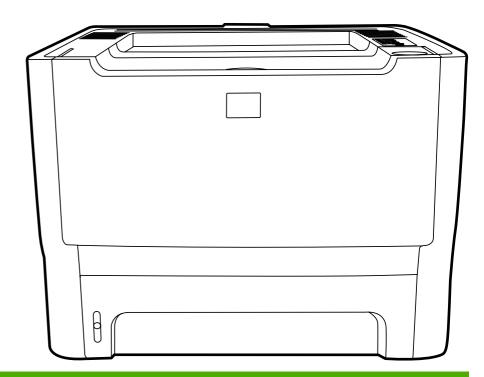
# HP LaserJet P2015 Series User Guide







# HP LaserJet P2015 Series

User Guide



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# 1 Product information

This chapter provides information on the following topics:

- Product features
- Identify product parts

# **Product features**

The following are the standard configurations for the HP LaserJet P2015 Series printers.

# **HP LaserJet P2015 printer**

- 27 ppm (Letter-size), 26 ppm (A4–size)
- First page out in as few as 8.5 seconds
- ProRes 1200 (provides fine-line detail at 1200 x 1200 dpi)
- 600 dpi (provides 600 x 600 dpi output with Resolution Enhancement Technology (REt) for improved text)
- 50-sheet multipurpose tray (tray 1)
- 250-sheet enclosed input tray (tray 2)
- Optional additional 250-sheet input tray (tray 3)
- EconoMode
- Print watermarks, booklets, multiple pages per sheet (N-up), and first page on different media than the rest of the document
- 32 MB RAM
- Memory can be upgraded to 288 MB
- 3,000-page or 7,000-page print cartridge
- PCL 6, PCL 5e, and HP postscript level 3 emulation (printer automatically determines and switches to the appropriate language)
- Compatible with USB 2.0 specifications
- Supported by Windows® 98 (printer driver only), Me (printer driver only), 2000, Server 2003 (printer driver only), XP 32-bit, XP 64-bit (printer driver only)
- Supported by Macintosh OS X V10.2.8, V10.3.9, V10.4.3
- On/off switch
- HP ToolboxFX (provides printer status information, troubleshooting information, and printer configuration information)
- Embedded Web server (EWS) with internal pages that are localized in 16 languages
- 46 HP fonts
- 35 HP postscript emulation level 3 fonts

# **HP LaserJet P2015d printer**

The HP LaserJet P2015d printer includes all of the features of the HP LaserJet P2015 plus automatic two-sided (duplex) printing.

# **HP LaserJet P2015n printer**

The HP LaserJet P2015n printer includes all of the features of the HP LaserJet P2015 plus an HP internal network port.

# **HP LaserJet P2015dn printer**

The HP LaserJet P2015dn printer includes all of the features of the HP LaserJet P2015d plus an HP internal network port.

# **HP LaserJet P2015x printer**

The HP LaserJet P2015x printer includes all of the features of the HP LaserJet P2015dn plus an additional 250-sheet input tray (tray 3).

ENWW Product features

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# **Identify product parts**

The following illustrations identify the components of the HP LaserJet P2015 Series printers. The HP LaserJet P2015dn model is shown.

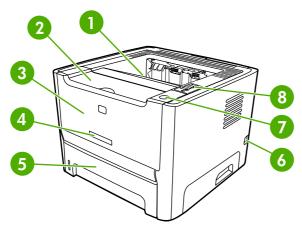


Figure 1-1 HP LaserJet P2015dn, front view

1	Output bin
2	Print-cartridge door
3	Tray 1 (50–sheet multipurpose tray)
4	Model number
5	Tray 2 (250-sheet enclosed input tray)
6	On/off switch
7	Print-cartridge-door button
8	Control panel

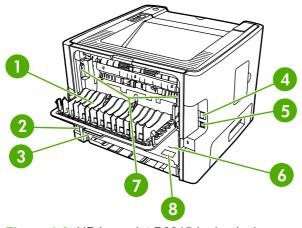


Figure 1-2 HP LaserJet P2015dn, back view

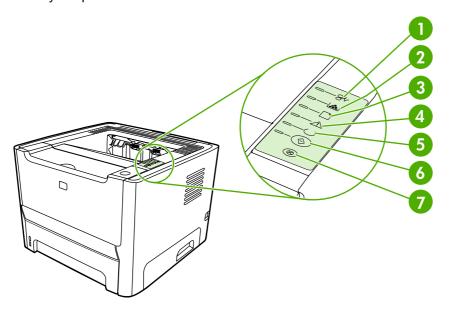
1	Straight-through output door			
2	Power receptacle			

3	Automatic two-sided-printing media-size selector (duplex models only)			
4	HP internal network port (network-ready models only)			
5	USB port			
6	Rear automatic two-sided path door (duplex models only)			
7	Jam-clearing levers			
8	Serial number			

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# 2 Control panel

The printer control panel is comprised of six lights and two buttons. The lights produce patterns that identify the printer status.



- 1 Jam light: Indicates that there is a jam in the printer.
- **Toner light**: When the print cartridge is low, the Toner light illuminates. When the print cartridge is out of the printer, the Toner light blinks.
- 3 Paper out light: Indicates that the printer is out of paper.
- 4 Attention light: Indicates that the print cartridge door is open or other errors exist.
- **Ready light**: Indicates that the printer is ready to print.
- 6 Go button and light.
- 7 Cancel **button**: To cancel the print job that is currently printing, press the Cancel button.



**NOTE** See Status-light patterns for a description of the light patterns.

# 3 Product software

For easy printer setup and access to the full range of printer features, HP strongly recommends that you install the software that is provided with the printer.

The following sections describe the software that is provided with the HP LaserJet P2015 Series printers:

- Supported operating systems
- Printer connections
- Software for Windows
- Software for Macintosh

# **Supported operating systems**

The printer comes with software for the following operating systems:

- Windows 98 (printer driver only)
- Windows Me (printer driver only)
- Windows 2000
- Windows Server 2003 (printer driver only)

For more information about upgrading from Windows 2000 Server to Windows Server 2003; using Windows Server 2003 Point and Print; or using Windows Server 2003 Terminal Services and Printing, go to <a href="http://www.microsoft.com/">http://www.microsoft.com/</a>.

Windows XP (32-bit)

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- Windows XP (64-bit) (printer driver only)
- Macintosh OS X V10.2.8, V10.3.9, and V10.4.3

Chapter 3 Product software ENWW

## **Printer connections**

This section shows you how to connect the printer to your computer or network by a USB or network connection.

## **USB** connections

All HP LaserJet P2015 Series printers support USB connections.

- 1. Insert the software installation CD into the computer CD-ROM drive.
- If the installation program does not start automatically, browse the CD contents and run the SETUP.EXE file.
- Follow the on-screen instructions.

#### **Network connections**

The HP LaserJet P2015n, HP LaserJet P2015dn, and HP LaserJet P2015x printers can connect to networks through the HP internal networking port. External network print servers are available for the HP LaserJet P2015 and HP LaserJet P2015d printers. The following table identifies what is required to add networking to any HP LaserJet P2015 Series printer.

Table 3-1 Networking options

HP LaserJet model	10/100Base-TX
P2015 and P2015d	HP Jetdirect 175x
	HP Jetdirect en3700
P2015n, P2015dn, P2015x	Included

To order the print server, see <u>10/100 networking print servers</u>.

#### Connect the printer to the network

To connect a networking-equipped HP LaserJet P2015 Series printer to your network, you need the following items:

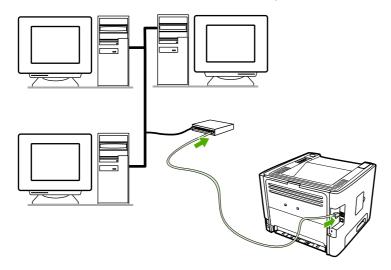
- Functional wired network
- CAT-5 Ethernet cable

To connect the printer to your network, perform the following steps:

Connect the CAT-5 Ethernet cable to an available port on the Ethernet hub or router.

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2. Connect the Ethernet cable to the Ethernet port on the back of the printer.



- **3.** Verify that one of the network lights (10 or 100) is illuminated on the network port located on the back of the printer.
- **4.** Print a Network Configuration page: When the printer is in the Ready state, press and hold the Go button for 5 seconds. The Network Configuration page automatically prints with the Configuration page.



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**NOTE** To resolve network connection problems, see <u>Network setup problem solving</u>.

## Install the printer software for the network printer

To use the printer on the network, install the printer software on a computer that is connected to the network. See <u>Software for Windows</u> or <u>Software for Macintosh</u> for information about installing the printer software.

Chapter 3 Product software

## **Software for Windows**

The following sections describe the Windows software that is available for the HP LaserJet P2015 Series printers.

## Windows printer drivers

A printer driver is the software that provides access to printer features and provides the means for the computer to print to the printer.

## Windows driver types

Three Windows printer drivers are available: PCL 5e, PCL 6, and HP postscript level 3 emulation. Choose a printer driver based on the way you use the printer.

- Use the PCL 5e printer driver for faster printer performance and a quick first page out with 600 dpi print quality.
- Use the **PCL 6** printer driver for enhanced **print quality**. The PCL 6 driver allows you to take advantage of HP's proprietary ProRes 1200 and FastRes 1200 technologies. Printer performance and first page out may be slower with this driver.
- Use the **HP postscript level 3 emulation** printer driver for HP postscript level 3 emulation. Certain printer features are not available in this printer driver.

The printer automatically switches between HP postscript level 3 emulation and PCL printer languages depending on the driver that you have selected.

## Install the Windows printer software

The following sections provide instructions for installing the printer driver on Windows operating systems.

To install printer software for Windows XP (64-bit) and Windows Server 2003

See the operating system documentation for instructions on installing a printer driver.

To install printer software for Windows 98 (driver only), Me (driver only), 2000, and XP (32-bit)

Insert the software CD that came with the printer into the computer CD-ROM drive. Follow the on-screen installation instructions.



**NOTE** If the Welcome screen does not open, click **Start** on the Windows task bar, click **Run**, type Z:\setup (where Z is your CD drive letter), and click **OK**.

## Configure the Windows printer driver

Use one of the following methods to open the Windows printer driver from your computer:

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Operating system	To change the settings for all print jobs until the software program is closed		To change the print job default settings (for example, turn on Print on Both Sides by default)		To change the configuration settings (for example, add a tray or enable/disable Manual Duplexing)	
Windows 98, Me, 2000, XP (32–bit and 64–bit), and Server 2003	1.	On the <b>File</b> menu in the software program, click <b>Print</b> .	1.	Click Start, click Settings, and then click Printers or Printers and Faxes.	1.	Click Start, click Settings, and then click Printers or Printers and Faxes.
2000	2.	Select the name of the printer, and then click <b>Properties</b> or <b>Preferences</b> .	2.	Right-click the printer icon, and then select <b>Printing Preferences</b> .	2.	Right-click the printer icon, and then select <b>Properties</b> .
		e steps can vary; this cedure is most common.			3.	Click the <b>Device Settings</b> tab.

## **HP ToolboxFX**

HP ToolboxFX is software that you can use to complete the following tasks:

- Check the printer status.
- Configure the printer settings.
- View troubleshooting information.
- View online documentation.

See HP ToolboxFX for more information.

## **Embedded Web server**

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You can use the embedded Web server to configure the printer, view status information, and obtain problem-solving information.

See Embedded Web server for more information.

Chapter 3 Product software ENWW

# **Software for Macintosh**

The following sections describe the Macintosh software that is available for the HP LaserJet P2015 Series printers.

## **Macintosh printer drivers**

A printer driver is the software component that provides access to printer features and provides the means for the computer to communicate with the printer.

## Install the Macintosh printer driver

This section explains how to install the printing system software for Macintosh OS X V10.2.8, V10.3.9 and V10.4.3.



**NOTE** USB queues are created automatically when the printer is attached to the computer. However, the queue will use a generic PPD if the installer has not been run before the USB cable is connected. To change the queue PPD, open the Print Center or Printer Setup Utility, select the correct printer queue, and then click **Show Info** to open the **Printer Info** dialog box. In the pop-up menu, select **Printer Model**, and then, in the pop-up menu in which **Generic** is selected, select the correct PPD for the printer.

Use the following procedure to install the Macintosh printer driver:

- 1. Insert the printer CD into the CD-ROM drive and run the installer.
- 2. Double-click the CD icon on the desktop
- Double-click the Installer icon.
- **4.** Follow the instructions on the computer screen.
- 5. Print a test page or a page from any software program to make sure that the printer software is correctly installed.

If installation fails, reinstall the software. If this fails, see the Late-Breaking Information section of the Install Notes. The Install Notes are located on the printer CD or at the support Web site (see <a href="How to contact HP">How to contact HP</a> for the Web address).

## **Configure the Macintosh printer driver**

Use one of the following methods to open the Macintosh printer driver from your computer:

Operating System	print jobs until the software settings (for example, turn		change the print job default tings (for example, turn on nt on Both Sides by default)	on settings (for example, add a		
Macintosh OS X V10 .2.8, V10.3.9, and V10.4.3	1.	On the <b>File</b> menu, click <b>Print</b> .	1.	On the <b>File</b> menu, click <b>Print</b> .	1.	Open <b>Printer Setup Utility</b> by selecting the hard drive, clicking <b>Applications</b> ,
V10.1.0	2.	Change the settings that you want on the various pop-up menus.	2.	Change the settings that you want on the various pop-up menus.		clicking Utilities, then double-clicking Printer Setup Utility.
			3.	On the <b>Presets</b> pop-up menu, click <b>Save as</b> and type a name for the preset.	2.	Click the print queue.

ENWW Software for Macintosh 15

Operating System	To change the settings for all print jobs until the software program is closed	To change the print job default settings (for example, turn on Print on Both Sides by default)	settings (for example, add a	
		These settings are saved in the <b>Presets</b> menu. To use the new settings, you must select the	3.	On the <b>Printers</b> menu, click <b>Show Info</b> .
		saved preset option every time you open a program and print.	4.	Click the <b>Installable Options</b> menu.

# **PostScript Printer Description files (PPDs)**

PPDs, in combination with the HP postscript level 3 emulation driver, access the printer features and allow the computer to communicate with the printer. An installation program for the PPDs is provided on the HP LaserJet P2015 Series printer CD.

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# 4 Supported paper and other media

The HP LaserJet P2015 Series printer can use a variety of paper and other print media in accordance with the guidelines in this user guide. Media that does not meet these guidelines might cause the following problems:

- Poor print quality
- Increased jams
- Premature wear on the printer, requiring repair

For best results, use only HP brand paper and print media. Hewlett-Packard Company cannot recommend the use of other brands. Because they are not HP products, HP cannot influence or control their quality.

It is possible for media to meet all of the guidelines in this user guide and still not produce satisfactory results. This might be the result of improper handling, unacceptable temperature and humidity levels, or other variables over which Hewlett-Packard has no control.

Before you purchase a large quantity of media, test the media and make sure that it meets the requirements specified in this user guide and in *HP LaserJet printer family media guide*. The guidelines can be downloaded from <a href="http://www.hp.com/support/ljpaperguide/">http://www.hp.com/support/ljpaperguide/</a>, or see <a href="Order supplies and accessories">Order supplies and accessories</a> for more information about ordering the guidelines.



**CAUTION** Using media that does not meet Hewlett-Packard's specifications might cause problems for the printer, requiring repair. This repair is not covered by the Hewlett-Packard warranty or service agreements.

# Optimize print quality for media types

The HP LaserJet P2015 Series printers provide a number of print modes that allow the unit to adapt to various media. You can change the print modes on the **Paper** tab in the printer driver, in HP ToolboxFX, or in the embedded Web server.



**NOTE** When using the CARDSTOCK, ENVELOPE, LABEL, and ROUGH modes, the printer pauses between pages and the number of pages per minute decreases.

Table 4-1 Driver print modes

Mode	Media type
PLAIN	75 to 104 g/m² (20 to 27 lb)
LIGHT	Less than 75 g/m² (20 lb)
HEAVY	90 to 105 g/m² (24 to 28 lb)
CARDSTOCK	Card stock or thick media
TRANSPARENCY	4-mil, 0.1 Monochrome Overhead Transparencies (OHTs)
ENVELOPE	Standard HP LaserJet envelopes
LABEL	Standard HP LaserJet labels
BOND	Bond paper
ROUGH	Rough paper

# **Guidelines for using media**

You can print on a variety of media, such as paper (including up to 100% recycled-fiber-content paper), envelopes, labels, transparencies, and custom-size media. The following are the supported media sizes:

- Minimum: 76 by 127 mm (3 x 5 inches)
- Maximum: 216 by 356 mm (8.5 x 14 inches)

Properties such as weight, grain, and moisture content are important factors that affect printer performance and quality. To achieve the best possible print quality, only use high-quality media that is designed for laser printers.



**NOTE** Always test a sample of the media before you purchase large quantities.

#### **HP** media

HP recommends a variety of media. See the HP LaserJet Printer Family Print Media Guide (<a href="http://www.hp.com/support/ljpaperguide/">http://www.hp.com/support/ljpaperguide/</a>) for a full list.

#### Media to avoid

Media outside the printer specifications will cause a loss of print quality and increase the occurrence of jams.

- Do not use paper that is too rough.
- Do not use paper with cutouts or perforations other than standard 3-hole punched paper.
- Do not use multi-part or multi-page forms.
- Do not use paper with a watermark if you are printing solid patterns.

# Media that can damage the printer

Avoid media that can damage the printer.

- Do not use media with staples attached.
- Do not use transparencies designed for inkjet printers or other low temperature printers. Use only transparencies that are specified for use with HP LaserJet printers.
- Do not use photo paper intended for inkjet printers.
- Do not use paper that is embossed or coated and is not designed for the temperatures of the printer's image fuser. Select media that can tolerate temperatures of 200° C (392° F) for 0.1 second.
   HP produces a selection of media that is designed for the HP LaserJet P2015 Series printers.
- Do not use letterhead paper with low temperature dyes or thermography. Preprinted forms or letterhead must use inks that can tolerate temperatures of 200° C (392° F) for 0.1 second.
- Do not use any media that produces hazardous emissions, or that melts, offsets, or discolors when exposed to 200° C (392° F) for 0.1 second.

To order HP LaserJet printing supplies, go to <a href="http://www.hp.com/go/ljsupplies/">http://www.hp.com/go/ljsupplies/</a> in the U.S. or to <a href="http://www.hp.com/ghp/buyonline.html/">http://www.hp.com/ghp/buyonline.html/</a> worldwide.

## **Paper**

For best results, use conventional 75 g/m<sup>2</sup> (20 lb) paper. Make sure that the paper is of good quality and free of cuts, nicks, tears, spots, loose particles, dust, wrinkles, voids, and curled or bent edges.

#### Labels

Print labels from tray 1 using the straight-through output path. See <u>Print on transparencies or labels</u> and <u>Straight-through output path</u> for more information.



**CAUTION** Do not feed a sheet of labels through the printer more than once. The adhesive degrades and might damage the printer.

