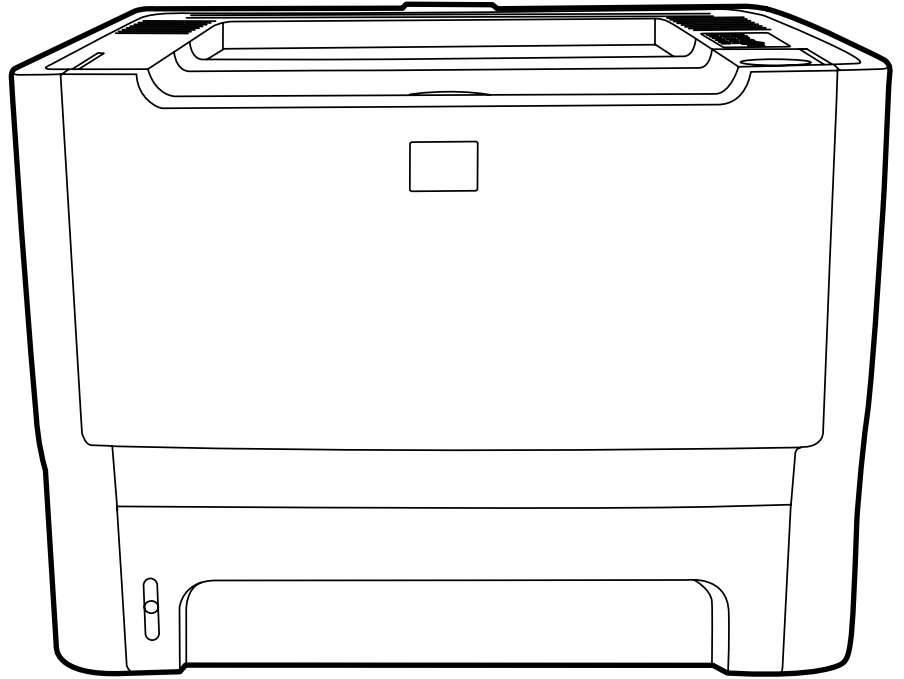


HP LaserJet P2015 Series

Service Manual



HP LaserJet P2015 Series

Service Manual



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Part number CB366-90905

Edition 1, 10/2006

Safety information

WARNING!

Potential Shock Hazard

Always follow basic safety precautions when using this product to reduce risk of injury from fire or electric shock.

Read and understand all instructions in the user guide.

Observe all warnings and instructions marked on the product.

Use only a grounded electrical outlet when connecting the printer to a power source. If you do not know whether the outlet is grounded, check with a qualified electrician.

Do not touch the contacts on the end of any of the sockets on the printer. Replace damaged cords immediately.

Unplug this product from wall outlets before cleaning.

Do not install or use this product near water or when you are wet.

Install the product securely on a stable surface.

Install the product in a protected location where no one can step on or trip over the power cord and where the power cord will not be damaged.

If the product does not operate normally, see the online user guide.

Refer all servicing questions to qualified personnel.

Information regarding FCC Class B, Parts 15 and 68 requirements can be found in the user guide.

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Table of contents

1 Product information

Product features	2
HP LaserJet P2015 printer	2
HP LaserJet P2015d printer	2
HP LaserJet P2015n printer	3
HP LaserJet P2015dn printer	3
HP LaserJet P2015x printer	3
Identify product parts	4
Control panel	6
Supported paper and other media	7
Optimize print quality for media types	7
Guidelines for using media	8
HP media	8
Media to avoid	8
Media that can damage the printer	8
Paper	9
Labels	9
Label construction	9
Transparencies	9
Envelopes	9
Envelope construction	10
Envelopes with double-side seams	10
Envelopes with adhesive strips or flaps	10
Envelope storage	10
Card stock and heavy media	11
Card stock construction	11
Card stock guidelines	11
Letterhead and preprinted forms	11
Load media	13
Tray 1	13
Tray 2 and optional tray 3	14
Straight-through output path	14
Manual feed	15
Media type and tray loading	15

2 Installation

Site preparation	18
Package contents	19
Install tray 3	20

Install printer software	21
Supported operating systems	21
Drivers	21
Windows printer drivers	21
Macintosh printer driver	21
Driver downloads	21
Installing software on Microsoft® Windows	22
Installing software on Macintosh OS X V10.2.8, V10.3.9, and V10.4.3	23
Uninstaller	23
Printer information pages	25
Demo page	25
Configuration page	25
Supplies Status page	25
Network Configuration page	25

3 Manage the printer

HP ToolboxFX	28
To view HP ToolboxFX	28
Status	29
Alerts	30
Set up status alerts	30
Set up e-mail alerts	30
Help	30
Device settings	31
Device information	31
Paper handling	32
Print quality	32
Paper types	32
System setup	33
Service	33
Print settings	33
Printing	33
PCL 5e	33
PCL 6	33
PostScript®	34
Network settings	34
Embedded Web server	35
Open the embedded Web server	35
Status tab	36
Settings tab	36
Networking tab	36
Links	37

4 Maintenance

Replace the print cartridge	40
Redistribute toner	42
Clean the printer	43
Clean the print-cartridge area	43
Clean the printer media path	44
Clean the pickup roller (tray 1)	46

Replace the pickup roller (tray 1)	51
Clean the pickup roller (tray 2)	55
Replace the pickup roller (tray 2)	62

5 Theory of operation

Introduction	70
Internal components	71
Timing	73
Engine control system	74
Laser/scanner system	76
Pickup/feed/delivery system	77
Image-formation system	79

6 Removal and replacement

Introduction	84
Removal and replacement strategy	84
Electrostatic discharge	84
Required tools	84
Before performing service	85
Pre-service procedures	85
Parts removal order	85
Covers	86
Left-side cover	86
Right-side cover	86
Back cover	87
Duplexer tray (HP LaserJet P2015d, P2015dn, and P2015x printers only)	89
Top cover	90
Control panel	95
Formatter	97
Laser/scanner	98
Memory-tag-reader assembly	99
Duplex-drive PCA (HP LaserJet P2015d, P2015dn, and P2015x printers only)	101
Fuser	103
Fan	103
Duplex-drive gears (HP LaserJet P2015d, P2015dn, and P2015x printers only)	104
Duplex solenoid (HP LaserJet P2015d, P2015dn, and P2015x printers only)	106
Fuser	107
Interlock assembly	118
ECU	119
Main motor	126
Pickup and feed assemblies	128
Transfer roller	128
Registration assembly	129
Main gear assembly/tray 2 pickup solenoid	130
Print-cartridge door	134

