LEXMARK™

E340, E342n

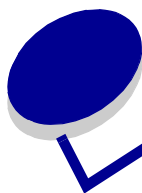**User's Reference**

June 2005

Notices

Edition notice

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Details relating to compatibility are included in the *Technical Reference*.

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In addition, the printer resident software may contain:

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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

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

Laser notice

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

Class I laser products are not considered to be hazardous. The printer contains internally a Class IIIb (3b) laser that is nominally a 5 milliwatt gallium arsenide laser operating in the wavelength region of 770-795 nanometers. The laser system and printer are designed so there is never any human access to laser radiation above a Class I level during normal operation, user maintenance, or prescribed service condition.

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.

Conventions

Note: A *note* identifies something that could help you.
CAUTION: A *caution* identifies something that could cause you harm.
Warning: A *warning* identifies something that could damage your product hardware or software.

Electronic emission notices

Federal Communications Commission (FCC) compliance information statement

The Lexmark E340, Machine Type 4511-600, and Lexmark E342n, Machine Type 4511-610, have been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

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

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

The manufacturer is not responsible for 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 B 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.

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

Director of Lexmark Technology & Services

Lexmark International, Inc.

740 West New Circle Road

Lexington, KY   40550

(859) 232-3000

Industry Canada compliance statement

This Class B 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 B 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 is available from the Director of Manufacturing and Technical Support, Lexmark International, S. A., Boigny, France.

This product satisfies the limits of EN 55022; safety requirements of EN 60950; radio spectrum requirements of ETSI EN 300 330-1 and ETSI EN 300 330-2; and the EMC requirements of EN 55024, ETSI EN 301 489-1 and ETSI EN 301 489-3.

Japanese VCCI notice

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

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B情報技術装置です。この装置は、家庭環境で使用することを目的としていますが、この装置がラジオやテレビジョン受信機に近接して使用されると、受信障害を引き起こすことがあります。取扱説明書に従って正しい取り扱いをしてください。

Korean MIC statement

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

이 기기는 가정용으로 전자파적합등록을 한 기기로서 주거 지역에서는 물론 모든 지역에서 사용할 수 있습니다.

This equipment has undergone EMC registration as a household product. It can be used in any area, including a residential area.

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	
Printing	53—Machine types 4511-600, 4511-610
Idling	30

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.

WEEE

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

Printer energy consumption

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

Mode	Description	Power consumption
Printing	Printer is generating hard copy output	475 W
Ready	Printer is waiting for a print job	85 W
Power Saver	Printer is in energy saving mode	8 W
Off	Printer is plugged into a wall outlet, but switch is turned off	0 W

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

Power Saver

This printer is designed with an energy-saving mode called Power Saver. The Power Saver Mode is equivalent to the EPA Sleep Mode. The Power Saver Mode saves energy by lowering power consumption during extended periods of inactivity. The Power Saver Mode is automatically engaged after this printer is not used for a specified period of time, called the Power Saver Timeout. The factory default Power Saver Timeout is 30 minutes for the Lexmark E320, and Lexmark E342n.

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

If the Power Saver Mode is affecting the effective use of this printer, this mode can be disabled from the Local Printer Settings Utility (see **page 14**) or, if you have a network model, from the printer's resident Web page (see **page 91**).

Total energy usage

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

Statement of Limited Warranty

Lexmark International, Inc. Lexington, KY

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

Lexmark E340, E342n

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

Limited warranty

Lexmark warrants that this product:
- Is manufactured from new parts, or new and serviceable used parts, which perform like new parts
- Is, during normal use, free from defects in material and workmanship

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

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

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

Limited warranty service

The warranty period starts on the date of original purchase as shown on the purchase receipt and ends 12 months later provided that the warranty period for any supplies and for any maintenance items included with the printer shall end earlier if it, or its original contents, are substantially used up, depleted, or consumed. ###List product-specific maintenance items such as fuser units, transfer belts, and paper feed items)###, if any, and any other items for which a Maintenance Kit is available are substantially consumed when the printer displays a "Life Warning" or "Scheduled Maintenance" message for such item.

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

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

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

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

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

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

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

Extent of limited warranty

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

Warranty service does not include repair of failures caused by:
- Modification or unauthorized attachments
- Accidents, misuse, abuse or use inconsistent with Lexmark user's guides, manuals, instructions or guidance
- Unsuitable physical or operating environment
- Maintenance by anyone other than Lexmark or a Lexmark authorized servicer
- Operation of a product beyond the limit of its duty cycle
- Use of printing media outside of Lexmark specifications
- Refurbishment, repair, refilling or remanufacture by a third party of products, supplies or parts
- Products, supplies, parts, materials (such as toners and inks), software, or interfaces not furnished by Lexmark

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Additional rights

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

Contents

Contents

Contents

Contents

1 Printer overview

150-sheet output bin

Paper support

Front cover

Manual feeder

250-sheet tray

Optional 550-sheet drawer

Operator panel

Rear paper exit

Power button

Dust cover

The printer operator panel has a 2-line by 16-character liquid crystal display (LCD), five buttons, and one indicator light that flashes when the printer is processing a job indicated by the Busy message.

2 Installing software for local printing

Before installing printer software

A local printer is a printer attached to a computer using a USB or parallel cable. You must install some necessary printer software on the computer before connecting the USB cable.

Windows

The drivers CD can be used to install software on most Windows operating systems. If the operating system is not supported by the CD, the Add Printer Wizard must be used. Updates for the printer software may be available on the Lexmark Web site at **www.lexmark.com**.
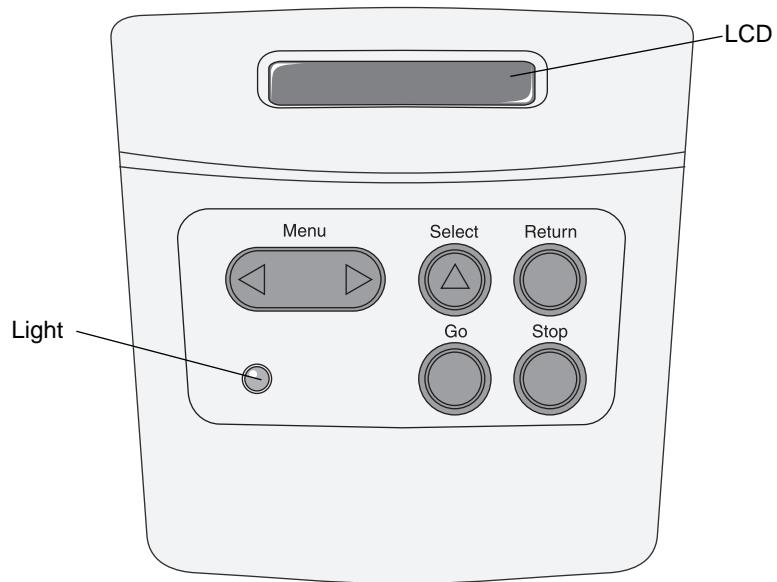
Installing printer software using the drivers CD

You can install printer drivers and software for the following operating systems using the drivers CD:

- Windows Server 2003
- Windows Server 2003 x64
- Windows XP
- Windows XP x64 bit Edition
- Windows 2000
- Windows 98 Second Edition
- Windows Me
- Windows NT 4.x (USB not supported)

1 Insert the drivers CD. If the CD does not launch automatically, click **Start → Run,** and type **D:\Setup.exe** in the Run dialog (where D is the letter of the CD-ROM drive).

2 Select the Local install path and follow the instructions on the screen.

3 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 the computer.

Installing printer software through the Add Printer Wizard

The following operating systems must use the Add Printer Wizard to install printer software:

- Windows 95 (USB not supported)
- Windows 98 First Edition (USB not supported)

1 Insert the drivers CD. If the CD launches automatically, click **Exit**.

2 Launch the Add Printer Wizard.

3 When prompted, select to install a Local printer, then click **Have Disk**.

4 Specify the location of the printer software on the drivers CD. The path should be similar to the following: **D:\Drivers\Print\Win_9xMe\<language>** where D is the letter of the CD-ROM drive.

5 Click **OK**.

Installing optional printer software

If you want to use any of the other software applications available on the drivers CD, now is a good time to set them up.

Local Printer Settings Utility

The Local Printer Settings Utility, a printer configuration utility, gives you the ability to change and save printer settings on a locally (USB and parallel) connected printer. User default settings remain in effect until you make other selections, or until you restore the original printer settings (called preset factory default settings). The configurable settings are organized according to menu. You can change settings such as Toner Darkness, Power Saver, Default Paper Size, and Default Paper Type.

Installing the Local Printer Settings Utility

1   Launch the drivers CD.

2   Click **Install Printer Software.**

3   Select the Custom install path.

4   Under Tools, select **Local Printer Settings Utility**.

5   Click **Finish** to complete the installation.

Use the printer driver to make changes to settings for individual print jobs, which will override the default settings on the printer. To access the Local Printer Setup Utility from your desktop, click **Start** → **Programs** → **Lexmark** → **Local Printer Settings Utility**.

Macintosh

Mac OS 9.x or later is required for USB printing. To print locally to a USB-attached printer, create a desktop printer icon (Mac OS 9), or create a queue in Print Center / Printer Setup Utility (Mac OS X).

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

Creating a queue in Print Center / Printer Setup Utility (Mac OS X)

1   Install a PostScript Printer Description (PPD) file on the computer. A PPD file provides detailed information about the capabilities of a printer to the Macintosh computer.

   a   Insert the drivers CD.

   b   Double-click the installer package for the printer.

   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   On the Easy Install screen, click **Install.**

   g   Enter the user password, and click **OK**. All the necessary software is installed on the 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**.

4 Do one of the following:

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

`Creating a desktop printer icon (Mac OS 9.x)

1 Install a PostScript Printer Description (PPD) file on the computer. A PPD file provides detailed information about the capabilities of a printer to the Macintosh computer.

  a Insert the drivers CD.

  b Double-click **Classic**, and double-click the installer package for the printer.

  c Choose the language needed for use, and click **Continue**.

  d Click **Continue** after viewing the Readme file.

  e Click **Continue** after viewing the license agreement, and click **Agree** to accept the terms of the agreement.

  f On the Easy Install screen, click **Install**. All the necessary files are installed on the computer.

  g Click **Close** when installation is complete.

2 Do one of the following:

- For *Mac OS 9.0*: Open **Apple LaserWriter**.
- For *Mac OS 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 the 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 the printer, and click **OK**. The printer appears in the original Printer (USB) window.

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

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

9 Specify a printer name, and click **Save**. The 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.

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.

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.
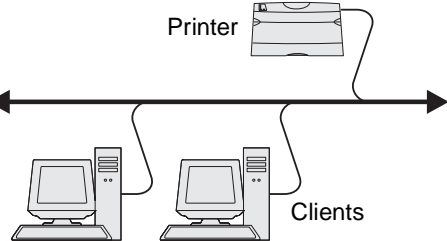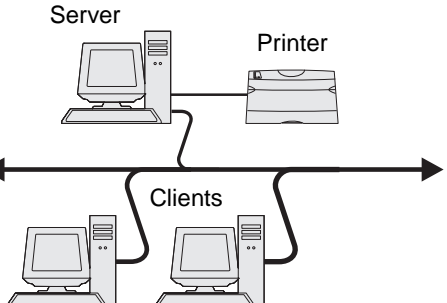
3 Installing software for network printing

Windows

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

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

Printing configuration		Go to page
Direct IP printing • Printer is connected directly to the network using a network cable, such as Ethernet. • Printer drivers are typically installed on each network computer.	Printer Clients	16
Shared printing • 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.	Server Printer Clients	17

Installing software for direct printing

    1 Launch the drivers CD.

    2 Follow the instructions on the screen. Select the **Suggested** path to accept the defaults. Select **Custom** to choose the software that is installed. The printer is automatically discovered on the network, an IP address is assigned, and a network printer object is created in the printers folder.

    3 Print a test page to verify printer installation.

    4 Repeat steps 1–4 on every computer you want to enable to print directly to the network printer.

Setting up shared printing

Setting up shared printing requires several steps and should be done in the following order:

1   Install the software on the computer attached to the printer.

2   Share the printer on the network.

3   Connect other network computers to the printer.

Installing software on the computer attached to the printer

1   Launch the drivers CD.

2   Follow the instructions on the screen.

3   Connect the USB cable to the printer. Once Plug and Play is finished, a printer object will be created in the printers folder.

4   Print a test page to verify local printer installation.

Sharing the printer on the network

1   Open the Printers folder of the operating system.

2   Select the printer object.

3   Open the Properties of the printer,and click the option to share the printer. This requires assigning a shared name to the printer.

4   Click **OK**. If files are missing, prompts may appear to request the operating system CD.

5   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 attached computer, and look for the shared name assigned to the printer.

Connecting other network computers to the printer

The printer driver or a subset of the driver information must be installed on every network computer that you want to enable to print to a shared printer.

Using the peer-to-peer method

With this method, the printer driver is fully installed on each network computer. Each network computer retains control of driver modifications. Each network computer handles the print job processing.

1   Launch the Add Printer Wizard.

2   Select the option to add a network printer.

3   Enter the printer name or URL (if on the Internet or an intranet), and then click **Next**. If the printer name or URL is unknown, leave the text box blank, and then click **Next**.

4   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 looks similar to the following: **\\<server host name>\<shared printer name>.**

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.

5   Click **OK**. When prompted, select whether this printer will be the default printer for the client.

6   When installation is complete, print a test page to verify.

7 Repeat steps 1–6 on every network computer you want to enable to print to the shared printer.

Using the point-and-print method

> **Note:** Point and print may not be supported in some 64 bit environments. Refer to the Lexmark Web site at **www.lexmark.com** for the latest information. Look for a Knowledgebase article about 64 bit support for the printer.

This method is usually the best use of system resources. The computer attached to the printer handles driver modifications and print job processing for all print jobs including those routed from other network computers. This lets the other network computers return to applications much faster. With this method, a subset of driver information is copied from the computer attached to the printer across the network to the other computers. This is just enough information to send a print job to the printer.

1 On the next network computer you want to enable to print to the printer, double-click **Network Neighborhood or My Network Places** on the desktop.

2 Locate the host name of the computer attached to the printer, and double-click the host name.

3 Right-click the shared printer name, and select the option to install the printer on your computer.

Wait a few minutes for the printer software to be copied from the computer attached to the printer to the computer you are working on, 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.

4 Close **Network Neighborhood or My Network Places**.

5 Print a test page to verify printer installation.

6 Repeat steps 1–5 on every network computer you want to enable to print to the shared printer.

Installing optional printer software

If you want to use any of the other software applications available on the drivers CD, now is a good time to set them up. They can be installed by following the Custom install path.

Helpful tips for network printing

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. See **Printing a network setup page**.

2 Go to **Verifying the IP settings on page 19**.

If your network is not using DHCP, then you must manually assign an IP address to the printer.

An easy way to do this is to use the printer operator panel:

`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 option card slot 1 or 2, you see `Network Option 1` or `Network Option 2`.

1 Press **Menu** until you see `NETWORK MENU`, and then press **Select**.

2 Press **Menu** until you see `Standard Network`, and then press **Select**.

3 Press **Menu** until you see `Std Net Setup` (or `Network 1 Setup` or `Network 2 Setup`), and then press **Select**.

4 Press **Menu** until you see `TCP/IP`, and then press **Select**.

5 Press **Menu** until you see `Set IP Address`, and then press **Select**.

6 Change the address by pressing **Menu** to increase or decrease each number. Press **Select** to move to the next segment. Press **Select** when you are finished. The message `Saved` appears briefly.

7 Press **Menu** until you see `Set IP Netmask`, and then press **Select**.

8 Repeat **step 6** to set the IP Netmask.

9 Press **Menu** until you see `Set IP Gateway`, and then press **Select**.

10 Repeat **step 6** to set the IP Gateway.

11 When you are finished, press **Go** to return the printer to the `Ready` state.

12 Go on to **Verifying the IP settings on page 19**.

Printing a network setup page

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

> **Note:** If an optional MarkNet print server is installed, you may see `Print Net1 Setup` (or `Print Net2 Setup`).

1 Make sure the printer is on.

2 Press **Menu** until you see `UTILITIES MENU`, and then press **Select**.

3 Press **Menu** until you see `Print Net Setup`, and then press **Select** to print the page.

> **Note:** *Save the network setup page after it prints*. You will use it in the other steps.

4 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 network support person for a solution. Afterwards, print another network setup page to verify that you are connected to your network.

Printing setup pages

Verifying the IP settings

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 the menu settings and network setup pages on page 89** for additional information.

> **Note:** To display a command prompt on a Windows computer, click **Start → Programs → Command prompt** (or **Accessories → Command prompt** if using Windows 2000).

Ping the printer, and verify that it responds. For example, at a command prompt on a network computer, type `ping` followed by the new printer IP address (for example, `ping 192.168.0.11`). If the printer is active on the network, you should receive a reply.

Macintosh

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).

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

Mac OS X

Step 1: Install a custom PPD file

1 Install a PostScript Printer Description (PPD) file on the computer.

    a Insert the drivers CD.

    b Double-click the installer package for the printer.

    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 On the Easy Install screen, click **Install**.

    g Enter the user password, and click **OK**. All the necessary software is installed on the computer.

    h Click **Close** when installation is complete.

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

Using AppleTalk Printing

Follow these steps to create a print queue using AppleTalk Printing.

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. Look on the network setup page under the "AppleTalk" heading to know which zone or printer to select.

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 "Copies & Pages" pop-up menu. Look on the Network Setup page under the "AppleTalk" heading to find the default name of the printer to know which printer to select.

       • If the PPD file displayed in the Summary window is correct for the printer, then printer setup is complete.

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

Using IP Printing

Follow these steps to create a print queue using IP Printing.

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 Address box.

6 Choose **Lexmark** 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 "Copies & Pages" pop-up menu.

    d Do one of the following:

        • If the PPD file displayed in the Summary window is correct for the printer, then printer setup is complete.

        • If the PPD file displayed in the Summary window is *not* correct for the printer, delete the printer from the printer list in Print Center or Printer Setup Utility, and repeat the step for installing a custom PPD file.

Mac OS 9.x

Step 1: Install a custom PPD file

1 Insert the drivers CD.

    a Double-click **Classic**, and double-click the installer package for the printer.

    b Choose the language needed for use, and click **Continue**.

    c Click **Continue** after viewing the Readme file.

    d Click **Continue** after viewing the license agreement, and click **Agree** to accept the terms of the agreement.

    e On the Easy Install screen, click **Install**. All the necessary files are installed on the computer.

    f Click **Close** when installation is complete.

        Note: A PPD for the 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 For a routed network, select the default zone from the list. For the zone to select, look on the Network Setup page under AppleTalk for Zone.

3 Select the new printer from the list.

4 To determine 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 just added.

    b Choose **Printing → Change Setup**.

    – If the PPD file displayed in the PostScript Printer Description (PPD) file portion of the menu is correct for the 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 the printer, repeat the step for installing a custom PPD file.

UNIX/Linux

The 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.

These packages are available for download from the Lexmark Web site. The driver package needed is also on the drivers CD.

NetWare

The 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 Print media tasks and tips

What types of print media can be loaded?

Get the most out of your printer by properly loading the trays. Never mix media types within a tray.

