

Infoprint 1422



# User's Guide



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# User's Guide

**Edition: March 2004**


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### **Safety information**

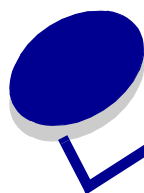
- If your product is *not* marked with this symbol , it *must* be connected to an electrical outlet that is properly grounded.  
**CAUTION:** Do not set up this product or make any electrical or cabling connections, such as the power cord or telephone, during a lightning storm.
- The power cord must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

### **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.



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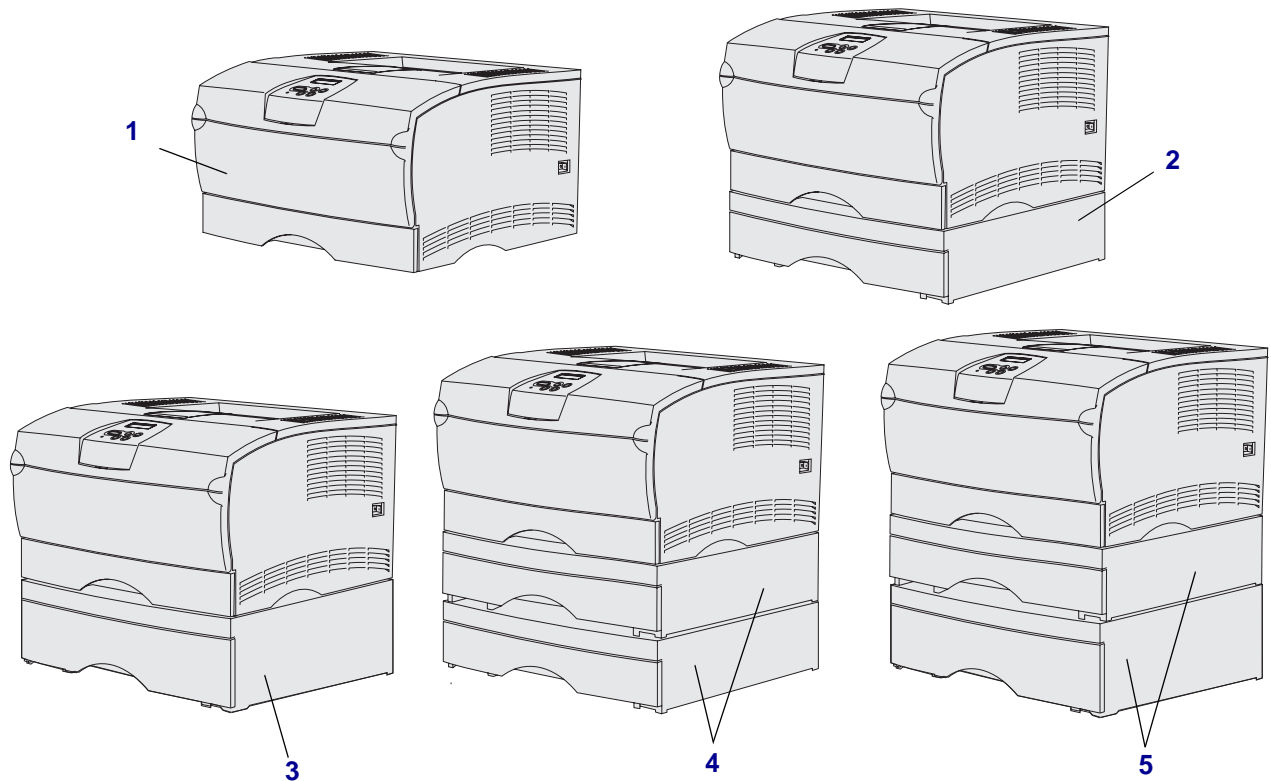
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# 1

## Printer overview

The following illustrations show the standard printer (1) and the printer configured with additional drawers.

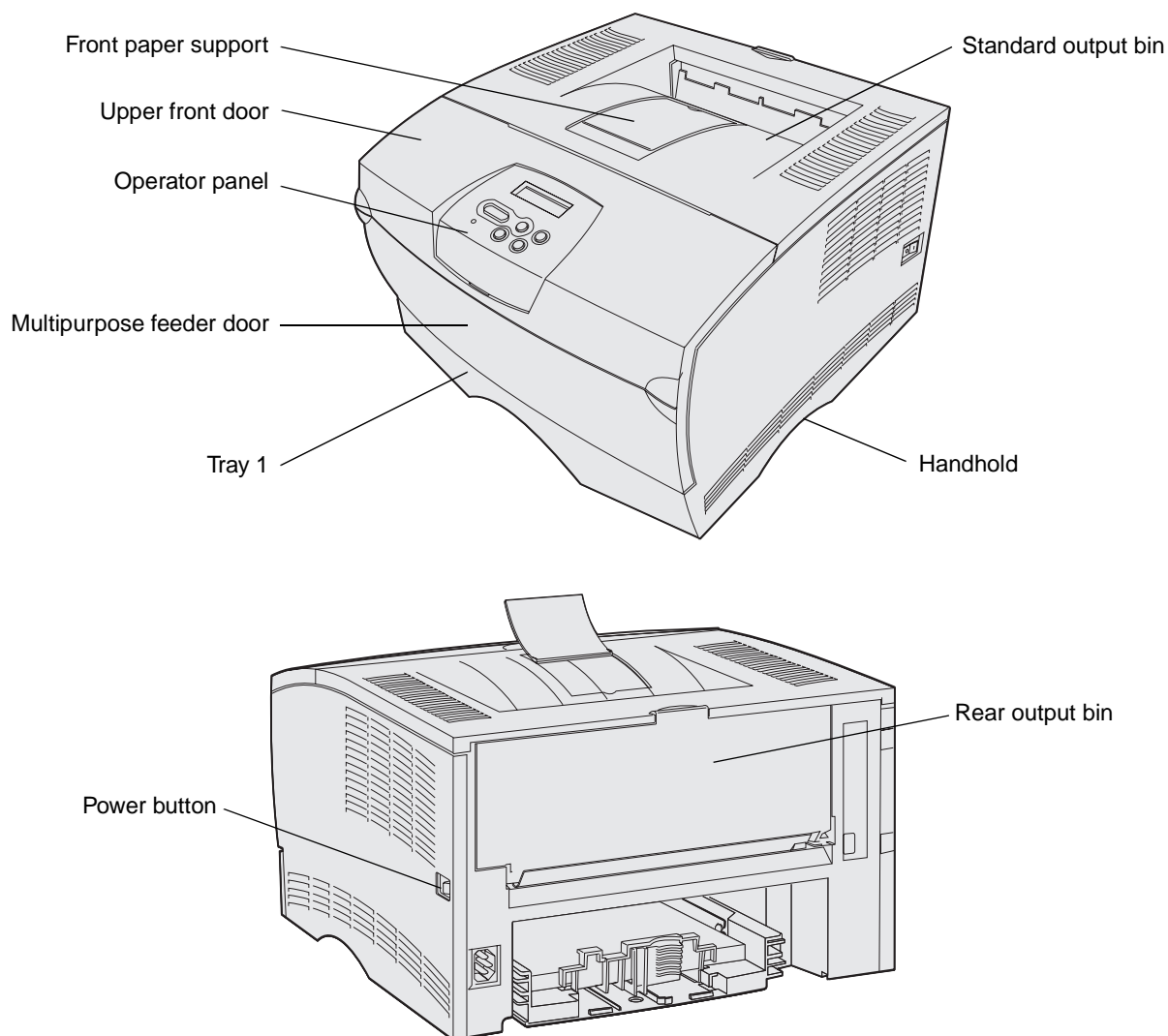


The printer supports up to two additional drawers in the following configurations:

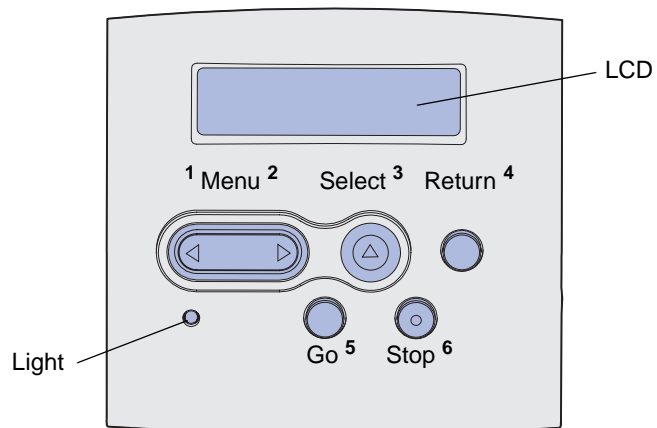
- One 250-sheet drawer (2)
- One 500-sheet drawer (3)
- Two 250-sheet drawers (4)
- One 250-sheet drawer and one 500-sheet drawer (5); the 500-sheet drawer must be on the bottom of the stack

**Note:** The printer does not support the addition of two 500-sheet drawers.

## Printer overview



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.





## Print media

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### *Print media sources and specifications*

For best printer performance, properly load the trays. Never mix media types within a tray.

#### Print media source specifications

Source	Print media supported	Sizes supported	Weight	Capacity
Tray 1 (standard 250-sheet tray)	Paper, transparencies	A4, A5, JIS B5, folio, letter, legal, executive, statement	60–105 g/m <sup>2</sup> (16–28 lb)	<ul style="list-style-type: none"><li>• 250 sheets of paper</li><li>• 50 transparencies</li><li>• 100 sheets of labels</li></ul>
Tray 2 (optional 250-sheet tray)	Paper only	A4, A5, JIS B5, folio, letter, legal, executive, statement	60–105 g/m <sup>2</sup> (16–28 lb)	250 sheets of paper
Tray 2 (optional 500-sheet tray)	Paper only	A4, JIS B5, folio, letter, legal, executive	60–90 g/m <sup>2</sup> (16–24 lb)	500 sheets of paper
Multipurpose feeder	Paper, envelopes, labels, transparencies, card stock*	<b>Minimum:</b> 76.2 x 127 mm (3 x 5 in.) <b>Maximum:</b> 216 x 355.6 mm (8.5 x 14 in.) Supports all sizes listed in <b>Supported print media sizes.</b>	60–163 g/m <sup>2</sup> (16–43 lb)	<ul style="list-style-type: none"><li>• 100 sheets of paper</li><li>• 10 envelopes</li><li>• 30 sheets of labels</li><li>• 20 transparencies</li><li>• 10 sheets of card stock</li></ul>
* Card stock must exit through the rear output bin.				

#### Duplex unit specifications

	Exits to the standard output bin
Sizes supported	A4, JIS B5, folio, letter, legal
Weight	60–105 g/m <sup>2</sup> (16–28 lb)

### Supported print media types

✓ - indicates support ✗ - indicates no support							
Print media	Tray 1 (250-sheet tray)	Tray 2 (optional 250-sheet drawer)	Tray 2 (optional 500-sheet drawer)	Multipurpose feeder	Standard output bin	Rear output bin	Duplex
Paper	✓	✓	✓	✓	✓	✓	✓
Card stock	✗	✗	✗	✓	✗	✓	✗
Labels	✗	✗	✗	✓	✓*	✓	✗
Transparencies	✓	✗	✗	✓	✓*	✓	✗
Envelopes	✗	✗	✗	✓	✓	✓	✗
* Labels and transparencies may be sent to the standard output bin; however, they may print more successfully when sent to the rear output bin.							

## Supported print media sizes

✓ - indicates support ✗ - indicates no support		Tray 1 (250-sheet tray)	Tray 2 (optional 250-sheet drawer)	Tray 2 (optional 500-sheet drawer)	Multipurpose feeder	Standard output bin	Rear output bin	Duplex
Print media	Dimensions							
A4	210 x 297 mm (8.27 x 11.7 in.)	✓	✓	✓	✓	✓	✓	✓
A5	148 x 210 mm (5.83 x 8.27 in.)	✓	✓	✗	✓	✓	✓	✗
JIS B5	182 x 257 mm (7.17 x 10.12 in.)	✓	✓	✓	✓	✓	✓	✓
Letter	215.9 x 279.4 mm (8.5 x 11 in.)	✓	✓	✓	✓	✓	✓	✓
Legal	215.9 x 356 mm (8.5 x 14 in.)	✓	✓	✓	✓	✓	✓	✓
Executive	184.2 x 266.7 mm (7.25 x 10.5 in.)	✓	✓	✓	✓	✓	✓	✗
Folio	215.9 x 330 mm (8.5 x 13 in.)	✓	✓	✓	✓	✓	✓	✓
Statement	139.7 x 215.9 mm (5.5 x 8.5 in.)	✓	✓	✗	✓	✓	✓	✗
Universal	216 x 356 mm (8.5 x 14 in.)	✓	✓	✗	✓	✓	✓	✓
7 3/4 Envelope (Monarch)	98.4 x 190.5 mm (3.875 x 7.5 in.)	✗	✗	✗	✓	✓	✓	✗
9 Envelope	98.4 x 225.4 mm (3.875 x 8.875 in.)	✗	✗	✗	✓	✓	✓	✗
10 Envelope (Com-10)	104.8 x 241.3 mm (4.125 x 9.5 in.)	✗	✗	✗	✓	✓	✓	✗
DL Envelope	110 x 220 mm (4.33 x 8.66 in.)	✗	✗	✗	✓	✓	✓	✗
C5 Envelope	162 x 229 mm (6.38 x 9.01 in.)	✗	✗	✗	✓	✓	✓	✗
B5 Envelope	176 x 250 mm (6.93 x 9.84 in.)	✗	✗	✗	✓	✓	✓	✗
Other Envelope (Universal)	356 x 216 mm (14 x 8.5 in.)	✗	✗	✗	✓	✓	✓	✗

### ***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.

- Capacities listed in the **Print media source specifications** table are for 20 lb paper, unless otherwise noted.
- The following sizes or types of print media *must* exit to the rear output bin:
  - Print media 165.1 mm (6.5 in.) or less in length
  - 3 x 5 in. and 4 x 6 in. index cards and card stock
- Select Universal size when using a nonstandard size sheet of print media. The printer formats the page for the maximum size (8.5 x 14 in.). Set the actual size from your software application.

### ***Paper***

- For the best print quality, use 75 g/m<sup>2</sup> (20 lb) xerographic, grain long paper.
- 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.
- Legal size paper sent to the rear exit bin stacks improperly when too many sheets accumulate. Remove the paper often from this bin.
- Keep paper sealed in its original packaging until ready to use.

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

- Paper with a rough or heavily textured surface
- Coated papers, such as erasable bond
- Preprinted papers manufactured with chemicals that may contaminate the printer
- Multiple-part forms
- Synthetic papers
- Thermal papers
- Recycled paper having a weight less than 75 g/m<sup>2</sup> (20 lb)

### ***Preprinted forms and letterhead***

Use papers printed with heat-resistant inks designed for use in xerographic copiers. The ink must be able to withstand temperatures up to 200°C (392°F) without melting or releasing hazardous emissions. Use inks that are not affected by the resin in toner or the silicone in the fuser. 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.

- 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.

### **Printing on preprinted forms and letterhead**

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

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

Print media source or process	Top of page		
	Print side	Portrait	Landscape
Tray 1 (standard tray)  Tray 2 (optional 250-sheet or 500-sheet drawer)	Face down	Front of tray	Left side of tray
Duplex printing using Tray 1 or Tray 2	Face up	Logo faces rear of tray	Not applicable
Multipurpose feeder (including feeding individual sheets)	Face up	Logo enters the printer first	Left side of tray
Duplex printing using the multipurpose feeder	Face down	Logo enters the printer last	Not applicable



### ***Transparencies***

You can feed transparencies from the standard 250-sheet tray or the multipurpose feeder. Do not load transparencies in the optional 250-sheet or 500-sheet drawer.

- Use transparencies designed specifically for laser printers. Transparencies must be able to withstand temperatures of 175°C (347°F) without melting, discoloring, or releasing hazardous emissions.
- To prevent print quality problems, avoid getting fingerprints on the transparencies.
- Before loading transparencies, fan the stack to prevent sheets from sticking together.
- You can send transparencies to the standard output bin; however, they may print more successfully when sent to the rear output bin.
- Be sure to set the Paper Type to Transparency from the printer driver or from MarkVision™ to avoid damaging your printer.

### ***Envelopes***

You can load up to 10 envelopes in the multipurpose feeder.

- Use envelopes made from 75–105 g/m<sup>2</sup> (20–28 lb) bond paper.
- Do not use envelopes that:
  - Have excessive curl
  - Are stuck together
  - Are damaged in any way
  - Contain windows, holes, perforations, cutouts, or embossing
  - 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 205°C (401°F) without sealing, excessive curling, wrinkling, or 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.
- Set the Paper Source to MP Feeder or Manual Env, set the paper type to Envelope, and select the correct envelope size from the printer driver or from MarkVision.
- Load envelopes with the flap side down, and position the short edge nearest the return address to enter the printer first.
- Adjust the right paper guide to fit the width of the envelopes.
- If you are feeding self-sealing envelopes, open the rear output bin door so envelopes feed straight out the back of the printer. The rear output bin holds about 10 envelopes.
- Envelopes may curl less if they exit to the rear output bin.

### **Labels**

Your printer can print on many labels designed for use with laser printers. However, vinyl labels are not supported. These labels are supplied in letter size and A4 size sheets. Label adhesives, face sheet (printable stock), and topcoats must be able to withstand temperatures of 205°C (401°F) and pressure of 25 pounds per square inch (psi) (172 kilopascals).

When printing on labels:

- Set the Paper Type to Labels from the printer driver or from MarkVision.
- You can send labels to the standard output bin; however, they may print more successfully when sent to the rear output bin.
- Do not load labels together with paper or transparencies in the same paper source.
- Do not use label sheets with a slick backing material.
- Do not print within 1 mm (0.04 in.) of the die cut.
- Use full label sheets. Partial sheets may cause labels to peel off during printing, resulting in a jam. Partial sheets also contaminate your printer and your cartridge with adhesive, and could void your printer and cartridge warranties.
- Use labels that can withstand temperatures of 205°C (401°F) without sealing, excessive curling, wrinkling, or releasing hazardous emissions.
- Do not print within 1 mm (0.04 in.) of the edge of the label, of the perforations, or between die-cuts of the label.
- Do not use label sheets that have adhesive to the edge of the sheet. We recommend zone coating of the adhesive at least 1 mm (0.04 in.) away from edges. Adhesive material contaminates your printer and could void your warranty.
- If zone coating of the adhesive is not possible, a 3 mm (0.125 in.) strip should be removed on the leading and driver edge, and a non-oozing adhesive should be used.
- Remove a 3 mm (0.125 in.) strip from the leading edge to prevent labels from peeling inside the printer.
- Portrait orientation is preferred, especially when printing bar codes.
- Do not use labels that have exposed adhesive on the sheets.

### ***Card stock***

Card stock is single ply, and has a large array of properties, such as the orientation of paper fibers and texture, that can significantly affect the print quality.

You may only print card stock from the multipurpose feeder. Card stock must always exit to the rear output bin.

- Do not use card stock that is perforated or creased. 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.
- We recommend the use of grain short card stock.

### ***Storing print media***

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

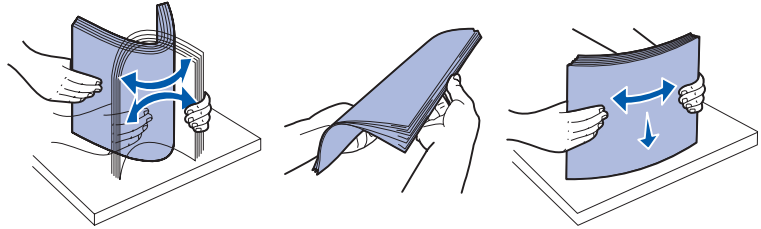
- For best results, store print media in an environment where the temperature is approximately 21°C (70°F) and the relative humidity is 40%.
- Store cartons of print media on a pallet or shelf, rather than directly on the floor.
- If you store individual packages of print media out of the original carton,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

### ***Preventing jams***

By carefully selecting appropriate print media and loading it properly, you should be able to avoid most jams. If you do experience a jam, see [Clearing jams](#) for instructions.

The following hints can help you avoid jams:

- Use only recommended print media.
- Do not load wrinkled, creased, damp, or curled print media.
- Flex, fan, and straighten print media before you load it. If jams do occur with print media, try feeding one sheet at a time through the multipurpose feeder.
- Do not overload the print media sources. Make sure the stack height does not exceed the maximum height indicated by the labels in the sources.
- Do not use print media that you have cut or trimmed yourself.
- Do not mix print media sizes, weights, or types in the same print media source.
- Make sure the recommended print side is face down when loading all trays and the recommended print side is face up when loading the multipurpose feeder.
- Keep print media stored in an acceptable environment. See [Storing print media](#).
- Do not remove trays during a print job.
- Push all trays in firmly after loading them.
- Make sure the guides in the trays are properly positioned for the size print media you have loaded. Make sure the guides are not placed too tightly against the stack of print media.
- Card stock must exit to the rear output bin. See [Using the rear output bin](#) for more information.
- Envelopes may be sent to the standard output bin; however, if the envelopes exit to the rear output bin there is less curl.
- Make sure all cables that connect to the printer are correctly attached. Refer to the *Setup Guide* for more information.



### ***Loading trays***

Your printer has two standard sources, the 250-sheet tray (standard tray) and the multipurpose feeder. For more information, see [Loading and using the multipurpose feeder](#). Load the print media you use for the majority of your print jobs in the standard 250-sheet tray.

Proper print media loading helps prevent jams and helps make your printing trouble-free.

Before loading print media, know the recommended print side of the print media you are using. This information is usually indicated on the print media package.

Do not remove trays while a job prints. Doing so may cause a jam.

### ***Loading the standard tray and the optional 250-sheet tray***

The following instructions work for loading the standard tray or the tray for the optional 250-sheet drawer.

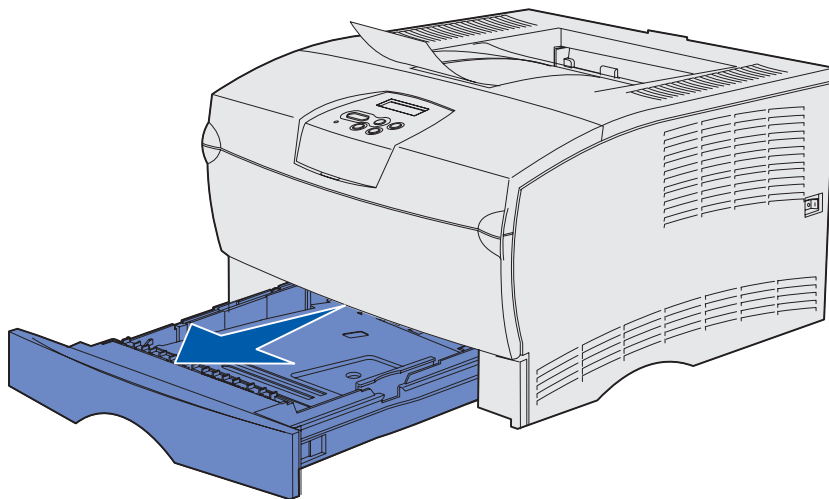
Your printer has one standard 250-sheet tray.

For the sizes and types of print media these trays support, see [Print media source specifications](#).

To load the tray for the optional 500-sheet drawer, see [Loading the optional 500-sheet tray](#).

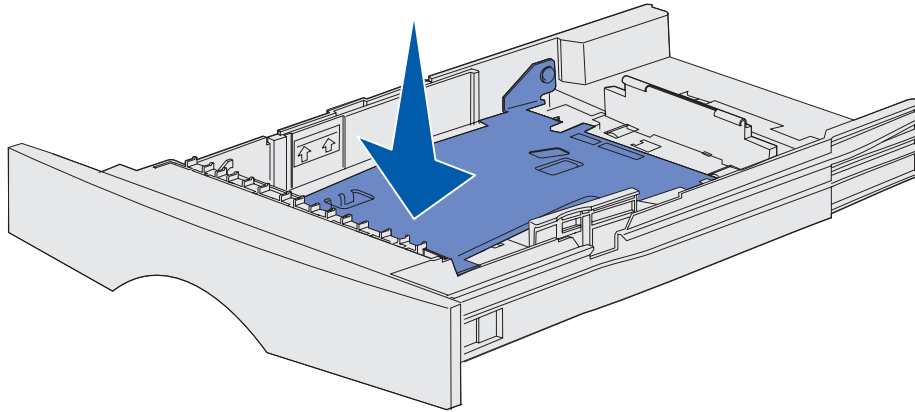
To load print media in a tray:

- 1 Remove the tray completely.

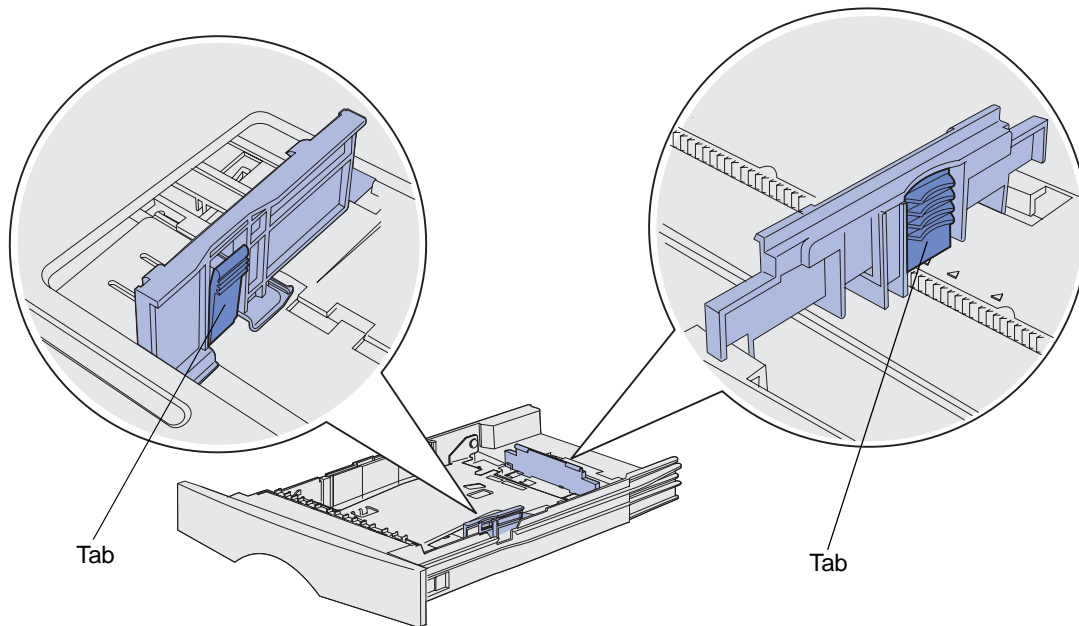


- 2 If you are loading print media that is over 90 g/m<sup>2</sup> (24 lb) (but no greater than 105 g/m<sup>2</sup> [28 lb]), adjust the dial on the bottom of the tray. See [Loading print media over 90 g/m<sup>2</sup> \(24 lb\) on page 25](#) for more information.

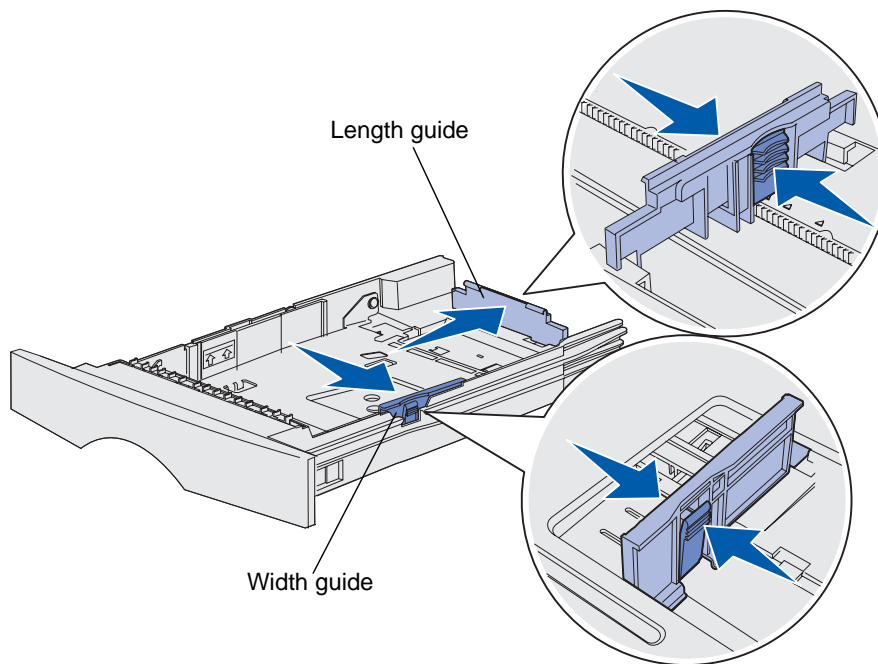
- 3** Press down on the metal plate until it locks into place.



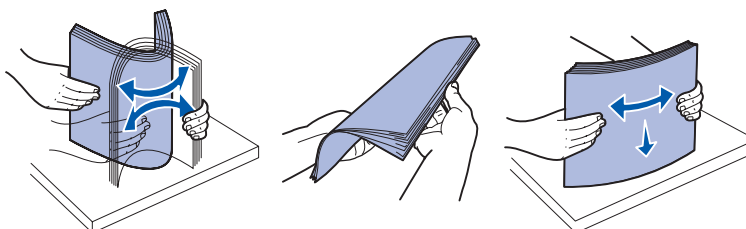
- 4** Locate the tabs on both of the guides.



- 5 Squeeze the length guide tab and the length guide together, and then slide the guide to the back of the tray.



- 6 Squeeze the width guide tab and the width guide together, and then slide the guide all the way to the right.
- 7 Flex the sheets back and forth to loosen them, then fan them. Do not fold or crease the print media. Straighten the edges on a level surface.



Hold the print media so the side you want to print on is face down, and the front edge of the stack is toward the front of the tray.

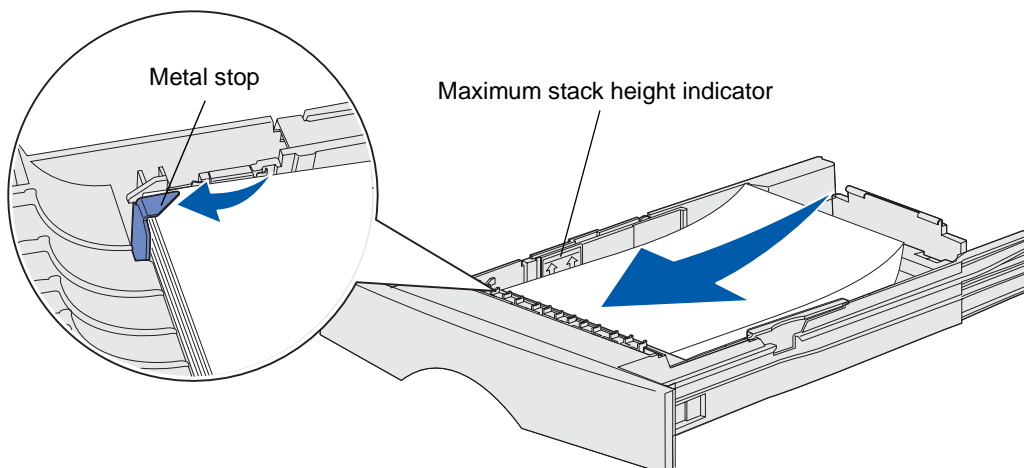
For information on loading letterhead, see [Printing on preprinted forms and letterhead](#).



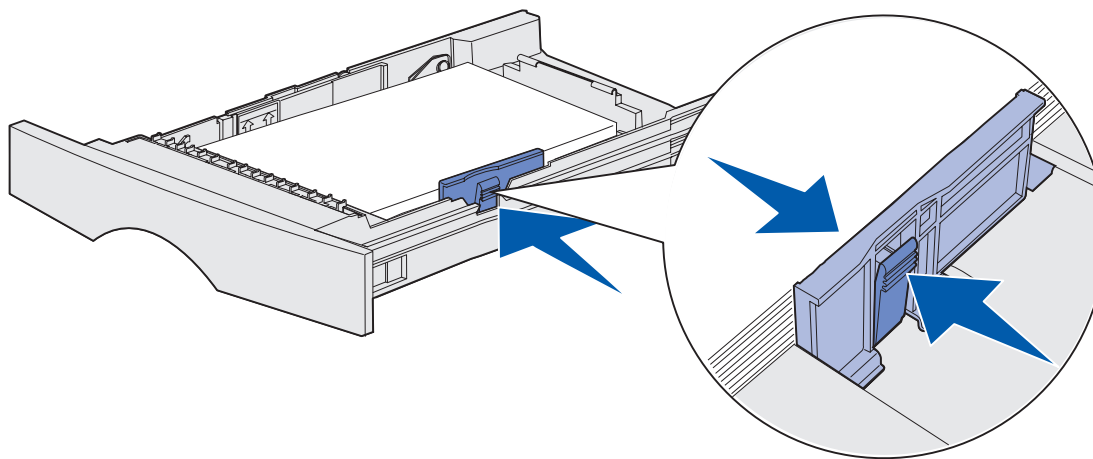
- 8** Place the stack of print media against the left side of the tray and insert it under the metal stop.