7 Problem solving

Basic problem solving	138
Status-light patterns	140

Fatal error secondary messages	147
Accessory error secondary messages	150
Media problemsolving	151
Printed page is different from what appeared on screen	153
Garbled, incorrect, or incomplete text	153
Missing graphics or text, or blank pages	153
Page format is different from another HP LaserJet printer	154
Graphics quality	154
Image problem solving	155
Light print or faded	155
Toner specks	155
Dropouts	155
Vertical lines	156
Gray background	156
Toner smear	156
Loose toner	157
Vertical repetitive defects	157
Misformed characters	157
Page skew	158
Curl or wave	158
Wrinkles or creases	158
Toner scatter outline	159
Clear jams	160
Print-cartridge area	160
Input trays	162
Output bin	165
Straight-through output path	166
Automatic two-sided printing path	167
Diagnostic resources	172
Engine test	172
Continuous self-test	172
Half self-test functional check	173
Drum rotation functional check	173
Heating element check	173
High-voltage contacts check	174
Checking the print cartridge contacts	174
Checking the high-voltage connector assembly	175
Network-setup problemsolving	176
Reset the printer	177
NVRAM initialization	177
Super NVRAM initialization	177
Network reset	178
Cold reset	178
Troubleshooting tools and reference diagrams	179
Repetitive image defects	179
General timing chart	180
Circuit diagram	181
Solenoids	183
Switches and sensors	184
Rollers and pads	185

8 Parts and diagrams

Order parts and supplies	188
Parts	188
Related documentation and software	188
Supplies	188
Assembly locations	190
Covers	194
Internal assemblies	198
Alphabetical parts list	228
Numerical parts list	239

Appendix A Accessory/Consumable addendum

Consumables and accessories	252
10/100 networking print servers	252
HP print cartridges	253
HP policy on non-HP print cartridges	253
Storing print cartridges	253
Print cartridge life expectancy	253
Saving toner	253
DIMMs (memory or font)	254
Install a DIMM	254
Test the DIMM installation	256
Remove a DIMM	256

Appendix B Service and support

Hardware service	260
Extended warranty	260
Guidelines for repacking the printer	261
How to contact HP	261

Appendix C Printer specifications

Environmental specifications	264
Acoustic emissions	264
Electrical specifications	265
Physical specifications	267
Printer capacities and ratings	268
Memory specifications	268
Port availability	268

Appendix D Regulatory information

FCC compliance	270
Declaration of Conformity statements	271
Regulatory statements	272
Laser safety statement	272
Canadian DOC regulations	272
Korean EMI statement	272
Laser statement for Finland	273

Appendix E Warranty and licensing

Hewlett-Packard limited warranty statement276

Hewlett-Packard software license agreement277

Limited warranty for print cartridge278

Index279

1 Product information

This chapter provides information on the following topics:

- [Product features](#)
- [Identify product parts](#)
- [Control panel](#)
- [Supported paper and other media](#)
- [Load media](#)

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)
- FastRes 1200 600x600x2
- 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
- 45 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).

Identify product parts

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

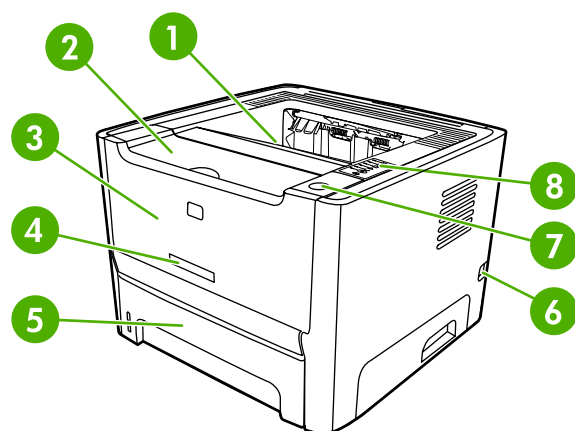


Figure 1-1 HP LaserJet P2015dn, front view

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

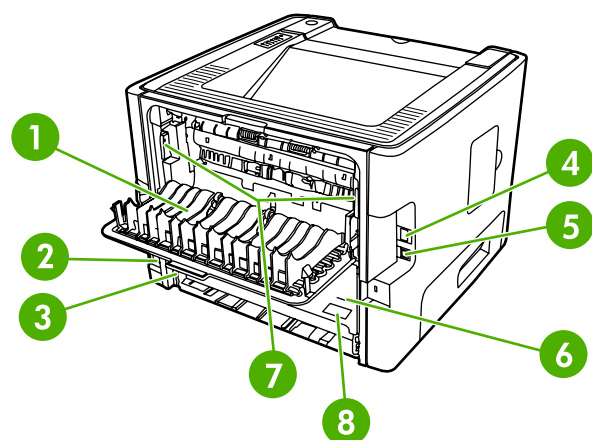


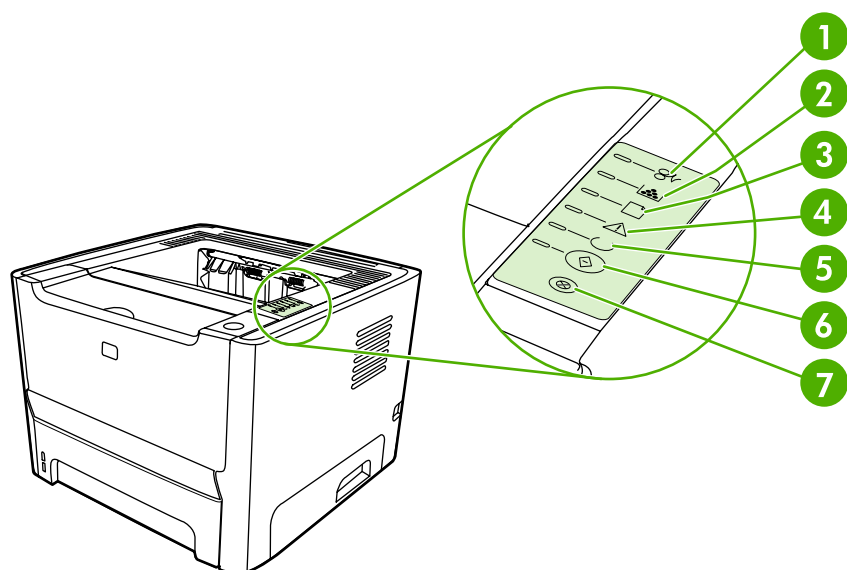
Figure 1-2 HP LaserJet P2015dn, back view

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

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.
2	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.
5	Ready light: Indicates that the printer is ready to print.
6	Go button and light: Initiates action or indicates status.
7	Cancel button: To cancel the print job that is currently printing, press the Cancel button.

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*. Download the guidelines from <http://www.hp.com/support/ljpaperguide/>.



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 1-1 Driver print modes

Mode	Media type
PLAIN	75 to 104 g/m ² (20 to 27 lb)
LIGHT	Less than 75 g/m ² (20 lb)
HEAVY	90 to 105 g/m ² (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.

HP media

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

Media to avoid

- 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 multipart or multipage forms.
- Do not use paper that contains a watermark if you are printing solid patterns.

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 that uses 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 temperatures of 200°C (392°F) for 0.1 second.

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

Paper

For best results, use conventional 75 g/m² (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 by using the straight-through output path.



CAUTION Do not feed a sheet of labels through the printer more than once. The adhesive degrades during the heat of printing 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 inch) of curl in any direction.
- **Condition:** Do not use labels that have 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 by using the straight-through paper path.