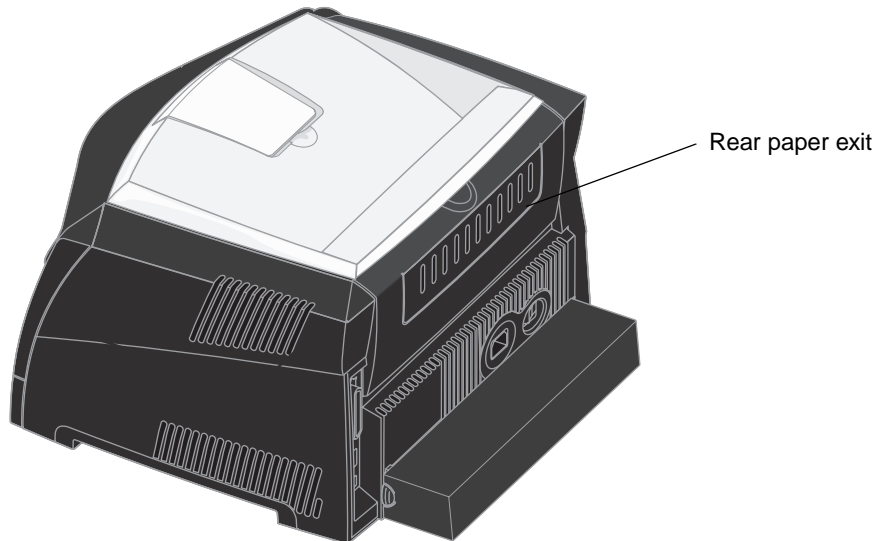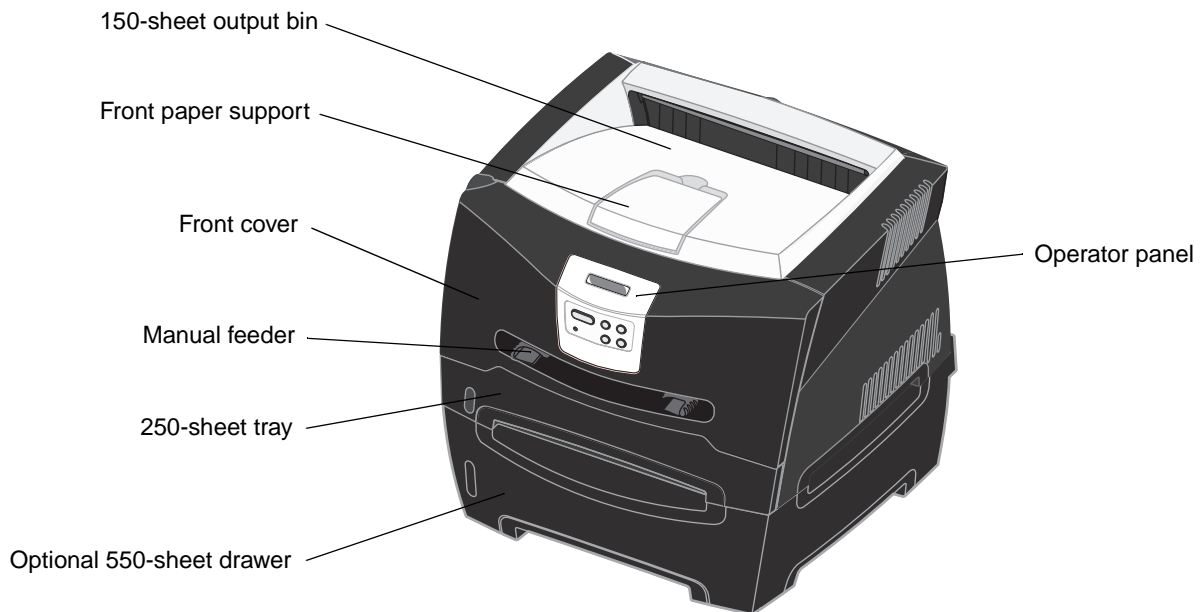| Source	Sizes	Types	Weight	Capacity[*] (sheets)
Tray 1 (250-sheet tray)	A4, A5, JIS B5, letter, legal, executive, folio, statement, Universal[‡]	Plain paper, transparencies, labels	60–90 g/m^2 (16–24 lb)	• 250 paper • 50 labels • 50 transparencies
Tray 2 (550-sheet tray)	A4, A5, JIS B5, letter, legal, executive, folio, statement, Universal[‡]	Plain paper, transparencies, labels	60–90 g/m^2 (16–24 lb)	• 550 paper • 50 labels • 50 transparencies
Manual feeder	A4, A5, JIS B5, letter, legal, executive, folio, statement, Universal[‡]	Plain paper, transparencies, labels	60–163 g/m^2 (16–43 lb)	1
		Card stock[†]	• 120–163 g/m^2 (16–90 lb) Index Bristol • 75–163 g/m^2 (50–100 lb) Tag	
	7¾, 9, 10, DL, C5, B5, other (custom size)	Envelopes	90 g/m^2 (24 lb)	

* Capacity for 20 lb print media, unless otherwise noted.
† Grain short is recommended. Use rear exit for best results.
‡ Universal size ranges:
  – **Tray 1**: 89–216 x 210–356 mm (3.5–8.5 x 8.27–14.0 in.)
  – **Tray 2**: 148–216 x 210–356 mm (5.83–8.5 x 8.27–14.0 in.)
  – **Manual feeder**: 76–216 x 127–356 mm (3.0–8.5 x 5.0–14.0 in.) (includes 3 x 5 in. cards)				

Where can print media be loaded in the printer?

Your printer has two standard paper sources: an automatic 250-sheet paper feeder (Tray 1) and a single-sheet manual feeder. Use Tray 1 for most print jobs. Use the manual feeder for a single piece of paper, transparency, envelope, paper label, card stock, or index card. You can increase paper capacity by purchasing an optional 550-sheet drawer.

An output bin on top of the printer holds up to 150 sheets. The single-sheet rear exit provides a straight-through paper path to help reduce curling and potential jams. This is especially useful for specialty media, such as transparencies, envelopes, paper labels, card stock, or index cards.

150-sheet output bin

Front paper support

Front cover

Manual feeder

250-sheet tray

Optional 550-sheet drawer

Operator panel

Rear paper exit

Tips on choosing the right print media

Selecting the right paper or other media reduces printing problems. For best print quality, try a sample of the paper or other media you are considering before buying large quantities.

See the *Card Stock & Label Guide* available on our Lexmark Web site at **www.lexmark.com** for more information about which paper provides optimum results for your printing environment.

Paper

- For the best print quality, use 20 lb (75 g/m^2) xerographic, grain long paper.

  The printer can automatically feed paper weights from 60 to 90 g/m^2 (16 to 24 lb bond) grain long. Paper lighter than 60 g/m^2 (16 lb) might not be stiff enough to feed properly, causing jams. Paper heavier than 90 g/m^2 (24 lb) should be fed through the optional 550-sheet tray or the manual feeder.

- The laser printing process heats paper to high temperatures of 170°C (338°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 you have chosen is acceptable for laser printers.

Preprinted forms and letterhead

- Use only forms and letterhead printed using an offset lithographic or engraved printing process.

- Choose papers that absorb ink, but do not bleed.

- 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 170°C (338°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. If you are in doubt, contact your paper supplier.

Preprinted papers such as letterhead must be able to withstand temperatures up to 170°C (338°F) without melting or releasing hazardous emissions.

Transparencies

- Use transparencies designed specifically for laser printers. Transparencies must be able to withstand temperatures of 170°C (338°F) without melting, discoloring, offsetting, or releasing hazardous emissions.

  We recommend Lexmark laser printer transparencies: part number 70X7240 for letter size transparencies; part number 12A5010 for A4 size transparencies.

- To prevent print quality problems, avoid getting fingerprints on the transparencies.

Envelopes

- Use envelopes made from 24 lb (90 g/m^2) bond paper.

- Do not use envelopes that:
  - Have excessive curl
  - Are stuck together
  - Are damaged in any way
  - Contain windows, holes, perforations, cutouts, or embossments
  - Use metal clasps, string ties, or metal folding bars
  - Have postage stamps attached

- – Have any exposed adhesive when the flap is in the sealed position
- Use envelopes that can withstand temperatures of 170°C (338°F) without:
  - – sealing
  - – excessive curling
  - – wrinkling
  - – releasing hazardous emissions

  If you have any doubts about the envelopes you are considering using, check with the envelope supplier.

- A combination of high humidity (over 60%) and the high printing temperatures may seal the envelopes.

Labels

- Do not use labels that have exposed adhesive on the sheets.

- Do not print a large number of labels continuously.

- Do not use vinyl labels.

- Use labels that can withstand temperatures of 170°C (338°F) without sealing, excessive curling, wrinkling, or releasing hazardous emissions. Label adhesives, face sheet (printable stock), and topcoats must also be able to withstand 25 pounds per square inch (psi) (172 kilopascals) pressure.

Card stock

- 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.

- Use card stock with a maximum weight of 163 g/m^2 and a minimum size of 76 x 127 mm (3 x 5 in.).

Tips on storing print media and supplies

Storing paper

Use the following guidelines to avoid paper feeding problems and uneven print quality.

- Store paper 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, curl, or become damaged.

- Do not place anything on top of paper packages.

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

Tips on preventing jams

You can avoid most paper jams by correctly loading paper and specialty media in the printer.

The following hints can help you avoid paper jams:

- Do not load wrinkled, creased, or damp paper.

- Never mix media types within a tray.

- Flex, fan, and straighten paper before you load it.
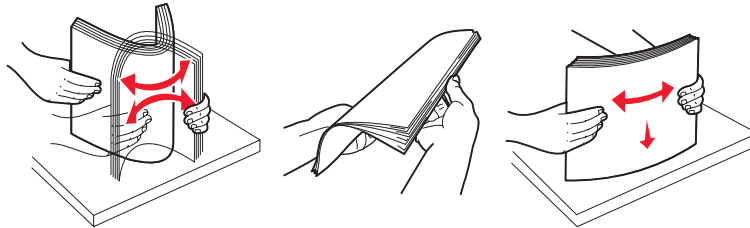
- Do not exceed the maximum stack height.

- Push all trays *firmly* into the printer after loading them.

- Make sure the guides in the trays are positioned snug against the paper or specialty media.

- Do not remove paper trays while a job is printing.

- Before loading transparencies, fan the stack to prevent sheets from sticking together.

- Do not use envelopes that:

    – Have excessive curl
    – Are stuck together
    – Are damaged in any way
    – Contain windows, holes, perforations, cutouts, or embossments
    – Have metal clasps, string ties, or metal folding bars
    – Have postage stamps attached
    – Have any exposed adhesive when the flap is in the sealed position

- Use only recommended paper. See the *Card Stock & Label Guide* available on our Lexmark Web site at **www.lexmark.com** for more information about which paper provides optimum results for your printing environment.

- If you need detailed information before purchasing large quantities of customized paper, see the *Card Stock & Label Guide*.

# *How to load the 250-sheet and 550-sheet trays*

Follow these instructions to load paper in the 250-sheet tray and 550-sheet tray.

   **1** Remove the tray.
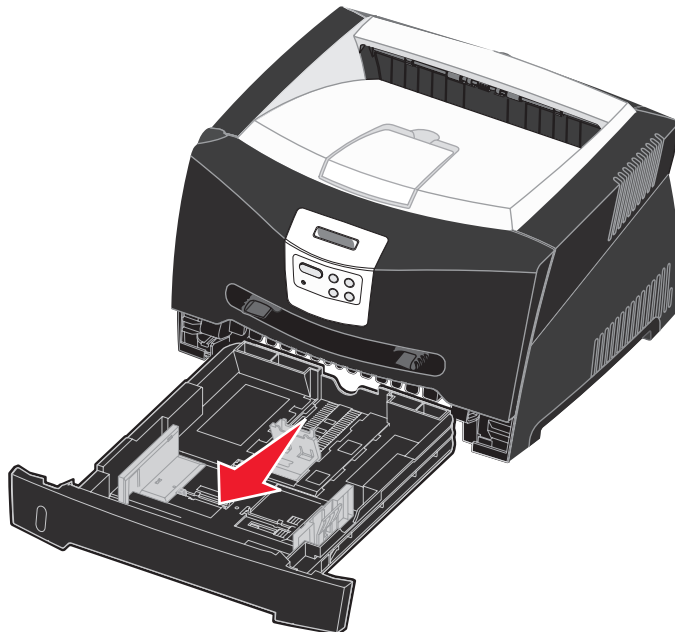
> **Note:** If you are going to load legal or folio size paper, you have to extend the length of the paper tray. See **Extending the tray for legal or folio size paper on page 32** for instructions.

    2 Prepare a stack of paper for loading by flexing and fanning it back and forth. Straighten the edges on a level surface.
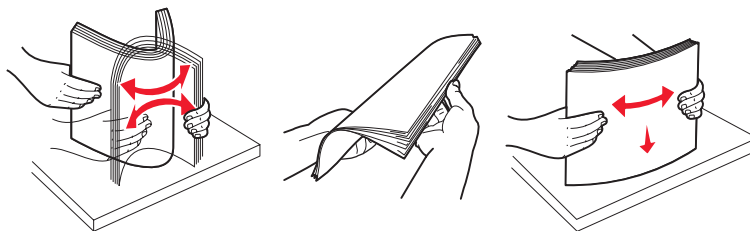
3   Load the paper in the tray with the print side facing down.
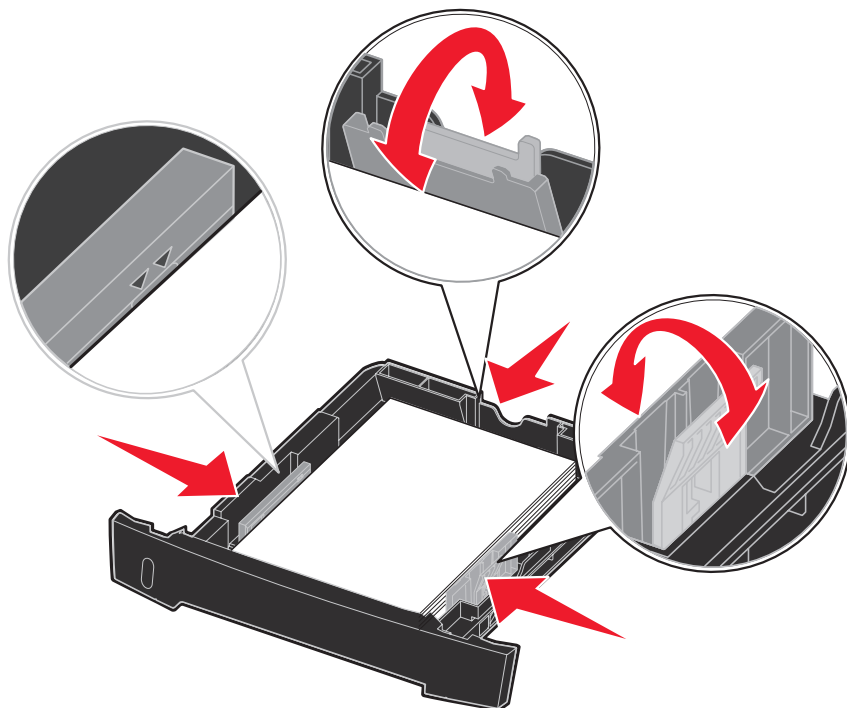
> **Note:** Load letterhead paper with the design side facing down. The top edge of the sheet with the logo should be placed at the front of the tray.

Make sure the paper is below the max fill line on the side guides. Overloading may cause jams.

4   Slide the two side guides and the back guide until they fit snugly against the stack of paper.

5 Insert the tray.
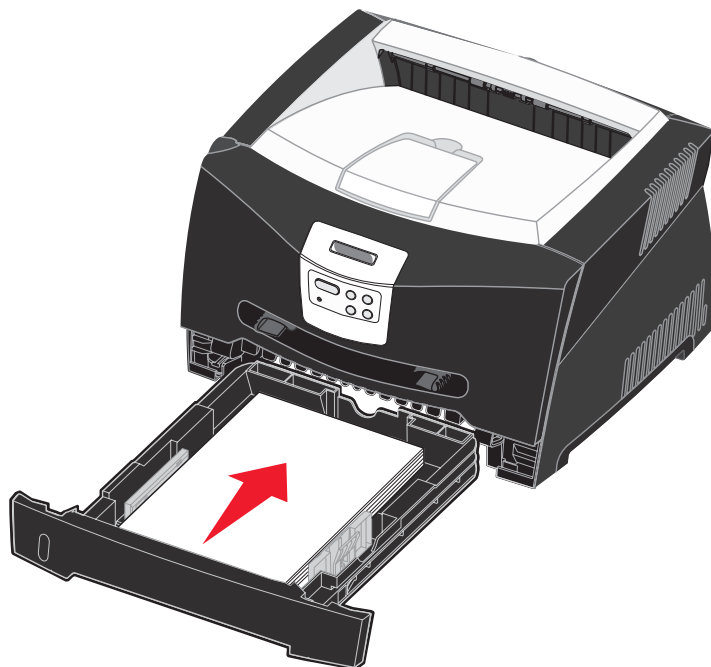
6 Extend the paper support on the output bin.

Extending the tray for legal or folio size paper

To load legal or folio size paper, you need to extend the paper tray. You should also attach the dust cover on the back of the printer to protect the tray while it is extended.

1   Press down on the latch at the back of the tray.

2   Expand the tray until the extender locks into place.
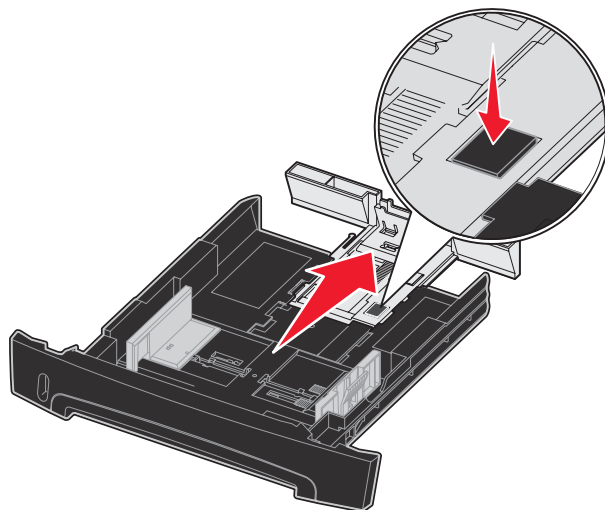
Attaching the dust cover

The dust cover helps protect the paper tray from the environment as well as keep the tray from being knocked out of position while it is extended.

Attach the dust cover to the back of the printer by aligning the tabs on the cover to the holes on the printer, and *snap* the cover into place.
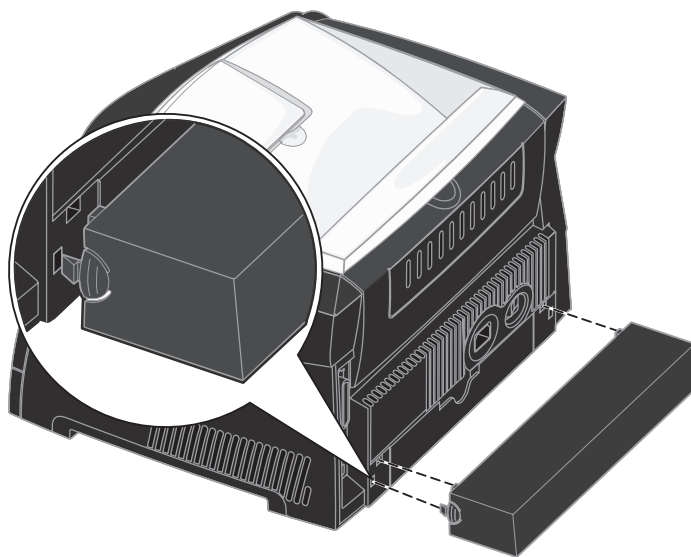
How to load the manual feeder

The manual feeder is located at the front of your printer and can only feed one sheet of print media at a time. You can use the manual feeder to make quick runs of paper types or sizes that are not currently loaded in the paper tray.

For information on acceptable print media to use in the manual feeder, see **What types of print media can be loaded? on page 23**. Using only the specified print media helps prevent paper jams and print quality problems.

> **Note:** We recommend that you send your print job to the printer prior to loading the manual feeder. See **How to manually feed a print job on page 38** for more information.

To load the manual feeder:

1 Place a sheet of the selected print media, print side facing up, at the center of the manual feeder, but only to the point where its leading edge can contact the paper guides. Otherwise, the printer will engage the print media too soon and likely skew the print job.

2 Adjust the paper guides to the print media width.

3 Hold both sides of the print media close to the manual feeder, and push it into the printer until it automatically engages.

There is a brief pause between the time the printer engages the print media and when it feeds into the printer.

> **Warning:** Do not force the print media into the feeder. Forcing the media causes jams.

- Insert envelopes with the flap side down and with the stamp area as shown.

- Hold transparencies by the edges, and avoid touching the print side. Oil from your fingers can affect print quality.

- Load letterhead face-up, with the top of the sheet entering first.

- If you experience problems with paper feed, turn the paper over.
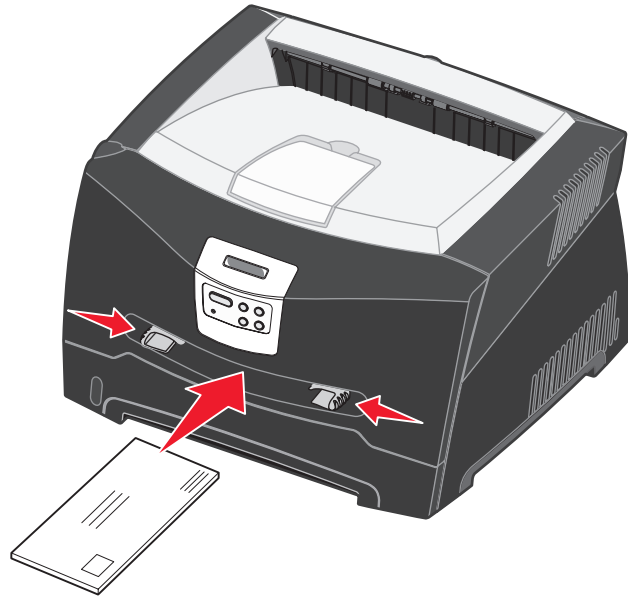
How to use the rear exit

The single-sheet rear exit provides a straight-through paper path to help reduce curling and potential jams. This is especially useful for specialty media, such as transparencies, envelopes, labels, card stock, or index cards.

To use the rear exit, open the rear exit door. When the rear exit door is open, all print media comes out the rear exit. When closed, all media is sent to the output bin on top of the printer.
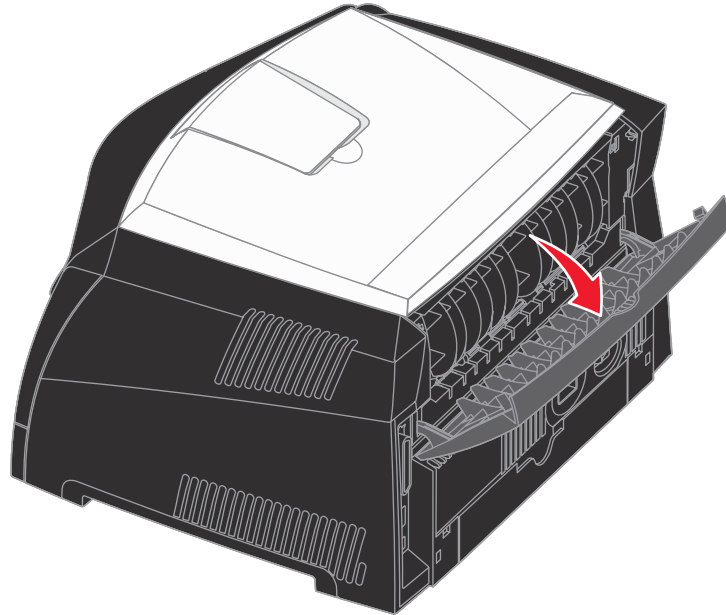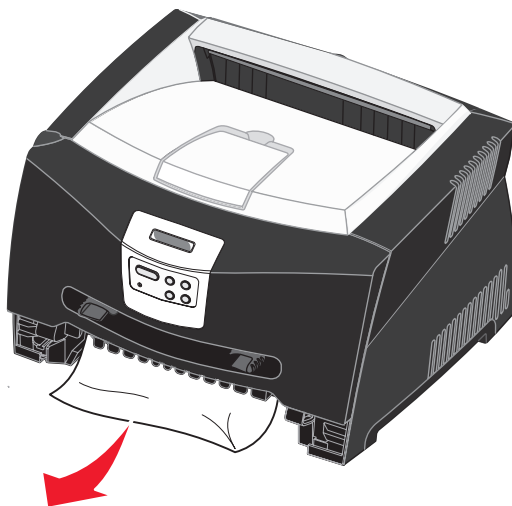
How to clear paper jams

By carefully selecting print media and loading it properly, you should be able to avoid most jams.

