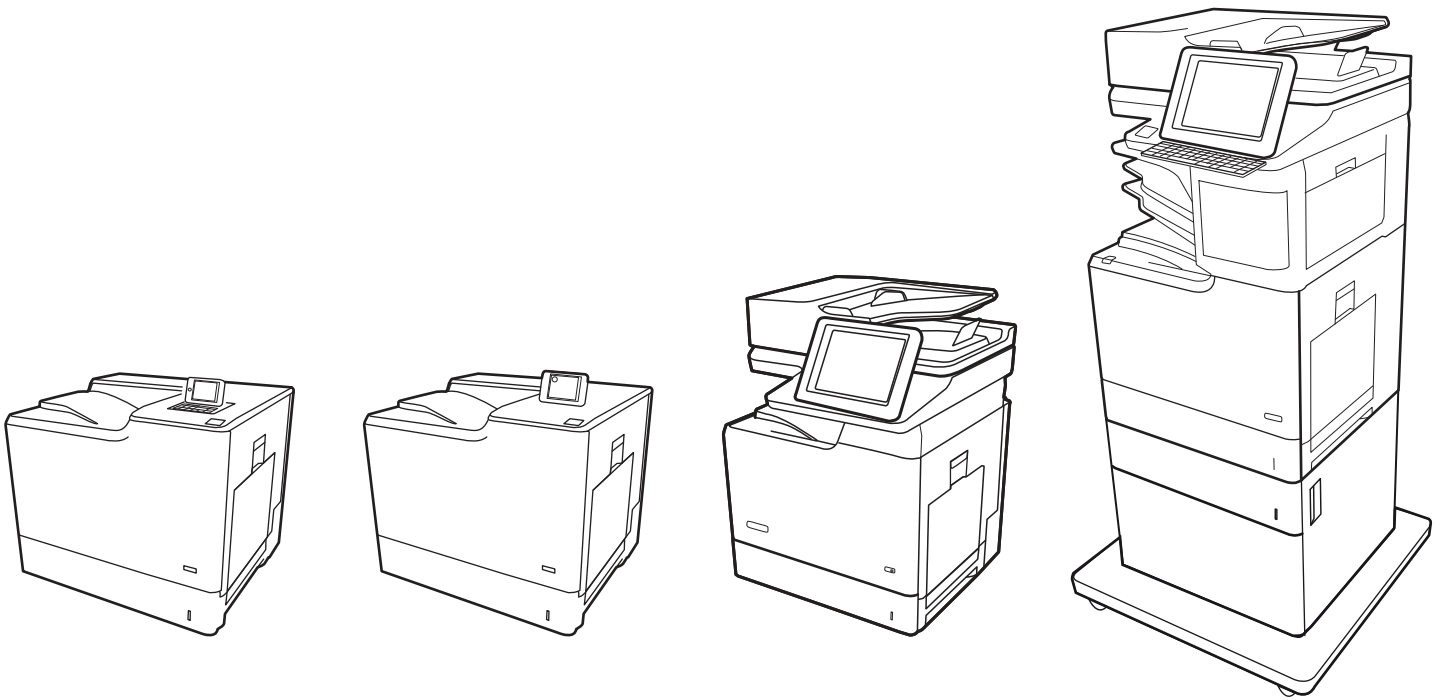




HP Color LaserJet Enterprise M652, M653
HP Color LaserJet Managed E65050, E65060
HP Color LaserJet Managed E65150, E65160
HP Color LaserJet Enterprise MFP M681, M682
HP Color LaserJet Managed MFP E67550, E67560
HP Color LaserJet Managed MFP E67650, E67660

Service Manual



www.hp.com/support/colorlj652
www.hp.com/support/colorlj653
www.hp.com/support/ljE65050
www.hp.com/support/ljE65060
www.hp.com/support/colorljE65150
www.hp.com/support/colorljE65160

www.hp.com/support/colorljM681MFP
www.hp.com/support/colorljM682MFP
www.hp.com/support/ljE67550MFP
www.hp.com/support/ljE67560MFP
www.hp.com/support/colorljE67650mfp
www.hp.com/support/colorljE67660mfp



HP Color LaserJet Enterprise M652, M653, HP Color LaserJet Managed E65050, E65060, HP Color LaserJet Managed E65150, E65160, HP Color LaserJet Enterprise MFP M681, M682, HP Color LaserJet Managed MFP E67550, E67560, HP Color LaserJet Managed MFP E67650, E67660 Service Manual

SUMMARY

Learn about printer theory of operation, how to diagnose and solve printer problems, and how to remove and replace supported printer service parts.

Legal information

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Edition 15, 11/2022

Revision history

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Table Revision history

Revision number	Revision date	Revision notes
15	11/2022	Added ITB part number for Managed Print Service (MPS). See Theory of operation: Sensors and Parts and diagrams: Parts and diagrams: Internal components (3 of 6) (Ref No: 5 in part table) and Parts and diagrams: Internal components (4 of 6) (Ref No: 12 in part table). Updated part number for Image scanner kit. See Removal and replacement: Image scanner assembly .
14	10/2022	Added part number RL2-1504-000CN, see Parts and diagrams: Internal components (1 of 6)
13	8/2022	Updated Formatter part number for E67650/E67660 (3GY31-67901), see Parts and diagrams: Internal components (6 of 6)
12	5/2022	Updated Scanner control board, see Document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660 only) .
11	4/2022	Updated part diagram internal 4 of 6 to add remove "A" from call out 16 and 17. Parts are notated in part table as 16 and 17. Parts and diagrams: Internal components (4 of 6)
10	9/2021	Updated part number for Toner collection kit in removal and replace section to: RM2-6613-000CN
9	5/2021	<ul style="list-style-type: none">• Content migration into SDL Tridion Docs.• RRP/TTS structure changed to combined service manual (CSRM) format
8	5/2020	<ul style="list-style-type: none">• Added revision table• Added service stapler part number (see Supplies and accessories)• Added control panel kit part number (see Parts and diagrams: Covers (M652/M653/E65050/E65060/E65150/E65160))

Conventions used in this guide

Learn about the conventions used in this publication.



TIP: Tips provide helpful hints or shortcuts.



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



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



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

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- Install and configure
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- [WISE - Chinese \(traditional\)](#)
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[View a video of ow to use WISE to find technical support videos \(Product detail page \[PDP\] search\).](#)

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3 Reverse the removal steps to install the assembly.....	710
Removal and replacement: Right door.....	712
1 Remove the right door.....	713
2 Unpack the replacement assembly.....	716
Removal and replacement: Left door.....	717
1 Remove the TCU.....	717
2 Remove the left door.....	718
3 Unpack the replacement assembly.....	719
Removal and replacement: Top cover (M652/M653/E65050/E65060/E65150/E65160).....	720
1 Remove the formatter cover.....	721
2 Remove the control panel (M652/M653/E65050/E65060/E65150/E65160).....	721

3 Remove the top cover (M652/M653/E65050/E65060/E65150/E65160).....	724
4 Unpack the replacement assembly.....	726
Removal and replacement: Left rear cover	727
1 Remove the formatter cover.....	728
2 Remove the left rear cover	728
3 Unpack the replacement assembly.....	729
Removal and replacement: Output bin	730
1 Remove the formatter cover.....	730
2 Remove the keyboard (MFP).....	731
3 Remove the control panel (M681/M682/E67550/E67560/E67650/E67660).....	734
4 Remove the document feeder and image scanner (M681/M682/E67550/E67560/E67650/ E67660).....	738
5 Remove the stapler/stacker (Flow M681z/Flow M682z/Flow E67660z)	744
6 Remove the face-down front cover (M681dn/M681/M682dn/Flow M681f/E67650dh)	751
7 Remove the top cover (M681dn/M681/M682dn/Flow M681f/E67650dh)	752
8 Remove the right cover (M681dn/M681/M682dn/Flow M681f/E67650dh).....	752
9 Remove the front cover (M681dn/M681/M682dn/Flow M681f/E67650dh).....	753
10 Remove the rear upper cover (M681dn/M681/M682dn/Flow M681f/E67650dh).....	753
11 Remove the rear upper cover (M681dn/M681/M682dn/Flow M681f/E67650dh).....	754
12 Remove the face-down cover (M681dn/M681/M682dn/Flow M681f/E67650dh)	755
13 Remove the main cover (M681dn/M681/M682dn/Flow M681f/E67650dh).....	755
14 Remove the control panel (M652/M653/E65050/E65060/E65150/E65160).....	756
15 Remove the top cover (M652/M653/E65050/E65060/E65150/E65160).....	759
16 Remove the output bin	761
17 Unpack the replacement assembly.....	762
18 Reverse the removal steps to install the assembly	763
Removal and replacement: Rear cover	765
1 Remove the formatter cover.....	766
2 Remove the left rear cover	767
3 Remove the rear cover	767
4 Unpack the replacement assembly.....	768
5 Reverse the removal steps to install the assembly.....	769
Removal and replacement: Right rear cover	769
1 Remove the formatter cover.....	770
2 Remove the left rear cover	771
3 Remove the rear cover	771
4 Remove the right rear cover.....	772
5 Unpack the replacement assembly.....	773
6 Reverse the removal steps to install the assembly.....	773
Removal and replacement: Right handle.....	774
1 Remove the formatter cover.....	775
2 Remove the left rear cover	775
3 Remove the rear cover	776
4 Remove the right rear cover.....	777
5 Remove the right handle.....	777
6 Unpack the replacement assembly	778
7 Reverse the removal steps to install the assembly.....	778
Removal and replacement: Left handle.....	779
1 Remove the TCU.....	780

2 Remove the left rear cover	781
3 Remove the left door	782
4 Remove the left handle	783
5 Unpack the replacement assembly.....	783
6 Reverse the removal steps to install the assembly.....	784
Document feeder / scanner	785
Removal and replacement: Document feeder	786
1 Remove the document feeder.....	786
2 Unpack the replacement assembly.....	790
3 Reverse the removal steps to install the assembly.....	791
Removal and replacement: Document feeder hinges.....	791
1 Remove the document feeder.....	792
2 Remove the document feeder hinges.....	795
3 Unpack the replacement assembly.....	796
4 Reverse the removal steps to install the assembly.....	797
Removal and replacement: Image scanner assembly.....	798
1 Remove the document feeder.....	798
2 Remove the keyboard (MFP).....	802
3 Remove the control panel (M681/M682/E67550/E67560/E67650/E67660).....	805
4 Remove the image scanner assembly (M681/M682/E67550/E67560/E67650/E67660).....	809
5 Unpack the replacement assembly.....	817
6 Reverse the removal steps to install the assembly.....	818
Removal and replacement: Scanner control board (SCB).....	822
1 Remove the image scanner rear cover.....	823
2 Remove the scanner control board (SCB).....	824
3 Unpack the replacement assembly.....	824
4 Reverse the removal steps to install the assembly.....	825
Internal parts and assemblies	826
Removal and replacement: Tray 1 pickup roller	826
1 Remove the Tray 1 pickup roller	827
2 Unpack the replacement assembly.....	828
3 Install the Tray 1 pickup roller	829
Removal and replacement: Tray 1 separation roller.....	829
1 Remove the Tray 1 separation roller	830
2 Unpack the replacement assembly.....	834
Removal and replacement: Formatter	835
1 Remove the formatter cover	835
2 Remove the fax PCA (M681f/Flow M681f/Flow M681z/Flow M682z).....	836
3 Remove the hard disk drive (HDD; M653dh/M681/M682/E67550/E67560/E67650/E67660).....	837
4 Remove the embedded MultiMedia Card (eMMC).....	838
5 Remove the dual in-line memory module (DIMM)	839
6 Remove the formatter	840
7 Unpack the replacement assembly.....	840
Removal and replacement: Pre-exposure PCA assembly (black)	841
1 Remove a toner cartridge.....	842
2 Remove the front door	842
3 Remove the front inner covers	845
4 Remove the pre-exposure PCA assembly (black).....	847

5	Unpack the replacement assembly.....	849
6	Reverse the removal steps to install the assembly.....	850
	Removal and replacement: Pre-exposure PCA assembly (cyan, magenta, or yellow).....	852
1	Remove a toner cartridge.....	853
2	Remove the front door.....	853
3	Remove the front inner covers.....	856
4	Remove the pre-exposure PCA assembly (cyan, magenta, or yellow).....	858
5	Unpack the replacement assembly.....	859
6	Reverse the removal steps to install the assembly.....	860
	Removal and replacement: Power switch PCA.....	863
1	Remove the front door.....	864
2	Remove the microswitch.....	866
3	Unpack the replacement assembly.....	871
4	Reverse the removal steps to install the assembly.....	872
	Removal and replacement: Left upper front and left upper rear fans.....	874
1	Remove the TCU.....	875
2	Remove the keyboard (MFP).....	876
3	Remove the control panel (M681/M682/E67550/E67560/E67650/E67660).....	880
4	Remove the document feeder and image scanner (M681/M682/E67550/E67560/E67650/ E67660).....	883
5	Remove the stapler/stacker (Flow M681z/Flow M682z/Flow E67660z).....	890
6	Remove the face-down front cover (M681dn/M681/M682dn/Flow M681f/E67650dh).....	897
7	Remove the top cover (M681dn/M681/M682dn/Flow M681f/E67650dh).....	897
8	Remove the right cover (M681dn/M681/M682dn/Flow M681f/E67650dh).....	898
9	Remove the front cover (M681dn/M681/M682dn/Flow M681f/E67650dh).....	898
10	Remove the rear upper cover (M681dn/M681/M682dn/Flow M681f/E67650dh).....	899
11	Remove the face-down cover (M681dn/M681/M682dn/Flow M681f/E67650dh).....	900
12	Remove the main cover (M681dn/M681/M682dn/Flow M681f/E67650dh).....	900
13	Remove the control panel (M652/M653/E65050/E65060/E65150/E65160).....	901
14	Remove the top cover (M652/M653/E65050/E65060/E65150/E65160).....	904
15	Remove the output bin.....	906
16	Remove the formatter cover.....	907
17	Remove the left door.....	908
18	Remove the left rear cover.....	909
19	Remove the left upper front and left upper rear fans.....	909
20	Unpack the replacement assembly.....	912
21	Reverse the removal steps to install the assembly.....	913
	Removal and replacement: Toner carry assembly.....	916
1	Remove the TCU.....	917
2	Remove the keyboard (MFP).....	918
3	Remove the document feeder and image scanner (M681/M682/E67550/E67560/E67650/ E67660).....	922
4	Remove the stapler/stacker (Flow M681z/Flow M682z/Flow E67660z).....	928
5	Remove the face-down front cover (M681dn/M681/M682dn/Flow M681f/E67650dh).....	935
6	Remove the top cover (M681dn/M681/M682dn/Flow M681f/E67650dh).....	936
7	Remove the right cover (M681dn/M681/M682dn/Flow M681f/E67650dh).....	936
8	Remove the front cover (M681dn/M681/M682dn/Flow M681f/E67650dh).....	937
9	Remove the rear upper cover (M681dn/M681/M682dn/Flow M681f/E67650dh).....	937
10	Remove the face-down cover (M681dn/M681/M682dn/Flow M681f/E67650dh).....	938

11 Remove the main cover (M681dn/M681/M682dn/Flow M681f/E67650dh).....	939
12 Remove the control panel (M652/M653/E65050/E65060/E65150/E65160).....	940
13 Remove the top cover (M652/M653/E65050/E65060/E65150/E65160).....	943
14 Remove the output bin	945
15 Remove the formatter cover.....	946
16 Remove the left door	947
17 Remove the toner carry assembly	948
18 Unpack the replacement assembly	950
19 Reverse the removal steps to install the assembly	951
Removal and replacement: Estrangement detect PCA	955
1 Remove the fuser	956
2 Remove the keyboard (MFP).....	957
3 Remove the control panel (M681/M682/E67550/E67560/E67650/E67660).....	960
4 Remove the document feeder and image scanner (M681/M682/E67550/E67560/E67650/ E67660).....	964
5 Remove the stapler/stacker (Flow M681z/Flow M682z/Flow E67660z)	970
6 Remove the face-down front cover (M681dn/M681/M682dn/Flow M681f/E67650dh)	977
7 Remove the top cover (M681dn/M681/M682dn/Flow M681f/E67650dh)	978
8 Remove the right cover (M681dn/M681/M682dn/Flow M681f/E67650dh).....	978
9 Remove the front cover (M681dn/M681/M682dn/Flow M681f/E67650dh).....	979
10 Remove the rear upper cover (M681dn/M681/M682dn/Flow M681f/E67650dh).....	979
11 Remove the face-down cover (M681dn/M681/M682dn/Flow M681f/E67650dh)	980
12 Remove the main cover (M681dn/M681/M682dn/Flow M681f/E67650dh).....	981
13 Remove the control panel (M652/M653/E65050/E65060/E65150/E65160).....	982
14 Remove the top cover (M652/M653/E65050/E65060/E65150/E65160).....	985
15 Remove the output bin	987
16 Remove the formatter cover	988
17 Remove the estrangement detect PCA	989
18 Unpack the replacement assembly	992
19 Reverse the removal steps to install the assembly	993
Removal and replacement: Environmental sensor PCA	995
1 Remove the TCU.....	996
2 Remove the left rear cover	997
3 Remove the left door	998
4 Remove the left handle	999
5 Remove the environmental sensor PCA.....	999
6 Unpack the replacement assembly	1000
7 Reverse the removal steps to install the assembly	1001
Removal and replacement: Cartridge fan	1002
1 Remove the TCU.....	1003
2 Remove the left rear cover	1004
3 Remove the left door	1005
4 Remove the left handle	1006
5 Remove the cartridge fan	1006
6 Unpack the replacement assembly	1008
7 Reverse the removal steps to install the assembly	1009
Removal and replacement: Front fan	1010
1 Remove the front door	1011
2 Remove the front inner covers	1013

3 Remove the front fan	1015
4 Unpack the replacement assembly.....	1016
5 Reverse the removal steps to install the assembly.....	1017
Removal and replacement: Power supply fan.....	1019
1 Remove the formatter cover.....	1020
2 Remove the left rear cover	1021
3 Remove the rear cover	1021
4 Remove the low-voltage power supply (LVPS) and fan.....	1022
5 Remove the power supply fan.....	1023
6 Unpack the replacement assembly	1024
7 Reverse the removal steps to install the assembly.....	1025
Removal and replacement: DC controller PCA.....	1025
1 Remove the formatter cover.....	1026
2 Remove the left rear cover	1027
3 Remove the rear cover	1027
4 Remove the DC controller PCA.....	1028
5 Unpack the replacement assembly.....	1029
6 Reverse the removal steps to install the assembly.....	1029
Removal and replacement: Low-voltage power supply (LVPS).....	1030
1 Remove the formatter cover.....	1031
2 Remove the left rear cover	1032
3 Remove the rear cover	1032
4 Remove the low-voltage power supply (LVPS) and fan.....	1033
5 Remove the low-voltage power supply (LVPS).....	1034
6 Unpack the replacement assembly	1036
7 Reverse the removal steps to install the assembly.....	1037
Removal and replacement: Lower high-voltage power supply (HVPS).....	1037
1 Remove the formatter cover.....	1038
2 Remove the left rear cover	1039
3 Remove the rear cover	1039
4 Remove the low-voltage power supply (LVPS) and fan.....	1040
5 Remove the lower high voltage power supply (HVPS).....	1041
6 Unpack the replacement assembly	1042
7 Reverse the removal steps to install the assembly.....	1043
Removal and replacement: Upper high-voltage power supply (HVPS).....	1044
1 Remove the keyboard (MFP).....	1045
2 Remove the control panel (M681/M682/E67550/E67560/E67650/E67660).....	1048
3 Remove the document feeder and image scanner (M681/M682/E67550/E67560/E67650/ E67660).....	1052
4 Remove the stapler/stacker	1058
5 Remove the face-down front cover (M681dn/M681/M682dn/Flow M681f/E67650dh)	1065
6 Remove the top cover (M681dn/M681/M682dn/Flow M681f/E67650dh).....	1066
7 Remove the right cover (M681dn/M681/M682dn/Flow M681f/E67650dh).....	1066
8 Remove the front cover (M681dn/M681/M682dn/Flow M681f/E67650dh).....	1067
9 Remove the rear upper cover (M681dn/M681/M682dn/Flow M681f/E67650dh).....	1067
10 Remove the face-down cover (M681dn/M681/M682dn/Flow M681f/E67650dh).....	1068
11 Remove the main cover (M681dn/M681/M682dn/Flow M681f/E67650dh).....	1069
12 Remove the control panel (M652/M653/E65050/E65060/E65150/E65160).....	1070
13 Remove the top cover (M652/M653/E65050/E65060/E65150/E65160).....	1073

14 Remove the output bin	1075
15 Remove the formatter cover.....	1076
16 Remove the left rear cover	1077
17 Remove the rear cover	1077
18 Remove the fax PCA (M681f/Flow M681f/Flow M681z/Flow M682z)	1078
19 Remove the hard disk drive (HDD; M653dh/M681/M682/E67550/E67560/E67650/E67660).....	1079
20 Remove the formatter	1080
21 Remove the formatter case	1080
22 Remove the DC controller PCA	1082
23 Remove the DC controller stay	1082
24 Remove the upper high-voltage power supply (HVPS).....	1083
25 Unpack the replacement assembly.....	1084
26 Reverse the removal steps to install the assembly.....	1085
Removal and replacement: Rear fan	1089
1 Remove the keyboard (MFP).....	1090
2 Remove the control panel (M681/M682/E67550/E67560/E67650/E67660).....	1094
3 Remove the document feeder and image scanner (M681/M682/E67550/E67560/E67650/ E67660).....	1097
4 Remove the stapler/stacker (Flow M681z/Flow M682z/Flow E67660z).....	1104
5 Remove the face-down front cover (M681dn/M681/M682dn/Flow M681f/E67650dh)	1111
6 Remove the top cover (M681dn/M681/M682dn/Flow M681f/E67650dh).....	1111
7 Remove the right cover (M681dn/M681/M682dn/Flow M681f/E67650dh).....	1112
8 Remove the front cover (M681dn/M681/M682dn/Flow M681f/E67650dh).....	1112
9 Remove the rear upper cover (M681dn/M681/M682dn/Flow M681f/E67650dh)	1113
10 Remove the face-down cover (M681dn/M681/M682dn/Flow M681f/E67650dh).....	1114
11 Remove the main cover (M681dn/M681/M682dn/Flow M681f/E67650dh).....	1114
12 Remove the control panel (M652/M653/E65050/E65060/E65150/E65160).....	1115
13 Remove the top cover (M652/M653/E65050/E65060/E65150/E65160).....	1118
14 Remove the output bin	1120
15 Remove the formatter cover.....	1121
16 Remove the left rear cover	1122
17 Remove the rear cover	1122
18 Remove the fax PCA (M681f/Flow M681f/Flow M681z/Flow M682z)	1123
19 Remove the hard disk drive (HDD; M653dh/M681/M682/E67550/E67560/E67650/E67660).....	1124
20 Remove the formatter	1125
21 Remove the formatter case	1125
22 Remove the DC controller PCA	1127
23 Remove the DC controller stay	1127
24 Remove the upper high-voltage power supply (HVPS).....	1128
25 Remove the rear fan.....	1129
26 Unpack the replacement assembly.....	1130
27 Reverse the removal steps to install the assembly	1131
Removal and replacement: Lifter drive assembly	1136
1 Remove the formatter cover	1137
2 Remove the left rear cover	1137
3 Remove the rear cover	1138
4 Remove the low-voltage power supply (LVPS) and fan.....	1139
5 Remove the lower high voltage power supply (HVPS).....	1140
6 Remove the lifter drive assembly.....	1141

7	Unpack the replacement assembly	1142
8	Reverse the removal steps to install the assembly.....	1143
	Removal and replacement: Laser scanner	1144
1	Remove the TCU.....	1145
2	Remove the left door.....	1146
3	Remove the laser scanner	1147
4	Unpack the replacement assembly.....	1149
	Removal and replacement: Drum motor 1	1150
1	Remove the keyboard (MFP).....	1150
2	Remove the control panel (M681/M682/E67550/E67560/E67650/E67660).....	1154
3	Remove the document feeder and image scanner (M681/M682/E67550/E67560/E67650/ E67660).....	1157
4	Remove the stapler/stacker (Flow M681z/Flow M682z/Flow E67660z)	1164
5	Remove the face-down front cover (M681dn/M681/M682dn/Flow M681f/E67650dh)	1171
6	Remove the right cover (M681dn/M681/M682dn/Flow M681f/E67650dh).....	1172
7	Remove the front cover (M681dn/M681/M682dn/Flow M681f/E67650dh).....	1172
8	Remove the rear upper cover (M681dn/M681/M682dn/Flow M681f/E67650dh).....	1173
9	Remove the face-down cover (M681dn/M681/M682dn/Flow M681f/E67650dh).....	1173
10	Remove the main cover (M681dn/M681/M682dn/Flow M681f/E67650dh).....	1174
11	Remove the control panel (M652/M653/E65050/E65060/E65150/E65160).....	1175
12	Remove the top cover (M681dn/M681/M682dn/Flow M681f/E67650dh).....	1178
13	Remove the output bin	1179
14	Remove the formatter cover.....	1180
15	Remove the left rear cover.....	1181
16	Remove the rear cover	1181
17	Remove the fax PCA (M681f/Flow M681f/Flow M681z/Flow M682z).....	1182
18	Remove the hard disk drive (HDD; M653dh/M681/M682/E67550/E67560/E67650/E67660).....	1183
19	Remove the formatter	1183
20	Remove the formatter case	1184
21	Remove the DC controller PCA.....	1185
22	Remove the DC controller stay	1186
23	Remove the upper high-voltage power supply (HVPS).....	1186
24	Remove drum motor 1.....	1187
25	Unpack the replacement assembly.....	1188
26	Reverse the removal steps to install the assembly.....	1189
	Removal and replacement: Drum motor 2.....	1190
1	Remove the formatter cover	1191
2	Remove the left rear cover	1191
3	Remove the rear cover	1192
4	Remove the fax PCA (M681f/Flow M681f/Flow M681z/Flow M682z).....	1193
5	Remove the hard disk drive (HDD; M653dh/M681/M682/E67550/E67560/E67650/E67660)	1194
6	Remove the formatter	1194
7	Remove the formatter case.....	1195
8	Remove the DC controller PCA.....	1196
9	Remove the DC controller stay	1197
10	Remove drum motor 2.....	1197
11	Unpack the replacement assembly.....	1198
12	Reverse the removal steps to install the assembly.....	1199
	Removal and replacement: Drum motor 3	1200

1 Remove the formatter cover.....	1201
2 Remove the left rear cover.....	1201
3 Remove the rear cover.....	1202
4 Remove the fax PCA (M681f/Flow M681f/Flow M681z/Flow M682z).....	1203
5 Remove the hard disk drive (HDD; M653dh/M681/M682/E67550/E67560/E67650/E67660).....	1204
6 Remove the formatter.....	1204
7 Remove the formatter case.....	1205
8 Remove the DC controller stay.....	1206
9 Remove the DC controller stay.....	1207
10 Remove drum motor 3.....	1207
11 Unpack the replacement assembly.....	1208
12 Reverse the removal steps to install the assembly.....	1209
Removal and replacement: Main drive assembly.....	1210
1 Remove the fuser.....	1211
2 Remove the intermediate transfer belt (ITB).....	1212
3 Remove the keyboard (MFP).....	1214
4 Remove the control panel (M681/M682/E67550/E67560/E67650/E67660).....	1217
5 Remove the document feeder and image scanner (M681/M682/E67550/E67560/E67650/ E67660).....	1221
6 Remove the stapler/stacker (Flow M681z/Flow M682z/Flow E67660z).....	1227
7 Remove the face-down front cover (M681dn/M681/M682dn/Flow M681f/E67650dh).....	1234
8 Remove the top cover (M681dn/M681/M682dn/Flow M681f/E67650dh).....	1235
9 Remove the right cover (M681dn/M681/M682dn/Flow M681f/E67650dh).....	1235
10 Remove the front cover (M681dn/M681/M682dn/Flow M681f/E67650dh).....	1236
11 Remove the rear upper cover (M681dn/M681/M682dn/Flow M681f/E67650dh).....	1236
12 Remove the face-down cover (M681dn/M681/M682dn/Flow M681f/E67650dh).....	1237
13 Remove the main cover (M681dn/M681/M682dn/Flow M681f/E67650dh).....	1238
14 Remove the control panel (M652/M653/E65050/E65060/E65150/E65160).....	1239
15 Remove the top cover (M652/M653/E65050/E65060/E65150/E65160).....	1242
16 Remove the output bin.....	1244
17 Remove the formatter cover.....	1245
18 Remove the left rear cover.....	1246
19 Remove the rear cover.....	1246
20 Remove the fax PCA (M681f/Flow M681f/Flow M681z/Flow M682z).....	1247
21 Remove the hard disk drive (HDD; M653dh/M681/M682/E67550/E67560/E67650/E67660).....	1248
22 Remove the formatter.....	1249
23 Remove the formatter case.....	1249
24 Remove the DC controller PCA.....	1251
25 Remove the DC controller stay.....	1251
26 Remove the upper high-voltage power supply (HVPS).....	1252
27 Remove the low-voltage power supply (LVPS) and fan.....	1253
28 Remove the lower high voltage power supply (HVPS).....	1254
29 Remove the main drive assembly.....	1255
30 Unpack the replacement assembly.....	1258
31 Reverse the removal steps to install the assembly.....	1259
Removal and replacement: Fuser motor.....	1264
1 Remove the formatter cover.....	1265
2 Remove the left rear cover.....	1266
3 Remove the rear cover.....	1266

4 Remove the fax PCA (M681f/Flow M681f/Flow M681z/Flow M682z).....	1267
5 Remove the hard disk drive (HDD; M653dh/M681/M682/E67550/E67560/E67650/E67660)	1268
6 Remove the formatter	1269
7 Remove the formatter case.....	1269
8 Remove the DC controller PCA.....	1271
9 Remove the DC controller stay	1271
10 Remove the fuser motor	1272
11 Unpack the replacement assembly.....	1272
12 Reverse the removal steps to install the assembly.....	1273
Removal and replacement: Fuser drive assembly	1276
1 Remove the fuser	1277
2 Remove the intermediate transfer belt (ITB).....	1278
3 Remove the keyboard (MFP).....	1280
4 Remove the control panel (M681/M682/E67550/E67560/E67650/E67660).....	1283
5 Remove the document feeder and image scanner (M681/M682/E67550/E67560/E67650/ E67660).....	1287
6 Remove the stapler/stacker (Flow M681z/Flow M682z/Flow E67660z)	1293
7 Remove the face-down cover (M681dn/M681/M682dn/Flow M681f/E67650dh).....	1300
8 Remove the top cover (M681dn/M681/M682dn/Flow M681f/E67650dh).....	1301
9 Remove the right cover (M681dn/M681/M682dn/Flow M681f/E67650dh).....	1301
10 Remove the front cover (M681dn/M681/M682dn/Flow M681f/E67650dh).....	1302
11 Remove the rear upper cover (M681dn/M681/M682dn/Flow M681f/E67650dh)	1302
12 Remove the face-down cover (M681dn/M681/M682dn/Flow M681f/E67650dh)	1303
13 Remove the main cover (M681dn/M681/M682dn/Flow M681f/E67650dh).....	1304
14 Remove the control panel (M652/M653/E65050/E65060/E65150/E65160).....	1305
15 Remove the top cover (M681dn/M681/M682dn/Flow M681f/E67650dh).....	1308
16 Remove the output bin	1308
17 Remove the formatter cover	1309
18 Remove the left rear cover.....	1310
19 Remove the rear cover	1310
20 Remove the fax PCA (M681f/Flow M681f/Flow M681z/Flow M682z).....	1311
21 Remove the hard disk drive (HDD; M653dh/M681/M682/E67550/E67560/E67650/E67660)	1312
22 Remove the formatter.....	1313
23 Remove the formatter case	1313
24 Remove the DC controller stay.....	1315
25 Remove the DC controller stay	1315
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5 Remove the developer alienation motor	1329
6 Unpack the replacement assembly	1330
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6 Unpack the replacement assembly	1335
7 Reverse the removal steps to install the assembly	1336
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5 Remove the delivery assembly.....	1344
6 Unpack the replacement assembly	1347
7 Reverse the removal steps to install the assembly	1347
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5 Remove the registration assembly	1400
6 Unpack the replacement assembly	1403
7 Reverse the removal steps to install the assembly	1404
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6 Remove the right door	1422
7 Remove the secondary transfer assembly.....	1425
8 Remove the low-voltage power supply (LVPS) and fan.....	1428
9 Remove the lower high voltage power supply (HVPS).....	1429
10 Remove the registration assembly.....	1430
11 Remove the feed roller assembly.....	1434
12 Unpack the replacement assembly.....	1436
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1 Remove the formatter cover.....	1441
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4 Remove the right rear cover.....	1443
5 Remove the right handle.....	1444
6 Remove the right door	1444
7 Remove the secondary transfer assembly.....	1447
8 Remove the low-voltage power supply (LVPS) and fan.....	1450
9 Remove the lower high voltage power supply (HVPS).....	1452
10 Remove the registration assembly.....	1453
11 Remove the feed roller assembly.....	1456
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1 Remove the formatter cover.....	1466
2 Remove the left rear cover	1466
3 Remove the rear cover.....	1467
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6 Remove the drawer connector and holder	1470
7 Unpack the replacement assembly.....	1471
8 Reverse the removal steps to install the assembly.....	1472
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2 Unpack the replacement assembly.....	1477
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1 Remove the right door link (550-sheet paper feeder).....	1481
2 Remove the right door (550-sheet paper feeder).....	1482
3 Unpack the replacement assembly.....	1483
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1 Remove the rear cover (550-sheet paper feeder).....	1486
2 Remove the left cover (550-sheet paper feeder).....	1487
3 Unpack the replacement assembly.....	1488
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1 Remove the right door link (550-sheet paper feeder).....	1489
2 Remove the right lower cover	1490
3 Unpack the replacement assembly.....	1491
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1 Remove the rear cover (550-sheet paper feeder).....	1492
2 Remove the auto-close assembly (550-sheet paper feeder)	1493
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3 Remove the right door (550-sheet paper feeder).....	1496
4 Remove the right lower cover (550-sheet paper feeder).....	1497
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6 Unpack the replacement assembly	1499
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1 Remove the rear cover (550-sheet paper feeder).....	1501
2 Remove the right door link (550-sheet paper feeder).....	1501
3 Remove the right door (550-sheet paper feeder).....	1502
4 Remove the drive assembly	1503
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6 Unpack the replacement assembly	1505
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3 Remove the right door (550-sheet paper feeder).....	1508
4 Remove the right lower cover	1509
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3 Unpack the replacement assembly.....	1532
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1 Remove the rear cover (550-sheet paper feeder).....	1533
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3 Unpack the replacement assembly.....	1536
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3 Unpack the replacement assembly.....	1540
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1 Remove the left cover (1x550-sheet paper feeder with stand).....	1542
2 Unpack the replacement assembly.....	1542
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1 Remove the right door link.....	1544
2 Unpack the replacement assembly.....	1545
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1 Remove the rear cover (1x550-sheet paper feeder with stand).....	1549
2 Unpack the replacement assembly.....	1550
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1 Remove the front door (1x550-sheet paper feeder with stand).....	1552
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3 Unpack the replacement assembly.....	1555
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1 Remove the rear cover (1x550-sheet paper feeder with stand).....	1556
2 Remove the front door (1x550-sheet paper feeder with stand).....	1557
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5 Unpack the replacement assembly.....	1560
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4 Remove the left lower cover (1x550-sheet paper feeder with stand).....	1564
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8 Reverse the removal steps to install the assembly.....	1575
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2 Remove the right door (1x550-sheet paper feeder with stand).....	1577
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4 Unpack the replacement assembly.....	1579
5 Reverse the removal steps to install the assembly.....	1580
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1 Remove the rear cover (1x550-sheet paper feeder with stand).....	1581
2 Remove the size sensor (1x550-sheet paper feeder with stand).....	1582
3 Unpack the replacement assembly.....	1583
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1 Remove the rear cover (1x550-sheet paper feeder with stand).....	1584
2 Remove the drawer connector holder and cable assembly (1x550-sheet paper feeder with stand).....	1585
3 Unpack the replacement assembly.....	1588
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1 Remove the auto-close assembly (1x550-sheet paper feeder with stand).....	1589
2 Unpack the replacement assembly.....	1590
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1 Remove the right door (1x550-sheet paper feeder with stand).....	1591
2 Remove the paper pickup assembly (1x550-sheet paper feeder with stand).....	1592
3 Unpack the replacement assembly.....	1593
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2 Remove the feed motor (1x550-sheet paper feeder with stand).....	1596
3 Unpack the replacement assembly.....	1596
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1 Remove the rear cover (1x550-sheet paper feeder with stand).....	1598
2 Remove the feed motor (1x550-sheet paper feeder with stand).....	1599
3 Remove the drive assembly (1x550-sheet paper feeder with stand).....	1599
4 Unpack the replacement assembly.....	1600

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1 Remove the rear cover (1x550-sheet paper feeder with stand).....	1602
2 Remove the feed motor (1x550-sheet paper feeder with stand).....	1603
3 Remove the drive assembly (1x550-sheet paper feeder with stand).....	1603
4 Remove the pickup alienation holder (1x550-sheet paper feeder with stand).....	1604
5 Unpack the replacement assembly.....	1605
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1 Remove the rear cover (1x550-sheet paper feeder with stand).....	1607
2 Remove the feed motor (1x550-sheet paper feeder with stand).....	1608
3 Remove the drive assembly (1x550-sheet paper feeder with stand).....	1608
4 Remove the pickup alienation holder (1x550-sheet paper feeder with stand).....	1609
5 Remove the lifter drive assembly (1x550-sheet paper feeder with stand).....	1610
6 Unpack the replacement assembly.....	1611
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1 Remove the left lower cover (1x550-sheet paper feeder with stand).....	1612
2 Remove the controller PCA (1x550-sheet paper feeder with stand).....	1613
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2 Unpack the replacement assembly.....	1616
3 Reverse the removal steps to install the assembly.....	1616
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1 Remove the left cover (3x550-sheet paper feeder with stand).....	1618
2 Unpack the replacement assembly.....	1618
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1 Remove the right door link (3x550-sheet paper feeder with stand).....	1620
2 Unpack the replacement assembly.....	1621
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1 Remove the right door link (3x550-sheet paper feeder with stand).....	1622
2 Remove the right door (3x550-sheet paper feeder with stand).....	1623
3 Unpack the replacement assembly.....	1624
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1 Remove the rear cover (3x550-sheet paper feeder with stand).....	1625
2 Unpack the replacement assembly.....	1626
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1 Remove the left cover (3x550-sheet paper feeder with stand).....	1628
2 Remove the left lower cover (3x550-sheet paper feeder with stand).....	1628
3 Unpack the replacement assembly.....	1629
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3 Remove the right lower cover (3x550-sheet paper feeder with stand).....	1632
4 Unpack the replacement assembly.....	1633
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1 Remove the rear cover (3x550-sheet paper feeder with stand).....	1635
2 Remove the right door (3x550-sheet paper feeder with stand).....	1636
3 Remove the left cover (3x550-sheet paper feeder with stand).....	1637

4 Remove the left lower cover (3x550-sheet paper feeder with stand).....	1637
5 Remove the right lower cover (3x550-sheet paper feeder with stand)	1638
6 Remove the rear lower cover	1639
7 Unpack the replacement assembly.....	1640
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2 Remove the right door (3x550-sheet paper feeder with stand).....	1642
3 Remove the left cover (3x550-sheet paper feeder with stand).....	1643
4 Remove the left lower cover (3x550-sheet paper feeder with stand).....	1644
5 Remove the right lower cover (3x550-sheet paper feeder with stand)	1644
6 Remove the front lower cover.....	1646
7 Unpack the replacement assembly.....	1646
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1 Remove the rear cover (3x550-sheet paper feeder with stand).....	1648
2 Remove the right door (3x550-sheet paper feeder with stand).....	1649
3 Remove the right door switch (3x550-sheet paper feeder with stand).....	1650
4 Unpack the replacement assembly.....	1651
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1 Remove the rear cover (3x550-sheet paper feeder with stand).....	1652
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3 Unpack the replacement assembly.....	1654
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1 Remove the rear cover (3x550-sheet paper feeder with stand).....	1656
2 Remove the drawer connector holder and cable assembly (3x550-sheet paper feeder with stand).....	1657
3 Unpack the replacement assembly.....	1659
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1 Remove the auto-close assembly (3x550-sheet paper feeder with stand)	1661
2 Unpack the replacement assembly.....	1661
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1 Remove the right door (3x550-sheet paper feeder with stand).....	1663
2 Remove the paper pickup assembly (3x550-sheet paper feeder with stand).....	1663
3 Unpack the replacement assembly.....	1665
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1 Remove the rear cover (3x550-sheet paper feeder with stand).....	1666
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3 Unpack the replacement assembly.....	1668
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1 Remove the rear cover (3x550-sheet paper feeder with stand).....	1669
2 Remove the feed motor (3x550-sheet paper feeder with stand).....	1670
3 Remove the drive assembly (Tray 3 or 5) (3x550-sheet paper feeder with stand).....	1671
4 Unpack the replacement assembly.....	1673
Removal and replacement: Drive assembly (Tray 4) (3x550-sheet paper feeder with stand).....	1673
1 Remove the rear cover (3x550-sheet paper feeder with stand).....	1674
2 Remove the Tray 4 feed motor (3x550-sheet paper feeder with stand).....	1675
3 Remove the drive assembly (3x550-sheet paper feeder with stand).....	1676
4 Unpack the replacement assembly.....	1677
Removal and replacement: Pickup alienation holder (Tray 4) (3x550-sheet paper feeder with stand).....	1678

1 Remove the rear cover (3x550-sheet paper feeder with stand).....	1678
2 Remove the feed motor (3x550-sheet paper feeder with stand)	1679
3 Remove the drive assembly (Tray 3 or 5) (3x550-sheet paper feeder with stand).....	1680
4 Remove the drive assembly (3x550-sheet paper feeder with stand).....	1682
5 Remove the pickup alienation holder (3x550-sheet paper feeder with stand).....	1683
6 Unpack the replacement assembly	1683
Removal and replacement: Lifter drive assemblies (Trays 3 and 4) (3x550-sheet paper feeder with stand).....	1684
1 Remove the rear cover (3x550-sheet paper feeder with stand).....	1685
2 Remove the feed motors (Trays 3, 4, and 5) (3x550-sheet paper feeder with stand).....	1686
3 Remove the drive assemblies (Trays 3 and 5) (3x550-sheet paper feeder with stand)	1687
4 Remove the drive assembly (Tray 4) (3x550-sheet paper feeder with stand).....	1688
5 Remove the pickup alienation holder (3x550-sheet paper feeder with stand).....	1689
6 Remove the lifter drive assembly (Trays 3 and 4) (3x550-sheet paper feeder with stand).....	1690
7 Unpack the replacement assembly	1691
Removal and replacement: Lifter drive assemblies (Tray 5) (3x550-sheet paper feeder with stand).....	1692
1 Remove the rear cover (3x550-sheet paper feeder with stand).....	1692
2 Remove the feed motor (Tray 5) (3x550-sheet paper feeder with stand)	1693
3 Remove the drive assembly (Tray 5) (3x550-sheet paper feeder with stand).....	1694
4 Remove the lifter drive assembly (Tray 5) (3x550-sheet paper feeder with stand).....	1696
5 Unpack the replacement assembly.....	1696
Removal and replacement: Controller PCA (3x550-sheet paper feeder with stand).....	1697
1 Remove the rear cover (3x550-sheet paper feeder with stand).....	1697
2 Remove the controller PCA (3x550-sheet paper feeder with stand).....	1698
3 Unpack the replacement assembly.....	1699
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Removal and replacement: Left cover (2,550-sheet paper feeder with stand)	1700
1 Remove the left cover (2,550-sheet paper feeder with stand).....	1701
2 Unpack the replacement assembly.....	1701
Removal and replacement: Right door link (2,550-sheet paper feeder with stand).....	1702
1 Remove the right door link.....	1702
2 Unpack the replacement assembly.....	1703
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1 Remove the right door link arm (2,550-sheet paper feeder with stand).....	1705
2 Remove the right door (2,550-sheet paper feeder with stand).....	1706
3 Unpack the replacement assembly.....	1706
Removal and replacement: Rear cover (2,550-sheet paper feeder with stand).....	1707
1 Remove the rear cover (2,550-sheet paper feeder with stand).....	1708
2 Unpack the replacement assembly.....	1709
Removal and replacement: Left lower cover (2,550-sheet paper feeder with stand).....	1710
1 Remove Tray 4 (2,550-sheet paper feeder with stand)	1710
2 Remove the left cover (2,550-sheet paper feeder with stand).....	1711
3 Remove the left lower cover (2,550-sheet paper feeder with stand)	1712
4 Unpack the replacement assembly.....	1712
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1 Remove the rear cover (2,550-sheet paper feeder with stand).....	1714
2 Remove the right door (2,550-sheet paper feeder with stand).....	1715
3 Remove the right lower cover (2,550-sheet paper feeder with stand).....	1715
4 Unpack the replacement assembly.....	1717

Removal and replacement: Rear lower cover (2,550-sheet paper feeder with stand).....	1718
1 Remove the rear cover (2,550-sheet paper feeder with stand).....	1718
2 Remove the right door (2,550-sheet paper feeder with stand).....	1719
3 Remove the left lower cover (2,550-sheet paper feeder with stand)	1720
4 Remove the right lower cover (2,550-sheet paper feeder with stand).....	1720
5 Remove the rear lower cover.....	1722
6 Unpack the replacement assembly	1722
Removal and replacement: Right door switch (2,550-sheet paper feeder with stand).....	1723
1 Remove the rear cover (2,550-sheet paper feeder with stand).....	1724
2 Remove the right door (2,550-sheet paper feeder with stand).....	1725
3 Remove the right door switch (2,550-sheet paper feeder with stand).....	1725
4 Unpack the replacement assembly.....	1728
Removal and replacement: Size sensor (Tray 3) (2,550-sheet paper feeder with stand).....	1728
1 Remove the rear cover (2,550-sheet paper feeder with stand).....	1729
2 Remove the size sensor (Tray 3) (2,550-sheet paper feeder with stand).....	1730
3 Unpack the replacement assembly.....	1731
Removal and replacement: Size sensor (Tray 4) (2,550-sheet paper feeder with stand).....	1732
1 Remove Tray 4 (2,550-sheet paper feeder with stand)	1732
2 Remove the rear cover (2,550-sheet paper feeder with stand).....	1733
3 Remove the size sensor (Tray 4) (2,550-sheet paper feeder with stand).....	1734
4 Unpack the replacement assembly.....	1736
Removal and replacement: Drawer connector and cable assembly (2,550-sheet paper feeder with stand).....	1737
1 Remove the rear cover (2,550-sheet paper feeder with stand).....	1737
2 Remove the drawer connector holder and cable assembly (2,550-sheet paper feeder with stand).....	1738
3 Unpack the replacement assembly.....	1741
Removal and replacement: Auto-close assembly (Tray 3) (2,550-sheet paper feeder with stand).....	1742
1 Remove the auto-close assembly (Tray 3) (2,550-sheet paper feeder with stand)	1742
2 Unpack the replacement assembly.....	1743
Removal and replacement: Auto-close assembly (Tray 4) (2,550-sheet paper feeder with stand).....	1744
1 Remove the auto-close assembly (Tray 4) (2,550-sheet paper feeder with stand)	1744
2 Unpack the replacement assembly.....	1745
Removal and replacement: Paper pickup assemblies (2,550-sheet paper feeder with stand).....	1746
1 Remove the right door (2,550-sheet paper feeder with stand).....	1746
2 Remove the paper pickup assembly (2,550-sheet paper feeder with stand).....	1747
3 Unpack the replacement assembly.....	1748
Removal and replacement: Tray lifter motor drive assembly(2,550-sheet paper feeder with stand).....	1749
1 Remove the rear cover (2,550-sheet paper feeder with stand).....	1749
2 Remove the left cover (2,550-sheet paper feeder with stand).....	1750
3 Remove the tray lifter motor drive assembly (2,550-sheet paper feeder with stand).....	1751
4 Unpack the replacement assembly.....	1752
Removal and replacement: Feed motors (2,550-sheet paper feeder with stand).....	1753
1 Remove the rear cover (2,550-sheet paper feeder with stand).....	1753
2 Remove the feed motor (2,550-sheet paper feeder with stand).....	1754
3 Unpack the replacement assembly.....	1755
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1 Remove the rear cover (2,550-sheet paper feeder with stand).....	1756
2 Remove the Tray 3 feed motor (2,550-sheet paper feeder with stand).....	1757

3 Remove the drive assembly (Tray 3) (2,550-sheet paper feeder with stand).....	1758
4 Unpack the replacement assembly.....	1759
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1 Remove the rear cover (2,550-sheet paper feeder with stand).....	1761
2 Remove the Tray 4 feed motor (2,550-sheet paper feeder with stand).....	1762
3 Remove the drive assembly (Tray 4) (2,550-sheet paper feeder with stand).....	1763
4 Unpack the replacement assembly.....	1763
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1 Remove the rear cover (2,550-sheet paper feeder with stand).....	1765
2 Remove the feed motors (Trays 3 and 4) (2,550-sheet paper feeder with stand).....	1766
3 Remove the drive assembly (Tray 3) (2,550-sheet paper feeder with stand).....	1767
4 Remove the drive assembly (Tray 4) (2,550-sheet paper feeder with stand).....	1767
5 Remove the pickup alienation holder (2,550-sheet paper feeder with stand).....	1768
6 Unpack the replacement assembly	1769
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1 Remove the rear cover (2,550-sheet paper feeder with stand).....	1771
2 Remove the feed motors (Trays 3 and 4) (2,550-sheet paper feeder with stand).....	1772
3 Remove the drive assembly (Tray 3) (2,550-sheet paper feeder with stand).....	1773
4 Remove the drive assembly (Tray 4) (2,550-sheet paper feeder with stand).....	1773
5 Remove the pickup alienation holder (2,550-sheet paper feeder with stand).....	1774
6 Remove the lifter drive assembly (2,550-sheet paper feeder with stand)	1775
7 Unpack the replacement assembly	1776
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1 Remove the rear cover (2,550-sheet paper feeder with stand).....	1777
2 Remove the controller PCA (2,550-sheet paper feeder with stand).....	1778
3 Unpack the replacement assembly.....	1779
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2 Remove the document feeder and image scanner (M681/M682/E67550/E67560/E67650/ E67660).....	1784
3 Remove the stapler/stacker	1791
4 Unpack the replacement assembly.....	1798
5 Reverse the removal steps to install the assembly.....	1799
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1 Remove the rear cover (3-bin stapler/stacker).....	1801
2 Unpack the replacement assembly.....	1803
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1 Remove the right door (3-bin stapler/stacker).....	1804
2 Unpack the replacement assembly.....	1806
Removal and replacement: Right upper cover (3-bin stapler/stacker).....	1807
1 Remove the right upper cover (3-bin stapler/stacker).....	1808
2 Unpack the replacement assembly.....	1808
Removal and replacement: Staple door (3-bin stapler/stacker).....	1809
1 Remove the staple door (3-bin stapler/stacker).....	1810
2 Unpack the replacement assembly.....	1811
Removal and replacement: Staple cover (3-bin stapler/stacker).....	1812
1 Remove the staple cover (3-bin stapler/stacker).....	1812
2 Unpack the replacement assembly.....	1814

3 Reverse the removal steps to install the assembly.....	1815
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1 Remove the staple cartridge.....	1816
2 Remove the staple cover (3-bin stapler/stacker).....	1817
3 Remove the stapler.....	1819
4 Unpack the replacement assembly.....	1820
5 Reverse the removal steps to install the assembly.....	1820
Removal and replacement: Right front cover (3-bin stapler/stacker).....	1821
1 Remove the staple cover (3-bin stapler/stacker).....	1822
2 Remove the right front cover (3-bin stapler/stacker).....	1824
3 Unpack the replacement assembly.....	1825
4 Reverse the removal steps to install the assembly.....	1825
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1 Remove the rear cover (3-bin stapler/stacker).....	1827
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3 Remove the right corner cover (3-bin stapler/stacker).....	1833
4 Unpack the replacement assembly.....	1833
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1 Remove the staple cover (3-bin stapler/stacker).....	1834
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3 Unpack the replacement assembly.....	1839
4 Reverse the removal steps to install the assembly.....	1840
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4 Remove the right corner cover (3-bin stapler/stacker).....	1846
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6 Unpack the replacement assembly.....	1847
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3 Remove the right upper cover (3-bin stapler/stacker).....	1852
4 Remove the right corner cover (3-bin stapler/stacker).....	1853
5 Remove the staple rear cover (3-bin stapler/stacker).....	1854
6 Remove the right lower cover (3-bin stapler/stacker).....	1854
7 Unpack the replacement assembly.....	1855
8 Reverse the removal steps to install the assembly.....	1856
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3 Unpack the replacement assembly.....	1860
4 Reverse the removal steps to install the assembly.....	1861
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1 Remove the tray assembly (3-bin stapler/stacker)	1862
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1 Remove the tray pin (3-bin stapler/stacker)	1866
2 Unpack the replacement assembly	1868
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1 Remove the staple cover (3-bin stapler/stacker)	1870
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3 Remove the rear cover (3-bin stapler/stacker)	1874
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5 Unpack the replacement assembly	1877
6 Reverse the removal steps to install the assembly	1878
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1 Remove the tray assembly (3-bin stapler/stacker)	1879
2 Remove the staple cover (3-bin stapler/stacker)	1882
3 Remove the rear cover (3-bin stapler/stacker)	1884
4 Remove the rear inner cover (3-bin stapler/stacker)	1885
5 Remove the stacking wall cover (3-bin stapler/stacker)	1886
6 Unpack the replacement assembly	1887
7 Reverse the removal steps to install the assembly	1888
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1 Remove the right door (3-bin stapler/stacker)	1889
2 Remove the staple cover (3-bin stapler/stacker)	1891
3 Remove the stapler (3-bin stapler/stacker)	1893
4 Remove the rear cover (3-bin stapler/stacker)	1894
5 Remove the right upper cover (3-bin stapler/stacker)	1895
6 Remove the right corner cover (3-bin stapler/stacker)	1896
7 Remove the staple rear cover (3-bin stapler/stacker)	1897
8 Remove the upper feed assembly (3-bin stapler/stacker)	1897
9 Unpack the replacement assembly	1899
10 Reverse the removal steps to install the assembly	1900
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1 Remove the rear cover (3-bin stapler/stacker)	1901
2 Remove the fan (3-bin stapler/stacker)	1902
3 Unpack the replacement assembly	1903
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1 Remove the tray assembly (3-bin stapler/stacker)	1905
2 Remove the right door (3-bin stapler/stacker)	1908
3 Remove the staple cover (3-bin stapler/stacker)	1910
4 Remove the stapler	1912
5 Remove the rear cover (3-bin stapler/stacker)	1913
6 Remove the rear inner cover (3-bin stapler/stacker)	1914
7 Remove the stacking wall cover (3-bin stapler/stacker)	1914
8 Remove the fan (3-bin stapler/stacker)	1915
9 Remove the right upper cover (3-bin stapler/stacker)	1916
10 Remove the right corner cover (3-bin stapler/stacker)	1917
11 Remove the rear cover (3-bin stapler/stacker)	1917
12 Remove the staple rear cover (3-bin stapler/stacker)	1918
13 Remove the upper feed assembly (3-bin stapler/stacker)	1919

14 Remove the lower feed assembly (3-bin stapler/stacker).....	1920
15 Unpack the replacement assembly.....	1921
16 Reverse the removal steps to install the assembly	1922
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1 Remove the tray assembly (3-bin stapler/stacker)	1924
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3 Remove the jogger cover (3-bin stapler/stacker).....	1929
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5 Remove the rear inner cover (3-bin stapler/stacker)	1933
6 Remove the stacking wall cover (3-bin stapler/stacker).....	1934
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8 Unpack the replacement assembly	1936
9 Reverse the removal steps to install the assembly.....	1937
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4 Remove the microswitch (3-bin stapler/stacker).....	1946
5 Unpack the replacement assembly.....	1948
6 Reverse the removal steps to install the assembly.....	1949
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1 Remove the rear cover (3-bin stapler/stacker).....	1951
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3 Remove the feed motor (3-bin stapler/stacker).....	1953
4 Unpack the replacement assembly.....	1954
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1 Remove the rear cover (3-bin stapler/stacker).....	1955
2 Remove the controller PCA (3-bin stapler/stacker).....	1956
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1 Printer information, configurations, and specifications

Learn about printer configuration and specifications.

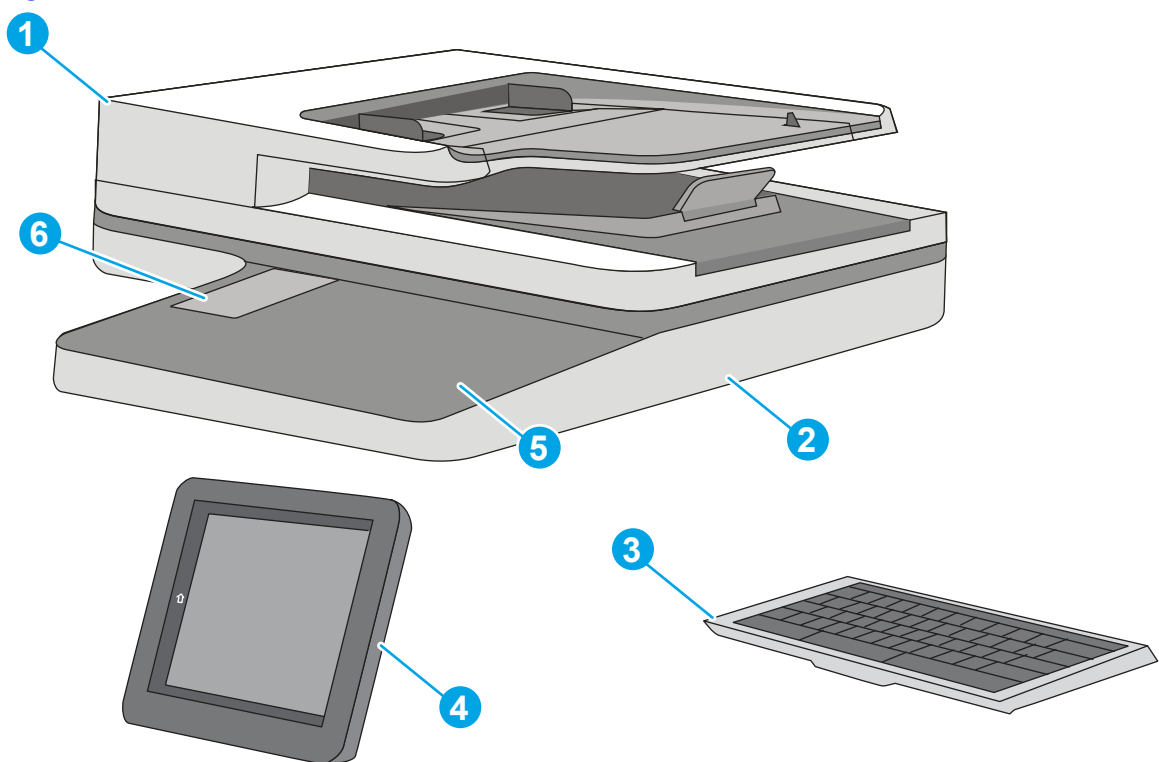
Information (document feeder and scanner)

Learn about the document feeder and scanner.

Document feeder and scanner front view

Learn about the document feeder and scanner components.

Figure 1-1 Document feeder and scanner front view



Item	Description
1	Document feeder

Item	Description
2	Image scanner
3	Control panel
4	Physical keyboard (Flow)
5	Hardware integration pocket (for connecting accessory and third-party devices)
6	Control panel cover (bezel)

Specifications (document feeder and scanner)

Learn about the document feeder and scanner specifications.

Technical specifications

Learn about the document feeder and scanner specifications.

Review the technical specifications for the document feeder and scanner.

See www.hp.com/support/colorljM681MFP or www.hp.com/support/colorljM682MFP or www.hp.com/support/ljE67550MFP or www.hp.com/support/ljE67560MFP or www.hp.com/support/colorljE67650MFP or www.hp.com/support/colorljE67660MFP for current information.



NOTE: For the E67550 and E67560, see the product specific support page above.

Table 1-1 Copy and scan specifications (document feeder and scanner)

Copy and scan features	M681dh	M681f	Flow M681f	Flow M681z	Flow M682z	E67650dh	E67660z-Flow
150-page document feeder with dual-head scanning for single-pass duplex copying and scanning	✓	✓	✓	✓	✓	✓	✓
Send documents to email, USB, and shared folders on a network	✓	✓	✓	✓	✓	✓	✓
Send documents to SharePoint®	Not supported	Not supported	✓	✓	✓	Not supported	✓

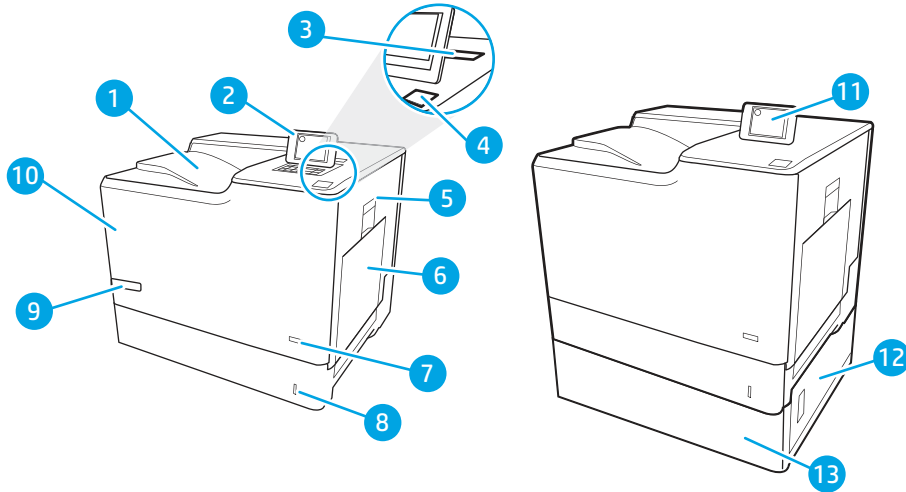
Information (base printer)

Learn about the base printer.

Printer front view (M652/M653/E65050/E65060/E65150/E65160)

Identify the parts on the front of the printer (SFP).

Figure 1-2 Printer front view (SFP)

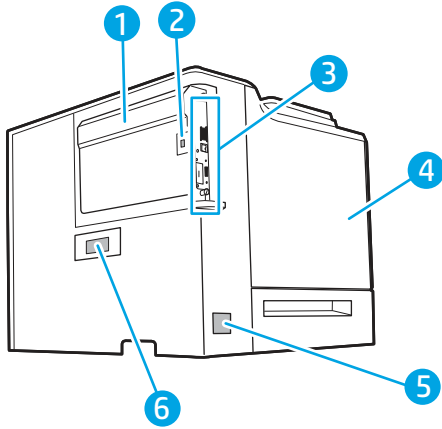


Number	Description
1	Output bin
2	Control panel with color graphical display and keypad (M652 models only)
3	Hardware integration pocket for connecting accessory and third-party devices
4	Easy-access USB port Insert a USB flas drive for printing without a computer or to update the printer firmware. NOTE: An administrator must enable this port before use.
5	Right door (access to the fuser and for clearing jams)
6	Tray 1
7	On/off button
8	Tray 2
9	Model name
10	Front door (access to the toner cartridges)
11	Control panel with color touchscreen display (M653 models only)
12	Lower-right door (access for clearing jams)
13	1 x 550-sheet paper feeder, Tray 3 (included with the M653x model, optional for the other models)

Printer back view (M652/M653/E65050/E65060/E65150/E65160)

Identify the parts on the front of the printer (SFP).

Figure 1-3 Printer back view (SFP)

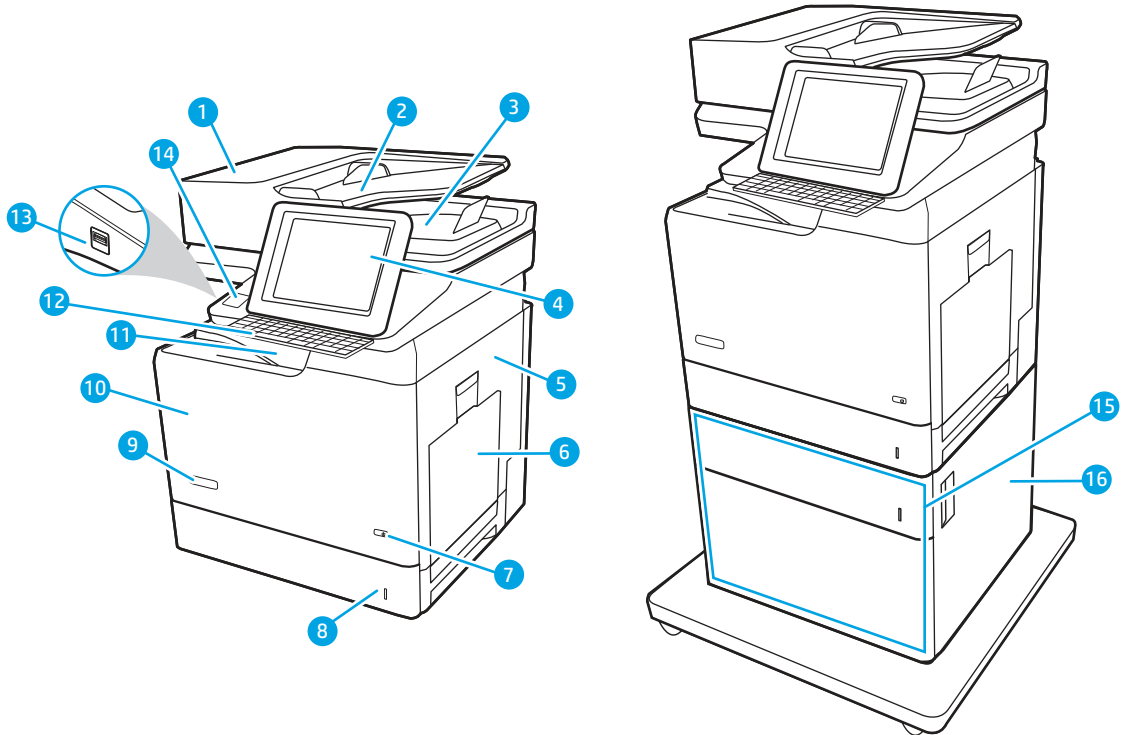


Number	Description
1	Formatter cover
2	Slot for a cable-type security lock
3	Formatter (contains the interface ports)
4	Left door (access to the toner-collection unit)
5	Power connection
6	Serial number and product number label

Printer front view (M681/M682/E67550/E67560/E67650/E67660)

Identify the parts on the front of the printer (MFP).

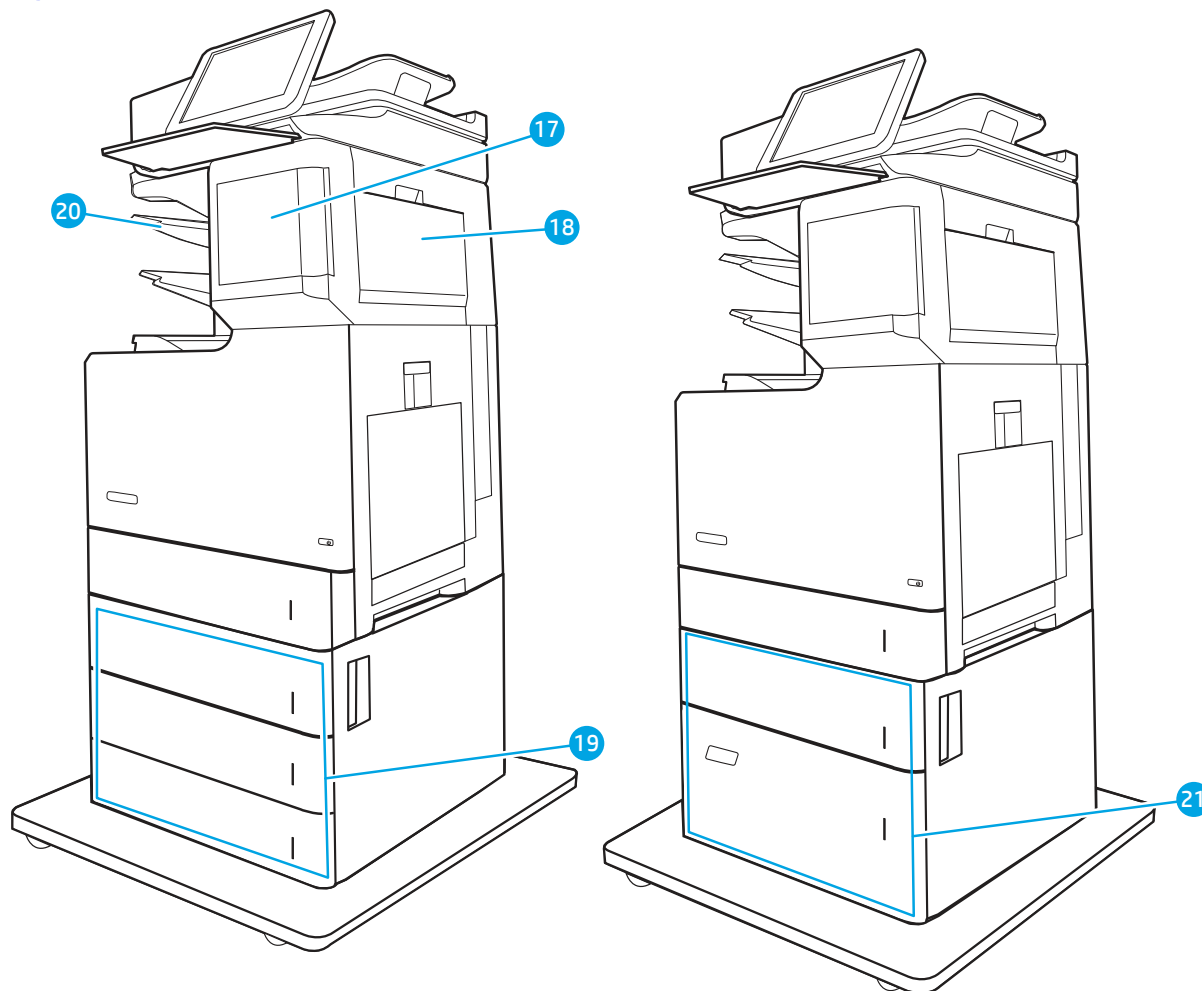
Figure 1-4 Printer front view (MFP 1 of 2)



Number	Description
1	Document-feeder cover (access for clearing jams)
2	Document-feeder input tray
3	Document-feeder output bin
	NOTE: When feeding long paper through the document feeder, extend the paper stop at the right side of the output bin.
4	Control panel with color touchscreen display (tilts up for easier viewing)
5	Right door (access to the fuser and for clearing jams)
6	Tray 1
7	On/off button
8	Tray 2
9	Model name
10	Front door (access to the toner cartridges)
11	Standard output bin
12	Physical keyboard (Flow models only). Pull the keyboard straight out to use it.
	CAUTION: Close the keyboard when it is not in use.
13	Easy-access USB port (on the side of the control panel)
	Insert a USB flash drive for printing or scanning without a computer or to update the printer firmware.
	NOTE: An administrator must enable this port before use.
14	Hardware integration pocket (for connecting accessory and third-party devices)

Number	Description
15	1x550-sheet paper feeder with stand
16	Lower-right door (access for clearing jams)

Figure 1-5 Printer front view (MFP 2 of 2)

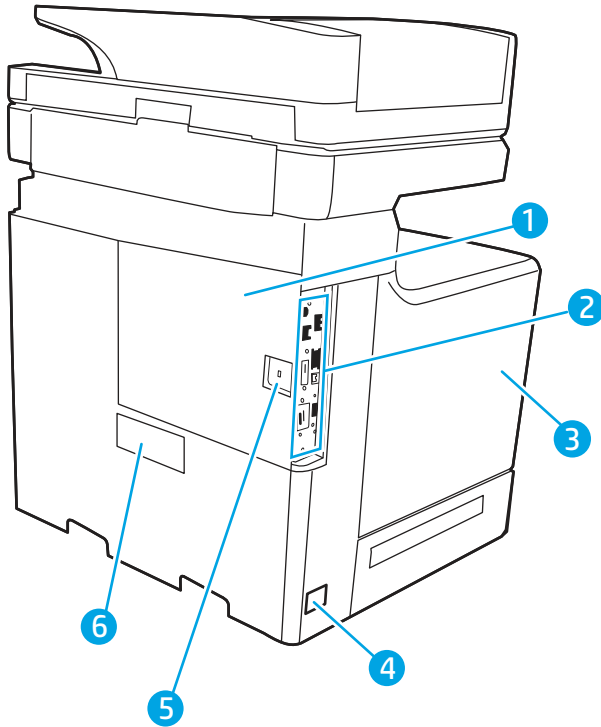


Number	Description
17	Stapler-cartridge door (z models only)
18	Stapler/stacker-right door (z models only) (access for clearing jams)
19	3x550-sheet paper feeder with stand
20	2-bin stapler/stacker
21	High-capacity paper feeder and 550-sheet paper feeder with stand

Printer back view (M681/M682/E67550/E67560/E67650/E67660)

Identify the parts on the front of the printer (MFP).

Figure 1-6 Printer back view (MFP)



Number	Description
1	Formatter cover
2	Formatter (contains the interface ports)
3	Left door (access to the toner-collection unit)
4	Power connection
5	Slot for a cable-type security lock
6	Serial number and product number label

Specifications (base printer)

Learn about the base printer specifications.

Technical specifications (M652/M653/E65050/E65060)

Review the technical specifications for the M652/M653/E65050/E65060 printers.

See www.hp.com/support/colorijM652 or www.hp.com/support/colorijM653 or or www.hp.com/support/ijE65050 or www.hp.com/support/ijE65060 or www.hp.com/support/colorijE65150 or www.hp.com/support/colorijE65160 for current information.

Product numbers for each model

- M652n - J7Z98A
- M652dn - J7Z99A

- M653dn - J8A04A
- M653x - J8A05A
- E65050 - L3U55A
- E65060 - L3U56A

Table 1-2 Paper handling specifications (M652/M653/E65050/E65060)

Paper handling features	M652n	M652dn	M653dn	M653x
		E65050dn	E65060dn	
Tray 1 (100-sheet capacity)	✓	✓	✓	✓
Tray 2 (550-sheet capacity)	✓	✓	✓	✓
1 x 550-sheet paper feeder	Optional	Optional	Optional	✓
NOTE: The M652n, M652dn and M653dn models accept up to two optional 1 x 550-sheet feeders. Tray 3 is included with the M653x model, which can accept one additional 1 x 550-sheet paper feeder.				
1 x 550-sheet paper feeder with stand	Optional	Optional	Optional	Optional
3 x 550-sheet paper feeder with stand	Optional	Optional	Optional	Optional
High-capacity input feeder (HCI)	Optional	Optional	Optional	Optional
Automatic duplex printing	Not supported	✓	✓	✓

Table 1-3 Connectivity specifications (M652/M653/E65050/E65060)

Connectivity features	M652n	M652dn	M653dn	M653x
		E65050dn	E65060dn	
10/100/1000 Ethernet LAN connection with IPv4 and IPv6	✓	✓	✓	✓
Hi-speed USB 2.0	✓	✓	✓	✓
Easy-access USB port for printing without a computer and upgrading the firmware	✓	✓	✓	✓
Hardware Integration Pocket (HIP) for connecting accessory and third-party devices	✓	Not supported	✓	✓
HP Internal USB Ports	Optional	Optional	Optional	✓
HP Jetdirect 3000w NFC/wireless accessory for printing from mobile devices	Optional	Optional	Optional	Optional
NOTE: For use in the Hardware Integration Pocket. The HP Jetdirect 3000w NFC/Wireless Accessory requires the HP Internal USB ports accessory. The J8030A can also be connected via the rear HIP is not used.				

Table 1-3 Connectivity specifications (M652/M653/E65050/E65060) (continued)

Connectivity features	M652n	M652dn	M653dn	M653x
		E65050dn	E65060dn	
Integrated HP near-field communication (NFC) and Wi-Fi Direct functionality for printing from mobile devices	Not supported	Not supported	Not supported	✓
HP Jetdirect 2900nw Print Server accessory for wireless connectivity	Optional	Optional	Optional	Optional

Table 1-4 Print specifications (M652/M653/E65050/E65060)

Print features	M652n	M652dn	M653dn	M653x
		E65050dn	E65060dn	
Prints 50 pages per minute (ppm) on letter and 47 ppm on A4-size paper	✓	✓	Not supported	Not supported
Prints 60 pages per minute (ppm) on letter and 56 ppm on A4-size paper	Not supported	Not supported	✓	✓
Easy-access USB printing (no computer required)	✓	✓	✓	✓
Store jobs in the printer memory to print later or print privately	✓	✓	✓	✓

Table 1-5 Other specifications (M652/M653/E65050/E65060)

Other features	M652n	M652dn	M653dn	M653x
		E65050dn	E65060dn	
1.0 GB base memory	✓	✓	✓	✓
NOTE: Expandable to 2 GB.				
500 GB FIPS140 certified hard-disk drive	Optional	Optional	Optional	Optional
HP Trusted Platform Module for encrypting all data that passes through the printer	Optional	Optional	Optional	Optional
Color graphical display with 10-key keypad	✓	✓	Not supported	Not supported
Color touchscreen control panel	Not supported	Not supported	✓	✓

Technical specifications (E65150/E65160)

Review the technical specifications for the E65150/E65160 printers.

See www.hp.com/support/colorljM652 or www.hp.com/support/colorljM653 or www.hp.com/support/ljE65050 or www.hp.com/support/ljE65060 or www.hp.com/support/colorljE65150 or www.hp.com/support/colorljE65160 for current information.

Product numbers for each model

- E65150dn - 3GY03A
- E65160dn - 3GY04A

Table 1-6 Paper handling specifications (E65150/E65160)

Paper handling features	E65150dn	E65160dn
Tray 1 (100-sheet capacity)	✓	✓
Tray 2 (550-sheet capacity)	✓	✓
1 x 550-sheet paper feeder	Optional	Optional
NOTE: The E65150dn and E65160dn models accept up to two optional 1 x 550-sheet feeders.		
1 x 550-sheet paper feeder with stand	Optional	Optional
3 x 550-sheet paper feeder with stand	Optional	Optional
High-capacity input feeder (HCI)	Optional	Optional
Automatic duplex printing	✓	✓

Table 1-7 Connectivity specifications (E65150/E65160)

Connectivity features	E65150dn	E65160dn
10/100/1000 Ethernet LAN connection with IPv4 and IPv6	✓	✓
Hi-speed USB 2.0	✓	✓
Easy-access USB port for printing without a computer and upgrading the firmware	✓	✓
Hardware Integration Pocket (HIP) for connecting accessory and third-party devices	Not supported	✓
HP Internal USB Ports	Optional	Optional
HP Jetdirect 3100w BLE/NFC/Wireless Accessory for printing from mobile devices	Optional	Optional
NOTE: Connected via the Hardware Integration Pocket or the rear host USB port. The HP Jetdirect 3100w BLE/NFC/Wireless Accessory requires the HP Internal USB ports accessory.		
HP Jetdirect 2900nw Print Server accessory for wireless connectivity	Optional	Optional

Table 1-8 Print specifications (E65150/E65160)

Print features	E65150dn	E65160dn
Prints 50 pages per minute (ppm) on letter and 47 ppm on A4-size paper	✓	Not supported
Prints 60 pages per minute (ppm) on letter and 56 ppm on A4-size paper	Not supported	✓
Easy-access USB printing (no computer required)	✓	✓
Store jobs in the printer memory to print later or print privately	✓	✓

Table 1-9 Other specifications (E65150/E65160)

Other features	E65150dn	E65160dn
1.0 GB base memory	✓	✓
NOTE: The base memory is expandable to 2 GB by adding a DIMM memory module.		
500 GB FIPS140 certified hard-disk drive	Optional	Optional
HP Trusted Platform Module for encrypting all data that passes through the printer	Optional	Optional
Color touchscreen control panel	✓	✓

Technical specifications (M681/M682/E67550/E67560)

Review the technical specifications for the M681/M682/E67550/E67560 printer.

