



# LASERJET PRO 200 COLOR

## Troubleshooting Manual



M251n



M251nw





# HP LaserJet Pro 200 color M251 Series Printer

## Troubleshooting Manual

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## Conventions used in this guide

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 **TIP:** Tips provide helpful hints or shortcuts.

 **NOTE:** Notes provide important information to explain a concept or to complete a task.

 **CAUTION:** Cautions indicate procedures that you should follow to avoid losing data or damaging the product.

 **WARNING!** Warnings alert you to specific procedures that you should follow to avoid personal injury, catastrophic loss of data, or extensive damage to the product.

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# 1 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](#)
- [Laser/scanner system](#)
- [Image-formation system](#)
- [Pickup-and-feed system](#)
- [USB flash drive](#)

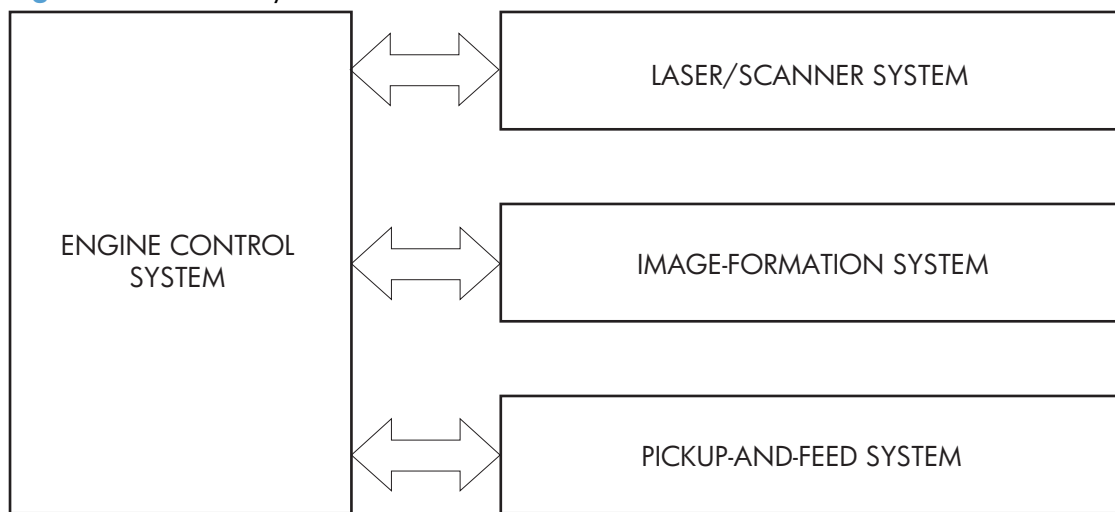
# Basic operation

## Major product systems

The product includes the following systems:

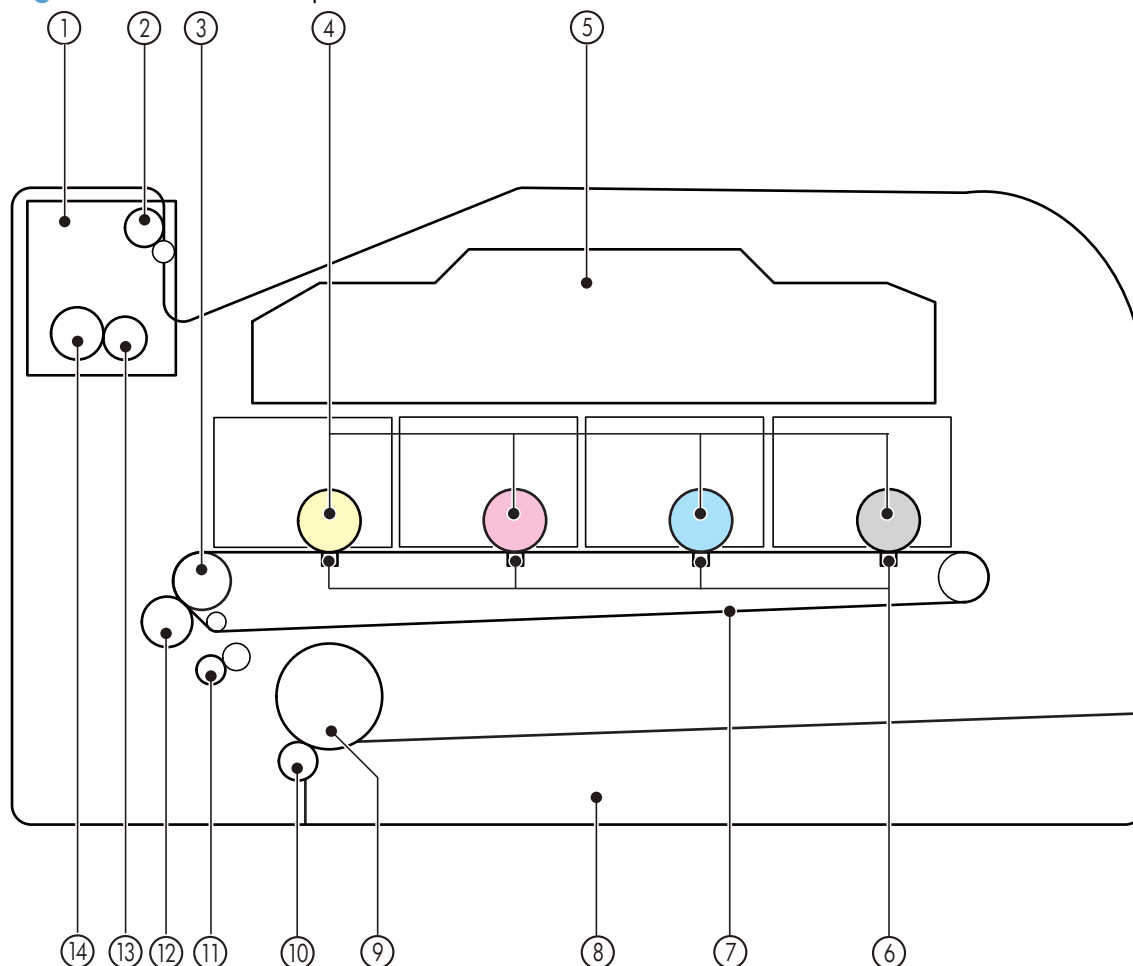
- Engine control system
- Laser/scanner system
- Image-formation system
- Pickup-and-feed system

**Figure 1-1** Product systems



## Product components

**Figure 1-2** Product components



Item	Description	Item	Description
1	Fuser unit	8	Cassette
2	Delivery roller	9	Pickup roller
3	ITB drive roller	10	Separation roller
4	Photosensitive drum	11	Registration roller
5	Laser scanner assembly	12	Secondary transfer roller
6	Transfer pad	13	Fusing film
7	Intermediate transfer belt (ITB)	14	Pressure roller

## Sequence of operation

**Table 1-1 Sequence of operation**

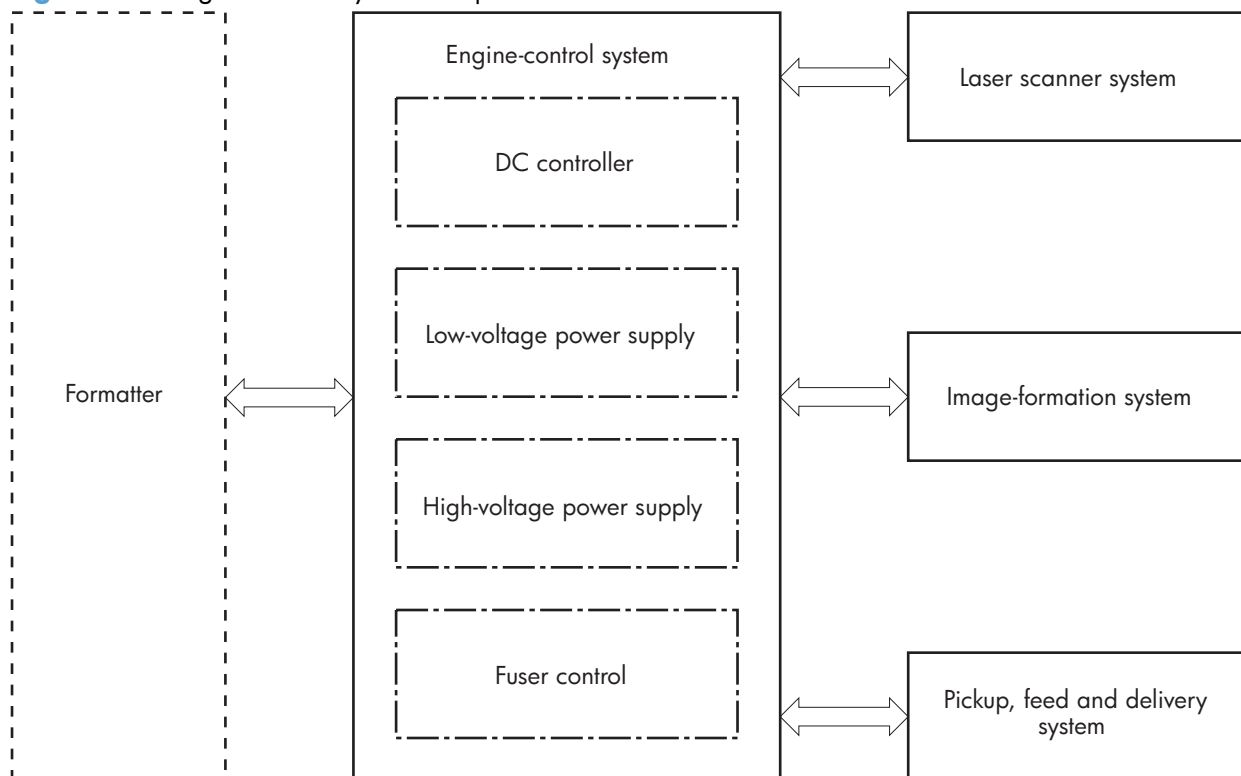
Period	Duration	Purpose	Remarks
WAIT	From the time the power is turned on or the door is closed, until the printer is ready for a print operation	Clears the potential from the drum surface, adjusts the drum phase, and cleans the ITB	Detects the cartridge presence and environment; completes any required 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.

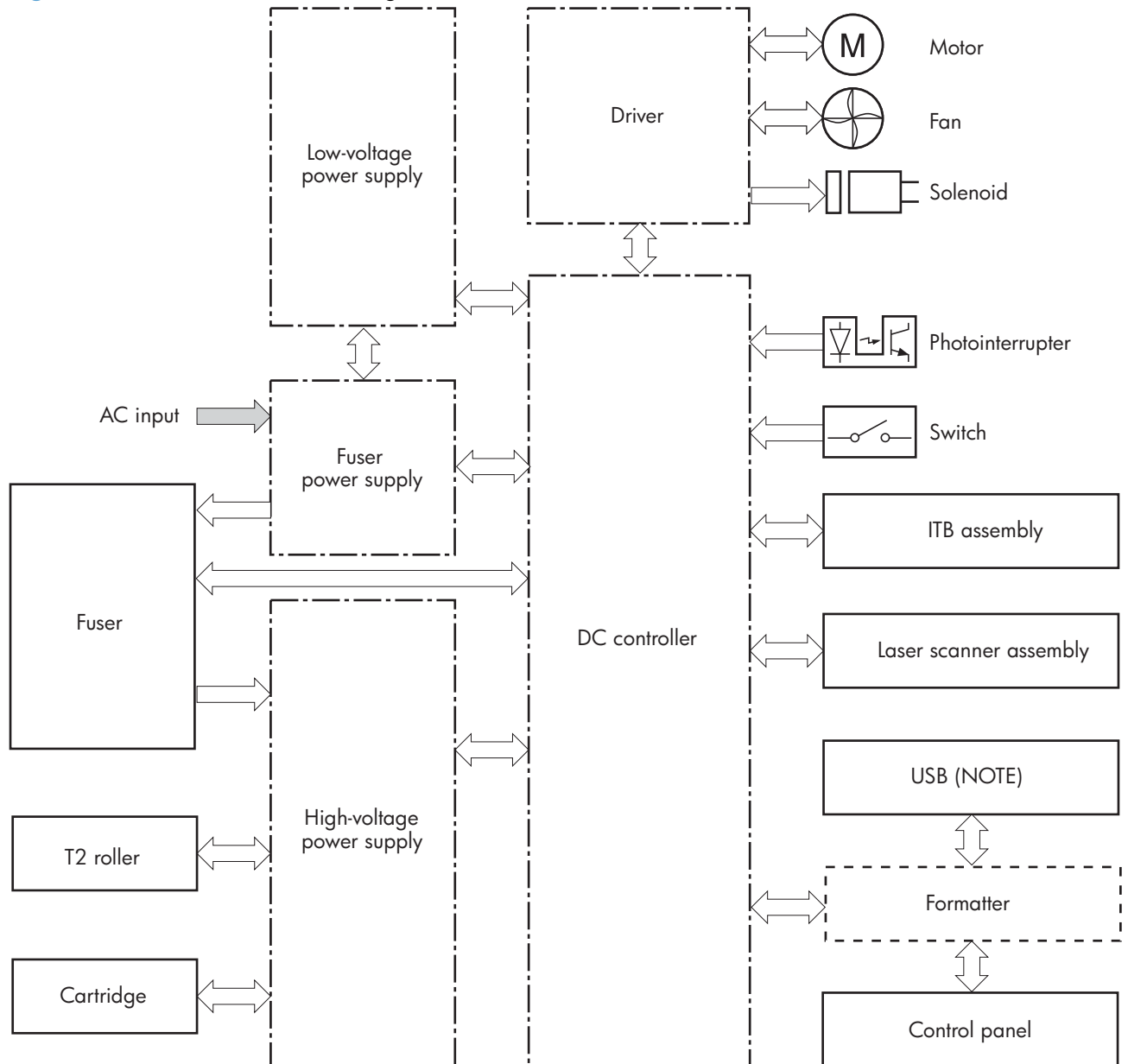
The engine control system contains the DC controller, high-voltage power-supply PCA, low-voltage power-supply unit, and fuser control.


