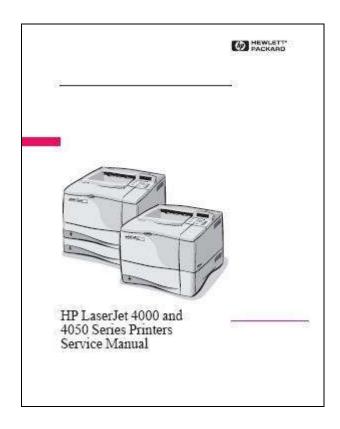


© Copyright 2009 Tucker's Guide to Laser Printers, All Right Reserved

Guide to Laser Printers



Laser Jet 4000/4050 Printer

LaserJet 4000, 4000T, 4000N, 4000TN, 4050, 4050T, 4050N, 4050TN series

- Printing information pages Problem/solution troubleshooting
- Error codes/ Self Diagnostics Quick reference parts list
- Fuser film replacement procedure HP LaserJet 4000/4050 Service Guide
- •10% discount on everything at www.tonerovernight.com Free Technical Support

Table of Contents

- Page 2 About this Guide
- **Page 3 Quick Reference Parts List**
- **Page 4 Printer Information**
- **Page 4 Printing Information Pages**
- Page 6 Paper Jam Related Problems
- Page 9 Image Related Problems
- Page 10 Network Related Problems
- Page 11 Setting the IP Address
- Page 12 Error Codes/Self Diagnostics
- Page 13 Replacing the Fuser Film
- Page 23 Cleaning the Scanner
- Page 30 Installing HP Maintenance Kits "The Right Way"
- Page 32 Maintenance Kit Installation Instructions
- Page 37 Replacing Tray 2 and 3 Separation Clutch
- Page 36 Replacing Tray 2 and 3 Pickup/Separation Rollers
- Page 40 Replacing Tray 1 Separation Pad
- Page 43 Reset the Maintenance Count in Service Mode

About This Guide

This Service Guide was designed for IT professionals and for do it yourself type people. With that in mind I try to keep it simple and straight forward. I only put information in this guide that you need. Theory is interesting but this guide is for people who want to fix their printer quickly. The problems and solutions listed here are from those I have found from my field experience. I have included the major problems that occur so you won't waste time skimming through the Service Guide or the internet for the solution to the problem. But if you need the service guide it is included with the purchase of this guide.

Note: Many procedures are listed in the Hewlett Packard Service Guide. Covering them would be redundant and are not covered in Tucker's Guide to Laser Printers.

Author: Bill Tucker

e-mail Bill@tonerovernight.com

Here's what's included:

Printing information pages Problem/solution troubleshooting Error codes/ Self Diagnostics Quick Reference Parts List

Fuser Film Replacement Procedure

Where to buy parts and supplies <u>www.tonerovernight.com</u> phone 559-222-2255

HP LaserJet 4000/4050 Service Guide

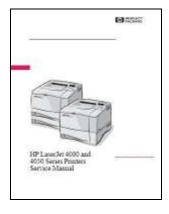
10% discount for one year on everything at www.tonerovernight.com

One Year Technical Support via E-mail

One Hour Tech Support via Phone Support (Expires 3months from purchase of Guide)

The author Bill Tucker has made every effort to ensure that the information and procedures in this guide are accurate. We make no promises or warranty to anyone using this guide to repair any equipment. We assume no responsibility or liability of any kind for any error in the material of this guide. This book is intended as a guide and for quick reference to save time and frustration for those who choose to repair there own printer.

All Right Reserved Copyright 2009 © Bill Tucker's Guide to Laser Printers



Quick Reference Parts List

Parts from tonerovernight.com

HP LJ-4000/4050 Maintenance Kit (OEM and Compatible)

HP LJ-4000/4050 Fuser Assembly (OEM and Refurbished)

HP LJ-4000/4050 Feed Roller Kit (OEM and Aftermarket)

HP LJ- 4000/4050 Fuser Rebuild Kit (Aftermarket Parts)

Maintenance Items

Maintenance Kit (110V) C4118-67909, C4118-67902, C4118-69001

Fuser (110V) RG5-2661

Transfer Roller RG5-4283

Delivery Assembly RG5-2648

500-sheet tray RG5-2672

Toner Cartridge C4127X

Feed Components

Tray 1 Pickup Assembly RG5-2655

Tray 2 & 3 Pickup Roller Assembly 4 rollers with shaft RF5-2484

Tray 2 & 3 Pickup Roller order 4 per tray RB1-8865/RB1-8957

"Use highlighted P/N for updated roller

Tray 1 Pickup Roller RG5-3718

Feed/Separation Roller RF5-1885

Separation Pad RG5-5281

Separation Clutch RB1-8974

Circuit Boards

Feeder Controller PCA for the 500 sheet tray RG5-2673 Feeder, Control PCA for the 250 sheet feeder RG5-2685

