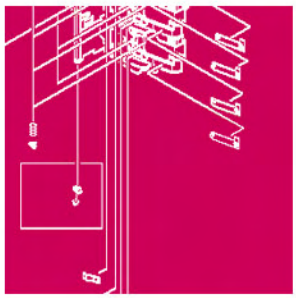
HP LaserJet Product Update Newsletter





October 2006
Issue 32

Welcome to the 32nd edition of the HP LaserJet Product Update Newsletter—created for our most valuable HP partners and customers. Our intent is to provide "hot-off-the-press" technical information about the HP LaserJet printers you use and support.

This edition focuses on color—HP now offers the ability to manage HP color by downloading previous product color tables, as well as controlling color access through a powerful suite of tools.

Write us at LJNEWSLETTER@HP.COM with feedback and suggestions for future issues!

Inside...

Inside, cont'd…

HP Color Access Control

HP helps customers control and manage color

For many of our customers, the main barrier to widespread adoption of color printing is the perceived cost of color and lack of control over color printing. The powerful HP Color Access Control suite of tools can help customers use color printers and MFPs more effectively.

With HP Color Access Control, people who truly need color—to print sales materials, for example—can use color, while other people or applications can be automatically set to switch to black-and-white printing. This prevents color resources from being depleted on personal or non-essential print jobs and helps lower overall printing costs significantly.

Our tools are designed to address concerns in three major areas:

- Monitoring and awareness of color usage
- Managing access to color
- Job tracking and billing (third-party)

Reap the benefits of color

Monitoring and awareness of color usage

With HP Color Access Control you can identify the following:

- How much is being printed in color
- When printing is occurring
- Users or departments that over-use color

Tools to help you monitor color usage
The table below provides a list of tools that HP offers to monitor color usage on select HP devices.

Manage one device— Device control panel or HP Embedded Web Server	Print a Color Usage Job Log, showing the date, time, user, job, application, and number of pages printed
Manage up to 15 devices— HP Easy Printer Care software	Track and print reports on color printing usage
Manage a fleet— HP Web Jetadmin (with the Report Generation Plug-in)	• Identify potential overuse or abuse with centralized proactive threshold alerts • Observe user and device trend information with real-time and periodic online reports and graphs • Schedule notification usage emails • Configure color access control on large numbers of printers at one time • Configure color access by time of day

Managing color access

Make color available to those users who legitimately need it. You can allow or restrict color printing by user, device, or application on select HP devices. Some of the features below are designed for use on a smaller number of devices, while others are designed for managing larger fleets:

Individual or few devices and small workteams

Device control panel

Enable complete color lockout for printing or copying.

HP Embedded Web Server

- Enable/disable color for up to 50 user names
- Enable/disable color for up to 10 applications
- Authorize pin-restricted access to color copying on MFPs

Multiple offices or larger fleets

HP Web Jetadmin

- Enable/disable color by Time of Day
- Enable/disable color by application
- Enable/disable color by user
- Enable/disable color by device
- Import list of users and applications

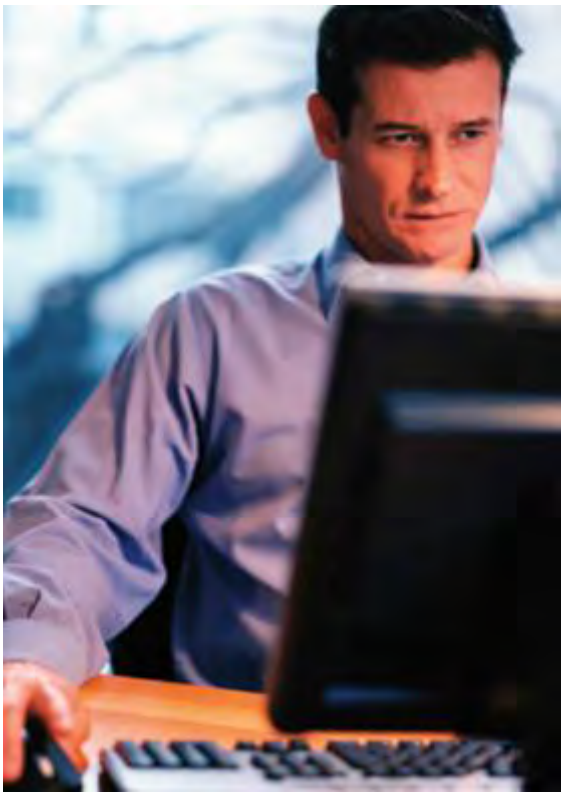
The HP Web Jetadmin Report Generation Plug-in provides color usage tracking capabilities. It can track network jobs, walk up jobs, applications, error reports, consumables usage, and can identify high color users.

HP Universal Print Driver 3.0 and HP Managed Print Administrator (MPA)

- Use one driver across your fleet to manage color access by user, group (unlimited with HP MPA), or by application
- Easily define user, group, and device privileges or policies with the HP MPA tool
- Create managed printer lists (MPLs)

HP Active Directory Services

Use HP templates to manage access by user, application, group, or device. Available Dec 1, 2006.



You may download the HP Universal Print Driver Series for Windows® for free. Version 3.0 will be available mid-November, 2006 at www.hp.com/go/upd.

Download the HP Managed Print Administrator software for free at www.hp.com/go/MPA.

Job tracking and billing

With job tracking and billing, you will know precisely who to charge, and how much to charge for device usage. Organizations can easily recover their print, copy, or fax costs. Plus, frivolous or personal use is reduced.

- Accurately charge individuals, departments, or workgroups
- Accurately charge clients for copy usage
- Accurately charge clients for specific projects
- Color/mono department level cost allocation

You can integrate HP printers with the following third-party tools to easily track and charge back for color printing:

- Capella MegaTrack
- Pharos
- Ringdale
- Safecom

HP Color Access Control components

The table below provides a handy reference to help you see which solutions are available for select HP printers and MFPs.

KEY:	
HP Easy Printer Care	●
HP Embedded Web Server	✓
Control Panel	★
HP Web Jetadmin[1]	■
HP Universal Print Driver (UPD)	▲
Active Directory Services (ADS)[2]	♦

Scalable solutions to manage color access[3] Fall '06

HP Color Access Control Feature	HP Color LaserJet 2605 printer 9500 printer 2820/2840 AiO	HP Color LaserJet 3000/3800/ CP4005/4700/5550 printers 4730 MFP 9500 MFP	HP Color LaserJet CM1015/1017 MFP	HP Color LaserJet 2700 printer
Color Usage Job Log	N/A	● ✓ ■ ★	N/A	● ✓ ■ ★
Application control	▲ ♦	✓ ■ ▲ ♦	▲ ♦	▲ ♦
User control	▲ ♦	✓ ■ ▲ ♦	▲ ♦	▲ ♦
Group control	▲ ♦	▲ ♦	▲ ♦	▲ ♦
Disable Color mode	N/A	✓ ■ ★ ▲ ♦	✓ ■ ★ ▲ ♦	✓ ■ ★ ▲ ♦
Control Color Copy/Photo card slot with PIN	■	✓ ■ ★	✓ ■ ★	N/A
Control usage tracking by job, user, time, and by device reports	■	■	■	■
Color control use by Time of Day	N/A	■ ▲ ♦	■ ▲ ♦	■ ▲ ♦
DMC printer driver configuration and deployment tool	CLJ 9500 only	Yes	No	No
Color/mono page limits using quotas (third-party software purchased separately)	Yes	Yes	Yes	Yes

[1] Some color access control features and capabilities are available only with HP Web Jetadmin 8.1 with Report Generation Plug-in (RPG) 3.1. For more information, go to www.hp.com/go/webjetadmin.

[2] Some color access control features and capabilities are available only with the HP Universal Print Driver 3.0 (available approximately mid-November, 2006) and HP Managed Print Administrator software. For more information, go to www.hp.com/go/upd.

[3] We are not currently planning color access control (CAC) firmware capabilities for the CLJ 2605, the CLJ 9500, and the CLJ 2820/2840 AiO. (These products do have the capabilities for CAC features when using the UPD and MPA/ADS.) The CLJ 5550 will have CAC capable firmware placed on the web to download for free in Spring, 2007. HP Color Access Control capabilities vary from device to device. HP Web Jetadmin software is required for some features and available separately for certain printers and features. Refer to the table above to see which HP Color LaserJet printers support which CAC features. For more information about HP Color Access Control, go to www.hp.com/go/cac.

Frequently asked questions

Question 1: How do I set up the printer so most users print in black-and-white but some, faculty members for example, print in color?

There are the several easy ways you can restrict most users to black-and-white printing, while allowing others to print in color:

1. You can use the HP Embedded Web Server (EWS) to restrict color access. Follow these simple steps:
   a) On the **Settings** tab, click **Restrict Color**, then select **Color If Allowed**.
   b) Under the **Default User Permission** box, select **Black Only**.
   c) Designate which users can print in color.
   d) Under the **Permission** box, select **Color**.
   e) Click the **Apply** button to save changes.

The administrator can copy the User and Application name from the Color Usage Job Log on the **Information** tab on the EWS.

Here are the conditions where the printer will print in black only:

You will print in black only if . . .

- The job is completely monochrome OR
- Restrict Color Use (in the HP Embedded Web Server) = Disable Color OR
- Restrict Color Use = Color If Allowed AND
  - The User's permission (in the HP Embedded Web Server) is Black Only OR
  - The Application's permission (in the EWS) is Black Only OR
  - The User is not found in the permission list AND the default user permission is Black Only OR
  - The Application is not found in the permission list AND the default application permission is Black Only
- "Print in Grayscale" is selected within the driver OR
- The black only driver is being used.

Note

The printer requires both the user *and* the application to have color permission in order to print in color. If either the user or the application is restricted to **Black Only**, then the job will print in **Black Only**.

Question 2: What components are needed in order apply the Restrict Color Usage features?

- Currently, you must have a printer which supports the Restrict Color Usage features. All HP Color LaserJets 3000/3800/CP4005 support this feature. The HP Color LaserJet 4700 and the 4730/9500 MFP drivers support this feature with the current web versions of software and firmware upgrades. The CLJ 5550 will have CAC capabilities in Spring 07.
- For more information about which printers support which features, see the HP Color Access Control table on the previous page.
- The new HP Universal Print Driver 3.0 (available for free download approximately mid-November, 2006) provides important HP Color Access Control (CAC) capabilities. IT administrators can limit who uses color and when they use it by assigning color access by user/application, and by group and time of day, through HP Managed Printing Administration (MPA) or Active Directory Services (available December 1, 2006). Administrators can also shut down color access completely until it's needed for special projects.
- For more information, and to download the HP Universal Print Driver for free, go to www.hp.com/go/universalprintdriver.

Since you can set the user default permission (through the EWS to be **Black Only**, if you want some users to be able to print in color, you need a driver with the CAC feature enabled. These drivers send the User name and the Application name to the printer, which can then be used to set permissions/restrictions.

The HP Color LaserJet 4700 and 4730mfp driver versions that support HP Color Access Control features are shown in the tables below.

CLJ 4700 operating system	Driver version
Windows 9x, Me (PCL5, PCL6)	4.26.4700.410
Windows 9x, Me (PS)	60.051.41.00
Windows® 2000, XP, Server 2003 (PCL6, PS)	60.052.262.32
Windows 2000, XP, Server 2003 (PCL5)	60.052.262.31

CLJ 4730 MFP operating system	Driver version
Windows 9x, Me (PCL5, PC 6)	4.26.4730.410
Windows 9x, Me (PS)	60.051.41.00
Windows 2000, XP, Server 2003 (PCL5, PCL6, PS)	60.052.262.32

Note

If a black-only driver is available for the printer, it could be used to prevent printing in color, or administrators can use the HP Driver Pre-Configuration Software utility (www.hp.com/go/hpdpc_sw) to lock the driver in black only. This could be used with any HP Color LaserJet product.

Question 3: If we use multiple versions of an application, do I need to list each one in my permission list?

If the application names in the Color Usage Job Log are different, and you want to set up a restriction based on that application, then each version with a unique name will need to be listed in the permission list. HP Color Access Control tools rely on matching exact names.

Question 4: Can I make Macintosh jobs print in black-and-white only?

Yes, you can control color printing from the Mac through the HP Embedded Web Server or HP Web Jetadmin. You may use the HP Printer Utility to control color printing with the CLJ 3800/3000/CP4005 printers. Follow these steps:

1. Open the HP Printer Utility.
2. In the **Configuration Settings** list, click **Restrict Color**, and then select the appropriate color-use setting.
3. Click **Apply Now**.

The Mac OS X v10.2 and later drivers for the CLJ 3800/3000/CP4005 send the User name and Application name to the printer to restrict color. Mac driver support for the CLJ 4700 and CLJ 4730 MFP/9500 MFP is available in the current web versions of the Mac OS X installer.

Question 5: Do CAC features work with Linux drivers?

Yes, CAC works with the PostScript® Linux drivers for the HP Color LaserJet 3000/3800/4700/CP4005 printers and the HP Color LaserJet 4730 MFP/9500 MFP. These send the User name and Application name to the device, so CAC can be configured through the device EWS.

Question 6: Do CAC features work with the Universal Print Driver?

Yes, full Universal Print Driver (UPD) support (both PCL 5 and PostScript) is available with version 3.0 or later. Prior to this version, the UPD provides color lock-out support by User name but not by Application name. The new HP Universal Print Driver 3.0 (available for free download approximately mid-November, 2006) provides important HP Color Access Control capabilities. IT administrators can limit who uses color and when they use it by assigning color access by user/group, time of day, and by application through the device EWS. And with the addition of HP Managed Printing Administration (MPA) or Active Directory Services (available December 1, 2006), administrators will be able to control virtually unlimited numbers of users, groups, applications, and by time of day.