Make sure the print media fits easily under the metal stop and is not bent or wrinkled. Do not raise the metal stop or force print media under it.

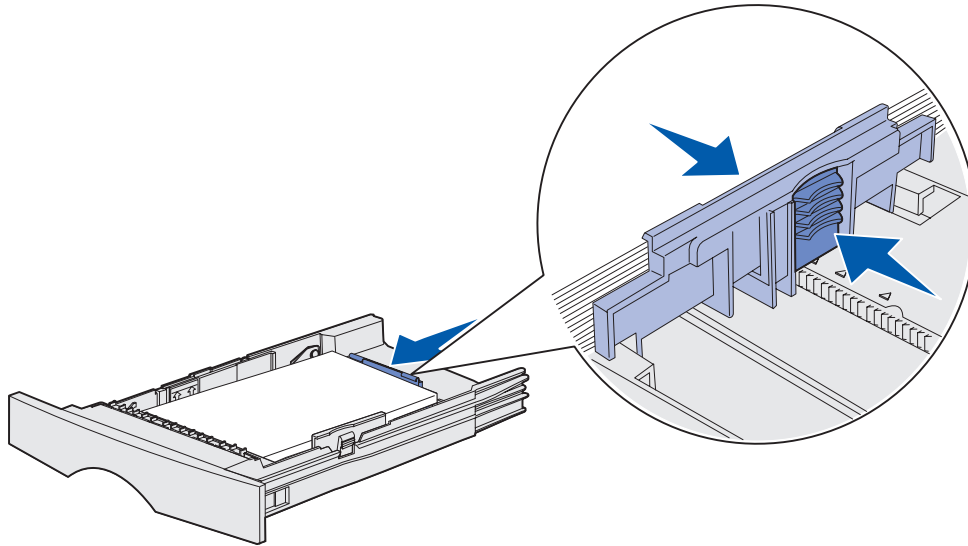
**Note:** Do not exceed the maximum stack height indicated. Overfilling the tray may cause jams.



- 9** Squeeze the width guide tab and the width guide together, and then slide the guide to the edge of the print media.

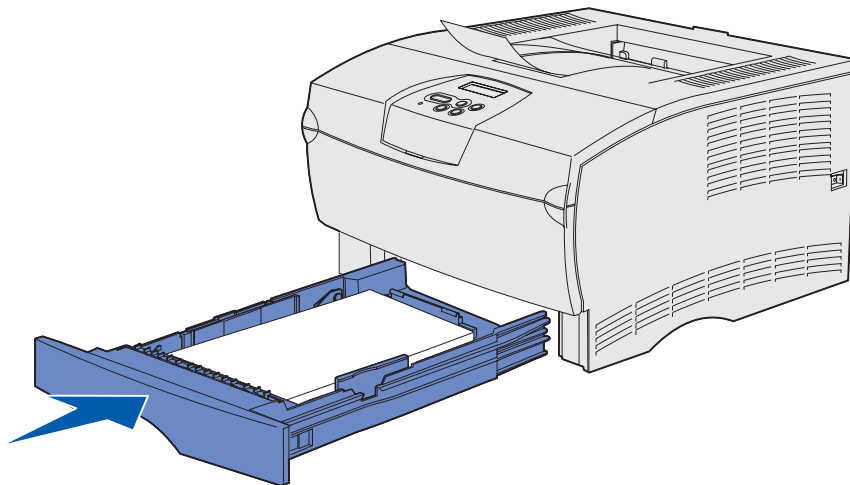


- 10 Squeeze the length guide tab and the length guide together, and then slide the guide to the edge of the print media.



**Note:** Sliding the guides too tightly against the print media may cause misfeeds.

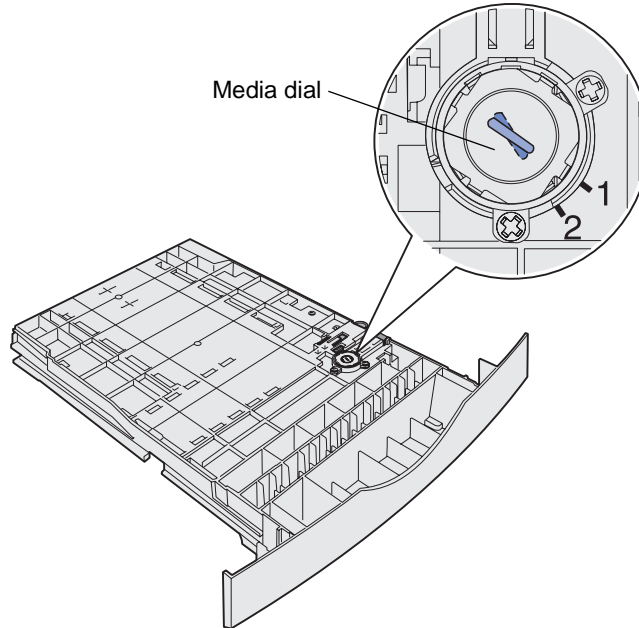
- 11 Insert the tray.



### Loading print media over 90 g/m<sup>2</sup> (24 lb)

When you are loading print media over 90 g/m<sup>2</sup> (24 lb) (but no greater than 105 g/m<sup>2</sup> [28 lb]) in the standard tray or optional 250-sheet tray, the tray's media dial must be set to position 2.

- 1 Remove the tray completely.
- 2 Remove any print media already in the tray.
- 3 Turn the tray over.
- 4 Using a coin, push the media dial down and turn it from position 1 to position 2.



- 5 Turn the tray over and load the appropriate print media as described in [Loading the standard tray and the optional 250-sheet tray on page 20](#).

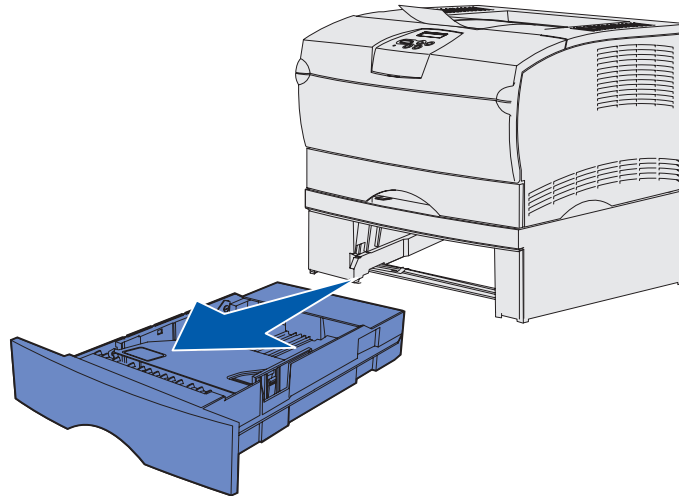
If you are using print media that is 60–90 g/m<sup>2</sup> (16–24 lb), the media dial should be in position 1.

### ***Loading the optional 500-sheet tray***

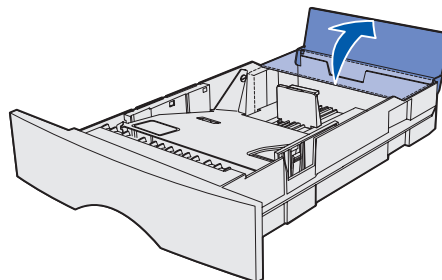
The optional 500-sheet tray only accepts paper. It has a special cover at the back of the tray to protect legal size paper from exposure to dust.

To load paper in the tray:

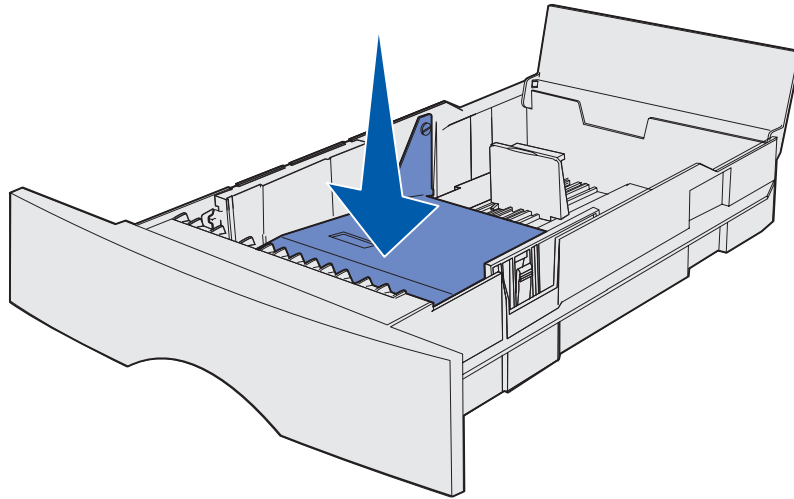
- 1 Remove the tray completely.



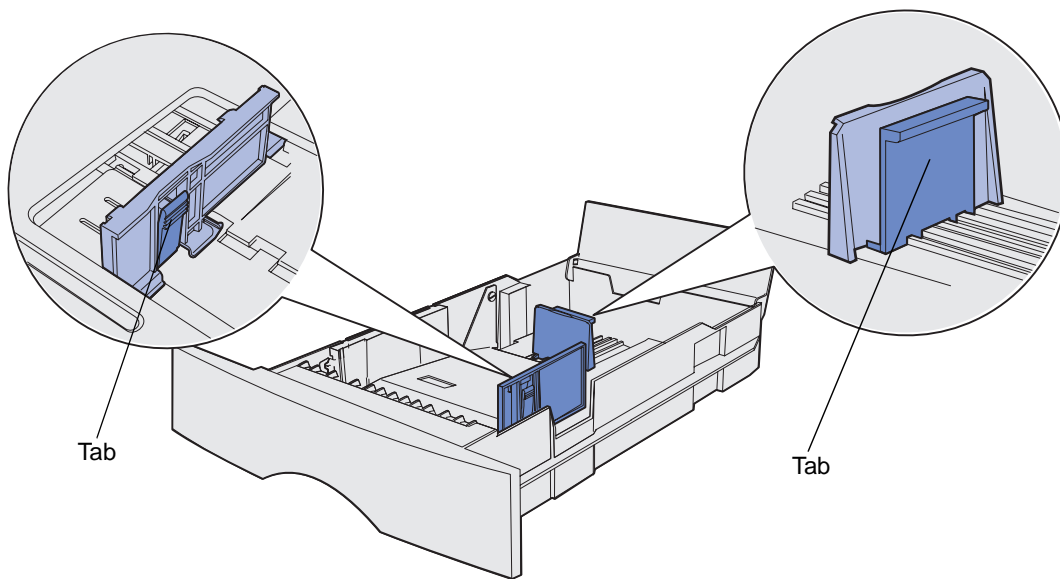
- 2 Raise the cover.



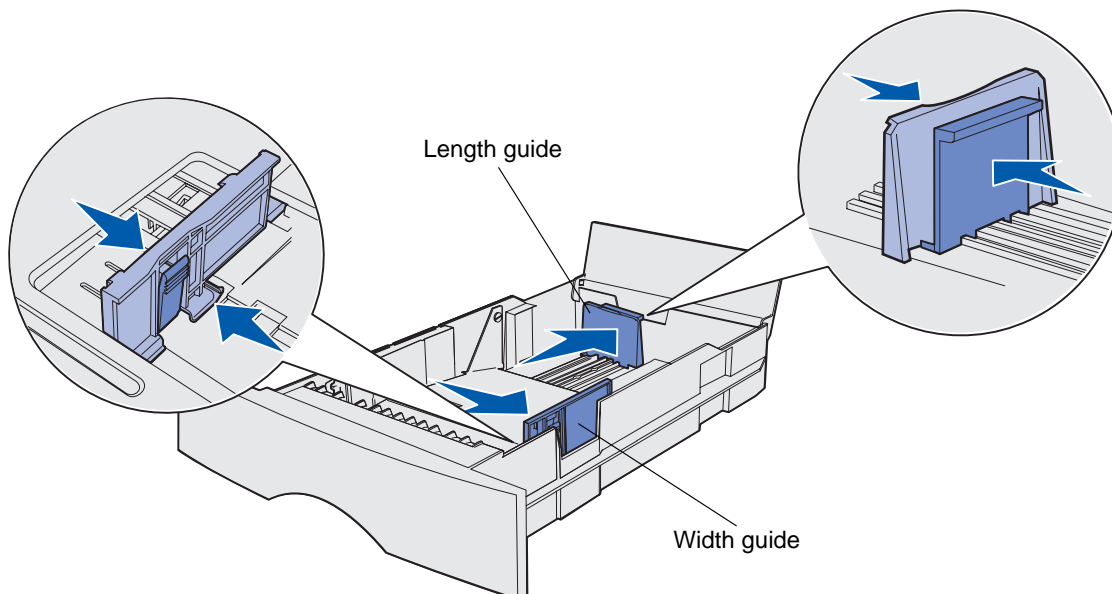
- 3** Press down on the metal plate until it locks into place.



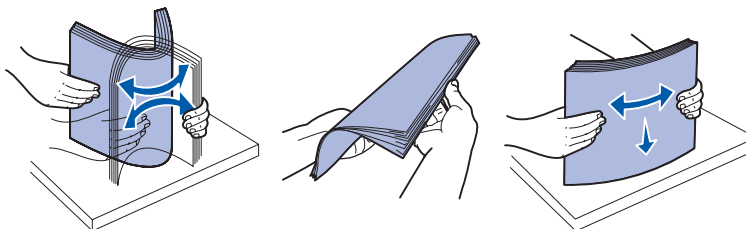
- 4** Locate the tabs on both of the guides.



- 5 Squeeze the length guide tab and the length guide together, and then slide the guide to the back of the tray.



- 6 Squeeze the width guide tab and the width guide together, and then slide the guide all the way to the right.
- 7 Flex the sheets back and forth to loosen them, then fan them. Do not fold or crease the paper. Straighten the edges on a level surface.



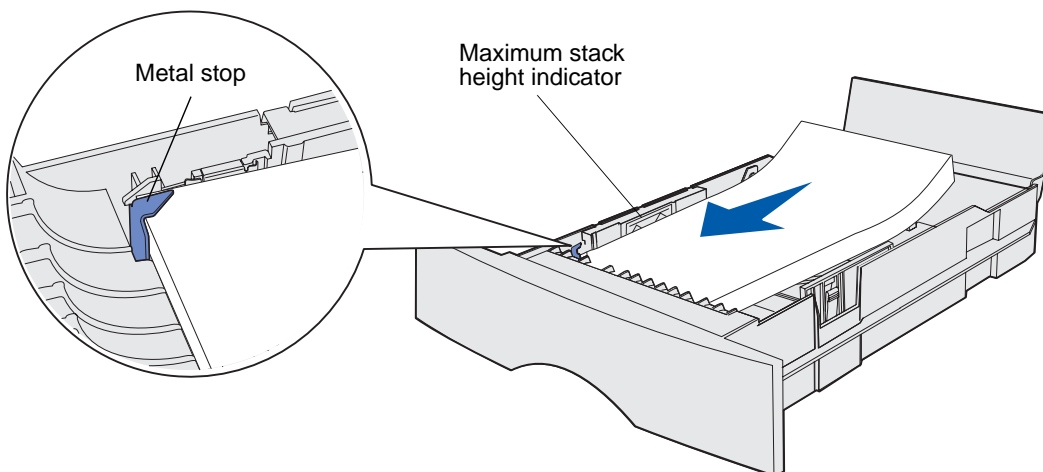
Hold the paper so the side you want to print on is face down, and the front edge of the stack is toward the front of the tray.

For information on loading letterhead, see [Printing on preprinted forms and letterhead](#).

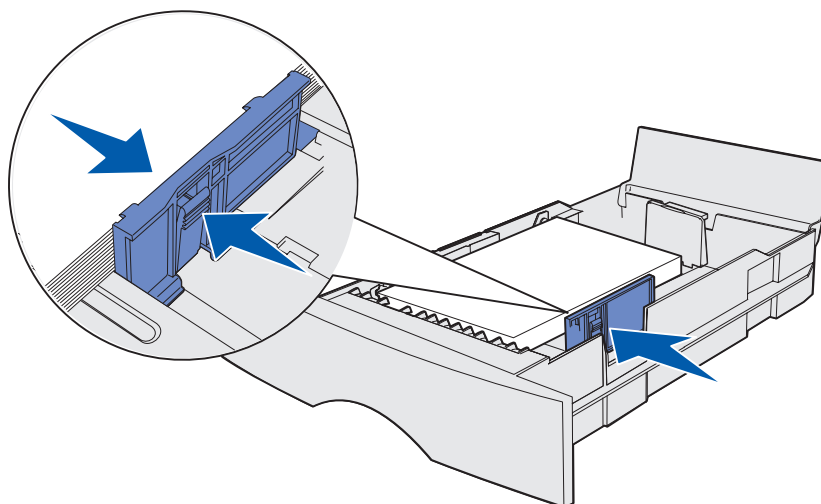
- 8** Place the stack of paper against the left side of the tray and insert it under the metal stop.

Make sure the paper fits easily under the metal stop and is not bent or wrinkled. Do not raise the metal stop or force paper under it.

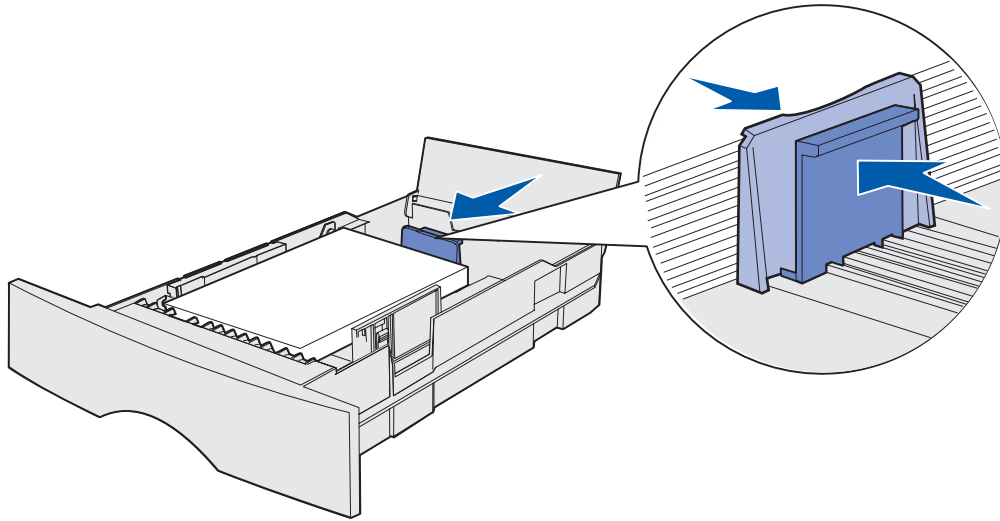
**Note:** Do not exceed the maximum stack height indicated. Overfilling the tray may cause jams.



- 9** Squeeze the width guide tab and the width guide together, and then slide the guide to the edge of the paper.

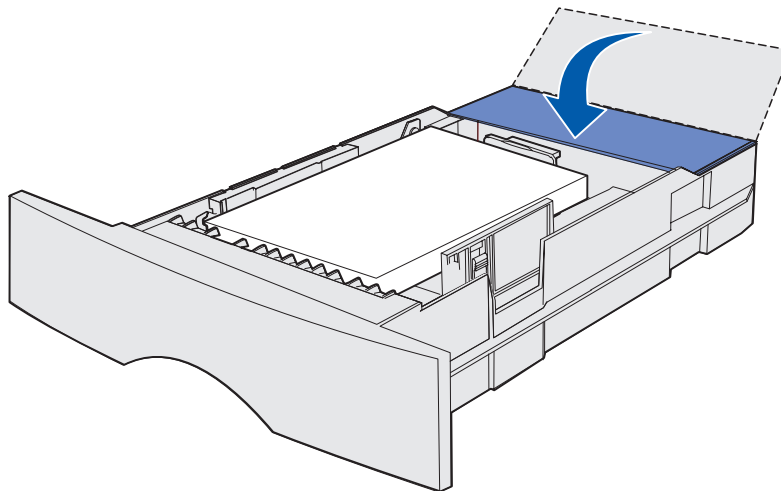


- 10** Squeeze the length guide tab and the length guide together, and then slide the guide to the edge of the paper.



**Note:** Sliding the guides too tightly against the paper may cause misfeeds.

- 11** Close the cover.



- 12** Insert the tray.



### ***Loading and using the multipurpose feeder***

Your printer has a multipurpose feeder that holds several sizes and types of print media. It is located on the front of your printer and can be closed when you are not using it. Reserve the multipurpose feeder for printing on different sizes and types of print media, such as card stock, transparencies, postcards, note cards, and envelopes. You can load a stack of print media, or you can load single sheets you do not keep in a tray.

See **Print media sources and specifications** for a listing of supported types and sizes.

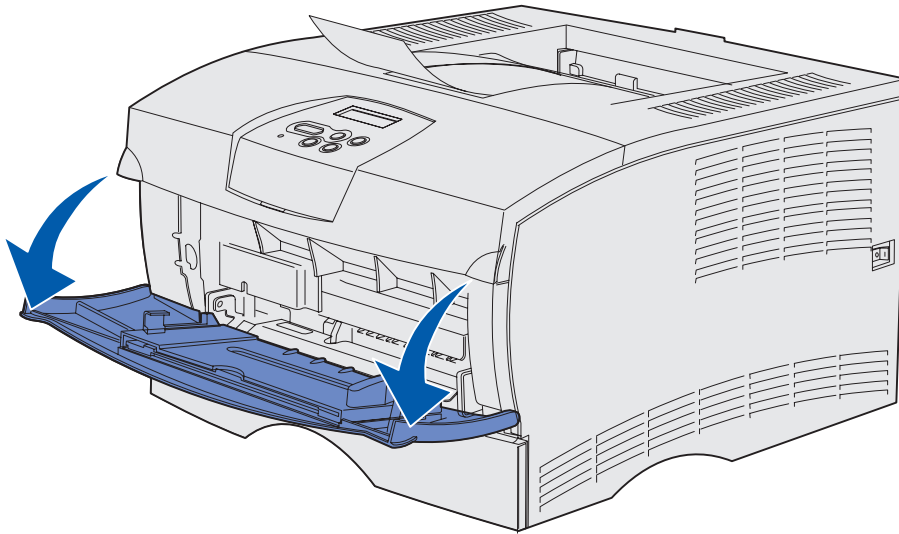
**Note:** When printing from the multipurpose feeder, be sure to set the Paper Size and Paper Type.

Follow these guidelines when using the multipurpose feeder:

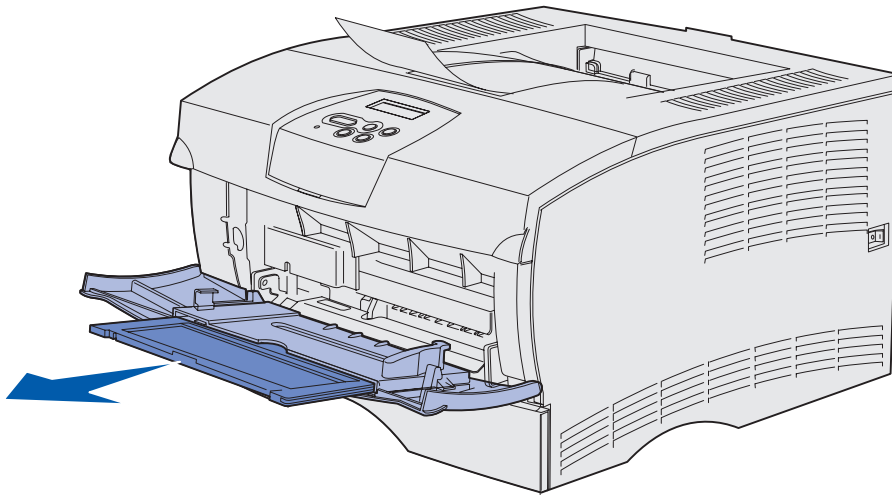
- Load only one size and type of print media at a time.
- To achieve the best possible print quality, use only high-quality print media that is designed for use in laser printers.
- To prevent jams, do not add print media to the multipurpose feeder when it already contains print media.
- Do not close the multipurpose feeder while a job is printing or while **Ready/Data** blinks on the operator panel. Doing so may cause a jam.
- Load print media with the top edge going into the multipurpose feeder first.
- Do not place objects on the multipurpose feeder. Also, avoid applying excessive force.

### ***Opening the multipurpose feeder***

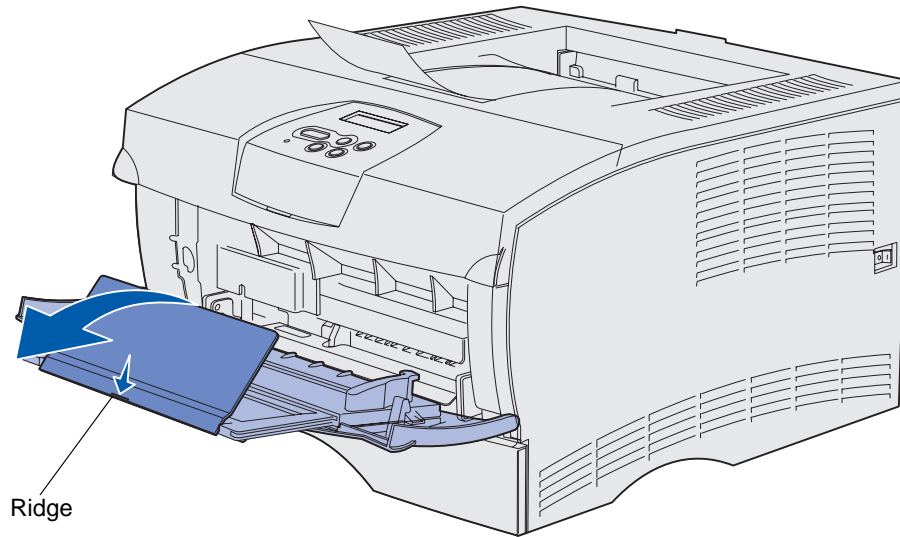
- 1 Open the multipurpose feeder door.



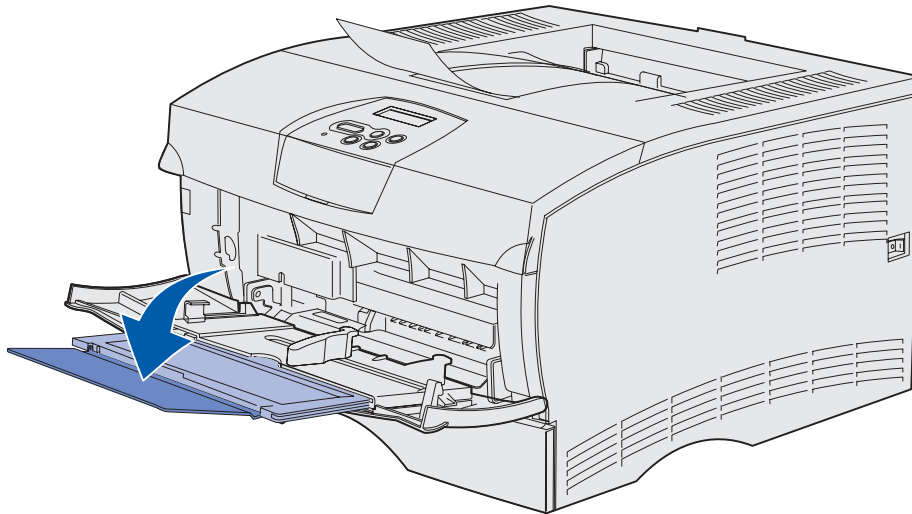
- 2 Pull the extension out.



- 3** Gently press down on the ridge. The extension unfolds.



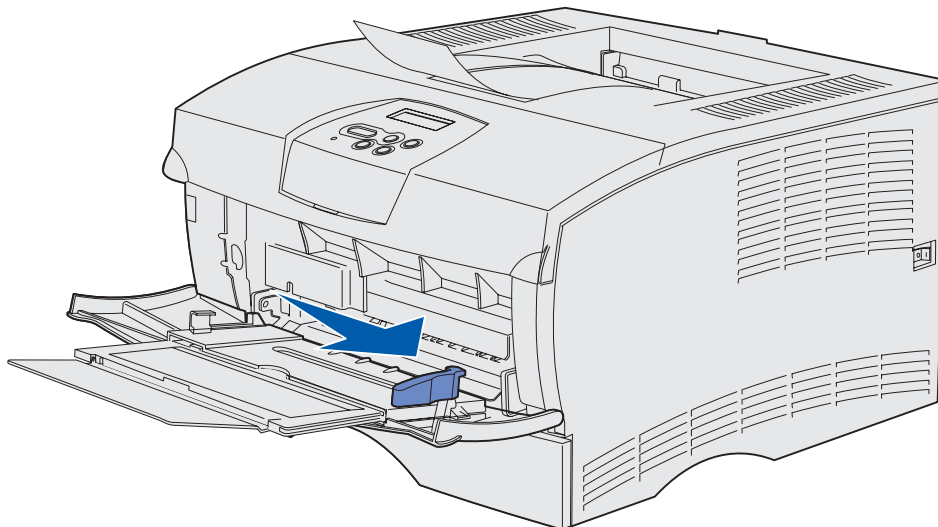
- 4** Guide the extension down gently so the multipurpose feeder is extended fully.



### ***Loading the multipurpose feeder***

See **Print media source specifications** for information on sizes and types of print media you can load in the multipurpose feeder.

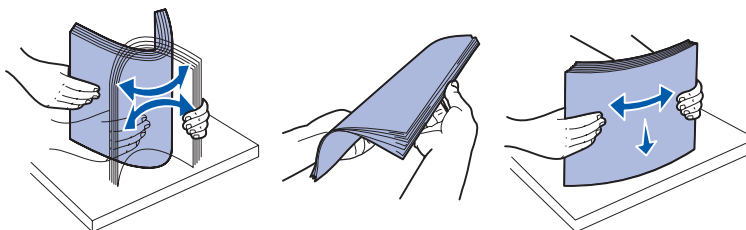
- 1 Slide the width guide all the way to the right.



- 2 Prepare print media for loading.

**Note:** Do not load different sizes or types of print media at the same time. Doing so may cause a jam.

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

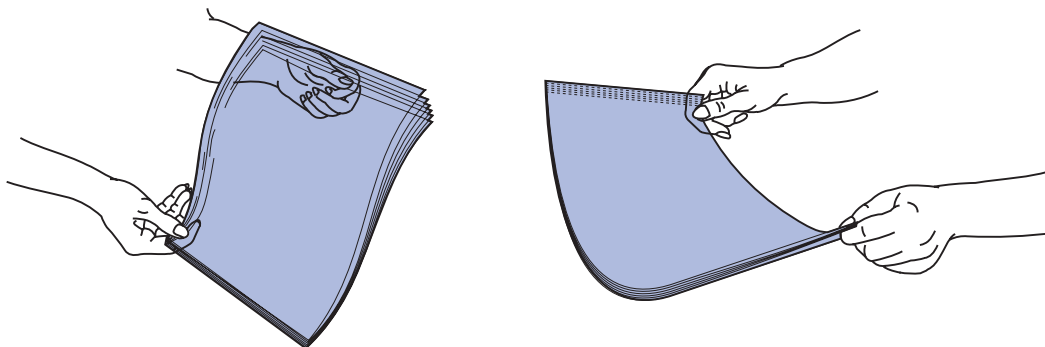


## Print media

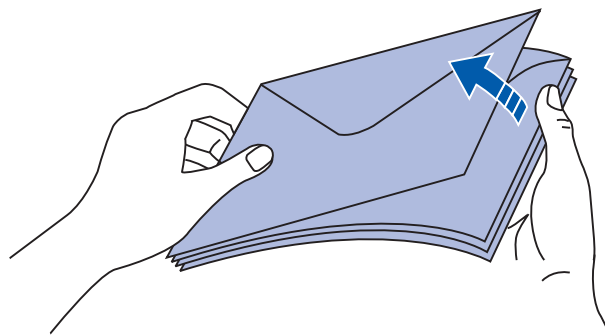
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- Hold transparencies by the edges and fan them to prevent feeding failures.

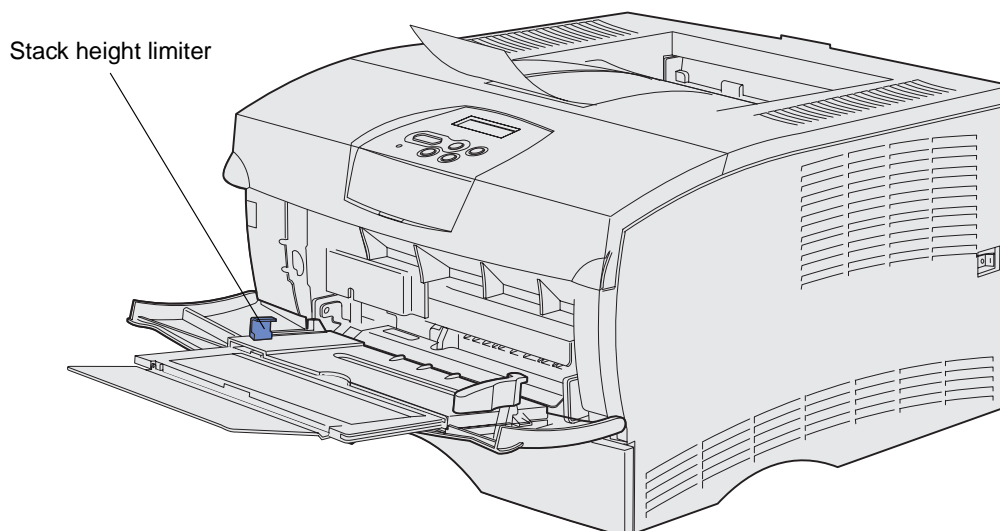
**Note:** Avoid touching the print side of the transparencies. Be careful not to scratch them.



