 mm (5.5 x 8.5 in.)	✓	X	✓	X
Universal[3,4]	138 x 210 mm (5.5 x 8.3 in.) up to 216 x 356 mm (8.5 x 14 in.)	✓	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
	148 x 182 mm (5.8 x 7.7 in.) up to 216 x 356 mm (8.5 x 14 in.)	✓	X	✓	✓
7 3/4 Envelope (Monarch)	98 x 191 mm (3.9 x 7.5 in.)	X	X	✓	X
9 Envelope	98 x 225 mm (3.9 x 8.9 in.)	X	X	✓	X
10 Envelope	105 x 241 mm (4.1 x 9.5 in.)	X	X	✓	X
DL Envelope	110 x 220 mm (4.3 x 8.7 in.)	X	X	✓	X
Other Envelope	98 x 162 mm (3.9 x 6.4 in.) to 176 x 250 mm (6.9 x 9.8 in.)	X	X	✓	X

[1] This size appears in the Paper Size menu only when Tray Size Sensing is turned off. For more information, contact Customer Support.

[2] Only the standard exit bin supports this size.

[3] 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.

[4] To support duplexing, the Universal width must be between 148 mm (5.8 in) and 216 mm (8.5 in); Universal length must be between 182 mm (7.2 in) and 356 mm (14 in).

Paper types and weights supported by the printer

The printer engine supports 60–176 g/m² (16–47 lb) paper weights. The duplex unit supports 63–170 g/m² (17–45 lb) paper weights.

Paper type	250- or 550-sheet trays (standard or optional)	Optional 2000-sheet tray	Multipurpose feeder	Duplex unit
Paper • Plain • Bond • Colored • Custom • Letterhead • Light • Heavy • Preprinted • Rough/Cotton • Recycled	✓	✓	✓	✓
Card stock	✓	✓	✓	✓
Envelopes	X	X	✓	X
Labels [1] • Paper • Vinyl	✓	✓	✓	✓
Transparencies	✓	✓	✓	✓
[1] Printing labels requires a special label fuser cleaner which is included with the special cartridge required for label applications.				

Paper types and weights supported by the output bins

Use this table to determine the possible output destinations of print jobs which use supported paper types and weights. The paper capacity of each output bin is listed in parentheses. Paper capacity estimations are calculated based on 75 g/m² (20 lb) paper.

The finisher supports 60–176 g/m² (16–47 lb) paper weights.

Paper type	Standard exit bin (350 or 550 sheets)	Optional hardware		
		Output Expander (550 sheets) or High Capacity Output Stacker (1850 sheets)	5-Bin Mailbox (500 sheets)[1]	StapleSmart II Finisher (500 sheets)[2]
Paper • Plain • Bond • Colored • Custom • Letterhead • Light • Heavy • Preprinted • Rough/Cotton • Recycled	✓	✓	✓	✓
Card stock	✓	✓	X	X
Envelopes	✓	✓	X	X
Labels [3] • Paper • Vinyl	✓	✓	X	X
Transparencies	✓	✓	X	X
[1] Supports 60-90 g/m^2 (16-24 lb) paper weights. [2] Maximum of 50 sheets of 75 g/m^2 (20 lb) paper per stapled packet. Results may vary with heavier paper. [3] Printing labels requires a special label fuser cleaner which is included with the special cartridge required for label applications.				

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 82 and "Storing paper" on page 69.

Printing a document

1 From the printer control panel Paper menu, set the Paper Type and Paper Size to match the loaded paper.

2 Send the print job:

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 52
    - "Loading the 2000-sheet tray" on page 56

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^2 (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.
- We recommend Lexmark part number 12A5010 for A4‑size transparencies and Lexmark part number 70X7240 for letter‑size transparencies.

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^2 (24 lb bond) paper. Use up to 105 g/m^2 (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^2 (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

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

Notes:

- Paper, dual-web paper, polyester, and vinyl labels are supported.
- When using the duplex unit, specially-designed, integrated, and dual-web paper labels are supported.
- Printing labels requires a special label fuser cleaner which is included with the special cartridge required for label applications. For more information, see "Ordering supplies" on page 169.

For detailed information on label printing, characteristics, and design, see the *Card Stock & Label Guide* available on the Lexmark Web site at **www.lexmark.com/publications**.

When printing on labels:

- Feed labels from a 250-sheet tray, a 550-sheet tray, or the multipurpose feeder.
- Use labels designed specifically for laser printers. Check with the manufacturer or vendor to verify that:
  - The labels can withstand temperatures up to 230°C (446°F) without sealing, excessive curling, wrinkling, or releasing hazardous emissions.
  - Label adhesives, face sheet (printable stock), and topcoats can withstand up to 25 psi (172 kPa) pressure without delaminating, oozing around the edges, or releasing hazardous fumes.
- Do not use labels with slick backing material.
- 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 *and* 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.

Other types of held jobs include:

- Profiles from various sources including Lexmark Document Solutions Suite (LDSS)

- Forms from a kiosk

- Bookmarks

- Jobs not printed, which are called *parked jobs*

Printing confidential and other held jobs

Note: 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, Repeat, Reserve, or Verify), 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 arrow buttons until √**Held jobs** appears, and then press ☑.

7 Press the arrow buttons until √ appears next to your user name, and then press ☑.

8 Press the arrow buttons 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 77.

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 arrow buttons until √**Cancel** appears, and then press ☑.

10 Press the arrow buttons until √ appears next to the job you want to print, and then press ☑.

11 Press the arrow buttons 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 or Copies & Pages pop-up menu, choose **Job Routing**.

3 Select your job type (Confidential, Repeat, Reserve, or Verify), and then assign a user name. For a confidential job, also enter a four-digit PIN.

4 Click **OK** or **Print**, and then go to the printer to release the job.

5 From the printer control panel, press the arrow buttons until √**Held jobs** appears, and then press ☑.

6 Press the arrow buttons until √ appears next to your user name, and then press ☑.

7 Press the arrow buttons until √ appears next to the job type or job name, and then press ☑.

If you selected a job name, proceed to step 10 on page 78.

8 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 arrow buttons until √**Cancel** appears, and then press ☑.

9 Press the arrow buttons until √ appears next to the job you want to print, and then press ☑.

10 Press the arrow buttons 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.

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.

Many flash drives are tested and approved for use with the printer. For more information, visit the Lexmark Web site at **www.lexmark.com**.

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.

To print from a flash drive:

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

2 Insert a flash drive into the front USB port.
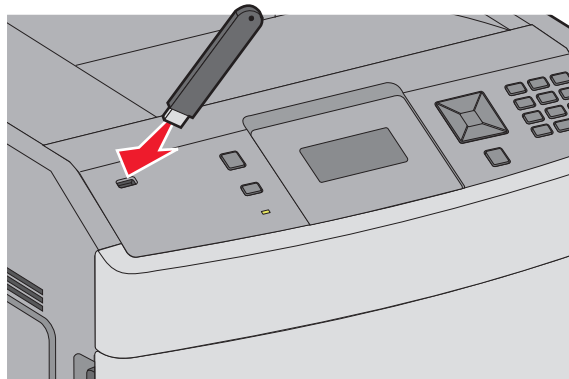
Notes:

- 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 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 arrow buttons until √ **Reports** appears, and then press ✓.

4 Press the arrow buttons until √ **Print Fonts** appears, and then press ✓.

5 Press the arrow buttons until √ appears next to **PCL Fonts**, **PostScript Fonts**, or **PPDS Fonts**, and then press ✓.

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 arrow buttons until √ **Reports** appears, and then press ✓.

4 Press the arrow buttons until √ **Print Directory** appears, and then press ✓.

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 ▶ while turning the printer on.

3 Release the buttons when the clock appears, and wait for **CONFIG MENU** to appear.

4 Press the arrow buttons until √ `Prt Quality Pgs` appears, and then press ☑.

The print quality test pages print.

5 Press the arrow buttons 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 arrow buttons until √ `Cancel` appears.

A list of jobs appears.

2 Press the arrow buttons 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 arrow buttons 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.

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 71.
- 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	StapleSmart II Finisher
283	Staple cartridge

200 and 201 paper jams

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

2 Push the release latch, and then open the front cover.
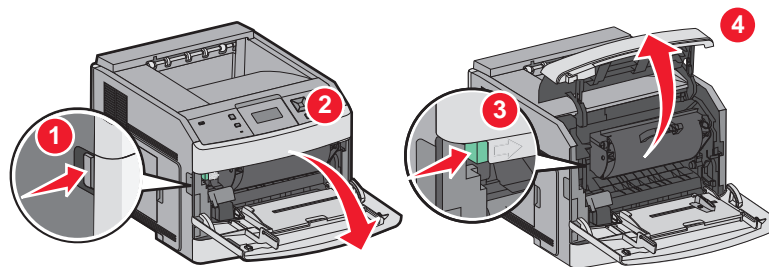
3 Lift and pull the print cartridge out of the printer.

> **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.
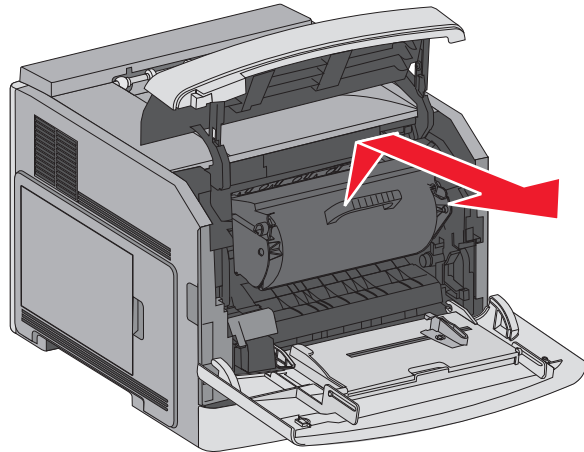
4 Place the print cartridge aside on a flat, smooth surface.

> **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 print 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.
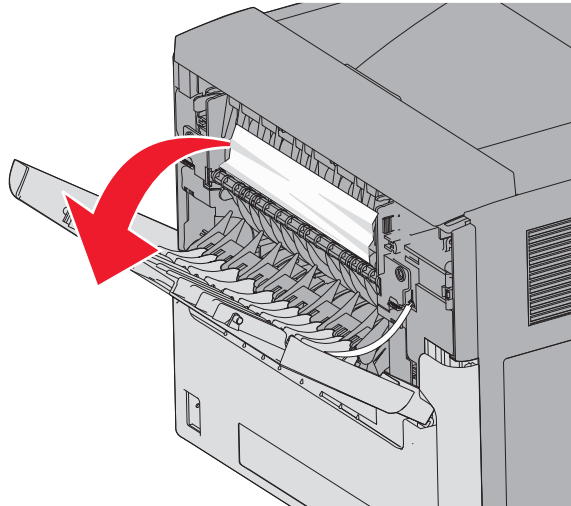
2 Slowly remove the jammed paper to avoid tearing it.

3 Close the top rear door.

4 Press ☑.

230 paper jam

Rear paper jams

1 Remove the standard tray from the printer.
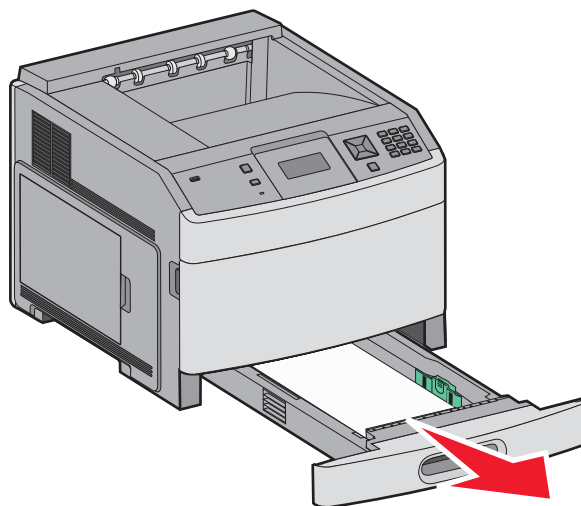
2 Pull down the bottom rear door.
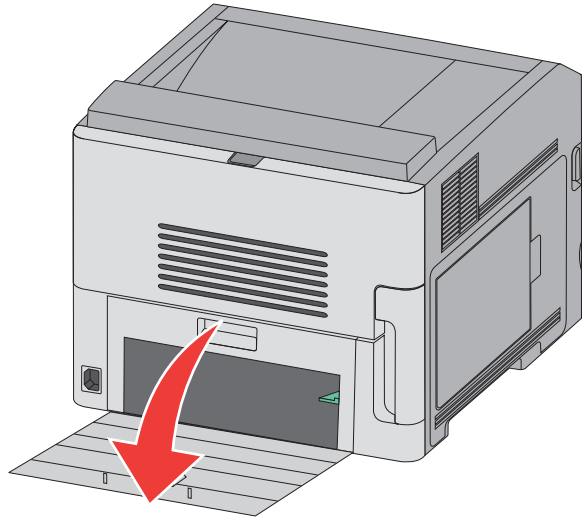
3 Push the tab down.
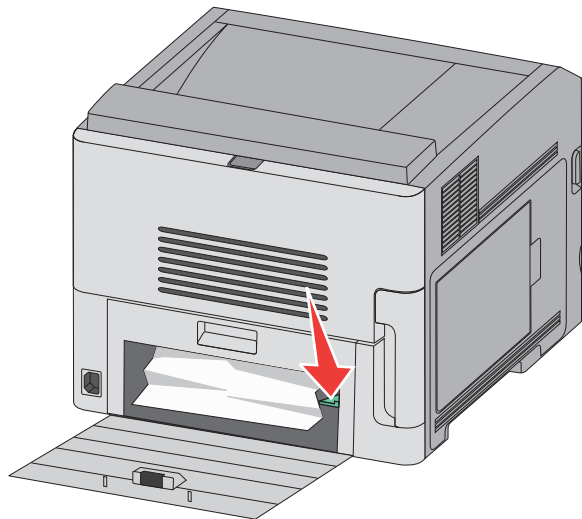
4 Remove the jammed paper.

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.
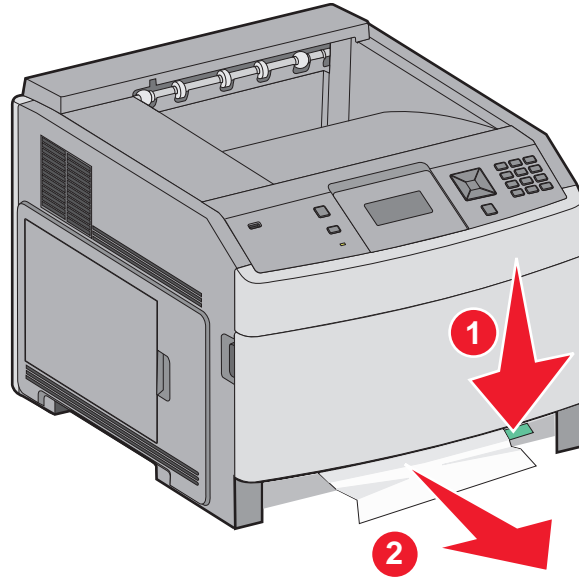
3 Remove the jammed paper.

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.
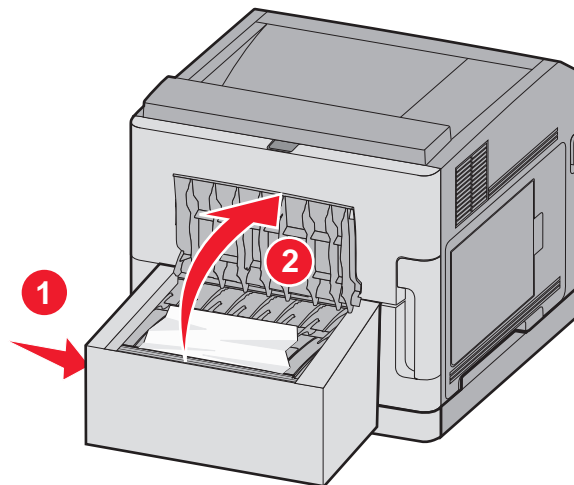
2 Remove the jammed paper.

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.
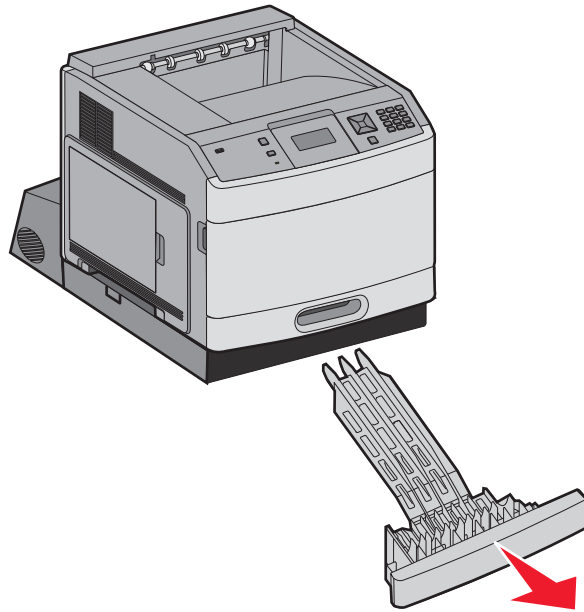
3 Raise the recessed duplex bar.
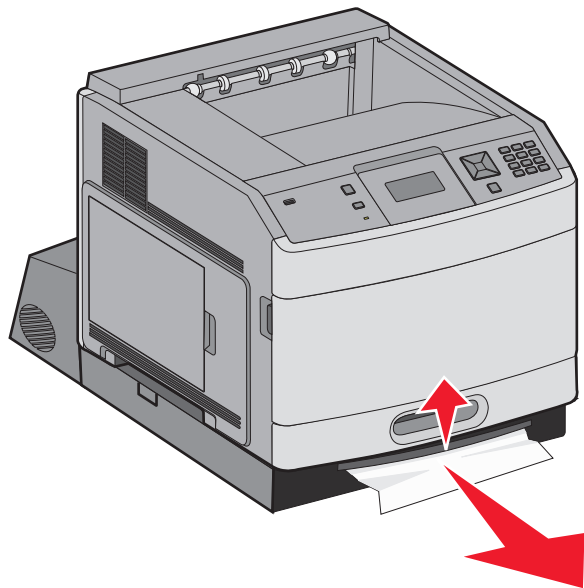
4 Remove the jammed paper.