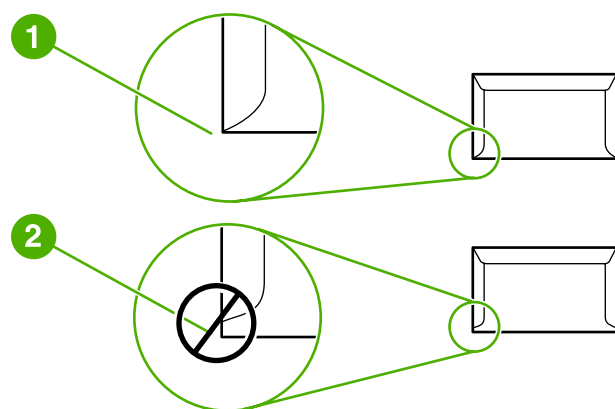
Envelope construction

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 inches) to 178 x 254 mm (7 x 10 inches).

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 inch) 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 inches)
 - **Maximum:** 216 x 356 mm (8.5 x 14.0 inches)

Card stock guidelines

Set margins at least 2 mm (0.08 inch) 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.

Load media

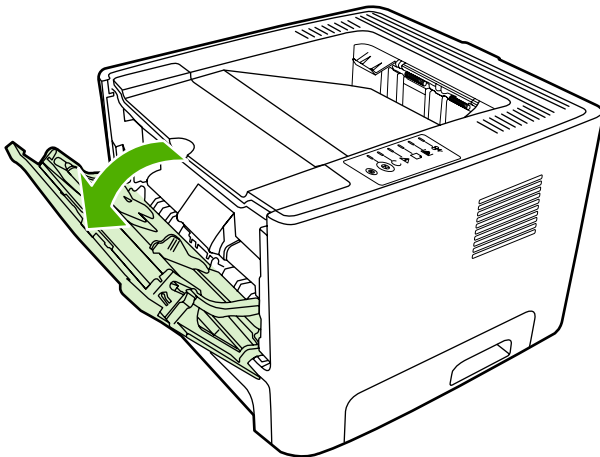
The following sections describe how to load media into the different input trays.



CAUTION If you try to print on media that is wrinkled, folded, or damaged in any way, a jam might occur.

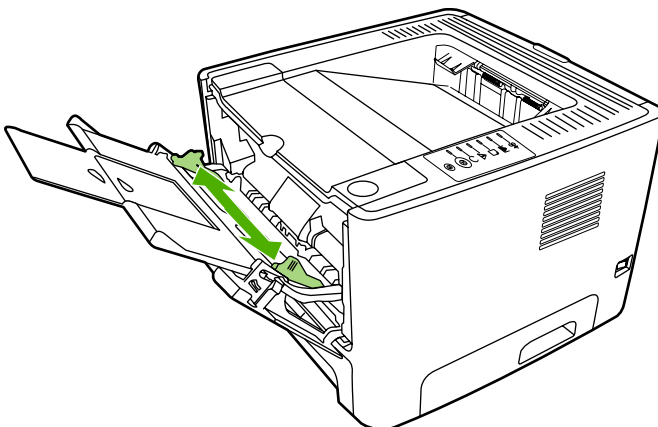
Tray 1

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.

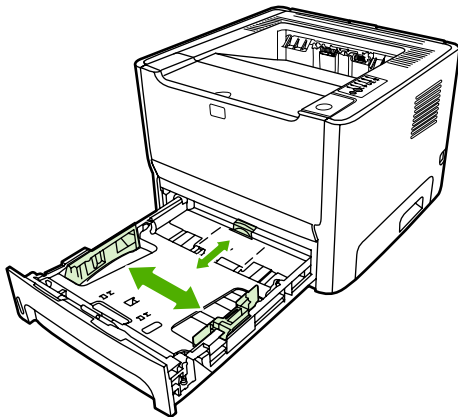
Media guides ensure that the media is correctly fed into the printer and that the print is not skewed (crooked on the media). When loading media, adjust the media guides to match the width of the media that you are using.



Tray 2 and optional tray 3

Tray 2 and optional tray 3 hold up to 250 pages of 75 g/m² (20 lb) paper, or fewer pages of heavier media (25 mm (0.9 inch) or less stack height). Load media with the top forward and the side to be printed on facing down.

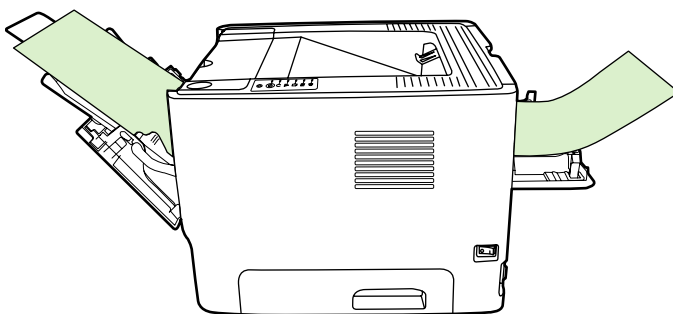
Media guides ensure that the media feeds correctly into the printer and that the print is not skewed. Tray 2 has side and rear media guides. When loading media, adjust the media guides to match the length and width of the media that you are using.



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. After you have enabled manual feed, press the **Go** button to print.

Media type and tray loading

The HP LaserJet P2015 Series has the following tray priority:

1. Tray 1 (if open)
2. Tray 3 (if attached)
3. Tray 2

Minimum media dimensions are 76 x 127 mm (3 x 5 inches).

Maximum media dimensions are 216 x 356 mm (8.5 x 11 inches).

Table 1-2 Tray 1 media information

Media type	Media specifications	Media quantity	Driver settings	Paper orientation	Output
Normal	75 to 104 g/m ² (20 to 27 lb)	Up to 50 sheets	Plain or unspecified	N/A	Output bin
Envelopes	Less than 90 g/m ² (24 lb)	Up to 10 envelopes	Envelope	Short edge leading, flap on right side facing up	Straight-through output door
Labels	Standard	Up to 10 sheets	Labels	Side to be printed facing up	Straight-through output door
Shipping labels	Heavy	Up to 10 sheets	Cardstock	Side to be printed facing up	Straight-through output door
Transparencies	4-mil, 0.1 Monochrome Overhead	Up to 10 sheets	Transparencies	Side to be printed facing up	Straight-through output door
Heavy	90 to 105 g/m ² (24 to 28 lb)	Up to 10 sheets	Light glossy, glossy, or heavy glossy	Side to be printed facing up	Straight-through output door
Glossy	75 to 105 g/m ² (20 to 28 lb)	Up to 10 sheets	Light glossy, glossy, or heavy glossy	Side to be printed facing up	Straight-through output door
Letterhead	75 to 104 g/m ² (20 to 27 lb)	Up to 10 sheets	Letterhead	Side to be printed facing up, top of page in first	Output bin
Cardstock	Up to 10	Up to 10	Cardstock	Side to be printed facing up	Straight-through output door

Table 1-3 Tray 2 and optional tray 3 media information

Media type	Media specifications	Media quantity	Driver settings	Paper orientation	Output
Normal	75 to 104 g/m ² (20 to 27 lb)	Up to 250 sheets	Plain or unspecified	N/A	Output bin
Heavy	90 to 105 g/m ² (24 to 28 lb)	Up to 250 sheets	Cardstock	N/A	Straight-through output door
Transparencies	4-mil, 0.1 Monochrome Overhead	Up to 10 sheets	Transparencies	Side to be printed face down	Straight-through output door
Letterhead	75 to 104 g/m ² (20 to 27 lb)	Up to 250 sheets	Letterhead	Side to be printed face down	Normal: output bin Heavy: straight-through output door

2 Installation

- [Site preparation](#)
- [Package contents](#)
- [Install tray 3](#)
- [Install printer software](#)
- [Printer information pages](#)

Site preparation

Place the printer on a sturdy, level surface that meets the following environmental requirements:

- Temperature: 15°C to 32.5°C (59°F to 90.5°F)
- Humidity: 10% to 80% relative humidity (no condensation)
- Exposure: Place away from direct sunlight, open flames, ammonia fumes, and air vents.
- Clearance: Allow sufficient space around the printer for access.
- Ventilation: Ensure that the printer is located in a well-ventilated area.