Formatter Board C4251-69001 (4050 only)

Formatter Board C4118-69008 (4000 only)

Engine Controller Board, (110V) RG5-3693

Printer Information

LaserJet 4000

Model Number C4118A Release Date November 1997 Speed 17 pages per minute (ppm) Resolution Max DPI 1200 Duty Cycle 65,000 pgs/month Maintenance Interval 200,000 pages

LaserJet 4050

Model Number C4251A Release Date May 1999 Speed 17 pages per minute (ppm) Resolution Max DPI 1200 Duty Cycle 65,000 pgs/month Maintenance Interval 200,000 pages

Parts Reference

Maintenance Kit C4118-67909 Fuser Assembly 110v RG5-2661 Toner Cartridge C4127X

Printing Information Pages

Printing a Configuration page

- 1 Press [Menu] until INFORMATION MENU appears.
- 2 Press [Item] until PRINT CONFIGURATION appears.
- 3 Press [Select] to print the Configuration Page

The Configuration Page shows the printer's current configuration. If a Jet Direct card is installed, a Jet Direct Configuration Page will print out also.

To Print a Control Panel menu map:

- 1 Press [Menu] until INFORMATION MENU appears.
- 2 Press [Item] until PRINT MENU MAP appears.
- 3 Press [Select] to print the menu map.

To see the current settings for all of the menus and menu items Available on the Control Panel, print a Control Panel menu map.

To print an Event Log:

- 1 Press [Menu] until INFORMATION MENU appears.
- 2 Press [Item] until PRINT EVENT LOG appears.
- 3 Press [Select] to print the event Log.

The Event Log retains the printer's last 30 error messages.

PRINT PAPER PATH TEST

- 1 Press [Menu] until PRINT PAPER PATH TEST appears.
- 2 Press [Item] Choose the input tray, output bin, duplexer (if available), and number of copies.
- 3 Press [Select] to print the PRINT PAPER PATH TEST

The paper path test is a great tool. Test specific trays for paper jam problems, test intermittent image problems or anything you can think of.

Paper Jam Related Problems - Error 13.xx

The number(s) after 13 indicate where the jam is occurring. This can be wrong. There are many paper jam problems at the feed area. (From the tray) If printer has more than one tray, use the same troubleshooting approach.

Tip: To determine where the paper is jamming, print one at a time until it jams. This will be the problem area to focus. If you print a multi page job you won't know where to start. With paper feed problems I am organizing them in order of what happens more often.

Problem: Jamming from Tray 2 and 3

Solution: Replace Feed Rollers. PN- Tray 2&3 Feed/Separation Roller RF5-1885

Symptom:

- a.) Paper folded under in the middle of paper the width of the Feed/Separation roller.
- b.) Buzzing noise when pulling from tray.
- c.) Rollers are slick with little to no tread left.
- d.) Intermittent jamming in the exit on large print jobs can actually be caused by worn feed rollers intermittently not pulling from paper tray.

Note: Instructions for replacing the rollers are in the Maintenance Kit Installation Instruction section

Problem: Multi-feeding/Jamming from Tray 2 & 3 (pulling more than one sheet at a time)

Solution: Replace Feed and Separation rollers P/N RF5-1885, Replace Separation Clutch P/N RB1-8974

Symptom:

- a.) If you have replaced paper tray feed and separation rollers and it is still has a buzzing noise when pulling from the paper tray replace separation clutch.
- b.) Multi-feeding can be caused by a bad clutch.

Problem: Jamming at paper tray 2 & 3.

Note: These rarely should be replaced and they don't come in the maintenance kit. Clean with 409 cleaner

Solution: Replace Tray 2 & 3 Pickup Rollers 4 rollers each tray RB1-8865/RB1-8957or Tray 2 & 3 Pickup Roller Assembly 4 rollers with shaft RF5-2484

Problem: Paper Jamming Tray 2 and 3. Paper tray springs are not pushing paper up all the way.

Solution: Check tray with paper loaded. Inspect both sides. The paper should be pushing on the metal tabs, one on each side (chrome triangular tabs). If not there may be something under the plate that the paper sits on or the springs have been compressed and need to be stretched.