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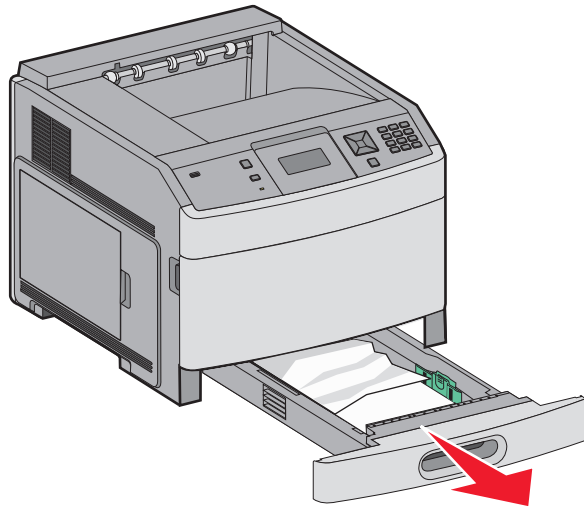
2 Remove any jammed paper, and then insert the tray.

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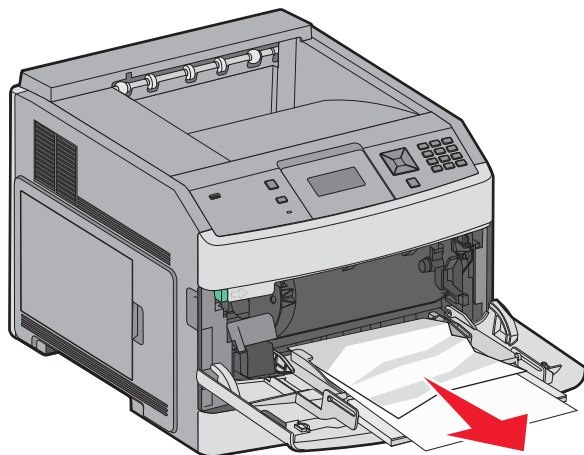
2 Flex the sheets of paper back and forth to loosen them, and then fan them. Do not fold or crease the paper. Straighten the edges on a level surface.

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.
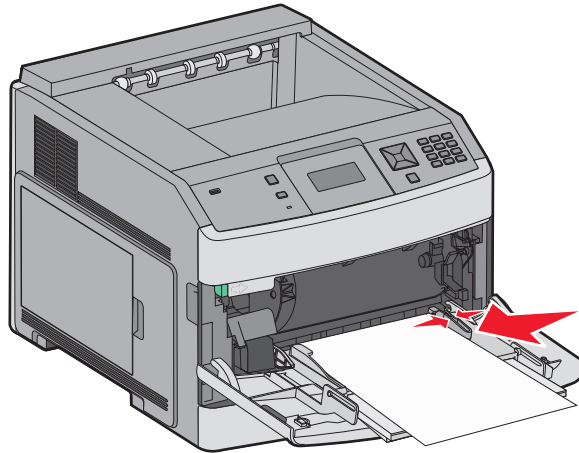
5 Press ☑.

260 paper jam

The envelope feeder feeds envelopes from the bottom of the stack; the bottom envelope will be the one that is jammed.

1 Lift the envelope weight, and then remove all the envelopes.
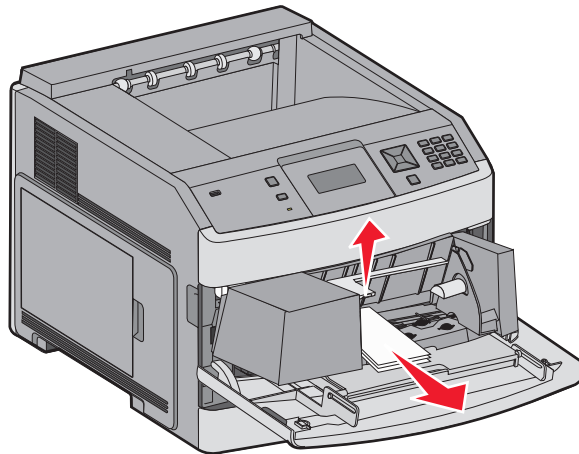
2 If the jammed envelope has entered the printer and cannot be pulled out, then lift the envelope feeder up and then out of the printer, and then set it aside.

3 Remove the envelope from the printer.

   Note: If you cannot remove the envelope, then the print cartridge will have to be removed. For more information, see "200 and 201 paper jams" on page 83.

4 Reinstall the envelope feeder. Make sure it *snaps* 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 StapleSmart II 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 StapleSmart II Finisher door.
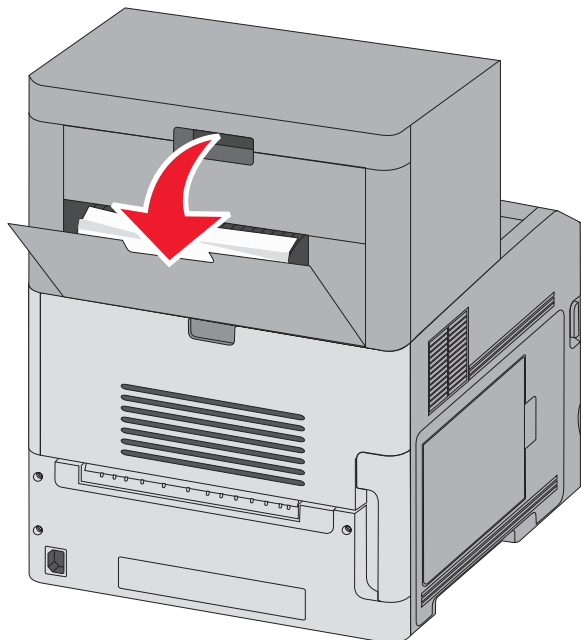
2 Remove the jammed paper.

3 Close the StapleSmart II Finisher door.

4 Press ☑.

281 paper jam

1 Clear the jam from the stapler output bin.
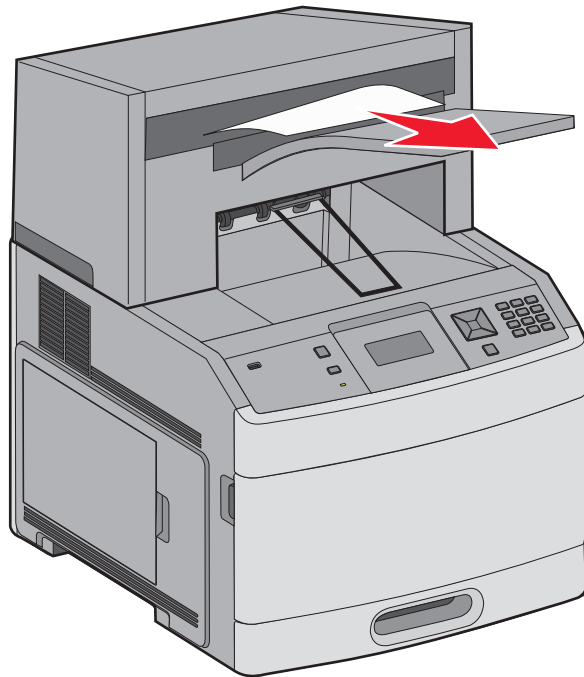
2 Press ☑.

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.
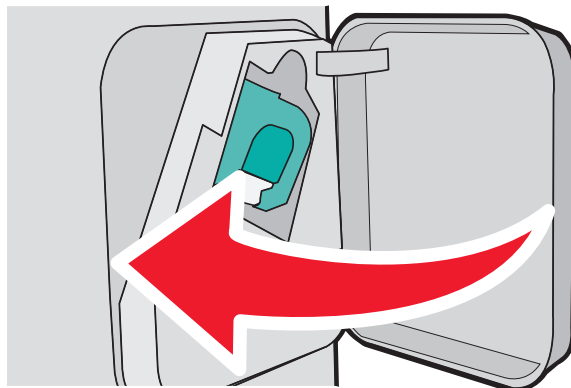
2 Press ☑.

283 staple jam

1 Press the latch to open the stapler door.
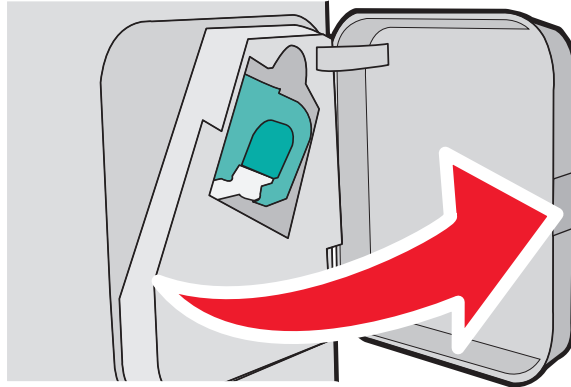
2 Pull the latch of the staple cartridge holder down, and then pull the holder out of the printer.
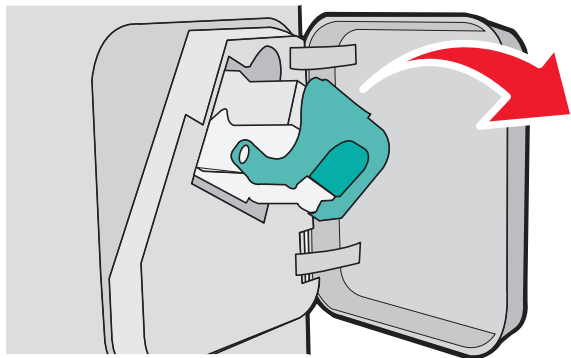
3 Use the metal tab to lift the staple guard, and then remove any loose staples.
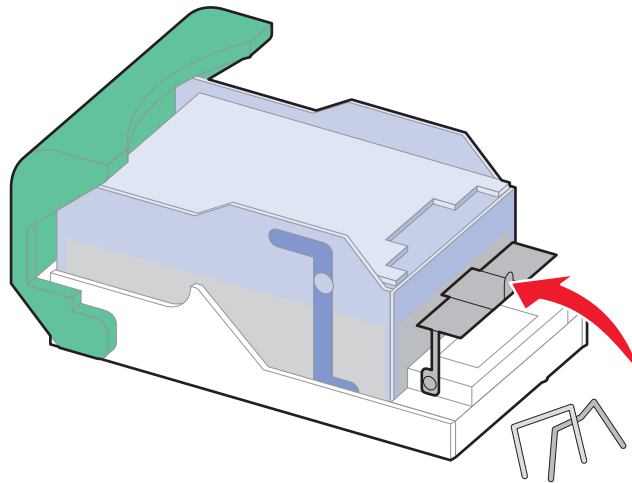
4 Press down on the staple guard until it *snaps* into place.
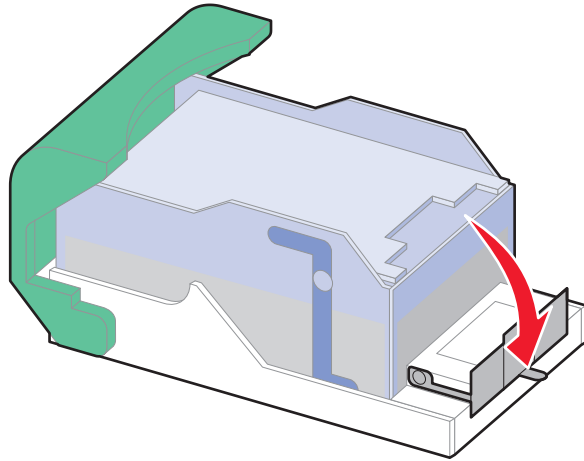
5 Push the cartridge holder firmly back into the stapler unit until the cartridge holder *clicks* into place.

6 Close the stapler door.

7 Press ✓.

Understanding printer menus

Menus list

A number of menus are available to make it easy for you to change printer settings:

Paper Menu

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

Reports

Menu Settings Page
Device Statistics
Network Setup Page[1]
Profiles List
NetWare Setup Page
Print Fonts
Print Directory
Asset Report

Network/Ports

Active NIC
Standard Network[2]
Standard USB
Parallel <x>
Serial <x>
SMTP Setup

[1] Depending on the printer setup, this menu item appears as Network Setup Page or Network <x> Setup Page.

[2] Depending on the printer setup, this menu item appears as Standard Network or Network <x>.

Security

Miscellaneous Security Settings
Confidential Print
Disk Wiping
Security Audit Log
Set Date/Time

Settings

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

Help

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

Paper menu

Default Source menu

Menu item	Description
Default Source Tray <x> MP Feeder Envelope Feeder Manual Paper Manual Env	Sets a default paper source for all print jobs **Notes:** • Tray 1 (standard tray) is the factory default setting. • Only an installed paper source will appear as a menu setting. • A paper source selected by a print job will override the Default Source setting for the duration of the print job. • 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. • From the Paper menu, Configure MP must be set to Cassette in order for MP Feeder to appear as a menu setting.

Paper Size/Type menu

Menu item	Description
Tray <x> Size A4 A5 A6 JIS B5 Letter Legal Executive[*] Oficio[*] Folio Statement[*] Universal	Specifies the paper size loaded in each tray **Notes:** • A4 is the international factory default setting. Letter is the US factory default setting. • For trays with automatic size sensing, only the size detected by the hardware appears. • 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. • Automatic size sensing is not supported for Oficio, Folio, or Statement paper sizes. • The 2000-sheet tray supports A4, Letter, and Legal paper sizes.
[*] Appears only if Tray Size Sensing is turned off. For more information, contact Customer Support.	
Note: Only installed trays, drawers, and feeders are listed in this menu.	

Menu item	Description
Tray <x> Type 　　Plain Paper 　　Card Stock 　　Transparency 　　Recycled 　　Labels 　　Vinyl Labels 　　Bond 　　Letterhead 　　Preprinted 　　Colored Paper 　　Light Paper 　　Heavy Paper 　　Rough/Cotton Paper 　　Custom Type <x>	Specifies the type of paper loaded in each tray **Notes:** • Plain Paper is the factory default setting for Tray 1. Custom Type <x> is the factory default setting for all other trays. • If available, a user-defined name will appear instead of Custom Type <x>. • 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.
MP Feeder Size 　　A4 　　A5 　　A6 　　JIS B5 　　Letter 　　Legal 　　Executive 　　Oficio 　　Folio 　　Statement 　　Universal 　　7 3/4 Envelope 　　9 Envelope 　　10 Envelope 　　DL Envelope 　　Other Envelope	Specifies the paper size loaded in the multipurpose feeder **Notes:** • From the Paper menu, Configure MP must be set to Cassette in order for MP Feeder Size to appear as a menu item. • A4 is the international factory default setting. Letter is the US factory default setting. • The multipurpose feeder does not automatically sense paper size. The paper size value must be set.
* Appears only if Tray Size Sensing is turned off. For more information, contact Customer Support. **Note:** Only installed trays, drawers, and feeders are listed in this menu.	

Menu item	Description
MP Feeder Type Plain Paper Card Stock Transparency Recycled Labels Vinyl Labels Bond Envelope Rough Envelope Letterhead Preprinted Colored Paper Light Paper Heavy Paper Rough/Cotton Paper Custom Type <x>	Specifies the type of paper loaded in the multipurpose feeder **Notes:** • From the Paper menu, Configure MP must be set to Cassette in order for MP Feeder Type to appear as a menu item. • Plain Paper is the factory default setting.
Envelope Feeder Size 7 3/4 Envelope 9 Envelope 10 Envelope DL Envelope Other Envelope	Specifies the envelope size loaded in the envelope feeder **Note:** DL Envelope is the international factory default setting. 10 Envelope is the US factory default setting.
Envelope Feeder Type Envelope Rough Envelope Custom Type <x>	Specifies the type of envelope loaded in the envelope feeder **Notes:** • Envelope is the factory default setting. • The Custom Type setting can be used to store up to six types of envelopes.
Manual Paper Size A4 A5 A6 JIS B5 Letter Legal Executive Oficio Folio Statement Universal	Specifies the size of the paper being manually loaded **Note:** A4 is the international factory default setting. Letter is the US factory default setting.
[*] Appears only if Tray Size Sensing is turned off. For more information, contact Customer Support. **Note:** Only installed trays, drawers, and feeders are listed in this menu.	

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

Configure MP menu

Menu item	Description
Configure MP Cassette Manual First	Determines when the printer selects paper from the multipurpose feeder **Notes:** • Cassette is the factory default setting. • The Cassette setting configures the multipurpose feeder as an automatic paper source. • When Manual is selected, the multipurpose feeder can be used only for manual feed print jobs. • If paper is loaded in the multipurpose feeder and First is selected, then paper always feeds from the multipurpose feeder first.

