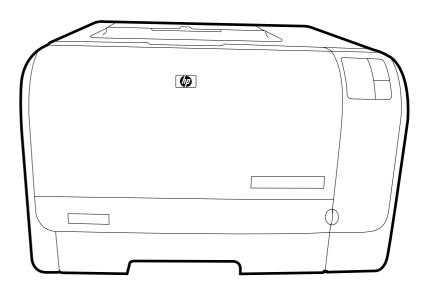
HP Color LaserJet CP1210 and CP1510 Series Printers Service Manual





HP Color LaserJet CP1210 and HP Color LaserJet CP1510 Series Printers Service Manual



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Safety information

WARNING!

Potential Shock Hazard

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

Read and understand all instructions in the user quide.

Observe all warnings and instructions marked on the product.

Use only a grounded electrical outlet when connecting the product 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 product. Replace damaged cords immediately.

Unplug the product from wall outlets before cleaning.

Do not install or use the 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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1 Product basics

- Quick access to product information
- Product comparison
- Product features
- Walkaround (HP Color LaserJet CP1210 Series Printer)
- Walkaround (HP Color LaserJet CP1510 Series Printer)
- Supported operating systems
- Supported product software
- System requirements
- Connectivity (HP Color LaserJet CP1510 Series Printer only)

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Quick access to product information

Use the following Web sites to find information about the product:

• <u>www.hp.com/support/ljcp1210series</u> or <u>www.hp.com/support/ljcp1510series</u>

Table 1-1 Product guides

Guide	Description
Getting Started Guide	Provides step-by-step instructions for installing and setting up the product.
User Guide	Provides detailed information for using the product and for problem solving. Available on the product CD or in Program Group if the software is installed on a computer.
HP Color LaserJet CP1210 Series Toolbox	To check the product status and settings, and to view problem solving information and online documentation, use HP Color LaserJet CP1210 Series Toolbox. You must have performed a recommended software installation in order to use HP Color LaserJet CP1210 Series Toolbox. See the user guide for more information about software installation.
HP ToolboxFX (HP Color LaserJet CP1510 Series Printer)	To check the product status and settings, and to view problem solving information and online documentation, use HP ToolboxFX. You must have performed a recommended software installation in order to use HP ToolboxFX. See the user guide for more information about software installation.
Online Help	Provides information about options that are available in the printer drivers. To view a Help file, open the online Help through the printer driver.

Product comparison

HP Color LaserJet CP1210 Series Printer		HP Color LaserJet CP1510 Series Printer	
•	Prints up to 12 pages per minute (ppm) on letter-size media or A4-size media in monochrome (black and white), and 8 ppm in color	•	Prints up to 12 ppm on letter-size media or A4-size media in monochrome (black and white), and 8 ppm in color
•	150-sheet input tray (Tray 1)	•	Single-sheet priority feed slot (Tray 1) and 150-sheet input tray (Tray 2)
•	Hi-Speed universal serial bus (USB) 2.0 port	•	Hi-Speed universal serial bus (USB) 2.0 port
		•	Built-in networking to connect to 10Base-T/100Base-TX networks
		•	Photo imaging model only
			Photo memory card slots
			PictBridge slot

Product features

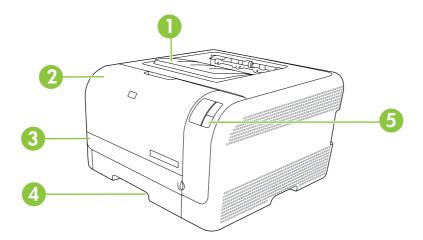
	HP Color LaserJet CP1210 Series Printer HP Color LaserJet CP1510 Series Printer				
Print	 Prints letter-size and A4-size pages at speeds up to 8 pages per minute (ppm) in color and 12 ppm in black and white. 				
	Prints at 600 dots per inch (dpi).				
	 Includes adjustable settings to optimize print quality. 				
	 The print cartridges use HP ColorSphere toner. For information about the number of pages the cartridges can print, see www.hp.com/go/pageyield. Actual yield depends on specific use. 				
Memory	 Includes 16 megabytes (MB) of random-access Includes 96 MB of RAM. memory (RAM). 				
Supported	Windows® 2000 Windows 2000				
operating systems	Windows XP® Home/Professional Windows XP Home/Professional				
	 Windows Server 2003 (32-bit only) Windows Server 2003 (32-bit only) 				
	Windows Vista® Windows Vista				
	Mac OS X V10.2.8 and later				
Paper handling	 Tray 1 holds up to 150 sheets of print media or Tray 1 single-sheet priority feed slot. 10 envelopes. 				
nanamig	 Output bin holds up to 125 sheets of print media. Tray 2 holds up to 150 sheets of print media of 10 envelopes. 				
	 Output bin holds up to 125 sheets of print media 				
Printer driver features	 ImageREt 2400 produces 2400-dpi print quality for fast, high-quality printing of business text and graphics. ImageREt 3600 produces 3600 dpi print quality for fast, high-quality printing of business text and graphics. 				
Interface connections	Includes a Hi-Speed USB 2.0 port. Includes a Hi-Speed USB 2.0 port.				
Connections	 Built-in networking to connect to 10Base-T/ 100Base-TX networks. 				

ENWW Product comparison

Environmental features	To determine the ENERGY STAR® qualification status for this product, see the Product Data Sheet or Specifications Sheet.			
Economical • Provides N-up printing (printing more than one page on a sheet).		one page on a sheet).		
printing	The printer driver provides the option to ma	The printer driver provides the option to manually print on both sides.		
Supplies	Uses a print cartridge that has a no-shake design.			
	Uses print cartridges with HP ColorSphere	Uses print cartridges with HP ColorSphere toner.		
Accessibility	Online user guide is compatible with text so	Online user guide is compatible with text screen-readers.		
	Print cartridges can be installed and remove	ed by using one hand.		
	All doors and covers can be opened by using	All doors and covers can be opened by using one hand.		
PictBridge USB port (HP Color LaserJet CP1510ni only)	(Not applicable)	Enables direct connection of a compatible camera or camcorder to the product for direct printing of recorded images.		
, , ,		The following memory cards are supported:		
slots (HP Color LaserJet		CompactFlash (CF) Type 1 and Type 2		
CP1510ni only)		 Memory Stick, Memory Stick PRO, and Memory Stick Duo 		
		MultiMedia Card (MMC)		
		Secure Digital (SD)		
		xD Picture Card		

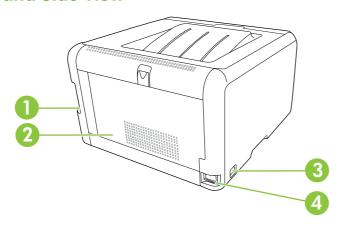
Walkaround (HP Color LaserJet CP1210 Series Printer)

Front view



1	Output bin (holds 125 sheets of standard paper)
2	Front door (provides access to the print cartridges)
3	Jam-access door
4	Tray 1 (holds 150 sheets of standard paper)
5	Control panel

Back and side view

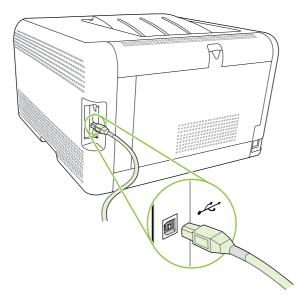


1	Hi-Speed USB 2.0 port
2	Rear door (for jam access)
3	Power switch
4	Power connection

USB connection

NOTE: Do *not* connect the USB cable before installing the software. The installation program will notify you when the USB cable should be connected.

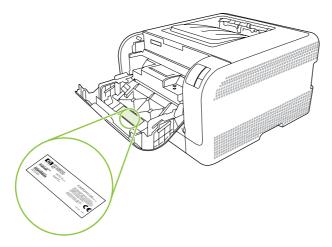
This product supports a USB 2.0 connection. You must use an A-to-B type USB cable for printing.



Model and serial numbers

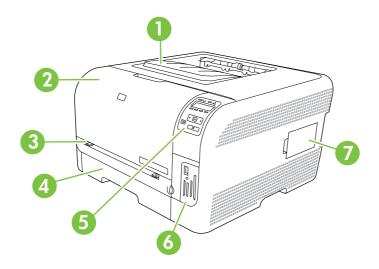
The model number and serial number are listed on an identification label located inside the front door.

The label contains information about the country/region of origin and the revision level, manufacturing date, production code, and production number of the product. The label also contains power rating and regulatory information.



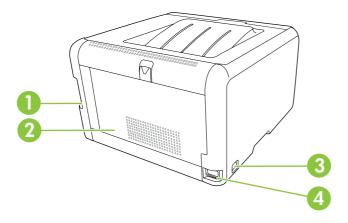
Walkaround (HP Color LaserJet CP1510 Series Printer)

Front view



1	Output bin (holds 125 sheets of standard paper)
2	Front door (provides access to the print cartridges)
3	Tray 1 (single-sheet priority feed slot) and jam-access door
4	Tray 2 (holds 150 sheets of standard paper)
5	Control panel
6	Memory card slots and PictBridge port (HP Color LaserJet CP1510ni only)
7	DIMM door (for adding additional memory)

Back and side view

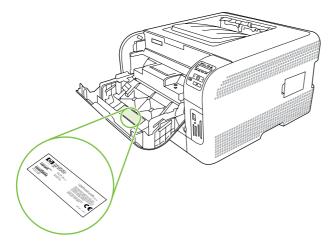


1	Hi-Speed USB 2.0 port and network port
2	Rear door (for jam access)
3	Power switch
4	Power connection

Model and serial numbers

The model number and serial number are listed on an identification label located inside the front door.

The label contains information about the country/region of origin and the revision level, manufacturing date, production code, and production number of the product. The label also contains power rating and regulatory information.



Supported operating systems

The product supports the following operating systems:

- Windows 2000
- Windows XP Home/Professional
- Windows Server 2003 (32-bit only)
- Windows Vista
- Mac OS X V10.2.8 and later (HP Color LaserJet CP1510 only)

Supported product software

Software included with the product

There are several options for completing a recommended install. Easy Install will complete the installation with default settings. Advanced Install allows you to select custom settings and choose the components that are installed.

Recommended installation for Windows

- Printer drivers
- HP Update program
- HP Customer Participation Program
- Shop for HP Supplies program

Express installation

The following software is included with an Express installation:

- Printer driver
- NOTE: For the HP Color LaserJet CP1510 Series printer, HP postscript level 3 emulation drivers can be installed by using the Microsoft® Add Printer wizard.

Macintosh software (HP Color LaserJet CP1510 only)

- HP Product Setup Assistant
- HP Device Configuration
- HP Uninstaller
- HP Director
- HP Photosmart

Printer driver (HP Color LaserJet CP1210 Series Printer)

The product comes with software for Windows that allows the computer to communicate with the product. This software is called a printer driver. Printer drivers provide access to product features, such as printing on custom-sized paper, resizing documents, and inserting watermarks.

NOTE: The most recent drivers are available at www.hp.com/support/ljcp1210series. Depending on the configuration of Windows-based computers, the installation program for the product software automatically checks the computer for Internet access in order to obtain the latest drivers.

Supported printer drivers (HP Color LaserJet CP1510 Series Printer)

The product uses the PCL 6 and HP postscript level 3 emulation PDL drivers.

Operating system	Network support	PCL 6	HP postscript level 3 emulation
Windows	√ 1	✓	√ 1
Mac OS X V10.3, V10.4, and later	✓		✓
Linux ²			✓

¹ Driver can be installed by using the Microsoft Add Printer wizard, too.

The printer drivers include online Help that has instructions for common printing tasks and also describes the buttons, check boxes, and drop-down lists that are in the printer driver.

Other software provided

Software for Windows

HP Color LaserJet CP1210 Series Toolbox

HP Color LaserJet CP1210 Series Toolbox is a software program that you can use for the following tasks:

- Checking the product status
- Checking the supplies status and ordering supplies online
- Setting up alerts
- Viewing and changing product settings
- Viewing product documentation
- Gaining access to troubleshooting and maintenance tools

To use HP Color LaserJet CP1210 Series Toolbox, perform a Full installation of the product software from the product CD.

HP ToolboxFX (HP Color LaserJet CP1510 Series Printer)

HP ToolboxFX is a software program that you can use for the following tasks:

- Checking the product status
- Checking the supplies status and ordering supplies online
- Setting up alerts
- Setting up e-mail notification for certain product and supplies events
- Viewing and changing product settings

² For Linux, download the HP postscript level 3 emulation driver from www.hp.com/go/ljcp1510series software.

- Viewing product documentation
- Gaining access to troubleshooting and maintenance tools

You can view HP ToolboxFX when the product is directly connected to a computer or is connected to a network. To use HP ToolboxFX, perform a Recommended software installation.

Software for Macintosh (HP Color LaserJet CP1510 Series Printer only)

The HP installer provides PostScript Printer Description (PPD) files, Printer Dialog Extensions (PDEs), and the configure device software for use with Macintosh computers.

PostScript Printer Description (PPD) files

The PPD, in combination with the Apple PostScript printer drivers, provides access to product features. An installation program for the PPD and other software is provided on the product CD-ROM.

Configuring the product using a Macintosh

For information about configuring the product using a Macintosh and the embedded Web server (EWS), see HP Embedded Web Server (HP Color LaserJet CP1510 Series Printer only) on page 58.

Status Alerts software

The Status Alerts software provides information about the current status of the product.

The software also provides pop-up alerts when certain events occur, such as an empty tray or a problem with the product. The alert includes information about solving the problem.

Software for networks (HP Color LaserJet CP1510 Series Printer only)

HP Web Jetadmin

HP Web Jetadmin is a browser-based management tool for network-connected printers within your intranet. It should be installed only on the network administrator's computer.

To download a current version of HP Web Jetadmin and for the latest list of supported host systems, visit www.hp.com/go/webjetadmin.

When installed on a host server, any client can gain access to HP Web Jetadmin by using a supported Web browser (such as Microsoft® Internet Explorer 6.x or Netscape Navigator 7.x or later) and navigating to the HP Web Jetadmin host.

Embedded Web server (HP Color LaserJet CP1510 Series Printer)

The EWS provides access to information about product and network activities. This information appears in a Web browser, such as Microsoft Internet Explorer, Netscape Navigator, or Macintosh OS Safari.

The embedded Web server resides on the product. It is not loaded on a network server. No special software is installed or configured, but you must have a supported Web browser on your computer.

NOTE: Macintosh users can open the EWS by clicking the **Utility** button when viewing the print queue. This will start a Web browser, such as Safari, which allows the user to access the EWS. The EWS can also be accessed directly by typing the network IP address or DNS name of the product into the Web browser.

HP USB EWS Gateway software, which is automatically installed, also allows a Web browser to access the product if the product is connected using a USB cable. Click the **Utility** button when using a USB connection to access the EWS though the Web browser.

For a complete explanation of the features and functionality of the embedded Web server, see <u>HP</u> <u>Embedded Web Server (HP Color LaserJet CP1510 Series Printer only) on page 58</u>.

Linux

For information, go to www.hp.com/go/linuxprinting.

System requirements

Windows requirements

- 512 MB of RAM
- 350 MB of disk space

Macintosh requirements (HP Color LaserJet CP1510 Series Printer only)

- 256 MB of RAM
- 150 MB of disk space

Connectivity (HP Color LaserJet CP1510 Series Printer only)

Supported networks

The HP Color LaserJet CP1510 Series Printer supports the TCP/IP protocol, which is the most widely used and accepted networking protocol. Many networking services utilize this protocol. This product also supports IPv4 and IPv6. The following tables list the networking services/protocols that are supported on the product.

Table 1-2 Printing

Service name	Description
port 9100 (Direct Mode)	Printing service
LPD (Line printer daemon)	Printing service

Table 1-3 Network product discovery

Service name	Description	
SLP (Service Location Protocol)	Device Discovery Protocol, used to help find and configure network devices. Used primarily by Microsoft-based software programs.	
mDNS (multicast Domain Name Service - also known as "Rendezvous" or "Bonjour")	Device Discovery Protocol, used to help find and configure network devices. Used primarily by Apple Macintosh-based software programs.	
NOTE: mDNS is supported for IPv4 only.		

Table 1-4 Messaging and management

Service name	Description
HTTP (hypertext transfer protocol)	Allows Web browsers to communicate with embedded Web server.
EWS (Embedded Web Server)	Allows a user to manage the product through a Web browser.
SNMP (simple network management protocol)	Used by network programs for product management. SNMP V1 and standard MIB-II (Management Information Base) objects are supported.

Table 1-5 IP addressing

Service name	Description
DHCP (dynamic host configuration protocol)	For Automatic IP address assignment. A DHCP server provides the product with an IP address. Generally requires no user intervention for the product to obtain an IP address from a DHCP server.
BOOTP (bootstrap protocol)	For Automatic IP address assignment. A BOOTP server provides the product with an IP address. Requires administrator to input the product Mac hardware address on BOOTP server in order for the product to obtain an IP address from that server.
Auto IP	For Automatic IP address assignment. If neither a DHCP server nor a BOOTP server is present, this service allows the product to generate a unique IP address.

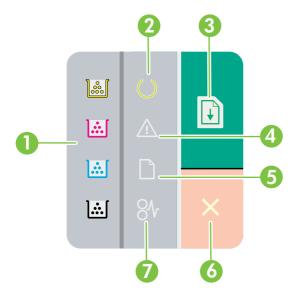
2 Control panel

- Control-panel walkaround (HP Color LaserJet CP1210 Series Printer)
- Control-panel walkaround (HP Color LaserJet CP1510 Series Printer)
- Use the control-panel menus (HP Color LaserJet CP1510 Series Printer only)

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Control-panel walkaround (HP Color LaserJet CP1210 Series Printer)

The product has the following lights and buttons on the control panel:



- Toner lights: Indicate that a print cartridge needs to be replaced. When a print cartridge is out of the product, the corresponding light blinks.

 Ready light: Indicates that the product is ready to print.

 Resume button and light: Indicates that a job is paused. Press this button to continue printing the current job.

 Attention light: Indicates that a door is open or other errors exist.

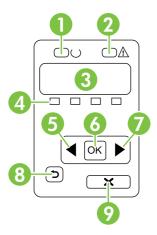
 Paper out light: Indicates that the product is out of paper.

 Cancel button: To cancel the print job that is currently printing, press the Cancel button.

 Jam light: Indicates that there is a jam in the product.
- NOTE: See Status-light patterns (HP Color LaserJet CP1210 Series Printer only) on page 172 for descriptions of the light patterns.

Control-panel walkaround (HP Color LaserJet CP1510 Series Printer)

The product has the following items on the control panel.



- 1 Ready light (green): The Ready light is on when the product is ready to print. It blinks when the product is receiving print data.
- Attention light (amber): The Attention light blinks when a print cartridge has reached the end of its life or the product requires user attention.

NOTE: The Attention light does not blink if more than one print cartridge has reached the end of its life.

- 3 **Control-panel display**: The display provides information about the product. Use the menus on the display to establish product settings. See <u>Use the control-panel menus (HP Color LaserJet CP1510 Series Printer only) on page 21</u>.
- 4 **Print cartridge status gauges**: These gauges show the consumption level for each print cartridge (black, yellow, cyan, and magenta).

If the consumption level is unknown, a ? symbol appears. This can occur in the following circumstances:

- The print cartridge is missing or installed incorrectly.
- The print cartridge is defective.
- The print cartridge might not be an HP cartridge.
- 5 Left arrow (◀) button: Use this button to navigate through the menus or to decrease a value that appears on the display.
- 6 OK button: Press the OK button for the following actions:
 - Open the control-panel menus.
 - Open a submenu displayed on the control-panel display.
 - Select a menu item.
 - Clear some errors.
 - Begin a print job in response to a control-panel prompt (for example, when the message [OK] to print appears on the control-panel display).
- 7 Right arrow (►) button: Use this button to navigate through the menus or to increase a value that appears on the display.

- 8 Back arrow () button: Use this button for the following actions:
 - Exit the control-panel menus.
 - Scroll back to a previous menu in a submenu list.
 - Scroll back to a previous menu item in a submenu list (without saving changes to the menu item).
- 9 Cancel Job (X) button: Press this button to cancel a print job whenever the attention light is blinking or to exit the control-panel menus.

Use the control-panel menus (HP Color LaserJet CP1510 Series Printer only)

Use the menus

- 1. Press OK to open the menus.
- 2. Press the Left arrow (◄) or Right arrow (►) button to navigate through the listings.
- 3. Press OK to select the appropriate option. An asterisk (*) appears next to the active selection.
- **4.** Press the Back arrow (♠) button to scroll back through the submenus.
- **5.** Press X to exit the menu without saving any changes.

The sections that follow describe the options for each of the main menus:

- Reports menu on page 22
- System setup menu on page 23
- Network config. menu on page 25
- Service menu on page 26

Reports menu

Use the **Reports** menu to print reports that provide information about the product.

Menu item	Description	
Demo page	Prints a color page that demonstrates print quality.	
Menu structure	Prints a map of the control-panel-menu layout. The active settings for each menu are listed.	
Config report	Prints a list of all the product settings. Includes network information when the product is connected to a network.	
Supplies status	Prints the status for each print cartridge, including the following information:	
	Estimated pages remaining	
	Part number	
	Number of pages printed	
Network report	Prints a list of all product network settings	
Usage page	Prints a page that lists PCL pages, PCL 6 pages, PS pages, pages that were jar or mispicked in the product, monochrome (black and white) or color pages; a reports the page count	
	HP Color LaserJet CP1510 only: prints a page that lists the information above, and the monochrome (black and white) or color pages printed, number of memory cards inserted, number of PictBridge connections, and the PictBridge page count	
PCL font list	Prints a list of all the PCL fonts that are installed.	
PS font list	Prints a list of all the PostScript® (PS) fonts that are installed	
PCL6 font list	Prints a list of all the PCL6 fonts that are installed	
Color usage log	Prints a report that shows the user name, application name, and color usage information on a job-by-job basis	
Service page	Prints the service report	
Diagnostics page	Prints the calibration and color diagnostics pages	
	······································	

System setup menu

Use this menu to establish basic product settings. The **System setup** menu has several sub-menus. Each is described in the following table.

Menu item	Sub-menu item	Sub-menu item	Description
Language			Select the language for the control-panel display messages and the product reports.
Paper setup	Def. paper size	Letter	Select the size for printing internal reports or any print job that does not specify a
		A4	size.
		Legal	
	Def. paper type	A list of available media types appears.	Select the media type for printing internal reports or any print job that does not specify a type.
	Tray 2	Paper size	Select the default size and type for Tray 2
		Paper type	from the list of available sizes and types.
	Paper out action	Wait forever	Select how the product should react
		Override that is not av	when a print job requires a size or type that is not available or when a specified
	Cancel	Cancel	tray is empty.
			Select Wait forever to make the product wait until you load the correct media and press OK. This is the default setting.
			Select Override to print on a different size or type after a specified delay.
			Select Cancel to automatically cancel the print job after a specified delay.
			If you select either Override or Cancel , the control panel prompts you to specify the number of seconds to delay. Press the Right arrow (►) button to increase the time, up to 3600 seconds. Press the Left arrow (◄) button to decrease the time.
Print quality	Calibrate color	After power on	After power on: Select how soon the product should calibrate after you turn it
		Calibrate now	on. The default setting is 15 minutes .
		Calibration mode	Calibrate now: Makes the product perform a calibration immediately. If a job is processing, the product calibrates after the job is complete. If an error message is displayed, you must clear the error first.

Menu item	Sub-menu item	Sub-menu item	Description
			Calibration mode : Determines the type of calibration that the product uses during the calibration process.
			 Normal: The standard Calibration mode setting.
			 Full: The extended Calibration mode setting (this calibration takes longer).
	Replace Supplies	Override out	Override out: If the product determines
		Stop at out	that a print cartridge has reached the end of its life, you can continue printing until you notice a decrease in print quality.
			Stop at out: If the product determines that a print cartridge has reached the end of its life, you must replace the cartridge before printing can continue. This is the default setting.
	Cartridge low	(1-20)	The percentage threshold determines when the product begins reporting low toner. The message is either reported on the control-panel display or using the toner LED, if it exists. The default setting is 10%.
	Restrict color	Enable color	Select Enable color to allow the job to print in either monochrome (black and
		Disable color	white) or color, depending on the specifications of the job.
			Select Disable color to disable color printing. All jobs will print in monochrome (black and white).
Courier font	Regular		Selects a version of the Courier font. The default is Regular .
	Dark		delault is Regular .
Display contrast	Medium		Select the level of contrast for the display. The default setting is Medium .
	Darker		The detault setting is Mediulii .
	Darkest		
	Lightest		
	Lighter		

Network config. menu

Use this menu to establish network configuration settings.

Menu item	Sub-menu item	Description
TCP IP config	Automatic Manual	Select Automatic to automatically configure all the TCP/IP settings.
	manuai	Select Manual to manually configure the IP address, subnet mask, and default gateway.
		The default setting is Automatic .
Automatic crossover	On	This item is used when you are connecting the product directly to a personal computer using an
	Off	Ethernet cable (you might have to set this to On or Off depending on the computer being used).
		The default setting is On .
Network services	IPv4	This item is used by the network administrator to limit the network services available on this product.
	IPv6	On
		Off
		The default setting is On .
Memory card	On	Use this option to enable or disable file sharing between an installed memory card and the product.
	Off	The default setting is Off .
Show IP address on control panel	No	No : The product IP address will not appear on the control-panel display.
	Yes	Yes : The product IP address will appear on the control-panel display.
		The default setting is No .
Restore defaults		Press OK to restore the network configuration settings to the default values.

Service menu

Use this menu to restore default settings, clean the product, and activate special modes that affect print output.

Menu item	Description
Restore defaults	Sets all customized settings to the factory default values.
PowerSave	Sets how long the product remains idle before it enters PowerSave mode. The product automatically exits PowerSave mode when you send a print job or press a control-panel button.
	The default setting is 1 minute.
Cleaning mode	Use this option to clean the product if you see toner specks or other marks on the printed output. The cleaning process removes dust and excess toner from the paper path.
	When you select this item, the product prompts you to load plain paper in Tray 1, and then press OK to start the cleaning process. Wait until the process is complete. Discard the page that prints.
USB speed	Sets the USB speed to High or Full . For the product to actually operate at high speed, it must have high speed enabled and be connected to an EHCI host controller that is also operating at high speed. This menu item also does not reflect the current operating speed of the product.
	The default setting is High .
Less paper curl	If printed pages are consistently curled, use this option to set the product to a mode that reduces curl.
	The default setting is Off .
Archive print	If you are printing pages that will be stored for a long time, use this option to set the product to a mode that reduces toner smearing and dusting.
	The default setting is Off .

3 Paper and print

- Supported paper and print media
- Load paper and print media

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Supported paper and print media

Paper for the HP Color LaserJet CP1210 Series Printer

Supported paper and print media sizes

This product supports a number of paper sizes, and it adapts to various media.

NOTE: To obtain best print results, select the appropriate paper size and type in your print driver before printing.

Table 3-1 Supported paper and print media sizes	Table 3-1	Supported	naper and	print	media sizes
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Size	Dimensions	Tray 1
Letter	216 x 279 mm (8.5 x 11 inches)	✓
Legal	216 x 356 mm (8.5 x 14 inches)	✓
A4	210 x 297 mm (8.27 x 11.69 inches)	✓
Executive	184 x 267 mm (7.24 x 10.51 inches)	✓
A3	297 x 420 mm (11.69 x 16.54 inches)	
A5	148 x 210 mm (5.83 x 8.27 inches)	✓
A6	105 x 148 mm (4.13 x 5.83 inches)	✓
B4 (JIS)	257 x 364 mm (10.12 x 14.33 inches)	✓
B5 (JIS)	182 x 257 mm (7.17 x 10.12 inches)	✓
B5 (ISO)	176 x 250 mm (6.93 x 9.84 inches)	
B6 (ISO)	125 x 176 mm (4.92 x 6.93 inches)	
16k	197 x 273 mm (7.75 x 10.75 inches)	✓
8.5 x 13	216 x 330 mm (8.5 x 13 inches)	✓
4 x 6	107 x 152 mm (4 x 6 inches)	✓
5 x 8	127 x 203 mm (5 x 8 inches)	✓
10 x 15 cm	100 x 150 mm (3.9 x 5.9 inches)	✓
Custom	(76 - 216) x (127 - 356) mm ((3 - 8.5) x (5 - 14) inches)	✓

Table 3-2 Supported envelopes and postcards

Size	Dimensions	Tray 1
Envelope #10	105 x 241 mm (4.13 x 9.49 inches)	\checkmark

Table 3-2 Supported envelopes and postcards (continued)

Size	Dimensions	Tray 1
Envelope DL	110 x 220 mm (4.33 x 8.66 inches)	✓
Envelope C5	162 x 229 mm (6.93 x 9.84 inches)	✓
Envelope B5	176 x 250 mm (6.7 x 9.8 inches)	✓
Envelope Monarch	98 x 191 mm (3.9 x 7.5 inches)	✓
Postcard	100 x 148 mm (3.94 x 5.83 inches)	✓
Double postcard	148 x 200 mm (5.83 x 7.87 inches)	✓

Supported paper types and tray capacity

Media type	Dimensions ¹	Weight	Capacity ²	Paper orientation
Paper, including the following types:	Minimum: 76 x 127 mm (3 x 5 inches)	60 to 90 g/m ² (16 to 24 lb)	Up to 150 sheets	Side to be printed on face- up, with the top edge at
• Plain	Maximum: 216 x 356 mm		75 g/m ² (20 lb bond)	the back of the tray
 Letterhead 	(8.5 x 14 inches)			
• Color				
 Preprinted 				
 Prepunched 				
 Recycled 				
Thick paper	Same as for paper	Up to 200 g/m ² (53 lb)	Up to 15 mm (0.6 inches) stack height	Side to be printed on face- up, with the top edge at the back of the tray
Cover paper	Same as for paper	Up to 200 g/m ² (53 lb)	Up to 15 mm (0.6 inches) stack height	Side to be printed on face up, with the top edge at the back of the tray
Glossy paper	Same as for paper	Up to 220 g/m ² (59 lb)	Up to 15 mm (0.6 inches) stack height	Side to be printed on face up, with the top edge at the back of the tray
Transparencies	A4 or Letter	Thickness: 0.12 to 0.13 mm (4.7 to 5.1 mils)	Up to 50 sheets	Side to be printed on face- up, with the top edge at the back of the tray
Labels ³	A4 or Letter	Thickness: up to 0.23 mm (9 mils)	Up to 50 sheets	Side to be printed on face- up, with the top edge at the back of the tray
Envelopes	COM 10 Monarch	Up to 90 g/m ² (24 lb)	Up to 10 envelopes	Side to be printed on face up, with the stamp-end at the back of the tray
	• DL			

Media type	Dimensions ¹	Weight	Capacity ²	Paper orientation
	• C5			
	• B5			
Postcards or index cards	100 x 148 mm (3.9 x 5.8 inches)		Up to 50 sheets	Side to be printed on face- up, with the top edge at the back of the tray

¹ The product supports a wide range of standard and custom sizes of print media. Check the printer driver for supported sizes.

Paper for the HP Color LaserJet CP1510 Series Printer

Supported paper and print media sizes

This product supports a number of paper sizes, and it adapts to various media.

NOTE: To obtain best print results, select the appropriate paper size and type in your print driver before printing.

T. I. I. O. O.				
l able 3-3	Supported	paper and	print i	media sizes

Dimensions	Tray 1	Tray 2	
216 x 279 mm (8.5 x 11 inches)	✓	✓	
216 x 356 mm (8.5 x 14 inches)	✓	✓	
210 x 297 mm (8.27 x 11.69 inches)	✓	✓	
184 x 267 mm (7.24 x 10.51 inches)	✓	✓	
297 x 420 mm (11.69 x 16.54 inches)			
148 x 210 mm (5.83 x 8.27 inches)	✓	✓	
105 x 148 mm (4.13 x 5.83 inches)	✓	✓	
257 x 364 mm (10.12 x 14.33 inches)			
182 x 257 mm (7.17 x 10.12 inches)	✓	✓	
176 x 250 mm (6.93 x 9.84 inches)			
125 x 176 mm (4.92 x 6.93 inches)			
184 x 260 mm (7.24 x 10.23 inches)			
195 x 270 mm (7.68 x 10.62 inches)	\checkmark	\checkmark	
197 x 273 mm (7.75 x 10.75 inches)			
216 x 330 mm (8.5 x 13 inches)	✓	✓	
107 x 152 mm (4 x 6 inches)	✓	✓	
	216 x 279 mm (8.5 x 11 inches) 216 x 356 mm (8.5 x 14 inches) 210 x 297 mm (8.27 x 11.69 inches) 184 x 267 mm (7.24 x 10.51 inches) 297 x 420 mm (11.69 x 16.54 inches) 148 x 210 mm (5.83 x 8.27 inches) 105 x 148 mm (4.13 x 5.83 inches) 257 x 364 mm (10.12 x 14.33 inches) 182 x 257 mm (7.17 x 10.12 inches) 176 x 250 mm (6.93 x 9.84 inches) 125 x 176 mm (4.92 x 6.93 inches) 184 x 260 mm (7.24 x 10.23 inches) 195 x 270 mm (7.68 x 10.62 inches) 197 x 273 mm (7.75 x 10.75 inches) 216 x 330 mm (8.5 x 13 inches)	216 x 279 mm (8.5 x 11 inches) 216 x 356 mm (8.5 x 14 inches) 210 x 297 mm (8.27 x 11.69 inches) 184 x 267 mm (7.24 x 10.51 inches) 297 x 420 mm (11.69 x 16.54 inches) 148 x 210 mm (5.83 x 8.27 inches) 105 x 148 mm (4.13 x 5.83 inches) 257 x 364 mm (10.12 x 14.33 inches) 182 x 257 mm (7.17 x 10.12 inches) 176 x 250 mm (6.93 x 9.84 inches) 125 x 176 mm (4.92 x 6.93 inches) 184 x 260 mm (7.24 x 10.23 inches) 195 x 270 mm (7.68 x 10.62 inches) 197 x 273 mm (7.75 x 10.75 inches) 216 x 330 mm (8.5 x 13 inches)	216 x 279 mm (8.5 x 11 inches) 216 x 356 mm (8.5 x 14 inches) 210 x 297 mm (8.27 x 11.69 inches) 184 x 267 mm (7.24 x 10.51 inches) 297 x 420 mm (11.69 x 16.54 inches) 148 x 210 mm (5.83 x 8.27 inches) 105 x 148 mm (4.13 x 5.83 inches) 257 x 364 mm (10.12 x 14.33 inches) 182 x 257 mm (7.17 x 10.12 inches) 176 x 250 mm (6.93 x 9.84 inches) 184 x 260 mm (7.24 x 10.23 inches) 195 x 270 mm (7.68 x 10.62 inches) 197 x 273 mm (7.75 x 10.75 inches) 216 x 330 mm (8.5 x 13 inches)

² Capacity can vary depending on media weight and thickness, and environmental conditions.