> **Note:** To clear the `Paper Jam` error message, you must remove all jammed print media from the entire paper path, and then press **Go**.
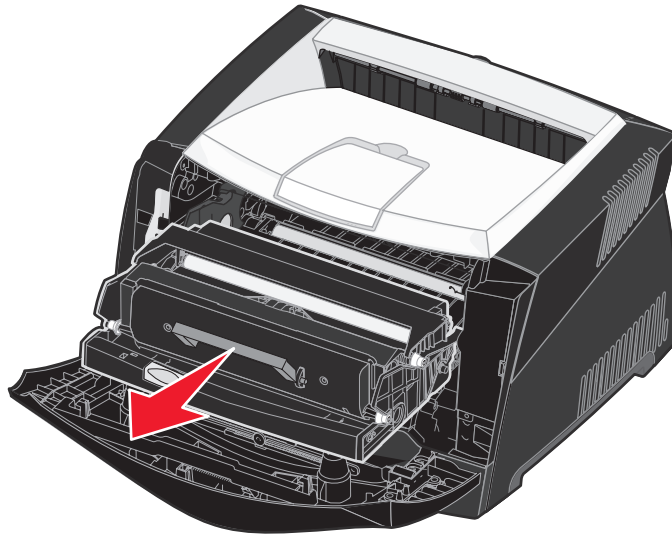
To clear a paper jam:

**1** If you are feeding paper from a tray, remove the tray, and then remove any jams.

2 Open the front cover, and remove the print cartridge assembly.

Warning: Do not leave the print cartridge assembly exposed to direct light for an extended period of time. Extended light exposure can cause print quality problems.
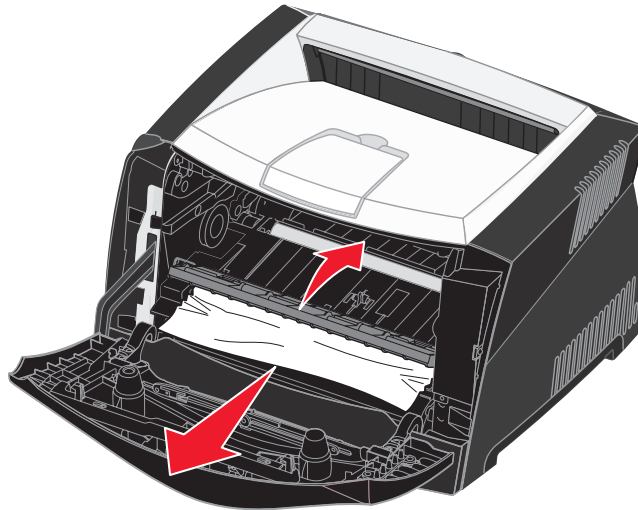
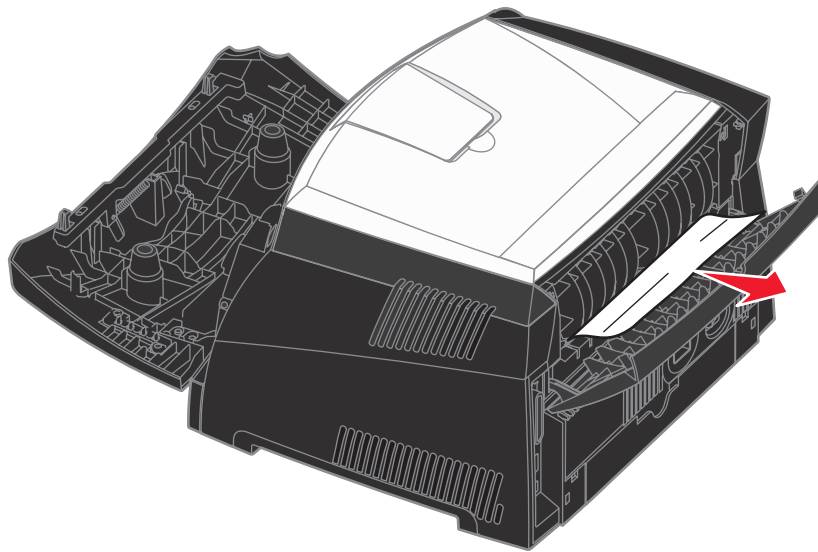**3** Remove any jams in the area behind the print cartridge assembly.
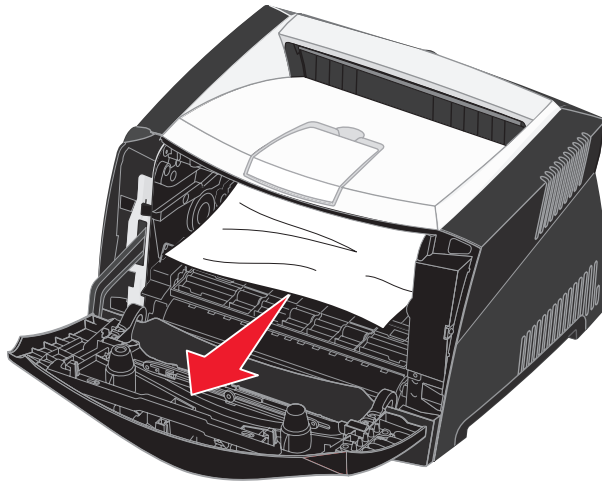
Warning: Fuser or area may be hot.

4 Lift the flap at the front of the printer, and remove any jams beneath the flap.

5 Open the rear exit, and remove any jams.

> **Warning:** Fuser or area may be hot.

6 After you have cleared the jams, reinstall the print cartridge assembly, make sure all printer covers and trays are closed, and then then press **Go** to resume printing.

> **Note:** The printer reprints the pages that caused the paper jam.

5 Printing tasks

How to manually feed a print job

The manual feeder is located at the front of the printer and can only feed one sheet of print media at a time. For information on acceptable print media to use in the manual feeder, see **What types of print media can be loaded? on page 23**.

When using the manual feeder, send the print job to the printer before loading the print media. When the printer is ready, it will prompt you to load the manual feeder, at which point you should load the media.

To manually feed a print job:

1   From the computer software application, select **File → Print**.

2   Click **Properties** (or **Options**, **Printer**, or **Setup**, depending on the application) to view the printer driver settings.

3   Click the **Paper** tab.

4   Select **Manual paper** from the Paper tray drop-down list.

5   Select the appropriate Paper size and type.

6   Click **OK**.

7   Click **OK** on the Print window to send the job to print.

8   Place a sheet of the selected print media, print side facing up, at the center of the manual feeder, but only to the point where its leading edge can contact the paper guides.

   • Hold transparencies by the edges, and avoid touching the print side. Oil from your fingers can affect print quality.
   • 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.
   • Load letterhead face-up, with the top of the sheet first.
   • If you experience problems with paper feed, turn the paper over.

9   Adjust the paper guides to the print media width.

10 Hold both sides of the print media close to the manual feeder, and push it into the printer until it automatically engages.
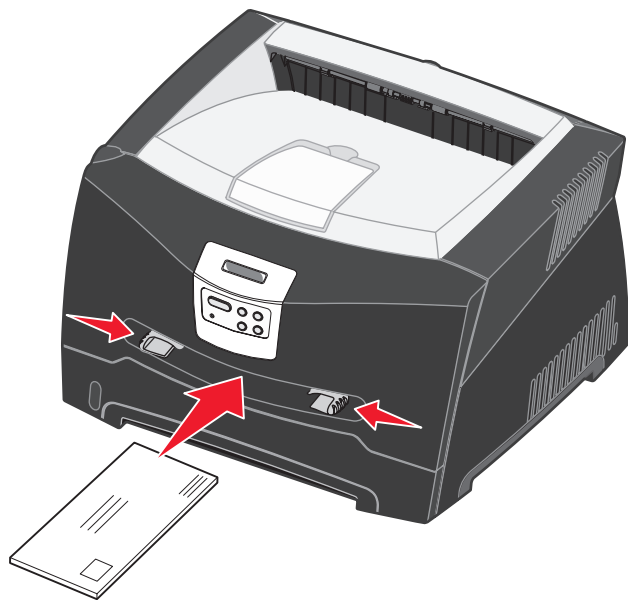
There is a brief pause between the time the printer engages the print media and when it feeds into the printer.

Warning: Do not force the print media into the feeder. Forcing the media causes jams.

How to print on both sides of the paper (manual duplex)

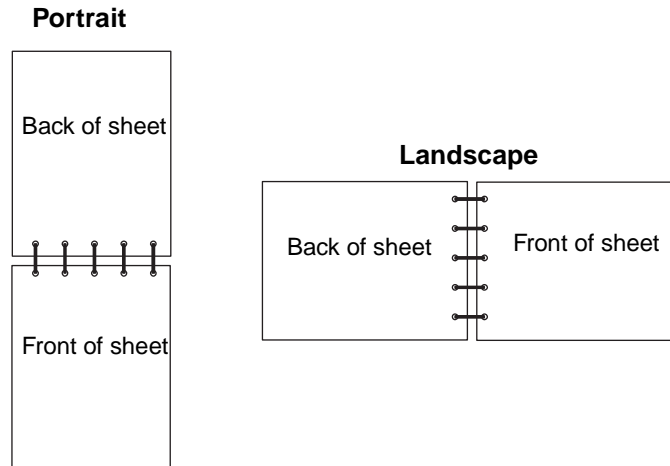Printing on both sides of the paper reduces printing costs.

Although you can use Tray 1 or the 550-sheet tray to print the first side of the duplex job, only use Tray 1 to print the second side.

You can choose how you want your job duplexed: Long Edge or Short Edge.

- Long Edge means pages are bound along the long edge of the page (left edge for portrait, top edge for landscape).

Landscape

Portrait

Back of sheet / Front of next sheet

Back of sheet / Front of next sheet
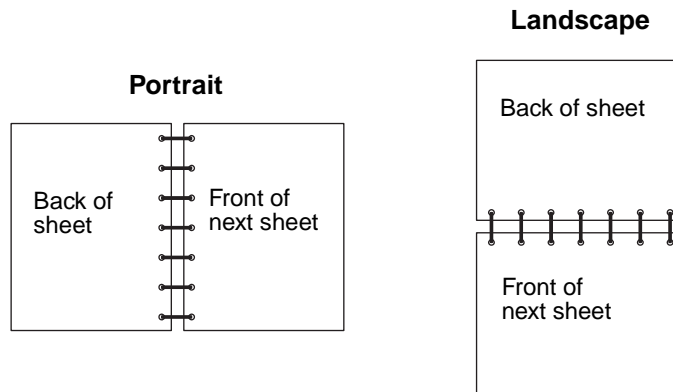
- Short Edge means pages are bound along the short edge of the page.

Portrait

Back of sheet / Front of sheet

Landscape

Back of sheet / Front of sheet

To manually duplex a print job:

1 From the computer software application, select **File → Print**.

2 Click **Properties** (or **Options**, **Printer**, or **Setup**, depending on the application) to view the printer driver settings.

3 From the Page Layout tab, select **2-sided printing**.

4 Select either **Long Edge** or **Short Edge**.

5 Select **Manual 2-sided printing**.

6 Click the **Paper** tab.

7 Select the appropriate **Input options** for your print job.

8 Click **OK**.

9 Click **OK** on the Print window.

The printer prints every other page of the document first. Once the first side of your job prints, the Load Paper message appears.

10 Load the paper back into the printer with the already-printed side up and the top of the page toward the front of the tray, and press **Go** to resume printing.

> **Note:** Manual duplex is not available on a Macintosh computer.

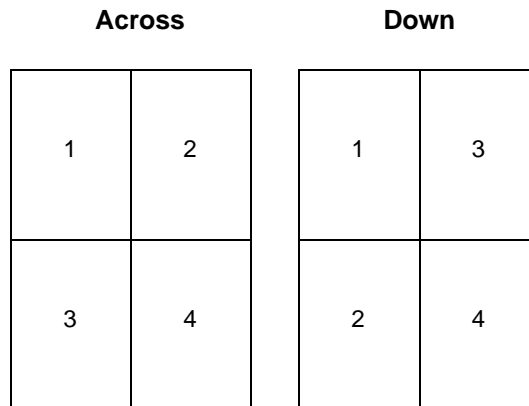# How to print multiple page images on one page (N-up printing)

The Multipage Printing (N-up) setting is used to print multiple page images on a single page. For example, 2-Up means two page images are printed on one page, 4-up means four page images are printed on one page, and so on.

The printer uses the Multipage Order, Multipage View, and Multipage Border settings to determine the order and orientation of the page images, and whether a border is printed around each page image.

1 From the computer software application, select **File → Print**.

2 Click **Properties** (or **Options**, **Printer**, or **Setup**, depending on the application) to view the printer driver settings.

3 From the Page Layout tab, select the number of images per sheet (from the Multipage printing section) and the orientation you would like the paper to have.

The positioning depends on the number of images and whether the images are portrait or landscape in orientation.

For example, if you select 4-Up multipage printing and portrait orientation, the results differ depending on the Multipage Order value you select:

Across		**Down**	
1	2	1	3
3	4	2	4

4 To print a visible border around each page image, select **Print page borders**.

5 Click **OK**.

6 Click **OK** on the Print window to send the job to print.

How to print a booklet

The Booklet setting lets you print multiple pages in booklet form without having to re-format your document so the pages print in the proper order. The pages print so that the finished collated document may be folded along the center of each page to form a booklet.
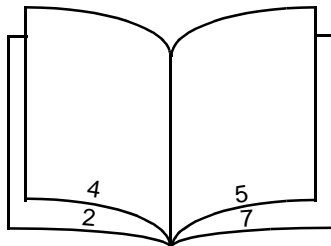
If the document contains many pages, a booklet may have too many pages to fold easily. If you are printing a fairly large booklet, you might want to use the Sheets per Bundle option to specify how many physical pages are put into one bundle. The printer will print the necessary number of bundles, which you can then bind into one booklet. Printing in bundles helps the outside edge of the pages line up more evenly.

You must specify whether or not you want to print using any Duplex printing options before you select to print using the booklet function. Once you choose Print Using Booklet, the controls for the Duplex options are unavailable and remain at the last setting used.

1 From the computer software application, select **File → Print**.

2 Click **Properties** (or **Options**, **Printer**, or **Setup**, depending on the application) to view the printer driver settings.

3 From the Page Layout tab, click **More Page Layout Options**.

4 Click **Booklet**.

   If your print job is large, you may want to use the **Sheets per Bundle** option.

5 Select the appropriate binding edge for your print job.

6 To print a visible fold mark on the pages, select **Print fold mark**.

7 Click **OK** twice.

8 Click **OK** on the Print window to send the job to print.

   Note: Booklet printing is not available on a Macintosh computer.

How to print a poster

The Poster setting lets you print a single image across several pages. Once printed, you can combine the pages to create one large image.
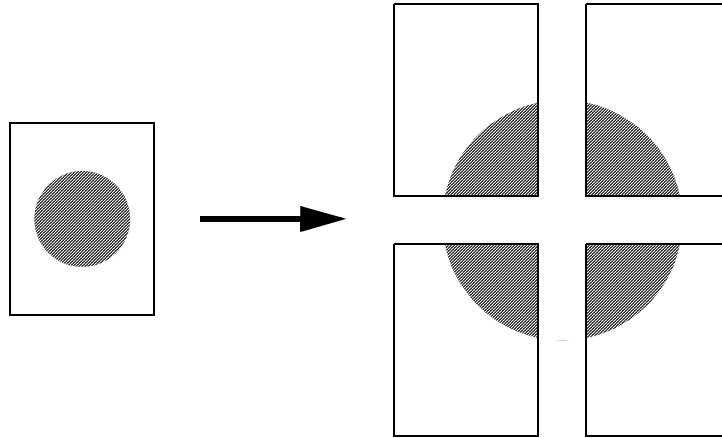
1   From the computer software application, select **File → Print**.

2   Click **Properties** (or **Options**, **Printer**, or **Setup**, depending on the application) to view the printer driver settings.

3   From the Page Layout tab, click **More Page Layout Options**.

4   Click **Poster**.

5   Select the poster size you want by choosing the number of pages to use in the poster.

6   To print crop marks on the pages, select **Print crop marks**.

7   Select the amount of overlap you want each page to have.

8   Click **OK** twice.

9   Click **OK** on the Print window to send the job to print.

> **Note:** Poster printing is not available on a Macintosh computer.

How to print on letterhead

To print on letterhead, make sure the paper is loaded with the proper orientation.

1 Make sure the letterhead is properly loaded according to the paper source you are using:

- **Tray 1 or 2**—Load the letterhead paper with the design side facing down. The top edge of the sheet with the logo should be placed at the front of the tray.
- **Manual feeder**—Load the letterhead paper face-up, with the top of the sheet entering first.

   Note: If you are using the manual feeder, first send the job to print, then load the letterhead when the printer displays the **Load Manual Feeder** message (see **How to manually feed a print job on page 38**).

2 From the computer software application, select **File → Print**.

3 Click **Properties** (or **Options**, **Printer**, or **Setup**, depending on the application) to view the printer driver settings.

4 Click the **Paper** tab.

5 Select **Letterhead** from the Paper type drop-down lists.

6 Select the appropriate paper size and tray.

7 Click **OK**.

8 Click **OK** on the Print window to send the job to print.

How to print using an overlay or a watermark

Overlays and watermarks are templates that can be defined and then printed as a background on a form before the data from the current job is printed. Typical examples of overlays include company logos or letterheads, decorative borders, and simulated "preprinted" forms. Overlays can include text, graphics, or images. Watermarks are simple text. You can create overlays and watermarks and then download them directly to the printer, or you can create an overlay or watermark file on your system and then download it to the printer.

   Note: To create and download overlays, you must have flash memory installed.

For information about how to create, save, or download an overlay or watermark, see the printer driver Help.

Using an overlay

1 From the computer software application, select **File → Print**.

2 Click **Properties** (or **Options**, **Printer**, or **Setup**, depending on the application) to view the printer driver settings.

3 Click the **Other Options** tab.

4 Click **Overlay**.

5 Select which pages receive the overlay.

6 Select the overlay to use.

7 Select whether to place the overlay on top of or underneath the page image in the Overlay placement area.

8 Click **OK**.

Using a watermark

1 From the computer software application, select **File → Print**.

2 Click **Properties** (or **Options**, **Printer**, or **Setup**, depending on the application) to view the printer driver settings.

3 Click the **Other Options** tab.

4 Click **Watermark**.

5 Select which pages receive the watermark.

6 Select the watermark to use.

7 Select whether to place the watermark on top of or underneath the page image in the Watermark placement area.

8 Click **OK**.

How to cancel a print job

A print job can be canceled from the operator panel or from your computer.

From the printer operator panel

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

1 Press **Menu** until you see `Job Menu`, and then press **Select**.

2 Press **Menu** until you see `Cancel Job`, and then press **Select**.

From a Windows computer

1 Click **Start → Settings → Printers**.

2 Double-click the printer you are using to print the job.

A list of print jobs appears.

3 Right-click the document you want to stop printing, and then click **Cancel**.

Canceling a job from a Macintosh computer

Canceling a print job from a computer running Mac OS 9

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 Select the print job you want to cancel.

3 Click the trash can button.

Canceling a job from a computer running Mac OS X

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

1 Open **Applications → Utilities**, and then double-click **Print Center** or **Printer Setup**.

2 Double-click the printer you are printing to.

3 In the printer window, select the print job you want to cancel.
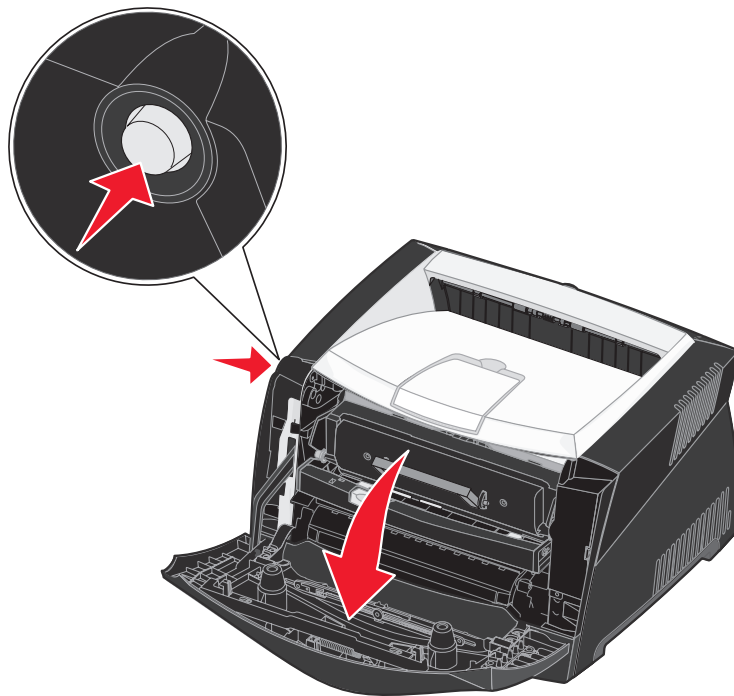
4 Press **Delete**.

