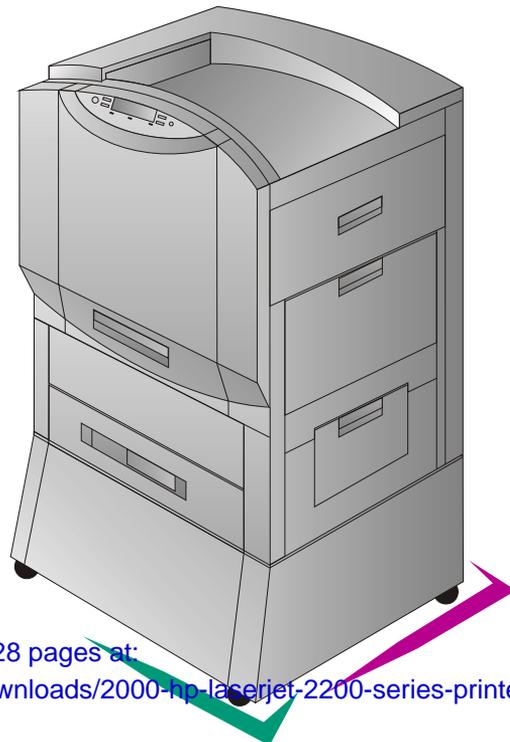


Color 
LaserJet™
8500/8550 Printer Family

Service Manual



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HP Color LaserJet 8500/8550 Printer Family

Service Manual_____

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Safety Information

WARNING
Electrical Shock Hazard

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

Table of Contents

1 Product information

Chapter contents	19
Introduction	21
Printer features	22
Specifications	24
Site requirements	27
Media requirements	29
Identification (model and serial numbers)	38
Printer Information	39
Safety information	46

2 Service approach

Chapter contents	59
Introduction	61
Parts and supplies	61
Ordering	62
Technical assistance	64
Warranty	69

3 Operational overview

Chapter contents	71
Verifying package contents	73
Verifying the cables are installed	74
Connecting the printer to the network	76
Changing the printer control panel overlay	79
Printer control panel layout	80
Menu maps	82
Selecting the display language	97
Installing the consumables	98
Configuring input trays	103
Verifying the printer is installed correctly	105
Verifying DIMM installation	106
Duplex registration (HP Color LaserJet 8550)	107
Booklet printing	109
HP TonerGauge (HP Color LaserJet 8550)	110

4 Printer maintenance

Chapter contents	111
Cleaning procedures	113
Printer consumables	118

5 Theory of operation

Chapter contents	133
Introduction	135
Color theory	138
Image formation	141
Consumable detection mechanisms	154
Electrical systems	164
Mechanical systems	169
Paper path	178
Printer timing	192
EPH controller board	199
Duplexer	199
2,000-sheet input unit	199
Multi-bin mailbox	205
3,000-sheet stapler/stacker	211

6 Removal and replacement

Chapter contents	217
Introduction	222
Maintenance units	224
Doors and covers	225
Top assemblies	245
Front assemblies	251
Left assemblies	253
Right assemblies	261
Rear assemblies	270
2,000-sheet input unit	298
Multi-bin mailbox	314
3,000-sheet stapler/stacker and 3,000-sheet stacker	338

7 Troubleshooting

Chapter contents	363
Pre-troubleshooting checklist	367
Printer message troubleshooting	368
Aids to troubleshooting	415
Paper path troubleshooting	433
Image formation troubleshooting	438
Image defects troubleshooting	441
Color balance adjustment	457
Repetitive defects troubleshooting	462
Repetitive defects troubleshooting	463
2,000-sheet input unit troubleshooting	469
Multi-bin mailbox troubleshooting	477
3,000-sheet stapler/stacker troubleshooting	482
Communications troubleshooting	502
Diagrams	503

8 Parts and diagrams

Chapter contents	509
Overview	511
Ordering parts	511
Illustrations and parts lists	516
Numerical parts list	574
Alphabetical parts list	587

