

hp deskjet 9600 series



service guide

(for Authorized  
Service Providers)



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## Product overview



**HP Deskjet 9600 Series**

Product price

Region	HP Deskjet 9650	Deskjet 9670	Deskjet 9680
Asia Pacific	\$399	not available	\$499
Europe	euro499	euro599	euro649
North America	\$399	\$499	\$499
Latin America	\$399	not available	not available

### Prices of HP Deskjet 9600 models

Product introduction date

- September 1, 2003

Product positioning

- A high performance, wide-format, versatile color inkjet printer for the SOHO user who requires exceptional print and photo PQ

Product benefits

- Exceptional print quality
- True borderless printing
- Fast print speed (20/15 ppm)
- Versatile printing on everything from A6 to A3+
- Ease of use with auto-duplexer
- A high performance, photo quality, versatile printer for the customer who requires digital imaging for business

Product features

- 4800 dpi
- PhotoREt IV
- Borderless
- 20/15 ppm
- 3mm margin all round
- 6-ink capable
- Auto-duplexer



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## Key selling points

The printer has the following key selling points:

- Strong brand in North America
- Versatility and flexibility
- Fast print speeds (20/15)
- High photo print quality (6-ink capable; 4800x1200dpi; PhotoREt IV) & 4-side borderless from A6 to A3
- Auto-duplex unit (optional)
- Best print quality
- True borderless printing (zero margin)
- Narrowest margins for biggest printable area
- Greater ease of use with auto-duplexer
- Accepts thickest media (280 g/m<sup>2</sup>)

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## Unique product features

Unique product features for this printer include:

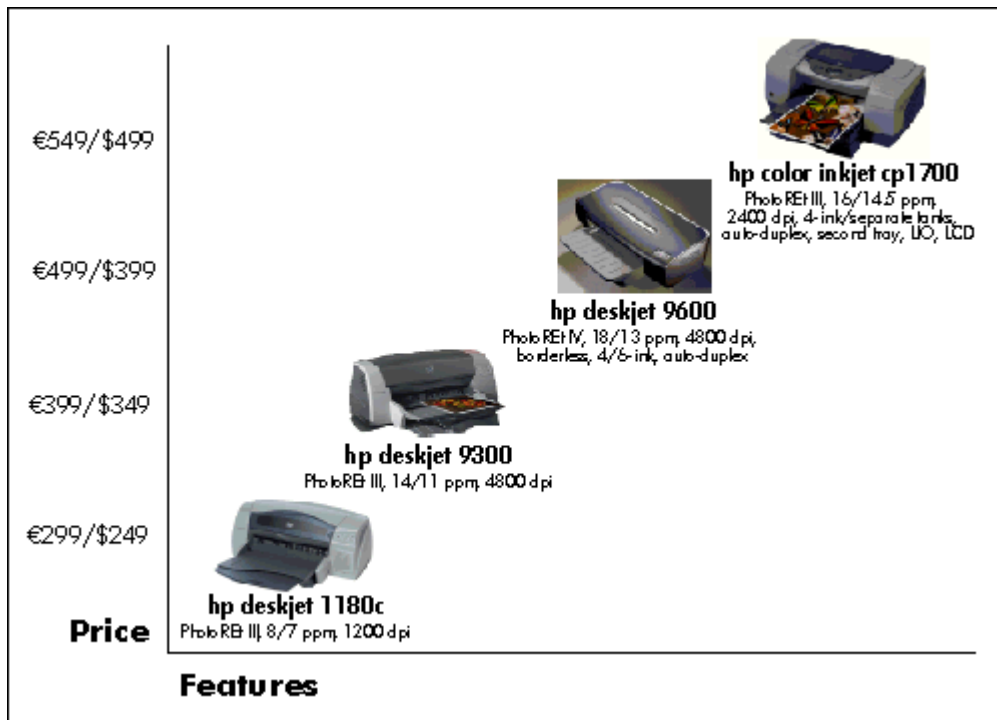
- 4800 dpi and PhotoREt IV
- High print quality and performance
- Versatile media support: 4x6" to 13x19"; 65 gsm to 280 gsm
- Fast print speeds
- Flexibility of 4-ink and 6-ink printing
- Borderless edge-to-edge printing
- HP Photo & Imaging Software and Smart Software features
- EXIF Print
- Auto-duplex option

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## Product positioning statement

A high-performance, versatile, wide-format color inkjet printer for the SOHO user who requires exceptional print and photo print quality.

## Graphical comparison



**Graphical comparison of HP Deskjet 1180c, 9300, and 9600 and HP Color Inkjet cp1700**

This graphic shows the following for the HP Deskjet 1180c, 9300, and 9600 and the HP Color Inkjet cp1700:

- Relative performance
- Price
- Print speed
- Resolution

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## Product placement

### Product description

A high performance wide-format versatile printer with exceptional photo printing capabilities.

### Channel

The HP Deskjet 9600 will need two messaging and positioning strategies as it targets two different sets of customers. In North America, it targets mainly the office segment; in Europe and Asia-Pacific, it targets the photo segment.

These targets are as follows:

- Office segment: commercial and retail worldwide.
- Photo segment: commercial and retail in Europe and Asia Pacific.

### Marketing

#### Office segment messages

Flexible & versatile

- 4-ink / 6-ink printing system
- Options for auto-duplexing and software PostScript RIP
- Support wide range of media types & sizes (Hagaki/A6 to A3+; 65-280 gsm; plain, photo, films, double-sided coated, transparencies, T-shirt iron-on transfers.

High performance

- High speed: 20/15 ppm for black/color draft
- High paper handling capacity

Photo capability

- 6-ink capable, 4800 dpi, PhotoREt IV, Light-fastness up to 73 years
- 4-side borderless from A6 to A3
- Software features: CUE 2.0, EXIF Print

#### Photo segment messages

Photo capability

- 6-ink capable, 4800 dpi, PhotoREt IV, Light-fastness up to 73 years
- 4-side borderless from A6 to A3
- Software features: CUE 2.0, EXIF Print

Flexible & versatile

- 4-ink / 6-ink printing system
- Options for auto-duplexing and software PostScript RIP
- Support wide range of media types & sizes (Hagaki/A6 to A3+; 65-280 gsm; plain, photo, films, double-sided coated, transparencies, T-shirt iron-on transfers.

High performance

- High speed: 20/15 ppm for black/color draft
- High paper handling capacity

## SKUs

Product	HP Deskjet 9650	Deskjet 9670	Deskjet 9680
part number	C8137A	C8138A	C8139A
street price	<ul style="list-style-type: none"> <li>• North America \$399</li> <li>• Europe euro499</li> <li>• Asia Pacific \$399</li> <li>• Latin America \$399</li> </ul>	<ul style="list-style-type: none"> <li>• North America \$499</li> <li>• Europe euro599</li> <li>• Asia Pacific not available</li> <li>• Latin America not available</li> </ul>	<ul style="list-style-type: none"> <li>• North America \$499</li> <li>• Europe euro649</li> <li>• Asia Pacific \$499</li> <li>• Latin America not available</li> </ul>
live cpl	<ul style="list-style-type: none"> <li>• October 1, 2003 (AP)</li> <li>• November 1, 2003 (LAR)</li> <li>• October 1, 2003 (EU)</li> <li>• October 1, 2003 (NA)</li> </ul>	<ul style="list-style-type: none"> <li>• November 1, 2003 (NA)</li> <li>• November 1, 2003 (EU)</li> </ul>	<ul style="list-style-type: none"> <li>• January 1, 2004 (NA)</li> <li>• January 1, 2004 (EU)</li> <li>• January 1, 2004 (NA)</li> </ul>

### Comparison between HP Deskjet 9600 models

Additional blue-angel compliant SKUs:

- hp deskjet 9650 color inkjet printer (base SKU) C8148A
- hp deskjet 9650 color inkjet printer (auto-duplex SKU) C8149A

These blue-angel compliant SKUs will only be on blind CPL. They are meant for some tenders or large deals in Europe that require blue-angel compliance. The only difference between the blue-angel compliant and normal SKUs is that C8148A and C8149A do not have the metallic strip on the front access door panel.

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## Benefits

- A high performance, photo quality, versatile printer for the customer who requires digital imaging for business.
- 4800 dpi and PhotoREt IV
- Versatile media support: 4x6" to 13x19"; 65gsm to 280gsm
- Fast print speeds
- Flexibility of 4-ink and 6-ink printing
- Borderless edge-to-edge printing
- HP Photo & Imaging Software & Smart Software Features
- EXIF Print
- Ease of use with auto-duplex unit

## Localization

Language	Getting Started Guide	User's Guide	Quick Tour	Windows Driver Components	Macintosh Driver Components
Czechoslovakian	Y	Y	Y	Y	N
Danish	Y	Y	Y	Y	N
Dutch	Y	Y	Y	Y	Y
English (US)	Y	Y	Y	Y	Y
Finnish	Y	Y	Y	Y	N
French	Y	Y	Y	Y	Y
German	Y	Y	Y	Y	Y
Hungarian	Y	Y	Y	Y	N
Italian	Y	Y	Y	Y	Y
Norwegian	Y	Y	Y	Y	N
Polish	Y	Y	Y	Y	N
Portuguese (Brazilian)	Y	Y	Y	Y	Y
Russian	Y	Y	Y	Y	N
Spanish (European)	Y	Y	Y	Y	Y
Swedish	Y	Y	Y	Y	Y
Arabic	Y	Y	Y	all except HP Photo Imaging Software	N
Greek	Y	Y	Y	Y	N
Hebrew	Y	Y	Y	all except HP Photo Imaging Software	N
Turkish	Y	Y	Y	Y	N
Japanese	Y	Y	Y	Y	Y
Korean	Y	Y	Y	Y	N
Simplified Chinese	Y	Y	Y	Y	N
Traditional Chinese	Y	Y	Y	Y	N

**Localization Matrix**



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## The printers

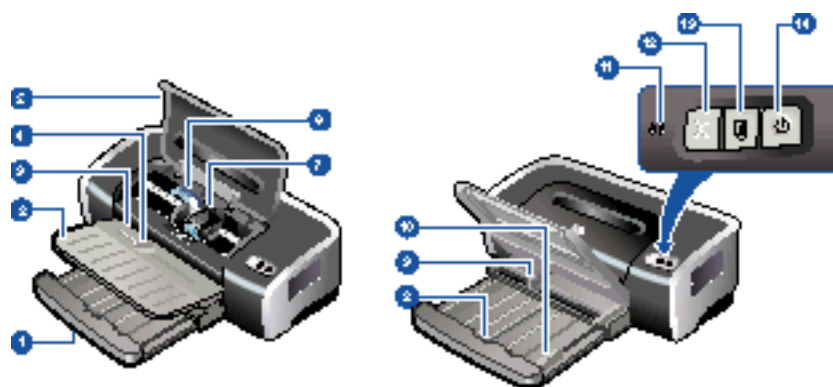
Feature	HP Deskjet 9650	HP Deskjet 9670	HP Deskjet 9680
part numbers	C8137A	C8138A	C8139A
weight	11 kg (24.25 lbs)	With auto-duplex unit 13.8 kg (30.42 lbs)	11 kg (24.25 lbs)
dimensions with input tray closed	591.5 mm x 176.72 mm x 378.85 mm	With auto-duplex unit: 469.35 mm (depth)	591.5 mm x 176.72 mm x 378.85 mm
dimensions with input tray fully extended	591.85 mm x 176.72 mm x 378.85 mm	With auto-duplex unit: 601.36 mm (depth)	591.85 mm x 176.72 mm x 378.85 mm

### Printer comparison

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## Printer parts

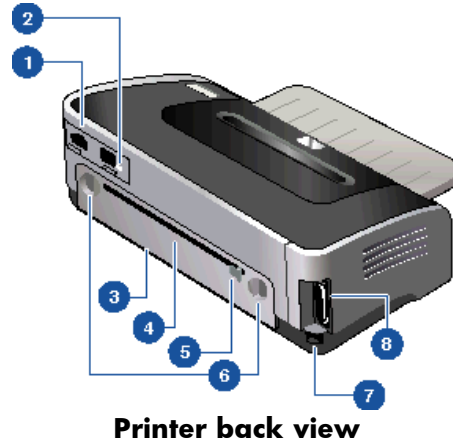
### Front view



**Printer front view**

1. Extendable input tray
2. Extendable output tray
3. Front manual feed slot
4. Front manual feed paper guide
5. Top cover
6. Print cartridge cradle
7. Print cartridge latch
8. Input tray lock
9. Paper width guide
10. Small media guide
11. Left and right print cartridge lights
12. Cancel button
13. Resume button and light
14. Power button and light

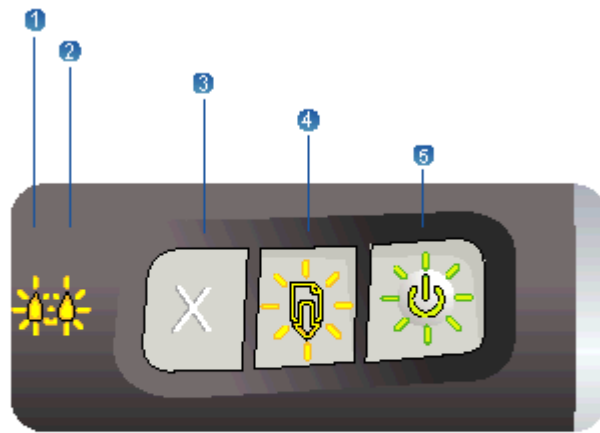
## Back view



1. Power input
2. Power supply module
3. Rear access panel -- Remove to clear any jammed paper.
4. Rear manual feed slot -- Manually feed thick paper (like cardstock) or thick photo paper that requires a straight paper path.
5. Rear manual feed paper guide
6. Rear access panel release buttons
7. Universal serial bus (USB) port
8. Parallel port

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## Printer buttons and lights



### Printer front

The printer lights provide visual cues about the status of the printer.

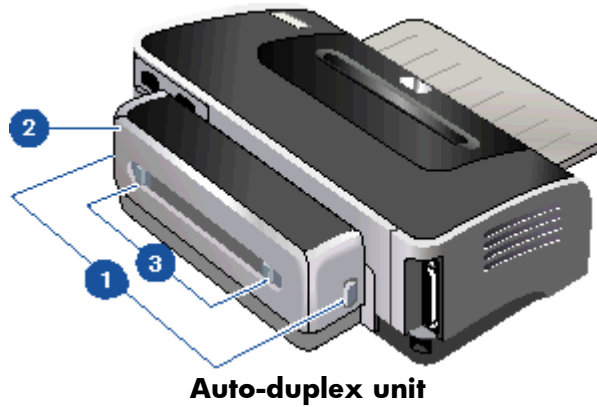
1. Left Print Cartridge light
2. Right Print Cartridge light
3. Cancel button
4. Resume button and light
5. Power button and light

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## Auto-duplex unit

The printer can automatically print on both sides of a sheet of paper when the auto-duplex unit is attached to the back of the printer.

The auto-duplex unit is a standard part in the hp deskjet 9670. It may be purchased separately in some countries/regions.



1. Buttons – Push these buttons in to remove the auto-duplex unit from the printer.
2. Rear cover – Remove this cover to clear any jammed paper from the auto-duplex unit.
3. Rear cover release buttons

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## Specifications

The print method is drop-on-demand thermal inkjet printing.

	<b>fast draft</b>	<b>fast normal</b>	<b>normal</b>	<b>best</b>
black text, letter, plain paper	20 ppm	8 ppm	6 ppm	1.5 ppm
mixed text color, letter, plain paper	15 ppm	6.5 ppm	4 ppm	1.5 ppm
full-page color, letter, plain paper	4 ppm	2 ppm	1 ppm	0.3 ppm

### **Print speed (approximate\*)**

Typical photo print speed in best mode:

Typical photo print speed in best mode:

- A size with border = 0.1 ppm or 10:43 min.
- A size borderless = 0.08 ppm or 12:30 min.
- 4x6 borderless = 0.22 ppm or 4:30 min.
- B size with border = 0.05 ppm or 20:03 min.
- B size borderless = 0.04 ppm or 23:06 min.

Maximum black and color resolution is 4800 x 1200 dpi.

The printer supports up to 4800 x 1200 optimized dpi for color printing and 1200 input dpi. This setting will temporarily use a large amount of hard disk space (400 MB or more) and will print slower. Photo cartridge, if present, further enhances the print quality.

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## Hardware accessories

Accessories	Part number
Two-sided printing accessory -- HP auto-duplex unit	C8248A
HP IEEE-1284 A-B parallel cable (2 m)	C2950A
HP IEEE-1284 A-B parallel cable (3 m)	C2951A
HP USB A-B (2 m)	C6518A
HP Jetdirect 170x Print Server	C3258A
HP Jetdirect 175X external print server (USB)	J6035C
HP Jetdirect 310X external print server (USB)	J6038A
HP Jetdirect 300X external print server (Parallel)	J3263A
HP Jetdirect 500x external print server (Parallel)	J3265A

### Hardware accessories for HP deskjet printer 9600 series

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## User-replaceable components (CREW parts)

The following parts are the user-replaceable parts or CREW parts that can be fixed by customers:

- Output Tray (C8137-67009)
- Cleanout Trough (C8137-67012)
- Door Access (C8137-67008)
- Pick Roller (C8137-67014)
- Duplexer (C8137-67013)
- Rubber Foot (square) (C8137-67039)
- Power Supply (C8137-67042)



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## Print cartridges



### Print cartridges and print cartridge protector

Cartridge	Ink capacity	Part number	Page yield	Cost per page	US street price
Black (HP 56)	19 ml	C6656A	450 pages	0.044	\$19.99
Tri-color (HP 57)	17ml	C6657A	400 pages	0.087	\$34.99
Photo (HP 58)	17 ml	C6658A	270 pages		\$24.99

### Print cartridges

The printer uses two print cartridges at one time.

- For four-ink printing, use HP 56 Black and HP 57 Tri-color print cartridges.
- For six-ink printing, use HP 57 Tri-color and HP 58 Photo print cartridges.

The Tri-color print cartridge ships with a "print cartridge protector." This protector keeps the cartridge sealed and in proper alignment while not in use.

## HP media

Type	Finish and/or size	Sheets	Dimensions	Part number
HP bright white inkjet paper	A3	200	297 by 420 mm	C1858A
HP bright white inkjet paper	US B size	200	11 by 17 in.	C1857A
HP bright white inkjet paper	US Letter	250	8.5 by 11 in.	HPB250
HP bright white inkjet paper	US Letter	500	8.5 by 11 in.	HPB1124
HP bright white inkjet paper	A4	200	210 by 297 mm	C5977A
HP bright white inkjet paper	A4	500	210 by 297 mm	C1825A
HP everyday inkjet paper	US Letter	400	8.5 by 11 in.	HPD400
HP premium inkjet paper	A3	100	297 by 420 mm	C1856A
HP premium inkjet paper	US B size	100	11 by 17 in.	C1855A
HP premium inkjet paper	A4	200	210 by 297 mm	51634Z
HP premium inkjet paper	US Letter	200	8.5 by 11 in.	51634Y
HP color inkjet paper	US Letter	500	8.5 by 11 in.	HPK115
HP everyday copy & print paper	US Letter	400	8.5 by 11 in.	HPA400
HP everyday copy & print paper	US Letter	500	8.5 by 11 in.	HPA500
HP everyday copy & print paper	US Letter	500	8.5 by 11 in.	HPA51 + B7380
HP photo paper	US Letter	50	8.5 by 11 in.	Q1785A
HP photo paper	4 by 6 in.	60	4 by 6 in.	C7893A
HP photo paper	Glossy, A4	25	210 by 297 mm	Q5437A
HP photo paper	Glossy, A4	50	210 by 297 mm	C7897A
HP photo paper	US Letter	60	8.5 by 11 in.	C1846A
HP everyday photo paper	Semi-gloss, A4	100	210 by 297 mm	Q2510A
HP everyday photo paper	Semi-gloss, A4	100	210 by 297 mm	Q2511A
HP everyday photo paper	Semi-gloss, A4	25	210 by 297 mm	C7006A
HP everyday photo paper	Semi-gloss, US Letter	100	8.5 by 11 in.	Q2509A

HP everyday photo paper	Semi-gloss, US Letter	25	8.5 by 11 in.	C6983A
HP everyday photo paper	Semi-gloss, US Letter	75	8.5 by 11 in.	Q1976A
HP premium photo paper	Glossy, A3	20	297 by 420 mm	C6059A
HP premium photo paper	Glossy, US B	20	11 by 17 in.	C6058A
HP premium photo paper	Glossy	20	10 by 15 cm	Q1991A
HP premium photo paper	Glossy	20	4 by 6 in.	Q1988A
HP premium photo paper	Glossy, A4	15	210 by 297 mm	C6040A
HP premium photo paper	Glossy, US Letter	15	8.5 by 11 in.	C6039A
HP premium photo paper	Glossy, US Letter	50	8.5 by 11 in.	C6979A
HP premium plus photo paper	Glossy	20	10 by 15 cm	Q1979A
HP premium plus photo paper	Glossy	20	4 by 6 in.	Q1977A
HP premium plus photo paper	Glossy, A4	20	210 by 297 mm	C6832A
HP premium plus photo paper	Glossy, US Letter	20	8.5 by 11 in.	C6831A
HP premium plus photo paper	Matte, US Letter	20	8.5 by 11 in.	C6950A
HP premium plus photo paper (borderless)	Glossy	20	10 by 15 cm borderless	Q2503
HP premium plus photo paper (borderless)	Glossy	20	10 by 15 cm borderless	Q2504A
HP premium plus photo paper (borderless)	Glossy	60	4 by 6 in. borderless	Q2502A
HP glossy photo paper	Glossy	20	4 by 6 in.	C7890A
HP glossy premium photo paper	Glossy, A4	50	210 by 297 mm	C7040A
HP advance photo paper	Glossy, US Letter	25	8.5 by 11 in.	C1846A
HP advance photo paper	Glossy, A4	20	210 by 297 mm	C6765A
HP colorfast photo paper		20	10 by 15 cm	Q1952A
HP colorfast photo paper	A4	20	210 by 297 mm	Q1951A
HP photo greeting cards	Glossy, US Letter	10 cards	8.5 by 11 in.	C6044A

HP photo greeting cards	White, A4	10 cards	210 by 297 mm	C6045A
HP linen greeting cards	Ivory (half-fold), US Letter	20 cards	8.5 by 11 in.	Q1787A
HP linen greeting cards	White (half-fold), US Letter	20 cards	8.5 by 11 in.	Q1788A
HP premium high-gloss film	US Letter	20 cards	8.5 by 11 in.	Q1973A
HP premium inkjet transparencies	A4	20	210 by 297 mm	C3832A
HP premium inkjet transparencies	A4	50	210 by 297 mm	C3835A
HP premium inkjet transparencies	US Letter	20	8.5 by 11 in.	C3828A
HP premium inkjet transparencies	US Letter	50	8.5 by 11 in.	C3834A
HP brochure paper	Glossy, US Letter, Scored, Tri-fold	100	8.5 by 11 in.	C7020A
HP brochure paper	A4, Tri-fold	50	210 by 297 mm	Q2525A
HP brochure and flyer paper	Glossy, A3	50	297 by 420 mm	C6821A
HP brochure and flyer paper	Glossy, US B size	50	11 by 17 in.	C6820A
HP brochure and flyer paper	US Letter	50	8.5 by 11 in.	C6817A
HP address labels	White	100	1 by 2-5.8 in.	Q2588A
HP address labels	White	25	1 by 2-5.8 in.	Q2587A
HP address labels	White	25	1/2 by 1-3/4 in.	Q2593A
HP address labels	White	100	1-1/3 by 4 in.	Q2590A
HP address labels	White	25	1-1/3 by 4 in.	Q2589A
HP full-sheet labels	White, US Letter	100	8.5 by 11 in.	Q2551A
HP full-sheet labels	White, US Letter	25	8.5 by 11 in.	Q2550A
HP shipping labels	White	100	2 by 4 in.	Q2592A
HP shipping labels	White	25	2 by 4 in.	Q2591A
HP shipping labels	White	100	3-1/3 by x 4 in.	Q2594A

#### HP media

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## Upgrades

Upgrade options include the auto-duplex unit and second paper tray. See the HP Customer Care web site ([www.hp.com/support](http://www.hp.com/support)) for specific upgrade details.

Only printers built within the first three months will have upgradable firmware. Ideally, only technicians will upgrade firmware, but potentially, a serious upgrade would go to the Web for customer upgrades.

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## Value-added services

The value-added services that HP provides with this product include:

- HP instant support
- myPrintMileage

### HP instant support for printers

The screenshot shows the HP Instant Support web interface. At the top, there's a navigation bar with links: hp home, products & services, support, solutions, and how to buy. Below this is the HP logo and a 'select region/language' dropdown set to 'United States/English'. The main heading is 'instant support for your printer'. On the left, there's a sidebar with 'about your printer' and links for search, contact hp, home, services, self-help, and software. The main content area features a printer image, a 'welcome' message for an HP Deskjet 9300, and a 'legend' for alerts. Below this is an 'alerts at a glance' section with a table of alerts.

alerts at a glance	
	<b>tips</b> → tips for avoiding paper jams → using and caring for print cartridges
	<b>myPrintMileage</b> send your printer information to myPrintMileage for your customized usage analysis → myPrintMileage
	<b>firmware</b> latest firmware package version 7.4.2 available for download: - updating using Mac OS download DFR742.hqx - updating using Web JetAdmin download DFR742S.zip - updating using Windows utility download DFR742C.zip → download page
	<b>Warranty</b> → Your warranty is expiring. Check for new support pack
	<b>Software</b> → You have firmware version 5.5. Upgrade new firmware version 6.0. → You have PDL firmware version 5.5. Upgrade new PDL firmware version 6.0. → Download new driver version 8.0 for Windows users.

### hp instant support home page

HP instant support is a Web-based tool that provides you with product-specific services, troubleshooting tips, and information about your printer's ink and media usage (via myPrintMileage). With this information, you can diagnose and solve printer problems and manage your printing activities and printer supplies more effectively.

To access HP instant support, select hp instant support in the Toolbox Information tab. HP instant support provides the following services for the printer:

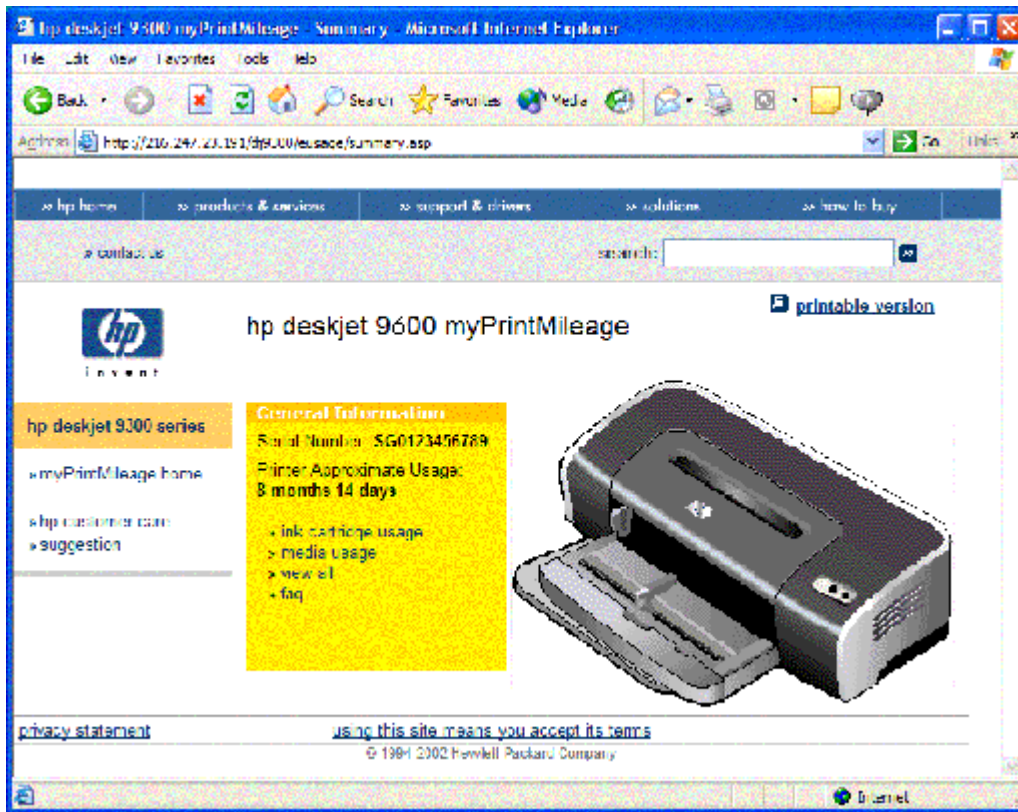
- Easy access to troubleshooting tips – To help you quickly resolve printer problems or prevent some problems from happening, HP instant support provides tips that are customized for your printer.
- Notification of driver and firmware updates – When a firmware or driver update for your printer is available, a notification message will appear on the HP instant support homepage. You can access the download site from the web page.
- Access to hp services – From the website, you can find out more about the support services available for your printer (such as maintenance programs), obtain information about service providers, and also make online purchase of printer supplies and accessories.
- Notification of warranty expiration – When the printer warranty is expiring, a notification message will appear on the HP instant support homepage.

To provide current information on the website, the web pages are created dynamically. Bookmarking a web page and connecting via the bookmark will not display the page. Instead, connect from the Toolbox by clicking the HP instant support button on the Information tab.

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**Note** *The Toolbox is supported for Windows 98 and later and is available when you install the printer from the printer software CD. (Installing the printer via the Windows Printer Wizard will install the driver only.)*

## myPrintMileage



**myPrintMileage home page**

myPrintMileage keeps track of your printer usage information to help you plan the purchase of consumables. It consists of two parts.

- myPrintMileage website
- myPrintMileage Agent, which is a utility installed with the Toolbox on your computer

myPrintMileage is activated during installation of the printer driver, or through the Toolbox via a link to the myPrintMileage website. You can connect to the myPrintMileage website to view a customized analysis of your printer's usage.

### myPrintMileage website

To visit the myPrintMileage website from the Toolbox, click the myPrintMileage button or double-click the myPrintMileage Agent icon on the Windows taskbar (near the clock). You must have an Internet connection to use this function.

This web site shows:

- The amount of ink you have used. myPrintMileage forecasts how many print cartridges you might use in one year.
- Whether you use more black or color ink.
- The average quantity of media you use per month for each media type.
- Number of pages printed, and the estimated number of pages you can print with the amount of ink remaining.



- Links to third-party utilities and software.
- Information on the latest digital printing tools, such as Bluetooth and infrared printing.
- Printing tips.

myPrintMileage websites are dynamically created. Bookmarking this site and connecting using the bookmark will not display the current information. Instead, connect from the Toolbox by clicking the myPrintMileage button on the Information tab.

Using this service of the myPrintMileage website requires that your printer data is transferred to HP. This is only a one-time transfer, the periodic data flow remains active or inactive, according to the choice you made. Only your printer usage data will be stored in the HP database.

## **myPrintMileage Agent**

myPrintMileage Agent is installed with the Toolbox during printer driver installation. During driver installation, select “I accept the terms in the disclaimer” to let myPrintMileage Agent send printer usage information to the myPrintMileage website. If you do not select this option, you can enable it later through the Toolbox. You can disable the periodic updates at any time through its icon on the system tray.

When you have a USB or parallel bi-directional connection to your printer, the myPrintMileage Agent will run and check for Internet connection. Then the agent will fetch updated data from the printer and send it to the myPrintMileage website.

## **myPrintMileage requirements**

In order to use myPrintMileage website and myPrintMileage Agent, you must have:

- The Toolbox installed.
- An Internet connection.
- An active Windows USB or parallel bi-directional connection to your printer.

## **Information sent to myPrintMileage website**

The following information will be automatically sent to the myPrintMileage website if you have enabled myPrintMileage for your printer, or request your printer's status on the myPrintMileage website.

- Your ink usage. For example, the amount of ink you have used.
- Your media usage. For example, the average quantity of media you use per month for each media type.
- The applications that you use to print with the printer.
- Job and page count. For example, the number of pages that have been printed and the estimated number of pages that can be printed with the amount of ink. remaining.
- The driver features that you frequently use.
- The printer serial # and the IP address of the PC.

---

**Note**

*HP respects your privacy and manages your printer information according to the guidelines in the Hewlett-Packard Online Privacy Statement:*

*<http://www.hp.com/country/us/eng/privacy.htm>. To view all the data that is sent to Hewlett-Packard, from the View menu of your Web browser, select Source (for Internet Explorer) or Page Source (for Netscape).*

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## Education and training

Documentation/training	Information	Purpose
Getting Started Guide	Contains easy-to-follow instructions and illustrations to quickly set up your printer and identify printer parts.	To set up the printer.
Setup poster	Contains easy-to-follow illustrations to quickly set up your printer.	To set up the printer.
Toolbox	Contains "how-to" and troubleshooting instructions and allows access to printer maintenance functions and HP information.	To learn how to use the printer and to perform troubleshooting.
HP Instant Support	A web-based tool that provides product-specific services, troubleshooting tips, and information about your printer's ink and media usage. This e-service can be accessed via the Toolbox.	To obtain immediate troubleshooting tips and information specific to a printer's usage.
<a href="http://www.hp.com/support/dj9600">http://www.hp.com/support/dj9600</a>	Provides the latest printer software, product, operating system, and support information.	To provide the latest information.
Starter CD	Includes printer software, a utility that lets you create customized installation packages, an electronic copy of this user's guide, and ordering information.	Software to support the printer's use.
User's guide	Procedures for setting up, using, and troubleshooting the printer.	To set up, use, and troubleshoot the printer.

### Education and training available for the printer

---

## Service and support

### Toolbox

The Toolbox is available only if you installed the printer driver through Setup.exe. Clicking the Troubleshooting button on the Information tab provides easy step-by-step solutions to common printing problems. You should be able to resolve most printing problems by following the provided solutions step-by-step. To open the Toolbox, click Start, point to Programs, hp deskjet 9600 series, and then click hp deskjet 9600 series Toolbox. Or in the status area of the Windows taskbar (near the clock), click the Toolbox icon.

### HP instant support

HP instant support is a web-based tool that provides product-specific services, troubleshooting tips, and information about your printer's ink and media usage. You must have an Internet connection to use HP instant support.

To access HP instant support, open the Toolbox and click HP instant support on the Information tab.

HP instant support web pages are dynamically created. Do not bookmark this site; always access it from the Toolbox.

### World Wide Web

Visit our World Wide Web for the latest printer software, product, operating system, and support information at <http://www.hp.com/support/dj9600>.

### HP telephone support

During the warranty period, you may obtain assistance from the HP Customer Care Center. For the number to call, see the support guide that came in the box with your printer.

To help our Customer Care Center representatives serve you better, have the following information ready before calling:

1. Print the printer diagnostic page. If the printer does not print, have the following information ready: printer model number and serial number (located at the back of the printer), such as C8137A and SG1881119P, and printer model name, such as HP Deskjet 9600 series (shown on the nameplate at the lower right front of the printer).
2. Check the operating system you are using (for example, Windows 98 SE).
3. If the printer is connected to the network, check the network operating system (for example, Windows NT Server 4.0).
4. Note how the printer is connected to the system (for example, parallel, USB, or network).
5. Obtain the printer driver and version number of the printer software (for example, HP Deskjet 9600 series PCL 3 version 1.0).
  1. Click Start, point to Settings, and then click Printers (Windows NT 4.0, 98, Me, and 2000) or Printers and Faxes (Windows XP).
  2. Right-click the printer icon and select Properties.
  3. Click the About tab and write down the version number.
6. If you have a problem printing from a particular application, note the application and version number.

---

## Repair strategy

The regional repair strategy is "Return to bench." There are regional customer options to upgrade to, e.g. EPUS (express pickup & deliver).

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## Warranty

### Warranty statement

Hewlett-Packard warrants to the end-user customer that the HP products specified below will be free from defects in materials and workmanship for the duration specified below , which duration begins on the date of purchase by the customer. Detailed warranty information is in the user's guide.

### Warranty duration

HP product	Duration
Software	90 days
Accessories	90 days
Print cartridges	English only: Until the HP print cartridge has been depleted of HP ink, or until the "end of warranty" date printed on the HP print cartridge, whichever occurs first. Rest of localization: 90 days.
Printer peripheral hardware	1 year

### Warranty duration

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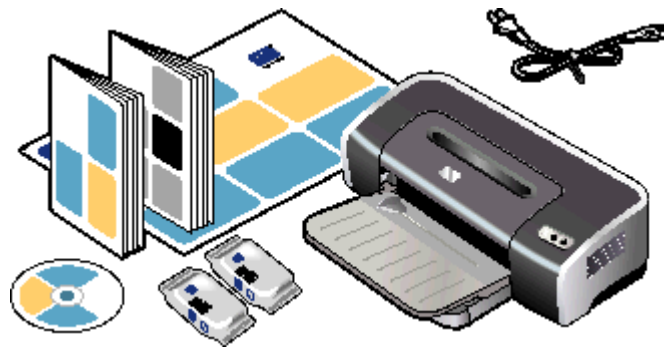
## Hardware setup requirements

<b>Operating system</b>	<b>Minimum</b>	<b>Recommended</b>
Windows 98	Pentium 90 MHz, 16 MB RAM, 100 MB hard disk space	Pentium 266 MHz, 32 MB RAM, 200 MB hard disk space
Windows NT 4.0	Pentium 100 MHz, 32 MB RAM, 100 MB hard disk space	Pentium 266 MHz, 64 MB RAM, 200 MB hard disk space
Windows Me	Pentium 150 MHz, 32 MB RAM, 100 MB hard disk space	Pentium 266 MHz, 32 MB RAM, 200 MB hard disk space
Windows 2000	Pentium 300 MHz, 64 MB RAM, 100 MB hard disk space	Pentium 300 MHz, 64 MB RAM, 200 MB hard disk space
Windows XP	Pentium 300 MHz, 64 MB RAM, 100 MB hard disk space	Pentium 300 MHz, 128 MB RAM, 200 MB hard disk space
Mac OS 9.x	iMac 333 MHz or G3 350 MHz, 32 MB RAM	iMac 333 MHz or G3 350 MHz, 64 MB RAM
Mac OS X	G3 (except original PowerBook G3), 128 MB RAM	G4 800 MHz, 256 MB RAM

**Minimum and recommended system requirements**

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## Contents of the box



### **Contents of the box**

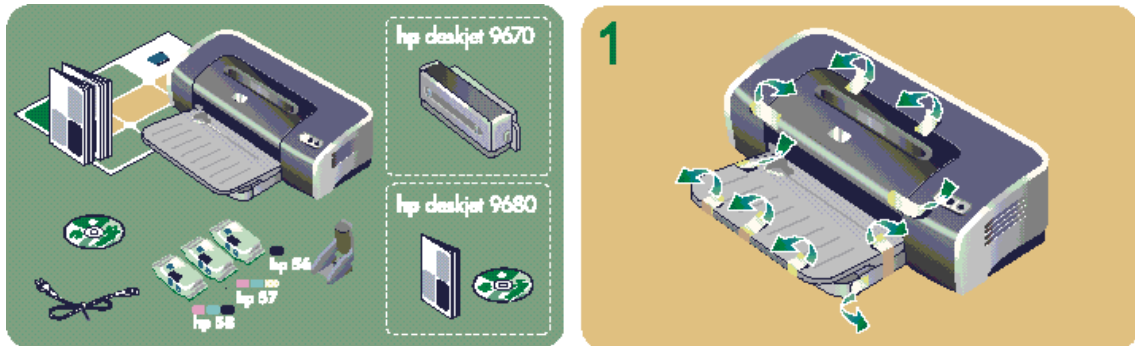
- HP Deskjet 9600 series printer
- Black, Tri-color, and Photo print cartridges
- Printed documentation (setup poster, getting started guide, HP customer support guide)
- Starter CD (software and electronic documentation)
- Power cord
- Photo media pack
- Print cartridge protector
- Auto-duplex unit (included with HP Deskjet 9670)
- PostScript CD (included with HP Deskjet 9680)

---

## Overall setup procedure

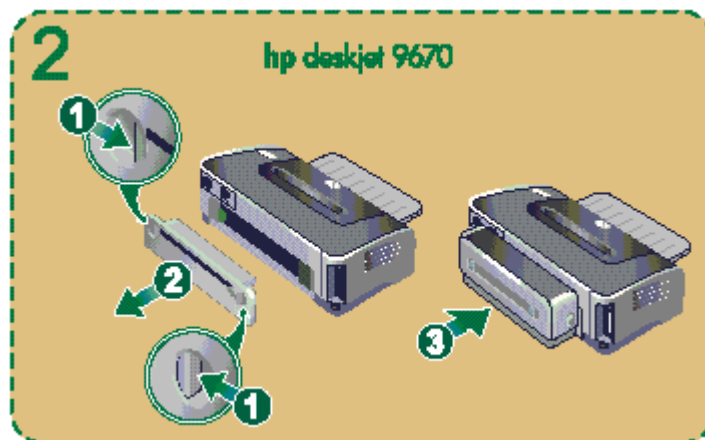
The setup procedure for this product is:

1. Check the package contents and remove the packing materials.



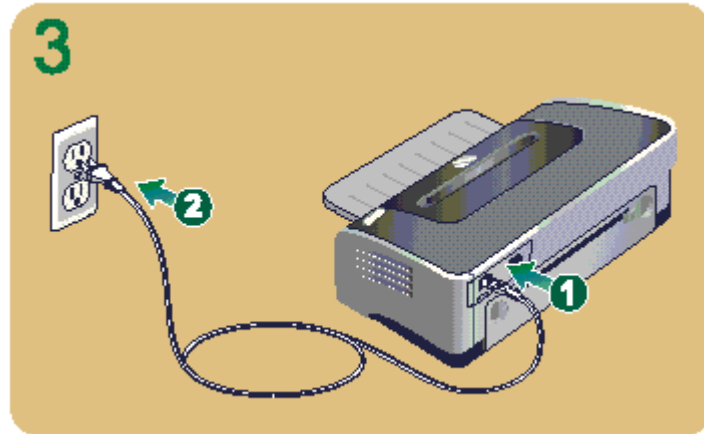
**Setup poster step 1**

2. Install the auto-duplex unit if applicable.



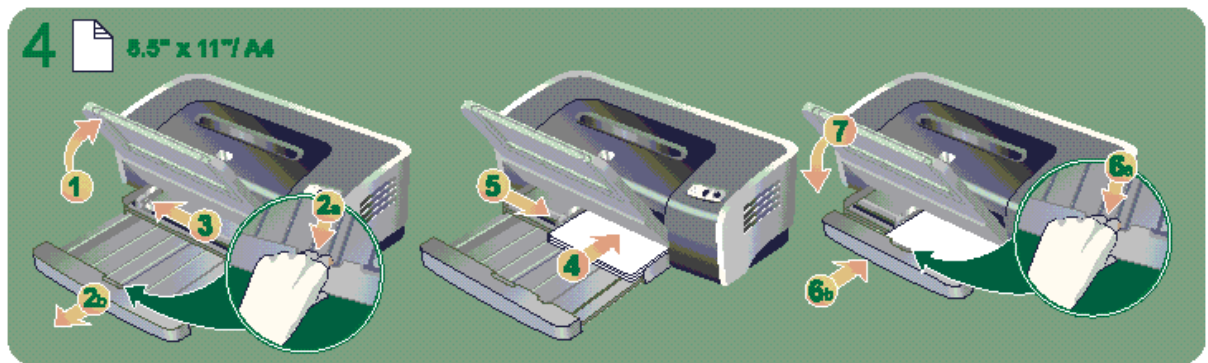
**Setup poster step 2**

3. Connect the power cord.



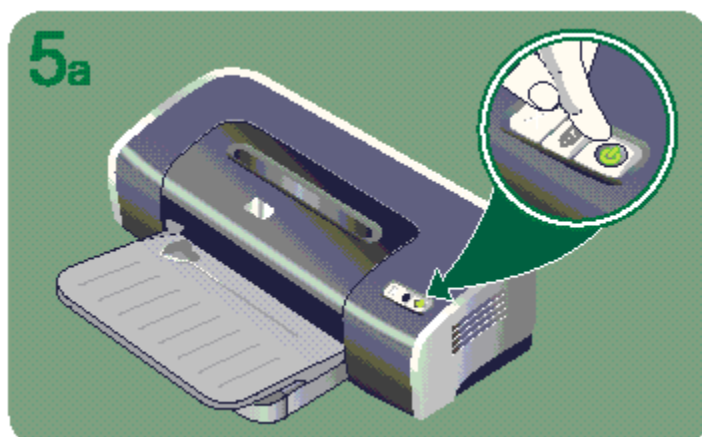
**Setup poster step 3**

4. Load paper.

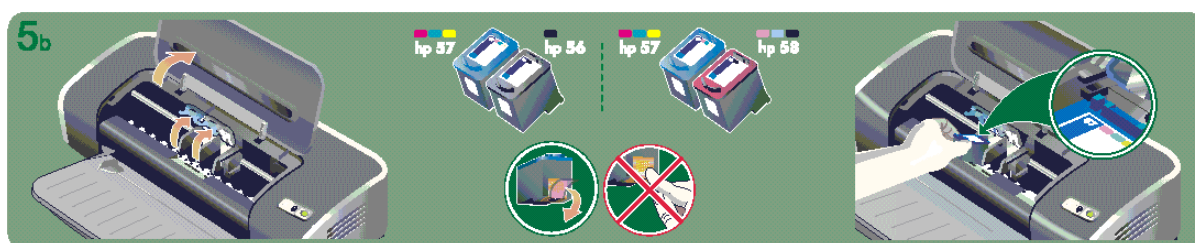


**Setup poster step 4**

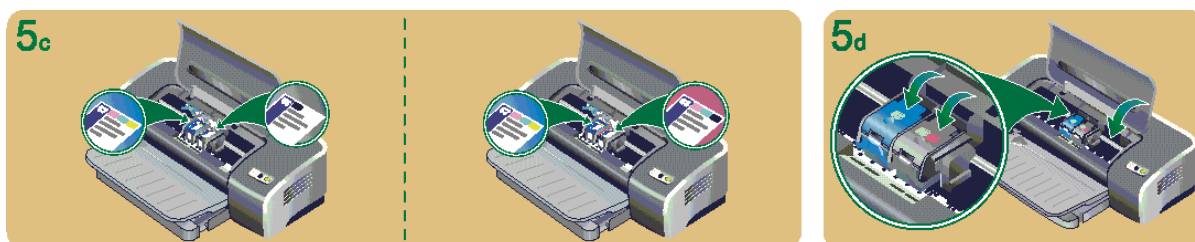
5. Turn on the printer and install the print cartridges.



**Setup poster step 5a**



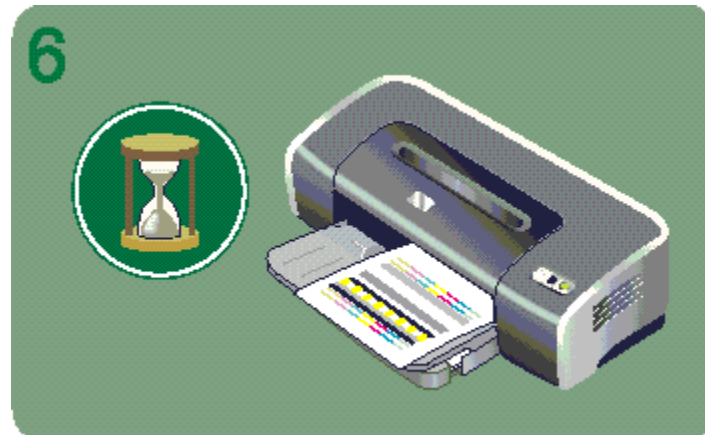
**Setup poster step 5b**



**Setup poster step 5c, 5d**

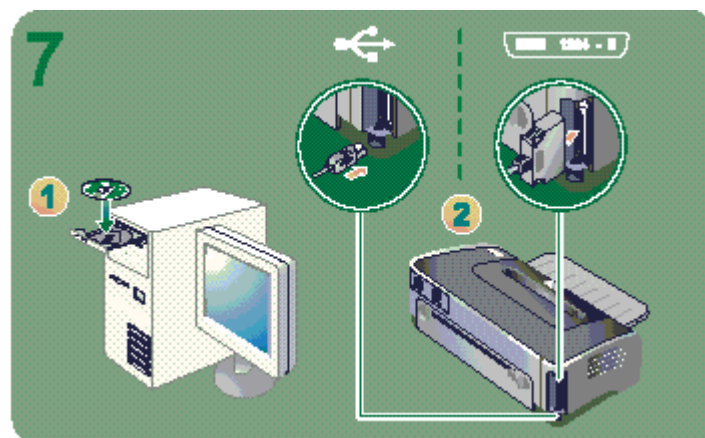


6. Test the hardware installation by printing a demo page.



**Setup poster step 6**

7. Install the software and connect the printer.



**Setup poster step 7**

---

## Connect the printer

The printer supports local printing and network printing. For local printing, connect the printer using a USB cable or parallel cable. For network printing, connect via an optional HP external print server. For best results, install the software before connecting the printer to the computer.

### Windows

Use a USB cable to connect the printer to the computer if the computer has a USB port and is running Windows 98, Windows Me, Windows 2000, or Windows XP. If the computer does not meet these specifications, use a parallel cable to connect the printer to the computer. In most cases, after installing the printer software and connecting a printer to the computer, additional printers with USB cables can be installed without reinstalling the printing software.

### Windows software-first installation (recommended)

Complete the setup using these instructions if you have not yet connected a USB or parallel cable.

1. Close any application that is running.
2. Insert the Starter CD into your CD-ROM drive. The CD menu runs automatically. If the CD menu does not run automatically, click Start, click Run, and in the command line box, type the letter of your computer's CD-ROM drive followed by `: \setup` (for example, type `D: \setup`).
3. On the CD menu, click Install Printer Driver.
4. Choose the language you want and click OK.
5. Follow the onscreen instructions. If the installation program detects that the printer is already connected to the computer using a parallel cable (before running the program), it will provide you with the option to install the printer using the same port. In addition, if you select the express install check box, the installation program uses the default settings.
6. In the printer connection dialog box, select Connected directly to this computer and click Next.
7. Do one of the following:
  - For a USB connection: Select USB Cable and click Next.
  - For a parallel connection: Select Parallel Cable and use the drop-down list to select the parallel port to which the printer is connected (usually LPT1).

---

#### Note

*It is recommended to install the Toolbox, which is installed by selecting Typical Installation (Recommended). If you select Custom Installation, you can still choose to install the Toolbox from the list of options to install. The Toolbox provides status and maintenance information about your printer. It also provides access to documentation and online help tools for solving printer problems. If you do not install the Toolbox you will not see printer error messages on your computer screen and will not have access to the myPrintMileage website. See "Using the Toolbox" for more information.*

8. Follow the onscreen instructions to complete the installation.
9. When prompted, connect the USB or parallel cable to the computer and the printer. The Found New Hardware wizard appears on the computer screen and the printer icon is created in the Printers folder.

## Windows hardware-first installation

Complete the setup using these instructions if you have already connected a USB or parallel cable to the printer and computer, and the Found New Hardware wizard appears. If you have connected the parallel or USB cable to your printer and turned on the printer, do not turn off the printer or unplug the cable from the printer when the printer setup program is running. If you do so, the setup program will not finish.

- On the screen that allows you to select a method to locate the driver, select the advanced option and click Next. Do not allow the hardware wizard to perform an automatic search for the driver.
- Select the check box that allows you to specify the driver location, and ensure the other check boxes are cleared.
- Insert the Starter CD into your CD-ROM drive. If the CD menu appears, click Exit twice to close the CD menu.
- Browse to locate the root directory on the Starter CD (for example, D:), and then click OK.
- Click Next and follow the onscreen instructions.
- Click Finish to close the Found New Hardware wizard.
- Upon completion of the installation process, the hardware wizard will automatically launch the printer setup program. This may take more than a minute. For Windows 98 and Me, you must complete the setup program at this point if you wish to install a non-English driver.
- The setup program provides options to install non-driver components such as the Toolbox, which is recommended to install. For instructions on completing the setup program, see "To complete a software-first installation (recommended)".

## Macintosh

To connect the printer to an Apple computer that uses Mac OS 9.1 or later, use the USB port. To connect an older model that does not have a USB port, either connect the Macintosh to an HP Jetdirect print server (Jetdirect 300x), or contact Apple for USB solutions.

## Connecting directly using a USB cable (Mac OS)

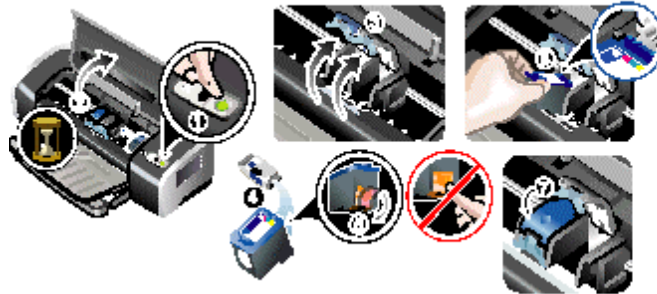
Install the software first, and then connect the printer to the computer. You may share the printer with other Mac OS users when you are finished.

- Insert the Starter CD into your CD-ROM drive. The CD menu runs automatically. If the CD menu does not run automatically, double-click the CD icon on the desktop, and then double-click the Setup icon.
- Click Install Driver.
- Follow the onscreen instructions.
- Connect the USB cable to the computer and the printer

- Mac OS 9.1.x and 9.2.x
  - When prompted, restart the computer.
  - Select Chooser from the Apple menu.
  - Select hp deskjet xx in the upper-left window of the Chooser window, where xx represents the version of the current printer driver.
  - Select hp deskjet 9600 series in the right window of the Chooser screen.
  - Close the Chooser.
  - To share the printer, see "To share the printer on a peer-to-peer network (Mac OS)" below.
- Mac OS X
  - Open the Print Center, which is located in the Applications\Utilities folder.
  - Click Add.
  - Select USB from the menu.
  - Select hp deskjet 9600 series from the printer list, and then click Add. A dot appears beside the printer name, indicating that this printer is now the default printer.
  - Close the Print Center.

---

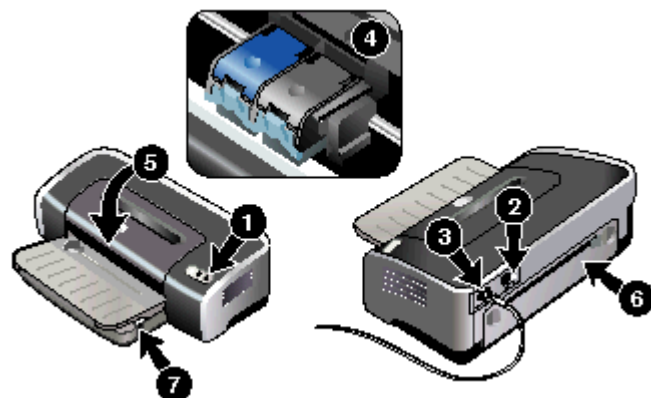
## Install print cartridges



1. Press the Power button to turn on the printer.
2. Open the top cover and wait for the print cartridge carriage to stop moving.
3. Lift the print cartridge latches.
4. Remove the color print cartridge (C6657A) from its package.
5. Remove the protective tape from the print cartridge. Caution: Do not touch the ink nozzles or copper contacts, and do not remove the copper contacts.
6. Insert the print cartridge into the left cradle.
7. Push down the latch until it snaps closed.



8. Repeat the preceding steps to install the black print cartridge (C6656A) or photo print cartridge (C6658A) into the right cradle.



9. Close the top cover. The printer aligns the print cartridges and prints an alignment page. Note: Do not open the top cover when the printer is aligning the print cartridges. If the printer does not print, make sure: 1) The power light is lit, 2) the light on the power supply module is lit, 3) the power cord is firmly connected, 4) the print cartridges are properly installed, 5) the top cover is closed, 6) the rear access panel is locked into place, 7) paper is loaded in the input tray.

---

## Installing the auto-duplex unit



### Installing the auto-duplex unit

1. Push the release buttons towards each other.
2. Pull the rear access panel out of the printer.
3. Insert the auto-duplex unit straight into the back of the printer until both sides snap into place.

Do not press the buttons on either side of the auto-duplex unit when installing it. Use these buttons only for removing the auto-duplex unit from the printer.

---

## Load media into main tray



### Loading media

1. Raise the output tray.
2. Press the input tray lock and extend the input tray.
3. Press the button on top of the paper width guide and slide the guide to the left to its outermost position.
4. Insert up to 150 sheets of paper, print-side down along the right side of the input tray until it stops.
5. Press the button on top of the paper width guide and slide the guide to the right until it stops at the edge of the media.
6. Press the input tray lock and retract the tray until it stops at the edge of the media.
7. Lower the output tray.



---

## Test hardware installation

The demo page is printed from the keypanel.

Try printing a demo page without being connected to a computer verifies the printer is set up correctly.

- Make sure the printer is turned on.
- Press and hold the Power button.
- Press the Resume button once.
- Release the Power button. The printer prints a demo page.



### hp deskjet 9600 series

hp's versatile high performance wide-format color printer  
with professional photo print quality for the business user

**professional photo quality with 6-ink borderless printing**

**superior performance with impressive print speeds**

**prints on a variety of sizes & types of media from  
A6 postcard up to A3+ / 13" x 19" poster**



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**Demo page**

---

## Windows software installation requirements

- Make sure your computer is running one of these operating systems: Windows 98, NT 4.0, Me, 2000, or XP (Windows NT 4.0 must have Service Pack 6.0 or later installed to use the setup program, the driver can be installed without the service pack).
- If you are using Windows NT 4.0, 2000, or XP, you must have administrator privileges to install the printer software.
- If your system is not running Windows 2000 (Service Pack 3 and above) or Windows XP, you must restart the system to complete the printer software installation when prompted.
- If you are installing the printer software on a Windows XP 64-bit system, download the printer software from <http://www.hp.com/support/dj9600> and use the Add Printer method to install.
- If you are using a Macintosh, it must be running Mac OS 9.1 or later.

---

## Windows contents of the software CD-ROM

The Starter CD includes printer software, additional software templates, a utility that can copy the printer software to a floppy disk, an electronic copy of this user's guide, and ordering information.

- Win32 CD browser
- Goldstone installer (including Network Printer Wizard)
- Windows 98/Me/NT/2K/XP PCL3 drivers
- Adobe Acrobat Reader 5.05 for Windows 9x/Me/NT/2K/XP
- HP Photo Imaging software for Windows
- Utilities such as Scrubber, HP Expansion Utility, Cosmo Toolbox, and Customization Utility.
- Quick tour
- Documentation such as release notes, getting started guide, user's guide, and setup poster

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## Windows startup page of the CD browser



**Windows startup screen**

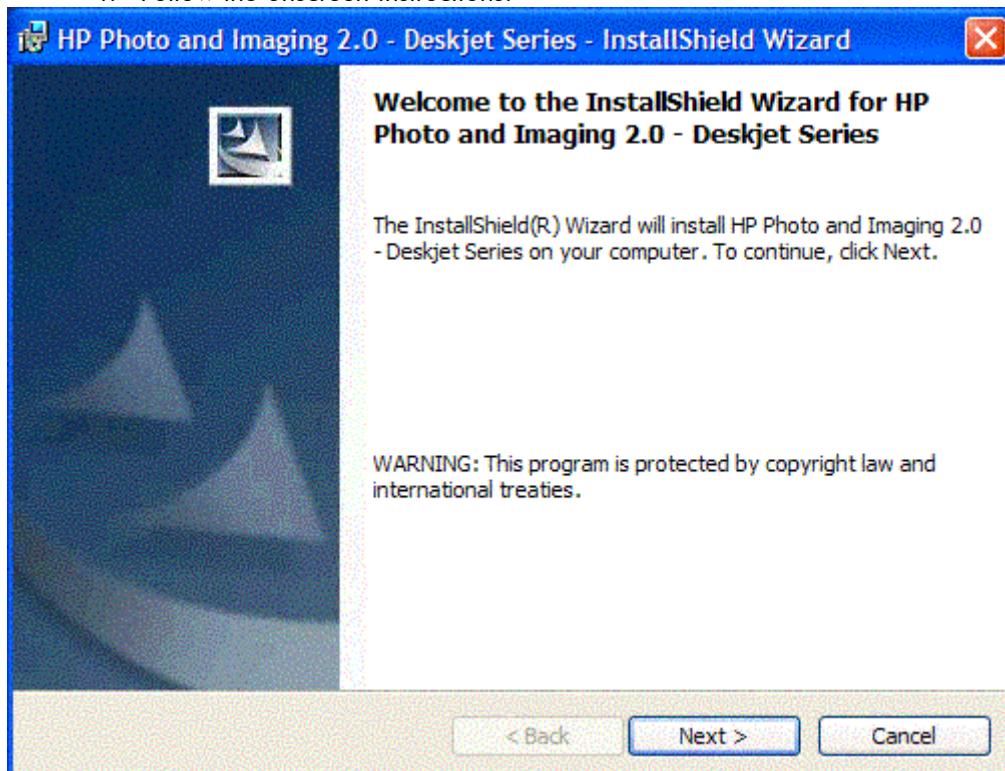
- Install Printer Driver launches the installer for the printer driver.
- HP Photo Imaging Software launches the installer for the photo imaging software.
- Quick Tour provides access to a Macromedia Flash presentation that introduces the printer.
- Browse Documentation opens the "Browse Documentation" screen from which the user can select the document to view.
- Register Product opens the URL <http://register.hp.com> in the default web browser on the user's system.
- Customization Utility launches the utility to create a customized installation package that can be launched silently.

---

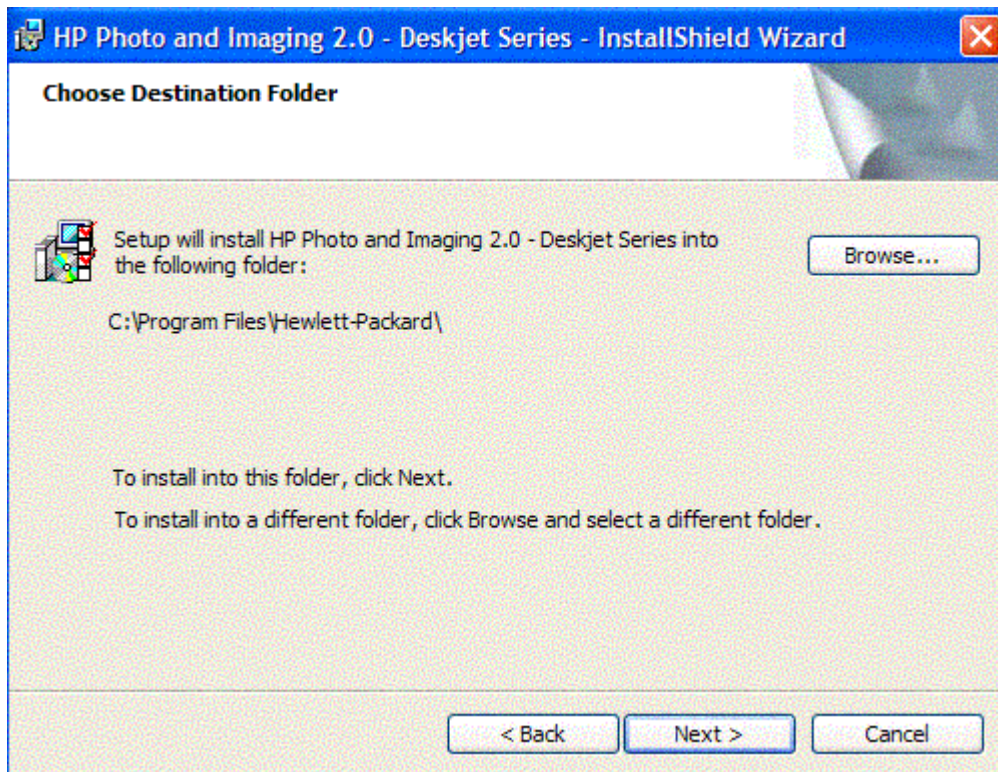
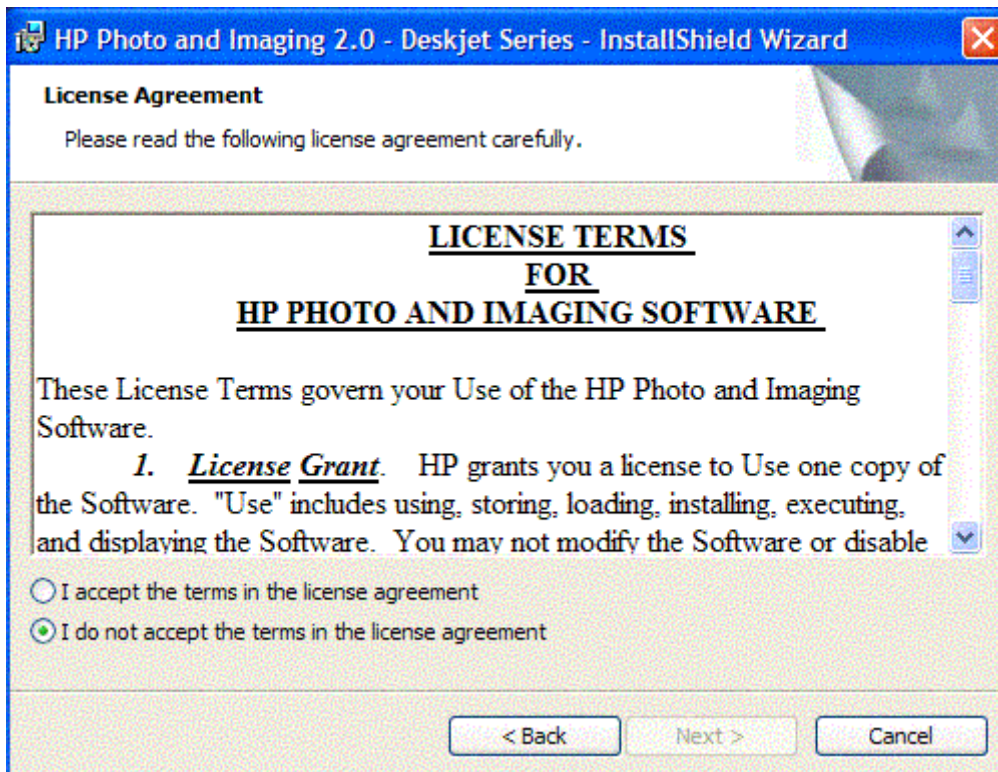
## Windows install HP Photo Imaging software

To install HP Photo Imaging software:

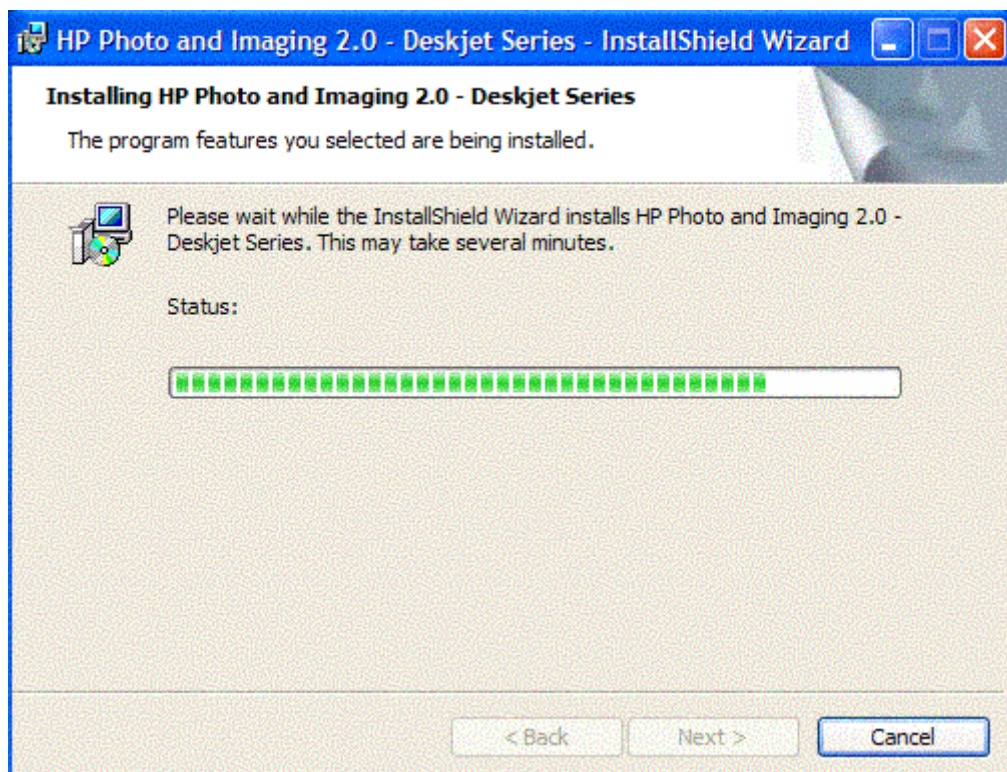
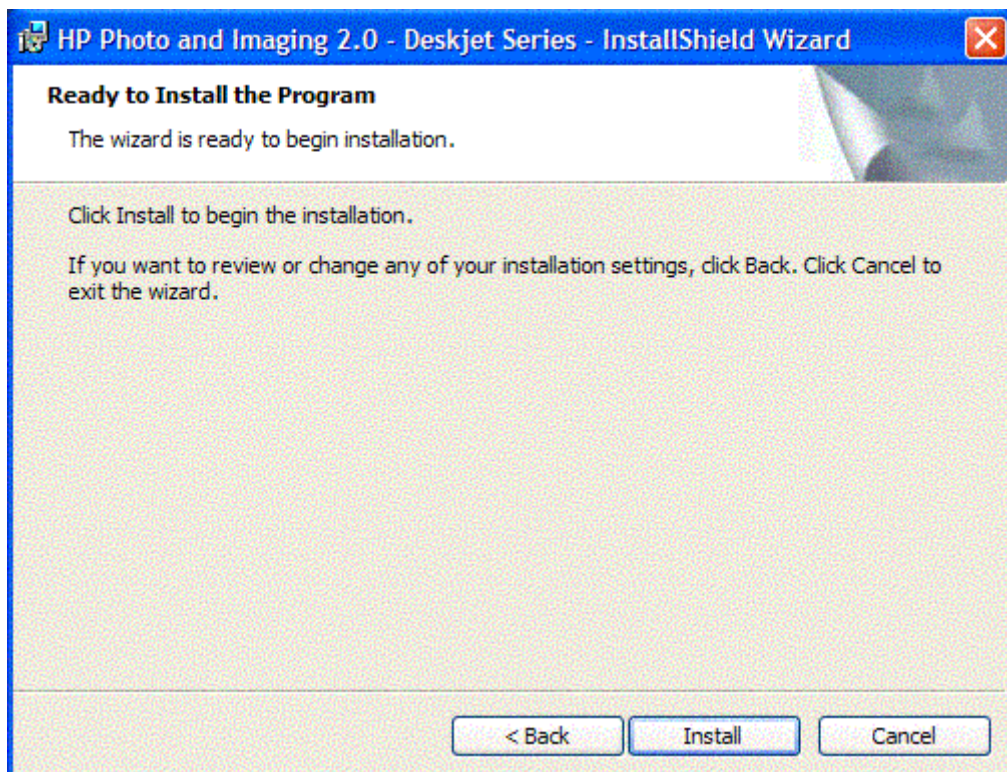
1. Start Windows and make sure no other Windows applications are running.
2. Insert the Starter CD into the CD-ROM drive. The CD menu runs automatically. If the CD menu does not run automatically, click Start, click Run, and in the command line box type the letter of the computer's CD-ROM drive followed by : \setup (for example, type D: \setup).
3. Click HP Photo Imaging Software from the CD menu.
4. Follow the onscreen instructions.