- Fan envelopes back and forth to loosen them. Do not fold or crease the envelopes. Straighten the edges on a level surface.

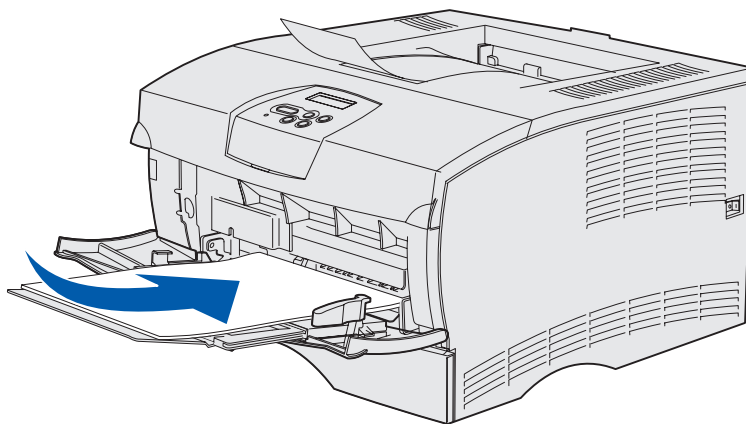


- 3 Do not exceed the maximum stack height by forcing print media under the stack height limiter. The maximum stack height is 10 mm (0.4 in.). Overfilling could cause jams.

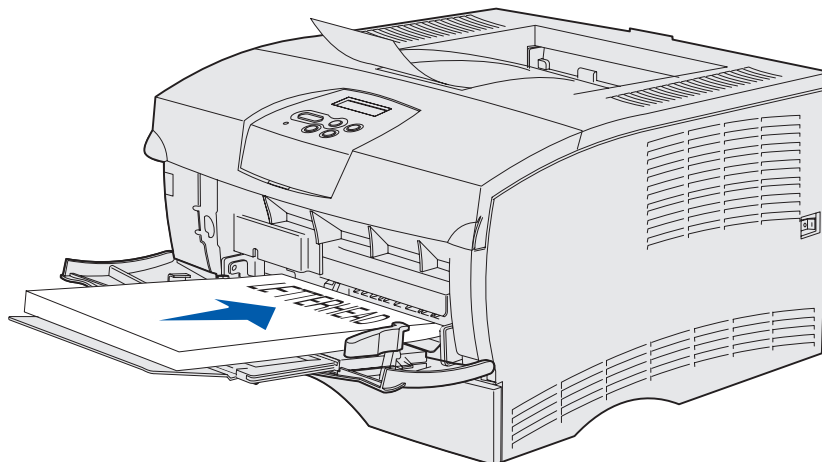


### 4 Load the print media.

- Load paper, card stock, and labels with the recommended print side face up and the top edge going in first.

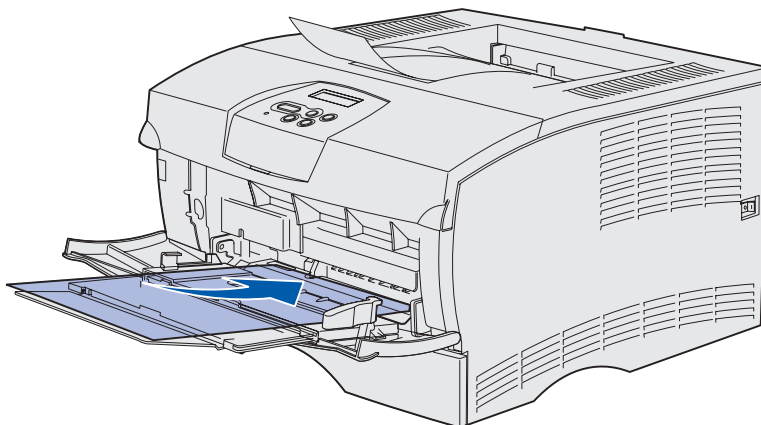


- Load letterhead with the logo face up and the top edge entering first.



**Note:** If you load letterhead for duplex printing, load the sheets with the logo face down and entering the printer last.

- Load transparencies with the recommended print side face up and the top edge going in first.

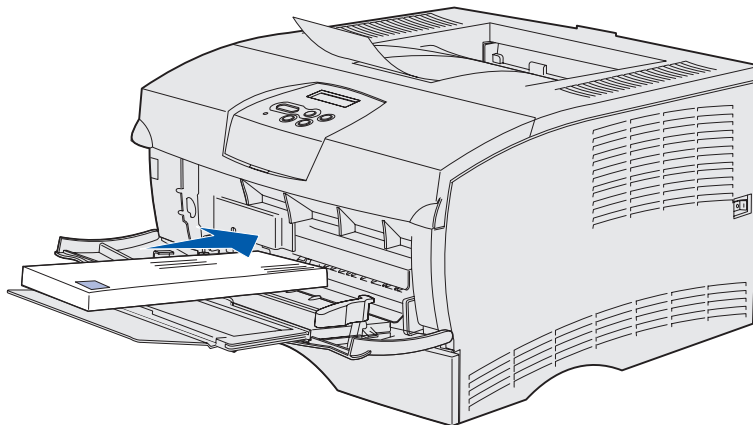


**Warning:** Never use envelopes with clasps, snaps, windows, coated linings, or self-stick adhesives. These envelopes may severely damage the printer.

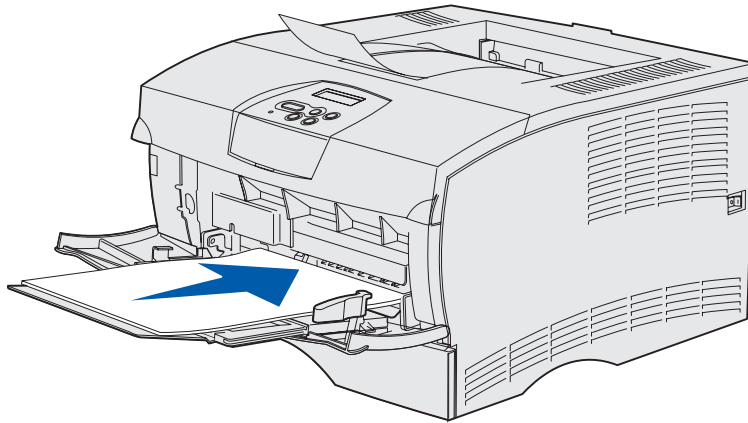
- Load envelopes with the flap side down and the stamp area going in last.

**Note:** For best results, peel-and-stick envelopes should exit to the rear output bin. Open the rear output bin when printing on these envelopes.

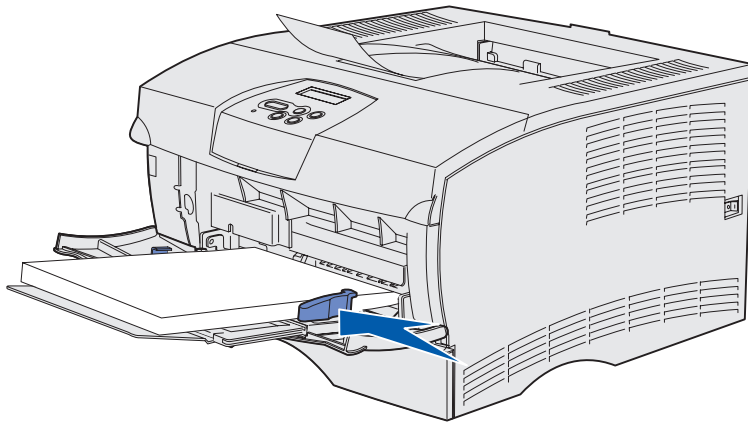
Do not feed stamped envelopes. The stamp and addresses are shown for envelope orientation only.



- 5** Slide the print media in as far as it will go without damaging the print media.



- 6** Slide the width guide to the left until it lightly touches the edge of the stack.

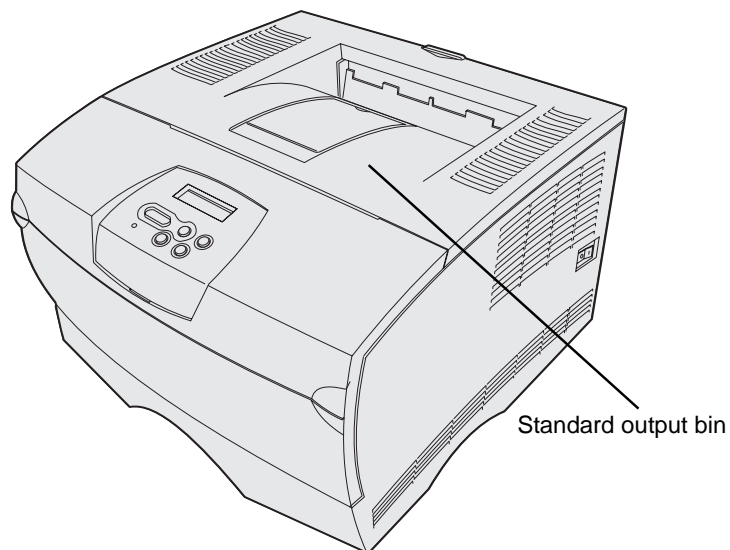


Make sure the print media fits loosely and is not bent or wrinkled.



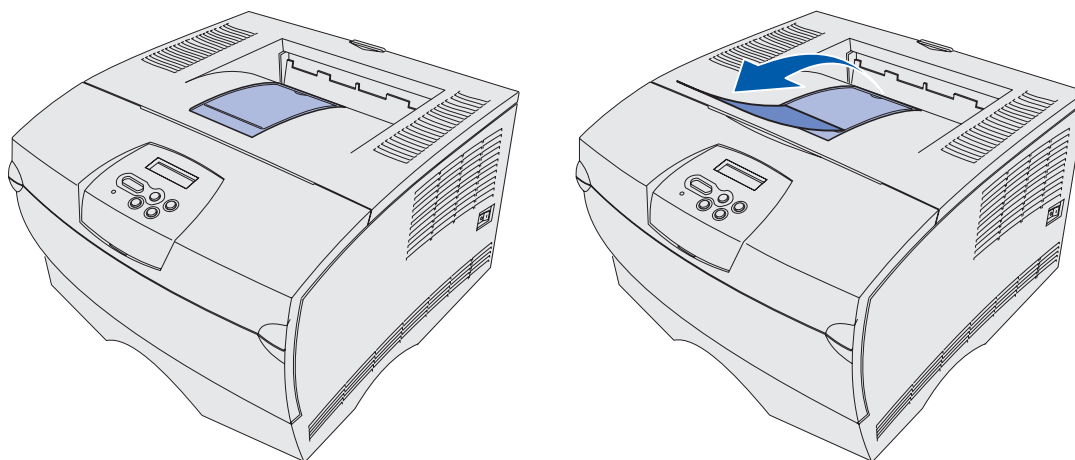
### ***Using the standard output bin***

The standard output bin holds 250 sheets of print media. The printer automatically sends print jobs to the standard output bin. Print jobs collate face down in this bin.



### ***Raising the paper rest***

The paper rest holds printed jobs to keep them from sliding out of the bin. Pull the paper rest forward to raise it.



### ***Using the rear output bin***

The printer automatically sends print jobs to the rear output bin when you open it. The rear output bin reverse collates (pages 4, 3, 2, 1) print jobs face up. The rear output bin holds 20 sheets of paper.

You may want to use the rear output bin when you print on different sizes and types of print media, such as paper, transparencies, postcards, note cards, and envelopes.

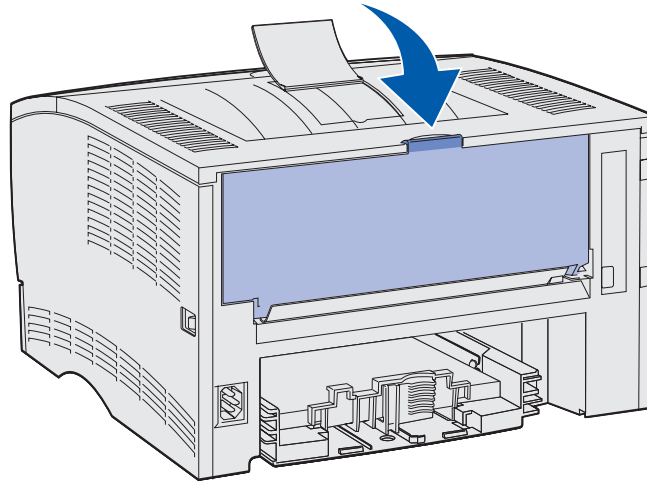
- Labels and transparencies may print more successfully when sent to the rear output bin.
- Envelopes may curl less if sent to the rear output bin.
- Card stock must always exit to the rear output bin.

Print media that is 165.1 mm (6.5 in.) or less in length must exit to the rear output bin.

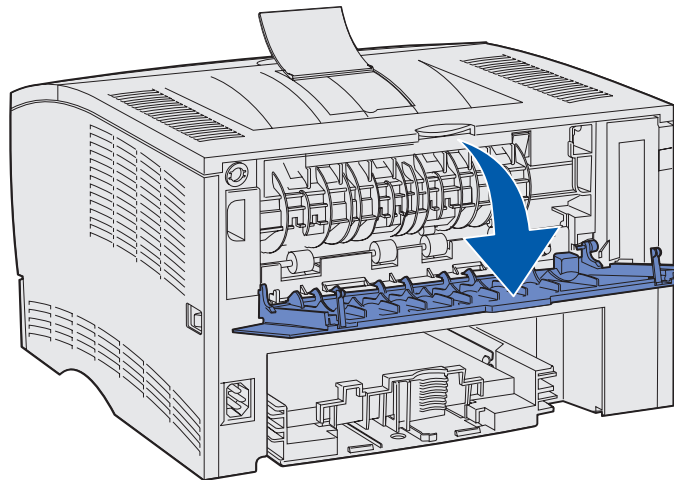
**Note:** Legal size print media sent to the rear exit bin stacks improperly when too many sheets accumulate. You must remove print media often from this bin.

To use the rear output bin:

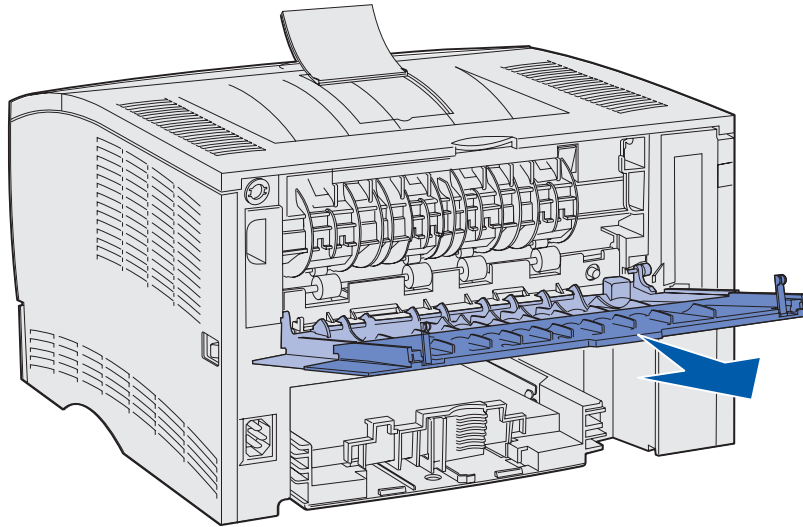
- 1 Grasp the tab as shown.



- 2 Pull the door down.



- 3 Pull the extension straight out using the tab.



- 4 Close the rear output bin door when you finish using it.

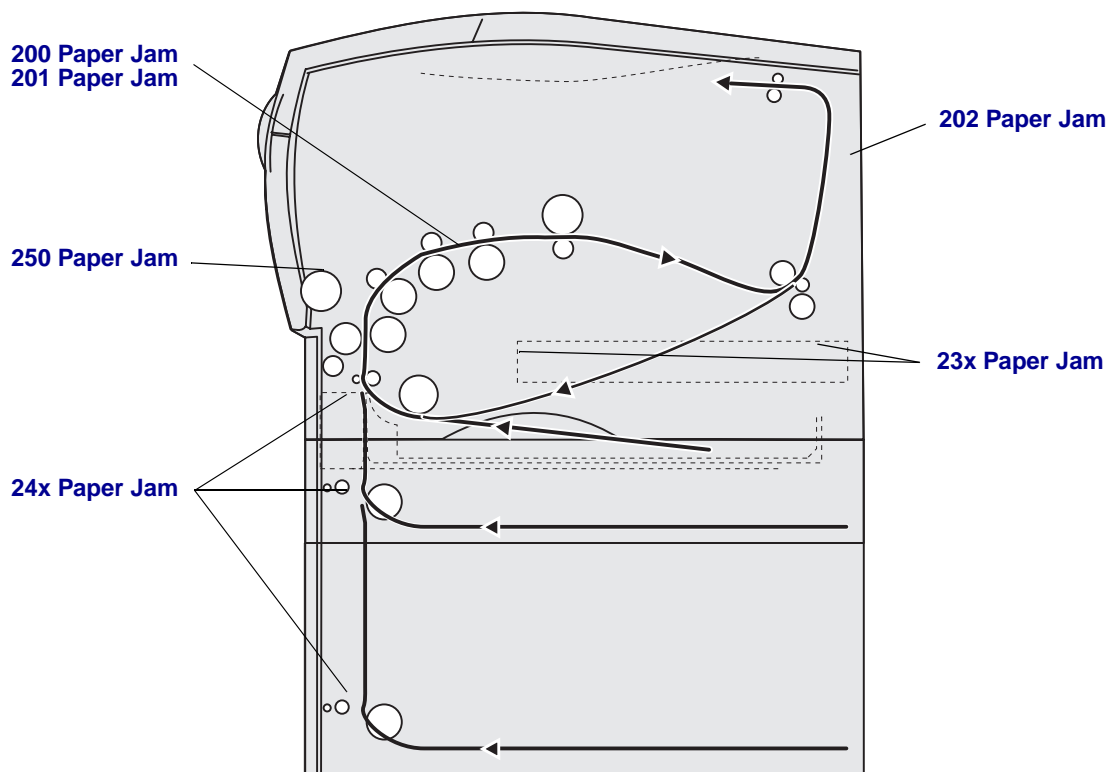
**Note:** Make sure the door closes properly on both sides to prevent jams.

### Clearing jams

By carefully selecting print media and loading it properly, you should be able to avoid most jams. If jams occur frequently, see [Preventing 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**.

The following illustration shows the path that print media travels through the printer. The path varies depending on the input source (trays and multipurpose feeder) and output bin you are using.



Use the following table to locate instructions for a particular jam:

Jam message	Go to page:
200 / 201 Paper Jam, Remove Cartridge	44
202 Paper Jam, Open Rear Door	46
23x Paper Jam (duplex jams)	49
24x Paper Jam, Check Tray <x>	53
250 Paper Jam, Check MP Feeder	55

**Note:** To avoid tearing print media, pull all jams out gently and slowly.

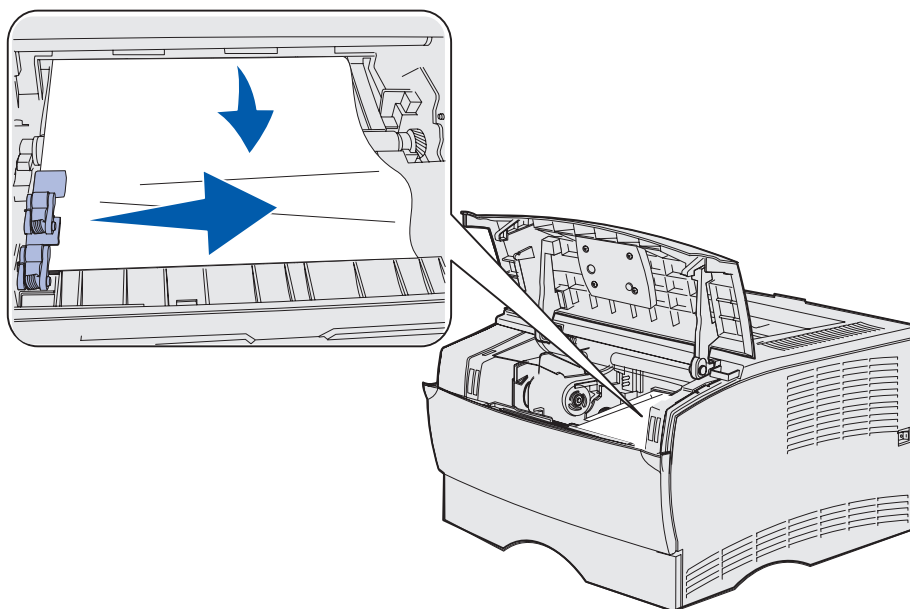
### **200 / 201 Paper Jam, Remove Cartridge**

Since the jam may occur farther back in the printer behind the print cartridge area, you may need to reach in farther to remove the jam.

- 1 Open the upper front door.
- 2 Remove the print cartridge. (See [Removing the used print cartridge](#) for instructions.)

**CAUTION:** The rear portion of the inside of the printer may be hot.

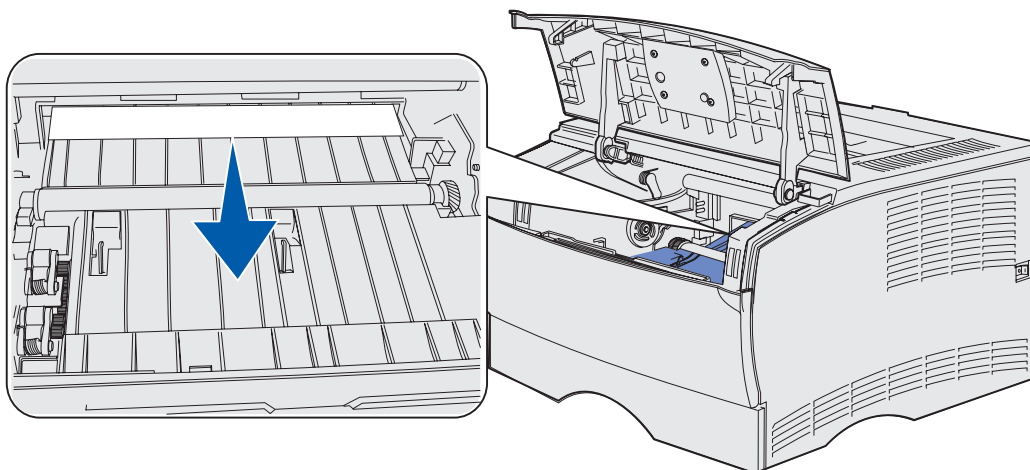
- 3 Locate the jam inside the printer.
  - If most of the paper is visible, gently pull the print media to the right, and then out.



## Print media

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- If only a small portion of the paper is visible, gently pull the jam straight out and then up.



**Note:** If the print media resists, stop pulling and access it from the rear output bin door.  
See **202 Paper Jam, Open Rear Door** to continue.

- 4 Reinstall the print cartridge. (See **Installing the new print cartridge** for instructions.)
- 5 Close the upper front door.

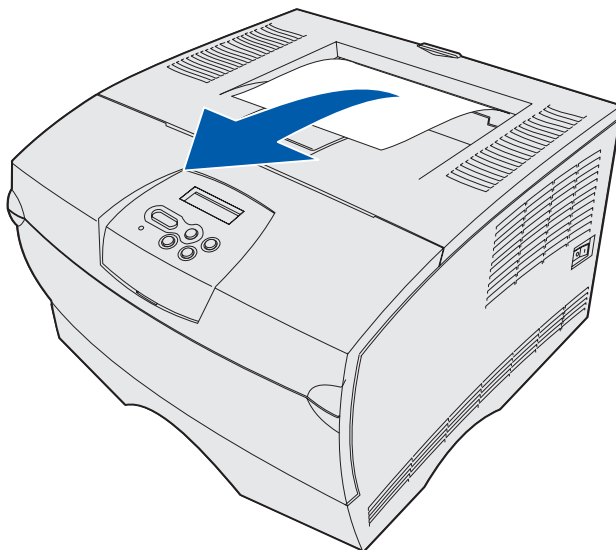
### **202 Paper Jam, Open Rear Door**

When this message is displayed, a jam can occur in one of two places:

- If the print media jams before completely exiting into the standard output bin, see **Exiting to the standard output bin**.
- If the print media jams before reaching the standard output bin, see **Before reaching the standard output bin**.

#### **Exiting to the standard output bin**

- 1 Gently pull the jam straight out.
- 2 If the print media does not pull easily from here, continue with **Before reaching the standard output bin**.

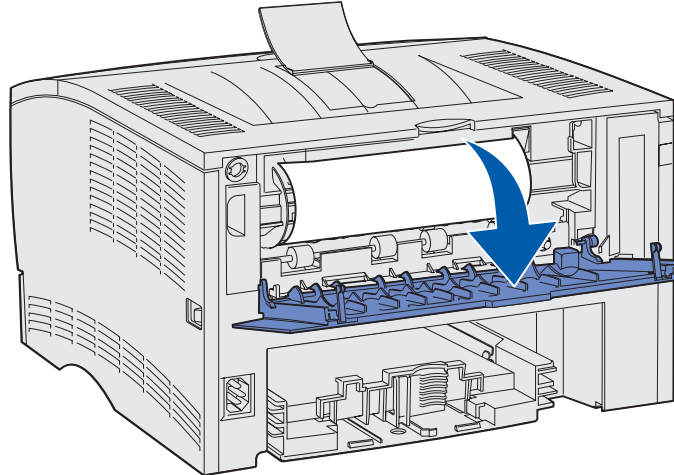




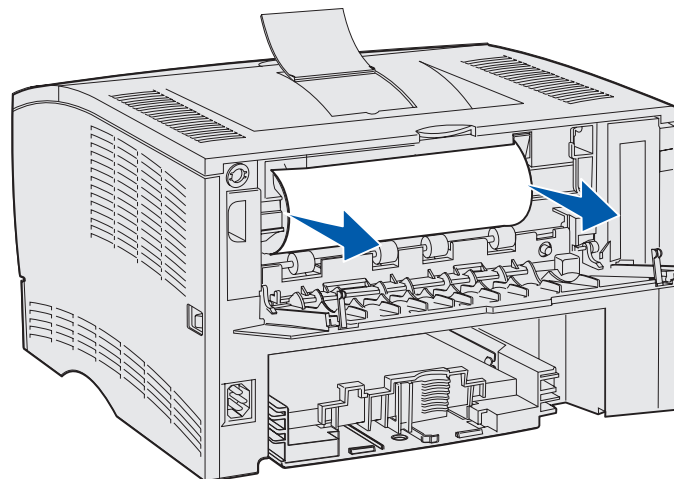
### Before reaching the standard output bin

The print media jams before reaching the standard output bin.

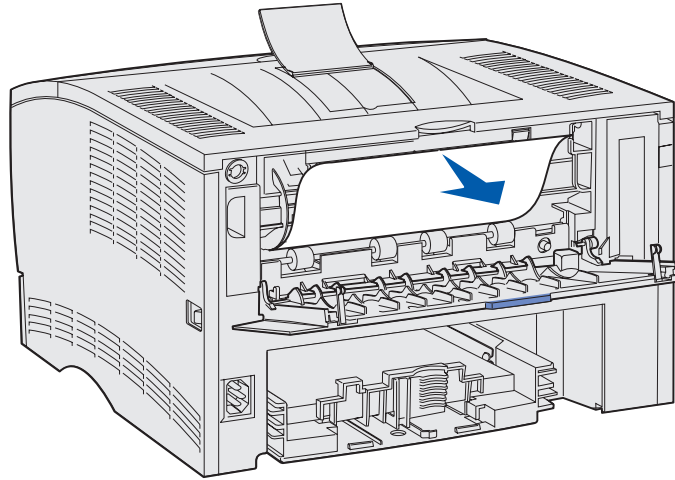
- 1 Open the rear output bin door.



- 2 Gently remove the jam based on how much is visible.
  - If the middle of the sheet of print media is visible, but not the ends, grasp the print media on both sides and gently pull it straight out.



- If an end of the jam is visible, pull it straight out.



- 3 Close the rear output bin door by pushing it in the middle under the tab.

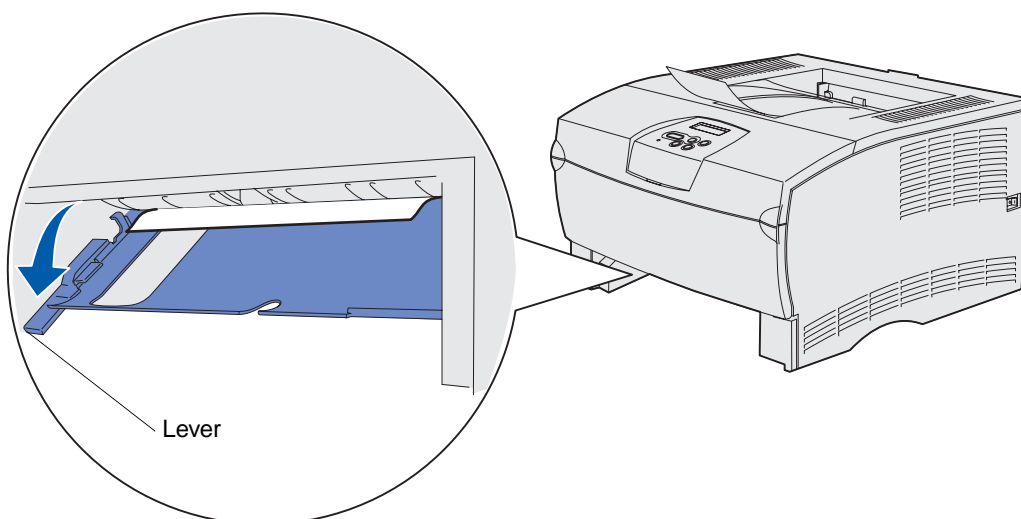
**Note:** Make sure the door closes on both sides.

### **23x Paper Jam (duplex jams)**

Print media can jam under the printer and above Tray 1 when the duplex function is in use. The printer can typically determine the location of a duplex jam, but occasionally it cannot. When a duplex jam occurs, one of three jam messages appears on the display, depending on if the location of the jam is known or not.

#### **23x Paper Jam, Remove Tray1, Pull Down Lever At Printer Front**

- 1 Pull Tray 1 completely out.
- 2 Look under the printer on the left side to locate a green lever.
- 3 Push down on the green lever.

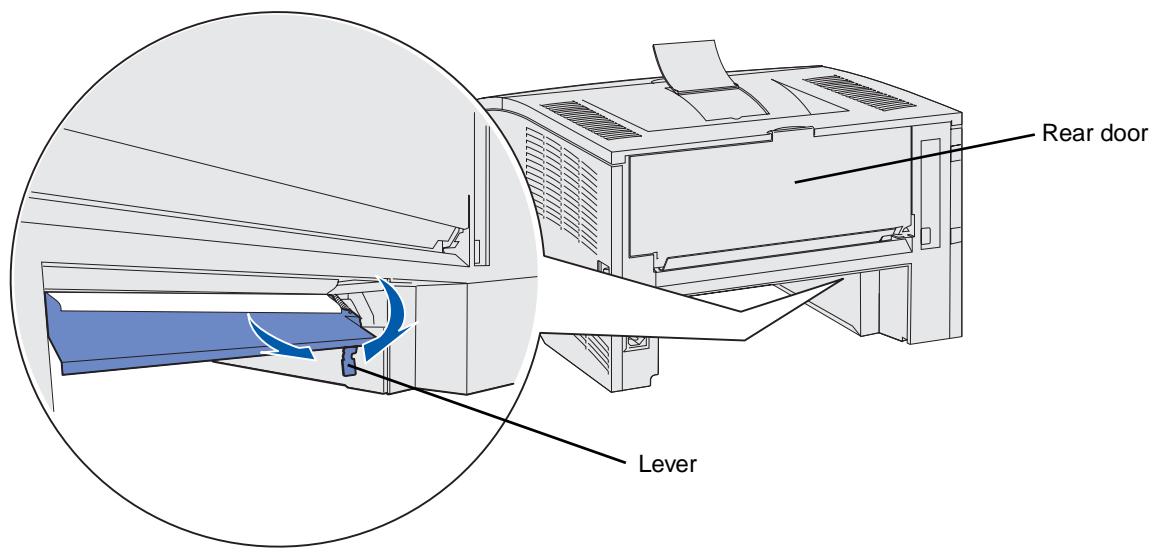


- 4 Gently pull the jam toward you.
- 5 Insert the tray.

**Note:** Make sure the metal plate at the bottom of the tray is locked down.

### 23x Paper Jam, Remove Tray1, Pull Down Lever At Printer Rear

- 1 Open the rear door and clear any jams. If you are unable to clear the jam from here, continue with **step 2**.
- 2 Pull Tray 1 completely out.
- 3 Look under the back of the printer on the right side to locate a green lever.
- 4 Push down on the lever.



