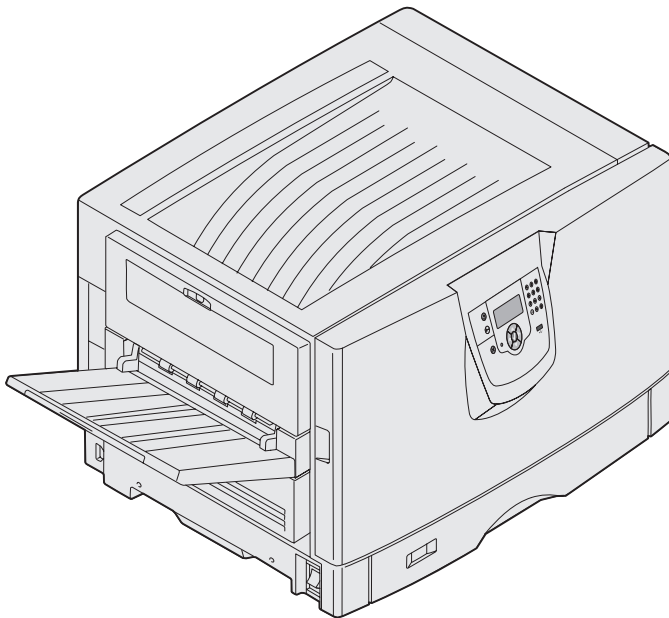




ABC

User's Guide



March 2005

www.lexmark.com

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740 West New Circle Road
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Edition: March 2005

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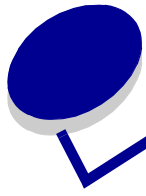
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- Cautions, warnings, and attentions
- Electronic emission notices
- Noise emission levels
- Energy Star
- Statement of limited warranty

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Click the title of the document you want to review:


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To obtain source code files for the Lexmark modified GNU licensed software, launch the drivers CD that shipped with your printer and click Contact Lexmark.

Safety information

- If your product is NOT marked with this symbol , it MUST be connected to an electrical outlet that is properly grounded.
CAUTION: Do not set up this product or make any electrical or cabling connections, such as the power cord or telephone, during a lightning storm.
- The power cord must be connected to an electrical outlet that is near the product and easily accessible.
- Refer service or repairs, other than those described in the operating instructions, to a professional service person.
- This product is designed, tested, and approved to meet strict global safety standards with the use of specific Lexmark components. The safety features of some parts may not always be obvious. Lexmark is not responsible for the use of other replacement parts.
- Your product uses a laser.
CAUTION: Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.
- Your 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.

Cautions, warnings, and attentions

CAUTION: A caution identifies something that could cause you harm.

Warning: A warning identifies something that could damage your product hardware or software.

Attention!



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

Electronic emission notices

Federal Communications Commission (FCC) compliance information statement

The Lexmark ABC base printer, Type xxxxxx, and network printer, Type xxxxxx, have been tested and found to comply with the limits for a Class A 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.

Electronic emission notices

The base and network printers, Machine Types xxxxxx and xxxxxx, have been tested and found to comply with the limits for a Class A 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 A limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

The manufacturer is not responsible for any 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 A computing device, use a properly shielded and grounded cable such as Lexmark part number 1329605 for parallel attach or 12A2405 for USB attach. Use of a substitute cable not properly shielded and grounded may result in a violation of FCC regulations. To assure compliance with FCC regulations on electromagnetic interference for a Class A computing device, use a properly shielded and grounded cable for parallel attach or USB attach. Use of a cable not properly shielded and grounded may result in a violation of FCC regulations.

Electronic emission notices

Industry Canada compliance statement

This Class A digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Avis de conformité aux normes de l'industrie du Canada

Cet appareil numérique de la classe A respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

European Community (EC) directives conformity

This product is in conformity with the protection requirements of EC Council directives 89/336/EEC and 73/23/EEC 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, S.A., Boigny, France.

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

Warning: This is a Class A product. In a domestic environment, this product may cause radio interference, in which case, the user may be required to take adequate measures.

Japanese VCCI notice



この装置は、情報処理装置等電波障害自主規制協議会(VCCI)の基準に基づくクラスA情報技術装置です。この装置を家庭環境で使用すると電波妨害を引き起こすことがあります。この場合には使用者が適切な対策を講ずるよう要求されることがあります。

Korean MIC statement

If this symbol appears on your product, the accompanying statement is applicable.



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This equipment has undergone EMC registration as a business product. It should not be used in a residential area.

The United Kingdom Telecommunications Act 1984

This apparatus is approved under the approval number NS/G/1234/J/100003 for the indirect connections to the public telecommunications systems in the United Kingdom.

Noise emission levels

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

	1-meter average sound pressure, dBA		
	Model		
	Base/ Network	Base/ Network with options	DTN
Printing	<54	<57	<55
Idling	<40	<57	<40
Power Saver	<25	<57	<25

Energy Star



The EPA ENERGY STAR Office Equipment program is a partnership effort with office equipment manufacturers to promote the introduction of energy-efficient products and to reduce air pollution caused by power generation.

Companies participating in this program introduce products that power down when they are not being used. This feature will cut the energy used by up to 50 percent. Lexmark is proud to be a participant in this program.

As an ENERGY STAR Partner, Lexmark International, Inc. has determined that this product meets the ENERGY STAR guidelines for energy efficiency.

Statement of limited warranty

Lexmark International, Inc., Lexington, KY

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

Lexmark ABC

This Statement of Limited Warranty applies to this product 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."

Statement of limited warranty

Warranty

Lexmark warrants that this product:

- Is manufactured from new parts, or new and serviceable used parts, which perform like new parts
- Is free from defects in material and workmanship
- Conforms to Lexmark's official published specifications
- Is in good working order

If this product does not function as warranted during the warranty period, contact a Remarketer or Lexmark for repair without charge.

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 designed. 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.

Warranty service

The warranty period is 12 months and starts on the date of original purchase as shown on the purchase receipt.

To obtain warranty service you may be required to present proof of original purchase. Warranty service will be provided at a 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, or damaged beyond repair. Also, such product must be free of any legal obligation or restrictions that prevent its exchange.

Before you present this product for warranty service, remove all programs, data, and removable storage media.

For further explanation of your warranty alternatives and the nearest Lexmark authorized servicer in your area, please contact Lexmark at 1-859-232-3000, or on the World Wide Web at <http://support.lexmark.com>.

Remote technical support is provided for this product throughout its warranty period. Lexmark offers a variety of extended warranty programs that include an extension of technical support. For products no longer covered by a Lexmark warranty, technical support may only be available for a fee.

Extent of warranty

We do not warrant uninterrupted or error-free operation of a product.

Warranty service does not include repair of failures caused by:

- Modification or attachments

Statement of limited warranty

- Accidents or misuse
- 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
- Failure to have installed a maintenance kit as specified (if applicable)
- Use of printing media outside of Lexmark specifications
- Use of other than Lexmark supplies (such as toner cartridges, inkjet cartridges, and ribbons)
- Use of other than Lexmark product or component

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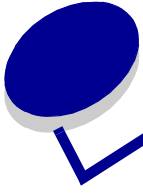
This limitation of remedies also applies to any developer of materials supplied to Lexmark. Lexmark's and the developer's limitations of remedies are not cumulative. Such developer is an intended beneficiary of this limitation.

Statement of limited warranty

Additional rights

Some states do not allow limitations on how long an implied warranty lasts, or do not allow the exclusion or limitation of incidental or consequential damages. If such laws apply, the limitations or exclusions contained in this statement may not apply to you.

This warranty gives you specific legal rights. You may also have other rights which vary from state to state.



Contents

- Notices 3**
 - Trademarks 4
 - Licensing notice 5
 - Safety information 6
 - Cautions, warnings, and attentions 6
 - Electronic emission notices 6
 - Noise emission levels 9
 - Energy Star 9
 - Statement of limited warranty 9

- Chapter 1: Learning about the printer 16**
 - Understanding the printer operator panel 17

- Chapter 2: Installing drivers for local printing 19**
 - Windows 19
 - Macintosh 23
 - UNIX/Linux 25

- Chapter 3: Install drivers for network printing 27**
 - Printing a network setup page 27
 - Assigning a printer IP address 27
 - Verifying the IP settings 29
 - Configuring Drag 'N' Print (TBD) 29
 - Windows 29
 - Macintosh 34
 - UNIX/Linux 37
 - UNIX/Linux 38
 - NetWare 38

- Chapter 4: Installing and removing options 39**

Contents

Removing the system board access cover	40
Installing a memory card	42
Installing a firmware card	43
Installing a hard disk	44
Installing an option card	46
Reinstalling the system board access cover	49
Removing the duplex unit	50
Removing the high capacity feeder	52
Removing an optional drawer	55
Chapter 5: Printing	57
Sending a job to print	57
Printing from a USB drive	58
Canceling a print job	59
Printing the menu settings page	60
Printing a network setup page	61
Printing a font sample list	61
Printing a directory list	62
Printing confidential and held jobs	62
Printing folio and statement sizes	65
Loading standard trays and optional trays	67
Loading the multipurpose feeder	68
Loading the high capacity feeder	72
Linking trays	75
Printing on banner paper	76
Tips for successful printing	78
Understanding fonts	79
Chapter 6: Media specifications	87
Media guidelines	87
Storing media	94
Identifying media sources and specifications	95
Tray linking	100
Using the duplex function (two-sided printing)	100
Avoiding jams	103

Contents

Chapter 7: Maintaining the printer	105
Determining the status of supplies	106
Conserving supplies	106
Ordering supplies	107
Cleaning the LEDs	109
Closing the top cover	112
Chapter 8: Clearing jams	114
Identifying jams	114
Identifying jam areas	115
Understanding jam messages	116
200 Paper Jam <x> Pages Jammed (Check Areas A-F, T1-5, MPF)	116
240 Paper Jam Check MP Feeder	131
24<x> Paper Jam Check Tray <x>	132
Chapter 9: Administrative Support	136
Disabling operator panel menus	136
Enabling operator panel menus	136
Restoring factory default settings	137
Adjusting Power Saver	138
Disabling Power Saver	139
Encrypting the disk	140
Setting security using the Embedded Web Server (EWS)	141
Chapter 10: Troubleshooting	146
Online technical support	146
Calling for service	146
Checking an unresponsive printer	146
Printing multi-language PDFs	147
Solving printing problems	148
Solving option problems	150
Solving paper feed problems	153
Solving print quality problems	154
Index	159

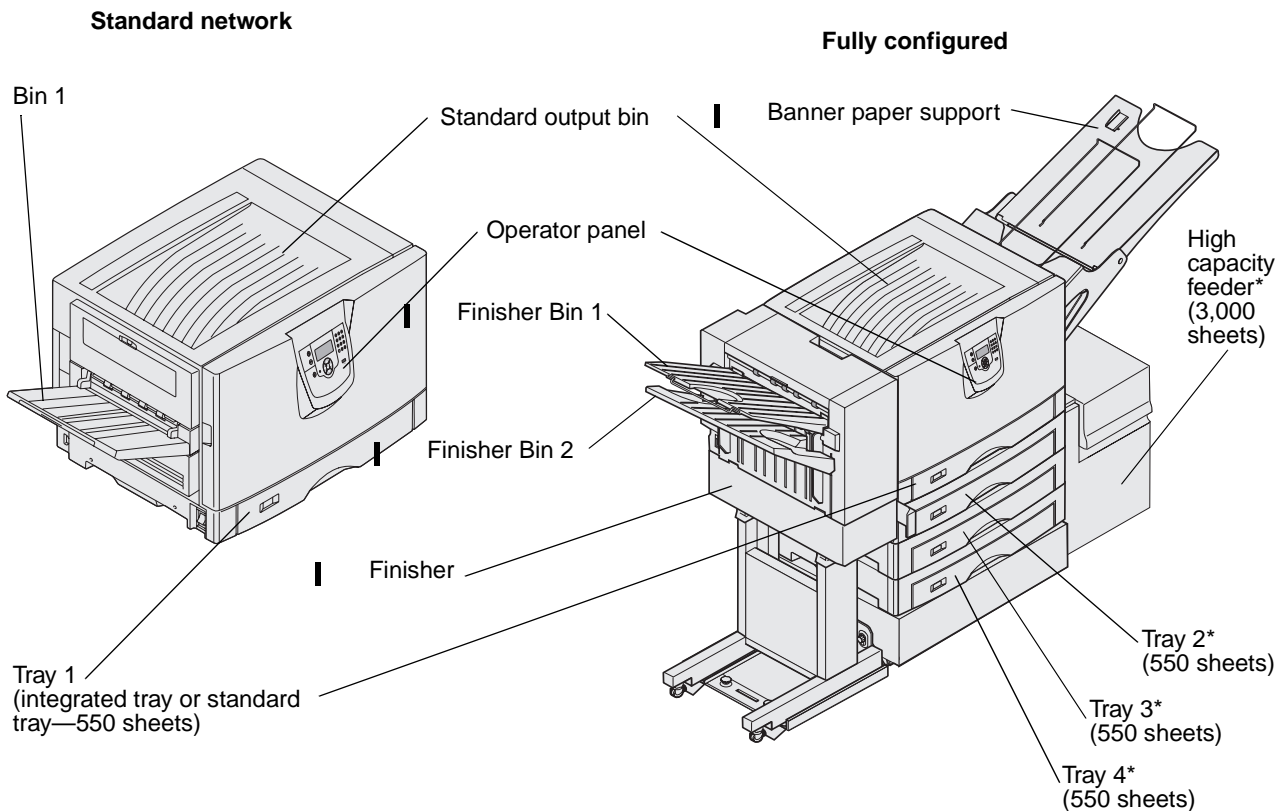
1

Learning about the printer

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

Configured models

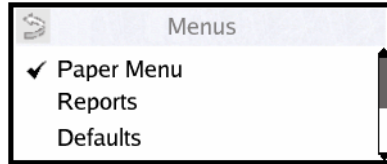
The following illustrations show a standard network and fully configured printer. If you attach print media handling options to the printer, it may look more like the fully configured model. Items denoted with an asterisk (*) are options.



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Learning about the printer

A number of menus are available to make it easy for you to change printer settings. The diagram shows the menu index on the operator panel and the menus and items available under each menu. For more information about menus and menu items, refer to the *Menus and Messages* book on your Publications CD.



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

- Reports**
- Menu Settings
 - Page
 - Network Setup
 - Page
 - Profiles List
 - Print Quick Ref
 - Netware Setup
 - Page
 - Print Fonts
 - Print Directory

- Defaults**
- Setup Menu
 - Finishing Menu
 - Quality Menu
 - Utilities Menu
 - PDF Menu
 - PostScript Menu
 - PCL Menu
 - PPDS Menu
 - HTML Menu
 - Image Menu

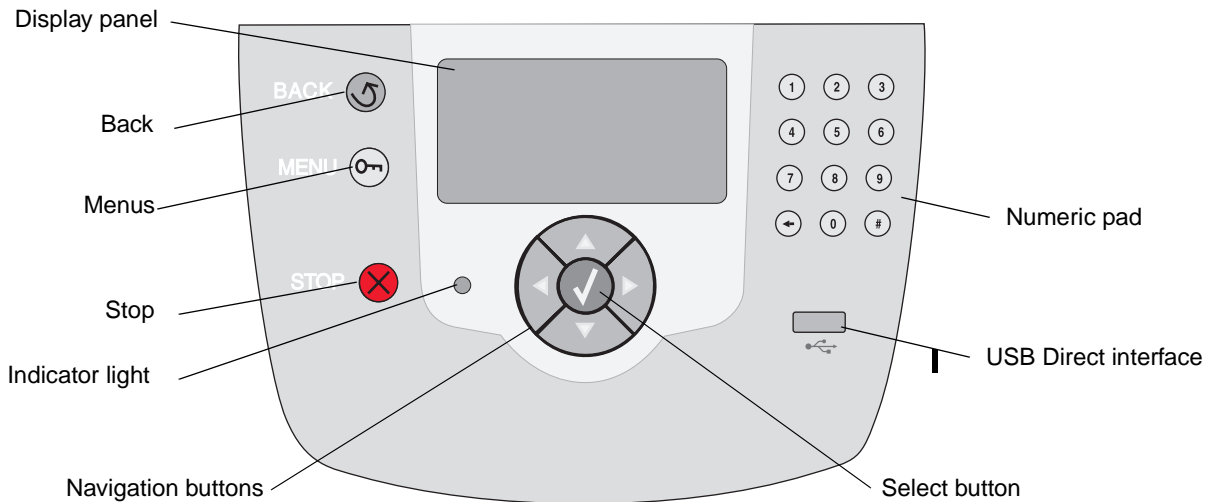
- Network/Ports**
- TCP/IP
 - Standard Network
 - Network Option n
 - Standard USB
 - USB Option n
 - Front USB
 - Parallel
 - Parallel Option n
 - Serial
 - Serial Option n
 - Netware
 - AppleTalk
 - LexLink

- Security**
- Max Invalid PIN
 - Job Expiration
 - Encrypt Disk

- Help**
- Print Quick Ref




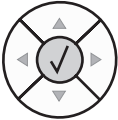




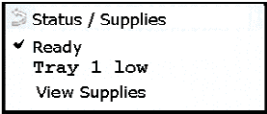
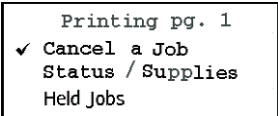
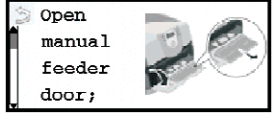
Understanding the printer operator panel

The operator panel on your printer is a 4-line back-lit gray scale display that can show both graphics and text. The Back, Menus, and Stop buttons are located to the left of the display, the navigation buttons are located below the display, and the numeric pad is located to the right of the display.



Learning about the printer

The use of the buttons and the layout of the display panel are described in the following table.

Button	Function
Back 	Press the Back button to return to the last screen you viewed. Note: Changes made on a screen will not be applied if you press the Back button.
Menu 	Press the Menu button to open the menu index. Note: The printer must be in the Ready state to access the menu index. A message indicating the menus are unavailable will appear if the printer is not ready.
Stop 	Press the Stop button to stop the mechanical operation of the printer. After pressing Stop , the message stopping is displayed. When the printer has stopped, the status line in the operator panel will show stopped , and a list of options will appear.
Navigation buttons 	 <p>The Up or Down buttons are used to move up and down lists. When navigating through a list using the Up or Down button, the cursor moves one line at a time. Pressing the Down button at the bottom of the screen changes the screen to the next whole page.</p>
	 <p>The Left or Right buttons are used to move within a screen such as moving from one menu index item to another. They are also used to scroll through text that will not fit on the screen.</p>
	 <p>The Select button is used to initiate action on a selection. Press Select when the cursor appears next to the selection you want such as following a link, submitting a configuration item, or when you want to start or cancel a job.</p>
Numeric pad 	<p>The numeric pad consists of numbers, a pound '#' sign, and a backspace button. The 5 button has a raised bump for non-visual orientation.</p> <p>The numbers are used to enter numeric values for items like quantities or PINs. The backspace is used to delete the number to the left of the cursor. Pressing the backspace multiple times will delete additional entries.</p> Note: The pound '#' sign is not used.
Display panel <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">  </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">  </div> <div style="border: 1px solid black; padding: 5px;">  </div>	<p>The display panel shows messages and graphics describing the current state of the printer and indicating possible printer problems you must resolve.</p> <p>The top line of the display is the header line. If applicable, it will contain the graphic indicating the Back button can be used. It will also display the current status, and the Supplies (Warnings) status. If multiple warnings are present, each warning will be separated by a comma.</p> <p>The other three lines of the display are the body of the screen. This is where you view printer status, supplies messages, show-me screens, and make selections.</p>

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2

Installing drivers for local printing

A local printer is a printer attached to your computer using a USB or parallel cable. The local printer is intended to be used by the computer to which it is attached. If you are attaching a local printer, you must install the printer driver on your computer before setting up your printer.

The printer driver is software that lets your computer communicate with your printer.

The procedure to install drivers depends on the operating system you are using. Use the following table to find driver installation instructions for your particular operating system. If you need additional help, see the documentation that shipped with your computer and your software.

Operating system	Go to page
Windows	5
Windows Server 2003, Windows 2000, Windows XP, Windows 98 SE, Windows Me, Windows NT 4.x	20
Windows 95 and Windows 98 (first edition)	20
Serial printing	21
Macintosh	23
UNIX/Linux	25

Windows

Some Windows operating systems may already include a printer driver that is compatible with your printer.

Note: Installing a custom driver will not replace the system driver. A separate printer object will be created and appear in the Printers folder.

Use the drivers CD that shipped with your printer to install the custom printer driver and obtain enhanced printer features and functionality.

Drivers are also available in downloadable software packages on the Lexmark Web site at www.lexmark.com.

Using Windows Server 2003, Windows 2000, Windows XP, Windows 98 SE, Windows Me, and Windows NT

Note: Install the printer software before connecting the USB cable.

- 1 Insert the drivers CD.

If the CD does not launch automatically, click **Start** → **Run**, and type **D:\setup.exe** in the Run dialog box (where D=the letter of your CD-ROM drive).

Note: USB support is not available for Windows NT operating systems.

- 2 Click **Install Printer and Software**.

Note: Some Windows operating systems require that you have administrative access to install printer drivers on your computer.

- 3 Click **Agree** to accept the license agreement.

- 4 Select **Suggested**, and click **Next**.

The Suggested option is the default installation for local and network-attached setup. If you need to install utilities, change settings, or customize device drivers, select **Custom**, and follow the instructions on the screen.

- 5 Select **Local Attach**, and click **Finish**.

Follow the instructions on the screen. It may take some time for the drivers to load.

- 6 Close the drivers CD installer application.

- 7 Connect the USB cable, and turn on the printer.

The Plug and Play screen appears, and a printer object is created in the printers folder of your computer.

Using Windows 95 and Windows 98 (first edition)

- 1 Turn on your computer.

- 2 Click **Start** → **Settings** → **Printers**, and double-click **Add Printer**.

Note: USB support is not available for the Windows 95 operating system.

- 3 When prompted, select **Local printer**.

- 4 Select the manufacturer and model of your printer, and click **Have Disk**.

Note: Some Windows operating systems require that you have administrative access to install printer drivers on your computer.

Installing drivers for local printing

5 Insert the drivers CD. If the CD launches automatically, click **Exit** to return to the Add Printer Wizard.

6 Specify the location of the custom printer driver on the drivers CD.

The path should be similar to the following:

X:\Drivers\Print\Win_9xMe*<language>*

Where X=the letter of your CD-ROM drive, and *<language>*=your preferred language. For example, D:\Drivers\Print\Win_9xMe\English.

7 Click **OK**.

It may take some time for the drivers to load.

8 Close the drivers CD.

Serial printing





[NOTE TO WRITERS: Delete this section if your printer does not support serial printing.]

With 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 your printer and computer, or when a parallel interface is not available.








Note: A serial interface card is required and can be purchased separately.

Before you can print, you must establish communication between your printer and computer. To do this, you have to 1) set serial parameters in the printer, 2) install a printer driver on the attached computer, and 3) match the serial settings in the COM port.



Setting parameters in the printer

- 1 Press  on the operator panel.
- 2 Press  until  **Print Menu** appears.
- 3 Press .

Note: For information about serial menus and messages, see the publications CD that shipped with your printer.

- 4 Press  until  **serial standard** (or  **serial option x** if you installed a serial interface card).
- 5 Press .
- 6 Press  until  **<Parameter>** appears. Where **<Parameter>**=the parameter you want to change.
- 7 Press .

Installing drivers for local printing

- 8 Press  until  <Setting> appears. Where <Setting>=the setting you want to change.


Note the following restrictions:

- Maximum baud rate supported is 115,200.
- Data Bits must be set to 7 or 8.
- Parity must be set to Even, Odd, or None.
- Stop Bits must be set to 2.
- Flow Control recommended protocol setting is Xon/Xoff.

- 9 Press .

- 10 When you are finished, press  to return the printer to the Ready state.

- 11 Print a Menu Settings page and verify that the serial parameters are correct. *Keep this page for later use.*

- a Press  on the operator panel.

- b Press  until  UTILITIES MENU.

- c Press .

- d Press  until  Print Menus,.

- e Press .

- f Look under the Standard Serial (or Serial Option X if you installed a serial interface card) heading to find the serial parameters.

Installing a printer driver

You must install a printer driver on the computer that is connected to the printer.

- 1 Insert the drivers CD into your CD-ROM drive. It should launch automatically. If the CD does not launch automatically, click **Start** → **Run**, and type the following in the Run dialog box:

D: /Setup.exe

Where D=the letter of your CD-ROM drive.

- 2 Click **Install Printer and Software**.
- 3 Click **Agree** to accept the Printer Software License Agreement.
- 4 Select **Custom**, and click **Next**.
- 5 Select **Select Components**, and click **Next**.
- 6 Select **Local**, and click **Next**.
- 7 Select your printer from the list, and click **Add Printer**.
- 8 Expand the printer item listed below Selected Components.

Installing drivers for local printing

- 9 Click **PORT: <LPT1>**, and select the communications port (COM1 or COM2) you want to use.
- 10 Click **Finish** to complete the printer software installation.

Setting parameters in the communications (COM) port

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

The serial parameters in the communications port must match exactly to the serial parameters you set in the printer.

- 1 Click **Start** → **Settings** → **Control Panel**, and double-click **System**.
- 2 On the **Device Manager** tab, click **+** to expand the list of available ports.
- 3 Select the communications port you assigned to the printer (COM1 or COM2).
- 4 Click **Properties**.
- 5 On the **Port Settings** tab, set the serial parameters to the exact same serial parameters in the printer.

Look for the printer settings under the Serial Standard (or Serial Option X) heading on the Menu Settings page you printed earlier.

- 6 Click **OK**, and close all the windows.
- 7 Print a test page to verify printer installation.
 - a Click **Start** → **Settings** → **Printers**.
 - b Select the printer you just created.
 - c Click **File** → **Properties**.
 - d Click **Print Test Page**. When a test page prints successfully, printer setup is complete.

Macintosh

Macintosh OS 9.x or later is required for USB printing. To print locally to a USB-attached printer, you must create a desktop printer icon (Macintosh 9.x) or create a queue in Print Center (Macintosh OS X).

Creating a queue in Print Center (Macintosh OS X)

- 1 Install a printer PostScript Printer Description (PPD) file on your computer.
 - a Insert the drivers CD.
 - b Double-click the installer package for your printer.

Note: A PPD file provides detailed information about the capabilities of a printer to your Macintosh computer.

- c Click **Continue** on the Welcome screen and again after viewing the Readme file.
 - d Click **Continue** after viewing the license agreement, and click **Agree** to accept the terms of the agreement.
 - e Select a Destination, and click **Continue**.
 - f Enter your password, and click **OK**.
 - g On the Easy Install screen, click **Install**. All the necessary software is installed on your computer.
 - h Click **Close** when installation is complete.
- 2 Open Finder, click **Applications**, and click **Utilities**.
- 3 Double-click **Print Center** or **Printer Setup Utility**.

Note: A PPD for your printer is also available in a downloadable software package on the Lexmark Web site at www.lexmark.com.

- 4 Do one of the following:

If your USB-attached printer appears in the Printer List, you can quit Print Center or Printer Setup Utility. A queue has been created for your printer.

If your USB-attached printer does not appear in the Printer List, make sure the USB cable is properly connected and the printer is turned on. After the printer appears in the Printer List, you can quit Print Center or Printer Setup Utility.

Creating a desktop printer icon (Macintosh 9.x)

- 1 Install a printer PostScript Printer Description (PPD) file on your computer.
 - a Insert the drivers CD.
 - b Double-click **Classic**, and double-click the installer package for your printer.

Note: A PPD file provides detailed information about the capabilities of a printer to your Macintosh computer.

Installing drivers for local printing

- c Choose the language you want to use, and click **OK**.
- d Click **Accept** after viewing the license agreement.
- e Click **Continue** after viewing the Readme file.
- f Choose a default paper size.
- g On the Easy Install screen, click **Install**. All the necessary files are installed on your computer.
- h Click **Quit** when installation is complete.

Note: A PPD for your printer is also available in a downloadable software package on the Lexmark Web site at www.lexmark.com.

- 2 Do one of the following:

Macintosh 9.0: Open **Apple LaserWriter**.

Macintosh 9.1–9.x: Open **Applications**, and click **Utilities**.

- 3 Double-click **Desktop Printer Utility**.

- 4 Select **Printer (USB)**, and click **OK**.

- 5 In the USB Printer Selection section, click **Change**.

If your printer does not appear in the USB Printer Selection list, make sure the USB cable is properly connected, and the printer is turned on.

- 6 Select the name of your printer, and click **OK**. Your printer appears in the original Printer (USB) window.

- 7 In the PostScript Printer Description (PPD) File section, click **Auto Setup**. Make sure your printer PPD now matches your printer.

- 8 Click **Create**, and click **Save**.

- 9 Specify a printer name, and click **Save**. Your printer is now saved as a desktop printer.

UNIX/Linux

Local printing is supported on many UNIX and Linux platforms, such as Sun Solaris and Red Hat.

If your drivers CD does not contain any UNIX/Linux printer driver packages, contact the place you purchased your printer to see if your printer is supported.

Some printer driver packages are available on the drivers CD. The UNIX/Linux *User's Guide* in each package gives detailed instructions for installing and using printers in UNIX and Linux environments.

The Sun Solaris and Linux packages are available on the drivers CD and on the Lexmark Web site at www.lexmark.com. The UNIX/Linux *User's Guide* in each package gives detailed instructions for installing and using Lexmark printers in UNIX and Linux environments.

Installing drivers for local printing

All the printer driver packages support local printing using a parallel connection. The driver package for Sun Solaris supports USB connections to Sun Ray appliances and Sun workstations.










Visit the Lexmark Web site at www.lexmark.com for a complete list of supported UNIX and Linux platforms.

3

Install drivers for network printing

Printing a network setup page

If the printer is attached to a network, print a network setup page on your printer to verify the network connection. This page also provides important information that helps you configure for network printing.

- 1 Make sure your printer is on.
- 2 Press  on the operator panel.
- 3 Press  until  **Defaults** appears.
- 4 Press .
- 5 Press  until  **Utilities Menu** appears.
- 6 Press .
- 7 Press  until  **Print Net Setup** appears.

Note: If an optional MarkNet print server is installed, you see **Print Net1 Setup** on the display.

- 8 Press .

The message **Printing Net Setup** appears.

The printer returns to the Ready state after the network setup page prints.

- 9 Check the first section on the network setup page, and confirm that Status is “Connected.”

If Status is “Not Connected,” your LAN drop may not be active, or your network cable may be malfunctioning. Consult your system support person for a solution, and print another network setup page to verify that you are connected to your network.







Assigning a printer IP address

If your network is using DHCP, an IP address is automatically assigned after you connect the network cable to the printer.

























- 1 Look for the address under the “TCP/IP” heading on the network setup page you printed in [Printing a network setup page](#).
- 2 Go to [Verifying the IP settings](#) and begin with step 2.

Install drivers for network printing

If your network is not using DHCP, then you must manually assign an IP address to the printer. One of the easiest ways is to use the operator panel:

- 1 Press  on the operator panel.
- 2 Press  until  **Network Menu** appears.
- 3 Press .
- 4 Press  until  **standard Network** appears.

standard Network appears if you purchased a printer with a network port on the printer system board. If you have a **MarkNet** print server installed in the option card, you see **Network Option 1**.

- 5 Press .
- 6 Press  until  **std Net Setup** (or  **Network 1 Setup**) appears.
- 7 Press .
- 8 Press  until  **TCP/IP** appears.
- 9 Press .
- 10 Press  until  **set IP Address** appears.
- 11 Press .
- 12 Using the numeric pad enter the IP Address (press  to move to the next segment). When you finish entering the address, press .
saved appears briefly.
- 13 Press  until  **set IP Netmask** appears.
- 14 Press .
- 15 Using the numeric pad enter the IP Netmask (press  to move to the next segment). When you finish entering the address, press .
saved appears briefly.
- 16 Press  until  **set IP Gateway** appears.
- 17 Press .
- 18 Using the numeric pad enter the IP Gateway (press  to move to the next segment). When you finish entering the address, press .
saved appears briefly.
- 19 When you are finished, press  to return the printer to the Ready state.

