hp business inkjet
3000 • 3000n • 3000dtn

invent

service and support
manual

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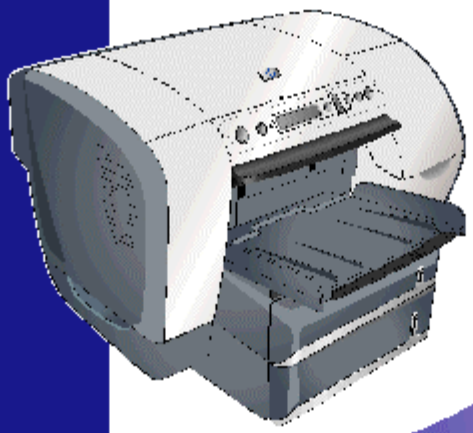
Module 1

hp business inkjet printer 3000 series

tour the product



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Product price:

- US$ 799 (Base), US$ 1099 (SN), US$ 1299 (DN)

Product launch date:

- November 2002

Product positioning:

- Fast, cost-effective, full-featured color printer for two- to eight-person business workteams

Product features:

- Cost-effective color added at less than 7.9 cents per page with 20% coverage
- High duty cycle for print volumes up to 30,000 pages per month
- Separate color ink cartridges for economical ink supplies management via replacement of one color at a time
- Laser-like speeds for color printing (14 ppm draft color/8 ppm normal color) with uncompromised print quality
- Standard dual 160 MHz and 400MHz processors handles and 88 MB of RAM (expandable to 344 MB) to quickly print large complex jobs
- Photo-quality printing (using hp photoREt III color technology) with up to 2400 by 1200 dpi with automatic color calibration
- Printer drivers for hp PCL6, hp PCL 5c, and printer emulation driver for PostScript® 3™

- Connect via USB or Parallel port or to PC or Mac® networks via hp jetdirect 615n EIO print server card (optional on the 3000)
- Embedded Web server (EWS, optional on the 3000) for proactive maintenance and supplies management
- 700 sheet paper tray and auto duplex unit (both standard on the 3000dtn)

key dates

The following are the key dates related to the printer:

- Announcement Date: September 23, 2002
- Blind CPL: October 1, 2002
- Live CPL: November 1, 2002
- DC Ship Date (FCS): November 18, 2002
- Channel availability: December 2, 2002

key selling points

The hp business inkjet printer 3000/3000n/3000dtn features:

- High print speeds (14/8ppm - laser equivalent speeds; 21/18 ppm in fast mode)
- Embedded Web Server - E-support (needs EIO JetDirect network card)
- Superior network performance and manageability by using HP PCL5C/6 and PostScript 3 emulation
- Up to 30,000 pages/month duty cycle
- Black, Cyan, Magenta, and Yellow (KCMY) high-capacity individual ink cartridges
- Wide range of media size: 3.5 x 5.5 inches to 8.5 x 14 inches
- 88 MB RAM, upgradeable to 344 MB
- High-capacity trays and manual feeds:
- Main tray supports a maximum of 300 sheets
- Tray 1 (rear manual feed unit) allows single-sheet manual feeds
- Optional second paper tray supports a maximum of 700 sheets (standard on the 3000dtn)
- Optional multipurpose tray (in Tray 1 slot) supports a maximum of 100 sheets
- Autoduplexer for two-sided printing (standard on the 3000dtn)
- Output tray holds a maximum of 300 sheets

unique product features

- Laser-like speeds for color printing:
- 14/8 ppm
- HP PhotoRet III print quality
- Low Total Cost of Ownership (TCO) at approximately 1.9 US cents mono cpp and 7.9 US cents color cpp
- Superior network performance with support for:
- HP PCL5C/6 and PostScript 3 emulation
- HP enhanced input/output (EIO) JetDirect (external)
- Built-in Universal Serial Bus (USB) and parallel ports
- Embedded Web server (EWS)
- LaserJet compatible printer drivers and installer
- Remote printer management using an embedded web server with:
- Remote printer & supplies status
- Remote printer configuration
- Remote printer diagnostic/troubleshooting
- Email alerts
- Link to hp instant support
- Usage information, such as amount of ink and number of pages
- Event log
- Ink supplies ordering
- hp business store
- Support for accessories and consumables:
- Individual KCMY, high-capacity ink cartridges
- Optional auto-duplex unit for double-sided printing
- Optional 700 sheet tray

product positioning statement

hp business inkjet 3000 series

fast, cost effective, full featured color printer for workgroups

breakthrough speeds

up to 14ppm monochrome and 8ppm color in Normal mode; up to 21ppm monochrome and 18ppm color in Fast mode.

built for business

high-capacity ink cartridges and lowest cost of ownership with robust duty cycles of up to 30,000 pages per month.

intelligent networking

connect to the network as easily and reliably as any hp LaserJet printer with PCL 5,6 & PS 3 as a standard.

www.hp.com

hp's fast, cost-effective, full-featured, high-capacity printer for small workteams of 2-8 users

product placement

hp business inkjet 3000	hp business inkjet 3000n	hp business inkjet 3000dtn
Part number: C8116a	Part number: C8117a	Part number: C8118a
Street price: $ 799	Street price : $ 1,099	Street price : $ 1,299
Live CPL: November 1, 2002	Live CPL: November 1, 2002	Live CPL: November 1, 2002
Placement: worldwide	Placement: worldwide	Placement: worldwide

comparison between hp business inkjet printer 3000, 3000n, 3000dtn

target customer

customer segment	customer profile	key requirements
Office workgroup in small-to medium-sized business (SMB)	Knowledge of color usage Comfortable with inkjet technology	Print professional-looking color documents and presentations Print high volume Higher-than-average-speed Low total cost of ownership
MIS managers in large companies	Decision makers Comfortable with inkjet technology	Print or publish professional documents High-speed printing Low TCO

customer profile and requirements

benefits

The hp business inkjet printer3000/3000n/3000dtn offers the following benefits to customers:

- fast color with best-in-class, laser-like performance
- high-performance 8 ppm color printing in normal mode
- low total cost of ownership (TCO)
- supplies status and alerts through hp embedded web server
- printer-sharing allows workteam to enjoy high-quality, high-speed printing for less
- innovative network printing is fast, reliable, easy to install and use, and includes laser compatibility

localization

Localization language options are available for the following items:

- Driver resources
- LCD control panel
- Online Help
- Readme text
- Getting Started Guide
- User's Guide

item	local languages in which the item is available	item availability in English only
Driver Resources for common installer- PCL5, PCL6 and PS for Windows	UFG, K, ISp, BNF, SwDa, DuPCR	all the other languages (see notes following table)
Driver Resources for PS for Mac	UFG, K, ISp	BNF, SwDa, DuPCR other languages
LCD control panel	UFG, ISp, BNF, SwDa, DuPCR	K other languages
Online help	UFG, K, ISp, BNF, SwDa, DuPCR	other languages
Readme file for Windows	UFG, K, ISp, BNF, SwDa, DuPCR	other languages
Readme file for Macintosh	UFG, K, ISp	BNF, SwDa, DuPCR other languages
Getting Started Guide	UFG, K, ISp, BNF, SwDa, DuPCR other languages	
User's Guide	UFG, K, ISp, BNF, SwDa, DuPCR	other languages

localization options

The acronyms listed in the table represent the following languages:

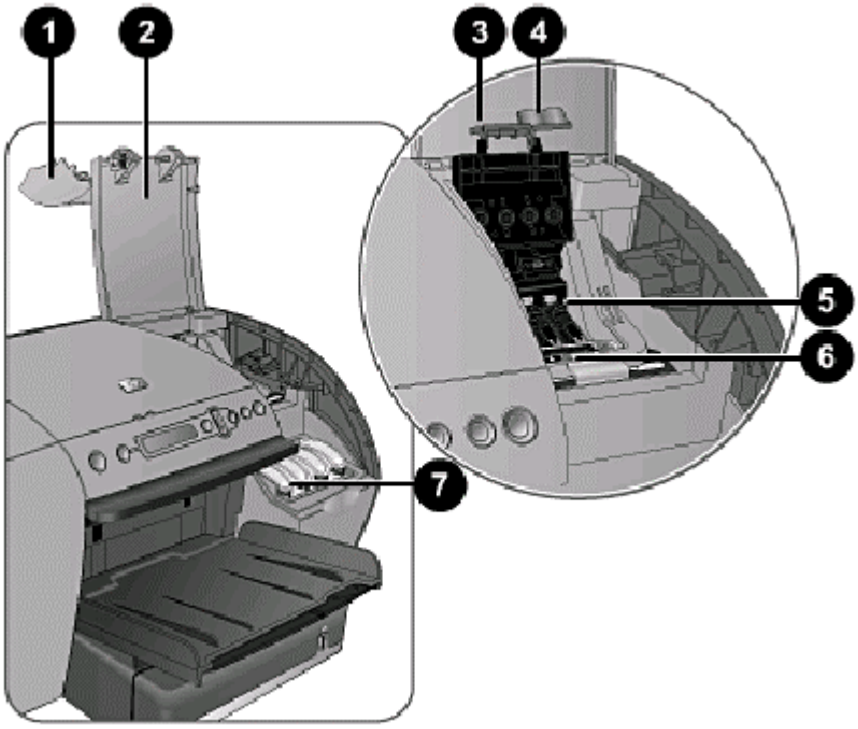
- UFG - English, French, and German
- K - Korean
- ISp - Italian and Spanish (Generic)
- BNF - Brazil Portuguese, Norwegian, and Finnish
- SwDa - Swedish and Danish
- DuPCR - Dutch, Polish, Czech, and Russian
- Other languages - Arabic, Greek, Hebrew, Hungarian, Turkish, Croatian, Romanian, Slovakian, and Slovenian

hp business inkjet printer 3000 series models

hp business inkjet printer 3000	hp business inkjet printer 3000n	hp business inkjet printer 3000dtn
Width: 592 mm (23.3 inches)	Width: 592 mm (23.3 inches)	Width: 592 mm (23.3 inches)
Height: 355 mm (14 inches)	Height: 355 mm (14 inches)	Height: 462 mm (18 inches)
Depth: 640 mm (25.2 inches)	Depth: 640 mm (25.2 inches)	Depth: 640 mm (25.2 inches)
Weight: 27.6 kg (60.8 lb)	Weight: 27.6 kg (60.8 lb)	Weight: 35.8 kg (78.9 lb)

printer comparison

top of the printer



top of the printer

The components located at the top of the printer are:

1. Ink cartridge cover - Provides access to ink cartridges.

2. Printhead cover - Provides access to printheads.

3. Hook - Connects to the catch and must be engaged for the printer to operate.

4. Printhead latch - Provides access for installing or removing printheads from their color-coded sockets.

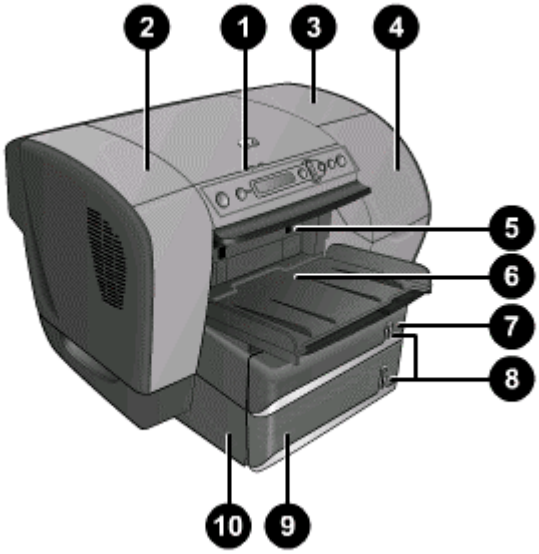
Note *To open the printhead latch, you must turn on the printer.*

5. Printheads - Like “writing pens” that apply the ink.

6. Catch - Metal bar that secures the hook and engages the printhead latch.

7. Ink cartridges - Reservoirs that hold the ink.

front of the printer

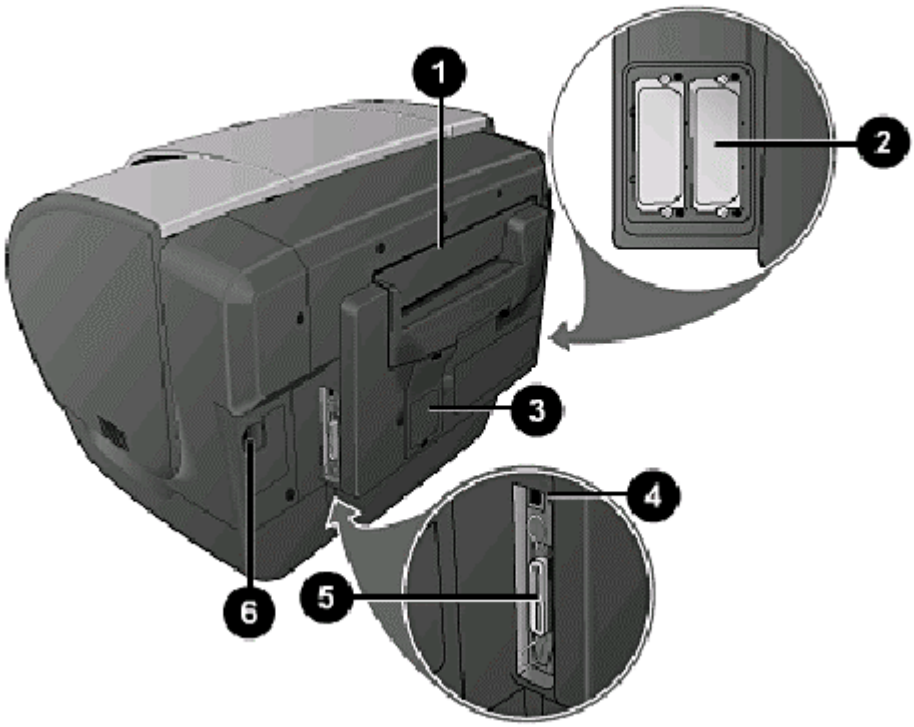


front of the printer

The components located at the front of the printer are:

1. LCD control panel - Configure settings and view status messages.
2. Top cover - Access the printing area.
3. Printhead cover - Access the printheads.
4. Ink cartridge cover - Access the ink cartridges.
5. Simplex or auto-duplex unit - For single-sided or double-sided printing.
6. Output bin - Collects the printed pages.
7. Tray 2 - Holds up to 300 sheets of paper.
8. Media level indicators - View the media levels.
9. Tray 3 - Holds as many as 700 sheets of paper (optional on the 3000 and 3000n).
10. Tray 3 base - Supports tray 3 and the printer.

rear of the printer



rear of the printer

The components located at the rear of the printer are:

1. Tray 1 - Must be removed to install the optional multipurpose tray.

2. EIO slots - Install an HP JetDirect print server in this slot (HP JetDirect comes by default with the hp business inkjet printers 3000n and 3000dtn).

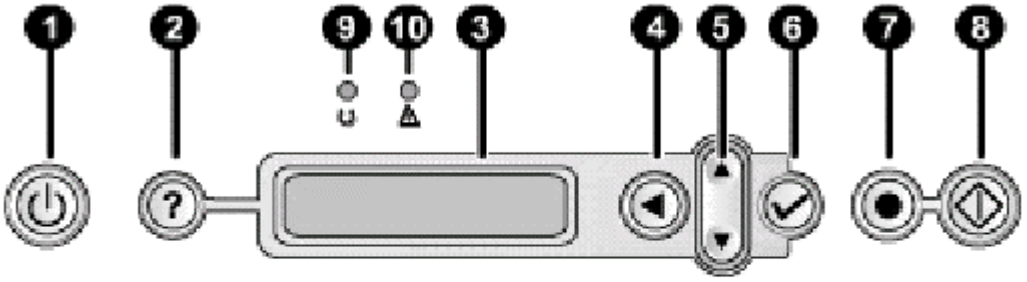
3. DIMM cover - Install extra memory here.

4. USB port - Connect the USB cable to this port.

5. Parallel port - Connect the parallel cable to this port.

6. Power input - Attach the power cord.

LCD control panel



LCD control panel

From the LCD control panel you can:

- Configure printer settings.
- View printer status.
- View printer messages.
- Diagnose printer problems.

The control panel contains the following:

1. Power Turns the printer off and on.

2. Help Provides additional information about printer messages or menus.

3. LCD display Shows status and error messages, as well as ink cartridge levels.

4. Back Navigates backward one level in the menus.

5. Up and down arrows Navigates menu items and increases or decreases numerical values.

6. Select Selects highlighted menu items. This button also restarts printing after continuable errors.

7. Cancel job Cancels the current print job. The time it takes to cancel depends on the size of the print job. Press this button only once to cancel the current print job.

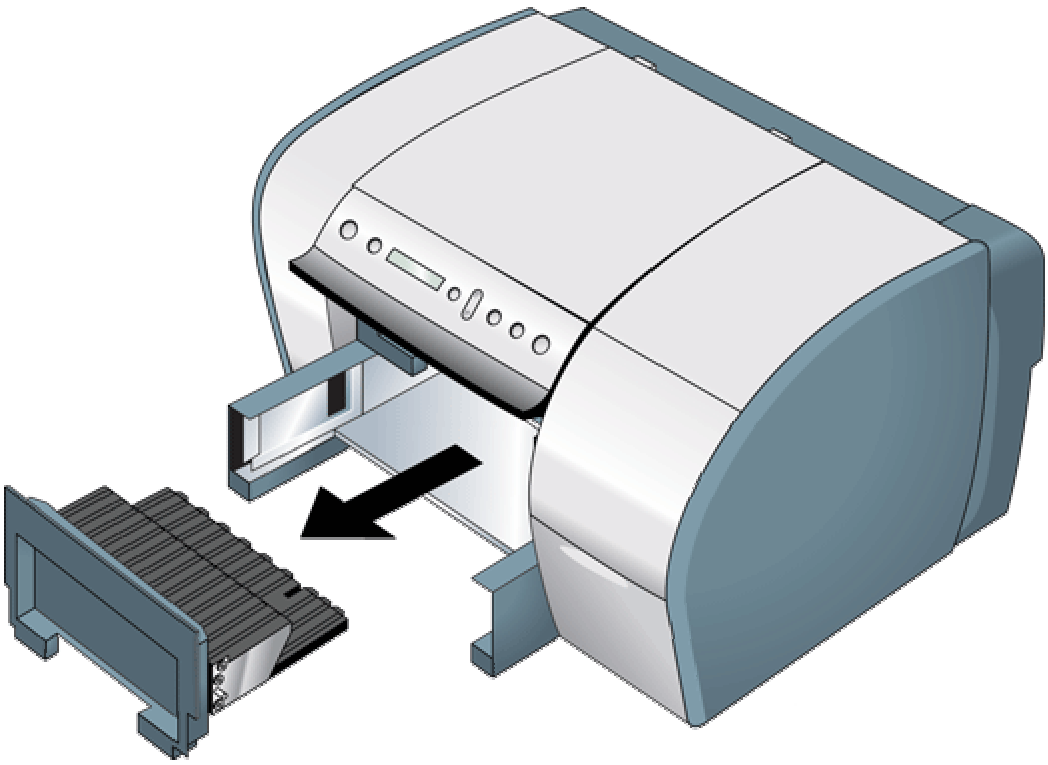
8. Pause/resume Pauses or resumes a print job; also exits menus and exits the LCD control panel help.

9. Ready light On indicates the printer is online and ready to accept print jobs. On may also indicate that the printer has data it has finished processing and is waiting to receive more data. Off indicates the printer is either offline, turned off, or has no data to process. Flashing indicates the printer is receiving data, or if the LCD displays the message PLEASE WAIT, the printer is in the process of stopping a print job to go offline.

10. Attention light On indicates a critical error has occurred and the printer requires attention (a critical-error message is usually also displayed). Off indicates no conditions exist that require attention (a printer-status message is usually also displayed). Flashing slowly indicates the printer needs attention, typically because the paper tray is empty or the output bin is full (a warning message is usually also displayed). Flashing quickly indicates the printer has encountered an error that requires a person's attention, such as an open door or paper jam (an error message is usually also displayed).

Note *Additional menu items can appear in the LCD control panel depending on the hardware modules installed in the printer.*

auto-duplex unit



auto-duplex unit

The printer can automatically print on both sides of paper with the optional auto-duplex unit (standard on the 3000dtn). It can be purchased separately for the hp business inkjet printer 3000/3000n. This unit is installed in the front of the printer. When printing on both sides of paper, the printer might require additional memory.

specifications

Please refer to the datasheet for detailed information.

competitive positioning

specification summary	HP Business Inkjet 3000	Lexmark C720	Epson Aculaser C1000	QMS 2200 Desklaser
engine	HP	Hitachi	Minolta QMS	Minolta QMS
technology	4-color Thermal Inkjet MIDS	4-pass color laser	4-pass color laser	4-pass color laser
econofast speed--black/ color	21/18 ppm	N/A	20 ppm	N/A
laser equivalent speed--black/color	14/8 ppm	24/6 ppm	5 ppm	20/5 ppm
resolution--default	600 x 600 dpi	600 x 600 dpi	600 x 600 dpi	1200 dpi
resolution--maximum	2400 x 1200 dpi on photopaper	2400 dpi	2400 dpi using Epson RIT	1200 dpi
pdl compatibility--standard	PCL5/6 & PS3 emulation	PCL6	ESC/P (host based)	GDI (host-based)
pdl compatibility--OS	Win, DOS, Mac OS 8.1, Novell, Linux, IBM OS/2	Win, DOS, Mac OS 8.1, Novell, Linux, IBM OS/2	Win 9x, ME, NT4.0, 2000; Mac OS 8.1 or later	Win only
memory--standard	88 MB	32 MB	16 MB	32 MB
memory--maximum	344 MB	386 MB	256 MB	96 MB
paper capacity--input	standard 300, optional 700+100	standard 250, optional 250+500	standard 500 + 150, optional 500	standard 500+150, optional 500
paper capacity--output	standard: 300	standard: 250	standard: 500	standard: 500
cost per page: 5% K	2.2 cents per page US	1.7 cents per page US	2.0 UK pence per page (3.0 cents/page US)	2.6 cents per page US
cost per page: 20% CMYK	8.4 cents per page US	9.5 cents per page US	8.8 UK pence per page (13.4 cents/page US)	12.2 cents per page US
embedded web server (ews)	yes, for printer diagnostics; also, Chai VM e-services	yes, MarkVision Professional web configuration tool	not available	yes, Crown View Web based printer management software

auto-duplexer/hdd	available as options	duplexer option alone available	only auto-duplexer option available	only auto-duplexer available as option
network connectivity	USB / Parallel / 2 EIO slots ; optional Ethernet, 802.11 via EIO	Parallel; optional USB, Ethernet, Token Ring	Parallel/USB; optional Ethernet 10/100Base-TX	Parallel / Ethernet 10 / 100Base-Tx
duty cycle	30,000 pages per month	35,000 pages per month	35,000 pages per month	17,500 pages per month (35,000 (50:50 color:mono))
warranty	1 year limited	1 year LexOnsite	1 year on-site	1 year limited
street price	$799 US/$1099 US with network card $1299 US with network card + 700-sheet paper tray	$1699 US/$2069 US with net work card $3539 US with network card + duplexer	€1300 ($1260 US), €1400 with network card ($1360 US), (exchange rate € 1 = $0.972 US)	$799 US after $200 rebate $1299 US with autoduplexer

specification comparisons with competitors' current products

hardware accessories

accessories	part number
100-sheet multipurpose tray	C8228A
700-sheet tray (3000/3000n only)	C8226A
Auto-duplex unit (3000/3000n only)	C8227A
HP 4 MB flash DIMM	C4287A
HP 64 MB SDRAM DIMM	C7846A
HP 128MB SDRAM DIMM	C9121A
HP Font DIMM, Korean	D4838A
HP EIO hard disk drive (10 GB)	J6054B
HP IEEE-1284 A-B parallel cable, 2 m (6.6 ft)	C2950A
HP IEEE-1284 A-B parallel cable, 3 m (9.8 ft)	C2951A
HP A-B USB cable, 2 m (6.6 ft)	C6518A
networking accessories	www.hp.com/go/networkprinting
HP Jetdirect 615n (EIO) Internal Print Server Fast Ethernet (10/100Base-TX)	1J6057A
HP Jetdirect 680n (EIO) Internal Print Server Wireless 802.11b	J6058A
HP Jetdirect 610n (EIO) Internal Print Server Token Ring	J4167A
HP Jetdirect 600n (EIO) Internal Print Server Ethernet (10Base-T, 10Base2) and LocalTalk	J3111A
HP Jetdirect 600n (EIO) Internal Print Server Ethernet (10Base-T)	J3110A
HP Jetdirect External Print Server 170x (10Base-T)	J3258B
HP Jetdirect External Print Server 175x	J6035A
HP Jetdirect External Print Server 300x (10/100Base-TX, 1-port)	J3263A
HP Jetdirect External Print Server 310x	J6038A

hardware accessories for hp business inkjet printer 3000 series

user replaceable components

part number	description	relative replacement rate
68116-67001	Door-Main Access SVC	7%
68116-67009	Assy - Manual Feed Unit SVC	3%
68116-67010	Assy - O/P Tray SVC	10%
68116-67011	Assy - Tray 2 SVC	10%
68116-67012	Assy - Door Access SVC	10%
68116-67019	Assy-Pick Roller SVC	3%
68116-67020	Assy-Separation Roller SVC	3%
68116-67023	Snap-On Foot SVC	1%
68116-67030	Cover - DIMM SVC	5%
68116-67062	Assy - Simplexer SVC	6%
68116-67063	Assy - Duplexer SVC	3%
68116-67071	Assy - Tray 3 SVC	3%
68116-67072	MP Tray 2 SVC	1%

user replaceable components

compatible hp media types

group	media
Everyday paper	HP multipurpose paper, HP printing paper, HP office paper, HP office recycled paper
Business communications paper	HP premium inkjet paper (not supported by the auto-duplex unit), HP professional brochure and flyer paper, HP premium inkjet heavyweight paper
Presentation paper	HP premium inkjet transperency film, HP premium plus inkjet transperency film,
Design paper	HP design heavyweight paper, HP design glossy paper, HP design glossy paper
Photo paper	HP premium plus photo paper - glossy, HP premium plus photo paper - matte, HP colorfast photo paper, HP premium photo paper, HP everyday photo paper - semi-gloss, HP everyday photo paper - matte, HP photo paper, HP photo quality inkjet paper

compatible hp media types

upgrades

paper handling upgrades

Upgrade the printer by obtaining one of the following paper handling upgrades:

- Purchase the auto duplex unit (part number C8227A) and tray 3, 700-sheet paper feeder (part number C8226A), to upgrade the hp business inkjet printers 3000/3000n.
- Purchase the multipurpose tray (part number C8228A) to upgrade hp business inkjet printers 3000/3000n/3000dtn.

networking upgrades

Purchase one of the following HP Jetdirect print servers to upgrade the hp business inkjet printer 3000:

- HP Jetdirect 615n fast Ethernet (10/100 Base-TX) internal print server (part number J6057A)
- HP Jetdirect 680n 802.11b wireless internal print server (part number J6058A)
- HP Jetdirect 610n token ring internal print server (part number J4167A)
- HP Jetdirect 600n Ethernet (10 Base-T, 10 Base2) internal print server (part number J3111A)
- HP Jetdirect 600n Ethernet (10 Base-T) internal print server (part number J3110A)
- HP Jetdirect connectivity card for USB, serial, and LocalTalk connections (part number J4135A)

Visit http://www.hp.com/support/ businessinkjet3000.

firmware upgrades

The firmware will be 100% flashable throughout the life of the product.

software upgrades

Upgrade the printer software by using the following URL:

http://www.hp.com/support/ businessinkjet3000

memory upgrades

Upgrade the printer memory by purchasing the following accessories:

- HP 4 MB flash DIMM (part number C4287A)
- HP 64 MB SDRAM DIMM (part number C7846A)
- HP 128 MB SDRAM DIMM (part number C9121A)
- Localized font DIMM, Korean (part number D4838A)
- HP EIO hard disk drive (10 GB) (part number J6054B)

consumable part numbers

part no.	name	ink capacity	estimated mean life	list price (US$) -- tentative	street price (US$)
C5023A	HP No. 12 Black Printhead	N.A.	45,000	82.99	70.99
C5024A	HP No. 12 Cyan Printhead	N.A.	105,000	82.99	70.99
C5025A	HP No. 12 Magenta Printhead	N.A.	105,000	82.99	70.99
C5026A	HP No. 12 Yellow Printhead	N.A.	105,000	82.99	70.99

printhead part numbers, capacities, mean life, and prices

part no.	name	ink capacity	list price (US$) -- tentative	street price (US$)	pages out
C4844A	HP No. 10 Black ink cartridge	69 mL	38.99	33.99	1750
C4804A	HP No. 12 Cyan ink cartridge	55 mL	77.99	65.99	3300
C4805A	HP No. 12 Magenta ink cartridge	55 mL	77.99	65.99	3300
C4806A	HP No. 12 Yellow ink cartridge	55 mL	77.99	65.99	3300

ink cartridge part numbers, capacities, and prices

technology update

Thermal Inkjet Technology

Thermal Inkjet Technology is based on HP's disposable ink cartridges and printheads. Each printhead contains a small reservoir known as the firing chamber, filled with a tiny measure of ink. This ink is heated with a thin-film resistor layered above the firing chamber. As the ink heats up, it expands to form a bubble. The bubble expands until it bursts, at which point the ink is forced through the nozzle located below the firing chamber and out onto the paper. This process is repeated up to 12,000 times per second, and creates residual heat in the resistor. A layer of silicon is placed above the resistor to cool it by transferring the residual heat awa

ColorSmart II

ColorSmart II is used by the PCL5 and PostScript drivers. This technology optimizes the color and halftoning for each element in a document (such as text, graphics, and photographs), providing consistent color treatment for everything on a page.

ColorSmart II uses a smooth halftone for photographs and a detail halftone for text, raster graphics, and vector graphics. When transparencies are printed, HP ColorSmart II chooses specialized colors to provide the best projection quality.

ColorSmart II is also the most reliable setting for PANTONE color reproduction.

ColorSmart III

ColorSmart III enables the printer driver to scan the contents (text, graphics, and images) of pages to generate optimal settings for each document printed. ColorSmart III further extends ColorSmart technology with new image-enhancement tools:

- HP SmartFocus—A new algorithm that improves image clarity in high-resolution files, as well as continues optimization for low-resolution images from the Internet or multimedia sources. Available with HPA.
- HP Automatic Contrast Enhancement (ACE)—Brightens colors and sharpens details in images captured under poor lighting conditions. Available with HPA.
- sRGB (standard Red, Green, Blue) calibration—An industry peripheral color standard developed jointly by HP and Microsoft that improves color matching between the source image, monitor, and printed page.
- Intel MMX/SIMD technology—Allows the driver to process media-rich data in parallel for faster processing of color and image graphics.
- CIECAM97s—Improves color maps for more accurate skin tones and richer hues.
- Object based color mapping enables optimum color quality. Available in PCL5.
- Color control settings enable manual adjustment in saturation, brightness, and tone. Available in HPA.

PhotoREt III

Photo Resolution Enhancement technology enables business inkjet printers to produce photo-quality color images. PhotoREt III's Color Layering technology combines small ink-drop-volume ink cartridges, vibrant, fade-resistant color inks, new halftoning algorithms, and specially developed HP Premium Plus Photo paper to deliver outstanding image quality and performance. The increased capacity of HP business inkjet 2230/2280 printers place up to 20 drops of ink in a single dot that creates finer color control and produces five times the number of colors produced by PhotoREt II printers. PhotoREt III enables faster color print speeds without sacrificing speed for print qualit

UnderPrinting

UnderPrinting prints a small amount of color ink (cyan or magenta) underneath the black ink. The pigment-based black ink penetrates the media at a slower rate than the dye-based color inks. UnderPrinting increases the penetration rate of the black ink.

The new printhead arrangement of the HP business inkjet 2230/2280 allows color ink to be printed on the page before the black ink in both carriage directions. Since black can now be printed in both directions with UnderPrinting, faster throughput can be achieved. UnderPrinting also provides significantly improved smudgefastness, dry time, K Optical Density, and print quality.

value added services

embedded Web server

The hp business inkjet printer is equipped with an embedded Web server (optional for the 3000) that is actually a remote management tool. The embedded Web server can be used from a standard Web browser or from the Toolbox (Windows only).

Use a standard Web browser and EWS to do the following:

- View the usage and event log
- Send email alerts and notifications
- Configure printer, events, and security information
- Obtain status information
- Perform printer diagnostics
- Manage printers remotely

hp instant support web site

The hp instant support Web site hosts a set of dynamic Web resources for printers. These resources help in tracking the status and usage of the printer. In addition, the hp instant support Web site helps in managing the printer and planning the purchase of consumables.

Access the hp instant support Web site to view the following information:

- Personalized printer information
- Printer usage pattern
- Error alerts
- Recommended actions to resolve errors
- Proactive announcement on release of firmware and drivers
- Direct access to printer reference materials, tips, and service options

myPrintMileage

myPrintMileage is a Web-based tool that keeps track of your printer usage information to help you plan the purchase of supplies more effectively.

myPrintMileage displays the following:

- The amount of ink you have used
- Whether you use more black or color ink
- The average amount of media you use per month for each media type
- The number of pages printed
- The estimated number of pages you can print with the amount of ink remaining

JetCAPS

JetCAPS is a set of products and solutions that can be mixed, matched, and customized to complement hp printers.

Use JetCAPS offers the following benefits:

- Document quality standards
- Huge savings/print on demand
- Printer consolidation

- Proven technical feasibility

hp mobile printing drivers

The hp mobile printing driver simplifies access to networked printers.

Use the hp mobile printing driver to do the following:

- Print from a conference room
- Print at a satellite office
- Print remotely from a home office

education and training

documentation/training	information	purpose
release notes	Includes installation and the latest printer information. Includes last minute changes and software troubleshooting tips.	
reference guide	Procedures for setting up, maintaining, and troubleshooting the printer.	To set up the printer.
setup poster	Illustrated setup information. It is available on the Starter CD.	To set up the printer.
Printer Driver Online Help (Windows only)	Procedures for using the printer.	To use the printer.
HP Jetdirect Print Server Administrator's Guide	Procedures for configuring and troubleshooting the HP JetDirect print server.	To set up and troubleshoot the HP JetDirect print server.
Embedded Web Server	Provides configuration, status, and diagnostic information about the printer.	
http://www.hp.com/support/businessinkjet3000	Provides the latest printer software, product information and support information available for the printer.	
HP Business Inkjet 3000 NPI training	Training for authorized service providers, bench technicians, call centers, customer care centers, customer engineers, repair technicians, response centers, and software engineers.	To use the printer and troubleshoot the printer problems.

education and training available for the printer

service and support

HP offers various support services to troubleshoot and diagnose printer problems and provides instructions for service and repair. HP also provides documentation and online and telephone support for troubleshooting.

support

- Express Exchange or unit exchange by courier assist
- Support Packs available
- One year

online support

HP provides several resources on the Web for troubleshooting. Access the URL http://www.hp.com/go/support for help regarding the following parameters:

- Setting up and using the printer
- Downloading printer drivers
- Solving a problem
- Ordering a product

Customers can also find product information on the www.hp.com Web site.

telephone support

- Available worldwide
- One year

Representatives at Customer Care Center answer questions regarding the setup, configuration, installation, and operation of the printer. They also help troubleshoot and diagnose printer problems and provide instructions for service and repair. Before calling a Customer Care Center representative, the customer needs to provide information regarding:

- Results of a configuration page
- Brand and model of the computer
- Operating system of the computer
- Printer driver installed

regional repair strategy

The regional repair strategy includes:

- North America – Express Exchange
- Europe – next day unit exchange by courier assist
- Asia Pacific & Latin America – Exchange, Support Packs

warranty period

duration

hp product	duration of limited warranty
Printer software	1 year
Ink cartridges	depletion of original ink or 30 months from date of insertion, whichever comes first
Accessories	1 year
Printer peripheral hardware	1 year

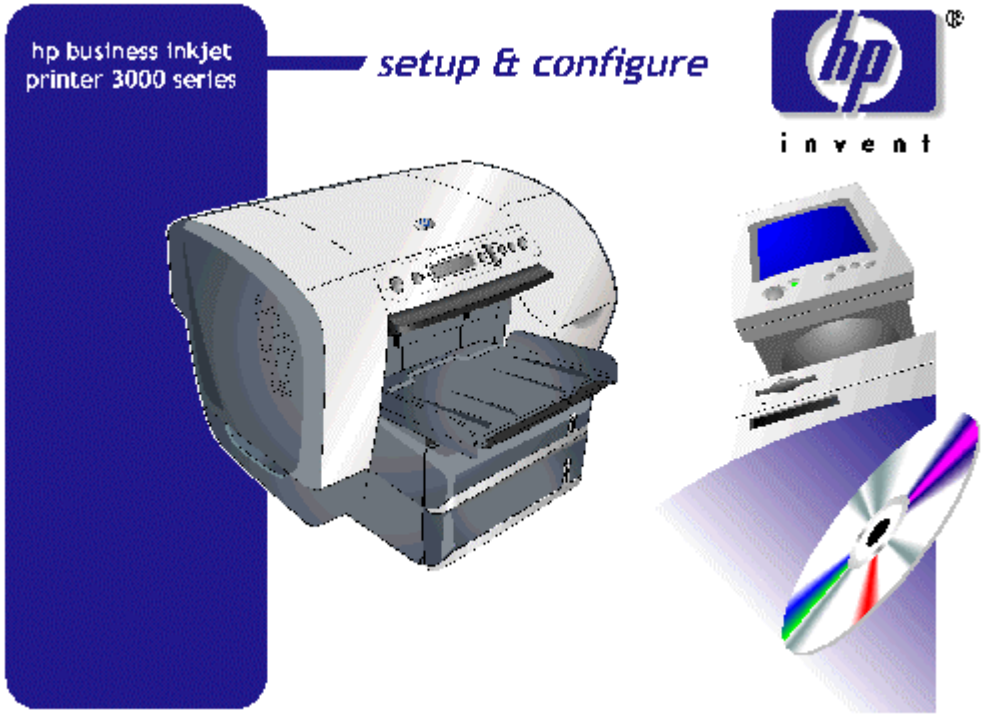
repair and warranty information

Hewlett-Packard warrants to the end-user customer that the HP product will be free from defects for the specified duration from the date of purchase. HP's limited warranty covers those defects that arise due to normal use.

limited warranty statement

The limited warranty statement for the printer is in the hp business inkjet printer 3000, 3000n, 3000dtn user guide.

Module 2


hp business inkjet
printer 3000 series
setup & configure
invent

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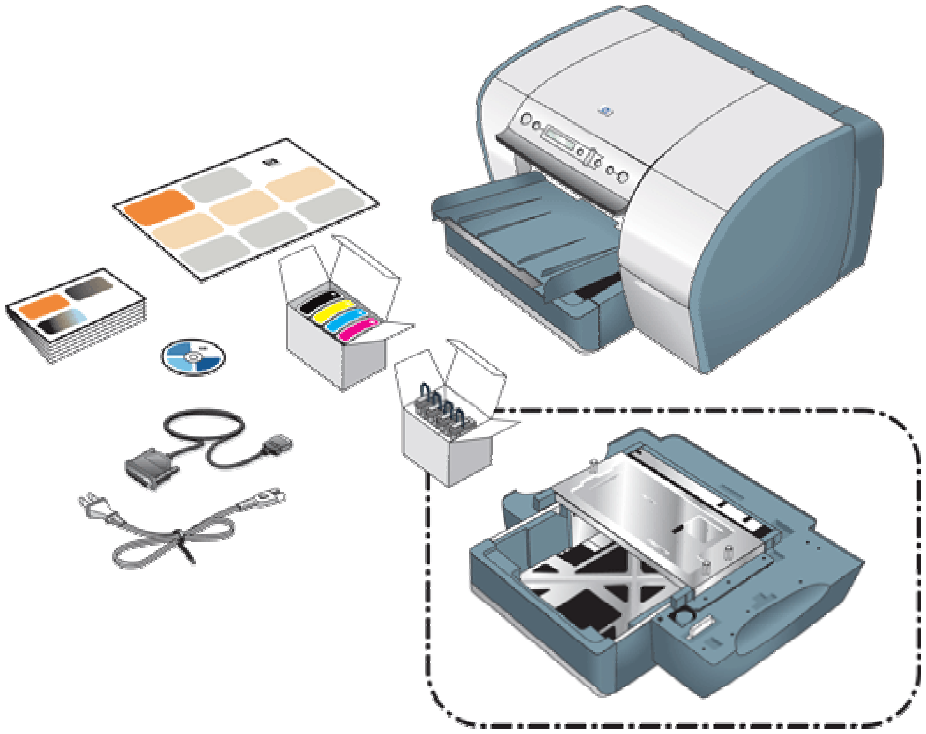
hardware setup requirements

operating system	minimum operating system requirements	recommended operating system requirements
Windows 98	486DX-100 Mhz 16-MB RAM 4-MB free hard-disk space	Pentium 266 Mhz 32-MB RAM 4-MB free hard disk space
Windows Me	Pentium 166 Mhz 32-MB RAM 4-MB free hard disk space	Pentium 266 Mhz 64-MB RAM 8-MB free hard disk space
Windows NT 4.0	Pentium 100 MHz 32-MB RAM 8-MB free hard disk space	Pentium 266 MHz 64-MB RAM 8-MB free hard disk space
Windows 2000	Pentium 166 Mhz 64-MB RAM 650-MB free hard disk space	Pentium 266 Mhz 64-MB RAM 650-MB free hard disk space
Windows XP	Pentium 233 MHz 64-MB RAM 1.5-GB free hard disk space	Pentium 300 Mhz 128-MB RAM 1.5-GB free hard disk space
Mac OS 8.6 - 9.2.2 (Classic)	64-MB RAM 2-MB free hard disk space	128-MB RAM 2-MB free hard disk space
Mac OS X - 10.2.1	128-MB RAM 10-MB free hard disk space	256-MB RAM 10-MB free hard disk space

minimum and recommended system requirements

contents of the box

The hp business inkjet printer 3000/3000n/3000dtn includes the following:



Tray 1. (installed in rear of printer)

Tray 2.

Tray 3 and Tray 3 base. (included with the hp business inkjet 3000dtn printer)

JetDirect print server (not shown), which features an embedded web server for printer and supplies management (included with the hp business inkjet 3000n/3000dtn printer)

Auto-duplex unit. (included with the hp business inkjet 3000dtn printer) An optional accessory for the hp business inkjet printer 3000/3000n Base SKU and included with the hp business inkjet printer 3000dtn.

Ink cartridges box. Includes four ink cartridges of the following colors:

- Black No. 10
- Cyan No. 12
- Magenta No. 12
- Yellow No. 12

Printheads box. Includes four printheads of the following colors:

- Black No. 12
- Cyan No. 12
- Magenta No. 12
- Yellow No. 12

Starter CD. Enables you to perform the following activities:

- Install the printer software
- Browse documentation
- Register the product
- Create a custom software installer
- Install the optional software

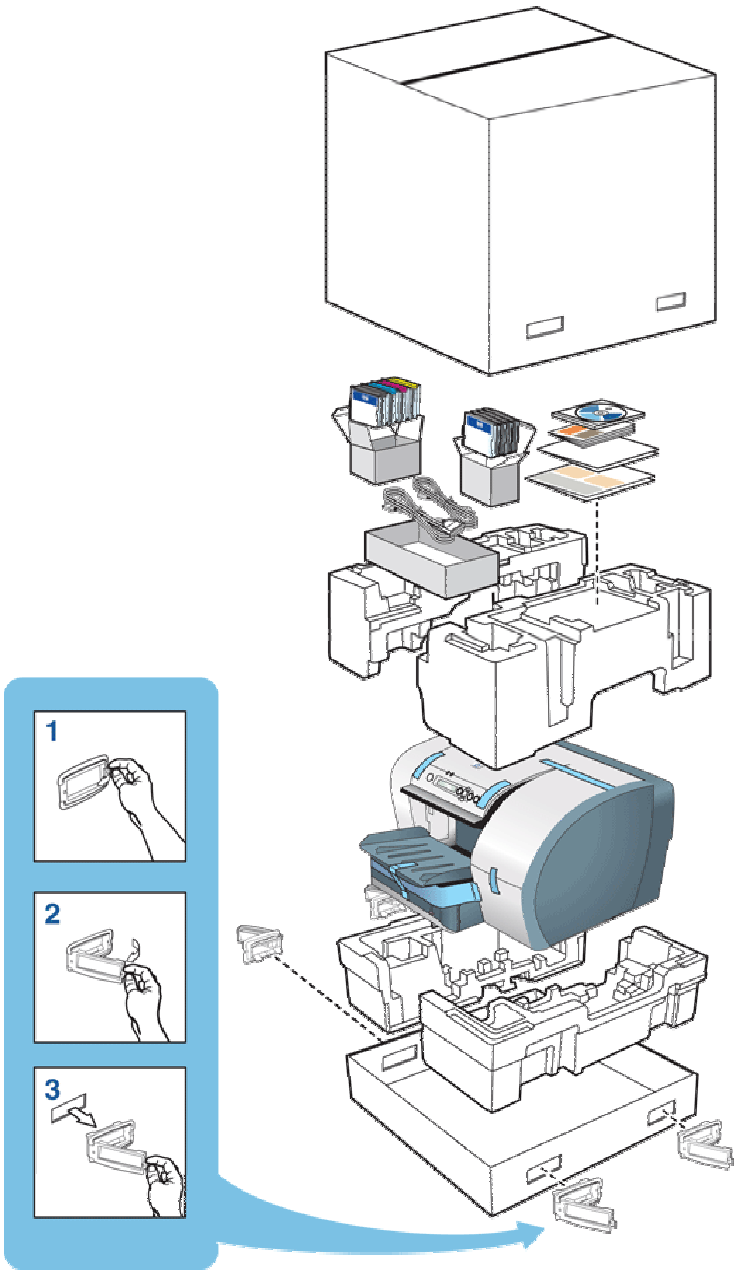
Power cord. Connects the printer to a power outlet.

Printed documentation. (setup poster, getting started guide, reference guide, regulatory booklet, and HP support flyer)

- **Setup poster** Provides wordless, illustrated setup information.
- **Reference guide** Provides more detailed, localized setup information.

unpacking the printer and components

unpacking the printer



The steps to unpack the printer are:

Remove the foam packing cushions from the bottom of the printer.

Unpack the printer, and remove the packing tape and shipping foam from the inside of the printer.

Remove the remaining contents of the box, such as the documentation and starter CD.

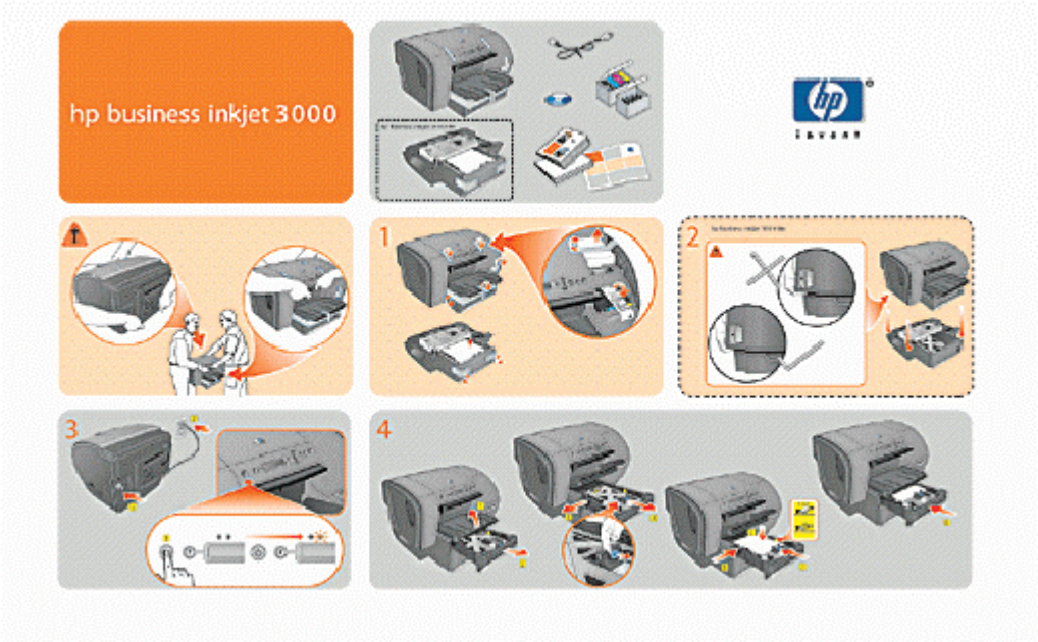
unpacking the auto-duplex unit

The steps to unpack the auto-duplex unit are:

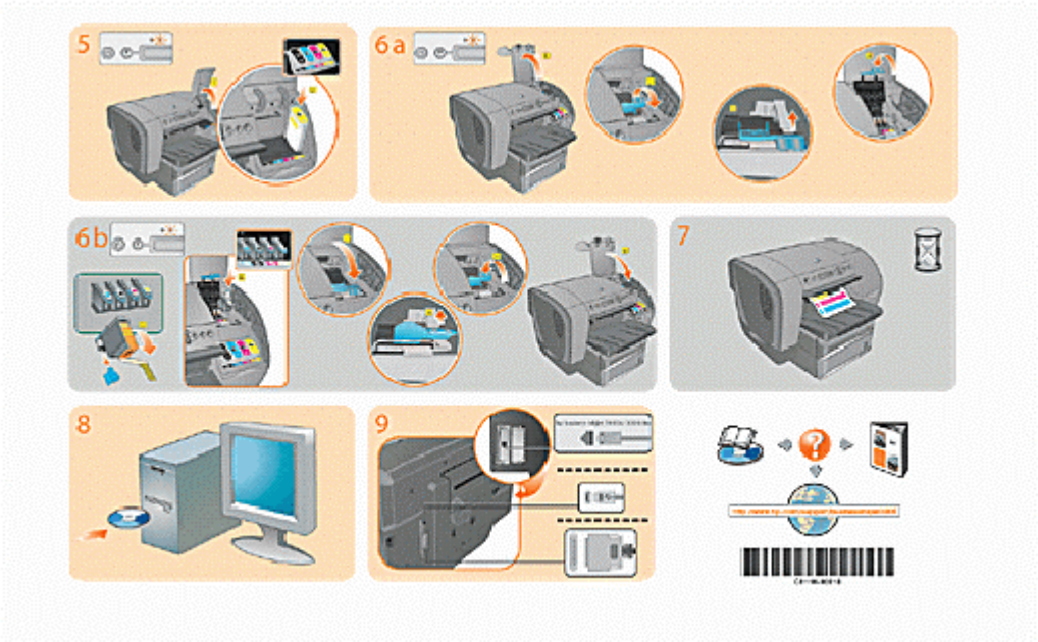
Unpack the auto-duplex unit.

Remove the packing tape and shipping foam.

overall setup procedure



setup poster - 1



setup poster - 2

setup procedure	steps
Unpack the printer and its components	Unpack the printer. Remove the packing tape and shipping foam. Two people should lift the printer. Each person should grasp the printer in the front just under the lip below the LCD control panel, and in the rear by the indentation on either side of Tray 1. Alternately, each person can hold on to the bottom of the printer during lifting. **Warning** *It is strongly recommended that two people lift or move the printer. The printer is top-heavy and can tip if lifted by only one person. The side of the printer that holds the ink cartridges and printheads is considerably heavier than the other side.* **Warning** *Do not attempt to move the printer by holding on to Tray 2 in the front or Tray 1 in the back. This can damage the printer and might cause you to lose your grip on the printer.*
Connect the power cord and turn on the printer	Connect the power cord to the printer and an alternating current power outlet. Turn on the printer.
Install ink cartridges	Lift the ink cartridge cover . Remove each ink cartridge from its package. Align the colored arrows and insert each ink cartridge into its respective color-coded socket. Press in each ink cartridge to ensure proper contact.

Install the printheads	Ensure that the printer is turned on. Lift the printhead cover. Pull the latch forward and down to release the hook from the metal latch. Lift and push the latch toward the rear of the printer. Remove each printhead from its package and remove the protective tape and blue printhead cover from each printhead. Insert each printhead into its respective color-coded socket. Press in each printhead to ensure proper contact. Lift the latch forward so that the hook catches the metal latch. Push the latch towards the rear of the printer. Close the printhead and ink cartridge covers. Wait while the printer initializes. When the initialization is complete, several alignment and calibration pages will print.
Install the printer software and connect the interface cable	Windows Installing the printer driver if the USB cable is not connected Installing the printer driver if the USB cable is connected Installing the printer driver by using a parallel port Installing the printer driver by using a network connection Macintosh Installing the printer software on Mac OS 8.6 to 9.1 using a USB cable Installing the printer software on Mac OS 8.6 to 9.1 using a network connection Installing the printer software on Mac OS X
Install the optional multipurpose tray	Install the multipurpose tray in the Tray 1 location in place of the single sheet manual feed unit that came installed with the printer.
Install Tray 3 (optional on 3000/3000n models)	Position the optional tray 3 base in the location where you want to place the printer. Tray 3 is already installed in the base. Align the tray 3 base with the opening in the printer and slide the tray and base into the printer until it snaps into place.

Install the optional auto-duplex unit (already installed on 3000dtn model)	Turn off the printer. Grasp the output bin by both sides and pull it straight out of the printer. Do not lift or tilt the output bin while removing it. Set the output bin aside. Grasp the handle under the front of Tray 2. Pull out Tray 2 until it catches. Slightly lift up Tray 2, or move the tray counterclockwise, and pull it completely out of the printer. Set Tray 2 aside. Grasp the handle under the front of the simplex unit. Be careful not to touch the star wheels. Pull the simplex unit straight out of the printer, and set it aside. Keep the simplex unit for future use. Look for the two pink guides inside the printer. Insert the rails of the auto-duplex unit into these guides. Slide the auto-duplex unit into the printer until it locks into place. Insert Tray 2 into the Tray 2 case and push it firmly into the printer until it locks into place. Set the output bin on top of Tray 2. Push the output bin into the printer. Be sure that both sides of the output bin snap into place.
Load paper and configure media sizes and types	Grasp the handle under the front of the tray, and then slowly pull the tray out until it stops. Do not pull the tray completely out of the printer. Push the blue tab on the paper length guide and paper width guides and slide them to their outermost positions. Place up to 300 sheets of paper (up to 34 mm, or 1.2 inches, stacked) into Tray 2, or up to 700 sheets of paper (up to 70 mm or 2.7 inches, stacked) into Tray 3. If printing on transparencies, load a maximum of 50 transparencies into each tray, with the adhesive strip face-up and toward the printer. (arrow side up and pointing into printer if arrows are printed on the adhesive strip.) Push the media as far back into the tray as it will go. Make sure the print-side of the media is facing down. Do not exceed the maximum stack height as indicated on the yellow label inside the tray on the right side. Push the blue tab on the paper length guide and paper width guides and slide them until they fit snugly against the media. Insert the tray into the printer until it closes completely. The printer can automatically detect some media sizes. If this is the case, only one size will appear in the TRAY 2 SIZE and TRAY 3 SIZE options. If the size does not match the media you loaded in the tray, open the tray and make sure the media sits as far in as possible. Adjust the paper width and length guides so they fit snugly against the media stack. Close the tray.

setting the LCD language

Configure the printer to display messages and print configuration pages in the required language.

To configure the LCD control panel language:

Method 1:

Turn off the printer.

Press the **SELECT** button on the LCD control panel and press the **POWER** button.

Method 2 (recommended):

Press the DOWN ARROW BUTTON to highlight Configure Device

Press **SELECT** to select Configure Device.

Press the **DOWN ARROW BUTTON** to highlight System Setup .

Press **SELECT** to select System Setup.

Press the **DOWN ARROW BUTTON** to highlight Language

Press **SELECT** to select Language.

Press the **DOWN or UP ARROW BUTTON** to highlight your language selection.

Press **SELECT** to confirm the language selection.

Press **PAUSE/RESUME** to return the printer to the ready state.

installing trays

tray 3 installation

If your printer was shipped with Tray 3 or you purchased Tray 3 as an optional accessory, Position Tray 3 in the location where you want to place the printer.

Gently lower the printer onto the Tray 3 base.

Warning *It is strongly recommended that two people lift or move the printer. The printer is top-heavy and can tip if lifted by only one person. The side of the printer that holds the ink cartridges and printheads is considerably heavier than the other side.*

Warning *Do not attempt to move the printer by holding on to Tray 2 in the front or Tray 1 in the back. This can damage the printer and might cause you to lose your grip on the printer.*

multipurpose tray installation

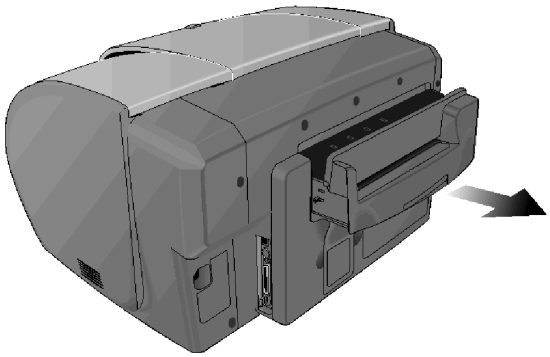
The printer comes with a single sheet manual feed unit in the Tray 1 location. You can purchase a multipurpose tray as an optional accessory, which is installed in place of the single sheet manual feed unit in the Tray 1 location.

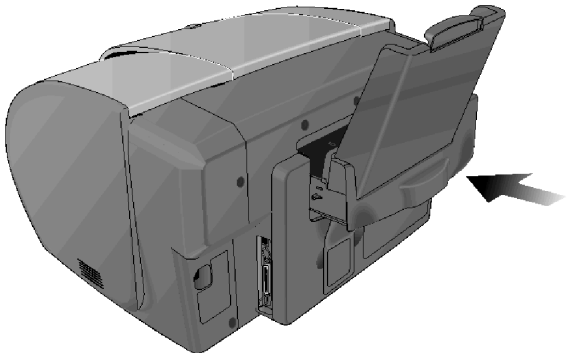
The multipurpose tray is designed to handle a variety of media types and sizes, including heavy paper and transparencies. The multipurpose tray is recommended if you print often on heavy paper or other special media that requires a straight-through paper path because it can hold up to 100 sheets of media.

Note *To install the multipurpose tray, you must first remove Tray 1 from the printer. The multipurpose tray replaces and functions as tray 1.*

1. Grasp the handle under the single sheet manual feed unit. Firmly pull to remove the manual feed unit from the printer. Keep this item for future use.

2. Slide the multipurpose tray into the Tray 1 opening at the back of the printer until it snaps into place.





installing the auto-duplex unit

Use the auto-duplex unit to print on both sides of the paper. The auto-duplex unit is included with the hp business inkjet printer 3000dtn. It can be purchased separately for the hp business inkjet printer 3000/3000n. When printing on both sides of paper, the printer might require additional memory.

The steps to install the auto-duplex unit in the printer are:

Turn off the printer.

Grasp the output bin by both sides and pull it straight out of the printer. Do not lift or tilt the output bin while removing it. Set the output bin aside.

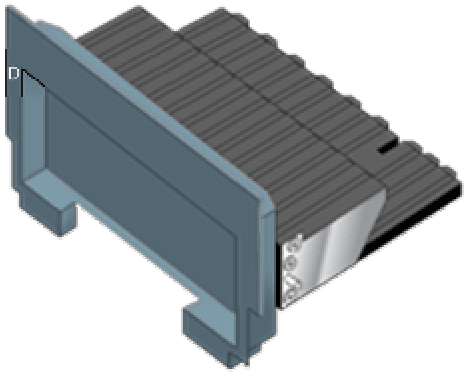
Grasp the handle under the front of Tray 2. Pull out Tray 2 until it catches. Slightly lift up Tray 2, or move the tray counterclockwise, and pull it completely out of the printer. Set Tray 2 aside.

Grasp the handle under the front of the simplex unit. Be careful not to touch the star wheels. Pull the simplex unit straight out of the printer, and set it aside. Keep the simplex unit for future use.

Look for the two pink guides inside the printer. Insert the rails of the auto-duplex unit into these guides. Slide the auto-duplex unit into the printer until it locks into place.

Insert Tray 2 into the Tray 2 case and push it firmly into the printer until it locks into place.

Set the output bin on top of Tray 2. Push the output bin into the printer. Be sure that both sides of the output bin snap into place.



installing the hp jetdirect EIO print server

The hp business inkjet printer 3000n/3000dtn has a preinstalled HP Jetdirect 615n (EIO) internal print server. If you have purchased an hp business inkjet printer 3000, purchase the internal HP Jetdirect print server separately.The embedded web server for printer and supplies management is included on the HP Jetdirect 615n (EIO) internal print server.

The hp Jetdirect printer server can be used in both client-server and peer-to-peer network configuration.

Note *The hp business inkjet printers 3000n and 3000dtn both include the HP JetDirect print server.*

Caution *The hp Jetdirect EIO print server contains electronic components that can be damaged by static electricity. To prevent the build up of static electricity:*

- Maintain contact with a bare sheet metal surface on the printer.
- Wear a grounding wrist strap.
- Handle the print server with caution.
- Avoid touching the electronic components or circuit paths.
-
-

Turn off the printer and unplug the power cord.

Choose which slot to use. Both slots work, but slot 2 is recommended, as it makes for a more convenient network cable path.

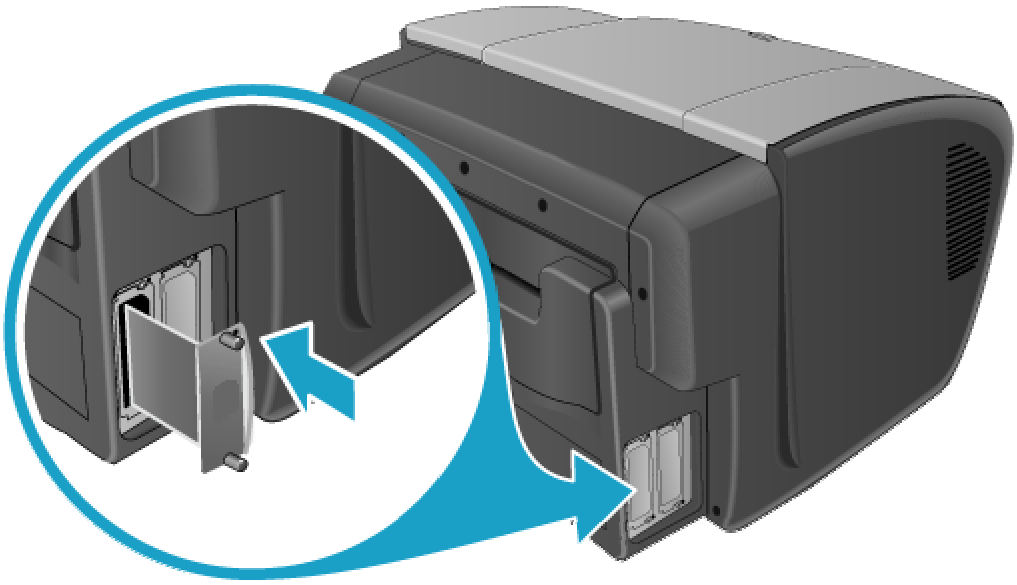
Unscrew and remove the metal plate at the rear of the printer.

Insert the print server by aligning it with the guide rails in the printer.

Press the print server into the slot.

Tighten each screw until both the screws are secure.

Connect the network cable to the print server.



installing the HP JetDirect EIO print server

installing additional memory

installation

The printer has three dual inline memory module (DIMM) slots for upgrading printer memory. The DIMMs are available in 8/16/32/64/128 MB for a maximum of 320 MB additional memory. Purchase additional memory as an accessory.

Caution *Static electricity can damage DIMMs. Ensure that you wear an antistatic wrist strap. Alternatively, touch the surface of the antistatic package of the DIMM and the bare metal on the printer.*

Print a Configuration page to note the memory capacity of the printer before adding more memory.

Turn off the printer.

Unplug the power cord and disconnect all cables.

Remove the DIMM cover from the back of the printer as follows:

Insert a flathead screwdriver into the top slot of the cover.

Gently push down on the screwdriver handle and grab the cover with finger and thumb.

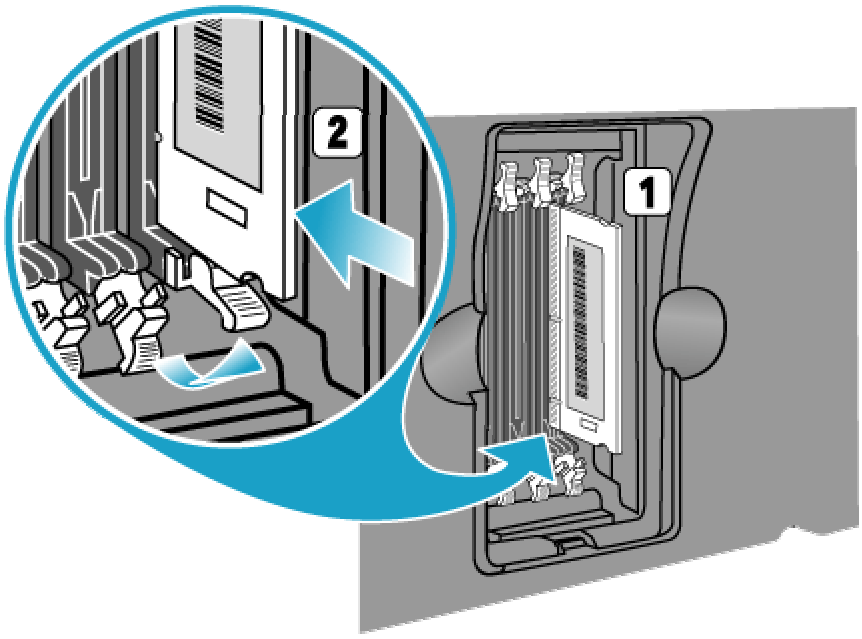
While pushing screwdriver handle down, pull out DIMM cover with finger and thumb.

Remove the DIMM from the antistatic package.

On the DIMM slot, push the DIMM locks outward to release the locks.

Insert the DIMM into the slot and press it firmly until it snaps into the slot.

Make sure the DIMM is installed properly. If installed properly, the locks will automatically snap into place as DIMM is pushed in.



inserting the DIMM into the slot

Replace the cover and gently apply pressure until the cover snaps into place. Make sure the steel enclosure of the DIMM cover does not interfere with the DIMM slot locks.

Reattach the cables and power cord. Turn on the printer and test the DIMM.

test

After installing additional printer memory, test the memory installation.

Ensure that READY appears on the LCD control panel when the printer is turned on. If an error message appears, the DIMM may be incorrectly installed .

Print a Configuration page.

Compare the memory section of the Configuration page with the Configuration page printed before the DIMM installation.

If the amount of memory has not increased, perform the following checks:

- The DIMM might not be installed correctly. Reinstall the DIMM.
- The DIMM might be defective. Use a different DIMM.

installing the EIO hard disk drive

installation

The printer has two EIO slots for upgrading the printer. One of these slots may be used for the optional EIO hard disk drive.

Caution *Static electricity can damage the hard drive. Ensure that you wear an antistatic wrist strap. Alternatively, touch the surface of the antistatic package of the hard drive and the bare metal on the printer.*

Turn off the printer.

Unplug the power cord and disconnect all cables.

Choose which slot to use. Both slots work, but slot 2 is recommended, as it makes for a more convenient network cable path.

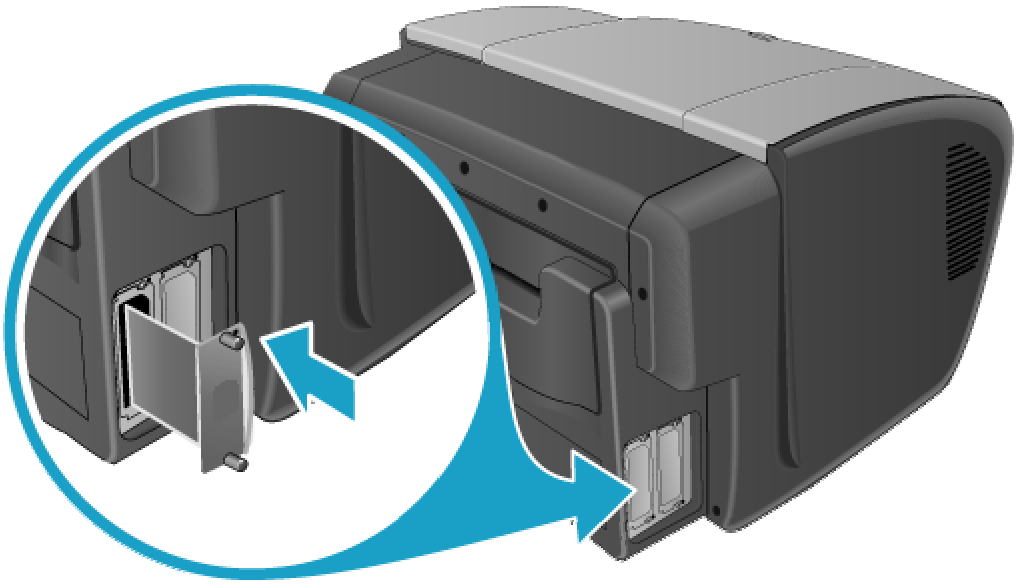
Unscrew and remove the metal plate at the rear of the printer.

Align the EIO hard drive with the guide rails in the printer.

Push the EIO hard drive into the slot.

Tighten each screw, alternatively, until both the screws are secure.

Reattach the cables and power cord. Turn on the printer and test the EIO hard drive.



test

After installing the EIO hard drive, test the hard drive installation.

The steps to test the hard drive installation are:

Ensure that READY appears on the LCD control panel when the printer is turned on. If an error message appears, the hard drive might be installed incorrectly.

Print a Configuration page.

Verify that the EIO hard drive is included on the configuration page.

If the hard drive is not shown on the configuration page, perform the following checks:

- The hard drive might not be installed correctly. Reinstall the hard drive.
- The hard drive might be defective. Use a different hard drive.

installing ink cartridges

installation

The steps to install ink cartridges are:

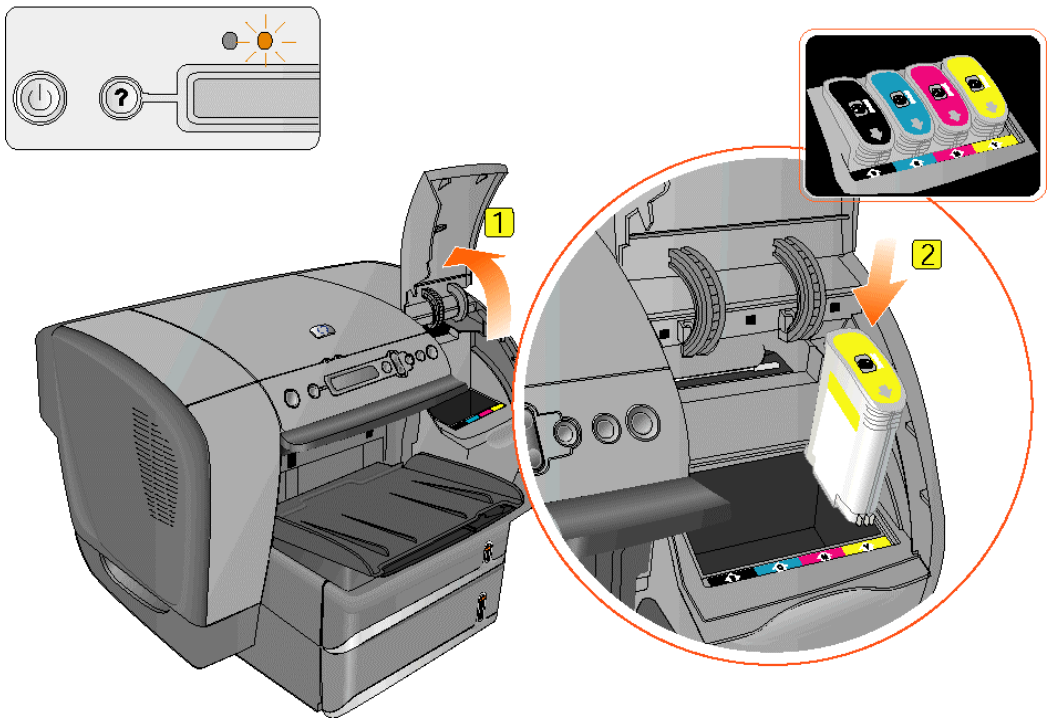
Make sure the printer is turned on.

Lift the ink cartridge cover.

Remove each ink cartridge from its package.

Align the colored arrows and insert each ink cartridge into its respective color-coded socket.

Firmly press each ink cartridge to ensure proper contact.



maintenance

- To reduce water vapor loss: Keep the ink cartridges sealed in the original packaging until ready to use.
- To reduce water vapor loss: Keep the opened ink cartridges in the printer or sealed in a plastic bag.
- Store ink cartridges at room temperature.
- Use a first-in first-out inventory process to avoid having expired ink cartridges in stock.
- Install ink catridges before the Install-By Date to maximize warranty.

terminology

The following dates are used when working with ink cartridges:

- **Manufacture Date** – Date on which the product begins its "life." Date on which the product "clock" starts.
- **Shelf Life** – Length of time from Manufacture Date to Install-By Date. Maximum shelf life is 24 months.
- **Install-By Date** – Date by which a PC/PH/IC should be installed in a printer to receive the full warranty period and optimal performance of the product.
- If cartridge is installed on or before Install-By Date, cartridge will expire after 30 months.
- If cartridge is installed after Install-By Date, cartridge will expire 54 months after manufacture date; ink cartridge will have an In-Printer Life shorter than 30 months.
- Cartridge cannot be used at or beyond 54 months after manufacture date.
- Printheads do not expire, but will likely wear out and fail over time (expected life ~2.5 years per printhead).
- **In-Printer Life** – Length of time after the Install-By Date. Maximum In-Printer Life is 30 months from Install-By Date.
- **Warranty Interval** – Begins on Manufacture Date and ends on End-of-Warranty Date. Warranty Interval is 6 months.
- **End-of-Warranty Date** – The latest date that a product is **warranted** to be free from defects in material and workmanship, with no appreciable decrease in performance during the warranty period.
- **End-of-Life Date** – A fixed date through which a product is **technically capable** of working with no appreciable decrease in performance.
- **Expiration Date** – A printer-generated date calculated at the time a TIJ3.0 ink cartridge is installed.

part numbers and ink capacities

part number	name	ink capacity
C4844A	HP No. 10 Black ink cartridge	69 mL
C4804A	HP No. 12 Cyan ink cartridge	55 mL
C4805A	HP No. 12 Magenta ink cartridge	55 mL
C4806A	HP No. 12 Yellow ink cartridge	55 mL

installing printheads

installation

The steps to install printheads are:

Insert the power cord into the power input slot.

Turn on printer to unlock the carriage and uncap the pens.This must be done before the printheads can be changed or installed for first time.

Lift the printhead cover.

Caution *Do not attempt to force open the printhead latch. The printhead carriage will move to the left when the printer is turned on, enabling you to open the latch. Press the select button if it does not move.*

To open the latch, lift it from the rear (item 1 in the graphic) and then pull it forward and down to release the hook from the metal catch (item 2 in the graphic).

Lift and push the latch toward the rear of the printer.

Remove each printhead from its package and remove the protective tape and the blue printhead cover from each printhead.

Insert each printhead into its respective color-coded socket.

Note *The order of printheads is different from the order of ink cartridges.*

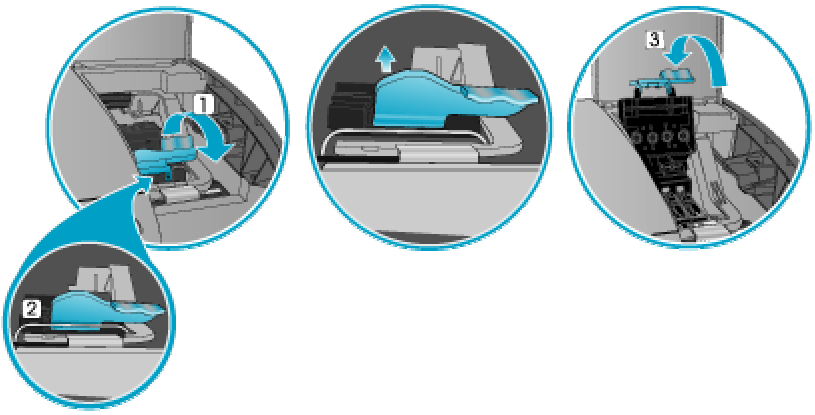
Firmly press each printhead to ensure proper contact.

Pull the latch all the way forward and down, and engage the catch with the hook (item 2 in the graphic). Push the latch towards the back of the printer. You might have to apply some pressure to close the latch.

Close the printhead and ink cartridge covers.

Wait while the printer initializes. When the initialization is complete, an alignment page prints.

Note *If no alignment page prints, ensure that there is paper in tray 2.*



maintenance

- Keep the printheads sealed in the original packaging until ready to use.
- Keep the printheads that are open in the printer or sealed in a plastic bag separately. Each printhead should have its own bag.
- Store printheads at room temperature.
- Power off the printer by pressing the **POWER** button. Powering off with the **POWER** button ensures the Carriage is at the Service Station position. The Service Station caps the printhead ink nozzles to prevent them from drying.
- Install printhead by Install-By Date to maximize warranty.
- If a printhead is removed and later replaced by one with the same serial number, the printer will only perform pen alignment.

expiration dates

- **Install-by date** : The Install-by date is printed on the retail box for printheads. Install the printheads before the date given in the Install-by date for optimized performance.
- **End-of-Warranty date** : The End-of-Warranty date is printed on the printheads. The End-of-Warranty date specifies the date by which the warranty period for the printheads end.

part numbers

part number	name
C5024A	HP No. 12 Black Printhead
C5023A	HP No. 12 Cyan Printhead
C5025A	HP No. 12 Magenta Printhead
C5026A	HP No. 12 Yellow Printhead

printhead specifications

paper types

media types	tray 1	tray 2	tray 3	manual feed units	auto-duplex unit
Everyday paper (HP Office Paper/HP Office Recycled Paper/HP Multipurpose Paper/HP Printing Paper)	Y	Y	Y	Y	Y
Business communication paper (HP Professional Brochure and Flyer Paper /HP Premium Inkjet Paper (not supported by the auto-duplex unit)/HP Premium Inkjet Heavyweight Paper)	Y	Y	Y	Y	Y
Presentation paper (HP Premium Inkjet Transparency Film/HP Premium Plus Inkjet Transparency Film)	Y	Y	Y	Y	N
Photo paper (HP Premium Plus Photo Paper/HP Premium Photo Paper/HP Photo Paper/HP Colorfast Photo Paper/HP Everyday Photo Paper*/HP Photo Quality Inkjet Paper*)	Y	Y	Y	Y	N

paper types supported by hp business inkjet printer 3000 series

Caution *Some media, such as envelopes and cards, can be used with only Tray 1 or the optional multipurpose tray. Using this media in Tray 3 or the auto-duplex unit can cause jams and might damage the printer and the auto-duplex unit.*

paper sizes, weights, and capacities

tray or bin	size or type of paper	weight	capacity
Tray 1/multipurpose tray/manual feed unit	Paper (89 by 140 mm (3.5 by 5.5 inches) to 216 by 356 mm (8.5 by 14 inches) U.S. Letter U.S. Legal U.S. Executive JIS Executive A4 JIS B5 ISO B4 Custom sizes larger than Letter and smaller than Legal	60-105 g/m^2 (16- 28 lb bond)	Single sheet (manual feed) or up to 100 sheets (multipurpose tray)
	Transparencies (same sizes as paper)	N.A.	
	Envelopes (98 by 191 mm (3.9 by 7.5 inches) to 162 by 229 mm (6.4 by 9 inches)	75 to 90 g/m^2	
	Cards (89 by 140 mm (3.5 by 5.5 inches) to 127 by 203 mm (5 by 8 inches)	110-199 g/m^2 (20-24 lb envelope)	
	Photo paper (same sizes as paper)	110 to 199 g/m^2 (29-53 lb index)	

Tray 2 and Tray 3	Paper (216 x 259 mm (8.5 by 11 inches) to 216 by 356 mm (8.5 by 14 inches) U.S. Letter U.S. Legal U.S. Executive JIS Executive A4 JIS B5 Custom sizes larger than Letter and smaller than Legal	60 to 105 g/m^2	Up to 300 sheets (Tray 2) or 700 sheets (Tray 3) of plain paper
	Transparencies (same sizes as paper)	N.A.	Up to 50 sheets
Auto-duplex unit	Paper (all sizes between B5 and Legal)	60 to 105 g/m^2	N.A.

supported paper sizes, weights, and capacities

guidelines for loading paper

The guidelines for loading paper are:

- The default size for all trays is 216 by 279 mm (8.5 by 11 inches) or A4.
- For Tray 2 and Tray 3, insert media with side for printing face-down with the short edge of the paper facing the rear of the printer. To print horizontally (landscape orientation), select landscape.
- When loading Tray 1, position the media with side for printing face-up with the left edge of the media against the left edge of the tray(looking from back) . For preprinted forms and letterhead, load the media with the top edge feeding into the printer first.
- If you purchased the optional multipurpose tray, which is installed in the Tray 1 location, position the media face-up against the right edge of the tray first (facing front of printer), and then slide the media down into the tray. Load the media print-side up. For preprinted forms and letterhead, load the media with the top edge feeding into the printer first.
- To prevent jams, load only one type of media at a time into a tray. Also, when adding media, always remove the existing media and realign the media width and length guides to fit the new media.
- Always use media that conforms to the printer specifications. For more information about types of media that can be used with the printer, see the topic “paper sizes, capacities, and weights.”
- Do not use paper that is heavily textured or does not absorb ink well. This type of paper can cause poorly filled graphics or text.
- The document margins must match (or exceed) a margin setting of 4 mm.

printing a demo page

Print a demo page to perform the following activities:

- Check the printer setup.
- Check the printer hardware configuration.

Print a demo page without connecting the printer to the computer. The demo page does not ensure that the computer and printer are properly connected.

The steps to print a demo page by using the LCD control panel are:

Press the select button on the LCD control panel. This brings up the MENU

Press the down arrow button to highlight **INFORMATION** , and then press the select button.

Press the down arrow button to highlight **PRINT DEMO** , and then press the select button to print the demo page.

hp business inkjet 3000 series

fast, cost effective, full featured color printer for workgroups

breakthrough speeds

up to 14ppm monochrome and 8ppm color in Normal mode; up to 21ppm monochrome and 18ppm color in Fast mode.

built for business

high-capacity ink cartridges and lowest cost of ownership with robust duty cycles of up to 30,000 pages per month.

intelligent networking

connect to the network as easily and reliably as any hp LaserJet printer with PCL 5,6 & PS 3 as a standard.

www.hp.com

demo page

software installation requirements

specifications for operating system compatibility

- Windows 98, Windows Millennium Edition, Windows NT 4.0, Windows 2000, Windows XP 32-bit (Professional and Home Editions), Windows XP 64-bit Edition
- Mac OS 8.6 - 9.2.2 (Classic)
- Mac OS X - 10.2.1
- OS/2
- Linux
- UNIX
- MS-DOS printer driver support through third-party applications

specifications for network operating system compatibility

hp business inkjet printer 3000

- Windows 98, Windows Millennium Edition, Windows NT 4.0, Windows 2000, Windows XP 32-bit (Professional and Home Editions), Windows XP 64-bit Edition

hp business inkjet printer 3000n

- Windows 98, Windows Millennium Edition, Windows NT 4.0, Windows 2000, Windows XP 32-bit (Professional and Home Editions), Windows XP 64-bit Edition
- Novell IntranetWare, NetWare 4.x, 5.x, 6, NDS, and NDPS
- HP-UX 10.20, 11.x
- Solaris 2.5x, 2.6, 7, 8
- RedHat Linux 6.x, 7.x
- SuSE Linux 6.x
- Mac OS 8.6 - 9.2.2 (Classic)
- Mac OS X - 10.2.1
- IBM OS/2 Warp 4.x
- AIX 3.2.5 and later
- MPE-iX*
- Artisoft LANtastic*
- Microsoft Windows Terminal Server Edition 4.0
- Windows 2000 Server Terminal Services with Citrix MetaFrame 1.8
- Windows XP Server Terminal Services with Citrix MetaFrame 1.8

hp business inkjet printer 3000dtn

- Windows 98, Windows Millennium Edition, Windows NT 4.0, Windows 2000, Windows XP 32-bit (Professional and Home Editions), Windows XP 64-bit Edition
- Novell IntranetWare, NetWare 4.x, 5.x, 6, NDS, and NDPS
- HP-UX 10.20, 11.x
- Solaris 2.5x, 2.6, 7, 8
- RedHat Linux 6.x, 7.x
- SuSE Linux 6.x
- Mac OS 8.6 - 9.2.2 (Classic)
- Mac OS X - 10.2.1
- IBM OS/2 Warp 4.x
- AIX 3.2.5 and later
- MPE-iX*
- Artisoft LANtastic*
- Microsoft Windows Terminal Server Edition 4.0
- Windows 2000 Server Terminal Services with Citrix MetaFrame 1.8
- Windows XP Server Terminal Services with Citrix MetaFrame 1.8

contents of software CD ROM

Windows NT4/2000/XP/9X/ME users

- Setup resources, including user-friendly CD shell, fonts, and web registration
- Printer drivers, including PCL5C/6 and PostScript emulation printer drivers
- Documentation, including readme file, user guide, and HP Jetdirect Administrator's Guide

Mac OS 8.6 - 9.2.2 (Classic) and OS X - 10.2.1 users

- Apple PS LaserWriter printer driver (Classic Only), hp business inkjet printer 3000 series PPD
- Web Register
- User Guide
- business inkjet printer 3000 series web site
- Release Notes

Unix/Linux users

- Readme files in corresponding sub-directories
- Solutions available on IBM Website

startup page of CD browser

The startup page of the CD browser consists of the following options:

Install printer driver : Install the necessary software from the computer or the network.

