

Help guide

Quick Reference pages

Other Quick Reference pages available include:

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Setup Guide

The *Setup Guide* provides information about setting up the printer and its options.

Publications CD / User's Reference

The publications CD contains a *User's Reference*, which provides information about loading paper, clearing error messages, ordering and replacing supplies, installing maintenance kits, and troubleshooting. It also provides general information for administrators.

The information on the publications CD is also available on Lexmark's Web site at www.lexmark.com/publications.

Drivers CD

The drivers CD contains the necessary printer drivers to get your printer up and running.

It may also contain printer utilities, screen fonts, and additional documentation.

Lexmark's Web site

Visit Lexmark's Web site at www.lexmark.com for updated printer drivers, utilities, and other printer documentation.

Connection guide

Follow these steps to properly connect your printer to your computer or network system:

- 1 **Connect the cables and power cord** on page 1.
- 2 **Install drivers for local printing** on page 3.
- 3 **Verify printer setup** on page 8.
- 4 **Configure for TCP/IP** on page 9.
- 5 **Install drivers for network printing** on page 10

Connect the cables and power cord

Attaching a local cable

USB cable

A USB port is standard on all models. Windows 98 SE, Windows Me, Windows 2000, Windows XP, and Windows Server 2003 operating systems support USB connections. Some UNIX, Linux, and Macintosh computers also support USB connections. Refer to your computer operating system documentation to see if your system supports USB.

To attach the printer to a computer:

- 1 Connect the printer to the computer using a USB cable. Be sure to match the USB symbol on the cable to the USB symbol on the printer.
- 2 Plug one end of the printer power cord into the socket at the back of the printer and the other end into a properly grounded outlet.
- 3 Turn on your printer.

After the printer completes its internal tests, the **Ready** message indicates that the printer is ready to receive jobs. If you see a message other than **Ready** on the display, refer to the publications CD for instructions on clearing the message.

- 4 Go on to **Install drivers for local printing** on page 3.

Parallel cable

A parallel port is standard on the base model and is available on an option card for all network models. Refer to the printer's *Setup Guide* for more information.

If you install an optional Parallel Interface Card to a network model or network duplex model, you need a 1284 A-C parallel cable.

- 1 Connect the printer to the computer using a 1284 A-C parallel cable.
- 2 Plug one end of the printer power cord into the socket at the back of the printer and the other end into a properly grounded outlet.

Serial cable

If you have installed an optional Serial Interface Card, you can locally attach the printer with a serial cable. With serial printing, data is transferred one bit at a time. Although serial printing is usually slower than parallel printing, it is the preferred option when there is a great deal of distance between your printer and computer or a parallel interface is not available.

A serial port requires a compatible serial cable that supports RS-232 connections.

- 1 Connect the printer to the computer using a serial cable.
- 2 Plug one end of the printer power cord into the socket at the back of the printer and the other end into a properly grounded outlet.

Attaching a network cable

You can attach your printer to a network using standard network cables.

Ethernet cable

A 10BaseT/100BaseTx Fast Ethernet port is standard on the network model.

To attach the printer to a network:

- 1 Make sure the printer is turned off and unplugged.
- 2 Connect the printer to a LAN drop or hub using standard cabling that is compatible with your network. The printer automatically adjusts for the network speed.
- 3 Plug one end of the printer power cord into the socket at the back of the printer and the other end into a properly grounded outlet.

Note: If you installed an optional 2000-sheet drawer, plug the printer power jumper cord into the back of the drawer, and then plug the drawer's cord into a properly grounded outlet.

- 4 Turn on your printer.

After the printer completes its internal tests, the **Ready** message indicates that the printer is ready to receive jobs.

If you see a message other than **Ready** on the display, refer to the publications CD for instructions on clearing the message.

- 5 Turn on your computer and any other peripherals.
- 6 Continue with **Verify printer setup** on page 8.

Other network options

Fiber optic and wireless network options may also be available for your printer. To view the cabling for other network options, launch the drivers CD and click **View Documentation**. Look for information about MarkNet Print Servers.

Install drivers for local printing

A local printer is a printer attached to your computer using a USB or parallel cable. *If your printer is attached to a network, instead of your computer, skip this step and go on to **Verify printer setup** on page 8.*

A printer driver is software that lets your computer communicate with your printer. The procedure to install drivers depends on the operating system you are using.

Note: For Windows operating systems, you can skip the hardware wizard and use the drivers CD to install your printer drivers. Launch the CD and follow the instructions to install printer software.

Select your operating system and cable from the following table to find driver installation instructions.

Operating System	Cable	Go to page...
Windows XP; Windows Server 2003	USB* or Parallel	3
Windows 2000	USB* or Parallel	4
Windows Me	USB* or Parallel	4
Windows 98	USB* or Parallel	5
Windows NT 4.x	Parallel only	5
Windows 95	Parallel only	6
Macintosh	USB only	6
UNIX/Linux	USB or Parallel	7

* If you attach a USB printer cable while your printer and computer are turned on, the Windows hardware wizard launches immediately. Find the instructions for your operating system and use them to answer the plug and play screens.

Windows

In addition to the following driver installation instructions, you may need to refer to the documentation that shipped with your computer and your Windows software.

Before you install

Some versions of Windows software may already have a system printer driver for this printer included. This may mean that installation will seem automatic in later versions of Windows. System drivers work well for simple printing, but they contain less functionality than our enhanced custom driver.

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

To obtain all the features of the custom driver, you will need to install the custom printer driver using the drivers CD that shipped with the printer.

Using Windows XP or Windows Server 2003 with USB or parallel cable

When the Found New Hardware Wizard screen appears:

- 1 Insert the drivers CD. If the CD auto launches, exit the CD. Click **Next**.

Note: Business versions of Windows XP require that you have administrative access in order to install printer drivers on your computer.
- 2 Browse to the location of the printer driver on the drivers CD:


```
D:\drivers\win_2000\
```
- 3 Click **Next**.
- 4 Disregard the next two messages and click **Continue Anyway**. Your printer has been thoroughly tested and is compatible with Windows XP and Windows Server 2003. The wizard copies all of the necessary files and installs the printer driver.
- 5 Click **Finish** when the software is installed.
- 6 Print a test page to verify printer setup

Using Windows 2000 with USB or parallel cable

When the Found New Hardware Wizard screen appears:

- 1 Insert the drivers CD. If the CD auto launches, exit the CD. Click **Next**.
Note: You need administrative access in order to install printer drivers on your computer.
- 2 Select **Search for a suitable driver**, and then click **Next**.
- 3 Select *only* **Specify a location**, and then click **Next**.
- 4 Browse to the location of the printer driver on the drivers CD:
`D:\Drivers\Win_2000\`
- 5 Click **Open**, and then click **OK**.
- 6 Click **Next** to install the driver that is displayed. *It is okay to disregard the message that the driver is not digitally signed.*
- 7 Click **Finish** when the software is installed.
- 8 Print a test page to verify printer setup.

Using Windows Me with USB or parallel cable

You must install both a USB port driver and an enhanced custom print driver.

When the Found New Hardware Wizard screen appears:

- 1 Insert the drivers CD. If the CD auto launches, exit the CD. Click **Next**.
- 2 Select **Automatic search for the best driver (recommended)**, and then click **Next**. The wizard searches for a USB port driver. The name of it will be similar to your printer name.
- 3 After the USB port driver is found, click **Finish**.
- 4 Select **Automatic search for the best driver (recommended)**, and then click **Next**. The wizard now searches for a printer driver.
- 5 Select your printer and driver from the list, and then click **OK**. Make sure you select the driver in the correct language you want to use.
`D:\Drivers\WIN_9X\<LANGUAGE>`
- 6 After the printer driver is installed, click **Finish**.
- 7 Use the default printer name or type a unique name for your printer, and then click **Next**.
- 8 Click **Yes (recommended)**, and then click **Finish** to print a test page.
- 9 After the test page prints, click **Yes** to close the window.
- 10 Click **Finish** to complete the installation and close the wizard. You are now ready to print.

Using Windows 98 with a USB or parallel cable

You must install both a USB port driver and an enhanced custom print driver.

Note: Depending on the software and printers already installed on your computer, your screens may vary from those in the instructions.

When the Add New Hardware Wizard screen appears:

- 1 Insert the drivers CD, and then click **Next**. If the CD auto launches, exit the CD.
- 2 Select **Search for the best driver for your device (recommended)**, and then click **Next**.
- 3 Select *only* **CD-ROM drive**, and then click **Next**.
- 4 After the wizard finds the USB port driver, click **Next**.
- 5 After the USB port driver is installed, click **Finish**.
- 6 Click **Next**.
- 7 Select **Search for the best driver (Recommended)**, and then click **Next**.
- 8 Select **Specify a location**.
- 9 Browse to the location of the printer driver on the drivers CD:
`D:\Drivers\WIN_9X\<language>`
- 10 Click **OK**.
- 11 After the printer driver is found, click **Next**.
- 12 Use the default printer name or type a unique name for your printer, and then click **Next**.
- 13 Select **Yes** to print a test page, and then click **Finish**. All the necessary files are installed on your computer.
- 14 After the test page prints, click **Yes** to close the message window.
- 15 Click **Finish** to complete the installation. You are now ready to print.

Using Windows NT with a parallel cable

The easiest way to install a driver is to use the drivers CD that shipped with your printer.

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

- 1 Insert the drivers CD.
- 2 Click **Install Printer and Software**.
Note: You need administrative access in order to install printer drivers on your computer.
- 3 Click **Printer**.
- 4 Click **Agree** to accept the license agreement.
- 5 Select **Quick Install** and then click **Next**.
- 6 Select the port you want to use, and then select the printer you are installing.
- 7 Click **Finish** to complete the installation. You are now ready to print.