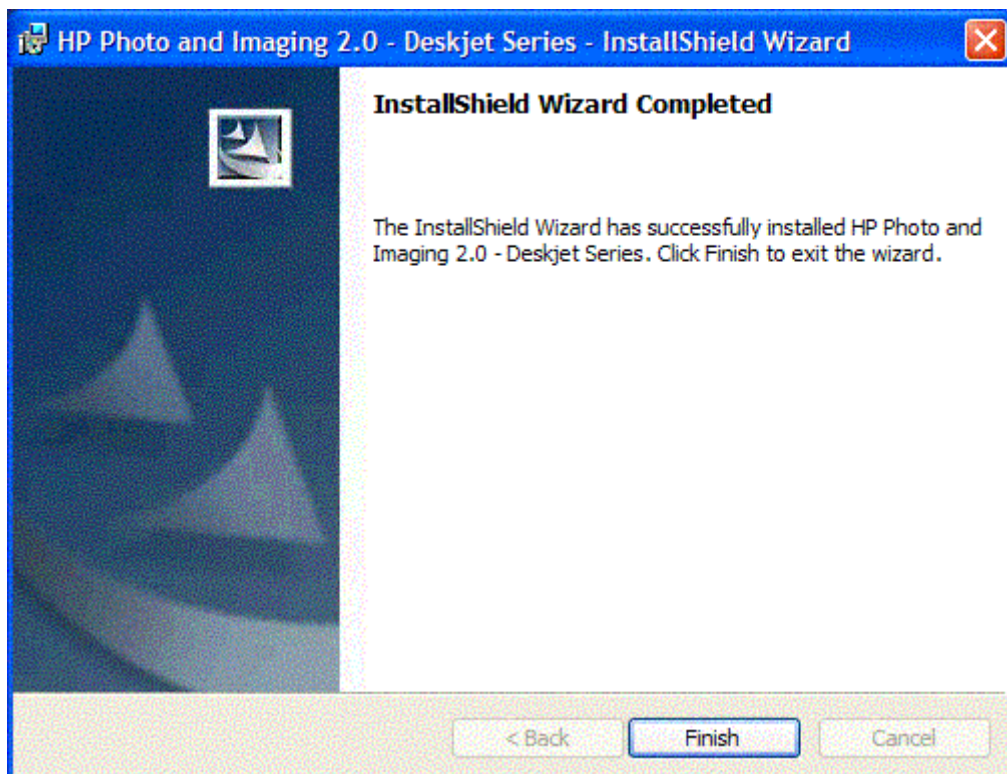














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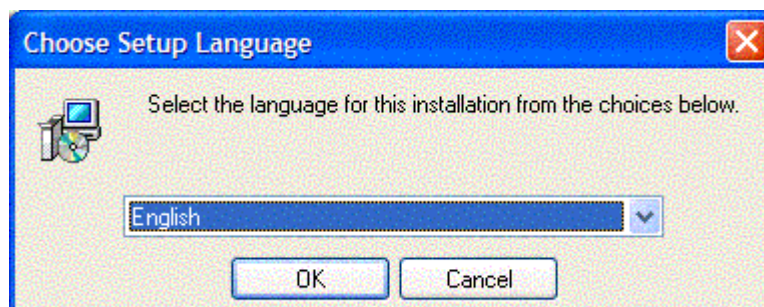
## Windows install the printer software

### Software-first installation (recommended)

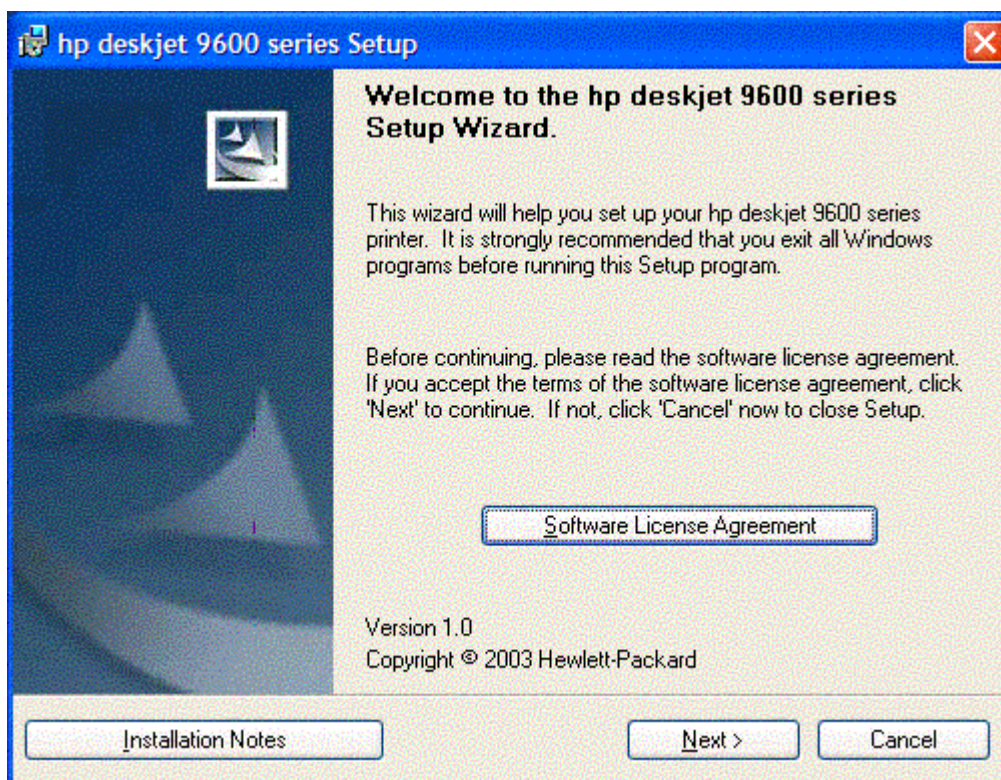
1. Start Windows and make sure no other Windows applications are running.
2. Insert the Starter CD into the CD-ROM drive. The CD menu runs automatically. If the CD menu does not run automatically, click Start, click Run, and in the command line box type the letter of the computer's CD-ROM drive followed by : \setup (for example, type D: \setup).
3. Click Install Printer Driver from the CD menu.
4. Choose the language and click OK.
5. Follow the onscreen instructions. If the installation program detects that the printer is already connected to the computer using a parallel cable (before running the program), it will provide you with the option to install the printer using the same port. In addition, if you select the express install check box, the installation program uses the default settings.
6. Click Connected directly to this computer, and then click Next.
7. If using a USB cable, select USB Cable and click Next. If using a parallel cable, select Parallel Cable. From the Ports drop-down list, select the parallel port on which the printer is connected.

It is recommended to install the Toolbox, which is installed by selecting Typical Installation (Recommended). If you select Custom Installation, you can still choose to install the Toolbox from the list of options to install. The Toolbox provides status and maintenance information about your printer. It also provides access to documentation and online help tools for solving printer problems. If you do not install the Toolbox you will not see printer error messages on your computer screen and will not have access to the myPrintMileage website. See "Using the Toolbox" for more information.

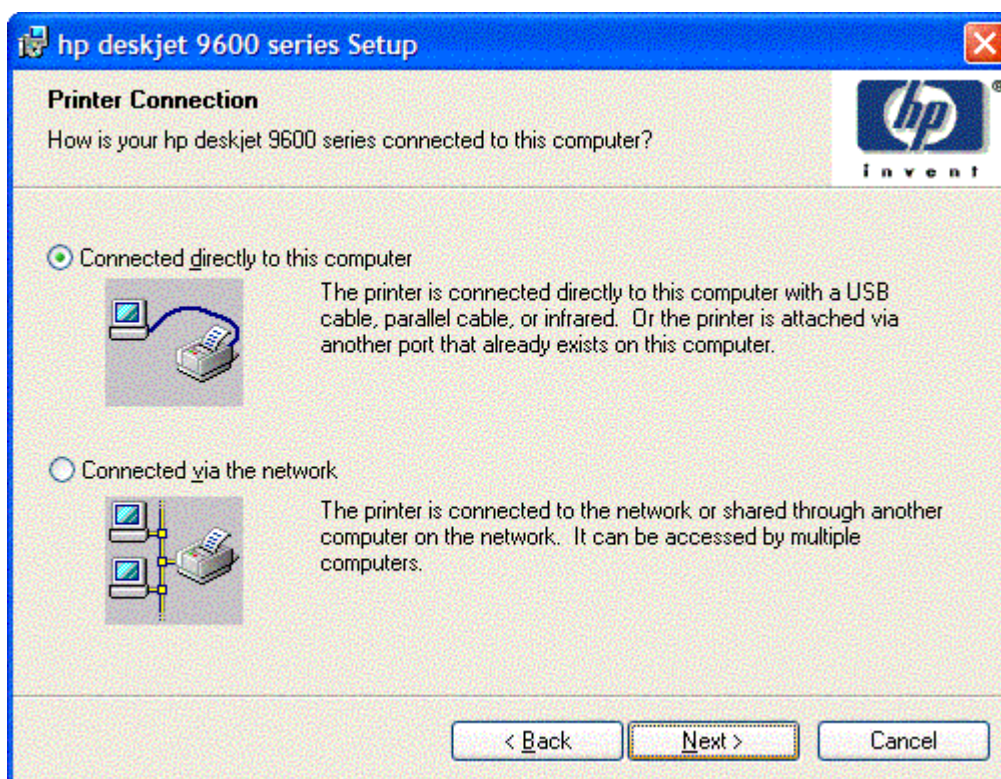
8. Click Next and follow the onscreen instructions.
9. Connect the USB cable or parallel cable to the computer and the printer when prompted. The Found New Hardware wizard appears on the computer screen and the printer icon is created in the Printers folder.



**Language**

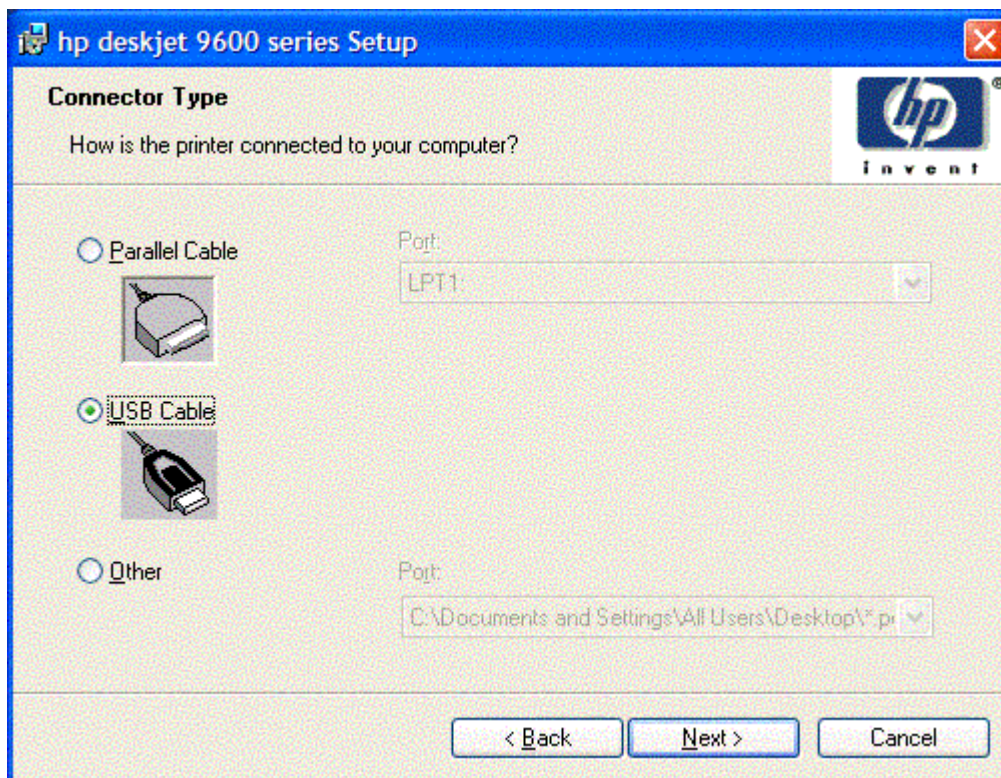


**Setup wizard**

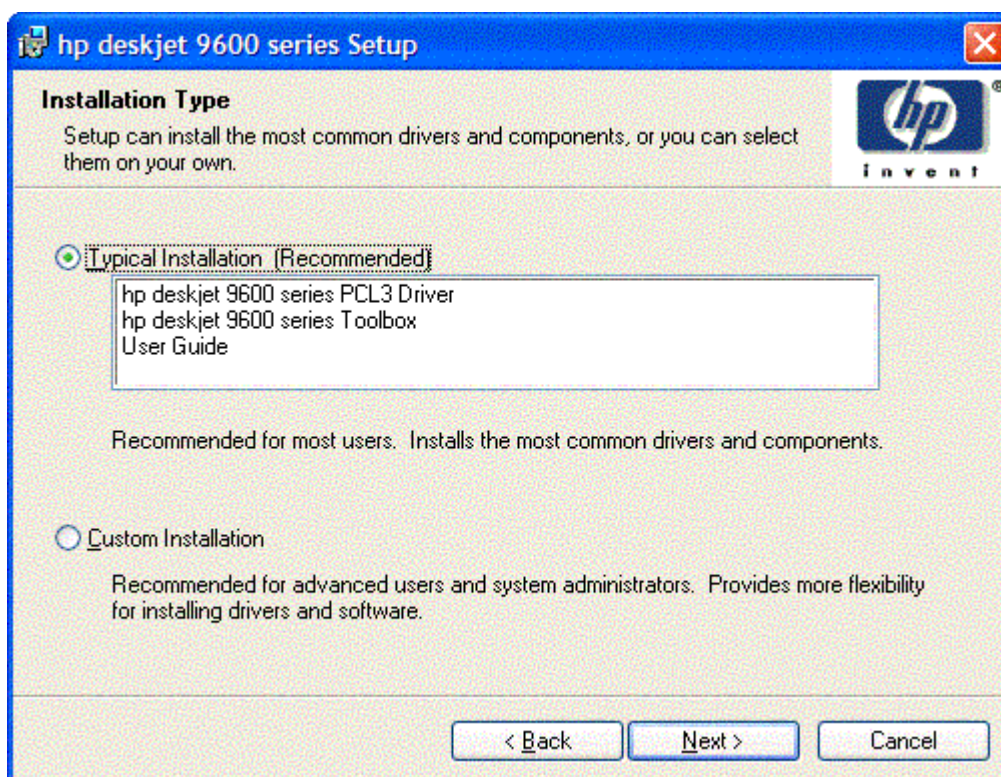


**Printer connection**



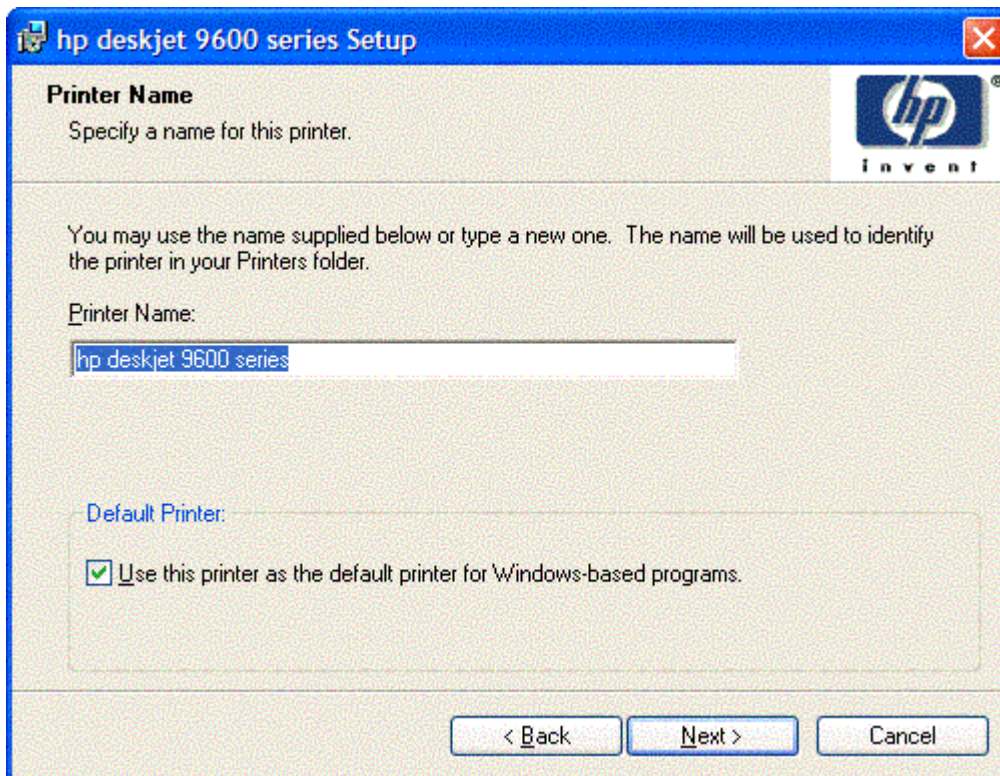


**Connector type**



**Installation type**





**hp deskjet 9600 series Setup**

**Printer Name**  
Specify a name for this printer.

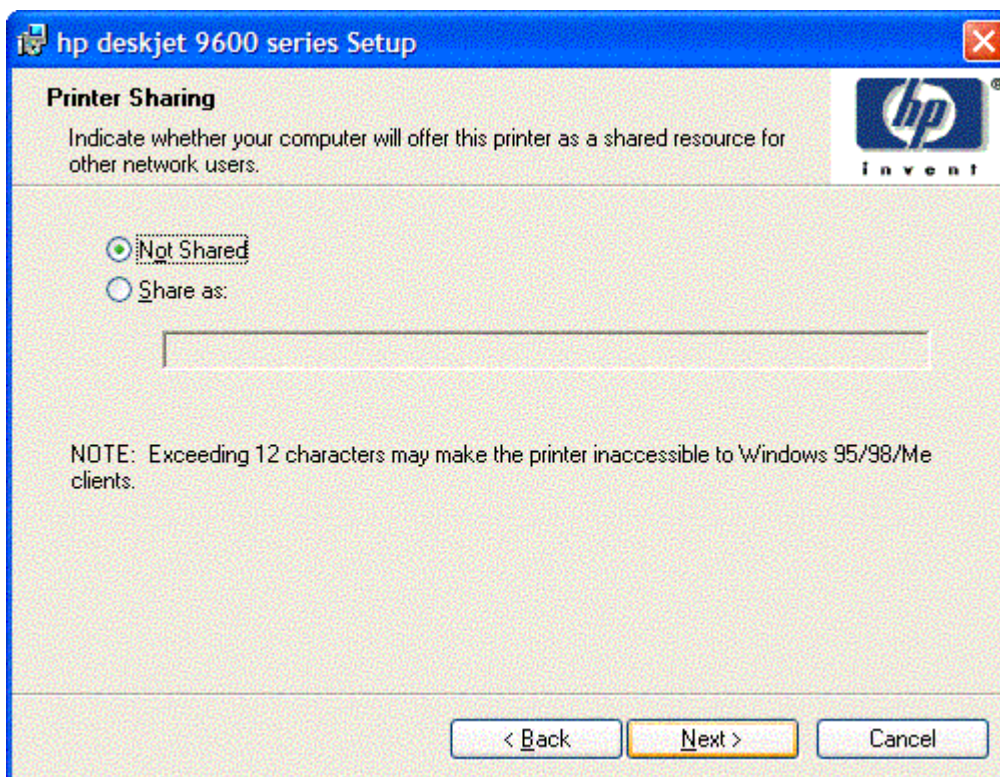
You may use the name supplied below or type a new one. The name will be used to identify the printer in your Printers folder.

Printer Name:  
hp deskjet 9600 series

Default Printer:  
☒ Use this printer as the default printer for Windows-based programs.

< Back   Next >   Cancel

**Printer name**



**hp deskjet 9600 series Setup**

**Printer Sharing**  
Indicate whether your computer will offer this printer as a shared resource for other network users.

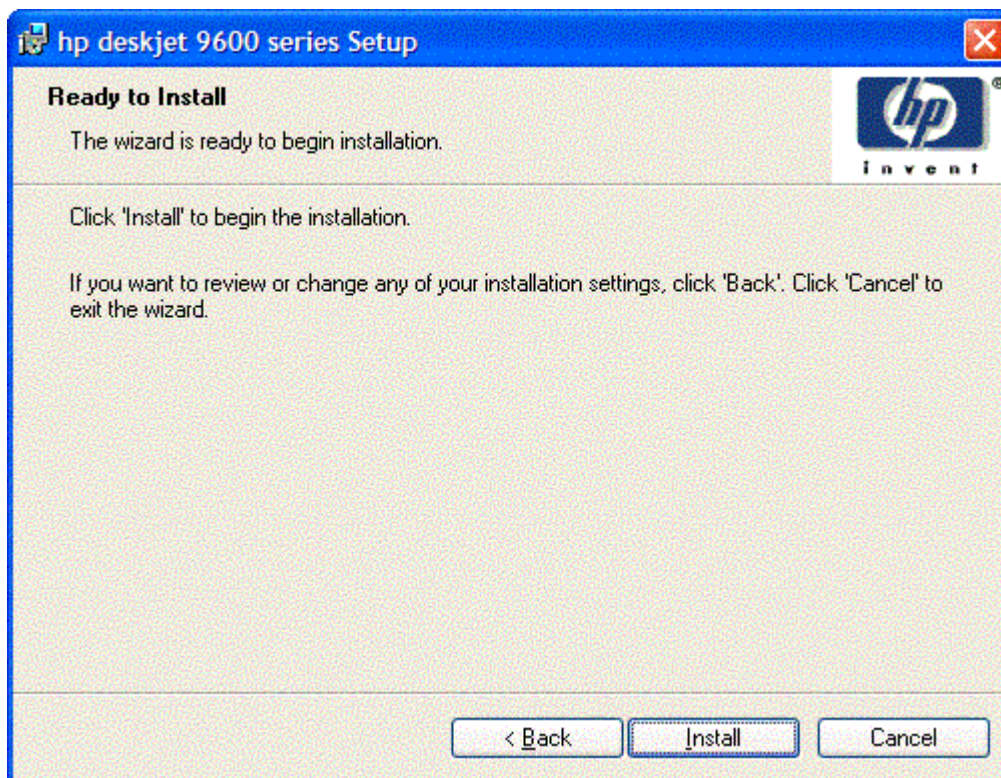
☒ Not Shared  
☐ Share as:  
\_\_\_\_\_

NOTE: Exceeding 12 characters may make the printer inaccessible to Windows 95/98/Me clients.

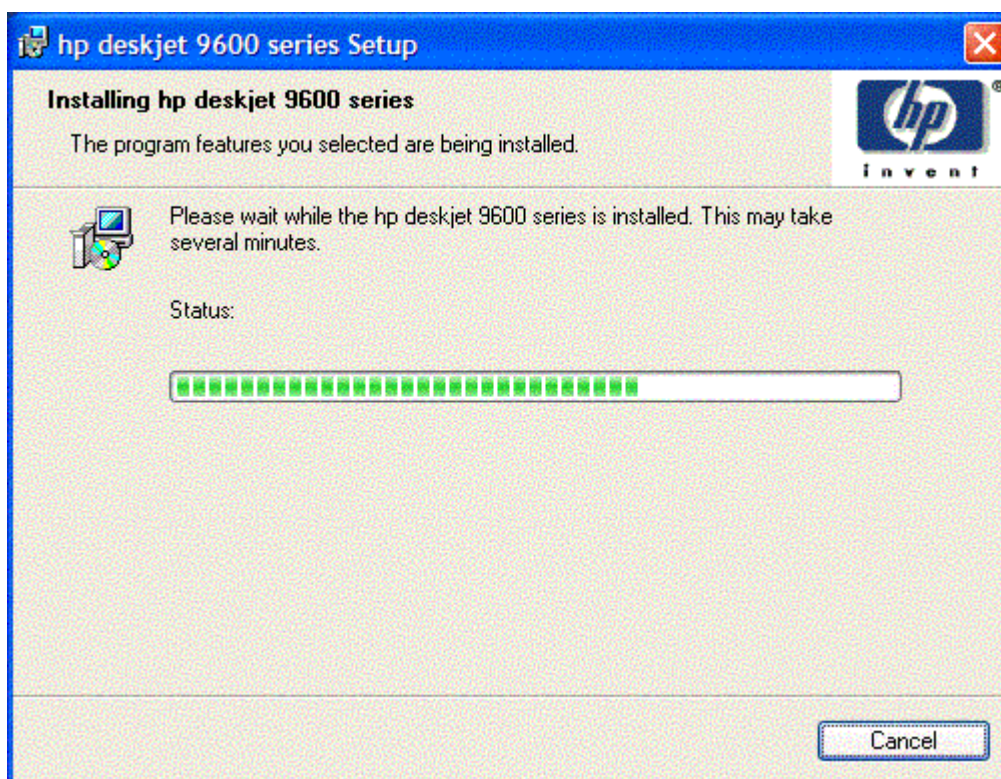
< Back   Next >   Cancel

**Printer sharing**

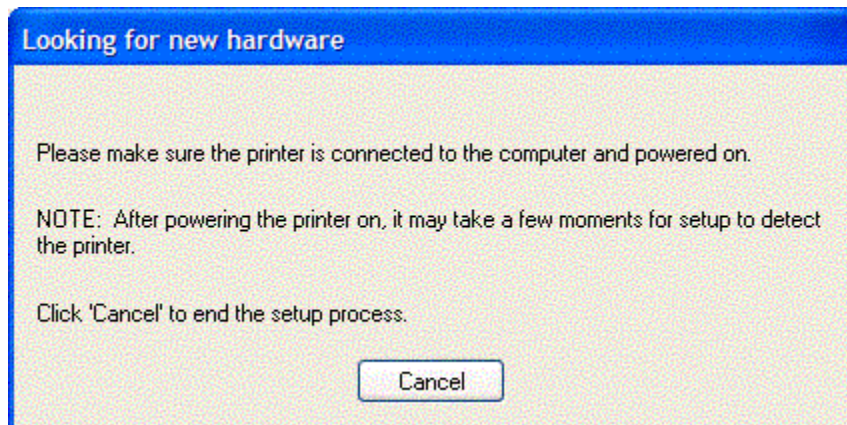




**Ready to install**



**Installing**

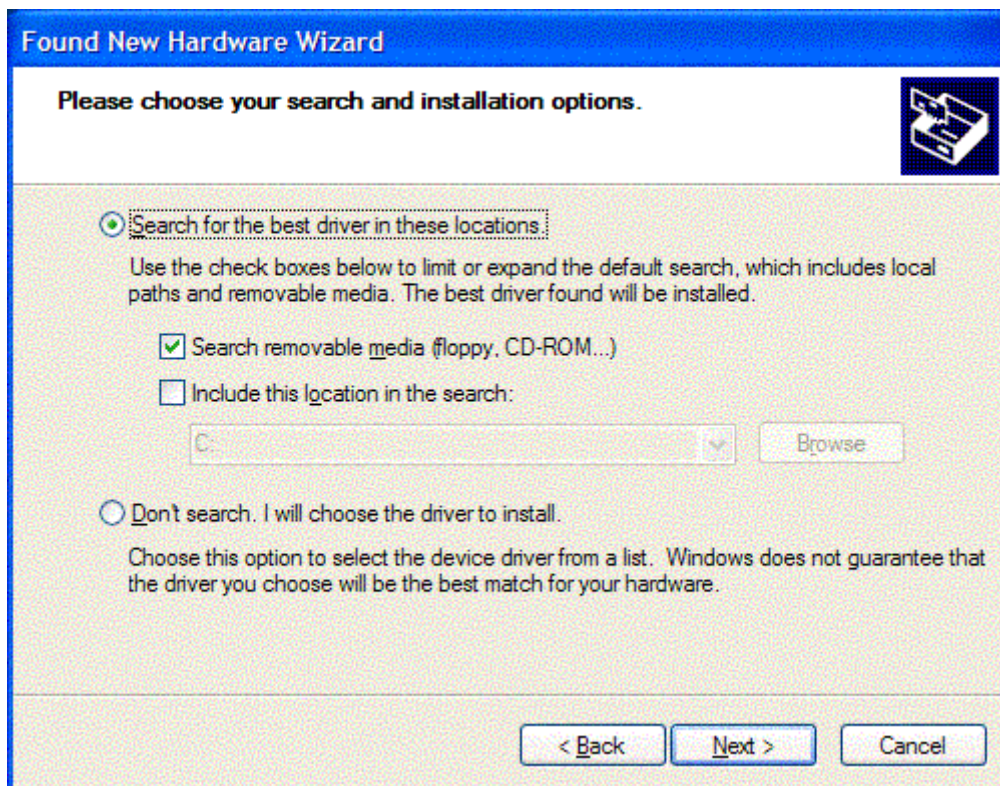


**Looking for hardware**

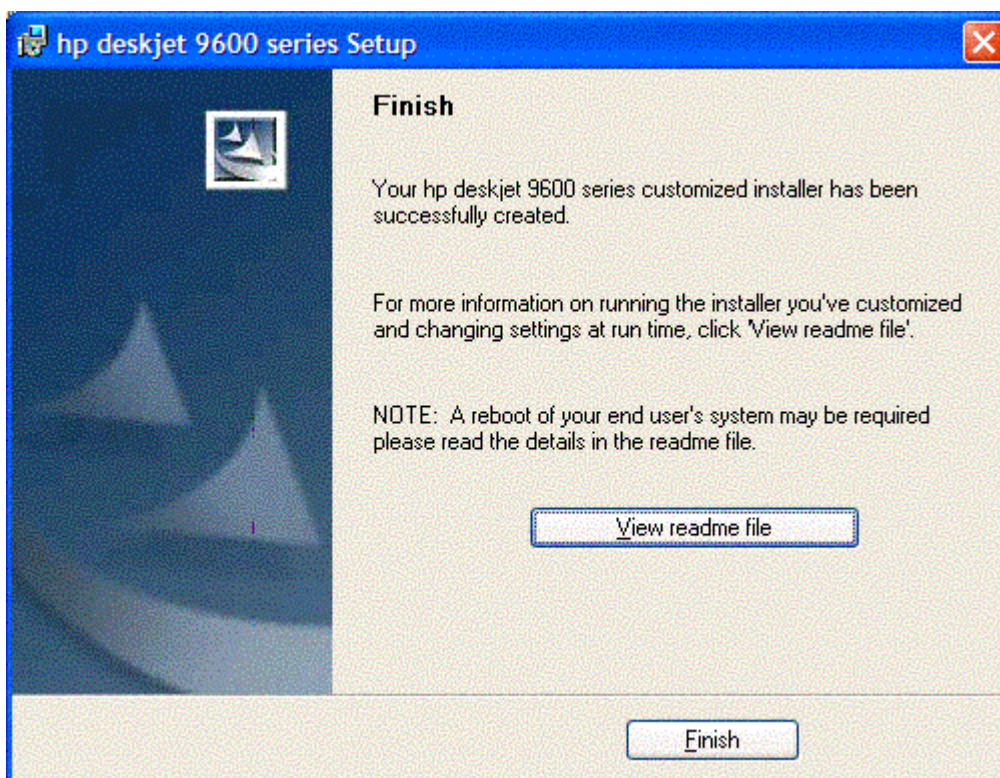


**Found new hardware**



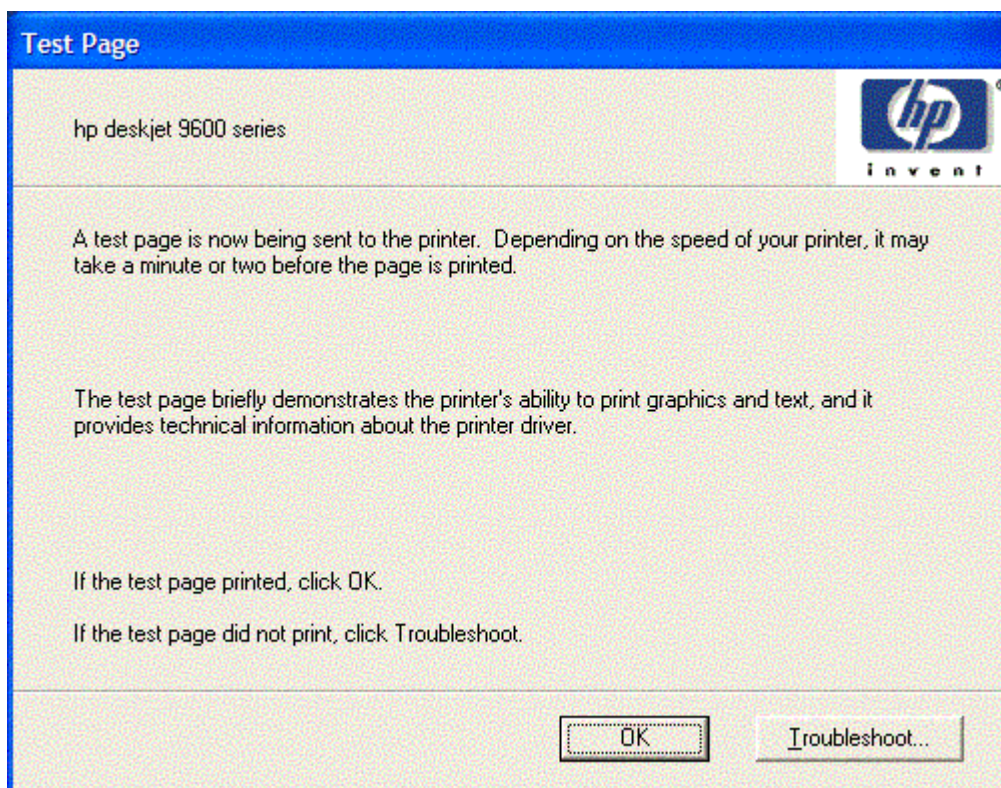


**Found new hardware wizard**



**Finish**





**Print a test page**



---

## Windows browse documentation



**Windows browse documentation screen**

- Release Notes opens \Docs\<LANG\_ID>\readme.rtf in WordPad.
- User's Guide opens \Docs\<LANG\_ID>\ug.chm in Microsoft HTML Help. If HTML Help Control is not installed, the PDF equivalent (\Docs\<LANG\_ID>\ug.pdf) will be launched. If Acrobat Reader is also not installed on the user's system, the "No PDF Viewer" screen is displayed.
- Setup Poster opens \Docs\roadmap.pdf in Acrobat Reader. If Acrobat Reader is not installed on the user's system, the "No PDF Viewer" screen is displayed.
- Printer Web Site opens the URL <http://www.hp.com> in the default web browser on the user's system.

## Windows register product

hp registration-Login - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites Media Print Mail

Address: va\_wreg\_wreg\_genpg&reqType=Auth&return=http%3A%2F%2Fregister.hp.com%2Fservlet%2FworkFlowController%3F Go Links >>

UNITED STATES

>> hp home >> products & services >> support & drivers >> solutions >> how to buy

>> contact hp search: >>

hp registration

» registration

» quick profile access

» about hp registration

I am a new visitor

Country/Region

(Click to Select)

next>>

I am a returning visitor

enter user ID:

enter password:

>> forgot your user id and password?

reset>> next>>

privacy statement using this site means you accept its terms

© 1994-2003 Hewlett-Packard Company

Done Internet

### Register software screen

Register the printer by clicking the Register Product button. This button enables access to the following Web site: <http://register.hp.com/>

Perform the following activities through the HP registration Web site:

- Create a profile
- Update a profile

Acquire the following information by accessing the HP registration Web site:

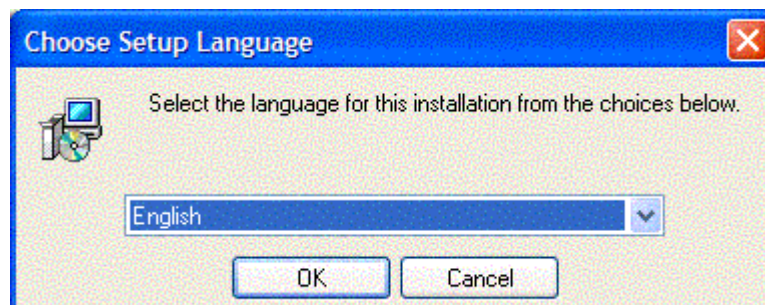
- Enhanced customer service
- Fast expert technical support
- Timely notices of product and software upgrades
- Free newsletters with exclusive guidelines
- Special offers of specific interest

---

## Windows Customization Utility

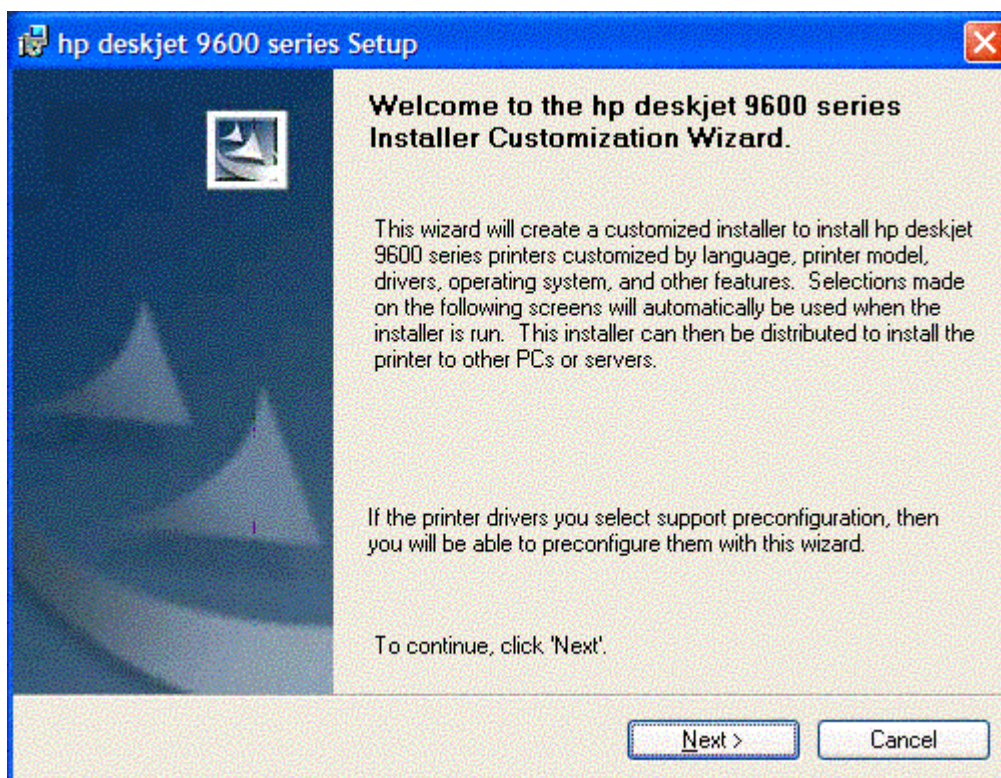


**Select Customization Utility**

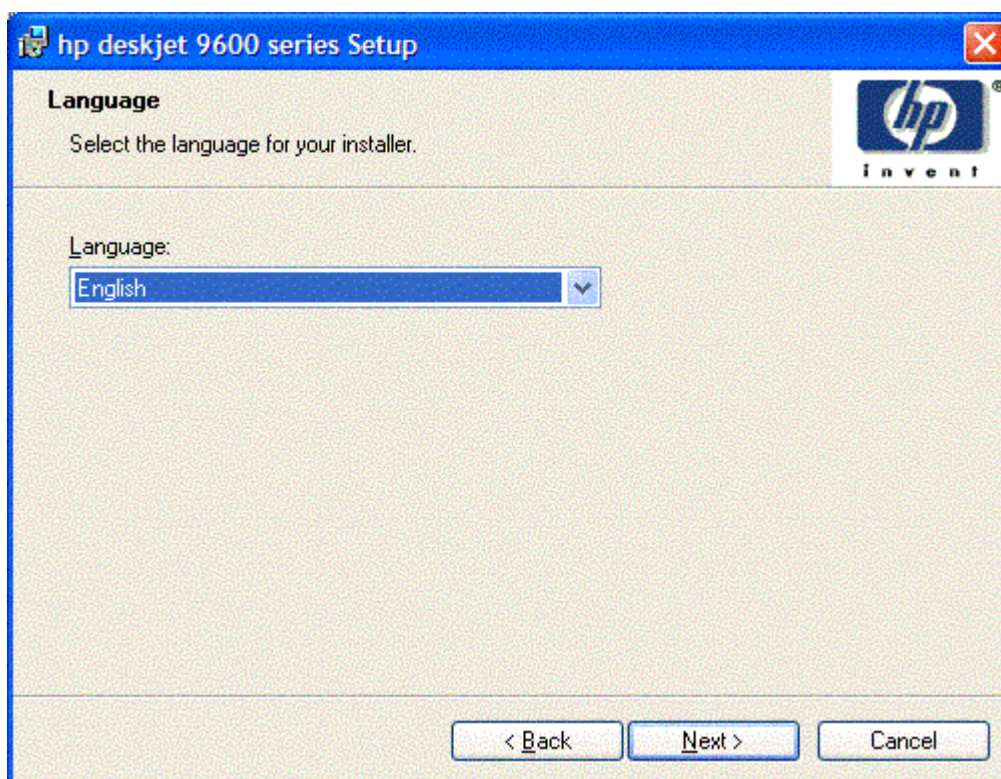


**Language**



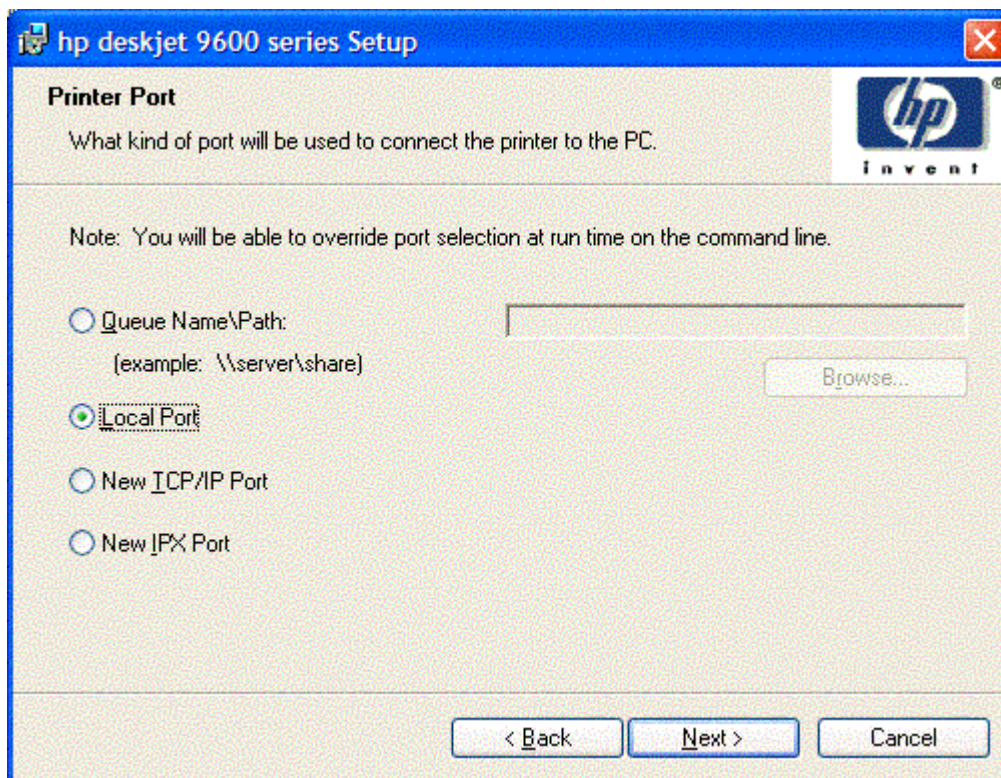


**Welcome**

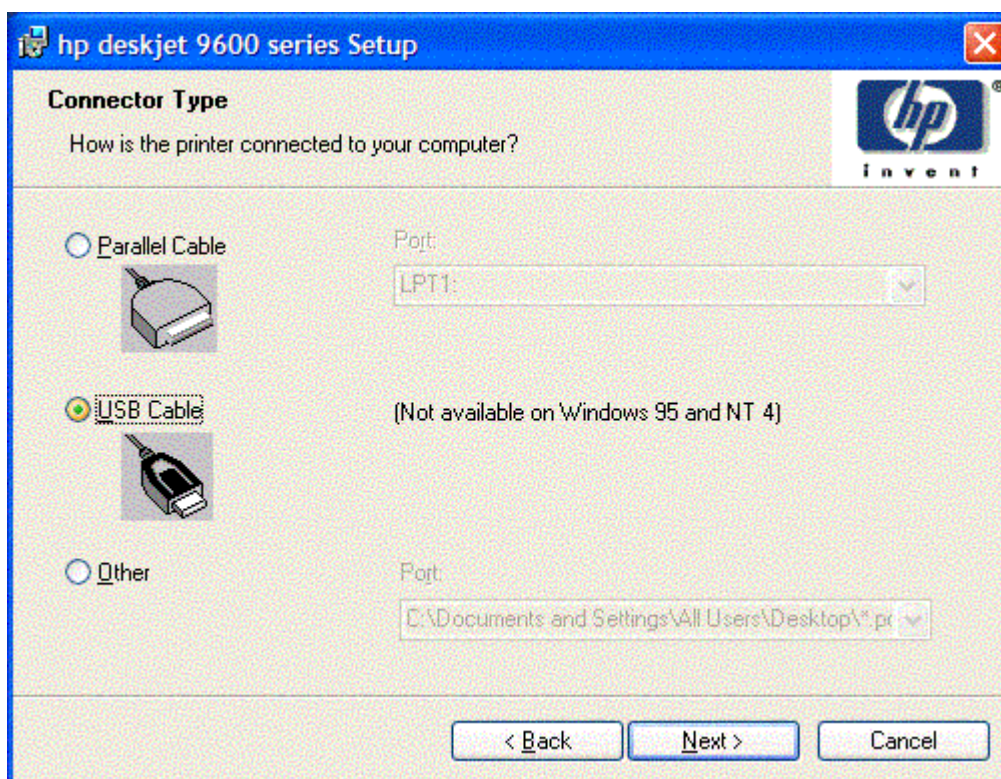


**Language**



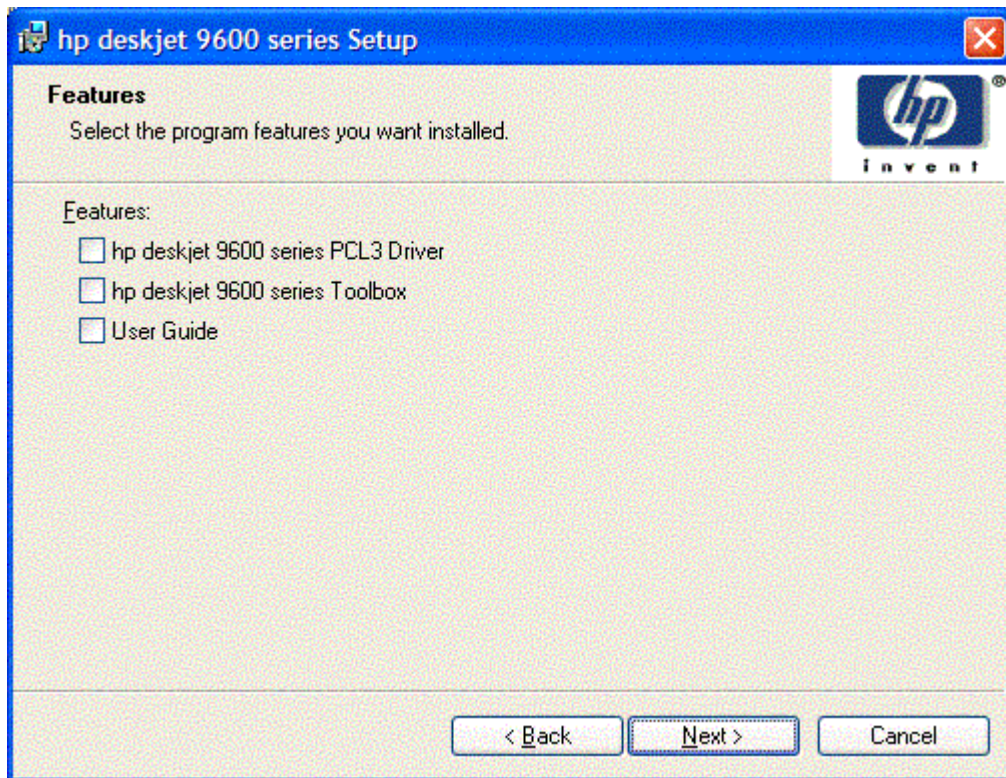


**Port**



**Connector**





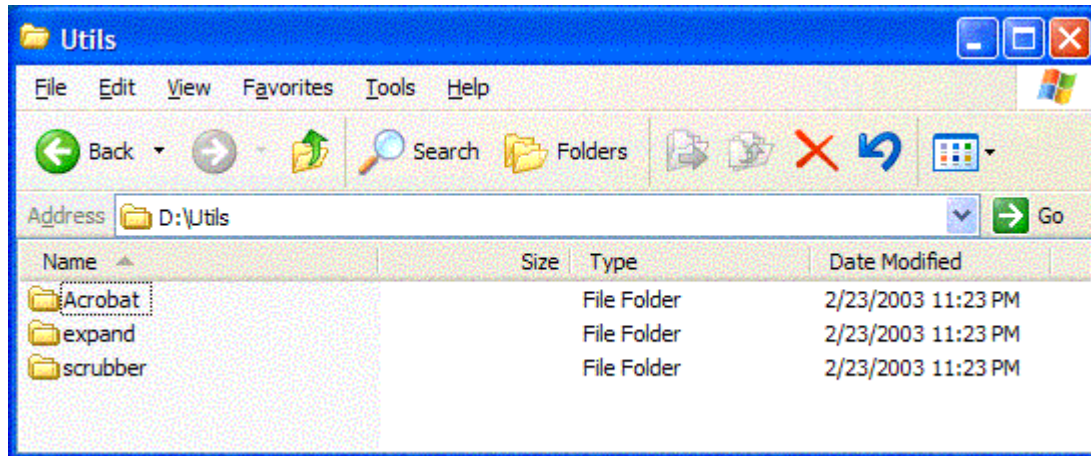
### Features

Selecting Customization Utility launches the utility that allows administrators to create customized installation package that can be launched silently or interactively. Create a custom software installer that can be copied to floppy disks, local hard drives, or network drives. Perform the following activities by accessing the customization utility option.

1. Create Customized Installer – Create an interactive installer customized by language, operating system, model, and components.

---

## Windows optional software



### Optional software

The optional software available for the printer includes:

1. Adobe Acrobat Reader 5.0.5
2. HP Photo Imaging software
3. Scrubber utility
4. HP file expansion utility

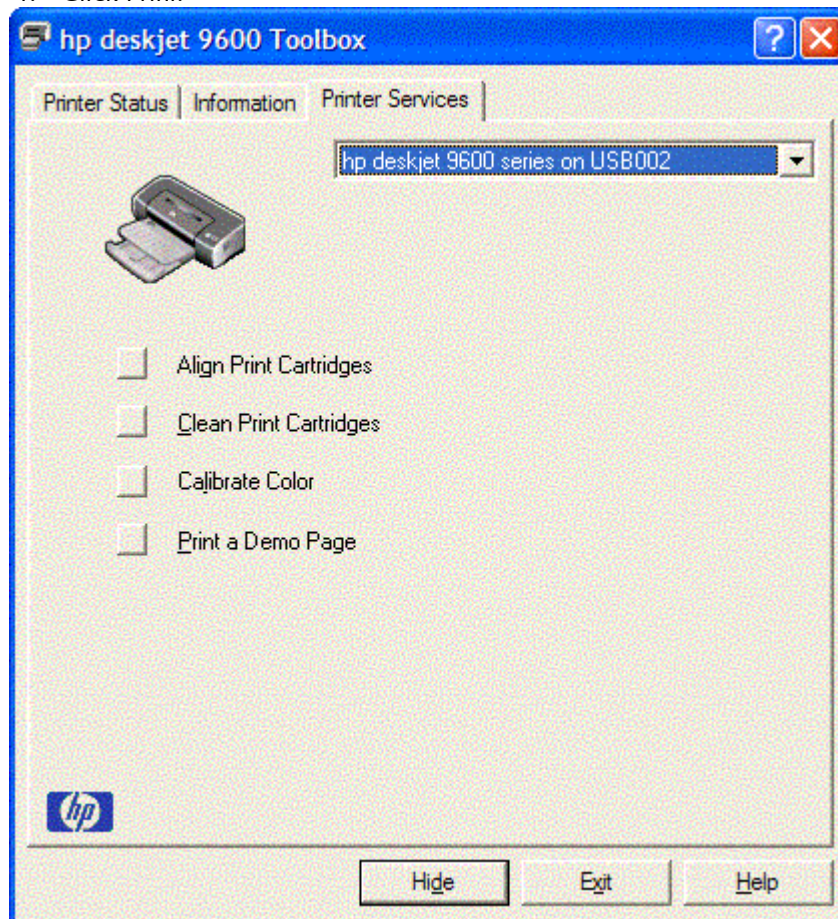
---

## Windows test software installation

Verify the software installation of the printer by printing a demo page.

To print a demo page:

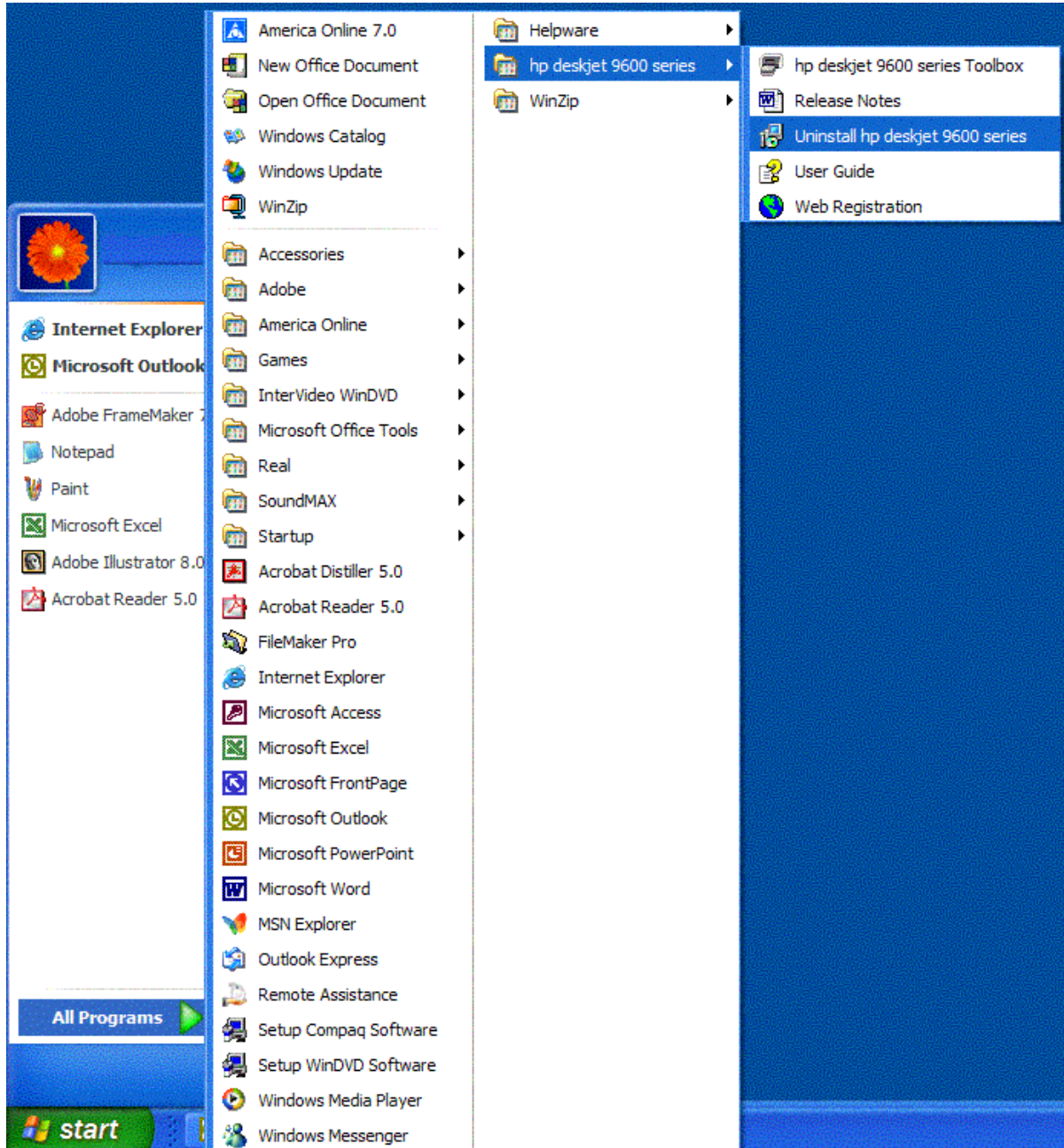
1. Open the Toolbox by clicking Start, pointing to Programs, hp deskjet 9600 series, and then clicking hp deskjet 9600 series Toolbox.
2. Click on the Printer Services tab.
3. Click Print a Demo Page.
4. Click Print.



**Printing a demo page**



## Windows uninstall printer software



**Launching the uninstaller**

Follow these steps to uninstall the software:

- Make sure no Windows applications are running.
- Click Start, point to Programs, hp deskjet 9600 series, and then click Uninstall hp deskjet 9600 series.
- Follow the onscreen instructions to remove the printer software.

Alternatively, uninstall the software through Add/Remove Programs:

1. Start Windows and make sure no other Windows applications are running.
2. Open Control Panel.
3. Double-click Add/Remove Programs.
4. Select hp deskjet 9600 series.
5. Follow the onscreen instructions to complete the removal of the printer software.

Administrator privileges are required for uninstalling the printer software in Windows NT 4.0, Windows 2000, and Windows XP.

If the software was not successfully installed, or the Uninstaller could not be found, run the scrubber utility from the Starter CD. For Windows 98 and Windows Me, use the scrub98.exe file located in the Windows\Utils\Scrubber\Win98\_Me folder. For Windows 2000 and Windows XP, use the scrub2k.exe file located in the Windows\Utils\Scrubber\Win2K directory instead. Repeat the whole installation process again after this is done.

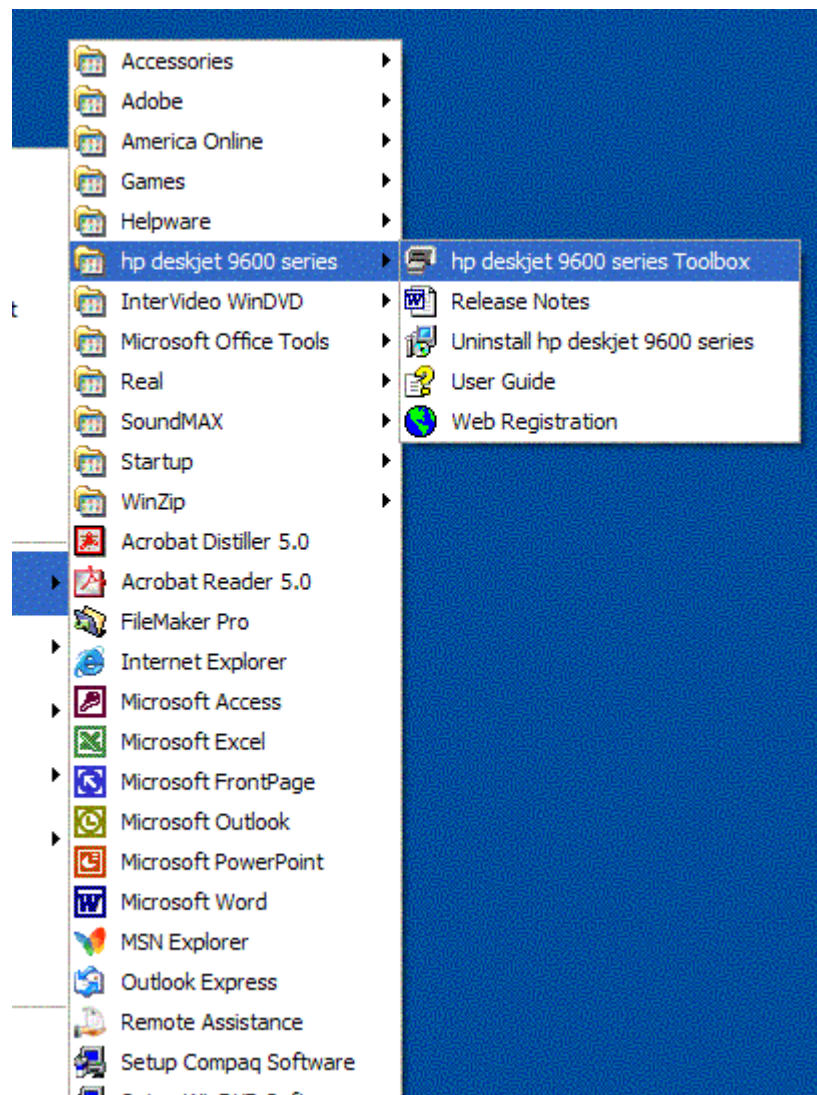
---

## Windows access the Toolbox

The Toolbox provides status and maintenance information about the printer. It also provides step-by-step guidance for basic printing tasks, gives help for solving printer problems, and provides access to online resources for the printer.

The Toolbox is for Windows only. For Macintosh, see the HP Inkjet Utility.

After installing the printer software, open the Toolbox by clicking Start, pointing to Programs, hp deskjet 9600 series, and then clicking hp deskjet 9600 series Toolbox.



**Access the Toolbox**

---

## Macintosh software installation requirements

This printer software works with the following Macintosh operating systems: OS 9.x and X.

OS	Minimum	Recommended
OS 9.1 and later	<ul style="list-style-type: none"><li>• iMac 333 Mhz or G3 350 Mhz</li><li>• 32MB RAM</li></ul>	<ul style="list-style-type: none"><li>• iMac 333 Mhz or G3 350 Mhz</li><li>• 64MB RAM</li><li>• 2MB free hard disk space</li><li>• CD-ROM Drive</li></ul>
OS X and later	<ul style="list-style-type: none"><li>• Power Macintosh G3/G4 300 Mhz</li><li>• 128MB RAM</li></ul>	<ul style="list-style-type: none"><li>• G4 800 Mhz</li><li>• 256MB RAM</li></ul>

### Macintosh software installation requirements

---

## Macintosh contents of the software CD-ROM

The Starter CD includes printer software, additional software templates, a utility that can copy the printer software to a floppy disk, an electronic copy of this user's guide, and ordering information.

- CD browser
- Macintosh installer
- Macintosh OS 9.x and OS X drivers
- HP Inkjet Utility
- Quick tour
- Documentation such as release notes, getting started guide, user's guide, and setup poster

---

## Macintosh startup page of the CD browser



**Macintosh startup page**

- Install Driver
- Quick Tour
- User's Guide
- Setup Poster
- Product Website
- Product Registration

---

## Macintosh install the printer software

Install the software first, and then connect the printer to the computer. You may share the printer with other Mac OS users when you are finished.

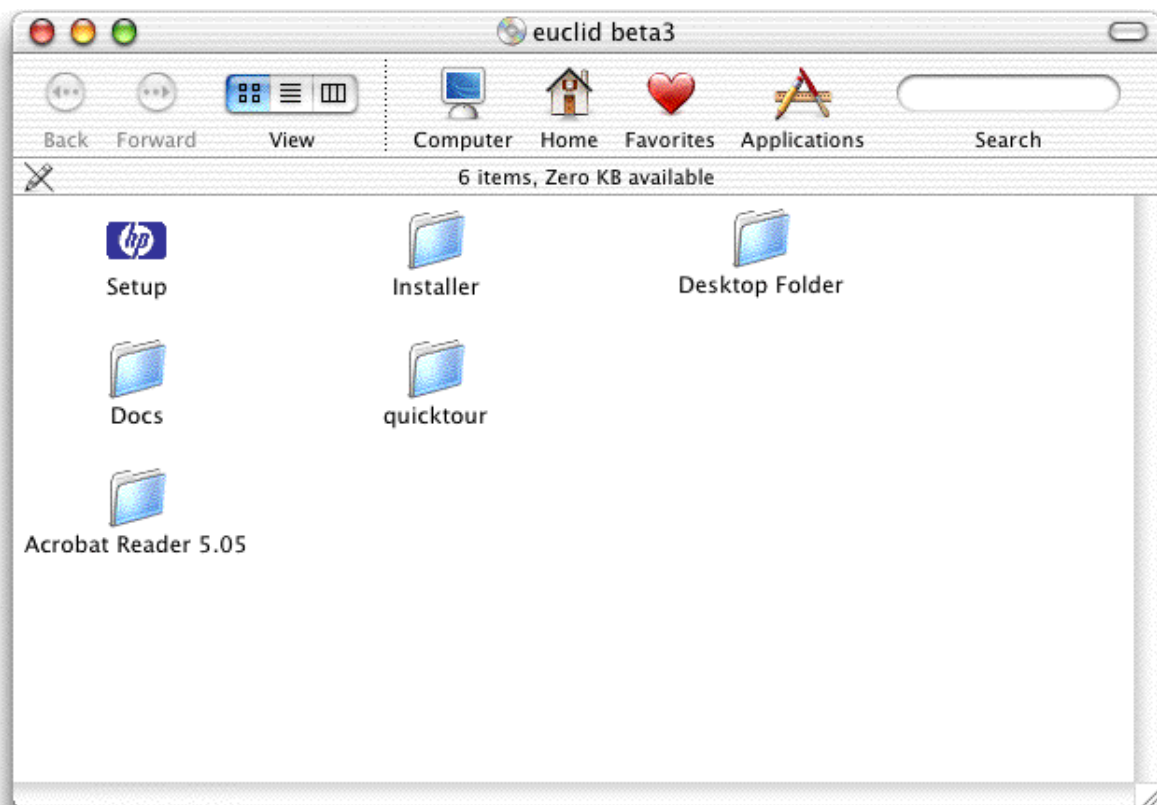
1. Insert the Starter CD into your CD-ROM drive. The CD menu runs automatically. If the CD menu does not run automatically, double-click the CD icon on the desktop, and then double-click the Setup icon.
2. Click Install Driver.
3. Follow the onscreen instructions.
4. Connect the USB cable to the computer and the printer.
5. Complete the installation in one of these ways.

### Mac OS 9.1.x and 9.2.x

- When prompted, restart the computer.
- Select Chooser from the Apple menu.
- Select hp deskjet xx in the upper-left window of the Chooser window, where xx represents the version of the current printer driver.
- Select hp deskjet 9600 series in the right window of the Chooser screen.
- Close the Chooser.
- To share the printer, see "To share the printer on a peer-to-peer network (Mac OS)" below.

### Mac OS X

- Open the Print Center, which is located in the Applications\Utilities folder.
- Click Add.
- Select USB from the menu.
- Select hp deskjet 9600 series from the printer list, and then click Add. A dot appears beside the printer name, indicating that this printer is now the default printer.
- Close the Print Center.



### Installing the printer

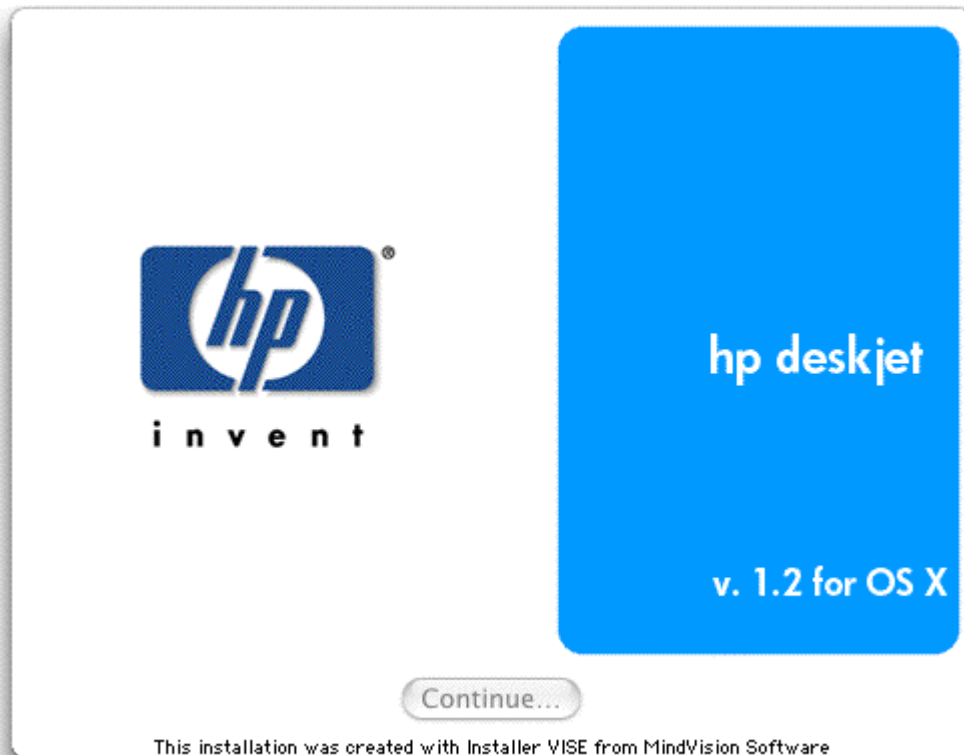




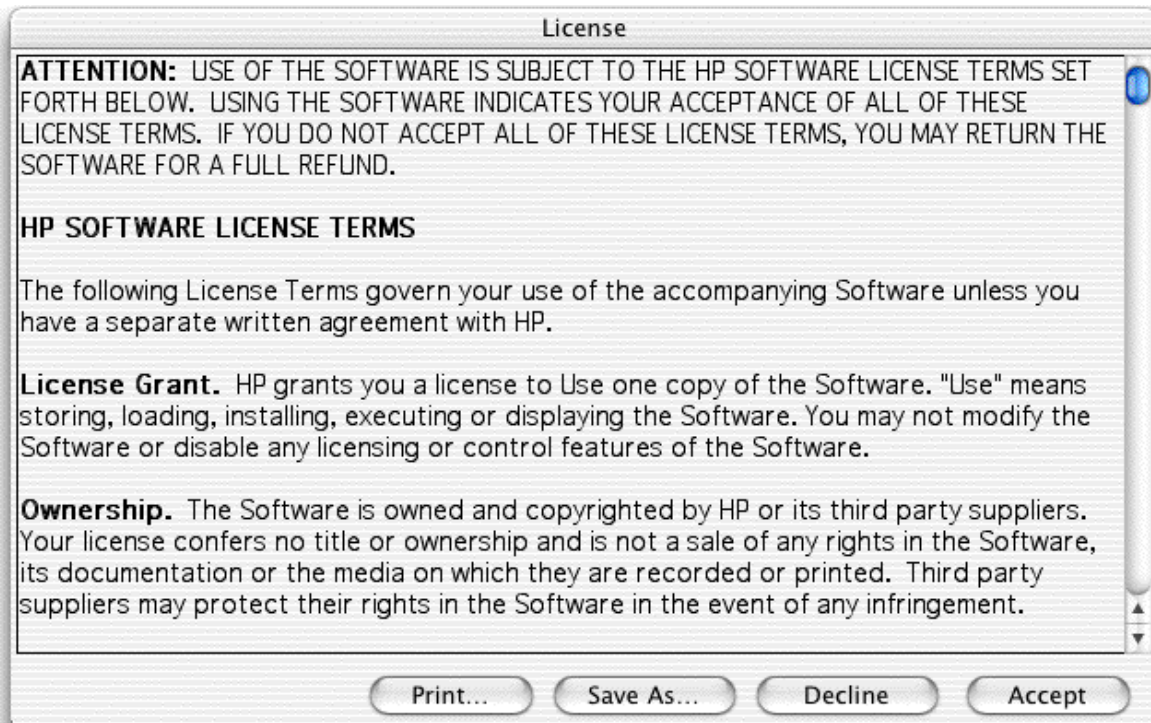
**Starter CD**



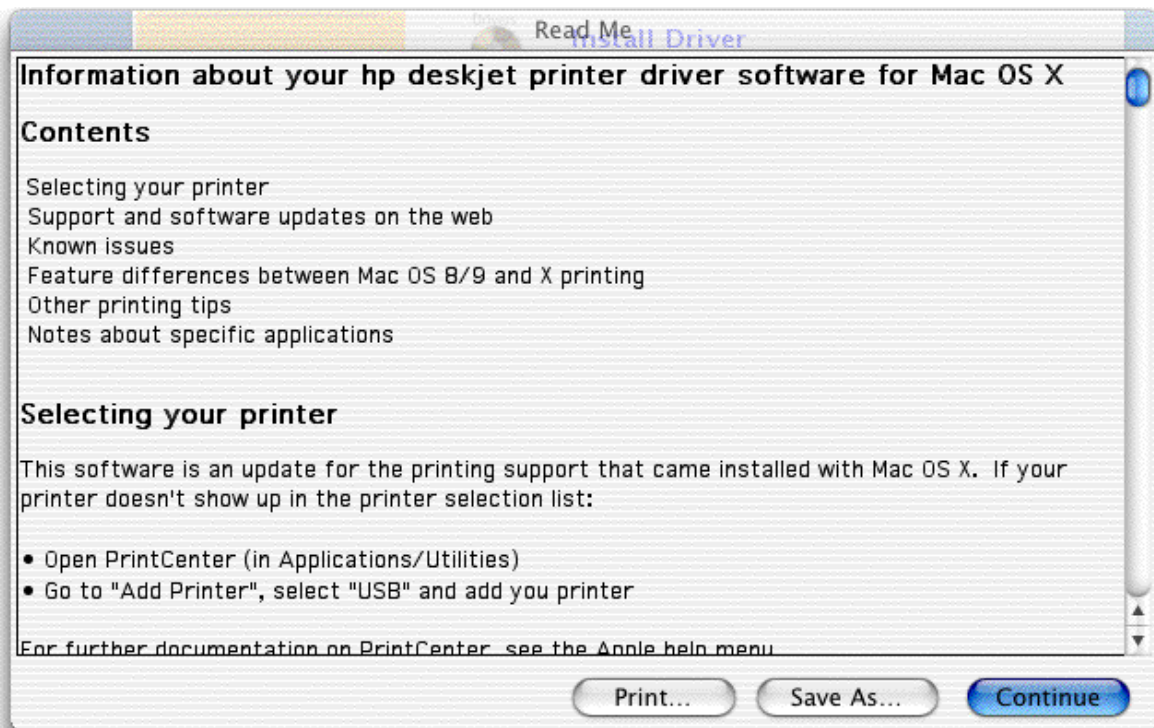
**Authentication**



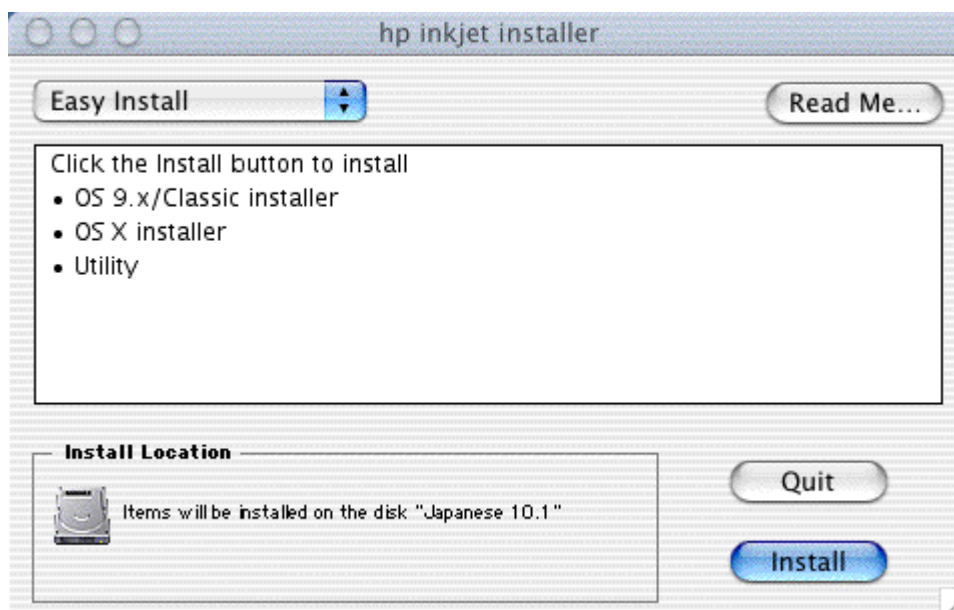
**Splash screen**



**Licence agreement**



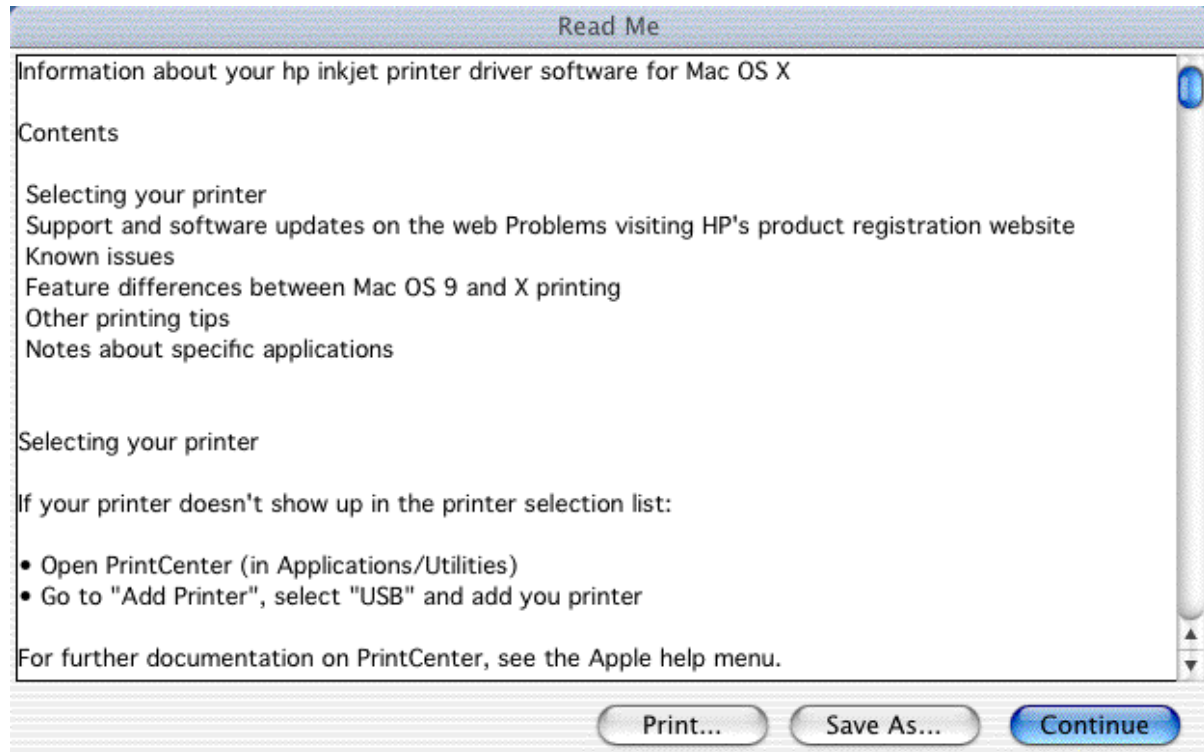
### Readme



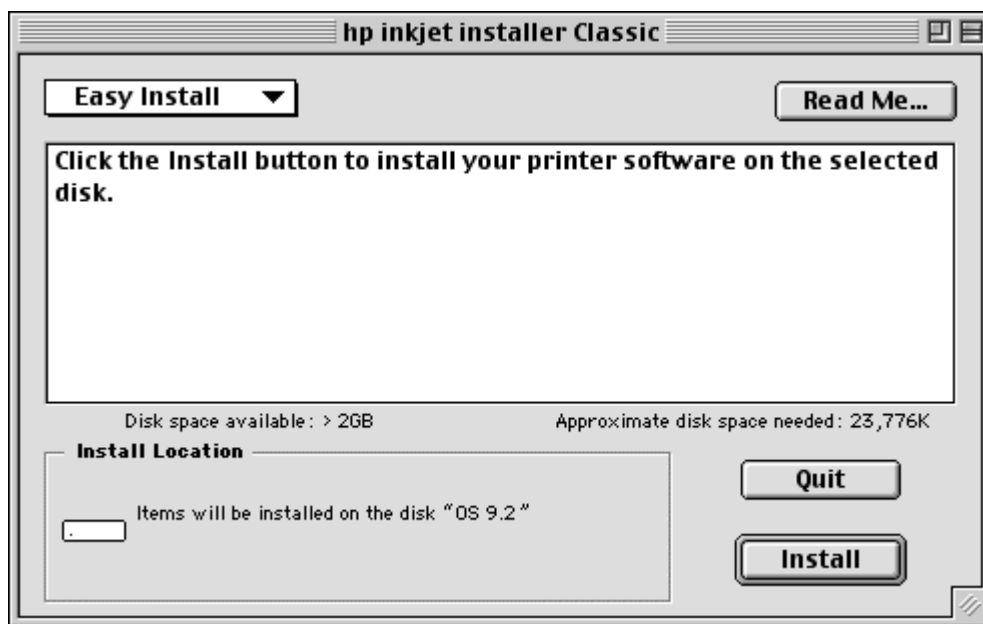
### Installer screen



### Add printer



### Printer list



**Installed printer**

---

## Macintosh browse documentation

The documentation for the HP Deskjet 9600 series can be accessed via the CD Menu. Clicking the Getting Started Guide or the User's Guide selections from the CD menu will open the selected documentation in Adobe Acrobat Reader (which is preinstalled in Mac OS X, or can be installed from the Deskjet 9600 Installation CD.


