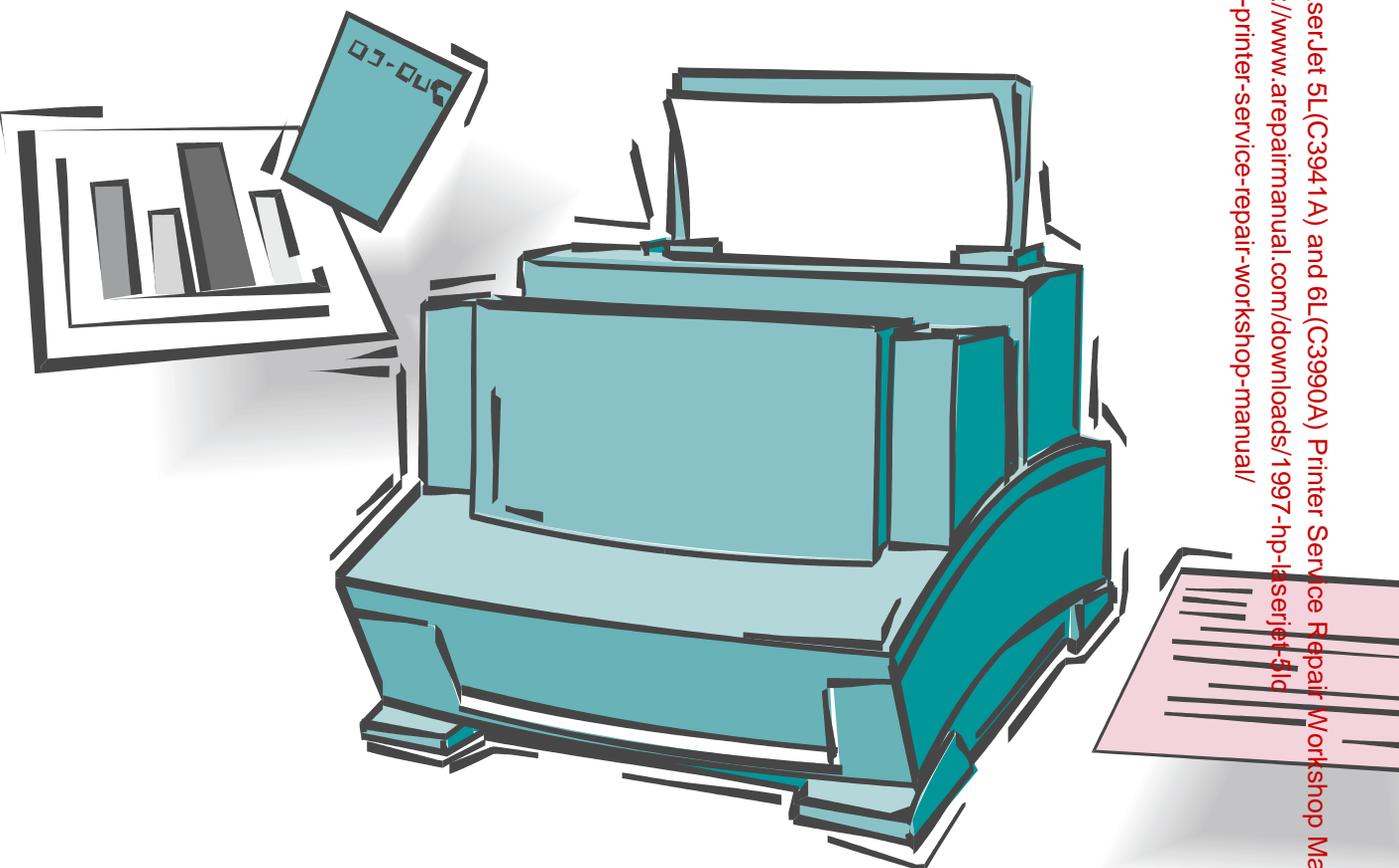




Product: 1997 HP LaserJet 5L(C3941A) and 6L(C3990A) Printer Service Repair Workshop Manual  
Full Download: <https://www.arepairmanual.com/downloads/1997-hp-laserjet-5l-c3941a-and-6lc3990a-printer-service-repair-workshop-manual/>



# HP LaserJet 5L and 6L Printer Service Manual

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Product: 1997 HP LaserJet 5L (C3941A) and 6L (C3990A) Printer Service Repair Workshop Manual  
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# Service Manual

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**HP LaserJet 5L  
(C3941A)**

**HP LaserJet 6L  
(C3990A)**

Sample of manual. Download All 204 pages at:

<https://www.arepairmanual.com/downloads/1997-hp-laserjet-5lc3941a-and-6lc3990a-printer-service-repair-workshop-manual/>

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First edition, May 1997

### **Warranty**

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the implied warranties or  
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herein or for incidental or  
consequential damaged in  
connection with the furnishing,  
performance, or use of this  
material.

### **WARNING**

Electrical Shock Hazard

To avoid electrical shock, use  
only supplied power cords and  
connect only to properly  
grounded (3-hole) wall outlets.

---

## Conventions

This manual uses the following conventions:

**Color** is used to emphasize items which are important to the material under discussion.

The names of major printer parts and assemblies are CAPITALIZED.

**Bold** is used for emphasis, particularly in situations where *italic* type would be confusing.

*Italic type* is used to indicate related documents or emphasis.

---

### Note

Notes contain important information set off from the text.

---

### Caution

Caution messages alert you to the possibility of damage to equipment or loss of data.

---

### WARNING!

Warning messages alert you to the possibility of personal injury.

---

# Chapter Descriptions

## 1 Product Information

Orientation to the printer, as well as the service and repair philosophy, is discussed. Information on obtaining assistance and warranty is also here.

## 2 Site Requirements

Here are recommendations pertaining to installation requirements.

## 3 Operating Overview

This chapter has detailed information about the Control Panel. Sample self tests and printer reset information are also included.