Question 7: Can I use HP Web Jetadmin to provide CAC settings to multiple printers?

Yes. HP Web Jetadmin 8.0 service patch 2 provides this capability via the support for the HP Color LaserJets 3000/3800/ 4700/CP4005 printers, and the HP Color LaserJet 4730 MFP/9500 MFP. HP Web Jetadmin can configure the same color access settings as the HP Embedded Web Server, but handles multiple devices simultaneously. HP Web Jetadmin allows the import of .csv files to populate the User and Application permission fields. For more information, see the HP Web Jetadmin Color Access Control whitepaper at the following link: http://h20338.www2.hp.com/Hpsub/downloads/wja_color_access_control.pdf.

Question 8: How do I restrict color copying on the HP Color LaserJet 4730 MFP?

Several options are available to print administrators:

- Device "Disable Color Copy" mode (Color Copy Lockout) - The printer administrator can configure the MFP to allow only monochrome (black) copy capabilities.
- Device Color Copy PIN Access – Use the device Control Panel, HP Embedded Web Server (PIN Authentication button on the **Settings** tab), or HP Web Jetadmin tools to define a color copy or scan authorization PIN.
- Device Color Copy PIN for multiple user access - Use Capella Technologies, VeriUser™ Authentication Solutions to define individual PIN for those users authorized to copy/scan in color. For more information, go to:

  http://www.capellatech.com/pages/2.1.3.veriuser.html
- LDAP can be selected by the administrator to authenticate the color copy on the HP Color LaserJet 4730 MFP. This function can only be managed through the HP Embedded Web Server.

Question 9: Can I provide mixed color access usage for one user or group?

Using the HP Embedded Web Server (EWS)

You can provide mixed color access usage if the scenario is similar to the example below:

The company has 10 users, and you want to enable User 1 and User 2 to print in color, while all other users are to print in black only.

- Set the Default User Permission to **Black Only** and give User 1 and User 2 color permission.
- Set the Default Application Permission to **Color**.

You *cannot* provide mixed color access usage if the scenario is similar to this example:

- The company has 10 users, and you want to enable User 1 and User 2 to print in color while all other users are to print in black only. *Except*, Users 9 and 10 want to print in color from Microsoft® Excel.
- If users 9 and 10 have Black Only permission they will not be able to print in color in Excel because both user *and* application must have color permission.

Using Managed Print Administrator (MPA) or Active Directory Services (ADS)

- Give User 1 and 2 a Color Always policy
- Give Users 3 – 8 a Black Only policy
- Give User 9 and 10 a policy that says Print in Black Always – Except, when the Application is Excel.

Resources

HP Color Access Control:
http://www.hp.com/go/cac1

Public sector HP Color Access Controls site:
http://www.hp.com/united-states/public/color/access/index.html

How Do I tech documents:
http://h20000.www2.hp.com/bizsupport/TechSupport/Document.jsp?lang=en&cc=us&objectID=c00599749

HP Color Access Control – In Command of Color Video:
http://hpbroadband.com/program.aspx?key=4ZJFTB05CC

HP Web Jetadmin CAC white paper:
http://h20338.www2.hp.com/Hpsub/downloads/wja_color_access_control.pdf

HP LaserJet news

Late-breaking news—Downloadable Color Tables

HP is continually refining the available color gamut on HP Color LaserJet printers. Because of this continuous improvement, colors on new HP Color LaserJet printers may not look exactly like older HP Color LaserJet printers. This can become a problem for customers who have standardized on specific color shades.

In response to customer requests to make new HP Color LaserJet printers print exactly like their older HP Color LaserJet printers, HP has created Downloadable Color Tables and made them available for select current HP Color LaserJet printers. The Downloadable Color Tables completely replace the printer's existing color tables. Once Downloadable Color Tables are downloaded to the printer, the colors of that printer will emulate the desired HP Color LaserJet product.

As depicted in the HP Color Access Control table (see page 5) color capability and control increases along with product complexity.

Availability

Downloadable Color Tables have been created to emulate HP Color LaserJet 4500, 4650, 5550, and 9500 printers output.

They will be available on www.hp.com as follows:

Printer model	Availability
CLJ CP4005 and 4700 printers CLJ 4730 MFP	Currently available
CLJ 3000/3800/CP4005	End of October 06
Future HP Color LaserJet printers	At introduction from hp.com

Installing

Instructions for downloading and installing the Color Tables are included in the Readme on hp.com. Functionality is only guaranteed with the latest firmware and software revisions currently available on hp.com.

Citrix and HP work together to test HP printers

Citrix has collaborated with HP to test select HP printers and their associated HP print drivers in a Citrix Presentation Server and Citrix Presentation Server for Microsoft Windows Server 2003 x64 Edition environments. Citrix Presentation Server 4.0 for Windows was tested on Microsoft Windows 2000 Advanced Server, Server 2003, and Server 2003 x64 Edition systems.

These tests were run to determine how HP printers and their associated printer drivers performed using the standard printer and printer-related features tests that Citrix uses to test its Presentation Server and Presentation Server client software.

Citrix also collaborated with HP to test select HP scanners and All-in-One devices. These tests were run to determine how HP scanners and All-in-One devices and their associated TWAIN drivers performed using the scan-related feature tests that Citrix uses to test its Presentation Server and Presentation Server client software.

To read more about these tests, click the link below:

http://techwebiii.cv.hp.com/sites%2FTechWeb%2FDocuments%2FHPprinters%5FCitrixPresentationServer%5F0706%2Epdf

The documentation at the above URL lists all of the printers tested by HP in Presentation Server environments, explains the printer tests performed by Citrix, identifies which HP printers and printer driver versions were used, and describes any issues that occurred while performing these tests.

The documentation also explains the scan tests performed by Citrix, identifies which HP scanners and all-in-one printers and TWAIN driver versions were used, and describes any issues that occurred while performing these tests.

Diagnosing light printing

Light print complaints are sometimes difficult to diagnose. It is not always clear whether the customer's experience is due to a defect, or is a mismatch between performance design and customer expectations. Standard troubleshooting techniques along with the suggestions provided in this article should help support personnel diagnose light print complaints and respond appropriately to customers.

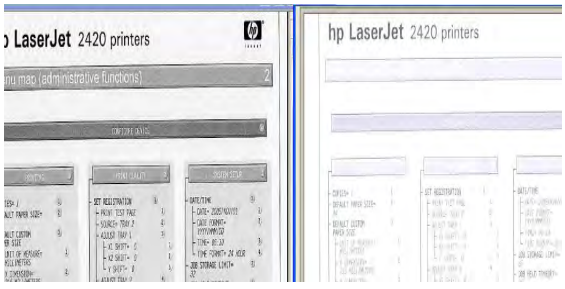
Most light print cartridge complaints should fit into one of the following categories.

- Extremely light print
- New cartridge prints lighter than previous cartridge – "thin print"
- Output is lighter compared to other printers
- HP cartridge prints lighter than refilled cartridge
- End of cartridge life – "fade"

The following sections describe each of these categories and the appropriate responses to our customers.

Extremely light print

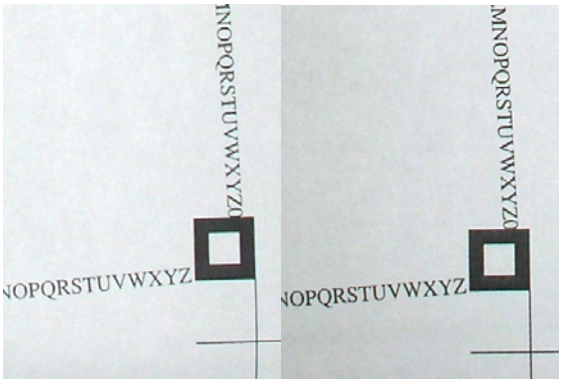
When a cartridge prints with extremely light print from the beginning, it typically indicates a print cartridge problem. Text characters and grayscale images or backgrounds may be noticeably lighter. Solid black areas on the page, such as boxes or logos, may appear to be a light gray. See the comparison below.



Comparison between normal print and extremely light print.

New cartridge prints lighter than previous cartridge – "thin print"

Light print is most often noticed when a customer installs and uses a new HP print cartridge and then compares the print darkness to that of the cartridge that was just removed. The print on the new cartridge may appear to be lighter. In this case, the text on a page is of uniform darkness and the lines may appear to be thinner. Any grayscale images or background on a page may appear to be slightly lighter. Solid black areas should appear dark. See the example below--the solid areas are dark, but the characters are thinner.



Examples of thin print

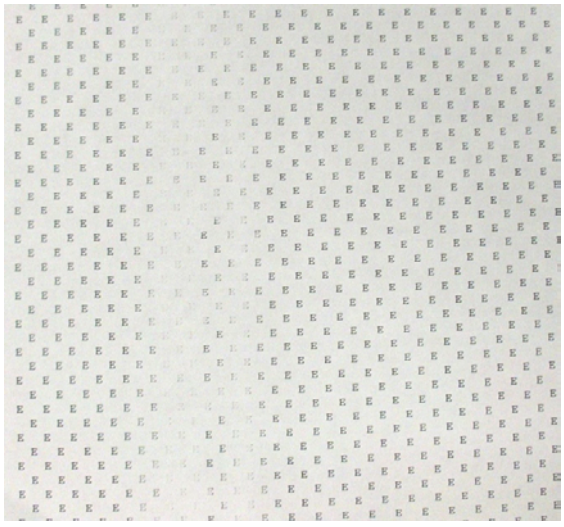
During the life of an HP print cartridge, the Organic Photo Conductor (OPC) rotates and experiences friction surface wear as a result of these rotations. In addition, lubricants on internal parts are worn off and the toner itself becomes more evenly charged. This causes a gradual increase in the width of the lines on the surface of the OPC. When the line width increases, it attracts additional toner to the OPC, thus placing a darker image on the page. The end result is that an HP toner cartridge will progressively produce darker print over time. Thus, it is possible for an HP print cartridge that is at mid- or end-of-life to actually print darker than a new HP print cartridge that has just been installed. This is normal behavior and is part of the break-in and aging cycle of a print cartridge.

Output is lighter compared to other printers

Customers sometimes complain that the print on a particular printer is lighter than the print on a different model of printer. Many factors can contribute to the differences in print darkness between HP printer models and between HP printers and those of competitors. Printer technology and toner formulation often differs between models and the print quality for that printer is established and tested based on those factors.

HP cartridge prints lighter than refilled cartridge
Some customers claim that when they use refilled cartridges, they do not see the same problems with light print. One point to note is that some refilled cartridges may re-use the original OPC drum in the cartridge. Since this OPC has been through the lifecycle of the cartridge, the line width is close to the maximum and printouts will be darker. However, since the original OPC drum has been through the lifecycle of the cartridge at least once, there is a high likelihood that customers may begin to experience print quality defects due to the breakdown and exhaustion of the OPC.

End of cartridge life – "fade"
When a monochrome print cartridge reaches end-of-life, the print will sometimes begin to fade as the toner in the cartridge is depleted. When this fade starts to occur, the print on the pages will begin to lighten. Typically, the lightness is not uniform across the page. Some areas of the page appear to be lighter than others. As pages are printed, the faded area will get bigger. See the sample below.



Example of faded print

Responding to customers with light printing issues

Extremely light print
Warranty replacement of the cartridge is recommended.

If the customer is seeing this extreme form of light print, they may have a defective cartridge. We have a confirmed issue in the Q5949A/X and Q6511A/X cartridges, which causes severe light print. The problem seems limited to certain older manufacturing lots of cartridges. Recent production should have improved performance.

Note

If replacing the cartridge does not resolve the issue, it is possible that the problem lies in the printer rather than the cartridge. In this case, follow the normal procedures for trouble-shooting a printer with hardware problems.

If it is necessary to escalate a case of light print, follow normal escalation procedures within a region for this type of case. Normally, the escalation can be handled by the technical support resources within a region. When the escalation cannot be handled in the region, it is possible that the case may be sent to the print cartridge engineering group in Boise. If cases of extreme light print are discovered on cartridges other than the Q5949A/X and Q6511A/X or on recent productions of these cartridges, they should be escalated to Boise. In these cases, it is critical to send the following items for analysis:

- Print samples
- The actual failing print cartridge or the cartridge lot code (if the cartridge is not available)

The following information is useful, if available:

- Printer Supplies Status Page (if available on the printer)
- Printer Configuration Page
- Operating and storage temperature and humidity information at the customer's site

New cartridge prints lighter than previous cartridge – "thin print"
Warranty replacement of the cartridge is not recommended.

If the customer complaint is related to the difference in print quality between pages when a cartridge is changed in the middle of a long job, instruct the customer to change the cartridge before starting a long document. Another alternative would be to increase the print density setting until the end of the document and then return to the default setting. If the density is only increased for a few hundred pages, the reduction in cartridge yield will be minimal. Please be advised that if the density setting is permanently increased, the yield of the cartridge will be reduced.

Output is lighter compared to other printers
Warranty replacement of the cartridge is not recommended.

HP does not guarantee that the print darkness of one printer will match that of another printer.

HP cartridge prints lighter than refilled cartridge
Warranty replacement of the cartridge is not recommended.

HP does not guarantee that the print darkness of our cartridges will match those of refilled cartridges.

End of cartridge life – "fade"
Warranty replacement of the cartridge is not recommended.