Using Windows 95 with a parallel cable

When the Update Device Driver Wizard screen appears:

- 1 Insert the drivers CD. If the CD auto launches, exit the CD.

If a system-compatible driver is found on your operating system, the Wizard installs it.

*If no compatible system driver is found on your operating system, click **Other Locations**.*

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

- 2 Browse to the location of the printer driver on the drivers CD:

`D:\drivers\win_9x\english`

- 3 Click **OK**.
- 4 Click **Finish**. The Add Printer Wizard screen appears.
- 5 Use the default printer name or type a unique name for your printer, and then click **Next**.
- 6 Click **Yes** to print a test page.
- 7 Click **Finish**. A test page is sent to the printer once the driver files are copied to your computer. You are now ready to print.

Macintosh

Macintosh OS 8.6 or higher is required for USB printing. In order to print locally to a USB-attached printer you must create a desktop printer icon (Macintosh 8.6-9.x) or create a queue in Print Center (Macintosh OS X).

Creating a desktop printer icon (Macintosh 8.6-9.x)

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

Note: A PPD file provides detailed information about the capabilities of a printer to your Macintosh computer.
 - c Choose the language you want to use and click **OK**.
 - d Click **Accept** after you read the license agreement.
 - e Click **Continue** after you finish with the Readme file.
 - f Choose a default paper size.
 - g On the Easy Install screen, click **Install**. All the necessary files are installed on your computer.
 - h Click **Quit** when installation is complete.
- 2 Do one of the following:

Macintosh 8.6 - 9.0: Open **Apple LaserWriter**.

Macintosh 9.1 - 9.x: Open **Applications**, and then click **Utilities**.
- 3 Double-click **Desktop Printer Utility**.
- 4 Select **Printer (USB)**, and then click **OK**.
- 5 In the USB Printer Selection section, click **Change**.

If your printer does not appear in the USB Printer Selection list, make sure the USB cable is properly connected and the printer is turned on.
- 6 Select the name of your printer, and then click **OK**. Your printer appears in the original Printer (USB) window.

- 7 In the PostScript Printer Description (PPD) File section, click **Auto Setup**. Make sure your printer PPD now matches your printer.
- 8 Click **Create**, and then **Save**.
- 9 Specify a printer name, and then click **Save**. Your printer is now saved as a desktop printer.

Creating a queue in Print Center (Macintosh OS X)

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

Note: A PPD file provides detailed information about the capabilities of a printer to your Macintosh computer.
 - c On the Authorization screen, choose **Click the lock to make changes**.
 - d Enter your password, and then click **OK**.
 - e Click **Continue** on the Welcome screen and again after your finish with the Readme file.
 - f Click **Agree** to accept the license agreement.
 - g Select a Destination, and then click **Continue**.
 - h On the Easy Install screen, click **Install**. All the necessary files are installed on your computer.
 - i Click **Close** when installation is complete.
- 2 Open the Finder, click **Applications**, and then click **Utilities**.
- 3 Double-click **Print Center**.
- 4 Do one of the following:
 - If your USB-attached printer appears in the *Printer List*, you can quit Print Center. A queue has been created for your printer.
 - If your USB-attached printer does not appear in the *Printer List*, make sure the USB cable is properly connected and the printer is turned on. After the printer appears in the *Printer List*, you can quit Print Center.

UNIX/Linux

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

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

Verify printer setup

Printing a menu settings page

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

Note: For more information about using the printer operator panel and changing menu settings, refer to the publications CD.

- 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 Menus, and then press **Select** to print the page.

The message **Printing Menus** appears on the display.

- 4 Verify that the options you installed are correctly listed under "Installed Features."

If an option you installed is not listed, turn the printer off, unplug the power cord, and reinstall the option.

- 5 Verify the amount of memory installed is correctly listed under "Printer Information."
- 6 Verify that the paper trays are configured for the sizes and types of paper you loaded.

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 see Print Net1 Setup on the display.

- 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**. The network setup page prints and the printer returns to **Ready** status.
- 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, and then print another network setup page to verify that you are connected to your network.

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 Print a network setup page.
- 2 Look for the address under the "TCP/IP" heading on the network setup page.
- 3 Go to [Verify printer setup](#) on page 8 and begin with step 2.

Note: You can find instructions for other methods of setting the IP address in the online documentation on the drivers CD that shipped with your printer. Launch the CD, and then click **View Documentation ▶ Network Printer Install**.

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

One of the easiest ways is to use the operator panel:

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

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

- 3 Press **Menu** until you see Std Net Setup (or Network 1 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.

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.
- 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):

```
ping xxx.xxx.xxx.xxx
```

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

Install drivers for network printing

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

Operating System	Go to page...
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NetWare	14

Windows

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

Supported printer drivers

- Windows system printer driver
- Custom printer driver

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

Supported network printer ports

- Microsoft IP port—Windows NT 4.0, Windows 2000, Windows XP, and Windows Server 2003
- Printer network ports—Windows 95/98/Me, Windows NT 4.0, Windows 2000, Windows XP, and Windows Server 2003

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

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

Printing configuration	Operating system
<p>Direct</p> <ul style="list-style-type: none"> • Printer is connected directly to the network using a network cable, such as Ethernet. • Printer drivers are typically installed on each network computer. 	Windows 95/98/Me, Windows NT 4.0, Windows 2000, Windows XP, or Windows Server 2003
<p>Shared</p> <ul style="list-style-type: none"> • Printer is connected to one of the computers on the network using a local cable, such as USB. • Printer drivers are installed on the computer attached to the printer. • During driver installation, the printer is set up to be "shared" so that other network computers can print to it. 	Windows NT 4.0, Windows 2000, Windows XP, or Windows Server 2003

Direct printing using Windows 95/98/Me, Windows NT 4.0, Windows 2000, Windows XP, and Windows Server 2003

To install a custom printer driver and network port:

- 1 Launch the drivers CD.
- 2 Click **Install Printer and Software**.
- 3 Click **Printer**.
- 4 Click **Agree** to accept the license agreement.
- 5 Select **Quick install**, and then click **Next**.
- 6 Click **Create new port**.
- 7 Click **Add Port**.
- 8 Select **TCP/IP Network Port**, and then click **Add**.
- 9 Enter the information to create the port.
 - a Assign a logical port name.

This can be any name that you associate with the printer, such as **Color1-lab4**. After the port is created, this name appears in the list of available ports on the Method of Connection screen.

Note: If you don't know the IP address, print a network setup page and look under the TCP/IP heading. For help, see [Printing a network setup page](#) on page 8.

- b Enter the IP address in the text box.
 - c Click **Add Port**.
- 10 Click **Done** until you return to the Method of Connection screen.
 - 11 Select the newly-created port from the list, and then select the model and manufacturer (if available) of the printer you want to install.
 - 12 Click **Finish** to complete the installation.
 - 13 Print a test page to verify printer installation.

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

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

Step 1: Install a custom printer driver

- 1 Launch the drivers CD.
- 2 Click **Install Printer and Software**.
- 3 Click **Printer**.
- 4 Click **Agree** to accept the license agreement.
- 5 Select **Quick install**, and then click **Next**.
- 6 Select the desired port from the list, and then select the model and manufacturer (if available) of the printer you want to install.
- 7 Click **Finish** to complete the installation.
- 8 Print a test page to verify printer installation.

Step 2: Share the printer on the network

- 1 Click **Start** ▶ **Settings** ▶ **Printers**.
- 2 Select the printer you just created.
- 3 Click **File** ▶ **Sharing**.
- 4 Check the **Shared** check box, and then enter a name in the **Shared Name** text box.
- 5 In the Alternate Drivers section, select the operating systems of all the network clients that will print to the printer.
- 6 Click **OK**.

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

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

Step 3: Install the printer driver (or subset) on network clients

Using the point and print method

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

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

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

Using the peer-to-peer method

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

- 1 Click **Start** ▶ **Settings** ▶ **Printers**.
- 2 Click **Add Printer** to launch the Add Printer wizard.
- 3 Click **Network Print Server**.
- 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 will look similar to the following:

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

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

The server host name is the name of the server computer that identifies it to the network. The shared printer name is the name assigned during the server installation process.

- 5 Click **OK**.
- 6 Select whether you want this printer to be the default printer for the client, and then click **Finish**.
- 7 Print a test page to verify printer installation.

Macintosh

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

To print to a network printer, each Macintosh user must install a custom PostScript Printer Description (PPD) file and either create a desktop printer on the computer (Mac OS 8.6 to 9.x) or create a print queue in Print Center (Mac OS X). Follow the instructions for your operating system.

Mac OS 8.6 to 9.x

Step 1: Install a custom PPD file

Note: Installing the custom PPD is required only if this is the first time the printer has been set up. If the printer was previously installed, go on to **Step 2: Create a desktop printer**.

- 1 Insert the drivers CD into your CD-ROM drive.
- 2 Double-click **Classic**.
- 3 Double-click the **Installer** icon.
- 4 Select the language of your operating system, and then click **OK**.
- 5 Click **Install** to install the PPD file for your printer.

Step 2: Create a desktop printer

- 1 In the Chooser, select the **LaserWriter 8** driver.
- 2 If you have a routed network, select the default zone from the list. If you don't know which zone to select, look on the Network Setup page under AppleTalk for Zone.
- 3 Select the new printer from the list.
- 4 If you don't know which printer to select, look on the Network Setup page under the AppleTalk heading to find the default name of the printer.
- 5 Click **Create**.
- 6 Make sure there is an icon next to the printer name in the Chooser.
- 7 Close the Chooser window.
- 8 Verify printer installation (see **Verify printer installation**).

Mac OS X version 10.1.2 and later

Step 1: Install a custom PPD file

- 1 Insert the drivers CD into your CD-ROM drive.
- 2 Click **Mac OS X** ▶ **<language>**.
For example, **Mac OS X** ▶ **English**.
- 3 Double-click the installer icon for your printer to run the installer.