Envelope Enhance

The envelope conditioner significantly reduces the wrinkling of some envelopes.

Menu item	Description
Envelope Enhance Off 1 (Least) 2 3 4 5 6 (Most)	Enables or disables the envelope conditioner **Notes:** • The factory default setting is 5. • If noise reduction is more important than wrinkle reduction, then decrease the setting.

Substitute Size menu

Menu item	Description
Substitute Size Off Statement/A5 Letter/A4 All Listed	Substitutes a specified paper size if the requested paper size is not available **Notes:** • All Listed is the factory default setting. All available substitutions are allowed. • The Off setting indicates no size substitutions are allowed. • Setting a substitution lets the job print without a Change Paper message appearing.

Paper Texture menu

Menu item	Description
Plain Texture Smooth Normal Rough	Specifies the relative texture of the paper loaded in a specific tray **Note:** Normal is the factory default setting.
Card Stock Texture Smooth Normal Rough	Specifies the relative texture of the card stock loaded in a specific tray **Notes:** • Normal is the factory default setting. • Settings appear only if card stock is supported.
Transparency Texture Smooth Normal Rough	Specifies the relative texture of the transparencies loaded in a specific tray **Note:** Normal is the factory default setting.

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

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

Paper Weight menu

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

Menu item	Description
Bond Weight Light Normal Heavy	Specifies the relative weight of the paper loaded in a specific tray **Note:** Normal is the factory default setting.
Envelope Weight Light Normal Heavy	Specifies the relative weight of the envelopes loaded in a specific tray **Note:** Normal is the factory default setting.
Rough Envelope Weight Light Normal Heavy	Specifies the relative weight of the rough envelopes loaded in a specific tray **Note:** Normal is the factory default setting.
Letterhead Weight Light Normal Heavy	Specifies the relative weight of the paper loaded in a specific tray **Note:** Normal is the factory default setting.
Preprinted Weight Light Normal Heavy	Specifies the relative weight of the paper loaded in a specific tray **Note:** Normal is the factory default setting.
Colored Weight Light Normal Heavy	Specifies the relative weight of the paper loaded in a specific tray **Note:** Normal is the factory default setting.
Light Weight Light	Specifies the relative weight of the paper loaded in a specific tray
Heavy Weight Heavy	Specifies the relative weight of the paper loaded in a specific tray
Rough Weight Light Normal Heavy	Specifies the relative weight of the paper loaded in a specific tray **Note:** Normal is the factory default setting.
Custom <x> Light Normal Heavy	Specifies the relative weight of the custom paper type loaded in a specific tray **Notes:** • Normal is the factory default setting. • Settings appear only if the custom type is supported.

Paper Loading menu

Paper trays require paper to be loaded differently for one-sided or two-sided (duplex) printing. However, if the specified paper is loaded in the duplex orientation, the Duplex setting permits correct printing of both one-sided or two-sided (duplex) print jobs without having to reload the paper. When one-sided printing is selected from Print Properties in Windows or the Print dialog in Macintosh, a blank page is inserted so that the one-sided job prints correctly.

Notes:

- Selecting a setting for one paper type will not affect other paper types.
- To set the printer default to duplex printing for all print jobs, use the Finishing menu.
- For information on paper loading orientation, see "Loading paper and specialty media" on page 51.

Menu item	Description
Card Stock Loading Duplex Off	When Duplex is selected, one-sided jobs can be printed when Card Stock is loaded in the two-sided orientation in the paper tray. When Off is selected, Card Stock must be loaded in either the one- or two-sided orientation depending on the print job. **Note:** Off is the factory default setting.
Recycled Loading Duplex Off	When Duplex is selected, one-sided jobs can be printed when Recycled paper is loaded in the two-sided orientation in the paper tray. When Off is selected, Recycled paper must be loaded in either the one- or two-sided orientation depending on the print job. **Note:** Off is the factory default setting.
Labels Loading Duplex Off	When Duplex is selected, one-sided jobs can be printed when Labels are loaded in the two-sided orientation in the paper tray. When Off is selected, Labels must be loaded in either the one- or two-sided orientation depending on the print job. **Note:** Off is the factory default setting.
Vinyl Labels Loading Duplex Off	When Duplex is selected, one-sided jobs can be printed when Vinyl Labels are loaded in the two-sided orientation in the paper tray. When Off is selected, Vinyl Labels must be loaded in either the one- or two-sided orientation depending on the print job. **Note:** Off is the factory default setting.
Bond Loading Duplex Off	When Duplex is selected, one-sided jobs can be printed when Bond paper is loaded in the two-sided orientation in the paper tray. When Off is selected, Bond paper must be loaded in either the one- or two-sided orientation depending on the print job. **Note:** Off is the factory default setting.
Letterhead Loading Duplex Off	When Duplex is selected, one-sided jobs can be printed when Letterhead paper is loaded in the two-sided orientation in the paper tray. When Off is selected, Letterhead paper must be loaded in either the one- or two-sided orientation depending on the print job. **Note:** Off is the factory default setting.

Menu item	Description
Preprinted Loading Duplex Off	When Duplex is selected, one-sided jobs can be printed when Preprinted paper is loaded in the two-sided orientation in the paper tray. When Off is selected, Preprinted paper must be loaded in either the one- or two-sided orientation depending on the print job. **Note:** Off is the factory default setting.
Colored Loading Duplex Off	When Duplex is selected, one-sided jobs can be printed when Colored paper is loaded in the two-sided orientation in the paper tray. When Off is selected, Colored paper must be loaded in either the one- or two-sided orientation depending on the print job. **Note:** Off is the factory default setting.
Light Loading Duplex Off	When Duplex is selected, one-sided jobs can be printed when Light paper is loaded in the two-sided orientation in the paper tray. When Off is selected, Light paper must be loaded in either the one- or two-sided orientation depending on the print job. **Note:** Off is the factory default setting.
Heavy Loading Duplex Off	When Duplex is selected, one-sided jobs can be printed when Heavy paper is loaded in the two-sided orientation in the paper tray. When Off is selected, Heavy paper must be loaded in either the one- or two-sided orientation depending on the print job. **Note:** Off is the factory default setting.
Rough Loading Duplex Off	When Duplex is selected, one-sided jobs can be printed when Rough paper is loaded in the two-sided orientation in the paper tray. When Off is selected, Rough paper must be loaded in either the one- or two-sided orientation depending on the print job. **Note:** Off is the factory default setting.
Custom <x> Loading Duplex Off	When Duplex is selected, one-sided jobs can be printed when Custom <x> paper is loaded in the two-sided orientation in the paper tray. When Off is selected, Custom <x> paper must be loaded in either the one- or two-sided orientation depending on the print job. **Notes:** • Off is the factory default setting. • Custom <x> Loading is available only if the custom type is supported.

Custom Types menu

Menu item	Description
Custom Type <x> Paper Card Stock Transparency Labels Vinyl Labels Envelope	Associates a paper or specialty media type with a factory default `Custom Type <x>` name or a user-defined Custom Name created from the Embedded Web Server or MarkVision Professional **Notes:** • Paper is the factory default setting. • The custom media type must be supported by the selected tray or multipurpose feeder in order to print from that source.
Recycled Paper Card Stock Transparency Labels Vinyl Labels Envelope	Specifies a paper type when the Recycled setting is selected in other menus **Notes:** • Paper is the factory default setting. • The custom media type must be supported by the selected tray or multipurpose feeder in order to print from that source.

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
Units of Measure Inches Millimeters	Identifies the units of measure **Notes:** • Inches is the US factory default setting. • Millimeters is the international factory default setting.
Portrait Width 3–14 inches 76–360 mm	Sets the portrait width **Notes:** • If the width exceeds the maximum, the printer uses the maximum width allowed. • 8.5 inches is the US factory default setting. Inches can be increased in 0.01-inch increments. • 216 mm is the international factory default setting. Millimeters can be increased in 1-mm increments.

Menu item	Description
Portrait Height 3–14 inches 76–360 mm	Sets the portrait height **Notes:** • If the height exceeds the maximum, the printer uses the maximum height allowed. • 14 inches is the US factory default setting. Inches can be increased in 0.01‑inch increments. • 356 mm is the international factory default setting. Millimeters can be increased in 1‑mm increments.
Feed Direction Short Edge Long Edge	Specifies the feed direction if the paper can be loaded in either direction **Notes:** • Short Edge is the factory default setting. • Long Edge appears only if the longest edge is shorter than the maximum width supported in the tray.

Bin Setup menu

Menu Item	Description
Output Bin Standard Bin Bin <x>	Specifies the default output bin **Note:** Standard Bin is the factory default setting.
Configure Bins Mailbox Link Mail Overflow Link Optional Type Assignment	Specifies configuration options for output bins **Notes:** • Mailbox is the factory default setting. • Bins assigned the same name are automatically linked unless Link Optional is selected. • The Mailbox setting treats each bin as a separate mailbox. • The Link setting links together all available output bins. • 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. • The Type Assignment setting assigns each paper type to an output bin or linked bin set.
Overflow Bin Standard Bin Bin <x>	Specifies an alternate output bin when a designated bin is full **Note:** Standard Bin is the factory default setting.

Menu Item	Description

Assign Type/Bin
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 Bin
Heavy 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>
	Note: Standard Bin is the factory default setting.

Reports menu

Menu item	Description
Menu Settings Page	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
Device Statistics	Prints a report containing printer statistics such as supply information and details about printed pages
Network Setup Page	Prints a report containing information about the network printer settings, such as the TCP/IP address information **Note:** This menu item appears only for network printers or printers connected to print servers.
Network <x> Setup Page	Prints a report containing information about the network printer settings, such as the TCP/IP address information **Notes:** • This menu item is available when more than one network option is installed. • This menu item appears only for network printers or printers connected to print servers.
Profiles List	Prints a list of profiles stored in the printer
NetWare Setup Page	Prints a report containing NetWare-specific information about the network settings **Note:** This menu item appears only for printers with an internal print server installed.

Menu item	Description

Print Fonts
    PCL Fonts
    PostScript Fonts
	Prints a report in English of all the fonts available for the printer language currently set in the printer
	
	Note: A separate list is available for PCL and PostScript emulations. Each emulator report contains print samples and information about the language's available fonts.

Print Directory	Prints a list of all the resources stored on an optional flash memory card or printer hard disk **Notes:** • Job Buffer Size must be set to 100%. • The optional flash memory or printer hard disk must be installed correctly and working properly.
Asset Report	Prints a report containing asset information including the printer serial number and model name. The report contains text and UPC barcodes that can be scanned into an asset database.

Network/Ports menu

Active NIC menu

Menu item	Description
Active NIC Auto <list of available network cards>	**Notes:** • Auto is the factory default setting. • This menu item appears only if an optional network card is installed.

Standard Network or Network <x> menus

Note: Only active ports appear in this menu; all inactive ports are omitted.

Menu item	Description

PCL SmartSwitch
    On
    Off
	Sets the printer to automatically switch to PCL emulation when a print job requires it, regardless of the default printer language
	
	Notes:
	• On is the factory default setting.
	• When the Off setting is used, the printer does not examine incoming data.
	• 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.

Menu item	Description
PS SmartSwitch On Off	Sets the printer to automatically switch to PS emulation when a print job requires it, regardless of the default printer language **Notes:** • On is the factory default setting. • When the Off setting is used, the printer does not examine incoming data. • 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.
NPA Mode Off Auto	Sets the printer to perform the special processing required for bidirectional communication following the conventions defined by the NPA protocol **Notes:** • Auto is the factory default setting. • Changing this setting from the printer control panel and then exiting the menus causes the printer to restart. The menu selection is updated.
Network Buffer Auto 3K to <maximum size allowed>	Sets the size of the network input buffer **Notes:** • Auto is the factory default setting. • The value can be changed in 1-K increments. • 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. • To increase the maximum size range for the Network Buffer, disable or reduce the size of the parallel, serial, and USB buffers. • Changing this setting from the printer control panel and then exiting the menus causes the printer to restart. The menu selection is updated.
Job Buffering Off On Auto	Temporarily stores jobs on the printer hard disk before printing. This menu only appears if a formatted disk is installed. **Notes:** • Off is the factory default setting. • The On value buffers jobs on the printer hard disk. This menu selection appears only when a formatted disk is installed and is not defective. • The Auto setting buffers print jobs only if the printer is busy processing data from another input port. • Changing this setting from the printer control panel and then exiting the menus causes the printer to restart. The menu selection is updated.
Mac Binary PS On Off Auto	Sets the printer to process Macintosh binary PostScript print jobs **Notes:** • Auto is the factory default setting. • The Off setting filters print jobs using the standard protocol. • The On setting processes raw binary PostScript print jobs.

Menu item	Description

Std Network Setup
    Reports or Network Reports
    Network Card
    TCP/IP
    IPv6
    AppleTalk
    NetWare
    LexLink
 	
Net <x> Setup
    Reports or Network Reports
    Network Card
    TCP/IP
    IPv6
    Wireless
    AppleTalk
    NetWare
    LexLink
	For descriptions and settings of the network setup menus, see the following:
	• "Network Reports menu" on page 111
	• "Network Card menu" on page 111
	• "TCP/IP menu" on page 112
	• "IPv6 menu" on page 113
	• "Wireless menu" on page 113
	• "AppleTalk menu" on page 114
	• "NetWare menu" on page 114
	• "LexLink menu" on page 115
	Note: The Wireless menu appears only when the printer is connected to a wireless network.

Network Reports menu

This menu is available from the Network/Ports menu:

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

Menu item	Description
Print Setup Page **Print NetWare Setup Page**	Prints a report containing information about the current network setup **Notes:** • The Setup Page contains information about the network printer settings, such as the TCP/IP address. • The NetWare Setup Page menu item appears only on models that support NetWare and shows information about NetWare settings.

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

View Card Status
    Connected
    Disconnected
	Lets you view the connection status of the Network Card

View Card Speed	Lets you view the speed of a currently active network card

Menu item	Description
Network Address UAA LAA	Lets you view the network addresses
Job Timeout 0–225 seconds	Sets the amount of time in seconds that a network print job can take before it is canceled **Notes:** • 90 seconds is the factory default setting. • A setting value of 0 disables the timeout. • If a value of 1–9 is selected, then the setting is saved as 10.
Banner Page Off On	Allows the printer to print a banner page **Note:** 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
Activate On Off	Activates TCP/IP **Note:** On is the factory default setting.
View Hostname	Lets you view the current TCP/IP hostname **Note:** This can be changed only from the Embedded Web Server.
IP Address	Lets you view or change the current TCP/IP Address **Note:** 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.
Netmask	Lets you view or change the current TCP/IP Netmask
Gateway	Lets you view or change the current TCP/IP Gateway
Enable DHCP On Off	Specifies the DHCP address and parameter assignment setting
Enable RARP On Off	Specifies the RARP address assignment setting **Note:** On is the factory default setting.

Menu item	Description
Enable BOOTP On Off	Specifies the BOOTP address assignment setting **Note:** On is the factory default setting.
AutoIP Yes No	Specifies the Zero Configuration Networking setting **Note:** Yes is the factory default setting.
Enable FTP/TFTP Yes No	Enables the built-in FTP server, which allows you to send files to the printer using the File Transfer Protocol. **Note:** Yes is the factory default setting.
Enable HTTP Server Yes No	Enables the built-in web server (Embedded Web Server). When enabled, the printer can be monitored and managed remotely using a web browser. **Note:** Yes is the factory default setting.
WINS Server Address	Lets you view or change the current WINS Server Address
DNS Server Address	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
Enable IPv6 On Off	Enables IPv6 in the printer **Note:** On is the factory default setting.
Auto Configuration On Off	Specifies whether the network adapter accepts the automatic IPv6 address configuration entries provided by a router **Note:** On is the factory default setting.
View Hostname **View Address** **View Router Address**	Lets you view the current setting **Note:** These settings can be changed only from the Embedded Web Server.
Enable DHCPv6 On Off	Enables DHCPv6 in the printer **Note:** 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
Network Mode 　Infrastructure 　Ad hoc	Specifies the network mode **Notes:** • Infrastructure mode lets the printer access a network using an access point. • Ad hoc is the factory default setting. Ad hoc mode configures the printer for wireless networking directly between it and a computer.
Compatibility 　802.11n 　802.11b/g 　802.11b/g/n	Specifies the wireless standard for the wireless network
Choose Network 　<list of available networks>	Lets you select an available network for the printer to use
View Signal Quality	Lets you view the quality of the wireless connection
View Security Mode	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
Activate 　On 　Off	Activates AppleTalk support **Note:** On is the factory default setting.
View Name	Shows the assigned AppleTalk name **Note:** The name can be changed only from the Embedded Web Server.
View Address	Shows the assigned AppleTalk address **Note:** The address can be changed only from the Embedded Web Server.
Set Zone 　<list of zones available on the network>	Provides a list of AppleTalk zones available on the network **Note:** 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
Activate Yes No	Activates NetWare support **Note:** No is the factory default setting.
View Login Name	Lets you view the assigned NetWare login name **Note:** This can be changed only from the Embedded Web Server.
Print Mode	Lets you view the assigned NetWare print mode **Note:** This can be changed only from the Embedded Web Server.
Network Number	Lets you view the assigned NetWare network number **Note:** This can be changed only from the Embedded Web Server.
Select SAP Frames Ethernet 802.2 Ethernet 802.3 Ethernet Type II Ethernet SNAP	Enables the Ethernet frame type setting **Note:** On is the factory default setting for all menu items.
Packet Burst Yes No	Reduces network traffic by allowing the transfer and acknowledgement of multiple data packets to and from the NetWare server **Note:** Yes is the factory default setting.
NSQ/GSQ Mode Yes No	Specifies the NSQ/GSQ Mode setting **Note:** Yes is the factory default setting.

