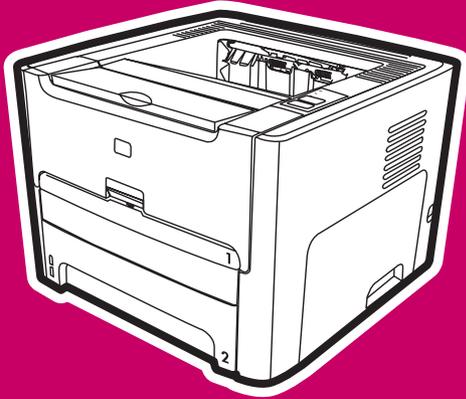


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service

hp LaserJet 1160 printer

hp LaserJet 1320 series printer

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HP LaserJet 1160 printer and
HP LaserJet 1320 Series printer

Service Manual _____

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Part number Q5927-90901

Edition 2, 9/2004

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.

Read and understand all instructions in the user guide.

Observe all warnings and instructions marked on the product.

Use only a grounded electrical outlet when connecting the printer to a power source. If you do not know whether the outlet is grounded, check with a qualified electrician.

Do not touch the contacts on the end of any of the sockets on the printer. Replace damaged cords immediately.

Unplug this product from wall outlets before cleaning.

Do not install or use this product near water or when you are wet.

Install the product securely on a stable surface.

Install the product in a protected location where no one can step on or trip over the power cord and where the power cord will not be damaged.

If the product does not operate normally, see the online user guide.

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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Printer configurations

The HP LaserJet 1160 printer is only available in the base configuration.

The HP LaserJet 1320 Series printer is available in several configurations. The letters that follow the printer name indicate the differences between the configurations. Each letter refers to a specific feature. Use the information in this section to determine which features your model has.

Table 1-1. Feature designations for HP LaserJet 1320 Series printers

Printer Model	Description
HP LaserJet 1160	This is the base model. It includes an IEEE-1284B parallel port and a universal serial bus (USB) port.
HP LaserJet 1320	This is the base model. It includes an IEEE-1284B parallel port and a universal serial bus (USB) port.
HP LaserJet 1320n	The printer includes the same features as HP LaserJet 1320 with an internal HP Jetdirect network port instead of the IEEE-1284B parallel port
HP LaserJet 1320tn	This printer includes the same features as HP LaserJet 1320n and adds a 250-sheet input tray.
HP LaserJet 1320nw	This printer includes the same features as HP LaserJet 1320t and adds integrated 802.11b/g wireless connectivity. NOTE For more information about this product, see the HP LaserJet 1320nw wireless printer user guide.

HP LaserJet 1160 and HP LaserJet 1320 Series printers base models

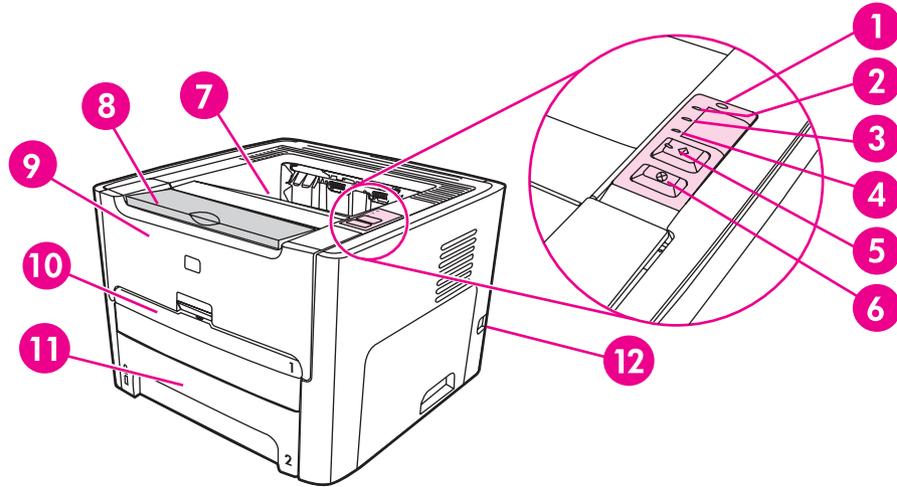


Figure 1-1.