## 4 Maintenance

Turn to this chapter for information about printer cleaning and care.

## 5 Functional Overview

Here you will find the basic theory-of-operation information required to understand the various printer systems and how they function together.

## 6 Removal and Replacement

This chapter contains the step-by-step procedures for replacing printer field replaceable units (FRUs). Assemblies are grouped by location in the printer.

## 7 Troubleshooting

Diagnose printer problems here. A preliminary troubleshooting table is followed by error messages, image defect samples, and diagnostic tools.

## 8 Parts and Diagrams

Look here to find any field replaceable unit (FRU) in the printer. Exploded view drawings are accompanied by complete part number tables.

## A Parts Index

All parts are sorted and cross-referenced here by part number and name.

## B Regulatory Information

Here are required statements regarding RFI and laser safety.

## C Service Notes

Service Notes for HP LaserJet 5L concerning paper jams appear here.

## Subject Index

Use the subject index to quickly locate any information in the manual.

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# Product Information

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## Printer Features

Table 1-1

Printer Features

Features	Descriptions
Print Speed	4 ppm (HP LaserJet 5L); 6 ppm (HP LaserJet 6L)
Text & Graphics Resolution	300 or 600 dpi
Printer Language	Enhanced PCL 5
Monthly Usage (pages)	4,000 pages (HP LaserJet 5L); 6,000 pages (HP LaserJet 6L)
Memory: Standard <sup>1</sup> Maximum Memory Capacity	1 Mbyte RAM (70nsec) 9 Mbyte total (available in increments of 1, 2, 4, and 8 Mbytes) 5 V JEDIA card <sup>2</sup>
Internal Typefaces	26 Scalable Typefaces
Standard Interfaces	Parallel (Bi-tonics)
Power Control	SleepMode
Control Panel	3 LEDs 1 Front Panel Button
EconoMode (toner saving)	Yes

1 Printer memory is optimized with Memory Enhancement technology (MEt).

2 JEDIA (Japanese Electronic Device Industry Association) is a group of DRAM suppliers who have standardized DRAM and other CMOS products.

## Paper Capacities and Sizes

Table 1-2

Paper Capacities and Sizes

Features	Descriptions
Paper Input Bin Capacity	Holds up to 100 sheets of regular weight paper or up to 10 envelopes
Paper Output Bin Capacity	Holds up to 100 sheets
Single Sheet Input Bin	1
Minimum Paper Size	3x5 in. (76 mm x 127 mm)
Maximum Paper Size	8.5x14 in. (216 mm x 356 mm)

# Identification

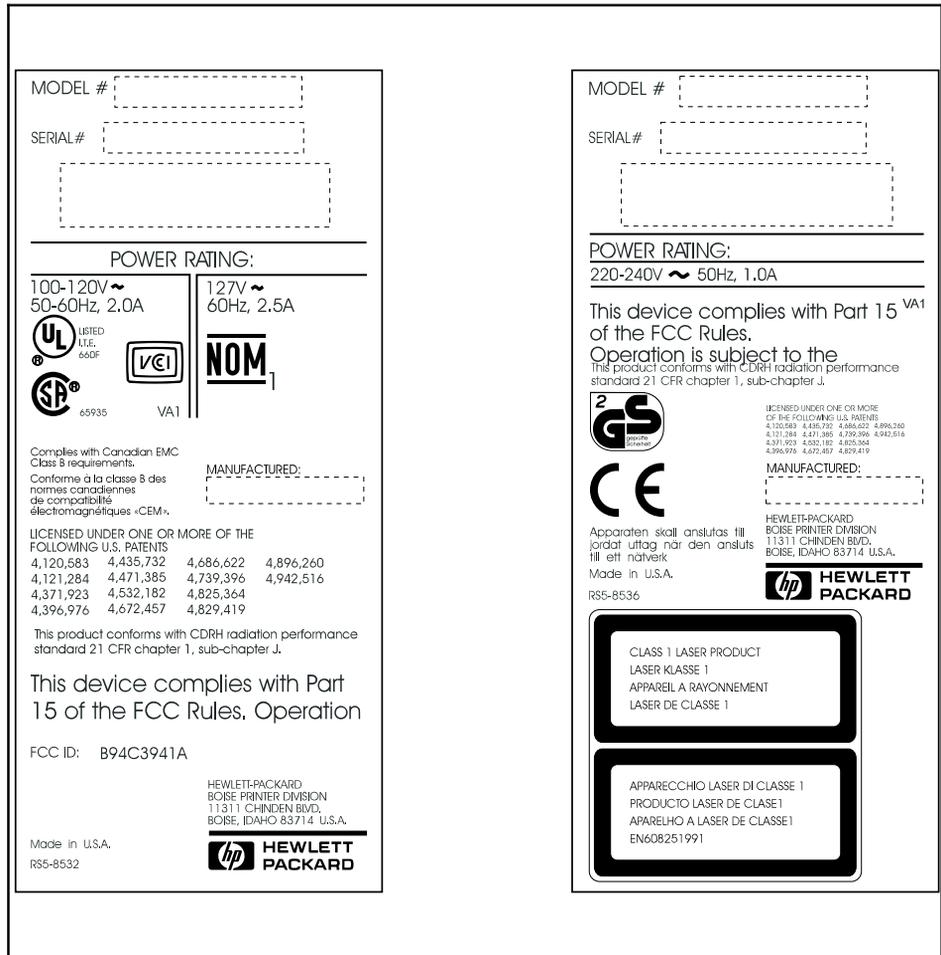
## Model and Serial

The model number and serial numbers are listed on identification labels located on the bottom of the printer. The model number is alphanumeric, such as C3941A for the HP LaserJet 5L printer, and C3990A for the HP LaserJet 6L printer.

The serial number contains information about the Country of Origin, the Revision Level, the Production Code, and production number of the printer.

The labels also contain power rating and regulatory information.