Package contents

Figure 2-1 Package contents on page 19 shows the package contents for the HP LaserJet P2015 Series printer.

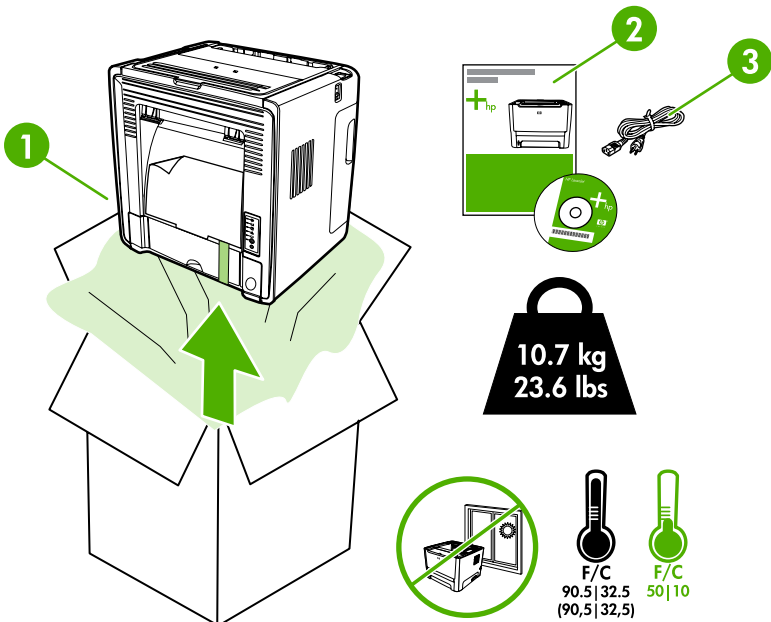


Figure 2-1 Package contents

1	HP LaserJet P2015 Series printer
2	Software and user documentation CD-ROM
3	Power cable

Install tray 3

If you have tray 3, install tray 3 as shown.

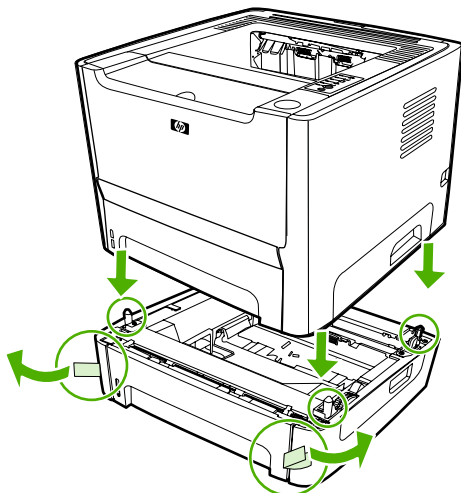


Figure 2-2 Installing tray 3

After installing tray 3, configure the printer driver to allow printing from tray 3.

1. On the Windows task bar, click **Start**, click **Settings**, and then click **Printers**.
2. Right-click the **HP LaserJet P2015** icon.
3. Click **Properties**.
4. Click the **Device Settings** tab.
5. Windows 2000/XP: Under **Installable Options**, change **Tray 3** to **Installed**.

Windows 98/Me: Click **Configure**, and then select **Tray 3** under **Optional Paper Sources**.

Install printer software

Supported operating systems

The printer software runs on the following operating systems:

- Windows 98 (printer driver only)
- Windows Me (printer driver only)
- Windows 2000
- Windows Server 2003 (printer driver only)
- Windows XP (32-bit)
- Windows XP (64-bit) (printer driver only)
- Macintosh OS X V10.2.8, V10.3.9, and V10.4.3

Drivers

Windows printer drivers

The software CD-ROM that came with the printer includes three Windows printer drivers: 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 if you need print results to look consistent with those from older HP LaserJet printers. Certain features are not available in this printer driver.
- 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.
- 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.

Macintosh printer driver

The software CD-ROM that came with the printer includes an HP LaserJet P2015 Series driver for Macintosh OS X V10.2.8, V10.3.9, and V10.4.3

Driver downloads

The latest printer drivers and printing software for your HP LaserJet printer are available on the Web at <http://www.hp.com/support/ljp2015>.

Installing software on Microsoft® Windows

Two methods are available for installing printer drivers and software components for the printer.

Full (Recommended). Installs everything that your device needs to work plus HP ToolboxFX:

- **HP LaserJet P2015 Series PCL 6 driver.**
- **HP ToolboxFX.** Allows you to change printer settings and contains documentation and self-help tools.
- **Screen Fonts.** Printer-matching TrueType fonts help ensure WYSIWYG printing.
- **HP LaserJet P2015 Series printer documentation.** A list of documentation, which includes information about product operation, troubleshooting, warranty and specifications, supplies, and support.
- **HP Software Update.** Use this software to check for software updates for your HP products.

Minimum. Installs only the software required to print. The following is a list of available components:

- **HP LaserJet P2015 Series PCL 6 driver**
- **Screen Fonts.** Printer-matching TrueType fonts help ensure WYSIWYG printing.
- **HP Software Update.** Use this software to check for software updates for your HP products.



NOTE To install additional printer drivers (PCL 5e or HP postscript level 3 emulation), utilize the Windows Add Printer utility.

NOTE Administrator privileges are required to install the printing system onto a Windows 2000 or Windows XP operating system.

USB Connection

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

Network Connection

If a computer on the network already has the HP LaserJet P2015 software installed, no additional software installation is necessary when adding a new HP LaserJet P2015 printer to the network. Otherwise, install the printer software on one of the networked computers as directed below.

1. Insert the software installation CD into the computer CD-ROM drive.
2. If the installation program does not start automatically, browse the CD contents and run the SETUP.EXE file.
3. Follow the onscreen instructions.
4. At the printer control panel, print a Network Configuration page to verify the installation was successful.

Installing software on Macintosh OS X V10.2.8, V10.3.9, and V10.4.3

USB connection

1. Insert the CD-ROM.
2. Run the installation utility.
3. After the software installation is complete, attach the USB cable to the printer and the computer and then restart the computer.
4. After the computer has restarted, open the Print Center or Printer Setup Utility to see if the printer name appears in the Printer List.
5. If the printer name appears in the Printer List, the setup is complete. If the printer name does not appear in the Printer List, go to the next step.
6. Click the **Add** button, and then select **USB** from the drop-down list.
7. Select **HP LaserJet P2015 Series** and then click **Add**. The printer name appears in the Printer List. Setup is complete.