³ Smoothness: 100 to 250 (Sheffield)

Table 3-3 Supported paper and print media sizes (continued)

Size	Dimensions	Tray 1	Tray 2
5 x 8	127 x 203 mm (5 x 8 inches)	✓	✓
10 x 15 cm	100 x 150 mm (3.9 x 5.9 inches)	✓	✓
Custom	(76 - 216) x (127 - 356) mm ((3 - 8.5) x (5 - 14) inches)	✓	✓

Table 3-4 Supported envelopes and postcards

Size	Dimensions	Tray 1	Tray 2
Envelope #10	105 x 241 mm (4.13 x 9.49 inches)	✓	✓
Envelope DL	110 x 220 mm (4.33 x 8.66 inches)	✓	✓
Envelope C5	162 x 229 mm (6.93 x 9.84 inches)	✓	✓
Envelope B5	176 x 250 mm (6.7 x 9.8 inches)	✓	✓
Envelope Monarch	98 x 191 mm (3.9 x 7.5 inches)	✓	✓
Postcard	100 x 148 mm (3.94 x 5.83 inches)	✓	✓
Double postcard	148 x 200 mm (5.83 x 7.87 inches)	✓	✓

Supported paper types and tray capacity

Media type	Dimensions ¹	Weight	Capacity ²	Paper orientation
Paper, including the following types:	Minimum: 76 x 127 mm (3 x 5 inches)	60 to 90 g/m ² (16 to 24 lb)	Tray 1: single sheet only	Side to be printed on face- up, with the top edge at
• Plain	Maximum: 216 x 356 mm (8.5 x 14 inches)		Tray 2: up to 150 sheets of 75 g/m ² (20 lb bond)	the back of the tray
 Letterhead 			3 (11111)	
 Color 				
 Preprinted 				
 Prepunched 				
 Recycled 				
Thick paper	Same as for paper	Up to 200 g/m ² (53 lb)	Tray 1: single sheet only	Side to be printed on face- up, with the top edge at the back of the tray
			Tray 2: up to 15 mm (0.6 inches) stack height	
Cover paper	Same as for paper	Up to 200 g/m ² (53 lb)	Tray 1: single sheet only	Side to be printed on face- up, with the top edge at the back of the tray
			Tray 2: up to 15 mm (. 59 inch) stack height	

Media type	Dimensions ¹	Weight	Capacity ²	Paper orientation
Glossy paper	Same as for paper	Up to 220 g/m² (59 lb)	Tray 1: single sheet only	Side to be printed on face- up, with the top edge at the back of the tray
Photo paper			Tray 2: up to 15 mm (. 59 inch) stack height	
Transparencies	A4 or Letter	Thickness: 0.12 to 0.13 mm (4.7 to 5.1 mils)	Tray 1: single sheet only	up, with the top edge at
		0.13 11111 (4.7 to 3.1 111118)	Tray 2: up to 50 sheets	
Labels ³	A4 or Letter	Thickness: up to 0.23 mm	Tray 1: single sheet only	Side to be printed on face- up, with the top edge at
		(9 mils) Tray 2: up to 50 shee	Tray 2: up to 50 sheets	the back of the tray
Envelopes	• COM 10	Up to 90 g/m ² (24 lb)	Tray 1: single envelope only	Side to be printed on face- up, with the stamp-end at
	 Monarch 		Tray 2: up to 10 envelopes	the back of the tray
	• DL		rray 2. up to 10 envelopes	
	• C5			
	• B5			
Postcards or index cards	Postcards or index cards 100 x 148 mm Tray 1: single (3.9 x 5.8 inches)	Tray 1: single sheet only	Side to be printed on face- up, with the top edge at	
	(0.9 x 0.0 mones)		Tray 2: up to 50 sheets	the back of the tray

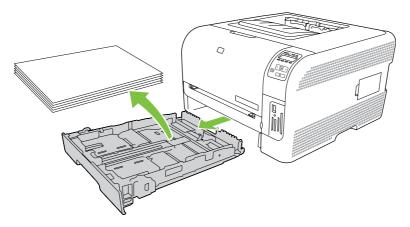
¹ The product supports a wide range of standard and custom sizes of print media. Check the printer driver for supported sizes.

² Capacity can vary depending on media weight and thickness, and environmental conditions.

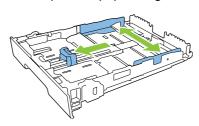
³ Smoothness: 100 to 250 (Sheffield)

Load paper and print media

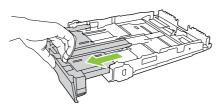
1. Pull the tray out of the product and remove any paper.



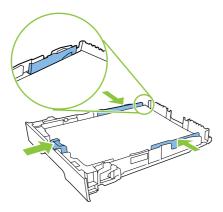
2. Slide open the paper length and width guides.



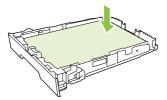
• To load Legal-size paper, extend the tray by pressing and holding the extension tab while pulling the front of the tray toward you.



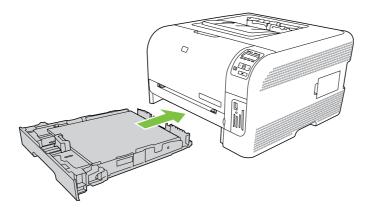
- NOTE: When it is loaded with Legal-size paper, the tray extends from the front of the product approximately 51 mm (2 inches).
- 3. Place the paper in the tray and make sure that it is flat at all four corners. Slide the paper length and width guides so that they are against the stack of paper.



4. Push down on the paper to make sure that the paper stack is below the paper limit tabs on the side of the tray.



5. Slide the tray into the product.



4 Manage and maintain

- Print information pages
- HP Color LaserJet CP1210 Series Toolbox
- HP ToolboxFX (HP Color LaserJet CP1510 Series Printer only)
- HP Embedded Web Server (HP Color LaserJet CP1510 Series Printer only)
- HP Web Jetadmin
- Manage supplies

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Print information pages

NOTE: Information pages also can be printed fromHP Color LaserJet CP1210 Series Toolbox or HP ToolboxFX.

Print information pages on the HP Color LaserJet CP1210 Series Printer

Use the control panel to print configuration and supplies status pages that give details about the product and its current settings.

- ▲ Press and hold the Resume button for two to three seconds to print a configuration page and a supplies status page.
- NOTE: Before you can print the configuration page, you must install the product software and connect the product to the computer.

Print information pages on the HP Color LaserJet CP1510 Series Printer

Use the control panel to print configuration and supplies status pages that give details about the product and its current settings.

- 1. Press OK to open the menus.
- 2. Press the Left arrow (◄) or Right arrow (▶) button to navigate to Reports, and then press OK.
- 3. Press the Left arrow (◄) or Right arrow (►) button to navigate to Config report or Supplies status, and then press OK to print the report.
- Press X to exit the menus.

HP Color LaserJet CP1210 Series Toolbox

HP Color LaserJet CP1210 Series Toolbox is a program that you can use to complete the following tasks:

- Check the product status.
- Configure the product settings.
- Configure pop-up-alert messages.
- View troubleshooting information.
- View online documentation.

You must perform a recommended software installation to use HP Color LaserJet CP1210 Series Toolbox.

NOTE: HP Color LaserJet CP1210 Series Toolbox is not supported for Windows Server 2003 or Macintosh operating systems. To use HP Color LaserJet CP1210 Series Toolbox, you must have the TCP/IP protocol installed on your computer.

You do not need Internet access to open and use HP Color LaserJet CP1210 Series Toolbox.

Supported browsers

To use HP Color LaserJet CP1210 Series Toolbox, you must have one of the following browsers:

- Microsoft Internet Explorer 5.5 or later
- Netscape Navigator 7.0 or later
- Opera Software ASA Opera 6.05 or later

All pages can be printed from the browser.

View the HP Color LaserJet CP1210 Series Toolbox

Open HP Color LaserJet CP1210 Series Toolbox in one of these ways:

- In the Windows system tray, double-click the HP Color LaserJet CP1210 Series Toolbox icon (◄).
- On the Windows Start menu, click Programs (or All Programs in Windows XP and Vista), click HP, click HP Color LaserJet CP1210 and HP Color Laserjet CP1510 Series, and then click HP Color LaserJet CP1210 Series Toolbox.

HP Color LaserJet CP1210 Series Toolbox contains the following folders:

- Status on page 39
- Alerts on page 40
- Product information on page 40
- Help on page 40
- Device Settings on page 42
- Network Settings on page 47

Status

The **Status** folder contains links to the following main pages:

- Device status. This page indicates product conditions such as a jam or an empty tray. After you
 correct a problem, click Refresh status to update the product status.
- **Supplies status**. View details such as the estimated percent 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 for ordering supplies and for finding recycling information.
- Device configuration. View a detailed description of the current product configuration, including the amount of memory installed and whether optional trays are installed.
- Network summary. View a detailed description of the current network configuration, including the IP address and network status.
- Print info pages. Print the Configuration page and other information pages, such as the Supplies status page. See Print information pages on page 36.
- Color usage job log. View color usage information for the product.
- Event log. View a history of product errors. The most recent error is listed first.

Event log

The Event log is a table that contains codes corresponding to error messages that have appeared on the product control-panel display, a brief description of each error, and the number of pages that printed when each error occurred. For more information about error messages, see Event log on page 184.

Alerts

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

- Set up Status Alerts. Set up the product to send you pop-up alerts for certain events, such as low toner levels.
- Set up E-mail Alerts. Set up the product to send you e-mail alerts for certain events, such as low toner levels.

Set up Status Alerts

Use this to set up the product so that it sends alerts to your computer when jams, low levels of toner in HP print cartridges, a non-HP print cartridge in use, empty input trays, and specific error messages occur.

Select to receive a pop-up, a system tray icon, a desktop alert, or any combination of these. The pop-up and desktop alerts only appear when the product is printing from the computer on which you set up the alerts. Desktop alerts are only visible momentarily, and disappear automatically.

Change the **Cartridge low threshold** setting, which sets the toner level that causes a low toner alert, on the **System setup** page.

NOTE: You must click **Apply** before your changes take effect.

Set up E-mail Alerts

Use this 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. Use the information for the e-mail server that will send out the e-mail alert messages for the product.

NOTE: You can only configure e-mail alerts to be sent from a server that does not require user authentication. If your e-mail server requires you to log in with a username and password, you cannot enable e-mail alerts.

NOTE: You must click **Apply** before your changes take effect.

Product information

The **Product information** folder contains links to the following:

 Demonstration Pages. Print pages that show the color print quality potential and overall print characteristics of the product.

Help

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

- **Troubleshooting**. View troubleshooting help topics, print troubleshooting pages, clean the product, and open Microsoft Office Basic Colors. For more information, see the product user guide.
- Paper and Print Media. Print information about how to obtain optimal results from your product using various types of paper and print media.
- How do I? Link to the user-guide index.

- Color Printing Tools. Open Microsoft Office Basic Colors or the full palette of colors with associated RGB values. For more information, see the product user guide. Use the HP Basic Color Match to adjust spot colors in your printed output.
- User Guide. View information about the product usage, warranty, specifications, and support. The user guide is available in both HTML and PDF formats.

Device Settings

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

- **Device Information**. View information such as the product description and a contact person.
- **Paper Handling**. Configure trays or change the product paper-handling settings, such as default paper size and default paper type.
- **Printing**. Change the default product print settings, such as number of copies and paper orientation.
- PostScript. Change the PS settings.
- Photo. Change the photo settings.
- Print Quality. Change the print-quality settings.
- Print Density. Change the print-density settings, such as contrast, highlights, midtones, and shadows.
- Paper Types. Change the mode settings for each media type, such as letterhead, prepunched, or glossy paper.
- Extended Print Modes. Change the default print modes.
- **System Setup**. Change the system settings, such as jam recovery and auto-continue. Change the **Cartridge low threshold** setting, which sets the toner level that causes a low toner alert.
- Service. Gain access to various procedures required to maintain the product.
- Save/Restore Settings. Save the current settings for the product to a file on your computer. Use
 this file to load the same settings onto another product or to restore these settings to this product
 at a later time.
- Password. Set a password to protect the device settings. Once a password is set, users will be
 prompted to enter the password before being allowed to change device settings. This password is
 the same as the embedded Web server password.

Device Information

The Device Information page stores data about your product for future reference. The information that you type in the fields on this page appears on the configuration page. You can type any character in each of these fields.

Paper Handling

Use these options to configure your default settings. These are the same options that are available on the control-panel menus on the control panel. For more information, see Use the control-panel menus (HP Color LaserJet CP1510 Series Printer only) on page 21.

The following 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 product waits before acting on your selections. You can specify from 0 to 3600 seconds.

NOTE: You must click **Apply** before your changes take effect.

Printing

Use these options to configure the settings for all print functions. These are the same options that are available on the control panel. For more information, see <u>Use the control-panel menus (HP Color LaserJet CP1510 Series Printer only)</u> on page 21.

NOTE: You must click **Apply** before your changes take effect.

PostScript

Use this option when you are using the PostScript print personality. When the **Print PostScript error** option is turned on, the PostScript error page automatically prints when PostScript errors occur.

NOTE: You must click **Apply** before your changes take effect.

Photo

Use these options to configure photo printing and to enable or disable using memory cards.

Print Quality

Use these options to improve the appearance of your print jobs. These are the same options that are available on the control panel menus. For more information, see <u>Use the control-panel menus (HP Color LaserJet CP1510 Series Printer only) on page 21</u>.

Color Calibration

- Power On Calibration. Specify whether the product should calibrate when you turn it on.
- Calibration Timing. Specify how frequently the product should calibrate.
- Calibration Mode. Specify the type of calibration the product should use.
 - Normal
 - Full (slower)

Full calibration improves the color accuracy of photos printed on 100 x 150 mm (4 x 6 in) HP Color Laser Photo Paper.

• Calibrate Now. Set the product to calibrate immediately.



Print Density

Use these settings to make fine adjustments in the amount of each color of toner that is used for your printed documents.

- **Contrasts**. Contrast is the range of difference between light (highlight) and dark (shadow) colors. To increase the overall range between light and dark colors, increase the **Contrasts** setting.
- Highlights. Highlights are colors that are nearly white. To darken highlight colors, increase the Highlights setting. This adjustment does not affect midtone or shadow colors.
- Midtones. Midtones are colors that are halfway between white and solid density. To darken
 midtone colors, increase the Midtones setting. This adjustment does not affect highlight or shadow
 colors.
- Shadows. Shadows are colors that are nearly solid density. To darken shadow colors, increase
 the Shadows setting. This adjustment does not affect highlight or midtone colors.

Paper Types

Use these options to configure print modes that correspond to the various media types. To reset all modes to factory default settings, select **Restore modes**.

Extended Print Modes

△ CAUTION: These advanced settings should only be used to improve print quality. Changing these settings can have a significant impact on print quality and product operation.

Use these options to configure the **Fusing**, **Transfer**, **Duplex Transfer**, and **Toner** print modes that correspond to the various media types found in the printer driver. You can also change product **Optimize** settings, such as drum and transfer belt cleaning.

To reset all modes to factory default settings, select **Restore modes**.

Print mode	Setting		
Fusing This print mode	 Paper curl. Decreases the fuser temperature to prevent or reduce page curl. Page curl can be a problem for light-weight media that is used in a high-humidity environment. 		
controls the fuser temperature.	 Heavy coverage. Increases the fuser temperature so that the toner properly adheres to the page whe a high percentage of toner is needed. 		
	 Flap sealing. Decreases the fuser temperature to make sure that envelope flaps do not seal during printing. 		
	 Less/More fusing. Provides two levels of decreased fuser temperatures and two levels of increase fuser temperatures. The user selects the best fuser temperature for the current print job. 		
Transfer	 Dry paper. Increases the transfer bias voltage to prevent print-quality transfer problems in low- humidity (dry) environments. 		
This print mode controls the transfer bias	 Humid paper. Decreases the transfer bias voltage to prevent print-quality transfer problems in high humidity (wet) environments. 		
voltage.	 Rough paper. Increases the transfer bias voltage to prevent print-quality transfer problems when usin rough papers (for example, cotton bond papers). 		
	 Less/More transfer. Provides two levels of decreased transfer bias voltage and two levels of increase transfer bias voltage. The user selects the best transfer bias voltage for the current print job. 		
Duplex Transfer	This mode has the same options as the Transfer mode, but is applied when the product is printing the		
This print mode controls the transfer bias voltage for duplex print jobs.	duplex side of a two-sided print job.		
Toner	Less toner		
This print mode controls the amount of toner applied to a page.	Decreases the amount of toner for each color that is applied to the page to prevent print-quality problem like toner scatter in high humidity (wet) environments. The options are 100% (No adjustment), 95% (-1) 90% (-2), and 85% (-3).		

Optimize

Background Toner

Select On to reduce background printing on glossy media.

Extra Drum Cleaning

Select On to reduce the residue left by high-acid media that can cause print-quality problems.

Drum Banding

Select On to reduce the occurrence of sharp image-quality defect lines at the photosensitive drum by inducing extra drum pre-rotations and by jogging the drums slightly after each job (the jogging motion is slightly audible).

Transfer Belt Cleaning

Increases the effectiveness of the transfer belt cleaning process. Use this option if a previous heavy-coverage print job is leaving a faint image (ghosting) on subsequently printed pages.

Transfer Belt Cleaning Voltage

Allows fine adjustment of the transfer belt cleaning roller and brush voltage.

Transfer Belt Voltage-Y

Allows for fine adjustment of the yellow print cartridge to Intermediate Transfer Belt (ITB) transfer voltage.

Transfer Belt Voltage-M

Allows for fine adjustment of the magenta print cartridge to Intermediate Transfer Belt (ITB) transfer voltage.

Transfer Belt Voltage-C

Allows for fine adjustment of the cyan print cartridge to Intermediate Transfer Belt (ITB) transfer voltage.

Transfer Belt Voltage-K

Allows for fine adjustment of the black print cartridge to Intermediate Transfer Belt (ITB) transfer voltage.

System Setup

Use these system settings to configure miscellaneous print settings. These settings are not available on the control panel.

NOTE: You must click Apply before your changes take effect.

Service

Click Restore to return the product settings to the factory default settings.

Network Settings

The network administrator can use this tab to control the network-related settings for the product when it is connected to an IP-based network.

Shop for Supplies

This button, at the top of each page, links to a Web site where you can order replacement supplies. You must have Internet access to use this feature.

Other Links

This section contains links that connect you to the Internet. 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 HP Color LaserJet CP1210 Series Toolbox, you must connect before you can visit these Web sites. Connecting might require that you close HP Color LaserJet CP1210 Series Toolbox and reopen it.

- HP Instant Support. Connects to the HP Instant Support Web site.
- **Support and Troubleshooting**. Connects to the support site for the product where you can search for help with a specific problem.
- **Product Registration**. Connects to the HP product registration Web site.

HP ToolboxFX (HP Color LaserJet CP1510 Series Printer only)

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

- Check the product status.
- Configure the product settings.
- Configure pop-up-alert messages.
- View troubleshooting information.
- View online documentation.

You can view HP ToolboxFX when the product is directly connected to your computer or is connected to the network. You must perform a recommended software installation to use HP ToolboxFX.

NOTE: HP ToolboxFX is not supported for Windows 2000, Windows Server 2003, or Macintosh operating systems. To use HP ToolboxFX, you must have the TCP/IP protocol installed on your computer.

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

View HP ToolboxFX

Open HP ToolboxFX in one of these ways:

- In the Windows system tray, double-click the HP ToolboxFX icon ().
- On the Windows Start menu, click Programs (or All Programs in Windows XP and Vista), click HP, click HP Color LaserJet CP1510, and then click HP ToolboxFX.

HP ToolboxFX contains the following folders:

- Status on page 49
- Alerts on page 50
- Product information on page 50
- Help on page 50
- Device Settings on page 52
- Network Settings on page 57

Status

The **Status** folder contains links to the following main pages:

- Device status. This page indicates product conditions such as a jam or an empty tray. After you
 correct a problem, click Refresh status to update the product status.
- **Supplies status**. View details such as the estimated percent 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 for ordering supplies and for finding recycling information.
- Device configuration. View a detailed description of the current product configuration, including the amount of memory installed and whether optional trays are installed.
- Network summary. View a detailed description of the current network configuration, including the IP address and network status.
- Print info pages. Print the Configuration page and other information pages, such as the Supplies status page. See Print information pages on page 36.
- Color usage job log. View color usage information for the product.
- Event log. View a history of product errors. The most recent error is listed first.

Event log

The Event log is a table that contains codes corresponding to error messages that have appeared on the product control-panel display, a brief description of each error, and the number of pages that printed when each error occurred. For more information about error messages, see Event log on page 184.

Alerts

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

- Set up Status Alerts. Set up the product to send you pop-up alerts for certain events, such as low toner levels.
- Set up E-mail Alerts. Set up the product to send you e-mail alerts for certain events, such as low toner levels.

Set up Status Alerts

Use this to set up the product so that it sends alerts to your computer when jams, low levels of toner in HP print cartridges, a non-HP print cartridge in use, empty input trays, and specific error messages occur.

Select to receive a pop-up, a system tray icon, a desktop alert, or any combination of these. The pop-up and desktop alerts only appear when the product is printing from the computer on which you set up the alerts. Desktop alerts are only visible momentarily, and disappear automatically.

Change the **Cartridge low threshold** setting, which sets the toner level that causes a low toner alert, on the **System setup** page.

NOTE: You must click **Apply** before your changes take effect.

Set up E-mail Alerts

Use this 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. Use the information for the e-mail server that will send out the e-mail alert messages for the product.

NOTE: You can only configure e-mail alerts to be sent from a server that does not require user authentication. If your e-mail server requires you to log in with a username and password, you cannot enable e-mail alerts.

NOTE: You must click **Apply** before your changes take effect.

Product information

The **Product information** folder contains links to the following page:

 Demonstration Pages. Print pages that show the color print quality potential and overall print characteristics of the product.

Help

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

- **Troubleshooting**. View troubleshooting help topics, print troubleshooting pages, clean the product, and open Microsoft Office Basic Colors. For more information see the product User Guide.
- Paper and Print Media. Print information about how to obtain optimal results from your product using various types of paper and print media.
- How do I? Link to the user-guide index.

- Color Printing Tools. Open Microsoft Office Basic Colors or the full palette of colors with associated RGB values. For more information, see the product user guide. Use the HP Basic Color Match to adjust spot colors in your printed output.
- User Guide. View information about the product usage, warranty, specifications, and support. The user guide is available in both HTML and PDF formats.

Device Settings

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

- **Device Information**. View information such as the product description and a contact person.
- **Paper Handling**. Configure trays or change the product paper-handling settings, such as default paper size and default paper type.
- Printing. Change the default product print settings, such as number of copies and paper orientation.
- PostScript. Change the PS settings.
- Photo. Change the photo settings.
- Print Quality. Change the print-quality settings.
- Print Density. Change the print-density settings, such as contrast, highlights, midtones, and shadows.
- Paper Types. Change the mode settings for each media type, such as letterhead, prepunched, or glossy paper.
- Extended Print Modes. Change the default print modes.
- **System Setup**. Change the system settings, such as jam recovery and auto-continue. Change the **Cartridge low threshold** setting, which sets the toner level that causes a low toner alert.
- Service. Gain access to various procedures required to maintain the product.
- Save/Restore Settings. Save the current settings for the product to a file on your computer. Use
 this file to load the same settings onto another product or to restore these settings to this product
 at a later time.
- Password. Set a password to protect the device settings. Once a password is set, users will be
 prompted to enter the password before being allowed to change device settings. This password is
 the same as the embedded Web server password.

Device Information

The Device Information page stores data about your product for future reference. The information that you type in the fields on this page appears on the configuration page. You can type any character in each of these fields.

Paper Handling

Use these options to configure your default settings. These are the same options that are available on the control-panel menus on the control panel. For more information, see Use the control-panel menus (HP Color LaserJet CP1510 Series Printer only) on page 21.

The following 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 product waits before acting on your selections. You can specify from 0 to 3600 seconds.

NOTE: You must click **Apply** before your changes take effect.

Printing

Use these options to configure the settings for all print functions. These are the same options that are available on the control panel. For more information, see <u>Use the control-panel menus (HP Color LaserJet CP1510 Series Printer only) on page 21</u>.

NOTE: You must click **Apply** before your changes take effect.

PostScript

Use this option when you are using the PostScript print personality. When the **Print PostScript error** option is turned on, the PostScript error page automatically prints when PostScript errors occur.

NOTE: You must click **Apply** before your changes take effect.

Photo

Use these options to configure photo printing and to enable or disable using memory cards.

Print Quality

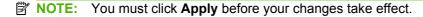
Use these options to improve the appearance of your print jobs. These are the same options that are available on the control panel menus. For more information, see <u>Use the control-panel menus (HP Color LaserJet CP1510 Series Printer only) on page 21</u>.

Color Calibration

- Power On Calibration. Specify whether the product should calibrate when you turn it on.
- Calibration Timing. Specify how frequently the product should calibrate.
- Calibration Mode. Specify the type of calibration the product should use.
 - Normal
 - Full (slower)

Full calibration improves the color accuracy of photos printed on 100 x 150 mm (4 x 6 in) HP Color Laser Photo Paper.

• Calibrate Now. Set the product to calibrate immediately.



Print Density

Use these settings to make fine adjustments in the amount of each color of toner that is used for your printed documents.

- **Contrasts**. Contrast is the range of difference between light (highlight) and dark (shadow) colors. To increase the overall range between light and dark colors, increase the **Contrasts** setting.
- Highlights. Highlights are colors that are nearly white. To darken highlight colors, increase the Highlights setting. This adjustment does not affect midtone or shadow colors.
- Midtones. Midtones are colors that are halfway between white and solid density. To darken
 midtone colors, increase the Midtones setting. This adjustment does not affect highlight or shadow
 colors.
- Shadows. Shadows are colors that are nearly solid density. To darken shadow colors, increase
 the Shadows setting. This adjustment does not affect highlight or midtone colors.

Paper Types

Use these options to configure print modes that correspond to the various media types. To reset all modes to factory default settings, select **Restore modes**.

Extended Print Modes

△ CAUTION: These advanced settings should only be used to improve print quality. Changing these settings can have a significant impact on print quality and product operation.

Use these options to configure the **Fusing**, **Transfer**, **Duplex Transfer**, and **Toner** print modes that correspond to the various media types found in the printer driver. You can also change product **Optimize** settings, such as drum and transfer belt cleaning.

To reset all modes to factory default settings, select **Restore modes**.

NOTE: You must click **Apply** before your changes take effect.

Print mode	Setting		
Fusing This print mode	 Paper curl. Decreases the fuser temperature to prevent or reduce page curl. Page curl can be a problem for light-weight media that is used in a high-humidity environment. 		
controls the fuser temperature.	 Heavy coverage. Increases the fuser temperature so that the toner properly adheres to the page whe a high percentage of toner is needed. 		
	 Flap sealing. Decreases the fuser temperature to make sure that envelope flaps do not seal during printing. 		
	 Less/More fusing. Provides two levels of decreased fuser temperatures and two levels of increase fuser temperatures. The user selects the best fuser temperature for the current print job. 		
Transfer	 Dry paper. Increases the transfer bias voltage to prevent print-quality transfer problems in low- humidity (dry) environments. 		
This print mode controls the transfer bias voltage.	 Humid paper. Decreases the transfer bias voltage to prevent print-quality transfer problems in high humidity (wet) environments. 		
	 Rough paper. Increases the transfer bias voltage to prevent print-quality transfer problems when usin rough papers (for example, cotton bond papers). 		
	 Less/More transfer. Provides two levels of decreased transfer bias voltage and two levels of increase transfer bias voltage. The user selects the best transfer bias voltage for the current print job. 		
Duplex Transfer	This mode has the same options as the Transfer mode, but is applied when the product is printing the		
This print mode controls the transfer bias voltage for duplex print jobs.	duplex side of a two-sided print job.		
Toner	Less toner		
This print mode controls the amount of toner applied to a page.	Decreases the amount of toner for each color that is applied to the page to prevent print-quality probl like toner scatter in high humidity (wet) environments. The options are 100% (No adjustment), 95% (-90% (-2), and 85% (-3).		

Optimize

Background Toner

Select On to reduce background printing on glossy media.

Extra Drum Cleaning

Select On to reduce the residue left by high-acid media that can cause print-quality problems.

Drum Banding

Select On to reduce the occurrence of sharp image-quality defect lines at the photosensitive drum by inducing extra drum pre-rotations and by jogging the drums slightly after each job (the jogging motion is slightly audible).

Transfer Belt Cleaning

Increases the effectiveness of the transfer belt cleaning process. Use this option if a previous heavy-coverage print job is leaving a faint image (ghosting) on subsequently printed pages.

Transfer Belt Cleaning Voltage

Allows fine adjustment of the transfer belt cleaning roller and brush voltage.

Transfer Belt Voltage-Y

Allows for fine adjustment of the yellow print cartridge to Intermediate Transfer Belt (ITB) transfer voltage.

Transfer Belt Voltage-M

Allows for fine adjustment of the magenta print cartridge to Intermediate Transfer Belt (ITB) transfer voltage.

Transfer Belt Voltage-C

Allows for fine adjustment of the cyan print cartridge to Intermediate Transfer Belt (ITB) transfer voltage.

Transfer Belt Voltage-K

Allows for fine adjustment of the black print cartridge to Intermediate Transfer Belt (ITB) transfer voltage.

System Setup

Use these system settings to configure miscellaneous print settings. These settings are not available on the control panel.

NOTE: You must click Apply before your changes take effect.

Service

During the printing process, paper, toner and dust particles can accumulate inside the product. Over time, this buildup can cause print-quality problems such as toner specks or smearing. The HP ToolboxFX provides an easy method for cleaning the paper path. For more information, see <u>Clean the paper path on page 69</u>.

Network Settings

The network administrator can use this tab to control the network-related settings for the product when it is connected to an IP-based network.

Shop for Supplies

This button, at the top of each page, links to a Web site where you can order replacement supplies. You must have Internet access to use this feature.

Other Links

This section contains links that connect you to the Internet. 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 HP ToolboxFX, you must connect before you can visit these Web sites. Connecting might require that you close HP ToolboxFX and reopen it.

- HP Instant Support. Connects to the HP Instant Support Web site.
- **Support and Troubleshooting**. Connects to the support site for the product where you can search for help with a specific problem.
- Product Registration. Connects to the HP product registration Web site.

HP Embedded Web Server (HP Color LaserJet CP1510 Series Printer only)

When the product is connected to the network, the embedded Web server is automatically available. You can open the embedded Web server from Windows 95 and later.

NOTE: When the product is directly connected to a computer, use HP ToolboxFX to view the product status.

Use the embedded Web server to view product and network status and to manage printing functions from your computer instead of from the product control panel.

- View product control status information.
- Set the type of paper loaded in each tray.
- Determine the remaining life of all supplies and order new ones.
- View and change tray configurations.
- View and change the product settings.
- View and print internal pages.
- View and change network configuration.
- View support content that is specific to the current state of the product.
- Restrict access to color-printing features.

To use the embedded Web server, you must have Microsoft Internet Explorer 6 or later, Netscape Navigator 7 or later, Safari 1.2 or later, Konqueror 3.2 or later, Firefox 1.0 or later, Mozilla 1.6 or later, or Opera 7 or later. The embedded Web server works when the product is connected to an IP-based network. The embedded Web server does not support IPX-based or AppleTalk printer connections. You do not need Internet access to open and use the embedded Web server.