Browse documentation : Browse the latest documentation available for the printer.

Register product: Register the printer by using this option.

Customization utility : Create a custom software installer that can be copied to floppy disks, the local hard drive, or the network drive.

Optional software : Install various optional software that are available for the printer.

startup page of the CD browser

installing the printer software

Install the printer software for local or network printing.

cable considerations

Warning *It is recommended that you install the software before you connect the printer to the computer. Do not connect the cable until you are prompted by the computer.*

Warning *Windows XP 64-bit requires hardware-first installation. See "Hardware-first installation for Windows XP."*

Warning *Ensure not to connect the printer by using both the USB and parallel cable.*

In most cases, after you install the printer software and connect a printer to the computer, you can install additional printers with USB cables without reinstalling the printing software.

printer software components for Windows

The printer software includes:

- Printer drivers:
- PCL 5C/6
- PostScript (PS) level 3 emulation
- Toolbox
- Screen fonts
- Customization utility

software-first installation

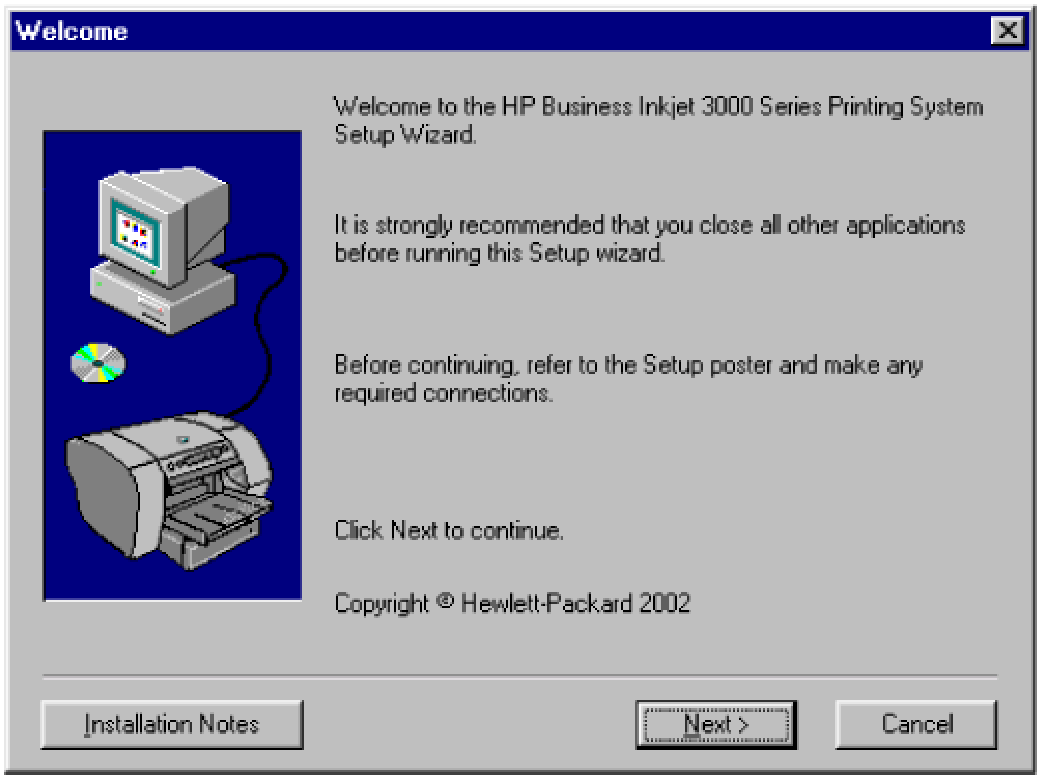
Warning *Windows XP 64-bit requires hardware-first installation. See "Hardware-first installation for Windows XP."*

Start Windows and make sure that no other Windows applications are running.

Insert the Starter CD into the CD-ROM drive. The CD menu runs automatically.

Note *If the CD does not run automatically, click Start , and then click Run . At the command line box, type the letter of your computer's CD-ROM drive followed by :\SETUP (for example, type D:\SETUP).*

On the CD menu, click **Install Printer Driver** .

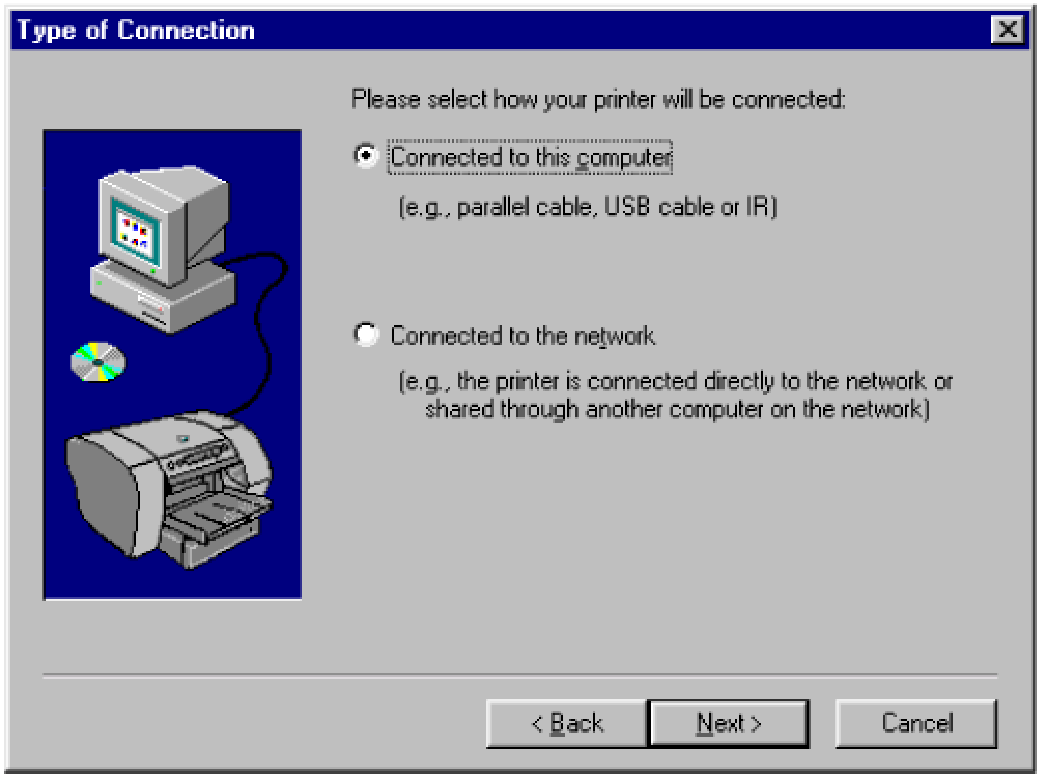


installing the printer software

Choose your language, and then click **OK** .

Follow the instructions on the screen.

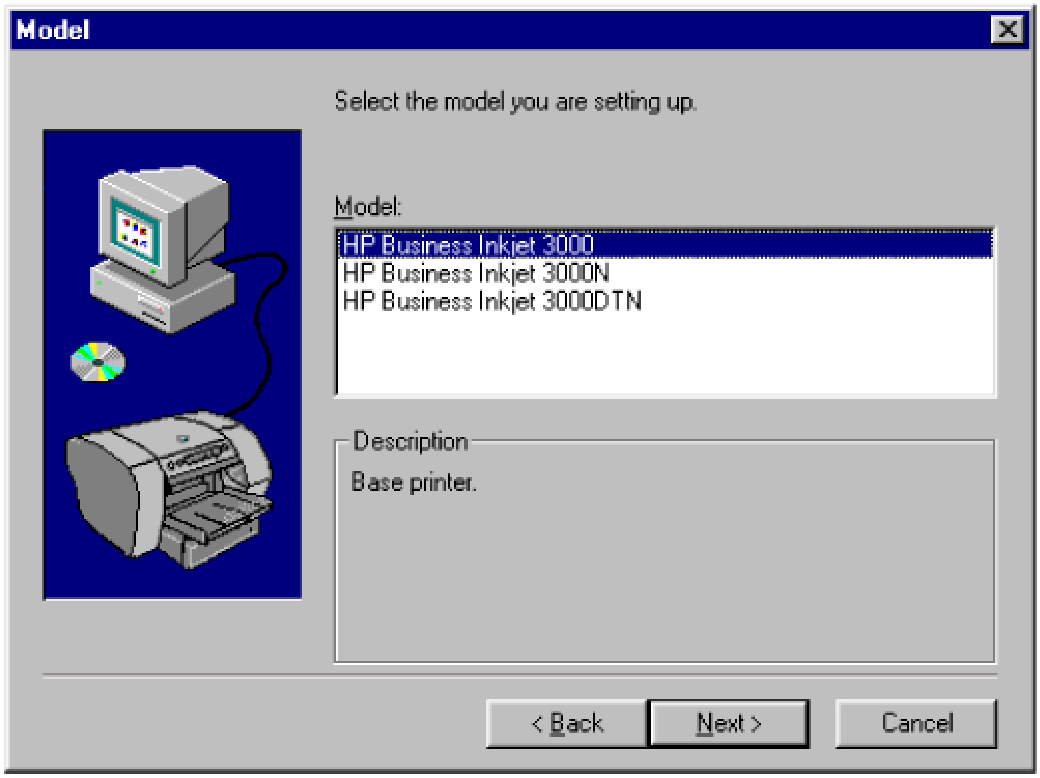
Click Connected to this computer , and then click Next .

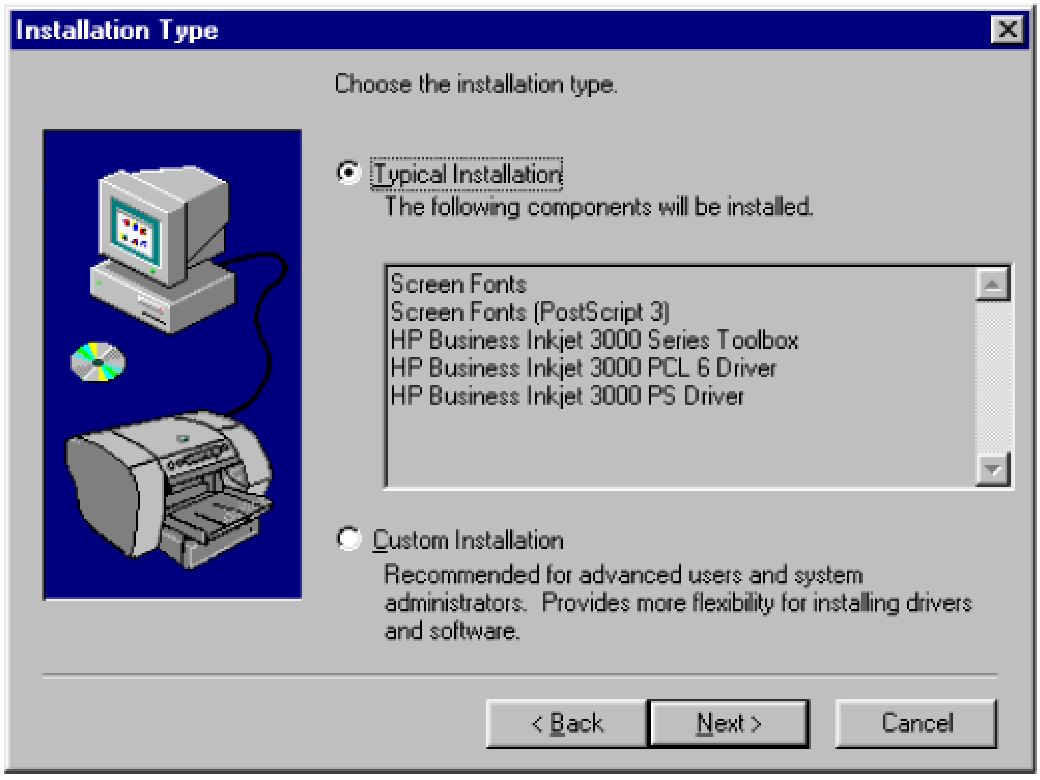


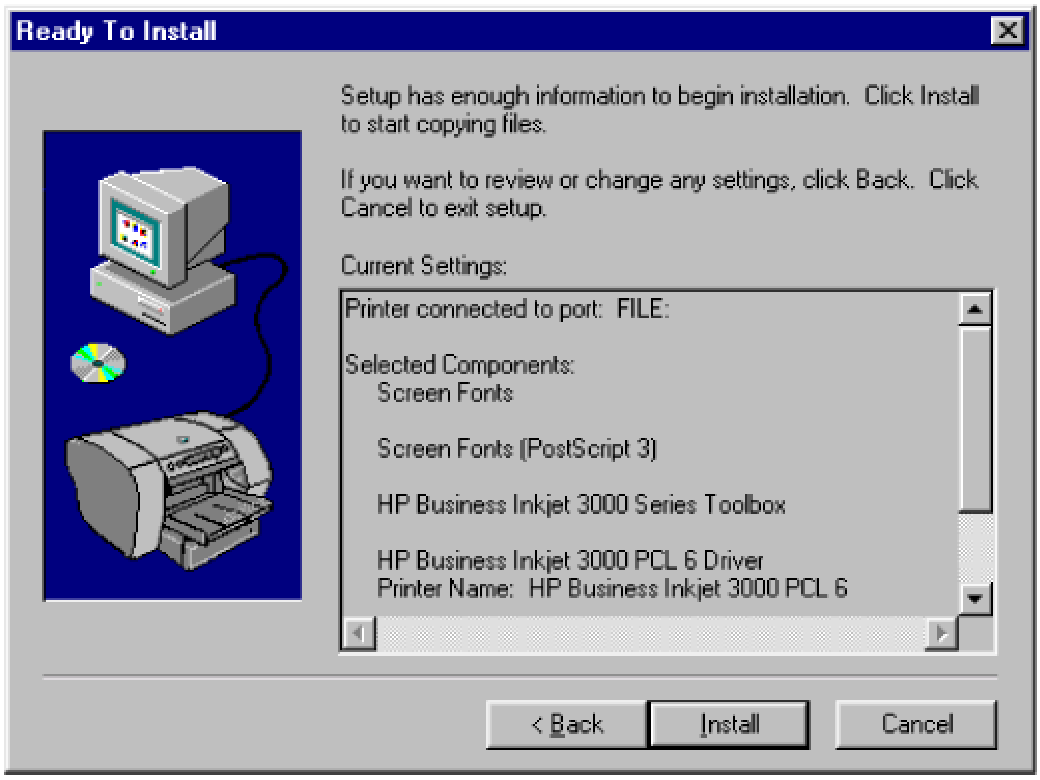
In the Select Port screen, click **USB** , and then click **Next** .

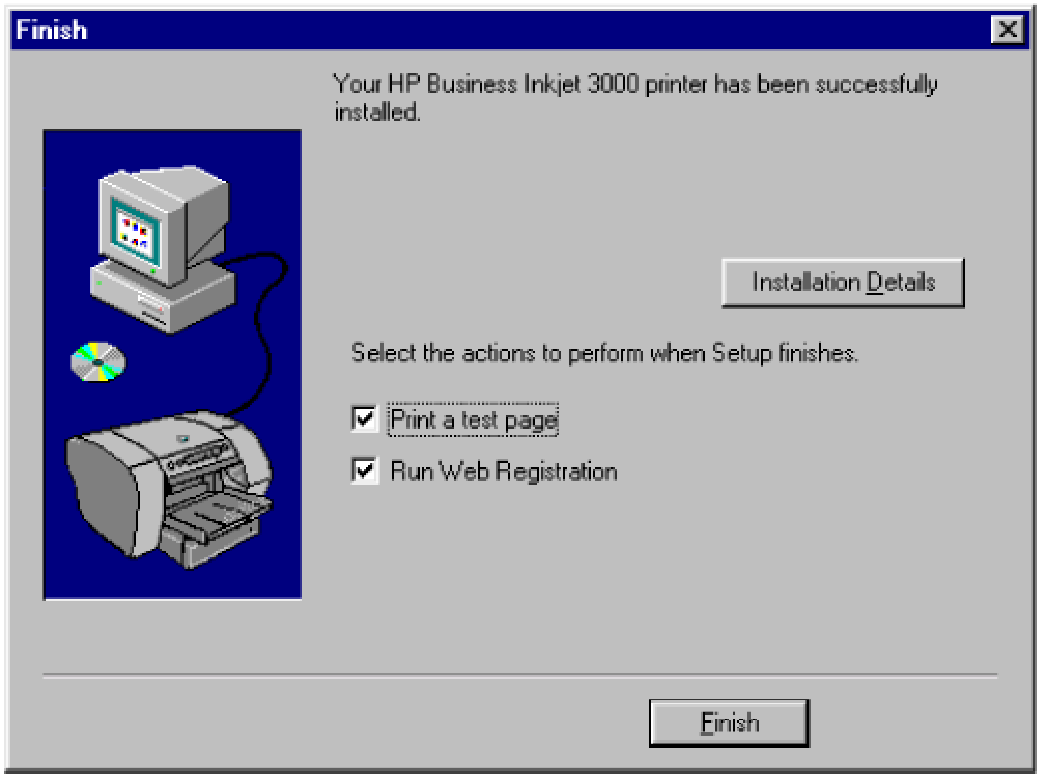
Warning *When connecting the printer using a USB cable, you can install either the PCL 6 or the Postscript printer driver at any time.*

Follow the instructions on the screen to complete the installation.









Connect the USB cable to the computer and the printer. The Found New Hardware wizard appears on the screen and the printer icon is created in the Printers folder.

hardware-first installation

If you have connected the USB cable to the ports on the computer and the printer before installing the printer software, the Found New Hardware wizard appears on the computer screen.

In the Found New Hardware wizard, click **Next** .

Click Search for the best driver for your device (Recommended) , and then click Next .

Insert the Starter CD into the CD-ROM drive. If the CD menu appears, click **Exit** twice to close the CD menu.

Select **Specify a location** , click **Browse** to locate the installation files for the operating system the computer is using, and then click **OK** .

- For Windows 98 and Windows Me, use DRIVERS\<PRINTER DRIVER>\WIN9X_ME\<LANGUAGE>. For example, DRIVERS\PCL6\WIN9X_ME\ENGLISH contains the installation files for the English version of the PCL 6 printer driver.
- For Windows 2000, use DRIVERS\<PRINTER DRIVER>\WIN2K\ <LANGUAGE>. For example, DRIVERS\PS3\WIN2K\ENGLISH contains the installation files for the English version of the PS 3 printer driver for Windows 2000.

Click **Next** , and then follow the instructions on the screen.

Click **Next** , and then click **Finish** .

If you are using Windows 98 or Windows Millennium Edition, repeat steps 3 to 6 to finish the installation.

hardware-first installation for Windows XP

If you have connected the USB cable to the ports on the computer and the printer before installing the printer software, the Found New Hardware wizard appears on the computer screen.

In the Found New Hardware wizard, click **Install the software automatically (Recommended)** , and then click **Next** .

In the Select Port screen, click **USB Printing Support** , which allows you to access the printer status using the Toolbox.

Warning *If you want to use USB Printing Support and you see more than one option, select the USB Printing Support option from Microsoft.*

Click **Next** and then click **Finish** .

In the second Found New Hardware Wizard, click **Next** .

Click the best driver for your operating system. For Windows XP 64-bit, click either **HP Business Inkjet 3000 PCL 5C** or **HP Business Inkjet 3000 PS** . For Windows XP 32-bit, click **HP Business Inkjet 3000 PS** , and then click **Next** .

If you see the Hardware Installation warning screen, click **Continue Anyway** . Otherwise, proceed to step 7.

Click **Finish** .

connecting the printer using a USB cable

Use a universal serial bus (USB) cable if the computer has a USB port and is running Windows 98, Windows Millennium Edition (Me), Windows 2000, or Windows XP. If your computer does not meet these specifications, connect the printer to your computer using a parallel cable.

connecting the printer using a parallel cable

Use a parallel cable to connect the printer to the computer if the computer has a parallel port and is running Windows 95, Windows 98, Windows Millennium Edition, Windows NT 4.0, Windows 2000, or Windows XP.

Start Windows and make sure that no other Windows applications are running.

Insert the Starter CD into the CD-ROM drive. The CD menu runs automatically.

Note *If the CD menu does not run automatically, click Start , click Run , and and at the command line box, type the letter of your computer's CD-ROM drive followed by :\SETUP (for example, type D:\SETUP).*

On the CD menu, click **Install Printer Driver** .

Choose your language, and then click **OK** .

Follow the instructions on the screen.

Click Connected to this computer , and then click Next .

Be sure the **Parallel** check box is selected. Use the drop-down menu to select the parallel port to which the printer is connected.

Warning *If the Express Install using HP recommended defaults check box is selected, the installation program uses default options. If you want to specify the installation options, clear this check box.*

Follow the instructions on the screen to complete the installation.

Connect the parallel cable to the computer and the printer.

connecting the printer using a network connection

When setting up the printer using a network connection, connect the printer to the network first, and then install the software.

If an HP Jetdirect print server was purchased separately, install it in the printer. The print server must be installed before you install the printer software. For more information about installing the HP Jetdirect print server, see “Installing optional accessories.”

Warning *The HP Jetdirect print server is pre-installed in the HP Business Inkjet 3000n and 3000dtn printer configurations.*

Connect the network cable between the HP Jetdirect print server and a network port.

Start Windows and make sure no other Windows applications are running.

Insert the Starter CD into your CD-ROM drive. The CD menu runs automatically.

Warning *If the CD menu does not run automatically, click Start , click Run , and at the command line box, type the letter of your computer's CD-ROM drive followed by :\SETUP (for example, type D:\SETUP).*

On the CD menu, click **Install Printer Driver** .

Choose your language, then click **OK** .

Follow the instructions on the screen.

Click Connected to the network , and then click Next .

Click Basic Server or Peer-to-Peer Network Setup , and then click Next .

Follow the instructions on the screen to complete the installation.

browsing documentation

Browse the latest documentation available for the printer by using the Browse Documentation option. Access the following documentation using the CD browser:

Release Notes – Includes installation and late-breaking information.

User's Guide – Includes the information related to:

- Setting up the printer
- Installing the printer software
- Troubleshooting the printer
- Maintaining the printer

HP JetDirect Guide – Enables you to access the following information:

- Configure the printer for network printing
- Troubleshoot the HP JetDirect print server

Setup Poster – A graphical, wordless roadmap to set up the printer.

Printer Web Site – Enables you to access the printer Web site for information related to the printer. Click the Printer Web site button to access the following Web site: http://www.hp.com/.

browse documentation

registering the product

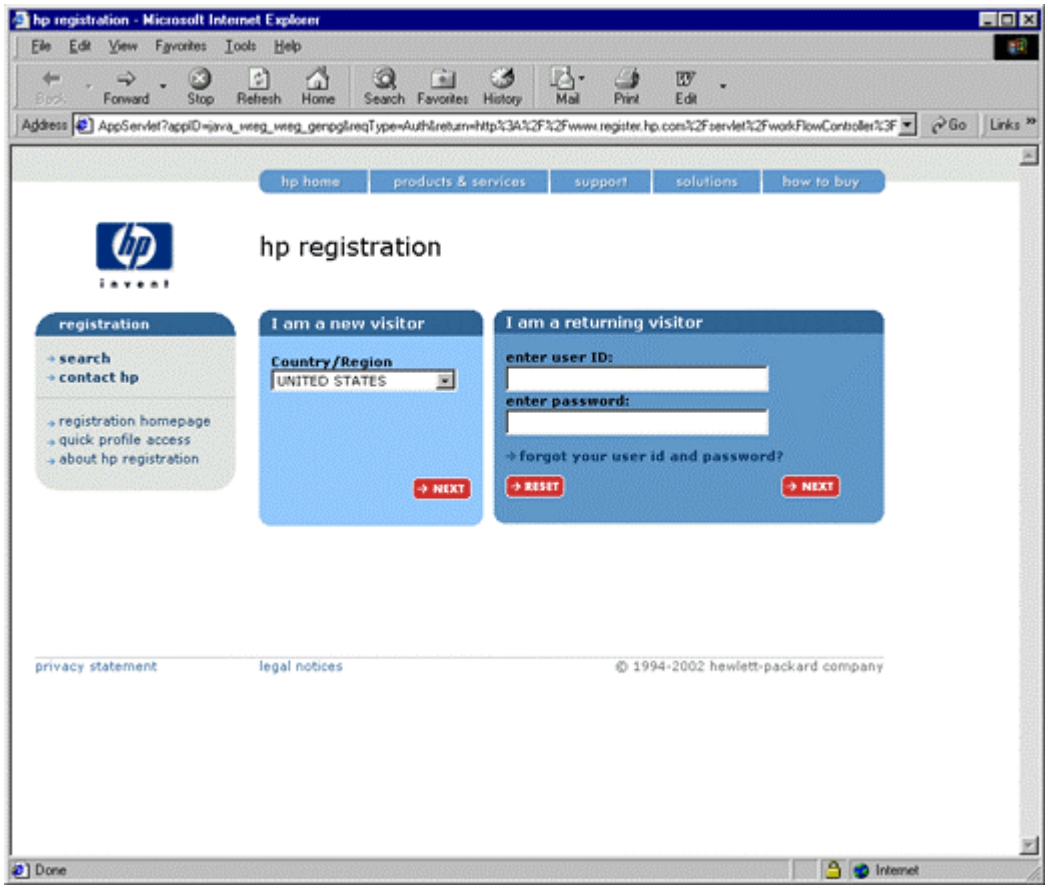
Register the printer by clicking the Register Product button. This button enables access to the following Web site: http://register.hp.com/

Perform the following activities by accessing the hp registration Web site:

- Create a profile
- Update a profile

Acquire the following information by accessing the hp registration Web site:

- Enhanced customer service
- Fast expert technical support
- Timely notices of product and software upgrades
- Free newsletters with exclusive guidelines
- Special offers specific to your requirements



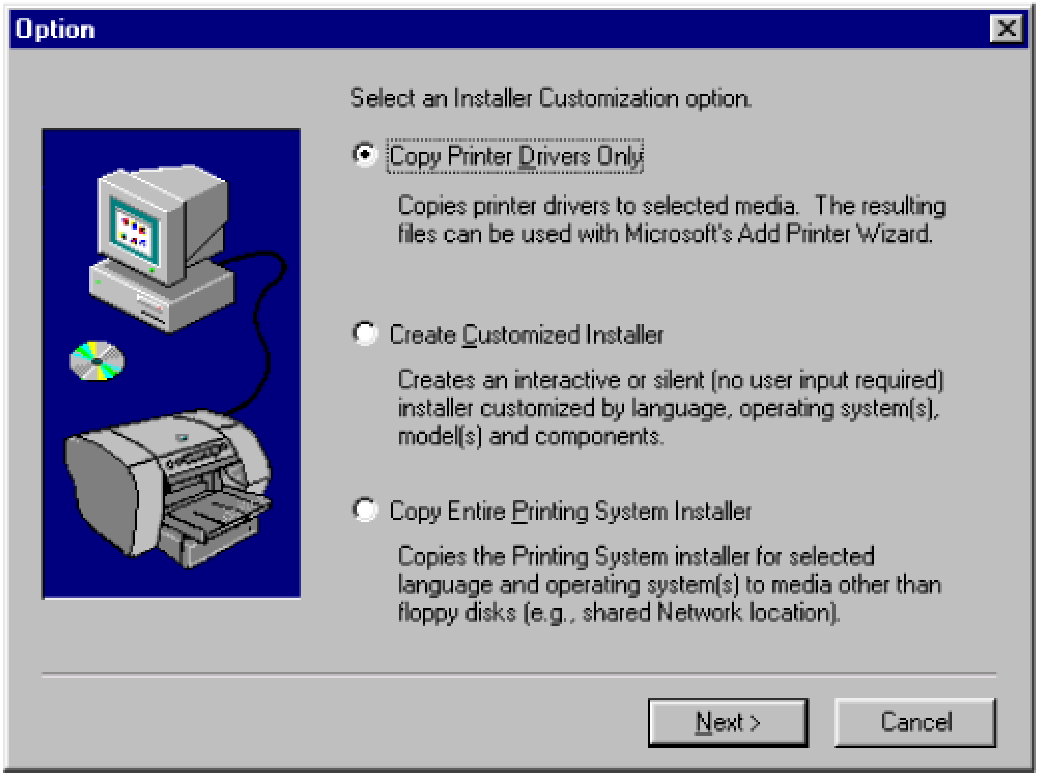
customization utility

Create a custom software installer that can be copied to floppy disks, local hard drives, or network drives. Perform the following activities by accessing the customization utility option:

Copy Printer Drivers Only – Copy the printer driver to selected media. The resulting files can be used with Add Printer Wizard of Microsoft.

Create Customized Installer – Create an interactive installer customized by language, operating system, model, and components.

Copy Entire Printing System Installer – Copy the printing system installer for the selected language and operating system to media other than floppy disks, for example shared network location.

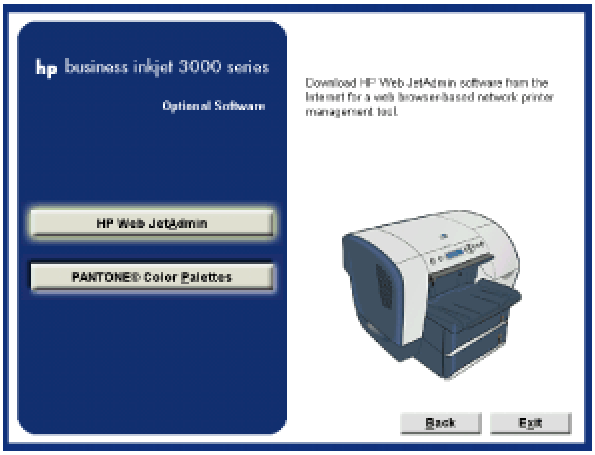


optional software

The optional software available for the printer includes:

HP WebJet Admin – Download HP WebJet Admin from the Internet for a network printer management tool that is Web browser-based. Download HP WebJet Admin from the following URL: http://www.hp.com/go/webjetadmin

PANTONE Color Palletes – Download PANTONE color palletes.

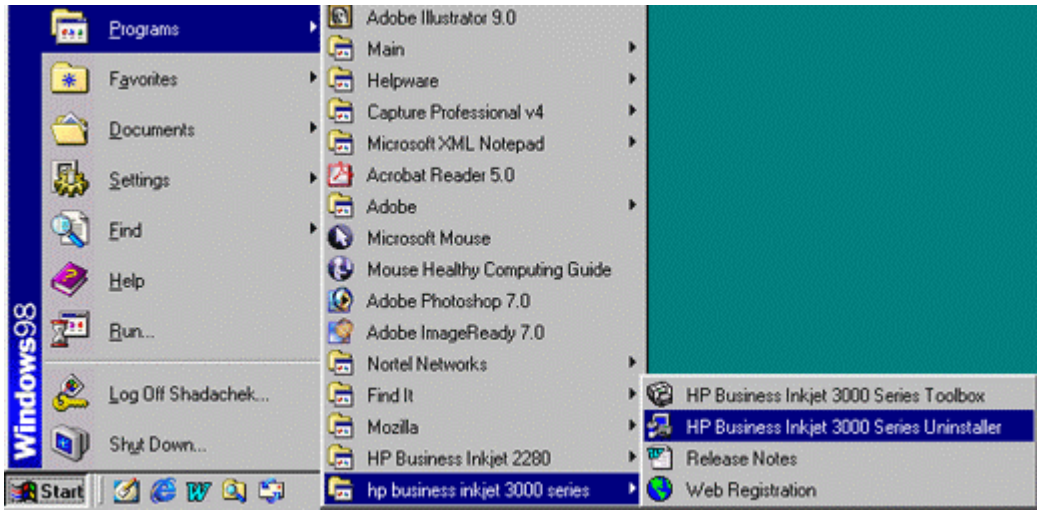


optional software

uninstalling the printer software

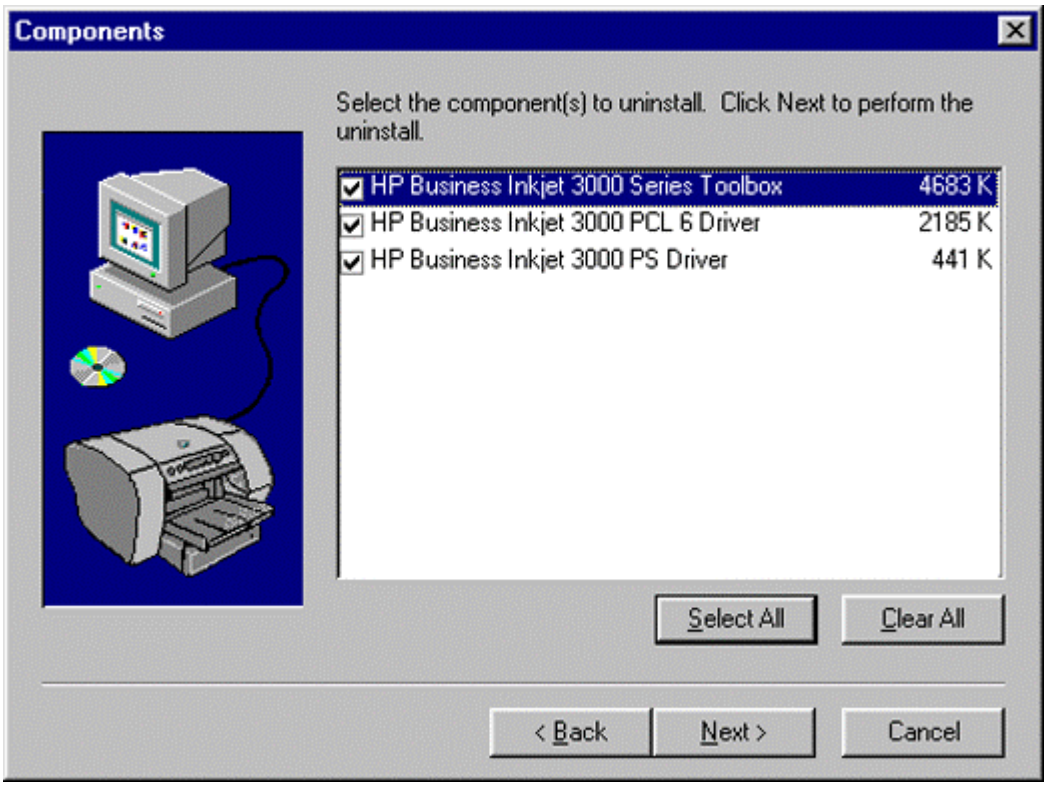
The steps to uninstall the printer software are:

Select Programs --> hp business inkjet printer 3000 series --> HP Business Inkjet 3000 Series Uninstaller menu command.



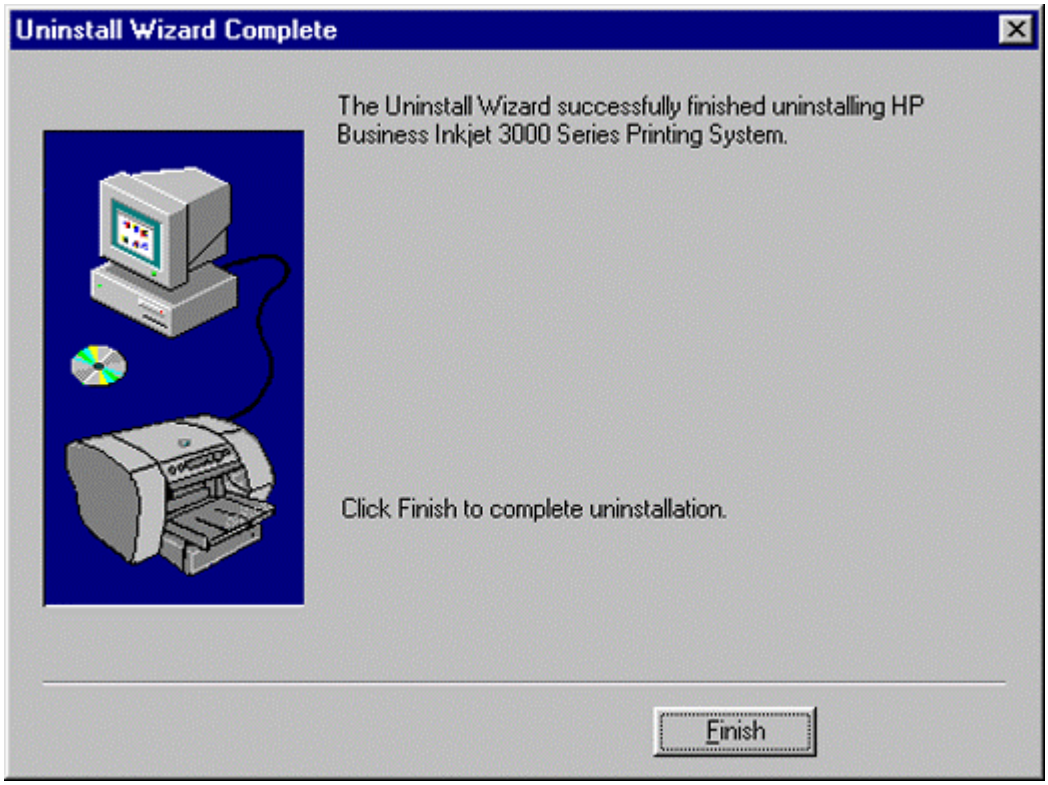
uninstalling printer software - step 1

Select the components that are to be uninstalled in the **Components** dialog box.



uninstalling printer software - step 2

Click **Finish** to uninstall the required components.



uninstalling printer software - step 3

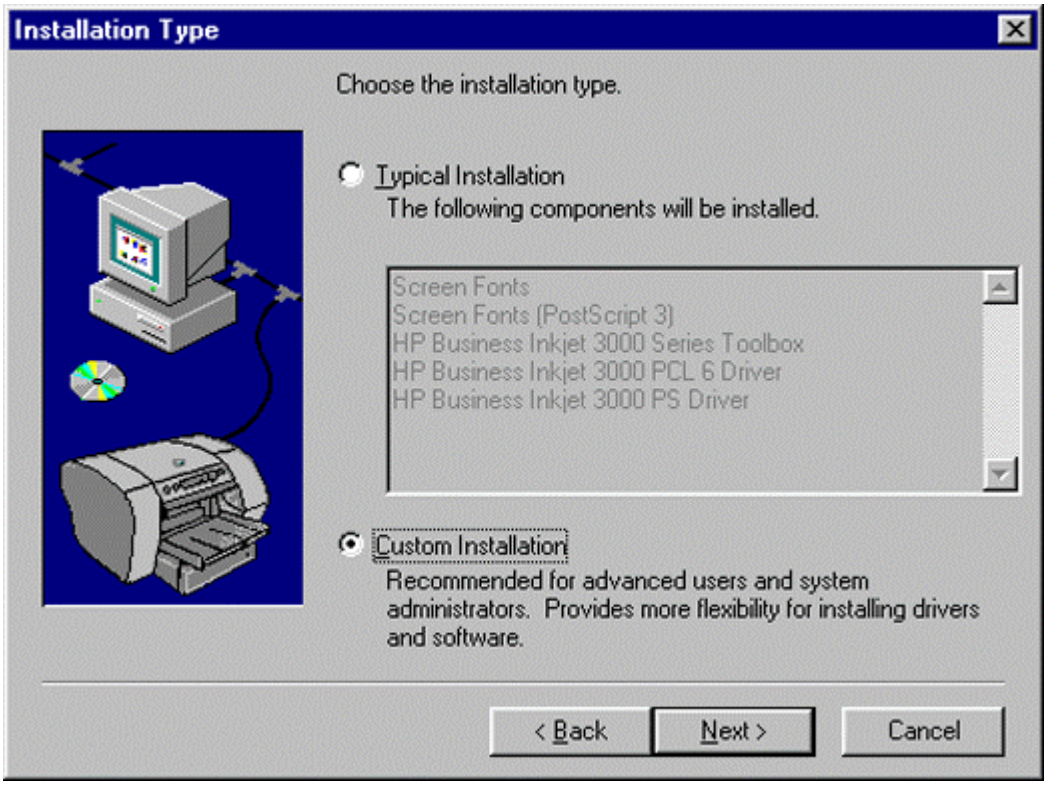
The scrubber utility is built into the uninstaller.The utility performs the following activities:

- Reads the .ini file for all information.
- Deletes all printers using the driver specified.
- Deletes the printer driver and its dependent files.
- Deletes all the devices in the computer with the specified plug-n-play ID and USB ID.
- Deletes all the .inf and .pnf files specified in the scrub.ini file.
- Deletes all oem*.* files in the inf directory.
- Deletes all the files specified in the DeleteFiles section.

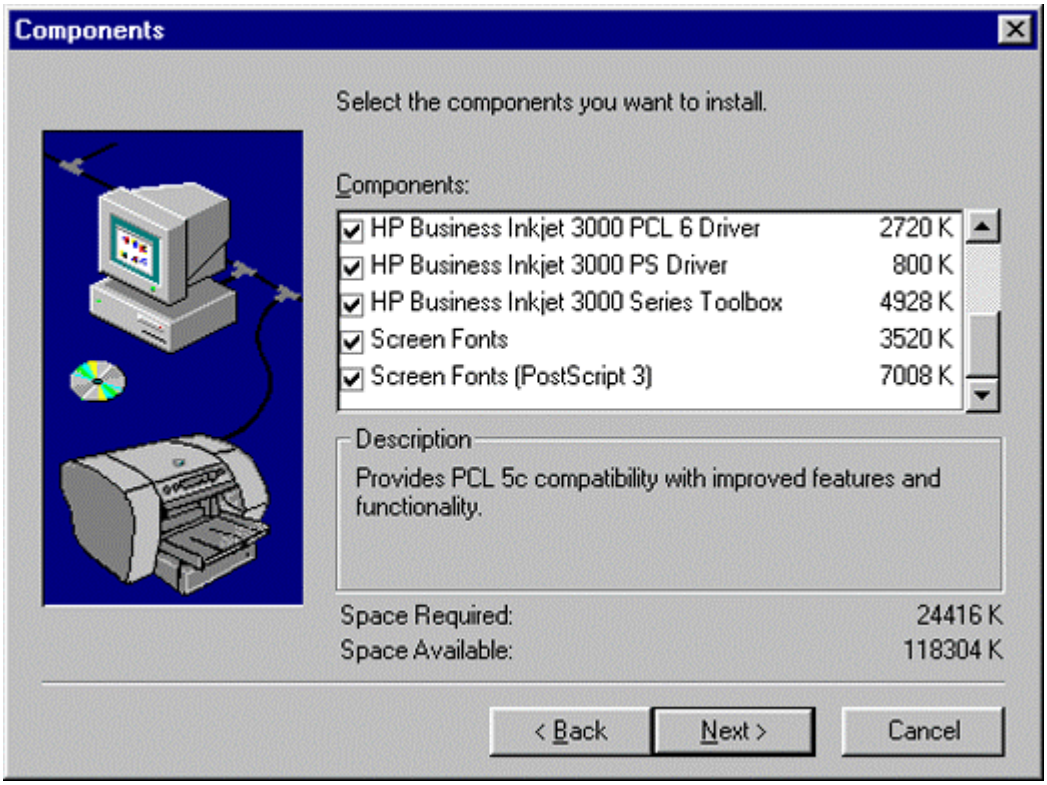
installing toolbox

The Toolbox is installed automatically when you install the printer software, or you can specify the Toolbox as part of a custom software installation.

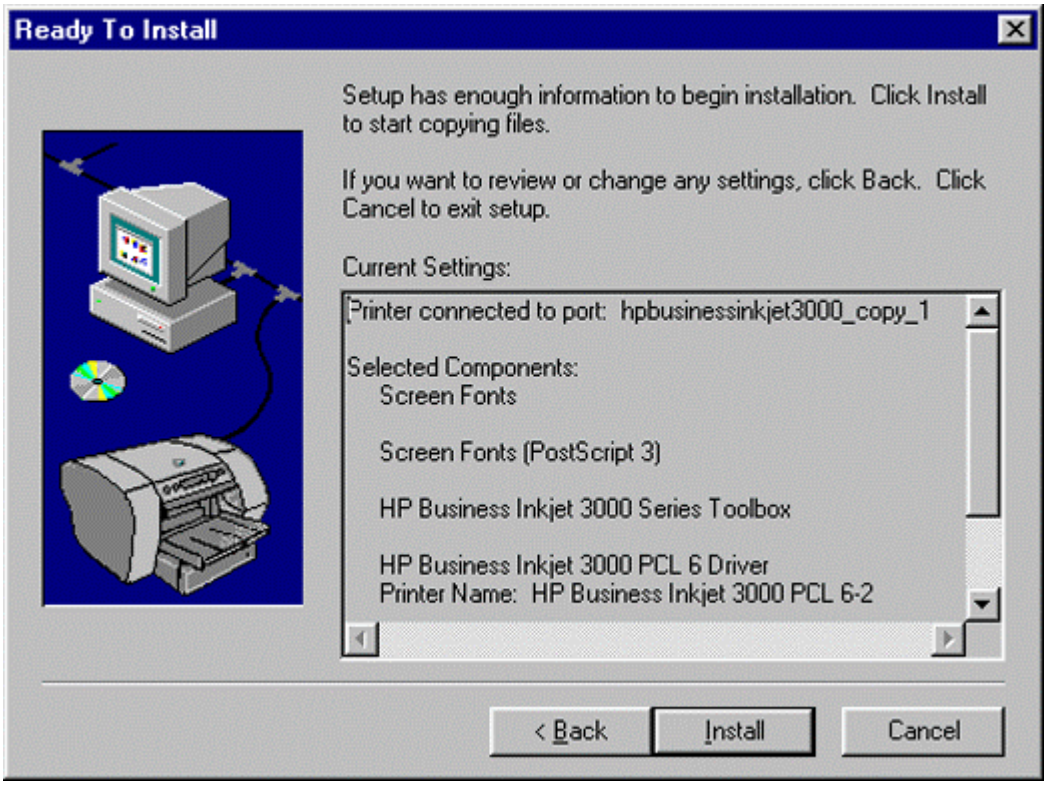
Select **Custom Installation** radio button in the **Installation Type** dialog box and click the **Next** button.



Select the **HP Business Inkjet 3000 Series Toolbox** check box in the **Components** dialog box and click the **Next** button.



Click the **Install** button in the **Ready To Install** dialog box to install the Toolbox.



installing the Macintosh printer software

Macintosh printing software components

The printer software for Macintosh includes the following components:

- PostScript Printer Description files (PPDs) (Mac OS 8.6 to Mac OS 9.2.2) PPDs, in combination with the Apple LaserWriter 8 printer driver, access the printer features and allow the computer to communicate with the printer. An installation program for the PPDs and other software is provided on the Starter CD. Use the Apple LaserWriter 8 printer driver that comes with the computer.
- Printing Dialog Extensions (PDEs) (Mac OS X) PDEs are code plug-ins that provide access to printer features, such as number of copies, print on both sides, and quality settings. An installation program for the PDEs and other software is provided on the Starter CD.
- The HP InkJet Utility allows control of features that are not available in the printer driver. Use the illustrated screens to select printer features and complete tasks with the printer, such as the following:
- download files, view fonts, and change many of the printer settings
- check the ink cartridge levels
- configure and set the printer for Internet Protocol (IP) or AppleTalk printing

Note *The HP InkJet Utility is not supported for the Korean, Japanese, Simplified Chinese, and Traditional Chinese languages.*

connecting the printer with a network (Ethernet) cable in the Mac OS

When connecting the printer to a network in the Mac OS, make sure the HP Jetdirect print server is installed in the printer before you install the printer software.

Insert the Starter CD into the CD-ROM drive. The CD menu runs automatically. If the CD menu does not run automatically, double-click the CD icon on the desktop, and then double-click the ClassicInstaller icon (if you are using Mac OS 8.6 to Mac OS 9.2.2) or the CarbonInstaller icon (if you are using Mac OS X). This icon is located in the Installer:<language> folder of the Starter CD (where <language> is your language preference).

Follow the instructions on the screen.

Connect the cable between the ports on the computer and the printer.

If you are using Mac OS 8.6 to Mac OS 9.2.2, complete steps 5 through 9. -Or- If you are using Mac OS X, complete steps 10 through 13.

Mac OS 8.6 to Mac OS 9.2.2

Open the Desktop Printer Utility:

- **Mac OS 8.6 to Mac OS 9.0.x** : On the hard drive, double-click the Desktop Printer Utility icon in the Apple Extras: Apple LaserWriter Software folder.
- **Mac OS 9.1.x to Mac OS 9.2.2** : On the hard drive, double-click the Desktop Printer Utility icon in the Applications (Mac OS 9): Utilities folder.

On the pop-up menu, select printer **LaserWriter8** from the list, and then click **OK** .

In the **PostScript Printer Description (PPD) File** section of the window that appears, click **Auto Setup** .

Make sure **HP Business Inkjet 3000** is selected and click Select.

Click **Create** . The printer icon appears on the desktop.

Mac OS X

Open the Print Center (located in the Applications/Utilities folder), and then click **Add Printer** -Or- If you are using an LPR network, on the pop-up menu, select **LPR Printer using IP** , and then type the IP address for the printer. .

If necessary, select the Zone.

Select **HP Business Inkjet 3000** from the list, and then click **Add** . A dot appears beside the printer name, indicating that this printer is now the default printer.

connecting the printer with a network (Ethernet) cable

When connecting the printer to a network, make sure the HP Jetdirect print server is installed in the printer before you install the printer software. For more information about using the HP Jetdirect print server, see installing optional accessories.

Insert the Starter CD into the CD-ROM drive. The CD menu runs automatically. If the CD menu does not run automatically, double-click the CD icon on the desktop, and then double-click the ClassicInstaller icon (if you are using Mac OS 8.6 to Mac OS 9.2.2) or the CarbonInstaller icon (if you are using Mac OS X). This icon is located in the Installer:<language> folder of the Starter CD (where <language> is your language preference).

Follow the instructions on the screen.

Connect the cable between the ports on the computer and the printer.

If you are using Mac OS 8.6 to Mac OS 9.2.2, complete steps 5 through 9. -Or- If you are using Mac OS X, complete steps 10 through 13.

Mac OS 8.6 to Mac OS 9.2.2

Open the Desktop Printer Utility:

- **Mac OS 8.6 to Mac OS 9.0.x** : On the hard drive, double-click the Desktop Printer Utility icon in the Apple Extras: Apple LaserWriter Software folder.
- **Mac OS 9.1.x to Mac OS 9.2.2:** On the hard drive, double-click the Desktop Printer Utility icon in the Applications (Mac OS 9): Utilities folder.

On the pop-up menu, select **LaserWriter8** , select **Printer (AppleTalk)** from the list, and then click **OK** .

In the **PostScript Printer Description (PPD) File** section of the window that appears, click **Auto Setup** .

Make sure **HP Business Inkjet 3000** is selected and click Select.

Click **Create** . The printer icon appears on the desktop.

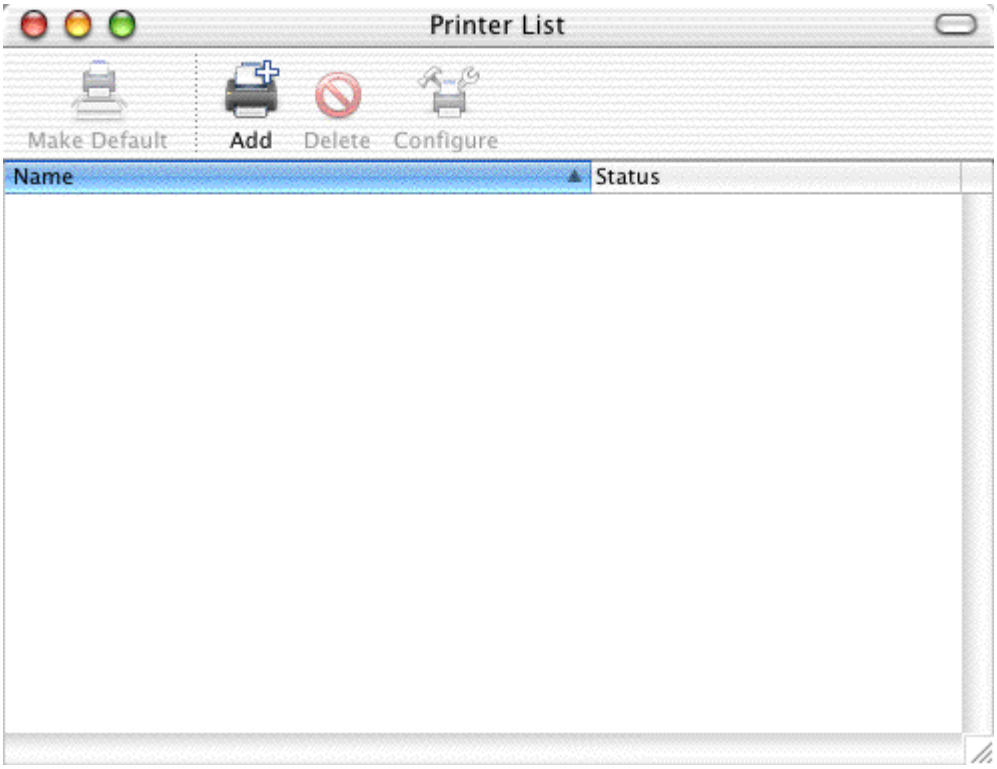
Mac OS X

Open the Print Center (located in the Dock at the bottom of the screen), and then click **Add Printer** .

If you are using an AppleTalk network, on the pop-up menu, select **AppleTalk** -Or- If you are using an LPR network, on the pop-up menu, select **LPR Printer using IP** , and then type the IP address for the printer.

If necessary, select the Zone.

Select **HP Business Inkjet 3000** from the list, and then click **Add** . A dot appears beside the printer name, indicating that this printer is now the default printer.



enabling optional accessories in the printer driver

If you have installed an auto-duplex unit, Tray 3, or the multipurpose tray (which replaces Tray 1), and you are using Mac OS 8.6 to Mac OS 9.2.2, you must enable these optional accessories in the printer driver before you can use them with the printer.

Note *Mac OS X automatically enables the auto-duplex unit in the printer driver when you install the printer software.*

To enable optional accessories:

Click the printer's desktop printer icon.

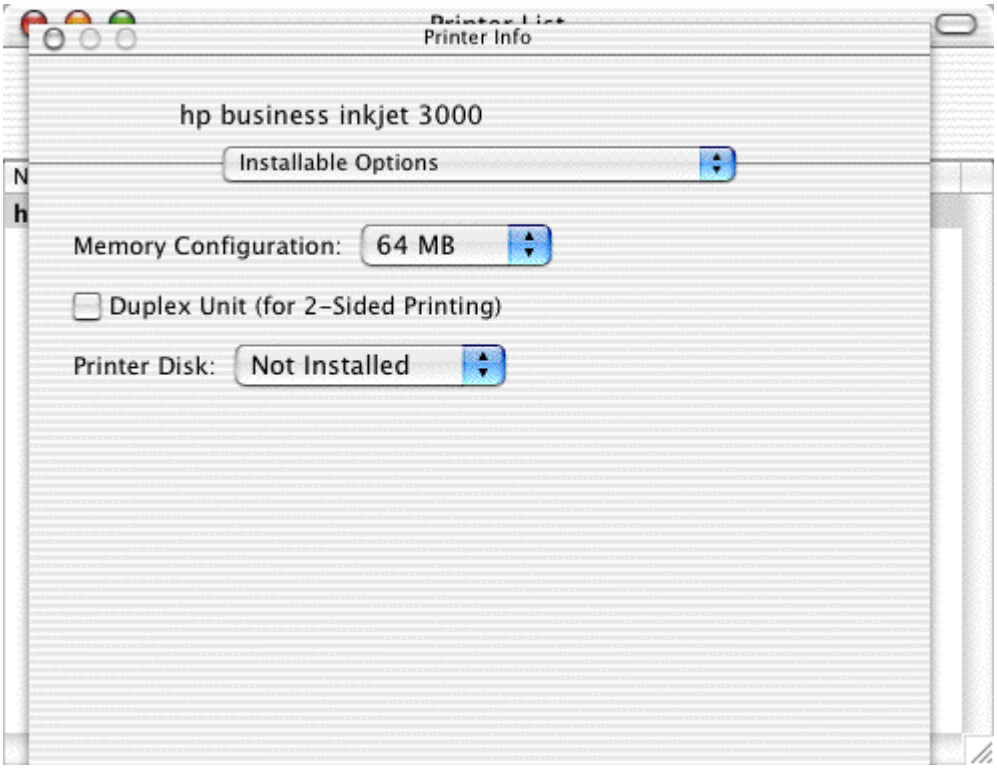
On the **Printing** menu, click **Change Setup** .

On the **Change** pop-up menu, select the optional accessory you want to enable.

On the **To** pop-up menu, select **Installed** .

Click **OK** .

Repeat this procedure for each optional accessory you want to enable.


Printer Info
hp business inkjet 3000
Installable Options
Memory Configuration:
64 MB
Duplex Unit (for 2-Sided Printing)
Printer Disk:
Not Installed

changing printer settings and printing documents

In the Mac OS, you can configure printer settings at the LCD control panel or from the Page Setup and Print dialog boxes in the Mac OS. Settings configured in the Mac OS override settings configured in the LCD control panel.

You can also select the default printer. The default printer is the one that is used if you choose the Print command without first specifying which printer you want to use with an application. The default printer should be the printer that you use most often.

For more information about using the Mac OS to configure printer settings, see the Mac Help on your computer.

to set the default printer, Mac OS 8.6 to Mac OS 9.2.2

Click the desktop printer icon for the printer you want to be the default printer.

On the **Printing** menu, click **Set Default Printer** . A dark outline appears around the printerís desktop printer icon.

to set the default printer, Mac OS X

Open the Print Center, select the printer you want to be the default printer from the Printers List. For information about opening the Print Center, see the Mac Help on your computer.

On the **Printers** menu, click **Make Default** . A blue dot appears next to the printer's name in the Printers List.

to change page setup settings

Open the document you want to print.

On the **File** menu, click **Page Setup** .

From the **Format for** pop-up menu, select the printer for which you want to format the document, and then change the desired settings (such as selecting the type of media and setting custom page sizes).

On the **Paper** pop-up menu (Mac OS 8.6 to Mac OS 9.2.2) or the **Paper Size** pop-up menu (Mac OS X), select the media size on which you want to print.

Click **OK** .

to change print settings

Open the document you want to print.

On the **File** menu, click **Print** .

Select the location of the media or the type of media on which you want to print:

- **Mac OS 8.6 to Mac OS 9.2.2:** On the pop-up menu, click **All pages from** , and then select the media source or the media type.
- **Mac OS X:** On the pop-up menu, select **Paper Feed** , and click **All pages from** . On the pop-up menu, select the media source or the media type.

Change the desired settings (such as selecting a source for the print job and choosing print quality modes).

Click **Print** .

uninstalling the Macintosh printer software

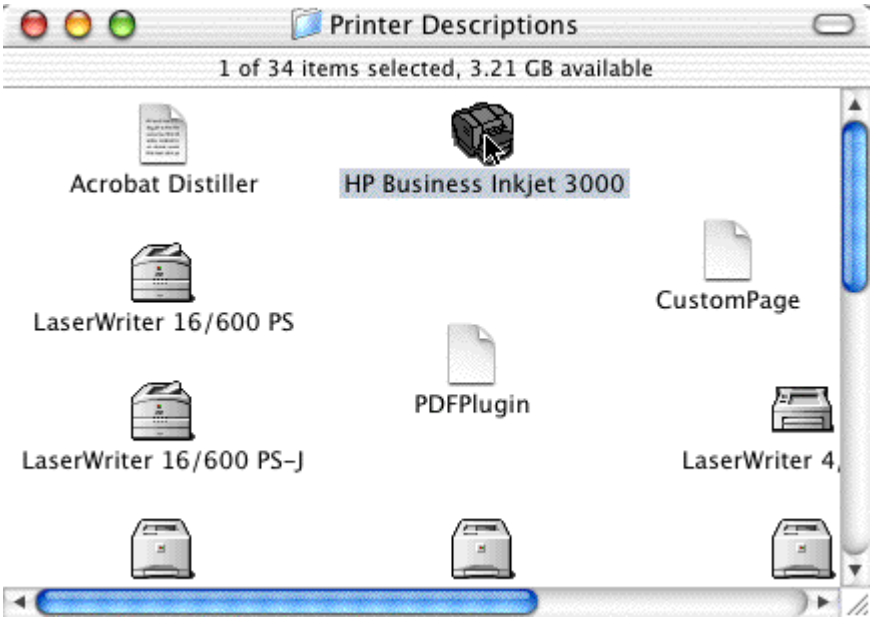
The Macintosh installer does not contain an unistall option. The user must manually remove the PPD files from the appropriate folder for Mac OS 8.6 - 9.2.2 and Mac OS X - 10.2.1.

Mac OS 8.6 - 9.2.2

Remove the PPD file from Macintosh HD (or the name of your hard drive) : Sysetm Folder : Extensions : Printer Descriptions : HP Business Inkjet 3000, and drag it onto the Trash icon on the Desktop.

On the Desktop there is an icon of the Printer. Drag this to the Trash.

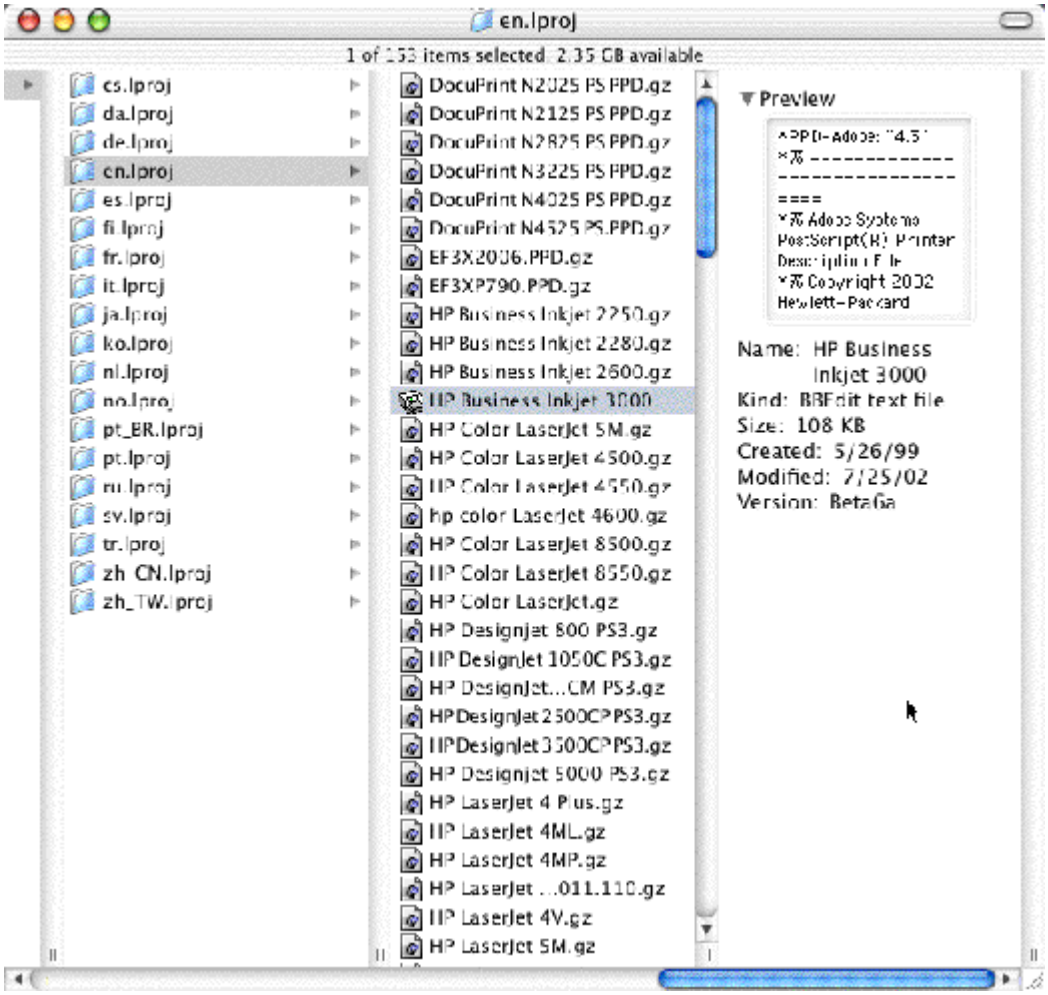
Go to the Special menu at the top, and select Empty Trash.



Mac OS X - 10.2.1

Remove the PPD file from Macintosh HD (or the name of your hard drive) : Library : Printers : PPDs : Contents : Resourcs : en.lproj :, and drag the file HP Business Inkjet 3000 to the Trash icon in the Dock.

Go to the Print Center, select the HP Business Inkjet 3000 in the Printer List, and click the Delete button at the top of the window.



Macintosh printer software components

Macintosh printer software components

The main components of the Macintosh OS PostScript solution include:

- PostScript Printer Desscription (PPD) files
- Printer Dialog Extensions (PDEs)
- LaserWriter printer software from Apple
- Installers (Carbon and Classic)
- Mac Laserjet Utility
- Mac CD browser

PostScript Printer Description (PPDs)

The PostScript Printer Description (PPD) files are text files that provide a uniform approach to using the diverse features of devices that contain PostScript interpreters. Such features include different page sizes, memory size, and font availability, as well as finishing features such as duplex printing and stapling.

The following illustrates an example of an hp business inkjet printer 3000 series PPD file:

```
*PPD-Adobe: "4.3"
*% ------------------------------
*% Adobe Systems PostScript(R) Printer Description File
*% Copyright 2002 Hewlett-Packard Company.
*% PPD Version For Apple Macintosh

*% Date Code: 20020111
*% ==============================
*% Product/PPD Version Information
*% ------------------------------
*% PPD File Version Information
*FormatVersion: "4.3"
*FileVersion: "1.0"
*LanguageVersion: English
*LanguageEncoding: MacStandard
*PCFileName: "HPWM5228.PPD"

*% Product Name and Version Information
*Manufacturer: "HP"
*Product:      "(hp business inkjet xxxx)"
*ModelName:    "HP Business Inkjet 4600 PS"
*ShortNickName: "HP Business Inkjet 4600 PS"
*NickName:     "HP Business Inkjet 4600 PS - Alpha3"
*PSVersion:    "(3010.107) 0"
```

Printer Dialog Extensions (PDEs)

Print Dialog Extensions (PDEs) are plug-ins for the OS X operating system. They are written by Apple and third parties to implement the printing user interface. Third parties add PDEs to support their custom features or to override Apple's default behaviors.

The currently supported PDEs include:

- **Image Quality** : General print quality features such as resolution and output mode. Print Quality: Best, Normal, Fast
- **Finishing** : Final media destinations, including stacking, stapling, and folding.
- **Job Retention** : Features to enable the user to hold and store jobs in printer mass storage.
- **Edge to Edge** : Enables (nearly) full bleed margins.
- **Proof and Print** : A reduced set of Job Retention, only implemented on the HP Color LaserJet 8550, available in OS X.
- **Color Option** : A combined set of features formerly from, and replacing, the obsolete ColorSmart and Color Quality, including Print Color as Gray (True, False).

All supported HP PDEs are included in the hp business inkjet printer 3000 series Macintosh installer, although they are not necessarily used by the printer PPDs. This minimizes conflicts between this and other printers. The unused PDEs are Finishing, Edge to Edge, and Proof and Print.

LaserWriter printer software

LaserWriter printer software includes the following files, which the installer places into the Extension folder:

- Desktop PrintMonitor v2.2.1
- Desktop Printer Spooler v2.2.1
- PrintingLib v8.6

installers

Both Carbon and Classic install the following:

- PPDs
- PDFs
- LaserWriter printer software
- Readmes
- User guides
- LaserJet Utility
- Fonts

The “installer locations” tables show where these items are installed.

item	version	package	location
HP Business Inkjet 3000.ppd	-	Printer Description	\\MacSystem\System Folder\Printer Descriptions
Desktop Printer Spooler	-	Extensions	\\MacSystem\System Folder\Extensions
Desktop PrintMonitor	-	Extensions	\\MacSystem\System Folder\Extensions
PrintingLib	-	Extensions	\\MacSystem\System Folder\Extensions
hp3000r.icm	18/06/2002	ColorSync Profile	\\MacSystem\HP LaserJet Folder\ColorSync Profile
Albertus Extra Bold	-	HP Fonts	\\MacSystem\HP LaserJet Folder\HP Fonts
Albertus Medium	-	HP Fonts	\\MacSystem\HP LaserJet Folder\HP Fonts
Antique Olive	-	HP Fonts	\\MacSystem\HP LaserJet Folder\HP Fonts
Arial	-	HP Fonts	\\MacSystem\HP LaserJet Folder\HP Fonts
CG Omega	-	HP Fonts	\\MacSystem\HP LaserJet Folder\HP Fonts
CG Times	-	HP Fonts	\\MacSystem\HP LaserJet Folder\HP Fonts
Clarendon Condensed Bold	-	HP Fonts	\\MacSystem\HP LaserJet Folder\HP Fonts
Coronet	-	HP Fonts	\\MacSystem\HP LaserJet Folder\HP Fonts
Garamond	-	HP Fonts	\\MacSystem\HP LaserJet Folder\HP Fonts
Letter Gothic	-	HP Fonts	\\MacSystem\HP LaserJet Folder\HP Fonts
Marigold	-	HP Fonts	\\MacSystem\HP LaserJet Folder\HP Fonts
Times New Roman	-	HP Fonts	\\MacSystem\HP LaserJet Folder\HP Fonts
Univers	-	HP Fonts	\\MacSystem\HP LaserJet Folder\HP Fonts
Univers Condensed	-	HP Fonts	\\MacSystem\HP LaserJet Folder\HP Fonts
Wingdings	-	HP Fonts	\\MacSystem\HP LaserJet Folder\HP Fonts

installer locations (Classic)

item	version	package	location
HP Frameworks	-	PDE	\\MacSystem\System\Library\Printers
HP Color Options PDE	-	PDE	\\MacSystem\System\Library\Printers\PDEs
HP Edge to Edge PDE	-	PDE	\\MacSystem\System\Library\Printers\PDEs
HP Finishing PDE	-	PDE	\\MacSystem\System\Library\Printers\PDEs
HP Image Quality PDE	-	PDE	\\MacSystem\System\Library\Printers\PDEs
HP Job Retention PDE	-	PDE	\\MacSystem\System\Library\Printers\PDEs
HP Proof and Print PDE	-	PDE	\\MacSystem\System\Library\Printers\PDEs
HP Business Inkjet 3000.ppd (OS10.0.0 - OS10.0.4)	-	PDE	\\MacSystem\System\Library\Printers\PPDs\Contents\Resources\English.lproj
HP Business Inkjet 3000.ppd (OS 10.1 and above)	-	PDE	\\MacSystem\System\Library\Printers\PPDs\Contents\Resources\En.lproj

installer locations (Carbon)

additional features

Additional features supported in PPD files include:

• Language support • Paper sources • Paper sizes • Print quality	• Tray support • Media types • Watermarks

Supported languages:

- English
- French
- German
- Italian
- Spanish
- Korean

Supported paper sources:

- Auto
- Tray 1
- Tray 2
- Tray 3
- Manual Paper Feed

Supported paper sizes:

Letter	Legal
Executive	A4
B5 (ISO)	B5 (JIS)
Envelope #10	Envelope Monarch
Envelope DL	Envelope C5
A6 Card	Custom Page

•

Supported print quality:

- Best
- Normal
- Fast

Supported watermarks:

- Company Confidential
- Company Proprietary
- Company Private
- Confidential
- Copy
- Copyright
- Draft
- File Copy

Supported watermarks (cont'd.):

- Preliminary
- Proof
- Review Copy
- Sample
- Top Secret
- Urgent
- Final
- For Internal Use Only

tray support

Paper	MP Tray Support	Tray 2	Tray 3	Duplex
Letter	Yes	Yes	Yes	Yes
Legal	Yes	Yes	Yes	Yes
Executive	Yes	Yes	Yes	Yes
A4	Yes	Yes	Yes	Yes
B5 (ISO)	Yes	Yes	No	Yes
B5 (JIS)	Yes	Yes	Yes	Yes
Envelope #10	Yes	No	No	No
Envelope Monarch	Yes	No	No	No
Envelope DL	Yes	No	No	No
Envelope C5	Yes	No	No	No
A6 Card	Yes	No	No	No
Custom Page	Yes	Yes	Yes	Yes

media types

Paper Name	MP Tray Support	Tray 2	Tray 3	Duplex
Plain Paper	Yes	Yes	Yes	Yes
HP Premium Inkjet Paper	Yes	Yes	Yes	No
HP Premium Inkjet Heavyweight Paper	Yes	Yes	Yes	Yes
HP Photo Quality Paper, Semi Gloss	Yes	Yes	Yes	Yes
HP Photo Quality Paper, Matte	Yes	Yes	Yes	Yes
HP Everyday Photo Paper, Semi Gloss	Yes	Yes	Yes	Yes
HP Everyday Photo Paper, Matte	Yes	Yes	Yes	Yes
HP Premium Transparency	Yes	Yes	Yes	No
HP Premium Plus Transparency	Yes	Yes	Yes	No
HP Photo Paper, Glossy	Yes	Yes	Yes	No
HP Premium Photo Paper, Glossy	Yes	Yes	Yes	No
HP Premium Plus Photo Paper, Glossy	Yes	Yes	Yes	No
HP Premium Plus Photo Paper, Matte	Yes	Yes	Yes	No
HP Colorfast Photo Paper, Glossy	Yes	Yes	Yes	No
HP Brochure & Flyer, Gloss	Yes	Yes	Yes	Yes
HP Brochure & Flyer, Matte	Yes	Yes	Yes	Yes

non-OS X features

Features supported in non-OS X operating systems:

- HP ColorSmart
- CMYK inks
- HP ColorSync Profile (hp3000r.icm is included with the installer)
- HP fonts
- Job Retention

Fonts supported in non-OS X operating systems:

- Albertus Extra Bold and Albertus Medium
- Antique Olive
- Arial
- CG Omega
- CG Times
- Clarendon Condensed Bold
- Coronet
- Garamond
- Letter Gothic
- Marigold
- Times New Roman
- Univers and Univers Condensed
- Wingdings

HP Job Retention features incorporated into the resource fork of non-OS X Macintosh PPD files:

- **Job Retention** : Off, Quick Copy, Proof and Hold, Stored Job
- **User Name** : User File Sharing Name, Forms, User-Defined Name
- **Job Name** : User Document Name, User-Defined Name
- **PIN** (for Private Job): User-Specified PIN

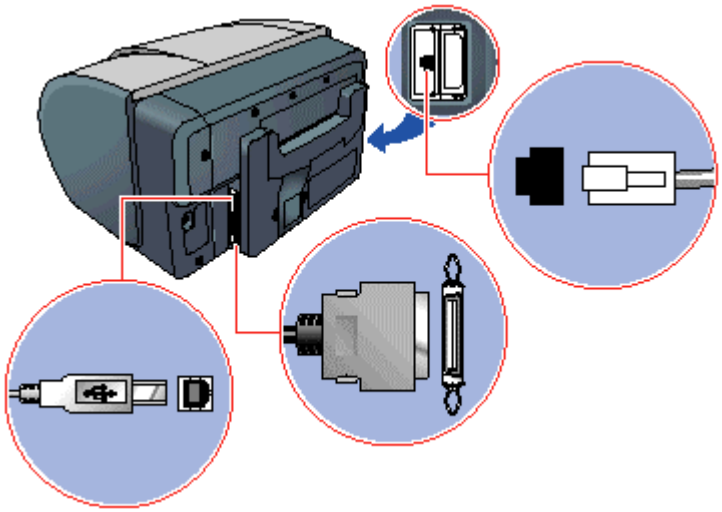
web deployment of drivers

The printer driver can be deployed from www.hp.com/support/businessinkjet3000.

The following drivers are deployed on the web:

- Full Printing System
- PCL6 + USB Driver
- PCL6 Driver
- PS Driver
- PCL5 + USB Driver
- PCL5 Driver
- LJ Utility
- WebJetAdmin support
- PS model script

connectivity options



connectivity options

USB cable

Use a USB cable, having a part number of C6518A, to connect the printer to the computer if the computer has a USB port and any one of the following operating systems:

- Windows 98
- Windows Millennium Edition (Me)
- Windows 2000
- Windows XP

If the computer does not meet the specifications, use a parallel cable to connect the printer to the computer.

In most cases, after you install the printer software and connect the printer to the computer, install additional printers with USB cables without reinstalling the printer software.

Warning *Ensure to connect the USB cable only when prompted by the computer.*

parallel cable

Use a parallel cable, having part numbers C2950A or C2951A, to connect the printer to the computer if the computer has a parallel port and any one of the following operating systems:

- Windows 95
- Windows 98
- Windows Millennium Edition
- Windows NT 4.0
- Windows 2000
- Windows XP

EIO

Install an HP Jetdirect print server in the EIO slot of the printer. By default, the hp business inkjet printer 3000n and 3000dtn configurations include an HP Jetdirect print server in one of these slots.

The printer is shared in a network environment by connecting it directly to the network with an HP Jetdirect print server. In addition, computers running in the Windows environment can share the printer when it is directly connected to a computer on the network. The HP Jetdirect printer server can be used in both client-server and peer-to-peer network configuration.

connectivity specifications

The connectivity specifications are:

product name	specification
hp business inkjet printer 3000	IEEE 1284-compliant bi-directional parallel USB 2.0 compliant full speed 2 open EIO slots 3 DIMM slots (100 pin, SDRAM, PC 100 or greater
hp business inkjet printer 3000n	IEEE 1284-compliant bi-directional parallel USB port EIO slots (1 open EIO slot, and HP Jetdirect 615n Internal Print Server for Fast Ethernet 10/100Base-TX in 1 EIO slot) 3 DIMM slots (100 pin, SDRAM, PC 100 or greater
hp business inkjet printer 3000dtn	IEEE 1284-compliant bidirectional parallel USB 2.0 compliant full speed EIO slots (1 open EIO slot, and HP Jetdirect 615n Internal Print Server for Fast Ethernet 10/100Base-TX in 1 EIO slot 3 DIMM slots (100 pin, SDRAM, PC 100 or greater

Note *EIO and personality cards can be swapped between slots.*

connecting to a network

The HP Jetdirect print server can be used in both client-server and peer-to-peer network configurations.

peer-to-peer network

In a peer-to-peer network, the printer software is installed on each computer, and the system is configured to send print jobs directly to the printer. Each individual computer manages its own print jobs. Peer-to-peer printing is more suitable for smaller networks.

client-server network

On a client-server network, client computers send print jobs to dedicated server computers that control the use of each printer. Client-server printing is normally used in small work groups where dedicated computer servers manage the printing needs of many users.

Access the HP Jetdirect Print Server Administrator guide on the starter CD for information to set up the printer on a network.

The HP Jetdirect Print Server Administrator guide provides detailed information about setting up and using your HP Jetdirect print server. It also provides information about the following:

- HP Software Solutions for HP Jetdirect print servers:
- TCP/IP configurations
- Using LPD (Line Printer Daemon) services on the HP Jetdirect print server
- FTP printing
- Troubleshooting and configuration page messages
- Embedded Web server to access configuration and management pages for the print server and device

establishing a network connection using the EIO module

When setting up the printer by using a network connection, connect the printer to the network first, and then install the software.

If an HP Jetdirect print server was purchased separately, install it in the printer. The print server must be installed before you install the printer software.

Note *The HP Jetdirect print server is pre-installed in the HP Business Inkjet 3000n and 3000dtn printer configurations.*

Connect the network cable between the HP Jetdirect print server and a network port.

Start Windows and make sure no other Windows applications are running.

Insert the Starter CD into the CD-ROM drive. The CD menu runs automatically.

Note *If the CD menu does not run automatically, select the Start , and then click Run . At the command line box, type the letter of your computer's CD-ROM drive followed by :\SETUP (for example, D:\SETUP.*

On the CD menu, click **Install Printer Driver** .

Choose your language, and then click **OK** .

Follow the instructions on the screen.

Click Connected to the network , and then click Next .

Click **Basic Server or Peer-to-Peer Network Setup** and click **Next** . Follow the instructions on the screen to complete the installation.

troubleshooting setup issues

quick checkup

If you have problems with the printer or have trouble printing, try the following troubleshooting tips to help diagnose and solve the problems:

- Print a Configuration Page, which can help diagnose printer problems.
- Check the printer's embedded Web server (if the printer is connected to a network).
- Complete the quick checkup steps listed below.

Step 1: Check the power

Make sure the power cord is connected firmly to the printer and to a working power receptacle. Make sure the printer is turned on.

Step 2: Check the print media

Make sure media is loaded correctly in the tray and that media is not jammed in the printer.

Note *The media level indicators on the front of Trays 2 and 3 are accurate only when the printer is turned on.*

Step 3: Check the LCD control panel

The printer displays two general types of error messages:

error message type	example	solution
Error messages showing common printer errors	BAD INK CARTRIDGE OR PRINTHEAD	See "Common printer messages."
Messages showing error codes	EVENT: XXXX	The printer might have a hardware problem. Turn off the printer, wait a few seconds, and then turn it on again. In most situations, this action solves the problem. If the message persists, your printer might need service. Write down the error code, and contact HP support.

general printer error messages

Step 4: Check the Attention light

If the Attention light on the LCD control panel is flashing and the printer does not print, lift the printhead cover and make sure the printhead latch is properly secured.

Step 5: Check the ink cartridges and printheads

Make sure all four ink cartridges and printheads are properly installed and that the protective tape covering the ink nozzles has been removed. Make sure the ink cartridges are not empty.

Step 6: Check the printer setup

Make sure the printer is selected as the current or default printer. If your computer is running Windows, make sure that Pause Printing is not selected. (From the desktop click Start, select Settings, and then click Printers. Right-click the printer and make sure a check does not appear next to Pause Printing.) For more information about checking printer settings, see the documentation for your computer.

Step 7: Check the print settings

Make sure the print settings (such as media type, media size, margins, and color) in the printer driver are correct. Also, check the settings in the Page Setup dialog box (typically available by selecting Page Setup from the File menu in an application).

Step 8: Check the USB or parallel port on your computer

Make sure your printer is connected directly to the USB or parallel port. Do not share the port with other devices, such as a Zip drive.

Step 9: Check the network setup

Make sure that your printer is properly set up in the network environment.