**Figure 1-3** Engine control system components



## DC controller

**Figure 1-4** DC controller circuit diagram

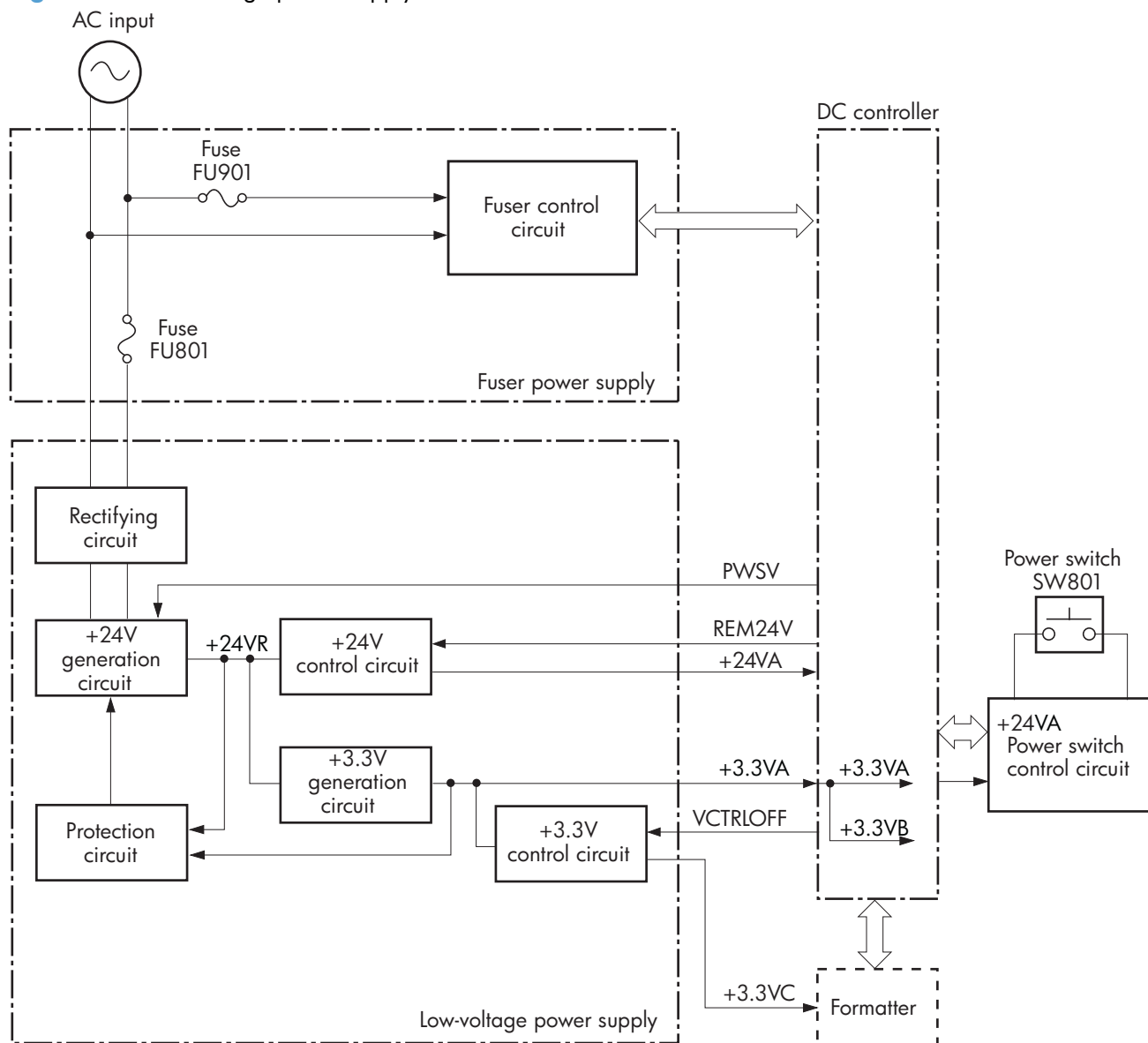


 **NOTE:** USB block for touchscreen-equipped models only.



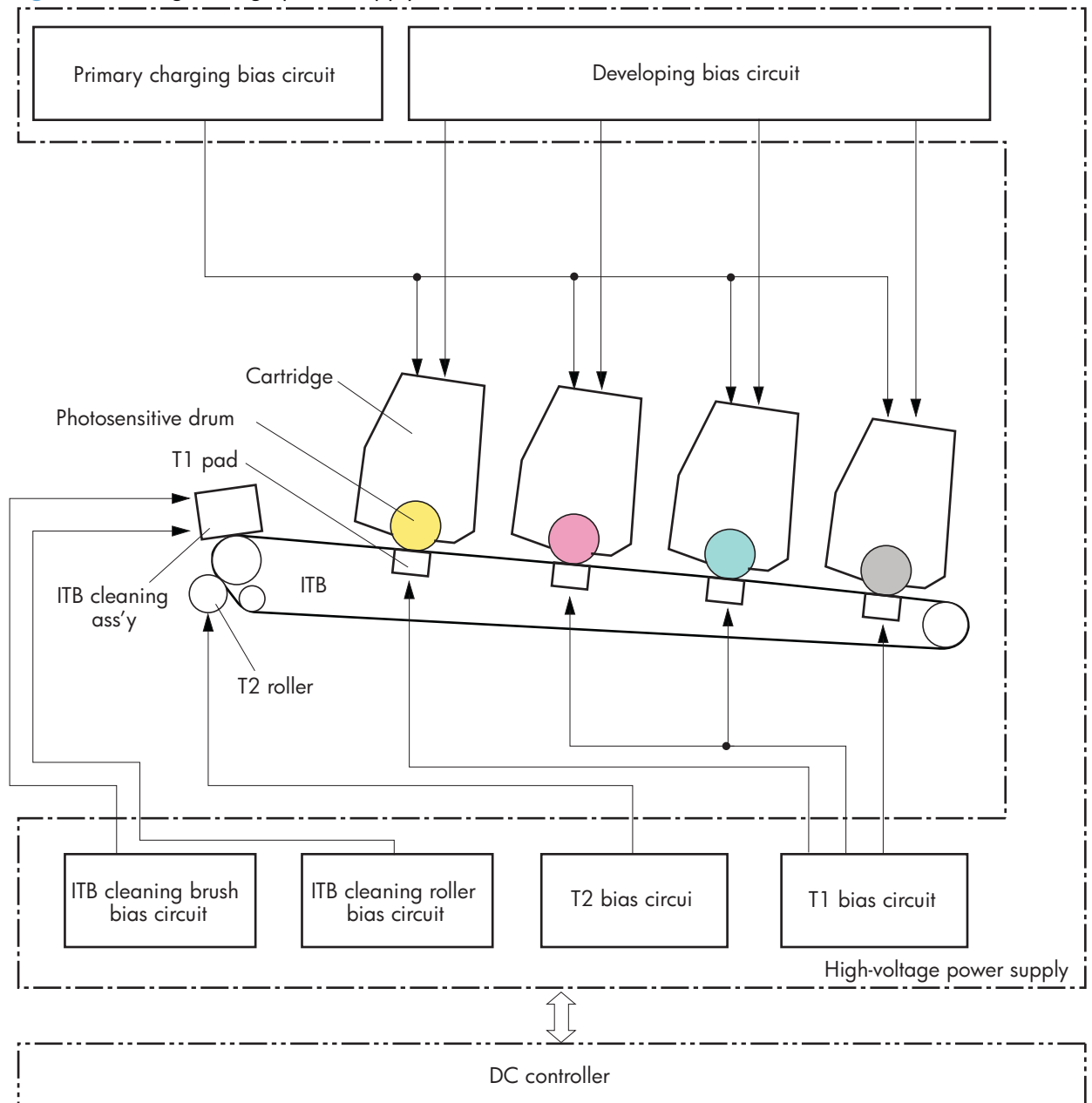
## Low-voltage power supply

**Figure 1-5** Low-voltage power supply



## High-voltage power supply

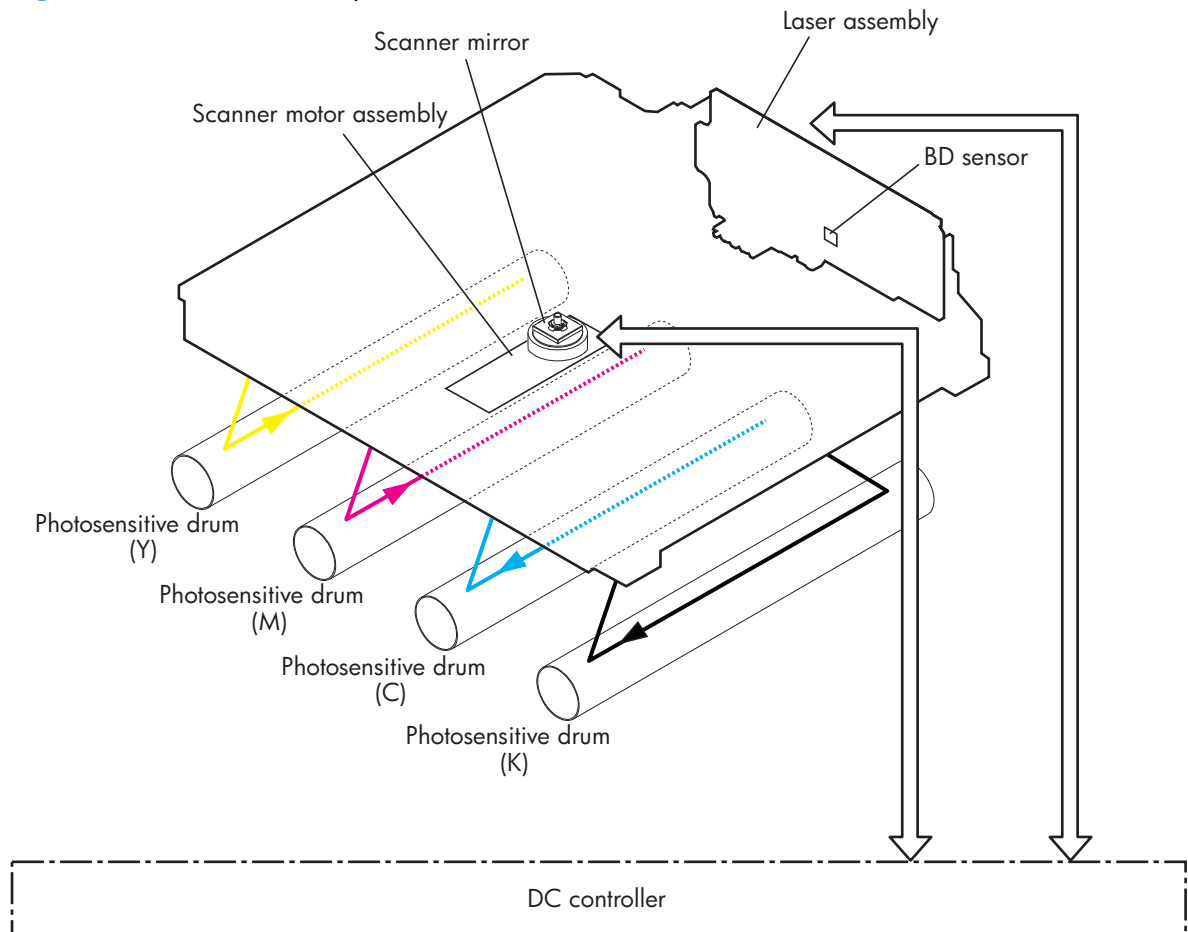
Figure 1-6 High-voltage power supply



## 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 1-7** Laser/scanner system



## Laser failure detection

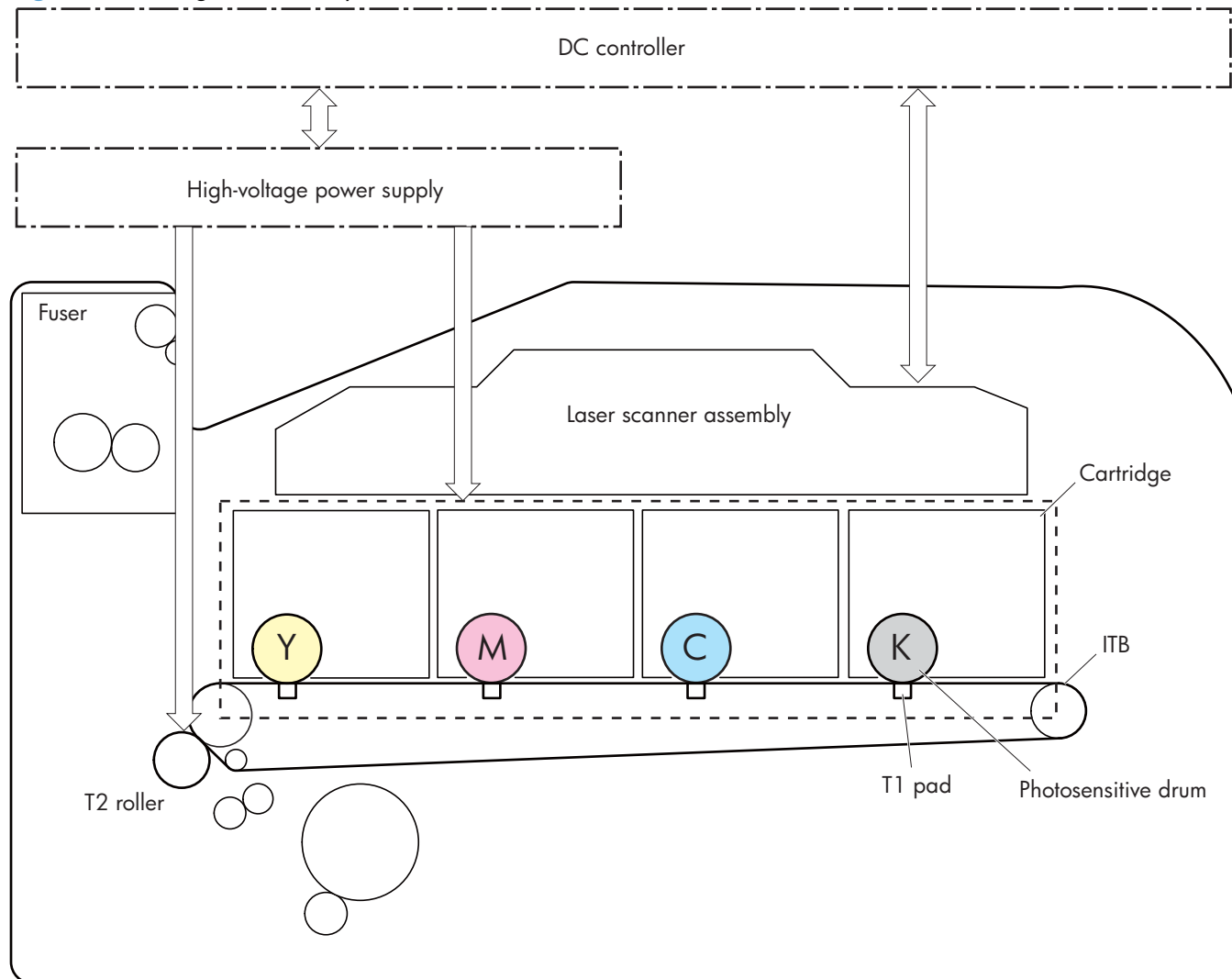
The optical unit failure detection sensor manages the laser/scanner unit failure-detection functions. The DC controller identifies the laser/scanner unit failure and notifies the formatter if the laser/scanner unit encounters the following conditions:

- Scanner motor failure
- BD failure

## Image-formation system

The image-formation system forms a toner image on media. The product includes four toner 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 (K).

**Figure 1-8** Image-formation system



## Image-formation process

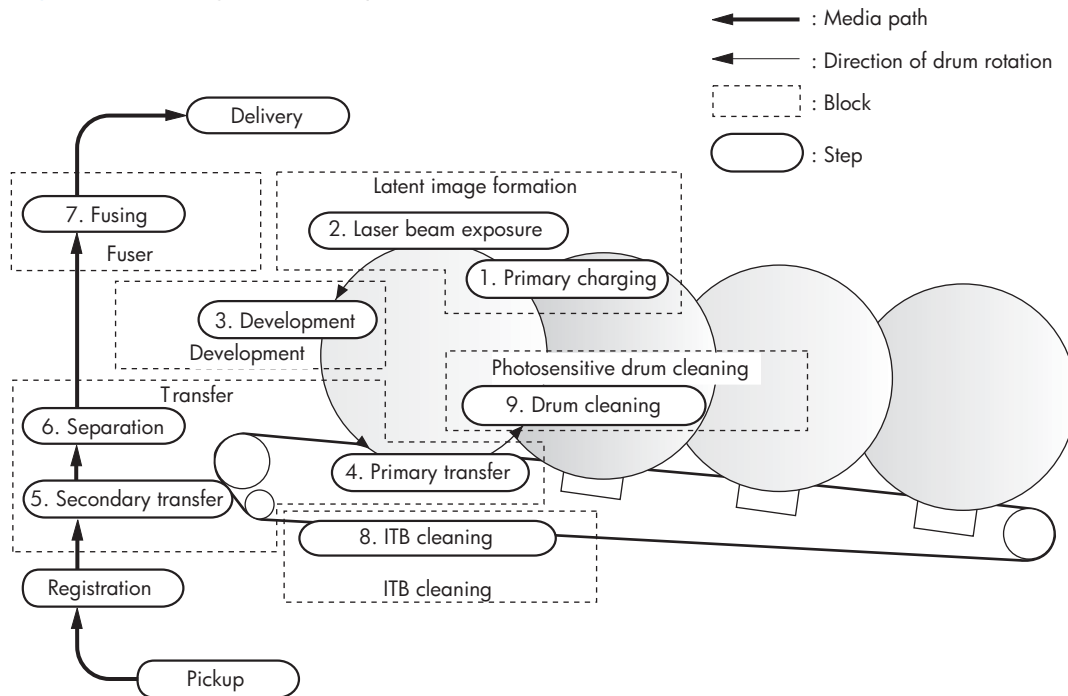
Laser printing requires the interaction of several different technologies including electronics, optics, and electrographics to provide a printed page. Each process functions independently and must be coordinated with the other processes. Image formation consists of the following processes:

- Latent-image formation
- Development
- Transfer

- Fuser
- ITB cleaning
- Drum cleaning

These processes are divided into nine steps, which are shown in [Figure 1-9 Image-formation process on page 11](#) and described in the following sections.

**Figure 1-9** Image-formation process



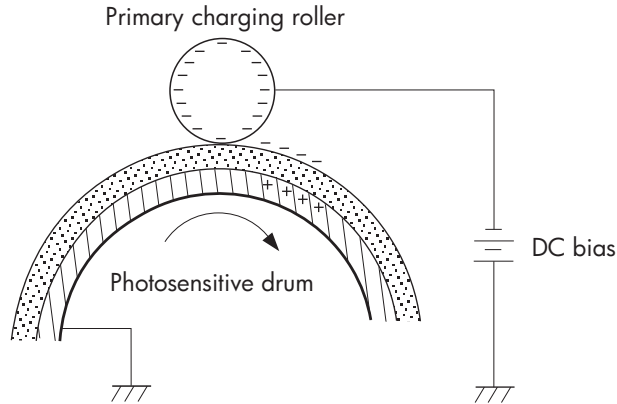
## Latent-image formation stage

During the two 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.

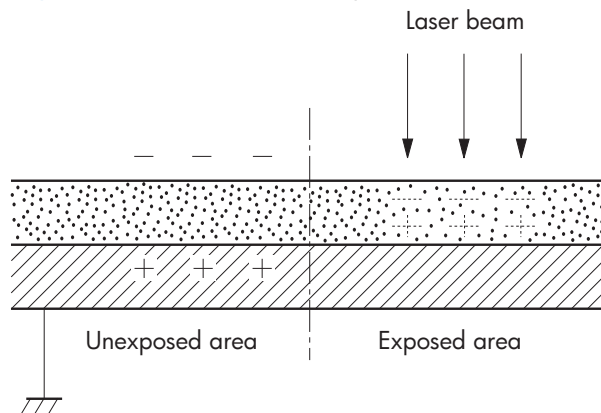
**Figure 1-10** Primary charging



## 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 1-11** Laser-beam exposure



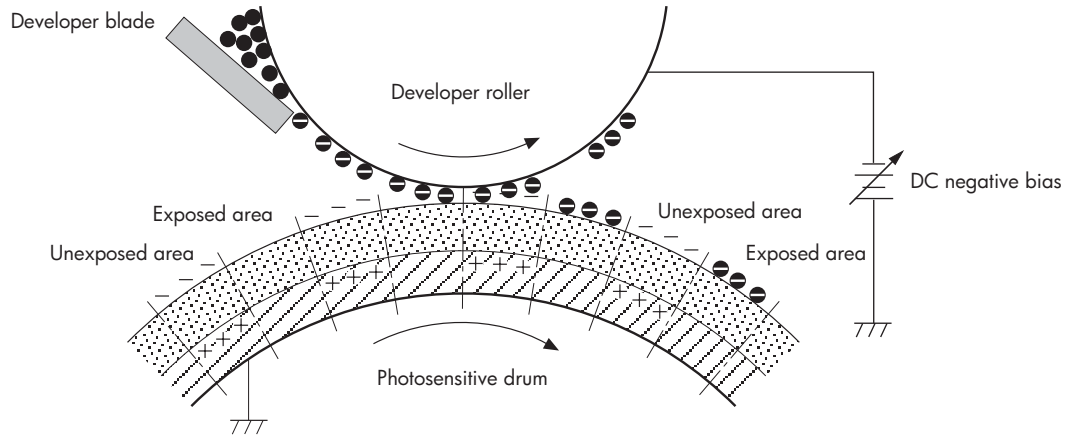
## Developing stage

The developer roller 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 developer roller rotating against the developer 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 1-12** Development

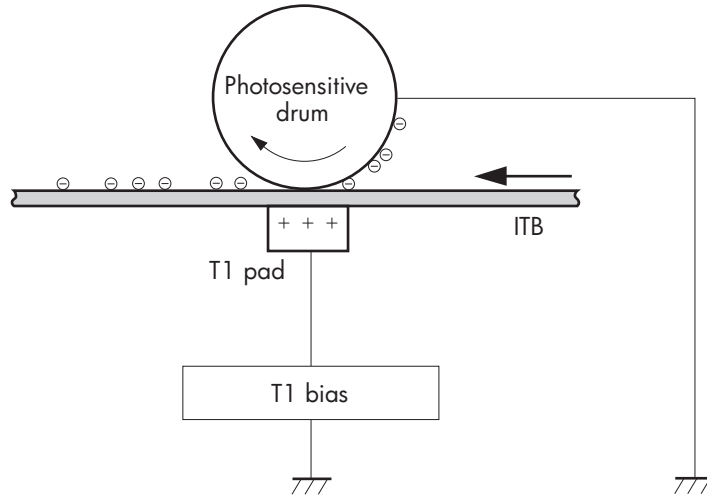


## Transfer stage

### 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.

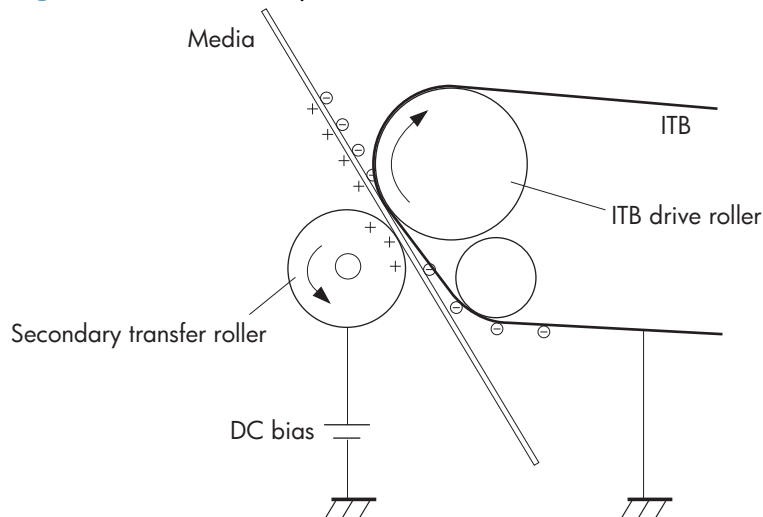
**Figure 1-13** Primary transfer



### 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 1-14** Secondary transfer

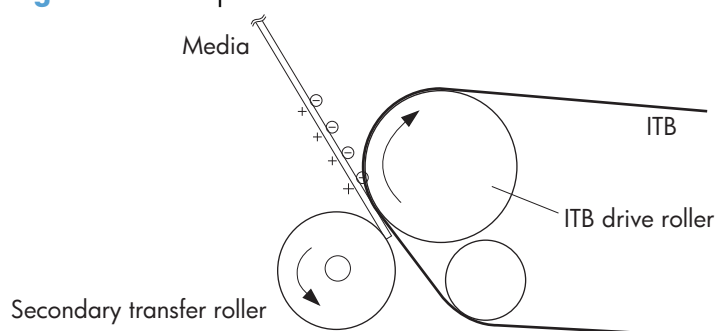




## Step 6: separation from the ITB

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

**Figure 1-15** Separation from the ITB



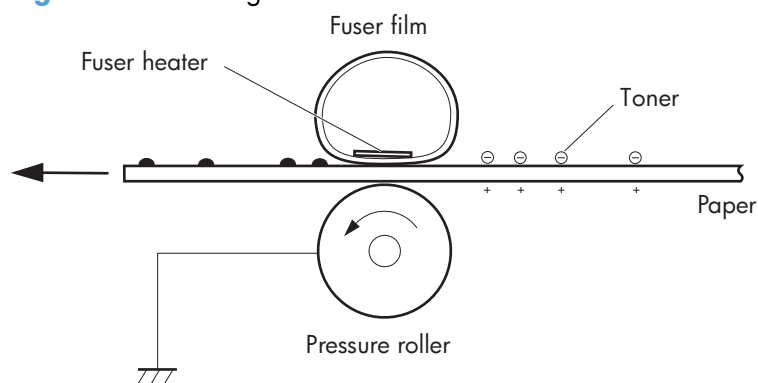
## Fusing stage

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 heat and pressure.