Problem: Jamming/multi-feeding from Tray 1 (pulling more than one sheet at a time) **Solution:** Replace Tray 1 Pickup Roller RG5-3718 and Separation Pad RG5-5281. Note: You can replace just the pad if the new style has been installed. You can tell the old style if it is all one piece. The new style pad comes off of the separation pad assembly.

Problem: Jamming from Tray 1

After you have tried replacing tray 1 Pickup Roller RG5-3718 and Separation Pad

RG5-5281 and you are still having problems.

Solution: Replace RG5-2655-100CN 1 Tray 1 Pickup Assembly

Problem: 41.3 unexpected paper size

Solution: Make sure that all trays are correctly adjusted for size. Print a configuration page and if the configuration page says it is different from what you have it set for then replace RG5-2673-000CN 1 Feeder Controller PCA for the 500 sheet tray. RG5-2685-000CN 1 Feeder, Control PCA for the 250 sheet feeder

Problem: 13.6 jamming in the Fuser, Paper stopped at Fuser.

Solution: Replace Fuser Assembly.

Tip: Remove fuser assembly and check that the exit sensor is snapped into the frame of the fuser and the lever swings freely.

Fuser Related Issues

Problem: Fuser Error 50.x A Fuser error has occurred.

Notes: X is the Description:

1 = Low Fuser temperature 2 = Fuser warm up service 3 = High Fuser temperature

4 = Low/Bad line voltage. (Printer hooked up to UPS uninterruptible power supply)

5 = Inconsistent Fuser

Solution: Replace Fuser Assembly, 110v P/N RG5-2661

I have had loose connectors so make sure nothing is loose. Replace the engine control

Board P/N Engine Controller Board RG5-3693-000CN (110V)

RG5-3694-000CN (220V)

Tip: 99% of the time the solution is to replace the Fuser Assembly. If you want to know for sure follow the procedure for measuring the point to point readings in the service guide.

Image Related Problems "Fuser"

If you have followed the procedure for determining image related problems then you have determined that the problem is in the fuser assembly.

Problem: Lines running down the length of the page. Print rubs off

Solution: Replace the Fuser Assembly, 110v P/N RG5-2661

Tip: A common problem is lines on the edge of the page. Rub it with your hand and you will feel the print rubbing off. This is a quick way to solve a fuser problem

Image Related Problems:

Image problems and print quality problems are mostly either a toner cartridge problem or a fuser assembly problem. The quickest way to determine the solution is to replace the toner cartridge. If you don't have a toner cartridge to test it there is a procedure you can use to make sure what the problem is.

Problem: lines, dark prints, light prints, streaks

Procedure for determining image related problems.

- a.) Place paper in tray 1.
- b.) Print from tray 1.
- c.) Stop machine (turn off) when page has fed past toner and just starts going into the fuser.
- d.) Carefully remove the toner cartridge
- e.) Carefully remove the printed page. You should have a partially printed page that is not fused. If the image defect is on the page the problem is in the toner cartridge.

Solution: Replace the toner cartridge. If you eliminated the fuser assembly and the problem still persists after you changed the toner cartridge, go to the next step.

Problem: light prints across the whole page **Solution:** a.) Check and turn off EconoMode.

b.) Replace transfer roller P/N Transfer Roller RG5-4283

Problem: light prints on a portion of the page

Solution: Clean the scanner.

Tip: When the scanner is dirty it will never be light across the whole page. It will be light on one side or in the middle. First replace the toner cartridge and if the pages are still partially blank or light it is a dirty scanner.

*See my article on cleaning the scanner on HP laser printers.

Network Related Issues

Problem: Network card problems, 8X.YYYY or 40 EIO X Bad Transmission **Note:** Print a Configuration Page.

Solution: a.) Does the EIO page print? If not reseat/replace Jet direct card b.) If it prints the EIO page check the IP address.

Setting the IP Address

If the printer contains an HP JetDirect Card print server EIO card (HP for network card), you can configure basic networking parameters using the EIO Menu. These and other parameters can also be configured through HP JetAdmin.

1 Press [Menu] until EIO Menu appears.

2 Press [Item] Choose the input tray, output bin, duplexer (if available), and number of copies.

3 Press [Select] to print the PRINT PAPER PATH TEST

CFG NETWORK=NO NO: The JetDirect Menu is not accessible.

CFG NETWORK=YES YES: The JetDirect Menu appears.

CFG TCP/IP=NO

NO: The TCP/IP Menu is not accessible.

CFG TCP/IP=YES

YES: The TCP/IP Menu appears.