Step 2: Create a print queue in Print Center

- 1 Click **Applications** ▶ **Utilities** ▶ **Print Center**.
- 2 Click **Add Printer**.
- 3 Choose **AppleTalk** as your method of connection.
- 4 If you have a routed network, select the zone from the list. If you don't know which zone to select, look on the Network Setup page under AppleTalk for Zone.
- 5 Select the new printer from the list, and then click **Add**.

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

- 6 Verify printer installation (see **Verify printer installation**).

Verify printer installation

- 1 Click **Applications** ▶ **TextEdit**.
- 2 Choose **File** ▶ **Print** ▶ **Summary**. The Summary window shows the PPD installed for your printer.
 - If the PPD file displayed in the Summary window is correct for your printer, printer setup is complete.
 - If the PPD file displayed in the Summary window is not correct for your printer, delete the print queue from Print Center and repeat "Step 1: Install a custom PPD file" on page 13.

UNIX/Linux

Your printer supports both UNIX and Linux network environments.

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

NetWare

Your printer supports both Novell Distributed Print Services (NDPS) and regular queue-based NetWare environments. For the latest information about installing a network printer in a NetWare environment, launch the drivers CD and click **View Documentation**.

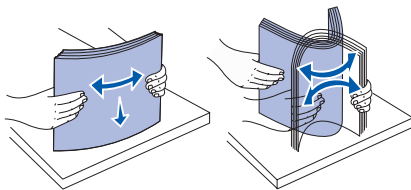
Printing guide

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

Load paper or other print media

To help prevent jams:

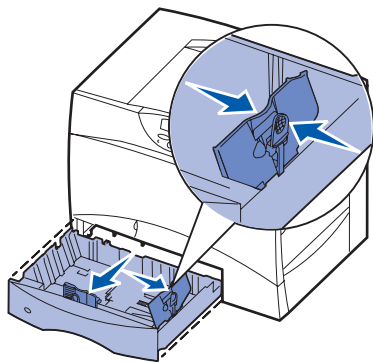
- Flex all stacks of print media back and forth to loosen them, and then fan them before loading. Do not fold or crease the print media. Straighten the edges of the stack on a level surface.



- Do not exceed the maximum stack height. Overfilling may cause jams.
- **Never remove paper trays while a print job is printing.** It could damage the tray or the printer.

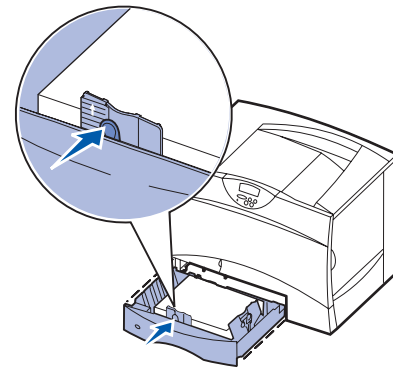
Loading 500-sheet trays

- 1 Remove the tray.
- 2 Squeeze the front guide lever and slide the guide to the front of the tray.



- 3 Squeeze the side guide lever and slide the guide to the correct position for the size paper you are loading.
- 4 Flex the sheets back and forth to loosen them, and then fan them.
- 5 Place the paper against the back left corner of the tray, print side down.

- 6 Squeeze the front guide lever and slide the guide until it firmly touches the stack of paper.

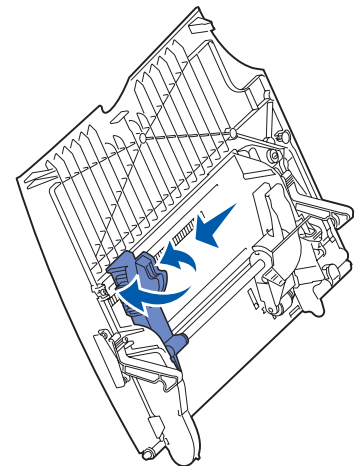


- 7 Reinstall the tray.
- 8 If you are loading a different type of media than was previously loaded in the tray, change the Paper Type setting for that tray on the operator panel. See "Set Paper Type and Paper Size" on page 2.

Loading the multipurpose feeder

- 1 Open the multipurpose feeder.
- 2 Squeeze the paper guide lever and slide the guide all the way toward the front of the printer.

- 3 Flex the sheets back and forth to loosen them, and then fan them.
- 4 Arrange the stack of print media correctly for the size, type, and print method you are using.



- 5 Place the print media, print side up, along the left side of the multipurpose feeder, and then push it in as far as it will easily go. Do not force the media.
- 6 Squeeze the paper guide lever and slide the guide until it lightly touches the side of the stack.
- 7 If you are loading a different type of media than was previously loaded in the tray, change the Paper Type setting for that tray on the operator panel. See "Set Paper Type and Paper Size" on page 2.

Loading other input options

For information about loading other input options, refer to the publications CD that came with the printer.

Set Paper Type and Paper Size

If you have set Paper Type and Paper Size to the correct values, any trays containing the same type and size of paper are automatically linked by the printer.

Note: If the type of the media you are loading is the same as the media previously loaded, you do not need to change the Paper Type setting.

To change a Paper Type or Paper Size setting:

- 1 Press **Menu** until you see Paper Menu, and then press **Select**.
- 2 Press **Menu** until you see Paper Type (or Paper Size), and then press **Select**.
Tray 1 Type (or **Tray 1 Size**) appears on the second line of the display.
- 3 Press **Select** if you want to change the Tray 1 Type (or Tray 1 Size) setting or press **Menu** to scroll to another source.
- 4 Press **Menu** to scroll through a list of possible paper types (or sizes).
- 5 When you see the correct paper type (or size), press **Select** to save the setting as the default.
- 6 Press **Go** to return the printer to the Ready state.

Printing on specialty media (transparencies, labels, etc.)

Follow these instructions when you want to print on media such as transparencies, card stock, glossy paper, labels, or envelopes.

- 1 Load the print media as specified for the tray you are using. See **“Load paper or other print media”** on page 1 for help.
- 2 From the printer's operator panel, set the Paper Type and Paper Size according to the print media you loaded. See **Set Paper Type and Paper Size** for help.
- 3 From the computer's software application, set the paper type, size, and source according to the media you loaded.
 - a In your word processor, spreadsheet, browser, or other application, select File ▶ Print.
 - b Click **Properties** (or **Options**, **Printer**, or **Setup**, depending on the application) to view the printer driver settings.
 - c Select the tray containing the specialty media from the **Form Source** list box.
 - d Select your media type (transparencies, envelopes, and so on) from the **Media Type** list box.
 - e Select the size of the specialty media from the **Form Type** list box.
 - f Click **OK**, and then send your print job as usual.

For more information about paper sizes, types, and weights, see the **Print Media Guide** page.

Print media guide

The printer supports the following standard print media sizes. The Universal setting lets you select custom sizes up to the maximum specified.

Print media	Source	A4 (210 x 297 mm)	A5 (148 x 210 mm)	JIS B5 (182 x 257 mm)	Statement (5.5 x 8.5 in.)	Letter (8.5 x 11 in.)	Folio (8.5 x 13 in.)	Legal (8.5 x 14 in.)	Executive (7.25 x 10.5 in.)	Universal (5.5 x 8.27 in. to 8.5 x 14 in.)	Universal (2.75 x 5 in. to 9.01 x 14 in.)	Universal (5.83 x 7.17 in. to 8.5 x 14 in.)	
Plain paper ^{1, 2} Grain long: 60–74.9 g/m ² (16–19.9 lb bond) Grain short: 75–176 g/m ² (20–47 lb bond)	500 ⁷	•	•	•	•	•	•	•	•	•		•	
	2000 ⁸	•	•	•		•		•	•				
	MPF ⁹	•	•	•	•	•	•	•	•	•	•	•	
Card stock ² Upper limit, grain long: Index Bristol: 163 g/m ² (90 lb) Tag: 163 g/m ² (100 lb) Cover: 176 g/m ² (65 lb) Upper limit, grain short: Index Bristol: 199 g/m ² (110 lb) Tag: 203 g/m ² (125 lb) Cover: 216 g/m ² (80 lb)	500	•	•	•	•	•	•	•	•	•		•	
	MPF	•	•	•	•	•	•	•	•	•	•	•	
Transparency 161–169 g/m ² (43–45 lb bond)	500	•				•							
	MPF	•				•							
Glossy paper Gloss Book, grain long: 88–176 g/m ² (60–120 lb book) Gloss Cover, grain long: 162–176 g/m ² (60–65 lb cover)	500	•	•	•	•	•	•	•	•	•		•	
	2000	•	•	•		•		•	•				
	MPF	•	•	•	•	•	•	•	•	•	•	•	
Labels Paper: ³ 180 g/m ² (48 lb bond) Dual-Web: ³ 180 g/m ² (48 lb bond) Polyester: 220 g/m ² (59 lb bond) Vinyl: ^{3, 4} 300 g/m ² (92 lb bond)	500	•	•	•	•	•	•	•	•	•		•	
	MPF	•	•	•	•	•	•	•	•	•	•	•	
Integrated forms (labels) ⁵ Pressure sensitive area: 140–175 g/m ² Paper base (grain long): 75–135 g/m ² (20–36 lb bond)	500	•	•	•	•	•	•	•	•	•		•	
	MPF	•	•	•	•	•	•	•	•	•	•	•	
Envelope ⁶ 60–105 g/m ² (16–28 lb bond)	MPF	7¼ Envelope (3.875 x 7.5 in.) 9 Envelope (3.875 x 8.9 in.) 10 Envelope (4.12 x 9.5 in.) Other Envelope (98.4 x 162 mm to 176 x 250 mm)						DL Envelope (110 x 220 mm) C5 Envelope (162 x 229 mm) B5 Envelope (176 x 250 mm)					
¹ Paper less than 75 g/m ² (20 lb) is limited to simplex only at less than 60% relative humidity and is not supported in duplex. The duplex option supports the same weights and types as the printer except for paper 60-74.9 g/m ² (16-19.9 lb) grain long bond, A5 cardstock, envelopes, transparencies, vinyl labels, and polyester labels.		³ Multipurpose feeder weights differ: • Paper: 199 g/m ² (53 lb) • Dual-Web: 199 g/m ² (53 lb) • Vinyl: 260 g/m ² (78 lb liner)						⁶ Sulfite, wood-free, or up to 100% cotton bond. • 100% cotton content maximum weight is 90 g/m ² (24 lb) bond. • 28 lb bond envelopes are limited to 25% cotton content.					
² For 60–176 g/m ² (16–65 lb) paper, grain long fibers are recommended. For papers heavier than 176 g/m ² (65 lb), grain short is preferred.		⁴ Vinyl labels are supported only when printing environments and media are 20–32.2°C (68–90°F).						⁷ 500-sheet tray		⁹ Multipurpose feeder			
		⁵ Pressure sensitive area must enter the printer first.						⁸ 2000-sheet tray					

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 or curl.
- Do not place anything on top of paper packages.