LexLink menu

This menu is available from the Network/Ports menu:

Network/Ports > **Standard Network** or **Network <x>** > **Std Network Setup** or **Net <x> Setup** > **LexLink menu**

Menu item	Description
Activate On Off	Activates LexLink support **Note:** Off is the factory default setting.
View Nickname	Lets you view the assigned LexLink nickname **Note:** The LexLink nickname can be changed only from the Embedded Web Server.

Standard USB menu

Menu item	Description
PCL SmartSwitch 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 **Notes:** • On is the factory default setting. • When the Off setting is used, the printer does not examine incoming data. • 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.
PS SmartSwitch 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 **Notes:** • On is the factory default setting. • When the Off setting is used, the printer does not examine incoming data. • 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.
NPA Mode On Off Auto	Sets the printer to perform the special processing required for bidirectional communication following the conventions defined by the NPA protocol **Notes:** • Auto is the factory default setting. • Changing this setting from the printer control panel and then exiting the menus causes the printer to restart. The menu selection is updated.
USB Buffer Disabled Auto 3K to <maximum size allowed>	Sets the size of the USB input buffer **Notes:** • Auto is the factory default setting. • The Disabled setting turns off job buffering. Any jobs already buffered on the disk are printed before normal processing is resumed. • The USB buffer size value can be changed in 1-K increments. • 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. • To increase the maximum size range for the USB Buffer, disable or reduce the size of the parallel, serial, and network buffers. • Changing this setting from the printer control panel and then exiting the menus causes the printer to restart. The menu selection is updated.

Menu item	Description
Job Buffering Off On Auto	Temporarily stores jobs on the printer hard disk before printing **Notes:** - Off is the factory default setting. - The On setting buffers jobs on the printer hard disk. - The Auto setting buffers print jobs only if the printer is busy processing data from another input port. - Changing this setting from the printer control panel and then exiting the menus causes the printer to restart. The menu selection is updated.
Mac Binary PS On Off Auto	Sets the printer to process Macintosh binary PostScript print jobs **Notes:** - Auto is the factory default setting. - The Off setting filters print jobs using the standard protocol. - The On setting processes raw binary PostScript print jobs.
USB With ENA 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. **Note:** This menu item is available only if the printer is attached to an external print server through the USB port.

Parallel <x> menu

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

Menu item	Description
PCL SmartSwitch 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 **Notes:** - On is the factory default setting. - When the Off setting is used, the printer does not examine incoming data. - 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.
PS SmartSwitch 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 **Notes:** - On is the factory default setting. - When the Off setting is used, the printer does not examine incoming data. - 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.

Menu item	Description
NPA Mode On Off Auto	Sets the printer to perform the special processing required for bidirectional communication following the conventions defined by the NPA protocol **Notes:** • Auto is the factory default setting. • Changing this setting from the printer control panel and then exiting the menus causes the printer to restart. The menu selection is updated.
Parallel Buffer Disabled Auto 3K to <max size allowed>	Sets the size of the parallel input buffer **Notes:** • Auto is the factory default setting. • The Disabled setting turns off job buffering. Any jobs already buffered on the disk are printed before normal processing is resumed. • The parallel buffer size setting can be changed in 1K increments. • 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. • To increase the maximum size range for the Parallel Buffer, disable or reduce the size of the USB, serial, and network buffers. • Changing this setting from the printer control panel and then exiting the menus causes the printer to restart. The menu selection is updated.
Job Buffering Off On Auto	Temporarily stores jobs on the printer hard disk before printing **Notes:** • Off is the factory default setting. • The Off setting does not buffer print jobs to the printer hard disk. • The On setting buffers jobs on the printer hard disk. • The Auto setting buffers print jobs only if the printer is busy processing data from another input port. • Changing this setting from the printer control panel and then exiting the menus causes the printer to restart. The menu selection is updated.
Advanced Status On Off	Enables bidirectional communication through the parallel port **Notes:** • On is the factory default setting. • The Off setting disables parallel port negotiation.
Protocol Standard Fastbytes	Specifies the parallel port protocol **Notes:** • Fastbytes is the factory default setting. It provides compatibility with most existing parallel ports and is the recommended setting. • The Standard setting tries to resolve parallel port communication problems.

Menu item	Description
Honor Init On Off	Determines whether or not the printer honors printer hardware initialization requests from the computer **Notes:** • Off is the factory default setting. • 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.
Parallel Mode 2 On Off	Determines whether the parallel port data is sampled on the leading or trailing edge of strobe **Notes:** • On is the factory default setting. • This menu appears only if a standard or optional parallel port is available.
Mac Binary PS On Off Auto	Sets the printer to process Macintosh binary PostScript print jobs **Notes:** • Auto is the factory default setting. • The Off setting filters print jobs using the standard protocol. • The On setting processes raw binary PostScript print jobs.
Parallel With ENA 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. **Note:** 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
PCL SmartSwitch 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 **Notes:** • On is the factory default setting. • When the Off setting is used, the printer does not examine incoming data. • 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.

Menu item	Description
PS SmartSwitch 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 **Notes:** • On is the factory default setting. • When the Off setting is used, the printer does not examine incoming data. • 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.
NPA Mode On Off Auto	Sets the printer to perform the special processing required for bidirectional communication following the conventions defined by the NPA protocol **Notes:** • Auto is the factory default setting. • 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. • When the Off setting is used, the printer does not perform NPA processing. • When the Auto setting is used, the printer examines data, determines the format, and then processes it appropriately. • Changing this setting from the printer control panel and then exiting the menus causes the printer to restart. The menu selection is updated.
Serial Buffer Disabled Auto 3K to <maximum size allowed>	Sets the size of the serial input buffer **Notes:** • Auto is the factory default setting. • The Disabled setting turns off job buffering. Any jobs already buffered on the disk are printed before normal processing is resumed. • The serial buffer size setting can be changed in 1‑K increments. • 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. • To increase the maximum size range for the Serial Buffer, disable or reduce the size of the parallel, USB, and network buffers. • Changing this setting from the printer control panel and then exiting the menus causes the printer to restart. The menu selection is updated.
Job Buffering Off On Auto	Temporarily stores jobs on the printer hard disk before printing **Notes:** • Off is the factory default setting. • The Off setting does not buffer print jobs to the hard disk. • The On setting buffers jobs on the printer hard disk. • The Auto setting buffers print jobs only if the printer is busy processing data from another input port. • Changing this setting from the printer control panel and then exiting the menus causes the printer to restart. The menu selection is updated.

Menu item	Description

Serial Protocol
  DTR
  DTR/DSR
  XON/XOFF
  XON/XOFF/DTR
  XON/XOFF/DTRDSR
	Selects the hardware and software handshaking settings for the serial port
	Notes:
	• DTR is the factory default setting.
	• DTR/DSR is a hardware handshaking setting.
	• XON/XOFF is a software handshaking setting.
	• XON/XOFF/DTR and XON/XOFF/DTR/DSR are combined hardware and software handshaking settings.

Robust XON
  On
  Off
	Determines whether or not the printer communicates availability to the computer
	Notes:
	• Off is the factory default setting.
	• This menu item applies only to the serial port if Serial Protocol is set to XON/XOFF.

Baud
  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
	Notes:
	• 9600 is the factory default setting.
	• 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.

Data Bits
  7
  8
	Specifies the number of data bits that are sent in each transmission frame
	Note: 8 is the factory default setting.

Parity
  Even
  Odd
  None
  Ignore
	Sets the parity for serial input and output data frames
	Note: None is the factory default setting.

Honor DSR
  On
  Off
	Determines whether the printer uses the DSR Signal. DSR is a handshaking signal used by most serial cables.
	Notes:
	• Off is the factory default setting.
	• 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 **On** to prevent stray characters from printing.
	• This menu item appears only if Serial RS-232/RS-422 is set to RS 232.

SMTP Setup menu

Use the following menu to configure the SMTP server.

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

Security menu

Miscellaneous menu

Menu item	Description

Panel Logins
    Login failures
    Failure time frame
    Lockout time
    Login timeout
	Limits the number and time frames of failed login attempts from the printer control panel before *all* users are locked out
	
	Notes:
	
	• "Login failures" specifies the number of failed login attempts before users are locked out. Settings range from 1–50. 3 attempts is the factory default setting.
	• "Failure time frame" specifies the time frame during which failed login attempts can be made before users are locked out. Settings range from 1–60 minutes. 5 minutes is the factory default setting.
	• "Lockout time" specifies how long users are locked out after exceeding the login failures limit. Settings range from 0–60 minutes. 5 minutes is the factory default setting. 0 indicates the printer does not impose a lockout time.
	• "Login timeout" specifies how long the printer remains idle on the Home screen before automatically logging the user off. Settings range from 1–900 seconds. 300 seconds is the factory default setting.

Remote Logins
    Login failures
    Failure time frame
    Lockout time
    Login timeout
	Limits the number and time frames of failed login attempts from a computer before *all* remote users are locked out
	
	Notes:
	
	• "Login failures" specifies the number of failed login attempts before users are locked out. Settings range from 1–50. 3 attempts is the factory default setting.
	• "Failure time frame" specifies the time frame during which failed login attempts can be made before users are locked out. Settings range from 1–60 minutes. 5 minutes is the factory default setting.
	• "Lockout time" specifies how long a user is locked out after exceeding the login failures limit. Settings range from 0–60 minutes. 5 minutes is the factory default setting. 0 indicates the printer does not impose a lockout time.
	• "Login timeout" specifies how long the remote interface remains idle before automatically logging the user off. Settings range from 1–900 seconds. 300 seconds is the factory default setting.

Confidential Print menu

Menu item	Description

Max Invalid PIN
    Off
    2–10
	Limits the number of times an invalid PIN can be entered
	
	Notes:
	
	• Off is the default setting.
	• This menu item appears only if a printer hard disk is installed.
	• Once a limit is reached, the jobs for that user name and that PIN are deleted.

Menu item	Description
Job Expiration 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 **Notes:** • Off is the default setting. • 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. • If the printer is turned off, all confidential jobs held in printer RAM are deleted.

Disk Wiping menu

Menu item	Description
Automatic Wiping Off On	Disk Wiping erases *only* print job data that *is not* currently in use by the file system from the printer hard disk. All permanent data on the printer hard disk is preserved, such as downloaded fonts, macros, and held jobs. Automatic Wiping marks all disk space used by a previous job and does not permit the file system to reuse this space until it has been sanitized. Only Automatic Wiping enables users to activate disk wiping without having to take the printer offline for an extended amount of time. **Notes:** • This menu item appears only if a formatted, non-defective printer hard disk is installed. • Off is the default setting. • Due to the large amount of resources required for Automatic Wiping, activating this option may decrease printer performance, especially if the printer requires hard disk space faster than it can be wiped and returned to service.
Manual Wiping Start now Do not start now	Disk Wiping erases *only* print job data that *is not* currently in use by the file system from the printer hard disk. All permanent data on the printer hard disk is preserved, such as downloaded fonts, macros, and held jobs. Manual Wiping overwrites all disk space that has been used to hold data from a print job that has been processed (i.e. printed). This type of wipe *does not* erase any information related to an unprocessed print job. **Notes:** • This menu item appears only if a formatted, non-defective printer hard disk is installed. • "Do not start now" is the default setting. • If the Disk Wiping access control is activated, then a user must successfully authenticate and have the required authorization in order to initiate the disk wipe.

Menu item	Description
Automatic Method Single pass Multiple pass	Disk Wiping erases *only* print job data that *is not* currently in use by the file system from the printer hard disk. All permanent data on the printer hard disk is preserved, such as downloaded fonts, macros, and held jobs. **Notes:** • This menu item appears only if a formatted, non-defective printer hard disk is installed. • Single pass is the default setting. • Highly confidential information should be wiped using the Multiple pass method *only*.
Manual Method Single pass Multiple pass	Disk Wiping erases *only* print job data that *is not* currently in use by the file system from the printer hard disk. All permanent data on the printer hard disk is preserved, such as downloaded fonts, macros, and held jobs. Both manual and scheduled wiping allow the file system to reuse marked disk space without first having to wipe it. **Notes:** • This menu item appears only if a formatted, non-defective printer hard disk is installed. • Single pass is the default setting. • Highly confidential information should be wiped using the Multiple Pass method *only*.
Scheduled Method Single pass Multiple pass	Disk Wiping erases *only* print job data that *is not* currently in use by the file system from the printer hard disk. All permanent data on the printer hard disk is preserved, such as downloaded fonts, macros, and held jobs. Both manual and scheduled wiping allow the file system to reuse marked disk space without first having to wipe it. **Notes:** • This menu item appears only if a formatted, non-defective printer hard disk is installed. • Single pass is the default setting. • Highly confidential information should be wiped using the Multiple Pass method *only*. • Scheduled wipes are initiated *without* displaying a user warning or confirmation message.

Security Audit Log menu

Menu item	Description
Export Log	Enables an authorized user to export the security log **Notes:** • To export the log from the printer control panel, a flash drive must be attached to the printer. • From the Embedded Web Server, the log can be downloaded to a computer.

Menu item	Description
Delete Log Delete now Do not delete	Specifies whether audit logs are deleted **Note:** Delete Now is the factory default setting.
Configure Log Enable Audit Enable Remote Syslog Remote Syslog Facility Severity of events to log	Specifies whether and how the audit logs are created **Note:** Factory default settings enable the security audit log.

Set Date/Time menu

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

Settings menu

General Settings menu

Menu item	Description
Display Language 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 **Note:** All languages may not be available for all printers.
Eco-Mode Off Energy Energy/Paper Paper	Minimizes the use of energy, paper, or specialty media **Notes:** • Off is the factory default setting. Off resets the printer to its factory default settings. • The Energy setting minimizes the power used by the printer. Performance may be affected but not print quality. • Paper minimizes the amount of paper and specialty media needed for a print job. Performance may be affected but not print quality. • Energy/Paper minimizes the use of power and of paper and specialty media.
Quiet Mode Off On	Reduces the amount of noise produced by the printer **Notes:** • Off is the factory default setting. • On configures the printer to produce as little noise as possible.

Menu item	Description
Run Initial setup Yes No	Instructs the printer to run the setup wizard **Notes:** • Yes is the factory default setting. • After completing the setup wizard by selecting Done at the Country select screen, the default becomes No.
Paper Sizes US Metric	**Notes:** • Initial setting is determined by your Country selection in the initial setup wizard. • 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.
Output Lighting Normal/Standby Mode • Bright • Dim • Off Power Saver • Bright • Dim • Off	Sets the amount of light from an optional output bin **Notes:** • In Normal/Standby Mode, the factory default is Bright. • In Power Saver Mode, the factory default is Dim.
Alarms 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 **Notes:** • Single is the factory default setting for Alarm Control. Single sounds three quick beeps. • Off is the factory default setting for Cartridge Alarm and Staple Alarm. Off means no alarm will sound. • Continuous repeats three beeps every 10 seconds. • Staple Alarm is available only when the finisher is installed.
Timeouts Job Hold Timeout 5–255 sec	Sets the amount of time the printer waits for user intervention before it holds jobs that require unavailable resources and continues to print other jobs in the print queue **Notes:** • 30 seconds is the factory default setting. • This menu item only appears when a printer hard disk is installed.

Menu item	Description
Timeouts Power Saver 1–240 min	Sets the amount of time the printer waits after a job is printed before it goes into a reduced power state **Notes:** • 30 minutes is the factory default setting. • Lower settings conserve more energy, but may require longer warm-up times. • Select the lowest setting if the printer shares an electrical circuit with room lighting or you notice lights flickering in the room. • 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.
Timeouts Screen Timeout 15–300 sec	Sets the amount of time in seconds the printer waits before returning the printer display to a `Ready` state **Note:** 30 seconds is the factory default setting.
Timeouts Print Timeout Disabled 1–255 sec	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 **Notes:** • 90 seconds is the factory default setting. • 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. • Print Timeout is available only when using PCL emulation. This setting has no effect on PostScript emulation print jobs.
Timeouts Wait Timeout Disabled 15–65535 sec	Sets the amount of time in seconds the printer waits for additional data before canceling a print job **Notes:** • 40 seconds is the factory default setting. • Wait Timeout is available only when the printer is using PostScript emulation. This setting has no effect on PCL or PPDS emulation print jobs.
Print Recovery Auto Continue Disabled 5–255 sec	Lets the printer automatically continue printing from certain offline situations when not resolved within the specified time period **Note:** Disabled is the factory default setting.
Print Recovery Jam Recovery Auto	Specifies whether the printer reprints jammed pages **Notes:** • 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. • On sets the printer to always reprint jammed pages. • Off sets the printer to never reprint jammed pages.

Menu item	Description
Print Recovery Page Protect Off On	Lets the printer successfully print a page that may not have printed otherwise **Notes:** • Off is the factory default setting. Off prints a partial page when there is not enough memory to print the whole page. • On sets the printer to process the whole page so that the entire page prints.
Factory Defaults Do Not Restore Restore Now	Returns the printer settings to the factory default settings **Notes:** • Do Not Restore is the factory default setting. Do Not Restore keeps the user-defined settings. • 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.
Custom Home Message Off IP Address Hostname Contact Name Location Zero Configuration Name Custom Text 1	Sets a pre-configured or customized message to appear on the display beside `Ready` **Notes:** • Off is the factory default setting. • IP address and Hostname are pre-configured messages. • Contact Name, Location, Zero Configuration Name, and Custom Text 1 are messages that can be customized by a system support person.