In the TCP/IP Menu, you can specify BOOTP=YES for TCP/IP parameters to be automatically loaded from a bootp or DHCP server when the printer is turned on.

If you specify BOOTP=NO, you can manually set selected TCP/IP parameters from the Control Panel.

You can manually set each byte of the

- IP address (IP)
- Subnet Mask (SM),
- •Syslog Server (LG),
- Default Gateway (GW).

Also, you can manually set the Timeout time period.

Note: If no IP address is assigned within the first 5 minutes, the HP JetDirect print server card will assume a default IP address of 192.0.0.192.

ERROR CODES for Hewlett Packard LaserJet 4000/4050

- 13. XX PAPER JAM [LOCATION] Paper is jammed at the specified location
- 13.1 PAPER JAM 13.1 Paper delay jam at paper feed area.
- 13.2 PAPER JAM 13.2 Paper stopped jam at paper feed area.
- 13.5 PAPER JAM Paper delay jam at Fuser.
- **13.6** PAPER JAM 13.6 Paper stopped jam at Fuser.
- 13.10 PAPER JAM Paper delay jam at paper reversing area, Jammed at Duplexor.
- 13.22 PAPER JAM Paper delay jam at paper reversing area, Jammed at Duplexor.
- 13.20 PAPER JAM Paper stopped jam in the paper path. Check the entire paper path
- 13.21 PAPER JAM Top open jam
- 13.32 PAPER JAM Paper stopped jam in the paper path.
- 13.33 PAPER JAM Top open Jam
- 20 INSUFFICIENT MEMORY alternates with PRESS GO TO CONTINUE
- 21 PAGE TOO COMPLEX alternates with PRESS GO TO CONTINUE
- 22 EIO X BUFFER OVERFLOW alternates with PRESS GO TO CONTINUE
- **22** PARALLEL I/O BUFFER OVERFLOW alternates with PRESS GO TO CONTINUE
- 22 SERIAL I/O BUFFER OVERFLOW alternates with PRESS GO TO CONTINUE
- 40 BAD SERIAL TRANSMISSION alternates with PRESS GO TO CONTINUE
- 40 EIO X BAD TRANSMISSION alternates with PRESS GO TO CONTINUE
- **41.3** UNEXPECTED PAPER SIZE
- 41. X PRINTER ERROR alternates with PRESS GO TO CONTINUE
- **50. X** FUSER ERROR A Fuser error has occurred.
- **51.** X PRINTER ERROR A loss of beam detect occurred.
- **52. X** PRINTER ERROR The Laser Scanner speed is incorrect.
- 53. XY.ZZ PRINTER ERROR
- 55 PRINTER ERROR An internal communications error occurred.
- **56.** X PRINTER ERROR A temporary printing error occurred.
- **57.** X PRINTER ERROR An error occurred with the Fan's motor.
- **59. X** PRINTER ERROR A printing error occurred.
- **62. X** PRINTER ERROR There is a problem with the printer's memory.
- **64. X** PRINTER ERROR A scan buffer error occurred.
- 66. XX.YY FINISHER/STAPLER STACKER FAILURE
- **66. XX.YY** INPUT DEVICE FAILURE
- **66. XX.YY** OUTPUT DEVICE FAILURE
- **68 NVRAM ERROR CHECK SETTINGS**
- 69. X PRINTER ERROR A temporary printing error occurred.
- **79. XXXX** PRINTER ERROR
- **8X.YYYY** The EIO accessory in slot

Replacing the Fuser Film Sleeve on the Hewlett Packard LaserJet 4000/4050

Tools and supplies needed:

- •#2 Philips head screwdriver
- Small flat blade screwdriver
- •High Temperature Grease
- Fuser Film for the HP LJ-4000/4050
- •Isopropyl Alcohol
- •Goof Off Cleaner

Note: You can buy Goof Off at Orchard Supply Hardware or other hardware supply stores.

Step #1.) Remove the two screws located in *Figure 1* **Tip:** Put all screws in a bowl so you don't loose them.



Figure 1

Step #2.) Remove the cover by using a flat blade screwdriver and prying the latches outward *See Figure 2 and 3*



Figure 2



Figure 3 Caution: Be careful not to damage sensor.

Step #3.)

Pull off the cover and set aside. Be careful not to knock off the springs on either side: See Figure 4

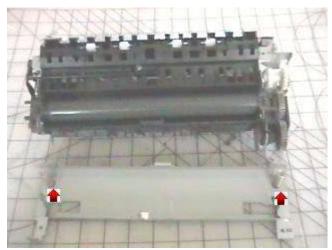


Figure 4

Step #4.)