Access the Embedded Web Server by using a network connection

- In a supported Web browser on your computer, type the IP address for the product in the address/ URL field. (To find the IP address, print a configuration page. See <u>Print information pages</u> on page 36.)
- NOTE: After you open the URL, you can 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 product: the Status tab, the Settings tab, and the Networking tab. Click the tab that you want to view.
 - See the following section for more information about each tab.

Embedded Web server sections

The table below describes the basic screens of the embedded Web server.

Tab or section	Description			
Status tab	Device Status : Shows the product status and shows the life remaining of HP supplies, with 0% indicating that a supply has reached the end of its life.			
Provides product, status, and configuration information.	Supplies Status : Shows the life remaining of HP supplies, with 0% indicating tha supply has reached the end of its life. This page also provides supplies part number			
	• Device Configuration : Shows the information found on the product configuration page.			
	 Network Summary: Shows the information found on the product network configuration page. 			
	 Print Info Pages: Allows you to print the PCL, PCL6, PS Font Lists, and the supplies status page that the product generates. 			
	Color Usage Job Log: Shows user color print jobs on a job-by-job basis.			
	Event Log: Shows a list of all product events and errors.			
	Support button: Provides a link to the product support page. The Support button can be password-protected.			
	Shop for Supplies button: Provides a link to a page where you can order supplies for the product. The Shop for Supplies button can be password-protected.			
Settings tab Provides the ability to configure th	Device Information: Allows you to name the product and assign an asset number to it. Enter the name for the primary contact who will receive information about the product.			
product from your computer.	 Paper Handling: Allows you to change the paper-handling defaults for the product 			
	Printing: Allows you to change the printing defaults for the product.			
	PostScript: Allows you to change the PostScript defaults for the product.			
	 Print Quality: Allows you to change the print quality defaults for the product, including calibration settings. 			
	 Print Density: Allows you to change the contrasts, highlights, midtones, and shadows values for each supply. 			
	 Paper Types: Allows you to configure print modes that correspond to the media types that the product accepts. 			
	System Setup: Allows you to change the system defaults for the product.			
	Service: Allows you to start the cleaning procedure on the product.			
	Support button: Provides a link to the product support page. The Support button can be password-protected.			
	 Shop for Supplies button: Provides a link to a page where you can order supplies for the product. The Shop for Supplies button can be password-protected. 			
	NOTE: The Settings tab can be password-protected. If this product is on a network, always consult with the printer administrator before changing settings on this tab.			
Networking tab	Network administrators can use this tab to control network-related settings for the product when it is connected to an IP-based network. This tab does not appear if the product is directly connected to a computer.			

Tab or section	Description	
Provides the ability to change network settings from your computer.	NOTE: The Networking tab can be password-protected.	

HP Web Jetadmin

HP Web Jetadmin is a browser-based management tool for network-connected printers within your intranet. It should be installed only on the network administrator's computer.

To download a current version of HP Web Jetadmin and for the latest list of supported host systems, visit www.hp.com/go/webjetadmin.

When installed on a host server, any client can gain access to HP Web Jetadmin by using a supported Web browser (such as Microsoft® Internet Explorer 6.x or Netscape Navigator 7.x or later) and navigating to the HP Web Jetadmin host.

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Manage supplies

Parts life expectancy

The print cartridges use HP ColorSphere toner. For information about the number of pages the cartridges can print, see www.hp.com/go/pageyield. Actual yield depends on specific use.

Check and order supplies

Print-cartridge storage

Do not remove the print cartridge from its package until you are ready to use it.

△ CAUTION: To prevent damage to the print cartridge, do not expose it to light for more than a few minutes.

HP policy on non-HP print cartridges

Hewlett-Packard Company cannot recommend the use of non-HP print cartridges, either new or remanufactured.

NOTE: Any damage caused by a non-HP print cartridge is not covered under the HP warranty and service agreements.

To install a new HP print cartridge, see <u>Replace print cartridges on page 63</u>. To recycle the used cartridge, follow the instructions included with the new cartridge.

HP fraud hotline and Web site

Call the HP fraud hotline (1-877-219-3183, toll-free in North America) or go to www.hp.com/go/anticounterfeit when you install an HP print cartridge and the control-panel message says the cartridge is non-HP. HP will help determine if the cartridge is genuine and take steps to resolve the problem.

Your print cartridge might not be a genuine HP print cartridge if you notice the following:

- You are experiencing a high number of problems with the print cartridge.
- The cartridge does not look like it usually does (for example, the orange pull tab is missing, or the packaging differs from HP packaging).

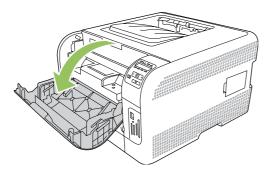
Recycle supplies

To recycle supplies, place the used supply in the box in which the new supply arrived. Use the enclosed return label to send the used supply to HP for recycling. For complete information, see the recycling guide that is included with each new HP supply item.

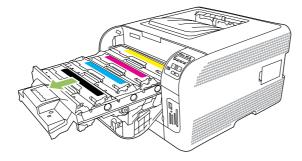
Replace supplies

Replace print cartridges

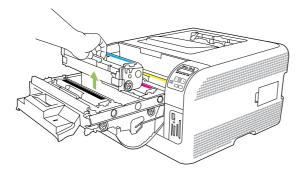
1. Open the front door.



2. Pull out the print-cartridge drawer.

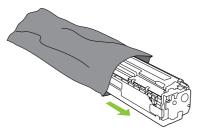


3. Grasp the handle on the old print cartridge and then pull the cartridge straight up to remove it.

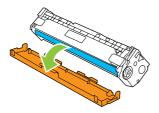


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4. Remove the new print cartridge from the packaging.



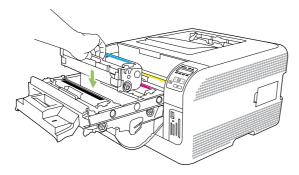
5. Remove the orange, plastic shield from the bottom of the new print cartridge.



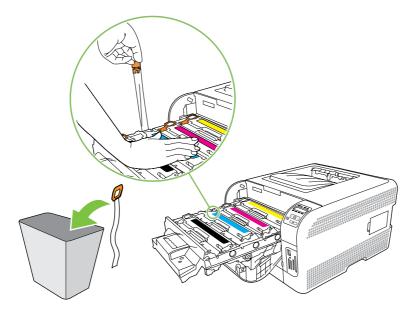
△ CAUTION: Do not touch the imaging drum on the bottom of the print cartridge. Fingerprints on the imaging drum can cause print-quality problems.



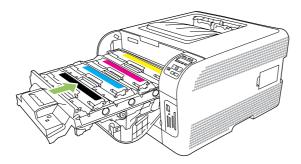
6. Insert the new print cartridge into the product.



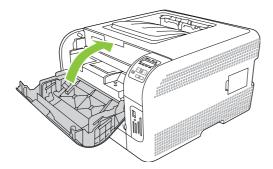
7. Pull the tab on the left side of the print cartridge straight up to completely remove the sealing tape. Discard the sealing tape.



8. Close the print-cartridge drawer.



9. Close the front door.



10. Place the old print cartridge in the box for the new print cartridge. Follow the recycling instructions that are included in the box.

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Work with memory

Product memory (HP Color LaserJet CP1510 Series Printer only)

The HP Color LaserJet CP1510 Series Printer has one dual inline memory module (DIMM) slot. Use the DIMM slot to upgrade the product with the following items:

- More product memory (DIMMs are available in 64, 128, and 256 MB)
- Other DIMM-based printer languages and product options

You might want to increase product memory if you often print complex graphics or HP postscript level 3 emulation documents, or if you use many downloaded fonts. Additional memory also enables multiple collated copies to print at the maximum speed.

Before ordering additional memory, see how much memory is currently installed by printing a Configuration page. See Print information pages on page 36.

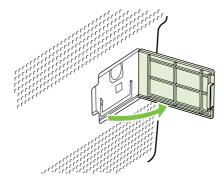
Install memory DIMMs

You can install more memory for the product, or you can install a font DIMM to allow the product to print characters (for example, Chinese language or the Cyrillic alphabet characters).

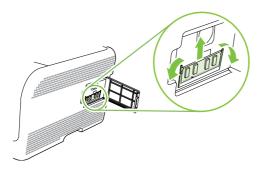
△ CAUTION: Static electricity can damage DIMMs. When handling DIMMs, either wear an antistatic wrist strap, or frequently touch the surface of the DIMM antistatic package, and then touch bare metal on the product.

Install memory and font DIMMs

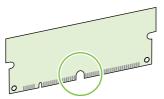
- 1. Turn the product off, and then disconnect all power and interface cables.
- 2. On the right side of the product, open the DIMM access door.



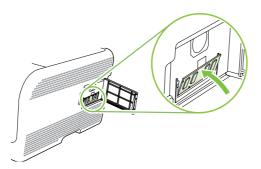
3. To replace a DIMM that is currently installed, spread the latches apart on each side of the DIMM slot, lift the DIMM up at an angle, and pull it out.



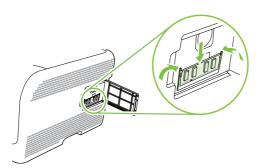
4. Remove the new DIMM from the antistatic package, and then locate the alignment notch on the bottom edge of the DIMM.



Holding the DIMM by the edges, align the notch on the DIMM with the bar in the DIMM slot at an angle.



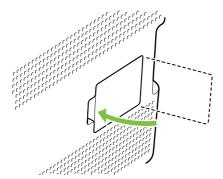
6. Push down on the DIMM until both latches engage the DIMM. When the installation is correct, the metal contacts are not visible.



NOTE: If you have difficulty inserting the DIMM, make sure that the notch on the bottom of the DIMM is aligned with the bar in the slot. If the DIMM still does not go in, make sure that you are using the correct DIMM type.

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7. Close the DIMM access door.



- 8. Reconnect the power cable and USB or network cable, and then turn on the product.
- **9.** See Enable memory on page 69 to enable the memory.

Enable memory

If you installed a memory DIMM, set the printer driver to recognize the newly added memory.

Enable memory for Windows

- On the Start menu, point to Settings, and click Printers or Printers and Faxes.
- 2. Select this product and select **Properties**.
- On the Configure tab, click More.
- 4. In the **Total Memory** field, type or select the total amount of memory that is now installed.
- 5. Click OK.

Check DIMM installation

Turn the product on. Check that the product is in the **Ready** state after it has gone through the startup sequence. If an error message appears, do the following:

- 1. Print a Configuration page. See Print information pages on page 36.
- 2. Check the Installed Personalities and Options section on the configuration page and compare it with the configuration page that you printed before the DIMM installation.
- 3. The DIMM might not be installed correctly. Repeat the installation procedure.

-or-

The DIMM may be defective. Try a new DIMM.

Clean the product

Clean the separation and pickup rollers

Use a clean damp lint-free cloth to gently wipe the rollers.

△ CAUTION: Do not use alcohol based solvents to clean the rollers.

Clean the paper path

During the printing process, paper, toner, and dust particles can accumulate inside the product. Over time, this buildup can cause print-quality problems such as toner specks or smearing. This product has a cleaning mode that can correct and prevent these problems.

Use the HP Color LaserJet CP1210 Series Toolbox to clean the paper path

- Open HP Color LaserJet CP1210 Series Toolbox.
- 2. Click the **Help** folder, and then click the **Troubleshooting** page.
- 3. In the area for **Cleaning Mode**, click **Start** to begin the cleaning process.

The product processes a single page, and then returns to the **Ready** state when the cleaning process is complete.

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Use HP ToolboxFX to clean the paper path

- 1. Open HP ToolboxFX.
- 2. Click the **Device Settings** folder, and then click the **Service** page.
- 3. In the area for Cleaning Mode, click Start to begin the cleaning process.

The product processes a single page, and then returns to the **Ready** state when the cleaning process is complete.

Upgrade firmware

To upgrade the product firmware, download the firmware update file from www.hp.com/go/ljcp1510series_software and save the file to your network or personal computer.

5 Theory of operation

This chapter presents an overview of the major components of the printer, and includes a detailed discussion of the image-formation system.

- Basic operation
- Engine control system
- <u>Laser/scanner system</u>
- Image-formation system
- Pickup-and-feed system

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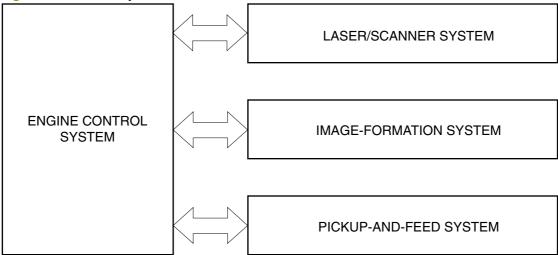
Basic operation

Major product systems

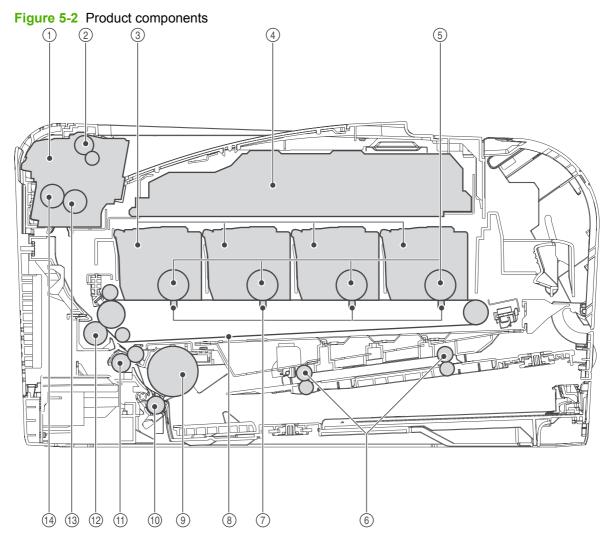
The product includes the following systems:

- Engine control system
- Laser/scanner system
- Image-formation system
- Pickup-and-feed system

Figure 5-1 Product systems



Product components



Item	Description	Item	Description
1	Fuser unit	8	Intermediate transfer belt (ITB)
2	Delivery roller	9	Pickup roller
3	Print cartridge	10	Separation roller
4	Laser/scanner unit	11	Registration roller
5	Photosensitive drum	12	Secondary transfer roller
6	Priority slot media-feed roller (HP Color LaserJet CP1510 Series Printer only)	13	Fusing film
7	Primary transfer pad	14	Pressure roller

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Sequence of operation

Table 5-1 Sequence of operation

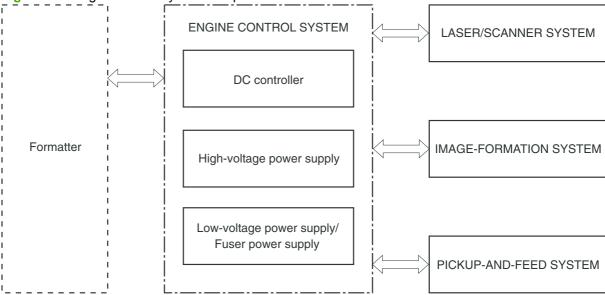
Period	Duration	Purpose	Remarks
WAIT	From the time the power is turned on or the door is closed until the drum-phase adjustment is complete	Clears the potential from the drum surface, adjusts the drum phase, and cleans the ETB	Detects the toner level, cartridge presence, and environment; completes any required calibration (color registration control and image stability)
STBY (Standby period)	From end of the WAIT or LSTR period until either the print command is received from the formatter or the power is turned off	Maintains the printer in readiness for a print command	The printer enters sleep mode when the formatter sends a sleep command, and performs color registration and the image stability control when the formatter sends those commands.
INTR (Initial rotation)	From the time the print command is received until the media is picked up	Prepares the photosensitive drum for printing	
PRINT	From the end of INTR period until the fuser paper sensor detects the trailing edge of paper	Forms the images on the photosensitive drum and transfers the toner image to the print media	Performs image stabilization at a specified print interval or at specified times
LSTR (Last rotation)	From the end of the PRINT period until the delivery motor stops rotating	Moves the printed sheet out of the printer	The printer enters the INTR period as soon as the formatter sends another print command.

Engine control system

The engine control system coordinates all printer functions and drives the other three systems.

The engine control system contains the DC controller, high-voltage power-supply PCA, and low-voltage power-supply unit.

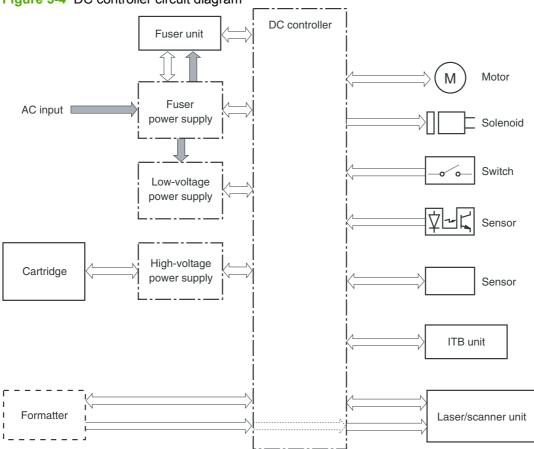
Figure 5-3 Engine control system components



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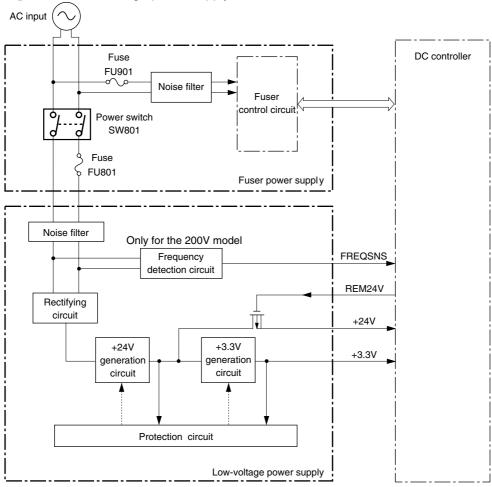
DC controller

Figure 5-4 DC controller circuit diagram



Low-voltage power supply

Figure 5-5 Low-voltage power supply



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High-voltage power supply

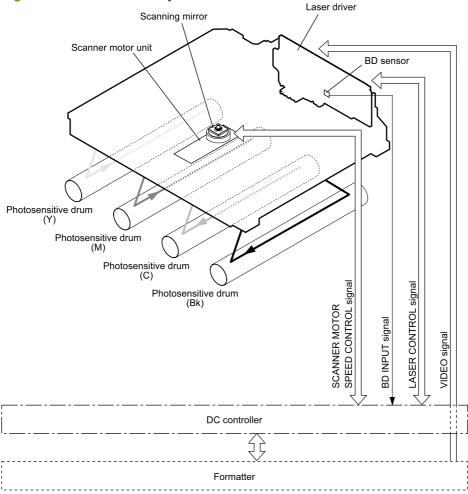
Figure 5-6 High-voltage power supply Primary charging Developing Blade high-voltage high-voltage high-voltage generation circuit generation circuit generation circuit DEV3 BLD1 BLD2 BLD3 BLD3 DEV1 PRI **y y y** Cartridge Photosensitive drum Primary transfer pad **ICLB ICLR** ITB ITB cleaning unit TR1_4 23 23 TR1_1 Secondary T, TH. transfer roller ITB cleaning roller ITB cleaning brush Secondary transfer Primary transfer high-voltage high-voltage high-voltage high-voltage generation circuit generation circuit generation circuit generation circuit High-voltage power supply

DC controller

Laser/scanner system

The formatter sends video signals to the DC controller, which controls the laser/scanner. When the laser/scanner system receives those signals, it converts them to latent images on the photosensitive drum.

Figure 5-7 Laser/scanner system



Laser failure detection

The optical unit failure detection sensor manages the laser/scanner unit failure-detection functions. The DC controller identifies the laser/scanner unit failure and notifies the formatter if the laser/scanner unit encounters the following conditions:

- Scanner motor failure
- BD failure

Image-formation system

The image-formation system forms a toner image on media. The product includes four print cartridges that contain the toner. Toner is applied in the following order, using only the colors necessary for a specific image: yellow (Y), magenta (M), cyan (C), and black (Bk).

Figure 5-8 Image-formation system

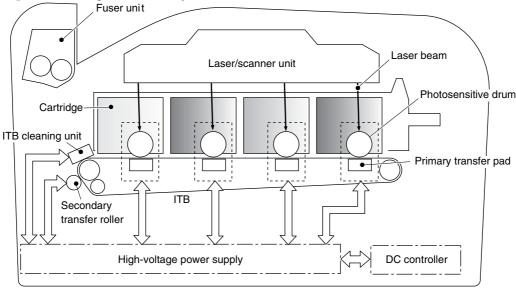


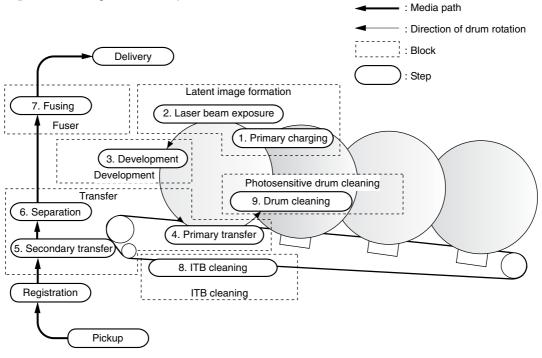
Image-formation process

Laser printing requires the interaction of several different technologies including electronics, optics, and electrographics to provide a printed page. Each process functions independently and must be coordinated with the other processes. Image formation consists of the following processes:

- Latent-image formation
- Development
- Transfer
- Fuser
- ITB cleaning
- Drum cleaning

These processes are divided into nine steps, which are shown in <u>Figure 5-9 Image-formation process</u> on page 81 and described in the following sections.

Figure 5-9 Image-formation process



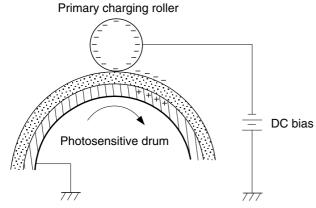
Latent-image formation stage

During the three steps that comprise this stage, a latent image is formed by applying a negative charge to the photosensitive drum. You cannot see this image on the drum.

Step 1: primary charging

A high-voltage DC bias is applied to the primary charging roller, which is made of conductive rubber and is in contact with the drum surface. As the roller moves across the drum, it applies the negative charge to that surface.

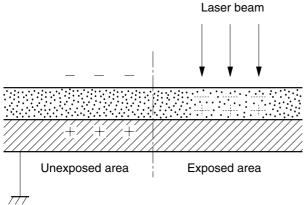
Figure 5-10 Primary charging



Step 2: laser-beam exposure

The laser beam scans the photosensitive drum to neutralize the negative charge on portions of the drum surface. An electrostatic latent image is formed where the negative charge was neutralized.

Figure 5-11 Laser-beam exposure



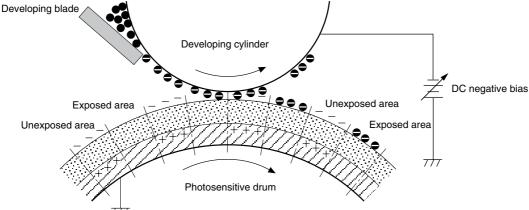
Developing stage

The developing cylinder comes in contact with the photosensitive drum and deposits toner on the electrostatic latent image.

Step 3: development

Toner acquires a negative charge as a result of the friction from the developing cylinder rotating against the developing blade. When the negatively charged toner comes in contact with the drum, it adheres to the electrostatic latent image. When the toner is on the drum, the image becomes visible.

Figure 5-12 Development

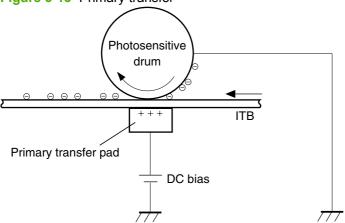


Transfer stage

Step 4: primary transfer

The toner image on the photosensitive drum is transferred to the ITB. The DC positive bias is applied to the primary transfer pad. The negatively charged toner transfers to the ITB from the drum surface.

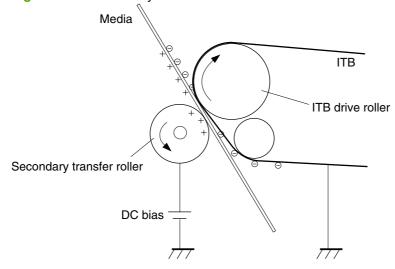
Figure 5-13 Primary transfer



Step 5: secondary transfer

The toner image on the ITB is transferred to the print media. The DC positive bias is applied to the secondary transfer roller. As the media passes between the secondary transfer roller and the ITB, the toner image is transferred to the media.

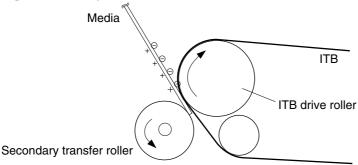
Figure 5-14 Secondary transfer



Step 6: separation from the drum

The elasticity of the print media and the curvature of the ITB drive roller cause the media to separate from the ITB.

Figure 5-15 Separation from the drum



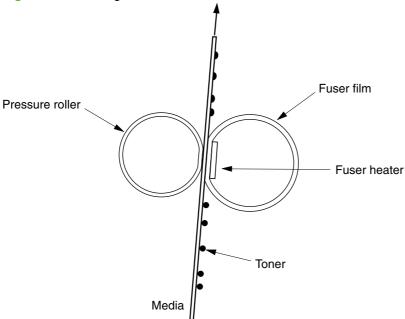
Fusing stage

Until the fusing stage is complete, the image is not permanently affixed to the print media. The toner can be easily smudged until the heat and pressure of the fusing process fix the image to the sheet.

Step 7: fusing

The product uses an on-demand fixing method to fix the toner image onto the media. The toner image is permanently affixed to the print media by the heat and pressure.

Figure 5-16 Fusing

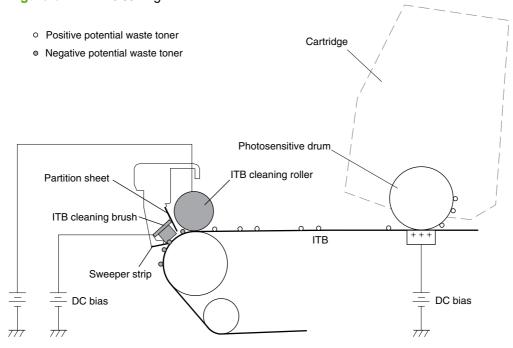


ITB cleaning stage

Step 8: ITB cleaning

The ITB cleaning roller and the cleaning brush are applied with the DC positive bias to charge the residual toner positive. Because the primary transfer pad is also applied with the DC positive bias, the positively charged residual toner is reverse-transferred to the photosensitive drum from the ITB surface.

Figure 5-17 ITB cleaning



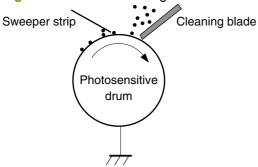
Drum cleaning stage

Not all of the toner is removed from the photosensitive drum during the transfer stage. During the cleaning stage, the residual, or waste, toner is cleared from the drum surface to prepare the surface for the next latent-image formation.

Step 9: drum cleaning

The cleaning blade scrapes the residual toner off the surface of the photosensitive drum and deposits it in the waste-toner container. The drum is now clear, and is ready for the next image-formation process.

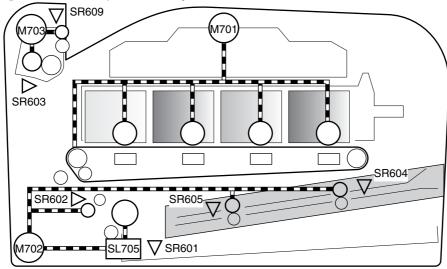
Figure 5-18 Drum cleaning



Pickup-and-feed system

The pickup-and-feed system picks up and feeds the print media. It consists of several types of feed rollers.

Figure 5-19 Pickup-and-feed system



HP Color LaserJet CP1510 only

Number	Description	Number	Description
M701	Main motor	SR602	Top-of-page sensor
M702	Pickup motor	SR603	Loop sensor
M703	Fuser motor	SR604	Priority slot media-presence sensor (HP Color LaserJet CP1510 only)
SL705	Cassette pickup solenoid	SR605	Priority slot top-of-page sensor (HP Color LaserJet CP1510 only)
SR601	Cassette media-presence sensor	SR609	Fuser delivery sensor

Jam detection

The product uses the following sensors to detect the presence of media and to check whether media is being fed correctly or has jammed:

- Cassette media-presence sensor
- Top-of-page sensor
- Loop sensor
- Priority slot media-presence sensor (HP Color LaserJet CP1510 only)
- Priority slot top-of-page sensor (HP Color LaserJet CP1510 only)
- Fuser delivery sensor

The product detects the following jams:

- Pickup delay jam
- Pickup stationary jam
- Delivery delay jam
- Delivery stationary jam
- Fixing wrapping jam
- Residual media jam

6 Removal and replacement

- Introduction
- Removal and replacement strategy
- <u>Electrostatic discharge</u>
- Required tools
- Before performing service
- After performing service
- Post-service test
- Parts removal order
- Remove the print cartridges
- Rollers
- Transfer roller
- Feed assembly
- External panels, covers, and doors
- Internal assemblies

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Introduction

This chapter discusses the removal and replacement of field replaceable units (FRUs) only.

Replacing FRUs is generally the reverse of removal. Occasionally, notes and tips are included to provide directions for difficult or critical replacement procedures.

HP does *not* support repairing individual subassemblies or problem solving at the component level.

Note the length, diameter, color, type, and location of each screw. Be sure to return each screw to its original location during reassembly.

Incorrectly routed or loose wire harnesses can interfere with other internal components and can become damaged or broken. Frayed or pinched harness wires can be difficult to locate. When replacing wire harnesses, always use the provided wire loops, lance points, or wire-harness guides.

Removal and replacement strategy

⚠ WARNING! Turn the product off, wait 5 seconds, and then remove the power cord before attempting to service the product. If this warning is not followed, severe injury can result, as well as damage to the product. The power must be on for certain functional checks during problem solving. However, the power supply should be disconnected during parts removal.

Never operate or service the product with the protective cover removed from the laser/scanner assembly. The reflected beam, although invisible, can damage your eyes.

The sheet-metal parts can have sharp edges. Be careful when handling sheet-metal parts.

- △ CAUTION: Do not bend or fold the flat flexible cables (FFCs) during removal or installation. Also, do not straighten pre-folds in the FFCs. You *must* make sure that all FFCs are fully seated in their connectors. Failure to fully seat an FFC into a connector can cause a short circuit in a PCA.
- NOTE: To install a self-tapping screw, first turn it counterclockwise to align it with the existing thread pattern, and then carefully turn it clockwise to tighten. Do not overtighten. If a self-tapping screw-hole becomes stripped, repair the screw-hole or replace the affected assembly.

Electrostatic discharge



CAUTION: Some parts are sensitive to electrostatic discharge (ESD). Look for the ESD reminder when removing product parts. Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, ground yourself by touching the sheet-metal chassis before touching an ESD-sensitive part.

Protect the ESD-sensitive parts by placing them in ESD pouches when they are out of the product.

Required tools

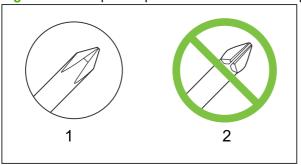
- #2 Phillips screwdriver with a magnetic tip and a 152-mm (6-inch) shaft length
- Small flatblade screwdriver

- Needle-nose pliers
- ESD mat (if one is available)
- Penlight (optional)

△ CAUTION: Always use a Phillips screwdriver (callout 1). Do not use a pozidrive screwdriver (callout 2) or any motorized screwdriver. These can damage screws or screw threads.

CAUTION: Avoid pulling directly on wires to disconnect wire-harness connectors. Pull on the plastic body of a connector to avoid damaging the connector wires.

Figure 6-1 Phillips and pozidrive screwdriver comparison



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Before performing service

- Remove all media from the product.
- Turn off the power using the power switch.
- Unplug the power cable and interface cable(s).
- Place the product on an ESD mat (if one is available). If an ESD workstation or mat is not available, ground yourself by touching the sheet-metal chassis before touching an ESD-sensitive part.
- Remove the print cartridges. See Remove the print cartridges on page 95.
- Remove the Tray 2 cassette.

After performing service

- Plug in the power cable.
- Reinstall the print cartridges.
- Reinstall the Tray 2 cassette.

Post-service test

After service has been completed, perform the following test to verify that the repair or replacement was successful.