In this case, the lighter print is occurring because the cartridge is running out of toner. This is normal behavior and signifies that a cartridge has reached end-of-life.

Control panel issues

HP has recently received an increased number of calls regarding the behavior of the touch screen on the control panels of several of our MFP models. The models affected include the HP LaserJet 4345/9040/9050 MFPs and HP Color LaserJet 4730/9500 MFP. Symptoms include one or more of the following:

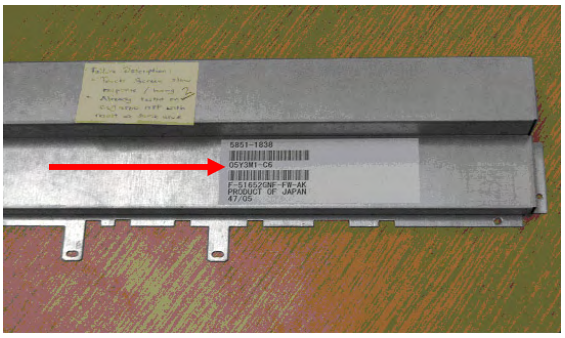
Symptom 1
The touch screen does not respond when touched.

Symptom 2
The touch screen responds as though it is being touched when it is not.

Background

HP has isolated the issue to a combination of two elements: the ESD (Electrostatic Discharge) design and a specific lot code of Mylar used inside the touch screen. Both of these elements have been corrected by our supplier.

Through HP's investigation and analysis, our estimation is that approximately1260 control panel assemblies may be susceptible to this failure. HP has been able to identify the defective control panels by serial number, and has pulled any remaining defective units out of our inventory. HP has completed the testing of our current production inventory and show zero failures.
To find the serial number, look on the second line of the label (see the photo below) or on the rear of the control panel. The serial number in the photo below is 05Y3M1-XX.



Locate the serial number on the second line

We have identified specific sub-numbers within serial numbers 05X, 05Y, 05Z, 061 and 062. The sub-numbers are shown in the table below.

05X	05Y	05Z	061	062
05X3	05Y1	05Z1	0611	0622
	05Y2	05Z2	0613	0623
	05Y3	05Z3		
	05Y4	05Z4		
	05Y5	05Z5		

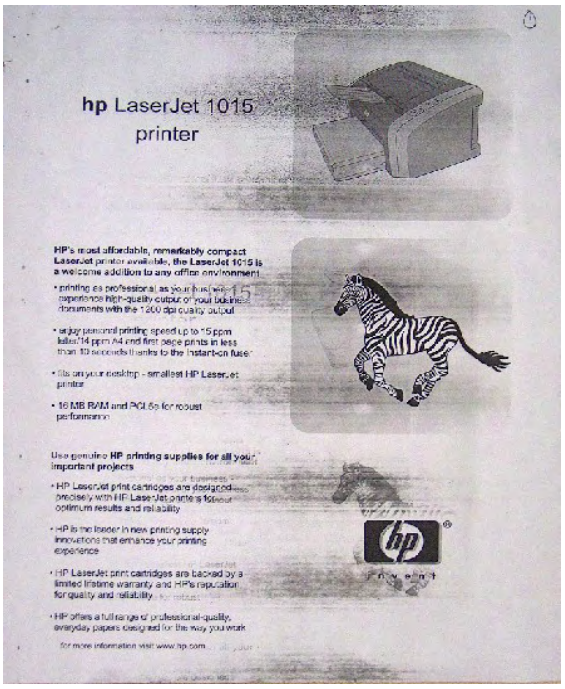
Workaround for symptom 1
Replace the control panel ONLY if the serial number identifies it as being defective.

Workaround for symptom 2
Turn the printer's power off overnight to limit the failure. Even if the control panel is "locked up," powering-off overnight will reset it.

This is a temporary workaround as we work toward a complete understanding of the issue. If the customer is unwilling to use the temporary workaround, replace the control panel if the serial number identifies it as being defective.

Defective print cartridges

We have discovered a defect for the print cartridges listed in the table on the following page. The Primary Charge Rollers (PCRs) are not charging the Organic Photo Conductor (OPC) drum correctly. This improper charging causes smudges on printed output repeating at the pitch of the PCR—about 38 mm. It is more noticeable on black and grayscale pages. On some cartridges, the "ghost" of text or images may repeat down the page at the OPC pitch. See the print sample below.



Print sample with ghost images

Replacing the print cartridges
The cartridges with a lot code that begins with a number greater than "5J" should be replaced under warranty. Refer to the table below for the defective print cartridge numbers.

Defective print cartridge numbers	Printer models that use these cartridges
C4096A C7115A C7115X Q2610A Q2612A Q2613A Q2613X Q2624A Q2624X	HP LaserJet 1000, 1005, 1010, 1012, 1015, 1020, 1022, 1150, 1200, 1220, 1300, 2100, 2200, 2300, 2300L, 3015, 3020, 3030, 3300, 3380

Introducing our latest fall products

New desktop and small workteam MFPs and AiOs

Product number	HP LaserJet M1005 MFP	HP LaserJet 3050z AiO	HP Color LaserJet CM1015/CM1017 MFP	HP LaserJet M3027 MFP
Features	Print, copy, and scan—HP's lowest-priced, entry-level desktop MFP	Printing, copying, faxing, and scanning in an inventive design that fits on your desktop	Easy-to-use, reliable color laser MFP with photo memory card slots (CM1017 only) and CAC features	High performance in a small package, with send to email and faxing capabilities
Price	$199-$249 AVAILABLE ONLY IN AP AND EMEA	$299 AVAILABLE ONLY IN AP AND EMEA	Starting at $499	$1499-$1799
Print and copy speed	Up to 15 ppm letter Up to 14 ppm A4	Up to 19 ppm letter Up to 18 ppm A4	Up to 8 ppm letter and A4 (color and black-and-white)	Up to 27 ppm letter Up to 25 ppm A4
First page out	Less than 10 seconds	Less than 8 seconds	As fast as 20.7 seconds	Less than 10 seconds
Memory	32 MB RAM	64 MB RAM	96 MB RAM, expandable to 224 MB	256 MB DDR RAM, expandable to 512 MB 40 GB built-in hard disk
Processor	230 MHz	264 MHz	300 MHz	400 MHz
Durability ratings	Duty cycle:[2] up to 5,000 pages per month	Recommended monthly page volume:[1] 250 to 2,000 pages Duty cycle:[2] 7,000 pages per month	Recommended monthly page volume:[1] 500 to 1,500 pages Duty cycle:[2] up to 35,000 pages per month	Recommended monthly page volume:[1] 2,000 to 6,000 pages Duty cycle:[2] up to 75,000 pages per month
Connectivity	Hi-Speed USB 2.0 port	One Hi-Speed USB 2.0 port One RJ-11 fax port One RJ-11 line-out telephone port	One Hi-Speed USB 2.0 port One built-in 10/100 Base-TX Ethernet/Fast Ethernet print server (CM1017 only)	One HP Jetdirect Fast Ethernet embedded print server One FIH port One USB type A port for accessories One USB type B port for printing One open EIO slot One analog fax port (M3027x only)
Paper input capacity	150 sheets	Up to 250 sheets 30-sheet ADF	Up to 500 sheets	Up to 1,100-sheets 50-sheet reversing ADF
Maximum paper size	8.5 by 14 inches (216 by 356 mm)	8.5 by 14 inches (216 by 356 mm)	8.5 by 14 inches (216 by 356 mm)	8.5 by 14 inches (216 by 356 mm)

[1] HP recommends that the number of pages per month of imaged output be within the stated range for optimum device performance, based on factors including supplies replacement intervals and device life over an extended warranty period.
[2] Duty cycle is defined as the maximum number of pages per month of imaged output. This value provides a comparison of product robustness in relation to other HP LaserJet or HP Color LaserJet devices, and enables appropriate deployment of printers and MFPs to satisfy the demands of connected individuals or group.

New small workteam and workgroup MFPs




Product number	HP LaserJet M3035 MFP	HP LaserJet M4345 MFP	HP LaserJet M5025 MFP	HP LaserJet M5035 MFP
Features	Network ready, printing, copying, and digital sending to e-mail or network folders with optional faxing and an optional 20-sheet convenience stapler	Print, copy, analog fax, embedded send-to-e-mail and network folder functionality with advanced paper handling and finishing features	Big impact in a small size—wide format printing, copying, and scanning, with optional faxing and send to e-mail capabilities	Wide format printing, copying, scanning, and faxing with multiple digital sending functions and paper handling options
Price	Starting at $1999	Starting at 2,599 (news release)	$2999	$3499-$5999
Print and copy speed	Up to 35 ppm letter Up to 33 ppm A4	Up to 45 ppm letter Up to 43 ppm A4	Up to 25 ppm, letter and A4	Up to 35 ppm, letter and A4
First page out	Less than 10 seconds	Less than 10 seconds	Less than 10 seconds	Less than 10 seconds
Memory	256 MB standard memory expandable to 512 MB 40 GB built-in hard disk	256 MB standard DDR RAM expandable to 512 MB 40 GB built-in hard disk	256 MB standard memory expandable up to 512 MB 40 GB built-in hard disk	256 MB standard memory expandable up to 512 MB 40 GB built-in hard disk
Processor	400 MHz	480 MHz	460 MHz	460 MHz
Durability ratings	Recommended monthly page volume:[1] 2,000 to 6,000 pages Duty cycle:[2] up to 75,000 pages per month	Recommended monthly page volume:[1] 5,000 to 15,000 pages Duty cycle:[2] up to 200,000 pages per month	Recommended monthly page volume:[1] 3,000 to 12,500 pages Duty cycle:[2] up to 200,000 pages per month	Recommended monthly page volume:[1] 3,000 to 12,500 pages Duty cycle:[2] up to 200,000 pages per month
Connectivity	One HP Jetdirect Fast Ethernet embedded print server One FIH port One USB type A port One USB type B port One open EIO slot One analog fax port (x model)	One HP Jetdirect Fast Ethernet embedded print server One USB type B port One Foreign Interface port One open EIO slot One analog fax port (x models)	One HP Jetdirect Fast Ethernet embedded print server One FIH port One USB type A port One USB type B port One open EIO slot Optional analog fax accessory	One HP Jetdirect Fast Ethernet embedded print server One FIH port One USB type A port One USB type B port One open EIO slot Optional analog fax accessory
Input capacity	Up to 1,100 sheets 50-sheet reversing ADF	Up to 2,100 sheets 50-sheet reversing ADF	Up to 2,100 sheets 50-sheet reversing ADF	Up to 2,100 sheets 50-sheet reversing ADF
Paper sizes	8.5 by 14 inches (216 by 356 mm)	8.5 by 14 inches (216 by 356 mm)	12.28 by 18.5 inches (312 by 470 mm)	12.28 by 18.5 inches (312 by 470 mm)

[1] HP recommends that the number of pages per month of imaged output be within the stated range for optimum device performance, based on factors including supplies replacement intervals and device life over an extended warranty period.
[2] Duty cycle is defined as the maximum number of pages per month of imaged output. This value provides a comparison of product robustness in relation to other HP LaserJet or HP Color LaserJet devices, and enables appropriate deployment of printers and MFPs to satisfy the demands of connected individuals or group.

New black-and-white and color printers

Product number	HP LaserJet P2015	HP LaserJet P3005	HP Color LaserJet 2700	HP Color LaserJet CP4005
Features	Entry level, network capable desktop printer with standard duplexing on most models	Fast, feature-packed network capable desktop printer with optional two-sided printing	High-quality color, fast, and easy to use and share with. color lockout capability	Durable, high-performance color printing; easy sharing, low operating costs, and new HP Color Access Control features
Price	$299-$549	Starting at $549	$599-$699 AVAILABLE ONLY IN AP AND EMEA	Starting at $1299
Print and copy speed	Up to 27 ppm letter Up to 26 ppm A4	Up to 35 ppm letter Up to 33 ppm A4	Up to 20 ppm black-and-white; up to 15 ppm color (letter and A4)	Up to 30 ppm black-and-white; up to 25 ppm color (letter and A4)
First page out	Less than 8.5 seconds	As fast as 9.5 seconds	Black: as fast as 13 seconds, Color: as fast as 17 seconds	As fast as 10 seconds
Memory	32 MB RAM, expandable to 288 MB	48/64/80 MB DDR2 memory, expandable to 320 MB	64 MB of memory, expandable to 320 MB	128/256 MB RAM, expandable to 512 MB
Processor	400 MHz	400 MHz	300 MHz	533 MHz MIPS
Durability ratings	Recommended monthly page volume:[1] 740 to 3,000 pages Duty cycle:[2] up to 15,000 pages per month	Recommended monthly page volume:[1] 1,500 to 5,000 pages Duty cycle:[2] up to 100,000 pages per month	Duty cycle:[2] up to 50,000 pages per month	Recommended monthly page volume:[1] 2,000 to 7,500 pages Duty cycle:[2] Up to 80,000 pages per month
Connectivity	One Hi-Speed USB 2.0 port One HP Jetdirect Fast Ethernet embedded print server on select models	One IEEE 1284-B compliant parallel port (P3005 and P3005d models) One Hi-Speed USB 2.0 port One open EIO slot One HP Jetdirect Fast Ethernet embedded print server (n, dn, and x models)	One Hi-Speed USB 2.0 port One built-in 10/100 Base-TX Ethernet/Fast Ethernet print server (2700n)	One Hi-Speed USB 2.0 port One HP Jetdirect Fast Ethernet embedded print server
Input capacity	Up to 550 sheets	Up to 1,100 sheets	Up to 850 sheets	Up to 1,100 sheets
Paper sizes	8.5 by 14 inches (216 by 356 mm)	8.5 by 14 inches (216 by 356 mm)	8.5 by 14 inches (216 by 356 mm)	8.5 by 14 inches (216 by 356 mm)

[1] HP recommends that the number of pages per month of imaged output be within the stated range for optimum device performance, based on factors including supplies replacement intervals and device life over an extended warranty period.
[2] Duty cycle is defined as the maximum number of pages per month of imaged output. This value provides a comparison of product robustness in relation to other HP LaserJet or HP Color LaserJet devices, and enables appropriate deployment of printers and MFPs to satisfy the demands of connected individuals or group.