Note *If the printer is connected to a network, you can use the embedded web server in the printer to check the network setup.*

printing a configuration page

Print a configuration page to diagnose printer problems. The configuration page has the following sections:

item	section	description
1	Printer Information	Shows general printer information, such as firmware version number, model name, and memory installed.
2	Event Log	Shows the number of entries in use, maximum number of entries, and the last three events on the LCD control panel display, starting with the most recent.
3	Installed Personalities and Options	Shows the printer languages (personalities) in use, and contents of the printer's DIMM slots and EIO slots.
4	Memory	Shows amount of RAM and Automatic Resource Saving information.
5	Security	Shows whether the LCD control panel is locked and whether a password is enabled.
6	Paper Trays and Options	Shows the printer's installed trays and their media type and size settings.

To print a configuration page:

Press the select button on the LCD control panel.

Press the down arrow button to highlight **INFORMATION** , and then press the select button to select **INFORMATION** .

Press the down arrow button to highlight **PRINT CONFIGURATION** , and then press the select button to print the configuration page.

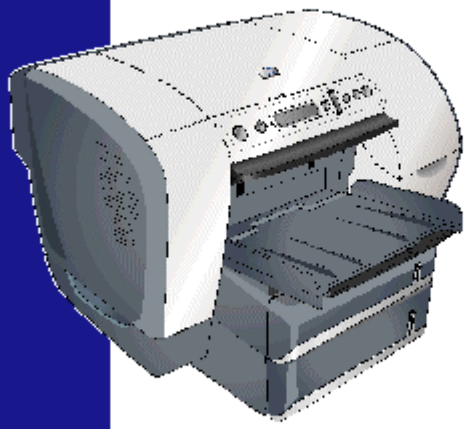
Note *If an HP Jetdirect print server is installed, two pages print. If the auto-duplex unit is installed, do not remove the page from the output bin until both sides are finished printing.*

configuration page

Module 3

hp business inkjet printer 3000 series

use & maintain



invent

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printer features overview

LCD control panel

The control panel consists of the LCD (liquid crystal display) that displays information on the current status of the printer. In addition, it provides the capability to configure and customize the printer.

paper input and output trays

The hp business inkjet 3000 series printers contain different paper trays for handling different types of paper and media. The different types of paper trays are:

- Tray 1 (rear) - This tray either holds a single sheet of printable paper for manual feeding or the multipurpose tray, depending on which is installed.
- Tray 2 (front) - This tray holds 300 sheets of 20-lb printable paper.
- Tray 3 (front) - This tray (optional with the 3000dtn printer) holds 700 sheets of 20-lb printable paper.
- Multipurpose tray (rear) - This tray holds cards and any special type of printable media It can hold up to 100 sheets of plain paper; other media have different specifications. Note: Tray 1 is removed to install the multipurpose tray.
- Output bin - This tray can hold up to 100 sheets of plain paper; other media have different specifications.

auto-duplex unit

This standard accessory for the 3000dtn printer allows automatic printing on both sides of the paper. It is an optional accessory for 3000 and 3000n.

LCD control panel overview

Identify the following components:

POWER button

HELP button

LCD display

Back button

Up and down arrow buttons

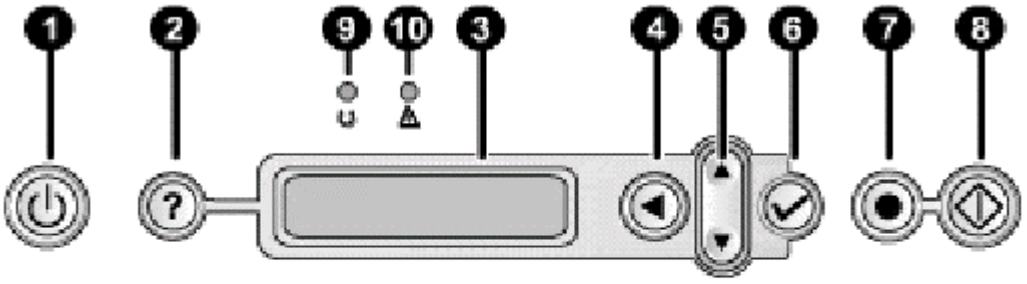
Select button

Ready light

Attention light

CANCEL JOB button

PAUSE/RESUME button



LCD control panel

extending multipurpose tray and output bin

multipurpose tray

The multipurpose paper tray is available as an optional accessory. When the multipurpose tray is installed, it functions as Tray 1.

The steps to extend the multipurpose tray are:

Open the printer as follows:

Pull out the multipurpose tray extension lengthwise until it clicks into place. This extends the multipurpose tray to support media up to A4 length, or 297 mm (11.68 inches). The tray extension also serves as the paper length guide for the multipurpose tray.

Pinch and slide the paper width guide to its outermost position.

Add paper as follows:

The multipurpose tray has a maximum capacity of up to 100 sheets of 75 g/m2 (20 lb. bond) paper or an equivalent stack height of 10 mm (.39 inch).

The print-side of the media must be face-up. For transparencies, the adhesive strip edge must feed into the printer first.

To properly align media, place the stack against the left edge of the multipurpose tray (looking from back), and then slide the media down to rest in the tray. Do not overload the tray.

Pinch and slide the paper width guide until it fits snugly against the side of media.

Gently push down the tray extension until it fits snugly against the top of media.

Note *Be careful that the tray extension does not cause the media to bend or sag.*

Configure the paper size for the multipurpose tray.

output bin

To extend the output bin for longer media (for example, legal):

Grasp the extension on the output bin with one hand on each side.

Pull the extension toward you until it does not extend any further.

printing from tray 1, the rear manual feed unit

Tray 1 (manual feed) is designed to support media from 89 by 140 mm (3.5 by 5.5 inches) up to 216 by 297 mm (8.5 by 11.68 inches). Use Tray 1 for printing single envelopes, cards, custom-size paper, and heavy paper up to 0.52 mm (0.02 inches) thick. Tray 1 provides a straight-through paper path that allows the printer to handle heavy or thick paper. A straight-through paper path does not force the media to curve or bend as it travels through the printer. The manual feed will accept only one sheet at a time.

To load tray 1:

In the printer driver, select Manual Feed as the media source.

Select the type of media.

When the LCD control panel displays MANUALLY LOAD [TYPE] [SIZE], insert a single sheet of media of the correct size and type..

Position the media with the short edge of the paper feeding into the printer and the long edge against the left side of the tray. The media should be face-up.

For envelopes, insert a single envelope with the short edge of the envelope feeding into the printer, the flap facing down, and the stamp corner against the left side of the tray.

Push the media into the printer until you feel some resistance. Take care not to force media into the feed slot.

After each sheet prints, the printer prompts you to load another sheet of media. Load media as needed until the printer finishes printing. Other print jobs will not continue until the Tray 1 job is finished.

printing from tray 2

Tray 2 is the main tray on all hp business inkjet 3000 series printers. It holds as many as 300 sheets of 16 to 72 lb bond, from envelopes to legal-sized paper, and as many as 50 transparencies.

To load tray 2:

Grasp the handle under the front of the tray.

Slowly pull the tray out until it stops.

Do not pull the tray completely out.

Push the blue tabs on the paper length guide and paper width guides, to slide the guides to their outermost positions.

Place up to 300 sheets of paper (up to 34 mm, or 1.2 inches, stacked) into Tray 2.

If printing on transparencies, load a maximum of 50 transparencies into each tray, with the adhesive strip face-up (arrows face up) and toward the printer.

Push the media as far back into the tray as it will go. Make sure the print-side of the media is facing down. Do not exceed the maximum stack height as indicated on the yellow label inside the tray on the right side.

Push the blue tab on the paper length guide and paper width guides and slide them until they fit snugly against the media.

Insert the tray into the printer until it closes completely.

The printer can automatically detect some standard media sizes. If this is the case, only one size will appear in the TRAY 2 SIZE options. If the size does not match the media you loaded in the tray, open the tray and make sure the media sits as far in as possible. Adjust the paper width and length guides so they fit snugly against the media stack. Close the tray.

printing from tray 3

Tray 3 is an optional tray on the hp business inkjet 3000dtn printer. It holds as many as 700 sheets of 16 to 72 lb bond. Tray 3 is designed to hold standard-to-legal size and standard-weight media. Loading certain types of special media (such as envelopes, cards, or heavy media) in tray 3 can cause jams and might damage the printer.

Tray 3 is recommended if you frequently print multi-page documents or anticipate a high volume of printing.

To load tray 3:

Grasp the handle under the front of the tray.

Slowly pull the tray out until it stops.

Do not pull the tray completely out.

Push the blue tabs on the paper length guide and paper width guides, and slide them to their outermost positions.

Place up to 700 sheets of paper (up to 70 mm or 2.7 inches, stacked) into Tray 3.

Push the media as far back into the tray as it will go. Make sure the print-side of the media is facing down. Do not exceed the maximum stack height as indicated on the yellow label inside the tray on the right side.

Push the blue tab on the paper length guide and paper width guides and slide them until they fit snugly against the media.

Insert the tray into the printer until it closes completely.

The printer can automatically detect some standard media sizes. If this is the case, only one size will appear in the TRAY 3 SIZE options. If the size does not match the media you loaded in the tray, open the tray and make sure the media sits as far in as possible. Adjust the paper width and length guides so they fit snugly against the media stack. Close the tray.

media-size detection

To use your printer most effectively, decide which types and sizes of media you want to use in the paper trays, and then configure this information in the LCD control panel.

detectable media size	tray 2	optional tray 3
Letter	Y	Y
A4	Y	Y
Legal	Y	Y
US Executive	Y	Y
ISO B5	Y	Y

detected media sizes

To ensure the media-size sensors are working properly, when loading tray 2 or 3, make sure the media sits as far in as possible. Adjust the paper width and length guides so they fit snugly against the media stack.

If you load custom-size media, you must configure the paper size in the LCD control panel. Also, if you are printing on media that does not match the media type setting for the tray, you must configure the media type in the LCD control panel.

printing on special media

envelopes and cards

Print envelopes and cards from tray 1 or the optional multipurpose tray. Use the rear manual feed for printing a single envelope (20 to 24 lb bond) or card (61 to 110 lb index). You can load up the multipurpose tray with as many as 10 envelopes or 10 cards (10 mm, or 0.4 inch, stacked).

To print single envelopes or cards using the rear manual feed:

In the printer driver, select Manual Feed as the media source, and then select the envelope or card size. Click OK.

When the LCD control panel displays **MANUALLY LOAD [TYPE] [SIZE]** , insert an envelope or card of the correct size and type along the left side of the tray.

Envelopes have to be inserted with the short edge of the envelope feeding into the printer, the flap facing down, and the stamp corner against the left side of the tray, looking at printer from back.

Push the media into the printer until you feel some resistance. Take care not to force media into the feed slot.

After each item prints, the printer prompts you to load another item of media. Load media as needed until the printer finishes printing.Other print jobs will not continue until the job in tray 1 is finished.

To print multiple envelopes or cards using the multipurpose tray:

Insert as many as 10 envelopes or cards into the multipurpose tray, and position them against the right side of the tray (facing front). Envelopes should be placed with the flap facing down and the stamp corner against the right side of the tray.

In the printer driver, select Tray 1 as the media source, and then select the envelope or card size.

Print the document.

transparencies

Use Tray 1 or the optional multipurpose tray (if installed) to print on transparencies. (If the optional multipurpose tray is not installed and you want to print multiple transparencies, use Tray 2 or Tray 3.) When Tray 2 or Tray 3 is configured in the LCD control panel to print transparencies, the printer optimizes the printing process to allow the transparencies to dry completely.

Load a maximum of 50 transparencies in Tray 2 or Tray 3, and up to 20 transparencies in the optional multipurpose tray. Tray 1 loads a single transparency at a time.

Handle transparencies using the edges. Oils from your fingers can cause print quality problems.

Use HP Premium Plus Inkjet Transparency Film, which is specifically designed to work with your printer, or use other transparencies designed to work with HP Inkjet printers.

For best results when printing multiple transparencies, use HP Premium Plus Inkjet Transparency Film.

The steps to print on transparencies are:

Load the transparencies into the optional multipurpose tray with the rough side up and the white strip feeding into the printer first. If the optional multipurpose tray is not installed, use Tray 2 or Tray 3 with the transparencies facing rough side down and the white strip pointing forward into the tray. Load no more than 50 transparencies in Tray 2 or Tray 3, and no more than 20 transparencies in the optional multipurpose tray. In the printer driver, select Tray 1, Tray 2, or Tray 3 as the media source, and then select HP Premium Transparency as the media type.

Print the document.

heavy weight paper

When printing on heavy paper, such as coated paper and photo paper, use the following guidelines:

When printing on heavy paper (up to 0.52 mm or 0.02 inch thick), use Tray 1 or the optional multipurpose tray. They provide a straight-through paper path that allows the printer to handle heavy or thick paper without bending or curling the paper

Use Tray 1 when printing a single sheet of heavy paper. If installed, use the optional multipurpose tray when printing multiple sheets of paper.

Caution *Do not use paper that is heavier than the media specification recommended for this printer. Doing so can cause misfeeds, jams, reduced print quality, and excessive mechanical wear.*

To print on heavyweight paper using the manual feed, tray 1:

In the printer driver, select Manual Feed as the media source, select the appropriate media type, and then print the document.

When the LCD control panel displays **MANUALLY LOAD [TYPE] [SIZE]** , insert one sheet of paper of the correct type and size into Tray 1. Make sure the sheet is facing up and is against the left edge of the tray.

If you are printing more than one page, insert another sheet of paper when prompted by the the LCD control panel.

To print on heavyweight paper using the optional multipurpose tray:

Load the media face-up in the optional multipurpose tray. Position the media against the right edge (when facing printer) of the tray first, and then slide the media down into the tray.

In the printer driver, select Tray 1 as the media source, and then select the appropriate media type.

Print the document.

custom-sized media

Use Tray 1 when printing on paper that is 89 by 140 mm (3.5 by 5.5 inches) to 216 by 356 mm (8.5 by 14 inches).

Use the optional multipurpose tray (if installed) when printing on paper that is 89 by 140 mm (3.5 by 5.5 inches) to 216 by 356 mm (8.5 by 14 inches).

Use Tray 2 or Tray 3 when printing on paper that is 176 by 250 mm (6.9 by 9.8 inches) to 216 by 356 mm (8.5 by 14 inches).

If your application supports custom size media, set the media size in the application before creating and printing the document. If your application does not support custom size media, set the size in the printer driver, create the document, and then print it. (You might need to reformat existing documents to print them correctly on custom paper sizes.)

To print on custom-size paper using the manual feed, tray 1:

In the printer driver, select Manual Feed as the media source, either select or create a custom size, and then print the document.

When the LCD control panel displays **LOAD TRAY 1 [TYPE] [SIZE]** insert one sheet of media into Tray 1, insert one sheet of media into Tray 1.

If you are printing more than one page, insert another sheet of media when prompted by the printer.

To print on custom-size paper using tray 2, tray 3, or the optional multipurpose tray:

Load the media in the tray.

Set the media type and size on the LCD control panel.

In the printer driver, select Tray 1, Tray 2, or Tray 3 as the media source, and then either select or create a custom size.

Print the document.

media and tray compatibility

types

The following table lists the types of media that are compatible with the printer and shows which media can be used with the printer's paper trays and accessories.

paper and transparency type	tray 1	tray 2	tray 3	auto-duplex unit
Everyday paper HP Multipurpose Paper HP Printing Paper Office Paper HP Office Recycled Paper	Y	Y	Y	Y
Business communication paper HP Premium Inkjet Paper (not supported by the auto-duplex unit) HP Professional Brochure and Flyer Paper HP Premium Inkjet Heavyweight Paper	Y	Y	Y	Y
Presentation paper HP Premium Inkjet Transparency Film HP Premium Plus Inkjet Transparency Film	Y	Y	Y	
Photo paper HP Premium Plus Photo Paper HP Premium Photo Paper HP Photo Paper HP Colorfast Photo Paper HP Photo Quality Paper HP Photo Quality Inkjet Paper	Y	Y	Y	
Design paper HP Design Glossy Paper HP Design Heavyweight Paper	Y	Y	Y	

supported media types

capacities

The following table lists the capacities of the printer's paper trays and accessories.

tray	capacity
1 manual feed unit	1 sheet paper or other media
2	300 sheets plain paper and HP media (30-mm or 1.2-inch stack of 16 to 72 lb bond/60 to 270 g/m2), 50 transparencies
3	700 sheets (70-mm or 2.8-inch stack of 16 to 28 lb/60 to 135 g/m2 plain bond)
auto-duplex unit	N.A.
multipurpose (in place of tray 1)	100 sheets plain paper and HP media (30-mm or 1.2-inch stack of 16 to 72 lb bond/60 to 270 g/m2), 20 transparencies, 10 envelopes (10-mm or 0.4-inch stack), 10 cards (10-mm or 0.4-inch stack)

capacities of paper trays and accessories

sizes

The following table lists the media-size compatibility for paper trays and accessories.

media	tray 1	tray 2	tray 3	auto-duplex unit
U.S. Letter (216 by 279 mm; 8.5 by 11 inches)	Y	Y	Y	Y
U.S. Legal (216 by 356 mm; 8.5 by 14 inches)	Y	Y	Y	Y
A4 (210 by 297 mm; 8.3 by 11.7 inches)	Y	Y	Y	Y
JIS B5 (182 by 257 mm; 7.2 by 10.1 inches)	Y	Y	Y	Y
ISO B5 (176 by 250 mm; 6.9 by 9.9 inches)	Y	Y	Y	Y
COM10 Envelope (105 by 241 mm; 4.1 by 9.5 inches)	Y			
DL Envelope (110 by 220 mm; 4.3 by 8.6 inches)	Y			
C5 Envelope (162 by 229 mm; 6.4 by 9 inches)	Y			
Monarch Envelope (98 by 191 mm; 3.9 by 7.5 inches)	Y			
Index cards (102 by 152 mm; 4 by 6 inches or by 203 mm; 5 by 8 inches)	Y			
US Postcard (89 by 140 mm; 3.5 by 5.5 inches)	Y			
A6 card (105 by 148 mm; 4.1 by 5.8 inches)	Y			
Custom-size media	176 by 257 mm up to 216 by 356 mm; 6.9 by 9.8 inches up to 8.5 by 14 inches	88.9 by 139.7 mm up to 216 by 356 mm; 3.5 by 5.5 inches up to 8.5 by 14 inches	176 by 257 mm up to 216 by 356 mm; 6.9 by 9.8 inches up to 8.5 by 14 inches	88.9 by 139.7 mm up to 216 by 356 mm; 3.5 by 5.5 inches up to 8.5 by 14 inches

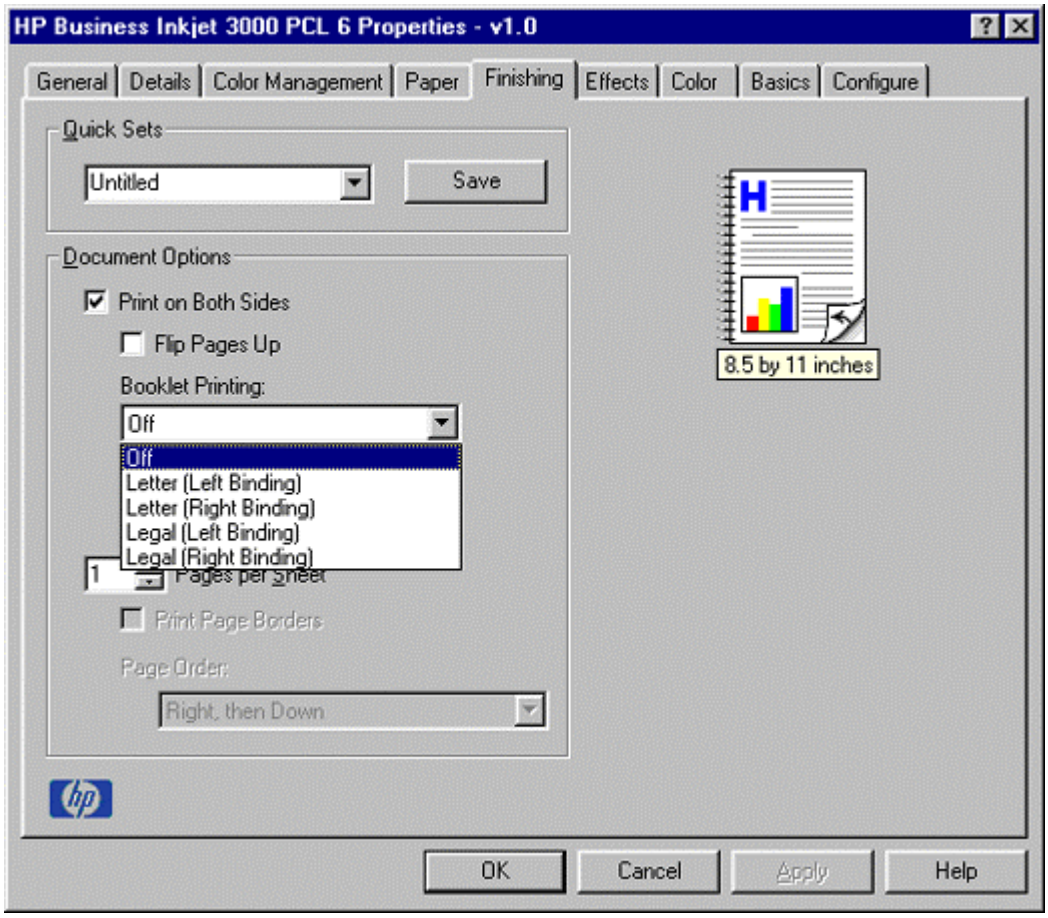
media sizes for paper trays and accessories

double-sided printing

layout guidelines

When printing on both sides of the page using the auto-duplex unit, follow these guidelines:

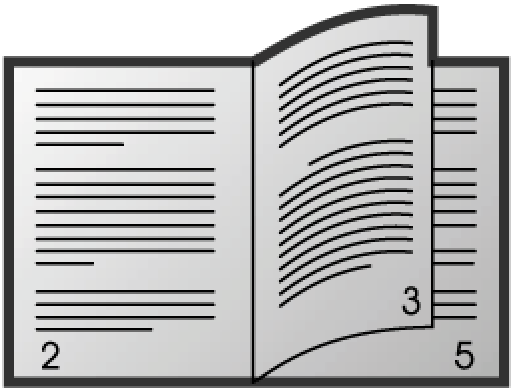
- When printing on both sides of a page, one side of the page is printed first. Then the page must partially exit the printer to be flipped. Do not attempt to remove the page from the printer until both sides have finished printing.
- The auto-duplex unit supports U.S. Letter, U.S. Legal, U.S. Executive, JIS Executive, A4, JIS B5, and custom size media from 176 by 250 mm (6.9 by 9.9 inches) up to 216 by 356 mm (8.5 by 14 inches).
- Do not print on both sides of transparencies, envelopes, index cards, or paper lighter than 60 g/m2 (16 lb bond) or heavier than 105 g/m2 (28 lb bond). Jams might occur with these types of media. However, double-sided special media made exclusively by HP can be used with the auto-duplex unit.
- To print on both sides of paper, make the selection from the software or printer driver. (For Windows, see the printer driver online help. For the Mac OS, see the Mac Help on your computer.)
- If you do not use the printer driver that came with the printer, you might need to change the DUPLEX setting from the PRINTING menu (within the CONFIGURE DEVICE menu) in the LCD control panel to ON. You can also set the layout options in the DUPLEX BINDING item.
- Several kinds of paper require a specific orientation when you print on both sides of a page, such as letterhead, preprinted paper, and paper with watermarks and prepunched holes.
- If you attempt to print on both sides of paper without an auto-duplex unit installed, the printer prints the document on one side of the paper.
- The four orientation options for printing on both sides of a page are shown below. These options can be selected from the printer driver or from the LCD control panel by setting DUPLEX BINDING from the PRINTING menu, and ORIENTATION from the PCL menu.



printer driver

long-edge portrait

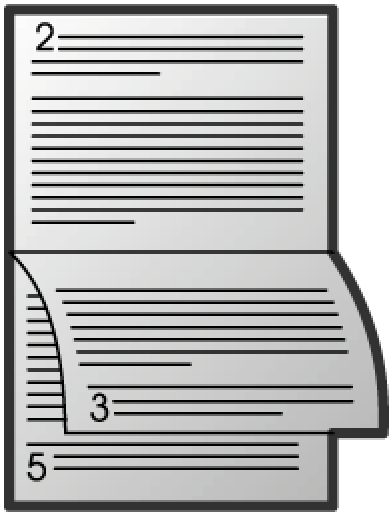
This is the default printer setting, and the most common layout used, with every printed image oriented right side up. Facing pages are read from top to bottom on the left page, then from top to bottom on the right page.



long-edge portrait

long-edge landscape

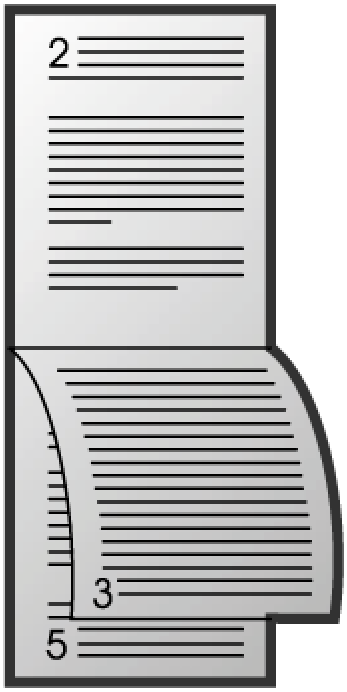
This layout is often used in accounting, data processing, and spreadsheet applications. Every other printed image is oriented upside-down. Facing pages are read continuously from top to bottom. When using the PCL printer driver on a computer that runs Windows, select “Flip Pages Up.”



long-edge landscape

short-edge portrait

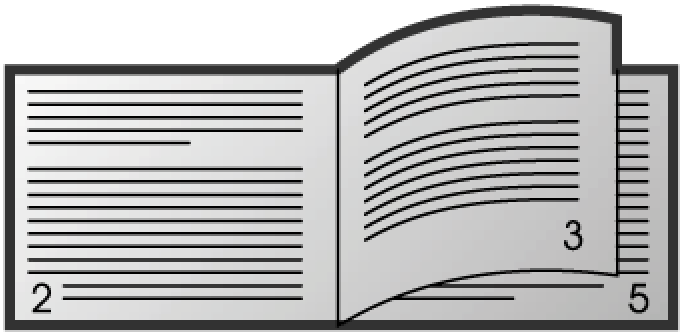
This layout is often used with clipboards. Every other printed image is oriented upside-down. Facing pages are read continuously from top to bottom. When using the PCL printer driver on a computer that runs Windows, select “Flip Pages Up.”



short-edge portrait

short-edge landscape

Each printed image is oriented right side up. Facing pages are read from top to bottom on the left page, then from top to bottom on the right page.



short-edge landscape

accessory	part number
HP PCL 5c/PostScript 3 Emulation Upgrade Kit	C8229A
HP JetDirect 610n EIO internal print server, Token Ring	J4167A
HP JetDirect 600n EIO internal print server, 10Base-T	J3110A
HP JetDirect 600n EIO internal print server, 10Base-T, 10Base2, and LocalTalk	J3111A
HP JetDirect 500x external print server, Token Ring (3-part)	J3264A
HP JetDirect 500x external print server, 10/100Base-TX (3-part)	J3265A
HP JetDirect 310x external print server	J6038A
HP JetDirect 300x external print server, 10/100Base-TX (1-part)	J3263B
HP JetDirect 175x external print server	J6035A
HP JetDirect 170x external print server, 10Base-T	J3258B
64 MB SDRAM DIMM	C7846A
128 MB SDRAM DIMM	C9121A
HP IEEE 1284-compliant bidirectional parallel cable, 2m	C2950A
HP IEEE 1284-compliant bidirectional parallel cable, 3m	C2951A

available accessories

Any laptop memory which is Intel-specified PC-100 SDRAM (64 MB/128 MB) capacity will work. HP recommends the two mentioned above.

upgrading firmware

firmware download utility

The HP firmware download utility provides improved usability for system administrators and others to upgrade printer firmware with ease. One of the main features of this utility is that it allows you to upgrade multiple similar printers simultaneously over a network.

flash over network

Select a printer model on the Network Printer Models List. This effectively acts as a filter for the printers shown on the Network Printers List.

The chosen file will be shown in the upper text box. The user then selects as many printers as required by checking them. Clicking on the "Flash" button will send the flash files over the network to the respective printers. Progress and Status bars are included in the user interface to ensure that the user is aware of the status of the send operation.

Currently, for network flash, only networks on TCP/IP are supported as utilizing FTP to perform the file transfer.

flash scheduling

The user can configure printer firmware flashing to be carried out at an appropriate time. The main reason for providing a scheduling mechanism in the firmware download utility is that it will not further congest network traffic during the day. Printer firmware flash can be performed while network traffic is easy and fewer users would be using the printer, which is during the night or on weekends.

The date and time for the schedule is configured using the Schedule section.

When the printer flash schedule configuration is completed, the user clicks the "Activate Task" to complete the schedule function.

The firmware download utility is then minimized to the system task tray and stays resident until the schedule expires. However, when the user double-clicks on the system task tray icon, the firmware download utility User-Interface will be restored and the schedule is disabled, available for re-configuring, until "Activate Task" is clicked again.

supported ports

Direct connect ports:

- Parallel ports (LPT)
- USB ports

Network ports:

- Standard and HP TCPI/P ports
- LPR ports

web jetadmin

HP's Web Jetadmin is a web-based system administration tool that allows remote installation and management of networked peripherals from a web browser. It enables network administrators to configure network printers, manage printer features, and monitor printer

status, including levels for printer supplies. HP Web Jetadmin is available from HP Customer Care Online at http://www.hp.com/go/webjetadmin .

alternative flash method

Power up until printer displays Ready. If the boot process fails during initialization, refer to "Boot Menu" in "Service and Repair" to boot the printer in MANUFACTURING mode.

From a DOS prompt, execute **Copy /b <firmware filename> lpt1** . The LCD control panel will display RECEIVING UPGRADE, then PERFORMING UPGRADE, then PROCESSING JOB.

Wait until the printer automatically reboots. The entire upgrade process can take at least 20 minutes to complete.

If the printer hangs at PROCESSING JOB after more than 20 minutes, reboot the printer manually by turning it off and then on again.

printer settings

You can change printer settings from the LCD control panel, from the printer driver, and from a software application.

Note *Settings in a software application always take precedence over settings in the printer driver or the LCD control panel.*

If you want printing options to be available only in a particular software application, change the settings from the application. After you close the application, the printer settings will return to the defaults configured in the printer driver.

To change printer settings from a software application, on the File menu, click Print, and then click Setup or Properties.

If you want printing options to be available in all software applications you use on the computer, change the default settings in the printer driver.

To change settings using the printer driver:

- 1. From the operating system desktop, click Start, point to Settings, then click Printers (Windows 95, Windows 98, Windows Me, Windows NT 4.0, and Windows 2000). -Or-Click Start, and then click Printers and Faxes (Windows XP).
- 2. Right-click the printer icon, and then choose the option for your operating system:
- For Windows 95, Windows 98, Windows Me, and Windows XP, click Properties.
- For Windows NT 4.0, click Document Defaults or Properties.
- For Windows 2000, click Printing Preferences or Properties.
- 3. Change the desired settings, and then click OK.

paper type

You can change the paper type from the LCD control panel.

printing a menu map

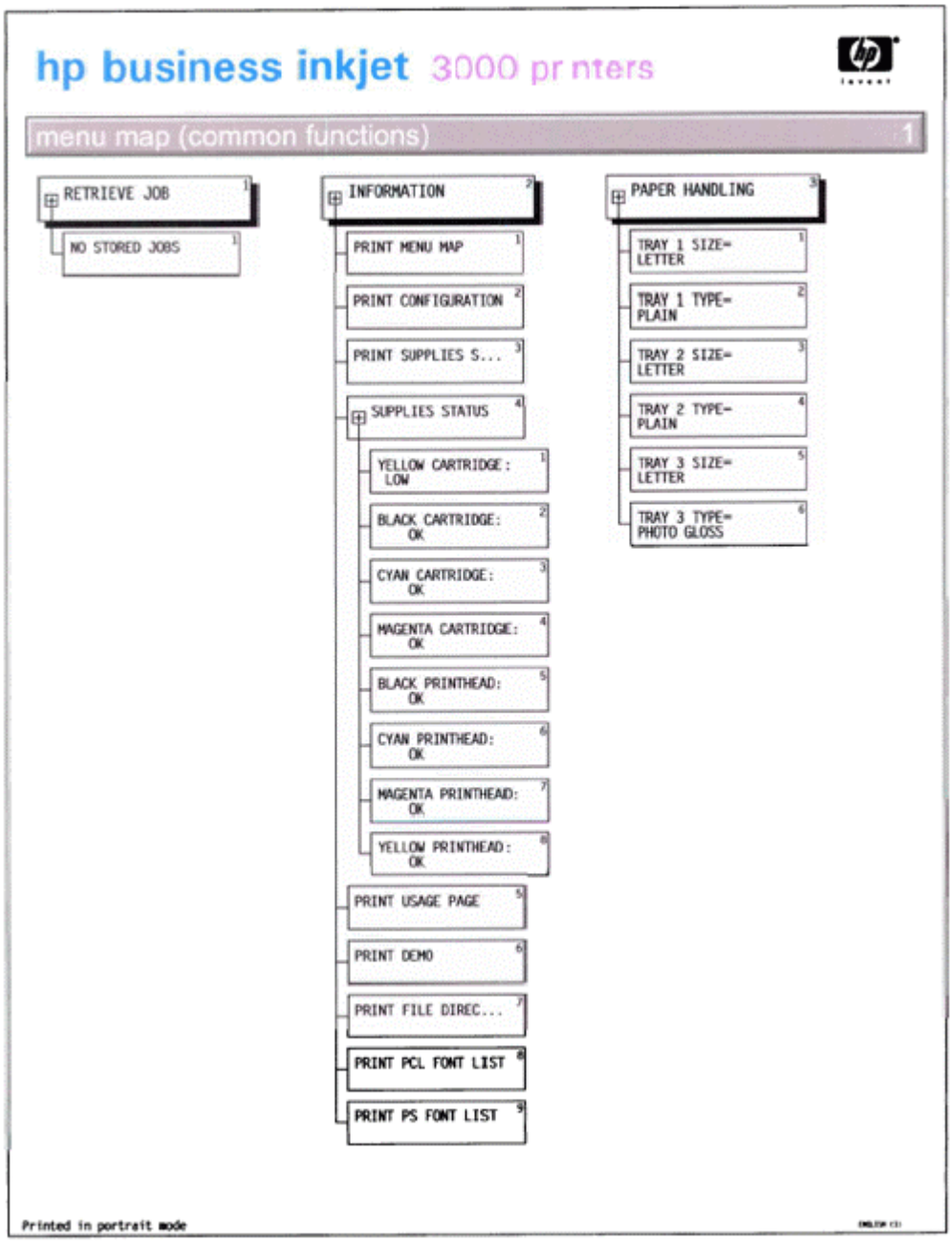
To print an LCD control panel menu map:

Press (select button) on the LCD control panel.

Press (down arrow button) to highlight INFORMATION, and then

Press (select button) to select INFORMATION.

Press (select button) to select PRINT MENU MAP.



example menu map

retrieve job menu

This menu displays all stored jobs. You can scroll through the list to find and select a specific job. If the printer has no stored jobs, the LCD control panel displays the message NO STORED JOBS.

information menu

message	value	description
PRINT MENU MAP	N.A.	Prints a map of the printer menu structure.
PRINT CONFIGURATION	N.A.	Prints a page describing current configuration settings (such as firmware version, model, accessories installed, I/O support, or other details). If an HP Jetdirect print server is installed, a second page will be printed, which displays the settings for the HP Jetdirect print server.
PRINT SUPPLIES STATUS PAGE	N.A.	Prints the estimated remaining life for the supplies and lists statistics on the total number of pages and jobs processed. This item also shows ink cartridge manufacture date, serial number, page counts, and maintenance information.
SUPPLIES STATUS	N.A.	Displays the supplies status in a scrollable list.
PRINT USAGE PAGE	N.A.	Prints a count of all media sizes that have passed through the printer; lists whether they were simplex, duplex, monochrome, or color; and reports the page count.
PRINT DEMO	N.A.	Prints a demonstration page.
PRINT FILE DIRECTORY	N.A.	Prints the name and directory of files stored on an optional hard disk.
PRINT PCL FONT LIST	N.A.	Prints the available PCL fonts.
PRINT PS FONT LIST	N.A.	Prints the available emulated PostScript (PS) fonts.

paper handling menu

message	value	description
TRAY 1 SIZE	LETTER LEGAL EXECUTIVE A4 A6 ISOB5 JISB5 JEXEC JPOST COM10 ENVELOPE MONARCH ENVELOPE C5 ENVELOPE DL ENVELOPE CUSTOM ANY CUSTOM	Selects media size loaded in Tray 1. Default = LETTER
TRAY 1 TYPE	PLAIN PHOTO GLOSS PHOTO QULALITY GLOSS PHOTO QUALITY MATTE PREMIUM INKJET PREMIUM IJ HEAVY BROCHURE GLOSS BROCHURE MATTE PM PHOTO GLOSS PM+ PHOTO GLOSS PM+ PHOTO MATTE PREMIUM TRNSPRNCY PREMIUM+ TRNSPRNCY COLORFAST PHOTO	Selects media type loaded in Tray 1. Default = PLAIN
TRAY 2 SIZE	ANY LETTER EXECUTIVE LEGAL A4 JISB5 ISOB5 CUSTOM	Displays the current size configuration for the tray. Sizes are detected by the printer tray. To use a custom size, load the media in the tray and adjust the length and width guides to fit snugly against the media. Default = LETTER
TRAY 2 TYPE	ANY PLAIN PHOTO GLOSS PHOTO QUALITY GLOSS PHOTO QUALITY MATTE PREMIUM INKJET PREMIUM IJ HEAVY BROCHURE GLOSS BROCHURE MATTE PM PHOTO GLOSS PM+ PHOTO GLOSS PM+ PHOTO MATTE PREMIUM TRNSPRNCY PREMIUM+ TRNSPRNCY COLORFAST PHOTO	Selects media type loaded in tray 2. Default = PLAIN
TRAY 3 SIZE	ANY LETTER LEGAL EXECUTIVE A4 JISB5 JEXEC CUSTOM ANY CUSTOM	Displays the current size configuration for the tray. Sizes are detected by the printer tray. To use a custom size, load the media in the tray and adjust the length and width guides to fit snugly against the media. This item is displayed only whenTray 3 is installed. Default = LETTER

TRAY 3 TYPE	ANY PLAIN PHOTO GLOSS PHOTO QUALITY GLOSS PHOTO QUALITY MATTE PREMIUM INKJET PREMIUM IJ HEAVY BROCHURE GLOSS BROCHURE MATTE PM PHOTO GLOSS PM+ PHOTO GLOSS PM+ PHOTO MATTE PREMIUM TRNSPRNCY PREMIUM+ TRNSPRNCY COLORFAST PHOTO	Selects media type loaded in Tray 3. This item is displayed only when Tray 3 is installed. Default = PLAIN

configure device menu

message	value	description
COPIES	1 - 32000	Sets the number of copies to print. Default = 1
DEFAULT PAPER SIZE	LETTER LEGAL EXECUTIVE A4 A6 ISOB5 JISB5 JEXEC JPOST JPOSTD COM10 ENVELOPE MONARCH ENVELOPE C5 ENVELOPE DL ENVELOPE CUSTOM	Sets the default media size. Default = LETTER
DEFAULT CUSTOM PAPER SIZE	UNIT OF MEASURE X DIMENSION Y DIMENSION	Sets the unit of measurement and dimensions for jobs that have no dimensions. The values can be set independently and apply to any jobs that are sent without dimensions. Default = INCHES
DEFAULT PAPER TYPE	ANY PLAIN PHOTO GLOSS PHOTO QUALITY GLOSS PHOTO QUALITY MATTE PREMIUM INKJET PREMIUM IJ HEAVY BROCHURE GLOSS BROCHURE MATTE PM PHOTO GLOSS PM+ PHOTO GLOSS PM+ PHOTO MATTE PREMIUM TRNSPRNCY PREMIUM+ TRNSPRNCY COLORFAST PHOTO	Sets a default media type. Default = PLAIN
DUPLEX	OFF ON	This item appears only when an auto-duplex unit is installed. Set the value to ON to print on both sides (duplex) or OFF to print on one side (simplex) of a sheet of paper. For more information, see "Load paper and configure media types and sizes." Default = OFF
DUPLEX BINDING	LONG EDGE SHORT EDGE	This item appears only when an auto-duplex unit is installed and the duplex option is on. Choose the binding edge when duplexing (printing on both sides of paper). For more information, see "Load paper and configure media types and sizes." Default = LONG EDGE

OVERRIDE A4/ LETTER	NO YES	Sets the printer to print an A4 job on letter-size paper when no A4 paper is loaded, or to print a letter-size job on A4 paper when no letter-size paper is loaded. Default = NO
MANUAL FEED	OFF ON	Feeds media manually. Default = OFF
COURIER FONT	REGULAR DARK	Selects a version of the Courier font. Default = REGULAR
WIDE A4	NO YES	Changes the printable area of A4 paper so that eighty 10-pitch characters may be printed on a single line. Default = NO
PRINT PS ERRORS	OFF ON	Prints a list of PS errors. Default = OFF
PCL	FORM LENGTH ORIENTATION FONT SOURCE FONT NUMBER FONT PITCH SYMBOL SET APPEND CR TO LF	Configures settings for printer control language (PCL), also known as the printer personality.

configure device/printing menu

message	value	description
ALIGN PRINTHEADS	N.A.	Begins the printhead alignment process.
COLOR CALIBRATION	N.A.	Begins the color calibration process.
CLEAN PRINTHEADS	N.A.	Begins the printhead cleaning process.
REPLACE PRINTHEADS	N.A.	Moves the printhead carriage to allow users to replace the printheads.
DEFAULT QUALITY LEVEL	DRAFT NORMAL BEST	Selects the default level for print quality. This setting is used if the print job contains no print-quality selection. Default = NORMAL
NORMAL MODE PRINTING	AUTO SPEED QUALITY	Selects the normal mode for print quality. SPEED prints at the best possible speed, with less concern for print quality. QUALITY prints at a predetermined quality level with less concern for print speed. AUTO combines speed and quality settings depending on the health of the printhead. Default = AUTO

configure device/print quality menu

system setup menu

message	value	description
JOB STORAGE LIMIT	1-100	Sets the maximum number of jobs that can be stored on the printer. (This item appears only if the printer has an optional hard disk installed.) Default = 32
JOB HELD TIMEOUT	OFF 1 HOUR 4 HOURS 1 DAY 1 WEEK	Sets how long the printer stores a copy of the job on its optional hard disk. Default = OFF
TRAY BEHAVIOR	USE REQUESTED TRAY MANUALLY FEED PROMPT	Specifies settings for the tray-selection behavior. USE REQUESTED TRAY requires the printer to print from only the tray specified. MANUALLY FEED PROMPT requires you to press (select button) on the LCD control panel before printing begins.
POWERSAVE TIME	2 MINUTES 15 MINUTES 30 MIN UTES 1 HOUR 90 MINUTES 2 HOURS 4 HOURS	Reduces power consumption when the printer has been inactive for an extended period. Default = 30 MINUTES
PERSONALITY	AUTO PCL PS	Sets the default personality to automatic switching, PCL, or PostScript emulation. Default = AUTO
CLEARABLE WARNINGS	JOB ON	Sets the length of time that a clearable warning is displayed on the LCD control panel. If JOB is selected, warnings are displayed until the end of the current job. If ON is selected, warnings are displayed until you press (select button). Default = JOB
AUTO CONTINUE	OFF ON	Determines printer behavior when the system generates an Auto Continuable error. Default = ON
SUPPLIES LOW	STOP CONTINUE	Sets the printing action to be taken when the low supplies setting is reached for ink catridges only. low supplies. Default = CONTINUE
LANGUAGE	A list of available languages appears	Sets the default language. Default = ENGLISH

I/O menu

message	value	description
I/O TIMEOUT	5 - 300	Sets the length of time (in seconds) that the printer waits for remaining data for a print job. After this time, the printer prints the print job. Default = 15.
PARALLEL INPUT	HIGH SPEED ADVANCED FUNCTIONS	Accesses two options: HIGH SPEED enables fast parallel port communication with the host. If the printer is connected to an older computer, you may want to disable this option. ADVANCED FUNCTIONS allows you to enable or disable the bi-directional parallel communication. If you disable this option, the host will not receive any messages from the Printer Status and Alerts software.
EIO X JETDIRECT	TCP/IP IPX/SPX APPLETALK DLC/LLC LINK SPEED	Accesses submenus for an EIO accessory, such as the HP Jetdirect print server.

resets menu

message	value	description
RESTORE FACTORY SETTINGS	N.A.	Restores all values (except those for an HP Jetdirect print server) to the predetermined factory values of the printer. **Warning** *Use the restore option on this menu with caution. You can lose printer configuration settings when you select these items. Reset the printer only when you want to restore the printer's default settings or when the communication between the printer and computer has been interrupted.*
POWERSAVE	OFF ON	Enables and disables Powersave. Default = ON

diagnostics menu

message	description
PRINT EVENT LOG	Prints the last 50 entries in the printer's event log, starting with the most recent event.
SHOW EVENT LOG	Displays the last 50 events on the LCD control panel display, starting with the most recent event.
PAPER PATH TEST	Tests the paper handling features of the printer.

service menu

message	value	description

CLEAR EVENT LOG	N.A.	Clears all events listed in the Event Log. This feature can be useful when tracking an issue.
TOTAL MONO PAGES	0-9999999	Tracks the number of pages printed using only black. Default = 9
TOTAL COLOR PAGES	0-9999999	Tracks the number of pages printed using any color other than black. Default = 9
SERIAL NUMBER	N.A.	Displays the printer serial number. The serial number displayed in the LCD control panel should match the serial number tag located on the rear of the printer.
SERVICE ID	N.A.	Displays a number for printer administrators to reference when contacting customer support.
COLD RESET PAPER	LETTER A4	Resets the default paper size.

EIO menu

message	value	description
TCP/IP	ENABLE CONFIGURE METHOD MANUAL SETTINGS	Enable or disables the TCP/IP menu and set the TCP/IP protocol parameters. In the TCP/IP menu, you can specify BOOTP=YES or DHCP=YES for TCP/IP parameters to be automatically configured by a BootP or DHCP server when the printer is turned on. If you specify BOOTP=NO and DHCP=NO, you can manually set the following TCP/IP parameters from the LCD control panel: Each byte of the IP address (IP) Subnet Mask (SM) Syslog Server (LG) Default Gateway (GW) Idle Timeout period (default is 270 seconds; 0 disables the timeout) When setting IP numbers, press (up arrow button) to increase the number by 1. Press (select button) to make your selection.
IPX/SPX	ENABLE FRAME TYPE	Enables the IPX/SPX menu, which you can use to set the IPX/SPX protocol parameters. In the IPX/SPX menu, you can specify the frame type parameter used on your network. The default is AUTO, which automatically sets and limits the frame type to the one detected. For Ethernet cards, frame type selections include EN_8023, EN_II, EN_8022, and EN_SNAP. For Token Ring cards, frame type selections include TR_8022 and TR_SNAP. In the IPX/SPX menu for Token Ring cards, you can also specify NetWareSource Routing parameters, which include SRC RT=AUTO (default), OFF, SINGLE R, or ALL RT.
APPLETALK	ENABLE	Enables or disables the AppleTalk protocol.
DLC/LLC	ENABLE	Enables or disables the DLC/LLC protocol.
LINK SPEED	LINK SPEED MODE	Manually sets the link speed (10 or 100 Mbs) and mode (Full or Half Duplex).

cancelling a print job

You can cancel a current print job either through the LCD control panel or through the printer icon on the desktop.

To cancel a currently processed print job by using the control panel:

Press the CANCEL JOB button to cancel the current print job.

To cancel a print job by using the printer icon on the desktop:

Double-click the printer icon on the lower right corner of the computer screen.

Select the print job that you want to cancel in the printer window.

Click the Document Cancel menu command to cancel the print job.

Note *Cancelling a print job does not affect the jobs waiting to be processed.*

configuration pages

printer configuration page

The printer configuration page shows:

- **Printer information** : Such as firmware version number, model name, and memory installed.
- **Event Log** : Number of entries in use, maximum number of entries, and the last three events on the LCD control panel display, starting with the most recent.
- **Installed Personalities and Options** : Printer languages (personalities) in use, and contents of the printer's DIMM slots and EIO slots.
- **Memory** : Capacity of RAM and Automatic Resource Saving information.
- **Security** : Whether the LCD control panel is locked and whether a password is enabled.
- **Paper Trays and Options** : Printer's installed trays and their media type and size settings.

To print the configuration page:

Press (select button) on the LCD control panel.

Press (down arrow button) to highlight INFORMATION, and then press (select button) to select INFORMATION.

Press (down arrow button) to highlight PRINT CONFIGURATION, and then press (select button) to print the configuration page.

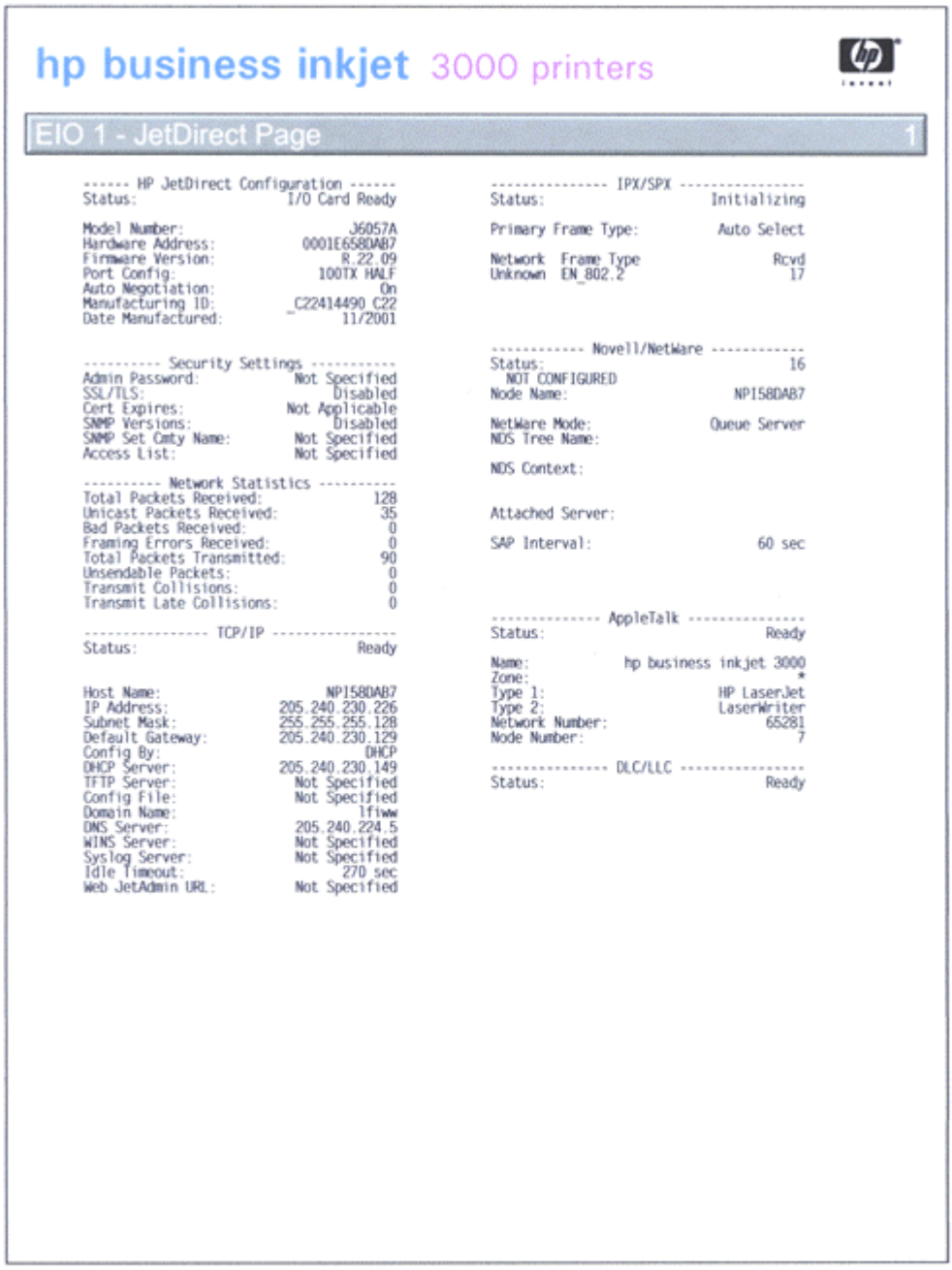
Note *If an HP JetDirect print server is installed, two configuration pages print. If the auto-duplex unit is installed, do not remove the page from the output bin until both sides are finished printing.*

printer configuration page

JetDirect configuration page

The JetDirect configuration page shows:

- **HP JetDirect Configuration** : Information such as whether I/O card is ready, model number, hardware address, firmware version, port configuration.
- **Security Settings** : Information such as administrator's password, SSL/TSL.
- **Network Statistics** : Information such as total packets received, unicast packets received, and unsendable packets.
- **TCP/IP** : Information such as whether ready, host name, IP address, and subnet mask.
- **IPX/SPX** : Information such as initializing status, primary frame type, and network frame type.
- **Novell/Netware** : Information such as status, node name, netware mode, NDS tree name, NDS context, attached server, and SAP interval.
- **AppleTalk** : Information such as status, name, zone, and network number.
- **DLC/LLC** : Information such as whether ready or not.



hp business inkjet 3000 printers

EIO 1 - JetDirect Page 1

------ HP JetDirect Configuration ------
Status: I/O Card Ready

Model Number: J6057A
Hardware Address: 0001E658DAB7
Firmware Version: R.22.09
Port Config: 100TX HALF
Auto Negotiation: On
Manufacturing ID: _C22414490 C22
Date Manufactured: 11/2001

---------- Security Settings ----------
Admin Password: Not Specified
SSL/TLS: Disabled
Cert Expires: Not Applicable
SNMP Versions: Disabled
SNMP Set Cmty Name: Not Specified
Access List: Not Specified

---------- Network Statistics ----------
Total Packets Received: 128
Unicast Packets Received: 35
Bad Packets Received: 0
Framing Errors Received: 0
Total Packets Transmitted: 90
Unsendable Packets: 0
Transmit Collisions: 0
Transmit Late Collisions: 0

---------- TCP/IP ----------
Status: Ready

Host Name: NPI58DAB7
IP Address: 205.240.230.226
Subnet Mask: 255.255.255.128
Default Gateway: 205.240.230.129
Config By: DHCP
DHCP Server: 205.240.230.149
TFTP Server: Not Specified
Config File: Not Specified
Domain Name: lftww
DNS Server: 205.240.224.5
WINS Server: Not Specified
Syslog Server: Not Specified
Idle Timeout: 270 sec
Web JetAdmin URL: Not Specified

---------- IPX/SPX ----------
Status: Initializing

Primary Frame Type: Auto Select

Network Frame Type Rcvd
Unknown EN_802.2 17

---------- Novell/NetWare ----------
Status: 16
NOT CONFIGURED
Node Name: NPI58DAB7

NetWare Mode: Queue Server
NDS Tree Name:

NDS Context:

Attached Server:

SAP Interval: 60 sec

---------- AppleTalk ----------
Status: Ready

Name: hp business inkjet 3000
Zone: *
Type 1: HP LaserJet
Type 2: LaserWriter
Network Number: 65281
Node Number: 7

---------- DLC/LLC ----------
Status: Ready

JetDirect configuration page

cleaning the printer

The hp business inkjet 3000 series printer does not require scheduled maintenance. However, you should clean the printer to keep it free of dust and debris.

guidelines for cleaning the printer

The following are the guidelines for cleaning the printer:

- Use a soft cloth moistened with mild detergent and water to clean the printer case.
- Do not touch the rollers as skin oil might result in poor print quality.

Warning *Using other cleaners, such as alcohol or alcohol-based cleaners, might damage the printer.*

steps for cleaning the printer

The following are the steps to clean the printer:

Turn the printer off.

Unplug the power cord.

Open the top cover of the printer.

Warning *Avoid reaching too far into the printer. The adjacent fusing area might be hot.*

Clean dust or dirt from the paper feed guides by using a dry, lint free cloth.

Close the top cover.

Plug in the power cord.

Turn on the printer.

caring for printheads

maintaining the printheads

The printheads for your printer have microscopic nozzles that can clog when exposed to the air for more than a few minutes. The printer is designed to prevent nozzles from drying out when the printer is idle and when it is turned off using the POWER button on the printer. A printhead that is not used for long periods of time can also clog, resulting in a noticeable decrease in print quality. To unclog the nozzles, clean the printheads.

message	description
CLEAN PRINTHEADS	Initiates the printhead cleaning process.
ALIGN PRINTHEADS	Initiates the alignment process.

maintenance tasks using the LCD control panel

cleaning the printheads

Clean the printheads when lines or dots are missing from printed text or graphics. These defects occur when ink nozzles in the printheads are exposed to air for a prolonged period of time.

You need to perform basic maintenance tasks to improve print quality and the health of the affected printer parts.

To clean the printheads:

Press (select button) on the LCD control panel.

Press (down arrow button) to highlight CONFIGURE DEVICE, and then press (select button) to select CONFIGURE DEVICE.

Press (down arrow button) to highlight PRINT QUALITY, and then press (select button) to select PRINT QUALITY.

Press (down arrow button) to highlight CLEAN PRINTHEADS, and then press (select button) to select CLEAN PRINTHEADS.

aligning the printheads

The printheads are automatically aligned upon installation. Misaligned printheads produce ragged edges, stray dots, white lines, or banding on printouts. If your printouts look like the printheads are misaligned, you can align them through the LCD control panel.

To align the printheads:

Press (select button) on the LCD control panel.

Press (down arrow button) to highlight CONFIGURE DEVICE, and then press (select button) to select CONFIGURE DEVICE.

Press (down arrow button) to highlight PRINT QUALITY, and then press (select button) to select PRINT QUALITY.

Press (down arrow button) to highlight ALIGN PRINTHEADS, and then press (select button) to select ALIGN PRINTHEADS.

The printer prints a page with alignment patterns in 5 minutes.

replacing the printheads

Replace the printheads when the following messages appear on the LCD control panel:

- REINSTALL [COLOR] PRINTHEAD
- INCORRECT [COLOR] PRINTHEAD

To replace the printheads:

Make sure the printer is turned on.

Lift the printhead cover, and press the SELECT button on the LCD control panel.

Caution *Do not attempt to force open the printhead latch. The printhead carriage will move to the left when the printer is turned on, enabling you to open the latch.*

To open the latch, lift it from the rear (item 1 in the graphic) and then pull it forward and down to release the hook from the metal catch (item 2 in the graphic).

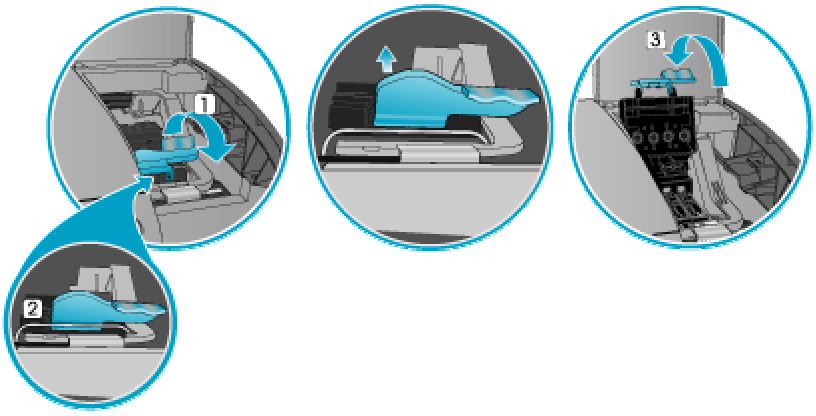
Lift and push the latch toward the back of the printer (item 3 in the graphic).

Remove each printhead from its package.

Remove the protective tape from each printhead.

Remove the plastic tab from each printhead by pulling down as indicated by the arrow on the tab.

Note *The color order of the printheads does not correspond with the color order of the ink cartridges.*



Insert printhead.

Press firmly on each printhead to ensure proper contact after installation.

Pull the latch all the way forward and down, and engage the catch with the hook (item 2 in the graphic). Push the latch towards the back of the printer. You might have to apply some pressure to close the latch.

Close the printhead cover and the ink cartridge cover.

Wait while the printer initializes the printheads. This can take a few minutes. When initialization is complete, an alignment page prints. If no alignment page prints, check to make sure there is media in the trays.

If the printer detects an error with a printhead, the carriage will move automatically when the printhead cover is opened.

If the printer does not detect an error or problem, the "tick" button needs to be pressed after opening the printhead cover to move the carriage.

caring for ink cartridges

maintaining ink cartridges

Ink cartridges generally do not require maintenance.

Note *You do not have to replace all four ink cartridges when one of them is empty. Replace only the empty ink cartridge.*

replacing ink cartridges -- when

The following LCD control panel messages are helpful when determining whether to install or replace ink cartridges:

- **INSTALL <COLOR> CARTRIDGE** . No ink cartridge is installed.
- **NON HP <COLOR> CARTRIDGE** . Non-HP cartridge is installed (appears first time only). Press SELECT to acknowledge.
- **REINSTALL <COLOR> CARTRIDGE** . Ink cartridge is present but the wrong one.
- ORDER <COLOR> CARTRIDGE . Ink level is low.
- **REPLACE <COLOR> CARTRIDGE** . Ink cartridge is empty.

replacing ink cartridges -- how

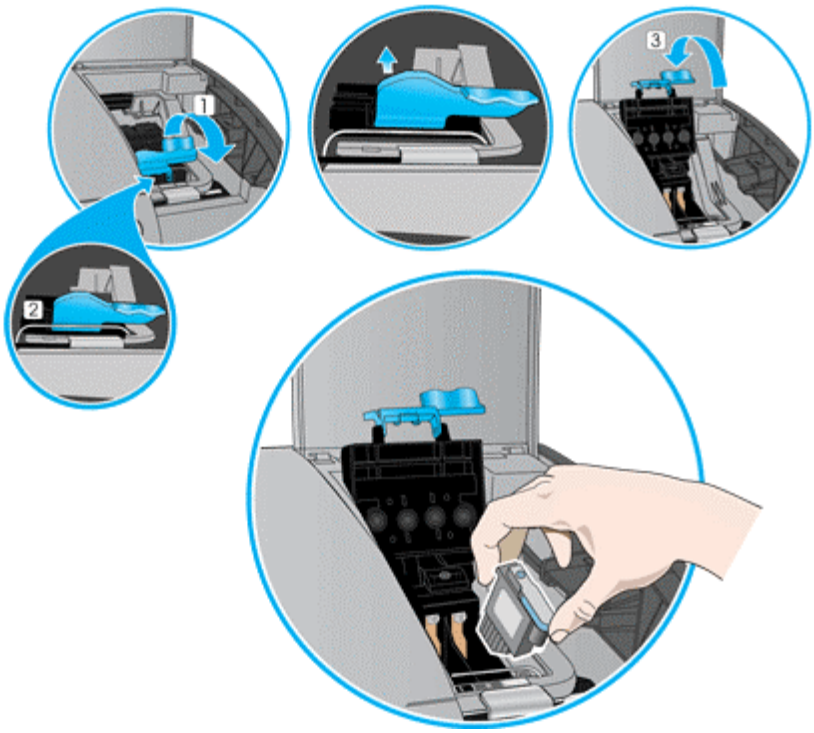
To replace an ink cartridge:

Make sure the printer is on (not necessary, but recommended).

Lift the ink cartridge cover.

Remove the new ink cartridge from its package.

Remove the empty ink cartridge by holding it firmly between the thumb and the forefinger and pull it out.



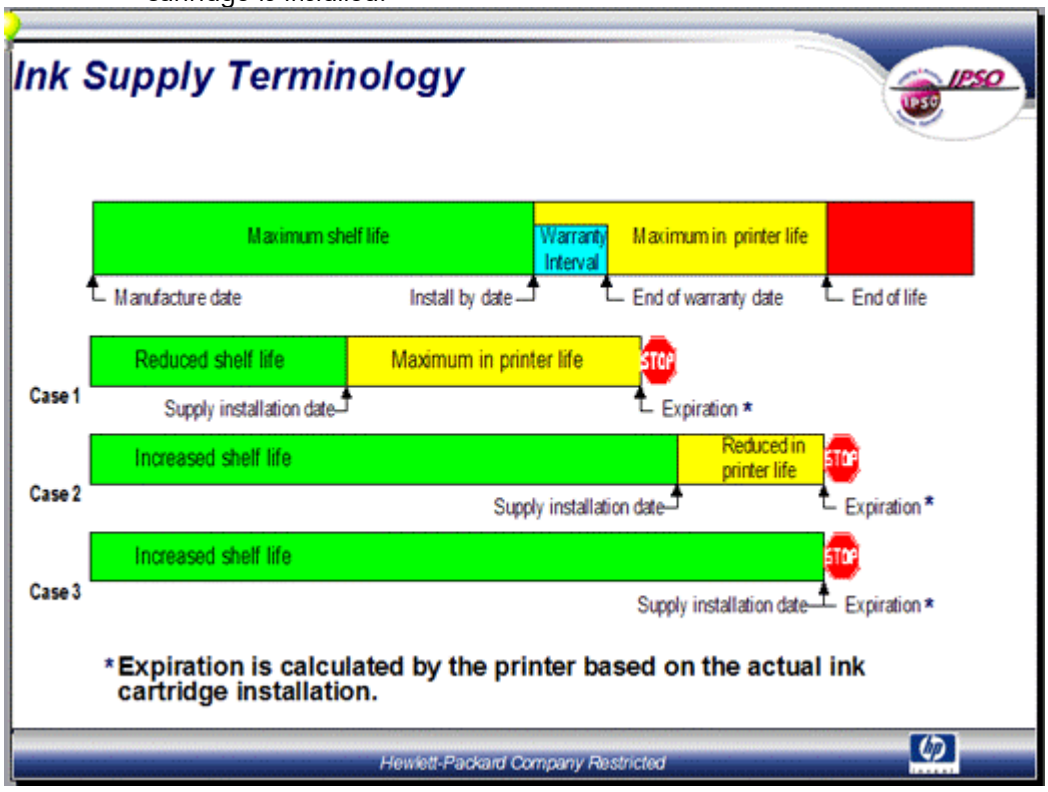
Align the colored arrows, and then insert the new ink cartridge into its color-coded slot.

Press firmly on the cartridges until they snap into place to ensure proper contact.

Close the ink cartridge cover.

ink terminology

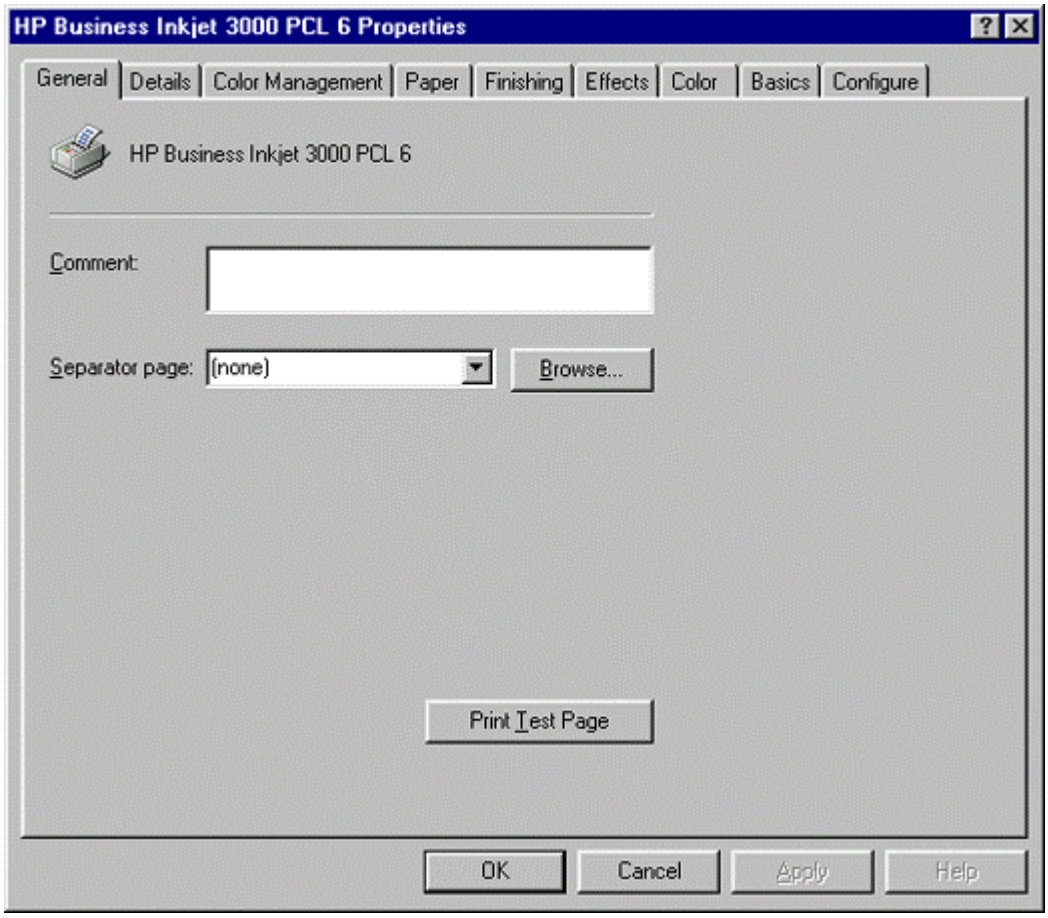
- **Manufacture Date** -- Date on which the product begins its "life." Date on which the product "clock" starts.
- **Shelf Life** -- Length of time from Manufacture Date to Install-By Date. Maximum shelf life is 24 months.
- **Install-By Date** -- Date by which a PC/PH/IC should be installed in a printer to receive the full warranty period and optimal performance of the product.
- If cartridge is installed on or before Install-By Date, cartridge will expire after 30 months.
- If cartridge is installed after Install-By Date, cartridge will expire 54 months after manufacture date; ink cartridge will have an In-Printer Life shorter than 30 months.
- Cartridge cannot be used at or beyond 54 months after manufacture date.
- Printheads do not expire, but will likely wear out and fail over time (expected life ~2.5 years per printhead).
- **In-Printer Life** -- Length of time after the Install-By Date. Maximum In-Printer Life is 30 months from Install-By Date.
- **Warranty Interval** -- Begins on Manufacture Date and ends on End-of-Warranty Date. Warranty Interval is 6 months.
- **End-of-Warranty Date** -- The latest date that a product is **warranted** to be free from defects in material and workmanship, with no appreciable decrease in performance during the warranty period.
- **End-of-Life Date** -- A fixed date through which a product is **technically capable** of working with no appreciable decrease in performance.
- **Expiration Date** -- A printer-generated date calculated at the time a TIJ3.0 ink cartridge is installed.

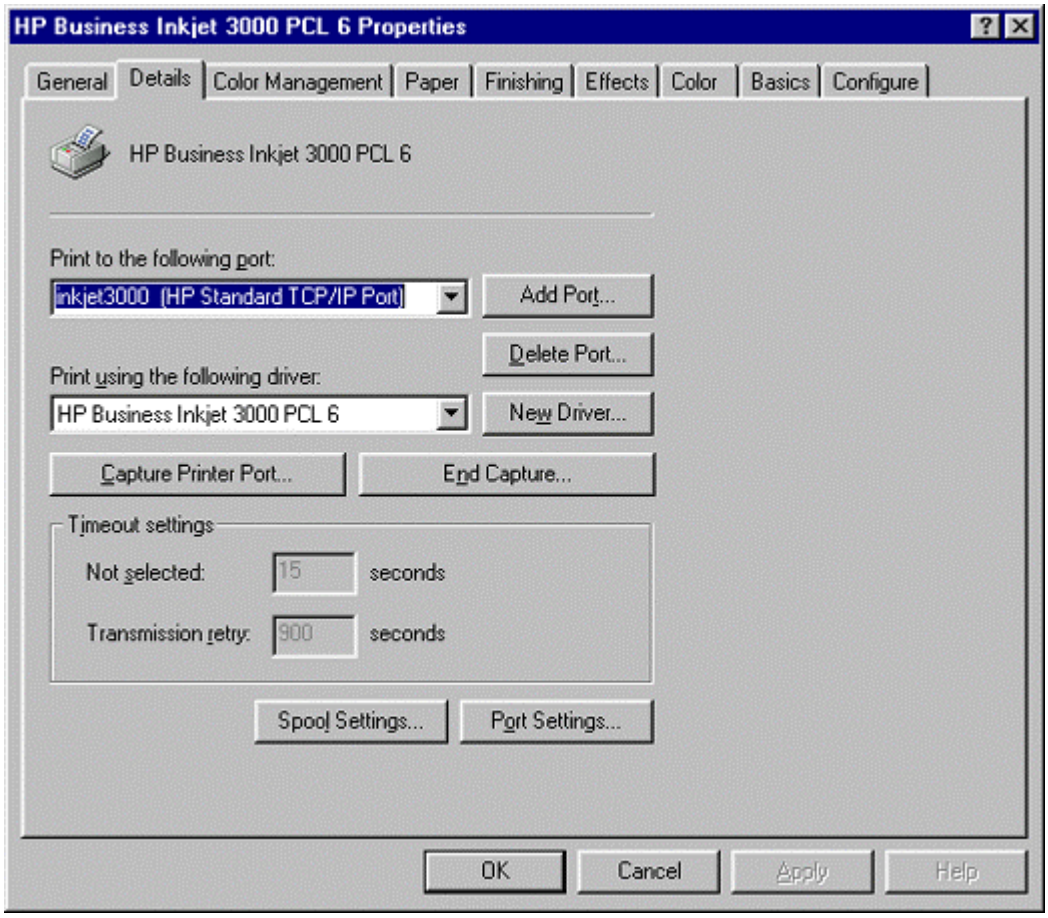


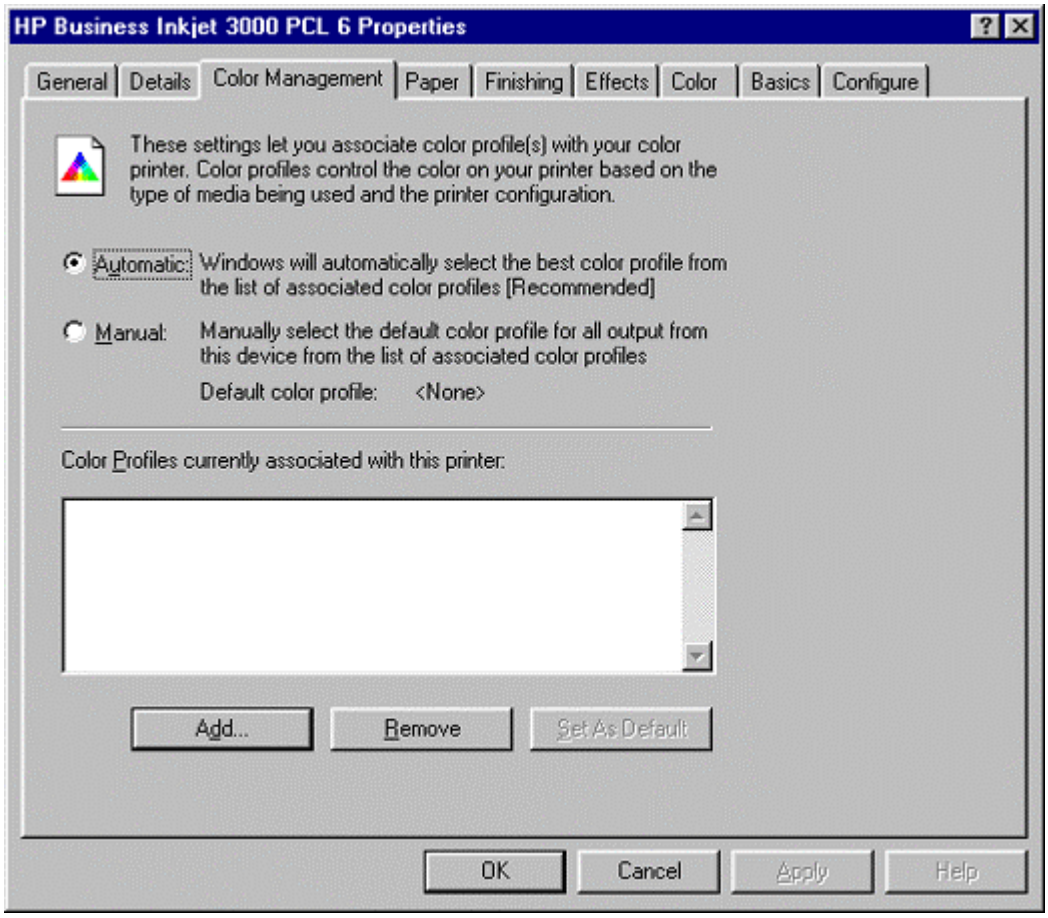
Windows

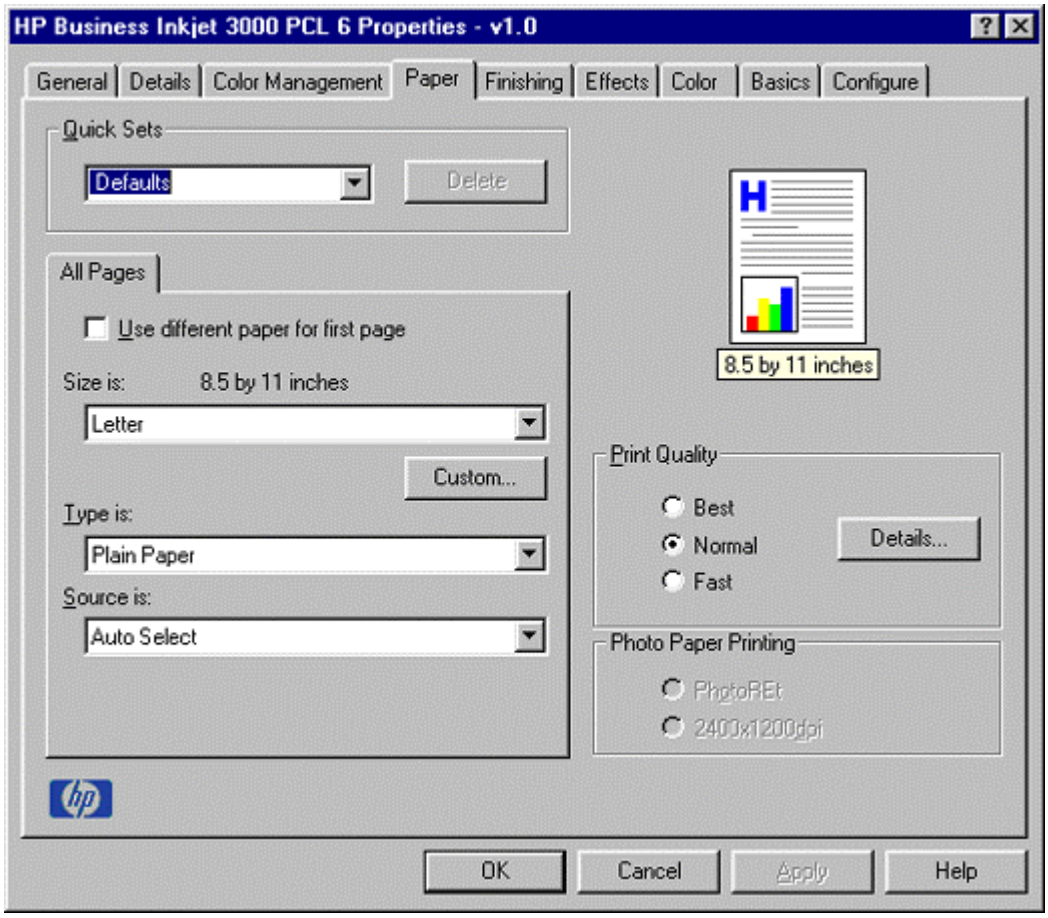
The Properties dialog of an hp business inkjet 3000 printer driver includes the following tabs:

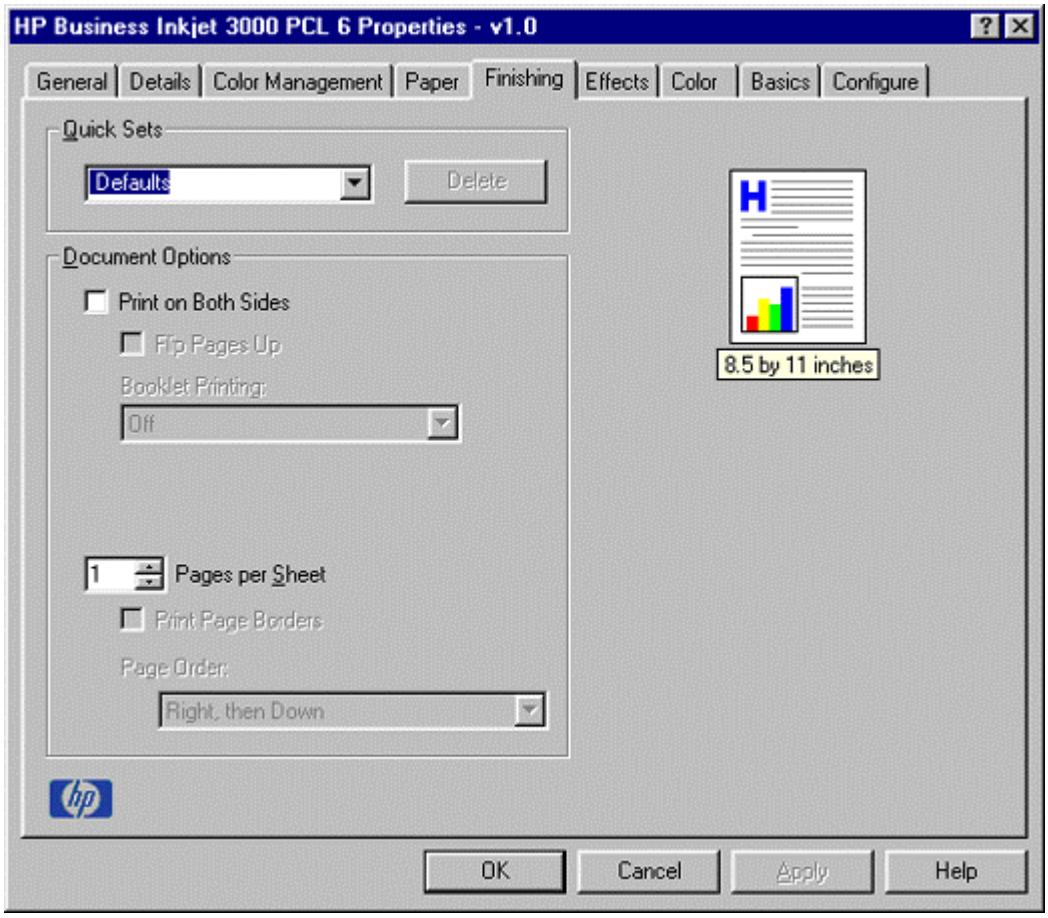
- **General** The General tab allows you to specify comments and separator pages, and print test pages.
- **Details** The Details tab allows you to specify ports, drivers, timeout settings, spool settings, and port settings.
- **Color Management** The Color Management tab allows you to control the color on your printer based on the type of media being used and the printer configuration.
- **Paper** The Paper tab allows you to specify quick sets; paper size, type, and source; print quality; and photo paper.
- **Finishing** The Finishing tab allows you to specify quick sets and document options.
- **Effects** The Effects tab allows you to specify quick sets, paper type, scaling, and watermarks.
- **Color** The Color tab allows you to specify quick sets and color options.
- **Basics** The Basics tab allows you to specify quick sets, number of copies, printing order, and orientation, and gain information about the printer driver.
- **Configure** The Configure tab allows you to specify printer model, paper handling options, paper destinations, paper sources, and other options.

