

Troubleshooting Manual





HP Officejet Enterprise Color X555 and MFP X585 Series

Troubleshooting Manual

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Conventions used in this guide

Tips provide helpful hints or shortcuts.

NOTE: Notes provide important information to explain a concept or to complete a task.

<u>CAUTION:</u> Cautions indicate procedures that you should follow to avoid losing data or damaging the product.

<u>MARNING!</u> Warnings alert you to specific procedures that you should follow to avoid personal injury, catastrophic loss of data, or extensive damage to the product.

ENWW iii

Table of contents

1 Theo	ory of operation	1
	Basic operation	2
	Function structure	2
	Operation sequence	4
	System control	7
	Formatter and data path	7
	Engine control	8
	Pen interface (I/F)	10
	Power supply	10
	Print subsystem	12
	Printbar	13
	Printbar lift	14
	Ink cartridges	15
	Optical scan carriage	15
	Print system operational states	15
	Paper-handling system	17
	Input trays	24
	Paper path zones	24
	Servicing system	28
	Service sled	30
	Aerosol management system	31
	Document feeder (X585 models)	33
	Document feeder operation	33
	Document feeder paper path and sensors	33
	Document feeder jam detection	34
	Scanner system (X585 models)	35
	Scanner power-on sequence of events	35
	Copy or scan-to-computer sequence of events	36
	Fax functions and operation (X585 models)	37
	Computer and network security features	37
	PSTN operation	37
	The fax subsystem	37

	Fax card in the fax subsystem	37
	Fax page storage in flash memory	39
2 Sr	olve problems	41
	Problem-solving checklist	
	Step 1: Check that the product power is on	
	Step 2: Check the control panel for error messages	
	Step 3: Test print functionality	
	Step 4: Test copy functionality	43
	Step 5: Test the fax sending functionality	43
	Step 6: Test the fax receiving functionality	43
	Step 7: Try sending a print job from a computer	43
	Step 8: Test the Plug and Print USB Drive printing functionality	44
	Factors that affect product performance	44
	Troubleshooting process	45
	Determine the problem source	45
	Power subsystem	46
	Scanning subsystem (X585)	47
	Control panel checks	47
	Tools for troubleshooting	57
	Print the configuration page	57
	Event log messages	59
	Error messages	
	Individual component diagnostics	149
	Diagrams	
	Print-quality troubleshooting tools	
	Preboot menu options	
	Control-panel menus	
	Administration menu	
	Device Maintenance menu	
	Solve image quality problems	
	Clean ink smears	
	Recover the printhead	
	Solve paper jam or feed problems	
	Product does not pick up paper or misfeeds	
	Clear jams	
	Solve performance problems	
	The product prints cloudy	
	The product prints slowly	
	Solve LISP direct, connect problems	
	Solve USB direct-connect problems	

	Solve network problems	256
	Solve wireless network problems	257
Servi	ce mode functions	262
	Service menu and Secondary service menu	262
	Product resets	262
Solve	e fax problems	263
	Fax reports	263
	Possible fax issues	266
Produ	uct upgrades	275
Appendix A Serv	vice and support	277
Hewle	ett-Packard limited warranty statement	278
	UK, Ireland, and Malta	
	Austria, Belgium, Germany, and Luxemburg	279
	Belgium, France, and Luxemburg	279
	Italy	
	Spain	281
	Denmark	281
	Norway	281
	Sweden	282
	Portugal	282
	Greece and Cyprus	282
	Hungary	282
	Czech Republic	282
	Slovakia	283
	Poland	283
	Bulgaria	283
	Romania	283
	Belgium and The Netherlands	283
	Finland	284
	Slovenia	284
	Croatia	284
	Latvia	284
	Lithuania	284
	Estonia	285
End U	Jser License Agreement	286
Open:	SSL	288
Custo	omer self-repair warranty service	289
Custo	omer support	290

Appendix B Product specifications	291
Physical specifications (X555 models)	292
Physical specifications (X585 models)	292
Power consumption, electrical specifications, and acoustic emissions	292
Environmental specifications	292
Appendix C Regulatory information	293
FCC regulations	294
Environmental product stewardship program	295
Protecting the environment	295
Ozone production	295
Power consumption	295
Paper use	295
Plastics	295
HP Officejet print supplies	295
Return and recycling instructions	296
Paper	297
Material restrictions	297
Disposal of waste equipment by users	297
Electronic hardware recycling	298
Chemical substances	298
Material Safety Data Sheet (MSDS)	298
EPEAT	298
For more information	298
Declaration of conformity (X555 models)	299
Declaration of conformity (X585dn model)	301
Declaration of conformity (X585f and X585z models)	303
Certificate of volatility (X555 models)	305
Certificate of volatility (X585 models)	307
Safety statements	309
Canada - Industry Canada ICES-003 Compliance Statement	309
VCCI statement (Japan)	309
Power cord instructions	309
Power cord statement (Japan)	309
EMC statement (China)	309
EMC statement (Korea)	309
EMI statement (Taiwan)	310
GS statement (Germany)	311
Substances Table (China)	311
SEPA Ecolabel User Information (China)	311
Restriction on Hazardous Substances statement (India)	312

	Restriction on Hazardous Substances statement (Turkey)	312
	Restriction on Hazardous Substances statement (Ukraine)	312
	Eurasian Conformity (Belarus, Kazakhstan, Russia)	312
	Additional statements for telecom (fax) products	313
	EU Statement for Telecom Operation	313
	New Zealand Telecom Statements	313
	Additional FCC statement for telecom products (US)	313
	Telephone Consumer Protection Act (US)	314
	Industry Canada CS-03 requirements	314
	Vietnam Telecom wired/wireless marking for ICTQC Type approved products	315
	Japan Telecom Mark	315
ndex		317

ENWW ix

x ENWW

List of tables

Table 1-1	Operation sequence	4
Table 1-2	Power supply module operating modes	11
Table 1-3	Printbar components	14
Table 1-4	Product sensors	20
Table 1-5	Paper-handling system motors	23
Table 1-6	Paper path zones	26
Table 1-7	Service sled components	30
Table 1-8	Aerosol management system components	32
Table 2-1	Troubleshooting flowchart	45
Table 2-2	Control panel diagnostic functions	47
Table 2-3	Important information on the configuration pages	59
Table 2-4	Heartbeat LED status	150
Table 2-5	Plug/jack locations (X555)	154
Table 2-6	Plug/jack locations (X585)	155
Table 2-7	Preboot menu options (1 of 6)	165
Table 2-8	Preboot menu options (2 of 6)	167
Table 2-9	Preboot menu options (3 of 6)	168
Table 2-10	Preboot menu options (4 of 6)	169
Table 2-11	Preboot menu options (5 of 6)	169
Table 2-12	Preboot menu options (6 of 6)	170
Table 2-13	Reports menu	172
Table 2-14	General Settings menu	174
Table 2-15	Copy Settings menu (X585)	179
Table 2-16	Scan/Digital Send Settings menu (X585)	185
Table 2-17	Fax Settings menu (X585)	195
Table 2-18	General Print Settings menu	207
Table 2-19	Print Options menu	210
Table 2-20	Display Settings menu	211
Table 2-21	Manage Supplies menu	213
Table 2-22	Manage Trays menu	217
Table 2-23	Network Settings menu	219
Table 2-24	Jetdirect Menu	219

Table 2-25	Troubleshooting menu	230
Table 2-26	Backup/Restore menu	233
Table 2-27	Calibrate/Cleaning menu	233
Table B-1	Physical specifications (X555 models), with ink cartridges	292
Table B-2	Physical specifications (X585 models), with ink cartridges	292
Table B-3	Operating-environment specifications	297

xii ENWW

List of figures

igure 1-1	Main components (X555 models)	2
igure 1-2	Main components (X585 models)	3
igure 1-3	System control	7
igure 1-4	Print subsystem components (X555 models)	12
igure 1-5	Print subsystem components (X585 models)	13
igure 1-6	Printbar components	14
igure 1-7	Paper-handling system paper path (X555 models)	17
igure 1-8	Paper-handling system paper path (X585 models)	18
igure 1-9	Product sensors (X555 models)	19
igure 1-10	Product sensors (X585 models)	20
igure 1-11	Paper-handling-system motors (X555 models)	22
igure 1-12	Paper-handling-system motors (X585 models)	23
igure 1-13	Paper path zones (X555 models)	25
igure 1-14	Paper path zones (X585 models)	26
igure 1-15	Servicing system components (X555 models)	28
igure 1-16	Servicing system components (X585 models)	29
igure 1-17	Service sled components	30
igure 1-18	Aerosol management process	31
igure 1-19	Aerosol management system components	32
igure 1-20	Document feeder paper path and sensors	34
igure 2-1	Touchscreen blank, white, or dim (no image)	51
igure 2-2	Touchscreen is slow to respond or requires multiple presses to respond	52
igure 2-3	Touchscreen has an unresponsive zone	53
igure 2-4	No control panel sound	54
igure 2-5	Home 🏠 button is unresponsive	55
igure 2-6	Hardware integration pocket (HIP) is not functioning (control panel functional)	56
igure 2-7	Configuration page	57
igure 2-8	HP embedded Jetdirect page	58
igure 2-9	LEDs	149
igure 2-10	Plug/jack locations (X555)	154
igure 2-11	Plug/jack locations (X585)	155
igure 2-12	Mark the web wipe	163

Figure C-1	Certificate of volatility (X555 models) (1 of 2)	. 305
Figure C-2	Certificate of volatility (X555 models) (2 of 2)	. 306
Figure C-3	Certificate of volatility (X585 models) (1 of 2)	. 307
Figure C-4	Certificate of volatility (X585 models) (2 of 2)	. 308

xiv ENWW

1 Theory of operation

- Basic operation
- System control
- Print subsystem
- Paper-handling system
- Servicing system
- Aerosol management system
- Document feeder (X585 models)
- Scanner system (X585 models)
- Fax functions and operation (X585 models)

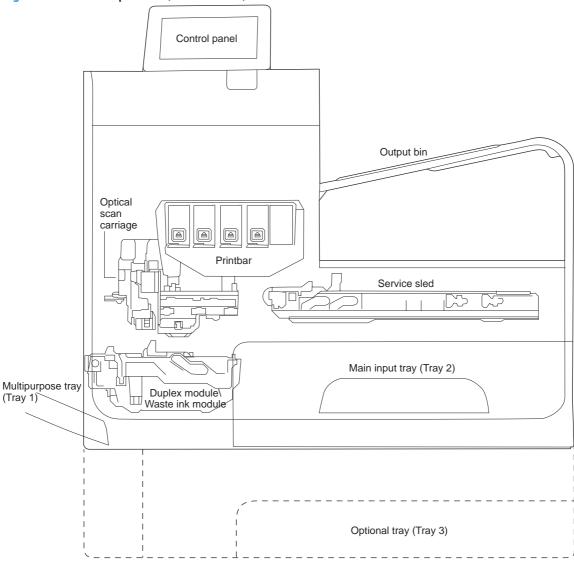
ENWW 1

Basic operation

Function structure

The product consists of the following components.

Figure 1-1 Main components (X555 models)



Control panel Document feeder Scanner Output bin Optical scan carriage Printbar Service sled Main input tray (Tray 2) Multipurpose tray (Tray 1) Duplex module\
Waste ink module Optional tray (Tray 3)

Figure 1-2 Main components (X585 models)

The product contains the following systems:

- Engine control system
- Print subsystem
- Paper-handling system
- Servicing system

ENWW Basic operation 3

- Aerosol management system
- Scanner and document feeder system (X585 models)

Two elements influence the product architecture:

- Orienting the printbar with its active face downward and statically located above the print media. This
 requires the printbar to move vertically to access its active face.
- Producing face-down output. Rather than ejecting the page face-up immediately after the ink is applied, as many inkjet printers do, the printed page is routed up and back over the printbar to eject face-down.

Operation sequence

The engine-control system on the formatter PCA controls the operational sequences. The following table describes durations and operations for each period of a print operation from when the product is turned on to when the motors stop rotating.

Table 1-1 Operation sequence

Period	Duration	Purpose
Initial startup and calibrations	When the product is set up for the first time from the factory.	 This period gets the product ready to print for the first time. The product flushes the shipping and handling fluid out of the printbar and replaces it with ink. Die alignment—The product aligns the 10 die on the printbar active face. Die density leveling—The product measures and compensates for the drop variation.
Servicing operations	When the printbar is entering the capping state after printing, when leaving capping state after a print job is initiated, or during extended print jobs.	Servicing maintains the print quality by ensuring debris and excess ink are removed and missing nozzles are replaced. Nozzle presence detection—The optical scan carriage detects and disables inoperable nozzles, and replaces them with operable nozzles. Printbar servicing—The web wipe on the service sled moves under the printbar to clean the active face and fire the nozzles into the waste ink module to clear clogs.

Table 1-1 Operation sequence (continued)

Period	Duration	Purpose
Print preparation	From the time the product	Prepares the product for a print job.
	receives a print command until paper enters the print zone.	 The printbar leaves the capping state as the service sled moves away from the printbar.
		If needed, some servicing occurs.
		 The printbar lowers to the printing position. The media type and printing mode determine the print zone height.
		The product picks media from one of the input trays.
		 Every page from Tray 1 is scanned. For Tray 2 and optional Tray 3, the product performs media edge detection after printing the first sheet after the main or optional tray is loaded. The last sheet of each job is also scanned if at least five sheets have been printed.
		 The product monitors environmental conditions. The product can decrease the print speed if conditions are significantly different from a normal office environment (23 degrees C (73 degrees F), 50% relative humidity).
		 The formatter PCA processes print data and transmits the dat to the printbar.
Printing	From the end of the preparation	Processes the print job.
	period until the last sheet is delivered.	 As the page travels through the print zone, the printbar applies ink to the page.
		 Simplex print job: the page moves up, over the printbar, and out to the output bin (face-down).
		 Duplex print job: the page moves up until the trailing edge is 40 mm past the star-wheel jam reflective sensor, then reverses direction down through the duplex path underneath the waste ink module, and then reenters the print zone where the printbar applies ink to the second side.
		 The process continues until all the pages of the print job are completed. Occasional nozzle presence detection and servicing events might occur if the job includes many pages.

ENWW Basic operation 5

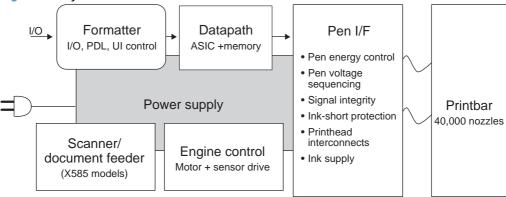
Table 1-1 Operation sequence (continued)

Period	Duration	Purpose		
End of print job	Performed after the print job is	Puts the product in a state where it's ready for the next print job.		
	completed, and continues until the next job is initiated.	If needed, some servicing occurs.		
		 The printbar moves to the capping position after a short dwell interval. 		
		The service sled moves to cap the printbar.		
Standby	The product is sitting idle, waiting for the next print job to be initiated.	Conserves energy while the product is sitting idle. Certain function might be disabled to save power, then are restarted when needed. The product has three sleep modes:		
		 Idle mode—The printbar is capped and the product is ready to immediately start a new job 		
		 Sleep1 mode—After the product is inactive for about 10 minutes, the control panel dims and the power LED blinks to indicate the unit is in Sleep1. All product functions are available. This setting can be adjusted from the control panel. 		
		 Sleep2 mode—After the product is inactive for a longer period of time (typically 2 hours), the engine controller powers down to minimize power consumption. This setting can be adjusted from the control panel. 		

System control

The system control coordinates all the other systems, according to commands from the formatter.

Figure 1-3 System control



The system consists of the following major sections:

- Formatter
- Data path
- Engine control
- Pen interface
- Scanner/document feeder (X585 models)
- Power supply

The engine control electronics are located on the engine control board (ECB). The formatter PCA is a separate assembly. The fax module (X585 models) is attached to the formatter PCA.

Formatter and data path

The formatter controller ASIC controls the input/output (I/O) control, the user interface, and the rendering of page description language files into printer-specific commands.

Input/output (I/O) control

The products support 10/100 Ethernet, a rear USB host port, a rear USB device port, a control panel USB host port, and analog fax port (some X585 models). For Ethernet networks, the formatter PCA uses a separate integrated circuit (Broadcom 57761) to provide the physical network interface.

The formatter PCA also controls the USB device and USB host.

User interface

The products contain either a 4.2-in (X555 models) or an 8-in (X585 models) color graphics display. The control panels include a USB host port for connection to thumb drives.

Formatter digital ASIC

The formatter digital ASIC has an ARM CPÙ (792 MHz) that executes firmware code that provides high-level device control. The digital ASIC uses a standard PCle interface to pass data to the engine control ASIC. The

7

ENWW System control

formatter firmware is located on either a rotating hard disk drive (HDD) or, on some X555 models, a solid state drive (SSD).

Additionally, the formatter digital ASIC manages the real-time clock, interfaces to the mass storage controller ASIC, provides control of USB ports, and interfaces with the Ethernet LAN ASIC and fax module.

Formatter Ethernet ASIC

The formatter Ethernet ASIC connects to the formatter digital ASIC with a PCIe interface to transmit and receive network packets.

Formatter mass storage ASIC

The formatter mass storage ASIC bridges between the formatter digital ASIC (via PCIe interface) and the mass storage device (via SATA interface). Both HDD and SSD mass storage media are supported. The X585 models all use a rotating media HDD, while the X555 models use either HDD or SSD depending upon the bundle option.

Formatter memory

Formatter memory is installed on-board and there is no support for additional DIMM memory installation. The size of the memory on the formatter is fixed at 1 GB.

Real-time clock

The real-time clock (RTC) allows the fax module to time-stamp outgoing faxes. It also determines the elapsed time between printhead and ISS calibration events. The RTC uses a separate device connected to the formatter digital ASIC, along with a crystal and a battery.

Engine control

The engine controller digital ASIC receives high-level commands from the formatter, and then provides low-level control to the print mechanism. The engine controller digital ASIC and its firmware control motors, system sensors, and the printbar. The engine controller analog ASIC integrates motor drivers, voltage regulators, sensor interfaces, and supervisory circuits.

Engine controller digital ASIC

The engine controller digital ASIC has a high-performance 480 MHz ARM CPU and DSP co-processors that execute firmware code to provide low-level engine control. It also drives the printbar via 15 high-speed LVDS transmission lines, which are routed from the engine PCA to the printbar via two large FFC cables. The engine controller digital ASIC receives pre-rendered data from the formatter digital ASIC over a standard PCle interface.

In some product sleep modes, the digital ASIC powers down. If a print job is received while the product is in this mode, power resumes to the digital ASIC, which then must "boot up". This can take approximately 15 seconds, which will delay the first page out (FPO) time accordingly. This sleep mode typically begins after two hours of product inactivity.

Engine controller analog ASIC

The engine uses two analog ASICs to generate the system voltages for the engine, drive the engine motors, control various engine sensors, and monitor printbar power delivery for correct operation.

The engine has seven motors, some of which are shared with other subsystems:

- Pick motor
- Feed motor
- Duplex motor
- Lift motor
- Eject motor
- Sensor carriage motor
- Aerosol fan motor

Each one is a DC motor with encoder feedback, to provide precision servo control. These motors are driven directly by one of the engine analog ASICs. Small DC motors also are used to drive the ISS pump and the aerosol fan. Solenoids actuate the ejection flap and the ISS priming system.

The product uses many sensors to track the media as it travels through the paper path. Most of these are optical REDI sensors, which are used in conjunction with mirrors to sense the presence or absence of paper in a particular location. These are carefully aligned and calibrated at the factory, so care must be taken when servicing these sensors. See the Remove and Replace chapter in the repair manual for more details.

Other printed circuit-board assemblies (PCAs)

In addition to hosting the system ASICs, the engine PCA is home to many circuits needed to interface to sensors and other sub-system components. In some cases, this circuitry is located on a smaller remote PCA (SLB) to optimize cable interconnects.

- Humidity sensor—The humidity sensor causes the product to adjust printing speed if ambient
 conditions are outside the optimal humidity range. This sensor is calibrated at the factory to ensure
 maximum accuracy.
- Temperature sensor—The temperature sensor causes the product to adjust printing speed if ambient conditions are outside the optimal temperature range. In some products, this sensor resides on a separate, remote PCA.
- Main tray presence sensor—The hall-effect sensor that detects if the main tray is properly engaged
 resides on the back of the engine PCA. A small magnet on the back of the main tray actuates the sensor.
 If the tray is fully engaged, the magnetic field strength is sufficient to trigger the sensor.

Additionally, the product includes the following PCAs:

- Fax PCA—Governs the product fax module.
- Duplex module presence sensor—A hall-effect sensor that detects that the duplex module is properly seated.
- Power button PCA—Includes the power button and power LED, as well as interface cables to the duplex module presence sensor and the MP tray empty REDI sensor.
- Accessory tray interconnect PCA—Provides communication to optional Tray 3.
- Pick encoder distribution PCA—Includes the pick motor encoder and the pick motor interconnect cable.
- Eject encoder distribution PCA—Includes the eject motor encoder and the interconnect cables to the eject motor and the aerosol fan.

ENWW System control

9

- Print zone distribution PCA—Joins interconnect cables to the following sensors: separator REDI, feed
 motion encoder, main tray empty sensor, feed roller OOPs REDI sensor, and the starwheel jam REDI
 sensor.
- REDI distribution PCA—Includes hall-effect sensors that detect ink cartridge door and left door
 positions. It also combines the interconnect cables for the eject jam REDI sensor, the upper drying path
 REDI sensor, the lower drying path REDI sensor, and the eject flap opto flag sensor.
- Sensor carriage PCA—Includes a carriage motion encoder, a ZIM sensor, and the BDD sensor.
- Printbar lift encoder distribution PCA—This PCA includes the printbar lift motion encoder, and combines
 interconnect cables to the printbar lift motor, carriage motor, and eject flap solenoid.
- Duplex encoder PCA—Contains the motion encoder for the duplex motor.
- SHAID PCA —Contains interfaces to the out-of-ink sensors for the ink cartridges, and combines the
 interface cables to the acumen PCA, the ISS pump, and the ISS solenoids.
- Acumen PCA—Contains interfaces to the acumen memory devices for the ink cartridges.

Pen interface (I/F)

The printbar is the key component that differentiates this product from other inkjet printers. The conventional approach is to print a page in horizontal swaths by moving a "scanning" printhead horizontally over a fixed sheet of paper, advancing the paper a fixed amount, and then printing the next swath. With this product, the paper moves underneath a fixed page-wide printhead in a single smooth motion.

Single pass page-wide printing requires that data and power be delivered to the printbar at a very high rate, while also maintaining good control of paper position as it moves past the printhead nozzles.

The engine PCA sends power and data to the printbar via two large flat flexible cables (36 and 38 pins). The printbar PCA routes power and data to 10 printhead die, which are attached to the PCA using a flexible tab circuit and wire-bonding process.

Electronics control the ink supply station (ISS). The SHAID PCA detects low-ink conditions. It gauges ink levels by electrically sensing the presence of ink and/or ink foam in the X-chamber. The SHAID PCA also collects and distributes electrical signals that drive the push-prime pump(s), engage the solenoids, and read the ink supply acumen data. All are routed through a single 17-pin FFC from the SHAID PCA to the engine PCA.

Each ink supply has a memory tag that stores information about its type of ink, the amount of ink remaining, and other critical data. It uses a special authentication scheme to ensure that only genuine HP supplies are used and the product is not damaged by using invalid supplies. Acumen uses a two-line serial bus, which, along with 3.3 V and ground, is cabled via the SHAID PCA to the engine PCA and the engine control digital ASIC.

Power supply

The power supply module converts 100-240 VAC to 33 VCD and 5.1 VCD to power the system. The 33 V rail goes to the engine and the scanner/document feeder, and the 5.1 V rail is supplies power to the formatter. The power supply module has a sleep mode that reduces power consumption in system low-power modes.

The power supply module has four operating modes, depending on certain control signals, as outlined in the table below. The power supply has a power factor correction (PFC) circuit to improve efficiency when the system is in the active mode.

Table 1-2 Power supply module operating modes

Mode	n33V_OFF input signal	nPFC_OFF input signal	PFC Status	33 V rail status	5.1 V rail status
OFF	Low	Low	Off	Off	On
Sleep 2	Low	Low	Off	Off	On
Sleep 1	High	Low	Off	On	On
Active	High	High	On	On	On

The power supply is a self-contained module that can be replaced if it is defective (see the Remove and Replace chapter of the Repair Manual).

To ensure safe operation, the power supply will "latch off" if a persistent over-current fault condition exists. This is typically caused by a short-circuit from 33 V or 5.1 V to ground in the product. Less severe faults also can cause the power supply to latch off, if present for an extended period of time, or if the product is operated above the recommended operating range.

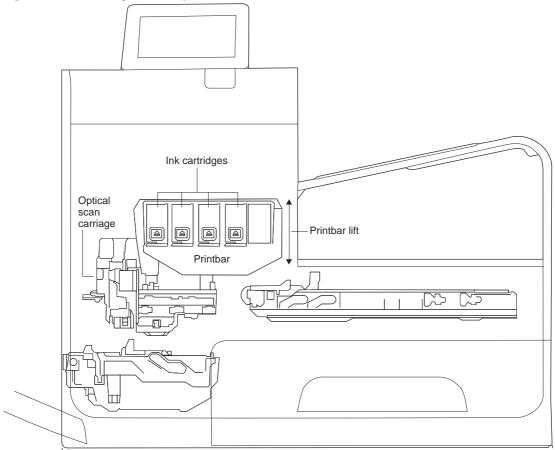
ENWW System control 17

Print subsystem

The print subsystem includes the following components:

- Printbar
- Printbar lift
- Ink cartridges
- Optical scan carriage

Figure 1-4 Print subsystem components (X555 models)



Ink cartridges Optical scan carriage Printbar lift Printbar

Figure 1-5 Print subsystem components (X585 models)

Printbar

The printbar converts the digital firing instructions from the product electronics into properly formed and timed microscopic drops of the four ink colors. The printbar spans the full width of a letter/A4-size sheet (216 mm (8.5 in)), which allows it to be statically positioned within the product and have the media move underneath it, printing the entire page in a single motion.

ENWW Print subsystem 13

Figure 1-6 Printbar components

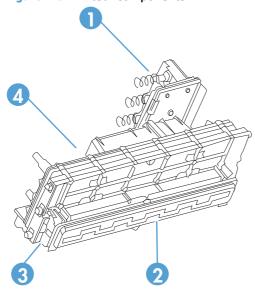


Table 1-3 Printbar components

ltem	Description
1	Ink cartridge connections
2	Thermal inkjet (TIJ) die array
3	Data/power flow and regulation
4	Inkflow channels and pressure regulation

The printbar has a fixed array of 10 thermal inkjet (TIJ) die oriented in two staggered rows. Each die contains over one thousand nozzles for each of the four ink colors (black (K), cyan (C), magenta (M) and yellow (Y)). Behind the die array are the ink flow channels and pressure regulation mechanisms that supply the die array with ink at the proper pressure and flow. Onboard electronic circuitry feeds power and data to the die at the appropriate levels and rates. Four ink cartridge receptacles, one for each color, are located at the top of the printbar. Flow connections link these cartridges to the rest of the printbar to supply the ink necessary for its operation.

A sensor technology called back-scatter drop detect (BDD) monitors printbar health and calibrations. This system looks at the reflection of the miniscule drops in flight and passes these signals through proprietary, advanced high-speed, high-gain, bandpass filters. An artificial intelligence (AI) system decides which drop ejectors are currently in or out of specifications.

After the AI system determines which drop ejectors are out of specification, the product compensates for them. Some ejectors use neighboring nozzles and at times even tiny amounts of other inks – whichever combination of methods necessary to deliver the best print quality possible at that moment. Up to half of the nozzles can be "out" without a noticeable degradation in quality. The compensation is done in real time with a dedicated high-speed DSP. The system can scan portions of the system after print jobs, but it is fully interruptible by new incoming print jobs.

Printbar lift

The printbar lift positions the printbar within the product and moves it up and down as required. This vertical motion establishes proper spacing to the paper during printing. It also raises the printbar to access the active face or perform necessary calibrations.

During printing, the lift mechanism sets the printbar height and paper height depending on the type of paper.

Ink cartridges

This product has new, state-of-the-art pigmented inks. They are filtered using proprietary processes to prevent printhead contamination. These inks are designed to produce optimal print quality on ColorLok office papers, but also produce very good print quality on regular office papers and specialty media.

Optical scan carriage

The optical scan carriage has optical sensors used for calibration. Its motion is along the long axis of the printbar. These sensors are used by a number of in-printer calibration features that are important for proper subsystem function. The BDD sensor is located on the optical scan carriage.

Print system operational states

The print subsystem has a number of distinct operational states besides active printing.

Startup

As it comes from the factory, the printbar is initially filled with an inert ink-substitute called Shipping and Handling Fluid (SHF). This fluid, essential for the manufacture and transportation of the printbar, must be flushed and replaced with actual ink. This is accomplished during the Startup phase. The flushing process automatically commences when ink supplies are inserted and the unit powered up for the first time. The SHF is removed by sustained printbar operation and replaced by ink from the supplies. The process terminates once all the SHF has been flushed from the printbar.

Special host supplies are supplied with the product prior to its first use. These supplies contain additional ink so that there will be 100 percent ink level after the SHF is replaced with ink. These supplies can be used only to initialize the product. You cannot use them in another product that has been initialized.



NOTE: The initial startup time is noticeably longer than the following regular startup times.

Die alignment

Die alignment is done by printing a special diagnostic image on a sheet of paper and then scanning it with the optical scan carriage. It is performed as part of initial unit startup, and can be manually invoked as part of the print quality recovery tool. Die alignment calibrates the positions of the 10 die. It also allows a uniform application of ink to the media, without gaps or overlaps between adjacent die.

Die density leveling

A set of diagnostic images is printed and scanned by the optical scan carriage to achieve uniform application of ink droplets to the media. Die alignment and die density leveling are usually paired together.

Nozzle presence detection

In printing, since all the ink is applied in a single smooth motion of the media past the printbar, any inoperable nozzle can show up as a streak. The operational state of each of the thousands of nozzles on the printbar is periodically measured. The printbar is raised by the printbar lift, and the BDD assembly on the optical scan carriage watches for drop presence as each nozzle is fired. Inoperable nozzles are turned off and other operable nozzles used on subsequent printed pages to apply the missing ink. Nozzle presence detection is fully interruptible by new incoming print jobs.

ENWW Print subsystem

Media edge position detection

The product uses a learning algorithm to define media center as a function of input source—multipurpose tray, main tray, or accessory tray. The edge scan is located downstream of the print zone. As media is scanned, the media center database is updated. The image is registered to the page using the media center database.

Servicing and capping

When in the capped state, the printbar is fully raised, the service sled is positioned underneath, and the printbar cap is engaged against the printbar active face. Servicing—the cleaning of the active face and the firing of the nozzles—can occur either during Sleep2 mode or after extended time in storage. It can also occur during extended print jobs.

Printing

The printing state begins by the printbar leaving the capping state, and being lowered to the printing position after the service sled moves out of the way. At the same time, a sheet of media is picked from one of the three trays and the leading edge staged at the entrance to the print zone. Once the print data has been sent, the media sheet is fed at a constant velocity through the print zone and the ink applied by the printbar.

In the case of one-sided printing the inked sheet is conducted up, over and out to the output tray. For two-sided printing the sheet is moved until its trailing edge is past the merge to the vertical path, and then it is reversed down through the duplex path underneath the waste ink module, and reintroduced into the print zone for inking of the second side.

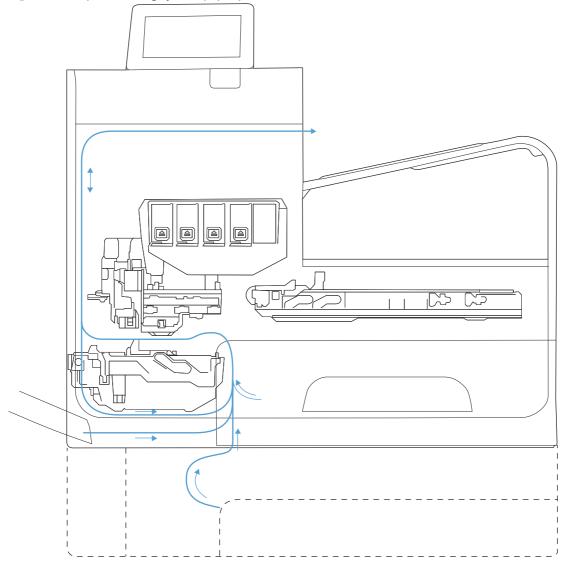
This process continues until all the pages of the print job are completed, perhaps being interrupted by servicing events if the job is many pages.

Paper-handling system

The paper-handling system moves paper through the product according to commands from the formatter.

The following figure shows the product paper path.

Figure 1-7 Paper-handling system paper path (X555 models)



ENWW Paper-handling system 17

Figure 1-8 Paper-handling system paper path (X585 models)

The paper path consists of the following major components:

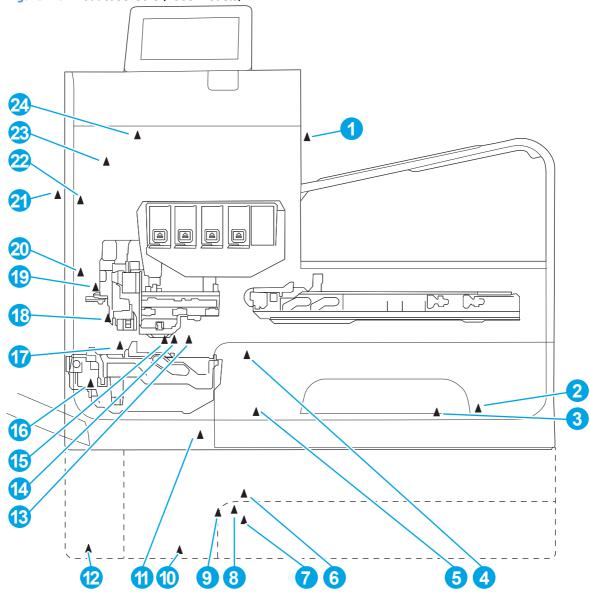
- Two integrated input trays plus one optional accessory tray
- Four motors and a solenoid plus two more motors in the accessory tray
- Duplex module
- Fourteen sensors plus four more sensors in the accessory tray

- Feed rollers, pinch rollers, star wheels, and media guides
- Transmission components (gears, shafts, levers, swing arms) that interface with other subsystems such
 as the printbar and service sled.

Components of the paper path move the paper from the input tray to a position 1 to 2 mm underneath the printbar, and then deliver the printed result to the output tray. The combined orientations and actions of the printbar, the printbar lift, and the paper path establish the print-zone, where the ink drops move from the active face of the printbar to the paper.

The following figure shows the product sensors.

Figure 1-9 Product sensors (X555 models)



ENWW Paper-handling system 19

Figure 1-10 Product sensors (X585 models) **19**

Table 1-4 Product sensors

Item	Description	Item	Description
1	Output flap jam sensor	13	Feed roller jam sensor
2	Ambient temperature sensor	14	Feed roller encoder
3	Ambient humidity sensor	15	Feed roller home sensor

Table 1-4 Product sensors (continued)

Item	Description	Item	Description
4	Tray 2 pickup tire home sensor	16	Duplex module presence sensor
5	Tray 2 tray presence sensor	17	Star-wheel jam sensor
6	Tray 3 pickup tire home sensor	18	Back-scatter drop detect sensor
7	Tray 3 paper presence sensor	19	Print calibration/Media edge detect sensor
8	Tray 3 separation sensor	20	Lower left door jam sensor
9	Tray 2 paper presence sensor	21	Left door open sensor
10	Tray 3 tray presence sensor	22	Upper left door jam sensor
11	Tray 1 paper presence sensor	23	Ink supply door open sensor
12	Tray 3 cleanout presence sensor	24	Eject jam sensor

There are several motors in the product for pick, feed, duplexing, printbar lift, delivery, and the scanning sensor carriage.

ENWW Paper-handling system 21

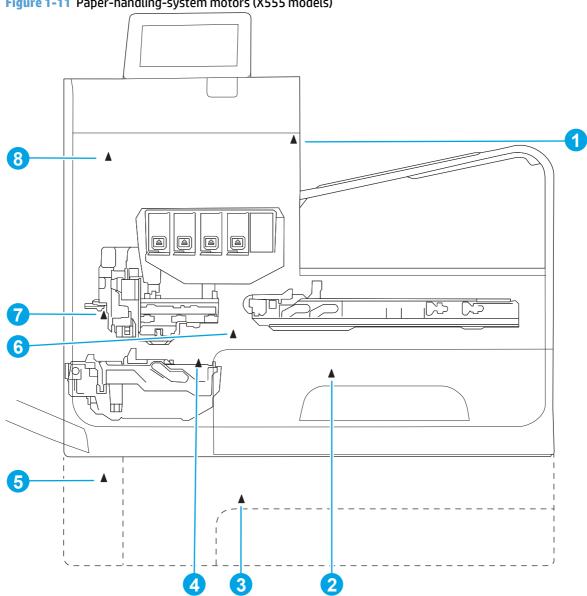


Figure 1-11 Paper-handling-system motors (X555 models)

Figure 1-12 Paper-handling-system motors (X585 models)

Table 1-5 Paper-handling system motors

ltem	Description
1	Eject (or output drive) motor
2	Tray 2 pickup motor
3	Tray 3 pickup motor

ENWW Paper-handling system 23

Table 1-5 Paper-handling system motors (continued)

Item	Description
4	Duplex Tray 1 motor
5	Tray 3 feed motor
6	Feed motor
7	Optical carriage motor
8	Printbar lift motor

Input trays

The product comes standard with two input trays, and also accepts an accessory tray.

- 50-page multipurpose (MP) tray—Tray 1: The tray shares a motor with the duplex module and has one sensor. This reflective (REDI) sensor determines if media is present in the tray. The feed roller REDI sensor determines if a sheet of media is successfully picked from the tray.
- 500-sheet letter/A4 size main tray—Tray 2: The tray has a pick motor, which is also moves the service sled. Both the main tray motor and the duplex MP tray motor operate at the same time when picking paper from the main tray. The main tray has three sensors:
 - A hall effect sensor determines if the tray is closed.
 - A flag/opto sensor determines if there is media in the tray.
 - A flag/opto sensor determines if the pick roller is in home position.

The feed roller jam sensor determines if a sheet of media is successfully picked from the main tray.

Optional 500-sheet legal size accessory tray—Tray 3: This optional tray has two motors, one for picking
paper and one for the turn roller. The turn roller receives paper from the pickup roller and transfers it to
the multipurpose tray ITR that is driven by the duplex module/MP tray motor. Both the accessory tray
motor and the duplex module/MP tray motor operate at the same time when picking paper out of the
accessory tray.

The accessory tray has the following sensors:

- A hall effect sensor detects if the tray is closed.
- A flag/opto sensor detects if there is media in the tray.
- A flag/opto sensor detects if the pickup roller is in home position.
- A hall effect sensor detects if the left door is closed.
- A separation sensor detects if the product successfully picked media.

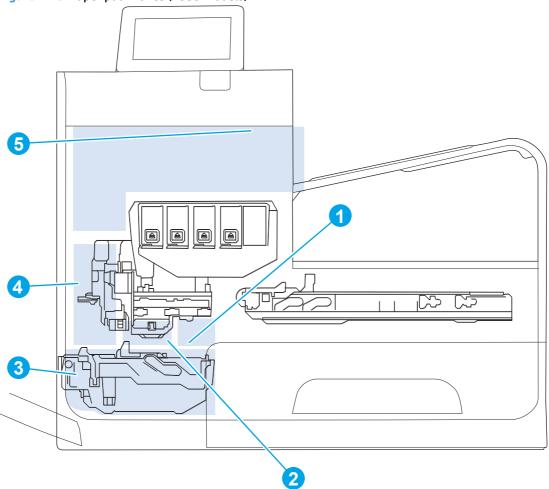
Paper path zones

The product paper path includes the following elements.

- Deskew buckle
- Print zone

- Duplex
- Output
- Eject

Figure 1-13 Paper path zones (X555 models)



ENWW Paper-handling system 25

Figure 1-14 Paper path zones (X585 models)

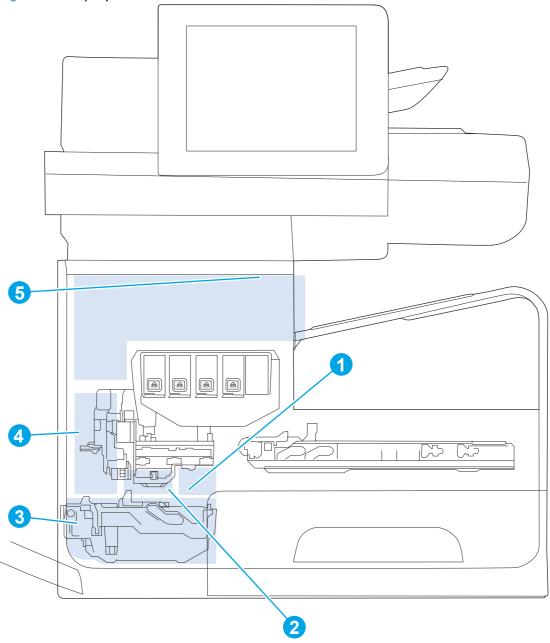


Table 1-6 Paper path zones

Item	Zone	Description
1	Deskew buckle	This is the area between the turn roller and feed roller. All print job paper passes through this zone. During the deskew operation, the duplex module/MP tray motor rotates forward, driving the paper into the feed roller nip while the feed roller is not moving. The feed roller REDI sensor determines the leading edge for accurate deskew buckle size, jam detection, and if the tray successfully picked media.

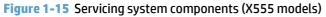
Table 1-6 Paper path zones (continued)

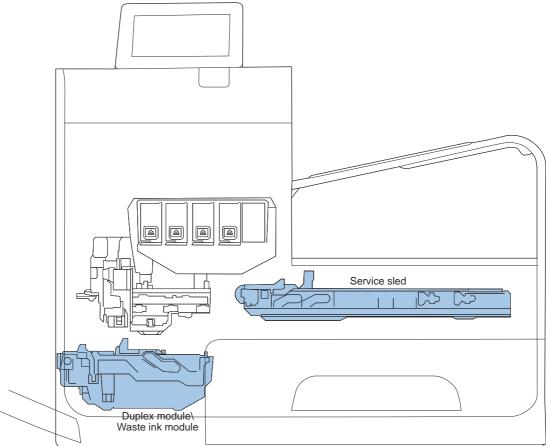
ltem	Zone	Description		
2	Print zone	This is the path between the feed roller and output pinch 1 roller. The feed roller, which has an analog quadrature encoder, precisely controls the paper in the paper feed direction. In the vertical direction, a combination of the platen, feed roller, and output pinch roller 1 controls the paper. The user can rotate the platen down for jam access after removing the duplex module.		
		There are no paper path sensors in the print zone. If a jam occurs in the print zone, it is not detected until the leading edge of the paper is determined to be "late" in reaching the jam sensor in the output path.		
		When a user pulls on jammed media in the print zone that is still partially in the feed roller nip, the servo control will detect a slight movement of the feed roller and assist the user by applying a forward torque to the roller. Also, the motion control system will disengage the duplex module rectifier (swing arm) so that the turn roller can spin freely. This feature reduces the pulling force needed by the user and therefore reduces the chance of leaving torn pieces of paper in the path—especially in the deskew buckle zone.		
3	Duplex	By opening the left door, the duplex module can be removed to clear jams. The duplex module also serves as waste collection unit for the print bar and will expose the user to waste ink when it is removed. Therefore there are warnings on the module to not touch certain areas.		
		When the user pulls on jammed media from the duplex module (or any of the trays) that is partially in the feed roller nip, the servo control detects a slight movement of the feed roller and assists the user by applying a reverse torque to the feed roller and disengages. Also, the motion control system disengages the duplex module rectifier so the turn roller can spin freely. This feature reduces the pulling force needed by the user and therefore reduces the chance of leaving torn pieces of paper in the path—especially in the deskew buckle zone.		
		In order for the product to determine the duplex module's presence, the duplex module has a magnet that triggers a hall effect sensor mounted to the structure.		
4	Output	The output path begins at output pinch roller 1 and continues to output pinch roller 5. There are four REDI sensors in this path that detect leading and trailing edges and jams.		
		The feed motor drives the rollers in the output path, except output pinch roller 5. All the pinch rollers in the output and exit path are star wheels to prevent roller tracking on wet/damp ink. However, the turn roller pinch is solid and has a high amount of force for deskew buckle formation. Also, the feed motor drives all output shafts except shafts 5 and 6.		
		The REDI dry path lower, REDI dry path upper, and eject jam REDI sensor in the output path all track the leading and trailing edges of media.		
		The outer and top portions of the vertical path are formed by paper guides molded in and attached to the left door. The left door can be opened for jam clearance and has a hall effect sensor to determine if it is closed. Also when the left door is opened, drive rollers that form pinches 3 and 4 disengage from the feed motor for safety purposes.		
5	Eject	The eject portion of the paper path includes the zone from output pinch roller 5 to the eject flap.		
		The eject motor powers output pinch roller 5 and eject pinch roller 6.		
		The eject flap has 3 positions:		
		Closed when not printing.		
		 Partially open for heavy ink printing in dry environments, to limit severe curl. 		
		Ofpen for all other printing. This position controls moderately curled media.		
		The flap is opened and closed by a torque clutch on the eject roller shaft. The flap also has a locking feature that is controlled by a solenoid. In order for the door to open all the way, or move between positions, the solenoid must be actuated.		

ENWW Paper-handling system 27

Servicing system

The servicing system comprises the service sled, which maintains print quality by wiping debris and ink off the print nozzles, and the service ink module, where waste ink is deposited.





Service sled Duplex module\
Waste ink module

Figure 1-16 Servicing system components (X585 models)

ENWW Servicing system 29

Service sled

Figure 1-17 Service sled components

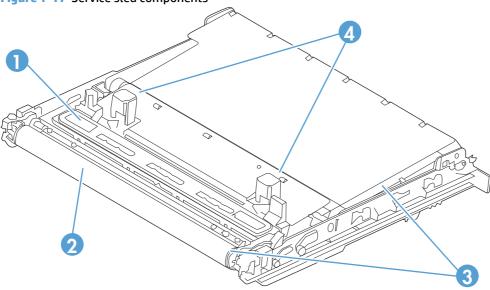


Table 1-7 Service sled components

ltem	Description
1	Service sled cap
2	Service sled wiping surface
3	Service sled web fabric loop
4	Printbar support posts

The service sled system keeps the printbar nozzles firing correctly throughout the life of the product as it performs the wiping and capping functions.

- The wiping function cleans the nozzles of ink residue and particulates.
- The capping function keeps the nozzles moist during storage when the product is idle.

The service sled system uses the pick drive system (a component of the paper path) for horizontal motion to perform its functions.

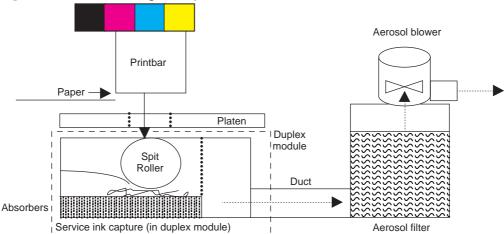
To perform the wiping function, the product moves the service sled underneath the printbar (which is elevated from the print position) so that the web fabric makes contact with the ink nozzles. The web fabric is a looped belt that advances after every wipe. Since the belt is a finite loop, it will eventually reuse previously used material. The web advances when the web wipe module moves to the right out of the print zone. The advance mechanism is triggered by a mechanism located on the rear wall of the unit.

To perform the capping function, the service sled moves underneath the printbar (which is elevated from the print position), which allows the rubber cap to seal the print nozzles from the environment.

Aerosol management system

The aerosol management system consists of a fan module and filter box to keep ink aerosol from building up inside the product. The following figure shows the service ink and aerosol capture system components.

Figure 1-18 Aerosol management process



Between pages, printed aerosol is drawn though the platen openings. Service ink travels directly through the platen, impacting and collecting on the spit roller. Aerosol from the service spitting is also collected. Service ink collects in the duplex module, and a porous filter element captures the aerosol as aerosol-laden air passes though it. The aerosol blower mounted to the filter housing creates the air motion (suction—lower pressure—in the print zone).

Most of printbar servicing ink (spit ink) is captured by the spit roller and scraped into the bottom of the bucket on the duplex module. The service ink spit roller is indexed slowly by the motion of paper though the product, driven by the swing-arm and turn-roller gear train, with power provided by the duplex motor.

When the product purges the printbar of its shipping fluid at initial startup, absorbers in the duplex module collect the fluid. These absorbers allow much of the initial water to evaporate from the shipping fluid over time. Also, they allow service ink coming into contact with the absorbers to leach some of their fluids into them, assisting with drying and thickening of the sludge.

The blower remains active as long as the printbar is uncapped, and it continues to operate for a few seconds after capping is complete.

Figure 1-19 Aerosol management system components

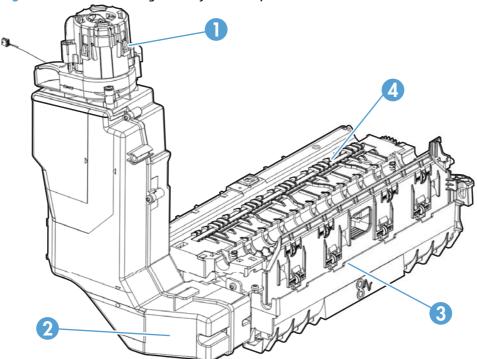


Table 1-8 Aerosol management system components

ltem	Description
1	Blower
2	Aerosol filter housing
3	Duplex module/waste ink module
4	Platen

Document feeder (X585 models)

Document feeder operation

Standby (paper-loading) mode: In standby mode, the pickup roller is up and the stack-stop is down, preventing the user from inserting the original document too far. When a document is inserted correctly, the paper-present sensor detects its presence.

The standard operation of the document feeder consists of the pick, feed, and lift steps.

Pick: When it receives a copy or scan command, the document feeder motor engages the gear train to lower the pickup-roller assembly and raise the stack-stop. The pre-pick roller moves the top few sheets forward into the document feeder. The pickup roller contacts the document feeder separation pad, which separates multiple pages into single sheets.

Feed: The form sensor, which is a set distance from the document feeder glass, detects the sheet. This alerts the scanner to start when the page reaches the glass. The scanner acquires the image until it detects the end of the page. The page is then ejected. The pick and feed steps are repeated as long as paper is detected in the document feeder input tray.