Avoiding paper jams

The following hints can help you avoid paper jams:

- Do not remove paper trays while a job is printing. Wait for a **Load Tray <x>** or **Ready** message before you remove the tray.
- Use only recommended paper.
- Do not load wrinkled, creased, or damp paper.
- Flex, fan, and straighten paper before you load it.
- Do not overload the trays or the multipurpose feeder. Make sure the stack height does not exceed the maximum height indicated.
- Push all trays *firmly* into the printer after loading them.
- Make sure the guides in the trays are properly positioned for the size paper you have loaded.
- Do not send jobs to staple, hole punch, or offset for transparencies, labels, or card stock.
- We recommend that transparencies, labels, card stock, and envelopes not be sent to the optional mailbox or optional finisher. These specialty media types should be sent to the standard bin.
- If an optional finisher or mailbox is attached to your printer, make sure the printer and option are correctly aligned. Refer to the *Setup Guide* that came with your printer or option for alignment instructions.
- Make sure all cables that connect the high capacity feeder or finisher to the printer are correctly attached. Refer to the *Setup Guide* for more information.
- If a jam should occur, clear the entire paper path.

Color quality guide

This Color Quality guide is intended to help users understand how operations available on the printer can be used to adjust and customize color output. A brief description of the purpose and operation of the functions available that affect color output is provided. Additionally, some helpful suggestions are provided on how to use these functions to produce desirable color output and to solve certain color related problems commonly experienced by users.

Color Menu

Selections available in the Color Menu provide the user with multiple options that can adjust color characteristics of the printer.

Note: Values marked by an asterisk (*) are the factory default settings. Values selected in the printer's PostScript™ or PCL™ drivers for Windows will override printer settings.

Menu item	Purpose	Values	
Print Mode	To determine whether files are printed in a monochrome grayscale or in color.	Color*	
		Black & White	
Color Correction	To adjust the printed color to better match the colors of other output devices or standard color systems.	Auto*	Applies different color conversion tables to each object on the printed page depending upon the type of object and how the color for each object is specified.
		Off	No color correction is implemented.
		Manual	Lets you customize the color conversion tables applied to each object on the printed page depending upon the type of object and how the color for each object is specified. Customization is performed using the selections available under the Manual Color menu item.
Print Resolution	To define the number of dots printed per inch (dpi).	2400 IQ*	Default setting.
		1200 dpi	Provides the highest resolution output which generates preferable output for certain images and graphics. This setting also provides increased gloss.
Toner Darkness	To lighten or darken printed output, or conserve toner. Note: Setting Toner Darkness to values of 1, 2, or 3 is only effective when using the PostScript driver.	5	If Print Mode is Black & White, a setting of 5 increases toner density and darkness to all print jobs (PCL or PostScript). If Print Mode is Color, a setting of 5 is the same as 4.
		4*	Default toner darkness setting.
		3	Reduction in toner consumption.
		2	Further reduction in toner consumption.
		1	Maximum reduction in toner consumption.

Menu item	Purpose	Values	
Color Balance	To provide users with the ability to make subtle color adjustments to printed output by increasing or decreasing the amount of toner being used for each color plane individually. Note: This function is only applied to files printed using the PostScript driver.	Cyan	-5, -4, -3, -2, -1, 0*, 1, 2, 3, 4, 5
		Magenta	<ul style="list-style-type: none"> • -5 is maximum decrease • 5 is maximum increase
		Yellow	
		Black	
		Reset Defaults	Sets values for Cyan, Magenta, Yellow, and Black to 0 (zero).
Color Samples	To assist users in selecting colors to be printed. Users can print color samples pages for each of the RGB and CMYK color conversion tables used in the printer. The color samples pages consist of a series of colored boxes along with the RGB or CMYK combination that creates the color observed for each particular box. These pages can be useful in helping users decide which RGB or CMYK combinations to use in their software applications to create the desired printed color output.	sRGB Display	Prints RGB samples using sRGB Display color conversion tables.
		sRGB Vivid	Prints RGB samples using sRGB Vivid color conversion tables.
		Off-RGB	Prints RGB samples using Off (or no) color conversion tables.
		Vivid	Prints RGB samples using Vivid color conversion tables.
		US CMYK	Prints CMYK samples using US CMYK color conversion tables.
		Euro CMYK	Prints CMYK samples using Euro CMYK color conversion tables.
		Off-CMYK	Prints CMYK samples using Off (or no) color conversion tables.
		Vivid CMYK	Prints CMYK samples using Vivid CMYK color conversion tables.
Manual Color	To let users customize the RGB or CMYK color conversions applied to each object on the printed page. Color conversion of the data specified using RGB combinations can be customized based on object type (text, graphics, or image).	RGB Image	<ul style="list-style-type: none"> • sRGB Display*: Applies a color conversion table to produce output that approximates the colors displayed on a computer monitor. • sRGB Vivid: Increases color saturation for the sRGB Display color conversion table. Preferred for business graphics and text. • Off: No color conversion is implemented. • Vivid: Applies a color conversion table that produces brighter, more saturated colors.
		RGB Text	<ul style="list-style-type: none"> • sRGB Display • sRGB Vivid* • Off • Vivid
		RGB Graphics	
		CMYK	<ul style="list-style-type: none"> • US CMYK*: Applies a color conversion table to approximate SWOP color output. • Euro CMYK: Applies color conversion table to approximate EuroScale color output. • Vivid CMYK: Increases color saturation for the US CMYK color conversion table. • Off: No color conversion is implemented.

Menu item	Purpose	Values	
Color Adjust	To manually recalibrate the color conversion tables, adjusting for variations in output that can occur as a result of changing conditions, such as room temperature or humidity.	No selections exist for this operation. Pressing Select initiates this operation.	
Color Saver	To conserve toner. If selected, this setting will override Toner Darkness settings.	On	Applies a lower Toner Darkness level. Toner Darkness setting is ignored.
		Off*	Prints using Toner Darkness setting.

Solving color quality problems

This section is intended to help answer some basic color-related questions and to describe how some of the features provided in the Color Menu can be used to solve typical color problems.

Note: You should also read the quick reference page entitled “Solving Print Quality Problems,” which provides solutions for common print quality problems, some of which may affect the color quality of the printed output.

Frequently asked questions (FAQ) about color printing

What is RGB color?

Red, green, and blue light can be added together in various amounts to produce a large range of colors observed in nature. For example, red and green light can be combined to create yellow light. Televisions and computer monitors create colors in this manner. RGB color is a method of describing colors by indicating the amount of red, green, and blue light needed to reproduce a particular color.

What is CMYK color?

Cyan, magenta, yellow, and black inks or toners can be printed in various amounts to produce a large range of colors observed in nature. For example, cyan and yellow can be combined to create green. Printing presses, inkjet printers and color laser printers create colors in this manner. CMYK color is a method of describing colors by indicating the amount of cyan, magenta, yellow, and black needed to reproduce a particular color.

How is color specified in a document to be printed?

Software applications typically specify document color using RGB or CMYK color combinations. Additionally, they commonly let users modify the color of each object in a document. Since the procedures to modify colors will vary depending upon the application, refer to the software application's Help section for instruction.

How does the printer know what color to print?

When a user prints a document, information describing the type and color of each object in the document is sent to the printer. The color information is passed through color conversion tables that translate the color into appropriate amounts of cyan, magenta, yellow, and black toner needed to produce the desired color. The object type information lets different color conversion tables be used for different types of objects. For example, it is possible to apply one type of color conversion table to text while applying a different color conversion table to photographic images.

Should I use the PostScript or PCL driver for the best color? What driver settings should I use for the best color?

The PostScript driver is strongly recommended for best color quality. The default settings in the PostScript driver will provide preferred color quality for the majority of printouts.

Why doesn't the printed color match the color I see on my computer screen?

The color conversion tables used in Auto [Color Correction](#) mode generally approximate the colors of a standard computer monitor. However, because of technology differences that exist between printers and monitors there are many colors that can be generated on a computer screen that cannot be physically reproduced on a color laser printer. Color match can also be affected by monitor variations and lighting conditions. Please read the response to the question "[How can I match a particular color \(such as a color in a corporate logo\)?](#)" on page 5 for recommendations on how the printer's Color Samples pages may be useful in solving certain color matching problems.

The printed page appears tinted. Can I slightly adjust the color?

Sometimes a user may consider printed pages to appear tinted (for example, everything printed seems to be too red). This can be caused by environmental conditions, paper type, lighting conditions, or simply user preference. In these instances, [Color Balance](#) may be used to create more preferable color. Color Balance provides the user with the ability to make subtle adjustments to the amount of toner being used in each color plane. Selecting positive (or negative) values for cyan, magenta, yellow and black under the Color Balance menu will slightly increase (or decrease) the amount of toner used for the chosen color. For example if a user believes the overall printed page to be too red, then decreases to both magenta and yellow could potentially improve color preference.