6 How to install options

How to access the system board

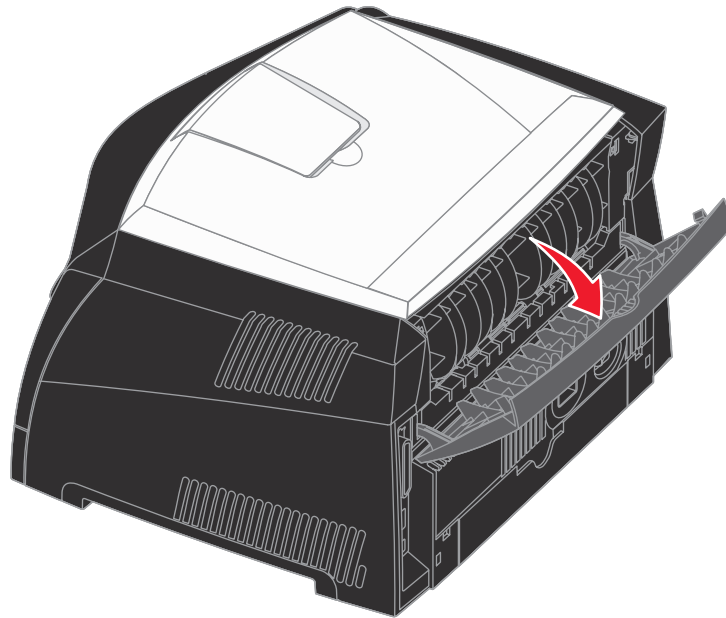To install a memory or flash card, you must access the printer system board.

> **CAUTION:** Turn the printer off, and unplug the power cord before continuing.

1 Open the front cover by pressing the button on the left side of the printer and lowering the cover.
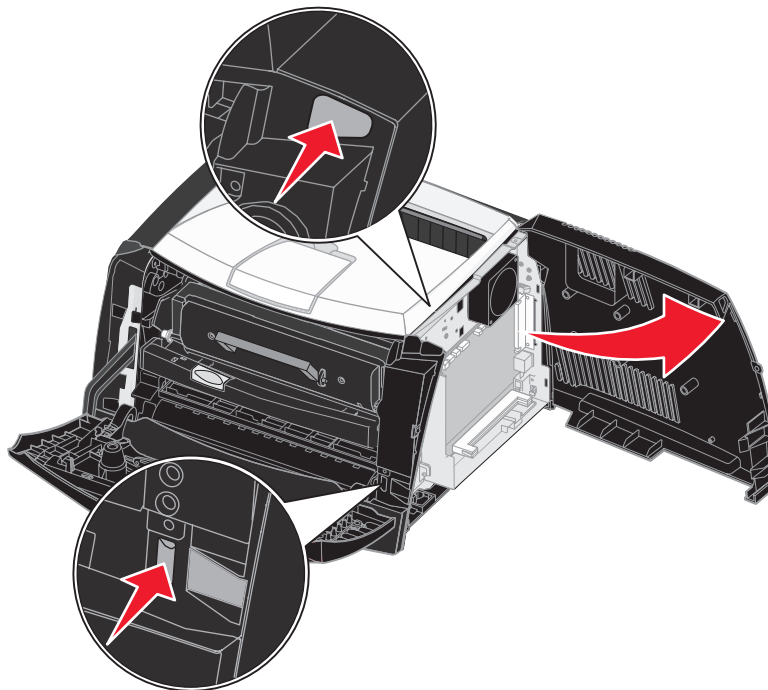
2 Open the rear exit.

3 Open the side cover by pressing the two detents on the front right side of the machine and swinging the cover back.

How to add a memory card

The system board has one connector for an optional memory card. The Lexmark E340 and the Lexmark E342n can support up to 128MB of additional memory (for a total of 160MB).

> **CAUTION:** If you are installing a memory card after setting up the printer, turn the printer off, and unplug the power cord before continuing.
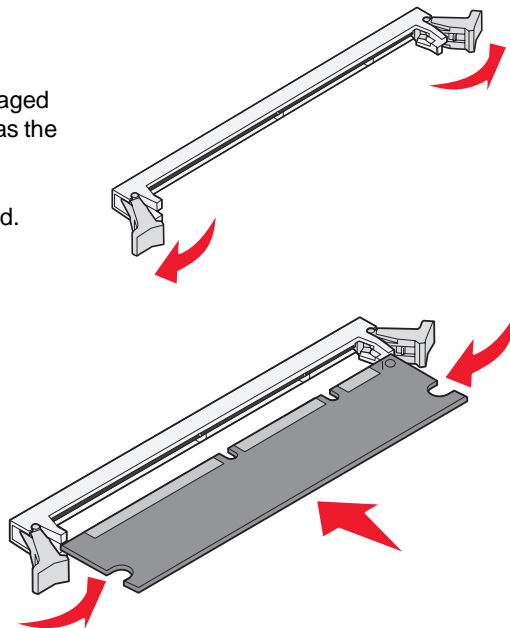
> **Note:** Memory options designed for other Lexmark printers may not work with your printer.

1 Access the system board (see **How to access the system board**).

2 Push open the latches on both ends of the memory connector.

3 Unpack the memory card.

> **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.

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

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.

7 Close the side cover.

8 Close the rear exit.

9 Close the front cover.

10 See **Recognizing installed options**.

How to add a flash card

The system board has one connector for an optional flash card. The printer can support 16MB and 32MB flash cards.

CAUTION: If you are installing a flash card after setting up the printer, turn the printer off, and unplug the power cord before continuing.

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

1 Access the system board (see **How to access the system board**).

2 Unpack the flash card.

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

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

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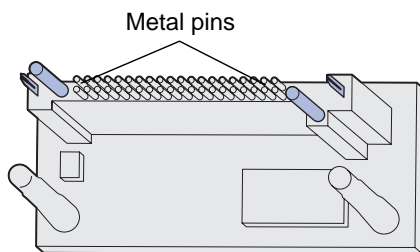
3 Holding the card by its sides, align the pins on the card with the holes on the system board.

4 Push the flash card firmly into place.
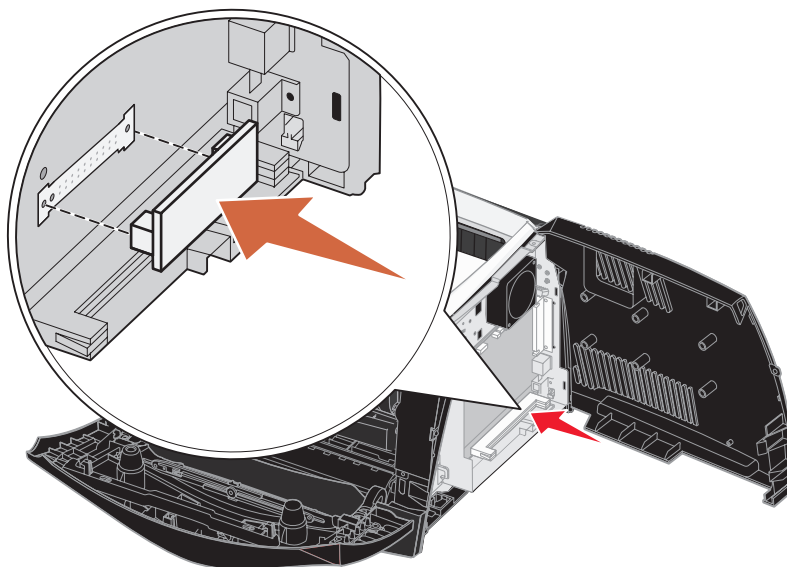
The entire length of the connector on the flash card must touch and be flush against the system board.

Be careful not to damage the connectors.

5 Close the side cover.

6 Close the rear exit.

7 Close the front cover.

8 See **Recognizing installed options**.

How to install a 550-sheet drawer

Your printer supports one optional drawer that lets you load up to 550 sheets of paper.

> **CAUTION:** If you are installing a 550-sheet drawer after setting up the printer, turn the printer off, and unplug the power cord before continuing.

1 Unpack the 550-sheet drawer, and remove any packing material.

2 Place the drawer in the location you have chosen for your printer.

3 Align the holes in the printer with the positioning posts on the 550-sheet drawer, and lower the printer into place.
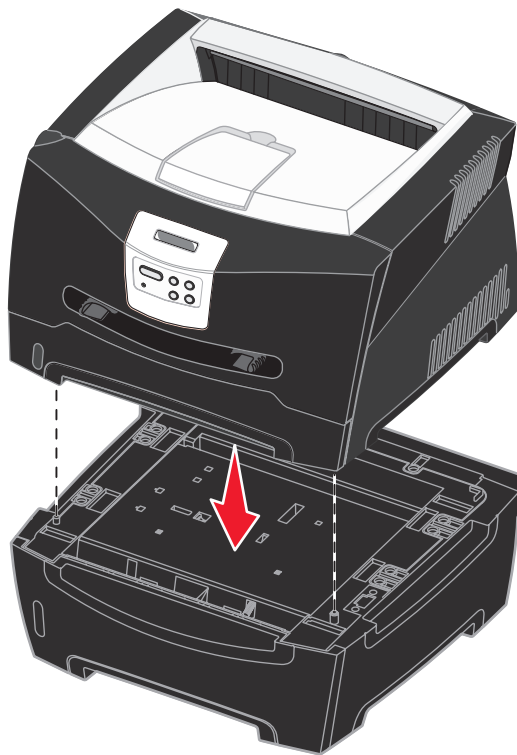
4 See **Recognizing installed options**.

Recognizing installed options

After the printer is turned on, the printer driver should automatically recognize an option you installed. If it does not, you can add it manually.

> **Note:** If you have not installed your printer driver yet, follow the appropriate instructions under **Software and network tasks**. After you have installed a printer driver, return here to complete these instructions.

1 Click **Start → Settings → Printers**.

2 Select the printers icon.

3 Click **File → Properties**.

4 Click the **Install Options** tab.

5 Add the appropriate options to your configuration:

- **550-Sheet Tray** or **Flash Card**—Select the option you installed from the Available options list, and click **Add**.
- **Memory Card**—Increase the printer memory to the appropriate number.

6 Click **OK**.
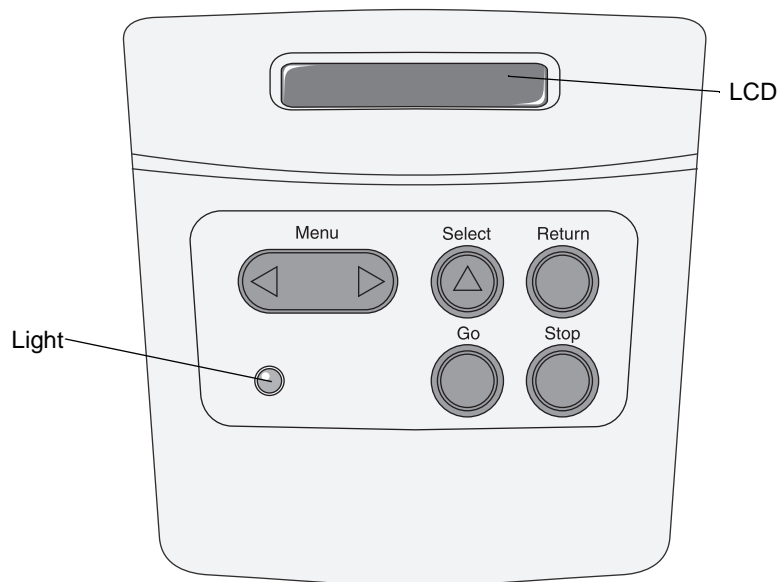
7 Understanding the operator panel

You can change most printer settings from your software application or printer driver. Settings you change from the application or printer driver apply only to the job you are preparing to send to the printer.

Changes made to printer settings from a software application override changes made from the printer operator panel.

If you cannot change a setting from your application, use the printer operator panel or the remote operator panel available from MarkVision™. Changing a printer setting from the printer operator panel or from MarkVision makes that setting the user default.

Using the operator panel

The printer operator panel has a 2-line by 16-character liquid crystal display (LCD), five buttons, and one indicator light that flashes when the printer is processing a job indicated by the **Busy** message.

See the **menu map** for a brief overview of the printer menus available from the operator panel.

Indicator light

The indicator light gives information about the status of your printer.

If the light is	The printer is
Off	Off

If the light is	The printer is
On	On, but idle
Blinking	On and busy

Buttons

Use the five operator panel buttons to open a menu, scroll through a list of values, change printer settings, and respond to printer messages.

Note: Buttons act on the information displayed on the second line of the operator panel.

The following information describes the functions of each button.

Button	Function
Go	Press **Go** to: • Return to the Ready state if the printer is offline (the **Ready** message does not appear on the display). • Exit printer menus and return to the Ready state. • Clear some operator panel messages. • Resume printing after loading print media and clearing paper jams. • Exit Power Saver. If you have changed printer settings from the operator panel menus, press **Go** before sending a job to print. The printer must display **Ready** for jobs to print.
Menu	Each end of the button has a function. Press **Menu>**: • When **Ready** is displayed, to take the printer offline (out of the **Ready** state) and enter the menus. • When **Busy** is displayed, to take the printer to the Job Menu. • When the printer is offline, to scroll through the menus. Press **<Menu** to go to the previous item in the menus. For menu items with numeric values, such as Copies, press and hold **Menu** to scroll through the values. Release the button when the number you want appears.

Select	Press **Select** to:
	• Open the menu shown on the second line of the operator panel. Depending on the type of menu, this action:
	  – Opens the menu and displays the first item in the menu.
	  – Opens the menu item and displays the default setting.
	• Save the displayed menu item as the new user default setting. The printer displays the **Saved** message and returns to the menu item.
	• Clear certain messages from the operator panel.

Return	Press **Return** to return to the previous menu level or menu item.
Stop	Press **Stop** at the **Ready**, **Busy**, or **Waiting** message to temporarily take the printer offline. The message changes to **Not Ready**. No data is lost. Press **Go** to return the printer to the **Ready**, **Busy**, or **Waiting** state.

If your printer is configured as a network printer available to a number of users, it is possible that **Menus Disabled** appears on the display when you press **Menu** from the Ready state. Disabling the menus prevents other users from using the operator panel to inadvertently change a printer user default that has been set by the administrator. You can still clear messages and select items from the Job Menu when printing a job, but you cannot change other printer settings. However, you can use your printer driver to override printer user defaults and select settings for individual print jobs.

Using the operator panel to change printer settings

From the operator panel, you can select menu items and associated values to print your jobs successfully. You can also use the panel to alter the setup and operating environment of the printer. See **Using printer menus** for an explanation of all the menu items.

You can modify printer settings by:

- Selecting a setting from a list of values
- Changing an On/Off setting
- Changing a numerical setting

To select a new value as a setting:

1 From a `Ready` status message, press **Menu**. The menu names appear.

2 Continue to press and release **Menu** until you see the menu you need.

3 Press **Select** to select the menu or menu item on the second line of the display.

- If the selection is a menu, the menu is opened, and the first printer setting in the menu appears.
- If the selection is a menu item, the default setting for the menu item appears.
  (The current user default setting has an asterisk [*] beside it.)

Each menu item has a list of values for the menu item. A value can be:

- A phrase or word to describe a setting
- A numerical value that can be changed
- An On or Off setting

4 Press **Menu** to move to the value you need.

5 Press **Select** to select the value on the second line of the operator panel. An asterisk appears beside the value to indicate that it is now the user default setting. The new setting appears for one second, clears, displays the word `Saved`, and then displays the previous list of menu items.

6 Press **Return** to go back to previous menus. Make additional menu selections to set new default settings. Press **Go** if this is the last printer setting you want to change.

User default settings remain in effect until you save new settings or restore the factory defaults. Settings you choose from your software application can also change or override the user default settings you select from the operator panel.

The **diagram** in **Using the printer menus** shows the menu items in each menu.

An asterisk (*) next to a value indicates the factory default setting. Factory defaults may differ for different countries or regions.

Factory defaults are the function settings in effect the first time you turn your printer on. These remain in effect until you change them. Factory defaults are restored if you select the Restore value for the Factory Defaults menu item in the Utilities Menu. See **Utilities Menu** for more information.

When you select a new setting from the operator panel, the asterisk moves next to the selected setting to identify it as the current user default.

User defaults are the settings you select for different printer functions and store in printer memory. Once stored, these settings remain active until new ones are stored or the factory defaults are restored.

> **Note:** Settings you choose from your software application may override the settings you select from the operator panel.

Menus Disabled
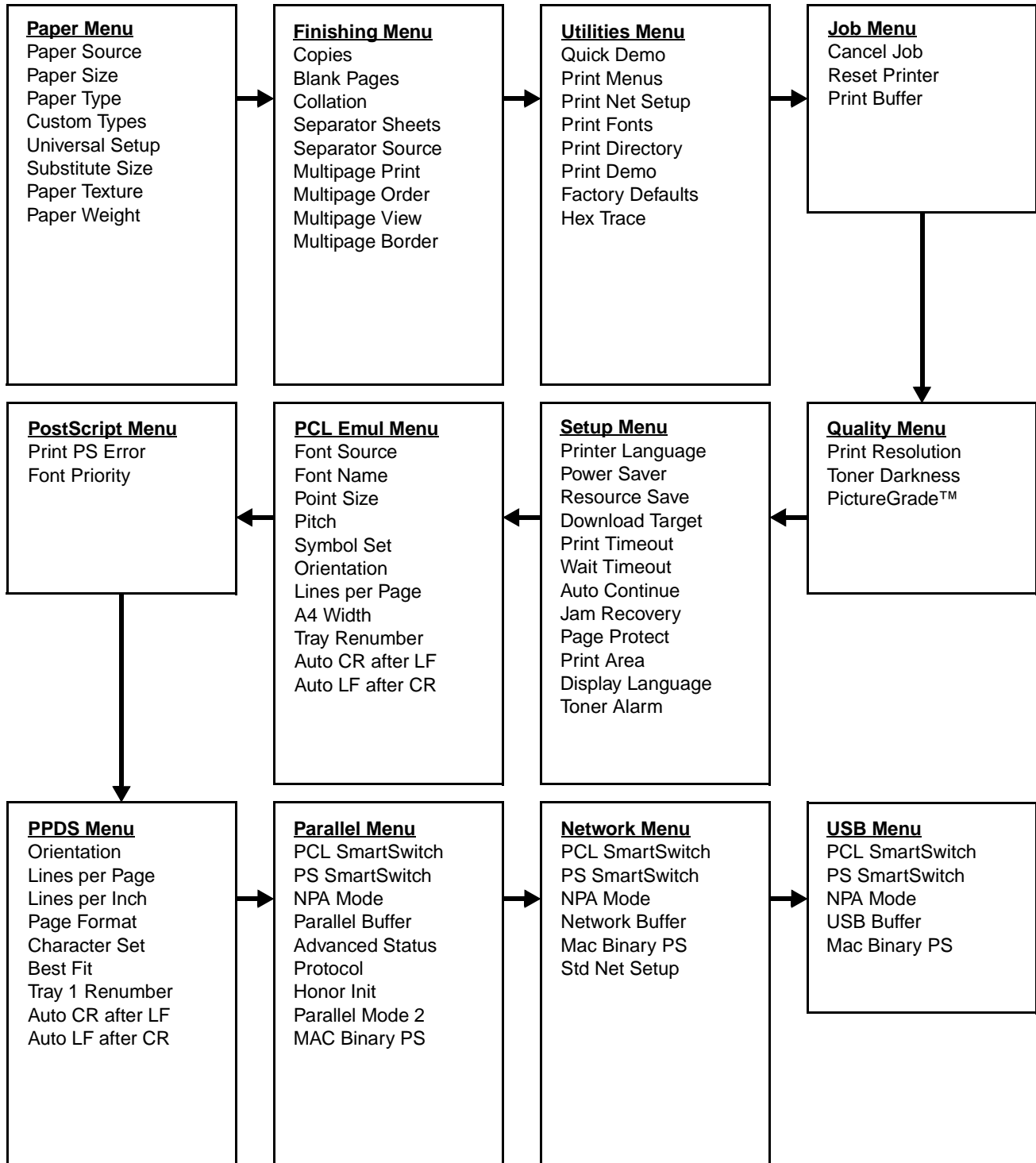
If your printer is configured as a network printer available to a number of users, `Menus Disabled` may appear when you press **Menu** from the `Ready` state. Disabling the menus prevents users from using the operator panel to inadvertently

change a printer default that has been set by the person managing the printer. You can still use Print and Hold features, clear messages, and select items from the Job Menu when printing a job, but you cannot change other printer settings. You can, however, use your printer driver to override printer defaults and select settings for individual print jobs.

Using the printer menus

Select a menu or menu item for more details.

Paper Menu
Paper Source
Paper Size
Paper Type
Custom Types
Universal Setup
Substitute Size
Paper Texture
Paper Weight

Finishing Menu
Copies
Blank Pages
Collation
Separator Sheets
Separator Source
Multipage Print
Multipage Order
Multipage View
Multipage Border

Utilities Menu
Quick Demo
Print Menus
Print Net Setup
Print Fonts
Print Directory
Print Demo
Factory Defaults
Hex Trace

Job Menu
Cancel Job
Reset Printer
Print Buffer

PostScript Menu
Print PS Error
Font Priority

PCL Emul Menu
Font Source
Font Name
Point Size
Pitch
Symbol Set
Orientation
Lines per Page
A4 Width
Tray Renumber
Auto CR after LF
Auto LF after CR

Setup Menu
Printer Language
Power Saver
Resource Save
Download Target
Print Timeout
Wait Timeout
Auto Continue
Jam Recovery
Page Protect
Print Area
Display Language
Toner Alarm

Quality Menu
Print Resolution
Toner Darkness
PictureGrade™

PPDS Menu
Orientation
Lines per Page
Lines per Inch
Page Format
Character Set
Best Fit
Tray 1 Renumber
Auto CR after LF
Auto LF after CR

Parallel Menu
PCL SmartSwitch
PS SmartSwitch
NPA Mode
Parallel Buffer
Advanced Status
Protocol
Honor Init
Parallel Mode 2
MAC Binary PS

Network Menu
PCL SmartSwitch
PS SmartSwitch
NPA Mode
Network Buffer
Mac Binary PS
Std Net Setup

USB Menu
PCL SmartSwitch
PS SmartSwitch
NPA Mode
USB Buffer
Mac Binary PS

Paper Menu

Use the Paper Menu to define the print media loaded in each tray and the default source and output bin.