Index

List of Figures

Figure 1.	Space requirements	28
Figure 2.	Example of printer model number and serial number label (110 V and 220 V).	38
Figure 3.	Front view	41
Figure 4.	Rear view	42
Figure 5.	Formatter assemblies	43
Figure 6.	Media-handling accessories and options	44
Figure 7.	Contents of printer box	73
Figure 8.	Power cord connection	74
Figure 9.	C-link and power cables connections	75
Figure 10.	Network connections	76
Figure 11.	Parallel cable connection	78
Figure 12.	Changing the printer control panel overlay	79
Figure 13.	Location of printer control panel features	80
Figure 14.	Consumables installation	98
Figure 15.	DIMM slot configuration	106
Figure 16.	Duplex registration	107
Figure 17.	Removing the toner catch tray cover	116
Figure 18.	Cleaning the toner catch tray	117
Figure 19.	Location of consumables in printer	118
Figure 20.	Contents of transfer kit	120
Figure 21.	Contents of drum kit	124
Figure 22.	Contents of fuser kit	127
Figure 23.	Cross-section view of internal components	136
Figure 24.	Image formation	141
Figure 25.	Electrostatic latent image formation block	142
Figure 26.	Preconditioning exposure	143
Figure 27.	Primary charging of imaging drum	144
Figure 28.	Black toner cartridge (left) and color toner cartridge (right) development	145
Figure 29.	Primary transfer	146
Figure 30.	Post charging	147
Figure 31.	Secondary transfer	148
Figure 32.	Separation	149
Figure 33.	Cleaning roller charging	150
Figure 34.	Transfer drum cleaning	151
Figure 35.	Imaging drum cleaning block	152
Figure 36.	Fusing the toner	153

Figure 37.	Waste toner level detection	155
Figure 38.	Color toner level detection	157
Figure 39.	Color toner lever detection	158
Figure 40.	Density sensor	160
Figure 41.	Transfer belt control	161
Figure 42.	Cleaning roller control.	162
Figure 43.	Carousel control	163
Figure 44.	Power distribution circuit diagram.	164
Figure 45.	Power Save circuit diagram	165
Figure 46.	High-voltage power supply circuit.	168
Figure 47.	Laser/scanner.	170
Figure 48.	Printer motors and heaters.	171
Figure 49.	Carousel motor (M1).	172
Figure 50.	Drum motor (M2)	173
Figure 51.	Cartridge motor (M3)	174
Figure 52.	Main motor (M4)	175
Figure 53.	Pick-up motor (M5)	176
Figure 54.	Paper path	178
Figure 55.	Tray 2 and 3 pick-up.	181
Figure 56.	Tray 1 pick-up.	183
Figure 57.	Printer sensors	184
Figure 58.	Printer switches	186
Figure 59.	Printer clutches and solenoids	189
Figure 60.	Fusing and delivery unit	191
Figure 61.	Timing chart for WAIT period (1 of 2)	193
Figure 62.	Timing chart for WAIT period (2 of 2)	194
Figure 63.	Timing chart, printing full-color letter-sized page (1 of 2)	195
Figure 64.	Timing chart, printing full-color letter-sized page (2 of 2)	196
Figure 65.	Timing chart, printing full-color 11-by-17-inch page (1 of 2)	197
Figure 66.	Timing chart, printing full-color 11-by-17 inch page (2 of 2)	198
Figure 67.	2,000-sheet input unit sensors, switches, clutches, and motors	200
Figure 68.	2,000-sheet input unit paper path.	204
Figure 69.	Multi-bin mailbox cabling	207
Figure 70.	Multi-bin mailbox sensors.	208
Figure 71.	Multi-bin mailbox paper path	210
Figure 72.	C-link cabling	212
Figure 73.	Stapler/stacker paper path and sensors.	215
Figure 74.	Stacker paper path and sensors.	216