Remove the end plate on the gear side.

Note: Some 4000 series fusers have 3 screws.

See figure 5

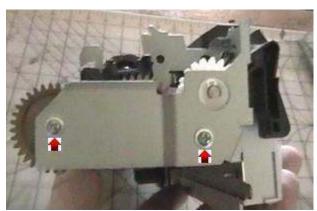


Figure 5

Step #5.)

Remove all of the gears.

See Figure 6

Remove the white gear by prying on clip with the flat blade screwdriver. Stack all of the gears so you know how they go back on.

Note: The exit roller shaft has a bushing that has a slot that must be in the groove or the white gear will not snap on.

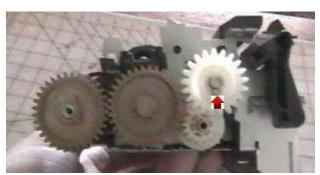


Figure 6

Step #6.)

Remove the front and rear connectors off of the fuser sleeve assembly.

Tip: Use a flat blade screwdriver to push off the connector on the gear side.

See Figure 7, 8 and 9



Figure 7



Figure 8



Figure 9

Step #7.)

Remove the fuser film sleeve assembly by pulling up and out.

Step #8.)Remove the left side grommet as shown in *figure 10 and 11*



Figure 10



Figure 11 End Grommet

Step #9.)
Remove the fuser film off of the sleeve by sliding it to the left.
See figure 12



Figure 12

Step #10.)

Clean all of the old grease off of the heating element and the end grommets.

Tip: Use a business card to scrape the old grease out of grooves.

Note: If the film was ripped, the baked on toner will need to be removed. You can use Goof Off cleaner to get the toner off. Use Isopropyl alcohol and clean the solvents and oils off of the heat element. Apply high temperature grease. Apply a thin even layer across just the heating element and each end grommet. *See Figure 13, 14 and 15*



Figure 13 Heater Element



Figure 14 Thin layer of grease on heating element



Figure 15 End Grommet

Step #11.)

Slide the new film on to the sleeve and reinstall the left side grommet and set the fuser sleeve aside.

Note: The black band should be on the left side.

Step #12.)

Remove the lower roller.

Note: Clean or replace lower roller. Clean or replace gears.

Note: Gently clean the roller with Goof off.

See figure 17



Figure 17

Step #13.)

Reinstall everything in reverse order and test.

Note: Error code 50 may be caused by not pushing connectors all of the way on.

Cleaning the Scanner, HP LaserJet 4000/4050

Tools needed:

#2 Phillips head screw driver, Needle nose pliers, and small flat blade screw driver, Q-tip.

Estimated Time of repair: 30 minutes

This article shows how to clean the scanner on all Hewlett Packard 4000 series Laser Printers. This procedure needs to be done when the machine is in a dirty environment and the dust builds up on the mirror inside the scanner.

Symptoms of a dirty scanner: Light prints even after you have tried a new toner cartridge. Mostly shows itself as light prints on one side of prints or streaks or wide blank lines.



LJ-4000/4050 Scanner

Cleaning the Scanner Procedure:

Step 1. Turn the power off and remove the power cord.

Step 2. Remove the right rear side cover. Push the cover toward the rear and it will slide out. **See Figure 1**

Step 3. Open the top cover and remove the toner cartridge.



Figure 1

Step 4. Remove the toner cartridge drive arm. **See Figure 2** Remove the Toner Cartridge Drive Arm by using needle-nose pliers to pinch the pin from its hinge on the Top Cover.



Figure 2

Step 5.

Remove the four screws holding the Top Cover See Figure 3 and 4 (two are behind the Rear Output Bin, near the top, and two are on top of the printer under the Top Cover).



Figure 3

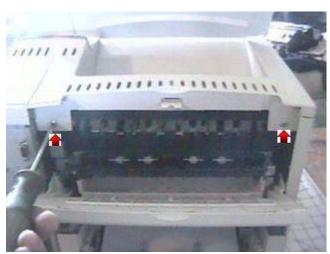


Figure 4

Step 4

Squeeze the right front side of the Top Cover to remove it. It may be necessary to use a small flat-blade screwdriver to release the tab inside the small hole. Holding the output assembly in place (located toward the rear of the printer), **See Figure 5**Caution: Disconnect the wiring connector(s). **See Figure 6**

Remove the Top Cover.



Figure 5



Figure 6

Remove output assembly.

Facing the rear, pull up brass arm on the left side straight up. See Figure 7 Pry the white tab on the right side See Figure 8 and pull the output assembly up and

Caution: Be careful of the sensor flag. When reinstalling make sure it rotates freely.