Verifying the IP settings

- 1 Print another network setup page. Look under the “TCP/IP” heading, and make sure the IP address, netmask, and gateway are what you expected. See [Printing a network setup page](#) if you need help.
- 2 Ping the printer, and verify that it responds. At a command prompt on a network computer, type `ping` followed by the new printer IP address (for example, `192.168.0.11`).

Note: On Windows computers, click **Start** → **Programs** → **Command prompt** (or **Accessories** → **Command prompt** if using Windows 2000).

If the printer is active on the network, you receive a reply.

After you have assigned and verified the TCP/IP settings, you are ready to install the printer on each network computer.

Configuring Drag ‘N’ Print (TBD)

For detailed configuration instructions, launch the drivers CD, click **View Documentation**, and click **Software and utilities**.

Windows

In Windows environments, network printers can be configured for direct printing or shared printing. Both network printing methods require the installation of a printer driver and the creation of a network printer port.

Supported printer drivers

- Windows system printer driver
- **Lexmark custom printer driver**
- **Custom printer driver**

System drivers are built into Windows operating systems. Custom drivers are available on the drivers CD.

Updated system and custom drivers are available on the Lexmark Web site at www.lexmark.com.

Supported network printer ports

- Microsoft Standard TCP/IP port—Windows 2000, Windows XP, and Windows Server 2003
- LPR—Windows NT 4.0
- **Lexmark Enhanced TCP/IP port—Windows 98 SE/Me, Windows NT 4.0, Windows 2000, Windows XP, and Windows Server 2003**
- **Printer network ports—Windows 98 SE/Me, Windows 2000, Windows XP, and Windows Server 2003**

Install drivers for network printing

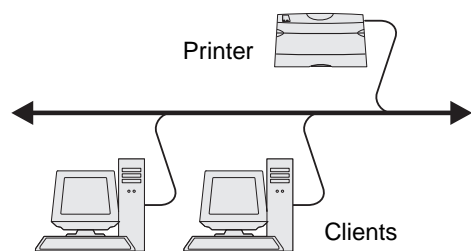
For basic printer functionality, you can install a system printer driver and use a system network printer port, such as an LPR or a Standard TCP/IP port. The system printer driver and port let you maintain a consistent user interface for use with all the printers on your network. However, using a custom printer driver and network port provides enhanced functionality, such as printer status alerts.

Follow the steps for your printing configuration and operating system to configure your network printer:

Printing configuration	Operating system	Go to page
Direct Printer is connected directly to the network using a network cable, such as Ethernet. Printer drivers are typically installed on each network computer.	Windows 98 SE, Windows NT 4.0, Windows Me, Windows 2000, Windows XP, or Windows Server 2003	30
Shared Printer is connected to one of the computers on the network using a local cable, such as USB. Printer drivers are installed on the computer attached to the printer. During driver installation, the printer is set up to be "shared" so that other network computers can print to it.	Windows NT 4.0, Windows 2000, Windows XP, or Windows Server 2003	32

Direct printing using Windows 98 SE, Me, Windows NT 4.0, Windows 2000, Windows XP, and Windows Server 2003

To install a custom printer driver and network port:



- 1 Launch the drivers CD.
- 2 Click **Install Printer and Software**.
- 3 Click **Agree** to accept the license agreement.
- 4 Select **Suggested**, and click **Next**.
- 5 Select **Network Attach**, and click **Next**.
- 6 Select your printer model from the list, and click **Next**.

Install drivers for network printing

- 7 Select your printer port from the list and click **Finish** to complete the installation.

If your printer port is not listed:

- a Click **Add Port**.
- b Select **Lexmark Enhanced TCP/IP Port**, and enter the information to create the port. Select **Enhanced TCP/IP Network Port**, and enter the information to create the port.
- c Enter a port name.
- d This can be any name that you associate with the printer, such as **Color1-1ab4**. After the port is created, this name appears in the list of available ports.
- e Enter the IP address in the text box.

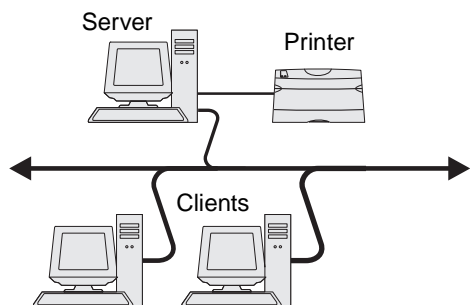
Note: If you don't know the IP address, print a network setup page, and look under the TCP/IP heading. For help, see **Printing a network setup page** and **Verifying the IP settings**.

- 8 Print a test page to verify printer installation.

Shared printing using Windows NT 4.0, Windows 2000, Windows XP, and Windows Server 2003

Note: Install the printer software before connecting the USB cable.

After connecting your printer to a Windows NT 4.0, Windows 2000, Windows XP, or Windows Server 2003 computer (which will act as a server), follow these steps to configure your network printer for shared printing:



- 1** Install a custom printer driver.
 - a** Launch the drivers CD.
 - b** Click **Install Printer and Software**.
 - c** Click **Agree** to accept the license agreement.
 - d** Select **Suggested**, and click **Next**.

The Suggested option is the default installation for local and network-attached setup. If you need to install utilities, change settings, or customize device drivers, select **Custom**, and follow the instructions on the screen.

- e** Select **Local Attach**, and click **Finish**.
- f** Close the drivers CD installer application.
- g** Connect the USB cable, and turn on the printer.

The Plug and Play screen appears, and a printer object is created in the Printers folder of your computer. You will share the printer in step 2: "Share the printer on the network."

- h** Print a test page to verify printer installation.
- 2** Share the printer on the network.
 - a** Click **Start** → **Settings** → **Printers**.
 - b** Select the printer you just created.
 - c** Click **File** → **Sharing**.

Install drivers for network printing

- d Select the **Shared as** check box, and enter a name in the text box.
- e In the Alternate Drivers section, select the operating systems of all the network clients that will print to the printer.
- f Click **OK**.

Note: If you are missing files, you may be prompted to provide the server operating system CD.

- g Check the following to make sure the printer was successfully shared.
 - The printer object in the Printers folder now has a shared indicator. For example, in Windows NT 4.0, a hand appears under the printer object.
 - Browse Network Neighborhood. Find the host name of the server, and look for the shared name you assigned to the printer.

Install the printer driver (or subset) on network clients

Using the point and print method

Note: This method is usually the best use of system resources. The server handles driver modifications and the print job processing. This lets network clients return to applications much faster.

With this method, a subset of driver information is copied from the server to the client computer. This is just enough information to send a print job to the printer.

- 1 On the Windows desktop of the client computer, double-click **Network Neighborhood**.
- 2 Locate the host name of the server computer, and double-click the host name.
- 3 Right-click the shared printer name, and click **Install**.
- 4 Wait a few minutes for the driver information to be copied from the server computer to the client computer, and for a new printer object to be added to the Printers folder. The time this takes varies based on network traffic and other factors.
- 5 Close Network Neighborhood.
- 6 Print a test page to verify printer installation.

Using the peer-to-peer method

With this method, the printer driver is fully installed on each client computer. Network clients retain control of driver modifications. The client computer handles the print job processing.

- 1 Click **Start** → **Settings** → **Printers**.
- 2 Click **Add Printer** to launch the Add Printer wizard.
- 3 Click **Next**.

Install drivers for network printing

- 4 Click **Network Printer**, and click **Next**.
- 5 Enter the printer name or URL (if on the Internet or an intranet), and click **Next**.
If you don't know the printer name or URL, leave the text box blank and, click **Next**.
- 6 Select the network printer from the Shared printers list. If the printer is not listed, enter the path of the printer in the text box.
The path will look similar to the following:

```
\\<server host name>\<shared printer name>
```

Note: If this is a new printer, you may be prompted to install a printer driver. If no system driver is available, then you will need to provide a path to available drivers.

The server host name is the name of the server computer that identifies it to the network. The shared printer name is the name assigned during the server installation process.
- 7 Click **OK**.
- 8 Select whether you want this printer to be the default printer for the client, and click **Finish**.
- 9 Print a test page to verify printer installation.

Macintosh

Note: A PostScript Printer Description (PPD) file provides detailed information about the capabilities of a printer to your UNIX or Macintosh computers.

To print to a network printer, each Macintosh user must install a custom PostScript Printer Description (PPD) file, and either create a desktop printer on the computer (Mac OS 9.x) or create a print queue in Print Center (Mac OS X).

Mac OS X version 10.1.2 and later

Step 1: Install a custom PPD file

- 1 Insert the drivers CD.
- 2 Double-click the installer package for your printer.

Note: A PPD file provides detailed information about the capabilities of a printer to your Macintosh computer.

- 3 On the Authorization screen, choose **Click the lock to make changes**.
- 4 Enter your password, and click **OK**.

Install drivers for network printing

- 5 Click **Continue** on the Welcome screen and again after viewing the Readme file.

Note: A PPD for your printer is also available in a downloadable software package on the Lexmark Web site at www.lexmark.com.

- 6 Click **Continue** after viewing the license agreement, and click **Agree** to accept the terms of the agreement.
- 7 Select a Destination, and click **Continue**.
- 8 On the Easy Install screen, click **Install**. All the necessary software is installed on your computer.
- 9 Click **Close** when installation is complete.

Step 2: Create a print queue in Print Center or Printer Setup Utility

- 1 Open Finder, click **Applications**, and click **Utilities**.
- 2 Double-click **Print Center** or **Printer Setup Utility**.
- 3 Choose **Add Printer** from the “Printers” menu.
- 4 Choose **AppleTalk** from the pop-up menu.

Note: If you don't know which zone or printer to select, look on the network setup page under the “AppleTalk” heading.

- 5 Select the AppleTalk zone from the list.
- 6 Select the new printer from the list, and click **Add**.
- 7 Verify printer installation:
 - a Open Finder, click **Applications**, and click **TextEdit**.
 - b Choose **Print** from the “File” menu.
 - c Choose **Summary** from the “Print Panel” menu.

Note: If you don't know which printer to select, look on the Network Setup page under the “AppleTalk” heading to find the default name of the printer.

- *If the PPD file displayed in the Summary window is correct for your printer, then printer setup is complete.*
- *If the PPD file displayed in the Summary window is not correct for your printer, delete the printer from the printer list in Print Center or Printer Setup Utility, and repeat **Step 1: Install a custom PPD file**.*

Install drivers for network printing

Using IP Printing

Follow these steps to create a print queue using IP Printing. To create an AppleTalk print queue, see **Step 2: Create a print queue in Print Center or Printer Setup Utility.**

- 1 Open Finder, click **Applications**, and click **Utilities**.
- 2 Double-click **Print Center** or **Printer Setup Utility**.
- 3 Choose **Add Printer** from the “Printers” menu.
- 4 Choose **IP Printing** from the pop-up menu.
- 5 Enter the IP address or the printer DNS name in the Printer’s Address box.
- 6 Choose **Lexmark** the printer manufacturer from the “Printer Model” pop-up menu.
- 7 Select the new printer from the list, and click **Add**.
- 8 Verify printer installation:
 - a Open Finder, click **Applications**, and click **TextEdit**.
 - b Choose **Print** from the File menu.
 - c Choose **Summary** from the Print Panel menu.
 - d Do one of the following:
 - *If the PPD file displayed in the Summary window is correct for your printer, then printer setup is complete.*
 - *If the PPD file displayed in the Summary window is not correct for your printer, delete the printer from printer list in Print Center or Printer Setup Utility, and repeat **Step 1: Install a custom PPD file.***

Macintosh 9.x

Step 1: Install a custom PPD file

- 1 Insert the drivers CD.
- 1 Double-click **Classic**, and double-click the installer package for your printer.

Note: A PPD file provides detailed information about the capabilities of a printer to your Macintosh computer.

- 2 Choose the language you want to use, and click **OK**.
- 3 Click **Accept** after viewing the license agreement.
- 4 Click **Continue** after viewing the Readme file.
- 5 Choose a default paper size.

Install drivers for network printing

- 6 On the Easy Install screen, click **Install**. All the necessary files are installed on your computer.
- 7 Click **Quit** when installation is complete.

A PPD for your printer is also available in a downloadable software package on the Lexmark Web site at www.lexmark.com.

Step 2: Create a desktop printer

- 1 In the Chooser, select the **LaserWriter 8** driver.
- 2 If you have a routed network, select the default zone from the list. If you don't know which zone to select, look on the Network Setup page under AppleTalk for Zone.
- 3 Select the new printer from the list.
- 4 If you don't know which printer to select, look on the Network Setup page under the "AppleTalk" heading to find the default name of the printer.
- 5 Click **Create**.
- 6 Make sure there is an icon next to the printer name in the Chooser.
- 7 Close the Chooser window.
- 8 Verify printer installation.
 - a Click the desktop printer icon you just created.
 - b Choose **Printing** → **Change Setup**.
 - If the PPD file displayed in the PostScript Printer Description (PPD) file portion of the menu is correct for your printer, printer setup is complete.
 - If the PPD file displayed in the PostScript Printer Description (PPD) file portion of the menu is not correct for your printer, repeat **Step 1: Install a custom PPD file**.

UNIX/Linux

Your printer supports many UNIX and Linux platforms, such as Sun Solaris and Red Hat. Visit the Lexmark Web site at www.lexmark.com for a complete list of supported UNIX and Linux platforms.

Note: The Sun Solaris and Linux packages are available on the drivers CD and on the Lexmark Web site at www.lexmark.com.

Lexmark provides a printer driver package for each supported UNIX and Linux platform. The *User's Guide* in each package gives detailed instructions for installing and using Lexmark printers in UNIX and Linux environments.

You can download these packages from the Lexmark Web site. You may also find the driver package you need on the drivers CD.

Install drivers for network printing

UNIX/Linux

Your printer supports both UNIX and Linux network environments.

For the latest information about installing a network printer in a UNIX or Linux environment, launch the drivers CD, and click **View Documentation**.

NetWare

Your printer supports Novell Distributed Print Services (NDPS/iPrint). For the latest information about installing a network printer in a NetWare environment, launch the drivers CD, and click **View Documentation**.

4

Installing and removing options

CAUTION: If you are installing memory or option cards sometime after setting up the printer, turn the printer off and unplug the power cord before continuing. If you have any other devices connected to the printer, turn them off as well and unplug any cables going to the printer.

You can customize your printer memory capacity and connectivity by adding optional cards. You can also use these instructions to help you locate an option for removal. The instructions in this section cover the following options:

Internal options:

- Memory cards
 - Printer memory
 - Flash memory
 - Fonts
- Firmware cards
 - Bar Code
 - ImageQuick
 - IPDS and SCS/TNe
 - PrintCryption™

Note: Use a Phillips screwdriver to remove the system board access cover.

- Other internal options
 - Printer hard disk
 - RS-232 serial interface card
 - Parallel 1284-B interface card
 - MarkNet N2100 Series internal print servers (also called internal network adapters or INAs)
 - Internal print servers (also called internal network adapters or INAs)

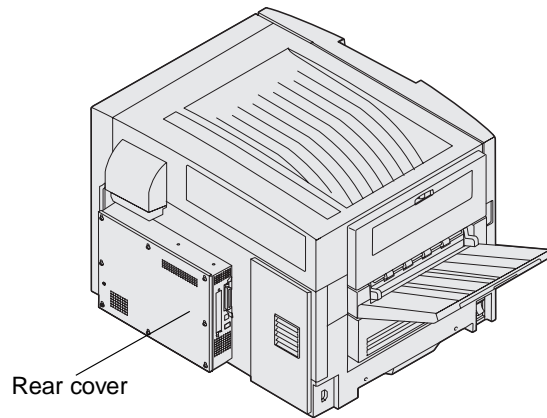
Other options (removing instructions only):

- Duplex unit
- High capacity feeder
- Optional drawer

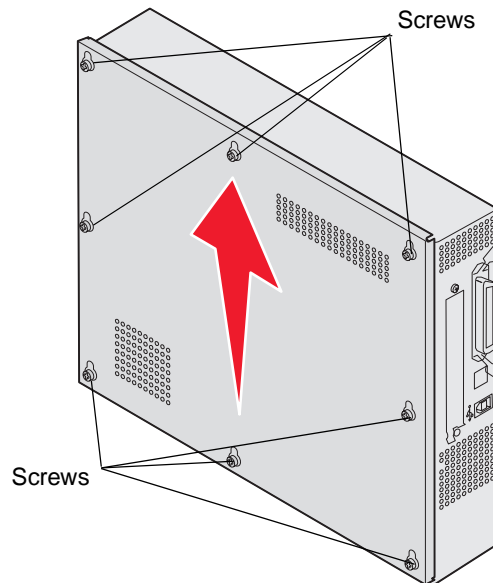
Removing the system board access cover

You must remove the system board cover to install memory cards, a firmware card, a hard disk, or an option card.

CAUTION: This printer weighs 80.5 kg (177 lb) and requires four people to lift. Anytime you move or lift the printer make sure you have enough people to help. Use the handholds located on the sides to lift the printer.



You need a number 2 Phillips screwdriver to remove the system board cover.

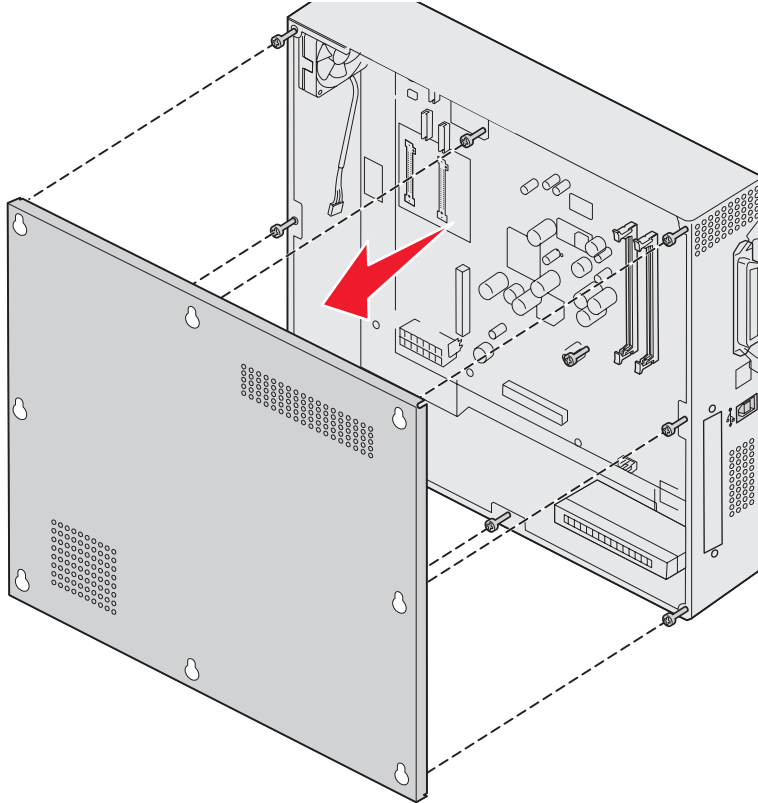


- 1 Loosen the eight screws on the system board cover. Do not remove the screws completely.

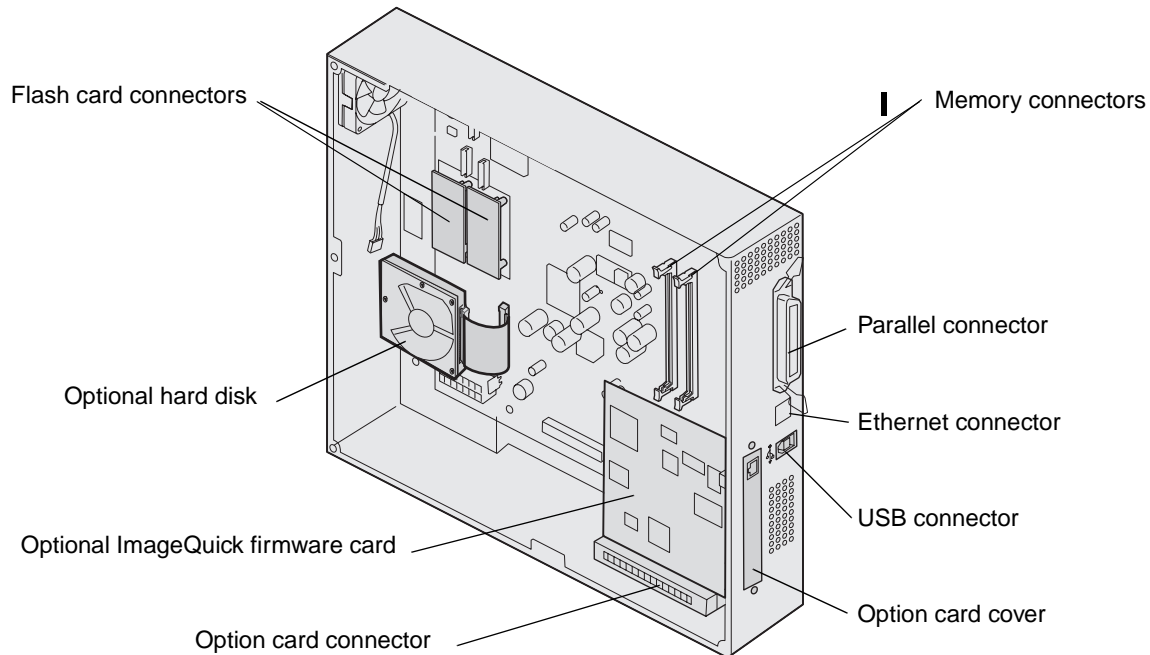
Warning: The system board access cover must be replaced before operating the printer.

Installing and removing options

- Slide the cover up and away from the printer.



- Use the illustration to locate the connector for the card you want to install or remove.



- Use the following table to locate the instructions you need.

Removing the system board access cover

Installing a memory card

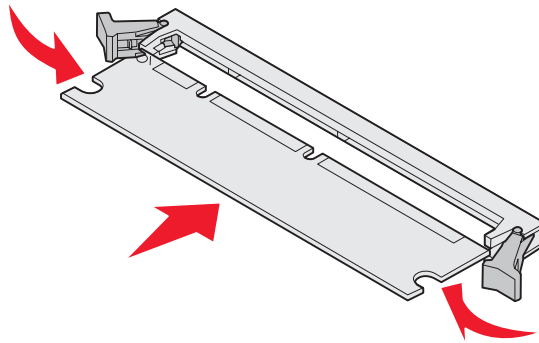
Complete the following instructions to install either a printer memory card or a flash memory card. Memory cards must have 168-pin connectors.

Memory options designed for other **Lexmark** printers may not work with your printer.

The system board has three connectors for optional memory cards. You can install any combination of printer memory and flash memory cards in the connectors. However, the printer only recognizes one flash memory card at a time.

Warning: Memory and flash memory cards are easily damaged by static electricity. Touch something metal, such as the printer frame, before you touch a memory card.

- 1 Remove the system board access cover (see [page 40](#)).
- 2 Push open the latches on both ends of the memory connector you want to use.
- 3 Unpack the memory card.
Avoid touching the connection points along the edge of the card. Save the packaging.
- 4 Align the notches on the bottom of the card with the notches on the connector.
- 5 Push the memory card firmly into the connector until the latches on either end of the connector *snap* into place.



It may require some force to fully seat the card.

- 6 Make sure each latch fits over the notch on each end of the card.

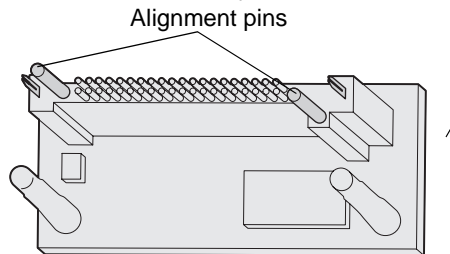
Installing a firmware card

If an option card has been installed, you need to remove the option card before installing the firmware card.

Note: Firmware cards designed for other **Lexmark** printers may not work with your printer.

- 1 Remove the system board access cover (see [page 40](#)).

Warning: Firmware cards are easily damaged by static electricity. Touch something metal, such as the printer frame, before you touch a card.

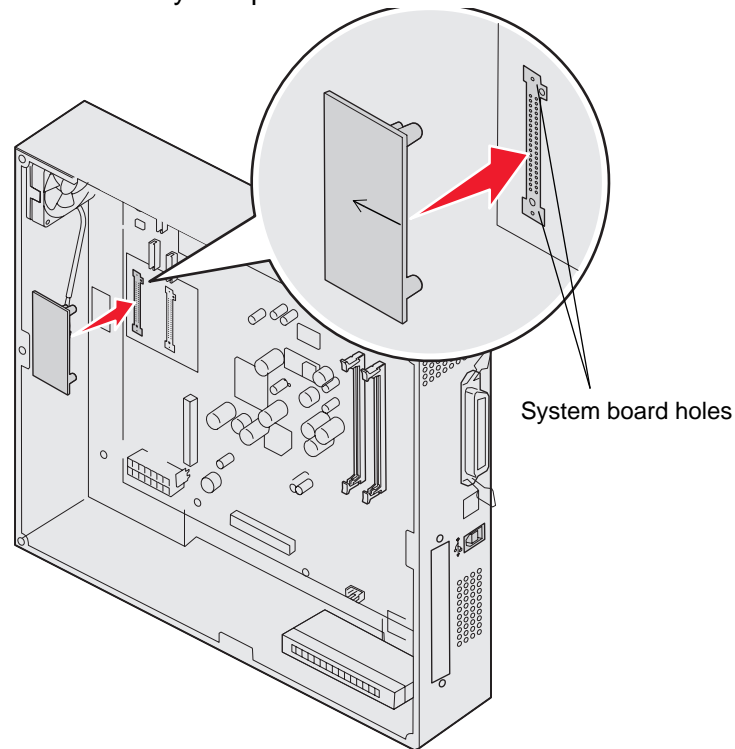


- 2 Unpack the firmware card.

Avoid touching the metal pins on the bottom of the card. Save the packaging.

Installing and removing options

- 3 Holding the card by its sides, align the pins on the card with the holes on the system board.
- 4 Push the firmware card firmly into place.



The entire length of the connector on the firmware card must touch and be flush against the system board.

Be careful not to damage the connectors.

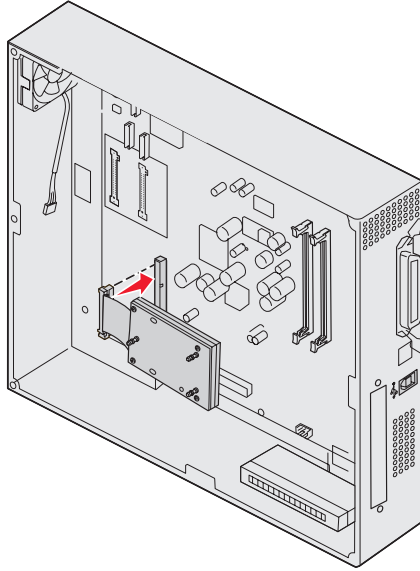
Installing a hard disk

Warning: Hard disks are easily damaged by static electricity and physical shock (such as dropping). Touch something metal, such as the printer frame, before you touch the hard disk.

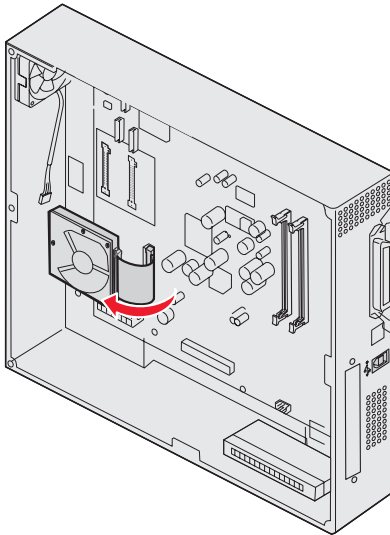
Installing and removing options

If an option card has been installed, you may have to remove the option card before installing the hard disk.

- 1 Remove the system board access cover (see [page 40](#)).
- 2 Align and press the ribbon cable connector into the connector on the system board.



- 3 Flip the hard disk over, and then press the three posts on the mounting plate into the holes on the system board. The hard disk *snaps* into place.



| *Installing an option card*

Your printer has one expansion card slot that supports a number of option cards. The following table describes their function.

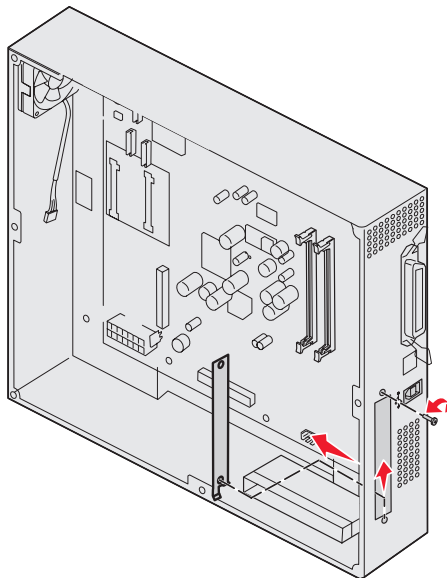
Card	Function
MarkNet™ internal print server	Adds an Ethernet, Token-Ring, or Fiber port to connect your printer to a network. Install a MarkNet N2501e or N2401e internal print server if you received either of these cards as part of a multifunction printer upgrade.
Serial/Parallel 1284-C Interface Card	Adds an RS-232C serial and 1284-C parallel interface port.
Coax/Twinax Adapter Card for SCS	Adds a coaxial/twinaxial network port.
802.11b Wireless Print Adapter	Connects to a MarkNet internal print server to add US or international 802.11b wireless printing capability.

Note: The network models ship with an Ethernet print server already installed.

Installing and removing options

You need a small Phillips screwdriver to install these options.

- 1 Remove the system board access cover (see [page 40](#)).
- 2 Remove the screw from the metal plate that covers the connector slot, and then lift the plate off.



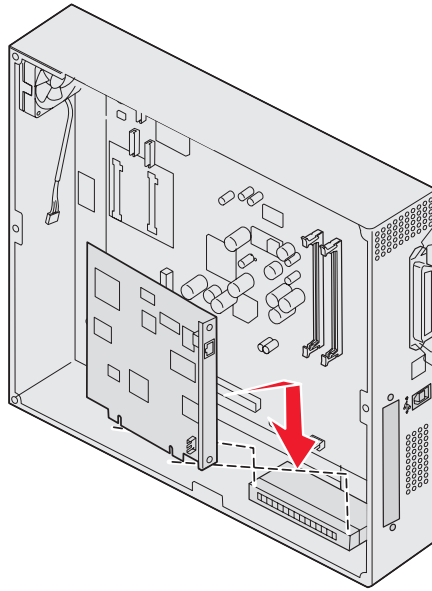
Save the screw.

Warning: Option cards are easily damaged by static electricity. Touch something metal, such as the printer frame, before you touch an option card.

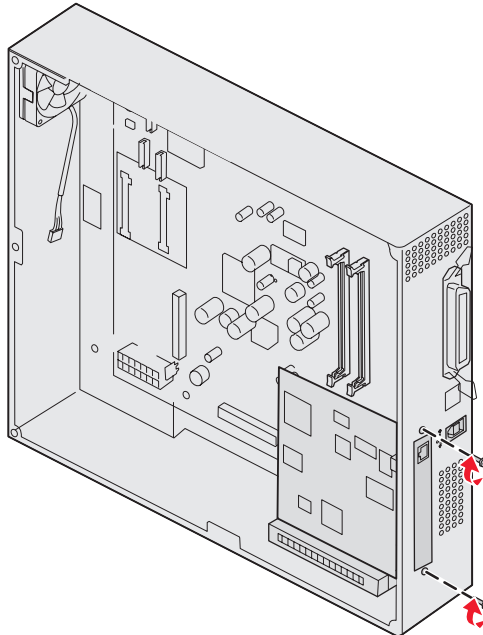
- 3 Unpack the option card.
Save the packing materials.