Figure 75.	Orientation of printer and accessories: top, front, and right	225
Figure 76.	Orientation of printer and accessories: rear and left	226
Figure 77.	Attachment bracket, HP Color LaserJet 8550 MFP printer	227
Figure 78.	Locking pins	227
Figure 79.	Removing the front cover	228
Figure 80.	Front right cover	229
Figure 81.	Inside left panel	230
Figure 82.	Filler panel for tray 2	231
Figure 83.	Screws behind left door	232
Figure 84.	Screws behind right door	232
Figure 85.	Connector on top cover	233
Figure 86.	Left door and strap	234
Figure 87.	Screws on left rear cover	235
Figure 88.	Screws on upper left door	236
Figure 89.	Stopper hinges on lower left cover	237
Figure 90.	Connectors on the right upper door	238
Figure 91.	E-ring	239
Figure 92.	Spring on right cover subassembly	240
Figure 93.	Right rear cover	241
Figure 94.	Screws on the right lower cover	242
Figure 95.	Plate, HP Color LaserJet 8550 MFP printer	243
Figure 96.	Rear cover	244
Figure 97.	Bottom of the control panel	246
Figure 98.	Laser/scanner shield	247
Figure 99.	Scanner unit	248
Figure 100.	Upper airflow vent	249
Figure 101.	Face-down exit sensor rail	249
Figure 102.	Face-down output assembly	250
Figure 103.	Toner lock sensor and color cartridge sensor	251
Figure 104.	Subrelay PCA	252
Figure 105.	Formatter board	254
Figure 106.	Connector on formatter board	256
Figure 107.	Back side of formatter board	256
Figure 108.	Feeder assembly	257
Figure 109.	Face-up solenoid (1 of 2)	258
Figure 110.	Face-up solenoid (2 of 2)	259
Figure 111.	Screws on the face-up exit assembly	260
Figure 112.	Tray 1	261
Figure 113.	Pick-up roller	262
Figure 114.	Registration roller assembly (front)	263
Figure 115.	Registration roller assembly (back)	264

Figure 116.	Connectors on registration roller assembly	265
Figure 117.	Density sensor	266
Figure 118.	Paper pick-up assembly	267
Figure 119.	Tray 1 pick-up assembly (1 of 2)	268
Figure 120.	Tray 1 pick-up assembly (2 of 2)	269
Figure 121.	Rear of printer with cover removed	270
Figure 122.	Rear of printer with formatter pan removed	271
Figure 123.	Formatter pan	272
Figure 124.	Formatter pan (left side)	273
Figure 125.	Fan 1	274
Figure 126.	Fan 2	275
Figure 127.	Power supply	276
Figure 128.	Controller board, HP Color LaserJet 8550 MFP printer	277
Figure 129.	Controller board, HP Color LaserJet 8500 printer	278
Figure 130.	ECO board	279
Figure 131.	Cartridge motor	280
Figure 132.	Main motor	281
Figure 133.	Carousel motor PCA	282
Figure 134.	Fans 1 and 2 housing assemblies	283
Figure 135.	Carousel motor	284
Figure 136.	Lower air duct	285
Figure 137.	Screws on the delivery drive assembly	286
Figure 138.	Access to main gear assembly	287
Figure 139.	Developer/imaging drum bias supply, HP Color LaserJet 8550 printer	288
Figure 140.	Developer/imaging drum bias supply	289
Figure 141.	Post charger HV module	290
Figure 142.	High-voltage power supply	291
Figure 143.	Cleaning roller HV module	292
Figure 144.	Main relay PCA	293
Figure 145.	Drum/cartridge drive assembly	294
Figure 146.	Separation discharge high-voltage converter	295
Figure 147.	Plate over media size sensing PCAs	296
Figure 148.	Media size sensing PCAs	297
Figure 149.	Front cover of the 2,000-sheet input unit	299
Figure 150.	Back cover removal	300
Figure 151.	Left cover removal	301
Figure 152.	Vertical transfer unit	302
Figure 153.	Right cover with VTU removed	304
Figure 154.	Tray 4 removal	305
Figure 155.	Paper pick-up assembly	306
Figure 156.	Controller PCA	307
Figure 157.	Screw on front LED PCA assembly	308

Figure 158.	Front LED PCA	308
Figure 159.	Power supply	309
Figure 160.	Main drive assembly	310
Figure 161.	Paper quantity switch assembly	311
Figure 162.	Paper size switch assembly	312
Figure 163.	Tension springs	313
Figure 164.	Front and back covers	315
Figure 165.	Top cover	316
Figure 166.	Power supply	317
Figure 167.	Paper bins	318
Figure 168.	Flipper assembly (1 of 3)	319
Figure 169.	Flipper assembly (2 of 3)	319
Figure 170.	Flipper assembly (3 of 3)	320
Figure 171.	Delivery head motor	321
Figure 172.	Transport belt motor	322
Figure 173.	Input paper guide (1 of 2)	323
Figure 174.	Input paper guide (2 of 2)	324
Figure 175.	Metallic tape and housing assembly (1 of 2)	325
Figure 176.	Metallic tape and housing assembly (2 of 2)	326
Figure 177.	Controller PCA (1 of 2)	327
Figure 178.	Controller PCA (2 of 2)	328
Figure 179.	Anti-curl strings (1 of 2)	329
Figure 180.	Anti-curl strings (2 of 2)	330
Figure 181.	Delivery head assembly (1 of 4)	331
Figure 182.	Delivery head assembly (2 of 4)	332
Figure 183.	Delivery head assembly (3 of 4)	332
Figure 184.	Delivery head assembly (4 of 4)	333
Figure 185.	Interlock switch	334
Figure 186.	Diagnostic LED PCA	335
Figure 187.	User status LED PCA	336
Figure 188.	Attachment assembly	337
Figure 189.	Bins removal	339
Figure 190.	Front and back covers removal	340
Figure 191.	Foot cover removal	341
Figure 192.	Stapler door assembly and controller PCA cover removal	342
Figure 193.	Flipper assembly removal (1 of 2)	343
Figure 194.	Flipper assembly removal (2 of 2)	344
Figure 195.	Carriage assembly removal (1 of 2)	345
Figure 196.	Carriage assembly removal (2 of 2)	346
Figure 197.	Accumulator assembly removal (1 of 2)	347
Figure 198.	Accumulator assembly removal (2 of 2)	348
Figure 199.	Offset module removal	349

