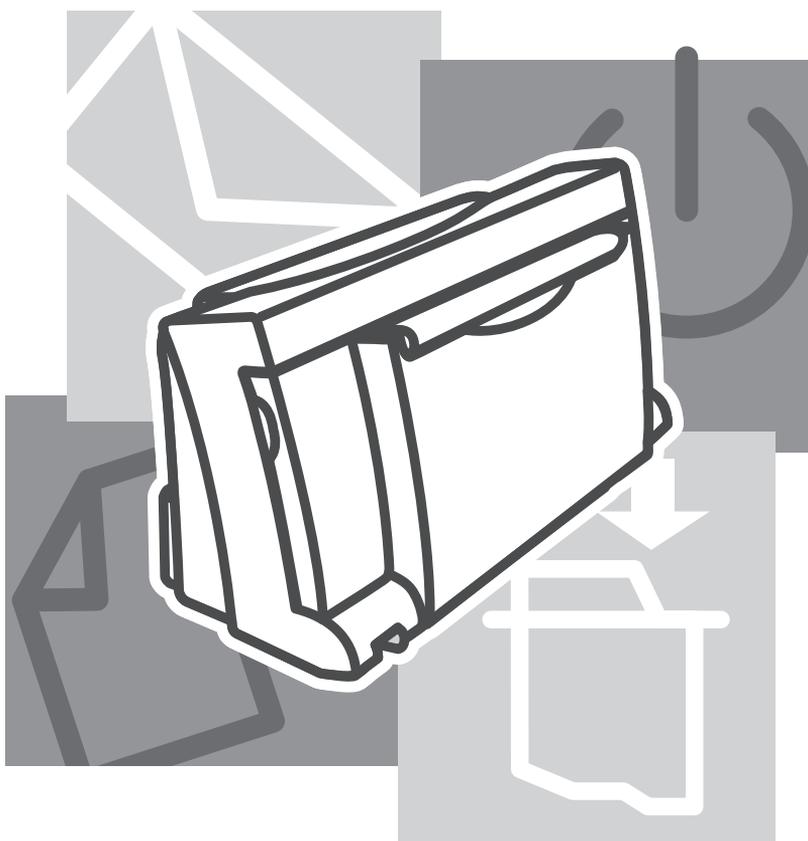


DeskJet 400 Series Printer

User's Guide

ENGLISH



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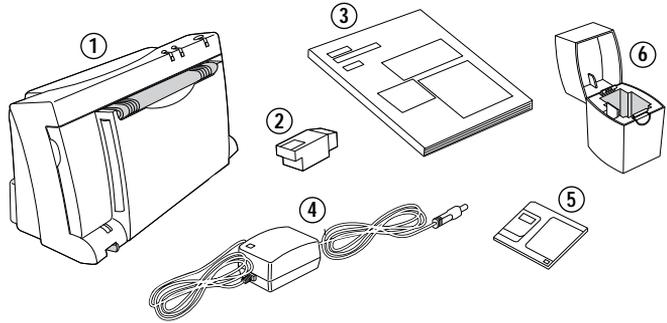
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Getting Started

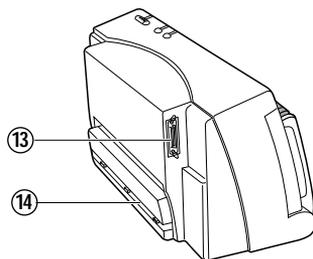
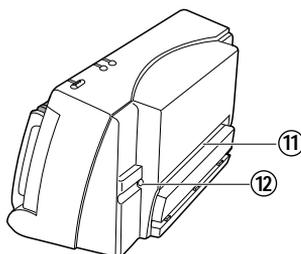
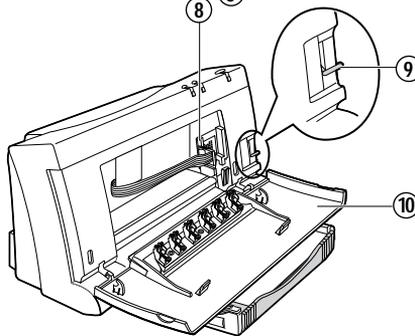
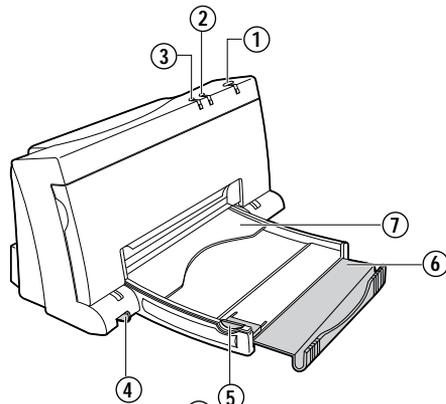
Packing List

1. HP DeskJet 400 series printer
2. Black print cartridge
3. User's guide
4. Power adapter
5. Printer software diskette
6. Print cartridge storage container



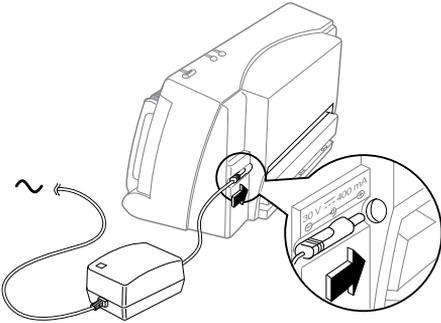
Printer Features

1. Power button (⏻)
2. Paper Feed button (⏴)
3. Change Cartridge button (🖨️)
4. Paper size selector (A4 / LTR)
5. Paper width guide
6. Paper tray
7. Paper separator
8. Print cartridge holder
9. Envelope lever (✉️ / 📄 ↕️)
10. Printer door
11. Manual feed slot
12. Power socket
13. Parallel port
14. Cable track

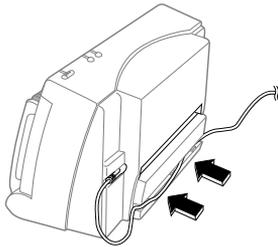


STEP 1: Connecting the Power Adapter

1. Plug the power adapter connector firmly into the printer's power socket.
2. Plug the other end of the power adapter cable into a grounded electrical outlet.



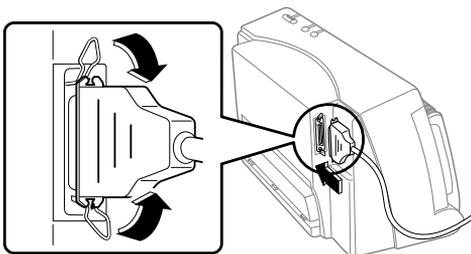
3. If the electrical outlet is on the same side as the parallel port on the printer, fit the power cable into the cable track so that the power cable is neatly housed in place.



STEP 2: Connecting the Parallel Cable

You must purchase separately a parallel cable to connect your printer to your computer. Use any high-quality parallel printer cable, or order HP part no. C2950A or C2951A from your local HP dealer.