HP Universal Print Driver 3.0

The latest version of the HP Universal Print Driver Series for Windows will be available approximately mid-November, 2006.

The new HP Universal Print Driver 3.0 provides important HP Color Access Control capabilities. IT administrators can limit who uses color and when they use it by assigning color access by user/group, time of day, and by application through HP Managed Printing Administration (MPA) or Active Directory. They can also shut down color access completely until it's needed for special projects.

Other new features for the HP Universal Print Driver 3.0 include:

- Release of PCL6 (32 and 64 bit versions)
- Support for Microsoft Active Directory Services integration through template files imported into Active Directory
- Enhanced HP Color Access Control features
- Driver packaging changes - Any .inf installation method now defaults to **Traditional** mode. Using the Install.exe file now provides a choice between **Dynamic** and **Traditional** mode
- Plug and Play support
- Manual Duplex
- Color Themes (RGP and CMYK)
- Color Settings
- Driver access to device HP Embedded Web Server
- Changes to HP Managed Printing Administration will allow for additional Color Access Control functionality

For more information, and to download the HP Universal Print Driver for free, go to www.hp.com/go/universalprintdriver.

HP Easy Printer Care 2.0

The new HP Easy Printer Care 2.0 will release to the web on November 17th with the following updates:

Compatibility and deployment

- Compatible with most HP LaserJet printers and MFPs produced from 1999 to the present
- Coordinated alert settings with Toolbox FX

Support

- HP Proactive Support (RADAR) provides troubleshooting guidance and printer firmware and software updates
- Improved icons, descriptions, and menu structure

Application improvements

- More intuitive and explanatory user interface
- Localized languages to include English +20
- HP Color Access Control on supported printers with HP Easy Printer Care on/off color switch

You can download HP Easy Printer Care 2.0 from a link found on the install CD provided with HP's newer printers and MFPs, or download it for free at www.hp.com/go/easyprintercare.

HP High-performance hard disk

With an impressive 40 GB of storage capacity, the new HP High-performance hard disk effortlessly stores forms, logos, and fonts.

Private printing features are available when using the new 40 GB hard disk. Private printing enhances the security of an HP peripheral, ensuring that only the user sending the job has access to it at the device. Private print jobs are stored until the user releases them at the control panel with a personal identification number.

The HP High-performance hard disk is embedded in the new HP LaserJet M3027/M3035/M4345/M5025/M5035 MFPs. You can add the HP High-performance serial ATA EIO hard disk to your printer via the printer's EIO slot (part number J7989G).

HP LaserJet printer updates

HP LaserJet 1018 and HP Color LaserJet 1600 Printers—Introductory print cartridges

In the spring of 2006, HP began shipping HP LaserJet 1018 and HP Color LaserJet 1600 printers with introductory print cartridges.

Shipping introductory cartridges with the printer reduces the price of the printer, thus addressing the needs of customers who are looking for a lower-priced color or monochrome laser printer.

Introductory print cartridges contain less toner than the standard cartridges for these printers. They are only shipped in the box with the printer, and are not available for sale separately.

The introductory cartridges are identical to the standard cartridges. You can tell the difference by checking the label on the cartridge. For the HP LaserJet 1018, the words "HP LaserJet Introductory Print Cartridge" are added to the label. For the HP Color LaserJet 1600, the word "Introductory" is added. Both have "Replace with" followed by the part number of the standard cartridge. See the examples in the next column.

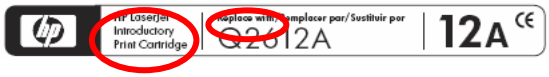
Replacement guidelines

Introductory cartridges are subject to the same troubleshooting steps as standard cartridges. If the cartridge is defective, replace it with a standard cartridge. Introductory cartridges are not available as replacement parts.

The yields for standard and introductory cartridges are shown in the table below.

Model	Standard cartridge yield	Introductory cartridge yield
HP LaserJet 1018 (yield based on ISO/IEC 19752)	2,000 pages	1,000 pages
HP Color LaserJet 1600 (yield based on 5% coverage)	Black: 2,500 pages CMY colors: 2,000 pages	1,000 pages (all colors)

HP LaserJet 1018 standard cartridge label



HP LaserJet 1018 introductory cartridge label

HP Color LaserJet 1600 standard cartridge label

HP Color LaserJet 1600 introductory cartridge label

HP LaserJet 4250/4350 Printer series—Print quality defect

The unusual pattern of random, dark characters appearing in the text (see the sample below) results from light that is leaking into the print cartridge cavity. In the case of the sample below, the multi-purpose tray (Tray 1) had been left open with the Envelope Feeder blanking cover removed.

To prevent this print defect from occurring, close the multi-purpose tray, and/or re-install the blanking plate.

Sample of print quality defect

HP Color LaserJet printer updates

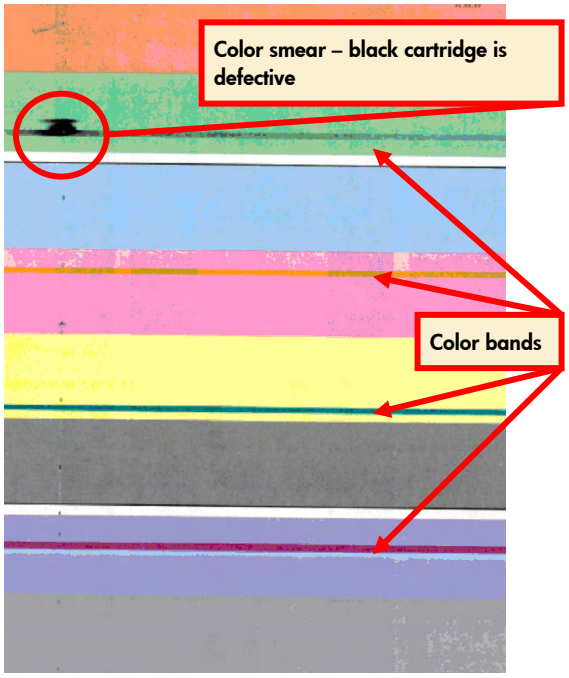
HP Color LaserJet 1600/2600/2605 Printer series—Colored bands across page

We have had reports of black and colored bands across the printed pages.

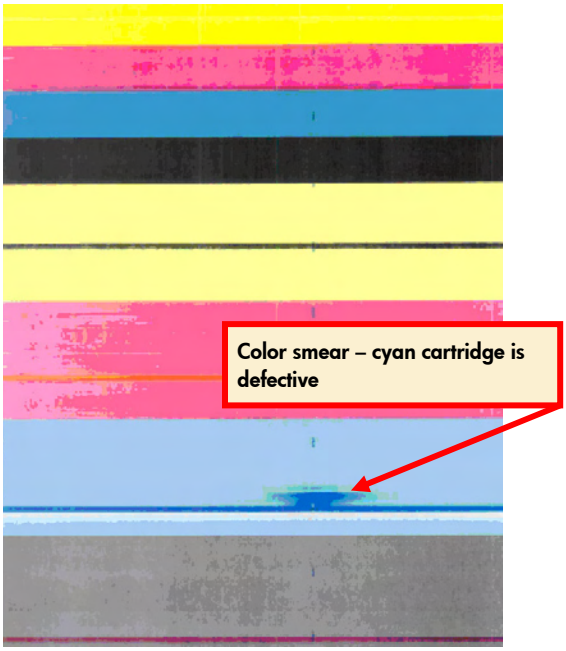
These bands are caused by damage to the Organic Photo Conductor (OPC), creating an electrical "leak" in the drum on one of the print cartridges. Because the OPCs for all four cartridges share a common power supply, when one of the OPCs is damaged, the defect shows up on all four colors. You can identify the damaged cartridge by a color smear on the line associated with the cartridge. For example, damage to the black cartridge can be identified by a black smear on the black line of the page. See the example below.

The damaged cartridge should be replaced. It is not necessary to replace all four cartridges. Determine which cartridge to replace by locating the smear on the line.

HP Color LaserJet 2600n printer



Example of defective black cartridge



Example of defective cyan cartridge

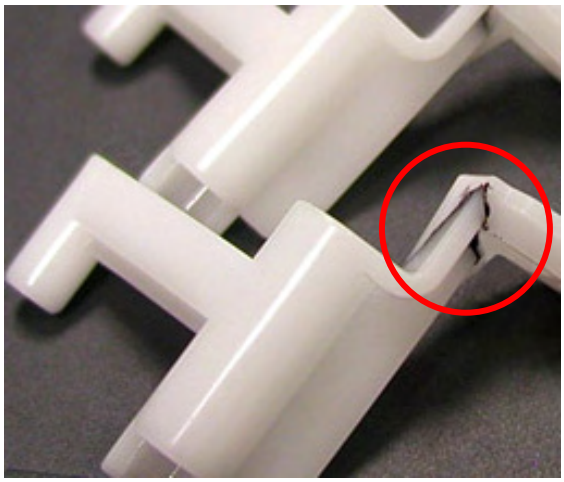
HP Color LaserJet 3000/3600/3800 Printer series

Toner cartridge shutters not closing/opening

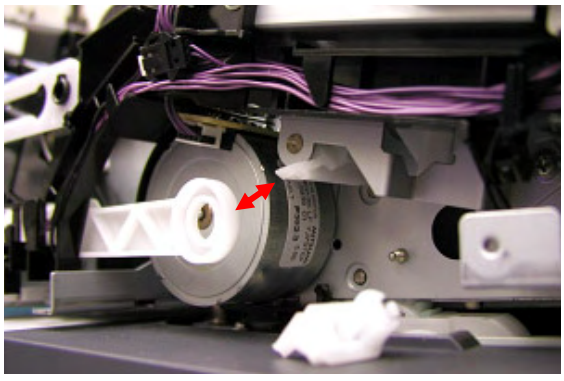
Our customers may experience issues with the toner cartridge shutters not opening or closing when they open or close the front door. Try these workarounds to resolve the issue:

- Reseat all the cartridges.
- Check for a broken part that controls the movement of the cartridge engagement arm, the cartridge shutters, and the Organic Photo Conductor (OPC) drive (see the photos below). The first photo shows where the break occurs. The second photo shows where this part is located. You can easily check this without taking off the covers by reaching over to the white rod arm on the right hand side of the ETB, and wiggling it. If it moves easily, the part is broken. Replace with part number RC1-6645-000CN.

HP Color LaserJet 3000 printer



Area where break occurs

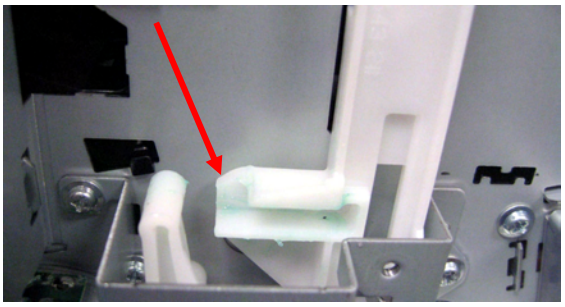


Part location

Note

If these parts break, a 10.92.XX error can occur.

Also, check to make sure the slide lever itself is not broken (see the photo below). If it is, replace it with part number RC1-6643-000CN. To replace these parts, refer to the instructions in the Cartridge Lock Service Note.

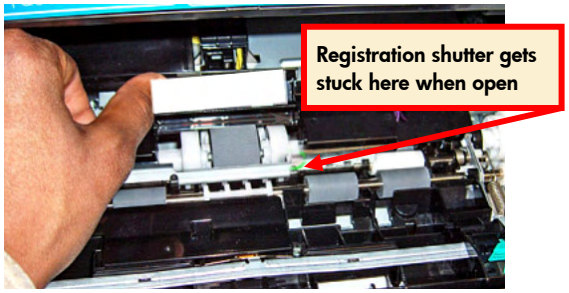


Check the slide lever

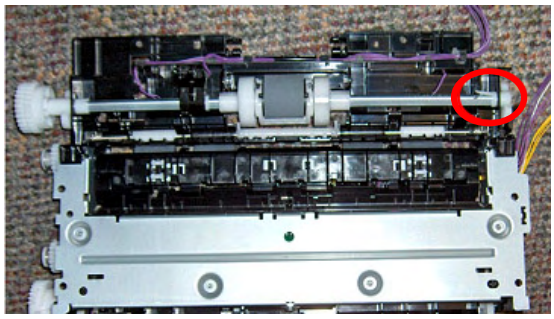
13.20/13.02 error messages

A customer may experience a 13.20 paper jam message, but not be able to find a paper jam. Alternatively, the customer may say that paper seems stuck in the fuser (protruding about 1 inch out of it) causing a 13.02 error message.

We have noticed that the pick-up assembly's (PIU) left cam's holding claw may come dislodged, causing the pick roller assembly to move further to the right, which in turn causes the registration shutter to get stuck in the open position, creating jams. (The shutter gets stuck on the side of the pick roller.) See the photos below for more details.