Front/right-side view

- 1 Wireless light (HP LaserJet 1320nw printer only)
- 2 Toner light
- 3 Attention light
- 4 Ready light
- 5 Go button and light
- 6 CANCEL button
- 7 Output bin
- 8 Media support
- 9 Print-cartridge door
- 10 Single-sheet priority input slot (tray 1)
- 11 Main input tray (tray 2)
- 12 On/off switch

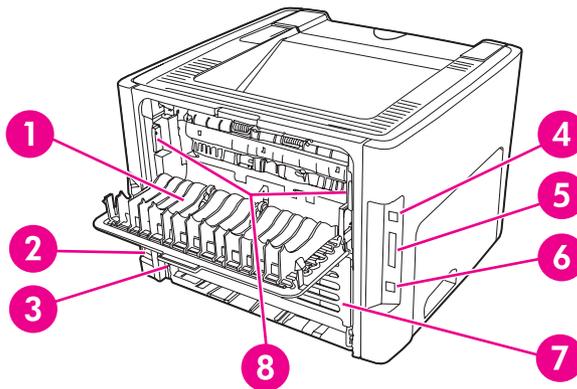


Figure 1-2.

Rear/left-side view

- 1 Straight-through output door
- 2 Power receptacle
- 3 Automatic two-sided printing media-size selector
- 4 USB port
- 5 Parallel port (HP LaserJet 1160 and HP LaserJet 1320 printers)
- 6 Internal HP Jetdirect network port (HP LaserJet 1320n, HP LaserJet 1320tn, and HP LaserJet 1320nw printers)
- 7 Rear automatic two-sided path door
- 8 Jam-clearing levers

Features

The following lists describe the features of HP LaserJet 1160 and HP LaserJet 1320 Series printers.

HP LaserJet 1160 printer

- 20 ppm (Letter), 19 ppm (A4)
- First page out in as little as 8.5 seconds
- 1200 dpi effective output quality (600 x 600 dpi with Resolution Enhancement technology [REt] with FastRes 1200)
- 250-sheet enclosed input tray (tray 2)
- Single-sheet priority input slot (tray 1)
- EconoMode (saves toner)
- The ability to print watermarks, booklets, and multiple pages per sheet (N-up), and to print the first page on different media from the remainder of the document
- 16 MB RAM
- 2,500-page print cartridge
- Host-based and PCL 5e (printer automatically determines and switches to the appropriate language)
- Compatible with USB 2.0 specifications
- IEEE-1284B parallel port
- Windows® 98, Windows Millennium Edition (Me), Windows NT® (parallel and printer driver only), Windows 2000, Windows Server 2003 (printer driver only), Windows XP 32-bit, Windows XP 64-bit (printer driver only)
- Mac OS 9.2 (printer driver only) and OS X V10.1.
- Power switch
- HP Toolbox (provides printer status information, troubleshooting information, and printer configuration information)
- 26 HP PCL fonts

HP LaserJet 1320 Series printer

- 22 ppm (letter), 21 ppm (A4)
- First page out in as little as 8.5 seconds
- ProRes 1200 (provides fine-line detail at 1200 x 1200 dpi)
- 600 dpi (provides 600 x 600 dpi output with Resolution Enhancement Technology [REt] for improved text)
- 250-sheet enclosed input tray (tray 2)
- Single-sheet priority input slot (tray 1)
- Optional additional 250-sheet input tray (tray 3) is available
- Automatic two-sided (duplex) printing

- EconoMode (saves toner)
- The ability to print watermarks, booklets, and multiple pages per sheet (N-up), and to print the first page on different media from the remainder of the document
- 16 MB RAM
- Memory is upgradeable to 144 MB
- 2,500- or 6,000-page print cartridge
- PCL 6, PCL 5e, and HP postscript Level 2 emulation (printer automatically determines and switches to the appropriate language)
- Compatible with USB 2.0 specifications
- IEEE-1284B parallel port
- Windows 98, Windows Me, Windows NT (parallel, network, and printer driver only), Windows 2000, Windows Server 2003 (printer driver only), Windows XP 32-bit, Windows XP 64-bit (printer driver only)
- Mac OS 9.1 and later (printer driver only)
- Mac OS X V10.1 (printer driver only), V10.2 and later
- Power switch
- HP Toolbox (provides printer status information, troubleshooting information, and configuration information)
- 46 HP PCL fonts
- 35 HP postscript fonts