1. Make sure the printer and the computer are turned off.
2. Connect the printer end of the parallel cable firmly to the parallel port on the printer.
3. Snap both clips into the notches on the connector.



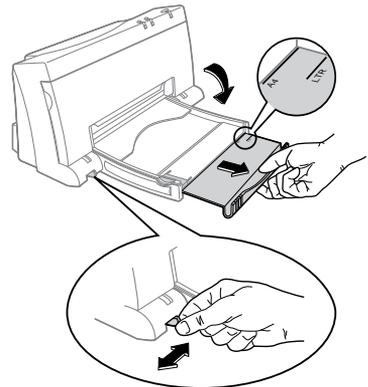
4. Connect the computer end of the parallel cable to the parallel port on your computer and tighten the screws on the connector.

To locate the parallel port on your computer, refer to the user's guide for your computer.

STEP 3: Loading Paper

The HP DeskJet 400 series printer prints on plain paper and other paper types. Most plain paper used for photocopying yields good results. See page 14, "Recommended Printable Weight" for information on other paper types you can use. See also page 5 for information on loading other size paper, envelopes, labels, and thick paper.

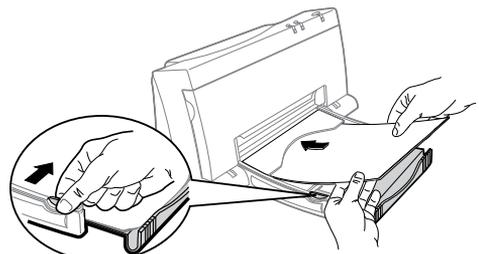
1. Open the paper tray.
2. Extend the paper tray to either the LTR (US Letter) mark.
3. Switch the paper size selector (A4 / LTR) to LTR.



4. Insert a stack of paper squarely into the paper tray, print side down, until it can go no farther.

Note: If you are loading letterheads or HP transparencies, insert them print side down, with the top of the page going into the printer first.

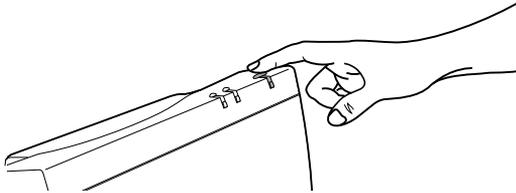
5. Move the paper width guide so that it presses lightly against the paper stack.



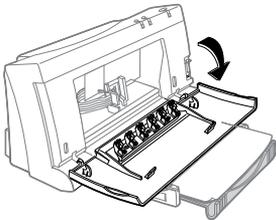
STEP 4: Installing a Print Cartridge

Note: Use the black print cartridge (HP part no. 51626A) supplied with the printer, or the color print cartridge (HP part no. 51625A) which you can purchase separately. You can use only one of these print cartridges at one time.

1. Press the Power button (⏻) to turn the printer on.

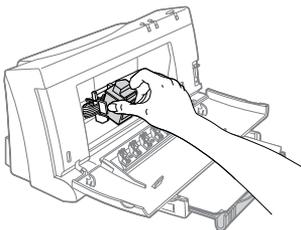
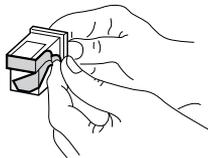


2. Open the printer door.

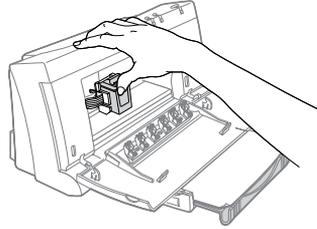


CAUTION: The star wheels on the printer door have sharp edges. Make sure your hand does not come in contact with the star wheels.

3. Remove the print cartridge from its box.
4. Gently remove the tape(s) covering the ink nozzles. Be careful not to touch the ink nozzles or the copper contacts.
5. Insert the print cartridge into the holder at an angle such that the green top is tilted toward you. The arrow on the print cartridge should be pointing toward the inside of the printer.



6. Push the green top in until the print cartridge snaps into place.



7. Close the printer door.
8. Press the Change Cartridge button (🖨️).

Note: If you did not install a recommended print cartridge, the print cartridge holder will move back to the loading position, and the Change Cartridge light will continue to blink.

CAUTION: The ink in the print cartridge has been carefully formulated by Hewlett-Packard to ensure superior print quality and compatibility with your printer. Damage to the printer or the print cartridge resulting from modifying or refilling the print cartridge is not the responsibility of Hewlett-Packard.

STEP 5: Installing the Printer Software

In a Windows Environment

To install the printer software, you need 8 MB of RAM with Microsoft Windows 95 or 4 MB of RAM with Windows 3.1 installed in your computer. Refer to page 15, "Hardware Compatibility" for hardware requirements.

Note: The HP DeskJet 400 series printer is not supported in network configuration.

Before you can use your printer, you must install the printer software.

1. Perform all procedures given earlier in this section.
2. Turn on the printer, then turn on the computer.
3. Close any screen saver or other software programs that are open and running in the background on your computer. To close software programs, follow these steps:
 - For *Windows 95* – Simultaneously press the Ctrl+Alt+Del keys. Then Highlight a program on the Close Program list and choose **End Task**. Repeat these steps until only the Explorer is listed.

- For *Windows 3.1x*– Simultaneously press the Ctrl+Esc keys. Then highlight a program on the Task List screen and choose **End Task**. Repeat these steps until only the Program Manager is listed.

Windows 95:

To install the Windows 95 printer software, use the following procedure:

1. Start Microsoft Windows 95.
2. Windows 95 should recognize the attached printer as a newly added piece of hardware and walk you through the installation instructions. If a screen with instructions does not appear, do the following:
3. Click on the **Start** button.
4. Choose **Setting** in the Start menu.
5. Click **Printers** in the Setting menu.
6. Click **Add Printer** in the Printers menu.
7. Follow the Wizard instructions that appear on the screen.
8. Choose **Local Printer**.
9. Click **Have Disk**.
10. Insert the HP's PrintSmart for Windows disk into the disk drive of your computer.
11. Select the disk drive and press **OK**.

Note: You must restart Windows to initialize the printing software. Until Windows 95 is restarted, the printer will not perform as expected.

Windows 3.1:

To install the Windows 3.1 printer software, use the following procedure:

1. Start Microsoft Windows and ensure no Windows applications are running.
2. Click **File** in the Program Manager window menu.
3. Click **Run** in the File menu.
4. Insert the HP's PrintSmart for Windows disk into the disk drive of your computer.
5. Type your disk drive address (for example, **A:**), followed by **SETUP**, in the command line box. Then click **OK**.
6. Follow the instructions that appear on the screen to complete the installation of the printer software.

Note: You must restart Windows to initialize the printing software. Until Windows 3.1 is restarted, the printer will not perform as expected.

DOS Printing

Note: You do not need to install the DJPMenu software if you are printing from your Windows applications.