#### Label construction

When selecting labels, consider the quality of the following components:

- Adhesives: The adhesive material should be stable at 200° C (392° F), the printer's maximum temperature.
- **Arrangement**: Only use labels with no exposed backing between them. Labels can peel off sheets that have spaces between the labels, causing serious jams.
- Curl: Prior to printing, labels must lie flat with no more than 13 mm (0.5 in.) of curl in any direction.
- Condition: Do not use labels with wrinkles, bubbles, or other indications of separation.

## **Transparencies**

Transparencies must be able to withstand 200° C (392° F), the printer's maximum temperature.

# **Envelopes**

Print envelopes from tray 1 using the straight-through paper path. See <u>Print on an envelope</u> and <u>Straight-through output path</u> for more information.

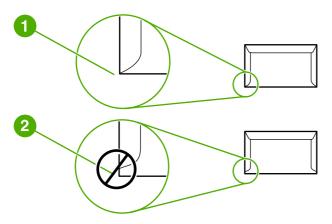
#### **Envelope construction**

Envelope construction is critical. Envelope fold lines can vary considerably, not only between manufacturers but also within a box from the same manufacturer. When selecting envelopes, consider the following components:

- **Weight**: The weight of the envelope paper should not exceed 90 g/m² (24 lb), or jamming might result.
- Construction: Prior to printing, envelopes should lie flat with less than 6 mm (0.25 in.) curl and should not contain air. Envelopes that trap air may cause problems. Do not use envelopes that contain clasps, snaps, tie strings, transparent windows, holes, perforations, cut outs, synthetic materials, stamping, or embossing. Do not use envelopes with adhesives that do not require moistening, but rely instead on pressure to seal them.
- **Condition**: Make sure that the envelopes are not wrinkled, nicked, or otherwise damaged. Make sure that the envelopes do not have any exposed adhesive.
- Sizes: From 90 x 160 mm (3.5 x 6.3 in.) to 178 x 254 mm (7 x 10 in.).

## **Envelopes with double-side seams**

An envelope with double-side-seam construction has vertical seams at both ends of the envelope rather than diagonal seams. This style might be more likely to wrinkle. Make sure that the seam extends all the way to the corner of the envelope as shown in the following illustration:



- 1 acceptable envelope construction
- 2 unacceptable envelope construction

#### **Envelopes with adhesive strips or flaps**

Envelopes with a peel-off adhesive strip or with more than one flap that folds over to seal must use adhesives compatible with the heat and pressure in the printer: 200° C (392° F). The extra flaps and strips might cause wrinkling, creasing, or jams.

#### **Envelope storage**

Proper storage of envelopes contributes to good print quality. You should store envelopes flat. If air is trapped in an envelope, creating an air bubble, the envelope might wrinkle during printing.

# Card stock and heavy media

You can print many types of card stock from the paper input tray, including index cards and postcards. Some card stock performs better than others because its construction is better suited for feeding through a laser printer.

For optimum printer performance, do not use paper heavier than 157 g/m² (42 lb). Paper that is too heavy might cause misfeeds, stacking problems, paper jams, poor toner fusing, poor print quality, or excessive mechanical wear.



**NOTE** You might be able to print on heavier paper if you do not fill the input tray to capacity and if you use paper with a smoothness rating of 100-180 Sheffield.

#### Card stock construction

- **Smoothness**: 135-157 g/m² (36-42 lb) card stock should have a smoothness rating of 100-180 Sheffield. 60-135 g/m² (16-36 lb) card stock should have a smoothness rating of 100-250 Sheffield.
- Construction: Card stock should lie flat with less than 5 mm (0.2 in.) of curl.
- Condition: Make sure that the card stock is not wrinkled, nicked, or otherwise damaged.
- Sizes: Only use card stock within the following size ranges:
  - **Minimum**: 76 x 127 mm (3 x 5 in.)
  - **Maximum**: 216 x 356 mm (8.5 x 14.0 in.)

## Card stock guidelines

Set margins at least 2 mm (0.08 in.) away from the edges.

## Letterhead and preprinted forms

Many manufacturers now offer premium paper advertised as laser-compatible or laser-guaranteed. Some of the rougher surface finishes, such as cockle, laid, or linen, might require the special fuser modes that are available on some printer models in order to achieve adequate toner adhesion.



**NOTE** Some page-to-page variation is normal when printing with laser printers. This variation cannot be observed when printing on plain paper. However, this variation is obvious when printing on preprinted forms because the lines and boxes are already placed on the page.

To avoid problems when using preprinted forms, embossed paper, and letterhead, observe the following guidelines:

- Avoid using low-temperature inks (the kind used with some types of thermography).
- Use preprinted forms and letterhead paper that have been printed by offset lithography or engraving.
- Use forms that have been created with heat-resistant inks that will not melt, vaporize, or release undesirable emissions when heated to 200° C (392° F) for 0.1 second. Typically, oxidation-set or oil-based inks meet this requirement.
- When the form is preprinted, be careful not to change the moisture content of the paper, and do not use materials that change the paper's electrical or handling properties. Seal the forms in moisture-proof wrap to prevent moisture changes during storage.
- Avoid processing preprinted forms that have a finish or coating.
- Avoid using heavily embossed or raised-letterhead papers.
- Avoid papers that have heavily textured surfaces.
- Avoid using offset powders or other materials that prevent printed forms from sticking together.

# 5 Print tasks

This chapter provides information on the following topics:

- Load media
- Print-quality settings
- Print on special media
- Print on both sides of the page (duplex)
- Print multiple pages on a single sheet of paper (N-up printing)
- Print booklets
- Print watermarks
- Cancel a print job

# Load media

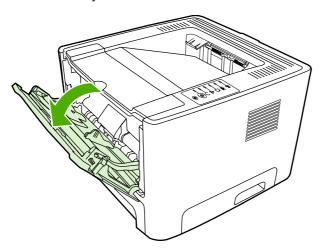
The following sections describe how to load media into the different input trays.



**CAUTION** If you try to print on media that is wrinkled, folded, or damaged in any way, a jam might occur. See <u>Clearing jams</u> for more information.

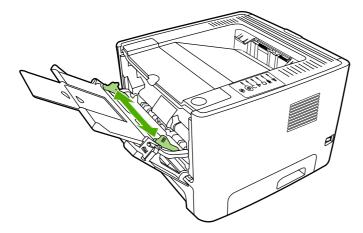
# Tray 1

Tray 1 is accessed from the front of the printer. The printer prints from tray 1 before attempting to print from other trays.



Tray 1 holds up to fifty sheets of 75 g/m² (20 lb) media or ten envelopes, ten transparencies, or ten cards. You can use tray 1 to print the first page on media different from the remainder of the document.

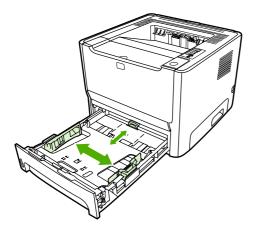
Media guides ensure that the media is correctly fed into the printer and that the print is not skewed (crooked on the media). When loading media, adjust the media guides to match the width of the media that you are using.



# Tray 2 and optional tray 3

Tray 2 and optional tray 3 hold up to 250 pages of 75 g/m $^2$  (20 lb) paper, or fewer pages of heavier media (25 mm (0.9 in) or less stack height). Load media with the top forward and the side to be printed on facing down.

Media guides ensure that the media feeds correctly into the printer and that the print is not skewed. Tray 2 has side and rear media guides. When loading media, adjust the media guides to match the length and width of the media that you are using.

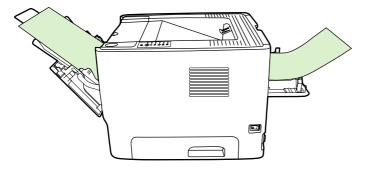




**NOTE** When you add new media, make sure that you remove all of the media from the input tray and straighten the stack of new media. This reduces jams by preventing multiple sheets of media from feeding through the printer at one time.

## Straight-through output path

Use the straight-through output path when printing envelopes, transparencies, heavy media, or any media that tends to curl when printed. If you open the straight-through output door before printing media from tray 1, tray 2, or optional tray 3, the media exits the printer through the straight-through output path.





**NOTE** Printed media does not stack when you use the straight-through output path. The media drops to the surface below unless you remove each sheet as it exits the printer.

#### Manual feed

You can use manual feed when printing mixed media. For example, you can use manual feed to print an envelope, then a letter, then an envelope, and so on. Load envelopes in tray 1 and load letterhead into tray 2.

To print using manual feed, open the printer Properties or Printer Setup, and then select **Manual Feed** (tray 1) from the **Source Tray** drop-down list. See <u>Configure the Windows printer driver</u> or <u>Configure the Macintosh printer driver</u> for instructions. After you have enabled manual feed, press the Go button to print.

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# **Print-quality settings**

Print-quality settings affect print resolution and toner usage.

Use the following procedure to change print-quality settings:

- 1. Open the printer Properties (or Printing Preferences in Windows 2000 and XP). See <u>Configure the Windows printer driver</u> or <u>Configure the Macintosh printer driver</u> for instructions.
- 2. On the **Paper/Quality** tab or the **Finishing** tab (the **Paper Type/Quality** tab for some Mac drivers), select the print quality setting you want to use. The following options are available:
  - 1200 dpi: This setting uses ProRes 1200 to provide fine-line detail at 1200 x 1200 dpi.
  - **1200 dpi effective output quality**: This setting provides 1200 dpi effective output quality using FastRes 1200.
  - **600 dpi**: This setting provides 600 x 600 dpi output with Resolution Enhancement technology (REt) for improved text.
  - EconoMode: Text is printed using less toner. This setting is useful when you are printing drafts. You can turn on this option independently of other print-quality settings. See EconoMode for more information.



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**NOTE** Not all printer features are available in all drivers or operating systems. See the printer Properties (driver) online Help for information about availability of features for that driver.

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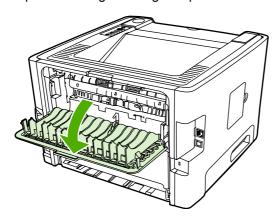
## Print on special media

The following sections explain how to print on a variety of media.

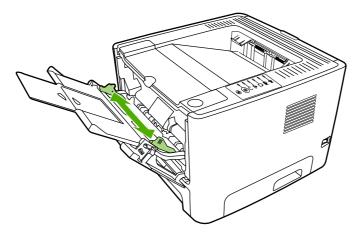
## Print on an envelope

Only use envelopes that are recommended for laser printers. See <u>Guidelines for using media</u> for more information.

1. Open the straight-through output door.



2. Open tray 1 and adjust the media guides to the width of the envelope.

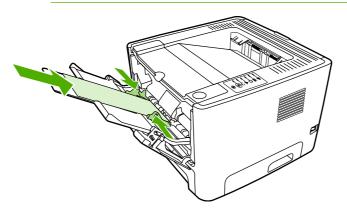


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3. Place the envelope with the side to be printed facing up and the top edge along the left media guide.



NOTE If the envelope has a flap on the short edge, feed that edge into the printer first.



- 4. Open the printer Properties (or Printing Preferences in Windows 2000 and XP). See Configure the Windows printer driver or Configure the Macintosh printer driver for instructions.
- On the Paper/Quality tab or the Paper tab (the Paper Type/Quality tab for some Mac drivers), choose the correct media type.



**NOTE** Not all printer features are available in all drivers or operating systems. See the printer Properties (driver) online Help for information about availability of features for that driver.

6. Print the document.

To print using manual feed, see Manual feed.

## Print on transparencies or labels

Use transparencies and labels that are recommended for use in laser printers. See <u>Guidelines for using</u> media for more information.



**CAUTION** Be sure to set the correct media type in the printer settings as instructed below. The printer adjusts the fuser temperature according to the media type setting. When printing on special media such as transparencies or labels, this adjustment prevents the fuser from damaging the media as it passes through the printer.

**CAUTION** Inspect the media to make sure that it is not wrinkled or curled and that it does not have any torn edges or missing labels.

- 1. Open the straight-through output door.
- 2. Open tray 1 and adjust the media guides to the width of the media.
- 3. Load media in tray 1. Make sure that the top of the media is forward and the side to be printed on (rough side) is facing up.



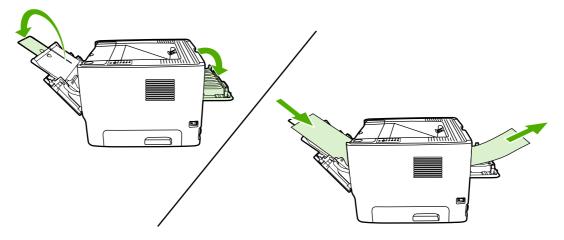
**NOTE** Transparencies can be printed from tray 2, but the printing speed is slower. Transparencies should *not* be printed from optional tray 3.

- **4.** Open the printer Properties (or Printing Preferences in Windows 2000 and XP). See <u>Configure the Windows printer driver</u> or <u>Configure the Macintosh printer driver</u> for instructions.
- On the Paper/Quality tab or the Paper tab (the Paper Type/Quality tab for some Mac drivers), choose the correct media type.



**NOTE** Not all printer features are available in all drivers or operating systems. See the printer Properties (driver) online Help for information about availability of features for that drivers.

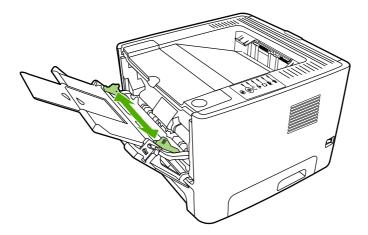
6. Print the document. Remove the media from the back of the printer as it prints to prevent it from sticking together, and place the printed pages on a flat surface.



## Print on letterhead and preprinted forms

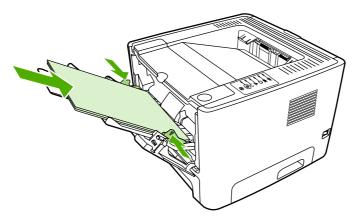
For media specifications, see **Guidelines for using media**.

1. Open tray 1 and adjust the media guides to the width of the media.



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2. Feed the media with the top forward and the side to be printed on facing up.



- 3. Open the printer Properties (or Printing Preferences in Windows 2000 and XP). See <u>Configure the Windows printer driver</u> or <u>Configure the Macintosh printer driver</u> for instructions.
- 4. On the Paper/Quality tab or the Paper tab (the Paper Type/Quality tab for some Mac drivers), choose the correct media type.



**NOTE** Not all printer features are available in all drivers or operating systems. See the printer Properties (driver) online Help for information about availability of features for that drivers.

Print the document.

To print using manual feed, see Manual feed.



**NOTE** To print a single-page cover letter on letterhead, followed by a multiple-page document, load the letterhead face-up in tray 1, and load the paper for the other pages in tray 2. The printer automatically prints from tray 1 first.

#### Print on custom-size media and card stock

For media specifications, see **Guidelines for using media**.

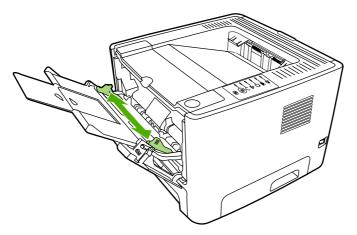


**CAUTION** Make sure that the sheets are not stuck together before you load them.

1. Open the straight-through output door.

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2. Open tray 1 and adjust the media guides to the width of the media.



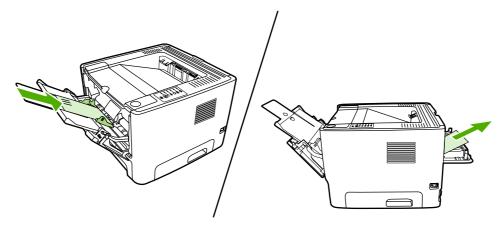
- 3. Load media in tray 1 with the narrow side forward and the side to be printed on facing up.
- **4.** Open the printer Properties (or Printing Preferences in Windows 2000 and XP). See <u>Configure the Windows printer driver</u> or <u>Configure the Macintosh printer driver</u> for instructions.
- 5. On the **Paper/Quality** tab or the **Paper** tab (the **Paper Type/Quality** tab for some Mac drivers), select the custom size option. Specify the dimensions of the custom-size media.



**NOTE** Not all printer features are available in all drivers or operating systems. See the printer Properties (driver) online Help for information about availability of features for that driver.

Print the document.

To print using manual feed, see Manual feed.



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## Print on both sides of the page (duplex)

The section explains the manual and automatic methods of printing on both sides of the paper.

## Manual two-sided printing

To manually print on both sides of the paper, you must run the paper through the printer twice. You can print using either these options:

- Top output bin (for lightweight paper)
- Straight-through output door (for heavy media or media that curls)



**NOTE** Manual two-sided printing can cause the printer to become dirty, reducing print quality. See <u>Clean the printer</u> for instructions if the printer becomes dirty.

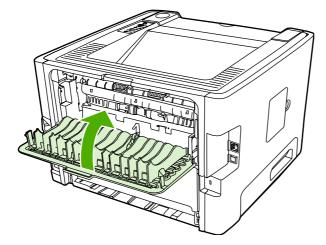
#### Manual two-sided printing using the top output bin

The following sections provide instructions for the different operating systems.

#### **Windows**

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1. Close the straight-through output door.



- From the Windows desktop, click Start, Settings, and then Printers (or Printers and Faxes for some Windows versions).
- Right-click on the HP LaserJet P2015 Series printer and select Properties.
- 4. Click the **Device Settings** tab.

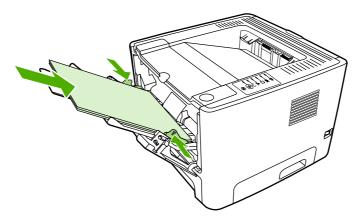
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5. In the Installable Options section, select Not Installed from the Duplex Unit (for 2–Sided Printing) drop-down list.

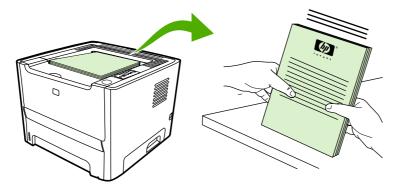


- 6. Click OK.
- 7. Open the **Print** dialog in the software program from which you are printing. In most programs this is done by clicking **File** and then **Print**.
- 8. Select the HP LaserJet P2015 Series printer.
- **9.** Click **Properties** or **Preferences**. The exact option name depends on the software program from which you are printing.
- 10. Click the **Finishing** tab.
- 11. Click to clear the Correct Order for Straight Paper Path check box.
- 12. Click the Print On Both Sides check box.
- 13. Click OK.

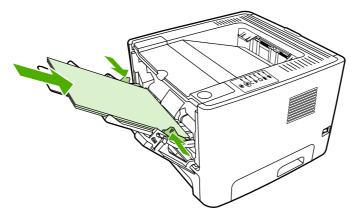
14. Print side one of the document using tray 1.



- **15.** After side one has printed, remove the remaining paper from tray 1 and set it aside until after you finish the manual two-sided print job.
- **16.** Gather the printed pages, and straighten the stack.