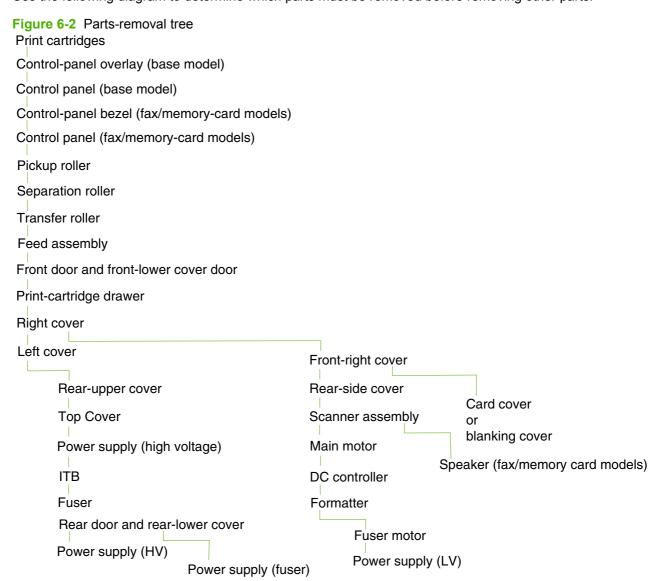
Print-quality test

- 1. Verify that you have completed the necessary reassembly steps.
- 2. Ensure that the input tray contains clean, unmarked paper.
- 3. Attach the power cord and interface cable, and then turn on the product.
- 4. Verify that the expected start-up sounds occur.
- Print a configuration page, and then verify that the expected printing sounds occur.
 - HP Color LaserJet CP1210 Series printer
 - Press and hold the Resume button for two to three seconds to print a configuration page and a supplies status page.
 - NOTE: Before you can print the configuration page, you must install the product software and connect the product to the computer.
 - HP Color LaserJet CP1510 Series printer
 - 1. Press OK to open the menus.
 - Press the Left arrow (◄) or Right arrow (►) button to navigate to Reports, and then press OK.
 - Press the Left arrow (◄) or Right arrow (►) button to navigate to Config report, and then press OK to print the report.
 - Press X to exit the menus.
- Print a demo page, and then verify that the print quality is as expected.
 - HP Color LaserJet CP1210 Series printer
 - Print the demo page from the HP Color LaserJet CP1210 Series Toolbox.
 - HP Color LaserJet CP1510 Series printer
 - Press OK to open the menus.
 - 2. Press the Left arrow (◄) or Right arrow (►) button to navigate to **Reports**, and then press OK.
 - Press the Left arrow (◄) or Right arrow (►) button to navigate to Demo page, and then
 press OK to print the report.
 - Press X to exit the menus.
- 7. Send a print job from the host computer, and then verify that the output meets expectations.
- 8. If necessary, restore any customer-specified settings.
- Clean the outside of the product with a damp cloth.

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Parts removal order

Use the following diagram to determine which parts must be removed before removing other parts.



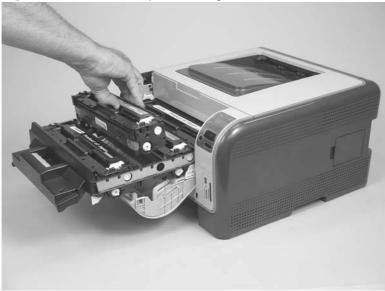
Remove the print cartridges

- △ 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.
 - 1. Open the front door and pull out the print-cartridge drawer.
 - 2. Grasp the handle on the print cartridge, and then pull the cartridge straight up to remove it. Repeat this step for the remaining print cartridges.
 - △ **CAUTION**: Do not touch the imaging drum on the bottom of the print cartridge. Finger prints on the imaging drum can cause print-quality problems.

Do not allow the image drum to contact any surface when the cartridges are set down. Protect the image drum at all times. Dust and debris can stick to the drum and cause print-quality problems.



Figure 6-3 Remove the print cartridge



3. Close the print-cartridge and front doors.

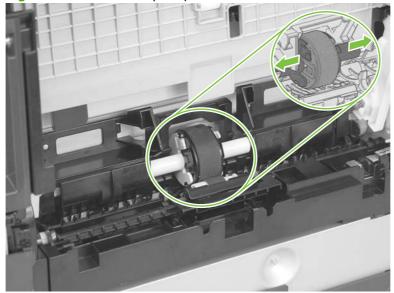
Rollers

Pickup roller

- △ CAUTION: Do not touch the spongy roller surface unless you are going to replace the roller. Skin oils on the roller can cause paper pickup problems.
 - 1. Use one of the following methods to rotate the roller into the position required to remove it.
 - HP Color LaserJet CP1210 Series Printer
 - **a.** With the product power off, press the Resume button.
 - b. Continue to depress the Resume button, and then turn the product power on.
 - **c.** Release the Resume button after 30 seconds. The control-panel LEDs will cycle on and off, indicating that the roller has moved to the required position.
 - NOTE: You must keep the Resume button depressed for at least 30 seconds, and then release it before 40 seconds pass.
 - d. Turn the power off.
 - HP Color LaserJet CP1510 Series Printer
 - a. Open the Secondary Service menu by pressing and holding both the Left arrow (◄) and Cancel.
 - **b.** Use the arrow buttons to select **Pick roller**, and then press **OK**.
 - c. Press OK again to confirm that you want the pick roller to rotate.
 - d. Turn the power off.
 - 2. Remove the 150-sheet input tray, and then carefully place the product front-side up.
 - △ CAUTION: The ADF and scanner cover are not captive and can open suddenly if the product is placed front-side up. Always support the ADF and scanner cover before placing the product front-side up.
 - NOTE: Debris can scratch or damage the back of the product. Before you place the product frontside up, remove any debris from the work surface. If possible, set the product on a clean, dry cloth to prevent scratching and damage.

3. Release the two white plastic locking tabs and remove the pickup roller.

Figure 6-4 Remove the pickup roller



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Separation roller

- △ CAUTION: Do not touch the spongy roller surface unless you are going to replace the roller. Skin oils on the roller can cause paper pickup problems.
 - Remove Tray 2, and then carefully place the product front-side up.
 - △ CAUTION: The ADF and scanner cover are not captive and can open suddenly if the product is placed front-side up. Always support the ADF and scanner cover before placing the product frontside up.
 - NOTE: Debris can scratch or damage the back of the product. Before you place the product frontside up, remove any debris from the work surface. If possible, set the product on a clean, dry cloth to prevent scratching and damage.
 - Release the two roller-cover locking pins, and then remove the cover.

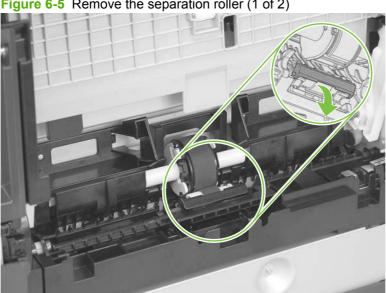
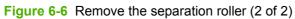
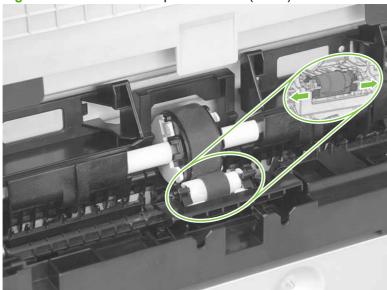


Figure 6-5 Remove the separation roller (1 of 2)

3. Release the roller holder to release the roller-locking pins. Remove the separation roller.





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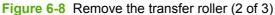
Transfer roller

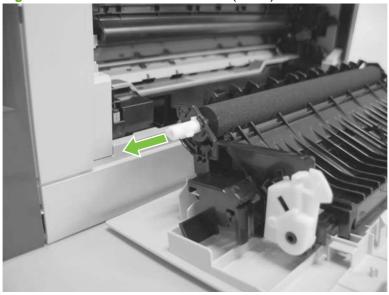
- 1. Open the rear door.
- Release the retainer clip and then rotate it until the pin on the clip aligns with the slot in the mounting bracket.

Figure 6-7 Remove the transfer roller (1 of 3)



- 3. Remove the clip. Repeat these steps for the remaining retainer clip.
 - TIP: One of the clips is made from a black conductive plastic. Make sure that the clips are reinstalled on the side of the transfer roller that they are removed from.





- 4. Slide the roller to one side to disengage the roller shaft from the mounting bracket, and then remove the transfer roller.
 - △ CAUTION: Do not touch the black sponge portion of the roller. Skin oils can cause print-quality problems.

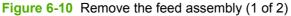
Figure 6-9 Remove the transfer roller (3 of 3)

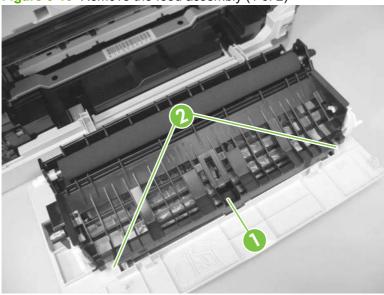


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Feed assembly

1. Release one captive screw (callout 1) and release two tabs (callout 2).





2. Remove the transfer roller assembly

Figure 6-11 Remove the feed assembly (2 of 2)

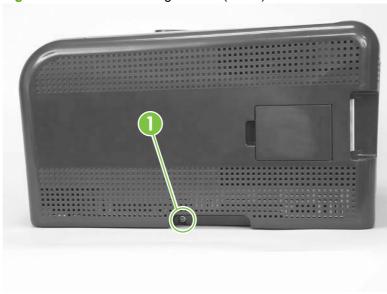


External panels, covers, and doors

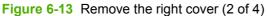
Right cover

Remove one screw (callout 1).

Figure 6-12 Remove the right cover (1 of 4)



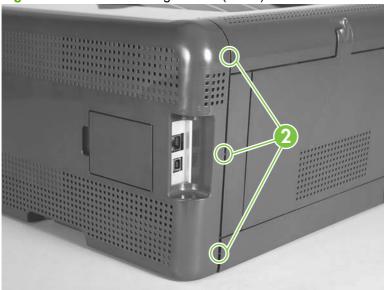
Carefully pry the front of the right cover away from the product to release one tab.





3. Use a small flatblade screwdriver to release three tabs (callout 2) at the back of the product.

Figure 6-14 Remove the right cover (3 of 4)



4. Rotate the bottom of the cover away from the product, and then slide it up to remove it.

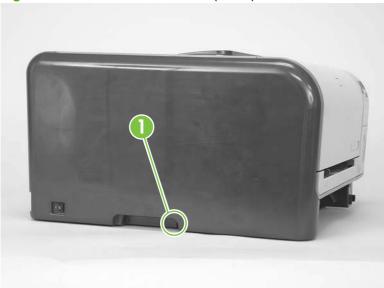
Figure 6-15 Remove the right cover (4 of 4)



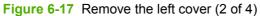
Left cover

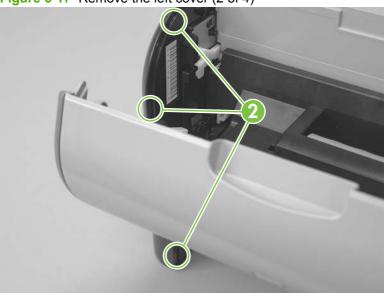
Remove one screw (callout 1).

Figure 6-16 Remove the left cover (1 of 4)



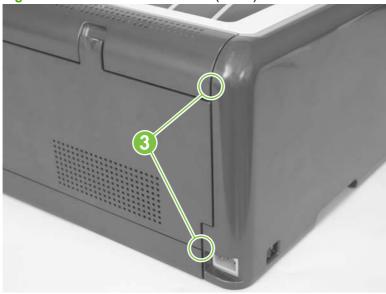
- Open the front door, and then use a small flatblade screwdriver to release three tabs (callout 2).
- NOTE: It might be easier to release the tabs if you first release the bottom tab, then the middle tab, and then the top tab.





- 3. Use a small flatblade screwdriver to release two tabs (callout 3) at the back of the product.
 - △ CAUTION: The bottom tab might be difficult to release. Make sure that you do not break the tab.

Figure 6-18 Remove the left cover (3 of 4)



4. Rotate the bottom of the cover away from the product, and then slide it up to remove it.

Figure 6-19 Remove the left cover (4 of 4)

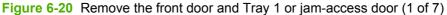


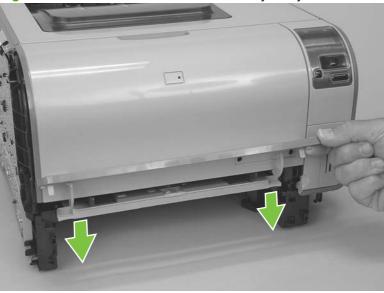
Front door and Tray 1 or jam-access door

For the HP Color LaserJet CP1210 Series, the door located below the front door is the jam-access door. For the HP Color LaserJet CP1510 Series, the door located below the front door is the Tray 1 (priorityfeed slot) door.

Open the Tray 1 or jam-access door.

HP Color LaserJet CP1510 Series Printer only: Push down on the priority-feed tray to release it.





Carefully push the left-side Tray 1 or jam-access door hinge in toward the center of the door to release it from the hinge pin.

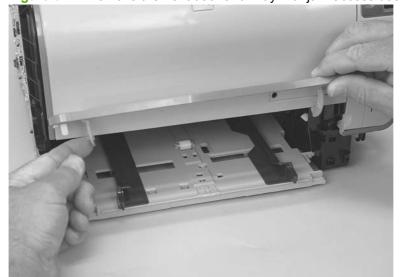
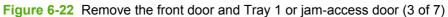
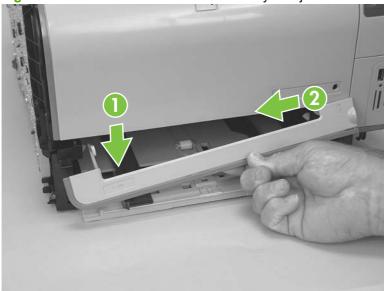


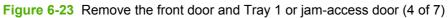
Figure 6-21 Remove the front door and Tray 1 or jam-access door (2 of 7)

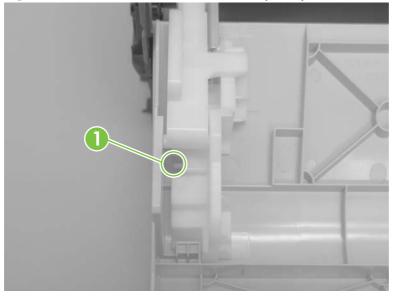
3. Lower the left side of the door and then slide it to the left to release the right-side hinge. Remove the door.



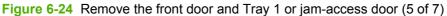


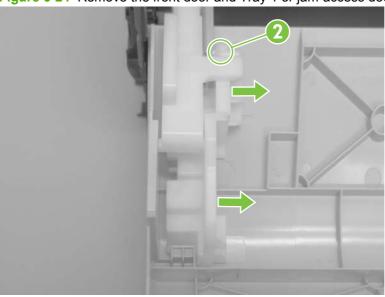
4. Open the front door, and then use a small flatblade screwdriver to release one tab (callout 1) on the left-side front-door cam.



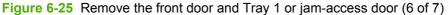


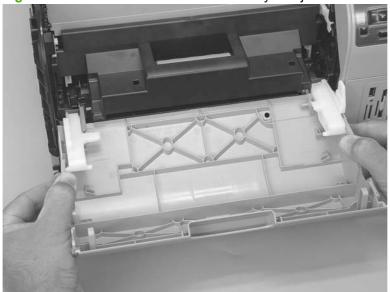
- Slide the cam toward the center of the door to remove it. Repeat this step for the right-side frontdoor cam.
 - △ CAUTION: The hinge pin (callout 2) on the cam can be easily broken. You must apply even pressure on the cam to remove it without using any twisting motion that might break the hinge pin off of the cam.



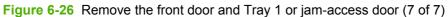


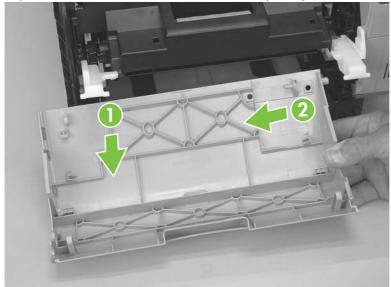
Carefully flex the edges of the door to release the right- and left-side door retainer arms.





7. Lower the left side of the door, and then slide it to the left to release the right-side door hinge pin. Remove the door.





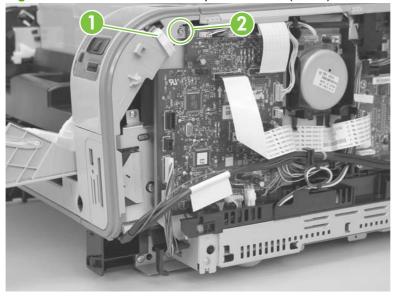
Control-panel module and photo-card reader PCA

The HP Color LaserJet CP1210 does not have a memory-card reader.

- △ CAUTION: Do not bend or fold the flat flexible cables (FFCs) during removal or installation. Also, do not straighten pre-folds in the FFCs. You must make sure that all FFCs are fully seated in their connectors. Failure to fully seat an FFC into a connector can cause a short circuit in a PCA.
 - Remove the right cover. See Right cover on page 103.
 - 2. Open the front door.

3. **HP Color LaserJet CP1210 Series Printer**: Disconnect one FFC (callout 1), and then remove one screw (callout 2).

Figure 6-27 Remove the control-panel module (1 of 4)

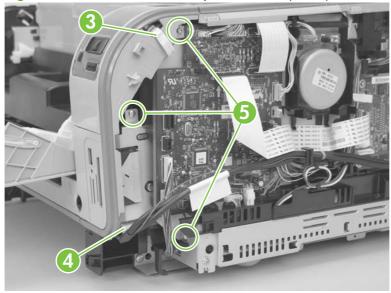


or

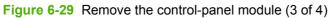
HP Color LaserJet CP1510ni only: Disconnect one FFC (callout 3), one wire-harness connector (callout 4), and then remove three screws (callout 5).

☼ TIP: The top-most memory-card bracket mounting screw is a self-tapping screw. When reinstalling the control-panel module, make sure that you replace this screw in the correct position in the product.

Figure 6-28 Remove the control-panel module (2 of 4)

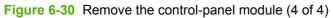


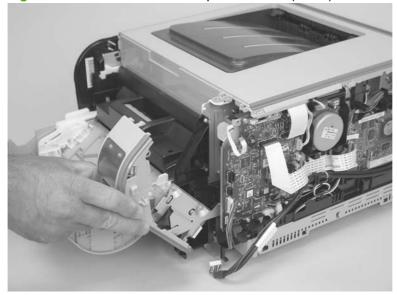
Use a small flatblade screwdriver to release one tab (callout 6).



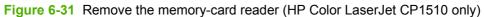


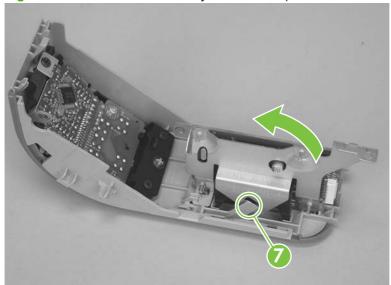
Rotate the top of the control-panel module away from the product to remove it.





6. HP Color LaserJet CP1510ni only: Release one tab (callout 7), and then rotate the photo-card reader PCA toward the control-panel PCA to remove it.





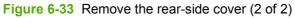
Rear-side cover

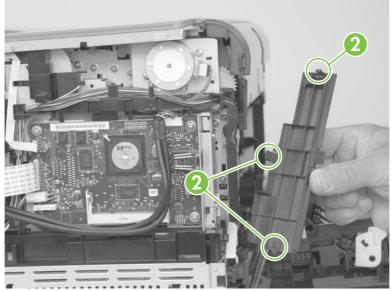
- Remove the right cover. See Right cover on page 103.
- 2. Open the rear door.
- 3. Use a small flatblade screwdriver to release two tabs (callout 1).

Figure 6-32 Remove the rear-side cover (1 of 2)



- Remove the rear-side cover.
- 文 TIP: Note the location of the mounting tabs (callout 2) on the rear-side cover.

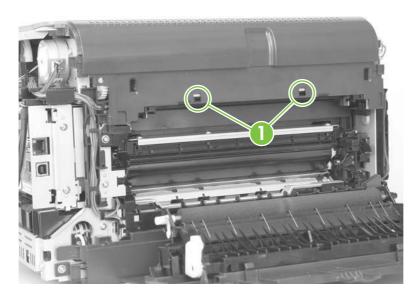




Rear-upper cover

- 1. Remove the following components:
 - Right cover. See Right cover on page 103.
 - Left cover. See <u>Left cover on page 105</u>.
 - Rear-side cover. See <u>Rear-side cover on page 115</u>.
- 2. Open the rear door.
- 3. Use a small flatblade screwdriver to release two tabs (callout 1).

Figure 6-34 Remove the rear-upper cover (1 of 2)



4. Pull the rear-upper cover away from the product to remove it.

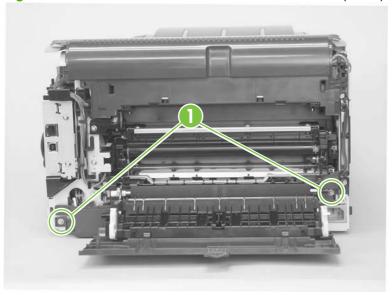
Figure 6-35 Remove the rear-upper cover (2 of 2)



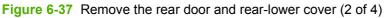
Rear door and rear-lower cover

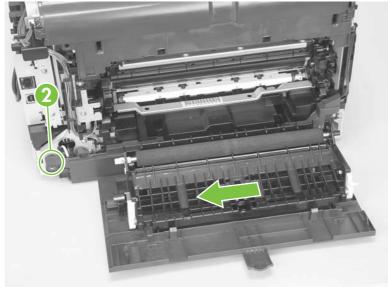
- Remove the following components:
 - Right cover. See Right cover on page 103.
 - Left cover. See <u>Left cover on page 105</u>.
 - Rear-side cover. See Rear-side cover on page 115.
- 2. Remove two screws (callout 1).

Figure 6-36 Remove the rear door and rear-lower cover (1 of 4)



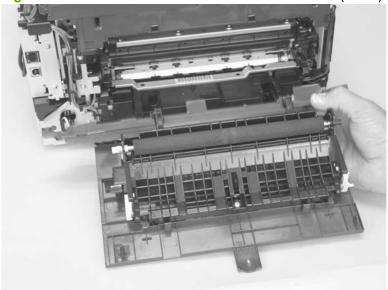
Release one pin (callout 2), and then slide the rear door and rear-lower cover toward the side of the product with the interface connectors.





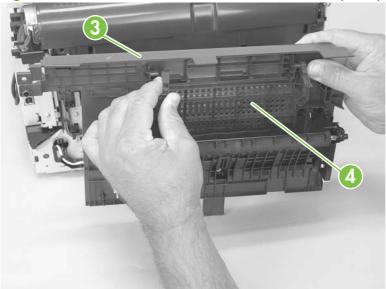
4. Remove the rear door and rear-lower cover.

Figure 6-38 Remove the rear door and rear-lower cover (3 of 4)



- 5. Carefully pry the rear-door hinge arms off of the hinge pins on the rear-lower cover to separate the rear cover (callout 3) from the rear door (callout 4).
- NOTE: If you are installing a replacement rear-lower door, remove the feed assembly from the discarded door, and then install it on the replacement door. See Feed assembly on page 102.

Figure 6-39 Remove the rear door and rear-lower cover (4 of 4)



Top cover

- Remove the following components:
 - Right cover. See Right cover on page 103.
 - Left cover. See <u>Left cover on page 105</u>.
 - Control-panel module and memory-card reader. See Control-panel module and photo-card reader PCA on page 111.
 - NOTE: HP Color LaserJet CP1210 does not have a memory-card reader.
 - Rear-side cover. See Rear-side cover on page 115.
 - Rear-upper cover. See Rear-upper cover on page 116.
- Partially open the front door. 2.
- 3. Remove one screw (callout 1).

Figure 6-40 Remove the top cover (1 of 4)



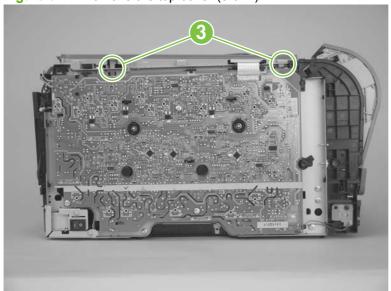
4. Release one tab (callout 2).

Figure 6-41 Remove the top cover (2 of 4)



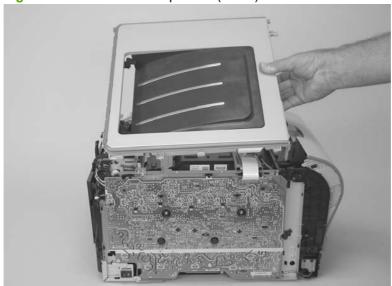
5. Release two tabs (callout 3).

Figure 6-42 Remove the top cover (3 of 4)



Remove the top cover.

Figure 6-43 Remove the top cover (4 of 4)

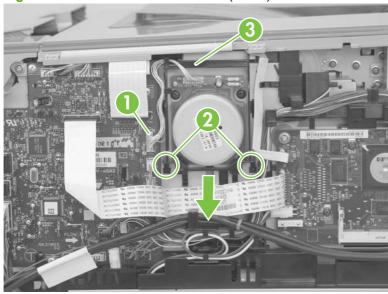


Internal assemblies

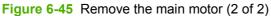
Main motor

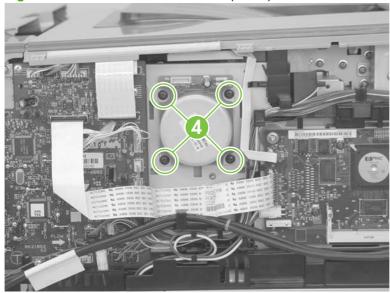
- 1. Remove the right cover. See Right cover on page 103.
- 2. Disconnect one wire-harness connector (callout 1), and then release two tabs (callout 2) to release the retainer (callout 3). Slide the retainer down and separate it from the chassis.

Figure 6-44 Remove the main motor (1 of 2)



3. Remove four screws (callout 4), and then remove the main motor.

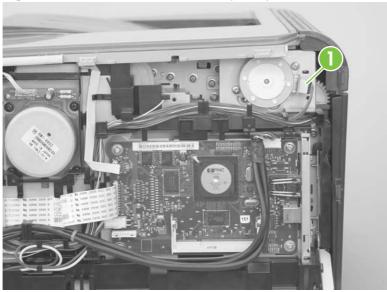




Fuser motor

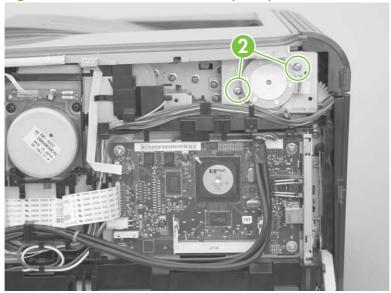
- 1. Remove the right cover. See Right cover on page 103.
- 2. Disconnect one wire-harness connector (callout 1).

Figure 6-46 Remove the fuser motor (1 of 2)



3. Remove two screws (callout 2), and then remove the fuser motor.

Figure 6-47 Remove the fuser motor (2 of 2)



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Intermediate transfer belt (ITB)

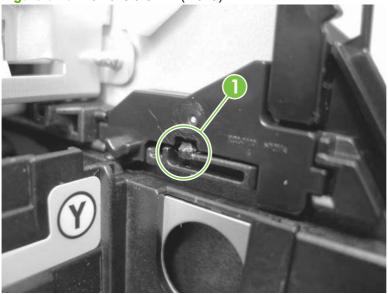
- 1. Remove the following components:
 - Right cover. See Right cover on page 103.
 - Left cover. See <u>Left cover on page 105</u>.
 - Rear-side cover. See Rear-side cover on page 115.
- 2. Open the front door and pull out the print-cartridge drawer.

Figure 6-48 Remove the ITB (1 of 9)



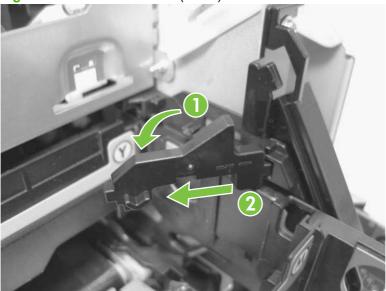
3. Release one tab (callout 1).

Figure 6-49 Remove the ITB (2 of 9)



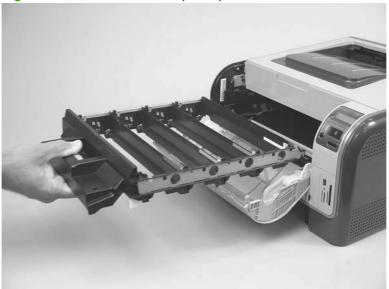
4. Rotate the cartridge-drawer retainer (callout 2) away from the chassis, and then remove it. Repeat the previous step and this step for the other cartridge-drawer retainer.

Figure 6-50 Remove the ITB (3 of 9)



5. Pull the print-cartridge drawer straight out of the product to remove it.

Figure 6-51 Remove the ITB (4 of 9)



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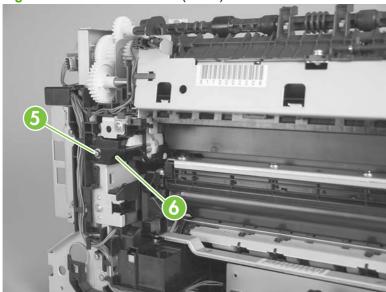
6. Disconnect one wire-harness connector (callout 3), and then release the wire harness from the retainer (callout 4).

Figure 6-52 Remove the ITB (5 of 9)



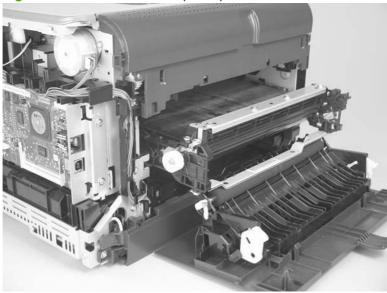
- **7.** Open the rear door.
- 8. Remove one screw (callout 5), and then remove the print-cartridge drawer stop (callout 6).

Figure 6-53 Remove the ITB (6 of 9)



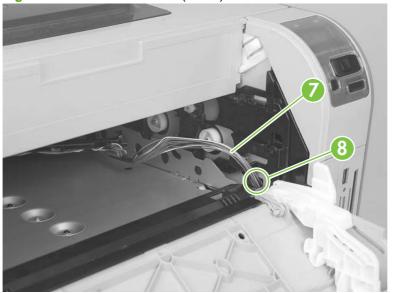
- 9. Carefully lift up on the black plastic portion of the ITB, and then pull it *partially* out of the product (the ITB wire harness will prevent the ITB from being fully removed).
- ⚠ **WARNING!** Only *partially* pull the ITB out of the product to avoid damage to the secondary-transfer (T2) roller.
- △ **CAUTION:** Avoid touching the black plastic transfer belt. Skin oils on the belt might cause printquality problems.

Figure 6-54 Remove the ITB (7 of 9)



10. Feed the ITB wire harness (callout 7) through an opening in the chassis (callout 8).





- 11. Carefully pull the ITB straight out of the product.
 - ▲ WARNING! Handle the ITB by its hard plastic sides to avoid damage to the sheet-metal frame. The lower sheet-metal portion of the ITB frame can be easily bent. See Figure 6-57 Reinstall the ITB (1 of 2) on page 129.
 - △ CAUTION: Make sure that the ITB wire harness does not get damaged as the ITB is removed from the chassis.

Figure 6-56 Remove the ITB (9 of 9)

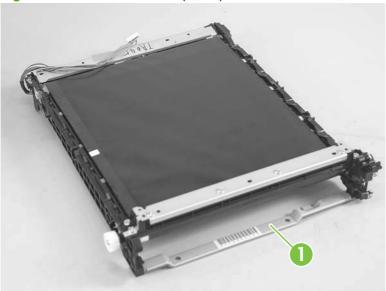


Reinstall the ITB

Use the following guidelines when you install the ITB.

• A WARNING! The lower sheet-metal portion of the ITB frame (callout 1) can be easily bent. Avoid handling the ITB by this part of the sheet-metal frame.

Figure 6-57 Reinstall the ITB (1 of 2)



- When handling the ITB, always use the hard plastic portions of the assembly.
- △ CAUTION: Avoid touching the black-plastic transfer belt or roller. Skin oils on the belt or roller might cause print-quality problems.
- Do not let the transfer belt contact hard or sharp objects.
- △ CAUTION: Scratches, punctures, or other damage to the belt will cause print-quality problems.
- Make sure that the wire harness is not twisted or pinched after it is passed through the opening in the chassis and that the ITB sits flat in the product.
- NOTE: When the print-cartridge drawer is installed, it should easily slide in and out of the product and not contact any part of the ITB assembly.

- Tape the wire harness to the sheet-metal frame so that it will not catch on internal components as the ITB is installed.
 - With the ITB partially installed, feed the wire harness through the opening in the chassis. See <u>Figure</u> 6-55 Remove the ITB (8 of 9) on page 127. Finish installing the ITB.
 - ▲ WARNING! Do not place the tape so that it makes contact with or adheres to the transfer belt.
 Tape or tape residue on the transfer belt will cause print-quality problems.
- NOTE: Make sure that you remove all of the tape and tape residue after installing the ITB.





DC controller **PCA**

Special consideration

⚠ WARNING! Do not install a *replacement* formatter PCA and DC controller PCA at the same time, and then turn the product power on.

The formatter PCA and the DC controller PCA store important product configuration information (NVRAM data) that will be lost if both PCAs are replaced at the same time. When the product power is turned on, the formatter will restore the NVRAM data to a replacement DC controller.

Replacing both the DC controller and the formatter at the same time will result in severe print-quality problems.

Replacing the DC controller PCA before the formatter PCA

Use the following procedure if you need to install a replacement DC controller *and* a replacement formatter PCA.

- NOTE: If you are only installing a replacement DC controller PCA, proceed to Remove the DC controller PCA on page 131.
 - Install a replacement DC controller PCA.
 - 2. Turn the product power on, and wait for the print-cartridge volume indicators to appear on the control-panel display.
 - NOTE: This allows important product information to be written to the replacement DC controller PCA.
 - 3. Turn the product power off.
 - 4. Install a replacement formatter PCA. See Remove the formatter PCA on page 134.
 - 5. Turn the product power on.