Figure 200.	Stapler removal (1 of 3)	350
Figure 201.	Stapler removal (2 of 3)	351
Figure 202.	Stapler removal (3 of 3)	352
Figure 203.	Stapler/stacker controller PCA or stacker controller PCA removal	353
Figure 204.	LED PCA removal	354
Figure 205.	Power supply removal	355
Figure 206.	Interlock switch removal	356
Figure 207.	Safety switch assembly removal	357
Figure 208.	Attachment assembly removal	358
Figure 209.	Flipper ribbon cable removal	359
Figure 210.	Stationary caster removal	360
Figure 211.	Adjustable caster removal	361
Figure 212.	Example of an HP Color LaserJet 8500 printer configuration page	417
Figure 213.	Example of an HP Color LaserJet 8550 printer configuration page	417
Figure 214.	Right upper cover detection interlock	425
Figure 215.	Drum cartridge detection interlock	425
Figure 216.	Black toner cartridge detection interlock	426
Figure 217.	Toner carousel door detection interlock	426
Figure 218.	Front cover/delivery cover detection interlocks	427
Figure 219.	Laser shutters	428
Figure 220.	Left upper cover detection	429
Figure 221.	Right lower cover detection	429
Figure 222.	Printer paper path	435
Figure 223.	Image orientation and direction of travel	442
Figure 224.	Color-plane registration	443
Figure 225.	Developer streak	444
Figure 226.	Rain	445
Figure 227.	Toner bubbles	446
Figure 228.	Charge roller set	447
Figure 229.	Waves	448
Figure 230.	Missing toner	449
Figure 231.	Hot offset (glossy paper or transparency)	450
Figure 232.	Fading resulting from broken transfer guide	451
Figure 233.	Color adjust page	458
Figure 234.	Repetitive defect ruler	463
Figure 235.	Cleaning the transfer drum	466
Figure 236.	Rear view of 2,000-sheet input unit	471
Figure 237.	Location of sensors in the 2,000-sheet input unit	475
Figure 238.	Multi-bin mailbox power supply test mode switch	477
Figure 239.	Staple position	483
Figure 240.	Device timing	485