Setup menu

Menu item	Description
Printer Language PCL Emulation PS Emulation	Sets the default printer language **Notes:** • PCL emulation uses a PCL interpreter for processing print jobs. PostScript emulation uses a PS interpreter for processing print jobs. • PCL is the factory default printer language. • Setting a printer language as the default does not prevent a software program from sending print jobs that use another printer language.

Menu item	Description
Job Waiting On Off	Specifies that print jobs be removed from the print queue if they require unavailable printer options or custom settings. They are stored in a separate print queue, so other jobs print normally. When the missing information and/or options are obtained, the stored jobs print. **Notes:** • Off is the factory default setting. • This menu appears only if a non-Read Only printer hard disk is installed. This requirement ensures that stored jobs are not deleted if the printer loses power.
Print Area Normal Whole Page	Sets the logical and physical printable area **Notes:** • This menu does not appear if Edge to Edge is enabled in the printer Setup menu. • 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. • 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. • 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.
Download Target RAM Flash Disk	Sets the storage location for downloads **Notes:** • RAM is the factory default setting. • Storing downloads in flash memory or on a printer hard disk places them in permanent storage. Downloads remain in flash memory or on the printer hard disk even when the printer is turned off. • Storing downloads in RAM is temporary. • This menu appears only if a flash and/or disk option is installed.

Menu item	Description
Job Accounting On Off	Specifies whether the printer stores statistical information about the most recent print jobs on the hard disk **Notes:** • Off is the factory default setting. Off means the printer does not store job statistics. • The statistics include a record of print errors, the print time, the job size in bytes, the requested paper size and type, the total number of printed pages, and the total number of copies requested. • Job Accounting is available only when a printer hard disk is installed and working properly. It should not be Read/Write or Write protected. Job Buffer Size should not be set to 100%. • Changing this setting from the printer control panel and then exiting the menus causes the printer to reset. The menu selection is updated.
Resource Save On Off	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 **Notes:** • 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. • The On setting retains the downloads during language changes and printer resets. If the printer runs out of memory, **38 Memory Full** appears, and downloads are not deleted.
Print All Order Alphabetically Newest First Oldest First	Specifies the order in which held and confidential jobs are printed when Print All is selected **Notes:** • Alphabetically is the factory default setting. • Print jobs always appear in alphabetical order on the printer control panel.

Finishing menu

Menu item	Description
Sides (Duplex) 2 sided 1 sided	Specifies whether duplex (2-sided) printing is set as the default for all print jobs **Notes:** • 1 sided is the factory default setting. • To set 2-sided printing from the software program: for Windows users, click **File > Print**, and then click **Properties**, **Preferences**, **Options**, or **Setup**; for Macintosh users, choose **File** > **Print**, and then adjust the settings from the Print dialog and pop-up menus.
Duplex Binding 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 **Notes:** • Long Edge is the factory default setting. • Long Edge specifies that binding be placed on the left edge of portrait pages and the top edge of landscape pages. • Short Edge specifies that binding be placed on the top edge of portrait pages and the left edge of landscape pages.
Copies 1–999	Specifies a default number of copies for each print job **Note:** 1 is the factory default setting.
Blank Pages Do Not Print Print	Specifies whether blank pages are inserted in a print job **Note:** Do Not Print is the factory default setting.
Collate 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 **Notes:** • Off is the factory default setting. No pages will be collated. • The On setting stacks the print job sequentially. • Both settings print the entire job the number of times specified by the Copies menu setting.
Separator Sheets None Between Copies Between Jobs Between Pages	Specifies whether blank separator sheets are inserted **Notes:** • None is the factory default setting. • 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. • Between Jobs inserts a blank sheet between print jobs. • 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.

Menu item	Description
Separator Source Tray <x> Multi-Purpose Feeder Envelope Feeder	Specifies the paper source for separator sheets **Notes:** • Tray 1 (standard tray) is the factory default setting. • From the Paper menu, Configure MP must be set to Cassette in order for Multi-Purpose Feeder to appear as a menu setting.
N-up (pages-side) 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 **Notes:** • Off is the factory default setting. • The number selected is the number of page images that will print per side.
N-up Ordering Horizontal Reverse Horizontal Reverse Vertical Vertical	Specifies the positioning of multiple-page images when using N-up (pages-sides) **Notes:** • Horizontal is the factory default setting. • Positioning depends on the number of images and whether the images are in portrait or landscape orientation.
Orientation Auto Landscape Portrait	Specifies the orientation of a multiple-page sheet **Note:** Auto is the factory default setting. The printer chooses between portrait and landscape.
N-up Border None Solid	Prints a border around each page image when using N-up (pages-sides) **Note:** None is the factory default setting.
Staple Job Off On	Specifies whether print jobs are stapled **Notes:** • This menu item is available only when the StapleSmart Finisher is installed. • Off is the factory default setting. Print jobs are not stapled. • Envelopes are not stapled.
Offset Pages Off Between Jobs Between Copies	Stacks copies or print jobs into staggered sets in an output bin **Notes:** • This menu item appears only when the StapleSmart Finisher is installed. • Off is the factory default setting. No pages are offset during the print job. • Between Jobs offsets each print job. • Between Copies offsets each copy of a print job.

Quality menu

Menu item	Description
Print Resolution 300 dpi 600 dpi 1200 dpi 1200 Image Q 2400 Image Q	Specifies the printed output resolution **Note:** 600 dpi is the factory default setting. The printer driver default is 1200 IQ.
Pixel Boost Off Fonts Horizontally Vertically Both Directions	Enhances the printed quality of small fonts and graphics **Notes:** • Off is the factory default setting. • Fonts applies this setting only to text. • Horizontally darkens horizontal lines of text and images. • Vertically darkens vertical lines of text and images. • Both Directions darkens horizontal and vertical lines on text and images.
Toner Darkness 1–10	Lightens or darkens the printed output **Notes:** • 8 is the factory default setting. • Selecting a smaller number can help conserve toner.
Enhance Fine Lines On Off	Enables a print mode preferable for files such as architectural drawings, maps, electrical circuit diagrams, and flow charts **Notes:** • Off is the factory default setting. • To set Enhance Fine Lines using the Embedded Web Server, type the network printer IP address in a browser window.
Gray Correction Auto Off	Adjusts the gray value of printed output **Note:** Auto is the factory default setting.
Brightness -6 to +6	Adjusts or darkens printed output and conserves toner **Notes:** • 0 is the factory default setting. • A negative value will darken text, images, and graphics. A positive value will lighten them and conserve toner.
Contrast 0–5	Adjusts the degree of difference between levels of gray in printed output **Notes:** • 0 is the factory default setting. • Higher settings show more difference between levels of gray.

Utilities menu

Menu item	Description
Remove Held Jobs Confidential Held Not Restored All	Removes confidential and held jobs from the printer hard disk **Notes:** • Selecting a setting affects only print jobs that are resident in the printer. Bookmarks, jobs on flash drives, and other types of held jobs are not affected. • Selecting Not Restored removes all Print and Hold jobs that were *not* restored from the disk.
Format Flash Yes No	Formats the flash memory. Flash memory refers to the memory added by installing a flash memory option card in the printer. **Warning—Potential Damage:** Do not turn off the printer while the flash memory is formatting. **Notes:** • 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. • Selecting Yes deletes all data stored in flash memory. • No cancels the format request.
Delete Downloads on Disk Delete Now Do Not Delete	Removes downloads from the printer hard disk, including all held Jobs, buffered jobs, and parked jobs. Job accounting information is not affected. **Note:** Delete Now is the default setting.
Job Acct Stat Print Clear	Prints a list of all stored job statistics or deletes the information from the printer hard disk **Notes:** • A printer hard disk must be installed in the printer and operating properly for this menu item to be available. • Selecting Print prints a list of statistics. • Clear deletes all job statistics stored on the printer hard disk. • The Clear selection will not appear if Job Accounting is set to MarkTrack™ using NPA.
Hex Trace Activate	Assists in isolating the source of a print job problem **Notes:** • When Activate is selected, all data sent to the printer is printed in hexadecimal and character representation and control codes are not executed. • To exit or deactivate Hex Trace, turn the printer off or reset the printer.
Coverage Estimator 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. **Note:** Off is the factory default setting.

Menu item	Description
LCD Contrast 1–10	Adjusts the contrast lighting of the display **Notes:** • 5 is the factory default setting. • A higher setting makes the display appear lighter. • A lower setting makes the display appear darker.
LCD Brightness 1–10	Adjusts the brightness of the backlight on the display **Notes:** • 5 is the factory default setting. • A higher setting makes the display appear lighter. • A lower setting makes the display appear darker.

XPS menu

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

PDF menu

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

PostScript menu

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

Menu item	Description
Font Priority Resident Flash/Disk	Establishes the font search order **Notes:** • Resident is the factory default setting. • A formatted flash memory option card or printer hard disk must be installed in the printer and operating properly for this menu item to be available. • The flash memory option or printer hard disk cannot be Read/Write, Write, or password protected. • Job Buffer Size must not be set to 100%.

PCL Emul menu

Menu item	Description
Font Source Resident Disk Download Flash All	Specifies the set of fonts used by the Font Name menu item **Notes:** • Resident is the factory default setting. It shows the factory default set of fonts downloaded into printer RAM. • Flash and Disk settings appear only if applicable and show all fonts resident in that option. • Flash and Disk options must be properly formatted and cannot be Read/Write, Write, or password protected. • Download appears only if applicable and shows all the fonts downloaded into printer RAM. • All shows all fonts available to any option.
Font Name <list of available fonts>	Identifies a specific font and the option where it is stored **Notes:** • Courier 10 is the factory default setting. • The font source abbreviation is R for Resident, F for Flash, K for Disk, and D for download.
Symbol Set 10U PC-8 12U PC-850	Specifies the symbol set for each font name **Notes:** • 10U PC-8 is the US factory default setting. • 12U PC-850 is the international factory default setting. • A symbol set is a set of alphabetic and numeric characters, punctuation, and special symbols. Symbol sets support the different languages or specific programs such as math symbols for scientific text. Only the supported symbol sets are shown.

Menu item	Description
PCL Emulation Settings Point Size 1.00–1008.00	Changes the point size for scalable typographic fonts **Notes:** • 12 is the factory default setting. • Point Size refers to the height of the characters in the font. One point equals approximately 1/72 of an inch. • Point sizes can be increased or decreased in 0.25-point increments.
PCL Emulation Settings Pitch 0.08–100	Specifies the font pitch for scalable monospaced fonts **Notes:** • 10 is the factory default setting. • Pitch refers to the number of fixed-space characters per inch (cpi). • Pitch can be increased or decreased in 0.01-cpi increments. • For nonscalable monospaced fonts, the pitch appears on the display but cannot be changed.
PCL Emulation Settings Orientation Portrait Landscape	Specifies the orientation of text and graphics on the page **Notes:** • Portrait is the factory default setting. • Portrait prints text and graphics parallel to the short edge of the page. • Landscape prints text and graphics parallel to the long edge of the page.
PCL Emulation Settings Lines per Page 1–255	Specifies the number of lines that print on each page **Notes:** • 64 is the US factory default setting. 68 is the international default setting. • 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.
PCL Emulation Settings A4 Width 198 mm 203 mm	Sets the printer to print on A4-size paper **Notes:** • 198 mm is the factory default setting. • The 203-mm setting sets the width of the page to allow the printing of eighty 10-pitch characters.
PCL Emulation Settings Auto CR after LF On Off	Specifies whether the printer automatically performs a carriage return after a line feed control command **Note:** Off is the factory default setting.
PCL Emulation Settings Auto LF after CR On Off	Specifies whether the printer automatically performs a line feed after a carriage return control command **Note:** Off is the factory default setting.

Menu item	Description

Tray Renumber
  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
	
	Notes:
	
	• Off is the factory default setting.
	• None is not an available selection. It is only displayed when it is selected by the PCL 5 interpreter.
	• None ignores the Select Paper Feed command.
	• 0–199 allows a custom setting to be assigned.

Tray Renumber
  View Factory Def
    MPF Default = 8
    T1 Default = 1
    T2 Default = 4
    T3 Default = 5
    T4 Default = 20
    T5 Default = 21
    Env Default = 6
    MPaper Default = 2
    MEnv Default = 3
	Displays the factory default setting assigned to each tray, drawer, or feeder, even if it has not been installed

Tray Renumber
  Restore Defaults
    Yes
    No
	Returns all tray, drawer, and feeder assignments to the factory default settings

HTML menu

Menu item		Description
Font Name		Sets the default font for HTML documents
Albertus MT	Intl CG Times	**Notes:**
Antique Olive	Intl Courier	
Apple Chancery	Intl Univers	• The Times font will be used in HTML documents that do not specify a font.
Arial MT	Joanna MT	
Avant Garde	Letter Gothic	• The following fonts appear only if the appropriate DBCS font card is installed: HG-GothicB, MSung-Light, MD_DotumChe, and MingMT-Light.
Bodoni	Lubalin Gothic	
Bookman	Marigold	
Chicago	MonaLisa Recut	
Clarendon	Monaco	
Cooper Black	New CenturySbk	
Copperplate	New York	
Coronet	Optima	
Courier	Oxford	
Eurostile	Palatino	
Garamond	StempelGaramond	
Geneva	Taffy	
Gill Sans	Times	
Goudy	TimesNewRoman	
Helvetica	Univers	
Hoefler Text	Zapf Chancery	

Menu item	Description
Font Size 1–255 pt	Sets the default font size for HTML documents **Notes:** • 12 pt is the factory default setting. • Font size can be increased in 1-point increments.
Scale 1–400%	Scales the default font for HTML documents **Notes:** • 100% is the factory default setting. • Scaling can be increased in 1% increments.
Orientation Portrait Landscape	Sets the page orientation for HTML documents **Note:** Portrait is the factory default setting.
Margin Size 8–255 mm	Sets the page margin for HTML documents **Notes:** • 19 mm is the factory default setting. • Margin size can be increased in 1-mm increments.

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

Image menu

Menu item	Description
Auto Fit On Off	Selects the optimal paper size, scaling, and orientation **Notes:** • On is the factory default setting. • The On setting overrides scaling and orientation settings for some images.
Invert On Off	Inverts bi-tonal monochrome images **Notes:** • Off is the factory default setting. • The font size can be increased in 1-point increments. • This setting does not apply to GIF or JPEG images.
Scaling Anchor Top Left Best Fit Anchor Center Fit Height/Width Fit Height Fit Width	Scales the image to fit the selected paper size **Notes:** • Best Fit is the factory default setting. • When Auto Fit is set to On, Scaling is automatically set to Best Fit.
Orientation Portrait Landscape Rev Portrait Rev Landscape	Sets the image orientation **Note:** Portrait is the factory default setting.

Flash Drive menu

Menu item	Description
Copies 1–999	Specifies a default number of copies for each print job **Note:** 1 is the factory default setting.
Paper Source Tray <x> MP Feeder Manual Paper Manual Env	Sets a default paper source for all print jobs **Note:** Tray 1 (standard tray) is the factory default setting.

Menu item	Description
Collate 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 **Note:** On is the factory default setting.
Sides (Duplex) 2 sided 1 sided	Controls whether the job prints on one side or both sides of the paper **Note:** 1 sided is the factory default setting.
Staple Off On	Specifies whether print jobs are stapled **Notes:** • This menu item is available only when the StapleSmart II Finisher is installed. • Off is the factory default setting. Print jobs are not stapled.
Duplex Binding 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 **Notes:** • Long Edge is the factory default setting. • Long Edge specifies that binding be placed on the left edge of portrait pages and the top edge of landscape pages. • Short Edge specifies that binding be placed on the top edge of portrait pages and the left edge of landscape pages.
Orientation Auto Long Edge Short Edge	Specifies the orientation of a multiple-page sheet **Notes:** • Auto is the factory default setting. The printer chooses between portrait and landscape. • Long Edge uses landscape. • Short Edge uses portrait.
N-up (pages-side) 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 **Notes:** • Off is the factory default setting. • The number selected is the number of page images that will print per side.
N-up Border None Solid	Prints a border around each page image when using N-up (pages-side) **Note:** None is the factory default setting.

Menu item	Description

N-up Ordering
    Horizontal
    Reverse Horizontal
    Reverse Vertical
    Vertical
	Specifies the positioning of multiple-page images when using N-up (pages-side)
	Notes:
	
	• Horizontal is the factory default setting.
	• Positioning depends on the number of images and whether the images are in portrait or landscape orientation.

Separator Sheets
    None
    Between Copies
    Between Jobs
    Between Pages
	Specifies whether blank separator sheets are inserted
	Notes:
	
	• None is the factory default setting.
	• 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, then a blank page is inserted between each set of printed pages, such as after all page 1's and after all page 2's.
	• Between Jobs inserts a blank sheet between print jobs.
	• 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.

Separator Source
    Tray <x>
    Multi-Purpose Feeder
    Envelope Feeder
	Specifies the paper source for separator sheets
	Notes:
	
	• Tray 1 (standard tray) is the factory default setting.
	• From the Paper menu, Configure MP must be set to Cassette in order for Multi-Purpose Feeder to appear as a menu setting.