Duplex: When the product duplexes from the document feeder, the paper passes through the document feeder three times. During the second instance, the product reverses the page orientation and then scans it. During the third instance, the product returns the page to the original orientation.

Lift: When no more paper is detected in the document feeder input tray and the form sensor detects the trailing edge of the last page, the last sheet is ejected and the motor lifts the pick-roller assembly to standby (paper-loading) mode again.

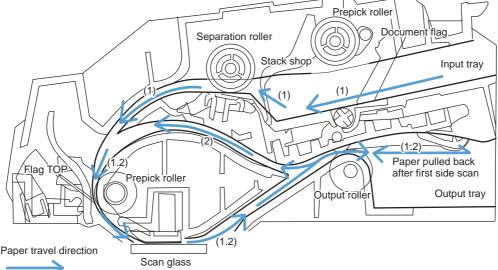
The document feeder will not function when the document feeder cover is open. When the document feeder cover is closed, the cover-present sensor detects its presence.

The paper path is incomplete if the scanner lid/document feeder is lifted from the glass, and it will result in a paper jam error.

Document feeder paper path and sensors

The following diagram shows the document feeder paper path during a duplexed copy job. The paper enters the product from the document feeder input tray and passes through the paper path for the first time. The product then pulls the paper back through the path to reorient the page and scan the second side. The paper then travels back to the end of the paper path, where it is pulled in again to be reoriented and ejected into the output bin.

Figure 1-20 Document feeder paper path and sensors



The paper-present sensor determines if paper is in the document feeder input tray. The form sensor detects the top and bottom edges of the document. Another sensor detects an open document feeder cover.

Document feeder jam detection

The document feeder has two sensors that detect paper. The paper-present sensor detects the presence of media in the document feeder input tray. The form sensor detects media moving through the document feeder. If a jam is detected, the document feeder immediately stops the paper feeding and initiates a jam clearing routine. A jam message appears on the control-panel display.

A jam can be detected under any of the following conditions:

- **Document-feeder jam:**When documents are detected in the document feeder input tray, and a command to copy, scan or fax is received, the document feeder attempts three times, or for about 10 seconds, to advance the paper to the form sensor. If the paper does not advance, the scan module turns off and the **ADF Misfeed** message appears on the control-panel display.
- Long-document jam: If the paper has advanced to trigger the form sensor, but the trailing edge is not
 detected within the time allowed for a 381 mm (15 in) document (the maximum allowable page length
 for the document feeder), the scan module turns off and the message Paper Jam appears on the
 control-panel display.
- Stall jam: When a page that is less than 381 mm (15 in) long has advanced to the form sensor but has
 not left it within the expected time, the paper has probably stalled or jammed. The scan module turns
 off and the message Paper Jam appears on the control-panel display.
- Other: If the paper stops in the document feeder and the scan module remains under the document feeder scanner glass, an internal firmware error has probably occurred and the message Cannot Scan, Copy, or Fax appears on the control-panel display. This is usually remedied by cycling the power.

Scanner system (X585 models)

The flatbed image scanner captures an electronic image of the document on the glass. The scanner does this by illuminating the document with LEDs (red, green, and blue) and capturing the image in the image sensor to create an electronic image of the document. The flatbed scanner consists of three main elements

- CIS scanner. The CIS (contact image sensor) scanner captures an image using the product's optical path.
 Red, green, and blue LEDs sequentially illuminate a small strip of the document (often called a raster
 line), and the optical system captures each color in a single row of CCD sensors that cover the entire
 page width. Because only one color is captured for each line per exposure, the three colors are
 recombined electronically to create the full color image. For monochromatic scans or copies, all three
 LEDs are illuminated to create a white light for the scan so the raster line can be captured in one
 exposure.
- Mechanical carriage drive. The carriage drive moves the CIS scan head along the document length to
 create the image. In this product, a small DC motor with an optical encoder creates this motion. The
 speed of the carriage drive is proportional to the scan resolution (300 ppi is much faster than 1200 ppi)
 and also proportional to the type of scan (color scans are three times slower than monochromatic
 scans). A 1200 ppi color scan moves so slowly that the product might appear to not be working,
 whereas a monochromatic copy scan moves at 50 times that speed and will be somewhat noisy.
- Image processing system (formatter). The formatter processes the scanner data into either a copy or a scan to the computer. For copies, the image data is sent directly to the product without being transmitted to the computer. Depending on user selections for the copy settings, the formatter enhances the scanner data before sending it to the product. Image data is captured at 300 ppi for copies and is user selectable for scans to the computer. Each pixel is represented by 8 bits for each of the three colors (256 levels for each color), for a total of 24 bits per pixel (24-bit color).

Scanner power-on sequence of events

When the product is turned on, it performs the following tests:

- **Motor test**. The product moves the motor left and right to confirm operation. It reports a scanner error 12 if no motion is detected in the motor encoder system.
- Wall find. The scan carriage moves slowly to the left while watching an encoder on the carriage motor
 to determine when the carriage has found the side wall or stop. This enables the product to identify the
 document origin (position of the original). If the document origin cannot be located, a default position is
 used instead.
- **LED check**. The product moves the carriage to the white calibration label under the left side of the flatbed image scanner, and it verifies that the minimum and maximum response is acceptable. It reports a scanner error 14 if the response is unacceptable.
- Home find. The scan carriage uses the optical scanner to find physical reference features that relate to
 the document origin at the left side of the image glass. This process ensures accurate location of the
 first document pixels so that the user documents will have an accurate placement of the image on
 scans and copies. It reports a scanner error 6 message if the reference features are not found.
- Calibration. This test, also known as scanner color calibration, enables the product to identify the black
 and white on every pixel in the CCD. Calibration occurs in two processes: a broad (analog) adjustment of
 all pixels to bring them into the target output range, and a pixel-by-pixel adjustment (digital) to fine
 tune the actual black and white response. The calibration process occurs under the left side of flatbed
 image scanner where there is a special white calibration label. The calibration code in the product
 firmware needs to be updated when the scanner assembly is replaced.

Calibration is the most important step in creating a high quality image. Calibration problems can include color and brightness inaccuracies and vertical streaks through the image. The calibration process identifies any bad pixels and enables the image formatter to recreate the lost information from adjacent pixels. Extreme cases of this problem can appear as large vertical streaks or image smears. The user has no control over the calibration process itself or this pixel-replacement process.

For best calibration results, make sure that the scanner lid is in the down (closed) position.

Copy or scan-to-computer sequence of events

To create an accurate rendition of a document, the scanner must be calibrated for the requested operation. If the user selects a scan at 600 ppi color, the flatbed image scanner calibrates for that specific operational mode. The flatbed image scanner automatically re-calibrates for the next requested operation. Calibration does not occur for every new copy request.

This is the normal sequence of operation for a flatbed copy or scan.

- 1. LEDs illuminate.
- 2. Carriage motion begins moving the CIS scanner toward the right.
- Image capture continues for the entire page or length requested in a scan-to-computer operation.
- 4. Carriage returns to the home position on the left.

Fax functions and operation (X585 models)

The following sections describe the product fax capabilities.

Computer and network security features

The product can send and receive fax data over telephone lines that conform to public switch telephone network (PSTN) standards. The secure fax protocols make it impossible for computer viruses to be transferred from the telephone line to a computer or network.

The following product features prevent virus transmission:

- No direct connection exists between the fax line and any devices that are connected to the USB or Ethernet ports.
- The internal firmware cannot be modified through the fax connection.
- All fax communications go through the fax subsystem, which does not use Internet data-exchange protocols.

PSTN operation

The PSTN operates through a central office (CO) that generates a constant voltage on the TIP and RING wires (usually 48 V). A device goes off-hook by connecting impedance (such as 600 ohms for the U.S.) across the TIP and RING so that a line current can flow. The CO can detect this current and send impulses like dial tones. The product generates more signaling tones, such as dialing digits, to tell the CO how to connect the call. The product can also detect tones, such as a busy tone from the CO, that tell it how to behave.

When the call is connected, the CO behaves like a wire connecting the sender and receiver. This is the period during which all of the fax signaling and data transfer occurs. When a call is completed, the circuit opens again and the line-current flow ceases, removing the CO connection from both the sender and the receiver.

On most phone systems, the TIP and RING signals appear on pins 3 and 4 of the RJ-11 modular jack (the one on the fax card, as defined in the common six-wire RJ standard). These two signals do not have to be polarized because all of the equipment works with either TIP or RING on one pin and the other signal on the other pin. This means that cables of either polarity can interconnect and still work.

These basic functions of PSTN operation are assumed in the design of the fax subsystem. The product generates and detects the signaling tones, currents, and data signals that are required to transmit and receive faxes using the PSTN.

The fax subsystem

The formatter, fax card, firmware, and software all contribute to the product fax functionality. The designs of the formatter and fax card, along with parameters in the firmware, determine the majority of the regulatory requirements for telephony on the product.

The fax subsystem is designed to support V.34 fax transmission, medium speeds (such as V.17 fax), and the lower speeds of older fax machines.

Fax card in the fax subsystem

The fax card contains the modem chipset (DSP and CODEC) that controls the basic fax functions of tone generation and detection, along with channel control for fax transmissions. The CODEC and its associated circuitry act as the third-generation silicon data access arrangement (DAA) to comply with worldwide regulatory requirements.

Safety isolation

The fax card provides safety isolation between the high-voltage, transient-prone environment of the telephone network (TNV [telephone network voltage]) and the low-voltage analog and digital circuitry of the formatter (SELV [secondary extra-low voltage]). This safety isolation provides both customer safety and product reliability in the telecom environment.

Any signals that cross the isolation barrier do so magnetically. The breakdown voltage rating of barrier-critical components is greater than 5 kV.

Safety-protection circuitry

In addition to the safety barrier, the fax card protects against over-voltage and over-current events.

Telephone over-voltage events can be either differential mode or common mode. The event can be transient in nature (a lightning-induced surge or ESD) or continuous (a power line crossed with a phone line). The fax card protection circuitry provides a margin of safety against combinations of over-voltage and over-current events.

Common mode protection is provided by the selection of high-voltage-barrier critical components (transformer and relay). The safety barrier of the fax card PCA and the clearance between the fax card and surrounding components also contribute to common mode protection.

A voltage suppressor (a crowbar-type thyristor) provides differential protection. This device becomes low impedance at approximately 300 V differential, and crowbars to a low voltage.

Data path

TIP and RING are the two-wire paths for all signals from the telephone network. All signaling and data information comes across them, including fax tones and fax data.

The telephone network uses DC current to determine the hook state of the telephone, so line current must be present during a call. The silicon DAA provides a DC holding circuit to keep the line current constant during a fax call.

The silicon DAA converts the analog signal to a digital signal for DSP processing, and also converts the digital signal to an analog signal for transmitting data through a telephone line.

The magnetically coupled signals that cross the isolation barrier go through a transformer.

The DSP in the fax card communicates with the ASIC in the formatter using the high-speed serial interface.

Ring detect

Ring detect is performed by the line voltage monitoring module of the silicon DAA, and is a combination of voltage levels and cadence (time on and time off). Both must be present to detect a valid ring. The CODEC works with DSP and the firmware to determine if an incoming signal is an answerable ring.

Line current control

The DC current from the CO needs to have a path to flow from TIP to RING. The DC impedance emulation line modulator and DC terminations modules in the silicon DAA act as a DC holding circuit, and work with the firmware to achieve the voltage-current characteristic between TIP and RING. The impedance (the current-voltage characteristic) changes corresponding to certain special events, such as pulse dialing or when the product goes on-hook.

Fax page storage in flash memory

Fax pages are the electronic images of the document page. They can be created in any of three ways: scanned to be sent to another fax machine, generated to be sent by the computer, or received from a fax machine to be printed.

The product automatically stores all fax pages in flash memory. After these pages are written into flash memory, they are stored until the pages are sent to another fax machine, printed on the product, transmitted to the computer, or erased by the user.

These pages are stored in flash memory, which is the nonvolatile memory that can be repeatedly read from, written to, and erased. The product has 2 MB of flash memory, of which 1.5 MB is available for fax storage. The remaining 0.5 MB is used for the file system and reclamation. Adding RAM does not affect the fax page storage because the product does not use RAM for storing fax pages.

Advantages of flash memory storage

Fax pages that are stored in flash memory are persistent. They are not lost as a result of a power failure, no matter how long the power is off. Users can reprint faxes if an ink cartridge runs out of ink or the product experiences other errors while printing.

The product also has scan-ahead functionality that makes use of flash memory. Scan-ahead automatically scans pages into flash memory before a fax job is sent. This allows the sender to pick up the original document immediately after it is scanned, eliminating the need to wait until the fax transmission is complete.

Because fax pages are stored in flash memory rather than RAM, more RAM is available to handle larger and more complicated copy and print jobs.

2 Solve problems

- Problem-solving checklist
- Troubleshooting process
- Tools for troubleshooting
- Control-panel menus
- Solve image quality problems
- Solve paper jam or feed problems
- Solve performance problems
- Solve connectivity problems
- Service mode functions
- Solve fax problems
- Product upgrades

ENWW 41

Problem-solving checklist

Follow these steps when trying to solve a problem with the product.

- Step 1: Check that the product power is on
- Step 2: Check the control panel for error messages
- Step 3: Test print functionality
- Step 4: Test copy functionality
- Step 5: Test the fax sending functionality
- Step 6: Test the fax receiving functionality
- Step 7: Try sending a print job from a computer
- Step 8: Test the Plug and Print USB Drive printing functionality
- Factors that affect product performance

Step 1: Check that the product power is on

- 1. Make sure that the product is plugged in and turned on. The power button should be lit with a green light. If it is not, press the power button. It should first glow with an amber color, and then quickly switch to green as the product initializes. If the power button does not light up, check the following conditions.
 - Make sure that the power cable is connected to the product and the outlet.
 - Check the power source by connecting the power cable to a different outlet.
- 2. If the product motors do not rotate, make sure that the ink cartridges are installed and that the doors are all closed. The control panel displays messages to indicate these problems.
- 3. If the document feeder motor does not rotate, open the document feeder cover and remove any packing material or shipping tape.
- If the scanner bulb does not light during copying, scanning, or faxing, contact HP support.

Step 2: Check the control panel for error messages

42

The control panel should indicate ready status. If an error message appears, resolve the error.

Print a supplies status page to ensure that the supplies are not at or over end of life.

- Ink collection unit (B5L09A): estimated life is 115,000 pages.
- Document feeder (ADF) roller kit, X585 models only (L2718A): estimated life is 100,000 pages.

NOTE: HP long-life consumable and maintenance kit life specifications are estimations. Actual individual life or yield during normal use will vary depending on usage, environment, media, and other factors. Estimated life is not an implied warranty.

Chapter 2 Solve problems ENWW

Step 3: Test print functionality

- 1. From the control panel Home screen, touch the Administration button.
- 2. Open the Reports menu, touch the Configuration/Status Pages menu, select the Configuration Page item, and then touch the Print button to print the report.
- 3. If the report does not print, make sure that paper is loaded in the tray, and check the control panel to see if paper is jammed inside the product.
 - NOTE: Make sure that the paper in the tray meets specifications for this product.

Step 4: Test copy functionality

- 1. Place the configuration page into the document feeder and make a copy. If paper does not feed smoothly through the document feeder, you might need to clean the document feeder rollers and separation pad. Make sure that the paper meets specifications for this product.
- 2. Place the configuration page onto the scanner glass and make a copy.
- **3.** If the print quality on the copied pages is not acceptable, clean the scanner glass and the small glass strip.

Step 5: Test the fax sending functionality

- 1. From the control panel Home screen, touch the Administration button.
- 2. Open the Fax Setup menu, and then open the Fax Tools menu. Touch the Run Fax Test button to test the fax functionality.
- 3. Touch the Fax on the product control panel, and then touch the Start Fax button.

Step 6: Test the fax receiving functionality

- 1. From the control panel Home screen, touch the Administration button.
- 2. Touch the Fax Setup menu, and then touch the Fax Tools menu. Touch the Run Fax Test button to test the fax functionality.
- Use another fax machine to send a fax to the product.
- 4. Review and reset the product fax settings.

Step 7: Try sending a print job from a computer

- 1. Use a word-processing program to send a print job to the product.
- 2. If the job does not print, make sure that you selected the correct printer driver.
- 3. Uninstall and then reinstall the product software.

Step 8: Test the Plug and Print USB Drive printing functionality

- 1. Load a .PDF document or .JPEG photo onto a USB flash drive, and insert it in the slot on the front of the product.
- 2. The USB Flash Drive menu opens. Try printing the document or photo.
- 3. If no documents are listed, try a different type of USB flash drive.

Factors that affect product performance

Several factors affect the time it takes to print a job:

- The software program that you are using and its settings
- The use of special paper (such as heavy paper or custom-size paper)
- Product processing and download time
- The complexity and size of graphics
- The speed of the computer you are using
- The USB or network connection

44

- Whether the product is printing in color or in monochrome
- The type of USB drive, if you are using one
- Environmental factors, such as low temperature or high humidity

Chapter 2 Solve problems ENWW

Troubleshooting process

Determine the problem source

When the product malfunctions or encounters an unexpected situation, the product control panel alerts you to the situation. This section contains a pre-troubleshooting checklist to filter out many possible causes of the problem. A troubleshooting flowchart helps you diagnose the root cause of the problem. The remainder of this chapter provides steps for correcting problems.

Use the troubleshooting flowchart to pinpoint the root cause of hardware malfunctions. The flowchart guides you to the section of this chapter that contains steps for correcting the malfunction.

Before beginning any troubleshooting procedure, check the following issues:

- Are supply items within their rated life?
- Are supply items Genuine HP supplies?
- Does the configuration page reveal any configuration errors?



NOTE: The customer is responsible for checking supplies and for using supplies that are in good condition.

Troubleshooting flowchart

This flowchart highlights the general processes that you can follow to guickly isolate and solve product hardware problems.

Each row depicts a major troubleshooting step. A "yes" answer to a question allows you to proceed to the next major step. A "no" answer indicates that more testing is needed. Go to the appropriate section in this chapter, and follow the instructions there. After completing the instructions, go to the next major step in this troubleshooting flowchart.

Table 2-1 Troubleshooting flowchart

1 Power on	Is the product on and does a readable message display?		Follow the power-on troubleshooting checks. See Power subsystem on page 46.
rowel oil	Yes↓	No →	After the control-panel display is functional, see step 2.
2 Control-panel	Does the message Ready display on the control panel?		After the errors have been corrected, go to step 3. See Error messages on page 60.
messages	Yes↓	No →	
3 Event log	Open the Troubleshooting menu and print an event log to see the history of errors with this product.		If the event log does not print, check for error messages. See Error messages on page 60. If paper jams inside the product, clear the jam. See Clear jams
	Does the event log print? Yes ✓	No →	on page 238. If error messages display on the control panel when you try to print an
	·		event log, see the control-panel message section of the service manual.
			After successfully printing and evaluating the event log, see step 4.

Table 2-1 Troubleshooting flowchart (continued)

4 Information pages	Open the Reports menu and print the configuration pages to verify that all the accessories are installed. Are all the accessories installed?		If accessories that are installed are not listed on the configuration page, remove the accessory and reinstall it. After evaluating the configuration pages, see step 5.
	Yes ↓	No →	
5 Print quality	Does the print quality med requirements?	et the customer's	Compare the images with the print quality report. See Interpret the print quality report on page 156.
Frint quality	Yes ↓	No →	After the print quality is acceptable, see step 6.
6 Interface	host computer?		Verify that all I/O cables are connected correctly and that a valid IP address is listed on the HP Jetdirect configuration page.
merace	Yes. This is the end of the troubleshooting process.	No →	If error messages display on the control panel when you try to print an event log, see the control-panel message section of the service manual.
			When the customer can print from the host computer, this is the end of the troubleshooting process.

Power subsystem

Power-on checks

The basic product functions should start up when the product is connected into an electrical outlet and the power switch is pushed to the *on* position. If the product does not start, use the information in this section to isolate and solve the problem.

If the control-panel display remains blank, random patterns display, or asterisks remain on the control-panel display, perform power-on checks to find the cause of the problem.

Power-on troubleshooting overview

During normal operation, a cooling fan begins to spin briefly after the product power is turned on. Place your hand over the vents at the rear of the product, next to the formatter, or on the on the rear of the scanner (X585 models). If the fan is operating, you will feel air passing out of the product. You can lean close to the product and hear the fan operating.

After the fan is operating, the main motor turns on (unless the left door or cartridge access door is open, a jam condition is sensed, or the paper-path sensors are damaged). You might be able to visually and audibly determine if the main motor is turned on.

If the fan and main motor are operating correctly, the next troubleshooting step is to isolate print engine, formatter, and control panel problems.

If the control panel is blank when you turn on the product, check the following items:

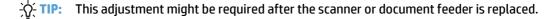
- 1. Make sure that the product is connected directly into an active electrical outlet (not a power strip) that delivers the correct voltage.
- 2. Make sure that the power switch is in the *on* position.
- Make sure that the fan runs briefly, which indicates that the power supply is operational.
- 4. Make sure that the control-panel display wire harness is connected.

- 5. Make sure that the formatter is seated and operating correctly. Turn off the product and remove the formatter. Reinstall the formatter, make sure the power switch is in the on position, and then verify that the heartbeat LED is blinking.
- 6. Remove any external solutions, and then try to turn the product on again.

Scanning subsystem (X585)

Calibrate the scanner

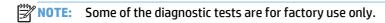
Use this procedure to properly position the copied image on the page.



- 1. From the Home screen on the product control panel, scroll to and touch the Device Maintenance button.
- 2. Touch the Calibration/Cleaning button.
- 3. Touch the Calibrate Scanner button, and then follow the instructions provided on the screen.

Control panel checks

The product includes a diagnostic test mode for the control panel. This mode allows you to troubleshoot issues with the touchscreen, the speaker, and the Home 🏠 button.



TIP: To diagnose control panel problems, see Control panel diagnostic flowcharts on page 50.

Open diagnostic mode

• Tilt the control panel forward. On the back side of the control panel, press the button that is underneath the round black rubber cover near the center of the control panel to access the diagnostic mode.

Repeatedly pressing the button will scroll through additional screens on the control-panel display. Continue to press the button to scroll back to the diagnostic-mode main test screen.

Exit diagnostic mode

Do one of the following:

- Touch the Cancel X button.
- Wait 20 seconds. The control panel will return to the Home screen.

Table 2-2 Control panel diagnostic functions

Item	Description	Remarks
×	Exits a test	
Cancel button		

Table 2-2 Control panel diagnostic functions (continued)

ltem	Description	Remarks
1 2 3 4 5 6 7 8 9	Selects test settings in some of the test windows	
Keypad		
#####	Verifies that all areas respond to a touch	Use this item to check the accuracy of the touch screen.
		Use a finger or 3 mm (.118 in) conductive stylus to trace between the grid lines to check the accuracy of the touchscreen calibration.
		NOTE: The gap between the grid lines is 6 mm (. 236 in).
Red-grid touch test		When the screen is touched, a line or a dot display on the screen (the X and Y coordinates of the position on the screen are also displayed).
	Checks calibration	Use this item to determine if the touchscreen calibration is within the acceptable range.
		When selected, ten target points (and the X and Y coordinates of the position of the target point) display on the screen.
Calibration touch test		Touching a target causes the X and Y coordinate o that target to appear in the middle of the touchscreen (above the cancel button).
		NOTE: The product automatically calibrates the touchscreen. A manual touchscreen calibration procedure is not available for this product.
	Selects a test pattern to view on the display.	Use this item to identify touchscreen LED display problems.
		1. Touch the icon.
		 Touch the up ▲ or down ▼ arrow buttons to scroll though touchscreen LED display test screens.
Touchscreen LED display test		3CI CC113.
44	Tests sounds	Use this item to test audio functionality.
		 Touching this item causes the speaker to em a tone.
7"		Touch the 2 button on the keypad, and then touch this item to cause the speaker to emit more complex tone.
Speaker test		

Table 2-2 Control panel diagnostic functions (continued)

ltem	Description	Remarks	
1	Shows the firmware version	Touch this item to display the control panel firmware version and firmware build date.	
Firmware information			
2	Factory use only		
	Tests the product keyboard NOTE: For products with a keyboard feature only.	When this item is selected, pressing a button on the keyboard causes the corresponding character to appear on the control-panel display.	
		1. Touch the icon.	
Keyboard test		Press a button on the keyboard. The corresponding character should appear on th control-panel display.	
	Adjusts the backlight	Use this item to adjust the brightness of the control-panel display.	
		1. Touch the icon.	
275		 Touch the up ▲ or down ▼ arrow buttons to adjust the backlight level. 	
Backlight test			
XX	Checks the ambient light sensor	Use this item to test the ambient-light sensor functionality.	
•		1. Touch the icon.	
		 Shine a flashlight at the control panel to the left of, and down about 25.4 mm (1 in,) from the Home button. 	
Ambient-light sensor test		3. The numbers displayed below the icon should be any value other than zero.	
û	Tests the Home 🏠 button	Use this item to test the Home 🏠 button LED and switch functionality.	
Home button test		1. Touch the icon.	
		2. Press the Home 🏠 button on the right side of	
		the control panel. The LED icon on the contro panel display illuminates if the button LED ar switch are correctly functioning.	

ENWW Troubleshooting process 49

Control panel diagnostic flowcharts

TIP: Tilt the control panel forward. On the back side of the control panel, press the button that is underneath the round black rubber cover near the center of the control panel to access the diagnostic mode.

Use the flowcharts in this section to troubleshoot the following control panel problems.

- Touchscreen is blank, white, or dim (no image).
- Touchscreen is slow to respond or requires multiple presses to respond.
- Touchscreen has an unresponsive zone.
- No control panel sound.
- Home button is unresponsive.
- Hardware integration pocket (HIP) is not functioning (control panel functional).

Chapter 2 Solve problems

Touchscreen black, white, or dim (no image)

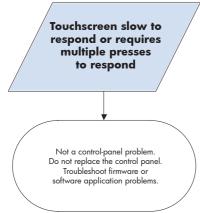
Black display (no backlight Dim display White display (no image) (no image) or image) Is the Home butto illuminated (bright white)? Is the product in bright sunlight? If yes, move the product to a different location. Open the diagnostic function Touch the display or Home button to exit sleep mode. Make sure that the product is plugged in and the power is turned on. Does an image appear on the control panel? Open the diagnostic function. Perform the backlight test. Turn the product power off.
Inspect and reseat the
control panel cables.
Remove and reseat the
formatter. Does the display Make sure that the formatter LEDs function. Problem solved. Is the backlight adjustable? Are the formatter LEDs functioning? Problem fixed? Do not replace the control panel. Turn the product power off. Remove and reseat the formatter. If the error persists, troubleshoot the formatter, USB cable, and the control panel. Turn the product power off. Remove and reseat the formatter.
Troubleshoot the formatter.
Do not replace the control panel. Replace the control panel

Figure 2-1 Touchscreen blank, white, or dim (no image)

Touchscreen is slow to respond or requires multiple presses to respond

TIP: Use the red-grid touch test to verify that all areas of the touchscreen are correctly functioning. See Table 2-2 Control panel diagnostic functions on page 47.

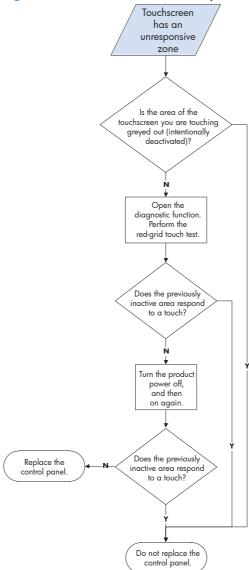
Figure 2-2 Touchscreen is slow to respond or requires multiple presses to respond



Chapter 2 Solve problems

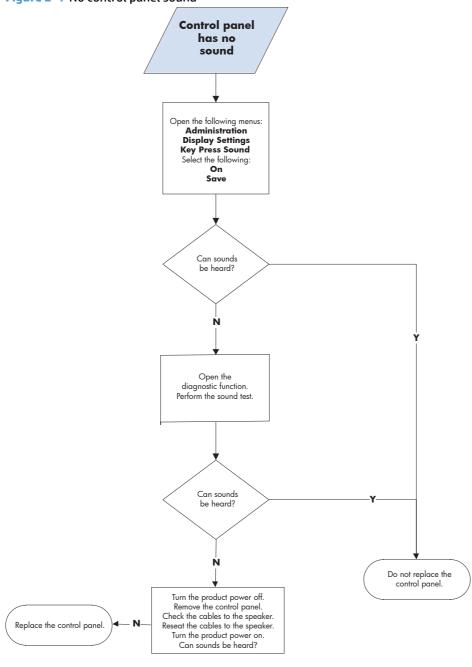
Touchscreen has an unresponsive zone

Figure 2-3 Touchscreen has an unresponsive zone



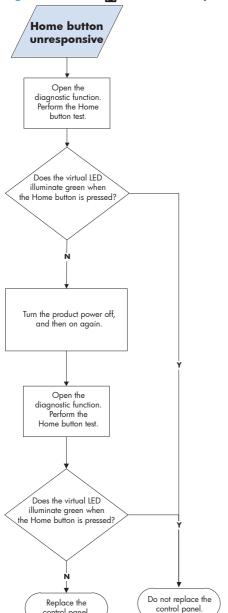
No control panel sound

Figure 2-4 No control panel sound



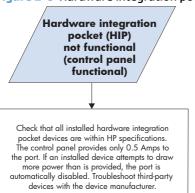
Home hutton is unresponsive

Figure 2-5 Home 🏠 button is unresponsive



Hardware integration pocket (HIP) is not functioning (control panel functional)

Figure 2-6 Hardware integration pocket (HIP) is not functioning (control panel functional)



Tools for troubleshooting

Print the configuration page

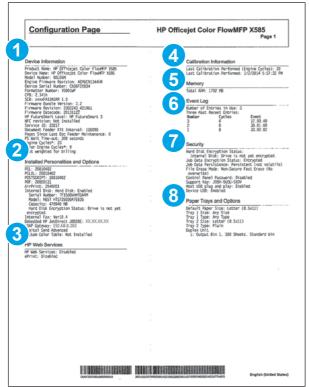
Depending on the model, up to three pages print when you print a configuration page. In addition to the main configuration page, the HP embedded Jetdirect configuration pages print.

Configuration page

Use the configuration page to view current product settings, to help troubleshoot product problems, or to verify installation of optional accessories, such as memory (DIMMs), paper trays, and product languages.

- 1. From the Home screen on the product control panel, scroll to and touch the Administration button.
- 2. Open the following menus:
 - Reports
 - Configuration/Status Pages
- 3. Touch Configuration Page to select it.
- Touch the View button to view the information on the control panel, or touch the Print button to print the pages.

Figure 2-7 Configuration page



- **Device Information** information, including the firmware version, usage statistics, and the service ID.
- Installed Personalities and Options information, including installed printer languages and hard disk information.
- 3 HP Web Services status information

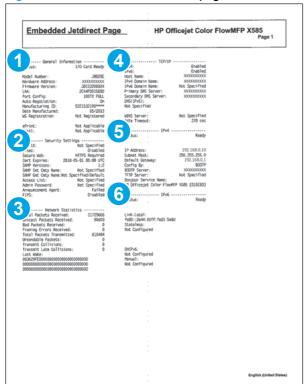
4	Calibration Information that shows when the product most recently performed a calibration.	
5	Memory	
6	Event Log information that shows the most recent entries in the log.	
7	Security information that includes encryption information and current security settings.	
8	Paper Trays and Options information that shows installed trays and current paper size/type settings.	

HP embedded Jetdirect page

The second configuration page is the HP embedded Jetdirect page, which contains the following information.

Always make sure the status line under the general information line indicates: I/O Card Ready.

Figure 2-8 HP embedded Jetdirect page



- **General Information** indicates the product status, model number, hardware firmware version, port select, port configuration, auto negotiation, manufacturing identification, and manufactured date.
- 2 Security Settings information
- 3 **Network Statistics** indicates the total packets received, unicast packets received, bad packets received, framing errors received, total packets transmitted, unsendable packets, transmit collisions, and transmit late collisions.
- 4 TCP/IP information, including the IP address
- 5 IPv4 information
- 6 **IPv6** information

58

Chapter 2 Solve problems ENWW

Finding important information on the configuration pages

Certain information, such as the firmware date codes, the IP address, and the email gateways, is especially helpful while servicing the product. This information is on the various configuration pages.

Table 2-3 Important information on the configuration pages

Type of information	Specific information	Configuration page
Firmware date codes	Engine firmware revision	Look on the main configuration page, under "Device Information."
When you use the remote firmware upgrade procedure, all of these firmware components are upgraded.	Firmware datecode	Look on the main configuration page under "Device Information."
	HP embedded Jetdirect firmware version	Look on the HP embedded Jetdirect page, under "General Information."
Accessories and internal storage All optional devices that are installed on the product should be listed on the main configuration page. In addition, separate pages print for the optional paper handling devices and the fax accessory. These pages list more detailed information for those devices.	Embedded HP Jetdirect	Look on the main configuration page under "Installed Personalities and Options." Shows model and ID.
	Total RAM	Look on the main configuration page under "Memory."
	Duplex unit	Look on the main configuration page under "Paper Trays and Options."
Finishing accessories	Installed finishing accessory type	Look on the main configuration page, under "Paper Trays and Options."
Engine cycles and event logs Total page counts and maintenance kit counts are important for ongoing product maintenance.	Engine cycles	Look on the main configuration page, under "Device Information."
The configuration page lists only the three most recent errors. To see a list of the 50 most recent errors, print an event log from the Troubleshooting menu.		
Event log information	Event log information	Look on the main configuration page, under "Event Log."

Event log messages

See the control-panel message and event-log entries section of the product reoubleshooting manual for eventl-log entry descriptions and solutions.

Print or view an event log

NOTE: The event log in the Administration menu shows only a subset of events. For a complete event log, use the Service menu.

Print or view the event log from the Administration menu

- 1. From the Home screen on the product control panel, scroll to and touch the Administration button.
- 2. Open the following menus:

- Troubleshooting
- Event Log
- 3. The event log displays on the screen. To print it, touch the Print button.

Print or view the event log from the Device Maintenance menu

- From the Home screen on the product control panel, scroll to and touch the Device Maintenance button.
- 2. Open the Service menu.
- On the sign-in screen, select the Service Access Code option from the drop-down list.
- 4. Enter one of the following service access code for your product:

• X555: 04055514

• **X585**: 04058514

- 5. Touch the Event Log item.
- 6. The event log displays on the screen. To print it, touch the Print button.

Clear an event log

- 1. From the Home screen on the product control panel, scroll to and touch the Device Maintenance button.
- 2. Open the Service menu.
- 3. On the sign-in screen, select the Service Access Code option from the drop-down list.
- 4. Enter one of the following service access code for your product:

• **X555**: 04055514

• **X585**: 04058514

5. Select the Clear Event Log item, and then touch the OK button.

Error messages

The following control-panel messages and software error messages, which appear on the user's computer screen, indicate the current product status or situations that might require action.

11.XX.YZ Error Messages

11.00.01 or 11.00.02 Internal clock error

Description

This message indicates a problem with the formatter's real time clock.

The product real time clock has experienced an error.

01=dead clock

02=dead real time clock

- 1. Whenever the product is turned off and then turned on again, set the time and date on the control panel.
- **2.** If the error persists, you might need to replace the formatter.

15.XX.YZ Error Messages

15.00.00 Unknown Jam

Description

A paper jam has occurred in the printer at an unknown location.

Recommended action

- 1. Follow jam removal instructions on the screen.
- **2.** Open all doors and trays and remove all paper from the paper path.
- 3. Run Paper Path Diagnostics to move paper from tray to output bin (Administration / Troubleshooting / Paper Path Page).

15.A0.01 Input Jam, Tray 1

Description

An input jam occurred from Tray 1 but sensor and condition are unknown.

No Pick "Did not pick page from tray 1".

This jam occurs when the paper does not reach the Feed roller REDI sensor [1] for Tray 1 in designated amount of time after the start of paper pick-up from Tray 1.

Recommended action

- 1. Follow jam removal instructions on the screen.
- Clear all possible paper jam locations (remove paper stack, open left door, remove ICU, lower flap, clear paper, raise flap, install ICU, close door).
- **3.** Verify the paper meets the specifications for the tray.
- **4.** Ensure that the tray width setting is set to your paper being installed into the tray.

The arrow on the guide should line up exactly with the line connected to paper size designation.

- **5.** Make sure the tray is not overload above the marking shown on the tray side guide.
- **6.** Check the Tray 1 feed roller for wear, damage or paper dusk. Clean or replace the rollers as needed.
- Run Paper Path Diagnostics to move paper from tray to output bin (Administration / Troubleshooting / Paper Path Page).
- **8.** Replace the Mech Kit.

15.A0.02 Input Jam, Tray 2

Description

An input jam occurred from Tray 2 but sensor and condition are unknown.

No Pick "Did not pick page from tray 2".

This jam occurs when the paper does not reach the Feed roller REDI sensor [1] for Tray 2 in designated amount of time after the start of paper pick-up from Tray 2.

Recommended action

- 1. Follow jam removal instructions on the screen.
- 2. Clear all possible paper jam locations (Open paper cassette remove paper, open left door, remove ICU, lower flap, clear paper, raise flap, install ICU, close door).
- **3.** Verify the paper meets the specifications for the tray.
- **4.** Ensure that the tray width setting is set to your paper being installed into the tray.

The arrow on the guide should line up exactly with the line connected to paper size designation.

- 5. Make sure the tray is not overload above the marking shown on the tray side guide.
- Check the Tray 2 pickup and feed rollers for wear, damage or paper dusk. Clean or replace the rollers as needed.
- Run Paper Path Diagnostics to move paper from tray to output bin (Administration / Troubleshooting / Paper Path Page).
- 8. Replace the Mech Kit.

15.A0.03 Input Jam, Tray 3

Description

An input jam occurred from Tray 3 but sensor and condition are unknown.

No Pick "Did not pick page from tray 3".

This jam occurs when the paper does not reach the Tray 3 separation REDI sensor in designated amount of time after the start of paper pick-up from Tray 3.

Recommended action

- 1. Follow jam removal instructions on the screen.
- 2. Clear all possible paper jam locations (Open paper cassette remove paper, open left door, remove ICU, lower flap, clear paper, raise flap, install ICU, close door).
- **3.** Verify the paper meets the specifications for the tray.
- **4.** Ensure that the tray width setting is set to your paper being installed into the tray.

The arrow on the guide should line up exactly with the line connected to paper size designation.

5. Make sure the tray is not overload above the marking shown on the tray side guide.

- **6.** Check the Tray 3 pickup and feed rollers for wear, damage or paper dusk. Clean or replace the rollers as needed.
- Run Paper Path Diagnostics to move paper from tray to output bin (Administration / Troubleshooting / Paper Path Page).
- 8. Replace the Mech Kit.

15.B0.0Z Image Area Jam from Tray X

Description

A Print Zone jam occurred from tray indicated but sensor and condition are unknown.

- **15.B0.01** Image Area from Tray 1
- 15.B0.02 Image Area from Tray 2
- **15.B0.03** Image Area from Tray 3
- **15.B0.0D** Image Area from Duplexer

Recommended action

- 1. Clear all possible paper jam locations (Remove paper from tray, open left door, remove ICU, lower flap, clear paper, raise flap, install ICU, close door).
- Run Paper Path Diagnostics to move paper from tray to output bin (Administration / Troubleshooting / Paper Path Page).
- 3. Replace Mech Kit.

15.CO.OZ Switchback area Jam from Tray X

Description

An output jam occurred while printing from indicated tray or area.

- 15.C0.01 Switchback jam from Tray 1
- 15.C0.02 Switchback jam from Tray 2
- **15.C0.03** Switchback from Tray 3
- **15.C0.0D** Switchback from Duplexer

Recommended action

- 1. Clear all possible paper jam locations (Open left door, remove ICU, lower flap, clear paper, raise flap, install ICU, close door).
- Run Paper Path Diagnostics to move paper from tray to output bin (Administration / Troubleshooting / Paper Path Page).
- 3. Replace Mech Kit.

15.E0.0Z Output jam from Tray X

Description

An eject jam occurred from the tray designated.

- **15.E0.01** Output jam from Tray 1
- 15.E0.02 Output jam from Tray 2
- 15.E0.03 Output jam from Tray 3
- **15.E0.0D** Output jam from Duplexer

- 1. Clear all possible paper jam locations (Open left door, remove ICU, lower flap, clear paper, raise flap, install ICU, close door).
- Run Paper Path Diagnostics to move paper from tray to output bin (Administration / Troubleshooting / Paper Path Page).
- 3. Replace Mech Kit.

17.XX.YZ Error Messages (Supply errors)

17.0X.00 Failed Cartridge

Description

The indicated cartridge is detected but its data is corrupt or invalid in some way.

- **17.00.00** Black Cartridge
- **17.01.00** Cyan Cartridge
- **17.02.00** Magenta Cartridge
- **17.03.00** Yellow Cartridge

Recommended action

- **1.** Remove the cartridge, reinstall it and close the ink door.
- **2.** Turn the product off, and then on again.
- **3.** Replace the failing cartridge.
- **4.** Replace the Mech Kit.

17.0X.34 Counterfeit or refilled cartridge installed

Description

The supply being used is either a counterfeit or refilled cartridge.

- **17.00.34** Black Cartridge
- 17.01.34 Cyan Cartridge
- **17.02.34** Magenta Cartridge
- **17.03.34** Yellow Cartridge

Recommended action

To avoid this condition – always use genuine HP cartridges.

The user must replace with a genuine HP cartridge OR approve the use of refilled cartridges before printing can continue.

If you believe you purchased a genuine HP supply, go to www.hp.com/go/anticounterfeit. Any print quality repair required as a result of using used cartridges is not covered under warranty. Supply status and features depending on supply status are not available.

17.0X.35 Incompatible <supply>

Description

The indicated supply is not compatible with this product.

- **17.00.35** Black Cartridge
- **17.01.35** Cyan Cartridge
- **17.02.35** Magenta Cartridge
- **17.03.35** Yellow Cartridge

Recommended action

To avoid this condition – always use genuine HP cartridges.

The user must replace with a genuine HP cartridge OR approve the use of refilled cartridges before printing can continue.

17.0X.36 Non-Startup cartridge at startup

Description

Non-Startup cartridge at startup.

A trade cartridge has been installed before purge has been completed.

- **17.00.36** Black Cartridge
- 17.01.36 Cyan Cartridge
- **17.02.36** Magenta Cartridge
- **17.03.36** Yellow Cartridge

Recommended action

To avoid this condition – always use the startup cartridges that shipped with the product.

Do not override and use trade cartridges unless absolutely necessary. If the user later finds the startup cartridges after initialization, these startup cartridges will be unusable on this device.

17.0X.37 Startup Cartridge after startup completed

Description

Startup cartridge is being used after startup completed.

- **17.00.37** Black Cartridge
- **17.01.37** Cyan Cartridge

- 17.02.37 Magenta Cartridge
- **17.03.37** Yellow Cartridge

To avoid this condition, always use trade cartridges after initialization has completed and the original startup cartridges are spent.

Startup cartridges can only be used the first time the product is initialized.

Once a startup cartridge has been used for initialization it's memory tag contents are changed to indicate it will now behave and be detected as a trade cartridge.

17.0X.38 Cartridge might be empty

Description

The cartridge indicated might be empty.

Continuing may cause image quality issues.

This is a transient condition that occurs when the cartridge memory tag indicates empty and the cartridge is newly inserted into a printer.

- **17.00.38** Black Cartridge
- **17.01.38** Cyan Cartridge
- 17.02.38 Magenta Cartridge
- **17.03.38** Yellow Cartridge

Recommended action

There several possible outcomes when this condition is detected:

- 1. The user removes the cartridge from the printer and replaces it with a non-empty cartridge.
- **2.** The user touches "OK" and approves the use of the "Possibly Empty" cartridge.
 - Printer attempts to pump/prime ink but is unsuccessful. The cartridge is declared as "Empty".
 - Some ink was previously stranded due to tilt and the pump/prime is successful. The cartridge is declared as "Low" or possibly "Very Low".
 - Cartridge has been refilled and now after printing some number of pages, the cartridge will be declared as "Refilled".

17.0X.39 Use new cartridges

Description

The Startup-Trade cartridge override feature has been enabled and a partially used Cyan Cartridge has been installed before the ink initialization process completed.

The cartridge might not be able to complete the ink initialization.

Using a new cartridge allows the process to complete in one session, preventing the user from leaving and coming back to find the process incomplete.

- 17.00.39 Black Cartridge
- **17.01.39** Cyan Cartridge
- 17.02.39 Magenta Cartridge
- 17.03.39 Yellow Cartridge

Touch "OK" to continue or use a new cartridge.

If a "Too Low to Prime" condition occurs, use the following steps.

- 1. The engine has determined that there is probably not enough ink in the installed trade cartridge to complete the initialization (ink purge) process.
- 2. The user can touch "OK" to proceed anyway (they may see this same message again once the current cartridge is depleted).

Condition does not distinguish between SHAID Too Early and a failure in the ink delivery system.

3. The user can replace the partially full trade cartridge with a replacement that is full.

17.0X.42 General printing error

Description

Printer failure or the indicated cartridge SHAID too early.

- **17.00.42** Black Cartridge
- **17.01.42** Cyan Cartridge
- **17.02.42** Magenta Cartridge
- **17.03.42** Yellow Cartridge



Recommended action

NOTE:

- **1.** Turn the product off, and then on again.
- **2.** Replace the cartridge.
- 3. Replace the Mech kit.

17.0X.52 Supply upgrade detected

Description

The indicated supply upgrade was detected.

- **17.00.52** Black Cartridge
- 17.01.52 Cyan Cartridge
- **17.02.52** Magenta Cartridge
- 17.03.52 Yellow Cartridge

Touch "OK" to continue or change cartridge.

17.0X.53 Supply upgrade successful

Description

The indicated supply upgrade was successful.

- **17.00.53** Black Cartridge
- **17.01.53** Cyan Cartridge
- **17.02.53** Magenta Cartridge
- **17.03.53** Yellow Cartridge

Recommended action

No action necessary.

17.0X.54 Supply upgrade problem

Description

The indicated supply encountered an upgrade problem.

The requested upgrade (addition of a new cartridge to the list of supported cartridges stored in the engine NVRAM) using a "Trade" cartridge did not succeed. The formatter does not know why the failure occurred, only that it did fail.

- 17.00.54 Black Cartridge
- **17.01.54** Cyan Cartridge
- **17.02.54** Magenta Cartridge
- **17.03.54** Yellow Cartridge

Recommended action

- **1.** Replace the failed cartridge with one that is known good and then reinsert the upgrade cartridge and try again.
- **2.** Turn the product off, and then on again.
- **3.** Remove the upgrade cartridge and go back to using the cartridge(s) supported at release.
- **4.** Replace the Mech Kit.

17.0X.55 Supply upgrade problem

Description

The indicated supply encountered an upgrade problem.

The requested upgrade (addition of a new cartridge to the list of supported cartridges stored in the engine NVRAM) using a "Startup" cartridge did not succeed. The formatter does not know why the failure occurred, only that it did fail.

- 17.00.55 Black Cartridge
- **17.01.55** Cyan Cartridge
- **17.02.55** Magenta Cartridge
- 17.03.55 Yellow Cartridge

- **1.** Replace the failed cartridge with one that is known good and then reinsert the upgrade cartridge and try again.
- **2.** Turn the product off, and then on again.
- **3.** Remove the upgrade cartridge and go back to using the cartridge(s) supported at release.
- Replace the Mech Kit.

17.0X.56 Ink sensor warning

Description

The indicated cartridge has printed past approximately 150% of its expected capacity and there has been no SHAID event.

The ink sensor might not be able to detect when supplies are empty or the cartridge has been refilled.

- **17.00.56** Black Cartridge
- **17.01.56** Cyan Cartridge
- **17.02.56** Magenta Cartridge
- **17.03.56** Yellow Cartridge

Recommended action

- **1.** If print quality issues exist, replace the cartridge.
- Check cartridge warranty and manufacture date. Check event log for low on ink code. If user acknowledges, assume cartridge has been refilled.

17.0X.57 HP Cartridge Protection enabled

Description

The indicated cartridge that has been protected using the HP cartridge protection feature has been detected.

The target cartridge has been locked to a different printer and cannot be used on this device.

- **17.00.57** Black Cartridge
- **17.01.57** Cyan Cartridge
- 17.02.57 Magenta Cartridge
- **17.03.57** Yellow Cartridge

- 1. Replace the indicated cartridge with one that has not been "protected" on another device.
- **2.** Once a cartridge is locked to a given device there is no way to unlock the cartridge.

17.0X.60 Cartridge Low Warning

Description

The indicated cartridge is low.

- **17.00.60** Black Cartridge
- **17.01.60** Cyan Cartridge
- **17.02.60** Magenta Cartridge
- 17.03.60 Yellow Cartridge

Recommended action

No action necessary.

17.0X.65 Install Supply

Description

The indicated cartridge is not installed or missing or has a damaged acumen.

- 17.00.65 Black Cartridge
- **17.01.65** Cyan Cartridge
- **17.02.65** Magenta Cartridge
- **17.03.65** Yellow Cartridge

Recommended action

- **1.** Reinstall the supply.
- **2.** Replace the indicated supply with a replacement.

17.0X.69 Cartridge Very Low

Description

The indicated cartridge is very low.

- **17.00.69** Black Cartridge
- **17.01.69** Cyan Cartridge
- **17.02.69** Magenta Cartridge
- **17.03.69** Yellow Cartridge

The target cartridge has been depleted and the only ink remaining is in the X chamber and print head. The cartridge can be replaced in this state without any loss of ink to the system.

No action necessary.

17.0X.70 Printing past very low

Description

The indicated cartridge is printing past very low.

- **17.00.70** Black Cartridge
- **17.01.70** Cyan Cartridge
- 17.02.70 Magenta Cartridge
- **17.03.70** Yellow Cartridge

Recommended action

The print quality should not degrade in any way when the ink cartridge approaches end-of-life as the product will halt printing when all of the usable ink has been depleted.

Customers should have a spare cartridge on-hand as the indicated cartridge will transition to Empty in just a few pages.

If print quality is not acceptable replace the indicated cartridge.

17.0X.80 Install Supply

Description

The indicated cartridge is missing.

- **17.00.80** Black Cartridge
- 17.01.80 Cyan Cartridge
- **17.02.80** Magenta Cartridge
- 17.03.80 Yellow Cartridge

Recommended action

Install the indicated cartridge.