**Figure 1-16** Fusing

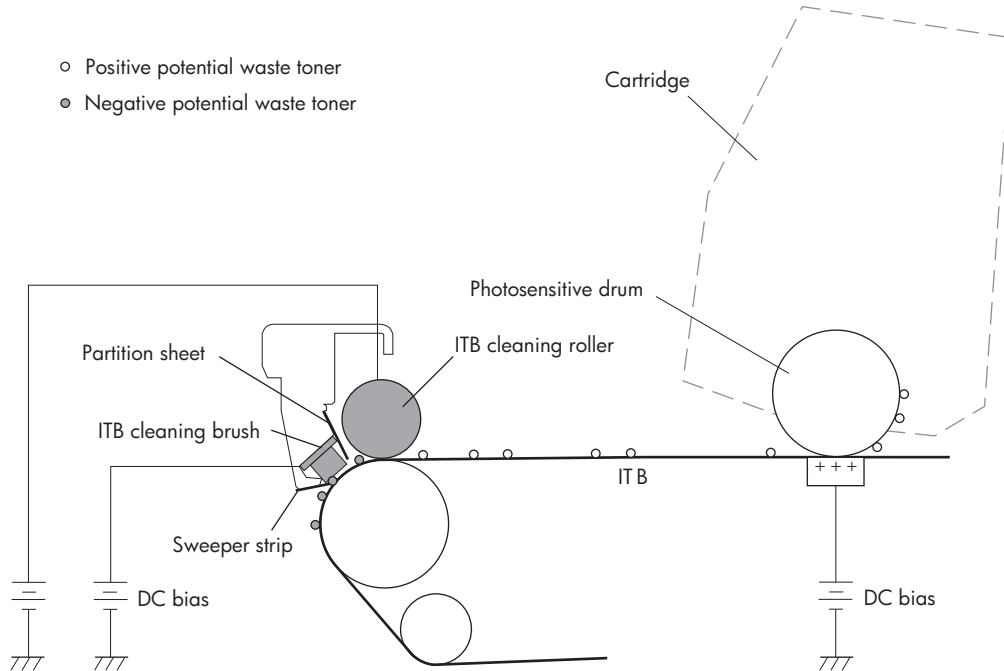


## ITB cleaning stage

### 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 1-17** ITB cleaning



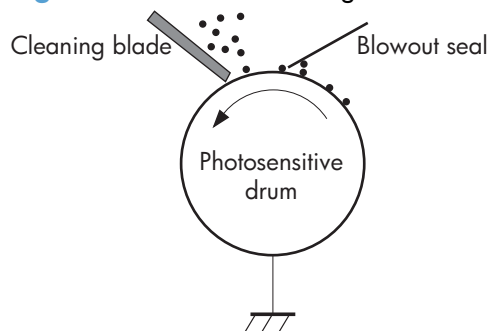
## Drum cleaning stage

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.

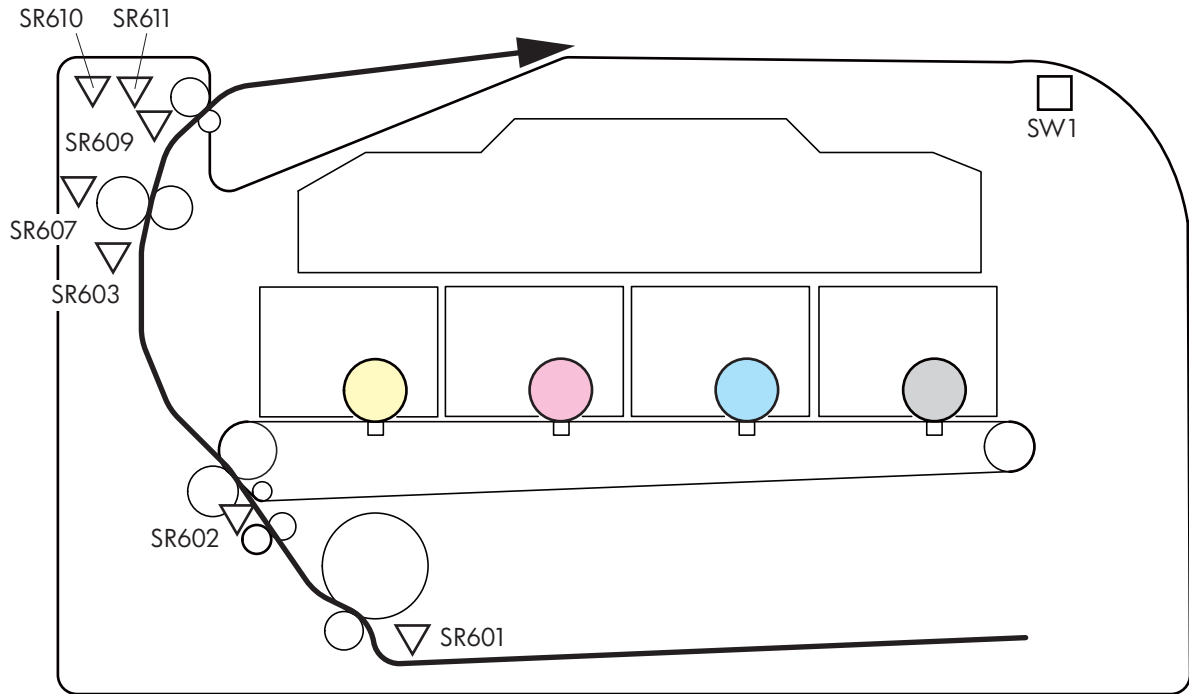
**Figure 1-18** Drum cleaning



## 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 1-19** Pickup-and-feed system



Number	Description	Number	Description
	Cassette paper out sensor	SR601	CASSETTE PAPER OUT signal
	Registration sensor	SR602	REGISTRATION signal
	Loop sensor	SR603	LOOP signal
	Fuser output sensor	SR609	FUSER OUTPUT signal
	Rear door open detection sensor	SR607	REAR DOOR OPEN DETECTION signal
	Paper width sensor (L)	SR610	PAPER WIDTH (L) signal
	Paper width sensor (R)	SR611	PAPER WIDTH (R) signal
	Front door open detection switch	SW1	FRONT DOOR OPEN DETECTION signal

## 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
- 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

## USB flash drive

This product features printing from the following types of files from the USB flash drive.

- PDF
- RGB JPEG

When a USB flash drive is inserted into the front of the product, the control panel will display the USB Flash Drive Menu. The files present on the USB flash drive can be accessed from the control panel using the touch screen. Any RGB jpeg or pdf files on the USB flash drive can be printed directly from the product control panel.

---

## 2 Solve problems

- [Solve problems checklist](#)
- [Menu map](#)
- [Troubleshooting process](#)
- [Tools for troubleshooting](#)
- [Clear jams](#)
- [Solve paper-handling problems](#)
- [Solve image quality problems](#)
- [Solve performance problems](#)
- [Solve product connectivity problems](#)
- [Service mode functions](#)
- [Product updates](#)

# Solve problems checklist

- 1.** Ensure that the product is set up correctly.
  - a.** Press the power button to turn on the product or to deactivate the Auto-Off mode.
  - b.** Check the power-cable connections.
  - c.** Ensure that the line voltage is correct for the product power configuration. (See the label that is on the back of the product for voltage requirements.) If you are using a power strip and its voltage is not within specifications, plug the product directly into the wall. If it is already plugged into the wall, try a different outlet.
- 2.** Check the cable connections.
  - a.** Check the cable connection between the product and the computer. Ensure that the connection is secure.
  - b.** Ensure that the cable itself is not faulty, by using a different cable, if possible.
  - c.** Check the network connection: Ensure the network light is lit. The network light is next to the network port on the back of the product.

If the product remains unable to connect to the network, uninstall and then reinstall the product. If the error persists, contact a network administrator.
- 3.** Check to see if any messages appear on the control panel.
- 4.** Ensure that the paper you are using meets specifications.
- 5.** Ensure that the paper is loaded correctly in the input tray.
- 6.** Ensure that the product software is installed correctly.
- 7.** Verify that you have installed the printer driver for this product and that you are selecting this product from the list of available printers.
- 8.** Print a configuration page.
  - a.** If the page does not print, verify that the input tray contains paper and that the paper is properly loaded.
  - b.** Ensure that the toner cartridge is installed correctly.



- c.** If the page jams in the product, clear the jam.
  - d.** If the print quality is unacceptable, complete the following steps:
    - Verify that the print settings are correct for the paper you are using.
    - Solve print-quality problems.
- 9.** Print a small document from a different program that has printed in the past. If this solution works, then the problem is with the program you are using. If this solution does not work (the document does not print), complete these steps:
- a.** Try printing the job from another computer that has the product software installed.
  - b.** Check the cable connection. Direct the product to the correct port, or reinstall the software, selecting the connection type you are using.

# Menu map

## Print a menu map (LCD control panel)




**NOTE:** This section applies to the HP LaserJet Pro 200 color M251n Printer model only.

1. On the control panel, press the **OK** button to open the menus.
2. Open the **Reports** menu.
3. Select **Menu Structure**, and then press the **OK** button to print the report.

## Print a menu map (touchscreen control panel)



**NOTE:** This section applies to the HP LaserJet Pro 200 color M251nw Printer model only.

1. From the Home screen on the product control panel, touch the Setup  button.
2. Touch the **Reports** button.
3. Touch the **Menu Structure** button.


# 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 the hardware malfunction. 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?

 **NOTE:** The customer is responsible for checking supplies and for using supplies that are in good condition.

## Pre-troubleshooting checklist

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

General topic	Questions
Environment	<ul style="list-style-type: none"><li>• Is the product installed on a solid, level surface (+/- 1°)?</li><li>• Is the power-supply voltage within <math>\pm 10</math> volts of the specified power source?</li><li>• Is the power-supply plug inserted in the product and the outlet?</li><li>• Is the operating environment within the specified parameters?</li><li>• Is the product exposed to ammonia gas, such as that produced by diazo copiers or office cleaning materials?  <b>NOTE:</b> Diazo copiers produce ammonia gas as part of the copying 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).</li><li>• Is the product exposed to direct sunlight?</li></ul>
Media	<ul style="list-style-type: none"><li>• Does the customer use only supported media?</li><li>• Is the media in good condition (no curls, folds, or distortion)?</li><li>• Is the media stored correctly and within environmental limits?</li></ul>
Input trays	<ul style="list-style-type: none"><li>• Is the amount of media in the tray within specifications?</li><li>• Is the media correctly placed in the tray?</li><li>• Are the paper guides aligned with the stack?</li><li>• Is the cassette correctly installed in the product?</li></ul>

General topic	Questions
Toner cartridges	<ul style="list-style-type: none"> <li>Is each toner cartridge installed correctly?</li> </ul>
Transfer unit and fuser	<ul style="list-style-type: none"> <li>Are the transfer unit and fuser installed correctly?</li> </ul>
Covers	<ul style="list-style-type: none"> <li>Is the front cover closed?</li> </ul>
Condensation	<ul style="list-style-type: none"> <li>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.</li> <li>Was the toner cartridge opened soon after being moved from a cold to a warm room? If so, allow the toner cartridge to sit at room temperature for 1 to 2 hours.</li> </ul>
Miscellaneous	<ul style="list-style-type: none"> <li>Check for and remove any non-HP components (toner cartridges, memory modules, and EIO cards) from the product.</li> <li>If the hardware or software configuration has not changed or the problem is not associated with any specific software, see the complete service manual for this product.</li> <li>Remove the product from the network and ensure that the failure is associated with the product before beginning troubleshooting.</li> <li>For any print-quality issues, calibrate the product.</li> </ul>

## 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 accessories or other devices, and then try to turn the product on again.
- Ensure 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


## Component diagnostics

### LED diagnostics

#### Network LEDs

The onboard network solution has two network port LEDs. When the product is connected to a properly working network through a network cable, the yellow LED indicates network activity, and the green LED indicates the link status. A blinking yellow LED indicates network traffic. If the green LED is off, a link has failed.


For link failures, check all of the network cable connections. In addition, you can try to manually configure the link settings on the onboard network solution by using the product control-panel menus.

1. Touchscreen control panel:
  - a. Touch the Setup  button.
  - b. Scroll to and touch the [Network Setup](#) menu.
  - c. Touch the [Link Speed](#) menu.
2. LCD control panel:
  - a. On the control panel, press the [OK](#) button to open the menus.
  - b. Open the following menus:
    - [Setup Menu](#)
    - [Network Setup](#)
    - [Link Speed](#)
3. Select one of the following options.

Setting	Description
<a href="#">Automatic</a>	The print server automatically configures itself for the highest link speed and communication mode allowed on the network.
<a href="#">10T Half</a>	10 megabytes per second (Mbps), half-duplex operation
<a href="#">10T Full</a>	10 Mbps, full-duplex operation
<a href="#">100TX Half</a>	100 Mbps, half-duplex operation
<a href="#">100TX Full</a>	100 Mbps, full-duplex operation

## Control panel LEDs

The state of the Ready light and the Attention light on the product signal the product status. The following table outlines the possible control-panel light states.

 **NOTE:** Wireless models have a blue LED that illuminates when the product's wireless function is enabled and available.





Product state	Ready light state	Attention light state
Initializing	Blinking	Blinking
Ready	On	Off
Receiving data/processing job or cancelling job	Blinking	Off
Error message	Off	Blinking
Fatal error (49 or 79 error) <sup>1</sup>	On	On

<sup>1</sup> The product restarts after one of these errors occurs.





## Control-panel diagnostics

The product includes diagnostic tests for the control panel.

### Test the control-panel display

1. Touch the Setup  button.
2. Touch the left arrow button , and then quickly touch the Cancel  button.
3. Touch the Setup  button to return to the main menu.
4. Open the [2ndary Service](#) menu.
5. Open the **Display test** menu.

### Test the control-panel buttons

1. Touch the Setup  button.
2. Touch the left arrow button , and then quickly touch the Cancel  button.
3. Touch the Setup  button to return to the main menu.
4. Open the [2ndary Service](#) menu.
5. Open the **Button test** menu.

## Engine diagnostics

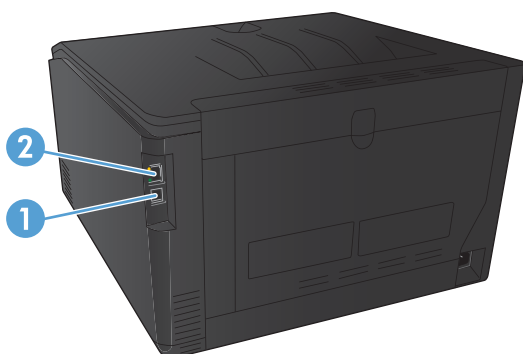
### Engine test

1. With the product off, open the front and rear doors.
2. Turn the power on, and close both doors within 10 seconds.
3. An engine test page (a page containing multiple horizontal-colored lines) will print.



## Diagrams

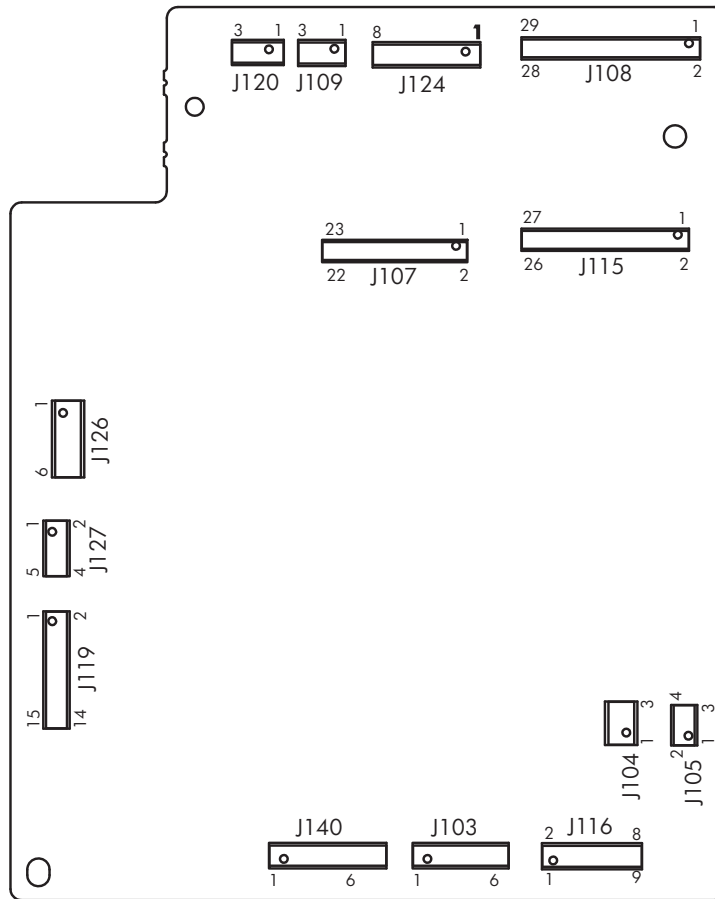
### Plug/jack locations



1	Hi-Speed USB 2.0 port
2	Network port

## DC controller PCA

**Figure 2-1** DC controller connectors



**Table 2-1** DC controller connectors

Item	Description
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)
J115	High-voltage power supply
J116	Pickup assembly <ul style="list-style-type: none"> <li>Loop sensor (SR603)</li> <li>Top-of-page sensor (SR602)</li> <li>Cassette media present sensor (SR601)</li> </ul>

**Table 2-1 DC controller connectors (continued)**

Item	Description
J119	ITB assembly density and perimeter sensors
J120	Developing home position sensor (SR606)
J124	Memory tags (e-labels)
J126	IOT
127	Flash
J130	Front door (cartridge access door) switch
J131	Power switch
J140	Motor driver