HP LaserJet 1320n printer

- The HP LaserJet 1320n printer includes all of the features of the HP LaserJet 1320 printer.
- The HP LaserJet 1320n printer substitutes an internal HP Jetdirect network port for the IEEE-1284B parallel port found on HP LaserJet 1320 printers.

HP LaserJet 1320tn printer

- The HP LaserJet 1320tn printer includes all of the features of the HP LaserJet 1320n printer.
- The HP LaserJet 1320tn printer adds an optional 250-sheet tray (tray 3).

HP LaserJet 1320nw printer

- The HP LaserJet 1320nw printer includes all of the features of the HP LaserJet 1320n printer.
- The HP LaserJet 1320nw printer adds integrated 802.11b/g wireless connectivity

Specifications

Physical specifications

Table 1-2. Physical specifications

Dimensions	<ul style="list-style-type: none">• Width: 350 mm (16.8 inches)• Depth: 352 mm (13.9 inches)• Height: 256 mm (10.0 inches)
Weight (2,500-page cartridge installed)	HP LaserJet 1160 printer: 10.7 kg (23.6 lb) HP LaserJet 1320 Series printer: 11.3 kg (24.9 lb)

NOTE

Values are current as of April 1, 2004. Values are subject to change without notice. See <http://www.hp.com/support/lj1160/> or <http://www.hp.com/support/lj1320/> for current information.

Printer capacities and ratings

Table 1-3. Printer capacities and ratings

Print speed	HP LaserJet 1160 printer: <ul style="list-style-type: none">• 20 ppm (Letter), 19 ppm (A4)• First page out in as few as 8.5 seconds HP LaserJet 1320 Series printer: <ul style="list-style-type: none">• 22 ppm (Letter), 21 ppm (A4)• First page out in as few as 8.5 seconds
Main input tray (tray 2) capacity	250 sheets of 75 g/m ² (20 lb) media
Single-sheet priority input slot (tray 1) capacity	1 sheet of media up to 163 g/m ² (43 lb) media or 1 envelope
Optional input tray (tray 3) capacity (HP LaserJet 1320 Series printer or Q2485A)	250 sheets of 75 g/m ² (20 lb) media
Top (face down) output bin capacity	125 sheets of regular weight 75 g/m ² (20 lb) paper
Minimum media size	76 x 127 mm (3 x 5 inches)
Maximum media size	216 x 356 mm (8.5 x 14 inches)
Media weight	Output bin: 60 to 105 g/m ² (16 to 28 lb) Straight through media path: 60 to 163 g/m ² (16 to 43 lb)
Base memory	16 MB of RAM

Table 1-3. Printer capacities and ratings (continued)

Memory upgrade (HP LaserJet 1320 Series printer only)	One DIMM slot available for a 16, 32, 64, or 128 MB RAM DIMM
Print resolution	<ul style="list-style-type: none"> ● 1200 dpi: (HP LaserJet 1320 Series printer only) This setting uses ProRes 1200 to provide fine-line detail at 1200 x 1200 dpi. ● 1200 effective dpi: This setting provides 1200 dpi effective output quality using FastRes 1200. ● 600 dpi: This setting provides 600 x 600 dpi output with Resolution Enhancement technology (REt) for improved text.
Duty cycle	<ul style="list-style-type: none"> ● 10,000 single-sided pages per month (maximum) ● 1,000 single-sided pages per month (average)
PCL	PCL 5e, PCL 6
HP postscript (HPLJ 1320)	Level 2 emulation

Memory specifications

Table 1-4. Memory

Base memory	16 MB RAM
Memory upgrade	100-pin, 66 MHz minimum speed

Port availability

Table 1-5. Port availability

USB	Compatible with USB 2.0 specifications
Network (HP LaserJet 1320n, HP LaserJet 1320tn, and HP LaserJet 1320nw printers only)	RJ-45, Ethernet 10/100
Wireless (HP LaserJet 1320nw printer only)	802.11b/g
Parallel (HP LaserJet 1160 and HP LaserJet 1320 printers only)	<ul style="list-style-type: none"> ● IEEE-1284B receptacle ● Set host computer to ECP

Electrical specifications

WARNING!