Network connection

1. Connect the local area network (LAN) cable to the printer.
2. Print the Network configuration report from the printer control panel. Find the "mDNS printer name" located under the TCP/IP heading. The mDNS name will be needed in step 7.
3. Insert the CD-ROM.
4. Run the installation utility.
5. After the installation utility has completed, open the Print Center or Printer Setup Utility.
6. Click **Add**, and then select **Bonjour/Rendezvous** from the drop-down list.
7. Select the **HP LaserJet P2015 Series printer** name that matches the mDNS printer name found on the Network configuration report printed in step 2.
8. Click **Add**. The printer name appears in the Printer List. Setup is complete.
9. At the printer control panel, print a Network Configuration page to verify the installation was successful.

Uninstaller

Use the Uninstall icon in the HP LaserJet P2015 Series printer program group to select and remove the HP printing system components from a Windows machine.

1. From the **Start** menu, in the **HP LaserJet P2015 Series** program group, click the **Uninstall** icon.
2. The printing system guides you through removing all of the printing system components.
3. If you have performed a **Full** install and you do not have any other HP devices installed, follow steps 4 and 5. Following these steps might disable the functionality of other HP devices that are installed because they share the software.

4. Open the Microsoft Windows Control Panel. Double-click **Add/Remove Programs**.
5. You will see entries for HP Extended Capabilities, HP Software Update, HP Imaging Device Functions, and HP Solution Center and Imaging Support Tools. For each item, click **Change/Remove** and follow the prompts.



NOTE For driver-only (Add Printer) installations, delete the printer icon from the Printers folder (Windows 98 Second Edition, Windows Me, Windows 2003 Server , and Windows XP 64-bit).

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 until the **Ready** and **Error** lights start blinking, and then release the **Go** button.
- 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.

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

3 Manage the printer

This chapter provides information on the following topics:

- [HP ToolboxFX](#)
- [Embedded Web server](#)

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**.

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 guide.

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.



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 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. If EconoMode is used full-time, it is possible that the toner supply will outlast the mechanical parts in the toner cartridge. If print quality begins to degrade under these circumstances, you will need to install a new toner cartridge, even if there is toner supply remaining in the cartridge.



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.

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.

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 Initial font support for PCL 5e is limited to the following fonts: Courier, Letter Gothic, Naskh, Koufi, and Lina Printer. Additional fonts can be used if you install a font DIMM.

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**

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.



Tip 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.



NOTE Initial font support for PCL 5e is limited to the following fonts: Courier, Letter Gothic, Naskh, Koufi, and Lina Printer. Additional fonts can be used if you install a font DIMM.

- **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.

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.

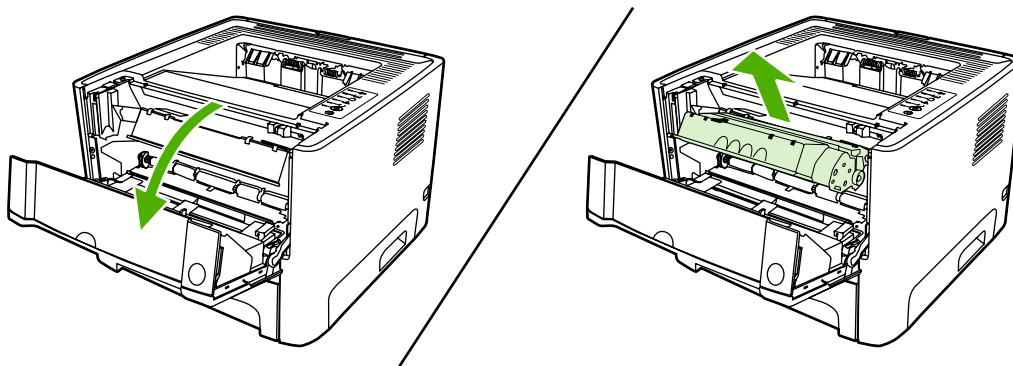
- **Order Supplies.** Click this link to connect to the Sure Supply Web site and order genuine HP supplies from HP or a reseller of your choice.
- **Product Support.** Connects to the support site for the HP LaserJet P2015 Series printer. You can search for help regarding general topics.

4 Maintenance

- [Replace the print cartridge](#)
- [Redistribute toner](#)
- [Clean the printer](#)
- [Clean the pickup roller \(tray 1\)](#)
- [Replace the pickup roller \(tray 1\)](#)
- [Clean the pickup roller \(tray 2\)](#)
- [Replace the pickup roller \(tray 2\)](#)

Replace the print cartridge

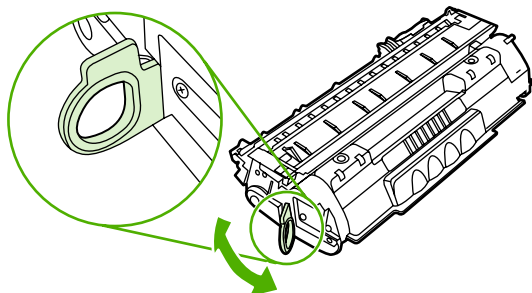
1. Press the print-cartridge-door button, and then remove the print cartridge from the printer. For recycling information, see the inside of the print-cartridge box.



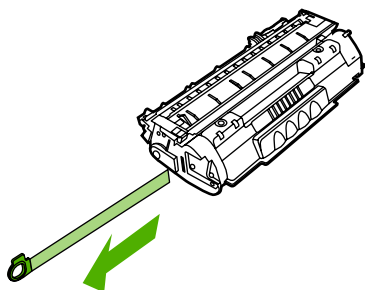
CAUTION To prevent damage, do not expose the print cartridge to light. Cover it with a piece of paper.

CAUTION After removing the print cartridge, only handle it on the ends.

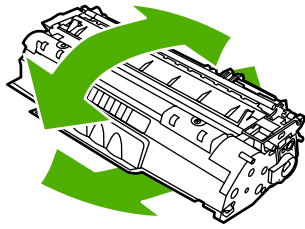
2. Remove the new print cartridge from the packaging.
3. Bend the tab on the left side of the cartridge to break it loose.



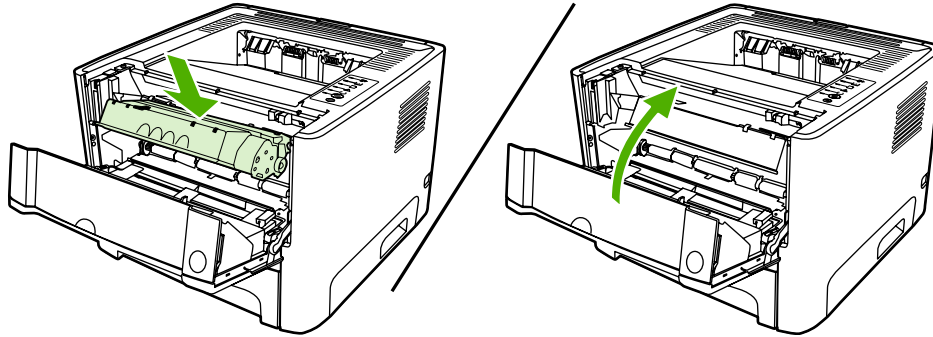
4. Pull the tab until all the tape is removed from the cartridge. Put the tab in the print-cartridge box to return for recycling.