Locations of major components

Figure 2-2 Major components

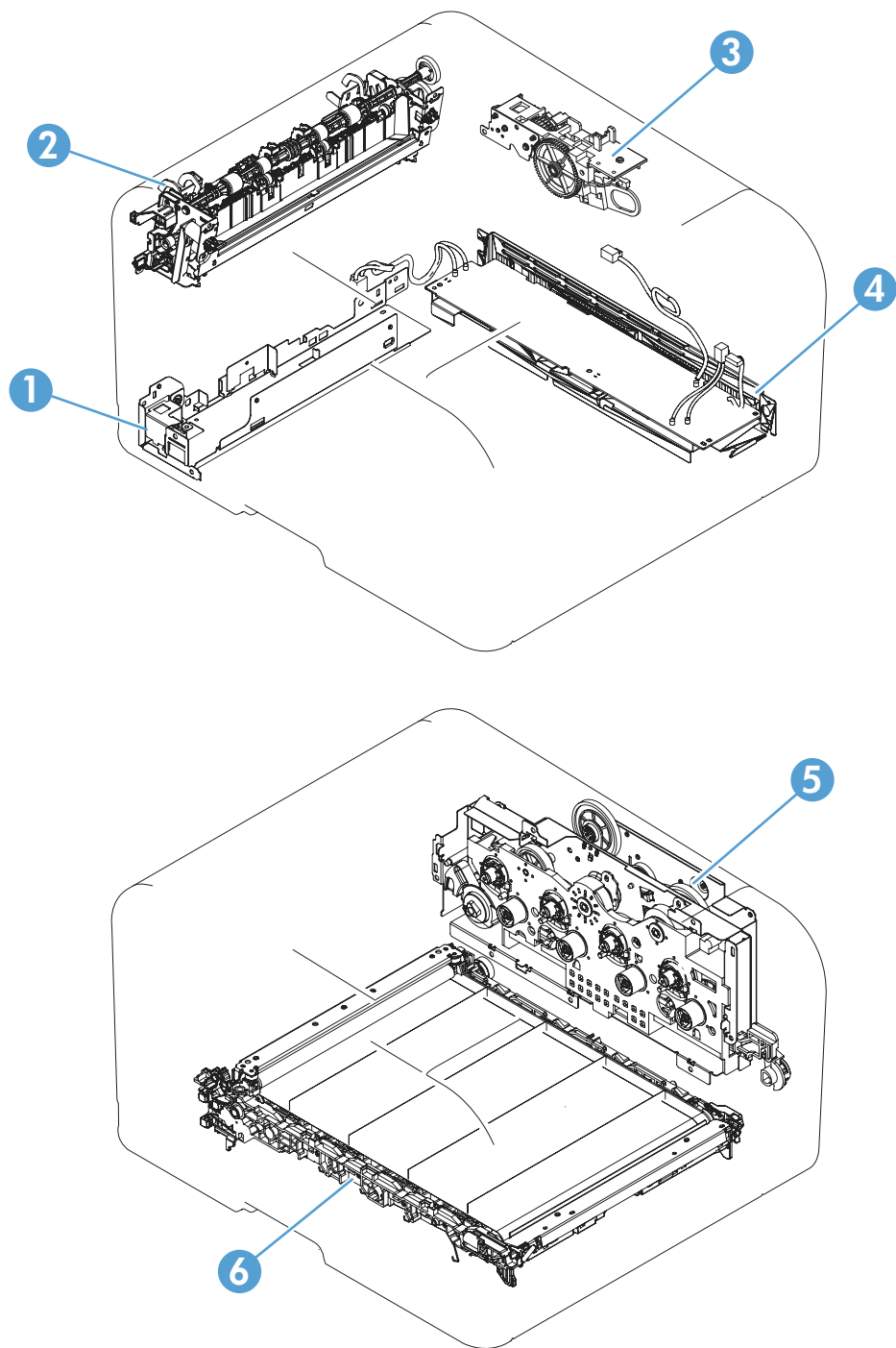


Table 2-2 Major components

Item	Description
1	Fuser power supply

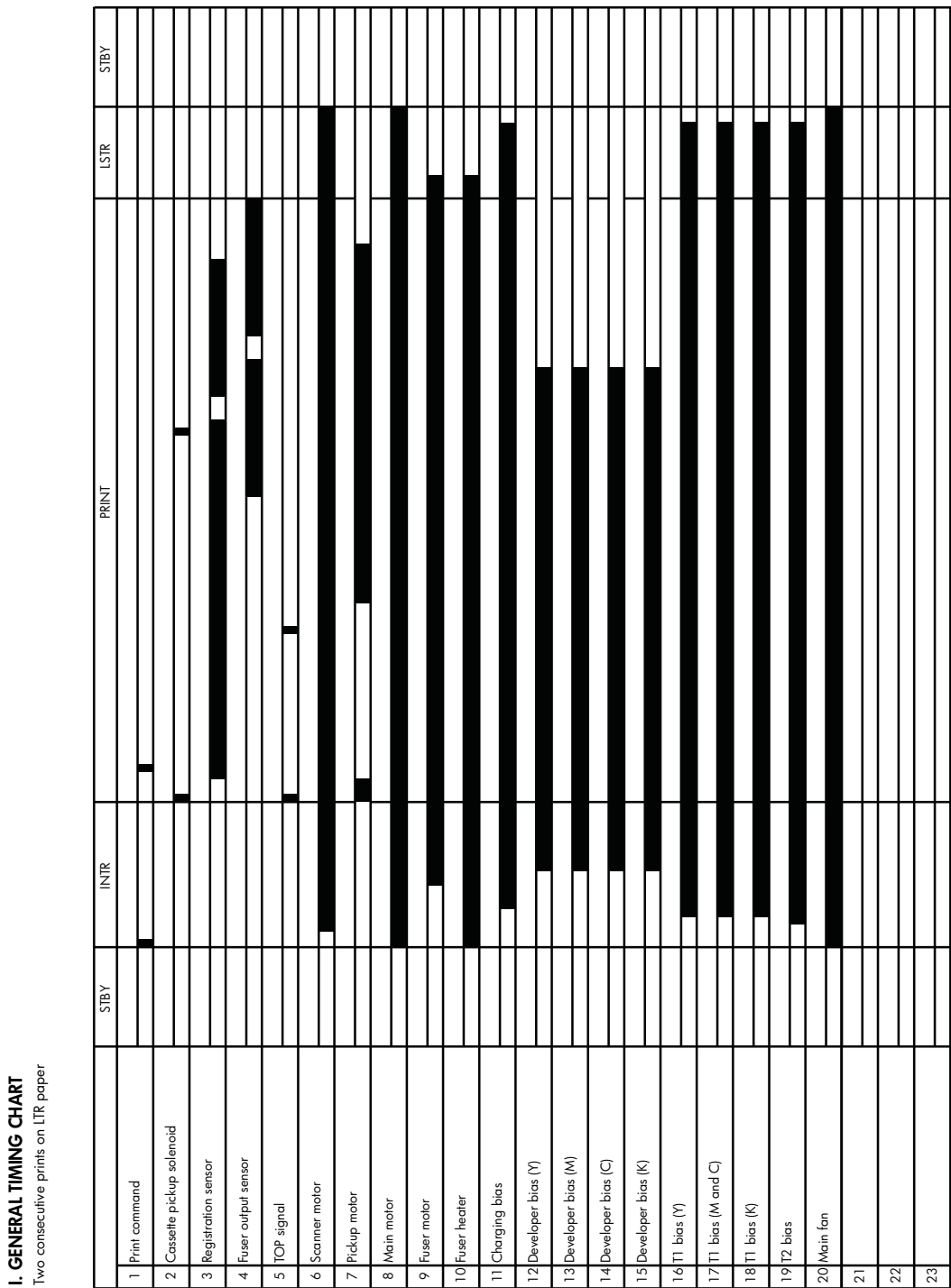
**Table 2-2 Major components (continued)**

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

# General timing chart

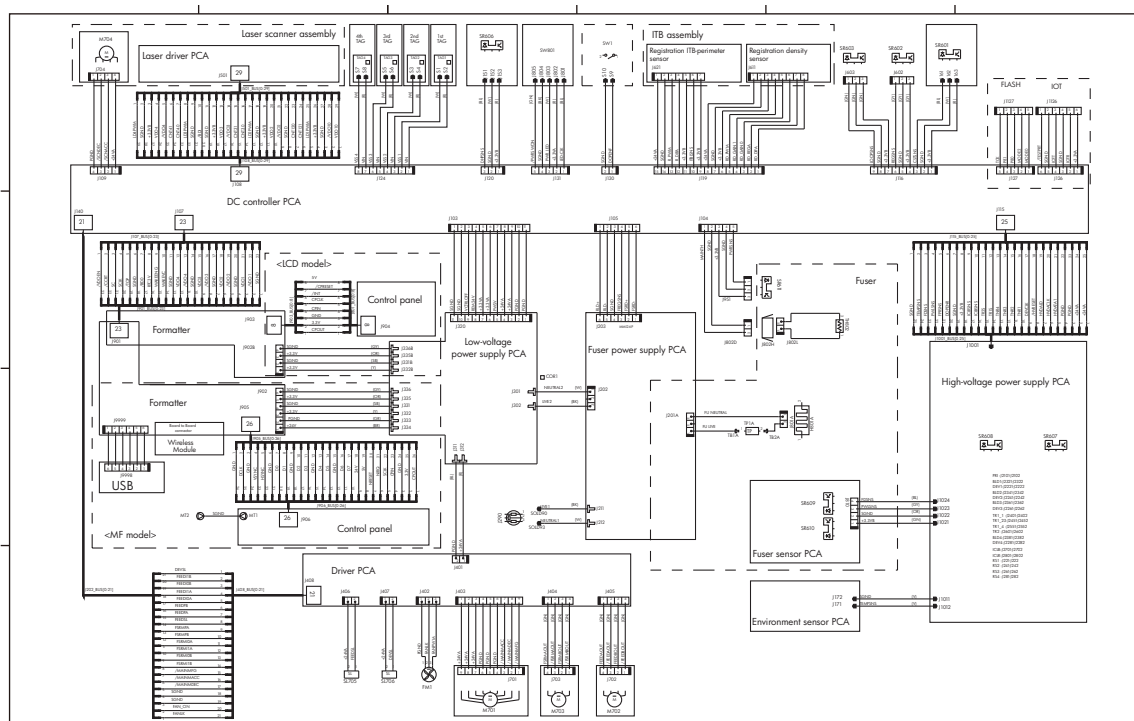
The following chart lists the approximate timing for this product, specified in seconds.

Figure 2-3 Timing diagram



## General circuit diagram

Figure 2-4 Circuit diagram

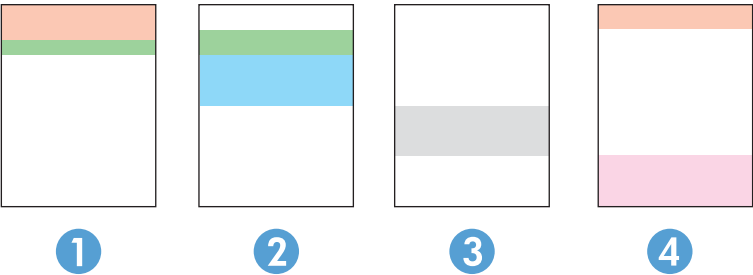


# Internal print-quality test pages

## Interpret the Print Quality Page

- 1. On the product control panel, open the [Reports](#) menu.
- 2. Select the [Print Quality Page](#) item to print it.

This page contains five bands of color, which are divided into four groups as indicated in the following illustration. By examining each group, you can isolate the problem to a particular print cartridge.



Section	Print-cartridge
1	Yellow
2	Cyan
3	Black
4	Magenta

- If dots or streaks appear in only one of the groups, replace the print cartridge that correlates with that group.
- If dots appear in more than one group, print a cleaning page. If this does not solve the problem, determine if the dots are always the same color; for example, if magenta dots appear in all five color bands. If the dots are all the same color, replace that print cartridge.
- If streaks appear in multiple color bands, contact HP. A component other than the print cartridge is probably causing the problem.


## Print a cleaning page

Print a cleaning page to remove dust and excess toner from the paper path if you are having any of the following problems:

- Specks of toner are on the printed pages.
- Toner is smearing on the printed pages.
- Repeated marks occur on the printed pages.




## Print a cleaning page (LCD control panel)

 **NOTE:** This section applies to the HP LaserJet Pro 200 color M251n Printer model only.

1. On the control panel, press the **OK** button to open the menus.
2. Open the following menus:
  - **Service**
  - **Cleaning Page**
3. Load plain paper in Tray 1, and then press the **OK** button to start the cleaning process.
4. The product prints the first side and then prompts you to remove the page from the output bin and reload it in Tray 1, keeping the same orientation (the side with the black stripe should be face-down with the arrow toward the back of the product).
5. Press the **OK** button to continue the cleaning process. Wait until the process is complete. Discard the page that prints.

## Print a cleaning page (touchscreen control panel)

 **NOTE:** This section applies to the HP LaserJet Pro 200 color M251nw Printer model only.

1. From the Home screen on the product control panel, touch the Setup  button.
2. Touch the **Service** menu.
3. Touch the **Cleaning Page** button.
4. Load plain letter or A4 paper when you are prompted.
5. Touch the **OK** button to begin the cleaning process.
6. The product prints the first side and then prompts you to remove the page from the output bin and reload it in Tray 1, keeping the same orientation (the side with the black stripe should be face-down with the arrow toward the back of the product).
7. Press the **OK** button to continue the cleaning process. Wait until the process is complete. Discard the page that prints.

## Configuration page

### Print a configuration page (LCD control panel)

 **NOTE:** This section applies to the HP LaserJet Pro 200 color M251n Printer model only.


The configuration page lists current product settings and properties. This page also contains a status log report. To print a configuration page, do one of the following:

1. Press **OK** to open the menus.
2. Press the left arrow ◀ or right arrow ▶ button to navigate to **Reports**, and then press the **OK** button.
3. Press the left arrow ◀ or right arrow ▶ button to navigate to the **Configuration Page** report, and then press the **OK** button to print the report.
4. Press **Cancel** **X** to exit the menus.

### Print a configuration page (touchscreen control panel)



**NOTE:** This section applies to the HP LaserJet Pro 200 color M251nw Printer model only.


1. From the Home screen on the product control panel, touch the Setup  button.
2. Touch the **Reports** button.
3. Touch **Configuration Report**.

## Print-quality troubleshooting tools

### 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. For the most accurate results, use a metric ruler.

**Table 2-3 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)	Charge roller (one rotation)	Appears in a single color plane.
28.5 mm (1.12 in)	RS roller (one rotation)	Appears in a single color plane.
44.0 mm (1.73 in)	Registration roller	
56.5 mm (2.22 in)	Fuser film (one rotation)	Appears in all color planes.
59.7 mm (2.35 in)	Fuser pressure roller (one rotation)	Appears in all color planes.
56.5 mm (2.22 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.
69.0 mm (2.71 in)	ITB drive roller pitch	

### Calibrate the product to align the colors

If the printed output has colored shadows, blurry graphics, or areas that have poor color, you might need to calibrate the product to align the colors. Print the Diagnostics Page from the Reports menu on the control panel to check the color alignment. If the blocks of color on that page are not aligned with each other, you need to calibrate the product.

1. On the product control panel, open the [System Setup](#) menu.
2. Open the [Print Quality](#) menu, and select the [Color Calibration](#) item.
3. Select the [Calibrate Now](#) option.

## Control-panel menus

### Setup Menu

To open this menu, touch the Setup  button. The following sub menus are available:

- HP Web Services
- Reports
- Self Diagnostics
- System Setup
- Service
- Network Setup
- Quick Forms

### HP Web Services

Menu item	Description
Enable Web Services	<p>Use <a href="#">Enable Web Services</a> to set up Web Services on the product.</p> <p><b>NOTE:</b> You must be connected to a network to enable HP Web Services.</p>
Proxy Settings	<p>The Proxy Settings sub-menu includes the following:</p> <ul style="list-style-type: none"><li>• <a href="#">Proxy Server</a></li><li>• <a href="#">Proxy Port</a></li><li>• <a href="#">Username</a></li><li>• <a href="#">Password</a></li></ul>

## Reports menu

Menu item	Description
Demo Page	Prints a page that demonstrates print quality
Menu Structure	Prints a control-panel menu layout map
Configuration Report	Prints a list of the product settings
Supplies Status	Prints the Supplies Status report. This report includes the following information: <ul style="list-style-type: none"><li>• Approximate pages remaining</li><li>• Supply level</li><li>• Serial number</li><li>• Number of pages printed</li><li>• First install date</li><li>• Last used date</li></ul>
Network Summary	Prints the Network Summary report. This report includes the following information: <ul style="list-style-type: none"><li>• Network hardware configuration</li><li>• Enabled features</li><li>• TCP/IP and SNMP information</li><li>• Network statistics</li><li>• Wireless network configuration (wireless models only)</li></ul>
Usage Page	Displays the number of pages printed by the product
PCL Font List	Prints a list of all installed PCL 5 fonts
PS Font List	Prints a list of all installed PS fonts
PCL6 Font List	Prints a list of all installed PCL 6 fonts
Color Usage Log	Prints information about the color supply usage
Service Page	Prints the service page  The service page includes information about supported paper types, copy settings, and other settings that are not included on the configuration page.
Diagnostics Page	Prints diagnostic information about calibration and color quality
Print Quality Page	Prints a page that helps solve problems with print quality

## Self Diagnostics menu

Menu item	Description
Run Network Test	<p>The network test provides information on the following:</p> <ul style="list-style-type: none"><li>• Diagnostics summary</li><li>• Troubleshooting</li><li>• Configuration summary</li></ul>


## System Setup menu

In the following table, items that have an asterisk (\*) indicate the factory default setting.

Menu item	Sub-menu item	Sub-menu item	Description
Language	(List of available control-panel display languages.)		Sets the language in which the control panel displays messages and product reports.
Paper Setup	Default Paper Size	Letter	Sets the size for printing internal reports or any print job that does not specify a size.  <b>NOTE:</b> The default setting is determined by the choice of location during the initial product setup.
		A4	
		Legal	
	Default Paper Type	Lists available paper types.	Sets the type for printing internal reports or any print job that does not specify a type.
	Tray 1	Paper Type	Configures the size and type for the tray.
		Paper Size	
	Paper Out Action	Wait forever*	Determines how the product reacts when a print job requires a paper size or type that is unavailable or when the tray is empty.  <ul style="list-style-type: none"> <li>• <b>Wait forever:</b> The product waits until you load the correct paper.</li> <li>• <b>Override:</b> Print on a different size paper after a specified delay.</li> <li>• <b>Cancel:</b> Automatically cancel the print job after a specified delay.</li> <li>• If you select either the <b>Override</b> or <b>Cancel</b> item, the control panel prompts you for the number of seconds to delay.</li> </ul>
		Cancel	
		Override	
Print Quality	Color Calibration	Calibrate Now	Performs a full calibration.  <ul style="list-style-type: none"> <li>• <b>Calibrate Now:</b> Performs an immediate calibration.</li> <li>• <b>Power-On Calibration:</b> Specify the length of time the product should wait after you turn it on before it calibrates.</li> </ul>
		Power-On Calibration	

Menu item	Sub-menu item	Sub-menu item	Description
Energy Settings	Sleep Delay	Off	Specifies the amount of idle time before the product enters sleep mode.
		1 Minute	
		15 Minutes*	
		30 Minutes	
		1 Hour	
		2 Hours	
	Auto Power Down	Power Down Delay	Set the amount of elapsed time before the product turns itself off. The options are:
	Wake Events		Select the events that bring the product out of sleep mode. The following events are available for selection:



Menu item	Sub-menu item	Sub-menu item	Description
Supply Settings	Black Cartridge	Very Low Setting	Stop  Prompt*  Continue
		Low Threshold	Enter a percentage for the low threshold setting.
	Color Cartridges	Very Low Setting	Stop: The product stops printing until you replace the print cartridge.  Prompt*: The product stops printing and prompts you to replace the print cartridge. You can acknowledge the prompt and continue printing.  Continue: The product alerts you that the print cartridge is very low, but it continues printing.  Print Black: When a color print cartridge becomes very low, the product prints in black. When you choose to replace the very low print cartridge, color printing resumes automatically. To configure the product to print in color and use the remaining toner in the print cartridge past very low, follow these steps:  <ol style="list-style-type: none"> <li>1. On the product control panel, touch the Setup  button, and then touch the <a href="#">System Setup</a> button.</li> <li>2. Touch the <a href="#">At Very Low</a> button, and then touch the <a href="#">Color Cartridges</a> button. Touch the <a href="#">Continue</a> button.</li> </ol>
		Low Threshold	Set a low threshold percentage setting for the following colors:  <ul style="list-style-type: none"> <li>• <a href="#">Cyan</a></li> <li>• <a href="#">Magenta</a></li> <li>• <a href="#">Yellow</a></li> </ul>
	Store Usage Data		Select where to store the product's usage data, either on the supplies or not on the supplies.
Administration	Product Security	On	Sets the product-security feature. If you select the <a href="#">On</a> setting, you must set a password.
		Off*	
	USB Flash Drive	On*	Enables or disables the USB flash drive.
		Off	
Courier Font	Regular*		Sets Courier font values.
	Dark		

## Service menu

In the following table, items that have an asterisk (\*) indicate the factory default setting.