17.31.60 Ink Collection Unit Warning

Description

Ink Collection Unit almost full. The percentage of life remaining is 2%.

The product's Ink Collection Unit (ICU) collects unused ink for later disposal. The life tracking on this supply is accomplished via a numeric percent life remaining (PLR) that starts at 100% and decreases in 1% increments as pages are printed. The engine counts the number of ink droplet that go into the ICU and reports this information to the formatter as a percentage of life remaining. The expected life of the ICU is nominally 120,000 page but this will vary depending on printing patterns.

A new ICU should be ordered and printing can continue.



NOTE: There is no sensor that indicates when the ICU has been replaced. For this reason the user will be asked near end of ICU life if the ICU has been replaced each time the left door closes or a power-on occurs.

17.31.65 Install Supply Ink Collection Unit

Description

The Ink Collection Unit (ICU) is not installed.

Recommended action

Install the ICU, make sure it is aligned and installed correctly.

If message continues to appear, install a replacement ICU.

17.31.69 Ink Collection Unit full

Description

The Ink Collection Unit is full. This is the second warning that the ICU life is almost depleted. The percentage of life remaining is 1% or less.

The products Ink Collection Unit (ICU) collects unused ink for later disposal. The life tracking on this supply is accomplished via a numeric percent life remaining (PLR) that starts at 100% and decreases in 1% increments as pages are printed. The engine counts the number of ink droplet that go into the ICU and reports this information to the formatter as a percentage of life remaining. The expected life of the ICU is nominally 120,000 page but this will vary depending on printing patterns.

Recommended action

Replace the ICU or continue printing until stop occurs.

17.31.70 Ink Collection Printing past full

Description

Ink Collection Unit (ICU) printing past full.

Recommended action

Replace the ICU.

Replacement can occur at this point or the user can continue until halted.

17.31.71 Reinstall Ink Collection Unit

Description

The product has prompted the user to remove and reinstall the Ink Collection Unit (ICU) to maintain print quality.

Recommended action

Remove and reinstall ICU, make sure it is aligned and installed correctly.

17.31.72 Ink Collection Unit reinstalled

Description

The user removed and reinstalled the Ink Collection Unit (ICU) to maintain print quality.

Recommended action

No action necessary.

17.31.73 New Ink Collection Unit

Description

The Ink Collection Unit (ICU) counter has been reset.

Recommended action

There is no sensor that indicates when the ICU has been replaced. For this reason the user will be asked near end of ICU life if the ICU has been replaced each time the left door closes or a power-on occurs. When "YES" is selected the reset will be performed.

17.31.80 Replace Ink Collection Unit

Description

Ink Collection Unit (ICU) is full and must be replaced.

Recommended action

Replace the ICU.

17.99.31 Non-HP supply in use

Description

Non-HP supply in use. If any of these bits are set, the event could be posted.

This message does not distinguish between supplies.

Recommended action

No action necessary.

17.99.32 Previously used HP Supply installed

Description

An original HP supply that started its life in another product is in use.

This message does not distinguish between supplies.

Recommended action

No action necessary.

17.99.40 Supplies installed

Description

Transition of at least one non-HP to all genuine.

This message does not distinguish between supplies.

Recommended action

No action necessary.

17.99.49 Startup Cartridge Override

Description

User has overridden using Startup cartridges.

This message does not distinguish between supplies.

Recommended action

No action necessary.

17.99.58 HP Cartridge Protection enabled

Description

A user enabled the HP Cartridge Protection Feature, protecting their cartridges and restricting the cartridges to only be usable in the product that originally protected them.

Recommended action

No action necessary.

20.XX.YZ, 21.XX.YZ Error Messages

20.00.00 Insufficient memory: < Device>

Description

Event log error message 20.00.00.

The product does not have enough memory to print the page.

The product received more data than can fit in the available memory. You might have tried to transfer too many macros, soft fonts, or complex graphics.

Recommended action

Touch the OK button to print the transferred data. Some data might be lost. Reduce the page complexity or add product memory.

21.00.00 Page Too Complex

Description

Event log error message 21.00.00.

The product displays this message to indicate that the page decompression process was too slow for the product.

Recommended action

Touch the OK button to continue. There may be some data loss on the page that was being formatted when the error occurred.

21.1C.2D Page complex error

Description

Event log error message 21.1C.2D.

The product displays this message to indicate that the page decompression process was too slow for the product.

Recommended action

Touch the OK button to continue. There may be some data loss on the page that was being formatted when the error occurred.

30.XX.YZ Error Messages — X585 only

30.01.01

Description

The flatbed cover sensor was interrupted.

The scanner flatbed cover is open.

Message appears only in the event log and is not posted on the control panel.

The control panel will read Flatbed Cover Open.

Recommended action

No action necessary. This error message should automatically clear.

If the error persists, open the Scanner Tests to test the flatbed cover sensor.

- If the cover is closed, check the cover sensor at the right rear of the scanner for correct mechanical functionality, using the scanner sensor test in the Administration / Troubleshooting / Diagnostics / Scanner Tests Menu.
- **2.** Check the connectors on the scanner control board (SCB) for loose connections.
- **3.** Replace the lid-sensor assembly.
- **4.** Replace the scanner control board (SCB).
- **5.** Replace the integrated scanning assembly (ISA).

30.01.02 Scanner calibration failure

Description

The scanner calibration failed.

- **1.** Turn the product off, and then on again.
- **2.** After the product warms up, repeat the calibration process.
- **3.** If the error persists, replace the Integrated Scanning Assembly (ISA).

30.01.06 Scanner Fan failure

Description

Scanner fan error.

The Copy, Fax and Send options will be grayed out or not present on the control panel and message will be posted in event log.

Recommended action

- 1. Turn the product off, and then on again.
- **2.** During the product initialization sequence, listen to the fan to determine if it is operating.
- 3. the error persists, turn the product off and then check the fan wire-harness connectors.
- **4.** If the error persists, replace the scanner control board (SCB).
- **5.** Replace the integrated scanning assembly (ISA).

30.01.08 Home position error

Description

The scanner optic failed to return to the home position.

Recommended action

- 1. Turn the product off, and then on again.
- **2.** Observe the movement of the optics assembly.
- If the error persists, run the scanner motor test under component test. Administration/ Troubleshooting/Scanner tests/Flatbed motor test
- **4.** If issue still remains and firmware has been upgraded replace scanner control board (SCB).
- 5. If the error persists, replace the integrated scanning assembly (ISA).

30.01.14 Scan system EEPROM error

Description

Scanner control board (SCB) EEPROM error.

Recommended action

- 1. Turn the product off, and then on again.
- **2.** Ensure all connectors on the SCB are connected and properly seated.
- 3. Ensure the MFP has at latest SCB firmware version.
- **4.** Replace the SCB.

30.01.15 Scanner error

Description

Scanner did not initialize (internal error).

The scanner failed to be initialized due to an internal error.

Recommended action

- 1. Turn the product off, and then on again.
- 2. Verify that all covers are installed correctly and that the ADF and ADF jam cover are closed.
- **3.** Check all sensors on the scanner to ensure they are not blocked.
- 4. Look through the vents on back of scanner check to see if GREEN SCB LEDs are lit.
- **5.** Check all connections for SCB to print engine and make sure the are properly seated.
- **6.** Replace the SCB.

30.01.18 Scanner Error

Description

Scanner internal optical sensor error.

Recommended action

- 1. Turn the product off, and then on again.
- **2.** Make sure that all the connectors on the SCB are properly seated.
- 3. Make sure that the MFP has the latest SCB firmware version.
- **4.** Replace the SCB.
- 5. If the error persists, replace the integrated scanning assembly (ISA)

30.01.19 Scanner lamp error

Description

Scanner internal lamp sensor error.

Recommended action

- **1.** Turn the product off, and then on again.
- **2.** Determine if the scanner lamp turns on and off approximately 12 second after the product turns on.
- **3.** Test the lower lamp using the scanner test located in the Diagnostics menu.
- **4.** Re-seat the interconnect cables between the optical carriage and the SCB.
- Replace the integrated scanning assembly (ISA)

30.01.30 or 30.01.32

Description

HP image ASIC error.

Recommended action

Turn the product off, and then on again.

Check all connections on the SCB.

Replace the SCB.

30.01.36 Upgrade Error Try downloading upgrade again

Description

Scanner firmware upgrade error.

Recommended action

- **1.** Re-send the scanner firmware upgrade.
- **2.** If the error persists, replace the SCB.

30.01.41 Scanner error

Description

The formatter lost connections with the SCB or communication was corrupted.

Recommended action

- **1.** Turn the product off, and then on.
- **2.** Remove and reinstall the formatter making to verify it is properly seated.
- **3.** Upgrade the firmware.
- 4. Verify that all cables are connected to the product and to the interconnect board / formatter and SCB.
- **5.** Verify that the scanner control board (SCB) has power.
- **6.** Replace the scanner control board (SCB).
- **7.** Replace the formatter.

30.01.42 Scanner error

78

Description

Internal product communication error.

- **1.** Turn the product off, and then on again.
- **2.** If the error persists, turn the product off, and then check all scanner control board (SCB) connectors are fully seated.
- **3.** If this error occurs after a formatter, fax card or hard disk has been replaced, check that the formatter is fully seated and the "Smiley face" icon on the formatter is illuminated. Check the fax card for proper seating on the formatter. (If Fax card is not properly seated it can prevent the formatter from seating properly.
- **4.** If the error persists, replace the scanner control board (SCB).

30.01.43 Scanner memory failure

Description

Scan memory error.

Recommended action

- 1. Turn the product off, and then on again.
- **2.** If the error persists, turn the product off, and then re-seat the formatter.
- **3.** If the error persists, replace the formatter.

30.01.44

Description

Copy processor (CPB) / scanner control board (SCB) communication error

Recommended action

- 1. Turn the product off, and then on again.
- **2.** If the error persists, turn the product off, and then check the scanner cable.
- **3.** Upgrade the firmware.
- **4.** If the error persists, turn the product off, and then re-seat the formatter.
- **5.** If the error persists, replace the scanner control board (SCB) or the formatter.

30.01.45

Description

Internal copy processor board (CPB) communication error.

CPB code assertion error for the copy processor board firmware.

Recommended action

- 1. Turn the product off, and then on again.
- **2.** If the error persists, turn the product off, and then re-seat the formatter.
- **3.** Upgrade the firmware.
- **4.** If the error persists, replace the scanner control board (SCB).
- 5. If the error persists, replace the formatter.

30.01.46 Scanner Error

Description

The firmware cannot find the copy processor board (CPB).

- **1.** Turn the product off, and then on again.
- **2.** If the error persists, turn the product off, and then re-seat the formatter.
- **3.** If the error persists, replace the scanner control board (SCB).

30.01.48 Scanner error

Description

Scanner error.

Scanner power is not connected.

Recommended action

- 1. Turn the product off, and then on again.
- **2.** If the error persists, turn the product off, and then check the scanner wire-harness connectors and the scanner power supply fan.
- 3. If the error persists, replace integrated scanning assembly (ISA).

30.01.50 Scanner error

Description

Internal scanner control board (SCB) error.

Recommended action

- 1. Turn the product off, and then on again.
- **2.** Upgrade the firmware (FW).
- **3.** If the error persists, replace the SCB.

30.03.14

Description

A non-fatal error has occurred.

A scanner EEPROM (NVM) error has occurred.

Recommended action

This is an informational message, and no action is required.

30.03.20

Description

The copy processor board firmware cannot communicate with the PCA on the optical assembly.

- Turn the product off, and then on again.
- 2. Verify that the flat flexible cables (FFCs) between scanner and the SCB are connected and properly seated.
- 3. Replace the integrated scanning assembly (ISA).

30.03.22 Scanner failure

Description

Front side illumination calibration failure.

The scan module cannot see the illumination module, or marginal illumination.

The optical assembly may not be parked under the calibration strip.

Recommended action

- 1. Turn the product off, and then on again.
- **2.** Upgrade the firmware.
- **3.** Check the service event log for other scanner errors, and then resolve those errors.
- **4.** Check the scan module flat flexible cable (FFC) connection.
- 5. Replace the integrated scanning assembly (ISA).

30.03.23 Scanner failure

Description

Flatbed alignment calibration error.

Recommended action

- **1.** Turn the product off, and then on again.
- **2.** Upgrade the firmware.
- **3.** Replace the scanner.

30.03.30 Scanner Failure

Description

Flatbed motor shutdown.

The scanner control board cannot communicate with the flatbed scanner motor.

- 1. Turn the product off, and then on again. As the product turns on, verify that the scan head moves.
- **2.** Verify that the drive belt is in the correct position.
- **3.** Run diagnostics on the flatbed scanner to see if the scan bar moves.

- 4. Check the cable connection to the SCB.
- **5.** Replace the scanner.

30.03.45 Scanner Error To continue turn off then on

Description

Scanner control board (SCB) firmware assertion failure. SCB firmware assert controls the scan head motor.

Recommended action

- **1.** Turn the product off, and then on again.
- **2.** Upgrade the firmware.
- **3.** Replace the Scanner control board (SCB).
- **4.** Replace the scanner assembly.

31.XX.YZ Error Messages — X585 only

31.01.03 Document feeder pick error

Description

The document feeder cannot pick up paper.

Recommended action

- 1. Verify that the paper meets the product specifications.
- 2. Make sure that the input tray is not overloaded and the tray guides are properly aligned to both edges of the media.
- **3.** Check and clean the rollers and separation pad, and test the registration sensor. If needed, replace pickup roller assembly and separation pad.
- **4.** Open and close the top cover to see if the pick motor turns without posting this error. If the motor turns, then the motor is good.
- **5.** Verify that the motor cables are connected.
- **6.** Re-seat the document feeder to the scanner control board (SCB).
- **7.** Replace the document feeder assembly.

31.01.47 Document feeder not detected

Description

The document feeder was not detected, and might not be document feeder connected. The flatbed glass is still available for scanning.

Recommended action

Turn the product off and then on.

If error persists, replace document feeder

NOTE: Before replacing the document feeder technicians should check the connections for the unit to make sure they are correctly and firmly seated.

31.03.14

Description

Backside scanner EEPROM (NVM) error.

A non-fatal error has occurred.

Recommended action

This is an informational message, and no action is required.

31.03.20 backside scanner not detected

Description

Backside scanner not detected.

Recommended action

- 1. Turn the product off, and then on again.
- 2. Verify the cables between scanner and scanner control board are connected.
- Replace the document feeder assembly

31.03.22 Scanner calibration failure

Description

Backside illumination calibration failure.

Recommended action

- 1. Turn the product off, and then on.
- 2. Upgrade the firmware.
- Verify the cables between scanner and scanner control board are connected.
- Replace the document feeder assembly.

31.03.30 Document feeder pick motor error

Description

The document feeder pick motor is not turning.

- 1. Verify that the paper meets the product specifications.
- **2.** Make sure that the feed tray is not overloaded.
- 3. Check the event log for document feeder errors, and then resolve any errors first.
- **4.** Open and close the top cover to see if the pick motor turns without posting this error. If the motor turns, then the motor is good.

- **5.** Verify that the motor cables are connected.
- **6.** Re-seat the document feeder to the scanner control board (SCB).
- **7.** Replace the document feeder assembly.

31.03.31 Document feeder motor stall

Description

The document feeder feed motor is not turning.

Recommended action

- 1. Verify that the paper meets the product specifications.
- 2. Make sure that the feed tray is not overloaded.
- 3. Check the event log for document feeder errors, and then resolve any errors first.
- **4.** Verify that the motor cables are connected.
- **5.** Re-seat the document feeder to the scanner control board (SCB).
- **6.** Replace the document feeder assembly.

31.03.32

Description

The document feeder de-skew motor is not turning.

Recommended action

- 1. Verify that the paper meets the product specifications.
- 2. Make sure that the input tray is not overloaded.
- 3. Check the event log for document feeder errors, and then resolve any errors first.
- **4.** Verify that the motor cables are connected.
- 5. Re-seat the document feeder to scanner control board (SCB) cables.
- **6.** Replace the document feeder assembly.

31.03.33 Backside scanner calibration area dirty

Description

The white area used for backside scanner calibration is dirty.

- **1.** Remove the white background and clean it.
- **2.** Clean the backside scanner glass.
- **3.** If issue remains replace the document feeder assembly.

31.03.34 Background missing

Description

The removable background for the backside scanner is either missing or not fully snapped into place.

Recommended action

- 1. Remove the white background and clean it.
- 2. Clean the backside scanner glass.
- **3.** If issue remains replace the document feeder assembly.

No action necessary.

31.13.00 Document feeder multi-pick error

Description

A multiple pick error was reported by the document feeder assembly.

Recommended action

- 1. Open the document feeder cover, pull **ALL** the sheets back into the tray and then resume the job.
- **2.** Verify that the paper meets the product specifications.
- **3.** Make sure that the input tray is not overloaded and the tray guides are properly aligned to both edges of the media.
- **4.** Check and clean the rollers and separation pad, and test the registration sensor. If needed, replace pickup roller assembly and separation pad.
- **5.** Verify that the motor cables are connected.
- **6.** Re-seat the document feeder to the scanner control board (SCB).
- **7.** Replace the document feeder assembly.

31.13.01

Description

Document feeder job error, pick error.

Paper pick was initiated, but the page didn't did not make it to the pick success sensor.

- 1. Open the document feeder lid, pull sheets back into input tray, and then resume the job.
- 2. Check the paper guides and make sure that they are set to the correct paper width.
- **3.** Make sure that the input tray is not overloaded and the tray guides are properly aligned to both edges of the media.
- 4. Check the document feeder page count for roller life.
- **5.** Verify that the paper meets the product specifications.

- **6.** Clean the document feeder pick and feeder rollers and clean separation pad If worn or damage replace roller kit.
- **7.** Open the following menus:
 - Administration
 - Troubleshooting
 - Diagnostic Tests
 - Scanner Tests
- **8.** Actuate the Pick-Success Sensor. If the sensor does not show functionality when tested, replace the document feeder.
- **9.** If sensor is not available for replacement or does not resolve issue replace the document feeder assembly.

31.13.02

Description

Document feeder job error, feed jam.

The paper passed the pick success sensor, and then jammed in the document feeder paper path.

Recommended action

- 1. Clear the paper path and try feeding the page again.
- **2.** Verify that the paper meets the product specifications.
- **3.** Check the paper guides and make sure that they are set to the correct paper width.
- **4.** Verify that the paper path is clear.
- **5.** Clean the document feeder pick and feeder rollers and clean separation pad. If worn or damage replace roller kit.
- **6.** Open the following menus:
 - Administration
 - Troubleshooting
 - Diagnostic Tests
 - Scanner Tests
- **7.** Actuate the Paper-Path Sensor. If the sensor does not show functionality when tested, replace the sensor.
- **8.** If sensor is not available for replacement or does not resolve issue replace the document feeder assembly.

31.13.13

Description

The document feeder jam access door is open.

- **1.** Verify that the jam access cover is closed.
- **2.** Verify that the flag is not broken off.
- **3.** Open the following menus:
 - Administration
 - Troubleshooting
 - Diagnostic Tests
 - Scanner Tests
- **4.** Actuate the document feeder Jam Cover Sensor. If the sensor does not show functionality when tested, replace the Sensor.
- 5. If not available for replacement or does not resolve issue replace the document feeder assembly.

31.13.14

Description

Document feeder job error, over current.

This is a feed jam in the document feeder, and the motor is not turning.

Recommended action

- 1. Verify that the paper meets the product specifications.
- **2.** Make sure that the document feeder input tray is not overloaded.
- **3.** Check the event log for document feeder errors, and then resolve any errors first.
- **4.** Open and close the top cover to see if the pick motor turns without posting this error. If there is no error, then the motor is good.
- **5.** Verify that the motor cables are connected.
- **6.** Re-seat the document feeder to the scanner control board (SCB).
- **7.** Replace the document feeder.

31.13.15

Description

This is a duplex re-feed jam in the document feeder.

The paper jam occurs on the back-side copy. The duplex re-feed does not make it to the deskew sensor.

- **1.** Remove the jammed paper.
- **2.** Verify that there is nothing in the paper path of the duplex refeed area.

- **3.** Retry the copy job.
- Replace the document feeder assembly.

32.08.XX Error Messages

32.08.A1, 32.08.A2, 32.08.A3

Description

```
32.08.A1 (event code)
```

Shutdown event-boot after abnormal shutdown.

32.08.A2 (event code)

Boot from normal shutdown event.

32.08.A3 (event code)

Regular boot event.

Recommended action

No action necessary.

32.1C.XX

Description

```
32.1C.05 (event code)
```

The restore job ticket was submitted with invalid credentials.

32.1C.06 (event code)

The backup job ticket was submitted with invalid credentials.

32.1C.07(event code)

Backup restore permissions error.

There was an error during the creation, read, or write of the restore file.

32.1C.08 (event code)

Not enough disk space to perform backup/restore or network share issue.

There was an error during the creation, read, or write of the backup file.

32.1C.09 (event code)

Tried to restore a backup file that was not valid for this product.

The data in the backup file specified in the restore job ticket is no longer valid due to a corruption of the data or no loner present.

32.1C.OA (event code)

Backup file is invalid.

The data in the backup file specified in the restore job ticket is no longer valid due to a corruption of the data or no loner present.

```
32.1C.OD (event code)
```

Backup/restore failed, auto-reboot failed, or the product might be busy.

```
32.1C.11 (event code)
```

Backup/restore timeout while communicating with the engine.

The backup was aborted because the product is busy.

```
32.1C.13 (event code) and 32.1C.14 (event code)
```

Not enough space exists to perform the backup.

The backup was aborted because the disk is at a critical level or full.

Scheduled backup failure.

```
32.1C.15 (event code)
```

Restore aborted because the backup file was created by a previous version of firmware no longer supported by the feature.

```
32.1C.2E (event code)
```

The restore was aborted because the product is busy.

```
32.1C.2F (event code)
```

Reset failure

```
32.1C.40 (event code)
```

The backup operation completed successfully (informational).

```
32.1C.41 (event code)
```

The backup operation encountered an error (informational).

```
32.1C.42 (event code)
```

The backup operation completed, but with a warning message (informational).

```
32.1C.43 (event code)
```

A component in the backup file is not supported by the current version of firmware and will not be restored (informational).

```
32.1C.44 (event code)
```

A component in the backup file is not transferable to another product and will not be restored (informational).

```
32.1C.45 (event code)
```

Some data was not included in the backup file (informational).

```
32.1C.46 (event code)
```

An expected component could not be found and was thus not backed up. Because components should be known on backups, this code is a warning (informational).

```
32.1C.47 (event code)
```

Some data was not restored from the backup file (informational).

```
32.1C.48 (event code)
```

The backup job ticket was submitted using an invalid network path.

```
32.1C.49 (event code)
```

The backup job ticket was submitted with a bad encryption.

```
32.1C.4A (event code)
```

An error occurred when creating the temporary directories used to store the backup files in transition to and from the compressed (ZIP) file.

```
32.1C.56 (event code)
```

Reset aborted. Backup/restore in progress (informational).

```
32.1C.57 (event code)
```

Reset aborted (informational).

```
32.1C.58 (event code)
```

Unknown reset error (informational).

```
32.1C.60 (event code)
```

The restore operation completed successfully (informational).

```
32.1C.61 (event code)
```

The restore operation encountered an error.

```
32.1C.62 (event code)
```

The restore operation completed, but with a warning message.

```
32.1C.68 (event code)
```

The restore job ticket was submitted using an invalid network path.

```
32.1C.69 (event code)
```

The restore job ticket was submitted with a bad encryption personal identification number (PIN).

```
32.1C.6A (event code)
```

An error occurred when creating the temporary directories used to store the restore files in transition to and from the compressed (ZIP) file.

```
32.1C.6D (event code)
```

An unusual error occurred when running the restore.

```
32.1C.05 (event code)
```

Verify the credentials that were submitted. Check the domain, user name, and password.

```
32.1C.06 (event code)
```

Verify the credentials that were submitted. Check the domain, user name, and password.

```
32.1C.07 (event code)
```

Retry the job.

32.1C.08 (event code)

- Retry the job.
- Remove stored jobs and retry.
- Use a larger capacity storage device.
- Check the network share.

Remove any stored jobs, and then retry.

If the error persists, try using a larger capacity storage device and check the network share settings.

```
32.1C.09 (event code)
```

Use a valid backup file.

32.1C.OA (event code)

Use a valid backup file.

Reboot, and then observe the state of the product.

If the error persists, perform a partition clean from the **Preboot** menu.

```
32.1C.OD (event code)
```

Reboot, and then retry the backup/restore.

```
32.1C.11 (event code)
```

Wait until the product is idle, and then try again.

```
32.1C.13 (event code) and 32.1C.14 (event code)
```

Free up disk space, and then try again.

```
32.1C.15 (event code)
```

- Use the current backup file.

```
32.1C.2E (event code)
```

Wait until the product is idle, and then try again.

Turn the product off then on, and then retry.

```
32.1C.2F (event code)
Turn the product off then on, and then retry.
32.1C.40 (event code)
No action necessary.
32.1C.41 (event code)
No action necessary.
32.1C.42 (event code)
No action necessary.
32.1C.43 (event code)
No action necessary.
32.1C.44 (event code)
No action necessary.
32.1C.45 (event code)
No action necessary.
32.1C.46 (event code)
No action necessary.
32.1C.47 (event code)
No action necessary.
32.1C.48 (event code)
Check that a share was provided as part of the network path (not blank).
Check that the server and the share exists.
Check that the user has permission to access the share on the provided server.
32.1C.49 (event code)
Verify that the encryption personal identification number (PIN) meets the restrictions for the product.
32.1C.4A (event code)
Retry the job.
If this does not resolve the issue, turn the product off then on again and retry the job.
If the error persists, perform a Partial Clean using the Preboot menu.
32.1C.56 (event code)
No action necessary.
32.1C.57 (event code)
```

No action necessary.

32.1C.58 (event code)

No action necessary.

32.1C.60 (event code)

No action necessary.

32.1C.61 (event code)

Review the error log to see specific details about the failure.

32.1C.62 (event code)

Review the error log to see specific details about the failure.

32.1C.68 (event code)

Check that a share was provided as part of the network path (not blank).

Check that the server and the share exist.

Check that the user has permission to access the share on the provided server.

Check that the path includes the compressed (ZIP) file name as part of the path

32.1C.69 (event code)

Verify the encryption personal identification number (PIN) is the same PIN used to encrypt the backup file.

32.1C.6A (event code)

Retry the job.

32.1C.6D (event code)

Retry the job.

33.XX.YZ Error Messages

33.02.01 Used board/disk installed

Description

Used board disk installed.

An encrypted board or disk with existing data previously locked to a different product has replaced the original. If you continue, data is permanently lost.

- 1. Reinstall the used board or disk back into its original printer.
- **2.** To save the data on the board or disk, turn the product off. Replace the board or disk with another board or disk.
- **3.** To delete the data on the board or disk and continue, touch the OK button.

33.03.03 Incompatible formater installed.

Description

This is and EFI BIOS event to prevent booting with the wrong formatter installed.

Recommended action

Power down the printer and install the correct formatter in the device.

NOTE: If it is believed that the formatter is the correct part number and model for this printer, replace the formatter again and return the formatter in question to HP for evaluation.

33.03.XX

Description

- 33.03.01: Save recover engine storage ID unexpected length.
- 33.03.02: Data size mismatch unable to reocver DCC MVRAM.

Recommended action

Power the printer off then back on.

If issue is not resolved replace the ICB and return to HP for evaluation.

40.XX.YZ Error Messages

40.00.01 USB I/O buffer overflow To continue, touch "OK"

Description

The USB buffer has overflowed.

Recommended action

- 1. Touch the OK button to print the transferred date (some data might be lost).
- **2.** Check the host configuration.

40.00.02 Embedded I/O buffer overflow To continue, touch "OK"

Description

The product has experienced a JetDirect buffer overflow.

Recommended action

- **1.** Touch the OK button to print the transferred date (some data might be lost).
- 2. Check the host configuration.

40.00.03 EIO <X> buffer overflow To continue, touch "OK"

Description

Too much data was sent to the EIO card in the specified slot (x). An incorrect communications protocol might be in use.

Touch the OK button to print the transferred date (some data might be lost).

40.00.04 EIO <X> bad transmission To continue, touch "OK"

Description

The connection between the product and the USB device has been broken.

Recommended action

- 1. Touch the OK button to clear the error message and continue printing.
- 2. Remove, and then reinstall the USB device.

40.00.05 Embedded I/O bad transmission To continue, touch "OK"

Description

The USB device has been removed.

Recommended action

- 1. Touch the **OK** button to clear the error message (data will be lost).
- 2. Install the USB device.

40.08.0X USB storage accessory removed

Description

X = 0 or ;1 information code.

Secure file erase is enabled.

Recommended action

No action necessary.

40.0X.05 USB storage accessory removed

Description

X = 1, 2, 3, 5, or 6; information code.

The USB storage accessory was removed.

Recommended action

No action necessary.

41.XX.YZ Error Messages

41.03.YZ Unexpected size in tray <X>

Description

The product detected a different paper size than expected.

Y = Type, Z = Tray

- Y = 0 Size mismatch. Detected media is longer or shorter than expected.
- Y = A Size mismatch. Detected media too long.
- Y = B Size mismatch. Detected media too short.
- Y = C Size mismatch. Inter-page gap error.
- Z = D Source is the duplexer.
- Z = 1 Source is Tray 1.
- Z = 2 Source is Tray 2.
- Z = 3 Source is Tray 3.

Recommended action

- **1.** Touch OK to use another tray.
- **2.** Make sure that the tray is loaded with the correct paper size and that the sliding paper guides are correctly adjusted.
- 3. Use the Tray/Bin manual sensor test to verify that the cassette media switch is correctly functioning.
- **4.** If the issue persists, replace the Mech kit.

42.XX.YY Error Messages

42.XX.YY Error Event Log message

Description

Internal system failure.

Recommended action

- **1.** Turn the product off, then on, and then retry.
- 2. If the error persists, clear the firmware image from the active partition by using the **Partial Clean** item in the **Preboot** menu.

44.XX.XX Error Messages

44.01.XX Error Event log message (Multifunction product only.)

Description

A digital send error has occurred.

Recommended action

Try to send the job again.

No action necessary. This error message should automatically clear.

44.02.XX Error Event log message (Multifunction product only.)

Description

Personal address book error has occurred.

Recommended action

Try to send the job again.

Check Digital Send configuration and address book.

44.03.XX Error Event log message (Multifunction product only.)

Description

A digital send error has occurred.

Recommended action

Try to send the job again.

Check the Digital Send configuration.

44.04.XX Error Event log message (Multifunction product only.)

Description

Digital Send Email error has occurred.

Recommended action

Try to send the job again.

Check the Digital Send configuration.

44.05.XX Error Event log message (Multifunction product only.)

Description

Digital Send Folder Job error has occurred.

Recommended action

Try to send the job again.

Check the Digital Send configuration.

44.07.XX Error Event log message (Multifunction product only.)

Description

Digital Send Remote Printer Job Error has occurred.

Recommended action

Try to send the job again.

Check the Digital Send configuration.

44.08.XX Error Event log message (Multifunction product only.)

Description

SharePoint Job Error has occurred.

Recommended action

- **1.** If this is the first time the error has occurred, cancel and then restart the job.
- **2.** If the error occurs repeatedly, reboot the engine and retry the job.
- 3. If error still persists, reset to factory settings. Upgrade to most current firmware.

44.10.XX Error Event log message (Multifunction product only.)

Description

A send to email error has occurred.

Recommended action

Try to send the job again.

Check the Digital Send configuration.

44.11.0E Error Event log message (Multifunction product only.)

Description

The attachment filename already exists at the destination, and the flag to fail on filename collisions was set. This file will not be sent.

Recommended action

- 1. If this is the first time the error has occurred, use a different filename or verify that the filename is not already in use.
- 2. If the issue persists, use a unique filename or disable the flag to fail on filename collision.

44.11.XX Error Event log message (Multifunction product only.)

Description

A Digital Send error has occurred.

Recommended action

Try to send the job again.

Check the Digital Send configuration.

44.12.0E Error Event log message (Multifunction product only.)

Description

Digital Send, the attachment filename already exists at the destination, and the flag to fail on filename collisions is set. This file will not be sent.

- 1. If this is the first time the error has occurred, use a different filename or verify that the filename is not already in use.
- 2. If the issue persists, use a unique filename or disable the flag to fail on filename collision.

44.12.XX Error Event log message (Multifunction product only.)

Description

A Digital Send error has occurred.

Recommended action

Try to send the job again.

Check the Digital Send configuration.

44.16.01 Error Event log message (Multifunction product only.)

Description

A Digital Send error has occurred while trying to create file type.

XX =

- 01 RTF File
- 03 CSV File
- 04 HTML File
- 05 XML File
- 06 XPS File
- 07 PDF File

Recommended action

- 1. Try to send the job again.
- 2. Check Digital Send configuration.

44.16.02 Error Event log message (Multifunction product only.)

Description

The destination URL was found to be invalid or unreachable.

- 1. If this is the first time the error has occurred, cancel and then restart the job.
- **2.** If the error persists, turn the product off and then on and retry the job.
- 3. If error still persists, reset to factory settings. Upgrade to current version of firmware.

44.16.03 Error Event log message (Multifunction product only.)

Description

The destination URL is not a SharePoint site.

Recommended action

- **1.** If this is the first time the error has occurred, verify settings in job configuration and then restart the job.
- 2. If the error persists,
 - Check network connection settings.
 - Verify access to the SharePoint site.

44.16.04 Error Event log message (Multifunction product only.)

Description

Credentials associated with the SharePoint destination were found to be invalid or missing.

Recommended action

- **1.** If this is the first time the error has occurred, verify settings in job configuration and then restart the job.
- 2. If the error persists,
 - Check network connection settings.
 - Verify access to the SharePoint site.

44.16.05 Error Event log message (Multifunction product only.)

Description

Credentials do not have write access to the SharePoint destination.

Recommended action

- **1.** If this is the first time the error has occurred, verify settings in job configuration and then restart the job.
- 2. If the error persists,
 - Check network connection settings.
 - Verify access to the SharePoint site.

44.16.06 Error Event log message (Multifunction product only.)

Description

Upload of image file failed. Reason unknown.

- If this is the first time the error has occurred, verify settings in job configuration and then restart the iob.
- 2. If the error persists, turn the product off then on again and retry the job.
- If error still persists, reset to factory settings. Upgrade to current firmware version.

44.16.07 Error Event log message (Multifunction product only.)

Description

Upload of image file failed.

The file exceeded the maximum form submission length on the Web server.

Recommended action

- If this is the first time the error has occurred, send fewer pages in the job, lower the DPI of the scanned pages, or select a file type that splits pages into separate files (for example, jpeg).
- If the error persists repeatedly, contact the SharePoint site administrator to increase the Web server's maximum form submission length.

44.16.08 Error Event log message (Multifunction product only.)

Description

Upload of image file failed. The SharePoint site storage guota limit was exceeded.

Recommended action

- If this is the first time the error has occurred, make space on the SharePoint site by deleting some files, and then retry the job.
- If the error occurs repeatedly, contact the SharePoint site administrator to increase the storage quota limit.

44.16.09 Error Event log message (Multifunction product only.)

Description

Upload of image file failed. A folder or filename length is too long.

Recommended action

- If this is the first time the error has occurred, check the destination URL and filename in the SharePoint job configuration to verify no folder or filename exceeds the maximum of 128 characters.
- If the error occurs repeatedly, try sending to a different folder on the SharePoint site or changing the filename (which could include prefix or suffix).

44.16.0A Error Event log message (Multifunction product only.)

Description

Upload of the image file failed. The image file already exists on the server and is checked out for editing by another user.

- 1. If this is the first time the error has occurred, verify that the filename used by the job is not checked out on the SharePoint site.
- **2.** If the error occurs persists, use a different filename for the job.

44.16.0B Error Event log message (Multifunction product only.)

Description

Upload of the image file failed. The image file already exists on the server and the job was set to not overwrite files.

Recommended action

- 1. If this is the first time the error has occurred, set the job to overwrite existing files.
- **2.** If the error occurs persists, use a different filename for the job.

44.16.0D Error Event log message (Multifunction product only.)

Description

Encountered an unexpected processing error while transferring attachments to the destination SharePoint.

Recommended action

- 1. If this is the first time the error has occurred, verify settings in job configuration and restart the job.
- **2.** If the error persists, turn the product off, and then on and retry the job.
- 3. If error continues, reset to factory settings. Upgrade to current version of firmware.

44.16.0E Error Event log message (Multifunction product only.)

Description

The attachment filename already exists at the destination, and the flag to fail on filename collisions was set. This file will not be sent.

Recommended action

- 1. If this is the first time the error has occurred, use a different filename or verify that the filename is not already in use.
- 2. If the issue persists, use a unique filename or disable the flag to fail on filename collision.

44.16.0F Error Event log message (Multifunction product only.)

Description

Not enough memory to process the current SharePoint Job.

- 1. If this is the first time the error has occurred, cancel and/or restart the job, breaking it up into small jobs.
- 2. Repeat this process if the error persists until job goes through.

44.16.10 Error Event log message (Multifunction product only.)

Description

SharePoint server is using an invalid certificate.

Recommended action

- If this is the first time the error has occurred, send the SharePoint job to a non-secure address, or send the job to a SharePoint server that has a valid certificate.
- 2. If the error occurs repeatedly, send the job to a different, trusted SharePoint server.

44.16.FF Error Event log message (Multifunction product only.)

Description

Unexpected error occurred in the SharePoint resource device code.

Recommended action

- If this is the first time the error has occurred, verify settings in job configuration and restart the job.
- If error persists, turn the product off, and then on and retry the job. 2.
- If error continues, reset to factory settings. Upgrade to current version of firmware.

44.34.XX Error Event log message (Multifunction product only.)

Description

A fax error has occurred.

Recommended action

- Try to send the job again.
- Check the fax configuration

44.90.XX Error Event log message - 44.91.XX Error Event log message - 44.92.XX Error Event log message (Multifunction product only.)

Description

A fax error has occurred.

Recommended action

- Try to send the job again.
- Check the fax configuration.

45.WX.YZ Error Messages

45.00.YZ

Description

Event log entry only

All 45.00.YZ events are OXPd/Webkit informational log entries.

No action necessary.

47.XX.XX Error Messages

47.00.XX

Description

Back channel internal error.

Recommended action

- **1.** Turn the product off, and then on again.
- 2. Resend the print job.
- 3. If the error persists, clear the active partition by using the Partial Clean item in the Preboot menu.

47.01.XX

Description

Image transformer internal error.

Recommended action

- **1.** Turn the product off, and then on again.
- **2.** Resend the print job.
- 3. If the error persists, clear the active partition by using the Partial Clean item in the Preboot menu.

47.02.XX

Description

Job parser internal error.

Recommended action

- **1.** Turn the product off, and then on again.
- **2.** Resend the print job.
- 3. If the error persists, clear the active partition by using the Partial Clean item in the Preboot menu.

47.03.XX

Description

Print job internal error.

- 1. Turn the product off, and then on again.
- **2.** Resend the print job.
- 3. If the error persists, clear the active partition by using the Partial Clean item in the Preboot menu.

47.04.XX

Description

Print spooler 9100 internal error.

Recommended action

- Turn the product off, and then on again.
- 2. Resend the print job.
- If the error persists, clear the active partition by using the Partial Clean item in the Preboot menu.

47.05.00

Description

Print spooler framework internal error.

Recommended action

- Turn the product off, and then on again.
- 2. Resend the print job.
- 3. If the error persists, clear the active partition by using the Partial Clean item in the Preboot menu.

47.06.XX

Description

Print application internal error.

Recommended action

- Turn the product off, and then on again.
- 2. Resend the print job.
- If the error persists, clear the active partition by using the Partial Clean item in the Preboot menu.

47.WX.YZ Printer Calibration Failed To continue, touch "OK"

Description

The device is unable to access or implement one of the image patterns files.

Y = Calibration type, Z = Event

- 47.FC.00 (event code) Color plane registration (CPR) Image not found at system initialization
- 47.FC.01 (event code) CPR Store Image failure
- 47.FC.02 (event code) CPR Image not found
- 47.FC.03 (event code) CPR Print engine execution failure
- 47.FC.10 (event code) Consecutive Dmax Dhalf Image not found at system initialization
- 47.FC.11 (event code) Consecutive Dmax Dhalf Store image failure

- 47.FC.12 (event code) Consecutive Dmax Dhalf Image not found
- 47.FC.13 (event code) Consecutive Dmax Dhalf Print engine execution failure
- 47.FC.20 (event code) Error Diffusion Image not found at system initialization
- 47.FC.21 (event code) Error Diffusion Store image failure
- 47.FC.22 (event code) Error Diffusion Image not found
- 47.FC.23 Error Diffusion Print engine execution failure
- 47.FC.30 0 (event code) Drum Speed Adjustment Image not found at system initialization
- 47.FC.31 (event code) Drum Speed Adjustment Store image failure
- 47.FC.32 (event code) Drum Speed Adjustment Image not found
- 47.FC.33 (event code) Drum Speed Adjustment Print engine execution failure
- 47.FC.40 (event code) Pulse Width Modulation Image not found at system initialization
- 47.FC.41 (event code) Pulse Width Modulation Store image failure
- 47.FC.42 (event code) Pulse Width Modulation Image not found
- 47.FC.43 (event code) Pulse Width Modulation Print engine execution failure

- 1. Turn the product off, and then on again.
- 2. If the error persists over multiple power cycles frequently and consistently on a unit then do the following.
 - In the Administration/Troubleshooting/Diagnostics, run the hard disk tests to validate health of the device. Fix any issue found with the mass storage device
- **3.** If the error persists, reload the firmware.
- **4.** If the error persists, clear the active partition by using the Partial Clean item in the Preboot menu then reload the firmware.

48.XX.YY Error Messages

48.XX.YY

Description

A job framework internal error has occurred.

- **1.** No action should be necessary.
- **2.** If the error persists, upgrade the product firmware.
- **3.** If the issue persists, continue troubleshooting with the flowcharts for either Intermittent or Persistent 49 error troubleshooting (whichever is appropriate) in document c03122817, "HP LaserJet FutureSmart Devices 49 Error Troubleshooting (Persistent and Intermittent)".

49.XX.YY Error Messages

49.XX.YY Error To continue turn off then on

Description

A firmware error occurred. Corrupted print jobs, software application issues, non-product specific print drivers, poor quality USB or network cables, bad network connections or incorrect configurations, invalid firmware operations, or unsupported accessories can cause this error.

Recommended action

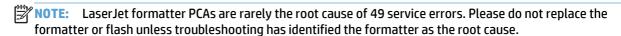
- Turn the product off, and then on.
- If the error persists, check the following:
 - The error might be caused by a network connectivity problem, such as a bad interface cable, a bad USB port, or an invalid network configuration setting.
 - The error might be caused by the print job, due to an invalid print driver, a problem with the software application, or a problem with the file being printed.
 - Upgrading the product firmware might help resolve the error. See the product user quide for more information.

When a 49 error occurs, the user sees a 49.XXXX message on the control panel (where XXXX is replaced by a combination of letters and numbers). A 49 error might happen at any time for multiple reasons. Although some types of 49 errors can be caused by hardware failures, it is more common for 49 errors to be caused by printing a specific document or performing some task on the product.

49 errors most often occur when a product is asked to perform an action that the product firmware is not capable of and might not have been designed to comply with, such as:

- Printing files with unsupported programming commands
- A unique combination of user environment and user interactions with the product
- Interfacing with a third-party solution that was not designed to work with the product
- Specific timing, network traffic, or concurrent processing of jobs

Each of these interactions could cause the product firmware to initiate an action that the product cannot accomplish. In situations like this, the product might present the error if it has no other option. When these errors occur, the only way to recover is to turn the product's power off and back on.



If the error persists, continue troubleshooting with the flowcharts for either Intermittent or Persistent 49 error troubleshooting (whichever is appropriate) in document c03122817, "HP LaserJet FutureSmart Devices - 49 Error Troubleshooting (Persistent and Intermittent)".

54.XX.YZ Error Messages

54.30.00 Calibration error

Description

An engine calibration has failed.

Details of which calibration and failure reason can be found in the payload.

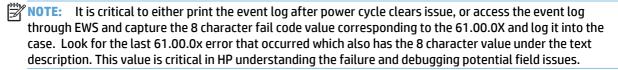
610000AC Sensor_Cms_Calibrate_Unknown_Sensor Tried to start a page calibration scan with an unknown sensor ID. Only Zim and BDD sensors are recognized.

610000AD Sensor_Cms_Calibrate_Invalid_Sensor A sensor other than Zim was specified for the pen calibration scan.

610000AE Sensor_Cms_Calibrate_Overshoot The paper advanced too far during a page calibration such that the printed artifact could not be scanned. This assert could happen if the mech wasn't able to stop the paper movement accurately.

Recommended action

- 1. Turn the power off on the product by pressing the power button and holding it for more than 3 seconds.
- **2.** Unplug power cord from back of product and wait 30 seconds.
- **3.** Plug power cord back into product.
- **4.** Turn the power on to the product using power button.
- 5. If the error condition is cleared then the issue is resolved, if not continue to step 6.
- **6.** Repeat steps 1 & 2.
- Remove the formatter, check formatter thoroughly for loose any connections and reseat them, then reinstall the formatter.
- **8.** Repeat steps 3 & 4.
- If the error condition is cleared then the issue is resolved, if issue is not resolved replace the Mech Kit.



58.XX error messages

58.10.02 Ink Sensor Failure

Description

SHAID electrical failure.

- 1. Turn the power off on the product by pressing the power button and holding it for more than 3 seconds.
- **2.** Unplug power cord from back of product and wait 30 seconds.
- **3.** Plug power cord back into product.
- **4.** Turn the power on to the product using power button.
- **5.** If the error condition is cleared then the issue is resolved, if not continue to step 6.
- **6.** Repeat steps 1 & 2.

- Remove the formatter, check formatter thoroughly for loose any connections and reseat them, then reinstall the formatter.
- 8. Repeat steps 3 & 4.
- 9. If the error condition is cleared then the issue is resolved, if issue is not resolved replace the Mech Kit.

61.00.0X Error Messages

61.00.01 Print Engine Error 61.00.02 Print Engine Error 61.00.03 Print Engine Error

Description

The print engine has encountered an error.

The payload data will be included which will be with the error code, and description string.

Service_Station_Cap_Home_Long (6100000D)

Paper_Load_Tray1_Pick_Motor (6100002D)

Paper_Load_Pick_Tire_Index_Sensor (6100002E)

Service_Station_Cap_Home_Short (6100000E)

SS_Restricted_Movement_Error (61000011)

Lift_Restricted_Movement_Error (61000012)

Carriage_Restricted_Movement_Error (61000013)

Service_Move_To_Tranny_State (610000C8)

DPU_Printbar_Crash_Into_Service_Station (610000D3)

DPU_Service_Station_Under_Print_Bar (610000D4)

Printbar_Clutch_Slippage (61000035)

Service_Station_Pen_Too_Cold (6100000B)

Service_Station_Home_Failure (6100000C)

Service_Carriage_Home_Invalid (610000C9)

Pen_Start_Up_Spits_Already_Done (6100004E)

- Turn the power off on the product by pressing the power button and holding it for more than 3 seconds.
- 2. Unplug power cord from back of product and wait 30 seconds.
- Plug power cord back into product. 3.
- Turn the power on to the product using power button. 4.
- If the error condition is cleared then the issue is resolved, if not continue to step 6. 5.
- Repeat steps 1 & 2.

- **7.** Remove the formatter, check formatter thoroughly for loose any connections and reseat them, then reinstall the formatter.
- **8.** Repeat steps 3 & 4.
- 9. If the error condition is cleared then the issue is resolved, if issue is not resolved replace the Mech Kit.
- NOTE: It is critical to either print the event log after power cycle clears issue, or access the event log through EWS and capture the 8 character fail code value corresponding to the 61.00.0X and log it into the case. Look for the last 61.00.0x error that occurred which also has the 8 character value under the text description. This value is critical in HP understanding the failure and debugging potential field issues.

81.XX.YY, 82.XX.YY Error Messages

81.WX.00 Wireless Network Error To continue turn off then on

Description

A wireless network component on the product has failed.

81.02.00 Wireless network Event

81.07.00 Internal Wireless Networking event

Recommended action

- **1.** Turn the product off then on.
- **2.** Turn the product off, reseat the wireless network component and turn the product back on.
- **3.** If error persists, replace the wireless network component.

81.WX.YZ Embedded Jetdirect Error To continue turn off then on

Description

The product experienced an embedded HP Jetdirect print server critical error.

81.01.00 EIO Event

81.03.00 Access Point Wireless Network event

81.04.00 JetDirect inside Network event

81.06.00 Internal EIO Networking event

81.08.00 Internal Access Point Wireless Network event

81.09.00 Internal JetDirect inside Network event

- **1.** Turn the product off then on.
- **2.** Turn the product off, reseat the EIO accessory and turn the product back on.
- **3.** If error persists replace the formatter.

82.73.45, Disk Successfully cleaned.

Description

Event log only, disk successfully cleaned.

Recommended action

No action necessary.

82.73.46, 82.73.47

Description

A hard disk or compact flash disk cleaning failed. This error is usually caused by a failure of the disk hardware.

Recommended action

- Turn the product off, and then on.
- 2. Use the Clean Disk item in the Preboot menu.
- Reload the firmware. 3.

98.0X.0Y Error Messages

98.00.01 or 98.01.00 Corrupt data in firmware volume

Description

Data corrupt has occurred in the firmware volume.

Recommended action

- Turn the product off, and then on.
- Use the Clean Disk item in the Preboot menu.
- **3.** Reload the firmware.

98.00.02 Corrupt data in the solutions volume

Description

Data corruption has occurred in the solutions volume.

Recommended action

- Turn the product off, and then on.
- 2. Use the Clean Disk item in the Preboot menu.
- Reload the firmware. 3.

98.00.03 Corrupt data in the configuration volume

Description

Data corrupt has occurred in the configuration volume.

- **1.** Turn the product off, and then on.
- 2. Download the firmware again, and then attempt the upgrade again.
- 3. Use the Clean Disk item in the Preboot menu.
- **4.** Reload the firmware.

98.00.04 Corrupt data in the job data volume

Description

Data corrupt has occurred in the job data volume.

Recommended action

- **1.** Turn the product off, and then on.
- 2. Rerun the file erase function.

99.XX.YY Error Messages

99.00.01 Upgrade not performed file is corrupt

Description

A remote firmware upgrade (RFU) was not performed.

This is a CRC error in the firmware image (bad image).