Use the DJPMenu software to define or change the settings on the DeskJet 400 series printer if your DOS applications do not allow you to do so.

Note: The DJPMenu software requires that your printer is connected directly to the parallel port of your computer. Refer to page 14, "Hardware Compatibility" for hardware requirements.

1. Insert the HP's PrintSmart for Windows disk into drive A.
2. At the DOS prompt (**A:\>**), type **A:\INSTALL** and press **ENTER**.
3. Follow the instructions on the screen.
4. To run the DJPMenu software, type **C:\DESKJET\DJPMENU** at the DOS prompt.
5. For more updated information on the DJPMenu software, please refer to the file **C:\DESKJET\DJPMENU.TXT** that you have just installed.

Selecting a printer software for the HP DeskJet 400 series printer in each DOS software program that you use ensures the best support for your printer. If the printer software for the HP DeskJet 400 series printer is not available within your program, select the printer software for the HP DeskJet 500C printer.

Getting Help

The printer software contains an online help that describes how to use the dialog boxes.

Whenever you move the cursor over a setting in the dialog box, a short description of the setting will be displayed at the bottom of the dialog box.

You can invoke the online help by clicking the **Help** button in the **Print** dialog box.

If you encounter a problem with the printer, you can also refer to "Solving Problems" which starts on page 8.

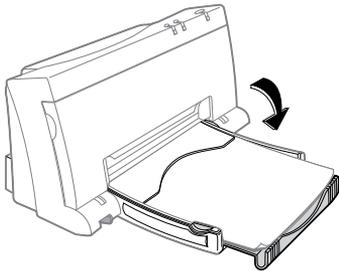
Getting the Most Out of Your Printer

Loading Other Size Paper

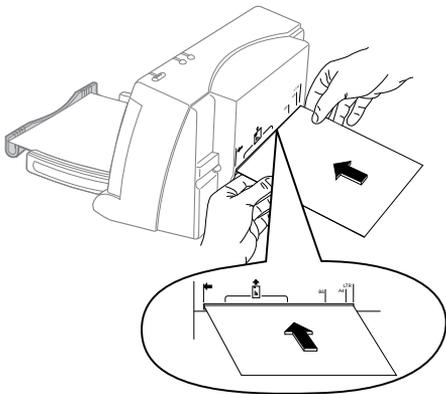
Legal, Executive, and B5 size paper must be fed into the printer manually, one by one, from the back of the printer. See page 15, "Printable Paper Sizes" for the paper sizes that you can print.

Note: If you are loading letterheads or HP transparencies from the back of the printer, insert them print side up, with the top of the page going into the printer first.

1. Ensure that you have selected **Manual Feed** in the **Printer Setup** dialog box.
2. Open the paper tray.



3. Align the paper against the molded line on the manual feed slot (on the back of the printer). Insert the paper until the printer pulls the paper in.

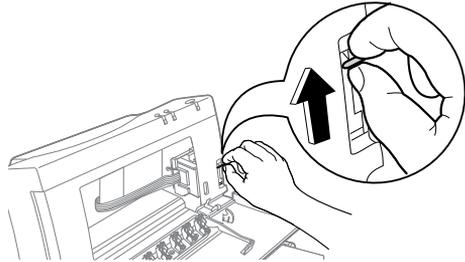


4. Access the print command from your computer.

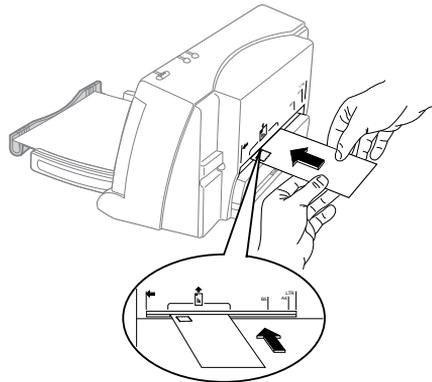
Loading Envelopes, Labels, and Thick Paper

Envelopes, labels, and thick paper must be fed into the printer manually, one by one and print side up, from the back of the printer. See page 15, "Printable Paper Sizes" for the envelope sizes that you can print.

1. Ensure that you have selected **Manual Feed** in the **Printer Setup** dialog box.
2. Open the paper tray.
3. Open the printer door and switch the envelope lever (✉↕↔) to Envelope (✉↔). Then close the printer door.



4. Align the envelope, label, or thick paper against the respective molded lines on the manual feed slot. Insert the envelope, label, or thick paper until the printer pulls it in.



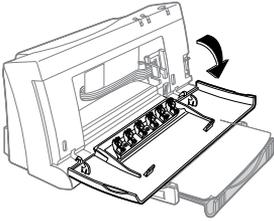
5. Access the print command from your computer.

Note: Remember to switch the envelope lever to paper (↕) after you have finished printing envelopes, labels, or thick paper. For optimal print quality, ensure that the envelope lever is adjusted according to what you want to print.

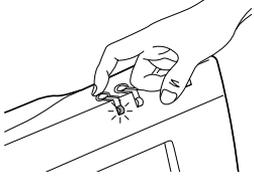
Changing Print Cartridges

The HP DeskJet 400 series printer takes any one of the following print cartridges at a time: black print cartridge (HP part no. 51626A) or color print cartridge (HP part no. 51625A). See your local HP dealer or office supply store to purchase the color print cartridge.

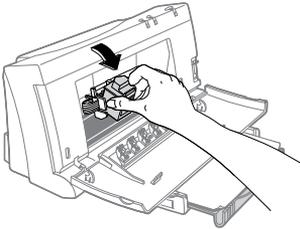
1. Open the printer door.



2. Press the Change Cartridge button (🔑) to move the print cartridge holder to the middle position.



3. Remove the print cartridge by pulling it by its green top.



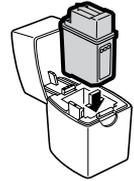
4. To install another print cartridge, follow steps 4 through 8 on page 3.

Using the Print Cartridge Storage Container

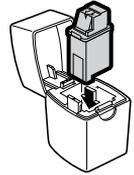
You can use either the black print cartridge supplied with the printer (HP part no. 51626A), or you can use the color print cartridge purchased separately (HP part no. 51625A). However, you can only use one of these print cartridges in the printer at one time.

Note: Always store the print cartridge that is not currently being used in the storage container. The storage container protects the ink nozzles from damage and prevents the ink from drying out while the print cartridge is not in use. This prolongs the life of the print cartridge, protecting your investment.

1. To store the color print cartridge, make sure the arrow on the top of the color print cartridge points toward the cartridge clip at the back of the storage container.



2. To store the black print cartridge, make sure the arrow on the top of the black print cartridge points toward the cartridge clip on the left of the storage container.



3. When removing a print cartridge from the storage container, be sure that the cartridge clip is disengaged, then lift the print cartridge out of the storage container.