Menu item	Sub-menu item	Sub-menu item	Description
Cleaning Page			<p>Cleans the product when specks or other marks appear on printed output. The cleaning process removes dust and excess toner from the paper path.</p> <p>When selected, the product prompts you to load plain Letter or A4 paper in Tray 1. Touch the <b>OK</b> button to begin the cleaning process. Wait until the process completes. Discard the page that prints.</p>
USB Speed	High*	Full	<p>Sets the USB speed for the USB connection to the computer.</p> <p>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 does not reflect the current operating speed of the product.</p>
Less Paper Curl	On	Off*	When printed pages are consistently curled, this option sets the product to a mode that reduces curl.
Archive Print	On	Off*	When printing pages that will be stored for a long time, this option sets the product to a mode that reduces toner smearing and dusting.
Firmware Datecode			Displays the current firmware datecode
Restore Defaults			Sets all settings to the factory default values
Signature Check	Cancel if Invalid*	Prompt if Invalid	Validates HP firmware downloads.
HP Smart Install	On*	Off	Enable, or disable, the HP Smart Install feature on the product.

Menu item	Sub-menu item	Sub-menu item	Description
LaserJet Update	Check for Updates Now	Install Now	
		Remind Me Later	
		Skip this Update	
	Manage Updates	Allow Downgrade	
		Check Automatically	
		Prompt Before Install	
		Allow Updates	

## Network Setup menu

In the following table, items that have an asterisk (\*) indicate the factory default setting.

Menu item	Sub-menu item	Description
Wireless Menu (wireless models only)	Wireless Direct Settings	Manage the product's wireless direct settings.
	Wireless Setup Wizard	Guides you through the steps to set up the product on a wireless network
	Wi-Fi Protected Setup	If your wireless router supports this feature, use this method to set up the product on a wireless network. This is the simplest method.
	Run Network Test	Tests the wireless network and prints a report with the results.
	Turn Wireless On/Off	Enables or disables the wireless network feature.
TCP/IP Config	Automatic*	<b>Automatic:</b> The product automatically configures all the TCP/IP settings via DHCP, BootP or AutoIP.
	Manual	<b>Manual:</b> You can manually configure the IP address, subnet mask, and default gateway. The control panel prompts you to specify values for each address section. As each address is completed, the product prompts for address confirmation before moving to the next one. After all three addresses are set, the network reinitializes.
Network Services	IPv4	Enable or disable the IPv4 and IPv6 protocols. By default, each protocol is enabled.
	IPv6	
Link Speed	Automatic*	Sets the link speed manually if needed.
	10T Full	After setting the link speed, the product automatically restarts.
	10T Half	
	100TX Full	
	100TX Half	
HTTPS Enforcement	Yes	An encrypted communication and secure identification of a network web server. Only enabled if printer is password protected.
	*No	
Restore Defaults		Resets all network configurations to their factory defaults.

## Quick Forms menu

Menu item	Sub-menu item	Description
Notebook Paper	Narrow Rule	Prints pages that have preprinted lines
	Wide Rule	
	Child Rule	
Graph Paper	1/8 inch	Prints pages that have preprinted graph lines
	5 mm	
Checklist	1-Column	Prints pages that have preprinted lines with check boxes
	2-Column	
Music Paper	Portrait	Prints pages that have preprinted lines for writing music
	Landscape	

## Function specific menus

The product features function-specific menus for copying and using a USB flash drive. To open these menus, touch the button for that function on the control panel.

### Apps

Use the [Apps](#) menu to install HP Web Services applications.

### USB Flash Drive

The following types are supported:

- .PDF
- .JPG

Menu item	Description
<a href="#">Print Documents</a>	<p>Prints documents stored on the USB flash drive. Use the arrow buttons to scroll through the documents. Touch the names of documents to print.</p> <p>Touch the summary screen to change settings such as the number of copies, the paper size, or the paper type.</p> <p>Touch the <a href="#">Print</a> button to print the documents.</p>
<a href="#">View and Print Photos</a>	<p>Previews photos on the USB flash drive. Use the arrow buttons to scroll through the photos. Touch the preview image for each photo to print. Adjust the settings, and save the changes as the new default settings. To print the photos, touch the <a href="#">Print</a> button.</p>

## Interpret control panel messages

### Control panel message types

The control panel messages indicate the current product status or situations that might require action.

Alert and warning messages appear temporarily and might require you to acknowledge the messages by touching the **OK** button to resume the job or by touching the **Cancel** **X** button to cancel the job. With certain warnings, the job might not complete or the print quality might be affected. If the alert or warning message is related to printing and the auto-continue feature is on, the product will attempt to resume the printing job after the message has appeared for 10 seconds without acknowledgement.

Critical error messages can indicate some kind of failure. Turning off and then turning on the power might fix the problem. If a critical error persists, the product might require service.

### Control panel messages

#### 10.X00Y Supply Error

##### Description

The memory chip for one of the toner cartridges cannot be read or is missing.

- 10.0000 = black memory chip error
- 10.0001 = cyan memory chip error
- 10.0002 = magenta memory chip error
- 10.0003 = yellow memory chip error
- 10.1000 = black memory chip is missing
- 10.1001 = cyan memory chip is missing
- 10.1002 = magenta memory chip is missing
- 10.1003 = yellow memory chip is missing

##### Recommended action

Reinstall the toner cartridge.

Turn the product off and then on.

If the problem is not solved, replace the toner cartridge.

If the problem is still not solved, verify that the connector J124 on the DC controller is firmly seated.

Replace the DC controller.

## 49 Error, Turn off then on

### Description

The product experienced an internal error.

### Recommended action

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.

If the message persists, contact HP support.

## 50.x Fuser Error

### Description

The product has experienced an error with the fuser.

### Recommended action

Turn the product power off, wait at least 30 seconds, and then turn the product power on and wait for it to initialize.

Turn off the product, wait at least 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.

If the message persists, contact HP support.

## 51.XX Error

### Description

The product has experienced an internal hardware error.

### Recommended action

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 on.

If the message persists, contact HP support.

## 54.XX Error

### Description

The product has experienced an error with one of the internal sensors.



**Recommended action**

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.

If the message persists, contact HP support.

**55.X Error****Description**

The product has experienced an internal error.

**Recommended action**

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.

If the message persists, contact HP support.

**57 Fan Error, Turn off then on****Description**

The product has experienced a problem with its internal fan.

**Recommended action**

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.

If the message persists, contact HP support.

**59.X Error****Description**

The product has experienced a problem with one of the motors.

**Recommended action**

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.

If the message persists, contact HP support.

## 79 Error Turn off then on

### Description

The product has experienced an internal firmware error.

### Recommended action

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.

If the message persists, contact HP support.

## Black Cartridge Low

### Description

The toner cartridge is at the end of its useful life. A customer configurable option on this product is "Prompt to Remind Me in 100 pages, 200 pages, 300 pages, 400 pages, or never." This option is provided as a customer convenience and is not an indication these pages will have acceptable print quality.

### Recommended action

Printing can continue, but consider having a replacement supply on hand.

## Black in wrong position

### Description

The toner cartridge is installed in the incorrect slot.

### Recommended action

Ensure that each toner cartridge is installed in the correct slot. From front to back, the toner cartridges are installed in this order: black, cyan, magenta, and yellow.

## Black Very Low

### Description

The toner cartridge is at the end of its useful life. A customer configurable option on this product is "Prompt to Remind Me in 100 pages, 200 pages, 300 pages, 400 pages, or never." This option is provided as a customer convenience and is not an indication these pages will have acceptable print quality.

### Recommended action

To ensure optimal print quality, HP recommends replacing the toner cartridge at this point. You can continue printing until you notice a decrease in print quality. Actual cartridge life might vary.

Once an HP supply has reached **Very Low**, HP's Premium Protection Warranty on that supply has ended. All print defects or cartridge failures incurred when an HP supply is used in [Continue](#) at very low mode will not be considered to be defects in materials or workmanship in the supply under the HP Print Cartridge Warranty Statement.

## Cleaning

### Description

The product periodically performs a cleaning procedure to maintain the best print quality.

### Recommended action

Wait for the cleaning process to finish.

## Cyan Cartridge Low

### Description

The toner cartridge is nearing the end of its useful life.

### Recommended action

Printing can continue, but consider having a replacement supply on hand.

## Cyan in wrong position

### Description

The toner cartridge is installed in the incorrect slot.

### Recommended action

Ensure that each toner cartridge is installed in the correct slot. From front to back, the toner cartridges are installed in this order: black, cyan, magenta, and yellow.

## Cyan Very Low

### Description

The toner cartridge is at the end of its useful life. A customer configurable option on this product is "Prompt to Remind Me in 100 pages, 200 pages, 300 pages, 400 pages, or never." This option is provided as a customer convenience and is not an indication these pages will have acceptable print quality.

### Recommended action

To ensure optimal print quality, HP recommends replacing the toner cartridge at this point. You can continue printing until you notice a decrease in print quality. Actual cartridge life might vary.

Once an HP supply has reached **Very Low**, HP's Premium Protection Warranty on that supply has ended. All print defects or cartridge failures incurred when an HP supply is used in [Continue](#) at very low mode will not be considered to be defects in materials or workmanship in the supply under the HP Print Cartridge Warranty Statement.

## Device error, press OK

### Description

An internal error occurred.

### Recommended action

Touch the **OK** button to resume the job.

## Door open

### Description

The product front door is open.

### Recommended action

Close the door.

## Genuine HP supply installed

### Description

A genuine HP supply was installed.

### Recommended action

No action necessary.

## Incompatible <color>

### Description

You have installed a toner cartridge that is intended for use in a different HP product model. The product might not function correctly with this toner cartridge installed.

### Recommended action

Install the correct toner cartridge for this product.

## Incorrect supplies

### Description

More than one toner cartridge is installed in the incorrect slot.

### Recommended action

Be sure that each toner cartridge is in the correct slot. From front to back, the toner cartridges are installed in this order: black, cyan, magenta, yellow.

### Install <color> cartridge

#### Description

The toner cartridge is either not installed or not correctly installed in the product.

#### Recommended action

Install the toner cartridge.

### Invalid driver Press [OK]

#### Description

You are using an incorrect printer driver.

#### Recommended action

Select the correct printer driver.

### Jam in Tray 1, Clear jam and then press OK

#### Description

The product has detected a jam.

#### Recommended action

Clear the jam from the tray, and then touch OK.

If the message persists, contact HP support.

### Load tray 1 Press [OK] for available media

#### Description

The tray is empty.

#### Recommended action

Load paper into the tray to continue printing. Touch the OK button to select a different tray.

### Load Tray 1 <TYPE> <SIZE>, Press OK to use available media

#### Description

The tray is not configured for the paper type and size that the print job is requesting.

#### Recommended action

Load the correct paper into Tray 1. Or touch the OK button to use the paper currently in the tray.

### Load Tray 1, <PLAIN> <SIZE> / Cleaning mode, OK to start

#### Description

The product is ready to process the cleaning operation.

### **Recommended action**

Load Tray 1 with plain paper in the size indicated, and then touch the **OK** button.

## **Magenta Cartridge Low**

### **Description**

The toner cartridge is nearing the end of its useful life.

### **Recommended action**

Printing can continue, but consider having a replacement supply on hand.

## **Magenta in wrong position**

### **Description**

The toner cartridge is installed in the incorrect slot.

### **Recommended action**

Ensure that each toner cartridge is installed in the correct slot. From front to back, the toner cartridges are installed in this order: black, cyan, magenta, and yellow.

## **Magenta Very Low**

### **Description**

The toner cartridge is at the end of its useful life. A customer configurable option on this product is "Prompt to Remind Me in 100 pages, 200 pages, 300 pages, 400 pages, or never." This option is provided as a customer convenience and is not an indication these pages will have acceptable print quality.

### **Recommended action**

To ensure optimal print quality, HP recommends replacing the toner cartridge at this point. You can continue printing until you notice a decrease in print quality. Actual cartridge life might vary.

Once an HP supply has reached **Very Low**, HP's Premium Protection Warranty on that supply has ended. All print defects or cartridge failures incurred when an HP supply is used in **Continue** at very low mode will not be considered to be defects in materials or workmanship in the supply under the HP Print Cartridge Warranty Statement.

## **Manual Duplex Load Tray 1, Press OK**

### **Description**

The first side of a manual duplex job has printed, and the page needs to be loaded to process the second side.

### **Recommended action**

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 touch the **OK** button.

### Memory is low. Press OK.

#### Description

The product memory is almost full.

#### Recommended action

Touch the OK button to finish the job, or touch the Cancel ✕ button to cancel the job.

Break the job into smaller jobs that contain fewer pages.

### Misprint, Press OK

#### Description

Paper has been delayed as it moves through the product.

#### Recommended action

Touch the OK button to clear the message.

To avoid this problem, try the following solutions:

1. Adjust the paper guides in the tray. Ensure the front paper guide is pushing the paper against the back edge of the tray.
2. Use paper that meets HP specifications. Store paper unopened in its original packaging.
3. Use the product in an area that meets the environmental specifications for this product.

### Print failure, press OK. If error repeats, turn off then on.

#### Description

The product cannot process the page.

#### Recommended action

Touch the OK button to continue printing the job, but output might be affected.

If the error persists, turn the power off and then on. Resend the print job.

### Rear door open

#### Description

The product rear door is open.

#### Recommended action

Close the door.

## Remove shipping lock from <color> cartridge

### Description

A toner cartridge shipping lock is installed.

### Recommended action

Pull the orange tab to remove the shipping lock from the cartridge.

## Remove shipping locks from cartridges

### Description

A toner cartridge shipping lock is installed on one or more toner cartridges.

### Recommended action

Pull the orange tab to remove the shipping lock from the cartridge.

## Replace <color>

### Description

The toner cartridge is at the end of its useful life, and the product is customer-configured to stop printing when it reaches the very low state.

### Recommended action

To ensure optimal print quality, HP recommends replacing the toner cartridge at this point. You can continue printing until you notice a decrease in print quality. Actual cartridge life might vary. Once an HP supply has reached **Very Low**, HP's Premium Protection Warranty on that supply has ended. All print defects or cartridge failures incurred when an HP supply is used in **Continue** at very low mode will not be considered to be defects in materials or workmanship in the supply under the HP Print Cartridge Warranty Statement.

## Supplies low

### Description

More than one toner cartridge is nearing the end of its useful life.

### Recommended action

Check the supply level gauges on the control panel, or print a supplies status page to determine which toner cartridges are low.

Printing will continue until a **Very Low** message displays. Consider having replacement supplies on hand.

## Unexpected size in tray 1 Load <size> Press [OK]

### Description

The product has detected paper in the tray that does not match the configuration for the tray.



**Recommended action**

Load the correct paper into the tray, or configure the tray for the size that you have loaded.

**Unsupported <color> Press [OK] to continue****Description**

The product has detected a toner cartridge that was not made by HP.

**Recommended action**

Touch the **OK** button to continue printing.

If you believe you purchased an HP supply, go to [www.hp.com/go/anticonterfeit](http://www.hp.com/go/anticonterfeit). Service or repairs that are required as a result of using unsupported supplies is not covered under HP warranty.

**Used <color> in use****Description**

You are using a toner cartridge that reached the default low threshold while it was installed in a product.

**Recommended action**

Printing can continue, but consider having a replacement supply on hand.

**Used <color> installed, to accept press OK****Description**

You have installed a toner cartridge that reached the default low threshold while it was installed in another product.

**Recommended action**

Touch the **OK** button to continue.

**Used supplies in use****Description**

You are using more than one toner cartridge that reached the default low threshold while it was installed in a product.

**Recommended action**

Printing can continue, but consider having replacement supplies on hand.

**Yellow Cartridge Low****Description**

The toner cartridge is nearing the end of its useful life.

### Recommended action

Printing can continue, but consider having a replacement supply on hand.

## Yellow in wrong position

### Description

The toner cartridge is installed in the incorrect slot.

### Recommended action

Ensure that each toner cartridge is installed in the correct slot. From front to back, the toner cartridges are installed in this order: black, cyan, magenta, and yellow.

## Yellow Very Low

### Description

The toner cartridge is at the end of its useful life. A customer configurable option on this product is "Prompt to Remind Me in 100 pages, 200 pages, 300 pages, 400 pages, or never." This option is provided as a customer convenience and is not an indication that these pages will have acceptable print quality.

### Recommended action

To ensure optimal print quality, HP recommends replacing the toner cartridge at this point. You can continue printing until you notice a decrease in print quality. Actual cartridge life might vary.

Once an HP supply has reached **Very Low**, HP's Premium Protection Warranty on that supply has ended. All print defects or cartridge failures incurred when an HP supply is used in [Continue](#) at very low mode will not be considered to be defects in materials or workmanship in the supply under the HP Print Cartridge Warranty Statement.

## Event-log messages

The following product events do not produce a message that appears on the control panel. Instead, they are recorded in the event log. To print the event log, open the secondary service menu, select **Service Reports**, and then select **Error Report**.

**Table 2-4 Event-log messages**

Event 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
10.0004	Imaging drum e-label error
10.1000	Black e-label missing
10.1001	Cyan e-label missing

**Table 2-4 Event-log messages (continued)**

Event code	Description
10.1002	Magenta e-label missing
10.1003	Yellow e-label missing
10.1004	Imaging drum e-label missing
10.3000	Non-HP black
10.3001	Non-HP cyan
10.3002	Non-HP magenta
10.3003	Non-HP yellow
10.3004	Non-HP drum
10.3100	Non-HP cloned black
10.3101	Non-HP cloned cyan
10.3102	Non-HP cloned magenta
10.3103	Non-HP cloned yellow
10.3104	Non-HP cloned imaging drum
10.3200	Unauthorized black supply
10.3201	Unauthorized cyan supply
10.3202	Unauthorized magenta supply
10.3203	Unauthorized yellow supply
10.3300	Used (moved) black supply
10.3301	Used (moved) cyan supply
10.3302	Used (moved) magenta supply
10.3303	Used (moved) yellow supply
10.3400	Used (beyond life) black supply
10.3401	Used (beyond life) cyan supply
10.3402	Used (beyond life) magenta supply
10.3403	Used (beyond life) yellow supply
10.3500	Incompatible black supply
10.3501	Incompatible cyan supply
10.3502	Incompatible magenta supply
10.3503	Incompatible yellow supply
10.4000	Genuine HP supplies installed (transition caused by black)
10.4001	Genuine HP supplies installed (transition caused by cyan)
10.4002	Genuine HP supplies installed (transition caused by magenta)

**Table 2-4 Event-log messages (continued)**

<b>Event code</b>	<b>Description</b>
10.4003	Genuine HP supplies installed (transition caused by yellow)
10.4100	Unsupported black supply
10.4101	Unsupported cyan supply
10.4102	Unsupported magenta supply
10.4103	Unsupported yellow supply
10.7000	Printing past very low black
10.7001	Printing past very low cyan
10.7002	Printing past very low magenta
10.7003	Printing past very low yellow
10.7100	Printing black only
10.8100	Not printing black only
10.9531	Unspecified supply error in Toner Collection Unit
10.9800	Waste Toner Out (full) black
10.9801	Waste Toner Out (full) cyan
10.9802	Waste Toner Out (full) magenta
10.9803	Waste Toner Out (full) yellow
13.0000	Paper jam
13.1200	External device paper jam (13.12XX)
20.0000	Memory out in print
20.0001	Memory out in copy
20.0002	Memory out in scan
20.0003	Memory out in photo
20.0006	Memory out in scan calibration
21.0000	Page punt
25.0000	SMTP error
30.0012	Scanner motor test failure
41.2000	Beam detect malfunction
41.3000	Unexpected size
50.0000	Fuser error
50.1000	Low fuser temperature error
50.1100	High subthermistor area 3 fuser error
50.1200	Low subthermistor area 3 fuser error

