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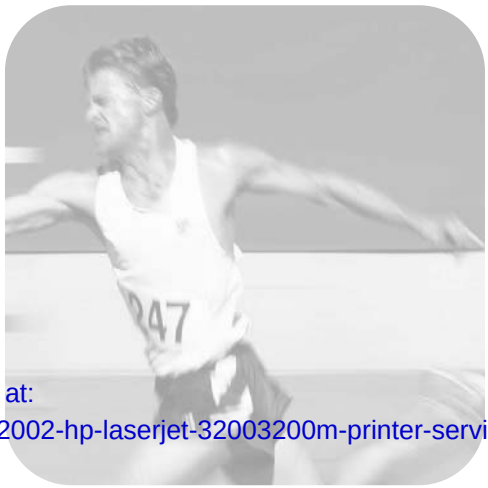

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HP LaserJet 3200 product
HP LaserJet 3200M product

Service manual

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Local country laws may prohibit the use of this product outside of the countries specified. It is strictly forbidden by law in most countries to connect nonapproved telecommunications equipment (fax machines) to public telephone networks.

Safety Information

WARNING!

Potential Shock Hazard

Always follow basic safety precautions when using this product to reduce risk of injury from fire or electric shock.

1. Read and understand all instructions in the user guide.
2. Observe all warnings and instructions marked on the product.
3. Use only a grounded electrical outlet when connecting the product to a power source. If you don’t know whether the outlet is grounded, check with a qualified electrician.
4. Do not touch the contacts on the end of the telephone cord or any of the sockets on the product. Replace damaged cords immediately.
5. Never install telephone wiring during a lightning storm.
6. Unplug this product from wall outlets and telephone jacks before cleaning.
7. Do not install or use this product near water or when you are wet.
8. Install the product securely on a stable surface.
9. Install the product in a protected location where no one can step on or trip over the line cord and the line cord will not be damaged.
10. If the product does not operate normally, see the online user guide.
11. Refer all servicing questions to qualified personnel.

Information regarding FCC Class B, Parts 15 and 68 requirements can be found in the *user guide*.

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1 Product information

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Introduction

The HP LaserJet 3200 product and HP LaserJet 3200M product are powerful business tools with the capabilities of a full range of office equipment. With the product, you can:

- **Print**—Print documents easily with the laser quality you have come to expect from an HP LaserJet printer.
- **Fax**—Use the product as a standalone fax machine to send and receive faxes, as well as perform advanced tasks such as forwarding faxes to other locations. Use the software to send faxes from and receive them to your computer.
- **Copy**—Make superior laser-quality copies. You can make up to 99 copies of a 30-page original. You can also enlarge, reduce, adjust contrast, and collate.
- **Scan**—Scan important documents to create electronic files.
- **Use software**—Use the software to print, fax, copy, or scan. Also use the software to store and organize scanned documents.

Hardware description

The product provides 1200 dot-per-inch (dpi) printing, plus scanning capabilities. The scanner scans at 600 dpi/24 bits per pixel (bpp) and contains a document feeder that holds up to 30 pages.

The product prints nine pages per minute (ppm). It provides an excellent Windows printing solution, ease of use, and higher performance. With 1200 dpi printing resolution, the product has exceptional text and graphics print quality. The simplified control panel and improved paper handling make this product very simple to use.

There is one main media input tray with a 125-sheet capacity for continuous, multiple-page printing. Manual, single-sheet printing is possible through the single-sheet input tray. Both trays are center-justified for all supported paper sizes. The output tray holds up to 100 sheets.

The product has a very fast first-page-out, at less than eighteen seconds. The formatter board contains 12 MB of ROM on a DIMM, 8 MB of RAM on a DIMM in the third DIMM slot (or 16 MB on a DIMM in the second DIMM slot for the "M" version), and a 32-bit MCF5202 chip. There is one DIMM slot available for DIMM expansion

(supporting an 8 MB, 16 MB, 32 MB, or 64 MB DIMM). The engine has a 1,000 average (10,000 peak) page-per-month duty cycle and has no fan. The toner life is 2,500 pages.