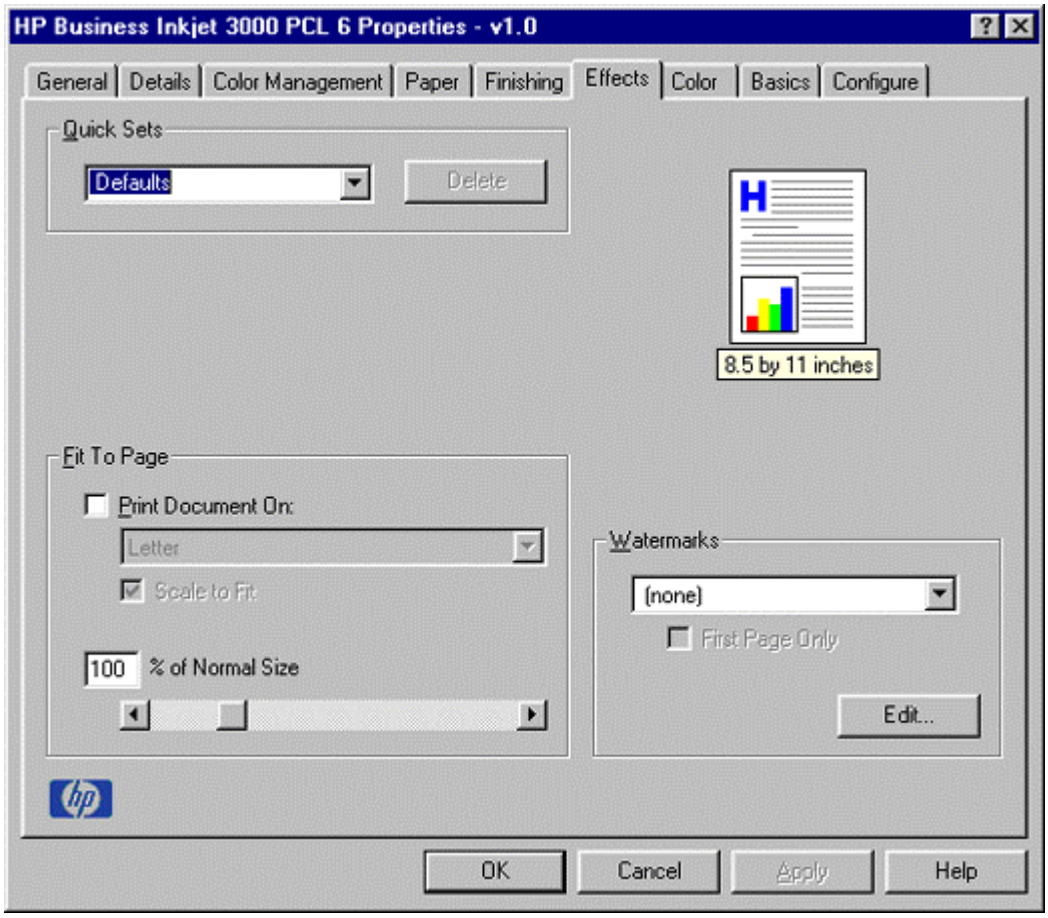

HP Business Inkjet 3000 PCL 6 Properties
General
Details
Color Management
Paper
Finishing
Effects
Color
Basics
Configure
HP Business Inkjet 3000 PCL 6
Comment:
Separator page:
(none)
Browse...
Print Test Page
OK
Cancel
Apply
Help

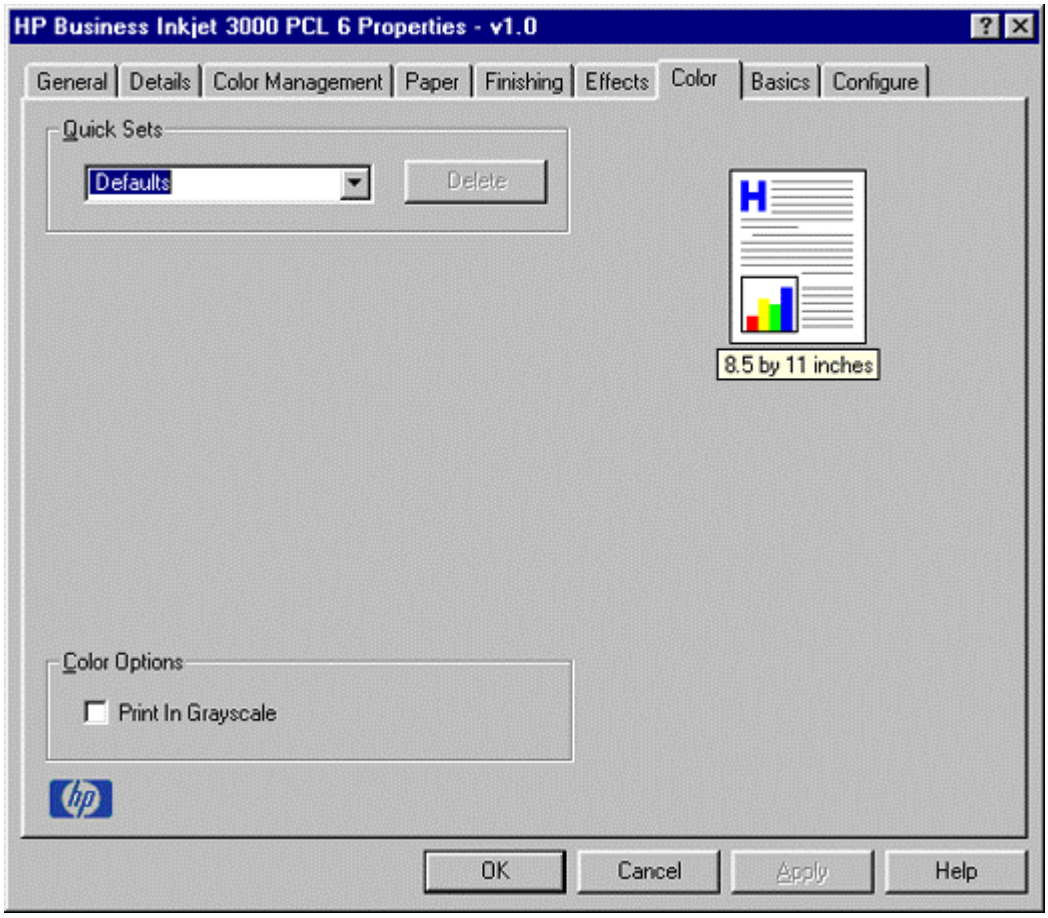

HP Business Inkjet 3000 PCL 6 Properties
General
Details
Color Management
Paper
Finishing
Effects
Color
Basics
Configure
HP Business Inkjet 3000 PCL 6
Print to the following port:
inkjet3000 (HP Standard TCP/IP Port)
Add Port...
Delete Port...
Print using the following driver:
HP Business Inkjet 3000 PCL 6
New Driver...
Capture Printer Port...
End Capture...
Timeout settings
Not selected:
15
seconds
Transmission retry:
900
seconds
Spool Settings...
Port Settings...
OK
Cancel
Apply
Help

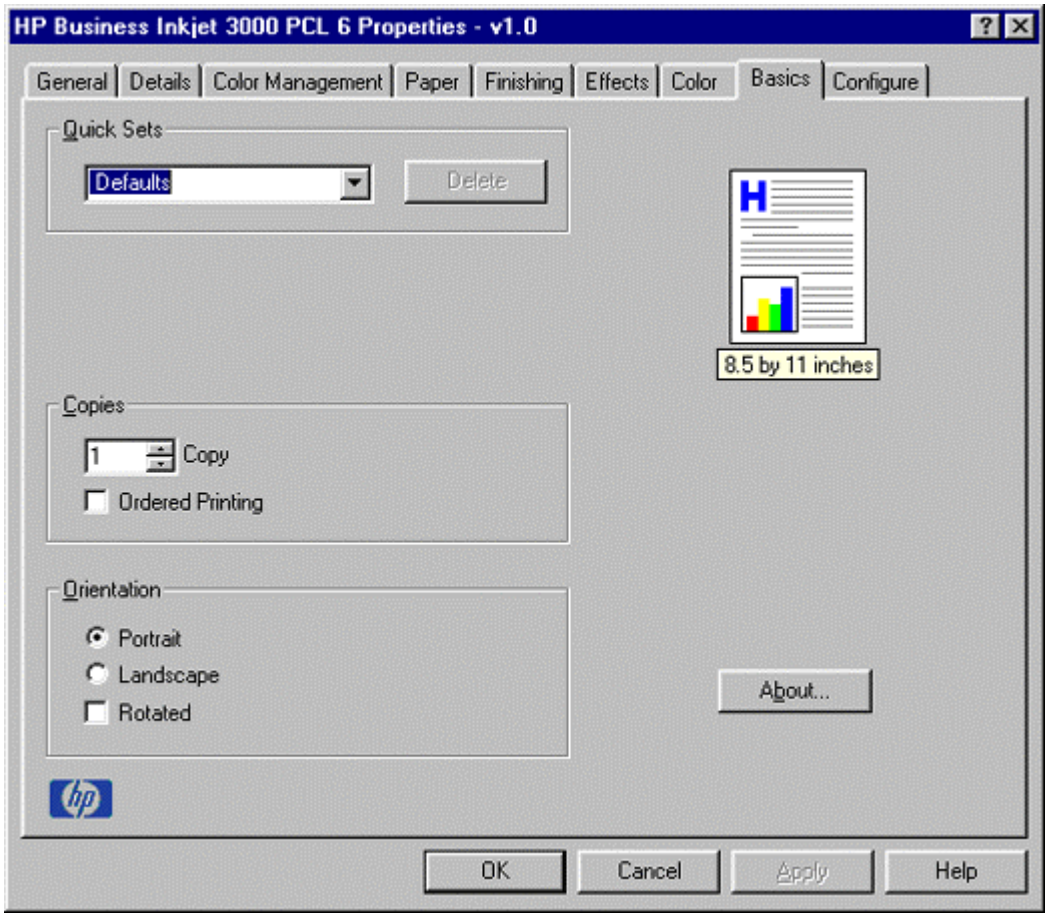

HP Business Inkjet 3000 PCL 6 Properties
General
Details
Color Management
Paper
Finishing
Effects
Color
Basics
Configure
These settings let you associate color profile(s) with your color printer. Color profiles control the color on your printer based on the type of media being used and the printer configuration.
Automatic:
Windows will automatically select the best color profile from the list of associated color profiles [Recommended]
Manual:
Manually select the default color profile for all output from this device from the list of associated color profiles
Default color profile:
<None>
Color Profiles currently associated with this printer:
Add...
Remove
Set As Default
OK
Cancel
Apply
Help

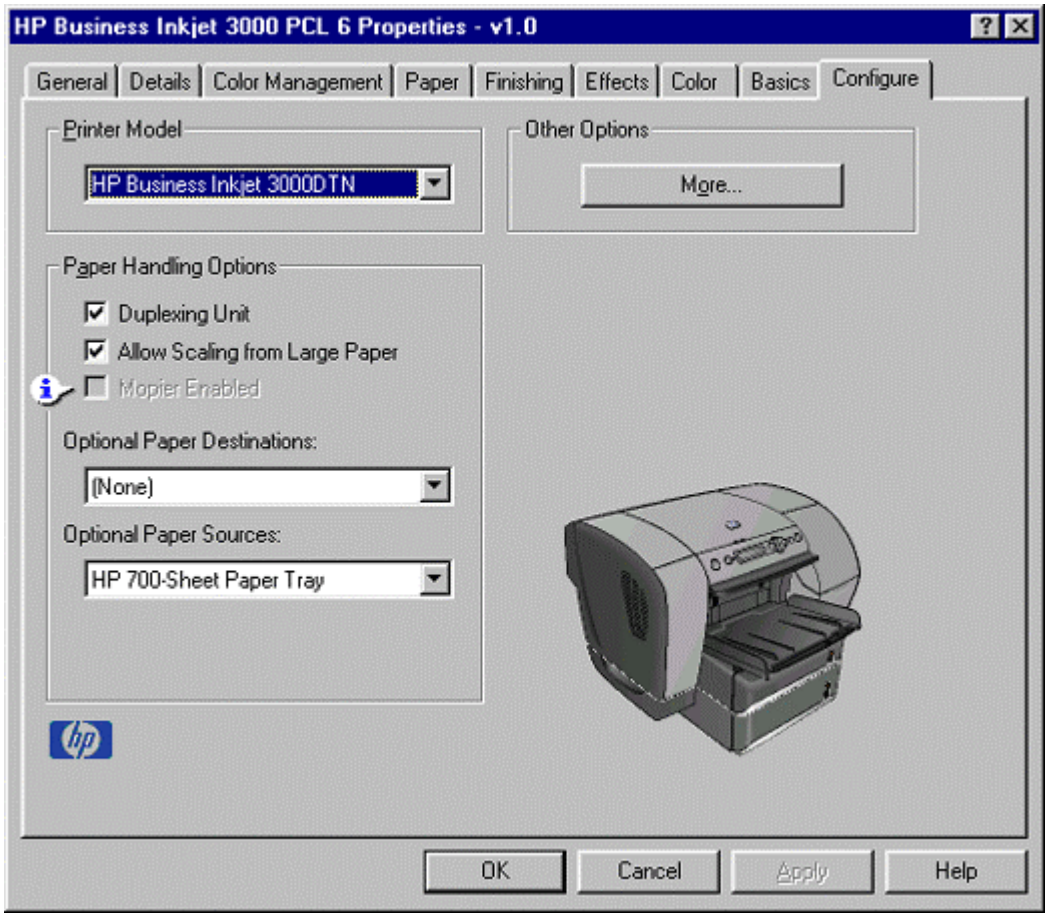

HP Business Inkjet 3000 PCL 6 Properties - v1.0
General
Details
Color Management
Paper
Finishing
Effects
Color
Basics
Configure
Quick Sets
Defaults
Delete
All Pages
Use different paper for first page
Size is:
8.5 by 11 inches
Letter
Custom...
Type is:
Plain Paper
Source is:
Auto Select
8.5 by 11 inches
Print Quality
Best
Normal
Fast
Details...
Photo Paper Printing
PhotoREt
2400x1200dpi
OK
Cancel
Apply
Help


HP Business Inkjet 3000 PCL 6 Properties - v1.0
General
Details
Color Management
Paper
Finishing
Effects
Color
Basics
Configure
Quick Sets
Defaults
Delete
Document Options
Print on Both Sides
Flip Pages Up
Booklet Printing:
Off
1
Pages per Sheet
Print Page Borders
Page Order:
Right, then Down
8.5 by 11 inches
OK
Cancel
Apply
Help

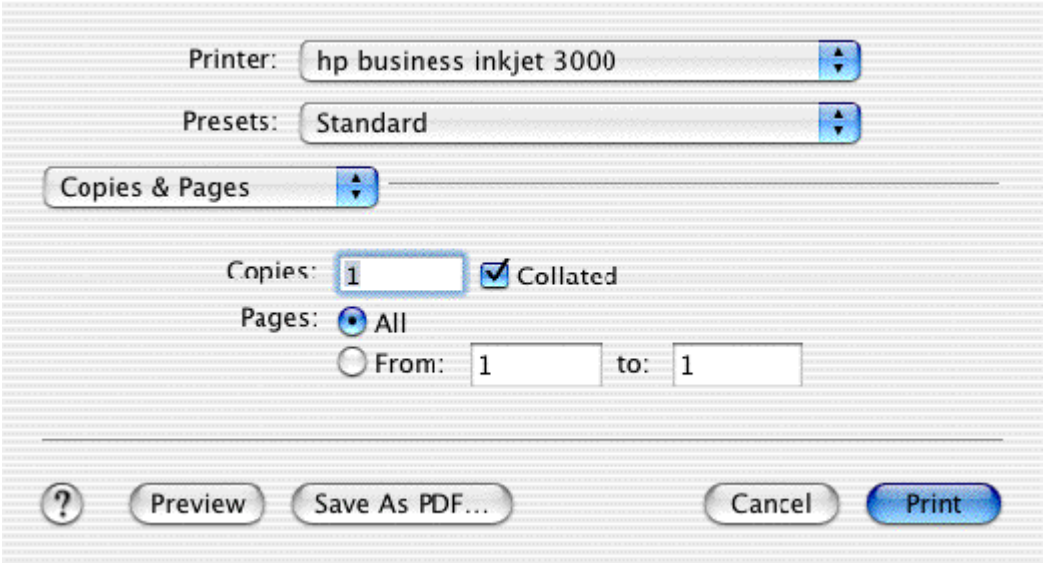

HP Business Inkjet 3000 PCL 6 Properties - v1.0
General
Details
Color Management
Paper
Finishing
Effects
Color
Basics
Configure
Quick Sets
Defaults
Delete
8.5 by 11 inches
Fit To Page
Print Document On:
Letter
Scale to Fit
100
% of Normal Size
Watermarks
(none)
First Page Only
Edit...
OK
Cancel
Apply
Help

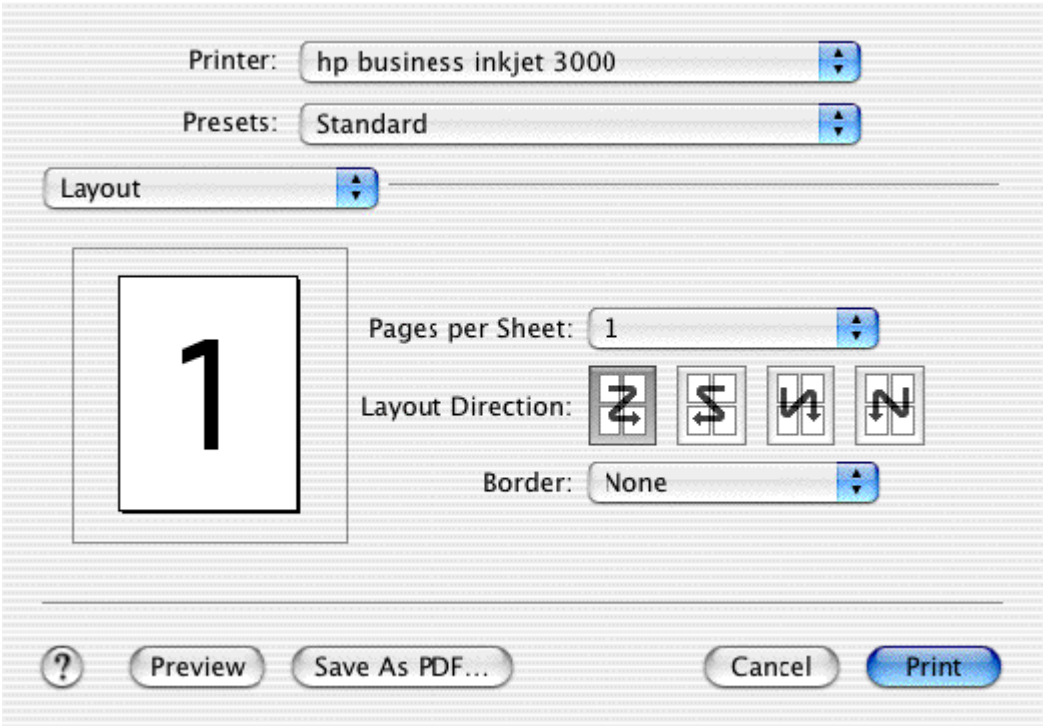

HP Business Inkjet 3000 PCL 6 Properties - v1.0
General
Details
Color Management
Paper
Finishing
Effects
Color
Basics
Configure
Quick Sets
Defaults
Delete
8.5 by 11 inches
Color Options
Print In Grayscale
OK
Cancel
Apply
Help

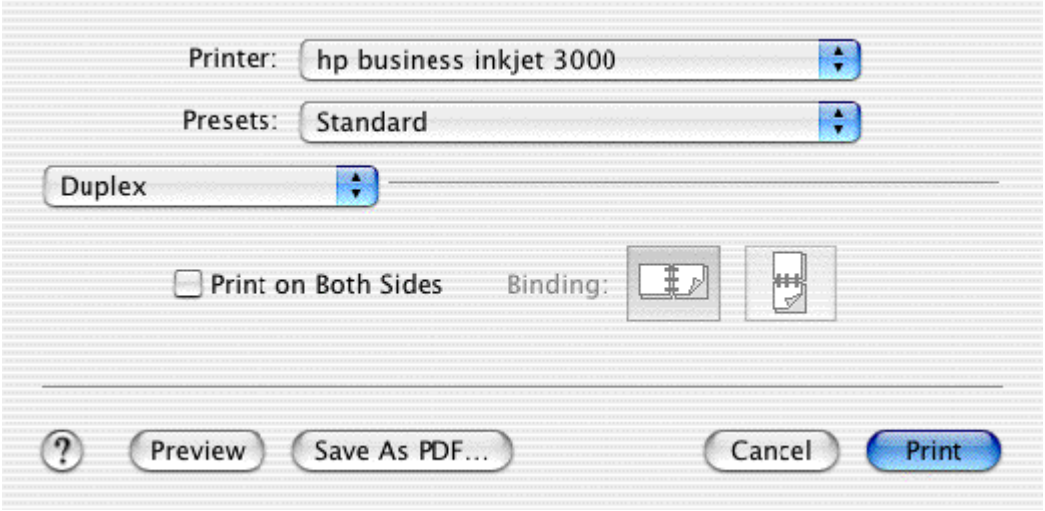

HP Business Inkjet 3000 PCL 6 Properties - v1.0
General
Details
Color Management
Paper
Finishing
Effects
Color
Basics
Configure
Quick Sets
Defaults
Delete
8.5 by 11 inches
Copies
1
Copy
Ordered Printing
Orientation
Portrait
Landscape
Rotated
About...
OK
Cancel
Apply
Help

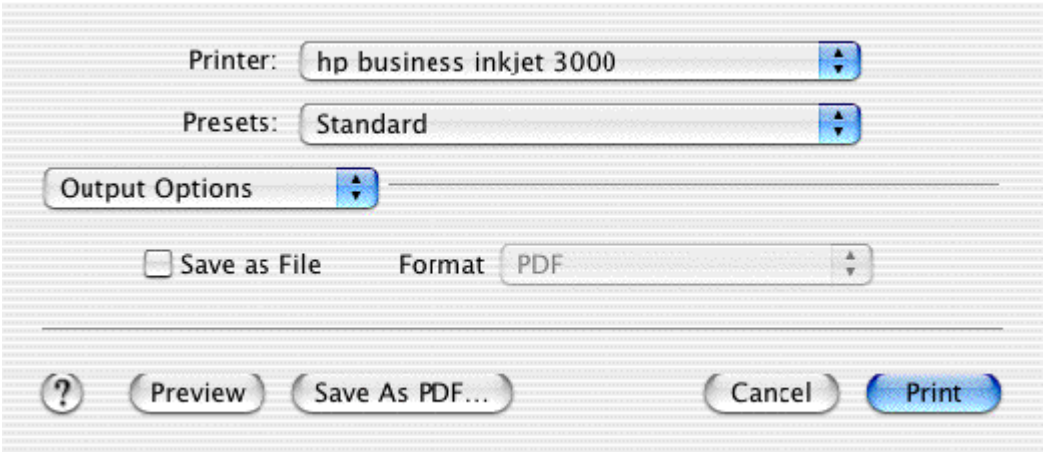

HP Business Inkjet 3000 PCL 6 Properties - v1.0
General
Details
Color Management
Paper
Finishing
Effects
Color
Basics
Configure
Printer Model
HP Business Inkjet 3000DTN
Other Options
More...
Paper Handling Options
Duplexing Unit
Allow Scaling from Large Paper
Mopier Enabled
Optional Paper Destinations:
(None)
Optional Paper Sources:
HP 700-Sheet Paper Tray
OK
Cancel
Apply
Help

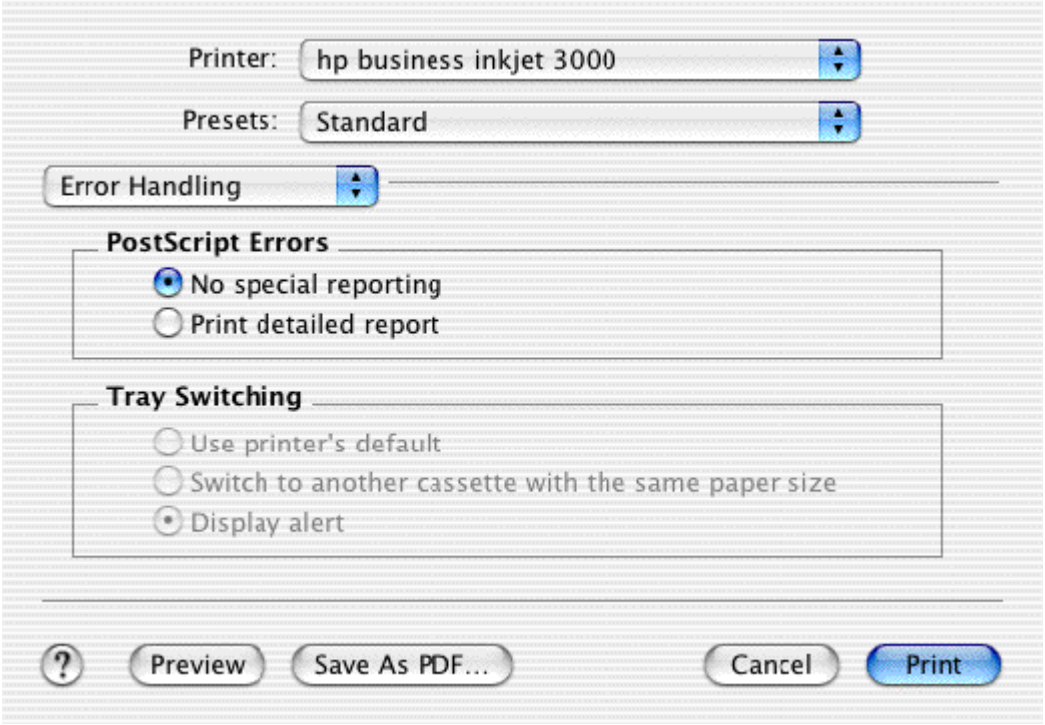
Macintosh OS X

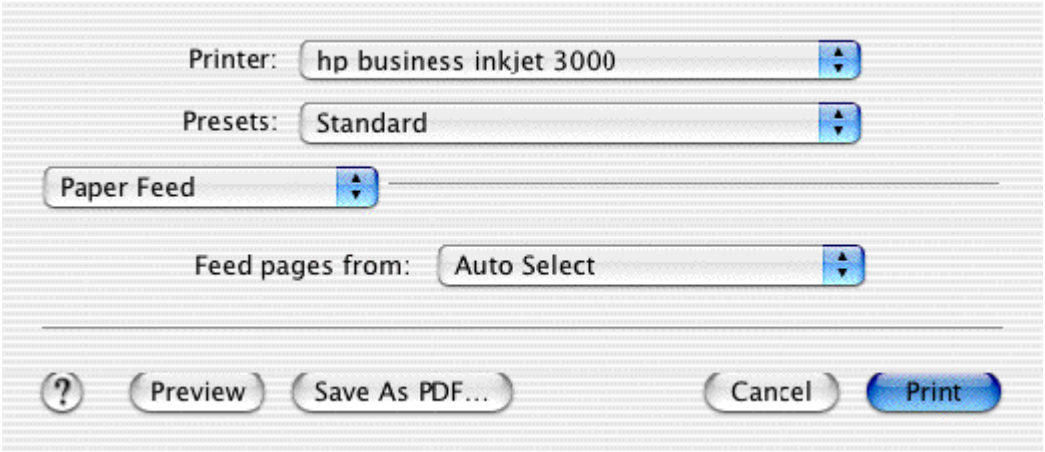


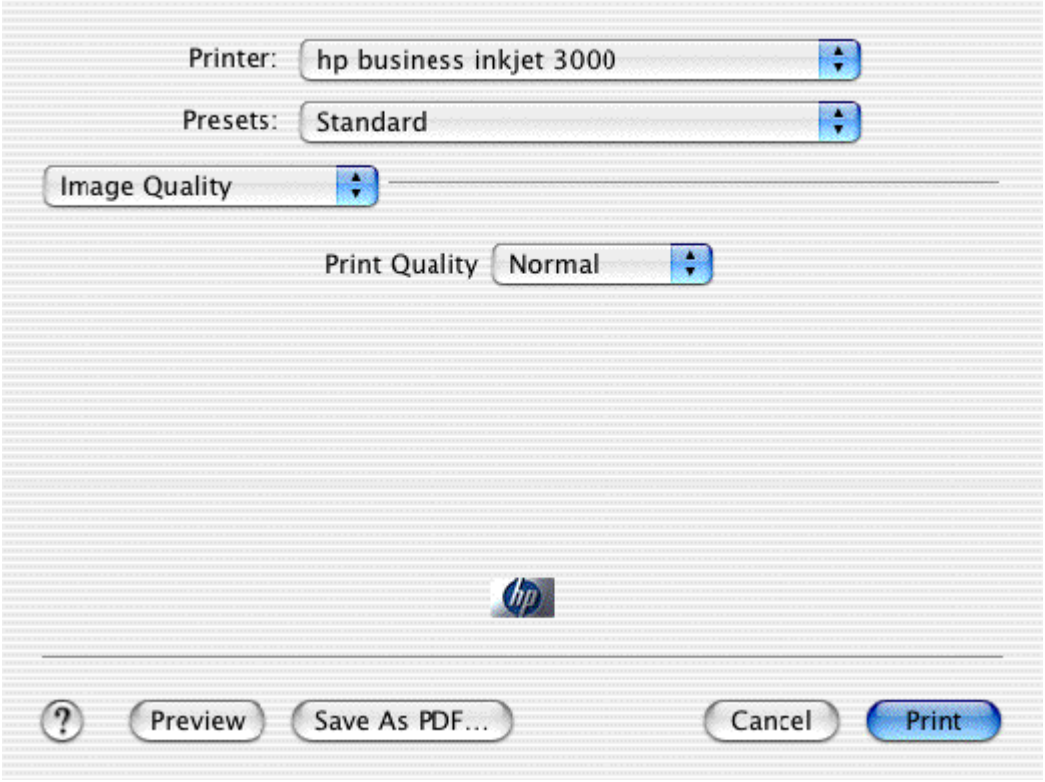


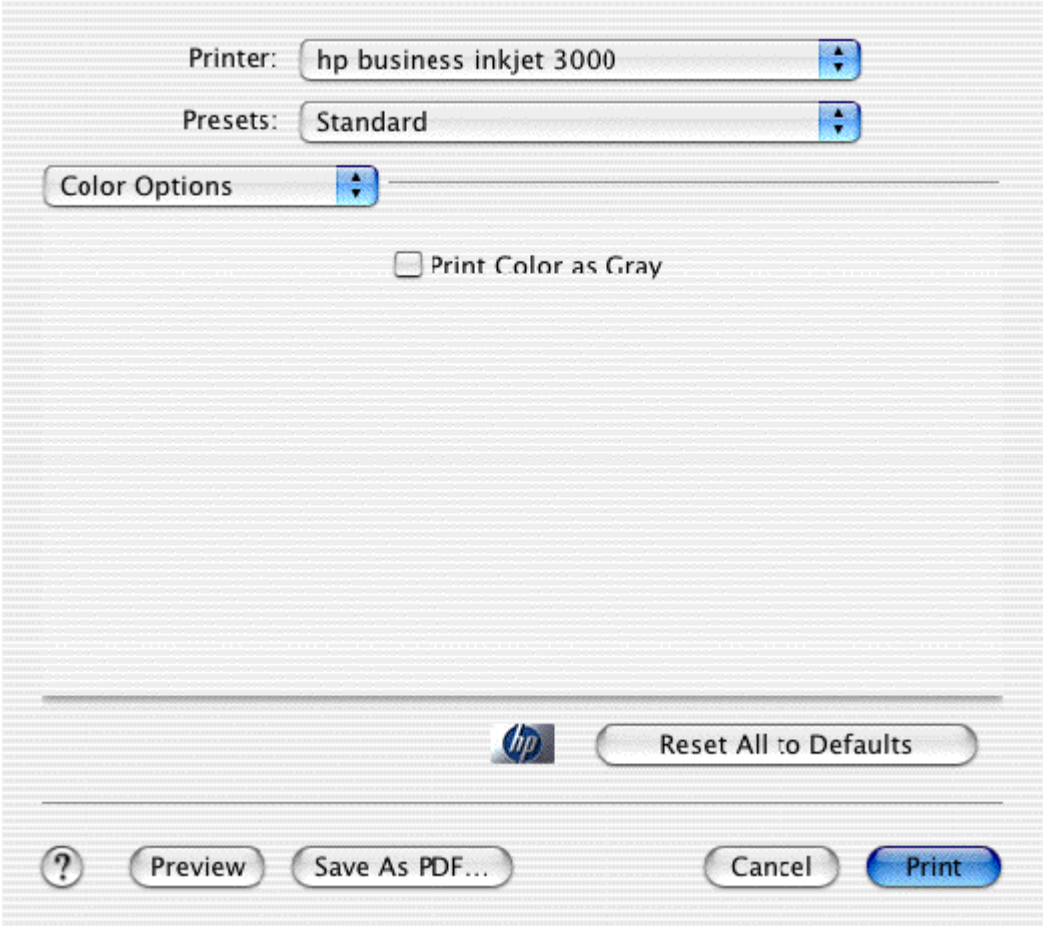

Printer:
hp business inkjet 3000
Presets:
Standard
Duplex
Print on Both Sides
Binding:
Preview
Save As PDF...
Cancel
Print

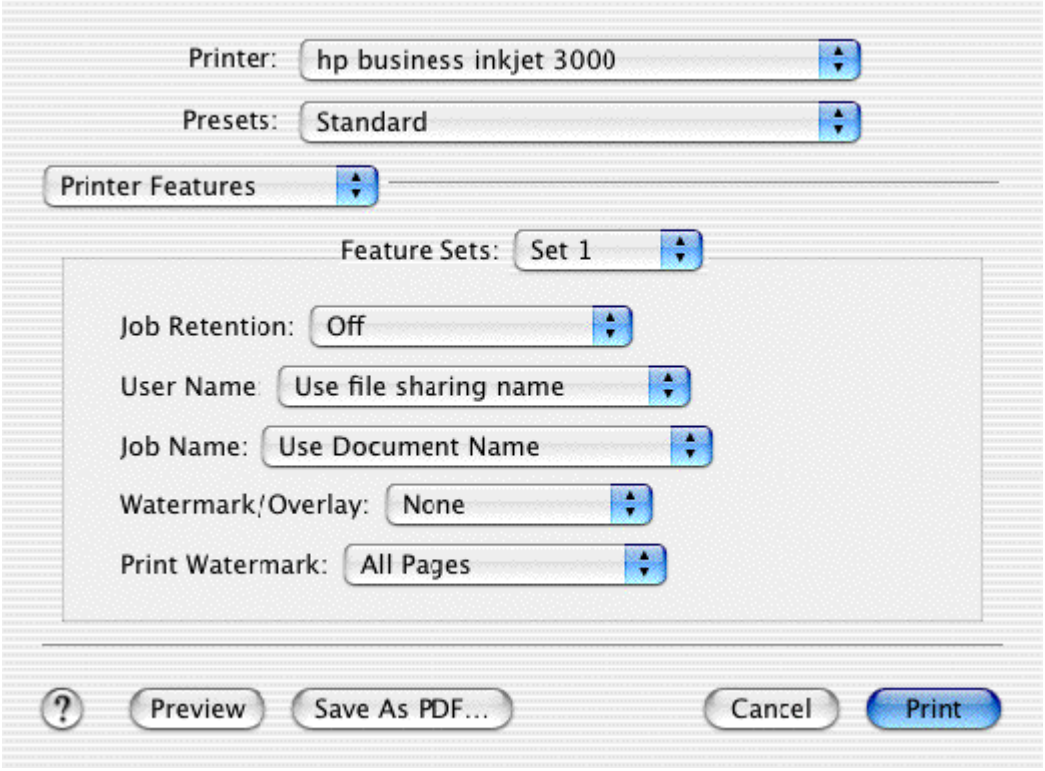

Printer:
hp business inkjet 3000
Presets:
Standard
Output Options
Save as File
Format
PDF
Preview
Save As PDF...
Cancel
Print

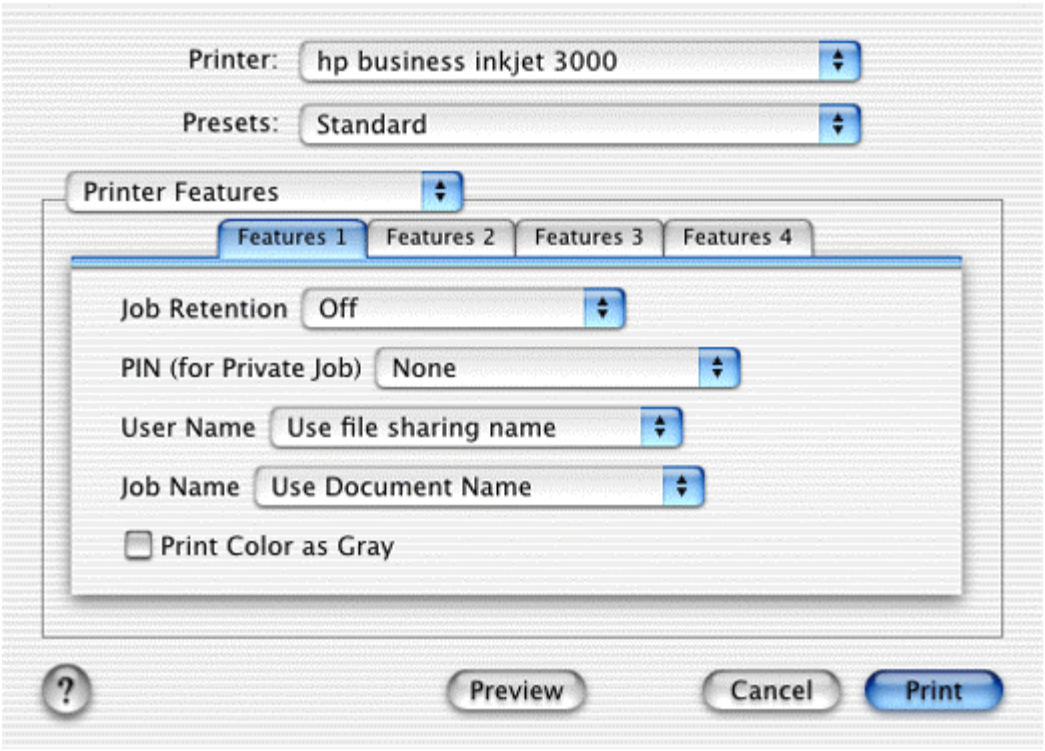

Printer:
hp business inkjet 3000
Presets:
Standard
Error Handling
PostScript Errors
No special reporting
Print detailed report
Tray Switching
Use printer's default
Switch to another cassette with the same paper size
Display alert
Preview
Save As PDF...
Cancel
Print

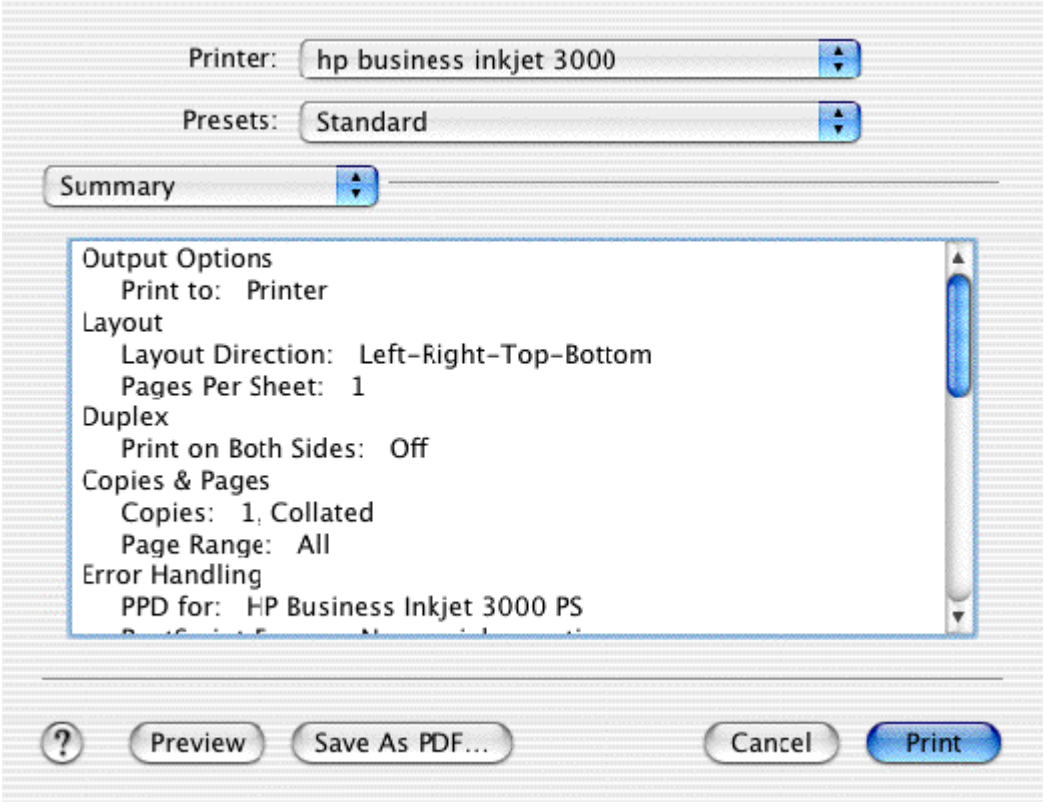

Printer:
hp business inkjet 3000
Presets:
Standard
Paper Feed
Feed pages from:
Auto Select
Preview
Save As PDF...
Cancel
Print


Printer:
hp business inkjet 3000
Presets:
Standard
Image Quality
Print Quality
Normal
Preview
Save As PDF...
Cancel
Print

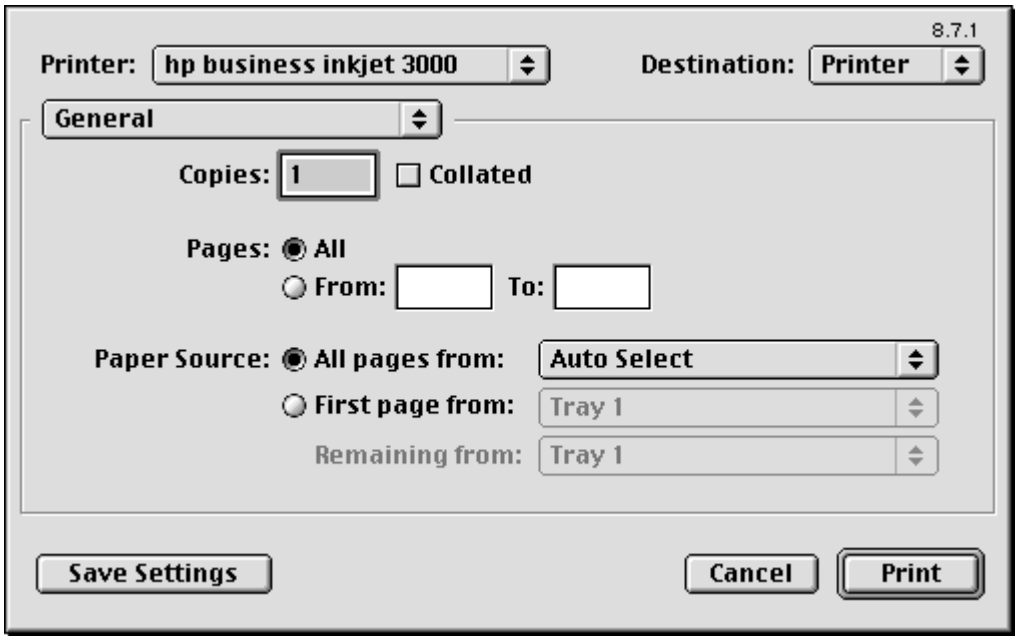

Printer:
hp business inkjet 3000
Presets:
Standard
Color Options
Print Color as Gray
Reset All to Defaults
Preview
Save As PDF...
Cancel
Print

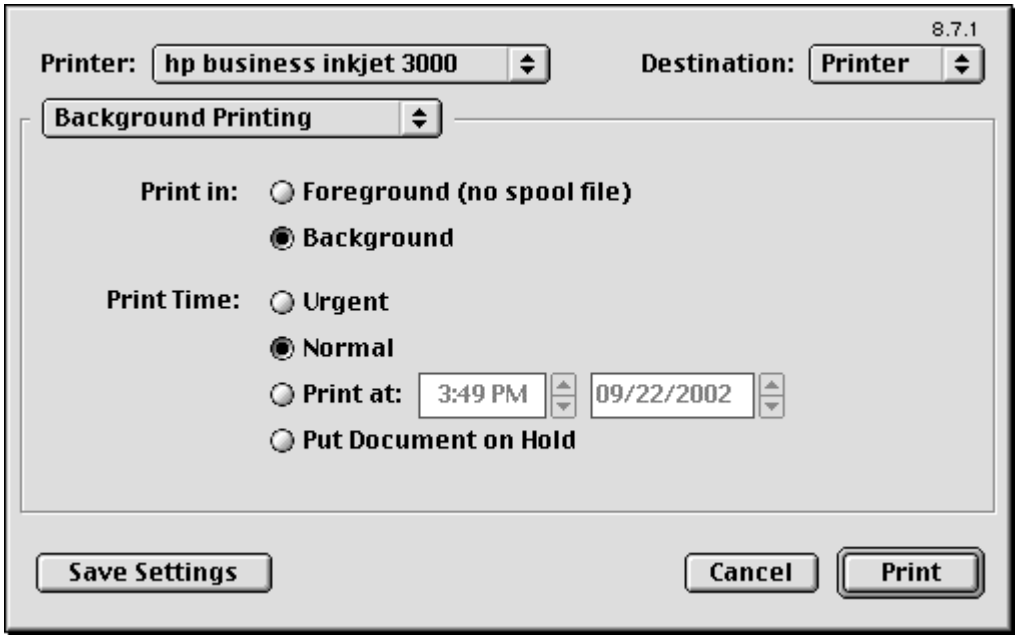

Printer: hp business inkjet 3000
Presets: Standard
Printer Features
Feature Sets: Set 1
Job Retention: Off
User Name Use file sharing name
Job Name: Use Document Name
Watermark/Overlay: None
Print Watermark: All Pages
Preview
Save As PDF...
Cancel
Print

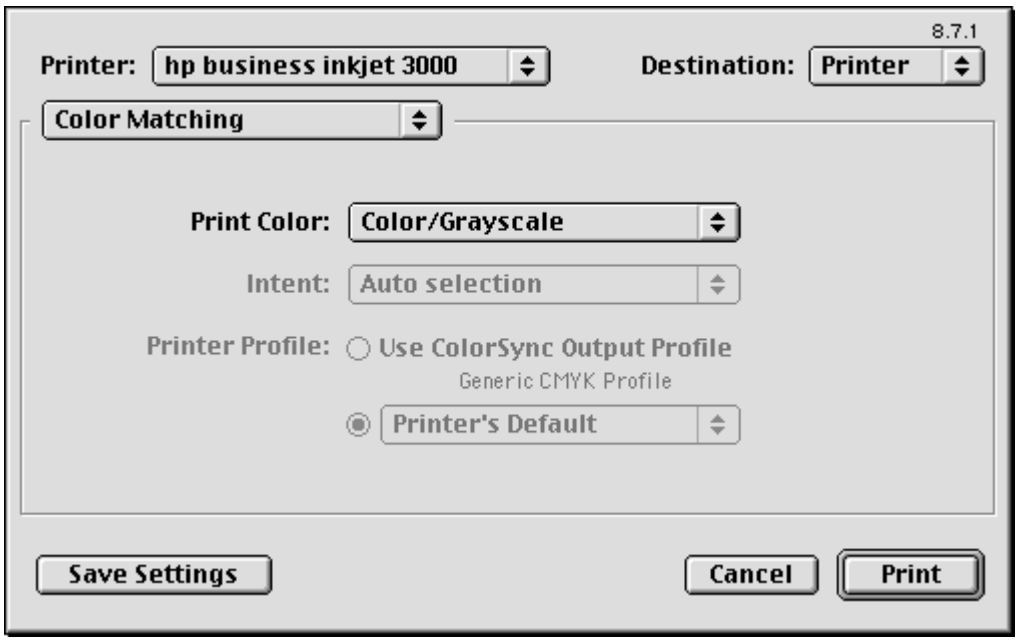

Printer: hp business inkjet 3000
Presets: Standard
Printer Features
Features 1
Features 2
Features 3
Features 4
Job Retention Off
PIN (for Private Job) None
User Name Use file sharing name
Job Name Use Document Name
Print Color as Gray
Preview
Cancel
Print

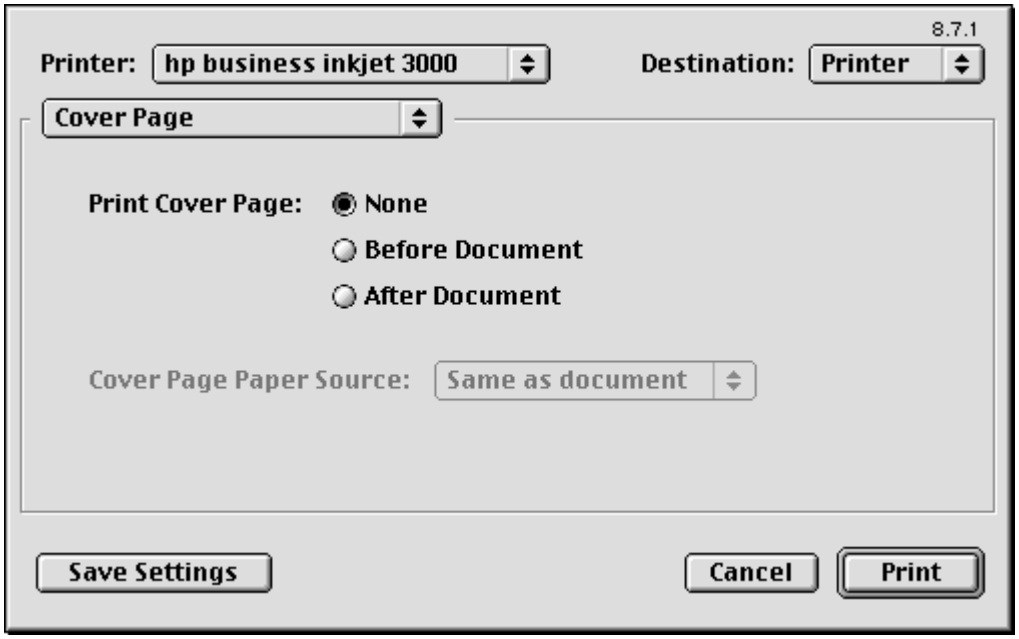

Printer:
hp business inkjet 3000
Presets:
Standard
Summary
Output Options
Print to: Printer
Layout
Layout Direction: Left-Right-Top-Bottom
Pages Per Sheet: 1
Duplex
Print on Both Sides: Off
Copies & Pages
Copies: 1, Collated
Page Range: All
Error Handling
PPD for: HP Business Inkjet 3000 PS
Preview
Save As PDF...
Cancel
Print

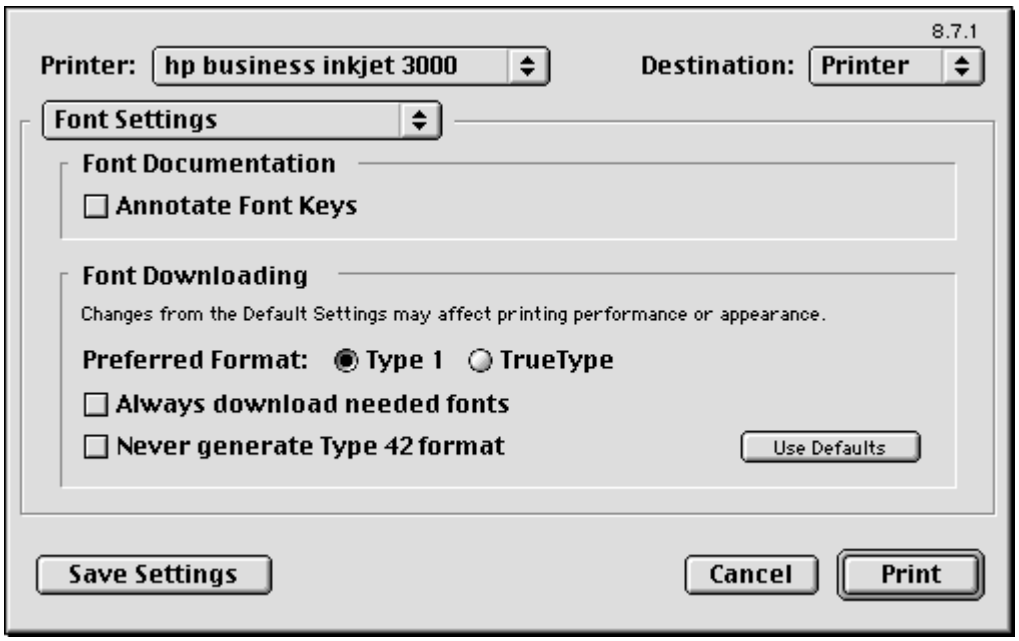
Macintosh OS 9

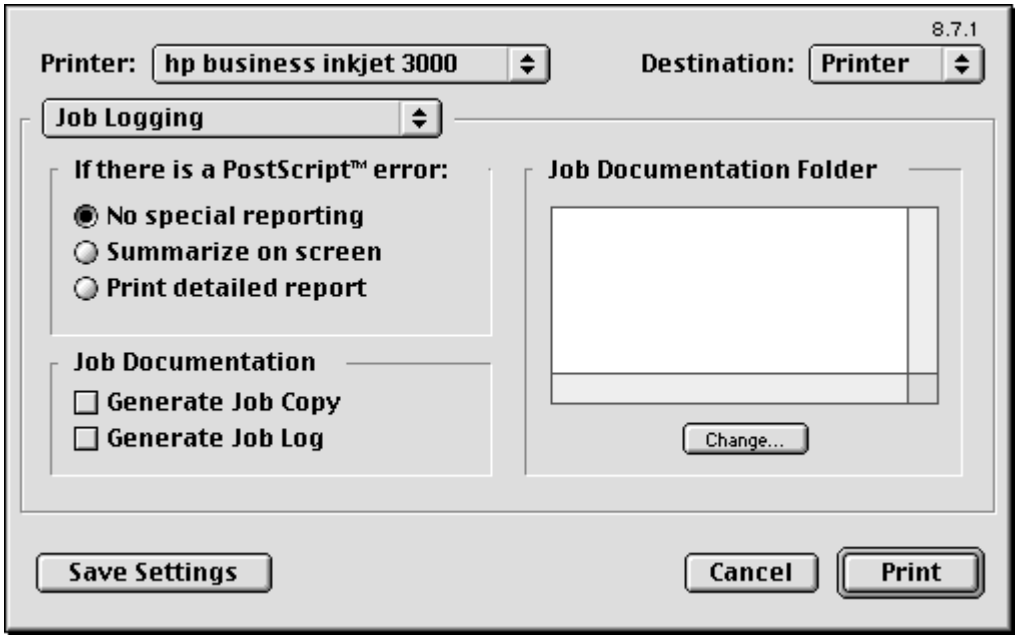


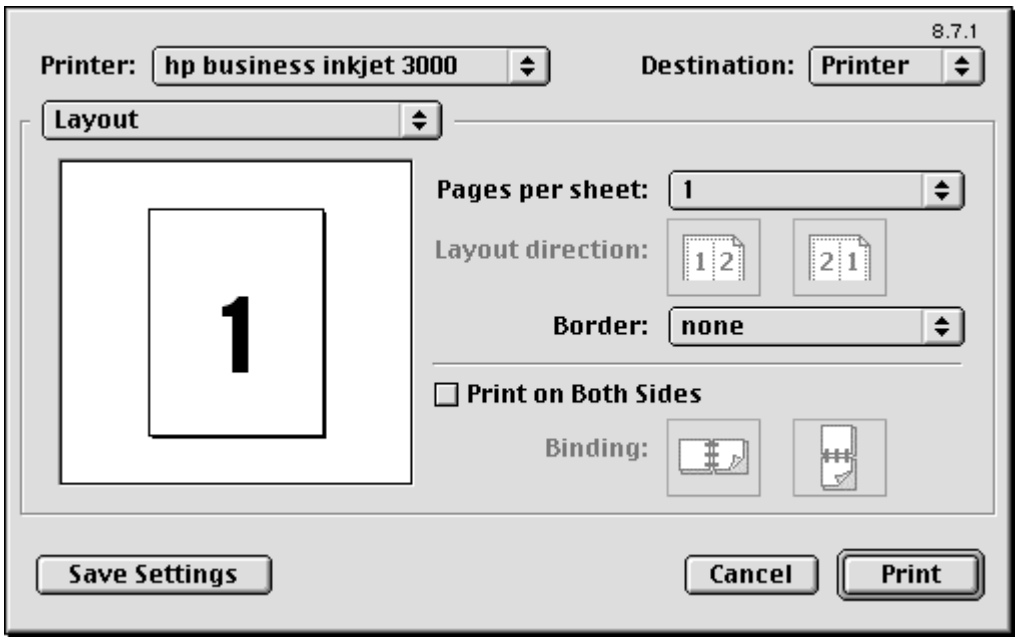


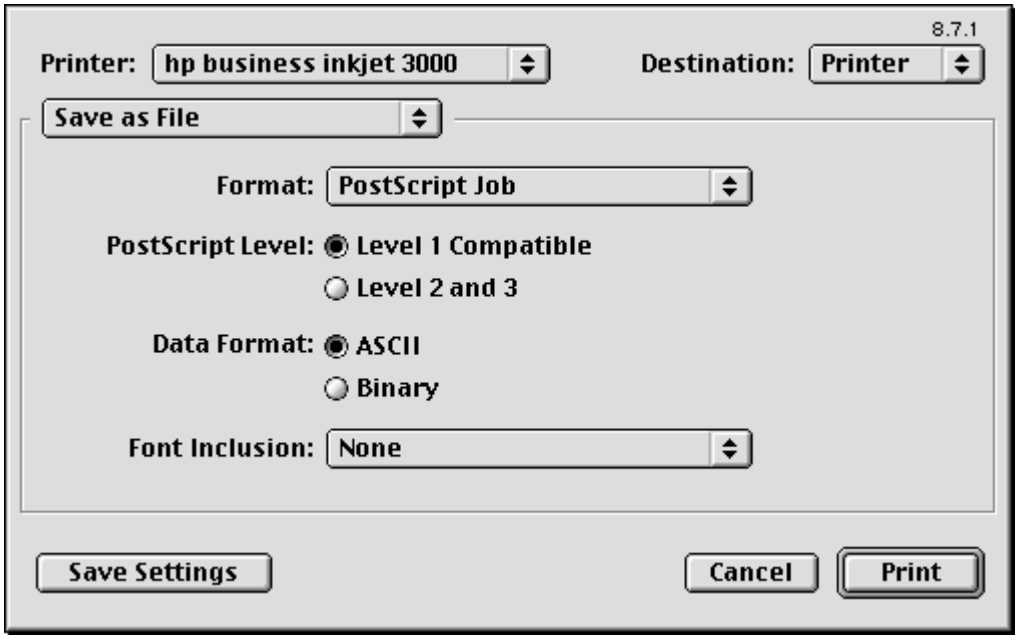

8.7.1
Printer: hp business inkjet 3000
Destination: Printer
Color Matching
Print Color: Color/Grayscale
Intent: Auto selection
Printer Profile: Use ColorSync Output Profile
Generic CMYK Profile
Printer's Default
Save Settings
Cancel
Print

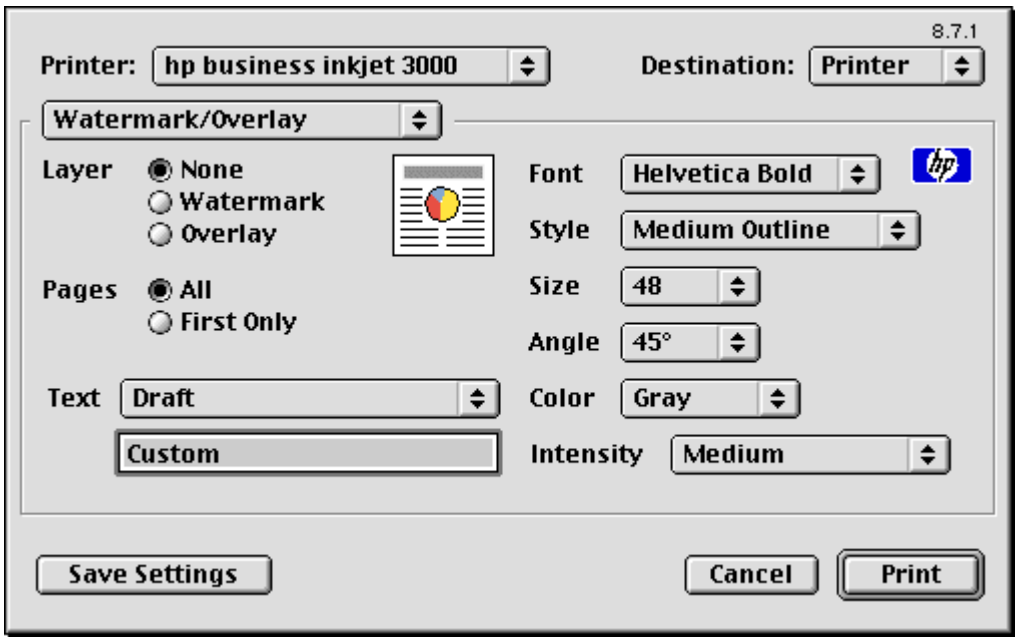

8.7.1
Printer: hp business inkjet 3000
Destination: Printer
Cover Page
Print Cover Page: None
Before Document
After Document
Cover Page Paper Source: Same as document
Save Settings
Cancel
Print

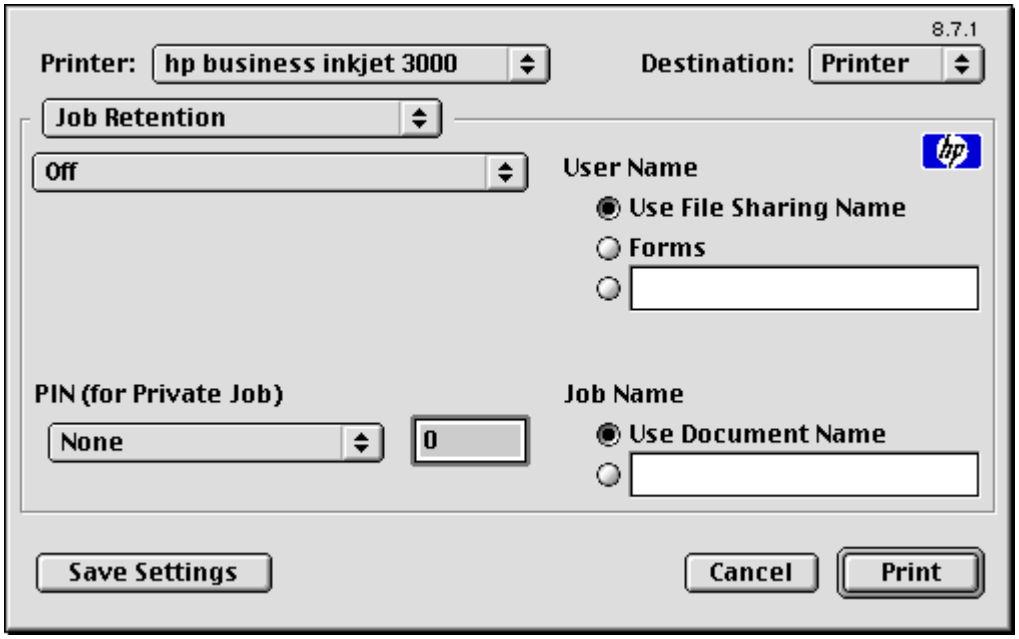

8.7.1
Printer: hp business inkjet 3000
Destination: Printer
Font Settings
Font Documentation
Annotate Font Keys
Font Downloading
Changes from the Default Settings may affect printing performance or appearance.
Preferred Format: Type 1 TrueType
Always download needed fonts
Never generate Type 42 format
Use Defaults
Save Settings
Cancel
Print

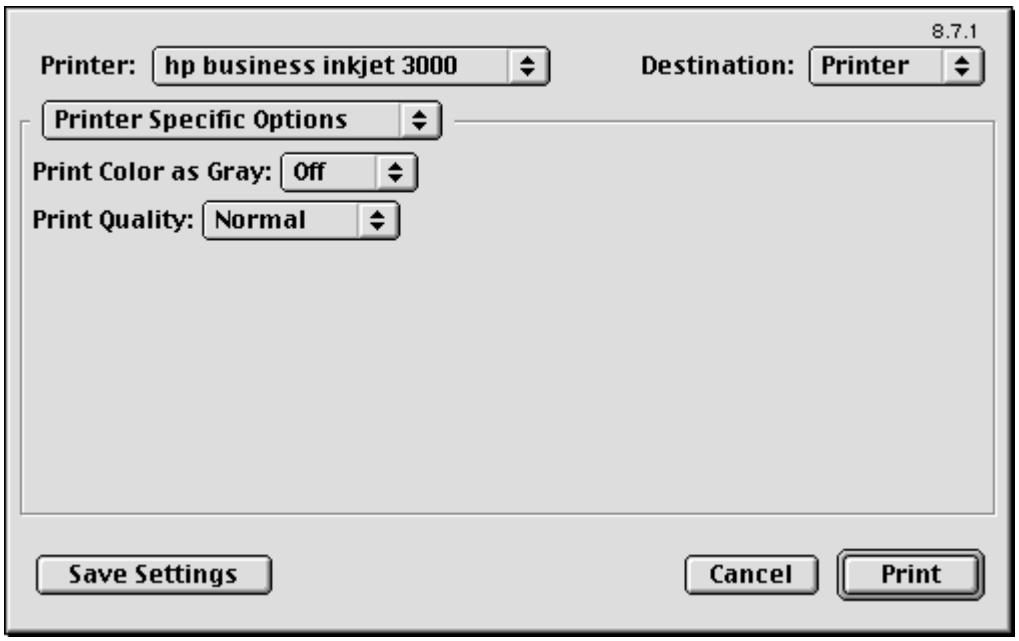

8.7.1
Printer: hp business inkjet 3000
Destination: Printer
Job Logging
If there is a PostScript™ error:
No special reporting
Summarize on screen
Print detailed report
Job Documentation
Generate Job Copy
Generate Job Log
Job Documentation Folder
Change...
Save Settings
Cancel
Print

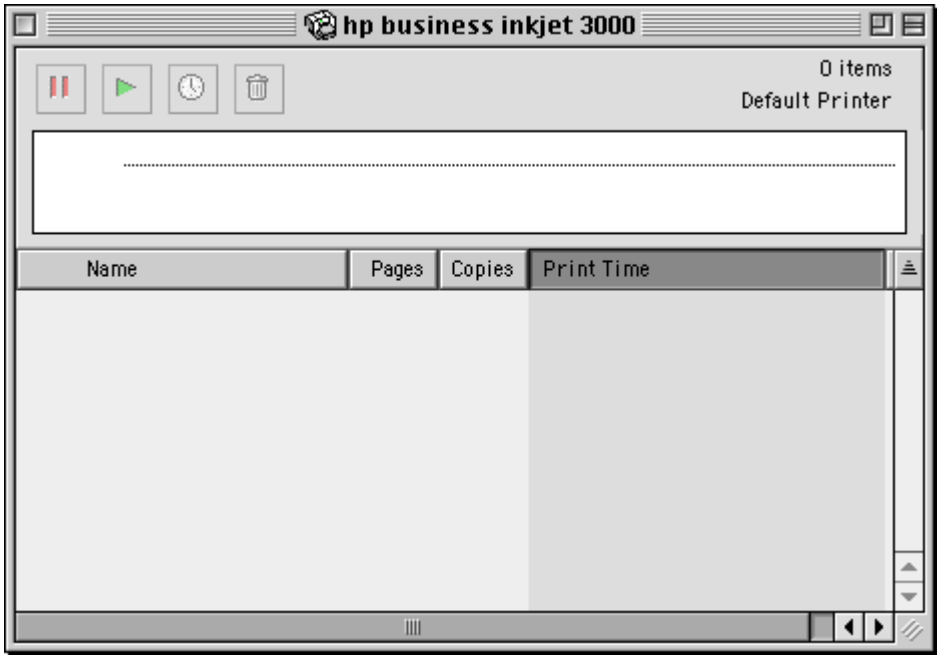

8.7.1
Printer: hp business inkjet 3000
Destination: Printer
Layout
1
Pages per sheet: 1
Layout direction:
Border: none
Print on Both Sides
Binding:
Save Settings
Cancel
Print

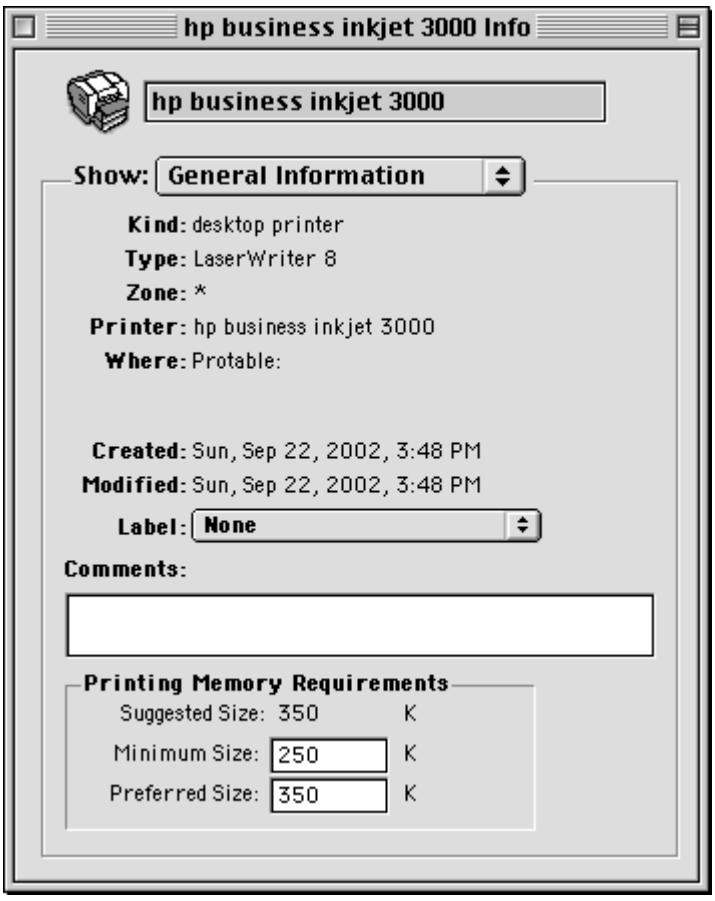

8.7.1
Printer: hp business inkjet 3000
Destination: Printer
Save as File
Format: PostScript Job
PostScript Level: Level 1 Compatible
Level 2 and 3
Data Format: ASCII
Binary
Font Inclusion: None
Save Settings
Cancel
Print

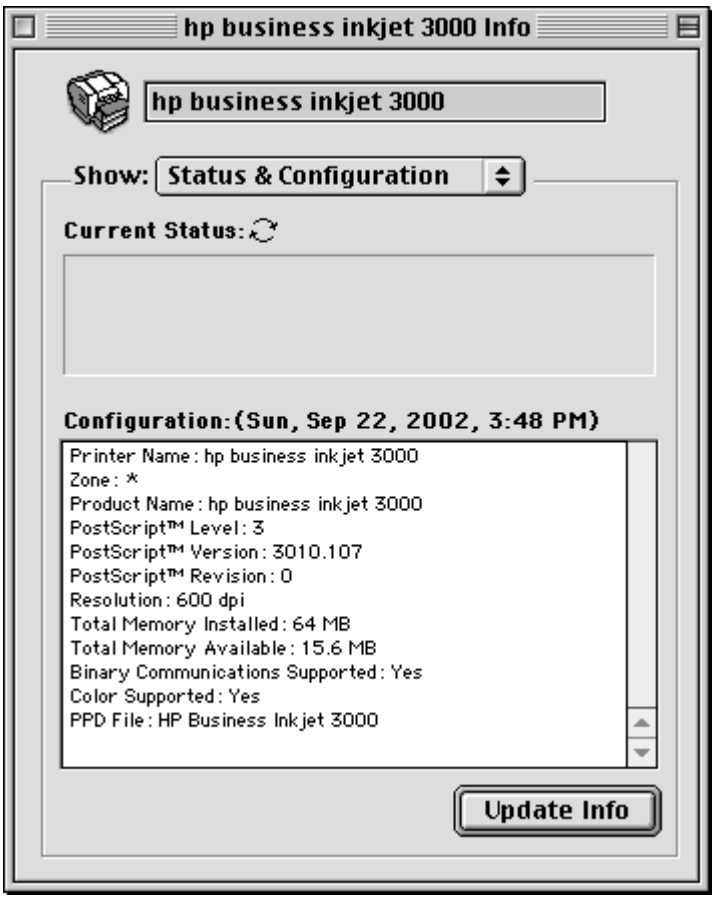

8.7.1
Printer: hp business inkjet 3000
Destination: Printer
Watermark/Overlay
Layer
None
Watermark
Overlay
Pages
All
First Only
Font
Helvetica Bold
Style
Medium Outline
Size
48
Angle
45°
Text
Draft
Color
Gray
Custom
Intensity
Medium
Save Settings
Cancel
Print

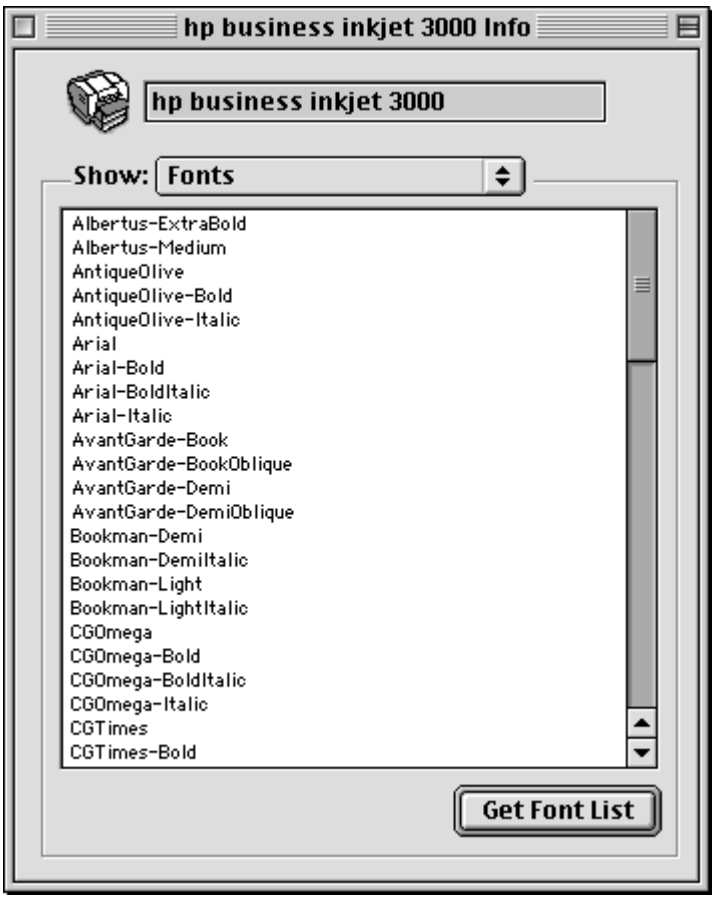

8.7.1
Printer: hp business inkjet 3000
Destination: Printer
Job Retention
Off
User Name
Use File Sharing Name
Forms
PIN (for Private Job)
None
0
Job Name
Use Document Name
Save Settings
Cancel
Print


8.7.1
Printer:
hp business inkjet 3000
Destination:
Printer
Printer Specific Options
Print Color as Gray:
Off
Print Quality:
Normal
Save Settings
Cancel
Print


hp business inkjet 3000
0 items
Default Printer
Name
Pages
Copies
Print Time


hp business inkjet 3000 Info
hp business inkjet 3000
Show: General Information
Kind: desktop printer
Type: LaserWriter 8
Zone: *
Printer: hp business inkjet 3000
Where: Protable:
Created: Sun, Sep 22, 2002, 3:48 PM
Modified: Sun, Sep 22, 2002, 3:48 PM
Label: None
Comments:
Printing Memory Requirements
Suggested Size: 350 K
Minimum Size: 250 K
Preferred Size: 350 K


hp business inkjet 3000 Info
hp business inkjet 3000
Show:
Status & Configuration
Current Status:
Configuration:(Sun, Sep 22, 2002, 3:48 PM)
Printer Name: hp business inkjet 3000
Zone: *
Product Name: hp business inkjet 3000
PostScript™ Level: 3
PostScript™ Version: 3010.107
PostScript™ Revision: 0
Resolution: 600 dpi
Total Memory Installed: 64 MB
Total Memory Available: 15.6 MB
Binary Communications Supported: Yes
Color Supported: Yes
PPD File: HP Business Inkjet 3000
Update Info


hp business inkjet 3000 Info
hp business inkjet 3000
Show:
Fonts
Albertus-ExtraBold
Albertus-Medium
AntiqueOlive
AntiqueOlive-Bold
AntiqueOlive-Italic
Arial
Arial-Bold
Arial-BoldItalic
Arial-Italic
AvantGarde-Book
AvantGarde-BookOblique
AvantGarde-Demi
AvantGarde-DemiOblique
Bookman-Demi
Bookman-DemiItalic
Bookman-Light
Bookman-LightItalic
CGOmega
CGOmega-Bold
CGOmega-BoldItalic
CGOmega-Italic
CGTimes
CGTimes-Bold
Get Font List

postscript printing

The following table identifies the operating system and PostScript driver correlation:

operating system	PostScript version number
Windows 9x, Me	Microsoft PScript Driver Version 4.00 and HP Business Inkjet 3000 PPD
Windows NT 4.0	Microsoft PScript Driver Version 4.01 and HP Business Inkjet 3000 PPD

operating system and PostScript versions

printer feature	Windows 9x/Me	Windows NT
Paper type	Y	Y
Print quality	Y	Y
Print in grayscale	Y	Y
Handout (N-up printing)	Y	Y
Watermark	Y	Y
Job storage		Y

PostScript features available for each operating system

upgrading from an older version of Windows

After completing the upgrade to a new version of Windows, you must reinstall the PostScript printer driver.

setting paper type with the PostScript driver

operating system	location in printer driver
Windows 9x, Me	Paper tab, More Options...
Windows NT 4.0	Advanced tab, Printer Features
Windows 2000, Windows XP	Advanced tab, Printing Defaults, Paper/Quality tab

setting paper type (Windows 9x) or media type (Windows NT 4.0)

paper-type options

HP Plain Paper; HP Premium Inkjet Paper; HP Premium Inkjet Heavyweight Paper, HP Photo Quality Paper, Semi Gloss; HP Photo Quality Paper, Matte; HP Premium Transparency; HP Premium Plus Transparency; HP Photo Paper, Glossy; HP Premium Photo Paper, Glossy; HP Premium Plus Photo Paper, Glossy; HP Premium Plus Photo Paper, Matte; HP Colorfast Photo Paper, Glossy; HP Brochure & Flyer Gloss; HP Brochure & Flyer, Matte. The Paper Type feature allows you to specify the type of paper on which you will be printing, such as plain paper or transparencies. Do not click HP Premium Transparencies when printing on regular paper.

Note *HP does not recommend using stiff media, such as card stock.*

setting print quality with the PostScript driver

operating system	location in printer driver
Windows 9x, Me	Paper tab, More Options...
Windows NT 4.0	Advanced tab, Printer Features

print quality feature

print quality options

Best, Normal, Fast

Best prints the best quality possible. Normal is the recommended mode for everyday printing. Fast uses less ink, but the quality is not as high as normal.

print colors as gray feature

operating system	location in printer driver
Windows 9x, Me	Device Options tab, Printer Features
Windows NT 4.0	Advanced tab, Printer Features

print color as gray feature

options for printing in grayscale

On, Off

To activate grayscale printing, change the Print Color as Gray setting to on. This overrides your color settings and prints your documents in black and white (monochrome, grayscale). Grayscale means shades of gray, starting with white and ending with black. When a color document is printed in grayscale, colors are converted to their grayscale equivalents, which means that different colors are represented as different shades of gray.

This printer can produce up to 256 shades of gray. Color images that are printed as monochrome print faster and are easier to reproduce on monochrome devices such as copiers and fax machines. When Print Color as Gray is On, all of your documents will print as grayscale until the setting is changed to Off.

set pages per sheet

operating system	location in printer driver
Windows 9x, Me	Paper tab, Layout
Windows NT 4.0	Advanced tab, Printer Features

pages per sheet feature

options for setting pages per sheet

1, 2, and 4 pages per sheet

Windows NT 4.0 also offers 6, 9, and 16 pages per sheet, with all NT 4.0 settings in both portrait and landscape and rotated landscape orientation.

The Pages per Sheet option, sometimes called layout or n-up, specifies the number of pages to print on a single sheet of paper. The multiple pages appear decreased in size and arranged based on the number of pages printed on the sheet. The Pages per Sheet option does not work effectively with all page setup options. Some applications request a different resolution, page size, or paper source, or orientations for different pages of a document. Combining page setup options while using the Pages per Sheet option might produce unexpected print results.

watermark printing

The Watermark options allow you to specify that text be placed underneath (in the background) of an existing document. For example, you may want to have large gray letters reading Draft or Confidential placed diagonally across the first page or all pages of a document. You can also specify the font, size, angle, and style of the watermark.

operating system	location in printer driver
Windows 9x, Me	Device Options tab
Windows NT 4.0	Advanced tab, Printer Features

watermark printing feature

watermark/overlay

Options: None, Watermark, Overlay.

This selection specifies whether a watermark is printed. Overlay prints the watermark on top of any text or graphics, so that what appears beneath is not visible.

watermark page

Options: All Pages, First Page Only.

The First Page Only option prints only on the first page of the current document.

watermark

Options: Draft, Company Confidential, Company Proprietary, Company Private, Confidential, Copy, Copyright, File Copy, Final, For Internal Use Only, Preliminary, Proof, Review Copy, Sample, Top Secret, Urgent, Custom.

The options listed are the available words that can be printed as a watermark. To turn watermark printing off, click None. If watermark printing is turned off, then the following watermark features are ignored.

watermark font

Options: Courier Bold, Times Bold, Helvetica Bold.

If you are printing a watermark, select one of the three font types.

watermark size

Options: 24, 30, 36, 42, 48, 54, 60, 66, 72, 78, 84, 90.

All option values are in degrees. The watermark can be positioned on the page at an angle in 15-degree increments. With zero (0) as normal readable text, the positive angles will rotate the text counter clockwise up to 90 degrees (vertical). The negative angles will rotate the text clockwise up to 90 degrees (vertical).

watermark style

Options: Narrow Outline, Medium Outline, Wide Outline, Wide Halo, Outline.

The style of the watermark defines the line thickness of the watermark word.

watermark color

Options: Gray, Red, Orange, Yellow, Green, Blue, Violet.

This sets the color of the watermark.

watermark intensity

Options: Darkest, Darker, Dark, Medium Dark, Medium, Medium Light, Light, Ligher, Lightest.

This sets the intensity of the watermark.

job storage

operating system	location in printer driver
Windows NT 4.0	Advanced tab, Printer Features

job storage feature

Options: Enabled, Disabled.

This allows you to store your print job on the printer's hard disk so you can access the print job later from the LCD control panel. The default setting is Enabled.

overview of toolbox

The Toolbox provides functions for trouble shooting and maintenance of HP Business Inkjet 3000. Toolbox supports shared connection, TCP/IP network connection, direct-connect over LPT, and USB using bidi Dot4 stack. The Toolbox needs to be installed on each machine that uses it.

user interface

Toolbox contains two tabs which displays the Printer status and Information.

status tab

Depending on the selected printer, this tab displays the status of the printer and the ink level information. Preferences can also be set for toolbox interface.

- **Printer selection:** Allows you to select a printer to monitor and lists printers that are compatible with the toolbox.
- **Status area:** Displays messages related to current printer status, such as Printing job, Top cover open, Ink Cartridge empty, etc.
- **Ink information:** Shows the ink levels for the four cartridges of the selected printer.
- **Preferences:** Allows you configure the toolbox behaviour for all printers that need to be monitored and maintained.

information tab

This tab provides the user with the functions to display printer Information. It also allows the user to get help on usage of printers.