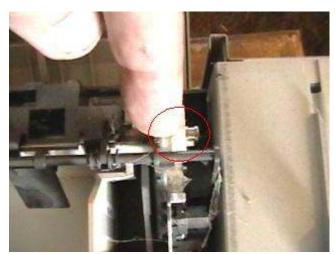


Figure 7



Removing the Scanner Cover:

Carefully remove the wiring connectors. Remove the cover of the scanner by removing the screws and using a small flat blade screwdriver to release the latches. Carefully remove the cover. **See Figure 9 and 10**

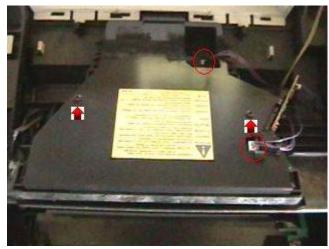


Figure 9



Figure 10

Cleaning the Scanner Mirror:

Clean the mirror that shines directly onto the drum in the toner cartridge.

See Figure 11 This mirror is at an angle. You need to clean the mirror from below.

Use a Q-tip to clean it. Make sure you clean the edges really good. Reinstall everything in reverse order.



Figure 11

Installing HP Maintenance Kits the Right Way

There is always a right way and a wrong way with anything that you do. Installing a maintenance kit in your HP Laser printer is one of them.

HP maintenance kits can be simple to install but many people are missing the service part of the installation. Just installing the kit will keep you up and running, but there is much more involved than just slapping in the components. A maintenance kit normally consists of a fuser assembly, transfer roller, and feed rollers. When replacing the items in the maintenance kit there are other service procedures that need to be accomplished as well. There are many different models of HP Laser Printers. I have combined all of them together for this article and may speak broadly on the specific issues or procedures I list.

First, you will need to vacuum out the residual paper and toner dust. This dust can find its way into the drum and fuser and cause undue wear on the drum and drum blade inside the toner cartridge. It can also cause wear on the fuser film or rollers in the fuser assembly. It is important to vacuum it all out.

Remove all of the components listed.

Remove the fuser assembly, paper trays, feed rollers, toner cartridge, and the transfer roller. Locate the jam area before the transfer roller. There is normally a green handle to lift up. If you make many prints you will see a great deal of paper dust under this area. Also, when you pull out the transfer roller, there will be toner and paper dust there also. Make sure you vacuum out the paper dust inside the paper trays. Remove the paper from the tray and you will not have any trouble finding paper dust. Some laser printers have a circulation fan that has a filter. These will get completely clogged with dust and can overheat the inside of the machine. This can cause many problems especially with the toner cartridge. Look for vents on the side of the machine.

Warning: Do not use canned air! This will just blow the contaminates into the circuit boards, bearings, and other components.

The next thing to do would be to wipe out the inside with a good towel. You can't get all of the toner and dust off with a vacuum. Toner tends to build up if not cleaned and it will eventually cause many problems. Make sure you clean the entire paper path good.

Warning: There may be a sensor lever that sticks up and you could break one while cleaning it if you are not careful.

Not all of the paper feed rollers are provided in a standard maintenance kit. There are rollers that do not require replacement most of the time and they are known as the prefeed rollers. Pre-feed rollers are the rollers that push the paper into the feed rollers. They don't wear as much but they do require cleaning. You can clean the rollers with WD-40. Just saturate the cloth and go over the tread of the roller really good. Then go back over them with the dry part of the cloth and remove any residual cleaner.

Warning: Never use alcohol when cleaning feed rollers. Alcohol will dry out the tread and ruin them!

Install all of the maintenance kit components. Be careful not to damage the fuser assembly while unpacking. There are some fragile sensor arms and other components that break easy on most of them. When you are done with installing all of the parts, you should clean the outside covers. This is important to me because I want it to look good when I am done. You can use 409 because it really cleans covers well and is easy to get and it is inexpensive. Follow the procedure for resetting the Perform Maintenance Display. Print out a test from your work station and you are finally done. If you follow these steps each time you change your maintenance kit you will see a big difference in quality and performance of your HP Laser Printer.

HP LaserJet 4000 and 4050 Series Printer Maintenance Kit Installation Instructions

NOTE: The printer will not reset the maintenance counter back to 0 until it reaches 200,000 pages. **See:** Resetting maintenance count before perform printer maintenance message is displayed.

Required tools

- · Phillips #2 screwdriver
- · Flat-blade screwdriver

Step 1: Fuser assembly

- 1. Turn the printer off.
- 2. Unplug the printer.