Also, documentation can also be directly opened from the Install CD located in ::HP Deskjet 9600 Series::Docs::

---

## Macintosh register the product

UNITED STATES

<a href="#">» hp home</a>	<a href="#">» products &amp; services</a>	<a href="#">» support &amp; drivers</a>	<a href="#">» solutions</a>	<a href="#">» how to buy</a>
<a href="#">» contact hp</a>		search: <input type="text"/> <a href="#">»</a>		



### hp registration

[» registration](#)  
  
[» quick profile access](#)  
[» about hp registration](#)

#### I am a new visitor

Country/Region

[next >>](#)

#### I am a returning visitor

enter user ID:

enter password:

[» forgot your user id and password?](#)

[reset >>](#) [next >>](#)

[privacy statement](#)[using this site means you accept its terms](#)

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### Register software screen

At the <http://register.hp.com/> Web site, register the product, create a profile, update a profile, and access information.

- Enhanced customer service
- Fast expert technical support
- Timely notices of product and software upgrades
- Free newsletters with exclusive guidelines
- Special offers of specific interest

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## Macintosh optional software

There is no optional software available for Macintosh.



---

## Macintosh test software installation

1. Double-click the Macintosh HD icon on the desktop.
2. Do one of the following. Mac OS 9.1: Select Applications (Mac OS 9), Utilities, and then hp inkjet. Mac OS X: Select Applications, and then Utilities.
3. Select hp inkjet utility.
4. Click Test to print a demo page.



### hp deskjet 9600 series

hp's versatile high performance wide-format color printer  
with professional photo print quality for the business user

**professional photo quality with 6-ink borderless printing**

**superior performance with impressive print speeds**

**prints on a variety of sizes & types of media from  
A6 postcard up to A3+ / 13" x 19" poster**



---

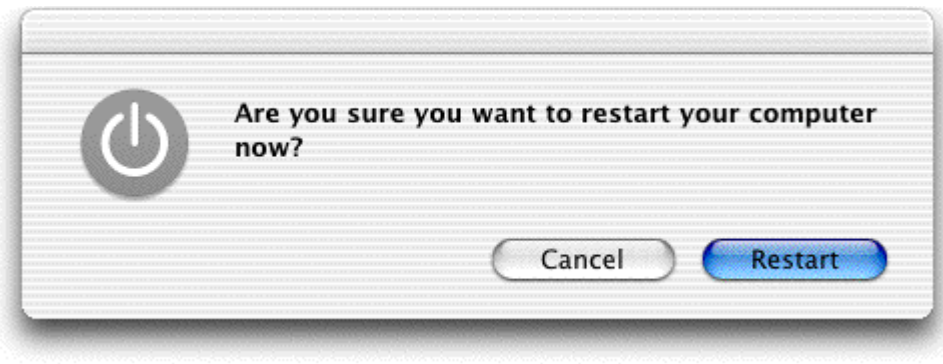
**Demo page**

---

## Macintosh uninstall printer software

To uninstall the printer software:

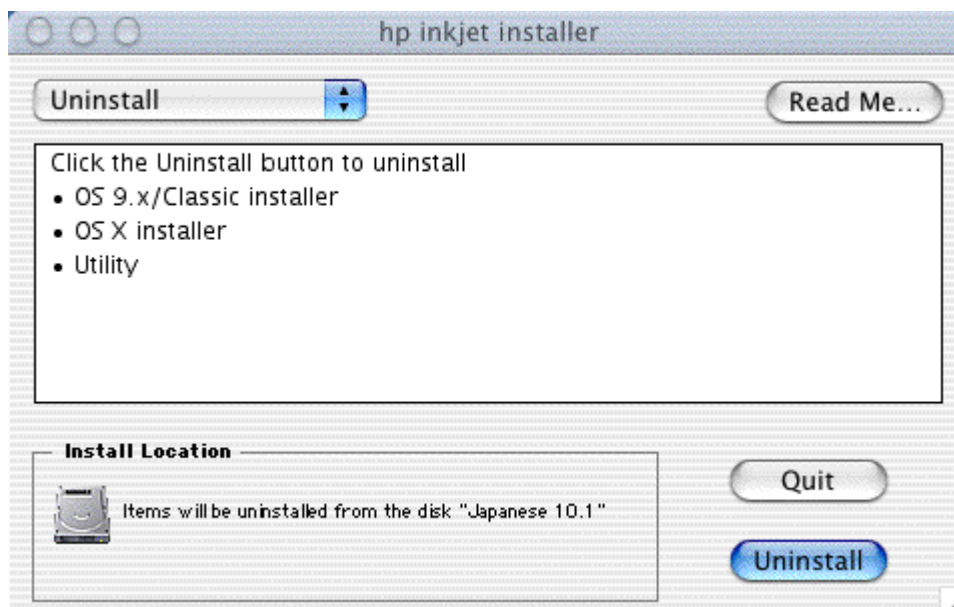
1. Restart the computer. Otherwise, some files will not be removed from the computer when the Uninstall option is run.
2. Insert the Starter CD into the CD-ROM drive and double-click the CD icon on the desktop.
3. Double-click the installer icon and follow the onscreen instructions.
4. When the Main Installation dialog box appears, select Uninstall from the drop-down list located in the upper-left part of the dialog box.
5. Follow the onscreen instructions to remove the printer software.



**Restart**



### Select Install Driver



### Click Uninstall

---

## Macintosh access the HP Inkjet Utility

For Mac OS 9.x and OS X, the HP Inkjet Utility contains tools to calibrate the printer, clean the print cartridges, print a test page, and find website support information.

To display the HP Inkjet Utility:

1. Double-click the Macintosh HD icon on the desktop.
2. Do one of the following:
  - Mac OS 9.1: Select Applications, Utilities, and then hp inkjet.
  - Mac OS X: Select Applications, then Utilities.
3. Select hp inkjet utility.

---

## Installing other software

- HP Photo Imaging Software – Lets you view and edit photos and image files in Windows. To install this software, insert the Starter CD, click the HP Photo Imaging Software button on the CD browser menu, and select it from the list of software shown.
- HP Deskjet Control Panel for DOS – Allows you to configure print settings in an MS-DOS® environment. Visit <http://www.hp.com/support/dj9600> to download the software.
- Linux driver – Visit <http://www.linuxprinting.org> to download the software. For information about using Linux with HP printers, visit <http://hp.sourceforge.net>.
- IBM PostScript 3 emulation printer driver for IBM OS/2 –Visit <http://www7.software.ibm.com/2bcprod.nsf> to download the software and for information on using the driver.

If you are using Windows NT 4.0, Windows 2000, or Windows XP, you must have administrator privileges to install a printer driver

---

## Web deployment of drivers

The printer driver can be deployed from [www.hp.com/support/dj9600](http://www.hp.com/support/dj9600).

PCL3 drivers for the following operating systems are deployed on the Web:

- Windows 98
- Windows Me
- Windows NT
- Windows 2000
- Windows XP

---

## Connectivity options

### Local and network connectivity options

The printer supports local printing and network printing. For local printing, connect the printer using a USB cable or parallel cable. For network printing, connect via an optional HP external print server.

---

#### Note

*For network printing, you can share the printer in these ways.*

### Windows

- You can use a simple form of networking, known as locally shared networking, if you use a USB cable or parallel cable to connect the printer to a computer running Windows. Using this method, you can share the printer with other Windows users.
- You can do peer-to-peer networking via an optional HP external print server.

### Macintosh

- You can use a simple form of networking, known as locally shared networking, if you use a USB cable to connect the printer to a computer running a Mac OS. Using this method, you can share the printer with other Mac OS users.

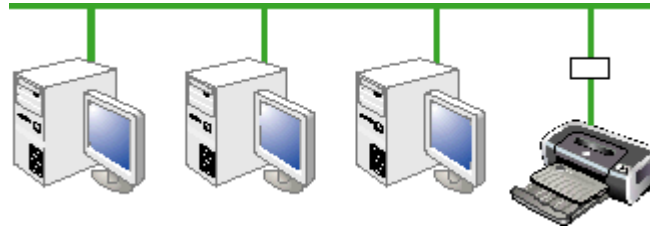
### Network

The printer can be shared in a network environment by connecting it directly to a network via an optional HP Jetdirect external print server. For information about setting up HP Jetdirect print servers, see the HP Jetdirect hardware and software installation guides.



---

## Establishing a network connection using an external print server



**Connecting to a network**

The printer can be shared in a network environment by connecting it directly to a network via an optional HP Jetdirect external print server. This configuration provides better performance than printing through a computer, flexibility in preparing a location for the printer, and the ability to share the printer with both Windows and Mac OS users. For information about setting up HP Jetdirect print servers, see the HP Jetdirect hardware and software installation guides.

### To install the printer driver on the PC or server (Windows)

Install the HP Jetdirect print server first, then connect the printer to the network and install the printer software on the computer that will send print jobs directly to the network printer.

1. After setting up the HP Jetdirect external print server, start Windows and make sure no Windows applications are running.
2. Insert the Starter CD into the CD-ROM drive. The CD menu runs automatically. If the CD menu does not run automatically, click Start, click Run, and in the command line box type the letter of the computer's CD-ROM drive followed by `: \setup` (for example, type `D: \setup`).
3. Click Install Printer Driver from the CD menu.
4. Choose the language and click OK.
5. Follow the onscreen instructions.
6. In the printer connection dialog box, select Connected via the network and click Next. Then select Basic network setup for a PC or server (recommended) and click Next.
7. Follow the onscreen instructions to complete the installation.
8. If you wish to set up the computer as a server, do the following:
  1. Select the option to share the printer, and then select to install printer drivers for Windows clients. The installation program installs the printer driver for the server and copies the client drivers to a location on the server for vending to users (clients).
  2. Follow the onscreen instructions to complete the installation.



Optional. If you are sharing the printer with users of other versions of Windows, click Additional Drivers to install their drivers as a convenience to those users. This step requires you to have the Starter CD in your CD-ROM drive.

- When sharing a locally connected printer, use the newest operating system as the server. It is recommended to use Windows 2000 or Windows XP as the server.
- If Windows NT 4.0 is the server, administrators need to install the Windows 2000 and Windows XP user mode driver on the server. This is because Windows 2000 and Windows XP cannot print using the Windows NT 4.0 kernel mode driver.

To install the Windows 2000 and Windows XP user mode driver on the Windows NT 4.0 server:

1. In the driver properties dialog box on the server, click the General tab and then click the New Driver button.
2. When prompted for files, locate the Windows 2000 and Windows XP folder on the printer Starter CD and select the user mode driver.

### To install the printer driver on a client

Once you have connected the printer to the network and installed the printer driver on the network computer acting as the server, you can share the printer. Individual Windows users, known as clients, can connect to the printer in these ways:

- In the Printers folder, double-click the Add Printer icon and follow the instructions for a network printer installation. See "To install the printer driver using Add Printer".
- Install the printer software from the Starter CD. When prompted, select Connected via the network, and then select Client setup for client-server printing.
- On the network, browse to the printer and drag it to your Printers folder.
- Add the printer and install the software from the INF file that has been saved to a location on your network. Ask the network administrator where the INF file is located.

On the Starter CD, the INF files are stored in folders using the following format:

<CD>:\Setup\Drivers\PCL3\<operating system>\<language>.

For example, if your CD drive letter is D:, then D:\Setup\Drivers\PCL3\Win2k\_XP\English would contain the English Windows 2000/XP PCL 3 INF file.

To install the printer driver using Add Printer

1. Click Start, point to Settings, and then click Printers (Windows NT 4.0, 98, Me, and 2000) or Printers and Faxes (Windows XP).
2. Double-click Add Printer, and then click Next.
3. For Windows 98, Me, 2000, or XP, select Network Printer, or for Windows NT 4.0, select Network Printer Server.
4. Click Next.

5. Do one of the following steps.
  - Type in the network path or queue name of the shared printer and click Next, and then click Have Disk when prompted to select the printer model.
  - Or, click Next and locate the printer in the Shared printers list.
6. Click Next and follow the onscreen instructions to complete the installation.

## To add a network port to the printer

If you have already installed the printer software using the printer setup program, and you want to create a port to connect through the network to the printer via an HP Jetdirect external print server, follow these instructions:

1. After installing the print server software, right-click hp deskjet 9600 series in the Printers folder and select Properties.
2. Do one of the following. For Windows NT 4.0, 2000, and XP: Click the Ports tab, and then click Add Port. For Windows 98 and Me: Click the Details tab, and then click Add Port.
3. Select the desired port (such as the HP Standard TCP/IP Port) and click the New Port button.
4. Click OK.

## Connecting to a network (Mac OS)

You must install the HP Jetdirect external print server first, then connect the printer to the network and install the printer software on the computer.

1. After setting up the HP Jetdirect external print server and a network port on your computer, start your computer and make sure no applications are running.
2. Insert the Starter CD into your CD-ROM drive. The CD menu runs automatically.
3. If the CD menu does not run automatically, double-click the CD icon on the desktop, and then double-click the Setup icon.
4. Click Install Driver.
5. Follow the onscreen instructions.
6. Mac OS 9.1.x and 9.2.x
  1. When prompted, restart the computer.
  2. Select Chooser from the Apple menu.
  3. Select hp deskjet xx in the upper-left window of the Chooser window, where xx represents the version of the current printer driver.
  4. Select hp deskjet 9600 series in the right window of the Chooser screen.
  5. Close the Chooser.
7. Mac OS X
  1. Open the Print Center, which is located in the Applications\Utilities folder.
  2. Click Add.
  3. If you are using an AppleTalk network, select AppleTalk on the pop-up menu. If you are using an IP network, select IP Printer on the pop-up menu and then type the IP address for the printer.
  4. If necessary, select the Zone.
  5. Select hp deskjet 9600 series from the printer list, and then click Add. A dot appears beside the printer name, indicating that this printer is now the default printer.
  6. Close the Print Center.

---

# Troubleshooting

## Introduction

This chapter provides solutions to common printer problems such as paper jams or software installation issues, and printing problems such as borderless or photo printing problems. If your printer is not operating properly and these suggestions do not solve the problem, try to print a diagnostic page and then contact the HP Customer Care Center (see "Printing a diagnostic page" and "Customer support").

## Starting troubleshooting

Start in this section if you are having a problem with the printer.

- If you have a jam, see "Clearing jams".
- If you have a different type of media-feed problem, such as the media is skewing or is not being picked up, see "Resolving media handling problems".
- Otherwise, if the printer is not working properly or if the print quality is not what you expect, try the following steps first.
  - Check that no error messages appear on the computer screen.
  - Check that you do not have too many programs open when you are trying to perform a task. Close programs that are not in use, or restart the computer before attempting the task again.
  - Check the printer lights. If the Power light is blinking, the printer is processing information. If other lights are on or blinking, see "Printer lights reference" for descriptions of printer lights and what they indicate.
  - Check that the power cord is securely connected to the printer and plugged into a live electrical outlet.
  - Try printing a demo page to see if the printer is set up correctly. Make sure the printer is turned on, press and hold the Power button, press the Resume button once, and then release the Power button. The printer prints a demo page.
  - Check that the network cable and the printer cable connections are firmly in place. If you are using an HP Jetdirect external print server, print its configuration page to check the operation of the print server and to verify network configuration settings. Please refer to the Jetdirect Administrator's Guide that comes with the print server.

After you have tried these steps, see the following sections for information about more specific problems.

- Troubleshooting installation issues
- Calibrating color
- Resolving printer problems
- Resolving printing problems (includes print-quality issues)
- Resolving color problems
- Resolving photo printing problems
- Resolving borderless printing problems
- Resolving banner printing problems
- Resolving media handling problems
- Resolving automatic two-sided printing problems

- Resolving automatic two-sided printing problems
- Resolving network printing problems
- Resolving network printing problems

If none of the solutions work, see “Customer support”.

For more information about how to troubleshoot Macintosh printing problems, see the release notes on the Starter CD.

## Printing a demo page

Printing a demo page without being connected to a computer verifies whether the printer is set up correctly.

1. Make sure the printer is turned on.
2. Press and hold the Power button, press the Resume button once, and then release the Power button.

The printer prints a demo page.

## Printing a diagnostic page

This page is useful to HP Technical Support if you have a printer problem.

1. Make sure the printer is turned on.
2. Press and hold the Power button, press the Resume button four times, and then release the Power button.

The printer prints a diagnostic page.

## Troubleshooting installation issues

If you had trouble installing the printer, check the following items.

### Hardware installation issues

- Press the Power button to turn off the printer, wait a few seconds, and then press the Power button to turn it on again. Also see “Power cannot be turned on” for other power-related troubleshooting steps.
- Make sure all packing tapes have been removed from the printer.
- Make sure the print cartridges are properly installed.
  - Check each print cartridge and make sure the protective tape is removed from the ink nozzles.
  - Make sure the print cartridges are in the correct cradle.
  - Make sure the print cartridges are firmly installed into the cradles. Press down firmly on each one to ensure proper contact.
  - Make sure the print cartridge latches are properly closed.
- Make sure the printer is loaded with paper.
- Make sure no lights are on or blinking except the Power light, which should be on. If any other lights are on, see “Printer lights reference” for a list of light patterns and what they indicate.

- Make sure the rear access panel or auto-duplex unit is correctly installed and locked into place.
- Make sure the printer cable is in good working order and that it is securely connected between the appropriate connector on the printer and the computer or a network connection.
- Try printing a demo page to see if the printer is set up correctly. Make sure the printer is turned on, press and hold the Power button, press the Resume button once, and then release the Power button. The printer prints a demo page.

### **Software installation issues**

- Make sure your computer is running one of these operating systems: Windows 98, NT 4.0, Me, 2000, or XP. Windows NT 4.0 must have Service Pack 6.0 or later installed to use the setup program (the driver can be installed without the service pack). If you are using a Macintosh, it must be running Mac OS 9.1 or later.
- Make sure the computer meets at least the minimum system requirements. See "Printer specifications".
- Before installing software on a Windows computer, make sure all other programs are closed.
- If the computer does not recognize the path that you type to the Starter CD, make sure you are specifying the correct drive letter for the CD-ROM drive.
- If the computer cannot recognize the Starter CD in the CD-ROM drive, inspect the CD for damage. You can download the printer driver from <http://www.hp.com/support/dj9600>.

### **USB installation failed or nothing prints through USB**

- Make sure your computer has a USB port and is properly configured to use a USB connection.
- Make sure your operating system supports USB connection, such as Windows 98, Me, 2000, or XP. Windows NT 4.0 does not support USB connection.
- Make sure the USB cable is properly connected to the computer and the printer.
- Make sure the printer is turned on.
- Restart the system and send the print job again.
- Connect the USB cable to the computer and printer and turn on the printer. Verify that Windows is able to detect the printer. Windows will display the Found New Hardware wizard if it detects the printer.
- If the installation failed, uninstall the printer software and try to install again. See "Uninstalling the printer software".

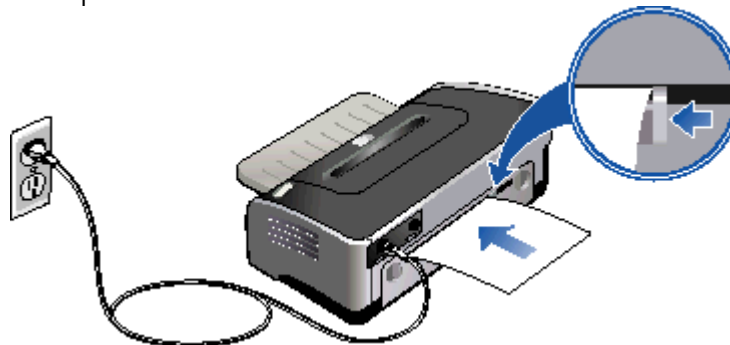
## Clearing jams

Use the following methods to locate and clear a paper jam. For information on how to avoid jams, see “Tips for avoiding paper jams”.

### Note

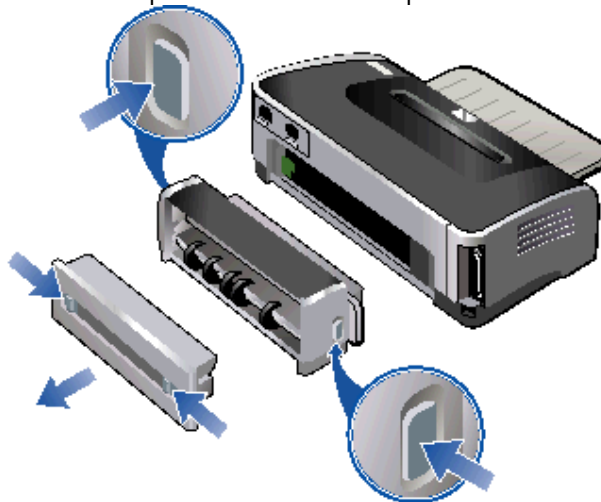
*To prevent jammed paper from tearing off inside the printer, try to grasp jammed paper with both hands and exert even pressure on both sides while pulling the paper towards you.*

- Remove the rear access panel, pull out any jammed paper, and then reinsert the rear access panel.



**Remove rear manual feed**

- Remove the rear cover from the auto-duplex unit (if installed), remove any paper, and replace the rear cover. If the paper jam is not visible by removing the rear cover, remove the auto-duplex unit to locate the jam.



**Remove jammed paper**

- Lift up the output tray and remove any jammed paper from the input tray.





#### Print jam\_output tray

- Open the top cover. The print cartridge carriage should return to the right side of the printer. If the carriage does not return to the right side, turn off the printer, and then move the carriage to the right. Pull any jammed paper towards you.

#### Note

*Do not reach into in the printer when the printer is on and the print cartridge carriage is stuck.*



#### Print jam\_topcover

After you clear the jam, close all covers, turn on the printer (if you turned it off), and press the Resume button. The printer will continue the print job on the next page. You will need to resend any pages that were jammed in the printer.

### Tips for avoiding paper jams

- Make sure nothing blocks the paper path.
- Do not use media that is damaged, curled, or wrinkled. It is recommended not to use paper with cutouts or perforations or paper that is heavily textured or embossed.
- To ensure that media feeds properly, load only one type of media at a time in the input tray or the manual feed slots.
- Make sure media is loaded correctly. See "Loading media in the input tray".
- For the input tray and front manual feed slot, load the media print-side down with the right edge of the media aligned against the right edge of the tray or slot. Make sure

the paper width guide and tray extension fit against the edges of the media. For the rear manual feed slot, load the media print-side up.

- Do not load more than 150 sheets of paper, or 15 envelopes, or a stack of media that exceeds the height of the paper width guide into the input tray. Do not load more than 10 sheets of paper into the front manual feed slot. Load only one sheet of paper at a time into the rear manual feed slot.
- Always use media that conforms with the types, sizes, and weights listed in “Printer specifications”. Also see “Selecting print media” for tips and guidelines on recommended media.

---

## Printer indicator lights

### Left and right print cartridge lights



#### Left and right print cartridge lights

The left print cartridge light indicates color print cartridge status; the right print cartridge light indicates black or photo print cartridge status.

The print cartridge lights can be on or blinking in combination with the Power light and Resume light behaviors listed in this table.

- On: Print cartridge is damaged, missing, or incompatible. Reinstall or replace the print cartridge. See “Installing or replacing the print cartridges”. If printing with a single print cartridge, ignore this light.
- Blinking: Print cartridge is low on ink. Replace the print cartridge soon. See “Installing or replacing the print cartridges”.

## Printer lights cycle



### Printer lights cycle

The printer lights cycle when the printer is turned on.

- No action required

## Power light on

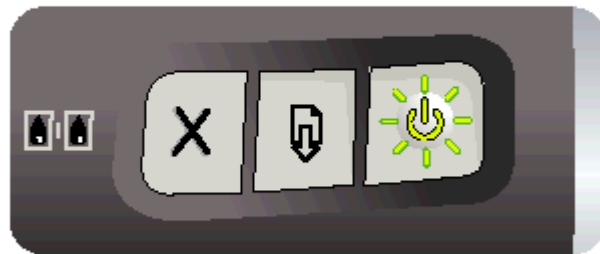


### Power light on

Printer is turned on and idle.

- No action required

## Power light blinks



### Power light blinks

Printer is printing or processing a print job.

- No action required

## Power light blinks twice, stays off, then repeats the pattern



### Power light blinks twice, stays off, then repeats the pattern

Printer is cancelling a print job.

- No action required

## Power light on, Resume light blinks



### Power light on, Resume light blinks

Check for one of the following conditions:

- Printer is waiting for special media to dry. Press the Resume button if you do not want to wait. You can change the dry time in the printer driver (see "Ink is smearing" for instructions).
- Printer is out of paper. Load paper and press the Resume button to continue the print job.
- Printer is waiting for a manual feed load. If using front or rear manual feed slot, load paper and press the Resume button to continue the print job.
- There is a media size mismatch. Make sure the paper size selected in the printer driver matches the paper size loaded in the printer.
- The printer has printed a banner and the banner needs to be removed from the printer. Press the Resume button to eject the banner media.
- I/O stall. Make sure your system is running properly and the printer is properly connected to your system. Then resend the print job. To check the system, see the guidelines in "Troubleshooting".



## Power light off, Resume light blinks



### **Power light off, Resume light blinks**

Paper jam or paper motor stall.

- Clear the jammed paper (see “Clearing Jams”). After clearing the jam, press the Resume button to continue the print job.
- If no paper jam exists, press the Resume button. If this does not work, turn off the printer, and then turn it on again. Then resend the print job.

## Power and Resume lights blink together at same time

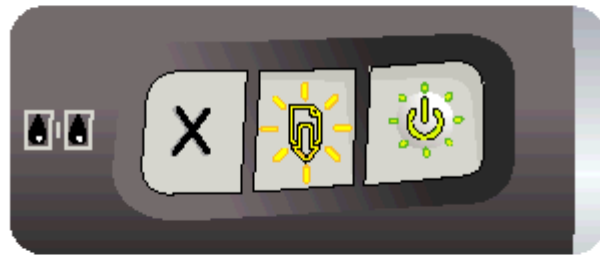


### **Power and Resume lights blink together at same time**

#### Carriage stall

- If there is a paper jam, clear the jammed paper (see “Clearing jams”). After clearing the jam, press the Resume button to continue the print job.
- If no paper jam exists, press the Resume button. If this does not work, turn off the printer, and then turn it on again. Then resend the print job.

### Power and Resume lights blink alternately



### Power and Resume lights blink alternately

#### Service station stall

- If there is a paper jam, clear the jammed paper (see “Clearing Jams”). After clearing the jam, press the Resume button to continue the print job.
- If no paper jam exists, press the Resume button. If this does not work, turn off the printer, and then turn it on again. Then resend the print job.

## All printer lights blink together



### All printer lights blink together

#### Hardware error

- Make sure there is no paper jam in the printer (see "Clearing jams").
- If you cannot resume the print job, cancel the print job. Turn off the printer, turn it back on, and then try to print again. If the problem persists, turn off the printer and disconnect the cable from the printer. Reconnect the cable, turn on the printer, and then try to print again.

## Power and Resume lights on



### Power and Resume lights on

Check for one of the following conditions:

- Make sure the top cover is closed.
- Make sure the rear access panel or auto-duplex unit is correctly installed and locked into place.

### Left print cartridge light on, Power light on



#### **Left print cartridge light on, Power light on**

Color print cartridge is damaged or missing

- Reinstall or replace the print cartridge. See "Installing or replacing the print cartridges".
- You can still print with one print cartridge. See "Printing with a single print cartridge".

Right print cartridge light on, Power light on



**Right print cartridge light on, Power light on**

Black or photo print cartridge is damaged or missing

- Reinstall or replace the print cartridge. See "Installing or replacing the print cartridges".
- You can still print with one print cartridge. See "Printing with a single print cartridge".

Left and right print cartridge lights on, Power light on



**Left and right print cartridge lights on, Power light on**

The left (color) and right (black or photo) print cartridges are both damaged or missing.

- Reinstall or replace the print cartridges. See “Installing or replacing the print cartridges”. The printer will not print if both print cartridges are damaged or missing.

### Left print cartridge light blinks, Power light on



### Left print cartridge light blinks, Power light on

Color print cartridge is low on ink

- Replace the print cartridge. See “Installing or replacing the print cartridges”.
- You can still print with one print cartridge. See “Printing with a single print cartridge”.



Right print cartridge light blinks, Power light on



**Right print cartridge light blinks, Power light on**

Black or photo print cartridge is low on ink

- Replace the print cartridge. See "Installing or replacing the print cartridges".
- You can still print with one print cartridge. See "Printing with a single print cartridge".

Left and right print cartridge lights blink, Power light on



**Left and right print cartridge lights blink, Power light on**

The left (color) and right (black or photo) print cartridges are both low on ink

- Replace the print cartridge. See “Installing or replacing the print cartridges”.
- You can still print with one print cartridge. See “Printing with a single print cartridge”.

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---

## Loading the input tray

### Loading media

The input tray is designed to hold the paper type used most often. It can hold up to 150 sheets of plain paper or 30 transparencies.

To load paper in the input tray:

Raise the output tray. If the tray is extended, close it first.

Press the input tray lock, and extend the input tray.

**Note** If the small media guide is in its open position, close it by moving it 90 degrees counterclockwise.

Press the button on top of the paper width guide, and slide the guide to the left to its outermost position.

Insert up to 150 sheets of paper (or a stack of media that does not exceed the height of the paper width guide) print-side down along the right side of the input tray until it stops. For transparencies, insert up to 30 transparencies, rough-side down and the adhesive strip pointing forward, along the right side of the input tray until it stops.

Press the button on top of the paper width guide, and slide the guide to the right until it stops at the edge of the media.

Press the input tray lock and retract the tray until it stops at the edge of the media.

**Note** When 8.5-by-11 inch paper is loaded in the input tray, the tray extension closes to the edge of the paper and leaves a slight gap between the extension and the tray. The tray extends further to accommodate larger-sized media.

Lower the output tray to its horizontal position.

Extend the output tray if necessary.



### Loading the input tray

### Loading small media

You can also use the input tray for envelopes, cards, and other small media.

If you are printing one or just a few envelopes or cards, you can use the front manual feed slot.

To load small media in the input tray:

Raise the output tray and remove any media from the input tray.

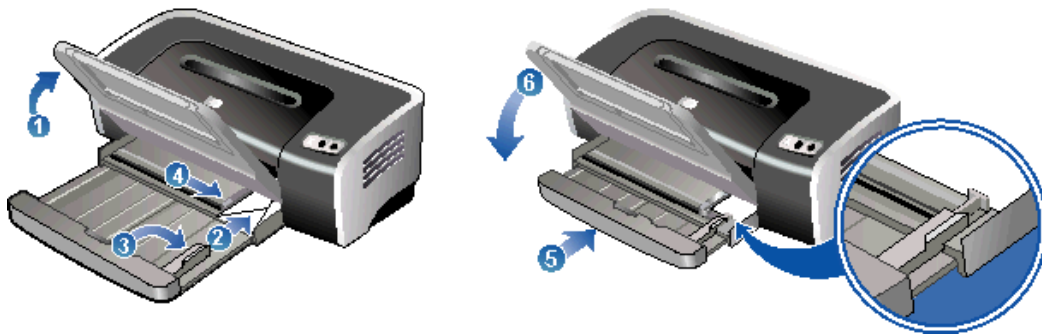
Insert up to 15 envelopes along the right side of the input tray, with the flaps facing up and to the right, until they stop.

Open the small media guide by moving it 90 degrees clockwise from start to end position.

Press the button on top of the paper width guide and slide the guide to the right until it stops at the edge of the envelopes.

Press the input tray lock and retract the tray until the small media guide stops at the edge of the envelopes.

Lower the output tray.



**Loading small media**

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## Loading the manual feed slots

The front manual feed slot is designed for printing a small number of photos, envelopes, or other items on media that is different than the media in the input tray.

The rear manual feed slot provides a straight paper path for printing on single sheets of thick paper (up to 280 g/m<sup>2</sup>) such as cardstock or photo paper.

- If the auto-duplex unit is installed, replace the auto-duplex unit with the rear access panel to access the rear manual feed slot
- If the printer is shared on a network, the option to print on both sides is disabled on the client machine.

### Front manual feed slot

If there are any printouts on the output tray, remove them before using the front manual feed slot.

Extend the output tray.

Slide the paper guide to its left-most position.

Insert up to 10 sheets of plain paper (or 5 cards or envelopes) print-side down into the right side of the slot until the media stops. Insert envelopes with the flaps facing up and to the right.

Slide the paper guide to the right until it stops at the edge of the paper.



### Adjust paper guide

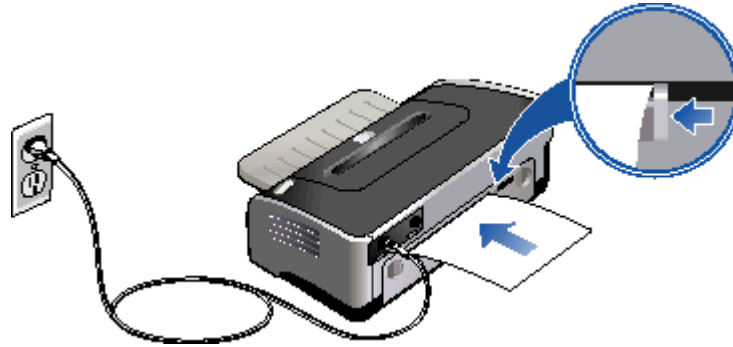
Press the Resume button to proceed with printing.

To resume printing from the input tray, remove the paper from the front manual feed slot.

## Rear manual feed slot

Adjust the paper guide to the size of the paper by aligning it with the appropriate icon below the rear manual feed slot.

Insert a single sheet of paper print-side up into the left side of the rear manual feed slot. The printer grips the paper.



### Insert paper into rear manual feed

Press the Resume button to proceed with printing. When printing more than one page, press the Resume button after inserting each sheet of paper.

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## Using the automatic paper sensor

The automatic paper-type sensor automatically selects the print settings appropriate for the media in the printer, particularly when used with HP media. The sensor scans the first page of a document, selects the media type and the best print quality, and then prints the document.

The following software features DO support automatic paper sensing: Best, Normal, Fast Normal, Fast Draft.

The following software features DO NOT support automatic paper sensing: Maximum dpi, Borderless Printing, Exif-Print.

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**Note** *Do not place the printer in direct sunlight. Direct sunlight can interfere with the automatic paper-type sensor.*

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**Note** *For best results when printing with higher-quality media, select the paper type in the printer driver.*

To use the automatic paper-type sensor as the default setting, see "Changing default print settings".

### For Windows

Open the printer driver and click Print Properties.  
Click the Paper/Quality tab.  
Select Automatic from the Type is drop-down list.  
Change any other desired print settings and click OK.

### For Macintosh

Click File, then click Print.  
Open the Paper Type/Quality panel.  
For Mac OS 9.1.x or 9.2.x:

- Select Automatic from Paper Selection.

  
For Mac OS X:  
Click the Paper tab.  
Select Automatic from the Paper type drop-down list.  
Change any other desired print settings and click OK or Print.

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## Printing

### Standard-sized paper

Use HP media for optimum print quality. HP media are specifically designed to work with the printer.

#### For Windows

Load the print media.  
Open the printer driver and click Print Properties.  
Click the Paper/Quality tab.  
Select the media type from the Type is drop-down list.  
Select the media size from the Size is drop-down list.  
Select the paper source from the Source is drop-down list.  
Change any other desired print settings and click OK.  
Print the document.

#### For Macintosh

Load the print media.  
Click File, then click Page Setup.  
Select the media size.  
Click File, then click Print.  
For Mac OS 9.1.x or 9.2.x: In the General panel, select the paper source from the Paper Source drop-down list.  
For Mac OS X: In the Copies & Pages panel, select the paper source.  
Open the Paper Type/Quality panel.  
For Mac OS 9.1.x or 9.2.x: Select the media group and type from Paper Selection.  
For Mac OS X: Click the Paper tab and select the media type from the Paper type drop-down list.  
Change any other desired print settings, then click OK or Print.

### Custom-sized paper

The width of the custom-sized paper must be between 100 and 330 mm (3.94 and 13 inches), and the length must be between 146 and 1,270 mm (5.75 and 50 inches).

#### For Windows

Load the print media.  
Open the printer driver and click Print Properties.  
Click the Paper/Quality tab.  
Click the Custom button beneath the Size is drop-down list.  
In the custom paper size dialog box, type values for the width and length.  
Choose any of the predefined names from the Name drop-down list, and click Save to save the custom settings.  
Click OK.  
Select the name of the custom paper size just created from the Size is drop-down list.  
Select the paper source from the Source is drop-down list.  
Change any other desired print settings and click OK.  
Print the document.



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## Printing on special media

### Envelopes

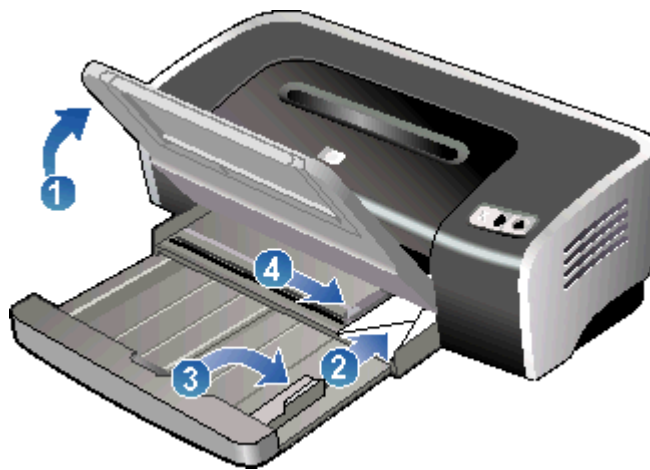
When printing only a few envelopes, the front manual feed slot may be more convenient. Avoid using envelopes that have clasps or windows; have thick, irregular, or curled edges; are shiny or embossed; or are wrinkled, torn, or otherwise damaged.

Raise the output tray and remove any media from the input tray.

Insert up to 15 envelopes along the right side of the input tray, with the flaps facing up and to the right, until they stop.

Open the small media guide by moving it 90 degrees clockwise from start to end position.

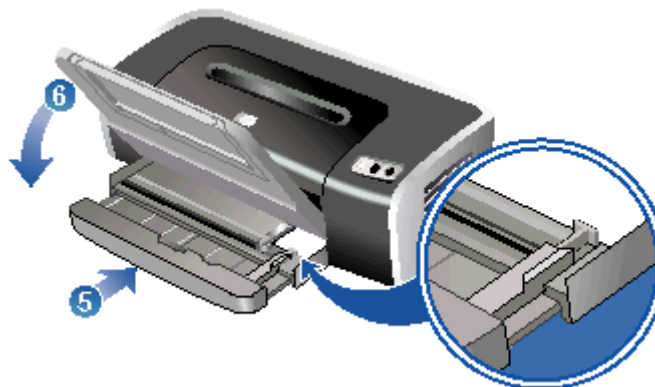
Press the button on the paper-width guide, and slide the guide to the right until it stops at the edge of the envelopes.



#### Adjust the paper-width guide

Press the input tray lock and retract the tray until the small media guide stops at the edge of the envelopes.

Lower the output tray.



#### Lower the output tray

For Windows:

Open the printer driver and click Print Properties.

Click the Paper/Quality tab.

Select the envelope size from the Size is drop-down list.

Change any other desired print settings and click OK.

Print the file.

For Macintosh:

Click File, and then click Page Setup.

Select the envelope size.

Change any other desired print settings and click OK or Print.

## Cards and smaller-sized media

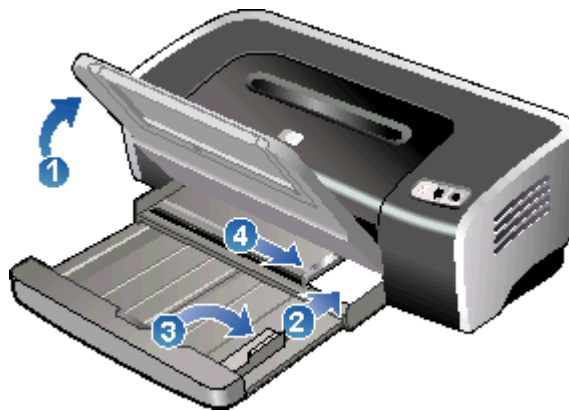
When printing on thick paper (such as cardstock), the rear manual feed slot may be more convenient.

Raise the output tray and remove any media from the input tray.

Insert up to 60 cards, or a stack of media that does not exceed the height of the paper width guide, print-side down along the right side of the input tray until it stops.

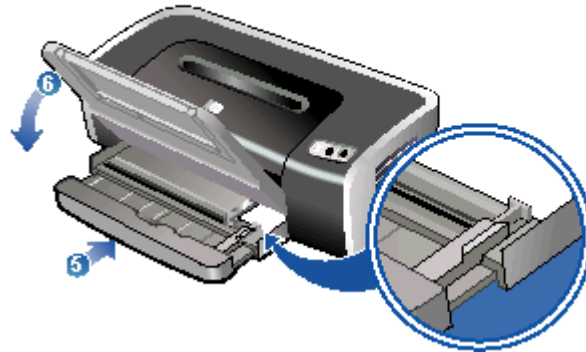
Open the small media guide by moving it 90 degrees clockwise from start to end position.

Press the button on top of the paper width guide and slide the guide to the right until it stops at the edge of the cards.



**Adjust the paper-width guide**

Press the input tray lock and retract the tray until the small media guide stops at the edge of the cards.  
Lower the output tray.



### **Lower the output tray**

For Windows:

Open the printer driver and click Print Properties.

Click the Paper/Quality tab.

Select the size of the cards from the Size is drop-down list.

Select the paper type from the Type is drop-down list.

Change any other desired print settings and click OK.

Print the file.

For Macintosh:

Click File, and then click Page Setup.

Select the size of the cards.

Click File, and then click Print.

Open the Paper Type/Quality panel.

For Mac OS 9.1.x or 9.2.x: Select the media group and type from Paper Selection.

For Mac OS X: Click the Paper tab and select the media type from the Paper type drop-down list.

Change any other desired print settings and click OK or Print.

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## Printing on both sides of the paper

### General information

- For automatic duplexing, use only sizes and types of media supported by the auto-duplex unit. Supported media is listed in the “Tray capacities” table in the “Media types, sizes, weights, and capacities” section. For unsupported media types, print on both sides manually.
- Increasing the dry time may prevent ink smudges when printing on both sides. For Windows, adjust the ink dry time by selecting Advanced Features from the Basics tab in the printer driver. For Macintosh, adjust the ink dry time by selecting the Ink tab in the Paper Type/Quality panel.
- For best results, do not print on paper heavier than 135 g/m<sup>2</sup> (36 lb bond), on both sides of labels or transparencies, or on both sides of pages that are covered densely with ink. The printer can jam when using these types of media for printing on both sides, and can be damaged when printing on both sides of labels.

### Manual duplexing

This feature is not available if the printer is not directly connected. The driver will allow the user to choose this option but the printer will default to simplex printing if the auto-duplex unit is not installed.

To print on both sides of a sheet of paper, turn the paper over and feed it into the printer again.

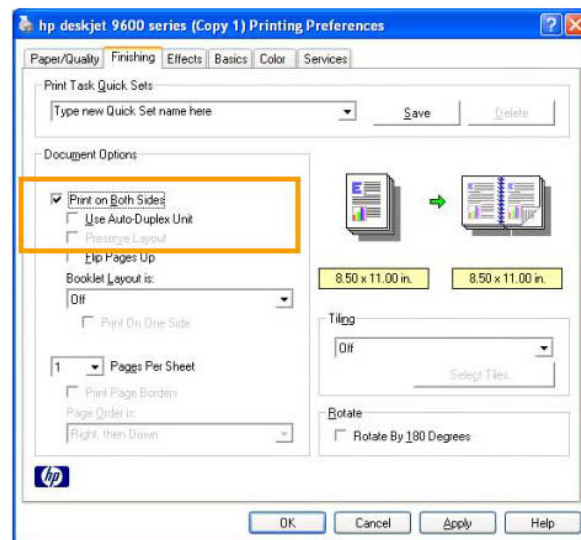
### Windows

Load the appropriate paper.

Open the printer driver and click Print Properties.

Click the Finishing tab.

Select the Print on Both Sides check box, and ensure that Use Auto-Duplex Unit is cleared.



### Manual duplex

If needed, select Flip Pages Up to change the page orientation.

If needed, choose a booklet layout from the Booklet Layout drop-down list.  
Change any other desired print settings, then click OK.  
Print the document.  
Follow the onscreen instructions to complete the printing.  
After one side of the page is printed, turn the paper over and reload it to print on the other side.

## Macintosh

Manual duplexing is available in Mac OS 9.1.x and 9.2.x only.  
Load the appropriate paper.  
Click File, then click Print.  
Open the Layout panel.  
Select Print Both Sides.  
Select the desired binding orientation (select the appropriate icon), then select Manual.  
Change any other desired print settings, then click OK or Print.  
Follow the onscreen instructions to complete the printing.  
After one side of the page is printed, turn the paper over and reload it to print on the other side.

## Auto-duplexing

The printer can automatically print on both sides of a sheet of paper when the auto-duplex unit is installed.

### Advantages of auto-duplexing

- Printing on both sides of a page without manually reloading the page.
- Printing long documents quickly and efficiently.
- Using less paper by printing on both sides of paper.
- Create professional-looking brochures, reports, newsletters, and other special items.

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#### Note

*After the first side of the page is printed, the printer pauses while the ink dries. Once the ink is dry, the paper is pulled back into the auto-duplex unit and the reverse side of the page is printed.*

## Windows

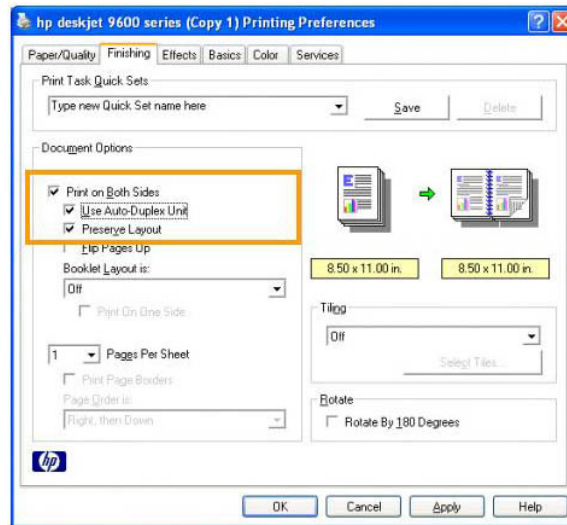
Load the appropriate paper.

Open the printer driver and click Print Properties.

Click the Finishing tab.

Select the Print on Both Sides check box, and ensure that Use Auto-Duplex Unit is selected. Automatically printing on two sides may increase your document's top margins to correctly align the two sides. This may result in a smaller printable area.

To automatically resize each page to match the document's onscreen layout, select Preserve Layout. This checkbox allows the printer software to reduce the size of your page so that extra pages are not created. Leave this checkbox unchecked to leave the content size unchanged, which may result in additional pages being created.



### Auto-duplex

If needed, select Flip Pages Up to change the page orientation.

If needed, choose a booklet layout from the Booklet Layout drop-down list.

Change any other desired print settings, then click OK.

Print the document.

## Macintosh

Load the appropriate paper.

Click File, then click Print.

For Mac OS 9.1.x or 9.2.x: Open the Layout panel.

For Mac OS X: Open the Two Sided Printing Panel.

Select Print Both Sides.

Select the desired binding orientation (select the appropriate icon), then select Auto-duplex unit.

Change any other desired print settings, then click OK or Print.

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## Printing with the front and rear manual feed slots

### Design

The front manual feed slot is designed for printing a small number of photos, envelopes, or other items on media that is different than the media in the input tray.

The rear manual feed slot provides a straight paper path for printing on single sheets of thick paper (up to 280 g/m<sup>2</sup>) such as cardstock or photo paper.

- If the auto-duplex unit is installed, replace the auto-duplex unit with the rear access panel to access the rear manual feed slot
- If the printer is shared on a network, the option to print on both sides is disabled on the client machine.

### How to print using the front or rear manual feed slot

For Windows:

Open the printer driver and click Print Properties.

Click the Paper/Quality tab.

Select the manual feed option from the Source is drop-down list.

Change any other desired print settings and click OK.

Print your document.

For Macintosh:

Click File, then click Page Setup.

Select the media size.

Click File, then click Print.

For Mac OS 9.1.x or 9.2.x: In the General panel, select the manual feed option from the Paper Source drop-down list.

For Mac OS X: In the Copies & Pages panel, select the manual feed option.

Open the Paper Type/Quality panel.

For Mac OS 9.1.x and 9.2.x: Select the media group and type from Paper Selection.

For Mac OS X: Click the Paper tab and select the media type from the Paper type drop-down list.

Change any other desired print settings, then click OK or Print.

When the Resume light blinks, follow the procedure for the front or rear manual feed slot, below.

### Front manual feed slot

If there are any printouts on the output tray, remove them before using the front manual feed slot.

Extend the output tray.

Slide the paper guide to its left-most position.

Insert up to 10 sheets of paper (or 5 cards or envelopes) print-side down into the right side of the slot until the media stops. Insert envelopes with the flaps facing up and to the right.



Slide the paper guide to the right until it stops at the edge of the paper.



### **Adjust paper guide**

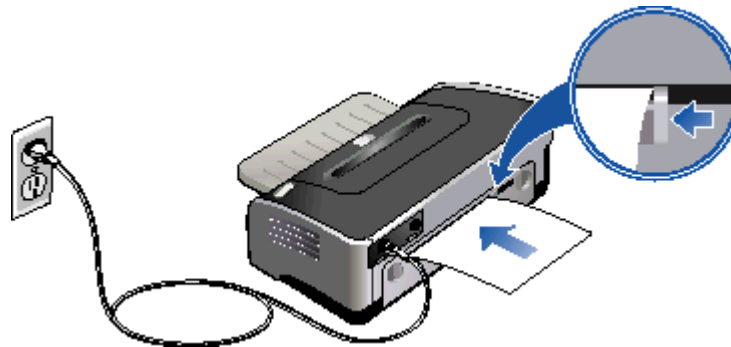
Press the Resume button to proceed with printing.

To resume printing from the input tray, remove the paper from the front manual feed slot.

### **Rear manual feed slot**

Adjust the paper guide to the size of the paper by aligning it with the appropriate icon below the rear manual feed slot.

Insert a single sheet of paper print-side up into the left side of the rear manual feed slot. The printer grips the paper.



### **Insert paper into rear manual feed**

Press the Resume button to proceed with printing. When printing more than one page, press the Resume button after inserting each sheet of paper.

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## Printing multiple pages on a single sheet

The printer can print multiple pages on a single sheet of media, and automatically resizes text and images as needed to fit on the printed page.

### For Windows

Load the appropriate media.  
Open the printer driver and click Print Properties.  
Click the Finishing tab.  
Select the number of pages to print on each sheet from the Pages Per Sheet drop-down list.  
To print a border around each printed page image, select the Print Page Borders check box.  
Select a layout from the Page Order is drop-down list.  
Change any other desired print settings and click OK.  
Print the document.

### For Macintosh

This feature is available only with Mac OS 9.1.x and 9.2.x.  
Load the appropriate media.  
Click File, then click Print.  
Open the Layout panel.  
Mac OS 9.1.x and 9.2.x only: Select Multiple Pages Per Sheet from the menu.  
Select the number of pages to print on each sheet from the Pages Per Sheet drop-down list.  
To print a border around each printed page image, select the Print Border check box.  
Change any other desired print settings and click OK or Print.

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## Printing booklets

Booklet printing automatically arranges and resizes the pages of a document, so that when the document is folded into a booklet, the page order is correct.

**Note** *If the printer is shared, the option to print on both sides will be disabled on the client machine.*

### Printing booklets manually

#### For Windows

Load the appropriate paper.  
Open the printer driver and click Print Properties.  
Click the Finishing tab.  
Select the Print on Both Sides check box, and ensure that Use Auto-Duplex Unit is cleared.  
Select a binding option from the Booklet Layout drop-down list.  
Do one of the following:

- To leave every other page of the booklet blank, select Print on One Side.
- To print on all pages in the booklet, make sure the Print on One Side check box is cleared.

Change any other desired print settings and click OK.

#### For Macintosh

Load the appropriate paper.  
Click File, then click Print.  
For Mac OS 9.1.x and 9.2.x:  
Open the Layout panel.  
Select the booklet option from the Multiple Pages Per Sheet menu.  
For Mac OS X:

- Open the Two Sided Printing panel.

Select Print Both Sides, then select Manual.  
Click the binding icon for Book (binding at the side) or Tablet (binding at the top).  
Change any other desired print settings and click OK or Print.

## Printing booklets automatically

Booklets can be printed automatically when the auto-duplex unit is installed on the printer.

### For Windows

- Load the appropriate paper.
- Open the printer driver and click Print Properties.
- Click the Finishing tab.
- Select Print on Both Sides.
- Select Automatic.
- Select Preserve Layout.
- Select a binding option from the Booklet Layout drop-down list.
- Do one of the following:
  - To leave every other page of the booklet blank, select Print On One Side.
  - To print on all pages in the booklet, make sure the Print On One Side check box is cleared.
- Change any other desired print settings and click OK.
- Print the document.

### For Macintosh

- Load the appropriate paper.
- Click File, then click Print.
- For Mac OS 9.1.x and 9.2.x:
  - Open the Layout panel.
  - Select the booklet option from the Multiple Pages Per Sheet menu.
- For Mac OS X:
  - Open the Two Sided Printing panel.
- Select Print Both Sides, then select Automatic.
- Click the binding icon for Book (binding at the side) or Tablet (binding at the top).
- Change any other desired print settings and click OK or Print.

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## Printing banners and posters

### Printing banners

The printer can print large images and bold, oversized fonts on continuous feeds of paper.

**Note** Use HP banner paper for great results. Remove any perforated strips from the banner paper before loading it in the input tray. Input tray capacity: up to 20 continuous sheets.

### For Windows

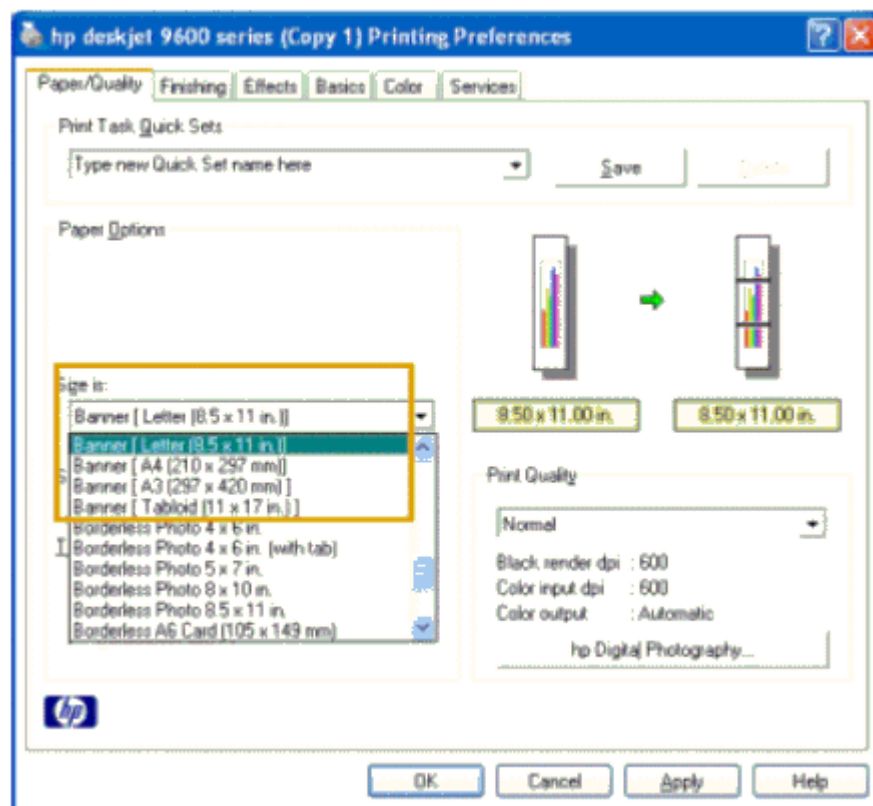
Load the appropriate media. Make sure the unattached edge is on top of the paper stack pointing towards the printer.

If the software program includes a banner-printing feature, follow the instructions provided with the software program. Otherwise, follow the instructions below.

Open the printer driver.

Click the Paper/Quality tab.

Select HP Banner Paper from the Type is drop-down list.



### Select banner paper

Change any other desired print settings and click OK.

Print the document.

### For Macintosh

Load the appropriate media. Make sure the unattached edge is on top of the paper stack pointing towards the printer.

If the software program includes a banner-printing feature, follow the instructions provided with the software program. Otherwise, follow the instructions below.

Click File, and then click Page Setup.

Select the correct banner paper size.

Print the document.

### Printing posters

The printer can enlarge a document from a single page to multiple tiles that can be pasted together into a poster.

### For Windows

Load the appropriate media into the input tray.

Open the printer driver and click Print Properties.

Click the Finishing tab.

Select the number of sheets for your poster from the Tiling drop-down list.

To print specific tiles in the poster, click Select Tiles.

Change any other desired print settings and click OK.

Print the document.

Once the poster sections are printed, trim the edges of the sheets, then attach the sheets to form the poster.

### For Macintosh

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#### Note

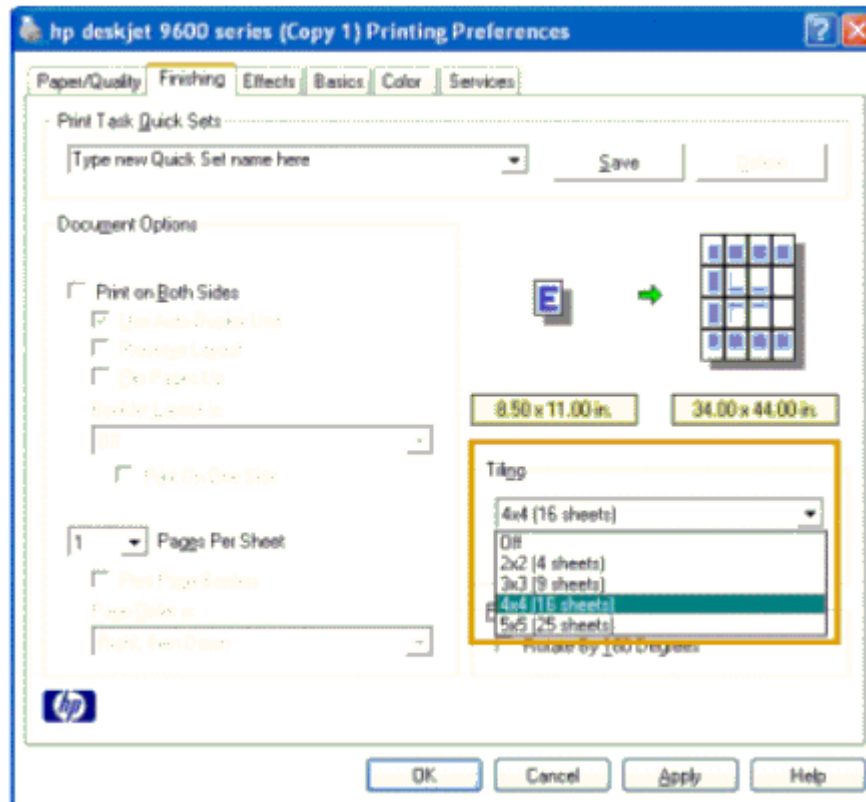
*Poster printing is available only in Mac OS 9.1.x and 9.2.x.*

Load the appropriate media into the input tray.

Click File, and then click Print.

Open the Layout panel.

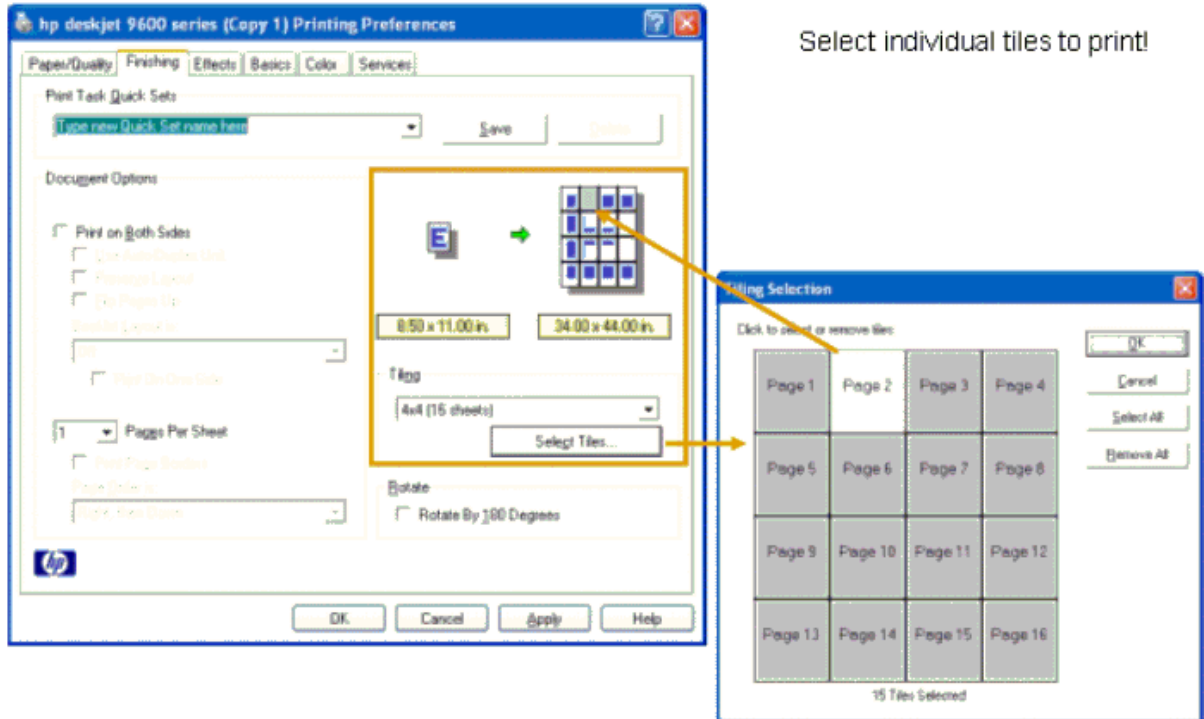
Select Tiling from the Multiple Pages Per Sheet drop-down list.  
Select the number of sheets for the poster from the Tiling Size drop-down list.



**Select number of sheets**



Change any other desired print settings and click OK or Print.



Select individual tiles to print!

### Select individual tiles to print, if desired

Once the poster sections are printed, trim the edges of the sheets, then attach the sheets to form the poster.

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## Printing labels and iron-on transfers

### Printing labels

**Note** *Use only paper labels that are designed specifically for the printer.*

**Note** *Use only full sheets of labels.*

**Note** *Make sure the labels are not sticky, wrinkled, or pulling away from their protective backing.*

**Note** *Do not use plastic or clear labels. The ink will not dry on these labels. The ink will not dry on these labels.*

**Note** *Input tray capacity: Up to 20 continuous sheets.*

### For Windows

- Fan the edges of the label sheets to separate them, and then align the label edges.
- Load up to 20 label sheets, label side down, in the input tray.
- Open the printer driver and click Print Properties.
- Select A4 or US Letter paper size.
- Select Automatic or the appropriate paper type.
- Ensure the option to print on both sides is cleared.
- Change any other desired print settings and click OK.
- Print the document.

### For Macintosh

- Fan the edges of the label sheets to separate them, and then align the label edges.
- Load up to 20 label sheets, label side down, in the input tray.
- Click File, and then click Page Setup.
- Select A4 or US Letter paper size.
- Click File, and then click Print.
- Open the Paper Type/Quality panel.
- Select Automatic or the appropriate paper type.
- Change any other desired print settings and click OK or Print.

## Printing iron-on transfers

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**Note** Use HP iron-on t-shirt transfer paper for great results.

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**Note** When printing a mirror image, the text and pictures are horizontally reversed from what appears on the computer screen.

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**Note** Input tray capacity: Up to 20 continuous sheets.

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**Note** Iron-on transfers are available in Windows only.

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Load up to 20 sheets of iron-on transfer paper in the input tray, print-side down.  
If your software program includes a iron-on transfer feature, follow the instructions provided with the software program. Otherwise, follow the instructions below.  
Open the printer driver and click Print Properties.  
Click the Paper/Quality tab.  
Select HP Iron-On Transfer from the Type is drop-down list.  
Click the Basics tab.  
Select Mirror Image.  
Change any other desired print settings and click OK.  
Print the document.

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## Canceling a print job

To cancel a print job, do either of the following.

- Press the Cancel button on the front panel of the printer. The print job stops immediately. Pressing the Cancel button clears the job being processed by the printer. It does not affect jobs waiting to be processed.
- Alternatively, cancel any print jobs in the print queue. See the Windows or Macintosh online help for more information.

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### Note

*If the spooler fails to respond, run the following commands from the Windows DOS prompt: 'net stop spooler', and then 'net start spooler'.*

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## Printing digital photographs with six-ink color

The printer can use six-ink color to enhance the quality of printed photographs. Six-ink color printing requires a photo print cartridge and a color print cartridge be installed together. When a new print cartridge is installed, the printer automatically aligns the print cartridges and uses one sheet of paper to print an alignment page. If higher-quality photo media is loaded in the input tray, consider loading a sheet of plain paper before installing the new print cartridge.

### Guidelines for printing photographs

- For the best results when printing photographs and images, choose Best mode and select an HP photo paper in the printer driver. Best mode uses HP's unique PhotoREt IV color-layering technology and ColorSmart III color optimization technology to create realistic photo images, vivid color output, and extremely sharp text. With PhotoREt IV, a greater range of colors, lighter tones, and smoother gradations between tones can be achieved, ensuring the best photo and image print quality.
- Alternatively, select Maximum dpi, which provides up to 4800 x 1200 Optimized dpi for optimum print quality. In this mode, printing takes longer because more memory is required in the computer.
- For best results, remove each sheet of paper as it prints and set it aside to dry.
- If the printed colors visibly shift towards yellow, cyan or magenta, or if there is a tinge of color in the gray shades, calibrate the color.
- When installing the photo print cartridge, align the print cartridges for best possible print quality.
- Always hold photo paper by the edges. Fingerprints on photo paper reduce print quality.
- Make sure the photo paper is flat before printing. If the corners of the photo paper curl more than 10 mm or 3/8 inch, flatten the paper by putting it in the resealable storage bag, then rolling the bag on a table edge until the paper is flat.

### Print cartridges used in six-ink and four-ink printing

- The printer can use six-ink color to enhance the quality of printed photographs. Six-ink color printing requires a photo print cartridge and a color print cartridge be installed together.
- The ink in 6-ink printing is dye based. In this printing, the black color in this mode is slightly grayish.
- The ink in 4-ink printing is pigment based (for black).
- Six-ink printing: Use HP 57 tri-color and HP 58 photo print cartridges.
- Four-ink printing: Use HP 56 black and HP 57 tri-color print cartridges.

## To print digital photographs

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**Note**

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*Before beginning six-ink color printing, make sure a photo print cartridge and a color print cartridge are installed in the printer.*

Load the photo paper:

- 4-by-6 inch photos can be printed using the input tray or the rear manual feed slot.
- When printing only a few sheets, consider selecting the manual feed option and using the front manual feed slot. When printing on thick paper, consider selecting the manual feed option and using the rear manual feed slot. When using either manual feed slot, load paper in a later step.

Print the photographs.

If using the front or rear manual feed slot, load the paper into the slot when the Resume light blinks.

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## Printing with thick or photo paper

When printing on thick or photo paper, consider selecting the manual feed option and using the rear manual feed slot.

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## Printing borderless

Borderless printing can print to the edges of certain paper types in a range of standard paper sizes from A6 (105 by 148 mm) to A3 (297 by 420 mm), or on 4-by-6 inch photo paper.

Borderless printing can provide up to 4800 x 1200 Optimized dpi color printing on HP Premium Photo Papers, from 1200 x 1200 dpi input.

### Windows

Load the appropriate paper. If you are printing one or just a few sheets, you can use the front or rear manual feed slot. If so, continue with the steps below and load the paper in a later step.

Open the file to print.

Open the printer driver.

Click the Paper/Quality tab.

Select the paper size from the Size is drop-down list.

Select the Borderless Printing check box.

Select the paper source from the Source is drop-down list. If you are printing on thick or photo paper, select the manual feed option.

Select the paper type from the Type is drop-down list. Do not select Automatic.

Select the Borderless Auto Fit check box to automatically resize the image to print without a border.

If printing photos, select Best from the Print Quality drop-down list. Alternatively, select Maximum dpi, which provides up to 4800 x 1200 optimized dpi for optimum print quality - up to 4800 x 1200 optimized dpi for color printing and 1200 input dpi. This setting will temporarily use a large amount of hard disk space (400 MB or more) and will print slower. Photo cartridge, if present, further enhances the print quality.

Change any other desired print settings and click OK.

If you printed on photo paper with a tear-off tab, remove the tab to make the document completely borderless.