**Table 2-4 Event-log messages (continued)**

Event code	Description
50.2000	Slow fuser error
50.3000	High fuser temperature error
50.4000	Fuser drive circuit error
50.7000	Fuser open error
50.8000	Low subthermistor fuser error
50.9000	High subthermistor fuser error
51.0000	Beam detect or laser error
51.2000	Black scanner laser error (inline devices only)
51.2100	Cyan scanner laser error (inline devices only)
51.2200	Magenta scanner laser error (inline devices only)
51.2300	Yellow scanner laser error (inline devices only)
52.0000	Scanner error
54.0100	Environmental sensor error
54.0600	Density sensor error
54.0700	Yellow drum phase control sensor error
54.0800	Magenta drum phase control sensor error
54.0900	Cyan drum phase control sensor error
54.1000	Black drum phase control sensor error
54.1100	Black density out of range
54.1101	Cyan density out of range
54.1102	Magenta density out of range
54.1103	Yellow density out of range
54.1200	Black density measurement abnormality
54.1201	Cyan density measurement abnormality
54.1202	Magenta density measurement abnormality
54.1203	Yellow density measurement abnormality
54.1400	Color plane registration sensor error (inline devices only)
54.1599	Black CPR pattern can't be read
54.1501	Cyan CPR pattern can't be read
54.1502	Magenta CPR pattern can't be read
54.1503	Yellow CPR pattern can't be read
54.1500	Yellow toner level sensor error

**Table 2-4 Event-log messages (continued)**

Event code	Description
54.1600	Magenta toner level sensor error
54.1700	Cyan toner level sensor error
54.1800	Black toner level sensor error
54.1900	Bad TOP sensor
54.2000	Carousel rotation error
54.2100	BD error
54.2500	TOP sensor error
54.2800	Density sensor or CPR contamination warning (54.1C)
55.0000	Engine internal communication error
55.0601	DC controller NVRAM data error
55.0602	DC controller NVRAM access error
55.1000	DC controller memory error
55.3000	Engine/ formatter communication error
55.4000	Engine communication timeout error
55.9028	DC controller NVRAM restore
56.0100	Illegal input
57.0000	Fan motor error
57.0100	Fan motor error
57.0200	Fan error
57.0600	Fan motor error
58.0400	Low voltage power supply error
59.0160	Main motor rotation error (59.A0)
59.0192	Developer motor rotation error (59.C0)
59.0240	Transfer alignment failure (59.F0)
59.3000	Fuser motor startup error
59.4000	Fuser motor error
59.5000	Image drum motor startup error- black
59.5100	Image drum motor startup error- cyan
59.5200	Image drum motor startup error- magenta
59.5300	Image drum motor startup error- yellow
59.6000	Image drum motor rotation error- black
59.6100	Image drum motor rotation error- cyan

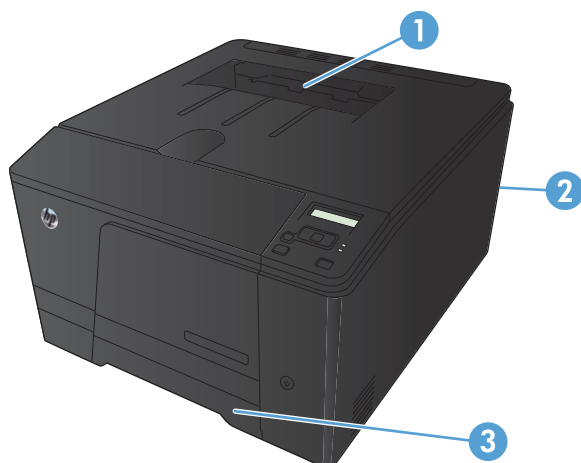
**Table 2-4 Event-log messages (continued)**

Event code	Description
59.6200	Image drum motor rotation error- magenta
59.6300	Image drum motor rotation error- yellow
59.7000	Black developer motor startup error
59.7300	Yellow developer motor startup error
59.8000	Black developer motor rotation error
59.8300	Yellow developer motor rotation error
59.9000	ETB motor start error
59.9900	T2 Clutch error
65.1200	External device operation error (65.12XX)
66.1200	External device critical error (66.12XX)
66.0015	External device communication error
79.0000	79 service, firmware exception
79.0001	79 service, firmware ASIC fault
79.0003	79 service, firmware Boba ASIC fault
79.0004	79 service, firmware memory interface fault
79.0005	79 service, firmware text write fault
49.<line #>	Firmware asserts
99.0028	Download error - bad signature accepted
99.0029	Download error - bad signature canceled

# Clear jams

## Jam locations

Jams can occur in these locations:



1	Output bin
2	Rear door
3	Input tray

Loose toner might remain in the product after a jam. This problem typically resolves itself after a few sheets have been printed.

## Clear jams in the paper input tray

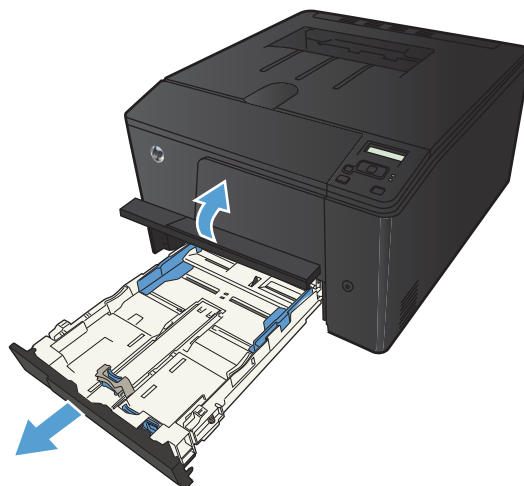
**CAUTION:** Do not use sharp objects, such as tweezers or needle-nose pliers, to remove jams. Damage caused by sharp objects is not covered by the warranty.

When removing jammed paper, pull it straight out from the product. Pulling jammed paper out of the product at an angle can damage the product.

**NOTE:** Depending on where the jam is located, some of the following steps might not be necessary.



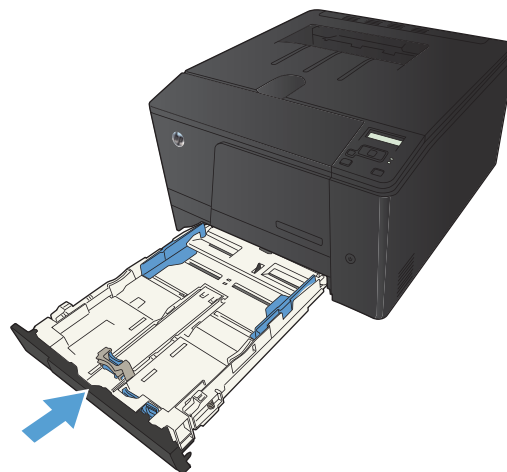
1. Pull out the tray, and lift the jam access door above the tray.



2. With both hands, grasp the paper, and carefully pull it free from the product.



3. Replace the tray.



4. Press the OK button to continue printing.

## Clear jams from the output bin

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

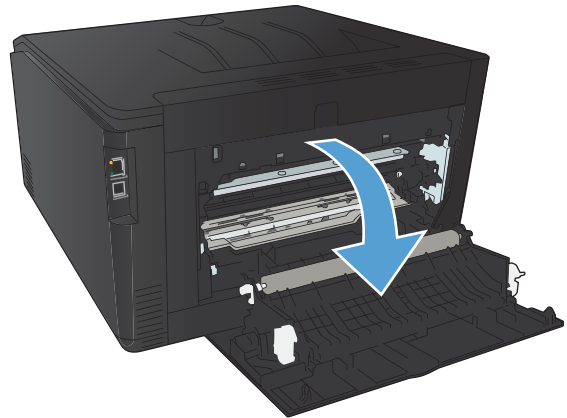
1. With both hands, grasp the paper, and carefully pull it free from the product.



## Clear jams from the rear door

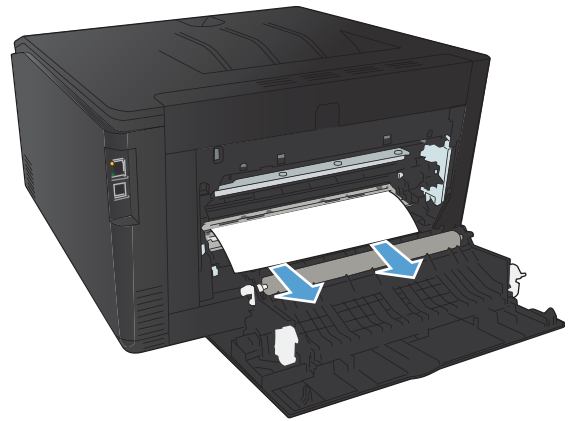
1. Open the rear door.

**CAUTION:** The fuser is located above the rear door, and it is hot. Do not attempt to reach into the area above the rear door until the fuser is cool.

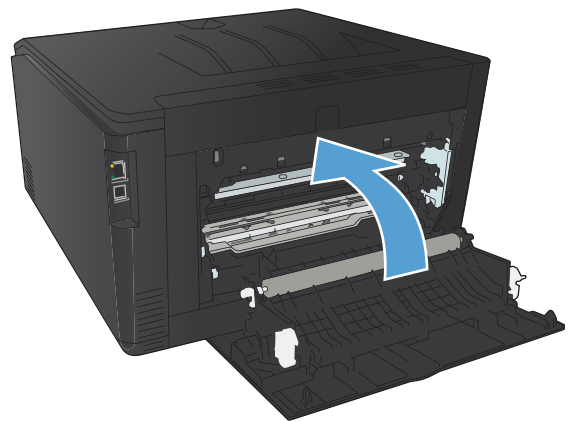


2. With both hands, grasp the paper, and carefully pull it free from the product.

**NOTE:** If the sheet tears, remove all fragments before continuing. Do not use sharp objects to remove fragments.



3. Close the rear door.



# Solve paper-handling problems

## The product picks up multiple sheets of paper

If the product picks up multiple sheets of paper from the tray, try these solutions.

1. Remove the stack of paper from the tray and flex it, rotate it 180 degrees, and flip it over. *Do not fan the paper.* Return the stack of paper to the tray.
2. Use only paper that meets HP specifications for this product.
3. Use paper that is not wrinkled, folded, or damaged. If necessary, use paper from a different package.
4. Make sure the tray is not overfilled. If it is, remove the entire stack of paper from the tray, straighten the stack, and then return some of the paper to the tray.
5. Make sure the paper guides in the tray are adjusted correctly for the size of paper. Align the guides with the paper-size markings in the bottom of the tray.

## The product does not pick up paper

If the product does not pick up paper from the tray, try these solutions.

1. Open the product and remove any jammed sheets of paper.
2. Load the tray with the correct size of paper for your job.
3. Make sure the paper guides in the tray are adjusted correctly for the size of paper. Align the guides with the paper-size markings in the bottom of the tray.
4. Check the product control panel to see if the product is waiting for you to acknowledge a prompt to feed the paper manually. Load paper, and continue.

# Solve image quality problems

You can prevent most print-quality problems by following these guidelines.

- [Use the correct paper type setting in the printer driver](#)
- [Adjust color settings in the printer driver](#)
- [Use paper that meets HP specifications](#)
- [Print a cleaning page](#)
- [Calibrate the product to align the colors](#)
- [Check the toner cartridges](#)
- [Use the printer driver that best meets your printing needs](#)

## Use the correct paper type setting in the printer driver

Check the paper type setting if you are having any of the following problems:

- Toner is smearing on the printed pages.
- Repeated marks occur on the printed pages.
- Printed pages are curled.
- Toner flakes off the printed pages.
- Printed pages have small unprinted areas.

## Change the paper type setting for Windows

1. On the **File** menu in the software program, click **Print**.
2. Select the product, and then click the **Properties** or **Preferences** button.
3. Click the **Paper/Quality** tab.
4. From the **Paper type** drop-down list, click the **More...** option.
5. Expand the list of **Type is:** options.
6. Expand each category of paper types until you find the paper type that you are using.
7. Select the option for the type of paper you are using, and click the **OK** button.

## Change the paper type setting for Mac

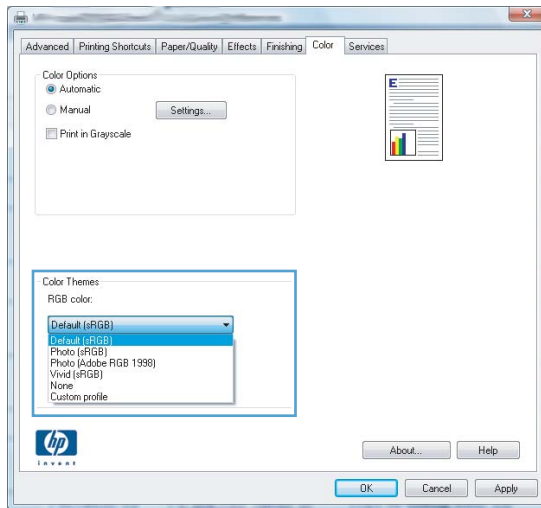
1. On the **File** menu in the software program, click the **Print** option.
2. In the **Copies & Pages** menu, click the **Page Setup** button.
3. Select a size from the **Paper Size** drop-down list, and then click the **OK** button.

4. Open the **Finishing** menu.
5. Select a type from the **Media-type** drop-down list.
6. Click the **Print** button.

## Adjust color settings in the printer driver

### Change the color theme for a print job

1. On the **File** menu in the software program, click **Print**.
2. Click **Properties** or **Preferences**.
3. Click the **Color** tab.
4. Select a color theme from the **Color Themes** drop-down list.




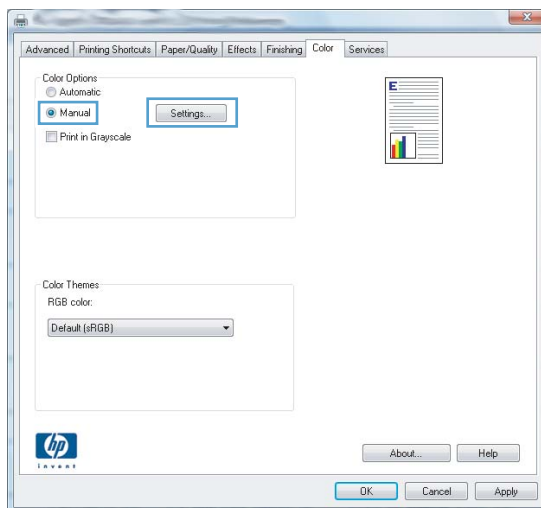
- **Default (sRGB):** This theme sets the product to print RGB data in raw device mode. When using this theme, manage color in the software program or in the operating system for correct rendering.
- **Vivid:** The product increases the color saturation in the midtones. Use this theme when printing business graphics.
- **Photo:** The product interprets RGB color as if it were printed as a photograph using a digital mini lab. The product renders deeper, more saturated colors differently than with the Default (sRGB) theme. Use this theme when printing photos.
- **Photo (Adobe RGB 1998):** Use this theme with printing digital photos that use the AdobeRGB color space rather than sRGB. Turn off color management in the software program when using this theme.
- **None**

## Change the color options

Change the color options settings for the current print job from the color tab of the printer driver.

1. On the **File** menu in the software program, click **Print**.
2. Click **Properties** or **Preferences**.
3. Click the **Color** tab.
4. Click the **Automatic** or **Manual** setting.
  - **Automatic** setting: Select this setting for most color print jobs
  - **Manual** setting: Select this setting to adjust the color settings independent from other settings.

 **NOTE:** Changing color settings manually can impact output. HP recommends that only color graphics experts change these settings.



5. Click the **Print in Grayscale** option to print a color document in black and white. Use this option to print color documents for photocopying or faxing.
6. Click the **OK** button.

## Use paper that meets HP specifications

Use different paper if you are having any of the following problems:

- The printing is too light or seems faded in areas.
- Specks of toner are on the printed pages.
- Toner is smearing on the printed pages.
- Printed characters seem misformed.
- Printed pages are curled.

Always use a paper type and weight that this product supports. In addition, follow these guidelines when selecting paper:

- Use paper that is of good quality and free of cuts, nicks, tears, spots, loose particles, dust, wrinkles, voids, staples, and curled or bent edges.
- Use paper that has not been previously printed on.
- Use paper that is designed for use in laser printers. Do not use paper that is designed only for use in Inkjet printers.
- Use paper that is not too rough. Using smoother paper generally results in better print quality.

## Print a cleaning page

Print a cleaning page to remove dust and excess toner from the paper path if you are having any of the following problems:

- Specks of toner are on the printed pages.
- Toner is smearing on the printed pages.
- Repeated marks occur on the printed pages.

## Print a cleaning page (LCD control panel)




**NOTE:** This section applies to the HP LaserJet Pro 200 color M251n Printer model only.

1. On the control panel, press the **OK** button to open the menus.
2. Open the following menus:
  - **Service**
  - **Cleaning Page**
3. Load plain paper in Tray 1, and then press the **OK** button to start the cleaning process.
4. The product prints the first side and then prompts you to remove the page from the output bin and reload it in Tray 1, keeping the same orientation. The side with the black stripe should be face-down with the arrow toward the back of the product.
5. Press the **OK** button to continue the cleaning process. When the process is complete, discard the page that prints.

## Print a cleaning page (touchscreen control panel)



**NOTE:** This section applies to the HP LaserJet Pro 200 color M251nw Printer model only.

1. From the Home screen on the product control panel, touch the Setup  button.
2. Touch the **Service** menu.
3. Touch the **Cleaning Page** button.



4. Load plain letter or A4 paper when you are prompted.
5. Touch the **OK** button to begin the cleaning process.
6. The product prints the first side and then prompts you to remove the page from the output bin and reload it in Tray 1, keeping the same orientation (the side with the black stripe should be face-down with the arrow toward the back of the product).
7. Press the **OK** button to continue the cleaning process. Wait until the process is complete. Discard the page that prints.

## Calibrate the product to align the colors

If the printed output has colored shadows, blurry graphics, or areas that have poor color, you might need to calibrate the product to align the colors. Print the Diagnostics Page from the Reports menu on the control panel to check the color alignment. If the blocks of color on that page are not aligned with each other, you need to calibrate the product.

1. On the product control panel, open the **System Setup** menu.
2. Open the **Print Quality** menu, and select the **Color Calibration** item.
3. Select the **Calibrate Now** option.

## Check the toner cartridges

Check each toner cartridge, and replace it if any of the following problems arise:

- The printing is too light or seems faded in areas.
- Printed pages have small unprinted areas.
- Printed pages have streaks or bands.

If a toner cartridge must be replaced, print the supplies status page to find the part number for the correct genuine HP toner cartridge.

Type of toner cartridge	Steps to resolve the problem
Refilled or remanufactured toner cartridge	Hewlett Packard Company cannot recommend the use of non-HP supplies, either new or remanufactured. Because they are not HP products, HP cannot influence their design or control their quality. If you are using a refilled or remanufactured toner cartridge and are not satisfied with the print quality, replace the toner cartridge with a genuine HP toner cartridge that includes the words "HP" or "Hewlett-Packard", or has the HP logo on it.
Genuine HP toner cartridge	<ol style="list-style-type: none"> <li>1. The product control panel or the <a href="#">Supplies Status</a> page indicates <b>Very Low</b> status when the toner cartridge has reached the end of its estimated life. Replace the toner cartridge if print quality is no longer acceptable.</li> <li>2. Print a Print Quality Page from the <b>Reports</b> menu on the control panel. If streaks or marks are in one color on the page, the color cartridge may be defective. See the instructions in this document for interpreting the page. Replace the toner cartridge if necessary.</li> <li>3. Visually inspect the toner cartridge for damage. See the instructions that follow. Replace the toner cartridge if necessary.</li> <li>4. If printed pages have marks that repeat several times at the same distance apart, print a cleaning page. If this does not solve the problem, use the repetitive defects ruler in this document to identify the cause of the problem.</li> </ol>

## Print the Supplies Status page

The [Supplies Status](#) page indicates the estimated life remaining in print cartridges. It also lists the part number for the correct genuine HP print cartridge for your product so you can order a replacement print cartridge, as well as other useful information.

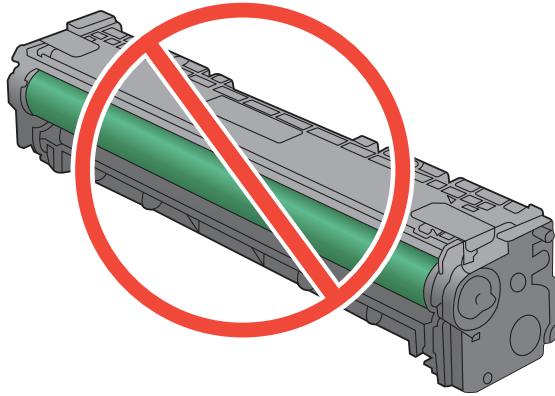
1. On the product control panel, open the [Reports](#) menu.
2. Select the [Supplies Status](#) page to print it.