- **Printer selection:** You can select the printer to view information.
- In the Embedded Web Server options group, Launch: The default web browser will be launched and will bring users to embedded web server in the printer when users click "Launch" buttoSn. If toolbox cannot resolve the port name of the current printer into an IP address, the button "Launch" will be disabled.
- In the Printer Information options group, MyPrintMileage: This button will launch the myPrintMileage data submission page in a browser window. Upon data submission the user is taken to the myPrintMileage Website.
- **Printer Head Health:** Displays a graphical interface of the print head condition.
- **Printer Hardware:** Displays the model, Firmware version, Duplexer info, hard disk info, RAM info and trays information.
- In the Help options:
- hp instant support: Launches the data submission page in a browser. Upon data submission, the user is taken to the hp instant support Web site.
- Register your printer: Provides online registration of the printer driver either by openning the link for online registration or by displaying a help screen, which contains the link.
- How do I: Provides help on maintenance activities of the printer.
- Troubleshooting: Provides helps on trouble shooting Printer, Printing, and Paper problems.
- Contact HP: Opens a help file that contains links to the HP Products and printer site for the specific printer model.

embedded web server

system requirements

To use the embedded Web server, you must have a TCP/IP-based network and a Web browser installed on your computer, either Netscape Navigator 4.7x or Microsoft Internet Explorer 5.0x and above. You do not need Internet access to open and use the embedded web server, however, some features will not be available.

Note *The embedded web server can be accessed from any operating system that supports the TCP/IP protocol and a Web browser. The embedded Web server does not support IPX/SPX-based network printer connections and cannot be accessed with a parallel cable. You cannot view the embedded Web server pages from outside a firewall.*

gaining access to the embedded web server

You can gain access to the embedded Web server in the following ways:

- **From the Toolbox** (Windows only): Launch the embedded Web server from the Information tab in the Toolbox. The default Web browser for the computer opens and displays the embedded Web server information.
- **From a Web browser** : In a supported Web browser on your computer, type the IP address assigned to the printer. For example, if the printer's IP address is 123.123.123.123, you would type http://123.123.123.123 into your Web browser.

If you do not know the IP address for the printer, it is listed on the printer configuration page. After you gain access to the embedded Web server, you can bookmark it so that you can return to it quickly in the future.

information pages

device status page

Device Status: This section displays the current status of the printer. This section also displays the (select button), PAUSE/RESUME, and CANCEL JOB buttons. When clicked, these buttons are equivalent to physically pushing the buttons on the printer.

Supplies: This section shows the life remaining of ink cartridges and printheads, with 0 percent representing a supply that is empty. This section also provides supplies part numbers. To order new supplies, click Order Supplies in the area on the left side of the window. To visit any Website, you must have Internet access.

Media: This section displays information about the installed trays, including the type and size of media loaded, as well as each tray's status. To change the tray settings, click Change Settings.

configuration page

Device Information: This section displays information about the printer, such as the model and serial number for the printer, the version number of the firmware, and the amount of memory installed.

Installed Personalities and Options: This section displays the version number of the printer's installed personalities, installed DIMMs and other storage devices, and printer security information.

Memory: This section displays the total amount of memory available for the printer, including the amount of driver workspace memory.

Paper Trays and Options: This section displays the default media size for each installed tray, and the total media capacity for each tray. It also shows whether an auto-duplex unit is installed in the printer.

supplies status

This page displays gauges that indicate the remaining ink levels for each ink cartridge. It also provides supplies part numbers, the estimated number of pages remaining before supplies must be replaced, and how many pages have been printed so far. You can also find information on and links for ordering replacement supplies and recycling used supplies.

event log

This page shows the most recent events and errors in the printer event log. The most recent item appears at the top of the list.

usage page

Identification: This section displays the printer serial number, product name, and service ID. If the network administrator has assigned a name or asset number to the printer, these items are also displayed.

Usage Tools: This section shows how much of each media type and size has been used by the printer. It also lists how much media has been printed from each tray and how much ink has been used.

settings

The Settings pages of the embedded web server allow you to configure the printer from your computer. These pages can be password protected. Always consult with your network administrator before changing the printer configuration.

configure device

The Configure Device page displays the menus available in the printer's LCD control panel, except the service menu options. From the Configure Device page, network administrators can perform configuration functions from a computer instead of from the LCD control panel.

alerts

Notification Distribution Lists: This section allows you to add the e-mail addresses of the people who will receive electronic notification of printer events, such as ink supplies and media path events. You are provided with e-mail lists, which you can rename as needed.

You can also add up to two e-mail addresses to each list. In addition, this page lets you configure the outgoing e-mail server settings that the embedded web server uses when sending e-mail notification of printer events.

Select Events: This section allows you to select which types of printer events will prompt e-mail notifications for each e-mail list. Click the type of printer event to set the threshold or condition under which an e-mail notification is sent. For example, for the Cartridge Low event, you can set the threshold to 20 percent. This means that e-mail notifications are sent to the e-mail lists you specified when an ink cartridge has 20 percent of its ink supply remaining.

email

Outgoing Mail: This section allows you to set the outgoing mail values for e-mail alerts.

Incoming Mail: This section allows you to set the incoming mail values to enable remote requests and commands sent to the printer.

AutoSend: This page allows you to automatically send printer usage information to HP. HP uses this information on the hp instant support page to help you understand your printing patterns. With this information, you can estimate the amount of ink and paper you use each month, which allows you to manage your printing supplies more effectively. If AutoSend is enabled, the embedded web server sends this usage information to HP.

Note *Before you enable AutoSend, you must configure the outgoing e-mail server settings on the Notification page. HP will treat this information in the manner set out in the Hewlett-Packard Online Privacy Statement (http://www.hp.com/country/us/eng/privacy.htm).*

Security: This section configures the password information and other security settings for the embedded web server and e-mail alerts. This information should be configured by the network administrator only.

other links

This page allows you to add additional links to the embedded Web server.

device information

This page displays information about the printer, such as the model and serial number for the printer, the version number of the firmware, and the amount of memory installed.

language

This page allows you to configure the language settings for the embedded Web server.

time services

This page allows you to define a network time server that the printer will use to synchronize its internal clock.

networking

The network pages of the embedded Web server allow the network administrator to configure the HP Jetdirect print server for the printer. This tab will not appear if the printer is connected to a network using anything other than an HP Jetdirect print server card.

Refer to the online help and to the HP Jetdirect Print Server Administrator's Guide for more information. This guide is located on the Starter CD.

other links

The following e-services are available from each embedded web server page. You must have an Internet connection to use these e-services. If you use a dial-up connection and did not connect when you first opened the embedded Web server, you must connect before you can visit these websites. Connecting might require that you close the embedded Web server and reopen it.

hp instant support

This page connects you to the HP website to help you find solutions. This service analyzes your printer error log and configuration information to provide diagnostic and support information specific to your printer. It also includes myPrintMileage, which helps you understand your printing patterns.

Access the hp instant support Web site to view the following information:

- Personalized printer information
- Printer usage pattern
- Error alerts
- Recommended actions to resolve errors
- Proactive announcement on release of firmware and drivers
- Direct access to printer reference materials, tips, and service options

myPrintMileage

This page keeps track of your printer usage information to help you plan the purchase of supplies. myPrintMileage displays the amount of ink you have used, whether you use more black or color ink, the average amount of media you use per month for each media type, the number of pages printed, and the estimated number of pages you can print with the amount of ink remaining.

myPrintMileage web pages are dynamically created.Bookmarking this site and connecting using the bookmark will not display the most current information. Instead, connect from the Toolbox by clicking myPrintMileage on the Information tab.

order supplies

This page shows the remaining life of the different ink supplies and the links to the HP website for ordering supplies, such as ink cartridges and print media.

product support

This page connects you to the support site for the printer. From this site, you can search for help regarding general topics.

hp web jetadmin

This page connects you to hp web jetadmin information.

hp instant support

hp instant support is a Web-based tool that provides you product-specific services, troubleshooting tips, and information about your printer's ink and media usage. With this information, you can diagnose and solve printer problems, and manage your printing activities and printer supplies more effectively.

hp instant support provides the following information about your printer:

- **Notification of printer driver and firmware updates.** When a firmware or driver update for your printer is available on the HP website, a message appears on the hp instant support homepage. Click the link within the message to go directly to the printer drivers downloads section of the HP website.
- **Resolutions for specific printer errors.** hp instant support provides immediate access to information that can help you resolve error messages specific to your printer. To see a description of the problem, as well as recommendations for solving or preventing the problem, click the link within the message. To see a list of past printer errors, click alerts on the left side of the hp instant support page.
- **Managing ink and media usage (myPrintMileage).** myPrintMileage helps you manage your printing activities and printer supplies. This tool tracks your printer usage information to help you plan the purchase of supplies.
- **Obtaining support services.** HP offers a variety of support services that can help you maintain your printer. hp instant support creates a list of the support services available for your printer. To learn more about these services or to purchase a service, click the appropriate link.
- **Easy access to troubleshooting tips** . To help you quickly resolve printer problems or prevent some problems from happening, hp instant support provides tips that are customized for your printer.

using hp instant support

You can use hp instant support from the Toolbox (if the computer is running Windows and the printer is connected to a network) or the embedded Web server.

Note *Because Web pages used to display hp instant support (as well as myPrintMileage) are dynamically created, creating a bookmark or favorite for these Web pages and connecting using this bookmark or favorite will not display the most current information. Instead, connect from the embedded Web server or from the Toolbox.*

to launch hp instant support from the Toolbox (Windows only)

Note *To launch hp instant support from the Toolbox, the printer must be connected to a network.*

Open the Toolbox.

On the Information tab, click hp instant support. The default Web browser opens and displays the current hp instant support information for your printer.

to launch hp instant support from the embedded Web server

Open a Web browser and type the IP address for the printer in the address box. The IP address is shown on the Configuration page.

In the Other Links section of any embedded Web server page, click hp instant support.

security and privacy

To use this tool, detailed information, such as serial number, error conditions, and status, is sent to HP. Hewlett-Packard respects your privacy and manages this information according to the guidelines outlined in the Hewlett-Packard Online Privacy Statement (http://www.hp.com/country/us/eng/privacy.htm).

Note *To view all the data that is sent to Hewlett-Packard, select Source (for Internet Explorer) or Page Source (for Netscape) from the View menu in your Web browser.*

mobile printing

driver

This printer comes with the hp mobile printing driver. The hp mobile printing driver loads on any portable PC and enables the user to print to any networked PostScript-enabled printer. Faster and far less complicated than adding a printer driver using Microsoft's "Add Print Wizard," the hp mobile printing driver is always within your Microsoft Windows application so you can achieve printing success in seconds with no technical capability required.

uses

Use the hp mobile printing driver to do the following:

- print from a conference room
- print at a satellite office
- print remotely from a home office

procedure

To use the hp mobile printing driver from within a Microsoft Windows application:

Initiate the standard "file print" routine.

Select **HP Mobile Printing Driver** from the list of printers.

Enter the printer's IP address or network path.

Send the print job.

Success with the hp mobile printing driver requires the user to know the printer's IP address or network path. This information can be obtained from the printer's LCD display or by printing a configuration page found in the printer's menu options. Some businesses have affixed labels with this information to their printers to expedite user access.

details

Additional information about hp mobile printing is available online at www.hp.com/go/mobileprintingdriver

changing default software settings

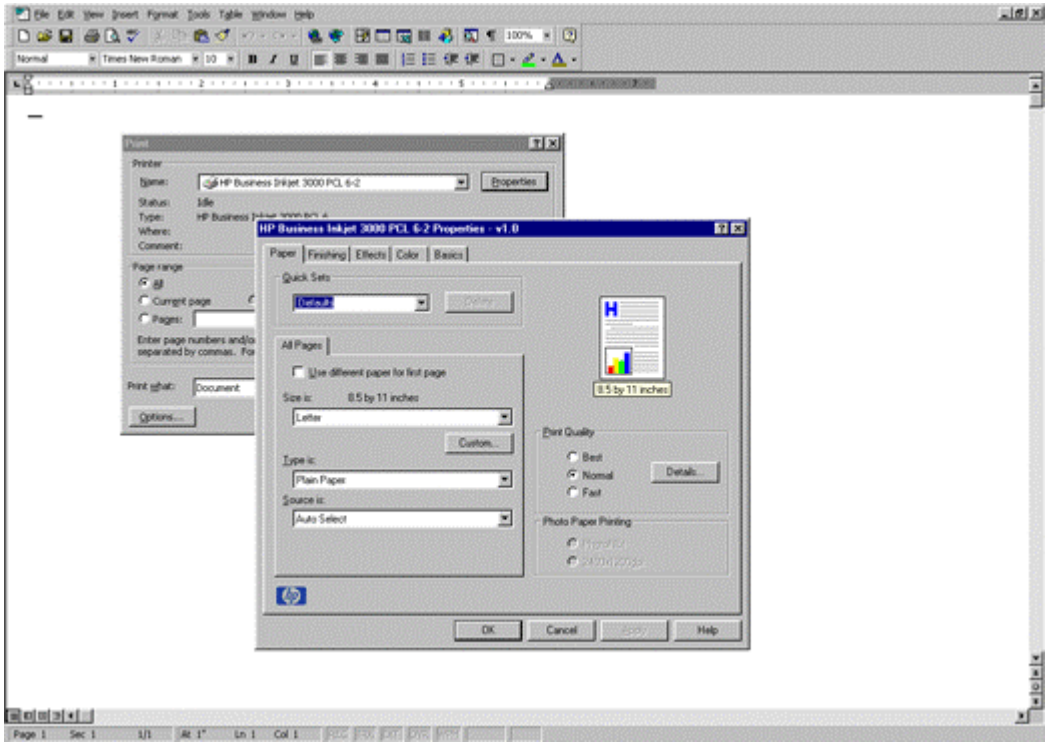
You can change printer settings from the LCD control panel, from the printer driver, and from a software application. If you want printing options to be available only in a particular application, change the settings from this application. After you quit the application, the printer settings will return to the defaults configured in the printer driver.

Note *Settings in a software application always take precedence over settings in the printer driver or the LCD control panel.*

If you want printing options to be available in all software applications you use on the computer, change the default settings in the printer driver.

change printer settings from a software application

To change printer settings from a software application, from the **File** menu, click **Print** , and then click **Setup** or **Properties** .



change global printing settings from the printer driver

If you want common printing options for all applications on the computer, change the default settings in the printer driver. The steps to change settings from the printer driver are:

Click **Start** , point to **Settings** , and then click **Printers**

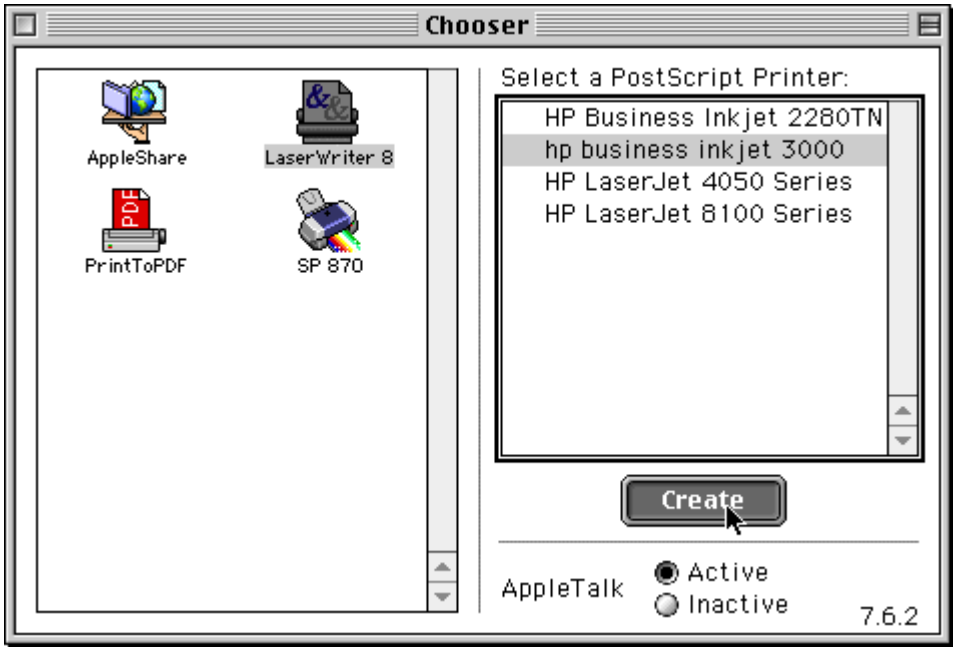
Right-click the printer icon, and then choose the option for your operating system:

- For Windows 95, Windows 98, Windows ME, and Windows XP, click Properties.
- For Windows NT 4.0, click Document Defaults or Properties.
- For Windows 2000, click Printing Preferences or Properties.

Change the desired settings, and then click **OK**

change global printing settings from the printer driver in Mac OS 8.6 - 9.2.2

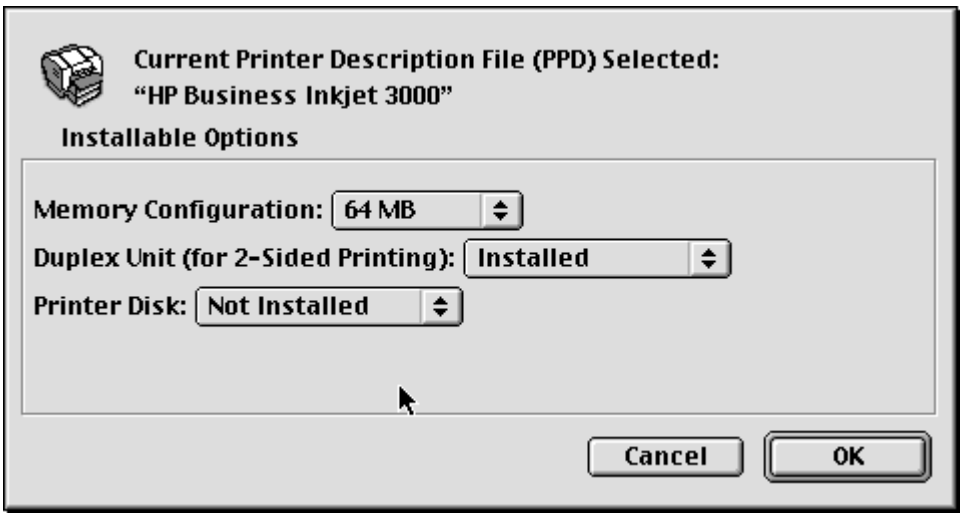
If you want common printing options for all applications on a Macintosh computer, change the default settings in the printer driver. The steps to change settings from the printer driver are:



From the Desktop, click the Apple Menu, select the Chooser, select LaserWriter 8, select the HP Business Inkjet 3000 in the printer list to the right, click the Setup button below the printer list. A dialog window will open. Click on the Configure Button.

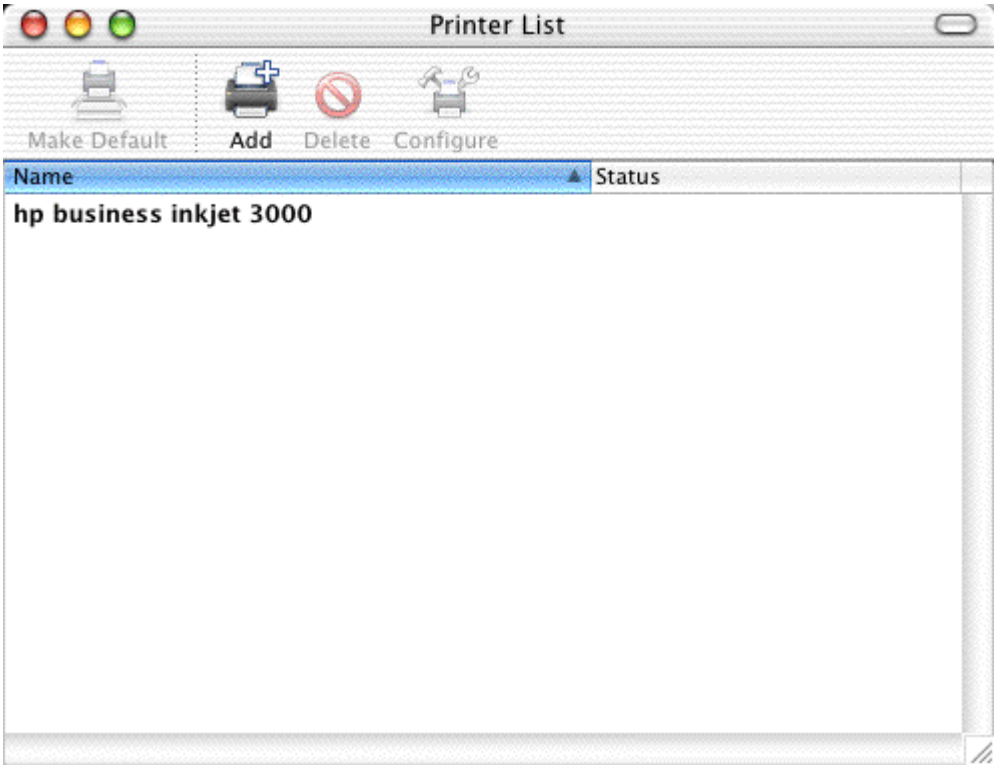
From the Configure PPD dialog window, there are 3 options and pull down menus to configure the PPD. These menus are Memory Configuration, Duplex Printing (for 2 sided printing) and Printer Disk. If more memory has been added, the Duplex Unit has been installed or a Hard Disk has been installed, you will need to manually modify these selections to match your upgraded HP Business Inkjet 3000 to take advantage of some of the upgraded features.

After changing the settings, click OK to return to the Chooser.



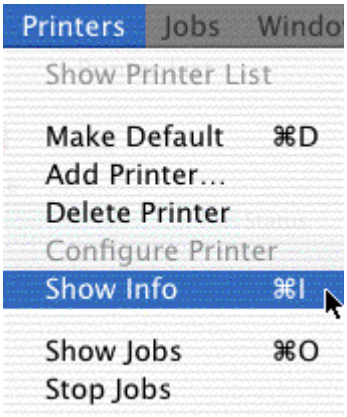
change global printing settings from the printer driver in Mac OS X - 10.2

If you want common printing options for all applications on a Macintosh computer, change the default settings in the printer driver. The steps to change settings from the printer driver are:



From the Desktop, double click Macintosh HD (or the name of your Hard Drive), and Applications : Utilities : and open the Print Center application.

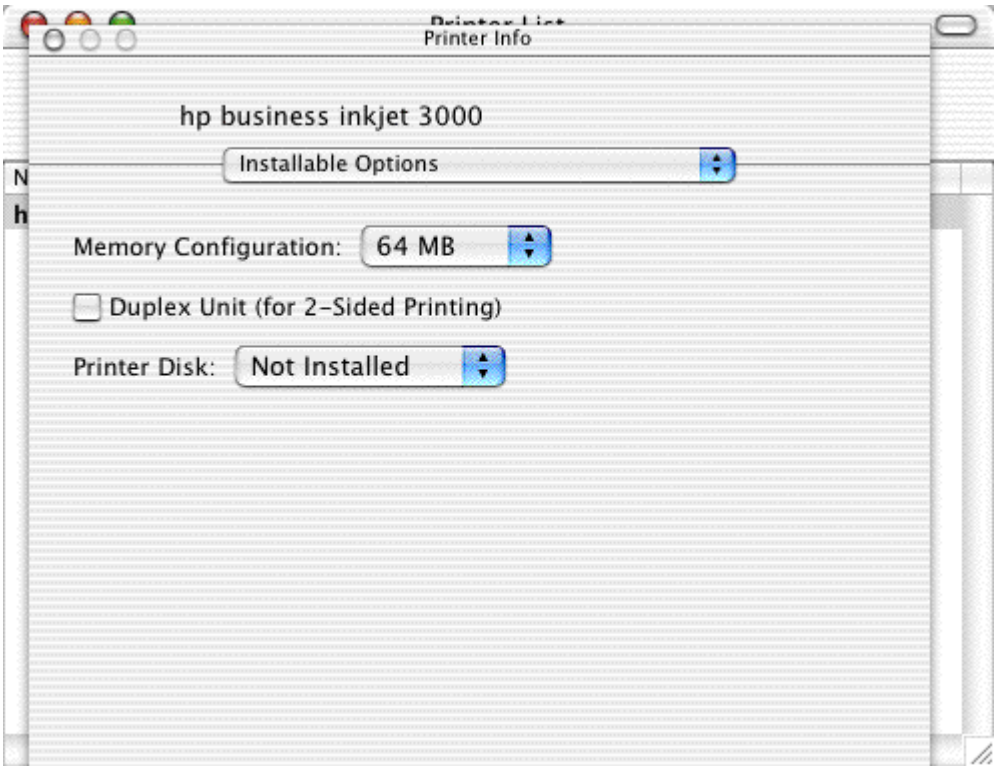
A window will open showing all of the installed printers on your Macintosh. Select the HP Business Inkjet 3000.



Go to the Menu bar and select Printers, choose the Show Info (Command I) option. A dialog window will appear showing Printer Info. A pull down menu under the printer name will be pre-selected to PPD. Select this menu and choose “Installable Options”

There will be 3 options available to configure in this dialog window. A pulld down menu to change the amount of RAM, a check box to select whther or not the Duplex unit is installed, and a pull down menu to select if a hard disk is installed.

If you have already installed the printer driver prior to installing any of the above options in your HP Business Inkjet 3000, you will need to manually configure these options to match your printer to take advantage of some of the installed features you have added. If you installed any of the options prior to installing the printer driver under Mac OS X or 10.2, you will not need to configure any of these options as it was automatically configured for you on installation.



troubleshooting advanced printer problems

symptom	solution
problems with the printer	If the printer is used on a network, see the HP Jetdirect Print Server Administrator's Guide on the Starter CD.
the printer is not responding	**check the printer LCD control panel for error messages** Make sure the ink cartridges, printheads, and print media are loaded correctly. Also make sure that the printer cable is firmly connected from the printer to your computer and that the power cord is connected from your printer to the power receptacle.
	check the printer setup Ensure that the correct port (LPTx, where "x" is the port number) is selected and that the printer is connected directly to your computer. If your printer is connected to a switch box, complete one of the following tasks, and then try printing again: Make sure that you have selected the correct switch. Connect the printer directly to the computer without the switch box.
	check the power If the printer is turned on, make sure your printer is selected as the current or default printer. For information about setting the default printer, see the online Help for your computer's operating system. If the printer is not turned on, press (power button) on the printer. After a brief printer startup, you should see a steady green light (the Ready light) on the LCD control panel. Note *If you tried to print when the printer was turned off, an alert message should have appeared on your computer. If the printer was off and you did not see a message when you tried to print, the printer setup might be incorrect. Uninstall the printer software by running the uninstaller program in the printer's program group or the Add/Remove Programs utility (Windows) or by selecting the uninstall option in the Installer (Mac OS). Then reinstall the software that came with your printer.*
the printer Attention light blinks	This indicates an event that requires user intervention or an error has occurred. For example, a printer cover might not be closed properly, or the carriage might be jammed. **check the LCD control panel** If the message shows a printer error, see "LCD control panel messages." Follow the recommended actions to resolve the error.

	restart the printer If the LCD control panel displays the message XX.XXXX SERVICE ERROR, the printer might have a hardware problem. Press and hold (power button) to turn off the printer. Wait a few seconds, and then turn it on again. In most situations, this action solves the problem. If the message persists, your printer might need service. Write down the error code, and then go to hp instant support to learn more about possible causes for the message. See "hp instant support" for more information.
the printer Ready light turns off while the printer is turned on	**the printer is offline and the LCD control panel displays the message PAUSED** Press (pause/resume button) on the printer. The printer resumes printing the current job or returns to the READY state.
the printer shuts down unexpectedly	**check the power** Make sure the power cord is connected firmly to the printer and to a working power receptacle, and that the printer is turned on. The Ready light on the LCD control panel should be green. Press and hold (power button) to turn off the printer, and then turn it on again.
nothing is printed	**be patient** Complex documents that contain many fonts, graphics, and color photos take longer to begin printing. The LCD control panel displays the message PROCESSING JOB and the Ready light blinks when the printer is processing information to be printed.
	check the power Make sure the power cord is connected firmly to the printer and to a working outlet, and that the printer is turned on. The LCD control panel should display some message and the Ready light should be green. Press and hold (power button) to turn off the printer, and then turn it on again.
	check the interface cable Make sure the interface cable (USB, parallel, or network) is connected properly.
	check the print media Make sure media is loaded correctly in the tray and that the print media is not jammed in the printer.
	try printing a demo page Press (select button) on the LCD control panel. Press (down arrow button) to highlight INFORMATION, and then press (select button). Press (down arrow button) to highlight PRINT DEMO, and then press (select button) to print the Demo page.
	check the printer setup Make sure the printer is selected as the current or default printer. Also, if your computer is running Windows, make sure that Pause Printing is not selected. Click Start, point to Settings, and then click Printers (Windows 98, Windows Millennium Edition, Windows NT 4.0, and Windows 2000). -Or- Click Start, and then click Printers and Faxes (Windows XP). Right-click the printer icon you want to check, and then make sure that Pause Printing is not selected.

	the print to file option is selected in the printer driver If Print to File is selected in the printer driver, the print job will not print. **Windows** : In the printer driver, check that the Print to File option is not selected. From the software application, on the File menu, click Print. Make sure the Print to File option is not selected. **Macintosh** : On the main pop-up menu in the Print dialog box, make sure the Print to file option is not selected.
	check the network setup Make sure that your printer is properly set up in the network environment.
printer takes a long time to print a job	**check your system configuration** Make sure your computer meets the designated system requirements. Although the printer is designed to function with a computer that meets the minimum system requirements, printer performance is optimized with a computer that meets the recommended system requirements.
	make sure the computer has sufficient hard-disk space If you are printing graphics-intensive files, make sure you have enough hard-disk space.
	make sure the port setting configuration in the computer is set to ECP (Windows 98 only) See the computer's manual for information on how to change your port setting, or contact your computer manufacturer.
	make sure the computer has enough resources available (Windows only) If less than 80 percent of the computer resources are available, printing could be significantly slower. To make more computer resources available, close all unused applications and resend your print job. If necessary, restart your system, and then resend your print job.

problems with the printer

symptom	solution
blank page is printed	check the LCD control panel for error messages
	check the printheads for tape Make sure you have removed the printhead protective tape from each ink nozzle.
	check the printer setup Make sure your printer is selected as the current or default printer.
	check the parallel port on your computer (Windows only) If you are using a parallel interface connection, make sure the printer is connected directly to the parallel port. Do not share the port with other devices, such as a Zip drive.
placement of the text or graphics is wrong	**make sure the media size or orientation settings are correct** Make sure the media size and page orientation selected in the software application match the settings in the printer driver.
	make sure the media is loaded correctly If everything on the page is slanted or skewed, check the following: Make sure the media width and length guides fit snugly but gently against the edges of the stack. If the optional multipurpose tray is installed in the Tray 1 location, make sure that no more than 100 sheets of media or 20 transparencies (up to 11 mm or 0.43 inch, stacked) are loaded in the tray. For Tray 2, make sure that no more than 300 sheets of media (up to 30 mm or 1.2 inches, stacked) are loaded in the tray. Tray 2 can hold a maximum of 50 transparencies. For optional Tray 3, make sure that no more than 700 sheets of media (up to 70 mm or 2.8 inches, stacked) are loaded in the tray. Tray 3 can hold a maximum of 50 transparencies.
	make sure the margin settings are correct If the text or graphics are cut off at the edges of the page, make sure the margin settings for the document do not exceed the printable area of your printer.
text or graphics are cut off at the edges of a page	**make sure the orientation settings are correct** The page orientation selected might not be correct for the document you are printing.
	make sure the margin settings are correct If the text or graphics are cut off at the edges of the page, make sure the margin settings for the document do not exceed the printable area of your printer. The document margins must match or exceed a margin setting of 4 mm (0.13 inch).

	make sure the content fits on the page Content that is cut off might be outside the printable area. Or, the size of the document you are printing is larger than the media size in the main tray. Check if the layout of the document you are trying to print will fit on a media size supported by the printer, and then load the correct media size. Make sure to select the correct page orientation.
	make sure the media is loaded correctly Make sure the media width and length guides fit snugly but gently against the edges of the stack. Also, make sure that the correct page orientation is selected.
	the software application cannot interpret print settings properly On the Starter CD, check the readme file for known software conflicts. Otherwise, check your software application manual, or contact the software manufacturer for more specific help for this problem.
the wrong fonts are printed	**make sure that fonts are used correctly in the document** Make sure you correctly apply the font you want to use. For example, in a graphics application, place the words in the desired size; do not enlarge by dragging and sizing.
	make sure the font is available in your computer The fonts used in the document might not match the fonts currently available in your computer or the type of font used is not designed to be printed. Make sure the font is available in your software application font selection box, and make sure it is a TrueType font. TrueType is a technology that can create fonts of any sizes from a basic font outline. TrueType fonts are scalable. They can be scaled at any time for use on the computer screen or the printer. This is the standard font-scaling technology in Windows.
	the wrong printer driver is selected Make sure your printer is selected as the current or default printer. For information about setting the default printer, see the online Help for your computer's operating system.
	the software application is conflicting with the printer The problem is likely a conflict related to the software application you are using. Contact the manufacturer of your software for help. On the Starter CD, see the readme file for a list of known conflicts with popular software applications.
text is jagged at the edges	**make sure the correct type of font has been chosen** Some software applications offer custom fonts or use bitmap images of text that have jagged edges when skewed, enlarged, or printed. By using TrueType fonts, you can ensure that the printer is able to print smooth fonts. When selecting a font, look for the TrueType icon.

	an incorrect media type is being used This printer is designed to work well with most office paper types or quality 25 percent cotton bond paper. Because it uses ink to produce an image, media that accepts ink well produces the best results. Media that is heavily textured or does not accept ink well can cause graphics and text to print poorly. It is best to test a variety of media types before buying large quantities. Find a media type that works well and is easy to purchase. HP Inkjet media are designed for the best quality results. To determine if the media type is the cause of the problem, try printing the same document on a type of media that has previously worked well with your printer.
	the software application is conflicting with the printer The problem is likely a conflict related to the software application you are using. Contact the manufacturer of your software for help. On the starter CD, see the readme file for a list of known conflicts with popular software applications.
the printout is incorrect or part of it is missing	**the margin settings might be wrong** The document margins must match or exceed a margin setting of 4 mm (0.13 inch).
	color print settings might be wrong The grayscale printing option is probably selected in the printer driver. *Windows* : In the printer driver, check that the color option is not set to print in black and white or grayscale. From the software application, on the File menu, click Print, and then click Setup or Properties. Make sure the Grayscale option is not selected. *Macintosh OS 8.6 to Mac OS 9.2.2* : On the main pop-up menu in the Print dialog box, select Color Matching. Make sure the Black and White or Grayscale options are not selected on the Print Color pop-up menu. *Macintosh OS X* : On the main pop-up menu in the Print dialog box, select HP Image Quality. Make sure the Print Color as Gray option is not selected.
	the wrong printer driver is selected Make sure your printer is selected as the current or default printer. For information about setting the default printer, see the online Help for your computer's operating system.
meaningless characters are printed	**a cable connection is poor** A common cause for nonsense characters is a poor cable connection between the printer and computer. Make sure the cable connection at both ends is good and that the cable is securely fastened.
	the system needs to be restarted Turn off the computer. Press and hold (power button) to turn off the printer for a few seconds. Turn them both back on, and then try printing again.
	the wrong printer driver is selected Make sure your printer is selected as the current or default printer. For information about setting the default printer, see the online Help for your computer's operating system.

	the document file is damaged Occasionally, a document file can become damaged. If you can print other documents from the same software application, try to print using a backup copy of your document, if available.
	printout is slanted or skewed If media is twisting as it feeds or margins appear crooked, the media guides might not be pressed snugly but gently against the stack. Both the media length and width guides must be gently pressed against the stack.

problems with printing

troubleshooting supplies usage

The information on the Supplies Status Page is useful for monitoring supplies and ordering new supplies.

- **Ordering Information** : Shows the website address for ordering supplies, and where to locate phone numbers for ordering supplies from HP.
- **Supplies Status Information** : Shows the estimated remaining life (represented in graphical form as a gauge) for the supplies. This item shows ink cartridge serial numbers, the expiration date, maintenance information, and whether ink levels are low. It also shows printhead serial numbers and printhead health information.

To print a Supplies Status Page:

- Press the select button on the LCD control panel.
- Press the down arrow button to highlight INFORMATION, and then press select button to select INFORMATION.
- Press the down arrow button to highlight PRINT SUPPLIES STATUS PAGE, and then press the select button to print the Supplies Status Page.

troubleshooting media-related problems

printing problems

blank page is printed

- Check the LCD control panel for error messages.
- Check the printheads for tape: Make sure you have removed the printhead protective tapes that cover the ink nozzles.
- Check the printer setup: Make sure your printer is selected as the current or default printer.
- Check the parallel port on your computer (Windows only): If you are using a parallel interface connection, make sure the printer is connected directly to the parallel port. Do not share the port with other devices, such as a Zip drive.

media-handling problems

media-feed problems

- Print media is jammed in the printer: Check for jams.
- Printer feeds multiple sheets: Make sure that only one type of media is loaded in each tray.
- Media is not loaded correctly: Make sure the media width and length guides fit snugly against the edges of the stack. Also, make sure that the correct page orientation is selected.
- Trays or other components are not inserted properly: Check that all trays and covers are completely closed. Make sure the simplex unit or auto-duplex unit is installed properly.

tray cannot be inserted

- Something in the printer is blocking the tray: Check the slot where the tray fits to ensure that nothing is broken or jammed that would prevent the tray from being inserted. Check the cams (two small levers inside the tray drawer). If these cams get pushed in while the tray is out of the printer, the tray will not close completely when it is reinserted. If this happens, pull out the tray half-way, and then push it in again until it closes completely.

media is not picked up from a tray

- The tray size or type settings configured in the LCD control panel do not match the size or type selected in the printer driver. Make sure the correct media is loaded in the tray and the media width and length guides are pressed snugly against the stack. Next, check that the media size and type are set correctly in the LCD control panel.
- The media width guide is pressed too tightly against the stack: Check that the media width guide is pressed snugly but gently against the stack.
- The media stack exceeds the maximum stack height for the tray: Check the yellow label inside Tray 2 and Tray 3 for the maximum stack height. If the media exceeds this level, remove some of the media from the tray.
- Media is curled: Make sure the media you are using is not curled. Uncurl the media by gently bending it in the opposite direction of the curl. If media has been exposed to a humid environment, it might curl. Media should be stored in a cool, dry place.

- The media lift plate inside the tray is stuck in the lowest position: Pull out the tray halfway, and then close the tray completely. If the media still is not picked up from the tray, open the tray and reposition the media. Make sure the media width and length guides fit snugly against the stack. Firmly close the drawer.

media is not picked up from Tray 1 or the optional multipurpose tray

- Too much media is loaded: Tray 1 is designed to hold a single sheet of media. The optional multipurpose tray is designed to hold up to 100 sheets (10 mm or 0.4 inch, stacked) of standard weight media.
- Media is wrinkled or bent: Make sure the media is not wrinkled or bent. Remove media from Tray 1 or the optional multipurpose tray after use. Leaving media in the tray for several hours can cause the media to bend.
- Photo paper is loaded face-down: Because Tray 1 and the optional multipurpose tray provide a straight-through paper path, media must be loaded with the side to be printed on facing up.
- Media is not positioned correctly in the optional multipurpose tray: When loading media in the optional multipurpose tray, place the stack against the left edge of the tray, and then slide the media down to rest in the tray. Otherwise, the media size might not be detected properly. Check that the multipurpose tray width and length guides fit snugly against the media stack.

media output problem

- Pages are falling off the printer: Make sure the output bin extension is fully extended. The output bin holds about 300 sheets of media. Remove excess media from the output bin.

media-feed problems

incorrect media type or size

- The LCD control panel displays the message NOT FOUND [TRAY] [MEDIASIZE] [MEDIATYPE]. PRESS TO CONTINUE: The media loaded in a tray is not the same as the media selected in the printer driver or configured in the LCD control panel. To resolve a media mismatch, load the correct media in the designated tray and press the select button to print the entire print job, or press CANCEL JOB to delete the print job from the print queue. If you do not press the select button or CANCEL JOB, and the printer has selected the tray automatically, the printer attempts to draw media from the other tray. If the other tray is loaded with the correct size of media or media that is larger than the print job, the print job prints correctly.
- The LCD control panel displays the message NOT FOUND [TRAY] [MEDIASIZE] [MEDIATYPE]. PRESS TO CROP AND CONTINUE: The tray is loaded with media that is too small. If you press the select button, the printer crops the print job to fit it on the available media.
- To avoid media mismatches, find out which tray contains the media on which you want to print, and then select that tray in the printer driver.

media and carriage jams

tips for avoiding jams

- Make sure the printhead latch is properly engaged.
- Make sure nothing is blocking the paper path.
- Do not overload the trays. Tray 1 feeds a single sheet of media at a time. Tray 2 holds up to 300 sheets of media, and Tray 3 holds up to 700 sheets of media. The optional multipurpose tray holds up to 100 sheets of media. Be sure the media does not exceed the maximum stack height as indicated on the labels in each tray.
- Load media properly.
- Do not use media that is damaged, curled, or wrinkled. Do not use media with cutouts or perforations or media that is heavily textured or embossed.
- Avoid media that is too thin, has a slick texture, or "stretches" easily. Such media does not feed properly through the printer.
- Always use media that conforms with that listed in "Media and paper-handling specifications."

to clear jams

Because media may be jammed in more than one location inside the printer, complete all the steps below to ensure that all jams are removed.

Note *Note: If the media tears when you try to remove it, make sure that all media fragments are removed from the printer before resuming printing.*

Remove all media from the output bin.

Open the top cover to locate the jam. When you lift the top cover, the carriage should return to its position on the left side of the printer. If the carriage does not return to this position, move the carriage to either side.

Free any wrinkled media and pull the sheet toward you through the top of the printer.

Pull out Tray 1 and place it on a flat surface. Remove any wrinkled or curled media from the tray.

Grasp any jammed or torn media by both corners and pull up and out of the printer. Replace Tray 1.

Pull out the output bin and set it aside.

Pull out Tray 2 and place it on a flat surface. Remove any wrinkled or curled media from the tray.

If Tray 3 is installed, grasp the handle below the tray and pull it out until you feel some resistance. Use your other hand to grasp the side of the tray and lift up slightly. Remove Tray 3 from the printer and place it on a sturdy, level surface that completely supports the tray. Remove any wrinkled or curled media from the tray.

Caution *Tray 3 can be heavy. Use two hands when removing and inserting Tray 3.*

Remove the simplex unit or auto-duplex unit (whichever your printer has installed). To remove the simplex unit or auto-duplex unit, grasp the handle below the unit and pull it out of the printer. Set the unit aside.

Warning *The printer contains metal parts that might be hot. Do not touch the metal parts inside the printer.*

Look inside the printer. Grasp any jammed media with both hands and pull it towards you.

Slide the simplex unit or auto-duplex unit firmly back into the printer until it snaps into place.

Reinsert Tray 2 and Tray 3 into the printer. Use two hands to support Tray 3 while reinserting it.

Place the output bin on top of the Tray 2 case and push it into the printer until both sides snap into place.

After you clear the jam, close all trays and the top cover, and press (select button).

After the jam is cleared, the printer will attempt to reprint jammed pages when sufficient memory is available.

jam recovery

This printer automatically provides jam recovery, a feature that allows you to set whether the printer should attempt to automatically reprint jammed pages. The options are:

- AUTO Printer will attempt to reprint jammed pages when sufficient memory is available. This is the default setting for the printer.
- OFF Printer will not attempt to reprint jammed pages.
- ON Printer will reprint any jammed page. Additional printer memory is required for this setting, so overall printer performance may suffer.

To improve print speed and increase memory resources, you may want to disable jam recovery. If jam recovery is disabled, the pages involved in a jam will not be reprinted.

Note *During the recovery process, the printer may reprint several good pages that were printed before the jam occurred. Be sure to remove any duplicated pages.*

to change jam recovery settings

Press (select button) on the LCD control panel.

Press (down arrow button) to highlight CONFIGURE DEVICE, and the press (select button) to select CONFIGURE DEVICE.

Press (down arrow button) to highlight SYSTEM SETUP, and then press (select button) to select SYSTEM SETUP.

Press (down arrow button) to highlight JAM RECOVERY, and then press (select button) to select JAM RECOVERY.

Press (down arrow button) to highlight the desired setting, and then press (select button) to save the setting.

troubleshooting print quality related problems

symptom	solution
printout is slanted or skewed	**make sure media guides are snug** If media is twisting as it feeds or margins appear crooked, the media guides might not be pressed snugly but gently against the stack. Both the media length and width guides must be gently pressed against the stack.
placement of the text or graphics is wrong	**make sure the media size or orientation settings are correct** Make sure the media size and page orientation selected in the software application match the settings in the printer driver.
	make sure the media is loaded correctly If everything on the page is slanted or skewed, check the following: Make sure the media width and length guides fit snugly against the edges of the stack. For the optional multipurpose tray, make sure that no more than 100 sheets of media or 20 transparencies (up to 10 mm or 0.39 inch, stacked) are loaded in the tray. For Tray 2, make sure that no more than 300 sheets of media (up to 30 mm or 1.18 inches, stacked) are loaded in the tray. For Tray 3, make sure that no more than 700 sheets of media (up to a 70 mm or 2.80 inches, stacked) are loaded in the tray. Trays 2 and 3 can hold a maximum of 50 transparencies.
	make sure the margin settings are correct If the text or graphics are cut off at the edges of the page, make sure the margin settings for the document do not exceed the printable area of your printer.
text or graphics are cut off at the edges of a page	**make sure the orientation settings are correct** The page orientation selected might not be correct for the document you are printing.
	make sure the margin settings are correct If the text or graphics are cut off at the edges of the page, make sure the margin settings for the document do not exceed the printable area of your printer.
	make sure the content fits on the page Content that is cut off might be outside the printable area. Or, the size of the document you are printing is larger than the media size in the main tray. Check if the layout of the document you are trying to print will fit on a media size supported by the printer, and then load the correct media size. Make sure to select the correct page orientation.
	make sure the media is loaded correctly Make sure the media width and length guides fit snugly against the edges of the stack. Also, make sure that the correct page orientation is selected.

	the software application cannot interpret print settings properly Check the readme file for known software conflicts. Otherwise, check your software application manual, or call the software manufacturer for more specific help for this problem.
printout is incorrect or part of it is missing	**margin settings might be wrong** Make sure the margin settings for the document do not exceed the printable area of your printer.
	color print settings might be wrong The grayscale printing option is probably selected in the printer driver. *Windows:* In the printer driver, check that the color option is not set to print in black and white or grayscale *Mac OS 8.6 to Mac OS 9.2.2:* On the main pop-up menu in the Print dialog box, select Color Matching. Make sure the Black and White or Grayscale options are not selected on the Print Color pop-up menu. *Mac OS X:* On the main pop-up menu in the Print dialog box, select HP Image Quality. Make sure the Print Color as Gray option is not selected.
	wrong printer driver is selected Make sure your printer is selected as the current or default printer.
	symmetrical margins option makes the left and right margins equal and top and bottom margins equal (Windows only) If the page appears incorrect, make sure this setting is not selected in the printer driver.

page layout issues

symptom	solution
wrong fonts are printed	**make sure that fonts are used correctly in the document** Make sure you correctly apply the font you want to use. For example, in a graphics application, place the words in the desired size; do not enlarge by dragging and sizing.
	make sure the font is available in your computer The fonts used in the document might not match the fonts currently available in your computer or the type of font used is not designed to be printed. Make sure the font is available in your software application's font selection box, and make sure it is a TrueType™ font. TrueType is a technology that can create fonts of any sizes from a basic font outline. TrueType fonts are scalable. They can be scaled at any time for use on the computer screen or the printer. This is the standard font-scaling technology in Windows.
	the wrong printer driver is selected Make sure your printer is selected as the current or default printer.
	the software application is conflicting with the printer The problem is likely a conflict related to the software application you are using. Contact the manufacturer of your software for help. See the release notes for a list of known conflicts with popular software applications.
text is jagged at the edges	**make sure the correct type of font has been chosen** Some software applications offer custom fonts or use bitmap images of text that have jagged edges when skewed, enlarged, or printed. By using TrueType fonts, you can ensure that the printer is able to print smooth fonts. When selecting a font, look for the TrueType icon.
	an incorrect media type is being used This printer is designed to work well with most office paper types or quality 25 percent cotton bond paper. Because it uses ink to produce an image, media that accepts ink well produces the best results. Media that is heavily textured or does not accept ink well can cause graphics and text to print poorly. It is best to test a variety of media types before buying large quantities. Find a media type that works well and is easy to purchase. HP Inkjet media are designed for the best quality results. To determine if the media type is the cause of the problem, try printing the same document on a type of media that has previously worked well with your printer.
	the software application is conflicting with the printer The problem is likely a conflict related to the software application you are using. Contact the manufacturer of your software for help. See the release notes for a list of known conflicts with popular software applications.

meaningless characters are printed	**a cable connection is poor** A common cause for nonsense characters is a poor cable connection between the printer and computer. Make sure the cable connection at both ends is good and that the cable is securely fastened.
	the system needs to be restarted Turn off the printer and computer for a few seconds, turn them both back on, and then try printing again.
	wrong printer driver is selected Make sure your printer is selected as the current or default printer.
	document file is damaged Occasionally, a document file can become damaged. If you can print other documents from the same software package, try to print using a backup copy of your document, if available.

text or graphic issues

low or excess use of ink in printouts

symptom	cause	solution
ink is smearing	Cause 1: The printout did not have time to dry.	Solution 1: While printing documents that use a lot of ink, allow the document more time to dry before handling it. This is especially true for transparencies. Select Best mode in the printer driver to set a longer dry time for printing transparencies, if the print job is not being attended to personally. The paper type might be causing the smearing. Some types of paper do not accept ink well, which causes the ink to dry more slowly and results in smearing.
	Cause 2: Too much ink on the page is causing wrinkling.	Solution 2: Color documents with rich, blended colors might use excess ink, which wrinkles the page during printing and causes smearing. Try using the Normal or Fast print quality setting to reduce ink or use HP Premium Paper designed for printing vivid color documents.
	Cause 3: Printhead problem.	Solution 3: Align and clean the printheads.
	Cause 4: Media type is causing the smearing.	Solution 4: Some types of media do not accept ink well, which causes the ink to dry more slowly and results in smearing.
	Cause 5: Media has been exposed to a humid environment.	Solution 5: If media has been exposed to a humid environment, it might be difficult to achieve the correct drying time, especially when printing with heavy color saturation. Print on a fresh ream of media that has been stored in a cool, dry place.
ink is not filling the text or graphics completely	Cause 1: The ink cartridges have poor contact	Solution 1: Try removing and then reinstalling the ink cartridges. Ensure to snap them firmly into place.
	Cause 2: The ink cartridge is out of ink	Solution 2: The ink cartridge might be out of ink. Replace the empty ink cartridge.
	Cause 3: An incorrect or poor paper type is being used	Solution 3: Some paper types are not suitable for use with the printer.
	Cause 4: The wrong print quality mode is being used	Solution 4: Try printing using Best print quality mode.

low or excess use of ink in printouts

troubleshooting incorrect color printouts

symptom	cause	solution
Printouts are faded or dull-colored	Cause 1: Fast print quality is selected	Solution 1: The Fast mode option is good for printing drafts. To achieve better-colored printout, select Normal or Best print quality in the printer driver. Use the Fast mode to print at a faster rate.
	Cause 2: An incorrect media type print setting is being used	Solution 2: When printing on transparencies or other special paper types, select the corresponding paper type in HP's Print Settings dialog box. Use this dialog box to gain access to printer features from a software application, such as a word-processing and graphics application. Use the printer driver to select print quality, page orientation, paper type, and paper size.
	Cause 3: An incorrect media type is being used	Solution 3: Some paper types are not suitable for use with the printer.
	Cause 4: An ink cartridge is low on ink	Solution 4: Check that all the lines are connected and printed properly. If the lines are broken, the ink cartridge is probably out of ink. Replace the ink cartridge with a new one. However, if the ink cartridge has been recently replaced, the cartridge is probably bad.

Colors are printing as black and white or the wrong colors are printing	Cause 1: The grayscale printing option is selected in the printer driver.	Solution 1: The grayscale printing option is probably selected in the printer driver. Click Start, point to Settings, and then click Printers (Windows 95, Windows 98, Windows Millennium Edition, Windows NT 4.0, and Windows 2000) or Printers and Faxes (Windows XP). Right-click the printer icon, and then click Properties (Windows 95, Windows 98, and Windows Millennium Edition), Document Defaults (Windows NT 4.0), or Printing Preferences (Windows 2000 and Windows XP). For the PCL 5C printer driver, make sure the Print In Grayscale check box is cleared on the Color tab. Click OK.

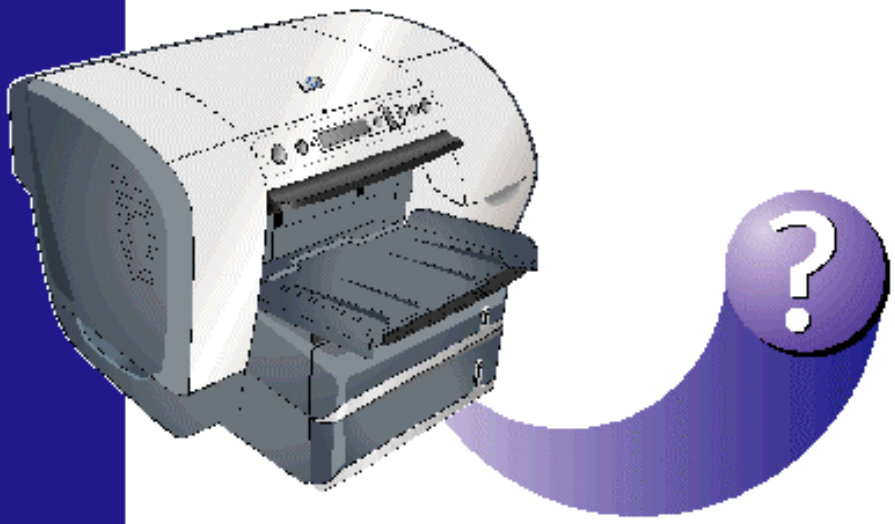
The wrong colors are printing	Cause 1: The Print in Grayscale option is selected in the printer driver	Solution 1: The grayscale printing option is probably selected in the printer driver. Windows: In the printer driver, check that the color option is not set to print in black and white or grayscale. Mac OS *Mac OS 8.6 to Mac OS 9.2.2*: On the main pop-up menu in the Print dialog box, select Color Matching. Make sure the Black and White or Grayscale options are not selected on the Print Color pop-up menu. *Mac OS X*: On the main pop-up menu in the Print dialog box, select HP Image Quality. Make sure the Print Color as Gray option is not selected. The wrong printer driver is selected in the software application: Make sure the correct printer driver is selected in the application. The printer is not configured correctly: Print a Configuration page. If no color appears on the Configuration page, contact HP support. Printheads are clogged or need cleaning: Whenever print quality noticeably decreases, it is a good idea to clean the printheads.
	Cause 2: The color cartridge is empty	Solution 2: When colors are completely wrong, the printer might have run out of one or more colors of ink.
	Cause 3: The printheads are clogged or need cleaning	Solution 3: Whenever print quality noticeably decreases, it is a good idea to clean the printheads.

Bleeding colors in printout	Cause 1: The print setting is using too much ink	Solution 1: Some paper type settings (such as transparency) and print quality settings (such as Best) require more ink than others. Choose different print settings in the printer driver. Also, make sure that the correct paper type is selected in the printer driver.
	Cause 2: An incorrect paper type is being used	Solution 2: Some paper types are not suitable for use with the printer.
	Cause 3: The ink cartridges have been refilled	Solution 3: HP does not guarantee or support refilled ink cartridges. Refilling processes and the use of incompatible inks might disrupt the intricate printing system, potentially resulting in reduced print quality and even printer damage.
Colors do not line up properly with each other	Cause 1: The printheads need to be aligned	Solution 1: The printheads on the printer are automatically aligned when a printhead is replaced. However, print quality might improve by aligning the printheads.
	Cause 2: Graphics in the document are not placed properly	Solution 2: Use the zoom or print preview feature of the software to check for gaps in the placement of graphics on the page.
Color prints inconsistently after installing a new ink cartridge	Cause 1: Another ink cartridge is low: Check the ink cartridge levels on the LCD control panel, print a Supplies Status Page, or use the embedded web server to view the remaining life of ink cartridges. If you are using a non-HP ink cartridge or a refilled ink cartridge, none of these sources provide information about low or empty non-HP ink cartridges.	Solution 1: Color printouts have an inconsistent finish
	Cause 2: The ink cartridges have poor contact: Try removing and then reinstalling the ink cartridges, making sure that they snap firmly into place.	Solution 2: Use smooth media, such as a high-quality paper made for inkjet printers.

Module 4

hp business inkjet printer 3000 series

support



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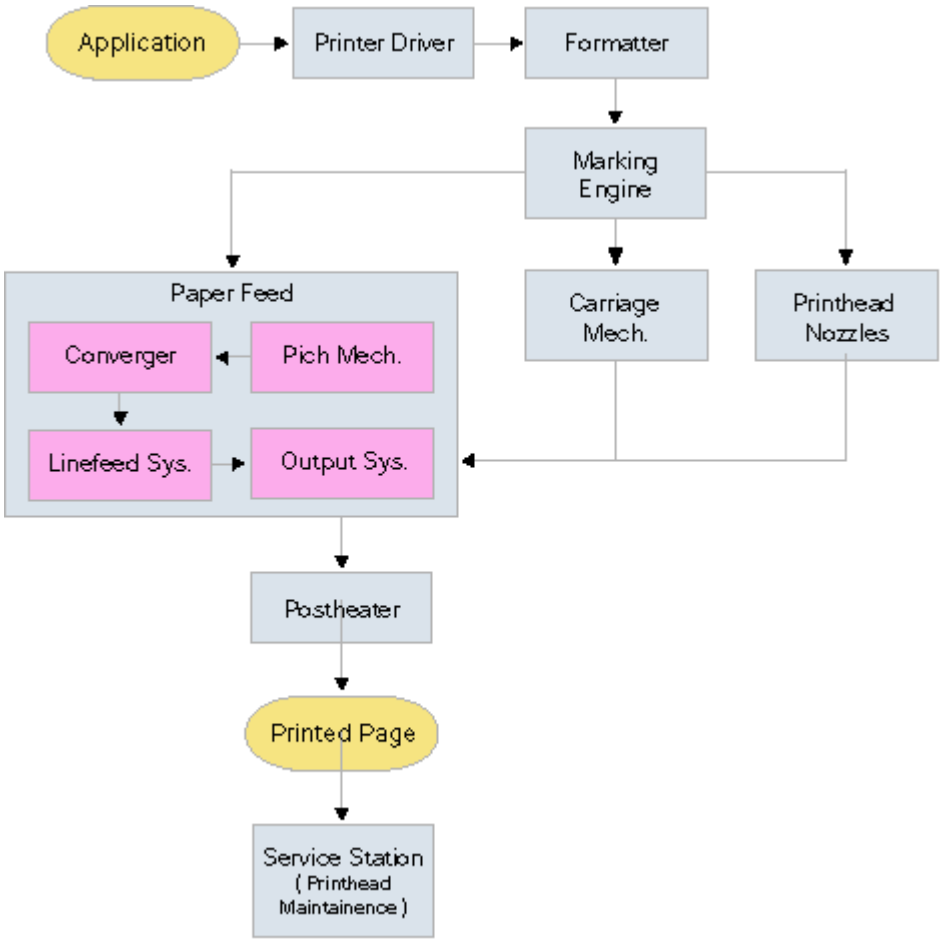


how the printer works

how the printer works

The printer driver converts the page seen on the computer screen into a dot pattern described by a series of commands (a PCL or PS language file) which are relayed to the formatter of the printer. The commands include the style, size, and the type of graphics, the graphics placement, and color treatment.The formatter optimizes the commands for specific characteristics of the printer such as how many dots-per-inch the printer is capable of printing. The writing system then creates a rectangular array of pixels, called a raster image, based on these commands. This image is then relayed to the marking engine of the printer, to be printed.

The marking engine controls and coordinates the firing of the printhead nozzles, and the movement of the paper feed and carriage drive mechanisms.The paper feed system moves the paper through the printer, allowing the printheads to cover the entire page with ink. The printer uses the rollers of the pick mechanism to pick the page from the Input tray and transfer it to the converger, where it is properly aligned and then transfered to the linefeed system. The linefeed system moves the page forward as the Carriage drive mechanism

moves the printheads back and forth across the width of the page, carefully controlling the position and speed of the printheads.

As the printheads traverse the page, they fire ink droplets from the nozzles to the surface of the page to form the images and characters of the printed page. The nozzles are positioned just above the surface of the page, the exact distance is important and is called the pen-to-paper spacing (PPS). Each nozzle can fire ink droplets to the page at a rate of up to 36,000 times per second. The ink droplets are absorbed and the page is transfered to the output mechanism. As the page exits the printer, it is dried by the post-heater, then ejected into the output tray.

After completing a print job, the carriage and printheads return to their original parked position, beyond the edge of the paper path, where the Service Station performs maintenance. The printhead nozzles are fired to clear the nozzles of any ink residue and then wiped to remove any remaining ink deposits.

The hp business inkjet 3000 series produce photo-quality color images using:

- color control
- resolution enhancements
-

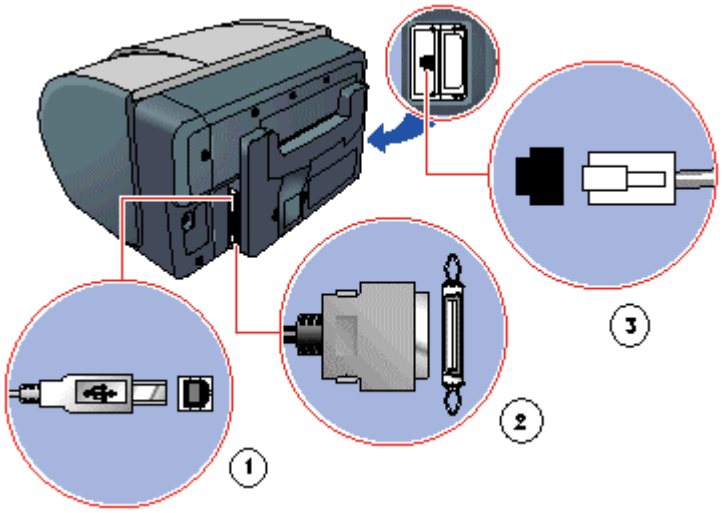
color control

The hp business inkjet 3000 series printing system produces a wide range of color using enhanced color layering with HP's Photo Resolution Enhancement technology (PhotoREt III). Variable ink-drop volume, using fade resistant inks places up to 20 drops of ink in a single dot that creates finer color control and produces five times the number of colors provided by PhotoREt II printers.

resolution enhancements

PhotoREt III enables business inkjet printers to produce photo-quality color images. PhotoREt III's new halftoning algorithms, and specially developed photo paper work together to deliver outstanding image quality and performance. PhotoREt III enables faster color print speeds without sacrificing print quality. The maximum resolution for both color and black&white printing is 2400 x 1200 dpi.

printer interfaces



printer interfaces

The hp business inkjet 3000 series has three I/O interface types:

Universal Serial Bus (USB) interface.

IEEE 1284-B parallel Centronics interface

(2) hp EIO Interfaces

Universal Serial Bus (USB) interface

The USB interface provides bi-directional communication allowing Windows computers to receive and display printer status information.

IEEE 1284-B parallel Centronics interface

Firmware in the printer supports the following modes of Centronics operation through the 1284-B parallel interface port. Most computers can operate in all three modes:

- Compatibility: unidirectional data flow from the computer to the printer.
- Nibble: unidirectional mode data flow from the printer to the computer.
- Extended Capabilities Port (ECP): true bi-directional communication between the printer and computer.

Computers can switch between Compatibility and Nibble modes to establish limited two-way (bi-directional) communication. ECP mode allows Windows computers to receive and display printer status information.

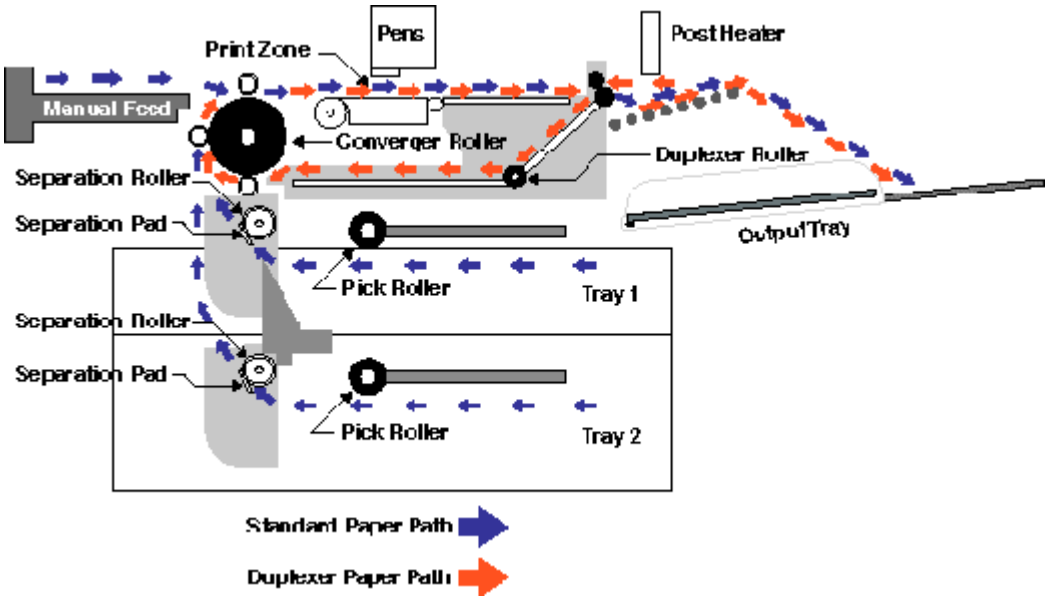
hp EIO Interface

In addition, the printer offers the Enhanced Input/Output (EIO) interface, which is a general-purpose interface for Hewlett-Packard peripherals used to expand the printer's capabilities with a network card or added memory. EIO is based on a high-performance 32-bit PCI bus that provides a substantial increase in I/O bandwidth over the older 16-bit MIO interface.

EIO offers the following interface accessories and added functionality:

- Addition of a 10GB EIO hard disk for print job storage, and the storage of additional fonts and forms.
- Addition of an EIO Jet Direct network card for fast printing, network installation, and ease of use.
- Addition of an EIO Jet Direct 802.11b wireless network card for wireless printing and networking.

paper path



paper path

The paper transfer sequence (paper path) involves four main systems:

- pick and separation system
- converger system
- linefeed system
- output system
-

pick and separation system

The pick motor activates the gear train that lowers the pick arm to pick a sheet of paper. The paper is picked up by the pick roller and passed to the separation trough. The separation roller moves the paper towards the deflected separation pad where friction is used to separate the paper into individual sheets. The paper is then passed to the converger.

converger system

The converger positions and aligns the paper for printing and feeds it into the print zone using a large set of rollers driven by the converger motor.

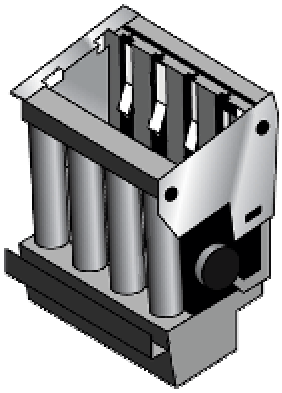
linefeed system

Once the page has entered the print zone, the linefeed roller, powered by the linefeed motor moves the paper forward.The plastic encoder disk on the linefeed roller maintains linefeed accuracy while the carriage assembly moves across the page applying ink. A vacuum is used in the printzone to remove dust or other particles. After printing, the paper is transferred to the output system.

output system

The simplexer or duplexer contain the output mechanism, driven by the output motor. Starwheel rollers are used to minimize smudging as the paper is ejected. The post-heater dries the page as it is slowly ejected from the printer, minimizing smudging against the previously printed page. If a duplexer is installed, and duplexing configured, the page is drawn back into the printer for printing on the opposite side of the page.

ink supply station



ink supply station

The Ink Supply Station (ISS) performs the following functions:

- holds ink cartridges
- supplies ink to the printheads
- collects excess ink
-

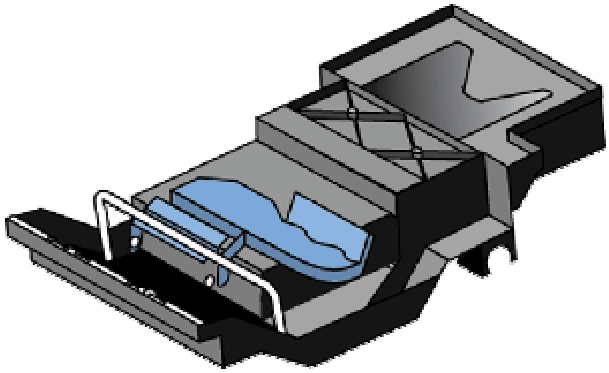
supplying ink to the printheads

The ISS supplies the printheads with ink using positive pressure provided by a pump located underneath each ink cartridge port. The Ink Distribution System (IDS) subassembly extracts ink from the cartridges using a needle which forms a pressurized seal with the ink cartridge. The ink is then transferred to the printheads through the ink tube.

collecting excess ink

The ISS collects excess ink should the ink system rupture. A sponge (ink-absorber) located in the ISS support bracket is used to absorb the ink. The ISS is also designed to collect spilled ink from the service station, should excesive ink flow out of the service station ink-waste bucket. This happens when evaporation rate is slower than spitting rate especially when printing exceeds 3600 pages per day, given a low temperature, high humidity environment. The ink-reservoir attached to the power supply will transfer the ink to the ISS reservoir.

carriage system



carriage system

The carriage systems performs the following functions:

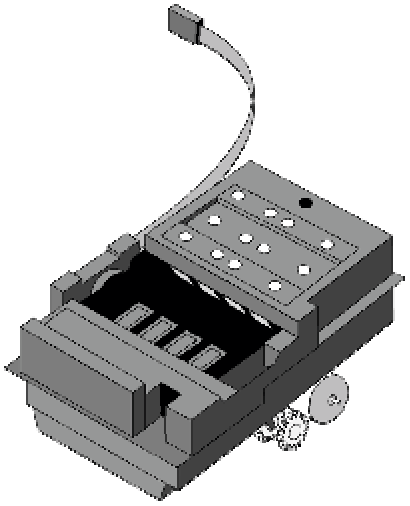
- holds printheads
- drives printheads across the page
-

driving printheads across the page

The carriage system drives the printheads across the page using a motorized belt. The belt loops around the belt tensioner pulley and the carriage motor pulley. The carriage assembly is fastened to one side of the belt so that as the belt moves, the carriage traverses the page.

The encoder strip runs through the carriage assembly and is attached at either side of the print mech chassis. The encoder strip is an encoded, filmstrip that helps maintain the accuracy of the carriage's position during printing. The carriage PCA, part of the carriage assembly, reads the encoder strip and sends feedback on the carriage's position to the main logic PCA.

service station



service station

The service station performs functions that help keep the printhead nozzles in top working condition. These functions include:

- spits ink
- wipes printheads
- caps printheads
-

spitting ink

The printer spits ink to help clear clogged nozzles. Spitting occurs when the printer is powered on and before and after printing

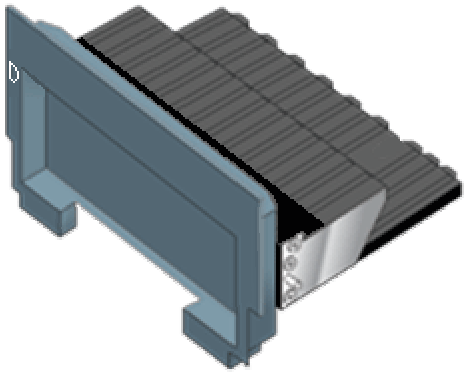
wiping printheads

Wiping removes dust, dried ink, and foreign particles from the outside of the printhead nozzles.To remove the debris from the wiper before it goes for the next wipe, the wiper goes through a scrapper. The scrapper is a part of the wiping mechanism. Wiping occurs before, after, or during printing.

capping printheads

Capping is done to prevent the printheads from drying up.The service station motor moves the service station base to place the caps under the printheads, capping the printhead nozzles. This is the default printhead position.

duplexer vs. simplexer



duplexer

Simplexer functions include:

- managing output of paper
- providing access to paper jams

Duplexer functions include:

- managing output of paper
- providing access to paper jams
- prints both sides of the page
-

managing output of paper

The output system is located in both the simplexer and duplexer. The gears of the output system are driven by the output motor located on the print mech chassis. A combination of output rollers, pinch rollers, and starwheels are used to eject the paper to the output tray. Small ramps are included in the output mechanism to support the page as it is dried and to prevent bulldozing into the output tray.

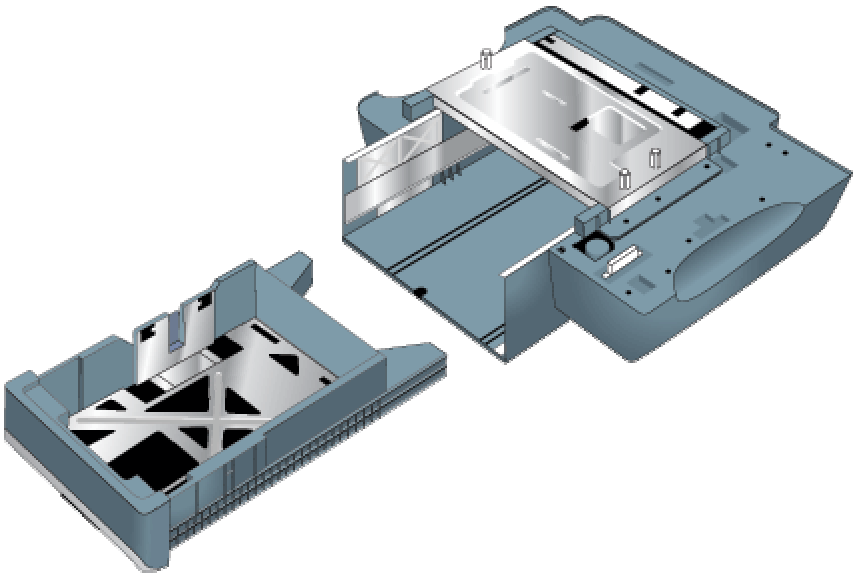
providing access to paper jams

Both the simplexer and duplexer are removable to help troubleshoot and eliminate paper jams. The duplexer sensors are used to detect paper jams

duplexing printed pages

The duplexer provides the capability of printing on both sides of the page, one side at a time, without user intervention. It is a front-end type to allow printed media to completely pass through the post-heat zone before re-directed back through the duplex path. The paper is supported by output ramps before it is redirected back to the converger.

Tray 3

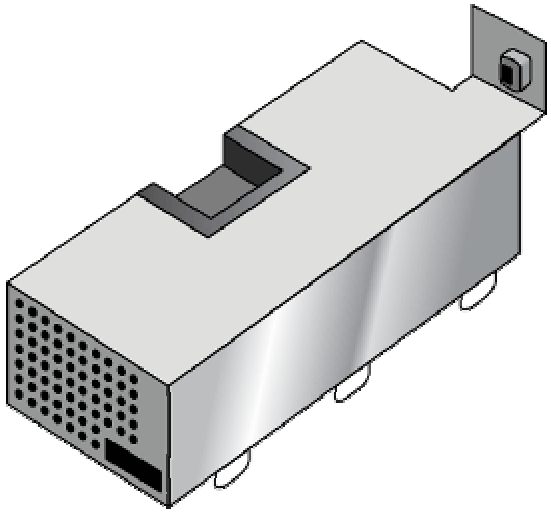


tray 3

extending media capacity

Tray 3 extends media capacity with the capability of holding 700 sheets of 20lb paper. Tray 3 is similar to Tray 2 with an identical pick and separation mechanism and media size sensors. The tray also has a presence sensor (optical) located in the rear of the tray path. The elevator mechanism on Tray 3 is driven by a dedicated motor activated by an optical sensor.

power supply



power supply

providing power to printer components

The power supply unit supplies the power required by the printer to operate properly. It accepts any input voltage of 110 or 240 VAC and provides +3.3V, +5V, and 12V DC to the different electronic subsystems.

Printed Circuit Assemblies (PCAs) included in the printer:

- main logic PCA
- compton PCA
- linefeed encoder PCA
- carriage PCA
- Tray 1 interconnect PCA
- EIO interface PCA

Electric motors included in the printer:

- pick motor
- linefeed motor
- carriage motor
- output motor
- service station motor
-
-

item	description
main logic PCA	Contains the print engine and supports all internal logic and user interfaces with the printer, including the control panel.
compton formatter PCA	Handles communication with the computer, processes PCL or PS commands, and controls EIO devices.
linefeed encoder PCA	Provides linefeed position feedback by reading the plastic encoder disk, and sending feedback to the logic PCA.
carriage PCA	Reads the encoder strip and sends feedback on the carriage's position to the logic PCA.
EIO interface PCA	Interfaces EIO devices with the formatter PCA and links the logic PCA and formatter PCA via a PCI (Protocol Control Information) bus.
Tray 1 interconnect PCA	Interfaces with Tray 1 electronics such as sensors

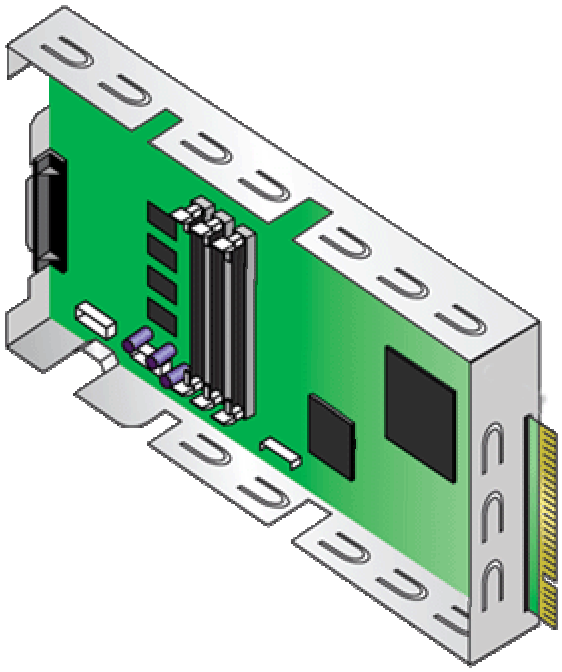
PCA components and their functions

item	description
pick motor	Drives the pick and separation mechanism (pick roller, separation roller, and separation pad).
converger motor	Drives the converger roller
linefeed motor	Drives the linefeed roller
carriage motor	Drives the carriage assembly laterally across the page during printing

output motor	Drives the output system in the duplexer or simplexer unit. If a duplexer unit is installed, the output motor will drive duplexing functions.
service station motor	Drives the wiping and capping of the printheads

electric motors and their functions

formatter PCA



formatter PCA

The formatter PCA board (compton PCA) performs the following functions:

- communicates with the computer
- processes PCL or PS commands
- controls EIO devices
-

communicating with the computer

The formatter communicates with the computer via the USB or IEEE 1284 parallel interfaces.