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.

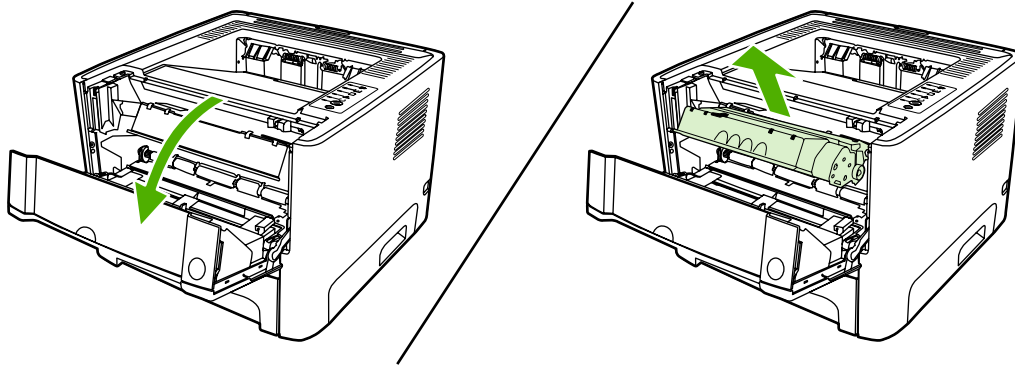


CAUTION If toner gets on your clothing, wipe it off with a dry cloth and wash the clothing in cold water. *Hot water sets toner into the fabric.*

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.

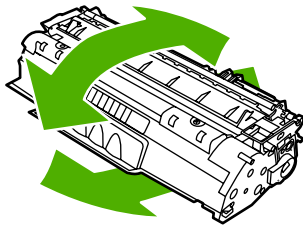
1. Open the print-cartridge-door button, and then remove the print cartridge from the printer.



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

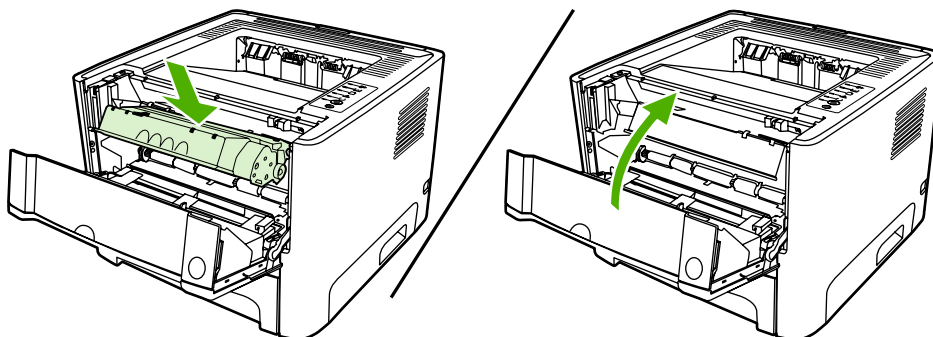
CAUTION After removing the print cartridge, only handle it on the ends.

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.

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.

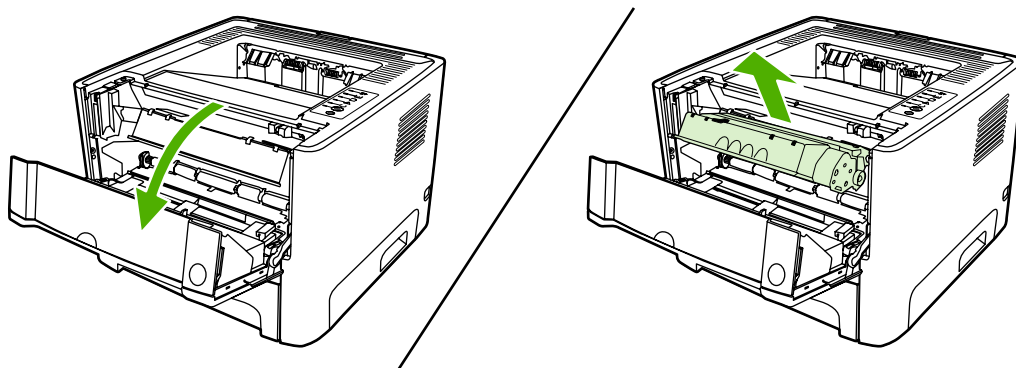
Clean the print-cartridge area

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.

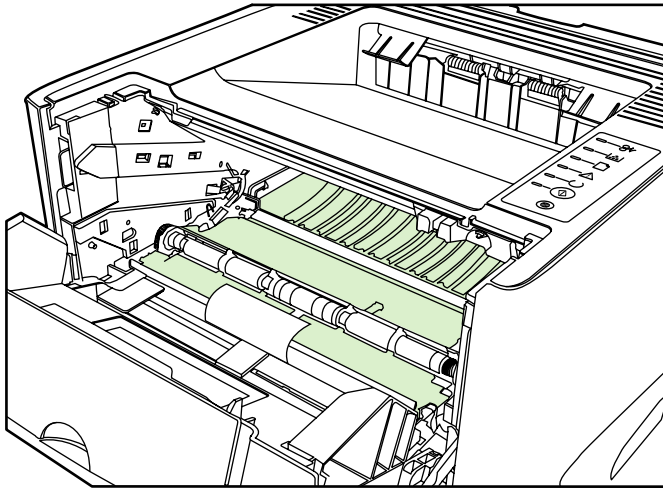


CAUTION Do not touch the black sponge-transfer roller inside the printer. Doing so can damage the printer.

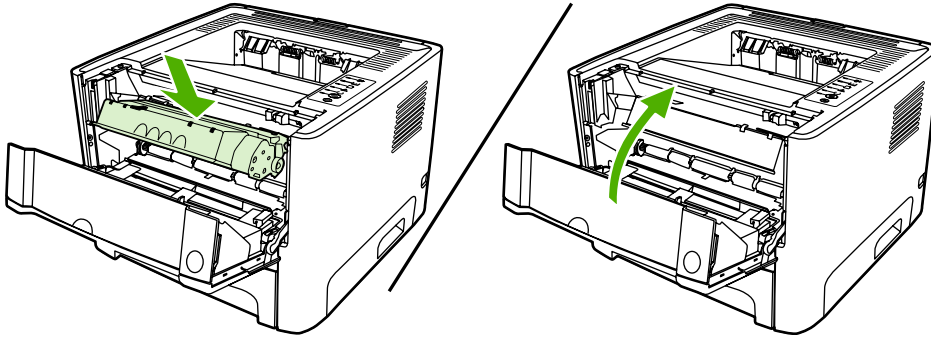
CAUTION To prevent damage, do not expose the print cartridge to light. Cover it with a piece of paper.

CAUTION After removing the print cartridge, only handle it on the ends.