The following are the standard options available in the Printer properties > Paper/Quality tab > Size is drop-down list:

- Borderless Photo 4 x 6 in.
- Borderless Photo 4 x 6 in. (with tab)
- Borderless Photo 5 x 7 in.
- Borderless Photo 8 x 10 in.
- Borderless Photo 8.5 x 11 in.
- Borderless A6 Card (105 x 148.5 mm)
- Borderless A4 (210 x 297 mm)
- Borderless Tabloid (11 x 17 in)
- Borderless A3 (297 x 420 mm)



Borderless printing is enabled on the following media selectable from the Printer properties  
> Paper/Quality tab > Source is drop-down list:

- hp premium paper
- hp premium plus photo paper, glossy
- hp premium plus photo paper, matte
- hp premium photo paper, glossy
- hp colorfast photo paper, glossy
- hp photo paper, glossy
- hp everyday photo paper, semi gloss
- hp everyday photo paper, matte finish
- hp premium high-gloss film
- hp iron-on transfers
- hp tri-fold brochure paper, glossy
- hp matte greeting cards
- hp photo greeting cards
- hp photo greeting cards
- hp textured greeting cards
- hp linen greeting cards
- hp brochure & flyer, gloss
- hp brochure & flyer, matte finish
- thick photo paper

## Macintosh

Load the appropriate paper. If you are printing one or just a few sheets, you can use the front or rear manual feed slot. If so, continue with the steps below and load the paper in a later step.

Open the file to print.

Click File, and then click Page Setup.

Select the borderless paper size.

Mac OS 9.1.x and 9.2.x only: Select the Borderless check box and click OK.

Click File, then click Print.

Select the paper source. If printing on thick or photo paper, select the manual feed option.

Open the Paper Type/Quality panel.

Mac OS 9.1.x and 9.2.x only: Select the media group and type from Paper Selection.

Mac OS X: Click the Paper tab and select the media type from the Paper type drop-down list.

If printing photos, click the Quality tab and then select Best. Alternatively, select Maximum dpi, which provides up to 4800 x 1200 optimized dpi for optimum print quality – up to 4800 x 1200 optimized dpi for color printing and 1200 input dpi. This setting will temporarily use a large amount of hard disk space (400 MB or more) and will print slower.

Photo cartridge, if present, further enhances the print quality.

Change any other desired print settings and click OK or Print.

If printing on thick or photo paper, insert paper into the rear manual feed slot at the back of the printer.

If printing on photo paper with a tear-off tab, remove the tab to make the document completely borderless.

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## Printing with PhotoREt IV

PhotoREt offers the best combination of print speed and quality for printing images. To print with PhotoREt technology, select Best as the print quality on the Paper/Quality tab in the printer driver.

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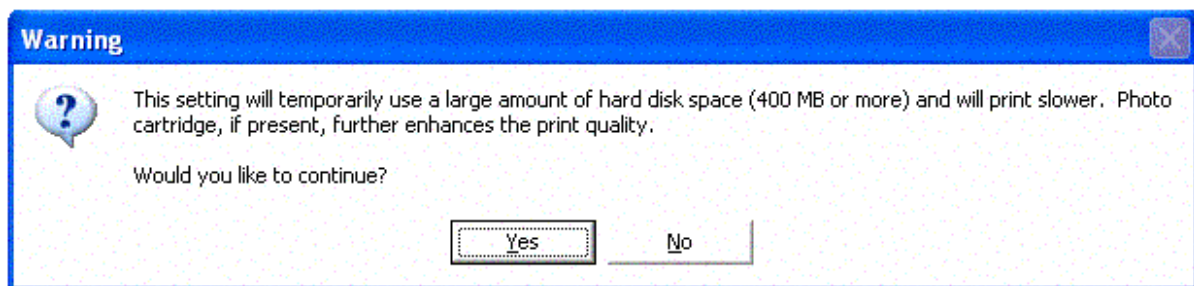
## 4800 x1200 Optimized dpi printing

4800 x 1200 Optimized dpi is the highest-quality resolution for this printer. When Maximum dpi is selected as the print quality, the color print cartridge prints in the 4800 x 1200 Optimized dpi mode.

4800 x 1200 Optimized dpi mode can produce up to 4800 x 1200 dpi color printing on HP Premium Photo Papers, from 1200 x 1200 dpi input. Printing takes longer because more computer memory is required.

If a photo print cartridge is also installed, the print quality is enhanced even further. To print with 4800 x 1200 Optimized dpi, select Maximum dpi as the print quality on the Paper/Quality tab (Windows) or Paper Type/Quality tab (Macintosh) in the printer driver.

Note the following driver message when selecting "Maximum dpi" as the print quality on the "Paper/Quality" tab (Win) or "Paper Type/Quality" tab (Mac) in the printer driver. The driver message is: "This setting will temporarily use a large amount of hard disk space (400 MB or more) and will print slower. Photo cartridge, if present, further enhances the print quality. Would you like to continue?"



Maximum dpi printing is enabled on the following media selectable from the Printer properties > Paper/Quality tab > Source is drop-down list:

- hp premium paper
- hp premium plus photo paper, glossy
- hp premium plus photo paper, matte
- hp premium photo paper, glossy
- hp colorfast photo paper, glossy
- hp photo paper, glossy
- hp everyday photo paper, semi gloss
- hp everyday photo paper, matte finish
- hp premium high-gloss film
- hp iron-on transfers
- hp tri-fold brochure paper, glossy
- hp matte greeting cards
- hp photo greeting cards
- hp textured greeting cards
- hp linen greeting cards
- hp brochure & flyer, gloss
- hp brochure & flyer, matte finish

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## Printing Exif Print-enhanced photographs

Exif (Exchangeable Image File Format 2.2) Print is an international digital imaging standard that simplifies digital photography and enhances printed photographs. When a photograph is taken with an Exif Print-enabled digital camera, Exif Print captures information such as exposure time, type of flash, and color saturation, and stores it in the image's file. The printer software then uses this information to automatically perform image-specific enhancements, resulting in outstanding photographs.

Printing Exif Print-enhanced photos requires the following:

- A digital camera that supports Exif Print
- Exif Print-enabled photo software
- HP inkjet printer software that supports Exif Print
- Windows 2000 or XP

Print Exif Print-enhanced photographs as follows:

Open the file to print using Exif Print-enabled photo software.

Print following the procedure for six-ink printing.

Exif print is enabled on the following media selectable from the Printer properties >

Paper/Quality tab > Source is drop-down list:

- hp premium plus photo paper, glossy
- hp premium plus photo paper, matte
- hp premium photo paper, glossy
- hp colorfast photo paper, glossy
- hp photo paper, glossy
- hp everyday photo paper, matte finish
- hp premium high-gloss film
- hp photo greeting cards

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## Media guidelines

The printer is designed to print on a variety of media, such as plain paper, envelopes, and transparencies. It works well with most office paper types, and provides best results on paper that accepts ink well.

For best results, test a variety of media types before buying large quantities. Find a paper type that works well. HP inkjet media produces the best-quality results.

- Paper that is too thin, has a slick texture, or “stretches” easily can feed improperly through the printer's paper path.
- Paper that is heavily textured or does not accept ink well can cause poorly filled graphics or text.
- To ensure that paper feeds properly, use only one type of paper at a time in the main tray.
- Try to use a paper type that has previously worked well with the printer.
- When printing more than one page on transparencies, photo paper, or other special paper, the printing pauses and the Resume light blinks after each page is printed. This allows the printed page to dry before printing the next page. Press the Resume button to continue printing without waiting for the printed page to dry, though this risks smearing the printed pages.

Use the media listed below for printing:

- Standard paper
- Custom paper
- Photo paper
- Glossy paper
- Envelopes
- Cards
- Thick cards (0.52 mm or 0.02 in.)
- Banner paper
- Labels
- Transparencies and slides
- HP special paper

## Media types, sizes, weights, capacities

Type	Finish and/or size	Sheets	Dimensions	Part number
HP bright white inkjet paper	A3	200	297 by 420 mm	C1858A
HP bright white inkjet paper	US B size	200	11 by 17 in.	C1857A
HP bright white inkjet paper	US Letter	250	8.5 by 11 in.	HPB250
HP bright white inkjet paper	US Letter	500	8.5 by 11 in.	HPB1124
HP bright white inkjet paper	A4	200	210 by 297 mm	C5977A
HP bright white inkjet paper	A4	500	210 by 297 mm	C1825A
HP everyday inkjet paper	US Letter	400	8.5 by 11 in.	HPD400
HP premium inkjet paper	A3	100	297 by 420 mm	C1856A
HP premium inkjet paper	US B size	100	11 by 17 in.	C1855A
HP premium inkjet paper	A4	200	210 by 297 mm	51634Z
HP premium inkjet paper	US Letter	200	8.5 by 11 in.	51634Y

### Media types, part 1

Type	Finish and/or size	Sheets	Dimensions	Part number
HP color inkjet paper	US Letter	500	8.5 by 11 in.	HPK115
HP everyday copy & print paper	US Letter	400	8.5 by 11 in.	HPA400
HP everyday copy & print paper	US Letter	500	8.5 by 11 in.	HPA500
HP everyday copy & print paper	US Letter	500	8.5 by 11 in.	HPA51 + B7380
HP photo paper	US Letter	50	8.5 by 11 in.	Q1785A
HP photo paper	4 by 6 in.	60	4 by 6 in.	C7893A
HP photo paper	Glossy, A4	25	210 by 297 mm	Q5437A
HP photo paper	Glossy, A4	50	210 by 297 mm	C7897A
HP photo paper	US Letter	60	8.5 by 11 in.	C1846A

### Media types, part 2

Type	Finish and/or size	Sheets	Dimensions	Part number
HP everyday photo paper	Semi-gloss, A4	100	210 by 297 mm	Q2510A
HP everyday photo paper	Semi-gloss, A4	100	210 by 297 mm	Q2511A
HP everyday photo paper	Semi-gloss, A4	25	210 by 297 mm	C7006A
HP everyday photo paper	Semi-gloss, US Letter	100	8.5 by 11 in.	Q2509A
HP everyday photo paper	Semi-gloss, US Letter	25	8.5 by 11 in.	C6983A
HP everyday photo paper	Semi-gloss, US Letter	75	8.5 by 11 in.	Q1976A
HP premium photo paper	Glossy, A3	20	297 by 420 mm	C6059A
HP premium photo paper	Glossy, US B	20	11 by 17 in.	C6058A
HP premium photo paper	Glossy	20	10 by 15 cm	Q1991A
HP premium photo paper	Glossy	20	4 by 6 in.	Q1988A
HP premium photo paper	Glossy, A4	15	210 by 297 mm	C6040A
HP premium photo paper	Glossy, US Letter	15	8.5 by 11 in.	C6039A
HP premium photo paper	Glossy, US Letter	50	8.5 by 11 in.	C6979A

### Media types, part 3

Type	Finish and/or size	Sheets	Dimensions	Part number
HP premium plus photo paper	Glossy	20	10 by 15 cm	Q1979A
HP premium plus photo paper	Glossy	20	4 by 6 in.	Q1977A
HP premium plus photo paper	Glossy, A4	20	210 by 297 mm	C6832A
HP premium plus photo paper	Glossy, US Letter	20	8.5 by 11 in.	C6831A
HP premium plus photo paper	Matte, US Letter	20	8.5 by 11 in.	C6950A
HP premium plus photo paper (borderless)	Glossy	20	10 by 15 cm borderless	Q2503
HP premium plus photo paper (borderless)	Glossy	20	10 by 15 cm borderless	Q2504A

HP premium plus photo paper (borderless)	Glossy	60	4 by 6 in. borderless	Q2502A
HP glossy photo paper	Glossy	20	4 by 6 in.	C7890A
HP glossy premium photo paper	Glossy, A4	50	210 by 297 mm	C7040A
HP advance photo paper	Glossy, US Letter	25	8.5 by 11 in.	C1846A
HP advance photo paper	Glossy, A4	20	210 by 297 mm	C6765A
HP colorfast photo paper		20	10 by 15 cm	Q1952A
HP colorfast photo paper	A4	20	210 by 297 mm	Q1951A
HP photo greeting cards	Glossy, US Letter	10 cards	8.5 by 11 in.	C6044A
HP photo greeting cards	White, A4	10 cards	210 by 297 mm	C6045A
HP linen greeting cards	Ivory (half-fold), US Letter	20 cards	8.5 by 11 in.	Q1787A
HP linen greeting cards	White (half-fold), US Letter	20 cards	8.5 by 11 in.	Q1788A
HP premium high-gloss film	US Letter	20 cards	8.5 by 11 in.	Q1973A

#### Media types, part 4

Type	Finish and/or size	Sheets	Dimensions	Part number
HP premium inkjet transparencies	A4	20	210 by 297 mm	C3832A
HP premium inkjet transparencies	A4	50	210 by 297 mm	C3835A
HP premium inkjet transparencies	US Letter	20	8.5 by 11 in.	C3828A
HP premium inkjet transparencies	US Letter	50	8.5 by 11 in.	C3834A
HP brochure paper	Glossy, US Letter, Scored, Tri-fold	100	8.5 by 11 in.	C7020A
HP brochure paper	A4, Tri-fold,	50	210 by 297 mm	Q2525A
HP brochure and flyer paper	Glossy, A3	50	297 by 420 mm	C6821A
HP brochure and flyer paper	Glossy, US B size	50	11 by 17 in.	C6820A
HP brochure and flyer paper	US Letter	50	8.5 by 11 in.	C6817A
HP address labels	White	100	1 by 2-5.8 in.	Q2588A
HP address labels	White	25	1 by 2-5.8 in.	Q2587A



HP address labels	White	25	1/2 by 1-3/4 in.	Q2593A
HP address labels	White	100	1-1/3 by 4 in.	Q2590A
HP address labels	White	25	1-1/3 by 4 in.	Q2589A
HP full-sheet labels	White, US Letter	100	8.5 by 11 in.	Q2551A
HP full-sheet labels	White, US Letter	25	8.5 by 11 in.	Q2550A
HP shipping labels	White	100	2 by 4 in.	Q2592A
HP shipping labels	White	25	2 by 4 in.	Q2591A
HP shipping labels	White	100	3-1/3 by x 4 in.	Q2594A

### Media types, part 5

Media	Dimensions
Standard US	Letter (8.5 by 11 inches), Legal (8.5 by 14 inches), Tabloid (11 by 17 inches), Super B (13 by 9 inches), Executive (7.25 by 10.5 inches), Statement (5.5 by 8.5 inches)
Standard international	A6 (105 by 148.5 mm), A5 (148.5 by 210 mm), A4 (210 by 297 mm), A3 (297 by 420 mm), A3+ (330 by 482 mm), JIS-B4 (257 by 364 mm), JIS-B5 (182 by 257 mm)
Transparencies	US Letter (8.5 by 11 inches), A4 (210 by 297 mm)
Envelopes	US No. 10 (4.12 by 9.5 inches), US A2 Invitation (4.37 by 5.57 inches), US Monarch (3.87 to 7.75 by 7.5 inches), European DL (220 by 110 mm), C5 (162 by 229 mm), C6 (114 by 162 mm), Japanese Kaku No. 2 (240 by 333 mm), No. 3 (120 by 235 mm), No. 4 (90 by 205 mm) Index Cards: US Index card (4 by 6 inches), US Index card (5 by 8 inches),
Index cards	US Index card (4 by 6 inches), US Index card (5 by 8 inches), A6 card (105 by 148.5 mm)
Labels	US Labels (8.5 by 11 inches), A4 Labels (210 by 297 mm)
Custom	89.9 by 146.05 mm (3.54 by 5.75 inches) to 330.2 by 1,270 mm (13 by 50 inches)

### Media sizes

Type	Tray	Recommended weight
Paper	input tray or front manual feed slot	65 to 135 g/m2 (17 to 36 lb bond)
Paper	rear manual feed slot	up to 280 g/m2 (74 lb bond)
Envelopes		75 to 90 g/m2 (20 to 24 lb bond)
Cards	rear manual feed slot	110 to 200 g/m2 (110 lb index)

### Recommended media weights

<b>Tray</b>	<b>Capacity</b>
Input tray	up to 19 mm (0.75 inches) or up to 150 sheets plain paper; up to 15 envelopes; up to 60 cards
Front manual feed slot	up to 10 sheets plain paper; up to 5 envelopes; transparency; photo media
Rear manual feed slot	single sheet; thick media (up to 0.3 mm); envelopes; cards
Auto-duplex unit	13 by 19 inches, 11 by 17 inches, Legal, Letter, Executive, A3+, A3, A4, and B5 (JIS). Does not support banners, index cards, envelopes, or custom sizes smaller than B5 (JIS) or larger than 13 by 19 inches/A3+
Output tray	up to 75 sheets

### **Tray capacities**

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## Minimum printing margins

Paper type/size	Minimum printing margins
Letter, legal, and executive size paper	Left: 3.2 mm (0.125 in.) Right: 3.2 mm (0.125 in.) Top: 0.27 mm (0.069 in.) Bottom: 12.7 mm (0.5 in.)
A4-size paper	Left: 3.2 mm (0.125 in.) Right: 3.2 mm (0.125 in.) Top: 0.27 mm (0.069 in.) Bottom: 12.7 mm (0.5 in.)
A3, A3+, A5, B4, B5-size paper, Ledger/Tabloid (11 by 17 in.), Statement, Super B (13 by 19 in.), Banner (Tabloid), Banner (A3), Custom	Left: 3.2 mm (0.125 in.) Right: 3.2 mm (0.125 in.) Top: 0.27 mm (0.069 in.) Bottom: 12.7 mm (0.5 in.)
Cards (4 by 6 in., 5 by 8 in., A6), Envelopes (#10, A2, Monarch, DL, C5, C6)	Left: 3.2 mm (0.125 in.) Right: 3.2 mm (0.125 in.) Top: 0.27 mm (0.069 in.) Bottom: 12.7 mm (0.5 in.)
Photos (4 by 6 in.) with tear-off tab	Left: 3.2 mm (0.125 in.) Right: 3.2 mm (0.125 in.) Top: 3.2 mm (0.125 in.) Bottom: 3.2 mm (0.125 in.)
HP Greeting Card envelopes (4.38 by 6 in.)	Left: 3.2 mm (0.125 in.) Right: 3.2 mm (0.125 in.) Top: 0.27 mm (0.069 in.) Bottom: 12.7 mm (0.5 in.)
Banners - Letter size (8.5 by 11 in.)	Left: 3.2 mm (0.125 in.) Right: 3.2 mm (0.125 in.) Top: 0 mm (0 in.) Bottom: 12.7 mm (0.5 in.)
Banners - A4 size (8.27 by 11.7 in.)	Left: 3.2 mm (0.125 in.) Right: 3.2 mm (0.125 in.) Top: 0 mm (0 in.) Bottom: 12.7 mm (0.5 in.)

### Minimum printing margins

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## Storing and handling photo paper

### Storing

- Keep unused photo paper in a resealable plastic bag, in the box in which it was originally packaged. Store the packaged photo paper on a flat surface in a cool place.
- When you are ready to print, remove only the paper that you plan to use immediately. When you have finished printing, return any unused photo paper to the plastic bag.
- Do not leave unused photo paper in the printer's paper tray. The paper may start to curl, which can reduce the quality of your photographs.

### Handling

- Always hold photo paper by the edges. Fingerprints on photo paper can reduce print quality.
- If the corners of the photo paper curl more than 10 mm or 3/8 inch, flatten the paper by putting it in a resealable storage bag, then rolling the bag on a table edge until the paper is flat.
- Photo paper should be flat before printing.

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## Cleaning the printer

### Cleaning the printer

The printer does not require scheduled maintenance. However, clean the printer from time to time to keep it free of dust and debris.

### Guidelines for cleaning the printer

#### Cleaning the encoder strip

Clean the encoder strip if experiencing carriage collision or jagged lines. Use a damp cotton swab for cleaning the hp 9600 series encoder strip as described on [www.hp.com](http://www.hp.com).

#### Cleaning the rollers

Clean the rollers if experiencing no picks or multiple picks. Remove the duplexer or cleanout to access the rollers. Use a damp lint-free cloth for cleaning the rollers and follow the procedure described on [www.hp.com](http://www.hp.com).

#### Cleaning the print cartridge contacts

Clean the print cartridge contacts if the cartridge is rejected or if the print quality is poor. Use a lint-free cloth to clean the cartridge contacts, as described on [www.hp.com](http://www.hp.com).

### Steps for cleaning the printer exterior case parts

- Turn the printer off.
- Unplug the power cord.
- Open the cover of the printer.

**Warning** *Avoid reaching too far into the printer. The adjacent fusing area might be hot.*

To remove dust, smudges, stains, and spilled ink from the exterior of the printer case, use a clean, lint-free cloth moistened with clean **water**. Soap is not necessary and should not be used.

- Close the cover.
- Plug in the power cord.
- Turn on the printer.

## Steps for cleaning the ink on cradle and pen latches

If users complain of inky fingers every time they change a pen, it is likely due to ink on the cradle and pen latches. Users should clean the latches and carriage base surrounding the latches using a moistened cotton swab. To access these parts for cleaning:

Open the top cover.

Disconnect power cord from the printer without turning the printer power off.

Cleaning and re-powering the printer must be completed in less than 30 minutes unless pens are removed and stored in pen cartridge protectors.

## Steps for cleaning the pivot

If a user attempts to print a full-sized document with smaller media (e.g. 4x6 or Hagaki) loaded, the printer will spray ink onto the pivot. This ink will probably lead to streaking on the backside of the next sheet (or several sheets) of full-sized media sent through the printer. Clean the pivot by doing one of the following:

- Run several sheets of media through the printer mechanism.
- If ink is still present, customers can clean the pivot points.

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## Aligning print cartridges

### Aligning the print cartridges

The printer automatically aligns print cartridges whenever a new print cartridge is installed. However, if printout becomes grainy, has stray dots or jagged edges, or the ink bleeds into another color on the page, realign the print cartridges.

#### For Windows

Load plain paper into the input tray.

Open the Toolbox: Click Start, point to Programs, hp deskjet 9600 series, and then click hp deskjet 9600 series Toolbox. – Or – Open the printer driver and click Print Properties.

Click the Printer Services tab (Toolbox) or Services tab (printer driver).

Click Align Print Cartridges and follow the onscreen instructions.

#### For Macintosh

Load plain paper into the input tray.

Open the HP Inkjet Utility.

Open the Calibrate panel.

Click Align.

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## Cleaning print cartridges

### Cleaning the print cartridges

The print cartridges have microscopic nozzles that can clog when exposed to air for too long. A print cartridge can also clog if not used for long periods, resulting in a noticeable decrease in print quality. Cleaning the print cartridges unclogs the nozzles.

Clean the print cartridges if printed characters are incomplete, or if dots or lines are missing from printed text or graphics.

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**Note** *Cleaning the print cartridges too often wastes ink and reduces the life of the print cartridges.*

---

### Cleaning print cartridges automatically

Print cartridges can be cleaned automatically:

- From the Toolbox or printer driver (Windows)
- From the HP Inkjet Utility (Macintosh)

#### **For Windows**

Load plain paper into the input tray.

Open the Toolbox: Click Start, point to Programs, hp deskjet 9600 series, and then click hp deskjet 9600 series Toolbox. – Or – Open the printer driver and click Print Properties.

Click the Printer Services tab (Toolbox) or Services tab (printer driver).

Click Clean Print Cartridges and follow the onscreen instructions.

If the printout is still unsatisfactory, repeat this process.

If problems still remain after the second cleaning, install a new print cartridge.

#### **For Macintosh**

Load plain paper into the input tray.

Open the HP Inkjet Utility.

Open the Clean panel.

Click Clean.

If the printout is still unsatisfactory, repeat this process.

If problems still remain after the second cleaning, install a new print cartridge.



## Cleaning print cartridges manually

Poor contact between the print cartridges and cartridge cradles can affect the quality of the printout. When this occurs, try cleaning the electrical contacts on the print cartridges and cartridge cradles.

Remove the print cartridge from the printer.



### Remove print cartridge

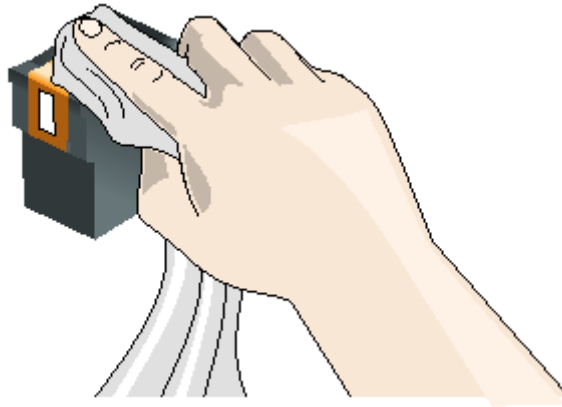
Clean the electrical contacts on the print cartridge cradle with a dry cotton swab.



### Clean print cartridge with swab

Carefully clean the electrical contacts on the print cartridge with a soft, dry, lint-free cloth.

**Note** *To prevent damage to the electrical contacts, wipe the contacts only once. Do not wipe the ink nozzles on the print cartridge.*



#### **Clean print cartridge with cloth**

Reinstall the print cartridge.

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## Maintaining and storing print cartridges

### Maintaining print cartridges

Follow these tips to maintain HP print cartridges and ensure consistent print quality.

- Keep print cartridges in their sealed packages until they are needed.
- Store print cartridges at room temperatures between 15° to 35° C (59° to 95° F).
- Do not remove the plastic tape covering the ink nozzles until the cartridge is ready to be installed in the printer. If the plastic tape has been removed from the cartridge, do not attempt to reattach it. Reattaching the tape damages the print cartridge.

---

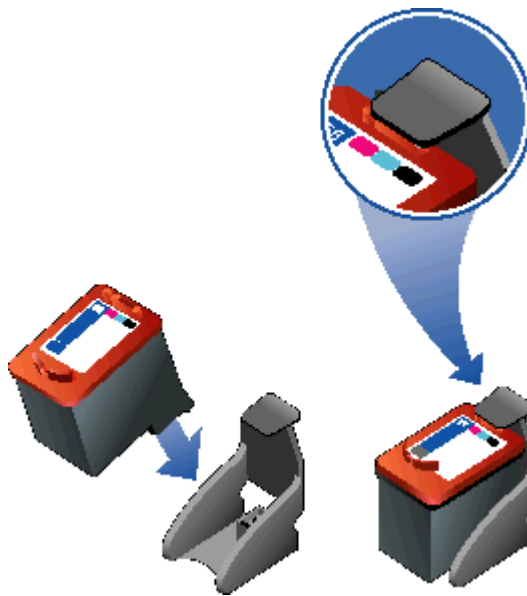
#### Note

*Do not drop the print cartridge. Dropping a print cartridge can damage it.*

### Storing opened print cartridges

When a print cartridge is removed from the printer, store it in the print cartridge holder (humidor) as follows.

Insert the print cartridge at a slight angle into the holder and snap it securely in place.



**Snap cartridge into holder**

To remove the print cartridge from the holder, press down and back on the tab inside the holder to release the print cartridge, and then remove the print cartridge.



**Remove cartridge from holder**

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## Printing with a single print cartridge

If one of the print cartridges runs out of ink, printing can continue with a single print cartridge until the empty cartridge can be replaced. This feature is very handy if one print cartridge is faulty or out of ink and there are no spares on hand.

**Note** *Printing from one print cartridge rather than two may be slower, and can produce altered colors. For best results, print with both print cartridges.*

**Note** *Borderless printing requires the color print cartridge.*

- If no replacement black print cartridge is available, remove the black print cartridge and print with the only color print cartridge.
- If no replacement color print cartridge is available, remove the color print cartridge and print with only the black or photo print cartridge. Documents will print in grayscale.
- If no replacement photo print cartridge is available, remove the photo print cartridge and print with only the color print cartridge.

Printing in reserve mode slows the printer and affects the quality of printouts.

If only this print cartridge is installed	Result
Black	Colors are printed as grayscale.
Tri-color	<ul style="list-style-type: none"><li>• Colors print but black is dark gray or dark purplish color and is not a true black.</li><li>• Printing a black text or monochrome document with a tri-color print cartridge increases printing time and uses more drops of ink (three color dots to make one black dot).</li></ul>
Photo	Colors are printed as grayscale.

### Results of single cartridge printing

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## Firmware upgrade procedure

### Printers that have upgradeable firmware

Only printers built within the first three to six months have upgradeable firmware.

### Ways to upgrade firmware

Ideally, only technicians will upgrade firmware, but potentially, a serious upgrade would be posted on the Web for customer upgrades.

### How to upgrade firmware

If needed, the Web site will list serial numbers of flashable printers, and will make the required firmware available.

The flash process includes three files: reflash.bat, StartFlash.PCL, and ERXXXXXX.fhx. Before flashing firmware, make sure your printer is connected to the LPT1 port and is powered on.

To flash upgrade the firmware from Windows, double-click the batch file called reflash.bat. This opens a DOS window and starts the flash procedure. During the flash procedure, the Print cartridge and Resume LEDs should be blinking. After approximately two minutes, the printer should start again and function as usual, with only the Power LED on.

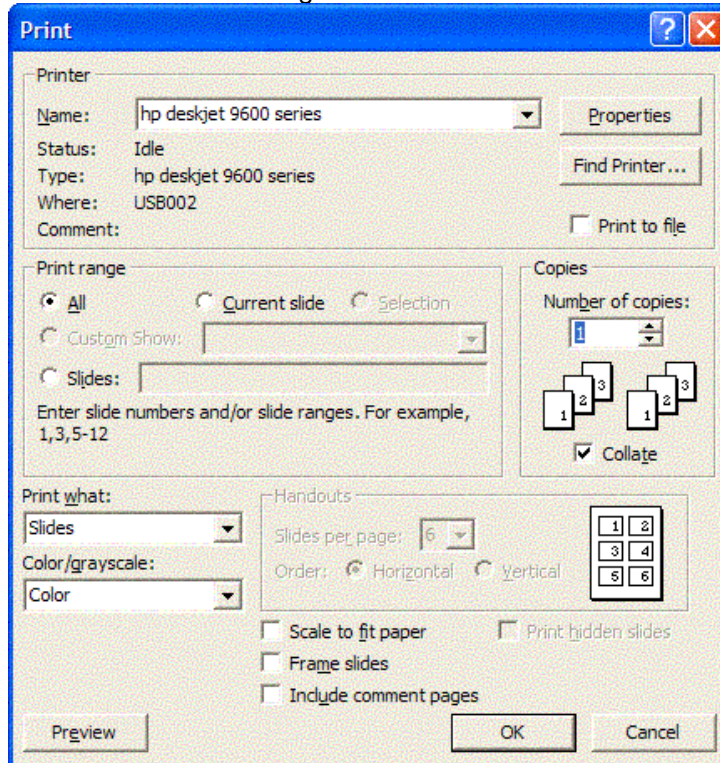
The firmware cannot be upgraded from a Macintosh operating system.

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## User interface details

### Windows

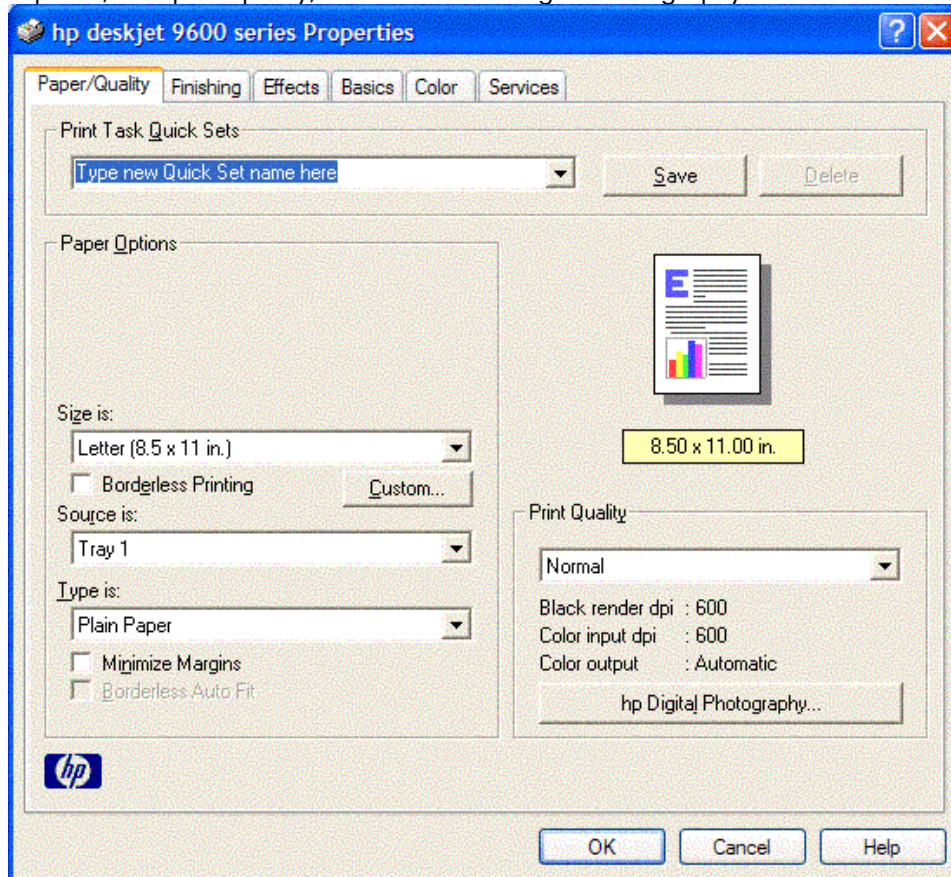
This interface includes the following screens and tabs.



**Windows Print dialog**

## Paper/Quality

Use the Paper/Quality tab to specify Quick Sets (saved groups of printer options), paper options, and print quality, or to access HP Digital Photography features.



**Paper/Quality tab**

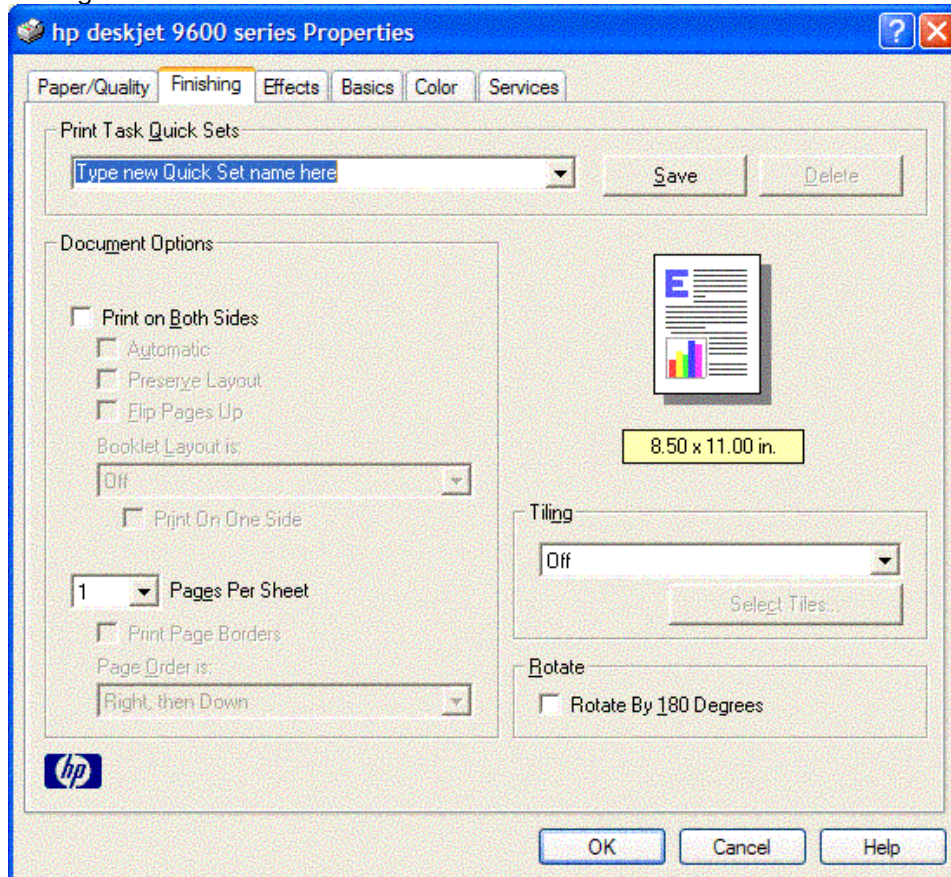


<b>Option</b>	<b>Purpose</b>
Print Task Quick Sets	Displays pre-defined print task quick sets, or allows user to define print task quick sets tailored to specific printing tasks.
Size is:	Select the paper size. The application settings override the settings in this driver.
Borderless printing	Enable this option to automatically select a borderless paper type in the size the user has currently selected. This feature may cause ink to smear on certain paper types.
Custom	Allows for customizable paper size.
Source is:	This menu determines which paper tray will be used when selecting paper for printing: Tray 1 or Manual Feed
Type is:	Displays a menu of all allowable paper types. Plain paper is the default setting. Automatic enables the printer to automatically select the paper type.
Minimize Margins	Minimizing margins allows users to print closer to the bottom edge of the paper. This feature may cause ink to smear on certain paper types.
Borderless Auto Fit	Enables the printer software to fit your image to the whole page when printing without borders. This option is grayed unless a borderless paper size is selected.
Print Quality	Determines the print quality and print speed. The print quality increases and the print speed decreases as print quality from FastDraft to Maximum dpi are selected. <ul style="list-style-type: none"> <li>FastDraft: Prints at the fastest speed while using the least amount of ink.</li> <li>Fast Normal: Prints faster than Normal and at a higher print quality than FastDraft.</li> <li>Normal: Prints faster than Best and at a higher quality than Fast Normal. This mode is appropriate for most print jobs and is the minimum print quality required for using the digital photography options.</li> <li>Best: Provides high-quality printing.</li> <li>Maximum dpi: Provides the highest-quality printing but requires longer to print than Best and requires a large amount of disk space.</li> </ul>
hp Digital Photography	Opens the Digital Photography Options dialog box. The options in this box can be used to improve the print quality of digital photographs.

#### **Paper/Quality tab**

## Finishing

Use the Finishing tab to select Quick Sets, document options, and tiling and rotation settings.



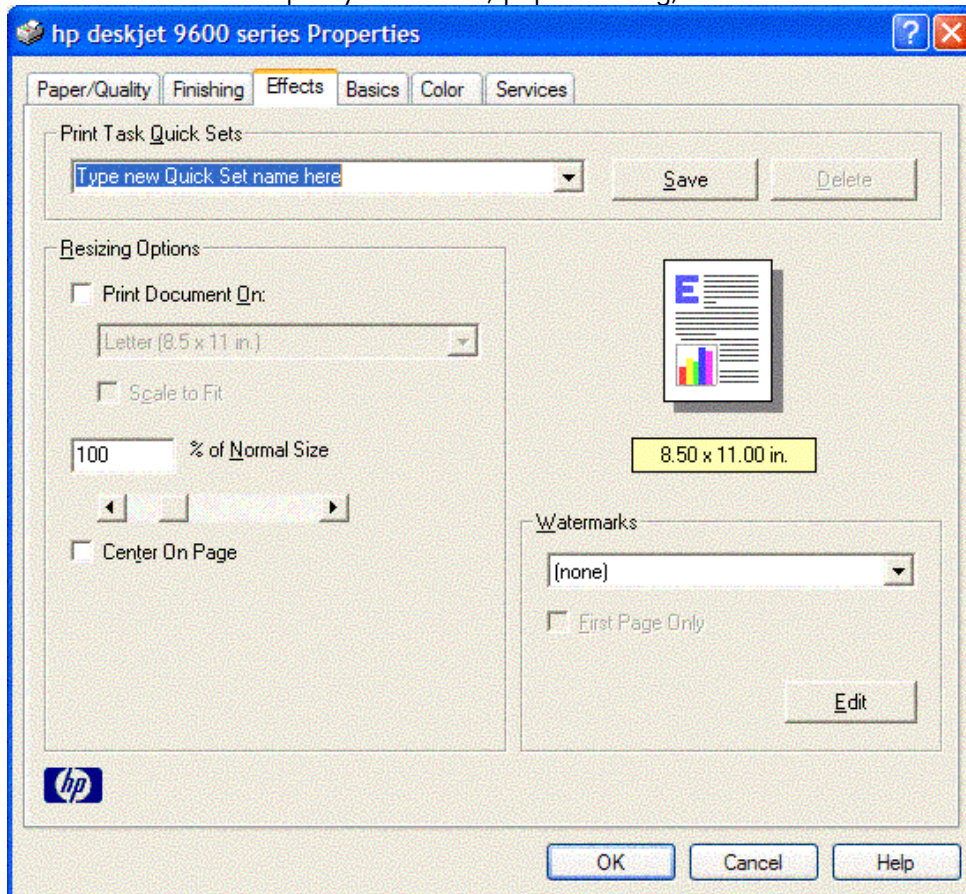
**Finishing tab**

Option	Purpose
Print Task Quick Set	Displays pre-defined print task quick sets, or allows user to define print task quick sets tailored to specific printing tasks.
Print on Both Sides	Allows for either manual or automatic duplexing. ·
Use Auto-Duplex Unit:	Select only if the optional duplexer is installed. · Preserve Page Layout: Automatically printing on two sides may increase your document's top margins to correctly align the two sides. This may result in a smaller printable area. This feature allows the printer software to reduce page size to match the onscreen layout. Leave this box unchecked to leave the content size unchanged, which may result in additional pages being created. · Flip Pages Up: Allows documents to be printed on both sides of the paper so the pages can be flipped up like a notebook.
Booklet Layout is:	Automatically arranges and resizes the pages of a document so when the document is folded into a booklet, the page order is correct. This option is grayed if Print on Both Sides is not selected.
Pages per sheet	Allows for printing multiple pages of a document on a single sheet of paper. Printer software automatically arranges and resizes the document text and images to fit on the printed page. · Print Page Borders: Prints a border around each page on the sheet of paper. · Page Order is: Determines the layout order of the pages on the sheet.
Tiling	Allows a document to be printed as a poster by printing the document image on multiple pages that can be taped together. The text and pictures of each page of the original document are magnified and printed across the sheets of paper. To re-print specific tiles in the poster, click on Select Tiles.
Mirror Image/Rotate 180°	Rotates the document image 180 degrees.

### Finishing tab

## Effects

Use the Effects tab to specify Quick Sets, paper resizing, and watermarks.



**Effects tab**



<b>Option</b>	<b>Purpose</b>
Print Task Quick Sets	Displays pre-defined print task quick sets, or allows user to define print task quick sets tailored to specific printing tasks.
Print Document On:	Prints on a paper size that is different from the one for which a document is formatted.
Scale to fit	Scales the document to fit on the selected paper size, from 50-100%. If the document should not be reduced or enlarged to fit, this option must be cleared.
% of Normal Size	Enlarges or reduces the document. The document is printed on the paper size selected. If the document is enlarged, some of each page may be cut off.
Center on Page	Allows the contents of the page to move to the exact centre of the page. This option takes all the text and images on the page as one piece and moves it to the center. This option is particularly useful when you want to center a small amount of text or images on a large sheet of paper. This option does not change the size of the page contents.
Watermarks	Specifies the watermark text that will be printed. · Edit: Opens the Watermark Details dialog box where you can create new watermarks or edit existing ones. · First Page Only: Prints the selected watermark on the first page only. Watermarks will not be printed on the second and subsequent pages.

### **Effects tab**

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## DOS Deskjet Control Panel

When printing from MS-DOS®, printer settings can be adjusted in two ways:

- In the HP Deskjet Control Panel for DOS
- From within the DOS application's printer driver

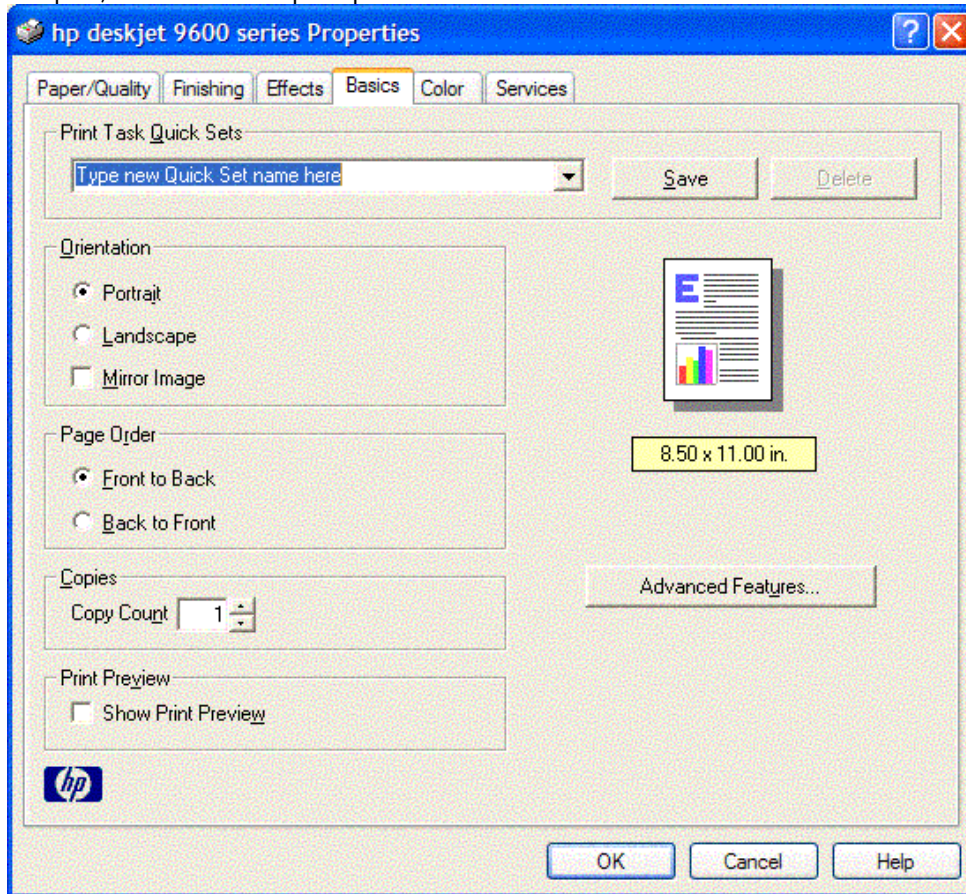
HP Deskjet Control Panel for DOS can be downloaded from  
<http://www.hp.com/support/dj9600>.

Many printer features can be accessed through application-specific DOS printer drivers; however, some software manufacturers do not develop printer drivers for their DOS applications. Use HP Deskjet Control Panel for DOS to specify the default printer settings for printing from DOS applications.

[manuals4you.com](http://manuals4you.com)

## Basics

Use the Basics tab to specify Quick Sets, page orientation and order, and number of copies, and to show a print preview or access advanced features.



**Basics tab**

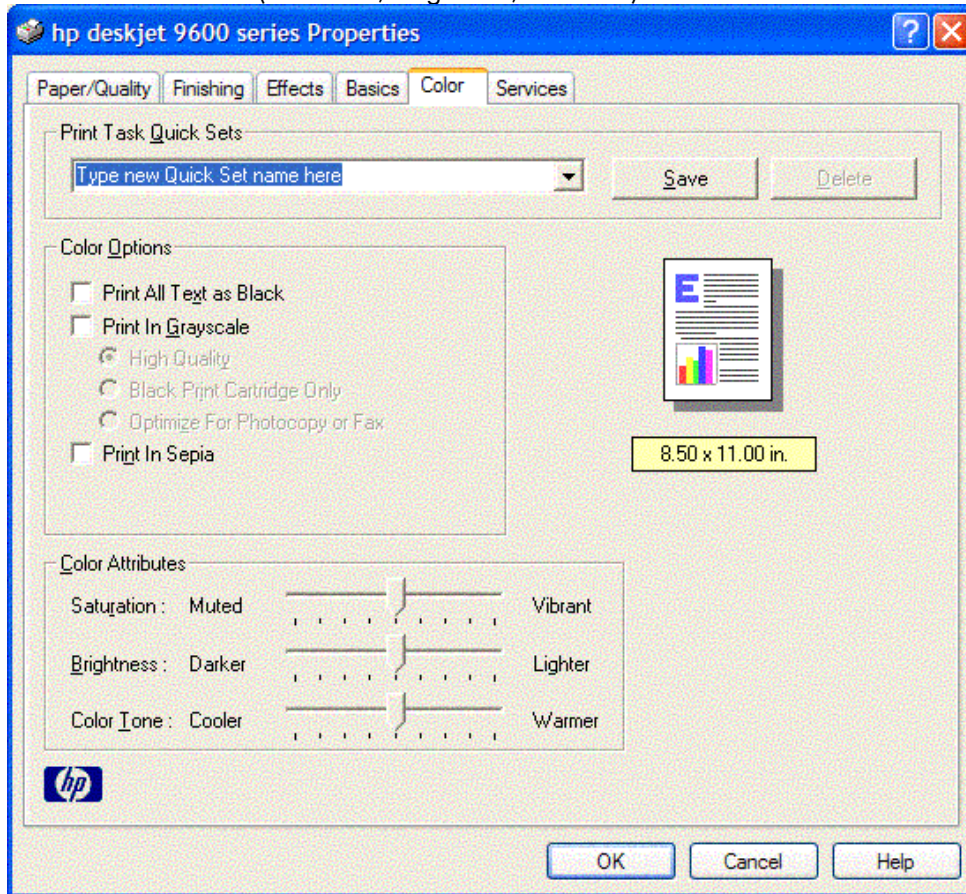
<b>Option</b>	<b>Purpose</b>
Print Task Quick Sets	Displays pre-defined print task quick sets, or allows user to define print task quick sets tailored to specific printing tasks.
Orientation	Specifies the page layout.· Portrait: The printed page is longer than it is wide.· Landscape: The printed page is wider than it is long.· Mirror Image: Reverses the printed image from left to right. This feature is used for iron-on transfer.
Page Order	Determines the order in which pages are printed.· Front to Back: First page will be on top when the document is finished printing.· Back to Front: Last page will be on top when the document is finished printing. This is the default setting.
Copies	Determines the number of copies to print.· Copy Count: The total number of copies to print.
Print Preview	When selected, displays the document onscreen before printing.
Advanced Features	Opens a dialogue box that allows you to adjust ink volume, dry time and low memory mode.· Ink Volume: Adjusts the amount of ink printed on a page. Reducing the ink volume reduces the print quality.· Dry Time: Provides extra drying time for slow-drying printouts.· Low Memory Mode: Allows a document to be printed from a computer that does not have enough memory or disk space to print the document under normal conditions. Using this option may reduce the quality of the printout. The Maximum dpi print quality mode is not available when the printer is in low memory mode.

### **Basics tab**



## Color

Use the Color tab to specify Quick Sets, color options (black text, grayscale/sepia images), and color attributes (saturation, brightness, and tone).



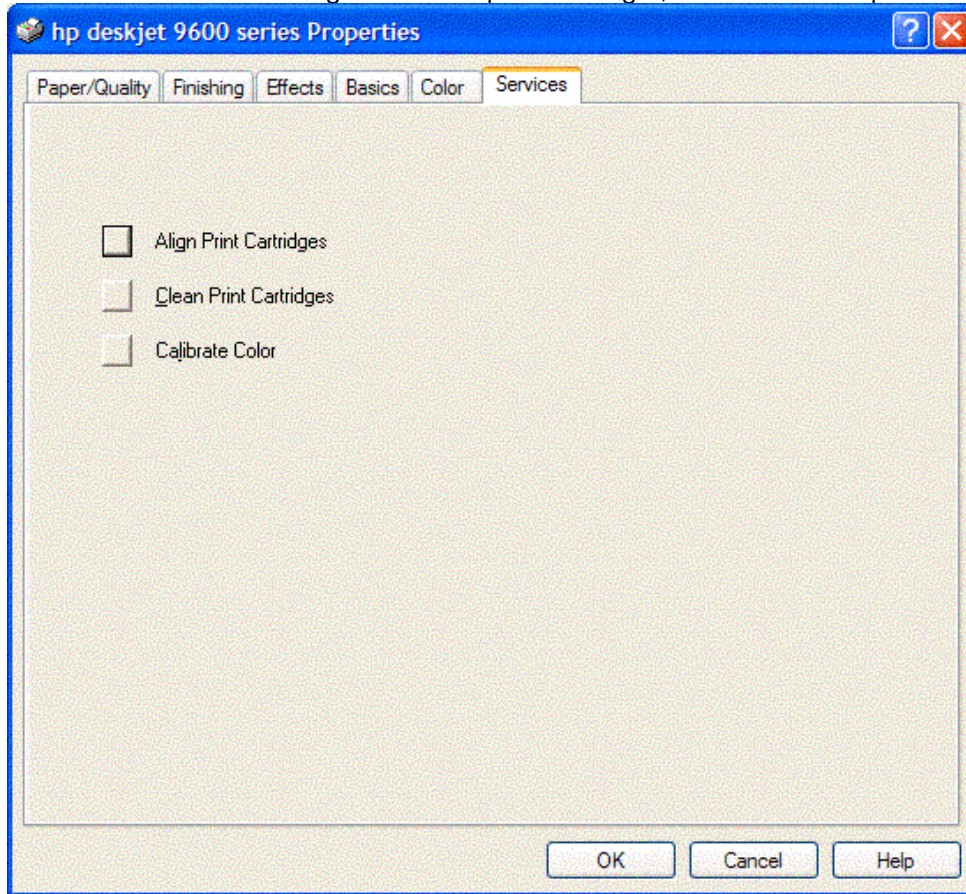
**Color tab**

<b>Option</b>	<b>Purpose</b>
Print Task Quick Sets	Displays pre-defined print task quick sets, or allows user to define print task quick sets tailored to specific printing tasks.
Orientation	Specifies the page layout.· Portrait: The printed page is longer than it is wide.· Landscape: The printed page is wider than it is long.· Mirror Image: Reverses the printed image from left to right. This feature is used for iron-on transfer.
Page Order	Determines the order in which pages are printed.· Front to Back: First page will be on top when the document is finished printing.· Back to Front: Last page will be on top when the document is finished printing. This is the default setting.
Copies	Determines the number of copies to print.· Copy Count: The total number of copies to print.
Print Preview	When selected, displays the document onscreen before printing.
Advanced Features	Opens a dialogue box that allows you to adjust ink volume, dry time and low memory mode.· Ink Volume: Adjusts the amount of ink printed on a page. Reducing the ink volume reduces the print quality.· Dry Time: Provides extra drying time for slow-drying printouts.· Low Memory Mode: Allows a document to be printed from a computer that does not have enough memory or disk space to print the document under normal conditions. Using this option may reduce the quality of the printout. The Maximum dpi print quality mode is not available when the printer is in low memory mode.

#### **Color tab**

## Services

Use the Services tab to align and clean print cartridges, and to calibrate printed color.



**Services tab**

<b>Option</b>	<b>Purpose</b>
Align Print Cartridges	Printers require proper alignment to produce good output. Users need to invoke this action periodically as a maintenance activity.
Clean Print Cartridges	Printers require regular cleaning to produce good output. Users need to invoke this action periodically as a maintenance activity.
Calibrate Color	It is used when users are not satisfied with the color. For example, if the printed colors visibly shift towards yellow, cyan or magenta, or if there is a tinge of color in the gray shades. The service adjusts color to correct problems with tint (only occurs when the color and photo print cartridges are installed together).

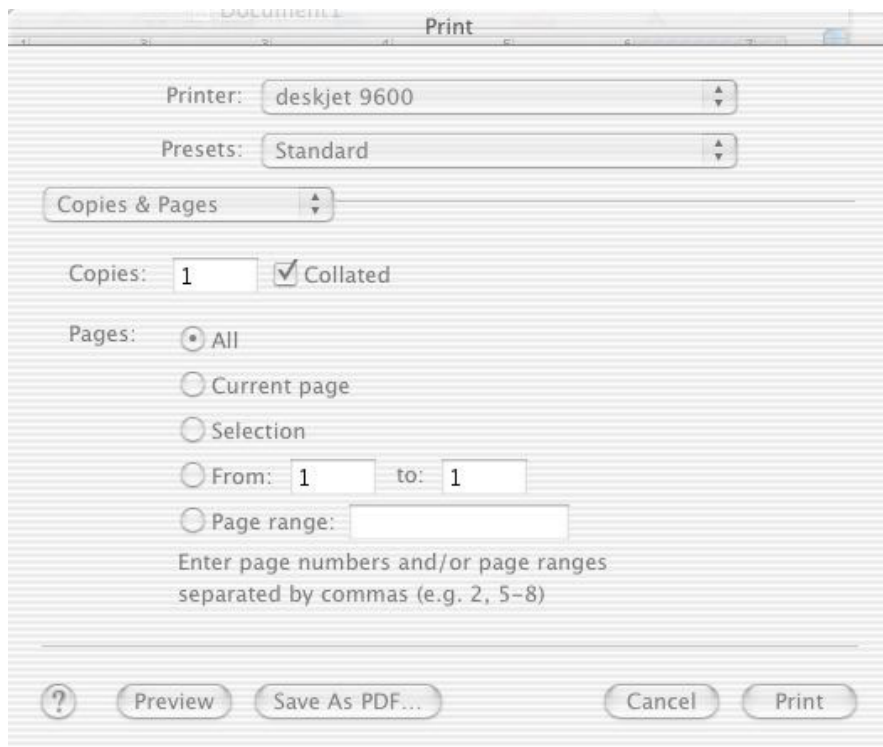
#### **Services tab**



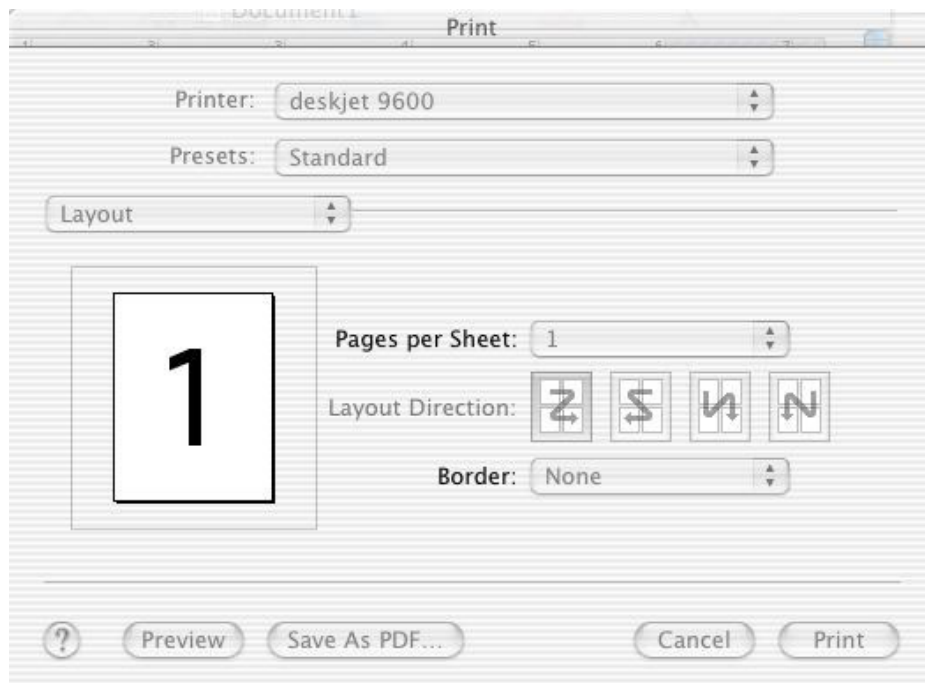
## Macintosh

This interface includes the following screens and tabs.

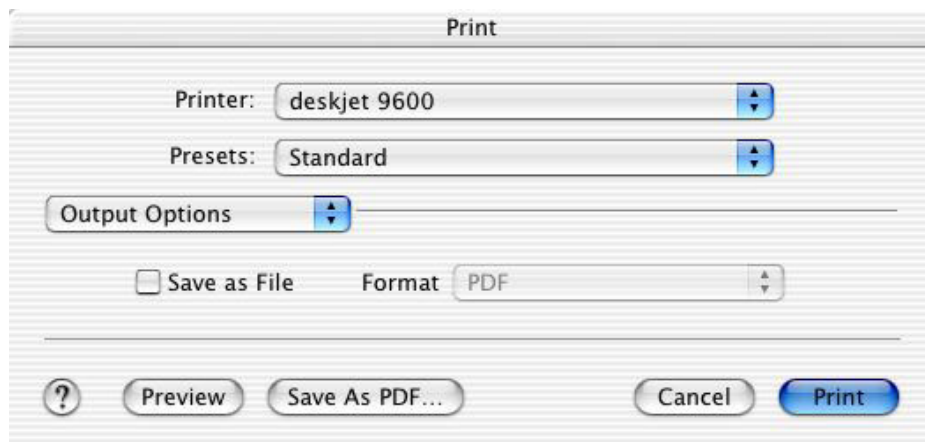
- The Copies & Pages option window includes number of copies, which pages to print, collate, and select or create presets.
- The Layout option window allows includes pages per sheet, border, and layout direction for multi-page printing.
- The Output Options window includes save as file, to PDF or PostScript.
- The Paper Type/Quality Paper Tab includes type of media, type of color output (IE Apple ColorSync or ColorSmart III), and tray.
- The Paper Type/Quality Color Options Tab includes Saturation, Brightness, and Color Tone.
- The Paper Type/Quality Digital Photo Tab includes options to improve pictures taken with a digital camera.
- The Paper Type/Quality Ink Tab includes Ink Density. The Ink Density Slider allows the alteration of the density of the ink used on the print job.
- The Driver Information option window includes Driver Name and Version of the printer software.
- The Summary option window shows all of the current properties for printing.



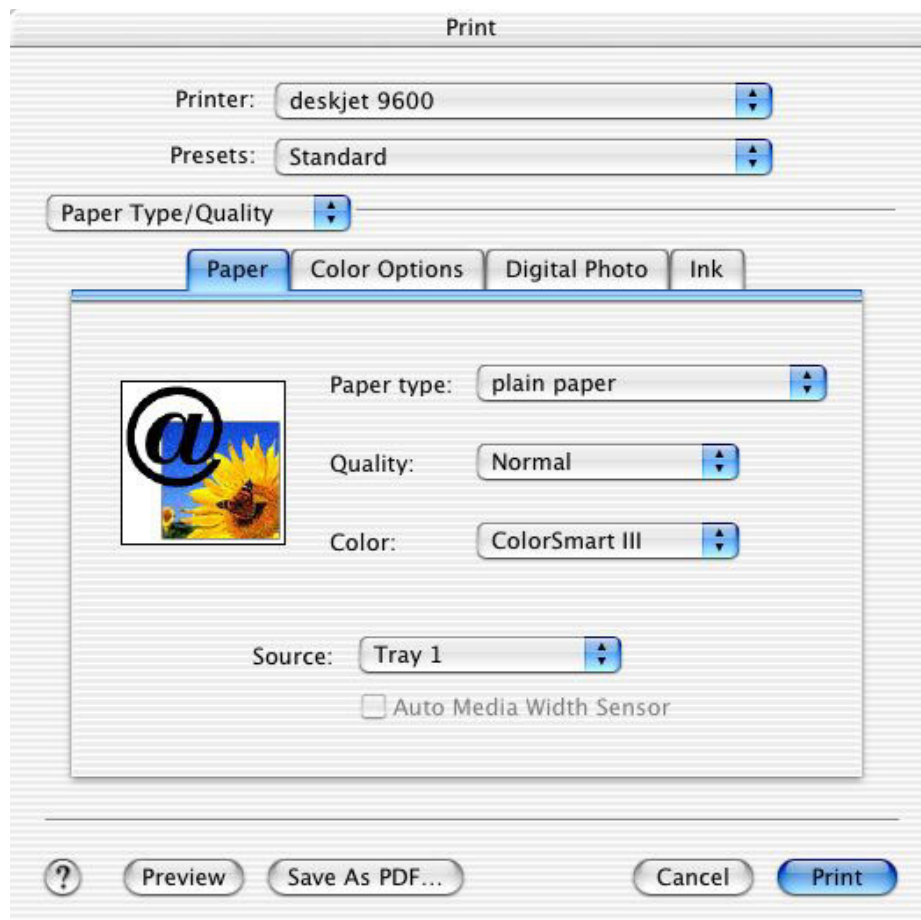
**Copies & Pages**



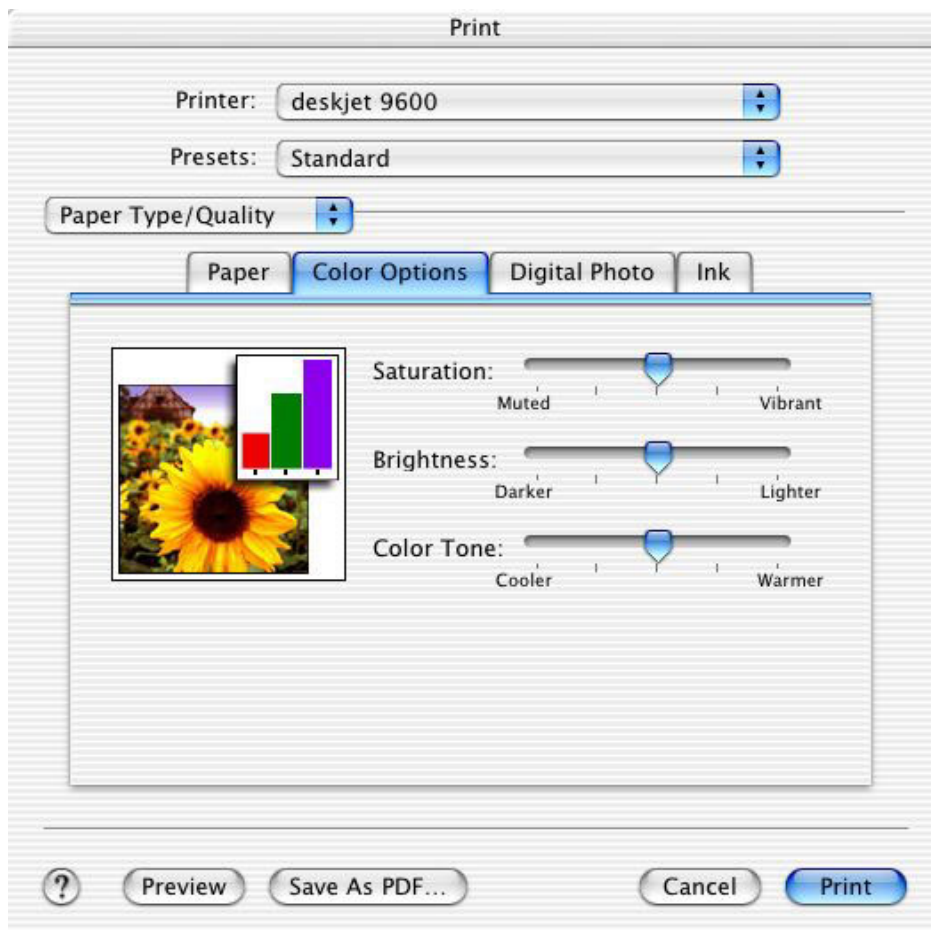
**Layout**



**Output Options**

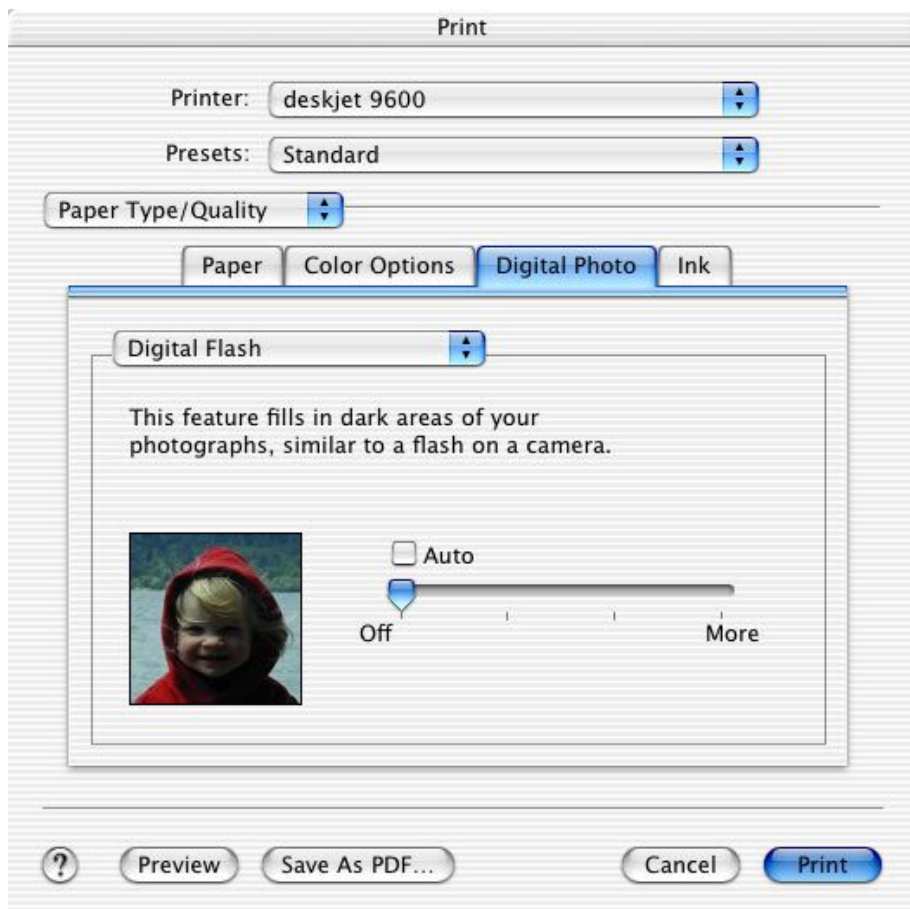


**Paper Type/Quality, Paper**

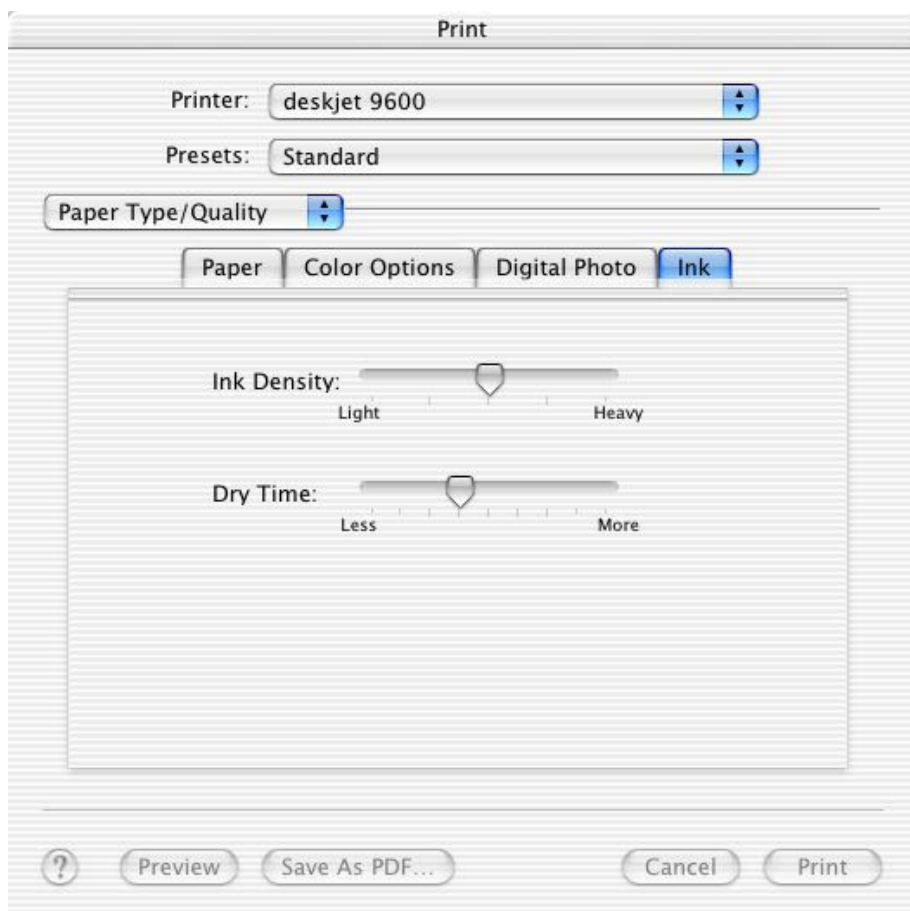


**Paper Type/Quality, Color Options**

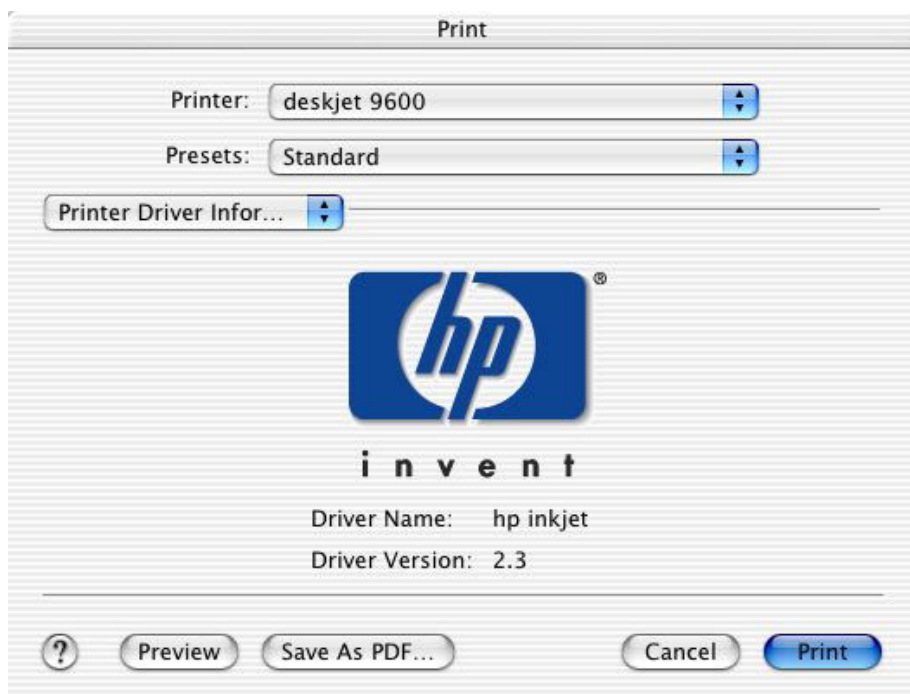




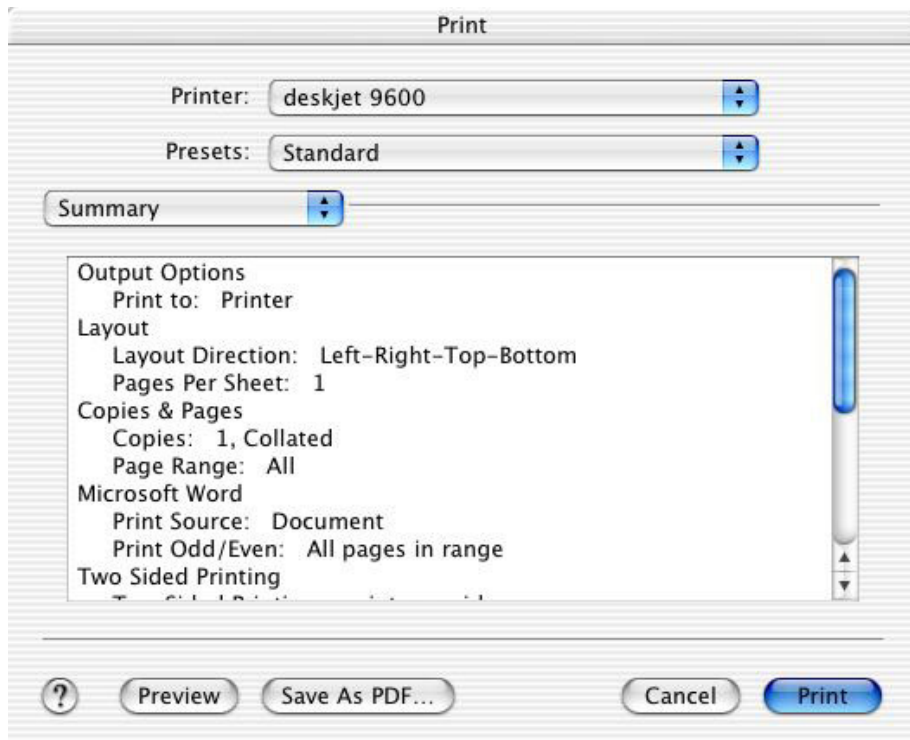
**Paper Type/Quality, Digital Photos**



**Paper Type/Quality, Ink**



**Printer Driver Information**



### Summary

Predefined quicksets for HP Deskjet 9600 Series:

- Default Print Settings
- Draft text or text with color printing
- 2 pages printed on one sheet
- Professional photo-quality printing
- 4800 x 1200-optimized dpi photo printing
- 4x6-inch borderless photo with a tear-off tab
- 4x6-inch borderless photo
- 4x6-inch photo with white border
- Two-sided printing - automatically from main tray
- For drivers with default paper size set to Letter:
  - 8.5x11-inch borderless photo
  - 8.5x11-inch photo with white border
- For drivers with default paper size set to A4:
  - A4 borderless photo
  - A4 photo with white border

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## Toolbox details

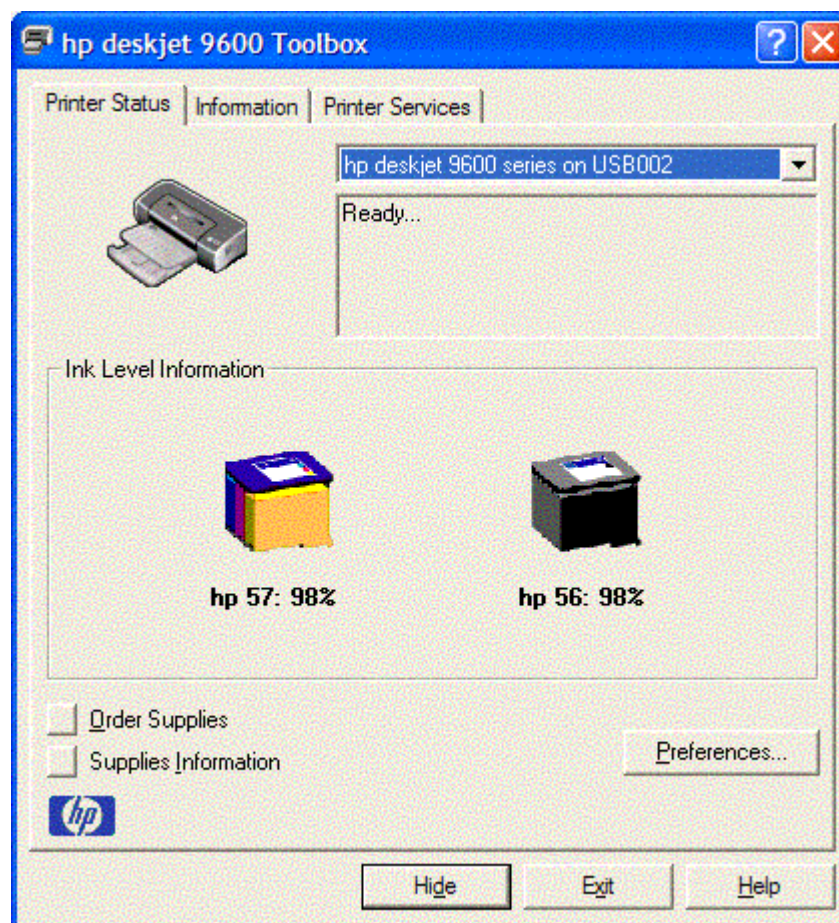
### Overview

The Toolbox provides status and maintenance information about the printer. It also provides step-by-step guidance for basic printing tasks, gives help for solving printer problems, and provides access to online resources for the printer.