See www.hp.com/support/colorIjM681MFP or www.hp.com/support/colorIjM682MFP or www.hp.com/support/IjE67550MFP or www.hp.com/support/IjE67560MFP or www.hp.com/support/colorIjE67650MFP or www.hp.com/support/colorIjE67660MFP for current information.

Product numbers for each model

- M681dh - J8A10A
- M681f - J8A11A
- Flow M681f - J8A12A
- Flow M681z - J8A13A
- Flow M682z - J8A17A
- E67550dh - L3U66A
- Flow E67560z - L3U70A

Table 1-10 Paper handling specifications (M681/M682/E67550/E67560)

Paper handling features	M681dh	M681f	Flow M681f	Flow M681z	Flow M682z
	E67550dh				Flow E67560z
Tray 1 (100-sheet capacity)	✓	✓	✓	✓	
Tray 2 (550-sheet capacity)	✓	✓	✓	✓	
1 x 550-sheet paper feeder	Optional	Optional	Optional	Not supported	Not supported
NOTE: The M681dh and Flow M681f models accept up to two optional 1 x 550-sheet feeders. Tray 3 is included with the M681f model, which can accept one additional 1 x 550-sheet paper feeder.					
1 x 550-sheet paper feeder with stand	Optional	✓	Optional	Not supported	Not supported

Table 1-10 Paper handling specifications (M681/M682/E67550/E67560) (continued)

Paper handling features	M681dh	M681f	Flow M681f	Flow M681z	Flow M682z
	E67550dh				Flow E67560z
3 x 550-sheet paper feeder with stand	Optional	Not supported	Optional	✓	Not supported
High-capacity input tray with stand	Optional	Not supported	Optional	Not supported	✓
3-bin stapler/stacker	Not supported	Not supported	Not supported	✓	✓
Automatic duplex printing	✓	✓	✓	✓	✓

Table 1-11 Connectivity specifications (M681/M682/E67550/E67560)

Connectivity features	M681dh	M681f	Flow M681f	Flow M681z	Flow M682z
	E67550dh				Flow E67560z
10/100/1000 Ethernet LAN connection with IPv4 and IPv6	✓	✓	✓	✓	✓
Hi-speed USB 2.0	✓	✓	✓	✓	✓
Easy-access USB port for printing without a computer and upgrading the firmware	✓	✓	✓	✓	✓
Hardware Integration Pocket (HIP) for connecting accessory and third-party devices	✓	✓	✓	✓	✓
HP Internal USB Ports	Optional	Optional	Optional	Optional	Optional
Integrated HP Wireless Direct Print functionality for printing from mobile devices	Not supported	Not supported	Not supported	Not supported	✓
HP Jetdirect 3000w NFC/Wireless Accessory for printing from mobile	Optional	Optional	Optional	Optional	Optional
HP Jetdirect 2900nw Print Server accessory for wireless connectivity	Optional	Optional	Optional	Optional	Optional

Table 1-12 Print specifications (M681/M682/E67550/E67560)

Print features	M681dh	M681f	Flow M681f	Flow M681z	Flow M682z
	E67550dh				Flow E67560z
Prints 50 pages per minute (ppm) on letter and 47 ppm on A4-size paper	✓	✓	✓	✓	Not supported
Prints 60 pages per minute (ppm) on letter and 56 ppm on A4-size paper	Not supported	Not supported	Not supported	Not supported	✓
Easy-access USB printing (no computer required)	✓	✓	✓	✓	✓

Table 1-12 Print specifications (M681/M682/E67550/E67560) (continued)

Print features	M681dh	M681f	Flow M681f	Flow M681z	Flow M682z
	E67550dh				Flow E67560z
Store jobs in the printer memory to print later or print privately	✓	✓	✓	✓	✓

Table 1-13 Copy and scan specifications (M681/M682/E67550/E67560)

Print features	M681dh	M681f	Flow M681f	Flow M681z	Flow M682z
	E67550dh				Flow E67560z
Copies 50 pages per minute (ppm) on letter and 47 ppm on A4-size paper	✓	✓	✓	✓	Not supported
Copies 60 pages per minute (ppm) on letter and 56 ppm on A4-size paper	Not supported	Not supported	Not supported	Not supported	✓
Scans at 75 images per minute (ipm) (simplex and duplex)	✓	✓	✓	✓	✓
Scans at 90 ipm (simplex)	Not supported	Not supported	✓	✓	✓
Scans at 180 ipm (duplex)	Not supported	Not supported	✓	✓	✓
150-page document feeder with dual-head scanning for single-pass duplex copying and scanning	✓	✓	✓	✓	✓
HP EveryPage Technologies including ultrasonic multi-feed detection	Not supported	Not supported	✓	✓	✓
Embedded optical character recognition (OCR) provides the ability to convert printed pages into text that can be edited or searched using a computer	Not supported	Not supported	✓	✓	✓
SMART Label feature provides paper-edge detection for automatic page cropping	Not supported	Not supported	✓	✓	✓
Automatic page orientation for pages that have at least 100 characters of text	Not supported	Not supported	✓	✓	✓
Automatic tone adjustment sets contrast, brightness, and background removal for each page	Not supported	Not supported	✓	✓	✓

Table 1-14 Digital Send specifications (M681/M682/E67550/E67560)

Print features	M681dh	M681f	Flow M681f	Flow M681z	Flow M682z
	E67550dh				Flow E67560z
Send documents to E-mail, USB, and shared folders on a network	✓	✓	✓	✓	✓

Table 1-14 Digital Send specifications (M681/M682/E67550/E67560) (continued)

Print features	M681dh E67550dh	M681f	Flow M681f	Flow M681z	Flow M682z Flow E67560z
Send documents to SharePoint®	Not supported	Not supported	✓	✓	✓

Table 1-15 Other specifications (M681/M682/E67550/E67560)

Other features	M681dh E67550dh	M681f	Flow M681f	Flow M681z	Flow M682z Flow E67560z
2 GB base memory	✓	✓	Not supported	Not supported	Not supported
NOTE: The base memory is expandable to 2.5 GB by adding a DIMM memory module.					
2.5 GB base memory	Not supported	Not supported	✓	✓	✓
NOTE: The base memory is expandable to 3 GB by adding a DIMM memory module.					
320 GB Hard Disk Drive	✓	✓	✓	✓	✓
Color touchscreen control panel	✓	✓	✓	✓	✓
Physical keyboard	Not supported	Not supported	✓	✓	✓
HP Trusted Platform Module for encrypting all data that passes through the printer	Optional	Optional	Optional	Optional	Optional
Fax	Optional	✓	✓	✓	✓

Technical specifications (E67650/E67660)

Review the technical specifications for the E67650/E67660 printer.

See www.hp.com/support/colorljM681MFP or www.hp.com/support/colorljM682MFP or www.hp.com/support/ljE67550MFP or www.hp.com/support/ljE67560MFP or www.hp.com/support/colorljE67650MFP or www.hp.com/support/colorljE67660MFP for current information.

Product numbers for each model

- E67650dh - 3GY31A
- E67660z -Flow - 3GY32A

Table 1-16 Paper handling specifications (E67650/E67660)

Paper handling features	E67650dh	E67660z -Flow
Tray 1 (100-sheet capacity)	✓	✓
Tray 2 (550-sheet capacity)	✓	✓

Table 1-16 Paper handling specifications (E67650/E67660) (continued)

Paper handling features	E67650dh	E67660z -Flow
1 x 550-sheet paper feeder	Optional	Optional
NOTE: These models accepts up to two optional 1 x 550-sheet feeders.		
1 x 550-sheet paper feeder with stand	Optional	Optional
3 x 550-sheet paper feeder with stand	Optional	Optional
High-capacity input tray with stand	Optional	Not supported
900-sheet 3-bin stapling mailbox	Not supported	✓
Automatic duplex printing	✓	✓

Table 1-17 Connectivity specifications (E67650/E67660)

Connectivity features	E67650dh	E67660z -Flow
10/100/1000 Ethernet LAN connection with IPv4 and IPv6	✓	✓
Hi-speed USB 2.0	✓	✓
Easy-access USB port for printing without a computer and upgrading the firmware	✓	✓
Hardware Integration Pocket (HIP) for connecting accessory and third-party devices	✓	✓
HP Internal USB Ports	Optional	Optional
Integrated HP Wireless Direct Print functionality for printing from mobile devices	Not supported	✓
HP Jetdirect 3100w BLE/NFC/Wireless Accessory for printing from mobile devices	Optional	Optional
NOTE: Connected via the Hardware Integration Pocket or the rear host USB port. The HP Jetdirect 3100w BLE/NFC/Wireless Accessory requires the HP Internal USB ports accessory.		
HP Jetdirect 2900nw Print Server accessory for wireless connectivity	Optional	Optional

Table 1-18 Print specifications (E67650/E67660)

Print features	E67650dh	E67660z -Flow
Prints 50 pages per minute (ppm) on letter and 47 ppm on A4-size paper	✓	Not supported
Prints 60 pages per minute (ppm) on letter and 56 ppm on A4-size paper	Not supported	✓
Easy-access USB printing (no computer required)	✓	✓
Store jobs in the printer memory to print later or print privately	✓	✓

Table 1-19 Copy and scan specifications (E67650/E67660)

Print features	E67650dh	E67660z -Flow
Copies 50 pages per minute (ppm) on letter and 47 ppm on A4-size paper	✓	Not supported
Copies 60 pages per minute (ppm) on letter and 56 ppm on A4-size paper	Not supported	✓
Scans at 75 images per minute (ipm) (simplex and duplex)	✓	✓
Scans at 90 ipm (simplex)	Not supported	✓
Scans at 180 ipm (duplex)	Not supported	✓
150-page document feeder with dual-head scanning for single-pass duplex copying and scanning	✓	✓
HP EveryPage Technologies including ultrasonic multi-feed detection	Not supported	✓
Embedded optical character recognition (OCR) provides the ability to convert printed pages into text that can be edited or searched using a computer	Not supported	✓
SMART Label feature provides paper-edge detection for automatic page cropping	Not supported	✓
Automatic page orientation for pages that have at least 100 characters of text	Not supported	✓
Automatic tone adjustment sets contrast, brightness, and background removal for each page	Not supported	✓

Table 1-20 Digital Send specifications (E67650/E67660)

Print features	E67650dh	Model E67660z -Flow
Send documents to E-mail, USB, and shared folders on a network	✓	✓
Send documents to SharePoint®	Not supported	✓

Table 1-21 Other specifications (E67650/E67660)

Other features	E67650dh	E67660z -Flow
2 GB base memory	✓	Not supported
NOTE: The base memory is expandable to 2.5 GB by adding a DIMM memory module.		
2.5 GB base memory	Not supported	✓
NOTE: The base memory is expandable to 3 GB by adding a DIMM memory module.		
320 GB Hard Disk Drive	✓	✓
Color touchscreen control panel	✓	✓
Physical keyboard	Not supported	✓

Table 1-21 Other specifications (E67650/E67660) (continued)

Other features	E67650dh	E67660z -Flow
HP Trusted Platform Module for encrypting all data that passes through the printer	Optional	Optional
Fax	Optional	✓

Printer dimensions (M652/M653/E65050/E65060/E65150/E65160)

Make sure your printer environment is large enough to accommodate the printer.



NOTE: Values subject to change. For the most current information, go to www.hp.com/support/colorljM652 or www.hp.com/support/colorljM653 or www.hp.com/support/ljE65050 or www.hp.com/support/ljE65060 or www.hp.com/support/colorljE65150 or www.hp.com/support/colorljE65160 or www.hp.com/support/colorljM681MFP or www.hp.com/support/colorljM682MFP or www.hp.com/support/ljE67550MFP or www.hp.com/support/ljE67560MFP or www.hp.com/support/colorljE67650MFP or www.hp.com/support/colorljE67660MFP

Table 1-22 Dimensions for the n and dn models

Measurement	Printer fully closed	Printer fully opened
1. Height	M652n and M652dn models: 482 mm (19 in) M653dn models: 510 mm (20 in)	M652n and M652dn models: 482 mm (19 in) M653dn models: 510 mm (20 in)
2. Depth	448 mm (18 in)	770 mm (30.3 in)
3.Width	510 mm (20 in)	963 mm (37.9 in)
Weight	26.8 kg (59 lb) (n models)	

Table 1-23 Dimensions for the x model

Measurement	Printer fully closed	Printer fully opened
1. Height	510 mm (16.3 in)	510 mm (19.2 in)
2. Depth	458 mm (18 in)	770 mm (30.3 in)
3.Width	510 mm (20 in)	963 mm (37.9 in)
Weight	33.1 kg (72.9 lb) (n models)	

Table 1-24 Dimensions for the printer and the 1 x 550-sheet paper feeder with stand

Measurement	Printer and accessories fully closed	Printer and accessories fully opened
1. Height	M652n and M652dn models: 932 mm (36.6 in) M653dn models: 960 mm (37.7 in)	M652n and M652dn models: 932 mm (36.6 in) M653dn models: 960 mm (37.7 in)
2. Depth	657 mm (25.8 in)	948 mm (37.3 in)
3. Width	657 mm (25.8 in) (lower-right door open)	992 mm (39 in) (lower-right door closed)
Weight	45.4 kg (100 lb)	

Table 1-25 Dimensions for the printer and the 3 x 550-sheet paper feeder with stand

Measurement	Printer and accessories fully closed	Printer and accessories fully opened
1. Height	M652n and M652dn models: 932 mm (36.6 in) M653dn models: 960 mm (37.7 in)	M652n and M652dn models: 932 mm (36.6 in) M653dn models: 960 mm (37.7 in)
2. Depth	657 mm (35.8 in)	984 mm (37.3 in)
3. Width	657 mm (25.8 in)	992 mm (39 in)
Weight	49.5 kg (109 lb)	

Table 1-26 Dimensions for the printer and the High-capacity input feeder (HCI) with stand

Measurement	Printer and accessories fully closed	Printer and accessories fully opened
1. Height	M652n and M652dn models: 932 mm (36.6 in) M653dn models: 960 mm (37.7 in)	M652n and M652dn models: 932 mm (36.6 in) M653dn models: 960 mm (37.7 in)
2. Depth	657 mm (35.8 in)	967 mm (38 in)
3. Width	657 mm (25.8 in)	992 mm (39 in)
Weight	52 kg (114.6 lb)	

Table 1-27 Dimensions for the High-capacity input feeder (HCI) with stand

Measurement	Description
1. Height	450 mm (17.7 in)
2. Depth	Tray closed: 657 mm (25.8 in) Tray open: 967 mm (38 in)
3. Width	Door closed: 657 mm (25.8 in) Door open: 992 mm (39 in)
Weight	25.2 kg (55.5 lb)

Printer dimensions (M681/M682/E67550/E67560/E67650/E67660)

Make sure your printer environment is large enough to accommodate the printer.



NOTE: Values subject to change. For the most current information, go to www.hp.com/support/colorijM652 or www.hp.com/support/colorijM653 or www.hp.com/support/ljE65050 or www.hp.com/support/ljE65060 or www.hp.com/support/colorijE65150 or www.hp.com/support/colorijE65160 or www.hp.com/support/colorijM681MFP or www.hp.com/support/colorijM682MFP or www.hp.com/support/ljE67550MFP or www.hp.com/support/ljE67560MFP or www.hp.com/support/colorijE67650MFP or www.hp.com/support/colorijE67660MFP

Table 1-28 Dimensions for the M681dh/Flow M681f/E67650/E67660 models

Measurement	Printer fully closed	Printer fully opened
1. Height	658 mm (25.9 in)	910 mm (35.8 in)

Table 1-28 Dimensions for the M681dh/Flow M681f/E67650/E67660 models (continued)

Measurement	Printer fully closed	Printer fully opened
2. Depth	460 mm (18.1 in)	770 mm (30.3 in)
3.Width	510 mm (20 in)	963 mm (37.9 in)
Weight	28 kg (61.7 lb) (n models)	

Table 1-29 Dimensions for the M681f models

Measurement	Printer fully closed	Printer fully opened
1. Height	1108 mm (43.6 in)	1360 mm (53.5 in)
2. Depth	657 mm (25.8 in)	948 mm (37.3 in)
3.Width	657 mm (25.8 in)	992 mm (39 in)
Weight	46.6 kg (102.7 lb) (n models)	

Table 1-30 Dimensions for the Flow M681z models

Measurement	Printer fully closed	Printer fully opened
1. Height	1270 mm (50 in)	1529 mm (60.1 in)
2. Depth	657 mm (25.8 in)	967 mm (38 in)
3.Width	657 mm (25.8 in)	992 mm (39 in)
Weight	59.3 kg (130.7 lb) (n models)	

Table 1-31 Dimensions for the Flow M682z models

Measurement	Printer fully closed	Printer fully opened
1. Height	1270 mm (50 in)	1529 mm (60.1 in)
2. Depth	657 mm (25.8 in)	770 mm (30.3 in)
3.Width	657 mm (25.8 in)	992 mm (39 in)
Weight	61.8 kg (136.2 lb) (n models)	

Table 1-32 Dimensions for the 1 x 550-sheet paper feeder

Measurement	Description
1. Height	130 mm (5.1 in)
2. Depth	Tray closed: 458 mm (18 in)
	Tray open: 770 mm (30.3 in)
3. Width	Door closed: 510 mm (20.7 in)
	Door open: 510 mm (20.7 in)
Weight	6.3 kg (13.8 lb)

Table 1-33 Dimensions for the printer with one 1 x 550-sheet paper feeder

Measurement	Printer and accessories fully closed	Printer and accessories fully opened
1. Height	M681dh/Flow M681f/E67650/E67660 models: 788 mm (31 in) M681f models: 1238 mm (48.7 in)	M681dh/Flow M681f/E67650/E67660 models: 1040 mm (40.9 in) M681f models: 1490 mm (58.6 in)
2. Depth	M681dh/Flow M681f/E67650/E67660 models: 460 mm (18.1 in) M681f models: 657 mm (25.8 in)	M681dh/Flow M681f/E67650/E67660 models: 770 mm (30.3 in) M681f models: 948 mm (37.3 in)
3. Width	M681dh/Flow M681f/E67650/E67660 models: 510 mm (20 in) M681f models: 960 mm (37.7 in)	M681dh/Flow M681f/E67650/E67660 models: 963 mm (37.9 in) M681f models: 960 mm (37.7 in)
Weight	M681dh/Flow M681f/E67650/E67660 models: 34.3 kg (75.6 lb) M681f models: 52.9 kg (116.6 lb)	

Table 1-34 Dimensions for the 1 x 550-sheet paper feeder with stand

Measurement	Description
1. Height	450 mm (17.7 in)
2. Depth	Tray closed: 657 mm (25.8 in) Tray open: 948 mm (37.3 in)
3. Width	Door closed: 510 mm (20.7 in) Door open: 992 mm (39 in)
Weight	18.6 kg (41 lb)

Table 1-35 Dimensions for the printer and the 1 x 550-sheet paper feeder with stand

Measurement	Printer fully closed	Printer fully opened
1. Height	1108 mm (43.6 in)	1360 mm (53.5 in)
2. Depth	657 mm (25.8 in)	948 mm (37.3 in)
3. Width	657 mm (25.8 in)	992 mm (39 in)
Weight	46.6 kg (102.7 lb) (n models)	

Table 1-36 Dimensions for the 3 x 550-sheet paper feeder with stand

Measurement	Description
1. Height	450 mm (17.7 in)
2. Depth	Tray closed: 657 mm (25.8 in) Tray open: 984 mm (37.3 in)

Table 1-36 Dimensions for the 3 x 550-sheet paper feeder with stand (continued)

Measurement	Description
3. Width	Door closed: 657 mm (25.8 in)
	Door open: 992 mm (39 in)
Weight	22.7 kg (50 lb)

Table 1-37 Dimensions for the printer and the 3 x 550-sheet paper feeder with stand

Measurement	Printer and accessories fully closed	Printer and accessories fully opened
1. Height	1108 mm (43.6 in)	1360 mm (53.5 in)
2. Depth	657 mm (25.8 in)	984 mm (37.3 in)
3. Width	657 mm (25.8 in)	992 mm (39 in)
Weight	50.7 kg (111.7 lb)	

Table 1-38 Dimensions for the printer and the High-capacity input feeder (HCI) with stand

Measurement	Printer and accessories fully closed	Printer and accessories fully opened
1. Height	1108 mm (43.6 in)	1360 mm (53.5 in)
2. Depth	657 mm (25.8 in)	967 mm (38 in)
3. Width	657 mm (25.8 in)	992 mm (39 in)
Weight	53.2 kg (117.2 lb)	

Table 1-39 Dimensions for the High-capacity input feeder (HCI) with stand

Measurement	Printer and accessories fully closed
1. Height	450 mm (17.7 in)
2. Depth	Tray closed: 657 mm (25.8 in)
	Tray open: 967 mm (38 in)
3. Width	Door closed: 657 mm (25.8 in)
	Door open: 992 mm (39 in)
Weight	25.2 kg (55.5 lb)

Printer space requirements

Learn about the printer space requirements

HP recommends that the following distances be added to the printer dimensions provided in this chapter to make sure there is sufficient space to open doors and covers, and to provide proper ventilation.

- From the left-side or right-side of the printer to an obstruction, add:

- 430 mm (17 in)
- From the front-side of the printer to an obstruction, add:
 - 610 mm (24 in)
- From the back-side of the printer to an obstruction, add:
 - 460 mm (18 in)

See [Printer dimensions \(M652/M653/E65050/E65060/E65150/E65160\)](#) and/or [Printer dimensions \(M681/M682/E67550/E67560/E67650/E67660\)](#).

Power consumption, electrical specifications, and acoustic emissions

In order to operate properly, the printer must be in an environment that meets certain power specifications.

See www.hp.com/support/colorljM652 or www.hp.com/support/colorljM653 or www.hp.com/support/ljE65050 or www.hp.com/support/ljE65060 or www.hp.com/support/colorljE65150 or www.hp.com/support/colorljE65160 or www.hp.com/support/colorljM681MFP or www.hp.com/support/colorljM682MFP or www.hp.com/support/ljE67550MFP or www.hp.com/support/ljE67560MFP or www.hp.com/support/colorljE67650MFP or www.hp.com/support/colorljE67660MFP for current information.

⚠ CAUTION: Power requirements are based on the country/region where the printer is sold. Do not convert operating voltages. This will damage the printer and void the printer warranty.

Operating-environment range

In order to operate properly, the printer must be in an environment that meets certain specifications.

Table 1-40 Operating-environment specifications

Environment	Recommended	Storage
Temperature	15° to 27°C (59° to 80.6°F)	10° to 30°C (50° to 86°F)
Relative humidity	30% to 70% relative humidity (RH)	10% to 80% RH

2 Printer installation and maintenance

Learn about printer installation and maintenance.

Document feeder / scanner

Learn about the printer document feeder and scanner installation and maintenance.

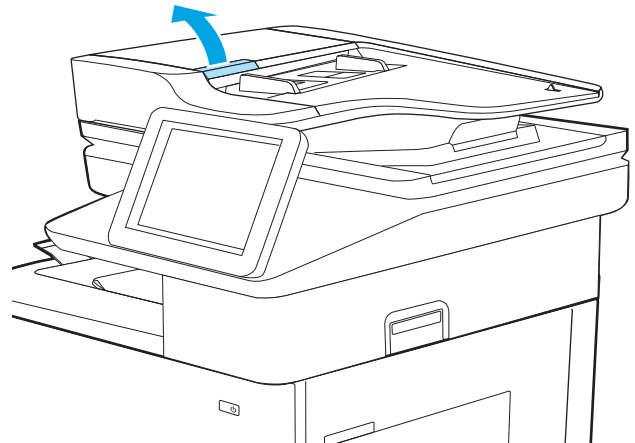
Clean the pickup rollers and separation pad in the document feeder (MFP)

Learn about cleaning the document feeder rollers and pads.

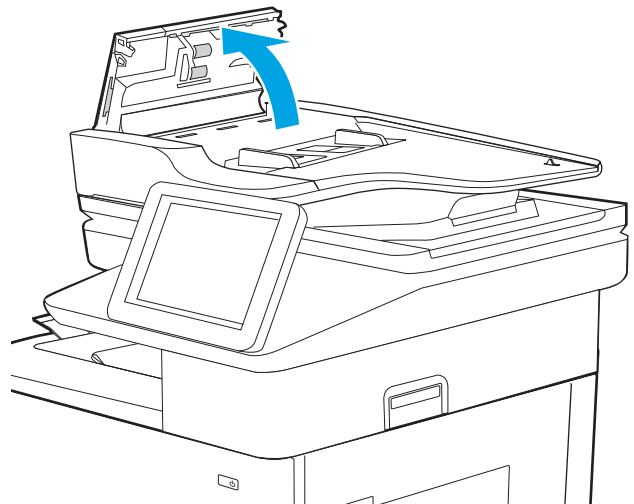
Over time, specks of debris might collect on the document feeder rollers and pads which can affect performance.

 **NOTE:** The figures in this topic show a typical MFP printer. However, the procedure is correct for all MFP printers.


1. Lift the document-feeder latch.

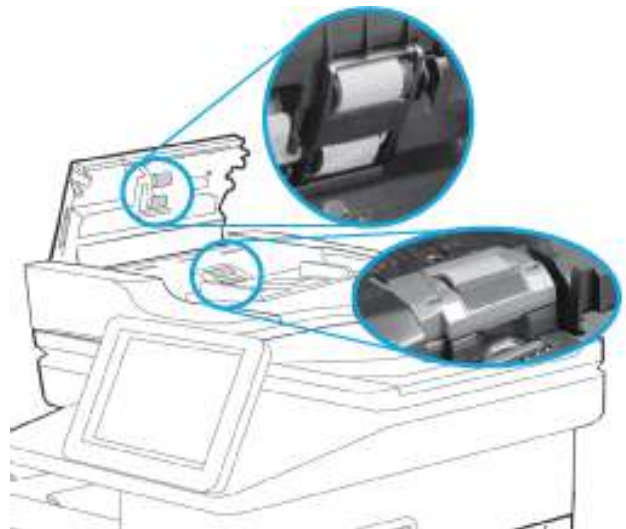


2. Open the document-feeder cover.



3. Remove any visible lint or dust from each of the feed rollers and the separation pad using compressed air or a clean lint-free cloth moistened with warm water.

 **NOTE:** Lift up the roller assembly to access and clean the second roller.



4. Close the document-feeder cover.

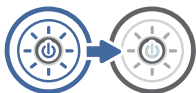
Check the scanner glass for dirt and smudges

Learn about solving copy-quality debris problems.

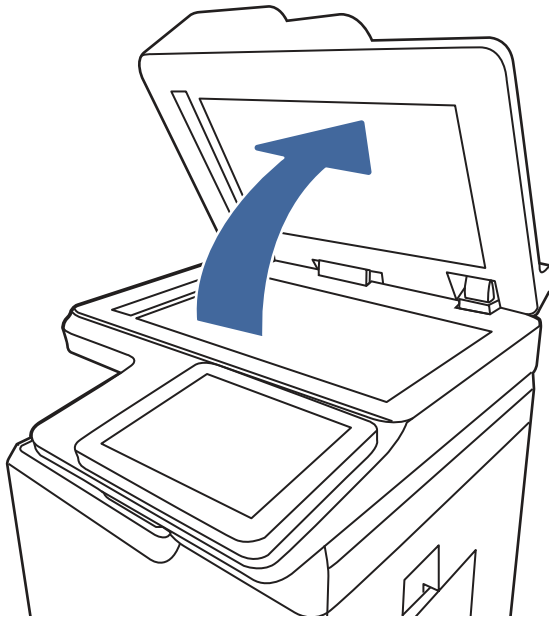
Over time, specks of debris might collect on the scanner glass and document feeder white plastic backing, which might cause print defects. Use the following procedure to clean the scanner if the printed pages have streaks, unwanted lines, black dots, poor print quality, or unclear text.

 [View a video of cleaning the document feeder glass and flatbed glass.](#)

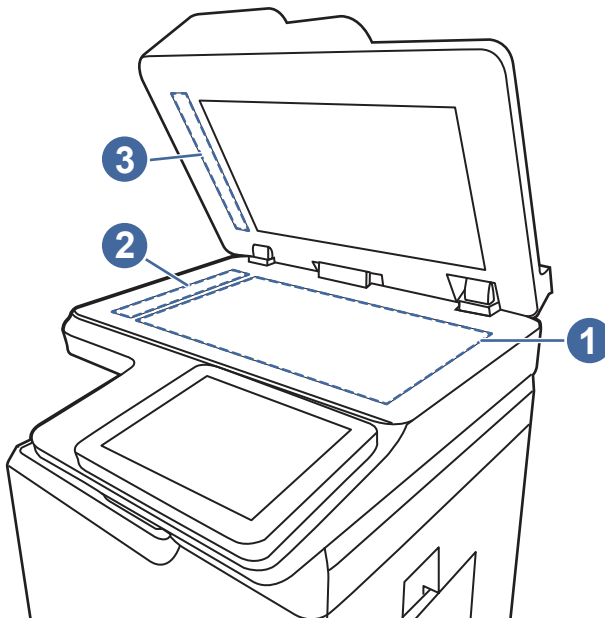
1. Press the power button to turn the printer off, and then disconnect the power cable from the electrical outlet.



2. Open the scanner lid.



3. Clean the scanner glass (callout 1) and the document feeder strips (callout 2, callout 3) with a soft cloth or sponge that has been moistened with nonabrasive glass cleaner.

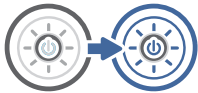


⚠ CAUTION: Do not use abrasives, acetone, benzene, ammonia, ethyl alcohol, or carbon tetrachloride on any part of the printer; these can damage the printer. Do not place liquids directly on the glass or platen. They might seep and damage the printer.

📝 NOTE: If you are having trouble with streaks on copies when you are using the document feeder, be sure to clean the small strips of glass on the left side of the scanner (callout 2, callout 3).

4. Dry the glass and white plastic parts with a chamois or a cellulose sponge to prevent spotting.

5. Connect the power cable to an outlet, and then press the power button to turn the printer on.



Base printer

Learn about the base printer installation and maintenance.

Print a cleaning page

Learn how to print a cleaning page.

Print a cleaning page from a touchscreen control panel

1. From the [Home](#) screen on the printer control panel, swipe until the [Support Tools](#) menu displays.
Touch the [Support Tools](#) icon to open the menu..
2. Open the following menus:
 - [Maintenance](#)
 - [Calibration/Cleaning](#)
 - [Cleaning Page](#)
3. Select [Print](#) button to print the page.



NOTE: A **Cleaning...** message displays on the control-panel display. Do not turn the printer off until the cleaning process has finished. When it is finished, discard the printed page.

Print a cleaning page from an LCD control panel

1. From the [Home](#) screen on the printer control panel, use the arrow buttons to scroll to [Device Maintenance](#), and then press the [OK](#) button.
2. Use the arrow buttons to scroll to [Calibration/Cleaning](#), and then press the [OK](#) button.
3. Use the arrow buttons to scroll to [Cleaning](#), and then press the [OK](#) button to print the page.
4. Follow the instruction on the printed cleaning page to finish the cleaning page process.



NOTE: A **Cleaning...** message displays on the control-panel display. Do not turn the printer off until the cleaning process has finished. When it is finished, discard the printed page.

Enable and configure auto cleaning (touchscreen control panels only)

Learn how to set up automatic cleaning page intervals.

1. From the [Home](#) screen on the printer control panel, swipe until the [Support Tools](#) menu displays.
2. Open the following menus:
 - [Maintenance](#)
 - [Calibration/Cleaning](#)

- [Cleaning Page](#)

3. Touch the desired automatic cleaning page interval, and then touch the [Done](#) button.

Clean the Tray 1 pickup roller

Learn how to remove clean the tray 1 pickup roller.

Before performing service

- Disconnect the power cable.

⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 2-1 Part information

Part number	Part description
RL2-0034-000CN	Tray 1 pickup roller

Required tools

- No special tools are needed to remove or install this assembly.

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

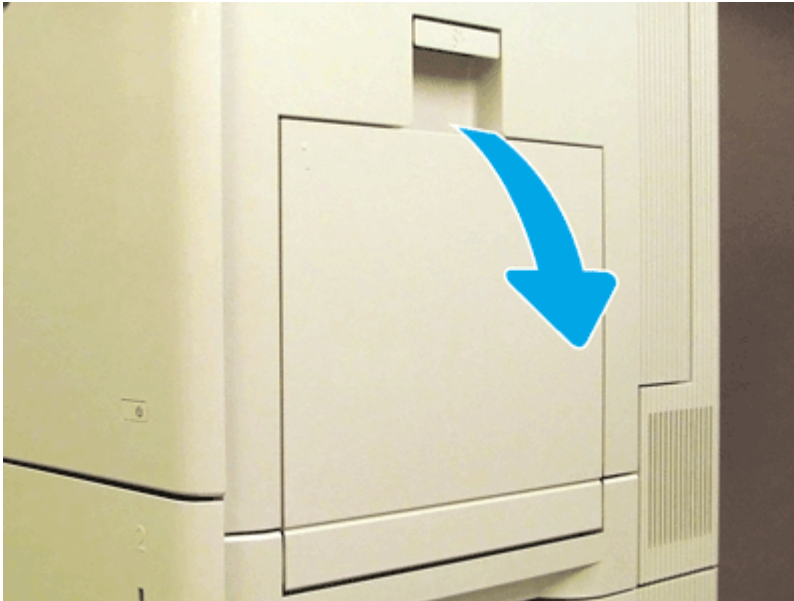
Print a document and select Tray 1 as the source. Verify that the paper correctly picks from Tray 1

Remove the Tray 1 pickup roller

Follow these steps to remove the Tray 1 pickup roller.

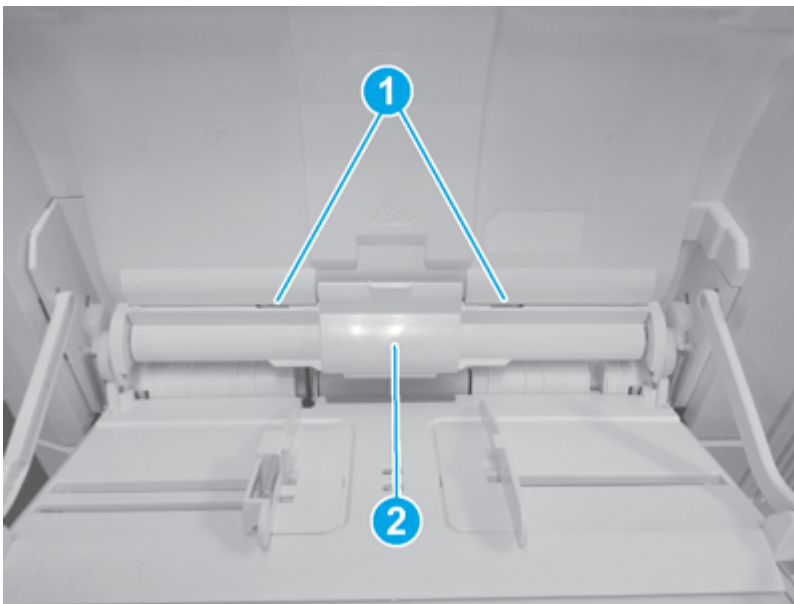
1. Open Tray 1.

Figure 2-1 Open Tray 1



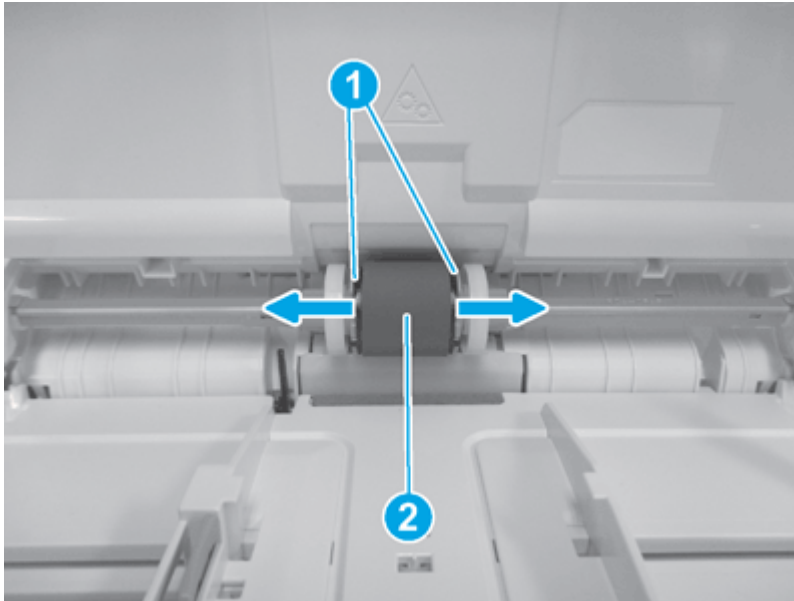
2. Place a finger in the center notch and gently pull down to release two tabs (callout 1) and remove the cover (callout 2).

Figure 2-2 Release two tabs and remove the cover



3. Use a small, flat-blade screwdriver to release two tabs (callout 1), and then use the screwdriver to gently pry and lift the roller (callout 2) up and out of the printer.

Figure 2-3 Remove the pickup roller



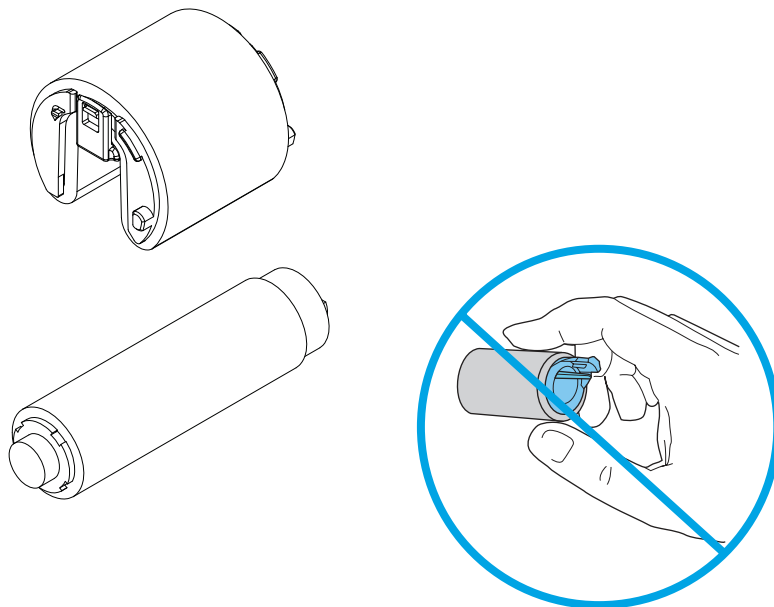
Clean the Tray 1 rollers

Learn about cleaning the Tray 1 rollers.

- Clean the Tray 1 rollers, and then reverse the removal steps to reinstall them.
 - Use a damp, lint-free cloth to gently clean the roller and pad.

CAUTION: When handling the roller and/or pad, avoid touching the spongy surfaces. Skin oils and fingerprints on a roller surface can cause print-quality problems.

Figure 2-4 Clean the rollers

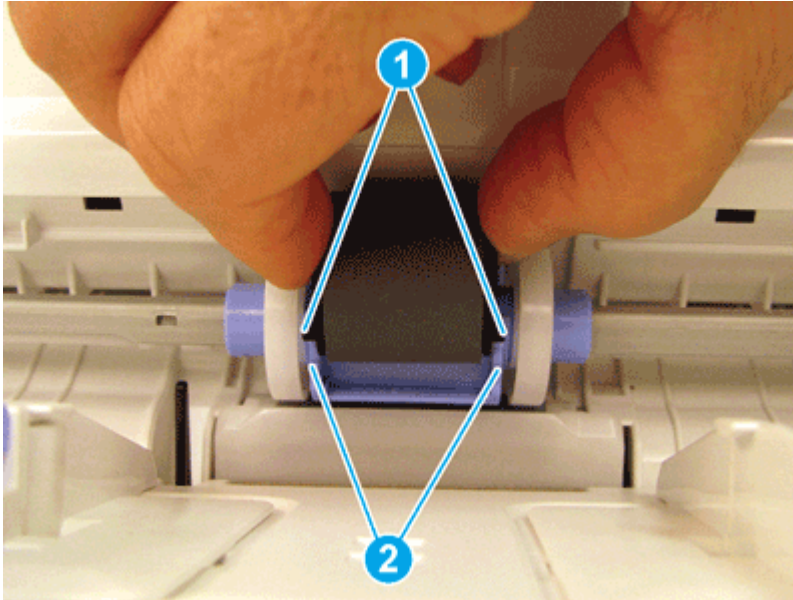


Install the Tray 1 pickup roller

Learn about installing the Tray 1 pickup roller.

1. To install the roller, align the tabs (callout 1) on the roller with the slots (callout 2) in the printer.

Figure 2-5 Install the pickup roller



2. Reverse the removal steps to finish installing the assembly.

Clean the Tray 1 separation roller

Learn how to clean the Tray 1 separation roller.

Before performing service

- Disconnect the power cable.

⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 2-2 Part information

Part number	Part description
RL2-0079-000CN	Tray 1 separation roller

Required tools

- Small, flat-blade screwdriver

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

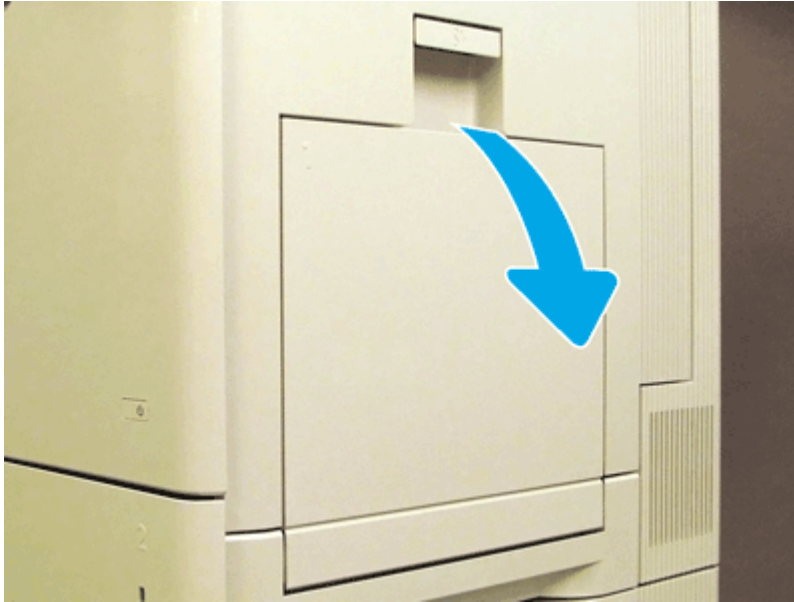
Print a document and select Tray 1 as the source. Verify that the paper correctly picks from Tray 1

Remove the Tray 1 separation roller

Follow these steps to remove the Tray 1 separation roller.

1. Open Tray 1.

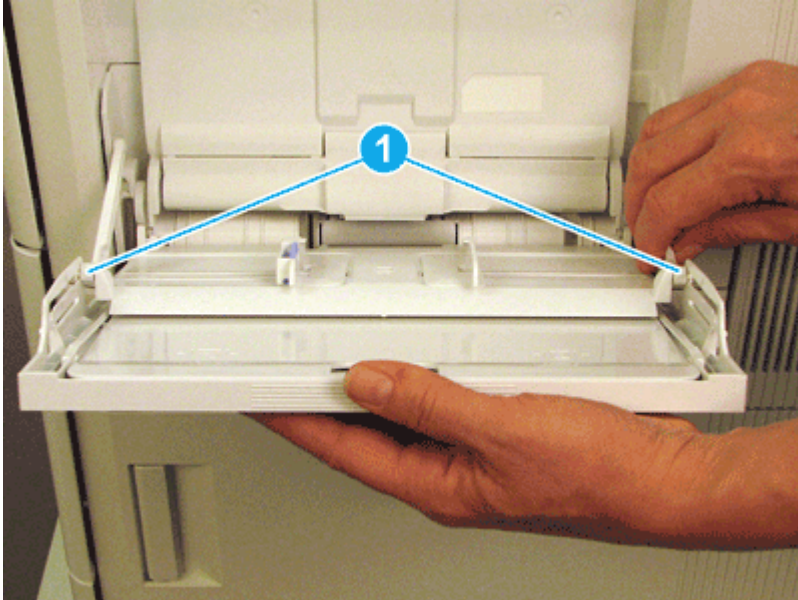
Figure 2-6 Open Tray 1



2. Slightly flex the slot guides to release two hinge pins (callout 1) from the guides.

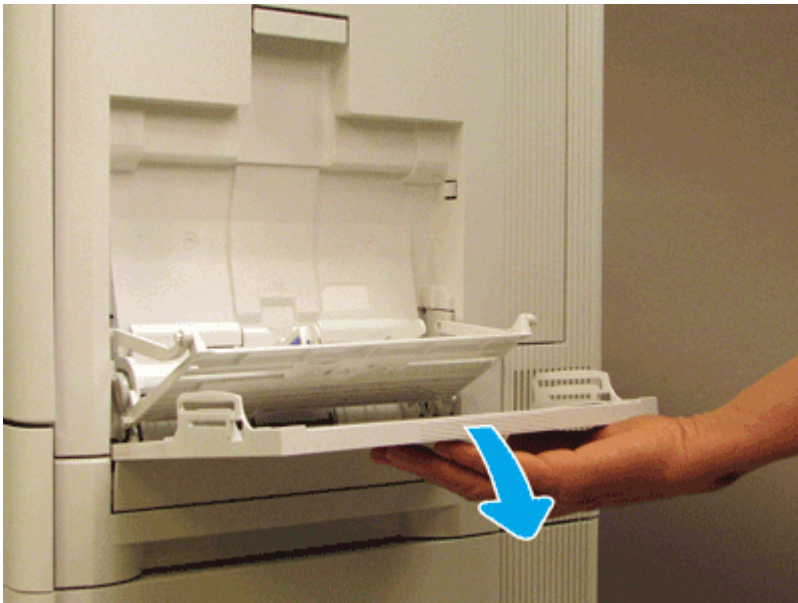
⚠ CAUTION: Support Tray 1 while releasing the hinge pins. The tray will drop and damage the printer if it is not supported.

Figure 2-7 Release two hinge pins



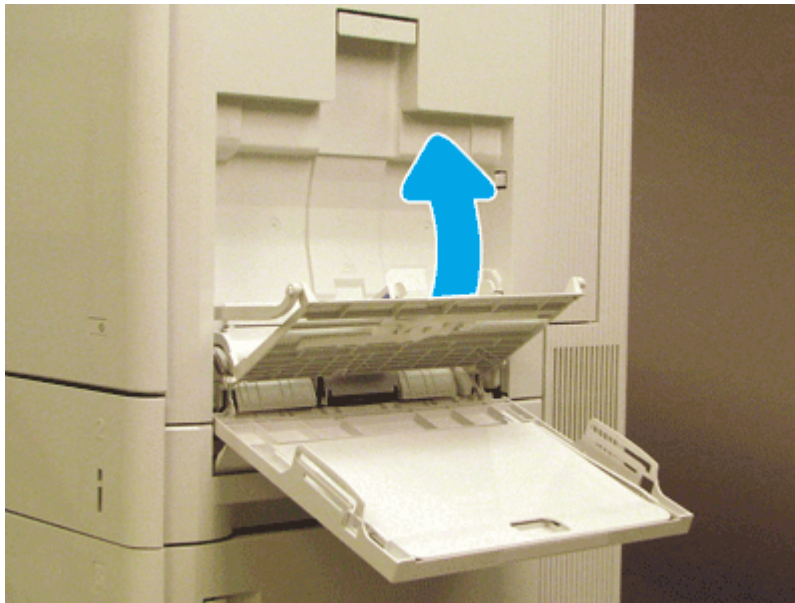
3. Carefully lower the outer tray.

Figure 2-8 Lower the outer tray



4. Raise the lifting plate up until it stays in position next to the printer.

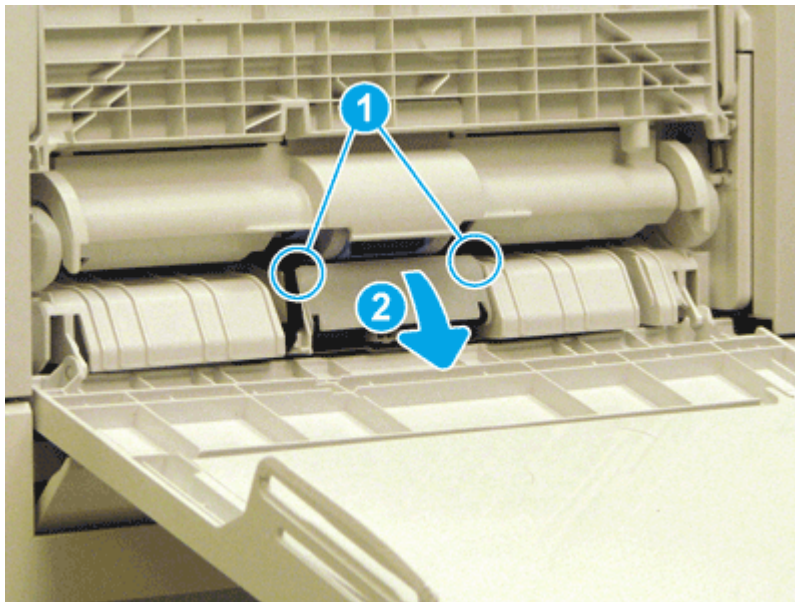
Figure 2-9 Raise the lifting plate



5. Release two tabs (callout 1), and then open the separation roller door (callout 2).

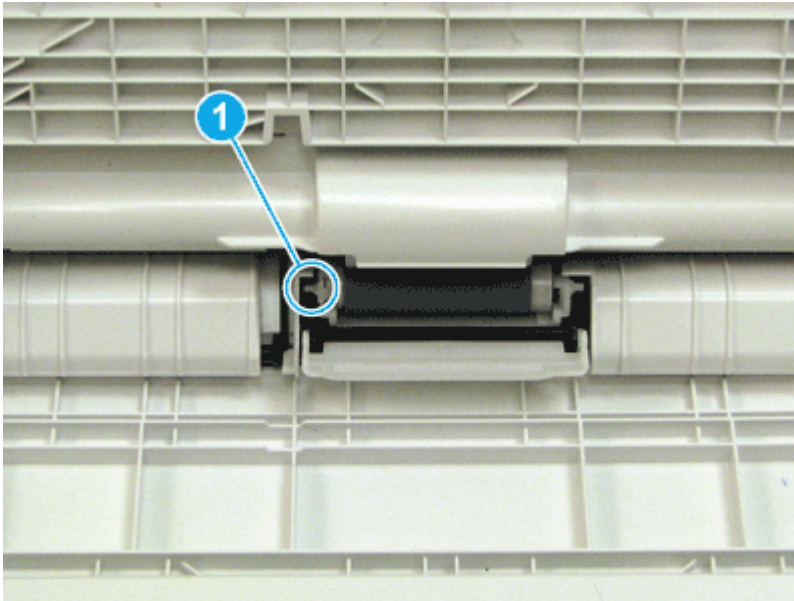
CAUTION: Use care when working in this area. The hinge pins on the outer door assembly are fragile and can easily break. Do not exert any pressure on the door assembly.

Figure 2-10 Open the separation roller door



6. Locate the tab (callout 1) on the left end of the roller.

Figure 2-11 Locate the tab



7. Use a small, flat-blade screwdriver to apply pressure to the left side of the roller, and then gently pry it away from the printer. Hold pressure on the roller until it clears the tab and the tray assembly.


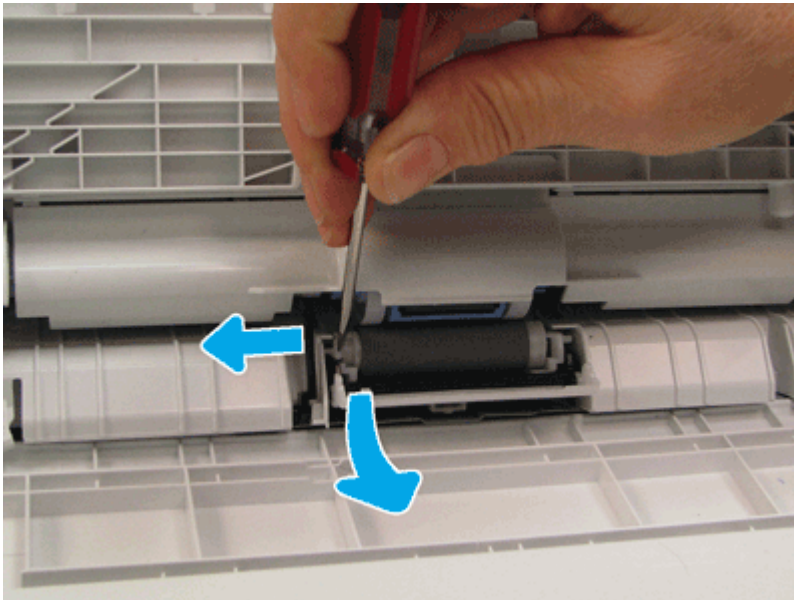
 **TIP:** Reverse the removal steps to install the assembly.

Figure 2-12 Remove the separation roller

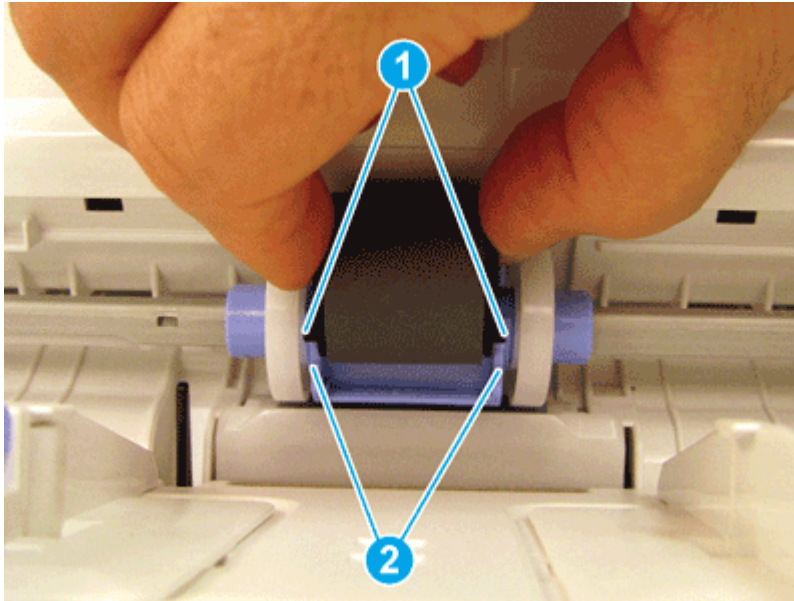


Install the Tray 1 pickup roller

Learn about installing the Tray 1 pickup roller.

1. To install the roller, align the tabs (callout 1) on the roller with the slots (callout 2) in the printer.

Figure 2-13 Install the pickup roller



2. Reverse the removal steps to finish installing the assembly.

Clean the Tray 2/3 pickup and separation rollers

Learn how to clean the Tray 2/3 pickup and separation rollers.

Before performing service

- Disconnect the power cable.

⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 2-3 Part information

Part number	Part description
J7Z98-67902	Kit- LJ Trays 2-x rollers

Required tools

- No special tools are needed to remove or install this assembly.

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

No post service test is available for this assembly.

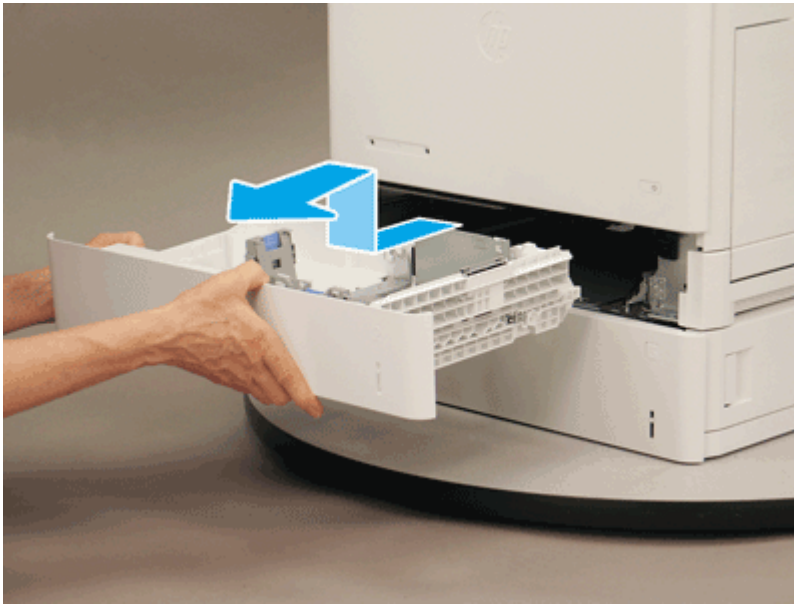
Remove the Tray 2 pickup rollers

Follow these steps to remove the Tray 2 pickup rollers.

1. Open Tray 2 until it stops, and then slightly lift and pull the tray out of the printer.

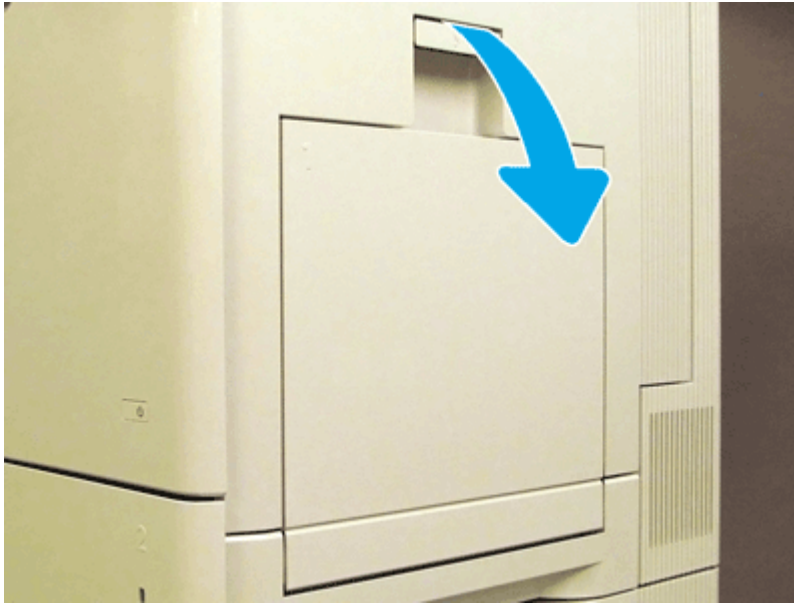
⚠ CAUTION: Do not extend more than one paper tray at a time. Do not use the paper tray as a step. Keep hands out of the paper trays when closing. All trays must be closed when moving the printer.

Figure 2-14 Remove Tray 2



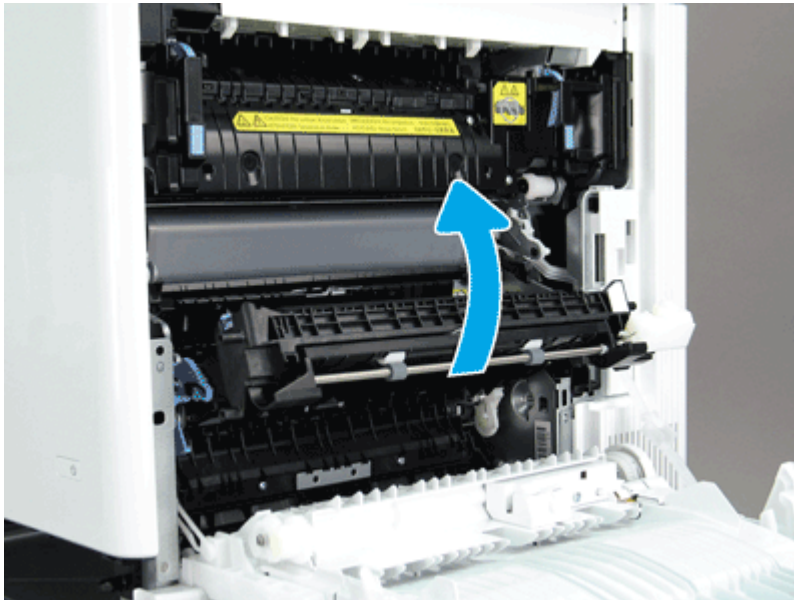
2. Open the right door.

Figure 2-15 Open the right door



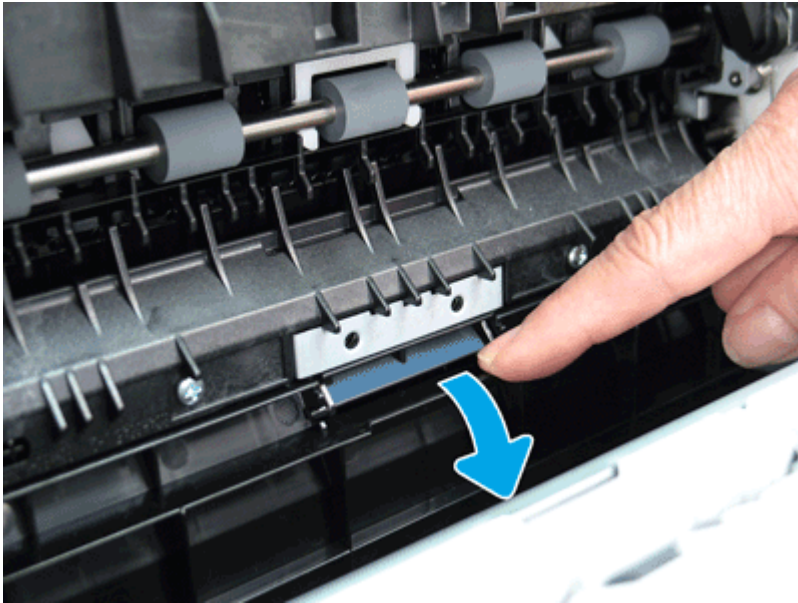
3. Carefully raise the transfer roller assembly until it locks in an upright position.

Figure 2-16 Raise the transfer roller assembly



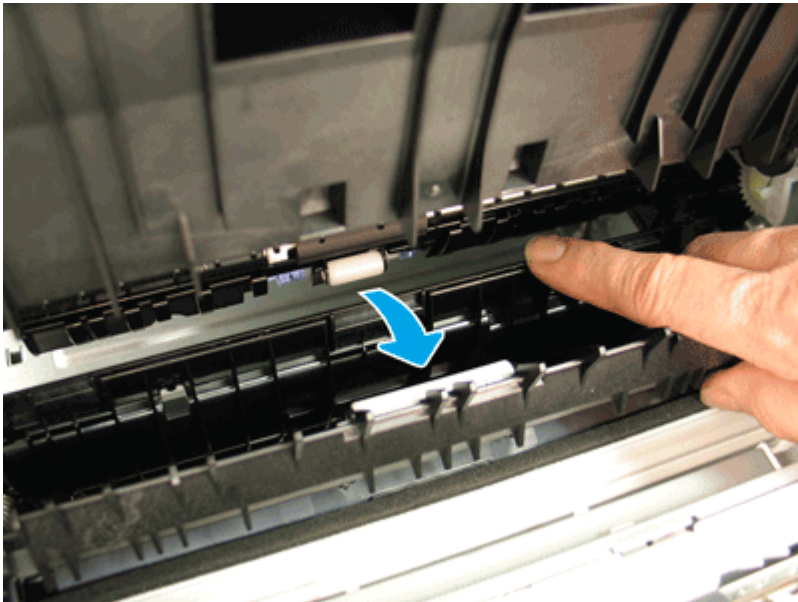
4. Lower the outer paper guide.

Figure 2-17 Lower the outer paper guide



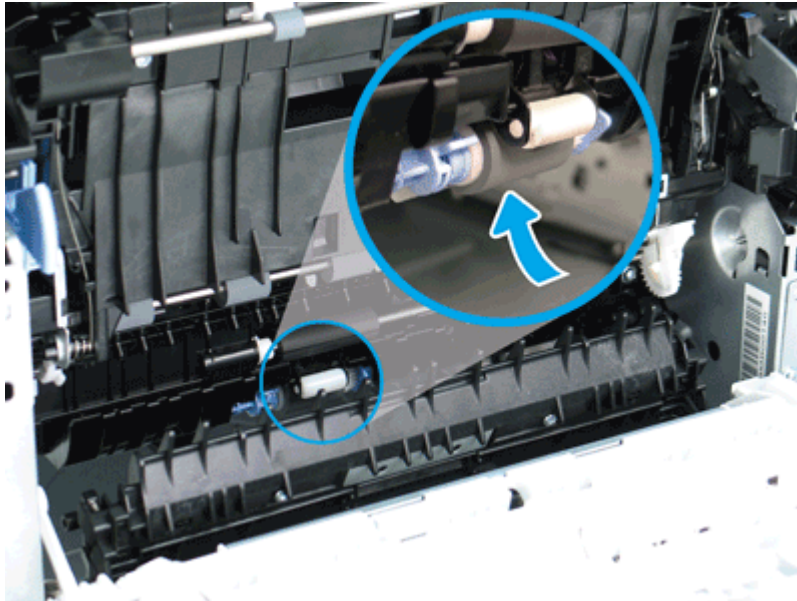
5. Lower the inner paper guide.

Figure 2-18 Lower the inner paper guide



6. Locate the tray pickup roller assembly, consisting of two gray rollers in a blue case.

Figure 2-19 Locate the pickup roller assembly



7. To remove the roller assembly, hold the rollers with your fingers and pull them back towards the front of the printer to compress the spring loaded shaft (callout 1). Rotate the right end of the assembly down (callout 2), and then remove the assembly.


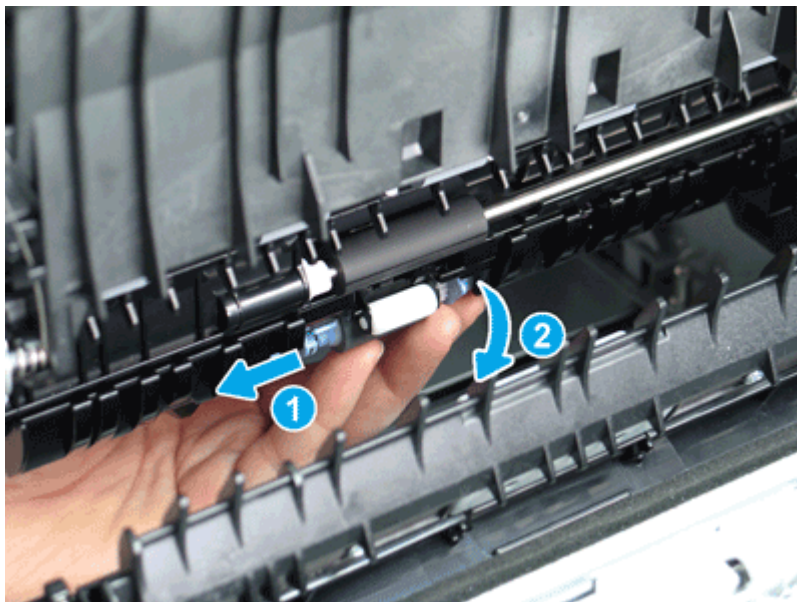
 **IMPORTANT:** The roller assembly must be accessed through the tray opening, while viewing it through the right door opening.

Figure 2-20 Remove the pickup roller assembly



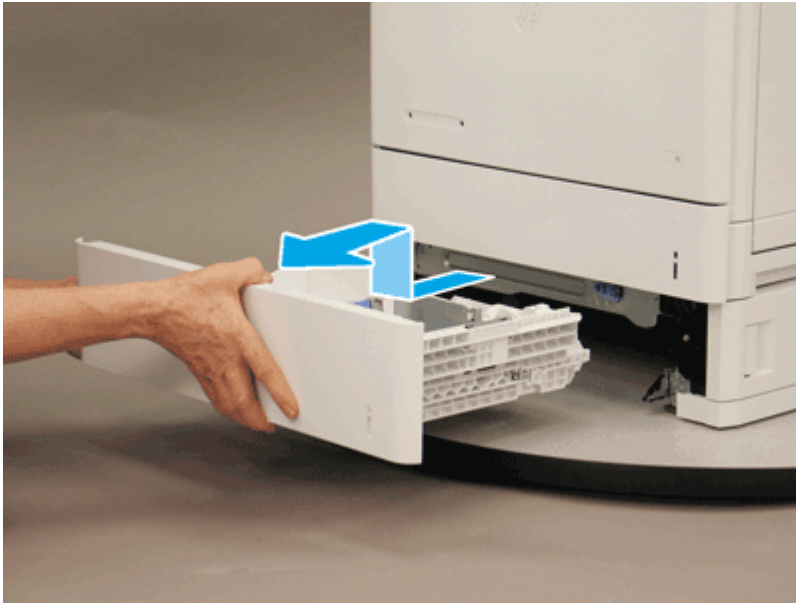
Remove the Tray 3 pickup rollers

Follow these steps to remove the Tray 3 pickup rollers.

1. Open Tray 3 until it stops, and then slightly lift and pull the tray out of the printer.

⚠ CAUTION: Do not extend more than one paper tray at a time. Do not use the paper tray as a step. Keep hands out of the paper trays when closing. All trays must be closed when moving the printer.

Figure 2-21 Remove Tray 3



2. Open the Tray 3 right door.

Figure 2-22 Open the Tray 3 right door



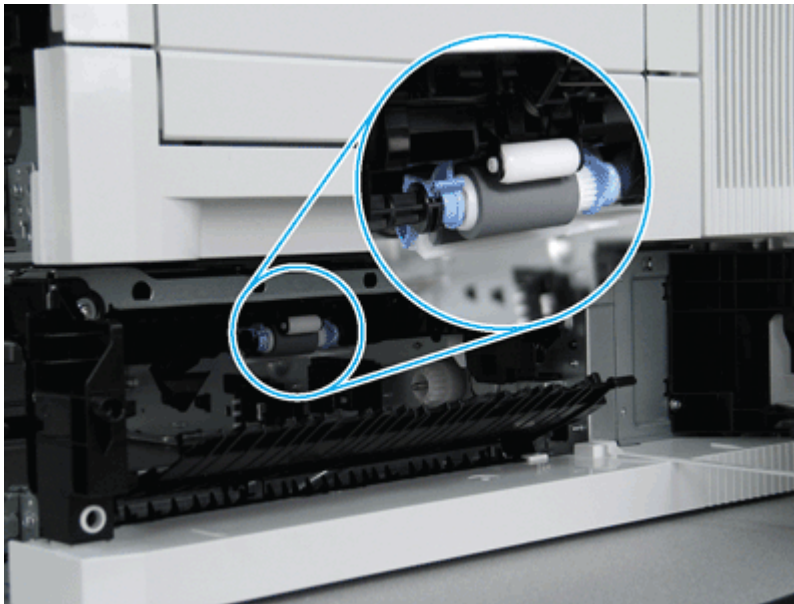
3. Locate the green tab on the feed assembly cover. Pull down and towards you to release the green tab and lower the assembly cover.

Figure 2-23 Lower the assembly cover



4. Locate the tray pickup roller assembly, consisting of two gray rollers in a blue case.

Figure 2-24 Locate the pickup roller assembly



5. To remove the roller assembly, hold the rollers with your fingers and pull them back towards the front of the printer to compress the spring loaded shaft (callout 1). Rotate the right end of the assembly down (callout 2), and then remove the assembly.


 **IMPORTANT:** The roller assembly must be accessed through the tray opening, while viewing it through the right door opening.

Figure 2-25 Remove the pickup roller assembly

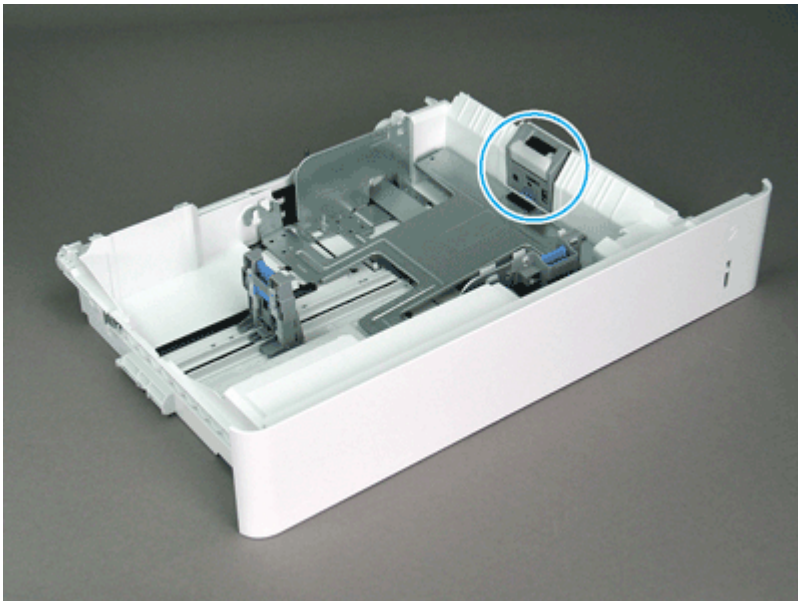


Remove the Tray 2 or 3 separation rollers

Follow these steps to remove the Tray 2 or 3 separation rollers.

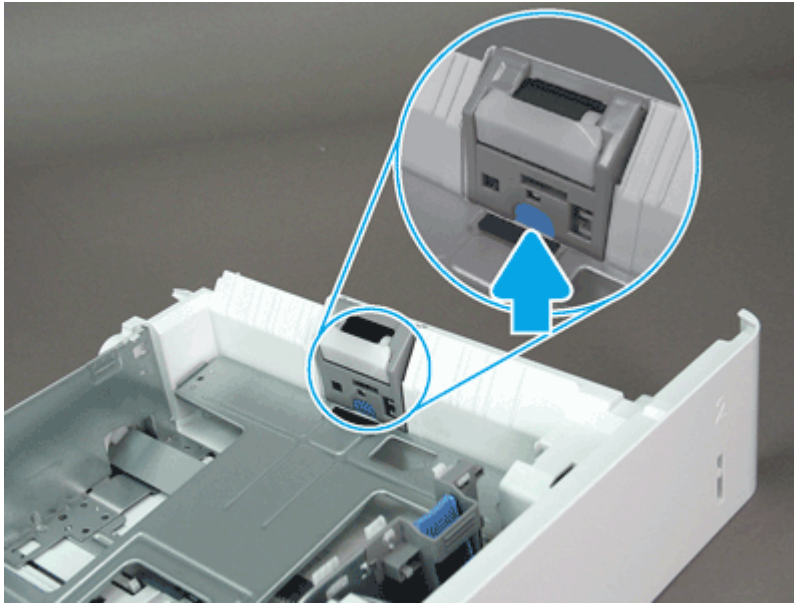
1. Locate the tray separation roller in the tray.

Figure 2-26 Locate the tray separation roller



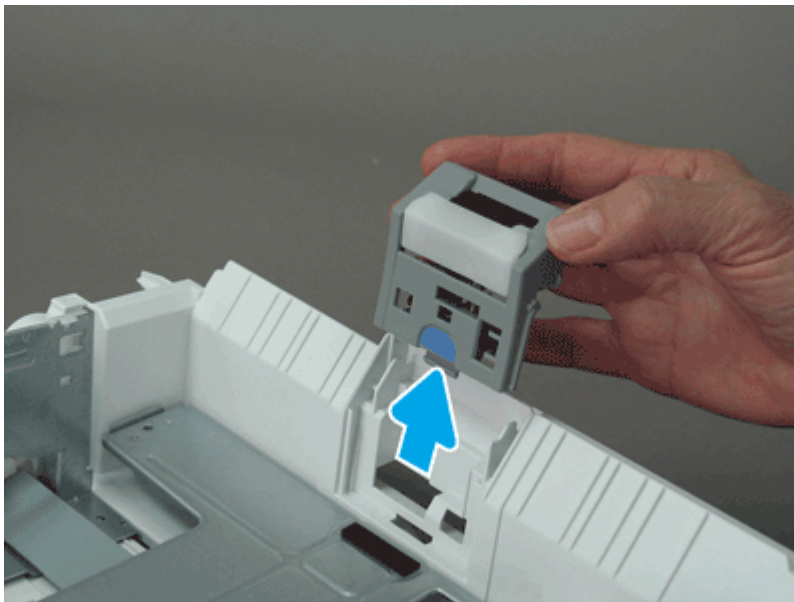
2. Push in on the blue label and push up slightly to release the roller assembly.

Figure 2-27 Release the roller assembly



3. Slide the roller assembly straight up to remove it.

Figure 2-28 Remove the roller assembly



Clean the Tray 2/3 rollers

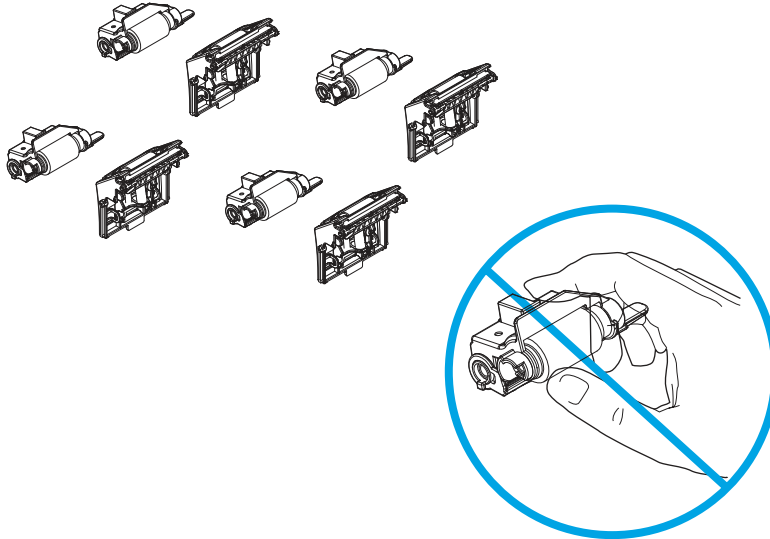
Learn about cleaning the Tray 2/3 rollers.

- Clean the Tray 2/3 rollers.

- Use a damp, lint-free cloth to gently clean the rollers.

⚠ **CAUTION:** Do not touch the spongy portion of the roller. Skin oils on the roller can cause paper-handling and print-quality problems. HP recommends using disposable gloves or thoroughly washing your hands before handling the assembly.

Figure 2-29 Clean the rollers

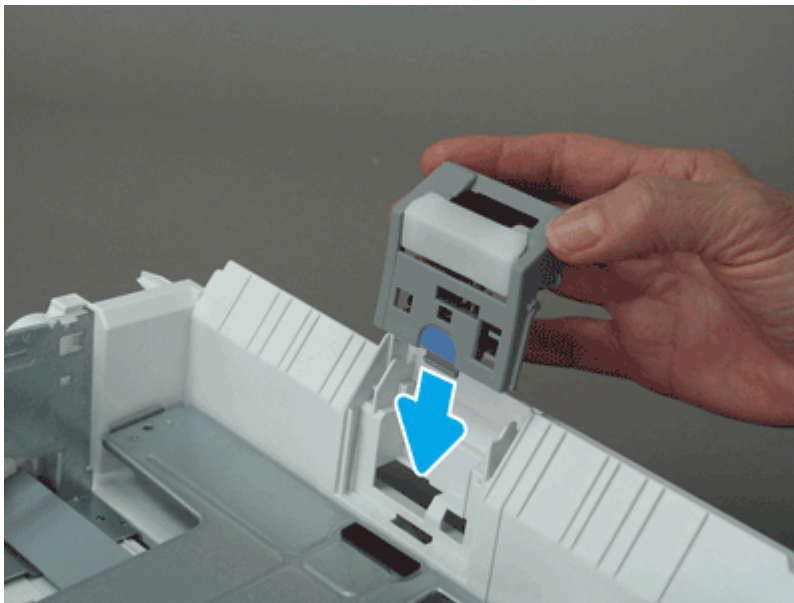


Install the Tray 2 or 3 separation rollers

Follow these steps to install the Tray 2 or 3 separation rollers.