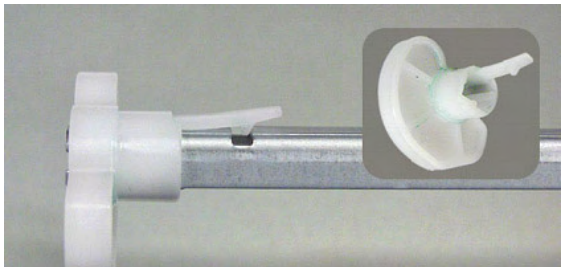


The pick roller assembly has moved to the right



Pick-up assembly with lifted flange circled

We suspect that the long tip of the left cam became bent, causing the holding claw to dislodge from the pick-roller shaft. Without the holding claw in place, the pick-roller assembly can shift to the right and interfere with the registration shutter (see the photo below).



Dislodged holding claw

Instruction to call center agents:
Have the customer open the front door and remove the print cartridges. See if the pick-roller has moved to the right and is interfering with the one edge of the registration shutter (as shown in the first photo). A service technician is required to replace the pick-up assembly (see the part numbers below).

Part	Part number
HP Color LaserJet 3000 Paper pick-up assembly	RM1-2774-050CN
HP Color LaserJet 3600/3800 Paper pick-up assembly	RM1-2755-050CN

Multi-feeds from Tray 1 with new HP glossy paper

In a soft roll as of September, 2006, HP replaced its 120 gsm glossy presentation paper with a new and improved 130 gsm glossy paper. Some customers may experience multi-feeds or no feeds with the new HP glossy paper when using Tray 1 in high-humidity environments.

To reduce multi-feeds, make sure you are using Glossy mode as recommended in the print instructions enclosed with the paper and shown in the table below.

HP Color Laser Glossy Presentation Paper 130 gsm, Letter and A4	
Printer series	HP Color LaserJet 3000, 3600, 3800
Paper type/Print mode	Glossy
Tray	Tray 1 and 2
Duplex	Auto or manual duplex

The new papers and part numbers are shown below:

Paper type	Region	Part number
HP Color Laser Glossy Presentation Paper	North America	Q2546A
	Canada	Q2546AC
HP Professional Laser Paper 130, glossy	Europe	Q6547A

Customer issues with HP Glossy Presentation Paper	Resolution
I just purchased a 300-sheet ream of HP Glossy Presentation paper and noticed it is different than the old paper. Why?	Starting September, 2006 the paper's formula is changing. There are slight changes to the packaging and messaging. We have improved the whiteness, gloss, and sheet color so that it matches the heavier HP glossy paper. Printing performance should be very similar to older versions of the paper on HP printers.
As seen in the User Guide or driver, the printer supports HP High Gloss paper or HP Photo & Imaging paper 120 gsm.	The glossy paper has gone through name changes in North America. The new name is HP Color Laser Glossy Presentation paper.
The printer, or tray, or auto-duplexing, supports gloss 120 gsm, not 130 gsm.	The new 130 gsm paper works the same as the 120 gsm glossy paper and should be used in the 120 gsm glossy modes.
Multi-feeding in high humidity.	• Coated papers in general, including HP Color Laser Glossy Presentation paper, tend to stick together in high humidity. Be sure not to load more paper than is recommended for 120 gsm or 130 gsm papers as described in the User Guide. We recommend 50 sheets, or 5 mm, as the maximum stack in a tray. • It is best is to use Tray 2 or a higher numbered tray for this coated paper. These trays have a more robust pick-up mechanism than Tray 1 does. • If you are using Tray 1, unwrap a ream of paper (or however much you need to print) and leave it exposed to the humid air for one day or longer. Acclimating the paper reduces multi-feed problems.

Color Plane misregistration

Customers may experience a Color Plane misregistration in the process direction (top to bottom of the page as it comes out of the printer). The image may appear blurry, and can occur anywhere on the page, but most often appears in the lower portion of the page (see the example below).

Example of a blurred image

Workaround

1. Ensure the customer has the latest DC controller and formatter firmware installed. You may download these files from the following URLs:

   www.hp.com/support/CLJ3000

   www.hp.com/support/CLJ3600

   www.hp.com/support/CLJ3800

2. Perform three full Calibrations in a row. You can do this from the control panel of the printer. Print out a page after each calibration to see if there is any improvement.
3. If this does not solve the issue, reseat the fuser. Open the top cover, pinch in at the blue marks, and lift up on the fuser. Set it back down into place and press firmly to make sure it is level and seated. Close the cover.
4. If the steps above did not solve the issue, contact HP customer support.

Update on the cartridge toner lock situation

We have resolved the cartridge toner lock situation with new countermeasured toner locks. Current purchased products should have these countermeasures in place. The cartridge lock kits (part number Q5982-67922) have the new countermeasured locks in them.

The cartridge toner lock service note is updated to reflect a modification recommended instead of information only, so if any of our older, installed base products have a lock break outside the warranty period, the repair will be covered by HP. The kits have four locks in them. Replace all four locks at the same time, even though only one lock may be broken. The other locks may have material fatigue, and replacing all four locks will ensure that the customer does not have this issue again with the older locks. Please note that this is a fix-on-fail-only service note. Our failure rate to date has not justified a proactive repair on this part!

The instructions have also been updated in the service note (and will soon be updated in the box with the kit) to show more timing and troubleshooting steps. The field has found the repair to be only 30 minutes in length and much smoother with these updated instructions (and with the experience gained after repairing this one or two times).

Larger volumes of the part have been forecast, so part-backlog issues can be reduced or eliminated. This part has been classified as a "critical part" so HP will keep an additional month's supply on hand to eliminate backorder issues.

We expect to see this issue's failure rate to decrease in the near future since the countermeasured locks are now in production.

You can go to the cartridge lock kit service note from the following URL:

http://techwebiii.cv.hp.com/sites/TechWeb/Documents/c00673707.doc

Tray 3 no pick/no printing issue

Customers installing a new Tray 3 may have no pick/no printing issues. This may due to the pick roller becoming dislodged during shipment. Instruct the customer to ensure the pick roller is not dislodged before replacing the unit. Have the customer remove and re-insert the Tray 3 pick roller to see if this resolves the issue.

HP Color LaserJet P3005 Printer series

Update on DIMM part numbers

The memory DIMM part numbers are incorrect in the initial P3005 User Guide. The correct numbers are provided in the table below. The User Guide rolled with the software September 15, 2006 and corrected this mistake.

32 MB 144-pin DDR2 DIMM	CB420A
64 MB 144-pin DDR2 DIMM	CB421A
128 MB 144-pin DDR2 DIMM	CB422A
256 MB 144-pin DDR2 DIMM	CB423A

EIO card not recognized

We have found that the printer may not recognize an EIO card installation. This is due to the fact that an EIO card may be installed without properly seating the connection to the formatter. Follow these steps to correct this issue:

1. Turn the device off.
2. Remove the DIMM cover.
3. Open the metal formatter door.
4. Squeeze the EIO card and formatter together.
5. Power on the device.
6. Print a configuration page to verify installation.

This problem is corrected with formatter Revision B or later.

Cleaning page printing incorrectly

The cleaning page is printing incorrectly resulting in inefficient cleaning of the fuser roller.

The cleaning page solid black diagonal is generated at the middle of the cleaning page. When you process the cleaning page, the cleaning (stepping of the motor) doesn't begin until nearly the end of the cleaning page, missing the solid black diagonal. This results in inefficient cleaning of the fuser.

This will be fixed in a future firmware release. Defect ID LSG#00184216.

Memory DIMM slot full

The P3005n, P3005dn, P3005x models required an additional 16 MB of memory to be installed in the memory DIMM slot. This additional memory now fills the only memory DIMM slot.

If an increase in memory is required, remove the existing 16 MB DIMM and replace it with the new memory DIMM.

Formatter revision C will correct the issue (available approximately mid-July, 2007).

Ping test not working properly

The Ping test in the HP LaserJet P3005 Printer series does not work properly because of a firmware defect. The Ping test can be made to work using the following steps:

- Press the **Menu** button
- Select **Configure Device**
- Select **I/O**
- Select **Embedded JetDirect Menu**
- Select **Diagnostics**
- Select **Ping Test**
- Fill out the following items:
  - Dest Type – Choose whether or not you're pinging an IPv4 or IPv6 address.
  - Dest IPv4 – If you chose IPv4, enter the destination IPv4 address here.
  - Dest IPv6 – If you chose IPv6, enter the destination IPv6 address here.
  - Packet Size – Select the size of the ping packets.
  - Time Out – Set the Time Out time in seconds.
  - Count – Specify how many times you want to ping the destination address.
- Use the **Back** button to back out of the I/O menu to the **Configure Device** menu
- Select **I/O**
- Select **Embedded JetDirect Menu**
- Select **Diagnostics**
- Select **Ping Test**
- Select **Print Results** and set it to **Yes**
- Select **Execute** and choose **Yes**

The Ping results will print in a few seconds.

HP Color LaserJet 4650 Printer series—Multi-feed or jams from Tray 2

To reduce the frequency of paper jams, no picks, and multi-feeds, and to prevent damage to the printer, please review the following instructions with your customer.

Preventing jams or multi-feeds

Instruct the customer to load the paper correctly and to use high-quality paper to dramatically reduce paper jams. Review the following steps:

1. Double-check the paper size settings in the paper tray. Adjust the side and rear paper guides until you hear a distinct "click" and the arrow on the guide points to the desired paper size. Being even 1 mm off of the correct paper size will increase the number of paper jams, no picks, and multi-feeds.
2. Do not "fan" the ream prior to loading it into the tray. Instead, simply bend the ream to break any possible seams.
3. Ensure that there are no notches or divots in the edge of the ream that might cause multiple sheets to stick together.
4. Make sure that the stack of paper is entirely under the tray's metal corner tabs after placing it in the tray.
5. When loading the tray do not push the paper all the way down to the point where the tray locks in the down position. This can cause the paper to bounce back out of the tray's corner tabs when the tray is closed.
6. If the paper was pushed down all the way, causing the paper lift plate to lock at the bottom of the tray, either activate the release mechanism on the side of the tray or insert the tray back into the printer completely to release the paper lift plate. Then verify that the paper ream is entirely under the tray's metal corner tabs.
7. Do not insert the paper tray rapidly. Slowly but firmly insert the tray.
8. Do not use dry paper. If the paper has become acclimated to a dry environment, static electricity builds between the sheets, causing multi-feeds to occur. If this happens, use fresh paper that is not acclimated to a dry environment. Increase the relative humidity in the ambient printer and media storage environments to 20% relative humidity or greater to decrease the frequency of multi-feeds.

Clearing jams

When multi-feeds occur, the paper usually jams between the paper tray and the paper input unit (PIU), just as the paper is entering the cartridge atrium.

Note

Clearing this kind of jam improperly results in broken printer parts, requiring a service technician to repair the printer.

To avoid unnecessary repair, expense, and inconvenience, follow these steps:

1. Do NOT pull Tray 2 out if you feel resistance. Paper may be caught between the tray and the paper input unit.
2. Do NOT pull paper up through the PIU (located at the bottom of the cartridge area).
3. If paper is caught or jammed between the tray and the PIU (i.e. if, when opening the front cover and ETB, you can see it looking down at or through the PIU from the cartridge atrium), gently push the paper back down through the PIU and back into the tray. If this is not possible, gently remove Tray 2 and carefully remove the paper through the Tray 2 cavity.
4. Do NOT attempt to reuse the paper as it may cause additional jams and/or multi-feeds.

If multi-feeds still occur or any parts from the PIU break off into any of the trays, you may need to replace the PIU.

HP Color LaserJet 4700 Printer series

Load Tray 1/13.01 error/no-picks

Some customers may report receiving a Load Tray 1 message even though paper is loaded in Tray 1. They might also receive a 13.01 error or no-picks when printing from Tray 1.

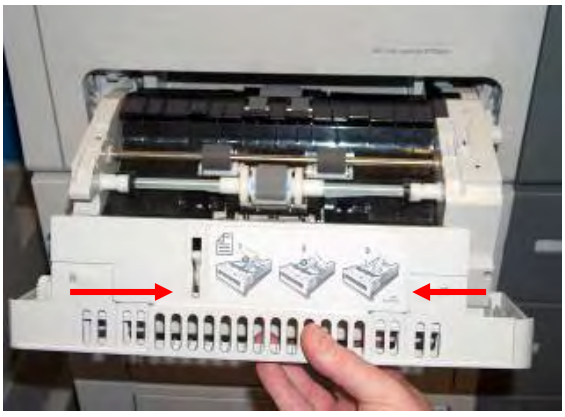
One possible cause for these errors is that the Tray 2 cassette shutter is not opening when Tray 1 opens. This shutter must open in order to allow paper to feed through the Tray 2 cassette when printing from Tray 1. (See the photos below.)

Tray 2 shutter closed (incorrect)

Tray 2 shutter open (correct)

Have the customer remove the front cover from Tray 2 and examine the shutter mechanism by following the steps in the next column.

1. Remove the front of the tray by pushing the white retaining clips on top of the cassette toward the center of the tray, and then pull the top-front of the tray towards you. See the photo below.



Removing the front cover from Tray 2

2. The shutter arm mechanism should look like the photo below and move freely to open and close the shutter.

The shutter arm mechanism should move freely

3. When reinstalling the Tray 2 front cover, be sure to clip the bottom of the front cover on the two tabs on the bottom of the cassette first. Then push the top of the cover into place and secure the cover on the tray with the white retaining clips.