The Toolbox is for Windows only. For Macintosh, see the HP Inkjet Utility.

After installing the printer software, open the Toolbox by clicking Start, pointing to Programs, hp deskjet 9600 series, and then clicking hp deskjet 9600 series Toolbox. Or in the status area of the Windows task bar (near the clock), click the Toolbox icon.

### Printer Status tab



#### Printer Status tab

The Printer Status tab displays the ink level for each print cartridge, as well as printer status.

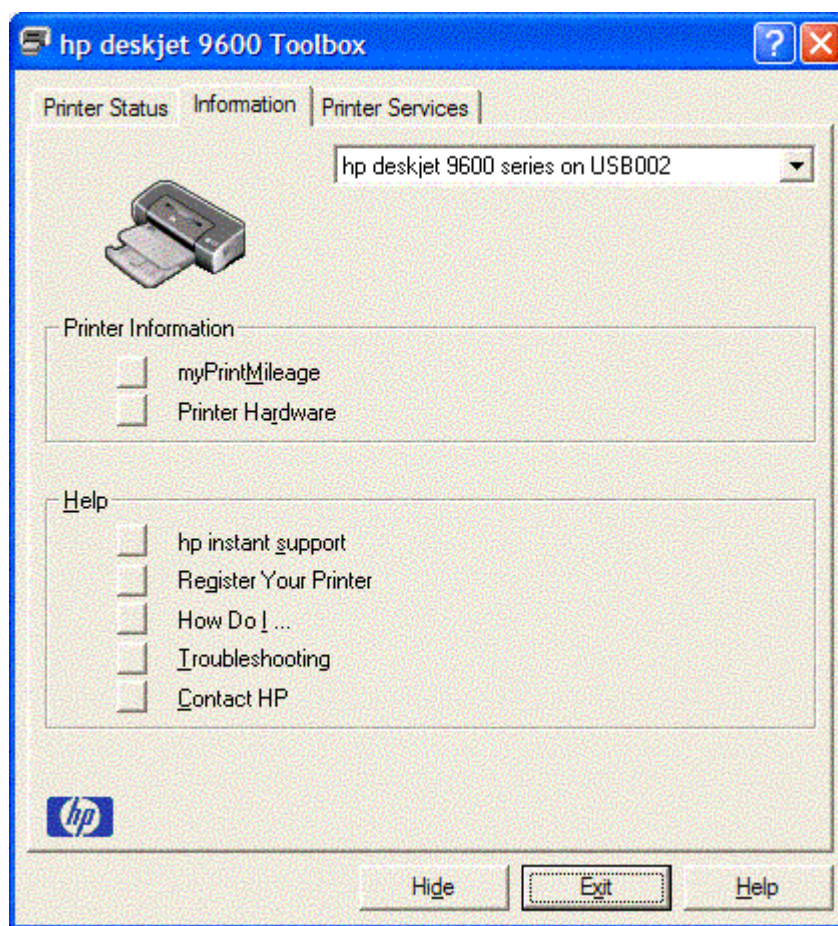
Use the printer selection drop-down list to select the Toolbox-compatible printer to use with the Toolbox utilities. The status window displays messages about printer status, such as Printing job, Access cover open, Ready, and Print cartridge empty.



Use this button	To do this
Order Supplies	Purchase printing supplies, such as print cartridges, online. You must have Internet access to perform this operation.
Supplies Information	View information on HP supplies, as well as ordering information.
Preferences	Select which Toolbox messages will appear. When a printer error or warning message is displayed in the Toolbox status area, a help file also displays information about the error status.

### Printer Status tab buttons

### Information tab



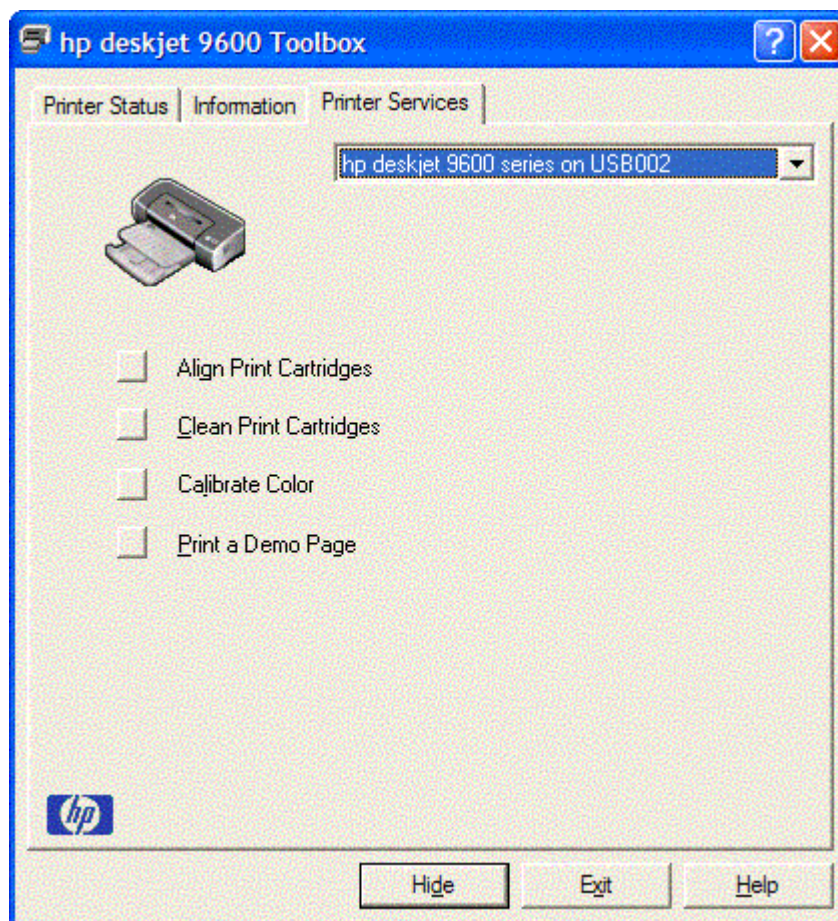
### Information tab

Use the Information tab to register the printer and display printer hardware information. The tab also provides access to online troubleshooting through HP instant support, as well as information about printer usage, using the printer, troubleshooting, and contacting HP.

Use this button	To do this
myPrintMileage	Access the myPrintMileage website and printer usage information (ink and media use patterns). This feature requires Internet access.
Printer Hardware	Display the printer's model, firmware version, and service ID.
hp instant support	Access the HP instant support website for support services and troubleshooting tips. This feature requires Internet access.
Register Your Printer	Register the printer online. This feature requires Internet access.
How Do I...	Display help for common printer and maintenance tasks.
Troubleshooting	View help for solutions to common printer problems (such as paper jams or trouble installing software) and printing problems (such as trouble with borderless or photo printing).
Contact HP	Get information on how to contact HP, including links to the HP products website and the website for the printer.

#### Information tab buttons

#### Printer Services tab



#### Printer Services tab

Use the Printer Services tab to help maintain and test your printer.

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## HP Inkjet Utility details

For Mac OS 9.1.x, 9.2.x, and OS X, the HP Inkjet Utility contains tools to calibrate the printer, clean the print cartridges, print a test page, and find website support information.

To display the HP Inkjet Utility:

Double-click the Macintosh HD icon on the desktop.

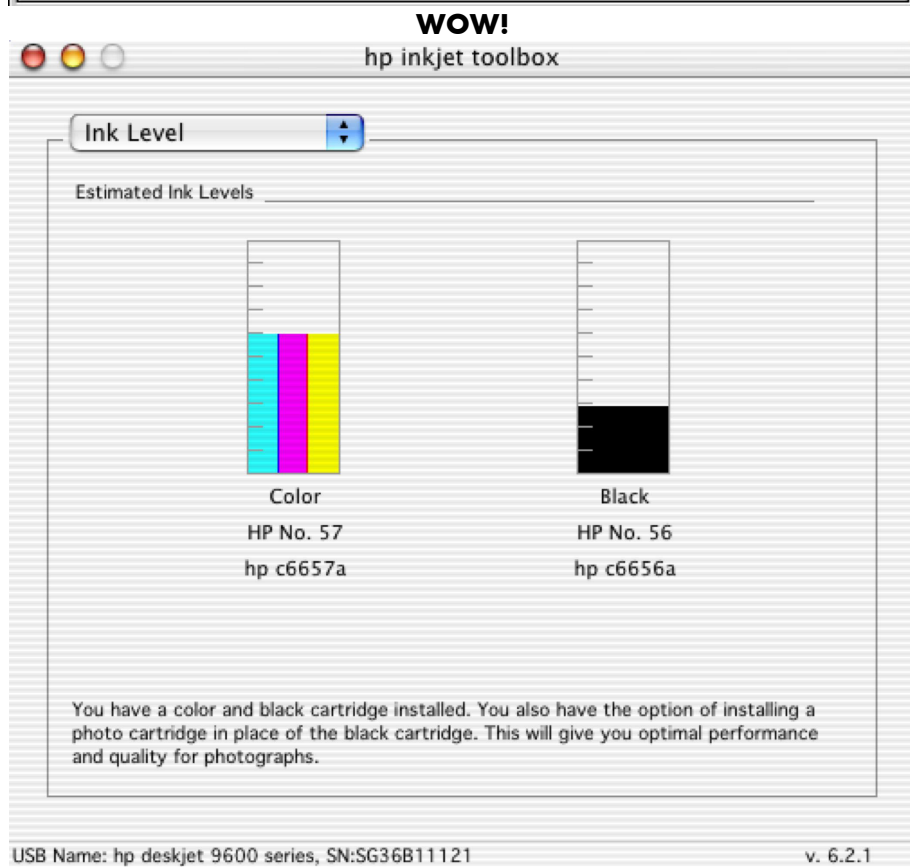
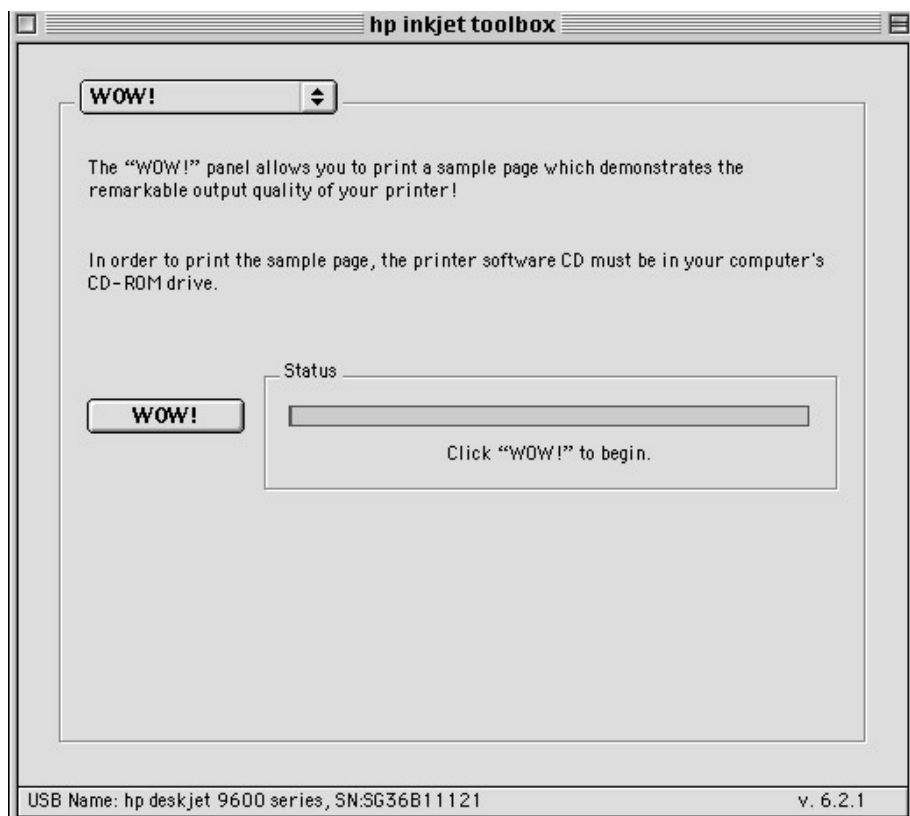
Do one of the following:

- Mac OS 9.1.x or 9.2.x: Select Applications, Utilities, and then hp deskjet.
- Mac OS X: Select Applications, and then Utilities.

Select hp inkjet utility.

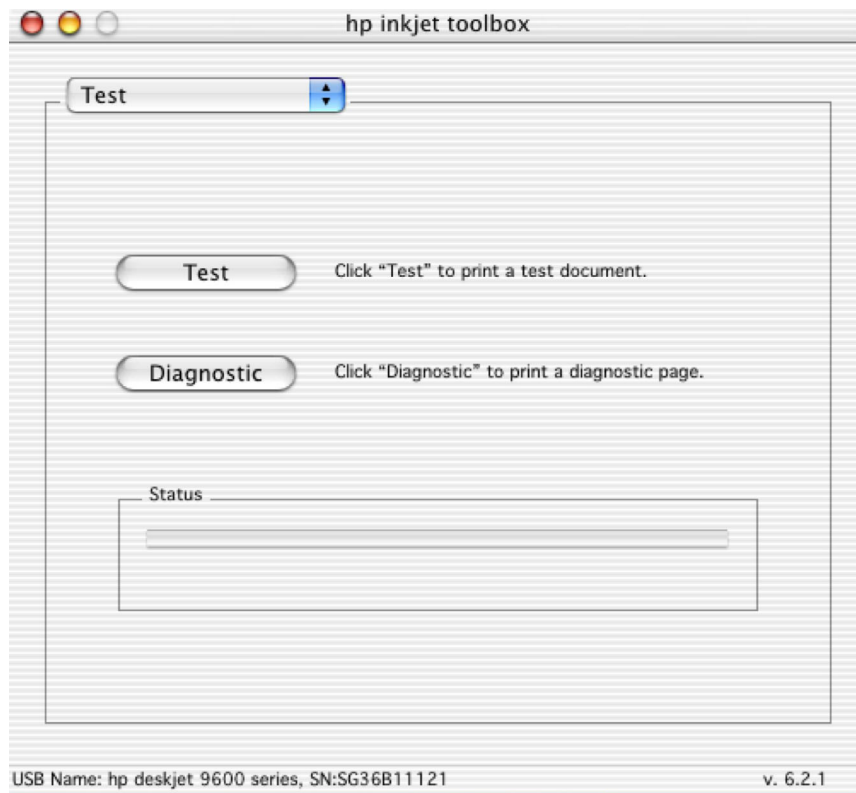
The following options are available on the HP Inkjet Utility Panel menu:

- WOW!: Prints a sample page that shows the print output quality.
- Ink Level: Displays print cartridge ink levels.
- Test: Prints a test page or diagnostic page.
- Clean: Cleans the print cartridges.
- Calibrate: Aligns the print cartridges.
- Color Calibrate: Adjusts color to correct problems with tint (only occurs when the color and photo print cartridges are installed). Used when users are not satisfied with the color. For example, if the printed colors visibly shift towards yellow, cyan, or magenta, or if there is a tinge of color in the gray shades. The service adjusts color to correct problems with tint (only occurs when the color and photo print cartridges are installed).
- Support: Provides access to the HP website for printer support and information about HP products and supplies.

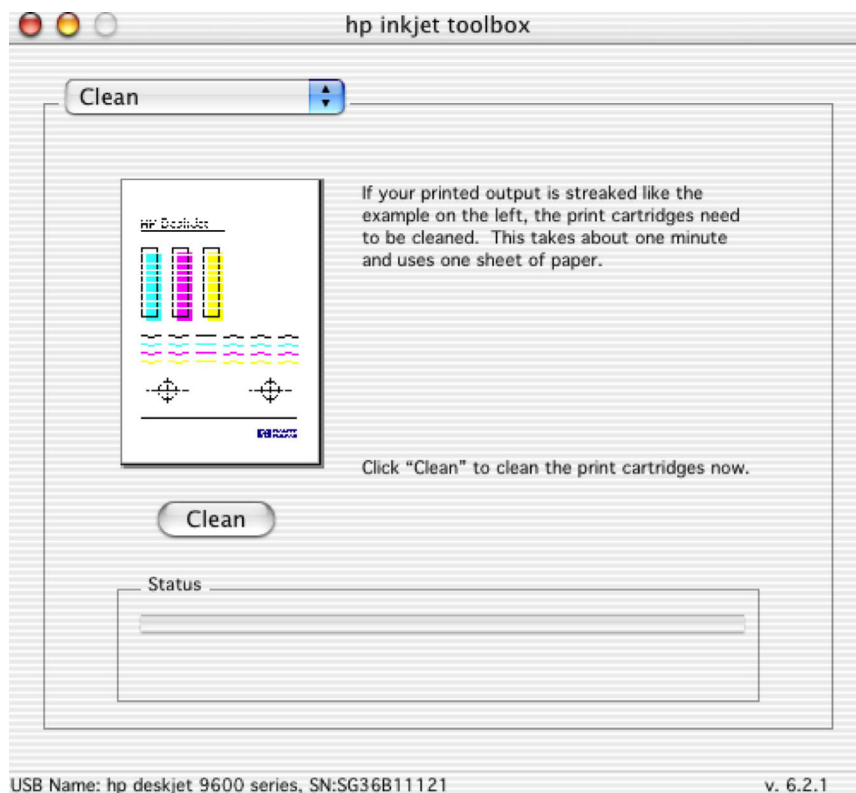


### Ink Level

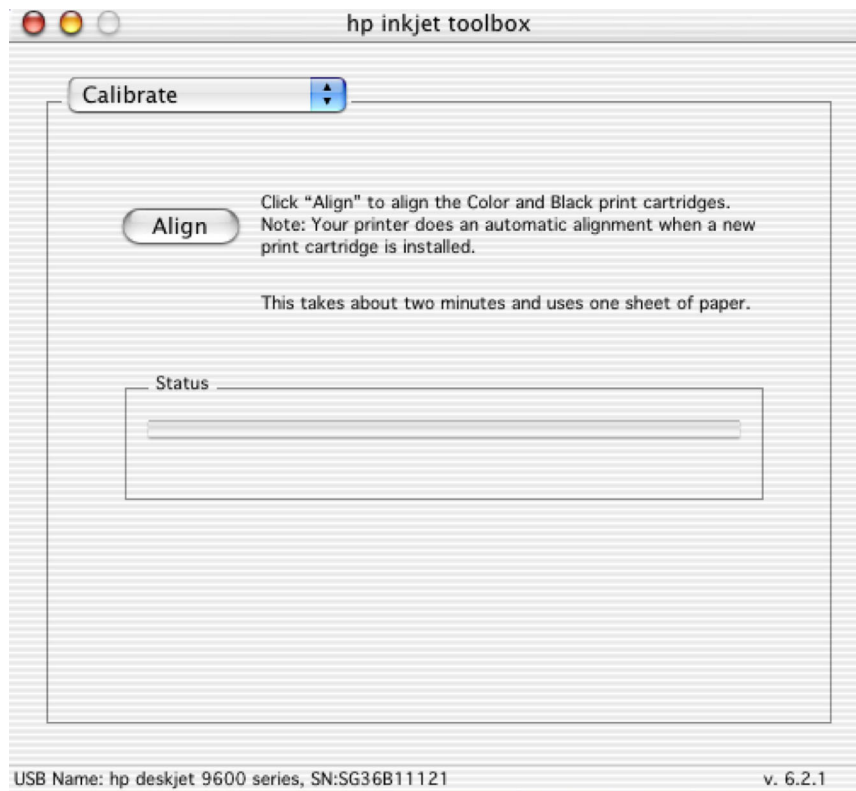




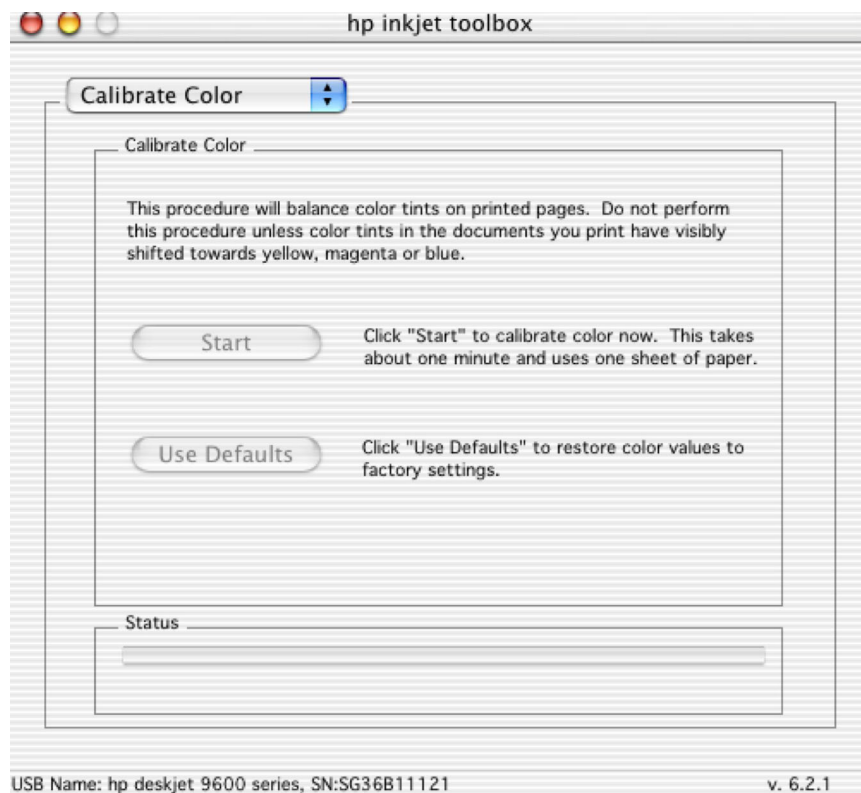
### Test



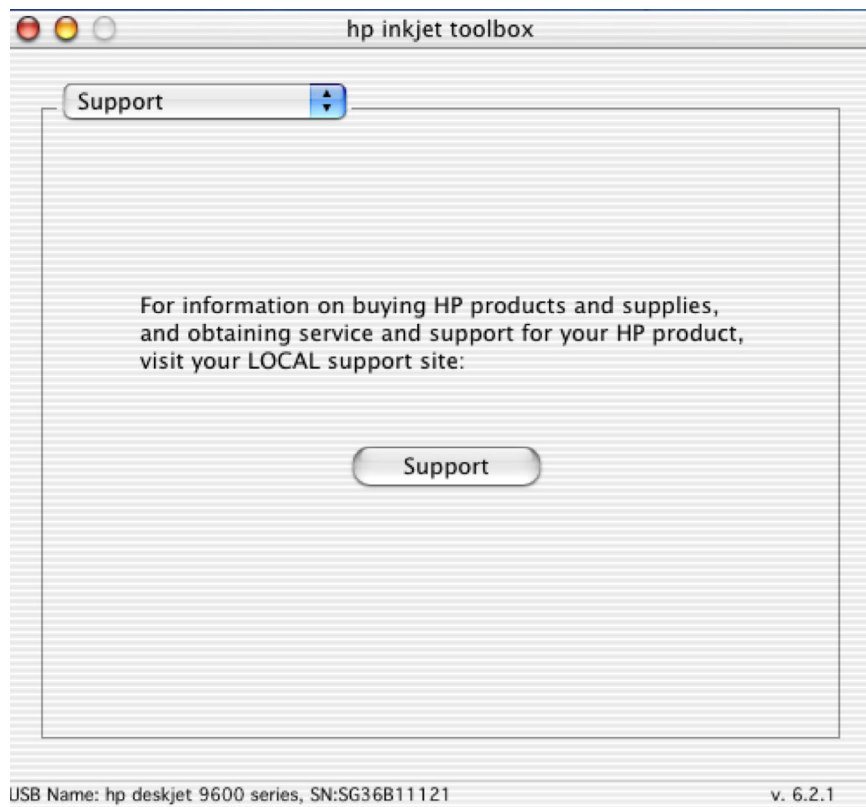
### Clean



### Calibrate



### Color Calibrate



## Support

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## Smart Software

The printer driver provides the following Smart Software features. For details on how to use these features, see the driver online help.

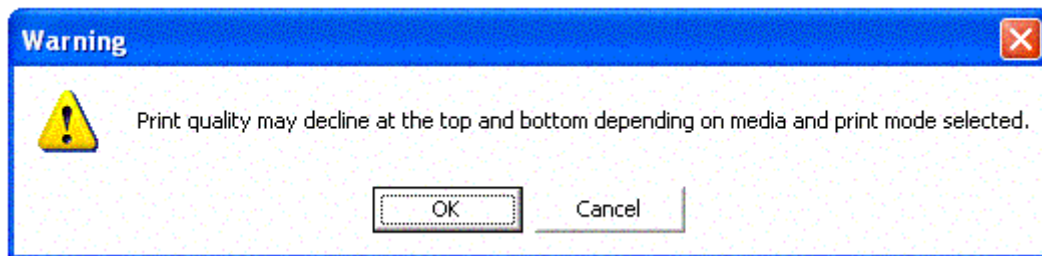
Some features are available only in Windows. For details on a specific feature in the Windows printer driver, right-click the feature and select What's This?

### Borderless Printing

Use the entire page surface when printing photos and cards.

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**Note** *Note the following driver warning message: Print quality may decline at the top and bottom depending on media and print mode selected.*



**Driver warning message**

### Resizing Options

Enlarge or reduce documents with virtually no loss in print quality or resolution. On the Effects tab, select the Print Document On check box, then select the desired document size, and select the Scale to Fit check box. Select Center On Page to center the document on the printed page.

Alternatively, the % of Normal Size scroll bar adjusts the document from 25 to 400 percent of its original size (though page content can be truncated at times).

### Print on Both Sides

Print on both sides of the paper to create professional looking brochures and catalogues.

### Minimize Margins

Print closer to the bottom edge of the page. On the Paper/Quality tab, select the Minimize Margins check box, then reduce the document margins by adjusting the page setup settings in the application being used.

---

**Note** *Note the following driver warning message: Print quality may decline at the top and bottom depending on media and print mode selected.*

## HP Digital Photography

Use a variety of settings to improve the quality of printed photographs. Use the HP Digital Photography features for high-resolution images (600 dpi or higher) printed on photo-quality paper. On the Paper/Quality tab, select a photo media, then click HP Digital Photography.

## Booklet Layout

Produce booklets without worrying about pagination. Produce booklets without worrying about pagination: simply fold the pages and bind them into a booklet. Choose to bind the booklet on the left or right side by selecting left- or right-edge binding. (This feature is available only when Print on Both Sides is selected on the Finishing tab.)

## Pages per Sheet

Arrange up to 16 pages on a single sheet of paper to reduce printing costs, and set the order of the layout.

## Tiling

Enlarge a one-page document (up to A3+ [13 by 19 in.]) as much as five times (5 x 5). Print the enlarged document on several sheets, and assemble it to form a large billboard. On the Finishing tab, select the number of tiles to create.

## Mirror Image

Flip a page horizontally. This lets you write on the underside of a transparency, leaving the upper side for annotations with marker pens. For Windows, on the Basics tab select the Mirror Image check box. For Macintosh, the Mirror feature is only available in Mac OS 9.1.x and 9.2.x (click File, and then click Page Setup).

## Banner printing

Print large images and bold, oversized fonts on continuous feeds of paper.

## Print in Sepia

Print images in a brownish tone to give them an antique look. On the Color tab, select the Print in Sepia check box.

## Print in Grayscale

Print black and white or color documents in grayscale. On the Color tab, select the Print in Grayscale check box.

## Print All Text as Black

Print all text characters as black while retaining colored graphics. On the Color tab, select the Print All Text as Black check box.

## Watermarks

Display short text such as CONFIDENTIAL as the background for the document's main text, and customize and rotate this watermark as needed. This feature is found on the Effects tab.

## Optimize for Photocopy or Fax

Color images are sometimes degraded when put through a black and white facsimile or photocopier. The Optimize for Photocopy or Fax feature prints images using high-contrast shades of gray, making them ideal for faxing and photocopying. On the Color tab, select the Print in Grayscale check box, and then select Optimize for Photocopy or Fax.

## Ink Volume Control

Adjust the amount of ink printed on a page. On the Basics tab, click Advanced Features, then drag the slider left for lighter images (less ink) or right for darker images (more ink). The less ink used, the faster the printouts dry.

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## Changing default software settings

### For Windows

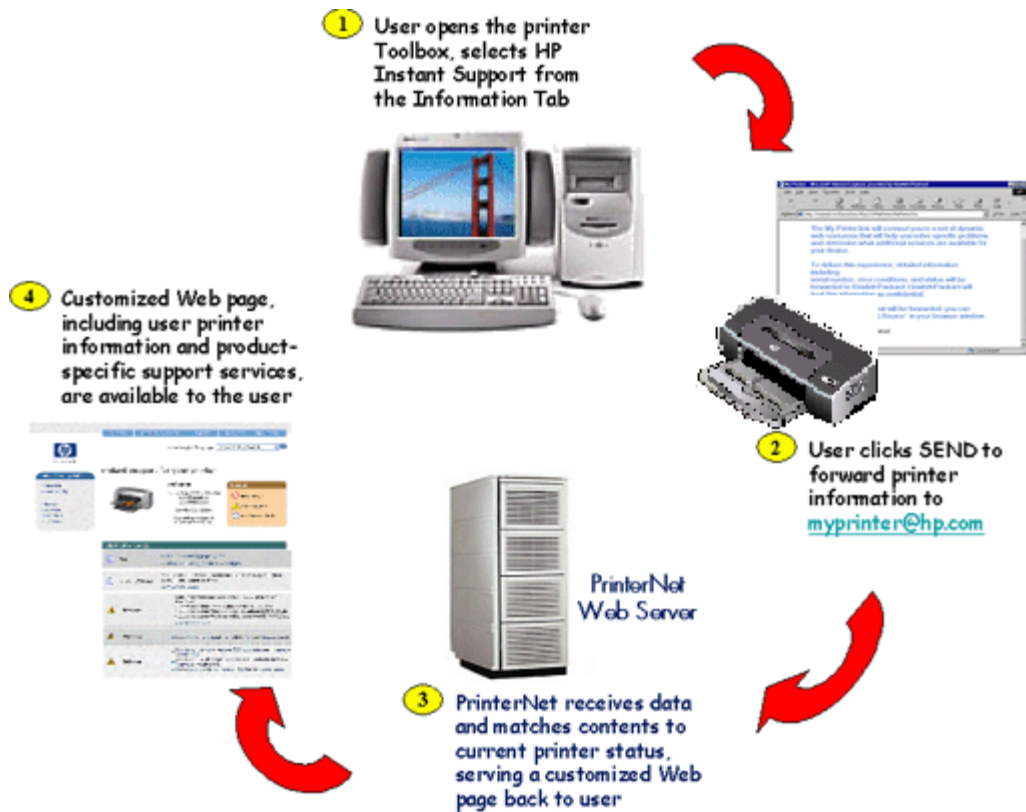
Click Start, point to Settings, and then click Printers (Windows NT 4.0, 98, Me, and 2000) or Printers and Faxes (Windows XP). (If Printers and Faxes is not in the Start menu in Windows XP, click Start, click Control Panel, and then click Printers and Faxes.) In the Printers folder, right-click the printer icon, and then click Properties (Windows 98 or Me), Document Defaults (Windows NT 4.0), or Printing Preferences (Windows 2000 or XP). Select the options you want to use as the default print settings. Click OK to save the new default print settings. To restore the default print settings, click the Print Task Quick Sets drop-down menu, and select Default Print Settings.

### For Macintosh

Click File, and then click Print. Select the options you want to use as the default print settings. For Mac OS 9.1.x or 9.2.x: Select Save Current Settings from the lower-left drop-down list. For Mac OS X: Select Save As from the Presets drop-down list. Type a name for these settings. For Mac OS 9.1.x and 9.2.x: Click Save to save the new default print settings. Mac OS X: Click OK to save the new default print settings. To restore the default print settings, select Default.

## HP instant support

### How it works



### How HP instant support for printers works

User selects hp instant support from the Toolbox.

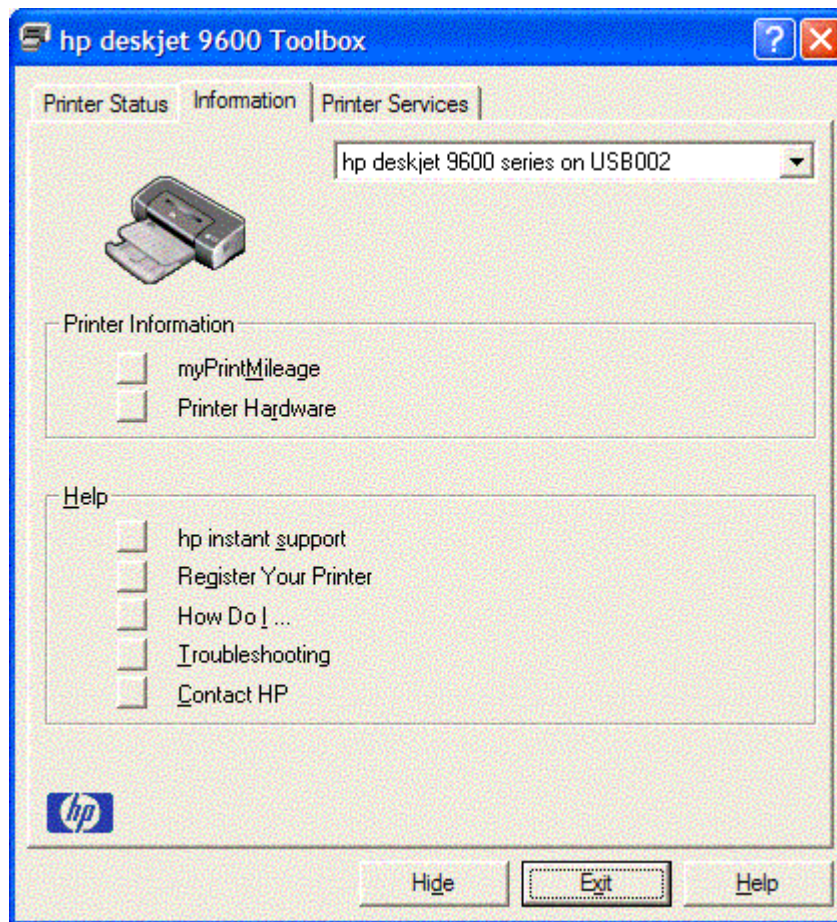
User selects hp instant support link for additional help, and printer harvests data.

Data is sent to [myprinter@hp.com](mailto:myprinter@hp.com).

PrinterNet receives data and matches content to current printer status, serving a customized web page back to user.



## Accessing



### Accessing HP instant support

- To access HP instant support, open the printer Toolbox, select the Information tab, and select the hp instant support checkbox.
- Supported environments: internet access, Windows 98, NT, ME, 2000, and XP, USB and parallel connections
- Unsupported environments: Macintosh

The Toolbox retrieves information from the printer. This process might take up to 45 seconds. Do not print to the printer during this time.



To view the information that will be sent to Hewlett-Packard, choose Source (for Microsoft Internet Explorer) or Page Source (for Netscape) from the Web browser View menu. The printer information is sent via HTML to HPCS for analysis by both HPIS and the myPrintMileage program.

The information sent includes:

- Serial number
- Service ID
- Model number
- Page count
- Ink and media usage

## Instant support home page

instant support for your printer

**about your printer**

- search
- contact hp
- home
- services
- self-help
- software

**welcome**

hp deskjet 9300 - C8136A  
Serial Number: 00000000010  
Service ID: 12308  
Your printer status is summarized below.

**legend**

- ✖ error alert
- ⚠ warning alert
- i information alert

**alerts at a glance**

- tips** (information alert)
  - tips for avoiding paper jams
  - using and caring for print cartridges
- myPrintMileage** (information alert)
  - send your printer information to myPrintMileage for your customized usage analysis
  - myPrintMileage
- firmware** (warning alert)
  - latest firmware package version 7.4.2 available for download:
    - updating using Mac OS download DFR742.hqx
    - updating using Web JetAdmin download DFR742S.zip
    - updating using Windows utility download DFR742C.zip
  - download page
- Warranty** (warning alert)
  - Your warranty is expiring. Check for new support pack
- Software** (warning alert)
  - You have firmware version 5.5. Upgrade new firmware version 6.0.
  - You have PDL firmware version 5.5. Upgrade new PDL firmware version 6.0.
  - Download new driver version 8.0 for Windows users.

**HP instant support home page**

This will only show up when service ID >= 330 days i.e the last 30 days of the basic warranty

These will only show up when there is a firmware or driver release

The HP instant support home page displays:

- Model number
- Serial Number
- Service ID used to check warranty
- Driver updates
- Notification of product warranty

Key points:

- Serial Number and Service ID are unique to each customer.
- Service ID is used for printer entitlement check.
- This page communicates major product issues such as firmware, drivers, or entitlement. Call centers can work with the product generation unit support manager to regularly add, update, or remove any tips documents to best meet user needs.
- Because the HP instant support home page is dynamically created, bookmarks of this site may not display the current information.

## Device not found by Internet

A generic device not found message could be due to an internal setting. Try another URL. If the problem persists, check the internet settings.

## Device not found by HP

welcome

We have not received any information concerning your printer. Please choose one of the following options to proceed with a navigation, customized for your device

### snapshot gathering

- re-enter your printer's IP address into your web browser
- click on the "hp instant support" link

Information about your printer such as model and serial numbers, general usage information and error numbers will be transferred to HP. This information will be utilized to offer you customized web pages for your printer.



### minimum navigation

Select a product number for general support information about your printer. Note: This option does not provide you with status information specific to your printer

select your printer :   

### customer care

Select your product number to access the Customer Care web site and get information about your type of printer

select your printer :   

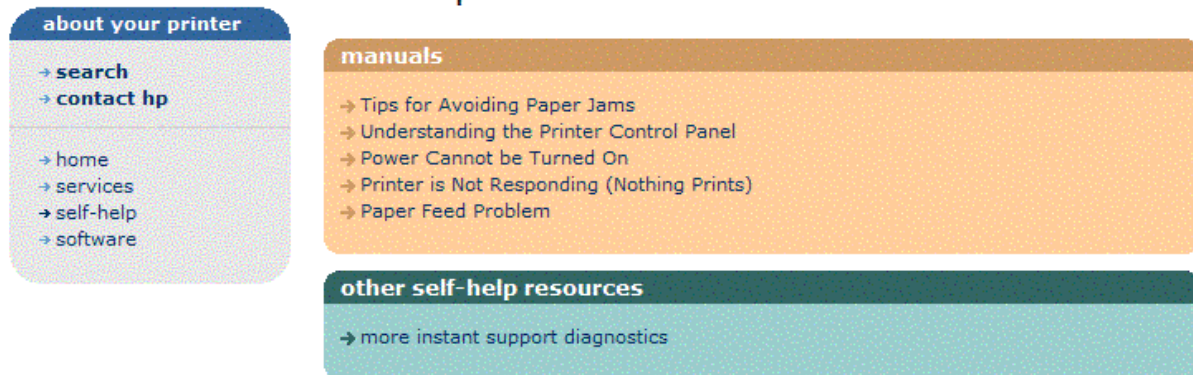
## Device not found by HP message

If the device is not found by HP, one of the following is the cause:

- Model number or Service ID is not set in XML or not being sent over. From the internet browser's View menu, select Source or Page to confirm.
- HP instant support server or program related issue. Inform the product generation unit immediately.



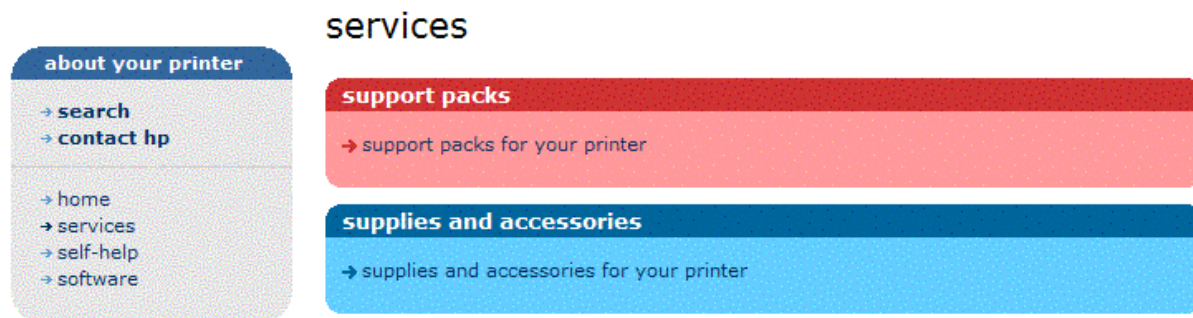
## Self-help page



### HP instant support self-help page

- Provides links to topics that help the user understand or solve any printer related issues. Includes content from the user's guide and video clips.
- Field support can provide input to the division support manager to add, remove, or update any information, if needed.

## Services page

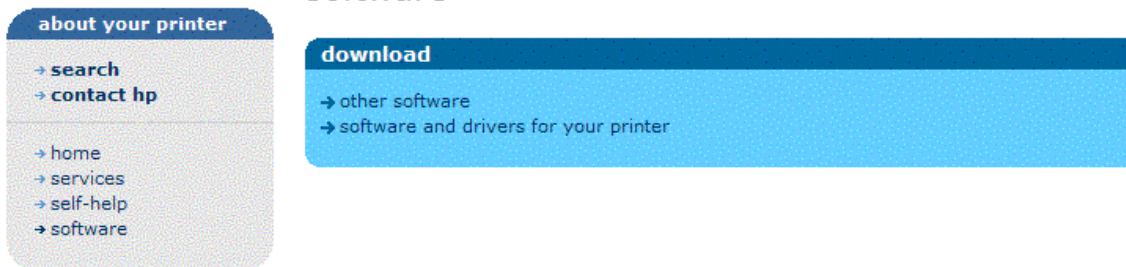


### HP instant support services page

Links to the HP online services for the purchase of:

- Support packs
- Supplies and accessories
- Other support programs such as Active Chat or Self-Solver

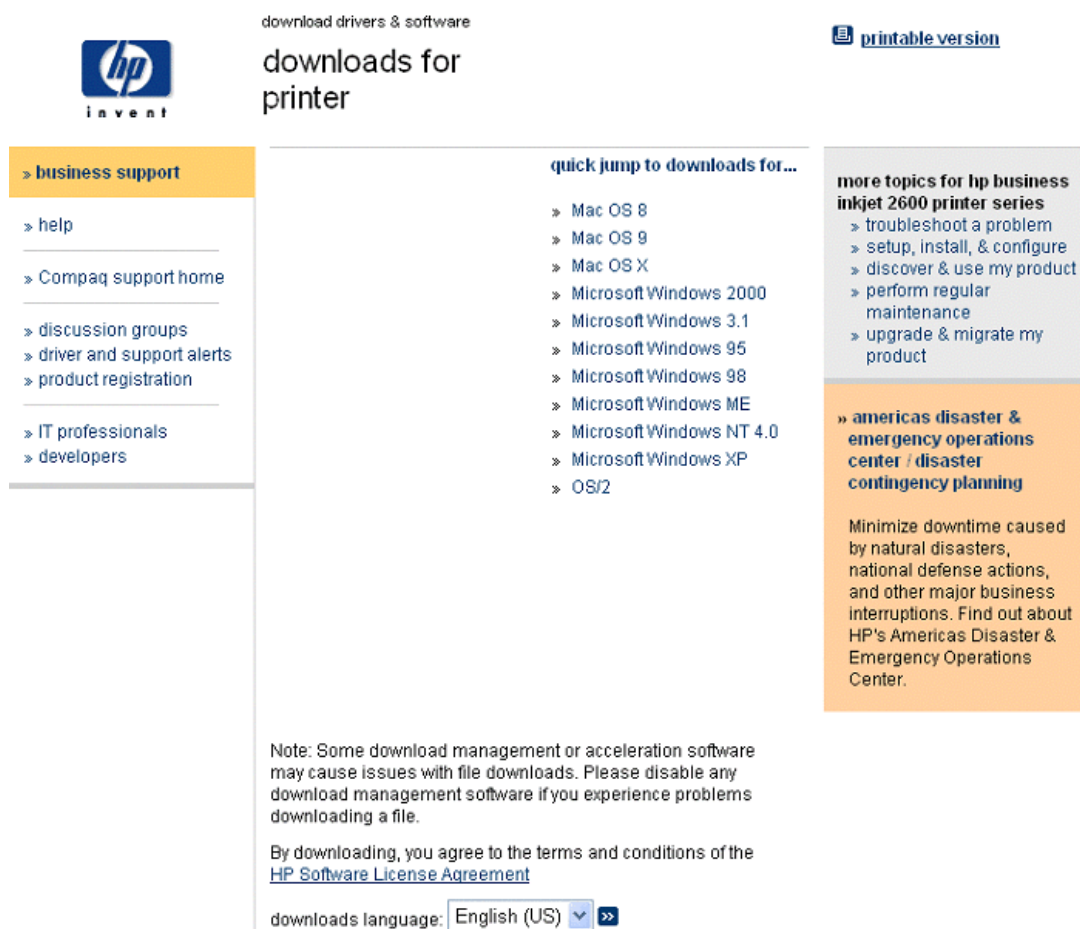
## Software page



## Software page

Links directly to the download page for firmware and printer drivers at hp.com.

## Downloads page



## Downloads page

Allows downloading firmware and drivers.

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## myPrintMileage

myPrintMileage keeps track of printer usage information to help plan the purchase of consumables. It consists of two parts:

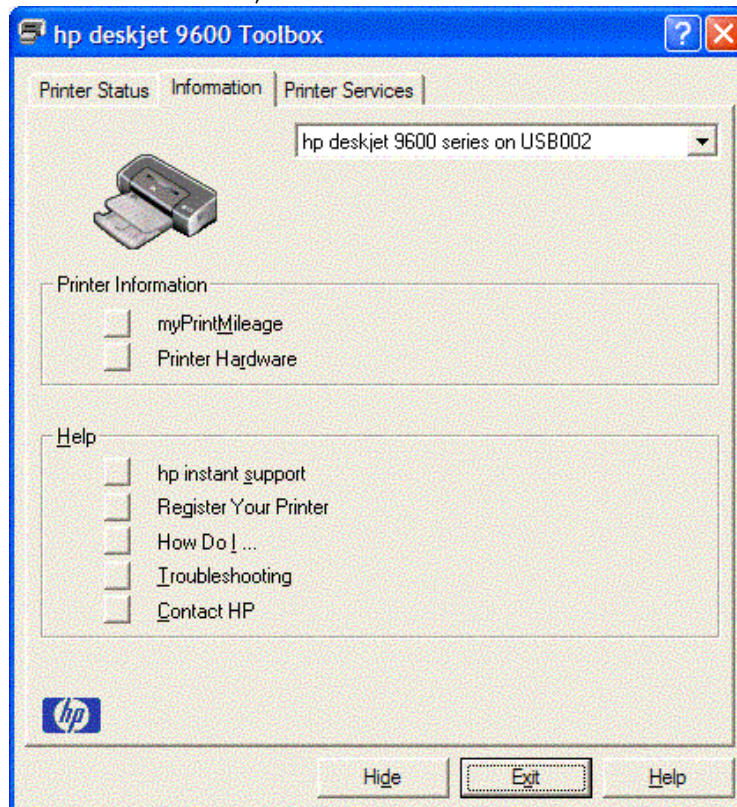
- myPrintMileage website
- myPrintMileage Agent (a utility installed on the computer with the Toolbox, that is activated during installation of the printer driver only if specifically chosen)

To visit the myPrintMileage website from the Toolbox, click the myPrintMileage button or double-click the myPrintMileage Agent icon on the Windows taskbar (near the clock). This website shows the following:

- Ink usage. For example, the amount of ink used.
- Media usage. For example, the average quantity of media used per month for each media type.
- The applications used to print with the printer.
- Job and page count. For example, the number of pages that have been printed and the estimated number of pages that can be printed with the amount of ink remaining.
- The driver features frequently used.

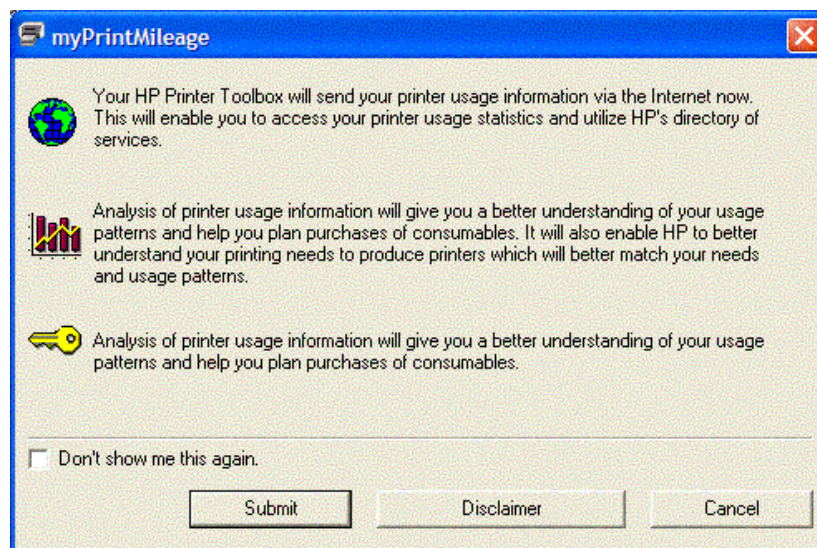
myPrintMileage websites are dynamically created. Bookmarking this site and connecting using the bookmark will not display the current information. Instead, connect from the Toolbox by clicking the myPrintMileage button on the Information tab.

To enable and disable myPrintMileage at any time, right-click the myPrintMileage Agent icon on the Windows taskbar, and click Enable or Disable.

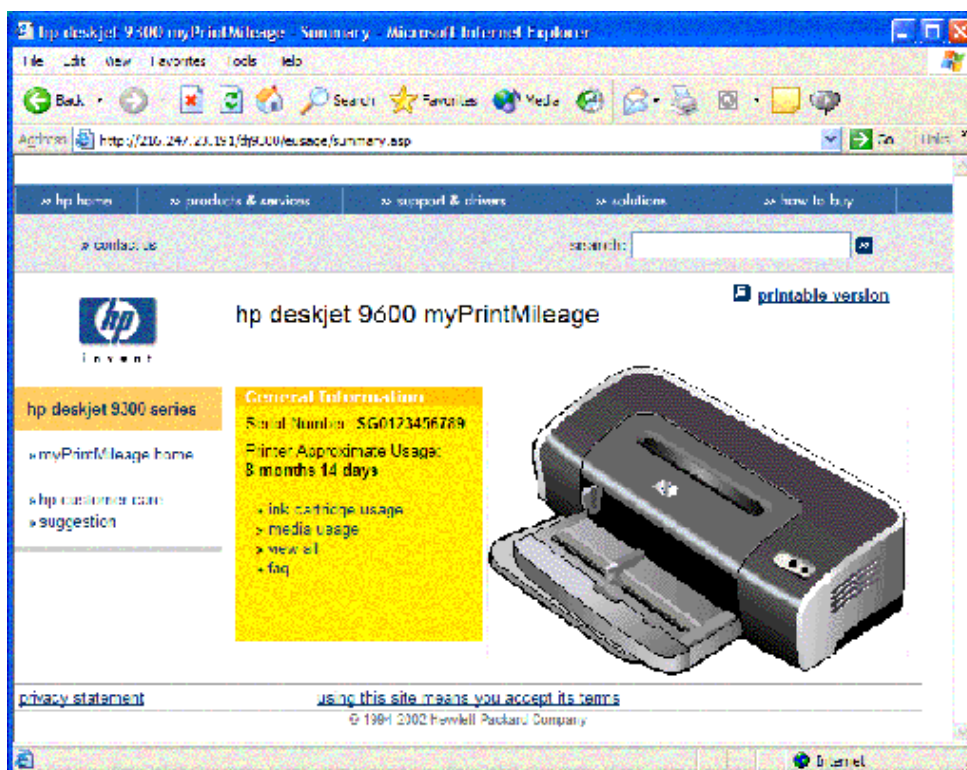


**Selecting myPrintMileage from the Toolbox Information tab**





**Submit**



**myPrintMileage home page**



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## Troubleshooting

### Calibrating color

Calibrating color is only necessary when printed colors have visibly shifted towards yellow, cyan, or magenta, or there is a tinge of color in the gray shades.

- Calibrate the color only when the color and photo print cartridges are installed together.
- It is not necessary to calibrate the color when printing using the color print cartridge in combination with the black print cartridge or when printing with a single print cartridge. See "Printing with a single print cartridge".

If the color-related problem still persists after performing a color calibration, the problem may be caused by a low or empty print cartridge. Check the ink levels, replace any low or empty print cartridges (see "Installing or replacing the print cartridges"), and then print again.

To check the print cartridge ink levels:

- Windows: See "Using the Toolbox".
- Macintosh: See "Displaying the HP Inkjet Utility"

### For Windows

You can calibrate the color from the Toolbox or the printer driver.

Load plain paper into the input tray (see "Loading media in the input tray"). The process uses one sheet of paper.

Open the Toolbox (see "Using the Toolbox") or open the printer driver (see "Changing default print settings").

Click the Printer Services tab (Toolbox) or Services tab (printer driver).

Click Calibrate Color.

Follow the onscreen instructions.

### For Macintosh

Load plain paper into the input tray (see "Loading media in the input tray"). The process uses one sheet of paper.

Open the HP Inkjet Utility and click Color Calibrate.

Follow the onscreen instructions.

## Resolving printer problems

### Printer shuts down unexpectedly

#### **Check the power**

See "Power cannot be turned on"

#### **Check the printer vents**

The printer vents are located on the sides of the printer. If the printer vents are covered and the printer overheats, it automatically turns off. Make sure the vents are not covered and the printer is in a cool, dry location.

#### **Check the rear access panel or auto-duplex unit**

Make sure the rear access panel or auto-duplex unit is correctly installed and locked into place.

### Power cannot be turned on

#### **Check the Power light**

The Power light on the printer should be green.

#### **Check the power supply module light**

Make sure the power supply module is firmly connected to the back of the printer. The light on the module should be lit.

#### **Check the power cord**

- Make sure the power cord is firmly connected to the printer and to a working outlet.
- Disconnect the power cord from the electrical outlet, wait a few seconds, and then reconnect the power cord. Then press the Power button to turn on the printer.

If the power still cannot be turned on, call the HP Customer Care Center for help (see "Customer support").

### Printer is not responding (nothing prints)

#### **Check the printer lights**

If the Power light is blinking, be patient. Complex documents containing many fonts, graphics, or color photos take longer to begin printing. If the Power light is blinking, the printer is processing information.

See "Printer lights reference" for descriptions of printer lights and what they indicate.

#### **Check the power**

See "Power cannot be turned on".

## **Check the cables**

- Make sure the printer cable (USB, parallel, or network) is firmly connected between the printer and the computer.
- Do not connect a USB and a parallel cable to the printer at the same time. If two cables are connected, turn off the printer and disconnect the cable you are not using.
- Make sure the cable is not damaged or frayed. If it is, contact the manufacturer of the cable and have it replaced.

## **Make sure the media is loaded correctly**

Make sure media is loaded correctly in the input tray and that the media is not jammed in the printer. See “Loading media in the input tray” and “Clearing jams”.

Make sure the correct-sized media is loaded and press the Resume button to continue.

## **Make sure the printer is selected**

When you print your file, make sure the printer is selected in the printer menu.

To set the printer as the default printer, right-click the printer name or icon in the Printers folder and select the option to set as default printer. For more information about setting the default printer, see the online Help for your computer’s operating system.

## **Check the Chooser (Mac OS 9.1.x and 9.2.x only)**

Make sure you have installed the printer software and the printer is selected. The printer version should be visible on the left panel of the Chooser. When you click the printer icon, the printer name should be available on the right panel of the Chooser. Select the printer’s name.

## **Make sure the printer is not paused**

Windows: Make sure Pause Printing is not selected in the Printer menu.

- Click Start, point to Settings, and then click Printers (Windows NT 4.0, 98, Me, and 2000) or Printers and Faxes (Windows XP). (If Printers and Faxes is not found on the Start menu in Windows XP, click Start, click Control Panel, and then click Printers and Faxes.)
- Right-click the printer icon.
- If Pause Printing is selected in the drop-down menu, click it to clear it.

Macintosh: Make sure Stop Print Queue is not selected in the Mac desktop’s Printing menu.

## **Make sure the print to file option is not selected in the printer driver**

If the print to file option is selected in the printer driver, the print job is saved to a file on your computer and not printed on paper.

- Windows: From the software application, click File, and then click Print. Make sure the Print to file option is not selected.
- Macintosh: On the main pop-up menu in the Print dialog box, make sure the Print to file option is not selected.

## **Check the rear access panel and top cover**

Make sure the rear access panel or auto-duplex unit is correctly installed and locked into place, and that the top cover is closed.

## **Check the print cartridges**

- If the Print Cartridge lights are on or blinking, see "Printer lights reference".
- If you are printing with a single print cartridge, see "Printing with a single print cartridge".

## **Try printing a demo page**

Try printing a demo page to see if the printer is set up correctly. Make sure the printer is turned on, press and hold the Power button, press the Resume button once, and then release the Power button. The printer prints a demo page.

## **Try printing a test page (Windows)**

To print a generic Windows test page:

Click Start, point to Settings, and then click Printers (Windows NT 4.0, 98, Me, and 2000) or Printers and Faxes (Windows XP). (If Printers and Faxes is not found on the Start menu in Windows XP, click Start, click Control Panel, and then click Printers and Faxes.)

Right-click the printer icon and select Properties.

Click the General tab, and then click Print Test Page.

If the test page prints, then the problem is not with the connection between the printer and the computer. Make sure the application you are trying to print from has the correct printer selected.

If the test page prints and the printer previously worked with the same software application you are using, try printing another file using the software. If this file prints, the file you were previously trying to print may be damaged. If you have a backup copy of the file, try printing it. If none of the above solutions work, this problem is likely caused by your software application's inability to properly interpret print settings. Check the release notes on the Starter CD for known software conflicts. Otherwise, check your software application manual, or call the software manufacturer to get more specific help for this problem.

If the test page does not print, make sure the correct port (USB, LPTx) is selected and that the printer is connected directly to your computer. If your printer is connected to a switch box, make sure you have selected the correct switch. When printing the test page, the printer Power light should blink. If the Power light does not blink, print a diagnostic page (see "Printing a diagnostic page").

## **Try printing from another application**

Try printing from other applications to see if this problem recurs.

## **Check the USB port**

Unplug the printer from the USB port, wait a few seconds, and then plug it back in. If that does not help, try plugging the cable into another USB port.

### **Check for conflicts with port-sharing devices**

If you are using a parallel cable, make sure your printer is connected directly to the parallel port. Avoid sharing the port with other devices such as a Zip drive or other printers.

### **Check the network setup**

If you are sharing the printer, make sure it is properly set up in your network environment. See "Connecting to a network" and the documentation provided by your network vendors. Also see "Resolving network printing problems" for additional troubleshooting information.

### **Try restarting the system**

Turn off the computer and the printer, wait a few seconds, and then turn them on again. Try printing again.

## **Printer lights are on or blinking**

The printer lights indicate printer status and are useful for diagnosing printing problems. For a list of printer light combinations, what they indicate, and what action to take if necessary, see "Printer lights reference".

For a description of the printer lights, see "Front view".

## **Printer takes a long time to print**

To enhance the performance of your printer, check the following:

### **Multiple software applications are open**

If multiple applications are open, the computer may not have sufficient resources for the printer to print at its optimum speed. To increase printer speed, close all unused software applications when printing. If necessary, restart your system, and then resend your print job.

### **Complex documents, graphics, or photographs are printing**

Documents containing graphics or photographs print slower than text documents. For Windows, if your computer does not have enough memory or disk space to print the document under normal conditions, you can use Low Memory Mode. Using this option may reduce the quality of the printout. Low Memory Mode also disables 4800 x 1200 Optimized dpi printing.

To activate Low Memory Mode:

Open the printer driver (see "Printing a document").

Click the Basics tab, and then click the Advanced Features button.

Select Low Memory Mode.

Print the document.

### **Check the print quality**

The printer prints slower when Best or Maximum dpi is selected as the print quality. To increase the printer speed, select a different print quality mode in the printer driver.

### **Automatic paper type option is enabled**

When the automatic paper type option is enabled (see "Using the automatic paper-type sensor"), it takes a few seconds for the printer to scan the first page of the print job to determine the appropriate paper type.

To increase the print speed, select the specific paper type in the printer driver.

### **Check your system configuration**

- See "Printer specifications" for recommended system requirements.
- There may be insufficient virtual memory in your system. Increase the size of your system's virtual memory. See the Windows or Macintosh help.

### **Check your port and cable settings (Windows 98/Me only)**

- If you are using a parallel connection, use an IEEE-1284 parallel cable to enable bidirectional communication.
- If you are using a parallel connection, try switching to a USB connection. See "Connecting the printer".
- The port setting configuration in your system may not be set to ECP. See the manual that comes with your computer for information on how to change your port setting or contact your computer manufacturer.

### **Check the print cartridges**

- If the Print Cartridge lights are on or blinking, see "Printer lights reference".
- A print cartridge may be low or out of ink. Check the print cartridge ink levels. Replace any low or empty print cartridges (see "Installing or replacing the print cartridges") and then print again.
- If you are printing with a single print cartridge, the print speed may be slower than normal. See "Printing with a single print cartridge".

### **Check for conflicts with port-sharing devices**

If you are using a parallel cable, make sure your printer is connected directly to the parallel port. Avoid sharing the port with other devices such as a Zip drive or other printers.

### **Printer does not print after switching ports**

Do not connect both the parallel cable and the USB cable to the printer simultaneously. Only use one type of connection to the printer at a time.

### **Check the cable**

Make sure the cable you are using is properly connected to the computer and the printer.

### **Make sure the printer is turned off when you switch ports**

If the printer was not turned off, turn it off, wait a few seconds, and then turn it on again.

### **Make sure the port setting matches the physical connection**

Click Start, point to Settings, and then click Printers (Windows NT 4.0, 98, Me, and 2000) or Printers and Faxes (Windows XP). (If Printers and Faxes is not found on the Start menu in Windows XP, click Start, click Control Panel, and then click Printers and Faxes.)

Right-click the printer icon and select Properties.

Click the Details tab (Windows 98 and Me) or the Ports tab (Windows NT 4.0, 2000, and XP) and check the port setting.

### **Print a test page**

To print a generic Windows test page:

- Click Start, point to Settings, and then click Printers (Windows NT 4.0, 98, Me, and 2000) or Printers and Faxes (Windows XP). (If Printers and Faxes is not found on the Start menu in Windows XP, click Start, click Control Panel, and then click Printers and Faxes.)
- Right-click the printer icon and select Properties.
- Click the General tab, and then click Print Test Page.

If the test page prints, then the problem is not with the connection between the printer and the computer. Make sure the application you are trying to print from has the correct printer selected.

## **Resolving printing problems**

### **A blank page printed**

#### **Check the print cartridges**

- If the Print Cartridge lights are on or blinking, see “Printer lights reference”.
- Each new print cartridge is packaged with protective tape covering the ink nozzles. Check each print cartridge and make sure the protective tape is removed from the ink nozzles.
- If you are printing black text and a blank page prints, your black print cartridge may be empty. Check the print cartridge ink level. Replace the empty black print cartridge (see “Installing or replacing the print cartridges”) and then print again.
- If one print cartridge is empty, you can still print with the other print cartridge. See “Printing with a single print cartridge”

#### **Make sure the printer is selected**

When you print your file, make sure the printer is selected in the printer menu.

To set the printer as the default printer, right-click the printer name or icon in the Printers folder and select the option to set as default printer. For more information about setting the default printer, see the online Help for your computer’s operating system.

#### **Check for conflicts with port-sharing devices**

If you are using a parallel cable, make sure your printer is connected directly to the parallel port. Avoid sharing the port with other devices such as a Zip drive or other printers.



### **Check the network setup**

If you are sharing the printer, make sure it is properly set up in your network environment. See "Connecting to a network" and the documentation provided by your network vendors. Also see "Resolving network printing problems" for additional troubleshooting information.

### **Check paper size**

Load the correct-sized paper and press the Resume button to continue.

## **Something on the page is missing or incorrect**

### **Check the margin settings**

Make sure the margin settings for the document do not exceed the printable area of the printer.

### **Make sure the printer is selected**

When you print your file, make sure the printer is selected in the printer menu. To set the printer as the default printer, right-click the printer name or icon in the Printers folder and select the option to set as default printer. For more information about setting the default printer, see the online Help for your computer's operating system.

### **Check the color print settings**

If colors are printing in shades of gray or black and white, or the color tone is off, see "Colors are different than they should be".

## **Placement of the text or graphics is wrong**

### **Check the paper size and orientation settings**

Make sure the paper size and page orientation selected in the software application match the settings in the printer driver.

### **Make sure the media is loaded correctly**

See "Loading media in the input tray" or "Printing with the front or rear manual feed slot".

### **Check the margin settings**

If the text or graphics are cut off at the edges of the page, make sure the margin settings for the document do not exceed the printable area of the printer.

## **Printout is slanted or skewed**

### **Media is skewed**

- If media is twisting as it feeds or margins appear crooked, make sure the media is loaded correctly. See "Loading media in the input tray" or "Printing with the front or rear manual feed slot".
- Make sure there is sufficient paper in the input tray. If you are printing one or just a few sheets, you can also use the front or rear manual feed slot.
- Make sure the paper width guide and tray extension fit against the edges of the media.

- Make sure the rear access panel or auto-duplex unit is correctly installed and locked into place.
- Do not load more than 150 sheets of paper, or 15 envelopes, or a stack of media that exceeds the height of the paper width guide into the input tray. Do not load more than 10 sheets of paper into the front manual feed slot. Load only one sheet of paper at a time into the rear manual feed slot.

## **Ink is smearing**

### **Make sure the printout has time to dry**

When printing documents that use a lot of ink, you must allow the document more time to dry before handling it. This is especially true for transparencies.

The Normal print quality setting in the printer driver is designed to optimize both dry time and speed. This mode allows the printout to dry completely in most situations.

Check immediately after printing whether smearing occurs in the printout. You can increase the amount of dry time in the printer driver.

- Windows: Adjust the ink dry time by selecting Advanced Features from the Basics tab in the printer driver.
- Macintosh: Adjust the ink dry time by selecting the Ink tab in the Paper Type/Quality panel.

### **Check the paper type**

Some paper types do not accept ink well, which causes the ink to dry more slowly and results in smearing. See “Selecting print media” for tips on using print media.

### **Check the paper type selection**

Make sure the paper type selected in the printer driver matches the paper you are printing on.

### **The page is wrinkling with too much ink**

Color documents with rich, blended colors can use excess ink, which can wrinkle the page during printing and cause smearing. Select Normal or Fast print quality in the printer driver to reduce ink, or use HP Premium Paper designed for inkjet printing of vivid color documents.

### **Check for excess ink buildup on the print cartridge**

An ink buildup problem can be solved by cleaning the cartridges. See “Cleaning the print cartridges”.

### **The media has been exposed to a humid environment**

If media has been exposed to a humid environment, it may be difficult to achieve the correct dry time, especially when printing with heavy color saturation. Print on a fresh ream of media that has been stored in a cool, dry place.

## **Ink is not filling the text or graphics completely**

### **Check the print cartridges**

- If the Print Cartridge lights are on or blinking, see “Printer lights reference”.
- A print cartridge may be low or out of ink. Check the print cartridge ink levels. Replace any low or empty print cartridges (see “Installing or replacing the print cartridges”) and then print again.
- The print cartridges may have poor contact. Try removing and then reinstalling the print cartridges, making sure to snap them firmly into place (see “Installing or replacing the print cartridges”). To clean the electrical contacts, see “Cleaning the print cartridges”.
- If you are printing with only one print cartridge, see “Printing with a single print cartridge”.
- Whenever print quality deteriorates, it is a good idea to clean the print cartridges. See “Cleaning the print cartridges”. Check that all the lines on the test page are connected and printed properly. If the lines are broken, your print cartridge is probably out of ink. Replace your print cartridge with a new one (see “Installing or replacing the print cartridges”). See “HP supplies and accessories” for replacement information.

### **Check the paper type**

Some paper types are not suitable for use with your printer. See “Selecting print media” for tips on using print media.

### **Check the print quality setting**

The Fast options use less ink and print at a faster rate, which is good for printing drafts. To achieve a better colored printout, select Normal, Best, or Maximum dpi print quality in the printer driver.

## **Text is jagged at the edges (not smooth)**

### **Check the type of font chosen**

Some software applications use custom fonts that have jagged edges when enlarged or printed. If you are printing a bitmap image of text, it may have jagged edges when skewed, enlarged or printed. By using TrueType™ fonts you can ensure that the printer will print smooth fonts. When selecting a font, look for the TrueType icon.

TrueType is a technology that can create fonts of any size from a basic font outline. TrueType fonts are scalable, meaning they can be scaled for use on the computer screen or the printer. This is the standard font-scaling technology in Windows.

### **Check the paper type**

Paper that is heavily textured or does not accept ink well can cause graphics and text to print poorly. See “Selecting print media” for tips on using print media.