- 5 Gently pull the jam toward you.
- 6 Insert the tray.

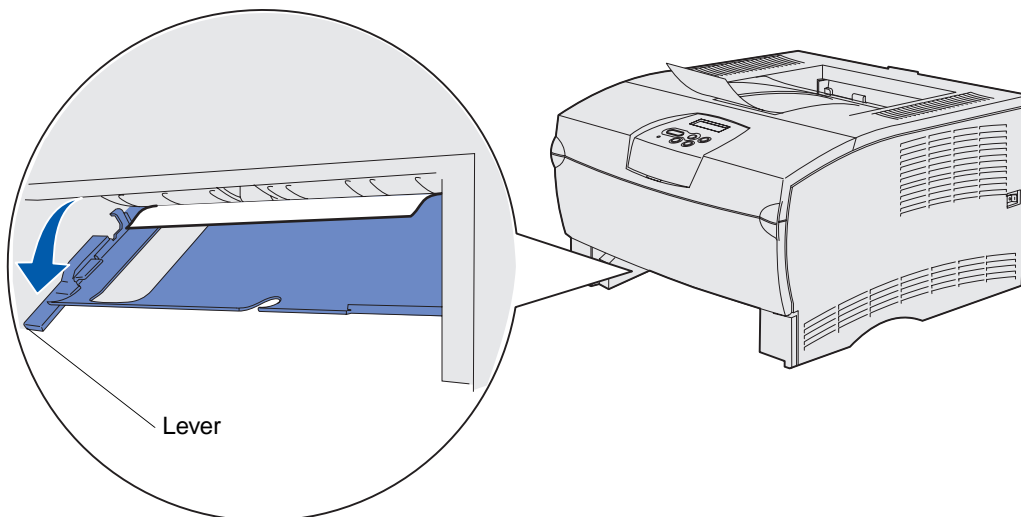
**Note:** Make sure the metal plate at the bottom of the tray is locked down.

### 23x Paper Jam, Check Duplex

This message appears only when the printer is uncertain about the location of the duplex jam.

To clear this type of jam:

- 1 Pull Tray 1 completely out.
- 2 Look under the printer on the left side to locate a green lever.
- 3 Push down on the green lever.

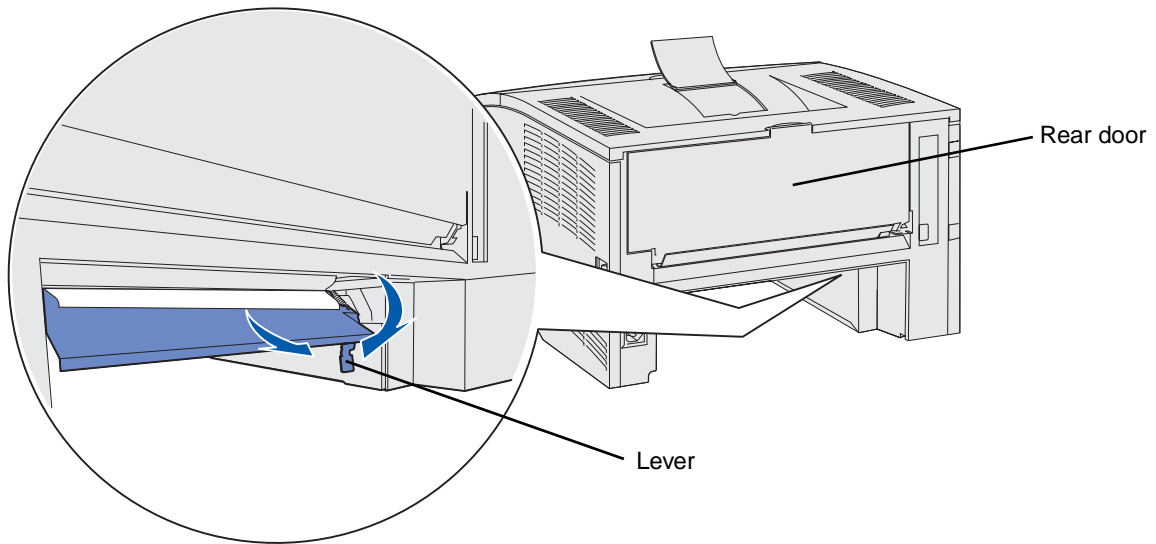


- 4 Look for the jam. If it is not visible from the front, continue with **step 6**.
- 5 Gently pull the jam toward you.

**Note:** If the jam does not come out easily, continue with **step 6**.

- 6 Open the rear door and clear any jams. If you are unable to clear the jam from here, continue with **step 7**.
- 7 Look under the back of the printer on the right side to locate a green lever.

- 8 Push down on the lever.



- 9 Gently pull the jam toward you.

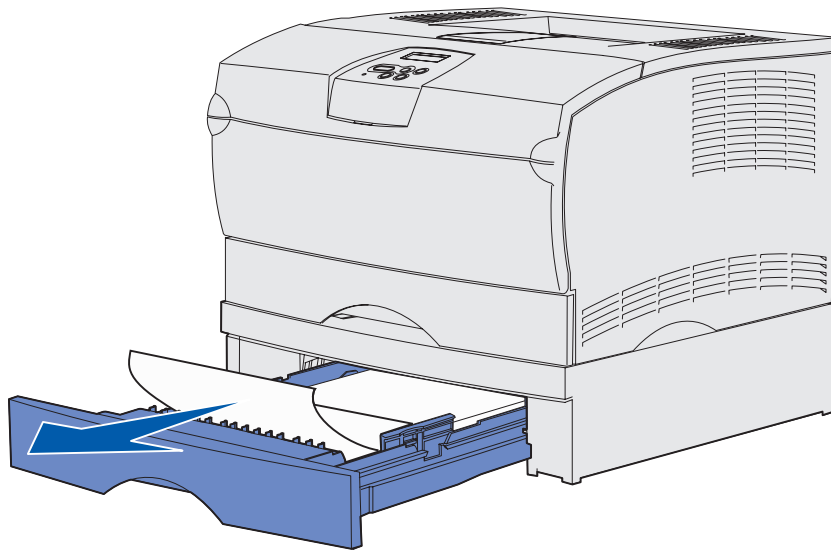
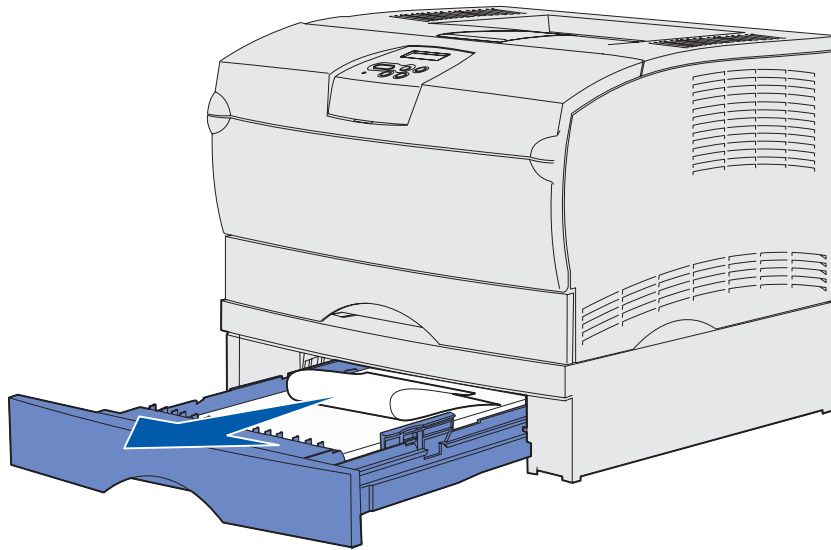
- 10 Insert the tray.

**Note:** Make sure the metal plate at the bottom of the tray is locked down.

### ***24x Paper Jam, Check Tray <x>***

Print media is jammed in the area under the print cartridge, but the jam is not visible.

- 1 Pull the specified tray out.
- 2 Pull the jam straight out.



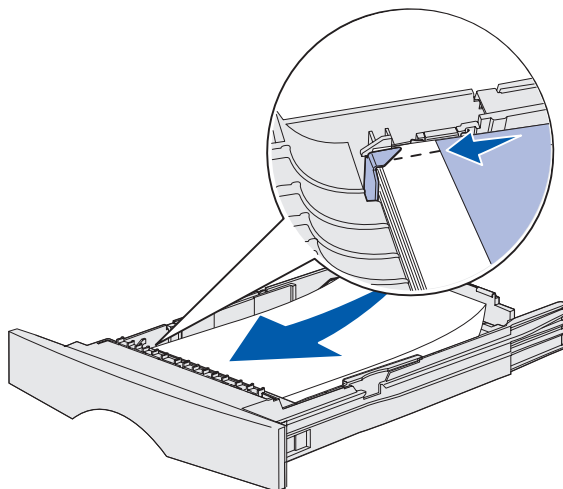
- 3 Insert the tray.

**Note:** Make sure the metal plate at the bottom of the tray is locked down.

### Jams inside a tray after clearing the metal stop

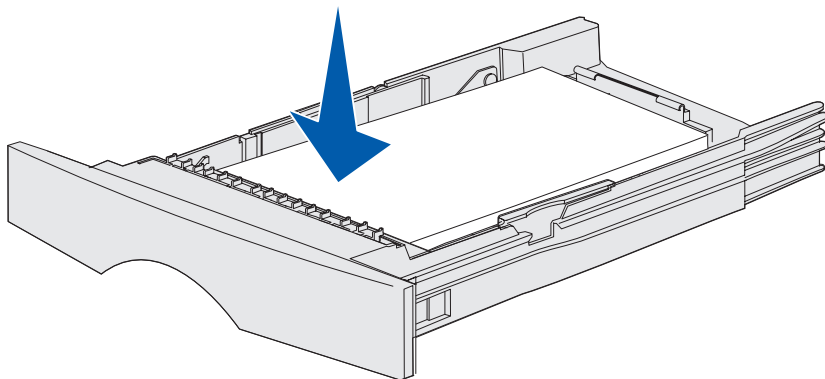
Sometimes print media jams as it releases from under the metal stop, but it has not completely exited the tray. This can occur in any of the trays. You need to check each tray.

- 1 Pull the tray completely out.
- 2 Reposition the print media under the metal stop.



**Note:** If the sheet of print media is damaged, remove it. Do not reposition it.

- 3 Press down on the print media until the metal plate below it locks into place.

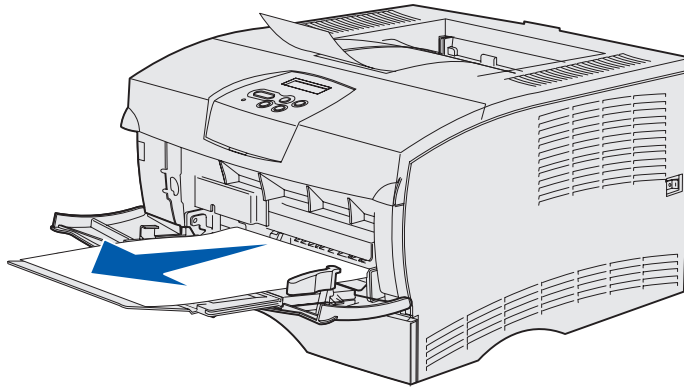


- 4 Insert the tray.



### ***250 Paper Jam, Check MP Feeder***

Pull the jam straight out.



# 3

## Printing tasks

Section	Page
<a href="#">Sending a print job</a>	56
<a href="#">Duplexing a print job (two-sided printing)</a>	57
<a href="#">Canceling a print job</a>	59
<a href="#">Linking trays</a>	60

### ***Sending a print job***

#### ***Printing from a Windows environment***

- 1 Load print media. (See [Loading trays](#) or [Loading and using the multipurpose feeder.](#))
- 2 From your software application, open the file you want to print.
- 3 From the File menu, select **Print Setup**.
- 4 Verify the correct printer is selected in the Print Setup dialog box.
- 5 In the Print Setup dialog box, select **Properties**, **Options**, or **Setup** (depending on the application), select the print media type and size, and then select **OK**.
- 6 Select **OK** or **Print**.

#### ***Printing from a Macintosh computer***

- 1 Load print media. (See [Loading trays.](#))
- 2 From your software application, open the file you want to print.
- 3 From the File menu, choose **Page Setup**.
- 4 Verify the correct printer is selected in the dialog box.
- 5 From the Paper menu, choose the print media type you are using, and then choose **OK**.
- 6 From the File menu, choose **Print**.

### ***Duplexing a print job (two-sided printing)***

Duplex printing (or *two-sided printing*) lets you print on both sides of a sheet of paper. For paper sizes that are acceptable for duplex printing, see [Duplex unit specifications](#).

**Note:** Print duplex jobs only on paper weighing 16–24 lb.

To duplex all jobs:

- 1 Make sure the printer is on and the **Ready** message appears.
- 2 Press **Menu** until you see **Finishing Menu**, and then press **Select**.
- 3 Press **Menu** until you see **Duplex**, and then press **Select**.
- 4 Press **Menu** until you see **On**, and then press **Select**.
- 5 Press **Return** until the **Ready** message appears.

To duplex an individual print job:

- 1 From the computer's 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 Setup tab, select either **Long Edge** or **Short Edge**.
- 4 Click **OK**.
- 5 Click **OK** on the Print window to send the job to print.

**Warning:** As the printer processes a duplex print job, it partially ejects a sheet to the standard output bin, and then pulls the sheet back inside. Do not touch the sheet while it is partially ejected. Doing so could damage the printer or cause a jam. Remove pages only after they have fully exited the printer to a bin.

### ***Duplex printing on letterhead***

- **From the multipurpose feeder**—Load the letterhead with the logo face down and entering the printer last.
- **From the trays**—Load the letterhead with the logo face up and facing toward the rear of the printer.

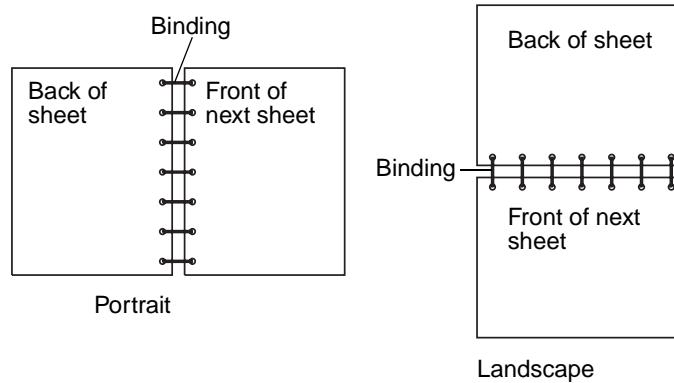
**Note:** Duplex jobs need to be sent to the standard output bin; the rear exit does not support duplex printing.

### Using Duplex Bind

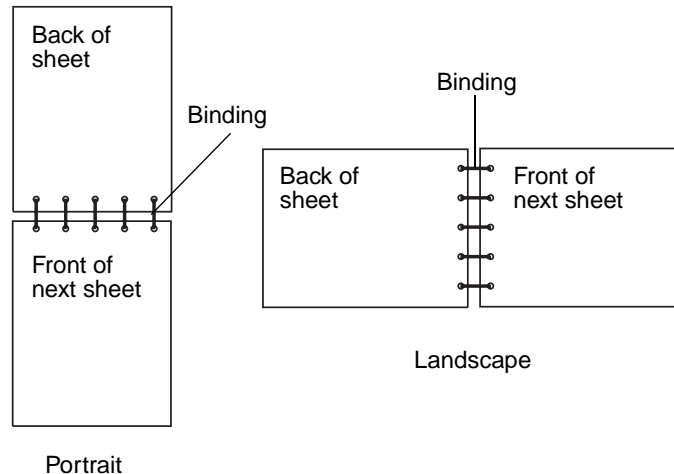
Printing on both sides of the paper reduces printing costs. When you select duplex bind printing in the printer driver or Duplex Bind in the Finishing Menu on the operator panel, you must select either long edge or short edge binding. Duplex Bind defines the way duplexed pages are bound, and how the printing on the back of the sheet (even-numbered pages) is oriented in relation to the printing on the front (odd-numbered pages).

The two values for Duplex Bind are:

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



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



### ***Canceling a print job***

#### ***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 Minimize all programs to display the desktop.
- 2 Double-click the **My Computer** icon.
- 3 Double-click the **Printer** icon.  
A list of available printers appears.
- 4 Double-click the printer you are using to print the job.  
A list of print jobs appears.
- 5 Select the job you want to cancel.
- 6 Press the **Delete** key.

#### ***From a Macintosh computer***

- 1 Double-click the printer icon on your desktop.  
A list of print jobs appears.
- 2 Press **Ctrl**, and then click the print job you want to cancel.
- 3 Choose **Stop Queue** from the pop-up menu.

### ***Linking trays***

If you use the same size and type of print media in two or more sources (standard tray, optional tray, and the multipurpose feeder), the automatic tray linking feature is enabled. When trays are linked in this way, the printer selects print media from a second tray when the first becomes empty.

To verify Paper Size and Paper Type settings, print a menu settings page (see [Printing the menu settings and network setup pages](#)). Change the Paper Size and Paper Type settings on the operator panel so the settings match.

If you load the same size print media in each tray, make sure the print media is all the same type, also.

### ***Disabling tray linking***

If you use different print media in the sources, each source with a different print media must have the Paper Type set to a unique value to disable the automatic tray linking feature. You set the Paper Type setting on the operator panel.

## 4

## Understanding fonts

Your printer has resident fonts stored permanently in its memory. Different fonts may be available in PCL and PostScript emulations.

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PCL bitmapped fonts	65
PCL symbol sets	65

### *Printing a font sample list*

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

- 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 **Print Fonts** appears, and then press **Select**.
- 4 Press and release **Menu** until either **PCL Fonts** or **PS Fonts** appears on the second line of the display.
  - Select **PCL Fonts** to print a listing of the fonts available to the PCL emulator.
  - Select **PS Fonts** to print a listing of the fonts available to the PostScript emulator.
- 5 Press **Select**.

The message **Printing Font List** appears and remains on the operator panel until the page prints. The printer returns to the **Ready** state after the font sample list prints.

### ***Scalable fonts***

Your printer supports the following scalable fonts.

#### **Supported fonts**

<b>PostScript font names</b>	<b>PCL font names</b>
AlbertusMT	Albertus Medium
AlbertusMT-Italic	
AlbertusMT-Light	
	Albertus Extra Bold
AntiqueOlive-Roman	Antique Olive
AntiqueOlive-Italic	Antique Olive Italic
AntiqueOlive-Bold	Antique Olive Bold
AntiqueOlive-Compact	
ArialMT	Arial
Arial-ItalicMT	Arial Italic
Arial-BoldMT	Arial Bold
Arial-BoldItalicMT	Arial Bold Italic
AvantGarde-Book	ITC Avant Garde Book
AvantGarde-BookOblique	ITC Avant Garde Book Oblique
AvantGarde-Demi	ITC Avant Garde Demi
AvantGarde-DemiOblique	ITC Avant Garde Demi Oblique
Bookman-Light	ITC Bookman Light
Bookman-LightItalic	ITC Bookman Light Italic
Bookman-Demi	ITC Bookman Demi
Bookman-DemiItalic	ITC Bookman Demi Italic
	Clarendon Condensed Bold
Coronet-Regular	Coronet
Courier	CourierPS
Courier-Oblique	CourierPS Oblique
Courier-Bold	CourierPS Bold
Courier-BoldOblique	CourierPS Bold Oblique
	CG Omega
	CG Omega Bold
	CG Omega Italic



### Supported fonts (continued)

PostScript font names	PCL font names
	CG Omega Bold Italic
Garamond-Antiqua	Garamond Antiqua
Garamond-Halbfett	Garamond Halbfett
Garamond-Kursiv	Garamond Kursiv
Garamond-KursivHalbfett	Garamond Kursiv Halbfett
GoldSansMM	
GoldSerifMM	
Helvetica-Light	Helvetica Light
Helvetica-LightOblique	Helvetica Light Oblique
Helvetica-Black	Helvetica Black
Helvetica-BlackOblique	Helvetica Black Oblique
Helvetica	Helvetica
Helvetica-Oblique	Helvetica Italic
Helvetica-Bold	Helvetica Bold
Helvetica-BoldOblique	Helvetica Bold Italic
Helvetica-Narrow	Helvetica Narrow
Helvetica-Narrow-Oblique	Helvetica Narrow Italic
Helvetica-Narrow-Bold	Helvetica Narrow Bold
Helvetica-Narrow-BoldOblique	Helvetica Narrow Bold Italic
Intl-CG-Times	CG Times
Intl-CG-Times-Italic	CG Times Italic
Intl-CG-Times-Bold	CG Times Bold
Intl-CG-Times-BoldItalic	CG Times Bold Italic
Intl-Univers-Medium	Univers Medium
Intl-Univers-MediumItalic	Univers Medium Italic
Intl-Univers-Bold	Univers Bold
Intl-Univers-BoldItalic	Univers Bold Italic
Intl-Courier	Courier
Intl-Courier-Oblique	Courier Italic
Intl-Courier-Bold	Courier Bold
Intl-Courier-BoldOblique	Courier Bold Italic
LetterGothic	Letter Gothic
LetterGothic-Slanted	Letter Gothic Italic

### Supported fonts (continued)

PostScript font names	PCL font names
LetterGothic-Bold	Letter Gothic Bold
LetterGothic-BoldSlanted	
Marigold	Marigold
NewCenturySchlbk-Roman	Century Schoolbook Roman
NewCenturySchlbk-Italic	Century Schoolbook Italic
NewCenturySchlbk-Bold	Century Schoolbook Bold
NewCenturySchlbk-BoldItalic	Century Schoolbook Bold Italic
Optima	
Optima-Bold	
Optima-BoldItalic	
Optima-Italic	
Palatino-Roman	Palatino Roman
Palatino-Italic	Palatino Italic
Palatino-Bold	Palatino Bold
Palatino-BoldItalic	Palatino Bold Italic
Symbol	SymbolPS
	Symbol
Times-Roman	Times Roman
Times-Italic	Times Italic
Times-Bold	Times Bold
Times-BoldItalic	Times Bold Italic
TimesNewRomanPSMT	Times New Roman
TimesNewRomanPS-ItalicMT	Times New Roman Italic
TimesNewRomanPS-BoldMT	Times New Roman Bold
TimesNewRomanPS-BoldItalicMT	Times New Roman Bold Italic
Univers	
Univers-Oblique	
Univers-Bold	
Univers-BoldOblique	
Univers-Condensed	Univers Condensed Medium
Univers-CondensedOblique	Univers Condensed Medium Italic
Univers-CondensedBold	Univers Condensed Bold
Univers-CondensedBoldOblique	Univers Condensed Bold Italic

### Supported fonts (continued)

PostScript font names	PCL font names
Wingdings-Regular	Wingdings
ZapfChancery-MediumItalic	ITC Zapf Chancery Medium Italic
ZapfDingbats	ITC Zapf Dingbats
	OCR-A
	OCR-B
	C39 Narrow
	C39 Regular
	C39 Wide

### ***PCL bitmapped fonts***

Your printer supports the following PCL bitmapped fonts:

- Line Printer 16
- POSTNET Bar Code

### ***PCL symbol sets***

Your printer supports the following PCL symbol sets.

#### Supported symbol sets

ABICOMP Brazil/Portugal	Wingdings	ISO 25: French
ABICOMP International	POSTNET Bar Code	ISO 57: Chinese
DeskTop	ISO : German	ISO 60: Norwegian version 1
Legal	ISO : Spanish	ISO 61: Norwegian version 2
MC Text	ISO 2: IRV (Int'l Ref Version)	ISO 69: French
Microsoft Publishing	ISO 4: United Kingdom	ISO 84: Portuguese
Russian-GOST	ISO 6: ASCII	ISO 85: Spanish
Ukrainian	ISO 10: Swedish	ISO 8859-1 Latin 1 (ECMA-94)
PCL ITC Zapf Dingbats	ISO 11: Swedish for Names	ISO 8859-2 Latin 2
PS ITC Zapf Dingbats	ISO 14: JIS ASCII	ISO 8859-5 Latin/Cyrillic
PS Math	ISO 15: Italian	ISO 8859-7 Latin/Greek
PS Text	ISO 16: Portuguese	ISO 8859-9 Latin 5
Pi Font	ISO 17: Spanish	ISO 8859-10 Latin 6

### Supported symbol sets (continued)

Symbol	ISO 21: German	ISO 8859-15 Latin 9
PC-8 Bulgarian	PC-855 Cyrillic	Roman-9
PC-8 Danish/Norwegian (437N)	PC-857 Latin 5 (Turkish)	Roman Extension
PC-8 Greek Alternate (437G)	PC-858 Multilingual Euro	Ventura ITC Zapf Dingbats
PC-8 Turkish (437T)	PC-860 Portugal	Ventura International
PC-8 Latin/Greek	PC-861 Iceland	Ventura Math
PC-8 PC Nova	PC-863 Canadian French	Ventura US
PC-8 Polish Mazovia	PC-865 Nordic	Windows 3.0 Latin 1
PC-8 Code Page 437	PC-866 Cyrillic	Windows Cyrillic
PC-1004 OS/2	PC-869 Greece	Windows Greek
PC-775 Baltic (PC-8 Latin 6)	PC-911 Katakana	Windows Latin 1
PC-850 Multilingual	Math-8	Windows Latin 2
PC-851 Greece	Greek-8	Windows Latin 5
PC-852 Latin 2	Turkish-8	Windows Latin 6 (Baltic)
PC-853 Latin 3 (Turkish)	Roman-8	OCR-A
OCR-B	109Y Bar Code	
9Y Bar Code	209Y Bar Code	

# 5

## Understanding the operator panel

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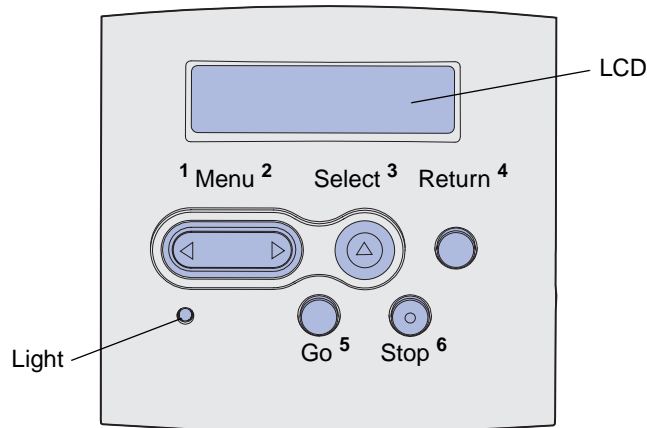
You can change most printer settings from your software application or printer driver. Settings you change from the application or printer driver apply only to the job you are preparing to send to the printer.

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
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.

The numbers 1 through 6 appear beside the operator panel buttons in this illustration. You use these numbers to enter your personal identification number (PIN) after you send a confidential print job from the printer driver (see [Using the Print and Hold function](#)).

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

## Understanding the operator panel

The following information describes the functions of each button.

Button	Function
<b>Go</b>	<p>Press <b>Go</b> to:</p> <ul style="list-style-type: none"><li>Return to the Ready state if the printer is offline (the <b>Ready</b> message does not appear on the display).</li><li>Exit printer menus and return to the Ready state.</li><li>Clear some operator panel messages.</li><li>Resume printing after loading print media and clearing paper jams.</li><li>Exit Power Saver.</li></ul> <p>If you have changed printer settings from the operator panel menus, press <b>Go</b> before sending a job to print. The printer must display <b>Ready</b> for jobs to print.</p>
<b>Menu</b>	<p>Each end of the button has a function. Press <b>Menu&gt;</b>:</p> <ul style="list-style-type: none"><li>When <b>Ready</b> is displayed, to take the printer offline (out of the <b>Ready</b> state) and enter the menus.</li><li>When <b>Busy</b> is displayed, to take the printer to the Job Menu.</li><li>When the printer is offline, to scroll through the menus.</li></ul> <p>Press <b>&lt;Menu</b> to go to the previous item in the menus.</p> <p>For menu items with numeric values, such as Copies, press and hold <b>Menu</b> to scroll through the values. Release the button when the number you want is displayed.</p>
<b>Select</b>	<p>Press <b>Select</b> to:</p> <ul style="list-style-type: none"><li>Open the menu shown on the second line of the operator panel. Depending on the type of menu, this action:<ul style="list-style-type: none"><li>Opens the menu and displays the first item in the menu.</li><li>Opens the menu item and displays the default setting.</li></ul></li><li>Save the displayed menu item as the new user default setting. The printer displays the <b>Saved</b> message and returns to the menu item.</li><li>Clear certain messages from the operator panel.</li><li>Continue printing after the <b>Change tray &lt;x&gt;</b> message appears. See <b>Change Tray &lt;x&gt;</b> for more information.</li></ul>
<b>Return</b>	<p>Press <b>Return</b> to return to the previous menu level or menu item.</p>
<b>Stop</b>	<p>Press <b>Stop</b> at the <b>Ready</b>, <b>Busy</b>, or <b>Waiting</b> message to temporarily take the printer offline. The message changes to <b>Not Ready</b>. No data is lost.</p> <p>Press <b>Go</b> to return the printer to the <b>Ready</b>, <b>Busy</b>, or <b>Waiting</b> state.</p>
<b>1, 2, 3, 4, 5, 6</b>	<p>Use the numbers located next to the names of the buttons to enter your personal identification number (PIN) after you send a confidential job. For more information, see <b>Entering a personal identification number (PIN)</b>.</p>

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.

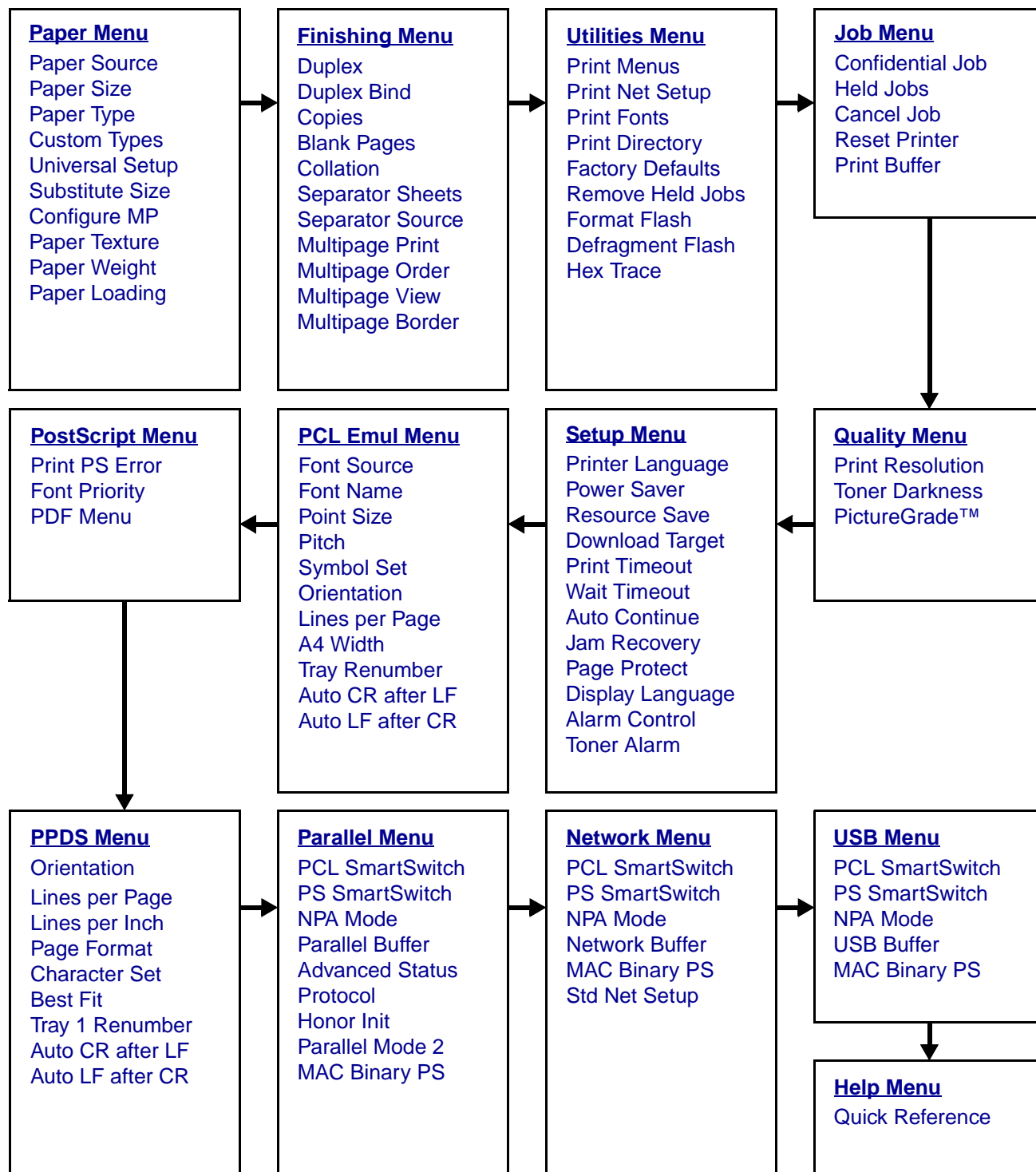
### ***Menus Disabled***

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.