Recommended action

Download the RFU file, and then attempt the upgrade again.

99.00.02 Upgrade not performed timeout during receive

Description

A remote firmware upgrade (RFU) was not performed.

The issue is an I/O timeout when reading the header number and size. It indicates a problem with the network environment, not the product.

Recommended action

The most common cause is an issue with the network environment.

Make sure that there is a good network connection to the product, and then attempt the firmware upgrade again, or upgrade using the USB walk-up port.

99.00.03 Upgrade not performed error writing to disk

Description

A remote firmware upgrade (RFU) was not performed.

This is a disk error. It might indicate a problem or a hard disk failure. It might be necessary to check the connection to the hard disk or replace the hard disk.

- 1. Download the RFU file, and then attempt the upgrade again.
- If the error persists, run the Clean Disk process from the Preboot menu. 2.

You will need to download the firmware from the Preboot menu.

If the error persists, replace the hard disk.

99.00.04 Upgrade not performed timeout during receive

Description

A remote firmware upgrade (RFU) was not performed.

The issue is an I/O timeout when reading the header.

Recommended action

The most common cause is an issue with the network environment.

Make sure that there is a good network connection to the product, and then attempt the firmware upgrade again, or upgrade using the USB walk-up port.

99.00.05 Upgrade not performed timeout during receive

Description

A remote firmware upgrade (RFU) was not performed.

The issue is an I/O timeout when reading image data.

Recommended action

The most common cause is an issue with the network environment.

Make sure that there is a good network connection to the product, and then attempt the firmware upgrade again, or upgrade using the USB walk-up port.

99.00.06 Upgrade not performed error reading upgrade

Description

A remote firmware upgrade (RFU) was not performed.

The issue is an unexpected read error when reading the header number and size.

Recommended action

- Download the RFU file, and then attempt the upgrade again.
- If the error persists, replace the hard disk.

99.00.07 Upgrade not performed error reading upgrade

Description

A remote firmware upgrade (RFU) was not performed.

The issue is an unexpected read error when reading the rest of the header.

- 1. Download the RFU file, and then attempt the upgrade again.
- **2.** If the error persists, replace the hard disk.

99.00.08 Upgrade not performed error reading upgrade

Description

A remote firmware upgrade (RFU) was not performed.

The issue is an unexpected read error when reading image data.

Recommended action

- 1. Download the RFU file, and then attempt the upgrade again.
- **2.** If the error persists, replace the hard disk.

99.00.09 Upgrade canceled by user

Description

A remote firmware upgrade (RFU) was not performed.

The RFU was canceled by the user.

Recommended action

Resend the RFU.

99.00.10 Upgrade canceled by user

Description

A remote firmware upgrade (RFU) was not performed.

The RFU was canceled by the user when reading the header number and size.

Recommended action

Resend the RFU.

99.00.11 Upgrade canceled by user

Description

A remote firmware upgrade (RFU) was not performed.

The RFU was canceled by the user when reading the rest of the header.

Recommended action

Resend the RFU.

99.00.12 Upgrade not performed the file is invalid

Description

A remote firmware upgrade (RFU) was not performed.

The header number is 1, but the header size does not match version 1 size.

Recommended action

Download the RFU file again.

Make sure that you download the file for the correct product model, and then resend the RFU.

99.00.13 Upgrade not performed the file is invalid

Description

A remote firmware upgrade (RFU) was not performed.

The header number is 2, but the header size does not match version 2 size.

Recommended action

Download the RFU file again.

Make sure that you download the file for the correct product model, and then resend the RFU.

99.00.14 Upgrade not performed the file is invalid

Description

A remote firmware upgrade (RFU) was not performed.

The file is invalid.

Recommended action

Download the RFU file again.

Make sure that you download the file for the correct product model, and then resend the RFU.

99.00.2X

Description

There is a compatibility issue with the firmware. The specific message varies depending on the cause, but the solution for each message is the same.

99.00.20 (event log)

The bundle is not for this product.

99.00.21 (event log)

The bundle is not signed with the correct signature, or the signature is invalid.

99.00.22 (event log)

The bundle header version is not supported by this firmware.

99.00.23 (event log)

The package header version is not supported by this firmware.

99.00.24 (event log)

The format of the bundle is invalid.

99.00.25 (event log)

The format of the package is invalid.

99.00.26 (event log)

A CRC32 check did not pass.

99.00.27 (event log)

An I/O error occurred while downloading the bundle.

Recommended action

Download the correct firmware file from www.hp.com, and then resend the firmware upgrade.

99.00.27 only:

- **1.** Turn the product off, and then on.
- **2.** Resend the firmware upgrade.
- 3. If the error persists, try installing the upgrade by another method (USB or Embedded Web Server).

99.01.XX

Description

A firmware install error has occurred. The specific message varies depending on the cause, but the solution for each message is the same.

- 99.01.00
- 99.01.10
- 99.01.20
- 99.01.21

Recommended action

Reload the firmware.

99.02.01

Description

Firmware installation was successful.

Recommended action

No action necessary.

99.02.09

Description

Firmware upgrade cancelled by user.

No action necessary.

99.09.60 Unsupported disk

Description

This is a **Preboot** menu error.

The hard disk currently installed is not recognized or supported by the product.

Recommended action

Install the correct hard disk for this product.

99.09.61 Unsupported disk

Description

This is a **Preboot** menu error.

The installed disk is installed in a product configured for an encrypted hard disk.

Recommended action

Access the Preboot menu, and then select Lock Disk to lock the disk.

99.09.62 Unknown disk

Description

This error indicates that there is an encryption mismatch between the HDD and the formatter. This typically happens because an HDD was swapped into a device from another device.

Recommended action

Install a new disk or use the Preboot menu unlock the disk.

If a disk is to be reused in a different product, execute the Clean Disk procedure from the Preboot, and then reload the firmware and lock the disk.

99.09.63 Incorrect disk

Description

This error indicates that the expected encrypted HDD is not present.

This is expected behavior when installing a new HDD in a device where the previous HDD was encrypted.

Recommended action

Follow the procedure to load firmware on a new hard disk, and then lock the disk to this product.

99.09.64 Disk malfunction

Description

A fatal hard disk failure has occurred.

Replace the hard disk.

99.09.65 Disk data error

Description

Disk data corruption has occurred.

Recommended action

Use the **Clean Disk** procedure from the **Preboot** menu, and then resend the RFU.

99.09.66 No disk installed

Description

A disk drive is not installed in the product.

Recommended action

- 1. Install a compatible hard disk drive.
- 2. If a compatible hard disk is installed, reseat the hard disk to make sure that it is connected correctly.
- **3.** If the error persists, replace the hard disk drive.

99.09.67 Disk is not bootable please download firmware

Description

This is an error indicating that there is no firmware installed on the disk. This is usually the result of installing a new disk or performing a Clean Disk operation from the Preboot menu.

Recommended action

- 1. Press any button to continue to the main **Preboot** menu.
- **2.** Press the Help button to see the help text for the error.
- 3. Select the Administration menu.
- NOTE: If there is a password assigned to the administrator, a prompt to enter the product displays. Enter the password to proceed.
- **4.** Select the Download item, and then download the latest firmware.

The user can now download a new firmware bundle to the product.

99.09.67 Disk is not bootable please download firmware

Description

This is an error indicating that there is no firmware installed on the disk. This is usually the result of installing a new disk or performing a Clean Disk operation from the Preboot menu.

- Press any button to continue to the main **Preboot** menu.
- Press the Help button to see the help text for the error. 2.
- Select the Administration menu. 3.
 - NOTE: If there is a password assigned to the administrator, a prompt to enter the product displays. Enter the password to proceed.
- Select the Download item, and then download the latest firmware.

The user can now download a new firmware bundle to the product.

99.XX.YY

Description

A message of this form indicates a firmware installation error.

Recommended action

Reload the firmware.

Alpha Error Messages

FIM Load Error Send full FIM on <X> port

Description

The product displays this message before the firmware is loaded at startup if an error has occurred during a firmware upgrade.

Recommended action

Resend the firmware upgrade.

<binname> full Remove all paper from bin

Description

The specified output bin is full.

Recommended action

Empty the bin to continue printing.

<Supply> almost full

Description

The ink collection unit is almost full.

Recommended action

Replace the ink collection unit.

<Supply> low OR Supplies low

Description

The product indicates when a supply level, or more than one supply, is low. Actual ink cartridge life might vary. You do not need to replace the ink cartridge at this time unless print quality is no longer acceptable.

When multiple supplies are low, more than one event code is recorded.

Recommended action

If print quality is no longer acceptable, replace the supply.

HP recommends that the customer have a replacement supply available to install when print quality is no longer acceptable.



NOTE: When an HP supply has reached its approximate end of life, the HP Premium protection warrant ends.

<Supply> very low OR Supplies very low

Description

The product indicates when a supply level, or more than one supply, is low. Actual ink cartridge life might vary. You do not need to replace the ink cartridge at this time unless print quality is no longer acceptable.

When multiple supplies are low, more than one event code is recorded.

Recommended action

If print quality is no longer acceptable, replace the supply.

HP recommends that the customer have a replacement supply available to install when print quality is no longer acceptable.



NOTE: When an HP supply has reached its approximate end of life, the HP Premium protection warrant

<Tray X> lifting

Description

The product is in the process of lifting paper in the indicated tray.

- **X = 2**: Tray 2
- **X = 3**: Tray 3

Recommended action

No action necessary.

[File System] device failure To clear touch "OK"

Description

The specified device has failed.

Touch the OK button to clear the error.

[File System] file operation failure To clear touch "OK"

Description

A PJL file system command attempted to perform an invalid operation.

Recommended action

Touch the OK button to clear the error.

[File System] file system is full To clear touch "OK"

Description

A PJL file system command could not store something on the file system because the file system is full.

Recommended action

Touch the OK button to clear the error.

[File System] is not initialized

Description

This file-storage component must be initialized before use.

Recommended action

Use the HP Embedded Web Server or HP Web Jetadmin to initialize the file system.

[File System] is write protected

Description

The file system device is protected and no new files can be written to it.

Recommended action

Touch the OK button to clear the error.

Accept bad signature

Description

The product is performing a remote firmware upgrade and the code signature is invalid.

Recommended action

Download the correct firmware upgrade file for the product, and then reinstall the upgrade. See the product user guide for more information.

Automatic Document Feeder cover open

Description

The document feeder cover is open.

Close the document feeder cover.

Bad optional tray connection

Description

The optional tray is not connected, not connected correctly, or a connection is not working correctly.

Recommended action

- **1.** Turn the product off.
- 2. Remove and then reinstall the optional tray.
- **3.** Reconnect the connectors for the tray.
- **4.** Turn the product on.
- **5.** If the error persists, replace the connector for the tray.

Calibration reset pending

Description

A calibration reset occurs when all jobs are processed.

Recommended action

To begin the reset sooner, cancel all jobs by pressing the Stop button.

Canceling

Description

The product is canceling the current job.

Recommended action

No action necessary.

Canceling...<jobname>

Description

The product is canceling the current job <jobname>.

Recommended action

No action necessary.

Cartridge Problem; Ink cartridge problem

Description

The product has detected that a cartridge is missing or damaged.

Recommended action

Replace the cartridge indicated in the error message.

Checking engine

Description

The product is conducting an internal test.

Recommended action

No action necessary.

Checking paper path

Description

The product is checking for possible paper jams.

Recommended action

No action necessary.

Chosen personality not available To continue, touch "OK"

Description

A print job requested a product language (personality) that is not available for this product. The job will not print and will be cleared from memory.

Recommended action

Print the job by using a print driver for a different language, or add the requested language to the product (if possible). To see a list of available personalities, print a configuration page.

Clear Output Area

Description

The product has detected a jam in the output area.

Recommended action

Remove any paper from the output flap area.

Make sure that the flap can open and close. If it cannot, replace the output flap.

Clearing event log

Description

This message is displayed while the event log is cleared. The product exits the menus when the event log has been cleared.

Recommended action

No action necessary.

Clearing paper path

Description

The product is attempting to eject jammed paper.

Media is detected in the paper path. The product will attempt to eject it.

Recommended action

No action necessary. Check the progress at the bottom of the control panel display.

If a jam is not cleared, remove the media.

Close Ink Access Door

Description

The product has detected that the ink cartridge door is open.

Recommended action

- 1. Close the door.
- **2.** Run the test in the sensor monitor mode to verify that the ink supply door open sensor is functioning properly. If it is not, replace the front door open detection switch.
- **3.** Check the sensor flag on the front door open detection sensor. If the flag is damaged, replace the ink supply door.

Close Left door

Description

The product has detected that the left door is open.

Recommended action

- 1. Close the door.
- **2.** Check the sensor flag on the left door. If the flag is damaged, replace the left door assembly.

Close upper Left door

Description

The product has detected that the left door is open.

Recommended action

- 1. Close the door.
- **2.** Check the sensor flag on the left door. If the flag is damaged, replace the left door assembly.

Cooling device

Description

The product is cooling.

Recommended action

No action necessary.

Counterfeit Cartridge Advisory

Description

This is a software message only.

The product has detected a possibly counterfeit cartridge.

Recommended action

At the computer, click the hypertext link to report fraud, or click the Continue button to clear the message.

Data received To print last page press "OK"

Description

The product is waiting for the command to print the last page.

Recommended action

Touch the OK button to print the last page of the job.

Do not use startup cartridges

Description

The startup cartridges that came with the product cannot be used after the product has been initialized.

Recommended action

Remove those cartridges, and then install non-startup cartridges.

Document feeder Misfeed

Description

Document feeder misfeed. The product has detected a failure to feed paper through the document.

Recommended action

Reload the paper and try the job again.

If the error persists, clean the document feeder pickup and feed rollers.

Document feeder not detected

Description

The document feeder was not detected when the product initialized.

Recommended action

Make sure that the document feeder cables are connected and fully seated.

Empty Ink Cartridge

Description

The product cannot detect ink in the indicated cartridge.

If ink is still present in the cartridge, touch the OK button to continue printing. If the cartridge is empty, replace the cartridge.

Event log is empty

Description

No product events are in the log.

Recommended action

No action necessary.

Expected drive missing

Description

The product cannot find the encrypted hard drive.

Recommended action

Install the encrypted hard drive.

Fax is disabled — ignoring call

Description

The product received a call, but the fax feature was not configured with the required settings (country/region, date/time, company name, fax number, etc.).

Recommended action

Use the Administration menu to configure the required fax settings.

Flatbed cover open or Close Flatbed cover

Description

The platen glass cover is open or the open/closed sensor is not functioning correctly.

Recommended action

- Close the flatbed cover.
- **2.** If the error persists, perform a sensors diagnostic in the Diagnostics menu on the product control panel to test the flatbed open/closed sensor.
- **3.** Clean, adjust, or replace the sensor as needed.

Gateways failed

Description

There is an incorrect gateways configuration.

Recommended action

Use the EIO <X> Jetdirect menu to configure the default gateway.

Gateways OK

Description

The gateways are configured correctly.

Recommended action

No action necessary.

Genuine HP cartridge installed

Description

A new HP cartridge has been installed. The message appears for about 6 seconds before the product returns to the ready state.

Recommended action

No action necessary.

Genuine HP supply installed

Description

A new genuine HP supply has been installed.

Recommended action

Touch the Hide button to remove this message.

HP Protected Cartridge Installed

Description

The product has detected cartridges that were locked in another product using the HP Cartridge Protection feature.

- 17.00.57: (event code) Black cartridge
- 17.01.57: (event code) Cyan cartridge
- 17.02.57: (event code) Magenta cartridge
- 17.03.57: (event code) Yellow cartridge

Recommended action

Cartridges locked in another product will not work in this product.

Replace the cartridge indicated in the error message.

HP Secure hard drive disabled

Description

The drive has been encrypted for another product.

Recommended action

Remove the drive or use the HP Embedded Web Server for more information.

Incompatible ink cartridges

Description

The product has detected a cartridge or cartridges that are not for use with the product.

- 17.00.35 : (event code) Black cartridge
- **17.01.35** : (event code) Cyan cartridge
- 17.02.35: (event code) Magenta cartridge
- 17.03.35 : (event code) Yellow cartridge

Recommended action

Replace the supply with one that is designed for this product.

Initializing...

Description

The product is starting.

Recommended action

No action necessary.

Ink cartridges depleted

Description

One or more of the ink cartridges is empty.

• **17.00.80**: (event code) Black cartridge

17.01.80: (event code) Cyan cartridge

17.02.80: (event code) Magenta cartridge

17.03.80: (event code) Yellow cartridge

Recommended action

Replace the empty cartridge or cartridges indicated in the error message.

Ink Sensor Failure

Description

The product ink sensor has failed and the product no longer prints.

- 17.00.42: (event code) Black cartridge
- 17.01.42 : (event code) Cyan cartridge
- 17.02.42 : (event code) Magenta cartridge
- 17.03.42 : (event code) Yellow cartridge

The product ink sensor has failed and the product no longer prints.

- Turn the product off and then on.
- 2. Replace cartridge.
- 3. Replace mech kit.

Install <supply>

Description

The indicated cartridge is not installed, missing or has a damaged acumen.

- 17.00.65: (event code) Black cartridge
- 17.01.65: (event code) Cyan cartridge
- 17.02.65: (event code) Magenta cartridge
- 17.03.65: (event code) Yellow cartridge

Recommended action

Install the supply item or make sure that the installed supply item is fully seated.

Internal disk device failure To clear touch "OK"

Description

82.0X.YY (event code)

The internal disk failed.

Recommended action

- Touch the OK button to clear the error. 1.
- If the error persists, turn off the product, and then remove and reinstall the hard drive. 2.
- Turn on the product. 3.
- If the error persists, replace the internal hard drive.

Internal disk file operation failed

Description

A PJL system command attempted to perform an invalid operation, such as downloading a file to a nonexistent directory.

Recommended action

Touch the OK button to clear the error.

Internal disk file system is full

Description

A PJL system command attempted to write data to the internal disk, but failed because the disk is full.

Recommended action

Touch the OK button to clear the error.

Internal disk is write protected

Description

The internal disk is write protected and no new files can be written to it.

Recommended action

Touch the OK button to clear the error.

Internal disk not found

Description

The internal disk was not found at start up.

Recommended action

Turn the product off, and then on.

Internal disk not functional

Description

82.0X.YY (event code)

The internal hard drive is not functioning correctly.

Recommended action

- 1. Turn off the product, and then remove and reinstall the hard drive.
- **2.** Turn on the product.
- **3.** If the error persists, replace the internal hard drive.

Internal disk not initialized

Description

The file system on the internal disk must be initialized before it can be used.

Recommended action

Initialize the file system on the internal disk.

Internal disk spinning up

Description

The internal disk device is spinning up its platter. Jobs that require disk access must wait.

No action is necessary.

Jam in document feeder

Description

A document feeder jam has occurred.

Recommended action

Clear the jam.

Load Tray <X>: [Type], [Size] To use another tray, press "OK"

Description

This message displays when the indicated tray is selected, but is not loaded, and other paper trays are available for use.

It also displays when the tray is configured for a different paper type or size than the print job requires.

Recommended action

- Load the correct paper in the tray.
- If prompted, confirm the size and type of paper loaded. 2.
- 3. Otherwise, press the OK button to select another tray.
- If error persists, use the cassette media present sensor test in the tray/bin manual sensor test to verify that the sensor is functioning correctly.
- Make sure that the sensor flag on the media presence sensor is not damaged and moves freely. 5.

Loading program <XX>

Description

Programs and fonts can be stored on the product's file system and are loaded into RAM when the product is turned on. The number <XX> specifies a sequence number indicating the current program being loaded.

Recommended action

No action necessary.



NOTE: Do not turn the product off.

Turning the product off might cause a corruption of the files loading.

Low on ink

Description

The ink level in the indicated cartridge has reached a low level.

- 17.00.60: (event code) Black cartridge
- 17.01.60: (event code) Cyan cartridge

- 17.02.60: (event code) Magenta cartridge
- 17.03.60: (event code) Yellow cartridge

It is not necessary to replace the cartridge at this point.

HP recommends having a replacement cartridge ready for when the cartridge is empty.

Main Tray 2 Missing or Open

Description

The product cannot detect the tray.

Recommended action

Install and close the tray.

Manually feed output stack Then touch "OK" to print second side

Description

The product has printed the first side of a manual duplex job and is waiting for the user to insert the output stack to print the second side.

Recommended action

- **1.** Maintaining the same orientation, remove the pages from the output bin.
- **2.** Flip the document printed side up.
- 3. Load the document in Tray 1.
- **4.** Touch the OK button to print the second side of the job.

Manually feed: <Type><Size> To use another tray, press "OK"

Description

This message displays when manual feed is selected, Tray 1 is loaded, and other trays are available.

Recommended action

- **1.** Load tray with the requested paper.
- 2. If paper is already in tray, press the Help button to exit the message, and then press the OK button to print.
- **3.** To use another tray, clear paper from Tray 1, press the Help button to exit the message, and then press the OK button.

No job to cancel

Description

The user pressed the "Stop" button, but the product is not actively processing any jobs.

No action necessary.

Non-HP Cartridge(s) Non-HP ink cartridges installed

Description

The product has detected a non-HP cartridge or cartridges

- 17.00.34: (event code) Black cartridge
- 17.01.34: (event code) Cyan cartridge
- 17.02.34: (event code) Magenta cartridge
- 17.03.34: (event code) Yellow cartridge

Recommended action

Press OK to continue.

HP cannot guarantee the quality or reliability of non-HP supplies.

Replace the cartridges with HP cartridges to ensure the best print quality.

If you believe you purchased a genuine HP supply, go to www.hp.com/go/anticounterfeit.

Output Bin Full

Description

The output bin is full or this message displays even though the output bin is not full.

Recommended action

- 1. Clear all media from the output bin.
- Check that the face-down tray media-full sensor flag to move smoothly. If the flag is damaged, replace the face-down delivery assembly
- Run the sensor test in the sensor monitor mode to verify that the face-down tray media-full sensor is functioning properly. If it is not, replace the face-down delivery assembly.

Paper Jam in Automatic Document Feeder

Description

The product has detected a jam in the document feeder.

Recommended action

Clear the jam and then touch the OK button.

Paper Jam Paper Jam

Description

The product has experienced a paper jam. Printing cannot continue until the jam has been cleared.

Follow the instructions on the product control panel to clear the jam.

Paper too short Paper too short

Description

The product cannot print on paper smaller than 12.5 cm (4.9 in) in length.

Recommended action

Load paper that exceeds the product minimum supported size and re-send the print job.

Paper too short to autoduplex

Description

The paper in the product does not meet the minimum size requirements for automatic two sided printing (duplexing).

Recommended action

Load paper that meets specifications for automatic duplexing.

Paper type mismatch

Description

The paper type detected by the product does not match the type selected in the software.

Recommended action

Select the correct type in the software, load the type dictated by the software, or touch the OK button to continue the job with the size mismatch.

Paused...

Description

The product is paused and there are no error messages pending at the display. The I/O continues receiving data until memory is full.

Recommended action

Press the Stop button.

Performing Paper Path Test...

Description

The product is performing a paper-path test.

Recommended action

No action necessary.

Please Wait...

Description

The product is in the process of clearing data.

Recommended action

No action necessary.

Print head Jam

Description

The product has detected a jam that is blocking the print head.

Recommended action

Follow the instructions on the product control panel to clear the jam.

Printer Failure

Description

The product or ink system has experienced an error.

Recommended action

Turn the product off and then on.

Printer Supply Upgrade

Description

The indicated supply upgrade was detected.

- **17.00.52** Black Cartridge
- **17.01.52** Cyan Cartridge
- **17.02.52** Magenta Cartridge
- 17.03.52 Yellow Cartridge

Recommended action

Press the OK button or touch the Upgrade button to install the upgrade cartridge, or replace the cartridge.

Printer Supply Upgrade Problem

Description

The indicated supply encountered an upgrade problem.

- 17.00.54 Black Cartridge
- **17.01.54** Cyan Cartridge
- 17.02.54 Magenta Cartridge
- 17.03.54 Yellow Cartridge

Replace the ink cartridge.

Printing Configuration...

Description

The product is printing the Configuration page.

Recommended action

No action necessary.

Printing Event Log...

Description

The product is printing the Event Log page.

Recommended action

No action necessary.

Printing File Directory...

Description

The product is printing the File Directory pages.

Recommended action

No action necessary.

Printing Font List...

Description

The product is printing the Font List pages.

Recommended action

No action necessary.

Printing Help Page...

Description

The product is printing the Help page.

Recommended action

No action necessary.

Printing Menu Map...

Description

The product is printing the Menu Map pages.

No action necessary.

Printing stopped

Description

Time expired on the Print/Stop test.

Recommended action

Touch the OK button to continue.

Printing Supplies Status Page...

Description

The product is printing the Supplies Status page.

Recommended action

No action necessary.

Printing Usage Page...

Description

The product is printing the Usage page.

Recommended action

No action necessary.

Printing...engine test

Description

The product is printing an Engine test page.

Recommended action

No action necessary.

Problem with Printer Preparation

Description

The product has detected an error with the product clock. Print quality can be affected.

Recommended action

Run a cleaning page through the product.

Problem with startup Cartridge(s)

Description

The product has detected a problem with the startup cartridges, which prevents the product from completing the initialization process during initial installation.

Replace the cartridges.

Processing job from tray <X>...Do not grab paper until job completes

Description

The product is actively processing a job from the designated tray.

Recommended action

No action necessary.

Processing...

Description

The product is currently processing a job, but is not yet picking pages. When paper motion begins, this message is replaced by a message that indicates the tray the job is using.

Recommended action

No action necessary.

Processing...copy <X> of <Y>

Description

The product is currently processing or printing collated copies. The message indicates that copy number <X> of total copies <Y> is currently being processed.

Recommended action

No action necessary.

RAM disk device failure To clear touch "OK"

Description

The specified device failed.

Recommended action

Touch the OK button to clear the error.

RAM disk file operation failed To clear touch "OK"

Description

A PJL command was received that attempted to perform an invalid operation, such as downloading a file to a nonexistent directory.

Recommended action

Touch the OK button to clear the error.

RAM disk file system is full To clear touch "OK"

Description

The hard disk is full.

Recommended action

Touch the OK button to clear the error.

RAM disk is write protected To clear touch "OK"

Description

The RAM device is write protected and no new files can be written to it.

Recommended action

Touch the OK button to clear the error.

RAM disk not initialized

Description

The file system on the RAM disk must be initialized before it can be used.

Recommended action

Initialize the file system on the RAM disk.

Ready

Description

The product is online and ready for data. No status or product attendance messages are pending at the display.

Recommended action

No action necessary.

Ready <IP Address>

Description

The product is online and ready for data. No status or product attendance messages are pending at the display. The product IP address displays.

Recommended action

No action necessary.

Receiving Upgrade

Description

The product is receiving a firmware upgrade.

Recommended action

Do not turn the product off until it reaches the Ready state.

Turning the product off might cause a corruption of the upgrade file.

Remove USB accessory

Description

This message displays when an unsupported USB device is inserted into a host USB port on the product.

Recommended action

Remove the unsupported USB device.

Resend Upgrade

Description

A firmware upgrade did not complete successfully.

Recommended action

Upgrade the firmware again.

Restore Factory Settings

Description

The product is restoring factory settings.

Recommended action

No action necessary.

ROM disk device failed To clear touch "OK"

Description

The specified device failed.

Recommended action

Touch the OK button to clear the error.

ROM disk file operation failed To clear touch "OK"

Description

A PJL command was received that attempted to perform an invalid operation, such as downloading a file to a nonexistent directory.

Recommended action

Touch the OK button to clear the error.

ROM disk file system is full To clear touch "OK"

Description

The hard disk is full.

Touch the OK button to clear the error.

ROM disk is write protected To clear touch "OK"

Description

The ROM device is write protected and no new files can be written to it.

Recommended action

Touch the OK button to clear the error.

ROM disk not initialized To clear touch "OK"

Description

The file system on the ROM disk must be initialized before it can be used.

Recommended action

Initialize the file system on the ROM disk.

Service Ink Capacity Warning

Description

The waste ink container on the duplex module is full or almost full. This can cause print quality issues (smearing).

Recommended action

Replace the duplex module, and then reset the service ink detection mechanism.

- Open the Administration menu on control panel.
- 2. Select Manage Supplies.
- 3. Select Reset Supplies.
- 4. Select New Ink Collection Unit and then touch the OK button

Size mismatch in Tray <X>

Description

The paper in the listed tray does not match the size specified for that tray.

Recommended action

- **1.** Load the correct paper.
- Make sure that the paper is positioned correctly.
- Close the tray, and then make sure that the control panel lists the correct size and type for the specified tray.

- **4.** If necessary, use the control panel menus to reconfigure the size and type settings for the specified tray.
- **5.** If error persists, use the tray/bin manual sensor test to test the switch.

Sleep mode on

Description

The product is in sleep mode. Pressing a control panel button, receiving of a print job, or an error condition clears this message.

Recommended action

No action necessary.

Startup Routine Ink Alert

Description

The cartridge indicated might not have enough ink to complete the product startup process.

- 17.00.36 Black Cartridge
- **17.01.36** Cyan Cartridge
- 17.02.36 Magenta Cartridge
- **17.03.36** Yellow Cartridge

Recommended action

Replace the cartridge indicated in the error message.

The unit has corrupt data

Description

Data corruption has occurred in the firmware volume.

- **98.00.01**: Corrupt data in the firmware volume
- **98.00.02**: Corrupt data in the solutions volume
- **98.00.03**: Corrupt data in the configuration volume
- **98.00.04**: Corrupt data in the job data volume

Recommended action

For **98.00.01**, **98.00.02**, and **98.00.03**, perform the following steps:

- **1.** Turn the product off, and then on.
- 2. Use the Clean Disk item in the Preboot menu.
- 3. Reload the firmware.

For **98.00.04**, perform the following steps:

- Turn the product off, and then on.
- Run the file erase function. 2.

Tray <X> [type] [size]

Description

The media in the specified tray is detected as the specified size and type.

The custom switch was not changed.

Recommended action

If the media is a custom size or type, change the custom switch accordingly.

Tray <X> empty: [Type], [Size] / Tray X Out of Paper

Description

The specified tray is empty and the current job does not need this tray to print.

- X = 1: Tray 1
- X = 2: Tray 2
- X = 3: Tray 3

Recommended action

Refill the tray at a convenient time.

This could be a false message. If the tray is loaded without removing the shipping lock, the product does not sense that the paper is loaded. Remove the shipping lock, and then load the tray.

Tray <X> lifting

Description

The product is in the process of lifting paper in the indicated tray.

- X = 2: Tray 2
- X = 3: Tray 3

Recommended action

No action necessary.

Tray <X> open

Description

The specified tray is open or not closed completely.

- X = 2: Tray 2
- X = 3: Tray 3

- **1.** Close the tray.
- 2. If this message displays after the lifter drive assembly was removed or replaced, make sure that the connector of the assembly is connected correctly and fully seated.
- 3. If the error persists, use the media size switches in the tray/bin manual sensor test to test the switches.
- **4.** If the switches do not respond, replace the associated lifter drive assembly.

Type mismatch Tray <X>

Description

The specified tray contains a paper type that does not match the configured type.

Recommended action

The specified tray will not be used until this condition is addressed. Printing can continue from other trays.

- 1. Load the correct paper in the specified tray.
- **2.** On the product control, make sure that the type loaded in the tray matches the specified setting for the tray.

Unsupported drive installed To continue, touch "OK"

Description

A non-supported hard drive has been installed. The drive is unusable by this product.

Recommended action

- 1. Turn the product off.
- 2. Remove the hard drive.
- **3.** Turn the product on.

Unsupported supply in use OR Unsupported supply installed To continue, touch "OK"

Description

A non-supported supply has been installed or the ink cartridge is for a different product.

Recommended action

Install the correct supplies for this product. See the parts chapter in the service manual for supply part numbers.

Unsupported USB accessory detected Remove USB accessory

Description

A non-supported USB accessory has been connected.

Recommended action

Turn the product off, remove the USB accessory, and then turn the product on.

Upgrade Error

Description

SCB upgrade error has occurred.

Recommended action

- Turn the product off, and then on.
- Resend the upgrade. 2.
- **3.** If the error persists, replace the SCB.

USB accessory not functional

Description

A parameter in the USB accessory is not functioning correctly.

Recommended action

- Turn the product off.
- 2. Remove the USB accessory.
- 3. Insert the USB accessory making sure it is fully seated and connected properly.
- 4. Turn the product on.
- If issue remains, replace the USB accessory.

USB hubs are not fully supported Some operations may not work properly

Description

Some USB hubs require more power than the product has available.

Recommended action

Remove the USB hub.

USB is write protected To clear touch "OK"

Description

The USB device is write protected and no new files can be written to it.

Recommended action

Touch the OK button to clear the error.

USB needs too much power

Description

Power requirements for the USB device attached to the product are beyond supported limits.

- 1. Remove the USB device.
- **2.** Turn the product off, and then on.
- **3.** Try a similar accessory that has its own power supply or requires less power.

USB needs too much power Remove USB and Then Turn Off then On

Description

A USB accessory is drawing too much electrical current. Printing cannot continue.

Recommended action

- 1. Turn the product off.
- **2.** Remove the USB accessory.
- **3.** Turn the product on.
- **4.** Try a similar USB accessory that has its own power supply or requires less power.

USB not initialized

Description

The file system on the USB device must be initialized before it can be used.

Recommended action

Use the HP Embedded Web Server or HP Web Jetadmin to initialize the USB device.

USB storage accessory removed Clearing any associated data

Description

This message displays for about 6 seconds after a USB device is removed.

Recommended action

Touch the Hide button to remove this message.

USB storage device failure To clear touch "OK"

Description

The specified device failed.

Recommended action

Touch the OK button to clear this error.

USB storage file operation failed To clear touch "OK"

Description

A PJL file system command was received that attempted to perform an invalid operation, such as downloading a file to a nonexistent directory.

Touch the OK button to clear this error.

USB storage file system is full To clear touch "OK"

Description

The file system on the installed USB device is full.

Recommended action

Touch the OK button to clear this error.

Use startup cartridges

Description

The product needs the startup ink cartridges that came with the product to perform the initial startup process.

Recommended action

Replace the cartridges with the startup ink cartridges that came with the product.

Used HP Ink Cartridge(s) installed

Description

The product has detected a used cartridge or cartridges.

Recommended action

Press or touch the OK button to clear the message.

Used or Counterfeit Cartridge Detected

Description

The supply being used is either a counterfeit or refilled cartridge.

- **17.00.34** Black Cartridge
- **17.01.34** Cyan Cartridge
- 17.02.34 Magenta Cartridge
- 17.03.34 Yellow Cartridge

Recommended action

At the computer, click Yes or No to clear the message.

If you believe you purchased a genuine HP supply, go to www.hp.com/go/anticounterfeit. Any print quality repair required as a result of using used cartridges is not covered under warranty. Supply status and features depending on supply status are not available.

Very Low on Ink

Description

The ink level in the indicated cartridge has reached a very low level.

- **17.00.69** Black Cartridge
- **17.01.69** Cyan Cartridge
- **17.02.69** Magenta Cartridge
- **17.03.69** Yellow Cartridge

Recommended action

It is not necessary to replace the cartridge at this point. HP recommends having a replacement cartridge ready for when the cartridge is empty.

Windows Login Required to Use this Feature

Description

Windows login is required for the selected feature or job.

Recommended action

Enter the necessary Windows login information.

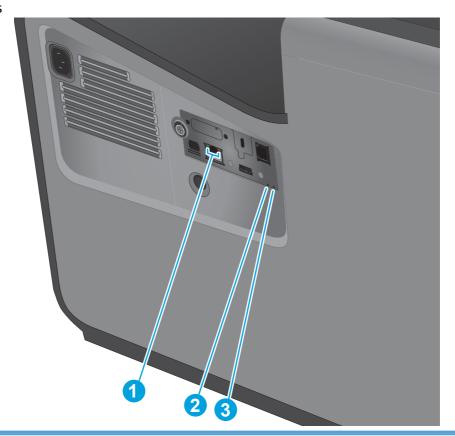
Individual component diagnostics

LED diagnostics

Understand lights on the formatter

The LEDS on the formatter indicate basic product functionality and may be used for troubleshooting.

Figure 2-9 LEDs



- **HP Jetdirect LEDs** 1
- 2 Connectivity LED
- 3 **Heartbeat LED**

Heartbeat LED

The heartbeat LED provides information about product operation. If a product error occurs, the formatter displays a message on the control-panel display. However, error situations can occur causing the formatter to control panel communication to be interrupted.



NOTE: HP recommends fully troubleshooting the formatter and control panel before replacing either assembly. Use the heartbeat LED to troubleshoot formatter and control panel errors to avoid unnecessarily replacing these assemblies.

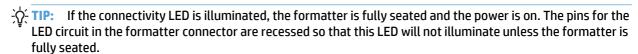
The heartbeat LED operates according to the product state.

Table 2-4 Heartbeat LED status

LED color	Description
Green	Solid—During part of boot up initialization and Pre-boot menu
	 Slow blinking—During normal operation/sleep mode
	• Formatter is operating normally
	• Firmware is operating normally
	 Control panel is connected
Yellow	Fast blinking—Formatter cannot connect to the control panel
	· Check control panel connections
	 Verify control panel functionality
Red	 Solid—Formatter error or failure (initially red for one second during power on)
	 Serial peripheral interface (SPI) flash memory boot error
	 Power on self test (formatter) failed
	 Diagnostic (formatter) failed
Off	The power cable is disconnected, or the product power switch is in the off position.
	 Firmware or system freeze. Reboot the product, or reload or upgrade the firmware
	 Check control panel for an error message
	 Control panel failure or the product power switch is in the off position
	NOTE: This condition is not usually caused by a formatter failure. Turn the power off, and then on again. If the error persists, perform a firmware upgrade.

Connectivity LED

If the connectivity LED is solid green, it indicates that the formatter assembly is correctly plugged in and powered up.



HP Jetdirect LEDs

The embedded HP Jetdirect print server has two LEDs. The yellow LED indicates network activity, and the green LED indicates the link status. A blinking yellow LED indicates network traffic. If the green LED is off, a link has failed.

For link failures, check all the network cable connections. In addition, you can try to manually configure the link settings on the embedded print server by using the product control-panel menus.

- From the Home screen on the product control panel, scroll to and touch the Administration button. 1.
- Open the following menus:

- **Network Settings**
- Embedded Jetdirect
- Link Speed
- Select the appropriate link speed, and then touch the OK button.

Paper path test

This diagnostic test generates one or more test pages that you can use to isolate the cause of jams.

To isolate a problem, specify which input tray to use, specify whether to use the duplex path, and specify the number of copies to print. Multiple copies can be printed to help isolate intermittent problems. The following options become available after you start the diagnostic feature:

- Print Test Page: Run the paper-path test from the default settings: Tray 2, no duplex, and one copy. To specify other settings, scroll down the menu, and select the setting, and then scroll back up and select Print Test Page to start the test.
- Source Tray: Select Tray 1, Tray 2, or the optional tray.
- Test Duplex Path: Enable or disable two-sided printing.
- Number of Copies: Set the numbers of copies to be printed; the range is 1-500.
- From the Home screen on the product control panel, scroll to and touch the Administration button. 1.
- 2. Open the following menus:
 - Troubleshooting
 - **Diagnostic Tests**
 - **Paper Path Test**
- Select the paper-path test options for the test you want to run.

Scanner tests (X585 only)

Use these diagnostic tests to manually test the document feeder and scanner sensors.

Scanner tests

This section lists the sensors available in the Scanner Tests.

Use the scanner tests

The Scanner Tests screen shows the sensor name, sensor state (active or inactive), and the number of times the sensor has been toggled (activated).

- 1. From the Home screen on the product control panel, scroll to and touch the Administration button.
- 2. Open the following menus:
 - Troubleshooting
 - Diagnostic Tests
 - Scanner Tests
 - Sensors
- 3. Touch the sensor name on the Scanner Tests screen to display a sensor location graphic on the control-panel display.
- 4. Activate the desired sensor, and then check the control-panel display to verify the sensor state (active or inactive).
 - The State virtual LED next to the sensor number and sensor name illuminates green when the sensor is active.
 - The Toggle virtual LED next to the sensor number and sensor name illuminates green after the sensor is activated and increments by one each time the sensor is interrupted (activated or deactivated).

For example, opening and closing the flatbed cover increments the Flatbed Cover Toggle item count two times—once when the door is opened, and once when the door is closed.

5. Touch the Reset Sensors button to reset the Toggle count item.

-or-

Touch the Cancel button to exit the Scanner Tests screen, and then touch the Cancel button again to return to the Diagnostic Tests menu.

Scanner sensor tests

- ADF Paper Present
- ADF Y (length)
- ADF Jam Cover
- ADF Paper Path Deskew
- ADF Paper Path Pick Success

- Paper path sensor 1 (unreachable)
- Paper path sensor 2 (unreachable)
- Flatbed Y (length)
- Flatbed cover

Diagrams

For diagrams showing sensors and other components, see the Theory of Operations chapter.

Plug/jack locations

Figure 2-10 Plug/jack locations (X555)

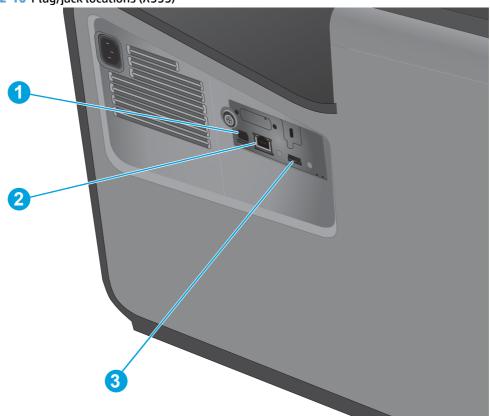


Table 2-5 Plug/jack locations (X555)

Item	Description	
1	Hi-Speed USB 2.0 printing port	
2	Local area network (LAN) Ethernet (RJ-45) network port	
3	USB port for connecting external USB devices	

Figure 2-11 Plug/jack locations (X585)

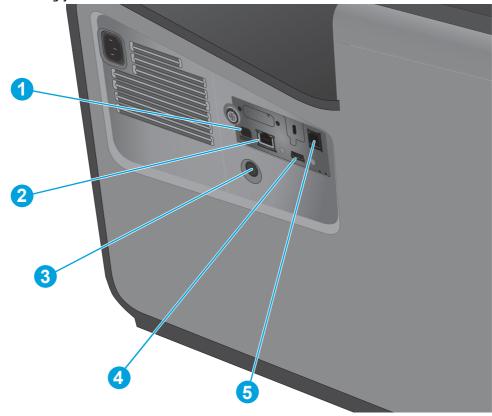


Table 2-6 Plug/jack locations (X585)

Item	Description	
1	Hi-Speed USB 2.0 printing port	
2	Local area network (LAN) Ethernet (RJ-45) network port	
3	Foreign interface harness (for connecting third-party devices)	
4	USB port for connecting external USB devices	
5	Fax port (fax models only)	

Print-quality troubleshooting tools

Internal print-quality test pages

Print-quality troubleshooting pages

Use the print-quality troubleshooting pages to help diagnose and solve print-quality problems.

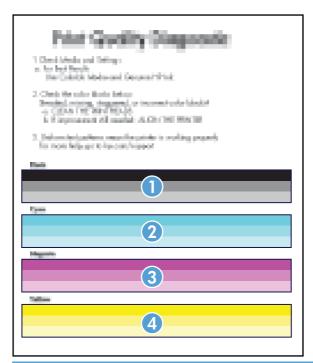
NOTE: To get further assistance in print-quality troubleshooting, go to www.hp.com/support/ojcolorX555 or www.hp.com/support/ojcolorMFPX585 and select PQ Troubleshooting Tools.

- From the Home screen on the product control panel, scroll to and touch the Administration button.
- Open the following menus:
 - **Troubleshooting**
 - **Print Quality Pages**
- Select one of the following documents to print:
 - **Troubleshooting Guide**
 - Diagnostic Page
 - **Print Quality Report**
 - **Print Quality Service Pages**
 - **Printhead Diagnostic Pages**

Interpret the print quality report

- Load the product with regular, unused white paper.
- 2. From the Home screen on the product control panel, touch the Administration button.
- Open the following menus: 3.
 - **Troubleshooting**
 - **Print Quality Pages**
- Select the Print Quality Report item to print it.

This page contains four bands of color, which are divided into the groups as indicated in the following illustration. By examining each group, you can isolate the problem to a particular ink cartridge.



Section	Ink cartridge
1	Black
2	Cyan
3	Magenta
4	Yellow

-\(\hat{C}\)-TIP: Mark this page with a "1" in a corner. If you clean the printhead later, you will want to keep track of which page was printed first, in order to note any progress.

In general, if the ink system is working correctly, all the color bars are present and not streaked. Each bar has three distinct shades, but otherwise the color should not vary across the bar. The bars should also be evenly lined up. The black text on the page should not show ink streaks.

The following table shows some representative examples of defects on the print quality report.

Defect	Example
Color variation across bar	Black
	Cyan
	Magenta
	Yellow
Coloniatorality variation are so have	
Color intensity variation across bars	Black
	Cyan
	Magenta
	N.H.
	Yellow

Defect	Example	
Uneven bars	Black	
	Cyan	
		_
	Magenta	
		-
	Yellow	_
		_
Vertical dark lines	Black	
	Cyan	
	Magenta	
	N. II	
	Yellow	

Defect	Example
Vertical white lines on all bars	Black
	Cyan
	Magenta
	Yellow
Vertical white lines on select bars	Black
	Cyan Magenta
	Yellow



If the print quality report shows defects like the ones above, clean the printhead as follows:

- 1. Load the product with regular, unused white paper.
- 2. On the control panel, touch the Device Maintenance button.
- 3. Open the Calibration/Cleaning menu.
- 4. Select the Printhead Cleaning item.

The cleaning process has several steps. After each of them, the product prints the print quality report again. Evaluate each of these pages to determine if the original defect has been fixed – if it has, there is no reason to go on to the next cleaning stage.

Number each of the print quality pages so you don't lose track of the prints later.

- If you finish the cleaning process and still see defects on the print quality report, retry cleaning, especially if you have seen improvement in the print quality reports.
- If the print quality report still shows defects after a second cleaning, go to the next section to service the product.

If the defect on the print quality report is color variation across the bars (see the table of defects above), and if the problem seems to go away after a cleaning, but then reoccurs in the same location on the color bar the next day, complete the following procedure:

- Check to see if any of the following conditions are true:
 - Prior to the print quality problem, the product was unused for more than three weeks.
 - The product was recently moved or experienced a large temperature shift.
 - There was a recent paper jam.
 - The print quality problem seems to be getting better as the product is used (especially if print jobs with dense backgrounds are printed).
- If none of the conditions above are true, the color problem is likely to reoccur, even if a cleaning fixes it temporarily. Go to the final section of this document to service the product.

If the print quality report has no defects, then the ink system is working correctly. There is no reason to clean the printhead, which unnecessarily wastes ink and paper. Complete the following steps:

- Retry the original print job. Just printing the print quality report can solve some problems. If the print job meets print quality standards, stop troubleshooting here.
- If problems still exist on print jobs, review the earlier steps in this document: make sure the ink and paper are appropriate, and that the print settings are correct. In addition, these suggestions may help with some problems:
 - If you are printing an image, make sure it has sufficient resolution. Images that have been enlarged too much might appear fuzzy or blurry.
 - If the problem is confined to a band near the edge of a printout, use the software you installed with the product or another software program to rotate the image 180°. The problem might not appear on the other end of the printout.
 - Always use the power button to turn the product off. This protects the printhead from exposure to

- If yellow is missing from color jobs, there might be an ink sludge buildup on the orifice plate. Clean the printhead several times and then see if print quality has improved.
- If all colors are experiencing poor print quality, there might be an issue with the web wipe not advancing. Open the left door, and then mark the edge of the web wipe above the duplex module.

Figure 2-12 Mark the web wipe



Run the product so that it performs a wipe, and then see if the web has advanced. If it has not, replace the print mechanism.

If the problem persists, contact HP to service the product.

Cleaning page

- 1. From the Home screen on the product control panel, scroll to and touch the Device Maintenance button.
- Open the following menus:
 - Calibration/Cleaning
 - Resolve Ink Smear
- Touch the Start button to begin the procedure.

The cleaning process can take several minutes.

Calibrate the product to align the colors

Calibration is a product function that optimizes print quality. If you experience any image-quality problems, calibrate the product.

- 1. From the Home screen on the product control panel, scroll to and touch the Device Maintenance button.
- Open the following menus:
 - Calibration/Cleaning
 - Advanced Calibration Support (and then touch Continue)
 - Color Density Calibration
- 3. Touch the Continue button to start the calibration process.
- 4. Wait while the product calibrates, and then try printing again.

Preboot menu options

If an error occurs while the product is initializing, an error message displays on the control-panel display. The user can open the Preboot menus. The error menu item will not be seen if an error did not occur.

CAUTION: The Format Disk option performs a disk initialization for the entire disk. The operating system, firmware files, and third party files (among other files) will be completely lost. HP does not recommend this action.

Open the Preboot menu

- 1. Turn the product on.
- 2. The HP logo displays on the product control panel. When a "1/8" with an underscore displays below the HP logo, touch the logo to open the Preboot menu.
- TIP: You can also wait for the HP logo to move to the center of the control-panel display, and then touch the logo to open the Preboot menu.
- 3. Use the arrow buttons on the touchscreen to navigate the Preboot menu.
- 4. Touch the OK button to select a menu item.

Cold reset using the Preboot menu

- 1. Turn the product on.
- The HP logo displays on the product control panel. When a "1/8" with an underscore displays below the HP logo, touch the logo to open the Preboot menu.
- Use the down arrow button to highlight the Administrator item, and then touch the OK button. 3.
- Use the down arrow button to highlight the Startup Options item, and then touch the OK button. 4.
- **5.** Use the down arrow button to highlight the Cold Reset item, and then touch the OK button.
- Touch the Home 🏠 button to highlight the Continue item, and then touch the OK button. 6.
 - NOTE: The product will initialize.

Table 2-7 Preboot menu options (1 of 6)

Menu option	First level	Second level	Third level	Description
Continue				Selecting the Continue item exits the Preboot menu and continues the normal boot process.
				If a selection is not made in the initial menu within 30 seconds, the product returns to a normal boot (the same as selecting Continue).
				If the user navigates to another menu, the timeout does not apply.
Sign In				Enter the administrator PIN or service PIN if one is required to open the Preboot menu.