Installing and removing options

- 4 Align the connector on the option card with the connector on the system board.
The cable connectors on the side of the option card must fit through the connector slot.
- 5 Push the option card firmly into the option card connector.



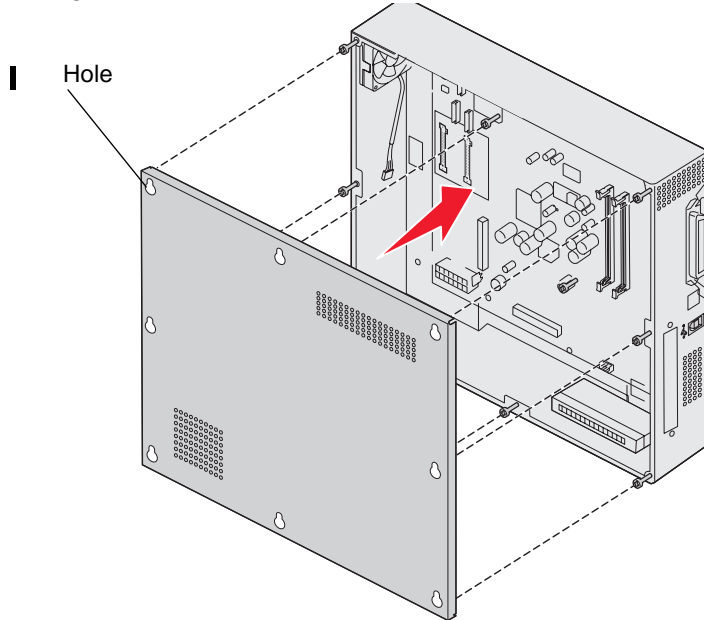
- 6 Secure the card to the system board with the screws.



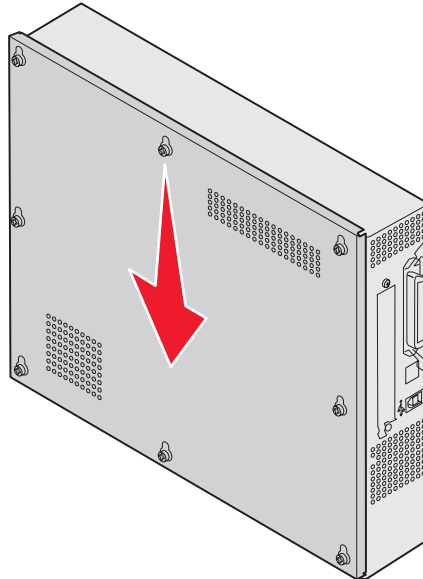
Reinstalling the system board access cover

After you finish installing cards on the printer system board, reinstall the system board access cover.

- 1 Align the holes on the access cover with the screws on the printer.



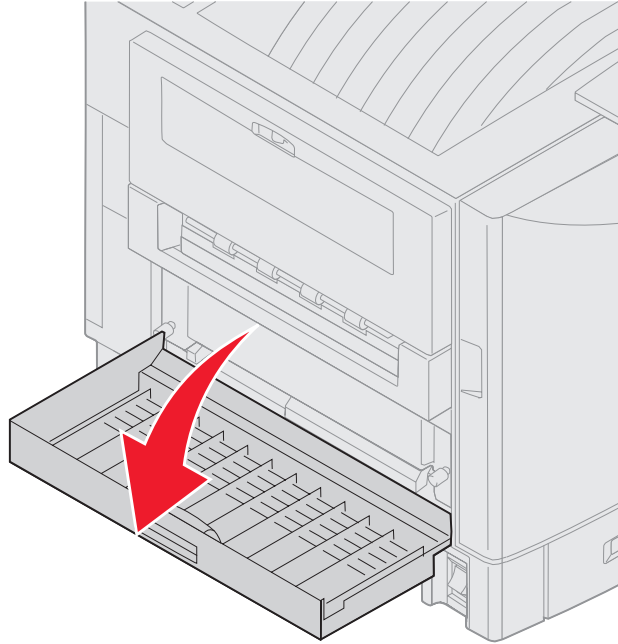
- 2 Place the cover against the printer and slide it down.



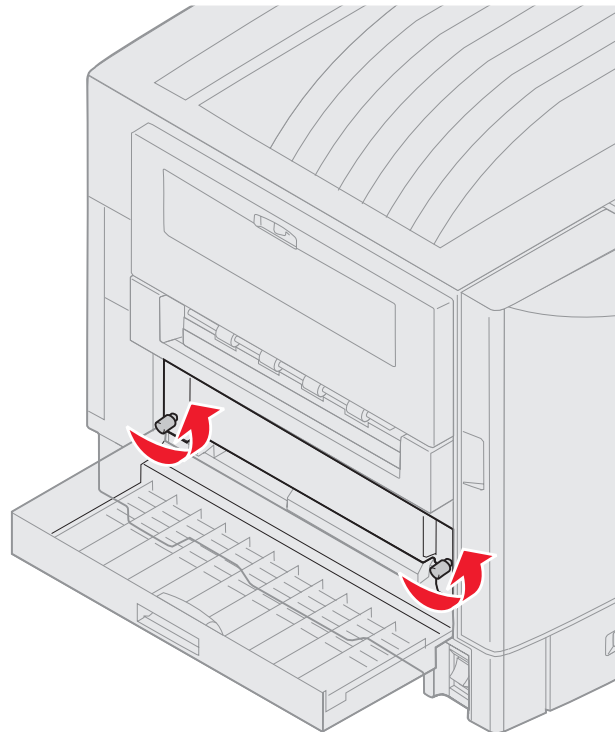
- 3 Tighten the eight screws.

Removing the duplex unit

- 1 Turn the printer off.
- 2 Open the duplex unit door.

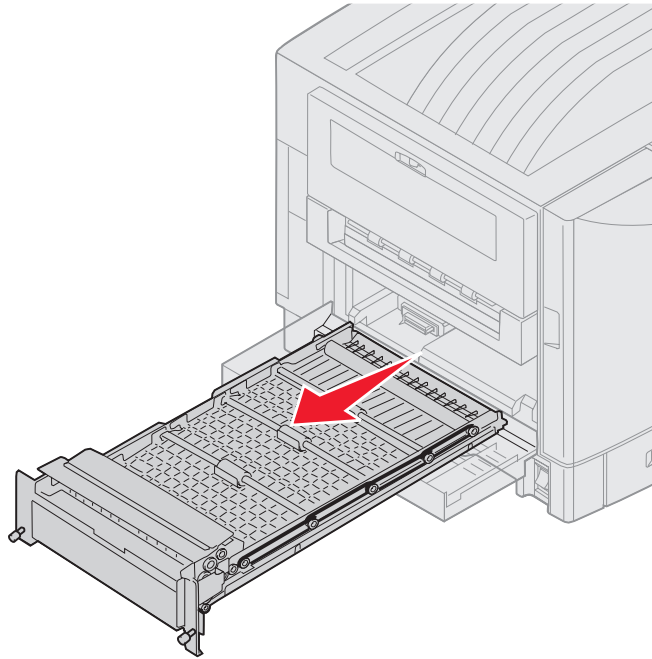


- 3 Loosen the thumbscrews securing the duplex unit.

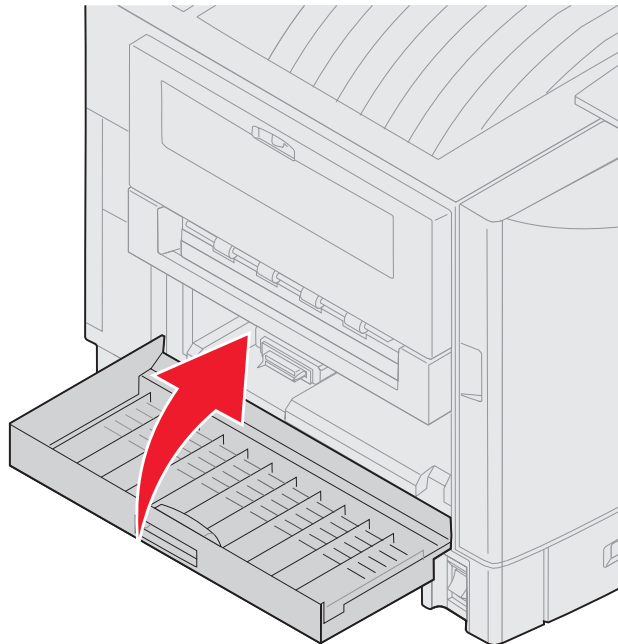


Installing and removing options

- 4 Slide the duplex unit out.

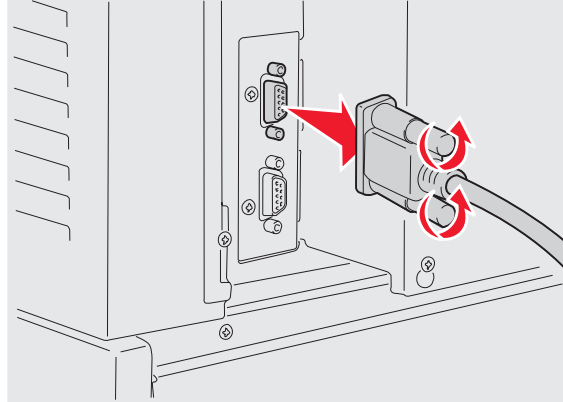


- 5 Close the duplex unit door.

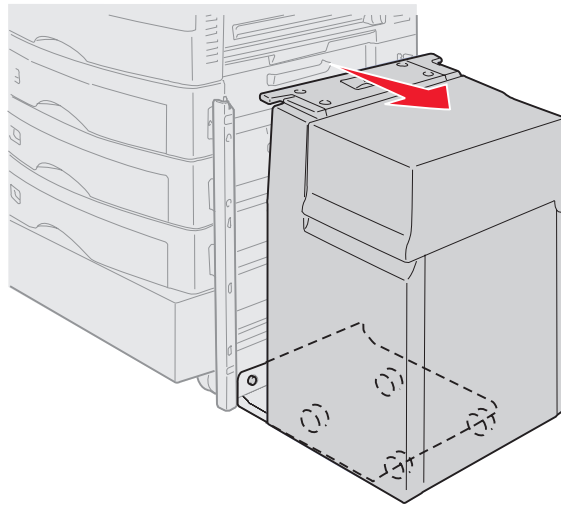


Removing the high capacity feeder

- 1 Turn the printer off.
- 2 Unplug the high capacity feeder power cord from the electrical outlet.
- 3 Disconnect the interface cable from the side of the high capacity feeder.



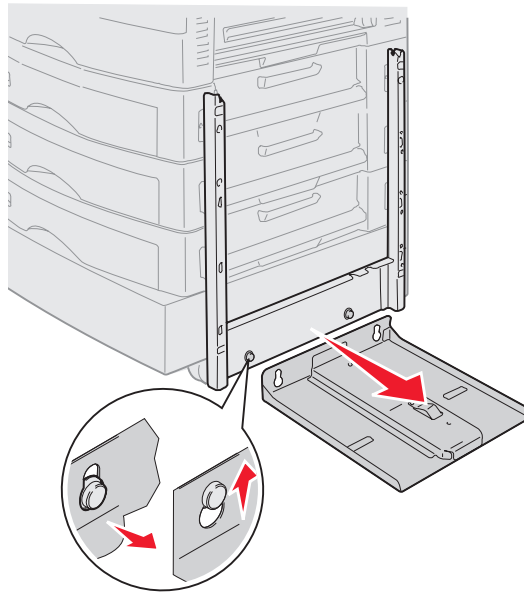
- 4 Roll the high capacity feeder away from the printer.



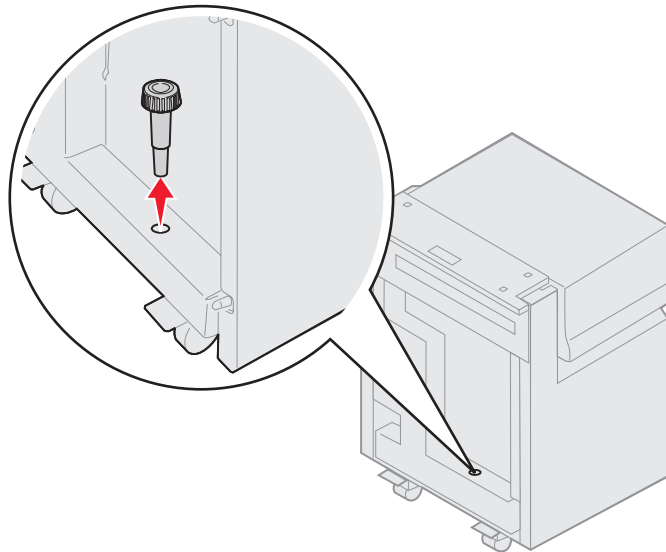
- 5 Remove the high capacity feeder from the guide rail.

Installing and removing options

- 6 Raise the guide rail and pull it away from the docking frame.

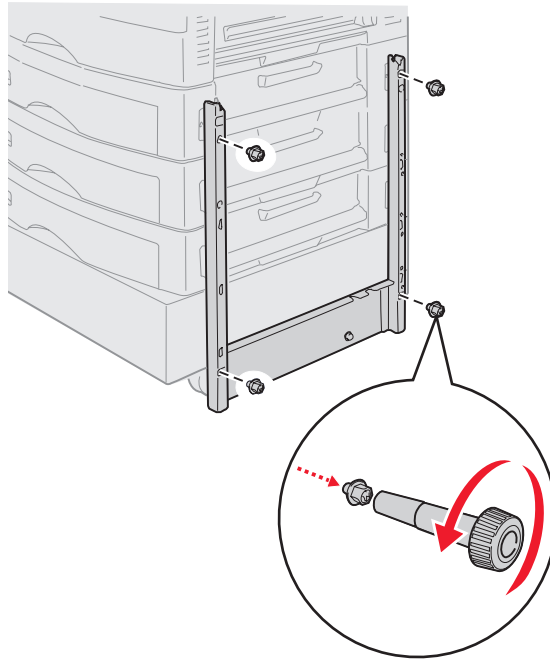


- 7 Remove the wrench from the holder in the high capacity feeder.

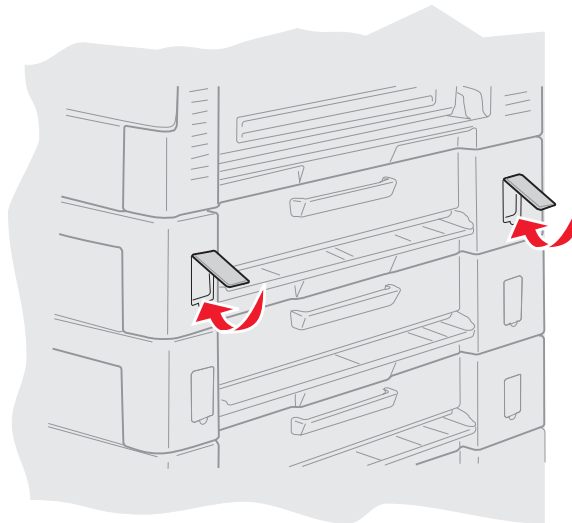


Installing and removing options

- 8 Remove the four screws securing the docking frame.



- 9 Insert the two side covers into the screw holes on the optional drawer until they snap into place.



Removing an optional drawer

- 1 Turn the printer off.
- 2 Unplug the power cord.

Note: To prevent an electrical overload, plug your printer into a well-grounded outlet on a non-ground fault interrupter (GFI) circuit.

- 3 Disconnect the parallel or Ethernet cable from the printer.

If you have any other devices connected to the printer, turn them off and unplug any cables going to the printer.

CAUTION: This printer weighs 80.5 kg (177 lb) and requires four people to lift. Anytime you move or lift the printer make sure you have enough people to help. Use the handholds located on the sides to lift.

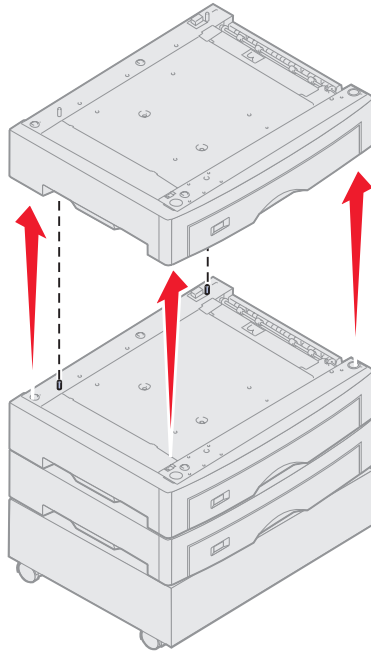
- 4 Lift the printer and move it away from the optional drawer.



CAUTION: An optional drawer weighs 18.5 kg (40.8 lb.). Have someone help when lifting.

Installing and removing options

- 5 Lift the optional drawer.



Lexmark Confidential until announced - Revision: 02/18/05

5

Printing

This chapter covers information about sending a job to print, printing confidential jobs, cancelling a print job, printing a menu settings page, a font list, and a directory list. This chapter also provides information on printing folio and statement size media. For tips on paper jam prevention and print media storage, see [Avoiding jams](#) or [Storing print media](#).

Sending a job to print

A printer driver is software that lets your computer communicate with your printer. When you choose **Print** from a software application, a window representing the printer driver opens. You can then select the appropriate settings for the specific job you are sending to the printer. Print settings selected from the driver override the default settings selected from the printer operator panel.

You may need to click **Properties** or **Setup** from the initial Print box to see all of the available printer settings you can change. If you are not familiar with a feature in the printer driver window, open the online Help for more information.

To support all the printer features, use the Lexmark custom printer drivers supplied with your printer. Updated drivers, as well as a complete description of the driver packages and Lexmark driver support, are available from the Lexmark Web site. *To support all the printer features, use the custom printer drivers supplied with your printer.* You can also use the system drivers built into your operating system.

To print a job from a typical Windows application:

- 1 Open the file you want to print.
- 2 From the File menu, select **Print**.
- 3 Select the correct printer in the dialog box. Modify the printer settings as appropriate (such as the pages you want to print or the number of copies).
- 4 Click **Properties** or **Setup** to adjust printer settings that were not available on the first screen, and then click **OK**.
- 5 Click **OK** or **Print** to send the job to the selected printer.

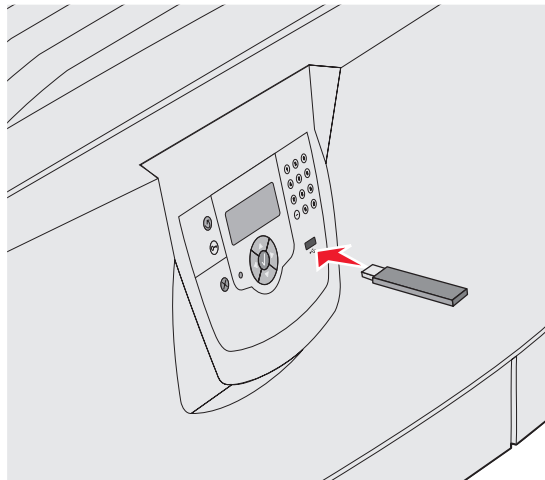
Printing from a USB drive

A USB port is located on the front of the operator panel so you can insert a USB drive and print PDF documents. Printing a document from the USB drive is similar to printing a held job.

- 1 Make sure the printer is on and **Ready** is displayed.
- 2 Insert a USB drive into the front USB slot.

Note:

- If you insert the drive when the printer requires attention such as when a paper jam has occurred, the printer will ignore the USB drive.
- If you insert the drive when the printer is busy printing other jobs, the message **Printing other jobs** will appear. You can select Continue, and your job will be printed after the other jobs finish.

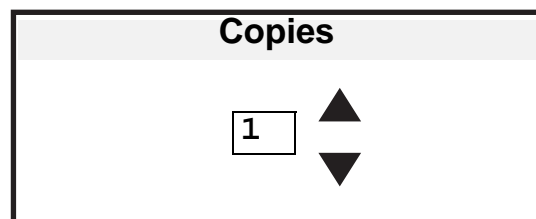
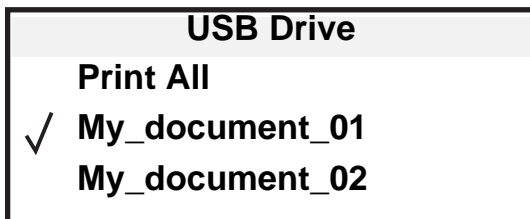


- 3 Press ▼ until ✓ appears next to the document you want to print.
- 4 Press (✓).

A screen asking the number of copies to be printed appears.

- 5 To print only one copy, press (✓). Otherwise, press ▼ to indicate the number of copies, and then press (✓).

The document prints.



Canceling a print job



There are several methods for canceling a print job.

- **Canceling from the printer operator panel**
- **Canceling a job from a computer running Windows**
 - **Canceling a job from the taskbar**
 - **Canceling a job from the desktop**
 - **Canceling a job from a Macintosh computer**

Canceling a job from the printer operator panel

Note: For more information about the operator panel, see [Understanding the printer operator panel](#).

If the job you want to cancel is printing, and **Busy** appears on the display:

- 1 Press  on the operator panel to open the Job Menu.
Cancel Job appears on the second line of the display.
 - 2 Press .
- The message **Canceling Job** is displayed.

Canceling a job from a computer running Windows

Canceling a job from the 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 the job you want to cancel.
- 3 Press the **Delete** key on the keyboard.

Canceling a job from the desktop

- 1 Minimize all programs to reveal the desktop.
- 2 Double-click the **My Computer** icon.
- 3 Double-click the **Printers** icon.
A list of available printers appears.

- 4 Double-click the printer you selected when you sent the job.
A list of print jobs appears in the printer window.
- 5 Select the job you want to cancel.
- 6 Press the **Delete** key on the keyboard.











Canceling a job from a Macintosh computer

When you send a job to print, the printer icon for your selected printer appears on the desktop.

- 1 Double-click the printer icon on your desktop.
A list of print jobs appears in the printer window.
- 2 Press **Control** and click the print job you want to cancel.
- 3 Select **Stop Queue** from the pop-up menu that appears.

Printing the menu settings page

You can print a menu settings page to review the default printer settings and to verify your printer options are installed correctly.











- 1 Make sure the printer is on.
- 2 Press  on the operator panel.
- 3 Press  until  **Defaults** appears.
- 4 Press .
- 5 Press  until  **Utilities Menu** appears.
- 6 Press .
- 7 Press  until  **Print Menus** appears.
- 8 Press .

Printing Menus Settings appears on the display.

The printer returns to the Ready state after the menu settings page prints.

Printing a network setup page

You can print a network setup page to review the default printer settings and to verify your printer options are installed correctly.











- 1 Make sure your printer is on.
- 2 Press  on the operator panel.
- 3 Press  until  **Defaults** appears.
- 4 Press .
- 5 Press  until  **Utilities Menu** appears.
- 6 Press .
- 7 Press  until  **Print Net Setup** appears.
- 8 Press .

The message **Printing Net Setup** appears on the display.

The printer returns to the Ready state after the network setup page prints.








Printing a font sample list

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

- 1 Make sure the printer is on and the **Ready** message appears.
- 2 Press  on the operator panel.
- 3 Press  until  **Reports** appears.
- 4 Press .
- 5 Press  until  **Print Fonts** appears.
- 6 Press .
- 7 Press  until  **PCL Fonts, PostScript Fonts, or PPDS Fonts** appears.
- 8 Press .

Printing a directory list

A directory listing shows the resources stored in flash memory or on the hard disk. To print a listing:

- 1 Make sure the printer is on and the **Ready** message appears.
- 2 Press  on the operator panel.
- 3 Press  until  **Reports** appears.
- 4 Press .
- 5 Press  until  **Print Directory** appears.
- 6 Press .

The message **Printing Directory List** appears on the display.

The printer returns to the Ready state after the directory list prints.

Printing confidential and held jobs

The confidential and held jobs function lets you print or delete a confidential job, a verify print job, a reserve print job, or a repeat print job.

When sending a job to the printer, you can specify in the driver that you want the printer to hold the job in memory. Once your job is stored in printer memory, go to the printer and use the printer operator panel to specify what you want to do with your print job.

All confidential and held jobs have a user name associated with them. To access confidential or held jobs, you must first select the type of job (confidential or held), and then select your user name from the user name list. Once you select your user name, you can:

Print All Jobs	Delete All Jobs
Print A Job	Delete A Job
Print Copies	

Printing a confidential job

When you send a confidential job to the printer, you must enter a personal identification number (PIN) from the driver. The PIN must be four digits using the numbers 1–6. The job is held in printer memory until you enter the same four-digit PIN from the operator panel and choose to print or delete the job. This ensures the job does not print until you are there to retrieve it. No one else using the printer can print the job without the PIN.

This feature will only work with the Lexmark custom drivers that came on the drivers CD which shipped with your printer. This feature will only work with the custom drivers that came on the drivers CD which shipped with your printer.

- 1 In your word processor, spreadsheet, browser, or other application, select File → Print.
- 2 Click **Properties**. (If there is no Properties button, click **Setup**, and then click **Properties**.)
- 3 Depending on your operating system, you may have to click the Setup tab →, and then click **Print and Hold**.

Note: If you have difficulty finding Print and Hold → Confidential Print, click **Help** and refer to the topic Confidential Print or Print and Hold, and then follow the driver instructions.

Go to the printer when you are ready to retrieve your confidential print job, and follow these steps:

- 4 Press ▼ until ✓ appears next to **Job Menu**. appears.
- 5 Press ✓.
- 6 Press ▼ until ✓ appears next to **Confidential Job** appears.
- 7 Press ✓.
- 8 Press ▼ until ✓ appears next to your user name.
- 9 Press ✓.
- 10 Enter your PIN. For more information about entering a PIN, see [Entering a personal identification number \(PIN\)](#).
- 11 Press ✓.

Note: After your job prints, it is deleted from printer memory.

Entering a personal identification number (PIN)


When you select **Confidential Job** from the **Job Menu**, the following prompt appears on the display after you select your user name:

Enter PIN:
=_____

- 1 Use the numeric buttons to the right of the display to enter the four-digit PIN associated with your confidential job.

Note: As you enter the PIN, asterisks appear on the display to ensure confidentiality. If you enter an invalid PIN, the message **No Jobs Found. Retry?** appears.

- 2 Press ✓ to reenter the PIN, or press ✕ to exit the Confidential Job menu.

- 3 Press  to print your confidential jobs.

Note: After your job prints, it is deleted from printer memory.

Printing and deleting held jobs

Held jobs (Verify Print, Reserve Print, or Repeat Print) differ in function and do not require a PIN to print the job. These jobs are printed or deleted from the printer operator panel.

Verify Print

If you send a Verify Print job, the printer prints one copy and holds the remaining copies you requested in printer memory. Use Verify Print to examine the first copy to see if it is satisfactory before printing the remaining copies. Once all copies are printed, the Verify Print job is automatically deleted from printer memory.

Reserve Print

If 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. Reserve Print jobs may be deleted if the printer requires extra memory to process additional held jobs.

Repeat Print

If 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.

Note: Repeat Print jobs are automatically deleted from printer memory when the printer requires extra memory to process additional held jobs.

This feature will only work with the Lexmark custom drivers that came on the drivers CD which shipped with your printer. This feature will only work with the custom drivers that came on the drivers CD which shipped with your printer.







- 1 In your word processor, spreadsheet, browser, or other application, select File → Print.
- 2 Click **Properties**. (If there is no Properties button, click **Setup**, and then click **Properties**.)
- 3 Depending on your operating system, you may have to click the Setup tab, and then click Print and Hold.

Note: If you have difficulty finding Print and Hold → Held Jobs, click **Help**, and refer to the topic Held Jobs or Print and Hold, then follow the driver instructions.

- 4 Select the type of held job you want, and then send your job to the printer.








Go to the printer when you are ready to retrieve your held print job, and follow these steps:

- 5 Press  until  **Job Menu** appears.

- 6 Press .
- 7 Press  until  **Held Jobs** appears.
- 8 Press .
- 9 Press  until  appears next to the type of action you want to perform.


Print All Jobs
Print A Job
Print Copies


Delete All Jobs
Delete A Job

- 10 Press .
- 11 Press  until  appears next to your user name.
- 12 Press .
- 13 Press  until  appears next to the job you want.
- 14 Press .

The job prints or is deleted based on your selection.

Recognizing format errors

If the  symbol appears on the display, it indicates the printer had trouble formatting one or more of the held jobs. These formatting problems are most commonly the result of insufficient printer memory or invalid data that might cause the printer to flush the job.

When a  symbol appears next to a held job, you can:

- Print the job. Be aware, however, that only part of the job may print.
- Delete the job. You may want to free up additional printer memory by scrolling through the list of held jobs and deleting others you have sent to the printer.

If formatting errors are a recurring problem with held jobs, your printer may require more memory.

Printing folio and statement sizes

Folio and statement sizes are not available in the Paper Size menu until Size Sensing is turned off. To turn off Size Sensing:

- 1 Make sure the printer is off.
- 2 Press and hold the  and  buttons while you turn the printer on.

Printing

- 3 Release both buttons when **Performing Self Test** appears on the display.

The printer performs its power-on sequence, and then **Config Menu** appears on the first line of the display.

- 4 Press ▼ until ✓ **Size Sensing** appears.

- 5 Press (✓).

Tray 1 Sensing appears on the second line of the display.

- 6 Press and release ▲ or ▼ to select the input option for the folio or statement size paper.

- 7 Press (✓).

The first line of the display shows the selected input option, and the second line shows the current setting.

- 8 Press ▲ or ▼ to change the setting to **Off**.

- 9 Press (✓).

SAVED appears briefly on the display, and then is replaced by **Config Menu** on the first line and **Size Sensing** on the second line.

- 10 Press and release ▲ or ▼ until ✓ appears next to **Exit Config Menu** appears.

- 11 Press (✓).

Activating Menu Changes appears briefly, followed by **Performing Self Test**. The printer returns to **Ready**.

Loading standard trays and optional trays

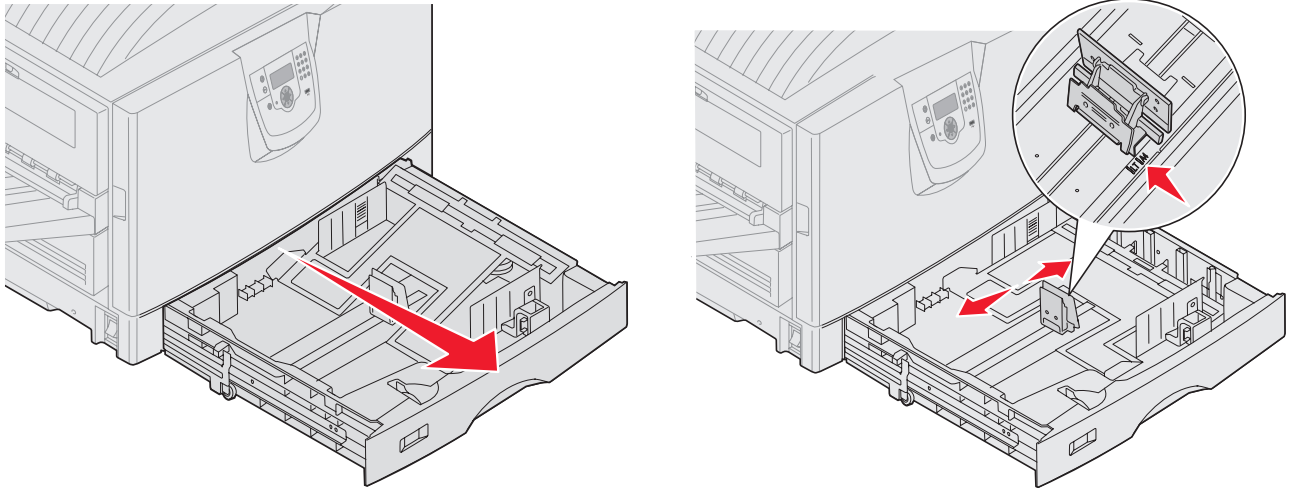
Your printer has a 550-sheet standard tray. You may have also purchased one or more 550-sheet optional trays. The steps for loading a standard or optional tray are the same.