For more information, see [Disabling the operator panel menus](#).

### Using the printer menus

Select a menu or menu item for more details.



### 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	
<b>Configure MP</b>	To determine when the printer selects paper loaded in the multipurpose feeder.	<b>Cassette*</b>	Printer treats the multipurpose feeder like any other paper tray. If a print job requests a paper size or type that is only loaded in the multipurpose feeder, the printer pulls paper from the multipurpose feeder for the job.
		<b>Manual</b>	Printer treats the multipurpose feeder like a manual feed tray, and displays <b>Load Manual</b> when you need to insert a single sheet of paper in the feeder.
		<b>First</b>	Printer pulls paper from the multipurpose feeder until it is empty, regardless of the paper source or paper size requested for the job.
<b>Custom Types</b>	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:	
		<b>Paper*</b>	<b>Note:</b> 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.
		<b>Card Stock</b>	
		<b>Transparency</b>	
		<b>Labels</b>	
		<b>Envelope</b>	

## Understanding the operator panel

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Menu item	Purpose	Values	
<b>Paper Loading</b>	<p>To properly handle preprinted paper loaded in a tray, whether the job is a duplexed job or a single-sided job.</p> <p><b>1</b> Select a paper type.</p> <p><b>Note:</b> If a user-defined name is available, it is displayed instead of Custom &lt;x&gt; Loading. The name is truncated to 14 characters.</p>	<b>Card Stock Load</b>	
		<b>Colored Loading</b>	
		<b>Custom &lt;x&gt; Loading</b>	
		<b>Labels Loading</b>	
		<b>Ltrhead Loading</b>	
		<b>Preprint Loading</b>	
		<b>Bond Loading</b>	
	<b>2</b> Select a value.	<b>Duplex</b>	Notifies the printer that the specified paper type is loaded properly for duplex printing. If the printer receives a single-sided job using that paper type, the printer inserts blank pages as necessary to print the job properly on preprinted forms. This setting may slow single-sided printing.
		<b>Off*</b>	Printer assumes preprinted material is loaded for single-sided printing. Duplexed jobs may not print properly.

## Understanding the operator panel

Menu item	Purpose	Values	
<b>Paper Size</b>	1 Select a paper source.	<b>Tray &lt;x&gt; Size</b>	
		<b>Manual Pap Size</b>	
		<b>MP Feeder Size</b>	
		<b>Manual Env Size</b>	
	2 Select a value. (* Denotes country/region-specific factory default values) <b>Note:</b> Size sensing must be turned off for Statement and Folio values to appear.	<b>Letter*</b>	
		<b>Legal</b>	
		<b>Executive</b>	
		<b>Statement</b> (not available for 500-sheet drawer)	
		<b>A4*</b>	
		<b>A5</b> (not available for 500-sheet drawer)	
		<b>B5</b>	
		<b>Folio</b>	
		<b>10 Envelope* (US)</b>	
		<b>9 Envelope</b>	
		<b>B5 Envelope</b>	
		<b>Other Envelope</b>	
		<b>7 3/4 Envelope</b>	
		<b>DL Envelope* (non US)</b>	
		<b>C5 Envelope</b>	
		<b>Universal</b>	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.
<b>Paper Source</b>	To identify the default paper source.	<b>Tray &lt;x&gt; (Tray 1*)</b>	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.
		<b>MP Feeder</b>	
		<b>Manual Paper</b>	
		<b>Manual Env</b>	

## Understanding the operator panel

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Menu item	Purpose	Values	
<b>Paper Texture</b>	<p>To identify the texture of the paper loaded in a specific source and to ensure that characters print clearly.</p> <p>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.</p>		
	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	<b>Note:</b> 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	

## Understanding the operator panel

Menu item	Purpose	Values	
Paper Type	To identify the type of paper installed in each paper source.  Use this menu item to: <ul style="list-style-type: none"><li>Optimize print quality for the specified paper.</li><li>Select paper sources through your software application by selecting type and size.</li><li>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.</li></ul>		
	1 Select a paper source.	Tray <x> Type	
		Manual Pap Type	
		MP Feeder 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:  <b>Note:</b> 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	
		Tray 3–Custom Type 3	
		Manual Pap Type–Plain Paper	

## Understanding the operator panel

Menu item	Purpose	Values	
<b>Paper Weight</b>	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. <b>Note:</b> If a user-defined name is available, it is displayed instead of Custom <x> Weight. The name is truncated to 14 characters.	<b>Plain Weight</b>	
		<b>CardStock Weight</b>	
		<b>Trnsprncy Weight</b>	
		<b>Preprint Weight</b>	
		<b>Colored Weight</b>	
		<b>Custom &lt;x&gt; Weight</b>	
		<b>Bond Weight</b>	
		<b>Envelope Weight</b>	
		<b>Labels Weight</b>	
		<b>Ltrhead Weight</b>	
	2 Select a value.	<b>Light</b>	
		<b>Normal*</b>	
		<b>Heavy</b>	
<b>Substitute Size</b>	To have the printer substitute the specified paper size if the requested size is not loaded.	<b>Off</b>	Printer prompts the user to load the requested paper size.
		<b>Statement/A5</b>	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.
		<b>Letter/A4</b>	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.
		<b>All Listed*</b>	Substitutes Letter/A4 and Statement/A5.
<b>Universal Setup</b>	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)	<b>Inches*</b>	
		<b>Millimeters*</b>	
	2 Select the values.	<b>Portrait Width</b>	=3.00–14.17 in. (8.5 in.*) =76–360 mm (216 mm*)
		<b>Portrait Height</b>	=3.00–14.17 in. (14 in.*) =76–360 mm (356 mm*)
		<b>Feed Direction</b>	=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	
<b>Blank Pages</b>	To specify whether to include application-generated blank pages as part of your printed output.	<b>Do Not Print*</b>	Does not print application-generated blank pages as part of your job.
		<b>Print</b>	Prints application-generated blank pages as part of your job.
<b>Collation</b>	To keep the pages of a print job stacked in sequence when printing multiple copies of the job.	<b>Off*</b>	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.
		<b>On</b>	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.
<b>Copies</b>	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.)	<b>1...999 (1*)</b>	
<b>Duplex</b>	To set duplexing as the default for all print jobs. (Select Duplex from the printer driver to duplex only specific jobs.)	<b>Off*</b>	Prints on one side of the paper.
		<b>On</b>	Prints on both sides of the paper.
<b>Duplex Bind</b>	To define the way duplexed pages would be bound, and how the printing on the back of the sheet (even-numbered pages) is oriented in relation to the printing on the front (odd-numbered pages).	<b>Long Edge*</b>	Assumes binding along the long end of the page (left edge for portrait orientation and top edge for landscape orientation).
		<b>Short Edge</b>	Assumes binding along the short edge of the page (top edge for portrait orientation and left edge for landscape orientation).

## Understanding the operator panel

Menu item	Purpose	Values																											
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:																												
<div><div>Horizontal</div><div><div>12</div><div>34</div></div></div> <div><div>Vertical Order</div><div><div>13</div><div>24</div></div></div> <div><div>Reverse Horizontal</div><div><div>21</div><div>43</div></div></div> <div><div>Reverse Vertical Order</div><div><div>31</div><div>42</div></div></div> <tr><td rowspan="8">Multipage Print</td><td rowspan="8">To print multiple page images on one side of a sheet of paper. Also called <i>n-up</i> or <i>Paper Saver</i>.</td><td>Off*</td><td>Prints 1 page image per side.</td></tr> <tr><td>2 Up</td><td>Prints 2 page images per side.</td></tr> <tr><td>3 Up</td><td>Prints 3 page images per side.</td></tr> <tr><td>4 Up</td><td>Prints 4 page images per side.</td></tr> <tr><td>6 Up</td><td>Prints 6 page images per side.</td></tr> <tr><td>9 Up</td><td>Prints 9 page images per side.</td></tr> <tr><td>12 Up</td><td>Prints 12 page images per side.</td></tr> <tr><td>16 Up</td><td>Prints 16 page images per side.</td></tr> <tr><td rowspan="3">Multipage View</td><td rowspan="3">To determine the orientation of a multipage sheet.</td><td>Auto*</td><td>Lets the printer choose between portrait and landscape orientation.</td></tr> <tr><td>Long Edge</td><td>Sets the long edge of the paper as the top of the page (landscape).</td></tr> <tr><td>Short Edge</td><td>Sets the short edge of the paper as the top of the page (portrait).</td></tr>				Multipage Print	To print multiple page images on one side of a sheet of paper. Also called <i>n-up</i> or <i>Paper Saver</i> .	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).
Multipage Print	To print multiple page images on one side of a sheet of paper. Also called <i>n-up</i> or <i>Paper Saver</i> .	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).																										

## Understanding the operator panel

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Menu item	Purpose	Values	
<b>Separator Sheets</b>	To insert blank separator sheets between jobs, between multiple copies of a job, or between each page of a job.	<b>None*</b>	Does not insert separator sheets.
		<b>Between Copies</b>	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.
		<b>Between Jobs</b>	Inserts a blank sheet between jobs.
		<b>Between Pages</b>	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.
<b>Separator Source</b>	To specify the paper source that holds separator sheets.	<b>Tray &lt;x&gt; (Tray 1*)</b>	Selects separator sheets from the specified tray.
		<b>MP Feeder</b>	Selects separator sheets from the multipurpose feeder. (You must also set Configure MP to Cassette.)

### 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	
<b>Defragment Flash</b>	To retrieve storage area lost when resources are deleted from flash memory.  <b>Warning:</b> Do not turn off the printer while the flash is defragmenting.	<b>Yes</b>	Printer transfers all resources stored in flash memory to printer memory and then reformats the flash memory option. When the format operation is complete, the resources are loaded back into flash memory.
		<b>No</b>	Printer cancels the request to defragment the flash memory.

## Understanding the operator panel

Menu item	Purpose	Values	
<b>Factory Defaults</b>	To return your printer settings to the factory default values.	<b>Restore</b>	<ul style="list-style-type: none"> <li>All menu items are returned to the factory default values except: <ul style="list-style-type: none"> <li>Display Language.</li> <li>All settings in the Parallel Menu, Serial Menu, Network Menu, and USB Menu.</li> </ul> </li> <li>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.)</li> </ul>
		<b>Do Not Restore</b>	User-defined settings remain.
<b>Remove Held Jobs</b>	To remove Print and Hold jobs, since unwanted jobs may tend to pile up and use too much memory. <b>Note:</b> This is only displayed if there are Print and Hold Jobs stored in memory.	<b>Confidential</b>	Causes all Confidential Print and Hold jobs to be removed.
		<b>Held</b>	Causes all non-Confidential Print and Hold jobs to be removed.
		<b>All</b>	Causes all Print and Hold jobs to be deleted.
<b>Format Flash</b>	To format the flash memory. <b>Warning:</b> Do not turn off the printer while the flash is formatting.	<b>Yes</b>	Deletes any data stored in flash memory and prepares the flash memory to receive new resources.
		<b>No</b>	Cancels the request to format the flash memory and leaves current resources stored in flash memory.
<b>Hex Trace</b>	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.		
<b>Print Directory</b>	To print a list of all the resources stored in flash memory or on the hard disk.  <b>Note:</b> 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%.		
<b>Print Fonts</b>	To print a sample of all the fonts available for the selected printer language.	<b>PCL Fonts</b>	Prints a sample of all printer fonts available for PCL emulation.
		<b>PS Fonts</b>	Prints a sample of all printer fonts available for PostScript emulation.
		<b>PPDS Fonts</b>	Prints a sample of all printer fonts available for PPDS emulation.
<b>Print Menus</b>	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.		
<b>Print Net Setup</b>	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. <b>Note:</b> Cancel Job is only displayed if the printer is processing a job or has a job in printer memory.		
Confidential Job	To print confidential jobs stored in printer memory. <b>Note:</b> When the confidential job prints, it is automatically deleted from printer memory.		
	1 Enter the Personal Identification Number (PIN) associated with your confidential job.	Enter PIN	Use the operator panel buttons to enter the PIN associated with your confidential job.
	2 Then select a value:	Print All Jobs	Prints all jobs associated with your PIN.
		Print A Job	Prints the specified confidential job. Press <b>Menu</b> to scroll through the list of confidential jobs associated with your PIN. Press <b>Select</b> to print a specific job.
		Delete All Jobs	Deletes all jobs associated with your PIN.
		Delete A Job	Deletes the specified confidential job. Press <b>Menu</b> to scroll through the list of Confidential Jobs associated with your PIN. Press <b>Select</b> to delete a specific job.
	Copies	Determines the number of copies printed for each confidential job. Press <b>Menu</b> to scroll through the list of confidential jobs associated with your PIN. Press <b>Select</b> to specify the job you want to print. Press <b>Menu</b> to increase or decrease the number of copies, and then press <b>Select</b> .	

## Understanding the operator panel

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Menu item	Purpose	Values	
<b>Held Jobs</b>	To print Reserve Print, Repeat Print, or Verify Print jobs stored in printer memory.	<b>Print All Jobs</b>	Prints all held jobs.
		<b>Print A Job</b>	Prints the specified held job. Press <b>Menu</b> to scroll through the list of held jobs. Press <b>Select</b> to print the specific job.
		<b>Delete All Jobs</b>	Deletes all held jobs.
		<b>Delete A Job</b>	Deletes the designated held job. Press <b>Menu</b> to scroll through the list of held jobs. Press <b>Select</b> to delete the job.
		<b>Copies</b>	Determines the number of copies for each held job. Press <b>Menu</b> to scroll through the list of held jobs. Press <b>Select</b> to specify the job you want to print. Press <b>Menu</b> to increase or decrease the number of copies, and then press <b>Select</b> .
<b>Print Buffer</b>	To print any data stored in the print buffer. <b>Note:</b> Print Buffer is only available when you enter the Job Menu while <b>Waiting</b> 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.		
<b>Reset Printer</b>	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. <b>Note:</b> 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	
<b>PictureGrade</b>	To improve the quality of grayscale printing at 600 dots per inch (dpi) in PostScript emulation.	<b>On</b>	Uses modified screening parameters to improve print quality of graphics.
		<b>Off*</b>	Uses standard screening parameters.
<b>Print Resolution</b>	To define the number of dots printed per inch (dpi). The higher the value, the sharper the clarity of printed characters and graphics.	<b>600 dpi</b>	Produces high quality output for print jobs that are mostly text.
		<b>1200 Image Q</b>	Uses line screening for print jobs that contain bitmapped images, such as scanned photos.
		<b>2400 Image Q</b>	
		<b>1200 dpi</b>	Produces highest quality output for jobs where print speed is not important and memory is abundant.
<b>Toner Darkness</b>	To lighten or darken text images, or conserve toner.	<b>1–10 (8*)</b>	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	
<b>Alarm Control</b>	To establish whether the printer sounds an alarm when the printer requires operator intervention.	<b>Off</b>	Printer does not sound an alarm.
		<b>Single*</b>	Printer sounds three quick beeps.
		<b>Continuous</b>	Printer repeats three beeps every 10 seconds.
<b>Auto Continue</b>	To define the amount of time (in seconds) the printer waits after displaying an operator intervention error message before it resumes printing.	<b>Disabled*</b>	Printer does not resume printing until someone clears the error message.
		<b>5...255</b>	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.
<b>Display Language</b>	To determine the language of the text on the operator panel display.	<b>English</b>	<b>Note:</b> All values may not be available.
		<b>Français</b>	
		<b>Deutsch</b>	
		<b>Italiano</b>	
		<b>Español</b>	
		<b>Dansk</b>	
		<b>Norsk</b>	
		<b>Nederlands</b>	
		<b>Svenska</b>	
		<b>Português</b>	
		<b>Suomi</b>	
		<b>Japanese</b>	
		<b>Russian</b>	
		<b>Polski</b>	
		<b>Hungarian</b>	
		<b>Turkish</b>	
		<b>Czech</b>	



## Understanding the operator panel

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Menu item	Purpose	Values	
<b>Download Target</b>	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.	<b>RAM*</b>	All downloaded resources are automatically stored in printer memory (RAM).
		<b>Flash</b>	All downloaded resources are automatically stored in flash memory.
<b>Jam Recovery</b>	To establish whether the printer reprints jammed pages.	<b>On</b>	Printer reprints jammed pages.
		<b>Off</b>	Printer does not reprint jammed pages.
		<b>Auto*</b>	Printer reprints a jammed page unless the memory required to hold the page is needed for other printer tasks.
<b>Page Protect</b>	To successfully print a page that may otherwise generate <b>Complex Page</b> 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.	<b>Off*</b>	Prints a partial page of data if memory is insufficient to process the entire page.
		<b>On</b>	Ensures that an entire page is processed before it prints.

## Understanding the operator panel

Menu item	Purpose	Values	
<b>Power Saver</b>	To specify the amount of time (in minutes) the printer waits after a job is printed before it goes into a reduced power state.	<b>Disabled</b>	This value does not appear unless Energy Conserve is set to Off.
		<b>1...240</b>	<p>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.)</p> <p>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.</p> <p>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.</p> <p>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.</p>
<b>Print Timeout</b>	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 <b>Waiting</b> is displayed.	<b>Disabled</b>	<p>The printer does not print the last page of a print job until one of the following occurs:</p> <ul style="list-style-type: none"> <li>• The printer receives enough information to fill the page.</li> <li>• The printer receives a Form Feed command.</li> <li>• You select Print Buffer from the Job Menu.</li> </ul>
		<b>1...255 (90*)</b>	The printer prints the last page after the specified time. (Your printer may not support the entire range of values.)

## Understanding the operator panel

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Menu item	Purpose	Values	
<b>Printer Language</b>	To establish the default printer language used to communicate data from the computer to the printer.  <b>Note:</b> Setting a printer language as the default does not prevent a software application from sending print jobs that use the other language.	<b>PCL Emulation</b>	PCL emulation, compatible with Hewlett-Packard printers.
		<b>PS Emulation*</b>	PostScript emulation, compatible with Adobe PostScript language.
		<b>PPDS Emulation</b>	PPDS emulation.
<b>Resource Save</b>	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.	<b>Off*</b>	Printer retains downloaded resources only until memory is needed. It then deletes those resources associated with the inactive printer language.
		<b>On</b>	Printer retains all downloaded resources for all printer languages during language changes and printer resets. If the printer runs out of memory, <b>38 Memory Full</b> is displayed.
<b>Toner Alarm</b>	To specify how the printer responds when it is low on toner.	<b>Off*</b>	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.
		<b>Single</b>	Printer stops printing, displays an error message, and sounds three quick beeps.
		<b>Continuous</b>	Printer stops printing, displays an error message, and repeats three beeps every 10 seconds until the toner cartridge is replaced.
<b>Wait Timeout</b>	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.  <b>Note:</b> Wait Timeout is only available when you use PostScript emulation. This menu item has no effect on PCL emulation print jobs.	<b>Disabled</b>	Disables Wait Timeout.
		<b>15...65535 (40*)</b>	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	
<b>A4 Width</b>	To select the width of the logical page for A4 size paper.	<b>198 mm*</b>	Makes the logical page compatible with the Hewlett-Packard LaserJet 5 Printer.
		<b>203 mm</b>	Makes the logical page wide enough to print eighty 10-pitch characters.
<b>Auto CR after LF</b>	To specify whether the printer automatically performs a carriage return after a line feed control command.	<b>Off*</b>	Printer does not perform a carriage return after a line feed control command.
		<b>On</b>	Printer performs a carriage return after a line feed control command.
<b>Auto LF after CR</b>	To specify whether the printer automatically performs a line feed after a carriage return control command.	<b>Off*</b>	Printer does not perform a line feed after a carriage return control command.
		<b>On</b>	Printer performs a line feed after a carriage return control command.
<b>Font Name</b>	To choose a specific font from the specified font source.	<b>R0 Courier 10*</b>	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.
<b>Font Source</b>	To determine the set of fonts displayed in the Font Name menu item.	<b>Resident*</b>	Displays all fonts resident in printer RAM when the printer ships from the factory.
		<b>Download</b>	Displays all fonts downloaded to printer RAM.
		<b>Flash</b>	Displays all fonts stored in flash memory.
		<b>All</b>	Displays all fonts available to the printer from all sources.

## Understanding the operator panel

Menu item	Purpose	Values	
<b>Lines per Page</b>	To determine the number of lines that print on each page.	<b>1...255</b>	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.
		<b>60*</b> (country/region-specific factory default values)	
		<b>64*</b> (country/region-specific factory default values)	
<b>Orientation</b>	To determine how text and graphics are oriented on the page.	<b>Portrait*</b>	Prints text and graphics parallel to the short edge of the paper.
		<b>Landscape</b>	Prints text and graphics parallel to the long edge of the paper.
<b>Pitch</b>	To specify the font pitch for scalable monospaced fonts.	<b>0.08...100</b> (in increments of 0.01 cpi)	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.  <b>Note:</b> Pitch is only displayed for fixed, or monospaced, fonts.
		<b>10*</b>	
<b>Point Size</b>	To change the point size for scalable typographic fonts.	<b>1...1008</b> in increments of 0.25 points)	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.  <b>Note:</b> Point Size is only displayed for typographic fonts.
		<b>12*</b>	
<b>Symbol Set</b>	To choose a symbol set for a specified font name.	<b>10U PC-8*</b> (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.
		<b>12U PC-850*</b> (country/region-specific factory default values)	

## Understanding the operator panel

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Menu item	Purpose	Values	
<b>Tray Renumber</b>	<b>Note:</b> To configure your printer to work with printer drivers or applications that use different source assignments for the paper trays.		
		1 Select a paper source.	Assign Tray <x>
			Assign MP Feeder
			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 <b>Menu</b> 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	
<b>Font Priority</b>	To establish the font search order. <b>Note:</b> 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%.	<b>Resident*</b>	Printer searches printer memory for the requested font before searching flash memory or hard disk.
		<b>Flash/Disk</b>	Printer searches the hard disk and flash memory for the requested font before searching printer memory.
<b>PDF Menu</b>	Use the PDF Menu within the PostScript Menu to change printer settings that only affect jobs using Portable Document Format (PDF) files.	See <b>PDF Menu</b> for more information.	
<b>Print PS Error</b>	To print a page defining the PostScript emulation error when an error occurs.	<b>Off*</b>	Discards the print job without printing an error message.
		<b>On</b>	Prints an error message before it discards the job.

### PDF Menu

Use the PDF Menu within the PostScript Menu to change printer settings that only affect jobs using Portable Document Format (PDF) files.

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

Menu item	Purpose	Values	
<b>Annotation</b>	To specify whether to print the annotations within the PDF file. Annotation tools provide a variety of methods for marking up text and attaching notes and commentaries to PDF documents. If you select to print annotations, a new PDF file is created which lists all the annotation notes within the original PDF.	<b>Do Not Print*</b>	Do not print the annotations in the PDF file.
		<b>Print</b>	Print the annotations in the PDF file.
<b>Halftone</b>	To specify whether to use the printer default halftone screen or the document screen.	<b>Printer*</b>	Use the printer default halftone screen.
		<b>Document</b>	Use the document halftone screen.

## Understanding the operator panel

Menu item	Purpose	Values	
<b>Orientation</b>	To specify the default orientation of the PDF.	<b>Portrait*</b>	Prints text and graphics parallel to the short edge of the paper for the PDF.
		<b>Landscape</b>	Prints text and graphics parallel to the long edge of the paper for the PDF.
<b>Scale to Fit</b>	To specify whether the document should be scaled to fit on the available print media.	<b>On</b>	The document is scaled to fit on the available print media.
		<b>Off*</b>	The document is not scaled to fit on the available print media. Text or graphics outside the printable area is clipped.

### 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	
<b>Auto CR after LF</b>	To specify whether the printer automatically performs a carriage return after a line feed control command.	<b>Off*</b>	Printer does not perform a carriage return after a line feed control command.
		<b>On</b>	Printer performs a carriage return after a line feed control command.
<b>Auto LF after CR</b>	To specify whether the printer automatically performs a line feed after a carriage return control command.	<b>Off*</b>	Printer does not perform a line feed after a carriage return control command.
		<b>On</b>	Printer performs a line feed after a carriage return control command.
<b>Best Fit</b>	To determine whether to perform a font best fit search if the requested font cannot be found.	<b>Off</b>	Printer stops printing when a requested font cannot be found. An error message is posted indicating the font could not be found.
		<b>On*</b>	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.



## Understanding the operator panel

Menu item	Purpose	Values	
<b>Character Set</b>	To determine which code page to use to print PPDS jobs.	<b>1</b>	The standard code pages are used.
		<b>2*</b>	The addresses from Value 1 change to represent characters and symbols used in non-US English languages.
<b>Lines per Inch</b>	To determine the number of lines that print per vertical inch.	<b>1...30 (6*)</b>	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.
<b>Lines per Page</b>	To determine the number of lines that print on each page.	<b>1...255 (64*)</b>	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.
<b>Orientation</b>	To determine how text and graphics are oriented on the page.	<b>Portrait*</b>	Prints text and graphics parallel to the short edge of the paper.
		<b>Landscape</b>	Prints text and graphics parallel to the long edge of the paper.
<b>Page Format</b>	Affects how the printer interprets the margins set from software applications.	<b>Print*</b>	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.
		<b>Whole</b>	Printer measures margin settings from the top left edge of the paper. The left and top margins areas on the print job are equal to the software margins settings.
<b>Tray 1 Renumber</b>	To configure your printer to work with printer drivers or applications that use different source assignments for the paper trays.  <b>Note:</b> This menu item is only displayed when Tray 2 is installed.	<b>Off*</b>	Print jobs are printed from the requested source.
		<b>Tray 2</b>	<ul style="list-style-type: none"> <li>• Print job requests for Tray 2 are converted to requests for Tray 1.</li> <li>• Print job requests for Tray 1 are converted to requests for Tray 2.</li> </ul>

### 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	
<b>Advanced Status</b>	To enable bidirectional communication through the parallel port.	<b>Off</b>	Disables parallel port negotiation.
		<b>On*</b>	Enables bidirectional communication through the parallel interface.
<b>Honor Init</b>	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.	<b>Off*</b>	Printer does not honor hardware initialization requests from the computer.
		<b>On</b>	Printer honors hardware initialization requests from the computer.
<b>MAC Binary PS</b>	To configure the printer to process Macintosh binary PostScript print jobs.	<b>On</b>	Printer processes raw binary PostScript print jobs from computers using the Macintosh operating system. <b>Note:</b> This setting often causes Windows print jobs to fail.
		<b>Off</b>	Printer filters PostScript print jobs using standard protocol.
		<b>Auto*</b>	Printer processes print jobs from computers using either Windows or Macintosh operating systems.
<b>NPA Mode</b>	To specify whether the printer performs the special processing required for bidirectional communication, following the conventions defined in the Network Printing Alliance (NPA) Protocol. <b>Note:</b> Changing this menu item automatically resets the printer.	<b>On</b>	Printer performs NPA processing. If data is not in NPA format, it is rejected as bad data.
		<b>Off</b>	Printer does not perform NPA processing.
		<b>Auto*</b>	Printer examines data and determines the format and then processes it appropriately.

## Understanding the operator panel

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Menu item	Purpose	Values	
<b>Parallel Buffer</b>	To configure the size of the parallel input buffer.  <b>Note:</b> Changing this menu item automatically resets the printer.	<b>Disabled</b>	Disables job buffering. Any jobs already buffered on the disk are printed before normal processing of incoming jobs resumes.
		<b>Auto*</b>	Printer automatically calculates the Parallel Buffer size (recommended setting).
		<b>3K to maximum size allowed</b>	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.
<b>Parallel Mode 2</b>	To determine whether the parallel port data is sampled on the leading or trailing edge of strobe.	<b>On*</b>	Samples parallel port data on the leading edge of strobe.
		<b>Off</b>	Samples parallel port data on the trailing edge of strobe.
<b>PCL SmartSwitch</b>	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.	<b>On*</b>	Printer examines data on the parallel interface and selects PCL emulation if the data indicates that is the required printer language.
		<b>Off</b>	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.
<b>PS SmartSwitch</b>	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.	<b>On*</b>	Printer examines data on the parallel interface and selects PostScript emulation if the data indicates that is the required printer language.
		<b>Off</b>	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.

## Understanding the operator panel

Menu item	Purpose	Values	
<b>Protocol</b>	To specify the parallel interface protocol.	<b>Standard</b>	May resolve some parallel interface problems.
		<b>Fastbytes*</b>	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	
<b>MAC Binary PS</b>	To configure the printer to process Macintosh binary PostScript print jobs.	<b>On</b>	Printer processes raw binary PostScript print jobs from computers using the Macintosh operating system.  <b>Note:</b> This setting often causes Windows print jobs to fail.
		<b>Off</b>	Printer filters PostScript print jobs using standard protocol.
		<b>Auto*</b>	Printer processes print jobs from computers using either Windows or Macintosh operating systems.
<b>Network Buffer</b>	To configure the size of the network input buffer.  <b>Note:</b> Changing the Network Buffer menu item automatically resets the printer.	<b>Auto*</b>	Printer automatically calculates the Network Buffer size (recommended setting).
		<b>3K to maximum size allowed</b>	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.

## Understanding the operator panel

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Menu item	Purpose	Values	
<b>NPA Mode</b>	To specify whether the printer performs the special processing required for bidirectional communication, following the conventions defined in the Network Printing Alliance (NPA) Protocol.  <b>Note:</b> Changing this menu item automatically resets the printer.	<b>Off</b>	Printer does not perform NPA processing.
		<b>Auto*</b>	Printer examines the data to determine the format and then processes it appropriately.
<b>PCL SmartSwitch</b>	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.	<b>On*</b>	Printer examines data on the network interface and selects PCL emulation if the data indicates that is the required printer language.
		<b>Off</b>	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.
<b>PS SmartSwitch</b>	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.	<b>On*</b>	Printer examines data on the network interface connection and selects PostScript emulation if the data indicates that is the required printer language.
		<b>Off</b>	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.
<b>Std Net Setup</b>	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.  <b>Note:</b> Refer to 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	
<b>MAC Binary PS</b>	To configure the printer to process Macintosh binary PostScript print jobs.	<b>Off</b>	Printer processes raw binary PostScript print jobs from computers using the Macintosh operating system.  <b>Note:</b> This setting often causes Windows print jobs to fail.
		<b>On</b>	Printer filters PostScript print jobs using standard protocol.
		<b>Auto*</b>	Printer processes print jobs from computers using either Windows or Macintosh operating systems.
<b>NPA Mode</b>	To specify whether the printer performs the special processing required for bidirectional communication, following the conventions defined in the Network Printing Alliance (NPA) Protocol.  <b>Note:</b> Changing this menu item automatically resets the printer.	<b>Off</b>	Printer performs NPA processing. If data is not in NPA format, it is rejected as bad data.
		<b>On</b>	Printer does not perform NPA processing.
		<b>Auto*</b>	Printer examines the data to determine the format and then processes it appropriately.
<b>PCL SmartSwitch</b>	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.	<b>On*</b>	Printer examines the data on the USB interface and selects PCL emulation if the data indicates that is the required printer language.
		<b>Off</b>	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.

## Understanding the operator panel

Menu item	Purpose	Values	
<b>PS SmartSwitch</b>	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.	<b>On*</b>	Printer examines data on the USB interface and selects PostScript emulation if the data indicates that is the required printer language.
		<b>Off</b>	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.
<b>USB Buffer</b>	To configure the size of the USB input buffer.  <b>Note:</b> Changing the USB Buffer menu item automatically resets the printer.	<b>Disabled</b>	Job buffering is disabled. Any jobs already buffered on the disk are printed before normal processing of incoming jobs resumes.
		<b>Auto*</b>	Printer automatically calculates the USB Buffer size (recommended setting).
		<b>3K to maximum size allowed</b>	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.

## Help Menu

Use the Help Menu to find additional information available about your printer.