Figure 1-1



## HP LaserJet 5L Model and Serial Numbers

Figure 1-2

<p>MODEL # <span style="border: 1px dashed black; padding: 2px;">C3990A</span></p> <p>SERIAL# <span style="border: 1px dashed black; display: inline-block; width: 100px; height: 20px;"></span></p> <hr/> <p style="text-align: center;"><b>POWER RATING:</b></p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none;">100-120V ~ 50-60Hz, 2.2A</td> <td style="width: 50%; border: none;">127V ~ 60Hz, 2.2A</td> </tr> </table> <div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;">  </div> <div style="text-align: center;">  </div> <div style="text-align: center;">  </div> </div> <p style="text-align: center;">NC1</p> <p style="font-size: small;">Complies with Canadian EMC Class B requirements. Conforme à la classe B des normes canadiennes de compatibilité électromagnétique «CEM».</p> <p style="font-size: small;">This product conforms with CDRH radiation performance standard 21 CFR chapter 1, sub-chapter J.</p> <div style="border: 1px solid black; padding: 2px; text-align: center; font-size: x-small;"> <b>FC</b> Tested To Comply With FCC Standards FOR HOME OR OFFICE USE     </div> <p style="margin-top: 20px;">FCC ID: B94C3941A</p> <p style="font-size: x-small;">HEWLETT-PACKARD BOISE PRINTER DIVISION 11311 CHINDEN BOVD. BOISE, IDAHO 83714 U.S.A.</p> <p style="font-size: x-small;">Made in Japan R55-8972</p> <div style="text-align: right;">  <b>HEWLETT PACKARD</b> </div>	100-120V ~ 50-60Hz, 2.2A	127V ~ 60Hz, 2.2A	<p>MODEL # <span style="border: 1px dashed black; padding: 2px;">C3990A</span></p> <p>SERIAL# <span style="border: 1px dashed black; display: inline-block; width: 100px; height: 20px;"></span></p> <hr/> <p style="text-align: center;"><b>POWER RATING:</b></p> <p style="text-align: center;">220-240V ~ 50Hz, 1.1A</p> <div style="border: 1px solid black; padding: 2px; text-align: center; font-size: x-small;"> <b>FC</b> Tested To Comply With FCC Standards FOR HOME OR OFFICE USE     </div> <p style="font-size: x-small;">This product conforms with CDRH radiation performance standard 21 CFR chapter 1, sub-chapter J.</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  </div> <div style="text-align: center;">  </div> </div> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  </div> <div style="text-align: center;">  </div> </div> <p style="text-align: right; font-size: x-small;">MANUFACTURED: <span style="border: 1px dashed black; display: inline-block; width: 100px; height: 20px;"></span></p> <p style="font-size: x-small;">HEWLETT-PACKARD BOISE PRINTER DIVISION 11311 CHINDEN BOVD. BOISE, IDAHO 83714 U.S.A.</p> <p style="font-size: x-small;">Made in Japan R55-8975</p> <div style="text-align: right;">  <b>HEWLETT PACKARD</b> </div> <div style="border: 2px solid black; padding: 5px; margin-top: 10px; text-align: center; font-size: x-small;">             CLASS 1 LASER PRODUCT              LASER KLASSE 1              APPAREIL A RAYONNEMENT              LASER DE CLASSE 1         </div> <div style="border: 2px solid black; padding: 5px; margin-top: 10px; text-align: center; font-size: x-small;">             APPARECCHIO LASER DI CLASSE 1              PRODUCTO LASER DE CLASE1              APARELHO A LASER DE CLASSE1              EN60825: 1991         </div>
100-120V ~ 50-60Hz, 2.2A	127V ~ 60Hz, 2.2A		

HP LaserJet 6L Model and Serial Numbers

# Specifications

**Table 1-3**

## Performance Specifications

Category	Specification
Print Speed*: HP LaserJet 5L Print Speed*: HP LaserJet 6L	4 ppm 6 ppm
Monthly Usage (Duty Cycle): HP LaserJet 5L Monthly Usage (Duty Cycle): HP LaserJet 6L	4,000 pages 6,000 pages
Life Expectancy of Toner Cartridge (pages)**	2,500 pages @ 5% coverage
First Print	A4 <23 seconds Letter <23 seconds

\* Actual speed depends on data complexity and software handling efficiency.

\*\* Toner cartridge life can be extended by using EconoMode.

**Table 1-4**

## Electrical Specifications

Volts	Freq	Amps	Watts (typical)	
120 Vac ± 10%	50/60 Hz ± 2 Hz	3.5 @ 120v*	printing = 100 (5L)	150 (6L)
100 Vac ± 10%	50/60 Hz ± 2 Hz		SleepMode = 6 (5L)	4 (6L)
220 Vac ± 10%	50 Hz ± 2 Hz	1.8 @ 230v	printing = 100 (5L)	150 (6L)
240 Vac ± 10%	50 Hz ± 2 Hz		SleepMode = 6 (5L)	4 (6L)

\*Minimum recommended circuit capacity for product.