17. Return the stack to tray 1 with the printed side down and the top edge toward the printer.



18. Press the Go button to print side two.

#### Mac OS X

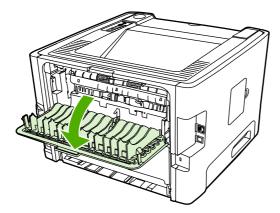
- 1. Close the straight-through output door.
- 2. If Manual Duplex does not appear as a printer option, perform the following steps:
  - a. Verify that **HP Manual Duplex&Booklet (Classic)** was selected when the software driver was installed with the **Custom Install** option.
  - **b.** Do a **File-Print**, select **Plug-In Preferences**, and click the right-facing arrow. The right-facing arrow changes to a down-facing arrow, and the HP Manual Duplex&Booklet feature displays.
  - c. Select Print Time Filters, select HP Manual Duplex&Booklet, and click Save Settings.
  - d. Select Manual Duplex, and select Print on Both Sides.
- 3. Print the document.
- **4.** After side one has printed, remove the remaining paper from tray 1 and set it aside until after you finish the manual two-sided print job.
- 5. Gather the printed pages, and straighten the stack.
- 6. Return the stack to tray 1 with the printed side down and the top edge toward the printer.
- 7. Press the Go button on the control panel to print side two.

#### Manual two-sided printing using the straight-through output door

The following sections provide instructions for the different operating systems.

#### **Windows**

1. Open the straight-through output door.



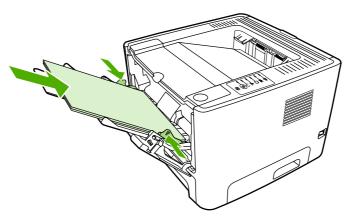
- 2. Open the printer Properties (or Printing Preferences in Windows 2000 and XP). See <u>Configure the Windows printer driver</u> for instructions.
- 3. On the Finishing tab, select the Correct Order for Straight Paper Path check box.



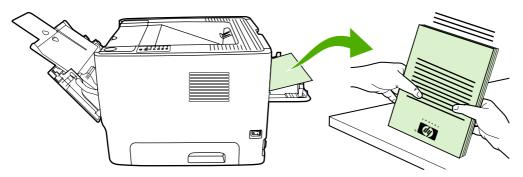
**NOTE** Not all printer features are available in all drivers or operating systems. See the printer Properties (driver) online Help for information about availability of features for that driver.

4. On the Finishing tab, select the Print On Both Sides (Manually) check box.

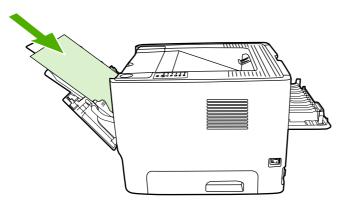
- 5. Click OK.
- 6. Print side one of the document from tray 1.



**7**. Gather the printed pages, and straighten the stack.



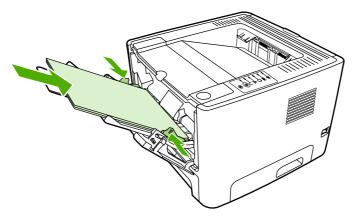
8. Return the stack to tray 1 with the printed side facing down and the top edge toward the printer.



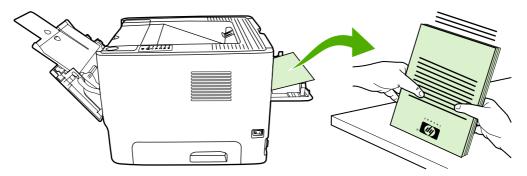
9. Press the Go button to print side two.

#### Mac OS X

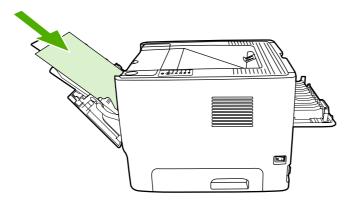
- 1. Open the straight-through output door.
- 2. If **Manual Duplex** does not appear as a printer option, perform the following steps:
  - a. Verify that **HP Manual Duplex&Booklet (Classic)** was selected when the software driver was installed with the **Custom Install** option.
  - b. Do a **File-Print**, select **Plug-In Preferences**, and click the right-facing arrow. The right-facing arrow changes to a down-facing arrow, and the HP Manual Duplex&Booklet feature displays.
  - c. Select Print Time Filters, select HP Manual Duplex&Booklet, and click Save Settings.
  - d. Select Manual Duplex, and select Print on Both Sides.
  - e. Select Alternate output bin is open (straight through paper path).
- Print side one of the document from tray 1.



**4.** Gather the printed pages, and straighten the stack.



5. Return the stack to tray 2 with the printed side down and the top edge toward the printer.



6. Press the Go button to print side two.

## **Automatic two-sided printing**

Automatic two-sided printing is available for the HP LaserJet P2015d, HP LaserJet P2015dn, and HP LaserJet P2015x printers.

Automatic two-sided printing is supported for the following media sizes:

- A4
- Letter
- Legal

The following sections provide instructions for the different operating systems.

#### **Windows**

- Close the straight-through output door.
- 2. Open the printer Properties (or Printing Preferences in Windows 2000 and XP). See <u>Configure the Windows printer driver</u> for instructions.
- 3. On the Finishing tab, click to clear the Correct Order for Straight Paper Path check box.
- 4. Select the **Print On Both Sides** check box.
- 5. Click OK.
- Print the document.

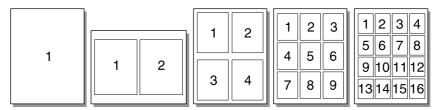
#### Mac OS X

- 1. Do a File-Print, select Duplex, and select Print on Both Sides.
- If the Print on Both Sides check box does not appear, perform the following steps:
  - a. In Print Center (Printer Setup Utility for Mac OS X v10.3), click Printer queue.
  - b. On the Menu bar, select Printers-Show Info.
  - c. On the Installable Options menu, check Duplex Unit.

- d. Click Apply Changes.
- e. Close the menu.

# Print multiple pages on a single sheet of paper (N-up printing)

Use N-Up printing to place multiple document pages on a single printed page.



- 1. Open the printer Properties (or Printing Preferences in Windows 2000 and XP). See <u>Configure the Windows printer driver</u> or <u>Configure the Macintosh printer driver</u> for instructions.
- 2. On the **Finishing** tab (the **Layout** tab for some Mac drivers), select the desired number of pages per sheet.



**NOTE** Not all printer features are available in all drivers or operating systems. See the printer Properties (driver) online Help for information about availability of features for that driver.

3. If desired, use the check box for page borders and the pull-down menu to specify the order of pages printed on the sheet.

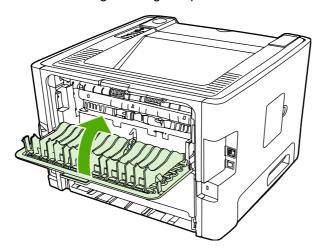
## **Print booklets**

You can print booklets on letter, legal, or A4 paper.

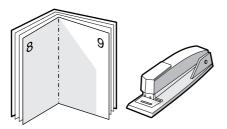


**NOTE** This feature is not available for all Macintosh OS X versions .

- Load paper in tray 1.
- Close the straight-through output door.



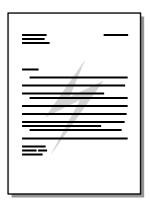
- 3. Open the printer Properties (or Printing Preferences in Windows 2000 and XP). See <u>Configure the Windows printer driver</u> for instructions.
- 4. On the **Finishing** tab (the **Paper Type/Quality** tab for some Mac drivers), click to clear the **Correct Order for Straight Paper Path** check box.
- 5. Select the **Print On Both Sides** check box.
- 6. Select Left Edge Binding or Right Edge Binding from the Booklet Layout drop-down list.
- 7. Set the number of pages per sheet to 2.
- 8. Click OK.
- 9. Print the document.
- **10.** Fold and staple the pages.



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## **Print watermarks**

You can use the watermark option to print text "underneath" (in the background) of an existing document. For example, you might want to have large gray letters reading *Draft* or *Confidential* printed diagonally across the first page or all of the pages of a document.



- Open the printer Properties (or Printing Preferences in Windows 2000 and XP). See <u>Configure the Windows printer driver</u> or <u>Configure the Macintosh printer driver</u> for instructions.
- 2. On the **Effects** tab (the **Watermark/Overlay** tab for some Mac drivers), select the watermark you want to use.



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**NOTE** Not all printer features are available in all drivers or operating systems. See the printer Properties (driver) online Help for information about availability of features for that driver.

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## Cancel a print job

You can cancel a print job from the following locations:

- Printer control panel: To cancel the print job, press and release the Cancel button on the printer control panel.
- Software application: Typically, a dialog box appears briefly on your screen, allowing you to cancel the print job.
- Windows print queue: If a print job is waiting in a print queue (computer memory) or print spooler, delete the job there. To go to the Printer screen in Windows 98, Me, 2000, or XP, click Start, Settings, and Printers. Double-click the HP LaserJet P2015 icon to open the window, select your print job, and click Delete.
- Desktop print queue (Mac OS): For Mac OS X, open Print Center (or Printer Setup Utility in V10.3.9), double-click the printer name, select the print job, and click Delete.
- HP ToolboxFX: Open HP ToolboxFX, browse to the Device Status page, and click Cancel Job.
   See HP ToolboxFX for more information.
- Embedded Web server: Open the printer's embedded Web server page, and click Cancel Job.
   See Embedded Web server for more information.

If the status lights on the control panel continue to blink after you cancel a print job, the computer is still sending the job to the printer. Either delete the job from the print queue or wait until the computer finishes sending data. The printer will return to the Ready state.

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## 6 Managing and maintenance

This chapter provides information on the following topics:

- Printer information pages
- HP ToolboxFX
- Embedded Web server
- Replace the print cartridge
- Redistribute toner
- Clean the printer
- Clean the pickup roller (tray 1)
- Clean the pickup roller (tray 2)
- EconoMode

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## **Printer information pages**

You can print the following information pages.

#### Demo page

The Demo page contains examples of text and graphics. To print the Demo page, press the Go button when the printer Ready light is on and no other jobs are printing.

## Configuration page

The Configuration page lists current settings and properties of the printer. It also contains a status log report. You can print a Configuration page from the following locations:

- Printer control panel. Press the Go button for five seconds when the printer Ready light is on and no other jobs are printing.
- Embedded Web server
- HP ToolboxFX



**NOTE** You can also get the information contained in the Event log and the Configuration page through the HP ToolboxFX without printing the pages. See <a href="https://example.com/hP-ToolboxFX">HP ToolboxFX</a> for more information.

## **Supplies Status page**

The Supplies Status page automatically prints when you print a Configuration page from the control panel. The Supplies Status page provides the following information:

- The estimated percentage of toner remaining in the print cartridge
- The number of pages and print jobs that have been processed
- Ordering and recycling information

## **Network Configuration page**



**NOTE** The Network Configuration page is only available on printers with an HP internal network port.

The Network Configuration page automatically prints when you print a Configuration page from the control panel. The Network Configuration page provides the following information about the printer network configuration:

- IP address
- firmware version
- network statistics
- protocol information

## **HP ToolboxFX**

HP ToolboxFX is software that you can use to complete the following tasks:

- Check the printer status.
- Configure the printer settings.
- View troubleshooting information.
- View online documentation.

You can view HP ToolboxFX when the printer is directly connected to your computer or when it is connected to the network. You must perform a typical software installation to install HP ToolboxFX.



**NOTE** HP ToolboxFX is not supported for Windows 98 SE, Windows Me, Windows Server 2003, or Macintosh operating systems.

NOTE You do not need Internet access to open and use HP ToolboxFX.

#### To view HP ToolboxFX

Open HP ToolboxFX in one of these ways:

- In the Windows system tray or on your desktop, double-click the HP ToolboxFX icon.
- On the Windows Start menu, click Programs (or All Programs in Windows XP), click HP, click
   HP LaserJet 2015 Series, and then click HP ToolboxFX.

The HP ToolboxFX software contains the following sections:

- Status
- Alerts
- Help
- Device settings
- Print settings
- Network settings

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#### **Status**

The HP ToolboxFX Status folder contains links to the following main pages:

- Device Status. View printer status information. This page indicates printer conditions such as a
  jam or an empty tray. After you correct a problem with the printer, click Refresh to update the printer
  status.
- **Supplies Status**. View detailed supplies status such as the estimated percentage of toner remaining in the print cartridge and the number of pages that have been printed with the current print cartridge. This page also has links to order supplies and to find recycling information.
- Device Configuration. View a detailed description of the current printer configuration, including the amount of memory installed and whether optional trays are installed.
- **Network Configuration**. View a detailed description of the current network configuration, including the IP address and network status.
- Print Info Pages. Print the Configuration page and various other information pages that are available for the printer, such as the Supplies Status page and the Demo page.
- Event Log. View a four-column table where printer events and error codes are logged for your
  reference. The number in the Page Count column specifies the total number of pages that the
  printer had printed when the error occurred. The Event log also contains a brief description of the
  error.

#### **Alerts**

The HP ToolboxFX **Alerts** folder contains links to the following main pages:

- Set up Status Alerts. Set up HP ToolboxFX to send you pop-up alerts for certain events, such as low toner levels.
- **Set up E-mail Alerts**. Set up HP ToolboxFX to send you e-mail alert messages for certain events, such as low toner levels.

#### Set up status alerts

HP ToolboxFX can open pop-up alerts on your computer when certain events occur. Events that trigger alerts include jams, low levels of toner in HP print cartridges, non-HP print cartridge in use, empty input trays, and error messages.

Alerts only appear when the printer is printing from the computer on which you set up the alerts.



**NOTE** You must click **Apply** to save your changes.

#### Set up e-mail alerts

Use HP ToolboxFX to configure up to two e-mail addresses to receive alerts when certain events occur. You can specify different events for each e-mail address. Enter the information for the e-mail server that will send out the e-mail alert messages for the printer.



**NOTE** You must click **Apply** to save your changes.

## Help

The HP ToolboxFX **Help** folder contains links to the following main pages:

- Troubleshooting. Print troubleshooting pages and clean the printer.
- How Do I? View the How Do I? Help for help with specific tasks.
- Animated demonstrations
- **User Guide**. View information about the printer usage, warranty, specifications, and support. The user guide is available in both HTML and PDF formats.
- Readme. View important information about the printer that is not available in the user quide.

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## **Device settings**

The HP ToolboxFX **Device Settings** folder contains links to the following main pages:

- **Device Information**. View information about the printer, such as the printer description and a contact person.
- Paper Handling. Change the printer paper-handling settings, such as default paper size and default paper type.
- Print Quality. Change the printer print-quality settings.
- **Paper types**. Change the printer mode settings for a each media type, such as letterhead, prepunched, or glossy paper.
- System Setup. Change the printer system settings, such as printer language and jam recovery.
- Service. Gain access to various procedures required to maintain the printer.

#### **Device information**

The information that you type in these fields appears on the Configuration page. See <u>Configuration page</u>.



NOTE You must click Apply to save your changes.

#### Paper handling

Use the HP ToolboxFX paper-handling options to configure your default settings.

Three options are available for handling print jobs when the product is out of media:

- Select Wait For Paper To Be Loaded.
- Select Cancel from the Paper out action drop-down list to cancel the print job.
- Select override from the Paper out time drop-down list to send the print job to another paper tray.

The **Paper out time** field specifies how long the printer waits before acting on your selections. You can specify from 0 to 3600 seconds.



**NOTE** You must click **Apply** to save your changes.

#### **Print quality**

Use the HP ToolboxFX print-quality options to improve the appearance of your print jobs.

- **Resolution**. Select 600 resolution for quality print jobs and Fast Res 1200 for higher-quality print jobs. Select ProRes 1200 for the highest-quality print job (printing time increases).
- REt. Activate REt to improve print quality.
- Print density. For increased print density, select a higher number. For decreased print density, select a lower number.
- **EconoMode**. EconoMode is a feature that allows the printer to use less toner per page. Selecting this option may extend the life of the print cartridge and reduce your cost per page. However, it will also reduce print quality. The printed image is lighter, but it is adequate for printing drafts or proofs. HP does not recommend full-time use of EconoMode. See EconoMode for more information.



**NOTE** You must click **Apply** to save your changes.

#### Paper types

Use these HP ToolboxFX **Paper types** options to configure print modes that correspond to the various media types. When you select **RESTORE MODES**, all of the modes are reset to the factory settings.



**NOTE** You must click **Apply** to save your changes.

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#### System setup

Use the HP ToolboxFX system settings options to configure miscellaneous print settings.



**NOTE** You must click **Apply** to save your changes.

#### Service

During the printing process, paper, toner, and dust particles can accumulate inside the printer. Over time, this buildup can cause print-quality problems such as toner specks or smearing. HP ToolboxFX provides an easy method for cleaning the paper path. For more information, see <u>Clean the printer media path</u>.

#### **Print settings**

The HP ToolboxFX Print Settings tab contains links to the following main pages:

- Printing. Change the default print settings, such as number of copies and paper orientation.
- PCL 5e. View and change the PCL 5e settings.
- PCL 6. View and change the PCL 6 settings.
- Postscript. View and change the HP postscript level 3 emulation settings.

#### **Printing**

Use the HP ToolboxFX printing settings options to configure the settings for all print functions.



**NOTE** You must click **Apply** to save your changes.

#### PCL 5e

Use the PCL 5e options to configure the settings when you are using the PCL 5e print personality.



**NOTE** You must click **Apply** to save your changes.

#### PCL 6

Use the PCL 6 printer driver to take full advantage of all printer features. Unless complete backward compatibility with previous PCL drivers or older printers is necessary, the PCL 6 driver is recommended.



**NOTE** You must click **Apply** to save your changes.

#### **PostScript**

Use the PostScript option when you are using the HP postscript level 3 emulation print personality. When the **Print PostScript Errors** option is turned on, the HP postscript level 3 emulation error page automatically prints when HP postscript level 3 emulation errors occur.



**NOTE** You must click **Apply** to save your changes.

## **Network settings**

The network administrator can use the HP ToolboxFX **Network Settings** folder to control the network-related settings for the printer when it is connected to a TCP/IP-based network.

The following options are available:

- IP Configuration
- Advanced
- SNMP
- Network Summary

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## **Embedded Web server**

The embedded Web server allows you to view printer and network status and to manage printing functions from your computer instead of from the printer control panel. Below are examples of what you can do using the embedded Web server:

- View printer status information
- View and print internal pages
- Determine the remaining life on all supplies and order new ones
- Set the size and type of media loaded in each tray
- View and change tray configurations
- View and change the printer default configuration settings
- View and change network configuration

The embedded Web server provides the same functions as the Advanced Printer Settings section of the HP ToolboxFX. The main differences between using the embedded Web server and using the HP ToolboxFX are the following:

- You do not need to install any software on the computer. You only need to use one of these supported Web browsers:
  - Internet Explorer 6.0 (and later)
  - Netscape Navigator 7.0 (and later)
  - Firefox 1.0 (and later)
  - Mozilla 1.6 (and later)
  - Opera 7.0 (and later)
  - Safari 1.2 (and later)
  - Konqueror 3.2 (and later)
- The embedded Web server is available in sixteen languages.
- The embedded Web server does not provide e-mail or status alerts.