> **Note:** Values marked by an asterisk (*) are the factory default settings.

Menu item	Purpose	Values	
Custom Types	To specify the kind of paper associated with each of the Custom Types available in the Paper Type menu item.	Values for Custom Type <x>, where <x> represents 1, 2, 3, 4, 5, or 6:	
		Paper*	**Note:** If a user-defined name is available, it is displayed instead of `Custom Type <x>`. The user-defined name is truncated to 14 characters. If two or more custom types share the same name, the name only appears once in the Custom Types value list.
		Card Stock	
		Transparency	
		Labels	
		Envelope	
Paper Size	To identify the default paper size for each paper source. For trays with automatic size sensing, only the value detected by the hardware is displayed.		
	1 Select a paper source.	**Tray <x> Size**	
		Manual Pap Size	
		Manual Env Size	
	2 Select a value. (* Denotes country/region-specific factory default values)	**Letter***	
		Legal	
		Executive	
		Statement (not available for 500-sheet drawer)	
		A4*	
		A5 (not available for 500-sheet drawer)	
		B5	
		Folio	
		10 Envelope* (US)	
		9 Envelope	
		B5 Envelope	
		Other Envelope	
		7 3/4 Envelope	
		DL Envelope* (non US)	
		C5 Envelope	
		Universal	Select Universal when you load paper that does not match any of the other available sizes. The printer automatically formats the page for the maximum possible size. You can then set the actual page size from your application software.

Menu item	Purpose	Values	
Paper Source	To identify the default paper source.	**Tray <x>** **(Tray 1*)**	If you loaded the same size and type of paper in two paper sources (and the Paper Size and Paper Type menu items are correctly set), the trays are automatically linked. When one paper source is empty, paper automatically feeds from the next linked source.
		Manual Paper	
		Manual Env	
Paper Texture	To identify the texture of the paper loaded in a specific source and to ensure that characters print clearly. Use Paper Texture in connection with the Paper Type and Paper Weight menu items. You may need to change those menu items to optimize print quality for your specific paper.		
	1 Select a paper type.	**Plain Texture**	
		Card Stock Text	
		Trnsprncy Text	
		Preprint Texture	
		Colored Texture	
		Custom <x> Texture	
		Labels Texture	
		Bond Texture	
		Envelope Texture	
		Ltrhead Texture	
	2 Select a value.	**Smooth**	**Note:** The default for Bond Texture is Rough instead of Normal. If a user-defined name is available for a custom Type, then the name is displayed instead of `Custom <x> Texture`. The name is truncated to 14 characters.
		Normal*	
		Rough	

Menu item	Purpose	Values
Paper Type	To identify the type of paper installed in each paper source. Use this menu item to: • Optimize print quality for the specified paper. • Select paper sources through your software application by selecting type and size. • Automatically link paper sources. Any sources containing the same type and size of paper are automatically linked by the printer, if you have set the Paper Size and the Paper Type to the correct values.	
	1 Select a paper source.	**Tray <x> Type**
		Manual Pap Type
		Manual Env Type
	2 Select a value.	**Plain Paper**
		Card Stock
		Transparency
		Labels
		Bond
		Letterhead
		Preprinted
		Custom Type <x>
		Envelope
		Colored Paper
	The Paper Type default for each envelope source is Envelope. The Paper Type default for each paper tray is as follows: **Note:** If a user-defined name is available, it is displayed instead of `Custom Type <x>`. The user-defined name is truncated to 14 characters. If two or more custom types share the same name, the name only appears once in the Paper Type value list.	**Tray 1**—Plain Paper
		Tray 2—Custom Type 2
		Manual Pap Type—Plain Paper

Menu item	Purpose	Values	
Paper Weight	To identify the relative weight of the paper loaded in a specific source and ensure that the toner adheres properly to the printed page.		
	1 Select a paper type. **Note:** If a user-defined name is available, it is displayed instead of `Custom <x> Weight`. The name is truncated to 14 characters.	**Plain Weight**	
		CardStock Weight	
		Trnsprncy Weight	
		Preprint Weight	
		Colored Weight	
		Custom <x> Weight	
		Bond Weight	
		Envelope Weight	
		Labels Weight	
		Ltrhead Weight	
	2 Select a value.	**Light**	
		Normal*	
		Heavy	
Substitute Size	To have the printer substitute the specified paper size if the requested size is not loaded.	**Off**	Printer prompts the user to load the requested paper size.
		Statement/A5	Prints A5 size jobs on statement size paper if only statement size paper is loaded, and prints statement size jobs on A5 paper if only A5 paper is loaded.
		Letter/A4	Prints A4 size jobs on letter size paper if only letter size paper is loaded, and prints letter size jobs on A4 size paper if only A4 size paper is loaded.
		All Listed*	Substitutes Letter/A4 and Statement/A5.
Universal Setup	To determine the default size when the Paper Size setting for a tray or feeder is Universal.		
	1 Select a unit of measure. (* Denotes a country/region-specific factory default value)	**Inches***	
		Millimeters*	
	2 Select the values.	**Portrait Width**	=3.00–14.17 in. (8.5 in.*) =76–360 mm (216 mm*)
		Portrait Height	=3.00–14.17 in. (14 in.*) =76–360 mm (356 mm*)
		Feed Direction	=Short Edge* =Long Edge

Finishing Menu

Use the Finishing Menu to define how the printer delivers the printed output.

> **Note:** Values marked by an asterisk (*) are the factory default settings.

Menu item	Purpose	Values	
Blank Pages	To specify whether to include application-generated blank pages as part of your printed output.	**Do Not Print***	Does not print application-generated blank pages as part of your job.
		Print	Prints application-generated blank pages as part of your job.
Collation	To keep the pages of a print job stacked in sequence when printing multiple copies of the job.	**Off***	Prints each page of a job the number of times specified by the Copies menu item. For example, if you set Copies to 2 and send three pages to print, the printer prints page 1, page 1, page 2, page 2, page 3, page 3.
		On	Prints entire job the number of times specified by the Copies menu item. For example, if you set Copies to 2 and send three pages to print, the printer prints page 1, page 2, page 3, page 1, page 2, page 3.
Copies	To set the number of copies you want for the printer default value. (Set the number of copies required for a specific job from the printer driver. Values selected from the printer driver always override values selected from the operator panel.)	**1...999 (1*)**	
Multipage Border	To print a border around each page image when using Multipage Print.	**None***	Does not print a border around each page image.
		Solid	Prints a solid line border around each page image.
Multipage Order	To determine the positioning of multiple page images when using Multipage Print. The positioning depends on the number of images and whether the images are portrait or landscape in orientation.	**Horizontal***	
		Vertical	
		Rev Horizontal	
		Rev Vertical	
	For example, if you select 4-Up multipage printing and portrait orientation, the results differ depending on the Multipage Order value you select: **Horizontal Order** **Vertical Order** **Reverse Horizontal Order** **Reverse Vertical Order** Horizontal Order: 1 2 / 3 4 Vertical Order: 1 3 / 2 4 Reverse Horizontal Order: 2 1 / 4 3 Reverse Vertical Order: 3 1 / 4 2		

Menu item	Purpose	Values	
Multipage Print	To print multiple page images on one side of a sheet of paper. Also called *n-up* or *Paper Saver.*	**Off***	Prints 1 page image per side.
		2 Up	Prints 2 page images per side.
		3 Up	Prints 3 page images per side.
		4 Up	Prints 4 page images per side.
		6 Up	Prints 6 page images per side.
		9 Up	Prints 9 page images per side.
		12 Up	Prints 12 page images per side.
		16 Up	Prints 16 page images per side.
Multipage View	To determine the orientation of a multipage sheet.	**Auto***	Lets the printer choose between portrait and landscape orientation.
		Long Edge	Sets the long edge of the paper as the top of the page (landscape).
		Short Edge	Sets the short edge of the paper as the top of the page (portrait).
Separator Sheets	To insert blank separator sheets between jobs, between multiple copies of a job, or between each page of a job.	**None***	Does not insert separator sheets.
		Between Copies	Inserts a blank sheet between each copy of a job. If Collation is Off, a blank page is inserted between each set of printed pages (all page 1's, all page 2's, and so on). If Collation is On, a blank page is inserted between each collated copy of the job.
		Between Jobs	Inserts a blank sheet between jobs.
		Between Pages	Inserts a blank sheet between each page of a job. This is useful if you are printing transparencies or want to insert blank pages in a document for notes.
Separator Source	To specify the paper source that holds separator sheets.	**Tray <x> (Tray 1*)** Selects separator sheets from the specified tray.	

Utilities Menu

Use the Utilities Menu to print a variety of listings relating to available printer resources, printer settings, and print jobs. Other menu items let you set up printer hardware and troubleshoot printer problems.

Menu item	Purpose	Values	
Quick Demo	To print a demo page.		

Factory Defaults	To return printer settings to the factory default values.	**Restore**	• All menu items are returned to the factory default values except:
			  – Display Language.
			  – All settings in the Parallel Menu, Serial Menu, Network Menu, and USB Menu.
			• All downloaded resources (fonts, macros, and symbol sets) in printer memory (RAM) are deleted. (Resources residing in flash memory or on the hard disk are unaffected.)

		Do Not Restore	User-defined settings remain.
Hex Trace	To help isolate the source of a print job problem. With Hex Trace selected, all data sent to the printer is printed in hexadecimal and character representation. Control codes are not executed. To exit Hex Trace, turn the printer off, or reset the printer from the Job Menu.		
Print Directory	To print a list of all the resources stored in flash memory or on the hard disk. **Note:** Print Directory is available only when either a nondefective flash or disk is installed and formatted, and Job Buffer Size is not set to 100%.		
Print Demo	To print pages describing the printer and demonstrating its capabilities.		
Print Fonts	To print a sample of all the fonts available for the selected printer language.	**PCL Fonts**	Prints a sample of all printer fonts available for PCL emulation.
		PS Fonts	Prints a sample of all printer fonts available for PostScript emulation.
		PPDS Fonts	Prints a sample of all printer fonts available for PPDS emulation.
Print Menus	To print a listing of the current user default values, the installed options, the amount of installed printer memory, and the status of printer supplies.		
Print Net Setup	To print information relating to the internal print server and the network settings defined by the Network Setup menu item in the Network Menu.		

Job Menu

The Job Menu is only available when the printer is busy processing or printing a job, when a printer message is displayed, or when the printer is in Hex Trace mode. Press **Menu** to open the Job Menu.

Menu item	Purpose	Values
Cancel Job	To cancel the current print job. **Note:** `Cancel Job` is only displayed if the printer is processing a job or has a job in printer memory.	

Menu item	Purpose	Values
Print Buffer	To print any data stored in the print buffer. **Note:** Print Buffer is only available when you enter the Job Menu while `Waiting` is displayed. The Waiting state occurs if an incomplete job is sent to the printer or an ASCII job, such as a print screen command, is printing.	
Reset Printer	To reset the printer to the user default value for each menu item, delete all downloaded resources (fonts, macros, and symbol sets) stored in printer memory (RAM), and delete all data in the interface link buffer. **Note:** Before selecting Reset Printer, exit the software application you are using.	

Quality Menu

Use the Quality Menu to change printer settings affecting the quality of printed characters and images.

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

Menu item	Purpose	Values	
PictureGrade	To improve the quality of grayscale printing.	**On**	Uses modified screening parameters to improve print quality of graphics.
		Off*	Uses standard screening parameters.
Print Resolution	To select printed output resolution.	**600 dpi**	
		1200 Image Q	
		2400 Image Q	
		1200 dpi	
Toner Darkness	To lighten or darken text images, or conserve toner.	**1–10 (8*)**	Select a lower value for finer line width and lighter grayscale images. Select a higher value for bolder line widths or darker grayscale images. Select 10 for very bold text. Select a value less than 7 to conserve toner.
			On the operator panel display, a vertical bar (	) indicates the factory default value. An arrow symbol (V) indicates a user default value.

Setup Menu

Use the Setup Menu to configure a variety of printer features.

Menu item	Purpose	Values	
Auto Continue	To define the amount of time (in seconds) the printer waits after displaying an operator intervention error message before it resumes printing.	**Disabled***	Printer does not resume printing until someone clears the error message.
		5...255	Printer waits the specified amount of time, and then automatically resumes printing. This timeout value also applies if the menus are displayed (and the printer is offline) for the specified period of time.
Display Language	To determine the language of the text on the operator panel display.	**English**	**Note:** All values may not be available.
		Français	
		Deutsch	
		Italiano	
		Español	
		Dansk	
		Norsk	
		Nederlands	
		Svenska	
		Português	
		Suomi	
		Japanese	
		Russian	
		Polski	
		Hungarian	
		Turkish	
		Czech	
Download Target	To specify the storage location for downloaded resources. Storing downloaded resources in flash memory or on a hard disk is permanent storage rather than the temporary storage that RAM provides. The resources remain in the flash memory or on the hard disk even when the printer is turned off.	**RAM***	All downloaded resources are automatically stored in printer memory (RAM).
		Flash	All downloaded resources are automatically stored in flash memory.
Jam Recovery	To establish whether the printer reprints jammed pages.	**On**	Printer reprints jammed pages.
		Off	Printer does not reprint jammed pages.
		Auto*	Printer reprints a jammed page unless the memory required to hold the page is needed for other printer tasks.

Menu item	Purpose	Values	
Page Protect	To successfully print a page that may otherwise generate `Complex Page` errors. If, after selecting On, you still cannot print the page, you may also have to reduce the size and number of fonts on the page, or increase the installed printer memory. For most print jobs, you do not need to select On. When On is selected, printing may be slower.	**Off***	Prints a partial page of data if memory is insufficient to process the entire page.
		On	Ensures that an entire page is processed before it prints.
Print Area	To modify the logical and physical printable area.	**Normal***	**Note:** The Whole Page setting only affects pages printed using PCL 5 interpreter. This setting has no effect on pages printed using the PCL XL or PostScript interpreters. If you try to print any data in the non-printable area defined by Normal Print Area, the printer will clip the image at the boundary defined by the Normal defined printable area.
		Fit to Page	
		Whole Page	
Power Saver	To specify the amount of time (in minutes) the printer waits after a job is printed before it goes into a reduced power state.	**Disabled**	This value does not appear unless Energy Conserve is set to Off.
		1...240	Specifies the amount of time after a print job before the printer goes into Power Saver mode. (Your printer may not support the entire range of values.) The factory default Power Saver setting depends on your printer model. Print the menu settings page to determine the current Power Saver setting. When the printer is in Power Saver mode, it is still ready to receive print jobs. Select 1 to put the printer in Power Saver mode one minute after it finishes a print job. This uses much less energy, but requires more warm-up time for the printer. Select 1 if your printer shares an electrical circuit with room lighting and you notice lights flickering. Select a high value if your printer is in constant use. Under most circumstances, this keeps the printer ready to print with minimum warm-up time. Select a value between 1 and 240 minutes if you want a balance between energy consumption and a shorter warm-up period.

Menu item	Purpose	Values	
Print Timeout	To specify the amount of time (in seconds) the printer waits before printing the last page of a print job that does not end with a command to print the page. The print timeout counter does not start until **Waiting** appears on the display.	**Disabled**	The printer does not print the last page of a print job until one of the following occurs: • The printer receives enough information to fill the page. • The printer receives a Form Feed command. • You select Print Buffer from the Job Menu.
		1...255 (90*)	The printer prints the last page after the specified time. (Your printer may not support the entire range of values.)
Printer Language	To establish the default printer language used to communicate data from the computer to the printer. **Note:** Setting a printer language as the default does not prevent a software application from sending print jobs that use the other language.	**PCL Emulation**	PCL emulation, compatible with Hewlett-Packard printers.
		PS Emulation*	PostScript emulation, compatible with Adobe PostScript language.
		PPDS Emulation	PPDS emulation.
Resource Save	To determine what the printer does with downloaded resources, such as fonts and macros stored in RAM, if the printer receives a job that requires more memory than is available.	**Off***	Printer retains downloaded resources only until memory is needed. It then deletes those resources associated with the inactive printer language.
		On	Printer retains all downloaded resources for all printer languages during language changes and printer resets. If the printer runs out of memory, **38 Memory Full** appears on the display.
Toner Alarm	To specify how the printer responds when it is low on toner.	**Off***	An error message is displayed until someone replaces the toner cartridge. If an Auto Continue value is selected from the Setup Menu, the printer resumes printing after the specified timeout value.
		Single	Printer stops printing, displays an error message, and sounds three quick beeps.
		Continuous	Printer stops printing, displays an error message, and repeats three beeps every 10 seconds until the toner cartridge is replaced.
Wait Timeout	To specify the amount of time (in seconds) the printer waits to receive additional bytes of data from the computer. When this timeout expires, the print job is canceled. **Note:** Wait Timeout is only available when you use PostScript emulation. This menu item has no effect on PCL emulation print jobs.	**Disabled**	Disables Wait Timeout.
		15...65535 (40*)	Specifies the amount of time the printer waits for additional data before it cancels the job.

PCL Emul Menu

Use the PCL Emul Menu to change printer settings that only affect jobs using the PCL emulation printer language.

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

Menu item	Purpose	Values	
A4 Width	To select the width of the logical page for A4 size paper.	198 mm*	Makes the logical page compatible with the Hewlett-Packard LaserJet 5 Printer.
		203 mm	Makes the logical page wide enough to print 80 10-pitch characters.
Auto CR after LF	To specify whether the printer automatically performs a carriage return after a line feed control command.	Off*	Printer does not perform a carriage return after a line feed control command.
		On	Printer performs a carriage return after a line feed control command.
Auto LF after CR	To specify whether the printer automatically performs a line feed after a carriage return control command.	Off*	Printer does not perform a line feed after a carriage return control command.
		On	Printer performs a line feed after a carriage return control command.
Font Name	To choose a specific font from the specified font source.	R0 Courier 10*	The font name and font ID for all fonts in the selected font source are displayed. The font source abbreviation is R for resident, F for flash, K for disk, and D for download.
Font Source	To determine the set of fonts displayed in the Font Name menu item.	Resident*	Displays all fonts resident in printer RAM when the printer ships from the factory.
		Download	Displays all fonts downloaded to printer RAM.
		Flash	Displays all fonts stored in flash memory.
		All	Displays all fonts available to the printer from all sources.
Lines per Page	To determine the number of lines that print on each page.	1...255	The printer sets the amount of space between each line (vertical line spacing) based on the Lines per Page, Paper Size, and Orientation menu items. Select the correct Paper Size and Orientation before changing Lines per Page.
		60* (country/region-specific factory default values)	
		64* (country/region-specific factory default values)	
Orientation	To determine how text and graphics are oriented on the page.	Portrait*	Prints text and graphics parallel to the short edge of the paper.
		Landscape	Prints text and graphics parallel to the long edge of the paper.

Menu item	Purpose	Values	
Pitch	To specify the font pitch for scalable monospaced fonts.	**0.08...100** (in increments of 0.01 cpi) **10***	Pitch refers to the number of fixed-space characters in a horizontal inch of type. You can select a pitch from 0.08 to 100 characters per inch (cpi) in increments of 0.01 cpi. For nonscalable monospaced fonts, the pitch is displayed, but cannot be changed. **Note:** Pitch is only displayed for fixed, or monospaced, fonts.
Point Size	To change the point size for scalable typographic fonts.	**1...1008** in increments of 0.25 points) **12***	Point size refers to the height of the characters in the font. One point equals approximately 1/72 of an inch. You can select point sizes from 1 to 1008 in increments of 0.25 points. **Note:** Point Size is only displayed for typographic fonts.
Symbol Set	To choose a symbol set for a specified font name.	**10U PC-8*** (country/region-specific factory default values) **12U PC-850*** (country/region-specific factory default values)	A symbol set is a set of alphabetic and numeric characters, punctuation, and special symbols used when printing with a selected font. Symbol sets support the different requirements for languages or specific applications, such as math symbols for scientific text. Only the symbol sets supported for the selected font name are displayed.
Tray Renumber	To configure your printer to work with printer drivers or applications that use different source assignments for the paper trays. **Note:** See the *Technical Reference* for more information about assigning source numbers.		
	1 Select a paper source.	**Assign Tray <x>**	
		Assign Man Env	
		Assign Man Paper	
	2 Select a value.	**Off***	Printer uses factory default paper source assignments.
		0...199	Select a numeric value to assign a custom value to a paper source.
		None	Paper source ignores the Select Paper Feed command.
	Other Tray Renumber selections	**View Factory Def**	Press **Menu** to display the factory default value assigned to each paper source.
		Restore Defaults	Select Yes to return all tray assignments to factory default values.

PostScript Menu

Use the PostScript Menu to change printer settings that only affect jobs using the PostScript emulation printer language.

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

Menu item	Purpose	Values	
Font Priority	To establish the font search order. **Note:** Font Priority is only displayed when a formatted flash or hard disk is installed, is neither defective nor Read/Write or Write protected, and Job Buffer Size is not set to 100%.	**Resident***	Printer searches printer memory for the requested font before searching flash memory or hard disk.
		Flash/Disk	Printer searches the hard disk and flash memory for the requested font before searching printer memory.
PDF Menu	Use the PDF Menu within the PostScript Menu to change printer settings that only affect jobs using Portable Document Format (PDF) files.	See **PPDS Menu** for more information.	
Print PS Error	To print a page defining the PostScript emulation error when an error occurs.	**Off***	Discards the print job without printing an error message.
		On	Prints an error message before it discards the job.