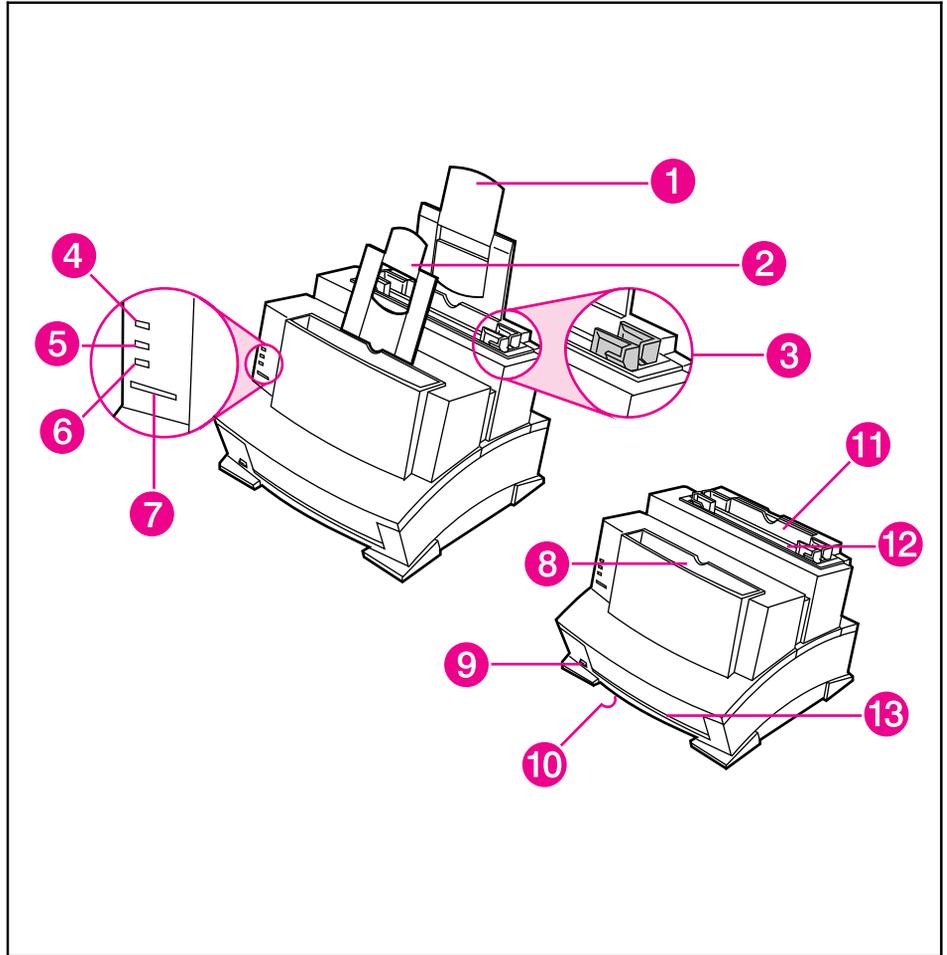
**Table 1-5**

## Acoustic Emissions

During Printing	5.6 Bels Sound Power Level ( per ISO 9296)
During Standby & SleepMode	Silent

## Product Overview

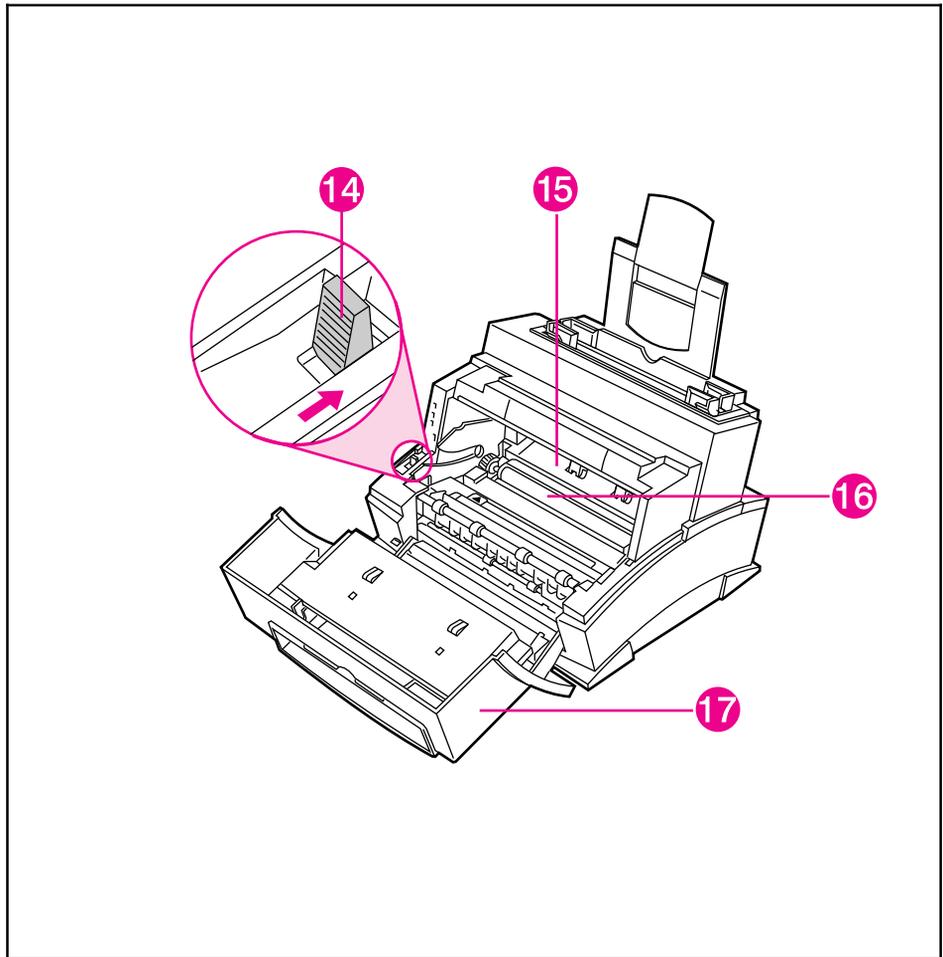
Figure 1-3



### Front/Side Views of the Printer

- |                         |   |                                 |
|-------------------------|---|---------------------------------|
| 1. Paper Input Support  | 7. Front Panel Button                       | 13. Front Output Slot (face-up) |
| 2. Paper Output Support | 8. Paper Output Bin                         |                                 |
| 3. Paper Guides         | 9. Paper Path Lever                         |                                 |
| 4. Error (top) Light    | 10. Serial and Model Number (under printer) |                                 |
| 5. Data (middle) Light  | 11. Paper Input Bin                         |                                 |
| 6. Ready (bottom) Light | 12. Single Sheet Input Slot                 |                                 |