The embedded Web server works when the printer is connected to an TCP/IP-based network. The embedded Web server does not support IPX-based printer connections.



**NOTE** You do not have to have Internet access to open and use the embedded Web server. However, if you click a link on any of the pages, you must have Internet access in order to go to the site associated with the link.

## Open the embedded Web server

To open the embedded Web server, type the IP address or hostname of the printer in the address field of a supported Web browser. To find the IP address, print a Configuration page at the printer by pressing and holding the Go button for 5 seconds.



Hint After you open the URL, bookmark it so that you can return to it quickly in the future.

The embedded Web server has three tabs that contain settings and information about the printer: the **Status** tab, the **Settings** tab, and the **Networking** tab.

#### Status tab

The Status pages group consists of the following pages.

- Device Status. This page displays the status of the printer and HP supplies.
- Device Configuration. This page shows the information found on the printer Configuration page.
- **Supplies Status**. This page shows the status of HP supplies and provides supplies part numbers. To order new supplies, click **Order Supplies** in the upper-right part of the window.
- Event log. This page shows a list of all printer events and errors.
- Print Info Pages. This page has links that allow you to print the various information pages that reside within the memory of the printer.
- Network Summary. This page shows the information found on the printer Network Summary page.

#### **Settings tab**

This tab allows you to configure the printer from your computer. If this printer is networked, always consult with the printer administrator before changing settings on this tab.

The **Settings** tab contains the following pages:

- Device Information. View and change basic information about the printer.
- Paper Handling. View and change the settings for the printer's input tray.
- Printing. View and change the default printer job settings.
- PCL 5e. View and change the PCL font information.
- Postscript. View and change the settings for HP postscript level 3 emulation errors.
- Print Quality. View and change the print-quality settings.
- Paper Types. View and change the print modes for various media types.
- System Setup. View and change system information.
- Service. Initiate the cleaning mode.

## Networking tab

This tab allows the network administrator to control network-related settings for the printer when it is connected to an IP-based network.

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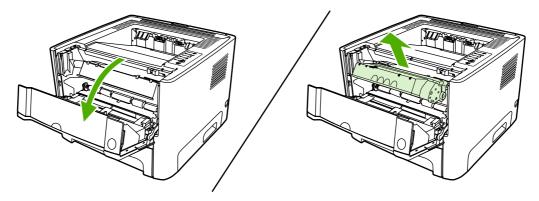
#### Links

Links are located in the upper-right part of the Status pages. You must have Internet access in order to use any of these links. If you use a dial-up connection and did not connect when you first opened the embedded Web server, you must connect before you can visit these Web sites. Connecting might require that you close the embedded Web server and reopen it.

- **Order Supplies**. Click this link to connect to the Sure Supply Web site and order genuine HP supplies from HP or a reseller of your choice.
- Product Support. Connects to the support site for the HP LaserJet P2015 Series printer. You can search for help regarding general topics.

## Replace the print cartridge

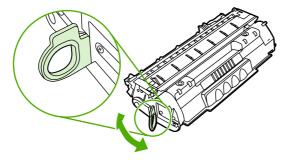
1. Press the print-cartridge-door button, and then remove the print cartridge from the printer. For recycling information, see the inside of the print-cartridge box.



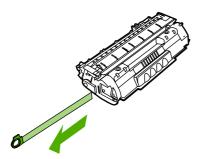


**CAUTION** To prevent damage, do not expose the print cartridge to light. Cover it with a piece of paper.

- 2. Remove the new print cartridge from the packaging.
- 3. Bend the tab on the left side of the cartridge to break it loose.



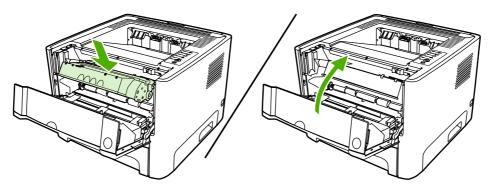
**4.** Pull the tab until all the tape is removed from the cartridge. Put the tab in the print-cartridge box to return for recycling.



5. Gently rock the toner cartridge from front to back to distribute the toner evenly inside the cartridge.



6. Insert the print cartridge in the printer and close the print-cartridge door.



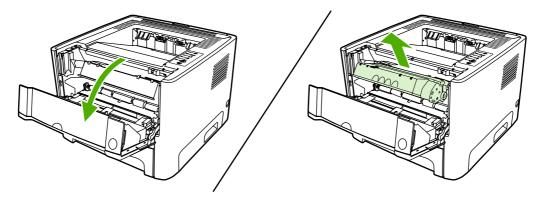


**CAUTION** If toner gets on your clothing, wipe it off with a dry cloth and wash the clothing in cold water. *Hot water sets toner into the fabric*.

## Redistribute toner

When toner is low, faded or light areas appear on the printed page. You might be able to temporarily improve print quality by redistributing the toner.

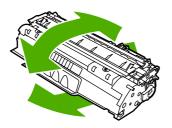
1. Open the print-cartridge-door button, and then remove the print cartridge from the printer.





**CAUTION** To prevent damage, do not expose the print cartridge to light. Cover it with a sheet of paper.

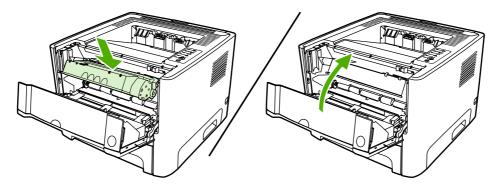
2. To redistribute the toner, gently rock the print cartridge from front to back.





**CAUTION** If toner gets on your clothing, wipe it off with a dry cloth and wash the clothing in cold water. *Hot water sets toner into the fabric.* 

3. Reinsert the print cartridge into the printer, and close the print cartridge door.



If the print is still light, install a new print cartridge. See Replace the print cartridge for instructions.

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## Clean the printer

Clean the outside of the printer with a clean, damp cloth when necessary.



**CAUTION** Do not use ammonia-based cleaners on or around the printer.

During the printing process, paper, toner, and dust particles can accumulate inside the printer. Over time, this buildup can cause print quality problems, such as toner specks or smearing, and paper jams. To correct and prevent these types of problems, you can clean the print cartridge area and the printer media path.

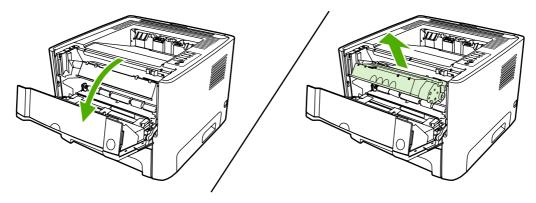
## Clean the print-cartridge area

You do not need to clean the print-cartridge area often. However, cleaning this area can improve the quality of your printed sheets.



**WARNING!** Before cleaning the printer, turn the printer off by unplugging the power cord, and wait for the printer to cool.

1. Press the print-cartridge-door button, and then remove the print cartridge from the printer.

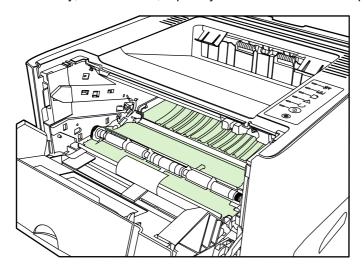


 $\triangle$ 

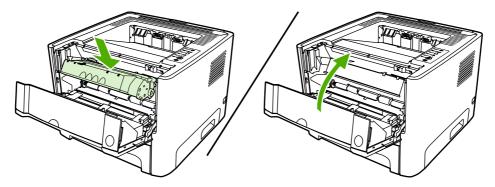
**CAUTION** Do not touch the black sponge-transfer roller inside the printer. Doing so can damage the printer.

**CAUTION** To prevent damage, do not expose the print cartridge to light. Cover it with a piece of paper.

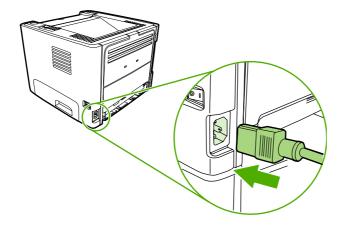
2. With a dry, lint-free cloth, wipe any residue from the media-path area and the print-cartridge cavity.



3. Replace the print cartridge, and close the print-cartridge door.



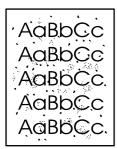
4. Plug the power cord back into the printer.



## Clean the printer media path

If you are experiencing toner specks or dots on the printouts, clean the printer media path. This process uses a transparency to remove dust and toner from the media path. Do not use bond or rough paper.

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**NOTE** For best results use a sheet of transparency. If you do not have any transparencies, you can use copier grade media (70 to 90 g/m² (18 to 24 lb.)) with a smooth surface.

- 1. Make sure that the printer is idle and the Ready light is on.
- 2. Load the transparency in tray 1.
- 3. Print a cleaning page using one of the following methods:
  - Open HP ToolboxFX. See <a href="HP ToolboxFX">HP ToolboxFX</a> for instructions. Click the **Troubleshooting** tab, and then click **Print Quality Tools**. Select the cleaning page.
  - On the printer control panel, press and hold the Go button until the Attention, Ready, and Go lights come on (about 10 seconds). When all three lights come on, release the Go button.

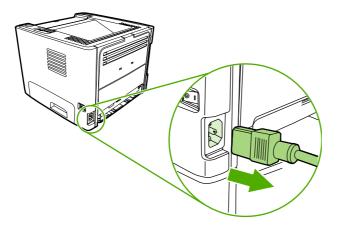


**NOTE** The cleaning process takes approximately 2 minutes. The cleaning page will stop periodically during the cleaning process. Do not turn the printer off until the cleaning process has finished. You might need to repeat the cleaning process several times to thoroughly clean the printer.

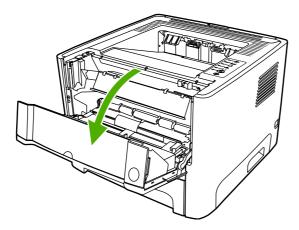
## Clean the pickup roller (tray 1)

If you want to clean the pickup roller for tray 1, follow these instructions:

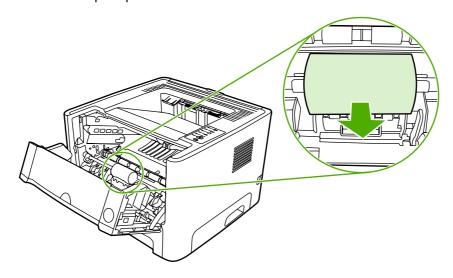
1. Unplug the power cord from the printer, and allow the printer to cool.



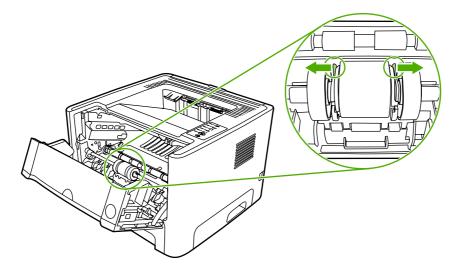
2. Press the print-cartridge-door button to open the print-cartridge door.



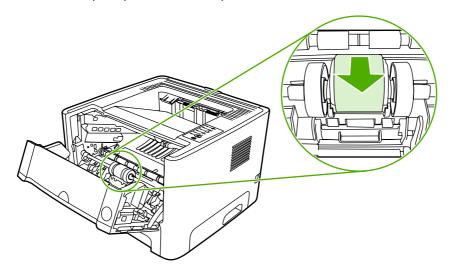
3. Remove the pickup-roller cover.



4. Press the two black retaining tabs outward until the pickup roller is released from its seat.



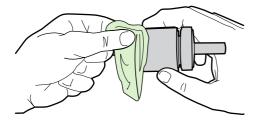
**5.** Remove the pickup roller from the printer.



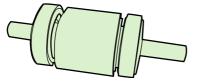
6. Dab a lint-free cloth in water, and scrub the roller.



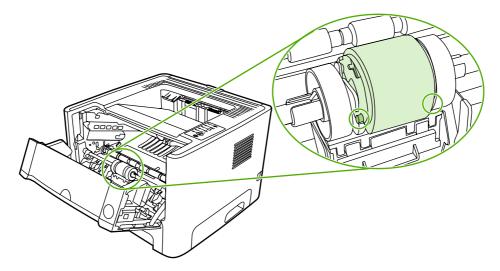
7. Using a dry, lint-free cloth, wipe the pickup roller to remove loosened dirt.



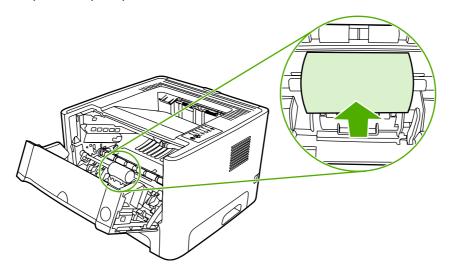
8. Allow the pickup roller to dry completely.



**9.** Line up the black retaining tabs in the printer with the grooves in the pickup roller, and then press the pickup roller into the pickup-roller seat until the retaining tabs click.



10. Replace the pickup-roller cover.

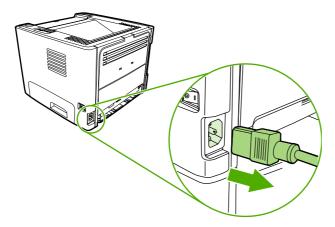


11. Close the print-cartridge door.

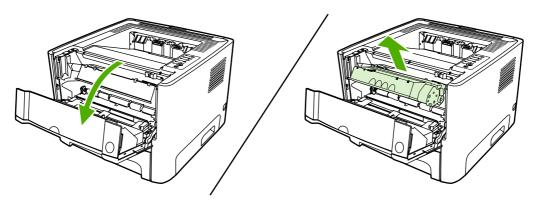
## Clean the pickup roller (tray 2)

If you want to clean the pickup roller for tray 2, follow these instructions:

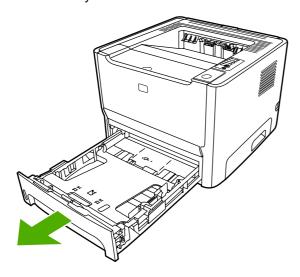
1. Unplug the power cord from the printer, and allow the printer to cool.



2. Press the print-cartridge-door button, and then remove the print cartridge from the printer.



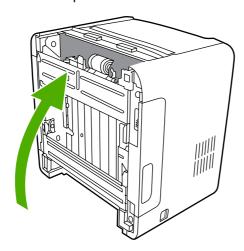
3. Remove tray 2.



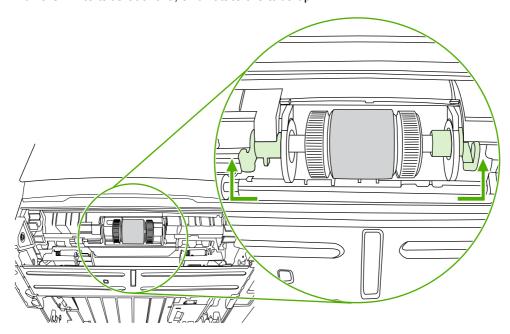
4. Open the automatic two-sided path door on the front of the printer (HP LaserJet P2015d, HP LaserJet P2015dn, and HP LaserJet P2015x printers only).



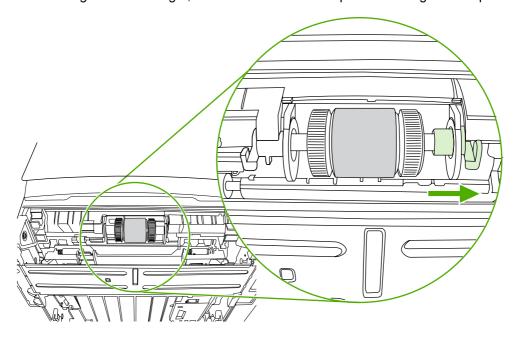
5. Place the printer on the work surface with the front of the printer facing up.



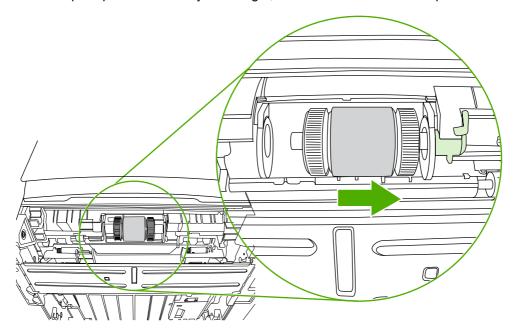
**6.** Pull the white tabs outward, and rotate the tabs up.



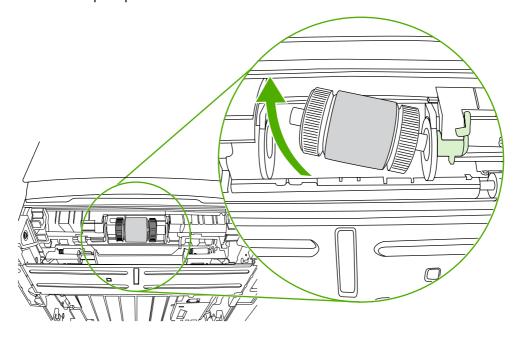
7. Slide the right tab to the right, and leave the tab in this position throughout the procedure.



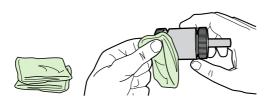
8. Slide the pickup roller assembly to the right, and remove the left end cap.



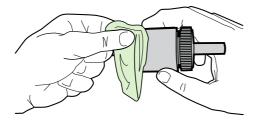
9. Remove the pickup roller.



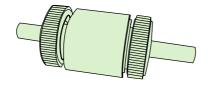
10. Dab a lint-free cloth in water, and scrub the roller.



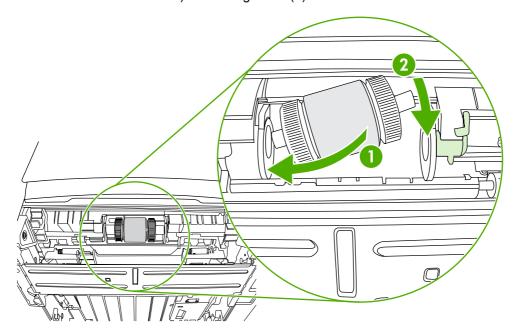
11. Using a dry, lint-free cloth, wipe the pickup roller to remove loosened dirt.



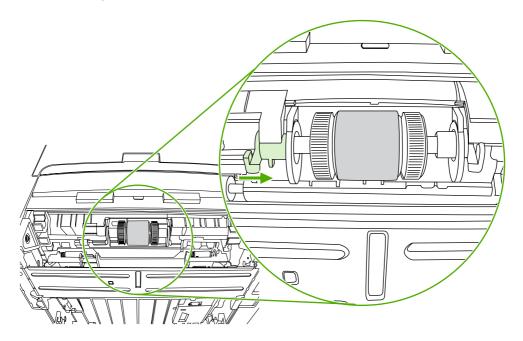
**12.** Allow the pickup roller to dry completely.



13. Insert the left side of the pickup roller into the left slot (1), and insert the right side (the side that has the notches in the shaft) into the right slot (2).