## Inspect the print cartridge for damage

1. Remove the print cartridge from the product, and verify that the sealing tape has been removed.
2. Check the memory chip for damage.

3. Examine the surface of the green imaging drum on the bottom of the print cartridge.

**CAUTION:** Do not touch the green roller (imaging drum) on the bottom of the cartridge. Fingerprints on the imaging drum can cause print-quality problems.



4. If you see any scratches, fingerprints, or other damage on the imaging drum, replace the print cartridge.
5. If the imaging drum does not appear to be damaged, rock the print cartridge gently several times and reinstall it. Print a few pages to see if the problem has resolved.

## Repeating defects

If defects repeat at any of the following intervals on the page, a print cartridge might be damaged.

- 22 mm
- 27 mm
- 29 mm
- 76 mm

## Use the printer driver that best meets your printing needs

You might need to use a different printer driver if the printed page has unexpected lines in graphics, missing text, missing graphics, incorrect formatting, or substituted fonts.

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**HP PCL 6 driver**

- Provided as the default driver. This driver is automatically installed unless you select a different one.
- Recommended for all Windows environments
- Provides the overall best speed, print quality, and product-feature support for most users
- Developed to align with the Windows Graphic Device Interface (GDI) for the best speed in Windows environments
- Might not be fully compatible with third-party and custom software programs that are based on PCL 5

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**HP UPD PS driver**

- Recommended for printing with Adobe® software programs or with other highly graphics-intensive software programs
- Provides support for printing from postscript emulation needs, or for postscript flash font support

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**HP UPD PCL 5**

- Recommended for general office printing in Windows environments
  - Compatible with previous PCL versions and older HP LaserJet products
  - The best choice for printing from third-party or custom software programs
  - The best choice when operating with mixed environments, which require the product to be set to PCL 5 (UNIX, Linux, mainframe)
  - Designed for use in corporate Windows environments to provide a single driver for use with multiple printer models
  - Preferred when printing to multiple printer models from a mobile Windows computer
- 

Download additional printer drivers from this Web site: [www.hp.com/support/ljcolorm251series](http://www.hp.com/support/ljcolorm251series).

# Solve performance problems

## Factors affecting print performance

Problem	Cause	Solution
Pages print but, are totally blank.	The sealing tape might still be in the toner cartridges.	Verify that the sealing tape has been completely removed from the toner cartridges.
	The document might contain blank pages.	Check the document that is 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. <b>NOTE:</b> The product print speed is effected by various factors (for example, media size or page complexity).	Heavier media types can slow the print job.	Print on a different type of media.
	Complex pages can print slowly.	Proper fusing might require a slower print speed to ensure the best print quality.
	Paper type not set correctly.	Select the type to match the paper.
Pages did not print.	The product might not be pulling media correctly.	Ensure paper is loaded in the tray correctly.  If the problem persists, the pickup rollers and the separation pad may need to be replaced.
	The media is jamming in the device.	Clear the jam.
	The USB cable might be defective or incorrectly connected.	<ul style="list-style-type: none"><li>• Disconnect the USB cable at both ends and reconnect it.</li><li>• Try printing a job that has printed in the past.</li><li>• Try using a different USB cable.</li></ul>
	Other devices are running on your computer.	The product might not share a USB port. If an external hard drive or network switchbox 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 use two USB ports on the computer.

## Print speeds

Print speed refers to the number of pages that print in one minute. Print speed depends on different engine-process speeds or operational pauses between printed pages during normal product operation. Factors that determine the print speed of the product include the following:

- Page formatting time

The product must pause for each page to be formatted before it prints. Complex pages take more time to format, resulting in reduced print speed. However, most jobs print at full engine speed (21 ppm on Letter-size media or 20 ppm on A4-size media).

- Color mode

Monochrome printing (black only) provides the maximum print speed. Full color print jobs cause a reduction in print speed.

- Media size

Legal-size media reduces print speed because it is longer than the standard Letter- or A4-size media. A reduced print speed is used when printing on narrow media to prevent the edges of the fuser from overheating.

- Media mode

Some media types require a reduced print speed to achieve maximum print quality on that media. For example, glossy, heavy, and specialty media (for example, envelopes or photos) require a reduced print speed. To maximize the print speed for special media types, ensure the correct media type is selected in the print driver.

- Product temperature

To prevent product damage, print speed is reduced if the product reaches a specific internal temperature (thermal slow down). The starting temperature of the product, the ambient environment temperature, and the print job size affect the number of pages that can be printed before the product reduces the print speed. Thermal slow-down reduces print speed by printing four pages and then pausing for an amount of time before printing continues.

- Other print speed reduction factors

Other factors (especially during large print jobs) that can cause reduced print speeds include:

- ITB cleaning and lubrication; occurs every 50 to 80 pages and takes about 60 seconds.
- CPR control sequence; occurs every 450 pages and takes about 90 seconds.
- Density control sequence; occurs every 150 pages and takes about 120 seconds.

## The product does not print or it prints slowly

### The product does not print

If the product does not print at all, try the following solutions.

1. Make sure the product is turned on and that the control panel indicates it is ready.
  - If the control panel does not indicate the product is ready, turn the product off and then on again.
  - If the control panel indicates the product is ready, try sending the job again.
2. If the control panel indicates the product has an error, resolve the error and then try sending the job again.
3. Make sure the cables are all connected correctly. If the product is connected to a network, check the following items:
  - Check the light next to the network connection on the product. If the network is active, the light is green.
  - Make sure that you are using a network cable and not a phone cord to connect to the network.
  - Make sure the network router, hub, or switch is turned on and that it is working correctly.
4. Install the HP software from the CD that came with the product. Using generic printer drivers can cause delays clearing jobs from the print queue.
5. From the list of printers on your computer, right-click the name of this product, click **Properties**, and open the **Ports** tab.
  - If you are using a network cable to connect to the network, make sure the printer name listed on the **Ports** tab matches the product name on the product configuration page.
  - If you are using a USB cable and are connecting to a wireless network, make sure the box is checked next to **Virtual printer port for USB**.
6. If you are using a personal firewall system on the computer, it might be blocking communication with the product. Try temporarily disabling the firewall to see if it is the source of the problem.
7. If your computer or the product is connected to a wireless network, low signal quality or interference might be delaying print jobs.

## The product prints slowly

If the product prints, but it seems slow, try the following solutions.

1. Make sure the computer meets the minimum specifications for this product. For a list of specifications, go to this Web site: [www.hp.com/support/ljcolorm251series](http://www.hp.com/support/ljcolorm251series).
2. When you configure the product to print on some paper types, such as heavy paper, the product prints more slowly so it can correctly fuse the toner to the paper. If the paper type setting is not correct for the type of paper you are using, change the setting to the correct paper type.
3. If your computer or the product is connected to a wireless network, low signal quality or interference might be delaying print jobs.



# Solve product connectivity problems

## Solve direct-connect problems

If you have connected the product directly to a computer, check the cable.

- Verify that the cable is connected to the computer and to the product.
- Verify that the cable is not longer than 5 m (16.4 ft). Try using a shorter cable.
- Verify that the cable is working correctly by connecting it to another product. Replace the cable if necessary.

## Solve network problems

Check the following items to verify that the product is communicating with the network. Before beginning, print a configuration page from the product control panel and locate the product IP address that is listed on this page.

- [Poor physical connection](#)
- [The computer is using the incorrect IP address for the product](#)
- [The computer is unable to communicate with the product](#)
- [The product is using incorrect link and duplex settings for the network](#)
- [New software programs might be causing compatibility problems](#)
- [The computer or workstation might be set up incorrectly](#)
- [The product is disabled, or other network settings are incorrect](#)

### Poor physical connection

1. Verify that the product is attached to the correct network port using a cable of the correct length.
2. Verify that cable connections are secure.
3. Look at the network port connection on the back of the product, and verify that the amber activity light and the green link-status light are lit.
4. If the problem continues, try a different cable or port on the hub.

### The computer is using the incorrect IP address for the product

1. Open the printer properties and click the **Ports** tab. Verify that the current IP address for the product is selected. The product IP address is listed on the product configuration page.
2. If you installed the product using the HP standard TCP/IP port, select the box labeled **Always print to this printer, even if its IP address changes.**

3. If you installed the product using a Microsoft standard TCP/IP port, use the hostname instead of the IP address.
4. If the IP address is correct, delete the product and then add it again.

### The computer is unable to communicate with the product

1. Test network communication by pinging the network.
  - a. Open a command-line prompt on your computer. For Windows, click **Start**, click **Run**, and then type `cmd`.
  - b. Type `ping` followed by the IP address for your product.
  - c. If the window displays round-trip times, the network is working.
2. 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.

### The product is using incorrect link and duplex settings for the network

Hewlett-Packard recommends leaving this setting in automatic mode (the default setting). If the setting is changed, it must also be changed for the network.

### New software programs might be causing compatibility problems

Verify that any new software programs are correctly installed and that they use the correct printer driver.

### The computer or workstation might be set up incorrectly

1. Check the network drivers, printer drivers, and the network redirection.
2. Verify that the operating system is configured correctly.

### The product is disabled, or other network settings are incorrect

1. Review the configuration page to check the status of the network protocol. Enable it if necessary.
2. Reconfigure the network settings if necessary.

## Solve wireless network problems

- [Wireless connectivity checklist](#)
- [The control panel displays the message: The wireless feature on this product has been turned off](#)
- [The product does not print after the wireless configuration completes](#)
- [The product does not print, and the computer has a third-party firewall installed](#)
- [The wireless connection does not work after moving the wireless router or product](#)
- [Cannot connect more computers to the wireless product](#)
- [The wireless product loses communication when connected to a VPN](#)
- [The network does not appear in the wireless networks list](#)
- [The wireless network is not functioning](#)

### Wireless connectivity checklist

- The product and the wireless router are turned on and have power. Also make sure the wireless radio in the product is turned on.
- The service set identifier (SSID) is correct. Print a configuration page to determine the SSID. If you are not sure the SSID is correct, run the wireless setup again.
- With secured networks, make sure the security information is correct. If the security information is incorrect, run the wireless setup again.
- If the wireless network is working correctly, try accessing other computers on the wireless network. If the network has Internet access, try connecting to the Internet over a wireless connection.
- The encryption method (AES or TKIP) is the same for the product as it is for the wireless access point (on networks using WPA security).
- The product is within the range of the wireless network. For most networks, the product must be within 30 m (100 ft) of the wireless access point (wireless router).
- Obstacles do not block the wireless signal. Remove any large metal objects between the access point and the product. Make sure poles, walls, or support columns containing metal or concrete do not separate the product and wireless access point.
- The product is located away from electronic devices that might interfere with the wireless signal. Many devices can interfere with the wireless signal including motors, cordless phones, security system cameras, other wireless networks, and some Bluetooth devices.
- The printer driver is installed on the computer.
- You have selected the correct printer port.
- The computer and product connect to the same wireless network.

## The control panel displays the message: The wireless feature on this product has been turned off

- ▲ Press the wireless button on the product to open the Wireless menu, and then turn the wireless radio on.

## The product does not print after the wireless configuration completes

1. Make sure the product is turned on and in the ready state.
2. Make sure you are connecting to the correct wireless network.
3. Make sure that the wireless network is working correctly.
  - a. Open the [Network Setup](#) menu, and then open the [Wireless Menu](#) item.
  - b. Select the [Run Network Test](#) item to test the wireless network. The product prints a report with the results.
4. Make sure that the correct port or product is selected.
  - a. From the list of printers on your computer, right-click the name of this product, click **Properties**, and then open the **Ports** tab.
  - b. Make sure the box is checked next to **Virtual printer port for USB**.
5. Make sure that your computer is working correctly. If necessary, restart your computer.

## The product does not print, and the computer has a third-party firewall installed

1. Update the firewall with the most recent update available from the manufacturer.
2. If programs request firewall access when you install the product or try to print, make sure you allow the programs to run.
3. Temporarily turn off the firewall, and then install the wireless product on the computer. Enable the firewall when you have completed the wireless installation.

## The wireless connection does not work after moving the wireless router or product

Make sure that the router or product connects to the same network that your computer connects to.

1. Open the [Reports](#) menu, and select the [Configuration Report](#) item to print the report.
2. Compare the service set identifier (SSID) on the configuration report to the SSID in the printer configuration for your computer.
3. If the SSIDs are not the same, the devices are not connecting to the same network. Reconfigure the wireless setup for your product.

## Cannot connect more computers to the wireless product

1. Make sure that the other computers are within the wireless range and that no obstacles block the signal. For most networks, the wireless range is within 30 m (100 ft) of the wireless access point.
2. Make sure the product is turned on and in the ready state.
3. Turn off any third-party firewalls on your computer.
4. Make sure that the wireless network is working correctly.
  - a. On the product control panel, open the [Network Setup](#) menu, and then open the [Wireless Menu](#) item.
  - b. Select the [Run Network Test](#) item to test the wireless network. The product prints a report with the results.
5. Make sure that the correct port or product is selected.
  - a. From the list of printers on your computer, right-click the name of this product, click **Properties**, and then open the **Ports** tab.
  - b. Click the **Configure Port** button to verify that the IP address matches the IP address listed on the Run Network Test report.
6. Make sure that your computer is working correctly. If necessary, restart your computer.

## The wireless product loses communication when connected to a VPN

- Typically, you cannot connect to a VPN and other networks at the same time.

## The network does not appear in the wireless networks list

- Make sure the wireless router is turned on and has power.
- The network might be hidden. However, you can still connect to a hidden network.

## The wireless network is not functioning

1. To verify if the network has lost communication, try connecting other devices to the network.
2. Test network communication by pinging the network.
  - a. Open a command-line prompt on your computer. For Windows, click **Start**, click **Run**, and then type `cmd`.
  - b. Type `ping` followed by the service set identifier (SSID) for your network.
  - c. If the window displays round-trip times, the network is working.
3. Make sure that the router or product connects to the same network that your computer connects to.
  - a. Open the [Reports](#) menu, and select the [Configuration Report](#) item to print the report.
  - b. Compare the service set identifier (SSID) on the configuration report to the SSID in the printer configuration for your computer.
  - c. If the SSIDs are not the same, the devices are not connecting to the same network. Reconfigure the wireless setup for your product.

# Service mode functions

## Service menu

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

## Service menu settings

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

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

- **Cleaning page**—used to remove dust and toner from the print paper path
- **USB speed**—used to set the USB speed to high or full
- **Less Paper Curl**—used to put the product into a mode that reduces paper curl
- **Archive Print**—used to put the product into a mode that produces output less susceptible to toner smearing and dusting for preservation and archival.
- **Firmware Datecode**—used to display the product's firmware date code.
- **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.

- **Signature Check**
- **HP Smart Install**
- **LaserJet Update**


## Restore the factory-set defaults

Restoring the factory-set defaults returns all of the product and network settings to the factory defaults. It will not reset the page count, tray size, or language. To restore the product to the factory-default settings, follow these steps.



**CAUTION:** Restoring the factory-set defaults returns all of the settings to the factory defaults, and it also deletes any pages that are stored in the memory. The procedure then automatically restarts the product.


## Restore the factory-set defaults (LCD control panel)


 **NOTE:** This section applies to the HP LaserJet Pro 200 color M251n Printer model only.

1. On the control panel, press the **OK** button to open the menus.
2. Open the following menus:
  - **Service**
  - **Restore Defaults**

The product automatically restarts.

## Restore the factory-set defaults (touchscreen control panel)

 **NOTE:** This section applies to the HP LaserJet Pro 200 color M251nw Printer model only.

1. From the Home screen on the product control panel, touch the Setup  button.
2. Scroll to and touch the **Service** menu.
3. Scroll to and touch the **Restore Defaults** button, and then touch the **OK** button.

The product automatically restarts.

## Secondary service menu

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 (LCD control panel)

1. Ensure the product is in the **Ready** state.
2. Press the Left arrow (◀) and the **Cancel** button simultaneously.
3. Press < and > to navigate through the menu.


### Open the secondary service menu (touchscreen control panel)


1. Touch the Setup  button.



2. Touch the middle of the screen along the left-hand edge (callout 1), and then immediately touch the lower-right corner (callout 2) of the screen.




3. When the Home screen appears, touch the Setup  button.
4. Touch the **2ndary Service** button to open the menu.

 **TIP:** When you are finished with the **2ndary Service** menu, touch the lower-right corner of the screen until the **Job settings cleared.** message appears on the Home screen. This step removes the **2ndary Service** option from the **Setup Menu**.

## Secondary service menu structure

**Table 2-5 Secondary Service menu**

Menu item	Sub-menu item	Description
<b>Service Reports</b>	<b>Cont. Self-Test</b>	Print a continuous configuration page.
	<b>Error Report</b>	Print an error report.
<b>Location</b>	A list of available locations appears	<p>This item sets certain product parameters that are dependent on the location, such as the default paper size and the symbol set.</p> <p>Scroll to the appropriate location and select <b>Yes</b> to set the location. The product automatically restarts after you change the location.</p>
<b>Display test</b>		<p>Use this test to verify that the LEDs and characters on the control-panel display function correctly.</p> <p>At the beginning of the test, each of the LEDs turns on one-at-a-time. Press the <b>OK</b> button to continue to the next LED.</p> <p>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 the <b>OK</b> button to continue to the next group of 16 characters. You can cancel the test at any time by pressing <b>Cancel</b> .</p>
<b>Button test</b>		Use this test to verify that the control-panel buttons function correctly. The display prompts you to press each button.
<b>Firmware date</b>		This item shows the current date code of the firmware.

**Table 2-5 Secondary Service menu (continued)**

Menu item	Sub-menu item	Description
<b>Color Cal.</b>	<b>Adjust color</b>	Use this item to adjust density settings for contrast, highlights, midtones, and shadows. Adjust each color individually.
	<b>Timing</b>	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.
<b>Enter MAC Addr.</b>		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 the <b>OK</b> button to move to the next digit.
<b>LED Test</b>		The LED's turn on one at a time during the test. Press <b>OK</b> to continue to the next LED.
<b>Clean Belt</b>		This item runs additional belt-cleaning cycles.
<b>Pick roller</b>		This item puts the pickup roller in position for replacement.

## 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 **Service** menu.

Restoring the default settings unlocks menus that have been previously locked and resets all control-panel 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 HP Jetdirect configuration page. You might need to restore the IP address after restoring defaults.

### 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 HP 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

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

## Product updates

Software and firmware updates and installation instructions for this product are available at [www.hp.com/support/ljcolorm251series](http://www.hp.com/support/ljcolorm251series). Click **Support & Drivers**, click the operating system, and then select the download for the product.



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# A Service and support

- [Hewlett-Packard limited warranty statement](#)
- [HP's Premium Protection Warranty: LaserJet print cartridge limited warranty statement](#)
- [Data stored on the print cartridge](#)
- [End User License Agreement](#)
- [OpenSSL](#)
- [Customer support](#)
- [Repack the product](#)

# Hewlett-Packard limited warranty statement

HP PRODUCT	DURATION OF LIMITED WARRANTY
HP LaserJet Pro 200 color M251n, M251nw	One-year product exchange

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

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

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

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

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

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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.

## HP's Premium Protection Warranty: LaserJet 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.

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## Data stored on the print cartridge

The HP print cartridges used with this product contain a memory chip that assists in the operation of the product.

In addition, this memory chip collects a limited set of information about the usage of the product, which might include the following: the date when the print cartridge was first installed, the date when the print cartridge was last used, the number of pages printed using the print cartridge, the page coverage, the printing modes used, any printing errors that might have occurred, and the product model. This information helps HP design future products to meet our customers' printing needs.

The data collected from the print cartridge memory chip does not contain information that can be used to identify a customer or user of the print cartridge or their product.