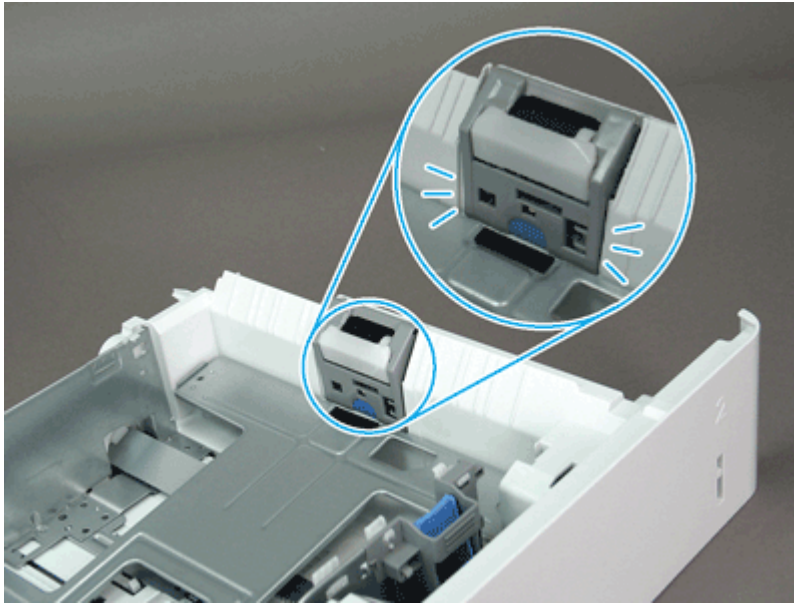
1. Slide the roller assembly straight into the tray to install it.

Figure 2-30 Install the roller assembly



2. Press down to make sure that the roller assembly snaps into place and is fully seated.

Figure 2-31 Make sure that the roller is seated

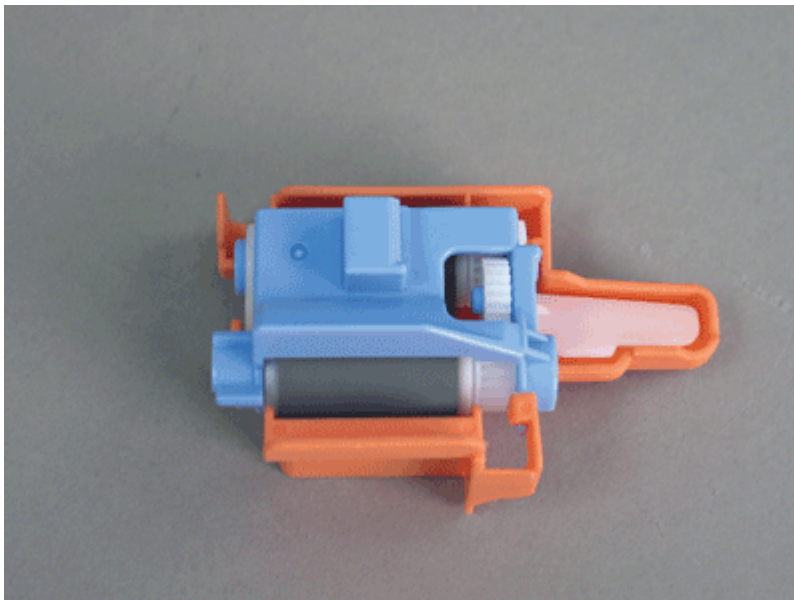


Install the Tray 3 pickup rollers

Follow these steps to install the Tray 3 pickup rollers.

1. The roller assembly is in an orange installation tray. Do not remove the orange installation tray until the roller assembly has been installed.

Figure 2-32 Do not remove the orange installation tray



2. In the printer, position the roller assembly so that the blue, spring-loaded shaft fits into the opening on the left side of the roller assembly (callout 1). With the shaft in the opening, pull toward the front of the printer to compress the shaft, and then pivot the right end of the assembly up (callout 2).


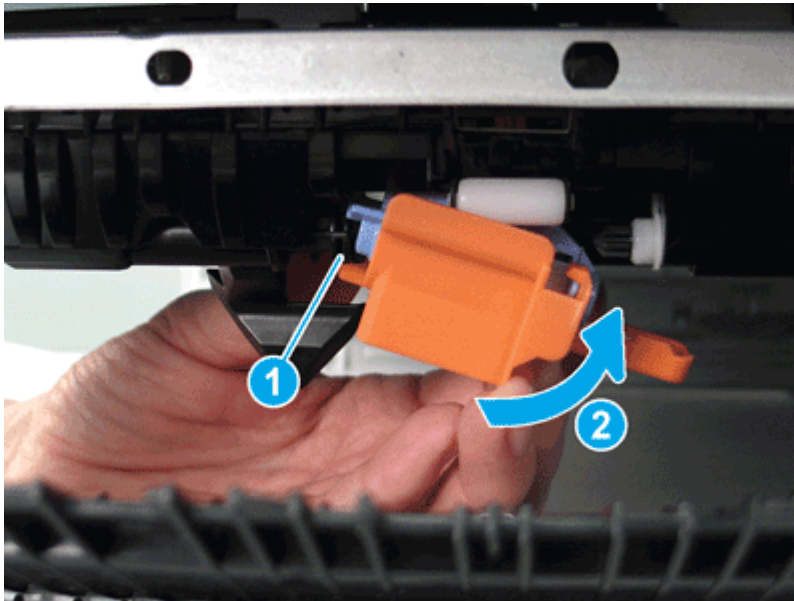
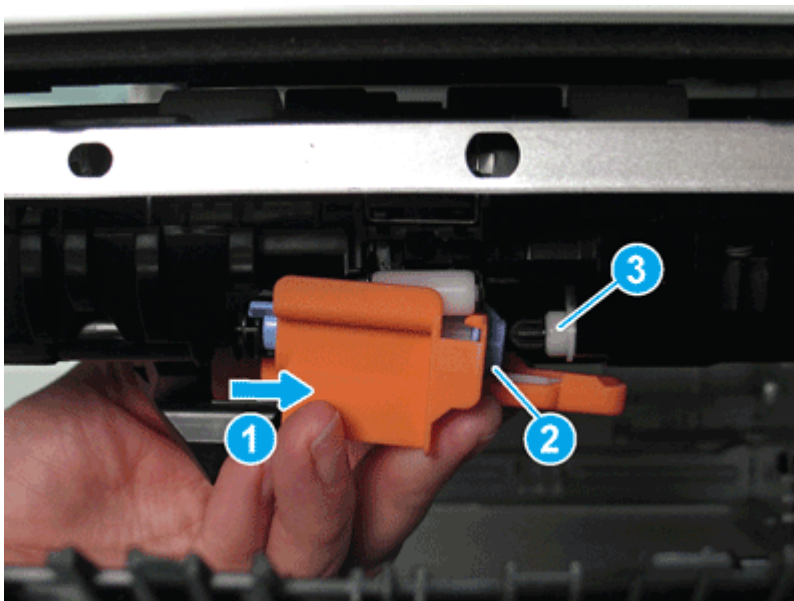
 **IMPORTANT:** The roller must be accessed through the tray opening, while viewing it through the right door opening.

Figure 2-33 Position the roller



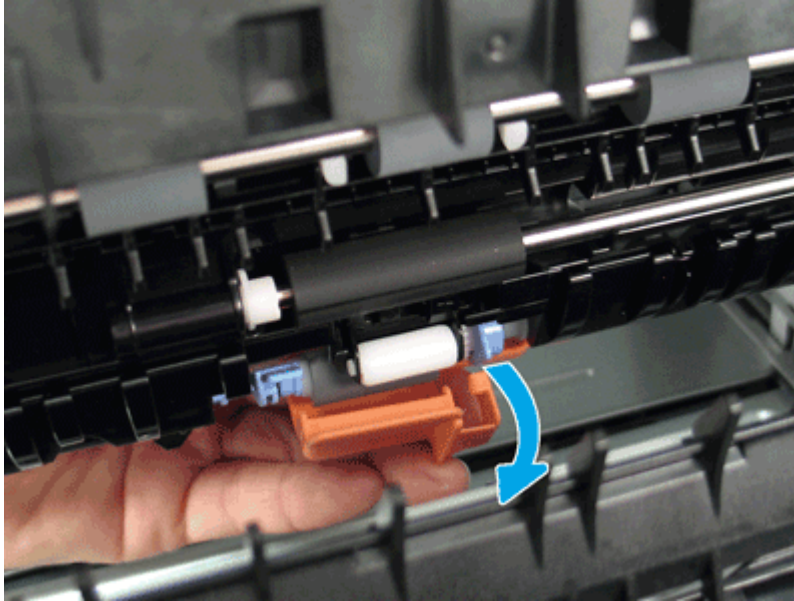
3. While holding the roller assembly in place against the printer, carefully allow the spring-loaded shaft to push the roller assembly forward (callout 1) until the front side (callout 2) comes to rest on a black shaft (callout 3). Gently move the assembly side to side to ensure both ends of the roller assembly are seated.

Figure 2-34 Install the roller assembly



4. Gently pinch and twist the orange installation tray, and then pull downward to remove it from the roller assembly.

Figure 2-35 Remove the orange installation tray



5. Look inside the printer through the tray opening and make sure that the roller assembly is correctly installed. It must not hang down into the tray opening. If the roller hangs down into the tray cavity, remove it, reinstall it in the orange installation tray, and then reinstall it in the printer.

CAUTION: If the roller assembly is not correctly installed, it might be damaged when the tray is installed.

Figure 2-36 Roller correct and incorrect installation

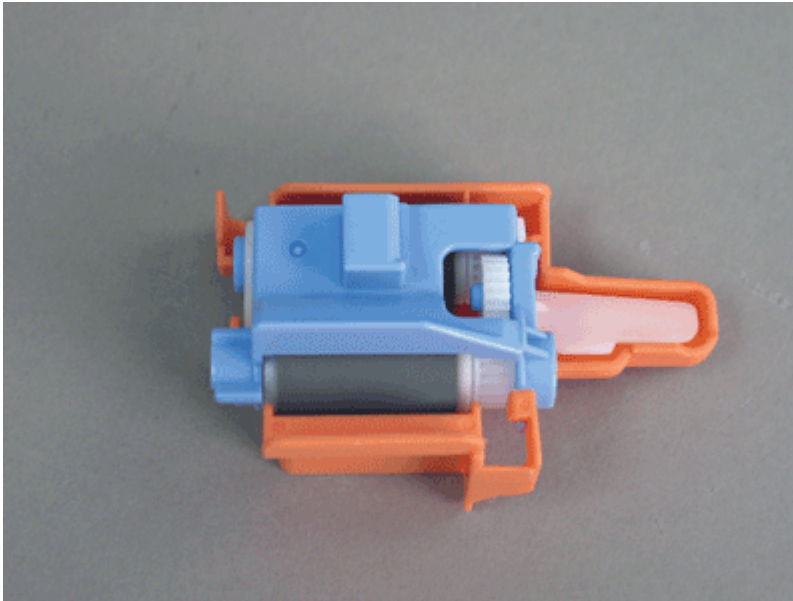


Install the Tray 2 pickup rollers

Follow these steps to install the Tray 2 pickup rollers.

1. The roller assembly is in an orange installation tray. Do not remove the orange installation tray until the roller assembly has been installed.

Figure 2-37 Do not remove the orange installation tray



2. In the printer, position the roller assembly so that the blue, spring-loaded shaft fits into the opening on the left side of the roller assembly (callout 1). With the shaft in the opening, pull toward the front of the printer to compress the shaft, and then pivot the right end of the assembly up (callout 2).


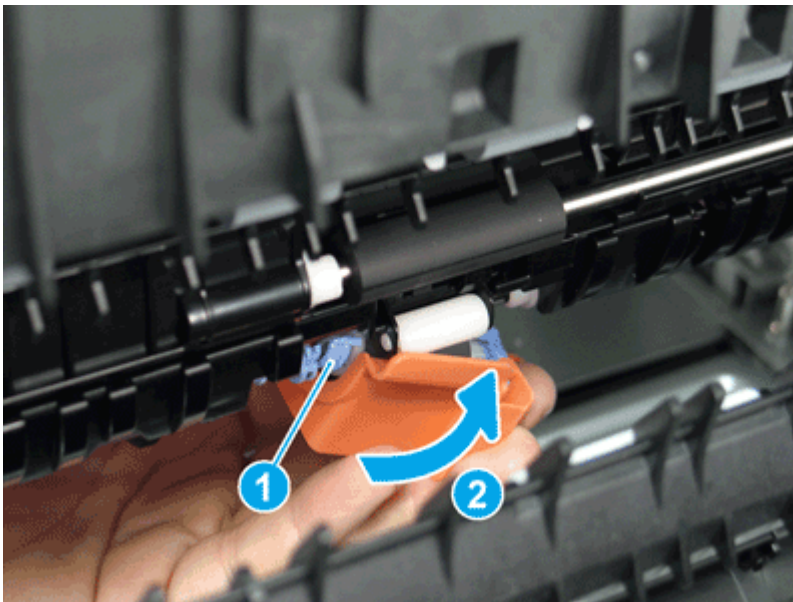
 **IMPORTANT:** The roller must be accessed through the tray opening, while viewing it through the right door opening.

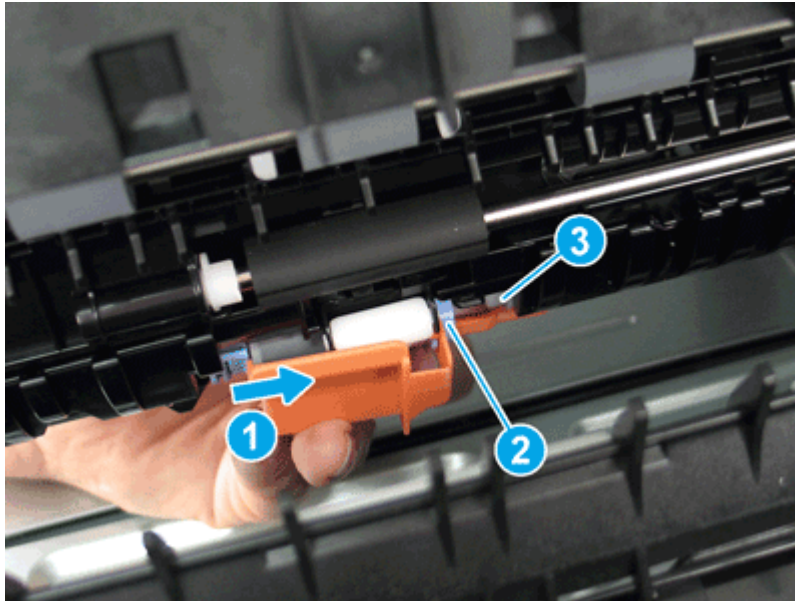
Figure 2-38 Position the roller



3. While holding the roller assembly in place against the printer, carefully allow the spring-loaded shaft to push the roller assembly forward (callout 1) until the front side (callout 2) comes to rest on

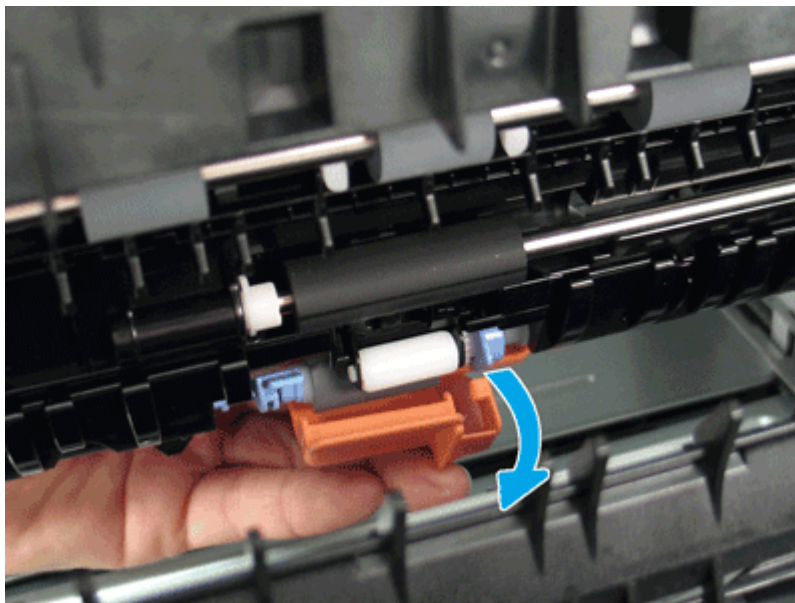
a black shaft (callout 3). Gently move the assembly side to side to ensure both ends of the roller assembly are seated.

Figure 2-39 Install the roller assembly



4. Gently pinch and twist the orange installation tray, and then pull downward to remove it from the roller assembly.

Figure 2-40 Remove the orange installation tray



5. Look inside the printer through the tray opening and make sure that the roller assembly is correctly installed. It must not hang down into the tray opening. If the roller hangs down into the tray cavity, remove it, reinstall it in the orange installation tray, and then reinstall it in the printer.

CAUTION: If the roller assembly is not correctly installed, it might be damaged when the tray is installed.

Figure 2-41 Roller correct and incorrect installation



Input devices

Learn about input device installation and maintenance.

Clean the Tray 2/3 pickup and separation rollers

Learn how to clean the Tray 2/3 pickup and separation rollers.

Before performing service

- Disconnect the power cable.

⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 2-4 Part information

Part number	Part description
J7Z98-67902	Kit- LJ Trays 2-x rollers

Required tools

- No special tools are needed to remove or install this assembly.

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

No post service test is available for this assembly.

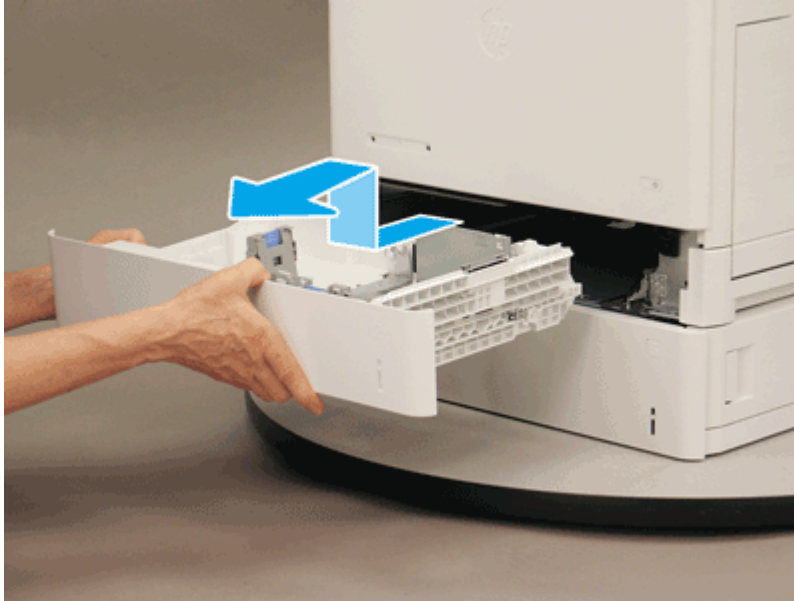
Remove the Tray 2 pickup rollers

Follow these steps to remove the Tray 2 pickup rollers.

1. Open Tray 2 until it stops, and then slightly lift and pull the tray out of the printer.

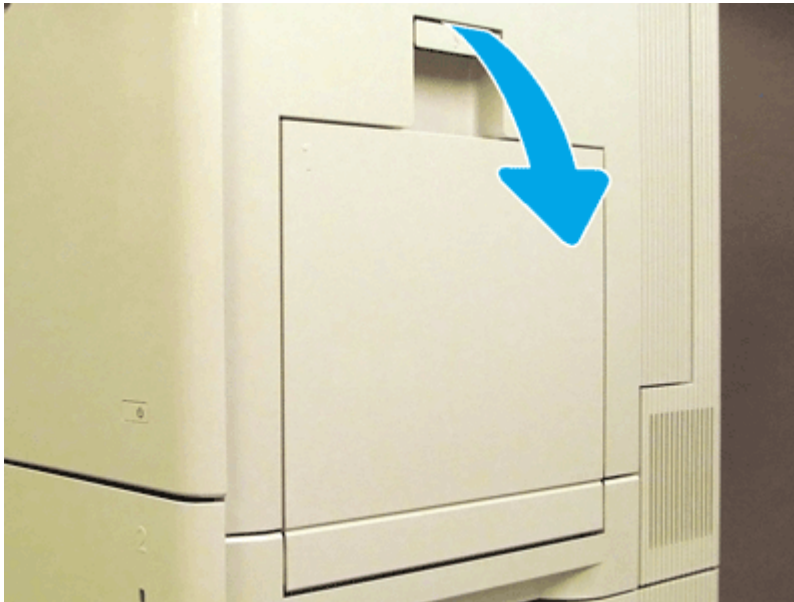
CAUTION: Do not extend more than one paper tray at a time. Do not use the paper tray as a step. Keep hands out of the paper trays when closing. All trays must be closed when moving the printer.

Figure 2-42 Remove Tray 2



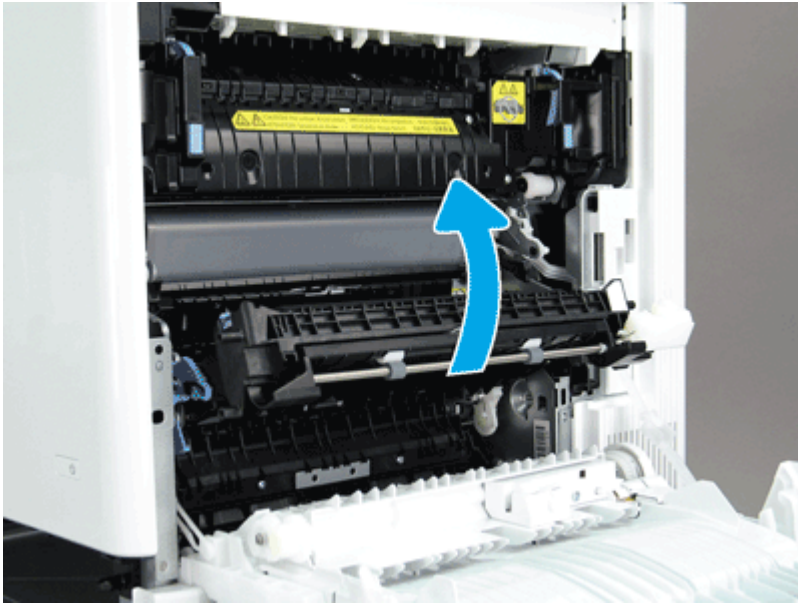
2. Open the right door.

Figure 2-43 Open the right door



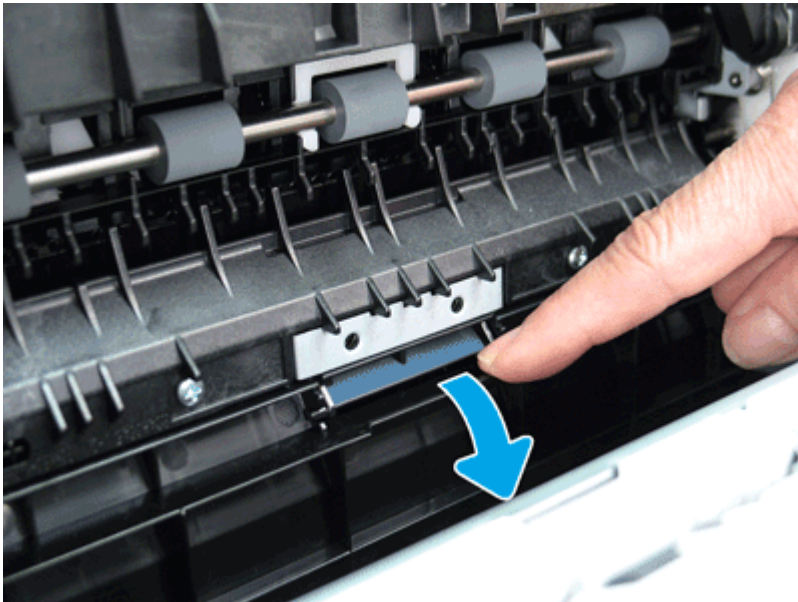
3. Carefully raise the transfer roller assembly until it locks in an upright position.

Figure 2-44 Raise the transfer roller assembly



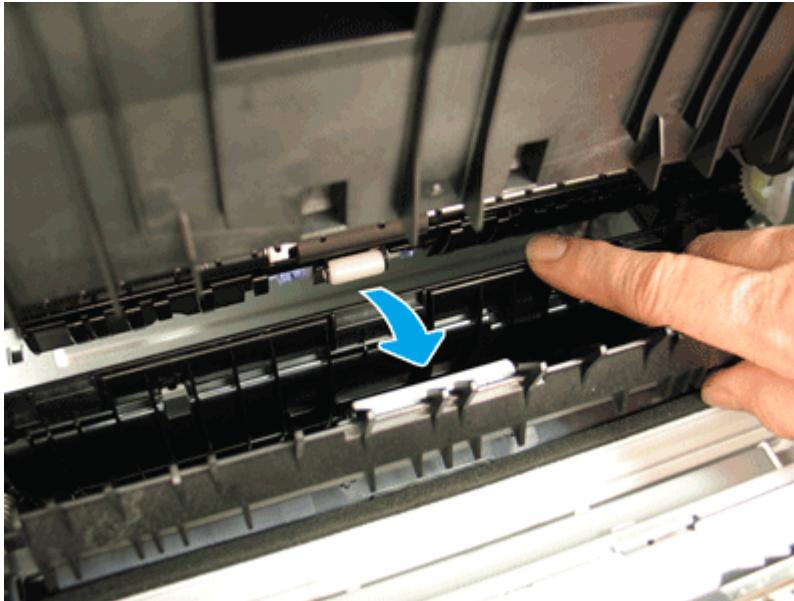
4. Lower the outer paper guide.

Figure 2-45 Lower the outer paper guide



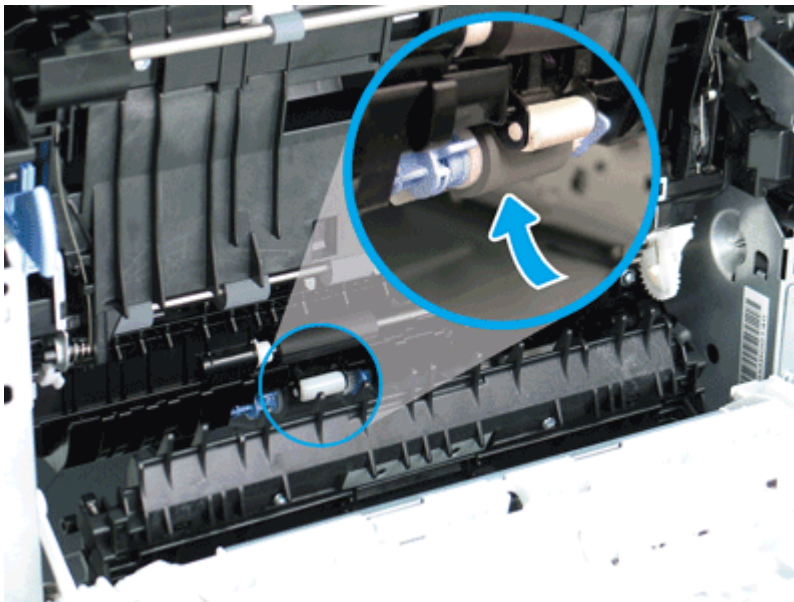
5. Lower the inner paper guide.

Figure 2-46 Lower the outer paper guide



6. Locate the tray pickup roller assembly, consisting of two gray rollers in a blue case.

Figure 2-47 Locate the pickup roller assembly



7. To remove the roller assembly, hold the rollers with your fingers and pull them back towards the front of the printer to compress the spring loaded shaft (callout 1). Rotate the right end of the assembly down (callout 2), and then remove the assembly.


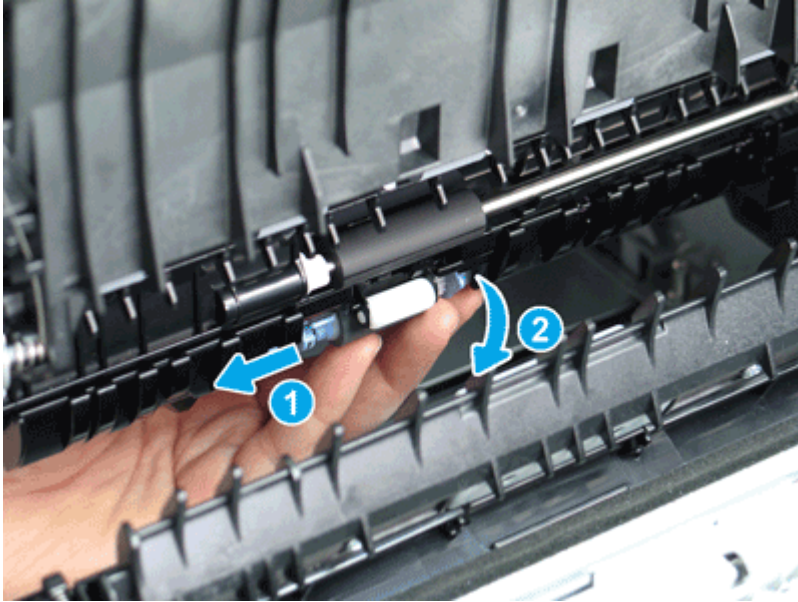
 **IMPORTANT:** The roller assembly must be accessed through the tray opening, while viewing it through the right door opening.

Figure 2-48 Remove the pickup roller assembly



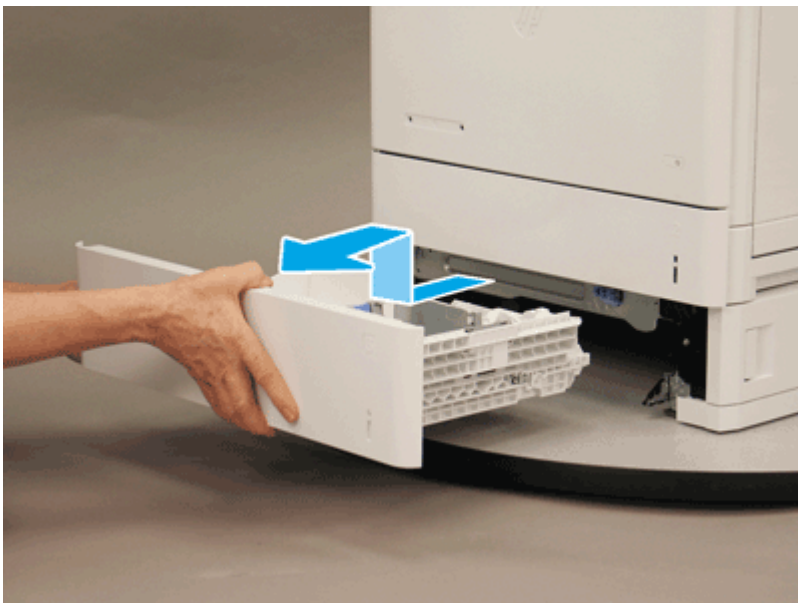
Remove the Tray 3 pickup rollers

Follow these steps to remove the Tray 3 pickup rollers.

1. Open Tray 3 until it stops, and then slightly lift and pull the tray out of the printer.

⚠ CAUTION: Do not extend more than one paper tray at a time. Do not use the paper tray as a step. Keep hands out of the paper trays when closing. All trays must be closed when moving the printer.

Figure 2-49 Remove Tray 3



2. Open the Tray 3 right door.

Figure 2-50 Open the Tray 3 right door



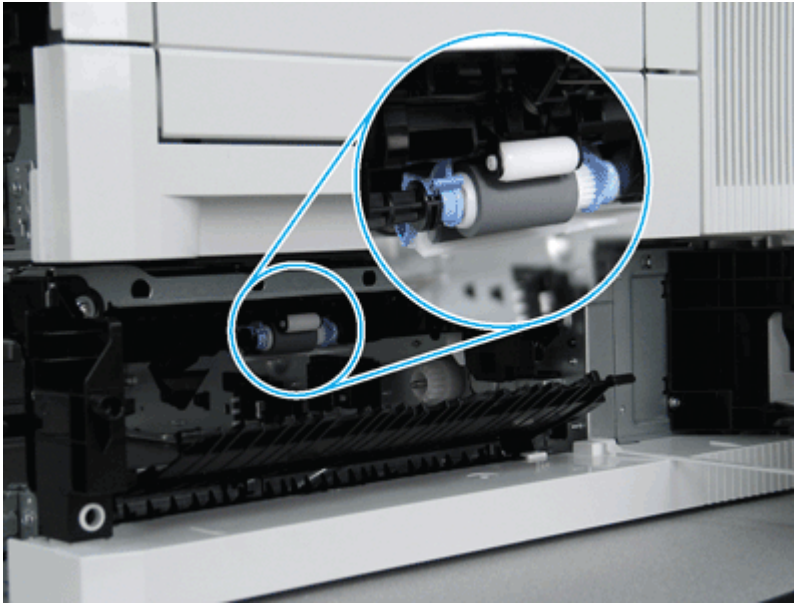
3. Locate the green tab on the feed assembly cover. Pull down and towards you to release the green tab and lower the assembly cover.

Figure 2-51 Lower the assembly cover



4. Locate the tray pickup roller assembly, consisting of two gray rollers in a blue case.

Figure 2-52 Locate the pickup roller assembly



5. To remove the roller assembly, hold the rollers with your fingers and pull them back towards the front of the printer to compress the spring loaded shaft (callout 1). Rotate the right end of the assembly down (callout 2), and then remove the assembly.


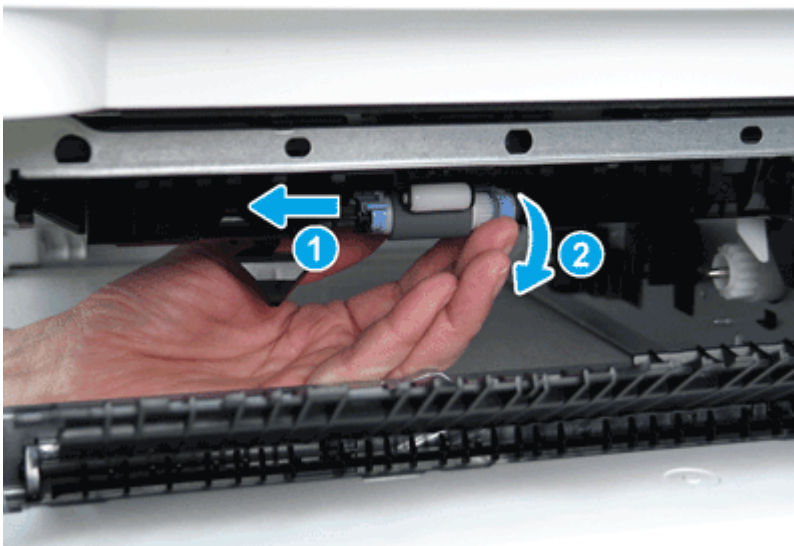
 **IMPORTANT:** The roller assembly must be accessed through the tray opening, while viewing it through the right door opening.

Figure 2-53 Remove the pickup roller assembly

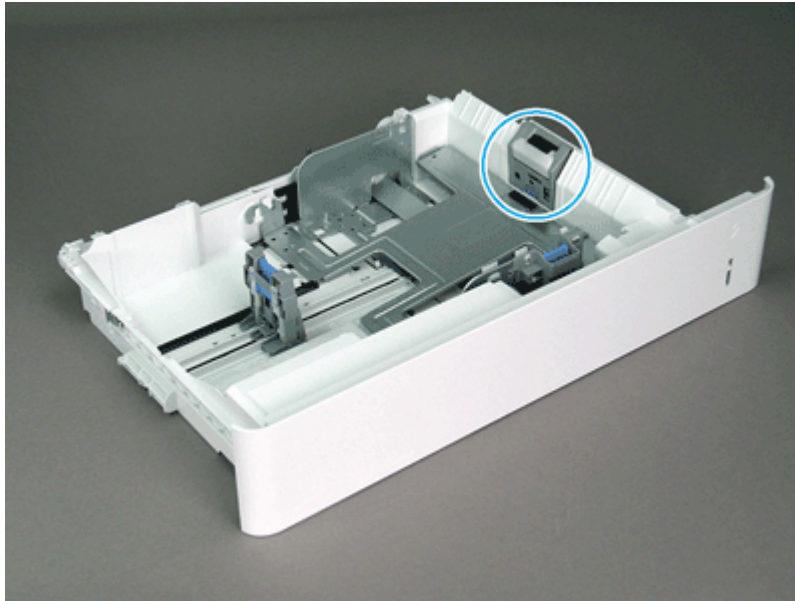


Remove the Tray 2 or 3 separation rollers

Follow these steps to remove the Tray 2 or 3 separation rollers.

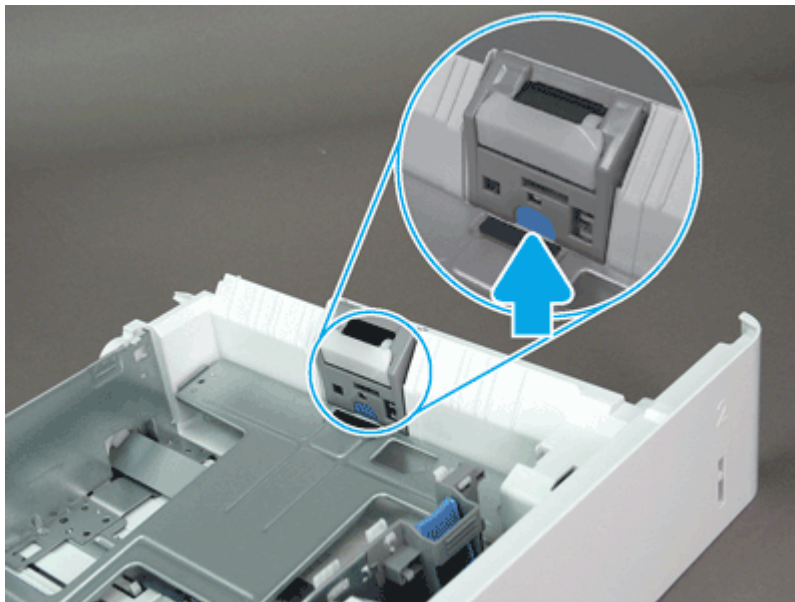
1. Locate the tray separation roller in the tray.

Figure 2-54 Locate the tray separation roller



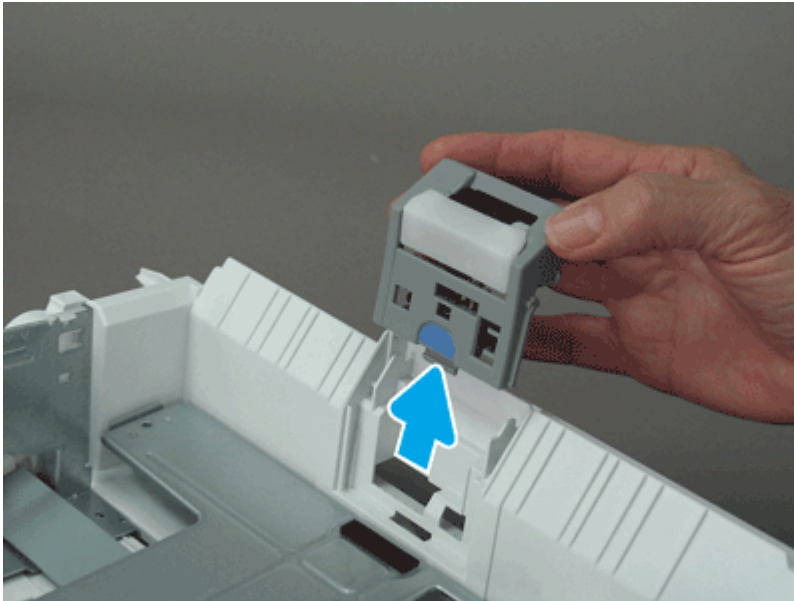
2. Push in on the blue label and push up slightly to release the roller assembly.

Figure 2-55 Release the roller assembly



3. Slide the roller assembly straight up to remove it.

Figure 2-56 Remove the roller assembly



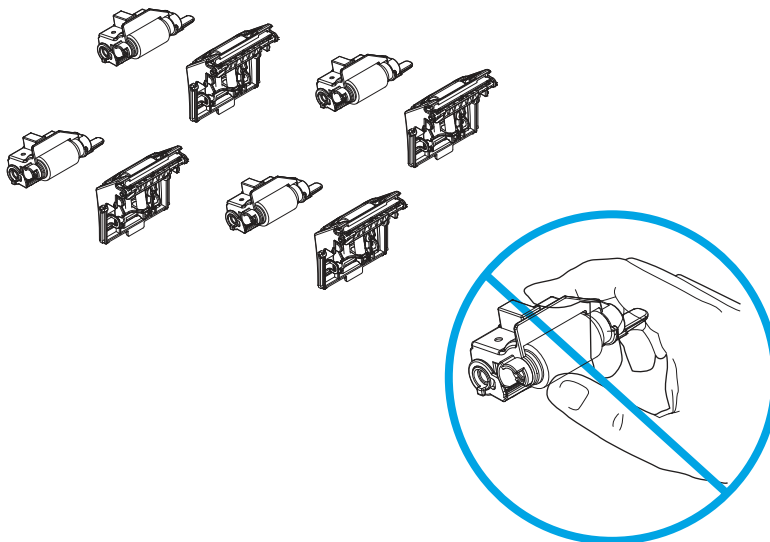
Clean the Tray 2/3 rollers

Learn about cleaning the Tray 2/3 rollers.

- Clean the Tray 2/3 rollers.
 - Use a damp, lint-free cloth to gently clean the rollers.

⚠ CAUTION: Do not touch the spongy portion of the roller. Skin oils on the roller can cause paper-handling and print-quality problems. HP recommends using disposable gloves or thoroughly washing your hands before handling the assembly.

Figure 2-57 Clean the rollers

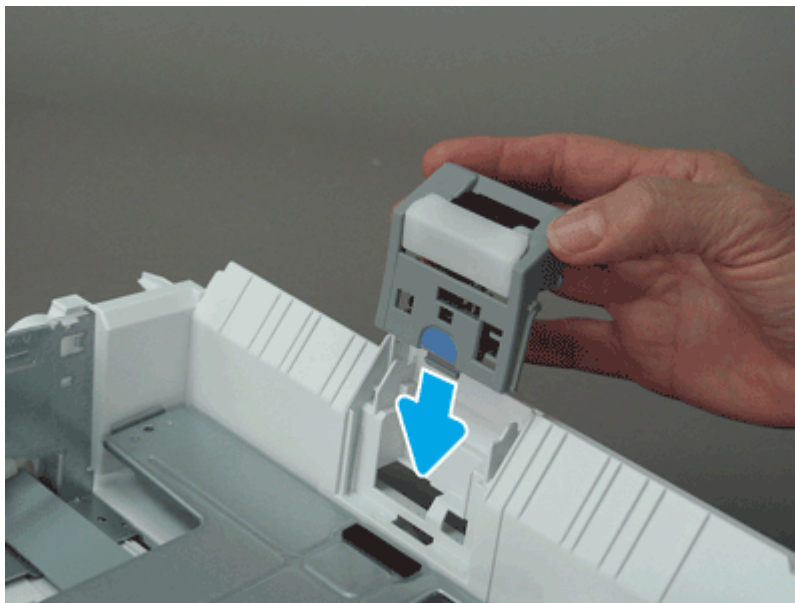


Install the Tray 2 or 3 separation rollers

Follow these steps to install the Tray 2 or 3 separation rollers.

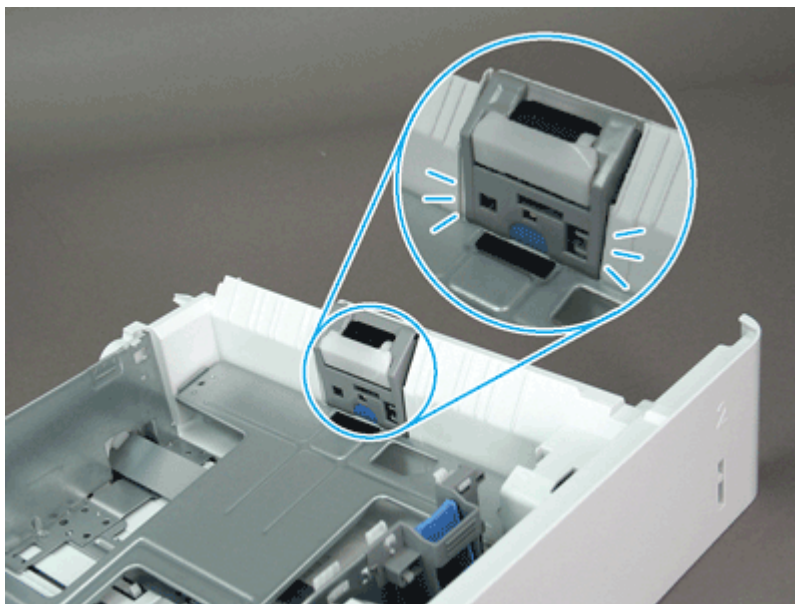
1. Slide the roller assembly straight into the tray to install it.

Figure 2-58 Install the roller assembly



2. Press down to make sure that the roller assembly snaps into place and is fully seated.

Figure 2-59 Make sure that the roller is seated

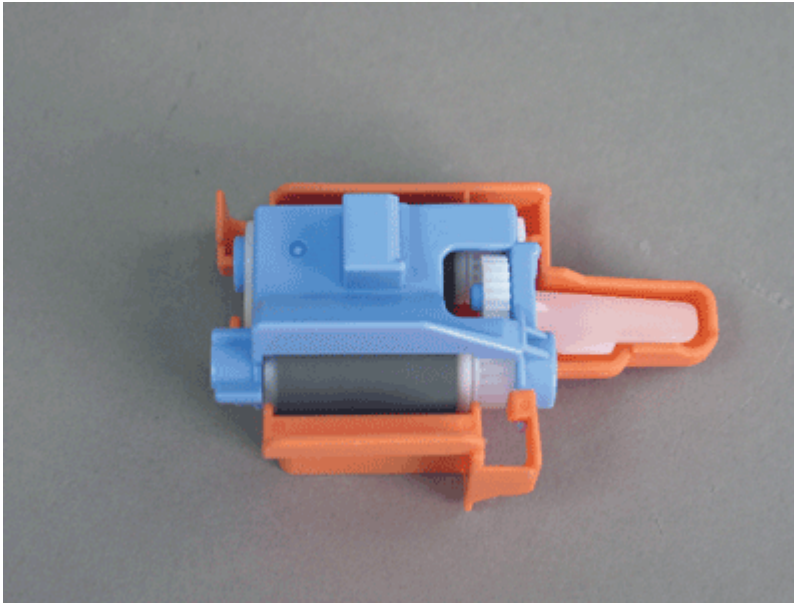


Install the Tray 3 pickup rollers

Follow these steps to install the Tray 3 pickup rollers.

1. The roller assembly is in an orange installation tray. Do not remove the orange installation tray until the roller assembly has been installed.

Figure 2-60 Do not remove the orange installation tray



2. In the printer, position the roller assembly so that the blue, spring-loaded shaft fits into the opening on the left side of the roller assembly (callout 1). With the shaft in the opening, pull toward the front of the printer to compress the shaft, and then pivot the right end of the assembly up (callout 2).


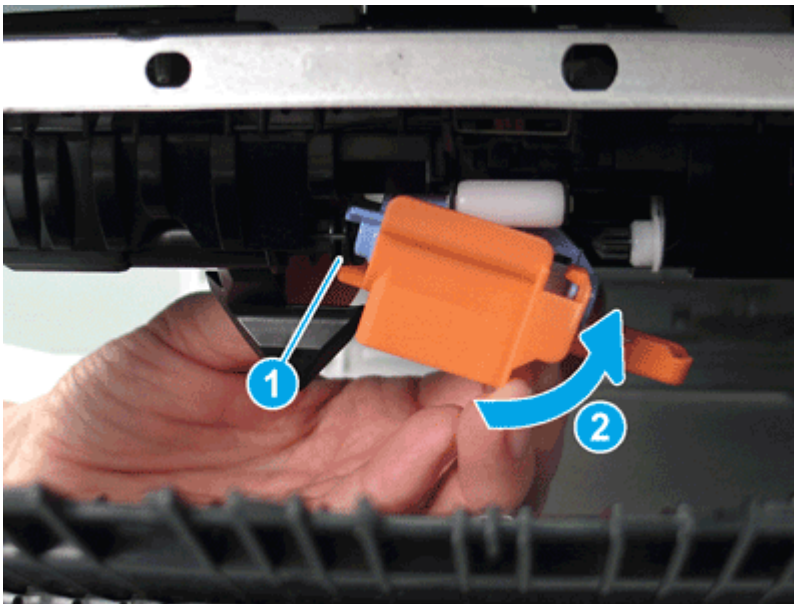
 **IMPORTANT:** The roller must be accessed through the tray opening, while viewing it through the right door opening.

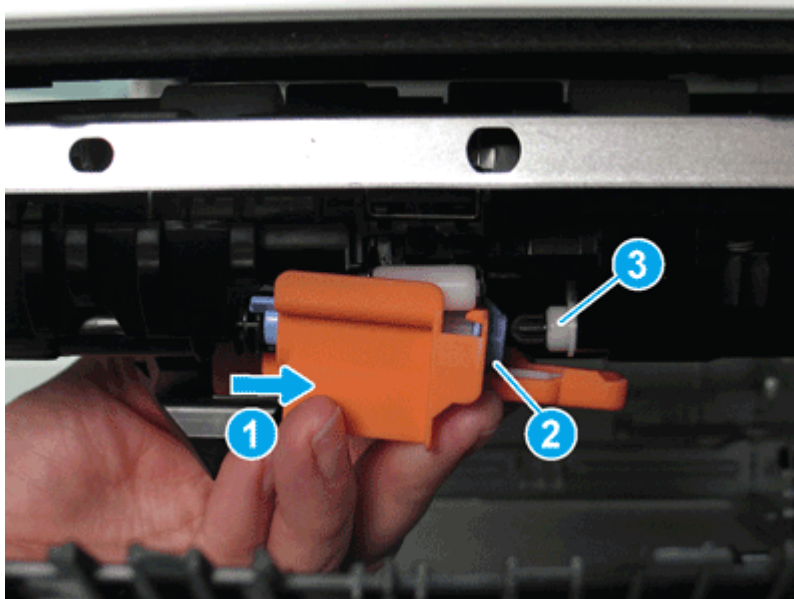
Figure 2-61 Position the roller



3. While holding the roller assembly in place against the printer, carefully allow the spring-loaded shaft to push the roller assembly forward (callout 1) until the front side (callout 2) comes to rest on

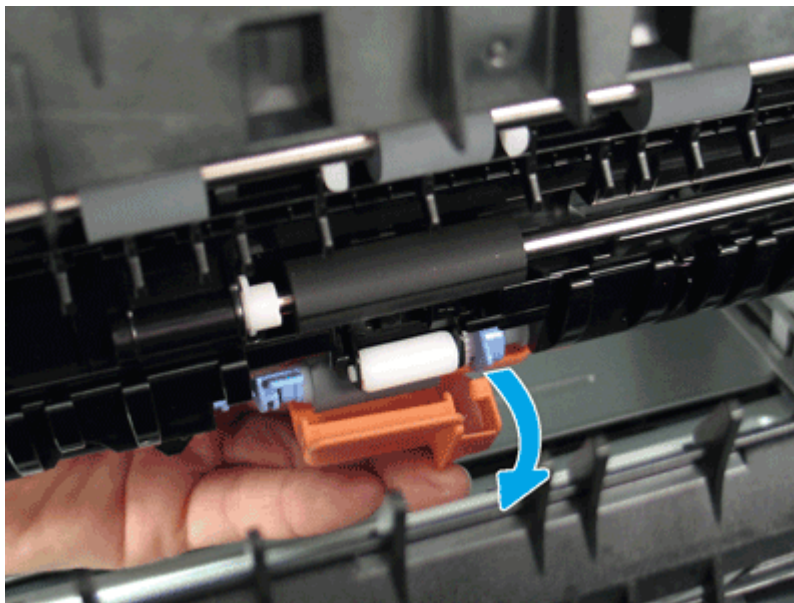
a black shaft (callout 3). Gently move the assembly side to side to ensure both ends of the roller assembly are seated.

Figure 2-62 Install the roller assembly



4. Gently pinch and twist the orange installation tray, and then pull downward to remove it from the roller assembly.

Figure 2-63 Remove the orange installation tray



5. Look inside the printer through the tray opening and make sure that the roller assembly is correctly installed. It must not hang down into the tray opening. If the roller hangs down into the tray cavity, remove it, reinstall it in the orange installation tray, and then reinstall it in the printer.

CAUTION: If the roller assembly is not correctly installed, it might be damaged when the tray is installed.

Figure 2-64 Roller correct and incorrect installation

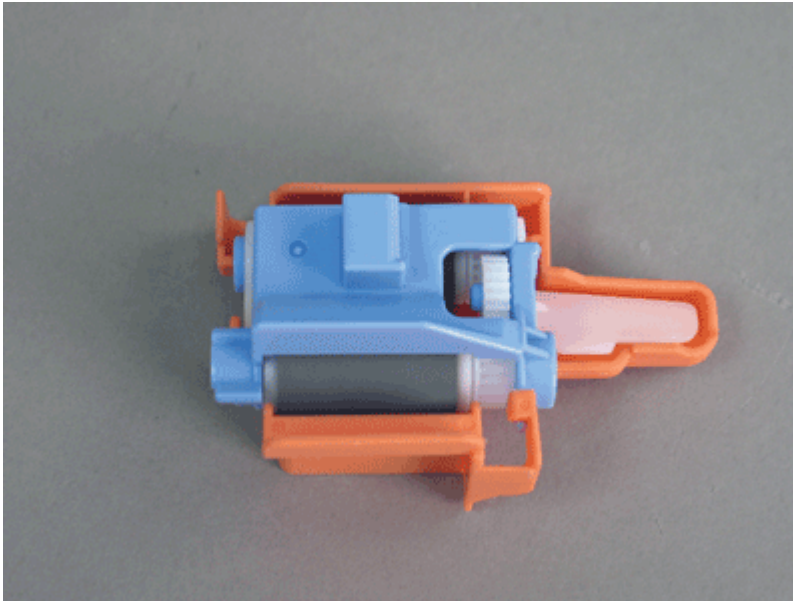


Install the Tray 2 pickup rollers

Follow these steps to install the Tray 2 pickup rollers.

1. The roller assembly is in an orange installation tray. Do not remove the orange installation tray until the roller assembly has been installed.

Figure 2-65 Do not remove the orange installation tray



2. In the printer, position the roller assembly so that the blue, spring-loaded shaft fits into the opening on the left side of the roller assembly (callout 1). With the shaft in the opening, pull toward the front of the printer to compress the shaft, and then pivot the right end of the assembly up (callout 2).



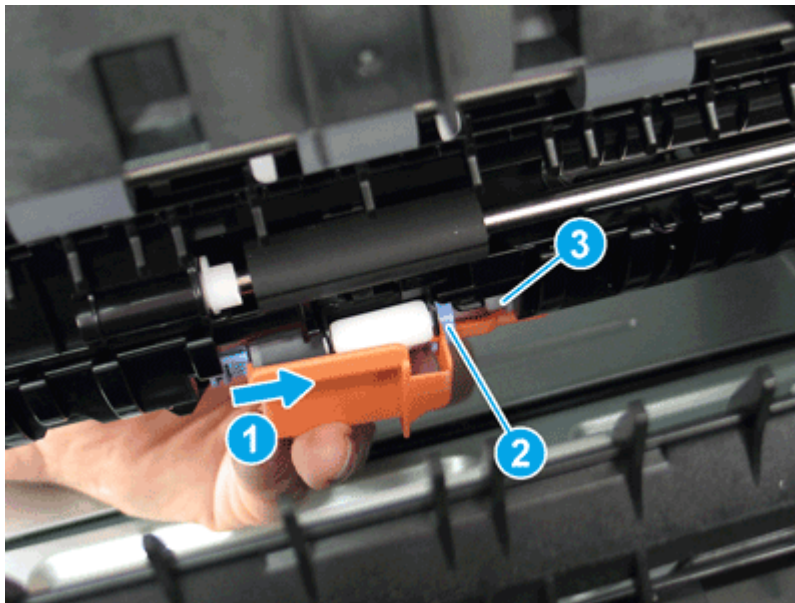
IMPORTANT: The roller must be accessed through the tray opening, while viewing it through the right door opening.

Figure 2-66 Position the roller



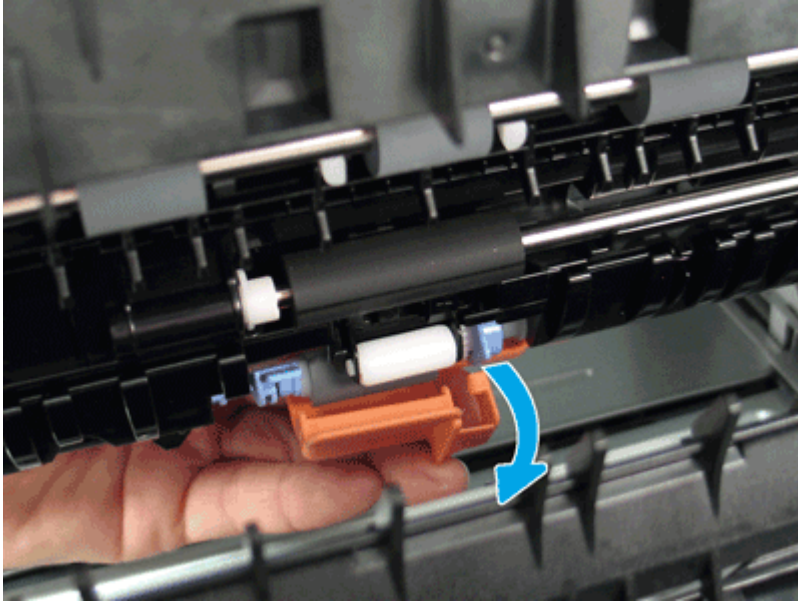
3. While holding the roller assembly in place against the printer, carefully allow the spring-loaded shaft to push the roller assembly forward (callout 1) until the front side (callout 2) comes to rest on a black shaft (callout 3). Gently move the assembly side to side to ensure both ends of the roller assembly are seated.

Figure 2-67 Install the roller assembly



4. Gently pinch and twist the orange installation tray, and then pull downward to remove it from the roller assembly.

Figure 2-68 Remove the orange installation tray



5. Look inside the printer through the tray opening and make sure that the roller assembly is correctly installed. It must not hang down into the tray opening. If the roller hangs down into the tray cavity, remove it, reinstall it in the orange installation tray, and then reinstall it in the printer.

⚠ CAUTION: If the roller assembly is not correctly installed, it might be damaged when the tray is installed.

Figure 2-69 Roller correct and incorrect installation



Clean the Tray 3-5 paper feeder stand pickup and separation rollers

Learn how to clean the Trays 3-5 paper feeder stand pickup and separation rollers.

Before performing service

- Disconnect the power cable.

⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 2-5 Part information

Part number	Part description
J7Z98-67902	Kit- LJ Trays 2-x rollers

Required tools

- No special tools are needed to remove or install this assembly.

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

No post service test is available for this assembly.

Remove the Trays 3-5 paper feeder stand pickup and separation rollers

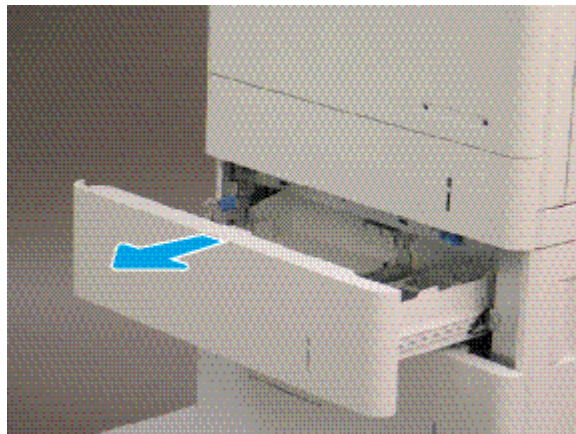
Follow these steps to remove the Trays 3-5 paper feeder stand pickup and separation rollers.

1. Do one of the following:

- a. Open the paper tray.

⚠ CAUTION: Do not extend more than one paper tray at a time. Do not use the paper tray as a step. Keep hands out of the paper trays when closing. All trays must be closed when moving the printer.

Figure 2-70 Open the paper tray



- b. Open the high-capacity paper tray.

Figure 2-71 Open the high-capacity paper tray



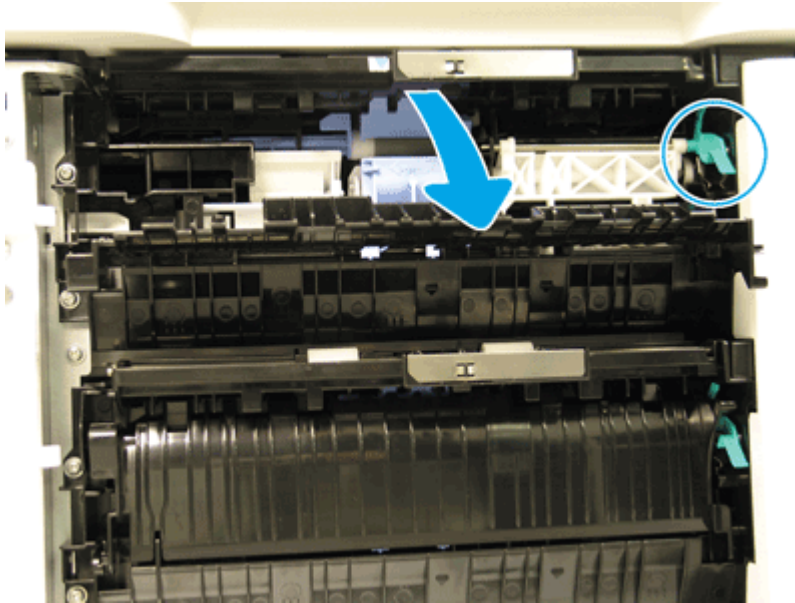
- 2. Open the right door of the paper feeder

Figure 2-72 Open the right door



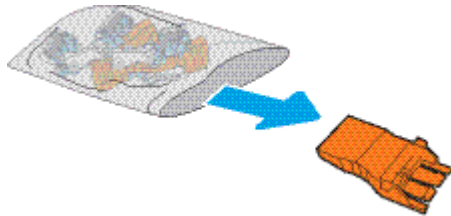
3. Locate the green tab on the feed assembly cover. Release the tab to lower the assembly cover.

Figure 2-73 Lower the feed assembly cover



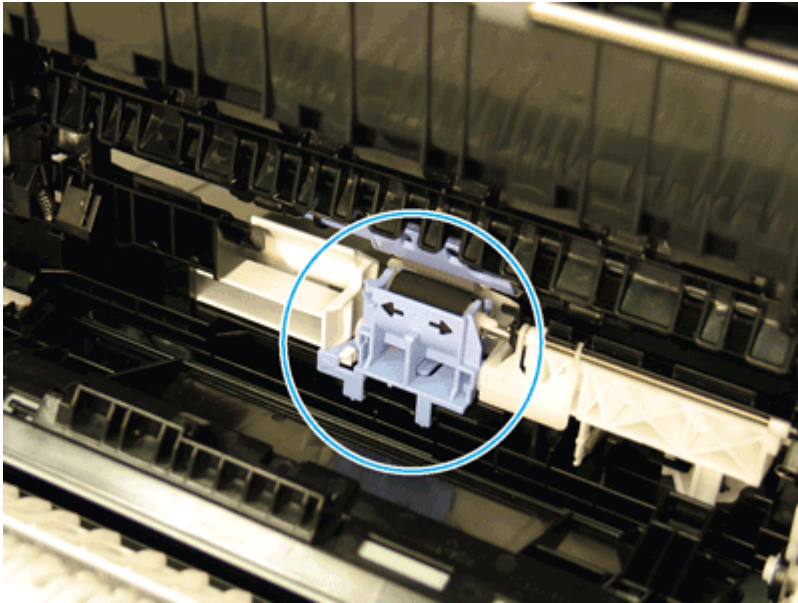
4. Remove the orange separation roller tool from the packaging.

Figure 2-74 Remove the tool from the packaging



5. Locate the separation roller.

Figure 2-75 Locate the separation roller



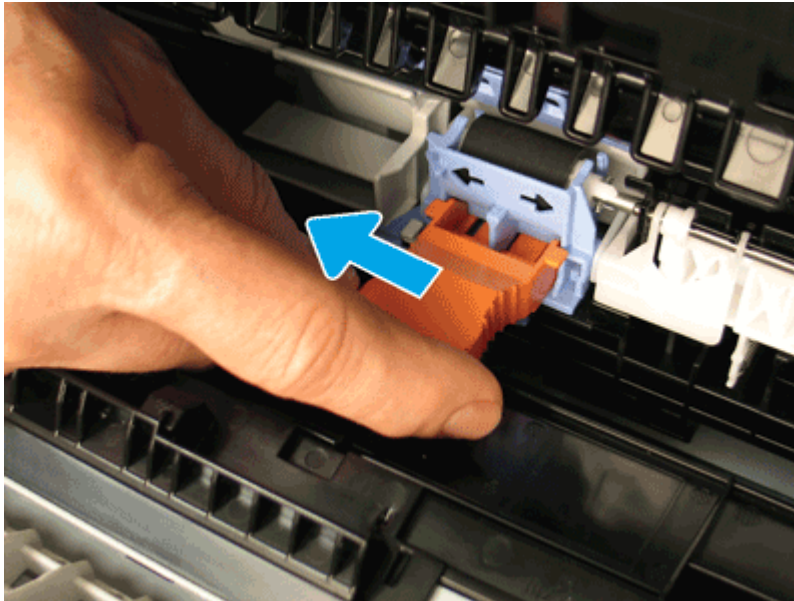
6. Install the orange tool in the separation roller until it snaps into place.

Figure 2-76 Install the orange tool



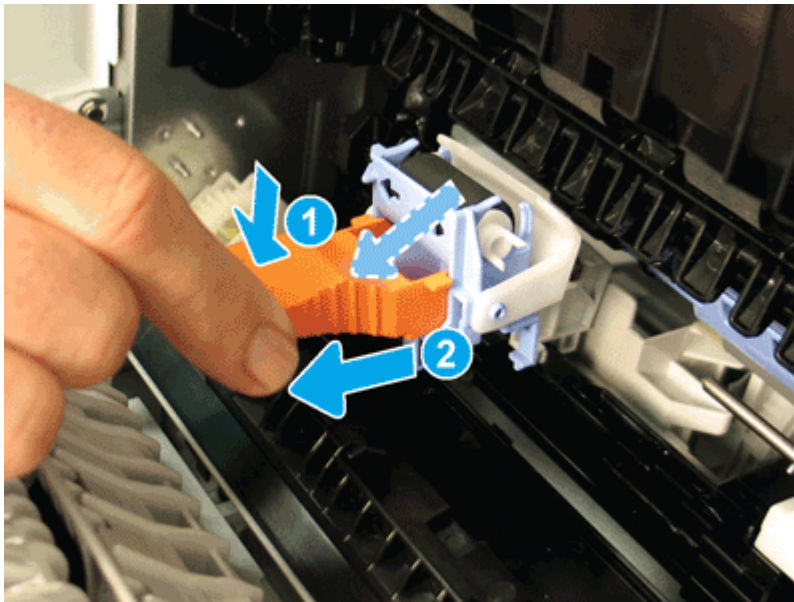
7. Slide the roller to the left.

Figure 2-77 Slide the roller to the left



8. Tilt the end of the tool down (callout 1), and then pull straight out of the printer (callout 2) to remove the separation roller.

Figure 2-78 Remove the separation roller

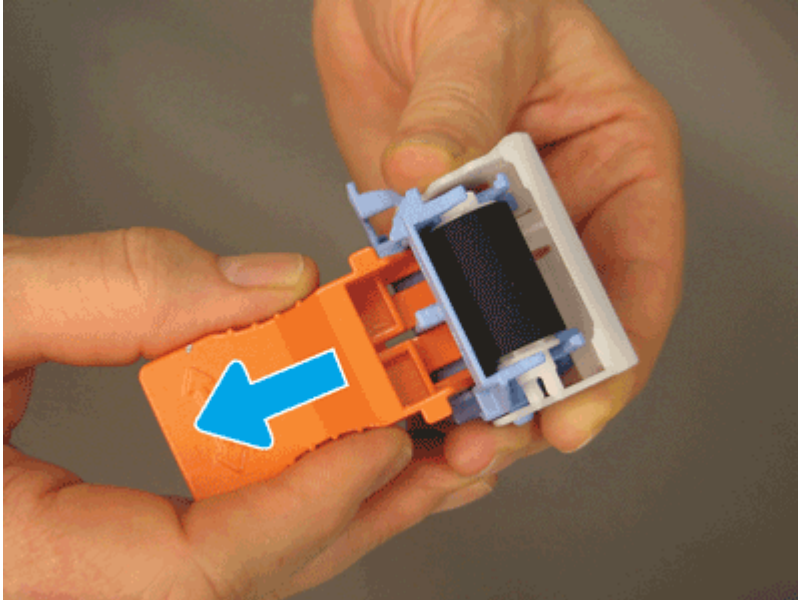


9. Remove the orange tool from the separation roller.



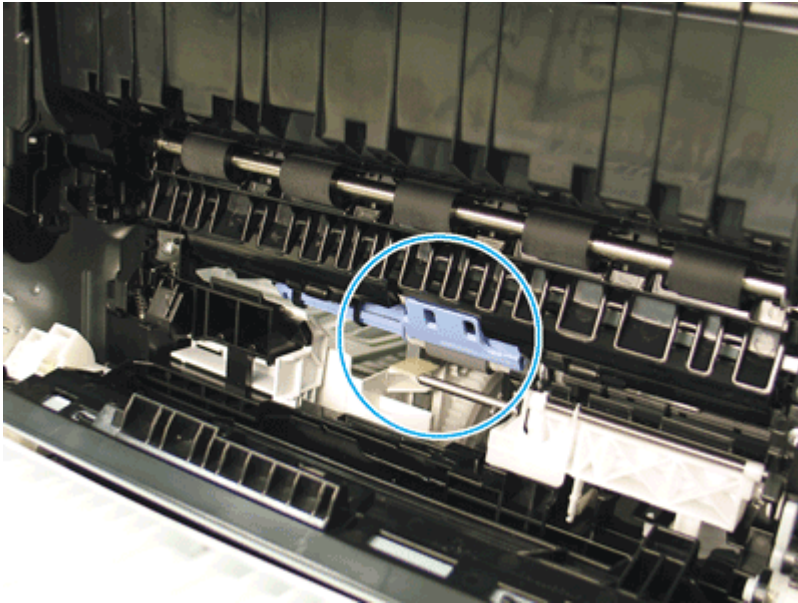
NOTE: The tool will be used to install the new separation roller.

Figure 2-79 Remove the orange tool



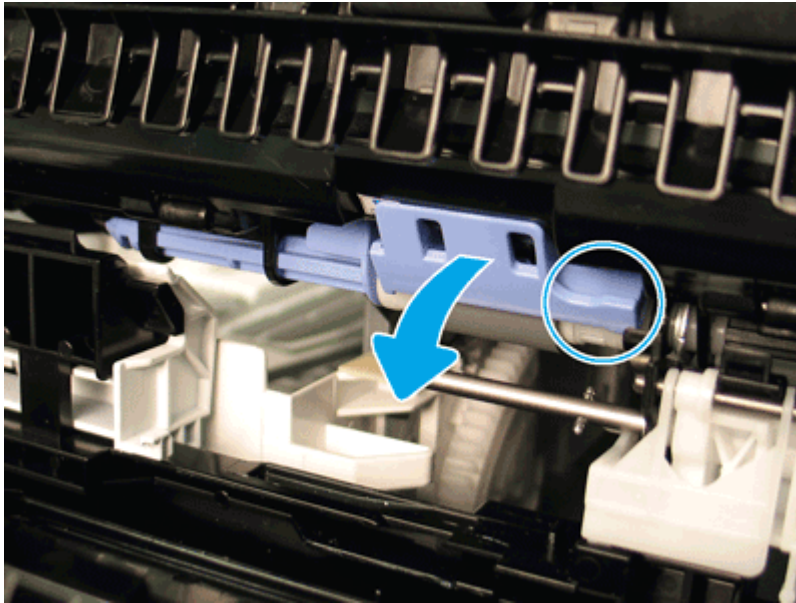
10. Locate the pickup and feed rollers.

Figure 2-80 Locate the pickup and feed rollers



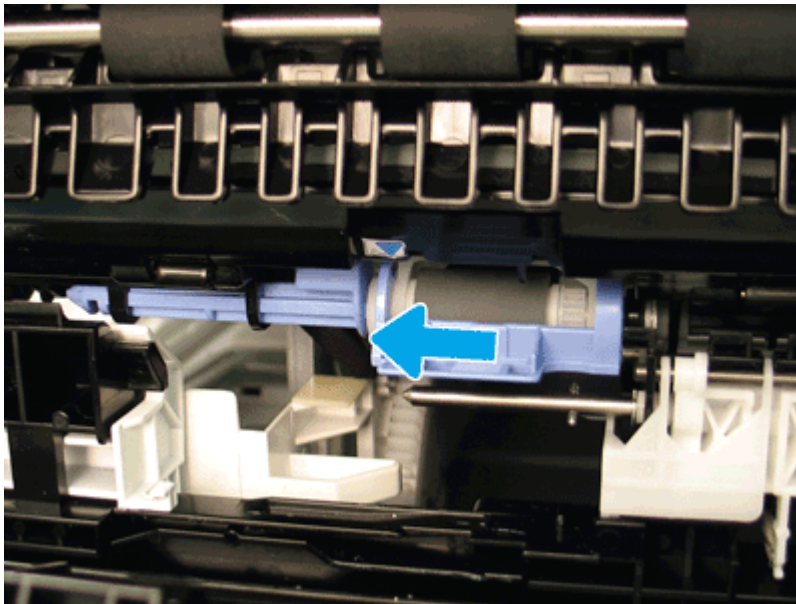
11. Locate and pull down the blue tab to unlock the pickup and feed rollers.

Figure 2-81 Unlock the pickup and feed rollers



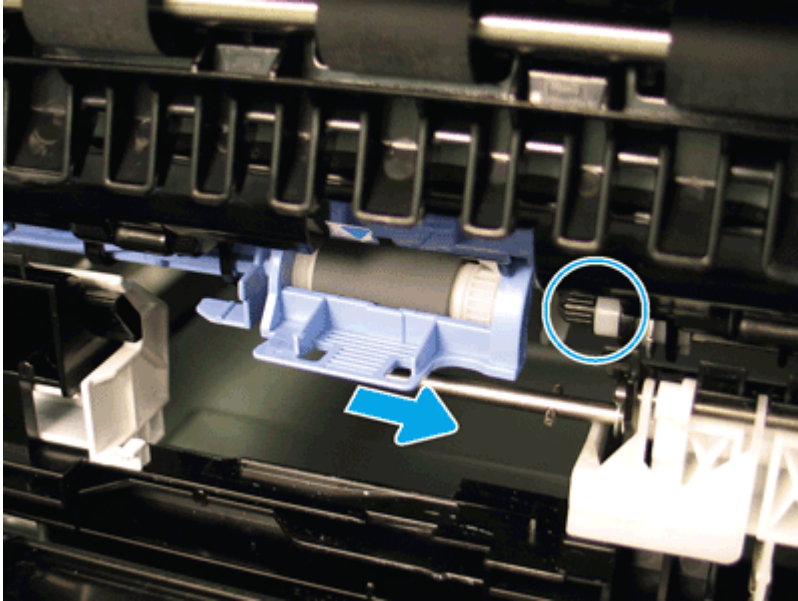
12. Use the blue tab as a handle to slide the rollers to the left to compress the left blue post until it clicks into place.

Figure 2-82 Slide the blue tab left, compressing the left blue post until it clicks



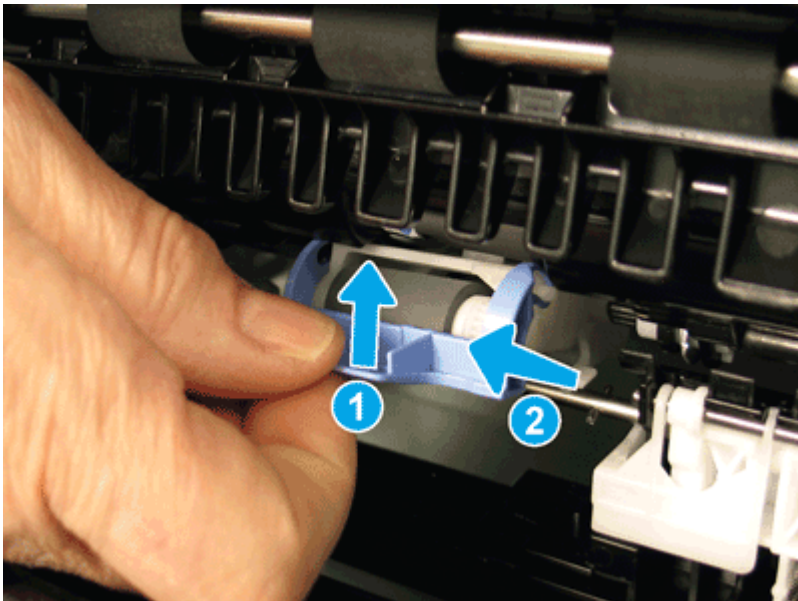
13. Slightly move the rollers to the right to free them from the blue post. Make sure that the roller is clear of the black post on the right.

Figure 2-83 Slightly move the rollers to the right to free them from the blue post



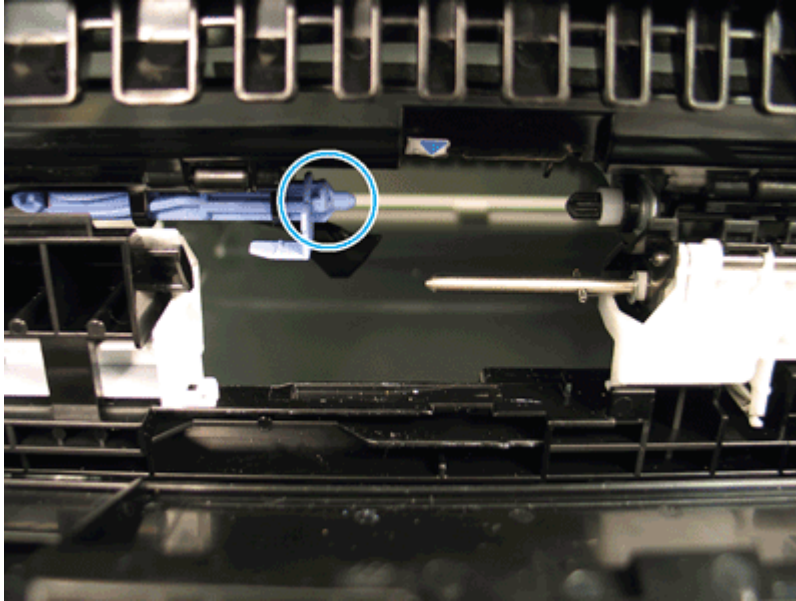
14. Slightly lift up the front of the roller assembly (callout 1), and then pull the assembly away from the printer (callout 2) to remove it.

Figure 2-84 Remove the roller assembly



15. If the left post does not stay in the locked position, press the end of the post left until it clicks into place.

Figure 2-85 Lock the left post



Clean the Tray 3-5 rollers

Learn about cleaning the Tray 3-5 rollers.

- Clean the Tray 3-5 rollers.
 - Use a damp, lint-free cloth to gently clean the rollers.