Note: The steps for loading a 3000-sheet drawer are different than the steps for loading a 550-sheet tray.

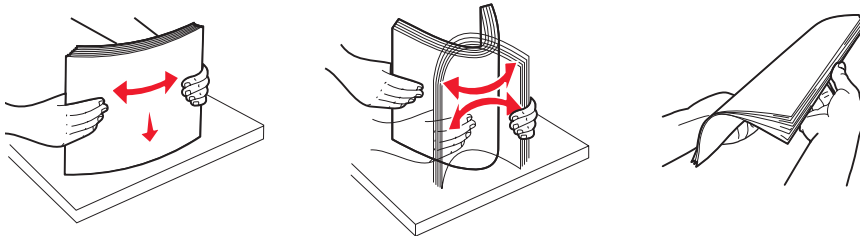
To load print media:

Note: Do not remove a tray when a job is printing or when the operator panel indicator light is blinking. Doing so may cause a jam.

- 1 Open the tray.
- 2 Squeeze the side guide tab, and position the guide for the size media you are using.



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

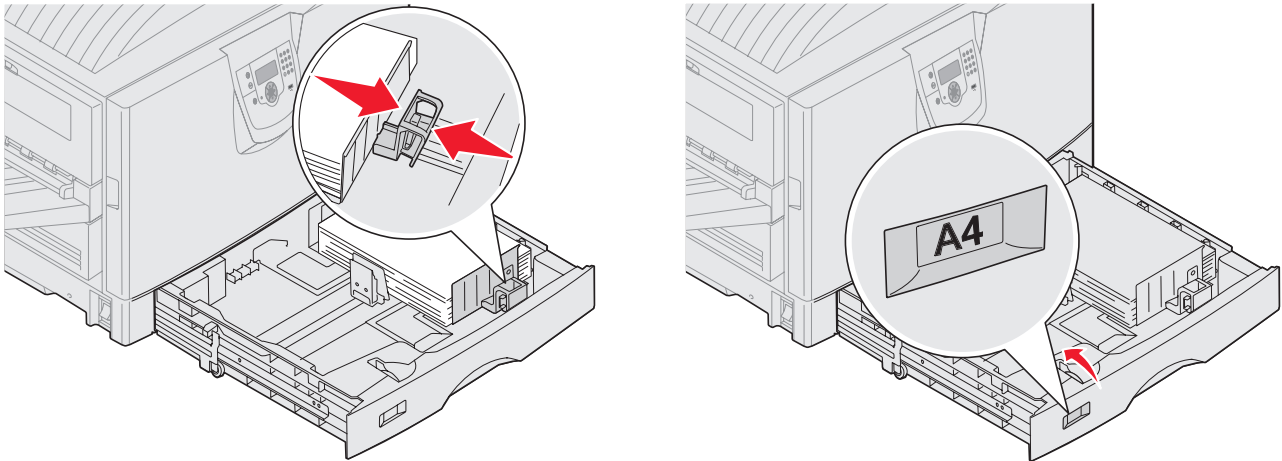


- 4 Place the print media face down in the tray. For duplex (two-sided) printing on letterhead, place the print media face up in the tray.

Note: Do not fill paper above the load line. Overfilling the tray may cause jams.

- 5 Squeeze the front guide tab, and slide the guide toward the inside of the tray until it lightly rests against the edge of the media.

- 6 Adjust the knob to show the size of the print media currently loaded.



Note: This setting serves as a visual reminder only; it has no effect on the operation of the printer.

- 7 Insert the tray into the printer.

Loading the multipurpose feeder

The multipurpose feeder can hold several sizes and types of print media, such as transparencies, postcards, note cards, and envelopes. It can be used for single-page or manual printing or as an additional tray.

The multipurpose feeder can hold approximately:

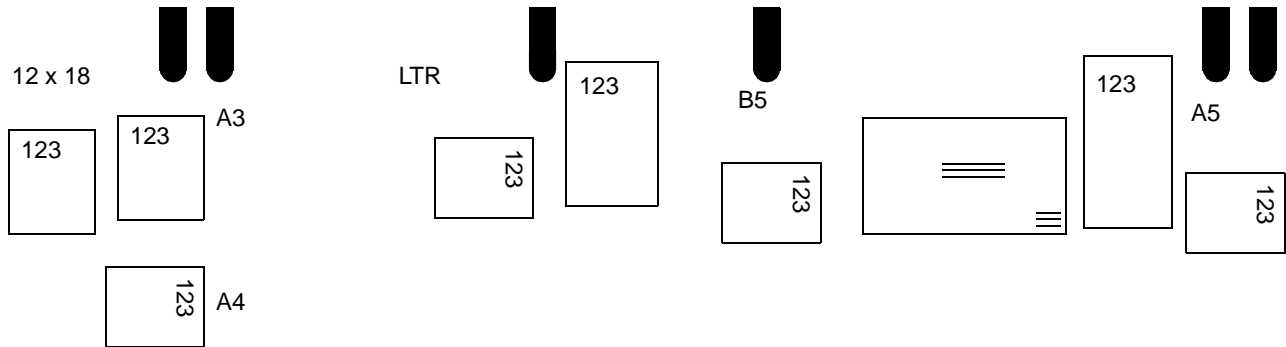
- 100 sheets of 75 g/m² (20 lb.) paper
- 80 sheets of 24 lb. 12x18 paper
- 55 sheets of labels
- 55 sheets of card stock
- 50 transparencies
- 10 envelopes
- 1 sheet of glossy paper (manual feed)
- 1 sheet of banner paper (297.2 x 914.4 mm. [11.7 x 36 in.]), manual feed

The multipurpose feeder accepts print media within the following dimensions:

- Width—69.85 mm (2.75 in.) to 215.9 mm (8.5 in.)
- Length—127 mm (5 in.) to 355.6 mm (14 in.)

Printing

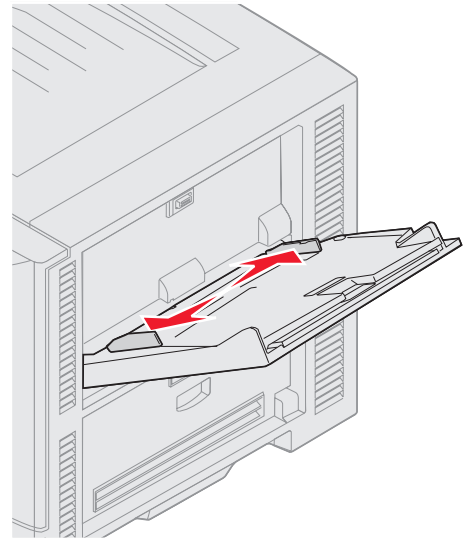
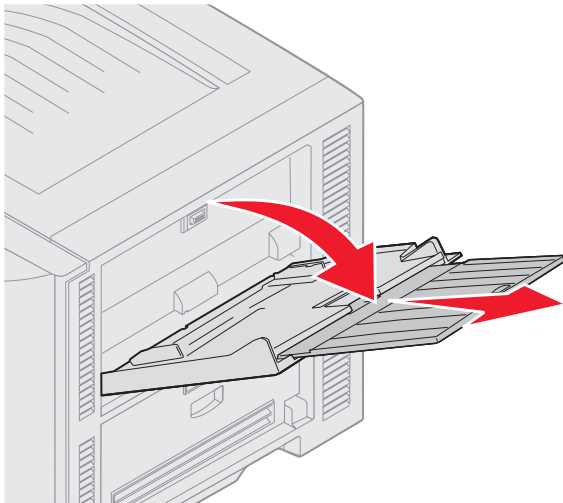
The icons on the multipurpose feeder show you how to load the multipurpose feeder with paper of various sizes, and how to turn an envelope for printing. Load letterhead face up for simplex printing, face down for duplex printing.



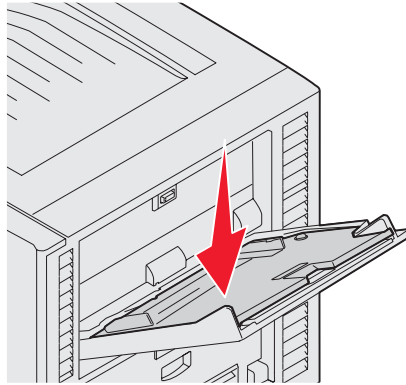
To load print media:

Note: Do not add or remove print media when the printer is printing from the multipurpose feeder or when the operator panel indicator light is blinking. Doing so may cause a jam.

- 1 Open the multipurpose feeder, and then extend the recessed tray to accommodate the paper you want to use.
- 2 Slide the paper width guides to the correct position.



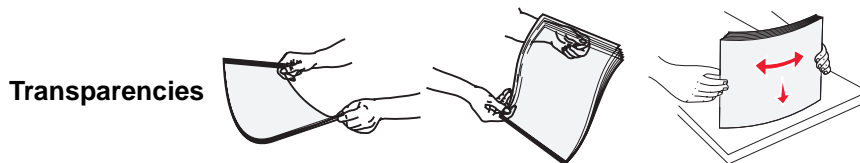
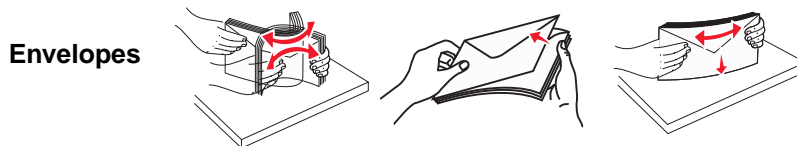
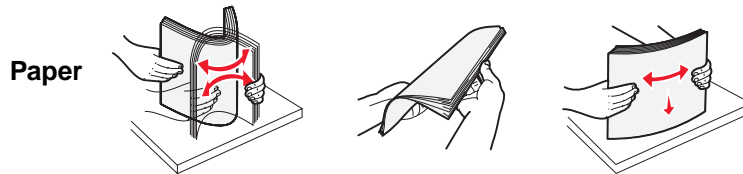
- 3 Push down the bottom plate until it locks into place.



Note: Do not place objects on the multipurpose feeder. Also, avoid pressing down on it or applying excessive force to it.

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

Note: Hold transparencies by the edges and avoid touching the print side. Fan the stack of transparencies to prevent jams. Be careful not to scratch or leave fingerprints on the transparencies.



5 Load the media in the tray.

Use the stack height label as a guide for stack height when loading print media.

Loading paper, transparencies, or envelopes

Note: Letterhead or other preprinted paper must be loaded differently depending on the options you have installed.

Load envelopes flap side down with the stamp area and flap on the left. The end of the envelope with the stamp area enters the multipurpose feeder first.




















- Never use envelopes with stamps, clasps, snaps, windows, coated linings, or self-stick adhesives. These envelopes may severely damage the printer.

Note: Load only one size and type of print media at a time in the multipurpose feeder. *Do not* mix sizes and types in the same tray.

Loading letterhead or preprinted paper

- Print side face up for *simplex* (single-sided) printing
- Print side face down for duplex printing
- Do not fill paper above the load line. Overfilling the tray may cause jams.

6 Set the Paper Size and Paper Type for the multipurpose feeder (MP Feeder Size and MP Feeder Type) to the correct value for the print media you loaded.

- Press  on the operator panel.
- Press  until the  appears next to **Paper Menu**.
- Press  on the operator panel.
- Press  until the  appears next to **Paper Size/Type**.
- Press  on the operator panel.
- Press  until the  appears next to **MP Feeder Size/Type**.
- Press  on the operator panel.
- Press  until the  appears next to the media size you loaded.
- Press  on the operator panel.
- Press  until the  appears next to **MP Feeder Size/Type**.
- Press  on the operator panel.
- Press  until the  appears next to the media type you loaded.
- Press  on the operator panel.

The printer returns to the **Ready** state.

Closing the multipurpose feeder

- 1 Remove print media from the multipurpose feeder.
- 2 Push the extension tray in.
- 3 Close the multipurpose feeder cover.

Loading the high capacity feeder

The optional high capacity feeder provides an additional input of 3,000 sheets of paper.

Note: Do not load any print media other than paper in the high capacity feeder.

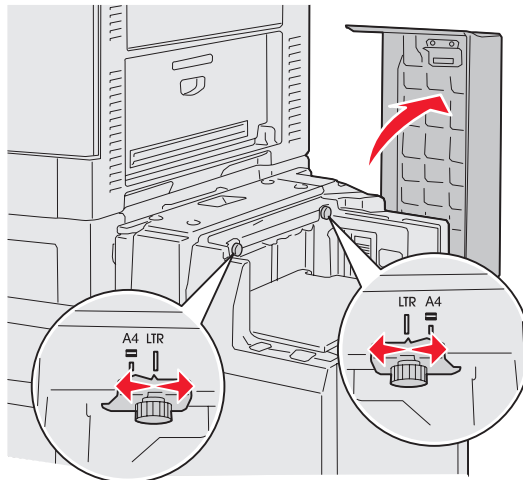
To load the high capacity feeder:

- 1 Open the top cover.

The paper guides are set at the factory and may already be configured for your paper size.

- 2 Inspect the position of the paper guides.

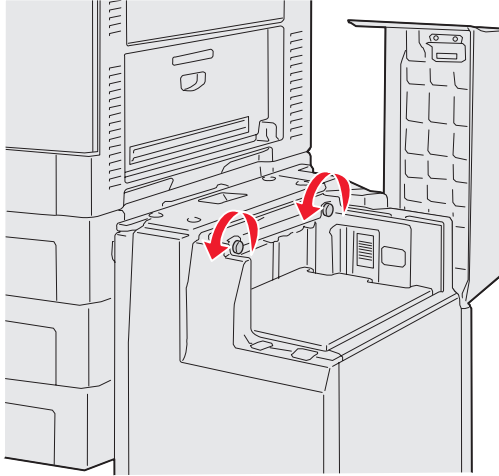
If the paper guides are correctly set for the size of paper you are loading, go to [step 6 on page 73](#). If not, continue with [step 3](#).



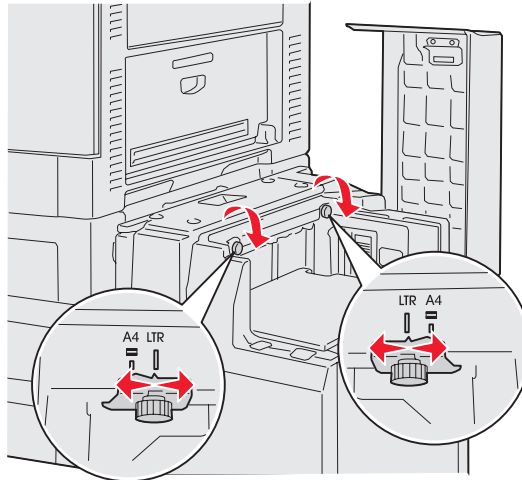
Note: The high capacity feeder must be properly adjusted for A4 or Letter size paper. If the paper guides are in the wrong position, you may experience paper feeding problems.

Printing

- 3 Loosen the left and right paper guide thumbscrews.



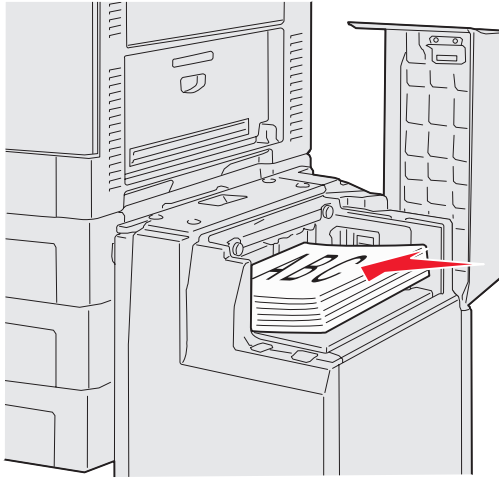
- 4 Slide the guides left or right to the correct position for the paper size you are loading (A4 or Letter).



- 5 Tighten the left and right paper guide thumbscrews.
- 6 Flex the sheets back and forth to loosen them, and then fan them.
Do not fold or crease the paper. Straighten the edges of the stack on a level surface.

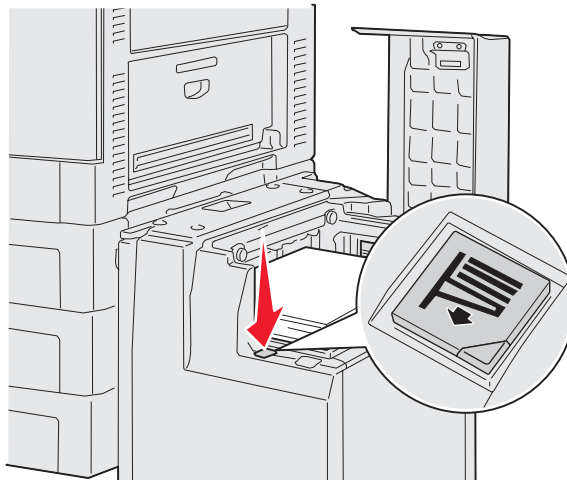
Printing

- 7 Place the paper against the paper guides with the print side up.



Note: Do not exceed the maximum stack height. Overfilling the tray may cause paper jams.

- 8 Press the paper tray button.

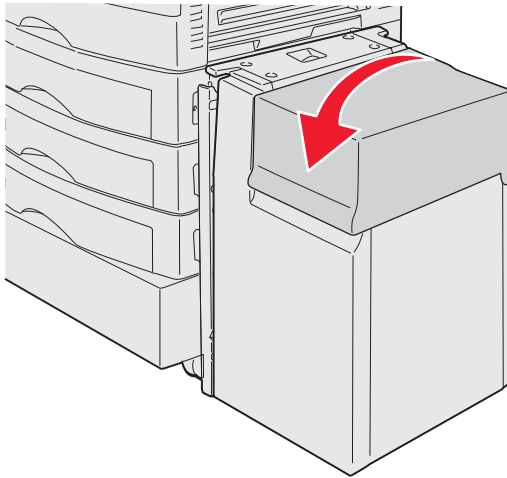


The paper tray lowers so you can load another 500 sheets of paper.

Note: If there is only a partial stack of paper in the tray, the paper low sensor will not allow the tray to go down. Add more paper to lower the tray.

- 9 Place the paper against the paper guides, with the print side up.
- 10 Repeat step 8 and step 9 until you have filled the tray or loaded the desired quantity.

- 11 Close the top cover.



Make sure the high capacity feeder is pushed completely against the printer.

Linking trays














Tray linking enables the automatic linking feature for trays when you load the same size and type of print media in multiple sources. The printer automatically links the trays; when one tray is empty, print media feeds from the next linked tray.

For example, if you have the same size and type of print media loaded in tray 2 and tray 4, the printer selects print media from tray 2 until it becomes empty, and then the printer automatically feeds print media from the next linked tray—tray 4.

By linking all five trays, you effectively create a single source with a capacity of 4,000 sheets.

If you load the same size print media in each tray, make sure the print media is all the same type in order to link the trays.

To set the paper type or size:

- 1 Press  on the operator panel.
- 2 Press  until the  appears next to **Paper Menu**.
- 3 Press .
- 4 Press  until the  appears next to **Paper Size/Type**.
- 5 Press .
- 6 Press  until the  appears next to **Tray <x> Size/Type**.
- 7 Press .
- 8 Press  until the  appears next to the envelope size you loaded.
- 9 Press .

- 10 Press ▼ until the ✓ appears next to **Tray <x> Size/Type**.
- 11 Press ✓.
- 12 Press ▼ until the ✓ appears next to the envelope type you loaded.
- 13 Press ✓.


The printer returns to the **Ready** state.

Once the trays you selected are loaded with the same size and type of print media, select the same Paper Type setting in the Paper Menu for these sources.

To disable tray linking, set the Paper Type to a unique value in each one of the trays. If all the trays do not have the same type of print media when they are linked, you could mistakenly print a job on the wrong paper type.

Printing on banner paper

Use these instructions to print on banner paper if you have attached an optional banner paper support.

- 1 Load paper in the banner tray (50 sheets maximum).
- 2 Press  on the operator panel.
- 3 Press ▼ until the ✓ appears next to **Paper Menu**.
- 4 Press ✓.
- 5 Press ▼ until the ✓ appears next to **Paper Size/Type**.
- 6 Press ✓.
- 7 Press ▼ until the ✓ appears next to **Manual Paper Size/Type**.
- 8 Press ✓.
- 9 Press ▼ until the ✓ appears next to **Universal**.
- 10 Press ✓.
- 11 Press ► until you see **Plain Paper**.
- 12 Press ▼ until the ✓ appears next to **Universal Setup**.
- 13 Press ✓.
- 14 Press ▼ until you see **Portrait Width**.
- 15 Press ✓.
- 16 Press ◀ or ▶ until you see **11.69**, or the width of your banner paper.
- 17 Press ✓.

- 18 Press ▼ until you see **Portrait Height**.
- 19 Press ✓.
- 20 Press ◀ or ▶ until you see **48**, or the length of your banner paper.
- 21 Press ✓.
- 22 Create a new form with the appropriate banner paper dimensions with Server Properties:
 - a Click Start **Start** →**Settings** →**Printers**.
 - b In the **File** menu, click **Server Properties**.
 - c Enter a Form Description.
 - d Enter the Paper Size.
 - e Click **Save Form**.
- 23 Set up the appropriate paper size within your application.
- 24 When printing, select the custom Banner form size.

Tips

- Banner sheets cannot be automatically duplexed.
- Banner media can only be fed from the banner tray to the standard bin.
- For more information, see [Media guidelines](#).

Tips for successful printing

Storing print media

Properly storing the media helps ensure trouble-free printing. Use the following guidelines:

- For best results, store media in an environment where the temperature is approximately 21°C (70°F) and the relative humidity is 40%.
- Store cartons of paper on a pallet or shelf, rather than directly on the floor.
- If you store individual packages of paper out of the original carton, make sure they rest on a flat surface so the edges do not buckle or curl.
- *Do not* place anything on top of the paper packages.

Avoiding paper jams

By carefully selecting print media and loading them properly, you should be able to avoid most paper jams. If jams do occur, follow the steps outlined in [Clearing paper jams](#). If jams occur frequently, make sure you follow these tips to avoid jams:

- See [Loading standard trays and optional trays](#) to load paper properly. Make sure the adjustable guides are positioned correctly before closing the tray.
- *Do not* overload the paper trays. Make sure the paper is under the paper capacity mark on the inside of the tray relative to the size and weight of the paper you are using.
- *Do not* remove trays while print jobs are in process.
- *Do not* mix reams of paper.
- Remove the top and bottom sheets of a ream before loading paper.
- *Do not* force paper into the multipurpose feeder when you load it; otherwise, it may skew or buckle.
- Make sure the paper width and length guides on the paper sources are adjusted correctly.
- Flex, fan, and straighten the paper before loading it.
- Fan stacks of labels or transparencies before loading them into the multipurpose feeder. If jams occur using the multipurpose feeder, try feeding one sheet at a time.
- *Do not* load wrinkled, creased, damp, or curled paper.
- *Do not* mix paper types or paper sizes in one tray.
- Use only recommended print media. See [Media guidelines](#).
- Make sure the recommended print side is face up when placed in the multipurpose feeder or high capacity feeder.
- Make sure the recommended print side is face down when loading trays 1 through 4.
- Keep print media stored in an acceptable environment. See [Media guidelines](#).

Understanding fonts

Resident fonts

Your printer is equipped with resident fonts stored permanently in printer memory. Different fonts are available in PCL 6 and PostScript 3 emulations. Some of the most popular typefaces, like Courier and Times New Roman, are available for all printer languages.

The fonts in the PCL emulation are compatible with the fonts in the HP4500 and include four additional fonts and many extra symbol sets to support extra languages and programs. The fonts in the PostScript emulation are compatible with Adobe PostScript 3 and include 20 additional fonts.

The following tables list all the fonts in your printer. You can select the resident fonts from your software program, or from the operator panel if you are using PCL 6 emulation.

PCL 6 emulation	PostScript 3 emulation
Albertus Medium	AlbertusMT
	AlbertusMT-Italic
	AlbertusMT-Light
Albertus Extra Bold	
Antique Olive	AntiqueOlive-Roman
Antique Olive Italic	AntiqueOlive-Italic
Antique Olive Bold	AntiqueOlive-Bold
	AntiqueOlive-Compact
Arial	ArialMT
Arial Italic	Arial-ItalicMT
Arial Bold	Arial-BoldMT
Arial Bold Italic	Arial-BoldItalicMT
ITC Avant Garde Book	AvantGarde-Book
ITC Avant Garde Book Oblique	AvantGarde-BookOblique
ITC Avant Garde Demi	AvantGarde-Demi
ITC Avant Garde Demi Oblique	AvantGarde-DemiOblique
ITC Bookman Light	Bookman-Light
ITC Bookman Light Italic	Bookman-LightItalic
ITC Bookman Demi	Bookman-Demi
ITC Bookman Demi Italic	Bookman-DemiItalic
Clarendon Condensed Bold	
Coronet	Coronet-Regular

Printing

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PCL 6 emulation	PostScript 3 emulation
CourierPS	Courier
CourierPS Oblique	Courier-Oblique
CourierPS Bold	Courier-Bold
CourierPS Bold Oblique	Courier-BoldOblique
CG Omega	
CG Omega Bold	
CG Omega Italic	
CG Omega Bold Italic	
Garamond Antiqua	Garamond-Antiqua
Garamond Halbfett	Garamond-Halbfett
Garamond Kursiv	Garamond-Kursiv
Garamond Kursiv Halbfett	Garamond-KursivHalbfett
Helvetica Light	Helvetica-Light
Helvetica Light Oblique	Helvetica-LightOblique
Helvetica Black	Helvetica-Black
Helvetica Black Oblique	Helvetica-BlackOblique
Helvetica	Helvetica
Helvetica Italic	Helvetica-Oblique
Helvetica Bold	Helvetica-Bold
Helvetica Bold Italic	Helvetica-BoldOblique
Helvetica Narrow	Helvetica-Narrow
Helvetica Narrow Italic	Helvetica-Narrow-Oblique
Helvetica Narrow Bold	Helvetica-Narrow-Bold
Helvetica Narrow Bold Italic	Helvetica-Narrow-BoldOblique
CG Times	Intl-CG-Times
CG Times Italic	Intl-CG-Times-Italic
CG Times Bold	Intl-CG-Times-Bold
CG Times Bold Italic	Intl-CG-Times-BoldItalic
Univers Medium	Intl-Univers-Medium
Univers Medium Italic	Intl-Univers-MediumItalic
Univers Bold	Intl-Univers-Bold
Univers Bold Italic	Intl-Univers-BoldItalic
Courier	Intl-Courier
Courier Italic	Intl-Courier-Oblique

Printing

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PCL 6 emulation	PostScript 3 emulation
Courier Bold	Intl-Courier-Bold
Courier Bold Italic	Intl-Courier-BoldOblique
Letter Gothic	LetterGothic
Letter Gothic Italic	LetterGothic-Slanted
Letter Gothic Bold	LetterGothic-Bold
	LetterGothic-BoldSlanted
Marigold	Marigold
Century Schoolbook Roman	NewCenturySchlbk-Roman
Century Schoolbook Italic	NewCenturySchlbk-Italic
Century Schoolbook Bold	NewCenturySchlbk-Bold
Century Schoolbook Bold Italic	NewCenturySchlbk-BoldItalic
	Optima
	Optima-Bold
	Optima-BoldItalic
	Optima-Italic
Palatino Roman	Palatino-Roman
Palatino Italic	Palatino-Italic
Palatino Bold	Palatino-Bold
Palatino Bold Italic	Palatino-BoldItalic
SymbolPS	Symbol
Symbol	
Times Roman	Times-Roman
Times Italic	Times-Italic
Times Bold	Times-Bold
Times Bold Italic	Times-BoldItalic
Times New Roman	TimesNewRomanPSMT
Times New Roman Italic	TimesNewRomanPS-ItalicMT
Times New Roman Bold	TimesNewRomanPS-BoldMT
Times New Roman Bold Italic	TimesNewRomanPS-BoldItalicMT
	Univers
	Univers-Oblique
	Univers-Bold
	Univers-BoldOblique
Univers Condensed Medium	Univers-Condensed

Printing

PCL 6 emulation	PostScript 3 emulation
Univers Condensed Medium Italic	Univers-CondensedOblique
Univers Condensed Bold	Univers-CondensedBold
Univers Condensed Bold Italic	Univers-CondensedBoldOblique
Wingdings	Wingdings-Regular
ITC Zapf Chancery Medium Italic	ZapfChancery-MediumItalic
ITC Zapf Dingbats	ZapfDingbats
	Univers-Extended
	Univers-ExtendedObl
	Univers-BoldExt
	Univers-BoldExtObl
	Univers-Light
	Univers-LightOblique
	Clarendon
	Clarendon-Light
	Clarendon-Bold
	Helvetica-Condensed
	Helvetica-Condensed-Bold
	Helvetica-Condensed-BoldObl
	Helvetica-Condensed-Oblique
	StempelGaramond-Bold
	StempelGaramond-BoldItalic
	StempelGaramond-Italic
	StempelGaramond-Roman
	Apple-Chancery
	Chicago
	Geneva
	Monaco
	NewYork
	Oxford
	Taffy
	MonaLisa-Recut
	Candid
	Bodoni
	Bodoni-Italic

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Printing

PCL 6 emulation	PostScript 3 emulation
	Bodoni-Bold
	Bodoni-BoldItalic
	Bodoni-Poster
	Bodoni-PosterCompressed
	CooperBlack
	CooperBlack-Italic
	Copperplate-ThirtyTwoBC
	Copperplate-ThirtyThreeBC
	Eurostile
	Eurostile-Bold
	Eurostile-ExtendedTwo
	Eurostile-BoldExtendedTwo
	GillSans
	GillSans-Italic
	GillSans-Bold
	GillSans-BoldItalic
	GillSans-Condensed
	GillSans-BoldCondensed
	GillSans-Light
	GillSans-LightItalic
	GillSans-ExtraBold
	Goudy
	Goudy-Italic
	Goudy-Bold
	Goudy-BoldItalic
	Goudy-ExtraBold
	HoeflerText-Regular
	HoeflerText-Italic
	HoeflerText-Black
	HoeflerText-BlackItalic
	HoeflerText-Ornaments
	JoannaMT
	JoannaMT-Italic
	JoannaMT-Bold

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PCL 6 emulation	PostScript 3 emulation
	JoannaMT-BoldItalic
	LubalinGraph-Book
	LubalinGraph-BookOblique
	LubalinGraph-Demi
	LubalinGraph-DemiOblique

Resident bit mapped fonts

PCL 6 emulation	PostScript 3 emulation
Line Printer 16	
POSTNET Bar code	

Symbol sets

A *symbol set* is an encoded collection of alphabetic and numeric characters, punctuation, and special characters available in the font you select. Symbol sets support the requirements for different languages or specific programs, such as math symbols used for scientific text.

The symbol set encoding also defines which character will print for each key on the keyboard (or more specifically, for each *code point*). Some programs require different characters at some code points. To support multiple programs and languages, your printer has 83 symbol sets for the resident PCL 6 emulation fonts.

Symbol sets for PCL 6 emulation

Not all fonts support all of the symbol sets listed in [Downloadable fonts](#). Refer to the *Technical Reference* to determine which symbol sets are supported by each font name.