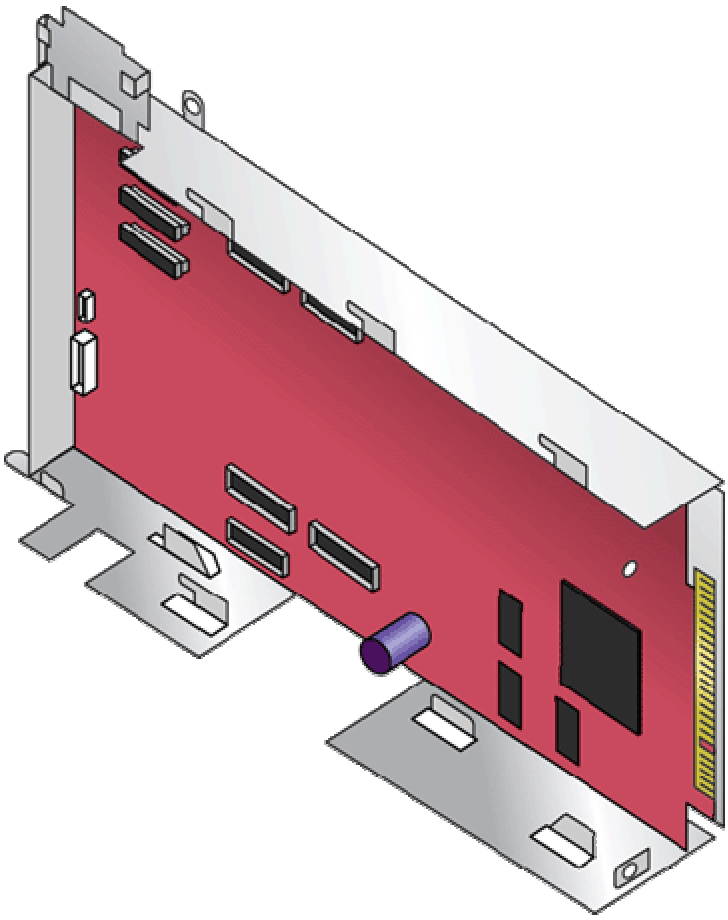
processing PCL or PS commands

PCL or PS commands are processed by the formatter and translated to Page Description Language (PDL) commands which are then sent to the logic PCA. PDL is a common intermediary language that allows for greater commonality between operating systems and the print engine.

controlling EIO devices

The formatter controls any installed EIO devices such as the JetDirect print servers or the optional harddisk, used for storing print jobs.

main logic PCA



main logic PCA

The main logic PCA board performs the following functions:

- contains the writing system and marking engine
- supports all internal logic for the printer
-

writing system and marking engine

The writing system takes PDL commands from the formatter PCA and produces a rasterized image. Color matching, half toning and any other ink mitigation algorithms are applied to the image, and it is transfered to the marking engine. The marking engine controls and coordinates the firing of the printhead nozzles, and the movement of the paper feed and carriage drive mechanisms as the rasterized image is applied to the page.

printer internal logic

The main logic PCA contains the firmware and controls all internal logic, including the control panel, LCD display and all peripheral systems such as the heating and vacuum systems.

sensors

Sensors are used to provide feedback on the state of various printer components. Sensor types implemented for the 3000 series include mechanical switches, optical sensors, and sensing capability implemented in the firmware. Optical sensors function using a mechanical arm (tripped by movement) or a flag located on the component itself to interrupt the light path of the sensor. The following sensors are included in the 3000 series:

Component presence and open / close sensors

- access door open sensors
- tray detection sensor
- tray open sensor
- duplexer open sensor

Media presence and size sensors

- tray empty sensor
- media size sensor
- transparency sensor
- media top sensors

Paper path sensors

- handover sensor
- linefeed encoder
- carriage encoder

Supplies sensors

- ink supply sensor
- printhead info
-
-

item	description
access door sensor	Detects the status of an access door (open or closed). This is an optical sensor (without a mechanical arm) implemented for the main access door and ink supply station access door.
tray detection sensor	Detects the presence of Tray 1(trough or multi-purpose) and Tray 3. This sensing capability is implemented in the printer firmware.
tray open sensor	Detects the status of a paper tray (open or closed). This is implemented using an optical sensor for both Tray 2 and Tray 3
duplexer / simplexer open and type sensor	Detects the type and status (open or closed) of a duplexer or simplexer unit. This is implemented using an optical sensor detecting duplexer/simplexer presence and a optical sensor that detects paper edge. This sensor also detects the presence of a paper jam in the duplex path.

component presence / type and open / close sensors

item	description
tray empty sensor	Detects the absence of media during printing. This sensor is also known as an Out of Paper Sensor (OOPS). This is an optical sensor implemented for Tray 2 and Tray 3.
media size sensor	Detects the size of the media present in a tray. This sensor is a printed circuit board (PCB) with three switches located on the printer mech frame, underneath the tray path. The three switches are actuated by the media adjustment tabs located on the tray. This is implemented for both Tray 2 and Tray 3.
transparency sensor	This sensor detects the use of transparency media, enabling the printer to automatically switch to transparency-printing mode. This is implemented using an optical sensor located between the pick and converger systems. The light path of the sensor is interrupted by opaque paper but not transparencies.
Tray 2 media top sensor	Detects when the media stack in tray 2 has reached the top of the tray. This is a non-electronic mechanical arm which causes the spring-loaded elevator mechanism to raise the media.
Tray 3 media top sensor	Detects when the media stack in tray 3 has reached the top of the tray. This is an optical sensor with a mechanical lever which senses when the paper has reached the top of the tray, stopping the elevator motor from continuing to raise the media.

media presence and size sensors

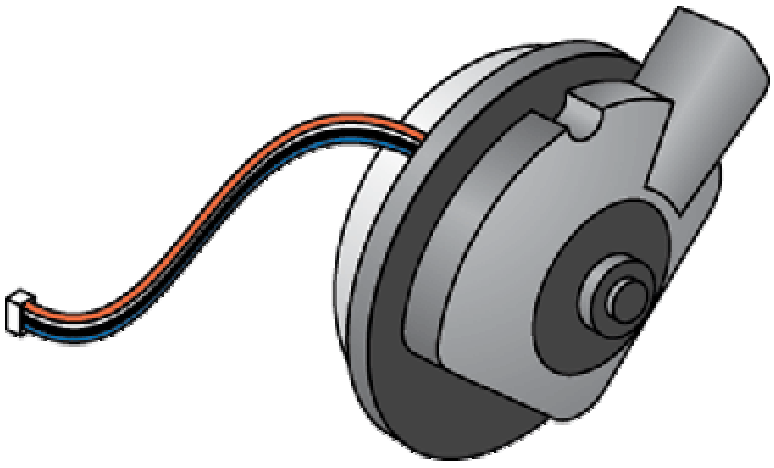
item	description
handover sensor	Detects the transfer of media from the pick system to the converger system. This is implemented using an optical sensor located on the converger.
linefeed encoder	Detects movement of the media through the printzone. Implemented using encoder electronics and an encoder disk located on the main roller. The line feed encoder is used to position the paper accurately during printing.
carriage encoder	Detects the movement of the carriage system. Implemented using encoder electronics and an encoder strip located underneath the carriage. This sensor is used to control the lateral movement of the carriage during the printing sequence.

paper path sensors

item	description
ink supply sensor	Detects the presence and status of ink supplies. This sensing capability is Implemented in the printer firmware.
printhead info	Detects the presence and status of the printheads. This sensing capability is Implemented in the printer firmware.

supplies sensors

vacuum system

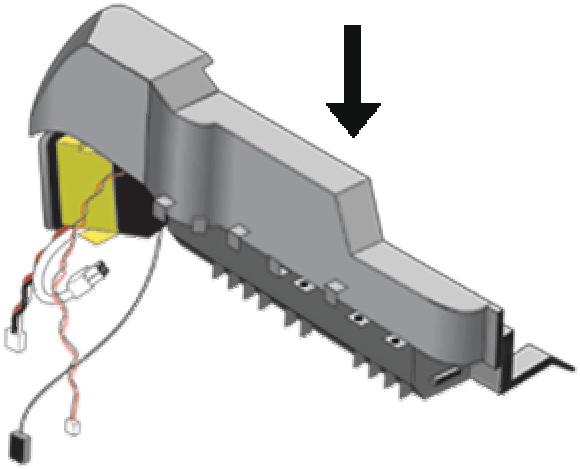


vacuum system

holding the page flat during printing

The vacuum system is used to hold the page flat during printing, keeping it away from the carriage to maintain consistant pen-to-paper spacing (PPS). The vacuum system consists of a vacuum pump and a channel that connects to the printzone.

aerosol system

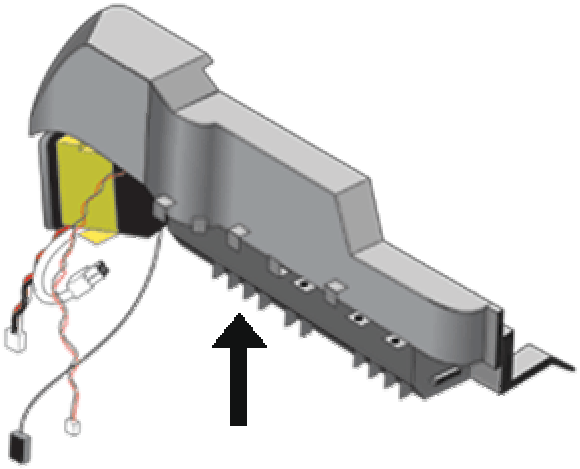


aerosol system

removing fine particles from the printzone

The aerosol system removes ink aerosols (fine ink particles) from the printzone as ink is fired from the printhead nozzles. The aerosol system consists of a filter, vacuum fan and channel suspended before the output system. Ink aerosols can coat the inside of the printer and foul optical sensors, and encoders causing the printer to malfunction.

post-heater system



post-heating system

drying the page before ejection

The post-heating system helps increase the printer output speed by decreasing the drying time for each printed page. Smudging is also minimized as each page is ejected or sent through the duplexing unit. The heating system consists of a heating element, a fan and a channel suspended before the output system.

LCD messages

LCD messages include:

- status messages
- warning messages
- error messages
- critical error messages

status messages

Status messages reflect the current state of the printer. They indicate normal printing operation and require no action to clear them. They change as the state of the printer changes. Whenever the printer is ready, not busy, and has no pending warning messages, the status message READY is if the printer is online.

warning messages

Warning messages indicate data and print errors. These messages typically alternate with the READY and STATUS messages and remain displayed until the SELECT button (check mark icon) is pressed.

error messages

Error messages communicate that some action must be performed, such as adding paper or clearing a paper jam. Some error messages are auto-continuable. If AUTO-CONTINUE=ON, the printer will continue normal operation after displaying auto-continuable error message for 10 seconds

critical error messages

Critical error messages indicate a device failure. Some of these messages can be cleared by pressing and holding the POWER button (circular icon) to turn the printer off then on again. These messages are not affected by AUTO CONTINUE settings. If a critical error persists, service is required.

item	description
INITIALIZING	The printer is initializing. Please wait.
READY	The printer is idle and ready to accept print jobs.
POWERING OFF	The POWER button (circular icon) has been pressed and held, and the printer is preparing to turn off.
POWERSAVE ON	The printer's powersave mode is activated. No action is required. If you want to exit powersave mode, press any button on the LCD control panel.
WARMING UP	The printer is warming up. Please wait.
PLEASE WAIT	Please wait. Printer has been placed offline while job is being processed. Press (pause/resume button) to resume processing job.

PAUSED	The printer has been paused and is currently off line. It will not process any print jobs currently in the queue. This feature is useful when performing minor maintenance tasks on the printer, like loading paper or replacing ink cartridges. Press the PAUSE / RESUME button (right error icon) to switch the printer to READY mode to continue printing.
DEPRESSURIZING WAIT FOR XX MINUTES	The printer is purging the air in the ink delivery tubes. Please wait until the process is complete.
WAIT FOR PRINTER TO REINITIALIZE	The printer needs to reinitialize. It will automatically turn itself off, and then turn itself on again. Please wait.
ACCESS DENIED	Access to this menu or menu item requires a PIN (Personal Identification Number). Please enter the correct password or contact the IT administrator.
INCORRECT PIN	An incorrect PIN has been entered. Please enter the correct PIN or contact the IT administrator.
SETTING SAVED	The control panel setting has been saved. No action required.
PRINTING CONFIGURATION	The Configuration page is being printed. Please wait.
PRINTING EVENT LOG	The event log is being printed. Please wait.
PRINTING FILE DIRECTORY	The file directory of the hard drive is being printed. Please wait.
PRINTING FONT LIST	The list of available fonts is being printed. Please wait.
PRINTING MENU MAP	The menu map is being printed. Please wait.
PRINTING NOZZLE TEST PAGE	The nozzle test page is being printed. The nozzle test page is printed automatically after printhead cleaning is complete.
PRINTING SUPPLIES STATUS	The supplies status page is being printed. Please wait.
PRINTING USAGE PAGE	The usage page is being printed. Please wait.
ALIGNING PRINTHEADS	The printer is aligning the printheads. Please wait.
CLEANING PRINTHEADS	The printer is cleaning the printheads. Please wait.
CALIBRATING COLOR CALIBRATION	The printer is calibrating the color. Please wait.
CANCELING COLOR CALIBRATION	The color calibration process has been canceled. Please wait until the process is completely canceled.
CALIBRATING LINEFEED	The printer is calibrating the linefeed. Please wait.
CANCELING LINEFEED CALIBRATION	The linefeed calibration process has been canceled. Please wait until the process is completely canceled.

PROCESSING... [JOBNAME] FROM TRAY XX	The printer is printing a print job from tray XX. Please wait.
PROCESSING... [JOBNAME]	The printer is printing a print job. Please wait.
PROCESSING... [JOBNAME] COPY [X] OF [Y]	The printer is printing the Xth copy of Y copies of a print job. Please wait.
CANCELING... [JOBNAME]	The printer is canceling a print job. No action is required.
NO JOB TO CANCEL	The CANCEL JOB button (X icon) has been pressed, but there are currently no print jobs in the queue to cancel.
UNABLE TO MOPY JOB [JOBNAME]	A request to print multiple copies of a print job was received. The printer was unable to accept the request, and only one copy of the print job will be printed. Possible reasons could be problems with the memory, hard disk or configuration. Check to see if a hard disk is installed in the printer.
UNABLE TO STORE JOB [JOBNAME]	A request to store a print job was received. The printer was unable to accept the request. Possible reasons could be problems with the memory, hard disk or configuration. Check to see if a hard disk is installed in the printer.
DELETING... [JOBNAME]	The printer is deleting a print job. No action is required.
PROCESSING DUPLEX JOB	The printer is processing a print job that requires both sides of the paper to be printed on. The printer prints one side of the page, holds the page momentarily, and then fully retracts the page into the printer before printing the other side of the page. Do not remove or disturb the paper until the printer fully releases it.
CLEARING EVENT LOG	The printer is clearing its event log. The event log is a record of past printer events. No action is required.
EVENT LOG EMPTY	The event log is empty. The event log is a record of past printer events. No action required.
PEFORMING PAPER PATH TEST	A paper path test has been initiated. The printer will continue feeding paper through the paper path until the CANCEL JOB button (X icon) is pressed.
CLEARING PAPER PATH	The printer is attempting to clear residual paper from the paper path. Please wait until it is complete.
EIO X DISK INITIALIZING	The EIO hard drive is initializing. Please wait.
EIO X DISK SPINNING UP	The EIO hard drive is spinning up. Please wait.
FLASH DISK X INITIALIZING	A new flash DIMM installed in slot X is initializing. Do not turn off the printer.
LOADING PROGRAM XX	Fonts and programs are being loaded into the system RAM. Do not turn off printer.

RESETTING FACTORY SETTINGS	The printer is resetting the menu settings to factory defaults. Please wait.
RECEIVING UPGRADE	The printer is currently receiving the firmware upgrade file. Please wait.
PERFORMING UPGRADE	The printer firmware is currently being upgraded. Please wait.
RESEND UPGRADE	The firmware upgrade process was not successful. Please send the firmware upgrade file again.

status messages

item	description
COLOR CALIBRATION FAILED	The color calibration has failed. Make sure plain letter or A4 paper is loaded in the printer, and then start the color calibration from the LCD control panel.
DATA RECEIVED	The printer has received some print job data, but not enough to start printing. It will time out and cancel the job after the time-out period if all the required data is not received. The I/O time-out period can be set in the LCD control panel.
[FS] DEVICE FAILURE	The specified file system device has failed.
[FS] FILE OPERATION FAILED	A file system command was received and attempted to perform an illogical operation, such as downloading a file to a non-existent directory.
[FS] FILE SYSTEM IS FULL	The hard disk is full. Delete stored files in the file system.
[FS] IS WRITE PROTECTED	The hard drive is write protected
LINEFEED CALIBRATION FAILED	The linefeed calibration has failed. Make sure plain letter or A4 paper is loaded in the printer, and then start the linefeed calibration from the LCD control panel.
NON HP CARTRIDGE IN USE	The printer has detected a third party ink cartridge or cartridges not provided by HP. Printer damage resulting from the use of ink cartridges not approved by HP could affect the printer's warranty. If you are certain all ink cartridges being used in the printer are genuine HP ink cartridges, please contact HP.
ORDER [COLOR] CARTRIDGE	The [COLOR] ink cartridge is running low on ink or is near expiration. Be prepared to replace it with a new ink cartridge.
ORDER [COLOR] PRINTHEAD	The printhead health has reached the low threshold. The printhead can continue to be used until the REINSTALL [COLOR] PRINTHEAD message is shown.

ORDER SUPPLIES	This message indicates one or both of the following: One or more of the ink cartridges are running low on ink or are nearing expiration. The health of one or more of the printheads is low. Press the SELECT button (check mark icon) for more information regarding specific ink cartridges and printheads. Be prepared to replace the specific ink cartridges and/or printheads with new ink cartridges and/or printheads.
PRINTHEAD ALIGNMENT FAILED	The printhead alignment has failed. Make sure plain letter or A4 paper is loaded in the printer, and then start the printhead alignment from the LCD control panel.
PRINTHEAD CLEANING FAILED	The printhead cleaning has failed. Make sure plain letter or A4 paper is loaded in the printer, and then start the printhead cleaning from the LCD control panel.
SIZE DETECTED BY TRAY alternates with TRAY X [TYPE][SIZE]	The printer automatically detected the paper size loaded in Tray X. Only certain standard sizes, such as A4 and Letter, can be automatically detected by the printer trays. No action is required.
TRAY XX EMPTY [TYPE][SIZE]	Please load Tray XX with media.
TRAY XX OPEN	Please close Tray XX. If the tray appears to be closed, it might not be closed properly. Pull out the tray and close it firmly.
TRAY XX [TYPE][SIZE]	The printer is able to automatically detect the paper size loaded in Tray XX. Only certain standard sizes, such as A4 and Letter can be automatically detected by the printer paper trays. No action is required.

warning messages

item	description
CLOSE COVERS	The covers are open or not closed completely. Close all covers to continue printing. If you need to replace a printhead, the printer must be in printhead replacement mode.
INSERT OR CLOSE TRAY XX	Tray XX is open or has been removed. Insert or close Tray XX to allow printing to continue. If the tray appears to be closed, it might not be closed properly. Pull out the tray and close it firmly.
INSTALL DUPLEX OR SIMPLEX UNIT	The optional auto-duplex unit or the simplex unit is missing. One of these units must be installed before printing can proceed.
LOAD TRAY XX [TYPE] [SIZE]	Tray XX is configured for a specific media type and size required for a print job that has been sent, but the tray is empty. Load the specified media type and size into Tray XX. To override this message and use a media type and size that is available in another tray, press the SELECT button (check mark icon).

USE [TYPE] [SIZE] FROM TRAY N INSTEAD?	This message is shown when you press the SELECT button (check mark icon) to print the current job from another tray. Press and (up and down arrow button) to scroll through the list of available trays. Press the SELECT button to select the desired tray.
REMOVE MEDIA IN TRAY 1	A media is detected in Tray 1 that prevents printing from continuing. This is valid if the source tray selected is not Tray 1.
MANUALLY FEED [TYPE] [SIZE]	The print job requires a specific media type and size that is not currently available, or the print job has specified the Tray 1 as the source tray. Load the specified media type and size into Tray 1. To override this message and use a media type and size that is available in another tray, the SELECT button (check mark icon).
CHOSEN PERSONALITY NOT AVAILABLE	The printer is not able to process the print job because the requested personality (printer language) is not available. The job was canceled and no pages were printed. Resend the print job using a supported personality (PCL 5c, PCL 6, or PS 3 emulation).
INSTALL SUPPLIES	At least one supply is missing or is installed incorrectly in the printer, and another supply is missing, installed incorrectly, out, or low. Press the SELECT button (check mark icon) for more information about specific ink cartridges and printheads. Install any missing ink cartridges and printheads. If all are installed, remove the ink cartridges and printheads. Verify that you are using the correct ink cartridges and printheads, and then firmly reinsert them into the printer. You might need to repeat this several times. Be prepared to replace the specific ink cartridges and/or printheads with new ink cartridges and/or printheads.
REINSTALL SUPPLIES	More than one ink cartridge or printhead is faulty, and more than one ink cartridge is empty or has expired. Replace the supplies to continue printing.
INCORRECT SUPPLIES	At least one supply is incorrect and another supply is missing, installed incorrectly, out, or low. Press the SELECT button (check mark icon) for more information about specific ink cartridges and printheads. Install any missing ink cartridges or printheads. Press the SELECT button to display the status of the printer supplies on the LCD control panel. If all supplies installed, remove the ink cartridges and printheads. (Verify that you are using the correct ink cartridges and printheads, and then firmly reinsert them into the printer. You might need to repeat this several times. If a printhead is still listed as one of the incorrect supplies, clean the printhead contacts. If the printhead is still listed after cleaning, install a new printhead. Be prepared to replace the specific ink cartridges and/or

ORDER SUPPLIES	The Supplies Low setting in the LCD control panel System Setup menu is set to Stop, and more than one supply item is low, or one or more ink cartridges is nearing expiration. If the Auto Continue setting in the System Setup menu is set to On, the printer continues printing until the supplies are empty or the ink cartridges expire. Otherwise, press the SELECT button (check mark icon) to continue printing.
REPLACE SUPPLIES	More than one ink cartridge is empty or has expired and needs to be replaced. Press the SELECT button (check mark icon) for more information about specific ink cartridges.
INSTALL PRINTHEADS AND CLOSE COVERS	The printhead cover is open and the printer is in printhead replacement mode. Replace the printhead(s) and close the printhead cover.
INSTALL [COLOR] CARTRIDGE	The [COLOR] ink cartridge is either not installed or is installed incorrectly. Install the ink cartridge. If already installed, remove and reinstall it. Do this several times. If the problem persists, replace the ink cartridge.
REINSTALL [COLOR] CARTRIDGE	An ink cartridge is faulty. Replace the ink cartridge to continue printing.
INCORRECT [COLOR] CARTRIDGE	An incorrect or faulty ink cartridge has been installed in the [COLOR] ink cartridge slot. Remove the ink cartridge. Verify that you are using the correct ink cartridge, and then firmly reinsert it into the printer.You might need to repeat this several times. Replace the ink cartridge with a new ink cartridge if the problem persists.
ORDER [COLOR] CARTRIDGE	This message is displayed when the supplies low setting in the LCD control panel system setup menu is set to Stop, and either a low ink level is reached, or the ink cartridge is nearing expiration. If the Auto Continue setting in the System Setup menu is set to On, the printer continues printing until the ink cartridge runs out of ink. Otherwise, press the SELECT button (check mark icon) to continue printing.
REPLACE [COLOR] CARTRIDGE	An ink cartridge is empty or has expired. Replace the ink cartridge to continue printing.
NON HP CARTRIDGE DETECTED	A new, non-HP ink cartridge has been installed. This message is displayed until you install an HP ink cartridge. Any printer repair required as a result of using non-HP supplies is not covered under HP warranty. To override this message, press the CANCEL JOB button (X icon)
INSTALL [COLOR] PRINTHEAD	The printhead is either not installed or is installed incorrectly. Install the printhead, or open the printhead cover and put the printer in printhead replacement mode Remove the printhead. Verify that you are using the correct printhead, and then firmly reinsert it into the printer. If the message persists, clean the printhead contacts. If more than one printhead is missing, the INCORRECT SUPPLIES message is displayed.

REINSTALL [COLOR] PRINTHEAD	A defective printhead has been detected. Verify that you are using the correct printhead, and then firmly reinsert it into the printer. If the message persists, clean the printhead contacts. If these procedures do not clear the message, install a new printhead. If more than one defective printhead is detected, the INCORRECT SUPPLIES message is displayed.
INCORRECT [COLOR] PRINTHEAD	A printhead is installed in the incorrect slot and the cover is closed. Open the printhead cover and put the printer in printhead replacement mode. Remove the printhead. Verify that you are using the correct printhead, and then firmly reinsert it into the printer. If the message persists, clean the printhead contacts. If these procedures do not clear the message, install a new printhead. If more than one printhead is incorrect, the INCORRECT SUPPLIES message is displayed.
EIO DISK X NOT FUNCTIONAL	The EIO hard disk in slot X is not working correctly. Press and hold the POWER button (circular icon) to turn the printer off. Remove and then firmly reinsert the EIO hard disk. Turn the printer back on. If the problem persists, replace the EIO hard disk.
13.JJ.NT JAM INSIDE DUPLEXER	A media jam has occurred in the auto-duplex unit area.
13.JJ.NT JAM INSIDE TOP COVER	A jam has occurred inside the top cover area.
13.JJ.NT JAM IN TRAY 1	A media jam has occurred in the Tray 1 area.
13.JJ.NT JAM IN TRAY X	A media jam has occurred in the Tray X area (where X=1, 2, or 3).
20 INSUFFICIENT MEMORY	More data has been received from the computer than fits in the printer's internal memory. To continue printing, press the SELECT button (check mark icon). Only the data that fits in the printer's internal memory is printed. The remainder of the job is canceled.
21 PAGE TOO COMPLEX	The page decompression process was too slow for the printer. Press the SELECT button (check mark icon) to continue printing. There may be some data loss on the page that was being formatted when the error occurred.
22 EIO X BUFFER OVERFLOW	The printer's EIO card in slot X has overflowed its I/O buffer during a busy state. Press the SELECT button (check mark icon) to resume printing. Some data will be lost.
22 PARALLEL I/O BUFFER OVER	The printer's parallel buffer has overflowed during a busy state. Press the SELECT button (check mark icon) to resume printing. Some data will be lost.
22 USB I/O BUFFER OVERFLOW	The printer's USB buffer has overflowed during a busy state. Press the SELECT button (check mark icon) to resume printing. Some data will be lost.
40 EIO X BAD TRANS	A connection with the card in EIO slot X has been broken. Press the SELECT button (check mark icon) to continue printing.

41.3 UNEXPECTED SIZE IN TRAY XX	An incorrect media size is loaded in Tray XX. Check that the media loaded in the tray matches the size setting in the LCD control panel.
41.5 UNEXPECTED TYPE IN TRAY XX	An incorrect media type is loaded in Tray XX. Check that the media loaded in the tray matches the type setting in the LCD control panel.
55.X PRINTER ERROR	The engine is not communicating with the formatter.
68.X PERMANENT STORAGE ERROR	One or more printer settings saved in the non-volatile storage device is invalid and has been reset to its factory default. Printing can continue, but there may be some unexpected behaviors because an error occurred in permanent storage. Press the SELECT button (check mark icon) to clear the message. X is: 0 for onboard NVRAM, 1 for removable disk (flash or hard)
68.X PERMANENT STORAGE FULL	A non-volatile storage device is full. Printing can continue, but there may be some unexpected behaviors because an error occurred in permanent storage. Press the SELECT button (check mark icon) to clear the message. X is: 0 for onboard NVRAM, 1 for removable disk (flash or hard)
68.X PERM. STORAGE WRITE FAIL	A non-volatile storage device is failing to write. Printing can continue, but there may be some unexpected behaviors because an error occurred in permanent storage. Press the SELECT button (check mark icon) to clear the message. X is: 0 for onboard NVRAM, 1 for removable disk (flash or hard)

error messages

item	description
49.XXXX PRINTER ERROR	A critical firmware error has occurred. Press and hold the POWER button (circular icon) to turn off the printer, and then turn it back on to clear the error.
53.XY.ZZ PRINTER ERROR	An error occurred on some memory of the printer.
8X.YYYY EIO ERROR	The EIO accessory card in slot X has encountered a critical error.

critical error messages

Paper handing strategy includes:

- hardware features
- Tray 2 and Tray 3
- Tray 1 - manual feed trough (MF) and multi-purpose tray (MP)
- duplex unit
- tray selection
- paper size selection
- setting the multi-purpose tray paper size
- setting the paper size in cassette trays
- support for custom paper sizes
- maxwell supported paper sizes
- paper type selection
- media types supported
-

basic hardware features

Tray 2 and Tray 3 (optional)

The following can be detected for Trays 2 and 3:

- Absence of paper in the cassette
- Closing of the cassette
- Size of paper in the cassette
- Error conditions associated with the cassette

In addition, the following can be detected for Tray 3:

- Absence of the cassette
- Lifting of the cassette

The following cannot be detected:

- Amount of paper in the cassette.
- Type of media in the cassette
-

Tray 1 - manual feed trough (MF) and multi-purpose tray (MP) (optional)

The following can be detected for Tray 1:

- Absense of the tray
- Presense of paper in the tray

The following cannot be detected:

- Size of paper in the tray
- Type of media in the tray

Because the tray is unable to detect the paper size currently installed in it, the printer must rely on the formatter firmware to indicate the size that will be printed from it. If the user

specifies an incorrect paper size installed in the tray, the possibility for a mis-print error will exist. The formatter firmware will limit envelopes to simplex printing (the back side of a duplex page would be printed on a second envelope).

duplex unit

The printer supports duplex printing through the duplex unit. For duplex printing, the front-side of the paper is printed first in normal orientation. Once the front-side finishes printing, the paper is sent to the duplex unit where the paper is physically flipped over. The printer then pulls the paper from the duplex unit and prints the back-side. The printer will then alternate, pulling paper from the input paper tray or the duplex unit.

sensors

The printer supports media size/type error detection using the following sensors:

- Transparency sensor
- Out-of-Paper sensing capability – to measure page length
- Envelope sensor
-

tray selection

All input paper trays are considered auto-selectable except for Tray 1 (MF or MP), which can only be selected with an explicit manual feed printing request. This means the formatter firmware can select from any of the input paper trays that satisfy a paper size/media name request. For example, if more than one input paper tray had the same size and type paper, the formatter could continue printing without user intervention by switching to a paper tray containing the same size and type paper when the currently selected paper tray is empty or removed.

In the case where a paper tray is specified, the paper tray is first checked to see if it contains the requested size (and type if also specified) and if so the printer will use that paper tray. Otherwise, the printer will look for the requested size and type in another tray.

Finding the correct size and type of paper implies searching all available input trays automatically for that paper. If the search fails, the printer can request the correct paper size & type to be loaded by the user . If the user loads the correct paper size and type, the printer will consider the request satisfied and printing will resume. Otherwise, the user may override the paper request by using a different size and/or type paper so that printing may continue.

paper size selection

All input trays (with the exception of Tray 1) can detect the size of paper currently installed. The printer will only support those paper sizes the trays can physically support (including custom). If the printer driver does not specify a paper size or requests a size not supported by the printer, the firmware will format the page to the default paper size. The default paper size is set by the factory to Letter or A4 (depending on the intended country of that printer) and can be changed by the user via the control panel (in service mode).

setting the multi-purpose tray paper size

The multi-purpose tray does not automatically detect the paper size it currently contains. Therefore, the user must inform the formatter firmware, via the control panel, what size paper is present in the tray.

setting the paper size in cassette trays

The cassette trays auto-detect several standard paper sizes. Other non-detectable standard sizes will physically fit in these cassettes, however non-detectable sizes will need to be specified in the control panel

support for custom paper sizes

The printer supports different sizes of custom paper. Custom sizes can be configured via the paper handling menu of the LCD control panel. The default values for the dimensions are the largest physical dimensions supported in the printer. Certain small paper sizes cannot be duplexed due to the physical limitations of the duplex unit. It is the responsibility of the printer driver software to restrict the user to allowable sizes.

supported paper sizes

Paper Size	Control Panel Name	Tray 1 (MF Trough / MP Tray)	Tray 2 & 3 (Cassette Trays)	Duplex Unit
Letter (8.5" x 11.0")	LETTER	Yes	Yes	Yes
Executive (7.25" x 10.5")	EXEC	Yes	Yes	Yes
Legal (8.5" x 14.0")	LEGAL	Yes	Yes	Yes
A4 (210.0mm x 297.0mm)	A4	Yes	Yes	Yes
JIS B5 (182.0mm x 257.0mm)	B5 JIS	Yes	Yes	Yes
ISO B5 (176.0mm x 250.0mm)	B5 ISO	Yes	Tray 2 only	No
JIS Executive (216mm x 330mm)	JISEXEC	Yes	Yes	Yes
A6 (Euro Postcard)(105.0mm x 148.5mm)	A6	Yes	No	No
JIS Postcard(148.0mm x 100.0mm)	JPOST	Yes	No	No
JIS Double Postcard(148.0mm x 200.0mm)	JPOSTD	Yes	No	No
Com10 Envelope (4.12" x 9.5")	COM10	Yes	No	No
Monarch Envelope (3.87" x 7.5")	MONARC	Yes	No	No

C5 Envelope (6.38" x 9.01")	C5	Yes	No	No
DL Envelope (4.33" x 8.66")	DL	Yes	No	No
*	CUSTOM	Yes	Yes	Yes

supported paper sizes

paper type selection

Unlike paper sizes, the cassette trays have no mechanism to automatically detect the currently installed media type. Therefore, the user (or printer administrator) must inform the printer, via the control panel or a system utility, what media type is contained in each of the paper trays.

media types supported

The predefined media types supported by the printer are listed in the table below. The media type is the ASCII string reported by the formatter firmware and is the string used by the printer driver to select a media type for a given page or pages. The control panel name is used in control panel messages. Unlike the control panel names, the predefined media types are NOT localized (at the printer) for each of the supported languages.

If the printer driver does not specify a media type, size or tray for a given page, the formatter firmware will set the requested media type to the default media type. If the printer driver does not specify a media type but specifies a tray number, the firmware will set the media type to that of the tray selected according to the requested tray number. If the printer driver requests a media type for a given page that is not currently supported by the printer, the formatter firmware will force the printer into Manual Feed mode. This will result in a Manual Feed Paper Mount Request.

Media Name	Control Panel Name (Long)	Tray 1 (MF trough / MP tray)	Tray 2 & 3 (Cassette trays)	Duplexer
Any	ANY	No	Yes	N/A
Plain Paper	PLAIN	Yes	Yes	Yes
HP Photo Quality Paper, Matte	PHOTO QUALITY MATT	Yes	Yes	Yes
HP Premium Inkjet Paper	PREMIUM INKJET	Yes	Yes	No
HP Premium Inkjet Heavyweight Paper	PREMIUM IJ HEAVY	Yes	Yes	Yes
HP Brochure & Flyer, Matte	BROCHURE MATTE	Yes	Yes	Yes
HP Photo Paper, Glossy	PHOTO GLOSS	Yes	Yes	No
HP Premium Photo Paper, Glossy	PM PHOTO GLOSS	Yes	Yes	No

HP Premium Plus Photo Paper, Glossy	PM+ PHOTO GLOSS	Yes	Yes	No
HP Premium Plus Photo Paper, Matte	PM+ PHOTO MATTE	Yes	Yes	No
HP Colorfast Photo Paper, Glossy	COLORFAST PHOTO	Yes	Yes	No
HP Photo Quality Paper, Semi Gloss	PHOTO QUALITY GLOS	Yes	Yes	Yes
HP Brochure & Flyer, Gloss	BROCHURE GLOSS	Yes	Yes	Yes
HP Premium Inkjet Transparency	PREMIUM TRNSPRNCY	Yes	Yes	No
HP Premium Plus Inkjet Transparency	PREMIUM+ TRNSPRNCY	Yes	Yes	No

supported media types

key driver improvements

The 3000 series includes the following driver improvements:

- compact PCL5 driver file size
- no EXE file in the printer driver
- no I/O contention problem between PCL5 and PS drivers
- robust network status solution
- support Novell printing configurations (NDPS and HP Gateway)

supported printer languages

The 3000 series supports the following printer languages:

- PCL6
- PCL5c
- PS
-

language	description
PCL6	Object-based language Designed to generate small print files ideal for printing over a network Uses less memory and CPU time on the computer than HPA Use to print from Windows 95/98/ME/2000/XP
PCL5c	Object-based language Designed to generate small print files ideal for printing over a network Uses less memory and CPU time on the computer than HPA Use to print from Windows 95/98/ME/2000/XP
PS	PostScript language Designed for compatibility with PostScript level 3 needs Use to print from Windows 95/98/ME/2000/XP Use to print from Macintosh, Unix, and Linux

printer languages

Driver features include:

- basic printing features
- office focus features
- retail / small business features
- Smart features

Compatibility features include:

- compatible operating systems
- compatible enterprise network systems
-

basic printing features

feature	PCL6	PCL5c	PS3
fast/normal/best print modes	Y	Y	Y
paper size/type/source	Y	Y	Y
custom paper size	Y	Y	Y
orientation	Y	Y	Y
number of copies	Y	Y	Y
ordered printing	Y	Y	

basic printing features

office focus features

feature	PCL5	PCL6	PS3
use different paper for first page	Y	Y	Y
use different paper for back page	Y	Y	Y
auto duplex	Y	Y	Y
zoomsmart	Y	Y	Y
print page borders	Y	Y	Y
watermark	Y	Y	Y
symmetrical margins	Y	Y	
emulate laserjet margins	Y	Y	
quick sets	Y	Y	Y
pantone color matching	Y	Y	Y
concept preview	Y	Y	Y
booklet printing	Y	Y	Y
colorsmart	Y	Y	
ink volume (using the toolbox)	Y	Y	

office focus features

retail / small business features

feature	PCL5	PCL6	PS3
booklet printing	Y	Y	Y
photoret	Y	Y	Y
NT form	Y	Y	
available tray	Y	Y	
size/type tray	Y	Y	

retail / small biz personal features

smart features

- ink level gauge (LCD & driver)
- media width (A4 vs. A3) sensing
- transparency sensing
- remote printer status, configuration & diagnostics with Embedded web server Auto pen alignment
- text based control panel with Job cancel button

operating systems compatibility:

The hp business inkjet 3000 series is compatible the following operating systems:

- MS Win95/98/ME
- MS WinNT 4.0
- MS Win2000/XP
- MacOS 8.1-9.5
- MacOSX
- Linux
- Unix Variants
- IBM OS/2 Warp
- MS-DOS

enterprise network compatibility:

The hp business inkjet 3000 series is compatible the following enterprise systems:

- Windows Terminal Services
- Citrix METAFRAME
- Novell ZenWorks
- NDPS
- Novell Netware 5.0/4.x
-

operating system & driver matrix

operating system	PCL6	PCL5	PS
Win95/98/ME	W, i	W, d	MS, o
WinNT 4.0	W, i	W, d	MS, o

Win 2000/XP	W, i	M, d	M, i
MacOS 8.1-9.5	--	--	A, i
MacOSX	--	--	A, i
Linux	--	--	G, d
Unix Variants	--	--	G, d
OS/2 Warp	--	W	I, o
MS-DOS	D, o	D, o	D, o

operating system & driver matrix

W = HP Wizard driver, MS = Microsoft PS driver + PPD, M = HP Mombi driver, A = Apple PS Laserwriter driver + PPD, G = Gnu GPr PS driver + PPD, I = IBM PS driver + PPD, D = HP Deskjet 1600C driver

i = included with the product CD, d = downloadable from the web, o = other

files copied during installation

Installed files include:

- software toolbox (optional)
- MS USB Printing System (Win98/Me)
- Win95/98/Me Printer Drivers
- WinNT4.0 Printer Driver
- Win2000/XP Printer Drivers
- uninstaller
- MacOS 8.6-9.5
- MacOSX
-

software toolbox (optional)

The target directory for software toolbox on a Win95/98/Me/NT4/2000/XP system is: C:\Program Files\Hewlett-Packard\hp business inkjet 3000 series\ToolBox

item	description
HPWETBX.EXE	Toolbox Executable
HPWEBUS.DLL	Status Server
HPWEC95.DLL	Common Services
HPWESVB.DLL	Basic Printer Services
HPWESVC.DLL	Printer Services
HPWETRE.DLL	Toolbox Resources
HPJCMN1.DLL	Federation SNMP
HPJPTS1.DLL	Federation SNMP
HPJSNM1.DLL	Federation SNMP
HPSF00EW.DLL	Embedded Web Server Services
MSVCRT.DLL	MSVC run-time library
HPWEERR.INI	Script for toolbox resource test
HPWETBX.HLP	Toolbox Windows Help File
HPWETBX.CHM	Toolbox Compiled HTML Help
HHCTRL.OCX*	Microsoft HTML Help Control

software toolbox files

MS USB printing system (Win98/Me)

The target directory for MS USB printing system (Win98/Me) on a Win98 system is:

- Printer driver to C:\Windows\system32\drivers\
- Port monitor to C:\Windows\system
- INF file to C:\Windows\inf
-

item	description

USBPRINT.SYS	Microsoft USB Printer Driver (kernel mode)
USBMON.DLL	Microsoft USB Port Monitor
HP30USB.INF	Add Printer INF file
HP30USB.CAT	Catalog File

MS USB printing system (Win98/ME) files

Win95/98/ME printer drivers

The target directories for the printer drivers on a Win95/98/Me system are:

- Driver files: C:\Windows\system
- INF file: C:\Windows\inf
-

PCL5 drivers

files	files
HPBAFD16.DLL	Appflags DLL
HPBFAB.DDU	Keep Driver
HPBFAB16.DLL	OS Code Thunk 16
HPBFAB32.DLL	OS Code Thunk 32
HPBFTM16.DLL	HP PFM Library 16
HPBFTM32.DLL	HP PFM Library 32
HPBF7430.DRV	Driver File
HPBF7430.PMD	Driver Data File
HPBF7430.HLP	Driver Help File
HP3000P5.INF	Add Printer INF file
HP30P59X.CAT	Catalog File
HPDMC16.DLL	DMC Driver 16
HPDMC32.DLL	DMC Driver 32
HPBFXMMA.DLL	Mutex DLL
HPIJ3000.CFG	DMC Configuration File
HPBCFGRE.DLL	Configuration Editor Resource File (Not installed)

Win95/98/ME PCL5 files

PCL6 drivers

files	files
HPBAFD16.DLL	Appflags DLL
HPBFAB.DDU	Keep Driver
HPBFAB16.DLL	OS Code Thunk 16
HPBFAB32.DLL	OS Code Thunk 32
HPBFTM16.DLL	HP PFM Library 16
HPBFTM32.DLL	HP PFM Library 32
HPBF7420.DRV	Driver File
HPBF7420.PMD	Driver Data File
HPBF7420.HLP	Driver Help File

HP3000P6.INF	Add Printer INF file
HP30P69X.CAT	Catalog File
HPDMC16.DLL	DMC Driver 16
HPDMC32.DLL	DMC Driver 32
HPBFXMMA.DLL	Mutex DLL
HPIJ3000.CFG	DMC Configuration File
HPBCFGRE.DLL	Configuration Editor Resource File (Not installed)
HPWELMN.DLL	Language Monitor

Win95/98/ME PCL6 driver files

PS drivers

files	files
HP3000.PPD	Postscript Printer Description File
PSCRIPT.DRV	Microsoft Postscript Driver
PSCRIPT.HLP	Microsoft Driver Help File
PSCRIPT.INI	Microsoft Configuration File
FONTS.MFM	Microsoft Font Metric File
ICONLIB.DLL	Microsoft Shared Library
HP3000PS.INF	Add Printer INF file
HP30PS9X.CAT	Catalog File

Win95/98/ME PS driver files

WinNT4.0 printer drivers

The target directories for the printer drivers on a WinNT 4.0 system are:

- Driver files: C:\WinNT\system32\spool\drivers\w32x86
- Driver files (kernel mode): C:\WinNT\system32\spool\drivers\w32x86\2
- INF file: C:\WinNT\inf
-

PCL5 drivers

files	files
HPBAFD32.DLL	Appflags DLL
HPBFTM32.DLL	OS Code Thunk 32
HPBF7430.DLL	Driver Config File
HPBF7432.DLL	Driver File
HPBF7434.PMD	Driver Data File
HPBF7430.HLP	Driver Help File
HP3000P5.INF	Add Printer INF file
HPCDMC32.DLL	DMC Driver 32
HPIJ3000.CFG	DMC Configuration File
HPBCFGRE.DLL	Configuration Editor Resource File (Not installed)
HPBMINI.DLL	Enterprise Auto Configuration (EAC) File
HPBF7434.HPI	EAC File

ATL.DLL	EAC File
HPBMIAPI.DLL	EAC File
HPBNRAC2.DLL	EAC File
HPBOID.EXE	EAC File
HPBOIDPS.DLL	EAC File
HPBPRO.EXE	EAC File
HPBPROPS.DLL	EAC File
HPJCMN2U.DLL	EAC File
HPJIPX1U.DLL	EAC File
HPNRA.EXE	EAC File
HPPAPML0.DLL	EAC File
HPPAPML0.EXE	EAC File
HPPAPTS0.DLL	EAC File
HPPASNM0.DLL	EAC File

WinNT4.0 PCL5 driver files

PCL6 drivers

files	files
HPBAFD32.DLL	Appflags DLL
HPBFTM32.DLL	OS Code Thunk 32
HPBF7420.DLL	Driver Config File
HPBF7422.DLL	Driver File
HPBF7424.PMD	Driver Data File
HPBF7420.HLP	Driver Help File
HP3000P6.INF	Add Printer INF file
HPCDMC32.DLL	DMC Driver 32
HPIJ3000.CFG	DMC Configuration File
HPBCFGRE.DLL	Configuration Editor Resource File (Not installed)
HPBMINI.DLL	Enterprise Auto Configuration (EAC) File
HPBF7424.HPI	EAC File
ATL.DLL	EAC File
HPBMIAPI.DLL	EAC File
HPBNRAC2.DLL	EAC File
HPBOID.EXE	EAC File
HPBOIDPS.DLL	EAC File
HPBPRO.EXE	EAC File
HPBPROPS.DLL	EAC File
HPJCMN2U.DLL	EAC File
HPJIPX1U.DLL	EAC File
HPNRA.EXE	EAC File
HPPAPML0.DLL	EAC File
HPPAPML0.EXE	EAC File
HPPAPTS0.DLL	EAC File
HPPASNM0.DLL	EAC File

WinNT4.0 PCL6 driver files

PS drivers

files	files
HP3000.PPD	Postscript Printer Description File
PSCRIPT4.DLL	Microsoft Postscript Driver (v4.5)
PSCRIPT4.HLP	Microsoft Driver Help File
PS4UI.DLL	Microsoft User Interface DLL
PSCRIPT.NTF	Microsoft Device Font Information
HP3000PS.INF	Add Printer INF file
HPBJRPS4.DLL	--
HPBJRPS4.INI	--
HPBJRUI4.DLL	Job Retention Files
HPBJSTR4.DLL	--
HPBOEM80.NTF	--

WinNT 4.0 PS driver files

Win2000/XP printer drivers

The target directories for the printer drivers on a Win2000/XP system are:

- Driver files: C:\WinNT\system32\spool\drivers\w32x86
- Driver files (user mode): C:\WinNT\system32\spool\drivers\w32x86\3
- INF file: C:\WinNT\inf
-

PCL5 drivers

files	files
HPBAFD32.DLL	Appflags DLL
HPBFTM32.DLL	OS Code Thunk 32
HPBF743E.DLL	Driver Config File
HPBF743G.DLL	Driver File
HPBF743I.PMD	Driver Data File
HPBF743E.HLP	Driver Help File
HP3000P5.INF	Add Printer INF file
HP30P52K.CAT	Catalog File
HPCDMC32.DLL	DMC Driver 32
HPIJ3000.CFG	DMC Configuration File
HPBMINI.DLL	Enterprise Auto Configuration (EAC) Files
HPBF743I.HPI	EAC File
HPBMIAPI.DLL	EAC File
HPBNRAC2.DLL	EAC File
HPBOID.EXE	EAC File
HPBOIDPS.DLL	EAC File
HPBPRO.EXE	EAC File
HPBPROPS.DLL	EAC File
HPJCMN2U.DLL	EAC File
HPJIPX1U.DLL	EAC File

HPNRA.EXE	EAC File
HPPAPML0.DLL	EAC File
HPPAPTS0.DLL	EAC File
HPPASNM0.DLL	EAC File

Win2000/XP PCL5 driver files

PS drivers

files	files
PSCRIPT5.DLL	Microsoft Postscript Driver (v5.0)
PSCRIPT5.DLL	Microsoft User Interface DLL
PSCRIPT.HLP	Microsoft Driver Help File
PSCRIPT.NTF	Microsoft Device Font Information
HPPRN04.DLL	Print Processor
HPCUI04.DLL	--
HPCPRD04.DLL	--
HPWM5300.PPD	Postscript Printer Description File
HPWM5300.XML	--
HPMOMBI3.DTD	--
HPCSTR04.DLL	--
HPCLJX04.HLP	--
HPW3000S.INI	--
HPOEM.NTF	--
HPCDMC32.DLL	DMC Driver 32
HPIJ3000.CFG	DMC Configuration File
HPBCFGRE.DLL	Configuration Editor Resource File (Not installed)
HP3000PS.INF	Add Printer INF file
HP30PS2K.CAT	Catalog File
HPBMIAPI.DLL	Enterprise Auto Configuration (EAC) File
HPBOID.EXE	EAC File
HPBOIDPS.DLL	EAC File
HPBPRO.EXE	EAC File
HPBPROPS.DLL	EAC File
HPPAPTS0.DLL	EAC File
HPPASNM0.DLL	EAC File
HPPAPML0.DLL	EAC File
HPZIPR12.DLL	EAC File
HPZIPT12.DLL	EAC File
HPZISN12.DLL	EAC File
HPZINW12.DLL	EAC File
HPZIPM12.DLL	EAC File

Win2000/XP PS driver files

WinXP64 printer drivers

The target directories for the printer drivers on a Win2000/XP system are:

- Driver files: C:\WinNT\system32\spool\drivers\w32x86
- Driver files (user mode): C:\WinNT\system32\spool\drivers\w32x86\3
- INF file: C:\WinNT\inf
-

PCL5 & PCL6 drivers

files	files
HP3000P5.INF	Add Printer INF file
HP30P564.CAT	Catalog File
HPCLJX04.HLP	---
HPCMAC04.GPD	---
HPCRD04.DLL	---
HPCSTR04.DLL	---
HPCUI04.DLL	---
HPMOMBI3.DTD	---
HPPRN04.DLL	Print Processor
HPW30005.INI	---
HPW30005.INI	Driver Data File
HPWM5300.XML	---
HPWMAC04.GPD	---
PCL5ERES.DLL	---
STDNAMES.GPD	---
UNIDRV.DLL	---
UNIDRV.HLP	---
UNIDRVUI.DLL	---
UNIRES.DLL	---
HPCDMC64.DLL	DMC Driver 64
HPIJ3000.CFG	DMC Configuration File

WinXP64 PCL5 & PCL6 driver files

PS drivers

files	files
HP3000PS.INF	Add Printer INF file
HP30PS64.CAT	Catalog File
HPCLJX04.HLP	---
HPCPRD04.DLL	---
HPCSTR04.DLL	---
HPCUI04.DLL	---
HPMOMBI3.DTD	---
HPOEM.NTF	---
HPPRN04.DLL	---
HPW3000S.INI	---

HPWM5300.PPD	Postscript Printer Description File
HPWM5300.XML	---
PS5UI.DLL	User Interface DLL
PSCRIPT.HLP	Driver Help File
PSCRIPT.NTF	Device Font Information
PSCRIPT5.DLL	Postscript Driver
HPCDMC64.DLL	DMC Driver 64
HPIJ3000.CFG	DMC Configuration File

WinXP64 PS driver files

uninstaller

The target directory for uninstaller on a Win95/98/Me/NT4/2000/XP system is: C:\Program Files\Hewlett-Packard\hp business inkjet 3000 series\Uninstall

item	description
_ISDEL.EXE	The install engine cleanup utility
SETUP.EXE	Uninstaller executable
_SETUP.DLL	Resource DLL used by setup.exe
LAYOUT.BIN	---
LANG.DAT	Localized strings for the language selection dialog
OS.DAT	OS data file
INST32I.EX	InstallShield's 32-bit install engine
_SYS1.HDR	InstallShield's header file
_USER1.HDR	InstallShield's header file
DATA1.HDR	InstallShield's header file
SETUP.INS	Compiled install program
SETUP.LID	InstallShield's language definition file
CIUNINST.INI	General Uninstaller Information File
SETUP.INI	InstallShield's initialization file
DATA.TAG	Tag file used for disk image identification
_SYS1.CAB	InstallShield's cabinet file for its support files
_USER1.CAB	Cabinet file for other support files
DATA1.CAB	Data cabinet file for compressed components
<COMPNAME>.HUF	Installed components information files

uninstaller files

MacOS 8.6-9.5 PS printer drivers

The target directories for the printer drivers on a Win2000/XP system are:

- PPD file: Macintosh HD (or the name of your Hard Drive) : System Folder : Extensions : Printer Descriptions : HP Business Inkjet 3000
- Desktop Print Spooler: Macintosh HD (or the name of your Hard Drive) : System Folder : Extensions : Desktop Print Spooler
- Desktop Print Monitor: Macintosh HD (or the name of your Hard Drive) : System Folder : Extensions : Desktop PrintMonitor

MacOSX 10.0.0-10.2.1 PS printer drivers

The target directories for the printer drivers on a Win2000/XP system are:

- PPD file: Macintosh HD (or the name of your Hard Drive) : Library : Printers : PPDs : Contents : Resources : en.lproj
- Print Dialog Extensions in: Macintosh HD (or the name of your Hard Drive) : Library : Printers : hp : Frameworks :

troubleshooting process

Quick troubleshooting steps includes:

- check the printer setup
- check printer connectivity
- check the computer
-

check the printer setup

- Plug in and power on the printer, allowing it to initialize.
- Check the LCD control panel for an error message.
- Ensure the printheads and ink cartridges are properly installed
- Print a demo page. If the demo page is generated, the printer is working properly.

check printer connectivity

- Check that the USB or parallel cable between the printer and the computer or HP JetDirect print server is connected securely.
- If the printer is networked, check that the network cable is connected securely, and the link-light is on.

check the computer

- If the printer is networked, check that the network is accessible from the computer.
- Ensure the driver settings are properly configured. (correct printer selected, print job is not sent to a locked tray, etc.)
- Check the driver version. If the problem is that the printer prints a nonsense version of the document, updating the driver may solve the problem. Visit the HP Web site to download the latest drivers.
- Check that too many programs are not open when trying to perform a task. Close programs that are not in use, or restart the computer before attempting the task again.
- Print a test page. If the test page is generated, the printing sequence is working properly.

Media feed errors include:

- jam rates
- multi-feed rates
-

jam rates

A jam rate is the number of times the printer will have a paper jam per X number or pages.

Tray 2 and 3

- special media - Max. 1 per 500 pages
- labels - Max. 1 per 500 pages
- OHT - Max. 1 per 500 pages

Manual feed / Multipurpose tray

- heavy weight media - Max. 1 per 500 pages
- Envelopes - Max. 1 per 500 pages
- Post cards - Max. 1 per 500 pages
- OHT - Max. 1 per 500 pages

multi-feed rates

A multi-feed rate is the number of times the printer will incorrectly pick multiple sheets of paper per X number or pages.

Tray 2 and 3

- special media - Max. 1 per 500 pages
- labels - Max. 1 per 500 pages
- OHT - Max. 1 per 500 pages

crew/user-replaceable parts

The following parts are the user replaceable parts or CREW parts that can be fixed by the Customer Care Center:

- Door - Main Access SVC #C8116-67002
- Assy - Manual Trough SVC #C8116-67009
- Assy - O/P Tray SVC #C8116-67010
- Assy - Tray 2 SVC #C8116-67011
- Assy - Door Access SVC #C8116-67012
- Assy - Pick Roller SVC #C8116-67019
- Assy - Separation Roller SVC #C8116-67020
- Snap-On Foot SVC #C8116-67023
- Cover - DIMM SVC #C8116-67030
- Assy - Simplexer SVC #C8116-67062
- Assy - Duplexer SVC #C8116-67063
- Assy - Tray 3 SVC #C8116-67071
- MP Tray 1 SVC #C8116-67072

repackaging the printer for return to hp

When repackaging the printer:

remove ink supplies.

remove trays and accessories

pack the printer

remove ink supplies

To remove the ink cartridges and printheads:

Lift the printhead / ink cartridge access cover. on the right side of the printer.

Carefully remove the ink cartridges from the ink supply station.

Press the SELECT button (checkmark icon). This unlocks the carriage assembly from the parked position.

Lift the printhead cover lock-lever and carefully remove the printheads from the carriage assembly.

To remove the printheads when the printer does not power on:

Remove the warranty void label from the stopper-latch located on the right side cover above the printhead cover lock-lever.

Unclip the stopper-latch from the printer right side cover, and slide the stopper-latch out to the left.

Lift the printhead cover lock-lever and carefully remove the printheads from the carriage assembly.

remove trays and accessories

Remove Tray 1 or trough from the rear of the printer.

Remove Tray 2 from the front of the printer.

Remove the duplexer or simplexer from the front of the printer.

Remove the output tray, pulling it straight out.

Remove EIO accessories (JetDirect card, hard disk)

Remove the printer from the Tray 3 base.

pack the printer

Pack the printer, ensuring that the printer is not turned upside down during transportation.

Pack Tray 2, Tray 1 / rear trough, the output tray, and Tray 3 separately.

setting up an exchanged unit

When setting up an exchanged unit:

install Tray 3 base unit (if applicable)

install duplexer or simplexer unit

install manual feed trough or multi-purpose tray (Tray1)

install Tray 2

install the output tray

install EIO cards (jetdirect, etc.)

install ink supplies

power on the printer

product escalation path by region

Product escalation path offered by region:

- USA
- Canada
- Latin America
- Europe
- Asia Pacific
-

USA

Support Flow: End Customer->Call Center->Response Center->Division->

Escalation Flow: End Customer->Call Center->Response Center->Division->

Canada

Support Flow: End Customer->Call Center->Response Center->Division->

Escalation Flow: End Customer->Call Center->Response Center->Division->

Latin America

Support Flow: End Customer->Call Center->Response Center->Division->

Escalation Flow: End Customer->Call Center->Response Center->Division->

Europe

Support Flow: End Customer->Call Center->Response Center->Division->

Escalation Flow: End Customer->Call Center->Response Center->Division->

Asia Pacific

Support Flow: End Customer->Call Center->Response Center->Division->

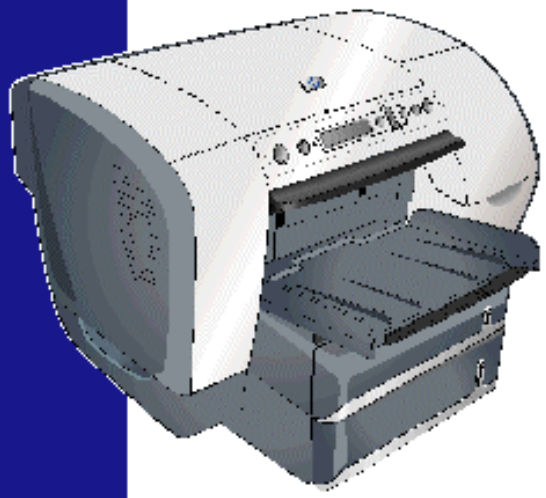
Escalation Flow: End Customer->Call Center->Response Center->Division->

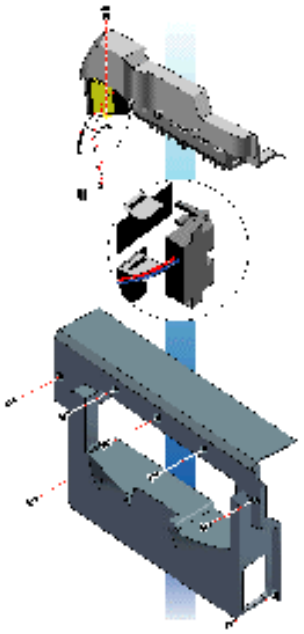
Module 5

hp business inkjet printer 3000 series

repair & maintenance

invent





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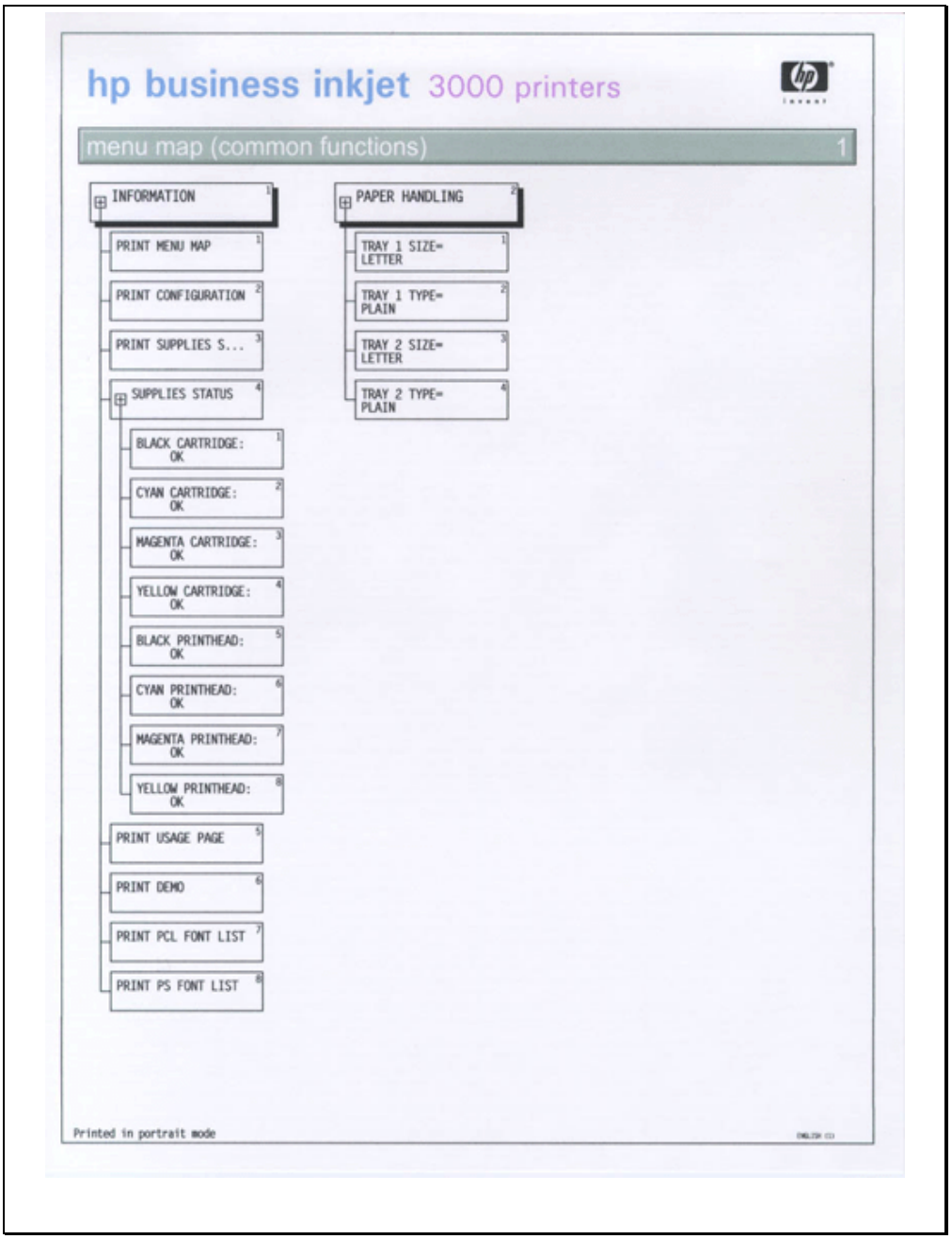
menu map



menu map

To print a menu map:

1. Press the SELECT button (check-mark icon) on the LCD control panel.
2. Press the DOWN button (down arrow icon) to highlight INFORMATION and then press SELECT.
3. Press the DOWN button to highlight PRINT MENU MAP, and then press SELECT.

The control panel menu structure

The LCD control panel displays the following menus:

- retrieve job menu
- information menu
- paper handling menu
- configure device menu
- printing submenu
- print quality submenu
- system setup submenu
- I/O submenu
- resets submenu
- diagnostics menu

If a JetDirect EIO card is installed, the following will be displayed:

- configure device: I/O: JetDirect menu

retrieve job menu

The retrieve job menu displays all stored jobs. You can scroll through the list to find and select a specific job. If the printer has no stored jobs, the LCD control panel displays the message NO STORED JOBS.

information menu

message	value	description
PRINT MENU MAP	N.A.	Prints a map of the printer menu structure.
PRINT CONFIGURATION	N.A.	Prints a page describing current configuration settings (such as firmware version, model, accessories installed, I/O support, or other details). If an HP Jetdirect print server is installed, a second page will be printed, which displays the settings for the HP Jetdirect print server.
PRINT SUPPLIES STATUS PAGE	N.A.	Prints the estimated remaining life for the supplies and lists statistics on the total number of pages and jobs processed. This item also shows ink cartridge manufacture date, serial number, page counts, and maintenance information.
SUPPLIES STATUS	N.A.	Displays the supplies status in a scrollable list.
PRINT USAGE PAGE	N.A.	Prints a count of all media sizes that have passed through the printer; lists whether they were simplex, duplex, monochrome, or color; and reports the page count.
PRINT DEMO	N.A.	Prints a demonstration page.
PRINT FILE DIRECTORY	N.A.	Prints the name and directory of files stored on an optional hard disk.
PRINT PCL FONT LIST	N.A.	Prints the available PCL fonts.
PRINT PS FONT LIST	N.A.	Prints the available emulated PostScript (PS) fonts.

information menu description

paper handling menu

message	value	description
TRAY 1 SIZE	LETTER LEGAL EXECUTIVE A4 A6 ISOB5 JISB5 JEXEC JPOST COM10 ENVELOPE MONARCH ENVELOPE C5 ENVELOPE DL ENVELOPE CUSTOM ANY CUSTOM	Selects media size loaded in Tray 1. Default = LETTER
TRAY 1 TYPE	PLAIN PHOTO GLOSS PHOTO QULALITY GLOSS PHOTO QUALITY MATTE PREMIUM INKJET PREMIUM IJ HEAVY BROCHURE GLOSS BROCHURE MATTE PM PHOTO GLOSS PM+ PHOTO GLOSS PM+ PHOTO MATTE PREMIUM TRNSPRNCY PREMIUM+ TRNSPRNCY COLORFAST PHOTO	Selects media type loaded in Tray 1. Default = PLAIN
TRAY 2 SIZE	ANY LETTER EXECUTIVE LEGAL A4 JISB5 ISOB5 CUSTOM	Displays the current size configuration for the tray. Sizes are detected by the printer tray. To use a custom size, load the media in the tray and adjust the length and width guides to fit snugly against the media. Default = LETTER
TRAY 2 TYPE	ANY PLAIN PHOTO GLOSS PHOTO QUALITY GLOSS PHOTO QUALITY MATTE PREMIUM INKJET PREMIUM IJ HEAVY BROCHURE GLOSS BROCHURE MATTE PM PHOTO GLOSS PM+ PHOTO GLOSS PM+ PHOTO MATTE PREMIUM TRNSPRNCY PREMIUM+ TRNSPRNCY COLORFAST PHOTO	Selects media type loaded in tray 2. Default = PLAIN
TRAY 3 SIZE	ANY LETTER LEGAL EXECUTIVE A4 JISB5 JEXEC CUSTOM ANY CUSTOM	Displays the current size configuration for the tray. Sizes are detected by the printer tray. To use a custom size, load the media in the tray and adjust the length and width guides to fit snugly against the media. This item is displayed only whenTray 3 is installed. Default = LETTER

TRAY 3 TYPE	ANY PLAIN PHOTO GLOSS PHOTO QUALITY GLOSS PHOTO QUALITY MATTE PREMIUM INKJET PREMIUM IJ HEAVY BROCHURE GLOSS BROCHURE MATTE PM PHOTO GLOSS PM+ PHOTO GLOSS PM+ PHOTO MATTE PREMIUM TRNSPRNCY PREMIUM+ TRNSPRNCY COLORFAST PHOTO	Selects media type loaded in Tray 3. This item is displayed only when Tray 3 is installed. Default = PLAIN

paper handling menu description

printing submenu

message	value	description
COPIES	1 - 32000	Sets the number of copies to print. Default = 1
DEFAULT PAPER SIZE	LETTER LEGAL EXECUTIVE A4 A6 ISOB5 JISB5 JEXEC JPOST JPOSTD COM10 ENVELOPE MONARCH ENVELOPE C5 ENVELOPE DL ENVELOPE CUSTOM	Sets the default media size. Default = LETTER
DEFAULT CUSTOM PAPER SIZE	UNIT OF MEASURE X DIMENSION Y DIMENSION	Sets the unit of measurement and dimensions for jobs that have no dimensions. The values can be set independently and apply to any jobs that are sent without dimensions. Default = INCHES
DEFAULT PAPER TYPE	ANY PLAIN PHOTO GLOSS PHOTO QUALITY GLOSS PHOTO QUALITY MATTE PREMIUM INKJET PREMIUM IJ HEAVY BROCHURE GLOSS BROCHURE MATTE PM PHOTO GLOSS PM+ PHOTO GLOSS PM+ PHOTO MATTE PREMIUM TRNSPRNCY PREMIUM+ TRNSPRNCY COLORFAST PHOTO	Sets a default media type. Default = PLAIN
DUPLEX	OFF ON	This item appears only when an auto-duplex unit is installed. Set the value to ON to print on both sides (duplex) or OFF to print on one side (simplex) of a sheet of paper. For more information, see "Load paper and configure media types and sizes." Default = OFF

DUPLEX BINDING	LONG EDGE SHORT EDGE	This item appears only when an auto-duplex unit is installed and the duplex option is on. Choose the binding edge when duplexing (printing on both sides of paper). For more information, see "Load paper and configure media types and sizes." Default = LONG EDGE
OVERRIDE A4/ LETTER	NO YES	Sets the printer to print an A4 job on letter-size paper when no A4 paper is loaded, or to print a letter-size job on A4 paper when no letter-size paper is loaded. Default = NO
MANUAL FEED	OFF ON	Feeds media manually. Default = OFF
COURIER FONT	REGULAR DARK	Selects a version of the Courier font. Default = REGULAR
WIDE A4	NO YES	Changes the printable area of A4 paper so that eighty 10-pitch characters may be printed on a single line. Default = NO
PRINT PS ERRORS	OFF ON	Prints a list of PS errors. Default = OFF
PCL	FORM LENGTH ORIENTATION FONT SOURCE FONT NUMBER FONT PITCH SYMBOL SET APPEND CR TO LF	Configures settings for printer control language (PCL), also known as the printer personality.

configure device: printing submenu description

print quality submenu

message	value	description
ALIGN PRINTHEADS	N.A.	Begins the printhead alignment process.
COLOR CALIBRATION	N.A.	Begins the color calibration process.
LINEFEED CALIBRATION	N.A.	Begins the linefeed calibration process.
CLEAN PRINTHEADS	N.A.	Begins the printhead cleaning process.
REPLACE PRINTHEADS	N.A.	Moves the printhead carriage to allow users to replace the printheads.
DEFAULT QUALITY LEVEL	DRAFT NORMAL BEST	Selects the default level for print quality. This setting is used if the print job contains no print-quality selection. Default = NORMAL

NORMAL MODE PRINTING	AUTO SPEED QUALITY	Selects the normal mode for print quality. SPEED prints at the best possible speed, with less concern for print quality. QUALITY prints at a predetermined quality level with less concern for print speed. AUTO combines speed and quality settings depending on the health of the printhead. Default = AUTO

configure device: print quality submenu description

system setup submenu

message	value	description
JOB STORAGE LIMIT	1-100	Sets the maximum number of jobs that can be stored on the printer. (This item appears only if the printer has an optional hard disk installed.) Default = 32
JOB HELD TIMEOUT	OFF 1 HOUR 4 HOURS 1 DAY 1 WEEK	Sets how long the printer stores a copy of the job on its optional hard disk. (This item appears only if the printer has an optional hard disk installed.) Default = OFF
TRAY BEHAVIOR	USE REQUESTED TRAY MANUALLY FEED PROMPT	Specifies settings for the tray-selection behavior. USE REQUESTED TRAY requires the printer to print from only the tray specified. MANUALLY FEED PROMPT requires you to press (select button) on the LCD control panel before printing begins.
POWERSAVE TIME	2 MINUTES 15 MINUTES 30 MIN UTES 1 HOUR 90 MINUTES 2 HOURS 4 HOURS	Reduces power consumption when the printer has been inactive for an extended period. Default = 30 MINUTES
PERSONALITY	AUTO PCL PS	Sets the default personality to automatic switching, PCL, or PostScript emulation. Default = AUTO
CLEARABLE WARNINGS	JOB ON	Sets the length of time that a clearable warning is displayed on the LCD control panel. If JOB is selected, warnings are displayed until the end of the current job. If ON is selected, warnings are displayed until you press (select button). Default = JOB
AUTO CONTINUE	OFF ON	Determines printer behavior when the system generates an Auto Continuable error. Default = ON
SUPPLIES LOW	STOP CONTINUE	Sets the printing action to be taken when the low supplies setting is reached for ink catridges only. low supplies. Default = CONTINUE
LANGUAGE	A list of available languages appears	Sets the default language. Default = ENGLISH

configure device: system setup submenu description

I/O submenu

message	value	description
I/O TIMEOUT	5 - 300	Sets the length of time (in seconds) that the printer waits for remaining data for a print job. After this time, the printer prints the print job. Default = 15.
PARALLEL INPUT	HIGH SPEED ADVANCED FUNCTIONS	Accesses two options: HIGH SPEED enables fast parallel port communication with the host. If the printer is connected to an older computer, you may want to disable this option. ADVANCED FUNCTIONS allows you to enable or disable the bi-directional parallel communication. If you disable this option, the host will not receive any messages from the Printer Status and Alerts software.
EIO X JETDIRECT	TCP/IP IPX/SPX APPLETALK DLC/LLC LINK SPEED	Accesses submenus for an EIO accessory, such as the HP Jetdirect print server.

configure device: I/O submenu description

resets submenu

message	value	description
RESTORE FACTORY SETTINGS	N.A.	Restores all values (except those for an HP Jetdirect print server) to the predetermined factory values of the printer. CAUTION: **Warning** *Use the restore option on this menu with caution. You can lose printer configuration settings when you select these items. Reset the printer only when you want to restore the printer's default settings or when the communication between the printer and computer has been interrupted.*
POWERSAVE	OFF ON	Enables and disables Powersave. Default = ON

configure device: resets submenu description

diagnostics menu

message	description
PRINT EVENT LOG	Prints the last 50 entries in the printer's event log, starting with the most recent event.
SHOW EVENT LOG	Displays the last 50 events on the LCD control panel display, starting with the most recent event.
PAPER PATH TEST	Tests the paper handling features of the printer.

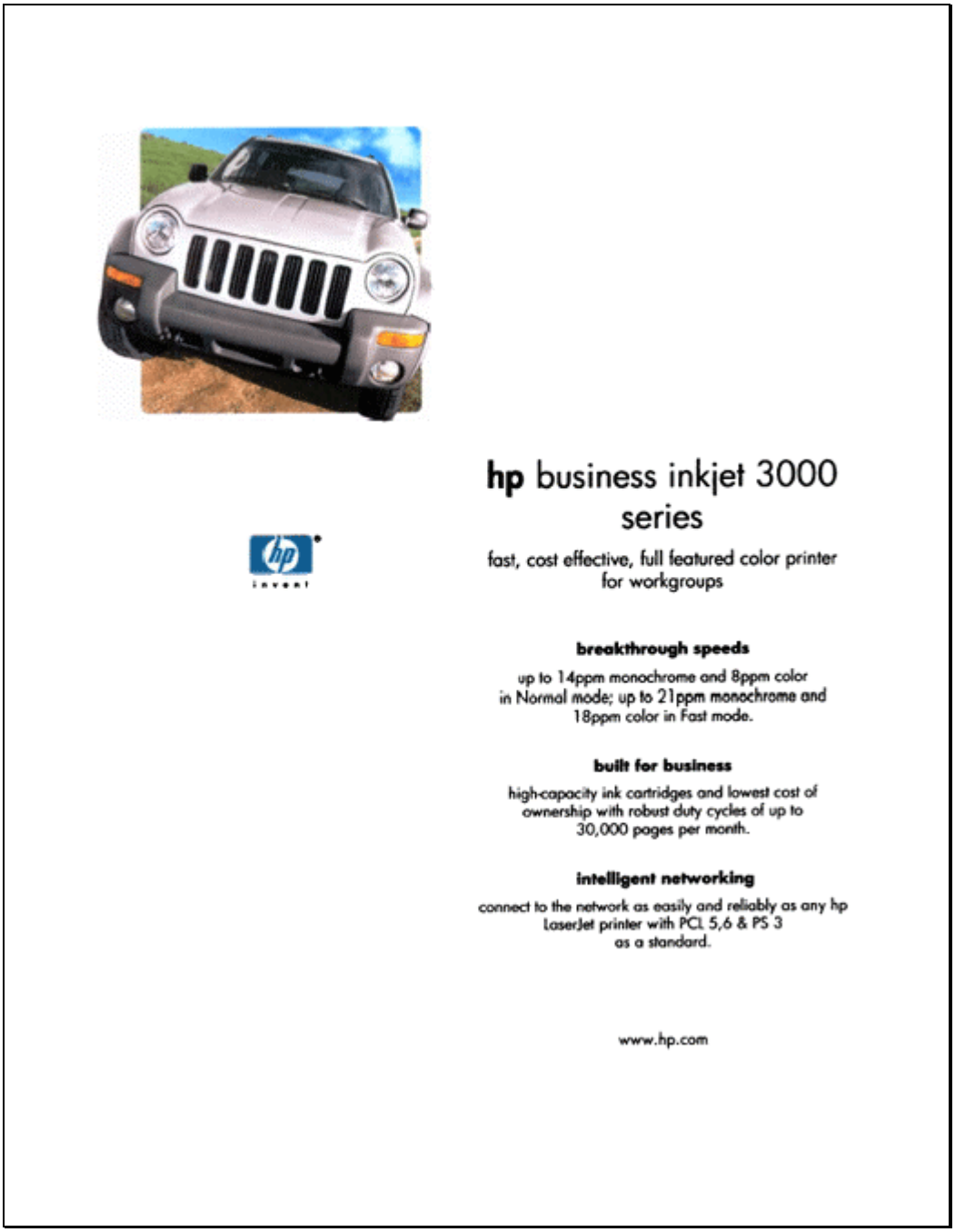
diagnostics menu description

JetDirect menu

message	value	description
TCP/IP	ENABLE CONFIGURE METHOD MANUAL SETTINGS	Enable or disables the TCP/IP menu and set the TCP/IP protocol parameters. In the TCP/IP menu, you can specify BOOTP=YES or DHCP=YES for TCP/IP parameters to be automatically configured by a BootP or DHCP server when the printer is turned on. If you specify BOOTP=NO and DHCP=NO, you can manually set the following TCP/IP parameters from the LCD control panel: Each byte of the IP address (IP) Subnet Mask (SM) Syslog Server (LG) Default Gateway (GW) Idle Timeout period (default is 270 seconds; 0 disables the timeout) When setting IP numbers, press (up arrow button) to increase the number by 1. Press (select button) to make your selection.
IPX/SPX	ENABLE FRAME TYPE	Enables the IPX/SPX menu, which you can use to set the IPX/SPX protocol parameters. In the IPX/SPX menu, you can specify the frame type parameter used on your network. The default is AUTO, which automatically sets and limits the frame type to the one detected. For Ethernet cards, frame type selections include EN_8023, EN_II, EN_8022, and EN_SNAP. For Token Ring cards, frame type selections include TR_8022 and TR_SNAP. In the IPX/SPX menu for Token Ring cards, you can also specify NetWareSource Routing parameters, which include SRC RT=AUTO (default), OFF, SINGLE R, or ALL RT.
APPLETALK	ENABLE	Enables or disables the AppleTalk protocol.
DLC/LLC	ENABLE	Enables or disables the DLC/LLC protocol.
LINK SPEED	LINK SPEED MODE	Manually sets the link speed (10 or 100 Mbs) and mode (Full or Half Duplex).

configure device: I/O: JetDirect menu description

demo page



demo page

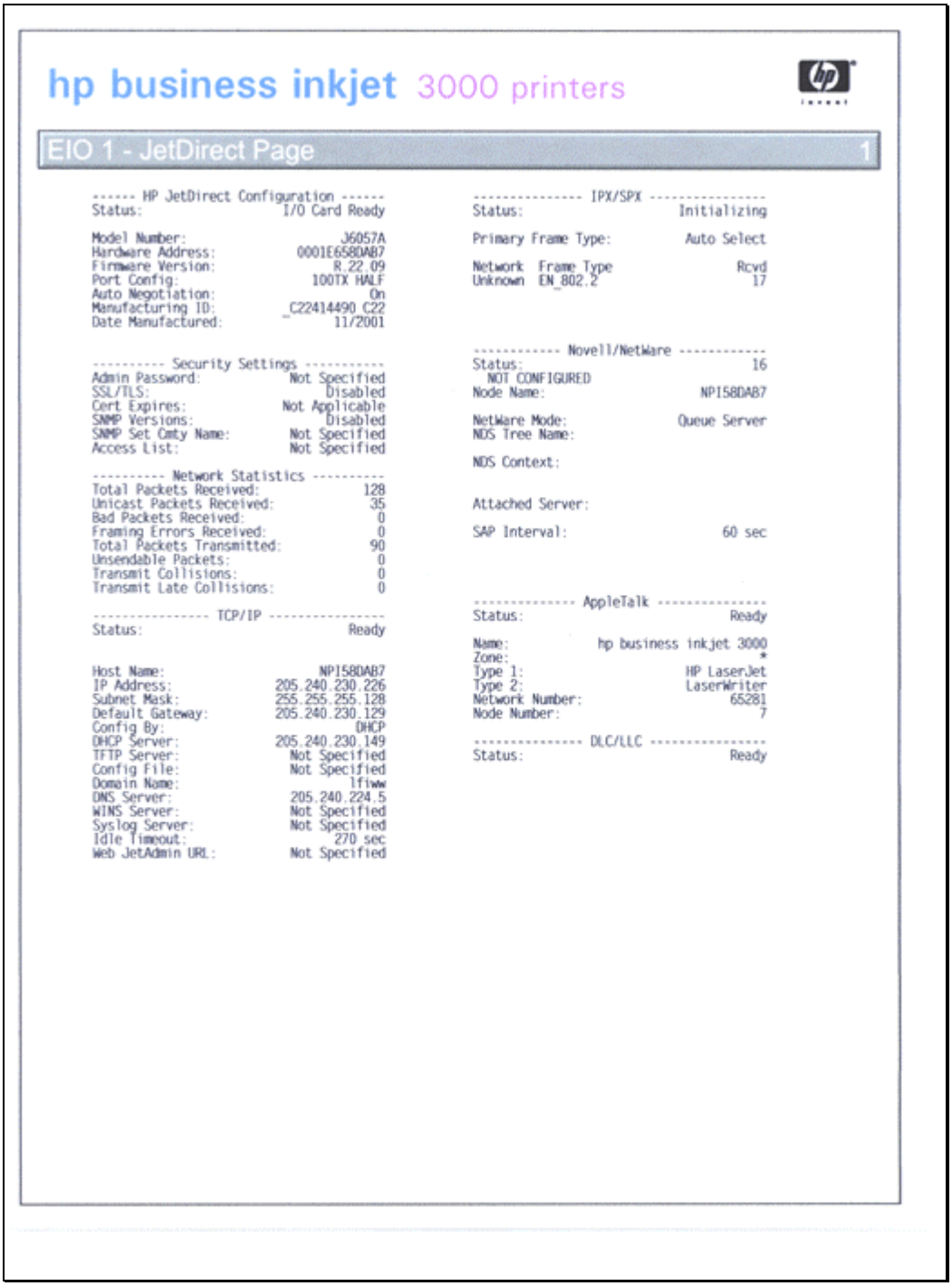
To print a demo page:

1. Press the SELECT button (check-mark icon) on the LCD control panel.
2. Press the DOWN button (down arrow icon) to highlight INFORMATION, and press SELECT.

3. Press the DOWN button (down arrow icon) until PRINT DEMO is highlighted, then press SELECT.

The demo page verifies printer functionality but does not verify functionality of the computer to printer connection. The demo page is also known as a sample page. Print a demo page to diagnose problems and to verify functionality of the printer hardware.

configuration page



hp business inkjet 3000 printers

EIO 1 - JetDirect Page 1

------ HP JetDirect Configuration ------
Status: I/O Card Ready

Model Number: J6057A
Hardware Address: 0001E658DAB7
Firmware Version: R.22.09
Port Config: 100TX HALF
Auto Negotiation: On
Manufacturing ID: _C22414490 C22
Date Manufactured: 11/2001

---------- Security Settings ----------
Admin Password: Not Specified
SSL/TLS: Disabled
Cert Expires: Not Applicable
SNMP Versions: Disabled
SNMP Set Cmty Name: Not Specified
Access List: Not Specified

---------- Network Statistics ----------
Total Packets Received: 128
Unicast Packets Received: 35
Bad Packets Received: 0
Framing Errors Received: 0
Total Packets Transmitted: 90
Unsendable Packets: 0
Transmit Collisions: 0
Transmit Late Collisions: 0

---------- TCP/IP ----------
Status: Ready

Host Name: NPI58DAB7
IP Address: 205.240.230.226
Subnet Mask: 255.255.255.128
Default Gateway: 205.240.230.129
Config By: DHCP
DHCP Server: 205.240.230.149
TFTP Server: Not Specified
Config File: Not Specified
Domain Name: lfiww
DNS Server: 205.240.224.5
WINS Server: Not Specified
Syslog Server: Not Specified
Idle Timeout: 270 sec
Web JetAdmin URL: Not Specified

---------- IPX/SPX ----------
Status: Initializing

Primary Frame Type: Auto Select

Network Frame Type Rcvd
Unknown EN_802.2 17

---------- Novell/NetWare ----------
Status: 16
NOT CONFIGURED
Node Name: NPI58DAB7

NetWare Mode: Queue Server
NDS Tree Name:

NDS Context:

Attached Server:

SAP Interval: 60 sec

---------- AppleTalk ----------
Status: Ready

Name: hp business inkjet 3000
Zone: *
Type 1: HP LaserJet
Type 2: LaserWriter
Network Number: 65281
Node Number: 7

---------- DLC/LLC ----------
Status: Ready

EIO configuration page

To print a configuration page:

1. Press the SELECT button (check-mark icon) on the LCD control panel.
2. Press the DOWN button (down arrow icon) to highlight INFORMATION and then press SELECT.
3. Press the DOWN button (down arrow icon) until PRINT CONFIGURATION PAGE is highlighted, then press SELECT.

general printer configuration

The printer configuration page provides information on printer identification and firmware versions, hardware configuration in terms of trays, RAM, installable options (personalities, expansion RAM, EIO cards), networking, and consumables status. A configuration page verifies printer hardware functionality but does not verify the functionality of the computer to printer connection.

item	description
printer information	Shows general printer information such as firmware version number, model name, and memory installed.
event log	Shows the number of entries in use, maximum number of entries, and the last three events on the LCD control panel, starting with the most recent.
installed personalities and options	Shows the printer languages (personalities) in use, and contents of the printer's DIMM slots and EIO slots.
memory	Shows the amount of RAM and Automatic Resource Saving Information.
security	Shows whether the LCD control panel is locked and whether a password is enabled.
paper trays and options	Shows the printer's installed trays and their media type and size settings.