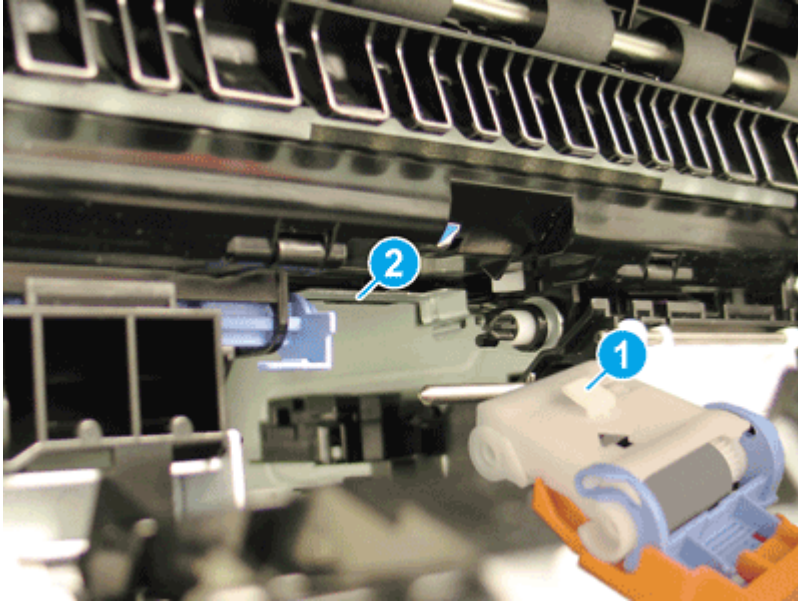
⚠ CAUTION: Do not touch the spongy portion of the roller. Skin oils on the roller can cause paper-handling and print-quality problems. HP recommends using disposable gloves or thoroughly washing your hands before handling the assembly.

Install the Trays 3-5 paper feeder stand pickup and separation rollers

Follow these steps to install the Trays 3-5 paper feeder stand pickup and separation rollers.

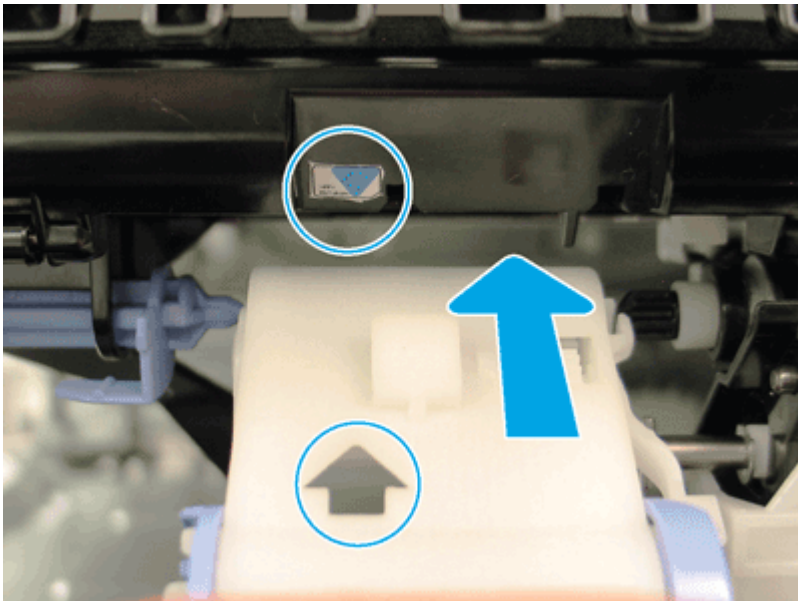
1. The white hook on the top of the roller assembly (callout 1) will hook onto a sheet metal plate (callout 2) when installed correctly.

Figure 2-86 White hook installation position



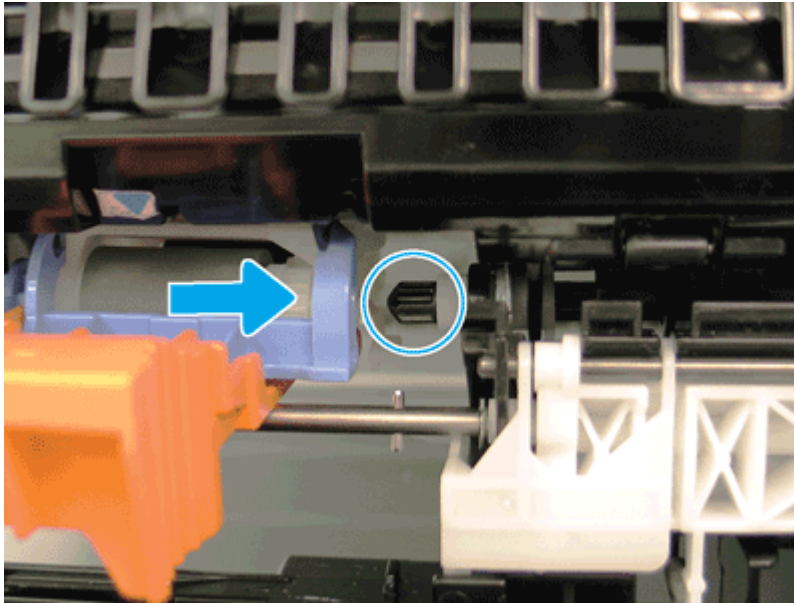
2. Align the arrow on the roller assembly with the arrow in the printer, and then slide the rollers into the printer.

Figure 2-87 Align the roller assembly



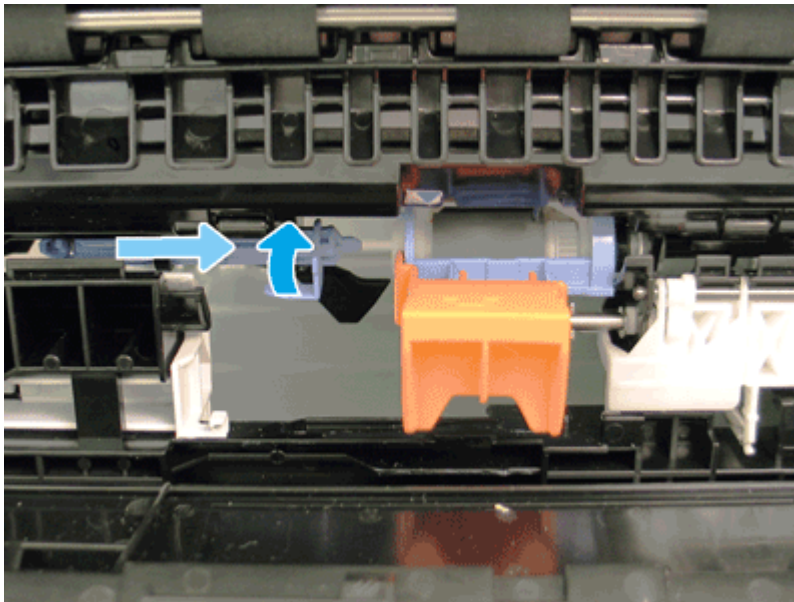
3. Slide the rollers to the right onto the black shaft.

Figure 2-88 Slide the rollers to the right onto the black shaft



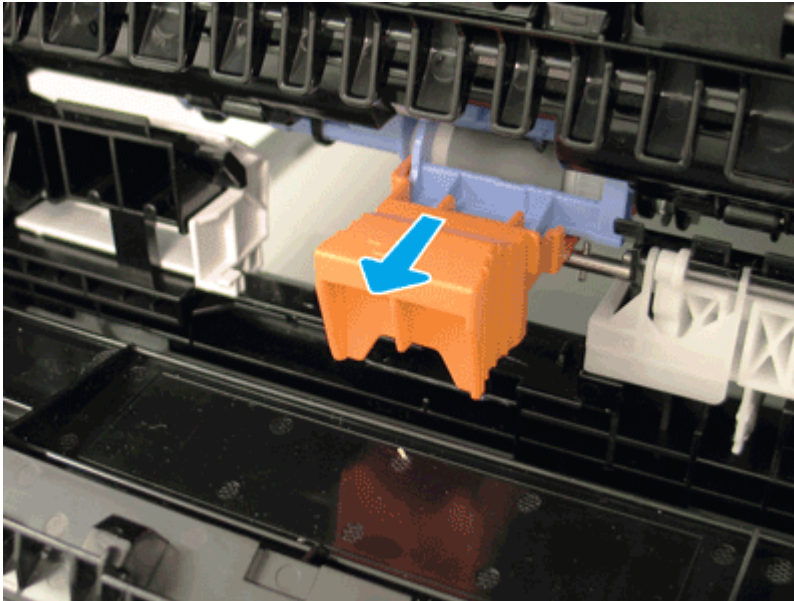
4. Locate the lever on the blue shaft on the left, and then release the lever by pressing upward. The blue shaft should spring to the right to click into position to hold the rollers in place.

Figure 2-89 Release the lever



5. Remove the orange tool from the roller assembly by pulling it away from the printer.

Figure 2-90 Remove the orange tool



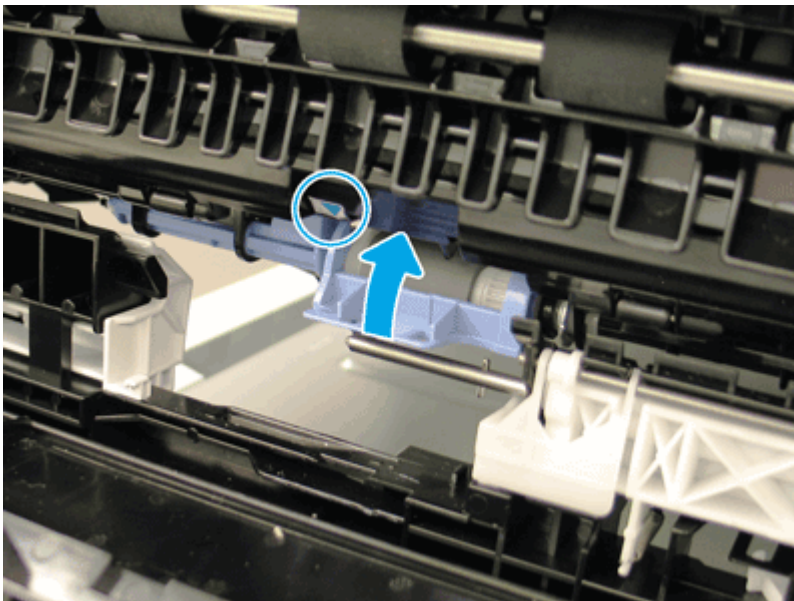
6. Pivot the tab up and snap it into place against the rollers to correctly lock the rollers in place.



NOTE: The blue arrow on the printer is hidden when the cover is correctly snapped into place.

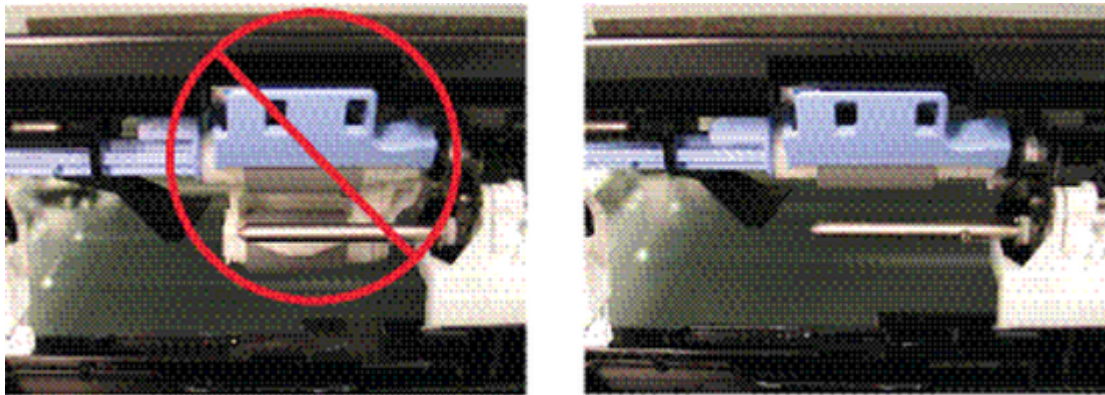
If the rollers are hanging, or at an angle, they are not installed correctly. Make sure that the hook on the top of the rollers is attached to the metal chassis plate inside the printer. If the rollers are not installed correctly, go back to step 16 and reinstall the assembly.

Figure 2-91 Pivot the tab up and snap it to lock the rollers correctly in place



7. If the rollers are hanging, or at an angle, they are not installed correctly. Make sure that the hook on the top of the rollers is attached to the metal chassis plate inside the printer. If the rollers are not installed correctly, go back to step 2 and reinstall the assembly.

Figure 2-92 Roller incorrect and correct installation



8. Install the orange separation roller tool onto the replacement separation roller.


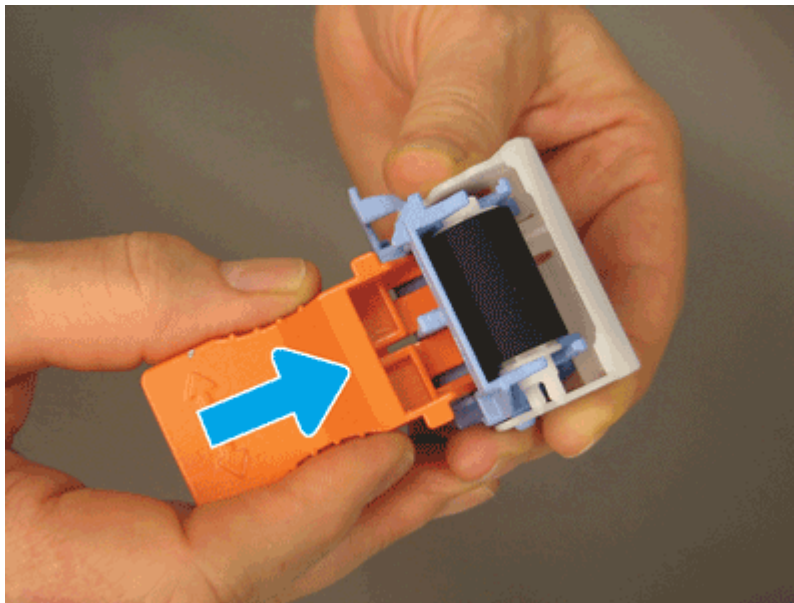
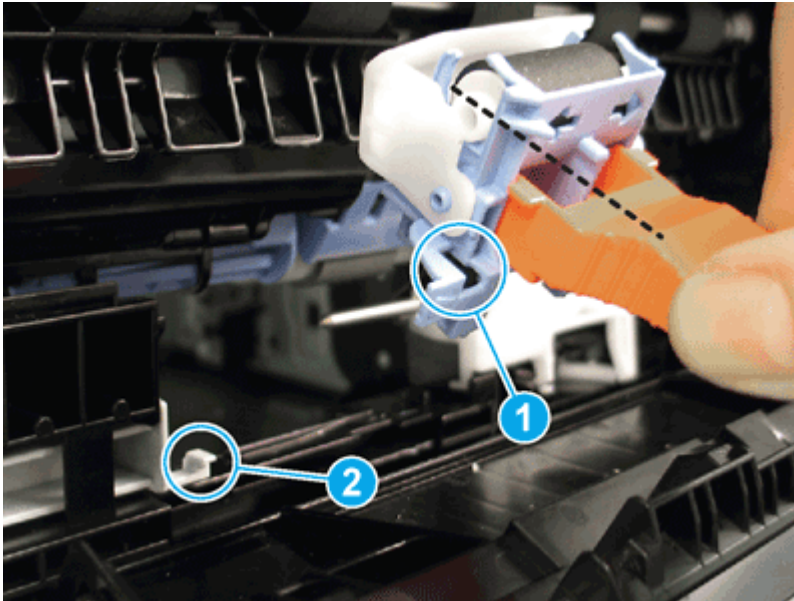
 **NOTE:** The tool will snap into place when it is fully installed.

Figure 2-93 Install the orange tool



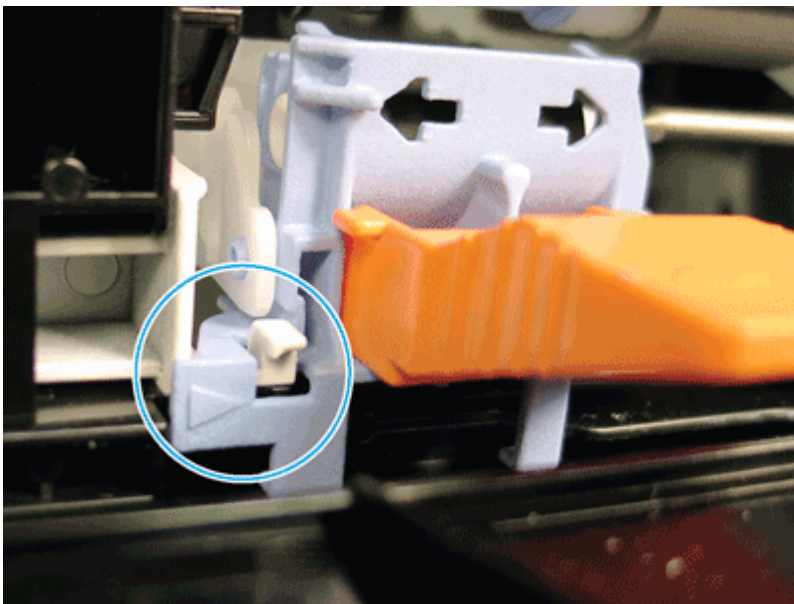
9. Tilt the orange tool slightly away from the printer, and then install the roller into the printer so that the opening in the roller (callout 1) fits over the white tab (callout 2) on the printer rail.

Figure 2-94 Position the roller



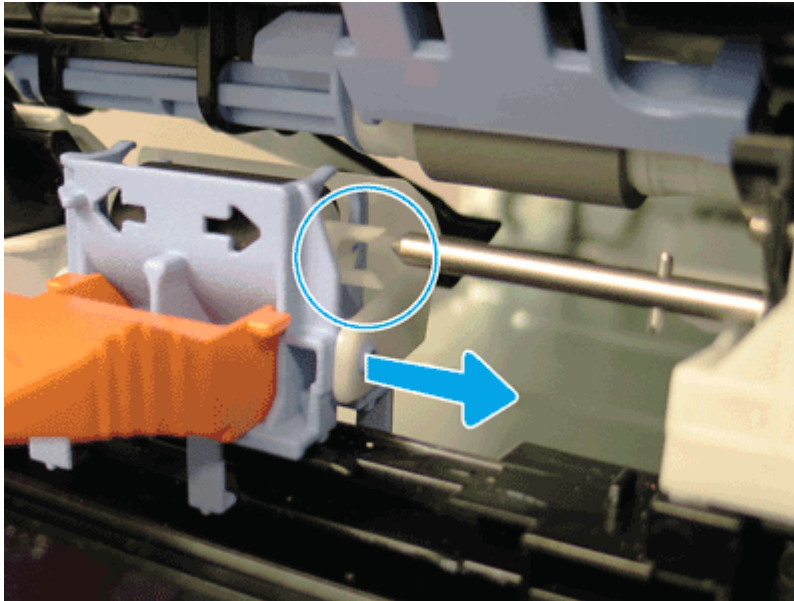
10. When installed correctly, the embossed arrow on the roller case aligns with the white tab on the rail.

Figure 2-95 Check roller alignment



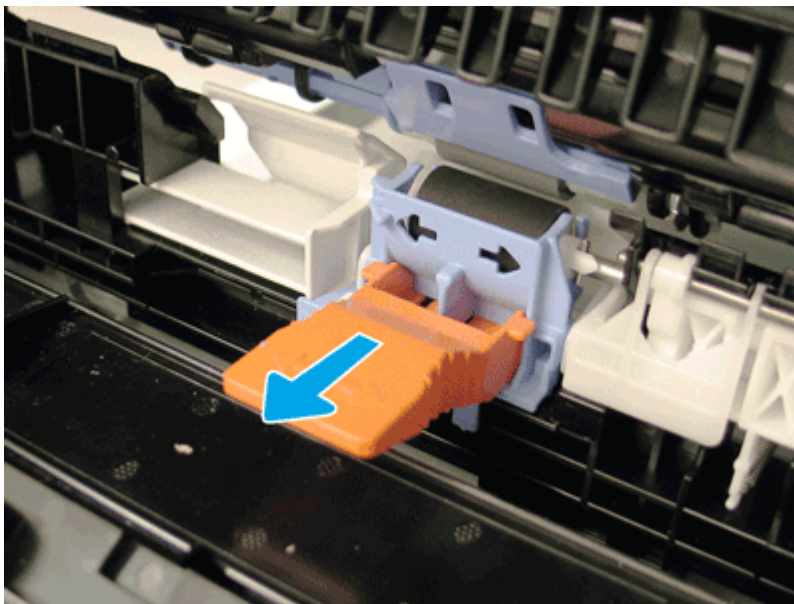
11. Align the center of the roller with the end of the metal shaft. Slide the roller to the right onto the metal shaft until it snaps into place.

Figure 2-96 Slide the roller on the metal shaft



12. Remove the orange tool by pulling it away from the printer.

Figure 2-97 Remove the orange tool



13. Close the feed assembly cover.

Figure 2-98 Close the feed assembly cover



14. Close the right door of the paper feeder.

Figure 2-99 Close the right door



15. Do one of the following:

- a. Close the paper tray.

Figure 2-100 Close the paper tray



- b. Close the high-capacity paper tray.

Figure 2-101 Close the high-capacity paper tray




3 Theory of operation

Learn about the printer theory of operation.

Document feeder / scanner

Learn about the printer document feeder and scanner components.

 **NOTE:** This section is for MFP printers only.

Document feed system

Learn about the various components of the document feed system.

This section describes the following:

- Sensors in the document feeder
- Document feeder paper path
- Simplex single-pass scanning
- Electronic duplexing (e-duplex) single-pass scanning
- Deskew operation
- Document feeder hinges

The printer supports single-pass electronic duplexing (e-duplex) copy jobs. Two separate scan modules scan the front-side and back-side of an e-duplex copy job page in a single pass through the document feeder.

For some printer bundles, this ADF supports a smart background feature which auto-crops and adjusts the image extents (see printer specifications for more information).


Sensors in the document feeder

Learn about the document feeder sensor locations and functions.

The document feeder contains the following sensors:

- **ADF paper present sensor:** Detects whether a document is present in the document feeder. If paper is present in the document feeder when copies are made, the printer scans the document using the document feeder. If no paper is present when copies are made, the printer scans the document using the scanner glass.

- **ADF Y (length) sensor:** Detects whether a legal-size original is present in the document feeder.
- **ADF jam cover sensor:** Detects whether the document feeder cover is open or closed.
- **ADF paper path deskew sensor:** Detects the top of the page as it enters the deskew rollers.
- **ADF paper path pick success sensor:** Detects a successful one page feed from the document feeder tray.

 **NOTE:** This sensor uses ultrasonic sound to detect a multi-page paper feed.

- **Paper path sensor 1:** Detects the top of the page as it approaches the front-side scan module (document feeder glass).

Figure 3-1 Document feeder sensors

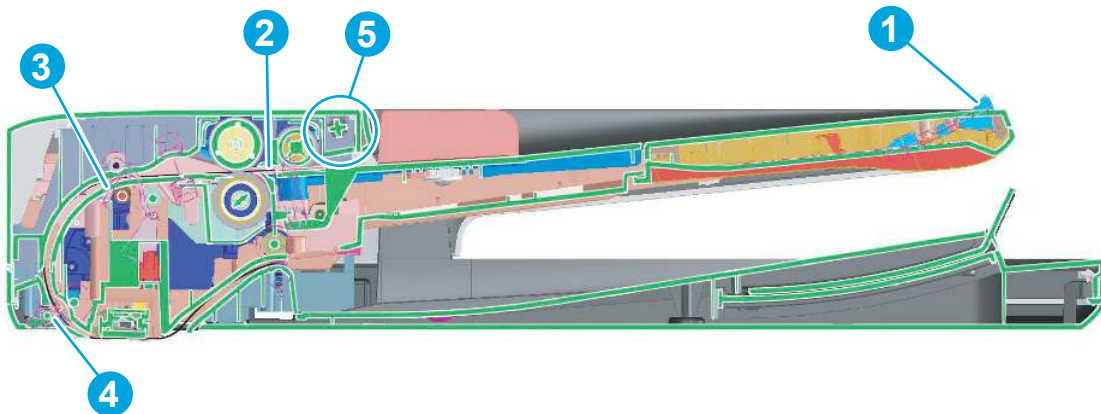


Table 3-1 Document feeder sensors

Item	Description
1	ADF Y (length) sensor
2	ADF paper present sensor
3	ADF deskew sensor
4	Paper path sensor 1 NOTE: For an e-duplex copy job, this sensor is used to activate the front-side scan module (in the scanner base) and the front-side background selector (in the document feeder), if needed.
5	ADF jam cover sensor (open the jam access cover and insert a folded piece of paper to activate the flag)

Document feeder paper path

Review the following information about the document feeder paper path.

Figure 3-2 Document feeder paper path

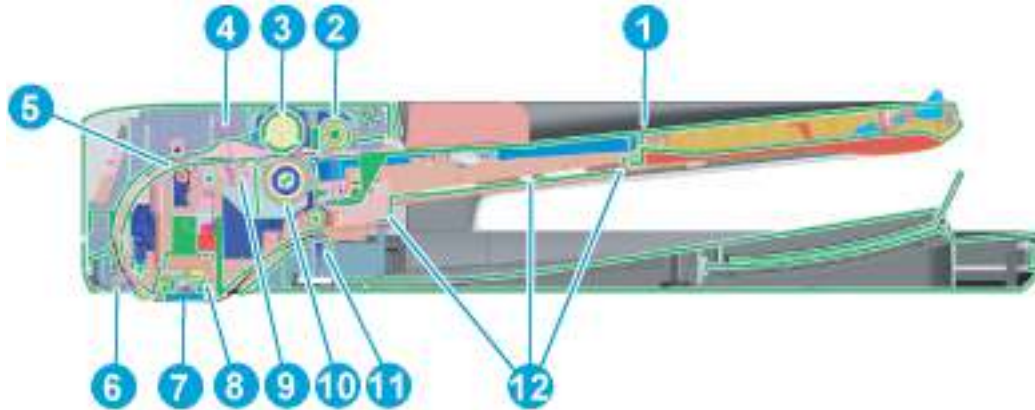


Table 3-2 Document feeder paper path

Item	Description	Item	Description
1	Input tray	7	Front-side scan module location NOTE: This scan module (document feeder glass) is located in the scanner base and is not pictured.
2	Pre-pick roller	8	Back-side scan module
3	Pick roller	9	ADF pick success transmitter
4	ADF pick success receiver	10	Separator roller
5	Deskew drive roller	11	Exit drive roller
6	Prescan drive roller	12	Lift plate

Document feeder simplex operation


Following is the basic sequence of operation for a document feeder simplex job.

1. The ADF jam cover sensor detects when the cover door is in the closed position.
2. The ADF paper present sensor activates when paper is loaded onto the input tray.
3. The feed motor rotates to raise the lift plate and starts to pick the loaded paper.
4. The ADF multi-pick (ultrasonic) sensor registers when the leading edge of the media is driven past the sensor. The printer firmware registers a successful pick operation.
5. The ADF paper path deskew activates when the leading edge of the paper passes it. The printer firmware registers the leading edge of the paper position.
6. The leading edge of the paper drives into the nip point of the deskew drive roller and the deskew pinch rollers. This creates a buckle of paper by the nip point for pick-skew correction.
7. The deskew motor rotates the deskew drive roller to pull the paper into the prescan drive roller.
8. The pick motor stops turning and allows both the pick and feed roller to turn freely while the paper is pulled in by the deskew drive roller.
9. The feed motor rotates to drive the paper into the prescan front-side sensor. The firmware registers the leading edge position of the paper as the multi-pick sensor activates.

10. The feed motor continues to rotate and drive the leading edge of the paper through the preset distance from the multi-pick sensor to the front-side scan zone. The scanner begins the scanning and data retrieval process.
11. The ADF multi-pick (ultrasonic) sensor deactivates when the trailing edge of the paper passes the sensor. The firmware registers the trailing edge of the paper position.
12. The feed motor continues to rotate and drive the trailing edge of the paper through the preset distance from the ADF multi-pick (ultrasonic) sensor to the front-side scan zone. The scanner ends the scanning and data retrieval process.
13. The feed motor continues to rotate and ejects the trailing edge of the paper into the output bin.
14. One of the following occurs:
 - If the copy job is complete, the ADF paper present sensor deactivates. The feed motor reverses rotation to raise the pick roller.
 - If the copy job is not complete, the ADF paper present sensor is active. The printer firmware detects additional pages in the input tray and the process repeats.

Document feeder e-duplex operation


Following is the basic sequence of operation for a document feeder simplex job.

 **NOTE:** For an e-duplex copy job, the background scan operation begins immediately after the simplex sequence of operation ends.

1. The feed motor continues to drive the paper until the leading edge activates the prescan back-side sensor. The printer firmware registers the position of the leading edge of the paper.
2. The feed motor continues to rotate to drive the leading edge of the paper through the preset distance from prescan back-side sensor to the back-side background selector scan zone. The back-side background scan module begins scanning and retrieval of the data.
3. The prescan back-side sensor deactivates when the trailing edge of the paper passes it. The printer firmware registers the trailing edge of the paper position.
4. The feed motor continues to rotate to drive the trailing edge of the paper edge past the back-side background selector scan zone.
5. The feed motor continues to rotate and ejects the trailing edge of the paper into the output bin.
6. One of the following occurs:
 - If the copy job is complete, the ADF paper present sensor deactivates. The feed motor reverses rotation to raise the pick roller.
 - If the copy job is not complete, the ADF paper present sensor is active. The printer firmware detects additional pages in the input tray and the process repeats.

Deskew operation

Learn about the document feeder deskew features.

 **NOTE:** For printer deskew specifications, go the HP Web-based interactive Search Engine (WISE) and search for [HP LaserJet Enterprise, Managed, HP PageWide Pro, Enterprise, Managed - Skew Guide \(C06363769\)](#).

Sliding side guides on the input tray make sure that the paper stack is correctly aligned at the center of the input tray when paper is loaded in the tray. The correct position of the loaded paper is parallel with the direction of travel into the document feeder paper path.

The document feeder further reduces paper skew due to improper loading of paper in the input tray by buckling the paper to create a paper buffer.

The document feeder aligns the leading edge of the paper parallel with the deskew drive rollers before the paper is driven further into the document feeder paper path.


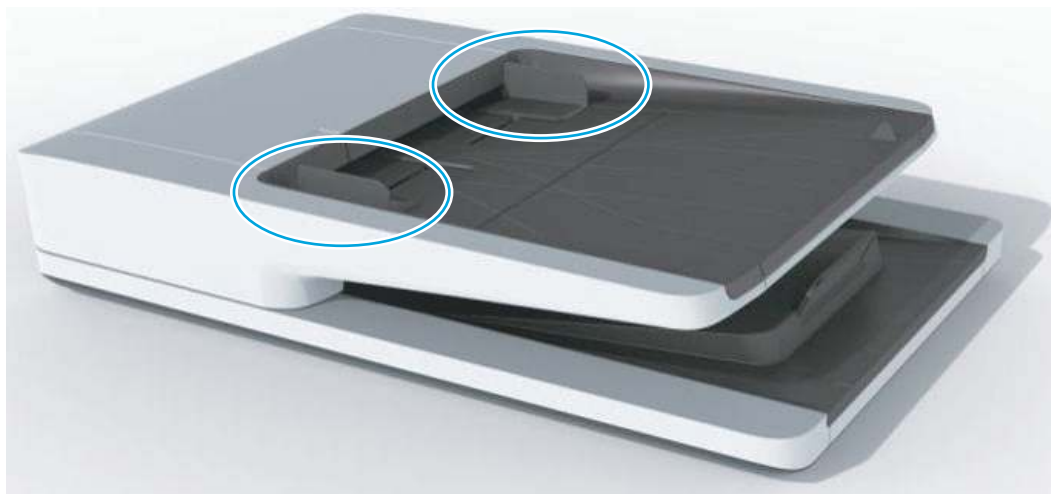
 **NOTE:** If the page to be copied is smaller than the minimal sliding guide setting, do not use the document feeder for the copy job. Attempting to copy too small of a page using the document feeder might result in document feeder jams and/or damage to the original page. Instead, use the flatbed glass to copy the page.

Figure 3-3 Document feeder side guides



Document feeder hinges

Review the following information about the document feeder hinges.

The document feeder hinges allow positioning the assembly vertically above the scanner glass to accommodate the placement of books and other objects up to 25 mm (1.0 in) in height on the scanner glass. The document feeder still closes (the bottom of the ADF is kept parallel to the scanner glass) and allows the printer to operate.

The document feeder will withstand a downward force of about 4.5 kg (10 lb) applied at the front edge center of the assembly—when the fulcrum (such as the spine of a book) is located anywhere on the scanner glass and parallel to its long axis—without breaking, deforming, detaching or experiencing performance degradation.

The document feeder hinges support the assembly in the open position and prevent the document feeder from suddenly closing and causing damage or a loud noise.

The hinges can hold the document feeder static in all positions higher than 100 mm (3.93 in); measured at the front of the assembly. Less than 2.3 kg (5 lb) of force is required to open or close the document feeder.

The hinges allow the document feeder to open to an angle of between 60° and 80° from the horizontal position (this angle will not allow the printer to tip over).

Figure 3-4 Document feeder open (book mode)

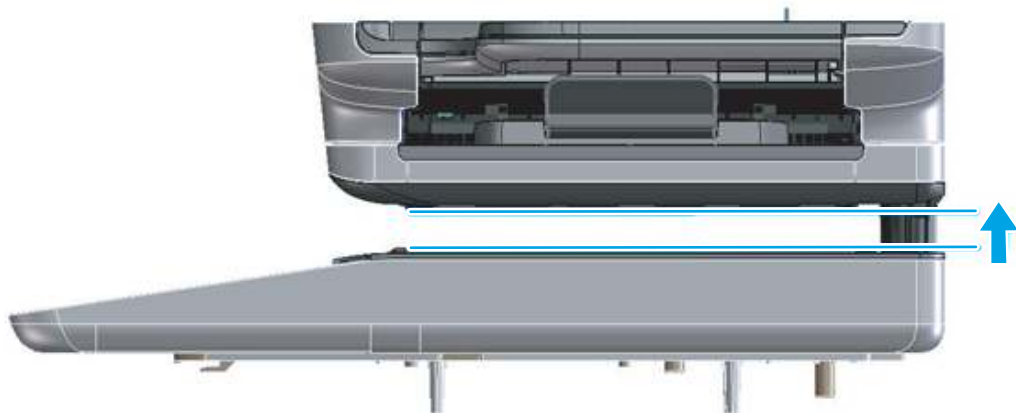


Figure 3-5 Document feeder open (60° to 80°)



Scanning and image capture system

Learn about the scanning and image capture system.

The scanner is a carriage-type platen scanner which includes the frame, glass, scan module, and a scan control board (SCB). The scanner has a sensor to detect legal-sized media and a switch to indicate when the document feeder is opened.

The document feeder and control panel are attached to the scanner. If the scanner fails, it can be replaced as a whole unit. The scanner replacement part does not include the document feeder, control panel, or SCB.

Base printer

Learn about the base printer components.

Basic operation

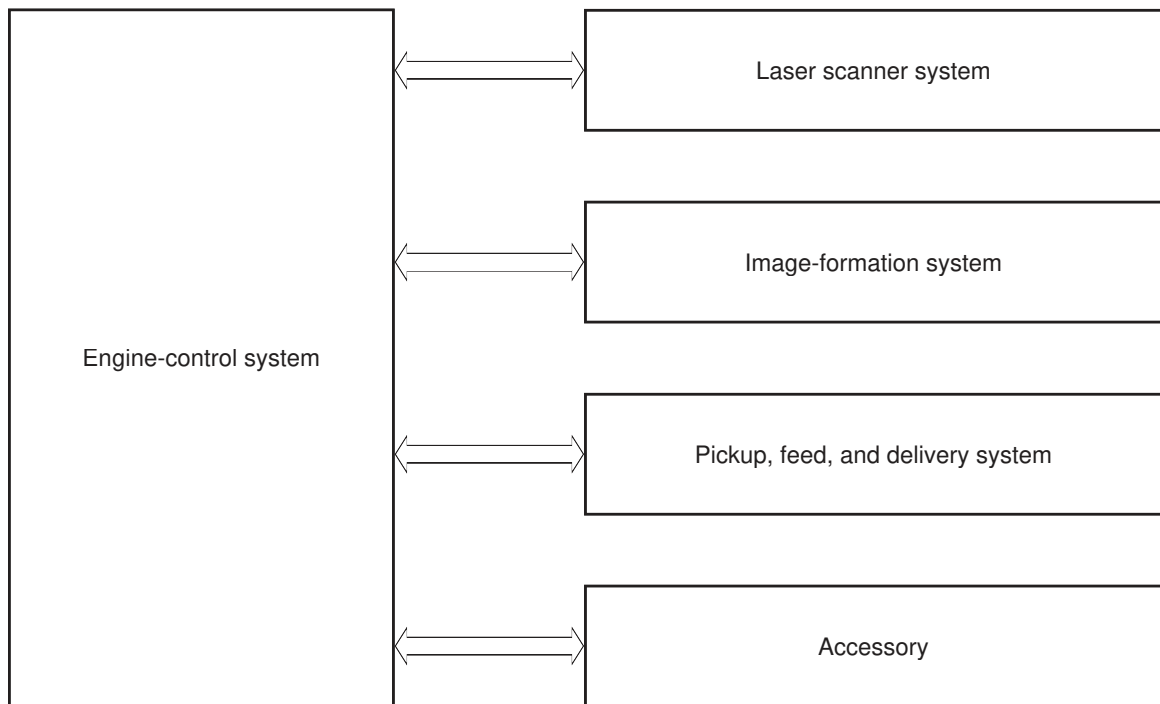
Learn about the basic operation of the printer.

The printer routes all high-level processes through the formatter, which stores font information, processes the print image, and communicates with the host computer.

The basic printer operation comprises the following systems:

- The engine-control system, which includes the high-voltage and low-voltage power supplies (HVPS and LVPS), fuser control circuits, and the DC controller printed circuit assembly (PCA)
- The laser/scanner system, which forms the latent image on the photosensitive drum
- The image-formation system, which transfers a toner image onto the paper
- The pickup, feed and delivery system, which uses a system of rollers and belts to transport the paper through the printer
- Accessory (optional paper feeders)

Figure 3-6 Relationship between the main printer systems



Sequence of operation

Learn how the DC controller PCA controls the printer operating sequence.

The DC controller PCA controls the operating sequence, as described in the following table.

Table 3-3 Sequence of operation

Period	Duration	Description
Waiting	From the time the power is turned on, the door is closed, or when the printer exits Sleep mode until the printer is ready for printing.	<ul style="list-style-type: none"> • Detects the fuser • Heats the fuser sleeve in the fuser • Pressurizes the pressure roller in the fuser • Detects the toner cartridges • Separates all of the developer rollers from the photosensitive drums • Separates all of the transfer rollers from the photosensitive drums • Rotates and stops each motor • Rotates and stops each fan • Detects the ITB • Cleans the ITB • Cleans the ITB secondary transfer roller

Table 3-3 Sequence of operation (continued)

Period	Duration	Description
Standby	From the end of the waiting sequence or the last rotation, until the formatter receives a print command, or until the printer is turned off.	<ul style="list-style-type: none">• Is in the Ready state• Enters Sleep mode if the formatter sends the sleep command• Rotates and stops each fan• Calibrates the printer if the calibration command is sent
Initial rotation	From the time the formatter receives a print command until the paper enters the paper path.	<ul style="list-style-type: none">• Rotates each motor• Rotates each fan• Activates the high-voltage power supply (high-voltage bias)• Prepares the laser/scanner unit• Warms the fuser to the correct temperature
Printing	From the time the first sheet of paper enters the paper path until the last sheet has passed through the fuser.	<ul style="list-style-type: none">• Forms the image on the photosensitive drums• Picks paper from the tray.• Transfers the toner to the paper• Fuses the toner image onto the paper
Last rotation	From the time the last sheet of paper exits the fuser until the motors stop rotating.	<ul style="list-style-type: none">• Moves the last printed sheet into the output bin• Stops each motor• Stops each fan• Stops the high-voltage power supply (high-voltage bias)• Stops the laser/scanner unit• Turns the fuser heater off• If another print command is received, the printer enters the initial rotation period when the last rotation is complete.

Formatter-control system

Learn about how the formatter operates.


CAUTION: Under **NO** circumstances should a formatter from a different printer be installed during the repair or troubleshooting processes. The formatter stores important data specific to the model of printer it is installed in and is not deigned to be swapped or repurposed in any way. Return a used formatter to HP.

Issues that can occur from swapping a formatter include:

- Serial number, product number, product name, page count, and supported cartridges information change and might make a product unusable

- 33.02.01 Used board/Disk installed errors

If a used formatter is installed and causes this issue, the **partner** must cover the costs of the repair in the form of a product replacement. **There is no method in the field to recover a printer where a used formatter is installed.**

 **IMPORTANT:** When a formatter PCA or DC controller is replaced a pairing operation must be completed to make the printer functional.


The formatter performs the following functions:

- Controls the sleep delay function
- Receives and processes print data from the various printer inputs
- Monitors control panel functions and relaying printer status information through the control panel and the network or bi-directional interface
- Develops and coordinates data placement and timing with the DC controller PCA
- Stores customer configuration settings and paper types.
- Stores font information
- Communicates with the host computer through the network or the bidirectional interface

The formatter receives a print job from the network or bidirectional interface and separates it into image information and instructions that control the printing process. The DC controller PCA synchronizes the image formation system with the paper input and output systems, and then signals the formatter to send the print image data.

Sleep mode

Learn about printer sleep mode.

 **NOTE: To modify sleep settings:** At the control panel, select the [Settings](#) menu, select the [General](#) menu, select the [Energy Settings](#) menu, and then select [Sleep Settings](#).

This feature conserves power after the printer has been idle for an adjustable period of time. When the printer is in Sleep mode, the printer retains all settings, downloaded fonts, and macros. The default setting is for Sleep mode to be enabled, and the printer enters Sleep mode after a 30-second idle time.

The printer firmware uses a combination of timers and Sleep settings to control when the printer enters a different state as well as what states the printer will enter. The available states are listed below, in descending order, from using the most power to using the least power:

- **Active:** The printer control panel is fully illuminated. The power button light is illuminated.
- **Shallow sleep:** The printer control panel is dim and the content is grayed out, but is still readable. The power button light is illuminated.
- **Sleep:** The printer control panel is off (blacked out). The power button light blinks once every three seconds.
- **Deep sleep:** The printer control panel is off (blacked out). The power button light blinks once every three seconds. The control panel and power button appearance is the same in this state as the sleep state. However, the printer is drawing less than 1 watt of power in the deep sleep state (as opposed to 6 watts of power in the sleep state).

- **Off:** This state is entered by pressing the power button or removing power from the printer. The power button light is not illuminated.



NOTE: In some countries/regions, Sleep mode cannot be turned off.

The printer exits Sleep mode and enters the warm-up cycle when any of the following events occur:

- The printer receives a print job, valid data, or a PML or PJP command.
- A control-panel button is pressed or the touchscreen is touched.
- A cover or door is opened.
- The engine self-test switch is pressed.
- A paper tray, other than Tray 1, is opened.



NOTE: If the printer is in the deep sleep state, opening a paper tray will not cause the printer to exit Sleep mode.



NOTE: Printer error messages override the Sleep message. Some messages, such as 49 errors, do not allow the printer to enter Sleep mode. Other messages allow the printer to enter Sleep mode at the appropriate time, but the error message continues to appear.

Printer job language (PJP)

Learn about printer job language (PJP).

PJP is an integral part of printer configuration, in addition to the standard PCL and PostScript (PS). With standard cabling, the printer can use PJP to perform a variety of functions.

- **Two-way communication with the host computer through a network connection or a USB device port:** The printer can inform the host about the control-panel settings, and the control-panel settings can be changed from the host.
- **Dynamic I/O switching:** The printer can be configured with a host on each I/O by using dynamic I/O switching. Even when the printer is offline, it can receive data from more than one I/O simultaneously, until the I/O buffer is full. This can occur even when the printer is offline.
- **Context-sensitive switching:** The printer can automatically recognize the personality (PS or PCL) of each job and configure itself to serve that personality.
- **Isolation of print environment settings from one print job to the next:** For example, if a print job is sent to the printer in landscape mode, the subsequent print jobs print in landscape only if they are formatted for landscape printing.

Printer management language (PML)

Learn about printer management language (PML)

PML allows remote configuration of the printer and status read-back from the printer through the I/O ports.

Control panel

Learn about the control panel.

The M652n/M652dn control panel is a 6.85 cm (2.7 in) four-line color display with numeric keypad and additional buttons for navigating control panel menus. The M653dn/M653x/M653dh/E65150/E65160 control panel is a 10.9 cm (4.3 in) full-color SVGA with infrared touchscreen and adjustable viewing angle. The M681/M682/E67550/E67560/E67650/E67660 control panel is a 20.3 cm (8.0 in) full-color SVGA with infrared touchscreen and adjustable viewing angle.

The M681/M682/E67550/E67560/E67650/E67660 control panel has a diagnostic mode to allow testing of the touchscreen, Home button, and speaker. The control panels do not require calibration.

The M653dn, M653x, and M653dh control panel has a diagnostic button on the back with some diagnostic capabilities.

See the Control-panel checks section of this manual for more information on accessing control panel diagnostics.

Easy-access USB port

Learn about the walk-up USB function.

This printer features easy-access USB printing, for quickly printing files without sending them from a computer. The printer accepts standard USB flash drives in the USB port near the control panel. It supports the following types of files:

- **.pdf**: A portable document format file used to present and exchange documents reliably, independent of software, hardware, or operating system.
- **.prn**: A generic file created by choosing “Print to File” within the Print dialog box.
- **.pcl**: A file created in the Printer Command Language (PCL) which describes the layout of text and graphics for the document.
- **.ps**: A file created in the Adobe PostScript language. These files can contain images, text or a combination thereof.
- **.cht**: A vector graphics format file supported by a variety of charting and graphics software.

The USB port is disabled by default. Follow the instructions in the printer user guide to enable the USB port and print USB documents.

Wireless

Learn about the wireless feature.

The M653x and Flow M682z models contain a wireless card to enable wireless direct printing over a 802.11b/g/n wireless connection.



NOTE: This card does not enable the printer to connect to the network.

CPU

Learn about the printer microprocessor.

The formatter incorporates a 1.2 GHz processor.

Input/output (I/O)

Learn about printer I/O functionality.

The printer has three I/O interfaces:

- Hi-Speed USB 2.0
- 10/100/1000 Ethernet LAN connection with IPv4 and IPv6
- Easy-access USB printing (no computer required)

Memory

Learn about printer memory functionality.

The formatter incorporates different types of memory and storage to store the printer firmware as well as print-job data and user settings.

embedded MultiMedia Card (eMMC)

The embedded MultiMedia Card (eMMC) on the formatter stores the firmware for the M652/M653/E65050/E65060/E65150/E65160 models. A remote firmware upgrade process is used to overwrite and upgrade the firmware. If a hard disk drive (HDD) is installed on the M652/M653/E65050/E65060/E65150/E65160 models, the firmware will automatically transfer to the HDD. Print jobs may also be stored on the eMMC for printing privately or at a later time.

Hard disk drive (HDD)

The hard disk drive (HDD) on the formatter stores the firmware for the M681/M682/E67550/E67560/E67650/E67660 models. A remote firmware upgrade process is used to overwrite and upgrade the firmware. Print jobs may also be stored on the HDD for printing privately or at a later time.

Fax PCA

The fax PCA allows the transmission and receipt of faxes. Fax jobs are stored temporarily on the PCA.

Nonvolatile random access memory (NVRAM)

The printer uses NVRAM to store printer and user configuration settings. The contents of NVRAM are retained when the printer is turned off or disconnected.

Random access memory

The RAM on the formatter serves as a temporary storage area for printing and system operation.

HP Memory Enhancement technology (MEt)

MEt effectively doubles the amount of standard memory through a variety of font- and data-compression methods.



NOTE: MEt is available only in when printing in printer command language (PCL) mode. It is not functional when printing in PostScript (PS) mode.

Engine-control system

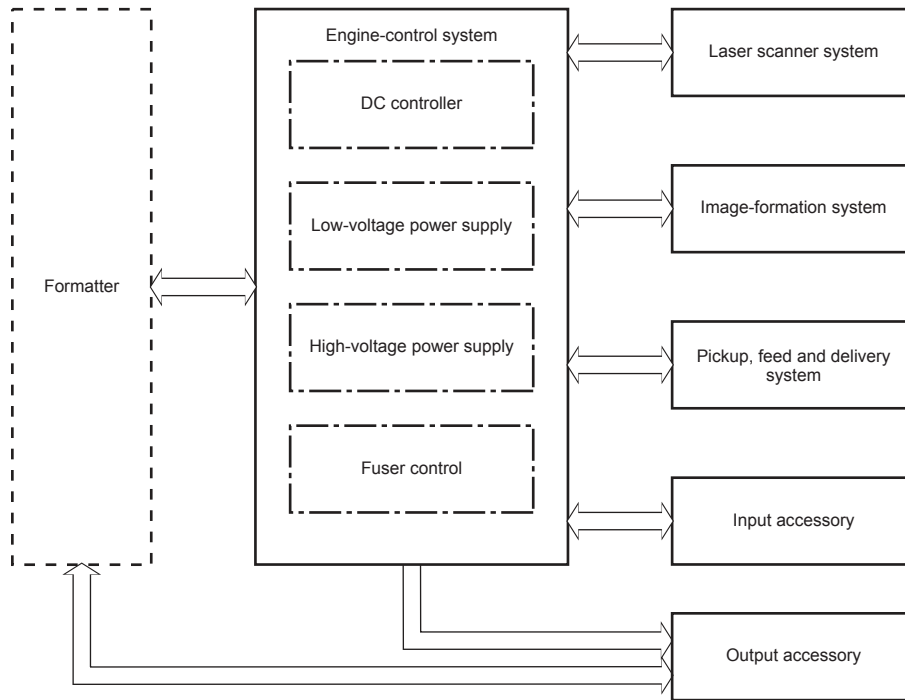
Learn about the engine control system.

The engine-control system receives commands from the formatter and interacts with the other main systems to coordinate all printer functions. The engine-control system consists of the following components:

- DC controller
- Low-voltage power supply (LVPS)

- High-voltage power supplies (HVPS)
- Fuser power supply (FPS)

Figure 3-7 Engine-control system

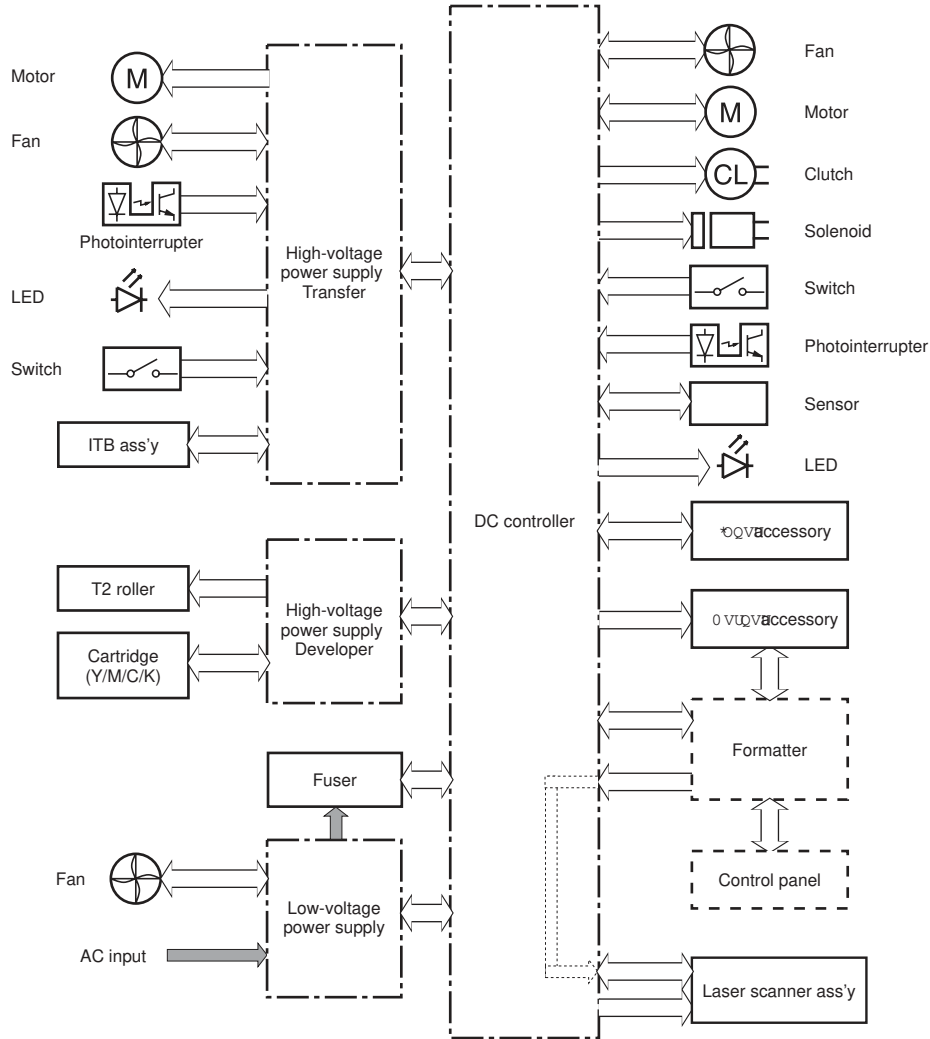


DC controller

Learn about the DC controller.

The DC controller controls the operation of the printer and its components. The DC controller starts the printer operation when the printer power is turned on and the power supply sends DC voltage to the DC controller. After the printer enters the standby period, the DC controller sends out various signals to operate motors, solenoids, and other printer components based on the print command and image data that the host computer sends.

Figure 3-8 DC controller block diagram



Motors

Learn about the printer motors.

The printer has eight motors. The motors drive the components in the paper-feed and image-formation systems.

The DC controller monitors the fuser motor; the scanner motor, and drum motors 1, 2, and 3 to determine if a motor has failed. It notifies the formatter when it encounters the following conditions:

- **Start-up failure:** the motor does not reach a specified speed within a specified time from when the motor starts.
- **Rotational failure:** the rotational speed of the motor is not in the specified range for a specified time after the motor reaches a specified speed.

Table 3-4 Motors

Abbreviation	Name	Purpose	Failure detection	Part number
M1	Drum motor 1	Drives the yellow photosensitive drum, yellow developing roller, and magenta developing roller	Yes	Drum motor (RM2-1956-000CN)
M2	Drum motor 2	Drives the magenta photosensitive drum, cyan photosensitive drum, and cyan developing roller	Yes	Drum motor (RM2-1956-000CN)
M3	Drum motor 3	Drives the black photosensitive drum, black developing roller, and ITB	Yes	Drum motor (RM2-1956-000CN)
M4	Fuser motor	Drives the pressure roller and delivery roller; the pressurization and release of the pressure roller; and the engagement and disengagement of the primary and secondary transfer rollers	Yes	Fuser drive assembly (RM2-1934-000CN)
M5	Pickup motor	Drives the registration roller, Tray 1 pickup roller, Tray 2 pickup roller, and Tray 2 feed roller	No	Paper pickup drive assembly (RM2-6556-000CN)
M6	Developer disengagement motor	Drives the engagement and disengagement of the developing rollers	No	Stepping motor (RK2-7757-000CN)
M7	Scanner motor	Drives the scanner mirror	Yes	Laser scanner assembly (RM2-1237-000CN)
M8	Duplex reverse motor (duplex models only)	Drives the duplex reverse roller	No	Right door (RM2-6622-000CN)

Fans

Learn about the printer fans.

The printer has six fans for preventing the temperature from rising in the printer and for cooling the printed pages.

The DC controller determines if there is a fan failure and notifies the formatter if the fan locks for a specified time from when the fan starts.

Table 3-5 Fans

Abbreviation	Name	Cooling area	Type	Speed	Part number
FM1	Power supply fan	LVPS	Intake	Full/half	Fan (RK2-7953-000CN)

Table 3-5 Fans (continued)

Abbreviation	Name	Cooling area	Type	Speed	Part number
FM2	Cartridge fan	Toner cartridges	Intake	Full	Fan (RK2-6124-000CN)
FM3	Left upper front fan	Fuser Delivery assembly	Intake	Full/half	Fan (RK2-7951-000CN)
FM4	Left upper rear fan	Fuser Delivery assembly	Intake	Full/half	Fan (RK2-7949-000CN)
FM5	Front fan	Fuser	Intake	Full/half	Fan (RK2-6124-000CN)
FM6	Rear fan	LVPS Formatter	Intake	Full/half	Fan (RK2-6124-000CN)

Solenoids

Learn about the printer solenoids.

Table 3-6 Solenoids

Abbreviation	Name	Replacement part number
SL1	Primary transfer roller disengagement solenoid	Right door assembly (RM2-6622-000CN)
SL2	Tray 1 pickup solenoid	Right door assembly (RM2-6622-000CN)
SL3	Duplex reverse solenoid	Right door assembly (RM2-6622-000CN)
SL4	Front door left lock solenoid (E65150/E65160/ E67650/E67660 models)	Not available
SL5	Front door right lock solenoid (E65150/E65160/ E67650/E67660 models)	Not available

Clutches

Learn about the printer clutches.

Table 3-7 Clutches

Abbreviation	Name
CL1	Tray 2 pickup clutch
CL2	Duplex re-pickup clutch

Switches

Learn about the printer switches.

Table 3-8 Switches

Abbreviation	Name	Part number
SW1	24V interlock switch	Interlock switch cable assembly (RM2-8449-000CN; not available)
SW2	ITB toner collection near full switch	Lever full flag (RC4-6528-000CN; part not available)
SW3	5V right door switch	Right door assembly (RM2-6622-000CN)
SW4	Power supply switch	Power supply switch assembly (RM2-1947-000CN)
SW5	Tray 2 media size switch	Size detect switch assembly (RM2-1946-000CN; part not available)
SW6	24V front door microswitch	Microswitch (RK2-0535-000CN)
SW9	5V interlock switch (E65150/E65160/E67650/E67660 models)	Not available
SW101	Test print switch	Not available

Sensors

Learn about the printer sensors.

Table 3-9 Sensors

Abbreviation	Name	Part number
SR11	Registration sensor	Registration assembly (RM2-1957-000CN)
SR12	Registration media width sensor 1	Registration assembly (RM2-1957-000CN)
SR13	Registration media width sensor 2	Registration assembly (RM2-1957-000CN)
SR14	Tray 2 media out sensor	Paper pick-up roller assembly (RM2-1275-000CN)
SR51	Drum home position sensor Y	Main drive assembly (RM2-1927-000CN)
SR52	Drum home position sensor MC	Main drive assembly (RM2-1927-000CN)
SR53	Drum home position sensor K	Main drive assembly (RM2-1927-000CN)
SR54	Developer alienation sensor	Main drive assembly (RM2-1927-000CN)
SR62	FD1 media full sensor	Paper delivery assembly (RM2-6621-000CN)
SR66	Duplex flapper position sensor	Paper delivery assembly (RM2-6621-000CN)
SR94	Duplex feed sensor	Right door assembly (RM2-6622-000CN)
SR95	Tray 1 media out sensor	Right door assembly (RM2-6622-000CN)
SR1901	ITB alienation sensor	ITB maintenance kit (P1B93-67901) MPS ITB PM kit (P1B93-69001)
SR8611	Fuser output sensor 1	Fuser kit (110V) (RM2-1928-000CN) Fuser kit (220V) (RM2-1929-000CN)
SR8612	Fuser pressure release sensor	Fuser kit (110V) (RM2-1928-000CN) Fuser kit (220V) (RM2-1929-000CN)

Table 3-9 Sensors (continued)

Abbreviation	Name	Part number
SR8613	Fuser output sensor 2	Fuser kit (110V) (RM2-1928-000CN) Fuser kit (220V) (RM2-1929-000CN)
SR8615	Fuser loop sensor	Fuser kit (110V) (RM2-1928-000CN) Fuser kit (220V) (RM2-1929-000CN)

Front door lock function

Learn about the front door lock function.

The E65150/E65160/E67650/E67660 models have a front-door locking mechanism. The lock mechanisms reside on the right and left ends of the front door, and the lock function works with two solenoids (SL4/SL5). The DC controller makes the solenoids function when it receives a formatter command to lock or unlock the front door. The solenoids maintain the front door lock/unlock status even after they function.

Low-voltage power supply

Learn about the low-voltage power supply (LVPS).

The low-voltage power-supply (LVPS) circuit converts the AC power from the wall receptacle into the DC voltage that the printer components use.



IMPORTANT: Make sure to plug the printer into the correct power source (110/220V).

Figure 3-9 Low-voltage power-supply circuit–M652/M653/M681/M682

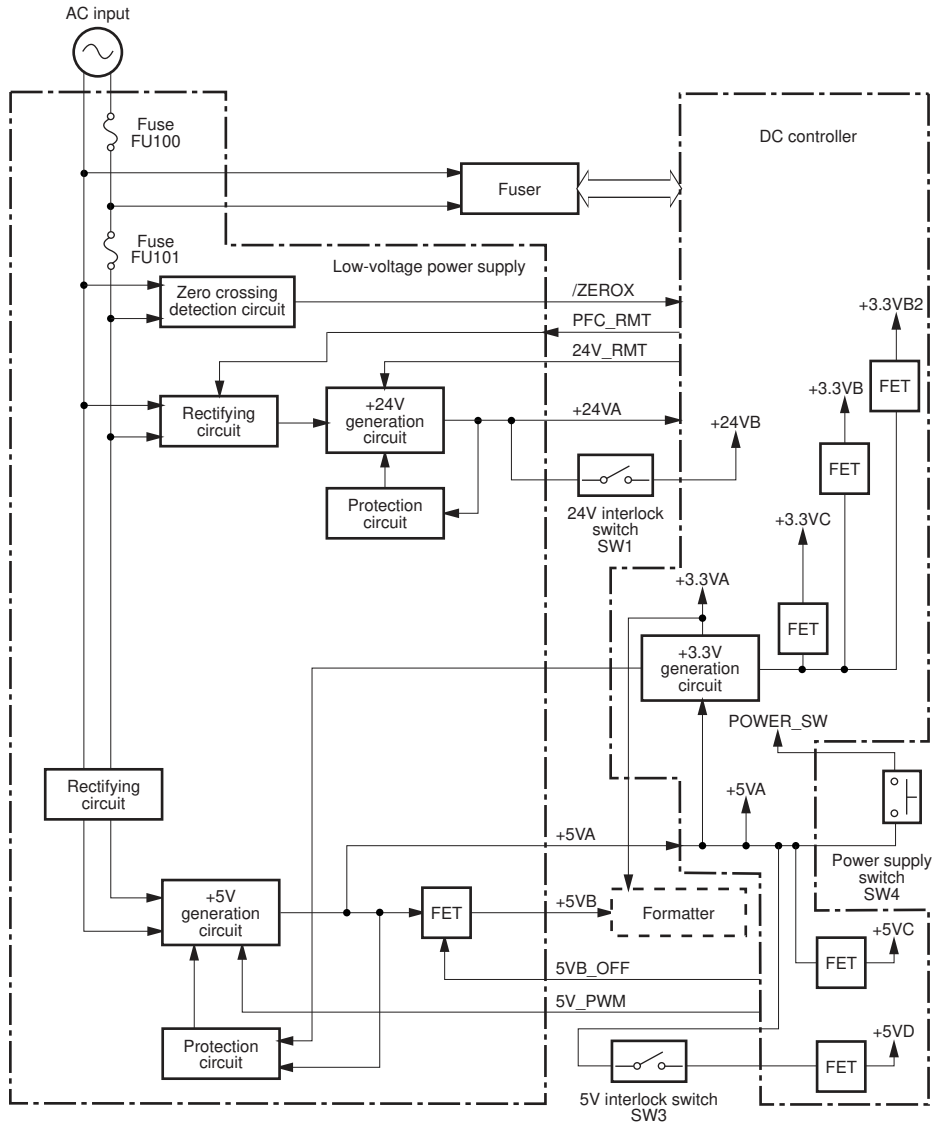
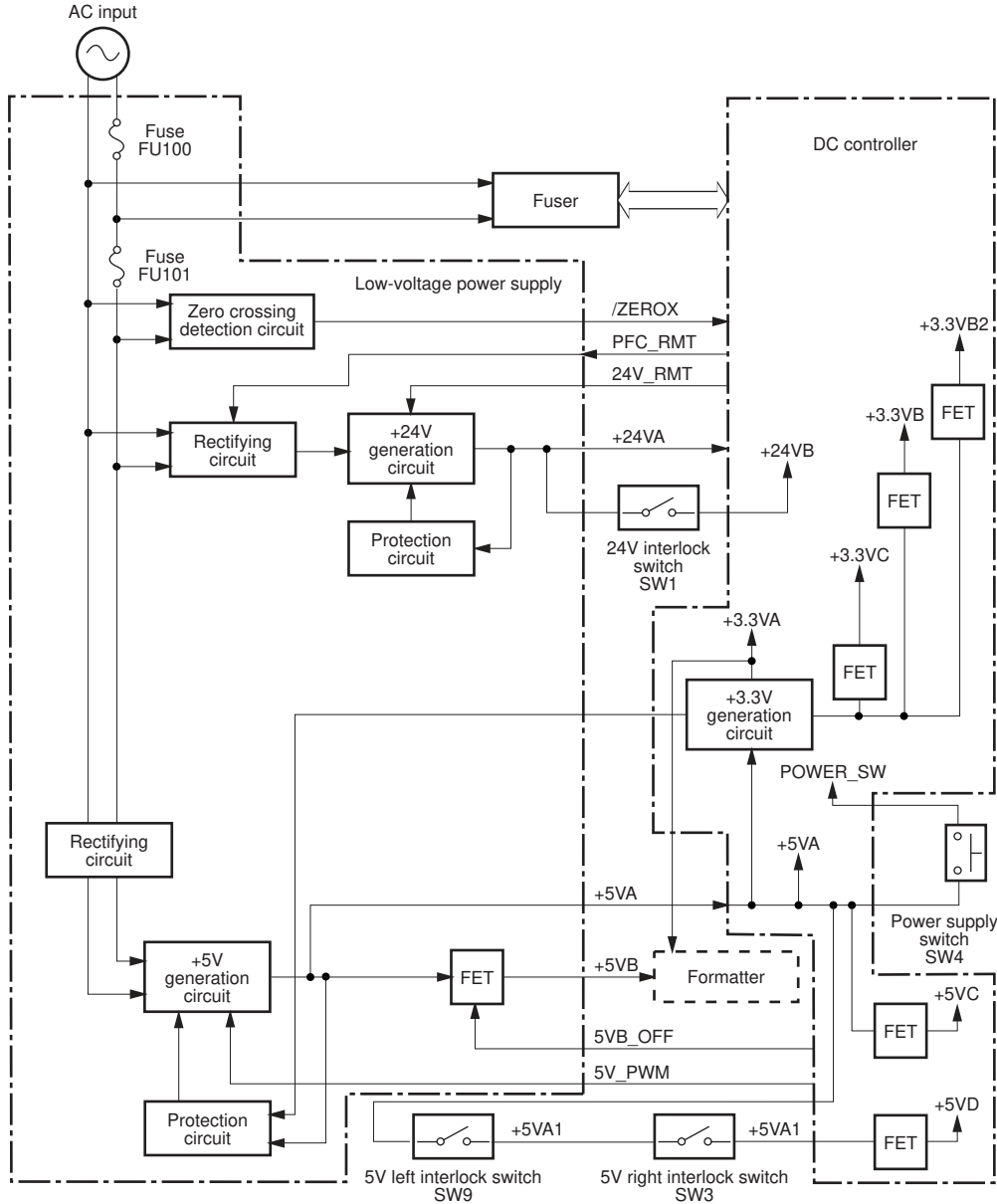


Figure 3-10 Low-voltage power-supply circuit—E65150/E65160/E67650/E67660



Low-voltage power supply voltages description

Learn about LVPS voltages.

The low-voltage power supply converts the AC power into three DC voltages, which it then subdivides, as described in the following table.

Table 3-10 LVPS voltages

DC power supply	Reference item	Description
+24V	+24VA	Constantly supplied
		Stopped during active OFF or inactive OFF
+24V	+24VB	Interrupted when the right door is open (SW1/SW3)

Table 3-10 LVPS voltages (continued)

DC power supply	Reference Item	Description
+5V	+5VA	Constantly supplied
+5V	+5VB	Constantly supplied Stopped during active OFF or inactive OFF
+5V	+5VC	Constantly supplied Stopped during active OFF or inactive OFF
+5V	+5VD	Constantly supplied Stopped during active OFF or inactive OFF Stopped when the front door or the right door is opened (SW1/SW3)
+3.3V	+3.3VA	Constantly supplied
+3.3V	+3.3VB	Constantly supplied Stopped inactive OFF
+3.3V	+3.3VB2	Constantly supplied Stopped inactive OFF Intermittent supplied during active OFF
+3.3V	+3.3VC	Constantly supplied Stopped during active OFF or inactive OFF

Over-current/over-voltage protection

Learn about LVPS protections.

The low-voltage power supply automatically stops supplying the DC voltage to the printer components whenever it detects excessive current or abnormal voltage. The low-voltage power supply has a protective circuit against over-current and over-voltage to prevent failures in the power supply circuit.

⚠ CAUTION: If DC voltage is not being supplied from the low-voltage power supply, the protective function might be running. In this case, turn the power switch off and unplug the power cord.

Do not turn the power switch on until the root cause is found and corrected.

If the protective function is active, the DC controller notifies the formatter of a low-voltage power supply failure. In addition, the low-voltage power supply has two fuses to protect against over-current. If over-current flows into the AC line, the fuse stops the AC power.

Sleep mode operation

Learn about LVPS sleep mode operation.

Sleep mode conserves energy by stopping the power to several components when the printer is idle. If the DC controller detects voltage that is too high when the printer is in Sleep mode, it determines that the low-voltage power supply has failed, and it notifies the formatter.

Low-voltage power supply failure detection

Learn about LVPS failure detection.

The DC controller determines a low-voltage power supply failure and notifies the formatter when the low-voltage power supply does not supply +24 V.

Low-voltage power supply functions

Learn about LVPS functions.

The printer has the following low-voltage power supply functions.

Table 3-11 Low-voltage power supply functions

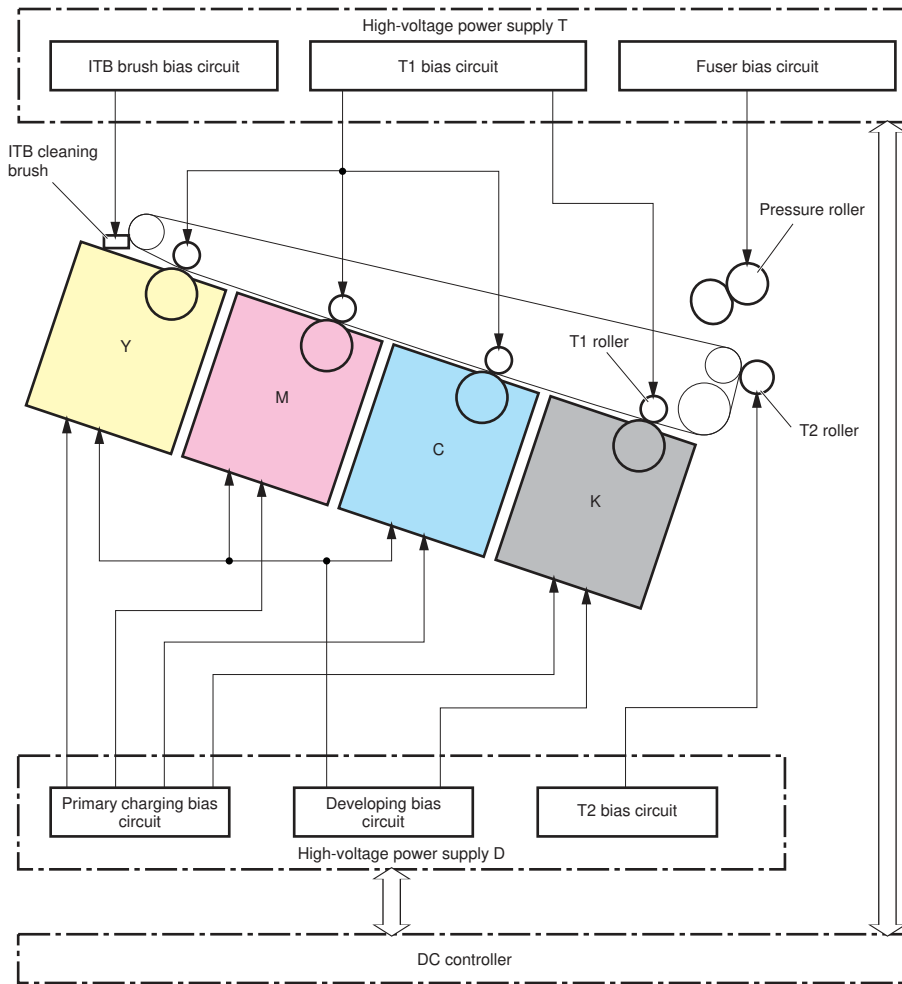
Function	Supported feature
Sleep mode	No
Power supply voltage detection	No
Automatic power OFF	No
Automatic power ON/OFF	No
Active OFF	Yes
Inactive OFF	Yes
Network mode	No
Power switch illumination	No
Low-voltage power supply failure detection	No
Power save mode	No

High-voltage power supply

Learn about the high-voltage power supply (HVPS).

The DC controller controls the high-voltage power supply (HVPS) to generate biases. The high-voltage power supply delivers the high-voltage biases to the following components used to transfer toner during the image-formation process:

- Primary charging roller (in the toner cartridges)
- Developing roller (in the toner cartridges)
- Primary transfer roller
- Secondary transfer roller
- Pressure roller
- ITB cleaning brush



High-voltage power supply circuits

Learn about HVPS circuits.

The high-voltage power supply contains the following separate circuits.

- **Primary-charging-bias generation**

The primary charging bias negatively charges the surface of the photosensitive drum to prepare for image formation.

- **Developing-bias generation**

The developing bias adheres toner to an electrostatic latent image formed on the photosensitive drums.

- **Primary-transfer-bias generation**

The primary transfer bias transfers the toner from each photosensitive drum onto the ITB.

- **Secondary-transfer-bias generation**

The positive secondary transfer bias transfers the toner image from the ITB onto the paper. The negative bias transfers residual toner on the secondary transfer roller back to the ITB. The residual toner on the ITB is deposited in the toner collection unit.

Fuser bias

Learn about HVPS fuser bias.

The printer uses instant-on fusing. The fuser bias is DC positive for improved print quality. The fuser bias circuit is located in the high-voltage power supply, HVPS (T).

Fuser control

Learn about fuser control operation.

The DC controller and components in the fuser perform the following functions related to fuser operation:

- Control fuser temperature
- Detect fuser failures
- Prevent excessive temperature rise
- Detect remaining life in the fuser
- Determine if the correct fuser is installed

Fuser circuits

Learn about fuser circuits.

The fuser heater control circuit and the fuser heater safety circuit control the fuser temperature according to commands from the DC controller. The fuser consists of the following major components:

Figure 3-11 Fuser components

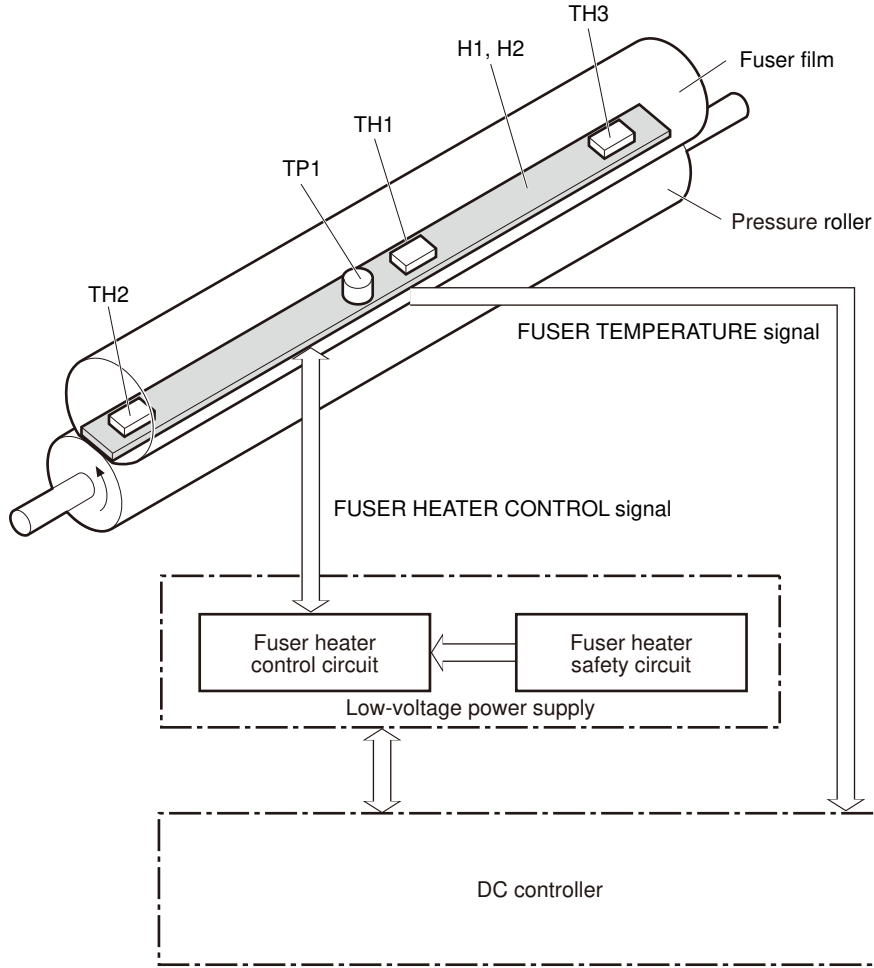


Table 3-12 Fuser components

Component	Abbreviation	Name	Function
Heater	H1	Fuser main heater	Heats the center of the fuser sleeve
Heater	H2	Fuser sub-heater	Heats the edge of the fuser sleeve
Thermistor (captive type)	TH1	Main thermistor	Detects the center temperature of the fuser heater
Thermistor (captive type)	TH2	Sub-thermistor 1	Detects the temperature at one end of the fuser heater
Thermistor (captive type)	TH3	Sub-thermistor 2	Detects the temperature at one end of the fuser heater
Thermoswitch (non-captive type)	TP1	Thermoswitch	Prevents an abnormal temperature rise in the fuser heater

Fuser control functions

Learn about fuser control functions.

The printer has the following fuser control functions.

Table 3-13 Fuser control functions

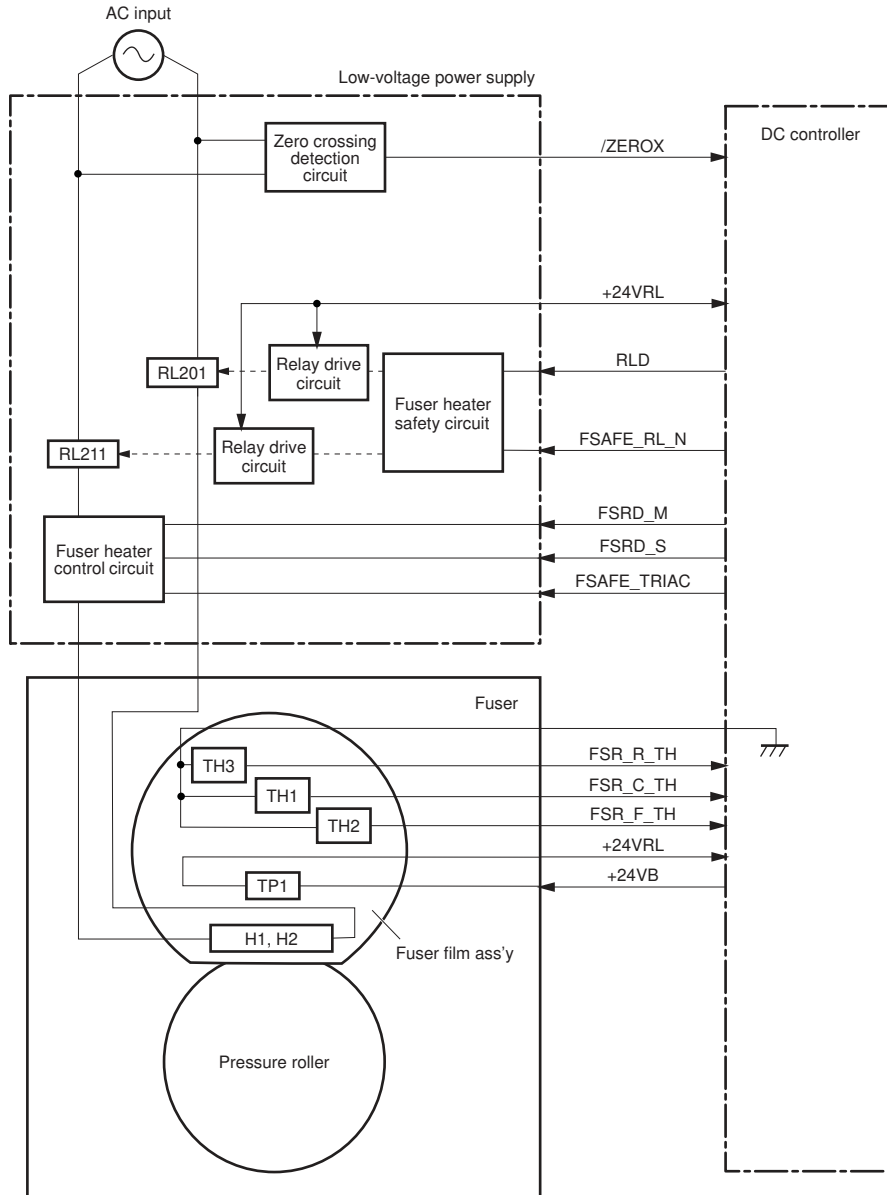
Function	Supported feature
Fuser temperature control	Yes
Fuser failure detection	Yes
Frequency detection circuit failure detection	Yes
Fuser pressure release mechanism failure detection	Yes
Fuser type discrepancy detection	Yes
Fuser type identification detection	No
Fuser presence detection	Yes
Fuser life detection	Yes
Relay failure detection	No
Pressure roller cleaning	Yes

Fuser temperature control

Learn about fuser temperature control.