Downloadable fonts

ABICOMP Brazil/Portugal	Wingdings	ISO 25: French
ABICOMP International	POSTNET Bar code	ISO 57: Chinese
DeskTop	ISO : German	ISO 60: Norwegian version 1
Legal	ISO : Spanish	ISO 61: Norwegian version 2
MC Text	ISO 2: IRV (Int'l Ref Version)	ISO 69: French
Microsoft Publishing	ISO 4: United Kingdom	ISO 84: Portuguese
Russian-GOST	ISO 6: ASCII	ISO 85: Spanish
Ukrainian	ISO 10: Swedish	ISO 8859-1 Latin 1 (ECMA-94)
PCL ITC Zapf Dingbats	ISO 11: Swedish for Names	ISO 8859-2 Latin 2
PS ITC Zapf Dingbats	ISO 14: JIS ASCII	ISO 8859-5 Latin/Cyrillic
PS Math	ISO 15: Italian	ISO 8859-7 Latin/Greek
PS Text	ISO 16: Portuguese	ISO 8859-9 Latin 5
Pi Font	ISO 17: Spanish	ISO 8859-10 Latin 6
Symbol	ISO 21: German	ISO 8859-15 Latin 9
PC-8 Bulgarian	PC-857 Latin 5 (Turkish)	Roman-9
PC-8 Danish/Norwegian (437N)	PC-858 Multilingual Euro	Roman Extension
PC-8 Greek Alternate (437G)	PC-860 Portuguese	Ventura ITC Zapf Dingbats
PC-8 Turkish (437T)	PC-861 Icelandic	Ventura International
PC-8 Latin/Greek	PC-863 Canadian French	Ventura Math
PC-8 PC Nova	PC-865 Nordic	Ventura US
PC-8 Polish Mazovia	PC-866 Cyrillic	Windows 3.0 Latin 1
PC-8 Code Page 437	PC-869 Greek	Windows 98 Cyrillic
PC-775 Baltic (PC-8 Latin 6)	PC-911 Katakana	Windows 98 Greek
PC-850 Multilingual	PC-1004 OS/2	Windows 98 Latin 1
PC-851 Greek	Math-8	Windows 98 Latin 2
PC-852 Latin 2	Greek-8	Windows 98 Latin 5
PC-853 Latin 3 (Turkish)	Turkish-8	Windows 98 Latin 6 (Baltic)
PC-855 Cyrillic	Roman-8	

You can download scalable fonts in PostScript 3 emulation and either scalable or bit mapped fonts in PCL 6 emulation. Fonts can be downloaded to printer memory, or to a flash memory option or hard disk option. Fonts downloaded to flash memory or hard disk remain in memory even after the printer language changes, the printer resets, or the printer is turned off.

Euro support

Support for the euro currency character is included in all applicable fonts for both the PostScript and PCL emulations. Twelve of the PCL symbol sets support the euro character, including all seven Windows symbol sets.

Hebrew and Arabic fonts

A variety of downloadable fonts for Hebrew and Arabic are included on the CD that shipped with the printer.

FontVision

Also included on the CD is the FontVision™ Management utility and screen fonts to match the resident scalable fonts. **An additional 48 TrueType fonts are available on the Lexmark Web site when you register the printer.**

6

Media specifications

Media is paper, card stock, transparencies, labels, and envelopes. The last four are sometimes referred to as *specialty media*. The printer provides high quality printing on a variety of media. A number of things must be considered concerning media before printing. This chapter provides information to help make media selections and how to care for media.

Media guidelines

Selecting the appropriate media for the printer helps avoid printing problems.

The following sections contain guidelines for choosing the correct media for the printer.

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

Paper

To ensure the best print quality and feed reliability, use 90 g/m² (24 lb) xerographic, grain long paper. Business papers designed for general business use may also provide acceptable print quality.

Lexmark recommends Lexmark Part Number 12A5950 letter size glossy paper and Lexmark Part Number 12A5951 for A4 size glossy paper.

Always print several samples before buying large quantities of any type of media. When choosing any media, consider the weight, fiber content, and color.

The LED printing process heats paper to high temperatures of 230°C (446°F) for non-MICR applications. Use only paper able to withstand these temperatures without discoloring, bleeding, or releasing hazardous emissions. Check with the manufacturer or vendor to determine whether the paper chosen is acceptable for laser printers.

When loading paper, note the recommended print side on the paper package, and load paper accordingly. See **Loading standard trays and optional trays** for detailed loading instructions.

Paper characteristics

The following paper characteristics affect print quality and reliability. It is recommended that these guidelines are followed when evaluating new paper stock.

For detailed information, 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 to 176 g/m² (16 to 47 lb bond) grain long. Paper lighter than 60 g/m² (16 lb) might not be stiff enough to feed properly, causing jams. For best performance, use 90 g/m² (24 lb bond) grain long paper. To use paper narrower than 182 x 257 mm (7.2 x 10.1 in.), it is recommended that the weight be greater than or equal to 90 g/m² (24 lb bond).

Curl

Curl is the tendency of media to curve 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 and dry conditions, even in the trays, can contribute to paper curling prior to printing and can cause feeding problems.

Smoothness

The degree of smoothness of paper directly affects print quality. If the paper is too rough, the toner does not fuse to the paper properly, resulting in poor print quality. If the paper is too smooth, it can cause paper feeding or print quality issues. Smoothness needs to be between 100 and 300 Sheffield points; however, smoothness between 150 and 250 Sheffield points produces the best print quality.

Moisture content

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

Condition paper while it is still in the original wrapper. To condition it, store it in the same environment as the printer for 24 to 48 hours before printing to let the paper stabilize in the new conditions. 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 because of the mass of material.

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 to 90 g/m² (16 to 24 lb bond) paper, grain long fibers are recommended.

Fiber content

Most high-quality xerographic paper is made from 100% chemically 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 possess characteristics that can result in degraded paper handling.

Unacceptable paper

The following papers are not recommended for use with the printer:

- Chemically treated papers used to make copies without carbon paper, also known as carbonless papers, carbonless copy paper (CCP), or no carbon required (NCR) paper
- Preprinted papers with chemicals that may contaminate the printer
- Preprinted papers that can be affected by the temperature in the printer fuser
- Preprinted papers that require a *registration* (the precise print location on the page) greater than ± 0.09 in., such as optical character recognition (OCR) forms

In some cases, registration can be adjusted with the 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 containing more than 25% post-consumer waste that do not meet DIN 19 309
- Recycled paper having a weight less than 60 g/m^2 (16 lb)
- Multiple-part forms or documents

Selecting paper

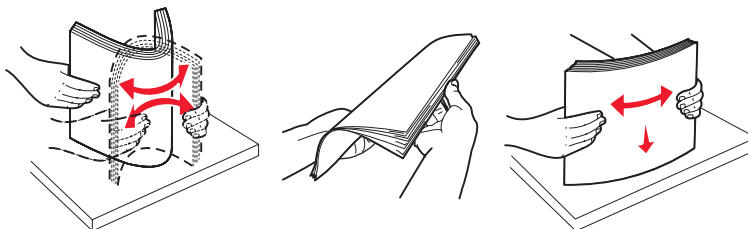
Proper paper loading helps prevent jams and ensures trouble-free printing.

To help avoid jams or 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 media sizes, weights, or types in the same source; mixing results in jams.
- *Do not* use coated papers unless they are specifically designed for electrophotographic printing.
- *Do not* forget to change the Paper Size setting when using a source that does not support auto size sensing.
- *Do not* remove trays while a job is printing or **Busy** appears on the operator panel.
- Make sure the Paper Type, Paper Texture, and Paper Weight settings are correct. (See “Paper Menu” in the *Menus and Messages Guide* located on the publications CD for detailed information about these settings.)
- Make sure the paper is properly loaded in the source.

Media specifications

- Flex paper back and forth. Do not fold or crease the paper. Straighten the edges on a level surface.



Selecting preprinted forms and letterhead

Use the following guidelines when selecting preprinted forms and letterhead paper for the printer:

- Use grain long papers for best results for 60 to 90 g/m² weights.
- 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 withstand temperatures of 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 should 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.

Printing on letterhead

Check with the manufacturer or vendor to determine whether the chosen preprinted letterhead is acceptable for laser printers.

Page orientation is important when printing on letterhead. Use the following table for help when loading letterhead in the media sources.

Media source or process	Print side	Top of page
Trays	Printed letterhead face down	Letterhead goes toward the rear of the tray.
Duplex (two-sided) printing from trays	Printed letterhead face up	Letterhead goes toward the front of the tray.
Multipurpose feeder	Printed letterhead face up	Icons on the multipurpose feeder show the correct orientation for each paper size.
Duplex (two-sided) printing from multipurpose feeder	Printed letterhead face down	Icons on the multipurpose feeder show the correct orientation for each paper size.

Transparencies

Feed transparencies from the standard tray or the multipurpose feeder. Try a sample of any transparencies being considered for use with the printer before buying large quantities.

When printing on transparencies:

- Be sure to set the Paper Type to Transparency from the printer driver or from MarkVision™ Professional to avoid damaging the printer.
- Use transparencies designed specifically for laser printers. Transparencies must be able to withstand temperatures of 230°C (446°F) without melting, discoloring, offsetting or releasing hazardous emissions.
- To prevent print quality problems, avoid getting fingerprints on the transparencies.
- Before loading transparencies, fan the stack to prevent sheets from sticking together.

Selecting transparencies

The printer can print directly on transparencies designed for use in laser printers. Print quality and durability depend on the transparency used. Always print samples on the transparencies being considered for use before buying large quantities.

Lexmark recommends Lexmark Part Number 12A8240 letter size transparency and Lexmark Part Number 12A8241 for A4 size transparency.

The Paper Type setting should be set to Transparency to help prevent jams. (See “Paper Type” on the publications CD for detailed information about this setting.) Check with the manufacturer or vendor to determine whether the transparencies are compatible with laser printers that heat transparencies to 230°C (446°F). Use only transparencies that are able to withstand these temperatures without melting, discoloring, offsetting, or releasing hazardous emissions. **For detailed information, see the *Card Stock & Label Guide*, which is available on the Lexmark Web site at www.lexmark.com/publications.**

Envelopes

Try a sample of any envelopes in consideration for use with the printer before buying large quantities. See **Loading the multipurpose feeder** for instructions on loading envelopes.

When printing on envelopes:

- To achieve the best possible print quality, use only high-quality envelopes that are designed for use in laser printers.
- Set the Paper Source in the Paper Menu based on the source in use, set the Paper Type to Envelope, and select the correct envelope size from the operator panel, the printer driver, or from MarkVision Professional.
- For best performance, use envelopes made from 90 g/m² (24 lb bond) paper. Use up to 105 g/m² (28 lb bond) weight for the 250-sheet standard tray or 105 g/m² (28 lb bond) weight for envelopes as long as the cotton content is 25% or less. Envelopes with 100% cotton content must not exceed 90 g/m² (24 lb bond) weight.
- Use only new, undamaged envelopes.
- For best performance and to minimize jams, do not use envelopes that:
 - Have excessive curl or twist
 - Are stuck together or damaged in any way
 - Contain windows, holes, perforations, cutouts, or embossing
 - Use metal clasps, string ties, or metal 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 nicked edges or bent corners
 - Have rough, cockle, or laid finishes
- Use envelopes that can withstand temperatures of 230°C (446°F) without sealing, excessive curling, wrinkling, or releasing hazardous emissions. If any doubts exist about the envelopes considered for use, check with the envelope supplier.
- Adjust the width guide to fit the width of the envelopes.
- Load only one size of envelope at a time in the tray. Envelopes may only be loaded in the standard tray. Load them with the flap down and the flap to the left of the tray.
- A combination of high humidity (over 60%) and the high printing temperatures may seal the envelopes.

Labels

The printer can print on many labels designed for use with laser printers, except for vinyl labels. These labels are supplied in letter size, A4 size, and legal size sheets. Label adhesives, face sheet (printable stock), and topcoats must be able to withstand temperatures of 230°C (446°F) and pressure of 25 pounds per square inch (psi).

Try a sample of any labels considered for use with the printer before purchasing a large quantity.

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:

- Set the Paper Type menu item to Labels in the Paper Menu. Set the Paper Type from the printer operator panel, the printer driver, or from MarkVision Professional.
- Do not load labels together with paper or transparencies in the same source; mixing media can cause feeding problems.
- Do not use label sheets with a slick backing material.
- Do not print within 1 mm (0.04 in.) of the die cut.
- 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.
- Use labels that can withstand temperatures of 230°C (446°F) without sealing, excessive curling, wrinkling, or releasing hazardous emissions.
- 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.
- Do not use label sheets that have adhesive to the edge of the sheet. 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 3 mm (0.125 in.) strip on the leading and driver edge, and use a non-oozing adhesive.
- Remove a 3 mm (0.125 in.) strip from the leading edge to prevent labels from peeling inside the printer.
- Portrait orientation is preferred, especially when printing bar codes.
- Do not use labels that have exposed adhesive.

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.

Card stock

Card stock is single ply, and has a large array of properties, such as the moisture content, thickness, and texture, that can significantly affect print quality. See **Identifying media sources and specifications** for information on the preferred weight for the grain direction of media.

Try a sample of any card stock considered for use with the printer before purchasing a large quantity.

See **Media types and weights** for information on the preferred weight of media.

When printing on card stock:

- Set the Paper Type menu item in the Paper Menu to Card Stock from the operator panel, from the printer driver, or from MarkVision Professional. Set the Paper Weight to CardStock Weight, and select the CardStock Weight as Normal or Heavy for the value. Set this from the operator panel, the printer driver, or from MarkVision Professional. Use Heavy for card stock weighing more than or heavier than 163 g/m² (90 lb).
- Be aware that preprinting, perforation, and creasing can significantly affect the print quality and cause media handling or jamming problems.
- Avoid using card stock that may release hazardous emissions when heated.
- Do not use preprinted card stock manufactured with chemicals that may contaminate the printer. Preprinting introduces semi-liquid and volatile components into the printer.
- The use of grain long card stock is recommended.

Storing media

Use the following guidelines for proper media storage. These help avoid media feeding problems and uneven print quality:

- For best results, store media in an environment where the temperature is approximately 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 a relative humidity of 40 to 60%.
- Store cartons of media on a pallet or shelf, rather than directly on the floor.
- When storing individual packages of media out of the original carton, make sure they rest on a flat surface so the edges do not buckle or curl.
- Do not place anything on top of the media packages.

Identifying media sources and specifications

The following tables provide information on standard and optional sources, including the media sizes available from the Paper Size menu, and supported weights.

Note: If a media size not listed needs to be used, select the next larger size.

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

Media sizes and support

Legend ✓ — supported ✗ — unsupported						
Media size	Dimensions	550-sheet trays	Multipurpose feeder	Optional high capacity feeder	Optional duplex unit	Optional finisher*****
A3	297 x 420 mm (11.7 x 16.5 in.)	✓	✓	✗	✓	✓
A4	210 x 297 mm (8.27 x 11.7 in.)	✓	✓	✓	✓	✓
A5	148 x 210 mm (5.83 x 8.27 in.)	✗	✓	✗	✓	✓
JIS B4	257 x 364 mm (10.1 x 14.3 in.)	✓	✓	✗	✓	✓
JIS B5*	182 x 257 mm (7.17 x 10.1 in.)	✗	✓	✗	✓	✓
Letter	215.9 x 279.4 mm (8.5 x 11 in.)	✓	✓	✓	✓	✓
<p>* This size does not appear in the Paper Size menu until Auto Size Sensing is turned off. See</p> <p>** This size setting formats the page or envelope for 297.0 x 355.6 mm (11.7 x 14 in.) unless the size is specified by the software application.</p> <p>*** Measurements apply to simplex (single-sided) printing only. For duplex (two-sided) printing, the minimum size is 139.7 x 210 mm (5.50 x 8.27 in.).</p> <p>**** This size setting formats the page or envelope for 216.0 x 355.6 mm (8.5 x 14 in.) unless the size is specified by the software application.</p> <p>***** Finisher bin 1. Only A4 and Letter sizes may be fed to finisher bin 2.</p>						

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Media specifications

Media sizes and support (continued)

Legend ✓ — supported ✗ — unsupported						
Media size	Dimensions	550-sheet trays	Multipurpose feeder	Optional high capacity feeder	Optional duplex unit	Optional finisher*****
Legal	215.9 x 355.6 mm (8.5 x 14 in.)	✓	✓	✗	✓	✓
Executive	184.2 x 266.7 mm (7.25 x 10.5 in.)	✗	✓	✗	✓	✓
Folio	216 x 330 mm (8.5 x 13 in.)	✗	✓	✗	✓	✓
Statement	139.7 x 215.9 mm (5.5 x 8.5 in.)	✗	✓	✗	✗	✗
Tabloid	279 x 432 mm (11 x 17 in.)	✓	✓	✗	✓	✓
Universal**	69.85 x 127 mm to 297 x 1219.2 mm (2.75 x 3.5 in. to 11.69 x 48 in.)***	✗	✓	✓	✓	✓
Banner	297 x 914 mm (11.69 to 17 in.)	✗	✓	✗	✗	✓
Banner	297 x 1219.2 mm (11.69 to 48 in.)	✗	✓	✗	✗	✓
7 3/4 Envelope (Monarch)	98.4 x 190.5 mm (3.875 x 7.5 in.)	✗	✓	✗	✗	✗
9 Envelope	98.4 x 225.4 mm (3.875 x 8.9 in.)	✗	✓	✗	✗	✗
Com 10 Envelope	104.8 x 241.3 mm (4.12 x 9.5 in.)	✗	✓	✗	✗	✗
<p>* This size does not appear in the Paper Size menu until Auto Size Sensing is turned off. See</p> <p>** This size setting formats the page or envelope for 297.0 x 355.6 mm (11.7 x 14 in.) unless the size is specified by the software application.</p> <p>*** Measurements apply to simplex (single-sided) printing only. For duplex (two-sided) printing, the minimum size is 139.7 x 210 mm (5.50 x 8.27 in.).</p> <p>**** This size setting formats the page or envelope for 216.0 x 355.6 mm (8.5 x 14 in.) unless the size is specified by the software application.</p> <p>***** Finisher bin 1. Only A4 and Letter sizes may be fed to finisher bin 2.</p>						

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Media specifications

Media sizes and support (continued)

Legend ✓ — supported ✗ — unsupported						
Media size Dimensions		550- sheet trays	Multipurpose feeder	Optional high capacity feeder	Optional duplex unit	Optional finisher ^{*****}
DL Envelope	110 x 220 mm (4.33 x 8.66 in.)	✗	✓	✗	✗	✗
C5 Envelope	162 x 229 mm (6.38 x 9.01 in.)	✗	✓	✗	✗	✗
B5 Envelope	176 x 250 mm (6.93 x 9.84 in.)	✗	✓	✗	✗	✗
Other Envelope ^{****}	104.8 mm x 210 mm to 215.9 mm x 355.6 mm 4.125 in. x 8.27 in. to 8.5 in. x 14 in.)	✗	✓	✗	✗	✗
<p>* This size does not appear in the Paper Size menu until Auto Size Sensing is turned off. See</p> <p>** This size setting formats the page or envelope for 297.0 x 355.6 mm (11.7 x 14 in.) unless the size is specified by the software application.</p> <p>*** Measurements apply to simplex (single-sided) printing only. For duplex (two-sided) printing, the minimum size is 139.7 x 210 mm (5.50 x 8.27 in.).</p> <p>**** This size setting formats the page or envelope for 216.0 x 355.6 mm (8.5 x 14 in.) unless the size is specified by the software application.</p> <p>***** Finisher bin 1. Only A4 and Letter sizes may be fed to finisher bin 2.</p>						

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Media specifications

Media support for sizes and optional duplex feature

Legend ✓ — supported ✗ — unsupported	550-sheet trays	Multipurpose feeder	Optional high capacity feeder	Optional duplex	Optional finisher
	✓	✓	✓	✓	✓
Paper	✓	✓	✓	✓	✓
Card stock	✓	✓	✗	✗	✓
Transparencies	✓	✓	✗	✗	✓
Banner	✗	✓	✗	✗	✗
Paper labels	✓	✓	✗	✗	✓
Envelopes	✗	✓	✗	✗	✓
Glossy paper	✓	✓	✗	✓	✓

Media types and weights

Legend ✓ — supported ✗ — unsupported	Media	Type	Media weight	
			550-sheet trays	Multipurpose feeder
	Paper	Xerographic or business paper (Used for simplex printing) ¹	60 to 74.9 g/m ² grain long (16 to 19.9 lb bond) ²	60 to 74.9 g/m ² grain long (16 to 19.9 lb bond) ²
		Xerographic or business paper (Used for duplex printing)	75 to 176 g/m ² grain long (20 to 47 lb bond)	75 to 176 g/m ² grain long (20 to 47 lb bond)

¹ Paper weighing less than 75 g/m² (20 lb bond) is limited to simplex printing only at less than 60% relative humidity.

² This paper weight in any source is not supported for duplex (two-sided) printing.

³ For 60 to 176 g/m² (16 to 47 lb bond) paper, grain long fibers are recommended. For papers heavier than 176 g/m² (47 lb bond), grain short is recommended.

⁴ Pressure sensitive area must enter the printer first.

⁵ 100% cotton content maximum weight is 90.2g/m² (24 lb) bond.

⁶ 105 g/m² (28 lb bond) envelopes are limited to 25% cotton content.

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Media specifications

Media types and weights (continued)

Legend ✓ — supported ✗ — unsupported	Media	Type	Media weight	
			550-sheet trays	Multipurpose feeder
	Glossy papers	Book	88 to 176 g/m ² grain long (60 to 120 lb book)	88 to 176 g/m ² grain long (60 to 120 lb book)
		Cover	162 to 176 g/m ² grain long (60 to 65 lb cover)	162 to 176 g/m ² grain long (60 to 65 lb cover)
	Card stock— maximum (grain long) ³	Index Bristol	163 g/m ² (90 lb)	163 g/m ² (90 lb)
		Tag	163 g/m ² (100 lb)	163 g/m ² (100 lb)
		Cover	176 g/m ² (65 lb)	176 g/m ² (65 lb)
	Card stock— maximum (grain short) ³	Index Bristol	199 g/m ² (110 lb)	199 g/m ² (110 lb)
		Tag	203 g/m ² (125 lb)	203 g/m ² (125 lb)
		Cover	216 g/m ² (80 lb)	216 g/m ² (80 lb)
	Transparencies	Laser printer	161 to 192 g/m ² (43 to 51 lb bond)	161 to 192 g/m ² (43 to 51 lb bond)
	Labels—maximum ⁴	Paper	180 g/m ² (48 lb bond)	199 g/m ² (53 lb bond)
	Envelopes	Sulfite, wood-free or up to 100% cotton bonds	Inapplicable	60 to 105 g/m ² (16 to 28 lb bond) ^{5, 6}

¹ Paper weighing less than 75 g/m² (20 lb bond) is limited to simplex printing only at less than 60% relative humidity.

² This paper weight in any source is not supported for duplex (two-sided) printing.

³ For 60 to 176 g/m² (16 to 47 lb bond) paper, grain long fibers are recommended. For papers heavier than 176 g/m² (47 lb bond), grain short is recommended.

⁴ Pressure sensitive area must enter the printer first.

⁵ 100% cotton content maximum weight is 90.2g/m² (24 lb) bond.

⁶ 105 g/m² (28 lb bond) envelopes are limited to 25% cotton content.

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Media capacities

Legend ✓ — supported ✗ — unsupported	550-sheet tray	Multipurpose feeder	Optional high capacity feeder	Optional finisher bin 1	Optional finisher bin 2
Paper	550 sheets*	100 sheets*	3000	100	1000
Card stock	40 sheets**	11	✗	100	✗
Paper labels	40	11	✗	30	✗
Vinyl labels	✗	11	✗	30	✗
Transparencies	20	7	✗	50	✗
Envelopes	✗	10 of Com 10	✗	10	✗
* Based on 20 lb paper.					
** 30 sheets of 90 lb card stock or 25 sheets of 110 lb card stock.					

Tray linking

Tray linking enables the automatic linking feature for trays when the same size and type of media is loaded in multiple sources. The printer automatically links the trays; when one tray is empty, media feeds from the next linked tray.

For example, if the same size and type of media is loaded in tray 1 and tray 2, the printer selects media from tray 1 until it becomes empty, and then the printer automatically feeds media from the next linked tray — tray 2.

By linking both trays, a single source with a capacity of 750 sheets is created.

If the same size media in each tray is loaded, make sure the media is all the same type in order to link the trays.

Once the selected trays are loaded with the same size and type of media, select the same Paper Type setting in the Paper Menu for these sources.

To disable tray linking, set the Paper Type to a unique value in each one of the trays. If all the trays do not have the same type of media when they are linked, a job could mistakenly print on the wrong paper type.

Using the duplex function (two-sided printing)

Duplex printing (or *two-sided printing*) allows printing on both sides of a sheet of paper. Printing on both sides of paper reduces printing costs.

- | For sizes that are acceptable for duplex printing, see **Media sizes and support**.

Select **Duplex** from the printer driver to print individual duplex jobs.

Duplex printing on letterhead

When duplex (two-sided) printing on letterhead from the trays, load it with the logo face-up and entering the printer first.

Using Duplex Bind

When Duplex Bind printing is selected in the printer driver or Duplex Bind in the Finishing Menu, either long edge or short edge binding must be selected, which are the values for this setting. The purpose of Duplex Bind is to define the way duplexed pages are bound, and how the printing on the back of the sheet (even-numbered pages) is oriented in relation to the printing on the front (odd-numbered pages).

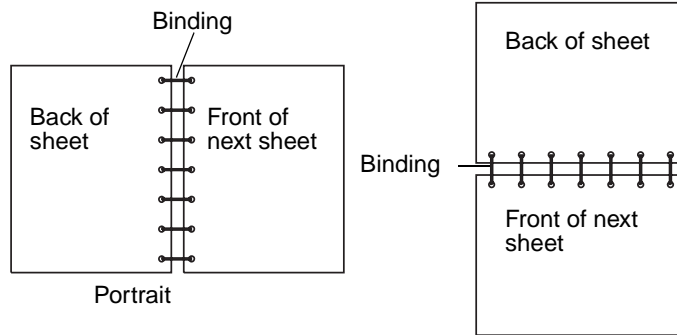
Media specifications

The two values for Duplex Bind are:

Long Edge*

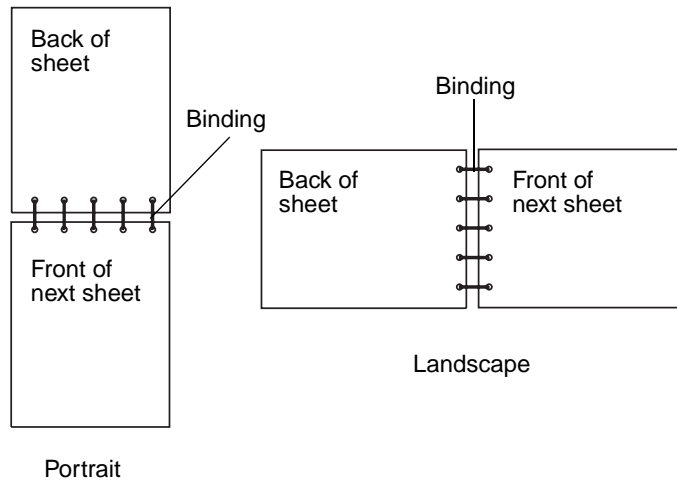
The asterisk (*) indicates this is the factory default setting.

Assumes binding along the long end of the page (left edge for portrait orientation and top edge for landscape orientation). The following illustration shows long-edge binding for portrait and landscape pages:



Short Edge

Assumes binding along the short edge of the page (top edge for portrait orientation and left edge for landscape orientation). The following illustration shows short-edge binding for portrait and landscape pages:



Avoiding jams

Use appropriate print media (paper, transparencies, labels, and card stock) to help ensure trouble-free printing. See [Identifying media sources and specifications](#) for more information.

Note: Try a limited sample of any print media you are considering using with the printer before purchasing large quantities.

By selecting the appropriate print media and loading it properly, you can avoid most jams. See [Loading standard trays and optional trays](#), [Loading the multipurpose feeder](#), or [Loading the high capacity feeder](#) for detailed tray loading instructions.

Media specifications

The following hints can help you avoid jams:

- Use only recommended print media.
- Do not overload the print media sources. Make sure the stack height does not exceed the maximum height indicated by the stack line on the labels in the sources.
- Do not load wrinkled, creased, damp, or curled print media.
- Flex, fan, and straighten print media before you load it. If jams do occur with print media, try feeding one sheet at a time through the multipurpose feeder.
- Do not use print media that you have cut or trimmed yourself.
- Do not mix print media sizes, weights, or types in the same print media source.
- Make sure the recommended print side is loaded in the source according to your simplex or duplex needs.
- Keep print media stored in an acceptable environment. See [Storing media](#).
- Do not remove trays during a print job.
- Push all trays in firmly after loading them.

Make sure the guides in the trays are properly positioned for the size of print media you have loaded. Make sure the guides are not placed too tightly against the stack of print media.

7

Maintaining the printer

Periodically, you need to complete certain tasks to maintain optimum print quality. These tasks are covered in this chapter.

If several people are using the printer, you may want to designate a key operator to do the setup and maintenance of your printer. Refer printing problems and maintenance tasks to this key operator.

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 bought your printer.

Contact the place where you bought your printer for information about authorized supplies dealers in your area.

Storing supplies

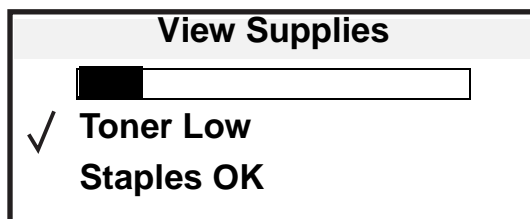
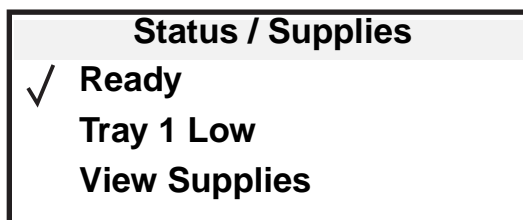
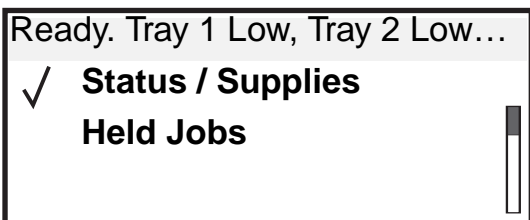
Choose a cool, clean storage area for your printer supplies. Store supplies right side up in their original packaging until you are ready to use them.

Do not expose supplies to:

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

Determining the status of supplies

The printer operator panel alerts you once a supply item or maintenance is required. You can also view the status of supplies in your printer on the operator panel unless the printer is printing or in a busy state. The header or gray area at the top of the display will indicate the printer is **Ready** and lets you know if any trays are low. Selecting **status / supplies** on the display will open the **status / supplies** screen where you can view the status of the various trays and open the supplies screen to view the current status of your toner cartridge.



Conserving supplies

Several settings in your application software or on the display let you conserve toner and paper. For more information on changing these settings, refer to the *Menus and Messages Guide*.

Supply	Menu selection item	What the setting does
Toner	Toner Darkness in the Defaults → Quality Menu	Lets you adjust the level of toner released on a sheet of print media. The values range from 1 (lightest setting) to 5 (darkest setting).
Color toner and color photodevel opers	Black Only Print Mode in the Defaults → Quality Menu	Prints black only to conserve your color print supplies.
Color toner	Color Saver in the Defaults → Quality Menu	Prints colors less vividly to conserve your color toner.

Maintaining the printer

Supply	Menu selection item	What the setting does
Print media	Multipage Print in the Defaults → Finishing Menu	Causes the printer to print the two or more page images on one side of a sheet. Values for Multipage Print are 2 Up, 3 Up, 4 Up, 6 Up, 9 Up, 12 Up, and 16 Up. Combined with the duplex setting, Multipage Print lets you print up to 32 pages on one sheet of paper (16 images on the front and 16 on the back).
	Duplex in the Defaults → Finishing Menu	Duplex printing is available when you attach the optional duplex unit. It lets you print on both sides of a sheet of paper.
	Use your software application or printer driver to send a Verify Print job.	Lets you examine the first copy of a multiple-copy job to be sure it is satisfactory before you print the other copies. If the job is unsatisfactory, you can cancel the job. See Printing and deleting held jobs for more information about a Verify Print job.