Printing in Color and Grayscale

The HP DeskJet 400 series printer is designed to print in color using the optional color print cartridge purchased separately. See your local HP dealer or office supply store to purchase the color cartridge (HP part no. 51625A).

When you select Print from your software application, HP's ColorSmart technology (which is built into the printer) scans your document and automatically adjusts the color settings for great-looking output.

For each type of object on the page – text, simple graphics, or complex images – ColorSmart chooses just the right color settings for optimum results. In most cases, ColorSmart provides the best output, so you don't have to select other color options.

You can, however, override the ColorSmart choices whenever you wish and select exactly the color settings you want from the options available in the printer software.

When printing with the optional color cartridge, the black that appears, called “composite black,” is a mixture of the cyan, yellow, and magenta inks. The darkness of the composite black depends on the intensity settings and the print quality mode selected through your printer software. Use the darkest intensity and the highest print quality available to produce the “blackest” composite black.

For printing documents with the color print cartridge, remove the black cartridge from the printer, store it in the storage container, insert the optional color cartridge in the printer, and print your color document.

How to print in grayscale

You can print drafts of your color documents in grayscale if you want to save time and ink. Click **Print in Grayscale** in the printer software. Your color documents print in shades of gray until you change the setting.

***Note:** For faster draft printing in grayscale, use the black print cartridge, not the optional color print cartridge.*

Solving Problems

If you encounter a problem with your printer, you can seek help from the following sources:

- **Online Help**
Read the suggestions in the error messages. If you need more help, press the Help button.
- **User's Guide**
Read the following tips to solve the problem.
- **Customer Support**
If the problem cannot be solved by the help suggestions in the User's Guide, refer to page 13, "Customer Support" for a listing of resources available to you for the support and maintenance of your printer.

Frequently Asked Questions

What is the difference between LTR and A4 paper?

LTR paper is commonly used in North America. The size is 8.5 inches x 11 inches (216 mm x 279 mm). **A4** paper is commonly used in Europe, Australia, New Zealand, Asia, and South America. The size is 210 mm x 297 mm.

How should paper be loaded into the printer?

First, switch the paper size lever on the left bottom corner to the correct paper setting, either **LTR** or **A4**. Then insert the paper into the paper tray until it can go no further. Finally, move the paper width guide, located on the tray, so that it presses lightly against the paper stack.

Is the sound the printer makes when it starts working normal?

Yes, when the printer functions properly, a sound occurs when you turn the printer on and also when it picks up paper. The sound when you turn the printer on is the print cartridge finding its starting position. The sound when the printer picks up paper is due to the activation of the printer mechanism.

What print cartridges can I use with the printer?

Use the HP black cartridge (HP part no. 51626A) for great looking black output. Purchase the optional HP color cartridge (HP part no. 51625A) for color output.

How do I print in color using Microsoft Windows software?

Use the optional HP color cartridge (HP part no. 51625A) for color printing and use the HP black print cartridge (HP part no. 51626A) for black printing. If you print in black, remember to check the **Print in Grayscale** setting in the printer setup menu.

How can I get the best print quality?

To ensure the highest print quality from the HP DeskJet 400 series printer, use original HP print cartridges together with HP's Premium InkJet Paper or Premium Glossy Paper.

The HP printer software gives you optimal results when you select the **Best** printing setting in the printer setup menu.

How do I print envelopes, labels, or thick paper (heavier than 24 lb)?

You must feed envelopes, labels, and thick paper one sheet at a time from the back of the printer. Be sure that you have selected **Manual Feed** and the appropriate **Paper Size** in the printer setup menu. Then open the printer door and switch the envelope lever to Envelope. Close the printer door and print one page.

What do I do if I get a paper path error?

To clear the paper path error:

1. Turn off the printer.
2. Remove the paper from the paper tray.
3. Remove the printer door by grasping it by its sides, then pulling the door up.
4. Carefully pull the paper out of the printer.

To avoid paper path errors, be sure to set the paper size lever to the correct setting and to move the paper width guide so that it presses lightly against the paper stack. Also, be sure to feed paper that is heavier or lighter than 16 to 24 lb from the back of the printer manually.

When the Printer Does Not Print

The printer shows no response at all to the print command.

- The printer is not properly connected to the power source. Make sure the printer's power adapter is firmly plugged into the printer and into the wall power outlet.
- The printer is off. Press the Power button (⏻) until the Power LED lights up.
- The printer is not properly connected to the computer. Make sure the interface cable is firmly connected to the parallel port of the printer and the computer.
- You may be using a wrong parallel cable or the parallel cable may be defective. Use any of the following parallel cables: HP part no. C2950A or C2951A.
- Your printer is not selected as the current or default printer. Select your printer using the **Printer Setup** menu in your software program. Alternatively, select your printer from **Printers** in the **Control Panel**.

The printer appears to be printing, but nothing prints on the paper.

- The ink nozzles of the print cartridge are covered by a sealing tape. Remove the tape(s). See page 3, "STEP 4: Installing a Print Cartridge."
- The ink nozzles of the print cartridge are clogged with dried ink. See page 12, "When the Ink Nozzles Are Clogged."
- The print cartridge is out of ink. Use a new print cartridge.

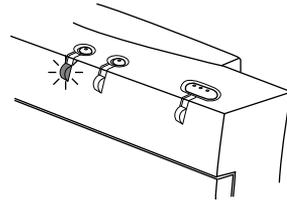
The printed page looks incomplete or has odd-looking characters.

- Your printer is not selected as the current or default printer. Select your printer using the **Printer Setup** menu in your software program. Alternatively, select your printer from **Printers** in the **Control Panel**.
- The printer is not properly connected to the computer. Make sure the interface cable is firmly connected to the parallel port of the printer and the computer.

- You may be using a wrong parallel cable or the parallel cable may be defective. Use one of the following parallel cables: HP part no. C2950A or C2951A.

When the Lights Blink

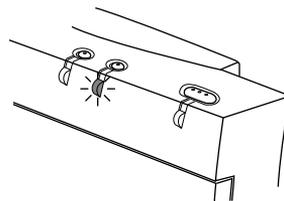
A. The Change Cartridge light is blinking.



Note: The Change Cartridge light blinks when the holder is in the middle position; this is NOT an error condition. In other cases, one of the following is true:

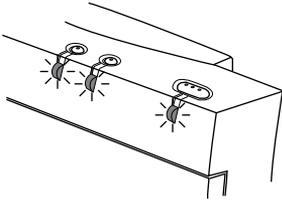
- You may be printing a black document with a color print cartridge, or vice-versa. Change the print cartridge accordingly.
- No print cartridge has been loaded. Load a print cartridge. (See page 3, "STEP 4: Installing a Print Cartridge".)
- The print cartridge is improperly installed in the printer. Remove the print cartridge and then reload the print cartridge.
- A wrong print cartridge has been loaded. See page 3, "STEP 4: Installing a Print Cartridge" for a list of print cartridges you can use.