Is it possible to increase the gloss in the printed output?

Additional gloss can be obtained by printing using the 1200 dpi [Print Resolution](#) setting.

My color transparencies seem dark when projected. Is there anything I can do to improve the color?

This problem most commonly occurs when projecting transparencies with reflective overhead projectors. To obtain the highest projected color quality, transmissive overhead projectors are recommended. If a reflective projector must be used, then adjusting [Toner Darkness](#) settings to 1, 2 or 3 will lighten the transparency.

What is Manual Color Correction?

The color conversion tables applied to each object on the printed page when using the default Auto [Color Correction](#) setting will generate preferred color for the majority of documents. Occasionally a user may desire to apply a different color table mapping. This customization is accomplished using the Manual Color menu and the Manual Color Correction setting.

Manual Color Correction applies the RGB and CMYK color conversion table mappings as defined in the Manual Color menu. Users may select any of four different color conversion tables available for RGB objects (sRGB Display, sRGB Vivid, Vivid, and Off) and any of four different color conversion tables available for CMYK objects (US CMYK, Euro CMYK, Vivid CMYK, and Off).

Note: The Manual Color Correction setting will not be useful if the software application does not specify colors with RGB or CMYK combinations, or in certain situations where the software application or the computer's operating system adjusts the colors specified in the application through color management.

How can I match a particular color (such as a color in a corporate logo)?

Occasionally users have a need for the printed color of a particular object to closely match a specific color of interest. A typical example of this situation is when a user is trying to match the color of a corporate logo. While instances can occur in which the printer cannot exactly reproduce the desired color, users should be able to identify adequate color matches for the majority of cases. The [Color Samples](#) menu items can provide useful information in helping to solve this particular type of color matching problem.

The eight Color Samples options correspond to color conversion tables in the printer. Selecting any of the Color Samples options will generate a multi-page printout consisting of hundreds of colored boxes. Either a CMYK or RGB combination will be located on each box depending upon the table selected. The observed color of each box is the result obtained by passing the CMYK or RGB combination labeled on the box through the selected color conversion table.

The user can scan the color samples pages and identify the box whose color is the closest to the desired color. The color combination labeled on the box can then be used for modifying the color of the object in a software application. The software application's Help section should provide instructions for modifying an object's color. Manual [Color Correction](#) may be necessary to utilize the selected color conversion table for the particular object.

Which Color Samples pages to use for a particular color matching problem depends upon the Color Correction setting being used (Auto, Off, or Manual), the type of object being printed (text, graphics, or images), and how the color of the object is specified in the software application (RGB or CMYK combinations). The following table identifies which Color Samples pages to use:

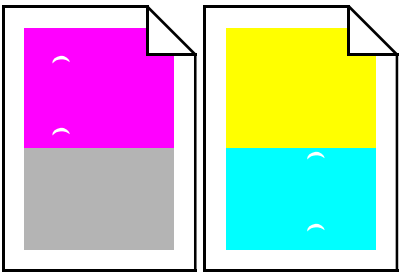
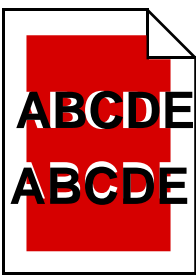
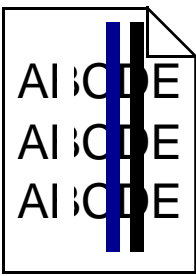
Color specification of object being printed	Classification of object being printed	Printer Color Correction setting	Color Samples pages to print and use for color matching
RGB	Text	Auto	sRGB Vivid
		Off	Off - RGB
		Manual	Manual Color RGB Text Setting
	Graphic	Auto	sRGB Vivid
		Off	Off - RGB
		Manual	Manual Color RGB Graphics Setting
	Image	Auto	sRGB Display
		Off	Off - RGB
		Manual	Manual Color RGB Image Setting
CMYK	Text	Auto	US CMYK
		Off	Off - CMYK
		Manual	Manual Color CMYK Text Setting
	Graphic	Auto	US CMYK
		Off	Off - CMYK
		Manual	Manual Color CMYK Graphics Setting
	Image	Auto	US CMYK
		Off	Off - CMYK
		Manual	Manual Color CMYK Image Setting

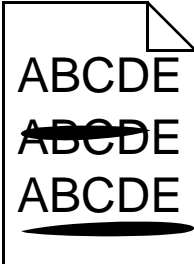
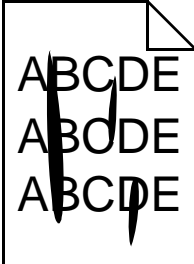
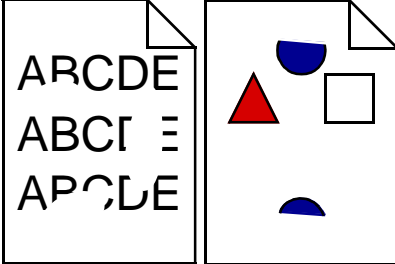
Note: The Color Samples pages are not useful if the software application does not specify colors with RGB or CMYK combinations. Additionally, certain situations exist where the software application or the computer's operating system will adjust the RGB or CMYK combinations specified in the application through color management. In such a situation, the resulting printed color may not be exactly as would be expected based on the Color Samples pages.

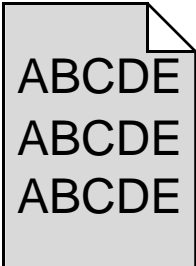
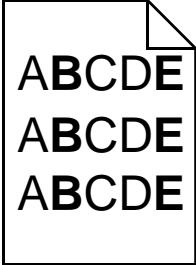
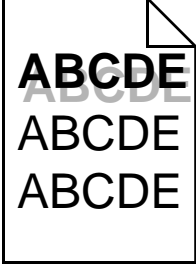
Print quality guide

You can solve many print quality problems by replacing a supply or maintenance item that has reached the end of its intended life. Check the operator panel for a message about a printer consumable.

Use the following table to find solutions to print quality problems.

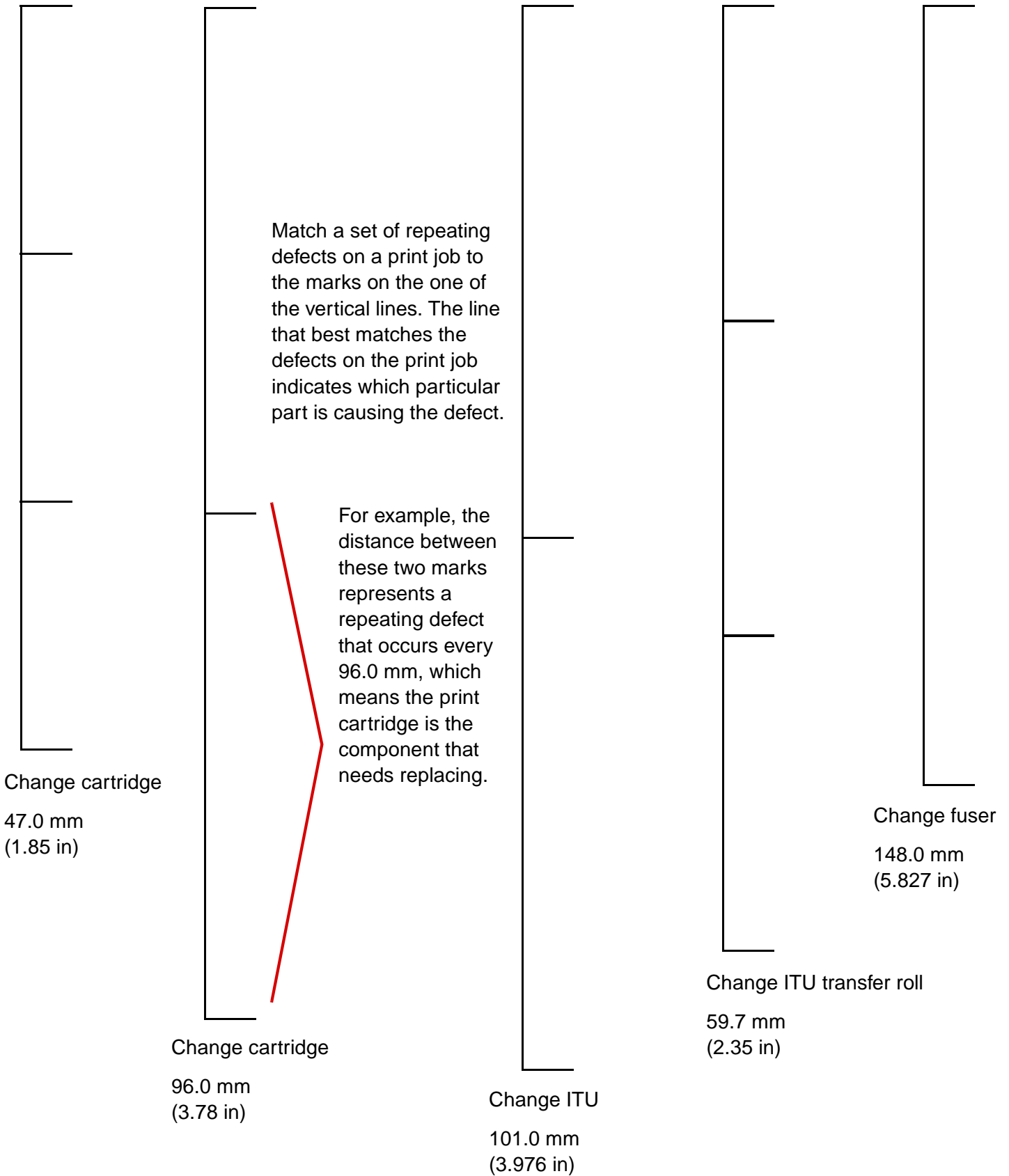
Symptom	Cause	Solution
<p>Repeating defects</p> 	<p>Either the print cartridges are defective, the image transfer unit and transfer roller are defective, or the fuser is defective.</p>	<p>Marks occur repeatedly only in one color and multiple times on a page:</p> <ul style="list-style-type: none"> • Replace the cartridge if the defects occur every: <ul style="list-style-type: none"> – 47.0 mm (1.85 in) – 96.0 mm (3.78 in) • Check the first transfer bellcranks and springs or Replace the image transfer unit if the defects occur every 101.0 mm (3.98 in) <p>Marks occur down the page repeatedly in all colors:</p> <ul style="list-style-type: none"> • Replace the transfer roll if the defects occur every 59.7 mm (2.35 in) • Replace the fuser if the if the defects occur every 148.0 mm (5.83 in) <p>Marks occur on every third or sixth page in any color:</p> <ul style="list-style-type: none"> • Replace the image transfer unit.
<p>Color misregistration</p> 	<p>Color has shifted outside of the appropriate area or has been superimposed over another color area.</p>	<p>Top to Bottom or Left to Right:</p> <ol style="list-style-type: none"> 1 Re-seat the cartridges by removing them from the printer and then reinserting them. 2 If you still have the problem, refer to the Color Alignment section under the Utilities Menu.
<p>White or colored line</p> 	<p>Either the print cartridges are defective, the image transfer unit and transfer roller are defective, or the fuser is defective.</p>	<ol style="list-style-type: none"> 1 Replace the color print cartridge causing the line. 2 If you still have the problem, replace the image transfer unit and transfer roller. 3 If you still have the problem, replace the fuser.