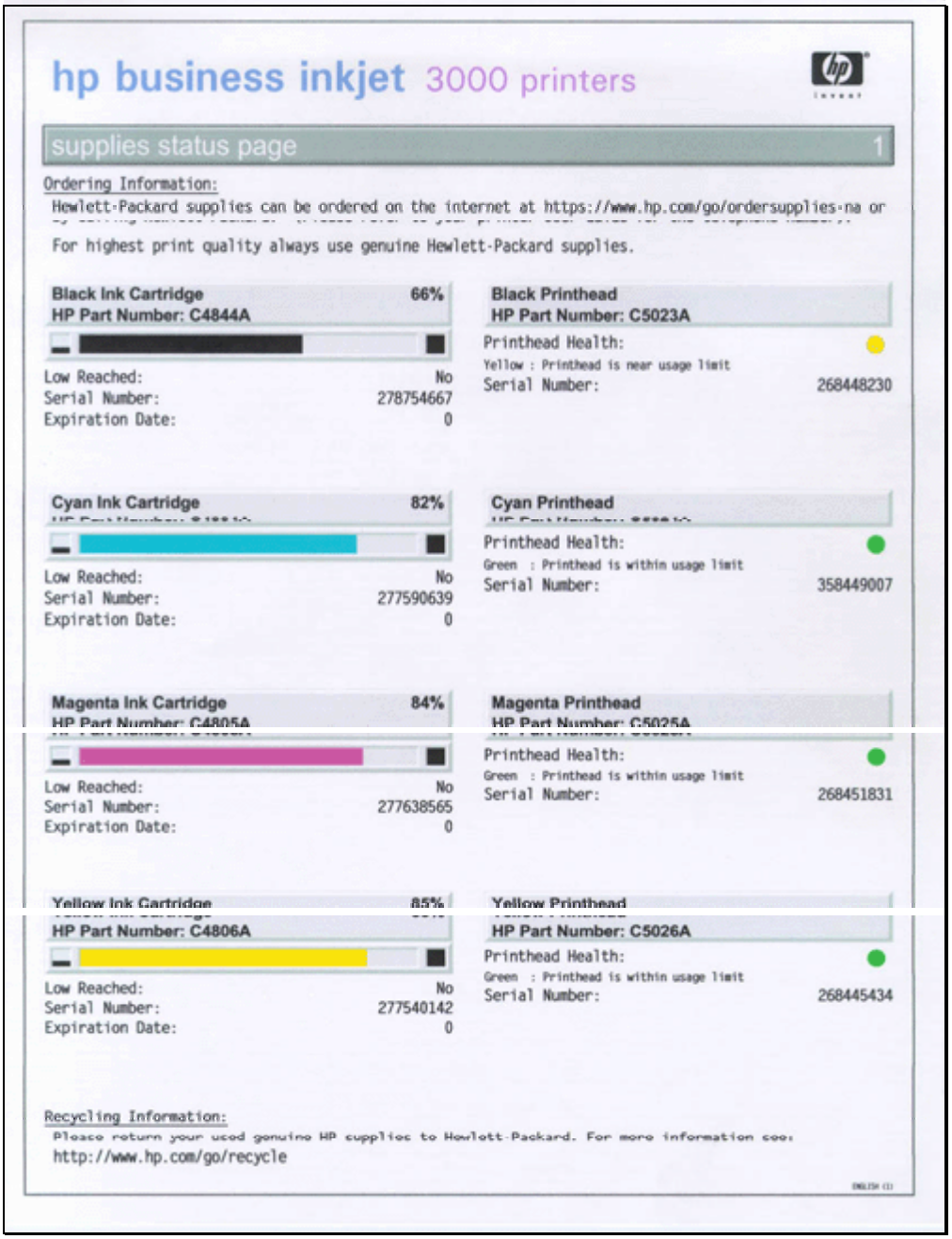
EIO device configuration

For each EIO expansion card installed, an EIO configuration page will be printed. A JetDirect configuration page will be available on the 3000n and 3000dtn, or if a JetDirect EIO module is installed on the printer.

item	description
hp jetdirect configuration	Shows general information about the JetDirect card such as firmware version number, model number, and network hardware address.
security settings	Shows admin password, SSL settings (for the embedded web server), SNMP community name, and access list.
network statistics	Shows ethernet network statistics such as total packets transmitted, total packets received, and errors such as collisions and bad packets.
TCP/IP	Shows TCP/IP protocol settings such as host name, IP address, subnet mask, default gateway, DNS and WINS servers.
IPX/SPX	Shows IPX/SPX protocol settings such primary frame type.
novell/netware	Shows Novell/Netware settings such as node name, NetWare mode, and Novell directory services settings such as NDS tree name and context.
appletalk	Shows AppleTalk protocol settings such name, zone, network number and node number.
DLC/LLC	Shows DLC/LLC status

JetDirect EIO configuration page description

supplies status page



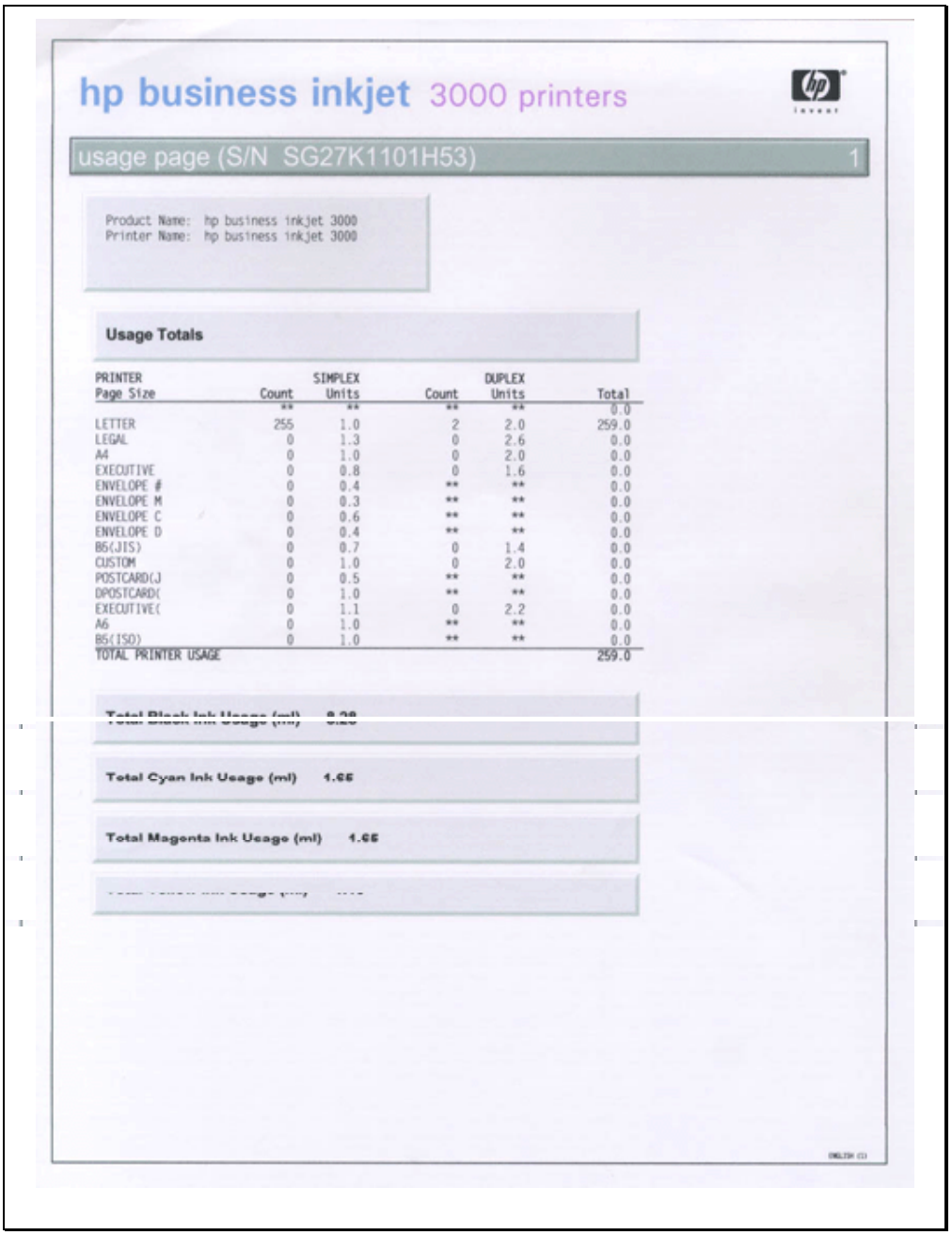
supplies status page

To print a supplies status page:

1. Press the SELECT button (check-mark icon) on the LCD control panel.
2. Press the DOWN button (down arrow icon) to highlight INFORMATION, and press SELECT.
3. Press the DOWN button (down arrow icon) until PRINT SUPPLIES STATUS PAGE is highlighted, then press SELECT.

Print a supplies status page to determine the longevity of ink supplies and to diagnose problems related to low ink levels. HP product numbers, serial numbers, and ordering information are listed, in addition to recycling information for returning supplies to HP.

usage page



hp business inkjet 3000 printers

usage page (S/N SG27K1101H53) 1

Product Name: hp business inkjet 3000
Printer Name: hp business inkjet 3000

Usage Totals

PRINTER Page Size	SIMPLEX Count	SIMPLEX Units	DUPLEX Count	DUPLEX Units	Total
	**	**	**	**	0.0
LETTER	255	1.0	2	2.0	259.0
LEGAL	0	1.3	0	2.6	0.0
A4	0	1.0	0	2.0	0.0
EXECUTIVE	0	0.8	0	1.6	0.0
ENVELOPE #	0	0.4	**	**	0.0
ENVELOPE M	0	0.3	**	**	0.0
ENVELOPE C	0	0.6	**	**	0.0
ENVELOPE D	0	0.4	**	**	0.0
B5(JIS)	0	0.7	0	1.4	0.0
CUSTOM	0	1.0	0	2.0	0.0
POSTCARD(J	0	0.5	**	**	0.0
DPOSTCARD(	0	1.0	**	**	0.0
EXECUTIVE(	0	1.1	0	2.2	0.0
A6	0	1.0	**	**	0.0
B5(ISO)	0	1.0	**	**	0.0
TOTAL PRINTER USAGE					259.0

Total Cyan Ink Usage (ml) 1.66

Total Magenta Ink Usage (ml) 1.66

usage page

To print a usage page:

1. Press the SELECT button (check-mark icon) on the LCD control panel.
2. Press the DOWN button (down arrow icon) to highlight INFORMATION, and press SELECT.
3. Press the DOWN button (down arrow icon) until PRINT USAGE PAGE is highlighted, then press SELECT.

Print a usage page to determine the total number and type of pages printed and total amount of ink used since the printer was manufactured.

Customer Service Checklist – For Printer Exchange

1. If the defective printer can be powered up and can print, do the following:
   a. Print a menu map from the INFORMATION menu;
   b. Print a configuration page from the INFORMATION menu (includes a page with JetDirect EIO card information if a JetDirect EIO network card is installed;
   c. If a hard drive is installed, print a file directory list from the INFORMATION menu. Keep this for reference in case there is a dispute about the files stored on the hard drive;

2. Remove all paper from all the paper trays;

3. Remove all accessories from the defective printer. This includes (but is not limited to) the following if installed:
   a. Any JetDirect EIO network cards or external JetDirect network boxes. Note the EIO slot each of the EIO accessories is installed in;
   b. Any EIO hard drives. Note which slot each hard drive is installed in;
   c. All cables including the power cable, network cable, USB cable and/or parallel cable. Before removing each cable, note how it is installed and where both ends are plugged into;
   d. The duplex or simplex unit;
   e. The 700 sheet paper tray (Titanium);
   f. Multipurpose tray (Tray 1);
   g. Tray 2, if the replacement printer does not have tray 2 installed;
   h. Any memory, flash and/or JetCAPS DIMM modules;
   i. The ink cartridges;
   j. The printheads. If the defective printer cannot be powered up, remove the printhead latch lock to remove the printheads;

4. Remove the defective printer from its location and set it aside;

5. Place the replacement printer at the location from where the defective printer was removed;

6. Install all accessories removed from the defective printer on the replacement printer. This includes (but is not limited to) the following if installed:
   a. Any JetDirect EIO network cards or external JetDirect network boxes. Install all of the EIO accessories in the same EIO slot as on the defective printer;
   b. Any EIO hard drives. Install each hard drive in the same EIO slot as on the defective printer;
   c. All cables including the power cable, network cable, USB cable and/or parallel cable. Make sure the cables are plugged into the same slots and/or sockets as on the defective printer. Also, make sure are routed and configured the same way as they were on the defective printer;
   d. The duplex or simplex unit;
   e. The 700 sheet paper tray (Titanium);
   f. Multipurpose tray (Tray 1);
   g. Tray 2, if the replacement printer does not have tray 2 installed;
   h. Any memory, flash and/or JetCAPS DIMM modules;
   i. The ink cartridges;

7. Replace all paper in the paper trays;

8. Power up or switch on the printer;

9. Wait for the LCD display to show "Install Supplies";

10. Open the printhead cover;

11. Wait for the carriage to move to the "change printhead" position. If the carriage does not move to the "change printhead" position, press the SELECT (green tick or check) button once while the printhead cover is open;

12. Open the printhead latch on the carriage and install the printheads that were removed from the defective printer;

13. Close the printhead latch. Make sure the hook engages with the steel catch. If not, the carriage will jam repeatedly;

14. Close the printhead and ink cartridge covers;

15. While waiting for the printer to complete self-calibration, use the information from the printed menu map to configure the replacement printer in the same way the defective printer was configured. This includes (but is not limited to) the following items:
    a. Tray paper types and sizes (from the PAPER HANDLING menu);
    b. Default custom paper size settings in the CONFIGURE DEVICE/PRINTING menu;
    c. The PCL settings in the CONFIGURE DEVICE/PRINTING menu;
    d. The system setup settings in the CONFIGURE DEVICE menu;
    e. The tray behavior settings in the CONFIGURE DEVICE/SYSTEM SETUP menu;
    f. The I/O settings in the CONFIGURE DEVICE menu;
    g. The powersave setting in the CONFIGURE DEVICE/RESETS menu;
    h. All other appropriate control panel menu settings;
    i. All configuration settings for any JetDirect EIO network cards and/or JetDirect network boxes;

16. Once self-calibration is complete and successful and the printer is idle (no activity and LCD display shows READY), print a demo page from the INFORMATION menu and an appropriate test page from a computer connected to the printer to verify proper function. If any of the self-calibration procedures do not complete successfully, manually repeat the failed self-calibration procedure using the menu items from the CONFIGURE DEVICE/PRINT QUALITY menu;

17. Pack the defective printer in the packaging used for the replacement unit;

18. Inform the customer the replacement of the defective printer has been completed successfully before leaving with the defective printer.

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before making modifications to the printer

Before you tear down a printer or as you are replacing a printer, use this customer service checklist to gather printer configuration information so you can properly configure the printer afterwards. Gathering this information is especially important if you anticipate replacing entire printer, the Logic PCA, restoring the factory settings (RESET menu), or resetting the HP JetDirect EIO Print Server card. You need to keep this information for your reference, especially during troubleshooting and any subsequent reinstallation procedures that you may need to perform.

Note *You will need this to check the serial number of the NVRAM during the final hardware test.*

after repairs are complete

After you repair the printer, reprogram it with the user's customized settings that you have already noted. After you have reset all the customized settings, reprint a menu map and configuration page and check it against the original to ensure that all the settings are correct. Ensure that all the customized settings have been reset, before returning the printer to the customer.

service menu

To access the service menu:

1. Press the SELECT button (check-mark icon) on the LCD control panel.
2. Press the DOWN button (down arrow icon) to highlight SERVICE MENU and then press SELECT.
3. Enter the 6 digit PIN (Personal Identification Number) number and press SELECT.

- The factory set PIN number follows the format: MMTTTTYY.
- M is the (2 digit) month the product was released
- Y is the (2 digit) year the product was released
- TTTT is the product series (eg. 3000).

message	value	description
CLEAR EVENT LOG	N.A.	Clears all events listed in the Event Log. This feature can be useful when tracking an issue.
TOTAL MONO PAGES	0-9999999	Tracks the number of pages printed using only black. Default = 9
TOTAL COLOR PAGES	0-9999999	Tracks the number of pages printed using any color other than black. Default = 9
SERIAL NUMBER	N.A.	Displays the printer serial number. The serial number displayed in the LCD control panel should match the serial number tag located on the rear of the printer.
SERVICE ID	N.A.	Displays a number for printer administrators to reference when contacting customer support.
COLD RESET PAPER	LETTER A4	Specifies the default paper size after a cold reset.

service menu description

boot menu

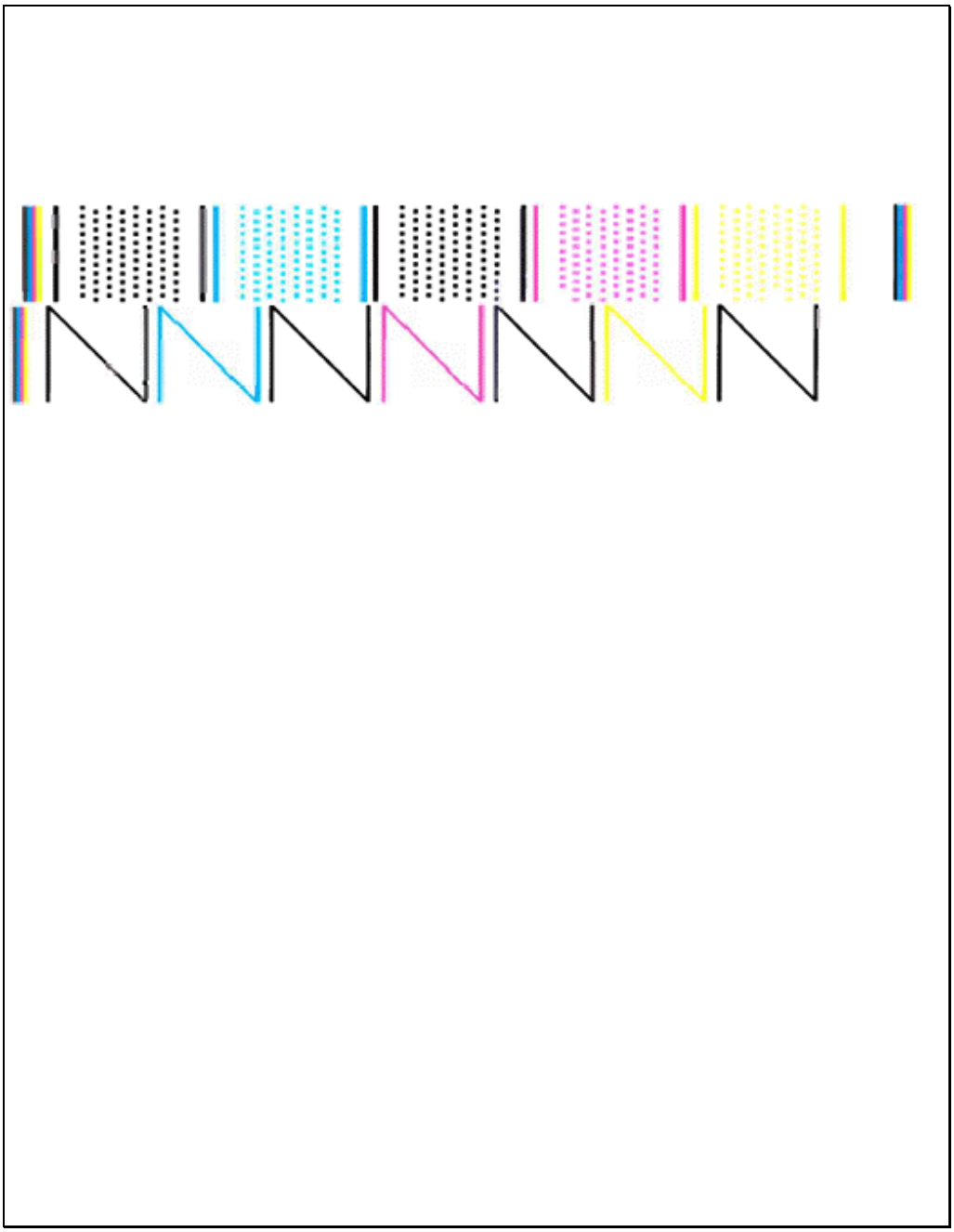
To access the boot menu:

1. Turn off the printer.
2. Press and hold the DOWN button (down arrow icon), and turn the printer on.
3. When the LED lights are lit continuously, and the LCD displays “064mb” with two rows of asterisks (******), release the DOWN button.
4. Press the UP button (up arrow icon) once.
5. Press the RESUME button (right arrow icon) once.

message	description
SKIP DISK LOAD	Boots the printer so that it will not execute any stored print jobs that may be queued on the hard drive.
SKIP CALIBRATION	Boots the printer to READY mode without performing any of the printer calibration procedures.
MANUFACTURING	Skips all the mechanical initialization procedures. Printer boots directly to READY mode. This is useful for getting the printer ready for firmware flashing if you are having difficulty booting and initializing the printer.
NVRAM INIT	Resets ALL NVRAM values, including any installed EIO JetDirect cards, the serial number stored in NVRAM and the service ID. Please exercise caution. If the EIO JetDirect NVRAM values (IP address, settings, etc.) need to be maintained, remove the card from the printer before performing a NVRAM INIT.

boot menu description

align printheads



align printheads process

To begin the automatic printhead alignment process:

1. Press the SELECT button (check-mark icon) on the LCD control panel.
2. Press the DOWN button (down arrow icon) until CONFIGURE DEVICE is highlighted, then press SELECT.
3. Press the DOWN button until PRINT QUALITY is highlighted, then press SELECT.

4. Press the DOWN button to highlight ALIGN PRINTHEADS, then press SELECT.

The printhead alignment process is used to align the printheads.

clean printheads

clean printheads process

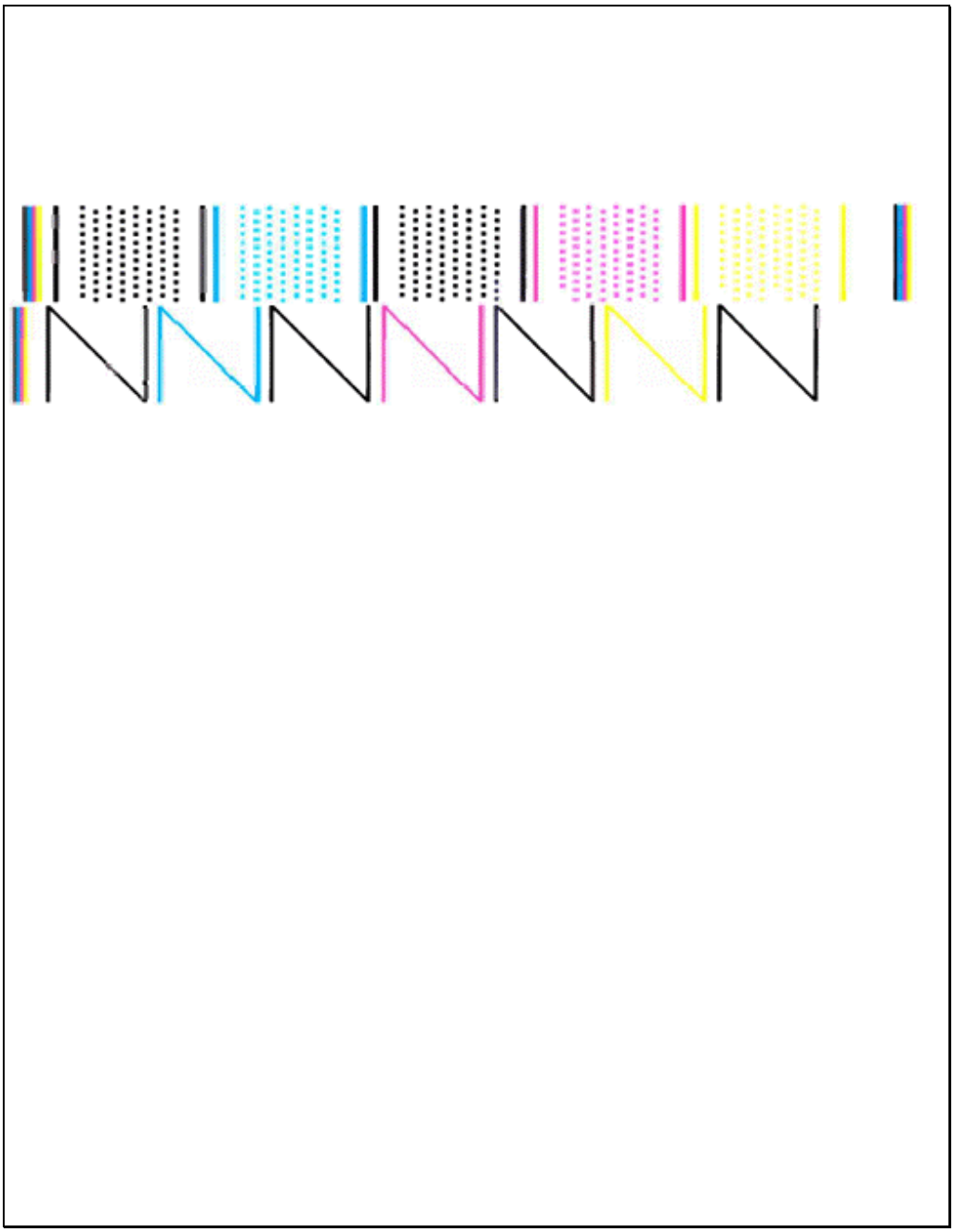
To begin the automatic printhead cleaning process:

1. Press the SELECT button (check-mark icon) on the LCD control panel.
2. Press the DOWN button (down arrow icon) until CONFIGURE DEVICE is highlighted, then press SELECT.
3. Press the DOWN button until PRINT QUALITY is highlighted, then press SELECT.

4. Press the DOWN button until CLEAN PRINTHEADS is highlighted, then press SELECT.

The printhead cleaning process is used to clean the printheads.

replace printheads



replace printheads process

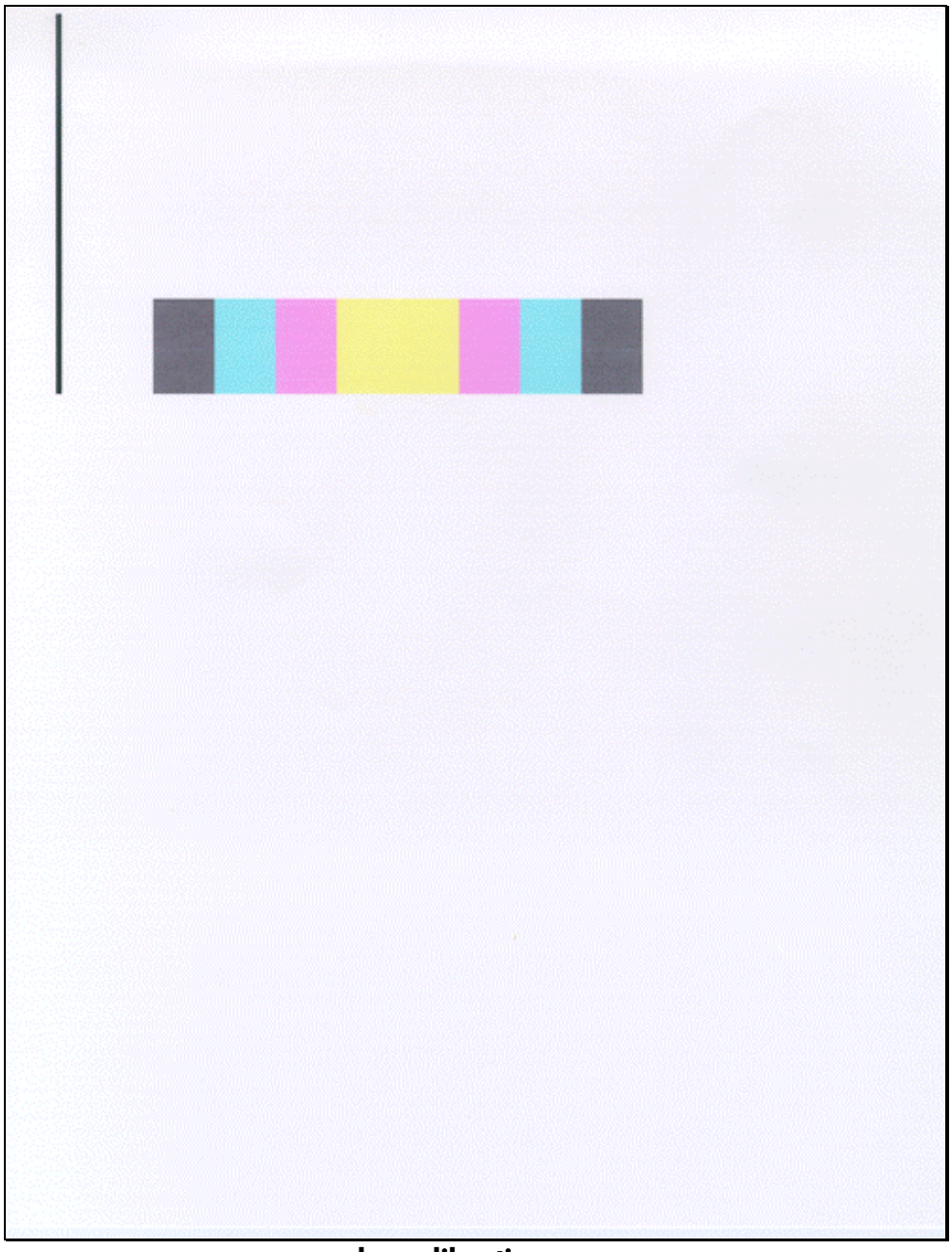
To begin the printhead replacement process:

1. Press the SELECT button (check-mark icon) on the LCD control panel.
2. Press the DOWN button (down arrow icon) until CONFIGURE DEVICE is highlighted, then press SELECT.
3. Press the DOWN button until PRINT QUALITY is highlighted, then press SELECT.

4. Press the DOWN button until REPLACE PRINTHEADS is highlighted, then press SELECT.

The printhead replacement procedure is used to determine if printheads need replacement.

color calibration process



color calibration page

To begin the color calibration process:

1. Press the SELECT button (check-mark icon) on the LCD control panel.
2. Press the DOWN button (down arrow icon) until CONFIGURE DEVICE is highlighted, then press SELECT.
3. Press the DOWN button until PRINT QUALITY is highlighted, then press SELECT.

4. Press the DOWN button until COLOR CALIBRATION is highlighted, then press SELECT.

The color calibration process is used to calibrate the color.

linefeed calibration process

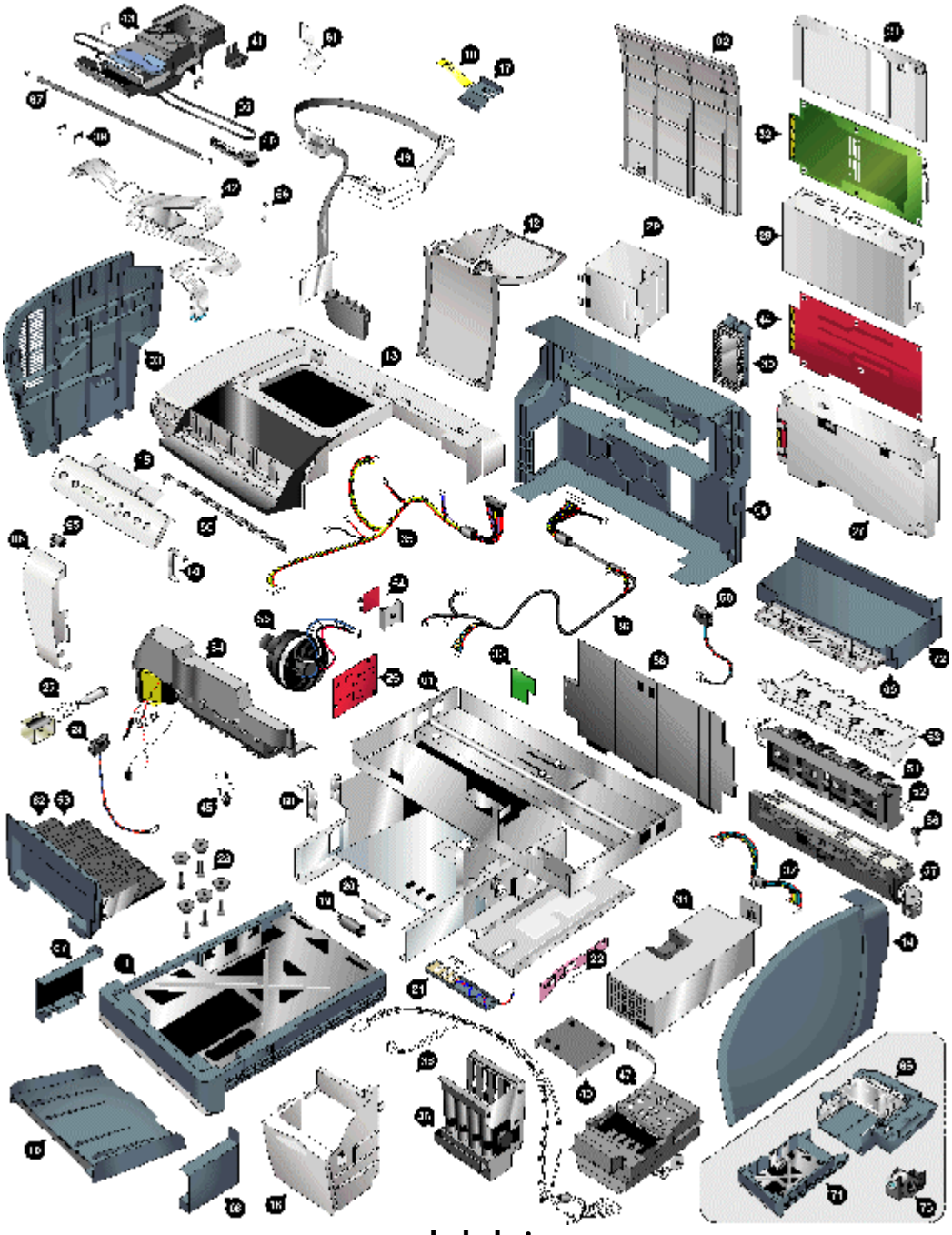
linefeed calibration page

To begin the linefeed calibration process:

1. Press the SELECT button (check-mark icon) on the LCD control panel.
2. Press the DOWN button (down arrow icon) until CONFIGURE DEVICE is highlighted, then press SELECT.
3. Press the DOWN button until PRINT QUALITY is highlighted, then press SELECT.
4. Press the DOWN button until LINEFEED CALIBRATION is highlighted, then press SELECT.

The linefeed calibration process is used to adjust the swath height error and line height.

exploded view



exploded view

s. no.	part name	part number	service level	bar code
1.	Bulkpack - Maxwell Base SVC	C8116-67001	NV	
2.	Door-Main Access SVC	C8116-67002	CREW	
3.	Cap - Side Left SVC	C8116-67003	NV	
4.	Cover Rear SVC	C8116-67004	NV	
5.	BELT, A-SIZE SVC	C8116-67005	V	
6.	Cover-Front Left SVC	C8116-67006	NV	
7.	Cover-Rail Left SVC	C8116-67007	NV	
8.	Cover-Rail Right SVC	C8116-67008	NV	
9.	Assy-Manual Trough SVC	C8116-67009	CREW	
10.	Assy-O/P Tray SVC	C8116-67010	CREW	
11.	Assy-Tray 2 SVC	C8116-67011	CREW	
12.	Assy-Door Access SVC	C8116-67012	CREW	
13.	Assy-Case Main SVC	C8116-67013	NV	
14.	Assy-Cap Right SVC	C8116-67014	NV	
15.	Assy-Keypanel SVC	C8116-67015	NV	
16.	Assy-Cover Front Right SVC	C8116-67016	NV	
17.	Stopper-Latch SVC	C8116-67017	NV	
18.	Label-Warranty Void SVC	C8116-67018	NV	
19.	Assy-Pick Roller SVC	C8116-67019	CREW	
20.	Assy-Separation Roller SVC	C8116-67020	CREW	
21.	Assy-MSS Tray2 SVC	C8116-67021	NV	
22.	SPRING-XBIAS, DUPLEXER SVC	C8116-67022	NV	

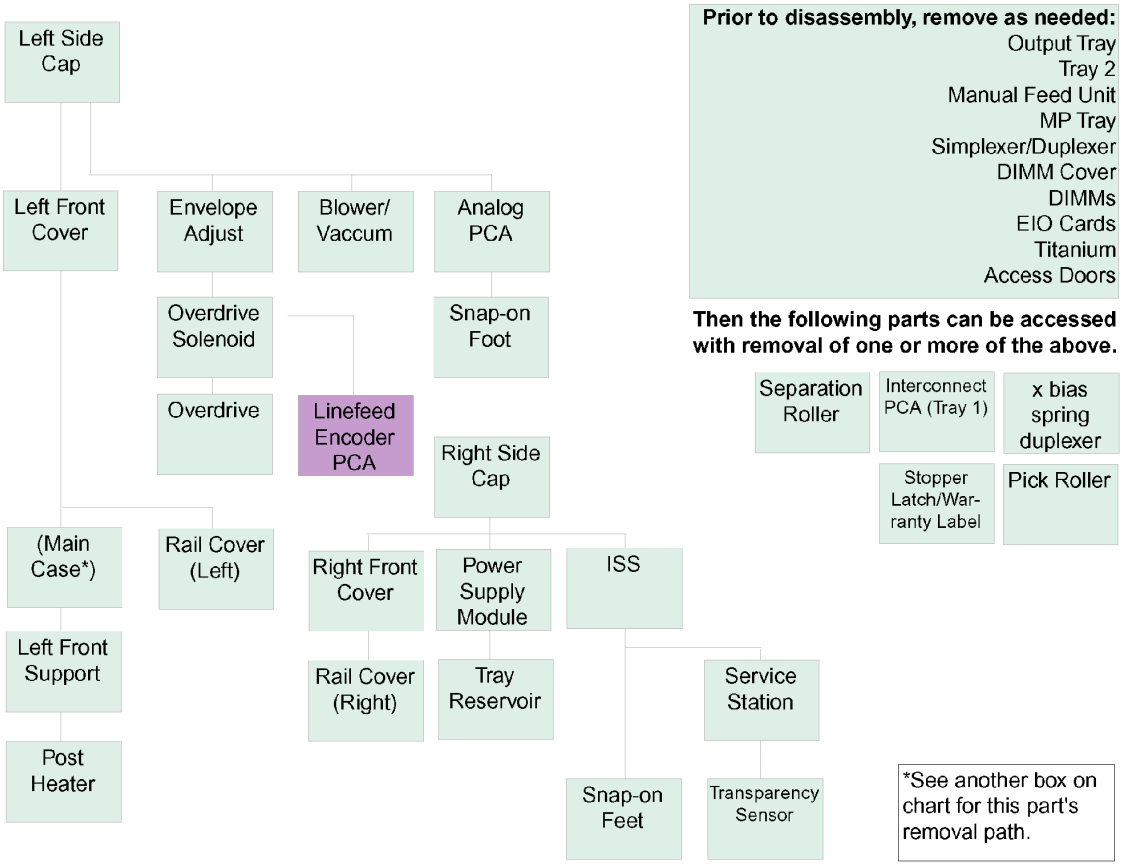
23.	Snap-on Foot SVC	C8116-67023	CREW	
24.	SENSOR-TRANSPARENCY SVC	C8116-67024	NV	
25.	SOLENOID-OVERDRIVE SVC	C8116-67025	NV	
26.	PCA-ANALOG, A-SIZE SVC	C8116-67026	NV	
27.	Box-Engine SVC	C8116-67027	NV	
28.	Box-Formatter SVC	C8116-67028	NV	
29.	Assy-Box-EIO SVC	C8116-67029	NV	
30.	Cover-DIMM SVC	C8116-67030	CREW	
31.	Cover-Formatter SVC	C8116-67031	NV	
32.	PCA-Compton SVC	C8116-67032	NV	
33.	PCA-Interconnect Tray1 SVC	C8116-67033	NV	
34.	Assy-PS Module SVC	C8116-67034	NV	
35.	Assy-Cable, Maxwell Left SVC	C8116-67035	NV	
36.	Assy-Cable Maxwell Right SVC	C8116-67036	NV	
37.	Harness 1-Power Supply SVC	C8116-67037	NV	
38.	Harness-Power On SVC	C8116-67038	NV	
39.	ASSY-FELT OILER, 4-PENSVC	C8116-67039	V	
40.	Tray-Reservoir SVC	C8116-67040	NV	
41.	COVER-CONNECTOR, 4-PEN SVC	C8116-67041	V	
42.	ASSY-TRAILING CABLE SVC	C8116-67042	V	
43.	Assy-Carriage SVC	C8116-67043	V	
44.	PCA-MAIN, OFFICE SVC	C8116-67044	V	
45.	Envelope Adjust SVC	C8116-67045	NV	
46.	ASSY-BELT TENSIONER SVC	C8116-67046	NV	

47.	ASSY-SERVICE STATION, 4-PEN SVC	C8116-67047	NV	
48.	ASSY-INK SUPPLY STATION, A-SIZE SVC	C8116-67048	NV	
49.	ASSY-REPLACEABLE IDS, A-SIZE SVC	C8116-67049	NV	
50.	ASSY-OVERDRIVE SVC	C8116-67050	NV	
51.	ASSY-CONVERGER GUIDE, FRONT SVC	C8116-67051	V	
52.	ASSY- CONVERGER W/ENCODER SVC	C8116-67052	V	
53.	ASSY-CONVERGER GUIDE, LOWER SVC	C8116-67053	V	
54.	ASSY POSTHEATER W/AEROSOL, A-SIZE SVC	C8116-67054	NV	
55.	Blower-Vacuum SVC	C8116-67055	NV	
56.	BEARING-CONVERGER ROLLER SVC	C8116-67056	V	
57.	Assy-Separation Trough SVC	C8116-67057	V	
58.	Tray 2/3-RP Guide SVC	C8116-67058	V	
59.	Assy-Edge Sensor SVC	C8116-67059	V	
60.	STRAP-BLOWER MOUNTING SVC	C8116-67060	NV	
61.	SHIELD-EMI, FLEX CABLE SVC	C8116-67061	NV	
62.	Assy-Simplexer SVC	C8116-67062	CREW	
63.	Assy-Duplexer SVC	C8116-67063	CREW	
64.	Assy-PCA Linefeed encoder SVC	C8116-67064	V	
65.	Ferrite Core CP SVC	C8116-67065	NV	
66.	SPRING-ENCODER SVC	C8116-67066	NV	
67.	ENCODER STRIP, A-SIZE SVC	C8116-67067	NV	
68.	Support-Front Left SVC	C8116-67068	NV	
69.	Titanium SVC	C8116-67069	NV	
70.	Assy-Elevator Drive SVC	C8116-67070	NV	

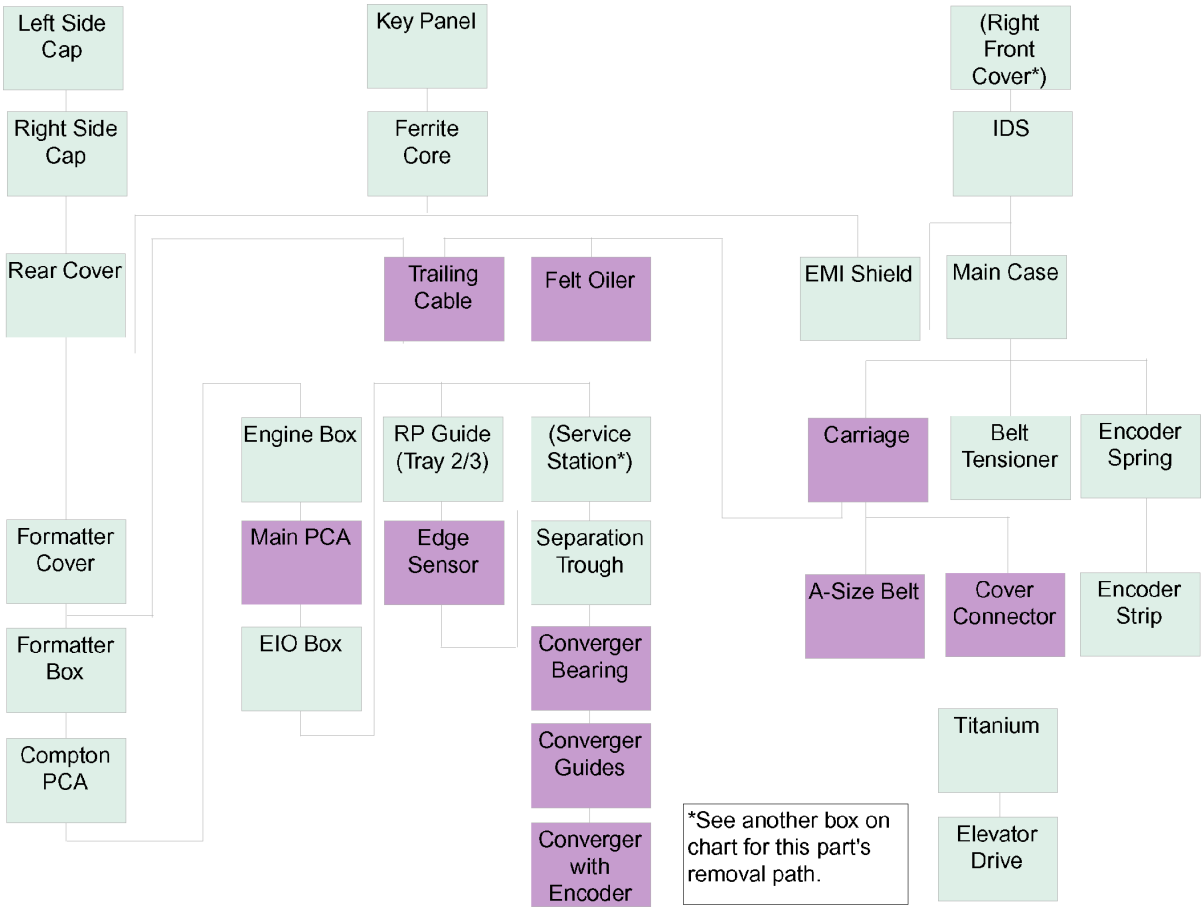
71.	Assy-Tray 3 SVC	C8116-67071	CREW	
72.	MP Tray 1 SVC	C8116-67072	CREW	

exploded view parts

teardown tree



hp 3000 teardown tree, part 1



hp 3000 teardown tree, part 2

predicted high failure rate parts

These parts need repair on a more frequent basis.

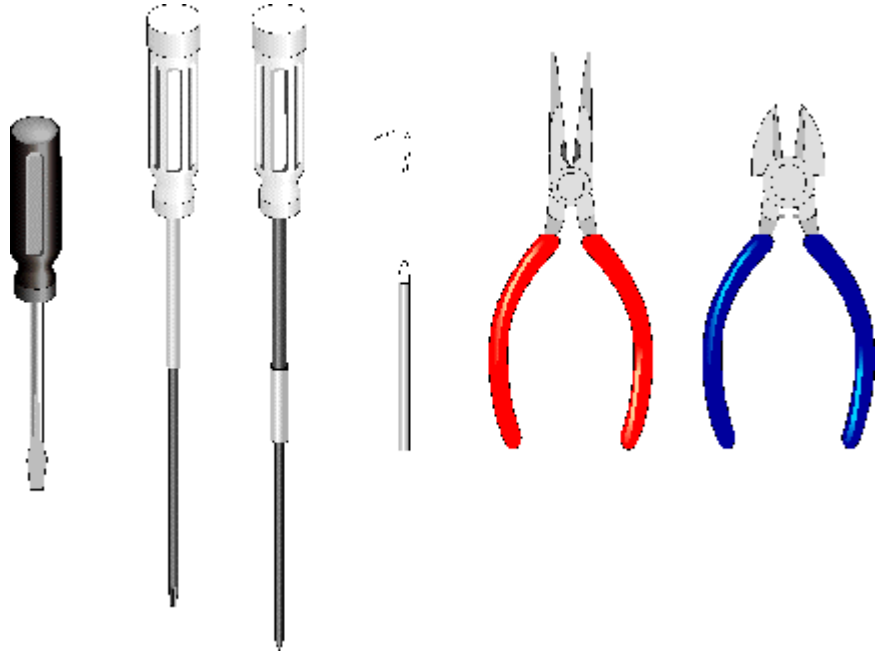
part name	part number	AFR%
Door - Main Access SVC	C8116-67002	10
Assy - O/P Tray SVC	C8116-67010	10
Assy - Tray 2 SVC	C8116-67011	10
Assy - Door Access SVC	C8116-67012	10
Label - Warranty Void SVC	C8116-67018	8
Bulkpack - Maxwell Base SVC	C8116-67001	7
ASSY-REPLACEABLE IDS,A-SIZE SVC	C8116-67049	7
ASSY-SERVICE STATION,4-PEN	C8116-67047	6
Assy - Simplexer SVC	C8116-67062	6
Cap - Side Left SVC	C8116-67003	5
Cover - Rear SVC	C8116-67004	5
Cover - Front Left SVC	C8116-67006	5
Assy - Case Main SVC	C8116-67013	5
Assy - Cap Right SVC	C8116-67014	5
Assy - Keypanel SVC	C8116-67015	5
Assy - Cover Front Right SVC	C8116-67016	5
Stopper - Latch SVC	C8116-67017	5
Cover - DIMM SVC	C8116-67030	5
ASSY-INK SUPPLY STATION, A-SIZE SVC	C8116-67048	5

predicted high failure rate parts (in order of AFR%)

Parts not listed in the above table have an AFR% of less than 5.

tools for repair

tools for repair

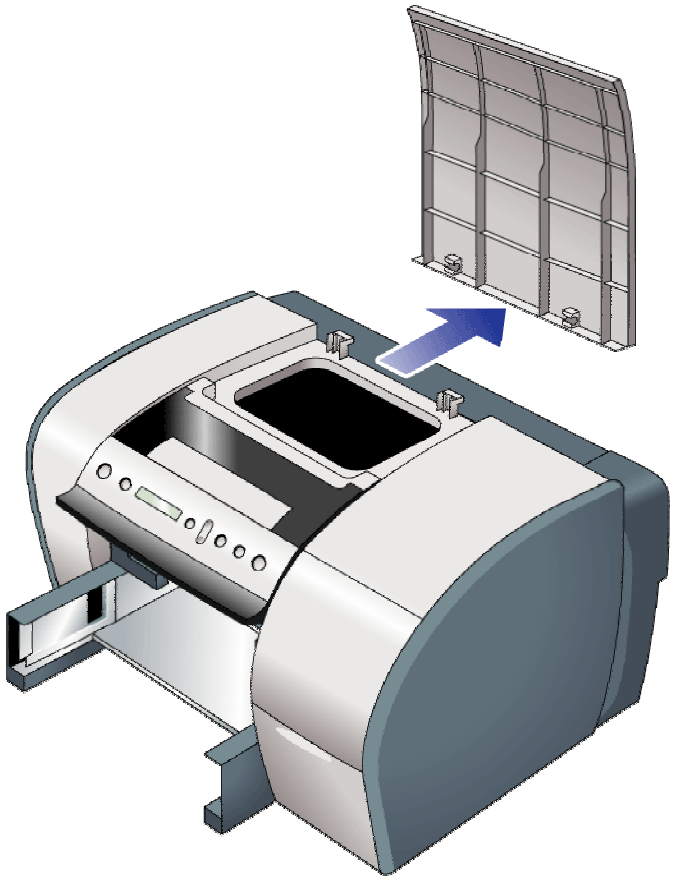


The tools required to disassemble the printer are:

1. flathead screwdriver
2. long torx drivers (T10 and T20)
3. probe
4. phillips-head screwdriver
5. needle-nosed and standard pliers

Door-Main Access SVC

C8116-67002

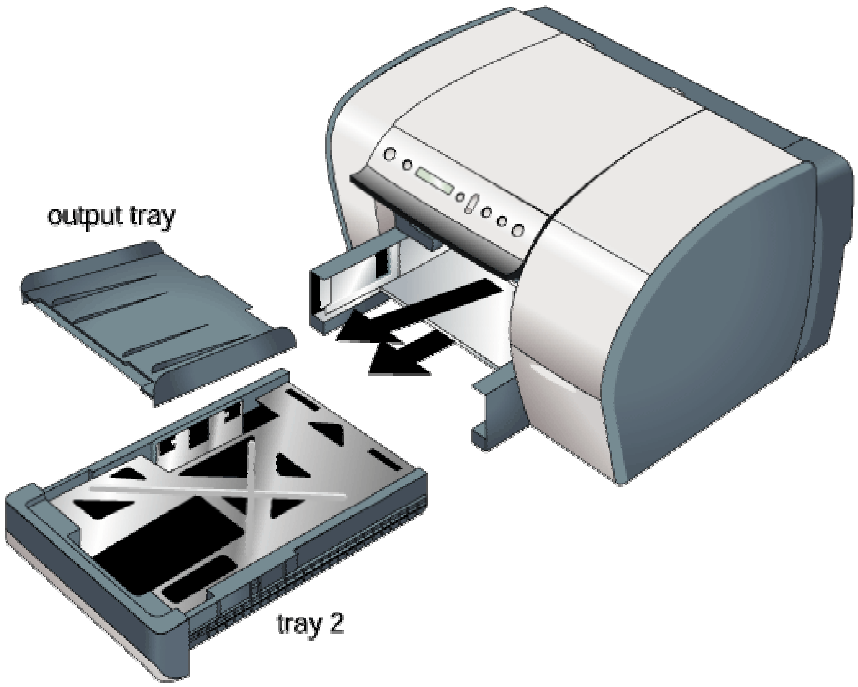


Remove this part by following these steps:

1. Open the door.
2. Note the orientation of the plastic hinges. Guard against breakage.
3. From the back of the printer with hands low on the door, pull the door straight back to release the hinges.

Assy-O/P Tray SVC

C8116-67010

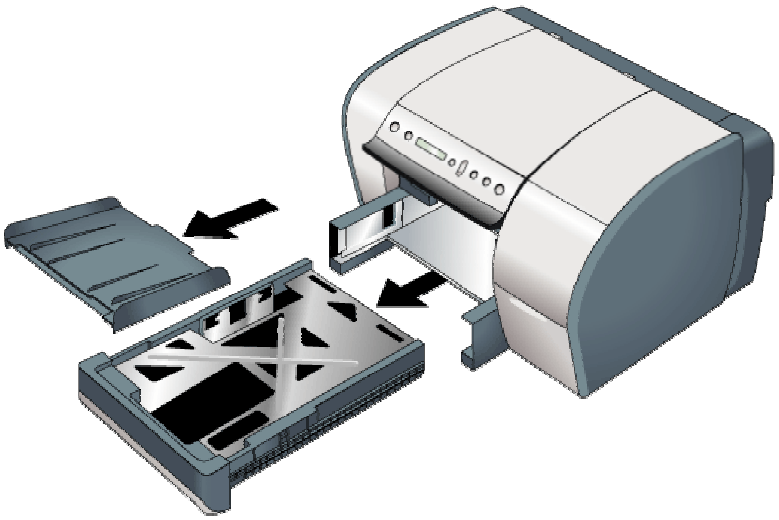


Remove the part by following these steps:

1. Remove the output tray by pulling it straight out of the printer (do not lift it).

Assy-Tray 2 SVC

C8116-67011

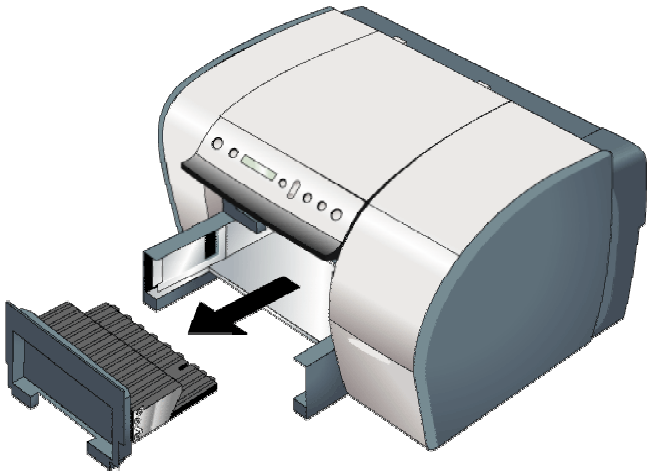


Remove the part by following these steps:

1. Slide tray 2 straight out.

Assy-Simplexer SVC

C8116-67062

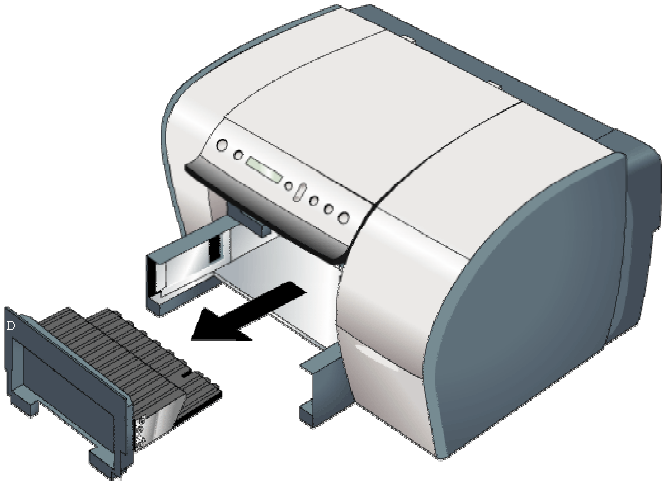


Remove the part by following these steps:

1. A D printed in the upper left corner indicates a duplexer is installed, otherwise it is a simplexer.
2. Grab the center of the bottom of the simplexer/duplexer and pull it straight out.

Assy-Duplexer SVC

C8116-67063

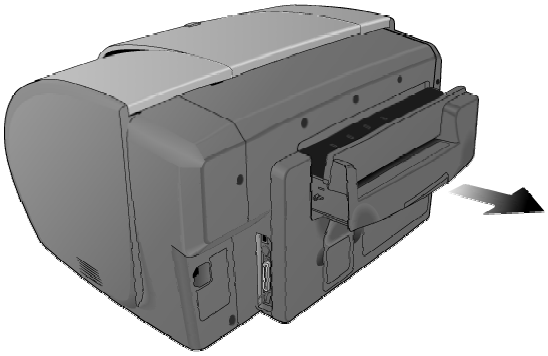


Remove the part by following these steps:

1. A D printed in the upper left corner indicates a duplexer is installed, otherwise it is a simplexer.
2. Grab the center of the bottom of the simplexer/duplexer and pull it straight out.

Assy-Manual Trough SVC

C8116-67009

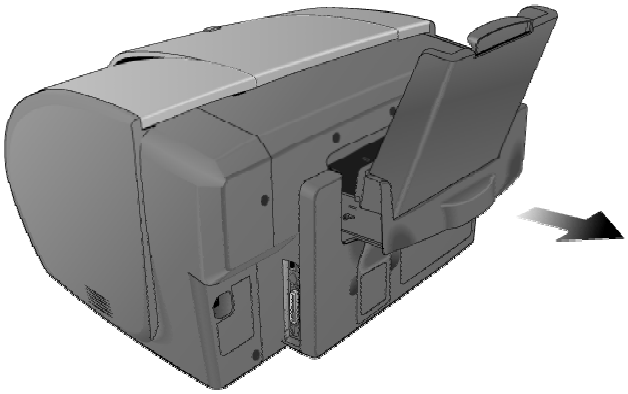


The manual trough is in the back of the printer. This same bay is used for the MP Tray 1.

Grab the center of the bottom of the manual trough (tray 1) and pull it straight out.

MP Tray 1 SVC

C8116-67072

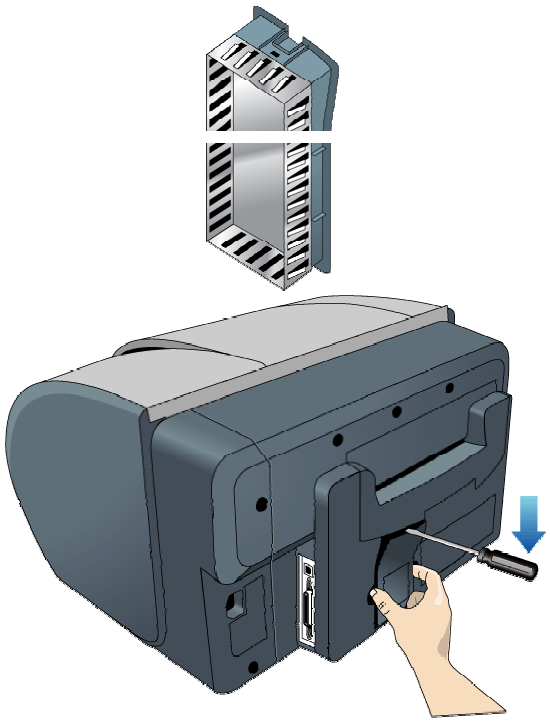


The manual trough is in the back of the printer. This same bay is used for the MP Tray 1.

Grab the center of the bottom of the manual trough (tray 1) and pull it straight out.

Cover-DIMM SVC

C8116-67030

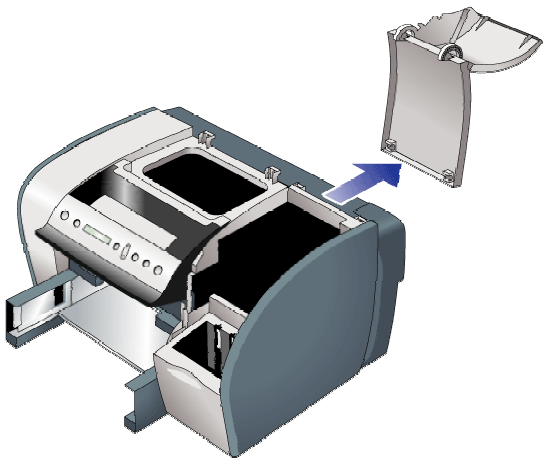


Remove the part by following these steps:

1. The DIMM cover is just below tray 2 in the back of the printer.
2. Insert a small, flathead screwdriver into the slot at the top of the cover.
3. Push down gently and remove the DIMM cover.

Assy-Door Access SVC

C8116-67012

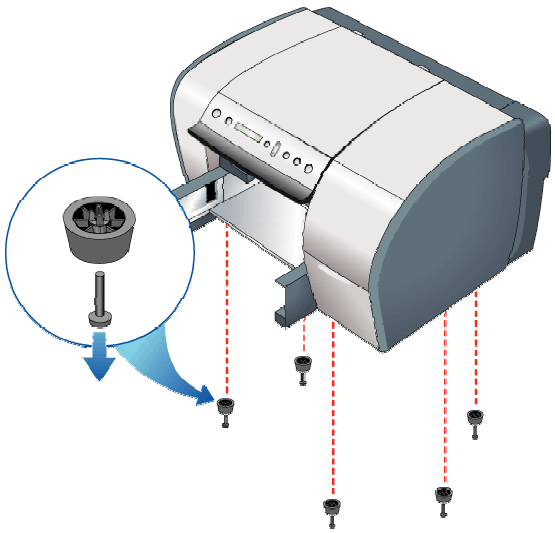


Remove the part by following these steps:

1. Fully open the access door.
2. Note how the upper part of the door is attached to the hinge unit.
3. Pull straight back, applying pressure close to the hinges, to remove the door without damaging the hinges.

Snap-on Foot SVC

C8116-67023



Remove these first:

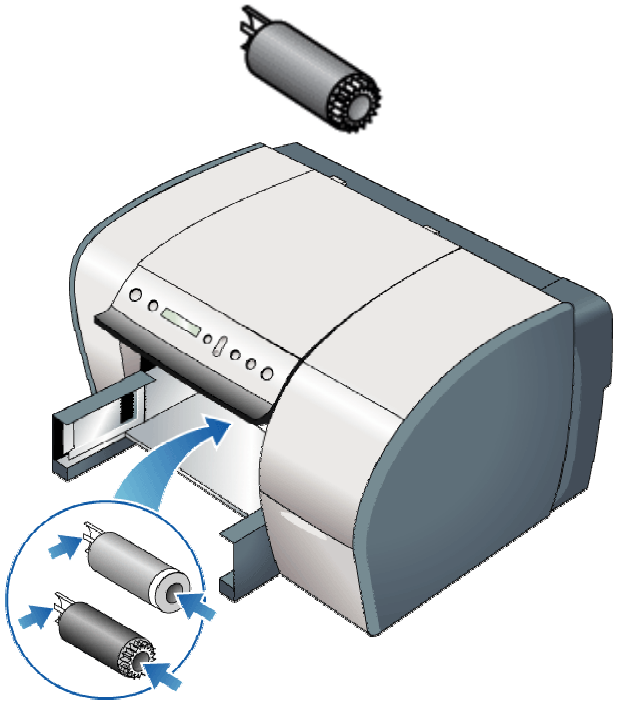
1. Door-Main Access SVC
2. Assy-Door Access SVC
3. Assy-Cap Right SVC
4. Cap - Side Left SVC
5. Assy-Cover Front Right SVC

Remove the part by following these steps:

1. Use needlenosed pliers to push the core of the foot down from the top of the foot (inside the printer).
2. Once the core is removed, the foot can be easily pulled from the printer.

3. Assy-Pick Roller SVC

C8116-67019



First, remove these parts:

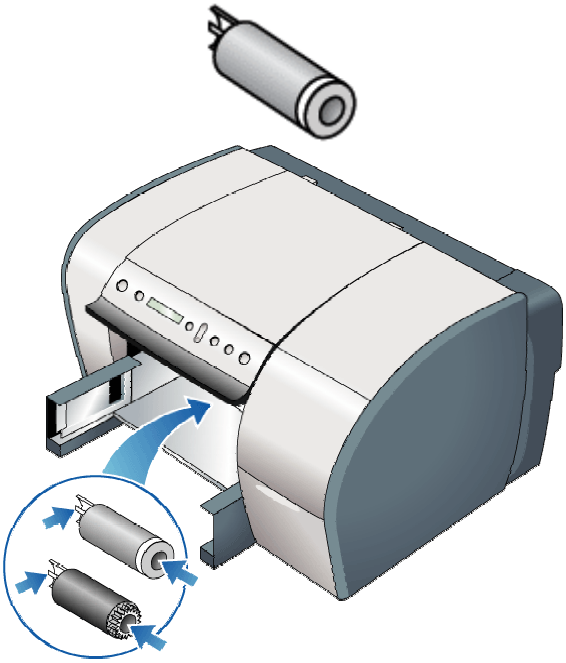
1. Output Tray
2. Tray 2
3. Simplexer/Duplexer.

Then remove this part by following these steps:

1. Reach in through the Simplexer/Duplexer bay to access the roller.
2. Pinch the plastic tab at the left end of the roller and slide it off the shaft.

Assy-Separation Roller SVC

C8116-67020



First, remove these parts:

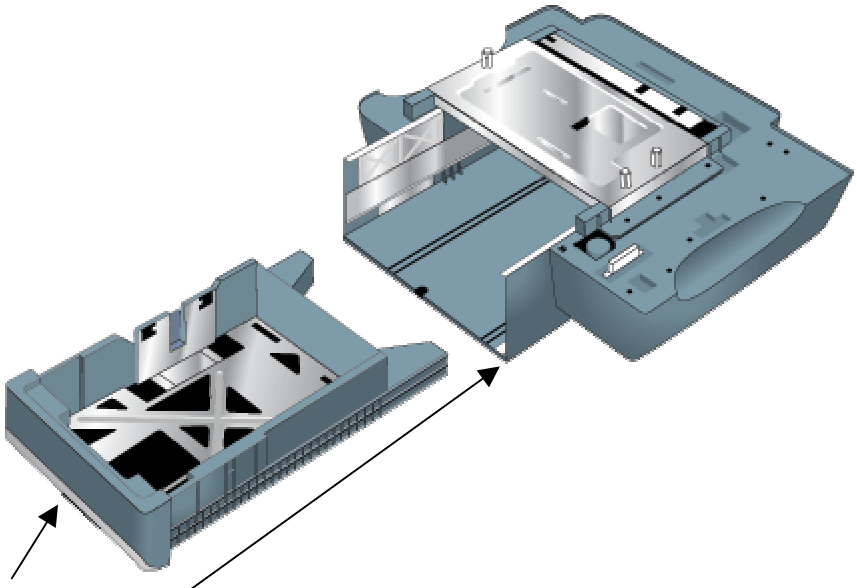
1. Output Tray
2. Tray 2
3. Simplexer/Duplexer.

Then remove this part by following these steps:

1. Reach in through the Simplexer/Duplexer bay to access the roller.
2. Pinch the plastic tab at the left end of the roller and slide it off the shaft.

Assy-Tray 3 SVC

C8116-67071

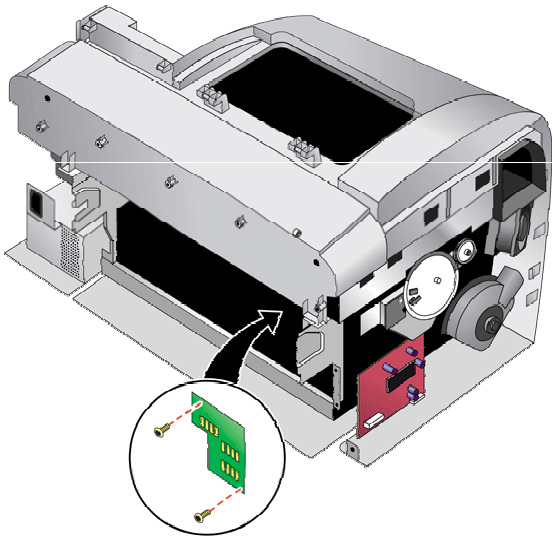


Tray 3 is in Titanium.

Simply slide Tray 3 out of Titanium.

PCA-Interconnect Tray1 SVC

C8116-67033



First, remove these parts:

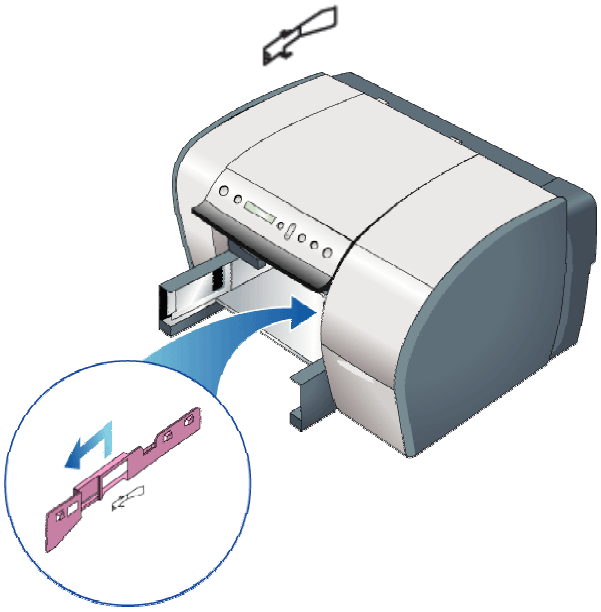
Tray 1

Then remove this part by following these steps:

1. Remove the two screws securing the PCA.
2. Pull the wire connector from the back of the PCA.

SPRING-XBIAS, DUPLEXER SVC

C8116-67022



First, remove these parts:

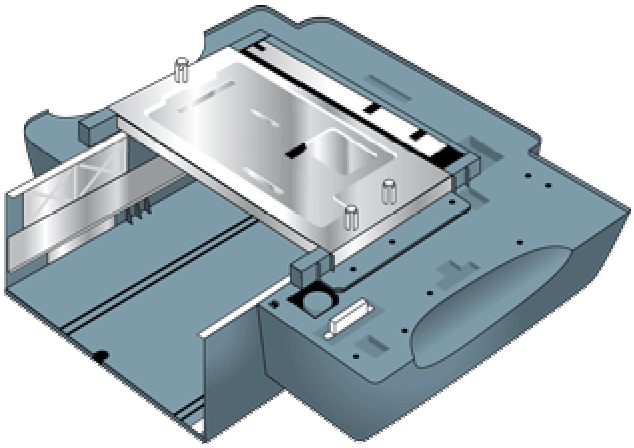
1. Output Tray
2. Duplexer

Then remove this part by following these steps:

1. The spring is on the right side behind the plastic rail that the duplexer slides into.
2. To remove the plastic rail, you need to slide it toward the center of the printer, but first, you need to release a locking tab. The locking tab is located in the center of the plastic rail.
3. Use a flat screwdriver to gently bend the plastic tab away from the wall (toward the center of the duplexer bay) while gently pushing the rail toward the center of the printer. When the tab is bent out just enough, the rail will slide forward.
4. Take off the rail.
5. Maneuver the spring out of the metal slots.

Titanium SVC

C8116-67069

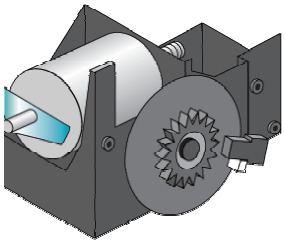


Remove the part by following these steps:

1. Use two people to lift the printer.
2. Lift the printer off of Titanium.

Assy-Elevator Drive SVC

C8116-67070



First, remove these parts:

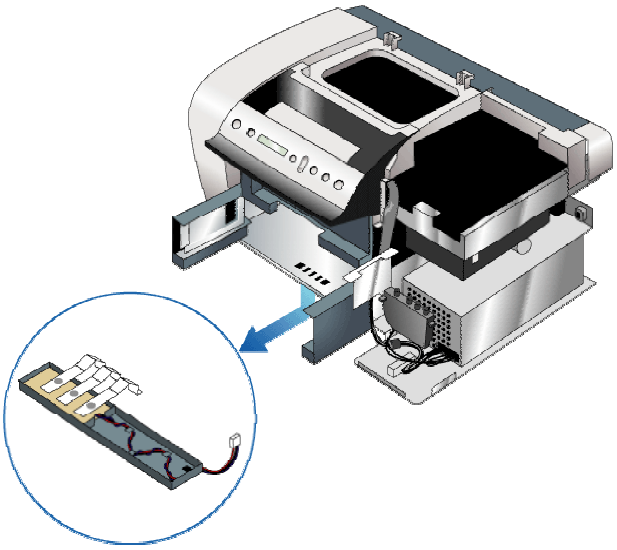
Titanium

Then remove this part by following these steps:

1. Remove the paper tray from Titanium.
2. Turn over Titanium and find the elevator drive cover.
3. Remove the four screws in the cover.
4. Ease out the elevator drive.
5. Separate the wire connector going to the drive motor.

Assy-MSS Tray2 SVC

C8116-67021



First, remove these parts:

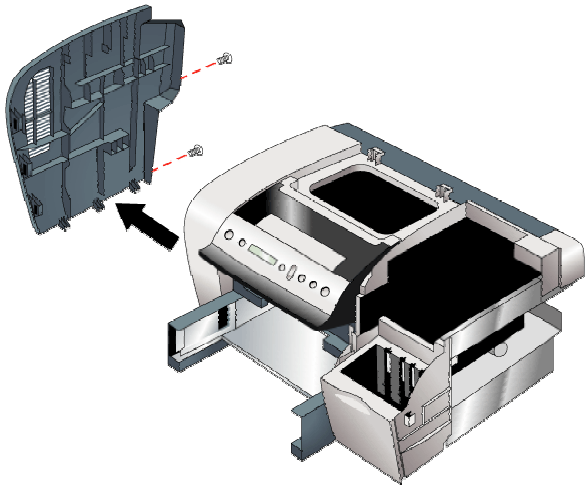
1. Output Tray
2. Tray 2
3. The media sensor is attached to the bottom of the printer, under Tray 2.

Then remove this part by following these steps:

1. Separate the wire connector leading to the media size sensor assembly.
2. Use needlenosed pliers to release the tabs securing the media size sensor assembly to the underside of the printer.

Cap - Side Left SVC

C8116-67003

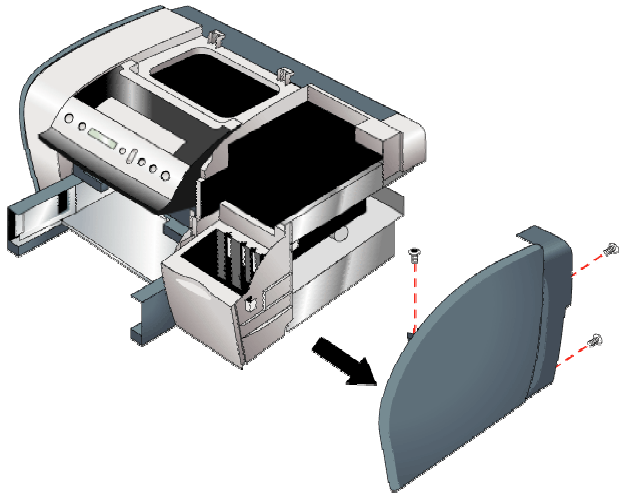


Remove the part by following these steps:

1. Remove two screws from the back.
2. Pull the cover straight back.

Assy-Cap Right SVC

C8116-67014

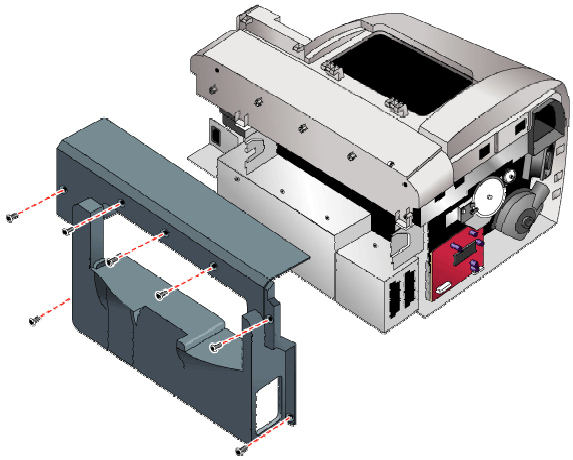


Remove the part by following these steps:

1. Remove three screws: two from the back and one from the top (inside).
2. Pull the cover straight back.

Cover Rear SVC

C8116-67004



First, remove these parts:

1. Door-Main Access SVC
2. Assy-Door Access SVC

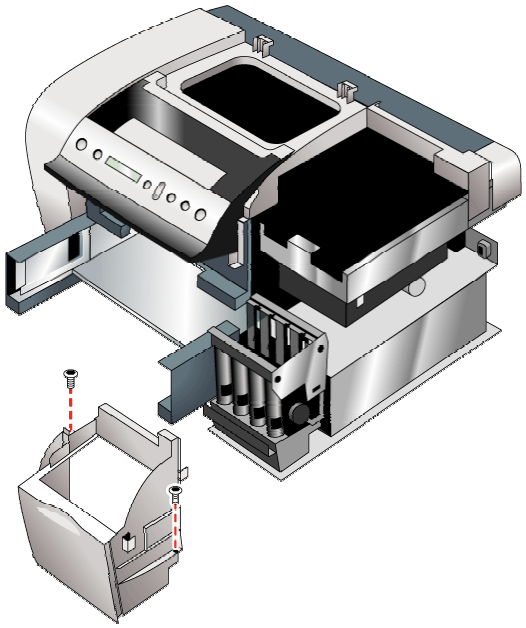
3. Assy-Cap Right SVC
4. Cap - Side Left SVC

Then remove this part by following these steps:

1. Remove five screws: three from the top, one from the left side, and one from the bottom.
2. Note that the DIMM cover will be removed with the back cover.
3. Note the plastic connections in the center of the back cover window. Guard against breakage.
4. Gently pull the cover straight back, minding any installed DIMM cards.

Assy-Cover Front Right SVC

C8116-67016



First, remove these parts:

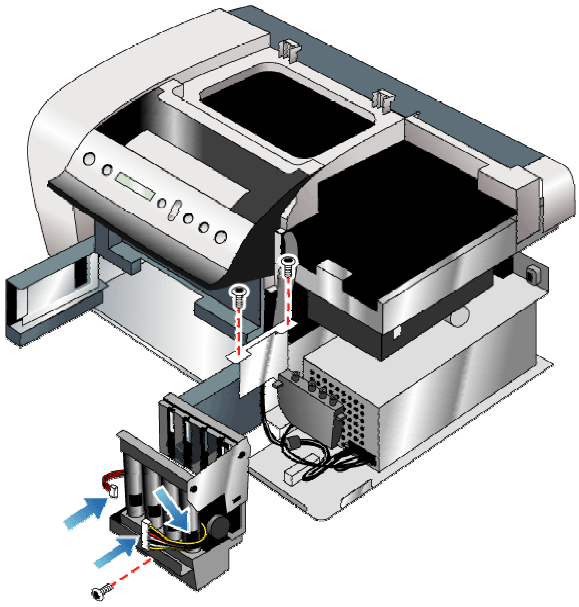
1. Ink Cartridges
2. Assy-Door Access SVC
3. Assy-Cap Right

Then remove this part by following these steps:

1. Remove two screws, one on the right side of the cover and one on the left.
2. Rock cover forward and remove.

ASSY-INK SUPPLY STATION, A-SIZE SVC

C8116-67048



First, remove these parts:

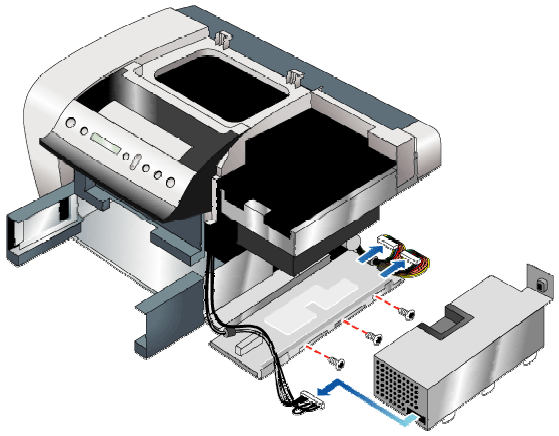
1. Ink Cartridges
2. Assy-Door Access SVC
3. Assy-Cap Right SVC
4. Cover Right Front SVC

Then remove this part by following these steps:

1. Separate the two wire connectors in the front of the ISS.
2. Pull the two wire connectors from the corner and right side of the ISS.
3. Remove the groundwire screw from the bottom center of the ISS.
4. Remove the two screws on the top left of ISS to free up the removable ink delivery system (RIDS) on the left side of the ISS.
5. Lift off the RIDS and gently set it aside.
6. Grasp the front, top of the ISS firmly and ease it out.

Assy-PS Module SVC

C8116-67034



First, remove these parts:

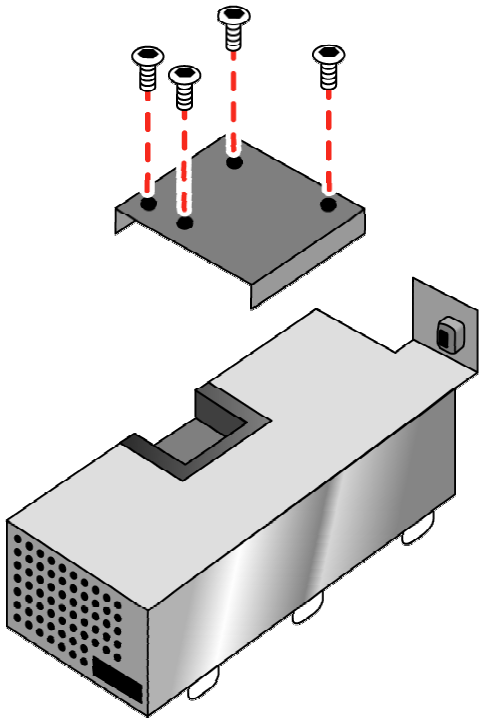
1. Assy-Door Access SVC
2. Assy-Cap Right SVC

Then remove this part by following these steps:

1. Pull the wire connector from the front of the PS module.
2. Free the wires in the back of the PS module from their retaining clips and pull the two wire connectors from the back.
3. Remove one screw on the back of the printer and three from the right side.
4. Slide the PS module straight out of the printer to the right.