B. The Paper Feed light is blinking.



- No paper has been loaded or the printer is out of paper. To load paper, see page 2, "STEP 3: Loading Paper."
- Paper is not loading. See page 11, "When Paper Is Not Loading."
- After loading paper, press the Paper Feed button (⏻) to continue printing.

C. All the three lights are blinking.



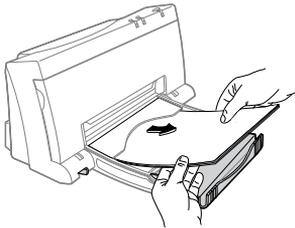
Paper is jammed in the printer. To clear the jam, see below, "When Paper Is Jammed in the Printer."

If there is no paper jam, turn the printer off and then on again. If the three lights still blink, call the Customer Support Center.

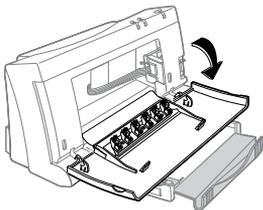
When Paper Is Jammed in the Printer

To clear the paper jam, perform the following steps:

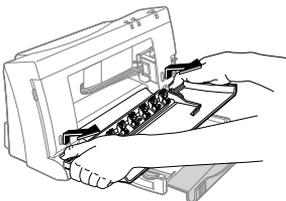
1. Turn off the printer.
2. Remove the paper from the paper tray.



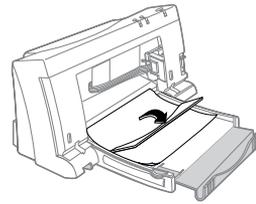
3. Open the printer door.



4. Remove the printer door by grasping it by its sides and then pulling the door up. (Use your thumbs to hold down the printer while pulling the door.)



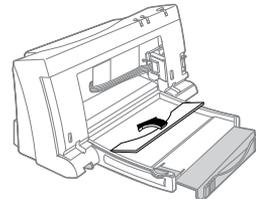
5. Open the paper separator (the flap that separates the printed pages from the blank sheets) by pulling it toward you. With the paper separator out of the way, your fingers will have a better grip on the jammed paper.



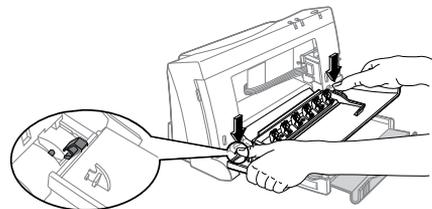
6. Grip the jammed paper firmly by its sides and pull it out slowly.



7. After clearing the paper jam, close the paper separator.



8. Re-attach the printer door by first placing the door flat on the paper tray. Then align the hinges on the printer door with the pins on the printer. Press the printer door down until the printer door clicks into place.



9. Close the printer door.
10. Load paper and try printing again.

When Paper Is Not Loading

Paper does not feed into the printer properly.

- Re-load the paper. See page 2, “STEP 3: Loading Paper.”
- You are printing on a US Letter size paper, but the paper size selector (**A4 / LTR**) is set to **A4**. Or you are printing on an **A4** size paper, but the paper size selector (**A4 / LTR**) is set to **LTR** (US Letter). Adjust the paper size selector (**A4 / LTR**) according to the paper size.
- Too many sheets of paper were loaded. Remove some paper.
- Paper is damaged, wrinkled, or curled. Replace paper with a new stack.
- Some paper in the stack may be of a different type, size, and weight. Make sure the paper in the stack are of the same type, size, and weight.

Paper does not eject from the printer.

- Paper is jammed in the printer. To clear the jam, see page 10, “When Paper Is Jammed in the Printer.”
- The printer door is not closed properly.
- The computer was turned off while the printer was printing. Turn off the printer and turn on the computer. Then turn the printer on.

More than one sheet of paper are fed into the printer at a time.

- The sheets of paper are stuck together. Remove the paper stack, separate the sheets, and re-load the paper stack.
- Too many sheets are loaded in the paper tray. Remove some paper.
- Some paper in the stack may be of a different type, size, and weight. Make sure the paper in the stack are of the same type, size, and weight.
- Paper is not fed into the printer properly. Re-load the paper. See page 2, “STEP 3: Loading Paper.”

Printing is slanted on the A4 size paper.

- You are printing on an A4 size paper, but the paper size selector (**A4 / LTR**) is set to **LTR** (US Letter). Switch the paper size selector (**A4 / LTR**) to **A4**.
- Paper is not fed into the printer properly. Reload the paper. See page 2, “STEP 3: Loading Paper.”

Printing is slanted on the Legal size paper, envelope, label, or thick paper.

The Legal size paper, envelope, label, or thick paper is not fed into the printer properly. Push evenly the Legal size paper, the envelope, or the thick paper into the back of the printer until the printer pulls in the paper. See page 5, “Loading Other Size Paper.”

Legal size paper, envelope, label, or thick paper does not advance into the printer.

Legal size paper, envelope, label, or thick paper should be loaded from the back of the printer, one at a time. Push evenly the Legal size paper, envelope, label, or thick paper into the back of the printer until the printer pulls in the paper. See page 5, “Loading Other Size Paper.”

When the Print Quality Is Not Satisfactory

Ink is smearing or paper is wrinkling.

- You are printing on an envelope, label, or thick paper, but the envelope lever (✉↗↖) behind the printer door is set to paper (↖↗). Adjust the lever to envelope (✉↗).
- You may have touched the printed page before the ink dried. Wait until the ink dries before you pick up the printed page.
- Too much ink was used on the page. Lower the intensity setting in your software application.

The printed page looks faded.

- You are printing on paper, but the envelope lever (✉/📧) behind the printer door is set to envelope (✉). Adjust the lever to paper (📄).
- The ink nozzles are clogged. See “When the Ink Nozzles Are Clogged” on this page.
- The print cartridge is running out of ink. Use a new print cartridge.
- You may be printing a black-only document with a color print cartridge. Increase the intensity setting or use a black print cartridge.

Characters, dots, or lines are missing or are incomplete.

- The print cartridge is running out of ink. Use a new print cartridge.
- The ink nozzles of the print cartridge may be clogged. Clean the print cartridge. (See “When the Ink Nozzles Are Clogged” on this page.)

Ink coverage is inconsistent.

- The ink nozzles of the print cartridge may be clogged. Clean the print cartridge. (See “When the Ink Nozzles Are Clogged” on this page.)
- The paper may not be suitable for the printer. Try another paper type.

Too much ink on the printed page.

- The paper may not be suitable for the printer. Try another paper type.
- You may be printing a black-only document with a color print cartridge. Decrease the intensity setting or use a black print cartridge.

A color page is printed in black.

- A black print cartridge is installed in the printer. Use a color print cartridge.
- Select **Automatic** in the ColorSmart dialog box and make sure the **Print in Grayscale** box is not checked.

Some colors are missing.