Figure 241.	Error format for paper handling	493
Figure 242.	Connectors on the controller board	503
Figure 243.	General printer circuit diagram (1 of 4)	504
Figure 244.	General printer circuit diagram (2 of 4)	505
Figure 245.	General printer circuit diagram (3 of 4)	506
Figure 246.	General printer circuit diagram (4 of 4)	507
Figure 247.	Major assembly locations (1 of 2)	517
Figure 248.	Major assembly locations (2 of 2)	518
Figure 249.	Printer covers and doors (1 of 4)—Filler panel for tray 2 (HP Color LaserJet 8550 base model only) .	519
Figure 250.	Printer covers and doors (2 of 4)	520
Figure 251.	Printer covers and doors (3 of 4)	522
Figure 252.	Printer covers and doors (4 of 4)	524
Figure 253.	Internal cover assembly	526
Figure 254.	Internal components (1 of 6)	528
Figure 255.	Internal components (2 of 6)	530
Figure 256.	Internal components (3 of 6)	532
Figure 257.	Internal components (4 of 6)	534
Figure 258.	Internal components (5 of 6)	536
Figure 259.	Internal components (6 of 6)	538
Figure 260.	Drum/cartridge drive assembly	540
Figure 261.	Delivery drive assembly	541
Figure 262.	Tray 3 assembly	542
Figure 263.	Tray 2 assembly	543
Figure 264.	Paper pick-up assembly (1 of 3)	544
Figure 265.	Paper pick-up assembly (2 of 3)	545
Figure 266.	Paper pick-up assembly (3 of 3)	546
Figure 267.	Registration frame assembly	548
Figure 268.	Registration roller assembly	549
Figure 269.	Feeder assembly	550
Figure 270.	Tray 1 pick-up assembly	551
Figure 271.	Tray 1 assembly	552
Figure 272.	Delivery assembly	553
Figure 273.	Delivery cover assembly	554
Figure 274.	Transfer belt assembly	555
Figure 275.	Fuser assembly (1 of 2)	556
Figure 276.	Fuser assembly (2 of 2)	557
Figure 277.	PCA assemblies	559
Figure 278.	2,000-sheet input unit covers and doors	560
Figure 279.	2,000-sheet input unit internal components	562
Figure 280.	Multi-bin mailbox components (1 of 3)	564
Figure 281.	Multi-bin mailbox components (2 of 3)	566
Figure 282.	Multi-bin mailbox components (3 of 3)	568

- Figure 283. 3,000-sheet stapler/stacker components (1 of 2) . . 570
Figure 284. 3,000-sheet stapler/stacker components (2 of 2) . . 572

List of Tables

Table 1.	Features and accessories by printer model	22
Table 2.	Printer performance	23
Table 3.	Electrical specifications	24
Table 4.	Operating environment specifications	24
Table 5.	Acoustic emissions	25
Table 6.	Printer dimensions	25
Table 7.	Consumable storage specifications	26
Table 8.	Media capacity and sizes for input trays	31
Table 9.	Media capacity and sizes for the multi-bin mailbox	33
Table 10.	Printable area specification	34
Table 11.	Paper handling accessory status LEDs	45
Table 12.	Ordering	61
Table 13.	Technical support websites	62
Table 14.	Asia Pacific region Customer Care Centers	68
Table 15.	Information Menu	83
Table 16.	Proof and Print Menu	84
Table 17.	Quick Copy Jobs Menu	84
Table 18.	Proof and Print Menu	85
Table 19.	Paper Handling Menu	85
Table 20.	Configuration Menu	88
Table 21.	Printing Menu	89
Table 22.	I/O Menu	91
Table 23.	I/O Menu	91
Table 24.	Resets Menu	92
Table 25.	Color Adjust Menu	92
Table 26.	Service Mode Menu	93
Table 27.	Replacement frequencies for printer consumables	119
Table 28.	Subtractive color absorption	138
Table 29.	Subtractive color mixing	139
Table 30.	Additive color mixing	140
Table 31.	Fusing temperatures	166
Table 32.	Printer motor and heater names and descriptions	171
Table 33.	Fan operation	177
Table 34.	Feed speeds based on media type	179
Table 35.	Printer sensor names and descriptions	185
Table 36.	Printer switch names and descriptions	187
Table 37.	Tray 2 and Tray 3 paper-size detection	188
Table 38.	Paper-quantity detection switches	202

Table 39.	Paper-size detection switches.	202
Table 40.	Multi-bin mailbox sensors, switches, motors, and controller board PCA	209
Table 41.	Numbered printer messages.	368
Table 42.	Unnumbered printer messages.	388
Table 43.	Sensor monitor test	424
Table 44.	Media jam detection	436
Table 45.	Neutral axis adjustments.	461
Table 46.	Status LED on the 2,000-sheet input unit	470
Table 47.	Patterns of LED flashing (2-second pause between each pattern)	472
Table 48.	DIP switch settings for troubleshooting test procedures	473
Table 49.	Status LEDs on the multi-bin mailbox	479
Table 50.	Service LED flashing patterns.	490
Table 51.	User LED status interpretation	490
Table 52.	Operating errors in the stapler/stacker	494
Table 53.	Open doors in the stapler/stacker	495
Table 54.	Jams in the stapler/stacker	496
Table 55.	Hardware malfunctions in the stapler/stacker	499
Table 56.	Accessories and consumables	512
Table 57.	Miscellaneous parts	514
Table 58.	Printer covers and doors (1 of 4)—Filler panel for tray 2	519
Table 59.	Printer doors and covers (2 of 4).	521
Table 60.	Printer doors and covers (3 of 4).	523
Table 61.	Printer covers and doors (4 of 4).	525
Table 62.	Internal cover assembly parts	527
Table 63.	Internal components parts (1 of 6)	529
Table 64.	Internal components parts (2 of 6)	531
Table 65.	Internal components parts (3 of 6)	533
Table 66.	Internal components parts (4 of 6)	535
Table 67.	Internal components parts (5 of 6)	537
Table 68.	Internal components parts (6 of 6)	539
Table 69.	Drum/cartridge drive assembly parts	540
Table 70.	Delivery drive assembly parts	541
Table 71.	Tray 3 assembly parts.	542
Table 72.	Tray 2 assembly	543
Table 73.	Paper pick-up assembly parts.	547
Table 74.	Registration frame assembly parts	548
Table 75.	Registration roller assembly parts.	549
Table 76.	Feeder assembly parts	550
Table 77.	Tray 1 pick-up assembly parts	551
Table 78.	Tray 1 assembly parts.	552