Table 2-7 Preboot menu options (1 of 6) (continued)

Menu option	First level	Second level	Third level	Description	
Administrator				This item navigates to the Administrator submenus.	
				If authentication is required (and the user is not already signed in) the Sign In prompt displays. The user is required to sign in.	
	Download	Network		This item initiates a preboot firmware download process. A USE thumb drive option will work on all FutureSmart products. USB	
		USB		or network connections are not currently supported.	
		USB Thumbdrive			
	Format Disk	Format Disk		This item reinitializes the disk and cleans all disk partitions.	
				CAUTION: Selecting the Format Disk item removes all data.	
				A delete confirmation prompt is not provided.	
				The system is not bootable after this action and a 99.09.67 error displays on the control panel. A firmware download must be performed to return the system to a bootable state.	
	Partial Clean			This item reinitializes the disk (removing all data except the firmware repository where the master firmware bundle is downloaded and saved).	
				CAUTION: Selecting the Partial Clean item removes all data except the firmware repository.	
				A delete confirmation prompt is not provided.	
				This allows a user to reformat the disk by removing the firmware image from the active directory without having to download new firmware code (product remains bootable).	
	Change Passwor	rd		Select this item to set or change the administrator password.	
	Clear Password			Select the Clear Password item to remove a password from the Administrator menu. Before the password is actually cleared, a message will be shown asking to confirm that the password should be cleared. Press the OK button to confirm the action.	
				When the confirmation prompt displays, press the OK button to clear the password.	

Table 2-8 Preboot menu options (2 of 6)

Menu option	First level	Second level	Third level	Description
Administrator continued	Manage Disk	Clear Disk		Select the Clear Disk item to disable using an external device for job storage. Job storage is normally enabled only for the boot device. This will be grayed out unless the 99.09.68 error is displayed.
		LockDisk		Select the LockDisk item to lock (mate) a new secure disk to this product.
				The secure disk already locked to this product will remain accessible to this product. Use this function to have more than one encrypted disk accessible by the product when using them interchangeably.
				The data stored on the secure disk locked to this product always remains accessible to this product.
		Leave Unlocked		Select the Leave Unlocked item to use a new secure disk in an unlocked mode for a single service event. The secure disk that is already locked to this product will remain accessible to this product and uses the old disk's encryption password with the new disk.
				The secure disk that is already locked to this product remains accessible to this product.
		Clear Disk Password		Select the Clear Disk Password item to continue using the non- secure disk and clear the password associated with the yet-to- be installed secure disk.
				CAUTION: Data on the missing secure disk will be permanently inaccessible.
		Retain Password		Select the Retain Password item to use the non-secure disk for this session only, and then search for the missing secure disk in future sessions.
		Boot Device	Secure Erase	Select the Secure Erase item to erase all of the data on the disk and unlock it if required.
				This might take a long time.
				NOTE: The system will be unusable until the system files are reinstalled. The ATA secure-erase command is a one-pass overwrite, which erases the entire disk including firmware. The disk remains an encrypted disk.
			Erase/Unlock	Select the Erase/Unlock item to cryptographically erase all data on the disk and unlock the disk to allow a user to gain access to it from any product.
				NOTE: The system will be unusable until the system files are reinstalled. It erases the encryption key. The encryption key is erased, so the disk becomes a non-encrypted disk.
			Get Status	This item provides disk status information if any is available.

Table 2-9 Preboot menu options (3 of 6)

Menu option	First level	Second level	Third level	Description
Administrator	Manage Disk	Internal Device		Select the Internal Device item to erase the internal device or get a status about the internal device.
ontinued	continued		Secure Erase	Select the Secure Erase item to erase all of the data on the disk and unlock it if required.
				This might take a long time.
				NOTE: The system will be unusable until the system files are reinstalled. The ATA secure-erase command erases the entire disk, including firmware. The disk remains an encrypted disk.
			Erase/Unlock	Select the Erase/Unlock item to cryptographically erase all of the data on disk and unlock the disk to allow the user to gain access to it from any product.
		are reins	NOTE: The system will be unusable until the system files are reinstalled. The HP High Performance Secure Hard Disk is erased.	
			Get Status	This item provides disk status information if any is availabl
		External Device		Select the External Device item to erase the internal device or get status about the internal device.
			Secure Erase	Select the Secure Erase item to erase all of the data on the disk and unlock it if required.
				This might take a long time.
				NOTE: The system will be unusable until the system files are reinstalled.
				The ATA secure-erase command erases the entire disk, including firmware. The disk remains an encrypted disk.
			Erase/Unlock	Select the Erase/Unlock item to cryptographically erase all of the data on disk and unlock the disk to allow a user to gain access to it from any product.
				NOTE: The system will be unusable until the system files are reinstalled. The encryption key is erased, so the disk becomes a non-encrypted disk.
			Get Status	This item provides disk status information if any is availabl

Table 2-10 Preboot menu options (4 of 6)

Menu option	First level	Second level	Third level	Description
Administrator	Configure LAN			Select the Configure LAN item to set up the network settings for the Preboot menu firmware upgrade.
continued				the Preport ment inniware appraise.
				The network can be configured to obtain the network settings from a DHCP server or as static.
		IP Mode DHCP		Use this item for automatic IP address acquisition from the DHCP server.
		IP Mode Static		Use this item to manually assign the network addresses.
			IP Address	Use this item to manually enter the IP addresses.
			Subnet Mask	Use this item to manually enter the subnet mask.
			Default Gateway	Use this item to manually enter the default gateway.
			Save	Select the Save item to save the manual settings.

Table 2-11 Preboot menu options (5 of 6)

Menu option	First level	Second level	Third level	Description
Administrator	Startup Options			Select the Startup Options item to specify options that can be set for the next time the product is turned on and initializes to the
continued				Ready state.
Show Revision Cold Reset		Not currently functional : Select the Show Revision item to allow the product to initialize and show the firmware version when the product reaches the Ready state.		
		Once the product power is turned on the next time, the Show Revision item is unchecked so that the firmware revision is not shown.		
	Cold Reset		Select the Cold Reset item to clear the IP address and all custome settings. (This item also returns all settings to factory defaults.)	
				NOTE: Items in the Service menu are not reset.
		Skip Disk Load		Select the Skip Disk Load item to disable installed third-party applications.
		Skip Cal		Select the Skip Cal item to initialize the product the next time the power is turned on without calibrating.
		Lock Service		CAUTION: Select the Lock Service item to lock the Service menu access (both in the Preboot menu and the Device Maintenance menu).
				Service personnel must have the administrator remove the Lock Service setting before they can open the Service menu.
		Skip FSCK		Select the Skip FSCK item to disable Chkdisk/ScanVolume during startup.

Table 2-11 Preboot menu options (5 of 6) (continued)

Menu option	First level	Second level	Third level	Description
Administrator	Startup Options	First Power		Not currently functional : This item allows the product to initialize as if it is the first time it has been turned on.
continued	continued			For example, the user is prompted to configure first-time settings like date/time, language, and other settings.
				Select this item so that it is enabled for the next time the product power is turned on.
				When the product power is turned on the next time, this item is unchecked so that the pre-configured settings are used during configuration, and the first-time setting prompt is not used.
		Embedded Jetdirect Off		Select the Embedded Jetdirect Off item to disable the embedded HP Jetdirect.
				By default this item is unchecked so that HP Jetdirect is always enabled.
		Wifi Accessory		Select the Wifi Accessory item to enable the wireless accessory.

Table 2-12 Preboot menu options (6 of 6)

Menu option	First level	Second level	Third level	Description
Administrator continued	Diagnostics	Memory	Do Not Run	Diagnostic items are useful for troubleshooting formatter problems. Use the options below the Do Not Run item to help troubleshoot formatter problems.
			Short	·
			Long	
		Disk	Do Not Run	
			Short	
			Long	
			Optimized	
			RAW	
			Smart	
		ICB		
		СРВ		
		Interconnect Run Selected		
	Remote Admin	Start Telnet		The Remote Admin item allows a service technician to gain access to the product remotely to troubleshoot issues.
		Stop Telnet		
		Refresh IP		

Table 2-12 Preboot menu options (6 of 6) (continued)

Menu option	First level	Second level	Third level	Description
	System Triage	Copy Logs		If you cannot print the error logs, the System Triage item allows you to copy the error logs to a flash drive on the next startup. The files can then be sent to HP to help determine the problem.
Service Tools				This item requires the service access personal identification number (PIN) for this product (see the service mode functions section in the product troubleshooting manual). If the product does not reach the Ready state, you can use this item to print the error logs. The logs can be copied to a USB drive when the product is initialized, and then these files can be sent to HP to help determine what is causing the problem.
	Reset Password			Use this item to reset the administrator password.
	Subsystems			For manufacturing use only. Do not change these values.
Developer Tools	Net Exec			This item is for factory use only.
				WARNING! HP recommends that field service personnel do not access, or use this item. This item is for factory use only.

Control-panel menus

Administration menu

You can perform basic product setup by using the Administration menu. Use the HP Embedded Web Server for more advanced product setup. To open the HP Embedded Web Server, enter the product IP address or host name in the address bar of a Web browser.

Reports menu

To display: At the product control panel, select the Administration menu, and then select the Reports menu.

Table 2-13 Reports menu

First level	Second level	Values	Description
Configuration/Status Pages	Administration Menu Map	Print	Shows a map of the entire Administration menu and the
		View	selected values for each setting.
	Current Settings Page	Print	Shows a summary of the current settings for the product. This
		View	might be helpful if you plan to make changes and need a record of the present configuration.
	Configuration Page	Print	Shows the product settings and installed accessories.
		View	instatica accessories.
	How to Connect Page	Print	Shows the network information typically needed to connect the
		View	product to a network.
	Supplies Status Page	Print	Shows the approximate remaining life for the supplies; reports
		View	statistics on total number of pages and jobs processed, serial number page counts, and maintenance information.
			HP provides approximations of the remaining life for the supplies as a customer convenience. The actual remaining supply levels might be different from the approximations provided.
	Usage Page	Print	Shows a count of all paper sizes that have passed through the
		View	product; lists whether they were simplex, duplex, monochrome, or color; and reports the page count.
	File Directory	Print	Shows the file name and folder name for files that are stored in
		View	the product memory.
	Web Services Status Page	Print	Shows the detected Web Services for the product.
		View	Tot the product.

Table 2-13 Reports menu (continued)

First level	Second level	Values	Description
	Color Usage Job Log	Print	Shows color jobs completed by the product.
		View	product.
Fax Reports (X585 only)	Fax Activity Log	Print	Contains a list of the faxes that have been sent from or received by
		View	this product.
	Billing Codes Report	Print	Provides a list of billing codes that
		View	have been used for outgoing faxes. This report shows how many sent
			faxes were billed to each code.
	Blocked Fax List	Print	A list of phone numbers that are
		View	blocked from sending faxes to this product.
	Speed Dial List	Print	Shows the speed dials that have
		View	been set up for this product.
	Fax Call Report	Print	A detailed report of the last fax
		View	operation, either sent or received.
Other Pages	Demonstration Page	Print	Prints a demonstration page.
	RGB samples	Print	Prints color samples for different
			RGB values. Use the samples as a guide for matching printed colors.
	Charles I		
	CMYK samples	Print	Prints color samples for different CMYK values. Use the samples as a
			guide for matching printed colors.
	PCL Font List	Print	Prints the available PCL fonts.
	PS Font List	Print	Prints the available PS fonts.

General Settings menu

To display: At the product control panel, select the Administration menu, and then select the General Settings menu.

In the following table, asterisks (*) indicate the factory default setting.

Table 2-14 General Settings menu

First level	Second level	Third level	Fourth level	Values	Description
Date/Time Settings	Date/Time Format	Date Format		DD/MMM/YYYY	Use the Date/Time Settings menu to
				MMM/DD/YYYY	specify the date and
				YYYY/MMM/DD	time and to configure date/time settings.
		Time Format		12 hour (AM/PM)	Select the format that
				24 hours	the product uses to show the date and time, for example 12- hour format or 24- hour format.
	Date/Time	Time Zone		Select the time zone from a list.	Select the time zone, date, and time that the product uses.
		Date		Select the date from a pop-up calendar.	
		Time		Select the time from a pop-up keypad.	
		Adjust for Daylight Savings		(Checkbox)	If you are in an area that uses daylight savings time, select the Adjust for Daylight Savings box.

Table 2-14 General Settings menu (continued)

First level	Second level	Third level	Fourth level	Values	Description
Energy Settings	Sleep Schedule	A list of scheduled		+ (Add)	Use to configure the
		events displays.		Edit	product to automatically wake up
				Delete	or go to sleep at specific times on specific days. Using
					this feature saves energy.
					NOTE: You must configure the date and time settings before you can use this feature.
			Event Type		Select whether to add or edit a Wake event or a Sleep event, and then select the time and the days for the wake or sleep event.
			Time		Set the wake or sleep event time parameters.
			Event Days	Select days of the week from a list.	Set the wake or sleep event day parameters.
	Sleep Timer Settings	Sleep/Auto Off After		Range: 1 to 120 minutes	Set the number of minutes after which
				Default = 60 minutes	the product enters Sleep or Auto Off mode. Touch the existing number to open the virtual keypad, and then increase or decrease the number of minutes.
		Wake/Auto On to These Events		All Events*	
				Network port	
				Power button only	

Table 2-14 General Settings menu (continued)

First level	Second level	Third level	Fourth level	Values	Description
Print Quality	Image Registration	Adjust Tray <x></x>	X1 Shift	-5.00 mm to 5.00 mm	Shift the margin
			Y1 Shift		alignment to center the image on the page
			X2 Shift		from top to bottom and from left to right.
			Y2 Shift		You can also align the image on the front with the image printed on the back.
					The direction that is perpendicular to the way the paper passes through the product is referred to as X. This is also known as the scan direction. X1 is the scan direction for a single-sided page or for the second side of a two-sided page. X2 is the scan direction for the first side of a two-sided page. The direction that the paper feeds through
					the product is referred to as Y. Y1 is the feed direction for a single-sided page or for the second side of a two-sided page. Y2 is the feed direction for the first side of a two-sided page.
					Use the Adjust Tray <x> menu to adjust the registration settings for each tray. Before adjusting these values, print a registration test page. It provides alignment guides in the X and Y directions so you can determine which</x>
					adjustments are necessary. You can adjust values for X1 Shift, X2 Shift, Y1 Shift, and Y2 Shift.

Table 2-14 General Settings menu (continued)

First level	Second level	Third level	Fourth level	Values	Description
			Print Test Page		Use the Print Test Page option to print a page to test the image registration. It provides alignment guides in the X and Y directions so you can determine which adjustments are necessary.
Jam Recovery				Auto* Off On	This product provides a jam recovery feature that reprints jammed pages. Select one of the following options: Auto: The product attempts to reprint jammed pages when sufficient memory is available. This is the default setting. Off: The product does not attempt to reprint jammed pages. Because no memory is used to store the most recent pages, performance is optimal. NOTE: When using this option, if the product runs out of paper and the job is being printed on both sides, some pages can be lost. On: The product always reprints jammed pages. Additional memory is allocated to store the last few pages printed This might cause a decrease in overall
Auto Recovery				Enabled Disabled*	performance. The product attempts to reprint jammed pages when sufficient memory is available. This is the default setting.
Manage Stored Jobs	General Stored Job Settings	Sort Stored Jobs By		Job Name*	This option allows you list the jobs either alphabetically or chronologically.

Table 2-14 General Settings menu (continued)

First level	Second level	Third level	Fourth level	Values	Description
		Default Folder Name			Type the name for the stored jobs folder that is accessible to all users.
	Temporary Stored Job	Retain Temporary		Do not retain	Sets which temporary
	Settings	Jobs After Reboot		Personal jobs only	jobs will be retained in the event of a product
				All temporary jobs	reboot.
		Delete Temporary		Off*	Sets a maximum
		Jobs After		1 Hour	storage-time limit for stored Quick Copy and
				4 Hours	Proof and Hold jobs. If a stored job is not
				1 Day	printed during this period, it is deleted.
				1 Week	
		Temporary Job		1-300	Configure global
		Storage Limit		Default = 32	settings for jobs that are stored in the product memory.
					The Temporary Job Storage Limit feature specifies the number of temporary jobs that can be stored on the product. The maximum allowed value is 300.
Enable Retrieve from				Enabled	Enables the product to
USB				Disabled*	open a file from a USB drive.
Hold Off Print Job				Enabled*	Enable this feature if
	Disabled	Disabled	you want to prevent print jobs from starting while a user is initiating a copy job from the control panel. Held print jobs start printing after the copy job is finished, provided that no other copy job is in the print queue.		
Restore Factory Settings				Restore	Use to restore all product settings to
				Cancel	their factory defaults.

Copy Settings menu (X585 only)

To display: At the product control panel, select the Administration menu, and then select the Copy Settings menu.

In the following table, asterisks (*) indicate the factory default setting.

Table 2-15 Copy Settings menu (X585)

First level	Second level	Third level	Values	Description
Copies			1–9999	Configure the default options for copy jobs. If the
			Default = 1	user does not specify the job options when creating the job, the default options are used.
Sides			1-sided original, 1-sided output*	Use to indicate whether the original document is printed on one or both
			2-sided original, 2-sided output	sides, and whether the copies should be printed on one or both sides. For
			1-sided original, 2-sided output	example, select 1-sided original, 2- sided output when the original is printed
			2-sided original, 1-sided output	on one side, but you want to make two-sided copies.
	Orientation	Portrait*		Specify portrait or landscape orientation and select the way the second sides are printed.
				Portrait orientation means the short edge of the page is along the top.
		Landscape		Landscape orientation means the long edge of the page is along the top.

Table 2-15 Copy Settings menu (X585) (continued)

First level	Second level	Third level	Values	Description
		2-Sided Format	Book-style	If you are making two- sided copies, select a 2-
			Flip-style	sided copies, select a 2-
			Book-style original; Flip- style copy	Book-style: The back side of the original is printed
			Flip-style original; Book- style copy	right-side-up, and the back side of the copy is printed the same way. Use this option for originals and copies that are bound along the left edge.
				Flip-style: The back side of the original is printed upside-down, and the back side of the copy is printed the same way. Use this option for originals and copies that are to be bound along the top edge.
				Book-style original; Flip- style copy: The back side of the original is printed right- side-up, but the back side of the copy is printed upside-down. Use this option when the original is bound along the left edge, but you want the copies to be bound along the top edge.
				Flip-style original; Book- style copy: The back side of the original is printed upside-down, but the back side of the copy is printed right-side-up. Use this option when the original is bound along the top edge, but you want the copies to be bound along the left edge.

Table 2-15 Copy Settings menu (X585) (continued)

First level	Second level	Third level	Values	Description
Color/Black			Automatically detect*	Select how the copy should be printed.
			Color Black	Automatically detect: Prints color documents in color, and black and white documents in black and white. For mixed documents, the product will determine whether to print in color or black and white.
				Color: Prints documents in color.
				Black: Prints documents in black and white.
Collate			Collate on (Sets in page order)*	If you are making more than one copy, select the
			Collate off (Pages grouped)	Collate on (Sets in page order) option to assemble the pages in the correct order in each set of copies.
				Select the Collate off (Pages grouped) option to group the same pages together. For example, if you are making five copies of an original document that has two pages, all five first pages would be grouped together and all five second pages would be grouped together.
Reduce/Enlarge	Scaling		Auto*	Use to scale the size of the document up or down.
			100%	Select one of the
			75%	predefined percentages, or select the Scaling field and
			50%	type a percentage between 25 and 400. The Auto
			125%	option automatically scales the image to fit the paper
			150%	size in the tray.
			200%	NOTE: To reduce the image, select a scaling percentage that is less than 100. To enlarge the image, select a scaling percentage that is greater than 100.
	Auto Include Margins			The product reduces the image slightly to fit the entire scanned image within the printable area or the page.

Table 2-15 Copy Settings menu (X585) (continued)

First level	Second level	Third level	Values	Description
Paper Selection			Manually feed	For the best color and image quality, select the
			Automatically select	appropriate paper type from the control panel
			Tray 1: [Type], [Size]	menu or from the print driver.
			Tray <x>: [Type], [Size]</x>	4.1761.
lmage Adjustment	Darkness		Select a value using the slide bar, or touch	Use to improve the overall quality of the copy.
				Adjust the Darkness setting to increase or decrease the amount of white and black in the colors.
	Contrast		Select a value using the slide bar, or touch Automatic.	Adjust the Contrast setting to increase or decrease the difference between the lightest and darkest color on the page.
	Background Cleanup		Select a value using the slide bar, or touch Automatic.	Adjust the Background Cleanup setting if you are having trouble copying a faint image.
	Sharpness		Select a value using the slide bar, or touch Automatic.	Adjust the Sharpness setting to clarify or soften the image. For example, increasing the sharpness could make text appear crisper, but decreasing it could make photographs appear smoother.
	Default			Select this to make the selected Image Adjustment setting the default value.
Content Orientation	Orientation		Portrait*	For some features to work correctly, you must specify
			Landscape	the way the content of the original document is placed on the page. Portrait orientation means the short edge of the page is along the top. Landscape orientation means the long edge of the page is along the top.
Optimize Text/Picture	Manually Adjust*		Optimize For slider	Use this setting to optimize the output for a particular type of content.

Table 2-15 Copy Settings menu (X585) (continued)

First level	Second level	Third level	Values	Description
			Text	Manually Adjust: Use to
			Printed picture	manually optimize the setting for each document.
			Photograph	Printed picture: Use for line drawings and preprinted images, such as magazine clippings or pages from books. If you see bands of irregular color or intensity on copies, try selecting the Printed picture setting to improve the quality.
				Photograph: Use for photographic prints.
Pages per Sheet			One (1)	Copies multiple pages onto one sheet of paper.
			Two (2)	
			Four (4)	NOTE: Before using this screen, use the Content Orientation screen to describe the original document orientation.
	Page Order		Right, then down	If you are printing four
			Down, then right	pages per sheet, select the page order. To print the pages in rows, select the Right, then down option. To print the pages in columns, select the Down, then right option.
	Add Page Borders			If you are printing two or more pages per sheet and you want to print a border around each page, select the Add Page Borders option.
Original Size			Select from a list of sizes that the product supports.	Describes the page size of the original document.
Booklet	Booklet Format		(Checkbox)	Use to copy two or more pages onto one sheet of paper so you can fold the sheets in the center to form a booklet. The product arranges the pages in the correct order. For example, if the original document has eight pages, the product prints pages 1 and 8 on the same sheet.
		Borders on Each Page	(Checkbox)	To print a border around each page, select the Borders on Each Page option.

Table 2-15 Copy Settings menu (X585) (continued)

First level	Second level	Third level	Values	Description
	Original Size		Select from a list of sizes that the product supports.	Describes the page size of the original document.
	Sides		1-sided	Select the 1-sided option if the original document is
			2-sided	printed on only one side.
				Select the 2-sided option if the original document is printed on two sides.
	Paper Selection		Manually feed	For the best color and image quality, select the
			Automatic	appropriate paper type from the control panel
			Tray 1: [Type], [Size]	menu or from the print
			Tray <x>: [Type], [Size]</x>	driver.
Edge-to-Edge			Normal (recommended)*	Use to avoid shadows that can appear along the edge
			Edge-to-Edge output	of copies when the original document is printed close to the edges. Combine with the Reduce/Enlarge feature to ensure that the entire page is printed on the copies. When the Edge-to-Edge feature is turned on, the product minimizes margins and prints as close to the edge of the paper as possible.
Job Build			Job Build off* Job Build on	Use to combine several original documents into one job. Also use this feature to scan an original document that has more pages than the document feeder can accommodate at one time. The product temporarily saves all the scanned images. After you have scanned all the pages for the job, touch the Finish option to finish the job.
Multi-feed Detection			Enabled*	This setting stops the
			Disabled	scanning process if it detects multiple-page feeds through the document feeder.
2–sided ID Scan			ID Scan on	ID Scan mode allows the
			ID Scan off*	user to scan both sides of an identification card onto one sheet.
Book Mode			Book Mode on	This setting allows the use
			Book Mode off*	to scan pages from a book.

Scan/Digital Send Settings menu (X585)

To display: At the product control panel, select the Administration menu, and then select the Scan/Digital Send Settings menu.

In the following table, asterisks (*) indicate the factory default setting.

Table 2-16 Scan/Digital Send Settings menu (X585)

First level	Second level	Third level	Fourth level	Values	Description
E-mail Settings	E-mail Setup Wizard				Use to configure settings that apply to
Save to Network Folder Options	NOTE: Email Settings only				settings that apply to sending documents through email or
Save to USB Options	,				saving documents to a folder on the network
NOTE: The same options are available					or on a USB multi- drive.
for each of these features, except					The E-mail Setup Wizard feature
where noted.					configures the
					product to send
					scanned images as email attachments. To
					open the product HP
					Embedded Web Server
					and set up the email
					notification server,
					enter the product IP address into a Web
					browser.

Table 2-16 Scan/Digital Send Settings menu (X585) (continued)

First level	Second level	Third level	Fourth level	Values	Description
	Default Job Options	Image Preview		Make optional*	Defines the default
				Require preview	job options for each function. If you do not
				Disable preview	specify the job option when creating the job the default options are used. For complete setup, go to the HP Embedded Web Server by typing the IP address of the product into a Web browser.
					Use the Image Preview feature to scan a document and display a preview before completing the job. Select whether this feature is available on the product.
					Make optional: The feature is optional, depending on the use who is signed in.
					Require preview Previews are required for all users.
					Disable preview: Previews are disabled for all users.
		Default File Name			The product is shippe with a factory default file name of [Untitled for any scanned files that are sent or saved Use this feature to specify a different default file name. If you are saving a file to a network folder or USB storage product and a file with the default file name already exists, a number is appended to the file name, for example, [Untitled]001.

Table 2-16 Scan/Digital Send Settings menu (X585) (continued)

First level	Second level	Third level	Fourth level	Values	Description
		Document File Type	е	Select from a list of file types.	PDF provides the best overall image and text quality.
					JPEG is a good choice for most graphics. Most computers have a browser that can view .JPEG files. This file type produces one file per page.
					TIFF is a standard file format that many graphics programs support. This file type produces one file per page.
					MTIFF: stands for multi-page TIFF. This file type saves multiple scanned pages in a single file.
					XPS (XML Paper Specification) creates an XML file that preserves the original formatting of the document and supports color graphics and embedded fonts.
					NOTE: OCR file types are not supported on this product unless attached to DSS.

Table 2-16 Scan/Digital Send Settings menu (X585) (continued)

First level	Second level	Third level	Fourth level	Values	Description
		Optimize Text/Pict	ure	Manually Adjust*	Use to optimize the
				Text	output for a particular type of content. You
				Printed picture	can optimize the output for text,
				Photograph	printed pictures, or a mixture.
					Manually Adjust: Use to manually optimize the setting for text or for pictures.
					Text: Use to optimize the text portion of the copy when text and/or pictures are on the original.
					Printed picture: Use for line drawings and preprinted images, such as magazine clippings or pages from books.
					Photograph: Best suited for making copies of printed pictures.
		Output Quality		High (large file)	Use to select the
				Medium*	quality for the output. Higher-quality images
				Low (small file)	require a larger file size than lower- quality images. Larger files take more time to send, and some recipients might have trouble receiving larger files.
		Original Sides		1-sided	Use to describe the layout for each side of
				2-sided	the original document. First select whether the original document is printed on one side or both sides. Then touch the Orientation setting to indicate whether the original has portrait or landscape orientation. If it is printed on both sides, also select the 2-sided format that matches the original

Table 2-16 Scan/Digital Send Settings menu (X585) (continued)

First level	Second level	Third level	Fourth level	Values	Description
			Orientation	Automatically detect	For some features to
				Portrait*	work correctly, you must specify the way
				Landana	the content of the
				Landscape	original document is placed on the page.
					Portrait orientation
					means the short edg
					of the page is along the top. Landscape
					orientation means th
					long edge of the pag
					is along the top. In th Orientation area,
					select whether the
					original document ha
					a portrait or landscape orientatio
			2-Sided Format	Book-style	Book-style: The back
				Flip-style	side of the original is printed right-side-up
					and the back side of
					the copy is printed the same way. Use this
					option for originals
					and copies that are
					bound along the left edge.
					Flip-style: The back
					side of the original is
					printed upside-dowr
					and the back side of the copy is printed tl
					same way. Use this
					option for originals
					and copies that are t be bound along the
					top edge.

Table 2-16 Scan/Digital Send Settings menu (X585) (continued)

First level	Second level	Third level	Fourth level	Values	Description
		Resolution		400 dpi	Sets the resolution for sent documents.
				300 dpi	Higher resolution
				200 dpi	images have more dots per inch (dpi), so
				150 dpi*	they show more detail. Lower
			75 dpi	75 dpi	resolution images have fewer dots per inch and show less detail, but the file size is smaller. Some file types, for example a file that will be processed with OCR, require a specific resolution. When these file types are selected, the Resolution setting
		Content Orientation	Orientation	Auto Detect	might automatically change to a valid value.
		Content Orientation	Orientation	Portrait*	work correctly, you
				Landscape	must specify the way the content of the
				Lanuscape	original document is placed on the page. Portrait orientation means the short edge of the page is along the top. Landscape orientation means the long edge of the page is along the top. In the Orientation area, select whether the original document has a portrait or landscape orientation.
			2-Sided Format	Book-style*	Use to configure the default style for 2-
				Flip-style	sided print jobs. If the Book-style option is selected, the back side of the page is printed the right way up. This option is for print jobs that are bound along the left edge. If the Flip-style option is selected, the back side of the page is printed upsidedown. This option is for print jobs that are bound along the top edge.

Table 2-16 Scan/Digital Send Settings menu (X585) (continued)

First level	Second level	Third level	Fourth level	Values	Description
		Color/Black		Automatically detect*	Use to enable or
				Color	disable color scanning.
				Black/Gray	Automatically detect:
				Black	Automatically scans documents in color if at least one page has color.
					Color: Scans documents in color.
					Black/Gray: Scans documents in grayscale.
					Black: Scans documents in black and white with a compressed file size.
		Original Size		Select from a list of supported sizes.	Use to describe the page size of the original document.
		Notification		Do not notify*	Configure to receive notification about the
				Notify when job completes	status of a sent document.
				Notify only if job fails	Do not notify: Turns
				Print	off this feature.
				E-mail	Notify when job completes: Select to receive notification for this job only.
					Notify only if job fails Select to receive notification only if the job is not sent successfully.
					Print: Select to print the notification at thi product.
					E-mail: Select to recieve the notification to an email account.
			Include Thumbnail		NOTE: When sending an analog far select Include Thumbnail to receive a thumbnail image of the first page of the fax in your notification.

Table 2-16 Scan/Digital Send Settings menu (X585) (continued)

First level	Second level	Third level	Fourth level	Values	Description
			Notification E-mail address		E-mail: Select to receive the notification in an email. Touch the text box following Email Address, and then type the email address for the notification.
		lmage Adjustment	Darkness		Use to improve the overall quality of the copy.
					Adjust the Darkness setting to increase or decrease the amount of white and black in the colors.
			Contrast		Adjust the Contrast setting to increase or decrease the difference between the lightest and darkest color on the page.
			Background Cleanup		Adjust the Background Cleanup setting if you are having trouble copying a faint image.
			Sharpness		Adjust the Sharpness setting to clarify or soften the image. For example, increasing the sharpness could make text appear crisper, but decreasing it could make photographs appear smoother.
			Automatic Tone		The product automatically adjusts the Darkness, Contrast, and Background Cleanup settings to the most appropriate for the scanned document.
			Default		Select this to make the selected Image Adjustment setting the default value.

Table 2-16 Scan/Digital Send Settings menu (X585) (continued)

First level	Second level	Third level	Fourth level	Values	Description
		Job Build		Job Build off*	Use to combine
				Job Build on	several original documents into one job. Also use to scan an original document that has more pages than the document feeder can accommodate at one time. The product temporarily saves all the scanned images. After you have scanned all the pages for the job, touch Finish to finish the job.
		Cropping Options		Do not crop*	Use this menu item to automatically crop the
				Crop to content	scan for digital sending. Use the Crop
				Crop to paper	to content option to scan the smallest possible area that has detectable content.
		Erase Edges		Use inches	Use this menu item to remove blemishes,
				Back side erase	such as dark borders
				Front side erase	or staple marks, by cleaning the specified edges of the scanned image. In each of the text boxes enter the measurements, in millimeters or inches, for how much of the top edge, bottom edge, left edge, and right edge to clean.
		Multi-feed Detection		Disabled	This setting stops the scanning process if it
				Enabled*	detects multiple-page feeds through the document feeder.
		Blank Page		Disabled*	Use to prevent blank
		Suppression		Enabled	pages in the original document from being included in the output document.

Table 2-16 Scan/Digital Send Settings menu (X585) (continued)

First level	Second level	Third level	Fourth level	Values	Description
Digital Send Service	Allow Usage of Digital			Disabled	Configure how the
Setup	Sending Software (DSS) Server Enabled*	product interacts with the HP Digital Sending Software (DSS) server. HP DSS handles digital sending tasks, such as faxing, emailing, and sending scanned documents to a network folder or USB storage device.			
					Use the Allow Usage of Digital Sending Software (DSS) Server option to configure the product to use HP DSS.
	Allow Transfer to New			Disabled	Use the Allow Transfer to New
	Digital Sending Software (DSS) Server			Enabled*	Digital Sending Software (DSS) Server option to specify whether DSS management of a product is transferable to a different DSS.

Fax Settings menu (X585)

To display: At the product control panel, select the Administration menu, and then select the Fax Settings menu.

In the following table, asterisks (*) indicate the factory default setting.

Table 2-17 Fax Settings menu (X585)

First level	Second level	Third level	Fourth level	Values	Description
Fax Send Settings	Fax Send Setup	Fax Setup Wizard			Configure settings for sending faxes from the product.
					Use the Fax Setup Wizard feature to set up options for faxing.
					NOTE: To set up LAN fax or Internet fax, use the HP Embedded Web Server. To open the HP Embedded Web Server, type the product network address into a Web browser. To configure the fax features, select the Fax tab.
		Fax Dialing Settings	Fax Dial Volume	Off	These settings control
				Low*	how the fax modem dials the outgoing fax
				High	number when faxes are sent.
			Dialing Mode	Tone*	
				Pulse	
			Redial Interval	1-5 Minutes	
				Default = 5 minutes	
			Fax Send Speed	Fast*	
				Medium	
				Slow	
			Dialing Prefix		
			Detect Dial Tone		
			Redial on Error	Range: 0-9	
				Default = 2	
			Redial on No Answer	Range: 0-2	
				Default = 0	
			Redial on Busy	Range: 0-9	
				Default = 3	

Table 2-17 Fax Settings menu (X585) (continued)

First level	Second level	Third level	Fourth level	Values	Description
		General Fax Send Settings	Fax Number Confirmation	Enabled	If this feature is enabled, you must
		Settings	Communication	Disabled*	enter the fax number twice.
			PC Fax Send	Enabled*	Enables users who have the correct driver
				Disabled	installed to send faxes through the product from their computers.
			JBIG Compression	Enabled*	The JBIG compression reduces fax-
			Error Correction Mode	Disabled Enabled*	transmission time, which can result in lower phone charges. However, using JBIG compression sometimes causes compatibility problems with older fax machines. If this occurs, turn off the JBIG compression.
				Disabled	mode is enabled and an error occurs during fax transmission, the product sends or receives the error portion again.
			Fax Header	Prepend*	Use to prepend or overlay the fax header
				Overlay	page.
			Fax Number Speed Dial Matching	Enabled	Use this item to match the fax number that
			_ act faccing	Disabled*	you type to numbers that are saved as a speed dial.

Table 2-17 Fax Settings menu (X585) (continued)

First level	Second level	Third level	Fourth level	Values	Description
		Billing Codes	Enable Billing Codes	Off*	When billing codes are
				On	enabled, a prompt displays that asks the
					user to enter the
					billing code for an
					outgoing fax. This
					prompt does not appear if the Allow
					users to edit billing
					codes check box is not
					checked.
					You can also use the
					billing codes report in
					the Reports menu to view the list of the
					billing codes that have
					been used for faxes
					that have been sent from the product. The
					list is grouped by
					billing code and also
					shows fax details. This
					feature can be used for billing or usage
					tracking.
			Default Billing Code		Specify a default
					billing code for faxing.
					If you specify a default billing code,
					this code displays in
					the Billing Code field
					when the user sends
					an outgoing fax. If this
					field is blank, no default billing code is
					provided for the user.
			Minimum Length	Range: 1-16	Specify the required
				Default = 1	length of the billing
				Derautt – 1	code. Billing codes can be between 1 and 16
					characters long.
			Allow users to edit	Off	
		billing codes			

Table 2-17 Fax Settings menu (X585) (continued)

First level	Second level	Third level	Fourth level	Values	Description
	Default Job Options	Image Preview		Make optional*	Use the Image Preview feature to
				Require preview	scan a document and
				Disable preview	display a preview before completing the job. Select whether this feature is available on the product.
					Make optional: The feature is optional, depending on the user who is signed in.
					Require preview Previews are required for all users.
					Disable preview: Previews are disabled for all users.
		Resolution		Standard (100 x 200dpi)*	Select the resolution for outgoing faxes. If
				Fine (200 x 200dpi)	you increase the resolution, faxes
				Superfine (300 x 300dpi)	might be clearer but they could transmit more slowly. Some file types, for example a file that will be processed with OCR, require a specific resolution. When these file types are selected, the Resolution setting might be automatically changed to a valid value.
		Original Sides		1-sided* 2-sided	Use to describe the layout for each side of the original document. First select whether the original document
					is printed on one side or both sides. Then touch the Orientation setting to indicate whether the original has portrait or landscape orientation. If it is printed on both sides, also select the 2-sided format that matches the original document.

Table 2-17 Fax Settings menu (X585) (continued)

First level	Second level	Third level	Fourth level	Values	Description
			Orientation	Portrait*	For some features to
				Landscape	work correctly, you must specify the way the content of the original document is placed on the page.
					Portrait: This setting means the short edge of the page is along the top.
					Landscape: This setting means the long edge of the page is along the top.
			2-Sided Format	Book-style*	Book-style: The back side of the original is printed right-side-up, and the back side of the copy is printed the same way. Use this option for originals and copies that are bound along the left edge.
				Flip-style	
					Flip-style: The back side of the original is printed upside-down, and the back side of the copy is printed the same way. Use this option for originals and copies that are to be bound along the top edge.
		Notification		Do not notify*	Use to receive
				Notify when job completes	notification about the status of a sent document.
				Notify only if job fails	Do not notify: Turns off this feature.
					Notify when job completes: Select to receive notification for this job only.
					Notify only if job fails Select to receive notification only if the job is not sent successfully.

Table 2-17 Fax Settings menu (X585) (continued)

First level	Second level	Third level	Fourth level	Values	Description
				Print	Print: Select to print the notification at this
				E-mail	product.
					E-mail: Select to receive the notification in an email. Touch the text box following Email Address, and then enter the email address for the notification.
			Include Thumbnail		When sending an analog fax, select Include Thumbnail to receive a thumbnail image of the first page of the fax in your notification.
			Notification E-mail address		Provide the email address that will receive notifications.
		Content Orientation	Orientation	Portrait*	For some features to
				Landscape	work correctly, you must specify the way the content of the original document is placed on the page.
					Portrait: This setting means the short edge of the page is along the top.
					Landscape: This setting means the long edge of the page is along the top.
			2-Sided Format	Book-style*	Use to configure the default style for 2-
				Flip-style	sided print jobs. If the Book-style option is selected, the back side of the page is printed the right way up. This option is for print jobs that are bound along the left edge. If the Flip-style option is selected, the back side of the page is printed upsidedown. This option is for print jobs that are bound along the top

Table 2-17 Fax Settings menu (X585) (continued)

First level	Second level	Third level	Fourth level	Values	Description
		Original Size		Select from a list of sizes that the product supports.	Use to describe the page size of the original document.
		Image Adjustment	Darkness		Use to improve the overall quality of the copy.
					Adjust the Darkness setting to increase or decrease the amount of white and black in the colors.
			Contrast		Adjust the Contrast setting to increase or decrease the difference between the lightest and darkest color on the page.
			Background Cleanup		Adjust the Backgroun Cleanup setting if you are having trouble copying a faint image
			Sharpness		Adjust the Sharpness setting to clarify or soften the image. For example, increasing the sharpness could make text appear crisper, but decreasing it could make photographs appear smoother.
			Automatic Tone		The product automatically adjusts the Darkness, Contrast, and Background Cleanup settings to the most appropriate for the scanned document.
			Default		Select this to make the selected Image Adjustment setting the default value.

Table 2-17 Fax Settings menu (X585) (continued)

First level	Second level	Third level	Fourth level	Values	Description
		Optimize Text/Picture	Manually Adjust*	Optimize For:	Optimizes the output
				Text	for a particular type of content. You can
				Printed picture	optimize the output for text, printed pictures, or a mixture.
				Photograph	
					Manually Adjust: Use to manually optimize the setting for text of for pictures.
					Text: Use to optimize the text portion of the copy where text and/ or pictures are on the original.
					Printed picture: Use for line drawings and preprinted images, such as magazine clippings or pages from books.
					Photograph: Best suited for making copies of printed pictures.
		Job Build		Job Build off*	Use to divide a complex job into
				Job Build on	smaller segments. This is useful when you are copying or scanning an original document that has more pages than the document feeder can hold, or when you want to combine pages that have different sizes into one job. You can use either the glass or the document feeder to scan the original documents.
		Multi-feed Detection		Disabled	Use this feature to prevent multiple
				Enabled*	pages being fed through the document feeder during document scans.
		Blank Page		Disabled*	Prevents blank pages
		Suppression		Enabled	in the original document from being included in the output document.

Table 2-17 Fax Settings menu (X585) (continued)

First level	Second level	Third level	Fourth level	Values	Description
Fax Receive Settings	Fax Setup Wizard				Configure settings for receiving faxes to the product.
					Use the Fax Setup Wizard feature to set up options for faxing.
					NOTE: To set up LAN fax or Internet fax, use the HP Embedded Web Server. To open the HP Embedded Web Server, type the product network address into a Web browser. To configure the fax features, select the Fax tab.
	Fax Receive Setup	Ringer Volume		Off	Use to configure
				Low*	settings for receiving faxes.
				High	
		Rings To Answer		Range: 1-6	
				Default = 1	
		Fax Receive Speed		Fast*	
				Medium	
				Slow	
		Ring Interval		Range: 220-600 ms	
				Default = 600 ms	
		Ring Frequency		Range: 1-200	
				Default = 68hz	
	Fax Printing Schedule			Always store faxes	If you have concerns about the security of
				Always print faxes*	private faxes, use this feature to store faxes
				Use Fax Printing Schedule	rather than having them automatically print. Open the Fax Printing Schedule submenu, and then you can choose to always store faxes, always print them, or you can set up a schedule for each day of the week.

Table 2-17 Fax Settings menu (X585) (continued)

First level	Second level	Third level	Fourth level	Values	Description
		Schedule	+ (Add)	Print incoming faxes	If you are using a fax
		Touch this to set up a fax printing schedule	Edit	Store incoming faxes	printing schedule, use this menu to configure
		if you selected the Use	Delete (trash can)	Time	when to print faxes.
		Fax Printing Schedule option.		Event Days	
	Blocked Fax Numbers	Fax Number to Block			The blocked fax list can contain up to 30 numbers. When the product receives a cal from one of the blocked fax numbers, it deletes the incoming fax. It also logs the blocked fax in the activity log along with job-accounting information.
					Add blocked numbers. Enter a fax number into the Fax Number to Block field, and then touch the arrow button to add a new number to the blocked fax list.
					To remove blocked numbers: Select a number and touch the Delete button to delete it from the blocked fax list.
					To clear all blocked numbers: Touch the Delete All button to clear all of the numbers from the blocked fax list.
					You also can use the Blocked Fax List report in the Information menu to view the list of the fax numbers that have been blocked on this product.

Table 2-17 Fax Settings menu (X585) (continued)

First level	Second level	Third level	Fourth level	Values	Description
	Default Job Options	Notification		Do not notify*	Configure to receive
				Notify when job completes	notification about the status of a sent document.
				Notify only if job fails	Do not notify: Turns off this feature.
					Notify when job completes: Select to receive notification for this job only.
					Notify only if job fails Select to receive notification only if th job is not sent successfully.
				Print	E-mail: Select to
				E-mail*	receive the notification in an email. Touch the text
					box following Email Address, and then enter the email address for the notification.
			Include Thumbnail		NOTE: When sending an analog far select Include Thumbnail to receive a thumbnail image of the first page of the fax in your notification.
			Notification E-mail address		Touch this text field, provide the email address to which you want notifications sent, and then touch the OK button
		Stamp Received Faxes		Enabled	Use this option to add
				Disabled*	the date, time, sender's phone number, and page number to each page of the faxes that this product receives.

Table 2-17 Fax Settings menu (X585) (continued)

First level	Second level	Third level	Fourth level	Values	Description
		Fit to Page		Enabled*	Use to shrink faxes
				Disabled	that are larger than Letter-size or A4-size so that they can fit onto a Letter-size or A4-size page. If this feature set to Disabled, faxes larger than Letter or A4 will flow across multiple pages.
		Paper Selection		Automatic*	
				Select from a list of the trays.	
		Sides		1-sided*	Use to describe the layout for each side of
				2-sided	the original document. First select whether the original document is printed on one side or both sides.
Fax Forwarding	Enable Fax Forwarding			Disabled*	Use to forward received faxes to
				Enabled	another fax machine.
		Type of Fax Job to Forward		All faxes	Use to select the type of fax jobs that you
				Sent faxes	want forwarded.
				Received faxes	
		Fax Forwarding Number			Provide the forwarding phone number, and then touch the OK button.
Clear Fax Activity Log					Clears all events from the fax activity log.

General Print Settings menu

To display: At the product control panel, select the Administration menu, and then select the General Print Settings menu.

In the following table, asterisks (*) indicate the factory default setting.

Table 2-18 General Print Settings menu

First level	Second level	Values	Description
Manual Feed		Enabled	Use to enable or disable the manual-feed feature, which allows
		Disabled*	the user to feed paper into the product by hand. When this feature is enabled, the user can select
			manual feed from the control panel as the paper source for a job. If a tray is not specified as part of a job, manual feed is selected.
Courier Font		Regular*	Select which version of the Courier font you want to use. The factory
		Dark	default setting is Regular, which uses an average stroke width. The Dark setting can be used if a heavier Courier font is needed.
Wide A4		Enabled	Changes the printable area of A4-
		Disabled*	size paper. If you enable this option, eighty 10-pitch characters can be printed on a single line of A4 paper.
Print PS Errors		Enabled	Use this feature to select whether a PostScript (PS) error page is
		Disabled*	printed when the product encounters a PS error.
Print PDF Errors		Enabled	Selects whether a PDF error page is printed when the product
		Disabled*	encounters a PDF error.
Personality		Auto*	Configures the default print language or personality for the
		PCL	product. Normally you should not change the product language. If
		PS	you change the setting to a specific product language, the product
		PDF	does not automatically switch from one language to another unless specific software commands are sent to it.
PCL	Form Length	Range: 5-128	Controls the PCL print-command options. PCL is a set of product
		Default = 60	commands that Hewlett-Packard developed to provide access to product features.
			Use the Form Length feature to select the user-soft default vertical form length.

Table 2-18 General Print Settings menu (continued)

First level	Second level	Values	Description
	Orientation	Portrait* Landscape	Select the orientation that is most often used for copy or scan originals. Select the Portrait option
			if the short edge is at the top or select the Landscape option if the long edge is at the top.
	Font Source	Internal*	Selects the font source for the user-soft default font. The list of available options varies depending on the installed product options.
	Font Number	Range: 0-110	Specifies the font number for the user-soft default font using the
		Default = 0	source that is specified in the Font Source menu. The product assigns a number to each font and lists it on the PCL font list. The font number displays in the Font # column of the printout.
	Font Pitch	Range: 0.44-99.99	If the Font Source option and the Font Number setting indicate a
		Default = 10	contour font, then use this feature to select a default pitch (for a fixed-spaced font).
	Font Point Size	Range: 4.00-999.75	If the Font Source option and the Font Number setting indicate a
		Default = 12.00	contour font, then use this feature to select a default point size (for a proportional-spaced font).
	Symbol Set	Select from a list of symbol sets.	Select any one of several availabl symbol sets from the control panel. A symbol set is a unique grouping of all the characters in a font. The factory default value for this option is PC-8. Either PC-8 or PC-850 are recommended for line draw characters.
	Append CR to LF	No*	Configure whether a carriage return (CR) is appended to each
		Yes	line feed (LF) encountered in backwards-compatible PCL jobs (pure text, no job control). Select Yes to append the carriage return The default setting is No. Some environments, such as UNIX, indicate a new line by using only the line-feed control code. This option allows the user to append the required carriage return to

Table 2-18 General Print Settings menu (continued)

First level	Second level	Values	Description
	Suppress Blank Pages	No* Yes	This option is for users who are generating their own PCL, which could include extra form feeds that would cause blank pages to be printed. When the Yes option is selected, form feeds are ignored if the page is blank.
	Media Source Mapping	Standard* Classic	Use to select and maintain input trays by number when you are not using the product driver, or when the software program has no option for tray selection. The following options are available:
			Standard: Tray numbering is based on newer HP LaserJet models.
			Classic: Tray numbering is based on HP LaserJet 4 and older models.

Print Options menu

To display: At the product control panel, select the Administration menu, and then select the Print Options

In the following table, asterisks (*) indicate the factory default setting.

Table 2-19 Print Options menu

First level	Second level	Values	Description
Number of Copies		Range: 1-32000	Sets the default number of copies for a copy job. This default applies
		Default = 1	when the Copy function or the Quick Copy function is initiated from the product Home screen.
Default Paper Size		Select from a list of sizes that the product supports.	Configures the default paper size used for print jobs.
Default Custom Paper Size	X Dimension	Range: 3-8.5 inches	Configures the default paper size that is used when the user selects
		Default = 8.5 inches	Custom as the paper size for a print job.
	Y Dimension	Range: 5-14 inches	
		Default = 14 inches	
	Use Inches	Enabled*	
		Disabled	
Sides		1-sided*	Use to indicate whether the original document is printed on
		2-sided	one or both sides, and whether the copies should be printed on one or both sides. For example, select the 1-sided original, 2-sided output option when the original is printed on one side, but you want to make two-sided copies.
2-Sided Format		Book-style*	Configures the default style for 2- sided print jobs. If the Book-style
		Flip-style	option is selected, the back side of the page is printed the right way up. This option is for print jobs that are bound along the left edge. If the Flip-style option is selected, the back side of the page is printed upside-down. This option is for print jobs that are bound along the top edge.
Edge-to-Edge		Normal (recommended)*	Use to avoid shadows that can appear along the edges of copies
		Edge-to-Edge output	when the original document is printed close to the edges.
Quality Level		General Office	Set the default print quality setting.
		Professional*	security.
		Presentation	

Display Settings menu

To display: At the product control panel, select the Administration menu, and then select the Display Settings menu.