Menu item	Purpose
<b>Quick Reference</b>	<p>Provides a quick glance at major topics about the printer and gives easy instructions. <i>Quick Reference</i> pages are stored inside the printer. They provide information about loading print media, diagnosing and solving print problems, and clearing jams. We strongly recommend that you print the <i>Quick Reference</i> pages and store them near the printer.</p> <p>To print the <i>Quick Reference</i>:</p> <ol style="list-style-type: none"> <li>1 Make sure the printer is on and the <b>Ready</b> message appears.</li> <li>2 Press and release <b>Menu</b> until you see <b>Help Menu</b>, and then press <b>Select</b>. <b>Quick Reference</b> is on the second line of the display.</li> <li>3 Press <b>Select</b>.</li> </ol> <p>The <i>Quick Reference</i> pages print.</p>

## 6

## 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
<b>Activating Menu Changes</b>	The printer is activating changes made to the printer settings.	Wait for the message to clear. See also: <a href="#">Disabling the operator panel menus</a>
<b>Activating PPDS</b>	The printer is activating PPDS emulation.	Wait for the message to clear.
<b>Busy</b>	The printer is busy receiving, processing, or printing data.	<ul style="list-style-type: none"> <li>Wait for the message to clear.</li> <li>Press <b>Menu</b> to open the Job Menu and cancel the current job.</li> </ul>
<b>Canceling Job</b>	The printer is processing a request to cancel the current print job.	Wait for the message to clear. See also: <a href="#">Canceling a print job</a>
<b>Change Tray &lt;x&gt;</b>	The printer is requesting different paper than what is loaded in the specified tray or defined by the Paper Size or Paper Type settings for that tray.  x indicates the number of the tray or MP Feeder.	Change the paper type in the specified source. See also: <a href="#">Loading trays</a> ; <a href="#">Loading and using the multipurpose feeder</a> ; <a href="#">Setup Guide</a>
<b>Change Cartridge Invalid Refill</b>	The printer has detected an unsupported refilled cartridge.	Remove the indicated print cartridge and install a new one. See also: <a href="#">Changing the print cartridge</a>



## Understanding the printer messages

Message	What this message means	What you can do
<b>Close Door</b>	The upper front door is open or the toner cartridge is not installed.	<ul style="list-style-type: none"> <li>Close the upper front door.</li> <li>Install the print cartridge.</li> </ul>
<b>Deactivating PPDS</b>	The printer is deactivating PPDS emulation.	Wait for the message to clear.
<b>Defragmenting DO NOT POWER OFF</b>	The printer is defragmenting the flash memory to reclaim storage space occupied by deleted resources.	Wait for the message to clear. <b>Warning:</b> Do not turn the printer off while this message is displayed.
<b>Delete All Jobs Go/Stop?</b>	The printer is requesting confirmation to delete all held jobs.	<ul style="list-style-type: none"> <li>Press <b>Go</b> to continue. The printer deletes all held jobs.</li> <li>Press <b>Stop</b> to cancel the operation.</li> </ul>
<b>Deleting Jobs</b>	The printer is deleting one or more held jobs.	Wait for the message to clear.
<b>Disabling Menus</b>	The printer is responding to a request to disable the menus.	Wait for the message to clear. <b>Note:</b> While the menus are disabled, you cannot change the printer settings from the operator panel. See also: <a href="#">Disabling the operator panel menus</a>
<b>Enabling Menus</b>	The printer is responding to a request to make the menus available to all users.	Wait for the message to clear, then press <b>Menu</b> to view the menus from the operator panel. See also: <a href="#">Enabling the menus</a>
<b>Enter PIN: =____</b>	The printer is waiting for you to enter your four-digit personal identification number (PIN).	Use the operator panel buttons to enter the PIN you identified in the driver when you sent the confidential job to the printer. See also: <a href="#">Entering a personal identification number (PIN)</a>
<b>Flushing Buffer</b>	The printer is flushing corrupted print data and discarding the current print job.	Wait for the message to clear.
<b>Formatting Flash DO NOT POWER OFF</b>	The printer is formatting the flash memory.	Wait for the message to clear. <b>Warning:</b> Do not turn the printer off while this message is displayed.

## Understanding the printer messages

Message	What this message means	What you can do
<b>Held Jobs may be lost</b>	The printer memory is too full to continue processing print jobs.	<ul style="list-style-type: none"> <li>Press <b>Go</b> to clear the message and continue printing. The printer frees memory by deleting the oldest held job and continues deleting held jobs until there is enough printer memory to process the job.</li> <li>Press <b>Stop</b> to clear the message without deleting any held jobs. The current job may not print correctly.</li> <li>Press <b>Menu</b> to open the Job Menu and cancel the current job.</li> <li>To avoid this error in the future: <ul style="list-style-type: none"> <li>Delete fonts, macros, and other data stored in printer memory.</li> <li>Install more printer memory.</li> </ul> </li> </ul> <p>The messages <b>37 Insufficient Memory</b> and <b>Held Jobs may be lost</b> alternate on the display.</p> <p>See also: <a href="#">Using the Print and Hold function</a>; <b>37 Insufficient Memory</b></p>
<b>Insert Tray &lt;x&gt;</b>	The specified tray is either missing or not fully inserted into the printer.	<ul style="list-style-type: none"> <li>Insert the specified tray completely into the printer.</li> <li>Press <b>Menu</b> to open the Job Menu and cancel the current job.</li> </ul>
<b>Install Tray &lt;x&gt; or Cancel Job</b>	The specified tray is either missing or not fully inserted into the printer.	<ul style="list-style-type: none"> <li>Insert the specified tray completely into the printer.</li> <li>Press <b>Menu</b> to open the Job Menu and cancel the current job.</li> </ul>
<b>Invalid Engine Code</b>	The printer engine code is not valid. The printer cannot receive and process jobs until valid code is programmed into the engine.	<p>Download valid code to the printer engine.</p> <p><b>Note:</b> You can download engine code while this message is displayed.</p>
<b>Invalid Standard Network Code</b>	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.	<p>Download valid code to the printer internal print server.</p> <p><b>Note:</b> You can download network code while this message is displayed.</p>
<b>Load &lt;x&gt;</b>	<p>The printer is trying to feed paper from a source it detects is empty.</p> <p>x is one of the following sources:</p> <ul style="list-style-type: none"> <li>Tray 1–Tray 3</li> <li>MP Feeder</li> </ul>	<ul style="list-style-type: none"> <li>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.</li> <li>Press <b>Menu</b> to open the Job Menu and cancel the current job.</li> </ul> <p>See also: <a href="#">Loading trays</a>; <a href="#">Loading and using the multipurpose feeder</a></p>

## Understanding the printer messages

Message	What this message means	What you can do
<b>Load Manual &lt;x&gt;</b>	The printer is trying to feed paper from the multipurpose feeder, which it detects is empty.	<ul style="list-style-type: none"> <li>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.</li> <li>Press <b>Menu</b> to open the Job Menu and cancel the current job.</li> </ul>
<b>Menus Disabled</b>	The printer menus are disabled. You cannot change the printer settings from the operator panel.	<p>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 network administrator.</p> <p>See also: <a href="#">Disabling the operator panel menus</a></p>
<b>Network Card Busy</b>	An internal print server (also called an internal network adapter or INA) is being reset.	Wait for the message to clear.
<b>No Jobs Found. Retry?</b>	The four-digit personal identification number (PIN) you entered is not associated with any confidential print job.	<ul style="list-style-type: none"> <li>Press <b>Go</b> to enter another PIN.</li> <li>Press <b>Stop</b> to clear the PIN entry prompt.</li> </ul> <p>See also: <a href="#">Printing a confidential job</a></p>
<b>Not Ready</b>	The printer is not ready to receive or process data. Someone pressed <b>Stop</b> to take the printer offline.	Press <b>Go</b> to make the printer ready to receive jobs.
<b>Performing Self Test</b>	The printer is running the series of start-up tests it performs after it is turned on.	Wait for the message to clear.
<b>Power Saver</b>	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 <b>Power Saver</b> message replaces the <b>Ready</b> message on the display.	<ul style="list-style-type: none"> <li>Send a job to print.</li> <li>Press <b>Go</b> to quickly warm the printer to normal operating temperature and display the <b>Ready</b> message.</li> </ul>
<b>Printing Directory List</b>	The printer is processing or printing a directory of all files stored in flash memory or on a hard disk.	<p>Wait for the message to clear.</p> <p>See also: <a href="#">Printing a directory list</a></p>
<b>Printing Font List</b>	The printer is processing or printing a list of all available fonts for the specified printer language.	<p>Wait for the message to clear.</p> <p>See also: <a href="#">Print Fonts</a></p>
<b>Printing Menu Settings</b>	The printer is processing or printing the menu settings page.	<p>Wait for the message to clear.</p> <p>See also: <a href="#">Print Menus</a>; <a href="#">Printing the menu settings and network setup pages</a></p>

## Understanding the printer messages

Message	What this message means	What you can do
<b>Printing Quality Test Pages</b>	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.
<b>Prog Engine Code DO NOT POWER OFF</b>	The printer is programming new engine code.	Wait for the message to clear and the printer to reset. <b>Warning:</b> Do not turn the printer off while this message is displayed.
<b>Prog System Code DO NOT POWER OFF</b>	The printer is programming new system code.	Wait for the message to clear and the printer to reset. <b>Warning:</b> Do not turn the printer off while this message is displayed.
<b>Program Flash DO NOT POWER OFF</b>	The printer is storing resources, such as fonts or macros, in flash memory.	Wait for the message to clear. <b>Warning:</b> Do not turn the printer off while this message is displayed.
<b>Queuing and Deleting Jobs</b>	The printer is deleting one or more held jobs and sending one or more jobs to print.	Wait for the message to clear. See also: <a href="#">Using the Print and Hold function</a>
<b>Queuing Jobs</b>	The printer is sending one or more held jobs to print.	Wait for the message to clear. See also: <a href="#">Using the Print and Hold function</a>
<b>Ready</b>	The printer is ready to receive and process print jobs.	Send a job to print.
<b>Ready Hex</b>	The printer is in Hex Trace mode and is ready to receive and process print jobs.	<ul style="list-style-type: none"> <li>Send a job to print. All data sent to the printer is printed in hexadecimal and character representation. Control strings are printed, not executed.</li> <li>Turn the printer off and then on to exit Hex Trace mode and return to Ready status.</li> </ul>
<b>Remove Paper Standard Bin</b>	The standard output bin is full.	Remove the stack of paper from the output bin to clear the message.
<b>Res Reduced</b>	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 <b>38 Memory Full</b> error. <b>Res Reduced</b> remains on the display while the job prints.	Press <b>Menu</b> to open the Job Menu and cancel the current job.
<b>Resetting Maint Cnt Value</b>	The printer is resetting the counter that tracks wear on the fuser.	Wait for the message to clear.

## Understanding the printer messages

Message	What this message means	What you can do
<b>Resetting the Printer</b>	The printer is resetting to the current default settings. Any active print jobs are canceled.	Wait for the message to clear. See also: <a href="#">Using the operator panel to change printer settings</a>
<b>Restoring Factory Defaults</b>	The printer is restoring the factory default printer settings. When factory default settings are restored: <ul style="list-style-type: none"> <li>• All downloaded resources (fonts, macros, symbol sets) in the printer memory are deleted.</li> <li>• All menu settings return to the factory default setting <i>except</i>: <ul style="list-style-type: none"> <li>– The Display Language setting in the Setup Menu.</li> <li>– All settings in the Parallel Menu, Serial Menu, Network Menu, USB Menu, and Fax Menu.</li> </ul> </li> </ul>	Wait for the message to clear. See also: <a href="#">Restoring factory default settings</a>
<b>Std Bin Full</b>	The standard bin is full.	Remove the stack of paper in the bin to clear the message.
<b>Toner Low</b>	The print cartridge is low on toner.	<ul style="list-style-type: none"> <li>• Shake the print cartridge to utilize the remaining toner.</li> <li>• Replace the cartridge.</li> <li>• Press <b>Go</b> to clear the message and continue printing.</li> </ul> <b>Note:</b> If you do not replace the cartridge, you may experience print quality problems.
<b>Tray &lt;x&gt; Missing</b>	The specified tray is either missing or not fully inserted into the printer.	Insert the tray completely into the printer. See also: <a href="#">Loading trays</a>
<b>Waiting</b>	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.	<ul style="list-style-type: none"> <li>• Press <b>Go</b> to print the contents of the buffer.</li> <li>• Press <b>Menu</b> to open the Job Menu and cancel the current job.</li> </ul> See also: <a href="#">Canceling a print job</a>
<b>1565 Emul Error Load Emul Option</b>	The download emulator version on the firmware card does not match the printer code version.  This error can occur if you update printer firmware or move a firmware card from one printer to another.	The printer automatically clears the message in 30 seconds, and then disables the download emulator on the firmware card.  Contact the place you bought your printer.
<b>2&lt;xx&gt; Paper Jam</b>	The printer detects a jam.	Clear the paper path. See also: <a href="#">Clearing jams</a>
<b>31 Missing or Defective Cart.</b>	The print cartridge is missing or is defective.	Install a print cartridge or replace the defective cartridge.

## Understanding the printer messages

Message	What this message means	What you can do
<b>32 Unsupported Print Cartridge</b>	An unsupported print cartridge is installed.	Remove the print cartridge and install a new one. See also: <a href="#">Changing the print cartridge</a>
<b>34 Short Paper</b>	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. For auto-size sensing trays, this error occurs if the guides are not in the correct position.	<ul style="list-style-type: none"> <li>Press <b>Go</b> to clear the message and continue printing. The printer does not automatically reprint the page that prompted the message.</li> <li>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.</li> <li>Press <b>Menu</b> to open the Job Menu and cancel the current job.</li> </ul> See also: <a href="#">Print media sources and specifications</a>
<b>35 Res Save Off Deficient Memory</b>	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.	<ul style="list-style-type: none"> <li>Press <b>Go</b> to disable Resource Save and continue printing.</li> <li>To enable Resource Save after you get this message:               <ul style="list-style-type: none"> <li>Make sure the link buffers are set to Auto, and exit the menus to activate the link buffer changes.</li> <li>When <b>Ready</b> is displayed, enable Resource Save from the Setup Menu.</li> </ul> </li> <li>Install additional memory.</li> </ul>
<b>37 Insufficient Collation Area</b>	The printer memory (or hard disk, if installed) does not have the free space necessary to collate the print job.	<ul style="list-style-type: none"> <li>Press <b>Go</b> to print the portion of the job already stored and begin collating the rest of the job.</li> <li>Press <b>Menu</b> to open the Job Menu and cancel the current job.</li> </ul> See also: <a href="#">Canceling a print job</a>
<b>37 Insufficient Defrag Memory</b>	The printer cannot defragment flash memory, because the printer memory used to store undeleted flash resources is full.	<ul style="list-style-type: none"> <li>Delete fonts, macros, and other data in printer memory.</li> <li>Install additional printer memory.</li> </ul>

## Understanding the printer messages

Message	What this message means	What you can do
<b>37 Insufficient Memory</b>	The printer memory is full and cannot continue processing current print jobs.	<ul style="list-style-type: none"> <li>Press <b>Go</b> to clear the message and continue the current print job. The printer frees memory by deleting the oldest held job and continues deleting held jobs until there is enough printer memory to process the job.</li> <li>Press <b>Stop</b> to clear the message without deleting any held jobs. The current job may not print correctly.</li> <li>Press <b>Menu</b> to open the Job Menu and cancel the current job.</li> <li>To avoid this error in the future: <ul style="list-style-type: none"> <li>Delete fonts, macros, and other data in printer memory.</li> <li>Install additional printer memory.</li> </ul> </li> </ul> <p><b>Note:</b> The messages <b>37 Insufficient Memory</b> and <b>Held Jobs may be lost</b> alternate on the display.</p> <p>See also: <a href="#">Accessing held jobs from the operator panel; Held Jobs may be lost</a></p>
<b>38 Memory Full</b>	The printer is processing data, but the memory used to store pages is full.	<ul style="list-style-type: none"> <li>Press <b>Go</b> to clear the message and continue printing the job. The job may not print correctly.</li> <li>Press <b>Menu</b> to open the Job Menu and cancel the current job.</li> <li>To avoid this error in the future: <ul style="list-style-type: none"> <li>Simplify the print job by reducing the amount of text or graphics on a page and deleting unnecessary downloaded fonts or macros.</li> <li>Install additional printer memory.</li> </ul> </li> </ul> <p>See also: <a href="#">Clearing jams</a></p>
<b>39 Complex Page</b>	The page may not print correctly because the print information on the page is too complex.	<ul style="list-style-type: none"> <li>Press <b>Go</b> to clear the message and continue printing the job. The job may not print correctly.</li> <li>Press <b>Menu</b> to open the Job Menu and cancel the current job.</li> <li>To avoid this error in the future: <ul style="list-style-type: none"> <li>Reduce the complexity of the page by reducing the amount of text or graphics on the page and deleting unnecessary downloaded fonts or macros.</li> <li>Set Page Protect to On in the Setup Menu.</li> <li>Install additional printer memory.</li> </ul> </li> </ul> <p>See also: <a href="#">Setup Menu</a></p>

## Understanding the printer messages

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Message	What this message means	What you can do
<b>50 PPDS Font Error</b>	The PPDS interpreter has encountered a font error or the printer has received invalid PPDS download font data.	<ul style="list-style-type: none"> <li>Press <b>Go</b> to clear the message and continue printing.</li> <li>Press <b>Menu</b> to open the Job Menu and cancel the job or reset the printer.</li> </ul>
<b>51 Defective Flash</b>	The printer detects defective flash memory.	Press <b>Go</b> to clear the message and continue printing. You must install different flash memory before you can download any resources to flash.
<b>52 Flash Full</b>	There is not enough free space in the flash memory to store the data you are trying to download.	<ul style="list-style-type: none"> <li>Press <b>Go</b> to clear the message and continue printing. Downloaded fonts and macros not previously stored in flash memory are deleted.</li> <li>Delete fonts, macros, and other data stored on the flash memory.</li> <li>Install flash memory with more storage capacity.</li> </ul>
<b>53 Unformatted Flash</b>	The printer detects unformatted flash memory.	<ul style="list-style-type: none"> <li>Press <b>Go</b> to clear the message and continue printing. You must format the flash memory before you can store any resources on it.</li> <li>If the error message remains, the flash memory may be defective and require replacing.</li> </ul>
<b>54 Std Network Software Error</b>	The printer cannot establish communications with an installed network port.	<ul style="list-style-type: none"> <li>Press <b>Go</b> to clear the message and continue printing. The job may not print correctly.</li> <li>Program new firmware for the network interface by way of the parallel port.</li> <li>Press <b>Menu</b> to open the Job Menu and reset the printer.</li> </ul>
<b>55 Unsupported Flash in Slot X</b>	The printer detects an unsupported flash memory card in one of the connectors.	Turn the printer off. Remove the unsupported option card.
<b>56 Std Parallel Port Disabled</b>	Data has been sent to the printer through a parallel port, but the parallel port is disabled.	<ul style="list-style-type: none"> <li>Press <b>Go</b> to clear the message. The printer discards any data received through the parallel port.</li> <li>Make sure the Parallel Buffer menu item in the Parallel Menu is not set to Disabled.</li> </ul> <p>See also: <a href="#">Parallel Buffer</a></p>



## Understanding the printer messages

Message	What this message means	What you can do
<b>56 Standard USB Port Disabled</b>	Data has been sent to the printer through a USB port, but the USB port is disabled.	<ul style="list-style-type: none"> <li>Press <b>Go</b> to clear the message. The printer discards any data received through the USB port.</li> <li>Make sure the USB Buffer menu item in the USB Menu is not set to Disabled.</li> </ul> <p>See also: <a href="#">USB Buffer</a></p>
<b>58 Too Many Flash Options</b>	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.
<b>58 Too Many Trays Attached</b>	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: <i>Setup Guide</i>
<b>80 Scheduled Maintenance</b>	The printer requires replacement of routine maintenance items to maintain top performance and avoid print quality and paper feed problems.	Replace the maintenance items and press <b>Go</b> to clear the message.
<b>88 Toner Low</b>	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.	<ul style="list-style-type: none"> <li>Shake the print cartridge to utilize the remaining toner.</li> <li>Replace the cartridge.</li> <li>Press <b>Go</b> to clear the message and continue printing. The <b>Supplies</b> message is displayed until you replace the cartridge.</li> </ul> <p>See also: <a href="#">Changing the print cartridge</a></p>
<b>900–999 Service &lt;message&gt;</b>	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.  See also: <a href="#">Contacting service</a>



## Software and network tasks

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Printing a confidential job	115
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### ***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 [Understanding 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.

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 [Solving print quality problems](#).

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

### ***Printing a directory list***

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

- 1 Make sure the printer is on and the **Ready** message appears.
- 2 Press and release **Menu** until you see **Utilities Menu**, and then press **Select**.
- 3 Press and release **Menu** until **Print Directory** appears, and then press **Select**.

The message **Printing Directory List** appears and remains on the operator panel until the page prints. The printer returns to the **Ready** state after the directory list prints.

### ***Printing a confidential job***

When you send a job to the printer, you can enter a personal identification number (PIN) from the driver. The PIN must be four digits using the numbers 1–6. The job is held in printer memory until you enter the same four-digit PIN from the operator panel and choose to print or delete the job. This ensures that the job does not print until you are there to retrieve it, and no one else using the printer can print the job.

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

- 1 In your word processor, spreadsheet, browser, or other application, select **File → Print**.
- 2 Click **Properties**. (If there is no Properties button, click **Setup**, and then click **Properties**.)
- 3 Click **Help** and refer to the topic confidential print or print and hold. Follow instructions for printing a confidential job. (See [Confidential jobs](#).)

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

- 4 Press and release **Menu** until you see **Job Menu**, and then press **Select**.
- 5 Press and release **Menu** until you see **Confidential Job**, and then press **Select**.
- 6 Press and release **Menu** until you see your user name, and then press **Select**.
- 7 See [Entering a personal identification number \(PIN\)](#) as follows. Continue with [step 1 on page 116](#) to print a confidential job.

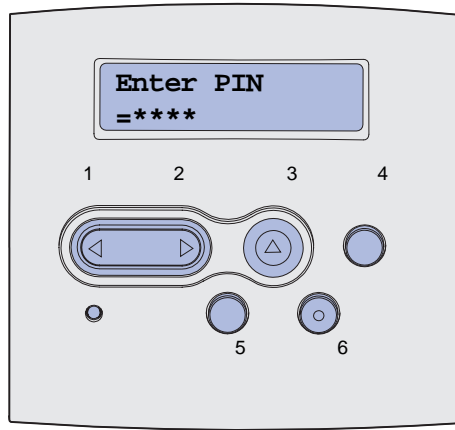
### ***Entering a personal identification number (PIN)***

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

**Enter PIN:**  
=\_\_\_\_\_

- 1 Use the buttons on the operator panel to enter the four-digit PIN associated with your confidential job.

The numbers next to the button names identify which button to press for each digit (1–6). As you enter the PIN, asterisks appear on the display to ensure confidentiality.



If you enter an invalid PIN, the message **No Jobs Found. Retry?** appears.

- 2 Press **Go** to reenter the PIN, or press **Stop** to exit the Confidential Job menu.
- 3 Press **Select** to print your confidential jobs.

Your jobs print and are deleted from printer memory.

For more information about confidential jobs, and Print and Hold jobs, see [Using the Print and Hold function](#).

### ***Using MarkVision to manage the printer***

To understand how MarkVision can help you manage the printer, refer to the drivers CD.

### ***Using Hex Trace mode***

When unexpected characters print or characters are missing, use Hex Trace to help you determine if the language interpreter or the cable has a problem. Hex Trace isolates printing problems by telling you what information your printer is receiving.

- 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 **Hex Trace** appears, and then press **Select**.

To exit Hex Trace mode, select **Reset Printer** from the Job Menu or turn the printer off and then back on.

## 8

## Supplies and maintenance information

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Changing the print cartridge	123
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### ***Maintaining the printer***

Periodically, you need to replace the print cartridge and clean the printer to maintain optimum print quality. See [Changing the print cartridge](#) and [Cleaning the printer](#) for more information.

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

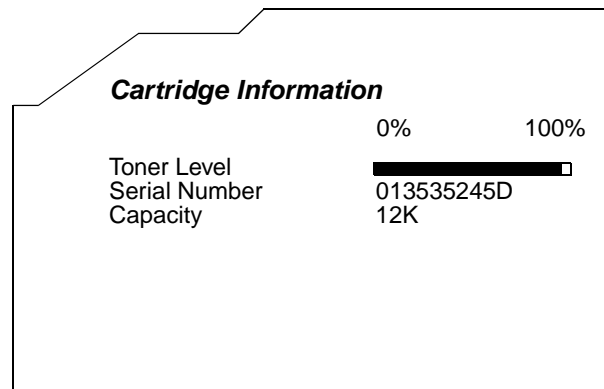
Contact the place where you bought your printer for information about authorized supplies dealers in your area.



### ***Determining the status of supplies***

The printer uses the second line of the display to alert you to any supply or maintenance items that need replacing. However, the printer can only display information about one item at a time.

If you want to determine the status of consumables installed in your printer, you can print the menu settings page from the Utilities Menu. (Press **Menu** until you see **Utilities Menu**, and then press **Select**. Press **Menu** until you see **Print Menus**, and then press **Select** to print the menu settings page.) One or two pages print depending on the number of menu settings you have. Look for “Cartridge Information” on the page; the percentage of life remaining for each of the items is indicated.



### ***Conserving supplies***

Conserving supplies lowers printing costs. Several settings in your application software or on the display let you conserve toner and paper:

Supply	Setting	What the setting does	For more information, see...
Toner	Toner Darkness in the Quality Menu	Lets you adjust the level of toner released on a sheet of print media. The values range from 1 (lightest setting) to 10 (darkest setting).	<b>Toner Darkness</b>
Print media	Multipage Print in the Finishing Menu	Causes the printer to print the two or more page images on one side of a sheet. Values for Multipage Print are 2 Up, 3 Up, 4 Up, 6 Up, 9 Up, 12 Up, and 16 Up. Combined with the duplex setting, Multipage Print lets you print up to 32 pages on one sheet of paper (16 images on the front and 16 on the back).	<b>Multipage Print</b>
	Duplex in the Finishing Menu	Duplex printing is available when you attach the optional duplex unit. It lets you print on both sides of a sheet of paper.	<b>Duplex</b>
Print media	Use your software application or printer driver to send a Verify Print job.  Use Held Jobs in the Job Menu to access your Verify Print job.	Lets you examine the first copy of a multiple-copy job to be sure it is satisfactory before you print the other copies. If the job is unsatisfactory, you can cancel the job.	<b>Verify Print</b> <b>Canceling a print job</b> <b>Held Jobs</b>

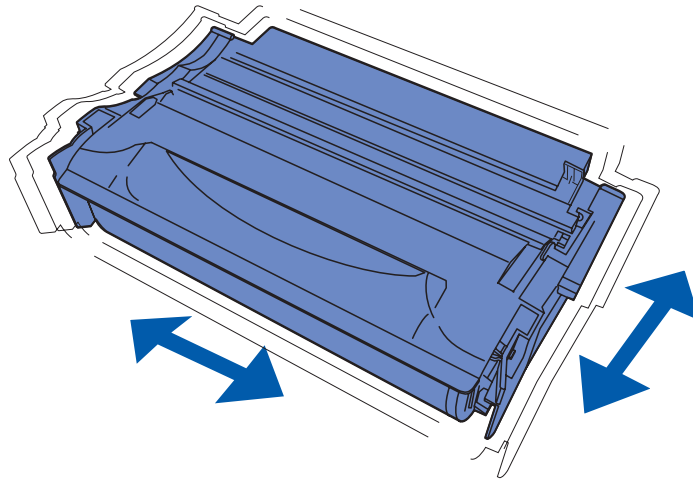
### ***Ordering supplies***

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

### ***Ordering a print cartridge***

When the **88 Toner Low** message appears, you should order a new print cartridge. You can print a few hundred pages after the **88 Toner Low** message comes on.

To use the remaining toner, remove the print cartridge, and then shake it gently back and forth.



You need to have a new print cartridge available when the current one no longer prints satisfactorily.

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

### ***Ordering a charge roll***

We recommend ordering a new charge roll when toner fog or background shading appears on printed pages. To order a charge roll, contact the place where you bought your printer for more information.

### ***Storing the print cartridge***

Store the print cartridge in the original packaging until you are ready to install it.

Do not store the print cartridge in:

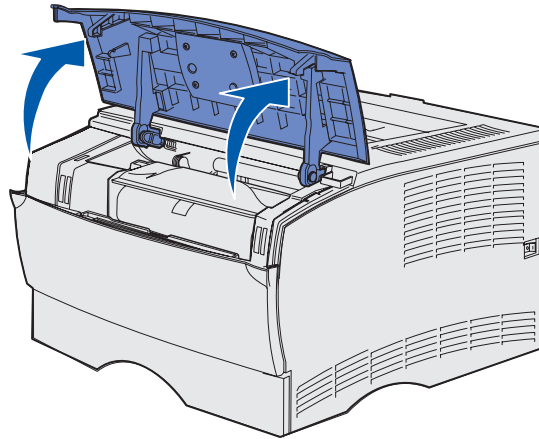
- Temperatures greater than 40°C (104°F).
- An environment with extreme changes in humidity or temperature.
- Direct sunlight.
- Dusty places.
- A car for a long period of time.
- An environment where corrosive gases are present.
- An environment with salty air.

### ***Changing the print cartridge***

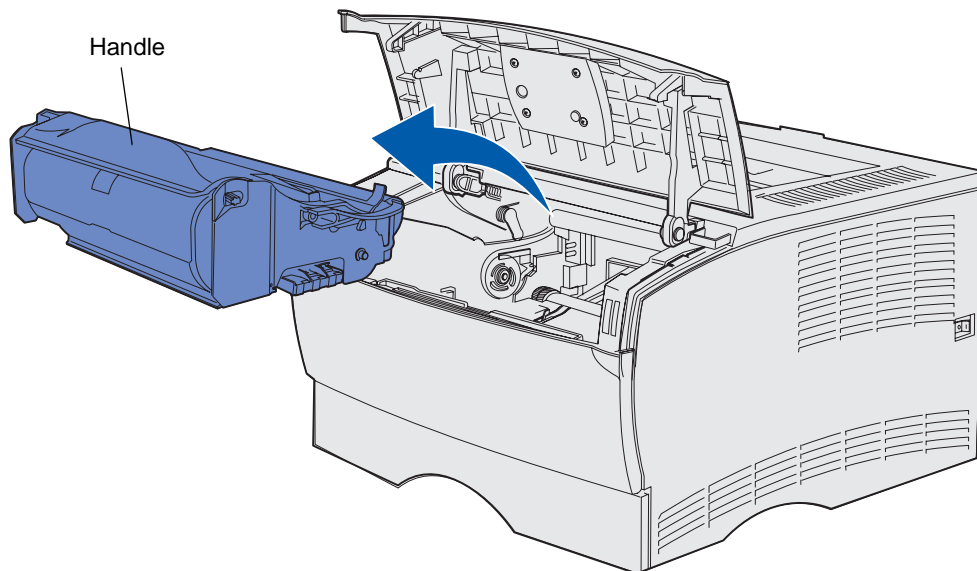
**Note:** The manufacturer does not recommend that you use print cartridges from a third-party refiller. Print quality and printer reliability cannot be guaranteed if you do. For best results, use genuine supplies.

#### ***Removing the used print cartridge***

- 1 Turn the printer off.
- 2 Open the upper front door.



- 3 Grasp the print cartridge by the handle and lift it out.

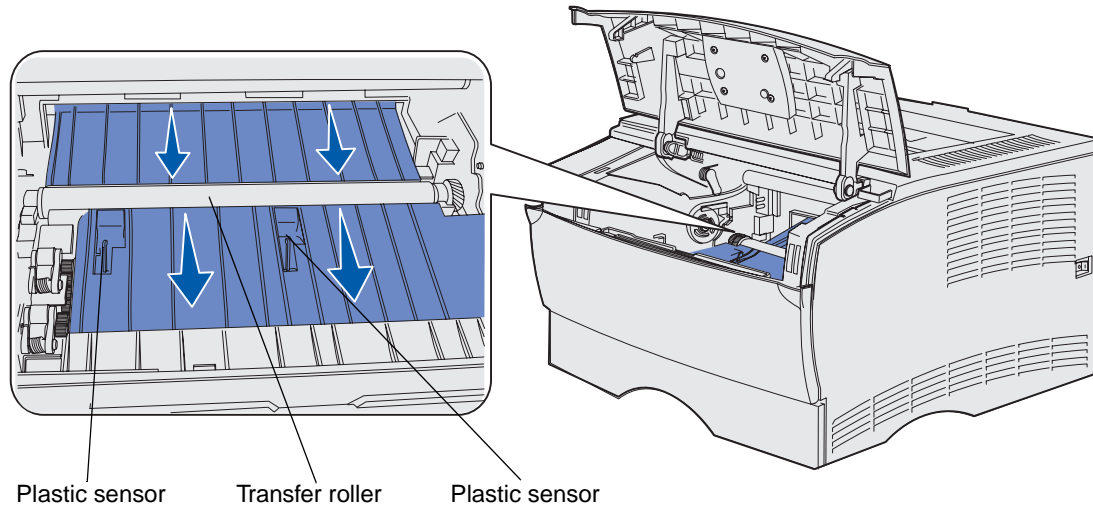


- 4 Set it aside.

### ***Cleaning the printer***

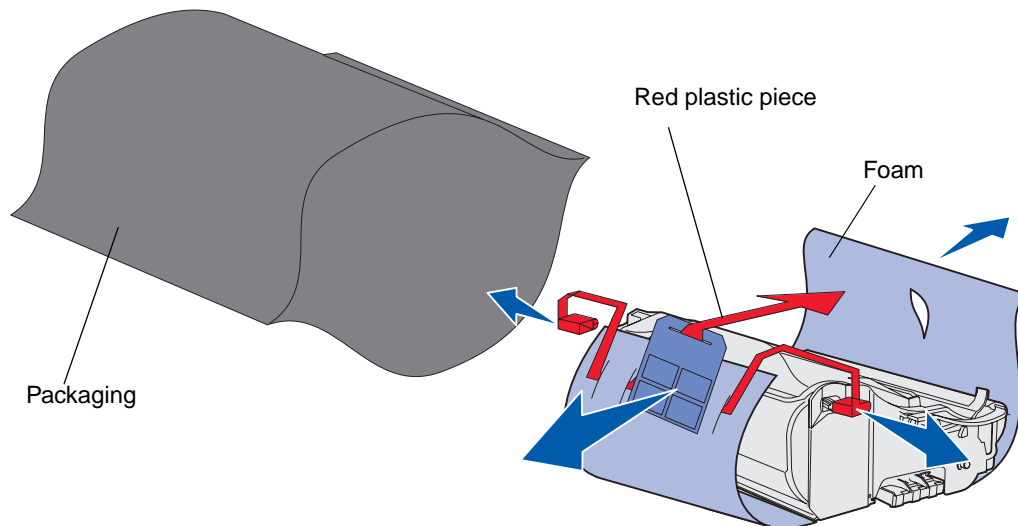
Using a clean, lint-free cloth, gently clean the shaded areas by wiping toward the front of the printer.