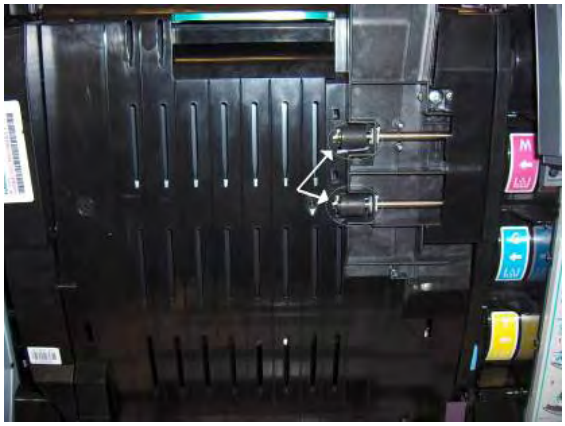
Resolving duplex jams

Some customers may report paper jams when processing a duplex job. Error messages can include:

- 13.1X JAM IN DUPLEX PATH
- 13.1X MULTIPLE JAMS IN DUPLEX PATH
- 13.20 JAM IN TOP COVER AREA

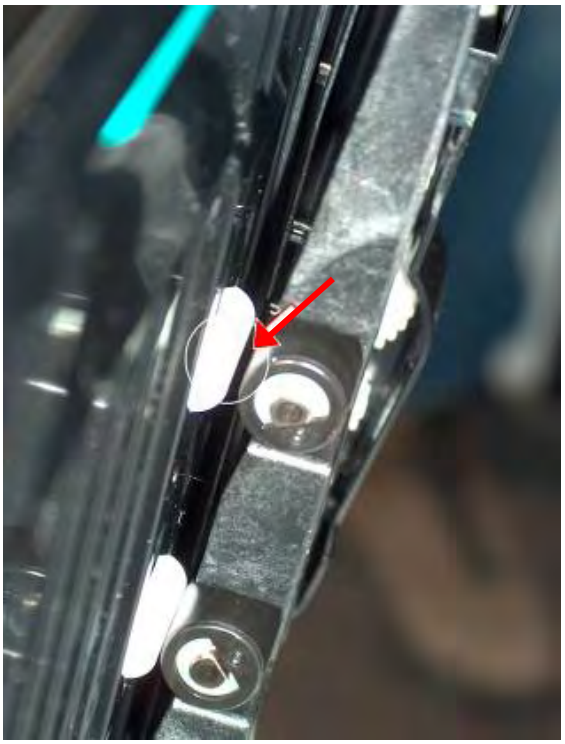
Solution

Make sure the duplexer roller plate is installed on the back of the Electro Transfer Belt (ETB). Check to make sure there are no gaps between the rollers. See the two photos below, and top-right.

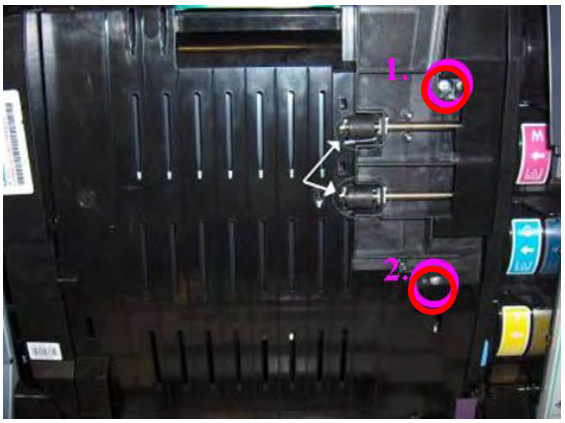


Location of the duplexer roller plate

Duplex printing cannot be performed without the duplexer roller plate. Verify that the plate is sitting flush to the ETB and not out like the photo below. Re-install the plate if necessary.



Incorrect position—gaps between the rollers



Location of ETB duplex guide screws

Screw the ETB duplex guide tight. The top screw may be loose. If you need to reinstall, remove the guide, then reinstall in the following manner:

1. Screw the top screw in tight.
2. Tighten the lower screw.

Tray 2 stuck

Customers may report they can't remove Tray 2—usually immediately out of the box. The cassette grounding spring may be deformed or bent.

Troubleshooting

Ask the customer to place the printer on a sturdy, flat, level surface and then try again to remove the tray.

If Tray 2 is still stuck, ask customer to "pull with authority," with a slightly downward angle, if possible. The customer should only attempt this if they feel confident and safe doing so.

Ask the customer to inspect the cassette ground spring on the right side of the cassette. See the photos below to identify a "normal" or good spring versus a deformed or bent cassette grounding spring.

"Normal" or good grounding spring

Deformed or bent grounding spring

BEFORE REPLACING THE CASSETTE please verify that the printer will actually print. Insert paper into Tray 1 and print a SUPPLIES STATUS PAGE through the control panel:

1. Press the **MENU** button.
2. Scroll down and select **INFORMATION**.
3. Scroll down and select **PRINT SUPPLIES STATUS PAGE**.
4. Verify that all color planes are present and that the printer does not exhibit additional shipping damage—including fuser errors, grinding noise, missing color plane, etc. (see "Identifying and handling shipping damage" in this column, below).
5. If there are symptoms of shipping damage, do not replace the cassette. Replace the printer.

If the cassette grounding spring appears deformed or bent and the printer does not exhibit any other symptoms associated with shipping damage, replace the cassette.

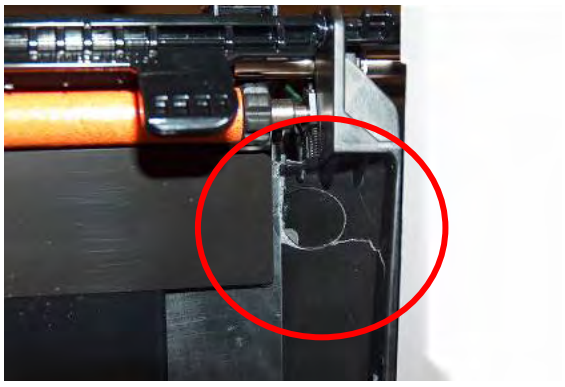
Identifying and handling shipping damage

Customers may report a number of problems with their printer that might be the result of shipping damage. Many of these problems will be reported immediately out of the box, but some may not. Ask the customer to look for the following evidences of shipping damage before you send out a repair technician:

- Grinding noises
- Broken parts
- No black color plane
- 10.92.00 error
- Tray 2 stuck
- Poor CPR
- Some duplex jams

The single greatest contributing factor is when the pallet is removed from the box during shipment prior to reaching the customer. Currently, the pallet is part of the protective packaging design and should remain attached to the box until reaching the customer.

Troubleshooting:
Before sending parts or a technician, ask the customer to visually inspect the following areas of the printer for cracks or obvious damage.

What to look for	What to do if damaged
Open the front door (not the multi-purpose tray) and inspect the left hinge. 	Replace the printer.
Open the front door and inspect the right hinge. 	Replace the printer.
Inspect the exit roller area (if ph+, remove the stapler/stacker). 	Replace the printer.
Check if Tray 2 is stuck. (See “Tray 2 stuck” on page 28.) Inspect the cassette grounding spring.	Replace Tray 2 cassette, if necessary.
Missing black and/or 10.92.00 error.	See “Black color plane missing and/or 10.92.00 error” on page 30.

Black color plane missing and/or 10.92.00 error

Customers may report that print jobs are missing the black (K) color plane and a 10.92.00 error appears in the event log.

Troubleshooting steps

- Verify that the 10.92.00 error appears in the event log.
- Disable cartridge check and swap cartridges with the black cartridge to verify that the problem is with the slot (consistent 10.92.00 error) and not the cartridge.
- If the problem follows the cartridge, replace the cartridge.
- If the problem follows the slot:
  - Place a black dot on the outside white edge of the OPC drum, install it in the printer, and power up. Check to see if the black dot moved (drum rotated).
  - If the drum does not rotate, follow standard support procedures.

Note

Replacing the main drive assembly is not recommended for DOA units caused by shipping damage because there are additional internal parts that could be damaged or compromised due to the severity of the handling.

Blank control panel display

Customers may report a "blank display" on their HP Color LaserJet 4700 Printer series. The purpose of this article is to provide troubleshooting steps when the printer will not power up and **READY** appears on the control panel.

Troubleshooting

1. Verify that the printer receives power and attempts to power on (fans and motors are running, etc.) If the printer does not power on, stop here and troubleshoot "no power."
2. Remove the formatter lever locks and set in a safe place.

Note

Try steps 3 through 8 (reseating and retesting) one component at a time.

3. Power off, firmly seat the formatter into the printer, and retest. Make sure the formatter is NOT flush with the cover, but set back (recessed) roughly a quarter of an inch (6–7 mm) and the formatter levers are in their outermost (locked) position. (See the photos below.)

Incorrect

In the photo above, the levers are in the innermost position (towards the center of the formatter=not locked) and the formatter is not recessed .25 inch (6–7 mm) from the side cover.

Correct

In the photo above, the levers are in the outermost position (locked) and the formatter is recessed .25 inch (6–7 mm) from the side cover.

4. Power off, reseat the Compact Flash firmware card on the formatter, and retest.
5. Power off, reseat the memory DIMM on the formatter, and retest.
6. Power off, remove the memory DIMM from the formatter board, install in the other open memory DIMM slot, and retest. (If this does

not resolve the issue, power off and put the memory DIMM back into the original slot.)

7. Please note in the call details whether or not the "heartbeat" LED light on the formatter is lit or flashing at any time during power up.
8. If the Compact Flash firmware card has not yet been replaced, replace it with a new Compact Flash firmware card.
9. Replace the formatter. The part numbers are given below.

Model number	Part number
HP Color LaserJet 4700 (Q7491A)	Q7491-67901
HP Color LaserJet 4700n (Q7492A)	Q7492-67901
HP Color LaserJet 4700dn (Q7493A)	Q7492-67901
HP Color LaserJet 4700dtn (Q7494A)	Q7492-67901
HP Color LaserJet 4700ph+ (Q7495A)	Q7495-67901

Keep the formatter from vibrating loose

During shipping, the formatter may vibrate loose. When this occurs, the control panel display will be blank. Other symptoms may occur if the formatter is loose, but not completely disconnected.

To ensure that the black tabs on the formatter lock in place and keep the formatter from vibrating loose, the product now has small white locking clips installed next to the black tabs. Although the greatest risk of the formatter coming loose occurs during initial shipment, HP recommends that the tabs be left in place. The tabs must be temporarily removed when the formatter is removed.

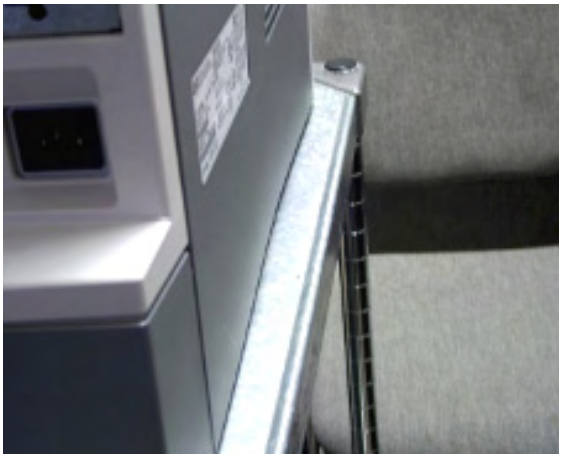
The initial HP Color LaserJet 4700 printer/4730 MFP did not ship with the white locking tabs. If the tabs are not present, you may order them. The kit part number is Q7491-67905 (2 tabs per kit).

60.02 lift motor error/Tray 2 grinding noise/Tray 2 no-picks

Some customers may report receiving a 60.02 lift motor error or a grinding noise from Tray 2, or that Tray 2 will not pick up paper. This frequently occurs immediately out of the box, but can occur after some time of operation.

This may occur if the HP Color LaserJet 4700 is not on a flat, level surface. For example, if the unit is on the edge of a table, the edge of the table will apply enough pressure to the bottom of Tray 2 to cause either a 60.02 error, no-picks from Tray 2, or make Tray 2 very difficult to remove.

The printer may have experienced mild damage during shipment—for example, the rear crossbar on the chassis (behind Tray 2) may bow inward, pushing Tray 2 slightly forward and out of a completely inserted position. See the photos below.



The rear cover normally bows slightly inward, but not as much as in picture below

The rear cover is removed, showing that the crossbar on the chassis is bowing inward more than normal

Troubleshooting steps

- Check for other signs of shipping damage to the printer, including the left and right front door hinges and the rear output rollers. (See "Identifying and handling shipping damage" on page 28.) If there is additional shipping damage, replace the printer.
- If there appears to be no other shipping damage, the customer may be able to fix this problem over the phone. This can be done with the printer in one of two positions: either on the edge of a desk/table or on the floor.

Edge of desk or table repair

This requires that the customer be *very* cautious so as not to pull the printer off the desk or table on to themselves or the floor.

1. Remove Tray 2.
2. Position the rear of the printer over the edge of a flat, stable surface to provide access to the area behind Tray 2.
3. Reach under and behind the rear cover, feeling for the metal crossbar.
4. Using the other hand or shoulder to brace against the printer, carefully pull the crossbar outward, being VERY careful to keep the printer from sliding off the table. See the photo below.

Position the printer

Note

Not much force should be required to pull the rear crossbar to a straighter position.

5. Use one hand to press against the rear of the printer and the other to pull the crossbar straight. See the photo below.

Pulling the crossbar straight

If the customer is uncomfortable with this procedure, ask them to place the printer on the floor.