In the following table, asterisks (*) indicate the factory default setting.

Table 2-20 Display Settings menu

First level	Second level	Values	Description
Display Brightness	Automatic*	The Manual setting uses a slider to manually control the display	Use to specify the intensity of the LCD control-panel display.
	Manual	brightness.	
Key Press Sound		On*	Use to specify whether you hear a sound when you touch the screen
		Off	or press buttons on the control panel.
Language Settings	Language	Select from a list of languages that the product supports.	Use to select a different language for control-panel messages and specify the default keyboard layout. When you select a new language, the keyboard layout automatically changes to match the factory default for the selected language.
	Keyboard Layout	Each language has a default keyboard layout. To change it,	Select the default keyboard layout that matches the language you
	X585 Flow only	select from a list of layouts.	want to use.
How to Connect Button		Display*	Use this menu item to display or hide the How to Connect Button on
X585 only		Hide	the Home screen.
Date and Time		Show Date and Time*	Select whether to display or hide the date and time on the control
X585 only		Hide Date and Time	panel Home screen.
Inactivity Timeout		Range: 10-300 seconds	Specifies the amount of time that elapses between any activity on
		Default = 60 seconds	the control panel and when the product resets to the default settings. When the timeout expires, the control-panel display returns to the Home menu, and any user signed in to the product is signed out.

Table 2-20 Display Settings menu (continued)

First level	Second level	Values	Description
Clearable Warnings		On	Use this feature to set the period
		Job*	that a clearable warning displays on the control panel. If the On setting is selected, clearable warnings appear until the Clearable Warnings button is pressed. If the Job setting is selected, clearable warnings stay on the display during the job that generated the warning and disappear from the display when the next job starts.
Continuable Events		Auto-continue (10 seconds)*	Use this option to configure the product behavior when the product
		Touch OK to continue	encounters certain errors. If the Auto-continue (10 seconds) option is selected, the job will continue after 10 seconds. If the Touch OK to continue option is selected, the job will stop and require the user to touch the OK button before continuing.

Manage Supplies menu

To display: At the product control panel, select the Administration menu, and then select the Manage Supplies menu.

In the following table, asterisks (*) indicate the factory default setting.

Table 2-21 Manage Supplies menu

First level	Second level	Third level	Fourth level	Values	Description
Supplies Status				Print	
				View	
Supply Settings	Black Cartridge	Low Threshold		1-100%	Set the estimated
		Settings		Default = 10%	percentage at which the product notifies you when an ink cartridge is very low.
		Very Low Settings		Stop	Specifies how the product notifies you
				Prompt to continue*	when an ink cartridge
				Continue	is very low.
					Stop: The product stops until you replace the cartridge.
					Prompt to continue: The product stops and prompts you to replace the cartridge. You can acknowledge the prompt and continue printing.
					Continue: The product alerts you that a cartridge is very low, but it continues printing.
	Color Cartridges	Low Threshold	Cyan	1-100%	Set the estimated
		Settings	Magenta	Default = 10%	percentage at which the product notifies
			Yellow		you when an ink cartridge is very low. You can specify a different percentage for each color.

Table 2-21 Manage Supplies menu (continued)

First level	Second level	Third level	Fourth level	Values	Description
		Very Low Settings		Stop	Specifies how the
				Prompt to continue*	product notifies you when an ink cartridge
				Continue	is very low. Stop: The product stops until you replace the cartridge.
					Prompt to continue: The product stops and prompts you to replace the cartridge. You can acknowledge the prompt and continue printing.
					Continue: The product alerts you that a cartridge is very low, but it continues printing.
	Ink Collection Unit	Low Threshold		1-100%	Set the estimated
		Settings		Default = 10%	percentage at which the product notifies you when the ink collection unit capacity is very low.
		Very Low Settings		Stop	Specifies how the
				Prompt to continue*	product notifies you when the ink collection unit capacity is very
				Continue	low.
					Stop: The product stops until you replace the unit.
					Prompt to continue: The product stops and prompts you to replace the unit. You can acknowledge the prompt and continue printing.
					Continue: The product alerts you that the ink collection unit capacity is very low, but it continues printing.
	Document Feeder Kit	Low Threshold		1-100%	Set the percentage at
	X585 only	Settings		Default = 10%	which the product notifies you when a document feeder kit is needed.

Table 2-21 Manage Supplies menu (continued)

First level	Second level	Third level	Fourth level	Values	Description
		Very Low Settings		Stop	Configure how the
				Prompt to continue*	product responds when the document
				Continue	feeder kit is reaching the end of its estimated life.
					Stop: The product stops until you replace the document feeder kit.
					Prompt to continue: The product stops and prompts you to replace the document feeder kit. You can acknowledge the prompt and continue printing
					Continue: The product alerts you that the document feeder kit is very low, but it continues printing.
	Restrict Color Use			Enable color	Use this feature to enable, restrict, or disable color printing
				Disable color	
				Color if allowed*	or copying.
	Store Usage Data			On supplies	The Store Usage Data menu provides a way
				Not on supplies	to suppress the cartridges from storing most of the information gathered exclusively for the purpose of understanding the usage of the product. Select the On supplies setting to store the data on the ink cartridge memory chip. Select the Not on supplies setting to suppress the information from being stored on the memory chip.
	HP Cartridge			Off*	Enable or disable the
	Protection			Protect cartridges	HP Cartridge Protection feature.

Table 2-21 Manage Supplies menu (continued)

First level	Second level	Third level	Fourth level	Values	Description
Supply Messages		Low Message		On*	Use to configure
				Off	whether a message displays on the control panel when supplies are getting low, but have not yet reached the low threshold.
Reset Supplies	New Ink Collection			No	Select the Yes option, and then touch the
	Unit			Yes	Save button if you have installed a new ink collection unit.
	New Document Feede	r		Reset	Touch the Reset
	Kit (X585)			Cancel	button if you have installed a new document feeder kit.

Manage Trays menu

To display: At the product control panel, select the Administration menu, and then select the Manage Trays menu.

In the following table, asterisks (*) indicate the factory default setting.

Table 2-22 Manage Trays menu

First level	Values	Description
Use Requested Tray	Exclusively*	Controls how the product handles jobs that
	First	have specified a specific input tray. Two options are available:
		Exclusively: The product never selects a different tray when the user has indicated that a specific tray should be used, even if that tray is empty.
		First: The product pulls from another tray if the specified tray is empty, even though the user specifically indicated a tray for the job.
Manually Feed Prompt	Always*	Indicate whether a prompt should appear when
	Unless loaded	the type or size for a job does not match the specified tray and the product pulls from the multipurpose tray instead. Two options are available:
		Always: A prompt always displays before using the multipurpose tray.
		Unless loaded: A message displays only if the multipurpose tray is empty.
Size/Type Prompt	Display*	Controls whether the tray configuration
	Do not display	message displays whenever a tray is closed. Two options are available:
		Display: Shows the tray configuration message when a tray is closed. The user is able to configure the tray settings directly from this message.
		Do not display: Prevents the tray configuration message from automatically appearing.
Use Another Tray	Enabled*	Use to turn on or off the control panel prompt to select another tray when the specified tray is
	Disabled	empty. Two options are available:
		Enabled: When this option is selected, the user is prompted either to add paper to the selected tray or to choose a different tray.
		Disabled: When this option is selected, the user is not given the option of selecting a different tray. The product prompts the user to add paper to the tray that was initially selected.

Table 2-22 Manage Trays menu (continued)

First level	Values	Description
Alternative Letterhead Mode	Disabled*	Use to load letterhead or preprinted paper into
	Enabled	the tray the same way for all print jobs, whether you are printing to one side of the
		sheet or to both sides of the sheet. When this
		option is selected, load the paper as you would
		for printing on both sides. See the user documentation that came with the product for
		instructions about loading letterhead for
		printing on both sides. When this option is
		selected, the product speed slows to the speed required for printing on both sides.
		required for printing on both sides.
Ouplex Blank Pages	Auto*	Controls how the product handles two-sided
	Yes	jobs (duplexing). Two options are available:
		Auto: Enables Smart Duplexing, which instructs
		the product not to process blank pages.
		Yes: Disables Smart Duplexing and forces the
		duplexer to flip the sheet of paper even if it is
		printed on only one side. This might be preferable for certain jobs that use paper types
		such as letterhead or prepunched paper.
Override A4/Letter	Yes*	
Override A4/Letter	res	Prints on letter-size paper when an A4 job is sent but no A4-size paper is loaded in the
	No	product (or to print on A4 paper when a letter-
		size job is sent but no letter-size paper is
		loaded). This option will also override A3 with ledger-size paper and ledger with A3-size
		teager-size paper and teager with A3-size paper.

Network Settings menu

To display: At the product control panel, select the Administration menu, and then select the Network Settings menu.

In the following table, asterisks (*) indicate the factory default setting.

Table 2-23 Network Settings menu

First level	Values	Description	
I/O Timeout	Range: 5 – 300 sec	Use to set the I/O timeout period in seconds. I/O timeout refers to the elapsed time before a	
	Default = 15	print job fails. If the stream of data that the product receives for a print job is interrupted, this setting indicates how long the product will wait before it reports that the job has failed.	
Jetdirect Menu	See <u>Table 2-24 Jetdirect Menu on page 219</u> for details. These menus have the same structure. If an additional HP Jetdirect network card is installed in the EIO slot, then both menus are available.		

Table 2-24 Jetdirect Menu

First level	Second level	Third level	Fourth level	Values	Description
Information	Print Sec Report			Yes	Yes: Prints a page that contains the current
				No*	security settings on the HP Jetdirect print server.
					No: A security settings page is not printed.
TCP/IP	Enable			On*	On: Enable the TCP/IP protocol.
				Off	Off: Disable the TCP/IP protocol.
	Host Name			Use the arrow buttons to edit the host name.	An alphanumeric string, up to 32 characters, used to
				NPIXXXXXX*	identify the product. This name is listed on the HP Jetdirect configuration page. The default host name is NPIxxxxxx, where xxxxxx is the last six digits of the LAN hardware (MAC) address.

Table 2-24 Jetdirect Menu (continued)

First level	Second level	Third level	Fourth level	Values	Description
	IPV4 Settings	Config Method		Bootp	Specifies the method that TCP/IPv4
				DHCP*	parameters will be configured on the
				Auto IP	HP Jetdirect print
				Manual	server.
					Bootp (Bootstrap Protocol): Use for
					automatic
					configuration from a
					BootP server.
					DHCP (Dynamic Host
					Configuration Protocol): Use for
					automatic
					configuration from a
					DHCPv4 server. If selected and a DHCP
					lease exists, the DHCI
					Release menu and th
					DHCP Renew menu
					are available to set DHCP lease options.
					Drice lease options.
					Auto IP: Use for
					automatic link-local IPv4 addressing. An
					address in the form
					169.254.x.x is
					assigned
					automatically.
					If you set this option
					to the Manual setting use the Manual
					Settings menu to
					configure TCP/IPv4
					parameters.
		Manual Settings	IP Address	Enter the address.	(Available only if the Config Method option
		NOTE: This menu is			is set to the Manual
		available only if you			option.) Configure
		select the Manual			parameters directly from the product
		option under the Config Method menu.			control panel.
			Subnet Mask	Enter the address.	
		-	Default Gateway	Enter the address.	

Table 2-24 Jetdirect Menu (continued)

First level	Second level	Third level	Fourth level	Values	Description
		Default IP		Auto IP*	Specify the IP address
				Legacy	to default to when the print server is unable to obtain an IP address from the network during a forced TCP/IP reconfiguration (for example, when manually configured to use BootP or DHCP). NOTE: This feature assigns a static IP address that might interfere with a
					managed network. Auto IP: A link-local IP address 169.254.x.x is set.
					Legacy: The address 192.0.0.192 is set, consistent with older HP Jetdirect products.
		Primary DNS		Range: 0-255	Specify the IP address (n.n.n.n) of a Primary
				Default = xxx.xxx.xx	Domain Name System (DNS) Server.
		Secondary DNS		Range: 0-255	Specify the IP address
				Default = 0.0.0.0	(n.n.n.n) of a Secondary DNS Server.
	IPV6 Settings	Enable		Off	Use this item to enable IPv6
				0n*	operation on the print server.
					Off: IPv6 is disabled.
					On: IPv6 is enabled.
		Address	Manual Settings	Enable	Use this item to enable and manually
		Address	Manual Settings	Enable Address	

Table 2-24 Jetdirect Menu (continued)

First level	Second level	Third level	Fourth level	Values	Description
		DHCPV6 Policy		Router Specified	Router Specified: The stateful auto-
				Router Unavailable*	configuration method to be used by the print
				Always	server is determined
					by a router. The route specifies whether the
					print server obtains its address, its
					configuration
					information, or both from a DHCPv6 server.
					Router Unavailable: If
					a router is not available, the print
					server should attemp to obtain its stateful
					configuration from a
					DHCPv6 server.
					Always: Whether a
					router is available, the print server always
					attempts to obtain its stateful configuration
					from a DHCPv6 server.
		Primary DNS		Range: 0-255	Specify the IP address
				Default =	(n.n.n.n) of a Primary Domain Name System
				XXX.XXX.XXX	(DNS) Server.
		Secondary DNS		Range: 0-255	Specify the IP address (n.n.n.n) of a
				Default = 0.0.0.0	Secondary DNS Server.

Table 2-24 Jetdirect Menu (continued)

First level	Second level	Third level	Fourth level	Values	Description
	Proxy Server			Select from a provided list.	Specifies the proxy server to be used by embedded applications in the product. A proxy server is typically used by network clients for Internet access. It caches Web pages, and provides a degree of Internet security for those clients.
					To specify a proxy server, enter its IPv4 address or fully-qualified domain name. The name can be up to 255 octets.
					For some networks, you might need to contact your Internet Service Provider (ISP) for the proxy server address.
	Proxy Port			Default = 00080	Enter the port number used by the proxy server for client support. The port number identifies the port reserved for proxy activity on you network, and can be a value from 0 to 65535.
	Idle Timeout			Default = 0270	The time period, in seconds, after which an idle TCP print data connection is closed (default is 270 seconds, 0 disables the timeout).

Table 2-24 Jetdirect Menu (continued)

First level	Second level	Third level	Fourth level	Values	Description
Security	Secure Web			HTTPS Required*	For configuration management, specify
				HTTPS Optional	whether the HP Embedded Web Server will accept communications using HTTPS (Secure HTTP) only, or both HTTP and HTTPS.
					HTTPS Required: For secure, encrypted communications, only HTTPS access is accepted. The print server will appear as a secure site.
	IPSEC			Кеер	Specify the IPSec status on the print
				Disable*	server.
					Keep: IPSec status remains the same as currently configured.
					Disable: IPSec operation on the print server is disabled.
	802.1X			Reset	Specify whether the 802.1X settings on
				Keep*	the print server are reset to the factory defaults.
					Reset: The 802.1X settings are reset to the factory defaults.
					Keep: The current 802.1X settings are maintained.
	Reset Security			Yes	Specify whether the current security
				No*	settings on the print server will be saved or reset to factory defaults.
					Yes: Security settings are reset to factory defaults.
					No: The current security settings are maintained.

Table 2-24 Jetdirect Menu (continued)

First level	Second level	Third level	Fourth level	Values	Description
Diagnostics	Embedded Tests	LAN HW Test		Yes No*	Provides tests to help diagnose network hardware or TCP/IP network connection problems.
					Embedded tests help to identify whether a network fault is internal or external to the product. Use an embedded test to check hardware and communication paths on the print server. After you select and enable a test and set the execution time, you must select the Execute option to initiate the test.
					Depending on the execution time, a selected test runs continuously until either the product is turned off, or an error occurs and a diagnostic page is printed.
					CAUTION: Running this embedded test will erase your TCP/IP configuration.
					This test performs an internal loop-back test. An internal loop-back test will send and receive packets only on the internal network hardware. There are no external transmissions on you network.
		HTTP Test		Yes	This test checks
				No*	operation of HTTP by retrieving predefined pages from the product, and tests the HP Embedded Web Server.
					Select the Yes option to choose this test, or the No option to not choose it.

Table 2-24 Jetdirect Menu (continued)

First level	Second level	Third level	Fourth level	Values	Description
		SNMP Test		Yes	This test checks operation of SNMP
				No*	communications by accessing predefined SNMP objects on the product.
					Select the Yes option to choose this test, o the No option to not choose it.
		Data Path Test		Yes	This test helps to identify data path and
				No*	corruption problems on an HP postscript level 3 emulation product. It sends a predefined PS file to the product, However the test is paperless; the file will not print.
					Select the Yes option to choose this test, o the No option to not choose it.
		Select All Tests		Yes	Use this item to seled
				No*	embedded tests.
					Select the Yes option to choose all tests. Select the No option to select individual tests.
		Execution Time [H]		Range: 1 – 24 hours	Specify the length of time (in hours) that a
				Default = 1 hour	embedded test will b run. If you select zerc (0), the test runs indefinitely until an error occurs or the product is turned off.
					Data gathered from the HTTP, SNMP, and Data Path tests is printed after the test have completed.
		Execute		No*	No: Do not initiate the selected tests.
				Yes	Yes: Initiate the selected tests.

Table 2-24 Jetdirect Menu (continued)

First level	Second level	Third level	Fourth level	Values	Description
	Ping Test	Dest Type		IPv4	This test is used to
				IPv6	check network communications. It sends link-level packets to a remote network host, then waits for an appropriate response
					Specify whether the target product is an IPv4 or IPv6 node.
		Dest IPv4		Range: 0-255	Enter the IPv4 address.
				Default = 127.0.0.1	
		Dest IPv6		Select from a provided list.	Enter the IPv6 address.
				Default = ::1	
		Packet Size		Default = 64	Specify the size of each packet, in bytes, to be sent to the remote host. The minimum is 64 (default) and the maximum is 2048.
		Timeout		Default = 001	Specify the length of time, in seconds, to wait for a response from the remote hos The maximum is 100
		Count		Default = 004	Specify the number oping test packets to send for this test. Select a value from 0 to 100. To configure the test to run continuously, select 0
		Print Results		Yes	
				No*	
		Execute		Yes	No: Do not initiate the
				No*	selected tests.
					Yes: Initiate the selected tests.
	Ping Results	Packets Sent		Default = 00000	Shows the number of packets (0-65535) sent to the remote host since the most recent test was initiated or completed.

Table 2-24 Jetdirect Menu (continued)

First level	Second level	Third level	Fourth level	Values	Description
		Packets Received		Default = 00000	Shows the number of packets (0 - 65535) received from the remote host since the most recent test was initiated or completed. The default is 0.
		Percent Lost		Default = 000	Shows the percent (0 to 100) of ping test packets that were sent with no response from the remote host since the most recent test was initiated or completed.
		RTT Min		Default = 0000	Shows the minimum detected roundtriptime (RTT), from 0 to 4096 milliseconds, for packet transmission and response.
		RTT Max		Default = 0000	Shows the maximum detected roundtriptime (RTT), from 0 to 4096 milliseconds, for packet transmission and response.
		RTT Average		Default = 0000	Shows the average round-trip-time (RTT), from 0 to 4096 milliseconds, for packet transmission and response.
		Ping In Progress		Yes	Shows whether a ping
				No*	test is in progress. Yes Indicates a test in progress. No Indicates that a test completed or was not run.
		Refresh		Yes	When viewing the ping test results, this item
				No*	upgrades the ping test data with current results. Select the Yes option to upgrade the data, or the No option to maintain the existing data. However, a refresh automatically occurs when the menu times out or you manually return to the main menu.

Table 2-24 Jetdirect Menu (continued)

First level	Second level	Third level	Fourth level	Values	Description
Link Speed				Auto*	The link speed and communication mode of the print server must match the network. The available settings depend on the product and installed print server. Select one of the following link configuration settings: CAUTION: If you change the link setting, network communications with the print server and network product might be lost. The print server uses auto-negotiation to configure itself with the highest link speed and communication mode allowed. If auto-negotiation fails, either the 100TX Half feature or the 10T Half feature is set depending on the detected link speed of the hub/switch port. (A 1000T half-duplex selection is not supported.)
				10T Half	10 Mbps, half-duplex operation.
				10T Full	10 Mbps, full-duplex operation.
				10T Auto	100 Mbps, half-duplex operation.
				100TX Half	100 Mbps, full-duplex operation.
				100TX Full	Limits auto- negotiation to a maximum link speed of 100 Mbps.
				100TX Auto	1000 Mbps, full- duplex operation.

Troubleshooting menu

To display: At the product control panel, select the Administration menu, and then select the Troubleshooting menu.

In the following table, asterisks (*) indicate the factory default setting.

Table 2-25 Troubleshooting menu

First level	Second level	Third level	Fourth level	Values	Description
Event Log				Print	Use to print a list of the 50 most recent events in the event log. For each event, the printed log shows the error number, page count, error code, and description or personality.
Paper Path Page				Print	Shows how many pages were printed from each tray.
Fax X585 only	Fax T.30 Trace	Print T.30 Report		Print	Use to print or configure the fax T.30 trace report. T.30 is the standard that specifies handshaking, protocols, and error correction between fax machines.
		When to Print Report		Never automatically print* Print after every fax Print only after fax send jobs Print after any fax error Print only after fax send errors Print only after fax receive errors	Configure the T.30 report to print after certain events. You can choose to print the report after every fax job, every fax job sent, every fax job received, every send error, or every receive error.
	Fax V.34			Normal* Off	Use to disable V.34 modulations if several fax failures have occurred or if phone line conditions require it.
	Fax Speaker Mode			Normal* Diagnostic	Used by a technician to evaluate and diagnose fax issues by listening to the sounds of fax modulations.

Table 2-25 Troubleshooting menu (continued)

First level	Second level	Third level	Fourth level	Values	Description
	Fax Log Entries			Standard*	The standard fax log
				Detailed	includes basic information such as the time and whether the fax was successful. The detailed fax log shows the intermediate results of the redial process not shown in the standard fax log.
Print Quality Pages	Troubleshooting Guide			Print	Use to print a guide that can help you resolve problems with print quality.
	Diagnostics Page			Print	Use to print a diagnostics page. The page includes color swatches, diagnostic information, and calibration information.
	Print Quality Report			Print	Use to print a page that helps you resolve problems with print quality.
	Print Quality Service Pages			Print	Use to print more detailed, service- oriented pages that can help you resolve problems with print quality.
	Printhead Diagnostic Page			Print	Use to print a page that includes printhead statistics.
Diagnostic Tests	Paper Path Test	Print Test Page			
		Source Tray		Select from a list of the available trays.	Generates a test page for testing paper handling features. You can define the path that is used for the test in order to test specific paper paths.
		Test Duplex Path		Off*	
				On	
		Number of Copies		Range: 1-500	Sets the default number of copies for a
				Default = 1	copy job. This default applies when the Copy or Quick Copy function is initiated from the product Home screen. The factory default setting is 1.

Table 2-25 Troubleshooting menu (continued)

First level	Second level	Third level	Fourth level	Values	Description
	Scanner Tests (X585 only)			Sensors	
	Continuous Scan (X585 only)			2-sided	
Advanced Diagnostic Pages				Engine Diagnostics Page	These pages provide more detailed
				Servo Calibration Page	information about certain components the product. Select the
				Technical Information Page	reports you want to print, and then touch the Print button.
				Motor Status Page	
				Data Path Page	
				Pen Status Page	
				Ink Delivery System Page	
				Writing System Page	
				Ink Supply Report	
				Counters Report	
				Hardware Status Page	
				PWM Page	
Retrieve Diagnostic Data				Create device data file	Create files that contain information
				Create zipped debug information file*	about the product tha can help identify the cause of problems.
				Include crash dump files	NOTE: Send to E- mail is available only i
				Clean up debug information	Create device data file is selected.
				Send to E-mail	
				Export to USB	
Generate Debug Data				Start	
Startup Cartridge				Disabled*	
Substitute				Enabled	

Device Maintenance menu

Backup/Restore menu

To display: At the product control panel, select the Device Maintenance menu, and then select the Backup/Restore menu.

In the following table, asterisks (*) indicate the factory default setting.

Table 2-26 Backup/Restore menu

First level	Second level	Third level	Values	Description
Back up Data	Back up Data		Back up Now	Initiate a backup.
			Cancel	
Restore Data			Insert a USB drive that contains the backup file.	Restore data from an external source.

Calibrate/Cleaning menu

To display: At the product control panel, select the Device Maintenance menu, and then select the Calibrate/Cleaning menu.

In the following table, asterisks (*) indicate the factory default setting.

Table 2-27 Calibrate/Cleaning menu

First level	Second level	Values	Description
Printhead Cleaning		Continue	Run this process to clean the
		Exit	printhead.
Resolve Ink Smear		Start	Run this process to send a cleaning
		Cancel	page through the paper path.
Advanced Calibration Support			Use this submenu to use more advanced cleaning and calibration processes.
	Printhead Cleaning Level 1	Continue	These two items perform a more
	Printhead Cleaning Level 2	Exit	thorough, detailed cleaning of the printhead. Each one runs for approximately 15 minutes.
	Pen Align	Continue	This process calibrates the pen
		Exit	unit.
	Color Density Calibration	Continue	Adjusts the print nozzles to have a
		Exit	uniform level of ink delivery and color intensity.
	Print Quality Report	Print	Produce a print quality report.
		Cancel	

Table 2-27 Calibrate/Cleaning menu (continued)

First level	Second level	Values	Description
Calibrate Scanner			Touch Next to calibrate the product scanner. Messages on the
X585 only			control-panel display will lead you through the calibration process.
Clean Rollers		Reset	The Maintenance History screen is view only. There are two options:
		Cancel	the Reset option to reset the page count, or the Cancel option to go back to the previous screen.
Clean Document Feeder Settings	Low Threshold Settings	Range: 0-100%	Configure cleaning settings for the document feeder.
X585 only		Default = 10%	uocument reeuer.
	Very Low Settings	Stop	Configure the product action if the document feeder requires
		Prompt to continue*	cleaning.
		Continue	

USB Firmware Upgrade menu

To display: At the product control panel, select the Device Maintenance menu, and then select the USB Firmware Upgrade menu.

Insert a USB storage device with a firmware upgrade bundle into the USB port, and follow the on-screen instructions.

Service menu

To display: At the product control panel, select the Device Maintenance menu, and then select the Service menu.

The Service menu is locked and requires a PIN for access. This menu is intended for use by authorized service personnel. See the Service mode function section in the product troubleshooting manual.

Solve image quality problems

Clean ink smears

Print a cleaning page to remove dust and excess ink from the printhead and paper path if you are having any of the following problems:

- Specks of ink are on the printed pages.
- Ink is smearing on the printed pages.
- Repeated marks occur on the printed pages.

Use the following procedure to clean ink smears.

- 1. Load the product with regular, unused white paper.
- 2. From the control panel, touch the Device Maintenance button.
- 3. Open the Calibration/Cleaning menu.
- Select the Resolve Ink Smear item.
- Touch the Start button to begin the cleaning process.

A page feeds through the product slowly. Retain this page for further print quality evaluation.

If the print jobs are showing ink smears on the back of the page, try the following solutions

- Remove the ink collection unit and then reinstall it. Black ink can build up on the ink collection unit after several thousand pages.
- The platen might have an ink buildup. Run a few sheets of blank (no text / graphics) thick paper through the product to clean the platen.
- If the error persists, send the product in for service.

Recover the printhead

If the product is producing pages with faded or fuzzy black ink at the top of the page, try recovering the printhead.

- Open the Device Maintenance menu.
- 2. Touch the Service menu.
- 3. Touch the Service Access Code item in the drop-down list, use the touchscreen keypad to enter the code, and then touch the OK button.
- 4. Touch the Printhead Recovery, and then touch the Start button.
- 5. Follow the onscreen instructions to complete the process.

Solve paper jam or feed problems

Product does not pick up paper or misfeeds

- The product does not pick up paper
- The product picks up multiple sheets of paper
- The document feeder jams, skews, or picks up multiple sheets of paper

The product does not pick up paper

If the product does not pick up paper from the tray, try these solutions.

- Open the product and remove any jammed sheets of paper.
- Load the tray with the correct size of paper for your job. 2.
- Make sure the paper size and type are set correctly on the product control panel. 3.
- Make sure the paper guides in the tray are adjusted correctly for the size of paper. Adjust the guides to the appropriate indentation in the tray.
- Check the product control panel to see if the product is waiting for you to acknowledge a prompt to feed the paper manually. Load paper, and continue.
- The rollers above the tray might be contaminated. Clean the rollers with a lint-free cloth dampened with warm water.

The product picks up multiple sheets of paper

If the product picks up multiple sheets of paper from the tray, try these solutions.

- Remove the stack of paper from the tray and flex it, rotate it 180 degrees, and flip it over. Do not fan the paper. Return the stack of paper to the tray.
- Use only paper that meets HP specifications for this product. 2.
- Use paper that is not wrinkled, folded, or damaged. If necessary, use paper from a different package.
- Make sure the tray is not overfilled. If it is, remove the entire stack of paper from the tray, straighten the stack, and then return some of the paper to the tray.
- Make sure the paper guides in the tray are adjusted correctly for the size of paper. Adjust the guides to the appropriate indentation in the tray.
- Make sure the printing environment is within recommended specifications.

The document feeder jams, skews, or picks up multiple sheets of paper

- The original might have something on it, such as staples or self-adhesive notes, that must be removed.
- Check that all rollers are in place and that the roller-access cover inside the document feeder is closed.
- Make sure that the top document-feeder cover is closed.
- The pages might not be placed correctly. Straighten the pages and adjust the paper guides to center the stack.

- The paper guides must be touching the sides of the paper stack to work correctly. Make sure that the paper stack is straight and the guides are against the paper stack.
- The document feeder input tray or output bin might contain more than the maximum number of pages. Make sure the paper stack fits below the guides in the input tray, and remove pages from the output
- Verify that there are no pieces of paper, staples, paper clips, or other debris in the paper path.
- Clean the document-feeder rollers and the separation pad. Use compressed air or a clean, lint-free cloth moistened with warm water. If misfeeds still occur, replace the rollers.
- From the Home screen on the product control panel, scroll to and touch the Supplies button. Check the status of the document-feeder kit, and replace it if necessary.

Clear jams

Auto-navigation for clearing jams

The auto-navigation feature assists you in clearing jams by providing step-by-step instructions on the control panel. When you complete a step, the product displays instructions for the next step until you have completed all steps in the procedure.

Experiencing frequent or recurring paper jams?

To reduce the number of paper jams, try these solutions.

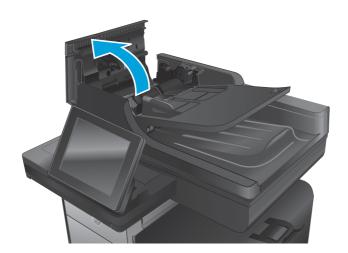
- Use only paper that meets HP specifications for this product.
- Use paper that is not wrinkled, folded, or damaged. If necessary, use paper from a different package. 2.
- Use paper that has not previously been printed or copied on. 3.
- Make sure the tray is not overfilled. If it is, remove the entire stack of paper from the tray, straighten the stack, and then return some of the paper to the tray.
- Make sure the paper guides in the tray are adjusted correctly for the size of paper. Adjust the guides so they are touching the paper stack without bending it.
- Make sure that the tray is fully inserted in the product.
- 7. If you are printing on heavy, embossed, or perforated paper, use the manual feed feature and feed sheets one at a time.
- From the Home screen on the product control panel, scroll to and touch the Trays button. Verify that the tray is configured correctly for the paper type and size.
- Make sure the printing environment is within recommended specifications.

Clear jams in the document feeder

1. Lift the latch to release the document-feeder cover.



Open the document-feeder cover.



Lift the jam-access door, and remove any jammed paper.

If necessary, rotate the green wheel at the front of the document feeder to remove jammed paper.



Press on the door next to the document-feeder rollers to make sure it is closed completely.



Flow models only: Lift the document feeder input tray.



Flow models only: Squeeze inward on the two slots at each end of the e-Duplex assembly.



Flow models only: Remove the e-Duplex assembly by pulling it out.



Flow models only: Remove any jammed paper.



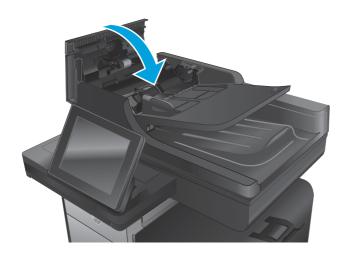
Flow models only: Reinstall the e-Duplex assembly by sliding it in until it locks into place.



10. Flow models only: Lower the document-feeder input tray.



11. Close the document-feeder cover.



NOTE: To avoid jams, make sure the guides in the document feeder input tray are adjusted tightly against the document. Remove all staples and paper clips from original documents.

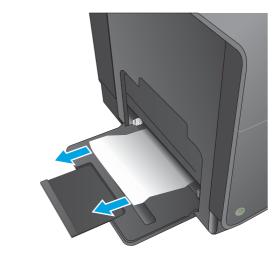
NOTE: Original documents that are printed on heavy, glossy paper can jam more frequently than originals that are printed on plain paper.

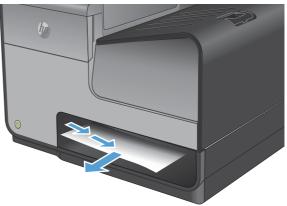
Clear jams in Tray 1 (multipurpose tray)

1. If the jammed sheet is visible and easily accessible in Tray 1, pull it from Tray 1.

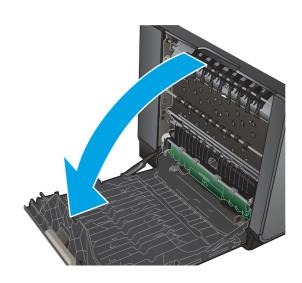
NOTE: If the sheet tears, make sure that all of the fragments are removed before you resume printing.

The jammed sheet may also be accessible by removing Tray 2 and removing the jammed sheet by pulling it to the right and then out of the product.





3. If the jammed sheet is not visible or easily accessible in Tray 1, open the left door to access the jammed sheet.

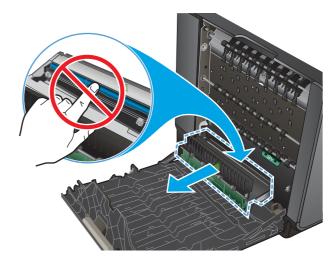


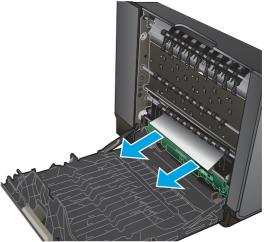
If the paper is still not visible or accessible, remove the ink collection unit by pulling it out with both hands. Set the unit aside, upright, on a piece of paper to prevent ink spills.

CAUTION: When pulling out the ink collection unit, avoid making direct contact with the black cylinder to prevent ink smear on skin or clothes.

Lower the platen by pressing down on the green tab. This will cause the product to try to feed the sheet through the print zone. You may need to gently pull on the sheet if it does not feed. Remove the sheet.

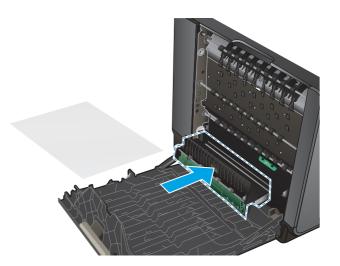
Lift the green tab to place the platen back into its operating position.



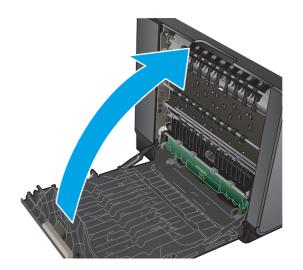




7. Reinstall the ink collection unit.



8. Close the left door.



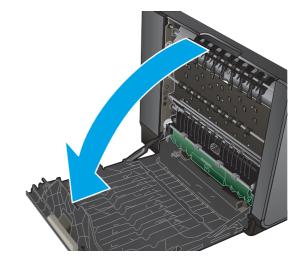
Clear jams in the left door

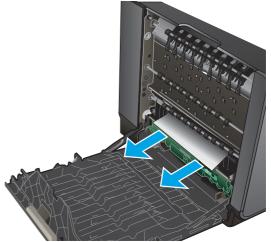
Open the left door.

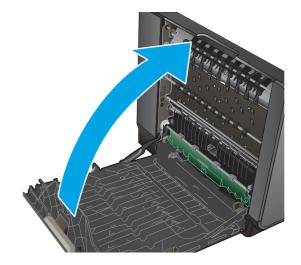
Gently remove any visible paper from the rollers and delivery area.

NOTE: If the sheet tears, make sure that all fragments are removed before you resume printing. Do not use sharp objects to remove fragments.

Close the left door.



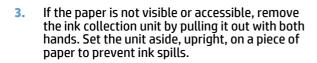




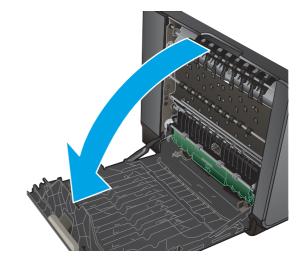
Clear jams in the ink collection unit area

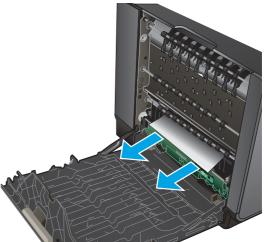
1. Open the left door.

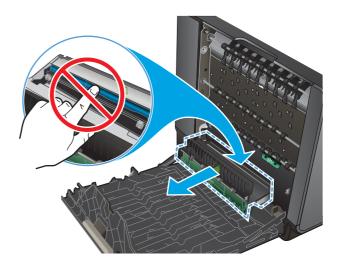
If you can see the trailing edge of the sheet, remove the sheet from the product.



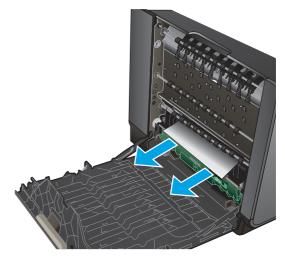
CAUTION: When pulling out the ink collection unit, avoid making direct contact with the black cylinder to prevent ink smear on skin or clothes.







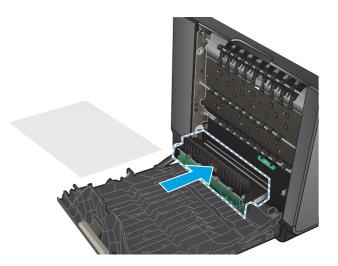
Lower the platen by pressing down on the green tab. This will cause the product to try to feed the sheet through the print zone. You might need to gently pull on the sheet if it does not feed. Remove the sheet.



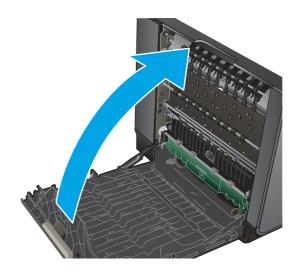
Lift the green tab to place the platen back into its operating position.



6. Reinstall the ink collection unit.



7. Close the left door.



Clear jams in Tray 2

Open Tray 2 by pulling it out and releasing the latch at the rear left of the tray.



Remove the jammed sheet by pulling it to the right and then out of the product.



3. Close Tray 2.

NOTE: To close the tray, push in the middle or with even pressure on both sides. Avoid pushing on one side only.



Clear jams in the output bin

1. Look for jammed paper in the output bin area.

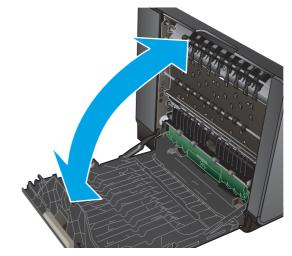
Remove any visible media.

NOTE: If the sheet tears, make sure that all fragments are removed before resuming printing.

3. Open and then close the left door to clear the message.

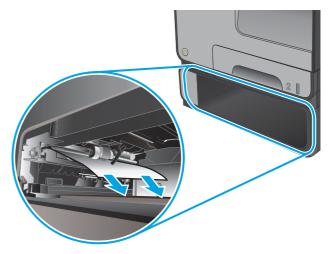






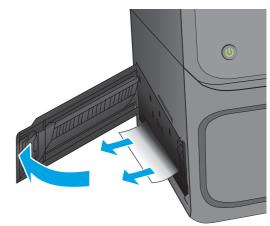
Clear jams in optional Tray 3

- Open Tray 3. 1.
- 2. Remove the jammed sheet by pulling it to the right and then out of the product.



If the jam cannot be cleared at the tray, try clearing the jam from the lower left door.

NOTE: If a jammed sheet tears while being removed, paper fragments might become lodged in the paper path between optional Tray 3 and the product. Lift the product from optional Tray 3, and then remove any paper fragments from the tray assembly.



Close Tray 3.

NOTE: To close the tray, push in the middle or with even pressure on both sides. Avoid pushing on one side only.



Solve performance problems

The product does not print

If the product does not print at all, try the following solutions.

- Make sure the product is turned on and that the control panel indicates it is ready.
 - If the control panel does not indicate the product is ready, turn the product off and then on again.
 - If the control panel indicates the product is ready, try sending the job again.
- If the control panel indicates the product has an error, resolve the error and then try to print a test page from the control panel. If the test page prints, there may be a communication problem between the product and the computer you are trying to print from.
- Make sure the cables are all connected correctly. If the product is connected to a network, check the following items:
 - Check the light next to the network connection on the product. If the network is active, the light is green.
 - Make sure that you are using a network cable and not a phone cord to connect to the network.
 - Make sure the network router, hub, or switch is turned on and that it is working correctly.
- Install the HP software from the CD that came with the product. Using generic printer drivers can cause delays clearing jobs from the print gueue.
- From the list of printers on your computer, right-click the name of this product, click **Properties**, and open the **Ports** tab.
 - If you are using a network cable to connect to the network, make sure the printer name listed on the **Ports** tab matches the product name on the product configuration page.
 - If you are using a USB cable and are connecting to a wireless network, make sure the box is checked next to Virtual printer port for USB.
- If you are using a personal firewall system on the computer, it might be blocking communication with the product. Try temporarily disabling the firewall to see if it is the source of the problem.
- If your computer or the product is connected to a wireless network, low signal quality or interference might be delaying print jobs.

If the control panel displays a General Printer Failure message, turn the product off and then on. If that does not clear the error, call HP for support.

If the product indicates that ink levels are too low, but the ink cartridges still have ink in them, make sure the product is set on a level surface.

The product prints slowly

If the product prints, but it seems slow, try the following solutions.

- Make sure the computer meets the minimum specifications for this product. For a list of specifications, go to this Web site: www.hp.com/support/ojcolorX555 or www.hp.com/support/ojcolorMFPX585.
- If the paper type setting is not correct for the type of paper you are using, change the setting to the correct paper type.
- If your computer or the product is connected to a wireless network, low signal quality or interference might be delaying print jobs.
- If the product is in an environment that experiences high humidity, low temperatures, or both conditions, the print speed might be affected.

Solve connectivity problems

Solve USB direct-connect problems

If you have connected the product directly to a computer, check the USB cable.

- Verify that the cable is connected to the computer and to the product.
- Verify that the cable is not longer than 5 m (16.4 ft). Try using a shorter cable.
- Verify that the cable is working correctly by connecting it with another product. Replace the cable if necessary.

Solve network problems

Check the following items to verify that the product is communicating with the network. Before beginning, print a configuration page from the product control panel and locate the product IP address that is listed on this page.

- Poor physical connection
- The computer is using the incorrect IP address for the product
- The computer is unable to communicate with the product
- The product is using incorrect link and duplex settings for the network
- New software programs might be causing compatibility problems
- The computer or workstation might be set up incorrectly
- The product is disabled, or other network settings are incorrect

Poor physical connection

- 1. Verify that the product is attached to the correct ethernet port using the proper cable.
- 2. Verify that cable connections are securely attached.
- Look at the ethernet port on the back of the product, and verify that the amber activity light and the green link-status light are active.
- If the problem continues, try a different cable or port on the network router, switch, or hub.

The computer is using the incorrect IP address for the product

- On the computer, open the printer properties and click the **Ports** tab. Verify that the current IP address
 for the product is selected. The product IP address is listed on the product configuration page or
 through the control panel.
- 2. If you installed the product using an HP standard TCP/IP port, select the box labeled **Always print to** this printer, even if its IP address changes.
- If you installed the product using a Microsoft standard TCP/IP port, use the hostname instead of the IP address.

If you installed the product using the CD installer, or downloaded the fully-featured installer from the HP's web site, you can view or change the product IP address using the following steps:

- Click Start. a.
- b. Click **All Programs**.
- C. Click **HP**.
- d. Click your product.
- Click **Update IP Address** to open a utility that reports the known ("previous") IP address for the e. product and allows you to change the IP address, if necessary.
- If the IP address is correct, delete the product entry from the list of installed printers, and then add it again.

The computer is unable to communicate with the product

- 1. Test network communication by pinging the product.
 - Open a command-line prompt on your computer. For Windows, click **Start**, click **Run**, and then type cmd.
 - b. Type ping followed by the IP address for your product.
 - If the window displays round-trip times, both the network and device are working. C.
- If the ping command failed, verify that the network router, hubs, or switches are on, and then verify that the network settings, the product, and the computer are all configured for the same network.

The product is using incorrect link and duplex settings for the network

Hewlett-Packard recommends leaving this setting in automatic mode (the default setting). If you change these settings, you must also change them for your network.

New software programs might be causing compatibility problems

Verify that any new software programs are correctly installed and that they use the correct printer driver.

The computer or workstation might be set up incorrectly

- Check the network drivers, printer drivers, and the network redirection.
- Verify that the operating system is configured correctly.

The product is disabled, or other network settings are incorrect

- Review the configuration page to check the status of the network protocol. Enable it if necessary. 1.
- 2. Reconfigure the network settings if necessary.

Solve wireless network problems

- Wireless connectivity checklist
- The control panel displays the message: The wireless feature on this product has been turned off
- The product does not print after the wireless configuration completes
- The product does not print, and the computer has a third-party firewall installed

- The wireless connection does not work after moving the wireless router or product
- Cannot connect more computers to the wireless product
- The wireless product loses communication when connected to a VPN
- The network does not appear in the wireless networks list
- The wireless network is not functioning

Wireless connectivity checklist

- The product and the wireless router are turned on and have power. Also make sure the wireless radio in the product is turned on.
- The service set identifier (SSID) is correct. Print a configuration page to determine the SSID. If you are not sure the SSID is correct, run the wireless setup again.
- With secured networks, make sure the security information is correct. If the security information is incorrect, run the wireless setup again.
- If the wireless network is working correctly, try accessing other computers on the wireless network. If the network has Internet access, try connecting to the Internet over another wireless connection.
- The encryption method (AES or TKIP) is the same for the product as it is for the wireless access point, such as a wireless router (on networks using WPA security).
- The product is within the range of the wireless network. For most networks, the product must be within 30 m (100 ft) of the wireless access point (wireless router).
- Obstacles do not block the wireless signal. Remove any large metal objects between the access point and the product. Make sure poles, walls, or support columns containing metal or concrete do not separate the product and wireless access point.
- The product is located away from electronic devices that might interfere with the wireless signal. Many
 devices can interfere with the wireless signal including motors, cordless phones, security system
 cameras, other wireless networks, and some Bluetooth devices.
- The print driver is installed on the computer.
- You have selected the correct printer port.
- The computer and product connect to the same wireless network.

The control panel displays the message: The wireless feature on this product has been turned off

- 1. Touch the Administration button, and then touch the Wireless Setup menu.
- 2. Touch the Turn Wireless Off/On button, and then touch the On button.

The product does not print after the wireless configuration completes

- 1. Make sure the product is turned on and in the ready state.
- 2. Make sure you are connecting to the correct wireless network.
- 3. Make sure that the wireless network is working correctly.

- On the control panel, touch the Administration button, and then touch the Network Configuration menu item.
- Select the Print Wireless Network Test item to test the wireless network. The product prints a report with the results.
- Make sure that the correct port or product is selected.
 - For products installed *without* the fully-featured installer:
 - i. From the list of printers on your computer, right-click the name of this product, click **Properties**, and then open the **Ports** tab.
 - Make sure the box is checked next to **Virtual printer port for USB**.
 - If you installed the product using the CD installer, or downloaded the fully-featured installer from b. the HP's Web site, you can view or change the product IP address using the following steps:
 - i. Click Start.
 - ii. Click All Programs.
 - iii. Click HP.
 - iv. Click your product.
 - v. Click **Update IP Address** to open a utility that reports the known ("previous") IP address for the product and allows you to change the IP address, if necessary.
- Make sure that that computer is working correctly. If necessary, restart the computer.

The product does not print, and the computer has a third-party firewall installed

- Update the firewall with the most recent update available from the manufacturer.
- If programs request firewall access when you install the product or try to print, make sure you allow the programs to run.
- Temporarily turn off the firewall, and then install the wireless product on the computer. Enable the firewall when you have completed the wireless installation.

The wireless connection does not work after moving the wireless router or product

Make sure that the router or product connects to the same network that the computer connects to.

- From the control panel, touch the Administration button, and then touch the Reports menu.
- Select the Network Configuration Page item to print the report. 2.
- Compare the service set identifier (SSID) on the configuration report to the SSID in the printer 3. configuration for your computer.
- If the SSIDs are not the same, the devices are not connecting to the same network. Reconfigure the wireless setup for the product.

Cannot connect more computers to the wireless product

- 1. Make sure that the other computers are within the wireless range and that no obstacles block the signal. For most networks, the wireless range is within 30 m (100 ft) of the wireless access point.
- Make sure the product is turned on and in the ready state.
- 3. Turn off any third-party firewalls on the computer.
- 4. Make sure that the wireless network is working correctly.
 - **a.** On the product control panel, touch the Administration button, and then touch the Network Configuration menu.
 - **b.** Touch the Print Wireless Test Report item to test the wireless network. The product prints a report with the results.
- 5. Make sure that the correct port or product is selected.
 - **a.** For products installed *without* the fully-featured installer:
 - i. From the list of printers on your computer, right-click the name of this product, click **Properties**, and then open the **Ports** tab.
 - ii. Make sure the box is checked next to **Virtual printer port for USB**.
 - **b.** If you installed the product using the CD installer, or downloaded the fully-featured installer from the HP's Web site, you can view or change the product IP address using the following steps:
 - i. Click Start.
 - ii. Click All Programs.
 - iii. Click HP.
 - iv. Click your product.
 - v. Click Update IP Address to open a utility that reports the known ("previous") IP address for the product and allows you to change the IP address, if necessary.
- 6. Make sure that the computer is working correctly. If necessary, restart the computer.