Figure 1-4



### Front Door Assemblies

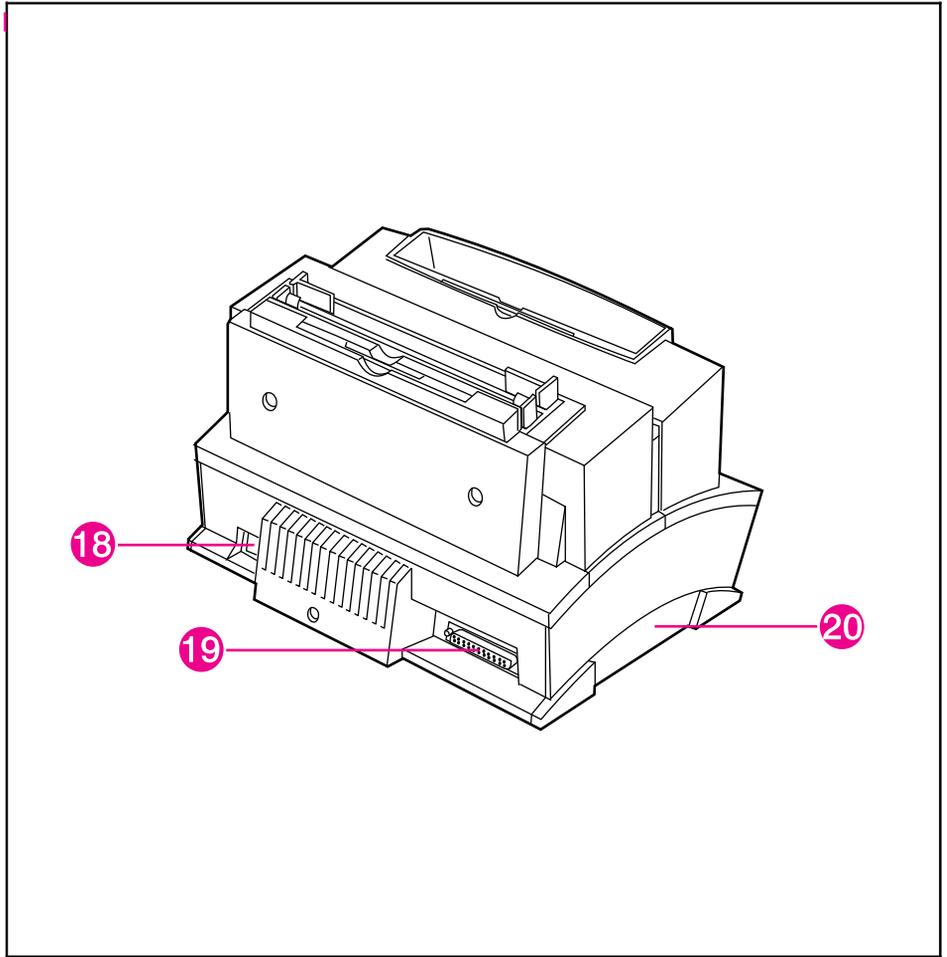
14. Paper Release Lever

15. Toner Cartridge Compartment

16. Transfer Roller (do not touch)

17. EP Door

Figure 1-5



**Back View of the Printer**

18. Power Cable Connector

19. Parallel Cable Connector

20. Memory Expansion Cover

---

## Service Approach

Repair of the printer normally begins with the use of the printer's internal diagnostics in conjunction with the troubleshooting procedures in Chapter 7. Once a faulty part is located, repair is generally accomplished by assembly level replacement of Field Replaceable Units (FRUs). Some mechanical assemblies may be repaired at the subassembly level. PCA component replacement is not supported by Hewlett-Packard. Part numbers for all FRUs are located in Chapter 8 of this manual.

## Parts Exchange Program

HP offers remanufactured assemblies for some selected parts. These are identified in Chapter 8 and can be ordered through HP's Parts Direct Ordering (PDO), or Parts Center Europe (PCE).

## Ordering Parts

Field replaceable part numbers are found in Chapter 8 of this manual. Replacement parts may be ordered through HP's Parts Direct Ordering (PDO), or Parts Center Europe (PCE).

## Ordering Consumables

The printer has no consumables other than the toner cartridge, which may be ordered directly from Hewlett-Packard. Refer to Chapter 8 for ordering information.

## Ordering Related Documentation

Table 1-6 on the following page lists part numbers and where to order related documentation. Phone numbers for the various sources are:

- Parts Direct Ordering (PDO)  
1-800-227-8164 (U.S. only)
- Parts Center Europe (PCE)  
(49 7031) 14-2253
- HP's Distribution Center (HPD)  
970-339-7009 (U.S. only)
- URL for HP Access: <http://www.hp.com>
- URL for Software and Support: <http://www.hp.com/cposupport/cpoinde.html>

Table 1-6

## Related Documentation

Description	Part Number	PDO	PCE	HPD
HP LaserJet Family Quick Reference Service Guide	5021-0369	X	X	
HP LaserJet 5L Printer User's Manual	C3941-90901	X		
HP LaserJet 6L Printer User's Manual	C3990-90901	X		
HP PCL5 Printer Language Technical Reference Information Package	5010-3994	X	X	
HP LaserJet Printer Family Paper Specifications Guide	5021-0368	X	X	X
LaserJet Basic Hardware Training Course	5961-0880	X	X	
HPLJ 5L and 6L Hardware Training Kit	C3990+49A-60001 (NTSC) C3990+49A-60002 (PAL)	X X	 X	
HP LaserJet 6L Printer Service Manual Bundle includes: Service Manual C3990-90991 Paper Specifications Guide 5021-0368 Quick Ref. Pocket Guide 5021-0369	C3990-99001	X	X	
HP LaserJet 6L Printer NTSC Kit includes: Box 9211-6385 6L Video Kit Label C3990-00010 6L Combined Test Kit C3990-67902 6L Video Tape C3990-99002	C3990-67901	X	X	
HP LaserJet 6L Printer PAL Kit includes: Cardboard Sleeve 5002-0556 VHS-PAL Tape 5010-6306 6L Spine Label C3990-00012 6L Face Label C3990-00013 6L Pal Kit Label C3990-00014	C3990-67903	X	X	
HP LaserJet 6L Combined Test Kit includes: Return Envelopes 5002-0562 Final Exam 5960-6642 6L Test Kit Label C3990-00011 6L Test Books (5 total) C3990-90992 Note: the five Test Books are labeled "A" through "E."	C3990-67902	X	X	
Specific Application Drivers				X