Power requirements are based on the country/region where the printer is sold. Do not convert operating voltages. Doing so might damage the printer and void the product warranty.

Table 1-6. Electrical specifications, HP LaserJet 1160 printer

Power requirements, 110-127 V models	110-127 V (+/-10%), 50/60 Hz (+/-2)
Power requirements, 220-240 V models	220-240 V (+/-10%), 50/60 Hz (+/-2 Hz)
Power consumption	<ul style="list-style-type: none"> ● During printing (20 ppm): 340 watts (average) ● During Ready (Standby) and PowerSave (instant-on fuser technology) modes: 4 watts ● Off: <1 watt
Minimum recommended circuit capacity for typical product	<ul style="list-style-type: none"> ● 4.5 amps at 115 V ● 2.6 amps at 230 V

Table 1-7. Electrical specifications, HP LaserJet 1320 printer

Power requirements, 110-127 V models	110-127 V (+/-10%), 50/60 Hz (+/-2)
Power requirements, 220-240 V models	220-240 V (+/-10%), 50/60 Hz (+/-2 Hz)
Power consumption	<ul style="list-style-type: none"> ● During printing (22 ppm): 340 watts (average) ● During Ready (Standby) and PowerSave (instant-on fuser technology) modes: 6 watts ● Off: <1 watt
Minimum recommended circuit capacity for typical product	<ul style="list-style-type: none"> ● 4.5 amps at 115 V ● 2.6 amps at 230 V

Table 1-8. Electrical specifications, HP LaserJet 1320n printer

Power requirements, 110-127 V models	110-127 V (+/-10%), 50/60 Hz (+/-2)
Power requirements, 220-240 V models	220-240 V (+/-10%), 50/60 Hz (+/-2 Hz)
Power consumption	<ul style="list-style-type: none"> ● During printing (22 ppm): 345 watts (average) ● During Ready (Standby) and PowerSave (instant-on fuser technology) modes: 6 watts ● Off: <1 watt
Minimum recommended circuit capacity for typical product	<ul style="list-style-type: none"> ● 4.5 amps at 115 V ● 2.6 amps at 230 V

Table 1-9. Electrical specifications, HP LaserJet 1320nw printer

Power requirements, 110-127 V models	110-127 V (+/-10%), 50/60 Hz (+/-2)
Power requirements, 220-240 V models	220-240 V (+/-10%), 50/60 Hz (+/-2 Hz)
Power consumption	<ul style="list-style-type: none">• During printing (22 ppm): 345 watts (average)• During Ready (Standby) and PowerSave (instant-on fuser technology) modes: 6 watts• Off: <1 watt
Minimum recommended circuit capacity for typical product	<ul style="list-style-type: none">• 4.5 amps at 115 Power requirements (110)• 2.6 amps at 230 Power requirements (110)

NOTE

Values are current as of April 1, 2004. Values are subject to change without notice. See <http://www.hp.com/support/lj1160/> or <http://www.hp.com/support/lj1320/> for current information.

NOTE

The power reported is the highest value measured for monochrome printing using all standard voltages.

NOTE

The default time from Ready mode to PowerSave mode and the recovery time from PowerSave mode to the start of printing is negligible (less than 10 seconds) because of the instant-on fuser technology.

NOTE

The heat dissipation in Ready mode is 20 BTU/hour.