Table 79.	Delivery assembly parts	553
Table 80.	Delivery cover assembly parts	554
Table 81.	Transfer belt assembly parts	555
Table 82.	Fuser assembly parts	558
Table 83.	PCA assembly parts	559
Table 84.	2,000-sheet input unit cover and door parts	561
Table 85.	2,000-sheet input unit internal component parts	563
Table 86.	Multi-bin mailbox component parts (1 of 3)	565
Table 87.	Multi-bin mailbox component parts (2 of 3)	567
Table 88.	Multi-bin mailbox component parts (3 of 3)	569
Table 89.	3,000-sheet stapler/stacker components (1 of 2)	571
Table 90.	3,000-sheet stapler/stacker components (2 of 2)	573
Table 91.	Numerical parts list	574
Table 92.	Alphabetical parts list	587

1

Product information

Chapter contents

Introduction	21
Printer features	22
Specifications	24
Electrical specifications	24
Operating environment specifications	24
Acoustic emission specifications	25
Printer dimensions	25
Consumable storage specifications	26
Site requirements	27
General guidelines	27
Space requirements	28
Media requirements	29
Selecting media	29
Storing media	30
Media capacity and sizes for input trays	31
Media capacity and sizes for the multi-bin mailbox	33
Printable area	34
Media considerations	35
Media to avoid	37
Identification (model and serial numbers)	38

Printer Information	39
Configurations	39
External views	41
Formatter assemblies	43
Media-handling accessories and options	44
Safety information	46
FCC regulations	46
Canadian DOC regulations	46
Declarations of conformity	47
VCCI statement (Japan)—8500 models	54
VCCI statement (Japan)—8550 models	54
EMI statement (Korea)—8500 models	54
EMI statement (Korea)—8550 models	54
Laser safety statement	55
Laser statement for Finland	56
Product information sheet	57
Toner safety	57
Material Safety Data Sheet (MSDS)	57
Ozone safety	58

Introduction

This manual covers service topics for the following printers and their paper-handling optional accessories:

- HP Color LaserJet 8500 printer (base model)
- HP Color LaserJet 8500 N printer
- HP Color LaserJet 8500 DN printer
- HP Color LaserJet 8550 printer (base model)
- HP Color LaserJet 8550 N printer
- HP Color LaserJet 8550 DN printer
- HP Color LaserJet 8550 GN printer
- HP Color LaserJet 8550 MFP—print engine **only**

Note

Service topics for the HP Color LaserJet 8550 MFP printer's copy module, automatic document feeder, and 1,000-sheet input paper deck are not included in this manual. See the HP Color LaserJet 8550 MFP printer service manual for all service information related to these devices.

Printer features

Table 1. Features and accessories by printer model

Feature/accessory		Model							
		8500	8500 N	8500 DN	8550	8550 N	8550 DN	8550 GN	8550 MFP
Features	● Standard DIMM memory (in MB)	32	32	64	32	64	64	128	64
	● Maximum DIMM memory ¹ (in MB)	256	256	256	512	512	512	512	512
	● Internal hard disk		X	X		X	X	X	X
	● HP JetDirect EIO card		X	X		X	X	X	X
	● 500-sheet tray 2	X	X	X		X	X	X	X
	● 2,000-sheet input unit			X			X	X	
	● Duplexer			X			X	X	X
● Copy module								X	
Accessories	● External (EIO-compatible) printer hard disk	X			X				
	● DRAM DIMMs (synchronous)	X	X	X	X	X	X	X	X
	● Duplexer ²	X	X		X	X			
	● HP JetDirect EIO card	X			X				
	● 500-sheet input tray				X				
	● 1,000-sheet paper deck (input)								X
	● Automatic document feeder								X
	● Multi-bin mailbox (output)			X			X	X	
● 3,000-sheet stapler/stacker or 3,000-sheet stacker (output)						X	X		

¹ To expand the dual inline memory module (DIMM) memory to 512 MB, install 64-MB DIMMs in all eight DIMM slots. Optimized memory for all models is 128 MB.