# Technical Assistance

<b>Online Services:</b> for 24-hour access to information over your modem, we suggest these services.	<b>World Wide Web URL</b> —Printer drivers, updated HP printer software, and product and support information may be obtained from <a href="http://www.hp.com">http://www.hp.com</a> , or in Europe from <a href="http://www2.hp.com">http://www2.hp.com</a> . In Japan printer drivers may be obtained from <a href="ftp://www.jp.hp.com/drivers/">ftp://www.jp.hp.com/drivers/</a> . Korea: <a href="http://www.hp.co.kr">www.hp.co.kr</a> . Taiwan: <a href="http://www.hp.com.tw">www.hp.com.tw</a> , with a local driver website of <a href="http://www.dds.com.tw">www.dds.com.tw</a> .	
	<b>HP Bulletin Board Service</b> —Our electronic download service provides convenient access to HP printer drivers, updated HP printer software, product information, and troubleshooting hints. Dial (208) 344-1691 (U.S. and Canada) and set your communication software to N,8,1. European Bulletin Board Service numbers are listed at <a href="http://www2.hp.com">http://www2.hp.com</a> . Taiwan: (886-2) 923-3233. Korea: HITEL or CHOLIAN (Go HPK). Australia: (613) 9890 0276. New Zealand: (649) 356-3660.	
	<b>America OnLine</b> —(America OnLine/Bertelsmann available in France, Germany, and UK)—Printer drivers, updated HP printer software, and support documentation are available to help you answer your HP product questions. Use Keyword HP to start your tour.	
	<b>CompuServe</b> —Printer drivers, updated HP printer software, and interactive sharing of technical information with other members are available on CompuServe's HP User's forums (GO HP), or call (800) 524-3388 and ask for representative #51. (CompuServe is also available in the UK, France, Belgium, Switzerland, Germany, and Austria.)	
<b>Obtaining Software Utilities and Electronic Information: U.S. and Canada</b>	Phone: (970) 339-7009 Fax: (970) 330-7655	Mail: Hewlett-Packard P.O. Box 1754 Greeley, CO 80632 USA
<b>Asia-Pacific Countries</b>	Fulfill Plus (65) 740-4477 (Singapore, Malaysia, Indonesia, Hong Kong).	
<b>Australia/New Zealand</b>	Call (612) 565-6099.	
<b>HP Direct Ordering for Accessories and Supplies</b>	Call (800) 446-0522 (U.S.) or (800) 387-8164 (Canada).	
<b>HP Support Assistant CD-ROM</b>	This support tool offers a comprehensive online information system designed to provide technical and product information on HP products. To subscribe to this quarterly service in the U.S. or Canada, call (800) 457-1762. Fulfill Plus, (65) 740-4477 (Singapore, Malaysia, Indonesia, Hong Kong).	
<b>HP Service Information</b>	To locate HP-authorized dealers, call (800) 243-9816 (U.S.); (800) 387-3867 (Canada).	
<b>HP Service Agreements</b>	Call (800) 446-0522 (U.S.); (800) 268-1221 (Canada).	
<b>HP FIRST:</b> HP FIRST Fax will deliver detailed troubleshooting information on common software applications and troubleshooting tips for your HP product. Call from any touch-tone phone and request up to three documents per call. These documents will be sent to the fax of your choice.		
Australia Austria Belgium (Dutch) Belgium (French) Canada China Denmark English outside of UK Finland France Germany Hong Kong India Indonesia Italy Japan	(03) 9272-2627 0660-8128 0800-1-1906 0800-1-7043 (800) 333-1917 (86 10) 6505 5280 800-10453 (31 20) 681-5792 9800-13134 05-905900 0130-810061 (852) 2506-2422 (011) 622-6420 (21) 352-2044 1678-59020 (813) 3335-8622	Korea Malaysia Netherlands New Zealand Norway Philippines Singapore Spain Sweden Switzerland (German) Switzerland (French) Taiwan Thailand United Kingdom United States
		(02) 769-0543 (03) 298-2478 0800-22-2420 (09) 356 6642 800-11319 (65) 291-7951 (65) 275-7251 900-993123 020-795743 0800 55-1527 0800 55-1526 02-719-5589 (02) 661-3511 0800-960271 (800) 333-1917