Blank Pages
    Do Not Print
    Print
	Specifies whether blank pages are inserted in a print job
	Note: Do Not Print is the factory default setting.

Help menu

The Help menu consists of a series of Help pages that are stored in the printer as PDFs. They contain information about using the printer and performing printing tasks.

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

Menu item	Description
Print All	Prints all the guides
Print Quality	Provides information about solving print quality issues
Printing Guide	Provides information about loading paper and other speciality media
Media Guide	Provides a list of the paper sizes supported in trays, drawers, and feeders
Print Defects	Provides information about resolving print defects
Menu Map	Provides a list of the printer control panel menus and settings
Information Guide	Provides help in locating additional information

Menu item	Description
Connection Guide	Provides information about connecting the printer locally (USB) or to a network
Moving Guide	Provides instructions for safely moving the printer
Supplies Guide	Provides part numbers for ordering supplies

Understanding printer messages

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

List of status and error messages

Activating Menu Changes

Wait for the message to clear.

Busy

Wait for the message to clear.

Cancel not available

Wait for the message to clear.

Canceling

Wait for the message to clear.

Change <src> to <x>

<src> is a tray or feeder, and <x> is a paper type or size.

Try one or more of the following:

- Press the arrow buttons until √ **Continue** appears, and then press √ if the paper was changed.

- Press the arrow buttons until √ **Use Current** appears, and then press √ to print on the paper currently in the printer.

- Cancel the current print job.

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 √ 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 √ to clear the message and print without using the tray.

Clearing job accounting statistics

Wait for the message to clear.

Close door or insert cartridge

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

Close finisher side door

Close the finisher side door to clear the message.

Defragmenting Flash DO NOT POWER OFF

Wait for the message to clear.

Warning—Potential Damage: Do not turn the printer off while this message appears on the display.

Deleting

Wait for the message to clear.

Deleting held jobs

Wait for the message to clear.

Deletion complete

Wait for the message to clear.

Deletion failed

Your attempt to delete a file failed.

1 Wait for the message to clear.

2 Try to delete the file again.

Disabling DLEs

Wait for the message to clear.

Disabling Menus

Wait for the message to clear.

Note: While the menus are disabled, printer settings cannot be changed from the printer control panel.

Disk Corrupted

The printer attempted to recover a disk, but was not able to do so. `Reformat` appears. Press √ to reformat the disk.

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

Disk recovery x/y XX% DO NOT POWER OFF

Wait for the message to clear.

Warning—Potential Damage: Do not power off while the printer is attempting to recover the printer hard disk.

Disk recovery takes place in several phases. The percentage completed during each phase appears on the display.

Enabling Menus

Wait for the message to clear.

Encrypting disk x/y XX% DO NOT POWER OFF

Wait for the message to clear.

Warning—Potential Damage: Do not power off while the printer is encrypting the printer hard disk.

The percentage completed appears on the display.

Enter PIN

Enter the PIN you created in Print Properties when the confidential job was sent for printing.

Error reading USB drive

Remove the device and wait for the message to clear. The USB drive may be corrupted.

Flushing buffer

Wait for the message to clear.

Formatting Disk x/y XX% DO NOT POWER OFF

Wait for the message to clear.

Warning—Potential Damage: Do not power off while the printer is formatting the printer hard disk.

The percentage completed appears on the display.

Formatting Flash DO NOT POWER OFF

Wait for the message to clear.

Warning—Potential Damage: Do not power off while the printer is formatting the flash memory.

Hex Trace Ready

The printer is in the `Ready` state, and Hex Trace is active. You can use Hex Trace to troubleshoot printer problems.

Insert staple cartridge

Try one or more of the following:
- Insert a staple cartridge to clear the message.
- Press √ to clear the message and print without using the staple feature.

Insert Tray <x>

Insert the specified tray into the printer.

Install bin <x>

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

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 current job.

Install envelope feeder

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 current job.

Install Tray <x>

Try one or more of the following:

- Install the specified tray:

  1 Turn the printer off.

  2 Unplug the power cord from the wall outlet.

  3 Install the specified tray.

  4 Connect the power cord to a properly grounded outlet.

  5 Restart the printer.

- Cancel the current job.

Install MICR Cartridge

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

Invalid Engine Code

You need to download valid engine code for the printer.

For more information, visit the Lexmark Web site at **www.lexmark.com**, or contact customer support.

Note: Engine code may be downloaded while this message appears on the display.

Invalid Network Code

You need to download valid network printing code for the internal print server. The internal print server is a hardware option installed inside the printer.

Note: Network code may be downloaded while this message appears on the display.

Invalid PIN

Enter a valid PIN.

Load manual feeder with <x>

Try one or more of the following:

- Load the specified paper in the multipurpose feeder.

- Press the arrow buttons until √ Continue appears, and then press ☑ to clear the message and continue printing.

  If the printer finds a tray that has the correct paper type and size, then it feeds from that tray. If the printer cannot find a tray with the correct paper type and size, then it prints from the default source.

- Cancel the current job.

Load <src> with <x>

<src> is a tray or feeder, and <x> is a paper type or size.

Try one or more of the following:

- Load the paper tray or other source with the correct paper type and size.
- Cancel the current job.

Load staples

Try one or more of the following:

- Replace the specified staple cartridge in the finisher.
- Press the arrow buttons until √ **Continue** appears, and then press ☑ to clear the message and continue printing.
- Cancel the print job.

Maintenance

Replace the maintenance items and, if necessary, reset the printer maintenance counter.

For information on purchasing supplies, see "Ordering supplies" on page 169.

Menu access turned off by system administrator

The printer menus cannot be accessed because your system support person disabled the menus. Wait for the message to clear.

Menus are Disabled

The printer menus are disabled. The printer settings cannot be changed from the printer control panel. Contact your system support person for help.

Note: When menus are disabled, it is still possible to cancel a print job, print a confidential job, or print a held job.

Must be in Ready state to enter menus

The printer menus cannot be accessed at this time because the printer control panel does not show the **Ready** message. Wait for the printer to complete its activity. When **Ready** appears, press 🔑.

Network/Network <x>/Network <x>, <y>

The printer is connected to the network, so the network interface is the active communication link.

- **Network** indicates that the printer is using the standard network port built into the printer system board.
- **Network <x>** indicates that an internal print server is installed inside the printer or that the printer is connected to an external print server.

- **Network <x>, <y>** indicates a network interface is the active communication link, where <x>, <y> indicates the active interface is connected to the printer through channel y on PCI connector x. If x equals 0, then the standard network interface is active.

Note: The current interface displays on the menus settings page.

Wait for the message to clear.

No held jobs

Wait for the message to clear.

No jobs found

The PIN you entered is not associated with any confidential print job.

Try one or more of the following:

- Press the arrow buttons until √ **Try again** appears, and then press √ to enter another PIN.
- Press the arrow buttons until √ **Cancel** appears, and then press √ to exit.

No jobs to cancel

Wait for the message to clear.

Not Ready

The printer is not ready to receive or process data, or the printer ports are offline.

No recognized file types

Either there are no files saved on the flash drive, or the files saved are not supported. Convert files to any of the following supported file types: .pdf, .gif, .jpeg, .jpg, .bmp, .png, .tiff, .tif, .pcx, or .dcx.

Overflow bin full

Remove the stack of paper from the bin to clear the message.

Parallel/Parallel <x>

The printer is using a parallel cable connection. The parallel port is the active communication link.

[PJL RDYMSG]

This is the Printer Job Language (PJL) Ready message. It appears after the **Ready** or **Power Saver** message. If the message string is too long, it is truncated.

Wait for the message to clear.

Power Saver

The printer is saving power while it waits for the next print job. Send a job to print to take the printer out of Power Saver mode.

Printer busy, Continue, Quit

Try one or more of the following:

- Press ☑ to read the information from the flash drive.
- Select **Quit** to cancel the information retrieval process.

Printing

Wait for the message to clear.

Printing from USB drive DO NOT REMOVE

Warning—Potential Damage: Do not turn the printer off or remove the flash drive while this message is displayed.

Wait for the message to clear.

Programming disk DO NOT POWER OFF

Wait for the message to clear.

Warning—Potential Damage: Do not turn the printer power off while **Programming disk** appears on the display.

Programming flash DO NOT POWER OFF

Wait for the message to clear.

Warning—Potential Damage: Do not turn the printer power off while **Programming flash** appears on the display.

Reading USB drive DO NOT REMOVE

Wait for the message to clear.

Ready

The printer is ready to receive print jobs.

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 √ 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 √ 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 √ to clear the message and print without using the envelope feeder.

Remote Management Active DO NOT POWER OFF

The printer settings are being configured. Wait for the message to clear.

Warning—Potential Damage: Do not turn the printer power off while `Remote Management Active` appears on the display.

Remove packaging material, check <x>

Remove any remaining packaging material from the specified location.

Remove paper from all bins

Remove the paper from all of the bins. The printer automatically senses paper removal and resumes printing.

If removing the paper does not clear the message, then touch **Continue**.

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 touch **Continue**.

Remove paper from standard output bin

Remove the stack of paper from the standard exit bin.

Remove paper from <linked bin set 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, press √.

Replace wiper

Try one or more of the following:

- Replace the fuser wiper.

- Press the arrow buttons until √ **Continue** appears, and then press ✓ to clear the message and continue printing.

Resetting active bin

Wait for the message to clear.

Resetting the printer

Wait for the message to clear.

Resetting without replacing may affect print quality.

You selected No from the "Verify PC unit replaced" screen. Wait for the message to clear.

Restoring Factory Defaults

Wait for the message to clear.

When factory default settings are restored:

- All downloaded resources in the printer memory are deleted. This includes fonts, macros, and symbol sets.

- All settings return to the factory defaults except the Display Language setting in the Setup menu and the custom settings in the Serial <x>, Network, Infrared, LocalTalk, and USB menus.

Restore Held Jobs?

Try one of the following:

- Press the arrow buttons until √ **Continue** appears, and then press ✓ to restore all held jobs stored on the printer hard disk.

- Press the arrow buttons until √ **Do not restore** appears, and then press ✓. No print jobs will be restored.

Restoring Held Job(s) x/y

x represents the number of jobs being restored. y represents the total number of jobs to be restored.

Try one or more of the following:

- Wait for the message to clear.

- Press the arrow buttons until √ **Quit restoring** appears, and then press ✓ to delete unrestored held jobs.

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.

Securely clearing disk space

The printer hard disk wiping process needs to recover. The message clears when all blocks are cleared.

Serial <x>

The printer is using a serial cable connection. The serial port is the active communication link.

Some held jobs were lost

Try one or more of the following:

- Press the arrow buttons until √ **Continue** appears, and then press √ to clear the message and continue printing.
- Cancel the current print job.

Staples <x> empty or misfed

Load the specified staple cartridge into the finisher to clear the message and continue stapling.

Staples <x> low or missing

Load the specified staple cartridge in the finisher to clear the message.

Standard Bin Full

Remove the stack of paper from the standard exit bin to clear the message.

Submitting selection

Wait for the message to clear.

Too many failed panel logins

The printer is now in a lockout mode because:

- You attempted to log in too many times with an incorrect PIN
- You attempted to log in using an incorrect password number for access to a printer feature, setting, or menu that you do not have access to.

Note: There is a defined limit on the number of login attempts. Once the limit is reached, this message appears and the printer enters a lockout mode. The message remains on the printer control panel, and any further attempts to enter menus is denied until the defined time out expires. The time out duration is set by your system support person.

Wait for the message to clear once the time out expires, and then:

- Enter the correct PIN to access any held jobs
- See your system support person if you need a password number to enter a specific printer feature, setting, or menu that is blocked from your use without the number.

Toner low

Try one or more of the following:

- Replace the print cartridge.
- Press ☑ to clear the message and continue printing.

Tray <x> Empty

Load paper in the tray to clear the message.

Tray <x> Low

Load paper in the specified tray to clear the message.

Tray <x> Missing

Insert the specified tray into the printer.

Unsupported disk

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

Unsupported USB device, please remove

Remove the unrecognized USB device.

Unsupported USB hub, please remove

Remove the unrecognized USB hub.

USB/USB <x>

The printer is using a USB cable connection. The USB port is the active communication link.

USB drive removed

Try one or more of the following:

- Wait for the message to clear.
- Insert the flash drive.

View supplies

This message shows the current level of supplies.

Waiting

The printer has received data to print, but is waiting for an End-of-Job command, a Form Feed command, or additional data.

Try one or more of the following:

- Press ✓ to print the contents of the buffer.
- Cancel the current print job.

30 Invalid refill, change cartridge

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

31 Replace defective cartridge

Remove the defective print cartridge, and then install a new one.

32 Cartridge part number unsupported by device

Remove the print 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 arrow buttons 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.

35 Insufficient memory to support Resource Save feature

Try one or more of the following:

- Press the arrow buttons 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 for Flash Memory Defragment operation

Try one or more of the following:

- Press the arrow buttons 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 to collate job

Try one or more of the following:

- Press the arrow buttons 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.

37 Insufficient memory, some held jobs were deleted

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

Press the arrow buttons until √ **Continue** appears, and then press ☑ to clear the message.

37 Insufficient memory, some Held Jobs will not be restored

The printer was unable to restore some or all of the confidential or held jobs on the printer hard disk.

Press the arrow buttons until √ **Continue** appears, and then press ☑ to clear the message.

38 Memory full

Try one or more of the following:

- Press the arrow buttons until √ **Continue** appears, and then press ☑ to clear the message.
- Cancel the current print job.
- Install additional printer memory.

39 Complex page, some data may not have printed

Try one or more of the following:

- Press the arrow buttons until √ **Continue** appears, and then press ☑ to clear the message and continue printing.
- Cancel the current print job.
- Install additional printer memory.

42.xy Cartridge region mismatch

Install a print cartridge that matches the region number of the printer. x indicates the value of the printer region. y indicates the value of the cartridge region. x and y can have the following values:

1	US
2	Europe, the Middle East, and Africa
3	Asia
4	Latin America
9	Invalid region

50 PPDS font error

Try one or more of the following:

- Press the arrow buttons until √ **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.

51 Defective flash detected

Try one or more of the following:

- Press the arrow buttons until √ **Continue** appears, and then press ☑ to clear the message and continue printing.
- Cancel the current print job.

52 Not enough free space in flash memory for resources

Try one or more of the following:

- Press the arrow buttons until √ **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 arrow buttons 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 Serial option <x> error

<x> is the number of the serial option.

Try one or more of the following:

- Check that the serial cable is connected correctly and is the proper one for the serial port.
- Check that the serial interface parameters (protocol, baud, parity, and data bits) are set correctly on the printer and host computer.
- Press the arrow buttons until √ **Continue** appears, and then press ☑ to continue printing.
- Turn the printer off and then back on to reset the printer.

54 Network <x> software error

Try one or more of the following:

- Press the arrow buttons until √ **Continue** appears, and then press ☑ to continue printing.
- Turn the printer off and then back on to reset the printer.
- Upgrade (flash) the network firmware in the printer or print server.

54 Standard network software error

Try one or more of the following:

- Press the arrow buttons until √ **Continue** appears, and then press ☑ to continue printing.
- 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 Parallel port <x> disabled

<x> is the number of the parallel port.

Try one or more of the following:

- Press the arrow buttons 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.

56 Serial port <x> disabled

<x> is the number of the serial port.

Try one or more of the following:

- Press the arrow buttons until √ **Continue** appears, and then press √ to clear the message.

  The printer discards any data received through the serial port.
- Make sure the Serial Buffer menu item is not set to Disabled.

56 Standard parallel port disabled

Try one or more of the following:

- Press the arrow buttons 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.

56 Standard USB port disabled

Try one or more of the following:

- Press the arrow buttons 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.

57 Configuration change, some held jobs were not restored

Since the time the jobs were stored on the printer hard disk something has changed in the printer to invalidate the held jobs. Possible changes include:

- The printer firmware has been updated.
- Paper input, output, or duplex options needed for the print job were removed.
- The print job was created using data from a device in the USB port and the device is no longer in the port.
- The printer hard disk contains jobs that were stored while installed in a different printer model.

Press the arrow buttons until √ **Continue** appears, and then press √ to clear the message.

58 Too many bins attached

1 Turn the printer power off.

2 Unplug the power cord from the wall outlet.

3 Remove the additional bins.

4 Connect the power cord to a properly grounded outlet.

5 Turn the printer power back on.

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 ✓ 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

1 Turn the printer off.

2 Unplug the power cord from the wall outlet.

3 Remove the additional trays.

4 Connect the power cord to a properly grounded outlet.

5 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 ☑ 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 ☑ 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 ☑ to clear the message and continue printing without using the specified tray.

61 Remove defective hard disk

Try one or more of the following:

- Press the arrow buttons until √ **Continue** appears, and then press ☑ to clear the message and continue printing.
- Install a different printer hard disk before performing any operations that require a hard disk.

62 Disk full

Try one or more of the following:

- Press the arrow buttons until √ **Continue** appears, and then press ☑ to clear the message and continue processing.
- Delete fonts, macros, and other data stored on the printer hard disk.
- Install a larger printer 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.

88 Cartridge low

The toner is low. Replace the print cartridge, and then press ☑ to clear the message and continue printing.

88.yy Cartridge nearly low

The toner is low. Replace the print cartridge, and then press ☑ to clear the message and continue printing.

88.yy Replace cartridge

The print cartridge is exhausted.

1 Replace the print cartridge.

2 Press ☑ to clear the message.

200–282 Paper jam

1 Clear the paper path.

2 After clearing the paper path, press ☑ to continue printing.

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.