² Minimum 64 MB memory recommended for automatic duplex printing.

Table 2. Printer performance

Print speeds	<ul style="list-style-type: none">● 24 pages per minute (ppm) black and white (b/w)● 6 ppm color
Text and graphics resolution	<ul style="list-style-type: none">● 600 dots per inch (dpi) resolution
Approximate print speeds	
Letter and A4-size	<ul style="list-style-type: none">● 24 ppm b/w; 6 ppm color
Legal, Executive, and 11-by-17 inch size	<ul style="list-style-type: none">● 12 ppm b/w; 3 ppm color
Heavy paper	<ul style="list-style-type: none">● 3.2 ppm b/w; 2.2 ppm color
Transparencies	<ul style="list-style-type: none">● 2.6 ppm b/w; 2.0 ppm color
Fonts	<ul style="list-style-type: none">● TrueType™ rasterizer in both HP PCL and Adobe PostScript®● 45 scalable HP typefaces● 136 scalable Adobe PostScript fonts
Printer personality support	<ul style="list-style-type: none">● Automatic personality switching● PCL and PostScript support
User interface and EIO	<ul style="list-style-type: none">● Standard ECP or bidirectional parallel cable interface (IEEE-1284 compliant)● 2 enhanced input/output (EIO) slots● Automatic input/output (I/O) switching

The approximate print speeds offered by this printer might vary from those listed above because the following factors affect processing time:

- complexity and size of graphics
- I/O configuration
- computer configuration
- amount of printer memory
- network operating system
- network configuration
- printer color calibration

Specifications

Electrical specifications

Table 3. Electrical specifications

Item	110-volt models	220-volt models
Power requirements	100 to 127 V (+/- 10%) 50/60 Hz (+/- 2 Hz)	220 to 240 V (+/- 10%) 50/60 Hz (+/- 2 Hz)
Power consumption (typical): During printing (b/w) During printing (color) During standby During Power Save mode During Off mode	750 W (average) 375 W (average) 190 W (average) less than 45 W less than 2 W	750 W (average) 375 W (average) 190 W (average) less than 45 W less than 2 W
Minimum recommended circuit capacity for typical product	12.0 A at 120 V	6.0 A at 220 V

Operating environment specifications

Table 4. Operating environment specifications

Item	Operating	Storage
Temperature Recommended Allowed	20 to 26° C (68 to 79° F) 15 to 30° C (59 to 86° F)	0 to 35° C (32 to 95° F) -20 to 60° C (-4 to 140° F)
Humidity Recommended Allowed	20 to 50% relative humidity (RH) 10 to 80% RH	35 to 85% RH 10 to 95% RH
Altitude Allowed	0 to 3,048 meters (0 to 10,000 feet)	0 to 3,048 meters (0 to 10,000 feet)

Note

See the HP Color LaserJet 8550 MFP printer service manual for dimensions that include copy module, automatic document feeder, and 1,000-sheet input paper deck.

Acoustic emission specifications

Table 5. Acoustic emissions

Category	8500	8550
Operation position (per ISO 9296, DIN 45635, T.19)	Printing: L _p A 54 dB(A) Standby: L _p A 49 dB(A)	L _p A 57 dB(A) L _p A 52 dB(A)
Bystander 1 meter (per ISO 7779, DIN 45635, T.19)	Printing: L _p A 50 dB(A) Standby: L _p A 45 dB(A)	L _p A 54 dB(A) L _p A 47 dB(A)
Sound power (per ISO 9296)	Printing: 6.8 B (A) Standby: 6.3 B (A)	7.0 B (A) 6.4 B (A)

Printer dimensions

Table 6. Printer dimensions

Category	Printer	Printer with stand	Printer with 2,000-sheet input unit and multi-bin mailbox or stapler/stacker
Height	750 millimeters (mm) (30 inches)	1111 mm (44 inches)	1230 mm (48 inches)
Width	566 mm (22 inches)	566 mm (22 inches)	1056 mm (42 inches)
Depth	625 mm (25 inches)	625 mm (25 inches)	625 mm (25 inches)
Weight (with consumables)	87 kilograms (kg) (192 pounds)	100 kg (220 pounds)	118 kg (260 pounds)

Consumable storage specifications

The life of consumables is greatly affected by their storage environment. Use the following table to determine the shelf life of stored consumables.