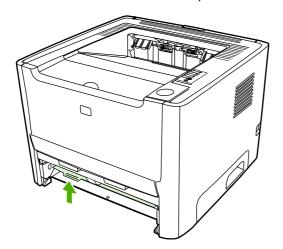


**14.** Place the end cap over the shaft on the left side, push the end cap to the right, and rotate the tab downward into position.

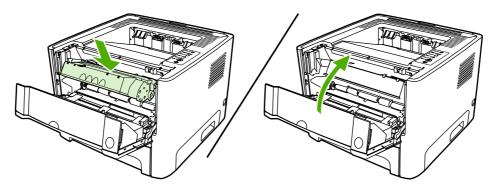


- 15. Rotate the shaft until the notches engage and the shaft clicks into place.
- **16.** Push the right tab to the left, and rotate the tab downward into position.
- 17. Place the printer on the work surface with the top of the printer facing up.

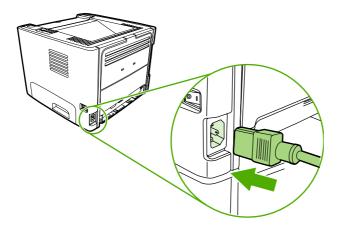
18. Close the automatic two-sided path door.



**19**. Reinstall the print cartridge, and close the print-cartridge door.



20. Plug the printer in to turn it back on.



#### **EconoMode**

EconoMode is a feature that allows the printer to use less toner per page. Selecting this option may extend the life of the print cartridge and reduce your cost per page. However, it will also reduce print quality. The printed image is lighter, but it is adequate for printing drafts or proofs.

HP does not recommend the full-time use of EconoMode. If EconoMode is used full-time when the average toner coverage is significantly less than 5%, it is possible that the toner supply will outlast the mechanical parts in the print cartridge. If print quality begins to degrade under these circumstances, you must install a new print cartridge, even if there is toner supply remaining in the cartridge.

- To use EconoMode, open the printer Properties (or Printing Preferences in Windows 2000 and XP).
   See Configure the Windows printer driver or Configure the Macintosh printer driver for instructions.
- 2. On the Paper/Quality tab or the Finishing tab (the Paper Type/Quality tab for some Mac drivers), select the EconoMode checkbox.



**NOTE** Not all printer features are available in all drivers or operating systems. See the printer Properties (driver) online Help for information about availability of features for that driver.

## 7 Problem solving

This chapter provides information on the following topics:

- Finding the solution
- Status-light patterns
- Common Macintosh problems
- HP postscript level 3 emulation errors
- Media problem solving
- Printed page is different than what appeared on screen
- Printer software problems
- Improve print quality
- Clearing jams
- Network setup problem solving

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## Finding the solution

You can use this section to find the solution to common printer problems.

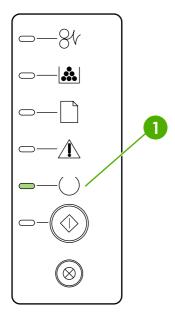
#### Step 1: Is the printer set up correctly?

- Is the printer plugged into a power outlet that is known to work?
- Is the on/off switch in the on position?
- Is the print cartridge properly installed? See Replace the print cartridge.
- Is paper properly loaded in the input tray? See <u>Load media</u>.

Yes	If you answered yes to the questions above, go to Step 2: Is the Ready light on?
No	If the printer will not turn on, Contact HP support.

#### Step 2: Is the Ready light on?

Verify that the Ready light (1) is illuminated on the control panel.



Yes	Go to Step 3: Can you print a demo page?
No	If the control panel lights do not look like the picture above, see <u>Status-light patterns</u> .
	If you are unable to resolve the problem, Contact HP support.

#### Step 3: Can you print a demo page?

Press the Go button to print a demo page.

Yes	If the demo page printed, go to Step 4: Is the print quality acceptable?	
No	If no paper came out, see Media problem solving.	
	If you are unable to resolve the problem, Contact HP support.	

#### Step 4: Is the print quality acceptable?

Yes	If the print quality is acceptable, go to Step 5: Is the printer communicating with the computer?
No	If the print quality is poor, see Improve print quality.
	Verify that the print settings are correct for the media you are using. See Optimize print quality for media types for information on adjusting the settings for various types of media.  If you are unable to resolve the problem, Contact HP support.

#### Step 5: Is the printer communicating with the computer?

Try printing a document from a software application.

Yes	If the document prints, go to Step 6: Does the printed page look like you expected?
No	If the document does not print, see <a href="Printer software">Printer software</a> <a href="problems">problems</a> .
	If you are using a Macintosh computer, see <a href="Common Macintosh problems">Common Macintosh problems</a> .
	If you are using an HP postscript level 3 emulation driver, see <u>HP postscript level 3 emulation errors</u> .
	If you are unable to resolve the problem, Contact HP support.

#### Step 6: Does the printed page look like you expected?

Yes	The problem should be resolved. If it is not resolved, <u>Contact HP support</u> .
No	See Printed page is different than what appeared on screen.
	If you are unable to resolve the problem, Contact HP support.

#### **Contact HP support**

- In the United States, see <a href="http://www.hp.com/support/ljP2015/">http://www.hp.com/support/ljP2015/</a> for the HP LaserJet P2015 printer.
- In other locations, see <a href="http://www.hp.com/">http://www.hp.com/</a>.

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## **Status-light patterns**

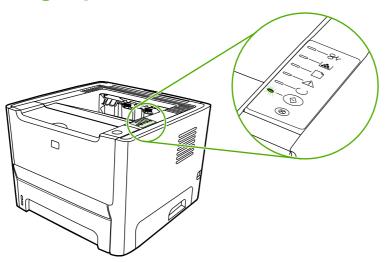


Table 7-1 Status-light legend

0	Symbol for "light off"
	Symbol for "light on"
	Symbol for "light blinking"

Table 7-2 Control-panel light messages

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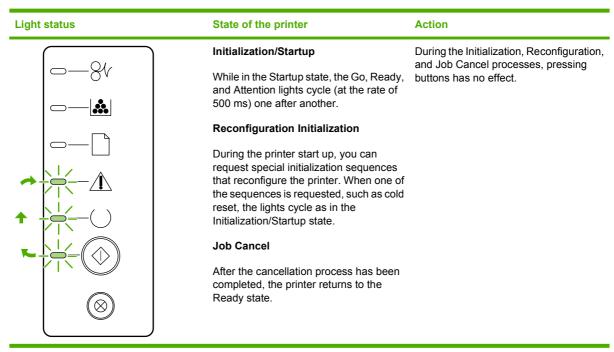


Table 7-2 Control-panel light messages (continued)

# Action Light status State of the printer To print a Configuration page, press and Ready hold the Go button for 5 seconds. The printer is ready with no job activity. To print a Demo page, press and release the Go button. To cancel the current job, press the Cancel button. **Processing Data** The printer is processing or receiving

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Table 7-2 Control-panel light messages (continued)

## **Light status** State of the printer **Action** Manual Feed or Continuable Error To recover from the error and print whatever data is possible, press the Go This state can be reached in the following button. circumstances: If the recovery is successful, the printer Manual feed goes to the Processing Data state and completes the job. General continuable error If the recovery is unsuccessful, the Memory configuration error printer returns to the Continuable Error Personality/Job related error Attention Close the print-cartridge door. The print-cartridge door is open.

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Table 7-2 Control-panel light messages (continued)

## Action Light status State of the printer **Fatal Error** Turn off the printer, wait 10 seconds, and turn on the printer. If you are unable to resolve the problem, Contact HP support. **Accessory Error** To display additional error information, press the Go button. The light pattern changes. For more information about the light pattern now displayed, see <u>Table</u> 7-3 Accessory error indicators. When you release the Go button, the printer returns to the initial Accessory Error state.

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Table 7-2 Control-panel light messages (continued)

## Action **Light status** State of the printer **Toner Low** Order a new print cartridge and have it ready. See Order supplies and The Go, Ready, and Attention lights act accessories. independently of the Toner Low state. **Toner Missing** Reinsert the print cartridge in the printer. The print cartridge has been removed from the printer.

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Table 7-2 Control-panel light messages (continued)

Light status	State of the printer	Action
-81	Jam	Clear the jam. See Clearing jams.

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Table 7-2 Control-panel light messages (continued)

# Action **Light status** State of the printer **Paper Out** Load paper or other media. **Paper Mount** Load acceptable paper or other media. See Supported paper and other media. The loaded paper or other media is not supported. Press the Go button to override the condition.

Table 7-3 Accessory error indicators

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Accessory error	Attention light	Ready light	Go light
DIMM slot incompatible error	Off	Off	On

## **Common Macintosh problems**

This section lists problems that can occur when using Mac OS X.

Table 7-4 Problems with Mac OS X

The printer driver is not listed in the Print Center or Printer Setup Utility.

Cause	Solution
The printer software might not have been installed or was installed incorrectly.	Make sure that the printer PPD is in the following hard-drive folder: Library/Printers/PPDs/Contents/Resources/ <lang>.lproj, where <lang> is the two-letter language code for the language that you are using. If necessary, reinstall the software. See the Getting Started Guide for instructions.</lang></lang>
The PostScript Printer Description (PPD) file is corrupt.	Delete the PPD file from the following hard-drive folder: Library/Printers/PPDs/Contents/Resources/ <lang>.lproj, where <lang> is the two-letter language code for the language that you are using. Reinstall the software. See the <i>Getting Started Guide</i> for instructions.</lang></lang>

The printer name, IP address, or Rendezvous or Bonjour host name does not appear in the printer list in the Print Center or Printer Setup Utility.

Cause	Solution
The printer might not be ready.	Make sure that the cables are connected correctly, the printer is on, and the ready light is on. If you are connecting through a USB or Ethernet hub, try connecting directly to the computer or use a different port.
The wrong connection type might be selected.	Make sure that USB, IP Printing, or Rendezvous or Bonjour is selected, depending on the type of connection that exists between the printer and the computer.
The wrong printer name, IP address, or Rendezvous or Bonjour host name is being used.	Print a configuration page to check the printer name, IP address, or Rendezvous or Bonjour host name. Verify that the name, IP address, or Rendezvous or Bonjour host name on the configuration page matches the printer name, IP address, or Rendezvous or Bonjour host name in the Print Center or Printer Setup Utility.
The interface cable might be defective or of poor quality.	Replace the interface cable. Make sure to use a high-quality cable.

The printer driver does not automatically set up your selected printer in the Print Center or Printer Setup Utility.

Cause	Solution
The printer might not be ready.	Make sure that the cables are connected correctly, the printer is on, and the ready light is on. If you are connecting through a USB or Ethernet hub, try connecting directly to the computer or use a different port.
The printer software might not have been installed or was installed incorrectly.	Make sure that the printer PPD is in the following hard-drive folder: Library/Printers/PPDs/Contents/Resources/ <lang>.lproj, where <lang> is the two-letter language code for the language that you are using. If necessary, reinstall the software. See the Getting Started Guide for instructions.</lang></lang>

Table 7-4 Problems with Mac OS X (continued)

The printer driver does not automatically set up your selected printer in the Print Center or Printer Setup Utility.

Cause	Solution
The PostScript Printer Description (PPD) file is corrupt.	Delete the PPD file from the following hard-drive folder: Library/Printers/PPDs/Contents/Resources/ <lang>.lproj, where <lang> is the two-letter language code for the language that you are using. Reinstall the software. See the <i>Getting Started Guide</i> for instructions.</lang></lang>
The printer might not be ready.	Make sure that the cables are connected correctly, the printer is on, and the ready light is on. If you are connecting through a USB or Ethernet hub, try connecting directly to the computer or use a different port.
The interface cable might be defective or of poor quality.	Replace the interface cable. Make sure to use a high-quality cable.

#### A print job was not sent to the printer that you wanted.

Cause	Solution
The print queue might be stopped.	Restart the print queue. Open <b>print monitor</b> and select <b>Start Jobs</b> .
The wrong printer name or IP address is being used. Another printer with the same or similar name, IP address, or Rendezvous or Bonjour host name might have received your print job.	Print a configuration page to check the printer name, IP address, or Rendezvous or Bonjour host name. Verify that the name, IP address, or Rendezvous or Bonjour host name on the configuration page matches the printer name, IP address, or Rendezvous or Bonjour host name in the Print Center or Printer Setup Utility.

#### You are unable to print from a third-party USB card.

Cause	Solution
This error occurs when the software for USB printers is not installed.	When adding a third-party USB card, you might need the Apple USB Adapter Card Support software. The most current version of this software is available from the Apple Web site.

#### When connected with a USB cable, the printer does not appear in the Print Center or Printer Setup Utility after the driver is selected.

Cause	Solution	
This problem is caused by either a software or a hardware component.	Software troubleshooting	
	<ul> <li>Check that your Macintosh supports USB.</li> </ul>	
	<ul> <li>Verify that your Macintosh operating system is Mac OS X v10.2 or later.</li> </ul>	
	<ul> <li>Ensure that your Macintosh has the appropriate USB software from Apple.</li> </ul>	
	Hardware troubleshooting	
	Check that the printer is turned on.	
	<ul> <li>Verify that the USB cable is connected correctly.</li> </ul>	
	Check that you are using the appropriate high-speed USB cable.	

Table 7-4 Problems with Mac OS X (continued)

When connected with a USB cable, the printer does not appear in the Print Center or Printer Setup Utility after the driver is selected.

Cause	Solution
	<ul> <li>Ensure that you do not have too many USB devices drawing power from the chain. Disconnect all of the devices from the chain, and connect the cable directly to the USB port on the host computer.</li> </ul>
	<ul> <li>Check to see if more than two nonpowered USB hubs are connected in a row on the chain. Disconnect all of the devices from the chain and connect the cable directly to the USB port on the host computer.</li> </ul>
	NOTE The iMac keyboard is a nonpowered USB hub.

## **HP postscript level 3 emulation errors**

The following situations are HP postscript level 3 emulation language-specific and can occur when several printer languages are being used.



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**NOTE** To receive a printed or screen displayed message when HP postscript level 3 emulation errors occur, open the **Print Options** dialog box and click the desired selection next to the **PS Errors** section. You can also access this from the embedded Web server.

Table 7-5 HP postscript level 3 emulation errors

Symptom	Possible cause	Solution
The job prints in Courier (the printer's default typeface) instead of the typeface you requested.	The requested typeface is not downloaded. A personality switch may have been performed to print a PCL job just before the HP postscript level 3 emulation printing job was received.	Download the desired font and send the print job again. Verify the type and location of the font. Download to printer if applicable. Check with the software documentation.
A legal page prints with clipped margins.	Print job too complex.	You may need to print your job at 600 dots per inch, reduce the complexity of the page, or install more memory.
An HP postscript level 3 emulation error page prints.	Print job may not be HP postscript level 3 emulation.	Make sure the print job is an HP postscript level 3 emulation job. Check to see whether the software application expected a setup or HP postscript level 3 emulation header file to be sent to the printer.
Limit Check Error	Print job is too complex.	You may need to print your job at 600 dots per inch, reduce the complexity of the page, or install more memory.
VM Error	Font Error	Select unlimited downloadable fonts from printer driver.
Range Check	Font Error	Select unlimited downloadable fonts from printer driver.

## Media problem solving

The following problems with media cause print-quality deviations, jamming, or damage to the printer.

Problem	Cause	Solution
Poor print quality or toner adhesion	The paper is too moist, too rough, too heavy or too smooth, or it is embossed or from a faulty paper lot.	Try another kind of paper, between 100 and 250 Sheffield, with 4 to 6% moisture content.
Dropouts, jamming, or curl	The paper has been stored incorrectly.	Store paper flat in its moisture-proof wrapping.
	The paper has variability from one side to the other.	Turn the paper over.
Excessive curl	The paper is too moist, has the wrong grain direction, or is of short-grain construction	Open the rear output bin, or use long- grain paper.
	The paper varies from side-to-side.	Turn the paper over.
Jamming, damage to printer	The paper has cutouts or perforations.	Use paper that is free of cutouts or perforations.
Problems with feeding	The paper has ragged edges.	Use high-quality paper that is made for laser printers.
	The paper varies from side-to-side.	Turn the paper over.
	The paper is too moist, too rough, too heavy or too smooth, has the wrong grain direction, or is of short-grain construction or it is embossed or from a faulty paper lot.	Try another kind of paper, between 100 and 250 Sheffield, 4 to 6% moisture content.
		Open the rear output bin, or use long-grain paper.
Print is skewed (crooked).	The media guides might be incorrectly adjusted.	Remove all media from the input tray, straighten the stack, and then load the media in the input tray again. Adjust the media guides to the width and length of the media that you are using and try printing again.
More than one sheet feeds at one time.	The media tray might be overloaded.	Remove some of the media from the tray. See <u>Load media</u> .
	The media might be wrinkled, folded, or damaged.	Verify that the media is not wrinkled, folded, or damaged. Try printing on media from a new or different package.
The printer does not pull media from the media input tray.	The printer might be in manual-feed mode.	Verify that the printer is not in manual feed mode and print your job again.
	The pickup roller might be dirty or damaged.	Contact HP Customer Care. See How to contact HP or the support flyer that came in the box.
	The paper-length adjustment control in tray 2 or optional tray 3 is set at a length that is greater than the media size.	Adjust the paper-length adjustment control to the correct length.
The printer does not pull media from media input tray when using the automatic two-sided printing feature.	The automatic two-sided printing mediasize selector is not set to the correct page size.	Push in the media selector for letter/ legal-size media. Pull out the media-size selector for A4–size media. See <u>Identify</u> <u>product parts</u> for the location of the

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Problem	Cause	Solution
		automatic two-sided printing media-size selector.

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### Printed page is different than what appeared on screen

Choose the item that best describes the problem:

- Garbled, incorrect, or incomplete text
- Missing graphics or text, or blank pages
- Page format is different than on another HP LaserJet printer
- Graphics quality

#### Garbled, incorrect, or incomplete text

- The wrong printer driver might have been selected when the software was installed. Make sure that the HP LaserJet P2015 printer driver is selected in the printer Properties.
- If a specific file prints garbled text, there might be a problem with that specific file. If a specific application prints garbled text, there might be a problem with that application. Make sure that the appropriate printer driver is selected.
- There might be a problem with your software application. Try printing from another software application.
- The USB cable might be loose or defective. Try the following:
  - Disconnect the cable and reconnect it at both ends.
  - Try printing a job that you know works.
  - If possible, attach the cable and printer to another computer, and try printing a job that you know works.
  - Try using a new USB 2.0 cable that is 3 m (10 ft) or less. See Order supplies and accessories.
  - Turn off the printer and the computer. Remove the USB cable, and inspect both ends of the cable for damage. Reconnect the cable, making sure that the connections are tight. Make sure that the printer is directly connected to the computer. Remove any switchboxes, tape backup drives, security keys, or any other devices that are attached between the USB port on the computer and the printer. These devices can sometimes interfere with communication between the computer and the printer. Restart the printer and the computer.