Symptom	Cause	Solution
<p>Streaked horizontal lines</p> 	<p>The print cartridges, the transfer roller, image transfer unit, or fuser may be defective, empty, or worn.</p>	<p>Replace the print cartridge, the transfer roller, the image transfer unit, or fuser as needed.</p>
<p>Streaked vertical lines</p> 	<ul style="list-style-type: none"> • Toner is smeared before fusing to the paper. • The print cartridge is defective. 	<ul style="list-style-type: none"> • If paper is stiff, try feeding from another tray. • Replace the color print cartridge causing the streaks.
<p>Print irregularities</p> 	<ul style="list-style-type: none"> • Paper has absorbed moisture due to high humidity. • You are using paper that does not meet the printer specifications. • The image transfer unit and transfer roller are worn or defective. • The fuser is worn or defective. 	<ul style="list-style-type: none"> • Load paper from a fresh package in the paper tray. • Avoid textured paper with rough finishes. • Make sure the printer's paper type setting matches the type of paper you are using. • Replace the image transfer unit and transfer roller. • Replace the fuser.
<p>Print too light</p>	<ul style="list-style-type: none"> • The Toner Darkness setting is too light. • You are using paper that does not meet the printer specifications. • The print cartridges are low on toner. • The print cartridges are defective or have been installed in more than one printer. 	<ul style="list-style-type: none"> • Select a different Toner Darkness setting from the printer driver before sending the job to print. • Perform a Color Adjust in the Utilities Menu. • 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 print cartridges.
<p>Print too dark</p>	<ul style="list-style-type: none"> • The Toner Darkness setting is too dark. • The print cartridges are defective. 	<ul style="list-style-type: none"> • Select a different Toner Darkness setting from the printer driver before sending the job to print. • Replace the print cartridges.
<p>Transparency print quality is poor (Print has inappropriate light or dark spots, toner is smeared, horizontal or vertical light bands appear, or color does not project.)</p>	<ul style="list-style-type: none"> • You are using transparencies that do not meet the printer specifications. • The Paper Type setting for the tray you are using is set to something other than transparency. 	<ul style="list-style-type: none"> • Use only transparencies recommended by the printer's manufacturer. • Make sure the Paper Type setting is set to transparency.

Symptom	Cause	Solution
<p>Toner specks</p>	<ul style="list-style-type: none"> • The print cartridges are defective. • The transfer roller is worn or defective. • The image transfer unit is worn or defective. • The fuser is worn or defective. • Toner is in the paper path. 	<ul style="list-style-type: none"> • Replace the print cartridges. • Replace the transfer roller. • Replace the image transfer unit. • Replace the fuser. • Call for service.
<p>Toner rubs off the paper easily when you handle the sheets.</p>	<ul style="list-style-type: none"> • The Texture setting is wrong for the type of paper or specialty media you are using. • The Weight setting is wrong for the type of paper or specialty media you are using. • The fuser is worn or defective. 	<ul style="list-style-type: none"> • Change Paper Texture from Normal to Smooth or Rough. • Change Paper Weight from Plain to CardStock (or other appropriate weight). • Replace the fuser.
<p>Gray background</p> 	<ul style="list-style-type: none"> • The Toner Darkness setting is too dark. • The print cartridges are defective. 	<ul style="list-style-type: none"> • Select a different Toner Darkness setting from the printer driver before sending the job to print. • Replace the print cartridges.
<p>Uneven print density</p> 	<ul style="list-style-type: none"> • The print cartridges are defective. • The transfer roller is worn or defective. • The image transfer unit is worn or defective. 	<ul style="list-style-type: none"> • Replace the print cartridges. • Replace the transfer roller. • Replace the image transfer unit.
<p>Ghost Images</p> 	<p>Toner level is low in the print cartridges.</p>	<ul style="list-style-type: none"> • Make sure the Paper Type setting is correct for the paper or specialty media you are using. • Replace the print cartridges.
<p>Clipped images (Some of the print is cut off on the sides, top, or bottom of the paper.)</p>	<p>Guides in the selected tray are set for a different size paper than what is loaded in the tray.</p>	<p>Move the guides in the tray to the proper positions for the size loaded.</p>

Symptom	Cause	Solution
Incorrect margins	<ul style="list-style-type: none"> Guides in the selected tray are set for a different size paper than what is loaded in the tray. Auto size sensing is set to off, but you loaded a different size paper in a tray. For example, you inserted A4 size paper into the selected tray but did not set the Paper Size to A4. 	<ul style="list-style-type: none"> Move the guides in the tray to the proper positions for the size loaded. Set the Paper Size to A4.
Skewed print (Print is inappropriately slanted.)	Guides in the selected tray are not in the correct position for the paper size loaded in the tray.	Move the guides in the tray to the proper positions for the size loaded.
Blank pages	<ul style="list-style-type: none"> An incorrect media type is loaded in the tray being printed from or the Paper Type setting does not match the type of media loaded in the tray. The print cartridges are defective or empty. The transfer roller is defective. The image transfer unit is defective. 	<ul style="list-style-type: none"> Load the correct type media for your print job or make sure the Paper Type setting is correct for the paper or specialty media you are using. Replace the print cartridges. Replace the transfer roller. Replace the image transfer unit.
Solid color pages	<ul style="list-style-type: none"> The print cartridges are defective. Your printer requires servicing. 	<ul style="list-style-type: none"> Replace the print cartridges. Call for service.
The paper curls badly once it prints and exits to a bin.	<ul style="list-style-type: none"> The Texture setting is wrong for the type of paper or specialty media you are using. The paper has been stored in a high humidity environment. 	<ul style="list-style-type: none"> Change Paper Texture from Rough to Normal or Smooth or change the type of paper you are using to match the Texture setting. Store the paper at less than 40% relative humidity (indoors with heat and air conditioning) in accordance with the storing paper section of the print media guide.