## Worldwide Support

<b>U.S. and Canada:</b>	Call (208) 323-2551 Mon-Fri 6 am to 10 pm and Saturday 9 am to 4 pm (Mountain Time) free of charge during the Warranty Period; however, your standard long-distance phone charges still apply. Please have your serial number ready when calling.				
<b>Customer Support &amp; Product Repair Assistance</b>	Post-warranty telephone assistance is available to answer your product questions. Call (900) 555-1500 (\$2.50* per minute, U.S. only), or call (800) 999-1148 (\$25* per call, Visa or MasterCard, U.S. and Canada) Mon-Fri 7 am to 6 pm and Saturday from 9 am to 3 pm (Mountain Time). Charges begin only when you connect with a support technician.				
<b>(Please refer to the warranty chapter of this manual for additional product repair information.)</b>	*Prices subject to change.				
<b>European Customer Support Center Language and In-Country Options Available</b> Open Monday-Friday 8:30-18:00 CET					
HP provides a free telephone support service during the warranty period. By calling a telephone number listed below, you will be connected to a responsive team waiting to help you. If you require support after your warranty has expired, you can receive support for a fee through the same telephone number. The fee is charged on a per-incident basis. When calling HP please have the following information ready:					
• Product name and serial number    Date of purchase    Description of the problem					
<b>Dutch</b>	Belgium:	02 626 8806	Norwegian	Norway:	22 11 6299
	Netherlands:	020 606 8751	<b>Danish</b>	Denmark:	3929 4099
<b>English</b>	Ireland:	01 662 5525	<b>Finnish</b>	Finland:	0203 47288
	UK:	0171 512 5202	<b>Swedish</b>	Sweden:	08 619 2170
	International:	44 171 512 52 02	<b>Italian</b>	Italy:	02 26410350
<b>French</b>	France:	04 50 43 9853	<b>Spanish</b>	Spain:	902 321 123
	Belgium:	02 626 8807	<b>Portuguese</b>	Portugal:	01 441 7199
	Switzerland:	084 880 1111			
<b>German</b>	Germany:	0180 5 25 81 43			
	Austria:	0660 6386			
<b>In-Country Support Numbers</b>					
Africa/Middle East	(41 22) 780-7111		Malaysia	(603) 295-2566	
Argentina	(54 1) 781-4059/69		Mexico D.F.	(52 5) 326-4600	
Australia	(03) 9272 8000		Mexico Guadalajara	(52 3) 669 95 00	
Brazil	(55 11) 709-1444		Mexico Monterrey	(52 83) 378 42 40	
Canada	(208) 323-2551		New Zealand	(64 9) 356-6640	
China	(8610) 6261-4174; 6261-4175; 6261-4176; 6262-5666		Philippines	(63 2) 894-1451	
Czech Republic	(42 2) 471 7321		Poland	(48 22) 37-5065	
Greece	(30 1) 689 64 11		Portugal	(351 1) 301 7330	
Hong Kong	800-7729		Russia	(7 095) 923-5001	
Hungary	(36 1) 252 4505		Singapore	(65) 272-5300	
India	(011) 6472366		Switzerland	(41 1) 753 7111	
Indonesia	(21) 350-3408		Taiwan	(02) 717-9609	
Japan	(31 20) 581-3318		Thailand	(662) 661-4011; 661-4012	
Korea	(82 2) 3270-0700; outside Seoul, call 080-999-0700		Turkey	(90 1) 224-5925	

## North American Response Center

The North American Response Center (NARC) is available for technical support to assist service technicians. The NARC can be reached at 1-800-544-9976. To access this service, HP resellers must have a valid CZ number.

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## Warranty

This warranty gives you specific legal rights. You may also have other rights, which may vary from area to area.

Hewlett-Packard warrants the 5L and 6L LaserJet printers against defects in materials and workmanship for a period of one year from the date of purchase by the end user and is not transferable.

During the warranty period, Hewlett-Packard will, at its option, either repair or replace hardware products that prove to be defective.

Should Hewlett-Packard be unable to repair or replace the product within a reasonable amount of time, a refund of the purchase price may be made upon return of the product. To have your printer serviced by Hewlett-Packard, you must make arrangements to have it serviced in the country of purchase.

## Warranty Exclusions

The warranty on your HP LaserJet printer shall not apply to defects or damage resulting from:

- Improper or inadequate maintenance by customer.
- Customer-supplied software or interfacing.
- Unauthorized modification or misuse.
- Operation outside of the environmental specifications for the product.
- Operation of nonsupported printing media.
- Duty cycle abuse (see later explanation).
- Operating the printer from a mechanical switchbox without a designated surge protector.
- Improper site preparation and maintenance.
- Use of non-HP toner cartridges (see explanation) or DRAM (JEDIA) memory cards.

The use of non-Hewlett-Packard toner cartridges does not affect either the warranty or any maintenance contract purchased from Hewlett-Packard. However, if an HP LaserJet printer failure or printer damage is found to be directly attributable to the use of any non-HP product, the repair will not be covered under the warranty or HP maintenance contract. Hewlett-Packard cannot recommend use of non-HP toner cartridges, either new or remanufactured, because they are not HP products and Hewlett-Packard cannot influence or control their quality.

Operation of the printer beyond the limit of its duty cycle (printing more than the equivalent of 4,000 single-sided pages per month on the HP LaserJet 5L or more than the equivalent of 6,000 single-sided pages per month on the HP LaserJet 6L) shall be deemed printer abuse and all repairs thereafter will be billed on a time and materials basis.

If you are using a mechanical switchbox, ensure that it is equipped with a surge protector. Damage to your printer could occur from the use of unprotected mechanical switchboxes.

The warranty period begins either on the date of delivery or, where the purchase price includes installation by Hewlett-Packard, on the date of installation.

## Warranty Limitations

The warranty set forth above is exclusive and no other warranty, whether written or oral, is expressed or implied. Hewlett-Packard specifically disclaims the implied warranties of merchantability and fitness for a particular purpose.

Some areas do not allow limitations on how long an implied warranty lasts, so the preceding limitation or exclusion may not apply to you. However, any implied warranty of merchantability or fitness is limited to the one-year duration of this written warranty.

In no event will Hewlett-Packard or its suppliers be liable to you for any consequential or incidental damages, including any lost profits or lost savings, or for any claim by any party, even if a representative of HP or its suppliers has been advised of the possibility of such damages.

Some areas, states, or provinces do not allow the exclusion or limitation of incidental or consequential damages, so the preceding limitation or exclusion may not apply to you.

## Voltage Conversions

HP LaserJet printers are manufactured to different specifications for different countries. Because of these differences, HP does not recommend transporting products sold within one country to another country.

In addition to the 115-220 voltage environment concerns, the country of final destination may have different import and export restrictions, power frequencies, and regulatory requirements.