The temperatures of the two rollers in the fuser fluctuate according to the stage of the printing process. The DC controller sends commands to the fuser-control circuit to adjust temperatures.

Figure 3-12 Fuser temperature-control circuit



Fuser heater protection

Learn about fuser heater protection.

Fuser heater protection is a feature that detects excessive temperatures in the fuser and interrupts the power supply to the fuser heater.

The following three protective components prevent the fuser heater from excessive rising temperature:

- **DC controller**

When a thermistor or sub-thermistor detects a temperature above a certain threshold, the DC controller interrupts power to the specific heater.

- **Fuser-heater safety circuit**

The fuser heater safety circuit monitors the detected temperature of the sub-thermistors.

- **Thermoswitch**

If the temperature in the heaters is abnormally high, and the temperature in the thermoswitch exceeds a specified value, the contact to the thermoswitch breaks.

Fuser unit life detection

Learn about fuser unit life detection.

Fuser life is tracked by fuser rotations, and not by the number of pages printed. This is the most accurate tracking method since the fuser rotates for every print job.

Variations in fuser life depend on customer usage. Customers who are running one- and two-page intermittent jobs with long pauses between each job might reach the fuser low message sooner due to the fuser rotating more times per page than it would for larger print jobs.

Fuser identification

Learn about fuser unit life detection.

The printer detects the type and presence of the fuser. The DC controller notifies the formatter when it fails to detect the type or presence of the fuser.



NOTE: The printer detects if the correct fuser for this printer is installed. The fuser from a different printer can be installed in this printer, but it will not correctly function.

Engine laser/scanner system

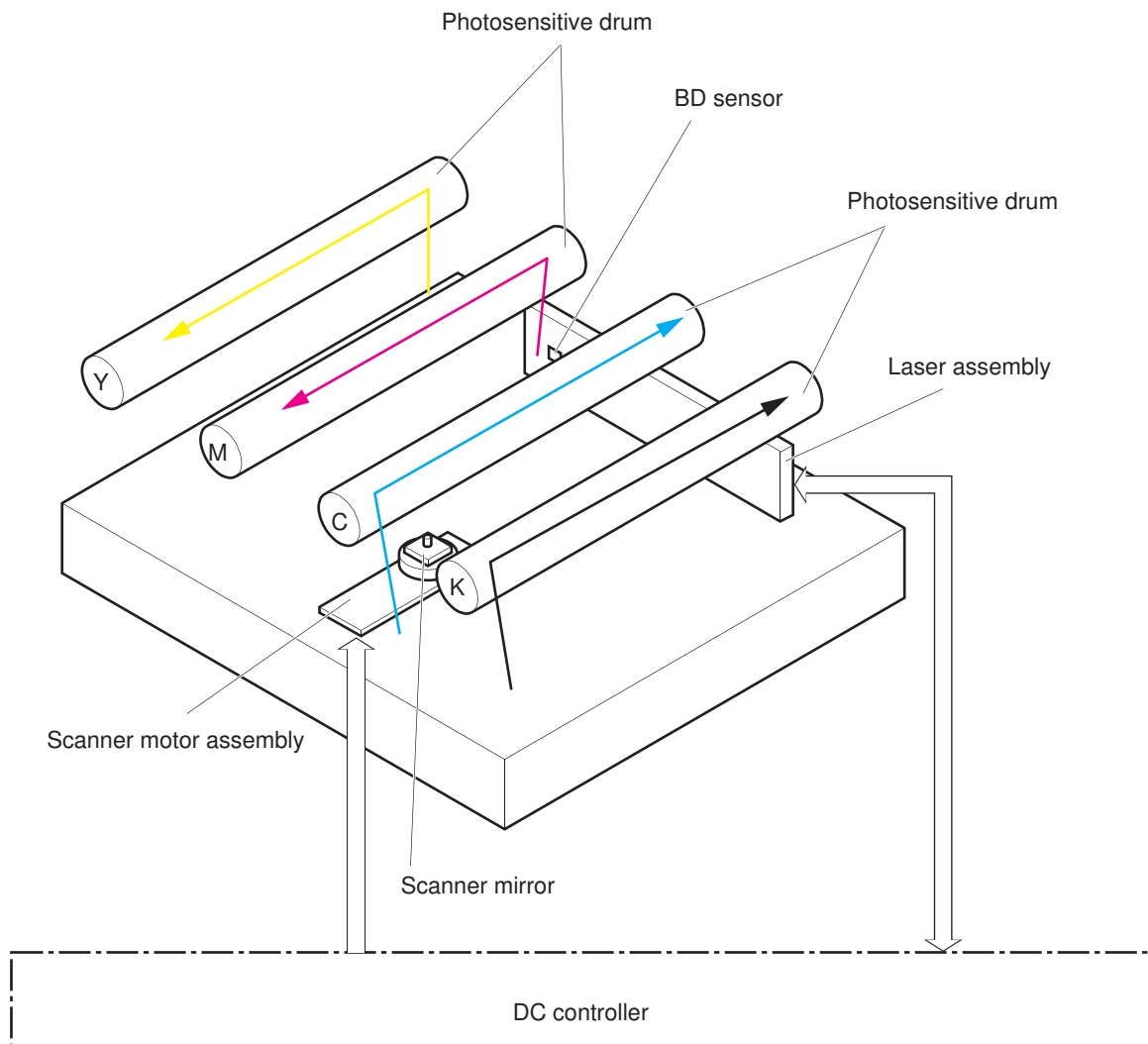
Learn about the engine laser/scanner system.

The laser/scanner system forms the latent electrostatic image on the photosensitive drums inside the toner cartridges.

The DC controller receives instructions from the formatter regarding the image of the page to be printed. The DC controller signals the lasers to emit light, and the laser beams pass through lenses and onto the scanner mirror, which rotates at a constant speed. The mirror reflects the beam onto the photosensitive drum in the pattern required for the image, exposing the surface of the drum so it can receive toner.

The main components of the laser/scanner system are the laser assembly and the scanner motor assembly, which are controlled by signals sent from the DC controller..

Figure 3-13 Laser/scanner system



Laser/scanner failure detection

Learn about laser/scanner failure detection.

The DC controller determines an optical unit failure and notifies the formatter of the error status when any of the following occurs:

Laser scanner failure detection

- BD sensor failure detection
- **Laser/scanner motor startup failure**

The scanner motor does not reach a specified rotation frequency within a specified period of time from when the laser/scanner starts up.

- **Laser/scanner motor abnormal rotation**

The laser/scanner motor does not reach a specified rotational frequency within a specified period of time during a print operation.

- Laser scanner failure detection

For example, the control panel will show a 51.00.XX error message when a laser scanner error occurs. The control panel messages document may then be consulted for appropriate troubleshooting steps.

Safety

Learn about laser/scanner safety.

The laser/scanner assembly has a mechanical laser shutter. For the safety of users and service technicians, the laser shutter interrupts the optical path of the laser/scanner assembly when the the front door (SW1/SW3) or right door (SW1/SW3) are opened.

- Front door (SW1/SW3/SW9)
- Right door (SW1/SW3)

Image-formation process

Learn about the image-formation process.

The image-formation system creates the printed image on the paper. The system consists of the following components:

- Toner cartridges
- Intermediate Transfer Belt (ITB)
- Primary transfer roller
- Secondary transfer roller
- Fuser
- Laser/scanner assembly
- High-voltage power supplies

The DC Controller controls the internal components of the image formation system (according to commands received from the formatter) to form the toner images on the photosensitive drum surfaces. The toner images are then transferred to the print media and fused.

Figure 3-14 Image-formation system

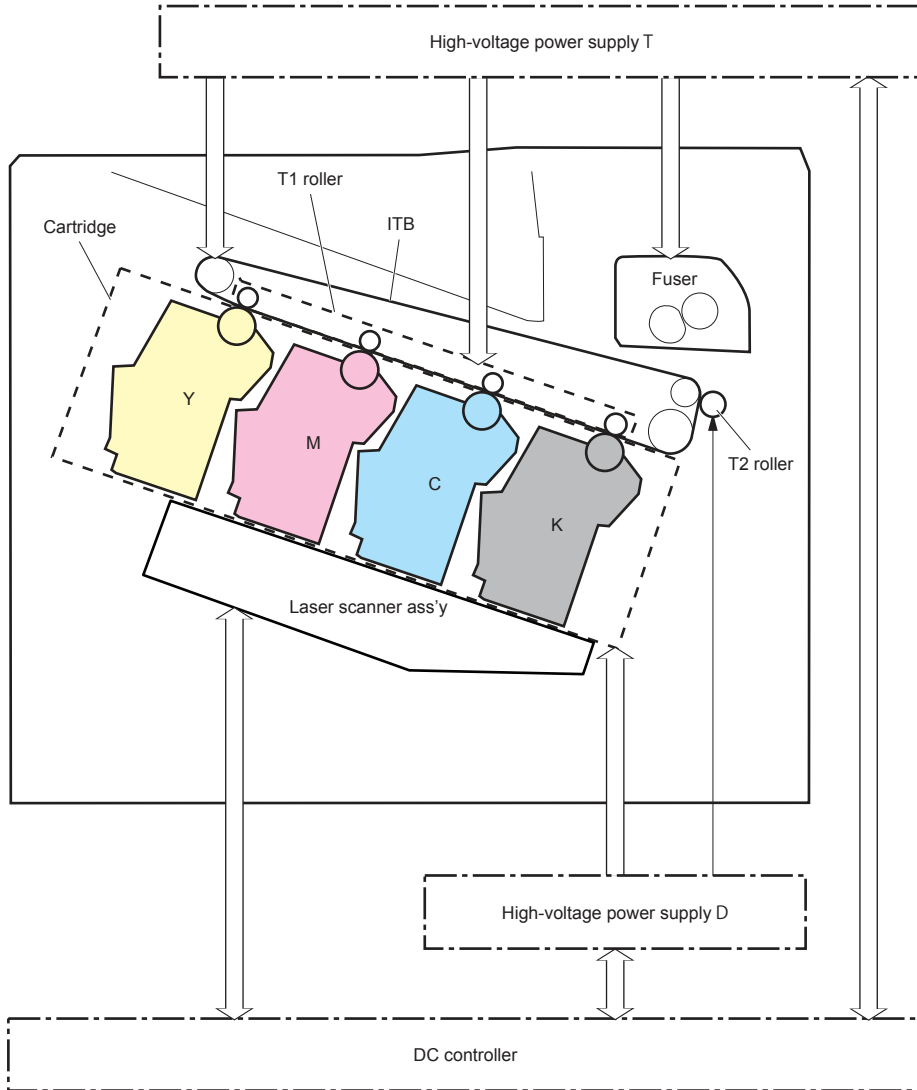


Image-formation system motors

The following figure shows the motors for the image-formation system.

Figure 3-15 Image-formation system motors

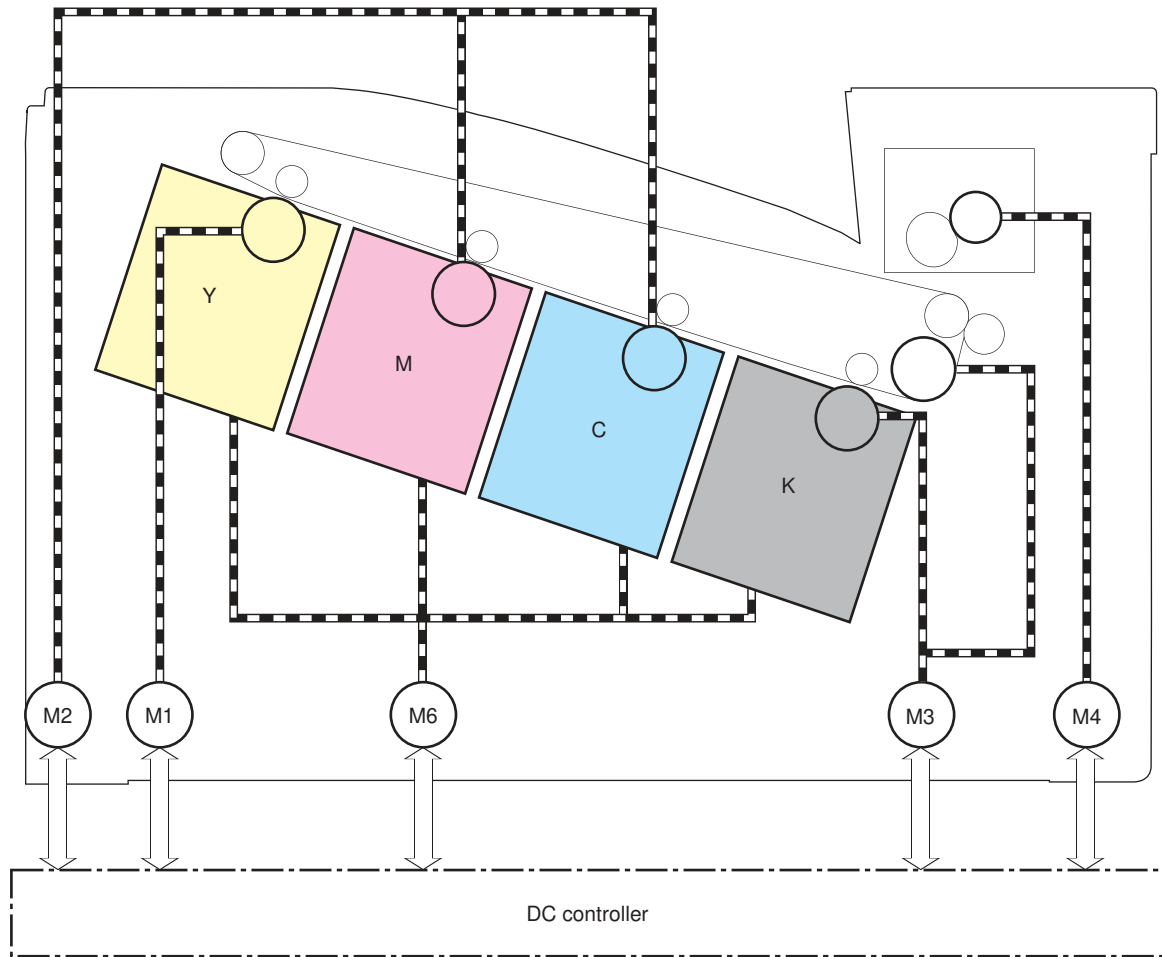


Table 3-14 Image-formation system motors

Abbreviation	Component
M1	Drum motor 1
M2	Drum motor 2
M3	Drum motor 3
M4	Fuser motor
M6	Developer disengagement motor

Image-formation system sensors

The following figure shows the sensors for the image-formation system.

Figure 3-16 Image-formation system sensors

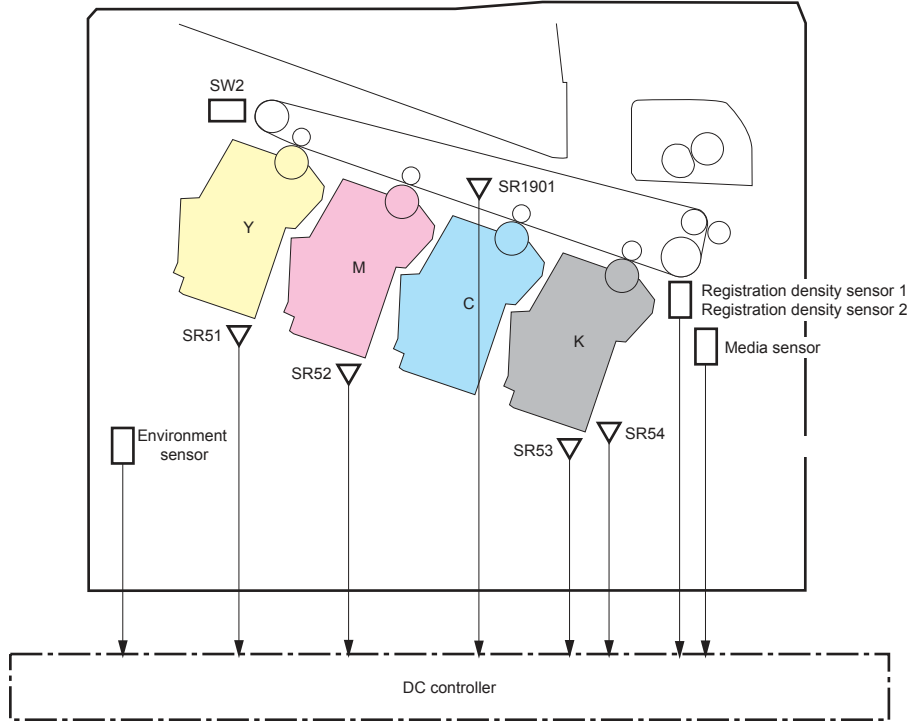


Table 3-15 Image-formation system sensors

Abbreviation	Name
SW2	ITB Toner collection near full switch
SR51	Drum home position sensor Y
SR52	Drum home position sensor MC
SR53	Drum home position sensor K
SR54	Developer alienation sensor
SR1901	ITB alienation sensor
	Registration density sensor 1
	Registration density sensor 2
	Environment sensor
	Media sensor

Image-formation system process

The image-formation process consists of ten steps divided into six functional blocks.

Figure 3-17 Image-formation system process

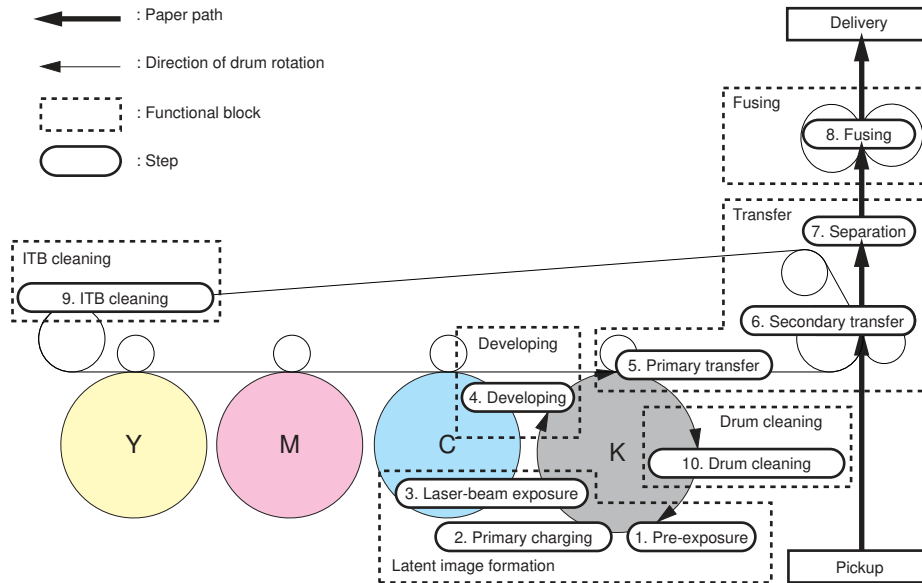


Table 3-16 Image formation process

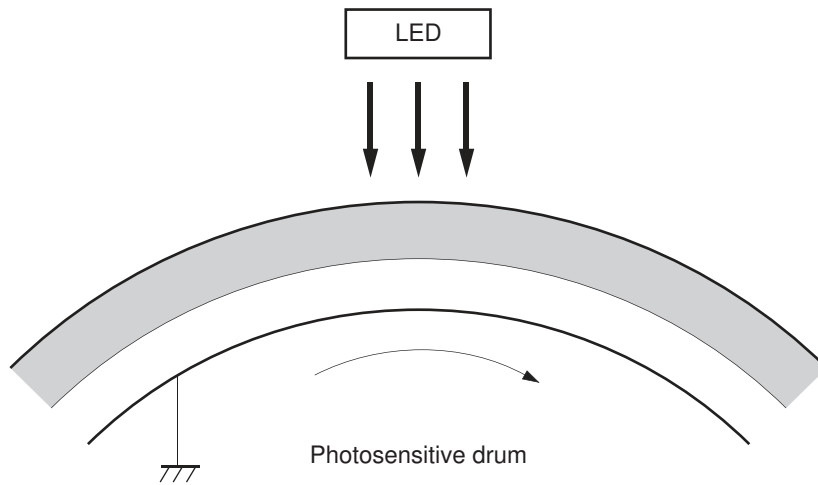
Functional block	Steps	Description
Latent image formation	1. Pre-exposure 2. Primary charging 3. Laser-beam exposure	An invisible latent image forms on the surface of the photosensitive drums.
Development	4. Development	Toner adheres to the electrostatic latent image on the photosensitive drums.
Transfer	5. Primary transfer 6. Secondary transfer 7. Separation	The toner image transfers to the ITB and then to the paper.
Fusing	8. Fusing	The toner fuses to the paper to make a permanent image.
ITB cleaning	9. ITB cleaning	Residual toner is removed from the ITB.
Drum cleaning	10. Drum cleaning	Residual toner is removed from the photosensitive drums.

Step 1: Pre-exposure

Learn about the image formation pre-exposure step.

Light from the pre-exposure LED strikes the surface of the photosensitive drum to remove any residual electrical charges from the drum surface.

Figure 3-18 Pre-exposure

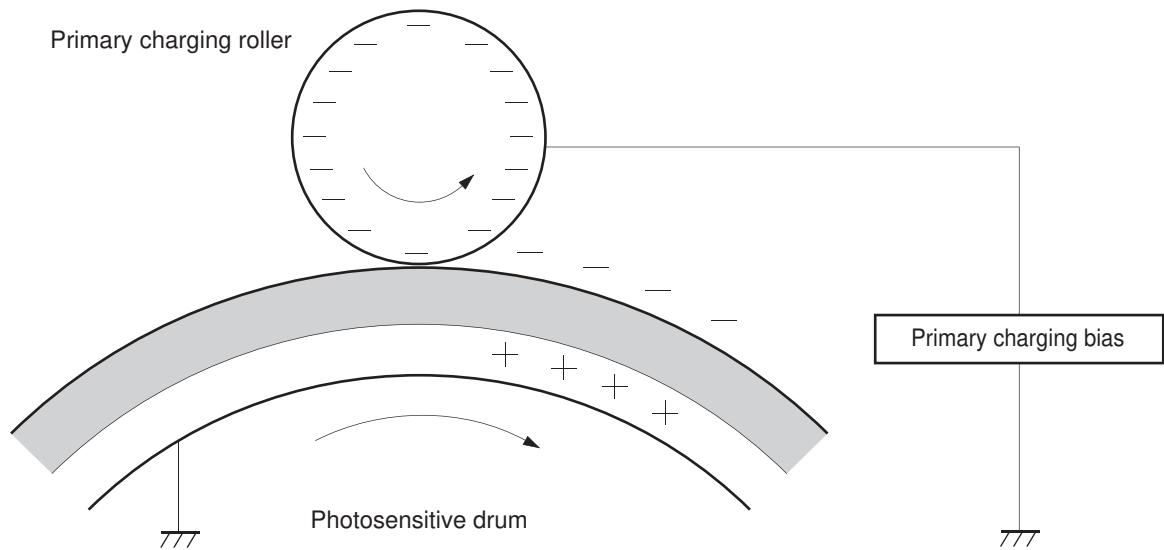


Step 2: Primary charging

Learn about the image formation primary charging step.

To prepare for latent image formation, the surface of the photosensitive drum is charged with a uniform negative charge. The primary charging roller receives the primary charging bias, and then the roller charges the drum by direct contact.

Figure 3-19 Primary charging

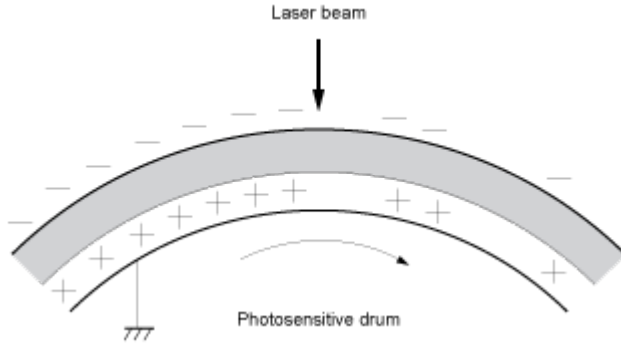


Step 3: Laser-beam exposure

Learn about the image formation laser-beam exposure step.

The laser beam strikes the photosensitive drum to neutralize the negative charge on the portions of the drum surface where the image will form. An electrostatic latent image forms where the negative charge was neutralized. The neutralized areas on the drum are ready to accept toner.

Figure 3-20 Laser-beam exposure

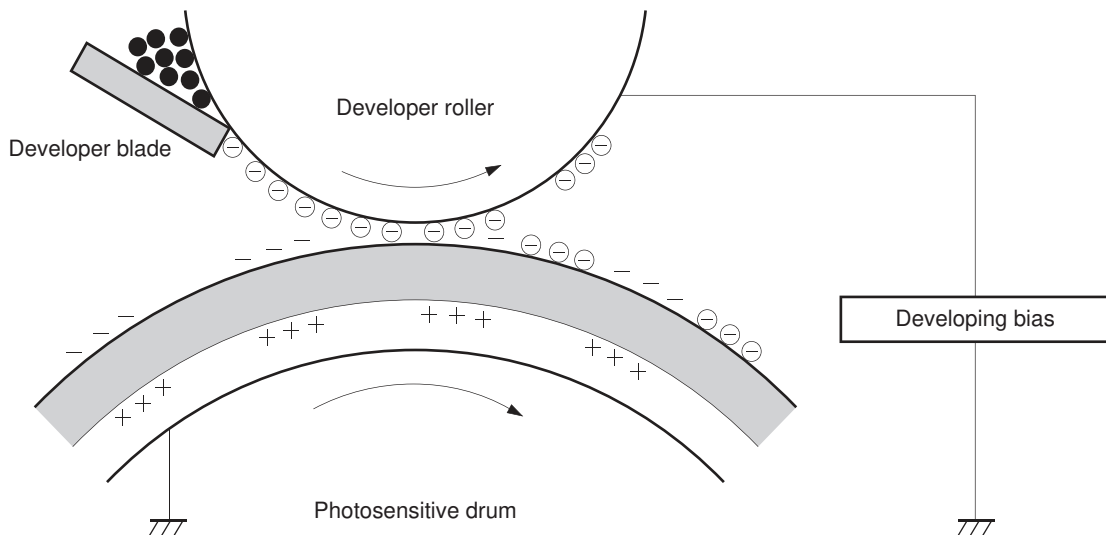


Step 4: Development

Learn about the image formation development step.

A developing bias is applied to the developing roller. The toner acquires a negative charge as a result of the friction from the developing roller rotating against the developing blade. Because the negatively charged surface of the photosensitive drums were neutralized where they have been struck by the laser beam, the toner adheres to those areas on the drums. The latent image becomes visible on the surface of the drum.

Figure 3-21 Development

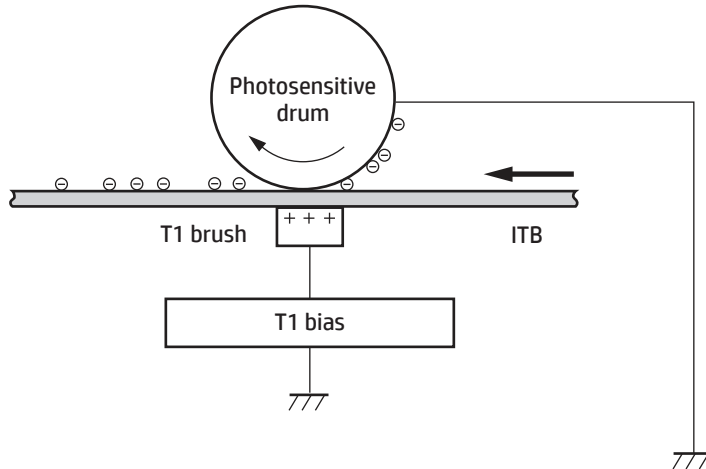


Step 5: Primary transfer

Learn about the image formation primary transfer step.

The positively charged primary-transfer brushes contact the ITB, giving the ITB a positive charge. The ITB attracts the negatively charged toner from the surface of each photosensitive drum, and the complete toner image transfers onto the ITB.

Figure 3-22 Primary transfer

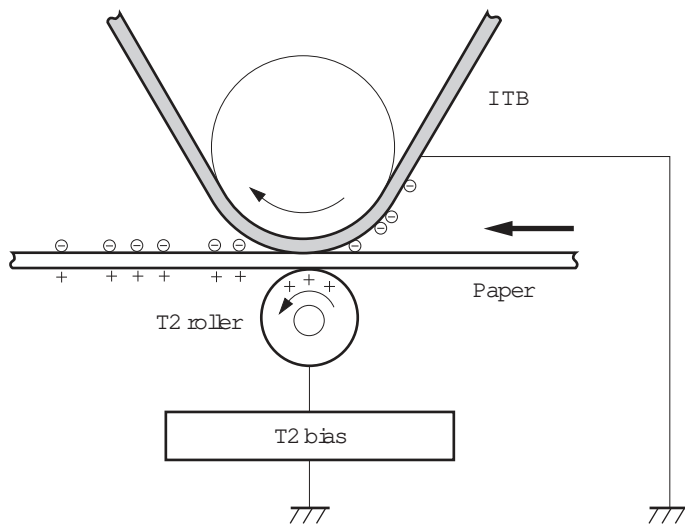


Step 6: Secondary transfer

Learn about the image formation secondary transfer step.

The paper acquires a positive charge from the secondary-transfer roller, and attracts the negatively charged toner from the surface of the ITB. The complete toner image transfers onto the paper.

Figure 3-23 Secondary transfer

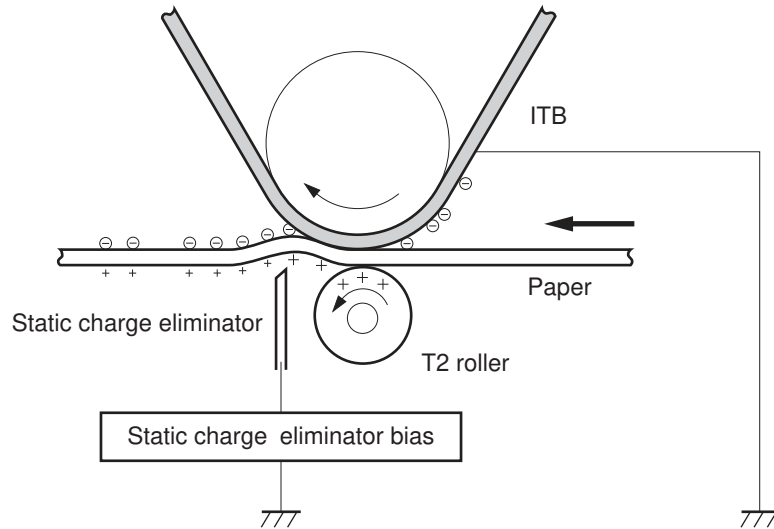


Step 7: Separation

Learn about the image formation separation step.

The stiffness of the paper causes it to separate from the ITB as the ITB bends. The static-charge eliminator removes excess charge from the paper for stable paper feeding and print quality.

Figure 3-24 Separation

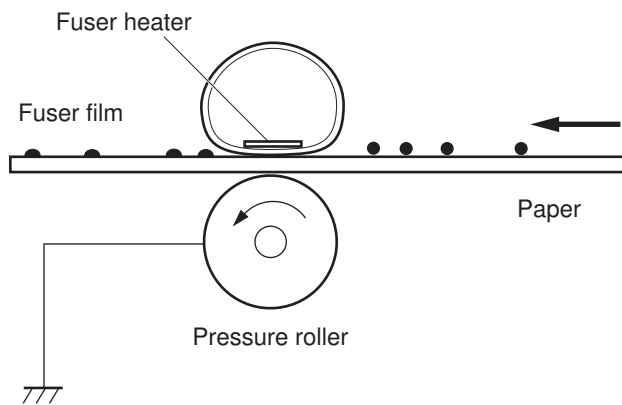


Step 8: Fusing

Learn about the image formation fusing step.

The printer uses an on-demand fusing method to adhere the toner image onto the page. As the page passes through the heated and pressurized rollers in the fuser the toner melts onto the page. The toner image is now permanently fused to the page. A fusing bias applied to the pressure roller improves image quality.

Figure 3-25 Fusing

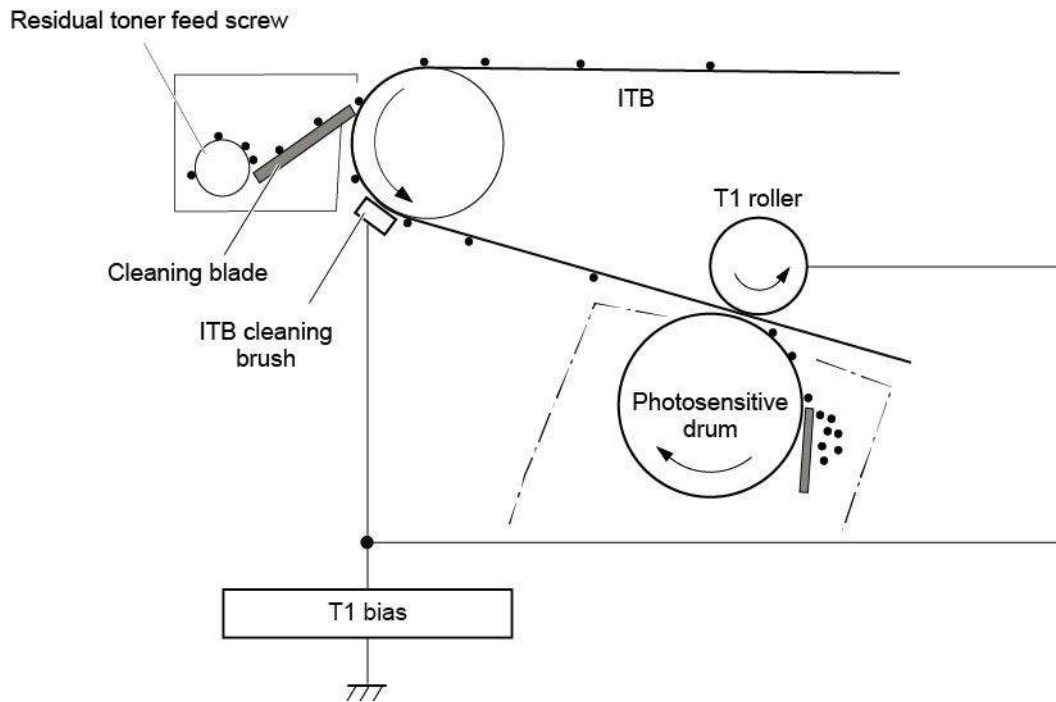


Step 10: Drum cleaning

Learn about the image formation ITB cleaning step.

The cleaning blade scrapes the residual toner off the surface of the ITB. The residual toner feed screw deposits residual toner in the toner collection unit. The residual toner which cannot be removed by the cleaning blade is charged by the ITB cleaning brush, and then transferred from the ITB surface to the photosensitive drum by the primary transfer (T1) roller.

Figure 3-26 ITB cleaning

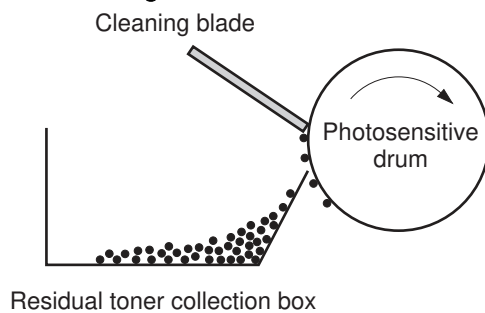


Step 10: Drum cleaning

Learn about the image formation drum cleaning step.

The cleaning blade scrapes the residual toner off the surface of the photosensitive drum and deposits it in the toner collection portion of the cartridge or in an external toner collection unit (TCU). The drum is now clear and ready for the next image-formation process.

Figure 3-27 Drum cleaning



Toner cartridges

Learn about the toner cartridges.

The following sections discuss the printer toner cartridges. The printer has four toner cartridges, one for each color: cyan, magenta, yellow, and black.

Design

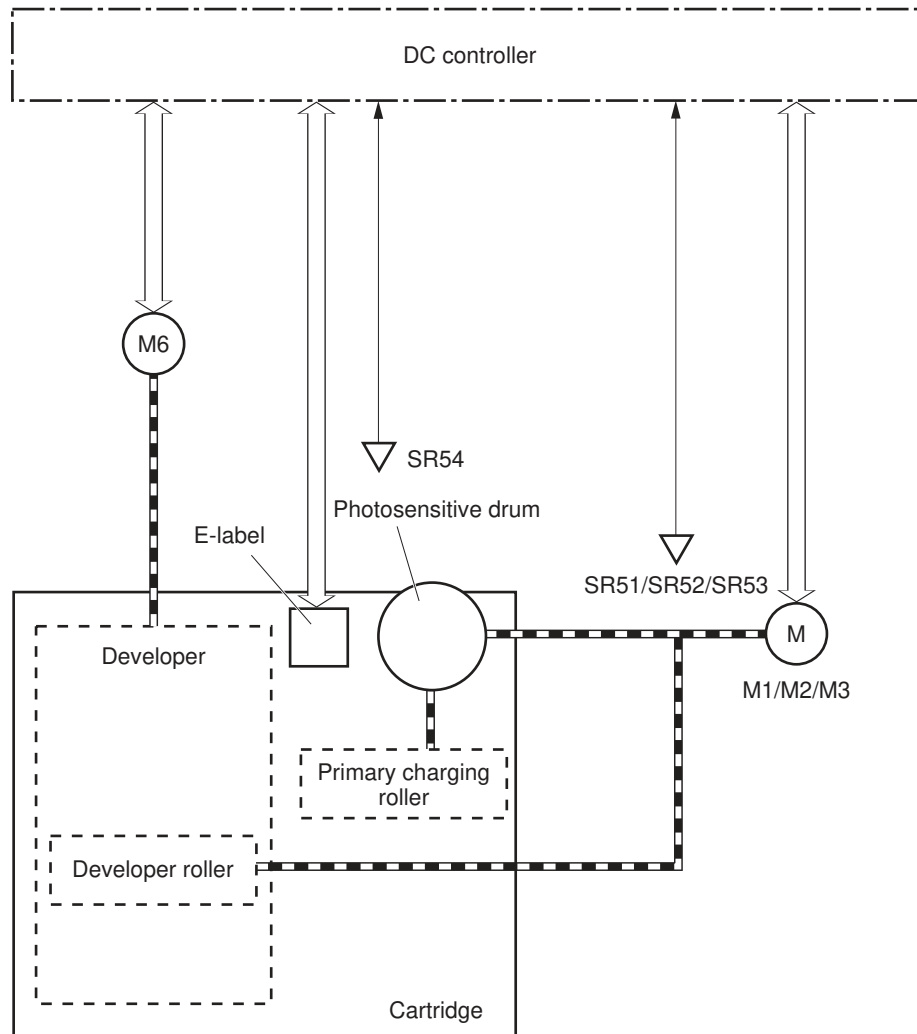
Learn about toner cartridge design.

Each toner cartridge is filled with toner and consists of the following components:

- Photosensitive drum
- Developer
- Primary-charging roller
- Memory chip

The DC controller rotates the drum motor to drive the photosensitive drum, developer roller, and the primary-charging roller.

Figure 3-28 Toner cartridge block diagram



Function	Applied
Cartridge presence detection	Yes
Toner level detection	Yes
Cartridge life detection	Yes
Cartridge mis-installation detection	Yes

Function	Applied
Developer alienation control	Yes
Developer alienation motor failure detection	Yes
Drum discharge mechanism	No

Memory chip

Learn about the toner cartridge memory chip.

The memory chip is non-volatile memory that stores information about the usage of the toner cartridge and helps protect the customer from counterfeit cartridges. This chip is also used to detect the presence of a cartridge within the printer or when a cartridge is installed in the wrong slot. The printer reads and writes the data in the memory chip.

Dynamic security

Learn about dynamic-security-enabled printers.



NOTE: All printer models might not support the Dynamic security feature.

Certain HP printers use cartridges that have security chips or electronic circuitry. Cartridges using a non-HP chip or modified or non-HP circuitry* might not work. And, those that work today might not work in the future.

As is standard in the printing business, HP has a process for authenticating cartridges. HP continues to use security measures to protect the quality of our customer experiences, maintain the integrity of our printing systems, and protect our intellectual property. These measures include authentication methods that change periodically and might prevent some third-party supplies from working now or in the future. HP printers and original HP cartridges deliver the best quality, security and reliability. When cartridges are cloned or counterfeited, the customer is exposed to quality and potential security risks, compromising the printing experience.

***Non-HP Chips and modified or non-HP electronic circuitry** are not produced or validated by HP. HP cannot guarantee that these chips or circuitry will work in your printer now or in the future. If you are using non-original HP cartridges, please check with your supplier to ensure your cartridge has an original HP security chip or unmodified HP electronic circuitry.

JetIntelligence

Learn about JetIntelligence enabled printers.

JetIntelligence supports two features for managing toner cartridges.

- The authentication feature allows customers to specify the use of only genuine HP toner cartridges in the printer.
- The anti-theft feature enables locking a cartridge to a specific printer or fleet of printers.

Authentication

The genuine HP authentication feature allows a customer to specify that only genuine HP supplies can be used in a printer. If a non-HP or used supply is installed, the printer will not print. This feature is disabled by default, and can be enabled or disabled from the control panel or the Embedded Web Server (EWS).

If a genuine HP toner cartridge from another printer is moved to a printer with this feature enabled, the toner cartridge will authenticate and print, unless the toner cartridge has passed the low state. If the toner cartridge has passed the low state, an **Unauthorized Cartridge** message displays on the control panel.

If a non-HP toner cartridge is used in a printer with this feature enabled, the message **Unauthorized Cartridge** appears on the control-panel display.



NOTE: If a customer suspects they have a counterfeit cartridge, they should report it by going to www.hp.com/go/anticounterfeit and selecting **Report now**.

Anti-theft

The toner cartridge anti-theft feature allows a customer to configure the printer to automatically lock genuine HP toner cartridges to a specific printer or fleet of printers when they are installed. A locked toner cartridge will only work in the specified printer or fleet of printers. This feature prevents toner cartridges from being stolen and used in another printer, or from being moved from an authorized printer to an unauthorized printer. This feature is disabled by default, and can be enabled or disabled from the control panel, the Embedded Web Server (EWS), or Web Jetadmin.

When the anti-theft feature is enabled, the toner cartridge in a printer will only work in the specified printer or fleet of printers. If a locked toner cartridge is moved to another printer, the cartridge will not print and the message **Protected Cartridge** appears on the control-panel display.



NOTE: When a toner cartridge is locked to a specific printer or fleet of printers, it cannot be unlocked. This is a permanent operation.

Toner cartridge seal

Learn about the toner cartridge seal.

The toner cartridge seal is opened automatically when the toner cartridge is installed into the printer.

Toner level and cartridge life detection

Learn about the toner level and cartridge life detection.

Toner level detection: The DC controller detects the remaining toner in the cartridge by the optical detection method and then notifies the formatter of the remaining toner level.

Cartridge life detection: Cartridge life detection is measured in two ways.

- Toner level

For the first 75% of cartridge life, toner level is measure through pixel counting by the DC controller. Once the level reaches 25%, the toner level sensor utilizes electrical properties to determine the amount of toner remaining.

- Rotations of internal components (OPC and developer roller)

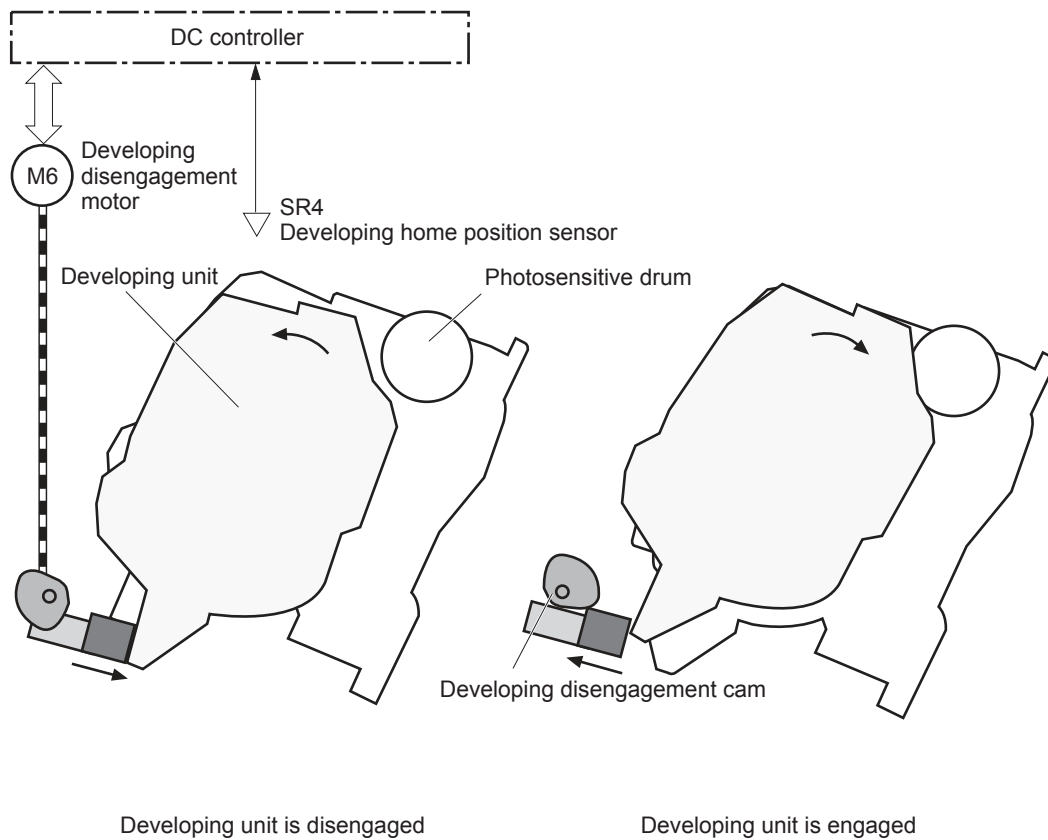
The DC controller monitors these two life parameters and reports them to the formatter as percent life remaining. End of cartridge life is determined by the lower value of the two.

Developing unit engagement and disengagement control

Learn about developing unit engagement and disengagement control.

The printer can print in full-color mode or in black-only mode. To print in black-only mode, the printer disengages the developing rollers in the cyan, magenta, and yellow toner cartridges, which maximizes the life of the cartridges.

Figure 3-29 Developer roller engagement and alienation control



The developer roller engagement and alienation control operates as follows: When the printer is turned on and when each print job is completed, all four of the developing units are disengaged from the photosensitive drums.

- The drive of the developer alienation motor rotates the developer alienation cam.
- As the cam rotates, the developing unit engages with or separates from the photosensitive drum.

When the print mode is full color, the developing units engage with the drums. When the print mode is black-only, only the black developing unit engages with the drum.

The DC controller determines a developer alienation motor failure and notifies the formatter when it does not detect a specified signal from the developer alienation sensor during the developing unit engagement and disengagement operation.

Intermediate transfer belt assembly

Learn about the Intermediate transfer belt (ITB) assembly.

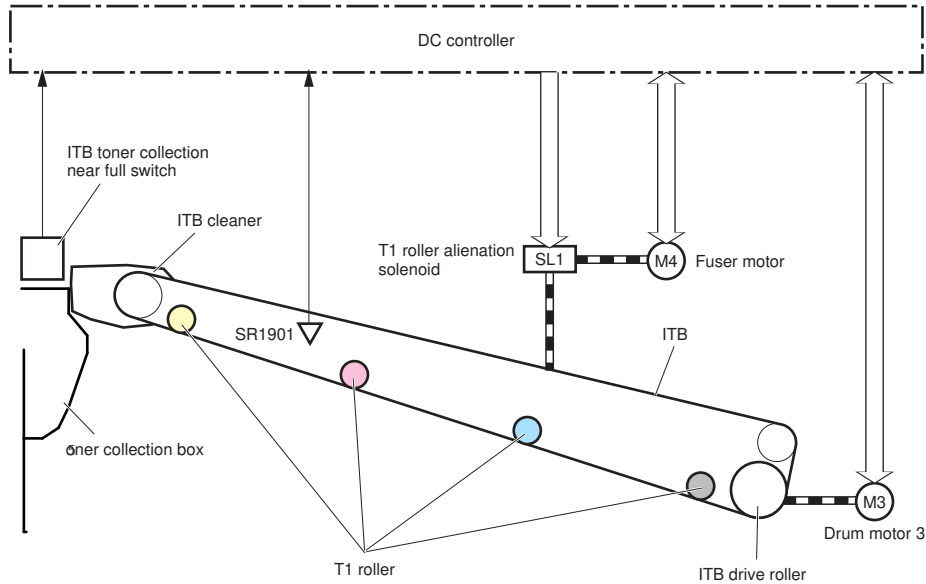
The ITB unit accepts the toner images from the photosensitive drums and transfers the completed image to the paper. The ITB unit has the following main components:

- Intermediate transfer belt (ITB)

- ITB-drive roller
- Primary-transfer roller
- ITB cleaner

Drum motor 3 drives the ITB drive roller, which rotates the ITB. The motion of the ITB causes the primary transfer rollers to rotate. The ITB cleaner cleans the ITB surface.

Figure 3-30 ITB unit



Function	Applied
T1 roller alienation control	Yes
T1 roller alienation mechanism failure detection	Yes
ITB assembly life detection	Yes
ITB assembly presence detection	No
Blade cleaning mechanism	Yes
Electrostatic cleaning mechanism	Yes
ITB toner collection box full detection	Yes
ITB toner collection box presence detection	No
ITB perimeter detection	Yes
ITB seal detection sensor failure detection	No

Primary-transfer roller engagement and disengagement control

Learn about ITB primary-transfer roller engagement and disengagement control.

Depending on the requirements of the print job, the primary-transfer rollers engage with the ITB so it can receive toner from the photosensitive drums. The primary-transfer rollers have three engagement states.

Primary-transfer roller engagement states

- **All rollers disengaged**

The ITB is disengaged from all the four photosensitive drums. This state is the home position for the ITB unit.

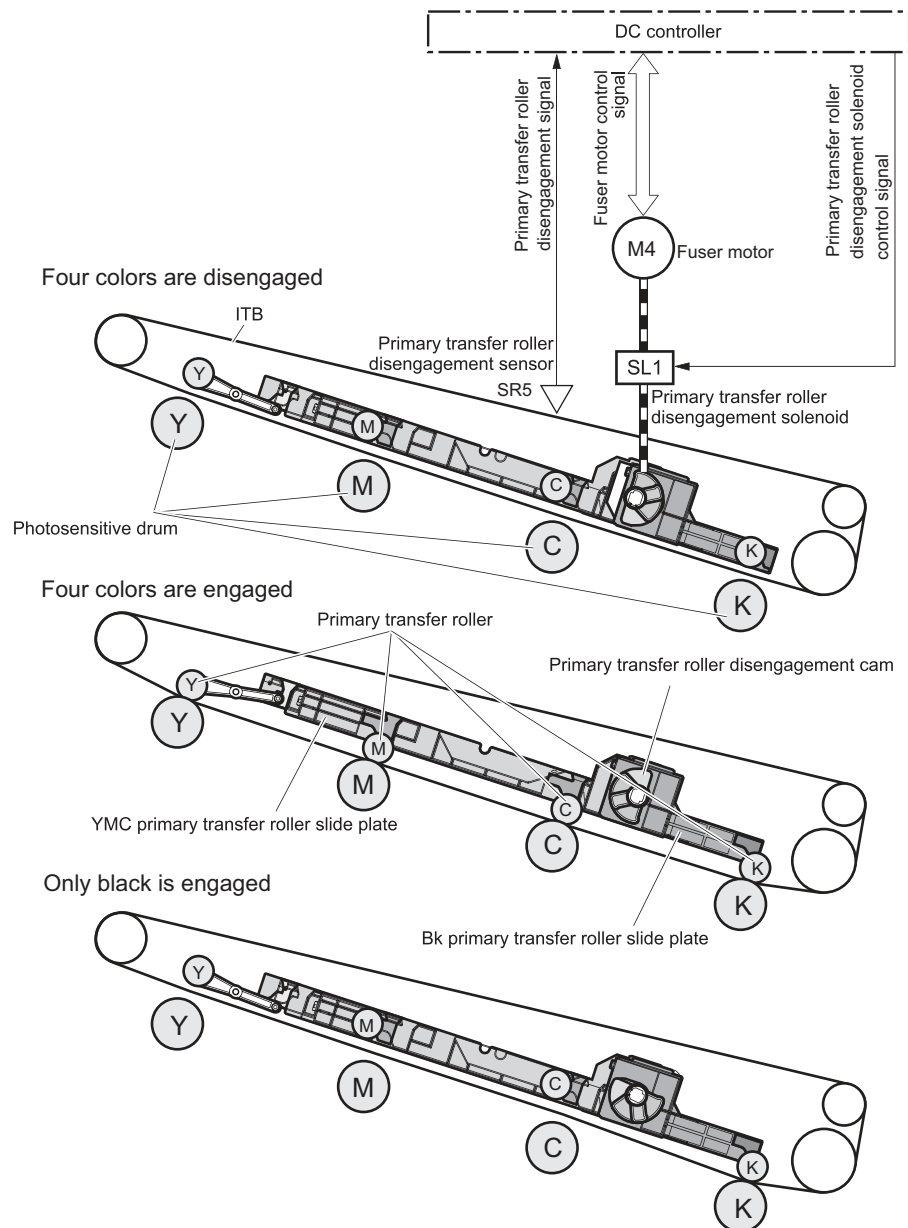
- **All rollers engaged**

The ITB is engaged with all four photosensitive drums. This is the state for full-color printing.

- **Black roller engaged**

The ITB is engaged with only the black photosensitive drum. This is the state for black-only printing.

Figure 3-31 Three states of primary-transfer roller engagement and disengagement



The primary-transfer-roller disengagement motor rotates or reverses to place the primary-transfer-roller disengagement cam into one of three positions. The cam causes the transfer-roller slide plate to move to the right or left. This movement causes the primary-transfer rollers to move up to engage the ITB with the photosensitive drum or down to disengage it.

The DC controller expects to receive a signal from the ITB home-position sensor when the primary-transfer roller engages or disengages. If the DC controller does not receive this signal, but detects that the primary-transfer-roller disengagement motor is rotating, the DC controller determines that the primary-transfer-disengagement mechanism has failed, and notifies the formatter. The formatter will then display a **59.00.F0** message on the control panel.

The DC controller detects whether the ITB unit is new by monitoring the new ITB unit sensor. The DC controller determines the ITB unit is at end of life and notifies the formatter when a specified number of pages are printed after the ITB unit is replaced. When swapping ITB units between two printers for troubleshooting purposes, make sure the ITB units are returned to their original printers to preserve the correct life count.

ITB unit detection

Learn about ITB unit detection.

The DC controller monitors several signals from the ITB unit to detect status.

Table 3-17 ITB unit detection

Item	Description
ITB unit life detection	<p>The DC controller detects whether the ITB unit is new by monitoring the new ITB unit sensor. The DC controller determines the ITB unit is at end of life and notifies the formatter when a specified number of pages are printed after the ITB unit is</p> <p>If swapping ITB units between two printers for troubleshooting purposes, be sure to return the ITB units to their original printers to maintain the correct life count.</p>
ITB unit presence detection	<p>The DC controller detects the presence of an ITB unit by monitoring the primary-transfer roller disengagement sensor. The DC controller turns on the primary-transfer disengagement solenoid for specified times during an initial rotation period when the following events occur:</p> <ul style="list-style-type: none"> • The printer is turned on • The printer exits sleep mode • The door is closed <p>The DC controller determines the absences of an ITB unit and notifies the formatter when it does not detect a specified signal from the new primary-transfer roller disengagement sensor.</p>

ITB cleaning mechanism

Learn about ITB cleaning.

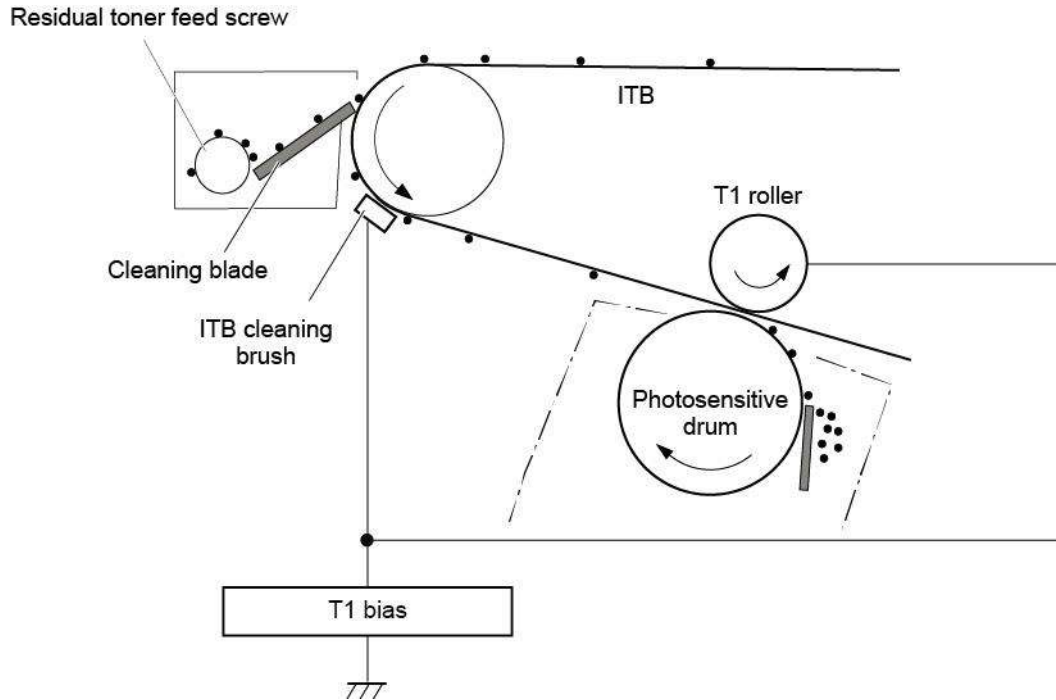
The cleaning blade in the ITB cleaner scrapes the residual toner off the ITB surface and deposits the residual toner into the toner collection unit. The residual toner feed screw deposits the residual toner to the residual toner feed unit. The ITB motor and the residual toner feed motor drive the screw.

The residual toner that cannot be removed by the cleaning blade is charged by the ITB cleaning brush, and then transferred from the ITB surface to the photosensitive drum by the primary transfer (T1) roller.

The DC controller detects whether the toner collection unit is full by using the toner collection unit full sensor, and then notifies the formatter.

NOTE: The figure below is representational only. The ITB configuration varies by printer design.

Figure 3-32 ITB cleaning process



Secondary transfer roller functions

Learn about secondary transfer roller functions.

The secondary transfer roller transfers the image from the ITB onto the paper.

The printer has the following secondary transfer roller functions.

Table 3-18 Secondary transfer roller functions

Function	Supported feature
Secondary transfer roller cleaning mechanism	Yes
Secondary transfer roller presence detection	No
Secondary transfer roller life detection	No
Secondary transfer roller alienation control	Yes

Calibration

Learn about printer ITB calibration.

The printer calibrates itself to maintain proper print-quality. The calibration corrects color-misregistration and color-density variation due to environmental changes or internal variation in the printer.

The printer has the following calibration functions.

Table 3-19 Calibration functions

Function	Supported feature
Color-plane registration correction control	Yes
Environment correction control	Yes
Image density control (DMAX)	Yes
Image halftone control (DHALF)	Yes
Registration density sensor failure detection	Yes
Color sensor control	No
Gray axis control (GAS)	No
Environment sensor failure detection	Yes

Engine pickup, feed, and delivery system

Learn about the printer pickup, feed and delivery system.

The DC controller controls the pickup, feed, and delivery system according to commands from the formatter. The pickup, feed, and delivery system uses a series of rollers to move the paper through the printer.

The pickup, feed, and delivery system consists of the following three functional blocks.

- **Pickup-and-feed-block:** Controls the movement of the paper from each pickup source to the fuser inlet
- **Fuser-and-delivery-block:** Controls the movement of the paper from the fuser to the delivery destination
- **Duplex block:** Controls the movement of the paper from the duplex switchback unit to the duplex re-pickup unit (duplex models only)

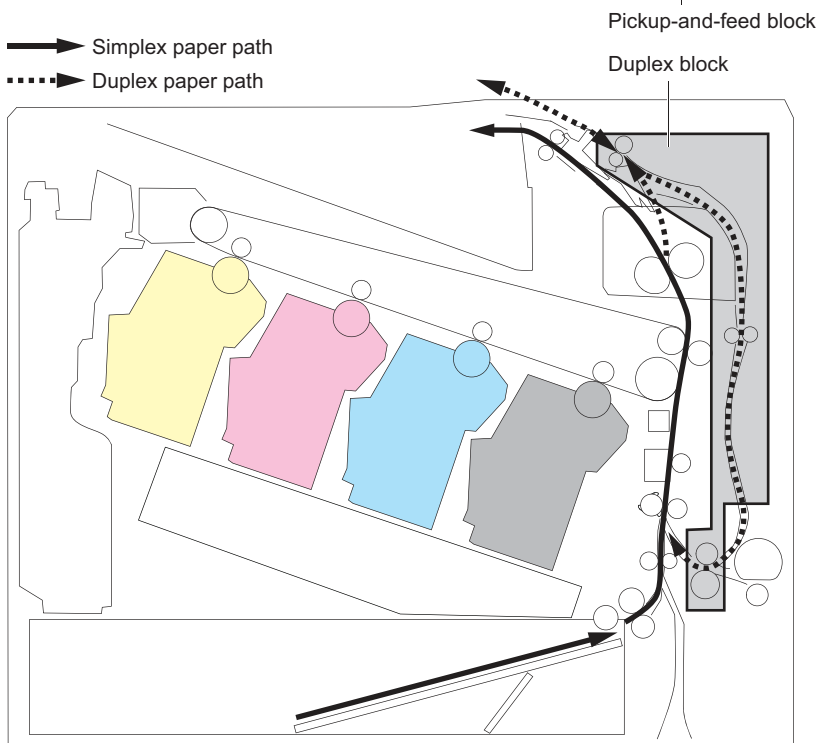
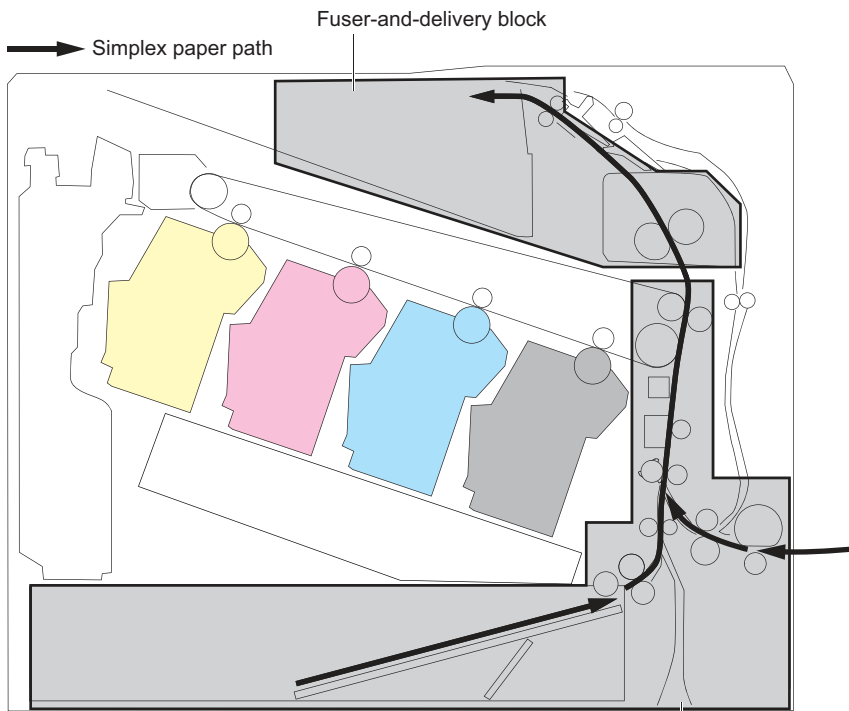


Photo sensors and switches

Learn about the engine pickup, feed, and delivery sensors and switches.

The following figure shows the sensors and switches for the engine pickup, feed, and delivery system.

Figure 3-33 Photo sensors and switches (engine pickup, feed, and delivery system)

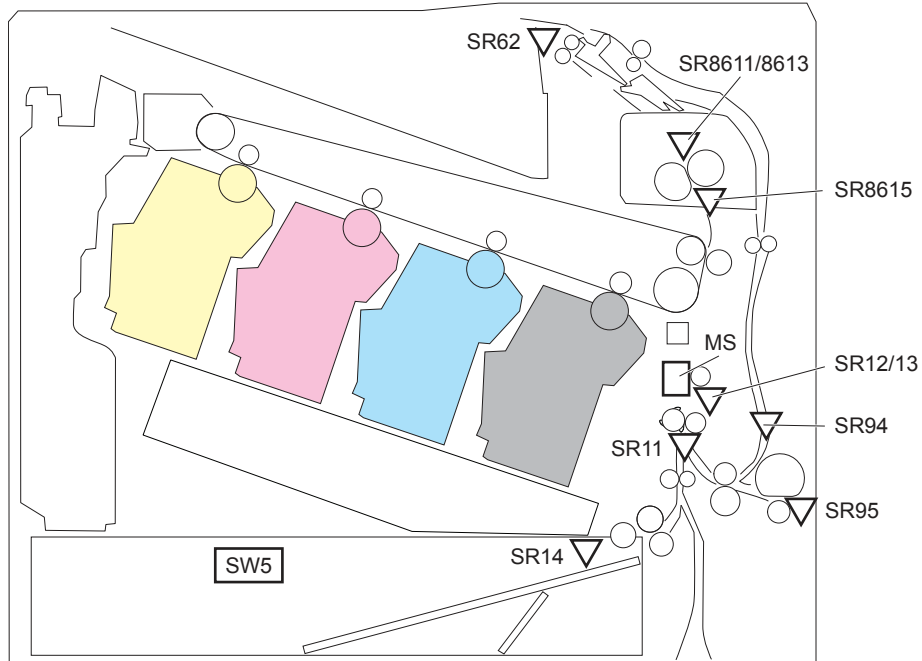


Table 3-20 Photo sensors and switches (engine pickup, feed, and delivery system)

Abbreviation	Component
SR11	Registration sensor
SR12	Registration media width sensor 1
SR13	Registration media width sensor 2
SR14	Tray 2 media out sensor
SR62	FD1 media full sensor
SR94	Duplex feed sensor
SR95	Tray 1 media out sensor
SR8611	Fuser output sensor 1
SR8613	Fuser output sensor 2
SR8615	Fuser loop sensor
SW5	Tray 2 media size switch 1
MS	Media sensor

Motors, clutches, and solenoids

Learn about the engine pickup, feed, and delivery motors, clutches, and solenoids.

The following figure shows the motors, clutches, and solenoids for the engine pickup, feed, and delivery system.

Figure 3-34 Motors, clutches, and solenoids (engine pickup, feed, and delivery system)

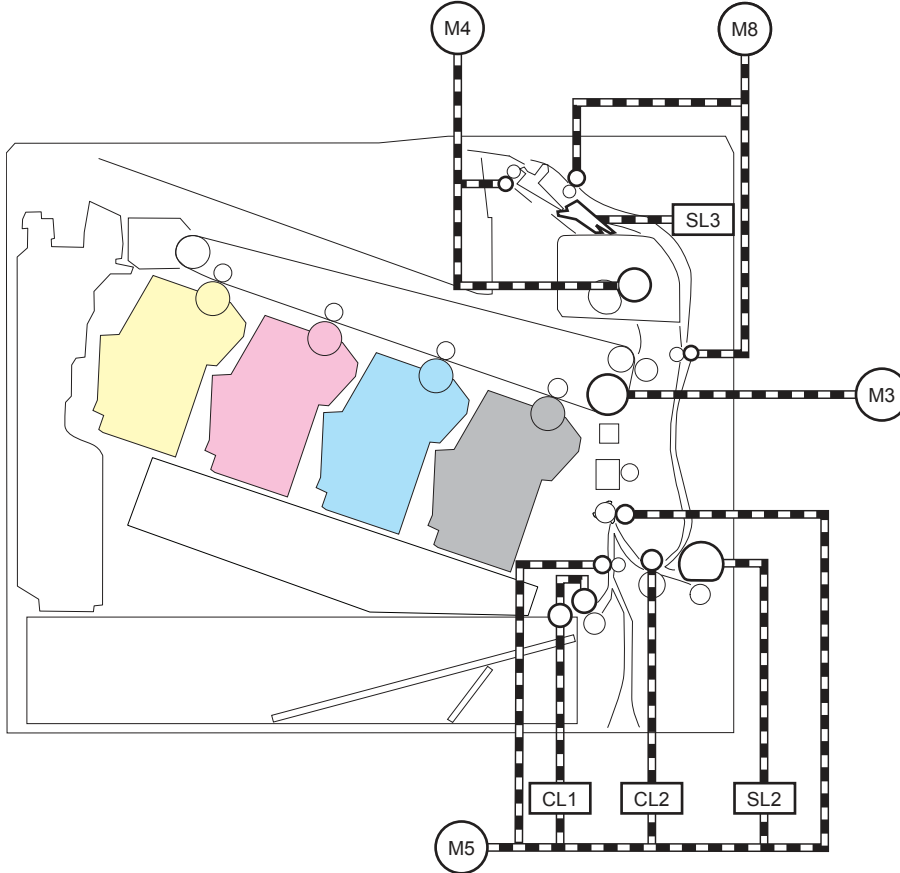


Table 3-21 Motors, clutches, and solenoids (engine pickup, feed, and delivery system)

Abbreviation	Component	Part number
M3	Drum motor 3	Drum motor assembly (RM2-1956-000CN)
M4	Fuser motor	Fuser motor assembly (RM2-1955-000CN)
M5	Pickup motor	Paper pickup assembly (RM2-6556-000CN)
M8	Duplex reverse motor	Right door assembly (RM2-6622-000CN)
SL2	Tray 1 pickup solenoid	Right door assembly (RM2-6622-000CN)
SL3	Duplex reverse solenoid	Right door assembly (RM2-6622-000CN)
CL1	Tray 2 pickup clutch	Lifter drive assembly (RM2-6669-000CN)
CL2	Duplex re-pickup clutch	Right door assembly (RM2-6622-000CN)

Paper trays

Learn about the paper trays in printer pickup, feed and delivery system.

Tray 2 media type detection

Learn about Tray 2 media type detection.

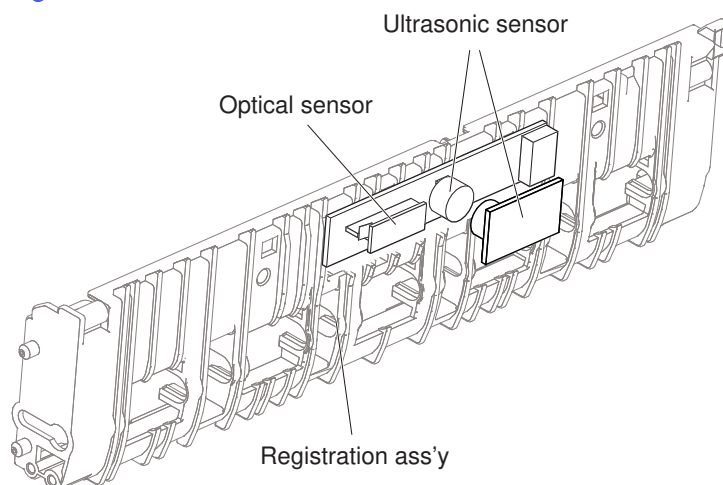
The printer selects the optimal print mode based upon the media type detected by the media sensor. The media sensor consists of an optical sensor, which detects the surface texture of the paper, and an ultrasonic sensor, which measures the thickness of the paper. The formatter informs the DC controller that the printer is in auto-sense mode and the DC controller changes the fuser mode based on media type.

Following are the print modes detected by the printer:

- Normal
- Heavy media 1
- Heavy media 2
- Heavy media 3
- Light media 1
- Light media 2
- Light media 3
- Glossy media 1
- Glossy media 2
- Glossy media 3
- Glossy
- OHT
- Designated media 1
- Designated media 2
- Designated media 3

The DC controller determines a media sensor error and reports it to the formatter when the value detected by the media sensor is out of a specified range of values.

Figure 3-35 Media sensors



Feed speed control

Learn about feed speed control.

The DC controller adjusts the feed speed to improve the print quality depending on the paper type. The paper is fed at a specified speed according to the print mode designated by the formatter.

 **NOTE:**

- 1/1 speed = 210 mm/s
- 1/2 speed = 105 mm/s
- 1/3 speed = 70 mm/s

Table 3-22 Print mode and feed speed

Print mode	Feed speed		Media sensor detection
	Full color	Monochrome	
Auto			Yes
Normal	1/1	1/1	Yes
Heavy media 1	3/4	3/4	no
Heavy media 2	1/2	1/2	Yes
Heavy media 3	1/3	1/3	Yes
Light media 1	1/1	1/1	Yes
Light media 2	1/1	1/1	Yes
Light media 3	1/2	1/2	Yes
Glossy media 1	1/3	1/3	Yes
Glossy media 2	1/3	1/3	Yes
Glossy media 3	1/3	1/3	Yes
Glossy film	1/3	1/3	Yes
Photo media 1			No
Photo media 2			No
Photo media 3			No
Envelope 1	1/3	1/3	No
Envelope 2			No
Envelope 3			No
OHT	1/3	1/3	Yes
Label	1/2	1/2	No
Designated media 1	1/2	1/2	No
Designated media 2	1/3	1/3	No
Designated media 3	3/4	3/4	No

Table 3-23 Pickup, feed and delivery system functions

Function	Supported
Tray 2 media size detection	Yes
Tray 2 presence detection	Yes
Tray 2 media surface detection	No
Tray 2 media presence detection	Yes
Tray 2 media level detection	No
Tray 2 lift-up control	Yes
Tray 2 lift-down control	No
Tray 2 multiple-feed prevention mechanism	Yes
Tray 1 media presence detection	Yes
Tray 1 media width detection	No
Tray 1 last-media detection	No
Skew-feed prevention mechanism	Yes
Feed speed control	Yes
Loop control	Yes
Media detection	Yes
OHT detection	Yes
Image leading edge positioning	Yes
Media length detection	Yes
Media width detection	Yes
Pressure roller pressure release control	Yes
Output bin media-full detection	Yes
Automatic delivery	Yes
Duplex switchback control	Yes
Duplex feed control	Yes

Duplexing unit

Learn about the printer duplexing unit.

The duplexing unit reverses the paper and feeds it through the paper path to print the second side.

Duplexing reverse and duplex feed control

Learn about duplexing reverse and duplex feed control.

The duplex reverse control reverses the paper after the first side is printed and feeds it to the duplex re-pickup position to print the second side of the page.

1. At a specified time after the first side of a page is printed, the duplex reverse motor rotates, and the duplex reverse solenoid is turned on.

2. The duplex flapper moves, and the paper feeds to the duplex reverse unit.
3. After a specified period of time, the duplex reverse motor reverses, and the paper feeds to the duplex feed unit.
4. The duplex reverse motor and the pickup motor move the paper to the duplex re-pickup position.
5. The duplex reverse motor and the duplex feed clutch stop, and the paper feed operation pauses.
6. After a specified period of time, the duplex reverse motor rotates, and the duplex feed clutch is turned on. The paper is then picked up again.

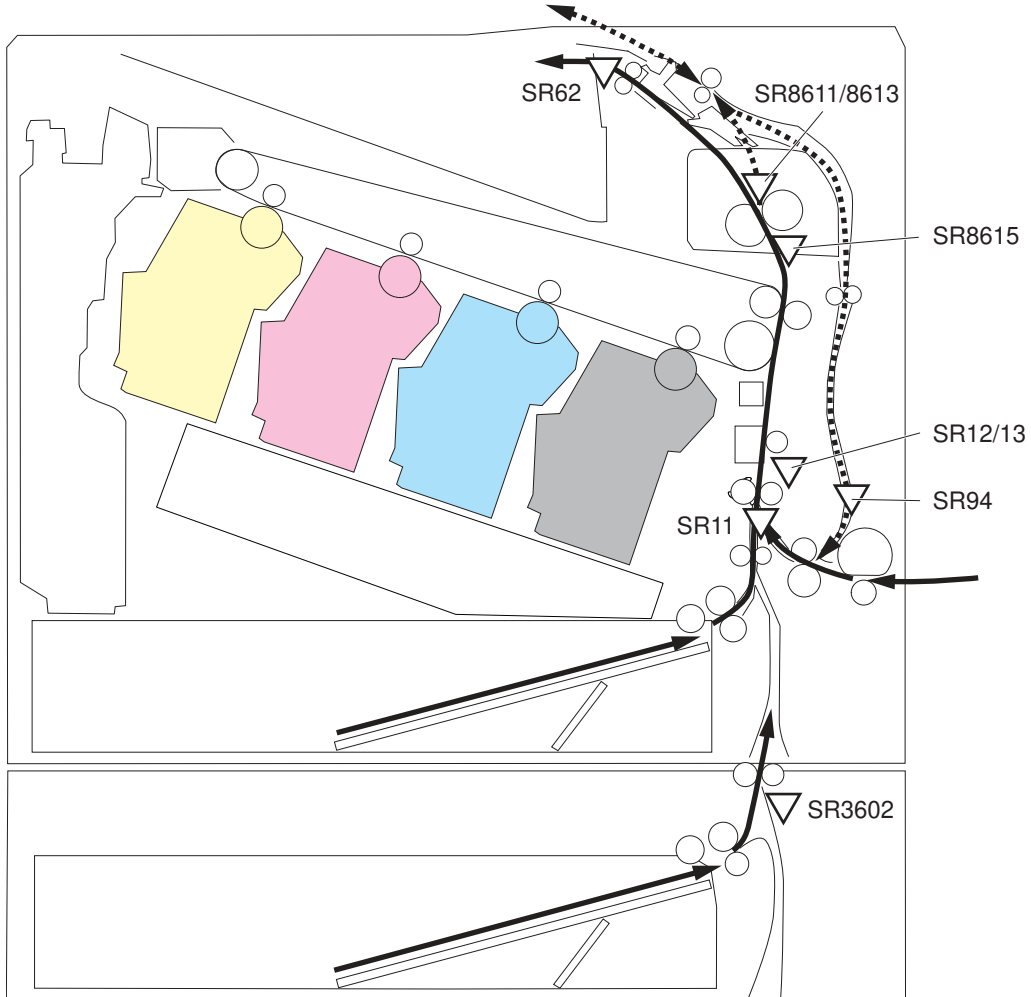
Jam detection/prevention

Learn about the engine pickup, feed, and delivery jam detection/prevention.