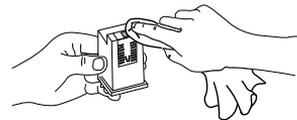
- The ink nozzles are clogged. Clean the print cartridge. (See “When the Ink Nozzles Are Clogged” below.)
- The color print cartridge has run out of one or more color ink. Use a new color print cartridge.

When the Ink Nozzles Are Clogged

Prolonged exposure to air may cause ink crust to form on the ink nozzles of the print cartridge. You can try to clear the crusted ink from the print cartridge, as follows:

Note: Ink may stain your hands or clothing.

1. Hold the print cartridge by its green top. Using a water-damp cloth, gently and slowly wipe the dried ink off the print cartridge nozzles into a trash container. Repeat this step, using a clean portion of the damp cloth to wipe residual ink off the nozzles.



2. Install the print cartridge in the printer and load paper in the paper tray.
3. Turn off the printer.
4. While pressing the Change Cartridge button (🔄), press the Power button (🔌) to activate the cleaning process. A page will then be printed. If the print quality is unsatisfactory, the print cartridge may be out of ink. In this case, use a new print cartridge.

Appendices

Customer Support

The information in the previous chapter suggests solutions to common problems. If your printer is not operating properly and these suggestions do not solve your problem, try using one of the following support services to obtain assistance.

Electronic Support Information

HP Web Site – If you have access to the Internet, you can check out HP's web site at URL <http://www.hp.com> or <http://www.hp.com/go/peripherals> for support documentation, the latest printer software, and the latest news from HP.

User Forums – In addition to the latest printer software that is available via the CompuServe and America Online user forums, you can also get friendly help from knowledgeable users and system operators. In the user forums, you can leave your question and check back later for ideas and solutions suggested by other users. You can read through old messages left by other users to see if anyone else has had a problem similar to yours and has provided the solution online. Also, the forum keeps a list of FAQs (Frequently Asked Questions) which you can peruse for hints.

CompuServe – Access the HP Peripherals forum (Go HPPER). To subscribe to CompuServe, in the U.S. call 1-800-848-8199 and ask for representative #51. Canadian residents should consult their phone directory for the nearest CompuServe office. (This service is not operated by Hewlett-Packard.)

America Online – Access the HP forum. Click "keyword" on the "Go To" menu, type "HP," and press the Enter key to bring the HP forum home page directly to your screen.

HP First Fax

Technical documentation and troubleshooting information is available 24 hours a day, seven days a week, every day of the year. Dial (800) 333-1917 from any touch-tone phone to access HP First Fax. By selecting from a series of menu choices, you can identify documents containing the information you need. You may request up to three documents per call. We'll fax them to you within minutes.

Printer Software

Printer software allows your printer to talk with your computer. (Printer software is also referred to as a printer driver or a printer file.) If you need to replace or upgrade a printer driver, you have several options:

- Download the driver by accessing CompuServe, America Online, or HP's Web site, as previously described.
- Download the driver from the HP Bulletin Board. You'll need a modem and communications software, set to N, 8, 1. Dial (208) 344-1691 and choose from the menus provided.
- If you don't have access to CompuServe, America Online, or the World Wide Web, you can get a new driver (if one is available) on disks. HP provides Windows 3.1, 3.11, or Windows 95 printer drivers and printer driver updates for the cost of the disks plus shipping. You can order them by calling (970) 339-7009 Monday thru Saturday, 24 hours a day. (For DOS printer drivers, contact the manufacturer of your software program.)

HP Telephone Support

Our highly responsive support staff can help you get your new printer up and running. They are available to answer questions about your printer and explain how it works. We're ready to help you Monday thru Friday, 6 am to 10 pm (MST), and Saturday, 9 am to 4 pm (MST). To reach us, call (208) 344-4131.

Ninety Days Free Support – Within 90 days from the time you purchase your new printer, telephone support is provided to you free of charge. Before placing a call to the HP Telephone Support Center, please make sure:

- You have referenced your user's manual and on-line help for installation and troubleshooting tips.
- You are seated in front of your computer, with the printer nearby.
- You have the following information available:
 - Your printer's serial number (on the label on the back of the printer).
 - Your printer's model number (on the label on the front of the printer).
 - The model of the computer.
 - The version of the printer driver and software program (if applicable).

During the 90-day period, all questions about your printer and printer software are answered free of charge.

After the Free Support Period – You can still get help for a fee (prices are subject to change without notice):

- For quick questions in the United States only, call (900) 555-1500. You are charged \$2.50 per minute and the charges begin when you connect with a support technician.
- For calls from Canada, or for calls in the U.S. that might be longer than ten minutes in length, call (800) 999-1148. The fee is \$25 per call, charged to your Visa or Master Card.

If during the phone call it is determined that your printer requires repair, and if you are within your printer's hardware warranty period, your phone charges are reversed.

Repairing Your Printer

To speak to someone to verify that your printer needs repair, please call the HP Telephone Support Center Monday thru Friday, 6 am to 10 pm (MST), and Saturday, 9 am to 4 pm (MST). If your printer requires repair, the HP Support Agent will coordinate the process. This service is free of charge during the warranty period of your printer. Outside of the warranty period, repairs are charged on a time and materials basis.

HP also offers a variety of options to complement the standard warranty. Call (800) 446-0522 in the U.S. or (800) 268-1221 in Canada for details.

Extended Warranty Options

If you would like to extend your printer coverage beyond the one year factory warranty, you have the following options:

- Consult your reseller to get extended coverage.
- If your reseller does not offer service contracts, please call Hewlett-Packard directly and ask about our service agreement offering. In the U.S. call (800) 446-0522, in Canada call (800) 268-1221. For service agreements outside the U.S. and Canada, contact your local HP Sales Office.

A Note about Letters

If you need technical help or have something you want to say to HP, it is best that you call us when you are in front of your computer and printer. This way we can work through the problem quickly. If you write a letter to HP, then we must call you back, which can be very difficult to do. Because of this, we request that you call us rather than write us, so we can help you immediately!

Printer Specifications

Print Method

Plain paper drop-on-demand thermal inkjet printing

Black Print Speed

These are approximate figures. Exact speed will vary depending on the system configuration and software used.

Letter quality mode: 2 pages per minute

Draft quality mode: Up to 3 pages per minute

Color Print Speed

These are approximate figures. Exact speed will vary depending on the system configuration and software used.

Full color graphics: 4-7 minutes per page

Mechanism Speed

Letter quality mode: 167 cps at 10 cpi

Draft quality mode: 330 cps at 10 cpi

Resolution

Letter quality mode: 600 x 300 dpi (black),
300 x 300 dpi (color)

Draft quality mode: 150 x 300 dpi

Graphics Resolution

Full-page 75, 100, 150, and 300 dpi, and 600 dpi in horizontal axis for black only

Printer Command Language

HP PCL Level 3 with extensions

Character Set Support

HP Roman8, PC-8, PC-8 (D/N), ISO 7-bit languages (German, French, Italian, Norwegian, Portuguese, Swedish, Spanish, U.K.), PC-850, ASCII, ECMA-94 Latin 1, and HP Legal

Built-in (internal) Fonts

Courier (Portrait)

Pitch: 5, 10, 16.67, 20 cpi

Point size: 6 and 12 pt.