WARNING: To avoid minor burns, wait 30 minutes for the fuser to cool before continuing with this procedure.

3. Remove the duplexer if installed. If it is not installed, remove the two duplexer slot covers by pulling away from the first.

Figure 1: Removing the left and right duplex connector covers

4. Turn the printer so its rear cover faces forward. Open and extend the rear output bin.

Figure 2: Removing the rear cover/rear output bin

- 5. Flex the tray slightly to remove one side at a time
- 6. Loosen the two screws in the fuser assembly.

Figure 3: Loosening the captive screws for the fuser

7. Grasp the sides of the fuser assembly and pull it out of the printer.

NOTE: When removing the fuser, the plastic cover can come off with the fuser remaining in the printer.

- 8. Install the new fuser assembly (align the left side first). Push the fuser assembly into the printer until the two tabs on both sides of the fuser assembly press against the plastic on the printer.
- 9. Replace the two screws. (Turn the screws counterclockwise until they click, then turn them clockwise to tighten.)
- 10. Replace the tray, inserting one side at a time.
- 11. Replace the duplexer slot covers or the duplexer.
- 12. Continue with the next section to remove and replace the transfer roller.



Figure 1:

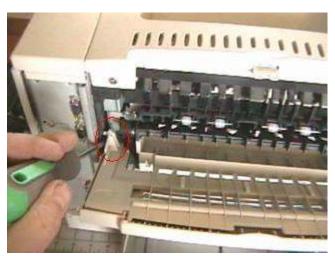


Figure 2:



Figure 3:

Step 2: Transfer roller

1. Put on gloves.

CAUTION: To avoid damaging the transfer roller, never touch the transfer roller with bare hands.

2. Turn the printer so the front is facing forward.

Figure 4: Removing the transfer roller

3. Open the top-cover and remove the toner cartridge. The transfer roller is underneath the toner cartridge. **See Figure 4**

CAUTION: Do not touch the black rubber part of the roller. Skin oils on the roller can cause problems with print quality.

4. Using a flat-blade screwdriver, pry the right end of the metal shaft out of place, then the left end.

NOTE: When the transfer roller is replaced, make sure the black collar is oriented properly, with the open end down.

5. Continue with the next section to remove and replace the Tray 1 pickup roller.

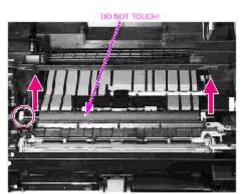


Figure 4

Step 3: Tray 1 pickup roller

- 1. With the top cover still open, open Tray 1 and locate the roller. The Tray 1 pickup roller is in the center of the Tray 1 pickup assembly.
- 2. Grasp the envelope entrance cover and pull it straight away from the printer.

See figure 5

- 3. Pry open the blue latch on the roller. See Figure 6
- 4. Lift the roller out.
- 6. Continue with the next section to remove and replace the separation rollers.





Figure 5

Figure 6

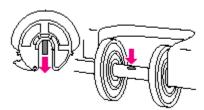


Figure 7

NOTE: To replace the roller, make sure the pin in the roller lines up with the hole in the shaft. Be sure the roller slides on fully and clicks into place. Be sure to close blue latch completely by pressing until it snaps into place. **See Figure 7**

Step 4: Separation rollers

NOTE: Remove and replace the separation rollers and feed rollers on all trays except Tray 1.

1. Remove the tray. Open the door on the left, inside front of the tray.

Removing the separation rollers

NOTE: The separation rollers are inside the paper trays.

- 2. Release the latch and lift the cover inside the tray. Figure 8:
- 3. Pinch the release at the left side of the roller and slide it off the shaft. Figure 9
- 4. Replace new roller by sliding it on the shaft. Replace the cover.

CAUTION: Be sure that the roller slides on fully and clicks into place. Be sure to close cover completely by pressing until it snaps into place.

Replacing Tray 2 and 3 Separation Clutch

If jamming and multi-feeding continues replace the separation clutch see Figure 10

5. Continue with the next section to remove and replace the feed roller.



Figure 8



Figure 9



Figure 10

Step 5: Feed rollers

1. Move the printer to the edge of the work area for access to the feed roller area.

NOTE: The following procedure is the same for all HP LaserJet 4000 series printers; there are two (2) rollers for the HP LaserJet 4000t and 4000tn and one roller for the HP LaserJet 4000 and 4000n.