### **If none of the above solutions work**

The problem is likely a conflict related to the software application you are using. Check the release notes on the Starter CD for known software conflicts. Otherwise, check your software application manual or call the software manufacturer to get more specific help for this problem.

### **Text or graphics are cut off at page edges**

#### **Check the page orientation setting**

The page orientation selected (for example, landscape or portrait) may not be correct for the document you are printing. See "Printing a document".

#### **Check the margin settings**

Make sure margin settings for the document do not exceed the printable area of the printer.

#### **Make sure the content fits on the page**

- Content that is cut off may be outside the printable area of the printer. Or, the size of the document you are printing is larger than the paper size in the input tray.
- You can use the built-in print preview feature to check the document before it prints. Check the graphics in the document to make sure their current size (scale) fits within the printable area of the printer.
- If the layout of the document you are trying to print will fit on a paper size supported by the printer, then load the correct paper size. Make sure to select the correct page orientation in the printer driver.
- You can scale the document to fit on the paper size you are using. See "Resizing options" under "Understanding smart software features" for more information.

#### **Make sure the media is loaded correctly**

See "Loading media in the input tray" or "Printing with the front or rear manual feed slot".

### **If none of the above solutions work**

The problem is likely a conflict related to the software application you are using. Check the release notes on the Starter CD for known software conflicts. Otherwise, check your software application manual or call the software manufacturer to get more specific help for this problem.

### **Meaningless characters are printed**

#### **Check the cable connection**

A common cause for nonsense characters is a poor cable connection between the printer and computer.

#### **Make sure the printer is selected**

When you print your file, make sure the printer is selected in the printer menu.

To set the printer as the default printer, right-click the printer name or icon in the Printers folder and select the option to set as default printer. For more information about setting the default printer, see the online Help for your computer's operating system.

### **The document file may be damaged**

Occasionally a document file can become damaged. If you can print other documents from the same software application, try to print using a backup copy of your document.

### **Check for conflicts with port-sharing devices**

If you are using a parallel cable, make sure your printer is connected directly to the parallel port. Do not share the port with other devices such as a Zip drive or other printers.

### **Try restarting the system**

Turn off the computer and the printer, wait a few seconds, and then turn them on again. Try printing again.

## **Wrong fonts are printed**

### **Make sure fonts are used correctly in the document**

Make sure you correctly apply the font you want to use. For example, in a graphics application place the words in the desired size and do not enlarge by dragging and sizing.

### **Make sure the font is available in your computer**

The fonts used in the document may not match the fonts currently available in your computer, or the type of font used is not designed to be printed. Make sure the font is available in the font selection box of your software application, and make sure it is a TrueType font.

TrueType is a technology that can create fonts of any size from a basic font outline. TrueType fonts are scalable, meaning they can be scaled for use on the computer screen or the printer. This is the standard font-scaling technology in Windows.

### **Make sure the printer is selected**

When you print your file, make sure the printer is selected in the printer menu.

To set the printer as the default printer, right-click the printer name or icon in the Printers folder and select the option to set as default printer. For more information about setting the default printer, see the online Help for your computer's operating system.

### **If none of the above solutions work**

The problem is likely a conflict related to the software application you are using. Check the release notes on the Starter CD for known software conflicts. Otherwise, check your software application manual or call the software manufacturer to get more specific help for this problem.

## Resolving color problems

### Printout is faded or colors are dull

#### Check the print quality setting

The Fast options use less ink and print at a faster rate, which is good for printing drafts. To achieve a better colored printout, select Normal, Best, or Maximum dpi print quality in the printer driver.

#### Check the paper type setting

When printing on transparencies or other special paper types, select the corresponding paper type in the printer driver.

#### Check the paper type

Some paper types are not suitable for use with your printer. See "Selecting print media" for tips on using print media.

#### Check the print cartridges for low ink or clogs

- If the Print Cartridge lights are on or blinking, see "Printer lights reference".
- A print cartridge may be low or out of ink. Check the print cartridge ink levels. Replace any low or empty print cartridges (see "Installing or replacing the print cartridges") and then print again.
- Whenever print quality deteriorates, it is a good idea to clean the print cartridges. See "Cleaning the print cartridges".
- Check that all the lines on the test page are connected and printed properly. If the lines are broken, your print cartridge is probably out of ink. Replace your print cartridge with a new one. See "Installing or replacing the print cartridges" and "HP supplies and accessories".
- If you are printing with a single print cartridge, see "Printing with a single print cartridge".

#### Make sure you are printing on the correct side of the media

- Load media print-side down in the input tray and front manual feed slot.
- Load media print-side up in the rear manual feed slot.

### Colors are bleeding into each other

#### Check the paper type and print quality settings

Some paper type settings (such as Transparency) and print quality settings (such as Best) require more ink than others. Choose different settings in the printer driver. Also, make sure you have selected the correct paper type in the printer driver.

#### Check the paper type

Some paper types are not suitable for use with your printer. See "Selecting print media" for tips on using print media.

### **Check the print cartridges**

- If you refilled your print cartridges, HP does not recommend or support refilled print cartridges. Refilling processes and the use of incompatible inks may disrupt the intricate printing system, potentially resulting in reduced print quality and even printer damage. To order an original HP print cartridge, see "HP supplies and accessories".
- If the Print Cartridge lights are on or blinking, see "Printer lights reference".

### **When printing on photo paper and transparency film**

- Load media print-side down in the front manual feed slot or input tray.
- Load media print-side up in the rear manual feed slot.
- Use only HP Inkjet Transparency Films listed in "HP supplies and accessories"

## **Colors are different than they should be**

### **Check the print cartridges**

- If the Print Cartridge lights are on or blinking, see "Printer lights reference".
- When colors are completely wrong (for example, when green prints as blue or yellow), the color print cartridge may have run out of one or more colors of ink. Check the print cartridge ink levels. Replace any low or empty print cartridges (see "Installing or replacing the print cartridges") and then print again.
- If you have the color and photo print cartridges installed, and the color does not print out as expected or there is a tinge of color in gray shades, calibrate the color. See "Calibrating color".
- Whenever print quality deteriorates, it is a good idea to clean the print cartridges. See "Cleaning the print cartridges".
- If you are printing with only one print cartridge, see "Printing with a single print cartridge".

### **Check the color print settings**

- If colors are printing in shades of gray or black and white, check the color print settings.
  - Windows: Open the printer driver (see "Printing a document"), click the Color tab, and make sure the grayscale and black and white options in the Color Options area are not selected.
  - Mac OS 9.1.x and 9.2.x: Click File, and then click Print. Click the Color tab, and then click the Image drop-down list. Make sure the Black and White or Grayscale options are not selected.
  - Mac OS X: Click File, and then click Print. Open the Paper Type/Quality panel and click the Paper tab. Click the Color drop-down list and make sure the Print Color as Gray option is not selected.
- If the hue or tone of color is shifted, the wrong setting may be selected in the printer driver. Click the Color tab and make sure the color sliders are centered.
- If you are printing with only the black or photo print cartridge, the printout will be printed in grayscale. See "Printing with a single print cartridge"



### **Check the paper type**

Colored paper may cause the mismatch in the printout. Try printing on plain white paper.

## **Resolving photo printing problems**

Also see “Resolving color problems” for additional troubleshooting information.

### **Make sure you are printing on the correct side of the media**

- Load media print-side down in the input tray and front manual feed slot.
- Load media print-side up in the rear manual feed slot.

### **Check the print settings**

Open the printer driver (see “Printing a document”).

From the Paper/Quality tab (Windows) or the Paper Type/Quality panel (Macintosh), check the following settings:

- Select the appropriate photo paper type.
- Select the highest resolution option such as Best or Maximum dpi on the print quality drop-down list.

### **Colors are tinted or incorrect**

If colors in photographs appear tinted or incorrect, follow these steps:

- Calibrate the color (see “Calibrating color”). A photo print cartridge must be installed for color calibration.
- Reprint the photograph.
- If colors are still tinted or incorrect, try the following steps:
  - Windows: Open the printer driver (see “Printing a document”) and click the Color tab.
  - Mac OS 9.1.x and 9.2.x: Click File, and then click Print. Click the Color tab.
  - Mac OS X: Click File, and then click Print. Open the Paper Type/Quality panel and click the Color Option tab.
- Adjust the color tone sliders: If the colors are too yellow, move the color tone slider towards Cooler. If the colors are too blue, move the color tone slider towards Warmer.
- Reprint the photograph.

## Resolving borderless printing problems

### Check the print settings

Open the printer driver (see "Printing a document").

From the Paper/Quality tab (Windows) or the Paper Type/Quality panel (Macintosh), check the following settings:

- Verify that the paper size specified in the driver matches the size of the paper loaded in the input tray.
- Select the appropriate paper type.

### Streaks appear in a light portion of a printout

If streaks appear in a light portion approximately 2.5 inches from one of the long edges of a photograph, try the following:

- Install a photo print cartridge (see "Installing or replacing the print cartridges").
- Clean the print cartridges (see "Cleaning the print cartridges").

### Image is printed at an angle

If paper is twisting as it feeds or margins appear crooked, make sure the paper width guide and tray extension fit against the edges of the paper.

### Printing with a single print cartridge

To do borderless printing with a single print cartridge, the color print cartridge must be installed. See "Printing with a single print cartridge".

## Resolving banner printing problems

### Make sure the paper is loaded correctly

- Unfold and refold the paper when several sheets feed into the printer at once.
- Make sure the unattached edge of the banner paper stack is on top and facing the printer.
- Verify that the correct paper for banner printing is used.

### Check the print settings

Open the printer driver (see "Printing a document").

From the Paper/Quality tab (Windows) or the Paper Type/Quality panel (Macintosh), check the following settings:

- Make sure hp banner paper is selected as the paper type.
- Make sure the appropriate banner size is selected.

### Check the software

- Make sure the software application prints banners. Not all software applications print banners.
- If gaps appear at the ends of the sheets, make sure the printer software is operating correctly.

## Resolving media handling problems

### Media feed problems

#### **Print media is jammed in the printer**

See “Clearing jams” for instructions on clearing a jam.

#### **Make sure the media is loaded correctly**

- See “Loading media in the input tray” or “Printing with the front or rear manual feed slot”.
- Make sure there is sufficient media in the input tray. When printing one or just a few sheets, consider using the front or rear manual feed slot.

#### **The printer feeds multiple sheets**

Be sure to load only one type of paper at a time.

#### **Check the paper type**

Some paper types are not suitable for use with the printer. See “Selecting print media” for tips on using print media.

#### **Media is skewed**

- If media is twisting as it feeds or margins appear crooked, make sure the media is loaded correctly. See “Loading media in the input tray” or “Printing with the front or rear manual feed slot”.
- Make sure there is sufficient paper in the input tray. If you are printing one or just a few sheets, you can also use the front or rear manual feed slot.
- Make sure the paper width guide and tray extension fit against the edges of the media.
- Make sure the rear access panel or auto-duplex unit is correctly installed and locked into place.
- Do not load more than 150 sheets of paper, or 15 envelopes, or a stack of media that exceeds the height of the paper width guide into the input tray. Do not load more than 10 sheets of paper into the front manual feed slot. Load only one sheet of paper at a time into the rear manual feed slot.

#### **Media is not picked up from the input tray**

- Make sure the media is loaded correctly. See “Loading media in the input tray”.
- Make sure the paper type you are using is suitable for use with the printer. See “Selecting print media” for tips on using print media.
- Make sure the paper width guide is not pressed too tightly against the media.
- Make sure the media stack does not exceed the height of the paper width guide.
- Make sure the media is not curled. Uncurl the media by gently bending it in the opposite direction of the curl. If media has been exposed to a humid environment, it might curl. Store media in a cool, dry place.

#### **If none of the above solutions work**

Print a diagnostic page (see “Printing a diagnostic page”).

## Media output problem

### Pages are falling off the output tray

Make sure the output tray extension is fully extended.

## Resolving automatic two-sided printing problems

### Note

*You can print on both sides manually for unsupported media types. See "Performing manual duplexing".*

### Paper jam occurs inside the auto-duplex unit

See "Clearing jams" for instructions.

### Option for printing on both sides cannot be selected

- Make sure the auto-duplex unit is attached to the printer.
- Make sure the auto-duplex unit is enabled in the printer driver. See "Performing auto-duplexing".
- Make sure the media type and size selected in the printer driver are supported by the auto-duplex unit. See "Printer specifications".

### Only one side of the page prints when the print on both sides option is selected

- Make sure the correct print options are set in both the printer driver and the application you are using. See "Performing auto-duplexing".
- Make sure the photo paper is not curled. Photo paper should be flat before printing. See guidelines under "Printing digital photographs".
- Make sure the media type and size selected in the printer driver are supported by the auto-duplex unit. See "Printer specifications".

### Binding margin is in the wrong place

Open the printer driver (see "Printing a document").

Do one of the following:

- Windows: Select the Finishing tab.
- Mac OS 9.1.x and 9.2.x: Open the Layout panel.
- Mac OS X: Open the Two Sided Printing Panel

Do one of the following:

- Windows: Select Flip Pages Up for binding along the top (tablet binding). Choose a booklet layout from the Booklet Layout is drop-down list for binding along the side (book binding).
- Macintosh: Select the binding orientation you desire (select the appropriate icon).

See "Printing on both sides (duplexing)" for more information.

## Paper size changes when the print on both sides option is selected

Make sure the paper size is supported by the auto-duplex unit, and make sure the media type and size selected in the printer driver are supported by the auto-duplex unit. See "Printer specifications".

## Resolving network printing problems

If you are using an HP Jetdirect external print server, print its configuration page to check the operation of the print server and to verify network configuration settings. Please refer to the Jetdirect Administrator's Guide that comes with the print server.

If you are having difficulties printing to a shared printer, try the following suggestions.

- If the Resume button is blinking, press it and wait a few seconds for printing to start.
- If printing does not resume, open the printer's top cover and check for a paper jam. See "Clearing jams".
- Make sure the printer is turned on and the top cover is closed.
- Make sure the rear access panel or auto-duplex unit is correctly installed and locked into place.
- Make sure the print cartridges are properly installed (see "Installing or replacing the print cartridges") and that media is properly loaded in the printer (see "Loading media in the input tray").
- Make sure the network cable and the printer cable connections are firmly in place.
- Try printing a demo page to see if the printer is set up correctly. Make sure the printer is turned on, press and hold the Power button, press the Resume button once, and then release the Power button. The printer prints a demo page.

**Note** *Sharing the printer in mixed Macintosh and PC networking environments is not recommended.*

After checking the printer, try to print a document from another client over the network. If the document was sent from another client and printed successfully, your system settings are probably not configured properly to use this printer. Check with your system administrator to solve the problem.

If the document did not print successfully from another client, print a demo page as follows.

Connect the printer to a PC that is running Windows.

Install the printer software if it is not already installed on this PC.

Open the Toolbox (see "Using the Toolbox").

From the Printer Services tab, click Print a Demo Page.

If the demo page printed, your printer is working, but your network settings may be configured incorrectly. Check with your system administrator for more information.

If the demo page did not print, this problem is likely caused by a failure in the printer or computer system. Call the HP Customer Care Center for help (see "Customer support"). Before calling, record your serial number and printer model, along with any information about your computer system that is available.

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## Firmware controls



### Cancel, Resume, Power buttons

The parts of the control panel are listed below:

Button/light	Function
Cancel button	Cancels the print job
Resume button	Resumes the print job
Resume light	Indicates that the printer needs user intervention
Power button	Turns the printer on and off
Power light	Indicates the power status of the printer
Left and right print cartridge lights	Indicate the status of the print cartridges

**Note:** The lights on the printer indicate various problems using light and blink sequences. See the following service and support topics: Troubleshooting using LEDsTrapped error codes

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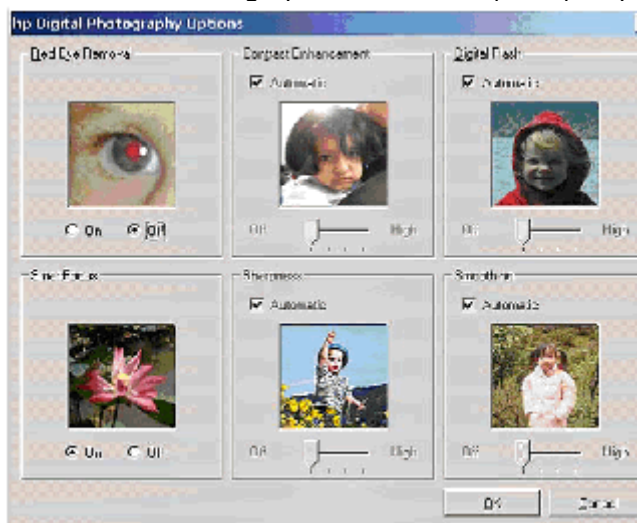
## Key driver improvements

The printer includes the following driver improvements:

- Print all text as black
- 4800 x 1200 optimized dpi
- Center On Page
- Minimize margins
- Borderless printing
- HP Digital photography

### HP Digital Photography

The HP Digital Photography button is only accessible in 4800x1200 Optimized dpi, Best and Normal mode. The feature is grayed-out if another print quality is selected.



**HP Digital Photography**

### Default settings

**In 4800x1200 optimize dpi & Best mode:** All options are either ON or AUTO.

**In Normal mode:** All options are OFF. User can turn on and change the slider controls.

## Features Descriptions

### Red Eye Removal

The Automatic Red-Eye Removal algorithm provides a no-user intervention solution to red-eye in flash photography.



**Red Eye Removal**

### Contrast Enhancement (ACE)

ACE increases image contrast to achieve a more visually pleasing result. This filter is useful with flat images where most of the scene content is compressed into a small dynamic range of pixel values. This could result naturally from haze in the view or it could result from camera or scanner limitations.



**Contrast Enhancement (ACE)**

### Digital Flash (LACE)

LACE adjusts lighting levels to reveal areas in shadows. Because many scenes will have shadows in them that occur due to natural or artificial lighting conditions, this filter "recognizes" dark regions in a scene and brings out detail without degrading other features in the image. This resultant in an improvement to images that might not other wise be useable.

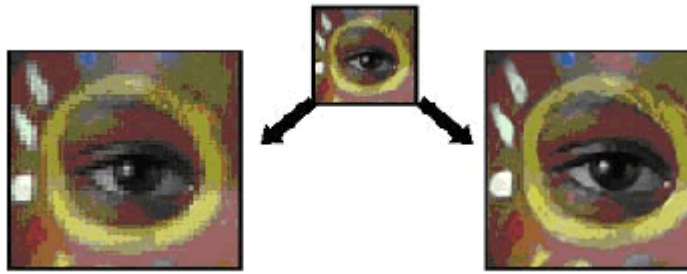


**Digital Flash (LACE)**

### SmartFocus (ResSyn)

ResSyn performs a smart upscaling of lower resolution images. The advent of digital cameras and the internet has led to downloading and printing images that may have been compressed due to size restrictions. When these images are printed, they may exhibit

pixelation artifacts. This filter "upscales" the image to the printer resolution without accentuating these artifacts.



**SmartFocus (ResSyn)**

### Sharpness (FRE)

FRE algorithm extracts edge detail in an image. Most images benefit from a little extra sharpness. This filter detects regions that contain significant variation in pixel value along a number of different vectors (denoting edges) and then applies a filter to subtly bring out detail.



**Sharpness (FRE)**

### Smoothing (FRE)

The smoothing algorithms smooth out noise in an image. Just as most images benefit from a little extra sharpness, many images will improve if system (camera, scanner) noise artifacts are mitigated. This filter detects regions that contain abrupt changes in pixel value with respect to surrounding pixels (denoting noise) and then applies a filter to smooth the output.



**Smoothing (FRE)**

---

## Driver features

Driver features include:

- basic printing features
- small business features

### Smart features

The printer driver offers the following smart features:

- Symmetrical Margins
- Emulate LaserJet Margins
- Print in Sepia
- Print in Grayscale
- Booklet Printing
- Optimize for Photocopy or Fax
- Media Width Sensing (4"x 6" to 13"x19")
- Resizing
- Tiling
- Banner
- Watermark
- Mirror Image
- Pages per sheet
- Print on both sides (automatic option)
- Adjust dry time
- Support for digital photography - HP Digital Photography feature enhances the look of printed pictures. Adjustments can be made for contrast enhancement, digital flash, SmartFocus, sharpness, and smoothing settings to optimize the printing needs. This feature is accessible in Best and Normal modes.
- Enhanced resolution 4800 x 1200 - 4800 x 1200 Optimized dpi\* can be selected for optimum print quality for photographs. In this mode, printing takes longer and more memory is required on the notebook or desktop.

Myprintmileage - myPrintMileage keeps track of the printer usage information. It helps to plan the purchase of consumables. It consists of two parts:

- myPrintMileage website
- myPrintMileage Agent, which is a utility installed with the Toolbox on the computer.

myPrintMileage is activated during installation of the printer driver, or through the Toolbox via a link to the myPrintMileage website. For a customized analysis of the printer's usage, connect to the myPrintMileage website



The key driver features in the printer for Win 98, Win ME, Win XP, Win 2K and Win NT are:

<b>Features</b>	<b>Win 98</b>	<b>Win ME</b>	<b>Win NT</b>	<b>Win 2K</b>	<b>Win XP</b>
Mirror Image	Driver	Driver	Driver	Driver	Driver
Rotate 180 Degrees	Driver	Driver	Driver	Driver	Driver
Use Different First Page	Driver	Driver	Driver	Driver	Driver
ZoomSmart	Driver	Driver	Driver	Driver	Driver
4800 x 1200 Optimized dpi	Driver	Driver	Driver	Driver	Driver
Emulate LaserJet Margins	Driver	Driver	Driver	Driver	Driver
Symmetrical Margins	Driver	Driver	Driver	Driver	Driver
Two-Sided Printing	Driver	Driver	Driver	Driver	Driver
Handout	Driver	Driver	Driver	Driver	Driver
Booklet	Driver	Driver	Driver	Driver	Driver
Tiling	Driver	Driver	Driver	Driver	Driver
Watermark	Driver	Driver	Driver	Driver	Driver
Print from Last Page	Driver	Driver	Driver	Driver	Driver
Preview	Driver	Driver	Driver	Driver	Driver
Print in Sepia	Driver	Driver	Driver	Driver	Driver
Print in Grayscale	Driver	Driver	Driver	Driver	Driver
Digital Photography	Driver	Driver	Driver	Driver	Driver
Optimize for Photocopy or Fax	Driver	Driver	Driver	Driver	Driver
Color Sliders	Driver	Driver	Driver	Driver	Driver
Background Printing	N.A.	N.A.	N.A.	N.A.	N.A.
Device Settings	N.A.	N.A.	Driver	Driver	Driver
Text: 1200dpi	Driver	Driver	Driver	Driver	Driver
Ink Level Indicator	Toolbox	Toolbox	Toolbox	Toolbox	Toolbox
Battery Gauge	N.A.	N.A.	N.A.	N.A.	N.A.
HP Instant Support	Toolbox	Toolbox	Toolbox	Toolbox	Toolbox
MyPrintMileage	Toolbox	Toolbox	Toolbox	Toolbox	Toolbox
Pen Alignment	Driver & Toolbox	Driver & Toolbox	Driver & Toolbox	Driver & Toolbox	Driver & Toolbox
Pen Cleaning	Driver & Toolbox	Driver & Toolbox	Driver & Toolbox	Driver & Toolbox	Driver & Toolbox
Color Calibration	Driver & Toolbox	Driver & Toolbox	Driver & Toolbox	Driver & Toolbox	Driver & Toolbox
Web Register	End of Setup	End of Setup	End of Setup	End of Setup	End of Setup

#### **Key driver features**

## Operating systems compatibility:

The printer is compatible the following operating systems:

- MS Win 98/ME
- MS WinNT 4.0
- MS Win2000/XP
- MacOS 9.x
- MacOSX
- MS-DOS

## Operating system & driver matrix

In the following table, i = included with the product CD, d = downloadable from the web, o = other

component	DOS	98SE	NT4.0	2K	XP64	OS2	OS2	MAC	MAC	Linux
-	-	Me	-	XP32	-	-	WIN	9	X	-
DRIVERS	-	-	-	-	-	-	-	-	-	-
PCL3 Oceania Driver	-	i	i	i	-	-	-	-	-	-
PCL3 Brangus	-	-	-	d	d	-	-	-	-	-
OS/2 IBM Omnidriver	-	-	-	-	-	d	-	-	-	-
Mac Kiwi	-	-	-	-	-	-	-	i	-	-
Mac Pelican	-	-	-	-	-	-	-	-	i	-
Linux APDK	-	-	-	-	-	-	-	-	-	d

**Operating system & driver matrix**

---

## Installer

### Goldstone Benefits

The installer for the printer is based on version 1.2 of the goldstone installer. Goldstone Common Installer is based on Microsoft ® Installer (MSI) technology. Notable features of the installer are:

- It's common. One solution fits all.
- Customer experience is consistent across hp product lines.
- Based on industry standard installer technology.
- Same customer experience when installing MS applications.
- Native support on newer Windows OS's (e.g. Win2k, XP).
- Independent of proprietary programs.
- Do not need to wait for InstallShield to support new OS's.
- Complete uninstallation using Add/Remove Program.
- Management of shared resources.
- Upgrade & patching capability.
- Compliance with accessibility guidelines laid down by US Rehabilitation Act Section 508.

### Goldstone Limitations

Notable limitations of Goldstone are:

- Requires reboot after MSI engine update.
- Goldstone requires at least v2.0 of the MSI engine to be preinstalled.
- Requires physical printer connection even for direct LPT installation.
- Same customer experience when installing MS applications
- All direct connections go through plug-and-play process.
- Requires Service Pack 6 on Windows NT4.
- Partial Novell support.
- Not able to create Novel queue.
- Does not support creation of driver floppy disk set.

### Installer features

Notable features of the installer are:

- language selection
- automatic printer detect
- express install
- connection type (supports network connection through JetDirect print server and print job management)
- port selection
- typical installation components with defaults varying by OS
- user customizable component selection
- printer sharing setup (Windows NT only)
- myPrintMileage installation disclaimer/educational dialogs
- Windows installer upgrade to 2.0
- Uninstall/Modify mode

<b>component</b>	<b>DOS</b>	<b>98SE</b>	<b>NT4.0</b>	<b>2K</b>	<b>XP64</b>	<b>OS2</b>	<b>MAC</b>	<b>MAC</b>	<b>Linux</b>
-	-	-	-	-	-	-	-	-	-
INSTALLERS	-	X	X	X	-	-	-	-	-
Goldstone Installer	-	X	X	X	-	-	-	-	-
Customization Utility	-	X	X	X	X	-	-	-	-
INF File	-	X	-	X	-	-	-	-	-
Windows CD Browser	-	-	-	-	-	-	-	-	-
Mac Installer	-	-	-	-	-	-	X	X	-
Mac CD Browser	-	-	-	-	-	-	X	X	-

**Operating system & installer matrix**

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## HP DeskJet configuration (hacker's) menu

### HP DeskJet configuration menu introduction

The HP DeskJet configuration (Hacker's) menu is a set of switches that provide workarounds for our customers. It is an undocumented feature that the Customer Care Center (CCC) uses to customize configuration settings for customers who call in for support. The HP DeskJet configuration menu modifies keys in the Windows Registry.

### Location

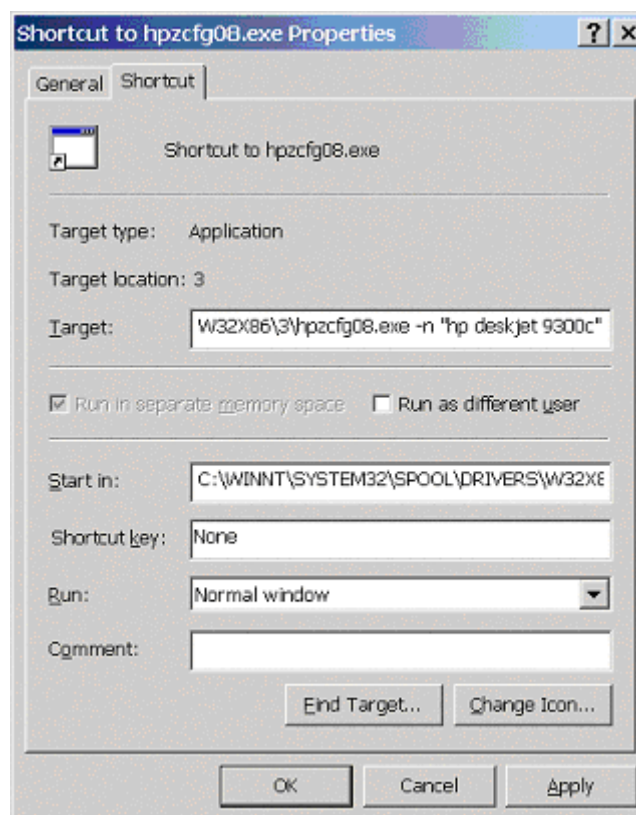
The HP DeskJet configuration Menu executable file (hpfcfg0.exe) is located in the following directories under Windows 9x and Windows NT 4.0.

- Windows 9x: C:\Windows\system
- Windows NT 4.0: C:\Winnt\system32\spool\drivers\w32x86\2
- Windows 2K/XP: C:\Winnt\system32\spool\drivers\w32x86\3

### Access

Access the HP DeskJet configuration Menu via Desktop shortcut :

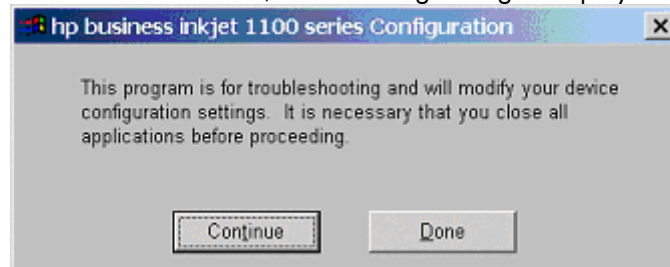
1. Access the file location as described in Location, above.
2. Create a shortcut to the file and drag it to the desktop.
3. Right click on the shortcut icon and select Properties.
4. Select the Shortcut tab on the HP DeskJet configuration Properties dialog.



**Shortcut to hpzcfg08.exe**

5. In the Target field, append the following to the shortcut path:
  - [space]-n "Hp DeskJet 9650c "
  - to configure hp deskjet 9650c and
  - [space]-n "hp business inkjet 1100 series"
6. Click OK to close the Properties dialog.
7. Open the shortcut.

When the executable is launched, the following dialog is displayed:

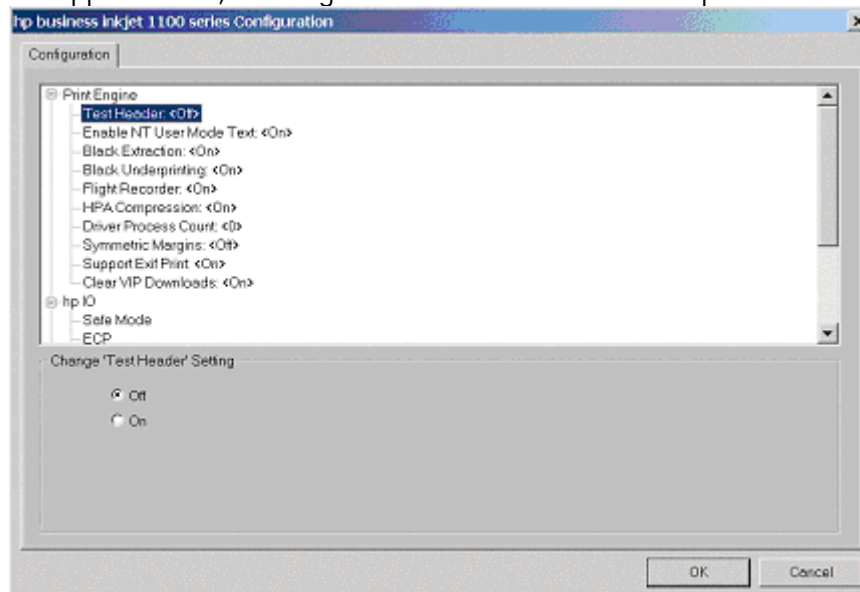


### Printer Configuration Dialog

Clicking Continue closes the dialog and opens the HP DeskJet configuration Menu. Clicking Exit closes the dialog without opening the HP DeskJet configuration Menu.

## HP DeskJet configuration menu and its functions

When a user selects one of the options in the options list, radio buttons appropriate for that option appear below, allowing a value to be selected for the option.



### Hackers Menu options

## HP DeskJet configuration menu options

The options on the HP DeskJet configuration menu have the following functions and default settings:

Feature Name	Function	Comments	Default Setting
Test Header	Print test header with page information at top of every page.	Friendly-name specific.	OFF
Enable NT User Mode Text	<ul style="list-style-type: none"><li>• ON - Driver processes text in user mode, which provides for either 300x300 dpi or 600x600 dpi , as required.</li><li>• OFF - Driver processes text in kernel mode at 300x300 dpi. Recommended when documents show garbled text with graphics that print correctly.</li></ul>	Friendly-name specific. Win NT 4.0 and Win 2000 only. Grayed for Win 9x.	ON
Black Extraction	Enable/disable black extraction filter (extracts black from color channel and moves it to black channel.)	Friendly-name specific.	ON
Black Underprinting	Enable/disable black under-printing (K fortification) algorithm (under-prints black data with cyan & magenta).	Friendly-name specific.	ON

Flight Recorder	Enable/disable flight recorder during printing.	Friendly-name specific. Flight recorder has band filter controlled via DAT file that captures page-level information and band filter in framework that captures job-level information. Key controls behavior of both. If set to Enabled (1), job level information is captured and written to a log file regardless of state of band filter.	OFF
HPA Compression	Enable/disable use of HPA Compression filter on DIBs.	Friendly-name specific. Checked by DIB-handling code. Specified in DAT file printer section. If key not present, default value of False used.	OFF
Driver Process Count	Limits number of concurrent network print jobs. Range = 0 – 64 (0 = infinity).	Friendly-name specific.	0
Symmetric Margins	Make trailing margin equal to leading margin. Formerly, Adjust Print Region.	Friendly-name specific.	OFF

#### Print engine options

Feature Name	Function	Comments	Default Setting
Safe Mode	Disable Safe Mode Run MLC mode.	Printer-model-name specific.	GRAYOUT
Partial Safe Mode	Run enhanced (ECP) mode.	Printer-model-name specific.	GRAYOUT
Ultra Safe Mode	Run only base mode (compatibility / bulk)	Printer-model-name specific.	GRAYOUT

#### HP I/O options



<b>Feature Name</b>	<b>Function</b>	<b>Comments</b>	<b>Default Setting</b>
Hardware ECP	Use hardware ECP.	Printer-model-name specific. PC BIOS and hardware must be configured to use hardware ECP.	GRAYOUT
Software ECP	Use software ECP.	Printer-model-name specific.	GRAYOUT
Remove hp IO	Remove HP IO	Printer-model-name specific.	GRAYOUT

#### **ECP**

<b>Feature Name</b>	<b>Function</b>	<b>Comments</b>	<b>Default Setting</b>
HP Preview	Disable/enable driver's print previewer.	Initially, the default OFF setting does not affect HP Preview functionality in the PPUI for setup.exe installs. Add Printer installs must turn HP Preview on in the HP DeskJet configuration Menu to use the function.	OFF

#### **Product Components Options**

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## Known issues

### Installer issues

These are some known issues with the Goldstone Installer:

- Goldstone Installer requires at least Service Pack 6 to be pre-installed on Windows NT4 system. This is needed because the installer uses the Windows Installer 2.0 (MSI) engine.
- May not print successfully after MSI engine update if Windows is not restarted. Need to restart Windows (as prompted) to resume printing.
- If MSI is updated during installation and user chooses to restart system later, some applications like Microsoft Office (that use MSI service) may fail to function properly until the next reboot. The user should reboot windows when recommended.
- If sharing the installer to Win9x/Me clients on a server, user must ensure that the share folder name does not exceed 12 characters. Otherwise, the Windows Installer will fail to execute.
- Goldstone requires at least Internet Explorer 4.0 to run the Peer-to-Peer or Server Setup.
- Running two instances of Windows Installer simultaneously will result in an execution error. If the user accidentally launches the setup twice, ensure both instances are closed before launching a new setup session.
- For hardware first installation on Window98/Me/2k/XP, specify the path to the root of the Starter CD when prompted for driver files by Add/Found New Hardware Wizard. On Windows 2000, for example, the Hardware Wizard may pick up the wrong driver file if it performs an automatic search on all removable media such as a CD-ROM drive.

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#### Note

*Do not turn off printer or unplug printer cable when printer setup program is running during hardware-first installation. If you have connected the parallel or USB cable to your printer and turned on the printer, do not turn off the printer or unplug the cable from the printer when the printer setup program is running. If you do so, the setup program will not go to completion.*

### Unable to create printer using setup program after Plug-and-Play installation on Windows systems

The printer setup program may fail to detect the printer if it has already been installed using Plug-and-Play without going through the setup program. The setup program will not go to completion. To resolve this, select the Cancel button to exit from the setup program, then run the setup program again and select an unused port.

### No printer icon created after USB installation

If you have connected the printer to your computer via a USB cable, ensure that the cable is properly connected and the printer is turned on. Restart your system if necessary. If the system still cannot detect the printer, run the Scrubber utility to perform a clean printer driver uninstallation (located in the Utils\Scrubber folder on the Starter CD). Restart your system, and re-install the printer driver.

## Unable to continue printer software installation without physically connecting printer

If you wish to install the printer by going through a direct connection (using a parallel or USB cable), you must physically connect the printer to the computer when prompted by the setup program. If you do not connect the printer, the setup program will not go to completion.

This problem does not apply to Windows NT 4.0. If you wish to install the printer software without connecting the printer, select any port (such as a COM port) from the Other Port drop-down list. After installation, associate the printer to an LPT or a USB port in the printer properties dialog box.

### Note

*Do not try to delete USB port created for printer on Windows 98. You will get an illegal operation error message if you try to delete the USB port created for a printer (from the Ports tab in the Printer Properties dialog box).*

## Unable to print on Windows 2000 and XP clients after installing (kernel mode) driver from Windows NT 4.0.

Users will be prompted for the printer driver when they try to print after installing the (kernel mode) driver from Windows NT 4.0 by doing a point-and-print.

This is because Windows 2000 and Windows XP cannot print using the Windows NT 4.0 kernel mode driver. To resolve this, administrators need to install the user mode driver for Windows 2000 and Windows XP on the Windows NT 4.0 server.

To install Windows 2000 and Windows XP user mode driver on Windows NT 4.0 server:

1. In the driver properties dialog box on the server, click the New Driver button on the General tab.
2. When prompted for files, locate the Windows 2000 and Windows XP folder on the printer Starter CD and select the user mode driver.

## Windows XP does not trigger Plug and Play when you restart system after uninstallation

If you uninstall the printer driver with the printer connected to your system and the system does not detect the printer after restart, try to restart again or run the Device Manager to search for the printer.

## Unable to install printer software from remote Windows NT. To install the printer software

To install the printer software:

1. Copy the printer files to your system.
2. Open the INF file with a text editor.
3. Locate any lines that contain 'LanguageMonitor' and delete them.
4. Run the installation program again.

## Windows NT Server 4.0, Terminal Server Edition.

Use the Add/Remove programs method to install the printer driver. To do so:

1. Double-click Add/Remove Programs in the Control Panel.
2. Click Install, and then click Next.
3. Click Browse and select setup.exe.
4. Select All users begin with common application settings and click Next. This will run the printer installer.
5. Follow the instructions on screen to complete the driver installation.
6. Return to the Add/Remove Programs dialog and click Next, followed by Finish to complete installation.

## Unable to do Plug-and-Play installation from Windows to Novell

The printer setup program will fail to detect the printer if you try to do a Plug-and-Play installation to a Novell server through an LPT or a USB port. The setup program will not go to completion.

To resolve this, select any port (such as a COM port) from the Other Port drop-down list. After installation, associate the printer to an LPT or a USB port in the printer properties dialog box.

## Unable to install printer driver using Novell NDPS printer manager on some Windows systems

If you have installed Novell client service pack 3.32sp1 on Windows 9x or 4.83sp1 on Windows 2000 or NT, an error message will appear when you try to install the printer driver using Novell NDPS printer manager. To resolve this, install the driver using the Add Printer method.

## Novell point-and-print

Novell point-and-print does not work with Windows 9x and Windows 2000. Use the Add Printer Wizard to install the printer driver:

1. Go to the Printers folder.
2. Double-click the Add Printer icon.
3. In the Add Printer dialog box, select the Network Print Server option.
4. Browse to the appropriate NDS or bindery queue.

For Windows 9x, you can also use the following alternative:

1. Use the HP File Expansion utility on the Starter CD's \Utils\Expand folder to uncompress the Windows 9x driver to a temporary location on your hard disk.
2. Use the driver in this temporary location to set up Novell point-and-print

## Uploading printer software to a Novell server

Before you upload the printer software from the Starter CD to your Novell server, you need to copy the files to a temporary directory and remove the read-only attributes.

## Unable to install printer software on Windows 2003 server

To install the printer driver, use the Add Printer Wizard.

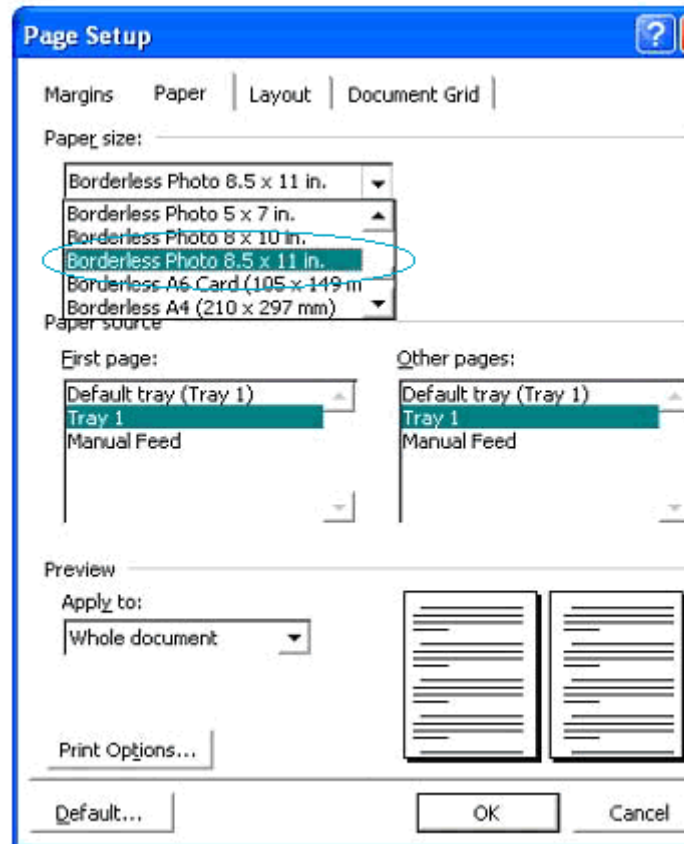
## Additional software issues and workarounds

The following describes additional known issues with the software and workarounds if available.

### Obtaining Toolbox status for locally shared and point-and-print clients

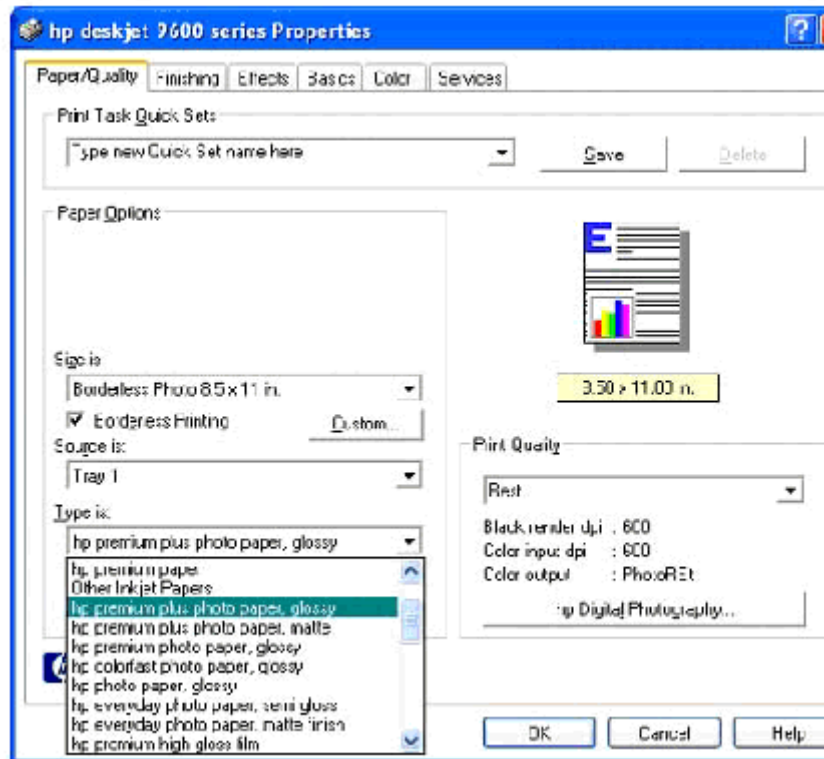
To obtain the Toolbox status in these environments, the Toolbox at the clients' end must be able to communicate to the server. Hence, Toolbox must also be running on the server. You can include Toolbox in the Startup folder so that it will automatically launch whenever you start the system.

### Printing borderless



#### **Choose a borderless paper size**

Choose a Borderless paper size in the application (Page Setup).



### Ensure paper type is correct

In the above screen, when Borderless 8.5x11 was selected in the application page setup, the Paper type option in the printer driver DID NOT change to hp premium plus photo paper glossy (which is the default paper type for borderless paper). Instead, it remained as Plain paper, and this will cause the print out to be completely off color.

If you select borderless paper sizes within applications, the printer will print borderless on any paper type selected in the printer driver. To avoid any print quality issues, make sure you select paper types that support borderless printing, such as photo and inkjet papers, and load the correct paper into the printer.

### Using manual feed with 11"x17", A3 or larger-sized paper

Make sure you load the correct-sized paper when printing.

If you do not load the correct paper, you may encounter ink smearing on the reverse side of the paper in subsequent prints. This is because the media sensor is not activated and loading smaller-sized paper will result in ink deposited on the cockle rips.

To resolve this, open the printer's top cover and use a dry cloth to clean the cockle rips (the little plastic pieces above the stretch of black sponge) in the printer.

### Garbage printing encountered when doing manual duplex printing

To avoid this problem, make sure you promptly reload the paper into the printer when prompted by the printer driver, and click the Continue button in the driver.

### Unable to print to Novell server from Windows 9x client

Printing will fail if you log onto a Novell server from a Windows 9x client system and try to print to the printer that is connected to the server.

To be able to print to the server from the client, do one of the following:

1. Install the printer driver on the Windows 9x client using the Add Printer Wizard.
2. Do a point-and-print to the Novell server.
3. Manually capture a printer port on the Windows 9x client

### Missing lines in printouts when using FastDraft

You may get missing lines in your printouts when you reduce the percentage setting of the document and print using FastDraft.

To resolve this, select the normal or best print quality.

### Problem printing with high-resolution and large scaling settings

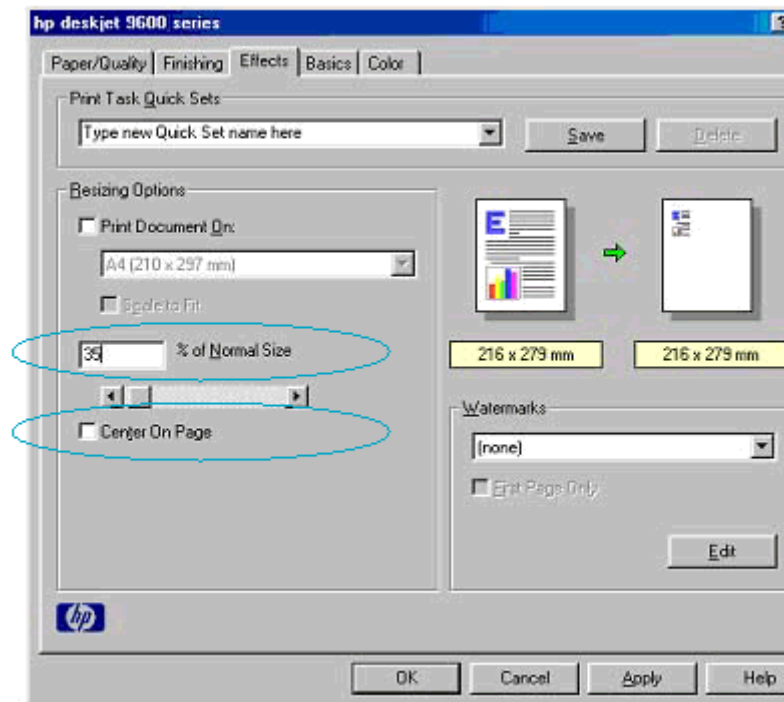
You may encounter problems such as insufficient disk space or get a blank printout when you do high-resolution printing (using settings such as 4800x1200 optimized dpi or 1200dpi) and scale your printout to greater than 248% (using HP ZoomSmart). Select the best mode (which uses PhotoREt technology) instead to allow the driver to automatically adjust to the best combination of print speed and quality.

### Acrobat 6.0 and Acrobat 5.05

Acrobat 6.0 (except on Windows 9x) and Acrobat 5.05 do not support printing of 11"x17", A3 or larger-sized paper using the Maximum dpi setting.

To print on these paper sizes, select Best as the print quality in the printer driver.

### FastDraft + % of normal size cause missing/truncation in printout



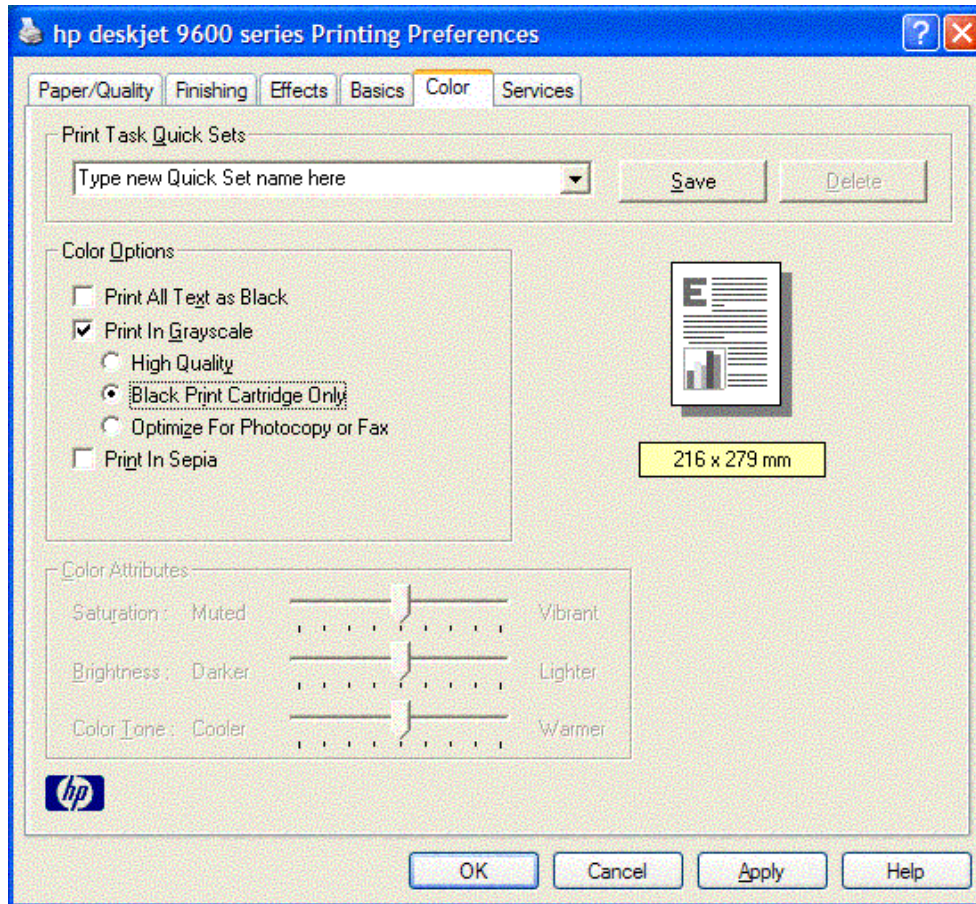
#### Ensure paper type is correct

The "% of Normal Size" must be 25-60 percent to see this defect. The defect also occurs when "Center on Page" is selected when the percentage ranges are 25-46 percent (FastDraft) and 25-48 percent (Fast Normal).



## Smearing on coated media, Print In Grayscale - Black Print Cartridge Only

On coated media, the tri-color pen needs to be installed in order to shorten dry time. Otherwise, printing pigment black on coated media will cause smearing. Let printout dry for at least 15 to 20 minutes.



**Color tab**

## Spooler stop in Windows

Under stress test condition when multiple print jobs are processed continuously, the Print spooler will stop. The printer is still visible in the printer folder but the user is not able to view the printer properties. Restart the spooler (run "net start spooler" in command prompt for Win 2K/XP/NT) or reboot the PC to resume printing. No jobs will be lost.

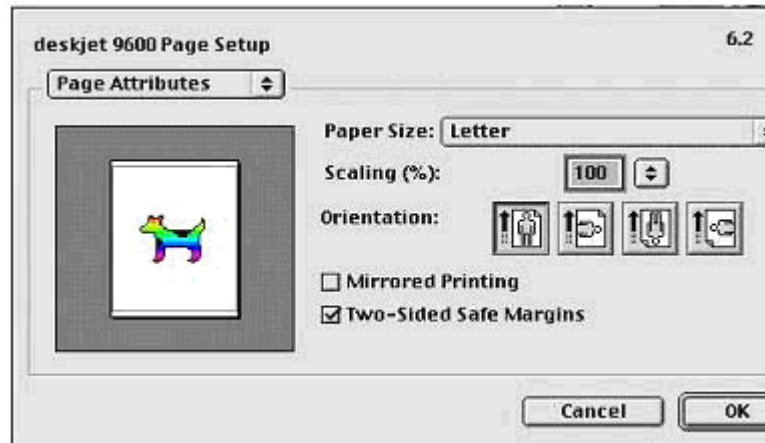
## Toolbox memory leak in Windows (All OS's)

The leakage is estimated to be around 72MB per day and the ever increasing size will exhaust the system virtual memory. Some systems will show low system resources message prompts. In Win9X, it may cause the OS to hang. To resolve this, close the toolbox to free up the memory. Alternately, under Toolbox-> Preferences, uncheck the "Run Toolbox when Windows starts".



## Auto Duplex printout clipped in OSX

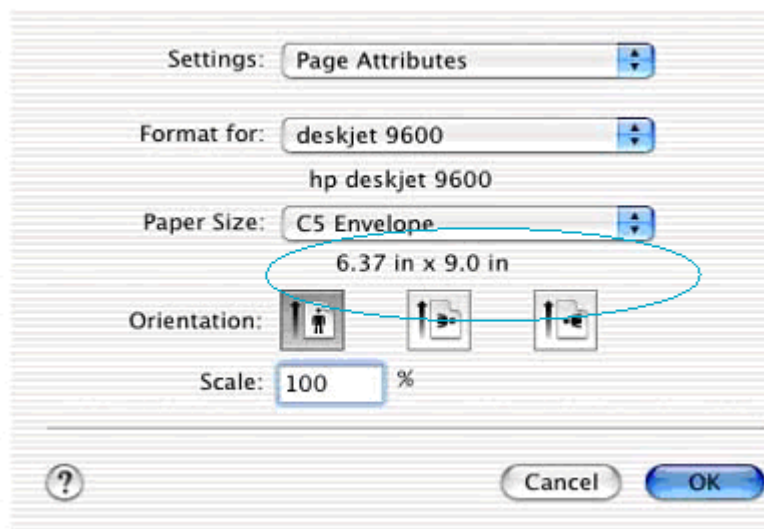
When printing auto-duplex jobs with top margins set to lesser than the bottom margin, clipping results on the top of the back page. Note that this issue is applicable to all printers and not unique to Euclid. We are request Apple to fix this in OS 10.3. For OS 9, ensure that Two-Sided Safe Margins is checked (it is by default), else, the top and bottom margins will be reversed for the back page, i.e. printouts on both sides will not align.



**Select two-sided safe margins**

## Margin display in UI erroneous for C5 envelope in OSX

Driver is sending down the right figures, but the display is still erroneous. Driver does not control the page setup dialog box, hence OS defect.



**Select two-sided safe margins**

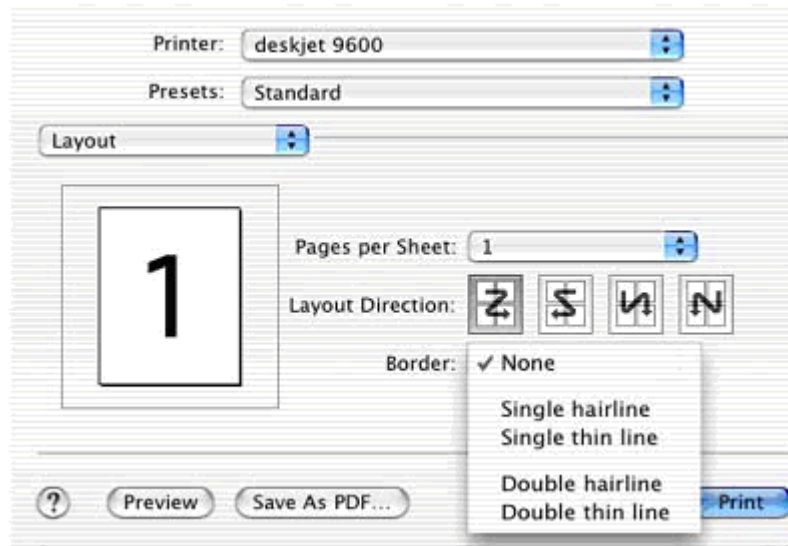
The correct dimensions should be 6.57 in. x 9.0 in., but this is not controlled by the driver.

## No alert for low ink level in OSX

Known issue in OS X where some messages that do not block printing (e.g. those that do not require user action on the printer, like closing the top lid, etc) are overwritten by the OS.

## Extra border lines in multiple page per sheet document in OSX

This problem only occurs when feeding the paper from rear. It can be seen from second page onwards.



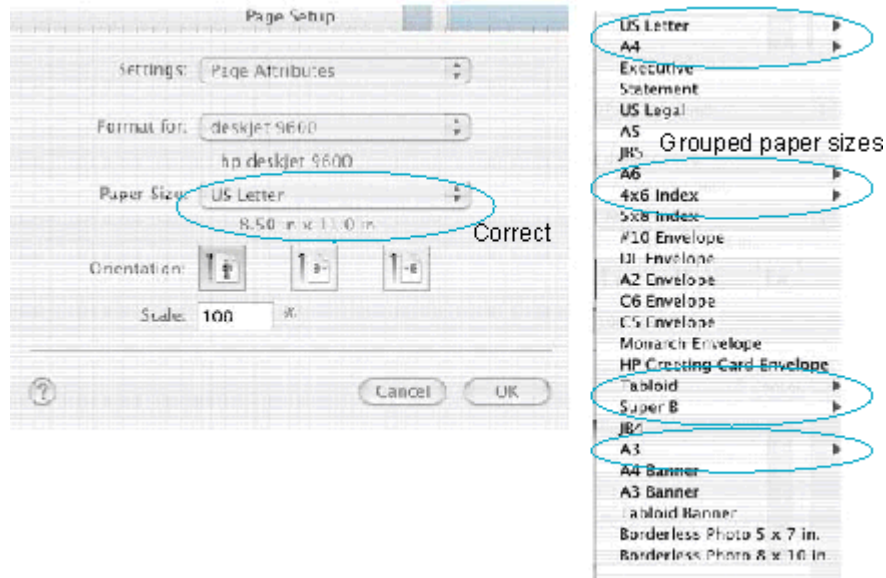
**Select None for border**

## Collate function does not work in MS PowerPoint in OSX

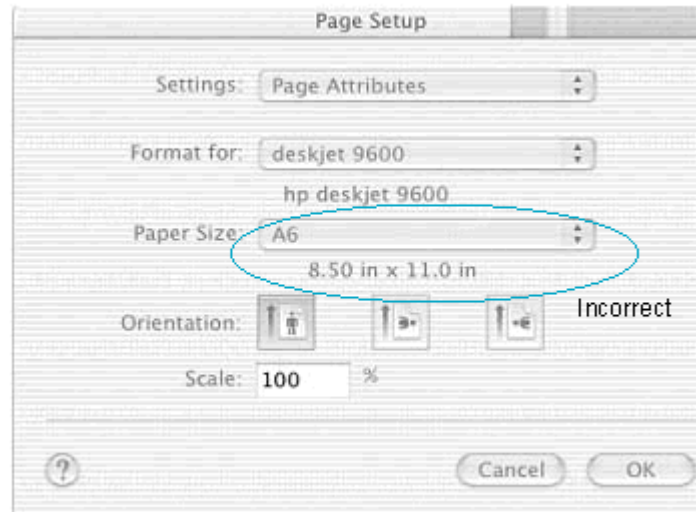
This is application related. The collate function works fine in OS10.2.6.

## Paper measurement does not refresh/change for grouped paper sizes in OSX

This is an OS related defect. Apple's dialogs are not controlled by the driver. The job ticket contains the right paper sizes.



**Paper measurement correct**



### Measurement does not refresh upon new selection

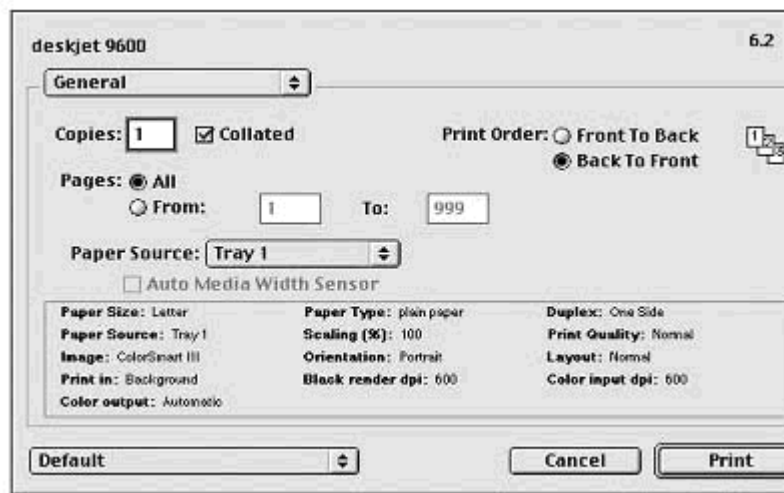
The same problem can be seen in other raster printers and PS printers.

### Corel Draw - Select page printing not functioning in OS9

Application overwrites driver settings. Tiling at borderless does not match at stitch in OS9  
Root cause to be identified.

### Incorrect Auto duplex and Back To Front printing for odd page document for OS9

E.g. A 5-page-document will print as 5+4, 3+2, blank+1.



**Back to front, double-sided printing is incorrect if odd number of pages**

## Print speeds: Differences between box specifications and documentation

Paper/Black/Color	Mode/Speed difference
Plain Paper (Letter) Black Text	Best Mode: 1.5 (box specs) vs. 2ppm (doc)
Full Page Color	Best Mode: 0.3 (box specs) vs. 0.2ppm (doc)
Photo Paper (10 by 15 cm)	Best Mode: 0.5 (box specs) vs. 0.4ppm (doc)

### Print speeds: Differences between box specifications and documentation:

Disclaimer in the documentation: \*Approximate figures. Exact speed depends on the system configuration, software program, and document complexity.

## Check patterns in colors when black ink is utilized in 4-ink printing



### Checked pattern on coated media

This may happen on Normal mode, coated media such as:

- hp premium paper Other Inkjet Papers hp everyday photo paper, semi gloss hp everyday photo paper, matte finish
- hp iron-on transfers
- hp tri-fold brochure paper, glossy
- Other Specialty Papers
- hp matte greeting cards
- hp textured greeting cards
- hp linen greeting cards
- Other Greeting Cards
- hp brochure & flyer, gloss
- hp brochure & flyer, matte finish
- Other Brochure Paper

To resolve this, print using Best or Maximum dpi mode or use 6-ink printing.

## Hardware issues and workarounds

The following table describes known hardware issues and workarounds if available.

No.	Issue	Workaround
1.	<b>Grainy streak seen near the bottom of the borderless photograph.</b> When printing a borderless color photograph, a grainy streak or lighter streak may be evident along the bottom (the last edge of the printout to leave the printer) of the photo. The grainy or lighter streak will be about 15 millimeters (.6 inches) from the last edge of the photo to leave the printer. It will be about 8 millimeters (.3 inches) wide. The graininess will be more evident on photos with blue sky or solid gray along the bottom of the printout. The bottom of the printed photograph is the last edge of the paper to leave the printer.	These workarounds can minimize the effects of this issue. -Print with six inks. The severity of this issue can be reduced by printing with the photo pen which is included in the box with the printer. -Use HP Premium Plus Photo Paper. HP Premium Plus Photo Paper shows the graininess less than other HP photo papers. -Print the image with a border. The issue will only be seen printing borderless photos. Adding a 14.3 millimeter (.56 inches) border will eliminate the problem. -Rotate the image. The issue is usually only visible on solid blue or gray areas of the photo. If the image can be rotated, the blue or gray area can be printed in a different orientation, making the issue less visible. -Store the photo media properly. Some of the HP photo papers tend to curl on the edges when there is a change in humidity. Storing the media in a sealed plastic bag will reduce the curling caused by humidity changes. Reducing the curling of the paper will reduce the severity of the printing issue.
2.	<b>Micro vertical banding seen throughout the photograph.</b> When printing a color photograph, lighter streaks may be evident along the length of the entire photo. The lighter streaks will be about 0.5 to 1 millimeters apart and spreading evenly across the photograph. The streaks may be more evident on photos with uniform background color.	These workarounds can minimize the effects of this issue. -Print with six inks. The severity of this issue can be reduced by printing with the photo pen which is included in the box with the printer. -Use HP Premium Plus Photo Paper. HP Premium Plus Photo Paper shows the graininess less than other HP photo papers.
4.	No pick on last page of: <ul style="list-style-type: none"> <li>HP Premium Plus Photo Paper, Glossy</li> <li>HP Photo Paper Glossy</li> </ul>	Make sure there is more than one page present in the input tray.

5.	Ink smear on reverse side of media (When printing borderless, carriage will overspray and ink may stain the cockle ribs. Therefore, when printing following page (especially if media is larger than previous media), ink smear may occur.	Clean the cockle ribs with a cloth.
6.	Skew on HP Premium Plus Photo Paper, Glossy Occurs only if media is stacked more than $\frac{3}{4}$ of the tray's height.	Stack this media less than $\frac{3}{4}$ of the tray's height to prevent skew.
7.	Unable to change the drytime for simplex printing. (Unable to incorporate this feature on time for product release)	No workaround. An appropriate estimated drytime is designed into the product. Individual pages of media can be removed as they are output.
8.	Possibility of paper jam when printing 4800dpi, duplex printing on plain media. (Paper can get soaked with ink, especially plain media. Feeding this paper back to the printer for duplex printing creates a high possibility of a jam.)	Avoid printing duplex, 4800dpi, on plain media.
9.	Unable to fit some of those Super B size media (13.3 inches). (This is related to the width of these media out of spec. Input tray has no tolerance for slightly wider out of spec Super B size media (13.2 inches)	Use media that is within specified allowed dimensions.

### **Known hardware issues and workarounds**

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## CREW/user-replaceable parts

The following parts are the customer replaceable parts or CREW parts that can be fixed by the Customer Care Center:

- DOOR - ACCESS SVC (C8137-67009)
- DOOR - ACCESS (BLUE ANGEL) SVC (C8137-67010) (Europe only)
- ASSY - OUTPUT TRAY SVC (C8137-67011)
- ASSY - CLEANOUT SVC (C8137-67014)
- ASSY - DUPLEXER SVC (C8137-67015)
- ASSY - PICK ROLLER SVC (C8137-67016)
- RUBBER FOOT(SQUARE) SVC (C8137-67039)
- POWER SUPPLY SVC (C8137-67043)

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## Product escalation path by region

Product escalation path offered by region:

- USA
- Canada
- Latin America
- Europe
- Asia Pacific

### USA

Support Flow: End Customer->Call Center->Response Center->Division->

Escalation Flow: End Customer->Call Center->Response Center->Division->

### Canada

Support Flow: End Customer->Call Center->Response Center->Division->

Escalation Flow: End Customer->Call Center->Response Center->Division->

### Latin America

Support Flow: End Customer->Call Center->Response Center->Division->

Escalation Flow: End Customer->Call Center->Response Center->Division->

### Europe

Support Flow: End Customer->Call Center->Response Center->Division->

Escalation Flow: End Customer->Call Center->Response Center->Division->

### Asia Pacific

Support Flow: End Customer->Call Center->Response Center->Division->

Escalation Flow: End Customer->Call Center->Response Center->Division->



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## Issue escalation path

### Issue Path

IP1	IP2	IP3	IP4
Software Applications	MS Word MS Excel MS Power Point MS Access MS Publisher AutoCAD Photoshop Freehand QuarkXpress Corel Draw Illustrator Adobe Acrobat Reader Internet Explorer Netscape Pagemaker Frame Maker Others - See detail	System error Windows General Protection Fault Color inaccuracy Unexpected output No output Truncated output Garbage printing Slow printing Incorrect Settings Printer Driver/Application	PCL3 / HPA Software PS RIP Minidriver Unidriver

#### IP1: Software Applications

IP1	IP2	IP3	IP4
Printer Drivers	Driver setup fail - Software 1st Driver setup fail - Hardware 1st Add printer install fail Uninstall fail System error Windows General Protection Fault Printing stops/No printers are installed.	USB Parallel External JetDirect Box Pass Through Device	PCL3 / HPA Software PS RIP Minidriver Unidriver
	Features (Use or Help with)	Print on Both Sides - Manual Print on Both Sides - Use Auto-duplex unit Resizing options Tiling Booklet Rotate By 180 Degrees Banner Watermark Borderless printing hp Digital Photography Others - See detail	
	Toolbox Printer Service Tab	Printer status wrong Printer status not available Bidi Conflict Broken links myPrintMileage Printer Service Not Working Others - See detail	
	Page Format / Layout	Clipping Print Area Margin Misaligned Printout off centered Missing images	Incorrect Settings Printer Driver/Application Driver or application issue

#### IP1: Printer Drivers

IP1	IP2	IP3	IP4
Hardware	Front Panel Error Message / Code	Printer hang Blinking light patterns (Hardware support product managers , please provide the top 5 error codes to be captured For printers with LEDs only, please log in the pattern of LED blinking. For printers with LEDs only, please log in the pattern of LED blinking.)	
	Mechanical Problem	Carriage Jam Service station Broken encoder strip Broken carriage latch Broken access door Unusual Noise Broken Parts / Loose Parts Cosmetic Defects	
	Paper Path	Skew No Pick Multiple Pick Paper Jam Bulldozing	Tray 1 Front Manual Feed Rear Manual Feed Auto-duplex unit
	Electrical Failure	No Power Auto Power Shutdown	Power Module Power Cord
	Print Cartridge	Unable to detect (rejection) No ink coming out Ink leaks	Cleaned contacts and re-seated Remove protective tape

#### IP1: Hardware

<b>IP1</b>	<b>IP2</b>	<b>IP3</b>	<b>IP4</b>
Customer Satisfaction	Product mis-conception / expectation	Print Speed Print Quality Noise Printable Area Unsupported Media Others - See detail	Dealer Product packaging Product web site Advertisement Others - See detail
	Service Complaint	Phone Support Complaint Repair Option Repaired/refurbished unit condition Order Status - Missed Committed Date	
	Availability Complaint	Customer Replaceable Parts Accessories Consumables	
	Setup Poster Getting Started Guide User Guide	Wrong information Missing information	
	Missing item in box Damaged item in box	Print Cartridges Print Cartridge Protector Setup poster User Guide Duplexer (DJ9670 only) PostScript RIP CD (DJ9680 only) Software CD Power Cord	

**IP1: Customer Satisfaction**

IP1	IP2	IP3	IP4
Product Info. Request	Specifications Upgrades / Accessories Memory Media Price Product Availability		
	How Do I?	Need help with hardware setup Need help with basic driver installation Need help with network installation Need help with hp photo/imaging software installation Need help with hp photo/imaging software image editor	

### IP1: Product Info Request

IP1	IP2	IP3	IP4
e-Support	Support Web Site	Driver not available Broken links Information not available Wrong information Downloading problem	

### IP1: e-Support

IP1	IP2	IP3	IP4
Print Quality	Starwheel mark Roller mark Vertical banding Micro vertical banding Horizontal banding BOF(Bottom of form banding) Ink Smearing Color mismatch/color shift White edge on borderless printing Fuzzy printing		

### IP1: Print Quality

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## Tap tests quick reference

Tap tests can be used for diagnosing a variety of problems. To initiate a tap test:

1. Verify full-sized media is loaded into the tray.
2. Press and hold the [power] button
3. While holding down the [power] button, press and release the [cancel] button once for each "ten" in the tap sequence number.
4. Continue holding the [power] button, and press and release the [resume] button once for each "one" in the tap sequence. (For example, for an 84-tap test, press and release the [cancel] button 8 times and the [resume] button 4 times.)
5. Release the [power] button.

The following table shows the most commonly used tap tests and provides a description of the contents of each.

Test Title	Tap Test	Test Description
Demo page	1-tap	Checks for basic functionality, and color and black printing.
Pen calibration	3-tap	Calibrate the pens.
Diagnostic page	4-tap	Basic printer information. Designed to assist call agents to diagnose problems.
Last-error	6-tap	Most recent error code is given using a pattern of blinking lights on the printer. There is no printout associated with this test.
Infinite HS	8-tap	Continuous H pattern in black. Press the [cancel] button on the printer to stop/interrupt this pattern.
Color HS	13-tap	Continuous H pattern in color. Press the [cancel] button on the printer to stop/interrupt this pattern.
Pick and Eject (Tray 1)	16-tap	Continuous pick and eject from tray 1. Press the [cancel] button on the printer to stop this test. This tests the paper path. The ejected media is blank.
Spit and wipe	20-tap	Pen recovery level 1. There is no printout associated with this test.
Clean pens	21-tap	Pen recovery level 2. There is no printout associated with this test.
Super clean pens	22-tap	Pen recovery level 3. There is no printout associated with this test.
Self-test	30-tap	Similar to the Diagnostic page but includes a tap test reference table.