Style: Upright (italic: 5, 10, 20 cpi only)

Stroke weight: Normal, Bold

Courier (Landscape)

Pitch: 10, 16.67, 20 cpi

Point size: 6, 12, and 24 pt.

Style: Upright

Stroke weight: Normal, Bold

CG Times (Portrait)

Pitch: Proportional

Point size: 6 and 12 pt.

Style: Upright, Italic

Stroke weight: Normal, Bold

Letter Gothic (Portrait)

Pitch: 6 and 12, and 24 cpi

Point size: 6 and 12 pt.

Style: Upright, Italic

Stroke weight: Normal, Bold

Hardware Compatibility

Windows Environment

80386 processor and above

Windows 95 or 3.1x

DOS 3.3 and above

8 MB RAM for Windows 95

4 MB RAM for Windows 3.1x

10 MB of free hard disk space

DOS Environment

8088 processor and above

DOS 3.3 and above

Software Compatibility

Microsoft Windows 95 or 3.1x

DOS (with DeskJet 500C driver compatible)

Recommended Printable Weight

Paper: [Auto feed] 60 to 90 g/m² (16 to 24 lb)

[Manual feed] 60 to 135 g/m² (16 to 36 lb)

Envelopes: 75 to 90 g/m² (20 to 24 lb)

Cards: 110 to 200 g/m² (110 lb Index max.: 8.5 pt max. thickness)

Printable Paper Sizes

US Letter: 216 x 279 mm (8.5 x 11 in.)

US Legal: 216 x 356 mm (8.5 x 14 in.)

Executive: 184 x 267 mm (7.25 x 10.5 in.)

A4: 210 x 297 mm

B5-JIS: 182 x 257 mm

US No. 10 envelope: 104.7 x 241.3 mm (4.12 x 9.5 in.)

DL envelope: 220 x 110 mm

Paper Handling

Paper tray (up to 50 sheets of 60 g/m² or 16 lb paper)

Manual feed (for paper, labels, postcards, and envelopes)

I/O Interface

Parallel, IEEE 1284 compliant with 1284-B receptacle (ECP)

Printer Memory

16 Kbyte input buffer

Power Requirements

Depending on the power adapter ordered: 100 V (50/60 Hz), 120 V (60 Hz), 127 V (60 Hz), 220 V (50 Hz), 230 V (50 Hz), or 240 V (50 Hz). Each of the input AC voltages is subject to +6%, -10% tolerance. Each of the frequencies is subject to ±3 Hz tolerance.

Power Consumption

4.5 W when idle

12 W during printing

Print Cartridges

Black

51626A or 26A

Color

51625A or 25A

Operating Environment

Temperature

Maximum operating temperature: 5°C to 40°C (41°F to 104°F)

Humidity: 10–80% RH non-condensing

Recommended operating conditions for best print quality: 15°C to 35°C (59°F to 95°F), 20 to 80%

RH non-condensing

Storage temperature: -40°C to 60°C (-40°F to 140°F)

Noise Levels per ISO 9296

Letter quality mode

Sound Power, LwAd: 6.1 B(A)

Sound Pressure, LpAm: 46 dB(A) [bystander position]

Draft quality mode

Sound Power, LwAd: 6.4 B(A)

Sound Pressure, LpAm: 49 dB(A) [bystander position]

Dimensions

With the paper tray closed

W x H x D: 348.5 x 176.9 x 163.3 mm (13.7 x 6.96 x 6.43 in.)

With the paper tray extended

W x H x D: 348.5 x 176.9 x 281.9 mm (13.7 x 6.96 x 11.1 in.)

Weight

3 kg (6.6 lb)

Reliability

25,000 page life. 20,000 hours MTBF
5,000 printed pages per year

Product Certifications

Safety Certifications

Power Adapter:

UL, CSA, TÜV, SEMKO, NEMKO, KEMA, FIMKO, LCIE, SECV, DEMKO, SEV, MITI, NOM1.

The socket-outlet shall be installed near the equipment and shall be easily accessible.

Printer with Power Adapter:

UL, CSA, TÜV, NOM1.

EMI Certifications

Printer with Power Adapter:

FCC Class B when used with a Class B computing device (USA), EMC Directive 89/336/EEC (European Community), VCCI (Japan), SABS (South Africa)

HP Supplies

Description	HP Part No.
Premium Transparency (US Letter, 50 sheets): 216 x 279 mm (8.5 x 11 in.)	C3834A
Premium Transparency (US Letter, 20 sheets): 216 x 279 mm (8.5 x 11 in.)	C3828A
Premium Transparency (A4, 50 sheets): 210 x 297 mm	C3835A
Premium Transparency (A4, 20 sheets): 210 x 297 mm	C3832A
Premium Glossy Paper (US Letter, 50 sheets): 216 x 279 mm (8.5 x 11 in.)	C3836A
Premium Glossy Paper (US Letter, 10 sheets): 216 x 279 mm (8.5 x 11 in.)	C3833A
Premium Glossy Paper (A4, 50 sheets): 210 x 297 mm	C3837A
Premium Glossy Paper (A4, 10 sheets): 210 x 297 mm	C3831A
Premium InkJet Paper (US Letter, 200 sheets): 216 x 279 mm (8.5 x 11 in.)	51634Y
Premium InkJet Paper (A4, 200 sheets): 210 x 297 mm	51634Z
HP Bright White (US Letter, 500 sheets)	C1824A
HP Bright White (A4, 500 sheets)	C1825A
HP Greeting Card Paper Kit (20 sheets, 20 envelopes)	C1812A

Regulatory Notices

Potential for Radio/Television Interference (U.S.A. only)

The HP DeskJet 400 printer generates and uses radio frequency energy and may cause interference to radio and television reception. Your printer complies with the specifications in Subpart B of Part 15 of the Federal Communications Commission rules for a Class B computing device. These specifications provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If the printer does cause interference to radio or television reception, which can be determined by turning the printer off and on, you can try to eliminate the interference problem by doing one or more of the following:

- Re-orient the receiving antenna.
- Re-orient the position of the printer with respect to the receiver.
- Move the printer away from the receiver.
- Plug the printer into a different outlet so that the printer and receiver are on different branch circuits.

To comply with FCC rules Part 15B Class B computing device, use only shielded interface cables.

Compliance Statement (Canada)

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numérique de la class B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

Power adapter statement

The power adapter cannot be repaired. If it is defective it should be discarded or returned to the supplier.

Das Netzteil (einschließlich Kabel und Adapter) können nicht repariert werden. Falls ein Teil des Netzteiles defekt ist, die ganze Einheit wegwerfen und durch eine neue Einheit ersetzen.