Remove the DC controller PCA

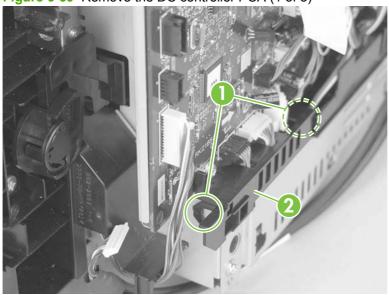
△ CAUTION: Do not bend or fold the flat flexible cables (FFCs) during removal or installation. Also, do not straighten pre-folds in the FFCs. You *must* make sure that all FFCs are fully seated in their connectors. Failure to fully seat an FFC into a connector can cause a short circuit in a PCA.

Some parts are sensitive to electrostatic discharge (ESD). Look for the ESD reminder when removing product parts. Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, ground yourself by touching the sheet-metal chassis *before* touching an ESD-sensitive part.

- 1. Remove the following components:
 - Right cover. See <u>Right cover on page 103</u>.
 - Left cover. See <u>Left cover on page 105</u>.
 - Control-panel module and memory-card reader. See <u>Control-panel module and photo-card</u> reader PCA on page 111.

- NOTE: The HP Color LaserJet CP1210 Series Printer does not have a memory-card reader.
- Rear-side cover. See Rear-side cover on page 115.
- Rear-upper cover. See <u>Rear-upper cover on page 116</u>.
- Top cover. See <u>Top cover on page 119</u>.
- 2. Release two tabs (callout 1) and then remove the protective cover (callout 2).

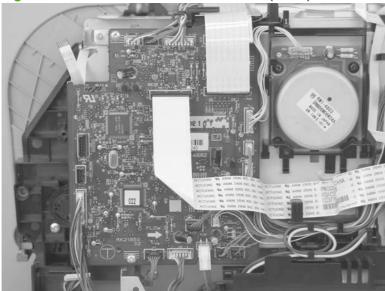
Figure 6-59 Remove the DC controller PCA (1 of 3)



- 3. Disconnect all of the FFCs and wire-harness connectors from the DC controller PCA.
 - Three FFCs: J107, J108, and J115
 - Wire harness
 - HP Color LaserJet CP1210 Series Printer: 14 wire-harness connectors: J012, J104, J105, J109, J110, J111, J112, J113, J116. J118, J119, J120, J121, and J124
 - NOTE: J117, J126, and J127 are not used.
 - HP Color LaserJet CP1510 Series Printer: 15 wire-harness connectors: J012, J104, J105, J109, J110, J111, J112, J113, J116, J117, J118, J119, J120, J121, and J124

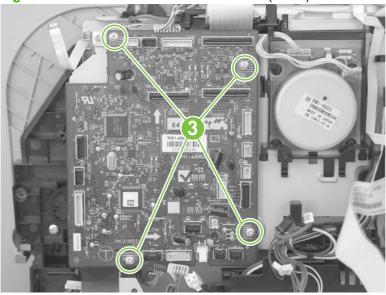
NOTE: J126 and J127 are not used.

Figure 6-60 Remove the DC controller PCA (2 of 3)



- 4. Remove four screws (callout 3), and then remove the DC controller PCA.
- NOTE: These four screws are ground screws. Make sure that the correct screws are used to reinstall the DC controller PCA.

Figure 6-61 Remove the DC controller PCA (3 of 3)



Formatter PCA

Special consideration

⚠ **WARNING!** Do not install a *replacement* formatter PCA and DC controller PCA at the same time, and then turn the product power on.

The formatter PCA and the DC controller PCA store important product configuration information (NVRAM data) that will be lost if both PCAs are replaced at the same time. When the product power is turned on, the DC controller will restore the NVRAM data on the replacement formatter.

Replacing both the formatter and the DC controller at the same time will result in severe print-quality problems.

Replacing the formatter PCA before the DC controller PCA

Use the following procedure if you need to install a replacement formatter PCA and a replacement DC controller.

- NOTE: If you are only installing a replacement formatter PCA, proceed to Remove the formatter PCA on page 134.
 - Install a replacement formatter PCA.
 - 2. Turn the product power on, and wait for the print-cartridge volume indicators to appear on the control-panel display.
 - NOTE: This allows important product information to be written to the replacement formatter PCA.
 - 3. Turn the product power off.
 - 4. Install a replacement DC controller. See Remove the DC controller PCA on page 131.
 - 5. Turn the product power on.

Remove the formatter PCA

The formatter PCA shown in this procedure is for the HP Color LaserJet CP1510 Series Printer.

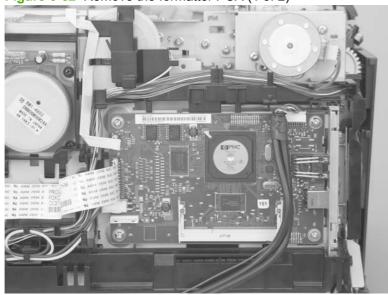
△ CAUTION: Do not bend or fold the flat flexible cables (FFCs) during removal or installation. Also, do not straighten pre-folds in the FFCs. You *must* make sure that all FFCs are fully seated in their connectors. Failure to fully seat an FFC into a connector can cause a short circuit in a PCA.

Some parts are sensitive to electrostatic discharge (ESD). Look for the ESD reminder when removing product parts. Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, ground yourself by touching the sheet-metal chassis *before* touching an ESD-sensitive part.

1. Remove the right cover. See Right cover on page 103.

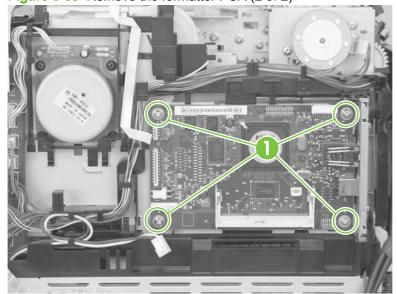
- 2. Disconnect all of the FFCs and wire-harness connectors from the formatter PCA.
 - FFCs
 - HP Color LaserJet CP1210 Series Printer: J1 and J2
 - HP Color LaserJet CP1510 Series Printer: J2 and J5
 - Wire-harness connectors
 - HP Color LaserJet CP1210 Series Printer: J4
 - HP Color LaserJet CP1510 Series Printer: J1 and P4

Figure 6-62 Remove the formatter PCA (1 of 2)



3. Remove four screws (callout 1), and then remove the formatter PCA.

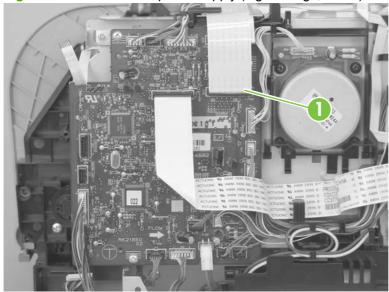
Figure 6-63 Remove the formatter PCA (2 of 2)



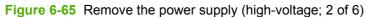
Power supply (high-voltage)

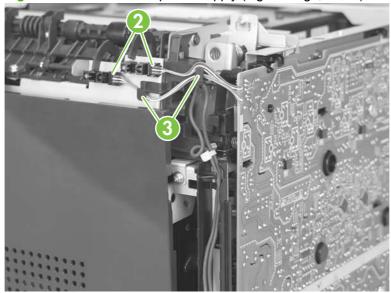
- △ CAUTION: Do not bend or fold the flat flexible cables (FFCs) during removal or installation. Also, do not straighten pre-folds in the FFCs. You *must* make sure that all FFCs are fully seated in their connectors. Failure to fully seat an FFC into a connector can cause a short circuit in a PCA.
 - 1. Remove the following components:
 - Right cover. See <u>Right cover on page 103</u>.
 - Left cover. See <u>Left cover on page 105</u>.
 - Control-panel module and memory-card reader. See <u>Control-panel module and photo-card</u> reader PCA on page 111.
 - NOTE: The HP Color LaserJet CP1210 Series Printer does not have a memory-card reader.
 - Rear-side cover. See Rear-side cover on page 115.
 - Rear-upper cover. See Rear-upper cover on page 116.
 - Top cover. See <u>Top cover on page 119</u>.
 - 2. Disconnect one FFC (callout 1; J107).

Figure 6-64 Remove the power supply (high-voltage; 1 of 6)



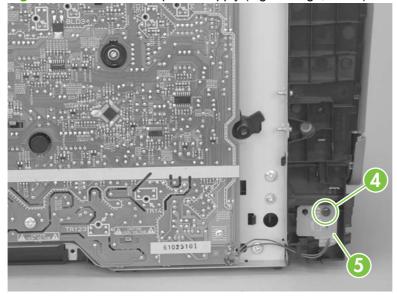
3. Disconnect two wire-harness connectors (callout 2) and release the wire harness from the retainer (callout 3).





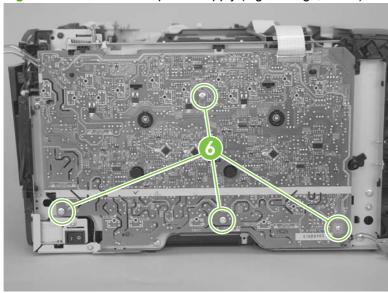
4. Remove one screw (callout 4), and then release the sub-PCA from the chassis (callout 5).





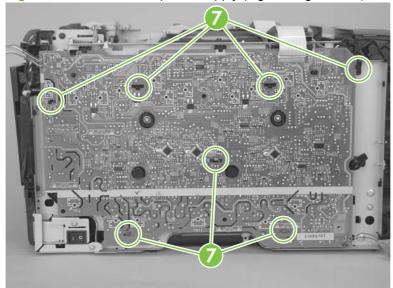
- 5. Remove four screws (callout 6).
- NOTE: The screw at the lower back of the power supply is a ground screw. Make sure that this screw is placed in the correct position when the power supply is reinstalled.

Figure 6-67 Remove the power supply (high-voltage; 4 of 6)



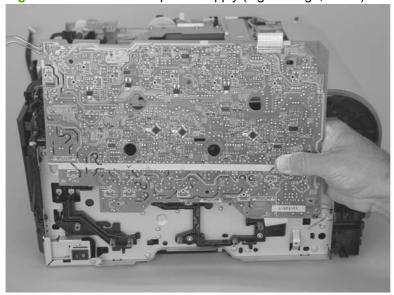
6. Release seven tabs (callout 7).

Figure 6-68 Remove the power supply (high-voltage; 5 of 6)



7. Remove the power supply.

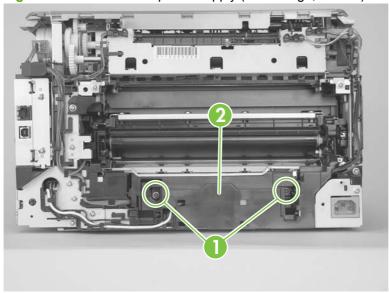
Figure 6-69 Remove the power supply (high-voltage; 6 of 6)



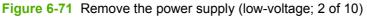
Power supply (low-voltage)

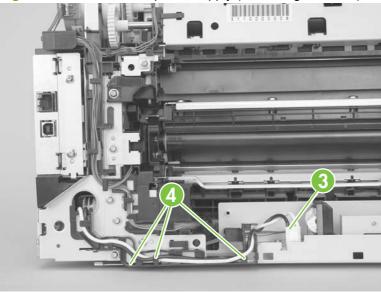
- △ CAUTION: Do not bend or fold the flat flexible cables (FFCs) during removal or installation. Also, do not straighten pre-folds in the FFCs. You *must* make sure that all FFCs are fully seated in their connectors. Failure to fully seat an FFC into a connector can cause a short circuit in a PCA.
 - 1. Remove the following components:
 - Right cover. See Right cover on page 103.
 - Left cover. See <u>Left cover on page 105</u>.
 - Rear-side cover. See Rear-side cover on page 115.
 - Rear door and rear-lower cover. See Rear door and rear-lower cover on page 117.
 - 2. Remove two screws (callout 1) and the power-supply cover (callout 2).



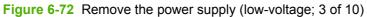


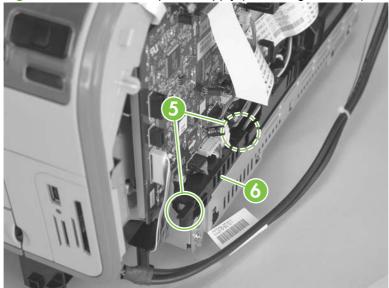
- 3. Disconnect one wire-harness connector (callout 3) and release the wire harness from the retainer (callout 4).
 - TIP: It might be easier to release one tab, and then remove the retainer from the product chassis.





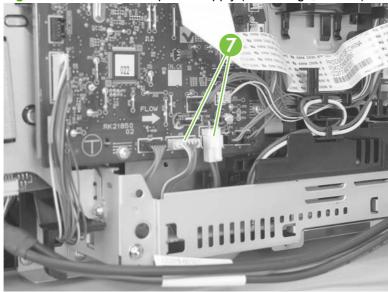
4. Release two tabs (callout 5), and then remove the protective cover (callout 6).





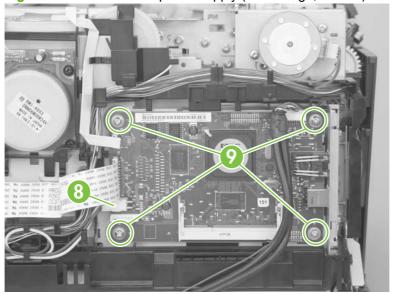
5. Disconnect two wire-harness connectors (callout 7; J102 and J103).

Figure 6-73 Remove the power supply (low-voltage; 4 of 10)



- **6. HP Color LaserJet CP1510 Series Printer** only: Disconnect one connector (callout 8; P4), and then remove four screws (callout 9) to release the formatter PCA from the chassis.
 - NOTE: You do not need to remove the PCA. Instead, release it from the chassis so it can be moved out of the way.
 - ☆ TIP: When you reinstall the formatter PCA, make sure that all of the connectors on the PCA are fully seated.

Figure 6-74 Remove the power supply (low-voltage; 5 of 10)



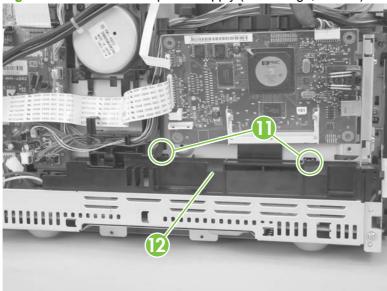
7. Release the wire harness (callout 10) from the retainer.

Figure 6-75 Remove the power supply (low-voltage; 6 of 10)



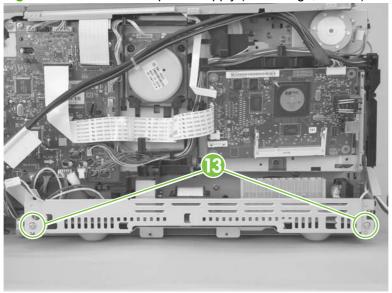
- 8. Release two tabs (callout 11), and then carefully remove the retainer (callout 12).
- NOTE: For the HP Color LaserJet CP1510 Series Printer, it might be easier to remove this retainer if you first move the cable that connects the memory-card reader and the formatter PCA out of the way, and hold the formatter PCA out and away from the chassis.

Figure 6-76 Remove the power supply (low-voltage; 7 of 10)



9. Remove two screws (callout 13).

Figure 6-77 Remove the power supply (low-voltage; 8 of 10)

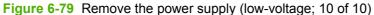


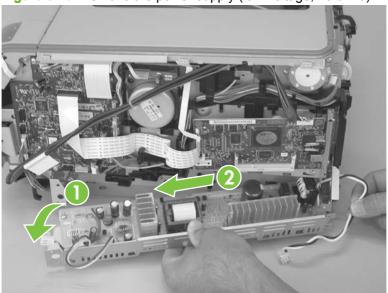
10. Pull the power supply away from the chassis (it will not come completely out).

Figure 6-78 Remove the power supply (low-voltage; 9 of 10)



- 11. Rotate the end of the power supply near the control-panel module out and away from the product until it clears the chassis, and then slide the power supply toward the control-panel module to remove it.
 - NOTE: As you remove the power supply, feed the wire harness at the rear of the product through the opening in the chassis.
 - 中 TIP: Make sure that the tab on the right end of the power-supply chassis fits into the slot on the product chassis when the power supply is reinstalled.

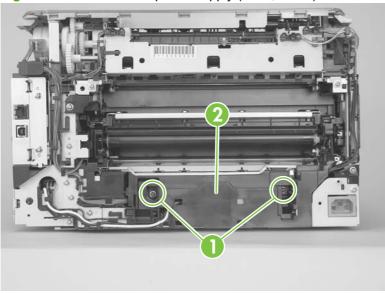




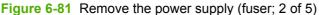
Power supply (fuser)

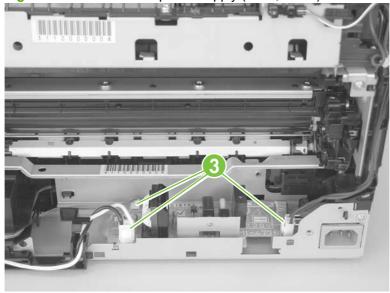
- 1. Remove the following components:
 - Right cover. See Right cover on page 103.
 - Left cover. See <u>Left cover on page 105</u>.
 - Rear-side cover. See Rear-side cover on page 115.
 - Rear door and rear-lower cover. See Rear door and rear-lower cover on page 117.
- 2. Remove two screws (callout 1) and the power-supply cover (callout 2).

Figure 6-80 Remove the power supply (fuser; 1 of 5)



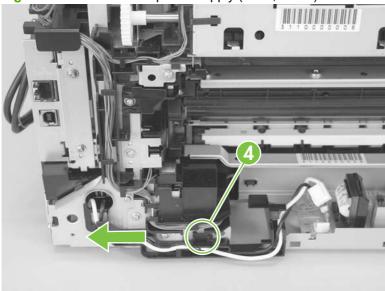
3. Disconnect three wire-harness connectors (callout 3).





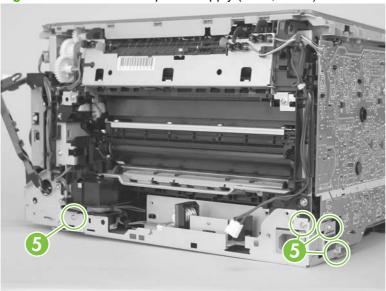
4. Release one tab (callout 4), slide the retainer toward the interface connectors to release it, and then separate the retainer from the chassis.

Figure 6-82 Remove the power supply (fuser; 3 of 5)



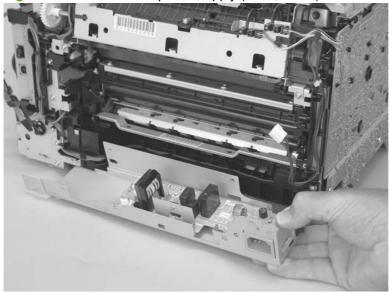
- **5.** Remove four screws (callout 5).
 - NOTE: The two screws near the power switch are ground screws. Make sure that these screws are placed in the correct positions when the power supply is reinstalled.

Figure 6-83 Remove the power supply (fuser; 4 of 5)



6. Remove the power supply.

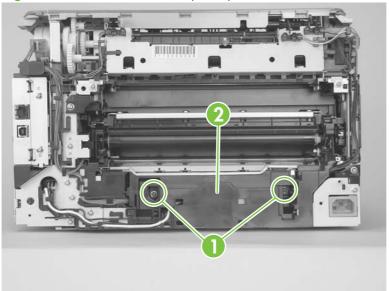
Figure 6-84 Remove the power supply (fuser; 5 of 5)



Fuser

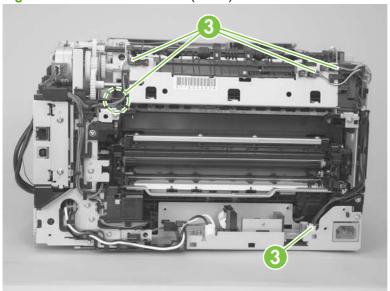
- Remove the following components:
 - Right cover. See Right cover on page 103.
 - Left cover. See <u>Left cover on page 105</u>.
 - Control-panel module and memory-card reader. See <u>Control-panel module and photo-card reader PCA on page 111</u>.
 - NOTE: The HP Color LaserJet CP1210 Series Printer does not have a memory-card reader.
 - Rear-side cover. See <u>Rear-side cover on page 115</u>.
 - Rear-upper cover. See <u>Rear-upper cover on page 116</u>.
 - Rear door and rear-lower cover. See Rear door and rear-lower cover on page 117.
 - Top cover. See <u>Top cover on page 119</u>.
- 2. Remove two screws (callout 1) and the power-supply cover (callout 2).

Figure 6-85 Remove the fuser (1 of 4)



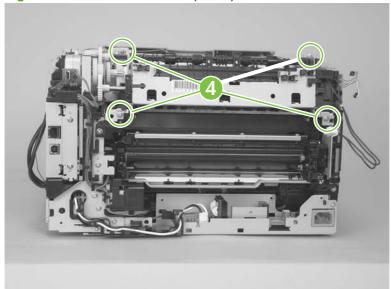
3. Disconnect five wire-harness connectors (callout 3). Remove the wire harness from the guides and one retainer.

Figure 6-86 Remove the fuser (2 of 4)



4. Remove four screws (callout 4).

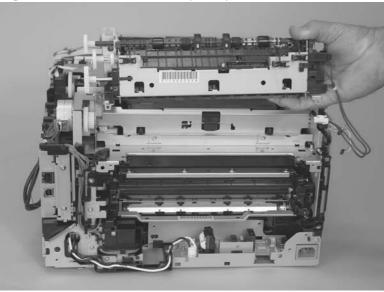
Figure 6-87 Remove the fuser (3 of 4)



5. Remove the fuser.

△ CAUTION: Handle the fuser carefully. The sensors that are mounted to the output side of the fuser can be easily dislodged. When the fuser is reinstalled, make sure that the sensors are present, and correctly fastened to the fuser assembly.

Figure 6-88 Remove the fuser (4 of 4)



7 Problem solve

To use the information in this chapter, you should have a basic understanding of the HP LaserJet printing process. Explanations of each mechanical assembly, the printer systems, and the basic theory of operation are contained in Theory of operation on page 71. Do not perform any of these troubleshooting processes unless you understand the function of each product component.

NOTE: To perform diagnostic and configuration procedures (for example resetting page counts) for the HP Color LaserJet CP1210, you must install the CP1210 Service Config Utility (available at your HP authorized repair center).

- Solve problems checklist
- Menu map (HP Color LaserJet CP1510 Series Printer only)
- <u>Troubleshooting process</u>
- Tools for troubleshooting
- Problem-solve diagrams
- Status-light patterns (HP Color LaserJet CP1210 Series Printer only)
- Status-alert messages (HP Color LaserJet CP1210 Series Printer only)
- Control-panel messages (HP Color LaserJet CP1510 Series Printer only)
- Pages and reports
- Paper-handling problems
- Image defects
- Performance problems
- Solve connectivity problems
- Service mode functions
- Solve memory card and PictBridge port (HP Color LaserJet CP1510ni only) problems

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Solve problems checklist

If you are experiencing problems with the product, use the following checklist to identify the cause of the problem:

- Is the product connected to power?
- Is the product on?
- Is the product in the Ready state?
- Are all necessary cables connected?
- Are any lights flashing or do any messages appear on the control panel?
- Are genuine HP supplies installed?
- Were recently replaced print cartridges installed correctly, and was the pull tab on the cartridge removed?

For additional information about installation and setup, see the product getting started guide.

If you cannot find solutions to problems in this guide, go to www.hp.com/support/ljcp1210series or www.hp.com/support/ljcp1510series.

Menu map (HP Color LaserJet CP1510 Series Printer only)

Print a menu map

- 1. Press OK to open the menus.
- 2. Use the arrow buttons to navigate to the **Reports** submenu, and then press OK.
- 3. Use the arrow buttons to navigate to the **Menu structure** submenu, and then press OK to print the menu structure.
- 4. Press X to exit the menus.

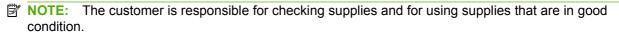
Troubleshooting process

When the product malfunctions or encounters an unexpected situation, the product control panel alerts you to the situation. This chapter contains information to help diagnose and solve problems.

- Use the pre-troubleshooting checklist to evaluate the source of the problem and to reduce the number of steps that are required to fix the problem.
- Use the troubleshooting flowchart to pinpoint the root cause of hardware malfunctions. The flowchart guides you to the section of this chapter that contains steps for correcting the malfunction.

Before beginning any troubleshooting procedure, check the following issues:

- Are supply items within their rated life?
- Does the configuration page reveal any configuration errors?



Pre-troubleshooting checklist

The following table includes basic questions to ask the customer to quickly help define the problem(s).

General topic	Questions
Environment	Is the product installed on a solid, level surface (+/- 1°)?
	• Is the power-supply voltage within ± 10 volts of the specified power source?
	Is the power-supply plug inserted in the product and the outlet?
	Is the operating environment within the specified parameters?
	 Is the product exposed to ammonia gas, such as that produced by diazo copiers or office cleaning materials?
	NOTE: Diazo copiers produce ammonia gas as part of the coping processes. Ammonia gas (from cleaning supplies or a diazo copier) can have an adverse affect on some product components (for example, the print-cartridge OPC).
	 Is the product exposed to direct sunlight?
Media	Does the customer use only supported media?
	 Is the media in good condition (no curls, folds, or distortion)?
	Is the media stored correctly and within environmental limits?
Input trays	Is the amount of media in the tray within specifications?
	 Is the media correctly placed in the tray?
	Are the paper guides aligned with the stack?
	Is the cassette correctly installed in the product?
Print cartridges	Is each print cartridge installed correctly?
Transfer unit and fuser	Are the transfer unit and fuser installed correctly?
Covers	Is the front cover closed?

General topic	Questions
Condensation	 Does condensation occur following a temperature change (particularly in winter following cold storage)? If so, wipe affected parts dry or leave the product on for 10 to 20 minutes.
	 Was a print cartridge opened soon after being moved from a cold to a warm room? If so, allow the print cartridge to sit at room temperature for 1 to 2 hours.
Miscellaneous	 Check for and remove any non-HP components (print cartridges, memory modules, and EIO cards) from the product.
	 Remove the product from the network and ensure that the failure is associated with the product before beginning troubleshooting.
	 For any print-quality issues, calibrate the product.

Power-on checks

When you turn on the product, if it does not make any sound or if the control-panel display is blank, check the following items:

- Verify that the product is plugged directly into an active electrical outlet that has the correct voltage.
 Do not plug the product into a surge protector or power strip.
- Verify that the on/off switch is in the on position.
- Verify that the formatter is seated and operating correctly.
- Remove any HP Jetdirect or other devices, and then try to turn the product on again.
- Make sure that the control-panel display is connected.
- Check the two fuses on the power supply.
- If necessary, replace the power supply.
- If necessary, replace the DC controller.

Tools for troubleshooting

The section describes the tools that can help you solve problems with your device.

Print-quality troubleshooting tools

Calibrate the product

Calibration is a product function that optimizes print quality. If you experience any print-quality problems, calibrate the product.

- Open HP Color LaserJet CP1210 Series Toolbox or HP ToolboxFX.
- 2. Click the **Device Settings** folder, and then click the **Print Quality** page.
- 3. In the area for Color Calibration, select the Calibrate Now check box.
- Click **Apply** to calibrate the product immediately.

Problem-solve diagrams

- Repetitive image defects
- Interface ports
- DC controller PCA
- Major components
- Solenoid, sensors, and motors
- Rollers
- PCAs
- Timing diagram
- Circuit diagram

Repetitive image defects

If the product output has a consistent, repetitive defect, use the table in this section to determine which part needs to be replaced based on the measured distance between the repetitions of the defect.

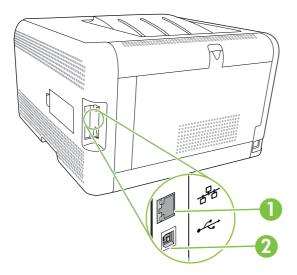
Repetitive defects for the ITB normally appear on every other page, because the ITB is longer than a page. However, the period of the repetitive defect can vary depending on the type of media, and a repetitive defect can occur more than once on the same page.

NOTE: The following table replaces the graphical repetitive defect ruler. You can make your own ruler by using these measurements.

Table 7-1 Repetitive image defects

Distance between identical defects	Component	Notes
22.3 mm (0.87 in)	Developer roller (one rotation)	Appears in a single color plane
26.7 mm (1.05 in)	Charger roller	Appears in a single color plane.
28.5 mm (1.12 in)	Developer RS roller (one rotation)	Inside developer, it and removes and supplies toner to the developer sleeve.
44.0 mm (1.73 in)	Registration roller	
56.5 mm (2.22 in)	Fuser film (one rotation)	Appears in all color planes
56.8 mm (2.23 in)	Fuser pressure roller (one rotation)	Appears in all color planes
57.0 mm (2.24 in)	Transfer roller	Appears in all color planes
69.0 mm (2.71 in)	Cartridge-to-cartridge spacing	Distance between each color OPC.
75.8 mm (2.98 in)	OPC drum (one rotation)	Appears in a single color plane and might be either a dark or white spot.
633.6 mm (24.94 in)	ITB	Because the ITB is longer than a page, you might have to look at multiple pages to determine if a repetitive defect is present.