Firmware description

Product firmware includes:

- Enhanced PCL 6 with status readback
- 45 fonts in Intellifont format, plus Cyrillic
- Full-page 600 dpi bitmap
- Pixel placement, mosaic characters
- Memory Enhancement technology (MEt) with hardware compression/decompression

The firmware also has REt and EconoMode functionality. Scan capability includes 600 dpi and 24-bit color.

Product specifications

Table 1. Physical specifications

Category	Specification
Height	272 mm (10.71 inches) without supports attached; 404 mm (15.91 inches) with supports attached
Depth	390 mm (15.36 inches) without supports attached; 598 mm (23.55 inches) with supports attached
Width	384 mm (15.12 inches)
Weight (cartridge installed)	10.6 kilograms (23.37 pounds)

Table 2. Environmental specifications

Category	Specification
Operating environment	Printer plugged into an AC outlet: • Temperature: 15 to 32.5 degrees Celsius (C); 59 to 90.5 degrees Fahrenheit (F) • Humidity: 20 to 80 percent relative humidity (no condensation)
Storage environment	Printer unplugged from an AC outlet: • Temperature: 0 to 40 degrees C (32 to 104 degrees F) • Humidity: 10 to 90 percent relative humidity (no condensation)

Table 3. Power specifications

Category	Specification
Power requirements	• 100 to 120 Volts alternating current (Vac), 50/60 Hz (± 2%); 127 Vac, 60 Hz NOM -Or- • 220 Vac (± 10%), 50/60 Hz (± 2 Hz) • 220-240 Vac (± 10%), 50 Hz (± 2 Hz) **Note** Power sources are not interchangeable.
Power consumption (in continuous copy mode)	200 watts
Power consumption (idle)	6 watts
Minimum recommended circuit capacity	4.5 amps at 115 V 2.5 amps at 230 V

Table 4. Performance

Category	Specification
Print resolution	1200 dpi
Scan resolution	600 dpi optical, with 256 levels of gray and 24-bit color
Fax resolution	Standard: 203 by 98 dpi Fine: 203 by 196 dpi Superfine: 300 by 300 dpi (no halftone) Photo: 300 by 300 dpi (halftone enabled)
Print speed	9 ppm
Copy speed	9 ppm

Table 5. Operating acoustical emissions (per ISO 9296) specifications

Category	Specification
Sound Power Level, L_{WAd} (1 bel = 10 decibels)	6.3 bels (B)
Sound Pressure Level, L_{pAm} (operator position)	57 decibels (dB)
Sound Pressure Level, L_{pAm} (bystander position)	48 dB

Table 6. Skew specifications

Category	Specification
Print skew—left	0.6% (1.5 mm over 250 mm in length)
Print skew—right angle accuracy	0.64% (1.2 mm over 190 mm in width)
Scan skew	1.2%

Model and serial numbers

The model number and serial number are listed on an identification label located on the back of the printer.

The serial number contains information about the country of origin, the revision level, the production code, and production number.

The label also contains power rating and regulatory information.