Floor repair

Note

The printer itself weighs approximately 100 lbs, so two people arerequired to safely place the printer on the floor to prevent risking hurting the customer or damaging the printer.

1. Remove all four cartridges. This is critical because the printer will be on its side.
2. Remove Tray 2.
3. Place the printer on the floor.
4. Gently lay the printer down on the left side (left side as you face the front of the printer).
5. Use one hand to carefully pull the crossbar outward while using the other hand to brace against the printer. Not much pressure is required to straighten the crossbar enough to prevent the 60.3 lift motor error and/or grinding noise.

If the customer is unwilling or unable to straighten the rear crossbar, send a technician with instructions on how to straighten the rear crossbar. Once the crossbar is straightened, have the customer or technician print internal pages from Tray 2 to confirm that there are no other issues with the printer, such as a 10.92.00 error (missing black color plane).

Color density changes with new cartridges

Some customers may call to report that the color density increases or decreases after a recent cartridge change.

Color density decrease

If the print defect appears as a color density decrease or drop-out ask the customer to resend all or part of the print job—particularly the page or pages that appeared "off color." If the defect has disappeared, ask the customer if they very recently changed the cartridge in the middle of a print job. It is very likely that part of the print job was still in memory when the cartridge was replaced and calibration occurred, but the image in memory was calculated using the old cartridge's calibration values. The affected pages should be limited to what was contained in the memory buffer.

Color density increase

If the print defect appears as a color density increase over the first 0–1000 pages of a new print cartridge, ask the customer to perform a "Quick Calibrate Now" anytime after the first 80 pages. This should reduce the most significant color density variability, which tends to occur with a new cartridge. Thereafter, the regularly scheduled calibrations which occur every 1000 pages should keep color density variation under control.

Note

Color density decrease or increase may occur on new cartridges installed in the future, at which point either resending the affected pages (for density decrease) or performing a "Quick Calibrate Now" (after the first 80 pages printed) should correct the color density variability. There is a firmware fix planned for April 2006 or sooner.

HP Color LaserJet 4700 printer

Stapler/stacker doesn't offset print jobs

Customers with a stapler/stacker installed on their HP Color LaserJet 4700 may report that jobs are not offsetting despite the feature being enabled through the control panel.

Solution

There is currently no software or firmware solution for this issue. However, a firmware fix is planned and should be available from hp.com in the April/May 2006 firmware roll.

HP Color LaserJet 4700 Printer series and 4730 MFP series

59.C0 error out of the box

Some HP Color LaserJet 4700 Printer series and 4730 MFP series customers may experience a 59.C0 error and a grinding noise during installation. When occurring out of the box, this error is a result of the secondary alienation cams (on the Developer Alienation Cams) getting caught on the sheet metal during shipment.

Background

Normal process at first power up

Secondary alienation cams are located on the Developer Alienation Cams. These secondary alienation cams are also called SCIP cams. SCIP stands for Ship Cartridges In Printer. The sole purpose of these cams is to further alienate the cartridges during shipment. At first power on out of the box, a SCIP cam "roll over" process occurs in order to rotate the cams out of the way. This process occurs only once—during installation—and will not occur again once completed. The photo below shows how the Developer Alienation Cams should appear after a successful "roll over" of the SCIP cams. Note that the Developer Alienation Cams are "phase" offset. The top cam appears to be rotated to the 6 o'clock position, the Magenta cam rotated to the 8 o'clock position, the Cyan cam rotated to the 10 o'clock position and the Yellow cam rotated to the 12 o'clock position. This is by design.

Developer Alienation Cams after successful SCIP cam roll over

59.C0 without grinding noise

Some units may exhibit a 59.C0 error on the control panel's display but not experience a grinding noise. The solution is to rotate the SCIP cams out of the way on the Developer Alienation Cams. See the photo below.

Rotating SCIP cams out of the way

59.C0 with grinding noise

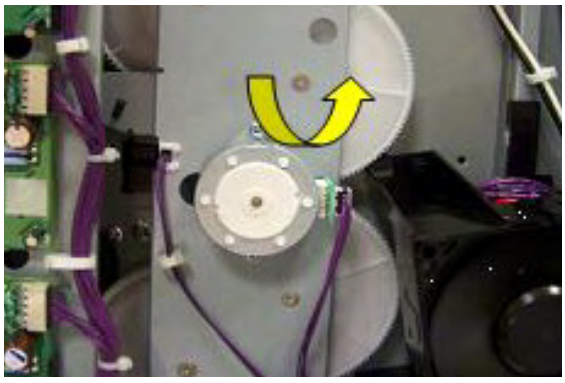
More often, the SCIP cams may catch on the back side of the sheet metal at the rear of the cartridge atrium. This prevents successful SCIP cam roll over. Because these cams are caught behind the back side of the sheet metal, the Developer Disengaging Motor stalls and makes

a pulsating grinding noise. See the photo below for the position of the cams when this occurs.

SCIP cams are not visible after unsuccessful roll over

Repair procedure

1. Power up and verify the 59.C0 error message and pulsing/grinding noise.
2. Open and remove the ETB and four cartridges.
3. Check the Developer Alienation Cam position and verify that the SCIP cams are not visible after unsuccessful "rollover."
4. On the HP Color LaserJet 4700, remove the right side cover. On the HP Color LaserJet 4730 MFP, remove the rear cover.
5. Manually rotate the Developer Drive Alienation Gear in the *counterclockwise* direction until the SCIP cams pop through the sheet metal hole.



Rotate counterclockwise

Be sure the SCIP cams pop through the sheet metal hole

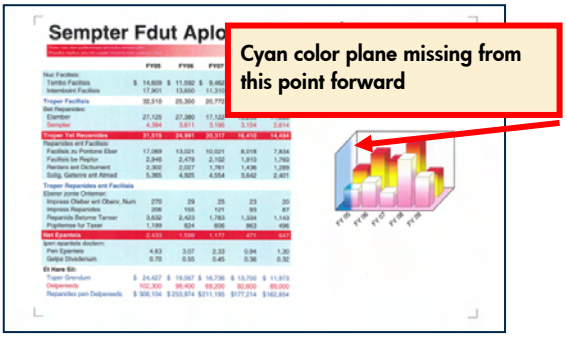
6. Manually rotate the Developer Drive Alienation Gear in the *clockwise* direction for two full 360° rotations. Verify that the SCIP cams have been rotated out of the way on the Developer Alienation Cams, as pictured below.

Verify that the SCIP cams have been rotated out of the way

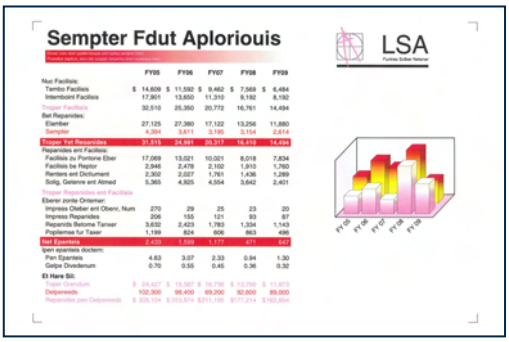
7. Install the ETB and print cartridges, then power up to verify that the 59.C0 error does not occur.
8. Print a Diagnostics Page to verify that all color planes are present.

Partial or missing color plane

Customers may report that a color plane is partially or completely missing from the page.



Partial color plane (cyan)



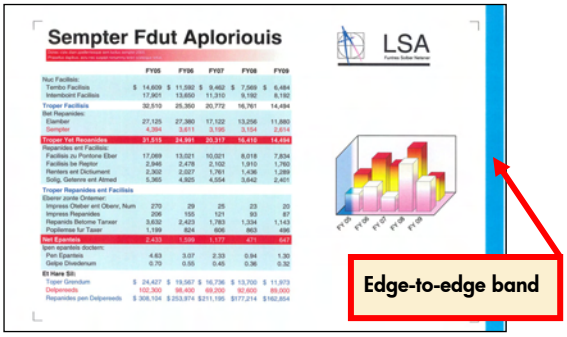
Missing color plane (cyan)

Troubleshooting

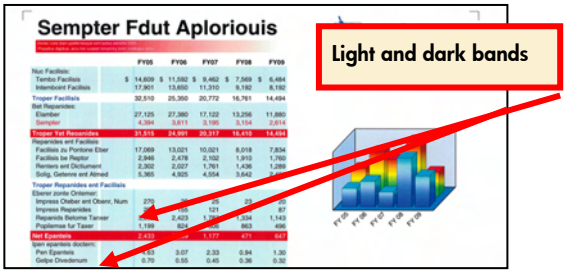
1. Verify that the cartridge is not in OVERRIDE mode. If the cartridge is in Override mode, ask the customer to replace the cartridge. The cartridge may be running low on toner.
2. Verify that a 10.92.xx error does not appear in the event log as associated with this failure. If the event log shows a 10.92.xx error, see "Black color plane missing and/or 10.92.00 error" on page 30.
3. Run the scanner motor test to make sure that the scanner is working correctly. If it is not, replace the scanner.
4. If the above steps do not resolve the issue, replace the OPC grounding springs.

Edge-to-edge bands

Customers may report an intermittent print quality defect where edge-to-edge bands appear on a page, on the back of a page, or on the ETB in a single color. Alternatively, customers may report light and dark bands on the page which are not edge to edge. These bands will appear as a light band (toner missing) followed 20 mm's later by a dark band (extra toner). See samples below.



Edge-to-edge band in single color



Light and dark bands on page (at 20 mm offset)

Troubleshooting

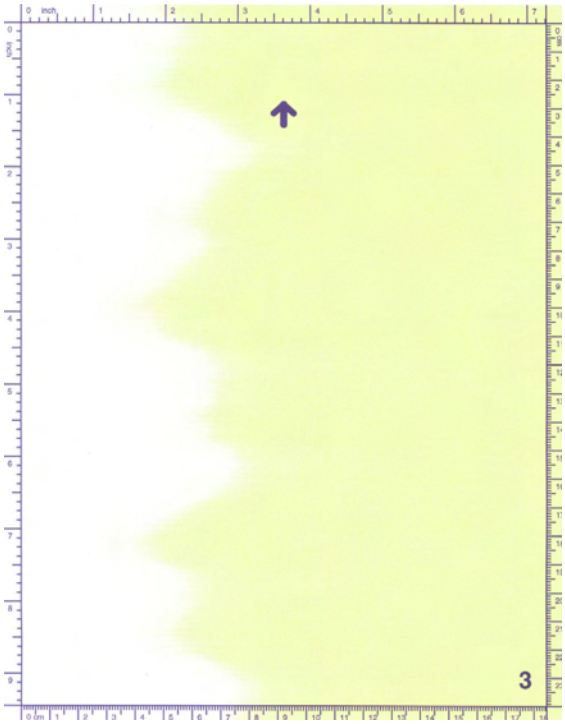
Replace the four cartridge grounding springs per the service note.

Note

Replacing the cartridge grounding springs will resolve the issue. Removing and reinserting the cartridge may seem to resolve this issue, but only temporarily.

Yellow cartridge partial or missing color plane

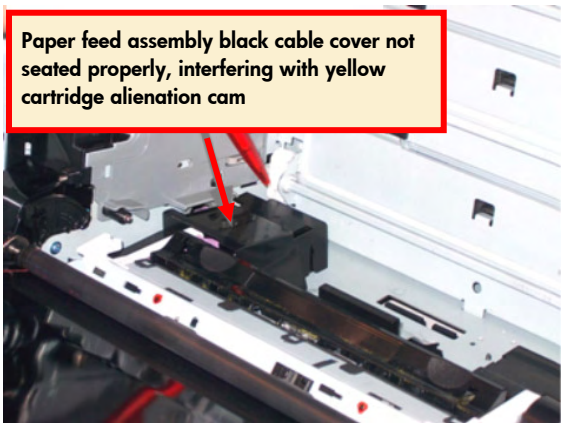
We have had some reports that the yellow cartridge is not engaging or disengaging properly, resulting in a partial or missing yellow color plane. This is seen as a fade from right to left on the yellow Print Quality Troubleshooting page. In addition to the misalignment of the main drive assembly gears, this phenomenon can also be caused by improper reinstallation of the paper feed assembly cable cover in the cartridge atrium.



Example of yellow not engaging

Solution

Reseat the paper feed assembly (PIU) cable cover, being careful to route the cables properly. The cover must not sit on top of any cables. It should be seated firmly at the bottom of the cartridge atrium, and should not interfere with the yellow cartridge left-side alienation cam. See the photo at the top, right.

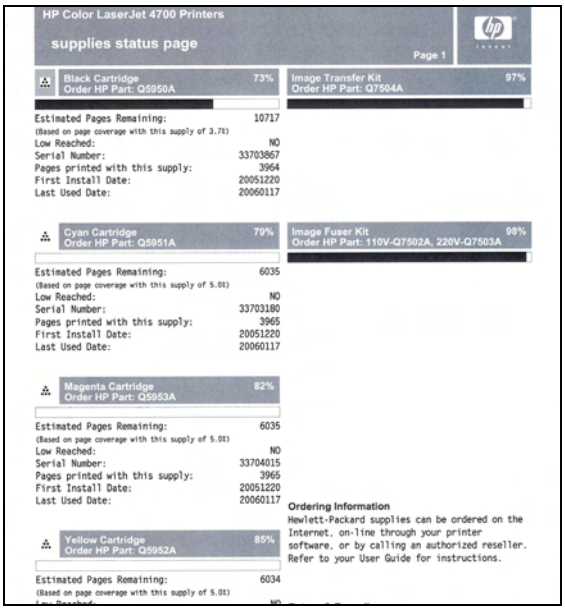


The cable cover is not seated properly

Color toner missing

We have discovered an issue on the HP Color LaserJet 4700 Printer series and 4730 MFP series that causes the transfer rollers in the ETB to remain disengaged intermittently, even after color printing resumes. Color images may have the following defects:

- Color toner missing —either on the full page or a portion of the page. See the "Color toner missing" example below.
- Extremely faint color.
- Two stripes of toner (calibration patches) on the backside of images if calibration occurred prior to printing the images. See "Calibration patches on reverse side" on the next page.