電波障害について

この装置は、第三種情報装置（住宅地域またはその隣接した地域において使用されるべき情報装置）で住宅地域での電波障害防止を目的とした情報処理装置等電波障害自主規制協議会（VCCI）基準に適合しております。

しかし、本装置をラジオ、テレビジョン受信機に近接してご使用になると、受信障害の原因になることがあります。

取扱説明書に従って正しい取り扱いをしてください。

Hewlett-Packard Limited Warranty Statement

HP Product	Duration of Limited Warranty
Software	90 Days
Print cartridges	90 Days
Printer peripheral hardware	1 Year

A. Extent of Limited Warranty

- Hewlett-Packard (HP) warrants to the end-user customer that HP products will be free from defects in materials and workmanship, for a specified time after the date of purchase by the customer. The duration of this limited warranty is stated above. Certain additional conditions and limitations of HP's warranty are stated in the user's guide. Those conditions and limitations include:
 - For software products, the warranty applies only to the media upon which the product is recorded; and
 - HP does not warrant the operation of any product to be uninterrupted or error free.
- HP's limited warranty covers only those defects which arise as a result of normal use of the product, and do not apply to any:
 - Improper or inadequate maintenance;
 - Software or interfacing not supplied by HP;
 - Unauthorized modification or misuse;
 - Operation outside the product's environmental specifications, including duty cycle abuse or use of a mechanical switchbox without a designated surge protector;
 - Use of non-supported printing media or memory boards; or
 - Improper site preparation or maintenance.
- For HP printer products, the use of a non-HP print cartridge or a refilled print cartridge does not affect either the warranty to the customer or any HP support contract with the customer; print cartridge includes both toner cartridges and ink cartridges. However, if printer failure or damage is attributable to the use of a non-HP or refilled print cartridge, HP will charge its standard time and materials charges to service the printer for the particular failure or damage.
- If any software media product or print cartridge product proves defective during the applicable warranty period, and if the product is covered by HP's warranty, the customer shall return the product for replacement.
- If HP receives, during the applicable warranty period, notice of a defect in a hardware product which is covered by HP's warranty, HP shall either repair or replace the product, at its option. Any replacement product may be either new or like-new, provided that it has functionality at least equal to that of the product being replaced.
- If HP is unable to repair or replace, as applicable, a defective product which is covered by HP's warranty, HP shall, within a reasonable time after being notified of the defect, refund the purchase price for the product, provided the customer returns the product.

- HP's warranty is valid in any country where the HP products listed above are distributed by HP, except for the Middle East, Africa, Argentina, Brazil, Mexico, Venezuela, and France's "Departments D'Outre Mer"; for those excepted areas, the warranty is valid only in the country of purchase. Contracts for additional warranty services, such as on-site service, may be available from any authorized HP service facility where the listed HP product is distributed by HP or an authorized importer.
- This Limited Warranty Statement gives the customer specific legal rights. The customer may also have other rights which vary from state to state in the United States, from province to province in Canada, and from country to country elsewhere in the world.

B. Limitations of Warranty

- NEITHER HP NOR ANY OF ITS THIRD PARTY SUPPLIERS MAKES ANY OTHER WARRANTY OF ANY KIND, WHETHER EXPRESS OR IMPLIED, WITH RESPECT TO HP PRODUCTS. HP AND ITS THIRD PARTY SUPPLIERS SPECIFICALLY DISCLAIM THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.
- To the extent that this Limited Warranty Statement is inconsistent with the law of the locality where the customer uses the HP product, this Limited Warranty Statement shall be deemed modified to be consistent with such local law. Under such local law, certain limitations of this Limited Warranty Statement may not apply to the customer. For example, some states in the United States, as well as some governments outside the United States (including provinces in Canada), may:
 - Preclude the disclaimers and limitations in this Warranty Statement from limiting the statutory rights of a consumer (e.g., Australia and the United Kingdom);
 - Otherwise restrict the ability of a manufacturer to make such disclaimers or impose such limitations; or
 - Grant the customer additional warranty rights, specify the duration of implied warranties which the manufacturer cannot disclaim, or not allow limitations on how long an implied warranty lasts.
- To the extent allowed by local law, the remedies provided in this Warranty Statement are the customer's sole and exclusive remedies.

C. Limitations of Liability

- EXCEPT FOR THE OBLIGATIONS SPECIFICALLY SET FORTH IN THIS WARRANTY STATEMENT, IN NO EVENT SHALL HP BE LIABLE FOR ANY DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, WHETHER BASED ON CONTRACT, TORT, OR ANY OTHER LEGAL THEORY AND WHETHER ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Printing from DOS

What is a printer driver?

If you use DOS software programs (whether or not they are running within Microsoft Windows), you need a specific printer driver for each DOS program in order to print to your HP DeskJet 400 series printer.

A printer driver is software that allows you to access your printer's features from within your software program's print menus or selections.

Why do I need to contact the software manufacturer?

DOS software manufacturers provide and update printer drivers for their DOS software programs. In DOS, each program is developed independently under different development standards. Therefore, the software manufacturer is able to tailor the printer driver to work specifically with their software program. The software manufacturer uses HP's printer language, called PCL, to develop printer drivers for HP DeskJet printers. Therefore, you can sometimes use a different HP DeskJet printer driver to print. However, the best driver to use is the one designed specifically for the HP DeskJet 400 series printer. Some drivers are simply renamed from previous drivers.

Why isn't there a printer driver for my brand new printer?

The software industry is moving toward development of individual software programs under a common set of development standards. The most common standard is Microsoft Windows. HP uses this common development standard to supply a printer driver for use with all Microsoft Windows compatible software programs. This is the reason that fewer DOS printer drivers are being developed over time.

If there is not a DOS printer driver for my new printer, is there another printer driver I can use instead?

Selecting a printer driver for the HP DeskJet 400 series printer in each DOS software program that you use ensures the best support for your printer. If there is not a printer driver available within your program for the HP DeskJet 400 series printer, select one of the following drivers.

Printer Driver	Level of Support
HP DeskJet 500C/540	Most black or color printing features
HP DeskJet 340/320/310	Most black or color printing features
HP DeskJet Portable	Most black printing features
HP DeskJet 520/510	Most black printing features
HP DeskJet 560C/550C	Most black printing features
HP DeskJet 500/PLUS/HP DeskJet	Some black printing features

How do I install DOS printer drivers?

To install the DOS drivers listed in this document, follow the instructions supplied by the software manufacturer. If you have questions or concerns about the performance of your printer when using one of these drivers, contact the software manufacturer.

Energy Consumption

As an Energy Star Partner, Hewlett-Packard has determined that this product meets the Energy Star guidelines for energy efficiency.



EPA POLLUTION PREVENTER



* C 2 6 4 2 - 9 0 0 4 3 *

HP Part Number C2642-90043

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