HP collects a sampling of the memory chips from print cartridges returned to HP's free return and recycling program (HP Planet Partners: [www.hp.com/recycle](http://www.hp.com/recycle)). The memory chips from this sampling are read and studied in order to improve future HP products. HP partners who assist in recycling this print cartridge might have access to this data, as well.

Any third party possessing the print cartridge might have access to the anonymous information on the memory chip. If you prefer to not allow access to this information, you can render the chip inoperable. However, after you render the memory chip inoperable, the memory chip cannot be used in an HP product.

# End User License Agreement

PLEASE READ CAREFULLY BEFORE USING THIS SOFTWARE PRODUCT: This End-User License Agreement ("EULA") is a contract between (a) you (either an individual or the entity you represent) and (b) Hewlett-Packard Company ("HP") that governs your use of the software product ("Software"). This EULA does not apply if there is a separate license agreement between you and HP or its suppliers for the Software, including a license agreement in online documentation. The term "Software" may include (i) associated media, (ii) a user guide and other printed materials, and (iii) "online" or electronic documentation (collectively "User Documentation").

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11. RESERVATION OF RIGHTS. HP and its suppliers reserve all rights not expressly granted to you in this EULA.

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Rev. 11/06

## OpenSSL

This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (<http://www.openssl.org/>)

THIS SOFTWARE IS PROVIDED BY THE OpenSSL PROJECT ``AS IS'' AND ANY EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE OpenSSL PROJECT OR ITS CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES;

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This product includes cryptographic software written by Eric Young ([ey@cryptsoft.com](mailto:ey@cryptsoft.com)). This product includes software written by Tim Hudson ([tjh@cryptsoft.com](mailto:tjh@cryptsoft.com)).

## Customer support

Get telephone support for your country/region	Country/region phone numbers are on the flyer that was in the box with your product or at <a href="http://www.hp.com/support/">www.hp.com/support/</a> .
Have the product name, serial number, date of purchase, and problem description ready.	
Get 24-hour Internet support	<a href="http://www.hp.com/support/ljcolorm251series">www.hp.com/support/ljcolorm251series</a>
Get support for products used with a Macintosh computer	<a href="http://www.hp.com/go/macosex">www.hp.com/go/macosex</a>
Download software utilities, drivers, and electronic information	<a href="http://www.hp.com/support/ljcolorm251series">www.hp.com/support/ljcolorm251series</a>
Order additional HP service or maintenance agreements	<a href="http://www.hp.com/go/carepack">www.hp.com/go/carepack</a>
Register your product	<a href="http://www.register.hp.com">www.register.hp.com</a>

## Repack the product

If HP Customer Care determines that your product needs to be returned to HP for repair, follow these steps to repack the product before shipping it.

**⚠ CAUTION:** Shipping damage as a result of inadequate packing is the customer's responsibility.

1. Remove and retain any DIMMs cards that you have purchased and installed in the product.

**⚠ CAUTION:** Static electricity can damage electronic parts. 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.

2. Remove and retain the toner cartridge.

**⚠ CAUTION:** It is *extremely important* to remove the toner cartridges before shipping the product. A toner cartridge that remains in the product during shipping can leak and cover the product engine and other parts with toner.

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

3. Remove and retain the power cable, interface cable, and optional accessories, such as an EIO card.
4. If possible, include print samples and 50 to 100 sheets of paper or other print media that did not print correctly.
5. In the U.S., call HP Customer Care to request new packing material. In other areas, use the original packing material, if possible. Hewlett-Packard recommends insuring the equipment for shipment.

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## B Product specifications

- [Physical specifications](#)
- [Power consumption, electrical specifications, and acoustic emissions](#)
- [Environmental specifications](#)

# Physical specifications

**Table B-1 Physical specifications**

Product	Height	Depth	Width	Weight
HP LaserJet Pro 200 color M251n Printer	250 mm (9.84 inches)	453 mm (17.83 inches)	405 mm (15.94 inches)	18.70 kg (41.22 lb)
	With control-panel lowered: 265 mm (10.43 inches)			
HP LaserJet Pro 200 color M251nw Printer	With control-panel raised: 354 mm (13.9 inches)	453 mm (17.83 inches)	405 mm (15.94 inches)	18.79 kg (41.42 lb)

## Power consumption, electrical specifications, and acoustic emissions

See [www.hp.com/support/ljcolorm251series](http://www.hp.com/support/ljcolorm251series) for current information.

**CAUTION:** Power requirements are based on the country/region where the product is sold. Do not convert operating voltages. This will damage the product and void the product warranty.

## Environmental specifications

**Table B-2 Environmental specifications**

Environment	Recommended	Allowed
Temperature	17° to 25°C (62.6° to 77°F)	15° to 30°C (59° to 86°F)
Humidity	30% to 70% relative humidity (RH)	10% to 80% RH
Altitude	Not applicable	0 to 3048 m (0 to 10,000 ft)



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# C Regulatory information

- [FCC regulations](#)
- [Environmental product stewardship program](#)
- [Declaration of conformity](#)
- [Declaration of conformity \(wireless model\)](#)
- [Certificate of Volatility](#)
- [Safety statements](#)
- [Additional statements for wireless products](#)

## 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<sub>3</sub>).

## Power consumption

Power usage drops significantly while in Ready or Sleep mode, which saves natural resources and saves money without affecting the high performance of this product. Hewlett-Packard printing and imaging equipment marked with the ENERGY STAR® logo is qualified to the U.S. Environmental Protection Agency's ENERGY STAR specifications for imaging equipment. The following mark will appear on ENERGY STAR qualified imaging products:



Additional ENERGY STAR qualified imaging product model information is listed at:

[www.hp.com/go/energystar](http://www.hp.com/go/energystar)

## 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 HP LaserJet print cartridges after use—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 (more than one cartridge)

1. Package each HP LaserJet print cartridge in its original box and bag.
2. Tape the boxes together using strapping or packaging tape. The package can weigh up to 31 kg (70 lb).
3. Use a single pre-paid shipping label.

#### OR

1. Use your own suitable box, or request a free bulk collection box from [www.hp.com/recycle](http://www.hp.com/recycle) or 1-800-340-2445 (holds up to 31 kg (70 lb) of 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 [www.ups.com](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 [www.hp.com/recycle](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.

## Residents of Alaska and Hawaii

Do not use the UPS label. Call 1-800-340-2445 for information and instructions. The U.S. Postal Service provides no-cost cartridge return transportation services under an arrangement with HP for Alaska and Hawaii.

## Non-U.S. 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 product supply item) or visit [www.hp.com/recycle](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.

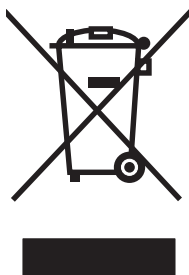
## Material restrictions

This HP product contains mercury in the fluorescent lamp of the scanner and/or control panel liquid crystal display that may require special handling at end-of-life.

This HP product does not contain a battery.

For recycling information, you can go to [www.hp.com/recycle](http://www.hp.com/recycle), or contact your local authorities or the Electronics Industries Alliance: [www.eiae.org](http://www.eiae.org).

## 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.

## Chemical substances

HP is committed to providing our customers with information about the chemical substances in our products as needed to comply with legal requirements such as REACH (Regulation EC No 1907/2006 of the European Parliament and the Council). A chemical information report for this product can be found at: [www.hp.com/go/reach](http://www.hp.com/go/reach).

## Material Safety Data Sheet (MSDS)

Material Safety Data Sheets (MSDS) for supplies containing chemical substances (for example, toner) can be obtained by accessing the HP Web site at [www.hp.com/go/msds](http://www.hp.com/go/msds) or [www.hp.com/hpinfo/community/environment/productinfo/safety](http://www.hp.com/hpinfo/community/environment/productinfo/safety).

## 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](http://www.hp.com/go/environment) or [www.hp.com/hpinfo/globalcitizenship/environment](http://www.hp.com/hpinfo/globalcitizenship/environment).

# Declaration of conformity

## Declaration of Conformity

according to ISO/IEC 17050-1 and EN 17050-1

**Manufacturer's Name:** Hewlett-Packard Company DoC#: BOISB-1104-00-rel.2.0

**Manufacturer's Address:** 11311 Chinden Boulevard  
Boise, Idaho 83714-1021, USA

**declares, that the product**

**Product Name:** HP LaserJet Pro 200 color M251n

**Regulatory Model:<sup>2)</sup>** BOISB-1104-00

**Product Options:** All

**Toner Cartridges:** CF210A, CF210X, CF211A, CF212A, CF213A

**conforms to the following Product Specifications:**

**SAFETY:** IEC 60950-1:2005 +A1 / EN60950-1: 2006 +A11:2009 +A1:2010

IEC 60825-1:2007 / EN 60825-1:2007 (Class 1 Laser/LED Product)

IEC 62479:2010 / EN62479:2010

GB4943-2001

**EMC:** CISPR22:2005 +A1/ EN55022:2006 +A1 - Class B<sup>1)</sup>

EN 61000-3-2:2006 +A1:2009 +A2:2009

EN 61000-3-3:2008

EN 55024:1998 +A1 +A2


FCC Title 47 CFR, Part 15 Class B<sup>1)</sup> / ICES-003, Issue 4

GB9254-2008, GB17625.1-2003

**ENERGY USE:** Regulation (EC) No. 1275/2008

ENERGY STAR® Qualified Imaging Equipment Typical Electricity Consumption (TEC) Test Procedure

### Supplementary Information:

The product herewith complies with the requirements of the EMC Directive 2004/108/EC and the Low Voltage Directive 2006/95/EC, the EuP Directive 2005/32/EC and carries the CE-Marking  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 USA**

**January 2012**

**For Regulatory Topics only, contact:**

European Contact: Your Local Hewlett-Packard Sales and Service Office or Hewlett-Packard GmbH, Department HQ-TRE / Standards Europe, Herrenberger Straße 140, D-71034, Böblingen (Fax: +49-7031-14-3143)  
[www.hp.eu/certificates](http://www.hp.eu/certificates)

USA Contact: Product Regulations Manager, Hewlett-Packard Company, PO Box 15, Mail Stop 160, Boise, Idaho 83707-0015 (Phone: 208-396-6000)

# Declaration of conformity (wireless model)

## Declaration of Conformity

according to ISO/IEC 17050-1 and EN 17050-1

**Manufacturer's Name:** Hewlett-Packard Company DoC#: BOISB-1104-01-rel.1.0

**Manufacturer's Address:** 11311 Chinden Boulevard  
Boise, Idaho 83714-1021, USA

**declares, that the product**

**Product Name:** HP LaserJet Pro 200 color M251nw

**Regulatory Model:<sup>2)</sup>** BOISB-1104-01

**Product Options:** All

**Radio Module:<sup>3)</sup>** SDGOB-0892

**Toner Cartridges:** CF210A, CF210X, CF211A, CF212A, CF213A

**conforms to the following Product Specifications:**

**SAFETY:** IEC 60950-1:2005 +A1 / EN 60950-1: 2006 +A11:2009 +A1:2010

IEC 60825-1:2007 / EN 60825-1:2007 (Class 1 Laser/LED Product)

IEC 62479:2010 / EN 62479:2010

GB4943-2001

**EMC:** CISPR22:2005 +A1/ EN55022:2006 +A1 - Class B<sup>1)</sup>

EN 61000-3-2:2006 +A1:2009 +A2:2009

EN 61000-3-3:2008

EN 55024:1998 +A1 +A2

FCC Title 47 CFR, Part 15 Class B<sup>1)</sup> / ICES-003, Issue 4

GB9254-2008, GB17625.1-2003

**Radio:<sup>3)</sup>** EN 301 489-1 v1.8.1 (2008-04) / EN 301 489-17 v2.1.1 (2009-05)

EN 300 328 v1.7.1 (2006-10)


FCC Title 47 CFR, Part 15 Subpart C (Section 15.247) / IC: RSS-210

IEC 62311 :2007 / EN 62311 :2008

**ENERGY USE:** Regulation (EC) No. 1275/2008

ENERGY STAR® Qualified Imaging Equipment Typical Electricity Consumption (TEC) Test Procedure

**Supplementary Information:**

The product herewith complies with the requirements of the R&TTE Directive 1999/5/EC Annex IV, EMC Directive 2004/108/EEC and the Low Voltage Directive 2006/95/EC, the EuP Directive 2005/32/EC, and carries the CE-Marking  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).
3. This product uses a radio module device which Regulatory Model number is SDGOB-0892 as needed to meet technical regulatory requirements for the countries/regions this product will be sold.

**Boise, Idaho USA**

**January 2012**

**For Regulatory Topics only, contact:**

European Contact: Your Local Hewlett-Packard Sales and Service Office or Hewlett-Packard GmbH, Department HQ-TRE / Standards Europe, Herrenberger Straße 140, D-71034, Böblingen (FAX: +49-7031-14-3143)  
[www.hp.eu/certificates](http://www.hp.eu/certificates)

USA Contact: Product Regulations Manager, Hewlett-Packard Company, PO Box 15, Mail Stop 160, Boise, Idaho 83707-0015 (Phone: 208-396-6000)

# Certificate of Volatility

Hewlett Packard Certificate of Volatility			
Model:	Part Number:	Address:	
M251n	CF146A	11311 Chinden Blvd.	
M251nw	CF147A	Boise, ID 83714	
Volatile Memory			
Does the device contain volatile memory (Memory whose contents are lost when power is removed)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes, please describe the type, size, function, and steps to clear the memory below.			
Type (SRAM, DRAM, etc): DDR3	Size: 128 MB	Function: Run-time firmware image, print job info during printing	Steps to clear Memory: Power off printer
Non-Volatile Memory			
Does the device contain non-volatile memory (Memory whose contents are retained when power is removed)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes, please describe the type, size, function, and steps to clear the memory below.			
Type (Flash, EEPROM, etc): Flash	Size: 16 kB	Function: Printer Specific Data	Steps to clear memory: NVRAM Initialization
Type (Flash, EEPROM, etc): NAND Flash	Size: 256 MB	Function: Firmware and Smart Install	Steps to clear memory: NVRAM Init
Mass Storage			
Does the device contain mass storage memory (Hard Disk Drive, Tape Backup)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, please describe the type, size, function, and steps to clear the memory below.			
Type (HDD, Tape, etc):	Size:	Function:	Steps to clear memory:
Type (HDD, Tape, etc):	Size:	Function:	Steps to clear memory:
Author Information			
Name:	Title: Technical Marketing Engineer	Email:	Business Unit: LaserJet Business
Date Prepared: 4/1/2012			

# 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 instructions

Make sure your power source is adequate for the product voltage rating. The voltage rating is on the product label. The product uses either 100-127 Vac or 220-240 Vac and 50/60 Hz.

Connect the power cord between the product and a grounded AC outlet.

**⚠ CAUTION:** To prevent damage to the product, use only the power cord that is provided with the product.

## 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。

## EMC statement (Korea)

B급 기기 (가정용 방송통신기기)	이 기기는 가정용(B급)으로 전자파적합등록을 한 기기로서 주로 가정에서 사용하는 것을 목적으로 하며, 모든 지역에서 사용할 수 있습니다.
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## Laser statement for Finland

### **Luokan 1 laserlaite**

Klass 1 Laser Apparat

HP LaserJet Pro 200 color M251n, M251nw, 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 (2007) mukaisesti.

### **VAROITUS !**

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

### **VARNING !**

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

### **HUOLTO**

HP LaserJet Pro 200 color M251n, M251nw - kirjoittimen sisällä ei ole käyttäjän huollettavissa olevia kohteita. Laitteen saa avata ja huoltaa ainoastaan sen huoltamiseen koulutettu henkilö. Tällaiseksi huoltotoimenpiteeksi ei katsota väriainekasetin vaihtamista, paperiradan puhdistusta tai muita käyttäjän käsikirjassa lueteltuja, käyttäjän tehtäväksi tarkoitettuja ylläpitotoimia, jotka voidaan suorittaa ilman erikoistyökaluja.

### **VARO !**

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

### **VARNING !**

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

Tiedot laitteessa käytettävän laserdiodin säteilyominaisuuksista: Aallonpituus 775-795 nm Teho 5 m W Luokan 3B laser.

## GS statement (Germany)

Das Gerät ist nicht für die Benutzung im unmittelbaren Gesichtsfeld am Bildschirmarbeitsplatz vorgesehen. Um störende Reflexionen am Bildschirmarbeitsplatz zu vermeiden, darf dieses Produkt nicht im unmittelbaren Gesichtsfeld platziert werden.

## Substances Table (China)

### 有毒有害物质表

根据中国电子信息产品污染控制管理办法的要求而出台

部件名称	有毒有害物质和元素					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr(VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
打印引擎	X	0	0	0	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	X	0	0	0	0	0
碳粉盒	X	0	0	0	0	0

0609

0：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。

注：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。

## Restriction on Hazardous Substances statement (Turkey)

Türkiye Cumhuriyeti: EEE Yönetmeliğine Uygundur



# Additional statements for wireless products

## FCC compliance statement—United States

### Exposure to radio frequency radiation

**⚠ CAUTION:** The radiated output power of this device is far below the FCC radio frequency exposure limits. Nevertheless, the device shall be used in such a manner that the potential for human contact during normal operation is minimized.

In order to avoid the possibility of exceeding the FCC radio frequency exposure limits, human proximity to the antenna shall not be less than 20 cm (8 in) during normal operation.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

**⚠ CAUTION:** Based on Section 15.21 of the FCC rules, changes of modifications to the operation of this product without the express approval by Hewlett-Packard Company may invalidate its authorized use.

## Australia statement

This device incorporates a radio-transmitting (wireless) device. For protection against radio transmission exposure, it is recommended that this device be operated no less than 20 cm from the head, neck, or body.

## Brazil ANATEL statement

Este equipamento opera em caráter secundário, isto é, não tem direito à proteção contra interferência prejudicial, mesmo de estações do mesmo tipo, e não pode causar interferência a sistemas operando em caráter primário.

## Canadian statements

**For Indoor Use.** This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus as set out in the radio interference regulations of the Canadian Department of Communications. The internal wireless radio complies with RSS 210 of Industry Canada.

**Pour l'usage d'intérieur.** Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de Classe B prescrites dans le règlement sur le brouillage radioélectrique édicté par le Ministère des Communications du Canada. Le composant RF interne est conforme à la norme CNR-210 d'Industrie Canada.

## European Union regulatory notice

The telecommunications functionality of this product may be used in the following EU and EFTA countries/regions:

Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, and United Kingdom.

## Notice for use in France

For 2.4 GHz Wireless LAN operation of this product certain restrictions apply: This equipment may be used indoor for the entire 2400-2483.5 MHz frequency band (channels 1-13). For outdoor use, only 2400-2454 MHz frequency band (channels 1-9) may be used. For the latest requirements, see [www.arcep.fr](http://www.arcep.fr).

L'utilisation de cet équipement (2.4 GHz Wireless LAN) est soumise à certaines restrictions : Cet équipement peut être utilisé à l'intérieur d'un bâtiment en utilisant toutes les fréquences de 2400-2483.5 MHz (Chaîne 1-13). Pour une utilisation en environnement extérieur, vous devez utiliser les fréquences comprises entre 2400-2454 MHz (Chaîne 1-9). Pour les dernières restrictions, voir, [www.arcep.fr](http://www.arcep.fr).

## Notice for use in Russia

Существуют определенные ограничения по использованию беспроводных сетей (стандарта 802.11 b/g) с рабочей частотой 2,4 ГГц: Данное оборудование может использоваться внутри помещений с использованием диапазона частот 2400-2483,5 МГц (каналы 1-13). При использовании внутри помещений максимальная эффективная изотропно-излучаемая мощность (ЭИИМ) должна составлять не более 100мВт.

## Korean statement

당해 무선설비는 운용 중 전파혼선 가능성이 있음

## Taiwan statement

### 低功率電波輻射性電機管理辦法

第十二條 經型式認證合格之低功率射頻電機，非經許可，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。

第十四條 低功率射頻電機之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。  
前項合法通信，指依電信法規定作業之無線電通信。  
低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。



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