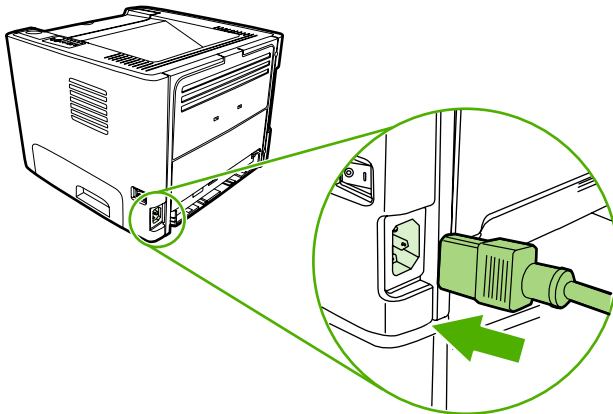
2. With a dry, lint-free cloth, wipe any residue from the media-path area and the print-cartridge cavity.



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

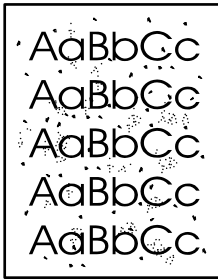


4. Plug the power cord into the printer.



Clean the printer media path

If you are seeing 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.



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.

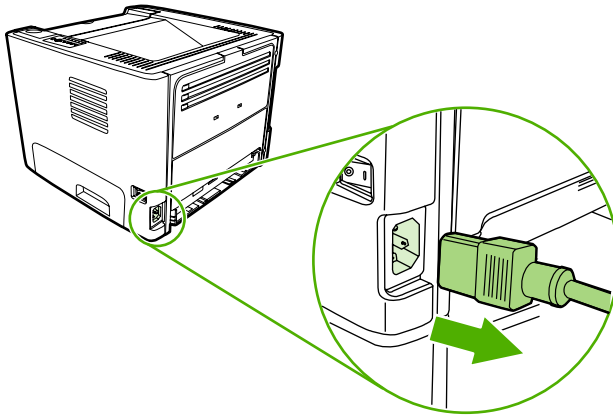
1. Make sure that the printer is idle and the Ready light is on.
2. Load the transparency in tray 1.
3. Print a cleaning page using one of the following methods:
 - Open HP ToolboxFX. Click the **Troubleshooting** tab, and then click **Print Quality Tools**. Select the cleaning page.
 - On the printer control panel, press and hold the **Go** button until the **Attention**, **Ready**, and **Go** lights come on. When all three lights come on, release the **Go** button.
 - Press **Go** again. The printer picks up the transparency and begins the cleaning process.



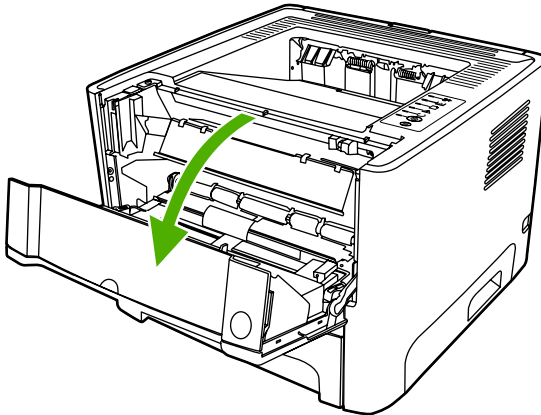
NOTE The cleaning process takes approximately 2 minutes. The cleaning page will stop periodically during the cleaning process. Do not turn the printer off until the cleaning process has finished. You might need to repeat the cleaning process several times to thoroughly clean the printer.

Clean the pickup roller (tray 1)

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 print cartridge.

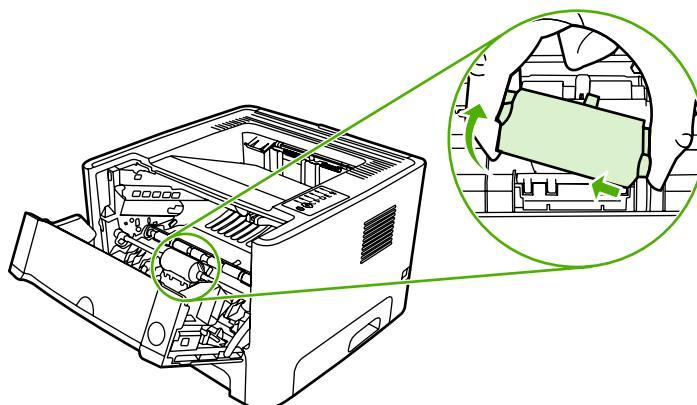
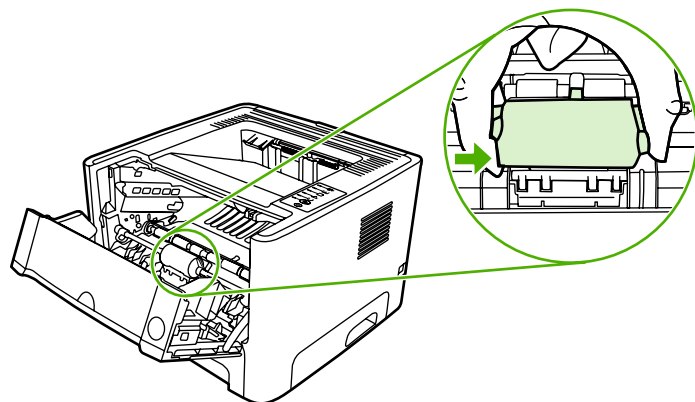


CAUTION After removing the print cartridge, only handle it on the ends.

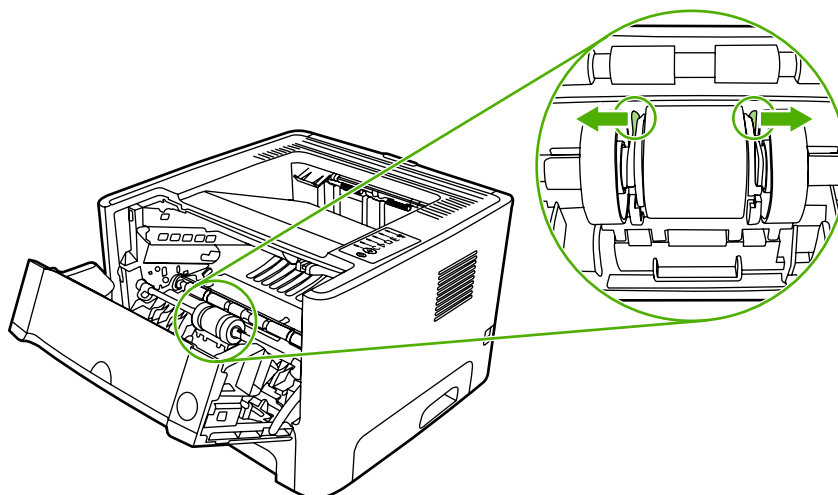
4. Grasping the pickup-roller cover with thumb and forefinger, squeeze the left side of the pickup-roller cover to release the left retaining tab, and then slide the cover to the left and up.



CAUTION Failure to slide the cover to the left when removing it can cause the right retaining tab to break.