Acoustic emissions

Declared per ISO 9296

Table 1-10. Acoustic emissions, HP LaserJet 1160 printer

Sound-power level	Printing (20 ppm): $L_{WAd} = 6.2$ Bels A and 62 dB (A) Ready and PowerSave: essentially inaudible
Sound-pressure level bystander position	Printing (20 ppm): $L_{pAm} = 48$ dB (A) Ready and PowerSave: essentially inaudible

Table 1-11. Acoustic emissions, HP LaserJet 1320 Series printer

Sound-power level	Printing (22 ppm): $L_{WAd} = 6.2$ Bels A and 62 dB (A) Ready and PowerSave: essentially inaudible
Sound-pressure level bystander position	Printing (22 ppm): $L_{pAm} = 48$ dB (A) Ready and PowerSave: essentially inaudible

NOTE

Values are current as of April 1, 2004. Values are subject to change without notice. See <http://www.hp.com/support/lj1160/> or <http://www.hp.com/support/lj1320/> for current information.

NOTE

The configuration that was tested to arrive at these values as an HP LaserJet 1320 printer (base model) with its standard tray, using A4 paper and simplex continuous printing.

Environmental specifications

Table 1-12. Environmental specifications

Operating environment	Printer plugged into an ac outlet: <ul style="list-style-type: none">• Temperature: 10°C to 32.5°C (50°F to 90.5°F)• Humidity: 20% to 80% (no condensation)
Storage environment	Printer unplugged from an AC outlet: <ul style="list-style-type: none">• Temperature: 0°C to 40°C (32°F to 104°F)• Humidity: 10% to 80% (no condensation)

NOTE

Values are current as of April 1, 2004. Values are subject to change without notice. See <http://www.hp.com/support/lj1160/> or <http://www.hp.com/support/lj1320/> for current information.

Print media specifications

HP LaserJet printers produce excellent print quality. The printer accepts a variety of print media, such as cut-sheet paper (including recycled paper), envelopes, labels, transparencies, and custom-size paper. Properties such as weight, grain, and moisture content are important factors affecting printer performance and output quality.

The printer can use a variety of paper and other print media in accordance with the guidelines in this guide. Media that does not meet these guidelines might cause the following problems:

- Poor print quality
- Increased jams
- Premature wear on the printer, requiring repair

For best results, use only HP-brand paper and print media. Hewlett-Packard Company cannot recommend the use of other brands. Because they are not HP products, HP cannot influence or control their quality.

It is possible for media to meet all of the guidelines in this user guide and still not produce satisfactory results. This might be the result of incorrect handling, unacceptable temperature and humidity levels, or other variables over which HP has no control.

Before you purchase a large quantity of media, make sure that it meets the requirements specified in this user guide and in *HP LaserJet Printer Family Media Guide*. The guidelines can be downloaded from <http://www.hp.com/support/ljpaperguide/>. Always test media before you purchase a large quantity.

CAUTION

Using media that does not meet Hewlett-Packard's specifications might cause problems for the printer, requiring repair. This repair is not covered by the Hewlett-Packard warranty or service agreements.

Supported media sizes

The following are the supported media sizes:

- **Minimum:** 76 x 127 mm (3 x 5 inches)
- **Maximum:** 216 x 356 mm (8.5 x 14 inches)

Also see [Printer capacities and ratings](#)

Hewlett-Packard limited warranty statement

HP PRODUCT
HP LaserJet 1160 and HP LaserJet 1320 Series
printers

DURATION OF LIMITED WARRANTY
One year from date of purchase

HP warrants to you, the end-user customer, that HP hardware and accessories 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 equivalent in performance to new.

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 which does not execute its programming instructions due to such defects.

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.

HP products may contain remanufactured parts equivalent to new in performance or may have been subject to incidental use.

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 (e) improper site preparation or maintenance.

HP's limited warranty is valid in any country/region or locality where HP has a support presence for this product and where HP has marketed this product. The level of warranty service you receive may vary according to local standards. HP will not alter form, fit or function of the product to make it operate in a country/region for which it was never intended to function for legal or regulatory reasons. TO THE EXTENT ALLOWED BY LOCAL LAW, THE ABOVE WARRANTIES ARE EXCLUSIVE AND NO OTHER WARRANTY OR CONDITION, WHETHER WRITTEN OR ORAL, IS EXPRESSED OR IMPLIED AND HP SPECIFICALLY DISCLAIMS ANY IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY, SATISFACTORY QUALITY, AND FITNESS FOR A PARTICULAR PURPOSE. Some countries/regions, states or provinces do not allow limitations on the duration of an implied warranty, so the above limitation or exclusion might not apply to you. This warranty gives you specific legal rights and you might also have other rights that vary from country/region to country/region, state to state, or province to province.