#### Missing graphics or text, or blank pages

- Make sure that your file does not contain blank pages.
- The sealing tape might still be in the print cartridge. Remove the print cartridge, and pull the tab
  on the end of the cartridge until the entire length of the tape is removed. Reinstall the print cartridge.
   See Replace the print cartridge for instructions. To check the printer, print a demo page by pressing
  the Go button.
- The graphic settings in the printer Properties might not be correct for the type of job that you are
  printing. Try a different graphic setting in the printer Properties. See <u>Configure the Windows printer</u>
  driver or <u>Configure the Macintosh printer driver</u> for more information.
- Clean the printer, particularly the contacts between the print cartridge and the power supply.

#### Page format is different than on another HP LaserJet printer

If you used an older or different HP LaserJet printer driver (printer software) to create the document, or if the printer Properties settings in the software are different, the page format might change when you try to print using your new printer driver or settings. To help eliminate this problem, try the following:

- Create documents and print them using the same printer driver (printer software) and printer Properties settings regardless of which HP LaserJet printer you use to print them.
- Change the resolution, paper size, font settings, and other settings. See <u>Configure the Windows</u> <u>printer driver</u> or <u>Configure the Macintosh printer driver</u> for more information.

#### **Graphics quality**

The graphics settings might be unsuitable for your print job. Check the graphic settings, such as resolution, in the printer Properties and adjust them as necessary. See <u>Configure the Windows printer</u> driver or <u>Configure the Macintosh printer driver</u> for more information.



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**NOTE** Some resolution may be lost when converting from one graphics format to another.

## **Printer software problems**

Table 7-6 Printer software problems

Problem	Solution	
A printer driver for the HP LaserJet P2015 printer is not visible in the <b>Printer</b> folder	Reinstall the printer software. In the Windows task bar, click Start, select Programs, select HP LaserJet P2015, and click Uninstall. Turn the printer off. Install the printer software from the CD-ROM. Turn the printer back on.      NOTE Close any applications that are running. To close an application that has an icon in the system tray, right-click the icon, and select Close or Disable.	
	Try plugging the USB cable into a different USB port on the PC.	
	<ul> <li>If you are trying to print to a shared printer, in the Windows task bar, click Start, select Settings, and select Printers. Double-click the Add Printer icon. Follow the instructions in the Add Printer Wizard.</li> </ul>	
An error message was displayed during the software installation	<ul> <li>Reinstall the printer software. In the Windows task bar, click Start, select Programs, select         HP LaserJet P2015, and click Uninstall. Turn the print off. Install the printer software from the CD-ROM. Turn the printer back on.</li> </ul>	
	NOTE Close any applications that are running. To close an application that has an icon in the task bar, right-click the icon, and select Close or Disable.	
	Check the amount of free space on the drive where you are installing the printer software. If necessary, free up as much space as you can, and reinstall the printer software.	
	• If necessary, run the Disk Defragmenter, and reinstall the printer software.	
The printer is in Ready mode, but nothing prints	<ul> <li>Print a Configuration page from the control panel of the printer, and verify the printer functionality.</li> </ul>	
	<ul> <li>Verify that all of the cables are properly seated and within specifications. This includes the USB, network, and power cables. Try a new cable.</li> </ul>	

### Improve print quality

This section provides information about identifying and correcting print defects.



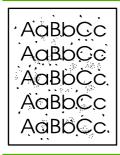
**NOTE** If these steps do not correct the problem, contact an HP-authorized dealer or service representative.

#### Light print or faded

AaBbCc
AaBbCc
AaBbCc
AaBbCc
AaBbCc

- The print cartridge is nearing end of life.
- The media might not meet Hewlett-Packard's media specifications (for example, the media is too moist or too rough). See <u>Supported paper and other media</u> for more information.
- If the whole page is light, the print density adjustment is too light or EconoMode might be turned on. Adjust the print density, and disable EconoMode in the printer Properties. See <u>Saving toner</u> for more information.

#### **Toner specks**



- The media might not meet Hewlett-Packard's media specifications (for example, the media is too moist or too rough). See <u>Supported paper and other media</u> for more information.
- The printer might need to be cleaned. See <u>Clean the</u> <u>printer</u> or <u>Clean the printer media path</u> for instructions.

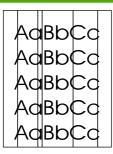
#### **Dropouts**

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AaBbCc AaBbCc AaBbCc AaBbCc AaBbCc

- A single sheet of media might be defective. Try reprinting the job.
- The media's moisture content is uneven or the media has moist spots on its surface. Try printing with new media.
   See <u>Supported paper and other media</u> for more information.
- The media lot is bad. The manufacturing processes can cause some areas to reject toner. Try a different type or brand of media.
- The print cartridge might be defective. See Replace the print cartridge for more information.

#### **Vertical lines**



The photosensitive drum inside the print cartridge has probably been scratched. Install a new HP print cartridge. See Replace the print cartridge for instructions.

#### **Gray background**

AaBbCc AaBbCc AaBbCc AaBbCc

- Make sure that tray 1 is in place.
- Decrease the print density setting through HP ToolboxFX or the embedded Web server. This decreases the amount of background shading. See HP ToolboxFX.
- Change the media to a lighter basis weight. See Supported paper and other media for more information.
- Check the printer's environment. Very dry (low humidity) conditions can increase the amount of background shading.
- Install a new HP print cartridge. See Replace the print cartridge for instructions.

#### **Toner smear**

AaBbCc AaBbCc AaBbCc AaBbCc

- If toner smears appear on the leading edge of the media, the media guides might be dirty. Wipe the media guides with a dry, lint-free cloth. See <u>Clean the printer</u> for more information.
- Check the media type and quality.
- Try installing a new HP print cartridge. See Replace the print cartridge for instructions.
- The fuser temperature might be too low. In your printer driver, make sure the appropriate media type is selected.

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#### Loose toner



- Clean the inside of the printer. See <u>Clean the printer</u> for instructions.
- Check the media type and quality. See <u>Supported paper</u> and other media for more information.
- Try installing a new HP print cartridge. See Replace the print cartridge for instructions.
- In your printer driver, make sure the appropriate media type is selected.
- Plug the printer directly into an AC outlet instead of into a power strip.

#### Vertical repetitive defects



- The print cartridge might be damaged. If a repetitive mark occurs at the same spot on the page, install a new HP print cartridge. See Replace the print cartridge for instructions.
- The internal parts might have toner on them. See <u>Clean</u> the <u>printer</u> for more information. If the defects occur on the back of the page, the problem will probably correct itself after a few more printed pages.
- In your printer driver, make sure the appropriate media type is selected.

#### Misformed characters

AaBbCc AaBbCc AaBbCc AaBbCc AaBbCc

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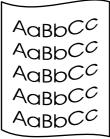
- If characters are improperly formed, producing hollow images, the media stock might be too slick. Try a different media. See <u>Supported paper and other media</u> for more information.
- If characters are improperly formed, producing a wavy effect, the printer might need service. Print a configuration page. If the characters are improperly formed, contact an HP-authorized dealer or service representative. See <u>How</u> to contact HP for more information.

#### Page skew

AaBbCc AaBbCc
AaBbCc AaBbCc
AaBbCc

- Make sure that the media is loaded correctly and the media guides are not too tight or too loose against the media stack. See <u>Load media</u> for more information.
- The input bin might be too full. See <u>Load media</u> for more information.
- Check the media type and quality. See <u>Supported paper</u> and other media for more information.

#### **Curl or wave**



- Check the media type and quality. Both high temperature and humidity cause media to curl. See <u>Supported paper</u> and other media for more information.
- The media might have been in the input tray too long.
   Turn over the stack of media in the tray. Also, try rotating the media 180° in the input tray.
- Open the straight-through output door and try printing straight through. See <u>Straight-through output path</u> for more information.
- The fuser temperature might be too high. In your printer driver, make sure the appropriate media type is selected. If the problem persists, select a media type that uses a lower fuser temperature, such as transparencies or light media.

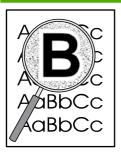
#### Wrinkles or creases

AaBbCc AaBbCc AaBbCc AaBbCc AaBbCc

- Make sure that media is loaded properly. See <u>Load</u> media for more information.
- Check the media type and quality. See <u>Supported paper</u> and other media for more information.
- Open the straight-through output door and try printing straight through. See <u>Straight-through output path</u> for more information.
- Turn over the stack of media in the tray. Also, try rotating the media 180° in the input tray.
- For envelopes, this can be caused by air pockets inside the envelope. Remove the envelope, flatten the envelope, and try printing again.

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#### **Toner scatter outline**



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- If large amounts of toner have scattered around the characters, the media might be resisting the toner. (A small amount of toner scatter is normal for laser printing.)
   Try a different media type. See <u>Supported paper and other media</u> for more information.
- Turn over the stack of media in the tray.
- Use media designed for laser printers. See <u>Supported</u> <u>paper and other media</u> for more information.

### **Clearing jams**

Occasionally, media becomes jammed during a print job. You are notified of a media jam by an error in the software and the printer control panel lights. See <u>Status-light patterns</u> for more information.

The following are some of the causes of media jams:

• The input trays are loaded improperly or too full. See Load media for more information.



**NOTE** When you add new media, always remove all of the media from the input tray and straighten the stack of new media. This helps prevent multiple sheets of media from feeding through the printer at one time, reducing media jams.

- The media does not meet HP specifications. See <u>Supported paper and other media</u> for more information.
- The printer might need to be cleaned to remove paper dust and other particles from the paper path. See Clean the printer for instructions.

There might be loose toner in the printer after a media jam. This toner clears up after a few sheets print.



**CAUTION** Media jams might result in loose toner on the page. If you get any toner on your clothes, wash them in cold water. Hot water will permanently set the toner into the fabric.

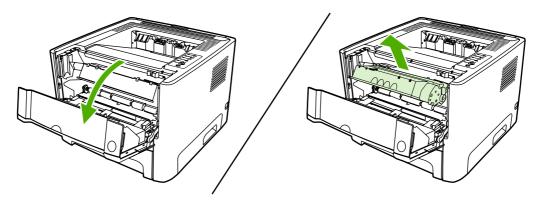
#### Print-cartridge area

To clear a jam in the print-cartridge area, perform the following steps:



**CAUTION** Do not use sharp objects, such as tweezers or needlenose pliers, to remove jams. Damage caused by sharp objects will not be covered by the warranty.

1. Press the print-cartridge-door button, and then remove the print cartridge from the printer.

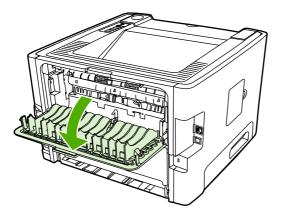


 $\wedge$ 

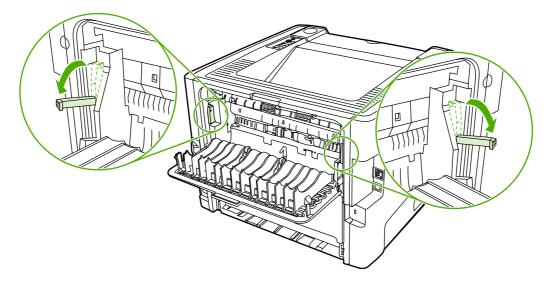
**CAUTION** To prevent damage to the print cartridge, minimize its exposure to direct light.

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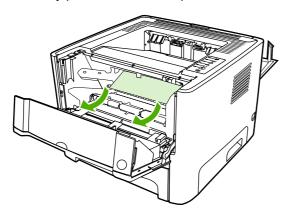
2. Open the straight-through output door.



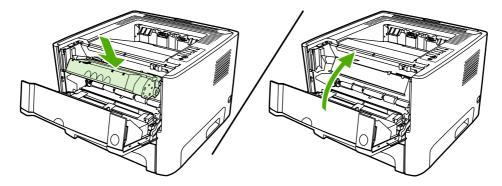
3. Pull down the green pressure-release levers.



**4.** With both hands, grasp the side of the media that is most visible (this includes the middle), and carefully pull it free from the printer.



5. Replace the print cartridge, and close the print-cartridge door.



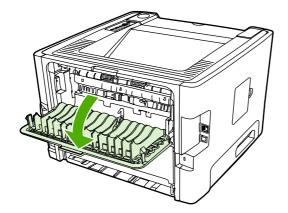
### Input trays

To clear a jam in the input trays, perform the following steps:

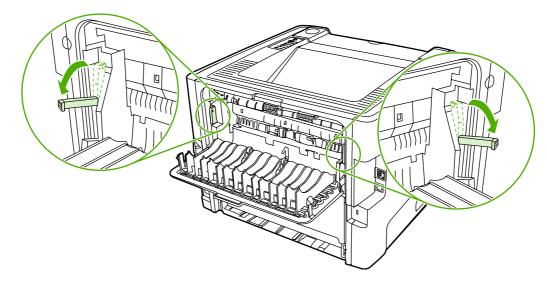


**CAUTION** Do not use sharp objects, such as tweezers or needlenose pliers, to remove jams. Damage caused by sharp objects will not be covered by the warranty.

1. Open the straight-through output door.

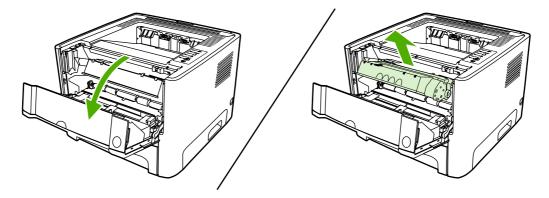


2. Pull down the green pressure-release levers.

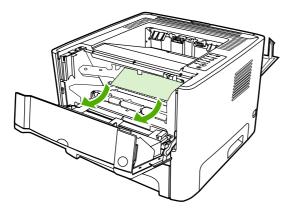


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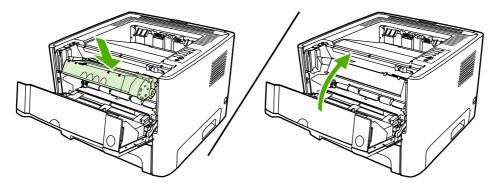
3. Press the print-cartridge-door button, and then remove the print cartridge from the printer.



**4.** With both hands, grasp the side of the media that is most visible (this includes the middle), and carefully pull it free from the printer.

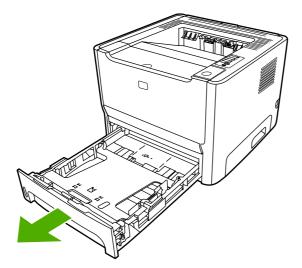


5. Insert the print cartridge in the printer and close the print-cartridge door.

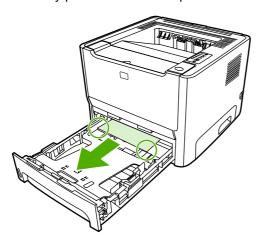


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6. Open tray 2.

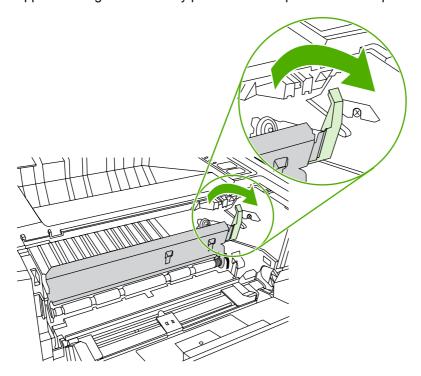


**7.** With both hands, grasp the side of the media that is most visible (this includes the middle), and carefully pull it free from the printer.

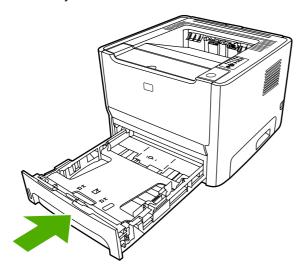


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**8.** If no media is visible, open the print-cartridge door, remove the print cartridge, and pull down the upper media guide. Carefully pull the media up and out of the printer.



9. Close tray 2.



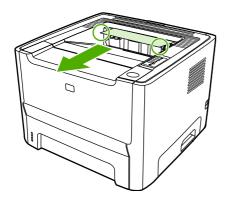
### **Output bin**



**CAUTION** Do not use sharp objects, such as tweezers or needlenose pliers, to remove jams. Damage caused by sharp objects will not be covered by the warranty.

With both hands, grasp the side of the media that is most visible (this includes the middle), and carefully pull it free from the printer.

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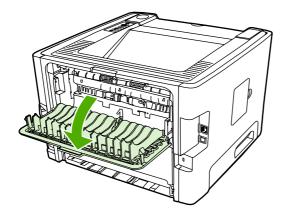
## Straight-through output path

To clear a jam in the straight-through output path, perform the following steps:

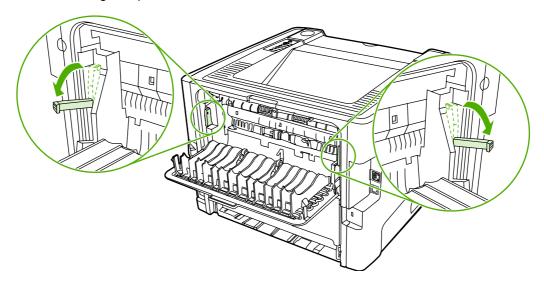


**CAUTION** Do not use sharp objects, such as tweezers or needlenose pliers, to remove jams. Damage caused by sharp objects will not be covered by the warranty.

1. Open the straight-through output door.

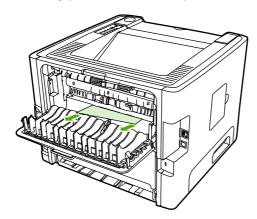


2. Pull down the green pressure-release levers.



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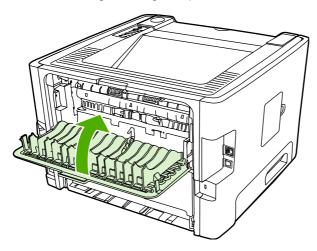
3. With both hands, grasp the side of the media that is most visible (this includes the middle), and carefully pull it free from the printer.





**NOTE** If you cannot grasp the media with your hands, perform the procedure in <u>Print-cartridge area</u>.

4. Close the straight-through output door.



### Automatic two-sided printing path

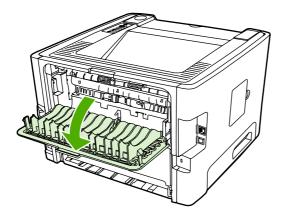
To clear a jam in the automatic two-sided printing path, perform the following steps:

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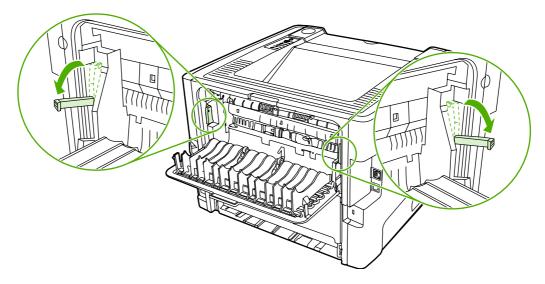
 $\wedge$ 

**CAUTION** Do not use sharp objects, such as tweezers or needlenose pliers, to remove jams. Damage caused by sharp objects will not be covered by the warranty.