**Warning:** Do not touch the transfer roller or the plastic sensors.



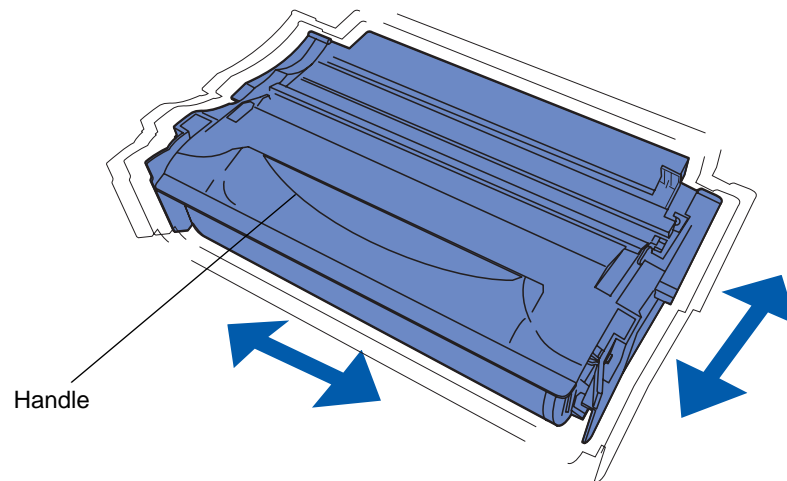
### ***Installing the new print cartridge***

- 1 Remove the cartridge packaging. Remove the red plastic piece and foam.

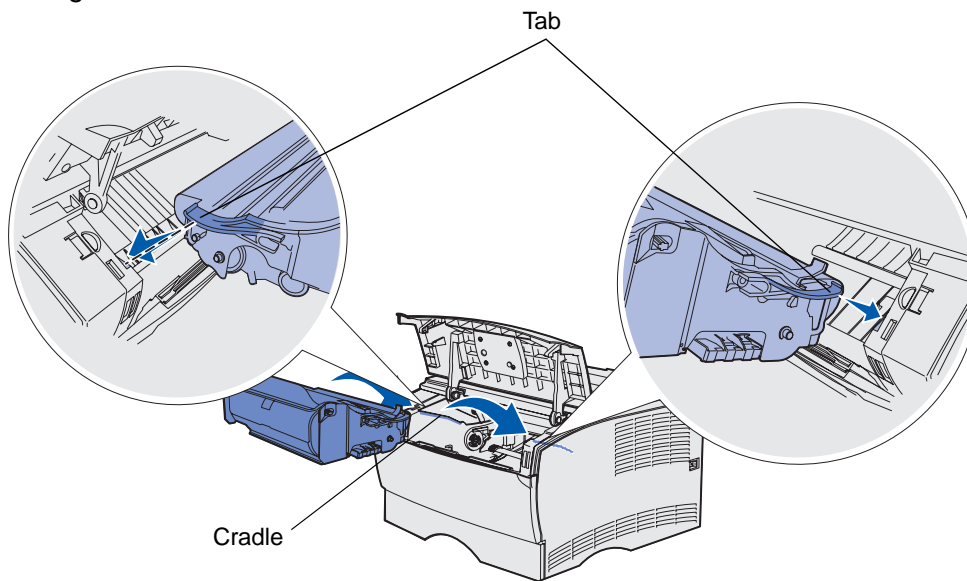


**Warning:** Do not touch the photoconductor drum on the bottom of the print cartridge.

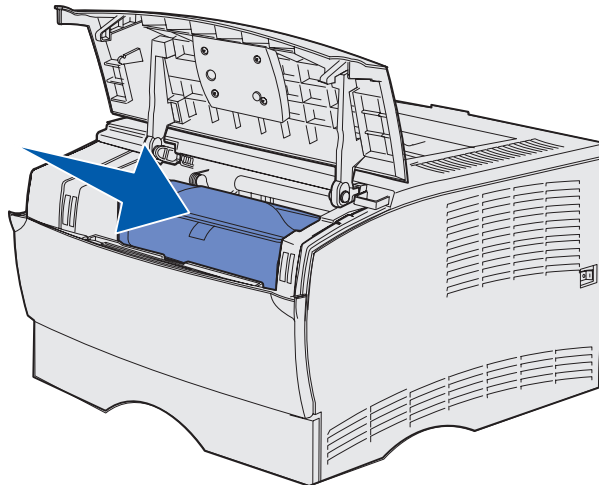
- 2 Hold the print cartridge by the handle and gently shake it side-to-side to distribute the toner.



- 3 Hold the print cartridge by the handle and insert it into the printer:
  - a Align the tabs on each side of the cartridge with the slots on each side of the print cartridge cradle.



- b Slide the cartridge in until it *snaps* into place.



- 4 Close the upper front door.

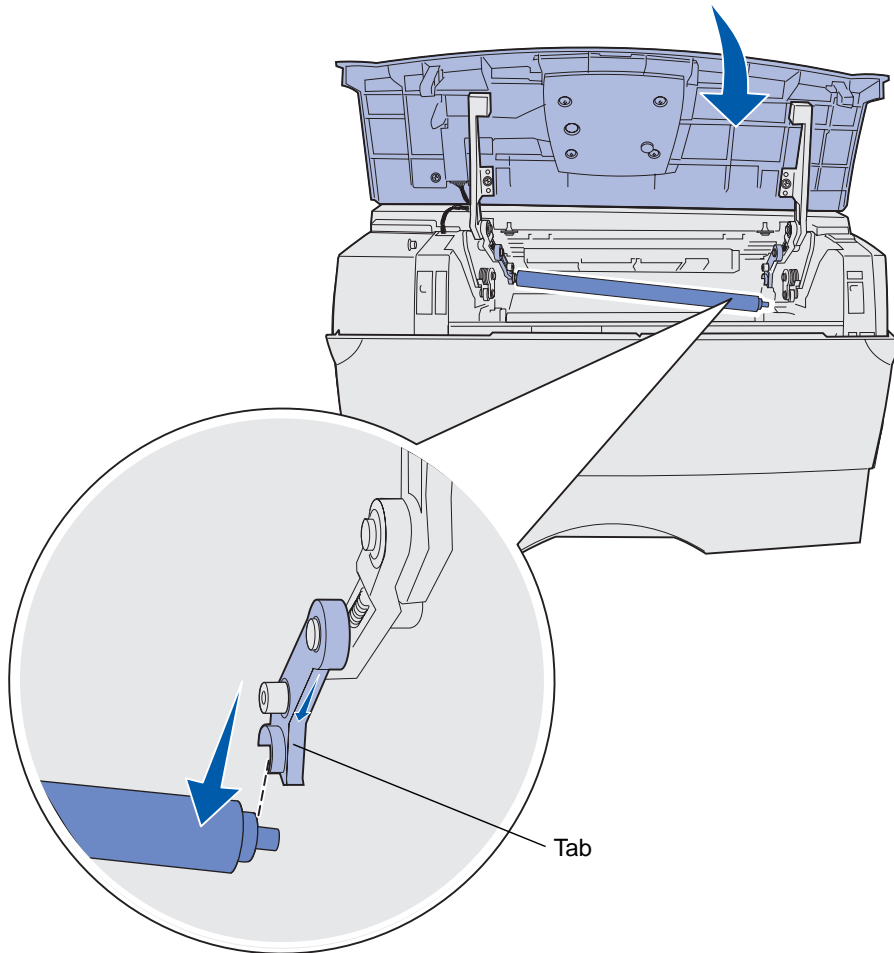
Make sure the door *snaps* closed on both sides, or the printer will not function properly.
- 5 Turn the printer on.



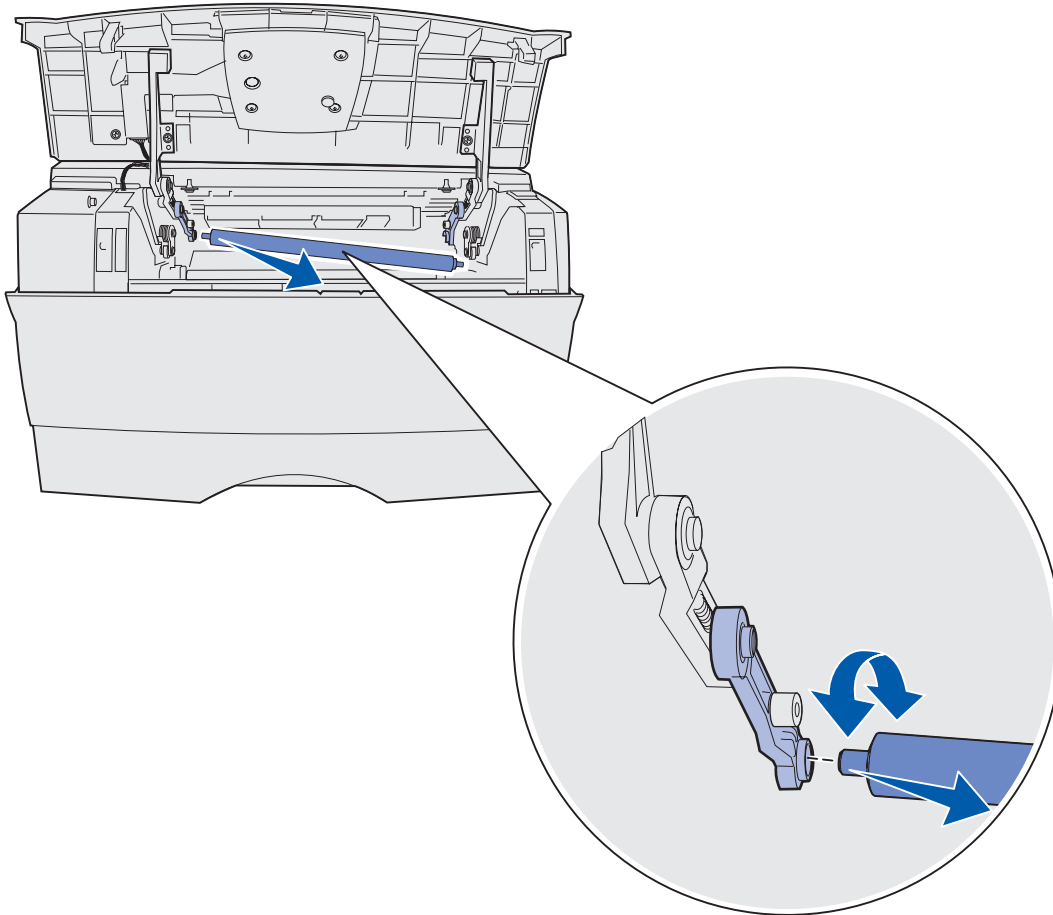
### ***Replacing the charge roll***

Order a new charge roll kit when toner fog or background shading appears on printed pages. See [Ordering supplies](#) for information on ordering a charge roll.

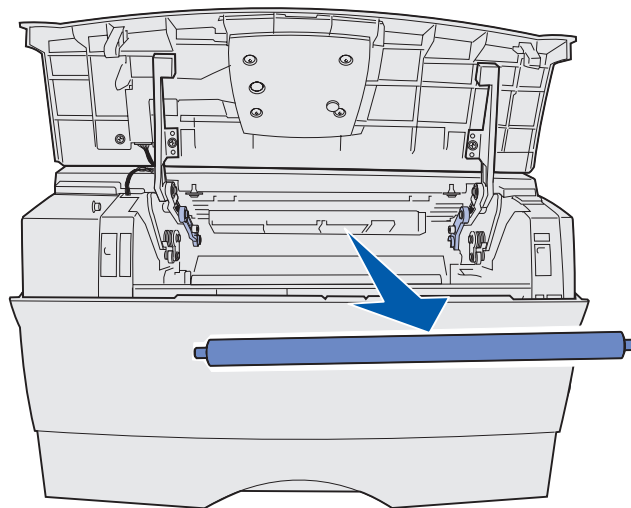
- 1 Turn the printer off and unplug the printer power cord.
- 2 Open the upper front door.
- 3 Remove the print cartridge.
- 4 Locate the used charge roll above the area for the print cartridge.
- 5 Locate the label with an arrow on the right side of the housing. It is attached to the arm-like tab.
- 6 Push the right end of the charge roll down and towards the back of the printer to release the roll from the tab.



- 7** Gently rotate the charge roll between your fingers and pull it to the right to remove it from the left tab.



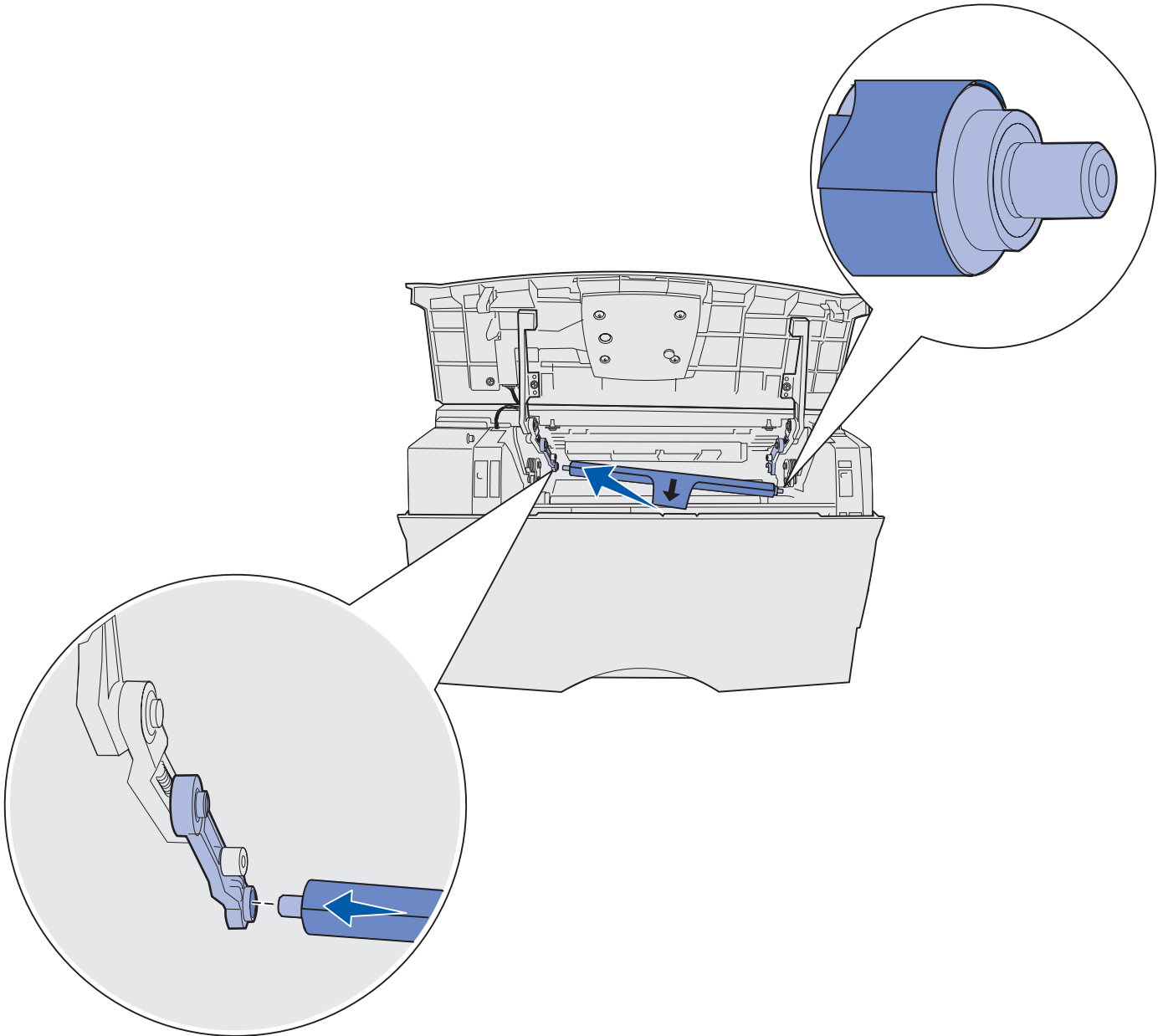
- 8** Pull the charge roll straight out of the printer.



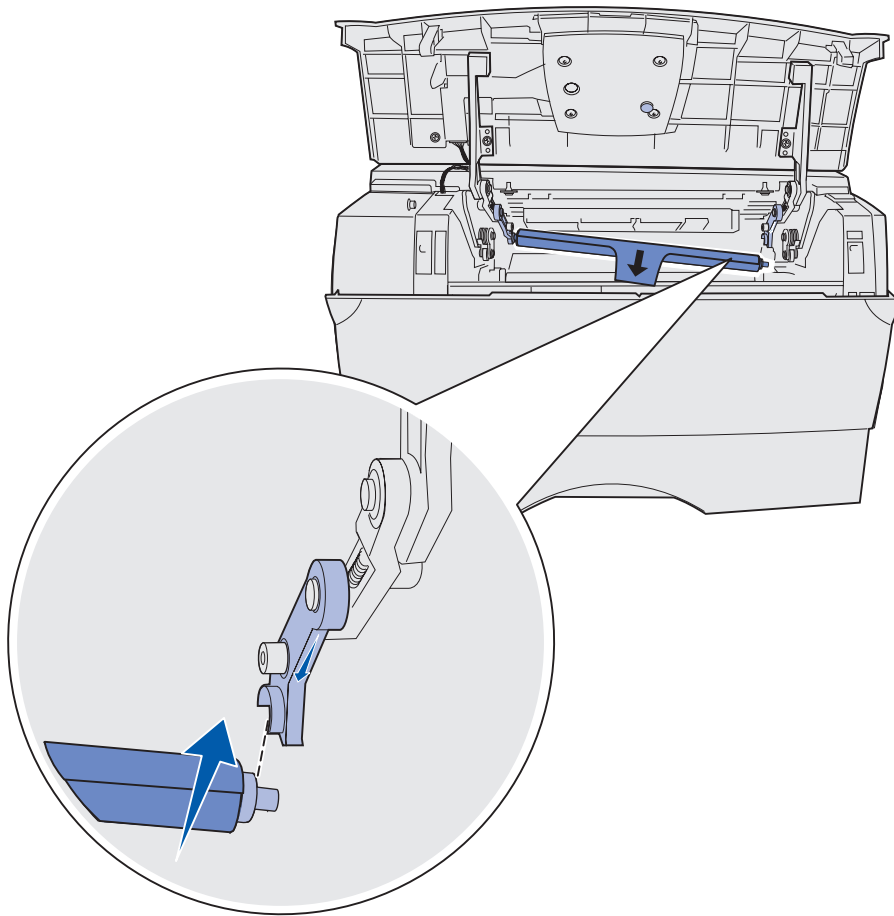
- 9 Remove the new charge roll from its packaging.

**Warning:** Do not remove the wrapper from the charge roll until you have installed it. Touching the cylinder part without the wrapper contaminates the charge roll and affects printing.

- 10 Insert the left side of the charge roll as shown.

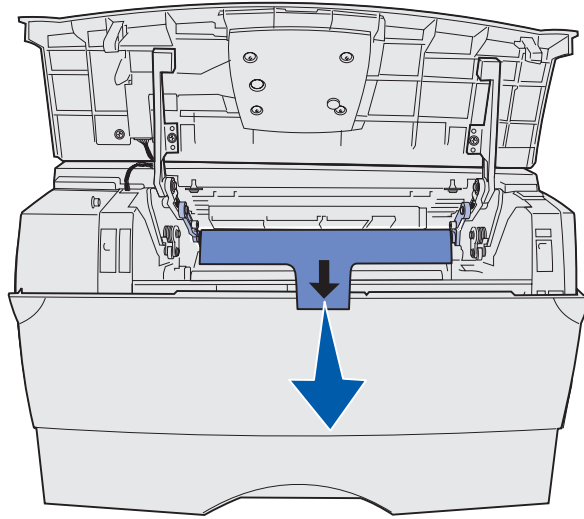


- 11 Push the right side of the charge roll up into the tab with the arrow label until it *snaps* into place.



**Note:** You may need to hold the upper front door still while inserting the charge roll into the right side.

- 12** Remove the charge roll wrapper by pulling it off the roller and out of the printer.



- 13** Reinstall the print cartridge and close the front door.
- 14** Plug the printer power cord into a properly grounded electrical outlet.

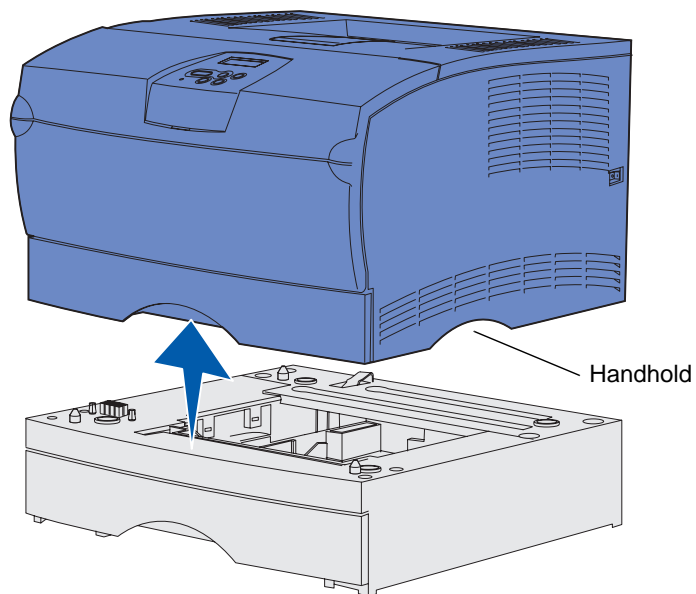
### ***Removing options***

#### ***Removing the printer from an optional drawer***

You can remove the printer from a 250-sheet drawer and/or the 500-sheet drawer using the same method.

- 1 Turn the printer power off.
- 2 Unplug the printer power cord.
- 3 Disconnect all cables from the back of the printer.
- 4 Use the handholds to lift the printer off of the optional drawer and set the printer aside.

**CAUTION:** Make sure your fingers are not under the printer when you set it down.



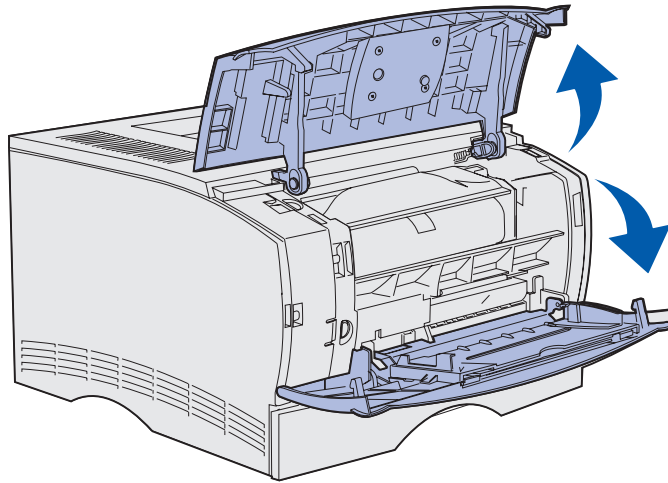
### ***Removing optional printer memory or firmware cards***

These instructions can help you remove optional printer memory or firmware cards.

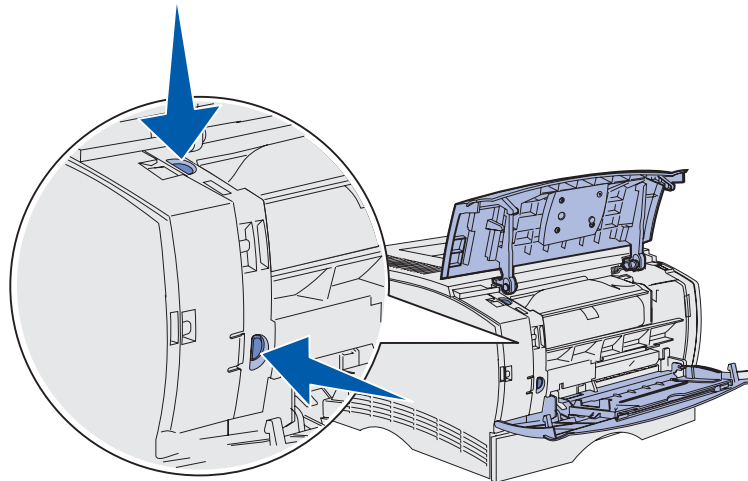
**Note:** You will need a #2 Phillips screwdriver for this procedure.

#### **Accessing the system board**

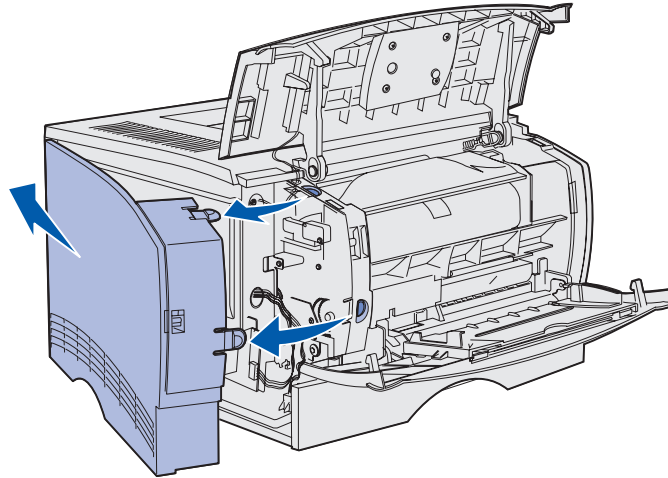
- 1 Turn the printer off and unplug the printer power cord.
- 2 Disconnect all cables from the back of the printer.
- 3 Open the upper front door and multipurpose feeder door.



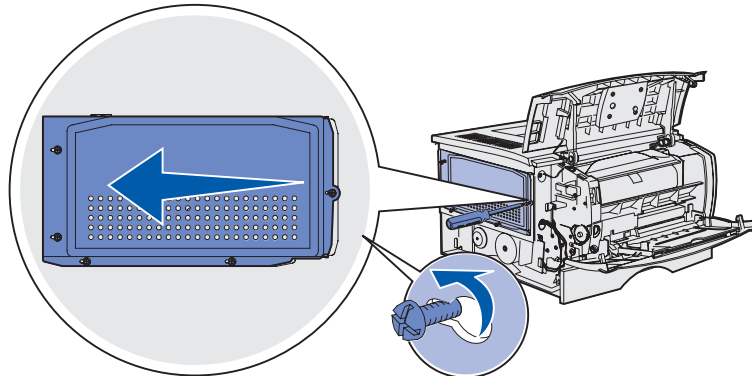
- 4 Press the tabs on the front and top of the printer to release the side cover.



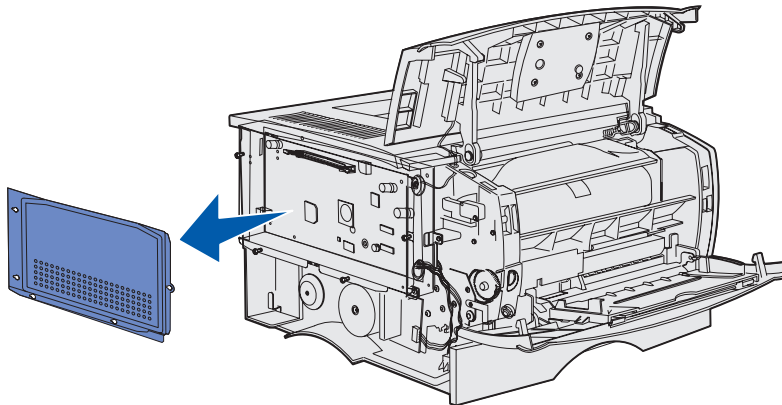
- 5** Swing the side cover away from the printer, and then slide the cover toward the back of the printer to remove it.



- 6** Loosen the five screws on the shield, but do not remove them completely.  
**7** Slide the shield to the left until the screws fit into the keyholes on the cover.



- 8** Remove the shield and set it aside.



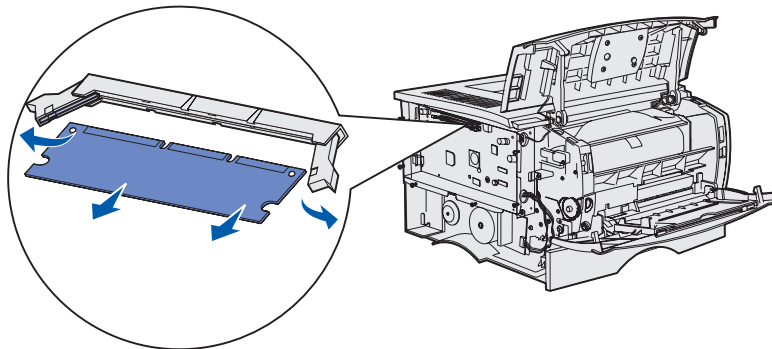


### Removing an optional memory card

Complete the following steps to remove an optional printer memory card.

**Warning:** Optional memory cards are easily damaged by static electricity. Touch something metal on the printer before you touch an optional memory card.

- 1 Remove the shield. See [Accessing the system board](#).
- 2 Locate the optional memory card.
- 3 Push the connector latches on both ends of the memory connector away from the memory card.

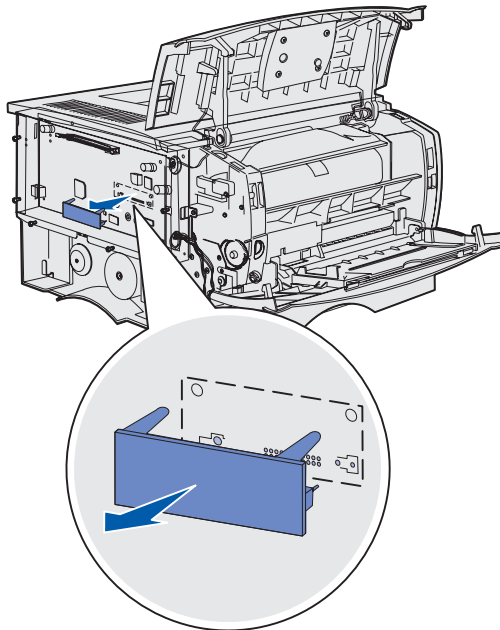


- 4 Pull the memory card straight out of the memory connector.
- 5 Place the memory card in its original packaging, or wrap it in paper and store it in a box.
- 6 Reinstall the shield. See [Reinstalling the shield](#).

### Removing an optional firmware card

**Warning:** Optional firmware cards are easily damaged by static electricity. Touch something metal on the printer before you touch an optional firmware card.

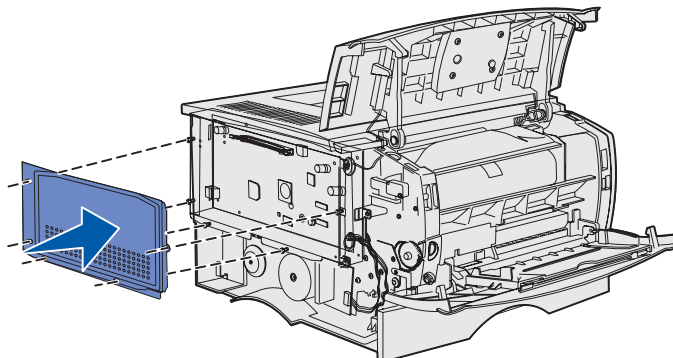
- 1 Remove the shield. See [Accessing the system board](#).
- 2 Locate the firmware card you want to remove.
- 3 Grasp the firmware card gently and pull it straight out in one motion. Do not pull one side and then the other.



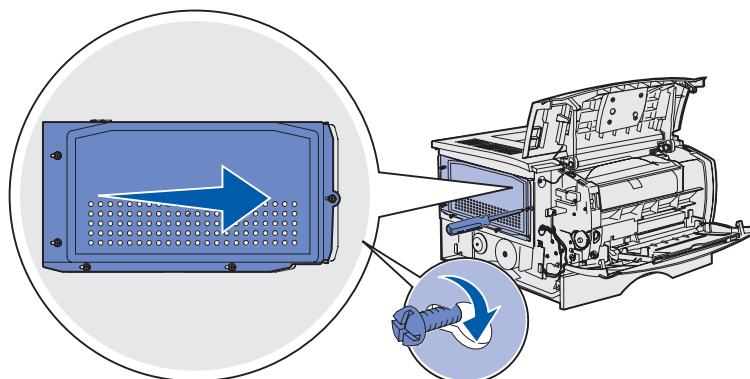
- 4 Place the card in its original packaging, or wrap the card in paper and store it in a box.
- 5 Reinstall the shield. See [Reinstalling the shield](#).

### Reinstalling the shield

- 1 Align the five keyholes with five screws on the system board.