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### Note

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The HP LaserJet family printers must be serviced by an authorized repair depot or reseller within the country where the printer was originally purchased.

Because of the different specifications and warranty coverage limitations, Hewlett-Packard does not offer a conversion, or support the conversion, of HP LaserJet family printers. We advise those customers planning to transport equipment to different countries to purchase the products in the country of final destination.



# Site Requirements

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# Site Requirements

## Operating Environment

The environmental requirements listed in the table below must be maintained to ensure the proper operation of this printer.

Table 2-1

Environmental Requirements

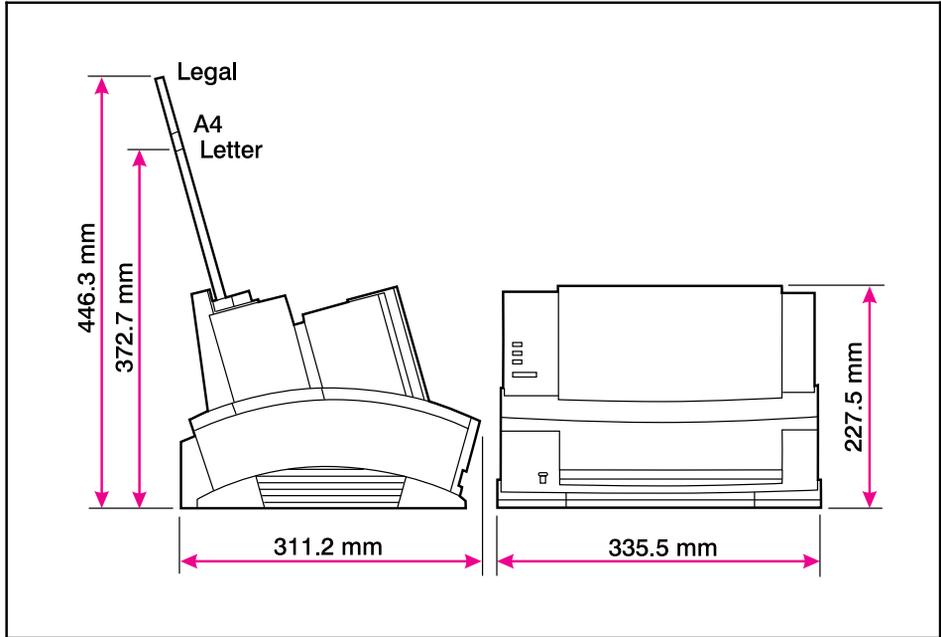
LaserJet 5L/6L & Cartridge	Operating	Storage
Temperature	50 to 90.5° F (10 to 32.5° C)	32 to 104° F (0 to 40° C)
Humidity	20 to 80% RH (with no condensation)	10 to 80% RH (with no condensation)

Consider the following points before installing the printer:

- Install in a **well-ventilated, dust-free** area.
- Install on a **hard, flat and continuous surface**, with all four printer feet level. Do not install on carpet or other soft surfaces.
- Ensure **adequate power is supplied**. Printer power requirements are listed under “Specifications,” in Chapter 1. Uninterruptible power supplies (UPS) should not be used with this printer.
- **Install away from direct sunlight**, open flames, or ammonia fumes. If the printer is placed near a window, make sure the window has a curtain or blind to block any direct sunlight.
- Install with enough **space around the printer** for proper access and ventilation. (See Figure 2-1.)
- Install printer **away from the direct flow of exhaust** from air ventilation systems.

# Printer Space Requirements

Figure 2-1



Printer Space Requirements

Table 2-2

Printer Dimensions

Description	Dimension
Width	13.2 in. (335.5 mm)
Depth	12.3 in. (311.2 mm)
Height (storage) (operational)	8.9 in. (227.5 mm) 14.6 in. (372.7 mm)*
Weight (with toner cartridge)	15.9 lbs. (7.2 kg)
Toner cartridge weight**	1.5 lbs. (.7 kg)

\* With letter input assembly extended.

\*\* Some quantity of toner will reside in the waste toner area of a toner cartridge when the toner supply is exhausted. Therefore, using toner cartridge weight may be an unreliable indication of remaining toner supply.

## The HP C3906A/F Toner Cartridge

Toner cartridges contain components that are sensitive to light, temperature, and humidity. Follow the recommendations in this section to ensure the highest quality and longest life of HP toner cartridges.

Keep the printer within the following environmental conditions for optimum performance.

### Storage Conditions

The toner cartridge is affected by its environment. Packaging protects the toner cartridge from light and increases its storage life. It is important to store the cartridge in its original packaging until the cartridge is ready to be installed in the printer.

When storing the toner cartridge in a warehouse or work area, make sure the storage place meets the conditions specified in Table 2-1.

### Storing Opened Toner Cartridges

Because the cartridge does not have a shutter to cover the laser beam access slot, it should be kept inside the printer until empty. Toner cartridges which have had the toner sealing tape removed are also more vulnerable to environmental extremes (such as high humidity).

If the toner cartridge must be removed from the printer, always store the cartridge:

- Inside the protective bag in which it was originally packaged.
- In a dark cabinet, away from direct sunlight.
- Correct side up and in a horizontal position (not standing on end).
- At a temperature between 32° to 104° F (0° and 40° C).
- Away from ammonia or other organic solvent fumes.

#### Caution

Never ship the printer with a toner cartridge installed. Excessive vibration during shipping can cause toner to leak, contaminating the printer. Never expose the toner cartridge to direct sunlight or to room light for more than a few minutes. Bright light and direct sunlight can permanently damage a toner cartridge.

#### Note

The C3906F toner cartridge is designed specifically for use in the environmental conditions of the Asia Pacific region and is only available in that region.

Sample of manual. Download All 204 pages at:

<https://www.arepairmanual.com/downloads/1997-hp-laserjet-5lc3941a-and-6lc3990a-printer-service-repair-workshop-manual/>