The printer uses the following sensors to detect the paper as it moves through the paper path and to report to the DC controller if the paper has jammed.

- Registration sensor (SR11)
- Registration media width sensor 1 (SR12)
- Registration media width sensor 2 (SR13)
- FD1 (output bin) media full sensor (SR62)
- Duplex feed sensor (SR94)
- Fuser output sensor 1 (SR8611)
- Fuser output sensor 2 (SR8613)
- Fuser loop sensor (SR8615)
- PF (paper feeder) feed sensor (PS3602) – 550-sheet paper feeder only
- PD (paper deck) cassette 1 feed sensor (PS3401) – 1x550-sheet paper-feeder, 3x550-sheet paper-feeder, and 2,550-sheet paper-feeder only
- PD (paper deck) cassette 2 feed sensor (PS4501) – 3x550-sheet paper-feeder and 2,550-sheet paper feeder only
- PD (paper deck) cassette 3 feed sensor (PS5601) – 3x550-sheet paper-feeder only

Figure 3-36 Jam detection sensors



The printer determines that a jam has occurred if one of these sensors detects paper at an inappropriate time. The DC controller stops the print operation and notifies the formatter.

Figure 3-37 Paper-feeder paper-path jam detection sensors

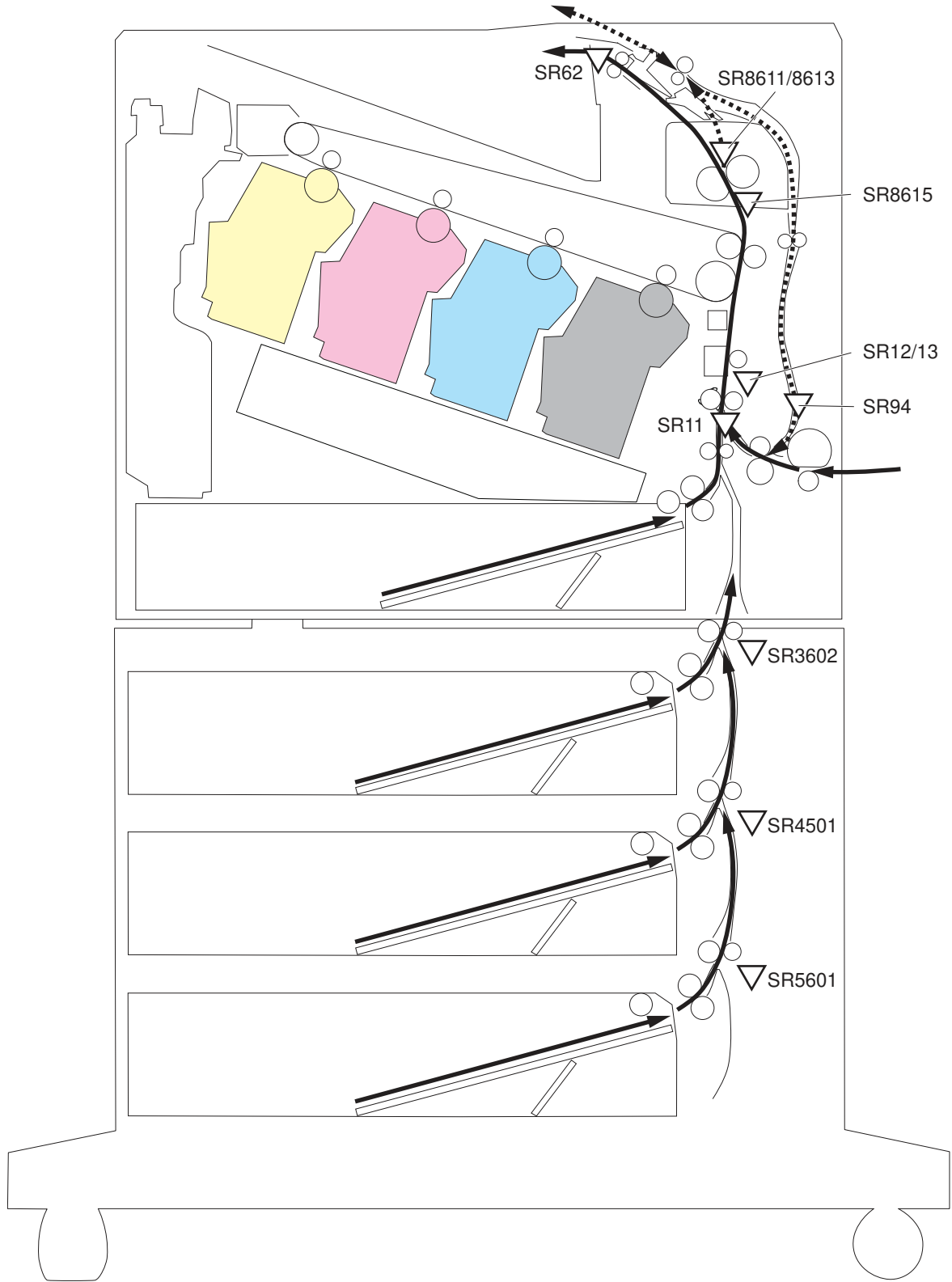


Table 3-24 Detected jam types

Jam	Supported feature
No pick jam 1	Yes
No pick jam 2	Yes
No pick jam 3	Yes
No pick jam 4	No
Pickup stay jam 1	Yes
Pickup stay jam 2	No
Pickup stay jam 3	No
Pickup stay jam 4	No
Fuser delivery delay jam 1	Yes
Fuser delivery delay jam 2	No
Fuser delivery delay jam 3	No
Fuser delivery delay jam 4	No
Fuser delivery stay jam 1	Yes
Fuser delivery stay jam 2	No
Fuser delivery stay jam 3	No
Fuser delivery stay jam 4	No
Residual paper jam 1	Yes
Residual paper jam 2	No
Residual paper jam 3	No
Residual paper jam 4	No
Door open jam 1	Yes
Door open jam 2	No
Door open jam 3	No
Door open jam 4	No
Fuser wrap jam1	Yes
Fuser wrap jam2	No
Fuser wrap jam3	No
Fuser wrap jam4	No
Duplex switchback jam1	No
Duplex switchback jam2	No
Duplex switchback jam3	No
Duplex switchback jam4	No
Duplex re-pickup jam 1	Yes
Duplex re-pickup jam 2	No

Table 3-24 Detected jam types (continued)

Jam	Supported feature
Duplex re-pickup jam 3	No
Duplex re-pickup jam 4	No
Delivery delay jam 1	Yes
Delivery delay jam 2	No
Delivery delay jam 3	No
Delivery delay jam 4	No
Delivery stay jam 1	No
Delivery stay jam 2	No
Delivery stay jam 3	No
Delivery stay jam 4	No
Multiple feed jam 1	No
Multiple feed jam 2	No
Multiple feed jam 3	No
Multiple feed jam 4	No
Duplex feed delay jam 1	Yes
Inappropriate to the delivery path Jam 1	No
Inappropriate to the delivery path Jam 2	No

Fuser wrapping jam detection

Learn about the engine pickup, feed, and delivery fuser wrapping jam detection.

The printer includes controls for detecting when a jam occurs causing the paper to wrap around the fuser roller.

Loop control

The loop control stabilizes the paper feed operation before the paper enters the fuser.

- If the pressure roller rotates slower than the secondary transfer roller, the paper loop increases and an image defect or paper crease occurs.
- If the pressure roller rotates faster than the secondary transfer roller, the paper loop decreases and a vertical scanning magnification failure occurs because the pressure roller pulls the paper.

To prevent these problems, the loop sensor detects the paper loop before the paper enters the fuser. The DC controller adjusts the rotational speed of the fuser motor according to the output signals from the loop sensor and maintains the paper loop. The DC controller slows the fuser motor when the sensor is off and speeds up the motor when the sensor is on.

Pressure roller pressurization and depressurization control

To prevent excessive wear on the pressure roller and help with jam-clearing procedures, the pressure roller pressurizes only during printing and standby. The DC controller reverses the fuser motor. The fuser motor rotates the fuser pressure-release cam.

The pressure roller depressurizes under the following conditions.

- The printer is turned off
- Any failure occurs
- During power-save mode
- A paper jam is detected

If the DC controller does not sense the fuser pressure-release sensor for a specified period after it reverses the fuser motor, it notifies the formatter that a fuser pressure-release mechanism failure has occurred.

Input devices

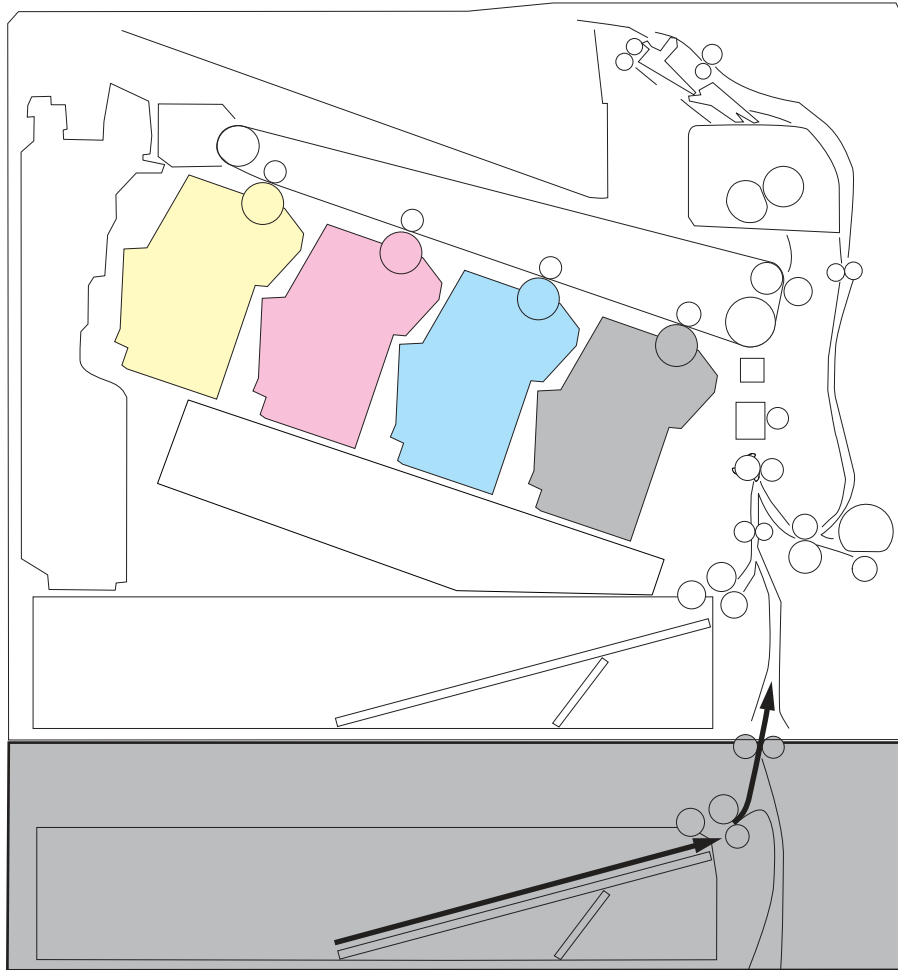
Learn about the input devices.

550-sheet paper feeder

Learn about the optional 550-sheet paper feeder.

The 550-sheet paper feeder is installed under the printer. It picks up paper and feeds it into the printer.

Figure 3-38 550-sheet paper feeder

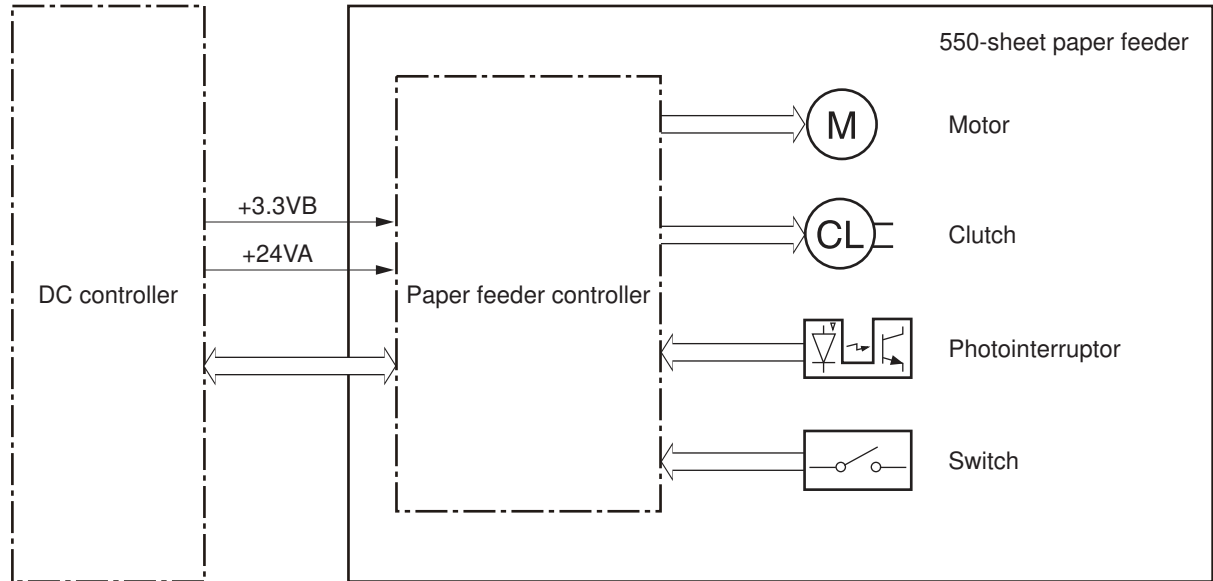


550-sheet paper feeder controller

Learn about the 550-sheet paper feeder controller.

The paper feeder controller controls the operational sequence of the paper feeder.

Figure 3-39 550-sheet paper feeder driver PCA



550-sheet paper feeder motor control

Learn about the 550-sheet paper feeder motor controller.

The 550-sheet paper feeder has one motor for lifting the tray and feeding paper.

Table 3-25 550-sheet paper feeder motor control

Abbreviation	Component	Drives	Failure detection
M3602	Feed motor (550-sheet paper feeder)	Tray pickup roller (B5L24-67904) Tray feed roller (RM2-6684-000CN) Paper feed assembly (RM2-5145-000CN) Lifter drive assembly (RM2-6669-000CN)	No

550-sheet paper feeder electrical components

Learn about the 550-sheet paper feeder electrical components.

The paper feeder contains several motors, solenoids, sensors, and switches, as described in the following table.

Table 3-26 550-sheet paper feeder electrical components

Component type	Abbreviation	Component name	Replacement part number
Motor	M3602	Feed motor (550-sheet paper feeder)	Paper feed assembly (RM2-5145-000CN)
Clutch	CL3602	Tray pick up clutch (550-sheet paper feeder)	Lifter drive assembly (RM2-5149-000CN)

Table 3-26 550-sheet paper feeder electrical components (continued)

Component type	Abbreviation	Component name	Replacement part number
Switches	SW3601	Right door switch (550-sheet paper feeder)	Right door (RM2-5146-000CN)
Switches	SW3602	Tray detection switch (550-sheet paper feeder)	Switch button (WC2-5806-000CN)
Sensors	PS3601	Tray media-out sensor (550-sheet paper feeder)	Paper pick up assembly (RM2-5154-000CN)
Sensors	PS3602	Feed sensor (550-sheet paper feeder)	Paper feed assembly (RM2-5145-000CN)

550-sheet paper feeder paper pickup

Learn about the 550-sheet paper feeder paper pickup.

The 550-sheet paper feeder picks up one sheet from the paper-feeder tray and feeds it to the printer.

Figure 3-40 Paper pickup and feed operation (550-sheet paper feeder)

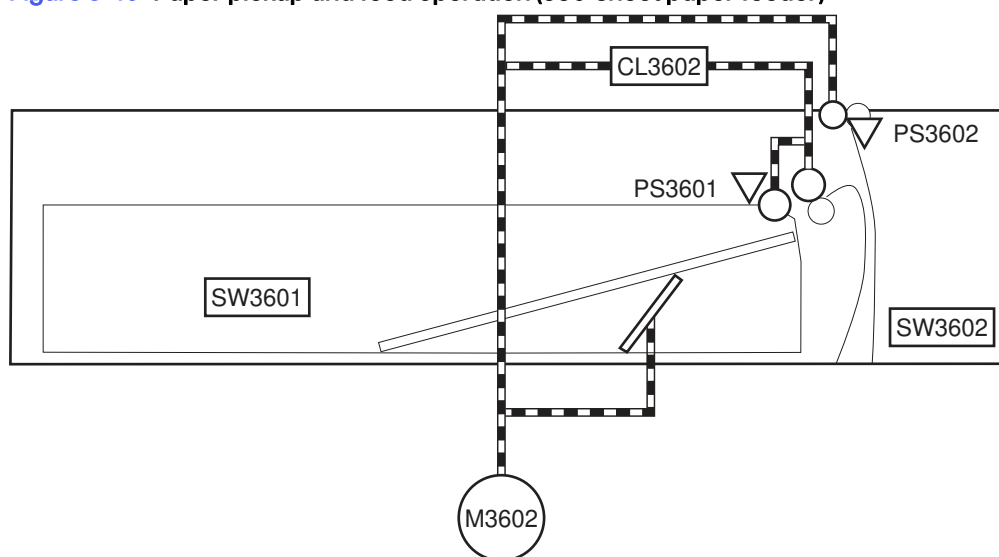


Table 3-27 Pickup feed components (1x550-sheet paper feeder)

Abbreviation	Component name	Replacement part number
M3602	Feed motor (550-sheet paper feeder)	Paper feed assembly (RM2-5145-000CN)
CL3602	Tray pick up clutch (550-sheet paper feeder)	Lifter drive assembly (RM2-5149-000CN)
SW3601	Media size switch	

Table 3-27 Pickup feed components (1x550-sheet paper feeder) (continued)

Abbreviation	Component name	Replacement part number
SW360 2	Door switch	
PS3601	Tray media-out sensor (550-sheet paper feeder)	Paper pick up assembly (RM2-5154-000CN)
PS360 2	Feed sensor (550-sheet paper feeder)	Paper feed assembly (RM2-5145-000CN)

550-sheet paper feeder multiple feed prevention

Learn about the 550-sheet paper feeder multiple feed prevention.

The multiple-feed prevention for the 550-sheet paper feeder is operated in the same way as that of the printer base.

550-sheet paper feeder tray presence detection

Learn about the 550-sheet paper feeder tray presence detection.

The presence detection for the 550-sheet paper feeder is the same way as that of the printer base.

550-sheet paper feeder tray lift operation

Learn about the 550-sheet paper feeder tray lift operation.

The 550-sheet paper feeder keeps the paper stack surface at the correct pickup position. The tray lift operation occurs under the following conditions:

- The printer is turned on.
- The tray is inserted.
- The paper stack surface of the tray lowers.

The sequence occurs as follows:

1. The feeder tray-lifting motor rotates and the lifter moves up.
2. When the paper-feeder media-stack-surface sensor detects the stack surface of the paper, the lifting motor stops.
3. The lifting motor rotates again to lift the lifter when the paper-feeder media-stack-surface sensor detects the stack surface, and then lowers during printing.

If a tray media-stack-surface sensor does not detect a stack surface within a specified period after the lifting motor starts rotating, the paper feeder driver determines that the lifting motor has failed and notifies the formatter through the DC controller.

The paper-feeder driver notifies the formatter if either of the paper-feeder media-stack-surface sensors fails to detect the stack surface within a specified period from when a lift-up operation starts.

550-sheet paper feeder jam detection

Learn about the 550-sheet paper feeder jam detection.

The 550-sheet paper feeder uses the feed sensor (SR21) and right door switch (SW20) to detect the presence of paper and to check whether paper has jammed.

The 550-sheet paper feeder detects the following jams:

- **Media input delay jam 1 (550-sheet paper feeder):** Paper did not reach the registration sensor in time.
- **Media input delay jam 2 (550-sheet paper feeder):** Paper did not reach the source tray feed sensor in time.
- **Media input delay jam 3 (550-sheet paper feeder):** Paper did not reach the tray 3 feed sensor in time.
- **Pickup stationary jam (550-sheet paper feeder):** The feed sensor does not detect the trailing edge of paper within a specified time after the sensor detects the leading edge.
- **Residual paper jam (550-sheet paper feeder):** The feed sensor detects the presence of paper for a specified time during an automatic delivery operation.
- **Right door open jam (550-sheet paper feeder):** The right door open is detected during a paper feed operation.

550- and 2,550-sheet paper feeder

Learn about the optional 550- and 2,550-sheet paper feeder.

The 550- and 2,550-sheet paper feeder is installed under the printer. It picks up paper and feeds it into the printer.

Figure 3-41 Paper path (1x550-sheet paper-feeder)

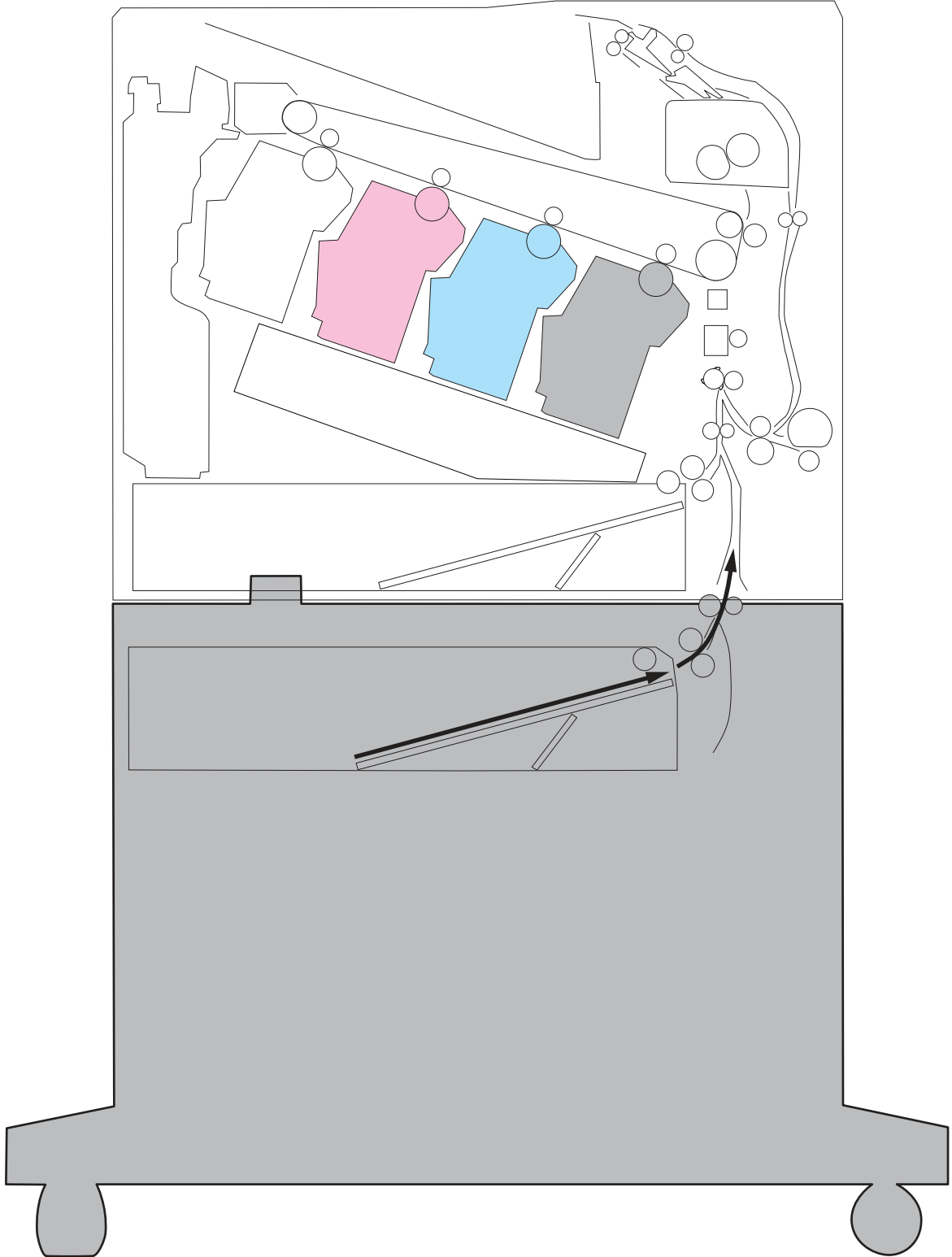


Figure 3-42 Paper path (3x550-sheet paper-feeder)

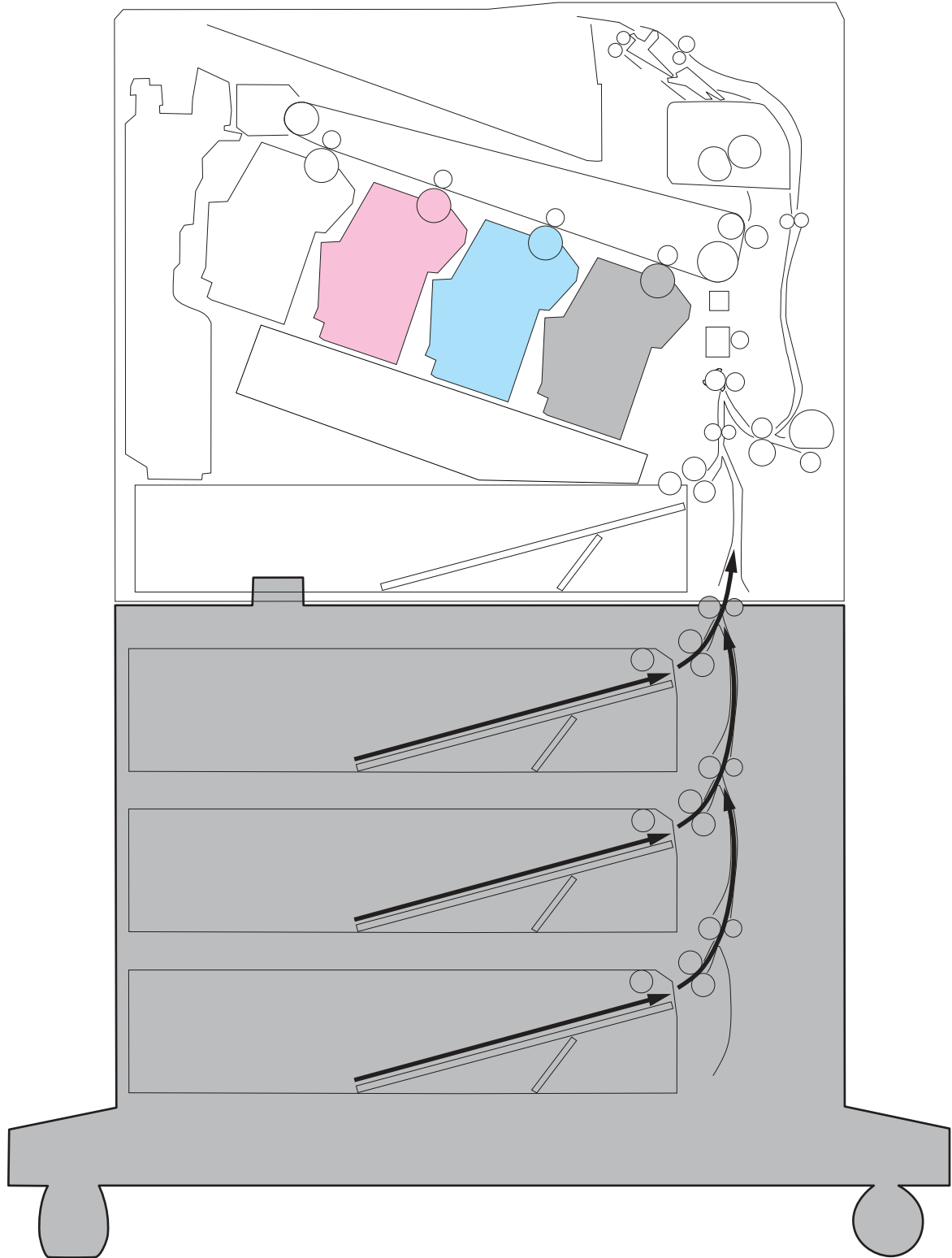
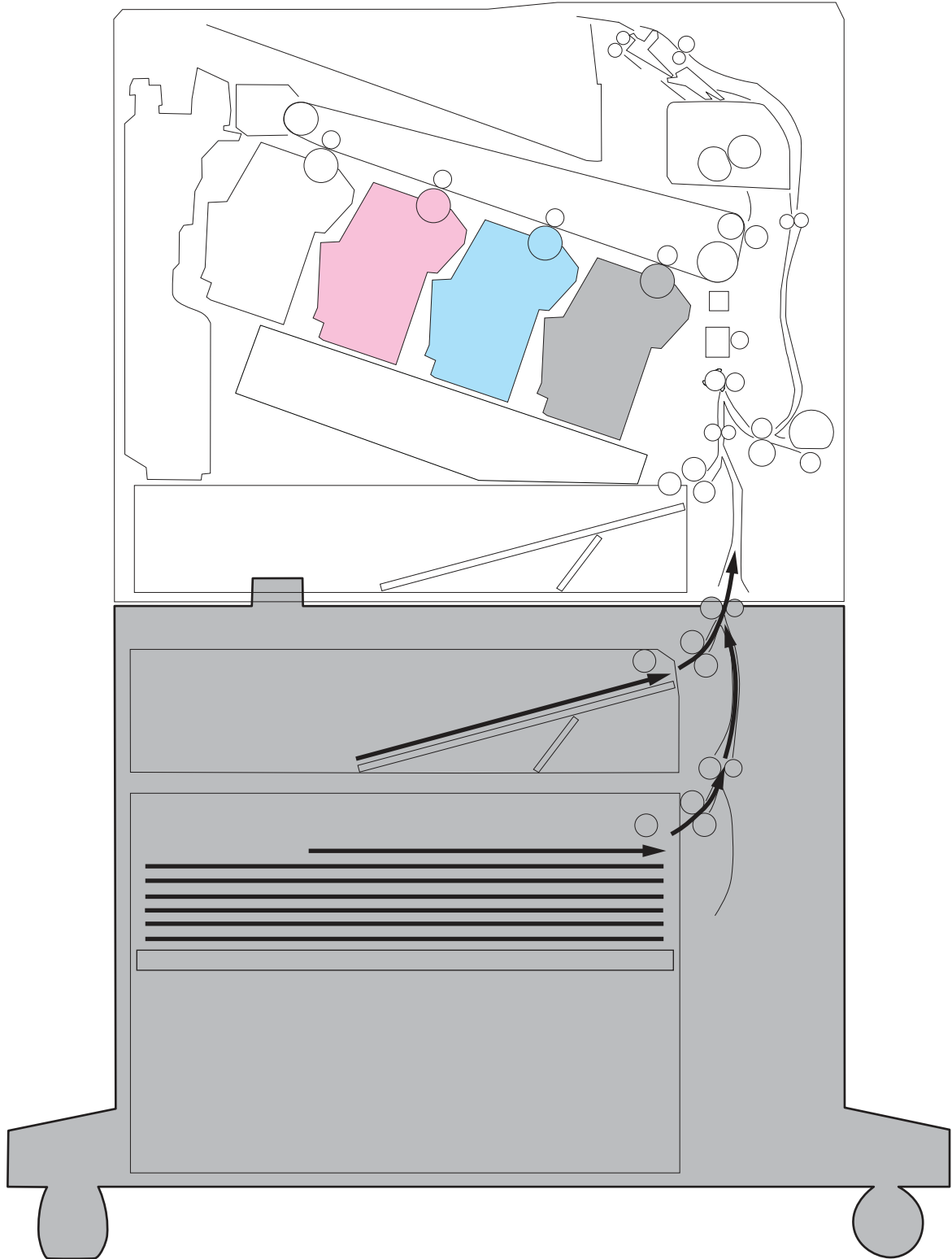


Figure 3-43 Paper path (2,550-sheet paper-feeder)



550- and 2,550-sheet paper feeder controller

Learn about the 550- and 2,550-sheet paper feeder controller.

The paper feeder controller controls the operational sequence of the paper feeder.

Figure 3-44 550- and 2,550-sheet paper feeder controller

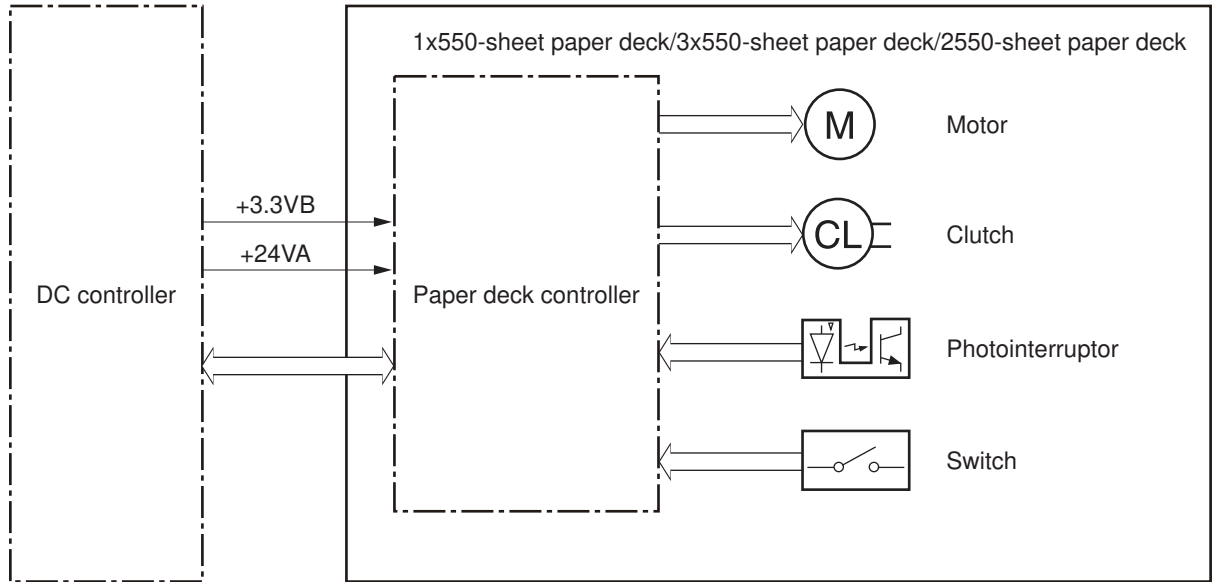


Table 3-28 Paper-feeder electrical component list

Component type	Abbreviation	Component name	1x550 PD	3x550 PD	2,550 PD
Motor	M3401	PD cassette 1 lifter motor	Yes	Yes	Yes
Motor	M3402	PD feed motor 1	Yes	Yes	Yes
Motor	M4501	PD cassette 2 lifter motor	No	Yes	Yes
Motor	M4502	PD feed motor 2	No	Yes	Yes
Motor	M5601	PD cassette 3 lifter motor	No	Yes	No
Motor	M5602	PD feed motor 3	No	Yes	No
Clutch	CL3401	PD cassette 1 pickup clutch	Yes	Yes	Yes
Clutch	CL4501	PD cassette 2 pickup clutch	No	Yes	Yes
Clutch	CL5601	PD cassette 3 pickup clutch	No	Yes	No
Switch	SW3401	PD Cassette 1 media size switch 1	Yes	Yes	Yes
Switch	SW3402	PD Cassette 1 media size switch 2	Yes	Yes	Yes
Switch	SW4501	PD Cassette 2 media size switch 1	No	Yes	Yes
Switch	SW4502	PD Cassette 2 media size switch 2	No	Yes	No
Switch	SW5601	PD Cassette 3 media size switch 1	No	Yes	No
Switch	SW5602	PD Cassette 3 media size switch 2	No	Yes	No
Switch	SW3403	PD door switch	Yes	Yes	Yes
Photointerrupter	PS3401	PD cassette 1 feed sensor	Yes	Yes	Yes
Photointerrupter	PS3402	PD cassette 1 media out sensor	Yes	Yes	Yes

Table 3-28 Paper-feeder electrical component list (continued)

Component type	Abbreviation	Component name	1x550 PD	3x550 PD	2,550 PD
Photointerrupter	PS3403	PD cassette 1 media surface sensor	Yes	Yes	Yes
Photointerrupter	PS3413	PD pickup roller alienation sensor	Yes	Yes	Yes
Photointerrupter	PS4501	PD cassette 2 feed sensor	No	Yes	Yes
Photointerrupter	PS4502	PD cassette 2 media out sensor	No	Yes	Yes
Photointerrupter	PS4503	PD cassette 2 media surface sensor	No	Yes	Yes
Photointerrupter	PS5601	PD cassette 3 feed sensor	No	Yes	No
Photointerrupter	PS5602	PD cassette 3 media out sensor	No	Yes	No
Photointerrupter	PS5603	PD cassette 3 media surface sensor	No	Yes	No

550- and 2,550-sheet paper feeder motor control

Learn about the 550- and 2,550-sheet paper feeder motor controller.

Table 3-29 550- and 2,550-sheet paper feeder motor control

Abbreviation	Component	Drives
M3401	PD Cassette 1 lifter motor	Lift up the cassette 1
M3402	PD feed motor 1	Cassette pickup roller, cassette feed roller, and feed roller
M4501	PD Cassette 2 lifter motor	Lift up the cassette 2 or tray NOTE: 3x550-sheet paper-feeder and 2,550-sheet paper-feeder only.
M4502	PD feed motor 2	Cassette pickup roller, cassette feed roller, tray pickup roller, tray feed roller, and feed roller NOTE: 3x550-sheet paper-feeder and 2,550-sheet paper-feeder only.
M5601	PD Cassette 3 lifter motor	Lift up the cassette 3 NOTE: 3x550-sheet paper-feeder only.
M5602	PD feed motor 3	Cassette pickup roller, cassette feed roller and feed roller NOTE: 3x550-sheet paper-feeder only.

550- and 2,550-sheet paper feeder pickup-and-feed operation

Learn about the 550- and 2,550-sheet paper feeder pickup-and-feed operation.

The paper-feeder picks up the sheet of paper one by one in the paper-feeder cassette and feeds it to the printer.

Figure 3-45 1x550-sheet paper-feeder/3x550-sheet paper-feeder electrical components

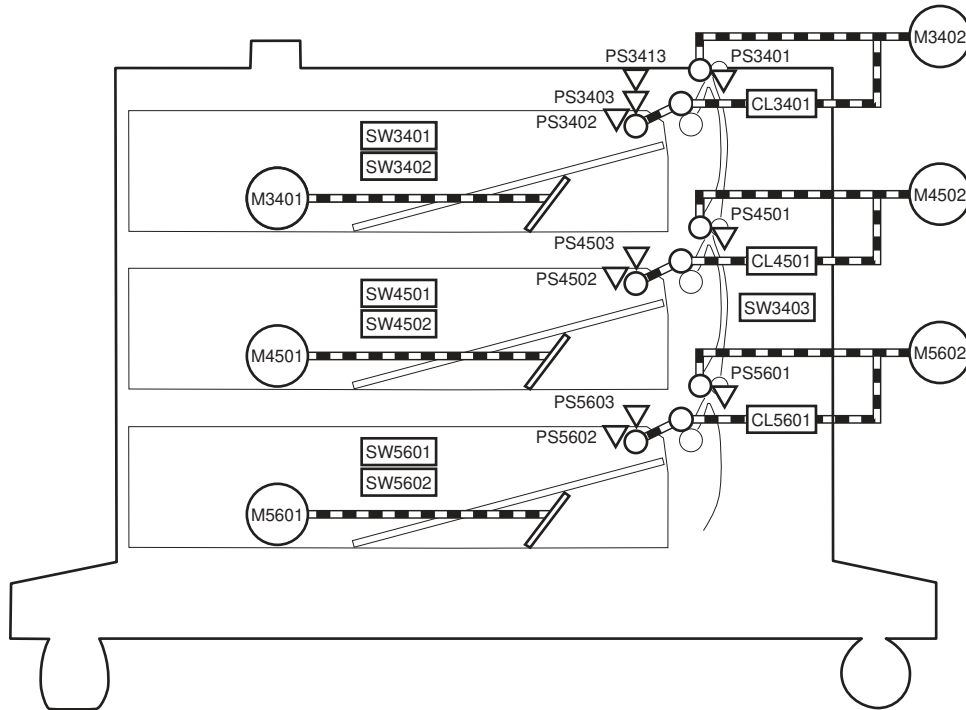


Table 3-30 1x550-sheet paper-feeder/3x550-sheet paper-feeder electrical components

Abbreviation	Component	1x550 PD	3x550 PD
M3401	PD cassette 1 lifter motor	Yes	Yes
M3402	PD feed motor 1	Yes	Yes
M4501	PD cassette 2 lifter motor	No	Yes
M4502	PD feed motor 2	No	Yes
M5601	PD cassette 3 lifter motor	No	Yes
M5602	PD feed motor 3	No	Yes
CL3401	PD cassette 1 pickup clutch	Yes	Yes
CL4501	PD cassette 2 pickup clutch	No	Yes
CL5601	PD cassette 3 pickup clutch	No	Yes
SW5602	PD Cassette 3 media size switch 2	No	Yes
SW3403	PD door switch	Yes	Yes
SW3401	PD cassette 1 feed sensor	Yes	Yes
SW3402	PD cassette 1 media out sensor	Yes	Yes
PS3403	PD cassette 1 media surface sensor	Yes	Yes
PS3413	PD pickup roller alienation sensor	Yes	Yes
PS4501	PD cassette 2 feed sensor	No	Yes
PS4502	PD cassette 2 media out sensor	No	Yes

Table 3-30 1x550-sheet paper-feeder/3x550-sheet paper-feeder electrical components (continued)

Abbreviation	Component	1x550 PD	3x550 PD
PS4503	PD cassette 2 media surface sensor	No	Yes
PS5601	PD cassette 3 feed sensor	No	Yes
PS5602	PD cassette 3 media out sensor	No	Yes
PS5603	PD cassette 3 media surface sensor	No	Yes

Figure 3-46 2,550-sheet paper-feeder electrical components

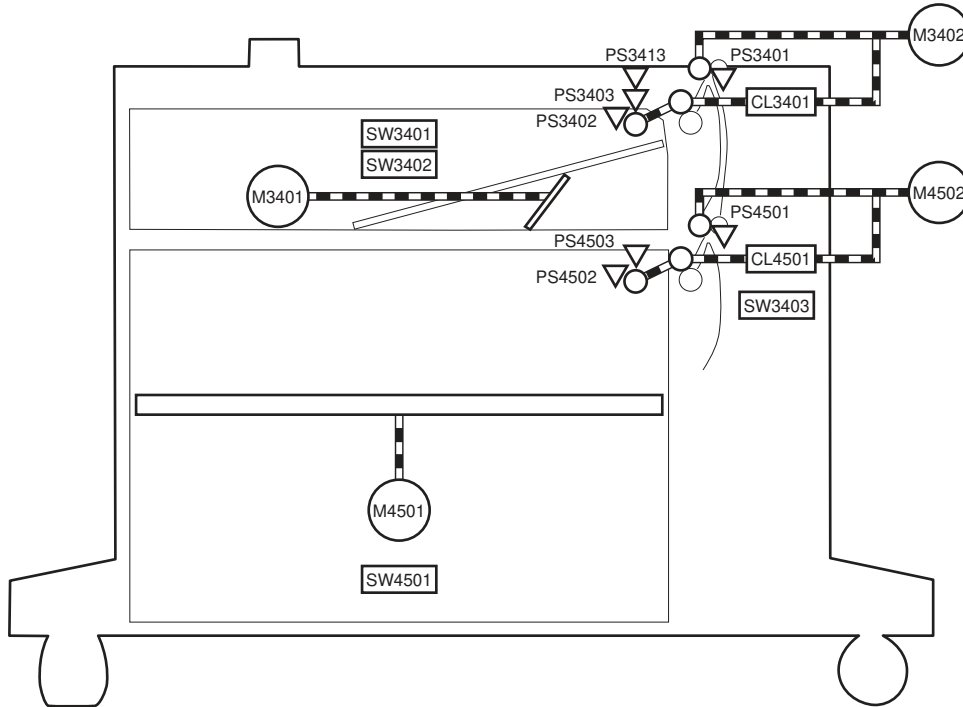


Table 3-31 1x550-sheet paper-feeder/3x550-sheet paper-feeder electrical components

Abbreviation	Component
M3401	PD cassette 1 lifter motor
M3402	PD feed motor 1
M4501	PD cassette 2 lifter motor
M4502	PD feed motor 2
CL3401	PD cassette 1 pickup clutch
CL4501	PD cassette 2 pickup clutch
SW3401	PD Cassette 1 media size switch 1
SW3402	PD Cassette 1 media size switch 2
SW4501	PD Cassette 2 media size switch 1
SW3403	PD door switch
PS3401	PD cassette 1 feed sensor

Table 3-31 1x550-sheet paper-feeder/3x550-sheet paper-feeder electrical components (continued)

Abbreviation	Component
PS3402	PD cassette 1 media out sensor
PS3403	PD cassette 1 media surface sensor
PS3413	PD pickup roller alienation sensor
PS4501	PD cassette 2 feed sensor
PS4502	PD cassette 2 media out sensor
PS4503	PD cassette 2 media surface sensor

Table 3-32 Paper-feeder functions

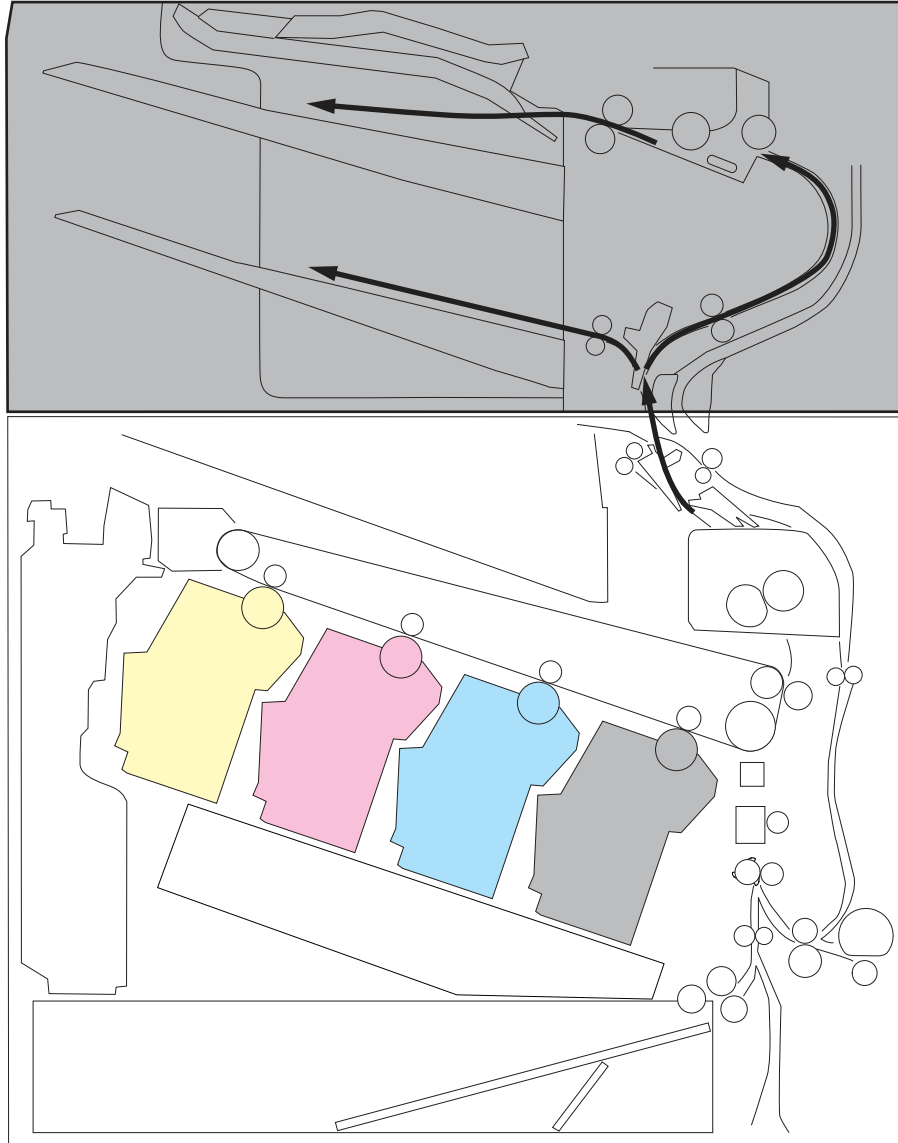
Function	Supported
Cassette lift-up control	Yes
Cassette presence detection	Yes
Cassette media size detection	Yes
Cassette media stack surface detection	Yes
Cassette media out detection	Yes
Cassette media level detection	No
Multiple-feed prevention	Yes
Automatic delivery	Yes

Staple stacker multi bin mailbox

Learn about the optional staple stacker multi bin mailbox.

The staple stacker multi bin mailbox (SSMBM) is installed on the upper side of the printer, and it delivers the print media to output tray after the staple process. The SSMBM controller controls the operation sequence of the SSMBM.

Figure 3-47 Staple stacker multi bin mailbox paper path



Staple stacker multi bin mailbox controller

Learn about the staple stacker multi bin mailbox.

Figure 3-48 SSMBM controller

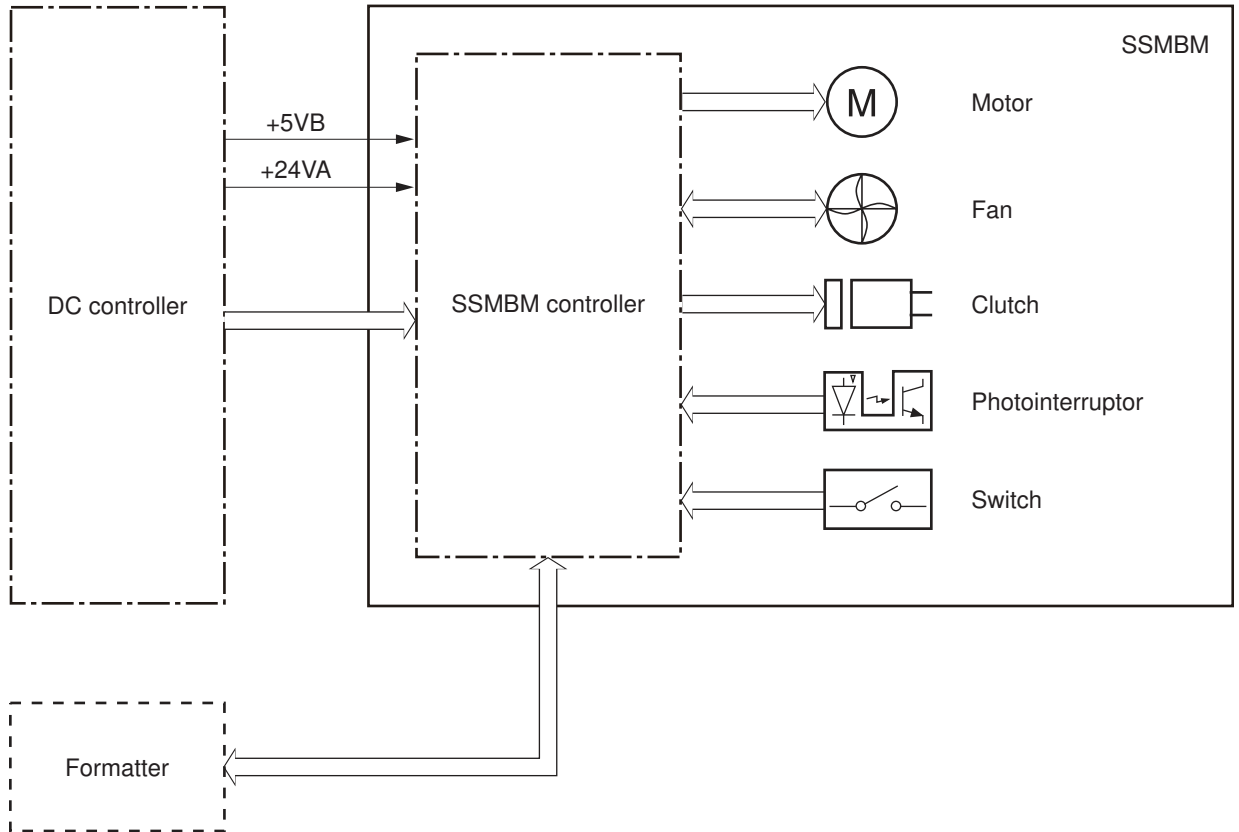


Table 3-33 SSMBM controller

Component type	Abbreviation	Component name
Motor	M11	SS output motor Upper paper feed assembly (RM2-6810-000CN)
Motor	M12	SS feed motor Motor, stepping DC RK2-8149-000CN
Motor	M14	Jogger motor Jog assembly (RM2-1066-000CN)
Motor	M15	Y alignment motor Upper paper feed assembly (RM2-6810-000CN)
Motor	M16	Staple motor Stapler assembly (RK2-8148-000CN)

Table 3-33 SSMBM controller (continued)

Component type	Abbreviation	Component name
Motor	M17	Lifter motor Upper paper feed assembly (RM2-6810-000CN)
Fan	FAN11	MBM fan Fan (RK2-8153-000CN)
Solenoid	SL11	Inlet flapper solenoid Lower paper feed assembly (RM2-6815-000CN)
Solenoid	SL12	Stamp solenoid Lower paper feed assembly (RM2-6815-000CN)
Solenoid	SL13	Output bin 2 flapper solenoid Lower paper feed assembly (RM2-6815-000CN)
Photointerrupter	PS101	Bin 1 media presence sensor Upper paper feed assembly (RM2-6810-000CN)
Photointerrupter	PS102	SS exit sensor Upper paper feed assembly (RM2-6810-000CN)
Photointerrupter	PS103	Staple inlet sensor Stapler assembly (RK2-8148-000CN)
Photointerrupter	PS104	Y alignment home position sensor Upper paper feed assembly (RM2-6810-000CN)
Photointerrupter	PS105	Bin 1 media full sensor Jog assembly (RM2-1066-000CN)
Photointerrupter	PS106	Alienation home position sensor Upper paper feed assembly (RM2-6810-000CN)

Table 3-33 SSMBM controller (continued)

Component type	Abbreviation	Component name
Photointerrupter	PS107	Jogger home position sensor Jog assembly (RM2-1066-000CN)
Photointerrupter	PS108	Bin 2 media presence sensor Lower paper feed assembly (RM2-6815-000CN)
Photointerrupter	PS109	Bin 2 media full sensor Lower paper feed assembly (RM2-6815-000CN)
Photointerrupter	PS110	SS inlet sensor Lower paper feed assembly (RM2-6815-000CN)
Photointerrupter	PS111	Bin 1 upper limit sensor Lower paper feed assembly (RM2-6815-000CN)
Photointerrupter	PS112	Bin 1 lower limit sensor Lower paper feed assembly (RM2-6815-000CN)
Photointerrupter	PS113	Staple low sensor Stapler assembly (RK2-8148-000CN)
Photointerrupter	PS114	Staple ready sensor Stapler assembly (RK2-8148-000CN)
Photointerrupter	PS115	Staple home position sensor Stapler assembly (RK2-8148-000CN)
Switch	SW2	SS door switch Upper paper feed assembly (RM2-6810-000CN)
Switch	SW11	Staple door switch Upper paper feed assembly (RM2-6810-000CN)

Staple stacker multi bin mailbox motor control

Learn about the staple stacker multi bin mailbox motor controller.

The SSBM detects the following motor failures:

- Jogger motor failure
- Y alignment motor failure
- Staple motor failure

Table 3-34 Staple stacker multi bin mailbox motor control

Abbreviation	Component	Drives	Replacement part number
M11	SS output motor	Output bin 1 delivery roller, exit feed roller	Upper paper feed assembly (RM2-6810-000CN)
M12	SS feed motor	Output bin 2 delivery roller, inlet feed roller	Lower paper feed assembly (RM2-6815-000CN)
M14	Jogger motor	Jogger guide	Jog assembly (RM2-1066-000CN)
M15	Y alignment motor	Alignment roller Engage/disengage the output bin 1 delivery roller	Upper paper feed assembly (RM2-6810-000CN)
M16	Staple motor	Staple	Stapler assembly (RK2-8148-000CN)
M17	Lifter motor	Lift up/down the output bin 1	Upper paper feed assembly (RM2-6810-000CN)

Staple stacker multi bin mailbox delivery operation

Learn about the staple stacker multi bin mailbox motor controller.

The SSMBM deliver a print media from the printer to the specified output bin for each print job. (Mailbox mode)

Figure 3-49 SSMBM motors and solenoids

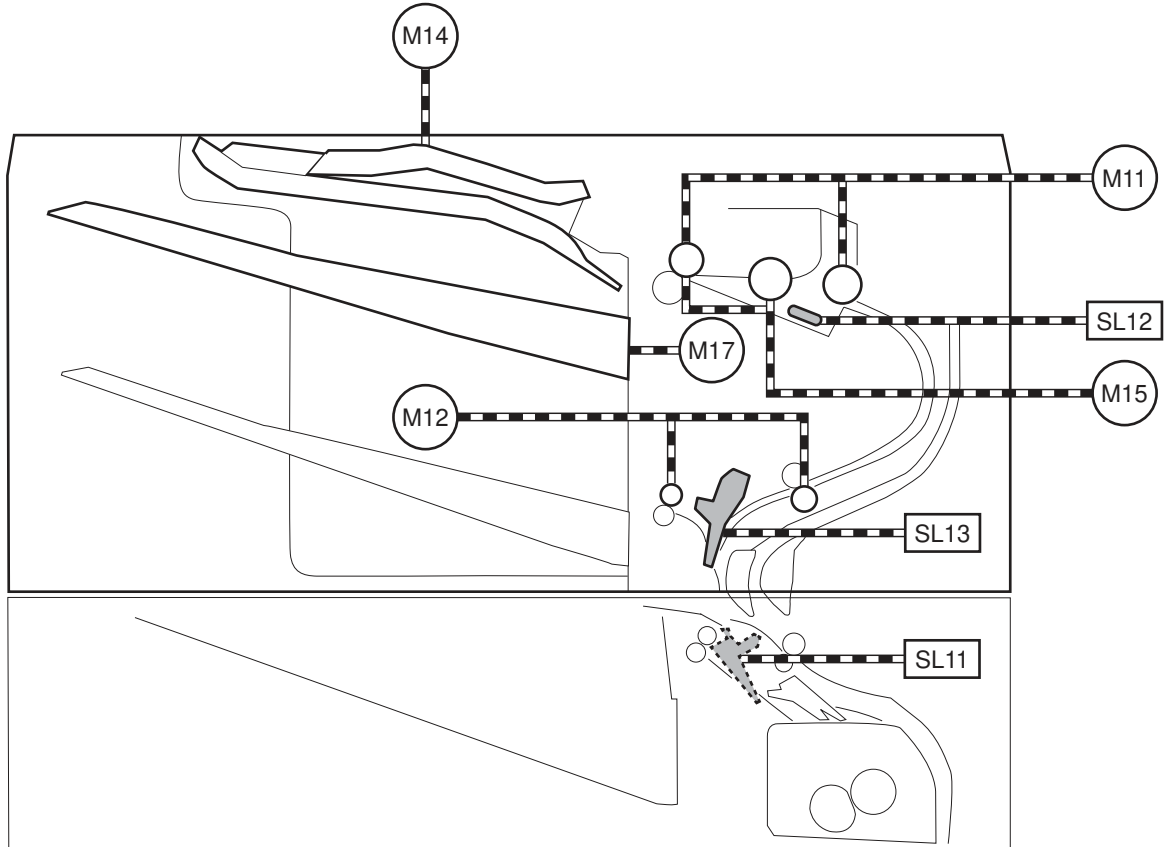


Table 3-35 SSMBM motors and solenoids

Abbreviation	Component	Replacement part number
M11	SS output motor	Upper paper feed assembly (RM2-6810-000CN)
M12	SS feed motor	Lower paper feed assembly (RM2-6815-000CN)
M14	Jogger motor	Jog assembly (RM2-1066-000CN)
M15	Y alignment motor	Upper paper feed assembly (RM2-6810-000CN)
M16	Staple motor	Stapler assembly (RK2-8148-000CN)
M17	Lifter motor	Upper paper feed assembly (RM2-6810-000CN)
SL11	Inlet flapper solenoid	Lower paper feed assembly (RM2-6815-000CN)
SL12	Stamp solenoid	Lower paper feed assembly (RM2-6815-000CN)
SL13	Output bin 2 flapper solenoid	Lower paper feed assembly (RM2-6815-000CN)

Figure 3-50 SSMBM sensors and switches

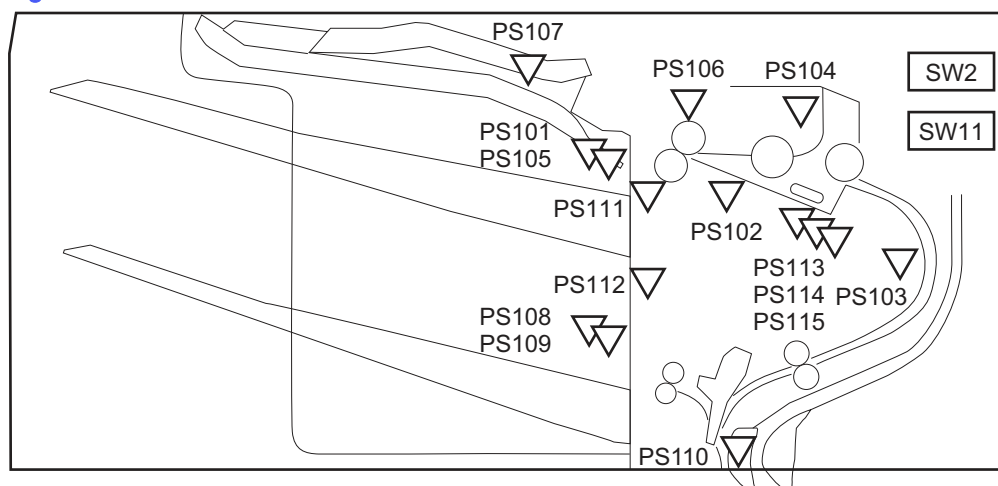


Table 3-36 SSMBM sensors and switches

Abbreviation	Component	Replacement part number
PS101	Bin 1 media presence sensor	Upper paper feed assembly (RM2-6810-000CN)
PS102	SS exit sensor	Upper paper feed assembly (RM2-6810-000CN)
PS103	Staple inlet sensor	Stapler assembly (RK2-8148-000CN)
PS104	Y alignment home position sensor	Upper paper feed assembly (RM2-6810-000CN)
PS105	Bin 1 media full sensor	Jog assembly (RM2-1066-000CN)
PS106	Alienation home position sensor	Upper paper feed assembly (RM2-6810-000CN)
PS107	Jogger home position sensor	Jog assembly (RM2-1066-000CN)
PS108	Bin 2 media presence sensor	Lower paper feed assembly (RM2-6815-000CN)
PS109	Bin 2 media full sensor	Lower paper feed assembly (RM2-6815-000CN)
PS110	SS inlet sensor	Lower paper feed assembly (RM2-6815-000CN)
PS111	Bin 1 upper limit sensor	Lower paper feed assembly (RM2-6815-000CN)
PS112	Bin 1 lower limit sensor	Lower paper feed assembly (RM2-6815-000CN)
PS113	Staple low sensor	Stapler assembly (RK2-8148-000CN)
PS114	Staple ready sensor	Stapler assembly (RK2-8148-000CN)
PS115	Staple home position sensor	Stapler assembly (RK2-8148-000CN)
SW2	SS door switch	Upper paper feed assembly (RM2-6810-000CN)
SW11	Staple door switch	Upper paper feed assembly (RM2-6810-000CN)

Table 3-37 SSMBM functions

Function	Applied
Mailbox mode	Yes
Stacker mode	No

Table 3-37 SSMBM functions (continued)

Function	Applied
Function separator mode	No
Job separator mode	No
Collator mode	No
Staple control	Yes
Automatic delivery	Yes

4 Solve problems

Learn about solving printer problems.

HP service and support

Learn about HP access to additional service and support information.

Additional service and support for channel partners

Channel partners go to partner.hp.com, and then use the steps below to access the HP Web-based Interactive Search Engine (WISE).



[View a video of how to use the HP Partner First Portal to access WISE.](#)

Access WISE for Channel partners

1. Select [Services & Support](#) (near the top of the screen).
2. Under [Services Delivery](#), select [Technical Support](#).
3. Select [Technical Documentation](#).

Find information about the following topics

- Service manuals
- Service advisories
- Up-to-date control panel message (CPMD) troubleshooting
- Solutions for printer issues and emerging issues
- Remove and replace part instructions and videos
- Install and configure
- Printer specifications
- Warranty and regulatory information

Additional service and support for HP internal personnel

HP internal personnel, go to one of the following Web-based Interactive Search Engine (WISE) sites:



[View a video of how to access WISE for internal HP users.](#)

Americas (AMS)

- [WISE - English](#)
- [WISE - Spanish](#)
- [WISE - Portuguese](#)
- [WISE - French](#)

Asia Pacific / Japan (APJ)

- [WISE - English](#)
- [WISE - Japanese](#)
- [WISE - Korean](#)
- [WISE - Chinese \(simplified\)](#)
- [WISE - Chinese \(traditional\)](#)
- [WISE - Thai](#)

Europe / Middle East / Africa (EMEA)

- [WISE - English](#)

Additional technical support WISE videos

The videos below provide additional ways to access printer information using WISE.



[View a video of how to use WISE to find technical support videos \(model number search\).](#)



[View a video of ow to use WISE to find technical support videos \(Product detail page \[PDP\] search\).](#)

Manually unlocking the front or left doors (managed printers)

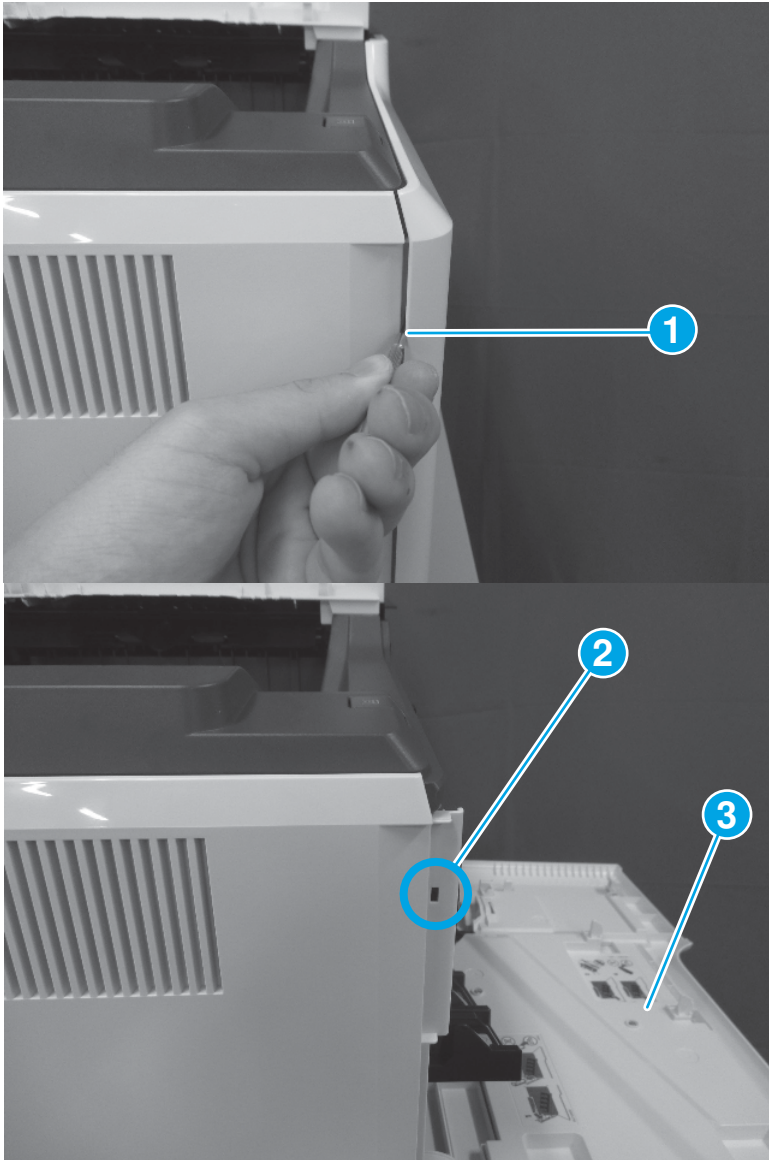
Learn about manually unlocking the front door.

If there is an issue with the front door locks, use the following procedure to manually disengage them.

Manually unlock the front door

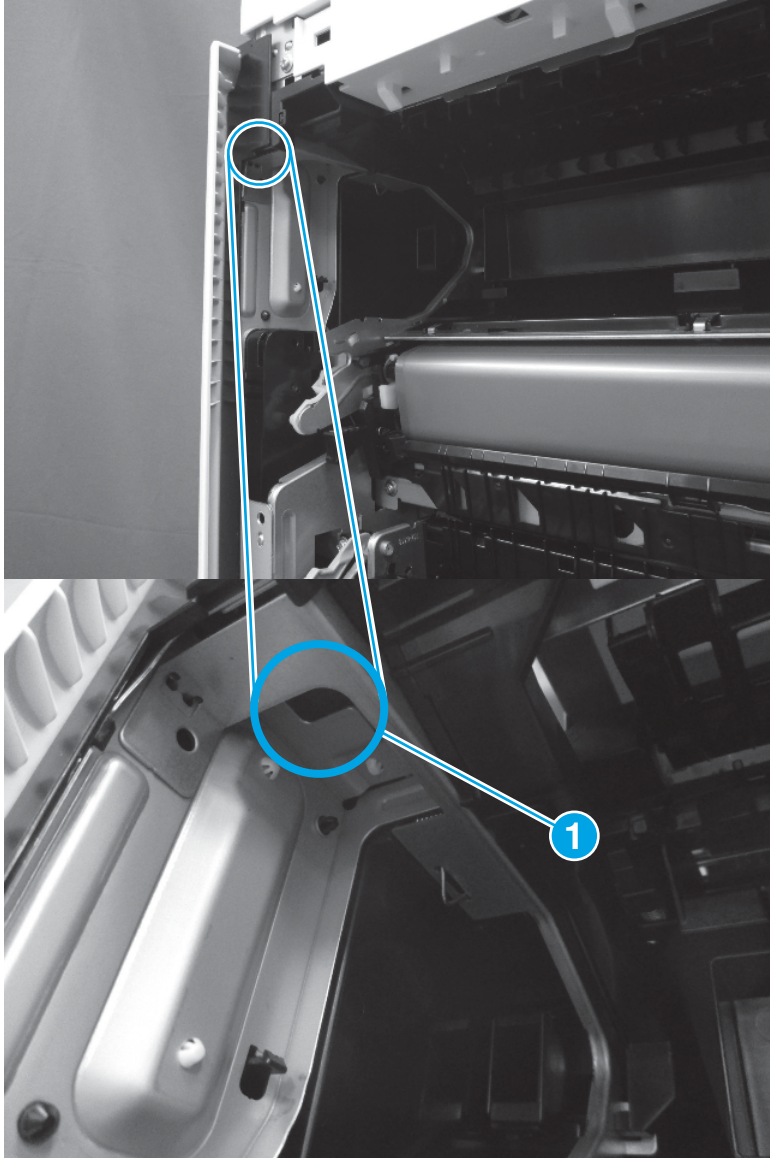
1. On the front side of the left door, insert a small, sharp tool (callout 1), such as a precision flat-blade screwdriver into the hole (callout 2) on the left door to unlock the front door (callout 3) at the left side.

Figure 4-1 Unlock the front door (1 of 3)



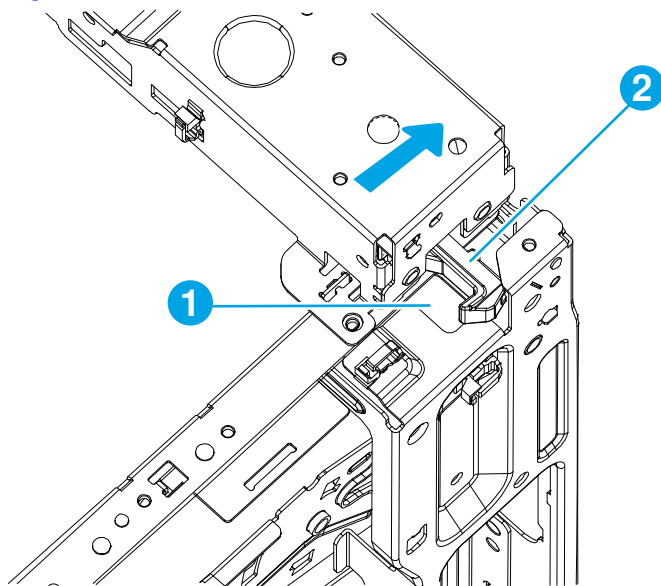
2. Open the right door, and locate the gap (callout 1) in the upper left area.

Figure 4-2 Unlock the front door (2 of 3)



3. Insert your finger in the gap (callout 1), and then push the lever (callout 2) in the direction indicated to unlock the front door at the right side.

Figure 4-3 Unlock the front door (3 of 3)



Solve problems checklist

When the printer malfunctions or encounters an unexpected situation, the printer control panel alerts the user to the situation.

If the printer is not correctly functioning, complete the steps (in the order given) in the following checklist. If the printer fails a checklist step, follow the corresponding troubleshooting suggestions for that step. If a checklist step resolves the problem, skip the remaining checklist items.

1. If the control panel is blank or black, check the following before proceeding:
 - Check to make sure that the printer is not in Sleep mode (tap the touchscreen control panel or press a button on the LCD control panel).
 - Check the power cable.
 - Check that the power is turned on.
 - Make sure that the line voltage is correct for the printer power configuration. (See the label that is on the back of the printer for voltage requirements.) If a power strip is in use, and its voltage is not within specifications, connect the printer directly into the electrical outlet. If it is already connected into the specifications, connect the printer directly into the electrical outlet. If it is already connected into the outlet, try a different outlet.



NOTE: The following conditions indicate that the printer has frozen while in Sleep mode. Opening a door, tapping the control panel (touchscreen control panels), or pressing a control panel button (LCD control panels) causes the printer to wake up from Sleep mode.

If the control panel is not responding to touch (touchscreen control panels), or if it appears black or blank, try the following:

- a. Turn the printer power off, and then on again.
- b. Verify that the control panel is correctly functioning by accessing the control panel diagnostics. See the control panel checks section of this manual.



TIP: The LED on the formatter will blink if the control panel is not detected or the cables are not properly seated.

If the control panel does not respond to the diagnostic button, try the following:

- Try printing from a host computer. Does the printer print a test page?
- Is the printer HP Embedded Web Server (EWS) accessible?
- Turn the power off.
- Reseat the cable connections on the bottom of the control panel assembly and the control panel connectors at the formatter.
- Turn the printer power on, and then check for functionality of the control panel by tapping the touchscreen or pressing a button on the LCD control panel.

If the error persists, replace the control panel assembly.

2. The control panel should indicate a [Ready](#), [Paused](#), or [Sleep mode](#) on status. If an error message displays, resolve the error.
3. For network connection errors, check the cables.
 - a. Check the network cable connections between the printer and the computer or network port. Make sure that the connections are secure.



NOTE: The network LEDs should be illuminated and flashing.

- b. Make sure that the cables are not faulty by trying different cables, if possible.
 - c. Check the network connection. Verify that the port is active.
4. Print a configuration page. If the printer is connected to a network, an HP Jetdirect page also prints.

Print a configuration page from a touchscreen control panel

- a. From the Home screen on the printer control panel, select [Reports](#).
- b. Select [Configuration/Status Pages](#).
- c. Select [Configuration Page](#).



TIP: Multiple report pages can be selected, and then printed together.


- d. Select [Print](#) to print the pages.

Print a configuration page from an LCD control panel


- a. From the Home screen on the printer control panel, use the arrow buttons to navigate to [Reports](#), and then select [OK](#).
- b. Open the following menus:
 - [Configuration/Status Pages](#)

- [Configuration Page](#)

c. Select [Print](#), and then select [OK](#) to print the pages.

 **TIP:** Multiple report pages can be selected, and then printed together.

If the pages do not print, check that at least one tray contains paper.

 **TIP:** Make sure that the selected paper size and type meet HP specifications. Also open the [Trays](#) menu on the printer control panel and verify that the tray is configured correctly for the paper type and size.

If the page jams in the printer, follow the instructions on the control panel to clear the jam.

If the page does not print correctly, the problem is with the printer hardware.

If the page prints correctly, the printer hardware is working. The problem is with the host computer, with the print driver, or with the program.

5. Print a supplies status page and then check that the maintenance items below are not at their end-of-life.

 **TIP:** If a maintenance item needs to be replaced, order the part number provided below.


Print a supplies status page from a touchscreen control panel

a. From the Home screen on the printer control panel, select [Reports](#).

b. Open the following menus:

- [Configuration/Status Pages](#)
- [Supplies Status Page](#)

c. Select [Print](#) to print the page, and then check the maintenance items (listed below in this step).

 **TIP:** Multiple report pages can be selected, and then printed together.


Print a supplies status page from an LCD control panel


a. From the Home screen on the printer control panel, use the arrow buttons to navigate to [Reports](#), and then select [OK](#).

b. Open the following menus:

- [Configuration/Status Pages](#)
- [Supplies Status Page](#)

c. Select [Print](#), and then select [OK](#) to print the page, and then check the maintenance items (listed below in this step).

 **TIP:** Multiple report pages can be selected, and then printed together.

 **NOTE:** HP long-life consumables and maintenance kit life specifications are estimations. Actual individual life/yield during normal use varies depending on usage, environment, media, and other factors. Estimated life is not an implied guarantee or warrantable.

- Fuser assembly; estimated life: 150,000 pages
RM2-1928-000CN (110V)
RM2-1929-000CN (220V)
 - Document feeder maintenance kit; estimated life: 150,000 pages
5851-7202
6. Verify that the correct print driver for this printer is installed. Check the program to make sure that the print driver for this printer is used.
- See www.hp.com/support/colorljM652 or www.hp.com/support/colorljM653 or www.hp.com/support/ljE65050 or www.hp.com/support/ljE65060 or www.hp.com/support/colorljE65150 or www.hp.com/support/colorljE65160 or www.hp.com/support/colorljM681MFP or www.hp.com/support/colorljM682MFP or www.hp.com/support/ljE67550MFP or www.hp.com/support/ljE67560MFP or www.hp.com/support/colorljE67650MFP or www.hp.com/support/colorljE67660MFP
7. Print a short document from a different program that has worked in the past. If this solution works, the problem is with the program. If this solution does not work (the document does not print), complete these steps:
- a. Try printing the job from another computer that has the printer software installed.
 - b. If the printer is connected to the network, connect the printer directly to a host computer with a USB cable. Redirect the printer to the correct port, or reinstall the software (make sure to select the new connection type).

Print a configuration report

Learn about the printing a configuration report.



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

Print the configuration page from a touchscreen control panel

1. From the Home screen on the printer control panel, select [Reports](#).
2. Select [Configuration/Status Pages](#).
3. Select [Configuration Page](#).
4. Select [Print](#) to print the pages.




TIP: Multiple report pages can be selected, and then printed together.

Print the configuration page from an LCD control panel

1. From the Home screen on the printer control panel, use the arrow buttons to navigate to [Reports](#), and then select [OK](#).
2. Select [Configuration/Status Pages](#), and then select [OK](#).
3. Select [Configuration Page](#), and then select [OK](#).

4. Select [Print](#), and then select [OK](#) to print the pages.

 **TIP:** Multiple report pages can be selected, and then printed together.


Print a settings menu map

Learn about the printing a settings menu map.

To more easily navigate individual settings, print a report of the complete menu system.


Print the menu map from a touchscreen control panel

1. From the Home screen on the printer control panel, select [Reports](#).
2. Select [Configuration/Status Pages](#).
3. Select [Settings Menu Map](#).
4. Select [Print](#) to print the pages.