Interface ports



- Network port (HP Color LaserJet CP1510 Series Printer only)
- 2 Hi-Speed USB 2.0 port

DC controller **PCA**

Figure 7-1 DC controller connectors

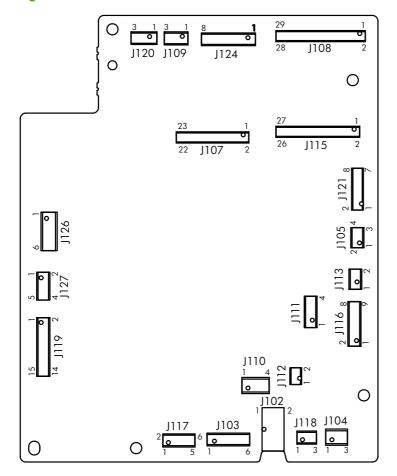


Table 7-2 DC controller connectors

Item	Description
J102	Low-voltage power supply (+24 V)
J103	Low-voltage power supply (+3.3 V)
J104	Thermistor (TH802)
J105	Fuser power supply
J107	Formatter
J108	Laser driver PCA
J109	Scanner motor (M704)
J110	Fuser motor (M703)
J111	Pickup assembly motor (M702)
J112	Developing disengagement solenoid (SL706)
J113	Cassette pickup solenoid (SL705)
J115	High-voltage power supply

Table 7-2 DC controller connectors (continued)

Item	Description		
J116	Pickup assembly		
	Loop sensor (SR603)		
	Top-of-page sensor (SR602)		
	Cassette media present sensor (SR601)		
J117	Priority feed slot (HP Color LaserJet CP1510 Series Printer only)		
	Top-of-page sensor (SR602)		
	Media present sensor (SR604)		
J118	Media width sensor (SR607)		
J119	ITB assembly		
J120	Developing home-position sensor (SR606)		
J121	Main motor (M701)		
J124	Memory tags (e-labels)		
J126	ЮТ		
J127	Flash		

Major components

Figure 7-2 Major components

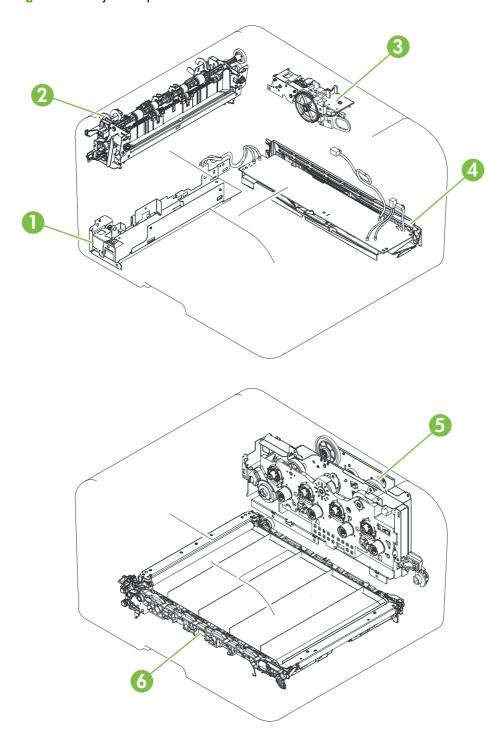


Table 7-3 Major components

Item	Description
1	Fuser power supply

Table 7-3 Major components (continued)

Item	Description	
2	Fuser assembly	
3	Sub-drive assembly	
4	Low-voltage power suppy	
5	Main drive assembly	
6	ITB assembly	

Solenoid, sensors, and motors

Figure 7-3 Solenoid, sensors, and motors

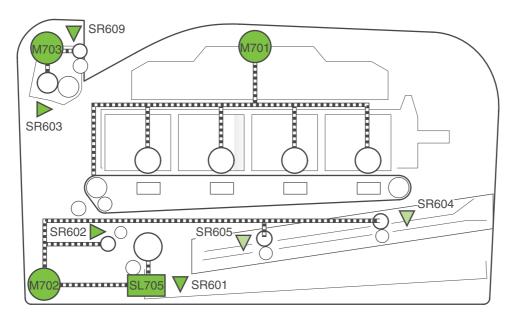


Table 7-4 Solenoid, sensors, and motors

Item	Description
M701	Main motor
M702	Pickup motor
M703	Fuser motor
SL705	Pickup solenoid; cassette
SR601	Cassette media present sensor; pickup assembly
SR602	Top-of-page sensor; pickup assembly
SR603	Loop sensor; pickup assembly
SR604	Media present sensor; priority feed slot (HP Color LaserJet CP1510 Series Printer only)
SR605	Top-of-page sensor; priority feed slot (HP Color LaserJet CP1510 Series Printer only)
SR609	Fuser delivery sensor

Rollers

Figure 7-4 Rollers

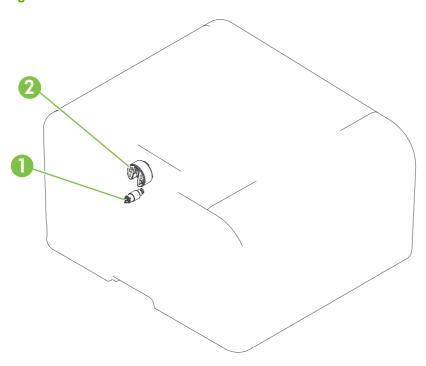


Table 7-5 Rollers

Item	Description
1	Separation roller
2	Pickup roller

PCAs

Figure 7-5 PCAs

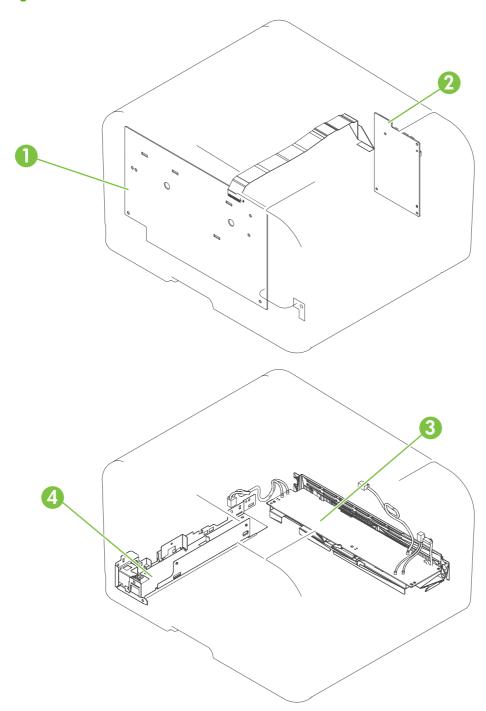


Table 7-6 PCAs

Item	Description	
1	High-voltage power supply PCA	
2	DC controller PCA	

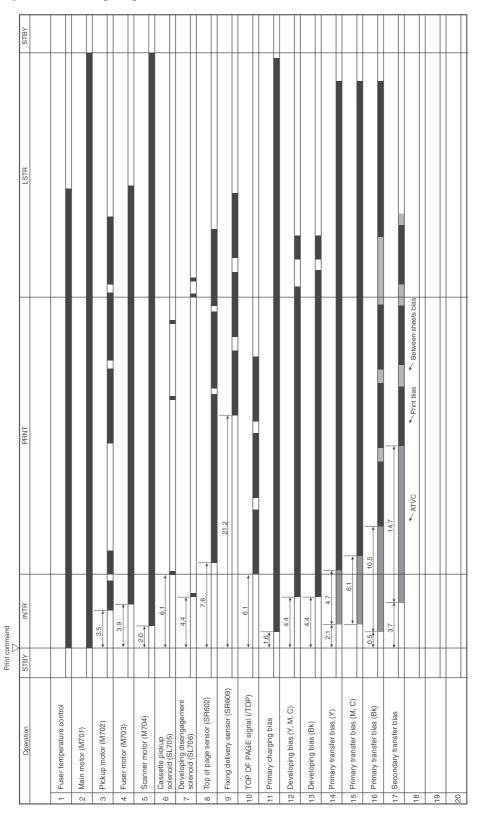
Table 7-6 PCAs (continued)

Item	Description	
3	Low-voltage power supply PCA	
4	Fuser power supply PCA	

Timing diagram

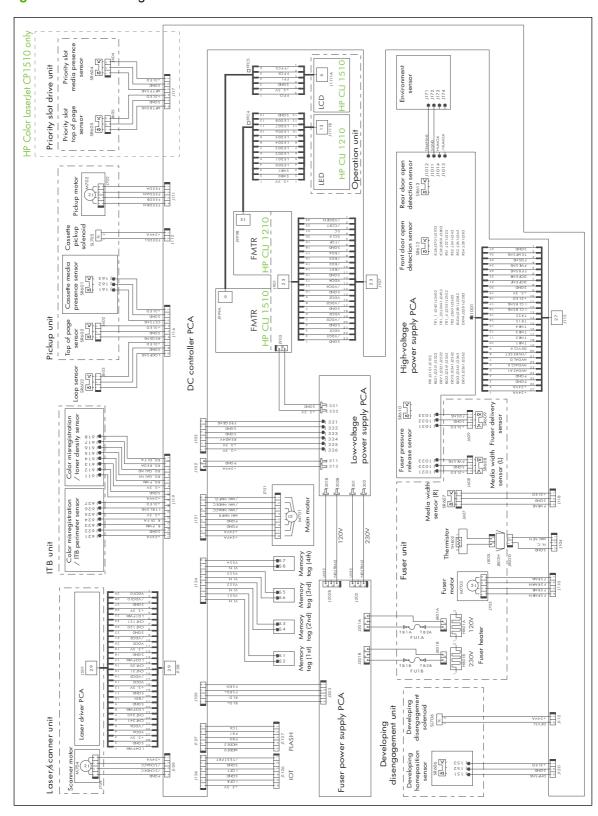
Approximate timing in seconds.

Figure 7-6 Timing diagram



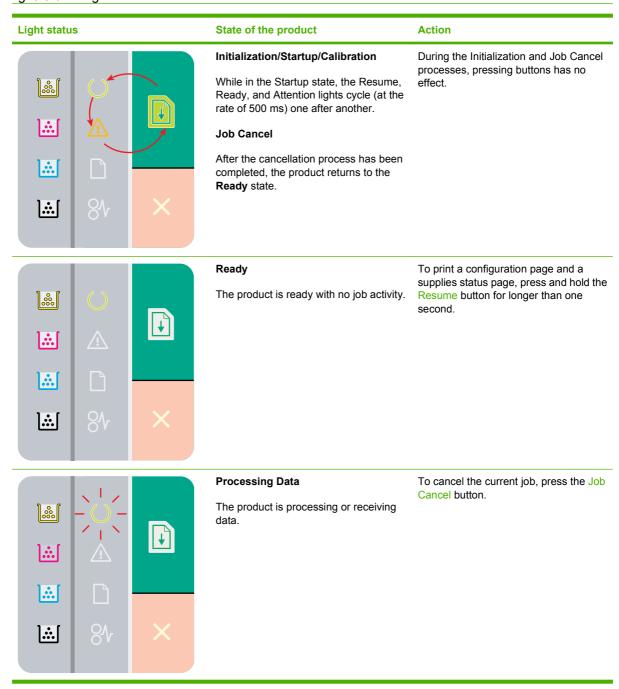
Circuit diagram

Figure 7-7 Circuit diagram

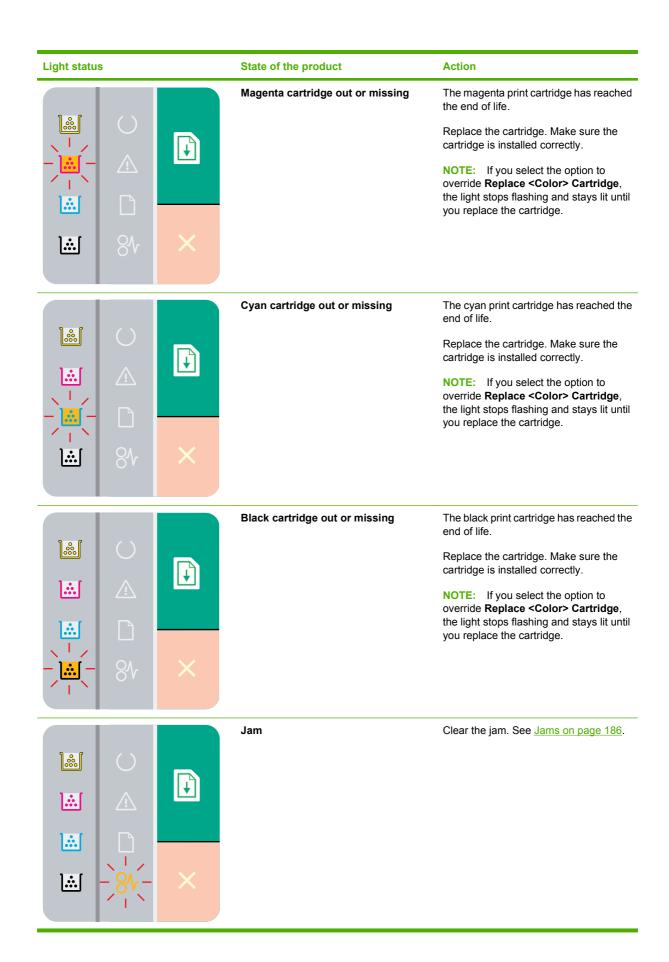


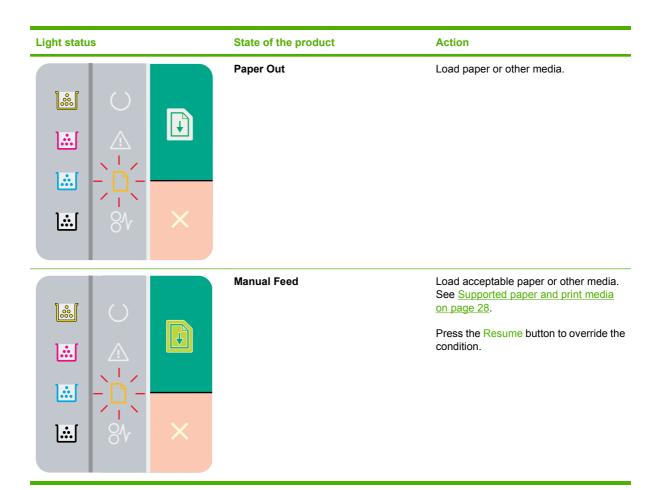
Status-light patterns (HP Color LaserJet CP1210 Series Printer only)

NOTE: In the illustrations in the following table, the small "burst" lines around a light indicate that the light is blinking.



Light status State of the product **Action Continuable Error** To recover from the error and print whatever data is possible, press the General continuable error Resume button. **...** Temporary product error If the recovery is successful, the product goes to the Processing Data state and **.**... completes the job. If the recovery is unsuccessful, the ... product returns to the Continuable Error state.].:.[Attention Close the door. A door is open. **₽ .**:. **.**:..].:.[**Fatal Error** Turn off the product, wait 10 seconds, and turn on the product. If you are unable to resolve the problem, see Customer support on page 243.].:.[.:.].:.[Yellow cartridge out or missing The yellow print cartridge has reached the end of life. Replace the cartridge. Make sure the **F** cartridge is installed correctly. NOTE: If you select the option to override Replace < Color > Cartridge, the light stops flashing and stays lit until ... you replace the cartridge.].:.[





Status-alert messages (HP Color LaserJet CP1210 Series Printer only)

Status-alert messages appear on the computer screen when the product has certain problems. Use the information in the following table to solve these problems.

Alert message	Description	Recommended action	
Black Scanner Error	An internal error has occurred.	Turn off the power by using the power switch, wait at least 30 seconds, and then turn on the power and wait for the product to initialize.	
		If you are using a surge protector, remove it. Plug the product directly into the wall socket. Use the power switch to turn on the product.	
Calibrating	The product is performing the internal calibration process to ensure the best possible print quality.	Wait for the process to complete.	
Cartridge Out Override In Use	A print cartridge has reached the end of its useful life, but you have selected the option to override the message and continue	Press the Resume button to clear the message.	
	printing.	Replace the print cartridge as soon as possible.	
	For all future print jobs, print quality could be diminished until you replace the cartridge.	possible.	
Cool Down Mode	After prolonged, continuous operation, or after printing on narrow paper, the product must pause to cool.	Printing will continue when the product has cooled.	
Cyan Scanner Error	An internal error has occurred.	Turn off the power by using the power switch, wait at least 30 seconds, and then turn on the power and wait for the product to initialize.	
		If you are using a surge protector, remove it. Plug the product directly into the wall socket. Use the power switch to turn on the product.	
DC Controller Error	The product has experienced an internal error.	Turn off the power by using the power switch, wait at least 30 seconds, and then turn on the power and wait for the product to initialize.	
		If you are using a surge protector, remove it. Plug the product directly into the wall socket. Use the power switch to turn on the product.	
Engine communication error	The product experienced an internal communication error.	Turn off the power by using the power switch, wait at least 30 seconds, and then turn on the power and wait for the product to initialize.	
		If you are using a surge protector, remove it. Plug the product directly into the wall socket. Use the power switch to turn on the product.	
Front Access Door Open	The door is open.	Close the door.	
Fuser Error	The product has experienced an error with the fuser.	Turn off the power by using the power switch, wait at least 30 seconds, and then turn on the power and wait for the product to initialize.	
		If the error continues, turn off the product, wait at least 25 minutes, and then turn on the product.	

Alert message	Description	Recommended action	
		If you are using a surge protector, remove it. Plug the product directly into the wall socket. Use the power switch to turn on the product.	
Incorrect <color> Cartridge</color>	A print cartridge is installed in the incorrect slot.	Be sure that each print cartridge is in the correct slot. From front to back, the print cartridges are installed in this order: black, cyan, magenta, and yellow.	
Install <color> Cartridge</color>	The cartridge is either not installed or not correctly installed in the product.	Install the print cartridge.	
Jam in <location> (<location> indicates the area where the jam has occurred)</location></location>	The product has detected a jam.	Clear the jam from the area indicated in the message. The job should continue to print. If it does not, try reprinting the job. See <u>Jams</u> on page 186.	
Load Paper <type></type>	The tray is empty.	Load print media into the tray.	
Magenta Scanner Error	An internal error has occurred.	Turn off the power by using the power switch, wait at least 30 seconds, and then turn on the power and wait for the product to initialize.	
		If you are using a surge protector, remove it. Plug the product directly into the wall socket. Use the power switch to turn on the product.	
Manual feed	The product is set for manual feed mode.	Load the correct media into the tray, and then press the Resume button to clear the message.	
Non-HP <color> Cartridge</color>	A new, non-HP supply has been installed. This message appears until an HP supply is installed or you press the Resume button.	If you believe you purchased an HP supply, go to www.hp.com/go/anticounterfeit .	
		Service or repairs that are required as a result of using non-HP supplies are not covered under HP warranty.	
		To continue printing, press the Resume button.	
Not Connected	The product software cannot communicate with the product.	Make sure the product is turned on.	
		Make sure the USB cable is connected securely to the product and the computer.	
Order <color> Cartridge</color>	The identified print cartridge is nearing the end of its useful life.	Order the identified print cartridge. Printing will continue until Replace <color></color> Cartridge appears.	
Page Too Complex	The product cannot process the page.	Press the Resume button to continue printing the job, but output might be affected.	
Printer Mispick	The print engine has failed to pick up a piece of media.	Reload the media in the input tray and press the Resume button to continue the job.	
Printing	The product is printing a document.	Wait for printing to finish.	
Rear Access Door Open	The door is open.	Close the door.	
Replace <color> Cartridge</color>	The print cartridge has reached the end of its life.	Replace the print cartridge.	

Alert message	Description	Recommended action	
Replace <color>Cartridge Override In Use</color>	A print cartridge has reached the threshold for end of life, but you have selected the option to override the message and continue printing.	Replace the print cartridge.	
	Print-quality problems can occur.		
Replace Supplies	More than one print cartridge has reached the end of its life.	Print a supplies status page to determine which cartridges have reached the end of their life. See Print information pages on page 36.	
		Replace the cartridges.	
Replace Supplies Override In Use	More than one print cartridge has reached the threshold for end of life, but you have selected the option to override the message and continue printing.	Replace the print cartridges.	
	Print-quality problems can occur.		
Resolution Reduction	A page requires more memory than the product has available. The product has	If the page requires too much memory, try simplifying it in the original software program.	
	reduced the image resolution so it can print the page.	If you do not want the product to automatically reduce the resolution, you can turn off the setting in the System Settings area of the HP Color LaserJet CP1210 Series Toolbox or HP Toolbox FX.	
Supply Memory Error on <color></color>	The e-label for one of the print cartridges cannot be read or is missing.	Reinstall the print cartridge.	
	carillot be read of is fillssilig.	Turn the product off, and then on.	
		If the problem is not solved, replace the cartridge.	
Toner Dam Not Removed	One of the print cartridges still contains the sealing tape from shipping.	Open the print-cartridge drawer and make sure that the sealing tape has been completely removed from each print cartridge.	
Tray 1 Jam	The product has detected a jam in the tray.	Clear the jam. See <u>Jams on page 186</u> .	
Unauthorized <color> Cartridge Installed</color>	A new, non-HP supply has been installed. This message appears until an HP supply is	If you believe you purchased an HP supply, go to www.hp.com/go/anticounterfeit .	
	installed or you press the Resume button.	Service or repairs that are required as a result of using non-HP supplies are not covered under HP warranty.	
		To continue printing, press the Resume button.	
Yellow Scanner Error	An internal error has occurred.	Turn off the power by using the power switch, wait at least 30 seconds, and then turn on the power and wait for the product to initialize.	
		If you are using a surge protector, remove it. Plug the product directly into the wall socket. Use the power switch to turn on the product.	

Control-panel messages (HP Color LaserJet CP1510 Series Printer only)

Control-panel message	Status alert	Description	Recommended action
10.XXXX Supply error	✓	The e-label for one of the print cartridges cannot be read or is missing.	Reinstall the print cartridge. Turn the product off, and then on.
		10.0000 = black e-label error	If the problem is not solved, replace the cartridge.
		10.0001 = cyan e-label error	
		 10.0002 = magenta e-label 	
		error	
		• 10.0003 = yellow e-label error	
		 10.1000 = black e-label is missing 	
		• 10.1001 = cyan e-label is missing	
		 10.1002 = magenta e-label is missing 	
		• 10.1003 = yellow e-label is missing	
49 Error Turn off then on		The product experienced an internal error.	Turn the product off, wait at least 30 seconds, and then turn the product on and wait for it to initialize.
			If you are using a surge protector, remove it. Plug the product directly into the wall socket. Turn the product power on.
51.XX Error	✓	The product has experienced an	Turn the product power off, wait
Turn off then on		internal hardware error.	at least 30 seconds, and then turn the product power on and wait for it to initialize.
			If you are using a surge protector, remove it. Plug the product directly into the wall socket. Turn the product on.
54.XX Error	✓	The product has experienced an	Turn the product power off, wait
Turn off then on		error with one of the internal sensors.	at least 30 seconds, and then turn the product power on and wait for it to initialize.
			If you are using a surge protector, remove it. Plug the product directly into the wall socket. Turn the product power on.
55.X Error	✓	The product has experienced an internal error.	Turn the product power off, wait
Turn off then on		internal enor.	at least 30 seconds, and then turn

Control-panel message	Status alert	Description	Recommended action
			the product power on and wait for it to initialize.
			If you are using a surge protector, remove it. Plug the product directly into the wall socket. Turn the product power on.
59.X Error Turn off then on	✓	The product has experienced a problem with one of the motors.	Turn the product power off, wait at least 30 seconds, and then turn the product power on and wait for it to initialize.
			If you are using a surge protector remove it. Plug the product directly into the wall socket. Turn the product power on.
79 Error Turn off then on		The product has experienced an internal firmware error.	Turn the product power off, wait at least 30 seconds, and then turn the product power on and wait for it to initialize.
			If you are using a surge protector, remove it. Plug the product directly into the wall socket. Turn the product power on.
79 Service error		An incompatible DIMM is	Turn the product power off.
Turn off then on		installed.	Install a DIMM that the product supports.
			3. Turn the product on.
<color> in wrong position</color>	✓	A print cartridge is installed in the incorrect slot.	Be sure that each print cartridge is in the correct slot. From top to bottom, the print cartridges are installed in this order: yellow, magenta, cyan, black.
Device error Press [OK]		An internal error occurred.	Press OK to resume the job.
Front Door open	✓	The product front door is open.	Close the door.
Fuser Error Turn off then on	✓	The product has experienced an error with the fuser.	Turn the product power off, wait at least 30 seconds, and then turn the product power on and wait fo it to initialize.
			Turn off the product, wait at leas 25 minutes, and then turn on the product.
			If you are using a surge protector remove it. Plug the product directly into the wall socket. Turn the product power on.
Genuine HP supply installed		A genuine HP supply was installed. This message will appear briefly after the supply is	No action necessary.

Control-panel message	Status alert	Description	Recommended action
		installed, and then be replaced by the message Ready .	
Incorrect supplies	✓	More than one print cartridge is installed in the incorrect slot.	Be sure that each print cartridge is in the correct slot. From top to bottom, the print cartridges are installed in this order: yellow, magenta, cyan, black.
Install <color> Cartridge</color>	✓	The cartridge is either not installed or not correctly installed in the product.	Install the print cartridge. See Replace print cartridges on page 63.
Invalid driver Press [OK]	✓	You are using an incorrect printer driver.	Select the correct printer driver.
Jam in <location></location>	✓	The product has detected a jam.	Clear the jam from the location indicated. The job should continue to print. If it does not, try reprinting the job.
Load Paper <type></type>	✓	Tray 2 is empty.	Load print media into Tray 2.
Load tray # <type> <size></size></type>	✓	A tray is configured for the media type and size that the print job is requesting, but that tray is empty.	Load the correct media into the tray, or press OK to use media in a different tray.
Load tray 1 plain <size> Cleaning mode [OK] to start</size>	✓	The product is ready to process the cleaning operation.	Load Tray 1 with plain paper in the size indicated, and then press OK.
Load tray 1 <type> <size></size></type>	✓	No trays are configured for the media type and size that the print job is requesting.	Load the correct media into tray 1, or press OK to use media in a different tray.
Manual duplex Load tray # Press [OK]		The first side of a manual duplex job has printed, and the page needs to be loaded to process the second side.	Load the page in the indicated tray with the side to be printed face up, and the top of the page away from you, and then press OK.
Manual feed <type> <size> Press [OK] for available media</size></type>	✓	The product is set for manual feed mode.	Press OK to clear the message or load the correct media into Tray 1.
Memory is low Press [OK]	✓	The product memory is almost full.	Press OK to finish the job, or press X to cancel the job. Break the job into smaller jobs
Misprint Press [OK]	✓	Print media has been delayed as it moves through the product.	that contain fewer pages. Press OK to clear the message.
Non HP supply installed	✓	A non-HP supply is installed.	If you believe you purchased an HP supply, go to www.hp.com/go/anticounterfeit .
			Service or repairs that are required as a result of using non-HP supplies are not covered under HP warranty.

Control-panel message	Status alert	Description	Recommended action
Order <color> Cartridge</color>	✓	The identified print cartridge is nearing the end of its useful life.	Order the identified print cartridge. Printing will continue until Replace <color> Cartridge appears.</color>
Order supplies	✓	More than one supply item is low.	Check the supply-level gauges on the control panel, or print a supplies status page to determine which cartridges are low. See Print information pages on page 36.
			Order the identified print cartridges. Printing will continue until Replace <color></color> Cartridge appears.
Print failure	✓	The product cannot process the page.	Press OK to continue printing the job, but output might be affected.
Press [OK] If error repeats turn off then on			If the error persists, turn the power off, and then on. Resend the print job.
Rear Door open	✓	The product rear door is open.	Close the door.
Remove shipping locks from <color> cartridge</color>	✓	A print cartridge shipping lock is installed.	Be sure that the print cartridge shipping lock has been removed.
Remove shipping locks from all cartridges	✓	A print cartridge shipping lock is installed on one or more print cartridges.	Be sure that each print cartridge shipping lock has been removed.
Replace <color> Cartridge</color>	✓	The print cartridge has reached the end of its life.	Replace the cartridge. See Replace print cartridges on page 63.
Replace supply Override in use	✓	The Print quality menu item Replace Supplies is set to Override out .	You can continue printing until you notice a decrease in print quality.
Tray 1 Jam Clear jam and then Press [OK]	✓	The product has detected a jam.	Clear the jam from the location indicated, and then press OK.
Unexpected size in tray # Load [size] Press [OK]	✓	The product has detected print media in the tray that does not match the configuration for the tray.	Load the correct media into the tray, or configure the tray for the size that you have loaded. See Load paper and print media on page 33.
Used <color> Cartridge in use</color>	✓	A refilled print cartridge was detected and accepted.	No action necessary.
Used supplies in use	✓	Refilled print cartridges are installed.	No action necessary.
Used supply installed	✓	A refilled print cartridge is installed.	Press OK to continue.
To accept Press [OK]			

Pages and reports

This section describes the pages and reports that help you diagnose and solve problems with the device.

Demo page

To verify that your product is functioning properly, print a Demo page.

Configuration page

The configuration page lists the current settings and properties of the product. You can use this page to check for color plane registration and cartridge half tones. Print a configuration page from the product or from one of the Toolbox software programs.

For more information about the configuration page, see Print information pages on page 36.

Supplies status page

The supplies status page lists the remaining life of the HP print cartridges. It also lists the estimated pages remaining, number of pages printed, and other supplies information. Print a supplies status page from the product or from one of the Toolbox software programs.

For more information about the supplies status page, see Print information pages on page 36.

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Event log

The event log is located on the configuration page (as Status Log) and lists the last five events.

Table 7-7 Event-log messages

Error log code	Description
10.0000	Black e-label error
10.0001	Cyan e-label error
10.0002	Magenta e-label error
10.0003	Yellow e-label error
10.1000	Black e-label missing
10.1001	Cyan e-label missing
10.1002	Magenta e-label missing
10.1003	Yellow e-label missing
10.3000	Non-HP black
10.3001	Non-HP cyan
10.3002	Non-HP magenta
10.3003	Non-HP yellow
13.0000	Paper jam, Tray 1 area
13.0001	Paper jam, Tray 2 area
13.0003	Paper jam, registration drum area
13.0004	Paper jam, drum fuser area
13.0005	Paper jam, fuser output area
20.0000	Memory out
21.0000	Video under run
50.1000	Low temperature fuser error
50.2000	Slow fuser error
50.3000	High temperature fuser error
50.4000	Fuser heater wire failure
50.5000	Fuser low temperature subtherm failure
50.6000	Fuser high temperature subtherm failure
52.0000	Scanner error, black laser failure
52.0100	Scanner error, cyan laser failure
52.0200	Scanner error, magenta laser failure
52.0300	Scanner error, yellow laser failure
54.0600	Density sensor error
54.1000	Color plane registration sensor error

Table 7-7 Event-log messages (continued)

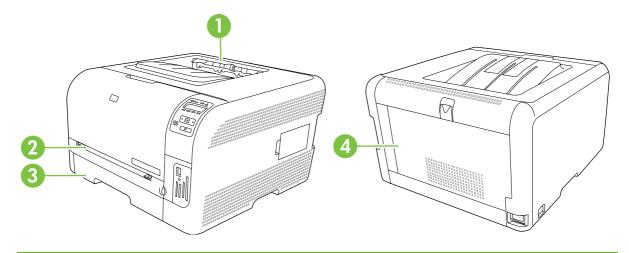
Error log code	Description	
54.2800	Sensor density contaminated	
54.2801	Sensor color plane registration contaminated	
55.0000	Engine comm fatal error	
55.0001	Engine comm critical error	
55.1000	DC controller memory error	
59.0000	ITB rotation failure	
59.0001	ITB ramp up failure	
101.0000	Color plane registration error	
102.0000	DMAX calibration error	
103.0000	DHALF calibration error	

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Paper-handling problems

Jams

Use this illustration to find the locations of jams. For instructions to clear jams, see <u>Clear jams</u> on page 188.



- 1 Output bin
- 2 Jam-access door (HP Color LaserJet CP1210 or priority input slot (HP Color LaserJet CP1510 Series Printer)
- 3 Tray 1 (HP Color LaserJet CP1210 Series Printer) or Tray 2 (HP Color LaserJet CP1510 Series Printer)
- 4 Fuser (behind the rear door)

Recover jams

When the Jam Recovery feature is turned on, the product reprints any pages that are damaged during a jam.

Use the product software to turn on the Jam Recovery feature.

- 1. Open HP Color LaserJet CP1210 Series Toolbox or HP ToolboxFX.
- 2. Click the **Device Settings** folder, and then click **System Setup**.
- 3. Next to Jam Recovery, select On from the drop-down list.

Common causes of jams

Common causes of jams¹

Cause	Solution
The paper length and width guides are not adjusted correctly.	Adjust the guides so they are against the paper stack.
The media does not meet specifications.	Use only media that meets HP specifications. See <u>Supported</u> paper and print media on page 28.
You are using media that has already passed through a printer or copier.	Do not use media that has been previously printed on or copied.
An input tray is loaded incorrectly.	Remove any excess media from the input tray. Make sure that the stack is below the maximum stack height mark in the tray. See Supported paper types and tray capacity on page 29.
The media is skewed.	The input-tray guides are not adjusted correctly. Adjust them so they hold the stack firmly in place without bending it.
The media is binding or sticking together.	Remove the media, flex it, rotate it 180 degrees, or flip it over. Reload the media into the input tray.
	NOTE: Do not fan paper. Fanning can create static electricity, which can cause paper to stick together.
The media is removed before it settles into the output bin.	Wait until the page completely settles in the output bin before removing it.
The media is in poor condition.	Replace the media.
The internal rollers from the tray are not picking up the media.	Remove the top sheet of media. If the media is heavier than 163 g/m² (43 lb), it might not be picked from the tray.
The media has rough or jagged edges.	Replace the media.
The media is perforated or embossed.	Perforated or embossed media does not separate easily. Load sheets one at a time.
Paper was not stored correctly.	Replace the paper in the trays. Paper should be stored in the original packaging in a controlled environment.

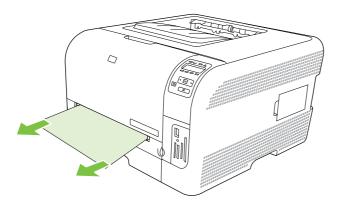
¹ If the product continues to jam, contact HP Customer Support or your authorized HP service provider.

Clear jams

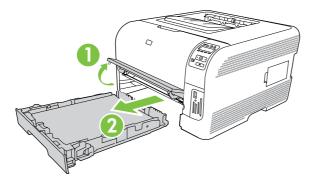
Jam in Tray 1

- NOTE: If the sheet tears, make sure that all of the fragments are removed before you resume printing.

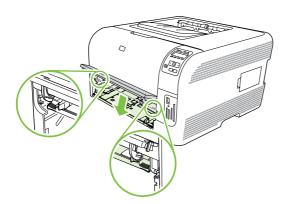
 For the HP Color LaserJet CP1210 Series Printer, this is the area behind the jam-access door.
 - 1. If you can see the jammed sheet, remove the jammed sheet by pulling it straight out.



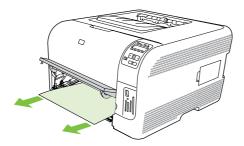
2. If you cannot see the jammed sheet, open the Tray 1 door (jam-access door) and pull out Tray 2.



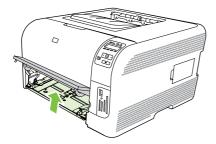
3. Push down on two tabs to release the Tray 1 panel (HP Color LaserJet CP1510 Series Printer).



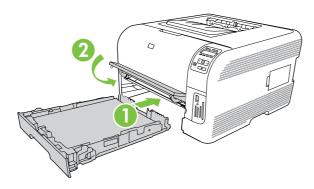
- Remove the jammed sheet by pulling it straight out.
- △ CAUTION: Do not pull up on the jammed sheet. Be sure to pull it straight out.



Push up on two tabs to replace the Tray 1 panel. **5**.

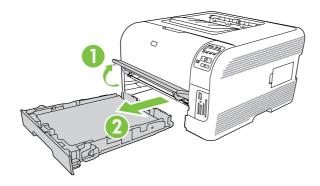


Replace Tray 2.

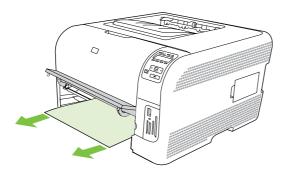


Jam in Tray 2

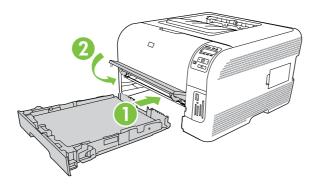
Pull out Tray 2 and place it on a flat surface.



2. Remove the jammed sheet by pulling it straight out.



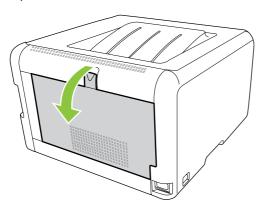
3. Replace Tray 2.