PPDS Menu

Use the PPDS Menu to change printer settings that only affect jobs using the PPDS emulation printer language.

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

Menu item	Purpose	Values	
Auto CR after LF	To specify whether the printer automatically performs a carriage return after a line feed control command.	**Off***	Printer does not perform a carriage return after a line feed control command.
		On	Printer performs a carriage return after a line feed control command.
Auto LF after CR	To specify whether the printer automatically performs a line feed after a carriage return control command.	**Off***	Printer does not perform a line feed after a carriage return control command.
		On	Printer performs a line feed after a carriage return control command.
Best Fit	To determine whether to perform a font best fit search if the requested font cannot be found.	**Off**	Printer stops printing when a requested font cannot be found. An error message is posted indicating the font could not be found.
		On*	Printer continues even though it was not able to locate a requested font. Instead, the printer tries to select another font that best matches the characteristics of the requested font.

Menu item	Purpose	Values	
Character Set	To determine which code page to use to print PPDS jobs.	**1**	The standard code pages are used.
		2*	The addresses from Value 1 change to represent characters and symbols used in non-US English languages.
Lines per Inch	To determine the number of lines that print per vertical inch.	**1...30 (6*)**	The printer sets the amount of space between each line (vertical line spacing) based on the Lines per Inch, Lines per Page, Paper Size, and Orientation menu items. Select the correct Paper Size and Orientation before changing Lines per Inch.
Lines per Page	To determine the number of lines that print on each page.	**1...255 (64*)**	The printer sets the amount of space between each line (vertical line spacing) based on the Lines per Inch, Lines per Page, Paper Size, and Orientation menu items. Select the correct Paper Size and Orientation before changing Lines per Page.
Orientation	To determine how text and graphics are oriented on the page.	**Portrait***	Prints text and graphics parallel to the short edge of the paper.
		Landscape	Prints text and graphics parallel to the long edge of the paper.
Page Format	Affects how the printer interprets the margins set from software applications.	**Print***	Printer measures the margin settings from the inside edge of the left unprintable area and the bottom of the top unprintable area. The left and top margin areas on the print job are equal to the software margins setting plus the unprintable area.
		Whole	Printer measures margin settings from the top left edge of the paper. The left and top margin areas on the print job are equal to the software margin settings.
Tray 1 Renumber	To configure your printer to work with printer drivers or applications that use different source assignments for the paper trays. **Note:** This menu item is only displayed when Tray 2 is installed.	**Off***	Print jobs are printed from the requested source.
		Tray 2	• Print job requests for Tray 2 are converted to requests for Tray 1. • Print job requests for Tray 1 are converted to requests for Tray 2.

Parallel Menu

Use the Parallel Menu to change printer settings affecting jobs sent to the printer through a parallel port (either Std Parallel or Parallel Opt <x>).

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

Menu item	Purpose	Values	
Advanced Status	To enable bidirectional communication through the parallel port.	**Off**	Disables parallel port negotiation.
		On*	Enables bidirectional communication through the parallel interface.
Honor Init	To determine whether the printer honors hardware initialization requests from the computer. The computer requests initialization by activating the INIT signal on the parallel interface. Many personal computers activate the INIT signal each time the computer is turned on and off.	**Off***	Printer does not honor hardware initialization requests from the computer.
		On	Printer honors hardware initialization requests from the computer.
MAC Binary PS	To configure the printer to process Macintosh binary PostScript print jobs.	**On**	Printer processes raw binary PostScript print jobs from computers using the Macintosh operating system. **Note:** This setting often causes Windows print jobs to fail.
		Off	Printer filters PostScript print jobs using standard protocol.
		Auto*	Printer processes print jobs from computers using either Windows or Macintosh operating systems.
NPA Mode	To specify whether the printer performs the special processing required for bidirectional communication, following the conventions defined in the Network Printing Alliance (NPA) Protocol. **Note:** Changing this menu item automatically resets the printer.	**On**	Printer performs NPA processing. If data is not in NPA format, it is rejected as bad data.
		Off	Printer does not perform NPA processing.
		Auto*	Printer examines data, determines the format, and then processes it appropriately.
Parallel Buffer	To configure the size of the parallel input buffer. **Note:** Changing this menu item automatically resets the printer.	**Disabled**	Disables job buffering. Any jobs already buffered on the disk are printed before normal processing of incoming jobs resumes.
		Auto*	Printer automatically calculates the Parallel Buffer size (recommended setting).
		3K to maximum size allowed	User specifies the Parallel Buffer size. The maximum size depends on the amount of memory in your printer, the size of the other link buffers, and whether Resource Save is set to On or Off. To maximize the range for the Parallel Buffer size, disable or reduce the size of the serial and USB buffers.

Menu item	Purpose	Values	
Parallel Mode 2	To determine whether the parallel port data is sampled on the leading or trailing edge of strobe.	**On***	Samples parallel port data on the leading edge of strobe.
		Off	Samples parallel port data on the trailing edge of strobe.
PCL SmartSwitch	To configure the printer so it automatically switches to PCL emulation when a print job received through the parallel port requires it, regardless of the default printer language.	**On***	Printer examines data on the parallel interface and selects PCL emulation if the data indicates that is the required printer language.
		Off	Printer does not examine the incoming data. The printer uses PostScript emulation to process the job if PS SmartSwitch is On, or uses the default printer language specified in the Setup Menu if PS SmartSwitch is Off.
PS SmartSwitch	To configure the printer so it automatically switches to PostScript emulation when a print job received through the parallel port requires it, regardless of the default printer language.	**On***	Printer examines data on the parallel interface and selects PostScript emulation if the data indicates that is the required printer language.
		Off	Printer does not examine the incoming data. The printer uses PCL emulation to process the job if PCL SmartSwitch is On, or uses the default printer language specified in the Setup Menu if PCL SmartSwitch is Off.
Protocol	To specify the parallel interface protocol.	**Standard**	May resolve some parallel interface problems.
		Fastbytes*	Provides compatibility with most existing parallel interface implementations (recommended setting).

Network Menu

Use the Network Menu to change printer settings affecting jobs sent to the printer through a network port (either Standard Network or Network Opt <x>).

> **Note:** Values marked by an asterisk (*) are the factory default settings.

Menu item	Purpose	Values	
Mac Binary PS	To configure the printer to process Macintosh binary PostScript print jobs.	**On**	Printer processes raw binary PostScript print jobs from computers using the Macintosh operating system. **Note:** This setting often causes Windows print jobs to fail.
		Off	Printer filters PostScript print jobs using standard protocol.
		Auto*	Printer processes print jobs from computers using either Windows or Macintosh operating systems.

Menu item	Purpose	Values	
Network Buffer	To configure the size of the network input buffer. **Note:** Changing the Network Buffer menu item automatically resets the printer.	**Auto***	Printer automatically calculates the Network Buffer size (recommended setting).
		3K to maximum size allowed	User specifies the Network Buffer size. The maximum size depends on the amount of memory in your printer, the size of the other link buffers, and whether Resource Save is set to On or Off. To maximize the range for the Network Buffer size, disable or reduce the size of the parallel, serial, and USB buffers.
NPA Mode	To specify whether the printer performs the special processing required for bidirectional communication, following the conventions defined in the Network Printing Alliance (NPA) Protocol. **Note:** Changing this menu item automatically resets the printer.	**Off**	Printer does not perform NPA processing.
		Auto*	Printer examines the data to determine the format and then processes it appropriately.
PCL SmartSwitch	To configure the printer so it automatically switches to PCL emulation when a print job received through the network port requires it, regardless of the default printer language.	**On***	Printer examines data on the network interface and selects PCL emulation if the data indicates that is the required printer language.
		Off	Printer does not examine the incoming data. The printer uses PostScript emulation to process the job if PS SmartSwitch is On, or uses the default printer language specified in the Setup Menu if PS SmartSwitch is Off.
PS SmartSwitch	To configure the printer so it automatically switches to PostScript emulation when a print job received through the network port requires it, regardless of the default printer language.	**On***	Printer examines data on the network interface connection and selects PostScript emulation if the data indicates that is the required printer language.
		Off	Printer does not examine the incoming data. The printer uses PCL emulation to process the job if PCL SmartSwitch is On, or uses the default printer language specified in the Setup Menu if PCL SmartSwitch is Off.
Std Net Setup	To configure an internal print server.	Values for this menu item are supplied by the specific print server. Select the menu item to see the available values. **Note:** See the documentation on the drivers CD for more information.	

USB Menu

Use the USB Menu to change printer settings affecting a Universal Serial Bus (USB) port (USB Option <x>).

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

Menu item	Purpose	Values	
Mac Binary PS	To configure the printer to process Macintosh binary PostScript print jobs.	**Off**	Printer processes raw binary PostScript print jobs from computers using the Macintosh operating system. **Note:** This setting often causes Windows print jobs to fail.
		On	Printer filters PostScript print jobs using standard protocol.
		Auto*	Printer processes print jobs from computers using either Windows or Macintosh operating systems.
NPA Mode	To specify whether the printer performs the special processing required for bidirectional communication, following the conventions defined in the Network Printing Alliance (NPA) Protocol. **Note:** Changing this menu item automatically resets the printer.	**Off**	Printer performs NPA processing. If data is not in NPA format, it is rejected as bad data.
		On	Printer does not perform NPA processing.
		Auto*	Printer examines the data to determine the format and then processes it appropriately.
PCL SmartSwitch	To configure the printer so it automatically switches to PCL emulation when a print job received through the USB port requires it, regardless of the default printer language.	**On***	Printer examines the data on the USB interface and selects PCL emulation if the data indicates that is the required printer language.
		Off	Printer does not examine the incoming data. The printer uses PostScript emulation to process the job if PS SmartSwitch is On, or uses the default printer language specified in the Setup Menu if PS SmartSwitch is Off.
PS SmartSwitch	To configure the printer so it automatically switches to PostScript emulation when a print job received through the USB port requires it, regardless of the default printer language.	**On***	Printer examines data on the USB interface and selects PostScript emulation if the data indicates that is the required printer language.
		Off	Printer does not examine the incoming data. The printer uses PCL emulation to process the job if PCL SmartSwitch is On, or uses the default printer language specified in the Setup Menu if PCL SmartSwitch is Off.

Menu item	Purpose	Values	
USB Buffer	To configure the size of the USB input buffer. **Note:** Changing the USB Buffer menu item automatically resets the printer.	**Disabled**	Job buffering is disabled. Any jobs already buffered on the disk are printed before normal processing of incoming jobs resumes.
		Auto*	Printer automatically calculates the USB Buffer size (recommended setting).
		3K to maximum size allowed	User specifies the USB Buffer size. The maximum size depends on the amount of memory in your printer, the size of the other link buffers, and whether Resource Save is set to On or Off. To maximize the range for the USB Buffer size, disable or reduce the size of the parallel, serial, and network buffers.

8 Understanding the printer messages

The printer operator panel displays messages describing the current state of the printer and indicates possible printer problems you must resolve. This topic provides a list of all printer messages, explains what they mean, and tells you how to clear the messages.
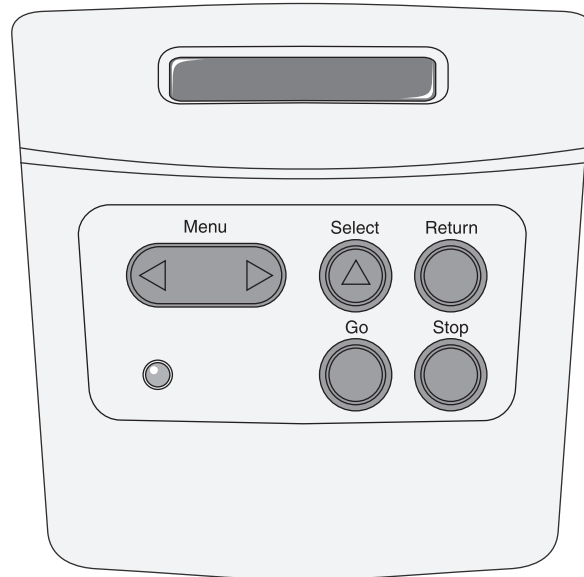
Message	What this message means	What you can do
Activating Menu Changes	The printer is activating changes made to the printer settings.	Wait for the message to clear. See also: **Disabling the operator panel menus**
Activating PPDS	The printer is activating PPDS emulation.	Wait for the message to clear.
Busy	The printer is busy receiving, processing, or printing data.	• Wait for the message to clear. • Press **Menu** to open the Job Menu, and cancel the current job.
Canceling Job	The printer is processing a request to cancel the current print job.	Wait for the message to clear. See also: **How to cancel a print job**
Change Cartridge Invalid Refill	The printer has detected an unsupported refilled cartridge.	Remove the indicated print cartridge, and install a new one. See also: **How to change a toner cartridge**
Close Door	The upper front door is open.	• Close the upper front door. • Install the print cartridge.
Deactivating PPDS	The printer is deactivating PPDS emulation.	Wait for the message to clear.

Understanding the printer messages

Message	What this message means	What you can do
Defragmenting **DO NOT POWER OFF**	The printer is defragmenting the flash memory to reclaim storage space occupied by deleted resources.	Wait for the message to clear. **Warning:** Do not turn the printer off while this message is displayed.
Disabling Menus	The printer is responding to a request to disable the menus.	Wait for the message to clear. **Note:** While the menus are disabled, you cannot change the printer settings from the operator panel. See also: **Disabling the operator panel menus**
Enabling Menus	The printer is responding to a request to make the menus available to all users.	Wait for the message to clear, then press **Menu** to view the menus from the operator panel. See also: **Enabling the menus**
Flushing Buffer	The printer is flushing corrupted print data and discarding the current print job.	Wait for the message to clear.
Formatting Flash **DO NOT POWER OFF**	The printer is formatting the flash memory.	Wait for the message to clear. **Warning:** Do not turn the printer off while this message is displayed.
Invalid Engine Code	The printer engine code is not valid. The printer cannot receive and process jobs until valid code is programmed into the engine.	Download valid code to the printer engine. **Note:** You can download engine code while this message is displayed.
Invalid Standard Network Code	The code in an internal print server is not valid. The printer cannot receive and process jobs until valid code is programmed into the internal print server.	Download valid code to the printer internal print server. **Note:** You can download network code while this message is displayed.
Load <x>	The printer is trying to feed paper from a source it detects is empty. x is one of the following sources: • Tray 1–Tray 3	• Load paper of the size and type requested in the second line of the display in the specified tray. Press **Go** to clear the message. • Press **Menu** to open the Job Menu, and cancel the current job. See also: **How to load the 250-sheet and 550-sheet trays**
Load Manual <x>	The printer is trying to feed paper from the multipurpose feeder, which it detects is empty.	• Load paper of the size and type requested in the second line of the display in the specified tray. The printer automatically clears the message and continues printing the job. • Press **Menu** to open the Job Menu and cancel the current job.
Menus Disabled	The printer menus are disabled. You cannot change the printer settings from the operator panel.	You can still open the Job Menu to cancel a job that is printing or to select a confidential job or a held job that you want to print. If you need access to the printer menus, contact your system support person. See also: **Disabling the operator panel menus**
Network Card Busy	An internal print server (also called an internal network adapter or INA) is being reset.	Wait for the message to clear.

Message	What this message means	What you can do
Not Ready	The printer is not ready to receive or process data. Someone pressed **Stop** to take the printer offline.	Press **Go** to make the printer ready to receive jobs.
Performing Self Test	The printer is running the series of start-up tests it performs after it is turned on.	Wait for the message to clear.
Power Saver	The printer is ready to receive and process data. It is reducing its electricity consumption while idle. If the printer remains inactive for the period of time specified in the Power Saver menu item (30 minutes is the factory default), the **Power Saver** message replaces the **Ready** message on the display.	• Send a job to print. • Press **Go** to quickly warm the printer to normal operating temperature and display the **Ready** message.
Printing Directory List	The printer is processing or printing a directory of all files stored in flash memory or on a hard disk.	Wait for the message to clear.
Printing Font List	The printer is processing or printing a list of all available fonts for the specified printer language.	Wait for the message to clear.
Printing Menu Settings	The printer is processing or printing the menu settings page.	Wait for the message to clear.
Printing Quality Test Pages	The printer is formatting and printing the Print Quality Test, which consists of 4 pages. Page 1 contains a mixture of graphics and text, pages 2 and 3 contain only graphics, and page 4 is a blank page. If Duplex is turned on, then the pages will be duplexed; otherwise, they are simplexed.	Wait for the message to clear.
Prog Engine Code **DO NOT POWER OFF**	The printer is programming new engine code.	Wait for the message to clear and the printer to reset. **Warning:** Do not turn the printer off while this message is displayed.
Prog System Code **DO NOT POWER OFF**	The printer is programming new system code.	Wait for the message to clear and the printer to reset. **Warning:** Do not turn the printer off while this message is displayed.
Program Flash **DO NOT POWER OFF**	The printer is storing resources, such as fonts or macros, in flash memory.	Wait for the message to clear. **Warning:** Do not turn the printer off while this message is displayed.
Ready	The printer is ready to receive and process print jobs.	Send a job to print.
Ready Hex	The printer is in Hex Trace mode and is ready to receive and process print jobs.	• Send a job to print. All data sent to the printer is printed in hexadecimal and character representation. Control strings are printed, not executed. • Turn the printer off and then on to exit Hex Trace mode and return to Ready status.
Res Reduced	The printer is reducing the resolution of a page in the current job from 600 dots per inch (dpi) to 300 dpi to prevent a **38 Memory Full** error. **Res Reduced** remains on the display while the job prints.	Press **Menu** to open the Job Menu, and cancel the current job.

Message	What this message means	What you can do
Resetting the Printer	The printer is resetting to the current default settings. Any active print jobs are canceled.	Wait for the message to clear. See also: **Using the operator panel to change printer settings**
Restoring Factory Defaults	The printer is restoring the factory default printer settings. When factory default settings are restored: • All downloaded resources (fonts, macros, symbol sets) in the printer memory are deleted. • All menu settings return to the factory default setting *except*: – The Display Language setting in the Setup Menu. – All settings in the Parallel Menu, Serial Menu, Network Menu, USB Menu, and Fax Menu.	Wait for the message to clear. See also: **Restoring factory default settings**
Toner Low	The print cartridge is low on toner.	• Shake the print cartridge to utilize the remaining toner. • Replace the cartridge. • Press **Go** to clear the message and continue printing. **Note:** If you do not replace the cartridge, you may experience print quality problems.
Waiting	The printer has received a page of data to print but is waiting for an End of Job command, a Form Feed command, or additional data.	• Press **Go** to print the contents of the buffer. • Press **Menu** to open the Job Menu, and cancel the current job. See also: **How to cancel a print job**
2<xx> Paper Jam	The printer detects a jam.	Clear the paper path. See also: **How to clear paper jams**
31 Missing or Defective Cart.	The print cartridge is missing or is defective.	Install a print cartridge, or replace the defective cartridge.
32 Unsupported Print Cartridge	An unsupported print cartridge is installed.	Remove the print cartridge, and install a new one. See also: **How to change a toner cartridge**
34 Short Paper	The printer has determined that the length of the paper in the source specified on the second line of the display is too short to print the formatted data.	• Press **Go** to clear the message and continue printing. The printer does not automatically reprint the page that prompted the message. • Make sure the Paper Size setting in the Paper Menu is correct for the size paper you are using. If MP Feeder Size is set to Universal, make sure your paper is large enough for the formatted data. • Press **Menu** to open the Job Menu and cancel the current job. See also: **What types of print media can be loaded?**

Message	What this message means	What you can do

35 Res Save Off Deficient Memory	The printer lacks the memory needed to enable Resource Save. This message usually indicates too much memory is allocated for one or more of the printer link buffers.	• Press **Go** to disable Resource Save and continue printing.
		• To enable Resource Save after you get this message:
		  – Make sure the link buffers are set to Auto, and exit the menus to activate the link buffer changes.
		  – When **Ready** is displayed, enable Resource Save from the Setup Menu.
		• Install additional memory.

37 Insufficient Collation Area	The printer memory (or hard disk, if installed) does not have the free space necessary to collate the print job.	• Press **Go** to print the portion of the job already stored and begin collating the rest of the job. • Press **Menu** to open the Job Menu, and cancel the current job. See also: **How to cancel a print job**
37 Insufficient Defrag Memory	The printer cannot defragment flash memory because the printer memory used to store undeleted flash resources is full.	• Delete fonts, macros, and other data in printer memory. • Install additional printer memory.

38 Memory Full	The printer is processing data, but the memory used to store pages is full.	• Press **Go** to clear the message and continue printing the job. The job may not print correctly.
		• Press **Menu** to open the Job Menu and cancel the current job.
		• To avoid this error in the future:
		  – Simplify the print job by reducing the amount of text or graphics on a page and deleting unnecessary downloaded fonts or macros.
		  – Install additional printer memory.
		See also: **How to clear paper jams**

39 Complex Page	The page may not print correctly because the print information on the page is too complex.	• Press **Go** to clear the message and continue printing the job. The job may not print correctly.
		• Press **Menu** to open the Job Menu and cancel the current job.
		• To avoid this error in the future:
		  – Reduce the complexity of the page by reducing the amount of text or graphics on the page and deleting unnecessary downloaded fonts or macros.
		  – Set Page Protect to On in the Setup Menu.
		  – Install additional printer memory.
		See also: **Setup menu**

42 Cartridge Region Mismatch	The cartridge you are using is not designed to match the region of your printer.	• Install a toner cartridge made for your printer region.
50 PPDS Font Error	The PPDS interpreter has encountered a font error, or the printer has received invalid PPDS download font data.	• Press **Go** to clear the message and continue printing. • Press **Menu** to open the Job Menu, and cancel the job or reset the printer.
51 Defective Flash	The printer detects defective flash memory.	Press **Go** to clear the message and continue printing. You must install different flash memory before you can download any resources to flash.