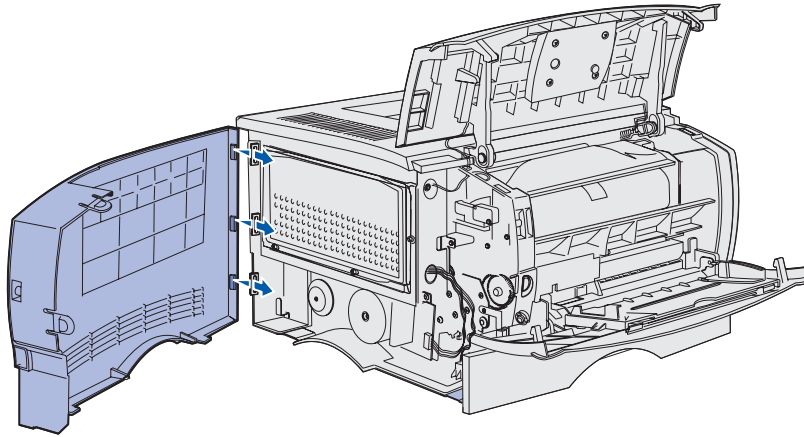


- 2 Slide the shield to the right, and then tighten the screws.

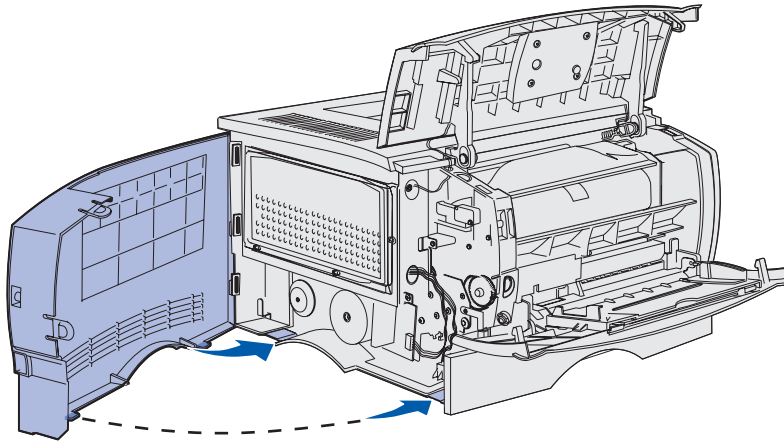


### Reattaching the side cover

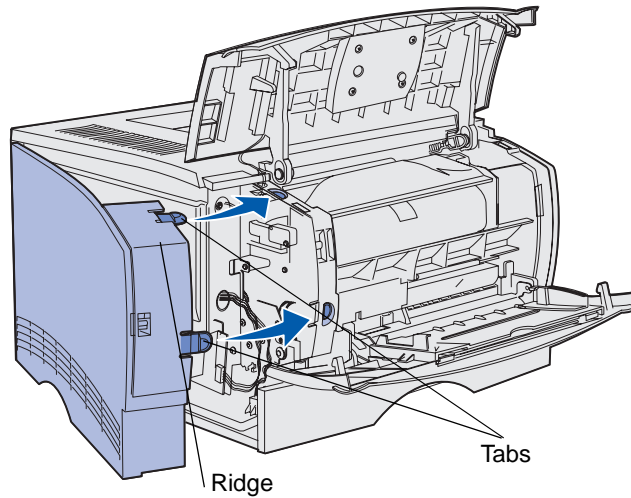
- 1 Align the three tabs on the back of the side cover with the slots on the printer.



- 2 Align the tabs on the bottom of the side cover with the slots at bottom of the printer.



- 3 Press the side cover firmly into place, making sure that the two tabs are in place, and that the ridge on top of the side cover aligns with the ridge on the printer.



- 4 Close the upper front door and multipurpose feeder door.
- 5 Reconnect all cables on the back of the printer.
- 6 Plug in the printer power cord, and turn the printer on.



## Administration

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

Section	Page
Disabling the operator panel menus	141
Restoring factory default settings	142
Using the Print and Hold function	143

### ***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.)

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](#).



### ***Using the Print and Hold function***

When sending a job to the printer, you can specify in the driver that you want the printer to hold the job in memory. When you are ready to print the job, you must go to the printer and use the operator panel menus to identify which *held* job you want to print. (See [Understanding the operator panel](#) for information on using the operator panel.) You can use this function to delay printing a job, verify one copy before printing additional copies, request extra copies of a job at a later time, or print a confidential job when you can be at the printer to retrieve it.

**Note:** *Print and Hold* functions require a minimum of 16MB available printer memory. We recommend a minimum of 32MB available printer memory and a hard disk.

### ***Selecting a user name***

All confidential and held jobs have a user name associated with them. To access all held jobs or confidential jobs, you must first select your user name from a list of user names for print jobs. When the list is presented, press **Menu** to scroll through the list. Press **Select** once you find your user name for your job.

### ***Printing and deleting held jobs***

Once held jobs are stored in printer memory, you can use the printer operator panel to specify what you want to do with one or more of the jobs. You can select either Confidential Job or Held Jobs (Repeat Print, Reserve Print, and Verify Print jobs) from the **Job Menu**. Then, you select your user name from a list. If you select Confidential Job, you must enter the personal identification number (PIN) you specified in the driver when you sent the job. See [Confidential jobs](#) for more information.

From either the Confidential Job or the Held Jobs menu items, you have five choices:

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

### ***Accessing held jobs from the operator panel***

- 1 To access held jobs from the operator panel:
  - If the printer is **Busy**, press **Menu** and the Job Menu appears.
  - If the printer is **Ready**, continue to step 2.
- 2 Press and release **Menu** until you see Held Jobs or Confidential Job on the operator panel display, depending on the type of job you want to access.
- 3 Press **Select**.

**User Name** appears on the first line of the operator panel. The second line displays the names of users currently associated with Print and Hold jobs.

- 4 Press and release **Menu** until you see your user name.

**Note:** If you are looking for a Confidential Job, you are prompted to enter your PIN. See [Confidential jobs](#) for more information.

- 5 Press **Select**.
- 6 Press **Menu** until the action you want to take is on the second line of the operator panel (**Print A Job**, **Delete A Job**, and so on).
- 7 Press **Select**.
  - If you are looking for a particular job, press and release **Menu** to scroll through the list of available jobs, and press **Select** when the correct job is displayed. An asterisk (\*) appears next to the job name, indicating you have chosen to print or delete that job.
  - If you are prompted to enter the number of copies you want to print, press **Menu** to increase or decrease the number on the display, and then press **Select**.
- 8 Press **Go** to print or delete specific jobs you have marked.

The printer briefly shows messages indicating what Print and Hold functions it is performing.

### ***Recognizing when format errors occur***

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

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

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

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

### ***Repeat Print***

If you send a Repeat Print job, the printer prints all requested copies of the job *and* stores the job in memory so you can print additional copies later. You can print additional copies as long as the job remains stored in memory.

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

### ***Reserve Print***

If you send a Reserve Print job, the printer does not print the job immediately, but stores the job in memory so you can print the job later. The job is held in memory until you delete it from the Held Jobs menu. Reserve Print jobs may be deleted if the printer requires extra memory to process additional held jobs.

See [Printing and deleting held jobs](#) for information.

### ***Verify Print***

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

See [Printing and deleting held jobs](#) if you need help printing the additional copies stored in memory.

**Note:** Once all copies are printed, the Verify Print job is deleted from printer memory.

### Confidential jobs

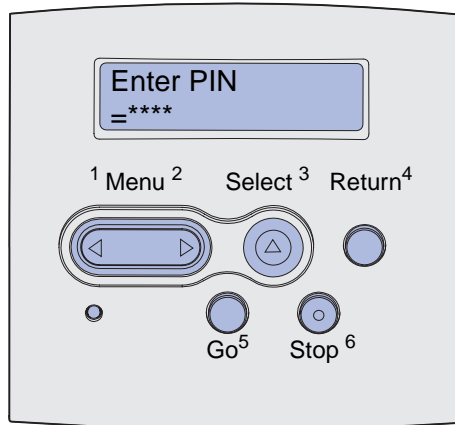
When you send a job to the printer, you can enter a personal identification number (PIN) from the driver. The PIN must be four digits using the numbers 1–6. The job is then held in printer memory until you enter the same four-digit PIN from the printer operator panel and choose to print or delete the job. This ensures that the job does not print until you are there to retrieve it, and no one else using the printer can print the job.

When you select Confidential Job from the Job Menu and then select your user name, the following prompt is displayed:

**Enter PIN:**

=\_\_\_\_\_

Use the buttons on the operator panel to enter the four-digit PIN associated with your confidential job. The numbers next to the button names identify which button to press for each digit (1–6). As you enter the PIN, asterisks are displayed to ensure confidentiality.



If you enter an invalid PIN, the message **No Jobs Found. Retry?** appears. Press **Go** to reenter the PIN, or press **Stop** to exit the Confidential Job menu.

When you enter a valid PIN, you have access to all print jobs matching the user name and PIN you entered. The print jobs matching the PIN you entered appear on the display when you enter the Print A Job, Delete A Job, and Print Copies menu items. You can then choose to print or delete jobs matching the PIN you entered. (See [Printing and deleting held jobs](#) for more information.) After printing the job, the printer deletes the confidential job from memory.

Section	Page
<a href="#">Solving basic printer problems</a>	<a href="#">147</a>
<a href="#">Solving display problems</a>	<a href="#">148</a>
<a href="#">Solving printing problems</a>	<a href="#">149</a>
<a href="#">Solving print quality problems</a>	<a href="#">153</a>
<a href="#">Solving option problems</a>	<a href="#">157</a>
<a href="#">Solving network printing problems</a>	<a href="#">158</a>
<a href="#">Solving other problems</a>	<a href="#">158</a>
<a href="#">Contacting service</a>	<a href="#">158</a>

## ***Solving basic printer problems***

Sometimes printer problems are very easy to solve. When you have a problem, first make sure that:

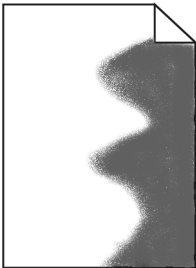
- If a message is displayed on the operator panel, see [Understanding the printer messages](#).
- The printer power cord is plugged into the printer and a properly grounded electrical outlet.
- The printer power switch is on.
- The electrical outlet is not turned off by any switch or breaker.
- Other electrical equipment plugged into the outlet is working.
- All options are properly installed.
- If you have checked all of the above and still have a problem, turn the printer power off, wait for about 10 seconds, and then turn the printer power on. This often fixes the problem.

**Note:** If any of these do not solve your problem, see the other topics listed in [Troubleshooting](#).

### *Solving display problems*

Problem	Action
Operator panel displays only diamonds or is blank.	<ul style="list-style-type: none"><li>• Turn the printer off, wait about 10 seconds, and turn the printer on.</li><li>• <b>Performing Self Test</b> appears on the operator panel. When the test is completed, <b>Ready</b> is displayed.</li></ul> <p>If the messages do not appear, turn the printer off and contact the place you bought your printer.</p>
Menu settings changed from the operator panel have no effect.	<p>Settings in the software application, the printer driver, or the printer utilities are overriding the settings made from the operator panel.</p> <ul style="list-style-type: none"><li>• Change the menu settings from the printer driver, the printer utilities, or the software application instead of the operator panel.</li><li>• Disable the settings in the printer driver, the printer utilities, or the software application so you can change settings from the operator panel.</li></ul>

## Solving printing problems

Problem	Solution
The printer prints slowly when Best quality is chosen in the printer driver.	The higher the quality you select, the slower the print job will print. If speed is necessary, choose Draft or Normal as the quality setting. Using Best slows the printer to about half the speed of Normal.
The printer prints slowly when printing on narrow media (less than 182 mm [7.2 in.] wide).	Narrow print media causes the printer to feed more slowly. If speed is necessary, print on wider media.
The printer prints slowly when printing on transparencies.	The printer slows down to optimize print quality. Changing the Media Type setting back to Plain Paper increases the speed, but transparencies may stick together in the output tray.
<p>The printer does not print at all or prints black splotches down the right side of a page.</p> 	<p>Make sure that the upper front door is fully closed on both sides.</p> <p>If the left side of the door is not fully closed, the printer will not print.</p> <p>If the right side of the door is not fully closed, black splotches may print down the right side of a page.</p>
Job did not print or incorrect characters printed.	<ul style="list-style-type: none"> <li>• Make sure <b>Ready</b> appears on the operator panel before you send a job to print. Press <b>Go</b> to return to <b>Ready</b>.</li> <li>• Make sure print media is loaded in the printer. See <a href="#">Loading trays</a> and <a href="#">Loading and using the multipurpose feeder</a>. Press <b>Continue</b>.</li> <li>• Verify that the printer is using the correct printer language.</li> <li>• Verify that the correct printer driver is being used.</li> <li>• Make sure the parallel cable or USB cable is firmly plugged in at the back of the printer.</li> <li>• Check the cable connections.</li> <li>• Make sure you are using the correct cable. If you use the parallel port, we recommend an IEEE 1284-compliant parallel cable.</li> <li>• If the printer is connected through a switch box, try a direct connection.</li> <li>• Verify that the correct print media size is selected in the printer driver or on the operator panel.</li> <li>• Make sure PCL SmartSwitch and PS SmartSwitch are set to On in the printer driver or on the operator panel.</li> <li>• If a print spooler is used, verify that the spooler is not stalled.</li> <li>• If you print across a network or on a Macintosh computer, see <a href="#">Solving network printing problems</a>.</li> <li>• Determine which host interface you are using.</li> </ul>
You are connected to the USB port, but the printer did not print.	Make sure you are using a USB-capable operating system supported by your printer.

## Troubleshooting

Problem	Solution
Print media misfeeds or multiple feeds occur.	<ul style="list-style-type: none"> <li>• Make sure the print media you are using meets the specifications for your printer. See <a href="#">Print media sources and specifications</a> for more information.</li> <li>• Flex print media before loading it in any of the sources.</li> <li>• Make sure the print media is loaded correctly.</li> <li>• Make sure the paper width and length guides on the print media sources are adjusted correctly and are not too tight.</li> <li>• Do not overfill the print media sources. Use the maximum stack height indicators to avoid overfilling sources.</li> <li>• Do not force print media into the multipurpose feeder.</li> <li>• Remove any curled print media from print media sources.</li> <li>• If the print media has a recommended print side, load the print media as described in <a href="#">Loading trays</a> and <a href="#">Loading and using the multipurpose feeder</a>.</li> <li>• Load less print media in the sources.</li> <li>• Turn the print media over or around and try printing again to see if feeding improves.</li> <li>• Do not mix print media types in the same source.</li> <li>• Do not mix reams of print media.</li> <li>• Remove the top and bottom sheets of a ream before loading the print media.</li> <li>• Load a print media source only when it is empty.</li> </ul>
Job prints from the wrong source or on the wrong print media.	Check the Paper Type setting in the printer driver or on the operator panel.
Print media does not stack neatly in an output bin.	<ul style="list-style-type: none"> <li>• Turn the print media stack over in the tray or multipurpose feeder.</li> <li>• Lift the paper rest in the standard output bin. The print media stacks more neatly.</li> </ul> <p><b>Note:</b> Legal size paper sent to the rear exit bin stacks improperly when too many sheets accumulate. You must remove the paper often from this bin.</p>
The printer has missing or damaged parts.	Contact the place where you purchased your printer.
You cannot close the upper front door.	Make sure the print cartridge is positioned correctly.
The printer is on, but nothing prints.	<ul style="list-style-type: none"> <li>• Make sure the print cartridge is installed.</li> <li>• Make sure the parallel, USB, or Ethernet cable is firmly plugged into its corresponding connector on the back of the printer.</li> </ul>
The print media skews or buckles.	<ul style="list-style-type: none"> <li>• Do not overfill the standard tray or the optional 250-sheet or 500-sheet tray. See print media capacity levels in <a href="#">Print media sources and specifications</a>.</li> <li>• Make sure the guides are flush against the edges of the print media.</li> </ul>
The print media sticks together or the printer feeds multiple sheets of print media.	<ul style="list-style-type: none"> <li>• Remove the print media from the tray and fan it.</li> <li>• Do not overfill trays. See print media capacity levels in <a href="#">Print media sources and specifications</a>.</li> </ul>



## Troubleshooting

Problem	Solution
The print media fails to feed from tray 1 (standard tray).	<ul style="list-style-type: none"> <li>Remove the print media and fan it.</li> <li>Make sure Tray 1 is selected from the printer driver or on the operator panel.</li> <li>Do not overfill the tray.</li> <li>Make sure the width and length guides on the print media sources are adjusted correctly and are not too tight.</li> <li>Make sure the tray's media dial is in the correct position for the weight of print media you are using. See <a href="#">Loading print media over 90 g/m<sup>2</sup> (24 lb)</a>.</li> </ul>
<p>The paper fails to feed from the optional tray 2 (250-sheet tray or 500-sheet tray).</p> <p><b>Note:</b> Optional trays support paper only.</p>	<ul style="list-style-type: none"> <li>Make sure the optional tray 2 is selected from the printer driver or on the operator panel.</li> <li>Make sure the tray is pushed in completely.</li> <li>Make sure the metal plate inside the tray is pressed down before inserting it into the printer. (After the tray is inserted, the metal plate springs back up.)</li> <li>Make sure the paper does not exceed the stack height indicator.</li> <li>Make sure the paper is under the paper stop. See <a href="#">Loading trays</a>.</li> <li>Make sure the width and length guides on the print media sources are adjusted correctly and are not too tight.</li> <li>Remove the paper from the optional tray 2 and fan it.</li> <li><i>250-sheet tray only:</i> Make sure the tray's media dial is in the correct position for the weight of paper you are using. See <a href="#">Loading print media over 90 g/m<sup>2</sup> (24 lb)</a>.</li> </ul>
The <b>Load Tray &lt;x&gt;</b> message appears on the operator panel even though there is paper loaded in tray 1 (standard tray) or the optional tray 2 (optional 250 or 500-sheet tray).	Make sure the tray is pushed all the way in.
A paper jam message still appears on the operator panel even though you cleared the jam.	<ul style="list-style-type: none"> <li>Make sure you cleared the entire paper path.</li> <li>Press <b>Go</b> or open and close the upper front door to restart the printer.</li> <li>Make sure the print cartridge is installed.</li> </ul>
While in PostScript 3 emulation, the printer is flushing data.	<ul style="list-style-type: none"> <li>Make sure you are using the correct PostScript driver.</li> <li>The printer does not have enough memory to print the job. Install more memory. Refer to the <i>Setup Guide</i> for information about installing optional memory cards.</li> </ul>

Problem	Solution
The paper is curled once it exits the printer.	<ul style="list-style-type: none"><li>• Use paper that is sealed in its original packaging.</li><li>• Turn the paper over.</li><li>• Rotate the paper 180 degrees.</li><li>• If you are printing a multi-page job, try duplexing it.</li><li>• When printing on heavy media, open the rear exit door for a straight-through paper path.</li><li>• Try another kind or brand of paper, such as a xerographic paper for laser printers.</li><li>• If possible, try printing in a less humid environment.</li></ul> <p>If the paper still curls, select the Reduce Curl setting from the Configuration menu (see <a href="#">Turning on Reduced Curl mode</a>).</p>
The print media is wrinkled or creased once it exits the printer.	<ul style="list-style-type: none"><li>• Make sure the print media is loaded properly.</li><li>• Try printing from a different tray.</li><li>• Turn over the stack of print media in the tray. Also try rotating the print media 180 degrees.</li></ul>

### ***Turning on Reduced Curl mode***

If print media is curled once it exits the printer, Reduced Curl mode can be turned on to help alleviate the problem. However, before turning this mode on, you should try the possible solutions offered in Troubleshooting (see [The paper is curled once it exits the printer.](#)).

**Note:** Print speed is significantly slower in Reduced Curl mode.

- 1 Turn the printer off.
- 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. **Reduced Curl** appears on the second line of the display.

- 4 Press **Select**.

**Off\*** appears on the second line of the display.

- 5 Press **Menu**.

**On** appears on the second line of the display.

- 6 Press **Select**.

**SAVED** appears briefly.

- 7 Press **Menu** until you see **Exit Config Menus**, and then press **Select**.

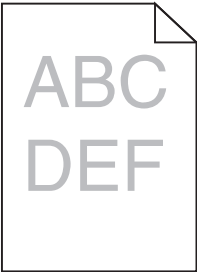
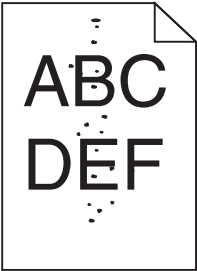
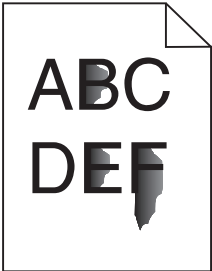
**Performing Self Test** will reappear. The printer returns to Ready state.


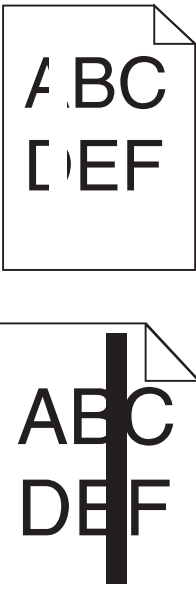
## Solving print quality problems

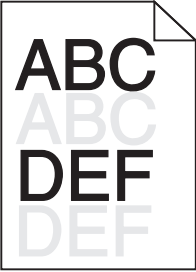
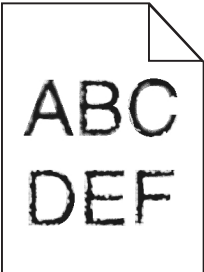
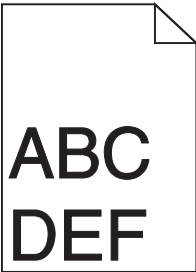

You may be able to correct many print quality problems by replacing a supply or maintenance item that has reached the end of its intended life.

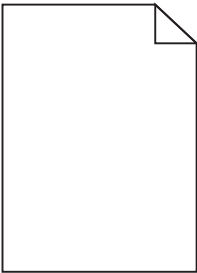
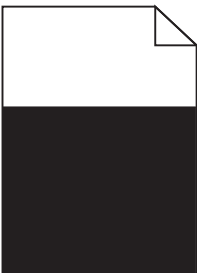
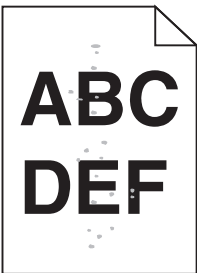

See [Determining the status of supplies](#) for information about other ways to identify consumables that need to be replaced.

Use the following table to find solutions to print quality problems you encounter. If you cannot fix the problem, contact the place where you bought your printer.

Problem	Solution
<p>Light or blurred characters.</p> 	<ul style="list-style-type: none"> <li>• The toner may be low. To utilize the remaining toner, remove the cartridge by gripping the handles with both hands. With the cartridge arrows pointing downward, shake the cartridge back and forth. Reinstall the cartridge and then press <b>Go</b>.</li> <li>• Change the Toner Darkness setting to a value greater than 8.</li> <li>• If you are printing on transparencies, card stock, or labels, be sure you selected the correct Paper Type in the printer driver or on the operator panel.</li> <li>• If you are printing on an uneven print surface, adjust the Paper Weight and Paper Texture settings.</li> <li>• Use recommended paper and other print media.</li> <li>• The printer detects a print cartridge error. Replace it.</li> <li>• Make sure print media you load in the sources is not damp.</li> </ul>
<p>Toner smudges appear on the front or back of the page.</p> 	<ul style="list-style-type: none"> <li>• Make sure the print media is straight and unwrinkled.</li> <li>• Replace the used print cartridge with a new one.</li> <li>• Toner is on the transfer roller. To help prevent this, do not load print media that is smaller than the page size of the job to be printed. Specify the correct page size in your driver or on the operator panel.</li> <li>• To clean the transfer roller, open and close the printer upper front door. The printer automatically runs its setup cycle.</li> </ul>
<p>Toner smears or rubs off the page.</p> 	<ul style="list-style-type: none"> <li>• If you are printing on an uneven print surface, change the Paper Weight and Paper Texture settings in the Paper Menu. See <a href="#">Paper Type</a>.</li> <li>• Verify that the print media is within the printer specifications. See <a href="#">Print media sources and specifications</a> for more information. If the problem continues, contact the place where you purchased your printer.</li> <li>• If you are printing on transparencies, card stock, or labels, be sure you selected the correct Paper Type in the printer driver or on the operator panel.</li> <li>• Try a different kind of paper. Paper designed for copiers provides the best quality.</li> </ul>

Problem	Solution
<p>Vertical or horizontal streaks appear on the page.</p> 	<ul style="list-style-type: none"> <li>• The toner may be low. Remove the print cartridge. To utilize the remaining toner, shake the cartridge gently, and then reinstall it. See <a href="#">Changing the print cartridge</a> for an illustration of how to shake the cartridge.</li> <li>• If you are using preprinted forms, make sure the ink can withstand temperatures of 200°C (392°F).</li> </ul>
<p>The print is light but the <b>Toner Low</b> message is not displayed.</p>	<ul style="list-style-type: none"> <li>• Remove the print cartridge and shake it from side to side to redistribute the toner to extend the life of the cartridge, and then reinstall it. See <a href="#">Changing the print cartridge</a> for an illustration of how to shake the cartridge.</li> <li>• Replace the used cartridge with a new one. See <a href="#">Changing the print cartridge</a> for instructions.</li> </ul>
<p>The <b>Toner Low</b> message is displayed.</p>	<ul style="list-style-type: none"> <li>• Remove the print cartridge and shake it from side to side to redistribute the toner to extend the life of the cartridge, and then reinstall it. See <a href="#">Changing the print cartridge</a> for an illustration of how to shake the cartridge.</li> <li>• Replace the used cartridge with a new one. See <a href="#">Changing the print cartridge</a> for instructions.</li> </ul>
<p>Solid black areas or white streaks appear on transparencies or paper.</p> 	<ul style="list-style-type: none"> <li>• Choose a different fill pattern in your software application.</li> <li>• Try a different type of print media. Print media designed for copiers provides the best quality.</li> <li>• Remove the print cartridge and shake it from side to side to redistribute the toner to extend the life of the cartridge, and then reinstall it. See <a href="#">Changing the print cartridge</a> for an illustration of how to shake the cartridge.</li> <li>• Replace the used cartridge with a new one. See <a href="#">Changing the print cartridge</a> for instructions.</li> </ul>

Problem	Solution
<p>Faint images or repetitive spots appear on the page.</p> 	<ul style="list-style-type: none"> <li>• Try a different type of print media. Print media designed for copiers provides the best quality.</li> <li>• Replace the used print cartridge with a new one. See <a href="#">Changing the print cartridge</a> for instructions.</li> </ul>
<p>Characters have jagged or uneven edges, or image quality is poor.</p> 	<ul style="list-style-type: none"> <li>• Change the <a href="#">Print Resolution</a> setting in the Quality Menu to 600 dpi or 1200 dpi.</li> <li>• If you are using downloaded fonts, verify that the fonts are supported by the printer, the host computer, and the software application.</li> <li>• Resolution was automatically reduced. Reduce the complexity of the print job or add printer memory.</li> </ul>
<p>The job prints, but the left and top margins are incorrect.</p> 	<ul style="list-style-type: none"> <li>• Make sure the <a href="#">Paper Size</a> setting in the Paper Menu is correct.</li> <li>• Make sure the margins are set correctly in your software application.</li> </ul>
<p>Printing is too dark.</p> 	<p>Change the <a href="#">Toner Darkness</a> setting in the Quality Menu.</p> <p><b>Note:</b> Macintosh computer users should make sure the lines per inch (lpi) setting is not set too high in the software application.</p>

Problem	Solution
<p>Pages are blank.</p> 	<ul style="list-style-type: none"> <li>• The print cartridge may be out of toner or defective. Replace the used cartridge with a new one. See <a href="#">Changing the print cartridge</a> for instructions.</li> <li>• You may have a software error. Try turning the printer off and back on.</li> <li>• Make sure the packaging material is removed from the print cartridge. See <a href="#">Changing the print cartridge</a> for information about removing the packaging.</li> <li>• Check the print cartridge to be sure it is installed correctly. See <a href="#">Changing the print cartridge</a> for more information.</li> </ul>
<p>Part or all of the page is printed in black.</p> 	<ul style="list-style-type: none"> <li>• Check the print cartridge to see if it is installed correctly. See <a href="#">Changing the print cartridge</a> for more information.</li> <li>• If the charge roll has been replaced, verify that it is installed correctly.</li> </ul>
<p>Toner fog or background shading appears on the page.</p> 	<ul style="list-style-type: none"> <li>• Check the print cartridge to make sure it is installed correctly. See <a href="#">Changing the print cartridge</a> for more information.</li> <li>• Change the print cartridge. See <a href="#">Changing the print cartridge</a> for more information.</li> <li>• If the problem continues, change the charge roll. See <a href="#">Replacing the charge roll</a> for more details.</li> </ul>
<p>Unexpected characters print or characters are missing.</p> 	<ul style="list-style-type: none"> <li>• Make sure you are using the correct printer driver.</li> <li>• Turn the printer off and on.</li> <li>• Make sure the parallel, USB, or Ethernet cable is firmly plugged into its corresponding connector on the back of the printer.</li> <li>• Access the menus by following the instructions on the Printer Settings Configuration sheet: <ul style="list-style-type: none"> <li>– Select Hex Trace mode to determine what the problem is. For more information, see <a href="#">Using Hex Trace mode</a>.</li> <li>– Select Restore Factory Defaults. For more information, see <a href="#">Restoring factory default settings</a>.</li> </ul> </li> </ul>

Problem	Solution
Print quality is poor on the second side of a duplex print job.	In the Paper Menu, change the <b>Paper Texture</b> to Rough.
Print quality is poor when using 24# paper with a high cotton content (rough paper).	In the Paper Menu, change the <b>Paper Texture</b> to Rough and the <b>Paper Weight</b> to Heavy.

### ***Solving option problems***

Problem	Solution
Option does not operate correctly after it is installed, or it quits working.	<ul style="list-style-type: none"><li>• Turn the printer power off, wait for about 10 seconds, and turn the printer power on. If this does not fix the problem, unplug the printer and check the connection between the option and printer.</li><li>• Make sure the option is installed and selected in the printer driver you are using.</li><li>• For Macintosh users: Make sure the printer is set up in Chooser.</li></ul> <b>Optional drawer:</b> <ul style="list-style-type: none"><li>– Make sure the connection between the optional drawer and the printer is secure. Refer to the <i>Setup Guide</i>.</li><li>– Make sure the print media is loaded correctly. See <b>Loading trays</b> for more information.</li></ul> <b>Optional flash memory card:</b> <ul style="list-style-type: none"><li>– Make sure the flash memory card is securely connected to the printer system board.</li></ul> <b>Optional printer memory card:</b> <ul style="list-style-type: none"><li>– Make sure the printer memory card is securely connected to the printer system board.</li></ul>

### ***Solving network printing problems***

Problem	Solution
Job did not print or incorrect characters printed.	<p>If you are using a print server, verify that it is set up properly and the network cable is connected.</p> <p><b>Note:</b> Refer to the documentation that came with your print server for more information.</p> <p>For Novell users:</p> <ul style="list-style-type: none"><li>• Make sure the netware.drv file is dated October 24, 1994, or later.</li><li>• Make sure the NT (no tabs) flag is included in the capture statement.</li></ul> <p>For Macintosh users, verify that the printer is set up correctly in Chooser.</p>

### ***Solving other problems***

Problem	Solution
How do I get updated printer drivers or utilities?	Contact the place where you purchased your printer.
Where are the printer escape codes listed?	The drivers CD that was shipped with your printer contains an Adobe Acrobat file with a complete list of Printer Command Language (PCL) escape codes.

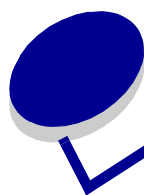
### ***Contacting service***

When you call for printer service, be prepared to describe the problem you are experiencing or the error message on the display.

Know your printer model type and serial number. Refer to the label on the back of the printer near the power cord for this information. The serial number is also listed on the menu settings page you can print from the Utilities Menu. See [Printing the menu settings and network setup pages](#) for more information.

For information about obtaining service, contact the place where you bought your printer.





# Notices

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## 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.

## Electronic emission notices

### Federal Communications Commission (FCC) compliance information statement

This printer, type 4048 or 4523, has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

The FCC Class B limits are designed to provide reasonable protection against harmful interference 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.

## 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.

## 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 has been signed by the Director of Manufacturing and Technical Support, Lexmark International, S.A., Boigny, France.

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

## Japanese VCCI notice

If your product includes the following symbol on the regulatory label:  
the following statement is applicable to your product.



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下さい。

## Korean MIC statement

If your product includes the following symbol on the regulatory label:  
the following statement is applicable to your product.



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
Idling	30

## 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	530 W
Ready	Printer is waiting for a print job	30 W
Power Saver	Printer is in energy saving mode	13 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.

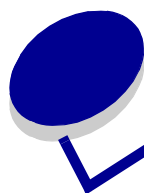
## Power Saver

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 for this printer is 60 minutes. 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 Setup Menu (see [page 88](#)).

## 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.



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Infoprint 1422  
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