To fix this, download the correct download emulator version from the Lexmark Web site at **www.lexmark.com**.

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 arrow buttons until √ **Status/Supplies** appears, and then press √ .

3 Press the arrow buttons 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

To order supplies in the U.S., contact Lexmark at 1-800-539-6275 for information about Lexmark authorized supplies dealers in your area. In other countries or regions, visit the Lexmark Web Site at **www.lexmark.com** or contact the place where you purchased the printer.

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

Ordering print cartridges

When **88 Cartridge low** appears or when the print becomes faded:

1 Remove the print cartridge.

2 Firmly shake the cartridge side-to-side and front-to-back several times to redistribute toner.
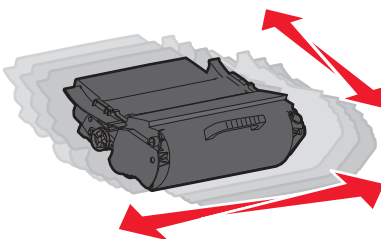
3 Reinsert the cartridge and continue printing.

Note: Repeat this procedure multiple times until the print remains faded, and then replace the cartridge.

Recommended print cartridges

Part name	Lexmark Return Program Cartridge	Regular cartridge
For the US and Canada		
Print Cartridge	T650A11A	T650A21A
High Yield Print Cartridge	T650H11A	T650H21A
Extra High Yield Print Cartridge*	T654X11A	T654X21A
High Yield Print Cartridge for Label Applications	T650H04A	Not applicable
Extra High Yield Print Cartridge for Label Applications*	T654X04A	Not applicable
For Europe, the Middle East, and Africa		
Print Cartridge	T650A11E	T650A21E
High Yield Print Cartridge	T650H11E	T650H21E
Extra High Yield Print Cartridge*	T654X11E	T654X21E
High Yield Print Cartridge for Label Applications	T650H04E	Not applicable
Extra High Yield Print Cartridge for Label Applications*	T654X04E	Not applicable
For the Asia Pacific Region		
Print Cartridge	T650A11P	T650A21P
High Yield Print Cartridge	T650H11P	T650H21P
Extra High Yield Print Cartridge*	T654X11P	T654X21P
High Yield Print Cartridge for Label Applications	T650H04P	Not applicable
Extra High Yield Print Cartridge for Label Applications*	T654X04P	Not applicable
For Latin America		
Print Cartridge	T650A11L	T650A21L
High Yield Print Cartridge	T650H11L	T650H21L
Extra High Yield Print Cartridge*	T654X11L	T654X21L
High Yield Print Cartridge for Label Applications	T650H04L	Not applicable
Extra High Yield Print Cartridge for Label Applications*	T654X04L	Not applicable
* Available for the T654 models.		

Ordering a maintenance kit

When `80 Routine maintenance needed` appears, order a maintenance kit. The maintenance kit contains all the items necessary to replace the pick rollers, the charge roll, the transfer roller, and the fuser.

Notes:

- Using certain types of paper may require more frequent replacement of the maintenance kit. The charge roll, fuser, pick rollers, and transfer roller can also be individually ordered and replaced as necessary.
- To check the fuser type (T1 or T2) installed in the printer, remove the print cartridge to view the label on the fuser.

Part name	Part number
Maintenance kit	40X4723 (100 V T1 fuser)
	40X4724 (110 V T1 fuser)
	40X4765 (220 V T1 fuser)
	40X4766 (100 V T2 fuser)
	40X4767 (110 V T2 fuser)
	40X4768 (220 V T2 fuser)

Ordering charge rolls

When toner fog or background shading appears on printed pages, order replacement charge rolls.

Part name	Part number
Charge roll assembly	40X5852

Ordering a fuser

To check the fuser type (T1 or T2) installed in the printer, remove the print cartridge to view the label on the fuser.

Part name	Part number
T1 fuser	40X1870 (100 V)
	40X4418 (110 V)
	40X1871 (220 V)
T2 fuser	40X5853 (100 V)
	40X5854 (110 V)
	40X5855 (220 V)

Ordering a fuser wiper

When `Replace wiper` appears on the display, order a fuser wiper.

Part name	Part number
Fuser wiper	40X4417

Ordering pick rollers

When the paper fails to properly feed from the tray, order new pick rollers.

Part name	Part number
Pick rollers	40X4308

Ordering staple cartridges

When **Staples Low** or **Staples Empty** appears, order the specified staple cartridge.

For more information, see the illustrations inside the stapler door.

Part name	Part number
Staple Cartridges–3 pack	25A0013

Ordering a transfer roller

When toner smudges appear on the front or back of printed pages, order a replacement transfer roller.

Part name	Part number
Transfer roll assembly	40X1886

Recycling Lexmark products

To return Lexmark products to Lexmark for recycling:

1 Visit our Web site at **www.lexmark.com/recycle**.

2 Find the product type you want to recycle, and then 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.
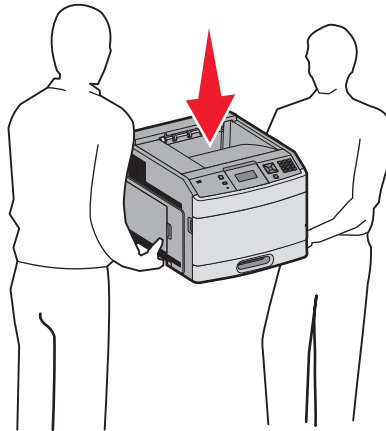
⚠️ **CAUTION—POTENTIAL INJURY:** Before moving the printer, follow these guidelines to avoid personal injury or printer damage:

- 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

Finding advanced networking and administrator information

This chapter covers basic administrative support tasks. For more advanced system support tasks, see the *Networking Guide* on the *Software and Documentation* CD and the *Embedded Web Server Administrator's Guide* on the Lexmark Web site at **www.lexmark.com.**

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.

Notes:

- 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.
- For more information, see the *Networking Guide* on the *Software and Documentation* CD and the *Embedded Web Server Administrator's Guide* on the Lexmark Web site at **www.lexmark.com**.

Checking the device status

Using the Embedded Web Server, you can view paper tray settings, the level of toner in the print cartridge, the percentage of life remaining in the maintenance kit, and capacity measurements of certain printer parts. To view 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, then print a network setup page and locate the IP address in the TCP/IP section.

2 Click **Device Status**.

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 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 arrow buttons until √ `Settings` appears, and then press ☑.

4 Press the arrow buttons until √ `General Settings` appears, and then press ☑.

5 Press the arrow buttons until √ `Timeouts` appears, and then press ☑.

6 Press the arrow buttons until √ `Power Saver` appears, and then press ☑.

7 Press the arrow buttons 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: Restoring factory defaults returns most printer settings to the original factory default setting. 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 or on a printer hard disk are not affected.

1 From the printer control panel, press ☒.

2 Press the arrow buttons until √ `Settings` appears, and then press ☑.

3 Press the arrow buttons until √ `General Settings` appears, and then press ☑.

4 Press the arrow buttons until √ `Factory Defaults` appears, and then press ☑.

5 Press the arrow buttons until √ `Restore Now` appears, and then press ☑.

`Restoring Factory Defaults` appears.

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.

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 **Performing Self Test** and **Ready** do not appear, turn the printer off and contact Customer Support.

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.

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**.

Error message about reading USB drive appears

Make sure the USB drive is supported. For information regarding tested and approved USB flash memory devices, visit the Lexmark Web site at **www.lexmark.com**.

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.

Copies of the printer software are also available on the Lexmark Web site at **www.lexmark.com**.

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

For more information, visit the Lexmark Web site at **www.lexmark.com**.

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 arrow buttons until √ `Settings` appears, and then press √.

3 Press the arrow buttons until √ `Setup Menu` appears, and then press √.

4 Press the arrow buttons until √ `Print Recovery` appears, and then press √.

5 Press the arrow buttons until √ `Page Protect` appears, and then press √.

6 Press the arrow buttons until √ `Off` appears, and then press √.

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, check the Paper Type setting from the Paper menu.

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 arrow buttons until √ **Settings** appears, and then press √.

3 Press the arrow buttons until √ **Setup Menu** appears, and then press √.

4 Press the arrow buttons until √ **Timeouts** appears, and then press √.

5 Press the arrow buttons until √ **Print Timeout** appears, and then press √.

6 Press the arrow buttons 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 power cord from the wall outlet.

3 Check the connection between the option and the printer.

4 Connect the power cord to a properly grounded wall outlet.

MAKE SURE THE OPTION IS INSTALLED CORRECTLY

Print a menu settings page and check to see if the option is listed in the Installed Options list. If the option is not listed, then reinstall it. For more information, see the hardware setup documentation that came with the option.

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 38.

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

If the paper tray is listed on the menu settings page, but paper jams when it enters or exits the tray, then it may not be properly installed. Reinstall the paper tray. For more information, see the hardware setup documentation that came with the paper tray, or see the latest comprehensive *User's Guide* available on our Web site at **www.lexmark.com/publications**.

MAKE SURE THE LIST OF OPTIONS IN THE PRINTER DRIVER IS UP TO DATE

From the computer you are printing from, verify that the paper tray is among the options listed in the printer driver. For more information, see "Updating available options in the printer driver" on page 38.

2000-sheet tray

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

THE ELEVATOR TRAY IS NOT WORKING PROPERLY

- Make sure the printer is properly connected to the 2000-sheet tray.
- Make sure the printer is turned on.

THE PAPER FEED ROLLERS DO NOT TURN TO ADVANCE PAPER

- Make sure the printer is properly connected to the 2000-sheet tray.
- Make sure the printer is turned on.

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 62.

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, check the settings for the envelope feeder from the Paper menu.

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

If the envelope feeder is listed on the menu settings page, but an envelope jams when it enters or exits the feeder, then it may not be properly installed. Reinstall the envelope feeder. For more information, see the hardware setup documentation that came with the envelope feeder, or go to **www.lexmark.com/publications** to view the envelope feeder instruction sheet.

Duplex unit

If the duplex unit is listed on the menu settings page, but paper jams when it enters or exits the duplex unit, then it may not be properly installed. Reinstall the duplex unit. For more information, see the hardware setup documentation that came with the duplex unit, or go to **www.lexmark.com/publications** to view the duplex unit instruction sheet.

5-bin mailbox

If the 5-bin mailbox is listed on the menu settings page, but paper jams when it exits the printer and enters the mailbox, then it may not be properly installed. Reinstall the 5-bin mailbox. For more information, see the hardware setup documentation that came with the 5-bin mailbox, or go to **www.lexmark.com/publications** to view the 5-bin mailbox instruction sheet.

Output options

If the Output Expander, High Capacity Output Expander, or StapleSmart II Finisher is listed on the menu settings page, but paper jams when it exits the printer or enters the output option, then it may not be properly installed. Reinstall the option. For more information, see the hardware setup documentation that came with the option, or go to **www.lexmark.com/publications** to view the option instruction sheet.

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 Lexmark 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

The paper path is not clear. Clear jammed paper from the entire paper path, 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 arrow buttons until √ **Settings** appears, and then press √.

3 Press the arrow buttons until √ **General Settings** appears, and then press √.

4 Press the arrow buttons until √ **Print Recovery** appears, and then press √.

5 Press the arrow buttons until √ **Jam Recovery** appears, and then press √.

6 Press the arrow buttons until √ **On** or √ **Auto** appears, and then press √.

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 √ and the right arrow button while turning the printer on.

3 Release both buttons when **Performing Self Test** appears.

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

4 Press the down arrow button until √ **Prt Quality Pgs** appears, and then press √.

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 down arrow button until √ **Exit Config Menu** appears, and then press √.

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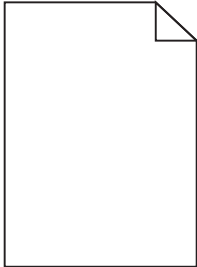
These are possible solutions. Try one or more of the following:

PACKING MATERIAL MAY BE ON THE PRINT CARTRIDGE

Remove the print cartridge and make sure the packing material is properly removed. Reinstall the print cartridge.

THE TONER MAY BE LOW

When **88 Cartridge low** appears, order a new print cartridge.

If the problem continues, the printer may need to be serviced. For more information, contact Customer Support.

Clipped images

These are possible solutions. 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
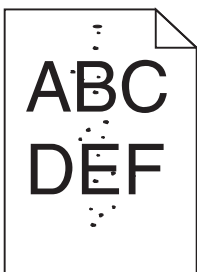
Make sure the paper size setting matches the paper loaded in the tray:

1 From the printer control panel, check the Paper Size setting from the Paper menu.

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
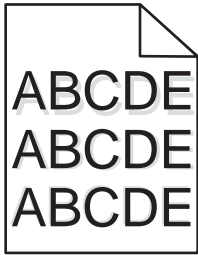
CHECK THE PAPER TYPE SETTING

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

1 From the printer control panel, check the Paper Type setting from the Paper menu.

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
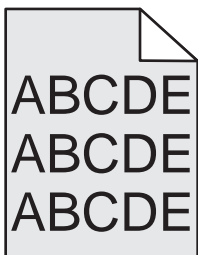
CHECK THE TONER DARKNESS SETTING

Select a lighter Toner Darkness setting:

- From the printer control panel, change the setting from the Quality menu.
- For Windows users, change the setting from Print Properties.
- For Macintosh users, change the setting from the Print dialog.

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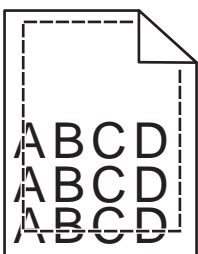
These are possible solutions. Try one or more of the following:

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, check the Paper Size setting from the Paper menu.

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, check the Paper Type setting from the Paper menu.

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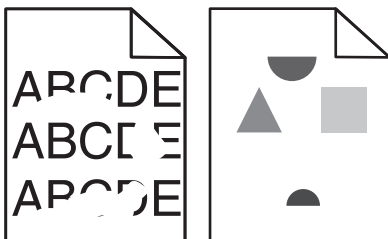
These are possible solutions. Try one or more of the following:

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, check the Paper Type setting from the Paper menu.

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 print cartridge.

THE FUSER MAY BE WORN OR DEFECTIVE

Replace the fuser.

Print is too dark
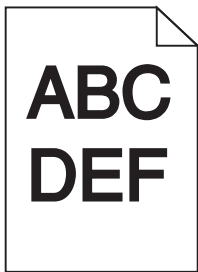
These are possible solutions. Try one or more of the following:

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.

- From the printer control panel, change these settings from the 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, check the Paper Type setting from the Paper menu.

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 PRINT CARTRIDGE MAY BE DEFECTIVE

Replace the print cartridge.

Print is too light
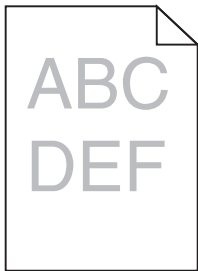
These are possible solutions. Try one or more of the following:

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.
- From the printer control panel, change these settings from the 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, check the Paper Type setting from the Paper menu.

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 print cartridge.

THE PRINT CARTRIDGE MAY BE DEFECTIVE

Replace the print cartridge.

Repeating defects
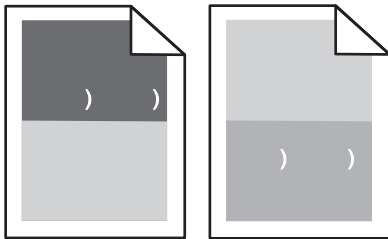
REPEATING MARKS OCCUR EVENLY DOWN THE PAGE

Replace the charge rolls if the defects occur every 28.3 mm (1.11 in.).

Replace the transfer roller if the defects occur every 51.7 mm (2.04 in.).

Replace the print cartridge if the defects occur every:
   - 47.8 mm (1.88 in.)
   - 96.8 mm (3.81 in.)

Replace the fuser if the defects occur every:
   - 88.0 mm (3.46 in.)
   - 95.2 mm (3.75 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
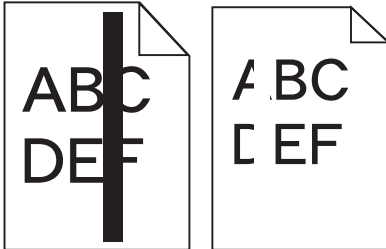
These are possible solutions. Try one or more of the following:

MAKE SURE THE FILL PATTERN IS CORRECT

If the fill pattern is incorrect, then choose a different fill pattern from your software program or application.

CHECK THE PAPER TYPE

- Try a different type of paper.
- Use only transparencies recommended by the printer manufacturer.
- Make sure the Paper Type and Paper Texture settings match the paper loaded in the tray or feeder.

MAKE SURE THE TONER IS DISTRIBUTED EVENLY IN THE PRINT CARTRIDGE

Remove the print cartridge and shake it from side to side to redistribute the toner, and then reinstall it.

THE PRINT CARTRIDGE MAY BE DEFECTIVE OR LOW ON TONER

Replace the used print cartridge with a new one.

Solid color pages

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

MAKE SURE THE PRINT CARTRIDGE IS PROPERLY INSTALLED

Remove the print cartridge and shake it from side to side to redistribute the toner, and then reinstall it.

THE PRINT CARTRIDGE MAY BE DEFECTIVE OR LOW ON TONER

Replace the used print cartridge with a new one. If the problem continues, the printer may need to be serviced. For more information, contact Customer Support.