Message	What this message means	What you can do
52 Flash Full	There is not enough free space in the flash memory to store the data you are trying to download.	• Press **Go** to clear the message and continue printing. Downloaded fonts and macros not previously stored in flash memory are deleted. • Delete fonts, macros, and other data stored on the flash memory. • Install flash memory with more storage capacity.
53 Unformatted Flash	The printer detects unformatted flash memory.	• Press **Go** to clear the message and continue printing. You must format the flash memory before you can store any resources on it. • If the error message remains, the flash memory may be defective and require replacing.
54 Std Network Software Error	The printer cannot establish communications with an installed network port.	• Press **Go** to clear the message and continue printing. The job may not print correctly. • Program new firmware for the network interface by way of the parallel port. • Press **Menu** to open the Job Menu, and reset the printer.
55 Unsupported Flash in Slot X	The printer detects an unsupported flash memory card in one of the connectors.	Turn the printer off. Remove the unsupported option card.
56 Std Parallel Port Disabled	Data has been sent to the printer through a parallel port, but the parallel port is disabled.	• Press **Go** to clear the message. The printer discards any data received through the parallel port. • Make sure the Parallel Buffer menu item in the Parallel Menu is not set to Disabled. See also: **Parallel menu**
56 Standard USB Port Disabled	Data has been sent to the printer through a USB port, but the USB port is disabled.	• Press **Go** to clear the message. The printer discards any data received through the USB port. • Make sure the USB Buffer menu item in the USB Menu is not set to Disabled.
58 Too Many Flash Options	Too many flash memory options are installed on the printer.	Turn off and unplug the printer. Remove the excess flash memory. Plug in the printer, and turn it on.
58 Too Many Trays Attached	Too many drawers with matching trays are installed on the printer.	Turn off and unplug the printer. Remove the additional drawers. Plug in the printer, and turn it on. See also: *Setup Sheet*
88 Toner Low	The printer has detected that the toner supply in the print cartridge is low. If you do not have a print cartridge on hand, order one now.	• Shake the print cartridge to utilize the remaining toner. • Replace the cartridge. • The `Toner Low` message is displayed until you replace the cartridge. See also: **How to change a toner cartridge**
900–999 Service <message>	Messages labeled 900–999 relate to printer problems that may require printer service.	Turn the printer off, and check all cable connections. Turn the printer back on. If the service message recurs, call for service, and report the message number and description of the problem.

9 Understanding the printer configuration menus

Network menu

Use the Network menu to change printer settings on jobs sent through a network port (either Standard Network or Network Opt <x>).

Setting	Purpose	Values
NPA Mode	Send print jobs to the printer and query printer status information simultaneously.	• **Off** • **Auto***
Mac Binary PS	Configure the printer to process Macintosh binary PostScript print jobs.	• **Off**—The printer filters PostScript print jobs using standard protocol. • **On**—The printer processes raw binary PostScript print jobs from computers using the Macintosh operating system. This setting often causes Windows print jobs to fail. • **Auto***—The printer processes print jobs from computers using either Windows or Macintosh operating systems.
Set Card Speed	Automatically detect the connection speed of your network. You can disable this setting to set the speed manually.	• **Auto***—The printer detects current network speed. • **10Mbps†, Half Duplex**—Forces the printer to try to connect to the network only at 10Mbps, Half Duplex. • **10Mbps, Full Duplex**—Forces the printer to try to connect to the network only at 10Mbps, Full Duplex. • **100Mbps, Half Duplex**—Forces the printer to try to connect to the network only at 100Mbps, Half Duplex. • **100Mbps, Full Duplex**—Forces the printer to try to connect to the network only at 100Mbps, Full Duplex.
* Factory default † Megabits per second		

Parallel menu

Use the Parallel menu to change printer settings on jobs sent through a parallel port.

Setting	Purpose	Values
NPA Mode	Send print jobs to the printer and query printer status information simultaneously.	• **Off** • **On** • **Auto***
Protocol	Receive information at a much higher transmission rate if your printer is set to Fastbytes (if your computer supports Fastbytes) or receive information at a normal transmission rate if your printer is set to Standard.	• **Standard** • **Fastbytes***
Parallel Mode 2	Determine whether the parallel port data is sampled on the leading (On) or trailing (Off) edge of strobe.	• **Off** • **On***
MAC Binary PS	Configure the printer to process Macintosh binary PostScript print jobs.	• **Off**—The printer filters PostScript print jobs using standard protocol. • **On**—The printer processes raw binary PostScript print jobs from computers using the Macintosh operating system. This setting often causes Windows print jobs to fail. • **Auto***—The printer processes print jobs from computers using either Windows or Macintosh operating systems.
* Factory default		

Setup menu

Use the Setup menu to configure how the printer formats the end of a line, depending on the computer system being used.

Setting	Purpose	Values
Auto CR after LF	Specify whether the printer automatically performs a carriage return after a line feed control command.	• **Off*** • **On**
Auto LF after CR	Specify whether the printer automatically performs a line feed after a carriage return control command.	• **Off*** • **On**
* Factory default		

USB menu

Use the USB menu to change printer settings on jobs sent through a Universal Serial Bus (USB) port.

Setting	Purpose	Values
NPA Mode	Send print jobs to the printer and query printer status information simultaneously.	• **Off** • **On** • **Auto***
Mac Binary PS	Configure the printer to process Macintosh binary PostScript print jobs.	• **Off**—The printer filters PostScript print jobs using standard protocol. • **On**—The printer processes raw binary PostScript print jobs from computers using the Macintosh operating system. This setting often causes Windows print jobs to fail. • **Auto***—The printer processes print jobs from computers using either Windows or Macintosh operating systems.
* Factory default		

Utilities menu

Use the Utilities menu to troubleshoot printer problems.

Setting	Purpose	Values
Reset Factory Defaults	Return your printer settings to the factory default values. Sometimes resetting the printer to the original settings solves formatting problems. All menu items are reset to the factory default values except: • Display Language. • All settings in the Parallel menu, Network menu, LocalTalk menu, and USB menu. All downloaded resources (fonts, macros, and symbol sets) in printer memory (RAM) are deleted. Resources in flash memory are unaffected.	
Reset Photoconductor Counter	Return the photoconductor counter to zero. The replace photoconductor message should be cleared *only* when the photoconductor kit has been replaced.	
Hex Trace	Help isolate printing problems when unexpected characters print or characters are missing. Hex Trace helps you determine if there is a problem with the language interpreter or the cable by telling you what information your printer is receiving. To exit Hex Trace, turn off the printer.	• **Off*** • **On**
Print Quality Test Pages	Help isolate print quality problems, such as streaking. When you select this setting, three pages print to help you evaluate print quality: • A text page with printer information, cartridge information, current margin settings, and a graphic. • Two pages with graphics.	
* Factory default		

10 Software and network tasks

Printing the menu settings and network setup pages

The menu settings page shows current settings (user default settings) for the menus, a list of installed options, and available printer memory. You can use this page to verify that all printer options are properly installed and the printer settings are correct.

See **Using the operator panel** to identify the display and operator panel buttons if you need help.

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

    2   Press and release **Menu** until you see `Utilities Menu`, and then press **Select**.

    3   Press and release **Menu** until you see `Print Menus`, and then press **Select**.

The message `Printing Menu Settings` appears while the page prints. The printer returns to the `Ready` message after the menu settings page prints.

If any other message appears when you print this page, see **Understanding the printer messages** for more information.

If your printer has a network port, an additional page prints to indicate more about network settings. The Network Menu and network settings are only shown if you are using the network printer model.

Settings for menu items can be set through the operator panel. Settings fr menu items can also be made using Print Job Language (PJL) commands. See the *Technical Reference* on the Lexmark's Web site for information about PJL.

You can use the menu settings page to verify that all printer options are properly installed and that printer settings are set correctly.

Printing the Print Quality Test Pages

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

> **Note:** The test pages must be printed on letter, legal, or A4 paper.

1 Turn off the printer.

2 Press and hold **Select** and **Return** as you turn on the printer.

Release the buttons once `Performing Self Test` displays.

3 Select **Prt Quality Pgs**.

The printer posts the `Printing Quality Test Pages` message as the pages print. The pages include:

- An information page containing printer information, cartridge information, current margin settings, and a graphic to use to evaluate the print quality
- Two pages with graphics to use to evaluate how well the printer is capable of printing various types of graphics

4 Examine the pages to determine the quality of printing. If there are problems, see **Print quality problems**.

To exit these menus, turn the printer off and then back on.

How to configure for TCP/IP

If you have TCP/IP available on your network, we recommend that you assign an IP address to the printer.

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 the menu settings and network setup pages on page 89**.

2 Go to **Verifying the IP settings on page 90,** and begin with **step 2**.

If your network is not using DHCP, then you must manually assign an IP address to the printer.

An easy way to do this is to use the Print Server TCP/IP Setup Utility.

Detailed instructions about installing and using this utility are located on the drivers CD that shipped with your printer. Launch the CD, click **View Documentation,** and then click **Network Printer Install**. Look for information about using the Print Server TCP/IP Setup Utility.

To use this utility, you will need to know the 12-digit physical address or *Universally Administered Address (UAA)* of the printer. Look for the UAA entry on the network setup page you printed earlier. You can use either the MSB or canonical form of the UAA.

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 the menu settings and network setup pages on page 89** if you need help.

> **Note:** To display a command prompt on a Windows computer, click **Start → Programs → Command prompt** (or **Accessories → Command prompt** if using Windows 2000).

2 Ping the printer, and verify that it responds. For example, at a command prompt on a network computer, type `ping` followed by the new printer IP address (for example, `192.168.0.11`):

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

Using the printer resident Web page

If you have a network model, your printer has a resident Web page, which you can access from your browser. To access the resident Web page, type the printer IP address in the URL address field of your browser (for example, http://192.168.236.24). If you do not know the IP address of your printer, you can find it on the network setup page (for help, see **Printing the menu settings and network setup pages on page 89**).

Some of the resident Web page features include a real-time status window of the printer and details of the printer configuration, such as current memory and engine code levels. If you have administrative rights, you can also change printer settings.

11 Supplies information

What supplies do I need and how do I order them?

There are only two supply items that have to be replaced on a regular basis: the toner cartridge and the photoconductor kit, which together comprise the print cartridge assembly. The photoconductor kit typically lasts up to 30,000 pages (at approximately 5% coverage), whereas the toner cartridge has to be replaced more frequently. How often the toner cartridge needs replacing depends on which cartridge you purchase and the average amount of toner coverage you have on your print jobs.

Within the United States or Canada, you can order Lexmark supplies from any authorized Lexmark supplies dealer. To locate the dealer nearest you, call 1-800-539-6275. In other countries or regions, visit the Lexmark online store at **www.lexmark.com**, or contact the place where you bought your printer.

The recommended supplies specifically designed for the printer are:

Part number	Description	Average cartridge yield
World Wide		
12A8302	Photoconductor kit	30,000 standard pages[1]
For the USA and Canada[3]		
24035SA	Print Cartridge	2,500 standard pages[2]
34035HA	High Yield Print Cartridge	6,000 standard pages[2]
24015SA	Return Program Print Cartridge	2,500 standard pages[2]
34015HA	High Yield Return Program Print Cartridge	6,000 standard pages[2]
For Europe, the Middle East, and Africa[4]		
24036SE	Print Cartridge	2,500 standard pages[2]
34036HE	High Yield Print Cartridge	6,000 standard pages[2]
24016SE	Return Program Print Cartridge	2,500 standard pages[2]
34016HE	High Yield Return Program Print Cartridge	6,000 standard pages[2]
For the Asia Pacific Region[5]		
34237HR	Print Cartridge	2,500 standard pages[2]
34237XR	High Yield Print Cartridge	6,000 standard pages[2]
34217HR	Return Program Print Cartridge	2,500 standard pages[2]
34217XR	High Yield Return Program Print Cartridge	6,000 standard pages[2]
[1] Approximately 5% coverage. [2] Declared yield value in accordance with ISO/IEC 19752. [3] Designed for use only in the USA and Canada. [4] Designed for use only in Europe, Middle East, and Africa. [5] Designed for use only in Asia Pacific Region, Australia, and New Zealand. [6] Designed for use only in Latin America.		

Part number	Description	Average cartridge yield
For Latin America[6]		
24038SL	Print Cartridge	2,500 standard pages[2]
34038HL	High Yield Print Cartridge	6,000 standard pages[2]
24018SL	Return Program Print Cartridge	2,500 standard pages[2]
34018HL	High Yield Return Program Print Cartridge	6,000 standard pages[2]
[1] Approximately 5% coverage. [2] Declared yield value in accordance with ISO/IEC 19752. [3] Designed for use only in the USA and Canada. [4] Designed for use only in Europe, Middle East, and Africa. [5] Designed for use only in Asia Pacific Region, Australia, and New Zealand. [6] Designed for use only in Latin America.		

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

How to conserve supplies

Conserving supplies lowers printing costs.

- When printing drafts, conserve toner by changing the Toner Darkness setting in your printer driver. The settings range from 1 (very light) to 10 (very dark), with 8 being the default. Setting the Toner Darkness to 1 conserves the most toner.
- Reduce paper consumption by printing on both sides of the paper.

How to know when you need new supplies

The following sections describe ways to determine when new supplies are needed.

Checking the toner and photoconductor levels

You can determine approximately how much toner is left in your cartridge and how full the photoconductor kit is by printing a menu settings page. This helps you decide when you might need to order replacement supplies. For help printing a menu settings page, see **Printing the menu settings and network setup pages on page 89**.

The **Toner Low** message (see **page 83**) is displayed when the toner cartridge is nearly empty. You can still print for a short time while this message is displayed, but print quality begins to decrease as the toner level decreases.

>   **Note:** The **Toner Low** message does not appear if the 1500-page starter print cartridge is installed.

When the toner low message appears, or when you experience faded print, remove the toner cartridge. Firmly shake it side to side and front to back several times to redistribute the toner, and reinsert it. Repeat this procedure multiple times. If the print remains faded, replace the toner cartridge.

To ensure print quality and to avoid damage to the printer, the printer stops operating after the photoconductor has reached a maximum of 40,000 pages. The printer automatically notifies you before the photoconductor reaches this point.

When you first receive the "Replace photoconductor kit" message, you should immediately order a new photoconductor kit. While the printer may continue to function properly after the photoconductor kit has reached its official end-of-life (approximately 30,000 pages), print quality begins to significantly decrease until the photoconductor stops operating at the maximum of 40,000 pages. Print a menu settings page (See **Printing the menu settings and network setup pages on page 89**) to determine when it reaches this point.

How to change a toner cartridge

1 Open the front cover by pressing the button on the left side of the printer and lowering the cover.
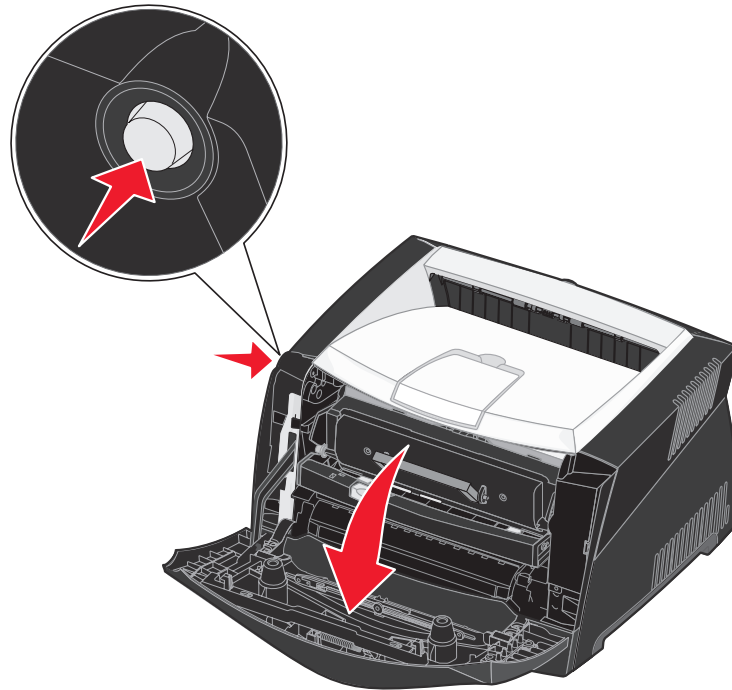
2 Remove the toner cartridge:

    a Press the button on the base of the print cartridge assembly.

    b Pull the toner cartridge up and out using the handle.
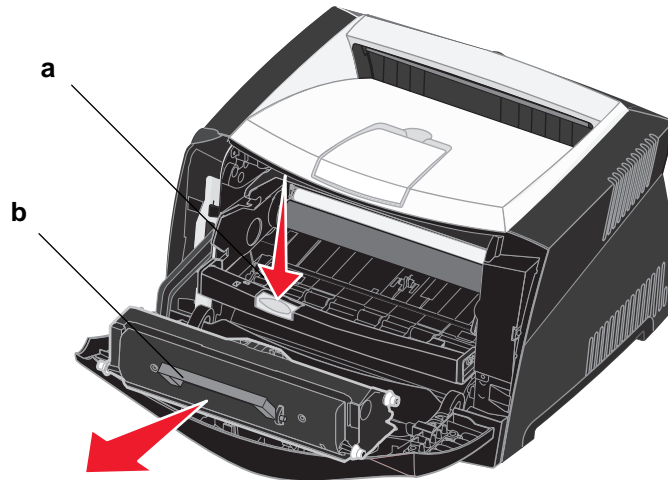
3 Unpack the new toner cartridge.

    Note: You can use the packing material from the new cartridge to ship the old cartridge back to Lexmark for recycling. See **Recycling Lexmark products on page 98** for more information.

4 Firmly shake the cartridge in all directions to distribute the toner.

How to change a toner cartridge
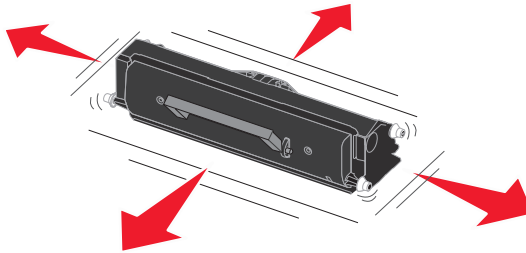
5 Install the new toner cartridge by aligning the white rollers on the toner cartridge with the white arrows on the tracks of the photoconductor kit and pushing the toner cartridge in as far as it will go. The cartridge *clicks* into place when correctly installed.
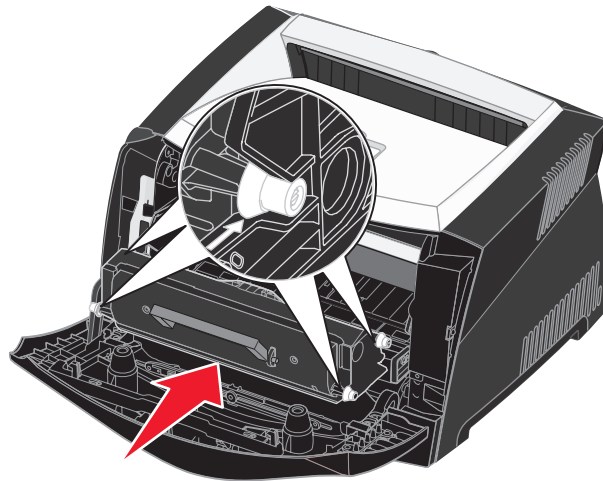
6 Close the front cover.

Recycling Lexmark products

To return Lexmark products to Lexmark for recycling:

1 Visit our Web site:

www.lexmark.com/recycle

2 Follow the instructions on the computer screen.

How to change a photoconductor kit

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

1 Open the front cover by pressing the button on the left side of the printer and lowering the cover.
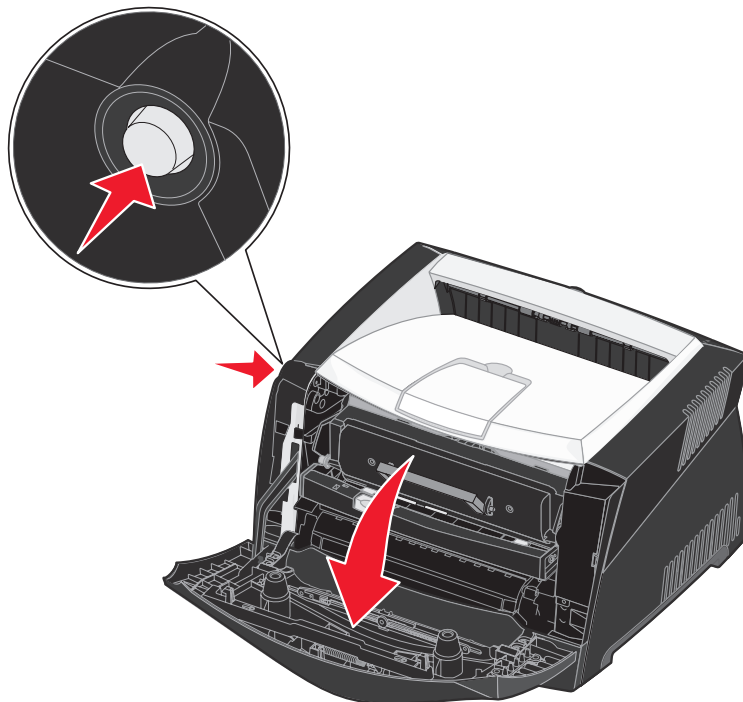
2 Pull the print cartridge assembly out of the printer by pulling on the toner cartridge handle.