For consumable replacement specifications, see page 119.

Table 7. Consumable storage specifications

Temperature Normal (maximum of 2.5 years) 0 to 35° C (32 to 95° F) Severe (maximum of 18 days) High: 35 to 40° C (95 to 104° F) Low: 0 to -20° C (32 to -4° F)
Maximum temperature change rate 40 to 15° C (104 to 59° F) within 3 minutes -20 to 25° C (-4 to 77° F) within 3 minutes
Humidity Normal (maximum of 2.5 years) 35 to 85% RH Severe (maximum of 18 days) High: 85 to 95% RH Low: 10 to 35% RH
Atmospheric pressure 460 to 760 mm mercury (Hg)

Site requirements

General guidelines

Locating and placing the printer correctly are important in maintaining the performance level set at the factory. In particular, be sure to adhere to the environmental specifications listed in this chapter. The following are recommendations for locating and placing the printer:

- Install in a well-ventilated, dust-free area.
- Install on a hard, level surface.
- Install where the temperature and humidity do not change abruptly. Do not install near water sources, humidifiers, air conditioners, refrigerators, or other major appliances.
- Do not expose the printer to direct sunlight, dust, open flames, or ammonia fumes.
- Install the printer away from walls or other objects. There must be enough space around the printer for proper access and ventilation (see figure 1 on page 28).
- Install the printer away from the direct flow of exhaust from air ventilation systems.

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Note

See the HP Color LaserJet 8550 MFP printer service manual for space requirements for the copy module, automatic document feeder, and 1,000-sheet input paper deck.

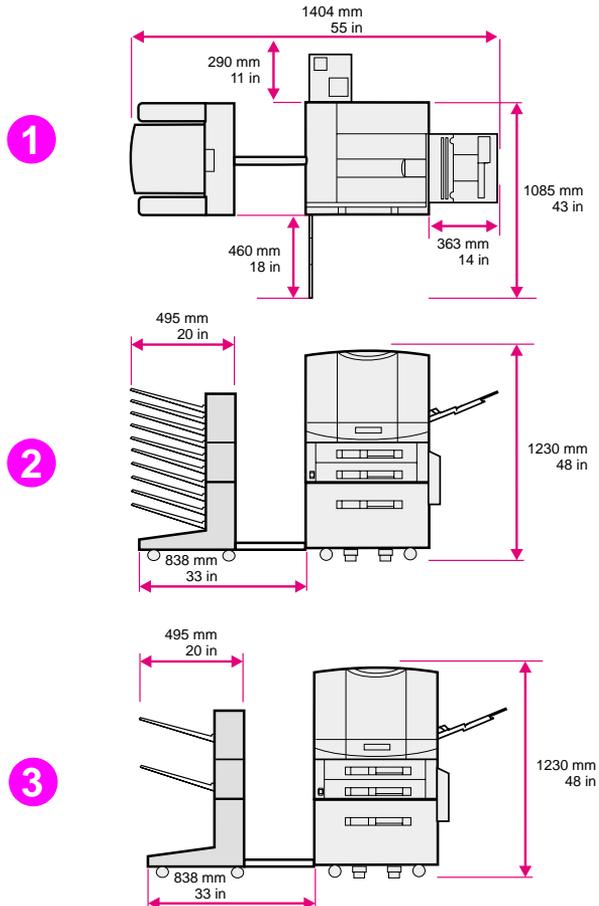


Figure 1. Space requirements

- 1 Top view (with an optional 2,000-sheet input tray and an optional multi-bin mailbox, 3,000-sheet stapler/stacker, or 3,000-sheet stacker)
- 2 Front view (with an optional 2,000-sheet input tray and an optional multi-bin mailbox)
- 3 Front view (with an optional 2,000-sheet input tray and an optional 3,000-sheet stapler/stacker or 3,000-sheet stacker)

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