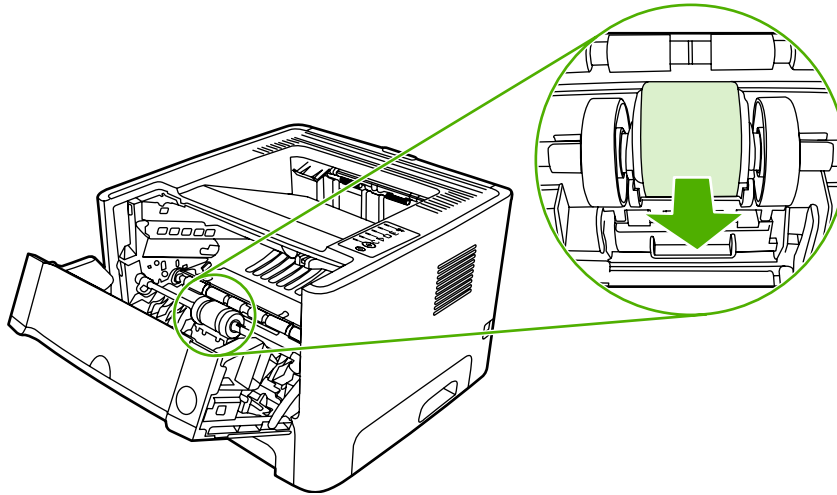
5. Press the two black retaining tabs outward until the pickup roller is released from its seat.



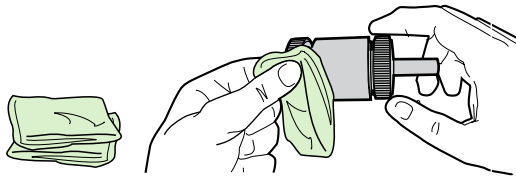
6. Remove the pickup roller from the printer.



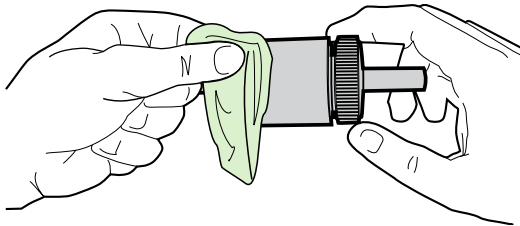
CAUTION Do not touch the pickup-roller pad.



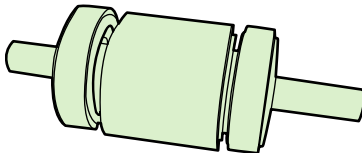
7. Dab a lint-free cloth in water, and scrub the roller.



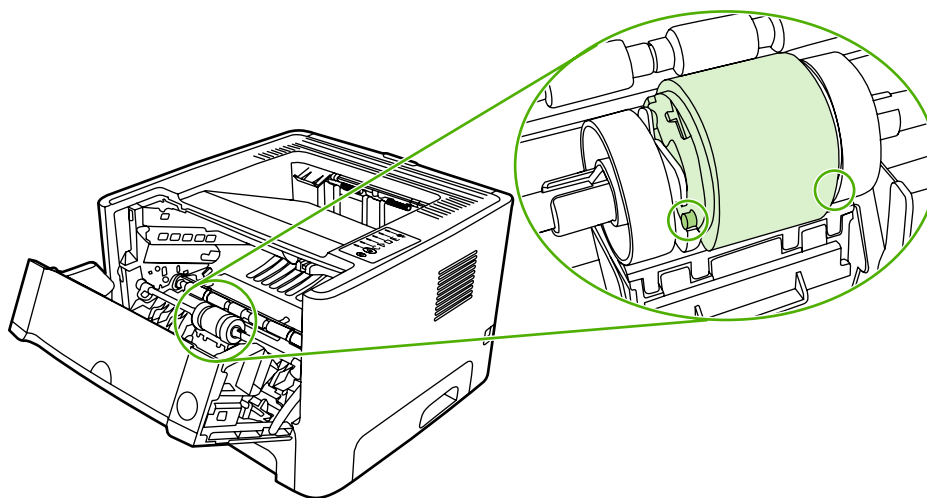
8. Using a dry, lint-free cloth, wipe the pickup roller to remove loosened dirt.



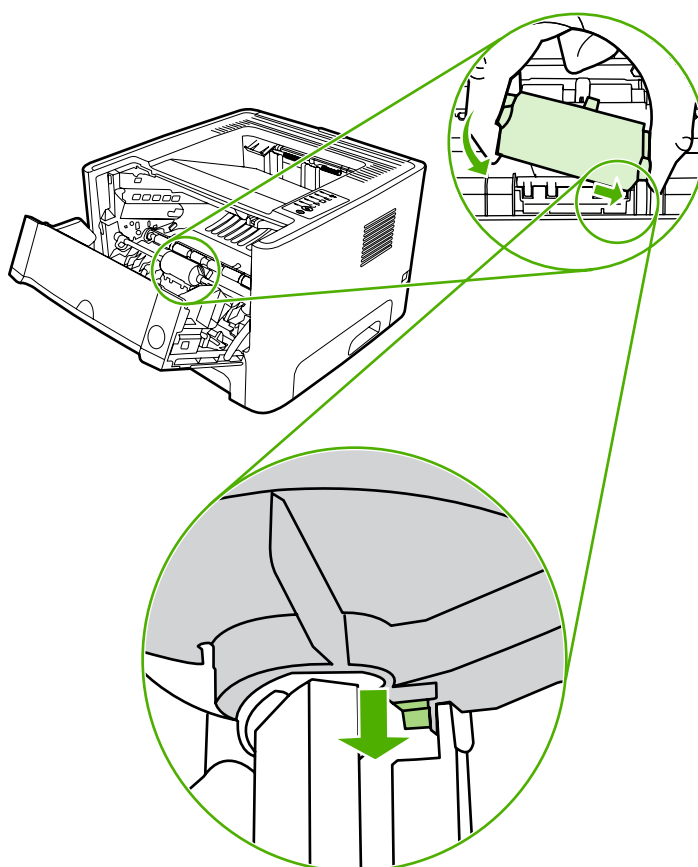
9. Allow the pickup roller to dry completely.



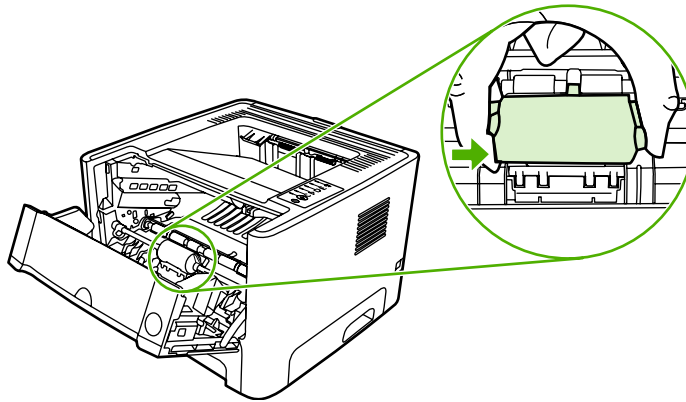
10. Line up the black retaining tabs in the printer with the grooves in the pickup roller, and then press the pickup roller into the pickup-roller seat until the retaining tabs click.



11. Grasping the pickup-roller cover with thumb and forefinger, insert the pickup-roller cover's right retaining tab into the retaining slot.



- 12.** Squeeze the left side of the pickup-roller cover and insert the left retaining tab in the retaining slot.



- 13.** Close the print-cartridge door.

- 14.** Plug the printer in.