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 bought your printer.

To order supplies, contact the place where you bought your printer for more information.

Ordering a toner cartridge

When the [color] Low message appears, you should order a new print cartridge. You can print a few hundred pages after the [color] Low message comes on. You need to have a new cartridge available when the current one no longer prints satisfactorily.

Note: Be sure to shake your new print cartridge before installing it into the printer, to maximize its yield.

The recommended print cartridges specifically designed for your printer are:

Part number	Description	Average yield ¹
C9202CH	Cyan toner cartridge	14,000 pages
C9202MH	Magenta toner cartridge	14,000 pages
C9202YH	Yellow toner cartridge	14,000 pages
C9202KH	Black toner cartridge	15,000 pages

¹ At approximately 5% coverage.

For information about the print cartridges available for your printer, contact the place where you bought your printer.

Maintaining the printer

When the message **Replace Black and Oil Coating Roll** appears, the black cartridge is empty. Replace both the black toner cartridge and the oil coating roll. **Order Lexmark part number C92035X to replace the oil coating roll.** To order an oil coating roll, contact the place where you bought your printer for more information.

Maintenance kits

Maintenance appears on the display after 300,000 pages to let you know it is time to replace printer maintenance items. Order maintenance kits when **Maintenance** first appears on the display, or when **Fuser Life Warning** or **Transfer Belt Life Warning** appear. Replace the items when **Replace Fuser** or **Replace Transfer Belt** appear. While each can be replaced separately, both the transfer belt and the fuser should be replaced when **Maintenance** appears on the display. Each kit contains all the items necessary to replace either the transfer belt or the fuser. **See the following table for the maintenance kit part number for your specific printer.**

Maintenance kits	Part numbers
Transfer belt	56P2652
Fuser	56P2650 (110 V) 56P2651 (220 V)

For information about maintenance kits available for your printer, contact the place where you bought your printer.

Ordering a black photodeveloper or color photodevelopers

We recommend ordering new photodevelopers when **Black Photo Dev Life Warning** or **Color Photo Dev Life Warning** appears on the display.

Note: When replacing color photodevelopers, it is important to replace all four color photodevelopers at once.

Order Lexmark part number C92030X for black or C92034X for color photodevelopers. To order photodevelopers, contact the place where you bought your printer for more information.

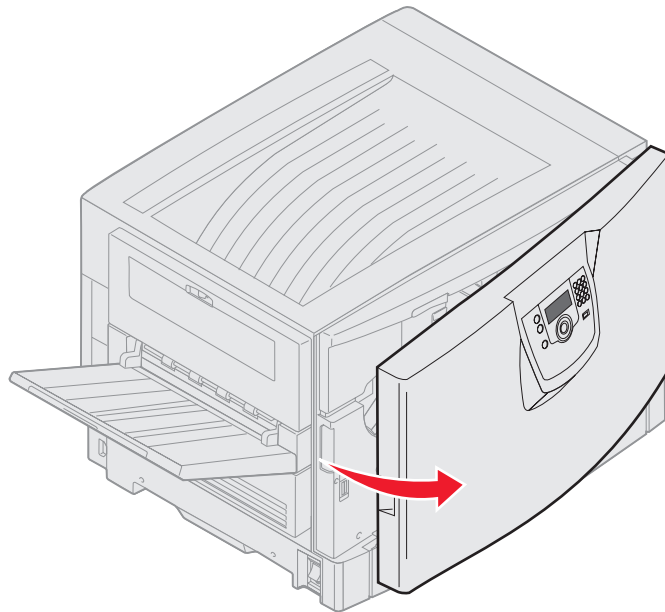
Finisher

For information on finisher maintenance and ordering finisher supplies, refer to the *Finisher Setup and Users Guide* that came with your finisher.

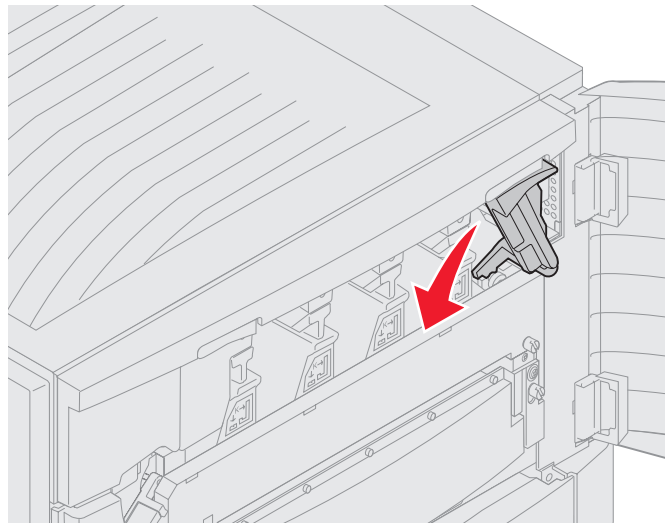
Cleaning the LEDs

If you are experiencing print quality problems such as voids, light streaks, or light print, you may need to clean the LEDs inside the top cover.

- 1 Open the top cover.
 - a Open the front door.

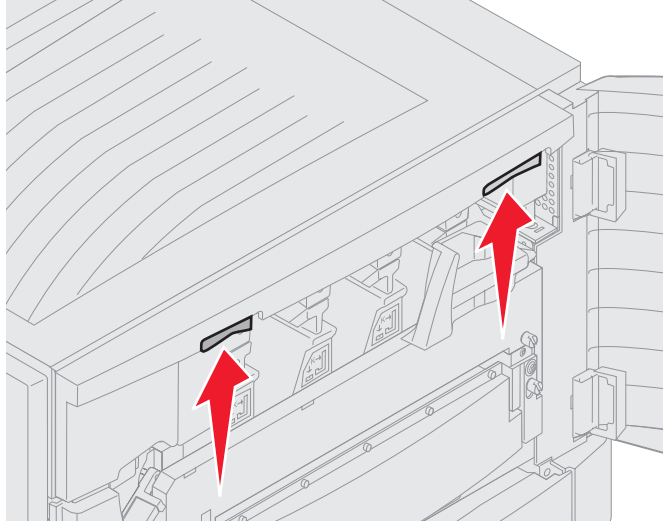


- b Rotate the top cover locking lever to the left.

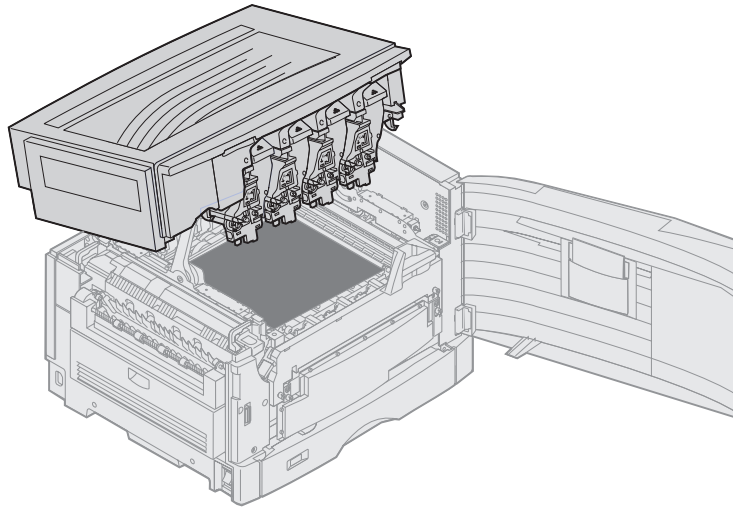


Maintaining the printer

- c Push up on the right top cover locking button and at the lift points shown below.

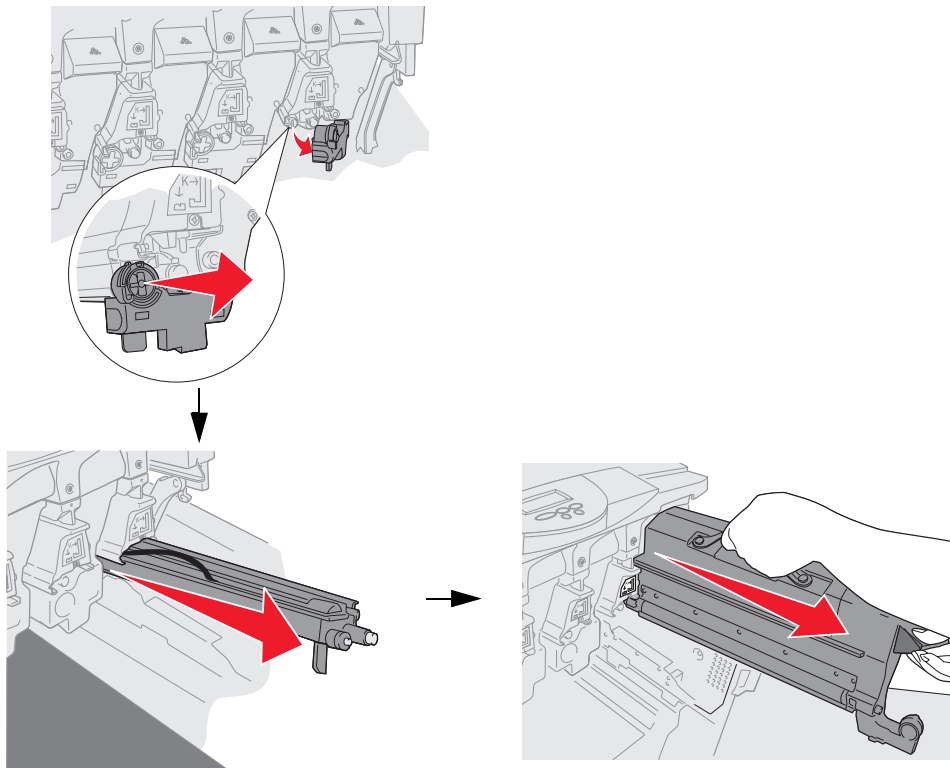


- d Lift the top cover until it stops.



Maintaining the printer

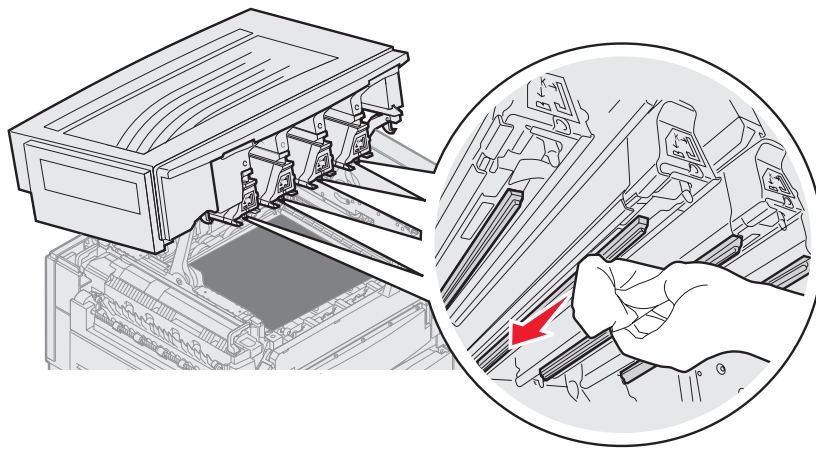
- 2 Remove all photodevelopers and toner cartridges.



Warning: Exposing the photodeveloper to light for prolonged periods of time can damage it. Do not expose the photodeveloper to light for more than ten minutes. Fingerprints can affect the performance of the photodeveloper. Avoid touching the photodeveloper anywhere except the handles.

Warning: The toner inside the toner cartridges can soil clothing. Do not clean clothing soiled with toner in hot water; this permanently adheres the toner to the clothing. Use cold water to remove toner that has soiled clothing.

- 3 Wipe the glass lenses of all four LED heads with a clean, dry cloth or tissue paper.



Maintaining the printer

- 4 Reinstall all toner cartridges.

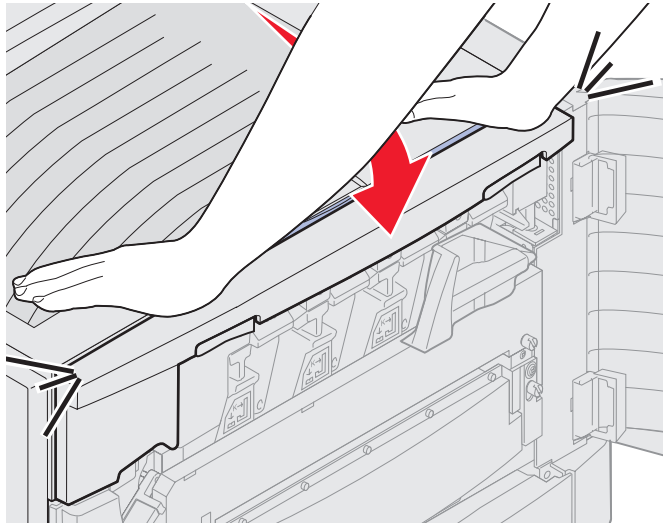
CAUTION: Before closing the top cover make sure everyone is away from the printer and the area under the cover is free of hands, clothing, and other items.

- 5 Close the top cover and the front door.

Closing the top cover

CAUTION: Before closing the top cover make sure everyone is away from the printer and the area under the cover is free of hands, clothing, and other items.

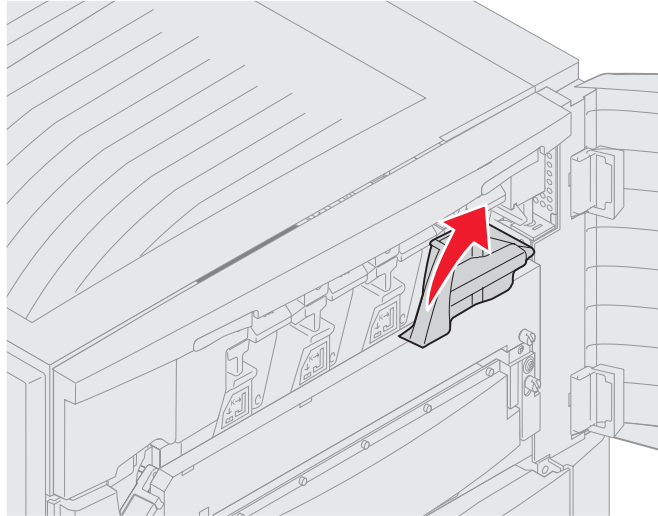
- 1 Place both hands on the top cover as shown.
- 2 Press down firmly until the top cover *clicks* into place.



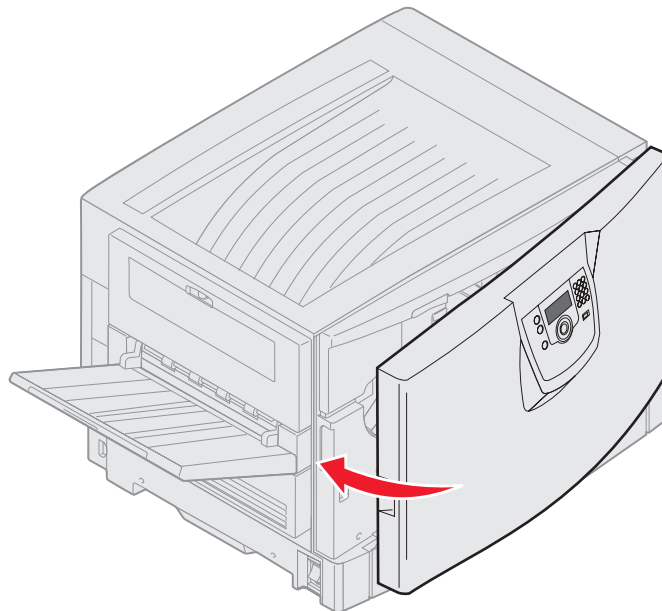
Maintaining the printer

- 3 Rotate the top cover locking lever to the right.

Note: If you cannot rotate the locking lever, the cover is not fully closed. Open the top cover and press down firmly until the top cover *clicks* into place.



- 4 Close the front door.



CAUTION: An optional drawer weighs 18.5 kg (40.8 lb.). Have someone help when lifting.

8

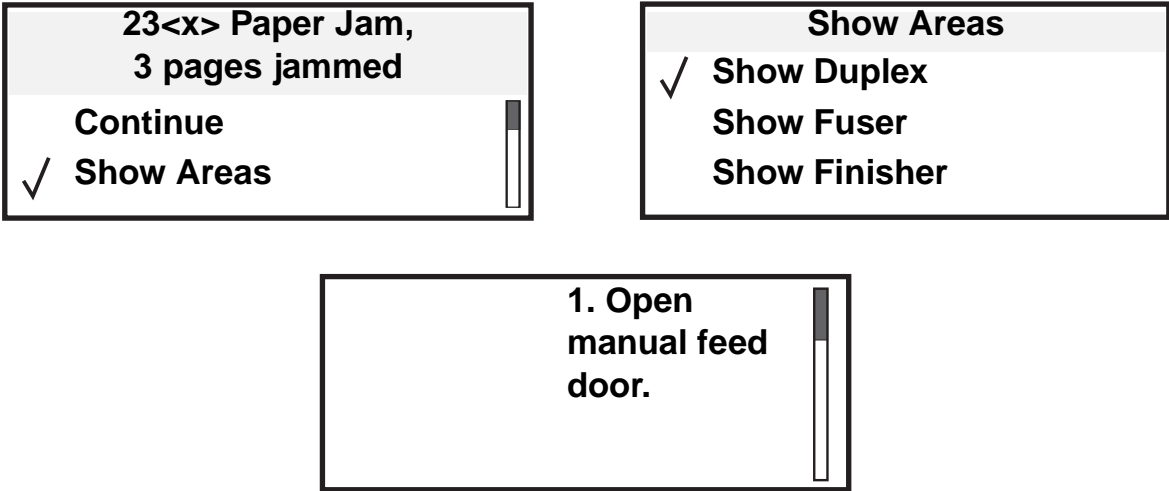
Clearing jams

By carefully selecting print media and loading it properly, you should be able to avoid most paper jams. For more information on avoiding paper jams, see [Avoiding jams](#). If jams do occur, follow the steps outlined in this section.

To resolve the paper jam messages, you must clear the entire paper path and then press to clear the message and resume printing. The printer prints a new copy of the page that jammed if Jam Recovery is set to On or Auto; however, the Auto setting does not guarantee the page will print.

Identifying jams

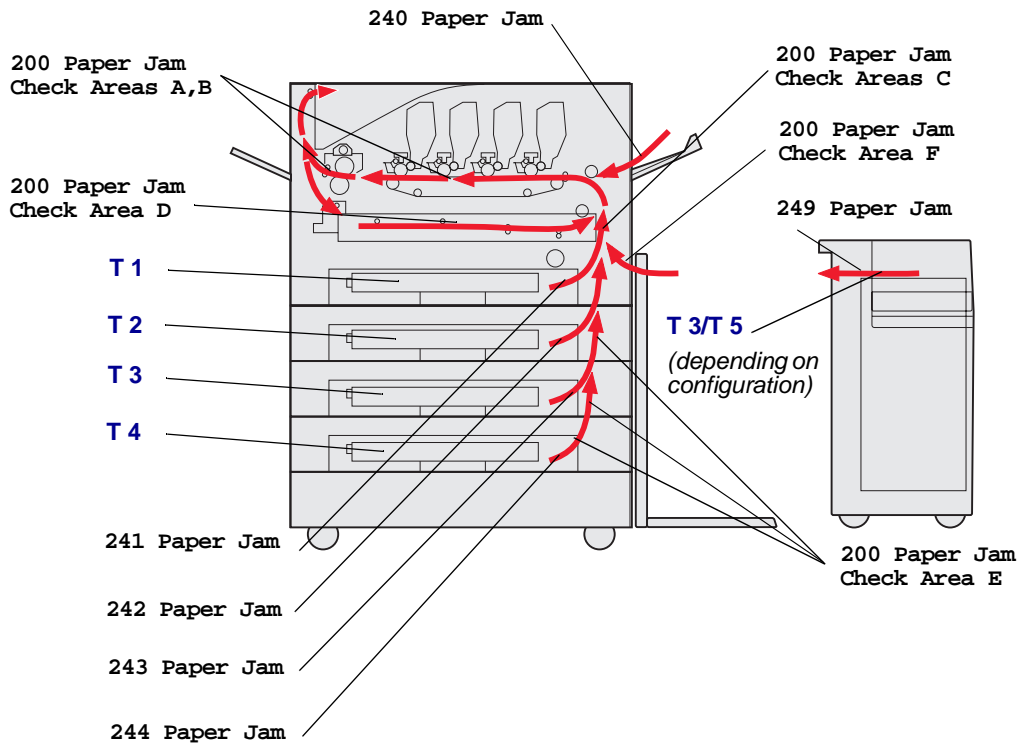
When the printer jams, the appropriate jam message will be displayed on the printer operator panel. If you select **Show Areas** on the operator panel, you can view one or more images to help you clear the jam.



See the diagram on [page 115](#) for an overview of the paper path and areas where jams may occur. The path varies depending on the paper source and output bins.

Identifying jam areas

The following illustration shows the path that print media travels through the printer. The path varies depending on the input sources you are using.



Understanding jam messages

The following table lists the jam messages that can occur and the action necessary to clear the message. The jam message indicates the area where the jam occurred. However, it is best to clear the entire paper path to ensure you have cleared all possible jams.

200 Paper Jam <x> Pages Jammed (Check Areas A-F, T1-5, MPF)

This message identifies the areas (A–F, MPF, or T1–T5) you need to check to remove the paper or to clear the message. The display alternates between **200 Paper Jam <x> Pages Jammed** and **Check Areas A-F, T1-5, MPF**:

Jam message	Jam message
Check Areas A,B	Check Area F
Check Area C	Check MPF
Check Area D	Check T1–T4
Check Area E	Check T5

Note: If there is a paper jam when you turn the printer on, the second line of the **200 Paper Jam** message is blank. To resolve the message, you must clear all paper from the paper path.

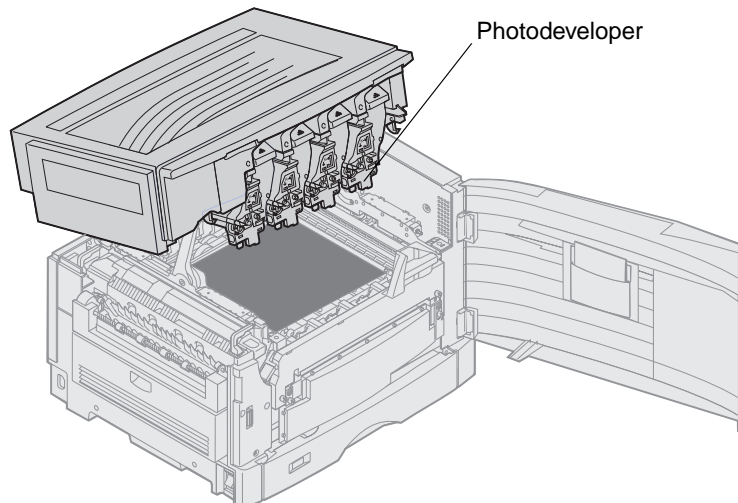
Clearing jams

Check Areas A,B

This message indicates a paper jam in the transfer belt, fuser, or output roller area. To clear areas A–B:

- 1 Complete the steps to open the top cover.

Note: If you need instructions on how to open the top cover, see [Open the top cover..](#)

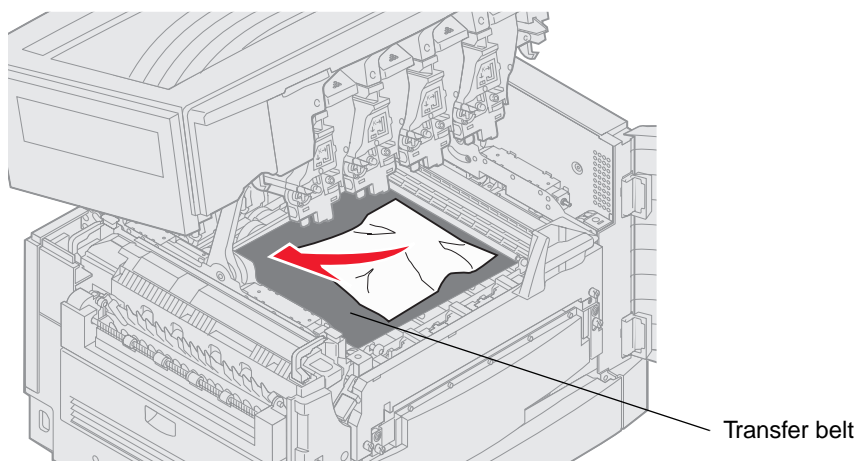


Warning: Never touch the photodeveloper drum on the underside of the toner cartridge.

Note: The paper may be covered with unfused toner, which can stain garments.

- 2 Remove any paper on the transfer belt.


If the paper source was the multipurpose feeder, check the area between the multipurpose feeder and the transfer belt.



Warning: Do not use any pointed objects to remove the paper. This could cause permanent damage to the transfer belt.

Clearing jams

- 3 Check the fuser area and top cover for additional jams.

If there is no jam in the fuser area or top cover, close the top cover and front door, and then press . If a jam is present, continue with **step 4**.

Note: If you need instructions on how to close the top cover, see **Closing the top cover**.

- 4 Grasp the fuser handles, then press the fuser release buttons with your thumbs.

CAUTION: The fuser may be hot. Let it cool before touching it.

- 5 Lift the fuser up and out of the printer. Set it on a clean, flat surface.

- 6 Open the standard tray and remove the green fuser screwdriver.

- 7 Loosen the 2 red screws.

- 8 Grasp the green tab and open the fuser access door.

- 9 Remove the jam.

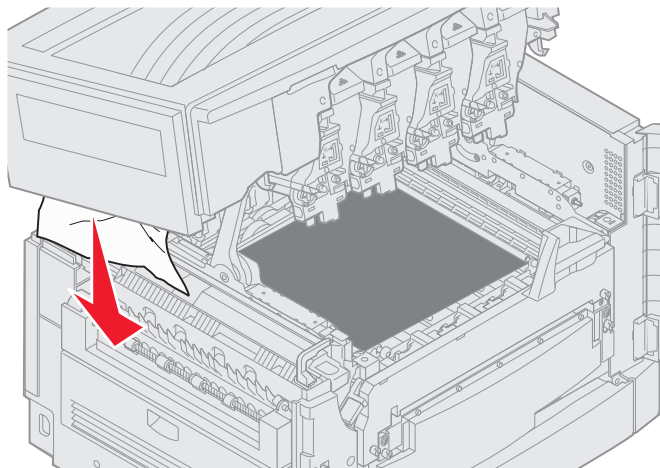
- 10 Replace the fuser.

- 11 Replace the fuser screwdriver and close the tray.

- 12 Check the top cover for additional jams.

If there is no jam in the top cover, close the top cover and front door. If a jam is present, continue with **step 13**.

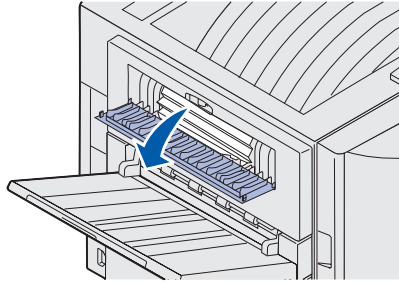
- 13 Remove the jam from the top cover.



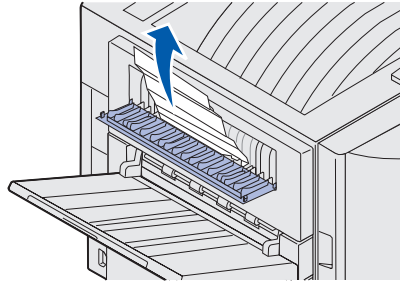
- 14 Close the top cover and the front door.

Clearing jams

- 15 Open the jam access door on the left side of the printer.

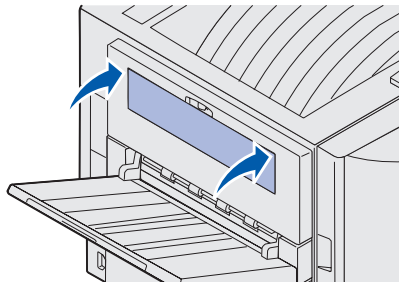


- 16 Remove any paper inside the printer.



- 17 Close the jam access door.

To prevent additional paper jams, make sure both sides of the door are closed.



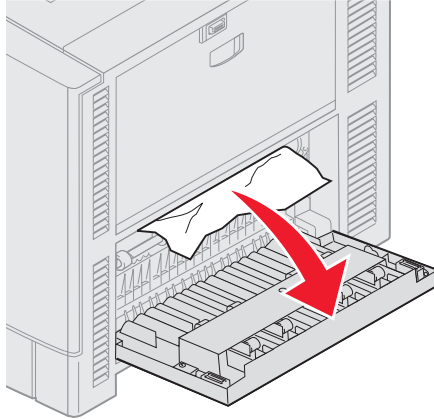
- 18 Press .

Clearing jams

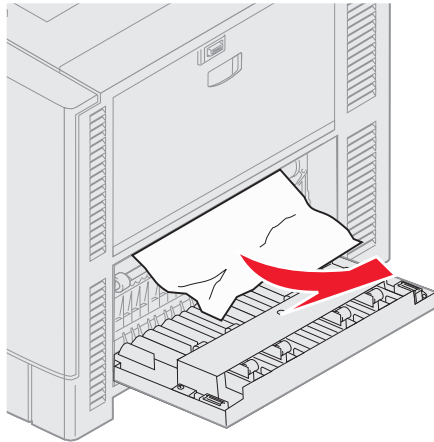
Check Area C

Jams that cause a **Check Area C** message require opening the duplex jam access door. If you are printing on small paper, the following steps may not clear the jam. See [Removing small size paper from the duplex unit](#).

- 1 Open the duplex jam access door on the right side of the printer.



- 2 Remove the jam.



- 3 Press .

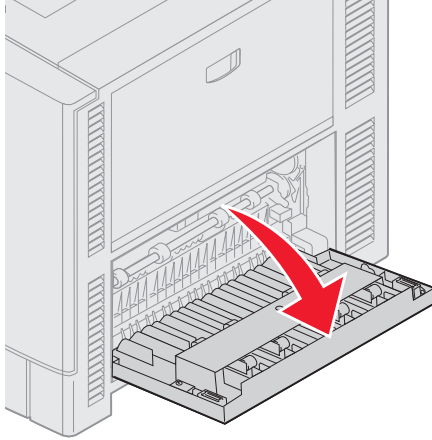
If the paper jam message continues, check and clear all paper from the paper path.

Clearing jams

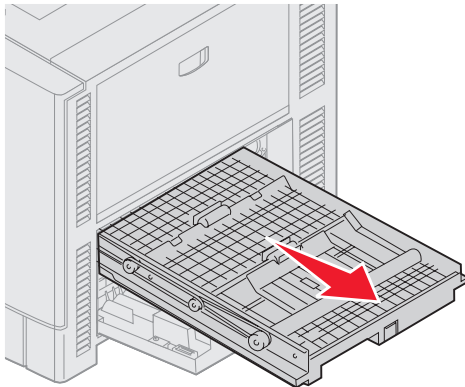
Check Area D

This message indicates a paper jam in the duplex unit area. To clear area D:

- 1 Open the duplex jam access door on the right side of the printer.



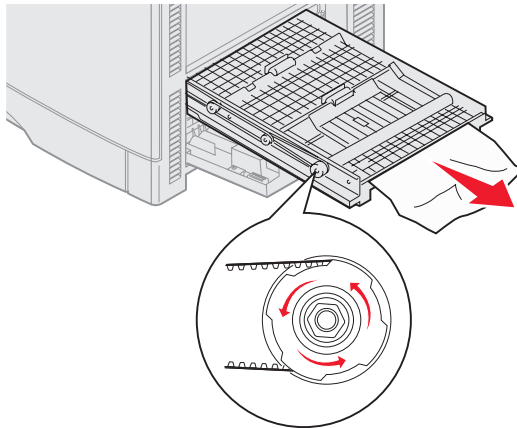
- 2 Gently pull out the duplex unit.