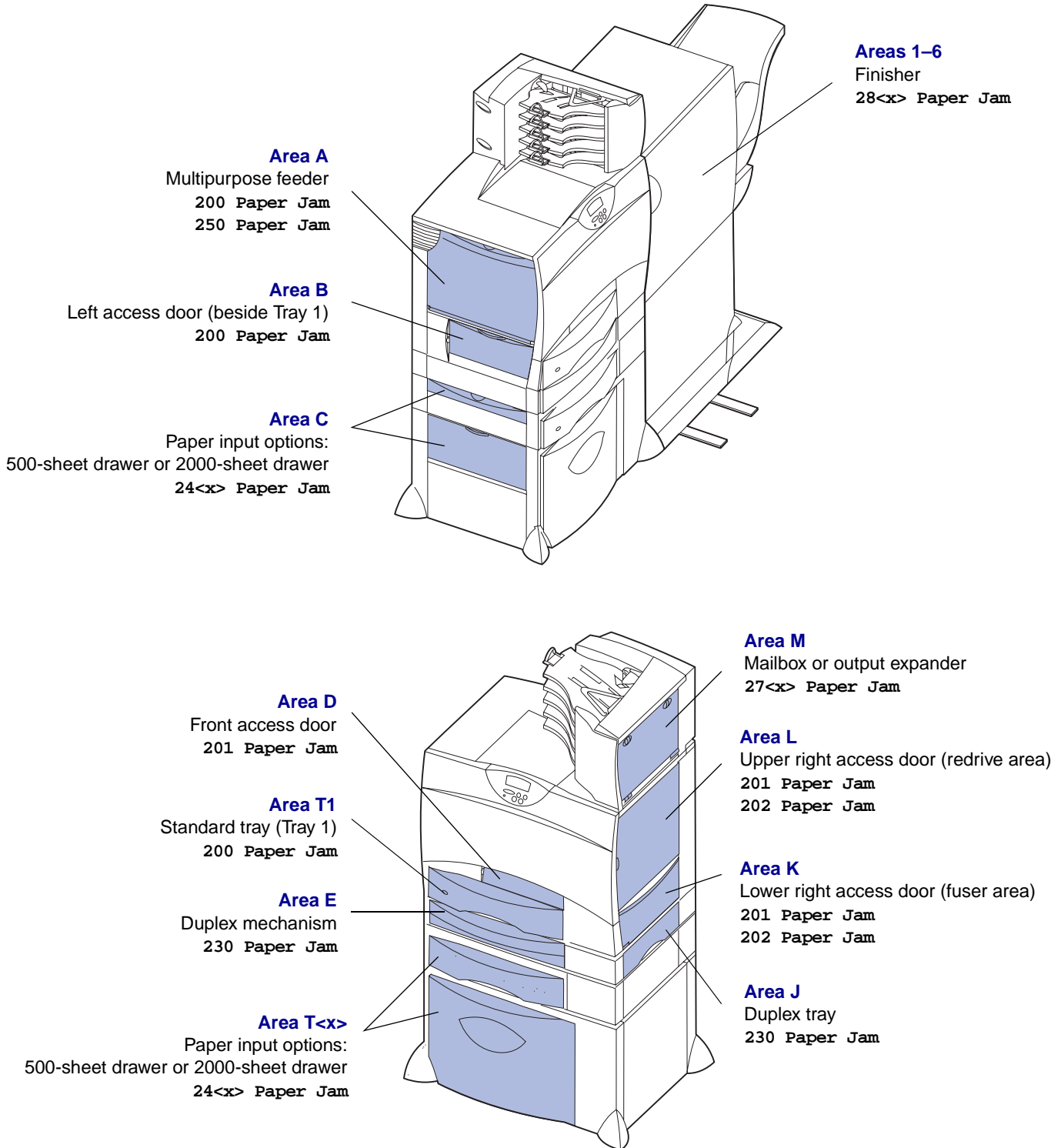
Repetitive defects guide



Clearing jams guide

Access doors and trays

The following illustrations show areas in the printer where jams can occur.



Understanding jam messages

Always clear the entire paper path when you receive any jam message.

Paper jam message	Check Areas...	What to do...
200 Paper Jam (Tray 1)	A, B, T1	Follow the instructions for clearing Area A , Area B , and Area T1 .
201 Paper Jam (Fuser area)	D, K, L	Follow the instructions for clearing Area D , Area K , and Area L . If the jam message persists, paper may be caught in the fuser. See Clearing fuser jams for instructions.
202 Paper Jam (Fuser area)	K, L	Follow the instructions for clearing Area K and Area L . If the jam message persists, paper may be caught in the fuser. See Clearing fuser jams for instructions.
230 Paper Jam (Duplex area)	E, J	Follow the instructions for clearing Area E and Area J .
24<x> Paper Jam (Trays 2–4)	C, T<x>	Follow the instructions for clearing Area C and Area T<x> .
250 Paper Jam (Multipurpose feeder)	A	Follow the instructions for clearing Area A .
27<x> Paper Jam (Mailbox or output expander)	M	Follow the instructions for Clearing mailbox or output expander jams (Area M) .
28<x> Paper Jam (Finisher)	1, 2, 3, 4, 5, 6	Follow the instructions for Clearing finisher jams (Areas 1–6) .

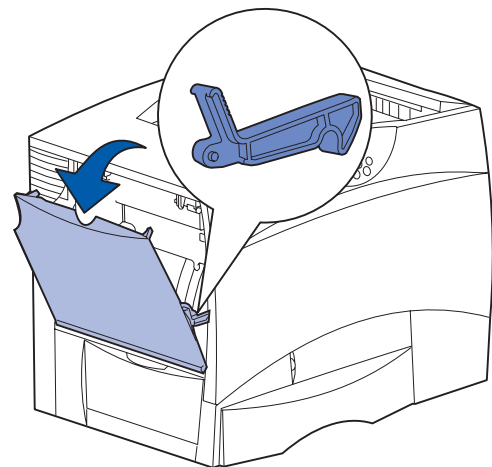
Clearing the entire paper path

When a paper jam occurs, the printer stops operating and displays **2xx Paper Jam** and a message to clear certain printer areas.

After you have cleared the following areas, make sure all printer covers, doors, and trays are closed, and then press **Go** to resume printing.

Area A

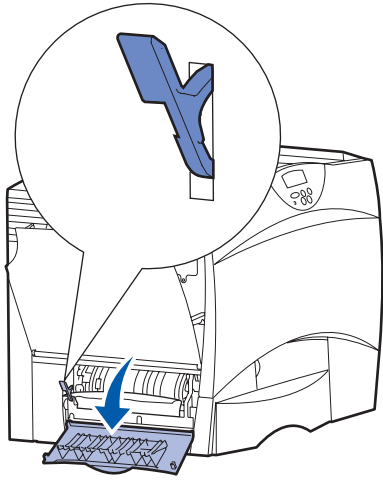
- 1 If you are using the multipurpose feeder, release the levers on each side of the feeder to open it flat.



- 2 Remove any jams and return the feeder to its working position.

Area B

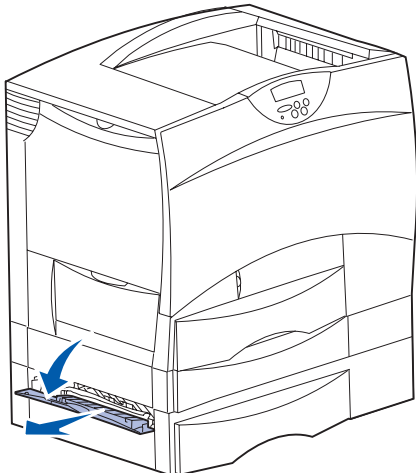
- 1 Open the left access door.
- 2 Pull down the lever until it stops.



- 3 Remove the jam.
- 4 Return the lever to its upright position.
- 5 Close the door.

Area C

- 1 If you have one or more optional 500-sheet drawers:
 - a Open the 500-sheet drawer access door. Hold the door down while removing jams.

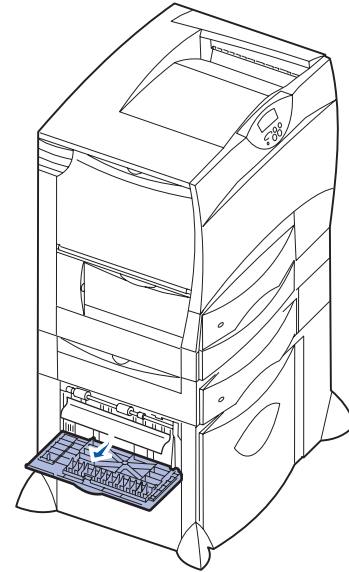


Note: Make sure the entire paper stack is loaded correctly and pushed all the way down into the tray.

- b Close the door.

- 2 If you have an optional 2000-sheet drawer:

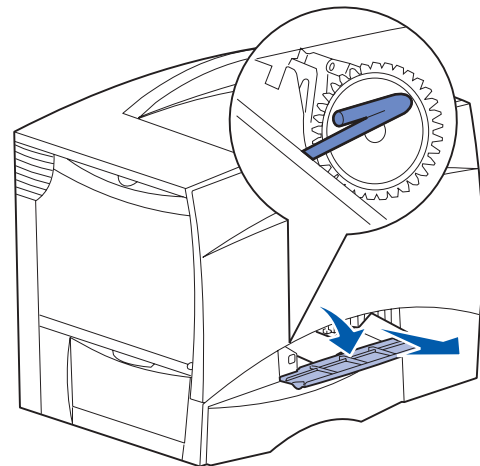
- a Open the 2000-sheet drawer access door. Pull the jam down and out of the rollers.



- b Close the door.

Area D

- 1 Open the front access door.
- 2 Hold down the lever in the upper left corner. Remove jams in the rollers under the image transfer unit.



Note: Unfused toner may be present.

Area T1

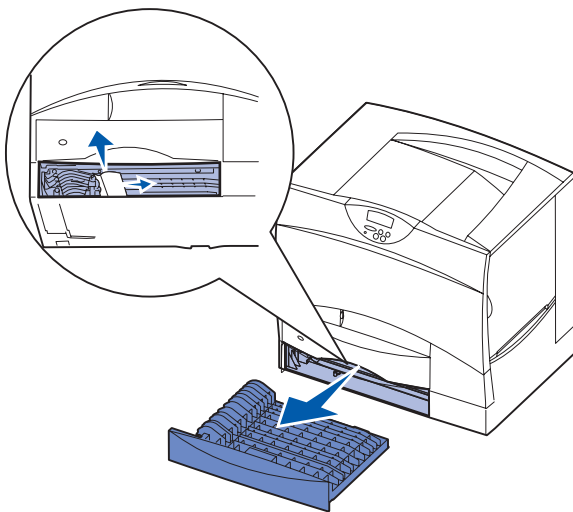
- 1 If clearing **Area B** did not clear your jam, then carefully open tray 1. Remove any jams.

Note: Make sure the paper is pushed all the way down into the tray.

- 2 Close tray 1.

Area E

- 1 Pull the duplex mechanism completely out. Look inside and remove any paper caught in the rollers. Also, look up inside, as some jams may be above the rollers.



- 2 Reinstall the duplex mechanism in the printer.

Area T<x>

- 1 If you cannot clear all the 500-sheet drawer jams from **Area C**:

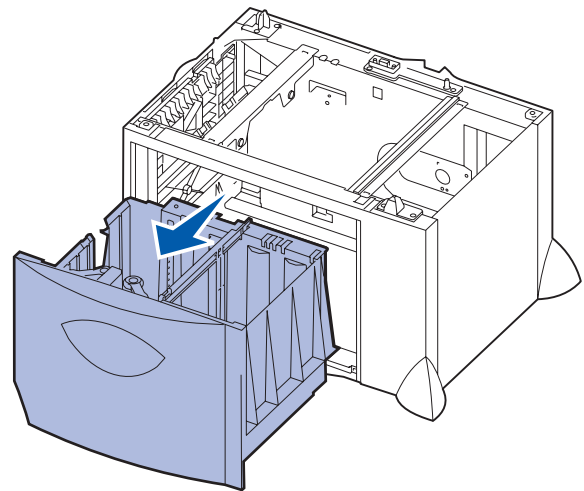
- a Carefully open trays 2 through 4 (all 500-sheet trays) and remove jams.