> **Note:** Do not press the button on the print cartridge assembly.
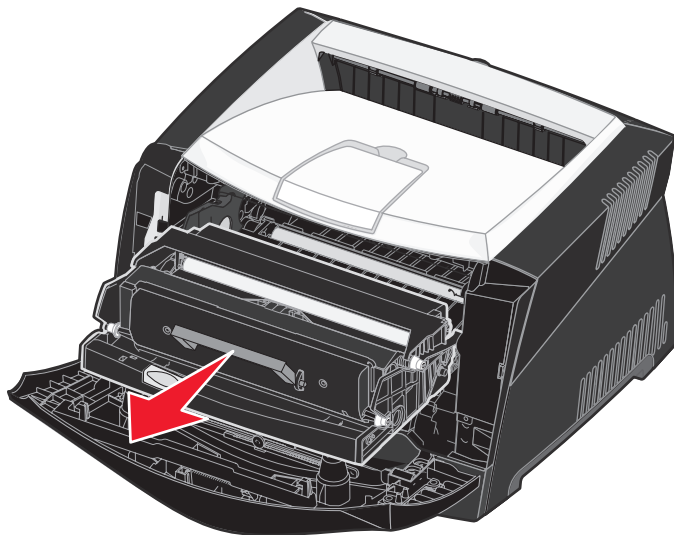
Place the print cartridge assembly on a flat, clean surface.

3 Remove the toner cartridge:

    a Press the button on the base of the print cartridge assembly.

    b Pull the toner cartridge up and out using the handle.
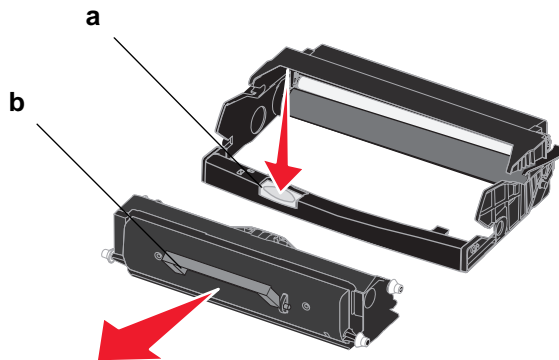
4 Unpack the new photoconductor kit.

5 Install the toner cartridge into the new print cartridge assembly by aligning the white rollers on the toner cartridge with the white arrows on the tracks of the photoconductor kit and pushing the toner cartridge in as far as it will go. The cartridge *clicks* into place when correctly installed.
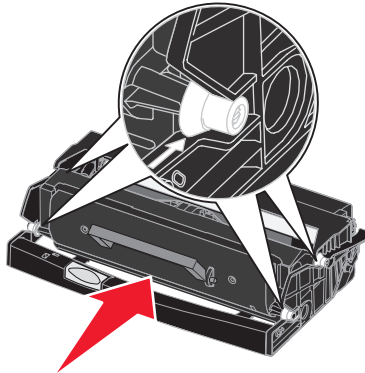
6 Install the print cartridge assembly into the printer by aligning the green arrows on the guides of the print cartridge assembly with the green arrows on the tracks in the printer and pushing the print cartridge assembly in as far as it will go.
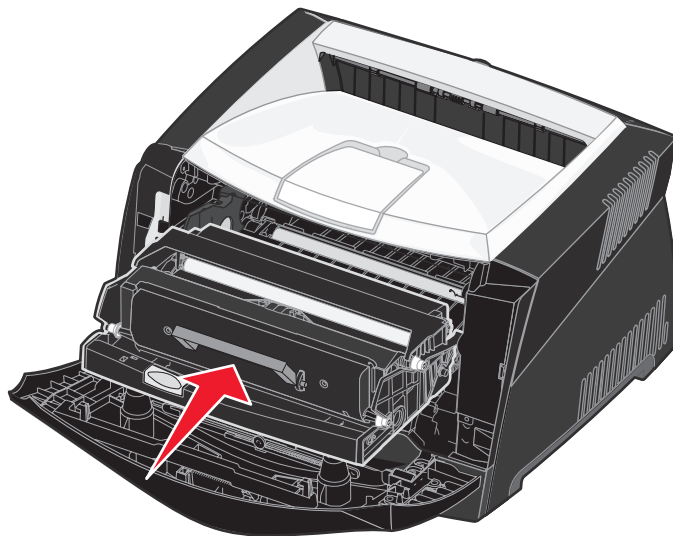
7 Close the front cover.

> **Note:** For information about resetting the photoconductor kit counter, see the instruction sheet that shipped with the new kit.

12 Administration

The following sections are for a network administrator in charge of the printer.

Disabling the operator panel menus

Since many people could be using the printer, an administrator may choose to lock the 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 the Job Menu or to Print and Hold functionality.

2 Press and hold **Select** and **Return**, and turn the printer on.

3 Release the buttons when you see `Performing Self Test`.

`Config Menu` appears on the first line of the display.

4 Press **Menu** until you see `Panel Menus`, and then press **Select**.

`Disable` appears on the second line of the display.

5 Press **Select**.

`Locking Menus` appears briefly.

6 Press **Menu** until you see `Exit Config Menus`, and then press **Select**.

The menus are disabled. If you press **Menu**, the message `Menus Disabled` appears.

Enabling the menus

1 Repeat steps **1** through **4** in **Disabling the operator panel menus**.

2 Press **Menu** until you see `Enable`.

Continue with steps **5** and **6** in **Disabling the operator panel menus**.

Restoring factory default settings

When you first enter the printer menus from the operator panel, you may notice an asterisk (*) next to 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 countries and regions.)

When you select a new setting from the operator panel, the `Saved` message appears. When the Saved 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:

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

    2   Press **Menu** until you see `Utilities Menu`, and then press **Select**.

    3   Press **Menu** until you see `Factory Defaults`, and then press **Select**.

         `Restore` appears on the second line of the display.

    4   Press **Select**.

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 downloaded resources (fonts, macros, and symbol sets) in printer memory (RAM) are deleted. (Resources residing in flash memory or on the optional hard disk are unaffected.)

- All menu settings are returned 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.

If you need more information about changing menu settings or selecting new user default settings, see **Using the operator panel to change printer settings**.

⑬ Troubleshooting

General problems
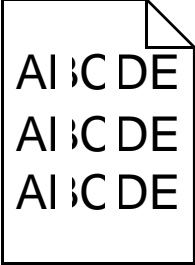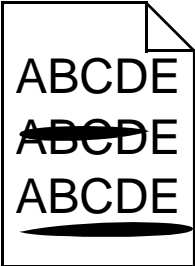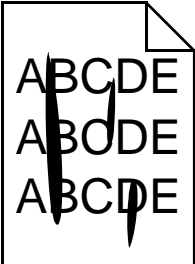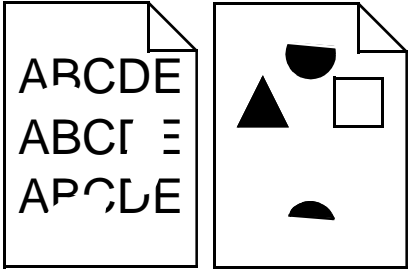
Problem / Question	Solution / Answer
Why am I missing characters when I print on envelopes?	If you see voids (missing characters) when printing envelopes, check your printer driver settings to make sure you selected Envelope from the Paper Type menu.
	If Envelope is already selected, try changing the texture setting to a rougher setting. Sometimes toner does not adhere well to smooth-textured envelopes. From your printer driver, select **Custom 6-Rough Env** from the Paper Type menu.
	To change Custom 6 back to its default settings for Paper Type, Paper Texture, and Paper Weight, use the Local Printer Settings Utility on the drivers CD that shipped with your printer. If you already installed the printer drivers and utilities, skip to step 7.
	1 Insert the drivers CD into your computer.
	2 Click **Printer Software**.
	3 Click **Agree**.
	4 Select **Local Printer Install**, and then click **Next**.
	5 Select your printer and port, and make sure Local Printer Settings Utility is checked.
	6 Click **Finish**.
	The Utility will be installed on your computer under Program Files (unless you chose a different directory).
	7 Open the Local Printer Settings Utility.
	8 From the Paper menu, scroll through the menu items until you see the Custom menu setting.
	9 Click **Custom**.
	10 Scroll down to Custom 6 Paper Type.
	11 Select **envelope** for the Custom 6 paper type, **heavy** for the Custom 6 paper weight, and **rough** for the Custom 6 paper texture.
	12 From the toolbar, click **Actions**.
	13 Click **Apply** to save the changes you made.
	14 Click **File → Exit** to close the Local Printer Settings Utility.
How do I clear a paper jam?	See **How to clear paper jams on page 35** for information about clearing jams.
The toner low message is on, but I don't have another cartridge to put in yet. Can I still print with the low cartridge?	Yes, you can still print. To extend the life of the toner cartridge somewhat, remove the cartridge, firmly shake it from side to side and front to back several times to use the remaining toner, then insert it back into the printer. Repeat this procedure multiple times. If print remains faded, replace the toner cartridge.
The printer seems to print slower when using the manual feeder.	This is normal. The printer sometimes prints at a slightly slower speed when feeding print media from the manual feeder.
I want to manually duplex card stock, but I'm having trouble getting it to feed.	The problem is that when the printer tries to manually duplex a print job, it always prints side 2 from Tray 1. However, Tray 1 does not support card stock.
	To achieve the desired effect, you have to send both pages of the print job as separate jobs. After the first page has printed, reload the card stock in the manual feeder. Load the card stock in the feeder with the already-printed side down, with the top of the sheet first.

Problem / Question	Solution / Answer
Paper stacks poorly in the output bin.	Extend the paper support on the output bin.
Dust is gathering on the paper tray when it is extended.	Attach the dust cover to the back of the printer. This protects the paper tray from the environment as well as keeping the tray from being knocked out of position while it is extended.
The paper tray is getting bumped and pushed out the front of the printer when it is extended.	See **Attaching the dust cover** for information about attaching the dust cover.
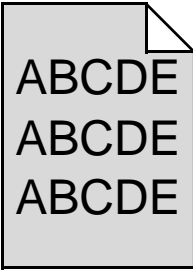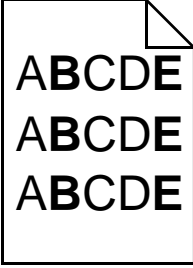
Print quality problems

You can solve many print quality problems by replacing a supply or maintenance item that has reached the end of its intended life. Use the following table to find solutions to print quality problems.

Symptom	Cause	Solution
White lines AI ͻC DE AI ͻC DE AI ͻC DE	• The printhead lens is dirty. • Either the toner cartridge or the fuser is defective.	Try the following in this order: **1** Clean the printhead lens. (See **How to clean the printhead lens on page 109**.) **2** Replace the toner cartridge. **3** Replace the fuser[*].
Streaked horizontal lines ABCDE ABCDE ABCDE	The toner cartridge or fuser may be defective, empty, or worn.	Replace the toner cartridge or fuser[*] as needed.
Streaked vertical lines ABCDE ABCDE ABCDE	• Toner is smeared before fusing to the paper. • The toner cartridge is defective.	• If paper is stiff, try feeding from another tray or the manual feeder. • Replace the toner cartridge.
Print irregularities ARCDE ABCΓ Ξ APϹLE	• Paper has absorbed moisture due to high humidity. • You are using paper that does not meet the printer specifications. • The fuser is worn or defective.	• Load paper from a fresh package in the paper tray. • Avoid textured paper with rough finishes. • Make sure the printer driver paper type setting matches the type of paper you are using. • Replace the fuser[*].
[*] To replace the fuser, call a service technician.		
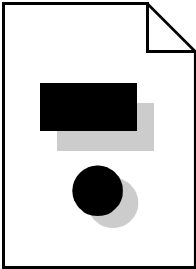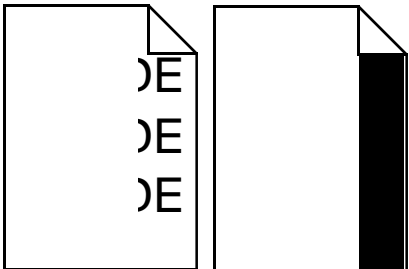
Symptom	Cause	Solution
Print too light	• The Toner Darkness setting is too light. • You are using paper that does not meet the printer specifications. • The toner cartridge is low on toner. • The toner cartridge is defective.	• Select a different Toner Darkness[†] setting from the printer driver before sending the job to print. • Load paper from a new package. • Avoid textured paper with rough finishes. • Make sure the paper you load in the trays is not damp. • Replace the toner cartridge.
Print too dark	• The Toner Darkness setting is too dark. • The toner cartridge is defective.	• Select a different Toner Darkness[†] setting from the printer driver before sending the job to print. • Replace the toner cartridge.
Transparency print quality is poor (Print has inappropriate light or dark spots, toner is smeared, or horizontal or vertical light bands appear.)	• You are using transparencies that do not meet the printer specifications. • The Form Type setting in the printer driver is set to something other than transparency.	• Use only transparencies recommended by the printer manufacturer. • Make sure the Form Type setting is set to transparency.
Toner specks	• The toner cartridge is defective. • The fuser is worn or defective. • Toner is in the paper path.	• Replace the toner cartridge. • Replace the fuser[*]. • Call for service.
Toner rubs off the paper easily when you handle the sheets	• The Paper Texture setting is wrong for the type of paper or specialty media you are using. • The Paper Weight setting is wrong for the type of paper or specialty media you are using. • The fuser is worn or defective.	• Change Paper Texture[†] from Normal to Smooth or Rough. • Change Paper Weight[†] from Plain to CardStock (or other appropriate weight). • Replace the fuser[*].
Gray background ABCDE ABCDE ABCDE	• The Toner Darkness setting is too dark. • The toner cartridge is defective.	• Select a different Toner Darkness[†] setting from the printer driver before sending the job to print. • Replace the toner cartridge.
Uneven print density ABCDE ABCDE ABCDE	The toner cartridge is defective.	Replace the toner cartridge.
[*] To replace the fuser, call a service technician.		

Symptom	Cause	Solution
Ghost Images	• The Form Type setting in the printer driver is set incorrectly. • Toner level is low in the toner cartridge.	• Make sure the Form Type setting is correct for the paper or specialty media you are using. • Replace the toner cartridge.
Uneven printing (Print only appears on one side of the page.)	The toner cartridge is not properly installed.	Remove and then reinsert the toner cartridge.
Incorrect margins	The Form Size setting in the printer driver is different than the size paper that is loaded in the tray. For example, you inserted A4 size paper into the selected tray but did not set the Form Size to A4.	Set the Form Size to A4.
Skewed print (Print is inappropriately slanted.)	• The guides in the selected tray are not in the correct position for the paper size loaded in the tray. • The manual feeder guides are not in the correct position for the paper size loaded in the feeder.	• Move the guides in the tray so that they are snug against the sides of the paper. • Move the manual feeder guides so that they are snug against the sides of the paper.
Blank pages	The toner cartridge is defective or empty.	Replace the toner cartridge.
Solid black pages	• The toner cartridge is defective. • Your printer requires servicing.	• Replace the toner cartridge. • Call for service.
Paper curls badly once it prints and exits to the bin	The Paper Weight setting is wrong for the type of paper or specialty media you are using.	Change Paper Weight to Smooth.
* To replace the fuser, call a service technician.		

How to clean the printhead lens

You can solve some print quality problems by cleaning the printhead lens.

    1   Turn the printer off.

    2   Open the front cover by pressing the button on the left side of the printer and lowering the cover.
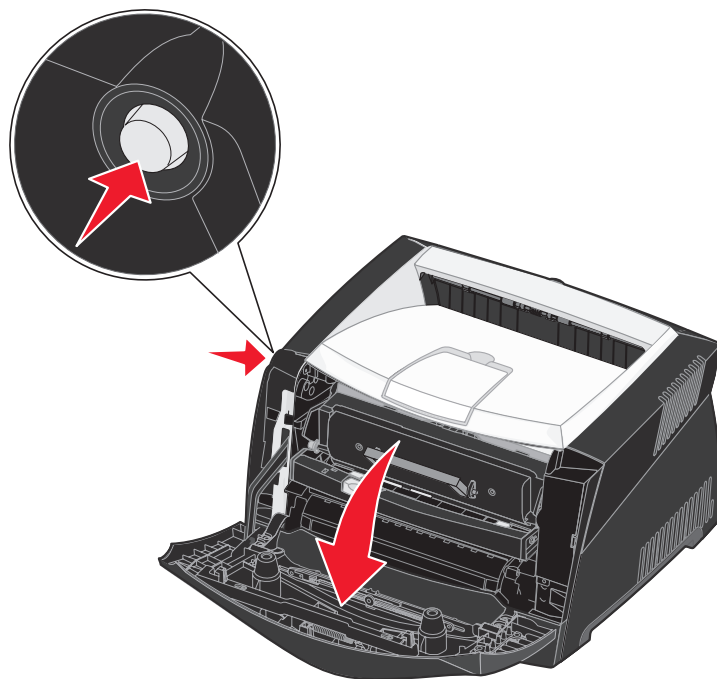
3 Remove the print cartridge assembly out of the printer by pulling on the toner cartridge handle.

> **Note:** Do not press the button on the print cartridge assembly.
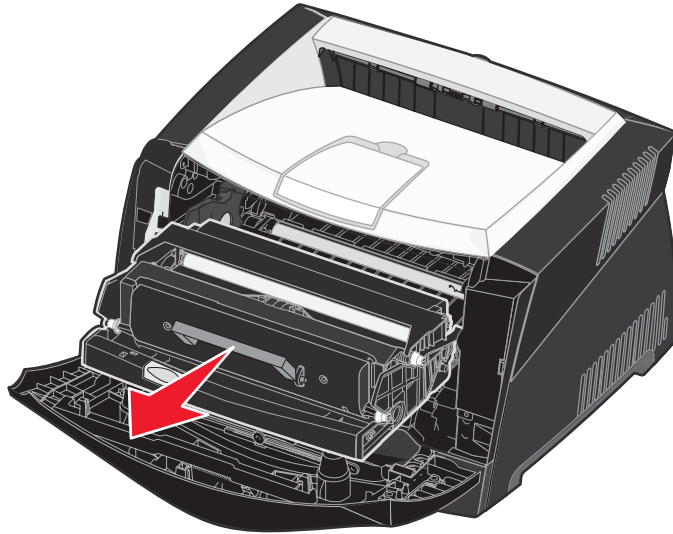
Place the print cartridge assembly on a flat, clean surface.

> **Warning:** Do not leave the print cartridge assembly exposed to direct light for an extended period of time. Extended light exposure can cause print quality problems.

4 Locate the glass printhead lens, which is located within the recessed area in the top of the printer.
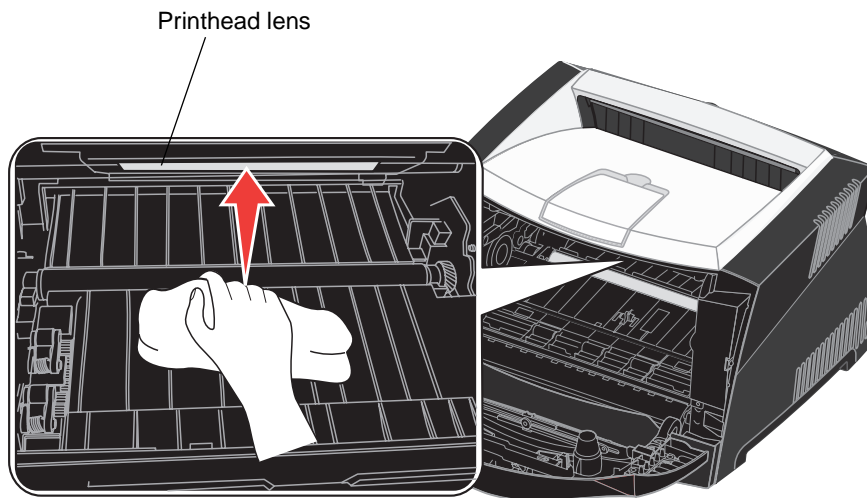
Printhead lens

5 Gently wipe the printhead lens with a clean, dry, lint-free cloth.

Warning: Not using a clean, dry, lint-free cloth may result in damage to the printhead lens.

6 Install the print cartridge assembly into the printer by aligning the green arrows on the guides of the print cartridge assembly with the green arrows on the tracks in the printer and pushing the print cartridge assembly in as far as it will go.
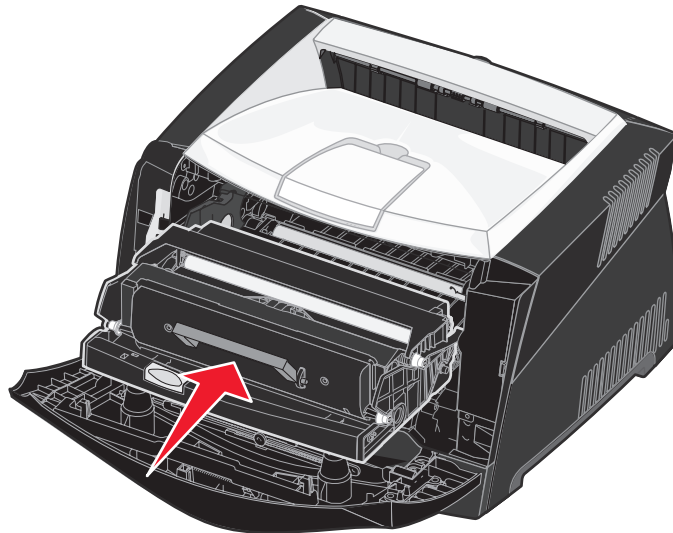
7 Close the front cover.

8 Turn the printer on.

Index