HP Color LaserJet 4700 Printers

supplies status page

Page 1

Black Cartridge 73%
Order HP Part: Q5950A

Estimated Pages Remaining: 10717
(Based on page coverage with this supply of 3.7%)
Low Reached: NO
Serial Number: 33703867
Pages printed with this supply: 3964
First Install Date: 20051220
Last Used Date: 20060117

Image Transfer Kit 97%
Order HP Part: Q7504A

Cyan Cartridge 79%
Order HP Part: Q5951A

Estimated Pages Remaining: 6035
(Based on page coverage with this supply of 5.0%)
Low Reached: NO
Serial Number: 33703180
Pages printed with this supply: 3965
First Install Date: 20051220
Last Used Date: 20060117

Image Fuser Kit 98%
Order HP Part: 110V-Q7502A, 220V-Q7503A

Magenta Cartridge 82%
Order HP Part: Q5953A

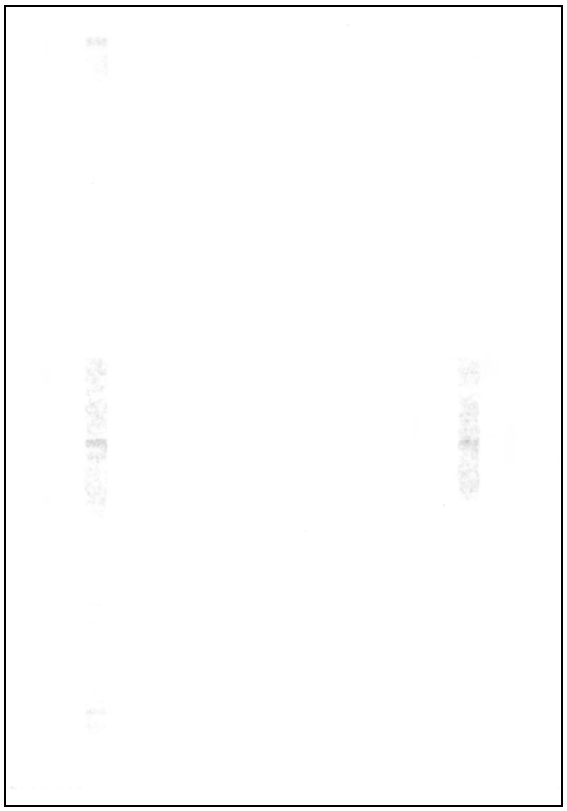
Estimated Pages Remaining: 6035
(Based on page coverage with this supply of 5.0%)
Low Reached: NO
Serial Number: 33704015
Pages printed with this supply: 3965
First Install Date: 20051220
Last Used Date: 20060117

Yellow Cartridge 85%
Order HP Part: Q5952A

Estimated Pages Remaining: 6034
(Based on page coverage with this supply of 5.0%)

Ordering Information
Hewlett-Packard supplies can be ordered on the Internet, on-line through your printer software, or by calling an authorized reseller. Refer to your User Guide for instructions.

Color toner missing



Calibration patches on reverse side

In the case above, the following calibration errors will also likely be listed in the Event Log:

Full calibration	
54.0C.03	Halftone calibration error
54.0C.02	Halftone calibration error
54.0C.01	Halftone calibration error
54.0C.00	Halftone calibration error
54.0F.03	CPR sensor out of range
54.0F.02	CPR sensor out of range
54.0F.01	CPR sensor out of range
54.0F.00	CPR sensor out of range

Quick calibration	
54.0C.03	Halftone calibration error
54.0C.02	Halftone calibration error
54.0C.01	Halftone calibration error
54.0C.00	Halftone calibration error

Troubleshooting

1. Verify that the color cartridges are not running in Override at Out Mode. Print a Supplies Status Page and check for the message "Supply Used After Out with OVERRIDE" under the cartridge part number. When a cartridge is used in this mode, the toner may be depleted, causing that color to fade.
2. Confirm that the image is not merely printed in grayscale. If the full image is printed (i.e. if areas that should be printed in color are printed in grayscale), check for the following possibilities:
   - The customer may be using a black-only print driver.
   - The RESTRICT COLOR USE setting may be set to COLOR IF ALLOWED or DISABLE COLOR through the control panel or the HP Embedded Web Server.
   - COLOR SUPPLY OUT may be set to AUTOCONTINUE BLACK through the control panel or the HP Embedded Web Server.
3. Verify that all three color planes (CMY) are missing from or appear very, very faint on the Supplies Status Page.

Workaround

1. Set the Color/Black mix in the **System Setup** menu to the **Auto** default setting. The **Mostly Black Pages** setting may exacerbate the issue.
2. Open and close the ETB. This may resolve the issue temporarily, so that the product will work correctly until a replacement ETB can be obtained.

Note

Do not replace the print cartridges for this defect.

ETB message won't clear

In some cases, when the transfer kit is replaced due to the message "Replace Transfer Kit" or "Order Transfer Kit," the message does not clear and the counter is not reset.

Solution

1. Ensure that the transfer belt is new and has not been previously installed in another printer.
2. Remove the transfer belt and close all doors on the printer. (The purple connectors for the transfer belt will need to be manually pushed up in order to close the right-side door.)
3. Turn the MFP off, leaving the transfer belt out.
4. Turn the MFP on. When it has finished booting up, install the transfer belt.

Background

The transfer belt contains a fusible link that blows when the belt is installed. For this reason, the transfer kit life counter cannot be manually reset. Also, if a transfer belt has been previously installed in a printer, the fusible link will have been blown and it will not reset the counter when installed in a different printer.

ETB squeak

Some customers may experience noise issues with ETB units at 60,000 pages or more. The customer may describe the noise as a "squeaking" noise that comes from the front area of the printer during printing. The noise becomes more audible when the multi-purpose tray (Tray1) is open.

Solution

1. Open multi-purpose tray (Tray 1) to listen for sounds coming from the ETB area.
2. Perform a Transfer Motor test through the control panel by selecting MENU, DIAGNOSTICS, COMPONENT TEST, and then TRANSFER MOTOR.
3. While the ETB rotates, listen for the sound.
4. If you hear squeaking coming from the ETB, replace the ETB.
5. If you do NOT hear the squeaking noise coming from the ETB, do not replace the ETB. Instead, please refer to the HP Color LaserJet 4700 Service Manual for additional troubleshooting.

Background

The ETB squeaking noise is the sound of rubbing debris caused by premature wear of the Transfer-Roller's Bushings. A countermeasure for this issue has been implemented.

HP LaserJet AiOs

HP LaserJet 3050, 3052/3055, 3390/3392 AiOs—How to use Scan to e-mail

The LaserJet 3050, 3052, 3055, 3390 and 3392 All-in-One (AiO) products can scan a document or photo and attach it directly to an e-mail to be sent from the end-user's default e-mail program. The AiO's Scan to e-mail functionality relies on the PC's default e-mail program. It differs from embedded digital-sending technology, which sends files directly from the MFP unit.

Scan to e-mail may be initiated at the end-user's PC using HP LaserJet Scan software, or from the front panel's **Scan to** button (when pre-programmed with the appropriate destination). The attachment may be in any one of the following image file types: .BMP, .GIF, .JPG, .PDF, .PNG, .TIFF (both regular and compressed).

The HP LaserJet AiO software for Windows supports only 32-bit, Messaging Application Programming Interface (MAPI)-compliant e-mail programs, and does *not* support Internet-based e-mail programs such as Hotmail, Yahoo, or MSN. The following are examples of supported e-mail programs:

- Microsoft Outlook 97, Outlook 98, Outlook 2003, Outlook XP, Outlook Express
- Lotus Notes version 3.0 and later

E-mail is always sent through the default e-mail client. To see the default e-mail client in Windows XP (the path varies for other Windows operating systems), click **Start**, **Settings**, **Control Panel**, **Network and Internet Options**, then **Internet Options**. Click the **Programs** tab, and review the **E-mail** setting.

How does it work?

You may use the HP LaserJet Scan software to scan from the HP LaserJet All-in-One and attach the scanned image file to an e-mail. Or, use the software to program a new destination for the **Scan to** button on the AiO control panel.

To use the HP LaserJet Scan software, click **Start**, **Programs** (or **All Programs**), **HP**, click the name of your HP LaserJet AiO, and then click **Scan**.

The HP LaserJet Scan software contains a simple user interface that provides a **What would you like to do?** drop-down menu, a **Setup** button, and a **Scan** button.

The **What would you like to do?** drop-down menu contains any user-defined destinations and the following default destination options:

- Scan a document and attach it to an e-mail
- Scan a photo and attach it to an e-mail
- Scan a photo and save it to a file
- Prompt me for settings first and then scan

Selecting either **Scan a document and attach it to an e-mail** or **Scan a photo and attach it to an e-mail** and pressing the **Scan** button will initiate the Scan to functionality from the end-user PC. Pressing the **Setup** button for either one of these will allow the end-user to define custom settings or create an entire new destination that may be stored at the AiO unit, and accessible using the **Scan to** button on the control panel.

How to scan to e-mail

How to scan to e-mail from the HP LaserJet Scan software

1. Load the originals that are to be scanned face-up in the automatic document feeder (ADF) input tray. Adjust the media guides to hold the originals in place.
   -or-
   Lift the flatbed scanner lid and load the original that is to be scanned face-down on the flatbed scanner with the upper-left corner of the document at the lower-right corner of the glass. Gently close the lid.
2. Open the HP LaserJet Scan software: Click **Start**, **Programs** (or **All Programs**), select **HP**, select the name of your HP LaserJet AiO, and then click **Scan**.

3. Select either **Scan a document and attach it to an e-mail** or **Scan a photo and attach it to an e-mail**.
4. Press the **Scan** button to attach the scanned item to a new e-mail message.

How to scan to e-mail from the control panel

To use this feature in Windows, an e-mail recipient must be programmed in the **Scan to** tab. See "Programming the All-in-One Scan to button" below. For Macintosh operating systems, set up this function from the **Monitor Device** tab. See the HP Director online Help.

1. Load the originals that are to be scanned face-up in the automatic document feeder (ADF) input tray. Adjust the media guides to hold the originals in place.
   -or-
   Lift the flatbed scanner lid and load the original that is to be scanned face-down on the flatbed scanner with the upper-left corner of the document at the lower-right corner of the glass. Gently close the lid.
2. On the All-in-One control panel, press **Scan to**.
3. Use the **<** or the **>** button to select an e-mail destination.
4. Press **Start Scan** to attach the scanned item to a new e-mail message.

Programming the Scan to button

The **Scan to** button must be programmed before you can use it. However, some destinations are programmed by default if the All-in-One is directly connected to the computer.

1. Open the HP LaserJet Scan software: click **Start**, **Programs** (or **All Programs**), select **HP**, select the name of your HP LaserJet All-in-One, and then click **Scan**.

Note

Pressing **Start Scan** on the All-in-One control panel also starts HP LaserJet Scan when the All-in-One is directly connected to the computer.

2. Click **Setup** to open the Scan to Setup Wizard.
3. Select **Change the destinations that show up on the All-in-One control panel when I press the Scan to button** and then click **Next**.
4. Select the **Allow me to scan by pressing the Scan to button on the All-in-One** check box.
5. Choose destinations by moving them from the PC window (the left window) to the All-in-One window (the right window).

Note

The All-in-One window might contain items set up by other computers that are connected to the All-in-One. You cannot make changes to these items.

6. Click **New** to create a new destination, then click **Update**.

How to create, modify, or delete destinations

1. Open the HP LaserJet Scan software: click **Start**, **Programs** (or **All Programs**), select **HP**, select the name of your HP LaserJet All-in-One, and then click **Scan**.

2. Click **Setup**, then follow the onscreen instructions.
   - **Create a new destination**. Set up a new destination using the Settings Wizard.
   - **Modify an existing destination**. Select an existing destination, then use the Settings Wizard to make changes to the destination.
   - **Delete a destination**. Select an existing destination and delete the destination after confirming its deletion.

HP LaserJet 3390/3392 AiOs—Toner gauge inaccurate

There are situations when the toner gauge for the HP LaserJet 3390 and 3392 AiO devices may not accurately represent the amount of toner remaining in the print cartridge. The toner gauge may indicate that there is more toner in the cartridge than is actually there. In extreme cases, it is possible for a customer to see end-of-life faded print before they receive the "Order Cartridge" (Toner Low) message from the printer. A customer may also complain that they have not received the expected page yield from their print cartridge.

Customer response

We have implemented firmware changes that include some image quality tuning and gas-gauge improvements to address these cases. If a customer complains about any of the above issues, instruct them to download the latest firmware:

Version 20060606.001 (6 June 2006) Rev E

This firmware, with instructions and a fix list, is available on hp.com. The fix list and instructions have also been added to the KRS/SAW database and to TechWeb.

It is important to relay to the customer that some toner gauge fluctuations and yield variations are normal. This firmware fix will address the more extreme variations.

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