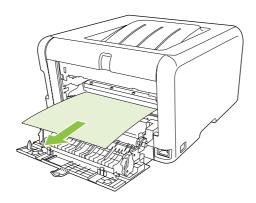
4. Press **OK** to continue printing.

Jam in fuser area

1. Open the rear door.

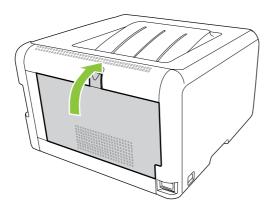


Remove any jammed sheets.



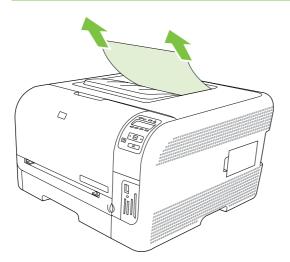
MOTE: If the sheet tears, make sure that all fragments are removed before you resume printing.

Close the rear door.



Jam in output bin

- 1. Look for jammed paper in the output bin area.
- 2. Remove any visible media.
- NOTE: If the sheet tears, make sure that all fragments are removed before resuming printing.



3. Open and then close the rear door to clear the message.

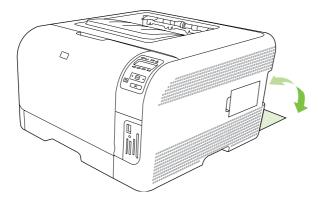


Image defects

General print quality issues

The following examples depict Letter-size paper that has passed through the product short-edge first. These examples illustrate problems that would affect all of the pages that you print, whether you print in color or in black only. The topics that follow list the typical cause and solution for each of these examples.

Problem	Cause	Solution
Print is light or faded.	The media might not meet HP specifications.	Use media that meets HP specifications.
AaBbCc AaBbCc AaBbCc	One or more print cartridges might be defective.	Print the Supplies status page to check the remaining life. See Print information pages on page 36.
AaBbCc AaBbCc		Replace any low print cartridges. See Replace print cartridges on page 63.
Aabbcc	The product is set to override the Replace <color> Cartridge message and to continue printing.</color>	Replace any low print cartridges. See Replace print cartridges on page 63.
Toner specks appear.	The media might not meet HP specifications.	Use media that meets HP specifications.
AaBbCc AaBbCc AaBbCc AaBbCc AaBbCc	The paper path might need cleaning.	Clean the paper path. See <u>Clean the paper path on page 69</u> .
Dropouts appear.	A single sheet of print media might be defective.	Try reprinting the job.
AaBbCc AaBbCc	The moisture content of the paper is uneven or the paper has moist spots on its surface.	Try different paper, such as high-quality paper that is intended for color laser printers.
AaBbCc AaBbCc AaBbCc	The paper lot is flawed. The manufacturing processes can cause some areas to reject toner.	Try different paper, such as high-quality paper that is intended for color laser printers.
Vertical streaks or bands appear on the page. Aa BbCcc Aa BbCcc Aa BbCcc Aa BbCcc Aa BbCcc	One or more print cartridges might be defective.	Print the Supplies status page to check the remaining life. See Print information pages on page 36.
		Replace any low print cartridges. See Replace print cartridges on page 63.
	The product is set to override the Replace <color> Cartridge</color> message and to continue printing.	Replace any low print cartridges. See Replace print cartridges on page 63.

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Problem	Cause	Solution
The amount of background toner shading becomes unacceptable.	Very dry (low humidity) conditions can increase the amount of background shading.	Check the device environment.
AaBbCc AaBbCc AaBbCc	The extended print mode setting is incorrect. Try the print job again using the Transfer extended print mode, Dry paper setting.	See Extended Print Modes on page 45.
AaBbCc AaBbCc	One or more print cartridges might be defective.	Replace any low print cartridges. See Replace print cartridges on page 63.
	The product is set to override the Replace <color> Cartridge message and to continue printing.</color>	Replace any low print cartridges. See Replace print cartridges on page 63.
Toner smears appear on the media.	The media might not meet HP specifications.	Use media that meets HP specifications.
AaBbCc AaBbCc AaBbCc AaBbCc AaBbCc	If toner smears appear on the leading edge of the paper, the media guides are dirty, or debris has accumulated in the print path.	Clean the media guides. Clean the paper path. See Clean the paper path on page 69.
The toner smears easily when touched. AGBOCC AGBOCC	The device is not set to print on the type of media on which you want to print.	In the printer driver, select the Paper tab and set Type is to match the type of media on which you are printing. Print speed might be slower if you are using heavy paper.
Agrocc Agrocc Agrocc	The media might not meet HP specifications.	Use media that meets HP specifications.
AaBbCc	The paper path might need cleaning.	Clean the paper path. See Clean the paper path on page 69.
Marks repeatedly appear at even intervals on the printed side of the page. AdBbCc	The device is not set to print on the type of media on which you want to print.	In the printer driver, select the Paper tab and set Type is to match the type of paper on which you are printing. Print speed might be slower if you are using heavy paper.
AaBbCc AaBbCc	Internal parts might have toner on them.	The problem typically corrects itself after a few more pages.
AaBbCc AaBbCc	The paper path might need cleaning.	Clean the paper path. See <u>Clean the paper path on page 69</u> .
	The fuser might be damaged or dirty.	To determine if the fuser has a problem, start HP Color LaserJet CP1210 Series Toolbox or HP ToolboxFX and print the print-quality diagnostics page.
		Clean the paper path. See <u>Clean the paper path on page 69</u> .
	A print cartridge may have a problem.	To determine which cartridge has a problem, start HP Color LaserJet CP1210 Series Toolbox or HP ToolboxFX and print the print-quality diagnostics page.

Problem	Cause	Solution
Marks repeatedly appear at even intervals on the unprinted side of the page.	Internal parts might have toner on them.	The problem typically corrects itself after a few more pages.
	The paper path might need cleaning.	Clean the paper path. See <u>Clean the</u> paper path on page 69.
ioA	The fuser might be damaged or dirty.	To determine if the fuser has a problem, open the HP Color LaserJet CP1210 Series Toolbox or HP ToolboxFX and print the print-quality diagnostics page.
		Clean the paper path. See Clean the paper path on page 69.
The printed page contains misformed characters.	The media might not meet HP specifications.	Use a different paper, such as high- quality paper that is intended for color laser printers.
AaBbcc AaBbcc AaBbcc AaBbcc AaBbcc AaBbcc	If characters are incorrectly formed so that they produce a wavy effect, the laser scanner might need service.	Verify that the problem also occurs on the configuration page. If so, replace the laser/scanner assembly.
The printed page is curled or wavy.	The device is not set to print on the type of media on which you want to print.	In the printer driver, select the Paper tab and set Type is to match the type of paper on which you are printing. Print speed might be slower if you are using heavy paper.
	The Service menu item Less paper curl is set to Off .	Use the control-panel menus to change the setting. See <u>Use the control-panel</u> menus (HP Color LaserJet CP1510 Series Printer only) on page 21.
	The media might not meet HP specifications.	Use a different paper, such as high- quality paper that is intended for color laser printers.
	Both high temperature and humidity can cause paper curl.	Check the device environment.
Text or graphics are skewed on the printed page. AGBOCC AGBOCC AGBOCC AGBOCC AGBOCC AGBOCC AGBOCC AGBOCC	The media might be loaded incorrectly.	Make sure that the paper or other print media is loaded correctly and that the media guides are not too tight or too loose against the stack. See Supported paper types and tray capacity on page 29.
	The media might not meet HP specifications.	Use a different paper, such as high- quality paper that is intended for color laser printers.

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Problem	Cause	Solution
The printed page contains wrinkles or creases. AdhoCc AdhoCc AdhoCc AdhoCc	The media might be loaded incorrectly.	Verify that the media is loaded correctly and that the media guides are not too tight or too loose against the stack. See Supported paper types and tray capacity on page 29. Turn over the stack of paper in the input tray, or try rotating the paper 180° in the
AaBbCc AaBbCc	The media might not meet HP specifications.	Use a different paper, such as high- quality paper that is intended for color laser printers.
Toner appears around the printed	The media might be loaded incorrectly.	Turn over the stack of paper in the tray.
ABCC AGBCC	If large amounts of toner have scattered around the characters, the paper might have high resistivity.	Use a different paper, such as high- quality paper that is intended for color laser printers.
An image that appears at the top of the page (in solid black) repeats farther down the page (in a gray field). ABBCC	Software settings might affect image printing.	In your software program, change the tone (darkness) of the field in which the repeated image appears. In your software program, rotate the whole page 180° to print the lighter image first.
AaBbCc AaBbCc AaBbCc	The order of images printed might affect printing.	Change the order in which the images are printed. For example, have the lighter image at the top of the page, and the darker image farther down the page.
	A power surge might have affected the device.	If the defect occurs later in a print job, turn the device off for 10 minutes, and then turn on the device to restart the print job.

Solve issues with color documents

This section describes issues that can occur when you print in color.

Problem	Cause	Solution
Only black is printing when the document should be printing in color.	Color mode is not selected in your program or printer driver.	Select color mode instead of grayscale mode.
AaBbCc AaBbCc AaBbCc AaBbCc AaBbCc	The correct printer driver might not be selected in the program.	Select the correct printer driver.
	The device might not be correctly configured.	Print a configuration page. Use the control-panel menus to correctly configure the device.
One or more colors are not printing, or are inaccurate.	Sealing tape might be on the print cartridges.	Verify that the sealing tape has been completely removed from the print cartridges.
AaBbCc AaBbCc AaBbCc AcBbCc	The media might not meet HP specifications.	Use a different paper, such as high- quality paper that is intended for color laser printers.
AcBbCc AaBbCc	The device might be operating in excessively humid conditions.	Verify that the device environment is within humidity specifications.
	One or more print cartridges might be defective.	Replace any low print cartridges. See Replace print cartridges on page 63.
	The product is set to override the Replace <color> Cartridge message and to continue printing.</color>	Replace any low print cartridges. See Replace print cartridges on page 63.
A color is printing inconsistently after you load a new print cartridge.	Another print cartridge might be defective.	Remove the print cartridge for the color that is printing inconsistently and reinstall it.
AaBbCc AaBbCc AaBbCc AaBbCc	The product is set to override the Replace <color> Cartridge</color> message and to continue printing.	Replace any low print cartridges. See Replace print cartridges on page 63.
The colors on the printed page do not match the colors as they appear on the	The colors on your computer monitor might differ from the device output.	See the product user guide.
AdbCc AdbCc AdbCc AdbCc AdbCc AdbCc AdbCc AdbCc AaBCc AaBCc AaBCc AaBCc AaBCc AaBCc AaBCc AaBCc	If extremely light colors or extremely dark colors on screen are not printing, your software program might interpret extremely light colors as white or extremely dark colors as black.	If possible, avoid using extremely light or extremely dark colors.
	The media might not meet HP specifications.	Use a different paper, such as high- quality paper that is intended for color laser printers.
The finish on the printed color page is inconsistent.	The media might be too rough.	Use a smooth paper or print media, such as a high-quality paper that is made for color laser printers. Generally, smoother media produces better the results.

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Problem	Cause	Solution
AaBbCc AaBbCc AaBbCc AaBbCc AaBbCc		

Performance problems

Problem	Cause	Solution
Pages print but are totally blank.	The sealing tape might still be in the print cartridges.	Verify that the sealing tape has been completely removed from the print cartridges.
	The document might contain blank pages.	Check the document that you are printing to see if content appears on all of the pages.
	The product might be malfunctioning.	To check the product, print a Configuration page.
Pages print very slowly.	Heavier media types can slow the print job.	Print on a different type of media.
	Complex pages can print slowly.	Proper fusing may require a slower print speed to ensure the best print quality.
Pages did not print.	The product might not be pulling media correctly.	Make sure paper is loaded in the tray correctly.
		If the problem persists, you might need to replace the pickup rollers and the separation pad. See <u>Customer support on page 243</u> .
	The media is jamming in the device.	Clear the jam. See <u>Jams on page 186</u> .
	The USB cable might be defective or incorrectly connected.	Disconnect the USB cable at both ends and reconnect it.
		Try printing a job that has printed in the past.
		Try using a different USB cable.
	Other devices are running on your computer.	The product might not share a USB port. If you have an external hard drive or network switchbox that is connected to the same port as the product, the other device might be interfering. To connect and use the product, you must disconnect the other device or you must use two USB ports on the computer.

Solve connectivity problems

Solve direct-connection problems

If the product is experiencing connection issues while directly connected to a computer, complete the following steps:

- 1. Make sure that USB cable is no longer than 2 meters (6 feet).
- 2. Make sure that both ends of the USB cable are connected.
- 3. Make sure that the cable is a USB 2.0 Hi-Speed-certified cable.
- 4. If the error persists, use a different USB cable.

Solve network problems (HP Color LaserJet CP1510 Series Printer only)

Check the following items to verify that the product is communicating with the network. Before you begin this troubleshooting procedure, print a configuration page. See Print information pages on page 36.

1. Are any physical connection problems evident between the workstation or file server and the product?

Verify that the network cabling, connections, and router configurations are correct. Verify that the network cable lengths meet network specifications.

2. Are the network cables connected correctly?

Make sure that the product is attached to the network through the appropriate port and cable. Check each cable connection to make sure that it is secure and in the right place. If the problem continues, try a different cable or connect to different ports on the hub or transceiver. The amber activity light and the green link status light next to the port connection on the back of the product should be lit.

- Can you "ping" the product? (Windows)
 - a. Click Start, click Run, type cmd, and click **OK** to open an MS-DOS command prompt.
 - b. Type ping followed by the product IP address. For example, type: ping 192.168.45.39 If the ping command is successful, a list of replies from the product appears in the window.
 - **c.** If you can ping the product, verify that the IP address configuration for the product is correct on the computer. If it is correct, delete the product, and then add it again.

-or-

If the ping command failed, verify that the network hubs are on, and then verify that the network settings, the product, and the computer are all configured for the same network.

4. Have any software programs been added to the network?

Make sure new programs are compatible and that they are installed correctly and use the correct printer drivers.

5. Can other users print?

The problem might be workstation-specific. Check the workstation network drivers, printer drivers, and redirection (capture in Novell NetWare).

- 6. If other users can print, are they using the same network operating system?
 Check your system for the correct network operating system setup.
- 7. Is your protocol enabled?

Check the status of your protocol on the configuration report. You can also use the embedded Web server, HP ToolboxFX, or Macintosh Configure Device to check the status of other protocols.

- 8. Does the product appear in HP Web Jetadmin or other management programs?
 - Verify the network settings on the network configuration page.
 - Confirm the network settings for the product by using the control panel.

Service mode functions

Service menu

Use the control-panel **Service** menu to troubleshoot device problems.

Service menu settings (HP Color LaserJet CP1510 Series Printer only)

The **Service** menu is used to calibrate, restore factory default settings, and clean the print paper path.

The following **Service** menu items are available:

- Restore defaults—used to reset all customer-accessible menu settings back to the factory default settings (except language) via the control panel or software
- NOTE: This service menu item does not reset factory-settable settings, including formatter number, page counts, factory paper settings, language, and so on.
- PowerSave—used to configure the amount of idle time before the engine enters sleep mode
- Cleaning mode—used to remove dust and toner from the print paper path

Restore the factory-set defaults on the HP Color LaserJet CP1210 Series Printer

- 1. Open the HP Color LaserJet CP1210 Series Toolbox.
- Click the Device Settings folder.
- 3. Click the **Service** page.
- 4. Click Restore.

Restore the factory-set defaults on the (HP Color LaserJet CP1510 Series Printer

- Press OK to open the menus.
- Use the Left arrow

 or the Right arrow

 button to select Service, and then press OK (Select).
- Use the Left arrow

 or the Right arrow

 button to select Restore defaults, and then press
 OK.

The product automatically restarts.

Secondary service menu (HP Color LaserJet CP1510 Series Printer only)

Use the secondary service menu to print service-related reports and to run special tests. Customers do not have access to this menu.

Open the secondary service menu

- Make sure the product is in the Ready state.
- 2. Press OK to enter the menus.
- 3. Simultaneously press < and OK to open the secondary service menu.
- **4.** Press < and > to navigate through the menu.

Secondary service menu structure

Table 7-8 2ndary Service menu

Menu item	Sub-menu item	Description
Service Reports	Cont. Self-Test	Print a continuous configuration page.
	Error report	Print an error report.
Location	A list of available locations appears	This item sets certain product parameters that are dependent on the location, such as the default paper size and the symbol set.
		Scroll to the appropriate location and select Yes to set the location. The product automatically restarts after you change the location.
Display test		Use this test to verify that the LEDs and characters on the control-panel display function correctly.
		At the beginning of the test, each of the LEDs is turned on one-at-time. Press ${\sf OK}$ to continue to the next LED.
		After the LED test is complete, the character test begins by testing the pixels on each line. Then, each of the 255 characters is displayed in groups of 16. Press OK to continue to the next group of 16 characters. You can cancel the test at any time by pressing X.
Button test		Use this test to verify that the control-panel buttons function correctly. The display prompts you to press each button.
Show FW Version		This item shows the current date code of the firmware.
Color Cal.	Adjust color	Use this item to adjust density settings for contrast, highlights, midtones, and shadows. Adjust each color individually.
	Timing	Use this item to specify how frequently the product should automatically perform a color calibration. The default setting is 48 hours. You can turn automatic calibration off.
Enter MAC Addr.		Use this item to specify the MAC address for the product. The MAC address is in hexadecimal code. Use the Right arrow ▶ button to scroll through the possible values for each character. When a digit is correct, press OK to move to the next digit.

Engine resets

Engine test page

- 1. With the product power off, open the front and rear doors.
- 2. Turn the power on, and close both doors within ten seconds.
- 3. An engine test page (a page containing multiple horizontal colored lines) will print.

Cold reset

The traditional cold reset function found in other HP LaserJet products is not supported for this product. The equivalent function is the **Restore defaults** option in the HP Color LaserJet CP1210 Series Toolbox (HP Color LaserJet CP1210 Series Printer) or the **Service** menu (HP Color LaserJet CP1510 Series Printer).

Restoring the default settings unlocks menus that have been previously locked and resets all controlpanel menu items to the factory defaults. It does *not* reset the serial number and the page counts.

- NOTE: Before restoring defaults, print a menu structure report and a configuration page. Use the information on these pages to reset customer-specific settings.
- △ CAUTION: All HP Jetdirect settings are also reset. Be sure to print a configuration page before restoring defaults. Make note of the IP address that is listed on the Jetdirect configuration page. You might need to restore the IP address after performing a cold reset.

NVRAM initialization

△ CAUTION: All HP Jetdirect settings are also reset. Be sure to print a configuration page before performing an NVRAM initialization. Make note of the IP address that is listed on the Jetdirect configuration page. You need to restore the IP address after performing an NVRAM initialization.

Performing an NVRAM initialization resets the following settings and information:

- All menu settings are reset to factory default values.
- All localization settings, including language and country/region, are reset.

After performing an NVRAM initialization, reconfigure any computers that print to this product so that the computers can recognize the product.

Perform an NVRAM initialization on the HP Color LaserJet CP1210 Series printer

- 1. Turn the product off.
- 2. Press and hold the Resume button.
- 3. Turn the product on, and continue holding the Resume button for at least 10 seconds, but not longer than 20 seconds. The Attention light will be lit.
- Release the Resume button.
 - NOTE: If the Attention and either the Paper out light or the Ready light are lit, restart the procedure.

The Attention, Ready, and Resume lights cycle from front to back until the process is complete. The product then enters the **Ready** state.

Perform an NVRAM initialization on the HP Color LaserJet CP1510 Series printer

- 1. Turn the product off.
- 2. Simultaneously press the Right arrow ▶ button and the X button. Keep these buttons depressed as you turn the product on.
- When Permanent storage init. appears on the display, release both buttons.
- 4. When the product has finished the NVRAM initialization, it returns to the **Ready** state.

Solve memory card and PictBridge port (HP Color LaserJet CP1510ni only) problems

Check the following items to verify that the product is communicating with a digital camera or recording device.

- To connect a device to the product by using the PictBridge port, the device must be in USB mode (for most devices, look in the Settings menu (or equivalent) on the device for PictBridge or PTP).
 - The message Camera Connected appears on the product control panel when a device is successfully connected.
 - If the device is not PictBridge compatible, or has not been configured to be in a USB mode, the message **Unsupported device** appears on the product control panel.
- The PictBridge port is a USB host connection on the memory-card reader. A green LED illuminates when a photo memory card is correctly inserted in the memory-card reader.
 - NOTE: The LED does not illuminate when a digital camera or recording device is connected to the product.
 - Make sure that the memory card is full seated in the card reader. For supported types of memory cards, see <u>Product features on page 3</u>.
 - To troubleshoot a memory card, remove it from the digital device and insert it in the memorycard reader on the product. If the LED illuminates, the problem might be with the digital device, and not with the memory card.

8 Parts and diagrams

- NOTE: In this chapter, part numbers are only listed for available replaceable parts.
 - Order parts, accessories, and supplies
 - Supplies part numbers
 - Screws
 - How to use the parts lists and diagrams
 - Covers, panels, and doors
 - Internal assemblies
 - Alphabetical parts list
 - Numerical parts list

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Order parts, accessories, and supplies

Several methods are available for ordering parts, supplies, and accessories.

Order directly from HP

You can obtain the following items directly from HP:

- Replacement parts: To order replacement parts in the U.S., go to www.hp.com/go/hpparts.
 Outside the United States, order parts by contacting your local authorized HP service center.
- Supplies and accessories: To order supplies in the U.S., go to www.hp.com/go/ljsupplies. To order supplies worldwide, go to www.hp.com/ghp/buyonline.html. To order accessories, go to www.hp.com/support/ljcp1210series or www.hp.com/support/ljcp1510series.

Order through service or support providers

To order a part or accessory, contact an HP-authorized service or support provider.

Order directly through the software

HP Color LaserJet CP1210 Series Toolbox and HP ToolboxFX are product management tools designed to make product configuration, monitoring, supplies ordering, troubleshooting, and updating as simple and efficient as possible.

Supplies part numbers

Table 8-1 Spare parts and replacement supplies

Part	Part number	Type/size
Print cartridges	CB540A	Black print cartridge with HP ColorSphere toner
For information	CB541A	Cyan print cartridge with HP ColorSphere toner
about the yield for the cartridges, see	CB542A	Yellow print cartridge with HP ColorSphere toner
www.hp.com/go/ pageyield. Actual yield depends on specific use.	CB543A	Magenta print cartridge with HP ColorSphere toner
Cables	C6518A	USB 2.0 printer cable (2-meter [6.5-foot] standard)
	CC378-60101	USB cable for photo card PCA (HP Color LaserJet CP1510)
Memory	CB421A	64 MB DDR2 144 pin SDRAM DIMM
	CB422A	128 MB DDR2 144 pin SDRAM DIMM
	CB423A	256 MB DDR2 144 pin SDRAM DIMM

Table 8-1 Spare parts and replacement supplies (continued)

Part	Part number	Type/size
Media	C2934A	50 sheets
		HP Color LaserJet Transparencies (letter)
	C2936A	50 sheets
		HP Color Laser Transparencies (A4)
	Q1298A	HP LaserJet Tough paper (letter)
	Q1298B	HP LaserJet Tough paper (A4)
	HPU1132	500 sheets
		HP Premium Choice LaserJet paper (letter)
	CHP410	500 sheets
		HP Premium Choice LaserJet paper (A4)
	HPJ1124	500 sheets
		HP LaserJet paper (letter)
	CHP310	500 sheets
		HP LaserJet paper (A4)
	Q6608A	100 sheets
		HP Color Laser Photo Paper, glossy
	Q6611A	150 sheets
		HP Color Laser Brochure Paper, glossy (letter)
	Q6541A	200 sheets
		HP Presentation Laser Paper, soft gloss (letter)
	Q6543A	150 sheets
		HP Brochure Laser Paper, matte (letter)
	Q2546A	300 sheets
		HP Presentation laser paper, glossy
	Q6549A	100 sheets
		HP Photo Paper, matte (letter)
	HPL285R	500 sheets
		HP Color Laser Paper (letter)
Reference materials	5851-1468	HP LaserJet Printer Family Print Media Specification Guide

Screws

Table 8-2 Common fasteners

Example	Description	Size	Part Number
	Screw, with washer	M3X8	XA9-1449-000CN
	Screw	M3X8	XA9-1671-000CN

How to use the parts lists and diagrams

The figures in this chapter show the major subassemblies in the product and their component parts. A parts list table follows each exploded view assembly diagram. Each table lists the item number, the associated part number, and the description of each part. If a part is not listed in the table, then it is not a field replacement unit (FRU).

- △ **CAUTION:** Be sure to order the correct part. When looking for part numbers for electrical components, pay careful attention to the voltage that is listed in the description column. Doing so will ensure that the part number selected is for the correct all-in-one model.
- NOTE: In this manual, the abbreviation "PCA" stands for "printed circuit board assembly." Components described as a PCA might consist of a single circuit board or a circuit board plus other parts, such as cables and sensors.

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Covers, panels, and doors

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Figure 8-1 Covers, panels, and doors (HP Color LaserJet CP1210 Series Printer)

Table 8-3 Covers, panels, and doors (HP Color LaserJet CP1210 Series Printer)

Ref	Description	Part number	Qty
1	Door, front	RC2-1786-000CN	1
2	Cover, right	RC2-1788-000CN	1
3	Cover, left	RC2-1789-000CN	1
4	Cover, rear, lower	RC2-1790-000CN	1
5	Cover, rear, upper	RC2-1791-000CN	1
6	Cover, rear, center	RC2-2875-000CN	1
7	Cover, priority slot (jam-access door)	RC2-2005-000CN	1
8	Door, rear	RC2-2115-000CN	1
9	Cover, upper (top cover)	RM1-4465-000CN	1
10	Control-panel assembly	RM1-4468-000CN	1
11	Screw, with washer, M3X8	XA9-1449-000CN	1
12	Screw, M3X8	XA9-1671-000CN	5

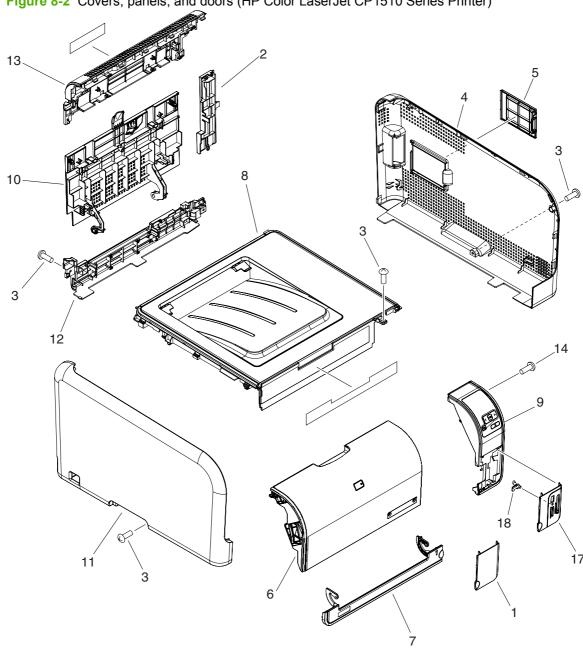


Figure 8-2 Covers, panels, and doors (HP Color LaserJet CP1510 Series Printer)

Table 8-4 Covers, panels, and doors (HP Color LaserJet CP1510 Series Printer)

Ref	Description	Part number	Qty
1	Cover, photo-card	RC2-3079-000CN	1
2	Cover, rear, center	RC2-3076-000CN	1
3	Screw, M3X8	XA9-1671-000CN	6
4	Cover, right	RC2-1797-000CN	1
5	Cover, DIMM	RC2-1798-000CN	1
6	Door, front assembly	RM1-4461-000CN	1
7	Cover, priority slot	RM1-4463-000CN	1
8	Cover, upper (top cover)	RM1-4466-000CN	1
9	Control-panel assembly	RM1-4469-000CN	1
10	Door, rear	RC2-3077-000CN	1
11	Cover, left	RC2-3073-000CN	1
12	Cover, rear, lower	RC2-3074-000CN	1
13	Cover, rear, upper	RC2-3075-000CN	1
14	Screw, with washer, M3X8	XA9-1449-000CN	1
17	Cover, photo-card	RC2-2916-000CN	1
18	Guide, light	RC2-3098-000CN	1

Internal assemblies

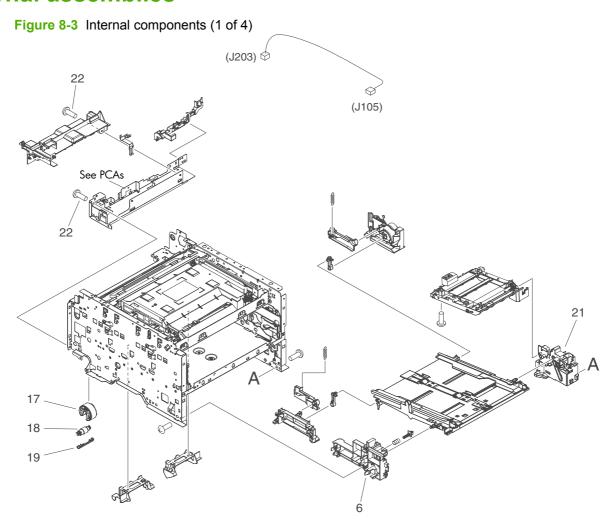


Table 8-5 Internal components (1 of 4)

Ref	Description	Part number	Qty
6	Rail, cassette, left-front	RC2-1878-000CN	1
17	Roller, pickup assembly	RM1-4426-000CN	1
18	Roller, separation assembly	RM1-4425-000CN	1
19	Cover, holder	RC2-2014-000CN	1
21	Rail, cassette, right-front	RL1-1849-000CN	1
22	Screw, M3X8	XA9-1671-000CN	6

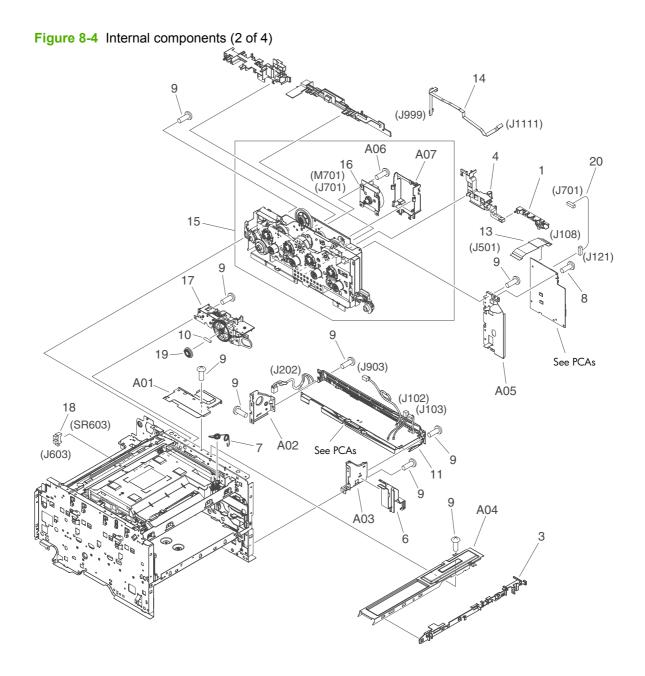


Table 8-6 Internal components (2 of 4)

Ref	Description	Part number	Qty
8	Screw, with washer, M3X8	XA9-1449-000CN	4
9	Screw, M3X8	XA9-1671-000CN	26
13	Cable, flat (FFC)	RK2-1955-000CN	1
14	Cable, flat (FFC), HP Color LaserJet CP1210 Series	RK2-1960-000CN	1
14	Cable, flat (FFC), HP Color LaserJet CP1510 Series	RK2-1959-000CN	1

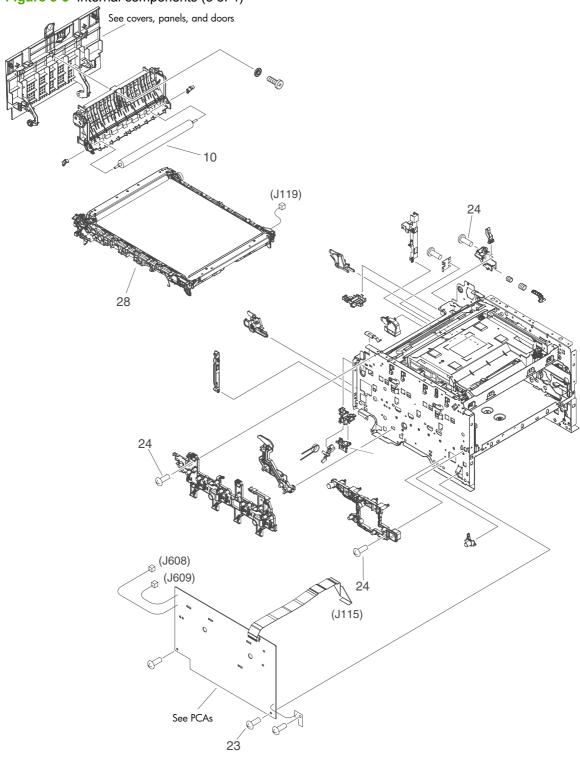


Table 8-7 Internal components (3 of 4)