 **TIP:** Multiple report pages can be selected, and then printed together.

Print the menu map from an LCD control panel

1. From the Home screen on the printer control panel, use the arrow buttons to navigate to [Reports](#), and then select [OK](#).
2. Select [Configuration/Status Pages](#), and then select [OK](#).
3. Select [Settings Menu Map](#), and then select [OK](#).
4. Select [Print](#), and then select [OK](#) to print the pages.

 **TIP:** Multiple report pages can be selected, and then printed together.


Print a current settings page

Learn about the printing a current settings page.

Printing the current settings page provides a map of the user configurable settings that might be helpful in the troubleshooting process.

Print the current settings page from a touchscreen control panel

1. From the Home screen on the printer control panel, select [Reports](#).
2. Select [Configuration/Status Pages](#).
3. Select [Current Settings Page](#).
4. Select [Print](#) to print the pages.

 **TIP:** Multiple report pages can be selected, and then printed together.

Print the current settings page from an LCD control panel

1. From the Home screen on the printer control panel, use the arrow buttons to navigate to [Reports](#), and then select [OK](#).

2. Select [Configuration/Status Pages](#), and then select [OK](#).
3. Select [Current Settings Page](#), and then select [OK](#).
4. Select [Print](#), and then select [OK](#) to print the pages.



TIP: Multiple report pages can be selected, and then printed together.

Print an event log

Learn about the printing an event log.

Printing the event log might be helpful in the troubleshooting process. For more information, see the Control Panel Messages Document (CPMD) section in this manual.

Print the event log from the Troubleshooting menu from a touchscreen control panel

1. From the Home screen on the printer control panel, select [Support Tools](#).
2. Select [Troubleshooting](#).
3. Select [Event Log](#).
4. The event log displays on the screen. Select [Print](#) to print the pages.

Print the event log from the Troubleshooting menu from an LCD control panel

1. From the Home screen on the printer control panel, use the arrow buttons to navigate to [Support Tools](#), and then select [OK](#).
2. Select [Troubleshooting](#), and then select [OK](#).
3. Select [Event Log](#), and then select [OK](#).
4. Select [Print](#), and then select [OK](#) to print the pages.

Print the event log from the Service menu from a touchscreen control panel

1. From the Home screen on the printer control panel, select [Support Tools](#).
2. Select [Service](#).
3. On the sign-in screen, select the [Service Access Code](#) option from the drop-down list.
4. Enter the following service access code for the printer:
 - 05065217 (M652/E65050/E65150)
 - 05065317 (M653/E65060/E65160)
 - 05068117 (M681/E67550/E67650)
 - 05068217 (M682/E67560/E67660)
5. Select [Event Log](#).
6. The event log displays on the screen. Select [Print](#) to print the page.

Print the event log from the Service menu from an LCD control panel

1. From the Home screen on the printer control panel, use the arrow buttons to navigate to [Support Tools](#), and then select [OK](#).
2. Select [Service](#), and then select [OK](#).
3. On the sign-in screen, select [Service Access Code](#) from the drop-down list.
4. Enter the following service access code for the printer:
 - 05065217 (M652/E65050/E65150)
 - 05065317 (M653/E65060/E65160)
 - 05068117 (M681/E67550/E67650)
 - 05068217 (M682/E67560/E67660)
5. Select [Event Log](#).
6. Select [Print](#), and then select [OK](#) to print the page.

Clear the event log from a touchscreen control panel

1. From the Home screen on the printer control panel, select [Support Tools](#).
2. Select [Service](#).
3. On the sign-in screen, select the [Service Access Code](#) option from the drop-down list.
4. Enter the following service access code for the printer:
 - 05065217 (M652/E65050/E65150)
 - 05065317 (M653/E65060/E65160)
 - 05068117 (M681/E67550/E67650)
 - 05068217 (M682/E67560/E67660)
5. Select [Event Log](#).
6. Select [Clear](#), and then select [OK](#).

Clear the event log from an LCD control panel

1. From the Home screen on the printer control panel, use the arrow buttons to navigate to [Support Tools](#), and then select [OK](#).
2. Select [Service](#), and then select [OK](#).
3. On the sign-in screen, select [Service Access Code](#) from the drop-down list.
4. Enter the following service access code for the printer:
 - 05065217 (M652/E65050/E65150)
 - 05065317 (M653/E65060/E65160)
 - 05068117 (M681/E67550/E67650)
 - 05068217 (M682/E67560/E67660)

5. Select **Event Log**.
6. Select **Clear**, and then select **OK**.

Pre-boot menu options

The **Pre-boot** menus are available prior to the printer initializing.

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 unless it is specified as a solution in the CPMD.

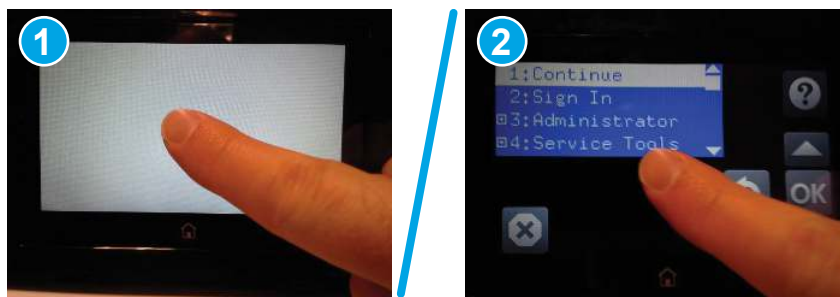
TIP: The **Pre-boot** menu is also remotely accessible by using a telnet network protocol (Remote Admin) to establish an administration connection to the printer.

Open the Pre-boot menu from a touchscreen control panel

Use the following procedure to open the **Pre-boot** menu from a touchscreen control panel.

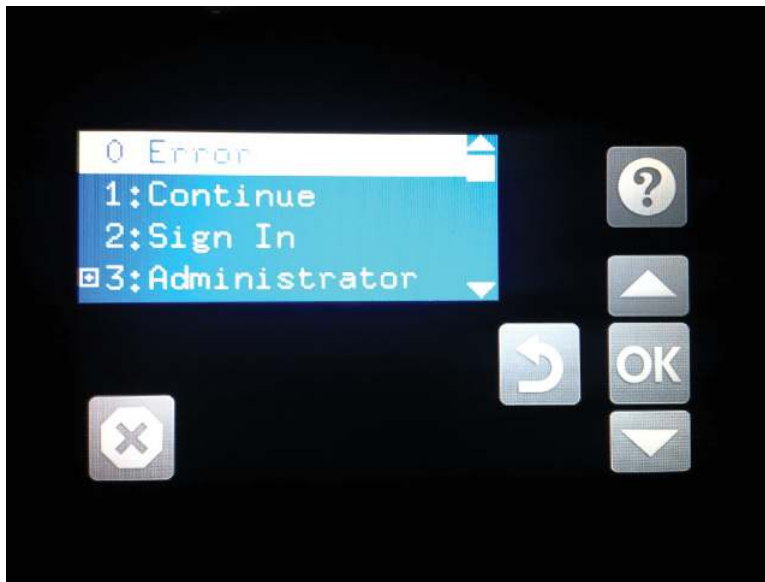
1. Turn the printer on.
2. Touch the middle of the control-panel display when you see the **1/8** under the logo.







Figure 4-4 Open the **Pre-boot** menu



- On the **Pre-boot** menu screen, use the following buttons to navigate the tests.

Figure 4-5 Pre-boot menu




Button	Description
	Use this button to see more information about a selected item.
	Use this button to scroll up through menu items.
	Use this button to select a highlighted menu item.
	Use this button to scroll down through menu items.
	Use this button to go back to the previous menu.
	Not used.

- Use the arrow buttons on the touchscreen to navigate the **Pre-boot** menu.
- Touch the **OK** button to select a menu item.

Open the Pre-Boot menu from an LCD control panel

Use the following procedure to open the **Pre-Boot** menu from an LCD control panel.

1. Turn the printer on.
2. Press the **Cancel**  button when you see the **1/8** under the logo.
3. Use the arrow buttons on the control panel to navigate the **Pre-Boot** menu.
4. Press the **OK** button to select a menu item.

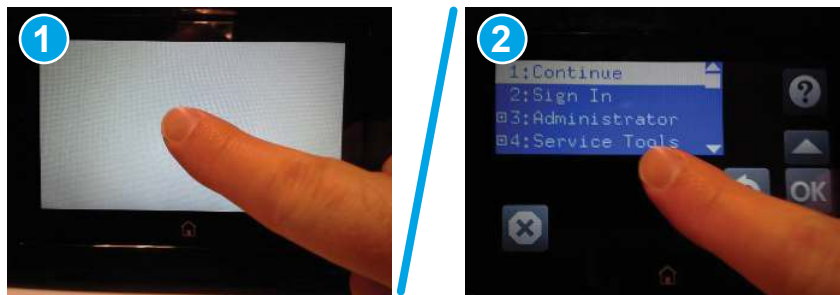
Cold reset using the Pre-boot menu from a touchscreen control panel

Use the following procedure to perform a cold reset using the **Pre-boot** menu from a touchscreen control panel.


CAUTION: This procedure resets all printer configurations and settings to factory defaults (customer configurations and settings are lost).

1. Touch the middle of the control-panel display when you see the **1/8** under the logo.

Figure 4-6 Open the **Pre-boot** menu




2. Use the down arrow ▼ button to highlight the **+3:Administrator** item, and then touch the **OK** button.
3. Use the down arrow ▼ button to highlight the **+8:Startup Options** item, and then touch the **OK** button.
4. Use the down arrow ▼ button to highlight the **2 Cold Reset** item, and then touch the **OK** button to select it.
5. Touch the Home button to return to the main **Pre-boot** menu and highlight the **1:Continue** item, and then touch the **OK** button.

 **NOTE:** The printer will initialize.


Cold reset using the Pre-boot menu from an LCD control panel

Use the following procedure to perform a cold reset using the **Pre-boot** menu from an LCD control panel.

CAUTION: This procedure resets all printer configurations and settings to factory defaults (customer configurations and settings are lost).

1. Press the **Cancel**  button when you see the **1/8** under the logo.
2. Use the down arrow ▼ button to highlight the **+3:Administrator** item, and then press the **OK** button.

3. Use the down arrow ▼ button to highlight the **+8:Startup Options** item, and then press the **OK** button.
4. Use the down arrow ▼ button to highlight the **2 Cold Reset** item, and then press the **OK** button to select it.
5. Touch the Home button to return to the main **Pre-boot** menu and highlight the **1:Continue** item, and then touch the **OK** button.

 **NOTE:** The printer will initialize.


 **NOTE:** Some of the pre-boot options in the following tables are not supported by the current version of the printer firmware and are included for information only. Future versions of firmware will support these options.

Table 4-1 Pre-boot menu options (1 of 7)

Menu option	First level	Second level	Third level	Description
Continue				<p>Selecting the Continue item exits the Pre-boot menu and continues the normal boot process.</p> <p>If a selection is not made in the initial menu within 30 seconds, the printer returns to a normal boot (the same as selecting Continue).</p> <p>If the user navigates to another menu, the timeout does not apply.</p>
Sign In				Enter the administrator PIN or service PIN if one is required to open the Pre-boot menu.
Administrator				<p>This item navigates to the Administrator submenus.</p> <p>If authentication is required (and the user is not already signed in) the Sign In prompt displays. The user is required to sign in.</p>
Administrator	Download	Network	USB USB Thumbdrive	This item initiates a Pre-boot firmware download process. A USB Thumbdrive option will work on all FutureSmart printers. USB or Network connections are not currently supported.
Administrator	Format Disk			<p>This item reinitializes the disk and cleans all disk partitions.</p> <p>CAUTION: Selecting the Format Disk item removes all data.</p> <p>A delete confirmation prompt is not provided.</p> <p>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.</p>

Table 4-1 Pre-boot menu options (1 of 7) (continued)

Menu option	First level	Second level	Third level	Description
Administrator	Partial Clean			<p>This item reinitializes the disk (removing all data except the firmware repository where the master firmware bundle is downloaded and saved).</p> <p>CAUTION: Selecting the Partial Clean item removes all data except the firmware repository. A delete confirmation prompt is not provided.</p> <p>CAUTION: This procedure resets all printer configurations and settings to factory defaults (customer configurations and settings are lost).</p> <p>This allows a user to reformat the disk by removing the firmware image from the active directory without having to download new firmware code (printer remains bootable).</p>
Administrator	Change Password			Select this item to set or change the administrator password.
Administrator	Clear Password			<p>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.</p> <p>When the confirmation prompt displays, press the OK button to clear the password.</p>

Table 4-2 Pre-boot menu options (2 of 7)

Menu option	First level	Second level	Third level	Description
Administrator (continued)	Manage Disk	Clear disk		Select the Clear disk item to enable 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.
Administrator	Manage Disk	Lock Disk		<p>Select the Lock Disk item to lock (mate) a new secure disk to this printer.</p> <p>The secure disk already locked to this printer will remain accessible to this printer. Use this function to have more than one encrypted disk accessible by the printer when using them interchangeably.</p> <p>The data stored on the secure disk locked to this printer always remains accessible to this printer.</p>
Administrator	Manage Disk	Leave Unlocked		<p>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 printer will remain accessible to this printer and uses the old disk's encryption password with the new disk.</p> <p>The secure disk that is already locked to this printer remains accessible to this printer.</p>

Table 4-2 Pre-boot menu options (2 of 7) (continued)

Menu option	First level	Second level	Third level	Description
Administrator	Manage Disk	Clear Disk Pwd		Select the Clear Disk Pwd 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.
Administrator	Manage Disk	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.
Administrator	Manage Disk	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.
Administrator	Manage Disk	Boot Device	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 printer. 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.
Administrator	Manage Disk	Boot Device	Get Status	This item provides disk status information if any is available.

Table 4-3 Pre-boot menu options (3 of 7)

Menu option	First level	Second level	Third level	Description
Administrator (continued)	Manage Disk (continued)	Internal Device		Select the Internal Device item to erase the internal device or get a status about the internal device.
Administrator	Manage Disk	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.
Administrator	Manage Disk	Internal Device	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 printer. NOTE: The system will be unusable until the system files are reinstalled. The HP High Performance Secure Hard Disk is erased.
Administrator	Manage Disk	Internal Device	Get Status	This item provides disk status information if any is available.

Table 4-3 Pre-boot menu options (3 of 7) (continued)

Menu option	First level	Second level	Third level	Description
Administrator	Manage Disk	External Device		Select the External Device item to erase the external device or get status about the external device.
Administrator	Manage Disk	External 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.
Administrator	Manage Disk	External Device	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 printer. 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.
Administrator	Manage Disk	External Device	Get Status	This item provides disk status information if any is available.

Table 4-4 Pre-boot menu options (4 of 7)

Menu option	First level	Second level	Third level	Description
Administrator (continued)	Configure LAN NOTE: This configuration is only active when the Pre-boot menu is open.	IP Mode [DHCP]		The network can be configured to obtain the network settings from a DHCP server or as static. Use this item for automatic IP address acquisition from the DHCP server.
Administrator	Configure LAN NOTE: This configuration is only active when the Pre-boot menu is open.	IP Mode [STATIC]		Use this item to manually assign the network addresses.
Administrator	Configure LAN NOTE: This configuration is only active when the Pre-boot menu is open.	IP Mode [STATIC]	IP Address	Use this item to manually enter the IP addresses.
Administrator	Configure LAN NOTE: This configuration is only active when the Pre-boot menu is open.	IP Mode [STATIC]	Subnet Mask	Use this item to manually enter the subnet mask.

Table 4-4 Pre-boot menu options (4 of 7) (continued)

Menu option	First level	Second level	Third level	Description
Administrator	Configure LAN NOTE: This configuration is only active when the Pre-boot menu is open.	IP Mode [STATIC]	Default Gateway	Use this item to manually enter the default gateway.
Administrator	Configure LAN NOTE: This configuration is only active when the Pre-boot menu is open.	IP Mode [STATIC]	Save	Select the Save item to save the manual settings.

Table 4-5 Pre-boot menu options (5 of 7)

Menu option	First level	Second level	Third level	Description
Administrator (continued)	Startup Options			Select the Startup Options item to specify options that can be set for the next time the printer is turned on and initializes to the Ready state.
Administrator	Startup Options	Show Revision		Not currently functional: Select the Show Revision item to allow the printer to initialize and show the firmware version when the printer reaches the Ready state. Once the printer power is turned on the next time, the Show Revision item is unchecked so that the firmware revision is not shown.
Administrator	Startup Options	Cold Reset		Select the Cold Reset item to clear the IP address and all customer settings. (This item also returns all settings to factory defaults.) NOTE: Items in the Service menu are not reset.
Administrator	Startup Options	Skip Disk Load		Select the Skip Disk Load item to disable installed third-party applications.
Administrator	Startup Options	Skip Cal		Select the Skip Cal item to skip the printer calibration for the very next power-initialization cycle only.
Administrator	Startup Options	Lock Service		CAUTION: Select the Lock Service item to lock the Service menu access (both in the Pre-boot menu and the Device Maintenance menu). Service personnel must have the administrator remove the Lock Service setting before they can open the Service menu.
Administrator	Startup Options	Skip FSCK		Select the Skip FSCK item to disable Chkdisk/ScanVolume during startup.

Table 4-5 Pre-boot menu options (5 of 7) (continued)

Menu option	First level	Second level	Third level	Description
Administrator	Startup Options	First Power		<p>Not currently functional: This item allows the printer to initialize as if it is the first time it has been turned on.</p> <p>For example, the user is prompted to configure first-time settings like date/time, language, and other settings.</p> <p>Select this item so that it is enabled for the next time the printer power is turned on.</p> <p>When the printer 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.</p>
Administrator	Startup Options	Embedded Jetdirect Off		<p>Select the Embedded Jetdirect Off item to disable the embedded HP Jetdirect.</p> <p>By default this item is unchecked so that HP Jetdirect is always enabled.</p>
Administrator	Startup Options	WiFi Accessory		<p>Select the WiFi Accessory item to enable the wireless accessory.</p>

Table 4-6 Pre-boot menu options (6 of 7)

Menu option	First level	Second level	Third level	Description
Administrator (continued)	Diagnostics			<p>Diagnostics items are useful to diagnose hardware components and their interface connections. Use these items to troubleshoot specific hardware components, and the interface between them and other components.</p>
Administrator	Diagnostics	Memory	Do Not Run	<p>Use the Do Not Run item to exclude the Memory diagnostic when executing multiple diagnostics.</p>
Administrator	Diagnostics		Short	<p>Use the Short item to select a brief memory test.</p> <p>NOTE: This test requires about four minutes to execute.</p>
Administrator	Diagnostics		Long	<p>Use the Long item to select an extended memory test.</p> <p>NOTE: This test requires about twenty minutes to execute.</p>
Administrator	Diagnostics	Disk	Do Not Run	<p>Use the Do Not Run item to exclude the Disk diagnostic when executing multiple diagnostics.</p>
Administrator	Diagnostics		Short	<p>Use the Short item to select a brief firmware self-test.</p> <p>NOTE: This test requires about two or three minutes to execute.</p>
Administrator	Diagnostics		Long	<p>Use the Long item to select an extended firmware self-test.</p> <p>NOTE: This test requires about sixty minutes to execute.</p>

Table 4-6 Pre-boot menu options (6 of 7) (continued)

Menu option	First level	Second level	Third level	Description
Administrator	Diagnostics		Optimized	Use the Optimized item to select a test that checks the active sectors on the disk. NOTE: This test requires about thirty minutes to execute.
Administrator	Diagnostics		Raw	Use the Raw item to select a test that checks every sector on the disk. NOTE: This test requires about fifty minutes to execute.
Administrator	Diagnostics		Smart	Use the Smart item to select a very brief test that checks the drive self-monitoring analysis and reporting technology (SMART) status—the drive detects and reports reliability indicators to help anticipate disk failures (SMART status).
Administrator	Diagnostics	CPB		Use the CPB item to verify the integrity of the copy processor board (CPB) and the formatter PCA connections.
Administrator	Diagnostics	Interconnect		Use the Interconnect item to verify the integrity of the interconnect PCA (ICB) and its connections.
Administrator	Diagnostics	Run Selected		Select the Run Selected item to execute a selected test. NOTE: If more than one test is selected, they are executed in sequence.

Table 4-7 Pre-boot menu options (7 of 7)

Menu option	First level	Second level	Third level	Description
Administrator (continued)	Remote Admin	Start Telnet		The Remote Admin item allows a service technician to access to the printer Pre-boot menu remotely, and to navigate the menu selections from a remote location. IMPORTANT: A Remote Admin connection must be initiated by a person that is physically present at the printer. This person will also need to provide a randomly generated PIN to the remote service technician. NOTE: For more information about using the Remote Admin function, see "Remote Admin (M506/M507/E50145, M527/M528/E52645)" in the Troubleshooting Manual.
Administrator	Remote Admin	Stop Telnet		
Administrator	Remote Admin	Refresh IP		
Administrator	System Triage	Copy Logs		If the device will not boot to the Ready state, or the diagnostic log feature found in the Troubleshooting menu is not accessible, then use the System Triage item to copy the diagnostic logs to a USB flash drive at the next printer start up. The files can then be sent to HP to help diagnose the problem.

Table 4-7 Pre-boot menu options (7 of 7) (continued)

Menu option	First level	Second level	Third level	Description
Administrator	Change Svc PWD			Use this item to change the Service menu personal identification number (PIN).
Administrator	Reset Svc PWD			If the Service menu personal identification number (PIN) has been changed. Use this item to reset it to the original PIN.
Service Tools	Reset Password			Use this item to reset the Pre-boot administrator password.
Service Tools	Subsystems			For manufacturing use only. Do not change these values.
Developer Tools	Netexec			

Pre-boot menu options

Learn about the Pre-boot menu options.


 **NOTE:** Some of the pre-boot options in the following tables are not supported by the current version of the printer firmware and are included for information only. Future versions of firmware will support these options.

Table 4-8 Pre-boot menu options

Menu option	First level	Second level	Third level	Description
Continue				<p>Selecting the Continue item exits the Pre-boot menu and continues the normal boot process.</p> <p>If a selection is not made in the initial menu within 30 seconds, the printer returns to a normal boot (the same as selecting Continue).</p> <p>If the user navigates to another menu, the timeout does not apply.</p>
Sign In				Enter the administrator PIN or service PIN if one is required to open the Pre-boot menu.
Administrator				<p>This item navigates to the Administrator submenus</p> <p>If authentication is required (and the user is not already signed in) the Sign In prompt displays. The user is required to sign in.</p>
Administrator	Download	Network USB USB Thumb-drive		This item initiates a Pre-boot firmware download process. A USB Thumb-drive option will work on all FutureSmart printers. USB or Network connections are not currently supported.
Administrator	Format Disk			<p>This item re-initializes the disk and cleans all disk partitions.</p> <p>CAUTION: Selecting the Format Disk item removes all data.</p> <p>A delete confirmation prompt is not provided</p> <p>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.</p>

Table 4-8 Pre-boot menu options (continued)

Menu option	First level	Second level	Third level	Description
Administrator	Partial Clean			<p>This item reinitializes the disk (removing all data except the firmware repository where the master firmware bundle is downloaded and saved).</p> <p>CAUTION: Selecting the Partial Clean item removes all data except the firmware repository. A delete confirmation prompt is not provided.</p> <p>CAUTION: This procedure resets all printer configurations and settings to factory defaults (customer configurations and settings are lost).</p> <p>This allows a user to reformat the disk by removing the firmware image from the active directory without having to download new firmware code (printer remains bootable).</p>
Administrator	Change Password			Select this item to set or change the administrator password.
Administrator	Clear Password			<p>Select the Clear Password item to remove a password from the control panel menus. Before the password is actually cleared, a message will be shown asking to confirm that the password should be cleared. Select OK to confirm the action.</p> <p>When the confirmation prompt displays, select OK to clear the password.</p>
Administrator	Manage Disk	Clear disk		Select the Clear disk item to enable 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.
Administrator	Manage Disk	Lock Disk		<p>Select the Lock Disk item to lock (mate) a new secure disk to this printer.</p> <p>The secure disk already locked to this printer will remain accessible to this printer. Use this function to have more than one encrypted disk accessible by the printer when using them interchangeably.</p> <p>The data stored on the secure disk locked to this printer always remains accessible to this printer.</p>
Administrator	Manage Disk	Leave Unlocked		<p>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 printer will remain accessible to this printer and uses the old disk's encryption password with the new disk.</p> <p>The secure disk that is already locked to this printer remains accessible to this printer.</p>
Administrator	Manage Disk	Clear Disk Pwd		<p>Select the Clear Disk Pwd item to continue using the non-secure disk and clear the password associated with the yet-to-be installed secure disk.</p> <p>CAUTION: Data on the missing secure disk will be permanently inaccessible.</p>
Administrator	Manage Disk	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.

Table 4-8 Pre-boot menu options (continued)

Menu option	First level	Second level	Third level	Description
Administrator	Manage Disk	Boot Device	Secure Erase	<p>Select the Secure Erase item to erase all of the data on the disk and unlock it if required.</p> <p>This might take a long time.</p> <p>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.</p>
Administrator	Manage Disk	Boot Device	Erase/Unlock	<p>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 printer.</p> <p>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.</p>
Administrator	Manage Disk	Boot Device	Get Status	<p>This item provides disk status information if any is available.</p>
Administrator	Manage Disk	Internal Device		<p>Select the Internal Device item to erase the internal device or get a status about the internal device.</p>
Administrator	Manage Disk	Internal Device	Secure Erase	<p>Select the Secure Erase item to erase all of the data on the disk and unlock it if required.</p> <p>This might take a long time.</p> <p>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.</p>
Administrator	Manage Disk	Internal Device	Erase/Unlock	<p>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 printer.</p> <p>NOTE: The system will be unusable until the system files are reinstalled. It erases the encryption key. The HP High Performance Secure Hard Disk is erased.</p>
Administrator	Manage Disk	Internal Device	Get Status	<p>This item provides disk status information if any is available.</p>
Administrator	Manage Disk	External Device		<p>Select the External Device item to erase the external device or get status about the external device.</p>
Administrator	Manage Disk	External Device	Secure Erase	<p>Select the Secure Erase item to erase all of the data on the disk and unlock it if required.</p> <p>This might take a long time.</p> <p>NOTE: The system will be unusable until the system files are reinstalled.</p> <p>The ATA secure-erase command erases the entire disk, including firmware. The disk remains an encrypted disk.</p>

Table 4-8 Pre-boot menu options (continued)

Menu option	First level	Second level	Third level	Description
Administrator	Manage Disk	External Device	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 printer. 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.
Administrator	Manage Disk	External Device	Get Status	This item provides disk status information if any is available.
Administrator	Configure LAN	IP Mode [DHCP]		The network can be configured to obtain the network settings from a DHCP server or as static. Use this item for automatic IP address acquisition from the DHCP server.
Administrator	Configure LAN	IP Mode [STATIC]	IP Address Subnet Mask Default Gateway Save	Use this item to manually assign the network addresses. Use this item to manually enter the IP addresses. Use this item to manually enter the subnet mask. Use this item to manually enter the default gateway. Select the Save item to save the manual settings.
Administrator	Startup Options			Select the Startup Options item to specify options that can be set for the next time the printer is turned on and initializes to the Ready state.
Administrator	Startup Options	Show Revision		Not currently functional: Select the Show Revision item to allow the printer to initialize and show the firmware version when the printer reaches the Ready state.
Administrator	Startup Options	Cold Reset		Select the Cold Reset item to clear the IP address and all customer settings. (This item also returns all settings to factory defaults.) NOTE: Items in the Service menu are not reset.
Administrator	Startup Options	Skip Disk Load		Select the Skip Disk Load item to disable installed third-party applications.
Administrator	Startup Options	Skip Cal		Select the Skip Cal item to skip the printer calibration for the very next power-initialization cycle only.
Administrator	Startup Options	Lock Service		CAUTION: Select the Lock Service item to lock the Service menu access (both in the Pre-boot menu and the Device Maintenance menu). Service personnel must have the administrator remove the Lock Service setting before they can open the Service menu.
Administrator	Startup Options	Skip FSCK		Select the Skip FSCK item to disable Chkdisk/ScanVolume during startup.

Table 4-8 Pre-boot menu options (continued)

Menu option	First level	Second level	Third level	Description
Administrator	Startup Options	First Power		<p>Not currently functional: This item allows the printer to initialize as if it is the first time it has been turned on.</p> <p>For example, the user is prompted to configure first-time time settings like date/time, language, and other settings.</p> <p>Select this item so that it is enabled for the next time the printer power is turned on.</p> <p>When the printer 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.</p>
Administrator	Startup Options	Embedded Jetdirect Off		<p>Select the Embedded Jetdirect Off item to disable the embedded HP Jetdirect.</p> <p>By default this item is unchecked so that HP Jetdirect is always enabled.</p>
Administrator	Startup Options	WiFi Accessory		<p>Select the WiFi Accessory item to enable the wireless accessory.</p>
Administrator	Diagnostics			<p>Diagnostic items are useful to diagnose hardware components and their interface connections. Use these items to troubleshoot specific hardware components, and the interface between them and other components.</p>
Administrator	Diagnostics	Memory	Do Not Run	<p>Use the Do Not Run item to exclude the Memory diagnostic when executing multiple diagnostics.</p>
Administrator	Diagnostics	Memory	Short	<p>Use the Short item to select a brief memory test.</p> <p>NOTE: This test requires about four minutes to execute.</p>
Administrator	Diagnostics	Memory	Long	<p>Use the Long item to select an extended memory test.</p> <p>NOTE: This test requires about twenty minutes to execute.</p>
Administrator	Diagnostics	Disk	Do Not Run	<p>Use the Do Not Run item to exclude the Disk diagnostic when executing multiple diagnostics.</p>
Administrator	Diagnostics	Disk	Short	<p>Use the Short item to select a brief firmware self-test.</p> <p>NOTE: This test requires about two or three minutes to execute.</p>
Administrator	Diagnostics	Disk	Long	<p>Use the Long item to select an extended firmware self-test.</p> <p>NOTE: This test requires about sixty minutes to execute.</p>
Administrator	Diagnostics	Disk	Optimized	<p>Use the Optimized item to select a test that checks the active sectors on the disk.</p> <p>NOTE: This test requires about thirty minutes to execute.</p>
Administrator	Diagnostics	Disk	Raw	<p>Use the Raw item to select a test that checks every sector on the disk.</p> <p>NOTE: This test requires about fifty minutes to execute.</p>
Administrator	Diagnostics	Disk	Smart	<p>Use the Smart item to select a very brief test that checks the drive self-monitoring analysis and reporting technology (SMART) status—the drive detects and reports reliability indicators to help anticipate disk failures (SMART status).</p>

Table 4-8 Pre-boot menu options (continued)

Menu option	First level	Second level	Third level	Description
Administrator	Diagnostics	CPB		Use the CPB item to verify the integrity of the copy processor board (CPB) and the formatter PCA connections.
Administrator	Diagnostics	Run Selected		Select the Run Selected item to execute a selected test. NOTE: If more than one test is selected, they are executed in sequence.
Administrator	Remote Admin	Start Telnet		The Remote Admin item allows a service technician to access to the printer Pre-boot menu remotely, and to navigate the menu selections from a remote location. IMPORTANT: A Remote Admin connection must be initiated by a person that is physically present at the printer. This person will also need to provide a randomly generated PIN to the remote service technician.
Administrator	Remote Admin	Stop Telnet		
Administrator	Remote Admin	Refresh IP		
Administrator	System Triage	Copy Logs		If the printer will not boot to the Ready state, or the diagnostic log feature found in the Troubleshooting menu is not accessible, then use the System Triage item to copy the diagnostic logs to a USB flash drive at the next printer start up. The files can then be sent to HP to help diagnose the problem.
Administrator	Change Svc PWD			Use this item to change the Service menu personal identification number (PIN).
Administrator	Reset Svc PWD			If the Service menu personal identification number (PIN) has been changed, use this item to reset it to the original PIN.
Service Tools	Reset Password			Use this item to reset the Pre-boot administrator password.
Service Tools	Subsystems			For manufacturing use only. Do not change these values.
Developer Tools	Netexec			For development use only. Do not change these values.

Remote Admin

Learn about the printer Remote Admin function.


The Remote Admin feature allows remote access the printer **Pre-boot** menu (BIOS environment). The printer functions as a telnet server which uses the telnet networking protocol to transmit text data. Any computer (with telnet installed and enabled) can function as the telnet client to remotely display and interact with the **Pre-boot** menu.



IMPORTANT: While the Remote Admin function allows remote access the **Pre-boot** menu, for security reasons the Remote Admin connection must be initiated by a person that is physically present at the printer.

Required software and network connection


Before using the Remote Admin feature, make sure that the telnet network protocol is installed and enabled on the remote telnet client computer.

 **NOTE:** This section describes enabling and configuring the telnet feature for computers using a Windows® operating system.

HP recommends that the telnet client computer be a Windows-based system; however, there are other operating systems that support the telnet network protocol. For information about enabling and configuring the telnet network protocol for other operating systems, see the owner's manual for that operating system.

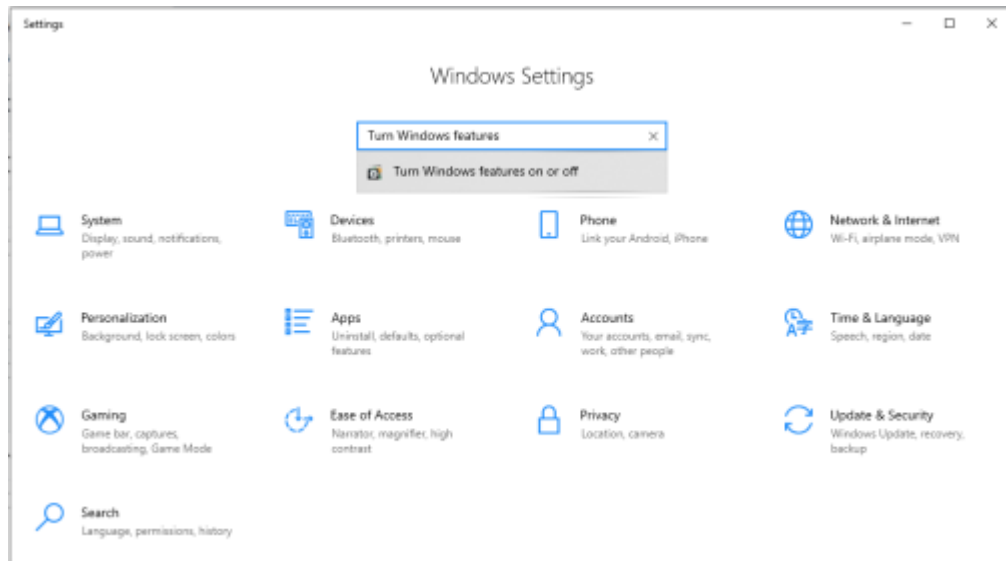
Enable the Windows telnet client

All computers using the Windows operating system have the telnet client installed, however, the telnet client function might not be enabled by default.

 **NOTE:** The figures and menus in this section are for the Windows 10® operating system. Screens and menu selections might vary slightly for other operating systems.

1. Use the **Start** menu to open the **Windows Settings** dialog box, and then search for **Turn Windows features on or off**. Click the **Turn Windows features on or off** item.

Figure 4-7 Open Windows Settings



2. In the **Windows Features** box, scroll down to **Telnet Client**. If the check box is not checked, click the box to select it, and then click the **OK** button.


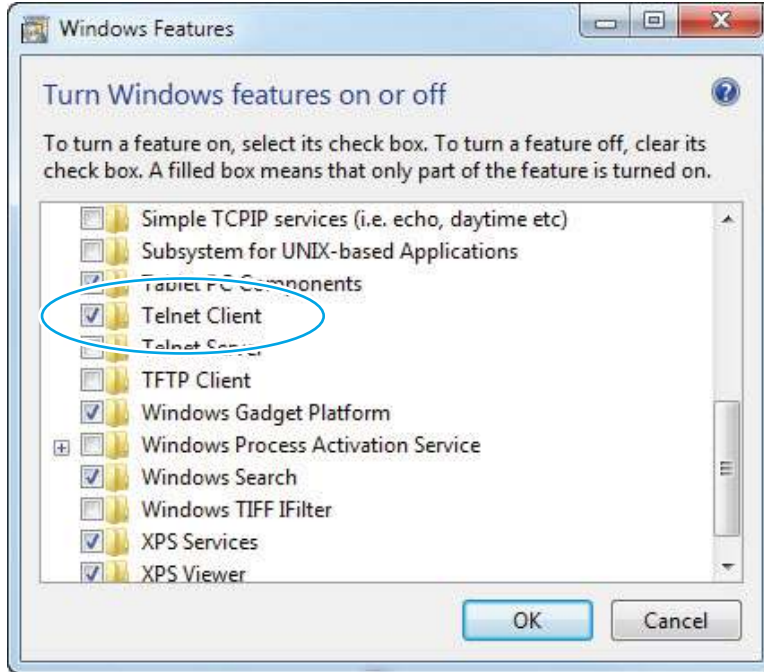
 **TIP:** If the check box is already checked then the telnet client function is already enabled. Click the **Cancel** button.

Figure 4-8 Enable the telnet client feature



Network connection

The remote telnet client computer must have direct network access to the printer for the Remote Admin function to operate. This means that the telnet client computer must be on the same network as the printer.

The Remote Admin function cannot be accessed through a network firewall or other remote access network security programs.


If a private network is not accessible, ask the network administrator to set up a virtual private network (VPN) connection to the network.

Connect a remote connection

Use the following procedures to connect a remote connection.

Start the telnet server function at the printer

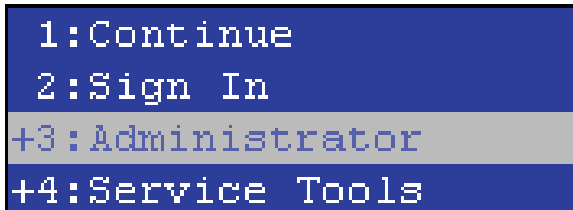
For security reasons the Remote Admin feature must be initiated by a person that is physically present at the printer. The following steps must be performed by a person that is physically present at the printer.

 **NOTE:** This person might need to sign in with an administrator or service password depending on how the printer is configured.

1. Turn the printer on.
2. The HP logo displays on the printer control panel. When a $1/8$ with an underscore displays, touch the middle of the screen to open the [Pre-boot](#) menu.

3. Use the arrow buttons on the touchscreen to scroll down and highlight the **+3:Administrator** item, and then touch the **OK** button to select it.

Figure 4-9 Select the +3:Administrator item



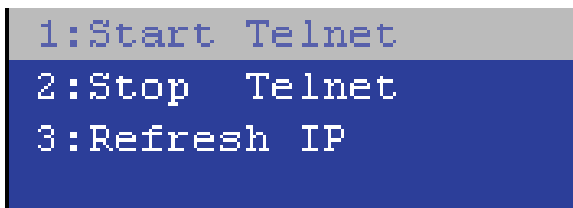
4. Use the arrow buttons on the touchscreen to scroll down and highlight the **+A:Remote Admin** item, and then touch the **OK** button to select it.

Figure 4-10 Select the +A:Remote Admin item



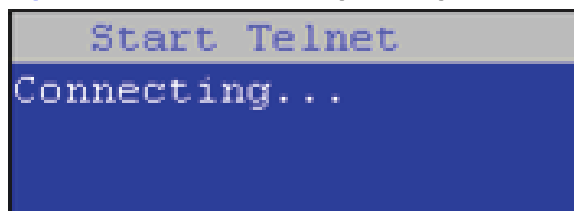
5. Use the arrow buttons on the touchscreen to scroll down and highlight the **1:Start Telnet** item, and then touch the **OK** button to select it.

Figure 4-11 Select the 1:Start Telnet item



6. Do one of the following
 - If a connecting message displays briefly, go to vii..

Figure 4-12 Telnet connecting message




- If an error message displays, use the steps below to identify the problem.

Figure 4-13 Telnet error message

```
Start Telnet
Unable to connect
Contact network
administrator.
```

- a. The printer network cable is not correctly connected.
 - b. The BIOS LAN settings are incorrect.
 - The printer should be configured to use a static IP address, but is configured to use DHCP instead.
 - The printer is configured to use a static IP address, but the IP address is incorrect.
 - c. The printer is correctly configured to use DHCP, but the DHCP server is not turned on or is malfunctioning.
7. When the printer telnet server function is initialized, the following screen appears. Use the information on this screen to connect the remote telnet client computer to the printer.

 **NOTE:** The printer is now ready to receive remote telnet client commands.

- **IP:** The static or dynamically allocated IP address for the printer.
- **Port:** The standard telnet port (23).
- **Pin:** A randomly generated 4-digit personal identification number (PIN).


Figure 4-14 Telnet server function initialized

```
Start Telnet
IP: 16.88.109.66
Port: 23
Pin : 4031
```

Start the telnet client function at the remote computer

The following steps establish a Remote Admin connection from a remote computer to the printer.

1. From the **Start** menu open the **Command Prompt** desktop application.

 **TIP:** Type `cmd` in the application search dialogue box to find the application.

2. From any displayed directory, type `telnet` at the prompt, and then press the **Enter** key.

Figure 4-15 Start a telnet session

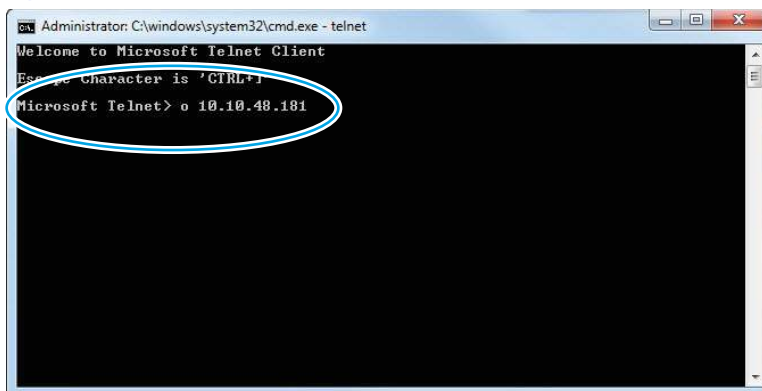


3. Type `<IP ADDRESS>` at the telnet prompt, and then press the **Enter** key.

NOTE: For `<IP ADDRESS>`, substitute the IP address that was displayed in step 7 of the "Start the telnet server function at the printer" topic.

TIP: If the telnet connection fails to establish a connection, the printer is probably behind a firewall or on a different network than the remote telnet client computer.

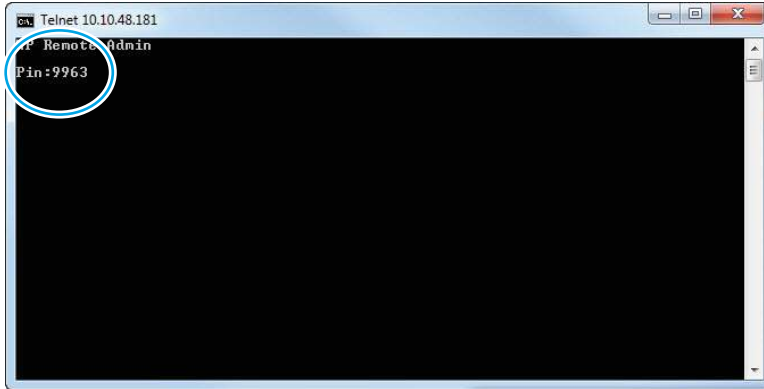
Figure 4-16 Establish a telnet connection



4. Type the PIN that was displayed in step 7 of the "Start the telnet server function at the printer" topic at the prompt, and then press the **Enter** key.

IMPORTANT: Make sure to type the PIN correctly. After five incorrect PIN entries, the printer terminates the Remote Admin connection. The Remote Admin feature must be re-initiated at the printer. See the "Start the telnet server function at the printer" topic.

Figure 4-17 Enter the PIN

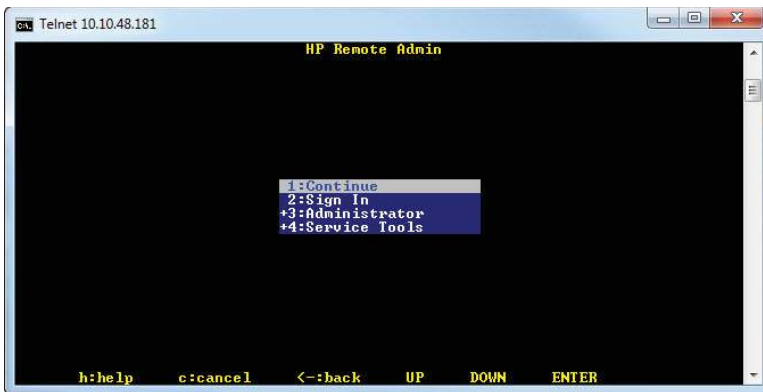


5. The following screen displays when the correct PIN is entered, and the Remote Admin connection is successful. For information about the Pre-boot menu and options, see "Pre-boot menu options" in the printer *Service Manual*.

NOTE: Because a Remote Admin connection is an unsecured telnet network protocol connection, the following Pre-boot menu items are disabled for the remote telnet client computer.

- The **+3:Administrator** menu **4:Change Password** item.
- The **+3:Administrator** menu **5:Clear Password** item.
- The **+3:Administrator** menu **6:Disk Manage** item.

Figure 4-18 Remote Admin window



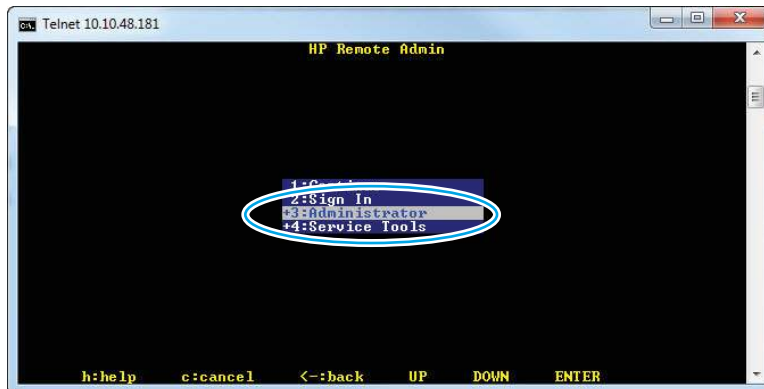
Disconnect a remote connection

The Remote Admin connection can be terminated from the printer control panel or the remote telnet client computer.

NOTE: The following procedure describes terminating a Remote Admin connection from the remote telnet client computer.

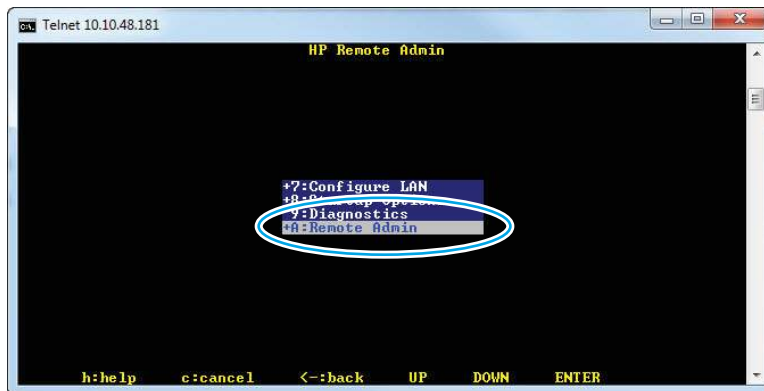
1. From the Pre-boot main menu, use the arrow buttons on the keyboard to scroll down to the **+3:Administrator** item, and then press the **Enter** key.

Figure 4-19 Access the administrator menu




2. Use the arrow buttons on the keyboard to scroll down to the **+A:Remote Admin** item, and then press the **Enter** key.

Figure 4-20 Access the remote admin menu

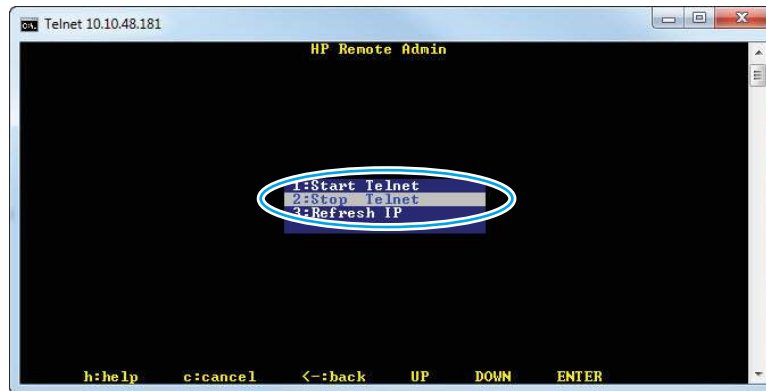


3. Use the arrow buttons on the keyboard to scroll down to the **2:Stop Telnet** item, and then press the **Enter** key. The Remote Admin connection between the printer and the remote telnet client computer terminates.

 **IMPORTANT:** The printer remains in the Pre-boot menu. Have the person that is physically present at the printer do the following:

- Touch the **Home** button to return to the main Pre-boot menu and highlight the **1:Continue** item, and then touch the **OK** button. The printer will continue to initialize.

Figure 4-21 Terminate the telnet connection



Troubleshooting process

Learn about the troubleshooting process.

Determine the problem source


When the printer malfunctions or encounters an unexpected situation, the printer control panel alerts the user to the situation.


This section contains a pre-troubleshooting checklist and a troubleshooting flow chart to filter out many possible causes of the problem.

- Use the pre-troubleshooting check list to gather information about the problem from the customer.
- 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?
- Does the configuration page reveal any configuration errors?

 **NOTE:** To print a configuration page using an HP Plus printer, the printer must have genuine original HP toner cartridges installed, must have an ongoing internet connection and an active HP Plus account (for more information, go to hp.com/plus).


 **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 to follow to quickly isolate and solve printer hardware problems.

Each row depicts a major troubleshooting step. Follow a “yes” answer to a question 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.

 **NOTE:** For solutions that require printing a page, see the following.

To print using an HP Plus printer, the printer must have genuine original HP toner cartridges installed, must have an ongoing internet connection and an active HP Plus account (for more information, go to hp.com/plus).

Table 4-9 Troubleshooting flowchart

Step	Question	Action
1 Power on	Is the printer on and does a readable message display?	<p>Basic printer functions should start up when the printer is connected into an electrical outlet and the power switch is pushed to the on position.</p> <p>During normal operation cooling fans and/or motors should be operating. Place a hand over fan intake or exhaust vents to determine if the fan or fans are spinning. Lean close to the printer to hear motors rotating.</p> <p>If fans and/or motors are operating, the dc side of the power supply is functioning.</p> <p>Always make sure that the printer is plugged into a known-functioning wall receptacle. Remove power strips and plug the printer directly into a wall receptacle.</p> <p>After the control panel display is functional, see step 2.</p>
	Yes ↓	
2 Control panel messages	Does the message Ready display on the control panel?	<p>After the errors have been corrected, go to step 3.</p> <p>Use the control panel message document (CPMD) section in this manual to correct any displayed error messages.</p>
	Yes ↓	
3 Event log	<p>Open the Troubleshooting menu and print an event log to see the history of errors with this printer.</p> <p>Does the event log print?</p>	

Table 4-9 Troubleshooting flowchart (continued)

Step	Question	Action
	<p>Yes ↓</p> <p>No →</p>	<p>If the event log does not print, check for error messages.</p> <p>If paper jams inside the printer, see the jams section of the printer service manual.</p> <p>If error messages display on the control panel when trying to print an event log, see the control panel message document (CPMD) section of this manual.</p> <p>After successfully printing and evaluating the event log, see step 4.</p>
4 Information pages	<p>Open the Reports menu and print the configuration pages to verify that all the accessories are installed.</p> <p>Are all the accessories installed?</p>	
	<p>Yes ↓</p> <p>No →</p>	<p>If accessories that are installed are not listed on the configuration page, remove the accessory and reinstall it.</p> <p>Make sure that the most recent firmware is installed. See the firmware upgrade section of this manual for more information.</p> <p>After evaluating the configuration pages, see step 5.</p>
5 Print quality	<p>Does the print quality meet the customer's requirements?</p>	
	<p>Yes ↓</p> <p>No →</p>	<p>Compare the images with the sample defects in the Image-quality troubleshooting section of this manual.</p> <p>Solve print-quality and copy-quality issues as needed.</p> <p>After the print quality is acceptable, see step 6.</p>
6 Interface	<p>Can the customer print successfully from the host computer?</p>	
	<p>Yes. This is the end of the troubleshooting process.</p> <p>No →</p>	<p>Verify that all I/O cables are connected correctly and that a valid IP address is listed on the HP Jetdirect configuration page.</p> <p>If error messages display on the control panel or appear in the event log, see the control-panel message document (CPMD) section of this manual.</p> <p>When the customer can print from the host computer, this is the end of the troubleshooting process.</p>

Power on troubleshooting

Learn about power on troubleshooting.

Power-on checks

Learn about power-on checks.

The basic printer functions should start up when the printer is connected into an electrical outlet and the power switch is pushed to the on position. If the printer 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

Learn about power-on troubleshooting.

During normal operation, a cooling fan begins to spin briefly after the printer power is turned on. Place your hand over the vents at the rear of the printer, next to the formatter, or on the rear of the scanner (MFPs only). If the fan is operating, you will feel air passing out of the printer. You can lean close to the printer 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 printer, check the following items:

1. Make sure that the printer 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.
3. 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 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 printer on again.

Troubleshooting a blank display, black display, no display, or no power situation

Learn about troubleshooting a blank display, black display, no display, or no power situation.

Customers usually report that the control panel display is not showing anything. It is very important to collect as much information as possible from the customer about the issue to help resolve it.

Following are some printer behaviors the customer might encounter:

- The control panel is completely blank (no LEDs or back light).
- The control panel is blank, but there might be LEDs illuminated.
- The control panel is blank (LEDs are on or flashing) and the back light is on (but no text is visible).

Following are some possible causes of a blank control panel display:

- No power to the printer.

- The control panel contrast setting is not correctly adjusted.
- The formatter connector(s) are not fully seated into the connector(s) on the DC controller.
- The memory DIMM is missing, faulty, incorrectly installed, or is not fully seated.
- A faulty component is installed on the formatter (for example a memory DIMM, fax PCA, network PCA, USB device, or another component).
- The formatter is defective.
- The control panel connector is not fully seated, or the control panel is defective.
- The DC controller is defective.

Following are some questions to ask the customer:


- Was the printer newly installed or has the printer been properly functioning?
 - For a new install, investigate to see if there was any shipping damage to the printer.
 - Did the customer notice any damage to the shipping box or any visible damage to the printer?
- What happened just prior to the control panel going blank?
 - Was the printer serviced recently?
 - Has a power outage recently occurred?
 - Has a lightning storm recently occurred?
 - Did the customer recently add a memory DIMM or install a third-party component?
- Make sure to get a complete description of the failure.
 - Is the control panel display completely blank (might be faint text and no back light)?
 - Is the control panel display back light on?
 - Are any of the LEDs (Ready, Data, or Attention) illuminated?
 - Has a print job been sent to the printer? The customer might report that their print jobs seemed to print, but when they go to the printer the control panel display is blank.

Recommended actions

If the control panel display is completely blank (no LEDs illuminated or no back light) check to see if the printer is getting power. Listen for fans or any printer initialization sounds when the power is turned on.

If there are no signs of power, then perform the following:

1. Make sure that the printer is plugged directly into an active electrical outlet (not a power strip or interruptible power supply) that delivers the correct voltage.

 **TIP:** Try using a different power cable if possible.

2. Turn the printer power on, and make sure that the fan(s) run briefly (this indicates that the power supply is operational).
3. Turn the printer power off.

4. Make sure that the control panel display wire harness (and/or flat cable) is properly connected (and fully seated), and then turn the printer power on again.
5. Verify the status LEDs are illuminated, but the control panel display is blank. If applicable: Check if the contrast setting is adjusted to very low. If so, try turning the contrast knob to see if the control panel display becomes visible.
6. From a host computer, send a print job to the printer.



NOTE: If the print job correctly prints, then the problem is most likely to a defective control panel.

7. Turn the printer power off, and then make sure that the memory DIMM is installed in the correct slot and is fully seated.



NOTE: For some printers, there may be more than one memory DIMM installed. Some printers have third-party solutions/applications or fonts that use memory.

8. Remove all of the components/accessories installed on the formatter (for example, hard drive, solid-state drive, memory DIMM(s), fax PCA, network PCA, USB devices, or other devices).
 - **For printers with an interconnect board (ICB):** Make sure that the formatter is fully seated.
 - Take out or disconnect all removable components on the formatter (SSD, HDD, or other devices).



IMPORTANT: This is important because the formatter or a component on the formatter might be defective or shorted which causes the printer to lose power.

9. **For printers with an interconnect board (ICB):** Reinstall the formatter.

Make sure that all of the connectors on the formatter are correctly connected and fully seated.

10. Turn the printer power on, and then check the control panel display.
11. If the printer control panel is properly working, replace each removed component (one at a time) to determine which one is causing the problem.



CAUTION: Turn the printer power off, and then on again, after replacing a component on the formatter.

12. If the control panel display is still blank after performing the above troubleshooting steps, replace the formatter.

Control panel checks

Learn about control panel troubleshooting.

The printer includes a diagnostic test mode for the touchscreen control panels.

Touchscreen diagnostic mode

Learn about touchscreen diagnostic mode.

Use the diagnostics in this section to test the control-panel hardware and embedded firmware. These tests are useful for checking control-panel functionality independent of the printer control-panel system diagnostics.

1. **M652/M653/E65050/E65060/E65150/E65160 models:** Locate the diagnostic-tests access button on the back of the control panel.

Figure 4-22 Diagnostic-tests access button



2. **M681/M682/E67550/E67560/E67650/E67660 models:** Locate the diagnostic-tests access button on the back of the control panel.

Figure 4-23 Diagnostic-tests access button

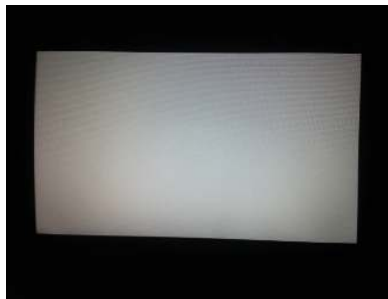


3. **M681/M682/E67550/E67560/E67650/E67660 only:** Press the diagnostics-access button. Repeatedly pressing the button cycles through the available diagnostics.

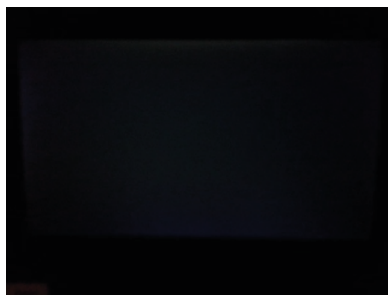
Figure 4-24 Press the diagnostics-access button



4. Touch the screen to cycle the screen through the following:
 - Five brightness levels of a white screen.



- A final black screen.



5. Pressing the diagnostic-tests button with the black screen displayed, exits the diagnostic mode.

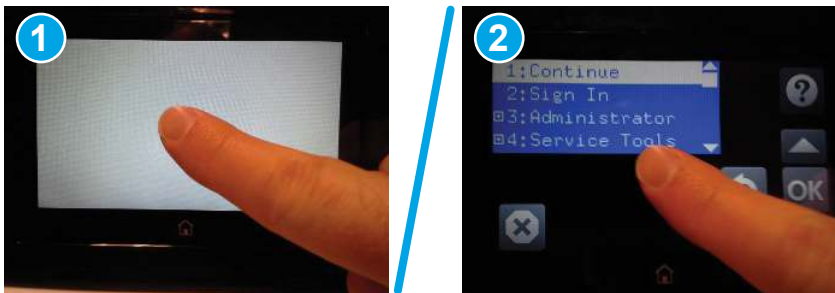
Open the control panel system diagnostic tests

Learn about accessing the control panel system diagnostics tests from a touchscreen control panel.

Use the following procedure to open the control panel system diagnostics tests.

1. Turn the printer power off, and then on again.
2. Touch the middle of the control panel display when you see the 1/8 under the logo.

Figure 4-25 Open the Pre-boot menu



3. On the Pre-boot menu screen, use the following buttons to navigate the tests.

Figure 4-26 Pre-boot menu

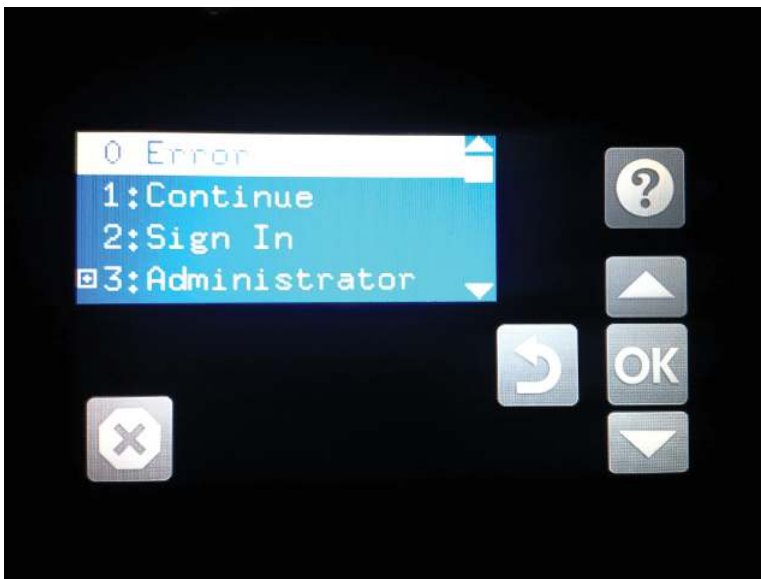


Table 4-10 Pre-boot menu button descriptions








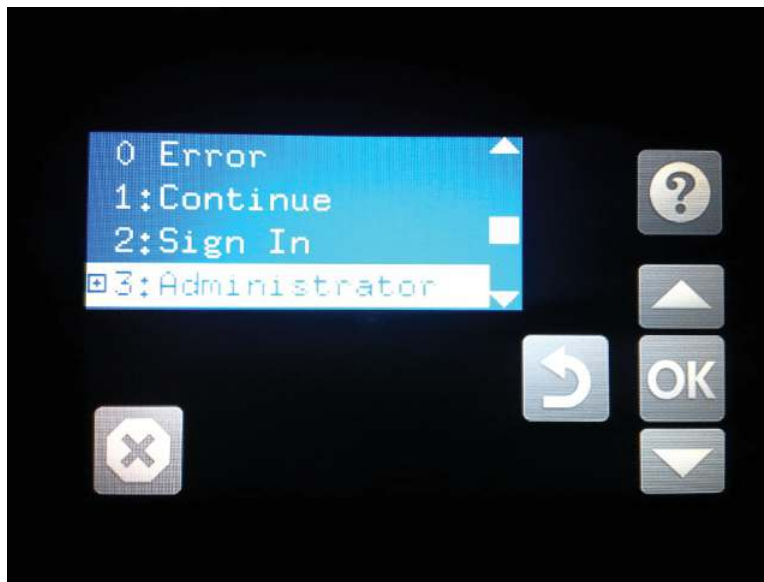
Button	Description
	Use this button to see more information about a selected item.
	Use this button to scroll up through menu items.
	Use this button to select a highlighted menu item.

Table 4-10 Pre-boot menu button descriptions (continued)

Button	Description
	Use this button to scroll down through menu items.
	Use this button to go back to the previous menu.
	Not used.
	Use this button to exit a diagnostic test.

4. Use the [down arrow ▼](#) button to scroll to **+3 Administration**, and then press the [OK](#) button to select it.

Figure 4-27 Access the administration menu



5. Use the [down arrow ▼](#) button to scroll to **+E CP Diagnostics**, and then press the [OK](#) button to select it.



NOTE: An administrator password might be required to continue.

Figure 4-28 Access the diagnostics menu

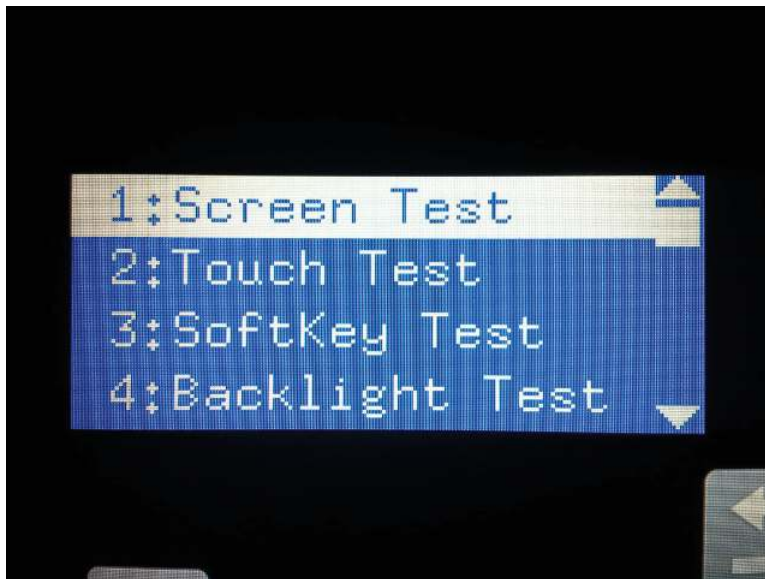


Screen test

Learn about the control panel system diagnostic screen test.

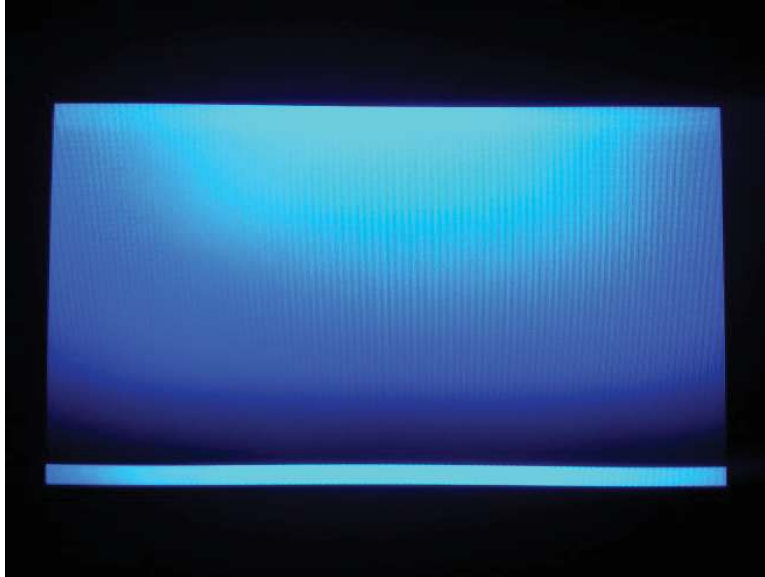
1. Open the control panel system diagnostic tests.
2. With **1 Screen Test** highlighted, press the **OK** button to select it.

Figure 4-29 Open the screen test



The blue vertical gradient screen appears.

Figure 4-30 Blue vertical gradient screen



3. Touch the touchscreen to scroll through the remaining touchscreen test screens.

 **NOTE:** Touch the [Home](#) button to exit the test.

Table 4-11 Touchscreen test screens

Screen	Description
	Green vertical gradient
	Red vertical gradient
	Blue horizontal gradient

Table 4-11 Touchscreen test screens (continued)

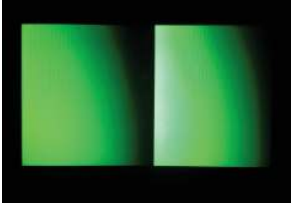
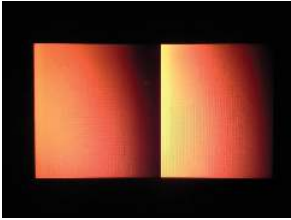
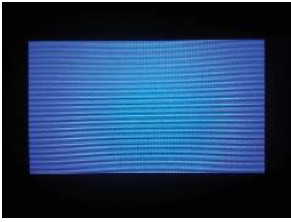

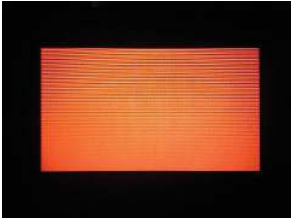
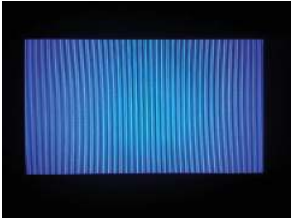
Screen	Description
	Green horizontal gradient
	Red horizontal gradient
	Blue with black horizontal interlaced
	Green with black horizontal interlaced
	Red with black horizontal interlaced
	Blue with black vertical interlaced

Table 4-11 Touchscreen test screens (continued)


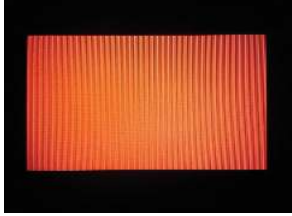





Screen	Description
	Green with black vertical interlaced
	Red with black vertical interlaced
	Black with white center
	White with black center
	Checkerboard
	Multicolor stripes

Table 4-11 Touchscreen test screens (continued)

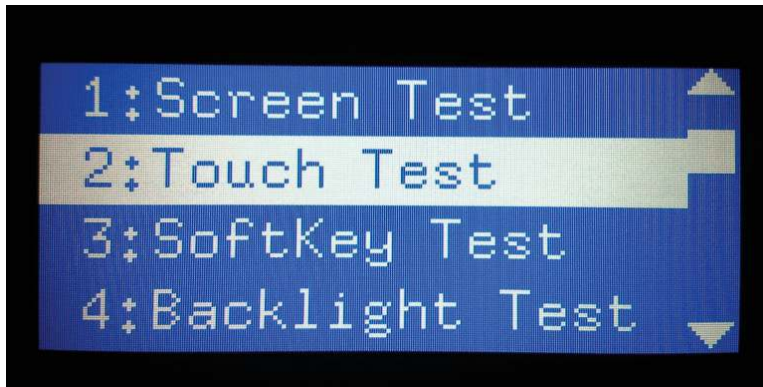
Screen	Description
	Blue green grid meshing

Touch test

Learn about the control panel system diagnostic touch test.

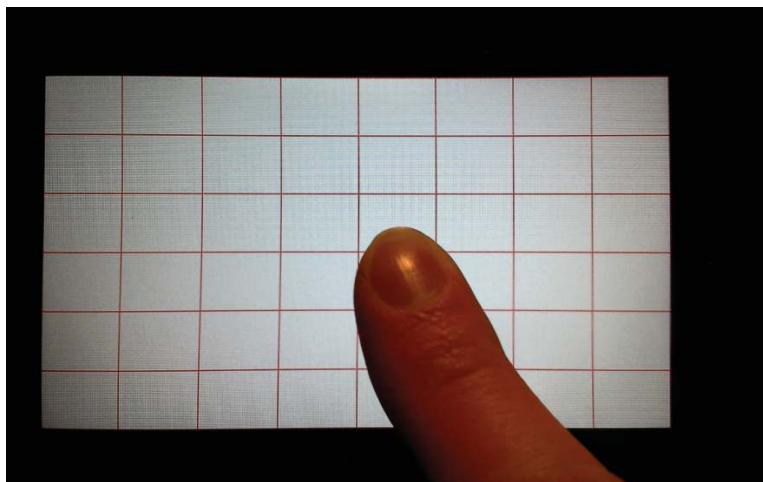
1. Open the control panel system diagnostic tests.
2. Use the [down arrow](#) ▼ button to scroll to **2 Touch Test**, and then press the **OK** button to select it.

Figure 4-31 Open the touch test



3. Use your finger to touch the white grid on the display.

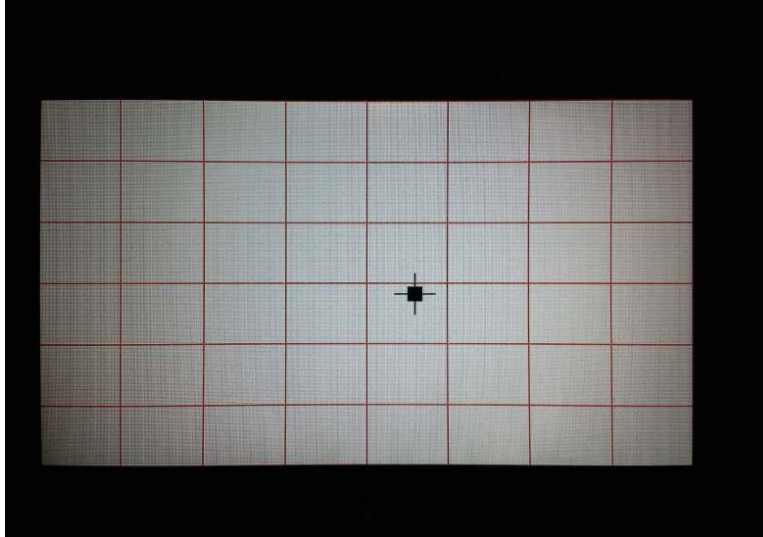
Figure 4-32 Touch the white grid



A mark appears on the grid where it was touched.

 **NOTE:** Touch the [Home](#) button to exit the test.

Figure 4-33 Verify the mark



SoftKey test

Learn about the control panel system diagnostic SoftKey test.

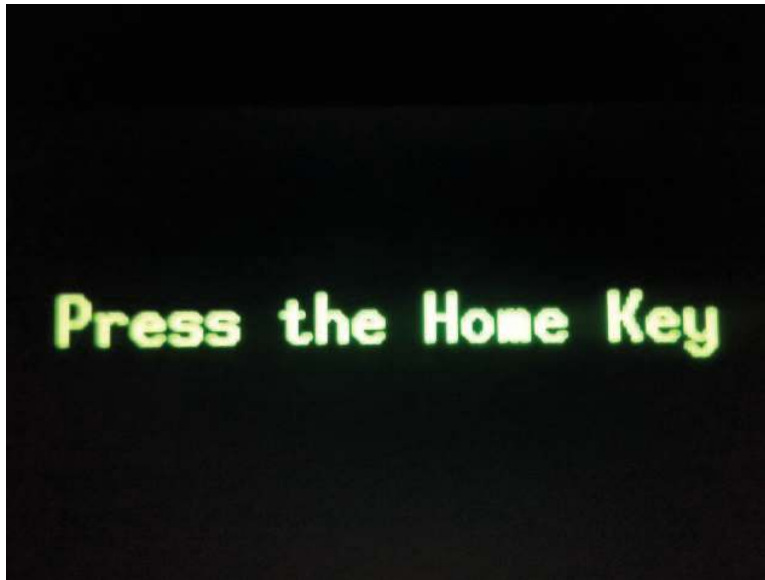
1. Open the control panel system diagnostic tests.
2. Use the [down arrow ▼](#) button to scroll to [3 SoftKey Test](#), and then press the [OK](#) button to select it.

Figure 4-34 Open the softkey test



3. When prompted, touch the [Home](#) button.

Figure 4-35 Touch the [Home](#) button



If the test is successful, the following screen appears on the display.


 **NOTE:** Touch the screen to exit the test.

Figure 4-36 Successful test



Backlight test

Learn about the control panel system diagnostic backlight test.

1. Open the control panel system diagnostic tests.

2. Use the **down arrow** ▼ button to scroll to **4 Backlight Test**, and then press the **OK** button to select it.

After selecting the **4 Backlight Test**, the screen automatically dims, and then returns to full brightness.


 **NOTE:** Touch any key to exit the test.

Figure 4-37 Open the backlight test



Sound test

Learn about the control panel system diagnostic sound test.

1. Open the control panel system diagnostic tests.
2. Use the **down arrow** ▼ button to scroll to **5 Sound Test**, and then press the **OK** button to select it.

After selecting the **5 Sound Test**, the printer emits a series of audible tones.



 **NOTE:** Touch any key to exit the test.

Figure 4-38 Open the sound test



Keyboard test (flow models only)

Learn about the control panel system diagnostic keyboard test.

 **IMPORTANT:** The control-panel system diagnostic tests include a [6 Keyboard Test](#) item. This test is not valid for printers that do **not** have a pull out keyboard installed, even though this option is present in the control-panel system diagnostic tests menu.

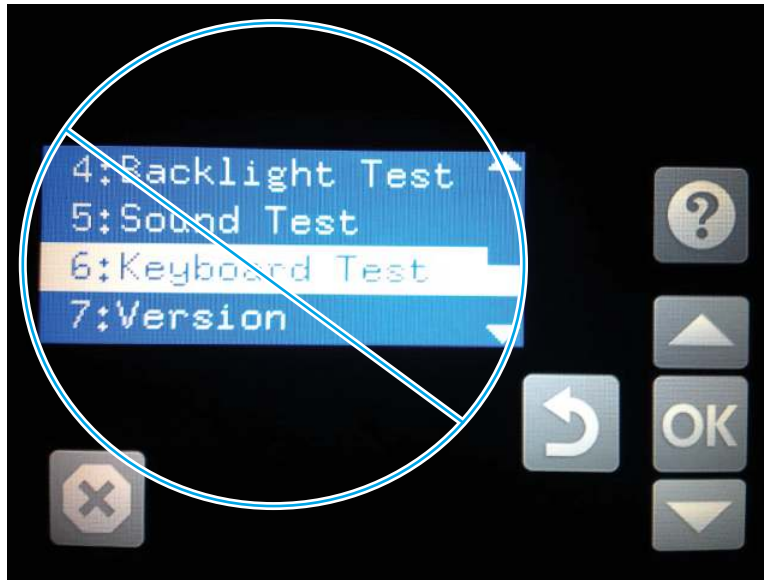
If the [6 Keyboard Test](#) is opened on a non-flow printer, the printer power must be turned off to exit the test.

HP **does not recommend** turning the printer power off during the control-panel system diagnostic tests.

1. Open the control panel system diagnostic tests. See [Open the control panel system diagnostic tests](#).

2. Use the **down arrow ▼** button to scroll to **6 Keyboard Test**, and then press the **OK** button to select it.

Figure 4-39 Open the keyboard test




3. When prompted, touch the H key on the keyboard or the Home button to exit the test.


Version

Learn about the control panel system diagnostic version information.

1. Open the control panel system diagnostic tests.
2. Use the **down arrow ▼** button to scroll to **7 Version**, and then press the **OK** button to select it.

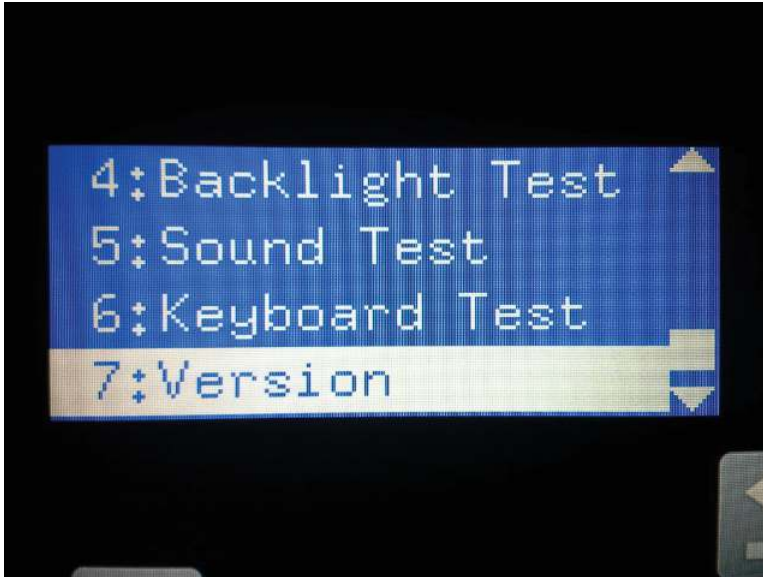
 **NOTE:** Touch any key to exit the test.