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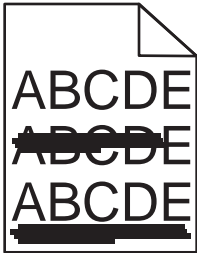
These are the possible solutions. Try one or more of the following:

THE TONER IS SMEARED

Select another tray or feeder to feed the paper for the job:
- From the printer control panel, select the Default Source from the Paper Menu.
- 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 PRINT CARTRIDGE MAY BE DEFECTIVE

Replace the print cartridge.

THE PAPER PATH MAY NOT BE CLEAR

Check the paper path around the print 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 vertical lines
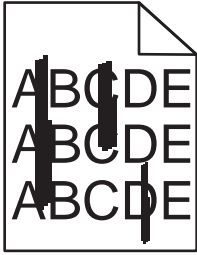
These are possible solutions. Try one or more of the following:

THE TONER IS SMEARED

Select another tray or feeder to feed paper for the job:

- From the printer control panel, select the Default Source from the Paper Menu.
- 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 PRINT CARTRIDGE IS DEFECTIVE

Replace the print cartridge.

THE PAPER PATH MAY NOT BE CLEAR

Check the paper path around the print 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 PRINT CARTRIDGE MAY BE DEFECTIVE

Replace the print cartridge.

THE CHARGE ROLLS MAY BE DEFECTIVE

Replace the charge rolls.

THERE IS TONER IN THE PAPER PATH

Clean any toner from the paper path. If the problem persists, then contact Customer Support.

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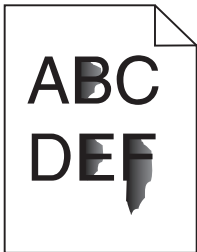
These are possible solutions. Try one or more of the following:

CHECK THE PAPER TYPE SETTING

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

1 From the printer control panel, check the Paper Type setting from the Paper menu.

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 PRINT CARTRIDGE MAY BE DEFECTIVE

Replace the print cartridge.

THERE IS TONER IN THE PAPER PATH

Clean any toner from the paper path. If the problem persists, then contact Customer Support.

Transparency print quality is poor

Try one or more of the following:

CHECK THE TRANSPARENCIES

Use only transparencies recommended by the printer manufacturer.

CHECK THE PAPER TYPE SETTING

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

1 From the printer control panel, check the Paper Type setting from the Paper menu.

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.

Contacting Customer Support

When you call Customer 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 serial number. For more information, see the label on the inside top front cover of the printer. The serial number is also listed on the menu settings page.

In the U.S. or Canada, call (1-800-539-6275). For other countries/regions, visit the Lexmark Web site at **www.lexmark.com**.

Notices

Product information

Product name:

Lexmark T650, T652, T654

Machine type:

4062, 4551, 4552, 4553

Model(s):

01A, 21A, 23A, 41A, 43A, n01, gn1, n03, n02, xn2, gn2, dn1, d03, gd1, dn2, gd2, xd2, mn1, gm1, md1

Edition notice

March 2012

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Lexmark International, Inc.
Bldg 004-2/CSC
740 New Circle Road NW
Lexington, KY 40550
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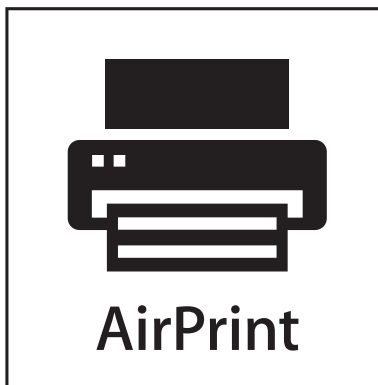
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Federal Communications Commission (FCC) compliance information statement

This product has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

The FCC Class B limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult your point of purchase or service representative for additional suggestions.

The manufacturer is not responsible for radio or television interference caused by using other than recommended cables or by unauthorized changes or modifications to this equipment. Unauthorized changes or modifications could void the user's authority to operate this equipment.

Note: To assure compliance with FCC regulations on electromagnetic interference for a Class B computing device, use a properly shielded and grounded cable such as Lexmark part number 1021231 for parallel attach or 1021294 for USB attach. Use of a substitute cable not properly shielded and grounded may result in a violation of FCC regulations.

Any questions regarding this compliance information statement should be directed to:

Director of Lexmark Technology & Services
Lexmark International, Inc.
740 West New Circle Road
Lexington, KY 40550
(859) 232–3000

Temperature information

Ambient temperature	15–32° C (60–90° F)
Shipping temperature	-40–60° C (-40–140° F)
Storage temperature	1–60° C (34–140° F)

Noise emission levels

The following measurements were made in accordance with ISO 7779 and reported in conformance with ISO 9296.

Note: Some modes may not apply to your product.

1-meter average sound pressure, dBA	
Printing	53 dBA for T650, 54 dBA for T652, 55 dBA for T654
Scanning	N/A
Copying	N/A
Ready	30 dBA

Values are subject to change. See **www.lexmark.com** for current values.

Waste from Electrical and Electronic Equipment (WEEE) directive

The WEEE logo signifies specific recycling programs and procedures for electronic products in countries of the European Union. We encourage the recycling of our products. If you have further questions about recycling options, visit the Lexmark Web site at **www.lexmark.com** for your local sales office phone number.

Static sensitivity notice

This symbol identifies static-sensitive parts. Do not touch in the areas near these symbols without first touching the metal frame of the printer.

ENERGY STAR

Any Lexmark product bearing the ENERGY STAR emblem on the product or on a start-up screen is certified to comply with Environmental Protection Agency (EPA) ENERGY STAR requirements as configured when shipped by Lexmark.

Laser notice

The printer is certified in the U.S. to conform to the requirements of DHHS 21 CFR Subchapter J for Class I (1) laser products, and elsewhere is certified as a Class I laser product conforming to the requirements of IEC 60825-1.

Class I laser products are not considered to be hazardous. The printer contains internally a Class IIIb (3b) laser that is nominally a 7 milliwatt gallium arsenide laser operating in the wavelength of 655-675 nanometers. The laser system and printer are designed so there is never any human access to laser radiation above a Class I level during normal operation, user maintenance, or prescribed service condition.

Laser advisory label

A laser notice label may be affixed to this printer as shown:
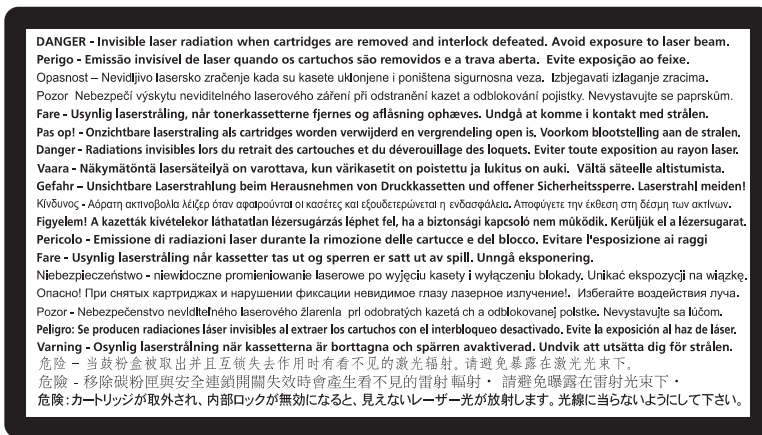
Power consumption

Product power consumption

The following table documents the power consumption characteristics of the product.

Note: Some modes may not apply to your product.

Mode	Description	Power consumption (Watts)
Printing	The product is generating hard-copy output from electronic inputs.	T650: 640 W (simplex), 540 W (duplex); T652: 725 W (simplex), 565 W (duplex); T654: 740 W (simplex), 575 W (duplex)
Copying	The product is generating hard-copy output from hard-copy original documents.	N/A
Scanning	The product is scanning hard-copy documents.	N/A
Ready	The product is waiting for a print job.	T650: 80 W; T652: 85 W; T654: 85 W
Power Saver	The product is in energy-saving mode.	T650: 12 W; T652: 13 W; T654: 14 W
Off	The product is plugged into a wall outlet, but the power switch is turned off.	0 W

The power consumption levels listed in the previous table represent time-averaged measurements. Instantaneous power draws may be substantially higher than the average.

Values are subject to change. See **www.lexmark.com** for current values.

Power Saver

This product is designed with an energy-saving mode called Power Saver. The Power Saver Mode is equivalent to the Sleep Mode. The Power Saver Mode saves energy by lowering power consumption during extended periods of inactivity.

The Power Saver Mode is automatically engaged after this product is not used for a specified period of time, called the Power Saver Timeout.

Factory default Power Saver Timeout for this product (in minutes):	30 (T650n, T652, T654); 10 (T650dn/dtn)

By using the configuration menus, the Power Saver Timeout can be modified between 1 minute and 240 minutes. Setting the Power Saver Timeout to a low value reduces energy consumption, but may increase the response time of the product. Setting the Power Saver Timeout to a high value maintains a fast response, but uses more energy.

Off mode

If this product has an off mode which still consumes a small amount of power, then to completely stop product power consumption, disconnect the power supply cord from the wall outlet.

Total energy usage

It is sometimes helpful to calculate the total product energy usage. Since power consumption claims are provided in power units of Watts, the power consumption should be multiplied by the time the product spends in each mode in order to calculate energy usage. The total product energy usage is the sum of each mode's energy usage.

Industry Canada compliance statement

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Standard ICES-003.

Avis de conformité aux normes de l'industrie du Canada

Cet appareil numérique de classe B est conforme aux exigences de la norme canadienne relative aux équipements pouvant causer des interférences NMB-003.

European Community (EC) directives conformity

This product is in conformity with the protection requirements of EC Council directives 2004/108/EC and 2006/95/EC on the approximation and harmonization of the laws of the Member States relating to electromagnetic compatibility and safety of electrical equipment designed for use within certain voltage limits.

A declaration of conformity with the requirements of the directives has been signed by the Director of Manufacturing and Technical Support, Lexmark International, Inc., S.A., Boigny, France.

This product satisfies the Class B limits of EN 55022 and safety requirements of EN 60950.

Regulatory notices for wireless products

This section contains the following regulatory information pertaining to wireless products that contain transmitters, for example, but not limited to, wireless network cards or proximity card readers.

Modular component notice

This product may contain the following modular component(s):

Lexmark Regulatory Type/Model LEX-M04-001; FCC ID: IYLLEXM04001; Industry Canada IC: 2376A-M04001

Exposure to radio frequency radiation

The radiated output power of this device is far below the radio frequency exposure limits of the FCC and other regulatory agencies. A minimum separation of 20 cm (8 inches) must be maintained between the antenna and any persons for this device to satisfy the RF exposure requirements of the FCC and other regulatory agencies.

Notice to users in Brazil

Este equipamento opera em carater secundario, isto e, nao tem direito a protecao contra interferencia prejudicial, mesmo de estacoes do mesmo tipo, e nao pode causar interferencia a sistemas operando em carater primario. (Res.ANATEL 282/2001).

Industry Canada (Canada)

This device complies with Industry Canada specification RSS-210. Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

This device has been designed to operate only with the antenna provided. Use of any other antenna is strictly prohibited per regulations of Industry Canada.

To prevent radio interference to the licensed service, this device is intended to be operated indoors and away from windows to provide maximum shielding. Equipment (or its transmit antenna) that is installed outdoors is subject to licensing.

The installer of this radio equipment must ensure that the antenna is located or pointed such that it does not emit RF fields in excess of Health Canada limits for the general population; consult Safety Code 6, obtainable from Health Canada's Web site www.hc-sc.gc.ca/rpb.

The term "IC:" before the certification/registration number only signifies that the Industry Canada technical specifications were met.

Industry Canada (Canada)

Cet appareil est conforme à la norme RSS-210 d'Industry Canada. Son fonctionnement est soumis aux deux conditions suivantes :

(1) cet appareil ne doit pas provoquer d'interférences et (2) il doit accepter toute interférence reçue, y compris celles risquant d'altérer son fonctionnement.

Cet appareil a été conçu pour fonctionner uniquement avec l'antenne fournie. L'utilisation de toute autre antenne est strictement interdite par la réglementation d'Industry Canada.

En application des réglementations d'Industry Canada, l'utilisation d'une antenne de gain supérieur est strictement interdite.

Pour empêcher toute interférence radio au service faisant l'objet d'une licence, cet appareil doit être utilisé à l'intérieur et loin des fenêtres afin de garantir une protection optimale.

Si le matériel (ou son antenne d'émission) est installé à l'extérieur, il doit faire l'objet d'une licence.

L'installateur de cet équipement radio doit veiller à ce que l'antenne soit implantée et dirigée de manière à n'émettre aucun champ HF dépassant les limites fixées pour l'ensemble de la population par Santé Canada. Reportez-vous au Code de sécurité 6 que vous pouvez consulter sur le site Web de Santé Canada www.hc-sc.gc.ca/rpb.

Le terme « IC » précédant le numéro de d'accréditation/inscription signifie simplement que le produit est conforme aux spécifications techniques d'Industry Canada.

Taiwan NCC RF notice statement

NCC型式認證設備注意事項
台灣低功率射頻電機設備之使用注意事項

經型式認證合格之低功率射頻電機，非經許可，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。

低功率射頻電機之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。前項合法通信，指依電信規定作業之無線電信。低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

Notice to users in the European Union

Products bearing the CE mark are in conformity with the protection requirements of EC Council directives 2004/108/EC, 2006/95/EC, and 1999/5/EC on the approximation and harmonization of the laws of the Member States relating to electromagnetic compatibility, safety of electrical equipment designed for use within certain voltage limits and on radio equipment and telecommunications terminal equipment.

Compliance is indicated by the CE marking.

$$C\:\epsilon$$

A declaration of conformity with the requirements of the directives is available from the Director of Manufacturing and Technical Support, Lexmark International, S. A., Boigny, France. Refer to the table at the end of the Notices section for further compliance information.

Products equipped with 2.4GHz Wireless LAN option are in conformity with the protection requirements of EC Council directives 2004/108/EC, 2006/95/EC, and 1999/5/EC on the approximation and harmonization of the laws of the Member States relating to electromagnetic compatibility, safety of electrical equipment designed for use within certain voltage limits and on radio equipment and telecommunications terminal equipment.

Compliance is indicated by the CE marking.

$$C\:\epsilon\:\textcircled{!}$$

Operation is allowed in all EU and EFTA countries, but is restricted to indoor use only.

A declaration of conformity with the requirements of the directives is available from the Director of Manufacturing and Technical Support, Lexmark International, S. A., Boigny, France. Refer to the table at the end of the Notices section for further compliance information.

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Statement of Limited Warranty

Lexmark T650, T652, T654

Lexmark International, Inc., Lexington, KY

This limited warranty applies to the United States and Canada. For customers outside the U.S., refer to the country-specific warranty information that came with your product.

This limited warranty applies to this product only if it was originally purchased for your use, and not for resale, from Lexmark or a Lexmark Remarketer, referred to in this statement as "Remarketer."

Limited warranty

Lexmark warrants that this product:

—Is manufactured from new parts, or new and serviceable used parts, which perform like new parts

—Is, during normal use, free from defects in material and workmanship

If this product does not function as warranted during the warranty period, contact a Remarketer or Lexmark for repair or replacement (at Lexmark's option).

If this product is a feature or option, this statement applies only when that feature or option is used with the product for which it was intended. To obtain warranty service, you may be required to present the feature or option with the product.

If you transfer this product to another user, warranty service under the terms of this statement is available to that user for the remainder of the warranty period. You should transfer proof of original purchase and this statement to that user.

Limited warranty service

The warranty period starts on the date of original purchase as shown on the purchase receipt and ends 12 months later provided that the warranty period for any supplies and for any maintenance items included with the printer shall end earlier if it, or its original contents, are substantially used up, depleted, or consumed.

To obtain warranty service you may be required to present proof of original purchase. You may be required to deliver your product to the Remarketer or Lexmark, or ship it prepaid and suitably packaged to a Lexmark designated location. You are responsible for loss of, or damage to, a product in transit to the Remarketer or the Lexmark designated location.

When warranty service involves the exchange of a product or part, the item replaced becomes the property of the Remarketer or Lexmark. The replacement may be a new or repaired item.

The replacement item assumes the remaining warranty period of the original product.

Replacement is not available to you if the product you present for exchange is defaced, altered, in need of a repair not included in warranty service, damaged beyond repair, or if the product is not free of all legal obligations, restrictions, liens, and encumbrances.

Before you present this product for warranty service, remove all print cartridges, programs, data, and removable storage media (unless directed otherwise by Lexmark).

For further explanation of your warranty alternatives and the nearest Lexmark authorized servicer in your area contact Lexmark on the World Wide Web at **www.lexmark.com/support**.

Remote technical support is provided for this product throughout its warranty period. For products no longer covered by a Lexmark warranty, technical support may not be available or only be available for a fee.

Extent of limited warranty

Lexmark does not warrant uninterrupted or error-free operation of any product or the durability or longevity of prints produced by any product.

Warranty service does not include repair of failures caused by:

—Modification or unauthorized attachments

—Accidents, misuse, abuse or use inconsistent with Lexmark user's guides, manuals, instructions or guidance

—Unsuitable physical or operating environment

—Maintenance by anyone other than Lexmark or a Lexmark authorized servicer

—Operation of a product beyond the limit of its duty cycle

—Use of printing media outside of Lexmark specifications

—Refurbishment, repair, refilling or remanufacture by a third party of products, supplies or parts

—Products, supplies, parts, materials (such as toners and inks), software, or interfaces not furnished by Lexmark

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