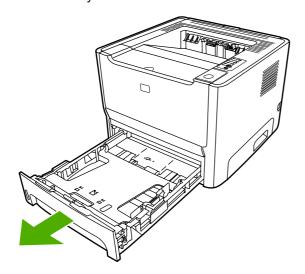
1. Open the straight-through output door.



2. Pull down the green pressure-release levers.

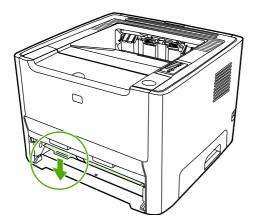


3. Remove tray 2.

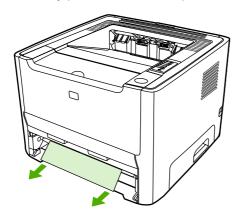


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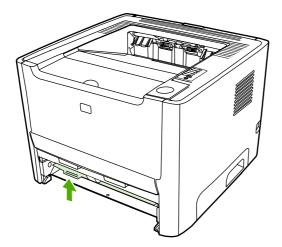
**4.** Push down on the green lever on the automatic two-sided printing path door on the front of the printer.



5. With both hands, grasp the side of the media that is most visible (this includes the middle), and carefully pull it free from the printer.

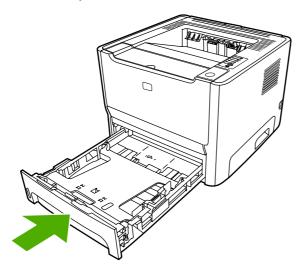


6. Close the automatic two-sided printing path door by firmly pushing it up.

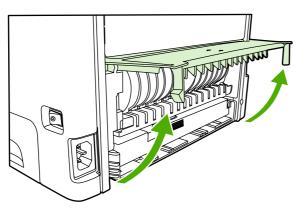


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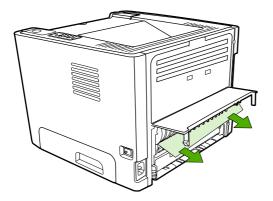
### 7. Reinsert tray 2.



8. Open the automatic two-sided printing path door on the back of the printer.

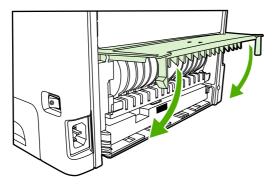


**9.** With both hands, grasp the side of the media that is most visible (this includes the middle), and carefully pull it free from the printer.



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**10**. Close the automatic two-sided printing path door.



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## **Network setup problem solving**

If the computer cannot discover the networked HP LaserJet 2015 Series printer, perform the following steps:

- 1. Check the cables to ensure that they are properly connected. Check all of the following connections:
  - Power cables
  - Cables between the printer and the hub or switch
  - Cables between the hub or switch and the computer
  - Cables to and from the modem or Internet connection, if applicable
- Verify that the computer's network connections are working properly (Windows only):
  - On the Windows desktop, double-click My Network Places or Network Neighborhood.
  - Click the Entire Network link.
  - Click the Entire Contents link.
  - Double-click one of the network icons, and make sure that some devices are listed.
- 3. Verify that the network connection is active:
  - Check the network light on the network (RJ-45) connector on the back of the printer.
  - If one of the lights is on solid, the printer is connected to the network.
  - If both network lights are off, check the cable connections from the printer to the gateway, switch, or hub to ensure that the connections are secure.
  - If the connections are secure, turn off the power to the printer for at least 10 seconds, and then turn on the power to the printer.
- Print a Network Configuration page. See Network Configuration page.
  - On the Network Configuration page, see if a non-zero IP address is assigned to the printer.
  - If the Network Configuration page does not have a valid, non-zero IP address, reset the HP
    internal network port to the factory defaults by pressing the Go and Cancel buttons at the
    same time.
    - After the Attention, Ready, and Go lights finish cycling, the printer returns to a Ready state and the reset is complete.
  - Two minutes after the printer reaches the Ready state, print another Network Configuration page, and check to see if a valid IP address is assigned to the printer.
  - If the IP address is still zeros, <u>Contact HP support</u>.

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# A Accessory/Consumable addendum

This appendix provides information on the following topics:

- Order supplies and accessories
- 10/100 networking print servers
- HP print cartridges
- DIMMs (memory or font)

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## Order supplies and accessories

You can increase the printer's capabilities with optional accessories and supplies. Use accessories and supplies specifically designed for the HP LaserJet P2015 Series printers to ensure optimum performance.

The HP LaserJet P2015 Series printer features Smart Printing Supplies. When you print a Configuration page by pressing and holding the Go button for 5 seconds, a Supplies Status page prints after the Configuration page. The Supplies Status page has information on the amount of toner remaining in the print cartridge, part numbers for ordering supplies, and whether the installed print cartridge is a genuine HP supply item.

Table A-1 Ordering information

	Item	Description or use	Order	number
Printing supplies	HP Multipurpose paper	HP brand paper for a variety of uses (1 box of 10 reams, 500 sheets each). To order a sample, in the U.S., call 1-800-471-4701.	HPM11	20
	HP LaserJet paper	Premium HP brand paper for use with HP LaserJet printers (1 box of 10 reams, 500 sheets each). To order a sample, in the U.S., call 1-800-471-4701.	HPJ11	24
	HP LaserJet transparency film	HP brand transparency film for use with HP LaserJet monochrome printers.	922961 922961	「(letter) J (A4)
Print cartridges for the HP LaserJet P2015 Series printer	Smart print cartridges	Replacement print cartridges for the HP LaserJet P2015 Series printer.	Q7553, cartridg	A (3,000-page ge)
			Q7553 cartridg	X (7,000-page ge)
Supplementary documentation	HP LaserJet family print media guide	A guide to using paper and other print media with HP LaserJet printers.	5963-7	863
				NOTE This document can be downloaded from http://www.hp.com/support/ljpaperguide/.
Replacement parts	Media pickup roller (for tray 1)	Picks media from tray 1 and advances it through the printer.	CB366-67901	
	Media pickup roller (for tray 2)	Picks media from tray 2 and advances it through the printer.	CB366-67902	
Accessories	250-sheet paper tray (tray 3)	Provides an additional 250- sheet input tray. It is standard on the HP LaserJet P2015x.	Q5931.	A

# 10/100 networking print servers

Table A-2 HP LaserJet P2015 Series printer

Item and description	Order number
HP Jetdirect 175x fast-Ethernet external print server (value line, USB port)	J6035C
Must be Version C or later.	
HP Jetdirect en3700 fast Ethernet print server	J7942A
HP Jetdirect en2400 802.11g wireless external print server (full featured, USB port)	J7951A

## **HP print cartridges**

### HP policy on non-HP print cartridges

Hewlett-Packard Company cannot recommend the use of non-HP print cartridges, either new, refilled, or remanufactured. Since they are not HP products, Hewlett-Packard cannot influence their design or control their quality. Service or repair that is required as a result of using non-HP print cartridges will not be covered under the printer warranty.



**NOTE** The warranty does not apply to defects resulting from software, interfacing, or parts not supplied by Hewlett-Packard.

### Storing print cartridges

Do not remove the print cartridge from its package until you are ready to use it, and minimize exposure to light.

### Print cartridge life expectancy

The average cartridge yield is 3000 pages in accordance with ISO/IEC 19752. A replacement cartridge that has an average yield of 7000 pages in accordance with ISO/IEC 19752 is also available. Actual cartridge yield depends on specific use.

### Saving toner

EconoMode is a feature that allows the printer to use less toner per page. Selecting this option may extend the life of the print cartridge and reduce your cost per page. However, it will also reduce print quality. The printed image is lighter, but it is adequate for printing drafts or proofs. HP does not recommend full-time use of EconoMode. See EconoMode for more information.

## **DIMMs (memory or font)**

The following sections provide instructions for installing, testing, and removing DIMMs.

### **Install a memory DIMM**

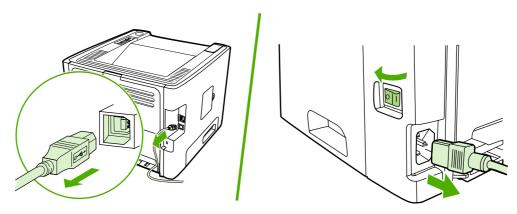
If you add memory (RAM only) to the HP LaserJet P2015 Series printer, you can print more complex print jobs.

To install a DIMM, follow the instructions below:

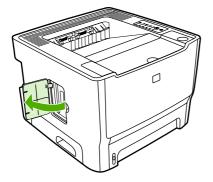


**CAUTION** Handling a DIMM (memory) without wearing a grounded, antistatic device might damage the DIMM. Touch any metal part of the printer or other grounded metal before touching the DIMM.

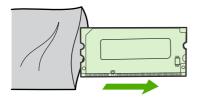
1. Use the power switch to turn off the printer, and then unplug all of the cables and cords connected to the printer.



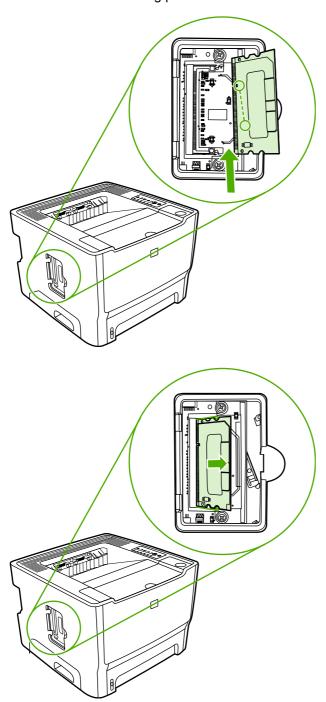
Open the DIMM door.



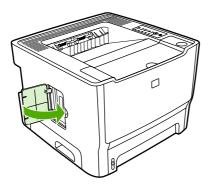
3. Remove the DIMM from the antistatic bag it came in, grasping the DIMM on the top edge.



4. With the gold contacts facing upward, insert the DIMM in the DIMM seat and press the DIMM body in until the metal retaining pins click.



5. Close the DIMM door.



6. Reconnect all printer cables and cords, and then use the power switch to turn on the printer.

### **Test the DIMM installation**

To test the DIMM installation, print a configuration page, and check the Total Memory specified on the page. See <u>Printer information pages</u> for more information.

If all lights on the control panel are blinking, the DIMM installation was unsuccessful. Remove the DIMM and reinstall it.

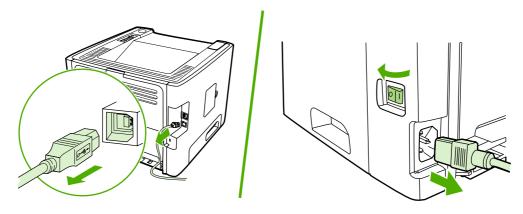
#### Remove a DIMM

To remove a DIMM, follow the instructions below:

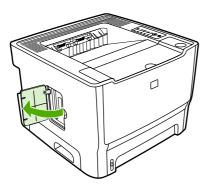


**CAUTION** Handling a DIMM (memory) without wearing a grounded, antistatic device might damage the DIMM. Touch any metal part of the printer or other grounded metal before touching the DIMM.

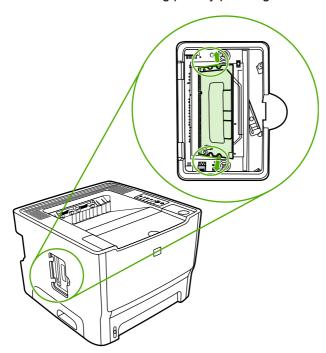
1. Use the power switch to turn off the printer, and then unplug all of the cables and cords connected to the printer.



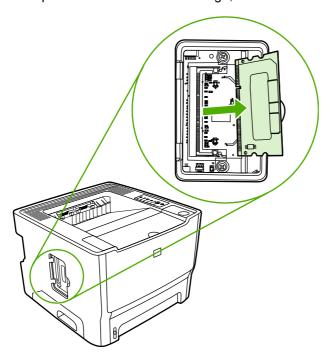
2. Open the DIMM door.



3. Unlock the DIMM retaining pins by pressing them outward.



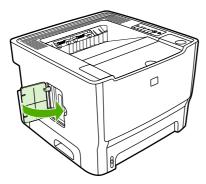
4. Grasp the DIMM on the bottom edge, and then remove the DIMM from the printer.





NOTE Store the DIMM in an antistatic bag.

5. Close the DIMM door.



**6.** Reconnect all printer cables and cords, and then use the power switch to turn on the printer.

# **B** Service and support

This appendix provides information on the following topics:

- Hardware service
- Extended warranty
- Guidelines for repacking the printer
- How to contact HP

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### **Hardware service**

If your hardware fails during the warranty period, Hewlett-Packard offers the following support options:

- **Hewlett-Packard repair services**: Hewlett-Packard will arrange to pick up the unit, repair it, and return it to you within 5 to 10 business days, depending on your location.
- Hewlett-Packard authorized service provider: You can return the unit to a local authorized service dealer.

See How to contact HP for more information.

## **Extended warranty**

HP Care Pack provides coverage for the HP product and all HP-supplied internal components. The hardware maintenance covers a three-year period from the date of the HP product purchase. The customer may purchase an HP Care Pack up to one year from the date of purchase of the HP product. For more information, contact the HP Customer Care Service and Support group. See <a href="How to contact HP">How to contact HP</a>.

HP Care Pack options might be available after the standard warranty period has expired. Go to <a href="http://www.hpexpress-services.com/10467a/">http://www.hpexpress-services.com/10467a/</a> and enter the product number to identify the HP Care Pack options that are available for your product.

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## **Guidelines for repacking the printer**

Use the following guidelines when repacking the printer:

- If possible, include print samples and 5 to 10 sheets of paper or other media that did not print correctly.
- Remove and keep any DIMMs (memory) installed in the printer. See <u>Install a memory DIMM</u> for more information.



**CAUTION** Static electricity can damage DIMMs. When handling DIMMs, wear a grounded, antistatic wrist strap.

- Remove and keep any cables, trays, and optional accessories installed in the printer.
- Remove and keep the print cartridge.



**CAUTION** To prevent damage to the print cartridge, store the print cartridge in its original packing material, or store it so that it is not exposed to light.

- If possible, use the original shipping container and packing material. Shipping damage as a result of inadequate packing is your responsibility. If you have already disposed of the printer's packing material, contact a local mailing service for information on repacking the printer.
- Hewlett-Packard recommends that you insure the equipment for shipment.

### How to contact HP

If you need to contact HP for service or support, use one of the following links:

- In the United States, go to <a href="http://www.hp.com/support/ljP2015/">http://www.hp.com/support/ljP2015/</a>.
- Worldwide, go to <a href="http://www.hp.com/">http://www.hp.com/</a>.

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# C Printer specifications

This appendix provides information on the following topics:

- Environmental specifications
- Acoustic emissions
- Electrical specifications
- Physical specifications
- Printer capacities and ratings
- Memory specifications
- Port availability

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## **Environmental specifications**

Operating environment	Printer plugged into an AC outlet:	
	• Temperature: 10° C to 32.5° C (50° F to 90.5° F)	
	Humidity: 20 to 80 percent (no condensation)	
Storage environment	Printer unplugged from an AC outlet:	
	<ul> <li>Temperature: 0° C to 40° C (32° F to 104° F)</li> </ul>	
	Humidity: 10 to 80 percent (no condensation)	



**NOTE** Values are based on preliminary data. See <a href="http://www.hp.com/support/ljP2015">http://www.hp.com/support/ljP2015</a> for current information.

### **Acoustic emissions**

Declared per ISO 9296

Table C-1 HP LaserJet P2015 printer

Sound power level	Printing (26 ppm): L <sub>WAd</sub> = 6.2 Bels A and 62 dB (A)
	Ready (Sleep): Inaudible
Sound pressure level bystander position	Printing (26 ppm): L <sub>pAm</sub> = 51 dB (A)
	Ready (Sleep): Inaudible



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**NOTE** Values are based on preliminary data. See <a href="http://www.hp.com/support/ljP2015">http://www.hp.com/support/ljP2015</a> for current information.

**NOTE** Configuration tested: HP LaserJet P2015 base base unit, 26 ppm, standard tray, A4 paper, and simplex continuous print.

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## **Electrical specifications**



**WARNING!** Power requirements are based on the country/region where the printer is sold. Do not convert operating voltages. Doing so might damage the printer and void the product warranty.

#### Table C-2 HP LaserJet P2015 printer

Power requirements (110)	110-127v (+/-10%), 50/60 Hz (+/-2)	
Power requirements (220)	220v-240v (+/-10%), 50/60 Hz (+/-2 Hz)	
Power consumption	<ul> <li>During printing (27 ppm): 325 watts (average)</li> </ul>	
	<ul> <li>During Ready (Standby) and Sleep*: 7 Watts</li> </ul>	
	* Instant-on fuser technology	
	Off: <1 watts	
Rated current	4.9 amps at 115 volts	
	<ul> <li>2.9 amps at 230 volts</li> </ul>	

Table C-3 HP LaserJet P2015d printer, HP LaserJet P2015n printer, HP LaserJet P2015x printer

Power requirements (110)	110-127v (+/-10%), 50/60 Hz (+/-2)	
Power requirements (220)	220v-240v (+/-10%), 50/60 Hz (+/-2 Hz)	
Power consumption	<ul> <li>During printing (27 ppm): 325 watts (average)</li> </ul>	
	<ul> <li>During Ready (Standby) and Sleep*: 7 Watts</li> </ul>	
	* Instant-on fuser technology	
	Off: <1 watts	
Rated current	4.9 amps at 115 volts	
	<ul> <li>2.9 amps at 230 volts</li> </ul>	

#### Table C-4 HP LaserJet P2015dn printer

Power requirements (110)	110-127v (+/-10%), 50/60 Hz (+/-2)	
Power requirements (220)	220v-240v (+/-10%), 50/60 Hz (+/-2 Hz)	
Power consumption	<ul> <li>During printing (27 ppm): 325 watts (average)</li> </ul>	
	<ul> <li>During Ready (Standby) and Sleep*: 7 Watts</li> </ul>	
	* Instant-on fuser technology	
	Off: <1 watts	
Rated current	4.9 amps at 115 volts	
	2.9 amps at 230 volts	

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**NOTE** Values are based on preliminary data. See <a href="http://www.hp.com/support/ljP2015">http://www.hp.com/support/ljP2015</a> for current information.

**NOTE** The power reported is the highest value measured for monochrome printing using all standard voltages.

**NOTE** The default time from Ready mode to Sleep mode and the recovery time from Sleep mode to the start of printing is less than 10 seconds because of the instant-on fusing.

**NOTE** The heat dissipation in Ready mode is 25 BTU/hour.

# **Physical specifications**

Dimensions	<ul> <li>Width: 350 mm (16.8 inches)</li> </ul>
	<ul> <li>Depth: 361 mm (14.2 inches)</li> </ul>
	<ul> <li>Height: 256 mm (10.0 inches)</li> </ul>
Weight (3,000-page cartridge installed)	HP LaserJet P2015 printer: 10.7 kg (23.6 lb)



**NOTE** Values are based on preliminary data. See <a href="http://www.hp.com/support/ljP2015">http://www.hp.com/support/ljP2015</a> for current information.