Note: Make sure the paper is pushed all the way down into the tray.

- b Close trays 2 through 4.

- 2 If you cannot clear the 2000-sheet drawer jam from **Area C**:

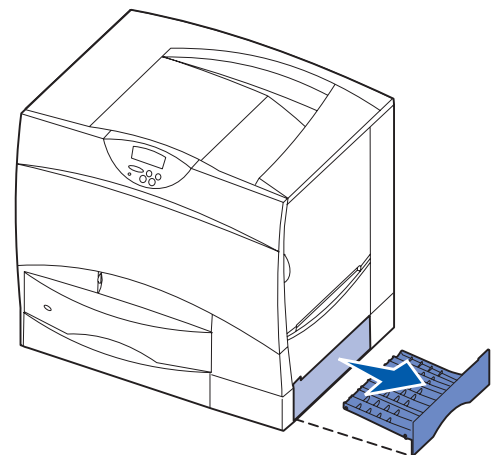
- a Open the 2000-sheet drawer.



- b Remove any jams, and then close the 2000-sheet drawer.

Area J

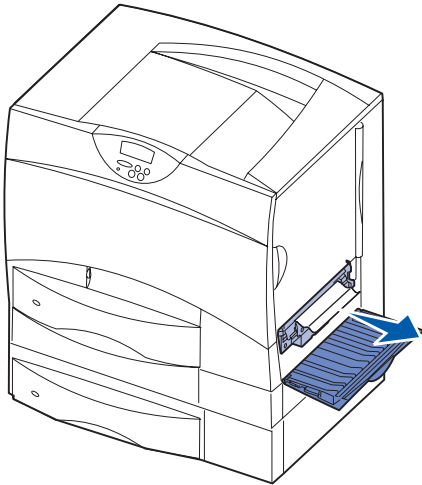
- 1 Remove the duplex tray.



- 2 Remove any jams and then reinstall the tray.

Area K

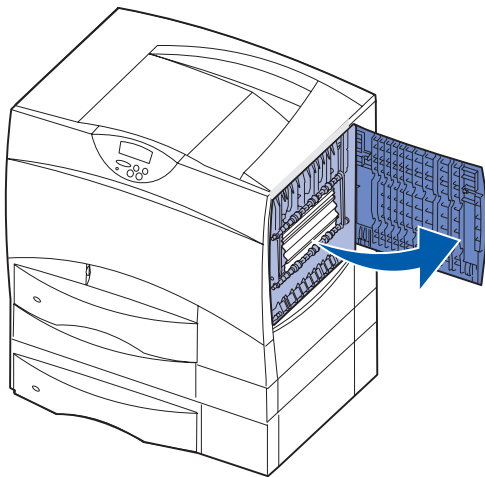
- 1 Open the lower right access door.



- 2 Remove any jams, and then close the door.

Area L

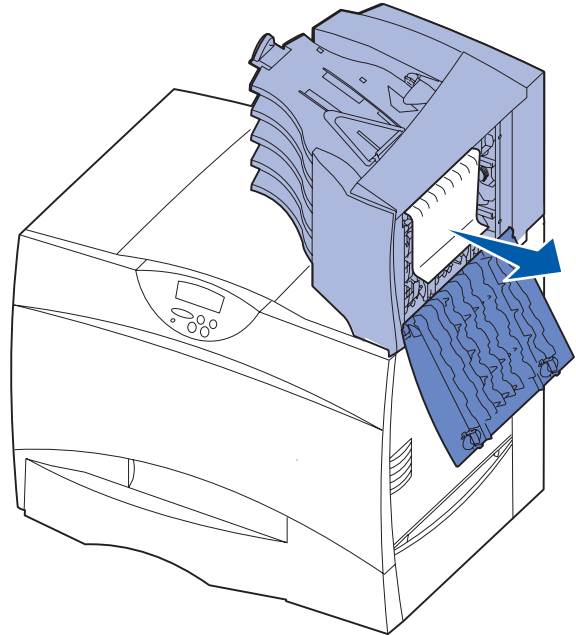
- 1 Open the upper right access door.



- 2 Remove jams from the rollers and then close the door.

Clearing mailbox or output expander jams (Area M)

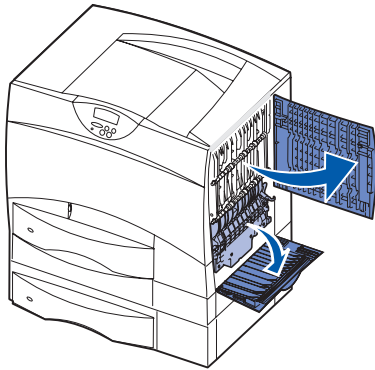
- 1 Open the rear door of the 5-bin mailbox.



- 2 Pull the jam straight out, and then close the door.

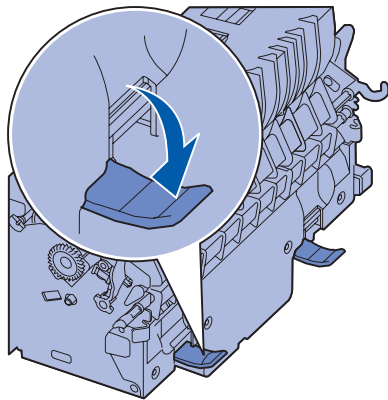
Clearing fuser jams

- 1 Clear the paper path. If the jam error message persists, go on to step 2.
- 2 Open both the upper right and the lower right access doors (Areas K and L).

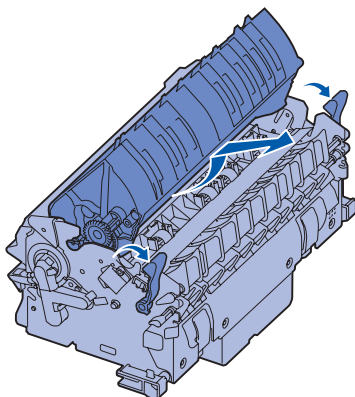


Caution: The fuser assembly may be hot. Let it cool before continuing.

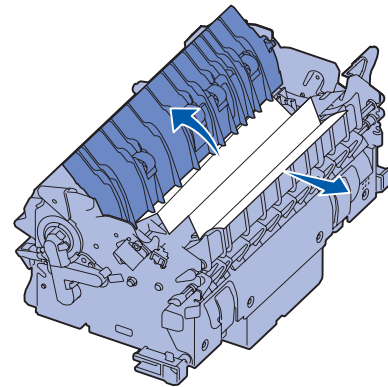
- 3 Pull down the latches. They slide toward the center to release the fuser.



- 4 Pull the fuser out of the printer, and set it on a clean, flat surface.
- 5 Unsnap the housing and set it aside.



- 6 Lift up the fuser roller cover and remove the jam.



- 7 Close the fuser roller cover.
- 8 Snap the housing back onto the fuser.
- 9 Insert the fuser back into the printer.
- 10 Slide the latches out, and then pull up to refasten them.
- 11 Close the doors.

Clearing image transfer unit jams

Refer to the *User's Reference* located on the publications CD for information about clearing this type of jam.

Clearing finisher jams (Areas 1–6)

Refer to the *Finisher Setup & User's Guide* for instructions on clearing finisher jams.

If you still need help

- 1 Turn the printer off and then back on.
- 2 Contact your administrator or Help desk if you need more assistance.

Supplies guide

The following tables list the part numbers for ordering new print cartridges, toner waste containers, fusers, or image transfer units (ITU).

Print cartridges

Visit Lexmark's Web site at www.lexmark.com for print cartridge ordering information.

The following is a list of cartridges you can order:

- Black print cartridge
- Cyan print cartridge
- Magenta print cartridge
- Yellow print cartridge
- Black high yield print cartridge
- Cyan high yield print cartridge
- Magenta high yield print cartridge
- Yellow high yield print cartridge
- Black Return Program print cartridge
- Cyan Return Program print cartridge
- Magenta Return Program print cartridge
- Yellow Return Program print cartridge
- Black high yield Return Program print cartridge
- Cyan high yield Return Program print cartridge
- Magenta high yield Return Program print cartridge
- Yellow high yield Return Program print cartridge

Toner waste container

To order a new toner waste container, order part number 10B3100.

Fuser or ITU

Refer to the part number listed on the fuser or ITU for the appropriate reordering number for these items.

Moving guide

Follow these guidelines to move the printer within the office or to prepare the printer for shipment.

Warning: Follow these guidelines to avoid injuring yourself or damaging the printer.

- Always use at least two people to lift the printer.
- Always turn off the printer using the power switch.
- Disconnect all cords and cables from the printer before attempting to move the printer.
- Failure to repackage the printer properly for shipment can result in damage to the printer not covered by the printer's warranty.
- Damage to the printer caused by improper moving is not covered by the printer's warranty.

Moving the printer within the office

The printer can be safely moved from one location within an office to another following these precautions:

- The printer must remain in an upright position.
- Any cart used to move the printer should have a surface able to support the full footprint of the printer.
- Severe jarring movements may cause damage to the printer and must be avoided.

Preparing the printer for shipment

To transport the printer by vehicle or by commercial carrier, the printer must be repackaged for shipment using the proper packaging. The printer package must be securely fastened to its pallet. Do not use a shipping or transport method that requires the printer to be shipped without a pallet. The printer must stay upright throughout the shipment. If you do not have all the original packaging, contact your local service representative to order the repackaging. Additional instructions for repackaging the printer are provided in the repackaging Kit.