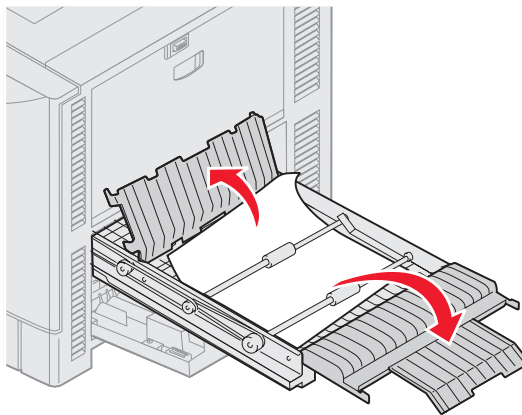
Clearing jams

- 3 Turn the paper forwarding dial counterclockwise.

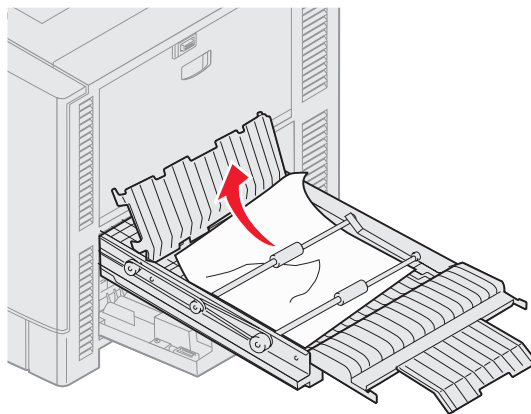
If the paper advances out of the duplex unit, remove the jam and go to step 7. If the paper does not advance, go to step 4.



- 4 Open the duplex unit covers.

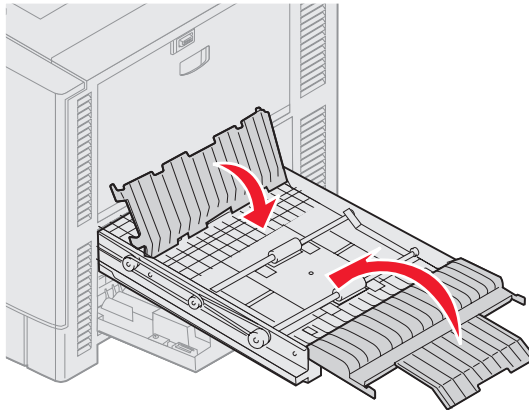


- 5 Remove the jam.

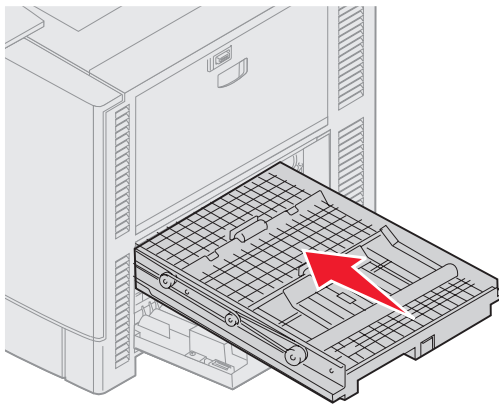


Clearing jams

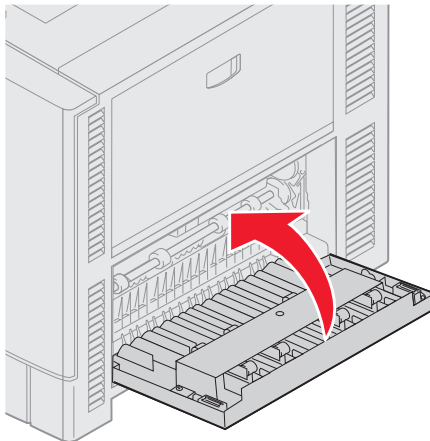
- 6 Close the duplex unit covers.



- 7 Push the duplex unit until it stops.



- 8 Close the access door.



- 9 Press .

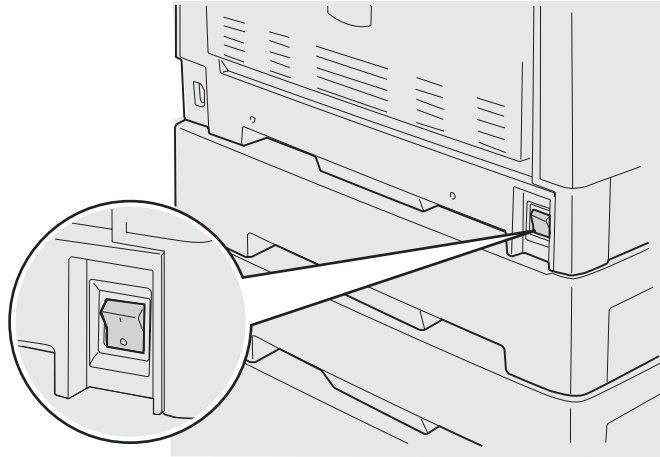
If the paper jam message continues, check and clear all paper from the paper path.

Clearing jams

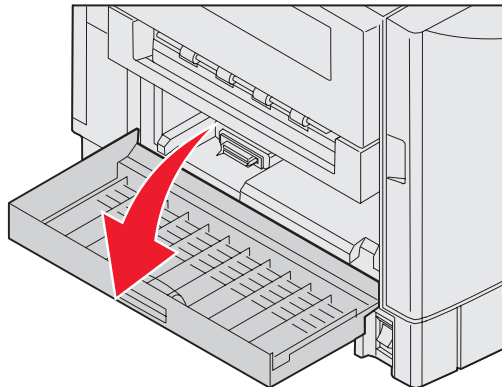
Removing small size paper from the duplex unit

When printing on both sides of A5 or other small size paper, you may need to partially remove the duplex unit to clear the jam.

- 1 Turn off the printer.

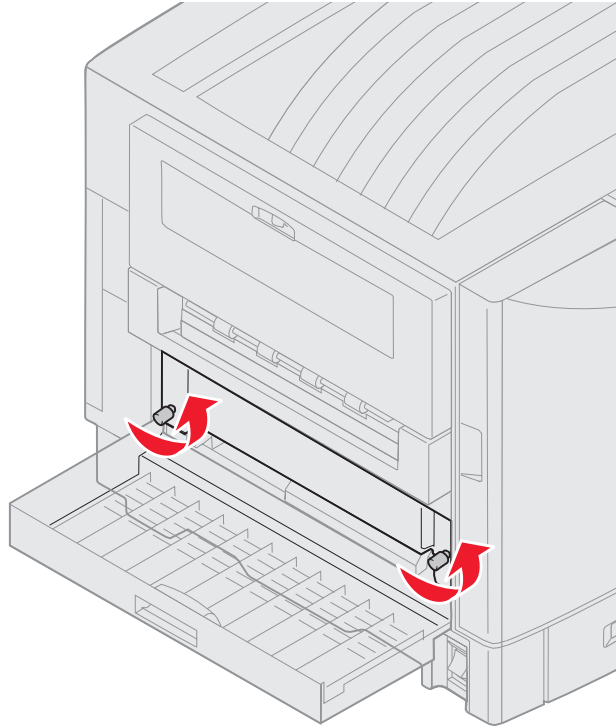


- 2 Open the duplex unit door.

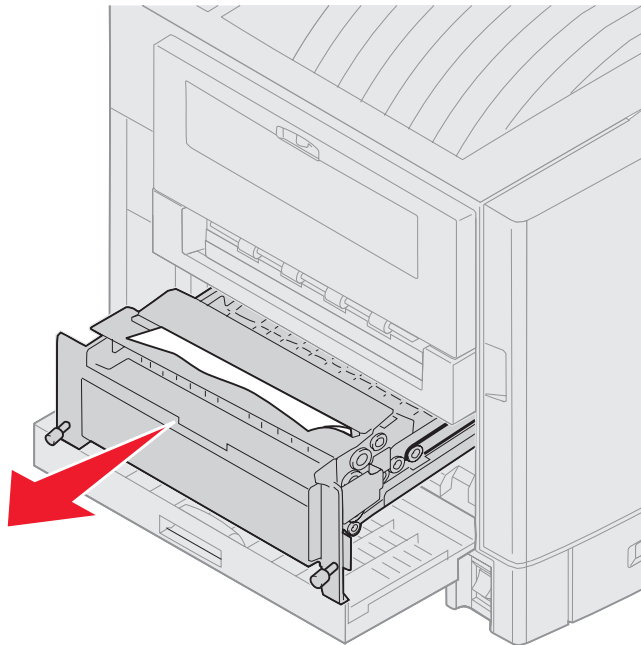


Clearing jams

- 3 Loosen the two screws shown.

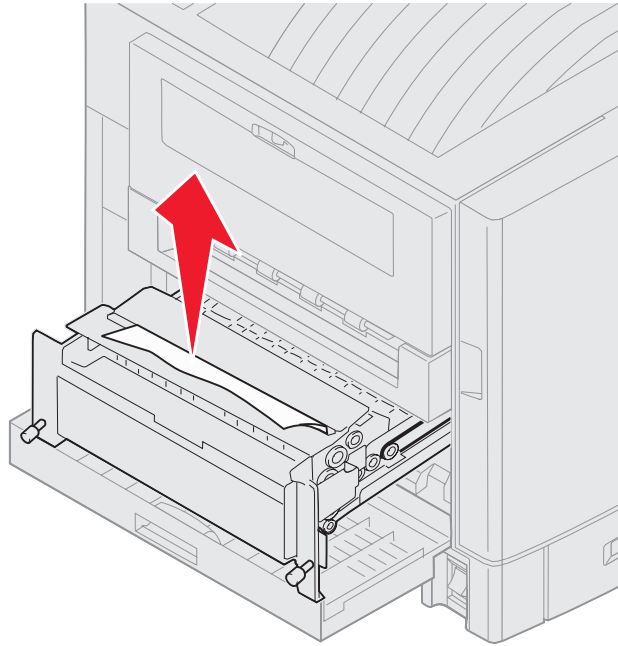


- 4 Pull out the duplex unit far enough to see the duplex unit inlet.

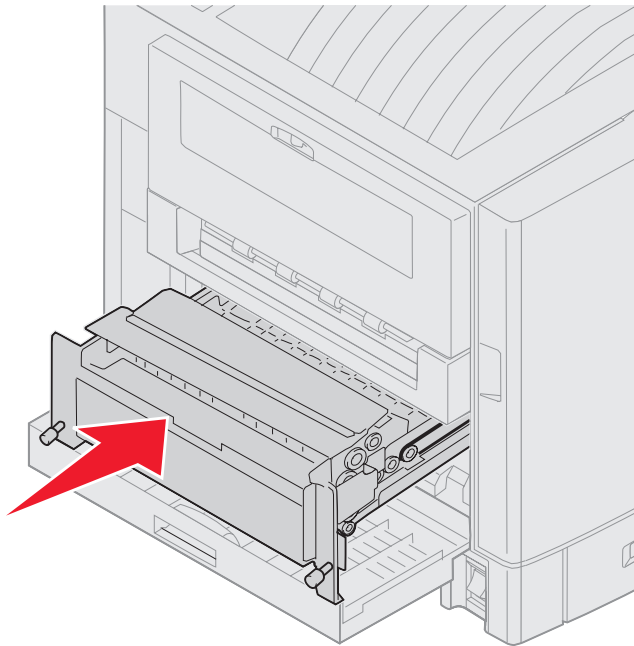


Clearing jams

- 5 Remove jam from the duplex unit inlet.

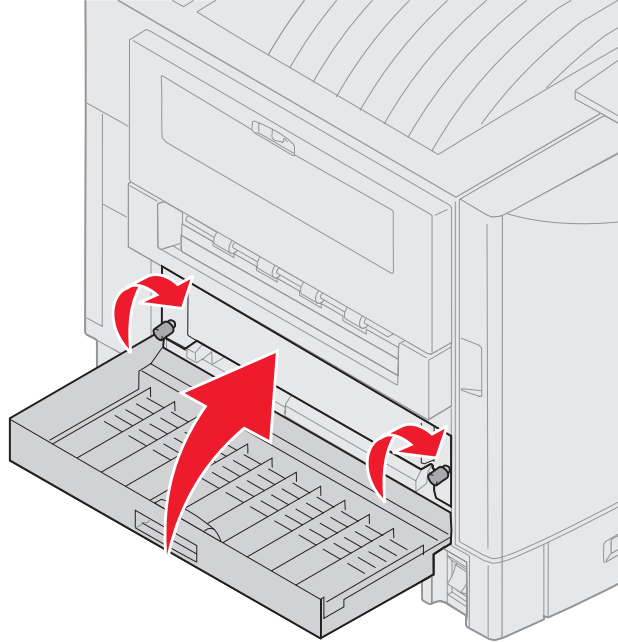


- 6 Slide the duplex unit in.



Clearing jams

- 7 Align the thumbscrews on the duplex unit with the holes in the printer.
- 8 Tighten the thumbscrews to secure the duplex unit.
- 9 Close the duplex unit door.



- 10 Press .

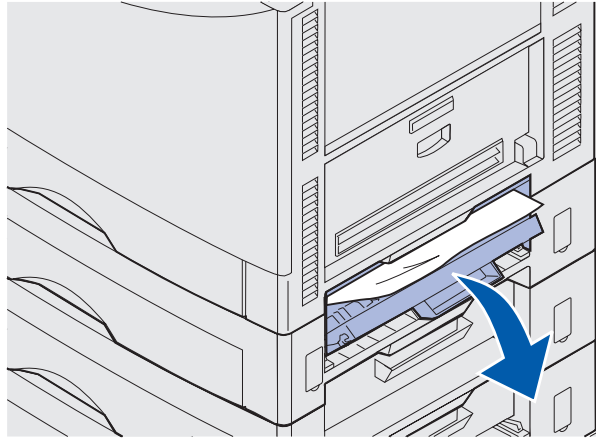
Clearing jams

Check Area E

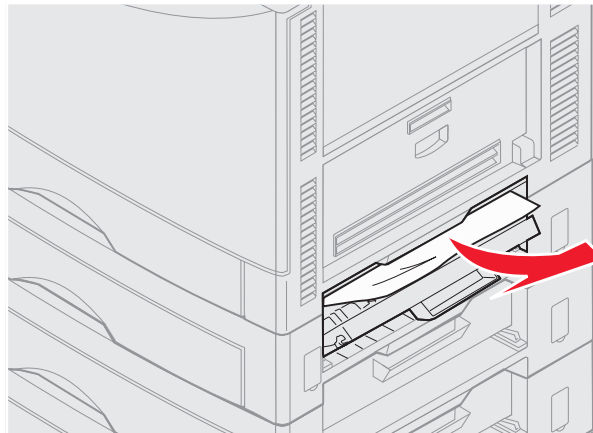
This message indicates a jam in the top, middle, or bottom optional drawer paper path area.


Note: If you have a high capacity feeder, pull the feeder away from the printer.

- 1 Open the jam access door on the top optional drawer.



- 2 Remove the jam.

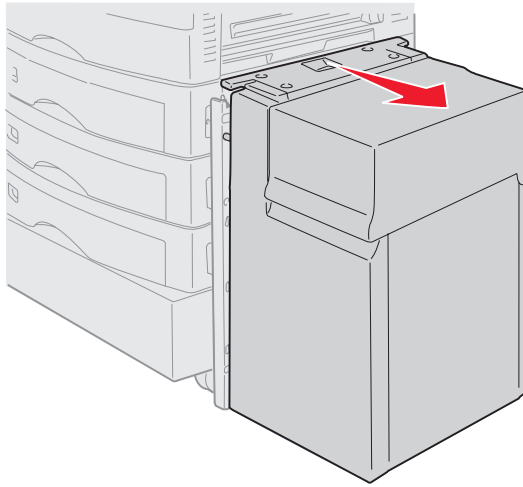


- 3 Close the jam access door.
- 4 Repeat these steps for jams in the middle and bottom drawers.
- 5 Press . If the paper jam message continues, check and clear all paper from the paper path.

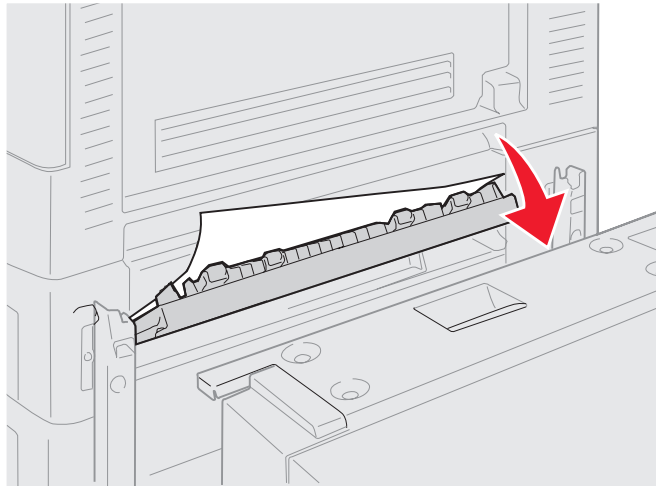
Clearing jams

Check Area F

- 1 Pull the high capacity feeder away from the printer.

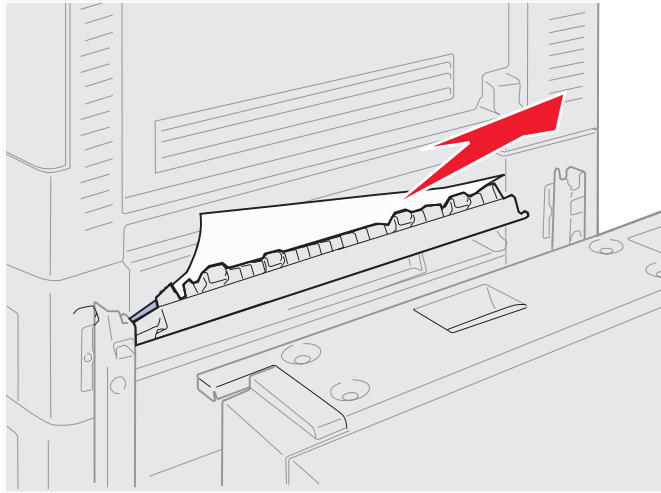


- 2 Open the jam access door on the top optional drawer.

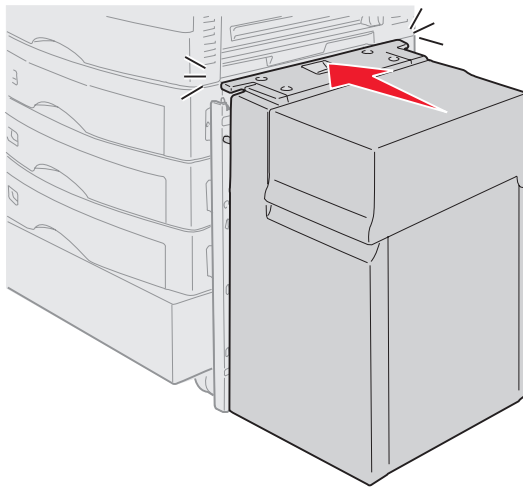


Clearing jams

- 3 Remove any jams.



- 4 Close the jam access door.
- 5 Slide the high capacity feeder until the feeder locks to the docking frame.
When the feeder is in the correct position, you hear a *click*.



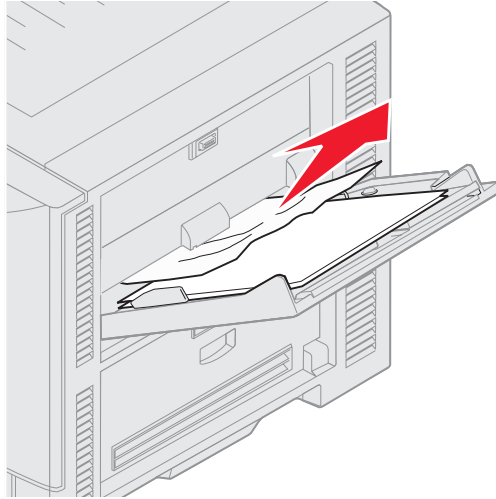
- 6 Press .

If the paper jam message continues, check and clear all paper from the paper path.

240 Paper Jam Check MP Feeder

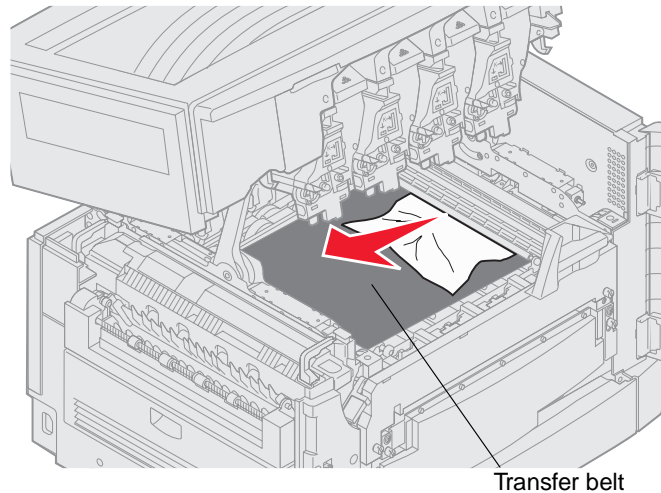
- 1 Slowly pull the jam straight out of the multipurpose feeder, **except when feeding banner paper (11.69 X 36 in.). Clear banner paper jams only in the paper feed direction.**


If the paper will not come out, proceed with step 2.



- 2 Open the top cover.
- 3 Remove the paper on the transfer belt.

Warning: Do not touch, drop, or place anything on the transfer belt. Touching the surface of the transfer belt or placing items on it may cause damage.



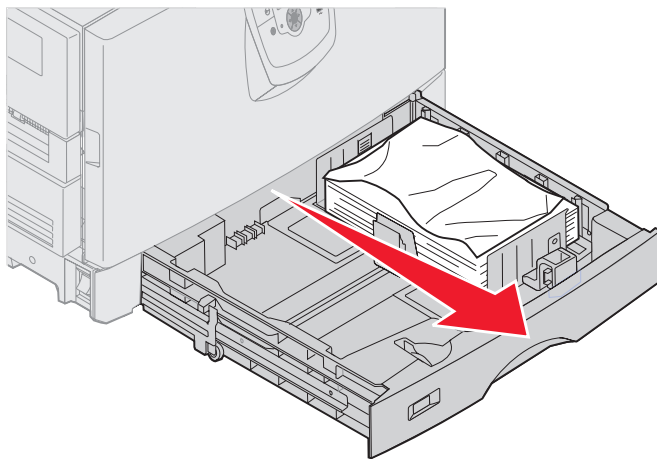
- 4 Close the top cover.
- 5 Press .

24<x> Paper Jam Check Tray <x>

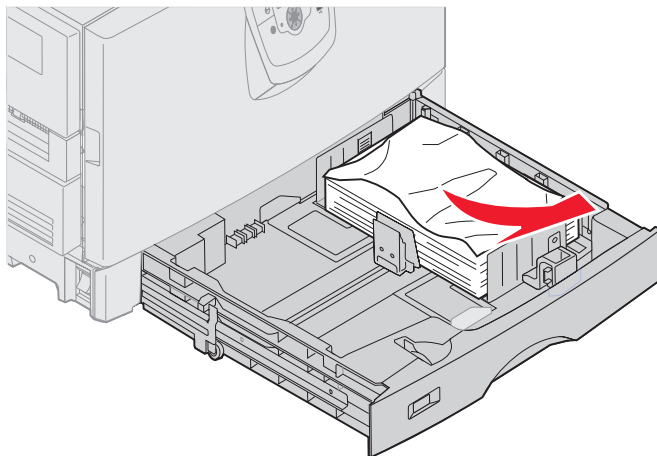
Jams in five areas result in a 24<x> Paper Jam message, where x represents the tray number where the jam has occurred. Paper jam messages 241–244 indicate a jam has occurred in one of the paper trays. A 249 Paper Jam Check Tray <x> message indicates a jam has occurred in the high capacity feeder. See [Identifying jam areas](#) for tray numbering.

241-244 Paper Jam

- 1 Pull out the tray indicated on the display.

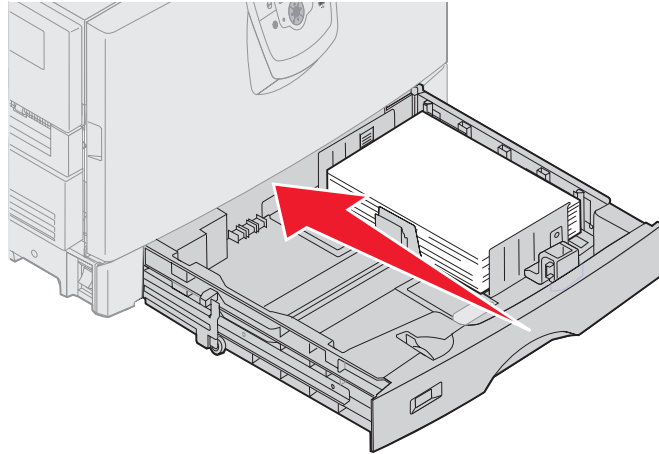


- 2 Remove any wrinkled or creased paper.



Clearing jams

- 3 Close the tray.



- 4 Press .

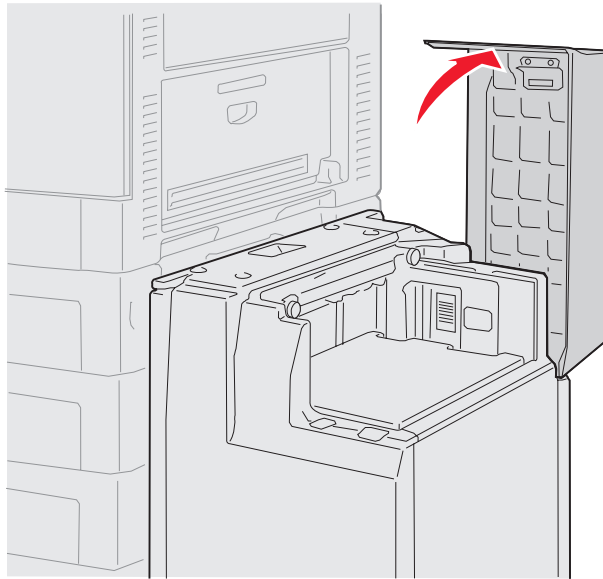
If the paper jam message continues, check and clear all paper from the paper path.

249 Paper Jam Check Tray <x>

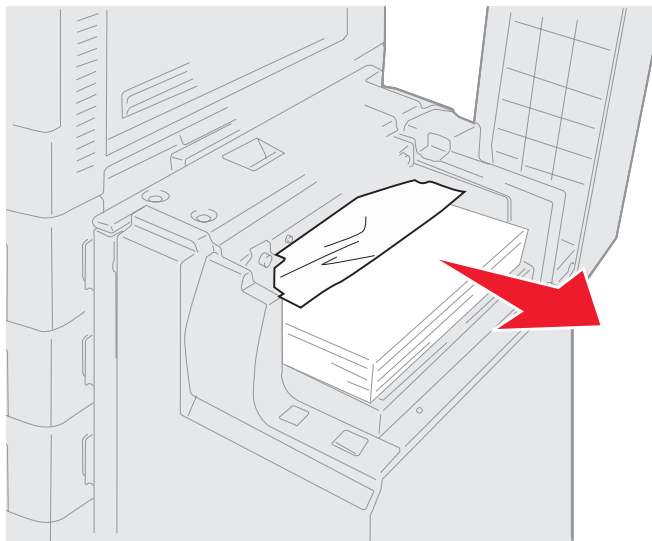
A 249 Paper Jam Check Tray <x> message indicates a jam has occurred in the high capacity feeder.

Note: If you have an optional printer cabinet, the high capacity feeder will be identified as tray 3.

- 1 Open the top cover.

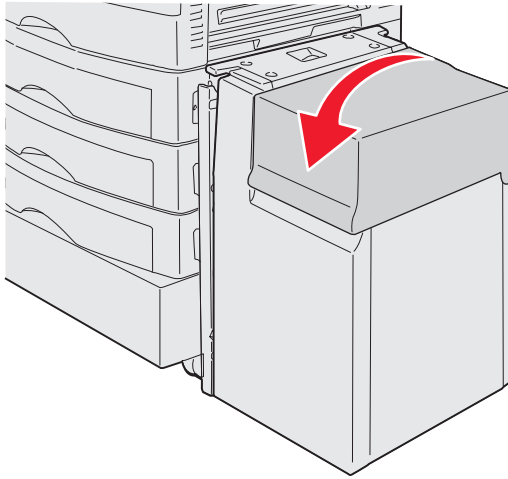


- 2 Remove the jam.



Clearing jams

- 3 Close the top cover.



- 4 Press .



Disabling operator panel menus

Since many people could be using the printer, an administrator may choose to lock the operator panel menus to keep others from changing menu settings from the operator panel.







To disable the operator panel menus so that changes cannot be made to the printer default settings:

- 1 Turn the printer off.

Note: Disabling the operator panel menus does not prevent access to Print and Hold functionality.

- 2 Press and hold  and  while turning the printer on.
- 3 Release the buttons when you see a clock.

CONFIG MENU appears on the first line of the display.

- 4 Press  until the  appears next to **Panel Menus**.
- 5 Press .
- 6 Press  until the  appears next to **Disable**.
- 7 Press .



The following messages appear briefly: **Submitting Selection** and **Disabling Menus**. The operator panel returns to **Panel Menus**.

- 8 Press  until the  appears next to **Exit Config Menus**.

Press . **Activating Menu Changes** appears. The menus are disabled.

Resetting the Printer appears briefly followed by a clock. The operator panel then returns to **Ready**.

Enabling operator panel menus

- 1 Turn the printer off.
- 2 Press and hold  and  while turning the printer on.
- 3 Release the buttons when you see a clock.

CONFIG MENU appears on the first line of the display.

- 4 Press ▼ until the ✓ appears next to **Panel Menus**.
- 5 Press (✓).
- 6 Press ▼ until the ✓ appears next to **Enable**.
- 7 Press (✓).

The following messages appear briefly in succession; **Submitting Selection** and **Enabling Menus**.

The operator panel returns to **Panel Menus**.

- 8 Press ▼ until the ✓ appears next to **Exit Config Menus**.
- 9 Press (✓). **Activating Menu Changes** appears. The menus are enabled.

Resetting the Printer appears briefly followed by a clock. The operator panel then returns to **Ready**.

Restoring factory default settings

When you first enter the printer menus from the operator panel, you may notice an asterisk (*) to the left of a value in the menus. This asterisk indicates the *factory default setting*. These settings are the original printer settings. (Factory defaults may vary for different regions.)

When you select a new setting from the operator panel, **submitting selection** appears. When the Submitting Selection message disappears, an asterisk appears next to the setting to identify it as the current *user default setting*. These settings are active until new ones are stored or the factory defaults are restored.

To restore the original printer factory default settings:

Warning: All downloaded resources (fonts, macros, and symbol sets) in printer memory (RAM) will be deleted. (Resources residing in flash memory or on the optional hard disk remain unaffected.)

- 1 Make sure the printer is on and **Ready** appears on the display.
- 2 Press (On) on the operator panel.
- 3 Press ▼ until the (✓) appears next to **Settings**.
- 4 Press (✓).
- 5 Press ▼ until the ✓ appears next to **Setup Menu**.
- 6 Press (✓).
- 7 Press ▼ until the ✓ appears next to **Factory Defaults**.
- 8 Press (✓).
- 9 Press ▼ until the ✓ appears next to **Restore Now**.

- 10 Press .











The message **Restoring Factory Defaults** appears, followed by the **Ready** message.

When you select Restore:

- No other button actions are available on the operator panel while **Restoring Factory Defaults** appears.
- All menu settings return to the factory default values, except:
 - The operator panel Display Language setting in the Setup Menu.
 - All settings in the Parallel Menu, Serial Menu, Network Menu, and USB Menu.