Tray-Reservoir SVC

C8116-67040



First, remove these parts:

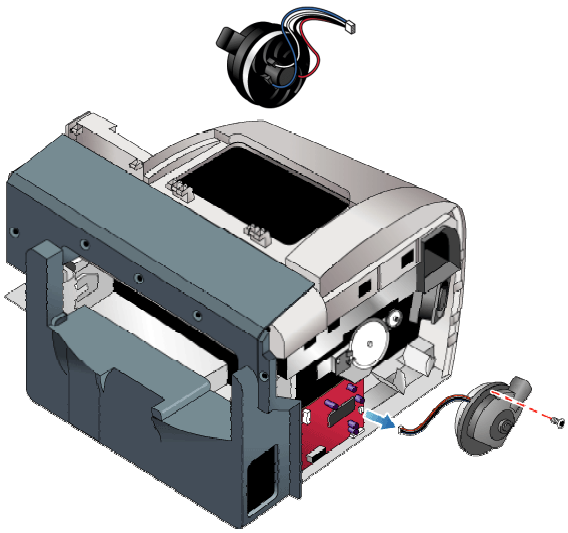
1. Assy-Door Access SVC
2. Assy-Cap Right SVC
3. Assy-PS Module SVC

Then remove this part by following these steps:

1. Remove the two screws that secure the tray to the top of the PS module.

Blower-Vacuum SVC

C8116-67055



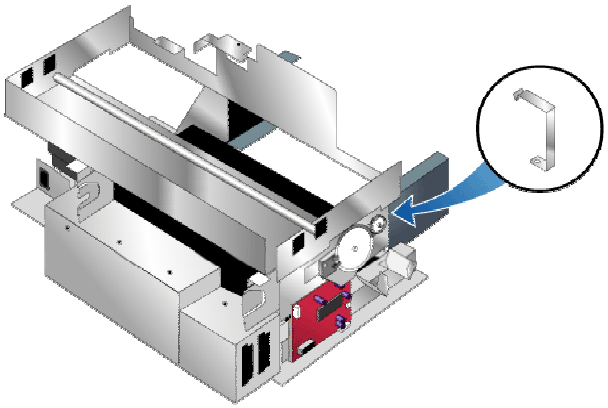
First remove Assy Cap-Side Left (C8116-67003).

Then remove this part by following these steps:

1. Disconnect the vacuum wires from the PCA-Analog.
2. Remove one screw from the top of the vacuum and move the strap.
3. Remove the vacuum blower from the printer.
4. The plastic vacuum blower cap can be separated from the metal body.

5. STRAP-BLOWER MOUNTING SVC

C8116-67060



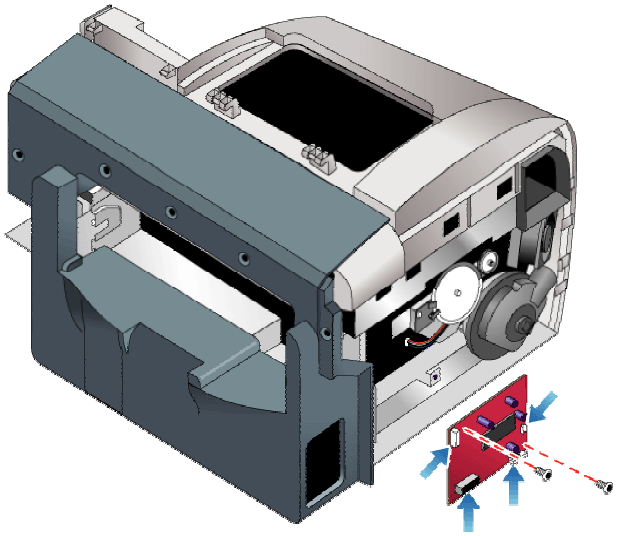
Remove the Cap - Side Left SVC and Blower-Vacuum SVC.

Then remove this part by following these steps:

1. With the strap hanging down, use the needle-nose pliers to squeeze the locking-tab end of the strap.
2. Ease the locking-tab end up through the slot.

PCA-ANALOG, A-SIZE SVC

C8116-67026



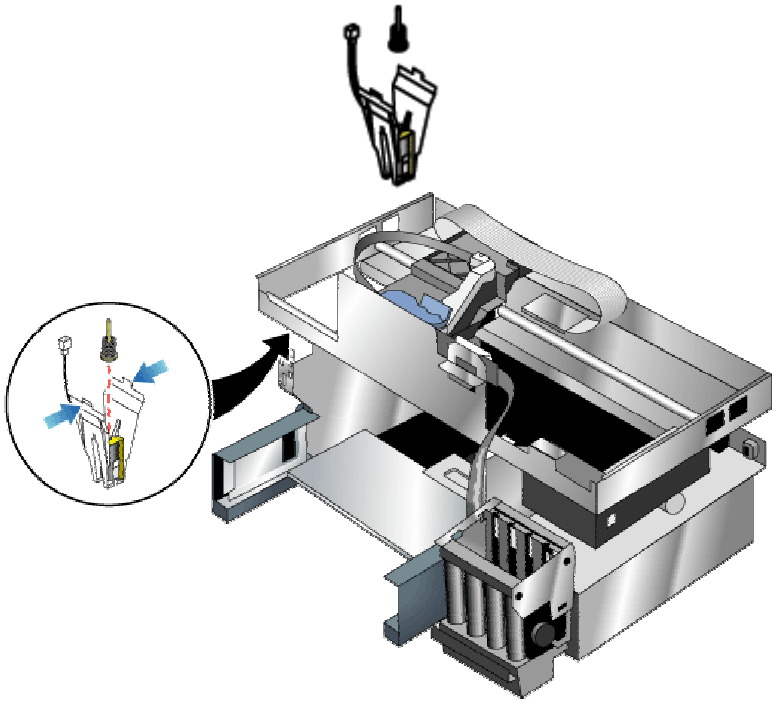
First remove Assy Cap-Side Left (C8116-67003).

Then remove this part by following these steps:

1. Pull the six wire connectors from the PCA.
2. Remove one screw from the top of the PCA and one from the side.
3. Remove the PCA from the printer (front first to free it from its retainer).

Envelope Adjust SVC

C8116-67045



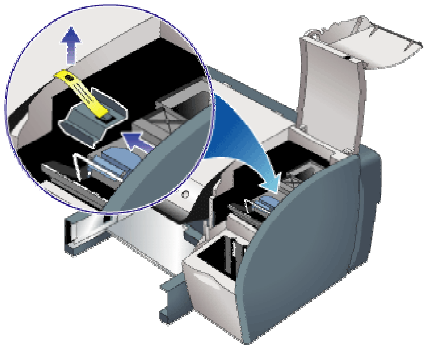
Remove the Cap-Side Left to access the envelope adjust solenoid.

Then remove this part by following these steps:

1. Separate the wire connector leading to the solenoid.
2. Squeeze the front and back of the plastic cage surrounding the solenoid.
3. The envelope adjust solenoid will easily come out. The spring, rod, and actuator are held together only by tension when installed. As soon as they are removed, they will tumble apart.

Label-Warranty Void SVC

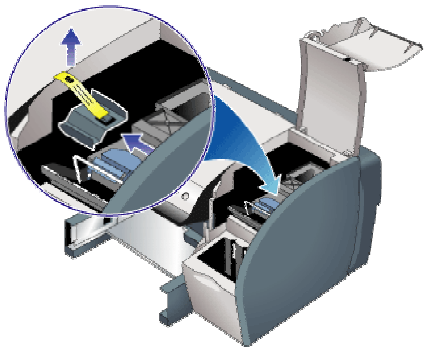
C8116-67018



Peel off the label prior to removing the stopper latch.

Stopper-Latch SVC

C8116-67017

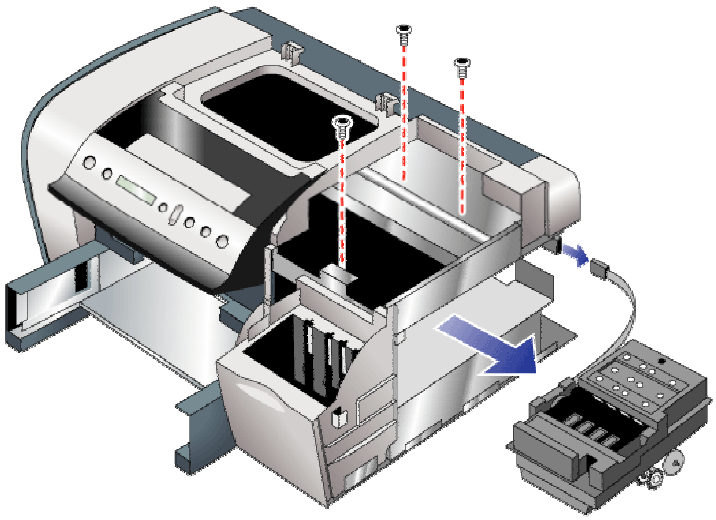


Remove the warranty void label.

Then slide out the stopper latch.

ASSY-SERVICE STATION, 4-PEN SVC

C8116-67047



First, remove these parts:

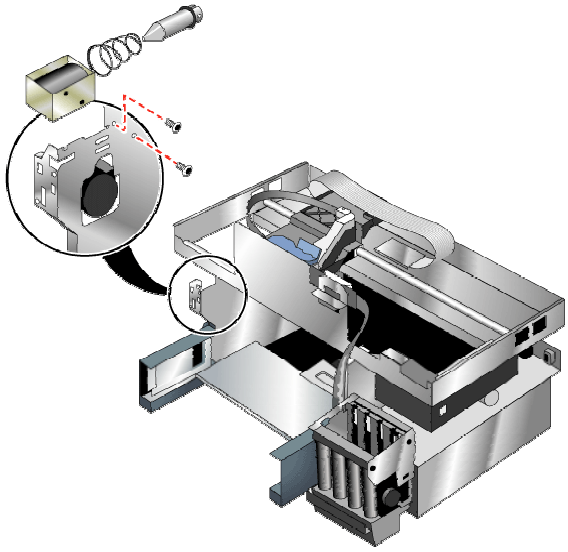
1. Assy-Door Access SVC
2. Access Cover
3. Right Cap
4. Release the carriage from its locked position by following the appropriate procedure (with power or without power on page 5-95). Slide the carriage to the left out of the way of its home area.

Then remove this part by following these steps:

1. Follow the wire harness leading from the Service Station Assy to two wire connectors. Unplug those two connectors.
2. With a long screwdriver, reach through the main case toward the back of the printer to remove two screws that secure the top of the Service Station Assy to the printer frame.
3. Remove one additional similar screw from the printer frame near the front of the printer in the carriage home area. The Service Station Assy will drop down toward the power supply.
4. Slide the Service Station Assy out of the printer with wires attached.

SOLENOID-OVERDRIVE SVC

C8116-67025



First, remove these parts:

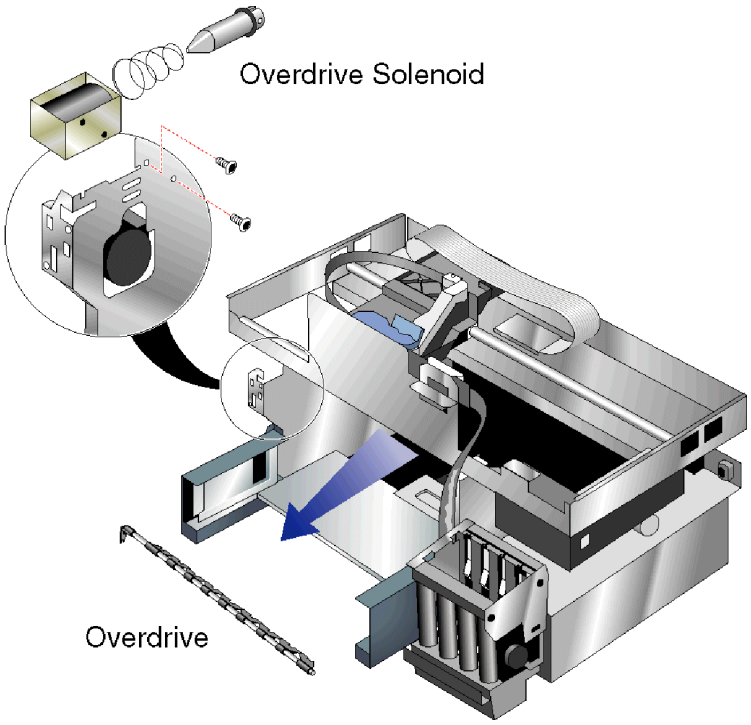
Cap - Side Left SVC

Then remove this part by following these steps:

1. Separate the wire connector leading to the solenoid.
2. Remove the two screws that secure the solenoid to the printer (inside the Simplexer/Duplexer bay).
3. Remove the solenoid from the printer.

ASSY-OVERDRIVE SVC

C8116-67050



First, remove these parts:

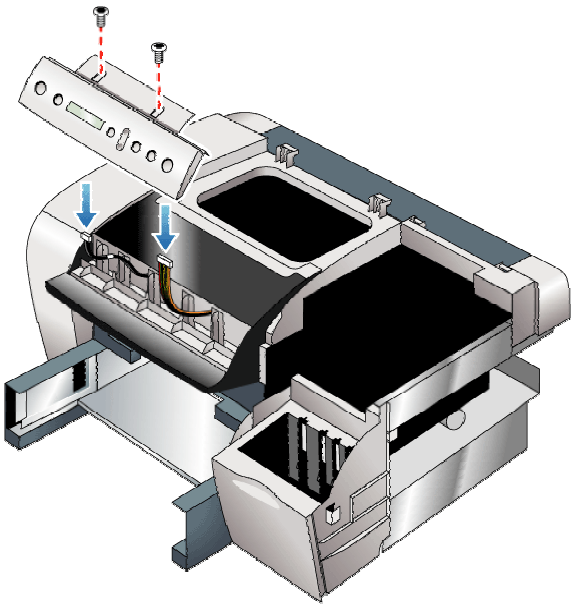
1. Cap - Side Left SVC
2. SOLENOID-OVERDRIVE SVC

Then remove this part by following these steps:

1. Reach in through the Simplexer/Duplexer bay and grasp the center of the overdrive.
2. Slide it to the left and the right side of the shaft will be free.
3. Note the flat slot on the left end of the shaft. Slide it out of the left side.

Assy-Keypanel SVC

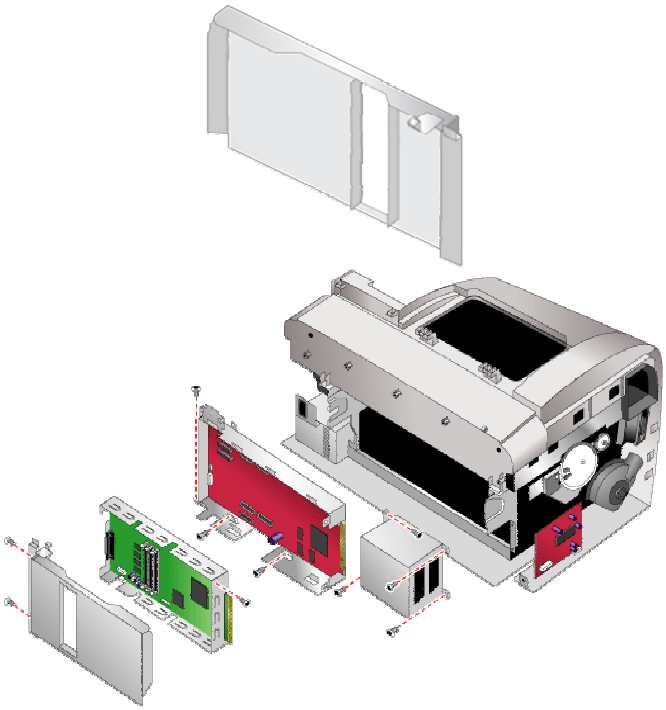
C8116-67015



1. Open the Main Access Door
2. Remove the two screws securing the Keypanel Assy.
3. Tilt the Keypanel Assy forward and pull the two wire connectors (and one wire retainer) from the assembly.
4. Continue tilting the Keypanel Assy forward and remove it from the printer.

Cover-Formatter SVC

C8116-67031



First, remove these parts:

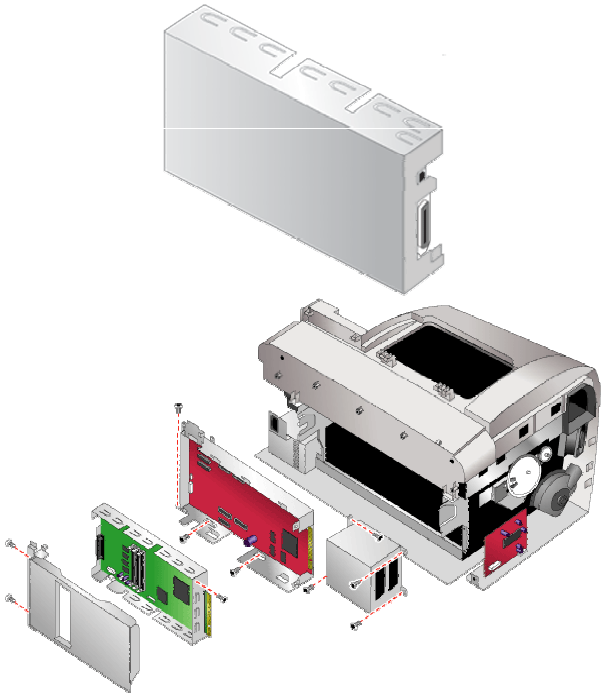
1. Door-Main Access SVC
2. Assy-Door Access SVC
3. Assy-Cap Right SVC
4. Cap - Side Left SVC
5. Cover Rear SVC

Then remove this part by following these steps:

1. Remove the four screws from the left side of the formatter box.
2. Slide the formatter cover to the left and remove it.

Box-Formatter SVC

C8116-67028



First, remove these parts:

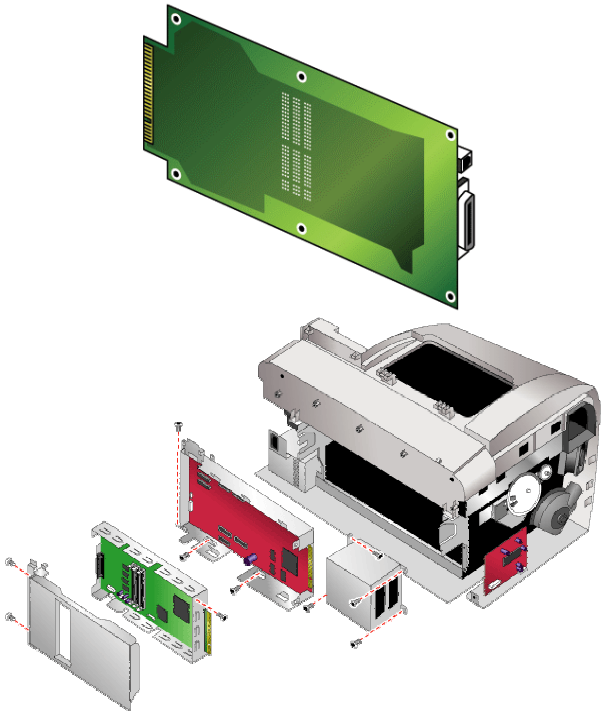
1. Door-Main Access SVC
2. Assy-Door Access SVC
3. Assy-Cap Right SVC
4. Cap - Side Left SVC
5. Cover Rear SVC
6. Cover-Formatter SVC

Then remove this part by following these steps:First, remove these parts:

1. Pull the two wire connectors from the Compton PCA.
2. Remove one screw from the lower right inside corner of the formatter box.
3. Remove one screw from the upper right outside corner of the formatter box.
4. Remove the formatter box, including the Compton PCA.

PCA-Compton SVC

C8116-67032



First, remove these parts:

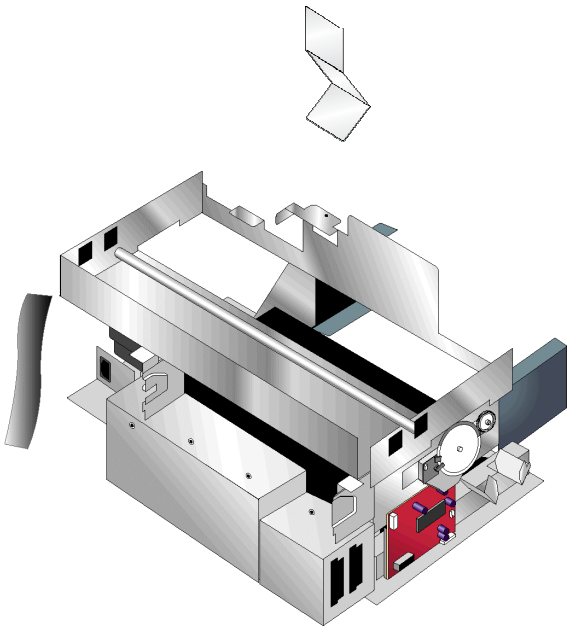
1. Door-Main Access SVC
2. Assy-Door Access SVC
3. Assy-Cap Right SVC
4. Cap - Side Left SVC
5. Cover Rear SVC
6. Cover-Formatter SVC
7. Box-Formatter SVC

Then remove the PCA from the box by following these steps:

1. Removing the six screws securing the PCA to the box.
2. Lift it out of the box by the parallel connector on the left side.

SHIELD-EMI, FLEX CABLE SVC

C8116-67061



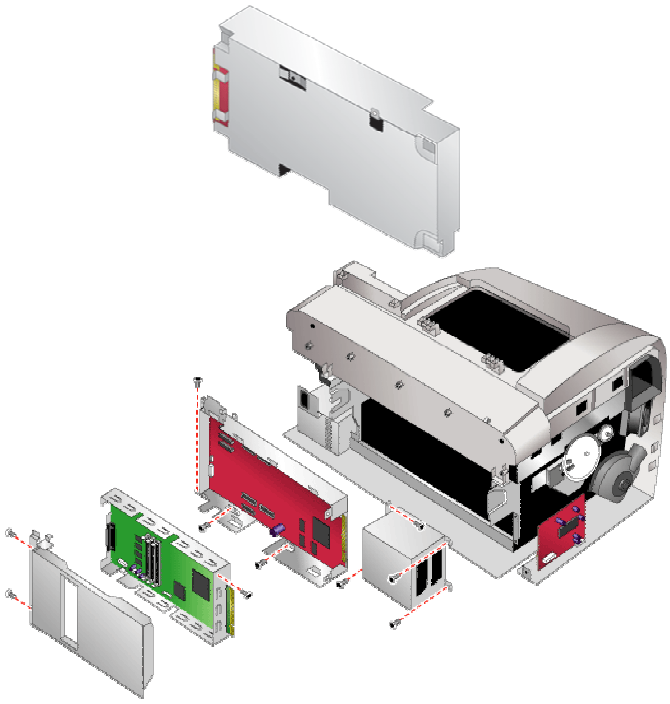
Before removing the EMI shield, remove these parts:

1. Door-Main Access SVC
2. Assy-Door Access SVC
3. Assy-Cap Right SVC
4. Cap - Side Left SVC
5. Cover Rear SVC
6. Cover-Formatter SVC

Remove the EMI flex cable shield.

Box-Engine SVC

C8116-67027



First, remove these parts:

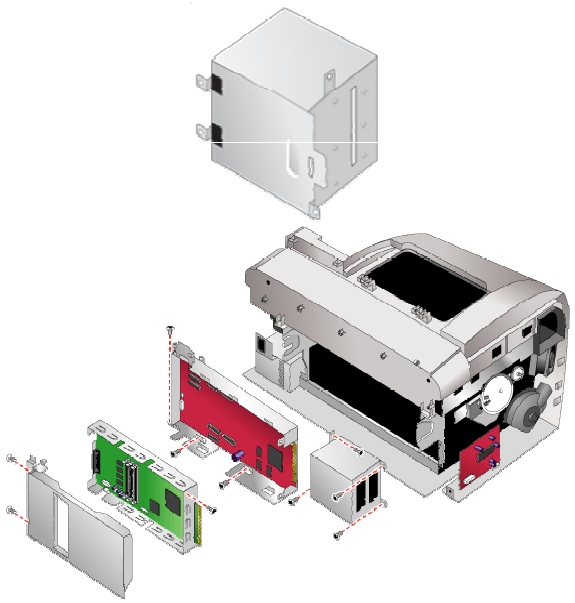
1. Door-Main Access SVC
2. Assy-Door Access SVC
3. Assy-Cap Right SVC
4. Cap - Side Left SVC
5. Cover Rear SVC
6. Cover-Formatter SVC
7. Box-Formatter SVC

Then remove this part by following these steps:

1. Disconnect the two ribbon cables from the main PCA inside the engine box.
2. Slide the ribbon connectors up through the top of the engine box.
3. Pull the wire connectors (six of them) from the main PCA.
4. Remove one screw from the outside upper right corner of the engine box and one from the inside lower right corner.
5. Slide the engine box to the left and out of the printer with the PCA inside (feeding all the wires through the bottom of the box.
6. Remove the main PCA from the engine box by removing the seven screws that secure it to the box.

Assy-Box-EIO SVC

C8116-67029



First, remove these parts:

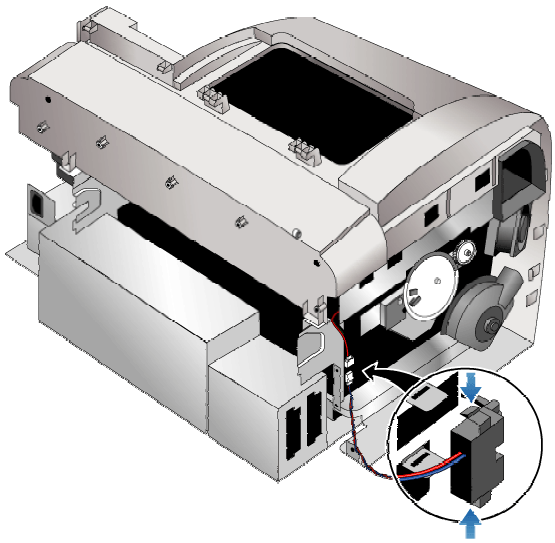
1. Door-Main Access SVC
2. Assy-Door Access SVC
3. Assy-Cap Right SVC
4. Cap - Side Left SVC
5. Cover Rear SVC
6. Cover-Formatter SVC
7. Box-Formatter SVC
8. PCA-Compton SVC
9. Box-Engine SVC
10. PCA-MAIN, OFFICE SVC

Then remove this part by following these steps:

Remove the four screws holding the EIO Assy Box to the printer.

SENSOR-TRANSPARENCY SVC

C8116-67024



First, remove these parts:

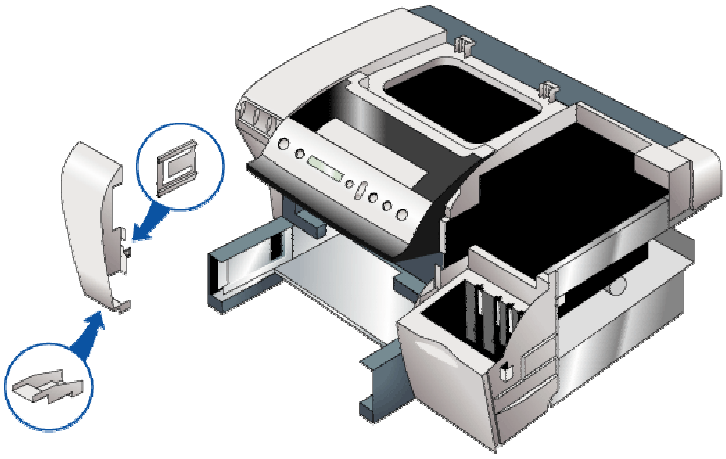
1. Assy-Cap Right SVC
2. Ink Service Station SVC

Then remove this part by following these steps:

1. The transparency sensor passes through the wall behind the ink service station assy.
2. Pull the wire connector from the sensor.
3. Pull the sensor out.

Cover-Front Left SVC

C8116-67006



First, remove these parts:

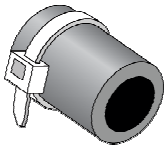
Cap - Side Left SVC

Then remove this part by following these steps:

1. Removing the front left cover is a matter of releasing the plastic tabs that hold it on the printer.
2. Start at the top. Insert a flat screwdriver under one of the two tabs that are a few centimeters below the top of the cover. Press each of the tabs up and pull the cover out just until the tab clears.
3. Then move to the next tab down, which is on the right side of the cover about halfway up. You can release it by inserting a probe into the round hole in the metal case on the right side of the cover.
4. Finally, there is a tab near the bottom on the right side. Press it to the right with the flat screwdriver. After releasing this last tab, remove the cover.

Ferrite Core CP SVC

C8116-67065



First, remove these parts:

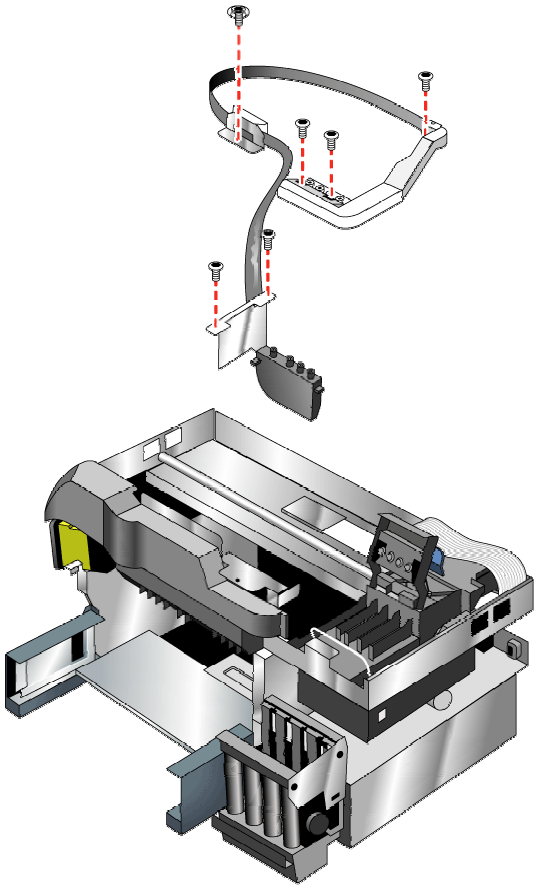
Assy-Keypanel SVC

Then remove this part by following these steps:

1. Prior to removing the main case assy., the ferrite core of the wire harness for the key panel must be removed so the harness can be pulled through its routing hole in the main case.
2. The wire connector is threaded through the ferrite core twice and secured. Reverse this to remove it.

ASSY-REPLACEABLE IDS, A-SIZE SVC

C8116-67049



First, remove these parts:

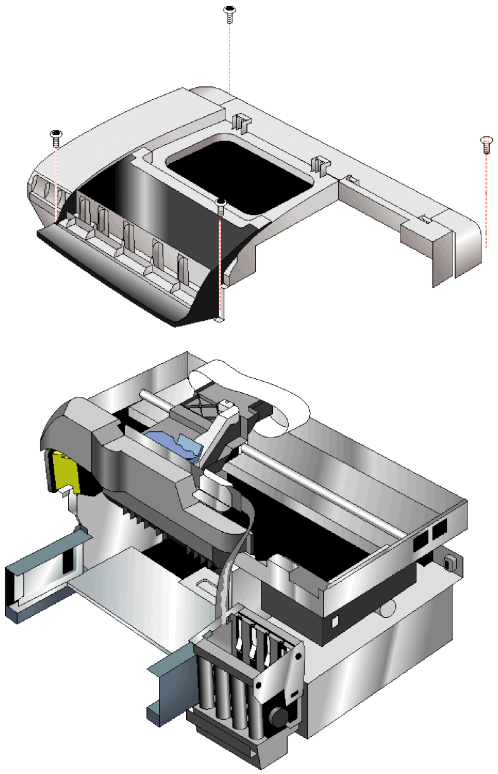
1. Door-Main Access SVC
2. Assy-Door Access SVC
3. Assy-Cap Right SVC
4. Assy-Cover Front Right SVC
5. Assy-Case Main SVC
6. Cover Rear SVC

Then remove this part by following these steps:

1. Remove the seven screws that secure the ink delivery system (IDS) to the printer (three on the end in the printhead chamber, two on inktube support clamps, and two in the ink-cartridge chamber).
2. Raise the cover of the printhead chamber.
3. Starting at the printhead chamber, lift up the end of the IDS, the inktube, and then the end in the ink-cartridge chamber.

Assy-Case Main SVC

C8116-67013



First, remove these parts:

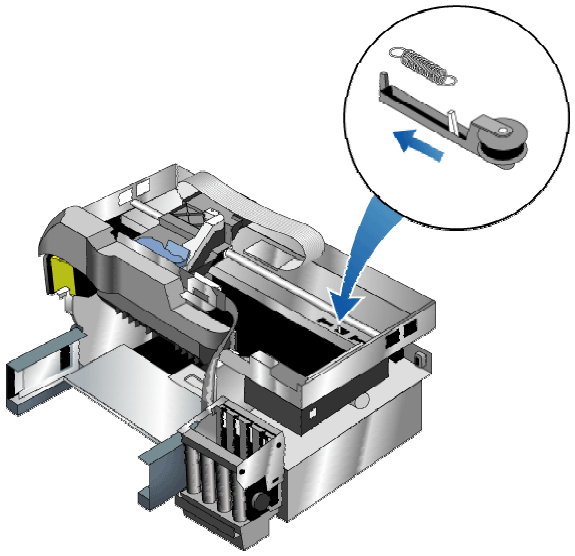
1. Door-Main Access SVC
2. Assy-Door Access SVC
3. Cover Rear SVC

Then remove this part by following these steps:

1. Separate the remaining wire connector on the keypanel wire harness, so that the main part of the harness can pass back through the routing hole in the main case.
2. Remove the four screws on the back of the printer that secure the case (two near the right side and two on the left side).
3. Lift off the main case allowing the keypanel wires to retract through the routing hole.

ASSY-BELT TENSIONER SVC

C8116-67046



First, remove these parts:

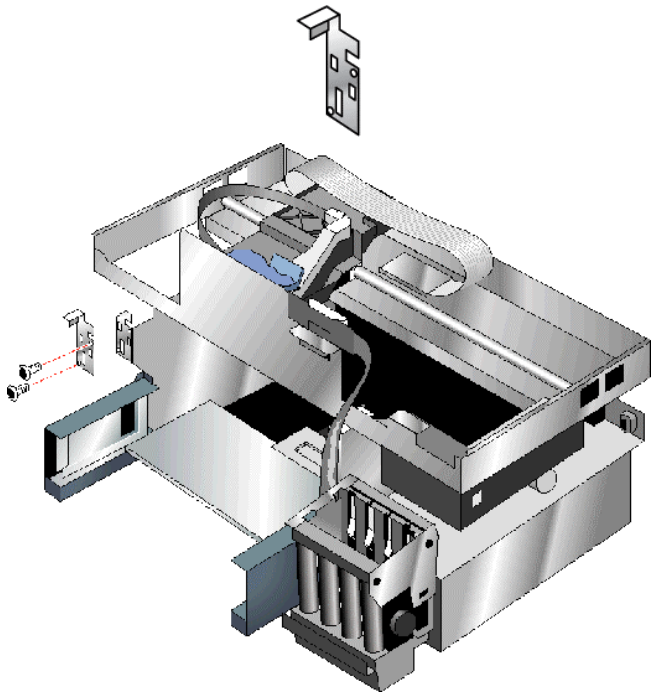
1. Door-Main Access SVC
2. Assy-Door Access SVC
3. Assy-Cap Right SVC
4. Cap - Side Left SVC
5. Cover Rear SVC
6. Assy-Case Main

Then remove this part by following these steps:

1. Release the spring from the metal tab.
2. Slide the tensioner to the left and remove from the printer.

Support-Front Left SVC

C8116-67068



First, remove these parts:

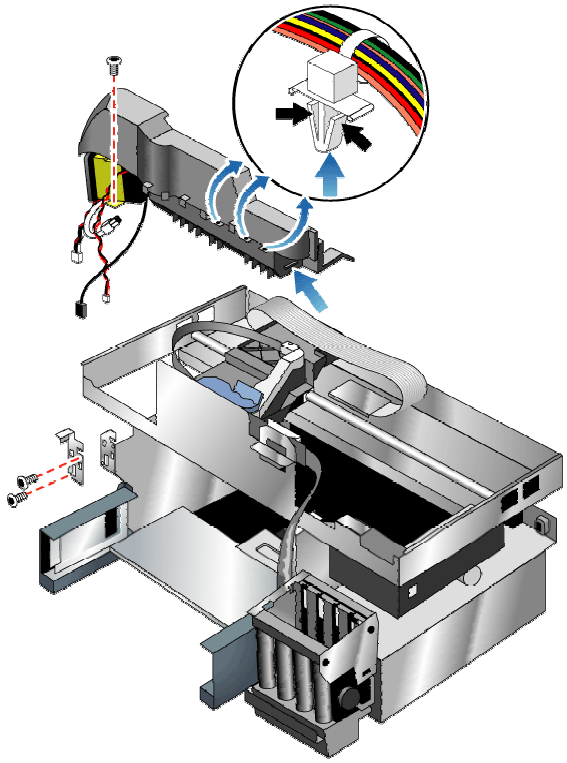
1. Door-Main Access SVC
2. Assy-Door Access SVC
3. Assy-Cap Right SVC
4. Cap - Side Left SVC
5. Cover Rear SVC
6. Assy-Case Main

Then remove this part by following these steps:

Remove the two screws on the support to take it off the printer. The lower screw connects a ground wire to the support.

ASSY POSTHEATER W/AEROSOL, A-SIZE SVC

C8116-67054



First, remove these parts:

1. Door-Main Access SVC
2. Assy-Door Access SVC
3. Assy-Cap Left SVC
4. Assy-Cap Right SVC
5. Cover-Front Left SVC
6. Cover-Front Right SVC
7. Cover Rear SVC
8. Assy-Case Main SVC
9. Support-Front Left SVC

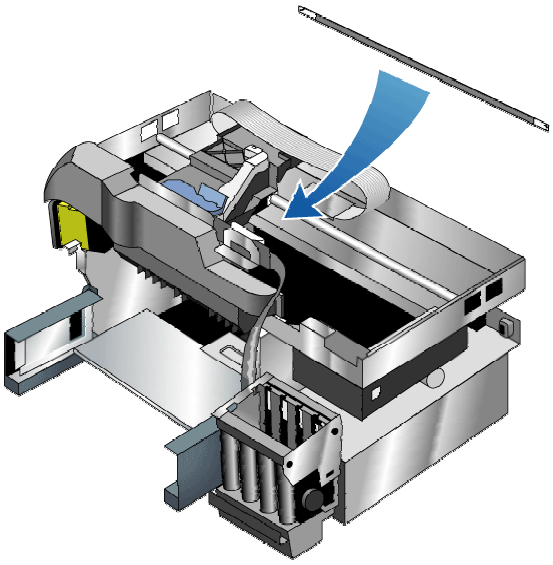
Then remove this part by following these steps:

1. User pliers to pop loose the wire harness retainer for the large white wire harness on the front of the postheater assembly.
2. Remove one screw from the lower left corner of the postheater assembly.
3. Separate the connector on the large wire harness that leads to the assembly.

4. Pull from the analog board (lower right corner) the three wire connectors that lead to the postheater assembly.
5. Reach under the printer with needle nose pliers and pop loose the wire harness retainer to the right of the analog board.
6. Use a flat screwdriver to release the plastic tab on the right side of the postheater assembly
7. Pull the assembly out toward the front of the printer, right side first.

ENCODER STRIP, A-SIZE SVC

C8116-67067



First, remove these parts:

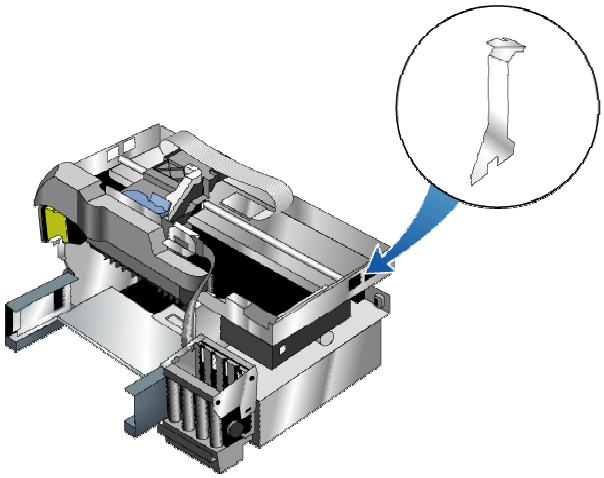
1. Door-Main Access SVC
2. Assy-Door Access SVC
3. Assy-Cap Right SVC
4. Cap - Side Left SVC
5. Cover Rear SVC
6. Assy-Case Main SVC
7. PCA-MAIN, OFFICE SVC
8. SPRING-ENCODER SVC

Then remove this part by following these steps:

1. Release both ends of the encoder strip.
2. Thread it gently out of the carriage to remove from the printer.

SPRING-ENCODER SVC

C8116-67066



First, remove these parts:

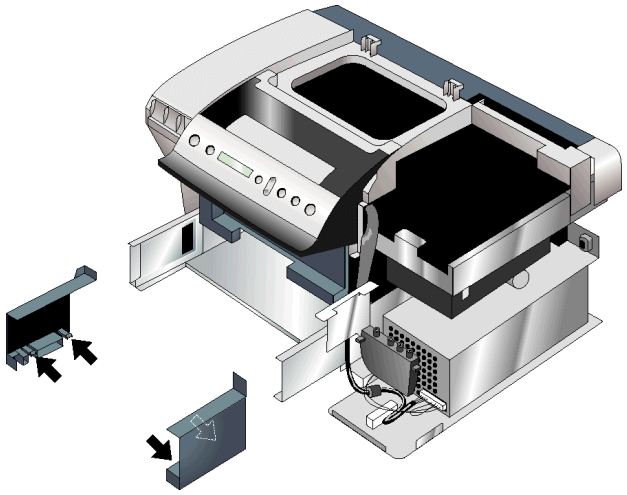
1. Door-Main Access SVC
2. Assy-Door Access SVC
3. Assy-Cap Right SVC
4. Cap - Side Left SVC
5. Cover Rear SVC
6. PCA-MAIN, OFFICE SVC

Then remove this part by following these steps:

1. Remove the encoder spring from the right side of the printer.

Cover-Rail Right SVC

C8116-67008



First, remove these parts:

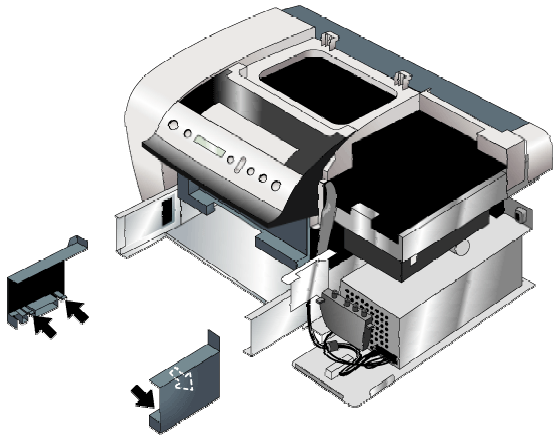
1. Door-Main Access SVC
2. Assy-Door Access SVC
3. Assy-Cap Right SVC
4. Cap - Side Left SVC
5. Assy-Cover Front Right SVC
6. Cover-Front Left SVC

Then remove this part by following these steps:

1. Use a flat screwdriver to gently pry down the two plastic tabs on the bottom of the rail cover.
2. Free the bottom of the rail cover and roll it out and up to remove it.

Cover-Rail Left SVC

C8116-67007



First, remove these parts:

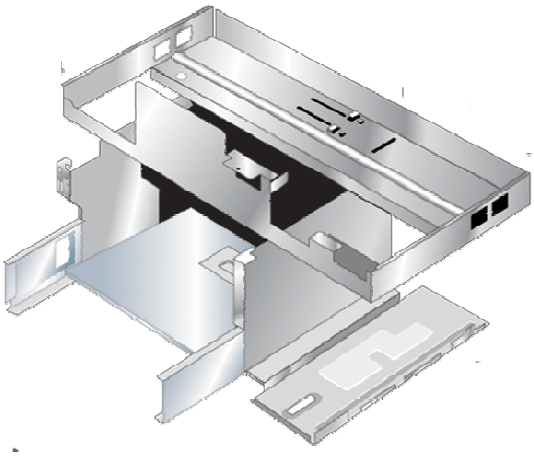
1. Door-Main Access SVC
2. Assy-Door Access SVC
3. Assy-Cap Right SVC
4. Cap - Side Left SVC
5. Assy-Cover Front Right SVC
6. Cover-Front Left SVC

Then remove this part by following these steps:

1. Use a flat screwdriver to gently pry down the two plastic tabs on the bottom of the rail cover.
2. Free the bottom of the rail cover and roll it out and up to remove it.

Bulkpack - Maxwell Base SVC

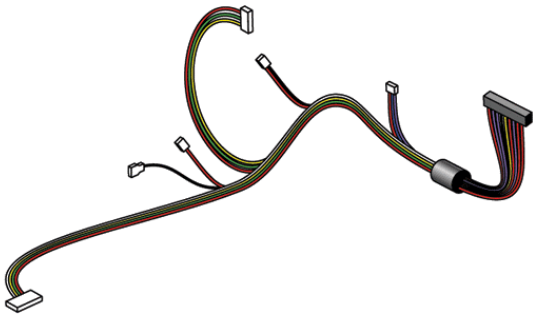
C8116-67001



The bulkpack is the main frame of the printer. Dissassembly down to this level is the full dissassembly of the printer...and thus the removal of all parts.

Assy-Cable, Maxwell Left SVC

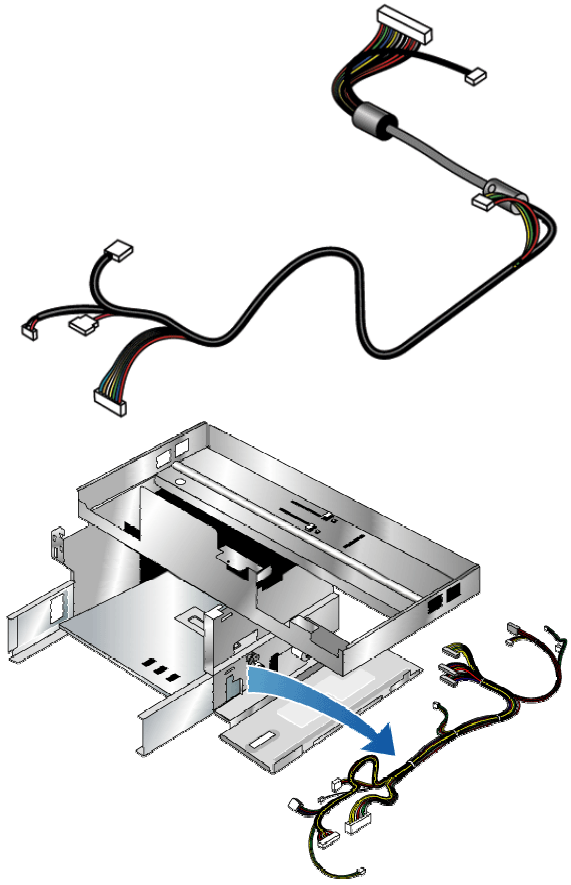
C8116-67035



Remove this part by following these steps:

Assy-Cable Maxwell Right SVC

C8116-67036



First, remove these parts:

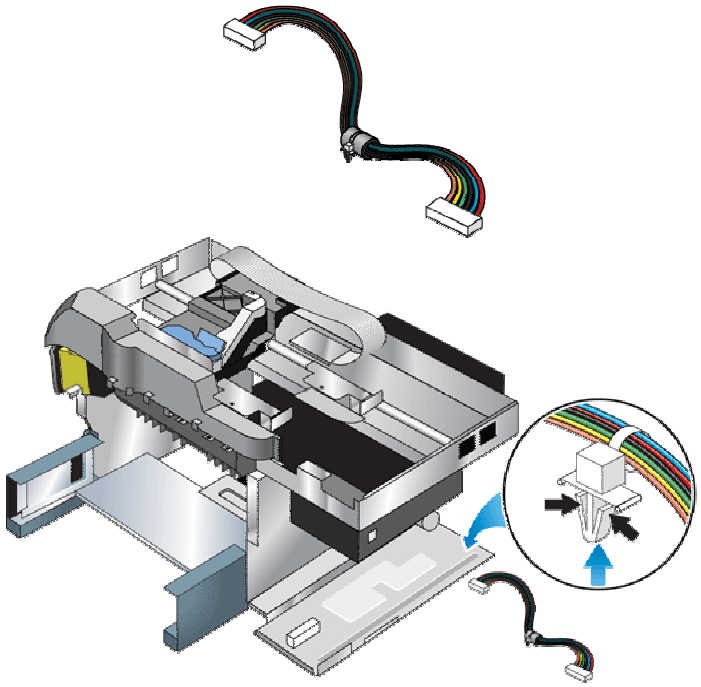
1. Door-Main Access SVC
2. Assy-Door Access SVC
3. Assy-Cap Right SVC
4. Cover Right Front SVC
5. ASSY-INK SUPPLY STATION, A-SIZE SVC
6. Assy-PS Module SVC
7. ASSY-SERVICE STATION, 4-PEN SVC

Then remove this part by following these steps:

1. Use needle-nosed pliers to release any plastic retaining clips.
2. Thread the harness out of the retaining supports.

Harness 1-Power Supply SVC

C8116-67037



First, remove these parts:

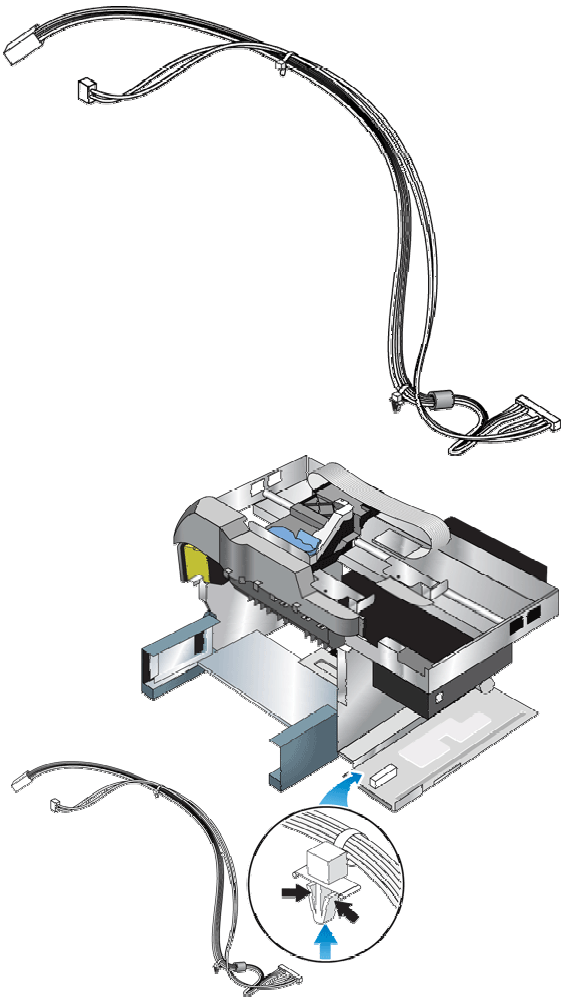
1. Door-Main Access SVC
2. Assy-Door Access SVC
3. Assy-Cap Right SVC
4. Cover Right Front SVC
5. ASSY-INK SUPPLY STATION, A-SIZE SVC
6. Assy-PS Module SVC
7. ASSY-SERVICE STATION, 4-PEN SVC

Then remove this part by following these steps:

1. Use needle-nosed pliers to release the plastic retaining clips from the bottom of the printer in the back.
2. Thread the harness out of the retaining supports.

Harness-Power On SVC

C8116-67038



First, remove these parts:

1. Door-Main Access SVC
2. Assy-Door Access SVC
3. Assy-Cap Right SVC
4. Cover Right Front SVC
5. ASSY-INK SUPPLY STATION, A-SIZE SVC
6. Assy-PS Module SVC
7. ASSY-SERVICE STATION, 4-PEN SVC

Then remove this part by following these steps:

1. Use needle-nosed pliers to release the plastic retaining clips from the bottom of the printer in the front and the back.
2. Thread the harness out of the metal retaining supports.

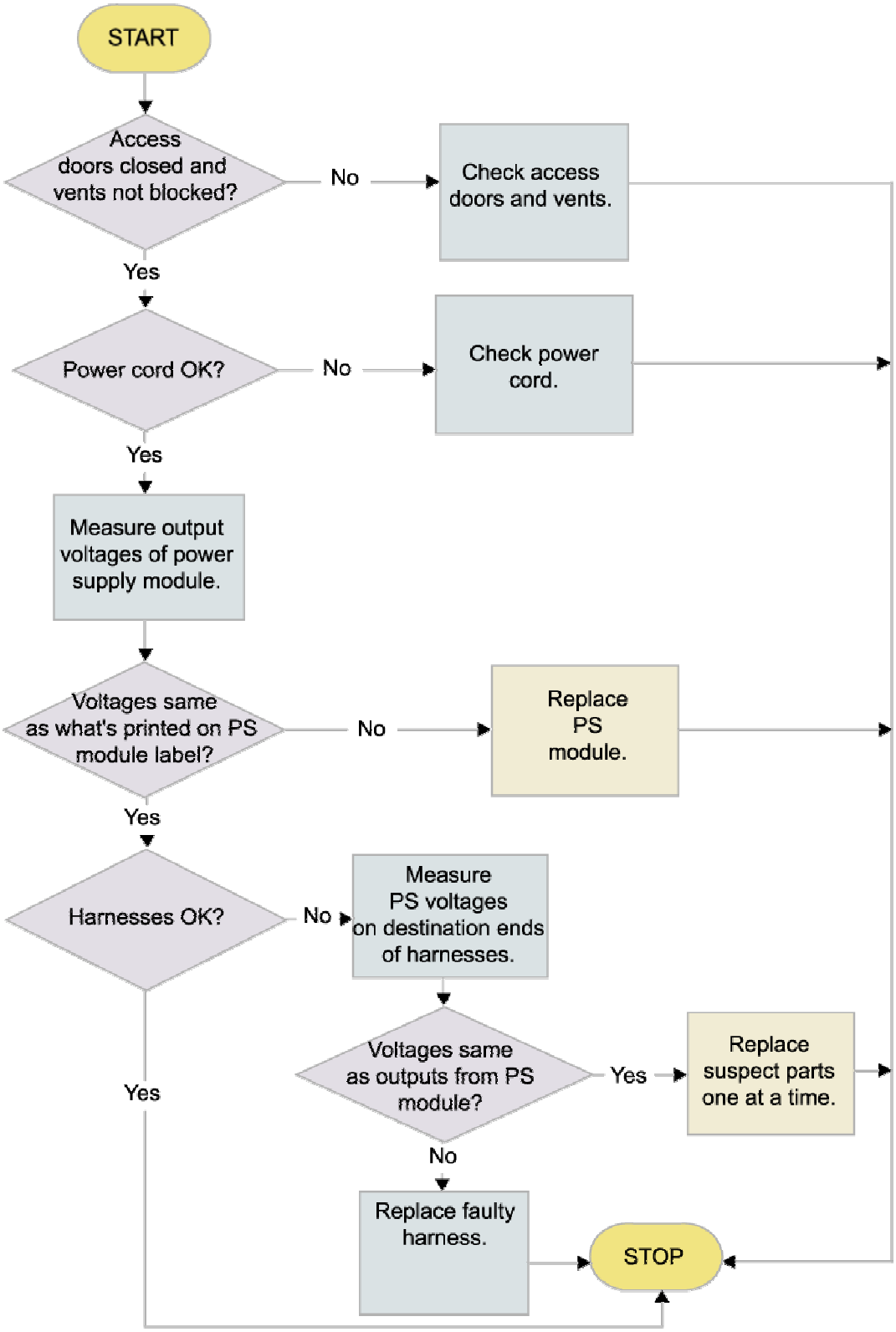
Carriage Release With Power To release the printhead carriage when power is available:

1. With the power on, lift the Access Door.
2. Press the green checkmark button to release the printhead carriage.
3. Unplug the printer power cord.
4. Now the printhead release lever can be lifted to remove the printheads, or the carriage can be slid manually to the left.

Carriage Release Without Power To release the printhead carriage and gain access to the printheads when no power is available:

1. Remove the Access Door, Warranty Void Label, Stopper Latch, and Cap-Side Right.
2. Firmly grasp the metal spindel of the carriage motor with pliers and rotate the carriage motor until the carriage releases.
3. Now the carriage can be slid manually to the left.

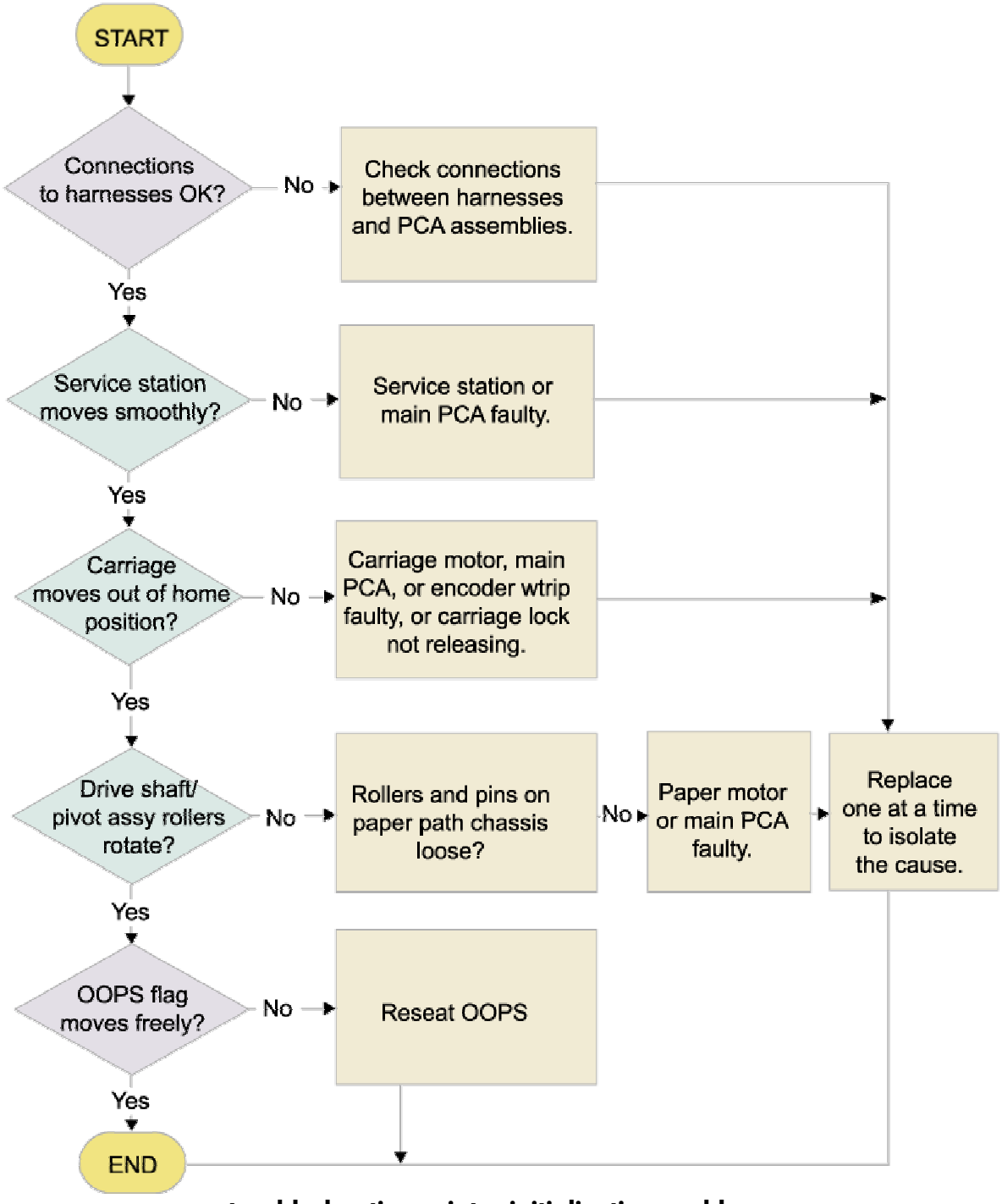
troubleshooting power-on issues



troubleshooting power-on problems

message	value	description
power-on and printer response issues	Cause 1: Access doors or vents open	Check the Access Doors: Make sure the Top Cover and Carriage Access Cover are firmly closed. If the LCD panel displays the message CLOSE ALL COVERS, open and close all access doors. Check the vents: If the printer's vents are covered, and the printer overheats, it automatically turns off. Make sure the vents are not covered and the printer is in a cool, dry location.
	Cause 2: Power cord incompatibilities	Make sure the printer is connected to the power cord, that the power cord is plugged in, and that the power cord can handle 230V. To test the power cord: Power off the printer, unplug the power cord and replace it with a new power cord, then power on the printer. If the printer now works, then the power cord was faulty.
	Cause 3: Verify voltage of Power Supply module	Disconnect the PS harness from the PS module. Use a multimeter to check the output voltages of the Power Supply Assembly. They should measure same as what's printed on PS module label. Reconnect the PS harness when you are finished. Turn the printer off and then on again.
	Cause 5: Faulty harness	Check that all connections to the harnesses are solid and that all connectors are attached firmly to the wires. Ensure that none of the wire insulation is frayed or missing. Check PS voltages at the destination ends of the harnesses.

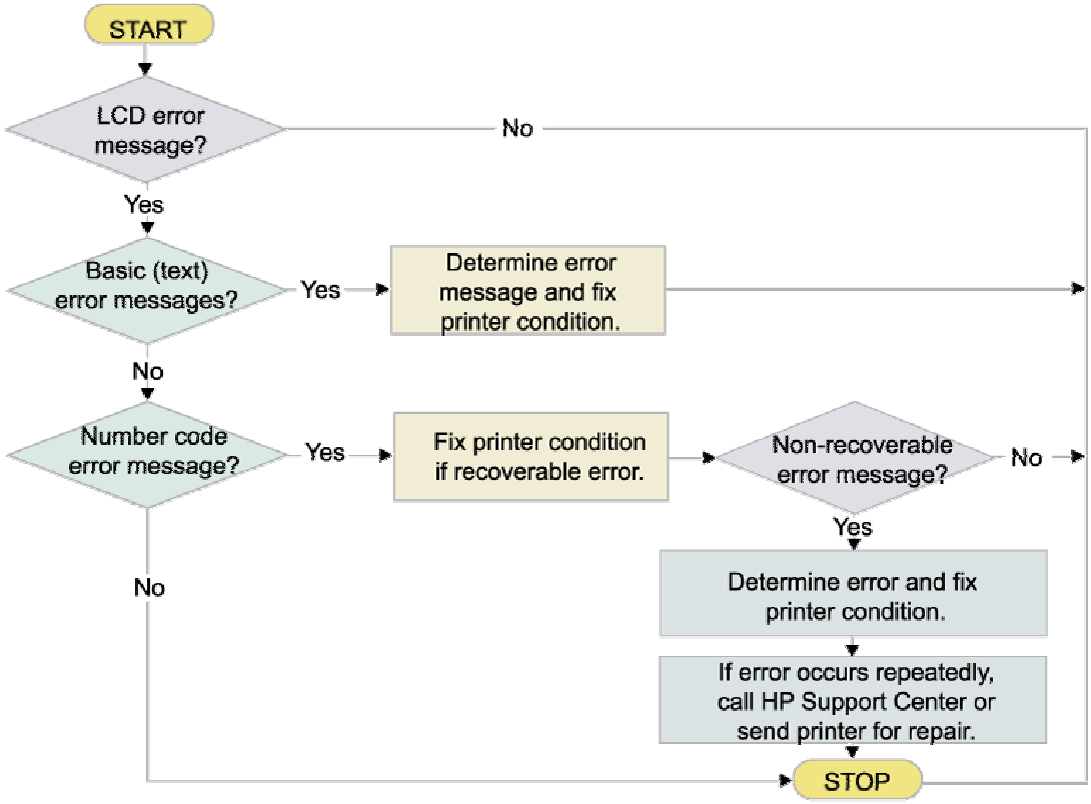
Note *If the logic PCA or power supply is replaced, hardware tests must be performed.*



troubleshooting printer initialization problems

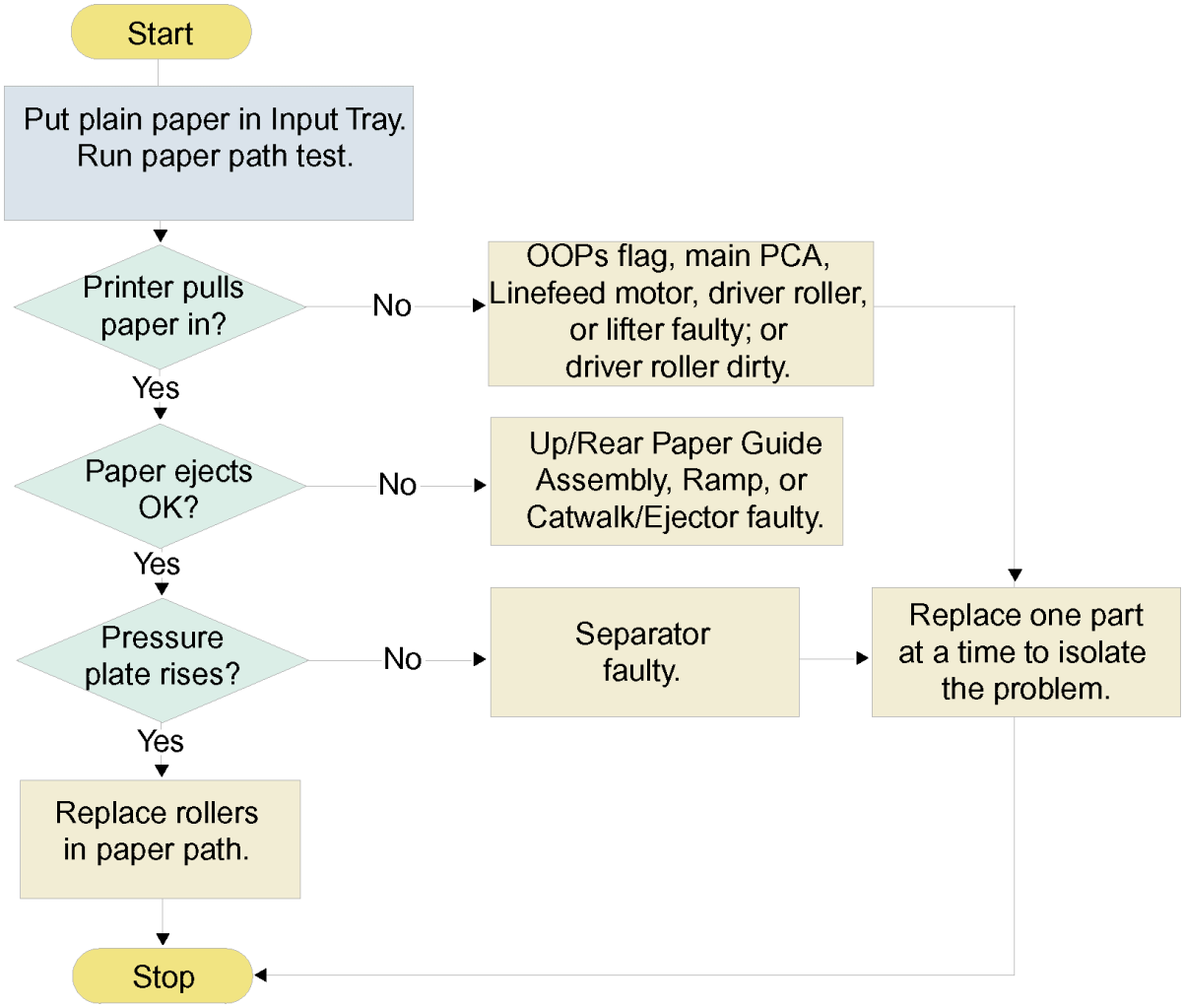
message	value	description
Service station does not move freely	Cause 1: Faulty service station or Logic PCA	Rotate the gears of the Service Station Motor Assembly to make sure the Wiper Assembly can move freely within the Service Station Mechanism Assembly.
Carriage assembly moves out of home position	Cause 1: Carriage Motor, Logic PCA, or Encoder strip faulty or Carriage lock not releasing.	If the Carriage Lock is not releasing, check the Carriage Lock and check the Service Station for movement. If the Carriage Assembly does not move out of the home position or return to the home position, clean the electrical contacts on the printheads and print cradle. Remove the printheads from the printer. Clean the electrical contacts on the print cradle with a dry cotton swab. Clean the electrical contacts on the printheads with a dry, lint free cloth. To prevent damage to the electrical contacts, you should wipe the contacts only once. Do not wipe the ink nozzles on the printheads. Re-install the printheads.

troubleshooting LCD messages



troubleshooting LCD messages

LCD error troubleshooting.

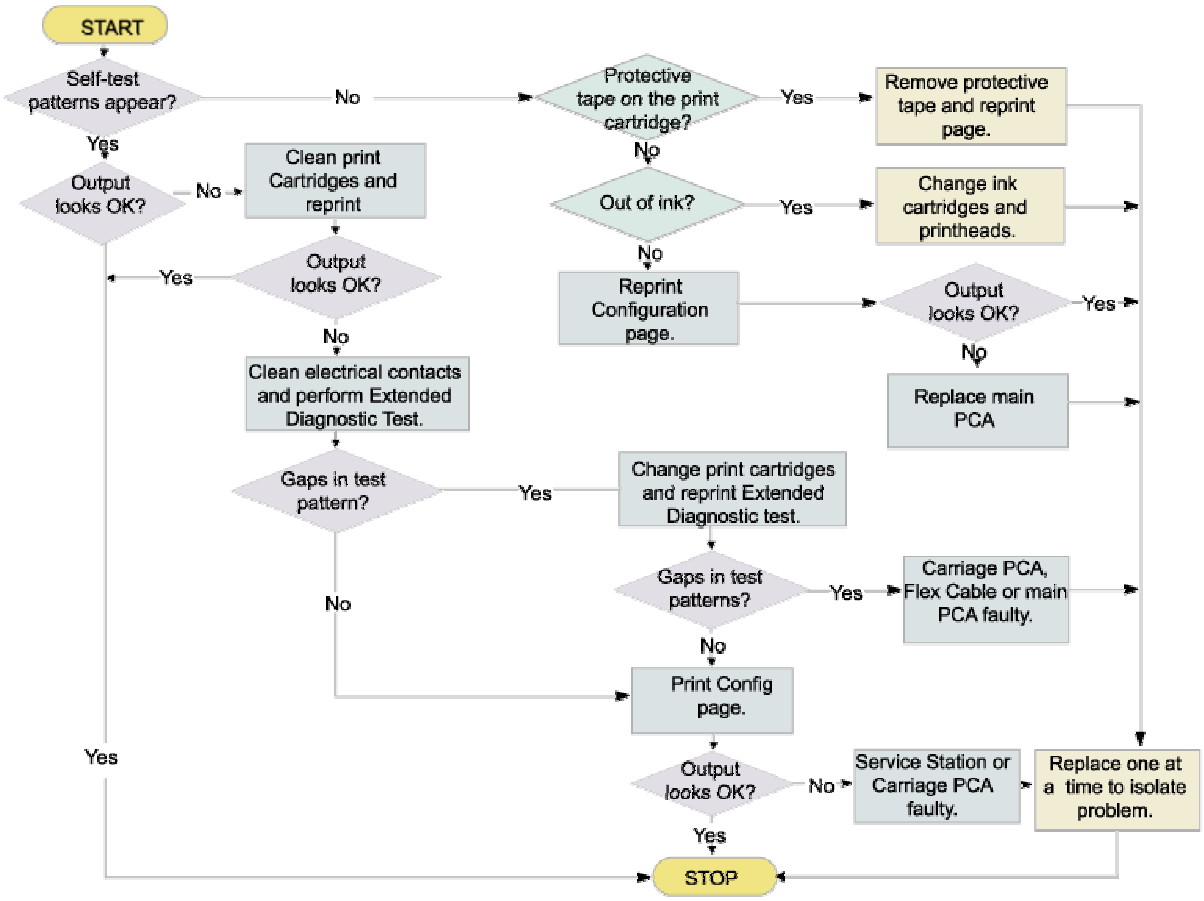


troubleshooting paper feed problems

message	value	description
Special media does not pick up	Cause 1: Media is curled.	Uncurl and flatten media as much as possible by physically curling it in the opposite direction.
	Cause 2: Envelope Feed Width Adjuster is fitted too tight against envelope	Loosen width adjusted away form paper stack.
	Cause 3: Too many envelopes in Envelope Feed	The Envelope Feed only supports one envelope at a time. To print more than one envelope, use Tray 1.
Paper does not pick up.	Cause 1: Left Width Adjuster	Check, if Left Width Adjuster is pressed too tightly against paper stack. Loosen it slightly.

	Cause 2: Paper stack height	Reduce paper stack height to level indicate by yellow sticker on right wall of Input Tray.
	Cause 3: Dirt accumulated on pick and drive rollers	Use the cleaning kit to clean the rollers. Replace pick/separation rollers if cleaning several times does not help.
	Cause 4: Paper Motor	Listen and look out for motor and roller movement. If no movement, use multimeter to probe contacts. If power is live, replace Paper Motor.
	Cause 5: Paper Motor power supply	Listen and look out for motor and roller movement. If no movement, use multimeter to probe contacts. If power is not live, the Power Supply module has failed.
	Cause 6: Electrical contacts	Change harnesses if necessary.
Skew Test Failure	Cause 1: Paper skew	Paper skew most frequently occurs when the Width Adjusters are not flush against the paper or excessive force is used to install the Input Tray.
	Cause 2: Input Tray not inserted correctly.	Insert the Input Tray correctly.
	Cause 3: Paper stack not fitting	Ensure paper stack fits snugly against the right and front walls.
	Cause 4: Length and Width Adjusters too tight	Ensure length and Width Adjusters fit firmly against the paper stack or envelope.
	Cause 5: Paper stack height is below the indicator	Paper stack height is below yellow indication sticker on right wall of Input Tray.
	Cause 6: Dirt accumulates on rollers	Drive Rollers are feeding unevenly due to dirt. If so, use the cleaning kit or clean the drive rollers. Add side wall on Input Tray. Add front bias spring on Width Adjuster. Install additional stopper at corner of page.
	Cause 2: Output tray full	Clear the Output Tray to make room for exiting paper. More than 150 sheets are on the output tray

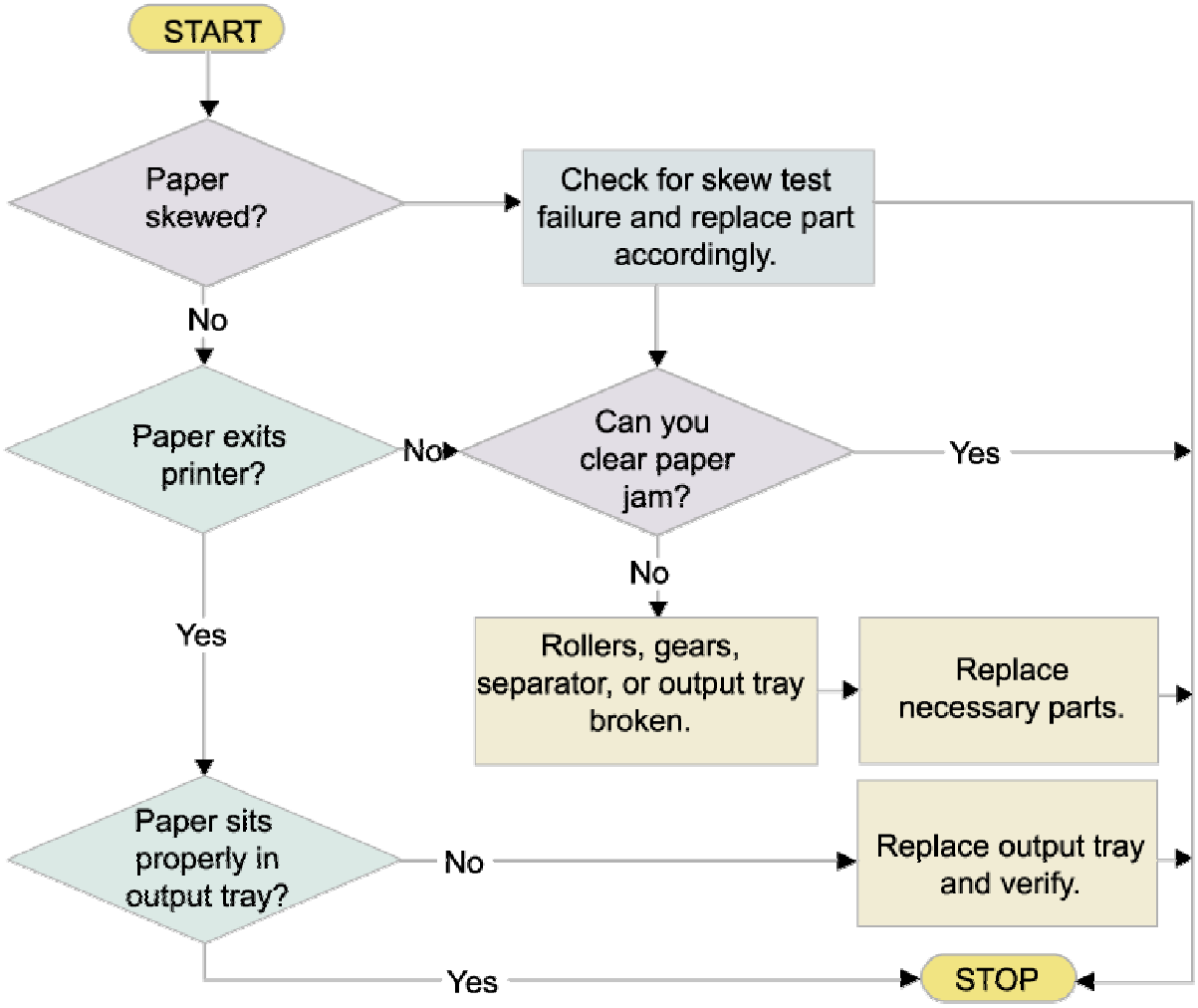
troubleshooting configuration page



troubleshooting problems using the configuration page

message	value	description
Self test patterns do not appear on paper	Cause 1: Protective tape on the print cartridge	Each new printhead is packaged with protective plastic tape covering the ink nozzles. Check each printhead and remove tape if necessary.
	Cause 2: Out of ink	If you are printing black text and a blank page prints, your black ink cartridge may be empty. Replace the black ink cartridge.
Self-test patterns do not appear on paper even after removing the protective tape and replacing the print cartridges.		If cleaning printheads and changing print cartridges do not help, replace the Logic PCA. Clean electrical contacts and perform Extended Diagnostic Test.
Gaps in test pattern	Cause 1: Ink cartridges out of ink	Change print cartridges and reprint Extended diagnostic test.
	Cause 2: Carriage PCA, Flex cable or Logic PCA faulty	The Carriage PCA or the Flex Cable or the Logic PCA could be faulty. Check each component and replace one at a time to isolate the problem.
Gaps in test pattern even after replacing the Carriage PCA, Flex cable, or Logic PCA	Cause 1: Service Station or Carriage PCA faulty	The Service station or the Carriage PCA could be faulty. Check each component and replace one at a time to isolate the problem.

troubleshooting paper eject problems

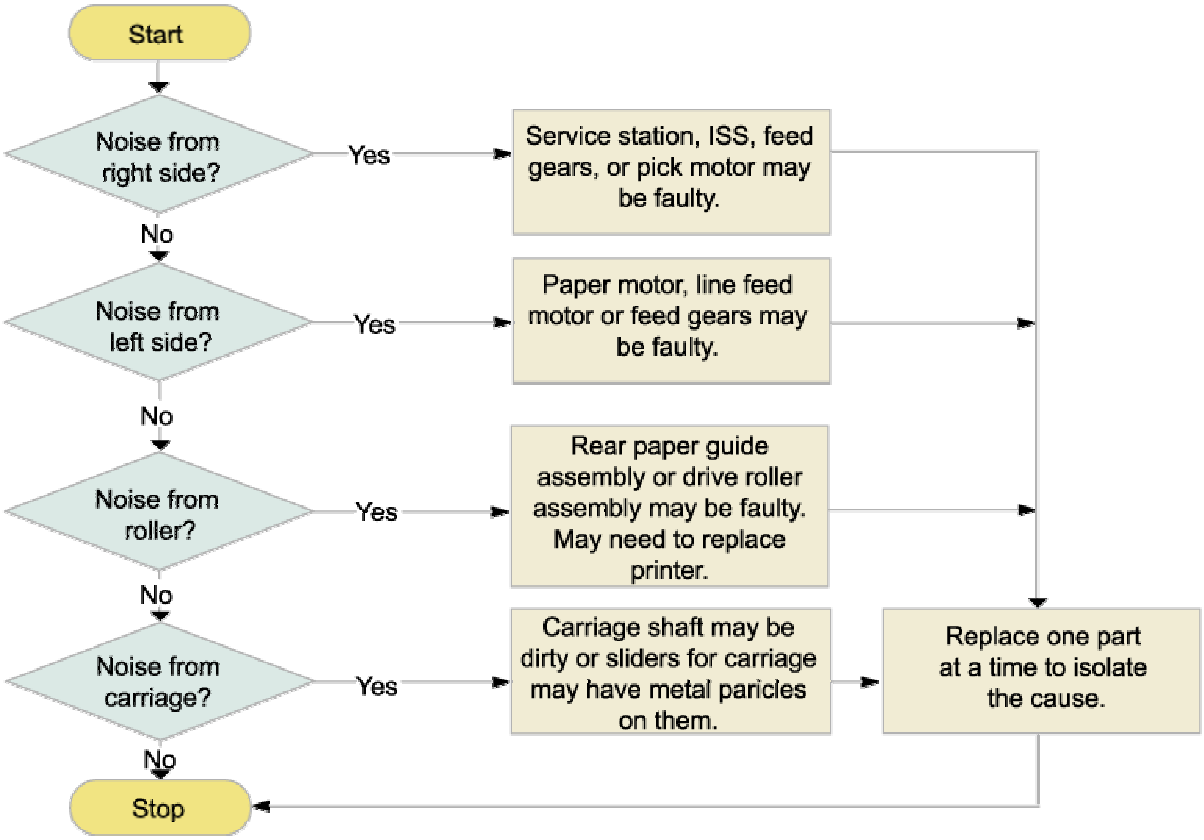


troubleshooting paper eject problems

message	value	description
Skew Test Failure	Cause 1: Paper skew	To check for skew test failure, print a configuration page. Fold the configuration page in half and make sure the skew test symbols in each corner of the page line up correctly. Paper skew most frequently occurs when the Width Adjusters are not flush against the paper or excessive force is used to install the Input Tray.
	Cause 2: Input Tray not inserted correctly.	Insert the Input Tray correctly.

	Cause 3: Paper stack not fitting	Ensure paper stack fits snugly against the right and front walls.
	Cause 4: Length and Width Adjusters too tight	Ensure length and Width Adjusters fit firmly against the paper stack or envelope.
	Cause 5: Paper stack height is below the indicator	Make sure paper stack height is below yellow indication sticker on right wall of Input Tray.
	Cause 6: Dirt accumulates on Drive Rollers	Drive Rollers are feeding unevenly due to dirt. If so, use the cleaning kit or replace the rollers if cleaning several times does not help.
Paper does not exit printer	Cause 1: Output tray may be incorrectly assembled	The output tray may be incorrectly installed. Properly install the output tray.
	Cause 2: Room for exiting paper	Clear the output tray to make room for exiting paper.

troubleshooting unusual noises



troubleshooting unusual noises

message	value	description
Noise from the right side of the printer	Cause 1: Faulty Service Station Assembly	If the right side of the printer is making unusual noises, the Service Station Assembly or one of its parts may be faulty.
Noise from the left side of the printer	Cause 1: Faulty Paper Motor	If the left side of the printer is making unusual noises, the Paper Motor may be faulty.
Noise from the rollers	Cause 1: Drive Shaft/Pivot Assembly or the Up/Rear Paper Guide Assembly could be faulty.	The Drive Shaft/Pivot Assembly and the Up/Rear Paper Guide Assembly have rollers responsible for feeding the paper in to the printer. Replace the faulty components.
Noise from the carriage	Cause 1: Dirt particles on the Carriage Shaft	Check the Carriage Shaft for dirt particles. To check the sliders on the Carriage, you must remove the Carriage.

Nonrecoverable error codes

Nonrecoverable error codes are those errors numbered 49.XXXX. These errors are fatal firmware errors. All other error codes can be corrected via some user action.

1. Hold down the power button for 3 seconds.
2. If power does not come on, unplug power cord and then plug it in again and turn on power.

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