Duplex demo	31-tap	Demo page with two-sided printing. This test is only available if the two-sided printing accessory is installed.
A-Size Skew test	36-tap	A-size media skew test.
B-Size Skew test	37-tap	B-size media skew test.
A-Size Duplex test	38-tap	A-size duplex side skew test
B-Size Duplex test	39-tap	B-size duplex side skew test
A-Size duplexer pick and eject test	40-tap	Continuous pick and duplex before ejecting. Press the [cancel] button on the printer to stop/interrupt this pattern. This tests the duplexer paper path. There is no printout associated with this test.
Dot Count test	41-tap	Prints a report of the dot count from the current set of print cartridges and from the previous set.
Nozzle pattern	84-tap	Print the pen nozzle pattern
Continuous media sense	100-tap	Tests the media sensing accuracy.
Media sense LTVG calibration	101-tap	Recalibrates the media sense.

### Tap Tests quick reference

#### Note

*Most but not all tests will work with a black only print cartridge installed. All tap Tests will work with a black and color print cartridge (4 ink) or photo and color print cartridge (6 ink) configuration. See each tap test for more specific information.*



### **hp deskjet 9600 series**

hp's high performance and versatile wide-format  
color inkjet printer for the business user

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Up to 4800 optimized-dpi color printing

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#### **prints on a wide variety of sizes & types of media**

Achieve outstanding results from 4"x6" (A6) to 13"x19" (A3+) sizes  
Prints on specialty photo paper, card stocks, transparencies and plain paper



---

**Demo page**

The demo page is printed from either the keypanel or from the toolbox software.

To print a demo page from the keypanel, use the 1-tap sequence:

1. Hold down the [power] button while pressing the [resume] button once.
2. Release the [power] button.

Pressing and holding the [resume] button accomplishes the same thing. Printing a demo page from the keypanel verifies printer and cartridge functionality but does not verify functionality of the computer to printer connection.

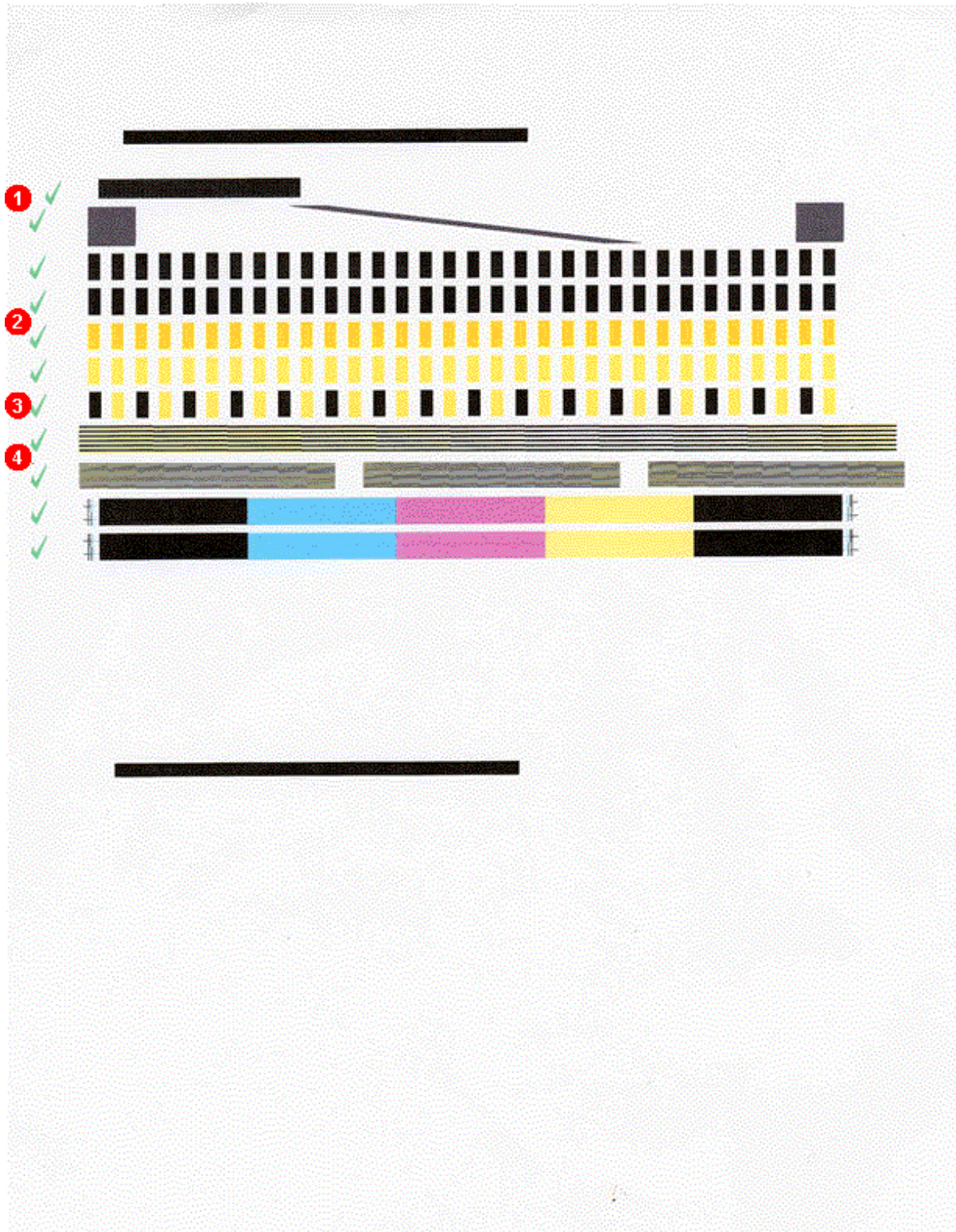
To print a demo page from the toolbox software:

1. Open the toolbox application.
2. Select the Printer Services tab.
3. Click Print a Demo Page.

Printing a demo page from the toolbox software verifies the printer and cartridge functionality, the computer to printer connection, and the driver installation.



## Pen calibration test (3-tap)



**Pen calibration test page with the #56 and #57 print cartridges**



### **Pen calibration test page with the #57 and #58 print cartridges**

To perform a pen calibration, use the 3-tap sequence:

1. Hold down the [power] button while pressing the [resume] button three times.
2. Release the [power] Button.

The last two check marks on the left indicate whether calibration was successful. This test requires a black (#56) and color (#57) or photo (#58) and color (#57) print cartridge configuration.

The following automatic calibration procedures are completed when printing the calibration page:

1. Zero Column Adjust–The printer prints a black bar and scans across the bar to the edges of the paper to calibrate the print cartridge tolerance from the home position.
2. Not used on this printer.
3. Bi-Directional Print Cartridge Alignment–Calibrates the printing alignment of bi-directional carriage movement.
4. Coarse and Fine Vertical Alignment–Calibrates the vertical alignment between the black and color print cartridges.

5. DVC (Drop Volume Compensation) - To achieve optimum print quality when using the photo pen (#58) and color pen (#57), the drop volumes of these six inks must be similar. If the drop ink volume differs between the #57 and #58 print cartridges, customers may notice an undesirable color shift. The DVC test prints a bar consisting of a spit bar (black square), gray fill from the #58 print cartridge, red fill from the #57 print cartridge, and an incremental gray fill from the #58 print cartridge. The spot sensor measures and matches the red fill to the appropriate value in the incremental gray fill and makes an adjustment to the printer's firmware to correct the relative drop volumes of the pen.



## Diagnostic page (4-tap)

hp deskjet 9600 Series  
Serial Number: SG36B1115W  
Service ID: 08218

FW Revision: ERO0055R  
Total Engine Page Count: 37  
Full Bleed Page Count (4 Ink/6 Ink): 0/0  
PCL Default Symbol Set: 341  
Mfg 0-2: 000000000000  
Pen ambient temperature: 250  
Flash CheckSum(Should be zero): 00000000  
Error Code: 00000000, no error  
Cleanout/Duplexer Status: Duplexer Installed  
PEN Status: 57: G 58: G  
Trail Pick: 0 No Pick: 1 Extended Pick: 0  
Paper Jam: 0 Crg Stalls: 2 SS Stalls: 0

Left Pen Led	Right Pen Led	Resume Led	Power Led	Printer Status
CYCLE	CYCLE	CYCLE	CYCLE	POWER ON
OFF	OFF	OFF	ON	IDLE
OFF	OFF	OFF	BLINK	PRINTING
OFF	OFF	OFF	2 ON 1 OFF	CANCEL PRINTING
OFF	OFF	BLINK	ON	IO STALL *1
OFF	OFF	BLINK	ON	ERY TIME WAIT
OFF	OFF	BLINK	ON	CUT OF PAPER
OFF	OFF	BLINK	ON	MEDIA SIZE MISMATCH *2
OFF	OFF	BLINK	ON	BANNER MISMATCH *2
OFF	OFF	BLINK	ON	BANNER EJECT NEEDED *2
OFF	OFF	BLINK	OFF	PAPER JAM
OFF	OFF	BLINK	OFF	PAPER MOTOR STALL
OFF	OFF	BLINK	BLINK	CARRIAGE MOTOR STALL
OFF	OFF	CYCLE	CYCLE	SERVICE STATION STALL
BLINK	BLINK	BLINK	BLINK	HARD ERROR
OFF	OFF	ON	ON	CLEANOUT/DUPLEXE MISSING
OFF	OFF	ON	ON	COVER OPEN
ON	OFF	OFF	ON	LEFT PEN BAD/ABSENT
OFF	ON	OFF	ON	RIGHT PEN BAD/ABSENT
ON	ON	OFF	ON	BOTH PENS BAD/ABSENT
BLINK	OFF	OFF	ON	LEFT PEN LOW INK
OFF	BLINK	OFF	ON	RIGHT PEN LOW INK
BLINK	BLINK	OFF	ON	BOTH PENS LOW INK

### NOTES:

1. Make sure system running properly and printer connected to system, power off and on printer and send printer job again.
2. Rnsure paper size selected in printer driver matches the paper size loaded in printer or press resume button to eject paper.



## Diagnostic page



This test provides most information needed from the customer during a call agent assisted call. The test will work with any print cartridge configuration. To print a diagnostic page from the keypanel, use the 4-tap sequence:

1. Hold down the [power] button while pressing the [resume] button four times.
2. Release the [power] button.

The diagnostic page contains the following information:

- Printer Model Number: However, it does not contain the sku number. The nameplate on the front of the printer main case shows the sku number.
- Serial Number
- Born-On Date (Service ID)–See below for more information.
- Firmware Revision
- Total Engine Page Count–Total number of pages printed on the printer.
- Full Bleed Page Count (4 Ink/ 6 Ink) - Number of borderless pages that have been printed using 4 Ink/6Ink.
- PCL Default Symbol Set–(For example, the code for the US fonts set is 341.)
- Manufacturing Tracking Code–(This information has no value for field repair.)
- Pen ambient temperature–(This information has no value for field repair.)
- Flash Checksum (Should be zero)–There is a firmware flashing error if the value is not zero.
- Error Code–If an error code (hex) number is displayed, it is the code of the last trapped error that occurred regardless of whether the problem that caused the error has been fixed and the printer is currently operational.
- Cleanout/Duplexer Status (please refer to latest firmware release)
- Printer Light Pattern Reference Table–Reference for understanding and troubleshooting the printer.
- Nozzle Pattern–Provides a visual indication of print cartridge nozzle strength.
- Print Cartridge Ink volume status–L represents ink is lower than 10%, G represents ink volume equal or more than 10%, B represent bad print cartridge.
- No-pick, paper jam, carriage jam or service station stall information–Number of times the printer has experienced a no-pick, paper jam, carriage stall or service station stall.

This test will work with any supported print cartridge configuration, including the ink backup mode configurations (e.g., color only print cartridge installed).

## Born-On Date

The Born-On Date (BOD), or Service ID, is automatically set when the first document is printed following the installation of the printer driver software. The BOD can be used to determine if the product is under warranty.

The BOD is saved as a five digit code, YYDDD, where YY equals the number of years after 1990 and DDD equals the day of the year. For example, 09245 is the 245th day of 1999 or, September 2, 1999. Therefore the warranty period began on September 2, 1999.

Provide a six-day grace period when determining if the printer is under warranty; this will allow for exceptions such as leap year calculations and manual calculation errors.

---

### Note

*The Born-On Date is also valuable for identifying the printer usage rate. The Diagnostic Page identifies the total pages printed by the printer (Print Engine Total Page Count). Determine the usage rate by identifying the page count per length of time:  $\text{page count} / (\text{current date} - \text{Born-On Date})$ . Remember, the Reliability and Estimated Usage specification for the printer is 5,000 pages per month.*

---

## Last error (6-tap)

To see the last error displayed as an error code in a pattern of lights, use the 6-tap sequence:

1. Hold down the [power] button while pressing the [resume] button six times.
2. Release the [power] button.

The last error test (6-tap) encodes the last error as a pattern of lights. There is no printout associated with this test.

---

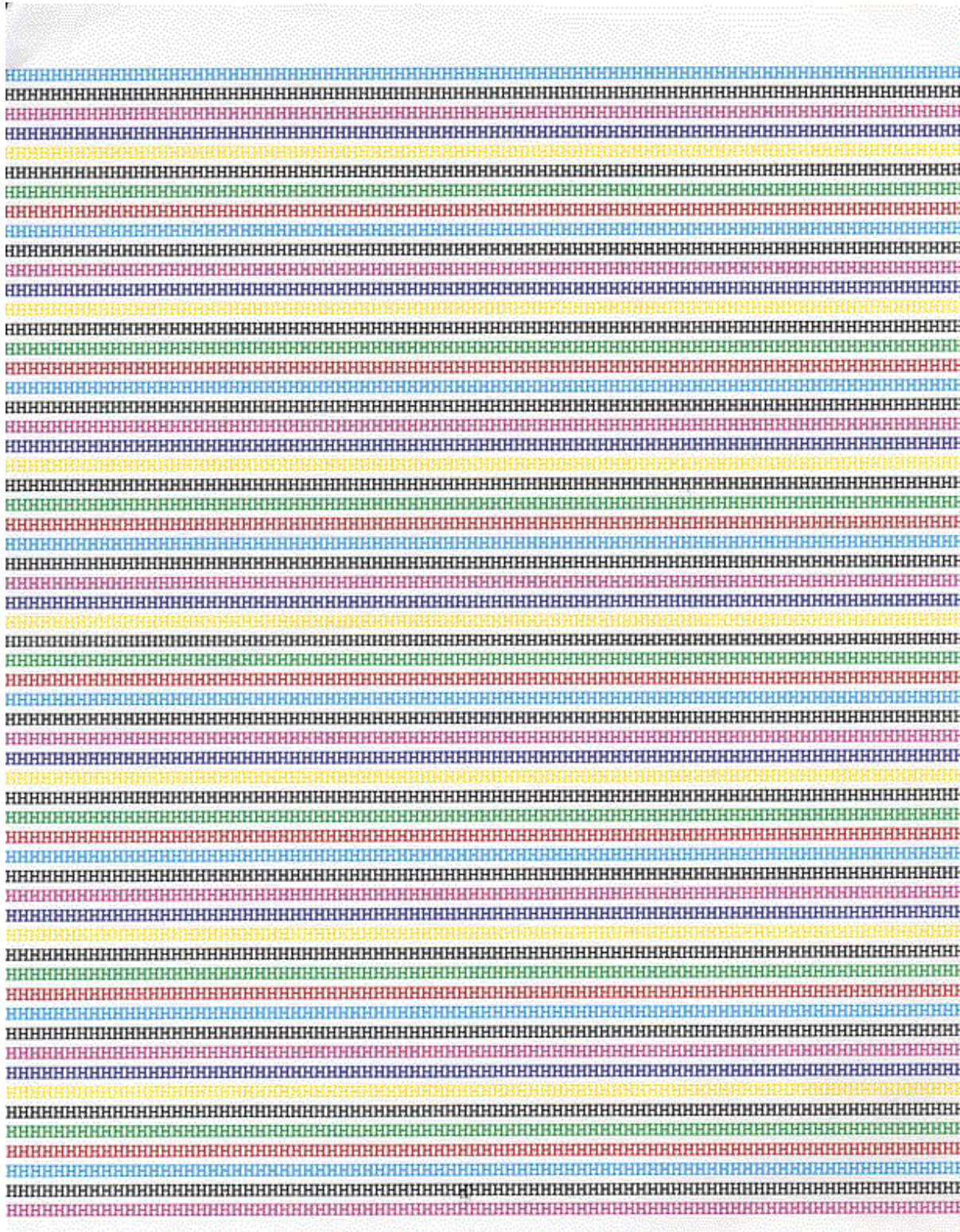
1. Hold down the [power] button while pressing the [resume] button eight times.
2. Release the [power] button.
3. Press [cancel] to end the test.

Repeating rows of Black H's continue printing until the test is cancelled or there is no more paper in the paper tray. This test requires a black or photo print cartridge installed in the printer. Press the Cancel button to stop the printing. This test is used to diagnose problems that are evident only when printing (like unusual noises, no pick, multiple pick, and paper jams).



---

## Color H test (13-tap)



Color H test page

This test is used to diagnose problems that are evident only when printing (like unusual noises, no pick, multiple pick, and paper jams). To print a Color H test from the keypanel, use the 13-tap sequence:

1. While holding down the [power] button, press and release the [cancel] button once.
2. Continue holding down the [power] button, and press and release the [resume] button three times.
3. Release the [power] button.
4. Press the [cancel] button to end the test.



## Self-test page (30-tap)

```
hp deskjet 9500 Series
Serial Number: B036H115W
Service ID: 08210

FW Revision: B0000500
Total Engine Page Count: 26
Full Bleed Page Count (4 inc/e ink): 0/0
PCL Default Symbol Set: 341
Mfg 0-2: 000000000000
Pen ambient temperature: 250
LPC feedroller: DIAMETER/AMPLITUDE/PHASE/DIAMETER3,
1017847/0/0/020517
LPC outputroller: DIAMETER2/AMPLITUDE2/PHASE2,
1017752/0/0
Flash CheckSum(should be zero): 00000000
Error Code: 00000000, no error
Cleanout/Duplexer Status: Duplexer Installed

CALIBRATION_PAGE - 3 Normal Pen Calibration
SELFTEST - 4 Selftest Page
REV_CODE - 5 Firmware Revision
LAST_ERR - 6 Most Recent Error Code is blinked by the LED's
LINUS_FULL_BLEED - 7 Full Bleed Linus Pattern for best/glossy linedfeed
INFINITE_HS - 8 Continuous H Pattern
LINUS4X6 - 9 4 X 6 Linus Pattern
PAPER_CAL_PAGE - 11 Paper Cal Data Tables
TECHY_SELFTEST - 12 NVRAM Contents Plus Constants
INFINITE_CHS - 13 Continuous Color H Pattern
PAPER_CAL - 14 Schedule a paper cal
PICK_N_EJECT - 16 Pick and Eject in Tray1
SPEEDMECH - 17 Speed Mech in Tray1
SLEW_PWM - 18 Slew Pwm for Servos
SPIT_N_WIPS - 20 Pen Recovery Level 1
CLEAN_PENS - 21 Pen Recovery Level 2
SUPER_CLEAN - 22 Pen Recovery Level 3
A_FD_SKEWCHECK - 25 A Size Fastdraft Skew Check
B_FD_SKEWCHECK - 26 B Size Fastdraft Skew Check
MANUAL_FEED - 28 Manual Feed Print
SRUPRST_PAGE - 30 This Report
DUPLX_MENU - 31 Demo page with two sides
A_SM_SKEWCHECK - 36 A Size Speedmech Skew Check
B_SM_SKEWCHECK - 37 B Size Speedmech Skew Check
A_DC_SKEWCHECK - 38 A Size Duplexer Skew Check
B_DC_SKEWCHECK - 39 B Size Duplexer Skew Check
A_DC_PICK_N_EJECT - 40 A Size Duplexer Pick and Eject
DOT_COUNT - 41 Pen Dot Counter Data
PEN_ID - 42 Pen Id
PEN_TEST - 43 Pen Test
LINUS_SPEED_MECH - 50 Speed Mech Linus Pattern
NOZZLE_PATTERN - 64 Print the Pen Nozzle Pattern
NO_TAP_TESTS - 90 Different MD Diagnostic Tests
MEDIA_SENSE_TEST - 100 Continuous Media Sense Test
MEDIA_SENSE_CAL - 101 Media Sense LTVG Calibration
LINUS_EXPLAIN - 120 Detail explanation on linus plot
```

### Self-test page

This test provides most information needed from the customer during a call agent assisted call and includes a reference table of all available tap tests. The test will work with any print cartridge configuration. To print a self-test page from the keypad, use the 30-tap sequence:

1. Hold down the [power] button while pressing the [cancel] button three times.
2. Release the [power] button.

The self-test page contains the following information:

- Printer Model Number: However, it does not contain the sku number. The nameplate on the front of the printer main case shows the sku number.
- Serial Number
- Born-On Date (Service ID)–See below for more information.
- Firmware Revision
- Total Engine Page Count–Total number of pages printed on the printer.



- Full Bleed Page Count (4 Ink/ 6 Ink) - Number of borderless pages that have been printed using 4 Ink/6Ink.
- PCL Default Symbol Set-(For example, the code for the US fonts set is 341.)
- Manufacturing Tracking Code-(This information has no value for field repair.)
- Pen ambient temperature-(This information has no value for field repair.)
- Flash Checksum (Should be zero)-There is a firmware flashing error if the value is not zero.
- Error Code-If an error code (hex) number is displayed, it is the code of the last trapped error that occurred regardless of whether the problem that caused the error has been fixed and the printer is currently operational. For more information about the meaning of the code, see "trapped error codes."
- Cleanout/Duplexer Status (please refer to latest firmware release)
- Reference table of all available tap tests.

This test will work with any supported print cartridge configuration, including the ink backup mode configurations (e.g., color only print cartridge installed).

---

## Duplex demo page (31-tap)



### hp deskjet 9600 series

hp's high performance and versatile wide-format  
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Innovative 6 ink technology produces impressive true-to-life photos  
Create vivid color images with or without borders  
Up to 4800 optimized-dpi color printing

#### **Fast wide-format, photo quality printing**

Prints documents at print speed of up to 18 ppm in black and 13 ppm in color  
HP PhotoREt IV technology supports fast speeds and maintains quality

#### **prints on a wide variety of sizes & types of media**

Achieve outstanding results from 4"x6" (A6) to 13"x19" (A3+) sizes  
Prints on specialty photo paper, card stocks, transparencies and plain paper



---

**Duplex demo page side 1 (both sides the same)**

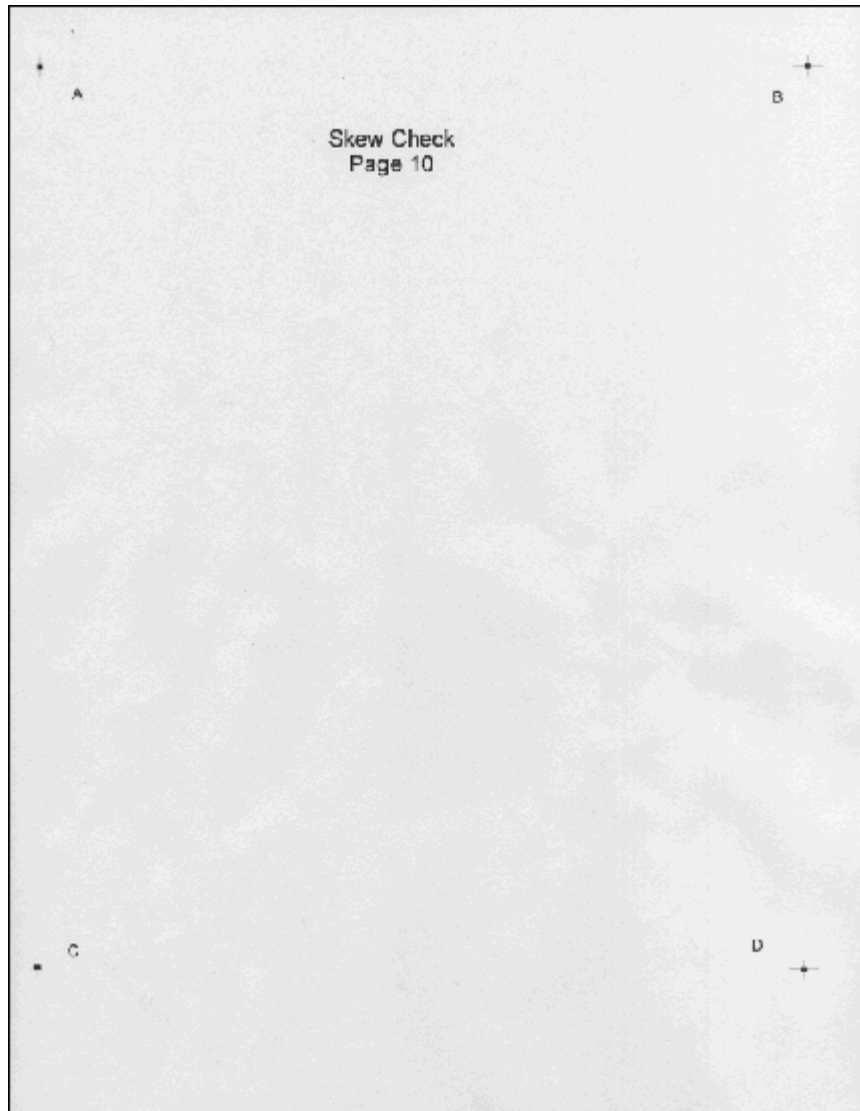
To print the duplex demo page from the keypad, use the 31-tap sequence:

1. While holding down the [power] button, press and release the [cancel] button three times.
2. Continue holding down the [power] button, and press and release the [resume] button once.
3. Release the [power] button.

The duplex demo page only prints if the duplexer is installed. Both sides of this page contain the same information, with the information on the second printed upside-down.

---

## Skew test (36, 37, 38, 39-tap)



### Skew test page

These are the 4 skew specifications and the equivalent skew verification test:

Paper size	Spec.	Tap test
A-Size	6 mils	36-tap
B-Size	9 mils	37-tap
A-Size Duplex	9 mils	38-tap
B-Size Duplex	12 mils	39-tap

To print the A-size skew test page, use the 36-tap sequence:

1. While holding down the [power] button, press and release the [cancel] button three times.
2. Continue holding down the [power] button, and press and release the [resume] button six times.
3. Release the [power] button.

#### Top Skew Verification

Fold the test page vertically, with the top edge of the paper aligned. Then, slide the paper along the top edge bringing point "A" and point "B" together. Keep the top edge aligned.

If point A and point B can overlap each other, then the skew is within the skew specifications.

#### Side Skew Verification

1. Fold the test page horizontally with the side edges of the paper aligned. Then, slide the paper along the side edge bringing point "A" and point "C" together. Keep the side edge aligned.
2. If point A and point C can overlap each other, then the skew is within the skew specification.

---

## Dot count page (41-tap)

### 41-Tap (Dot Counts)

#### Pen IDs:

	Current	Previous	Pen_Count
K	0x01c1a12f	0x0140412f	4
C	0x02c18065	0x03403064	3
P	0x0141f0f9	0x00000000	1

#### Counts:

	Current	Previous	Life/256	SS/256
K	23,335,400	14,703,936	715,429	187,982
C	18,326,965	73,660,149	361,632	549,912
M	17,980,703	67,522,245	336,662	
Y	19,944,158	78,611,648	387,236	
c	13,512,723	0	52,784	
m	13,514,899	0	52,792	
k	16,875,675	0	65,920	

#### Trigger Data:

	Left	Right
Trigger 1:	811,790,977	956,620,435
Trigger 2:	1,265,362,000	1,172,973,000
Trigger 3:	1,557,988,467	1,312,555,300
Trigger:	0	0
% Full:	97	97

Total Engine Page Count: 64

FW Revision: ER00025D  
Service ID: 08211

Serial Number: 9G349110569M

Dot count page

This test identifies the status of the current and previous black, tri-color, and tri-color photo print cartridges.

To print a dot count page, use the 41-tap sequence:

1. While holding down the [power] button, press and release the [cancel] button four times.
2. Continue holding down the [power] button, and press and release the [resume] button one time.
3. Release the [power] button.

The dot count page includes:

- Pen IDs—The identification number of the current and previous print cartridge. Pen Count column shows the number of different pens loaded into this printer.
- Counts—The number of dots fired for each print cartridge.
- Trigger Data—An estimated percentage of ink remaining in the current and previous print cartridges.

---

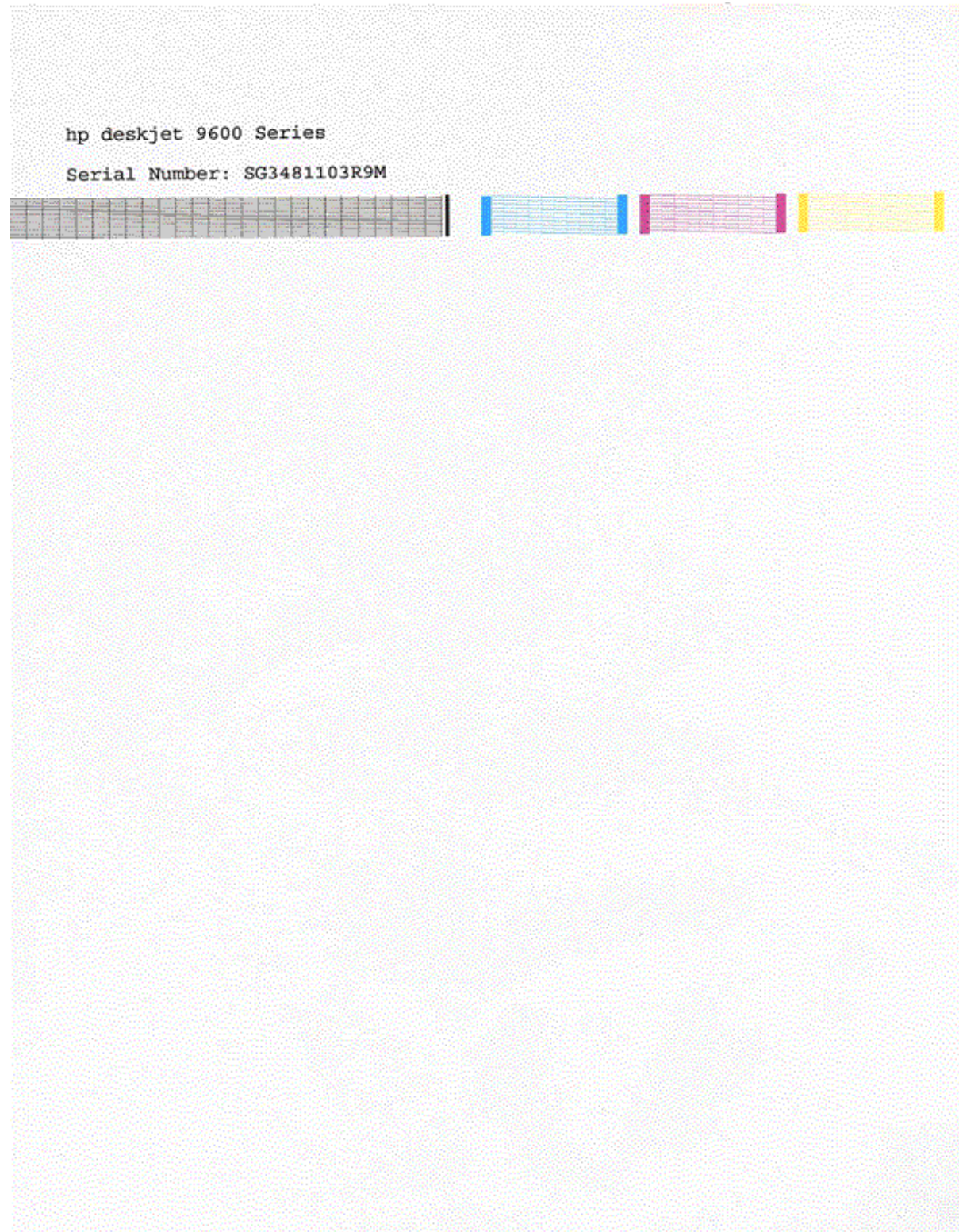
**Note**

*The % Full information is an estimate based on the known amount of ink drops deposited by this particular cartridge. Therefore, if a known low ink cartridge was used for the first time on a new hp deskjet 9600, this new printer will still report high % ink full status.*



---

## Nozzle pattern test (84-tap)



**Nozzle pattern test page**



To print a nozzle pattern test page, use the 84-tap sequence:

1. While holding down the [power] button, press and release the [cancel] button eight times.
2. Continue holding down the [power] button, and press and release the [resume] button four times.
3. Release the [power] button.

The nozzle pattern test provides a visual indication of print cartridge nozzle strength. The nozzle pattern is also found on the 4-tap test.

---

## Continuous media sense test (100-tap)

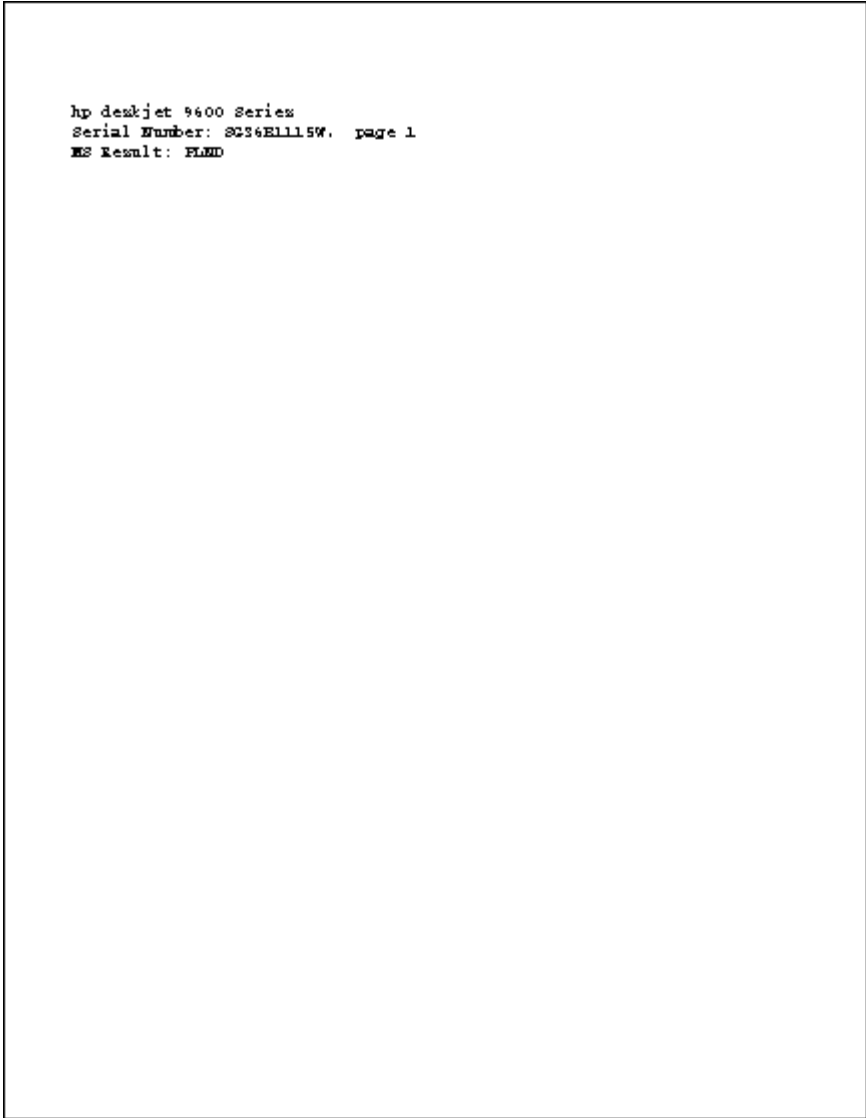
To print a continuous media sense test, use the 100-tap sequence:

1. While holding down the [power] button, press and release the [cancel] button ten times.
2. Release the [power] button.
3. Press [cancel] button to end the test.

The continuous media sense test can be used to check media sensing accuracy. The printer picks a sheet, senses the media type, prints the media sense results and ejects the sheet to the output tray. This is a continuous test. It will print with any print cartridge configuration.

The printer will sense one of three types of media:

- PLNx = Plain Paper
- TRNx = Transparency
- PHTx = Photo Media



```
hp deskjet 9600 Series  
Serial Number: 8C36E1115W. page 1  
MS Result: PLND
```

**Plain paper sensed**

hp deskjet 9600 Series  
Serial Number: SC36EL1115W. page 0  
ES Result: TERA

**Transparency sensed**

hp deskjet 9600 Series  
Serial Number: SG36E1115W, page 2  
MS Result: PRTn

### **Photo paper sensed**

The fourth character, identified by an "x" above, does not matter in regards to identifying the media sense.

Media sense notes:

- The printer senses media approximately 6 1/2 inches from the left edge of the media.
- The printer does not sense media in fast draft mode and on full bleed print jobs. Instead it assumes plain paper is loaded in fast draft print mode and photo media is loaded in full bleed print jobs.
- PPS adjustment can impact the accuracy of media sense.

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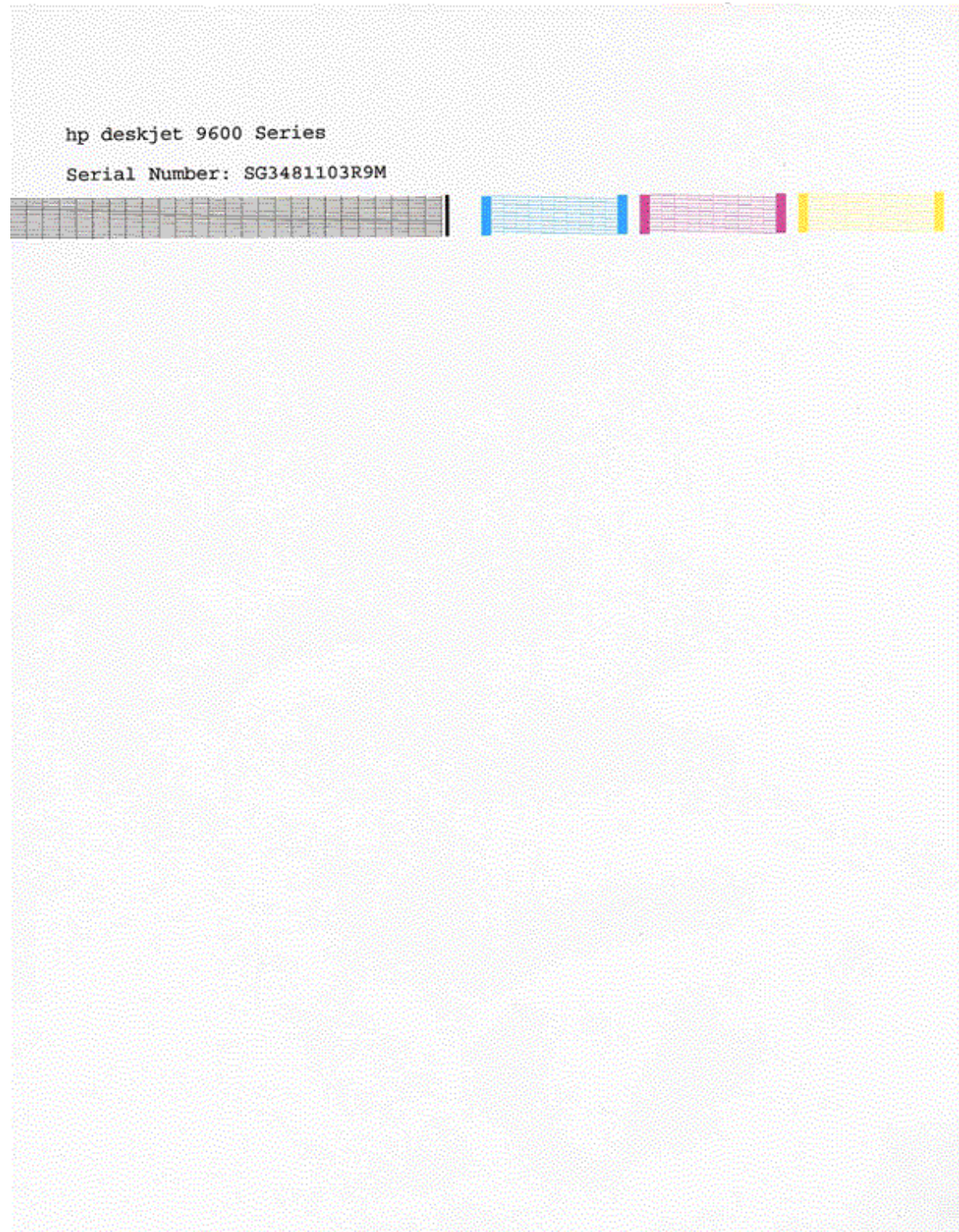
## Media Sense LTVG Calibration (101-tap)

To perform the media sense LTVG calibration:

1. Power on the printer.
2. Insert one sheet of HP bright white paper.
3. While holding down the [power] button, press and release the [cancel] button ten times.
4. Continue holding down the [power] button, and press and release the [resume] button one time.
5. Release the [power] button. The printer picks and kicks one sheet of paper while it's recalibrating the media sensing capability.

---

## Pen recovery procedure



**Nozzle pattern page**

## Nozzle pattern page

For this procedure, print a nozzle pattern page to see if the nozzles have been cleared. To print a nozzle pattern page:

1. Hold down the [power] button while pressing the [cancel] button 8 times and the [resume] button 4 times.
2. Release the [power] button. The printer prints a nozzle pattern (tap 84) test page.

## Pen recovery procedure

The pen recovery procedure is three levels of print cartridge cleaning followed by printing a nozzle pattern page to see if the pens are recovered. Each level of cleaning is more intensive. Level 3 takes approximately two minutes:

1. **Level 1 (tap 20):** hold down the [power] button, press the [cancel] button twice, then release the [power] button.
2. Print the nozzle pattern page (tap 4 or 84). If all nozzles are clear, STOP to avoid wasting ink. If one or more nozzles are not functioning, continue to level 2.
3. **Level 2 (tap 21):** hold down the [power] button, press the [cancel] button twice and the [resume] button once, then release the [power] button.
4. Print the nozzle pattern page (tap 84). If all nozzles are clear, STOP to avoid wasting ink. If one or more nozzles are not functioning, continue to level 3.
5. **Level 3 (tap 22):** hold down the [power] button, press the [cancel] button twice and the [resume] button twice, then release the [power] button.
6. Print the nozzle pattern page (tap 4 or 84). If one or more nozzles are still not functioning, replace the print cartridges.

---

## Cleaning internal parts procedure

### Cleaning the encoder strip

Clean the encoder strip if experiencing carriage collision or jagged lines. Use a damp cotton swab for cleaning the hp 9600 series encoder strip as described on [www. hp.com](http://www.hp.com).

### Cleaning the rollers

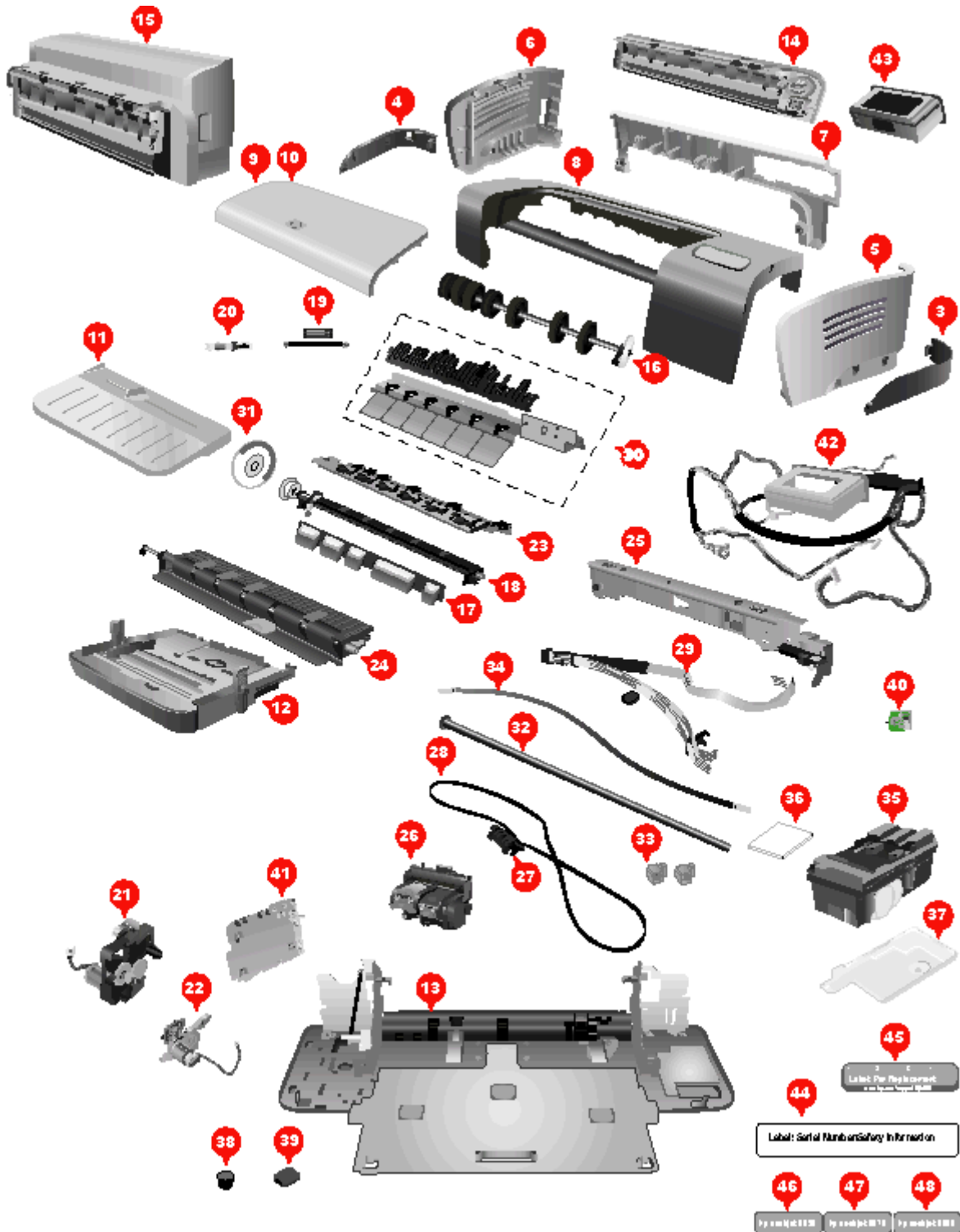
Clean the rollers if experiencing no picks or multiple picks. Remove the duplexer or cleanout to access the rollers. Use a damp lint-free cloth for cleaning the rollers and follow the procedure described on [www. hp.com](http://www. hp.com).

### Cleaning the print cartridge contacts

Clean the print cartridge contacts if the cartridge is rejected or if the print quality is poor. Use a lint-free cloth to clean the cartridge contacts, as described on [www. hp.com](http://www. hp.com).



## Exploded view



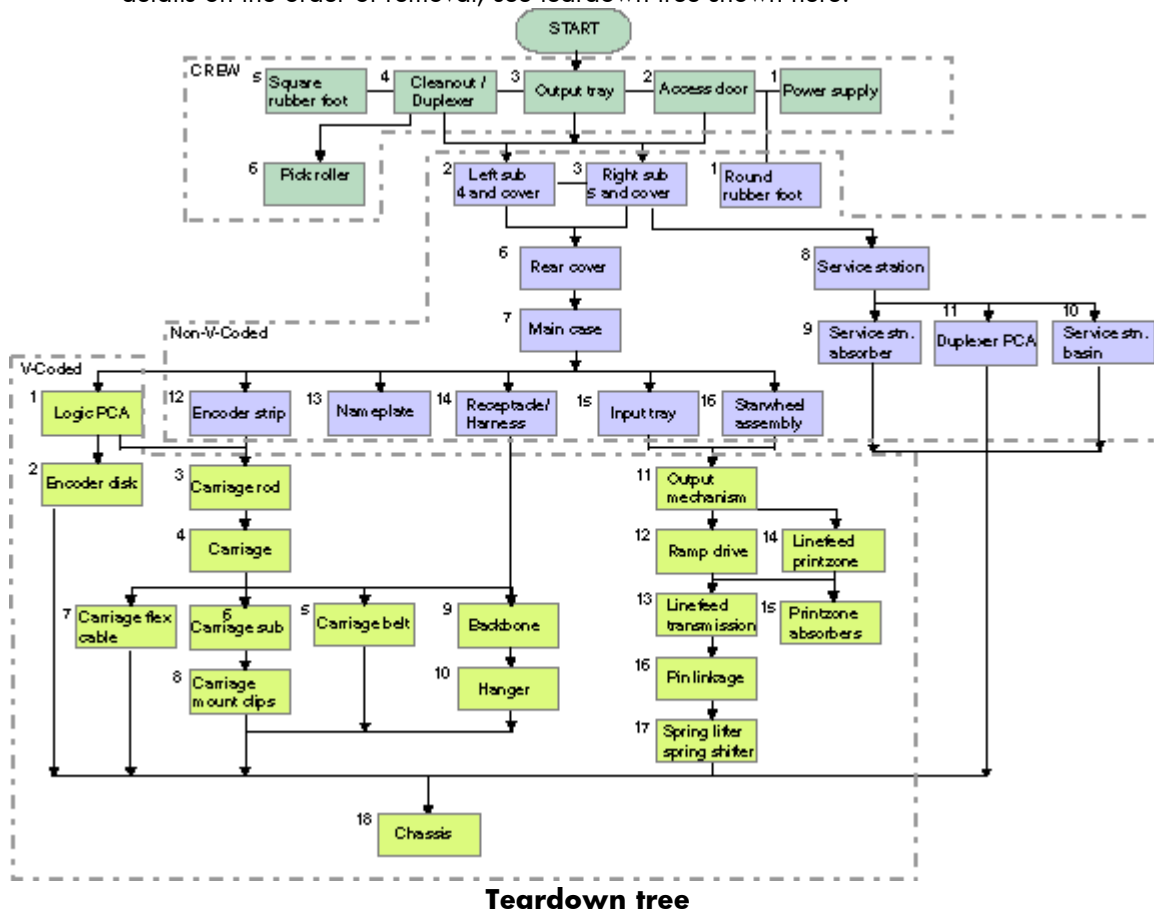
Exploded view

no.	part name	part number	s.l.	bar code
1.	PRINTER - EUCLID BASE ASSY	<b>C8137-67001</b>	NV	
2.	PRINTER - EUCLID MECH ASSY	<b>C8137-67002</b>	V	
3.	CASE - RIGHT SUB SVC	<b>C8137-67003</b>	NV	
4.	CASE - LEFT SUB SVC	<b>C8137-67004</b>	NV	
5.	CASE - RIGHT COVER SVC	<b>C8137-67005</b>	NV	
6.	CASE - LEFT COVER SVC	<b>C8137-67006</b>	NV	
7.	CASE - REAR COVER SVC	<b>C8124-67007</b>	NV	
8.	CASE - MAIN SVC	<b>C8137-67008</b>	NV	
9.	DOOR - ACCESS SVC	<b>C8137-67009</b>	CREW	
10.	DOOR - ACCESS (Blue Angel) SVC	<b>C8137-67010</b>	CREW	
11.	ASSY - OUTPUT TRAY SVC	<b>C8137-67011</b>	CREW	
12.	ASSY - INPUT TRAY SVC	<b>C8137-67012</b>	NV	
13.	ASSY CHASSIS SVC	<b>C8137-67013</b>	V	
14.	ASSY - CLEANOUT SVC	<b>C8137-67014</b>	CREW	
15.	ASSY - DUPLEXER SVC	<b>C8137-67015</b>	CREW	
16.	ASSY - PICK ROLLER SVC	<b>C8137-67016</b>	CREW	
17.	PRINT ZONE ABSORBERS SVC	<b>C8137-67017</b>	V	
18.	ASSY LINE FEED/PRINTZONE SVC	<b>C8137-67018</b>	V	
19.	ASSY SPRING LIFTER/ SHIFTER SVC	<b>C8137-67019</b>	V	
20.	ASSY PIN LINKAGE SVC	<b>C8137-67020</b>	V	
21.	ASSY LF TRANSMISSION SVC	<b>C8137-67021</b>	V	
22.	ASSY RAMP DRIVE SVC	<b>C8137-67022</b>	V	
23.	ASSY STARWHEEL FRAME SVC	<b>C8137-67023</b>	NV	
24.	ASSY OUTPUT MECHANISM	<b>C8137-67024</b>	V	
25.	ASSY BACKBONE SVC	<b>C8137-67025</b>	V	
26.	ASSY CARRIAGE SVC	<b>C8137-67026</b>	V	
27.	ASSY SUB CARRIAGE SVC	<b>C8137-67027</b>	V	
28.	BELT-CARRIAGE SVC	<b>C8137-67028</b>	V	
29.	CARRIAGE FLEX CABLE SVC	<b>C8137-67029</b>	V	
30.	ASSY HANGER SVC	<b>C8137-67030</b>	V	
31.	DISK ENCODER	<b>C8137-67031</b>	V	
32.	CARRIAGE ROD SVC	<b>C8137-67032</b>	V	
33.	CLIP-CARRIAGE ROD MOUNT SVC	<b>C8137-67033</b>	V	
34.	ENCODER STRIP SVC	<b>C8137-67034</b>	NV	
35.	ASSY - SERVICE STATION SVC	<b>C8137-67035</b>	NV	
36.	ABSORBER - SERVICE STATION SVC	<b>C8137-67036</b>	NV	
37.	BASIN - SERVICE STATION SVC	<b>C8137-67037</b>	NV	
38.	RUBBER FOOT(ROUND) SVC	<b>C8137-67038</b>	NV	
39.	RUBBER FOOT(SQUARE) SVC	<b>C8137-67039</b>	CREW	
40.	PCA - DUPLEXER SVC	<b>C8137-67040</b>	NV	
41.	ASSY - PCA LOGIC SVC	<b>C8137-67041</b>	V	
42.	ASSY - RECEPTACLE SVC	<b>C8137-67042</b>	NV	
43.	POWER SUPPLY SVC	<b>C8137-67043</b>	CREW	
44.	LABEL - SERIAL/SAFETY	<b>C8137-67044</b>	NV	
45.	LABEL PEN REPLACEMENT	<b>C8137-67045</b>	NV	
46.	Nameplate 9650	<b>C8137-67046</b>	NV	
47.	Nameplate 9670	<b>C8137-67047</b>	NV	
48.	Nameplate 9680	<b>C8137-67048</b>	NV	

## Disassembly prep. and teardown tree

### Printer disassembly

This topic describes the printer disassembly teardown tree. To service certain parts of the printer, it usually is not necessary to completely disassemble the printer. However, it is important to remove parts in the proper order and reassemble them in the reverse order. For details on the order of removal, see teardown tree shown here.



### Before disassembly

Before disassembling the printer:

1. Remove paper from the Input Tray.
2. Remove print cartridges from the Carriage. To prevent ink from clogging the print nozzles, place each print cartridge in a paper envelope and then seal it in a plastic bag. If available, use the ink cartridge holder
3. Power off the printer, remove the power cord, and wait at least five seconds.

### Warning

To avoid electrical shock, completely discharge the capacitors before handling power supply components. To do this, power off the printer before unplugging the power cord. Wait five seconds before disassembling the printer.

### Tips for printer disassembly and reassembly

- Many parts of the printer use plastic snap-fit technology. Use care when removing these parts; excessive force could break the snaps off of the parts.
- To reassemble the printer, reverse the order of the disassembly steps. Some reassembly tips may be included in the disassembly procedure.
- The majority of screws in this printer are the same T-10 machine screw. But some of them are unique. Use a system (like labeled paper cups) to track the unique screws during disassembly and use the right screws in the right places when reassembling.

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## Predicted high failure rate parts

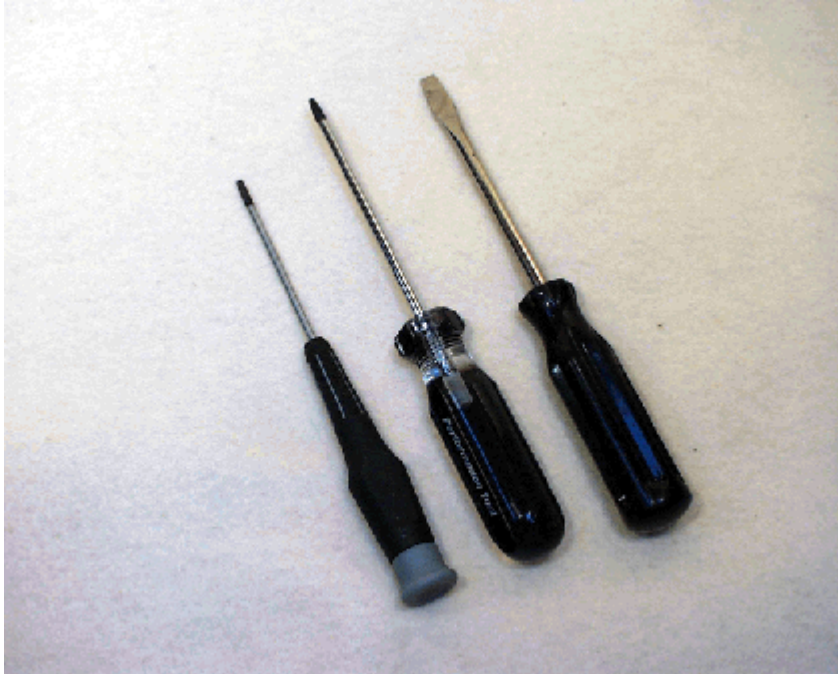
part name	part number	AFR%
PRINTER - EUCLID BASE ASSY	C8137-67001	1.0%
PRINT ZONE ABSORBERS	C8137-67017	1.0%
ASSY - SERVICE STATION SVC	C8137-67035	1.0%
ABSORBER - SERVICE STATION SVC	C8137-67036	1.0%
ASSY - PCA LOGIC SVC	C8137-67041	1.0%
ASSY - DUPLEXOR SVC	C8137-67015	0.8%
ASSY - PICK ROLLER SVC	C8137-67016	0.8%
ASSY LINE FEED/PRINTZONE SVC	C8137-67018	0.8%
ASSY OUTPUT MECHANISM	C8137-67024	0.8%
ASSY CARRIAGE SVC	C8137-67026	0.8%
CARRIAGE FLEX CABLE SVC	C8137-67029	0.8%

**Predicted high failure rate parts (in order of AFR%)**

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## Tools for repair

## Tools for repair



The tools required to disassemble the printer are:

- torx(R) drivers (T10 and T20)
- needle-nosed pliers
- small and medium flathead screwdrivers

Magnetized screwdrivers are helpful.

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## CREW parts

### POWER SUPPLY SVC (C8137-67043)

1. Remove one T10 screw (callout 1).
2. Press the tabs shown in picture.



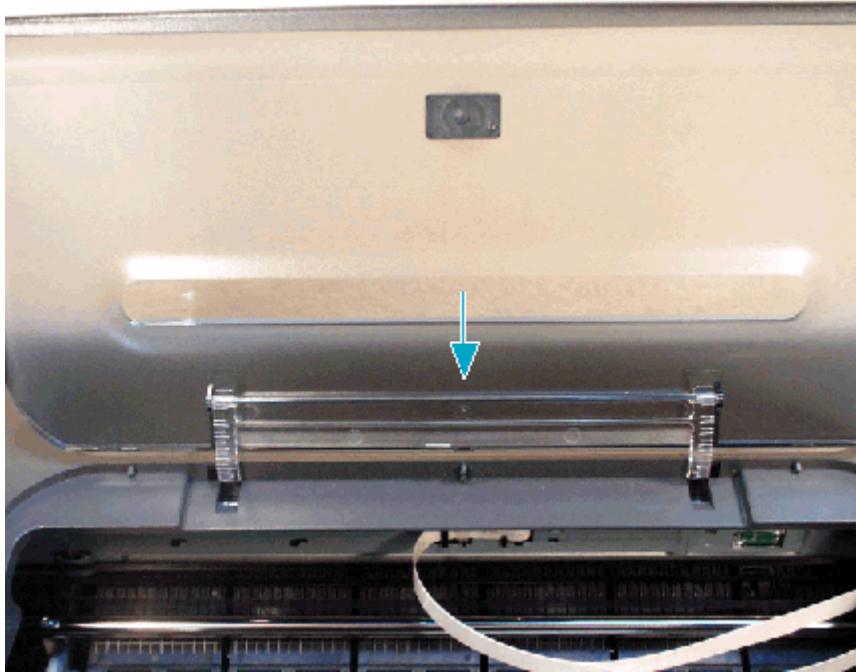
#### **Remove screw, press tabs**

3. Slide out the power supply.



### DOOR - ACCESS SVC (C8137-67009)

Grasp the access door hinge in the center and pull. The door will release easily.



**Grasp cover hinge**

### DOOR - ACCESS (BLUE ANGEL) SVC (C8137-67010)

Grasp the access door hinge in the center and pull. The door will release easily.



**Grasp cover hinge**

## ASSY - OUTPUT TRAY SVC (C8137-67011)

Remove the part by following these steps:

1. Look at the hinges on both sides of the output tray.
2. Rotate the output tray up and then pull it up and away from the printer.



**Rotate then lift**

## ASSY - CLEANOUT SVC (C8137-67014)

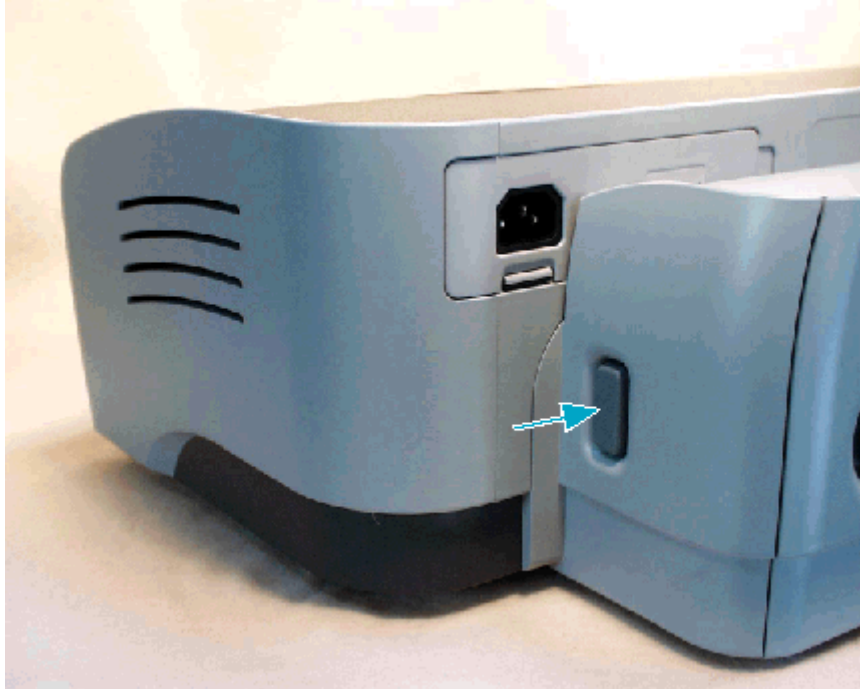
Press the two locks on the cleanout assembly and remove.



**Press the two locks.**

### ASSY - DUPLEXER SVC (C8137-67015)

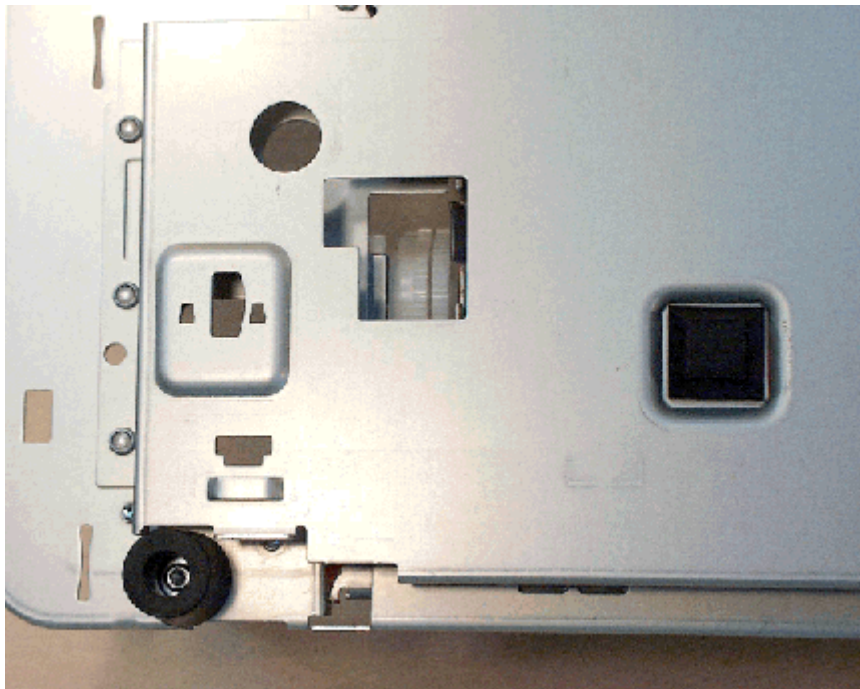
The duplexer replaces the cleanout assembly. Press the two locks and remove the duplexer.



**Press releases on both sides.**

### RUBBER FOOT (SQUARE) SVC (C8137-67039)

The square rubber feet just stick on with adhesive. Pry them off with a screwdriver to remove:

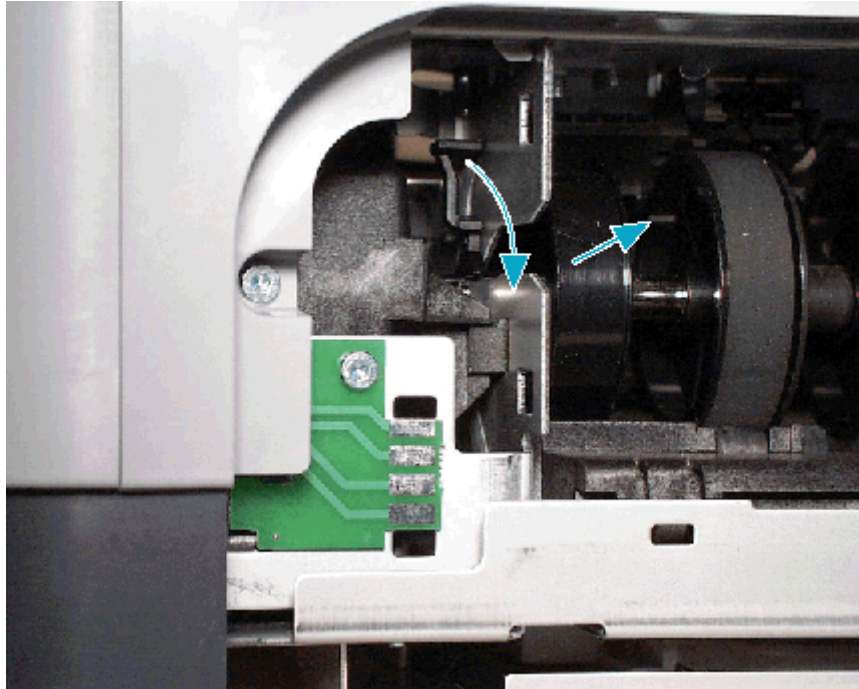


**Remove T10 screw**

## ASSY - PICK ROLLER SVC (C8137-67016)

Then remove this part by following these steps:

1. Pull the locking bearings on both sides of the pick roller out and forward and remove the pick roller assembly (printer-right side only is shown, similar on printer-left).



**Unlock ends and remove**



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## Non-v-coded parts

### PRINTER - EUCLID BASE ASSY (C8137-67001)



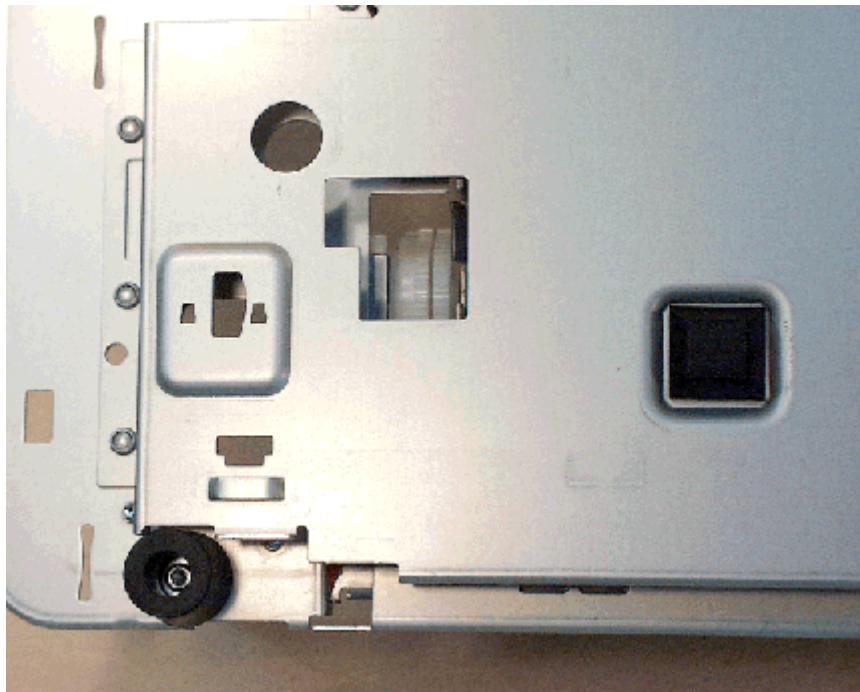
**HP 9650 series printer**

This is the name and part number for the replacement printer itself.

### RUBBER FOOT (ROUND) SVC (C8137-67038)

Remove the part as follows:

1. Remove the T20 screw in the center of the foot to remove.



**Remove T20 screw in foot center**

### CASE - LEFT SUB SVC (C8137-67004)

1. ASSY - CLEANOUT SVC

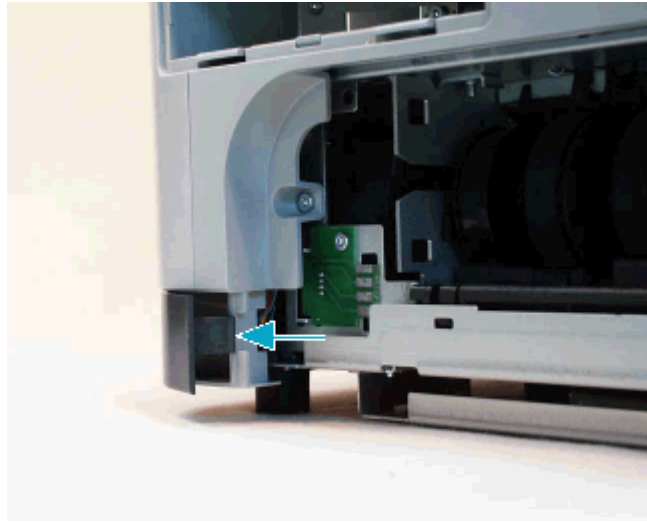
Remove the left sub case using the same steps as for the right sub case.

### CASE - RIGHT SUB SVC (C8137-67003)

1. ASSY - CLEANOUT SVC

Remove the part by following these steps:

1. Pull the tab out and around the corner to remove the right sub case:



**Pull tab out and around**

### CASE - LEFT COVER SVC (C8137-67006)

First remove the following:

1. ASSY - CLEANOUT SVC
2. CASE - LEFT SUB SVC

Remove the part by following the same procedure as for the right cover, removing the screw in the back on printer-left. See right cover removal procedure.

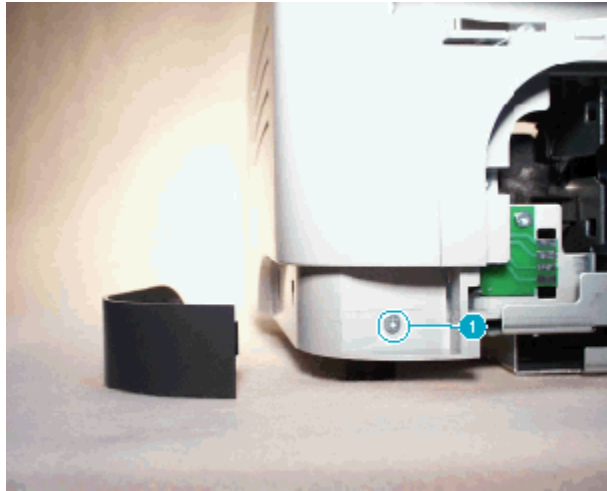
### CASE - RIGHT COVER SVC (C8137-67005)

First remove the following:

1. ASSY - CLEANOUT SVC
2. CASE - RIGHT SUB SVC

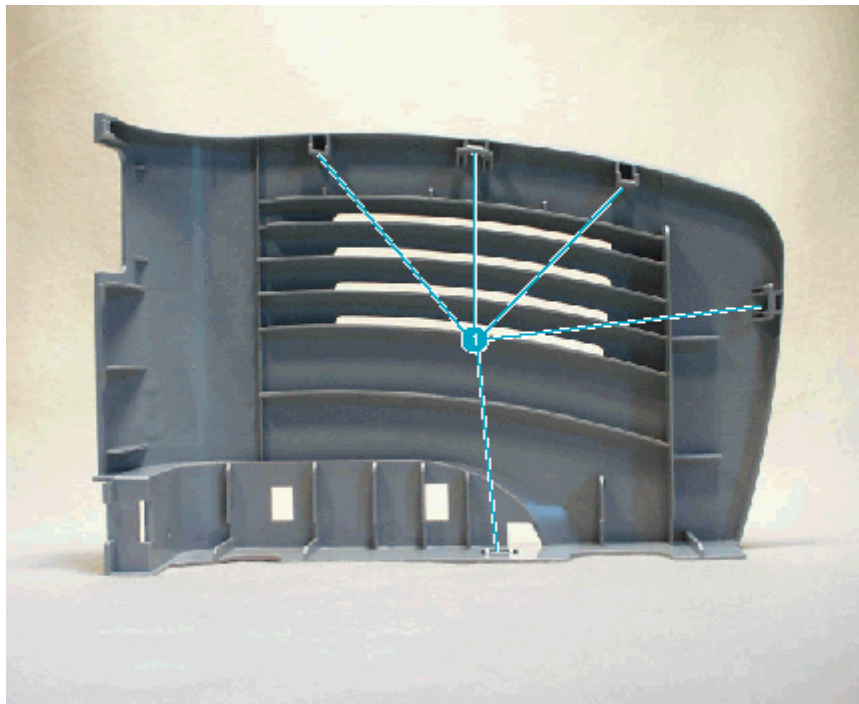
Remove the part by following these steps:

1. Remove one T10 screw (callout 1).



#### **Remove T10 screw**

2. Lift the tab on the bottom of the cover and remove forward.
3. Note the tabs on the cover (callout 1) as you remove it and reinstall it.