Adjusting Power Saver

To adjust the **Power Saver** setting:

- 1 Make sure the printer is on and **Ready** appears on the display.
- 2 Press  on the operator panel.
- 3 Press  until the  appears next to **Settings**.
- 4 Press .
- 5 Press  until the  appears next to **Setup Menu**.
- 6 Press .
- 7 Press  until the  appears next to **Power Saver**.
- 8 Press .
- 9 Using the numeric pad or the right and left arrows on the operator panel, enter the number of minutes for the printer to wait before entering Power Saver.

The settings available range from 1–240 minutes. If you want to turn Power Saver off, see [Disabling Power Saver on page 139](#).



- 10 Press .

Submitting Selection appears.






Note: You can also adjust the Power Saver setting by issuing a Printer Job Language (PJM) command. For more information, see the *Technical Reference* available on our Lexmark Web site at www.lexmark.com.

Disabling Power Saver

Disabling Power Saver is 2 step process. First, you must turn the variable on, then select the variable. To disable Power Saver:




- 1 Turn the printer off.
- 2 Press and hold  and  while turning the printer on.
- 3 Release the buttons when you see a clock.

CONFIG MENU appears on the first line of the display.












- 4 Press  until the  appears next to **Energy Conserve**.
- 5 Press .
- 6 Press  until the  appears next to **Off**.

submitting selection appears.

The operator panel returns to **Energy Conserve**.

- 7 Press  until the  appears next to **Exit Config Menus**.
- 8 Press .

Resetting the Printer appears briefly followed by a clock. The operator panel then returns to **Ready**.



- 9 Make sure **Ready** is displayed.
- 10 Press  on the operator panel.
- 11 Press  until the  appears next to **Settings**.
- 12 Press .
- 13 Press  until the  appears next to **Setup Menu**.
- 14 Press .
- 15 Press  until the  appears next to **Power Saver**.
- 16 Press .
- 17 Use either the numeric keypad or the right and left arrows to enter **0** (zero). **Disabled** appears.
- 18 Press .

submitting selection appears. Power Saver is now disabled.











Encrypting the disk

Warning: All resources on the hard disk will be deleted. (Resources residing in flash memory or in RAM remain unaffected.)



Note: This setting is only available when a hard disk is installed.

- 1 Turn the printer off.
- 2 Press and hold  and  while turning the printer on.
- 3 Release the buttons when you see a clock.










CONFIG MENU appears on the first line of the display.

- 4 Press  until the  appears next to **Disk Encryption**.
- 5 Press .
- 6 Press  until the  appears next to **Enable**.
- 7 Press .
- 8 **Contents will be lost. Continue?** appears. Press  until the  appears next to **Yes**.
- 9 Press . The Encrypting Disk progress bar appears.
- 10 When disk encryption has finished, click the back arrow.
- 11 Press  until the  appears next to **Exit Config Menu**.
- 12 Press .

To disable disk encryption:

- 1 Turn the printer off.
- 2 Press and hold  and  while turning the printer on.
- 3 Release the buttons when you see a clock.

CONFIG MENU appears on the first line of the display.

- 4 Press  until the  appears next to **Disk Encryption**.
- 5 Press .
- 6 Press  until the  appears next to **Disable**.
- 7 Press .
- 8 **Contents will be lost. Continue?** appears. Press  until the  appears next to **Yes**.
- 9 Press . The Encrypting Disk progress bar appears.

- 10 When disk encryption has finished, click the back arrow.
- 11 Press ▼ until the ✓ appears next to **Exit Config Menu**.
- 12 Press (✓).

Setting security using the Embedded Web Server (EWS)

You can enhance the security of network communications and device configuration by using the advanced security options. These features are available through the Web page of the device.

Setting the system password

Setting the system password protects configuration of the Embedded Web Server. A system password is also required for Secure mode and confidential communication with MVP.

To set the system password:

- 1 Open your Web browser. In the address line, enter the IP address of the printer you want to configure using the format: *http://ip_address/*.
- 2 Click **Configuration**.
- 3 Under Other Settings, click **Security**.
- 4 Click **Create Password**, if one has not been set previously. If a password has been set before, click **Change or Remove Password**.

Using the secure Embedded Web Server

The SSL (Secure Sockets Layer) allows for secure connections to the Web server within the print device. You can connect to the Embedded Web Server more securely by connecting to the SSL port instead of the default http port. The SSL port connection will encrypt all Web server network communications between the PC and the printer. To connect to the SSL port:

Open your Web browser. In the address line, enter the IP address of the printer you want to configure using the format: *https://ip_address/*.

Supporting SNMPv3 (Simple Network Management Protocol version 3)

SNMPv3 protocol allows for encrypted and authenticated network communications. It also lets the administrator select a desired level of security. Prior to use, at least one user name and password

must be established from the settings page. To configure for SNMPv3 through the Embedded Web Server of the printer:

- 1 Open your Web browser. In the address line, enter the IP address of the printer you want to configure using the format: *http://ip_address/*.
- 2 Click **Configuration**.
- 3 Under Other Settings, click **Network/Ports**.
- 4 Click **SNMP**.

SNMPv3 authentication and encryption has three levels of support:

- No authentication and no encryption
- Authentication with no encryption
- Authentication and encryption

Note: Only the selected level and higher may be used to communicate.

Supporting IPSec (Internet Protocol Security)

IP Security protocol provides authentication and encryption of communications at the network layer allowing all application and network communications over the IP protocol to be secure. IPSec can be set up between the printer and up to five hosts, using both IPv4 and IPv6. To configure IPSec through the Embedded Web Server:

- 1 Open your Web browser. In the address line, enter the IP address of the printer you want to configure using the format: *http://ip_address/*.
- 2 Click **Configuration**.
- 3 Under Other Settings, click **Network/Ports**.
- 4 Click **IPSec**.

Two types of authentication are supported for IPSec:

- **Shared Key Authentication**-Any ASCII phrase shared among all the participating hosts. This is the easiest way to configure when only a few hosts on the network use IPSec.
- **Certificate Authentication**-Allows any hosts or subnet of hosts to authenticate for IPSec. Each host must have a public/private key pair. *Validate Peer Certificate* is enabled by default, requiring each host to have a signed certificate and the certificate authority certificate must be installed. Each host must have its identifier in the *Subject Alternate Name* of the signed certificate.

Note: After a device is configured for IPSec with a host, IPSec is required for any IP communication to take place.

Using Secure mode

You can configure the TCP and UDP ports to one of three modes:

- **Disabled**-Never allows network connections to this port.
- **Secure and Unsecure**-Allows the port to remain open, even in Secure mode.
- **Unsecured Only**-Allows the port to only open when the printer is not in Secure mode

Note: A password must be set to enable Secure mode. Once enabled, only the ports set to Secure and Unsecure will be open.

To configure the Secure mode for TCP and UDP ports from the Embedded Web Server:

- 1 Open your Web browser. In the address line, enter the IP address of the printer you want to configure using the format: *http://ip_address/*.
- 2 Click **Configuration**.
- 3 Under Other Settings, click **Network/Ports**.
- 4 Click **TCP/IP Port Access**.

Note: Disabling ports will disable function on the printer.

Using 802.1x Authenticating

802.1x port authentication allows the printer to join networks that require authentication before allowing access. 802.1x port authentication can be used with the WPA (Wi-Fi Protected Access) feature of an optional internal wireless print server to provide WPA-Enterprise security support.

Support for 802.1x requires the establishment of credentials for the printer. The printer must be known to the Authentication Server (AS). The AS will allow network access to devices presenting a valid set of credentials which typically involves a name/password combination and possibly a certificate. The AS will allow network access to printers presenting a valid set of credentials. You can manage the credentials by using the Embedded Web Server of the printer. To use certificates as part of the credentials:

- 1 Open your Web browser. In the address line, enter the IP address of the printer you want to configure using the format: *http://ip_address/*.
- 2 Click **Configuration**.
- 3 Under Other Settings, click **Network/Ports**.
- 4 Click **Certificate Management**.

To enable and configure 802.1x on the Embedded Web Server after installing the required certificates:

- 1 Open your Web browser. In the address line, enter the IP address of the printer you want to configure using the format: *http://ip_address/*.
- 2 Click **Configuration**.
- 3 Under Other Settings, click **Network/Ports**.
- 4 Click **802.1x Authentication**.

Note: If an optional internal wireless print server is installed, click **Wireless** instead of **802.1x Authentication**.

Locking the operator panel menus

Operator Panel Menu Lockout lets you create a PIN number and choose specific menus to lock. Each time a locked menu is selected, the user will be prompted to enter the correct PIN at the operator panel. The PIN does not affect any access through the EWS. To lock operator panel menus:

- 1 Open your Web browser. In the address line, enter the IP address of the printer you want to configure using the format: *http://ip_address/*.
- 2 Click **Configuration**.
- 3 Under Other Settings, click **Security**.
- 4 Click **Menu Lockout Setup**.

Printing Lockout

Printing Lockout lets you lock or unlock a printer using an assigned PIN. When locked, every job the printer receives will buffer to the hard disk. A user can print jobs only by entering the correct PIN on the operator panel. You can assign a PIN through the Web page of the device.

Note: This setting is only available when a hard disk is installed.

Note: Back channel data will be processed while the printer is locked. Reports such as user or event logs can be retrieved from a locked printer.

To set Printing Lockout:

- 1 Open your Web browser. In the address line, enter the IP address of the printer you want to configure using the format: *http://ip_address/*.
- 2 Click **Configuration**.
- 3 Under Other Settings, click **Security**.

- 4 Click **Printer Lockout PIN**.

Confidential Print Setup

Confidential Print Setup lets you designate a maximum number of PIN entry attempts and set an expiration time for print jobs. When a user exceeds a specific number of PIN entry attempts, all of that user's print jobs are deleted. When a user has not printed their jobs within a designated time period, the print jobs are deleted. To activate Confidential Print Setup:

Note: This feature is only available on network models.

- 1 Open your Web browser. In the address line, enter the IP address of the printer you want to configure using the format: *http://ip_address/*.
- 2 Click **Configuration**.
- 3 Under Other Settings, click **Security**.
- 4 Click **Confidential Print Setup**.

Online technical support

Technical support is available on our Lexmark Web site at www.lexmark.com.

Calling for service

When you call for printer service, 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. Refer to the label on the inside top front cover of the printer for this information.

The serial number is also listed on the menu settings page. See [Printing the menu settings page on page 60](#) for more information.

For service in the U.S. or Canada, call 1-800-Lexmark (1-800-539-6275). For other countries/regions, refer to the numbers listed on the drivers CD.

Note: When calling for service, call from the location of the printer.

Checking an unresponsive printer

If your printer is not responding, first 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 electrical equipment plugged into the outlet is working.
- The printer is turned on.
- The printer cable is securely attached to the printer and the host computer, print server, option, or other network device.

Once you have checked each of these possibilities, turn the printer off and back on. This often fixes the problem.

Printing multi-language PDFs

Symptom	Cause	Solution
Some documents do not print.	The documents contain unavailable fonts.	<ol style="list-style-type: none">1 Open the document you want to print in Adobe Acrobat.2 Click the printer icon. The Print dialog box appears.3 Check the Print as image box.4 Click OK.

Solving printing problems

Symptom	Cause	Solution
The operator panel display is blank or displays only diamonds.	The printer self test failed.	Turn the printer off, wait about 10 seconds, and turn the printer back on. If the Performing Self Test and Ready messages do not appear, turn the printer off and call for service.
Jobs do not print.	The printer is not ready to receive data.	Make sure Ready or Power Saver appears on the display before sending a job to print. Press  to return the printer to the Ready state.
	The specified output bin is full.	Remove the stack of paper from the output bin, and then press  .
	The specified tray is empty.	Load paper in the tray.
	You are using the wrong printer driver or are printing to a file.	<ul style="list-style-type: none"> Verify you are using the printer driver associated with your printer. If you are using a USB port, make sure you are running Windows 98/Me, Windows 2000, Windows XP, or Windows Server 2003 and using a Windows 98/Me, Windows 2000, Windows XP, or Windows Server 2003 compatible printer driver.
	Your MarkNet print server is not set up properly or is not connected properly.	Verify that you have properly configured the printer for network printing. Refer to the drivers CD or to our Lexmark Web site for information.
	You are using the wrong interface cable, or the cable is not securely connected.	Make sure you are using a recommended interface cable. Make sure the connection is secure.
Held jobs do not print.	A formatting error has occurred.	<ul style="list-style-type: none"> Print the job. (Only part of the job may print.) Delete the job.
	The printer has insufficient memory.	<ul style="list-style-type: none"> Free up additional printer memory by scrolling through the list of held jobs and deleting others you have sent to the printer.
	The printer has received invalid data.	Delete the job.
Job takes longer than expected to print.	The job is too complex.	Reduce the complexity of your print job by eliminating the number and size of fonts, the number and complexity of images, and the number of pages in the job.
	Page Protect is set to On.	Set Page Protect to Off from the Setup Menu . For more information, refer to the <i>Menus and Messages Guide</i> .

Troubleshooting

Symptom	Cause	Solution
Job prints from the wrong tray or on the wrong paper or specialty media.	The operator panel menu settings do not match the media loaded in the tray.	Make sure the Paper Size and Paper Type specified in the printer driver match the paper size and type in the tray.
Incorrect characters print.	You are using an incompatible parallel cable.	If you are using a parallel interface, make sure you are using an IEEE 1284-compliant parallel cable. We recommend Lexmark part number 1329605 (10 ft) or 1427498 (20 ft) for the standard parallel port.
	The printer is in Hex Trace mode.	If Ready Hex appears on the display, 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.	Tray linking is not configured properly.	<ul style="list-style-type: none"> • Make sure both the size and type of media are the same in both trays. • Make sure the paper guides in the trays are set for the correct size media. • Make sure the menu values for both size and type are set correctly in the Paper Menu. • See Linking trays on page 75 or refer to the <i>Menus and Messages Guide</i> for more information.
Large jobs do not collate.	Collate is not set to On.	Set Collation to On in the Finishing Menu or through the printer driver. Note: Setting Collation to off in the driver overrides the setting in the Finishing Menu . Refer to the <i>Menus and Messages Guide</i> for more information.
	The job is too complex.	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.
	The printer does not have enough memory.	Add printer memory or an optional hard disk.
Unexpected page breaks occur.	The job has timed out.	Set Print Timeout to a higher value from the Setup Menu . Refer to the <i>Menus and Messages Guide</i> for more information.

Lexmark Confidential until announced - Revision: 02/18/05

Solving option problems

If an option does not operate correctly after it is installed or if it quits working:

- Turn the printer off, wait for about 10 seconds, and turn the printer on. If this does not fix the problem, unplug the printer, and check the connection between the option and printer.
- Print the menu settings page and check to see if the option is listed in the Installed Options list. If the option is not listed, reinstall it. See [Printing the menu settings page on page 60](#) for more information.
- Make sure the option is selected in the software application you are using.

For Macintosh computer users: Make sure the printer is set up in Chooser.

The following table lists printer options and suggested corrective actions for related problems. If the suggested corrective action does not fix the problem, call your service representative.

Option	Action
Drawers	<ul style="list-style-type: none"> • Make sure the connection between drawers and the printer is secure. • Make sure the print media is loaded correctly.
Duplex unit	Make sure the connection between the duplex unit and the printer is secure. If the duplex unit is listed on the menu settings page, but print media jams when it enters or exits the duplex unit, the printer and duplex unit may not be properly aligned.
Finisher	<ul style="list-style-type: none"> • Make sure the connection between the finisher and the printer is secure. If the finisher is listed on the menu settings page, but print media jams when it exits the printer and enters the finisher, it may not be properly installed. Reinstall the finisher. • Make sure you are using a print media size compatible with your optional output bins. See Media sizes and support.
Flash memory	Make sure flash memory 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.
Infrared adapter	<p>If infrared communication stops or does not occur, make sure:</p> <ul style="list-style-type: none"> • The distance between the two infrared ports is 1 meter (39 in.) or less. If communication does not occur between ports, move the ports closer together. • Both ports are stable. • The computer and the printer are on a level surface. • The angle of communication between the two infrared ports is within 15 degrees of either side of an imaginary line drawn between the two infrared ports. • No bright light, such as direct sun light, is interfering with communication. • No objects are placed between the two infrared ports.

Troubleshooting


Option	Action
Internal print server	<ul style="list-style-type: none">• Make sure the internal print server (also called an internal network adapter or INA) is securely connected to the printer system board.• Make sure you are using the correct cable, that it is securely connected, and the network software is correctly set up. Refer to the drivers CD that shipped with your printer for more details.
High capacity feeder	See Solving high capacity feeder problems on page 152.
Printer memory	Make sure printer memory is securely connected to the printer system board.
USB/Parallel interface	<ul style="list-style-type: none">• Make sure the USB/parallel interface card is securely connected to the printer system board.• Make sure you are using the correct cable and that it is securely connected.

Solving high capacity feeder problems

Problem	Solution
The paper tray does not raise when the loading door is closed, or the paper tray does not lower when the door is opened and the paper tray button is pushed.	<p>Check the following:</p> <ul style="list-style-type: none"> The printer is properly attached to the high capacity feeder. The printer is powered on. The power cord is plugged firmly into the back of the high capacity feeder. The power cord is plugged into an outlet. The outlet has power.
The paper tray lowers unexpectedly.	Check to see if your printer is out of paper or has a jam.
More than one sheet of paper is fed or a sheet is fed improperly.	Remove the paper in the printer paper path, and check the stack to ensure the paper has been loaded properly. Be sure to remove the top and bottom sheets of each ream of paper that is loaded.
A jam occurs.	
Rubber feed rollers do not turn to advance paper.	<p>Check the following:</p> <ul style="list-style-type: none"> The power cord is plugged firmly into the back of the high capacity feeder. The power cord is plugged into an outlet. The outlet has power
Consistent misfeeds or jams in the feeder.	<p>Try the following:</p> <ul style="list-style-type: none"> Flex the paper. Turn the print media over. <p>Check the following:</p> <ul style="list-style-type: none"> Feeder is properly installed. Paper is loaded correctly. Paper is not damaged. Paper meets specifications. Guides are positioned correctly for the paper size selected.
Service messages	<p>A service message indicates printer failure that may require service.</p> <p>Turn the printer off, wait about 10 seconds, and then turn the printer on.</p> <p>If the error recurs, write down the error number, the problem, and a detailed description. Call for service.</p>

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Solving paper feed problems

Symptom	Cause	Solution
Paper frequently jams.	You are using paper that does not meet the printer specifications.	Use recommended paper and other specialty media. <i>Refer to the Card Stock & Label Guide available on our Lexmark Web site at www.lexmark.com for detailed specifications.</i> See Avoiding jams for information that can help prevent jams from occurring.
	You have loaded too much paper or too many envelopes.	Make sure the stack of paper you load does not exceed the maximum stack height indicated in the tray or on the multipurpose feeder.
	Guides in the selected tray are not set to the appropriate position for the size paper loaded.	Move the guides in the tray to the correct position.
	The paper has absorbed moisture due to high humidity.	Load paper from a fresh package. Store paper in its original wrapper until you load it. See Storing media for more information.
The Paper Jam message remains after you remove the jammed paper.	You have not pressed Go or have not cleared the entire paper path.	Clear paper from the entire paper path, and then press  . See Clearing jams for more information.
The page that jammed does not reprint after you clear the jam.	Jam Recovery in the Setup Menu is set to Off.	Set Jam Recovery to Auto or On. Refer to the <i>Menus and Messages Guide</i> for more information.
Blank pages feed into the output bin.	An incorrect media type is loaded in the tray being printed from.	Load the correct type media for your print job, or change the Paper Type to match the type of media loaded. Refer to the <i>Menus and Messages Guide</i> for more information.




Lexmark Confidential until announced - Revision: 02/18/05

Solving print quality problems

To help isolate print quality problems, print the Print Quality Test Pages.




- 1 Turn the printer off.
- 2 Press  and . Hold them while you turn the printer on, and until the **Performing Self Test** message appears.

Config Menu appears.



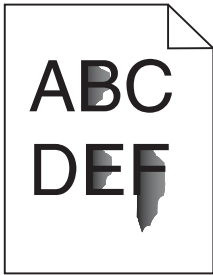
- 3 Press  until  **Prt Quality Pgs** appears, and then press .

The pages are formatted. The **Printing Quality Test Pages** message appears, then the pages print. The message remains on the operator panel until all the pages print.

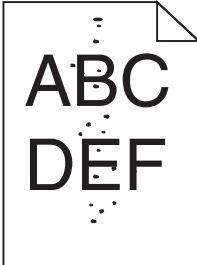
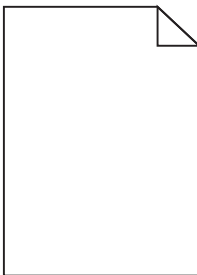

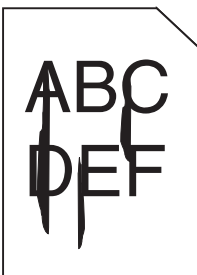

After the Print Quality Test Pages print, to exit the Config Menu:

- 4 Press  until  **Exit Config Menu** appears, and then press  to complete the procedure.

The information in the following table may help you solve print quality problems. If these suggestions still do not correct the problem, call for service. You may have a printer part that requires adjustment or replacement.

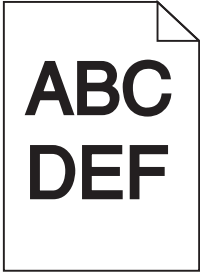
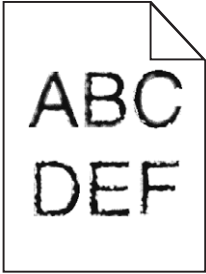
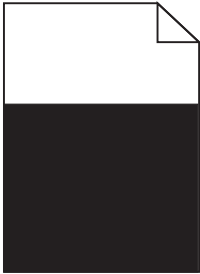
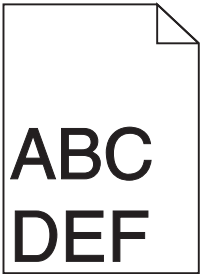
Problem	Action
Print is too light. 	<ul style="list-style-type: none"> • The toner may be low. To utilize the remaining toner, remove the cartridge by gripping the handles with both hands. With the cartridge arrows pointing downward, shake the print cartridge back and forth. Reinstall the cartridge and then press . • Change the Toner Darkness setting in the Quality Menu. • If you are printing on an uneven print surface, change the Paper Weight and Paper Texture settings in the Paper Menu. • Verify the correct print media is being used.
Toner smears or print comes off the page. 	<ul style="list-style-type: none"> • If you are printing on an uneven print surface, change the Paper Weight and Paper Texture settings in the Paper Menu. • Verify the print media is within the printer specifications. See Media specifications for more details. <p style="color: red;">If the problem continues, contact the Lexmark Customer Support Center at 1-859-232-3000 or http://support.lexmark.com.</p> <p style="color: blue;">If the problem continues, turn the printer off and contact the place you bought your printer.</p>

Troubleshooting

Problem	Action
<p>Toner appears on the back of the printed page.</p>	<p>Toner is on the transfer roll. To help prevent this, do not load print media that is smaller than the page size of the job to be printed.</p> <p>Open and close the printer top front cover to run the printer setup cycle and clean the transfer roll.</p>
<p>Toner fog or background shading appears on the page.</p> 	<ul style="list-style-type: none"> • Check the print cartridge to make sure it is installed correctly. • Replace the print cartridge.
<p>Entire page is white.</p> 	<ul style="list-style-type: none"> • Make sure the packaging material is removed from the print cartridge. • Check the print cartridge to be sure it is installed correctly. • The toner may be low. To utilize the remaining toner, remove the cartridge by gripping the handles with both hands. With the cartridge arrows pointing downward, shake the print cartridge back and forth. Reinstall the cartridge, and then press .
<p>Streaks appear on the page.</p> 	<ul style="list-style-type: none"> • The toner may be low. To utilize the remaining toner, remove the cartridge by gripping the handles with both hands. With the cartridge arrows pointing downward, shake the print cartridge back and forth. Reinstall the cartridge and then press . • If you are using preprinted forms, make sure the ink can withstand temperatures of 212°C (414°F).

Lexmark Confidential until announced - Revision: 02/18/05

Troubleshooting

Problem	Action
<p>Printing is too dark.</p> 	<p>Change the Toner Darkness setting in the Quality Menu. See the <i>Menus and Messages Guide</i> on the publications CD for more information.</p> <p>Note: Macintosh computer users should make sure the lines per inch (lpi) setting is not set too high in the software application.</p>
<p>Characters have jagged or uneven edges</p> 	<ul style="list-style-type: none"> • Change the Print Resolution setting in the Quality Menu to 600 dpi, 1200 dpi or 2400 IQ. Refer to the <i>Menus and Messages Guide</i> on the publications CD for more settings information. • If you are using downloaded fonts, verify the fonts are supported by the printer, the host computer, and the software application.
<p>Part or all of the page is printed in black.</p> 	<p>Check the print cartridge to see if it is installed correctly.</p>
<p>The job prints, but the top and side margins are incorrect.</p> 	<ul style="list-style-type: none"> • Make sure the Paper Size setting in the Paper Menu is correct. • Make sure the margins are set correctly in your software application.
<p>Ghost images appear.</p>	<ul style="list-style-type: none"> • Make sure the Paper Type setting in the Paper Menu is correct. • Replace the photoconductor kit.

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Troubleshooting

Problem	Action
Gray background prints	<ul style="list-style-type: none"> The Toner Darkness setting may be too dark. Change the Toner Darkness setting in the Quality Menu. See the <i>Menus and Messages Guide</i> on the publications CD for more information. The toner cartridge may be defective. Replace the toner cartridge.
Some of the print is cut off on the sides, top, or bottom of the media.	Move the guides in the tray to the proper positions for the size loaded.
Print is skewed, or inappropriately slanted.	
Transparency print quality is poor.	<ul style="list-style-type: none"> Use only transparencies recommended by the printer manufacturer. Make sure the Paper Type setting in the Paper Menu is set to Transparency.

The Quality Menu operator panel options can be adjusted to help improve print quality. For more information about these menu options, refer to the *Menus and Messages Guide* on the publications CD.

Menu selection	Purpose	Values	
Print Resolution	Defines the number of dots printed per inch (dpi).	2400 Image Quality*	
Toner Darkness	Lightens or darkens printed output and conserves toner.	1–10	8* is the default setting. Select a lower number to lighten the printed output or save toner.
Brightness	Adjusts the gray value of printed objects.	-6 – +6	0* is the default setting.
Contrast	Adjusts the contrast of printed objects.	0–5	0* is the default setting.

In addition, the Enhance Fine Lines and Gray Correction options can be enabled to improve print quality. These settings are available on the driver and on the printer Embedded Web Server (EWS) interface. For more information about these options, refer to the driver help.

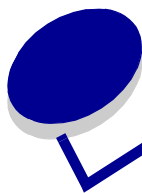
Driver option	Purpose	Values†	
Enhance Fine Lines	A selection to enable a print mode preferable for certain files containing fine line detail, such as architectural drawings, maps, electronic circuit diagrams and flow charts.	On	In the driver, enable the check box.
		Off*	In the driver, disable the check box.

† Values marked by an asterisk (*) are the factory default settings.

Troubleshooting

Driver option	Purpose	Values†	
Gray Correction	Automatically adjusts the contrast enhancement applied to images. Note: Selecting this feature disables the manual Brightness and Contrast controls.	Auto*	In the driver, enable the check box.
		Off	In the driver, disable the check box.

† Values marked by an asterisk (*) are the factory default settings.



Index

Numerics

550 sheet drawer 16

A

adjust paper tray 67

adjusting

Power Saver 138, 139

authorized supplies dealers 105

automatic size sensing 75, 100

automatic tray linking 75, 100

avoiding paper jams 78

B

Banner paper, printing on 76

binding, duplex 102

C

card stock

loading 67

card stock, guidelines 94

characteristics, media 87

letterhead 90

confidential jobs 62

entering a PIN 62

entering user name 62

sending 62

Configured models 16

D

disabling operator panel menus 136

downloadable fonts 85

duplex

binding 102

duplex (two-sided) printing

definition 100

from trays 102

selecting 102

Duplex Bind 102

duplex unit

printing definition 100

using 100

E

electrical emission statement 6

emission statement 6

enabling operator panel menus 136

envelope sizes

7 3/4 (Monarch) 96

F

FCC statement 6

folio size 65

fonts

downloadable 85

resident 79

symbol sets, PCL 6 emulation 84

G

guidelines

labels 93

media 87

paper

storing 78

printing letterhead 91

H

held jobs

confidential jobs 62

entering a PIN 62

entering user name 62

high capacity feeder

clearing jams in 132, 134

removing 52

successful printing in 78

J

jams

avoiding 78, 104

job 62

L

- labels
 - guidelines 93
 - printer maintenance 93
- letterhead 90
 - guidelines 90
 - loading
 - input tray 71
 - page orientation 91
 - printing 91
- Lexmark Authorized Supplies Dealers 105
- linking 75, 100
 - trays 75, 100
- Linux 25, 37, 38
- load line 67, 71
- loading print media
 - card stock 67
 - letterhead
 - input tray 71
 - paper
 - input tray 67
 - multipurpose feeder 68
 - transparencies
 - input tray 67

M

- Macintosh 34
- maintaining the printer 105
 - ordering a print cartridge 107
- maximum stack height 71
- media
 - guidelines 87
 - letterhead 90
 - letterhead, printing 91
 - letterhead
 - guidelines 90
 - loading instructions based on source 91
 - sizes supported
 - 7 3/4 (Monarch) 96
 - storing 94
 - transparencies, guidelines 91
- media specifications
 - characteristics 87
 - sizes 95
 - types 98
 - weight 98
- memory
 - Print and Hold function 62

- multipurpose feeder
 - closing 72
 - guidelines 68
 - icons 69
 - print media
 - loading 71
 - transparencies 70

N

- NetWare 38
- network setup page 27

O

- operator panel 27
 - disabling menus 136
 - enabling menus 136
- ordering, print cartridge 107

P

- paper
 - avoiding jams 78
 - letterhead 90
 - preprinted forms 90
 - recommended types 87
 - storing 78
 - unacceptable 89
- paper tray adjustment 67
- PCL emulation
 - resident fonts 79
- PIN
 - entering at the printer 63
 - entering from the driver 62
 - for confidential jobs 62
- PostScript emulation
 - resident fonts 79
- Power Saver, adjusting 138, 139
- preprinted forms 90
- print and hold jobs 62
- print cartridge
 - ordering 107
- print media jams
 - avoiding 104
- print media size window 68
- Printing 57
- printing
 - duplex
 - from trays 102

Index

- folio 65
 - on two sides
 - from trays 102
 - statement 65
- Printing on banner paper 76
- problems
 - incorrect characters print 149
 - job didn't print 148
 - job prints 149
 - from wrong tray 149
 - on wrong paper or specialty media 149
 - large jobs do not collate 149
 - operator panel 148
 - blank 148
 - displays black diamonds 148
 - paper feed
 - blank pages in output bin 153
 - frequent jams 153
 - jammed page does not reprint 153
 - Paper Jam message remains after clearing jam 153
 - print time seems long 148
 - tray linking does not work 149
 - unexpected page breaks 149

R

- repeat print 64
- reserve print 64
- resident fonts 79

S

- safety information 6
- scalable fonts, resident 79
- Sending a job to print 57
- side guide 67
- Size Sensing 65
- sizes, media
 - 7 3/4 (Monarch) 96
- standard tray 16
- statement size 65
- storing
 - media 94
 - paper 78
- supplies
 - maintenance kit 108
 - print cartridge 107
- symbol sets, definition 84

T

- toner
 - soiled clothing 111
- transparencies
 - loading
 - input tray 67
- tray linking 75, 100

U

- unacceptable papers 89
- UNIX 25, 37, 38

V

- verify print 64

W

- warranty 9
- width guide 67
- Windows 23, 29