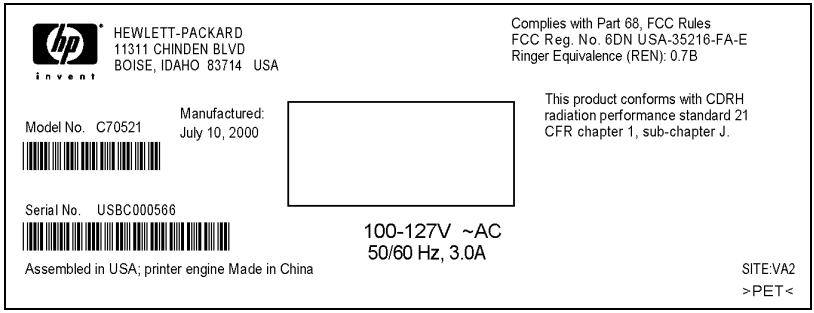

Figure 1. **Model and serial number label**

Product overview

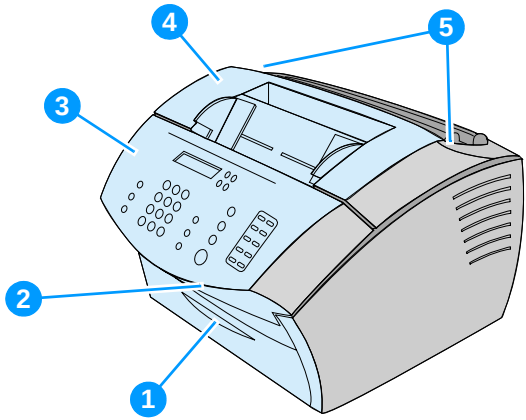

Figure 2. **Front and side view**

1 Front paper path door

2 Document output slot

3 Control panel/document release door

4 Printer door

5 Printer door release latches

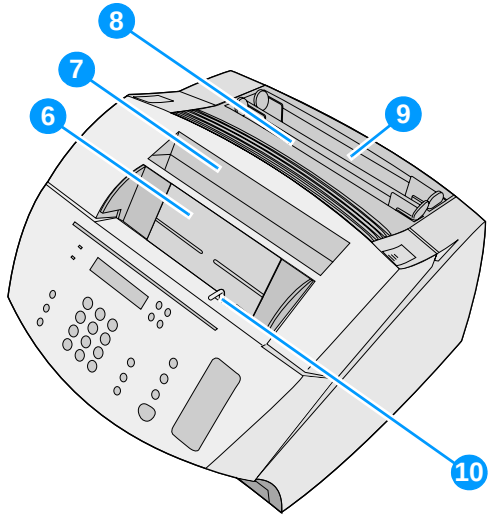

Figure 3. **Top view**

6 Document feeder tray

7 Paper output bin

8 Single-sheet input tray

9 Paper input tray

10 Special media lever

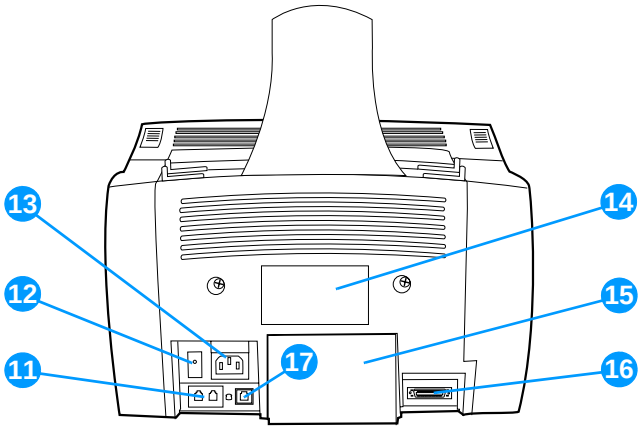

Figure 4. **Rear view**

11 Phone line connectors

12 On/off switch (on 220 V models only)

13 Power cable connector

14 Model and serial number label

15 Memory door

16 Parallel cable connector

17 USB connector

Warranty statement

This warranty gives specific legal rights. There may also be other rights which vary from area to area. See the user guide for further warranty information or see the warranty card included with the printer.

Hewlett-Packard limited warranty statement

HP LaserJet 3200 product ONE-YEAR LIMITED WARRANTY

1. HP warrants to you, the end-user customer, that HP hardware, accessories, and supplies, will be free from defects in materials and workmanship after the date of purchase, for the period specified above. If HP receives notice of such defects during the warranty period, HP will, at its option, either repair or replace products which prove to be defective. Replacement products may be either new or like-new.
2. HP warrants to you that HP software will not fail to execute its programming instructions after the date of purchase, for the period specified above, due to defects in material and workmanship when properly installed and used. If HP receives notice of such defects during the warranty period, HP will replace software media which does not execute its programming instructions due to such defects.
3. HP does not warrant that the operation of HP products will be uninterrupted or error free. If HP is unable, within a reasonable time, to repair or replace any product to a condition as warranted, you will be entitled to a refund of the purchase price upon prompt return of the product.
4. HP products may contain remanufactured parts equivalent to a new in performance or may have been subject to incidental use.
5. Warranty does not apply to defects resulting from (a) improper or inadequate maintenance or calibration, (b) software, interfacing, parts or supplies not supplied by HP, (c) unauthorized modification or misuse, (d) operation outside of the published environmental specifications for the product, or (d) improper site preparation or maintenance.
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Declaration of Conformity

Declaration of Conformity
according to ISO/IEC Guide 22 and EN 45014

Manufacturer's Name:	Hewlett-Packard Company
Manufacturer's Address:	11311 Chinden Boulevard Boise, Idaho 83714-1021, USA

declares, that the product

Product Name:	HP LaserJet 3200 product
Model Number:	C7052A, 7053A, 7055A (Printer/Fax/Scanner/Copier)
Product Options:	ALL

conforms to the following Product Specifications:

Safety: IEC 950:1991+A1+A2+A3+A4/EN 60950:1992+A1+A2+A3+A4+A11
IEC60825-1:1993+A1/EN 60825-1:1994+A11 Class 1 Laser/LED Product

EMC: CISPR 22:1997/EN 55022:1998 Class B[1]
CISPR 24:1997/EN 55024:1998
IEC 61000-3-2:1995/EN61000-3-2:1995
IEC61000-3-3:1994/EN61000-3-3:1995
FCC Title 47 CFR, Part 15 Class B[2] / ICES-003, Issue 2
AS / NZS 3548:1995

Supplementary Information:
The product herewith complies with the requirements of the Low Voltage Directive 73/23/EEC, the EMC Directive 89/336/EEC, and the R&TTE Directive 1999/5/EC (Annex II) and carries the CE-marking accordingly.

1) The product was tested in a typical configuration with Hewlett-Packard Personal Computer Systems.

2) This Device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

April 18, 2000

For Compliance Information ONLY, contact:
Australia Contact: Product Regulations Manager, Hewlett-Packard Australia Ltd., 31-41 Joseph Street, Blackburn, Victoria 3130, Australia
European Contact: Your Local Hewlett-Packard Sales and Service Office or Hewlett-Packard Gmbh, Department HQ-TRE / Standards Europe, Herrenberger Strasse 130, D-71034 Böblingen (FAX: +49-7031-14-3143)
USA Contact: Product Regulations Manager, Hewlett-Packard Company, PO Box 15, Mail Stop 160, Boise ID, 83707-0015 (Phone: 208-396-6000)

Toner cartridge information

The toner cartridge is designed to simplify replacement of the major consumable parts. The toner cartridge contains the printing mechanism and a supply of toner.

At five percent page coverage, a toner cartridge will print approximately 2,500 pages. However, a toner cartridge should print more pages if it regularly prints pages with less coverage, such as short memos. The cartridge might print fewer pages if heavy or bold print is used.

Note For best results, always use a toner cartridge before the expiration date stamped on the toner cartridge box.

Refilled toner cartridges

While Hewlett-Packard does not prohibit the use of refilled toner cartridges during the warranty period or while the printer is under a maintenance contract, it is not recommended for the following reasons:

- Repairs resulting from the use of refilled toner cartridges are not covered under Hewlett-Packard warranty or maintenance contracts.
- Hewlett-Packard has no control or process to ensure that a refilled toner cartridge functions at the high level of reliability of a new HP LaserJet toner cartridge. Hewlett-Packard also cannot predict the long term reliability effect on the printer from using different toner formulations found in refilled cartridges.
- The print quality of HP LaserJet toner cartridges influences the customer's perception of the printer. Hewlett-Packard has no control over the actual print quality of a refilled toner cartridge.

Recycling toner cartridges

In order to reduce waste, Hewlett-Packard offers a recycling program. Cartridge components that do not wear out are recycled. Plastics and other materials are recycled. Hewlett-Packard pays the shipping costs from the user to the recycling plant. To join this recycling effort, follow the instructions inside the toner cartridge box.

Additional product stewardship

Environmental conformity

The design of this HP LaserJet product facilitates the recycling of:

Printer and parts

Design for recycling has been incorporated into this printer and its accessories. The number of materials has been kept to a minimum while ensuring proper functionality and high product reliability. Dissimilar materials have been designed to separate easily. Fasteners and other connections are easy to locate, access, and remove with common tools. High-priority parts have been designed to be accessed quickly for efficient disassembly and repair. Plastic parts have been primarily designed in two colors to enhance recycling options. A few small parts are colored specifically to highlight customer access points. The plastics used in the printer housing and chassis are technically recyclable.

HP provides a product return system for customers in Germany. Many of the functional parts are recovered, tested, and reused as fully warranted service parts. Used parts are not placed into new products. Remaining product parts are recycled, if possible. For product return information, contact the address below:

Hewlett-Packard GmbH
Wertstoffzentrum
Fronackerstr.30
71063 Sindelfingen

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