#### **Note tabs on cover**

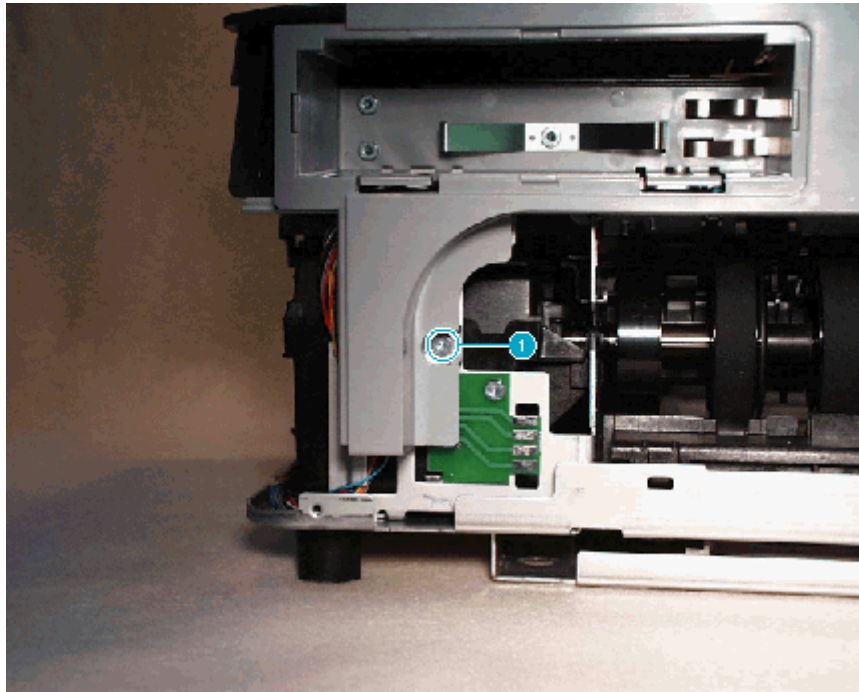


## CASE - REAR COVER SVC (C8137-67007)

1. ASSY - CLEANOUT SVC
2. CASE - RIGHT SUB SVC
3. CASE - RIGHT COVER SVC
4. CASE - LEFT SUB SVC
5. CASE - LEFT COVER SVC

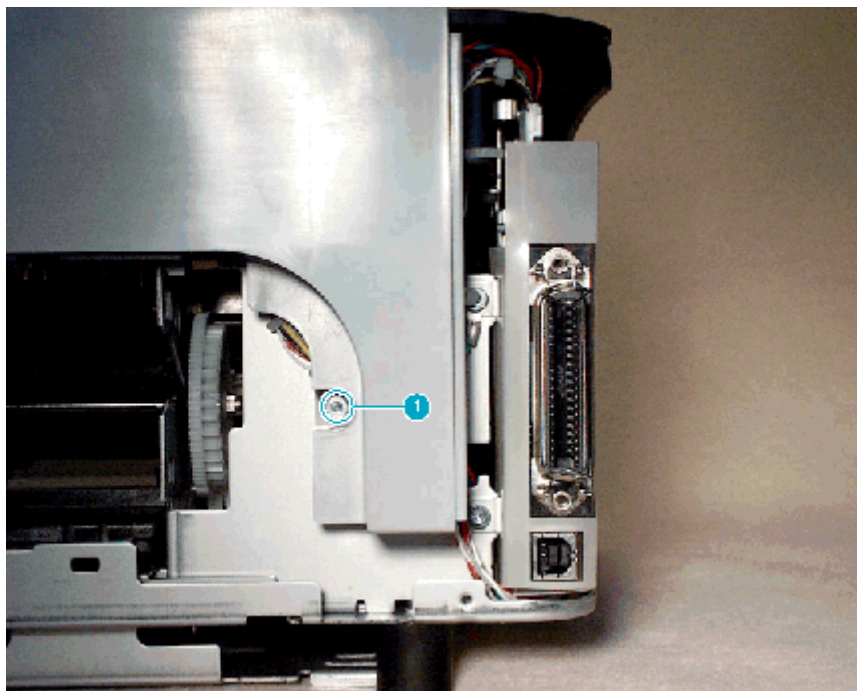
Remove the part by following these steps:

1. Remove one T10 screw on printer-right (callout 1).



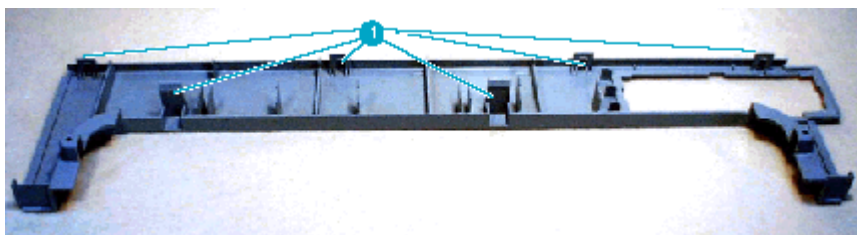
**Remove T10 screw**

2. Remove one T10 screw from printer-left (callout 1).



**Remove T10 screw**

3. Note the tabs on the rear cover (callout 1) as you remove it.

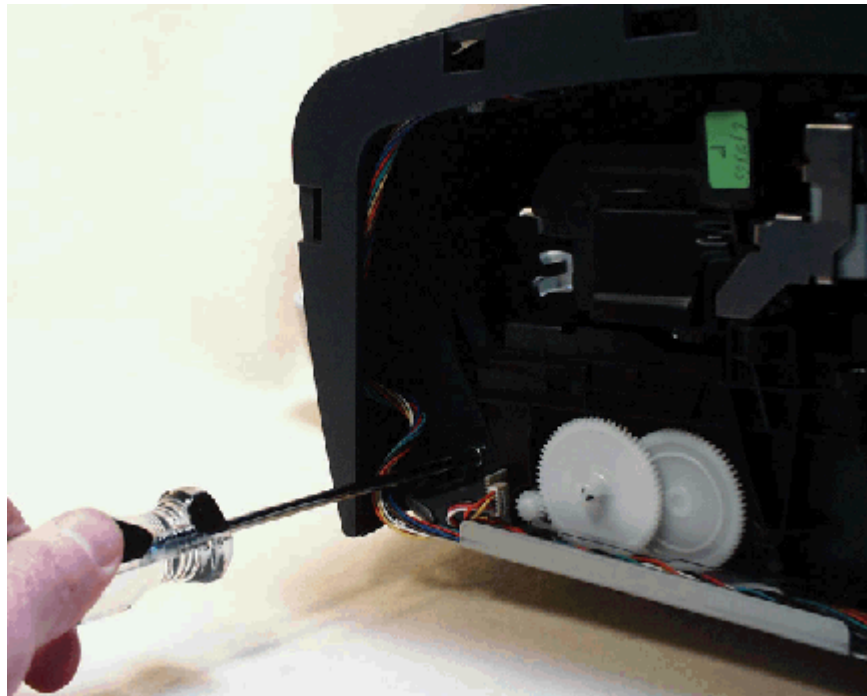


**Note tabs**

## CASE - MAIN SVC (C8137-67008)

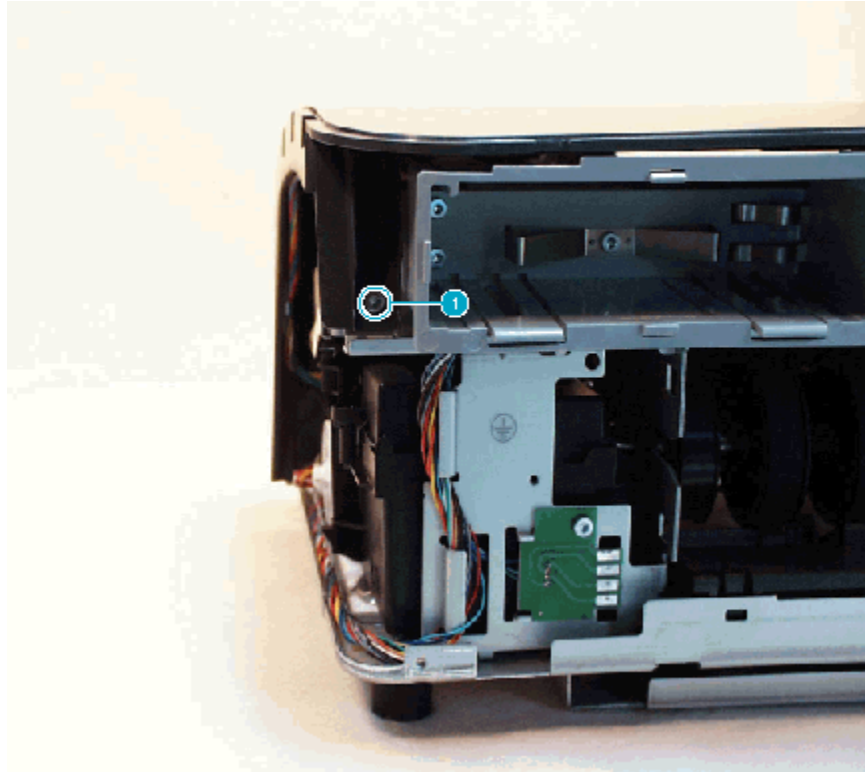
First remove the following:

1. ASSY - CLEANOUT SVC
2. CASE - RIGHT SUB SVC
3. CASE - RIGHT COVER SVC
4. CASE - LEFT SUB SVC
5. CASE - LEFT COVER SVC
6. CASE - REAR COVER SVC
1. Remove one T10 screw on printer-right as shown.



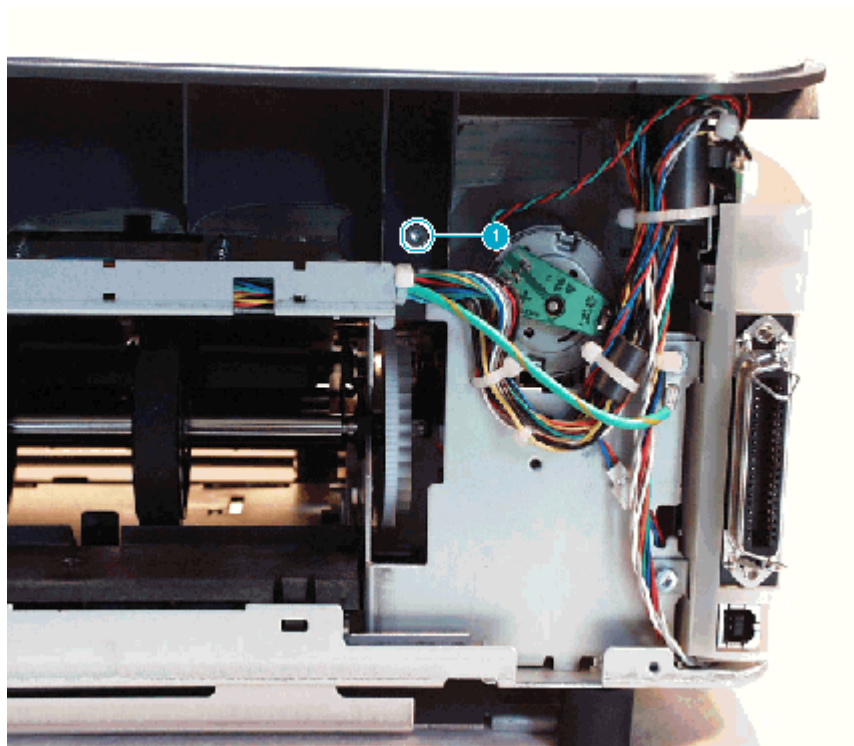
**Remove T10 screw**

2. Remove one T10 screw on printer-right in back (callout 1).



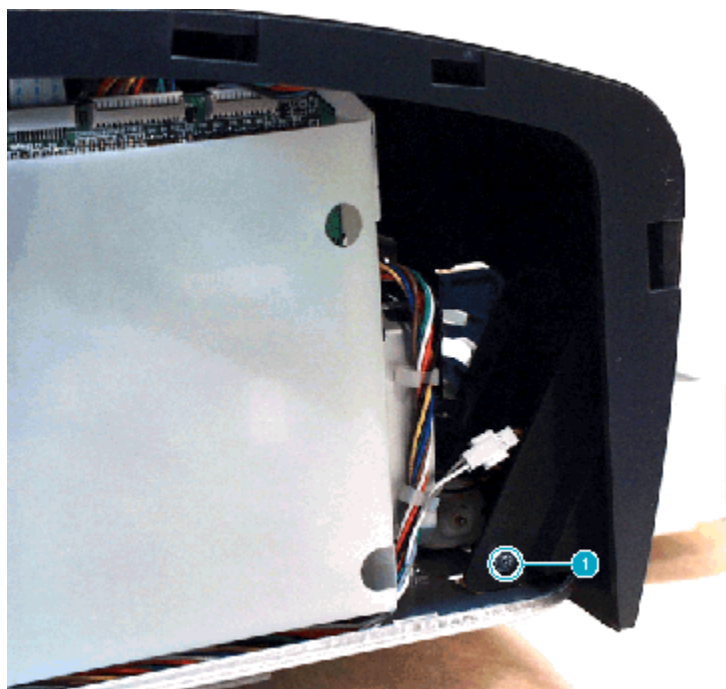
**Remove T10 screw**

3. Remove one T10 screw in back on printer-left (callout 1).



**Remove T10 screw**

4. Remove one T10 screw from the printer-left (callout 1).



**Remove T10 screw**

5. Lift off cover.
6. Disconnect the connector from the main case control panel PCA on printer-right.

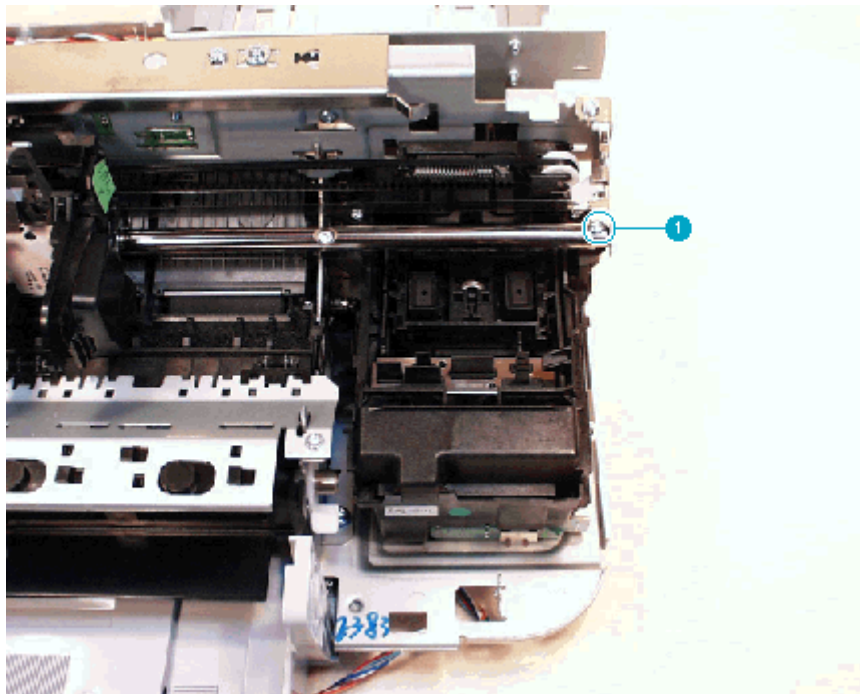
### **ASSY - SERVICE STATION SVC (C8137-67035)**

First remove the following:

1. CASE - RIGHT SUB SVC
2. CASE - RIGHT COVER SVC

Remove the part as follows:

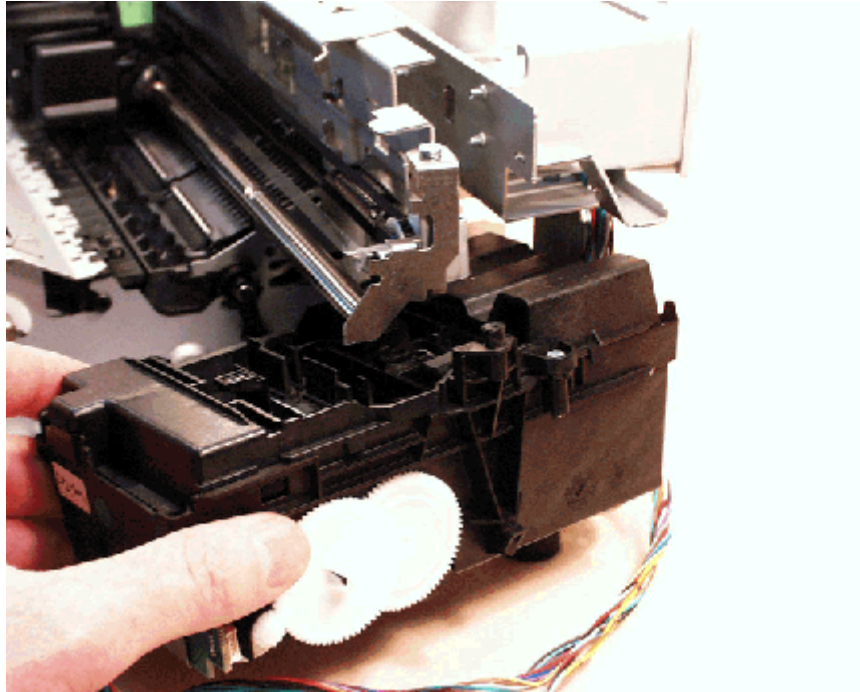
1. Ensure that the service station is upcapped. To upcap, simply turn the gears on the right side of the service station. Push the carriage to the center.
2. Disconnect the wire from the printer-right side of the service station.
3. Remove one T10 screw (callout 1).



**Remove T10 screw**



4. Remove the service station by pulling it out printer-right.



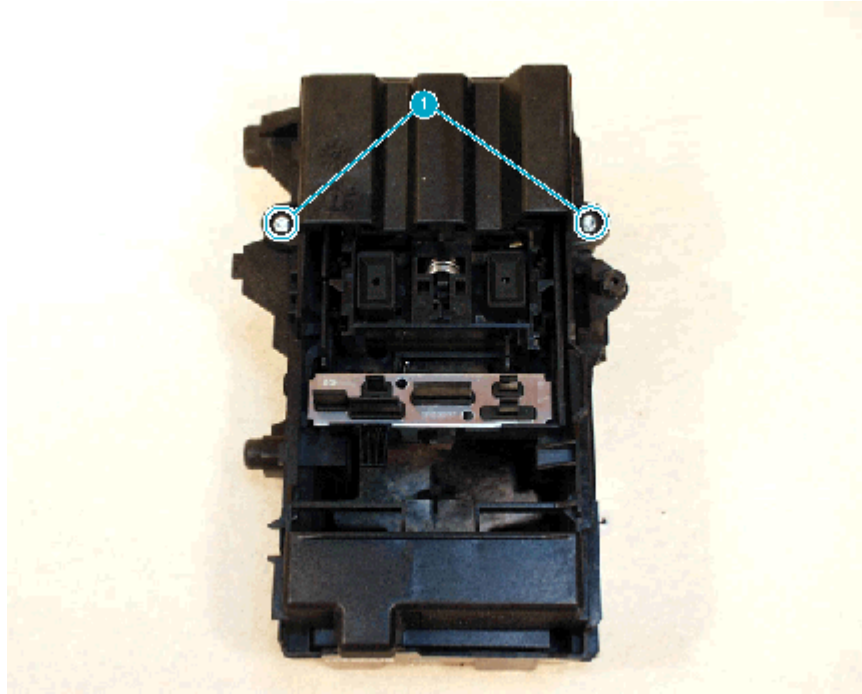
**Remove the service station**



## ABSORBER - SERVICE STATION SVC (C8137-67036)

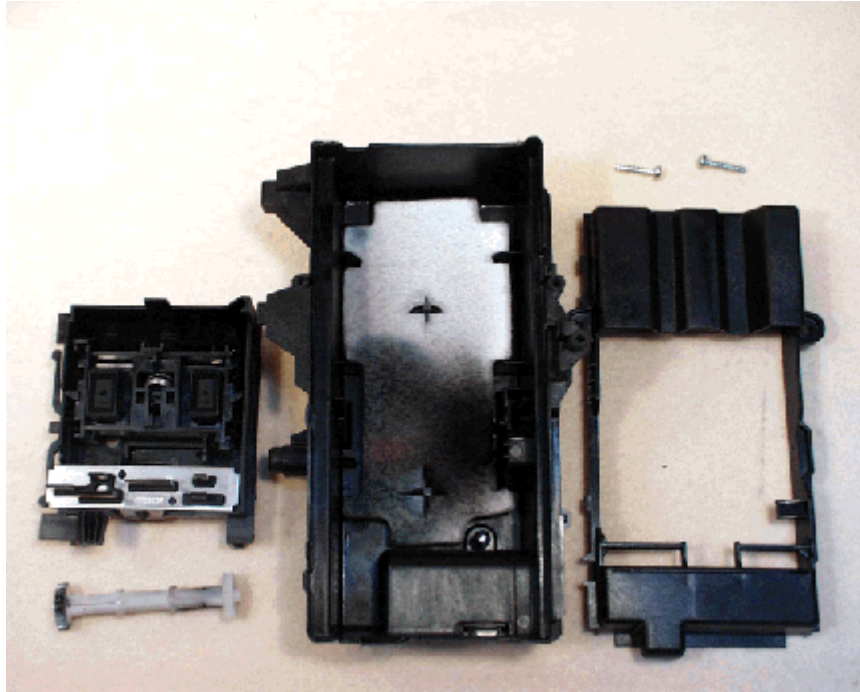
The absorber is inside the service station. Follow the procedure to remove the service station:

1. Remove 2 T-10 screws (callout 1).



**Remove two T10 screws**

2. Remove service station sled and gear shaft to access the absorber.

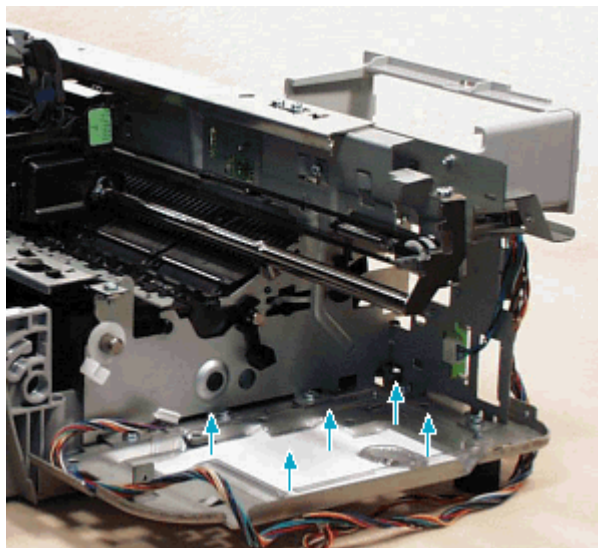


#### **Remove service station absorber**

#### **BASIN - SERVICE STATION SVC (C8137-67037)**

The service station basin is under the service station. Follow the procedure to remove the service station:

Pull up the basin under the service station.

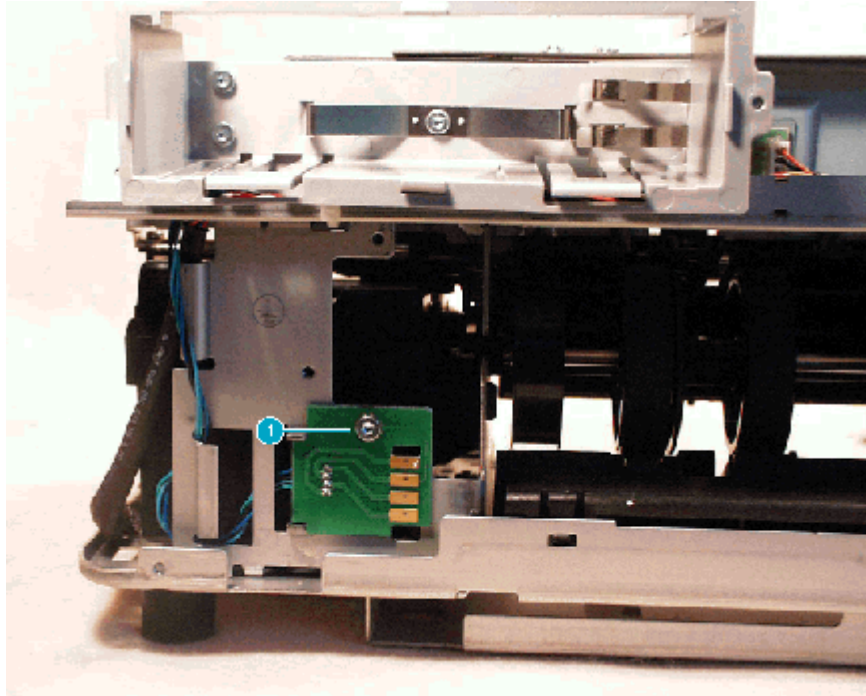


**Lift basin**

## PCA - DUPLEXER SVC (C8137-67040)

First remove the following:

1. CASE - RIGHT SUB SVC
2. CASE - RIGHT COVER SVC



**Remove one screw, disconnect wire.**

1. Remove one T10 screw (callout 1).
2. Unplug connector and remove the PCA.

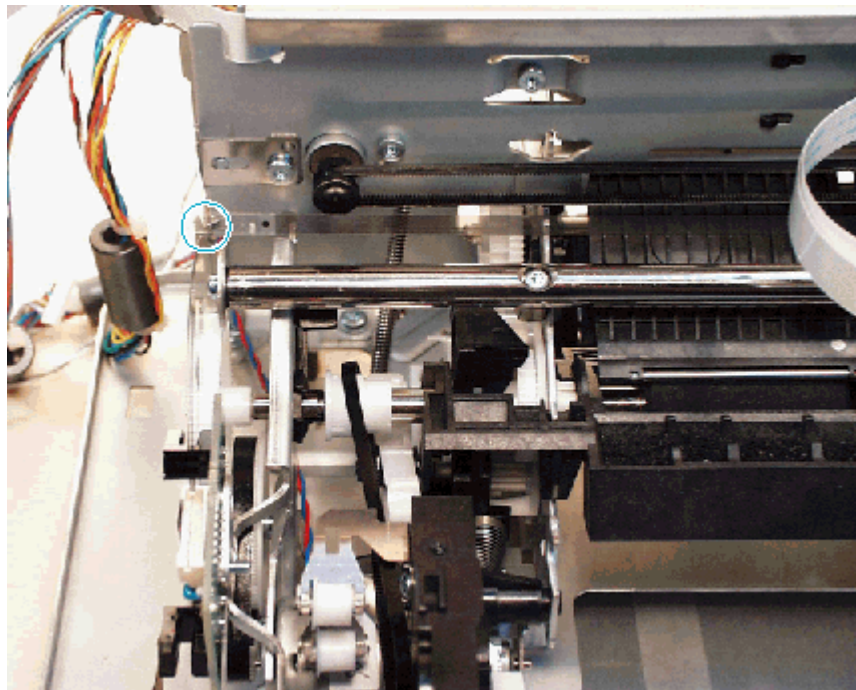
## ENCODER STRIP SVC (C8137-67034)

First remove the following:

1. CASE - RIGHT SUB SVC
2. CASE - RIGHT COVER SVC
3. CASE - LEFT SUB SVC
4. CASE - LEFT COVER SVC
5. CASE - REAR COVER SVC
6. CASE - MAIN SVC

Remove the part by following these steps:

1. Detach the left end of the encoder strip and slide it toward printer-right through the carriage.



**Detach encoder strip and slide to right**

## NAMEPLATE (C8137-67046, C8137-67047, C8137-67048)

First remove the following:

1. CASE - RIGHT SUB SVC
2. CASE - RIGHT COVER SVC
3. CASE - LEFT SUB SVC
4. CASE - LEFT COVER SVC
5. CASE - REAR COVER SVC
6. CASE - MAIN SVC

Release the tab behind the nameplate.

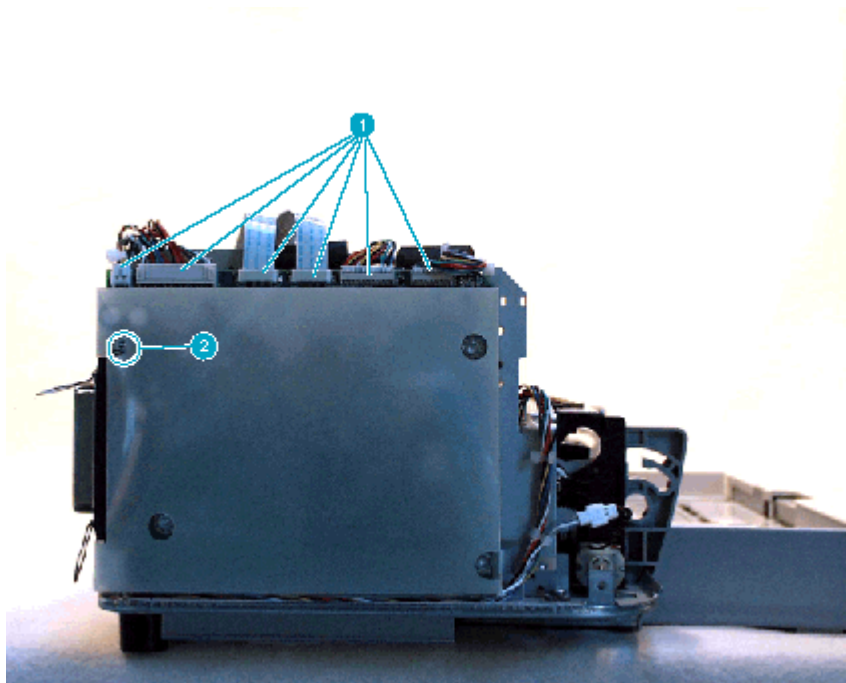
## ASSY - RECEPTACLE SVC (C8137-67042)

First remove the following:

1. CASE - RIGHT SUB SVC
2. CASE - RIGHT COVER SVC
3. CASE - LEFT SUB SVC
4. CASE - LEFT COVER SVC
5. CASE - REAR COVER SVC
6. CASE - MAIN SVC

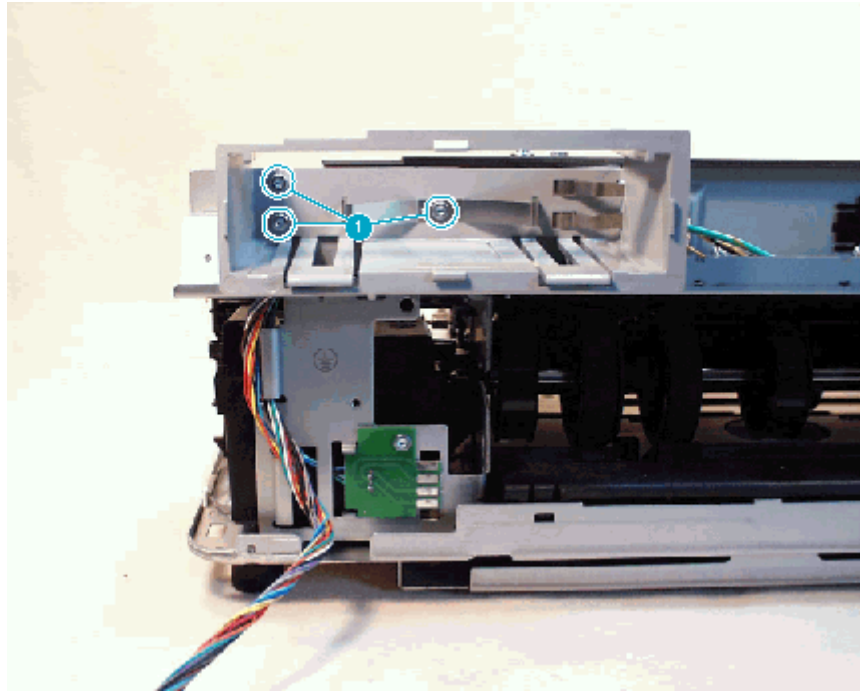
The receptacle assembly includes all the wire harnesses. Remove the assembly as follows:

1. Unplug six connectors from the top of the PCA (callout 1), and remove one T10 screw (callout 2).



**Unplug eight connectors and remove T10 screw**

2. Unplug connectors from the service station and duplexer PCA.
3. Remove three T10 screws (callout 1) in the receptacle.



#### **Remove T10 screws**

4. Remove one T10 screw securing the ground wire to the left of the receptacle.
5. Remove one T10 screw securing the wire harness channel from printer-left.
6. Remove the receptacle, all wires, and the harness channel, removing the harness from supports as necessary.

### **ASSY - INPUT TRAY SVC (C8137-67012)**

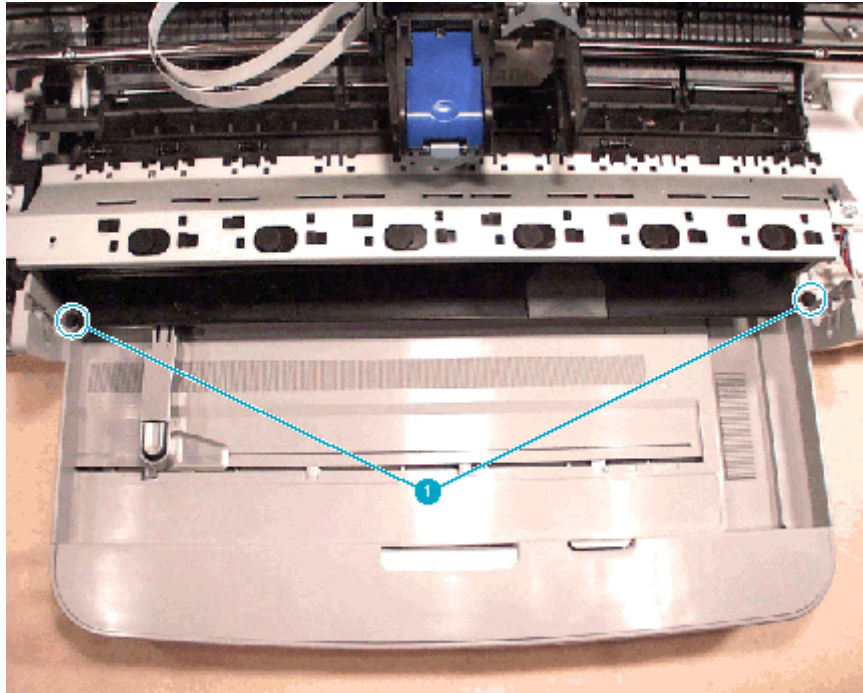
First remove the following:

1. ASSY - CLEANOUT SVC
2. CASE - RIGHT SUB SVC
3. CASE - RIGHT COVER SVC
4. CASE - LEFT SUB SVC
5. CASE - LEFT COVER SVC
6. CASE - REAR COVER SVC
7. CASE - MAIN SVC



Remove the part by following these steps:

1. Remove two T10 screws (callout 1).



**Remove two T10 screws**

2. Pull on both sides of the input tray to release it from the chassis.



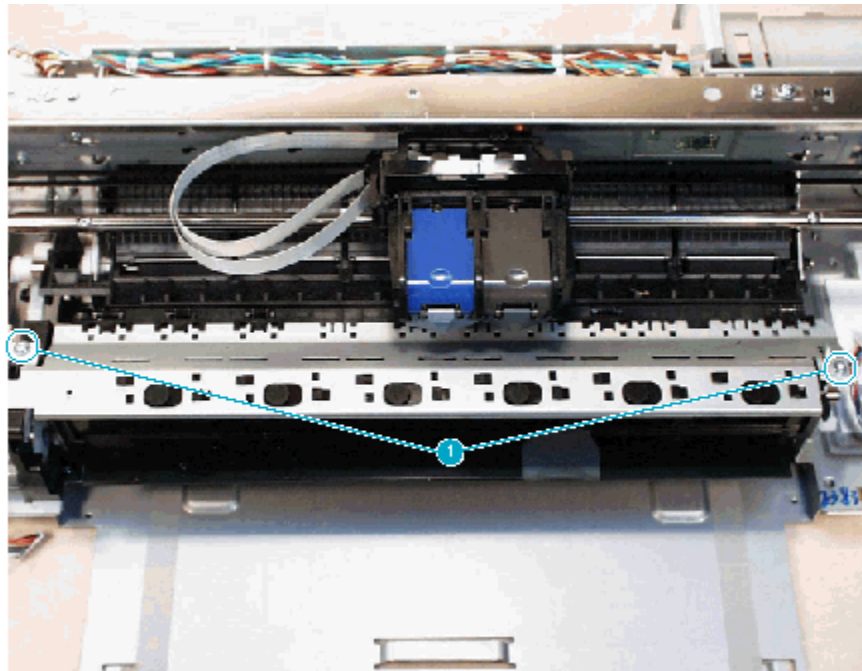
## ASSY STARWHEEL FRAME SVC (C8137-67023)

First remove the following:

1. CASE - RIGHT SUB SVC
2. CASE - RIGHT COVER SVC
3. CASE - LEFT SUB SVC
4. CASE - LEFT COVER SVC
5. CASE - REAR COVER SVC
6. CASE - MAIN SVC
7. ASSY - INPUT TRAY SVC
8. ASSY - STARWHEEL FRAME SVC

Then remove this part by following these steps:

1. Remove two T-10 screws (callout 1).



**Remove two T10 screws**

---

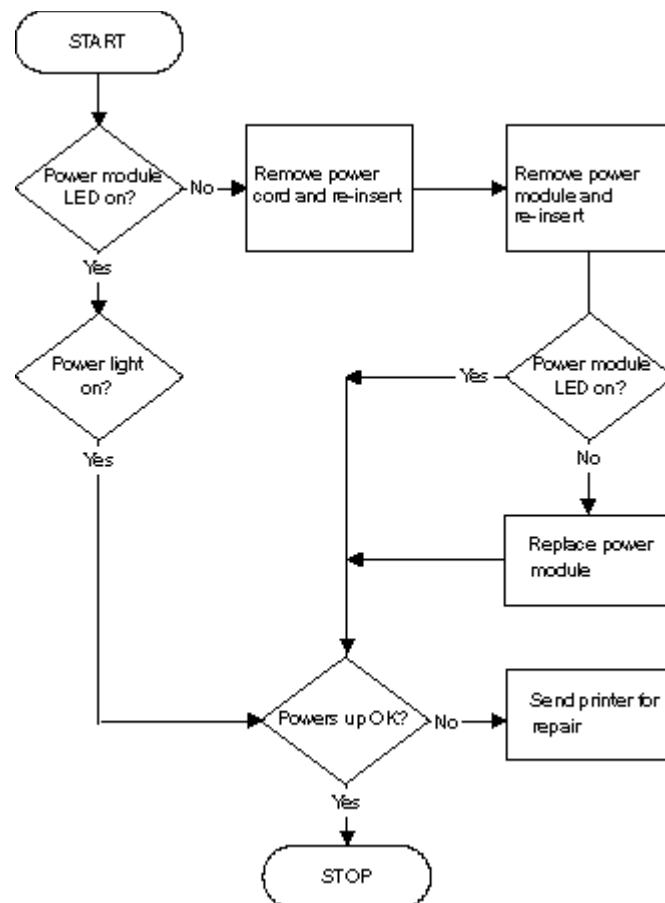
## Troubleshooting tools

The following tools are required to troubleshoot the printer:

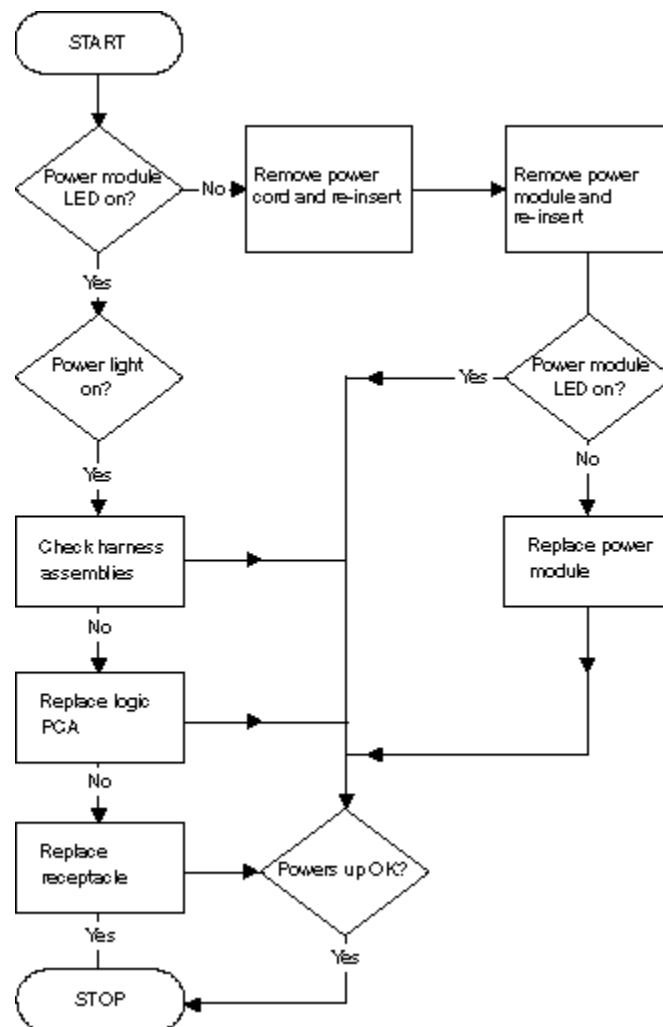
- Digital Multimeter.
- TORX T10.
- Small and medium flathead screwdriver.
- Needle-nosed pliers.
- Electrostatic Discharge (ESD) workstation or ESD dissipative straps (either heel straps or wrist straps).

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## Troubleshooting power-on issues



### Troubleshooting power-on problems at CCC

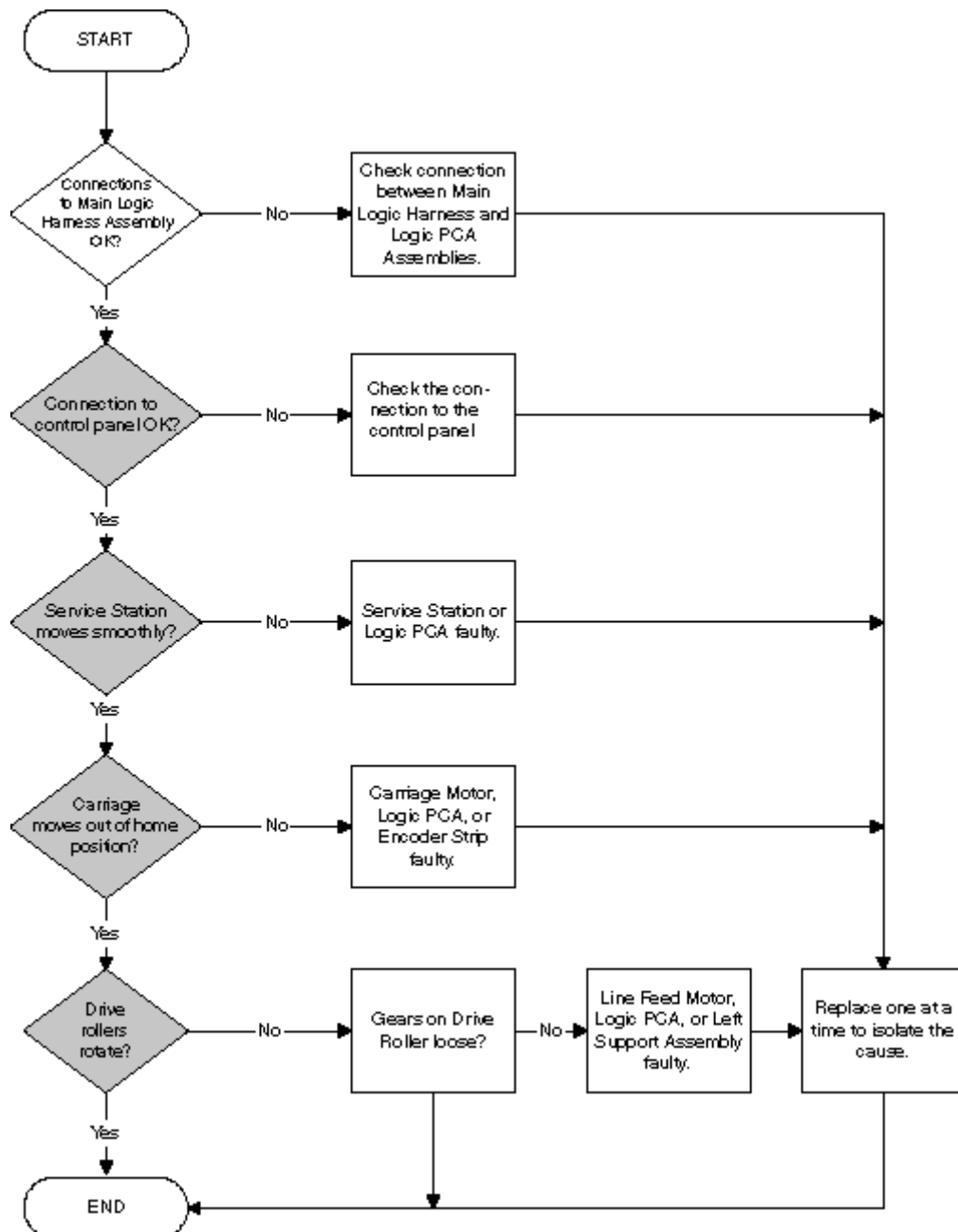


### Troubleshooting power-on problems at repair center

<b>Problem</b>	<b>Possible cause</b>	<b>Things to check</b>
Power-on and printer response issues	Cause 1: Cleanout not installed	Check that the cleanout assembly is installed and the locks are engaged.
	Cause 2: Power cord incompatibilities	Make sure the printer is connected to the power cord, that the power cord is plugged in, and that the power cord can handle 230V. To test the power cord: Power off the printer, unplug the power cord and replace it with a new power cord, then power on the printer. If the printer now works, then the power cord was faulty.
	Cause 3: Verify Power Supply module	Check that the LED on the power supply module is on when power is applied. If the LED is off, the power supply is faulty.
	Cause 4: Verify the logic PCA.	Replace the main logic PCA and power on the printer to see if the PCA is faulty.
	Cause 5: Faulty harness	Check that all connections to the harnesses are solid and that all connectors are attached firmly to the wires. Ensure that none of the wire insulation is frayed or missing. Check PS voltages at the destination ends of the harnesses.

### **Troubleshooting power-on issues**

## Troubleshooting printer initialization problems



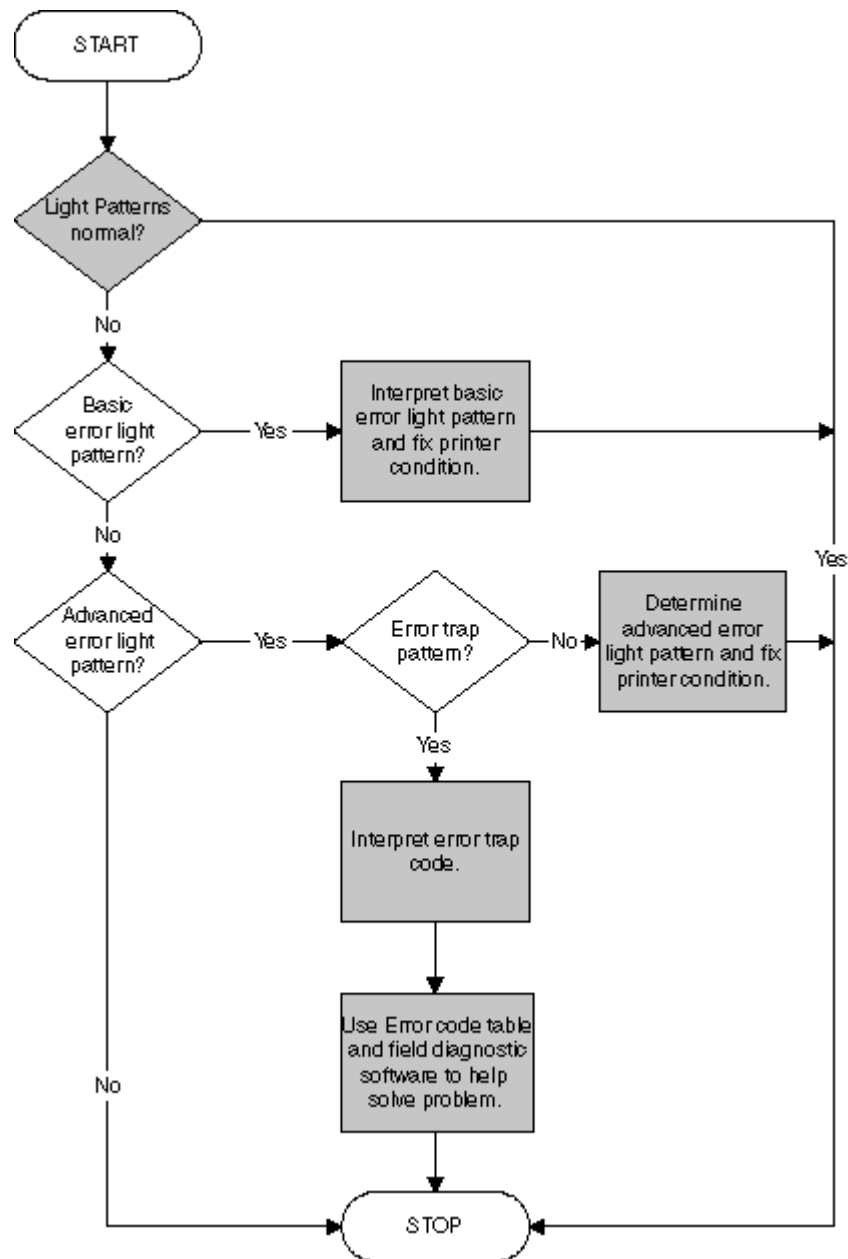
**Troubleshooting printer initialization problems**

<b>Problem</b>	<b>Possible cause</b>	<b>Things to check</b>
Service station does not move freely	Cause 1: Faulty service station or Logic PCA	Rotate the gears of the Service Station Motor Assembly to make sure the Wiper Assembly can move freely within the Service Station Mechanism Assembly.
Carriage assembly moves out of home position	Cause 1: Flex cable.	Check the Flex Cable Connection. Replace if flawed or worn.
Carriage assembly moves out of home position	Cause 2: Carriage Motor, Logic PCA, or Encoder strip faulty or Carriage lock not releasing.	<p>If the Carriage Lock is not releasing, check the Carriage Lock and check the Service Station for movement. If the Carriage Assembly does not move out of the home position or return to the home position, clean the electrical contacts on the print cartridges.</p> <ol style="list-style-type: none"> <li>1. Remove the print cartridges from the printer.</li> <li>2. Clean the electrical contacts on the print cradle with a dry cotton swab.</li> <li>3. Clean the electrical contacts on the print cartridges with a dry, lint free cloth.</li> <li>4. To prevent damage to the electrical contacts, wipe the contacts only once. Do not wipe the ink nozzles on the print cartridges.</li> <li>5. Re-install the print cartridges.</li> </ol>

### **Troubleshooting printer-init problems**



## Troubleshooting using LED's



**Troubleshooting using LEDs**

LED pattern	Means...	Explanation/things to check
All		If Flex Cable is worn or bent, replace it.
All lights are OFF.	The printer is OFF.	Check power troubleshooting if this is unexpected.
The Power Light is ON.	The printer is ready and waiting.	Send a document to print.
The Power Light is blinking	The printer is receiving data from the computer or is printing. The power light blinks 2-on, 1-off when a print job is being cancelled.	Wait for the document to print or the cancel-job to complete.
Power Light On and Resume Light blinks	Printer is waiting for special media to dry, out of paper, waiting for manual load, media size mismatch or I/O stall	If printer is waiting for media to dry, it will resume printing when the dry time is complete. If printing manual duplex, load paper and press resume to continue the print job. Verify that the printer has media in the input tray. Press Resume to reject paper. I/O stall occurs when a job has not completed yet but data stops coming from the host (PC for example). Verify that the host is working properly, and verify the connection to the printer.
Power and Resume Lights blink (synchronous)	Paper jam or paper motor stall: There is a Carriage Stall.	Open the Access Door. Remove any packing materials or excess paper from the printer. When there are no obstructions, power the printer off and then on again.
Power and Resume Lights blink (asynchronous)	Paper jam or carriage stall.	Open the Access Door. Remove any packing materials or excess paper from the printer. When there are no obstructions, power the printer off and then on again.
Power and Resume Lights blink (two-power, two resume)	Paper jam or service station stall.	Open the Access Door. Remove any packing materials or excess paper from the printer. When there are no obstructions, power the printer off and then on again.
Power and Resume Lights ON	Door open.	Close the Access Door. Make sure duplexer or cleanout trough is properly installed.
Power Light On and Print Cartridge Lights ON	Print cartridge bad or absent.	Incorrect installation (tape?). Print cartridge damaged or not usable. Low or out of ink. Wrong type of print cartridge.

All Lights blink	This is an error trap code.	Turn the printer off, then on again. If all the lights still blink, the problem is likely caused by a failure in the printer. (Firmware may need to be flashed). Refer to trapped error codes topic. Send printer for repair.
All Lights cycle rapidly	Firmware is being flashed.	Happens only during the firmware flash process.

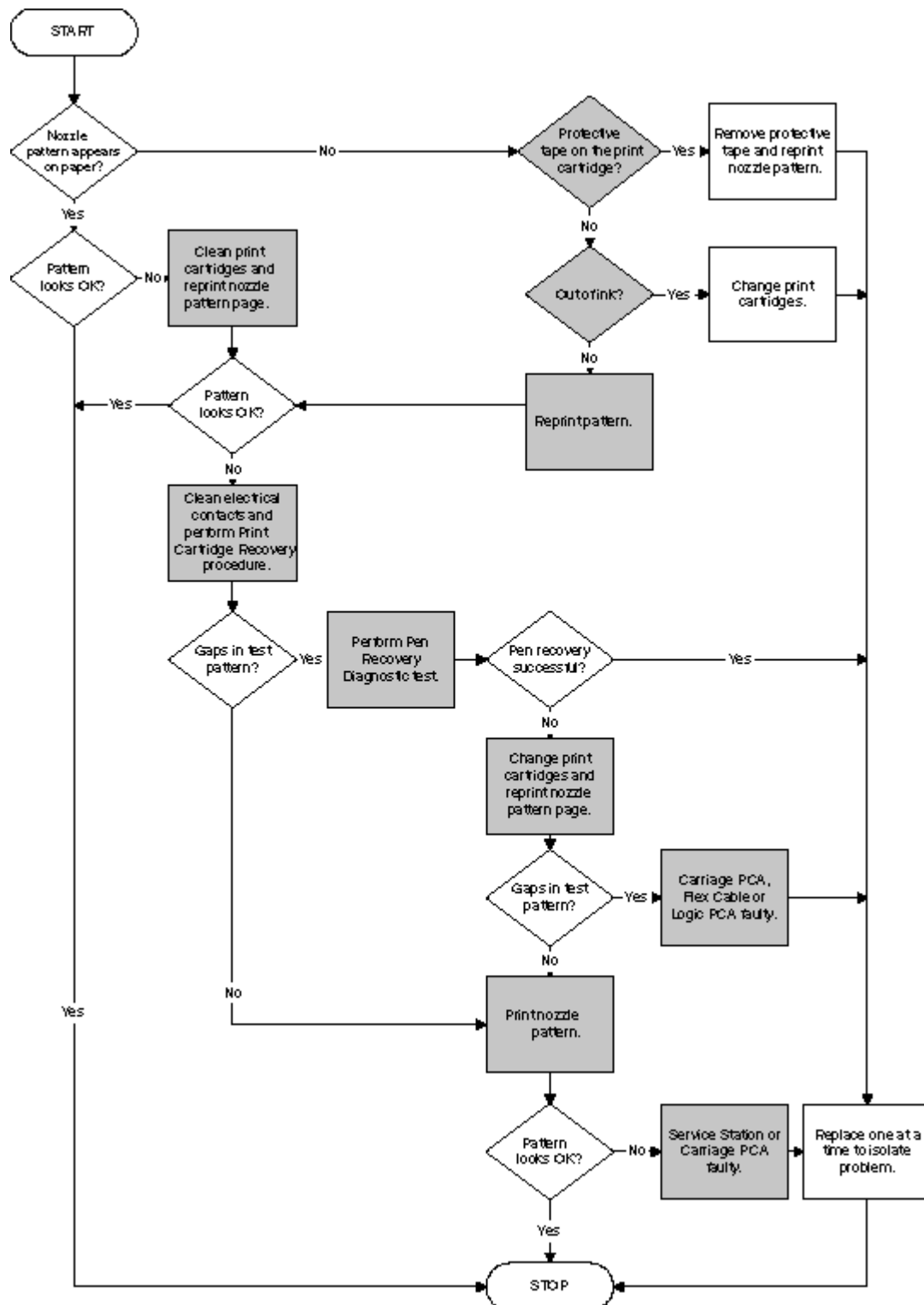
### Basic LED patterns

LED pattern	Symptom	Condition	Solution
All			If Flex Cable is bent or worn, replace it.
All lights off	Pressing the Power Button does not change the light pattern.	Power Button faulty.	Check or change: Main Harness Assembly (receptacle), Power Supply, Keypanel PCA (right cover), Logic PCA, Carriage.
Power Light blinks	Power Light continues to blink after all printer jobs are completed.	Power Button faulty.	Check the printer driver. If still blinking, check or change the Flex Cable, change the Logic PCA.
Resume Light blinks	Pressing and releasing Resume does not change the Light pattern.	Resume Button faulty.	Ensure Resume Button is not stuck. Check or change: Cable connection from Logic to Keypanel PCA, Keypanel PCA, Logic PCA.
Print Cartridge Light blinks	Opening and closing the Access Door does not change the light pattern.	Access Door sensor faulty.	Change the Logic PCA or Carriage.
Power and Resume Lights on	Installing and locking the Cleanout Trough does not change the light pattern.	Rear Access Sensor on Logic PCA faulty.	Ensure wire harnesses are properly connected. Check that the Cleanout Trough is locked. Check lever sensor. Change Logic PCA.
Power Light On and Resume Light blinks	Pressing and releasing Resume or Power does not change the light pattern.	Input/Output Stall. Out of paper, paper jam or problem with the paper feed.	Check or change: Paper feed, OOPS flag, OOPS sensor and if faulty, change Logic PCA, Output Belt, Carriage PCA, Encoder Disk, Pick Roller Assembly, Linefeed Motor, Trough 1.

Power Light On and Print Cartridge Light blinks	Carriage sits in middle of the printer.	Possible problem with print cartridge identification or Access Door sensor faulty.	Change BOTH print cartridges. Ensure Access Door flag is not bent. Check or change: Logic PCA, Flex Cable, Access Door Assembly, Carriage Assembly, Carriage PCA, Service Station.
Power and Resume Lights blink (asynchronous)	Paper is jammed.	Paper Stall Error.	Check for paper jam. Check 32V on Power Supply Assembly and replace PCA if necessary. Check or change: Wire harness connections, Encoder Disk, Encoder Strip, Linefeed motor, Logic PCA.
Power and Resume Lights blink (synchronous)	Carriage Motor has no holding torque.	Carriage Stall or Logic PCA is not properly reading the Encoder Strip.	Ensure Carriage is not stuck on the Service Station. Ensure wire harnesses are properly connected. Check or change: Wire harnesses, Service Station, Encoder Strip, Carriage Belt, Logic PCA, Spot Sensor Assembly, Carriage Motor.
All Lights blink	Cycling the printer power does not change the light pattern.	Error trap. See the topic on Error trap LED codes.	

### Advanced troubleshooting with LED patterns

## Troubleshooting using the nozzle pattern page

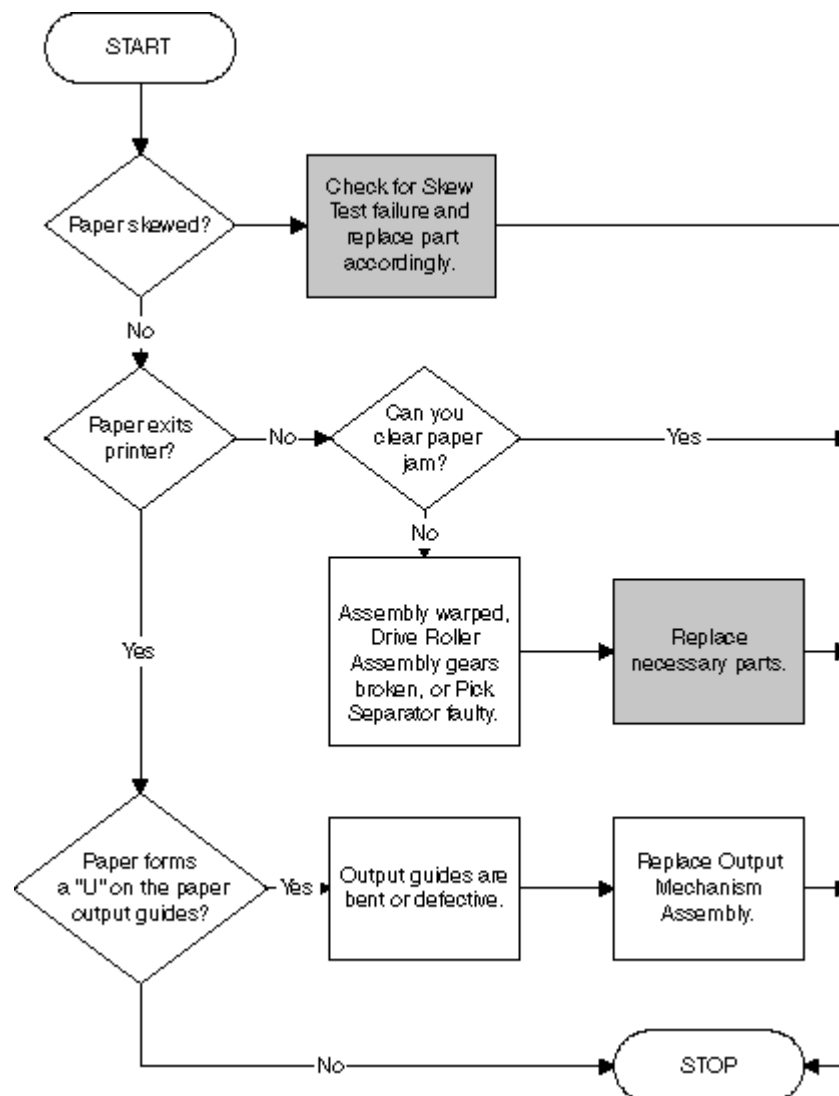


**Troubleshooting problems using the nozzle pattern page**

<b>Problem</b>	<b>Possible cause</b>	<b>Things to check</b>
Clear nozzle patterns do not appear on paper	Cause 1: Protective tape on the print cartridge	Each new printhead is packaged with protective plastic tape covering the ink nozzles. Check each printhead and remove tape if necessary.
	Cause 2: Out of ink	If a blank page is produced when attempting to print black text only, the black ink cartridge may be empty. Replace the black ink cartridge.
Nozzle patterns do not appear on paper even after removing the protective tape and replacing the print cartridges.		<ol style="list-style-type: none"> <li>1. If cleaning printheads and changing print cartridges do not help, clean electrical contacts and perform print cartridge recovery sequence.</li> <li>2. Replace the Flex Cable.</li> <li>3. Replace the Logic PCA.</li> </ol>
Gaps in nozzle pattern	Cause 1: Ink cartridges out of ink	Change print cartridges and reprint nozzle pattern test.
	Cause 2: Carriage PCA, Flex cable or Logic PCA faulty	The Carriage PCA, the Flex Cable, or the Logic PCA could be faulty. Check each component and replace one at a time to isolate the problem.
Gaps in nozzle pattern even after replacing the Carriage PCA, Flex cable, or Logic PCA	Cause 1: Service Station or Carriage PCA faulty	The Service station or the Carriage PCA could be faulty. Check each component and replace one at a time to isolate the problem.

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## Troubleshooting paper eject problems



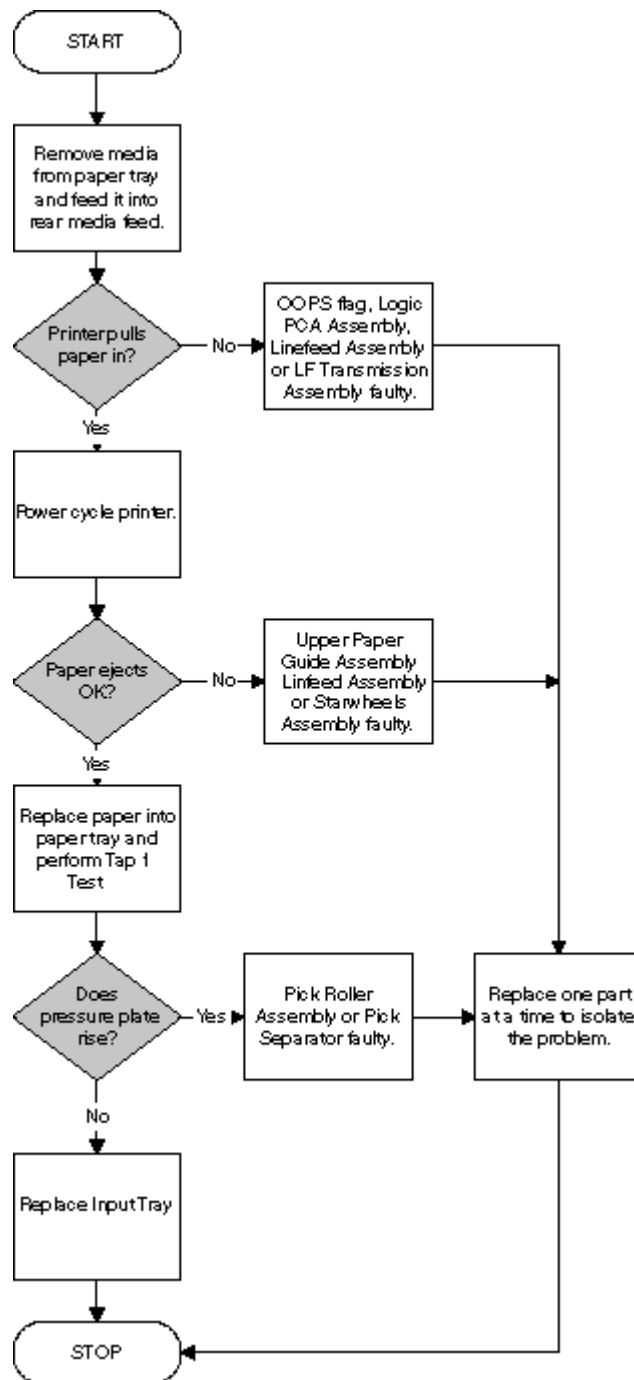
**Troubleshooting paper eject problems**



<b>problem</b>	<b>possible cause</b>	<b>things to check</b>
Paper Skew	Cause 1: Output Tray	If paper passed through secondary paper path, check that output tray is inserted correctly.
	Cause 2: Paper stack not fitting	Do not over stack. Ensure paper stack fits snugly against the right and front walls.
	Cause 3: Length and Width Adjusters too tight	Ensure length and Width Adjusters fit firmly against the paper stack or envelope.
	Cause 4: Dirt accumulated on Drive Rollers	Drive Rollers are feeding unevenly due to dirt. Use the printer's cleaning kit to clean the rollers or replace the rollers if cleaning several times does not help.
	Cause 5: Input Tray assembly	If after performing above does not help, the separation pad assembly may be faulty. Therefore, change the input tray.
Paper does not exit printer	Cause 1: Paper Jammed	Clear the jam. If problem persists in same location, check Starwheel Assembly or missing parts or parts causing obstruction.
	Cause 2: The pressure plate on the input tray assembly may be warped.	Visual inspect the pressure plate for warpage. If warpage present, change the input tray assembly.
	Cause 3: Room for exiting paper	Clear the output tray to make room for exiting paper.
Multi-pick or media dent (a dent on the front of the media).	Cause 1: Paper stack	Do not over stack.

### **Troubleshooting paper eject problems**

## Troubleshooting paper feed problems



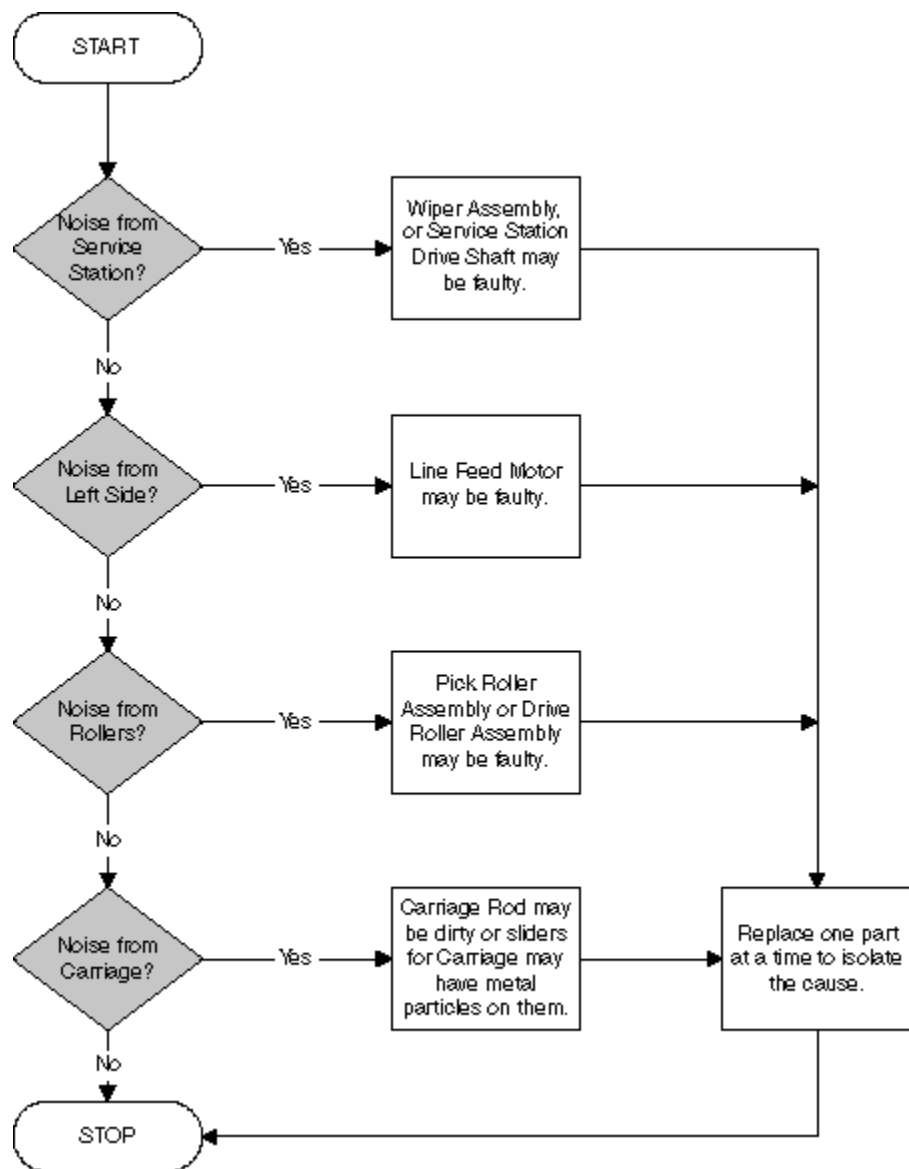
**Troubleshooting paper feed problems**

<b>Problem</b>	<b>Possible causes</b>	<b>Things to check</b>
Unable to advance paper	Cause 1: Oops flag on the Upper Paper guide faulty	
	Cause 2: Linefeed assy (feed rollers) or the LF transmission assy is faulty.	Check if LF transmission assy is moving. If so, change the Linefeed assy. Otherwise, change the Linefeed assy(feedroller)
	Cause 3: PCA logic	
No pick	Cause 1: Pressure plate	Observe if pressure plate rises. If not, replace Input tray assembly.
	Cause 2: Pick roller	May be due to pick roller not assembled properly or faulty, reassemble or replace pick roller
	Cause 3: Pick separator	If pressure plate rises, and after changing the pick roller still not able to resolve problem, change the input assy.

#### **Troubleshooting paper feed problems**

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## Troubleshooting unusual noises



**Troubleshooting unusual noises**

<b>Problem</b>	<b>Possible cause</b>	<b>Description</b>
Noise from the right side of the printer	Cause 1: Faulty Service Station Assembly	If the right side of the printer is making unusual noises, the Service Station Assembly or one of its parts may be faulty. Check for cracked gears and foreign particles.
Noise from the left side of the printer	Cause 1: Faulty Line Feed Motor	If the left side of the printer is making unusual noises, the Line Feed belt is loose, gears may be cracked, or the Line Feed Motor may be faulty.
Noise from the rollers	Cause 1: Pick roller assembly or Drive roller assembly could be faulty.	Check for foreign particles or cracked gears. Replace the faulty components. Check page count. If page count is low, then check assembly of printer.
Noise from the carriage	Cause 1: PPS calibration.	If noise occurs while carriage is moving, check/adjust PPS calibration. Small possibility that noise is caused by dirt on carriage rod.

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## Troubleshooting unusual noises

## Summary

The lessons in this Service and Repair module covered the advanced troubleshooting and repair procedures for the printer:

- Describe the procedure for printing diagnostic pages and reports and the functionality of each test.
- Identify the hardware diagnostic test for the printer.
- Disassemble the printer.
- Describe the advanced repair and troubleshooting procedures.
- Use this information, plus the theory of operation information learned in a previous module, to troubleshoot and resolve issues.



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