The wireless product loses communication when connected to a VPN

• Typically, you cannot connect to a VPN and other networks at the same time.

The network does not appear in the wireless networks list

- Make sure the wireless router is turned on and has power.
- The network might be hidden. However, you can still connect to a hidden network.

The wireless network is not functioning

- 1. To verify if the network has lost communication, try connecting other devices to the network.
- 2. Test network communication by pinging the network.

- Open a command-line prompt on your computer. For Windows, click Start, click Run, and then type cmd.
- b. Type ping followed by the IP address for the wireless router.
- c. If the window displays round-trip times, the network is working.
- Make sure that the router or product connects to the same network that your computer connects to.
 - From the product control panel, touch the Administration button, and then touch the Reports menu.
 - b. Touch the Network Configuration Page item to print the report.
 - Compare the service set identifier (SSID) on the configuration report to the SSID in the printer c. configuration for your computer.
 - If the SSIDs are not the same, the devices are not connecting to the same network. Reconfigure the wireless setup for your product.

Service mode functions

Service menu and Secondary service menu

Product resets

Restore the factory-set defaults

CAUTION: Restoring the factory-set defaults returns all of the product and network settings to the factory defaults, and it also clears the fax header name, phone number, and any stored faxes in the product memory. This procedure also clears the fax phone book, and deletes any pages that are stored in the memory. The procedure then automatically restarts the product.

- 1. On the product control panel, touch the Administration button.
- 2. Open the General Settings menu.
- Scroll to and touch the Restore Factory Settings button, and then touch the Restore button.

The product automatically restarts.

Restore the service ID

Restore the service ID

If you replace the formatter, the date is lost. Use this menu item to reset the date to the original date that the product was first used. The date format is YYDDD. Use the following formula to calculate the dates:

- 1. To calculate YY, subtract 1990 from the calendar year. For instance, if the product was first used in 2002, calculate YY as follows: 2002 1990 = 12. YY = 12.
- 2. Subtract 1 from 10 (October is the tenth month of the year): 10 1 = 9.
 - Multiply 9 by 30: 9 x 30 = 270 or add 17 to 270: 270 + 17 = 287. Thus, DDD = 287.

Convert the service ID to an actual date

You can use the product Service ID number to determine whether the product is still under warranty. Use the following formula to convert the Service ID into the installation date as follows:

- 1. Add 1990 to YY to get the actual year that the product was installed.
- 2. Divide DDD by 30. If there is a remainder, add 1 to the result. This is the month.
- 3. The remainder from the calculation in step 2 is the date.

Using the Service ID 12287 as an example, the date conversion is as follows:

- 1. 12 + 1990 = 2002, so the year is 2002.
- 2. 287 divided by 30 = 9 with a remainder of 17. Because there is a remainder, add 1 to 9 to get 10, which represents October.
- 3. The remainder in step 2 is 17, so that is the date.
- The complete date is 17-October-2002.

Product cold reset

Cold reset using the Preboot menu

- 1. Turn the product on.
- 2. The HP logo displays on the product control panel. When an underscore displays below the HP logo, touch the logo to open the Preboot menu.
- 3. Use the down arrow ▼ button to highlight Administrator, and then touch the OK button.
- 4. Use the down arrow ▼ button to highlight Startup Options item, and then touch the OK button.
- 5. Use the down arrow ▼ button to highlight the Cold Reset item, and then touch the OK button.
- 6. Touch the Home 🏠 button to highlight Continue, and then touch the OK button.



Solve fax problems

Fax reports

In addition to the product reports, the product also features several fax reports.

Fax test report

The user can use the fax test report to check the status of the product and ensure that it is set up appropriately for faxing. Perform this test after the product is set up for faxing.

The fax test performs the following activities:

- Tests the fax hardware.
- Checks whether the fax is connected to an active telephone wall jack.
- Checks whether the phone cord is plugged into the correct port.
- Checks whether the correct type of phone cord is connected to the HP printer.
- Checks for a dial tone.
- Checks for an active fax phone line.

The fax test report shows the following information:

- Pass/fail results for each of the fax setup tests
- Current fax settings to help diagnose issues
- Instructions on how to rerun the test

Guidelines for running the fax test

Before running the fax test, ensure that the following guidelines are met:

ENWW Solve fax problems 263

- The ink cartridges are installed properly.
- Full-size paper is loaded in the main tray.
- The product is set up for faxing according to the particular home or office setup instructions.

Running the fax test

- 1. On the control panel, open the Administration menu.
- 2. Open the Tools menu, and then touch the Run Fax Test item. The product displays the status of the test and prints a report.
- 3. Review the report.
 - If the test passes and you are still having problems faxing, check the fax settings listed in the report to verify the settings are correct. A blank or incorrect fax setting can cause problems faxing.
 - If the test fails, review the report for more information about how to fix any problems found.

Solve fax test failure

If the fax test fails to run, the product might be busy with another task, or it may have an error condition preventing it from running the fax test. If the test fails, check the following possible issues:

- 1. Verify that the product is set up properly, and connected to a power supply and to the computer. For more information on setting up the product, see the user guide that came with the product.
- 2. Verify that the product is powered on. If it is not, press the power button.
- 3. Verify that the ink cartridges are installed correctly and the front door is closed.
- 4. Verify that the product is not currently busy with another task. Check the display. If the product is busy, wait until it completes the current task and the run the fax test again.
- 5. Verify that the rear door is attached to the back of the product.
- 6. Verify that there are no error messages on the control-panel display. If there is an error message, resolve the problem and then run the test again.

Fax confirmation report

This report provides printed confirmation that the fax was successfully sent. The default fax confirmation setting is Off. To enable fax confirmation through the control panel, complete the following steps:

- 1. On the control panel, open the Administration menu.
- 2. Open the Fax Setup menu, and then open the Advanced Fax Setup menu.
- Touch the Fax Confirmation item.
- **4.** Select one of the following options:
 - On (Fax Send): Prints a fax confirmation report for every fax you send.
 - On (Fax Receive): Prints a fax confirmation report for every fax you receive.

- On (Send and Receive): Prints a fax confirmation report for every fax you send and receive.
- Off: Does not print a fax confirmation report when you send and receive faxes successfully. This is the default setting.

Fax error report

You can configure the product so that it automatically prints a report when there is an error during transmission or reception. To set up the product to automatically print fax error reports, complete the following steps:

- 1. On the control panel, open the Administration menu.
- 2. Open the Fax Setup menu, and then open the Advanced Fax Setup menu.
- 3. Touch the Fax Error Report item.
- **4.** Select one of the following options:
 - On (Fax Send): Prints whenever a transmission error occurs.
 - On (Fax Receive): Prints whenever a receiving error occurs.
 - On (Send and Receive): Prints whenever a fax error occurs. This is the default setting.
 - Off: Does not print any fax error reports.

Fax last transaction report

The Fax Last Transaction Report prints the details of the last fax transaction that occurred. Details include the fax number, number of pages, and the fax status. To print the last fax transaction report, complete the following steps:

- 1. On the control panel, open the Administration menu.
- 2. Open the Fax Setup menu, and then open the Fax Reports menu.
- 3. Touch the Last Transaction item.

Fax log

The fax log lists the last 30 transactions and the results. The report includes faxes that have been sent from the product control panel and all faxes that have been received. Each entry in the log contains the following information:

- Transmission date and time
- Type (whether received or sent)
- Fax number
- Duration
- Number of pages
- Result (status) of transmission

To print the fax log from the product control panel, complete the following steps:

ENWW Solve fax problems 265

- On the control panel, open the Administration menu.
- 2. Open the Fax Setup menu, and then open the Fax Reports menu.
- 3. Touch the Fax Log item.

Caller ID report

Use the following procedure to print a history of caller ID fax numbers. If there are no calls in the ID history, the history could have been cleared during a power cycle or the user has not signed up for the caller ID service with the user's phone company.

- On the control panel, open the Administration menu.
- Open the Fax Setup menu, and then open the Fax Reports menu.
- 3. Touch the Caller ID Report item.

Possible fax issues

The following issues are the faxing issues that you might encounter, and the associated troubleshooting actions.

Issue	Solution
The fax test failed.	If you ran a fax test and the test failed, review the report for basic information about the error. For more detailed information, check the report to see which part of the test failed, and then review the appropriate topic in this section for a solution.
	The "Fax Hardware Test" failed.
	 Power off the product by using the power button located on the product control panel and then unplug the power cord from the back of the product. After a few seconds,

Issue Solution

plug the power cord in again, and then power on the product. Run the test again. If the test fails again, continue reviewing the troubleshooting information in this section.

- Try to send or receive a test fax. If you can send or receive a fax successfully, there
 might not be a problem.
- If you are running the test from the Fax Setup Wizard (Windows) or HP Fax Setup Utility (Mac OS), ensure that the product is not busy completing another task, such as receiving a fax or making a copy. Check the display for a message indicating that the product is busy. If the product is busy, wait until the job is finished and the product is in the idle state before running the test.
- Ensure that you use the phone cord that came with the product. If you do not use the
 supplied phone cord to connect the product to the telephone wall jack, you might not
 be able to send or receive faxes. After you plug in the phone cord that came with the
 product, run the fax test again. You might need to connect the supplied phone cord to
 the adapter provided for your country/region.
- If you are using a phone splitter, this can cause faxing problems. A splitter is a twocord connector that plugs into a telephone wall jack. Try removing the splitter and connecting the product directly to the telephone wall jack.
- After you resolve any problem that is found, run the fax test again to check if the
 product passes the test and is ready for faxing. If the Fax Hardware Test continues to
 fail and you experience problems faxing, contact HP Support at www.hp.com/support.
 If prompted, choose your country/region, and then click Contact HP for information on
 calling for technical support.

The "Fax Connected to Active Telephone Wall Jack" test failed.

- Check the connection between the telephone wall jack and the product to ensure that the phone cord is secure.
- Ensure that you use the phone cord that came with the product. If you do not use the
 supplied phone cord to connect the product to the telephone wall jack, you might not
 be able to send or receive faxes. After you plug in the phone cord that came with the
 product, run the fax test again. You might need to connect the supplied phone cord to
 the adapter provided for your country/region.
- Ensure that you have correctly connected the product to the telephone wall jack.
 Connect one end of the phone cord supplied with the product to your telephone wall jack and the other end to the port labeled 1-LINE at the back of the product.
- Try connecting a working phone and phone cord to the telephone wall jack that you
 are using for the product and check for dial tone. If you do not hear a dial tone, contact
 your telephone company and have them check the line.
- Try sending or receiving a test fax. If you can do that successfully, there might not be a problem.
- After you resolve any problem that is found, run the fax test again to check if the product passes the test and is ready for faxing.

The fax test failed.

The "Phone Cord Connected to Correct Port on Fax" test failed.

(continued)

- Connect one end of the phone cord supplied with the product to your telephone wall
 jack and the other end to the port labeled 1-LINE at the back of the product.
- After you have connected the phone cord to the port labeled 1-LINE, run the fax test again to check if the product passes the test and is ready for faxing.
- Try to send or receive a test fax.

ENWW Solve fax problems 267

Solution Iccur

- Make sure you use the phone cord that came with the product. If you do not use the supplied phone cord to connect from the telephone wall jack to the product, you might not be able to send or receive faxes. After you plug in the phone cord that came with the product, run the fax test again.
- If you are using a phone splitter, this can cause faxing problems. (A splitter is a two-cord connector that plugs into a telephone wall jack.) Try removing the splitter and connecting the product directly to the telephone wall jack.

The "Using Correct Type of Phone Cord with Fax" test failed.

- Make sure you used the phone cord supplied in the box with the product to connect to the telephone wall jack. One end of the phone cord should be connected to the port labeled 1-LINE on the back of the product, and the other end to your telephone wall jack. If the phone cord that came with the product is not long enough, use a coupler to extend the length.
- Check the connection between the telephone wall jack and the product to ensure the phone cord is secure.
- Ensure that you use the phone cord that came with the product. If you do not use the supplied phone cord to connect the product to the telephone wall jack, you might not be able to send or receive faxes. After you plug in the phone cord that came with the product, run the fax test again. You might need to connect the supplied phone cord to the adapter provided for your country/region.
- If you are using a phone splitter, this can cause faxing problems. A splitter is a twocord connector that plugs into a telephone wall jack. Try removing the splitter and connecting the product directly to the telephone wall jack.

Issue	Solution
The fax test failed.	The "Dial Tone Detection" test failed.
(continued)	Other equipment, which uses the same phone line as the product, might be causing the test to fail. To determine if the other equipment is causing a problem, disconnect everything from the phone line, and then run the test again. If the product passes the Dial Tone Detection Test without the other equipment connected, then one or more pieces of the equipment is causing problems. Try adding them back one at a time and rerunning the test each time, until you identify which piece of equipment is causing the problem.
	 Try connecting a working phone and phone cord to the telephone wall jack that you are using for the product and check for dial tone. If you do not hear a dial tone, contact your telephone company and have them check the line.
	 Ensure that you have correctly connected the product to the telephone wall jack.
	 Connect one end of the phone cord supplied with the product to your telephone wall jack and the other end to the port labeled 1-LINE at the back of the product.
	 If your telephone system is not using a standard dial tone, such as the one used by some PBX systems, the test might fail. This will not cause a problem in sending or receiving faxes. Try sending or receiving a test fax.
	 Check to ensure that the country/region setting is set appropriately. If the country/ region setting is not set or is set incorrectly, the test might fail, and you might have problems in sending and receiving faxes.
	 Ensure that you connect the product to an analog phone line or you will not be able to send or receive faxes. To check if your phone line is digital, connect a regular analog phone to the line and listen for a dial tone. If you do not hear a normal sounding dial tone, it might be a phone line set up for digital phones. Connect the product to an analog phone line and try sending or receiving a fax.
	 Ensure that you use the phone cord that came with the product. If you do not use the supplied phone cord to connect the product to the telephone wall jack, you might not be able to send or receive faxes. After you plug in the phone cord, run the fax test again.
	 After you resolve any problem that is found, run the fax test again to check if the product passes the test and is ready for faxing. If the dial tone detection test continues to fail, contact your telephone company and have them check the phone line.
The fax test failed.	The "Fax Line Condition" test failed.
(continued)	 Ensure that you connect the product to an analog phone line or you will not be able to send or receive faxes. To check if your phone line is digital, connect a regular analog phone to the line and listen for a dial tone. If you do not hear a normal sounding dial

ENWW Solve fax problems 269

Solution Iccur

- tone, it might be a phone line set up for digital phones. Connect the product to an analog phone line and try sending or receiving a fax.
- Check the connection between the telephone wall jack and the product to make sure that the phone cord is secure.
- Ensure that you have correctly connected the product to the telephone wall jack.
- Connect one end of the phone cord supplied with the product to your telephone wall jack and the other end to the port labeled 1-LINE at the back of the product. You might need to connect the supplied phone cord to the adapter provided for your country/ region.
- Other equipment, which uses the same phone line as the product, might be causing the test to fail. To determine if the other equipment is causing a problem, disconnect everything from the phone line, and then run the test again.
- If the Fax Line Condition Test passes without the other equipment, then one or more pieces of the equipment is causing problems; try adding them back one at a time and rerunning the test each time, until you identify which piece of equipment is causing the problem.
- If the Fax Line Condition Test fails even after removing the other connected equipment, connect the product to a working phone line and continue reviewing the troubleshooting information in this section.
- If you are using a phone splitter, this can cause faxing problems. A splitter is a twocord connector that plugs into a telephone wall jack. Try removing the splitter and connecting the product directly to the telephone wall jack.
- Ensure that you use the phone cord that came with the product. If you do not use the supplied phone cord to connect the product to the telephone wall jack, you might not be able to send or receive faxes. After you plug in the phone cord that came with the product, run the fax test again.
- After you resolve any problem that is found, run the fax test again to check if the product passes the test and is ready for faxing. If the Fax Line Condition test continues to fail and you experience problems faxing, contact your telephone company and have them check the phone line.

The display always shows Phone Off Hook

- You are using the wrong type of phone cord. Ensure that you are using the phone cord that came with the product to connect the product to your phone line. If the phone cord that came with the product is not long enough, you can use a coupler to extend the length. You can purchase a coupler at an electronics store that carries phone accessories. You will also need another phone cord, which can be a standard phone cord that you might already have in your home or office.
- Other equipment that uses the same phone line as the product might be in use. Ensure that the extension phones—phones on the same phone line, but not connected to the product—or other equipment are not in use or off the hook. For example, you cannot use the product for sending a fax if an extension phone is off the hook, or if you are using a computer dial-up modem to send e-mail or access the Internet.
- The product is having problems sending and receiving faxes.
 - Ensure that the product is powered on. Look at the display on the product. If the display is blank and the Power light is not lit, the product is powered off. Check if the

Issue Solution

power cord is firmly connected to the product and plugged into a power outlet. Press the power button to power on the product.

- After powering on the product, HP recommends that you wait five minutes before sending or receiving a fax. The product cannot send or receive faxes while it is initializing after being powered on.
- Connect one end of the phone cord supplied with the product to your telephone wall
 jack and the other end to the port labeled 1-LINE at the back of the product.
- If the phone cord that came with the product is not long enough, you can use a coupler
 to extend the length. You can purchase a coupler at an electronics store that carries
 phone accessories. You will also need another phone cord, which can be a standard
 phone cord that you might already have in your home or office.
- Try connecting a working phone and phone cord to the telephone wall jack that you
 are using for the product and check for a dial tone. If you do not hear a dial tone, call
 your local telephone company for service.
- Other equipment, which uses the same phone line as the product, might be in use. For example, you cannot use the product for faxing if an extension phone is off the hook, or if you are using a computer dial-up modem to send an e-mail or access the Internet.
- Check to see if another process has caused an error. Check the control-panel display
 or your computer for an error message that provides information about the problem
 and its resolution. If there is an error, the product will not send or receive a fax until
 the error condition is resolved.
- The phone line connection might be noisy. Phone lines with poor sound quality (noise)
 can cause faxing problems. Check the sound quality of the phone line by plugging a
 phone into the telephone wall jack and listening for static or other noise. If you hear
 noise, turn Error Correction Mode (ECM) off and try faxing again. For information about
 changing ECM, see the onscreen Help. If the problem persists, contact your telephone
 company.

The product is having problems sending and receiving faxes.

If you are using a digital subscriber line (DSL) service, make sure that you have a DSL filter connected or you will not be able to fax successfully.

(continued)

- Ensure that the product is not connected to a telephone wall jack that is set up for
 digital phones. To check if your phone line is digital, connect a regular analog phone to
 the line and listen for a dial tone. If you do not hear a normal sounding dial tone, it
 might be a phone line set up for digital phones.
- If you are using a private branch exchange (PBX) or an integrated services digital network (ISDN) converter/terminal adapter, make sure that the product is connected to the correct port and the terminal adapter is set to the correct switch type for your country/region, if possible.
- If the product shares the same phone line with a DSL service, the DSL modem might not be properly grounded. If the DSL modem is not properly grounded, it can create noise on the phone line. Phone lines with poor sound quality (noise) can cause faxing problems. You can check the sound quality of the phone line by plugging a phone into the telephone wall jack and listening for static or other noise. If you hear noise, power off your DSL modem for at least 15 minutes, after which, power on the DSL modem again and listen to the dial tone. If the phone line is still noisy, contact your telephone company. For information on how to power off your DSL modem, contact your DSL provider for support.
- If you are using a phone splitter, this can cause faxing problems. (A splitter is a twocord connector that plugs into a telephone wall jack.) Try removing the splitter and connecting the product directly to the telephone wall jack.

ENWW Solve fax problems 271

Solution Iccur The product is having problems sending Ensure that the telephone you use to initiate the fax call is connected directly to the a manual fax. product. To send a fax manually, the telephone must be connected directly to the port labeled 2-EXT on the product. If you are sending a fax manually from a phone that is connected directly to the product, you must use the keypad on the telephone to send the fax. You cannot use the keypad on the product control panel. The product cannot receive faxes, but If you are not using a distinctive ring service, check to make sure that the Distinctive can send faxes. Ring feature on the product is set to All Rings If Auto Answer is set to Off, you will need to receive faxes manually; otherwise, the product will not receive the fax. If you have a voice mail service on the same phone number that you use for fax calls, you must receive faxes manually, not automatically. This means that you must be available to respond in person to incoming fax calls. If you have a computer dial-up modem on the same phone line as the product, check to make sure that the software that came with your modem is not set to receive faxes automatically. Modems that are set up to receive faxes automatically take over the phone line to receive all incoming faxes. As a result, the product doesn't receive fax If you have an answering machine on the same phone line with the product, you might have one of the following problems: Your answering machine might not be set up properly with the product. Your outgoing message might be too long or too loud to allow the product to detect fax tones, and the sending fax machine might disconnect. Your answering machine might not have enough quiet time after your outgoing message to allow the product to detect fax tones. This problem is most common with digital answering machines. The following actions might help solve the above stated problems. When you have an answering machine on the phone line that you use for fax calls, try connecting the answering machine directly to the product. Ensure that the product is set to receive faxes automatically. For information on setting up the product to receive faxes automatically, see Receive a fax. Ensure the Rings to Answer setting is set to a greater number of rings than the

answering machine.

causing the problem.

Disconnect the answering machine and then try receiving a fax. If faxing is successful without the answering machine, the answering machine might be

Reconnect the answering machine and record your outgoing message again. Record a message that is approximately 10 seconds in duration. Speak slowly and at a low volume when recording your message. Leave at least 5 seconds of

Issue Solution

silence at the end of the voice message. There should be no background noise when recording this silent time. Try to receive a fax again.

- If the product shares the same phone line with other types of phone equipment, such as an answering machine, a computer dial-up modem, or a multi-port switch box, the fax signal level might be reduced. The signal level can also get reduced if you use a splitter or connect extra cables to extend the length of your phone. A reduced fax signal can cause problems during fax reception. To find out if other equipment is causing a problem, disconnect everything except the product from the phone line, and then try to receive a fax. If you can receive faxes successfully without the other equipment connected, one or more pieces of the other connected equipment is causing problems; try adding them back one at a time and receiving a fax each time, until you identify which equipment is causing the problem.
- If you have a special ring pattern for your fax phone number (using a distinctive ring service through your telephone company), make sure that the Distinctive Ring feature on the product is set to match.

The product cannot send faxes, but can receive faxes.

- The product might be dialing too fast or too soon. You might need to insert some pauses in the number sequence. For example, if you need to access an outside line before dialing the phone number, insert a pause following the access number. If your number is 95555555, and 9 accesses an outside line, you might insert pauses as follows: 9-555-5555. To enter a pause in the fax number you are typing, touch Redial/Pause, or touch Space (#) repeatedly, until a dash (-) appears on the display.
- You can also send the fax by using monitor dialing. This enables you to listen to the
 phone line as you dial. You can set the pace of your dialing and respond to prompts as
 you dial.
- The number you entered when sending the fax is not in the proper format or the receiving fax machine is having problems. To check this, try calling the fax number from a telephone and listen for fax tones. If you cannot hear fax tones, the receiving fax machine might not be powered on or connected, or a voice mail service could be interfering with the recipient's phone line. You can also ask the recipient to check the receiving fax machine for any problems.

Fax tones are recorded on the answering machine.

- When you have an answering machine on the same phone line that you use for fax calls, try connecting the answering machine directly to the product. If you do not connect the answering machine as recommended, fax tones might be recorded on your answering machine.
- Ensure that the product is set to receive faxes automatically and that the Rings to
 Answer setting is correct. The number of rings to answer for the product should be
 greater than the number of rings to answer for the answering machine. If the
 answering machine and the product are set to the same number of rings to answer,
 both devices answer the call and fax tones are recorded on the answering machine.
- Set your answering machine to a low number of rings and the product to answer in the
 maximum number of rings supported. (The maximum number of rings varies by
 country/region.) In this setup, the answering machine answers the call and the
 product monitors the line. If the product detects fax tones, the product receives the
 fax. If the call is a voice call, the answering machine records the incoming message.

The phone cord that came with the product is not long enough.

- If the phone cord that came with the product is not long enough, you can use a coupler
 to extend the length. You can purchase a coupler at an electronics store that carries
 phone accessories. You will also need another phone cord, which can be a standard
 phone cord that you might already have in your home or office.
- To extend your phone cord, complete the following steps.

ENWW Solve fax problems 273

Issue	Solution
	 Using the phone cord supplied with the product, connect one end to the couple then connect the other end to the port labeled 1-LINE on the back of the product. Connect another phone cord to the open port on the coupler and the telephon wall jack.
Color faxes do not print	 The Incoming Fax Printing option might be turned off. To print color faxes, make su that the Incoming Fax Printing option in the product control panel is turned on.
The computer cannot receive faxes (Fax to PC or Fax to Mac)	 The computer selected to receive faxes might be turned off. Ensure that the compuselected to receive faxes is switched on at all times.
	 Different computers might be configured for setup and receiving faxes and one of them might be switched off. If the computer receiving faxes is different from the on used for setup, both computers should be switched on at all times.
	 Fax to PC or Fax to Mac might not be activated or the computer might not be configured to receive faxes. Activate Fax to PC or Fax to Mac and make sure the computer is configured to receive faxes.

Product upgrades

NOTE: If you are installing a replacement HDD or SSM, use this procedure to install the product firmware on the replacement drive.

If you are removing the HDD or SSM so that it can be installed on a replacement formatter, you can skip this procedure.

1. Locate the product support Web site.

In the US:

Go to www.hp.com/support/ojcolorX555 or www.hp.com/support/ojcolorMFPX585.

Outside the US:

- a. Go to www.hp.com/support.
- **b.** Select your country/region.
- c. Select Drivers & Downloads.
- d. Enter the product name, and then click Go.
- e. Select your product model.
- 2. Select Cross operating system (BIOS, Firmware, Diagnostics, etc.).
- 3. Locate the firmware download, and then select **Download**.
- 4. Copy the firmware upgrade file to the root directory of a USB flash drive. The firmware upgrade file has a .bdl extension.
- 5. Insert the USB flash drive into the USB port on the product control panel, and then turn the product power on.
- The following message displays on the control panel: Error: 99.09.63 Incorrect Disk. Touch the OK button to continue.
- 7. Wait for the Pre-Boot menu to appear on the control-panel display, and then touch the down arrow ▼ button to scroll to **3 Administrator**. Touch the OK button to select it.
- Touch the down arrow ▼ button to scroll to 6 Manage Disk. Touch the OK button to select it
- 9. Touch the down arrow ▼ button to scroll to + 6 Boot Device. Touch the OK button to select it.
- 10. Touch the down arrow ▼ button to scroll to 2 Erase / Unlock. Touch the OK button to select it
- 11. The message Proceed with Requested Action displays. Touch the OK button to select it.
- **12.** Touch the back **5** button to return to the Pre-Boot menu home screen.
- **13.** Touch the down arrow ▼ button to scroll to **3 Administrator**. Touch the OK button to select it.
- **14.** Touch the down arrow **▼** button to scroll to **1 Download**. Touch the **OK** button to select it.
- 15. Touch the down arrow ▼ button to scroll to 3 USB Thumbdrive. Touch the OK button to select it.

ENWW Product upgrades 275

- **16.** Touch the down arrow ▼ button to scroll to the firmware upgrade file that you downloaded in step 4. Touch the OK button to select it.
- NOTE: If no .bdl files are listed, try saving the file to a different USB flash drive.
- **17.** Wait while the file transfers. When the transfer is complete, the message **Complete** displays on the screen.
- **18.** Turn the product off, remove the USB flash drive, and then turn the product on. Wait for several minutes while the product initializes.

A Service and support

- Hewlett-Packard limited warranty statement
- End User License Agreement
- OpenSSL
- Customer self-repair warranty service
- Customer support

ENWW 277

Hewlett-Packard limited warranty statement

HP PRODUCT	DURATION OF LIMITED WARRANTY
HP Officejet Enterprise Color X555dn, X555xh, and MFP X585dn, X585f, X585z	1 year

HP warrants to you, the end-user customer, that HP hardware and accessories will be free from defects in materials and workmanship after the date of purchase, for the period specified above. If HP receives notice of such defects during the warranty period, HP will, at its option, either repair or replace products which prove to be defective. Replacement products may be either new or equivalent in performance to new.

HP warrants to you that HP software will not fail to execute its programming instructions after the date of purchase, for the period specified above, due to defects in material and workmanship when properly installed and used. If HP receives notice of such defects during the warranty period, HP will replace software which does not execute its programming instructions due to such defects.

HP does not warrant that the operation of HP products will be uninterrupted or error free. If HP is unable, within a reasonable time, to repair or replace any product to a condition as warranted, you will be entitled to a refund of the purchase price upon prompt return of the product.

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

Warranty does not apply to defects resulting from (a) improper or inadequate maintenance or calibration, (b) software, interfacing, parts or supplies not supplied by HP, (c) unauthorized modification or misuse, (d) operation outside of the published environmental specifications for the product, or (e) improper site preparation or maintenance.

TO THE EXTENT ALLOWED BY LOCAL LAW, THE ABOVE WARRANTIES ARE EXCLUSIVE AND NO OTHER WARRANTY OR CONDITION, WHETHER WRITTEN OR ORAL, IS EXPRESSED OR IMPLIED AND HP SPECIFICALLY DISCLAIMS ANY IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY, SATISFACTORY QUALITY, AND FITNESS FOR A PARTICULAR PURPOSE. Some countries/regions, states or provinces do not allow limitations on the duration of an implied warranty, so the above limitation or exclusion might not apply to you. This warranty gives you specific legal rights and you might also have other rights that vary from country/region to country/region, state to state, or province to province.

HP's limited warranty is valid in any country/region or locality where HP has a support presence for this product and where HP has marketed this product. The level of warranty service you receive may vary according to local standards. HP will not alter form, fit or function of the product to make it operate in a country/region for which it was never intended to function for legal or regulatory reasons.

TO THE EXTENT ALLOWED BY LOCAL LAW, THE REMEDIES IN THIS WARRANTY STATEMENT ARE YOUR SOLE AND EXCLUSIVE REMEDIES. EXCEPT AS INDICATED ABOVE, IN NO EVENT WILL HP OR ITS SUPPLIERS BE LIABLE FOR LOSS OF DATA OR FOR DIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL (INCLUDING LOST PROFIT OR DATA), OR OTHER DAMAGE, WHETHER BASED IN CONTRACT, TORT, OR OTHERWISE. Some countries/regions, states or provinces do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

THE WARRANTY TERMS CONTAINED IN THIS STATEMENT, EXCEPT TO THE EXTENT LAWFULLY PERMITTED, DO NOT EXCLUDE, RESTRICT OR MODIFY AND ARE IN ADDITION TO THE MANDATORY STATUTORY RIGHTS APPLICABLE TO THE SALE OF THIS PRODUCT TO YOU.

UK, Ireland, and Malta

The name and address of the HP entity responsible for the performance of the HP Limited Warranty in your country is as follows:

United Kingdom: Hewlett-Packard Ltd Cain Road Bracknell GB-Berks RG12 1HN

Eire: Hewlett-Packard Ireland Limited, 63-74 Sir John Rogerson's Quay, Dublin 2

Malta: Hewlett-Packard International Trade B.V. Malta Branch, 48, Amery Street, Sliema SLM 1701, MALTA

You may have additional statutory rights against the seller based on your purchase agreement. Those rights are not in any way affected by this HP Limited Warranty.

Austria, Belgium, Germany, and Luxemburg

Als Anlage finden Sie die Namen und Adressen der jeweiligen HP Gesellschaft, die in Ihrem Land die HP Herstellergarantie gewährt.

Deutschland: Hewlett-Packard GmbH, Herrenberger Straße 140, D-71034 Böblingen

Österreich: Hewlett-Packard Ges.m.b.H., Wienerbergstrasse 41, A-1120 Wien

Luxemburg: Hewlett-Packard Luxembourg SCA, Vegacenter 75, Parc d'Activités Capellen, L-8308 Capellen

Belgien: Hewlett-Packard Belgium BVBA/SPRL, Hermeslaan 1A, B-1831 Brüssel

Deutschland und Österreich

Über die Herstellergarantie hinaus haben Sie gegebenenfalls Mängelansprüche gegenüber Ihrem Verkäufer aus dem Kaufvertrag, die durch diese Herstellergarantie nicht eingeschränkt werden.

Luxemburg

Über die Herstellergarantie hinaus haben Sie gegebenenfalls gesetzliche Ansprüche gegenüber Ihrem Verkäufer aus dem Kaufvertrag, die durch diese Herstellergarantie nicht eingeschränkt werden. Insbesondere werden für Verbraucher folgende gesetzliche Bestimmungen von der Herstellergarantie nicht berührt: Gesetz vom 21. April 2004 bezüglich der Vertragsmässigkeit von Verbrauchsgütern und gesetzliche Bestimmungen des Zivilgesetzbuches bezüglich der Garantie. Die gesetzliche Garantie nach dem Gesetz vom 21. April 2004 ist auf zwei Jahren ab der Lieferung des Verbrauchgutes befristet.

Belgien

Sie haben gegebenenfalls zusätzliche Ansprüche gegenüber Ihrem Verkäufer aus dem Kaufvertrag, die durch diese HP Herstellergarantie nicht eingeschränkt werden.

Belgium, France, and Luxemburg

Vous trouverez, ci-après, les coordonnées de l'entité HP responsable de l'exécution de la garantie fabricant relative à votre matériel HP dans votre pays.

France:

En vertu de votre contrat d'achat, il se peut que vous disposiez de droits légaux supplémentaires à l'encontre de votre vendeur. Ceux-ci ne sont aucunement affectés par la présente garantie du fabricant HP.

En particulier, si vous êtes un consommateur domicilié en France (départements et territoires d'outre-mer (DOM-TOM) inclus dans la limite des textes qui leur sont applicables), le vendeur reste tenu à votre égard des défauts de conformité du bien au contrat et des vices rédhibitoires dans les conditions prévues aux articles 1641 à 1649 du Code civil.

Code de la consommation:

« Art. L. 211-4. - Le vendeur est tenu de livrer un bien conforme au contrat et répond des défauts de conformité existant lors de la délivrance.

Il répond également des défauts de conformité résultant de l'emballage, des instructions de montage ou de l'installation lorsque celle-ci a été mise à sa charge par le contrat ou a été réalisée sous sa responsabilité.»

- « Art. L. 211-5. Pour être conforme au contrat, le bien doit :
- 1° Etre propre à l'usage habituellement attendu d'un bien semblable et, le cas échéant correspondre à la description donnée par le vendeur et posséder les qualités que celui-ci a présentées à l'acheteur sous forme d'échantillon ou de modèle ;
- présenter les qualités qu'un acheteur peut légitimement attendre eu égard aux déclarations publiques faites par le vendeur, par le producteur ou par son représentant, notamment dans la publicité ou l'étiquetage;
- 2° Ou présenter les caractéristiques définies d'un commun accord par les parties ou être propre à tout usage spécial recherché par l'acheteur, porté à la connaissance du vendeur et que ce dernier a accepté. »
- « Art. L.211-12. L'action résultant du défaut de conformité se prescrit par deux ans à compter de la délivrance du bien. »

Code civil:

- « Code civil Article 1641 : Le vendeur est tenu de la garantie à raison des défauts cachés de la chose vendue qui la rendent impropre à l'usage auquel on la destine, ou qui diminuent tellement cet usage, que l'acheteur ne l'aurait pas acquise, ou n'en aurait donné qu'un moindre prix, s'il les avait connus. »
- « Code civil Article 1648 : L'action résultant des vices rédhibitoires doit être intentée par l'acquéreur dans un délai de deux ans à compter de la découverte du vice. »

L'entité HP responsable de l'exécution de la garantie fabricant relative à votre matériel HP est : Hewlett-Packard France SAS, 1 Avenue du Canada 91947 LES ULIS

Belgique:

En vertu de votre contrat d'achat, il se peut que vous disposiez de droits légaux supplémentaires à l'encontre de votre vendeur. Ceux-ci ne sont aucunement affectés par la présente garantie du fabricant HP.

L'entité HP responsable de l'exécution de la garantie fabricant relative à votre matériel HP est : Hewlett-Packard Belgium BVBA/SPRL, Hermeslaan 1A, B-1831 Belgique

Luxembourg:

En vertu de votre contrat d'achat, il se peut que vous disposiez de droits légaux supplémentaires à l'encontre de votre vendeur. Ceux-ci ne sont aucunement affectés par la présente garantie du fabricant HP. En particulier, si vous êtes un consommateur la présente garantie fabricant HP ne fait pas obstacle à l'application des dispositions de la loi du 21 avril 2004 relative à la garantie de conformité et des dispositions du Code civil relatives à la garantie. La durée de la garantie légale en vertu de la loi du 21 avril 2004 est de deux ans à compter de la délivrance du bien.

L'entité HP responsable de l'exécution de la garantie fabricant relative à votre matériel HP est : Hewlett-Packard Luxembourg SCA, Vegacenter 75, Parc d'Activités Capellen, L-8308 Capellen

Italy

In allegato il cliente troverà i nomi e gli indirizzi delle Società del Gruppo HP che prestano i servizi in Garanzia (garanzia di buon funzionamento e garanzia convenzionale) in Italia.

Italia: Hewlett-Packard Italiana S.r.L., Via G. Di Vittorio 9, 20063 Cernusco sul Naviglio

Oltre alla Garanzia del Produttore, e in modo indipendente dalla stessa, il Consumatore potrà far valere i propri diritti di legge nei confronti del venditore tra cui il diritto di chiedere, nei primi 24 mesi dalla data di acquisto del prodotto, la riparazione gratuita o la sostituzione del prodotto non conforme al contratto ai sensi dell'art. 130 del Codice del Consumo (Dlgs. 206/2005) laddove ne ricorrano le condizioni.

Spain

Adjunto puede encontrar el nombre y dirección de las entidades HP que ofrecen la Garantía Limitada de HP (garantía comercial adicional del fabricante) en su país.

España Hewlett-Packard Española S.L.U. C/Vicente Aleixandre 1 Parque Empresarial Madrid - Las Rozas, E-28232 Madrid

La garantía comercial adicional de HP (Garantía Limitada de HP) no afecta a los derechos que usted, como consumidor, pueda tener frente al vendedor por la falta de conformidad del producto con el contrato de compraventa. Dichos derechos son independientes y compatibles con la garantía comercial adicional de HP y no quedan afectados por ésta.

De conformidad con los mismos, si durante un plazo de dos años desde la entrega del producto aparece alguna falta de conformidad existente en el momento de la entrega, el consumidor y usuario tiene derecho a exigir al vendedor la reparación del producto, su sustitución, la rebaja del precio o la resolución del contrato de acuerdo con lo previsto en el Título V del Real Decreto Legislativo 1/2007. Salvo prueba que demuestre lo contrario, se presumirá que las faltas de conformidad que se manifiesten en los seis meses posteriores a la entrega del producto ya existían cuando el producto se entregó.

Únicamente cuando al consumidor y usuario le resulte imposible o le suponga una carga excesiva dirigirse al vendedor por la falta de conformidad con el contrato podrá reclamar directamente al fabricante con el fin de obtener la sustitución o reparación.

Denmark

Vedhæftet finder De navn og adresse på de HP-selskaber, som yder HP's mangeludbedring i Danmark.

Danmark: Hewlett-Packard A/S, Engholm Parkvej 8, DK-3450, Allerød

Herudover kan De have opnået rettigheder overfor sælger af HP's produkter i henhold til Deres købsaftale. HP's regler om mangeludbedring begrænser ikke sådanne rettigheder.

Norway

Vedlagt finner du navn og adresse på de HP-selskaper som svarer for fabrikkgarantien i Norge.

Norge: Hewlett-Packard Norge AS, Østensjøveien 32, 0667 OSLO, Norge

Utover dette kan du ha oppnådd rettigheter gjennom kjøpsavtalen med selgeren av ditt HP-produkt dersom du er en forbruker etter norsk forbrukerkjøpslov. Slike rettigheter innskrenkes ikke av fabrikkgarantien. Den lengste absolutte reklamasjonsretten er 5 år for produkter som ved vanlig bruk er ment å vare vesentlig lengre enn 2 år (med de begrensninger som følger av norsk lovgivning og rettspraksis). Overfor selgeren kan det reklameres på ytelsen som helhet selv om garantien kun dekker deler av ytelsen som er kjøpt.

Reklamasjonsretten kan tapes dersom det ikke reklameres innen rimelig tid, også innenfor den absolutte reklamasjonsperioden.

Sweden

Av bilagda förteckning framgår namn och adress till det HP-företag som svarar för HPs begränsade garanti (fabriksgaranti) i Sverige.

Sverige: Hewlett-Packard Sverige AB, SE-169 85 Stockholm

Ni kan utöver denna fabriksgaranti även ha tillkommande lagstadgade rättigheter, som följer av Ert avtal med säljaren av produkten. Dessa rättigheter inskränks inte av fabriksgarantin.

Portugal

Anexa à presente declaração encontra-se uma lista das empresas HP de entre as quais consta o nome e morada da empresa responsável pela prestação da Garantia Limitada HP (garantia do fabricante) no seu país.

Portugal: Hewlett-Packard Portugal, Lda., Edificio D. Sancho I, Quinta da Fonte, Porto Salvo, 2780-730 Paco de Arcos, P-Oeiras

Além da referida garantia do fabricante prestada pela HP, poderá também beneficiar, nos termos da legislação local em vigor, de outros direitos legais relativos à garantia, ao abrigo do respectivo Contrato de Compra e Venda.

A presente garantia não representará quaisquer custos adicionais para o consumidor. A presente garantia limitada não afeta os direitos dos consumidores constantes de leis locais imperativas, como seja o Decreto-Lei 67/2003, de 8 de Abril, com a redação que lhe foi dada pelo Decreto-Lei 84/2008, de 21 de Maio.

Greece and Cyprus

Συνημμένα αναφέρονται οι επωνυμίες και οι διευθύνσεις των εταιρειών της ΗΡ που παρέχουν την Περιορισμένη Εγγύηση της ΗΡ (εγγύηση κατασκευαστή) στην χώρα σας. Η εγγύηση κατασκευαστή δεν περιορίζει τα επιπλέον νόμιμα δικαιώματα που μπορεί να έχετε έναντι του πωλητή, όπως αυτά καθορίζονται στην σύμβαση αγοράς του προϊόντος.

Ελλάδα /Κύπρος: Hewlett-Packard Hellas Ε.Π.Ε., Βορείου Ηπείρου 76,151 25 ΜΑΡΟΥΣΙ

Hungary

Ön az alábbiakban megtalálja azon HP vállalatok nevét és címét, amelyek az egyes országokban biztosítják a HP mint gyártó által vállalt Korlátozott Jótállást.

Hungary: - Hewlett-Packard Magyarország Kft, H-1117 Budapest, Alíz utca 1.

- Hewlett-Packard Informatikai Kft, H-1117 Budapest, Alíz utca 1.

A HP Korlátozott Jótállásán túlmenően Önt a HP terméket Önnek értékesítő kereskedővel szemben megilletik a helyi kötelezően alkalmazandó és eltérést nem engedő jogszabályok által biztosított szavatossági és jótállási jogok. Az Önre vonatkozó, kötelezően alkalmazandó és eltérést nem engedő jogszabályban biztosított jogait a HP Korlátozott Jótállási nyilatkozata nem korlátozza.

Czech Republic

V příloze jsou uvedeny názvy a adresy společností skupiny HP, které poskytují omezenou záruku HP (záruku výrobců) ve Vaší zemi.

Česká republika: Hewlett Packard s.r.o., Vyskočilova 1/1410, 140 21 Praha 4

Pokud máte na základě konkrétní kupní smlouvy vůči prodávajícímu práva ze zákona přesahující záruku vyznačenou výrobcem, pak tato práva nejsou uvedenou zárukou výrobce dotčena.

Slovakia

V prílohe sú uvedené mená a adresy spoločností skupiny HP, ktoré zabezpečujú plnenia z obmedzenej záruky HP (záruka výrobcu) vo vašej krajine.

Slovenská republika: Hewlett-Packard Slovakia, s.r.o., Galvaniho 7, 820 02 Bratislava

Pokiaľ máte na základe vašej kúpnej zmluvy voči predávajúcemu práva zo zákona presahujúce záruku výrobcu, také práva nie sú uvedenou zárukou výrobcu dotknuté.

Poland

W załączeniu przedstawiamy nazwy i adresy jednostek HP, odpowiedzialnych za wykonanie ograniczonej gwarancji HP w Państwa kraju.

Polska: Hewlett-Packard Polska Sp. z o.o., Szturmowa 2a, 02-678 Warszawa wpisana do rejestru przedsiębiorców w Sadzie Rejonowym dla m. st. Warszawy, XIII Wydział Gospodarczy, pod numerem KRS 0000016370, E0001100WZ, kapitał zakładowy 475 000 PLN. NIP 527-020-51-28

HP informuje, że na podstawie umowy sprzedaży mogą Państwu przysługiwać wobec sprzedawcy ustawowe prawa niezależne w stosunku do udzielanej, ograniczonej gwarancji HP. Gwarancja HP nie wyłącza, nie ogranicza ani nie zawiesza uprawnień kupującego wynikających z niezgodności towaru z umową.

Bulgaria

Долу ще намерите името и адреса на дружеството във Вашата страна, отговорно за предоставянето на Гаранционната поддръжка в рамките на Ограничената Гаранция предоставяна от Хюлет-Пакард /НР.

Хюлет-Пакард България ЕООД, с ЕИК 121909024, със седалище и адрес на управление: София 1766, рн Младост, ул. Околовръстен път № 258

Вие имате допълнителни законови права пред продавача на продукта в съответствие с договора Ви за покупко-продажба. Тези права по-никакъв начин не се ограничават от Ограничената Гаранция предоставяна от НР.

При необходимост, моля да се обърнете към продавача на продукта.

Romania

Mai jos am inclus numele si adresa entitatii HP care este responsabila cu indeplinirea obligatiilor aferente Garantiei Producatorului HP in tara dvs.

Romănia: Hewlett-Packard Romănia SRL, Bd. Lascăr Catargiu nr. 47-53, Europe House Business Center, Et 3, Sector 1, Bucuresti

Aveti drepturi legale suplimentare impotriva vanzatorului pe baza contractului de achizitie. Aceste drepturi nu sunt afectate de Garantia Producatorului HP. Va rugam sa contactati vanzatorul.

Belgium and The Netherlands

Als bijlage ontvangt u hierbij een lijst met daarop de naam en het adres van de HP vestiging in uw land waar u terecht kunt voor de HP fabrieksgarantie.

Nederland: Hewlett-Packard Nederland BV, Startbaan 16, 1187 XR Amstelveen

België: Hewlett-Packard, BVBA/SPRL, P.O.

Naast deze fabrieksgarantie kunt u op basis van nationale wetgeving ten opzichte van uw verkoper rechten ontlenen aan de verkoopovereenkomst. De HP-fabrieksgarantie laat de wettelijke rechten onder de toepasselijke nationale wetgeving ongemoeid.

Finland

Oheisesta luettelosta löydätte yhteystiedot valmistajan takuusta vastaavaan HP:n edustajaan maassanne.

Suomi: Hewlett-Packard Oy, Piispankalliontie, FIN - 02200 Espoo

Teillä voi olla oikeus esittää takuun lisäksi vaatimuksia myös lain nojalla. Valmistajan takuu ei rajoita lakiin perustuvia oikeuksianne.

Slovenia

V prilogi vam pošiljamo imena in naslove HP-jevih skupin, pri katerih lahko v svoji državi uveljavljate HP-jevo omejeno garancijo (garancijo proizvajalca).

Slovenija: Hewlett - Packard d.o.o., Tivolska cesta 48, 1000 Ljubljana, Slovenija

Poleg garancije proizvajalca imate lahko na osnovi nakupne pogodbe tudi z zakonom predpisane pravice do prodajalca, ki jih ne omejuje ta garancija proizvajalca.

Croatia

Naziv i adresa HP-ovog subjekta koji je odgovoran za ispunjenje HP-ovog Ograničenog jamstva u Vašoj zemlji

Hewlett-Packard d.o.o.

Radnička cesta 41

10000 Zagreb

01/60 60 200

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Latvija: Hewlett-Packard SIA, Duntes iela 17a, Rīga, LV-1005, Latvija

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Lietuva: UAB "Hewlett-Packard", V. Gerulaičio g. 1, LT-08200 Vilnius

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Eesti: HP Oy Eesti Filiaal, A.H. Tammsaare tee 47, EE-11316 Tallinn

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Rev. 04/09

OpenSSL

This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (http:// www.openssl.org/)

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This product includes cryptographic software written by Eric Young (eay@cryptsoft.com). This product includes software written by Tim Hudson (tjh@cryptsoft.com).

Customer self-repair warranty service

HP products are designed with many Customer Self Repair (CSR) parts to minimize repair time and allow for greater flexibility in performing defective parts replacement. If during the diagnosis period, HP identifies that the repair can be accomplished by the use of a CSR part, HP will ship that part directly to you for replacement. There are two categories of CSR parts: 1) Parts for which customer self repair is mandatory. If you request HP to replace these parts, you will be charged for the travel and labor costs of this service. 2) Parts for which customer self repair is optional. These parts are also designed for Customer Self Repair. If, however, you require that HP replace them for you, this may be done at no additional charge under the type of warranty service designated for your product.

Based on availability and where geography permits, CSR parts will be shipped for next business day delivery. Same-day or four-hour delivery may be offered at an additional charge where geography permits. If assistance is required, you can call the HP Technical Support Center and a technician will help you over the phone. HP specifies in the materials shipped with a replacement CSR part whether a defective part must be returned to HP. In cases where it is required to return the defective part to HP, you must ship the defective part back to HP within a defined period of time, normally five (5) business days. The defective part must be returned with the associated documentation in the provided shipping material. Failure to return the defective part may result in HP billing you for the replacement. With a customer self repair, HP will pay all shipping and part return costs and determine the courier/carrier to be used.