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Print cartridge limited warranty

NOTE

The following warranty applies to the print cartridge that came with this printer.

This HP product is warranted to be free from defects in materials and workmanship. This warranty does not apply to products that (a) have been refilled, refurbished, remanufactured or tampered with in any way, (b) experience problems resulting from misuse, improper storage, or operation outside of the published environmental specifications for the printer product or (c) exhibit wear from ordinary use. To obtain warranty service, please return the product to place of purchase (with a written description of the problem and the print samples) or contact HP customer support. At HP's option, HP will either replace products that prove to be defective or refund your purchase price. TO THE EXTENT ALLOWED BY LOCAL LAW, THE ABOVE WARRANTY IS EXCLUSIVE AND NO OTHER WARRANTY OR CONDITION, WHETHER WRITTEN OR ORAL, IS EXPRESSED OR IMPLIED AND HP SPECIFICALLY DISCLAIMS ANY IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY, SATISFACTORY QUALITY, AND FITNESS FOR A PARTICULAR PURPOSE. TO THE EXTENT ALLOWED BY LOCAL LAW, IN NO EVENT WILL HP OR ITS SUPPLIERS BE LIABLE FOR DIRECT, SPECIAL INCIDENTAL, CONSEQUENTIAL (INCLUDING LOST PROFIT OR DATA), OR OTHER DAMAGE, WHETHER BASED IN CONTRACT, TORT, OR OTHERWISE. THE WARRANTY TERMS CONTAINED IN THIS STATEMENT, EXCEPT TO THE EXTENT LAWFULLY PERMITTED, DO NOT EXCLUDE, RESTRICT OR MODIFY AND ARE IN ADDITION TO THE MANDATORY STATUTORY RIGHTS APPLICABLE TO THE SALE OF THIS PRODUCT TO YOU.

HP LaserJet printing supplies

In many countries/regions, this product's printing supplies (for example, the print cartridge and fuser) can be returned to HP through the HP Printing Supplies Environmental Program. This easy-to-use and free take-back program is available in more than 30 countries/regions. Multilingual program information and instructions are included in every new HP LaserJet print-cartridge and supplies package.

HP Printing Supplies Returns and Recycling Program Information

Since 1992, HP has offered HP LaserJet supplies return and recycling free of charge in the world market where HP LaserJet supplies are sold. Postage-paid and pre-addressed labels are included within the instruction guide in most HP LaserJet print cartridge boxes. Labels and bulk boxes are also available through the Web site at <http://www.hp.com/recycle>. More than 10 million HP LaserJet print cartridges were recycled globally in 2002 through the HP Planet Partners supplies recycling program. This record number represents 26 million pounds of print cartridge materials that were diverted from landfills. Worldwide, HP recycled an average of 80% of the print cartridge by weight, consisting primarily of plastic and metals. Recycled plastics and metals are used to make new products, such as HP products, plastic trays, and spools. The remaining materials are disposed of in an environmentally responsible manner.

- **U.S. returns** For a more environmentally responsible return of used cartridges and supplies, HP encourages the use of bulk returns. Simply bundle two or more cartridges together and use the single, postage-paid, pre-addressed UPS label that is supplied in the package. For more information in the U.S., call 800-340-2445 or visit the HP LaserJet Supplies Web site at <http://www.hp.com/recycle>.
- **Non-U.S. returns** Non-U.S. customers should call the local HP Sales and Service Office or visit <http://www.hp.com/recycle> for further information regarding availability of the HP Supplies Returns and Recycling Program.
- **Material Safety Data Sheets (MSDSs)** For more information regarding toner safety, visit the <http://www.hp.com/go/msds> Web site.