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# **Printer capacities and ratings**

Print speed	HP LaserJet P2015 printer:
	<ul> <li>27 ppm (letter), 26 ppm (A4)</li> </ul>
	<ul> <li>First page out in as few as 8.5 seconds</li> </ul>
Tray 2 capacity	250 sheets of regular weight 75 g/m² (20 lb) paper
Tray 1 capacity	50 sheets of regular weight 75 g/m² ((20 lb)) paper
Optional input tray (tray 3) capacity	250 sheets of regular weight 75 g/m² (20 lb) paper
Top (face down) output bin capacity	125 sheets of regular weight 75 g/m² (20 lb) paper
Minimum paper size	76 by 127 mm (3 by 5 inches)
Maximum paper size	216 by 356 mm (8.5 by 14 inches)
Media weight	Output bin: 60 to 105 g/m² (16 to 28 lbs)
	Straight through media path: 60 to 163 g/m² (16 to 43 lbs)
Base memory	32 MB RAM
Upgrade memory expansion	One DIMM slot available for a 32, 64, 128, or 256 MB RAM DIMM
Print resolution	<ul> <li>1200 dpi: This setting uses ProRes 1200 to provide fine- line detail at 1200 x 1200 dpi.</li> </ul>
	<ul> <li>1200 effective dpi: This setting provides 1200 dpi effective output quality using FastRes 1200.</li> </ul>
	<ul> <li>600 dpi: This setting provides 600 x 600 dpi output with Resolution Enhancement technology (REt) for improved text.</li> </ul>
Duty cycle	10,000 single-sided pages per month (maximum)
	<ul> <li>1,000 single-sided pages per month (average)</li> </ul>
PCL	PCL 5e, PCL 6
Postscript emulation	HP postscript level 3 emulation

# **Memory specifications**

Base memory	32 MB RAM
Upgrade memory expansion	100-pin, 66 MHz minimum speed

# **Port availability**

USB	Compatible with High-speed USB 2.0 specifications
Network	RJ-45, Ethernet 10/100
(networking-equipped models only)	

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# **D** Regulatory information

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## **FCC** compliance

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy. If it is not installed and used in accordance with the instructions, it 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 separation between equipment and receiver.
- Connect equipment to an outlet on a circuit different from that to which the receiver is located.
- Consult your dealer or an experienced radio/TV technician.



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**NOTE** Any changes or modifications to the printer that are not expressly approved by Hewlett-Packard could void the user's authority to operate this equipment.

Use of a shielded interface cable is required to comply with the Class B limits of Part 15 of FCC rules.

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## **Declaration of Conformity statements**

**Declaration of Conformity** 

according to ISO/IEC Guide 22 and EN 45014

Manufacturer's Name:Hewlett-Packard CompanyManufacturer's Address:11311 Chinden Boulevard,Boise, Idaho 83714-1021, USA

declares that the product

Product Name 4): HP LaserJet P2015 Series

Regulatory Model <sup>3)</sup>: BOISB-0602-00

Including: Q5931A — Optional 250–Sheet Input Tray

Product Options: AL

Toner Cartridges: Q7553A / Q7553X

conforms to the following Product Specifications:

Safety: IEC 60950-1:2001 / EN 60950-1:2001 +A11

IEC 60825-1:1993 +A1 +A2/EN 60825-1:1994 +A1 +A2 Class 1 Laser/LED Product)

GB4943-2001

EMC: CISPR 22:1993 +A1 +A2/ EN 55022:1994 Class B1)

EN 61000-3-2:2000 EN 61000-3-3:1995 / A1 EN 55024:1998 +A1 +A2

FCC Title 47 CFR. Part 15 Class B2) / ICES-003. Issue 4

GB9254-1998, GB17625.1-2003

#### Supplementary Information:

The product herewith complies with the requirements of the EMC Directive 89/336/EEC and the Low Voltage Directive 73/23/EEC, and carries the CE-marking accordingly.

- 1) The product was tested in a typical configuration with Hewlett-Packard Personal Computer Systems.
- 2) This Device complies with 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.
- 3) For regulatory purposes, this product is assigned a Regulatory model number. This number should not be confused with the product name or the product number(s).

Boise, Idaho 83714, USA

#### September 1, 2006

#### For Regulatory Topics ONLY, contact:

Australia Contact: Product Regulations Manager, Hewlett-Packard Australia Ltd., 31-41 Joseph Street, Blackburn, Victoria 3130,

Australia

European Contact: Your Local Hewlett-Packard Sales and Service Office or Hewlett-Packard GmbH, Department HQ-TRE / Standards

Europe, Herrenberger Straße 140, Böblingen, D-71034, Germany, (FAX: +49-7031-14-3143)

USA Contact: Product Regulations Manager, Hewlett-Packard Company, PO Box 15, Mail Stop 160, Boise, Idaho 83707-0015,

USA, (Phone: 208-396-6000)

## Regulatory statements

### Laser safety statement

The Center for Devices and Radiological Health (CDRH) of the U.S. Food and Drug Administration has implemented regulations for laser products manufactured since August 1, 1976. Compliance is mandatory for products marketed in the United States. The printer is certified as a "Class 1" laser product under the U.S. Department of Health and Human Services (DHHS) Radiation Performance Standard according to the Radiation Control for Health and Safety Act of 1968.

Since radiation emitted inside the printer is completely confined within protective housings and external covers, the laser beam cannot escape during any phase of normal user operation.



**WARNING!** Using controls, making adjustments, or performing procedures other than those specified in this user guide could result in exposure to hazardous radiation.

### **Canadian DOC regulations**

Complies with Canadian EMC Class B requirements.

« Conforme à la classe B des normes canadiennes de compatibilité électromagnétiques (CEM). »

#### Korean EMI statement

B급 기기 (가정용 정보통신기기)

이 기기는 가정용으로 전자파적합등록을 한 기기로서 주거지역에서는 물론 모든지역에서 사용할 수 있습니다.

## Laser statement for Finland

## **LASERTURVALLISUUS**

#### **LUOKAN 1 LASERLAITE**

#### **KLASS 1 LASER APPARAT**

HP LaserJet P2015, HP LaserJet P2015d, HP LaserJet P2015n, HP LaserJet P2015x, HP LaserJet P2015dn -laserkirjoitin on käyttäjän kannalta turvallinen luokan 1 laserlaite. Normaalissa käytössä kirjoittimen suojakotelointi estää lasersäteen pääsyn laitteen ulkopuolelle.

Laitteen turvallisuusluokka on määritetty standardin EN 60825-1 (1994) mukaisesti.

### **VAROITUS!**

Laitteen käyttäminen muulla kuin käyttöohjeessa mainitulla tavalla saattaa altistaa käyttäjän turvallisuusluokan 1 ylittävälle näkymättömälle lasersäteilylle.

#### **VARNING!**

Om apparaten används på annat sätt än i bruksanvisning specificerats, kan användaren utsättas för osynlig laserstrålning, som överskrider gränsen för laserklass 1.

#### **HUOLTO**

HP LaserJet P2015, HP LaserJet P2015d, HP LaserJet P2015n, HP LaserJet P2015x, HP LaserJet P2015dn -kirjoittimen sisällä ei ole käyttäjän huollettavissa olevia kohteita. Laitteen saa avata ja huoltaa ainoastaan sen huoltamiseen koulutettu henkilö. Tällaiseksi huoltotoimenpiteeksi ei katsota väriainekasetin vaihtamista, paperiradan puhdistusta tai muita käyttäjän käsikirjassa lueteltuja, käyttäjän tehtäväksi tarkoitettuja ylläpitotoimia, jotka voidaan suorittaa ilman erikoistyökaluja.

#### VARO!

Mikäli kirjoittimen suojakotelo avataan, olet alttiina näkymättömälle lasersäteilylle laitteen ollessa toiminnassa. Älä katso säteeseen.

#### **VARNING!**

Om laserprinterns skyddshölje öppnas då apparaten är i funktion, utsättas användaren för osynlig laserstrålning. Betrakta ej strålen.

Tiedot laitteessa käytettävän laserdiodin säteilyominaisuuksista:

Aallonpituus 785-800 nm

Teho 5 mW

Luokan 3B laser

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## **Environmental product stewardship program**

## Protecting the environment

Hewlett-Packard Company is committed to providing quality products in an environmentally sound manner. This product has been designed with several attributes to minimize the impact on our environment.

## Ozone production

This product generates no appreciable ozone gas  $(O_3)$ .

## **Power consumption**

Power usage drops significantly while in Ready/Sleep mode, which saves natural resources and saves money without affecting the high performance of this product. This product qualifies for ENERGY STAR® (Version 3.0), which is a voluntary program to encourage the development of energy-efficient office products.



ENERGY STAR® and the ENERGY STAR mark are U.S. registered marks. As an Energy Star® partner, Hewlett-Packard Company has determined this product meets ENERGY STAR® guidelines for energy efficiency. For more information, see <a href="http://www.energystar.gov/">http://www.energystar.gov/</a>.

## Toner consumption

Economode uses significantly less toner, which might extend the life of the print cartridge.

## Paper use

This product's manual/optional automatic duplex feature and N-up printing (multiple pages printed on one page) capability can reduce paper usage and the resulting demands on natural resources.

## **Plastics**

Plastic parts over 25 grams (0.9 oz) are marked according to international standards that enhance the ability to identify plastics for recycling purposes at the end of the product's life.

## **HP LaserJet printing supplies**

It's easy to return and recycle your empty HP LaserJet print cartridges—free of charge—with HP Planet Partners. HP is committed to providing inventive, high-quality products and services that are environmentally sound, from product design and manufacturing to distribution, operation and recycling processes. We ensure your returned HP LaserJet print cartridges are recycled properly, processing them to recover valuable plastics and metals for new products and diverting millions of tons of waste from landfills. Since this cartridge is being recycled and used in new materials, it will not be returned to

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you. Your empty HP LaserJet print cartridges are recycled responsibly when you participate in the HP Planet Partners program. Thank you for being environmentally responsible!

In many countries/regions, this product's printing supplies (for example, print cartridges) can be returned to HP through the HP Printing Supplies Returns and Recycling Program. An easy-to-use, free take back program is available in more than 35 countries/regions. Multi-lingual program information and instructions are included in every new HP LaserJet print cartridge and supplies package.

## HP printing supplies returns and recycling program information

Since 1992, HP has offered HP LaserJet supplies return and recycling free of charge. In 2004, HP Planet Partners for LaserJet Supplies was available in 85% of the world market where HP LaserJet supplies are sold. Postage-paid and pre-addressed labels are included within the instruction guide in most HP LaserJet print cartridge boxes. Labels and bulk boxes are also available through the Web site: <a href="http://www.hp.com/recycle">http://www.hp.com/recycle</a>.

Use the label to return empty, original HP LaserJet print cartridges only. Please do not use this label for non-HP cartridges, refilled or remanufactured cartridges, or warranty returns. Printing supplies or other objects inadvertently sent to the HP Planet Partners program cannot be returned.

More than 10 million HP LaserJet print cartridges were recycled globally in 2004 through the HP Planet Partners supplies recycling program. This record number represents 26 million pounds of print cartridge materials diverted from landfills. Worldwide, in 2004, HP recycled an average of 59% of the print cartridge by weight consisting primarily of plastic and metals. Plastics and metals are used to make new products such as HP products, plastic trays and spools. The remaining materials are disposed of in an environmentally responsible manner.

### U.S. returns

For a more environmentally responsible return of used print cartridges and supplies, HP encourages the use of bulk returns. Simply bundle two or more print cartridges together and use the single, prepaid, pre-addressed UPS label that is supplied in the package. For more information in the U.S., call (1) (800) (340-2445) or visit the HP Web site at <a href="http://www.hp.com/recycle">http://www.hp.com/recycle</a>.

#### Non-U.S. returns

Non-U.S. customers should visit the <a href="http://www.hp.com/recycle">http://www.hp.com/recycle</a> Web site for more information regarding availability of the HP Supplies Returns and Recycling program.

## **Paper**

This product is capable of using recycled papers when the paper meets the guidelines outlines in the *Print Media Guide*. See <u>Order supplies and accessories</u> for ordering information. This product is suitable for the use of recycled paper according to EN12281:2002.

## Material restrictions

This HP product does not contain added mercury.

This HP product does not contain batteries.

# Disposal of Waste Equipment by Users in Private Household in the European Union

This symbol on the product or on its packaging indicates that this product must not be disposed of with your other household waste. Instead, it is your responsibility to dispose of your waste equipment by

handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local city office, your household waste disposal service or the shop where you purchased the product.



## **Material safety data sheet**

Material Safety Data Sheets (MSDS) for supplies containing chemical substances (e.g., toner) can be obtained by contacting the HP Web site at: <a href="http://www.hp.com/go/msds">http://www.hp.com/hpinfo/community/environment/productinfo/safety</a>.

## For more information

To obtain information about these environmental topics:

- Product environmental profile sheet for this and many related HP products
- HP's commitment to the environment
- HP's environmental management system
- HP's end-of-life product return and recycling program
- MSDS

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Visit: <a href="http://www.hp.com/go/environment/">http://www.hp.com/go/environment/</a> or <a href="http://www.hp.com/hpinfo/community/environment/">http://www.hp.com/hpinfo/community/environment/</a> productinfo/safety/.

Appendix D Regulatory information ENWW

# **E** Warranty and licensing

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# **Hewlett-Packard limited warranty statement**

**HP PRODUCT** 

**DURATION OF LIMITED WARRANTY** 

HP LaserJet P2015 Series printers

One year from date of purchase

HP warrants to you, the end-user customer, that HP hardware and accessories will be free from defects in materials and workmanship after the date of purchase, for the period specified above. If HP receives notice of such defects during the warranty period, HP will, at its option, either repair or replace products which prove to be defective. Replacement products may be either new or equivalent in performance to new.

HP warrants to you that HP software will not fail to execute its programming instructions after the date of purchase, for the period specified above, due to defects in material and workmanship when properly installed and used. If HP receives notice of such defects during the warranty period, HP will replace software which does not execute its programming instructions due to such defects.

HP does not warrant that the operation of HP products will be uninterrupted or error free. If HP is unable, within a reasonable time, to repair or replace any product to a condition as warranted, you will be entitled to a refund of the purchase price upon prompt return of the product.

HP products may contain remanufactured parts equivalent to new in performance or may have been subject to incidental use.

Warranty does not apply to defects resulting from (a) improper or inadequate maintenance or calibration, (b) software, interfacing, parts or supplies not supplied by HP, (c) unauthorized modification or misuse, (d) operation outside of the published environmental specifications for the product, or (e) improper site preparation or maintenance.

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## **Hewlett-Packard software license agreement**

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# Limited warranty for print cartridge life



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**NOTE** The following warranty applies to the print cartridge that came with this printer.

This HP product is warranted to be free from defects in materials and workmanship. This warranty does not apply to products that (a) have been refilled, refurbished, remanufactured or tampered with in any way, (b) experience problems resulting from misuse, improper storage, or operation outside of the published environmental specifications for the printer product or (c) exhibit wear from ordinary use. To obtain warranty service, please return the product to place of purchase (with a written description of the problem and the print samples) or contact HP customer support. At HP's option, HP will either replace products that prove to be defective or refund your purchase price. TO THE EXTENT ALLOWED BY LOCAL LAW. THE ABOVE WARRANTY IS EXCLUSIVE AND NO OTHER WARRANTY OR CONDITION, WHETHER WRITTEN OR ORAL, IS EXPRESSED OR IMPLIED AND HP SPECIFICALLY DISCLAIMS ANY IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY, SATISFACTORY QUALITY, AND FITNESS FOR A PARTICULAR PURPOSE. TO THE EXTENT ALLOWED BY LOCAL LAW, IN NO EVENT WILL HP OR ITS SUPPLIERS BE LIABLE FOR DIRECT, SPECIAL INCIDENTAL, CONSEQUENTIAL (INCLUDING LOST PROFIT OR DATA), OR OTHER DAMAGE, WHETHER BASED IN CONTRACT, TORT, OR OTHERWISE. THE WARRANTY TERMS CONTAINED IN THIS STATEMENT, EXCEPT TO THE EXTENT LAWFULLY PERMITTED, DO NOT EXCLUDE, RESTRICT OR MODIFY AND ARE IN ADDITION TO THE MANDATORY STATUTORY RIGHTS APPLICABLE TO THE SALE OF THIS PRODUCT TO YOU.

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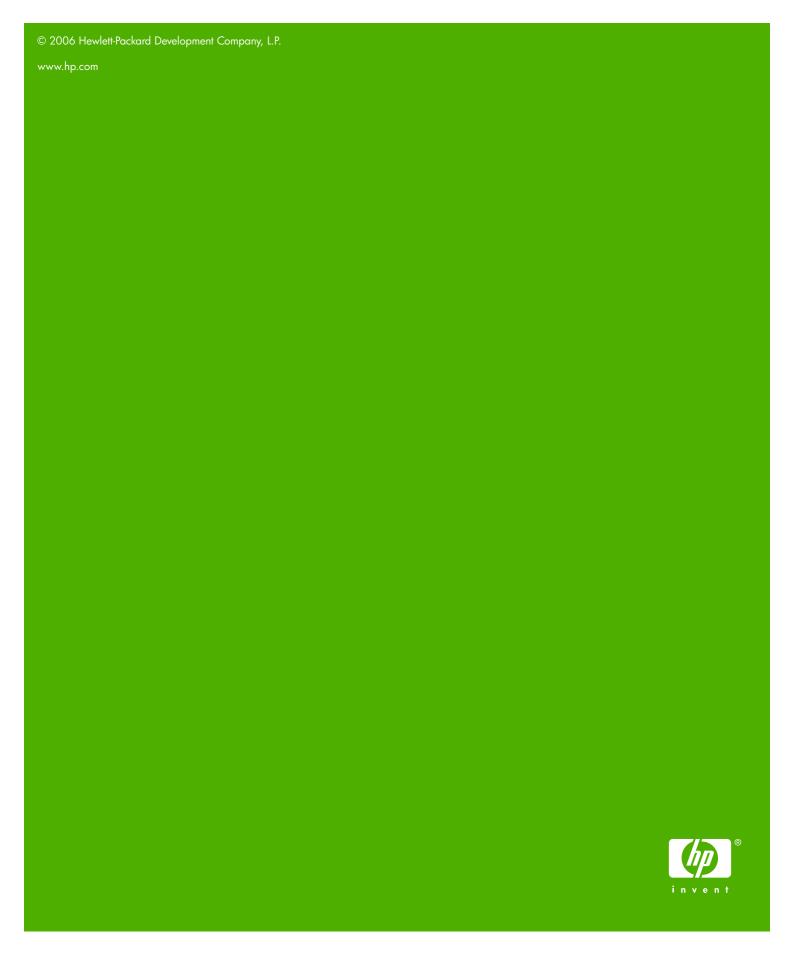
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