Ref	Description	Part number	Qty
10	Secondary transfer roller	RM1-4445-000CN	1
23	Screw, with washer, M3X8	XA9-1449-000CN	4
24	Screw, M3X8	XA9-1671-000CN	26
28	Intermediate transfer belt assembly (ITB)	RM1-4436-000CN	1

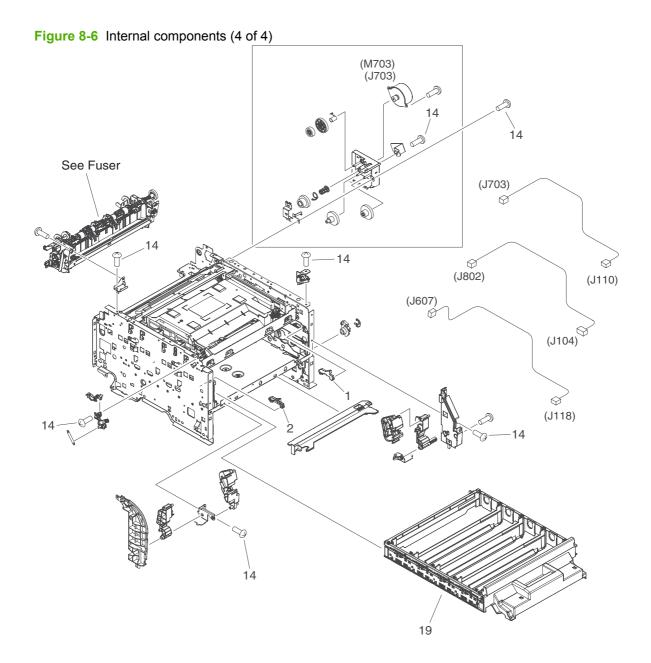


Table 8-8 Internal components (4 of 4)

Ref	Description	Part number	Qty
1	Clamp, cartridge tray (drawer), right	RC2-3109-000CN	1
2	Clamp, cartridge tray (drawer), left	RC2-3108-000CN	1
14	Screw, M3X8	XA9-1671-000CN	1
19	Cartridge tray assembly (drawer)	RM1-4428-000CN	1

Figure 8-7 Cassette

Table 8-9 Cassette

Ref	Description	Part number	Qty
All	Cassette, HP Color LaserJet CP1210	RM1-4439-000CN	1
All	Cassette, HP Color LaserJet CP1510	RM1-4440-000CN	1

Figure 8-8 Fuser assembly

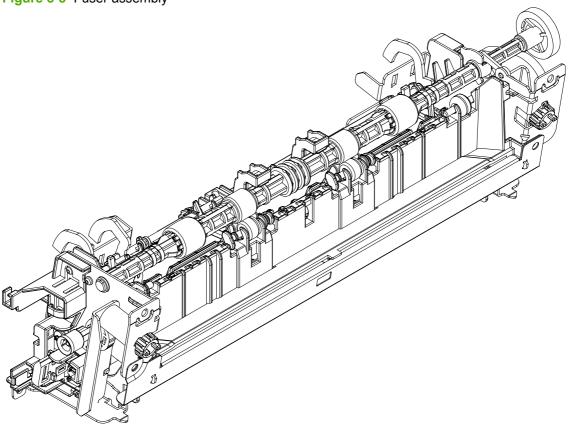


Table 8-10 Fuser assembly

Ref	Description	Part number	Qty
All	Fuser assembly (110V to 127V)	RM1-4430-000CN	1
All	Fuser assembly (220V to 240V)	RM1-4431-000CN	1

Figure 8-9 PCAs

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Table 8-11 PCAs

Ref	Description	Part number	Qty
1	Power supply, high voltage assembly	RM1-4689-000CN	1
2	Power supply, fuser assembly (110V to 127V)	RM1-4776-000CN	1
2	Power supply, fuser assembly (220V to 240V)	RM1-4777-000CN	1
3	Power supply, low-voltage assembly (110V to 127V)	RM1-4815-000CN	1
3	Power supply, low-voltage assembly (220V to 240V)	RM1-4816-000CN	1
4	DC controller PCA, HP Color LaserJet CP1210 Series	RM1-4813-000CN	1
4	DC controller PCA, HP Color LaserJet CP1510 Series	RM1-4811-000CN	1
5	Formatter PCA, HP Color LaserJet CP1210 Series	CB505-60001	1
5	Formatter PCA, HP Color LaserJet CP1510 Series	CB479-60001	1
6	Photo-card reader PCA, HP Color LaserJet CP1510ni only	CB434-600001	1

Alphabetical parts list

Table 8-12 Alphabetical parts list

Description	Part number	Table and page
Cable, flat (FFC)	RK2-1955-000CN	Internal components (2 of 4) on page 219
Cable, flat (FFC), HP Color LaserJet CP1210 Series	RK2-1960-000CN	Internal components (2 of 4) on page 219
Cable, flat (FFC), HP Color LaserJet CP1510 Series	RK2-1959-000CN	Internal components (2 of 4) on page 219
Cartridge tray assembly (drawer)	RM1-4428-000CN	Internal components (4 of 4) on page 223
Cassette, HP Color LaserJet CP1210	RM1-4439-000CN	Cassette on page 225
Cassette, HP Color LaserJet CP1510	RM1-4440-000CN	Cassette on page 225
Clamp, cartridge tray (drawer), left	RC2-3108-000CN	Internal components (4 of 4) on page 223
Clamp, cartridge tray (drawer), right	RC2-3109-000CN	Internal components (4 of 4) on page 223
Control-panel assembly	RM1-4468-000CN	Covers, panels, and doors (HP Color LaserJet CP1210 Series Printer) on page 213
Control-panel assembly	RM1-4469-000CN	Covers, panels, and doors (HP Color LaserJet CP1510 Series Printer) on page 215
Cover, DIMM	RC2-1798-000CN	Covers, panels, and doors (HP Color LaserJet CP1510 Series Printer) on page 215
Cover, holder	RC2-2014-000CN	Internal components (1 of 4) on page 217
Cover, left	RC2-1789-000CN	Covers, panels, and doors (HF Color LaserJet CP1210 Series Printer) on page 213
Cover, left	RC2-3073-000CN	Covers, panels, and doors (HP Color LaserJet CP1510 Series Printer) on page 215
Cover, photo-card	RC2-3079-000CN	Covers, panels, and doors (HF Color LaserJet CP1510 Series Printer) on page 215
Cover, photo-card	RC2-2916-000CN	Covers, panels, and doors (HF Color LaserJet CP1510 Series Printer) on page 215
Cover, priority slot	RM1-4463-000CN	Covers, panels, and doors (HF Color LaserJet CP1510 Series Printer) on page 215
Cover, priority slot (jam-access door)	RC2-2005-000CN	Covers, panels, and doors (HF Color LaserJet CP1210 Series Printer) on page 213

Table 8-12 Alphabetical parts list (continued)

Description	Part number	Table and page
Cover, rear, center	RC2-2875-000CN	Covers, panels, and doors (HP Color LaserJet CP1210 Series Printer) on page 213
Cover, rear, center	RC2-3076-000CN	Covers, panels, and doors (HP Color LaserJet CP1510 Series Printer) on page 215
Cover, rear, lower	RC2-1790-000CN	Covers, panels, and doors (HP Color LaserJet CP1210 Series Printer) on page 213
Cover, rear, lower	RC2-3074-000CN	Covers, panels, and doors (HP Color LaserJet CP1510 Series Printer) on page 215
Cover, rear, upper	RC2-1791-000CN	Covers, panels, and doors (HP Color LaserJet CP1210 Series Printer) on page 213
Cover, rear, upper	RC2-3075-000CN	Covers, panels, and doors (HP Color LaserJet CP1510 Series Printer) on page 215
Cover, right	RC2-1788-000CN	Covers, panels, and doors (HP Color LaserJet CP1210 Series Printer) on page 213
Cover, right	RC2-1797-000CN	Covers, panels, and doors (HP Color LaserJet CP1510 Series Printer) on page 215
Cover, upper (top cover)	RM1-4465-000CN	Covers, panels, and doors (HP Color LaserJet CP1210 Series Printer) on page 213
Cover, upper (top cover)	RM1-4466-000CN	Covers, panels, and doors (HP Color LaserJet CP1510 Series Printer) on page 215
DC controller PCA, HP Color LaserJet CP1210 Series	RM1-4813-000CN	PCAs on page 229
DC controller PCA, HP Color LaserJet CP1510 Series	RM1-4811-000CN	PCAs on page 229
Door, front	RC2-1786-000CN	Covers, panels, and doors (HP Color LaserJet CP1210 Series Printer) on page 213
Door, front assembly	RM1-4461-000CN	Covers, panels, and doors (HP Color LaserJet CP1510 Series Printer) on page 215
Door, rear	RC2-2115-000CN	Covers, panels, and doors (HP Color LaserJet CP1210 Series Printer) on page 213
Door, rear	RC2-3077-000CN	Covers, panels, and doors (HP Color LaserJet CP1510 Series Printer) on page 215
Formatter PCA, HP Color LaserJet CP1210 Series	CB505-60001	PCAs on page 229
Formatter PCA, HP Color LaserJet CP1510 Series	CB479-60001	PCAs on page 229
Fuser assembly (110V to 127V)	RM1-4430-000CN	Fuser assembly on page 227

Table 8-12 Alphabetical parts list (continued)

Description	Part number	Table and page
Fuser assembly (220V to 240V)	RM1-4431-000CN	Fuser assembly on page 227
Guide, light	RC2-3098-000CN	Covers, panels, and doors (HP Color LaserJet CP1510 Series Printer) on page 215
Intermediate transfer belt assembly (ITB)	RM1-4436-000CN	Internal components (3 of 4) on page 221
Photo-card reader PCA, HP Color LaserJet CP1510ni only	CB434-600001	PCAs on page 229
Power supply, fuser assembly (110V to 127V)	RM1-4776-000CN	PCAs on page 229
Power supply, fuser assembly (220V to 240V)	RM1-4777-000CN	PCAs on page 229
Power supply, high voltage assembly	RM1-4689-000CN	PCAs on page 229
Power supply, low-voltage assembly (110V to 127V)	RM1-4815-000CN	PCAs on page 229
Power supply, low-voltage assembly (220V to 240V)	RM1-4816-000CN	PCAs on page 229
Rail, cassette, left-front	RC2-1878-000CN	Internal components (1 of 4) on page 217
Rail, cassette, right-front	RL1-1849-000CN	Internal components (1 of 4) on page 217
Roller, pickup assembly	RM1-4426-000CN	Internal components (1 of 4) on page 217
Roller, separation assembly	RM1-4425-000CN	Internal components (1 of 4) on page 217
Screw, M3X8	XA9-1671-000CN	Covers, panels, and doors (HP Color LaserJet CP1210 Series Printer) on page 213
Screw, M3X8	XA9-1671-000CN	Covers, panels, and doors (HP Color LaserJet CP1510 Series Printer) on page 215
Screw, M3X8	XA9-1671-000CN	Internal components (1 of 4) on page 217
Screw, M3X8	XA9-1671-000CN	Internal components (2 of 4) on page 219
Screw, M3X8	XA9-1671-000CN	Internal components (3 of 4) on page 221
Screw, M3X8	XA9-1671-000CN	Internal components (4 of 4) on page 223
Screw, with washer, M3X8	XA9-1449-000CN	Covers, panels, and doors (HP Color LaserJet CP1210 Series Printer) on page 213
Screw, with washer, M3X8	XA9-1449-000CN	Covers, panels, and doors (HP Color LaserJet CP1510 Series Printer) on page 215
Screw, with washer, M3X8	XA9-1449-000CN	Internal components (2 of 4) on page 219

Table 8-12 Alphabetical parts list (continued)

Description	Part number	Table and page
Screw, with washer, M3X8	XA9-1449-000CN	Internal components (3 of 4) on page 221
Secondary transfer roller	RM1-4445-000CN	Internal components (3 of 4) on page 221

Numerical parts list

Table 8-13 Numerical parts list

Part number	Description	Table and page
CB434-600001	Photo-card reader PCA, HP Color LaserJet CP1510ni only	PCAs on page 229
CB479-60001	Formatter PCA, HP Color LaserJet CP1510 Series	PCAs on page 229
CB505-60001	Formatter PCA, HP Color LaserJet CP1210 Series	PCAs on page 229
RC2-1786-000CN	Door, front	Covers, panels, and doors (HP Color LaserJet CP1210 Series Printer) on page 213
RC2-1788-000CN	Cover, right	Covers, panels, and doors (HP Color LaserJet CP1210 Series Printer) on page 213
RC2-1789-000CN	Cover, left	Covers, panels, and doors (HP Color LaserJet CP1210 Series Printer) on page 213
RC2-1790-000CN	Cover, rear, lower	Covers, panels, and doors (HP Color LaserJet CP1210 Series Printer) on page 213
RC2-1791-000CN	Cover, rear, upper	Covers, panels, and doors (HP Color LaserJet CP1210 Series Printer) on page 213
RC2-1797-000CN	Cover, right	Covers, panels, and doors (HF Color LaserJet CP1510 Series Printer) on page 215
RC2-1798-000CN	Cover, DIMM	Covers, panels, and doors (HP Color LaserJet CP1510 Series Printer) on page 215
RC2-1878-000CN	Rail, cassette, left-front	Internal components (1 of 4) on page 217
RC2-2005-000CN	Cover, priority slot (jam-access door)	Covers, panels, and doors (HP Color LaserJet CP1210 Series Printer) on page 213
RC2-2014-000CN	Cover, holder	Internal components (1 of 4) on page 217
RC2-2115-000CN	Door, rear	Covers, panels, and doors (HF Color LaserJet CP1210 Series Printer) on page 213
RC2-2875-000CN	Cover, rear, center	Covers, panels, and doors (HF Color LaserJet CP1210 Series Printer) on page 213
RC2-2916-000CN	Cover, photo-card	Covers, panels, and doors (HP Color LaserJet CP1510 Series Printer) on page 215
RC2-3073-000CN	Cover, left	Covers, panels, and doors (HP Color LaserJet CP1510 Series Printer) on page 215

Table 8-13 Numerical parts list (continued)

Part number	Description	Table and page
RC2-3074-000CN	Cover, rear, lower	Covers, panels, and doors (HP Color LaserJet CP1510 Series Printer) on page 215
RC2-3075-000CN	Cover, rear, upper	Covers, panels, and doors (HP Color LaserJet CP1510 Series Printer) on page 215
RC2-3076-000CN	Cover, rear, center	Covers, panels, and doors (HP Color LaserJet CP1510 Series Printer) on page 215
RC2-3077-000CN	Door, rear	Covers, panels, and doors (HP Color LaserJet CP1510 Series Printer) on page 215
RC2-3079-000CN	Cover, photo-card	Covers, panels, and doors (HP Color LaserJet CP1510 Series Printer) on page 215
RC2-3098-000CN	Guide, light	Covers, panels, and doors (HP Color LaserJet CP1510 Series Printer) on page 215
RC2-3108-000CN	Clamp, cartridge tray (drawer), left	Internal components (4 of 4) on page 223
RC2-3109-000CN	Clamp, cartridge tray (drawer), right	Internal components (4 of 4) on page 223
RK2-1955-000CN	Cable, flat (FFC)	Internal components (2 of 4) on page 219
RK2-1959-000CN	Cable, flat (FFC), HP Color LaserJet CP1510 Series	Internal components (2 of 4) on page 219
RK2-1960-000CN	Cable, flat (FFC), HP Color LaserJet CP1210 Series	Internal components (2 of 4) on page 219
RL1-1849-000CN	Rail, cassette, right-front	Internal components (1 of 4) on page 217
RM1-4425-000CN	Roller, separation assembly	Internal components (1 of 4) on page 217
RM1-4426-000CN	Roller, pickup assembly	Internal components (1 of 4) on page 217
RM1-4428-000CN	Cartridge tray assembly (drawer)	Internal components (4 of 4) on page 223
RM1-4430-000CN	Fuser assembly (110V to 127V)	Fuser assembly on page 227
RM1-4431-000CN	Fuser assembly (220V to 240V)	Fuser assembly on page 227
RM1-4436-000CN	Intermediate transfer belt assembly (ITB)	Internal components (3 of 4) on page 221
RM1-4439-000CN	Cassette, HP Color LaserJet CP1210	Cassette on page 225
RM1-4440-000CN	Cassette, HP Color LaserJet CP1510	Cassette on page 225
RM1-4445-000CN	Secondary transfer roller	Internal components (3 of 4) on page 221

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Table 8-13 Numerical parts list (continued)

Part number	Description	Table and page
RM1-4461-000CN	Door, front assembly	Covers, panels, and doors (HP Color LaserJet CP1510 Series Printer) on page 215
RM1-4463-000CN	Cover, priority slot	Covers, panels, and doors (HP Color LaserJet CP1510 Series Printer) on page 215
RM1-4465-000CN	Cover, upper (top cover)	Covers, panels, and doors (HP Color LaserJet CP1210 Series Printer) on page 213
RM1-4466-000CN	Cover, upper (top cover)	Covers, panels, and doors (HP Color LaserJet CP1510 Series Printer) on page 215
RM1-4468-000CN	Control-panel assembly	Covers, panels, and doors (HP Color LaserJet CP1210 Series Printer) on page 213
RM1-4469-000CN	Control-panel assembly	Covers, panels, and doors (HP Color LaserJet CP1510 Series Printer) on page 215
RM1-4689-000CN	Power supply, high voltage assembly	PCAs on page 229
RM1-4776-000CN	Power supply, fuser assembly (110V to 127V)	PCAs on page 229
RM1-4777-000CN	Power supply, fuser assembly (220V to 240V)	PCAs on page 229
RM1-4811-000CN	DC controller PCA, HP Color LaserJet CP1510 Series	PCAs on page 229
RM1-4813-000CN	DC controller PCA, HP Color LaserJet CP1210 Series	PCAs on page 229
RM1-4815-000CN	Power supply, low-voltage assembly (110V to 127V)	PCAs on page 229
RM1-4816-000CN	Power supply, low-voltage assembly (220V to 240V)	PCAs on page 229
XA9-1449-000CN	Screw, with washer, M3X8	Covers, panels, and doors (HP Color LaserJet CP1210 Series Printer) on page 213
XA9-1449-000CN	Screw, with washer, M3X8	Covers, panels, and doors (HP Color LaserJet CP1510 Series Printer) on page 215
XA9-1449-000CN	Screw, with washer, M3X8	Internal components (2 of 4) on page 219
XA9-1449-000CN	Screw, with washer, M3X8	Internal components (3 of 4) on page 221
XA9-1671-000CN	Screw, M3X8	Covers, panels, and doors (HP Color LaserJet CP1210 Series Printer) on page 213
XA9-1671-000CN	Screw, M3X8	Covers, panels, and doors (HP Color LaserJet CP1510 Series Printer) on page 215
XA9-1671-000CN	Screw, M3X8	Internal components (1 of 4) on page 217
XA9-1671-000CN	Screw, M3X8	Internal components (2 of 4) on page 219

Table 8-13 Numerical parts list (continued)

Part number	Description	Table and page
XA9-1671-000CN	Screw, M3X8	Internal components (3 of 4) on page 221
XA9-1671-000CN	Screw, M3X8	Internal components (4 of 4) on page 223

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A Service and support

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Hewlett-Packard limited warranty statement

HP PRODUCT

DURATION OF LIMITED WARRANTY

HP Color LaserJet CP1215/CP1515/CP1518 Series Printers

One-year limited warranty

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.

TO THE EXTENT ALLOWED BY LOCAL LAW, THE ABOVE WARRANTIES ARE 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. Some countries/regions, states or provinces do not allow limitations on the duration of an implied warranty, so the above limitation or exclusion might not apply to you. This warranty gives you specific legal rights and you might also have other rights that vary from country/region to country/region, state to state, or province to province. HP's limited warranty is valid in any country/region or locality where HP has a support presence for this product and where HP has marketed this product. The level of warranty service you receive may vary according to local standards. HP will not alter form, fit or function of the product to make it operate in a country/region for which it was never intended to function for legal or regulatory reasons.

TO THE EXTENT ALLOWED BY LOCAL LAW, THE REMEDIES IN THIS WARRANTY STATEMENT ARE YOUR SOLE AND EXCLUSIVE REMEDIES. EXCEPT AS INDICATED ABOVE, IN NO EVENT WILL HP OR ITS SUPPLIERS BE LIABLE FOR LOSS OF DATA OR FOR DIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL (INCLUDING LOST PROFIT OR DATA), OR OTHER DAMAGE, WHETHER BASED IN CONTRACT, TORT, OR OTHERWISE. Some countries/regions, states or provinces do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

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.

Customer self repair warranty service

HP products are designed with many Customer Self Repair (CSR) parts to minimize repair time and allow for greater flexibility in performing defective parts replacement. If during the diagnosis period, HP identifies that the repair can be accomplished by the use of a CSR part, HP will ship that part directly to you for replacement. There are two categories of CSR parts: 1) Parts for which customer self repair is mandatory. If you request HP to replace these parts, you will be charged for the travel and labor costs of this service. 2) Parts for which customer self repair is optional. These parts are also designed for Customer Self Repair. If, however, you require that HP replace them for you, this may be done at no additional charge under the type of warranty service designated for your product.

Based on availability and where geography permits, CSR parts will be shipped for next business day delivery. Same-day or four-hour delivery may be offered at an additional charge where geography permits. If assistance is required, you can call the HP Technical Support Center and a technician will help you over the phone. HP specifies in the materials shipped with a replacement CSR part whether a defective part must be returned to HP. In cases where it is required to return the defective part to HP, you must ship the defective part back to HP within a defined period of time, normally five (5) business days. The defective part must be returned with the associated documentation in the provided shipping material. Failure to return the defective part may result in HP billing you for the replacement. With a customer self repair, HP will pay all shipping and part return costs and determine the courier/carrier to be used.

Print cartridge limited warranty statement

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 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.

Customer support

Get telephone support, free during your warranty period, for your country/region	Country/region phone numbers are on the flyer that was in the box with your product or at www.hp.com/support/ .
Have the product name, serial number, date of purchase, and problem description ready.	
Get 24-hour Internet support	www.hp.com/support/ljcp1210series or www.hp.com/support/ljcp1510series
Get support for products used with a Macintosh computer	www.hp.com/go/macosx
Download software utilities, drivers, and electronic information	www.hp.com/go/ljcp1210series_software or www.hp.com/go/ljcp1510series_software
Order supplies and paper	www.hp.com/go/suresupply
Order genuine HP parts or accessories	www.hp.com/buy/parts
Order additional HP service or maintenance agreements	www.hp.com/go/carepack

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Repack the product

If the product must be moved or shipped to another location, perform the following procedure to repack it.

△ CAUTION: Shipping damage as a result of inadequate packing is the customer's responsibility. The product must remain upright during shipment.

It is extremely important to remove the print cartridges before shipping the product. Print cartridges that remain in the printer during shipping will leak and entirely cover the product with toner.

To prevent damage to the print cartridges, avoid touching the rollers, and store them in the original packing material or so that they are not exposed to light.

- 1. Remove all four print cartridges and ship separately.
- 2. Use the original shipping container and packing material, if possible. If you have already disposed of the packing material, contact a local mailing service for information about repacking the printer. HP recommends insuring the equipment for shipment.

Service information form

WHO IS RETURNING THE EQUIPMENT?		Date:
Person to contact:		Phone:
Alternate contact:		Phone:
Return shipping address:	Special shipping instructions:	
WHAT ARE YOU SENDING?		
Model name:	Model number:	Serial number:
Please attach any relevant printouts. Do NOT the repair.	ship accessories (manuals, cleaning supplies,	and so on) that are not required to complete
HAVE YOU REMOVED THE PRINT CARTR	IDGES?	
You must remove them before shipping the pr	rinter, unless a mechanical problem prevents y	ou from doing so.
[] Yes.	[] No, I cannot remove them.	
WHAT NEEDS TO BE DONE? (Attach a sep	arate sheet if necessary.)	
Describe the conditions of the failure. (What running? Is the failure repeatable?)	at was the failure? What were you doing when t	he failure occurred? What software were you
2. If the failure is intermittent, how much time	elapses between failures?	
3. If the unit connected to any of the following	, give the manufacturer and model number.	
Personal computer:	Modem:	Network:
4. Additional comments:		
HOW WILL YOU PAY FOR THE REPAIR?		
[] Under warranty	Purchase/received date:	
(Attach proof o	of purchase or receiving document with original	received date.)
[] Maintenance contract number:		
[] Purchase order number:		
	a purchase order number and/or authorized , a minimum purchase order is required. Standa	
Authorized signature:		Phone:
Billing address:	Special billing instructions:	

B Specifications

- Physical specifications
- Electrical specifications
- Power consumption and acoustic emissions
- Operating-environment specifications
- Skew specifications

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Physical specifications

Height	Depth	Width	Weight
254 mm (10.0 inches)	452 mm (17.8 inches)	399 mm (15.7 inches)	17.6 kg (38.9 lb)

Electrical specifications

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

Item	110-volt models	220-volt models
Power requirements	100 to 127 V (+/-10%)	220 to 240 V (+/-10%)
	50 to 60 Hz (+/-2 Hz)	50 to 60 Hz (+/-2 Hz)
Minimum recommended circuit capacity	4.5 A	2.5 A

Power consumption and acoustic emissions

See www.hp.com/go/cljcp1210/regulatory or www.hp.com/go/cljcp1510/regulatory for current information.

Operating-environment specifications

Environment	Recommended	Allowed
Temperature	17° to 25°C (62.6° to 77°F)	15° to 30°C (59° to 86°F)
Humidity	20% to 60% relative humidity (RH)	10% to 80% RH
Altitude	Not applicable	0 to 3048 m (0 to 10,000 ft)

NOTE: These values are based on preliminary data. See www.hp.com/support/ljcp1210series or www.hp.com/support/ljcp1510series for current information.

Skew specifications

The product has the following skew specifications:

- Print engine (cut-sheet paper): less than 1.5 mm (0.06 inches) over a 260-mm (10.24-inch) length
- Print engine (envelopes): less than 3.3 mm (0.13 inches) over a 220-mm (8.66-inch) length

C Regulatory information

- FCC regulations
- Environmental product stewardship program
- Declaration of conformity
- Safety statements

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FCC regulations

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 this equipment 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.

NOTE: Any changes or modifications to the printer that are not expressly approved by HP 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.

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 impacts 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. To determine the ENERGY STAR® qualification status for this product see the Product Data Sheet or Specifications Sheet. Qualified products are also listed at:

http://www.hp.com/hpinfo/globalcitizenship/environment/productdesign/ecolabels.html

Paper use

This product's manual duplex feature (two-sided printing) 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 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 print supplies

It's easy to return and recycle your empty HP LaserJet print cartridges—free of charge—with HP Planet Partners. Multilingual program information and instructions are included in every new HP LaserJet print cartridge and supplies package. You help reduce the toll on the environment further when you return multiple cartridges together rather than separately.

HP is committed to providing inventive, high-quality products and services that are environmentally sound, from product design and manufacturing to distribution, customer use and recycling. When you participate in the HP Planet Partners program, we ensure your HP LaserJet print cartridges are recycled properly, processing them to recover 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 you. Thank you for being environmentally responsible!

NOTE: Use the return label to return original HP LaserJet print cartridges only. Please do not use this label for HP inkjet cartridges, non-HP cartridges, refilled or remanufactured cartridges or warranty returns. For information about recycling your HP inkjet cartridges please go to http://www.hp.com/ recycle.

Return and recycling instructions

United States and Puerto Rico

The enclosed label in the HP LaserJet toner cartridge box is for the return and recycling of one or more HP LaserJet print cartridges after use. Please follow the applicable instructions below.

Multiple returns (two to eight cartridges)

- 1. Package each HP LaserJet print cartridge in its original box and bag.
- 2. Tape up to eight single boxes together using strapping or packaging tape (up to 70 lbs).
- 3. Use a single pre-paid shipping label.

OR

- 1. Use your own suitable box, or request a free bulk collection box from the http://www.hp.com/recycle or 1-800-340-2445 (holds up to eight HP LaserJet print cartridges).
- 2. Use a single pre-paid shipping label.

Single returns

- 1. Package the HP LaserJet print cartridge in its original bag and box.
- 2. Place the shipping label on the front of the box.

Shipping

For all HP LaserJet print cartridge recycling returns, give the package to UPS during your next delivery or pickup, or take it to an authorized UPS drop-off center. For the location of your local UPS drop-off center, call 1-800-PICKUPS or visit http://www.ups.com. If you are returning via USPS label, give the package to a U.S. Postal Service carrier or drop off at a U.S. Postal Service Office. For more information, or to order additional labels or boxes for bulk returns, visit http://www.hp.com/recycle or call 1-800-340-2445. Requested UPS pickup will be charged normal pickup rates. Information subject to change without notice.

Non-US returns

To participate in HP Planet Partners return and recycling program, just follow the simple directions in the recycling guide (found inside the packaging of your new printer supply item) or visit http://www.hp.com/recycle. Select your country/region for information on how to return your HP LaserJet printing supplies.

Paper

This product is capable of using recycled papers when the paper meets the guidelines outlined in the *HP LaserJet Printer Family Print Media Guide*. 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 a battery.

Disposal of waste equipment by users in private households 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 (MSDS)

Material Safety Data Sheets (MSDS) for supplies containing chemical substances (for example, toner) can be obtained by contacting the HP Web site at www.hp.com/go/msds or www.hp.com/hpinfo/ globalcitizenship/environment.

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
- Material Safety Data Sheets

Visit www.hp.com/go/environment or www.hp.com/hpinfo/globalcitizenship/environment.

Declaration of conformity

Declaration of Conformity

according to ISO/IEC 17050-1 and EN 17050-1, DoC#: BOISB-0603-00-rel.1.0

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

declares, that the product

Product Name: HP Color LaserJet CP1215/CP1515/CP1518 Series

Regulatory Model:²⁾ BOISB-0603-00

Product Options: All

Toner Cartridges: CB540A, CB541A, CB542A, CB543A

conforms to the following Product Specifications:

SAFETY: IEC 60950-1:2001 / EN60950-1: 2001 +A11

IEC 60825-1:1993 +A1+A2 / EN 60825-1:1994 +A1 +A2 (Class 1 Laser/LED Product) GB4943-2001

EMC: CISPR22:2005 / EN55022:2006 - Class B¹⁾

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

FCC Title 47 CFR, Part 15 Class B1) / ICES-003, Issue 4 GB9254-1998, GB17625.1-2003

Supplementary Information:

The product herewith complies with the requirements of the EMC Directive 2004/108/EEC and the Low Voltage Directive 2006/95/EC, and carries the CE-Marking **C** accordingly.

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.

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

Boise, Idaho 83713, USA

October, 2007

For Regulatory Topics Only:

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), http://www.hp.com/go/

certificates

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

(Phone: 208-396-6000)

Safety statements

Laser safety

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 device 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 device 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 may 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 ». »

VCCI statement (Japan)

この装置は、情報処理装置等電波障害自主規制協議会(VCCI)の基準に基づくクラスB情報技術装置です。この装置は、家庭環境で使用することを目的としていますが、この装置がラジオやテレビジョン受信機に近接して使用されると、受信障害を引き起こすことがあります。

取扱説明書に従って正しい取り扱いをして下さい。

Power cord statement (Japan)

製品には、同梱された電源コードをお使い下さい。同梱された電源コードは、他の製品では使用出来ません。

EMI statement (Korea)

B급 기기 (가정용 정보통신기기)

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

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Laser statement for Finland

Luokan 1 laserlaite

Klass 1 Laser Apparat

HP Color LaserJet CP1215/CP1515/CP1518 Series, 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 Color LaserJet CP1215/CP1515/CP1518 Series - 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 näkymättömällelasersäteilylle 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 775-795 nm Teho 5 m W Luokan 3B laser.

Substances Table (China)

根据中国电子信息产品污染控制管理办法的要求而出台

Table C-1 有毒有害物质表

部件名称	有毒有害物质和元素					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价格 (Cr(VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
打印引擎	Х	0	Х	Х	0	0
控制面板	0	0	0	0	0	0
塑料外壳	0	0	0	0	0	0
格式化板组件	Х	0	0	0	0	0
碳粉盒	Х	0	0	0	0	0

- **O:**表示在此部件所用的所有同类材料中,所含的此有毒或有害物质均低于 SJ/T11363-2006 的限制要求。
- **X**:表示在此部件所用的所有同类材料中,至少一种 所含的此有毒或有害物质 高于 SJ/T11363-2006 的限制要求。

図 NOTE: 引用的 "环保使用期限"是根据在正常温度和湿度条件下操作使用产品而确定的。

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Certificate of Volatility

Model: HP Color LaserJet CP1510 Series Printers

Part number: CB479-60001

Hewlett-Packard Company

11311 Chinden Boulevard

Boise, Idaho

83714-1021, U.S.A.

- Volatile Memory
 - Type

DDR2 DRAM

Size

96 MB

Function

Main memory

Steps to clear memory

Disconnect power.

- Non-Volatile Memory
 - Type

SPI FLASH

Size

4 MB

Function

Compressed code storage

Steps to clear memory

Does not clear

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