Declaration of Conformity statements

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 1160 printer
Regulatory Model ³⁾: BOISB-0402-02
Product Options: ALL

conforms to the following Product Specifications:

Safety: IEC 60950:1999 / EN 60950:2000
IEC 60825-1:1993 +A1:1997 +A2:2001 / EN 60825-1:1994 +A11:1996 +A2:2001 (Class 1 Laser/LED Product)
GB4943-2001

EMC: CISPR 22:1997 / EN 55022:1998 Class B¹⁾
EN 61000-3-2:2000
EN 61000-3-3:1995 / A1
EN 55024:1998
FCC Title 47 CFR, Part 15 Class B²⁾ / ICES-003, Issue 3
GB9254-1998, GB17625.1-1998 / CNS13438

Supplementary Information:

The product herewith complies with the requirements of the EMC Directive 89/336/EEC and the Low Voltage Directive 73/23/EEC, 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.
- 3) For regulatory purposes, this product is assigned a Regulatory model number. This number should not be confused with the marketing name (HP LaserJet 1160 printer) or the product number (Q5933A).

Boise, Idaho 83714, USA

30 April 2004

For Regulatory Topics 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 140, Böblingen, D-71034, Germany (FAX: +49-7031-14-3143)

USA Contact: Product Regulations Manager, Hewlett-Packard Company, PO Box 15, Mail Stop 160, Boise, Idaho 83707-0015, USA (Phone: 208-396-6000)

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 ⁴⁾: HP LaserJet 1320 Series printer, HP LaserJet 1320n printer, HP LaserJet 1320tn printer, HP LaserJet 1320nw printer
Regulatory Model ³⁾: BOISB-0402-00/BOISB-0402-01
Including
Q5931A - Optional 250-Sheet Input Tray
Product Options: ALL

conforms to the following Product Specifications:

Safety: IEC 60950:1999 / EN 60950:2000
IEC 60825-1:1993 +A1:1997 +A2:2001 / EN 60825-1:1994 +A11:1996 +A2:2001 (Class 1 Laser/LED Product)
GB4943-2001

EMC: CISPR 22:1997 / EN 55022:1998 Class B¹⁾
EN 61000-3-2:2000
EN 61000-3-3:1995 / A1
EN 55024:1998
FCC Title 47 CFR, Part 15 Class B²⁾ / ICES-003, Issue 3
GB9254-1998, GB17625.1-1998 / CNS13438

Supplementary Information:

The product herewith complies with the requirements of the EMC Directive 89/336/EEC and the Low Voltage Directive 73/23/EEC, 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.
- 3) For regulatory purposes, this product is assigned a Regulatory model number. This number should not be confused with the marketing name (HP LaserJet 1320 Series printers) or the product numbers (Q5927A, Q5928A, Q5929A, and Q5930A).
- 4) Regulatory information regarding radio module approvals for the HP LaserJet 1320nw (Regulatory Model Number: BOISB-0402-01) can be found in the wireless user guide for that product.

Boise, Idaho 83714, USA

30 April 2004

For Regulatory Topics 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 140, Böblingen, D-71034, Germany (FAX: +49-7031-14-3143)

USA Contact: Product Regulations Manager, Hewlett-Packard Company, PO Box 15, Mail Stop 160, Boise, Idaho 83707-0015, USA (Phone: 208-396-6000)

Laser safety statement

The Center for Devices and Radiological Health (CDRH) of the U.S. Food and Drug Administration has implemented regulations for laser products manufactured since August 1, 1976. Compliance is mandatory for products marketed in the United States. The printer is certified as a "Class 1" laser product under the U.S. Department of Health and Human Services (DHHS) Radiation Performance Standard according to the Radiation Control for Health and Safety Act of 1968.

Since radiation emitted inside the printer is completely confined within protective housings and external covers, the laser beam cannot escape during any phase of normal user operation.

WARNING!

Using controls, making adjustments, or performing procedures other than those specified in this user guide could result in exposure to hazardous radiation.

Canadian DOC regulations

Complies with Canadian EMC Class B requirements.

«Conforme à la classe B des normes canadiennes de compatibilité électromagnétiques.
«CEM».»

Korean EMI statement

사용자 안내문 (B 급 기기)

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