Figure 7: Removing the paper feed rollers (HP LaserJet 4000t and 4000tn shown)

- 2. Remove the tray from the feeder. The paper feed roller's are inside the feeder.
- 3. Pinch the release at the left side of the roller and slide it off the shaft. Figure 11
- 4. Line up the new roller with the flat part of the axle. Slide the roller onto the axle and rotate until it locks into place.
- 5. Continue with the next section to reset the maintenance page count.



Figure 11

Replacing Tray 2 and 3 Pick up Rollers

Remove the toner cartridge power cord and network or parallel cable from machine. Remove all paper trays. Tip machine on the fuser side so the paper feed is facing up Push the white tab of each roller (4) and pull off rollers. **See Figure 12** Install each roller in reverse order.

Tray 2 & 3 Pickup Roller order 4 per tray RB1-8865/RB1-8957 "Use highlighted P/N for updated rollers"

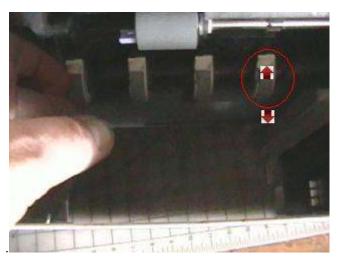


Figure 11

Step 6: Reset the maintenance page count

When all of the previous steps are complete, reset the maintenance page count.

To reset the maintenance page count:

Press and hold down the **left** side of the ITEM and VALUE buttons on the control panel while turning the printer on.

(The printer will not reset properly if the ITEM and VALUE buttons are held down on the right side.)

RESET MAINT COUNT appears in the display, followed by INITIALIZING. After a few seconds, READY will appear in the display. At this point, the printer's maintenance count has been reset.



Replacing Tray 1 Separation Pad P/N - RG5-5281

Step #1. Remove Tray 1 pickup roller

The Tray 1 pickup roller is in the center of the Tray 1 pickup assembly. Grasp the envelope entrance cover and pull it away from the printer.

See figure 1

Pry open the blue latch on the roller.

Lift the roller out. See Figure 2





Figure 1

Figure 2

Step #2. Remove the front cover from tray 1.

Push outward on the two plastic hinges.

Caution: Be careful not to break the hinges.

Slide the cover to the right and remove it from the three bottom hinges. **See Figure 3** Pull off tray 1 sensor arm cover and remove tray 1 by rotating it downward.



Figure 3

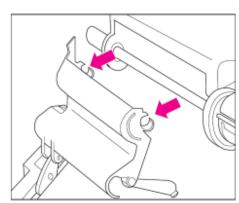


Figure 4

Step #3. Removing the Separation Pad

Use a small flat blade screwdriver and carefully remove the 2 outside springs. Leave the middle spring in place.

Caution: Be careful not to stretch or damage the springs.

Tip: Place the springs in a safe location to avoid loosing them.

Pry both sides of the separation pad and carefully remove it. **See Figure 5** Install new separation pad and install all parts in reverse order.

Note: Make sure all springs are positioned properly



Figure 5



Tip: The separation pad was updated. The old style was one solid piece with the pad glued onto the pad holder. The new style snaps on. If you have the new style you can skip all of these steps and just remove the tray 1 pickup roller unsnap the old pad and snap in the new pad. Make sure the pad slides into the slots in the rear of the holder then snap in the pad.

Reset the Maintenance Count in Service Mode

Before Perform Printer Maintenance message is Displayed

This procedure should be performed when you have replaced the maintenance kit but the "Perform Printer Maintenance" message has not reached 200,000 prints.

NOTE: The printer will not reset the maintenance counter back to 0 until it reaches 200,000 pages.

To enter Service Mode:

Hold down [Select] and [Cancel Job] while turning on the printer Until all of the lights on the Control Panel are lit. (If the Control Panel reads INITIALIZING, the keys were released too soon.)

Press the right side of the [Menu] key, and then press [Select]. The Message SERVICE MODE is displayed. To exit the Service Mode Press [Go].

Set Maintenance Value to 200,000

While in service mode Press [Select] until maintenance count appears.

Set maintenance count to 200,000 using [Item] +/- to advance value and [select] to save each value. Each value is saved and moves each digit to the right. Press go to exit service mode.

Print a configuration page and verify that "Perform Printer Maintenance" message is displayed. Perform reset procedure.

Reset Perform Printer Maintenance

The maintenance page count should be reset only after a Maintenance kit has been installed. This will reset the maintenance counter so that the message PERFORM PRINTER MAINTENANCE will display another 200,000 pages later (default).

Hold down the [- Item] and [- Value] keys.

Turn the printer on.

Wait for RESET MAINTENANCE COUNT to be displayed and then Release both keys.