Customer support

Get telephone support for your country/region Have the product name, serial number, date of purchase, and problem description ready.	Country/region phone numbers are on the flyer that was in the box with your product or at www.hp.com/support/ .	
Get 24-hour Internet support	 In the US, go to www.hp.com/support/ojcolorMFPX585. Outside the US, go to www.hp.com/support. Select your country/region. Click Troubleshooting. Enter the product name, and then select Search. 	
Download software utilities, drivers, and electronic information	 In the US, go to www.hp.com/support/ojcolorMFPX585. Click Drivers & Software. Outside the US, go to www.hp.com/support. Select your country/region. Click Drivers & Software. Enter the product name (for example, "LaserJet M575"), and then select Search. 	
Order additional HP service or maintenance agreements	www.hp.com/go/carepack	
Register your product	www.register.hp.com	

B Product specifications

- Physical specifications (X555 models)
- Physical specifications (X585 models)
- Power consumption, electrical specifications, and acoustic emissions
- Environmental specifications

ENWW 291

Physical specifications (X555 models)

Table B-1 Physical specifications (X555 models), with ink cartridges

Product	Height	Depth	Width	Weight
X555dn	406 mm (16 in)	399 mm (15.7 in)	515 mm (20.3 in)	21.9 kg (48.2 lb)
X555xh	545 mm (21.5 in)			27.2 kg (60 lb)

Physical specifications (X585 models)

Table B-2 Physical specifications (X585 models), with ink cartridges

Product	Height	Depth	Width	Weight
X585dn	594 mm (23.4 in)	545 mm (21.5 in)	515 mm (20.3 in)	34.8 kg (76.8 lb)
X585f	_			34.9 kg (76.86 lb)
X585z	_			35.3 kg (77.9 lb)

Power consumption, electrical specifications, and acoustic emissions

See www.hp.com/support/ojcolorX555 or www.hp.com/support/ojcolorMFPX585 for current information.

CAUTION: Power requirements are based on the country/region where the product is sold. Do not convert operating voltages. This will damage the product and void the product warranty.

Environmental specifications

Table B-3 Operating-environment specifications

Environment	Recommended	Allowed
Temperature	17° to 25°C (62.6° to 77°F)	15° to 30°C (59° to 86°F)
Relative humidity	30% to 70% relative humidity (RH)	10% to 80% RH
Altitude	Not applicable	0 to 3048 m (0 to 10,000 ft)

C Regulatory information

- FCC regulations
- Environmental product stewardship program
- Declaration of conformity (X555 models)
- Declaration of conformity (X585dn model)
- Declaration of conformity (X585f and X585z models)
- Certificate of volatility (X555 models)
- Certificate of volatility (X585 models)
- Safety statements
- Additional statements for telecom (fax) products

ENWW 293

FCC regulations

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.



NOTE: Any changes or modifications to the printer that are not expressly approved by HP could void the user's authority to operate this equipment.

Use of a shielded interface cable is required to comply with the Class A limits of Part 15 of FCC rules.

Environmental product stewardship program

Protecting the environment

Hewlett-Packard Company is committed to providing quality products in an environmentally sound manner. This product has been designed with several attributes to minimize impacts on our environment.

Ozone production

This product generates no appreciable ozone gas (0_3) .

Power consumption

Power usage drops significantly while in Ready or Sleep mode, which saves natural resources and saves money without affecting the high performance of this product. Hewlett-Packard printing and imaging equipment marked with the ENERGY STAR® logo is qualified to the U.S. Environmental Protection Agency's ENERGY STAR specifications for imaging equipment. The following mark will appear on ENERGY STAR qualified imaging products:



Additional ENERGY STAR qualified imaging product model information is listed at:

www.hp.com/go/energystar

Paper use

This product's manual/automatic duplex feature (two-sided printing) and N-up printing (multiple pages printed on one page) capability can reduce paper usage and the resulting demands on natural resources.

Plastics

Plastic parts over 25 grams are marked according to international standards that enhance the ability to identify plastics for recycling purposes at the end of the product's life.

HP Officejet print supplies

HP is committed to providing inventive, high-quality products and services that are environmentally sound, from product design and manufacturing to distribution, customer use and recycling. When you participate in the HP Planet Partners program, we ensure your HP Officejet ink cartridges are recycled properly, processing them to recover plastics and metals for new products and diverting millions of tons of waste from landfills. Since this cartridge is being recycled and used in new materials, it will not be returned to you. Thank you for being environmentally responsible!

NOTE: Go to www.hp.com/recycle for complete recycling information and to order postage paid labels, envelopes, or boxes, for recycling.

Return and recycling instructions

United States and Puerto Rico

Go to <u>www.hp.com/recycle</u> for complete recycling information and to order post-paid labels and envelopes or boxes. Please follow the applicable instructions below.

Multiple returns (more than one cartridge)

- Package each HP Officejet ink cartridge in its original box and bag.
- 2. Tape the boxes together using strapping or packaging tape. The package can weigh up to 31 kg (70 lb).
- 3. Use a single pre-paid shipping label.

OR

- Use your own suitable box, or request a free bulk collection box from www.hp.com/recycle or 1-800-340-2445 (holds up to 31 kg (70 lb) of HP Deskjet ink cartridges).
- 2. Use a single pre-paid shipping label.

Single returns

- 1. Package the HP Officejet ink cartridge in its original bag and box.
- **2.** Place the shipping label on the front of the box.

Shipping

For US and Puerto Rico HP Officejet ink cartridge recycling returns, use the pre-paid, pre-addressed shipping label contained in the box. To use the UPS label, give the package to the UPS driver during your next delivery or pick-up, or take it to an authorized UPS drop-off center. (Requested UPS Ground pickup will be charged normal pick-up rates.) For the location of your local UPS drop-off center, call 1-800-PICKUPS or visit www.ups.com.

If you are returning the package with the FedEx label, give the package to either the U.S. Postal Service carrier or FedEx driver during your next pick-up or delivery. (Requested FedEx Ground pickup will be charged normal pick-up rates.) Or, you can drop off your packaged ink cartridge(s) at any U.S. Post Office or any FedEx shipping center or store. For the location of your nearest U.S. Post Office, please call 1-800-ASK-USPS or visit www.usps.com. For the location of your nearest FedEx shipping center/store, please call 1-800-GOFEDEX or visit www.fedex.com.

For more information, or to order additional labels or boxes for bulk returns, visit www.hp.com/recycle or call 1-800-340-2445. Information subject to change without notice.

Residents of Alaska and Hawaii

Do not use the UPS label. Call 1-800-340-2445 for information and instructions. The U.S. Postal Service provides no-cost cartridge return transportation services under an arrangement with HP for Alaska and Hawaii.

Non-U.S. returns

To participate in HP Planet Partners return and recycling program, just follow the simple directions in the recycling guide (found inside the packaging of your new product supply item) or visit www.hp.com/recycle. Select your country/region for information on how to return your HP Officejet printing supplies.

Paper

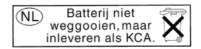
This product is capable of using recycled papers when the paper meets HP quidelines. This product is suitable for the use of recycled paper according to EN12281:2002.

Material restrictions

This HP product does not contain added mercury.

This HP product contains a battery that might require special handling at end-of-life. The batteries contained in or supplied by Hewlett-Packard for this product include the following:

HP Officejet Enterprise Color X555 and MFP X585 Series		
Туре	Lithium Manganese Dioxide	
Weight	3.0 g	
Location	On main board	
User-removable	No	



Dit HP Product bevat een lithium-manganese-dioxide batterij. Deze bevindt zich op de hoofdprintplaat. Wanneer deze batterij leeg is, moet deze volgens de geldende regels worden afgevoerd.



廢電池請回收

Please recycle waste batteries.

California Perchlorate Material Notice

Perchlorate material - special handling may apply. See: http://www.dtsc.ca.gov/hazardouswaste/perchlorate/

This product's real-time clock battery or coin cell battery may contain perchlorate and may require special handling when recycled or disposed of in California.

For recycling information, you can go to www.hp.com/recycle, or contact your local authorities or the Electronics Industries Alliance: www.eiae.org.

Disposal of waste equipment by users



This symbol means do not dispose of your product with your other household waste. Instead, you should protect human health and the environment by handing over your waste equipment to a designated collection point for the recycling of waste electrical and electronic equipment. For more information, please contact your household waste disposal service, or go to: www.hp.com/recycle.

Electronic hardware recycling

HP encourages customers to recycle used electronic hardware. For more information about recycling programs go to: www.hp.com/recycle.

Chemical substances

HP is committed to providing our customers with information about the chemical substances in our products as needed to comply with legal requirements such as REACH (Regulation EC No 1907/2006 of the European Parliament and the Council). A chemical information report for this product can be found at: www.hp.com/go/ reach.

Material Safety Data Sheet (MSDS)

Material Safety Data Sheets (MSDS) for supplies containing chemical substances (for example, ink) can be obtained by accessing the HP Web site at www.hp.com/go/msds.

EPEAT

Many HP products are designed to meet EPEAT. EPEAT is a comprehensive environmental rating that helps identify greener electronics equipment. For more information on EPEAT go to www.epeat.net. For information on HP's EPEAT registered products go to www.hp.com/hpinfo/globalcitizenship/environment/ pdf/epeat_printers.pdf.

For more information

To obtain information about these environmental topics:

- Product environmental profile sheet for this and many related HP products
- HP's commitment to the environment
- HP's environmental management system
- HP's end-of-life product return and recycling program
- **Material Safety Data Sheets**

Visit www.hp.com/go/environment.

Declaration of conformity (X555 models)

Declaration of Conformity

according to ISO/IEC 17050-1 and EN 17050-1

Manufacturer's Name: **Hewlett-Packard Company** DoC#: BOISB-1300-00-R1

Manufacturer's Address: 11311 Chinden Boulevard

Boise, Idaho 83714-1021, USA

declares, that the product

Product Name: HP Officejet Enterprise Color X555dn and HP Officejet Enterprise Color X555xh

B0ISB-1300-00 Regulatory Model:1)

Product Accessory: B5L07A — HP Officejet Enterprise 500-sheet paper tray

Ink Cartridges: D8J03A — HP 980 STARTUP Cyan Officejet Cartridge

D8J04A — HP 980 STARTUP Magenta Officejet Cartridge

D8J05A — HP 980 STARTUP Yellow Officejet Cartridge

D8J06A — HP 980 STARTUP Black Officejet Cartridge

D8J07A — HP 980A Cyan Officejet Cartridge

D8J08A — HP 980A Magenta Officejet Cartridge

D8J09A — HP 980A Yellow Officejet Cartridge

D8J10A — HP 980A Black Officejet Cartridge

conforms to the following Product Specifications and Regulations:

EMC: CISPR 22:2008 / EN55022:2010 Class A

CISPR 24:1997 +A1:2001 +A2:2002 / EN55024:2010

EN 61000-3-2:2006 +A1:2009 +A2:2009

EN 61000-3-3:2008

FCC Title 47 CFR, Part 15 Class A2) / ICES-003, Issue 4

GB9254-2008, GB17625.1-2003

SAFETY: IEC 60950-1:2005 +A1:2009/ EN60950-1: 2006 +A11:2009 +A1:2010 +A12:2011

IEC 60825-1:2007 / EN 60825-1:2007 (Class 1 Laser/LED Product)

IEC 62479:2010 / EN 62479:2010

GB4943.1-2011

RoHS: EN 50581:2012

Supplementary Information:

The product herewith complies with the requirements of the EMC Directive 2004/108/EC, the Low Voltage Directive 2006/95/EC, the RoHS Directive 2011/65/EU and carries the **((** marking accordingly.

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

Additional information:

- This product is assigned a Regulatory Model Number which stays with the regulatory aspects of the design. The Regulatory Model Number is the main product identifier in the regulatory documentation and test reports, this number should not be confused with the marketing name or the product numbers.
- The product meets the requirements of EN55022 & CNS13438 Class A in which case the following applies: "Warning This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures."

Boise, Idaho USA

July 2013

For Regulatory Topics only, contact:

European Contact: Hewlett-Packard GmbH, HQ-TRE, Herrenberger Straße 140, D-71034 Böblingen, Germany

www.hp.eu/certificates

USA Contact: Hewlett-Packard, 3000 Hanover St., Palo Alto, CA 94304, U.S.A. 650-857-1501

Declaration of conformity (X585dn model)

Declaration of Conformity

according to ISO/IEC 17050-1 and EN 17050-1

Manufacturer's Name: **Hewlett-Packard Company** DoC#: BOISB-1300-01-R1

Manufacturer's Address: 11311 Chinden Boulevard

Boise, Idaho 83714-1021, USA

declares, that the product

Product Name: HP Officejet Enterprise Color MFP X585dn

Regulatory Model:1) B0ISB-1300-01

Product Accessory: B5L07A - HP Officejet Enterprise 500-sheet paper tray

Ink Cartridges: D8J03A — HP 980 STARTUP Cyan Officejet Cartridge

D8J04A — HP 980 STARTUP Magenta Officejet Cartridge

D8J05A — HP 980 STARTUP Yellow Officejet Cartridge

D8J06A — HP 980 STARTUP Black Officejet Cartridge

D8J07A — HP 980A Cyan Officejet Cartridge

D8J08A — HP 980A Magenta Officejet Cartridge

D8J09A — HP 980A Yellow Officejet Cartridge

D8J10A — HP 980A Black Officejet Cartridge

conforms to the following Product Specifications and Regulations:

EMC: CISPR 22:2008 / EN55022:2010 Class A

CISPR 24:1997 +A1:2001 +A2:2002 / EN55024:2010

EN 61000-3-2:2006 +A1:2009 +A2:2009

EN 61000-3-3:2008

FCC Title 47 CFR, Part 15 Class A2) / ICES-003, Issue 4

GB9254-2008, GB17625.1-2003

SAFETY: IEC 60950-1:2005 +A1:2009/ EN60950-1: 2006 +A11:2009 +A1:2010 +A12:2011

IEC 60825-1:2007 / EN 60825-1:2007 (Class 1 Laser/LED Product)

IEC 62479:2010 / EN 62479:2010

GB4943.1-2011

RoHS: EN 50581:2012

Supplementary Information:

The product herewith complies with the requirements of the EMC Directive 2004/108/EC, the Low Voltage Directive 2006/95/EC, the RoHS Directive 2011/65/EU and carries the **((** marking accordingly.

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

- This product is assigned a Regulatory Model Number which stays with the regulatory aspects of the design. The Regulatory Model Number is
 the main product identifier in the regulatory documentation and test reports, this number should not be confused with the marketing name or
 the product numbers.
- The product meets the requirements of EN55022 & CNS13438 Class A in which case the following applies: "Warning This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures."

Boise, Idaho USA

July 2013

For Regulatory Topics only, contact:

European Contact: Hewlett-Packard GmbH, HQ-TRE, Herrenberger Straße 140, D-71034 Böblingen, Germany

www.hp.eu/certificates

USA Contact: Hewlett-Packard, 3000 Hanover St., Palo Alto, CA 94304, U.S.A. 650-857-1501

Declaration of conformity (X585f and X585z models)

Declaration of Conformity

according to ISO/IEC 17050-1 and EN 17050-1

Manufacturer's Name: **Hewlett-Packard Company** DoC#: BOISB-1300-02-R1

Manufacturer's Address: 11311 Chinden Boulevard

Boise, Idaho 83714-1021, USA

declares, that the product

Product Name: HP Officejet Enterprise Color MFP X585f and HP Officejet Enterprise Color Flow MFP X585z

Regulatory Model:1) B0ISB-1300-02

Product Accessories: BOISB-0703-00 (Fax module)2)

B5L07A - HP Officejet Enterprise 500-sheet paper tray

Ink Cartridges: D8J03A — HP 980 STARTUP Cyan Officejet Cartridge

D8J04A — HP 980 STARTUP Magenta Officejet Cartridge

D8J05A — HP 980 STARTUP Yellow Officejet Cartridge

D8J06A — HP 980 STARTUP Black Officejet Cartridge

D8J07A — HP 980A Cyan Officejet Cartridge

D8J08A — HP 980A Magenta Officejet Cartridge

D8J09A — HP 980A Yellow Officejet Cartridge

D8J10A — HP 980A Black Officejet Cartridge

conforms to the following Product Specifications and Regulations:

EMC: CISPR 22:2008 / EN55022:2010 Class A

CISPR 24:1997 +A1:2001 +A2:2002 / EN55024:2010

EN 61000-3-2:2006 +A1:2009 +A2:2009

EN 61000-3-3:2008

FCC Title 47 CFR, Part 15 Class A31 / ICES-003, Issue 4

GB9254-2008, GB17625.1-2003

SAFETY: IEC 60950-1:2005 +A1:2009/ EN60950-1: 2006 +A11:2009 +A1:2010 +A12:2011

IEC 60825-1:2007 / EN 60825-1:2007 (Class 1 Laser/LED Product)

IEC 62479:2010 / EN 62479:2010

GB4943.1-2011

TELECOM: ES 203 021

FCC Rules and Regulations 47 CFR Part 68

RoHS: EN 50581:2012

Supplementary Information:

The product herewith complies with the requirements of the EMC Directive 2004/108/EC, the Low Voltage Directive 2006/95/EC, the RoHS Directive 2011/65/EU and carries the **f** marking accordingly.

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

- This product is assigned a Regulatory Model Number which stays with the regulatory aspects of the design. The Regulatory Model Number is the main product identifier in the regulatory documentation and test reports, this number should not be confused with the marketing name or the product numbers.
- This product uses an analog fax accessory module which Regulatory Model number is: BOISB-0703-00 as needed to meet technical regulatory requirements for the countries/regions this product will be sold.
- The product meets the requirements of EN55022 & CNS13438 Class A in which case the following applies: "Warning This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures."
- Telecom approvals and standards appropriate for the target countries/regions have been applied to this product, in addition to those listed

Boise. Idaho USA

July 2013

For Regulatory Topics only, contact:

European Contact: Hewlett-Packard GmbH, HQ-TRE, Herrenberger Straße 140, D-71034 Böblingen, Germany

www.hp.eu/certificates

USA Contact: Hewlett-Packard, 3000 Hanover St., Palo Alto, CA 94304, U.S.A. 650-857-1501

Certificate of volatility (X555 models)

Figure C-1 Certificate of volatility (X555 models) (1 of 2)

Hewlett-Packard Certificate of Volatility				
Model: HP Officejet Enterprise color SFP X555 series	e X5	rt Number: 555dn = C2S11A	A, X555xh = C2S12A	Address: Hewlett Packard Company 11311 Chinden Blvd Boise, ID 83714
		Vol	atile Memory	,
		nory (Memory whos	se contents are lost when povunction, and steps to clear the	
Type (SRAM, DRAM, etc): DRAM	Size: 1.25 GB	User Modifiable: ☐ Yes ☐ No	Function: Used for temporary storage data during scan or print job processes, and for applicat that are running on the OS.	Steps to clear memory: When the device is powered off the memory is erased.
		Non-\	/olatile Memory	
		memory (Memory	whose contents are retained unction, and steps to clear the	
Type (Flash, EEPROM, etc): SPI Flash	Size: 12 MB	User Modifiable: ☑ Yes ☐ No	Function: Contains boot code and factor product configuration data required for the device to function. User modification are limited to downloading digitally signed HP firmware images.	Steps to clear memory: There are no steps to clear this data.
Type (Flash, EEPROM, etc): EEPROM	Size: 32 KB	User Modifiable: ☐ Yes ☑ No	Function: Backup device for critical system counters and produ configuration information.	Steps to clear memory: There are no steps to clear this data.
		Ma	ass Storage	
Does the device contain m		e memory (Hard D	isk Drive, Tape Backup)?	
Type (HDD, Tape, etc): HDD (HDD is standard on xh model) Type (HDD, Tape, etc):	Size: 320 GB	User Modifiable: ☑ Yes ☐ No User Modifiable:	Etion, and steps to clear the n Function: Stores customer data, OS, applications, digitally signed firmware images, persistent data, and temporary data u for processing and system functions.	Steps to clear memory: There are several ways to erase this: 1. Erase and Unlock sed Steps to clear memory to the sed Steps to clear memory: 1. Erase and Unlock Encrypted Disk – This changes the encryption keys rendering all data unreadable. 2. Secure Storage Erase – Erases temporary files and job data by overwriting information one or three times. 3. Secure Disk Erase – Industry standard ATA Secure Erase. Overwrites all data on the HDD. 4. Secure File Erase – Erases files when jobs finish processing by overwriting them one or three times. Steps to clear memory:
SSD	8 GB	Yes □ No	See HDD function above.	See HDD Steps to clear memory above.

Figure C-2 Certificate of volatility (X555 models) (2 of 2)

	U	SB		
Does the item accept USB input and if so, for what purpose (i.e Print Jobs, device firmware updates, scan upload)? Yes No If Yes please describe below				
Description: Print jobs, HP digitally signed firmware upgrades, 3 rd party application loading, Restore encrypted backed-up system settings. USB ports can be disabled.				
Can any data other than scan ☐ Yes ☐ No If Yes please de	upload be sent to the USB devescribe below	ice)?		
	e uploaded. Back-up of encryp	ted system settings.		
	RF/F	RFID		
Does the item use RF or RFID Bluetooth) ☐ Yes ☒ No If		data including remote diagnosti	cs. (e.g. Cellular phone,	
Purpose: Wireless information	string.			
Frequency:	-	Bandwidth:		
Modulation:		Effective Radiate Power (ERF	P):	
Specifications:				
	Other Transmis	sion Capabilities		
		ess to transmit or receive any del connections)? Yes N		
Purpose:				
Frequency:		Bandwidth:		
Modulation:				
Specifications:				
	Other Ca	pabilities		
	other method of communication If Yes please describe below:	s such as a Modem to transmit	or receive any data	
Purpose:				
Specifications:				
	Author In	formation		
Name:	Title:	Email:	Business Unit:	
	Technical Marketing Engineer	@hp.com		
		L	Date Prepared: 02-14-14	

Certificate of volatility (X585 models)

Figure C-3 Certificate of volatility (X585 models) (1 of 2)

Hewlett-Packard Certificate of Volatility				
Model:		art Number:	VEOE DELOCA	Address:
HP Officejet Enterprise color MFP X585 series		585z = B5L04 <i>F</i> 585z = B5L06A	A, X585f = B5L05A,	Hewlett Packard Company 11311 Chinden Blvd
COIOI WII I 7000 SCIIC	, ,	DOSE - BSEOOR		Boise, ID 83714
	<u> </u>		atile Memory	,
Does the device contain vo	latile mei	nory (Memory who	se contents are lost when pow unction, and steps to clear the	ver is removed)?
Type (SRAM, DRAM, etc):	Size:	User Modifiable:	Function:	Steps to clear memory:
DRAM	1.75 GE	☐ Yes ☒ No	Used for temporary storage data during scan or print job	of When the device is powered
			processes, and for application	
			that are running on the OS.	
		Non-\	Volatile Memory	
Does the device contain no	on-volatile	memory (Memory	whose contents are retained v	when power is removed)?
Yes No If Yes ple Type (Flash, EEPROM, etc):	ase descr Size:	ibe the type, size, f User Modifiable:	unction, and steps to clear the Function:	s memory below Steps to clear memory:
SPI Flash	12 MB	Yes	Contains boot code and fact	tory There are no steps to clear this
			product configuration data required for the device to	data.
			function. User modifications	3
			are limited to downloading digitally signed HP firmware	
			images.	
Type (Flash, EEPROM, etc): EEPROM	Size: 36 KB	User Modifiable: ☐ Yes ☐ No	Function: Backup device for critical	Steps to clear memory: There are no steps to clear this
EEI ITOM	OO NB		system counters and produc	
			configuration information.	
		M	ass Storage	
Does the device contain m	ass stora	ge memory (Hard D	hisk Drive, Tape Backup)? ction, and steps to clear the m	nomony holow
			ction, and steps to clear the m	
Type (HDD, Tape, etc):	Size:	User Modifiable:	Function:	Steps to clear memory:
HDD, Self Encrypting,			Stores customer data, OS,	Steps to clear memory: There are several ways to
	Size:	User Modifiable:		Steps to clear memory: There are several ways to erase this:
HDD, Self Encrypting,	Size:	User Modifiable:	Stores customer data, OS, applications, digitally signed firmware images, persistent data, and temporary data us	Steps to clear memory: There are several ways to erase this: 1. Erase and Unlock Encrypted Disk – This
HDD, Self Encrypting,	Size:	User Modifiable:	Stores customer data, OS, applications, digitally signed firmware images, persistent	Steps to clear memory: There are several ways to erase this: 1. Erase and Unlock
HDD, Self Encrypting,	Size:	User Modifiable:	Stores customer data, OS, applications, digitally signed firmware images, persistent data, and temporary data us for processing and system	Steps to clear memory: There are several ways to erase this: 1. Erase and Unlock Encrypted Disk – This changes the encryption keys rendering all data unreadable.
HDD, Self Encrypting,	Size:	User Modifiable:	Stores customer data, OS, applications, digitally signed firmware images, persistent data, and temporary data us for processing and system	Steps to clear memory: There are several ways to erase this: 1. Erase and Unlock Encrypted Disk – This changes the encryption keys rendering all data unreadable. 2. Secure Storage Erase –
HDD, Self Encrypting,	Size:	User Modifiable:	Stores customer data, OS, applications, digitally signed firmware images, persistent data, and temporary data us for processing and system	Steps to clear memory: There are several ways to erase this: 1. Erase and Unlock Encrypted Disk – This changes the encryption keys rendering all data unreadable. 2. Secure Storage Erase – Erases temporary files and job data by overwriting
HDD, Self Encrypting,	Size:	User Modifiable:	Stores customer data, OS, applications, digitally signed firmware images, persistent data, and temporary data us for processing and system	Steps to clear memory: There are several ways to erase this: 1. Erase and Unlock Encrypted Disk – This changes the encryption keys rendering all data unreadable. 2. Secure Storage Erase – Erases temporary files and
HDD, Self Encrypting,	Size:	User Modifiable:	Stores customer data, OS, applications, digitally signed firmware images, persistent data, and temporary data us for processing and system	Steps to clear memory: There are several ways to erase this: 1. Erase and Unlock Encrypted Disk – This changes the encryption keys rendering all data unreadable. 2. Secure Storage Erase – Erases temporary files and job data by overwriting information one or three times. 3. Secure Disk Erase –
HDD, Self Encrypting,	Size:	User Modifiable:	Stores customer data, OS, applications, digitally signed firmware images, persistent data, and temporary data us for processing and system	Steps to clear memory: There are several ways to erase this: 1. Erase and Unlock Encrypted Disk – This changes the encryption keys rendering all data unreadable. 2. Secure Storage Erase – Erases temporary files and job data by overwriting information one or three times. 3. Secure Disk Erase – Industry standard ATA
HDD, Self Encrypting,	Size:	User Modifiable:	Stores customer data, OS, applications, digitally signed firmware images, persistent data, and temporary data us for processing and system	Steps to clear memory: There are several ways to erase this: 1. Erase and Unlock Encrypted Disk – This changes the encryption keys rendering all data unreadable. 2. Secure Storage Erase – Erases temporary files and job data by overwriting information one or three times. 3. Secure Disk Erase – Industry standard ATA Secure Erase. Overwrites all data on the HDD.
HDD, Self Encrypting,	Size:	User Modifiable:	Stores customer data, OS, applications, digitally signed firmware images, persistent data, and temporary data us for processing and system	Steps to clear memory: There are several ways to erase this: 1. Erase and Unlock Encrypted Disk – This changes the encryption keys rendering all data unreadable. 2. Secure Storage Erase – Erases temporary files and job data by overwriting information one or three times. 3. Secure Disk Erase – Industry standard ATA Secure Erase. Overwrites all data on the HDD. 4. Secure File Erase –
HDD, Self Encrypting,	Size:	User Modifiable:	Stores customer data, OS, applications, digitally signed firmware images, persistent data, and temporary data us for processing and system	Steps to clear memory: There are several ways to erase this: 1. Erase and Unlock Encrypted Disk – This changes the encryption keys rendering all data unreadable. 2. Secure Storage Erase – Erases temporary files and job data by overwriting information one or three times. 3. Secure Disk Erase – Industry standard ATA Secure Erase. Overwrites all data on the HDD. 4. Secure File Erase – Erases files when jobs finish processing by
HDD, Self Encrypting,	Size:	User Modifiable:	Stores customer data, OS, applications, digitally signed firmware images, persistent data, and temporary data us for processing and system	Steps to clear memory: There are several ways to erase this: 1. Erase and Unlock Encrypted Disk – This changes the encryption keys rendering all data unreadable. 2. Secure Storage Erase – Erases temporary files and job data by overwriting information one or three times. 3. Secure Disk Erase – Industry standard ATA Secure Erase. Overwrites all data on the HDD. 4. Secure File Erase – Erases files when jobs
HDD, Self Encrypting,	Size:	User Modifiable:	Stores customer data, OS, applications, digitally signed firmware images, persistent data, and temporary data us for processing and system functions.	Steps to clear memory: There are several ways to erase this: 1. Erase and Unlock Encrypted Disk – This changes the encryption keys rendering all data unreadable. 2. Secure Storage Erase – Erases temporary files and job data by overwriting information one or three times. 3. Secure Disk Erase – Industry standard ATA Secure Erase. Overwrites all data on the HDD. 4. Secure File Erase – Erases files when jobs finish processing by overwriting them one or
HDD, Self Encrypting, SATA	Size: 320 GB	User Modifiable: ☑ Yes ☐ No	Stores customer data, OS, applications, digitally signed firmware images, persistent data, and temporary data us for processing and system functions.	Steps to clear memory: There are several ways to erase this: 1. Erase and Unlock Encrypted Disk – This changes the encryption keys rendering all data unreadable. 2. Secure Storage Erase – Erases temporary files and job data by overwriting information one or three times. 3. Secure Disk Erase – Industry standard ATA Secure Erase. Overwrites all data on the HDD. 4. Secure File Erase – Erases files when jobs finish processing by overwriting them one or three times.
HDD, Self Encrypting, SATA Does the item accept USB	Size: 320 GB	User Modifiable: ☑ Yes ☐ No if so, for what purpibe below	Stores customer data, OS, applications, digitally signed firmware images, persistent data, and temporary data us for processing and system functions. USB cose (i.e Print Jobs, device firms)	Steps to clear memory: There are several ways to erase this: 1. Erase and Unlock Encrypted Disk – This changes the encryption keys rendering all data unreadable. 2. Secure Storage Erase – Erases temporary files and job data by overwriting information one or three times. 3. Secure Disk Erase – Industry standard ATA Secure Erase. Overwrites all data on the HDD. 4. Secure File Erase – Erases files when jobs finish processing by overwriting them one or

Figure C-4 Certificate of volatility (X585 models) (2 of 2)

system settings. USB ports can be disabled.
Can any data other than scan upload be sent to the USB device)?
☑ Yes ☐ No If Yes please describe below
Diagnostic service logs can be uploaded. Back-up of encrypted system settings.
RF/RFID

RF/RFID			
Does the item use RF or RFID for receive or transmit of any data including remote diagnostics. (e.g. Cellular phone,			
Bluetooth) ☐ Yes ☒ No If Yes please describe below			
Purpose: Wireless information string.			
Frequency: Bandwidth:			
Modulation: Effective Radiate Power (ERP):			
Specifications:			

Other Transmission Capabilities		
Does the device employ any other methods of non-wired access to transmit or receive any data whatsoever (e.g. anything other than standard hard wired TCP/IP, direct USB, or parallel connections)? Yes No If Yes please describe below:		
Purpose:		
Frequency:	Bandwidth:	
Modulation:	Effective Radiate Power (ERP):	
Specifications:		

Other Capabilities		
Does the device employ any other method of communications such as a Modem to transmit or receive any data		
whatsoever? 🛛 Yes 🗌 No If Yes please describe below:		
Purpose: Fax modem – send/receive fax data		
Specifications: 33.6 kbs		

Author Information				
Name:	Title: Technical Marketing Engineer	Email: @hp.com	Business Unit:	
			Date Prepared: 02-14-14	

Safety statements

Canada - Industry Canada ICES-003 Compliance Statement

CAN ICES-3(A)/NMB-3(A)

VCCI statement (Japan)

この装置は、クラスA情報技術装置です。この装置を家庭環境で使用すると電波妨害を引き起こすことがあります。この場合には使用者は適切な対策を講ずるよう要求されることがあります。

VCCI-A

Power cord instructions

Make sure your power source is adequate for the product voltage rating. The voltage rating is on the product label. The product uses either 100-127 Vac or 220-240 Vac and 50/60 Hz.

Connect the power cord between the product and a grounded AC outlet.

⚠ CAUTION: To prevent damage to the product, use only the power cord that is provided with the product.

Power cord statement (Japan)

製品には、同梱された電源コードをお使い下さい。同梱された電源コードは、他の製品では使用出来ません。

EMC statement (China)

此为A级产品,在生活环境中,该产品可能会造成无线电干扰。在这种情况下,可能需要用户对其干扰采取切实可行的措施。

EMC statement (Korea)

A급 기기	이 기기는 업무용(A급)으로 전자파적합등록을 한 기			
	기이오니 판매자 또는 사용자는 이점을 주의하시기			
	바라며, 가정 외의 지역에서 사용하는 것을 목적으			
	로 합니다.			

ENWW Safety statements 309

EMI statement (Taiwan)

警告使用者:

這是甲類的資訊產品,在居住的環境中使用時,可能會造成射頻 干擾,在這種情況下,使用者會被要求採取某些適當的對策。

GS statement (Germany)

Das Gerät ist nicht für die Benutzung im unmittelbaren Gesichtsfeld am Bildschirmarbeitsplatz vorgesehen. Um störende Reflexionen am Bildschirmarbeitsplatz zu vermeiden, darf dieses Produkt nicht im unmittelbaren Gesichtsfeld platziert warden.

Das Gerät ist kein Bildschirmarbeitsplatz gemäß BildscharbV. Bei ungünstigen Lichtverhältnissen (z. B. direkte Sonneneinstrahlung) kann es zu Reflexionen auf dem Display und damit zu Einschränkungen der Lesbarkeit der dargestellten Zeichen kommen.

Substances Table (China)

有毒有害物质表

根据中国电子信息产品污染控制管理办法的要求而出台



	有毒有害物质和元素					
	铅	汞	镉	六价铬	多溴联苯	多溴二苯醚
部件名称	(Pb)	(Hg)	(Cd)	(Cr(VI))	(PBB)	(PBDE)
打印引擎	Χ	0	0	0	0	0
复印机组件	Х	0	0	0	0	0
控制面板	0	0	0	0	0	0
塑料外壳	0	0	0	0	0	0
格式化板组件	Х	0	0	0	0	0
碳粉盒	Х	0	0	0	0	0

0614

0:表示在此部件所用的所有同类材料中,所含的此有毒或有害物质均低于 SJ/T11363-2006 的限制要求。

X:表示在此部件所用的所有同类材料中,至少一种所含的此有毒或有害物质高于 SJ/T11363-2006 的限制要求。

注:引用的"环保使用期限"是根据在正常温度和湿度条件下操作使用产品而确定的。

SEPA Ecolabel User Information (China)

中国环境标识认证产品用户说明

噪声大于 63.0 dB(A)的办公设备不宜放置于办公室内,请在独立的隔离区域使用。

如需长时间使用本产品或打印大量文件,请确保在通风良好的房间内使用。

如您需要确认本产品处于零能耗状态,请按下电源关闭按钮,并将插头从电源插座断开。

您可以使用再生纸,以减少资源耗费。

ENWW Safety statements 311

Restriction on Hazardous Substances statement (India)

This product complies with the "India E-waste Rule 2011" and prohibits use of lead, mercury, hexavalent chromium, polybrominated biphenyls or polybrominated diphenyl ethers in concentrations exceeding 0.1 weight % and 0.01 weight % for cadmium, except for the exemptions set in Schedule 2 of the Rule.

Restriction on Hazardous Substances statement (Turkey)

Türkiye Cumhuriyeti: EEE Yönetmeliğine Uygundur

Restriction on Hazardous Substances statement (Ukraine)

Обладнання відповідає вимогам Технічного регламенту щодо обмеження використання деяких небезпечних речовин в електричному та електронному обладнанні, затвердженого постановою Кабінету Міністрів України від 3 грудня 2008 № 1057

Eurasian Conformity (Belarus, Kazakhstan, Russia)



Производитель: Hewlett-Packard Company, 3000 Hanover Street, Palo Alto, California 94304, США.

НР Россия: ЗАО "Хьюлетт-Паккард А.О.", 125171, Россия, г. Москва, Ленинградское шоссе, 16A, стр.3, тел/факс: +7 (495) 797 35 00, +7 (495) 287 89 05

НР Беларусь: ИООО «Хьюлетт-Паккард Бел», 220030, Беларусь, г. Минск, ул. Интернациональная, 36-1, офис 722-723, тел.: +375 (17) 392 28 18, факс: +375 (17) 392 28 21

НР Казахстан: ТОО «Хьюлетт-Паккард (К)», 050040, Казахстан, г. Алматы, Бостандыкский район, ул. Тимирязева, 28B, 1 этаж, тел./факс: +7 (727) 355 35 50, +7 (727) 355 35 51

Өндіруші: Hewlett-Packard Company, 3000 Hanover Street, Palo Alto, Калифорния 94304, АҚШ

НР Қазақстан: ЖШС «Хьюлетт-Паккард (К)», 050040, Қазақстан, Алматы қ., Бостандық ауданы, Тимирязев к-сі, 28В, тел./факс: +7 (727) 355 35 50, +7 (727) 355 35 51

Additional statements for telecom (fax) products

EU Statement for Telecom Operation

This product is intended to be connected to the analog Public Switched Telecommunication Networks (PSTN) of European Economic Area (EEA) countries/regions.

It meets requirements of EU R&TTE Directive 1999/5/EC (Annex II) and carries appropriate CE conformity marking.

For more details see Declaration of Conformity issued by the manufacturer in another section of this manual.

However due to differences between individual national PSTNs the product may not guarantee unconditional assurance of successful operation on every PSTN termination point. Network compatibility depends on the correct setting being selected by the customer in preparation of its connection to the PSTN. Please follow the instructions provided in the user manual.

If you experience network compatibility issues, please contact your equipment supplier or Hewlett-Packard help desk in the country/region of operation.

Connecting to a PSTN termination point may be the subject of additional requirements set out by the local PSTN operator.

New Zealand Telecom Statements

The grant of a Telepermit for any item of terminal equipment indicates only that Telecom has accepted that the item complies with minimum conditions for connection to its network. It indicates no endorsement of the product by Telecom, nor does it provide any sort of warranty. Above all, it provides no assurance that any item will work correctly in all respects with another item of Telepermitted equipment of a different make or model, nor does it imply that any product is compatible with all of Telecom's network services.

This equipment may not provide for the effective hand-over of a call to another device connected to the same line.

This equipment shall not be set up to make automatic calls to the Telecom "111" Emergency Service.

This product has not been tested to ensure compatibility with the FaxAbility distinctive ring service for New Zealand.

Additional FCC statement for telecom products (US)

This equipment complies with Part 68 of the FCC rules and the requirements adopted by the ACTA. On the back of this equipment is a label that contains, among other information, a product identifier in the format US:AAAEQ##TXXXX. If requested, this number must be provided to the telephone company.

The REN is used to determine the quantity of devices, which may be connected to the telephone line. Excessive RENs on the telephone line may result in the devices not ringing in response to an incoming call. In most, but not all, areas, the sum of the RENs should not exceed five (5.0). To be certain of the number of devices that may be connected to the line, as determined by the total RENs, contact the telephone company to determine the maximum REN for the calling area.

This equipment uses the following USOC jacks: RJ11C.

An FCC-compliant telephone cord and modular pluq is provided with this equipment. This equipment is designed to be connected to the telephone network or premises wiring using a compatible modular jack, which is Part 68 compliant. This equipment cannot be used on telephone company-provided coin service. Connection to Party Line Service is subject to state tariffs.

If this equipment causes harm to the telephone network, the telephone company will notify you in advance that temporary discontinuance of service may be required. If advance notice is not practical, the telephone company will notify the customer as soon as possible. Also, you will be advised of your right to file a complaint with the FCC if you believe it is necessary.

The telephone company may make changes in its facilities, equipment, operations, or procedures that could affect the operation of the equipment. If this happens, the telephone company will provide advance notice in order for you to make the necessary modifications in order to maintain uninterrupted service.

If trouble is experienced with this equipment, please see the numbers in this manual for repair and (or) warranty information. If the trouble is causing harm to the telephone network, the telephone company may request you remove the equipment from the network until the problem is resolved.

The customer can do the following repairs: Replace any original equipment that came with the device. This includes the toner cartridge, the supports for trays and bins, the power cord, and the telephone cord. It is recommended that the customer install an AC surge arrestor in the AC outlet to which this device is connected. This is to avoid damage to the equipment caused by local lightning strikes and other electrical surges.

Telephone Consumer Protection Act (US)

The Telephone Consumer Protection Act of 1991 makes it unlawful for any person to use a computer or other electronic device, including fax machines, to send any message unless such message clearly contains, in a margin at the top or bottom of each transmitted page or on the first page of the transmission, the date and time it is sent and an identification of the business, other entity, or individual sending the message and the telephone number of the sending machine or such business, or other entity, or individual. (The telephone number provided cannot be a 900 number or any other number for which charges exceed local or long distance transmission charges).

Industry Canada CS-03 requirements

Notice: The Industry Canada label identifies certified equipment. This certification means the equipment meets certain telecommunications network protective, operational, and safety requirements as prescribed in the appropriate Terminal Equipment Technical Requirement document(s). The Department does not guarantee the equipment will operate to the user's satisfaction. Before installing this equipment, users should ensure that it is permissible for the equipment to be connected to the facilities of the local telecommunications company. The equipment must also be installed using an acceptable method of connection. The customer should be aware that compliance with the above conditions may not prevent degradation of service in some situations. Repairs to certified equipment should be coordinated by a representative designated by the supplier. Any repairs or alterations made by the user to this equipment, or equipment malfunctions, may give the telecommunications company cause to request the user to disconnect the equipment. Users should ensure for their own protection that the electrical ground connections of the power utility, telephone lines, and internal metallic water pipe system, if present, are connected together. This precaution can be particularly important in rural areas.

CAUTION: Users should not attempt to make such connections themselves, but should contact the appropriate electric inspection authority, or electrician, as appropriate. The Ringer Equivalence Number (REN) of this device is 0.0.

This product meets the applicable Industry Canada technical specifications. / Le présent matériel est conforme aux specifications techniques applicables d'Industrie Canada.

Notice: The Ringer Equivalence Number (REN) assigned to each terminal device provides an indication of the maximum number of terminals allowed to be connected to a telephone interface. The termination on an interface may consist of any combination of devices subject only to the requirement that the sum of the Ringer Equivalence Number of all the devices does not exceed five (5.0). / L'indice d'équivalence de la

sonnerie (IES) sert à indiquer le nombre maximal de terminaux qui peuvent être raccordés à une interface téléphonique. La terminaison d'une interface peut consister en une combinaison quelconque de dispositifs, à la seule condition que la somme d'indices d'équivalence de la sonnerie de tous les dispositifs n'excède pas

The standard connecting arrangement code (telephone jack type) for equipment with direct connections to the telephone network is CA11A.

Vietnam Telecom wired/wireless marking for ICTQC Type approved products



Japan Telecom Mark



Index

A accessories installed, information 59 acoustic specifications 292 Administration menu, control panel 172	Display Settings menu 211 Fax Settings menu (X585) 195 General Settings menu 174 Manage Supplies menu 213 Manage Trays menu 217 Network Settings menu 219 Print Options menu 210	Display Settings menu, control panel 211 disposal, end-of-life 297 document conventions iii document feeder jams 239 paper-feeding problems 237
B	Print Settings menu 207	_
Backup/Restore menu, control	Reports menu 172	E
panel 233	Scan/Digital Send Settings menu	electrical specifications 292
batteries included 297	(X585) 185	electronic hardware recycling 298
bin, output	Service menu 235	end of print job period 6
jams, clearing 252	Troubleshooting menu 230	end-of-life disposal 297
C	USB Firmware Upgrade menu	engine control system operations 7
Calibrate/Cleaning menu, control	235	environmental stewardship
panel 233	control panel diagnostic flowcharts	program 295
calibration period 4	50	Eurasian conformity 312 event log
cautions iii	control-panel menus 172	clear 60
certificate of volatility 305, 307	conventions, document iii	information 59
clean the paper path	Copy Settings menu (X585 only), control panel 179	print 59
cleaning page printing 164	•	view 59
cleaning	copying	event-log messages 59
paper path 236	sequence 36 current control, fax line 38	event-tog messages 33
CO operations 37	customer support	F
components	online 290	factory-set defaults, restoring 262
diagrams of 154	ontine 290	fax
configuration pages	D	card 37
information 59	data path	data path 38
printing 57	fax 38	factory-set defaults, restoring
connectivity	date	262
solving problems 256	codes for firmware 59	flash memory storage 39
connectivity LED 149	manufacture 58	functions 37
control panel	defaults, restoring 262	line current control 38
Administration menu 172	determine problem source 45	operations 37
Backup/Restore menu 233	diagnostics	page storage 39
Calibrate/Cleaning menu 233	LED 149	PSTN operations 37
Copy Settings menu (X585	networks 225	ring detect 38
only) 179		safety isolation 38

ENWW Index 317

safety protection circuitry 38	J	Print Settings 207
subsystem 37	jack locations 154	Reports 172
fax card	jams	Scan/Digital Send Settings
CODEC 37	auto-navigation 238	(X585) 185
DSP 37	causes of 238	Service 235
fax subsystem 37	diagnostic test for 151	Troubleshooting 230
regional versions 37	document feeder 239	USB Firmware Upgrade 235
ring detect 38	ink collection unit 248	mercury-free product 297
fax security	output bin, clearing 252	model number 58
security features, computer 37	paper path, clearing 247	
security features, network 37	Japanese VCCI statement 309	N
Fax Settings menu (X585), control	Jetdirect print server	Network Settings menu, control
panel 195	lights 149	panel 219
fax subsystem	tights 113	networks
fax card 37	K	diagnostics 225
operations 37	Korean EMC statement 309	HP embedded Jetdirect
FCC regulations 294	Roledii Elife Statement 303	configuration page 58
firmware	1	link speed settings 229
	LEDs. See lights	security features 37
date codes 59	left door	no control panel sound 54
version information 58	jams, clearing 247	notes iii
flash memory, fax 39	license, software 286	notes in
flowcharts	lights	0
troubleshooting 45	formatter 149	
formatter lights 149	troubleshooting with 149	online support 290
		operation sequence 4
	line current control, fax 38	operations
General Settings menu, control panel 174	link speed settings 229	engine control system 7 fax 37
	M	fax card in subsystem 37
H	Manage Supplies menu, control	fax subsystem 37
hardware integration pocket (HIP) is	panel 213	fax, PSTN 37
not functioning 56	Manage Trays menu, control panel	paper-handling system 17
home button is unresponsive 55	217	PSTN 37
HP Customer Care 290	material restrictions 297	scanner system 35
HP embedded Jetdirect page 58	Material Safety Data Sheet (MSDS)	output bin
HP Jetdirect print server	298	jams, clearing 252
configuration page 58	memory	
lights 149	flash, fax 39	P
5	information 57	paper
I .	menus, control panel	jams 238
individual component disagnostics	Administration 172	paper-handling system
149	Backup/Restore 233	operations 17
ink collection unit	Calibrate/Cleaning 233	paper jams
jams 248	Copy Settings (X585 only) 179	document feeder 239
installation	Display Settings 211	ink collection unit 248
verify for optional accessories	Fax Settings (X585) 195	paper path
57	General Settings 174	diagnostic test 151
IPv4 information 58	Manage Supplies 213	jams, clearing 247
IPv6 information 58	Manage Trays 217	paper pickup problems
	Network Settings 219	solving 237
	Print Options 210	30g 23 ,

318 Index ENWW

paper-handling system	restore the service ID 262	scanner tests 152
sensors 17	restoring factory-set defaults 262	scanner X585 152
physical specifications 292	ring detect	theory of operations
plug/jack locations 154	fax card 38	engine control system 7
port configuration information 58	RING operations 37	paper-handling system 17
port locations 154		TIP operations 37
power	S	tips iii
consumption 292	safety	touchscreen blank, white, or dim (no
fax line current control 38	-protection circuitry, fax 38	image) 51
	isolation, fax 38	3 ·
power subsystem 46		touchscreen has an unresponsive
power supply	Scan/Digital Send Settings menu	zone 53
troubleshooting 46	(X585), control panel 185	touchscreen is slow to respond 52
power-on	scanner	Tray 1
scanner sequence 35	tests X585 152	jams, clearing 244
power-on troubleshooting	security features	tray 1
overview 46	computer 37	pickup-and-feed system
preboot menu options 164	network 37	operations 17
Print Options menu, control panel	security settings information 58	Tray 2
210	sensors	jams, clearing 251, 253
print preparation period 5	paper-handling operations 17	tray 2
print quality	Service menu, control panel 235	paper-handling operations 17
built-in troubleshooting pages	servicing operations 4	tray selection - use requested tray
156	settings	217
test pages 156	factory-set defaults, restoring	trays
print quality page	262	jams, clearing 251, 253
· · · · · · · · · · · · · · · · · · ·	size specifications, product 292	
interpreting 156	software	paper-handling system
printing 156		operations 17
print quality troubleshooting 156	software license agreement 286	troubleshooting
Print Settings menu, control panel	solving	checklist 42
207	network problems 256	clean the paper path 164
Print Test Page 177	USB direct-connect problems	configuration pages for 57
printing period 5	256	control panel checks 47
problem-solving	specifications	flowchart 45
event-log messages 59	electrical and acoustic 292	jams 238
networks 225	physical 292	lights, using 149
no response 254	startup period 4	network problems 256
slow response 254	storing	paper feed problems 237
product	fax pages in flash memory 39	power 46
fax, functions 37	support	process 45
product cold reset 263	online 290	scanner calibration 47
PSTN operations 37		scanning subsystem (M880) 47
1 5 TW operations 57	T	USB direct-connect problems
R	Taiwan EMI statement 310	256
recycling	TCP/IP information 58	Troubleshooting menu, control
electronic hardware 298	technical support	<u> </u>
	online 290	panel 230
HP printing supplies returns and		
environmental program 296	tests	U
regional versions	networks 225	understand lights on the formatter
fax card 37	paper path 151	formatter lights 149
Reports menu, control panel 172		

ENWW Index 319

```
understand the lights on the
 formatter
   connectivity LED 150
   heartbeat LED 149
  HP Jetdirect LEDs 150
USB Firmware Upgrade menu, control
 panel 235
Use Requested Tray 217
version, hardware firmware 58
W
warnings iii
warranty
   customer self repair 289
  license 286
   product 278
waste disposal 297
Web sites
   customer support 290
   Material Safety Data Sheet
    (MSDS) 298
```

320 Index ENWW

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