Select **7 Version** to view the following types of information:

 **NOTE:** The following types of information are for the control panel only, not the printer.

- Panel ID
- Hardware (version)
- Firmware (version)
- KB Hw (version)
- KB Firm (version)
- LCD Vendor
- Touch Controller Version

Figure 4-40 Open the version information



Control panel diagnostic flowcharts

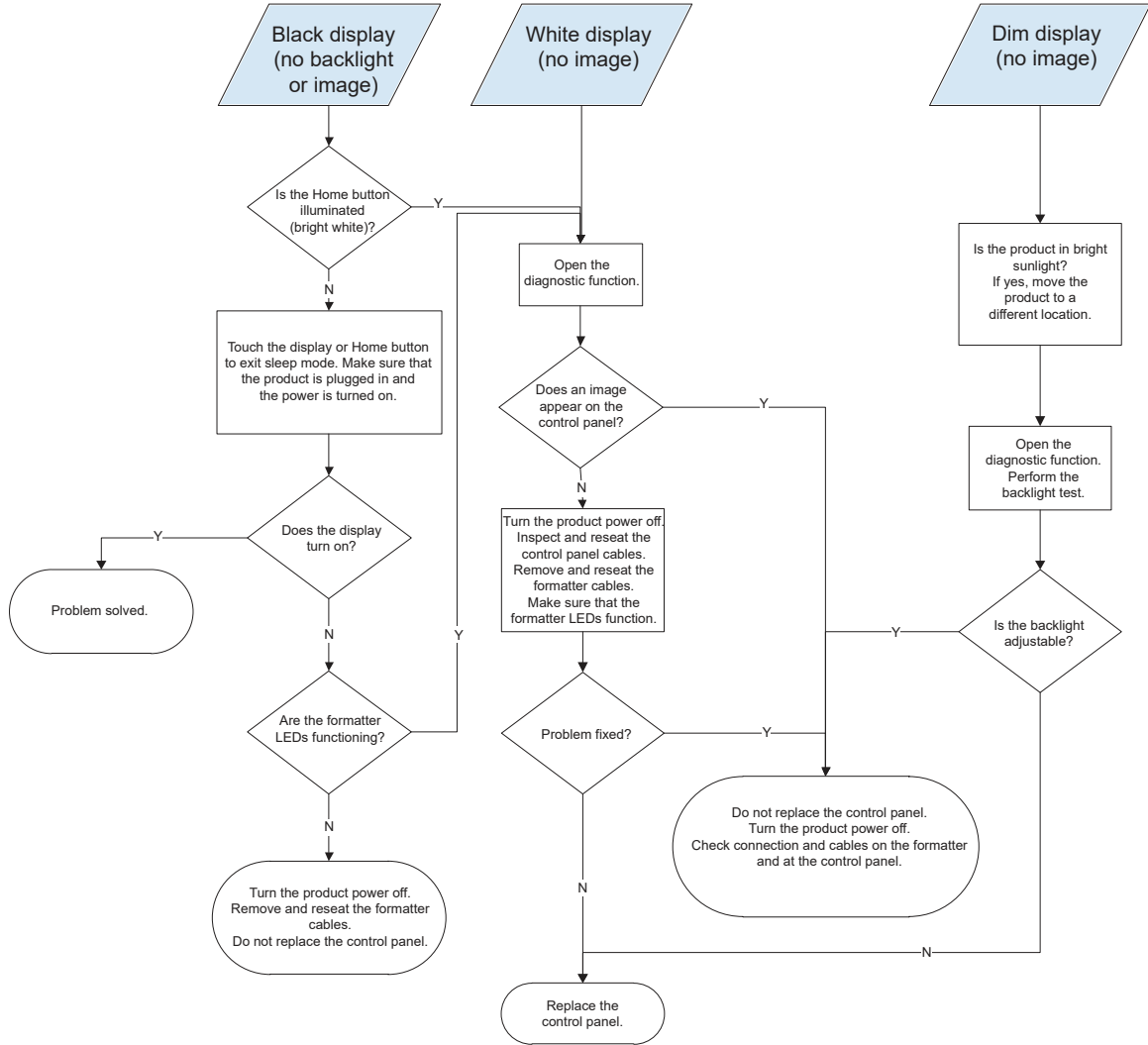
Use the flowcharts in this section to troubleshoot the following control panel problems.

- 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).

Touchscreen black, white, or dim (no image)

To open the diagnostic function, press the button on the back of the control panel.

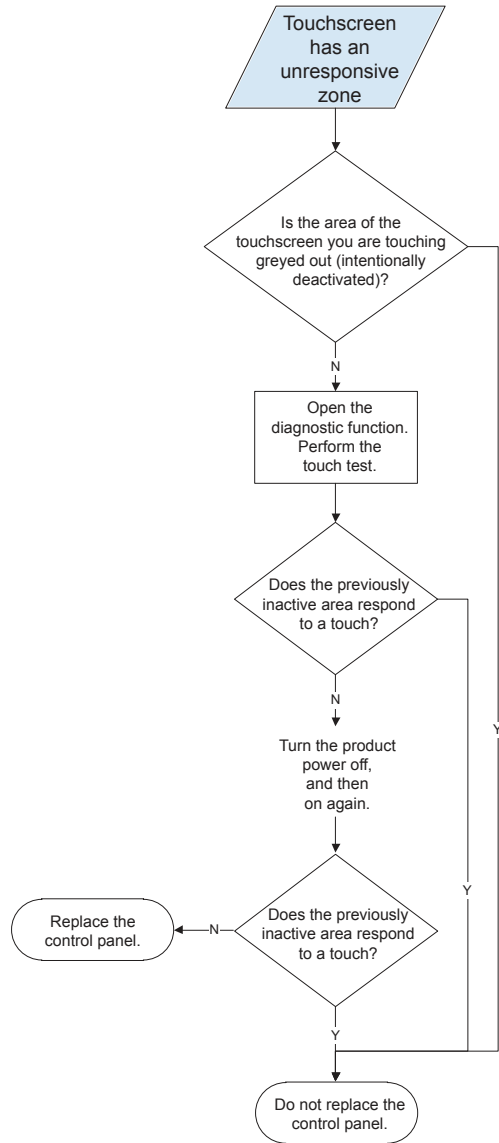
Figure 4-41 Touchscreen blank, white, or dim (no image)



Touchscreen has an unresponsive zone

To open the diagnostic function, press the button on the back of the control panel.

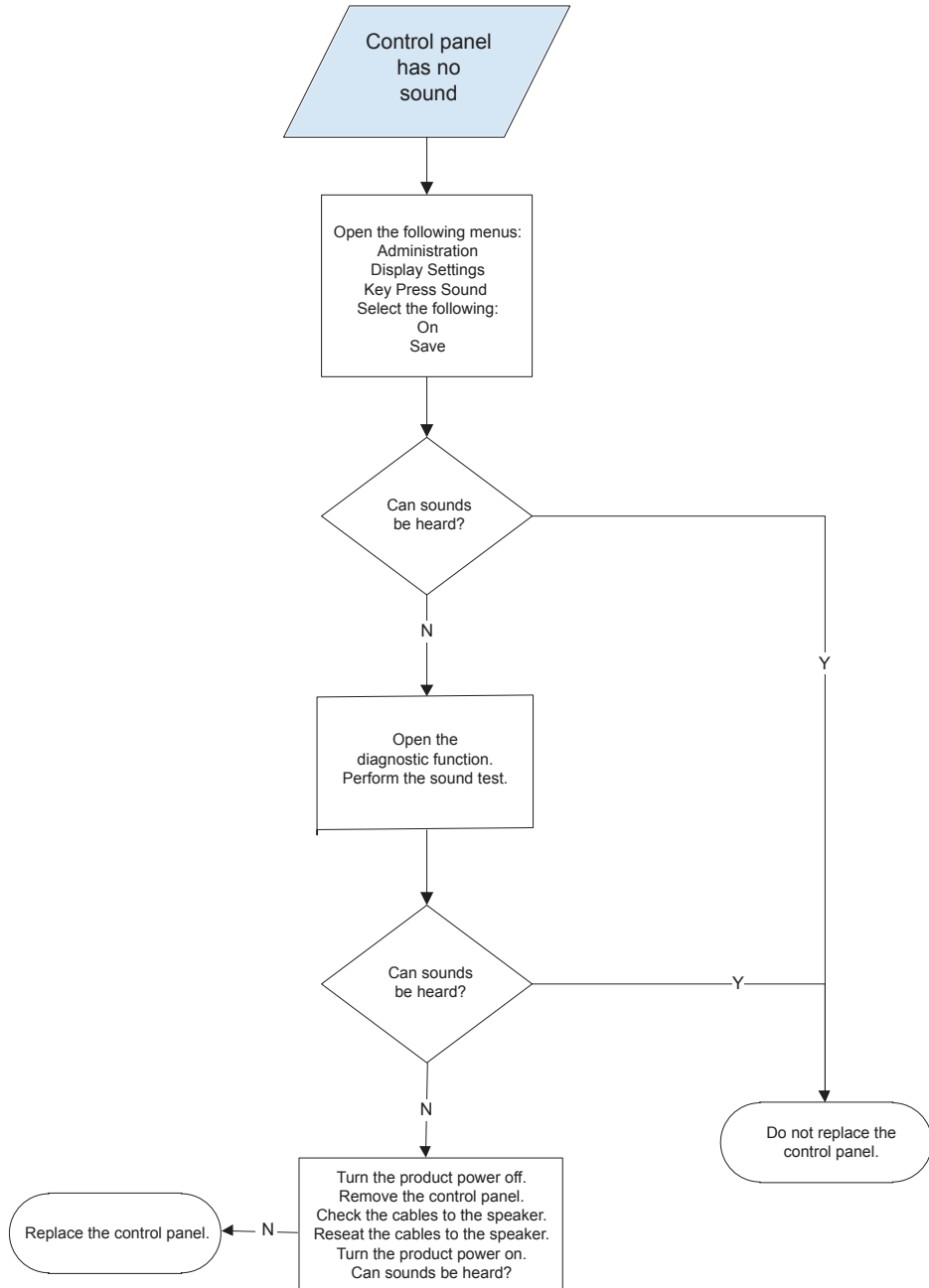
Figure 4-42 Touchscreen has an unresponsive zone



No control panel sound

To open the diagnostic function, press the button on the back of the control panel.

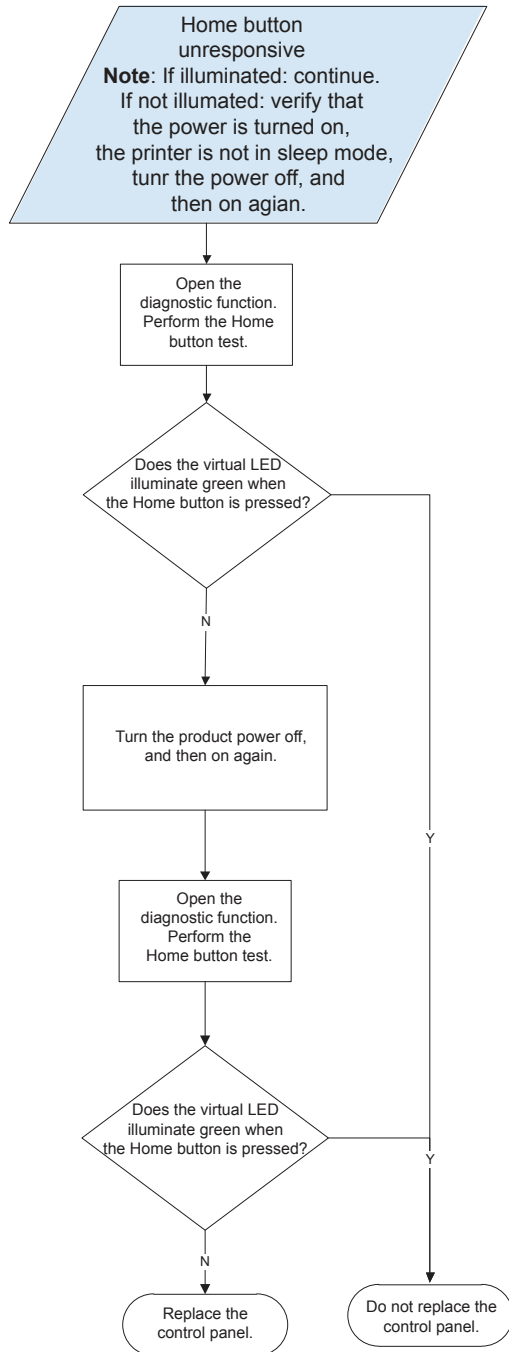
Figure 4-43 No control panel sound



Home button is unresponsive

To open the diagnostic function, press the button on the back of the control panel.

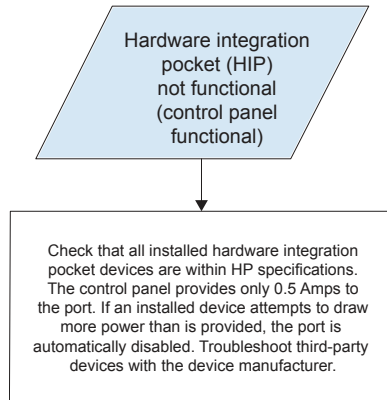
Figure 4-44 Home button is unresponsive



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

Review the following information when the HIP is not functioning, but the control panel is functional.

Figure 4-45 Hardware integration pocket (HIP) is not functioning (control panel functional)



Scanning subsystem (MFP)

Learn about the scanning subsystem troubleshooting process.

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



TIP: This adjustment might be required after the scanner or document feeder is replaced.

1. From the Home screen on the printer control panel, select [Support Tools](#).
2. Select [Calibrations](#).
3. Select [Calibrate Scanner](#), and then follow the instructions provided on the screen.

Tools for troubleshooting

Learn about the printer troubleshooting tools.

Individual component diagnostics

Learn about printer individual component diagnostics.

Tools for troubleshooting: LED diagnostics

Learn about troubleshooting the printer using formatter LEDs.

Understand lights on the formatter

Two LEDs on the formatter indicate that the printer is functioning correctly.

Figure 4-46 LEDs (formatter)

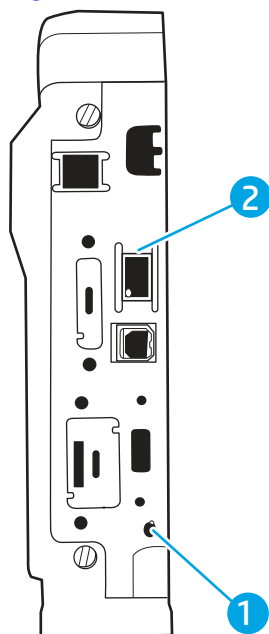


Table 4-12 LEDs (formatter)

Reference	Item	Description
1	Heartbeat LED	Indicates that the formatter is functioning.
2	HP Jetdirect LEDs	Indicates network activity and link status.

CAUTION: Under **NO** circumstances should a formatter from a different printer be installed during the repair or troubleshooting processes. The formatter stores important data specific to the model of printer it is installed in and is not designed to be swapped or repurposed in any way. Return a used formatter to HP.

Issues that can occur from swapping a formatter include:

- Serial number, product number, product name, page count, and supported cartridges information change and might make a product unusable
- 33.02.01 Used board/Disk installed errors

If a used formatter is installed and causes this issue, the **partner** must cover the costs of the repair in the form of a product replacement. **There is no method in the field to recover a printer where a used formatter is installed.**

For more information, see [HP LaserJet Enterprise](#), [HP LaserJet Managed](#), [HP PageWide Enterprise](#), [HP PageWide Managed - 33.02.01 error or printer name and/or product number changes after replacing the formatter](#).



This part contains components that are electrostatic discharge (ESD) sensitive. To reduce the possibility of ESD damage, always touch the sheet-metal chassis to ground yourself before touching an ESD sensitive part.

Heartbeat LED

The heartbeat LED indicates that the formatter is functioning correctly. While the product is initializing after it is turned on, the LED blinks rapidly, and then turns off. When the product has finished the initialization sequence, the heartbeat LED pulses on and off.

The following table describes the heartbeat LED operation while the product is executing the firmware boot process.


 **NOTE:** If after initialization, the heartbeat LED is not solid green, see the *Heartbeat LED, product operational* table in this topic.

Table 4-13 Heartbeat LED, product initialization

Initializing state	Heartbeat LED, normal state	Heartbeat LED, error state
No power (power cable disconnected or power switch off)	Off	Not applicable
Power on (immediately after the power switch pressed)	Red, solid <ul style="list-style-type: none"> Duration should be 1 second or less 	Red, solid <ul style="list-style-type: none"> Firmware error; problem finding hardware and booting the serial peripheral interface flash memory (boot process halted) Replace the formatter.
Serial peripheral interface (SPI) flash memory boot	Green, solid	Red, solid <ul style="list-style-type: none"> Firmware error; problem finding hardware and booting the serial peripheral interface flash memory (boot process halted) Replace the formatter.
HW checks on board DRAM	Green, solid	Red, solid <ul style="list-style-type: none"> Firmware error; problem finding hardware and booting the serial peripheral interface flash memory (boot process halted) Replace the formatter.
Control panel connection initializes	Green, solid <p>NOTE: Control panel communication successful. If an error occurs, a message should appear on the control-panel display.</p>	Yellow, fast flash <ul style="list-style-type: none"> Formatter to control panel connection failed (boot process halted) Check the cables between the formatter and control panel for damage. Make sure that the cables are fully seated.
Pre-boot menu available (including diagnostics)	Green, solid	Red, solid <ul style="list-style-type: none"> Diagnostic failure (Follow diagnostic instructions) Turn the power off, and then on again to restart the initialization process.

Table 4-13 Heartbeat LED, product initialization (continued)

Initializing state	Heartbeat LED, normal state	Heartbeat LED, error state
Accessing disk for firmware image	Green, solid NOTE: If applicable, disk error messages appear on the control-panel display.	Yellow, fast flash <ul style="list-style-type: none"> Control panel not connected
Firmware boot	Green, solid NOTE: If applicable, disk error messages appear on the control-panel display.	Yellow, fast flash <ul style="list-style-type: none"> Control panel not connected
Product operational	Green, heartbeat blink NOTE: If applicable, disk error messages appear on the control-panel display.	Yellow, fast flash <ul style="list-style-type: none"> Control panel not connected
49.XX.YY error or initialization freezes	Not applicable	LED off NOTE: An error message (for example, 49.XX.YY) might appear on the control-panel display. Eventually a formatter connection missing message appears. Turn the power off, and then on again to restart the initialization process. If the error persists, perform a firmware upgrade.
Control panel connection interrupted after the product is operational	Not applicable	Yellow, fast flash <ul style="list-style-type: none"> Control panel not connected
Flat flexible cable (FFC) between the formatter and DC controller is not connected or damaged	Not applicable	Yellow, solid <ul style="list-style-type: none"> Formatter to DC controller connection failed <p>Check the cable between the formatter and DC controller for damage. Make sure that the cable is fully seated.</p>
Sleep Mode	Green, slow blink	Not applicable
Approaching Sleep Mode	Green, slow blink	Not applicable
Wake up from Sleep Mode	Follows initialization progression	Follows initialization progression
Approaching wake up from Sleep Mode	Follows initialization progression	Follows initialization progression

The following table describes the heartbeat LED operation when the product completes the firmware boot process and is in the **Ready** state.

Table 4-14 Heartbeat LED, product operational

Green	<ul style="list-style-type: none">• Normal operation<ul style="list-style-type: none">– Formatter is operating normally– Firmware is operating normally– Control panel is connected
Yellow	<ul style="list-style-type: none">• Formatter cannot connect to the control panel<ul style="list-style-type: none">– Check control panel connections– Verify control panel functionality
Red	<ul style="list-style-type: none">• Formatter error or failure<ul style="list-style-type: none">– Serial peripheral interface (SPI) flash memory boot error– Power on self test (formatter) failed– Diagnostic (formatter) failed
Off	<p>TIP: The heartbeat LED is off if the power cable is disconnected, the product power switch is in the off position, or the product is in Sleep Mode.</p> <ul style="list-style-type: none">• Firmware or system freeze<ul style="list-style-type: none">– Check control panel for an error message– Control panel failure <p>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.</p>

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, try to manually configure the link settings on the embedded print server by using the printer control-panel menus.

1. From the Home screen on the printer control panel, scroll to and touch the [Administration](#) button.
2. Open the following menus:
 - [Network Settings](#)
 - [Embedded Jetdirect Menu](#)
 - [Link Speed](#)
3. Select the appropriate link speed, and then touch the [OK](#) button.

Tools for troubleshooting: Engine diagnostics

Learn about engine diagnostic troubleshooting.

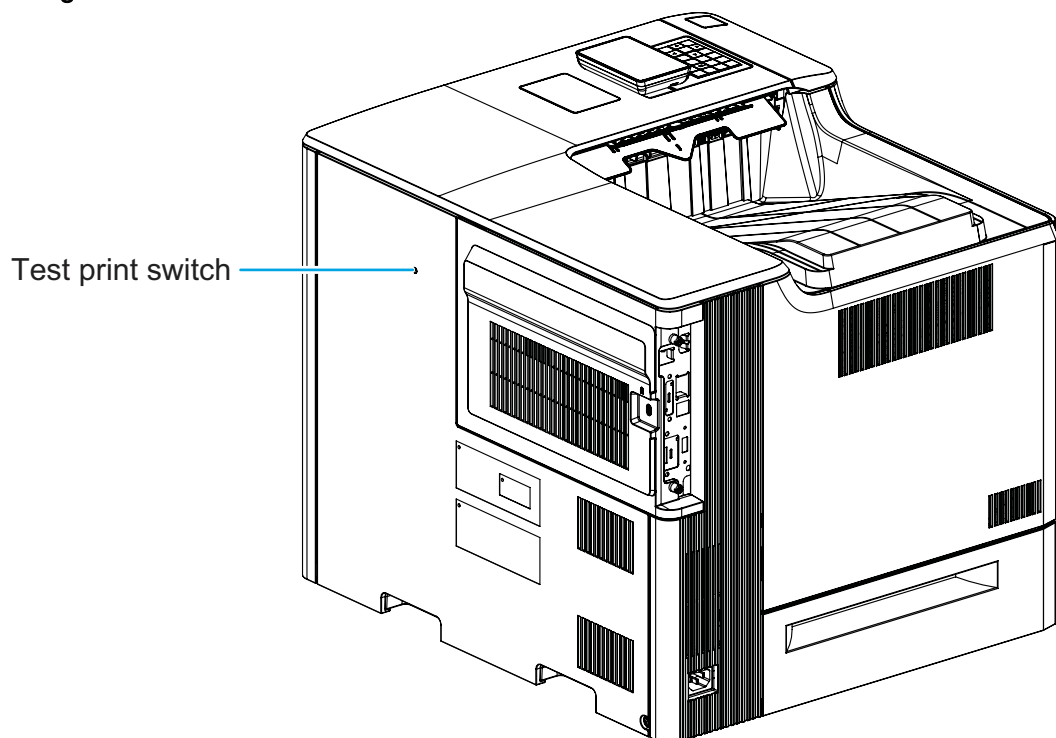
The printer contains extensive internal engine diagnostics that help in troubleshooting print quality, paper path, noise, assembly, and timing issues.

Engine test

Learn about troubleshooting the printer using the engine test diagnostic.

To verify that the printer engine is functioning, print an engine test page. Use a small pointed object to depress the test-page switch located on the rear of the printer. The test page should have a series of lines that are parallel to the short end of the page. The test page can use only Tray 2 as the paper source, so make sure that paper is loaded in Tray 2.

Figure 4-47 Engine test button



Defeating interlocks

Learn about defeating printer interlocks.

Different tests can be used to isolate different types of issues. For assembly or noise isolation, run the diagnostic test when the toner cartridge door or rear door is open.

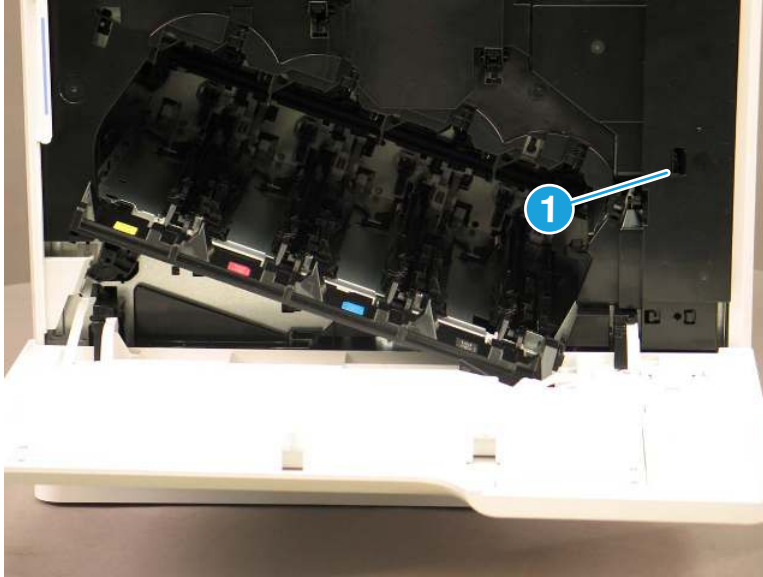
To operate the printer with the doors open, the interlock switch levers must be depressed to simulate a closed-cover position.

⚠ WARNING! Be careful when performing printer diagnostics to avoid risk of injury. Only trained service personnel should open and run the diagnostics with the covers removed. Never touch any of the power supplies when the printer is turned on.

💡 TIP: Fold a stiff piece of paper, for example a business card or index card, into a 10 mm (.375 in) strip, and insert the strip into the slots for the door logic switches.

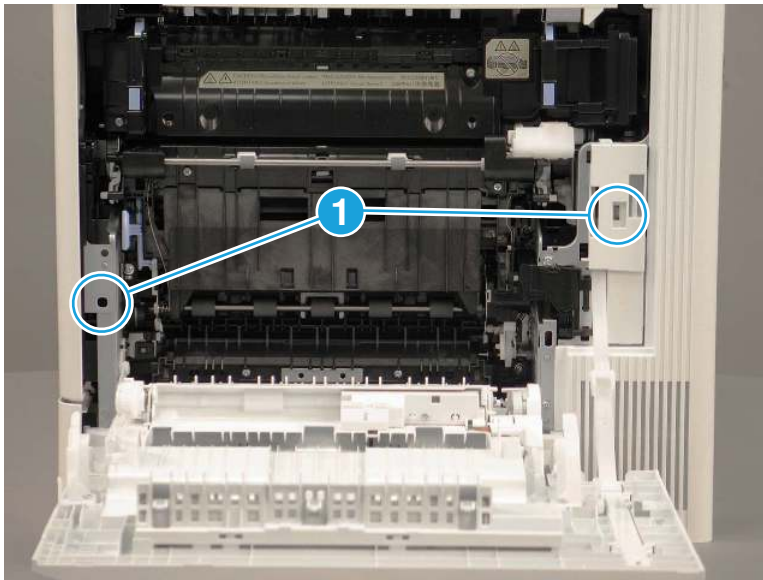
1. Open the front door, and then insert a folded piece of paper into one slot (callout 1).

Figure 4-48 Defeating interlocks (front door)



2. Open the right door, and then insert a folded piece of paper into two slots (callout 1).

Figure 4-49 Defeating interlocks (right door)



Disable cartridge check

Learn about the disable cartridge check troubleshooting diagnostic.

Use this diagnostic test to print internal pages or send an external job to the printer when the toner cartridge is removed or exchanged. Supply errors are ignored while the printer is in this mode.

When the printer is in this mode, access the troubleshooting menus and print internal pages (the print quality pages will be the most useful). This test can be used to isolate problems, such as noise, and to isolate print-quality problems that are related to the toner cartridge.



NOTE: Do not remove or exchange the toner cartridge until after beginning the disable cartridge check diagnostic.

Disable cartridge check from a touchscreen control panel

1. From the Home screen on the printer control panel, scroll to and touch the [Support Tools](#) button.
2. Open the following menus:
 - [Troubleshooting](#)
 - [Diagnostic Tests](#)
 - [Disable Cartridge Check](#)

Disable cartridge check from a non-touchscreen control panel

1. From the Home screen on the printer control panel, use the arrow keys to navigate to [Support Tools](#), and then press the [OK](#) button.
2. Use the arrow buttons to scroll to [Troubleshooting](#), and then press the [OK](#) button.
3. Use the arrow buttons to scroll to [Diagnostic](#), and then press the [OK](#) button.
4. Use the arrow buttons to scroll to [Disable Cartridge Check](#), and then press the [OK](#) button.

Tools for troubleshooting: Paper path and sensor diagnostic tests

Learn about paper path and sensor diagnostic tests.

Use these diagnostic tests to manually test the printer sensors, switches



NOTE: The menu list of sensors and switches for the [Paper path sensors test](#), [Manual Sensor Test](#), and the [Tray/Bin Manual Sensor Test](#) varies depending on which optional accessories are installed.

The tables in this section describe the sensor tests available with an optional 1x550-sheet paper feeder installed.

For trays other than Tray 1 or Tray 2, the tray number associated with a sensor or switch depends on the number and type of accessories installed.

Paper path test

Learn about the paper path test troubleshooting diagnostic.

This diagnostic test generates one or more test pages. Use these pages to isolate the cause of jams.

To isolate a problem, specify which input tray to use, and specify the number of copies to print. Print multiple copies to help isolate intermittent problems. The following options become available after beginning 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 choices are 1, 10, 50, 100, or 500.

Access the paper path test from a touchscreen control panel

1. From the [Home](#) screen on the printer control panel, scroll to and touch the [Support Tools](#) button.
2. Open the following menus:
 - [Troubleshooting](#)
 - [Diagnostic Tests](#)
 - [Paper Path Test](#)
3. Select the paper path test options for the test.

Access the paper path test from an LCD control panel

1. From the [Home](#) screen on the printer control panel, use the arrow buttons to navigate to [Support Tools](#), and then press the [OK](#) button.
2. Use the arrow buttons to scroll to [Troubleshooting](#), and then press the [OK](#) button.
3. Use the arrow buttons to scroll to [Diagnostic Tests](#), and then press the [OK](#) button.
4. Use the arrow buttons to scroll to [Paper Path Test](#), and then press the [OK](#) button.

Paper path sensors test

Learn about the paper path sensor test troubleshooting diagnostic.

Access the paper path sensors test from a touchscreen control panel

1. From the [Home](#) screen on the printer control panel, scroll to and touch the [Support Tools](#) button.
2. Open the following menus:
 - [Troubleshooting](#)
 - [Diagnostic Tests](#)
 - [Paper Path Sensors](#)
3. Touch [Start](#) to run the test.

Access the paper path sensors test from an LCD control panel

1. From the [Home](#) screen on the printer control panel, use the arrow buttons to navigate to [Support Tools](#), and then press the [OK](#) button.
2. Use the arrow buttons to scroll to [Troubleshooting](#), and then press the [OK](#) button.
3. Use the arrow buttons to scroll to [Diagnostic Tests](#), and then press the [OK](#) button.
4. Use the arrow buttons to scroll to [Paper Path Sensors](#), and then press the [OK](#) button.

Table 4-15 Paper-path sensors diagnostic tests

Sensor	Abbreviation	Description	Part number
Tray 3 feed sensor (optional accessory) NOTE: Only appears if optional accessories are installed.	SR21	Paper feed assembly	RM2-5145-000CN

Table 4-15 Paper-path sensors diagnostic tests (continued)

Sensor	Abbreviation	Description	Part number
Registration sensor	SR6	Registration assembly	RM2-1957-000CN
Fuser loop 1 sensor	PS1	Fuser	RM2-1928-030CN (110 V) RM2-1929-020CN (220 V)
Front media width sensor	SR13	Registration assembly	RM2-1957-000CN
Fuser output sensor	SR9	Fuser	RM2-1928-030CN (110 V) RM2-1929-020CN (220 V)
Developer alienation sensor	SR4	Main drive assembly	RM2-1927-000CN
Output bin full sensor	SR10	Paper delivery assembly	RM2-6621-000CN

Manual sensors test

Learn about the manual sensor test troubleshooting diagnostic.

Access the manual sensor test from a touchscreen control panel

1. From the [Home](#) screen on the printer control panel, scroll to and touch the [Support Tools](#) button.
2. Open the following menus:
 - [Troubleshooting](#)
 - [Diagnostic Tests](#)
 - [Manual Sensor Test](#)
3. 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).
4. Touch the [Reset Sensors](#) button to reset the [Toggle](#) count item.




or

Touch the [Cancel](#) button or the [Return](#) arrow button to exit the [Manual Sensor Test](#) screen and return to the [Diagnostic Tests](#) menu.


Access the manual sensor test from an LCD control panel

1. From the [Home](#) screen on the printer control panel, use the arrow buttons to navigate to [Support Tools](#), and then press the [OK](#) button.
2. Use the arrow buttons to scroll to [Troubleshooting](#), and then press the [OK](#) button.
3. Use the arrow buttons to scroll to [Diagnostic Tests](#), and then press the [OK](#) button.

4. Use the arrow buttons to scroll to **Manual Sensor Test**, and then press the **OK** button.
5. Activate the desired sensor, and then check the control-panel display to verify the sensor state (active or inactive).

 **TIP:** Press the return arrow  button to reset the sensor or press the Cancel  button to exit the test.

- 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).

 **NOTE:** The following table describes the sensor tests available with an optional 1x550-sheet paper feeder installed.

For trays other than Tray 1 or Tray 2, the tray number associated with a sensor or switch depends on the number and type of accessories installed.

Table 4-16 Manual sensor diagnostic tests

Sensor	Part number	Description
PS1 Fuser loop 1 sensor	RM2-1928-030CN (110 V) RM2-1929-020CN (220 V)	Fuser
SR6 Registration sensor	RM2-1957-030CN	Registration assembly
SR9 Fuser output sensor	RM2-1928-030CN (110 V) RM2-1929-020CN (220 V)	Fuser
SR10 Output bin full sensor	RM2-6621-000CN	Paper delivery assembly
SR11 Fuser pressure release sensor	RM2-1928-030CN (110 V) RM2-1929-020CN (220 V)	Fuser
SR13 Front Media width sensor SR13N Front Media width sensor	RM2-6556-000CN	Paper pickup assembly
SR14 Rear media width sensor SR14N Rear media width sensor	RM2-6556-000CN	Paper pickup assembly
SR21 Tray 3 feed sensor NOTE: Only appears if optional accessories are installed.	RM2-5145-000CN	Paper feed assembly
SW3 Right door opening/closing sensor	WC2-5806-000CN	Switch button assembly
SW4 Front door opening/closing sensor	RM2-7133-000CN	Switch PCA assembly

Tray/bin manual sensors test

Learn about the tray/bin manual sensor test troubleshooting diagnostic.

Access the tray/bin manual sensor test from a touchscreen control panel

1. From the [Home](#) screen on the printer control panel, scroll to and touch the [Support Tools](#) button.
2. Open the following menus:
 - [Troubleshooting](#)
 - [Diagnostic Tests](#)
 - [Tray/bin Manual Sensor Test](#)
3. 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).
4. Touch the [Reset Sensors](#) button to reset the [Toggle](#) count item.

or

Touch the [Cancel](#) button or the [Return](#) arrow button to exit the [Manual Sensor Test](#) screen and return to the [Diagnostic Tests](#) menu.

Tray/bin manual sensor test from a SFP control panel

1. From the [Home](#) screen on the printer control panel, use the arrow buttons to navigate to [Support Tools](#), and then press the [OK](#) button.
2. Use the arrow buttons to scroll to [Troubleshooting](#), and then press the [OK](#) button.
3. Use the arrow buttons to scroll to [Diagnostic Tests](#), and then press the [OK](#) button.
4. Use the arrow buttons to scroll to [Tray/bin Manual Sensor Test](#), and then press the [OK](#) button.
5. 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).



NOTE: The following table describes the sensor tests available with an optional 1x550-sheet paper feeder installed.

For trays other than Tray 1 or Tray 2, the tray number associated with a sensor or switch depends on the number and type of accessories installed.



TIP: The list of displayed sensors and switches depends on the installed accessories.

Table 4-17 Tray/bin manual sensor diagnostic tests

Sensor	Part number	Description
SR5 Tray 2 paper sensor	RM2-1946-000CN (part not available)	Size detect switch
SR8 Tray 1 paper sensor	RM2-6807-000CN	Right door assembly
SR10 Output bin media out sensor	RM2-6621-000CN	Paper delivery assembly
SR12 Cassette media out sensor	RM2-6556-000CN	Paper pickup assembly
SR20 Tray 3-X media out sensor	RM2-6556-000CN	Paper pickup assembly NOTE: Also associated with the media presence sensor.
SR21 Tray 3 feed sensor	RM2-5145-000CN	Paper feeder assembly
SW20 Right door sensor	RM2-6807-000CN	Right door assembly
SW21 Tray 3 cassette sensor	WC2-5803-000CN	Switch button assembly

Print/stop test

Learn about the print/stop test troubleshooting diagnostic.

Use this diagnostic test to isolate the cause of problems such as image-formation defects and jams within the engine.

During this test, stop the paper anywhere along the printer paper path. The test can be programmed to stop printing internal pages or an external print job when the paper reaches a certain position. The test can also be programmed to stop from 0 to 60,000 ms. If the timer is set to a value that is greater than the job-print time, the printer can recover in one of two ways.

Printer recovery (print/stop test)

- After the print job is completed press the **OK** button to return to the **Troubleshooting** menu before the timer times out.
- After the timer times out, touch the **Stop** button. Activate the door switch to restart the engine and return it to a normal state.



NOTE: Do not try to perform a print/stop test while the printer is calibrating, because restarting the printer might be necessary. If a jam message displays on the control panel during testing, activate the door switch.

Print/stop test from a touchscreen control panel

1. From the **Home** screen on the printer control panel, scroll to and touch the **Support Tools** button.
2. Open the following menus:
 - **Troubleshooting**
 - **Diagnostic Tests**
 - **Print/Stop Test**
3. Enter a range, and then touch the **OK** button.

Print/stop test from a non-touchscreen control panel

1. From the [Home](#) screen on the printer control panel, use the arrow buttons to navigate to [Support Tools](#), and then press the [OK](#) button.
2. Use the arrow buttons to scroll to [Troubleshooting](#), and then press the [OK](#) button.
3. Use the arrow buttons to scroll to [Diagnostic Tests](#), and then press the [OK](#) button.
4. Use the arrow buttons to scroll to [Print/Stop Test](#), and then press the [OK](#) button.

Tools for troubleshooting: component tests

Learn about component tests diagnostics.

Use the procedure below to test various printer mechanical and electromechanical assemblies.



NOTE: The menu list of sensors and switches for the [Paper path sensors test](#), [Manual Sensor Test](#), and the [Tray/Bin Manual Sensor Test](#) varies depending on which optional accessories are installed.

The tables in this section describe the sensor tests available with an optional 1x550-sheet paper feeder installed.

For trays other than Tray 1 or Tray 2, the tray number associated with a sensor or switch depends on the number and type of accessories installed.

Individual component diagnostics (special-mode test)

Learn about the component test troubleshooting diagnostic.



NOTE: The front door or right side door interlocks must be defeated to run the component tests. Some tests might require that the ITB and toner cartridges be removed. A control-panel display prompt appears indicate removing some, or all of the cartridges, during certain tests.

Access the individual component diagnostics from a touchscreen control panel

1. From the [Home](#) screen on the printer control panel, scroll to and touch the [Support Tools](#) button.
2. Open the following menus:
 - [Troubleshooting](#)
 - [Diagnostic Tests](#)
 - [Component Test](#)
3. Select the component test options for the test.

Access the individual component diagnostics from an LCD control panel

1. From the [Home](#) screen on the printer control panel, use the arrow buttons to navigate to [Support Tools](#), and then press the [OK](#) button.
2. Use the arrow buttons to scroll to [Troubleshooting](#), and then press the [OK](#) button.
3. Use the arrow buttons to scroll to [Diagnostic Tests](#), and then press the [OK](#) button.
4. Use the arrow buttons to scroll to [Component Test](#), and then press the [OK](#) button.



NOTE: The menu list of components for the [Component Test](#) varies depending on which optional accessories are installed.

The table in this section describes the components available with an optional 1x550-sheet paper feeder installed.

For trays other than Tray 1 or Tray 2, the tray number associated with a sensor or switch depends on the number of accessories installed.

Table 4-18 Component test details

Component test	Item tested	Part number	Comments
Feed roller clutch	CL1	RM2-2091-000CN Lifter drive assembly	Activates the specified clutch.
Drum motors	M1/M2/ M3	RM2-1956-000CN	Activates the specified motor.
Fuser drive assembly	M4	RM2-1934-000CN	Activates the specified motor.
Tray 2 pickup motor	M5	RM2-1222-000CN Pickup drive assembly	Activates the specified motor.
Fuser pressure release motor	M6		Activates the specified motor.
Laser Scanner motor	M7	RM2-1237-000CN Laser/scanner assembly	Activates the specified motor.
Duplexer pickup motor	M8		Activates the specified motor.
Tray 3 pickup motor	M20	RM2-5145-000CN Paper feed assembly	Activates the specified motor.
Tray 2 pickup solenoid	SL1	RM2-0022-000CN Tray 1 roller alienation (part of secondary transfer assembly)	Activates the specified solenoid.
Tray 1 pickup solenoid	SL2	RM2-1235-000CN Paper pickup assembly	Activates the specified solenoid.
Duplex switchback solenoid	SL3		Activates the specified solenoid.
Tray 3-X pickup solenoid	Not applicable	RM2-5154-000CN Paper pickup assembly	Activates the specified solenoid.
Repeat	Not applicable	Not applicable	Choose Off to execute the test once. Choose On to execute the test continuously.

Scanner tests (MFP)

Learn about troubleshooting the MFP 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 select the [Support Tools](#) item.
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 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. Select the [Reset sensors](#) item 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 the [Diagnostic Tests](#) menu.

Scanner test sensors

- [ADF paper present](#)
- [ADF Y \(length\)](#)
- [ADF jam cover](#)
- [ADF paper path deskew](#)
- [ADF paper path pick success](#)
- [Paper path sensor 1 \(unreachable\)](#)
- [Flatbed Y \(length\)](#)
- [Flatbed cover](#)

Diagrams

View diagrams for the printer.

Use the diagrams in this section to identify printer components.

Diagrams: Block diagrams

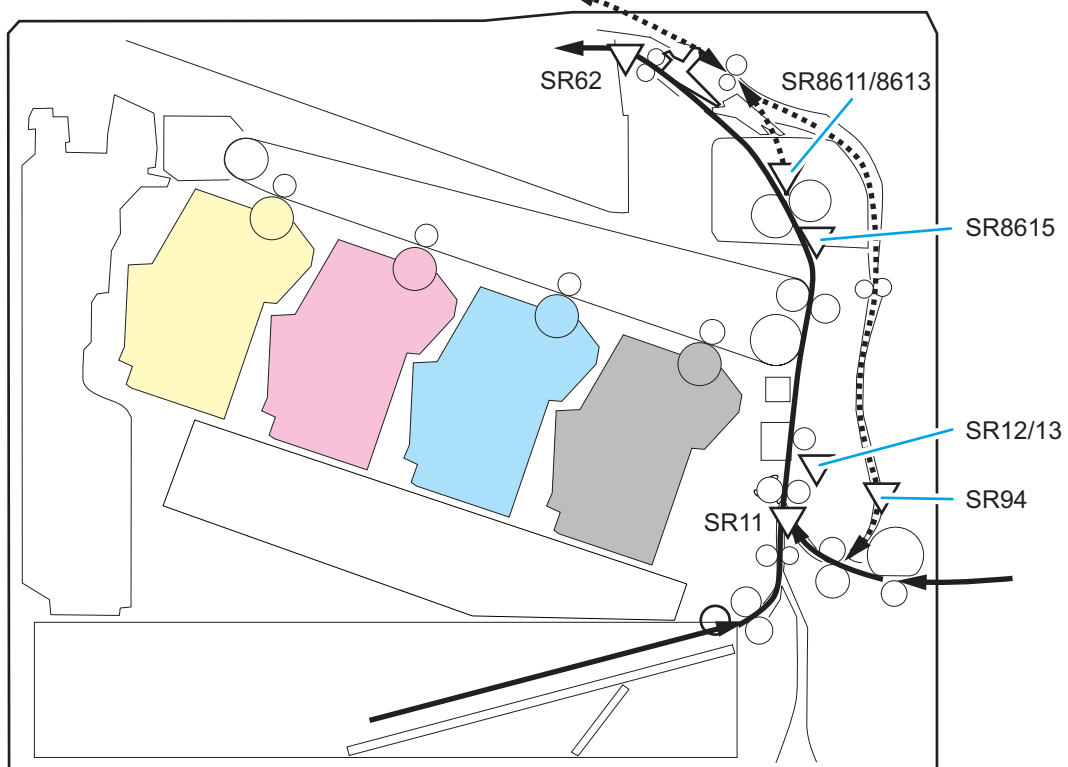
View block diagrams for the printer.

Sensors and switches

View document feeder, printer, and paper feeder sensor and switch diagrams.

Sensors and switches (printer base)

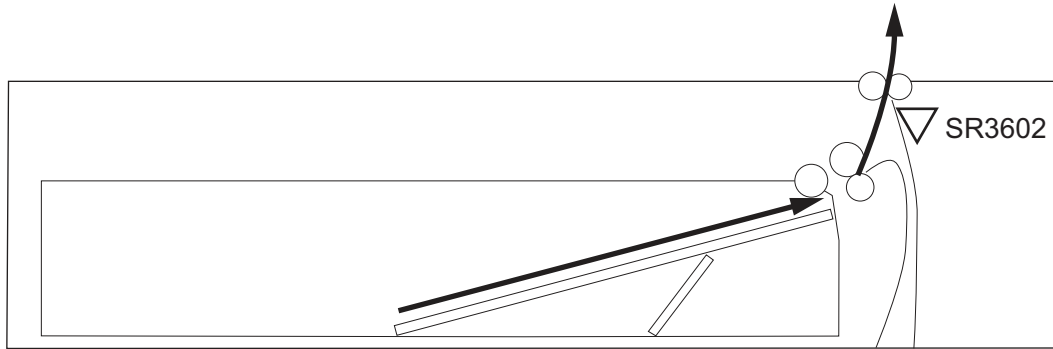
Figure 4-50 Sensors and switches (printer base)



Item	Description	Item	Description
SR11	Registration sensor	SR94	Duplex feed sensor (duplex models only)
SR12	Registration media width sensor 1	SR8611	Fuser output sensor 1
SR13	Registration media width sensor 2	SR8613	Fuser output sensor 2
SR62	FD1 media full sensor	SR8615	Fuser loop sensor

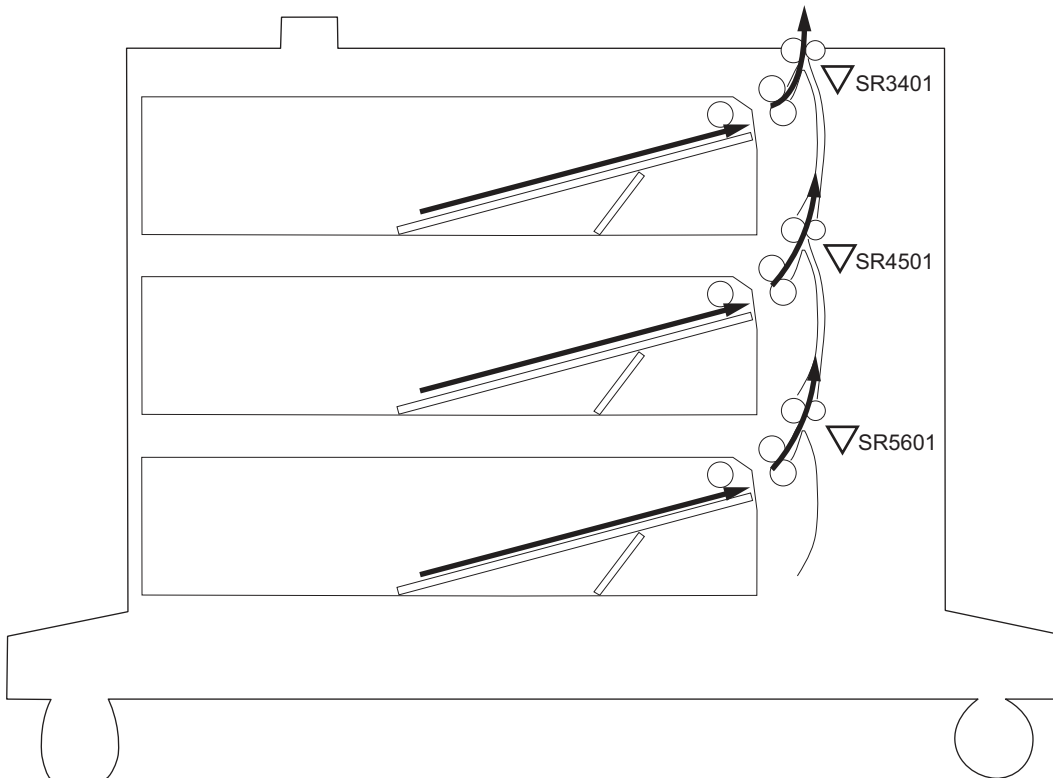
Sensors and switches (input and output devices)

Figure 4-51 1x550-sheet paper feeder, sensors and switches block diagram



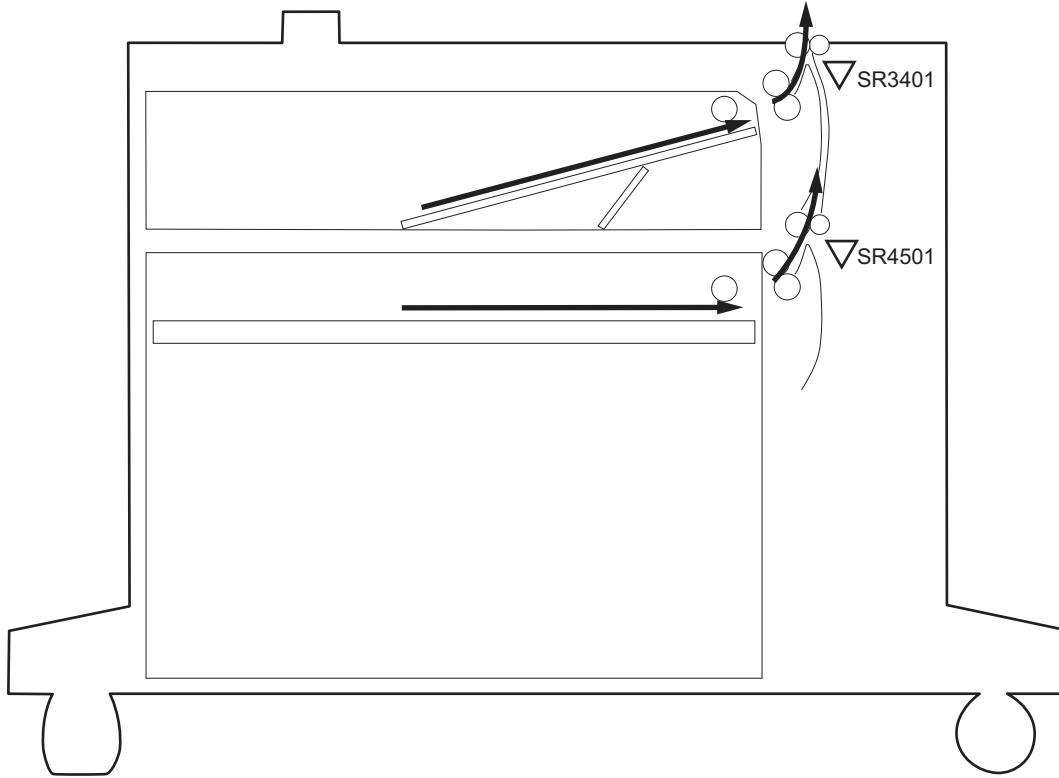
Item	Description
PS3602	Paper feeder sensor (550-sheet feeder only)

Figure 4-52 Paper deck, sensors and switches block diagram



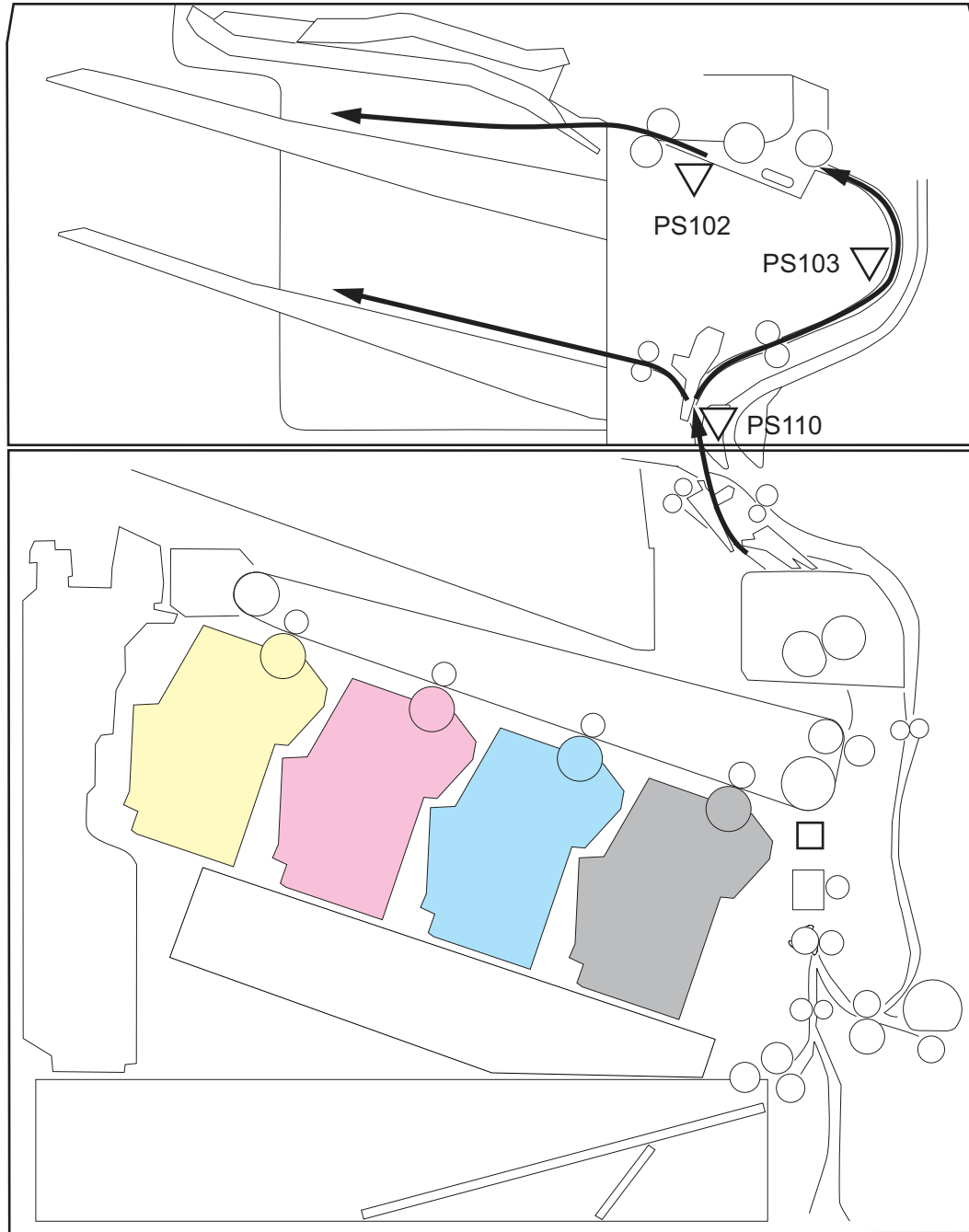
Item	Description
PS3401	Paper deck cassette 1 feed sensor (1x550-sheet paper deck, 3x550-sheet paper deck, and HCI only)
PS4501	Paper deck cassette 2 feed sensor (3x550-sheet paper deck and HCI only)
PS5601	Paper deck cassette 3 feed sensor (3x550-sheet paper deck only)

Figure 4-53 HCI, sensors and switches block diagram



Item	Description
PS3401	HCI cassette 1 feed sensor
PS4501	HCI cassette 2 feed sensor

Figure 4-54 HP Stapling Mailbox, sensors and switches block diagram



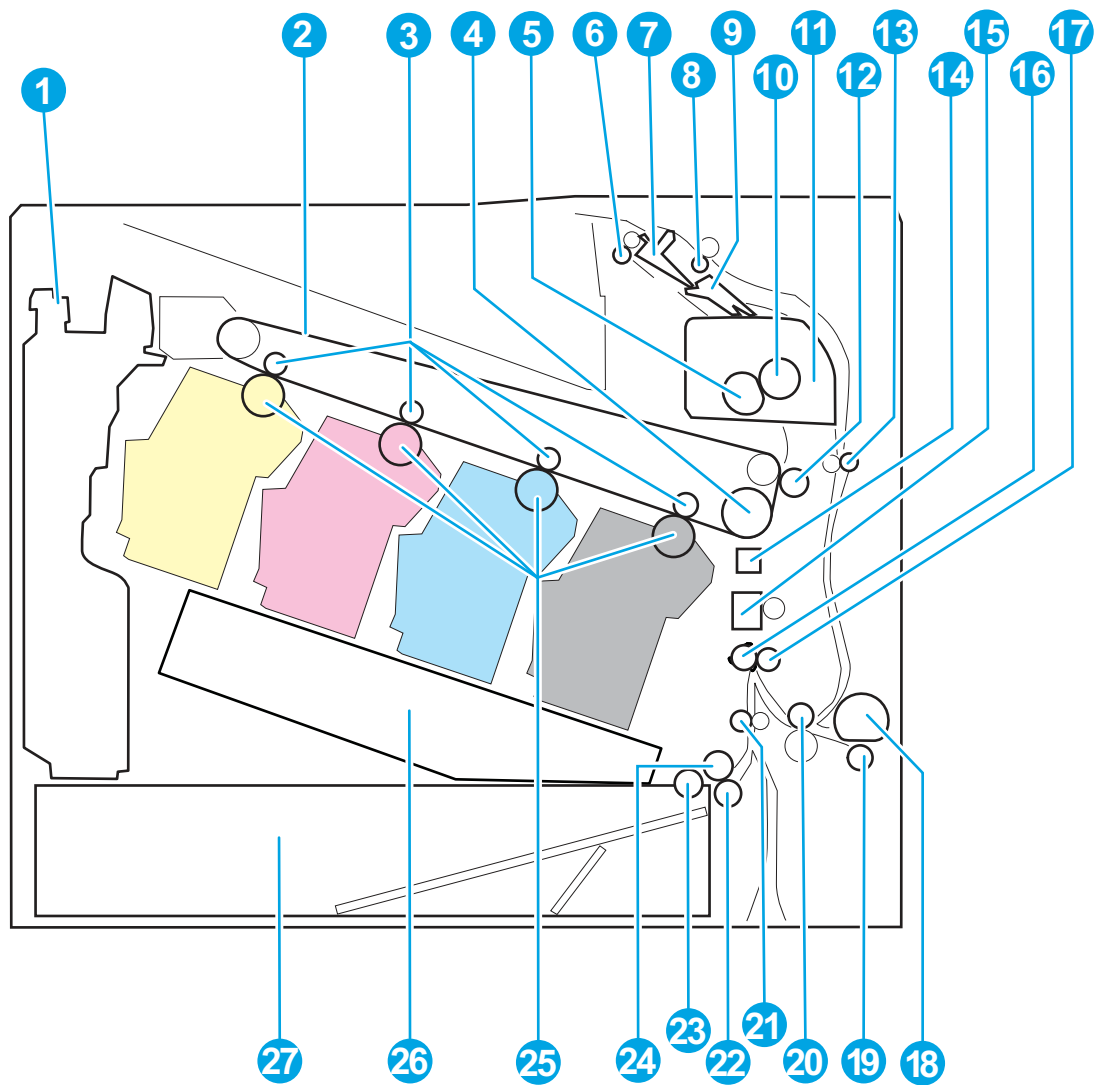
Item	Description
PS102	Stapler/stacker exit sensor
PS103	Staple inlet sensor
PS110	Stapler/stacker inlet sensor

Cross section diagrams

View printer and paper feeder cross section diagrams.

Cross-sectional view of the printer

Figure 4-55 Cross-sectional view of the printer

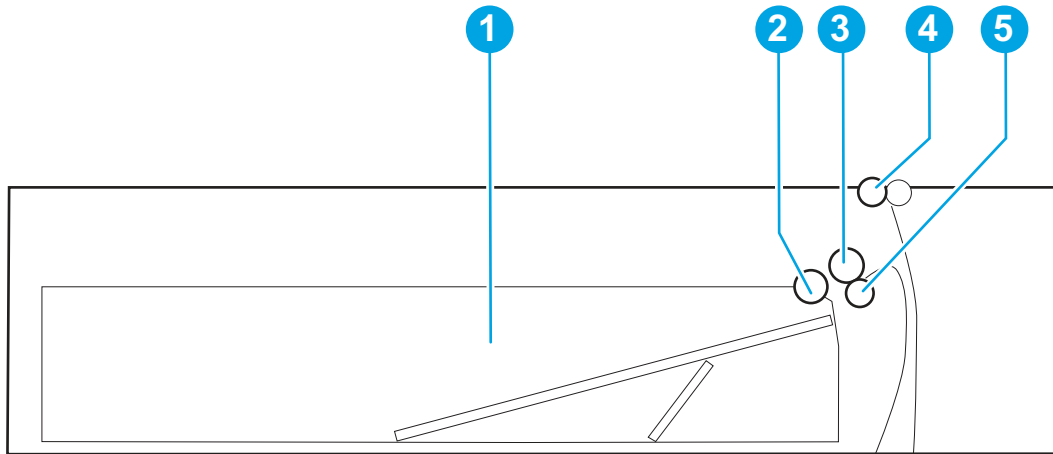


Item	Description	Item	Description
1	Toner collection unit	15	Media sensor
2	ITB	16	Registration shutter
3	T1 roller	17	Registration roller
4	ITB drive roller	18	Tray 1 pickup roller
5	Fuser film	19	Tray 1 separation roller
6	Output roller	20	Duplex re-pickup roller
7	Output accessory flapper	21	Intermediate feed roller
8	Duplex switchback roller	22	Tray 2 separation roller
9	Duplex flapper	23	Tray 2 pickup roller
10	Pressure roller	24	Tray 2 feed roller

Item	Description	Item	Description
11	Fuser	25	Photosensitive drum
12	T2 roller	26	Laser scanner assembly
13	Duplex feed roller	27	Tray 2
14	Registration density sensor		

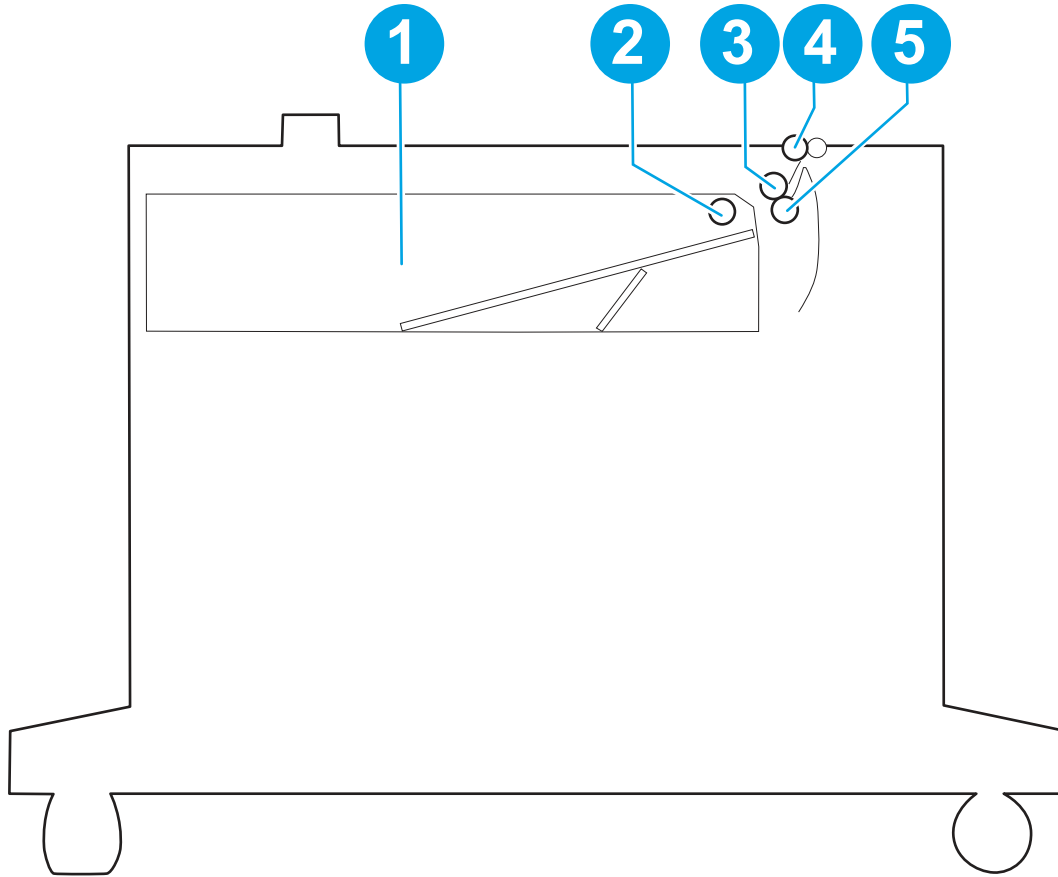
Cross-sectional view (input and output devices)

Figure 4-56 1x550-sheet paper feeder, cross section diagram



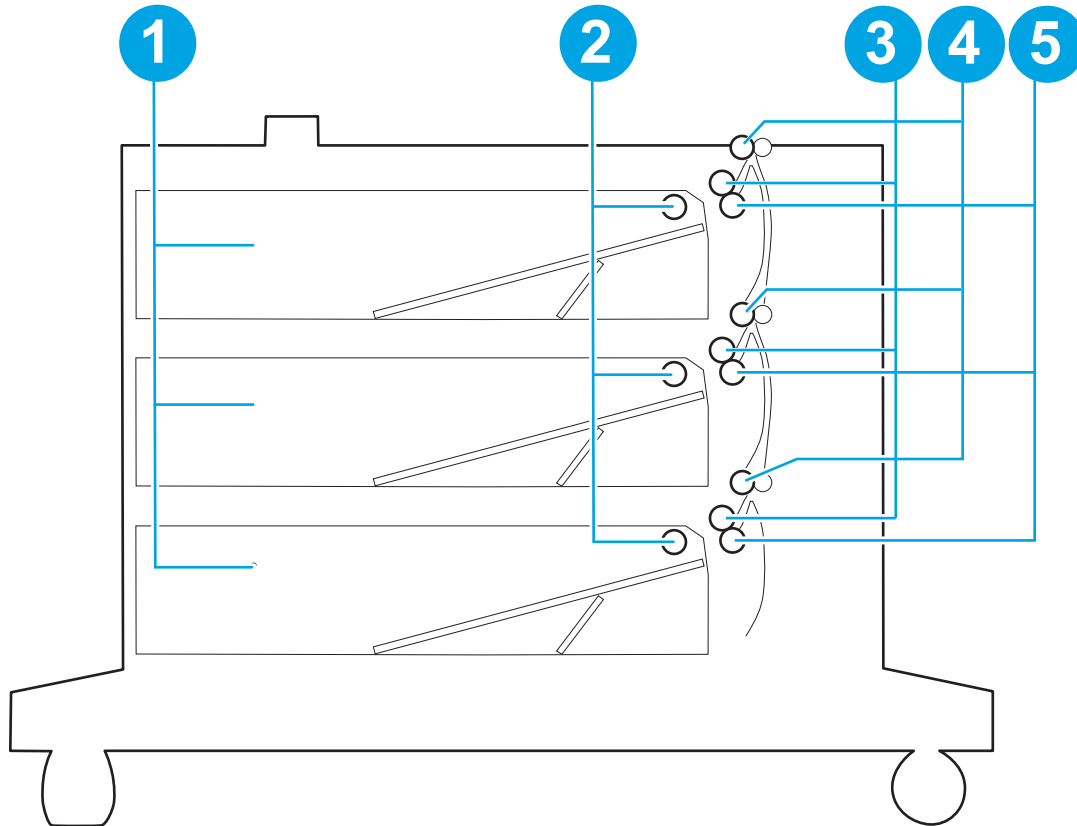
Item	Description
1	Cassette
2	Cassette pickup roller
3	Cassette feed roller
4	Feed roller
5	Cassette separation roller

Figure 4-57 Paper deck, 1x550, cross section diagram



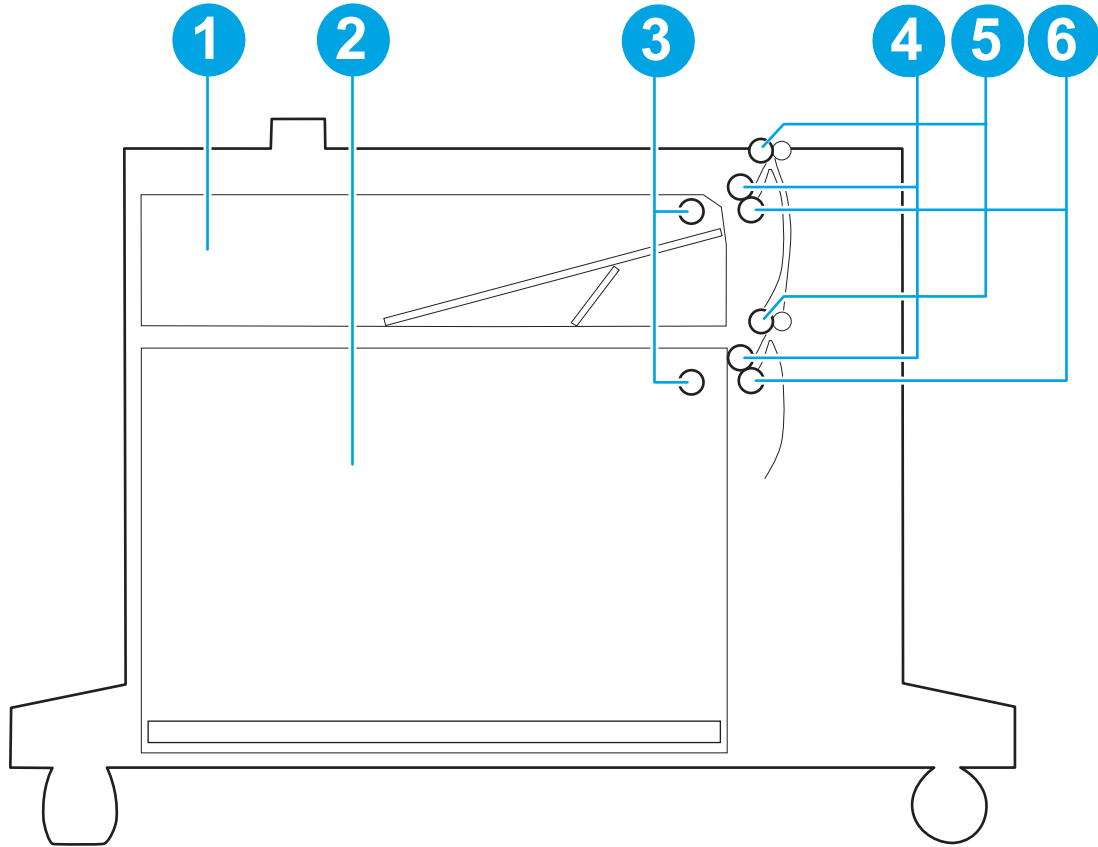
Item	Description
1	Cassette
2	Cassette pickup roller
3	Cassette feed roller
4	Feed roller
5	Cassette separation roller

Figure 4-58 Paper deck, 3x550, cross section diagram



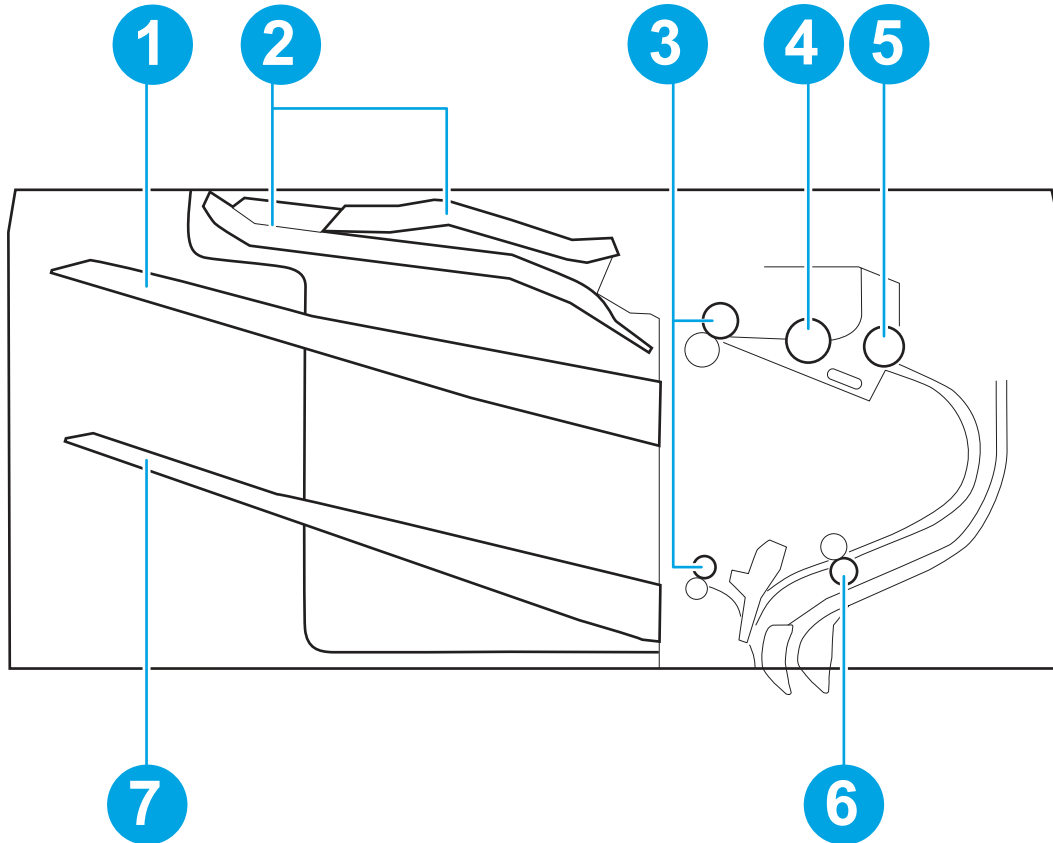
Item	Description
1	Cassette
2	Cassette pickup roller
3	Cassette feed roller
4	Feed roller
5	Cassette separation roller

Figure 4-59 HCI, cross section diagram



Item	Description
1	Cassette
2	Paper tray
3	Cassette pickup roller
4	Cassette feed roller
5	Feed roller
6	Cassette separation roller

Figure 4-60 HP Stapling Mailbox, cross section diagram



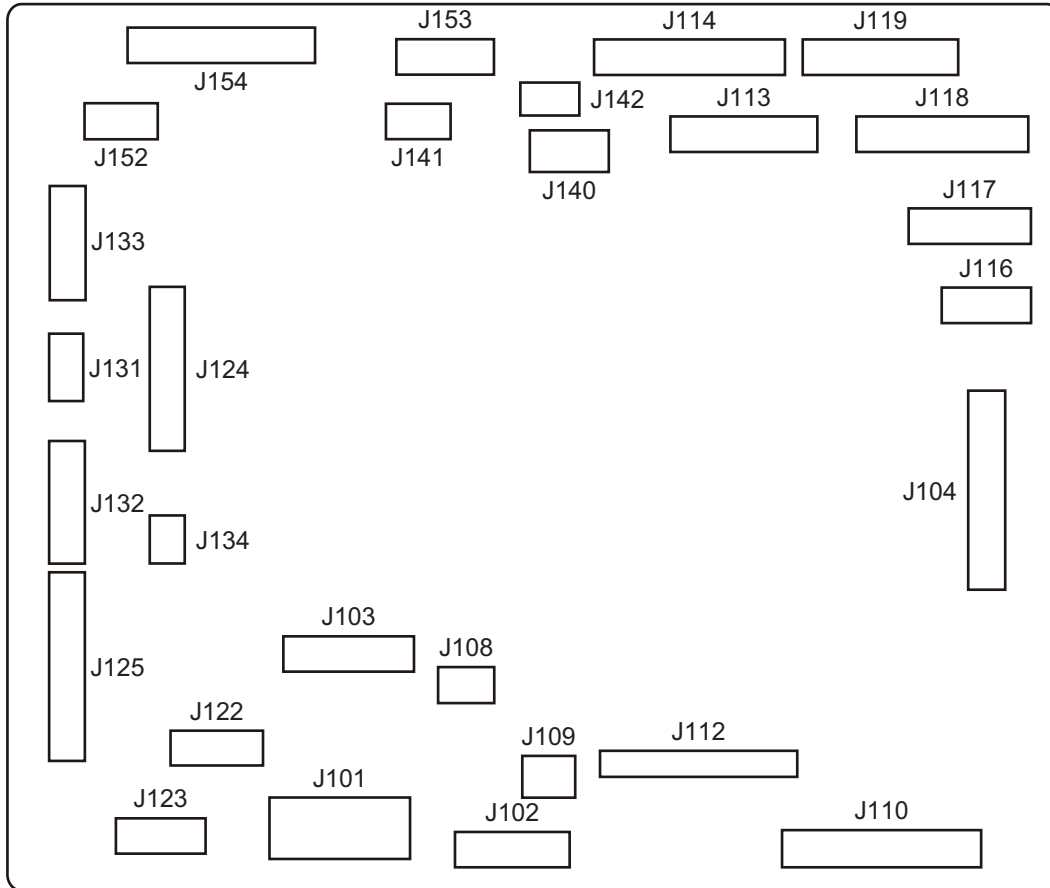
Item	Description
1	Output bin 1
2	Jogger guide
3	Output bin delivery roller
4	Alignment roller
5	Exit feed roller
6	Inlet feed roller
7	Output bin 2

Printed circuit assembly (PCA) connector locations

View printed circuit assembly (PCA) diagrams.

DC controller PCA connections

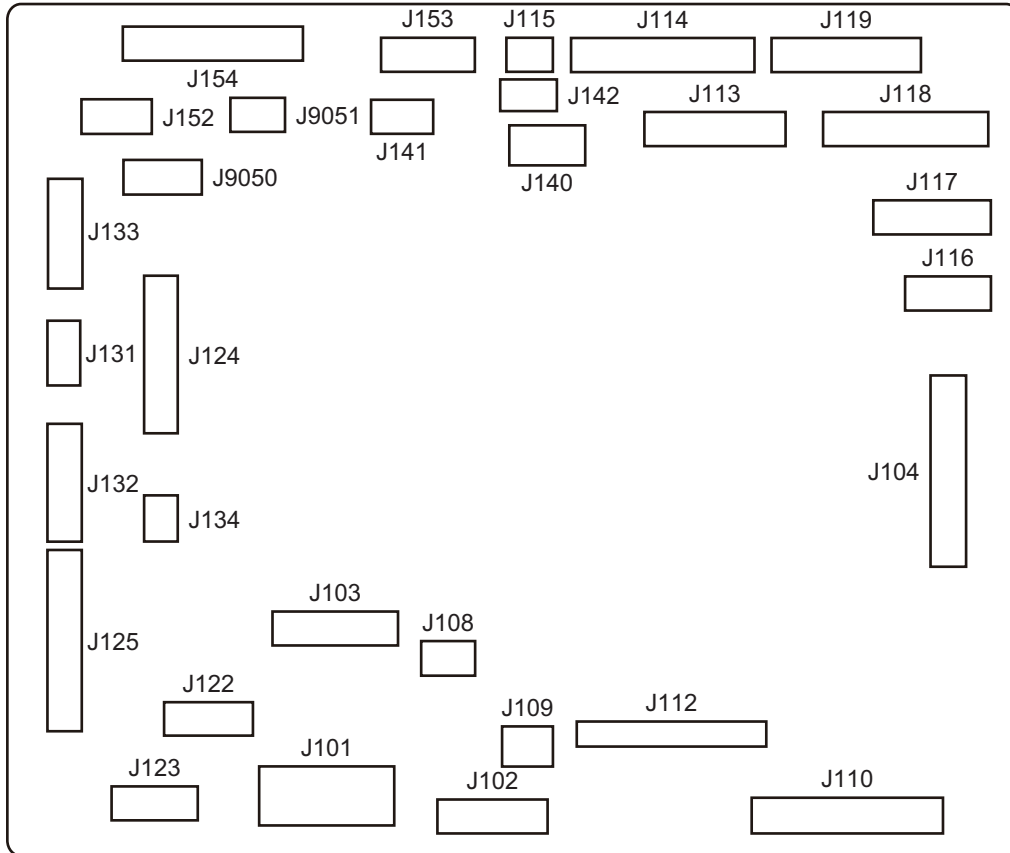
Figure 4-61 DC controller PCA connectors—M652/M653/M681/M682



Item	Description	Item	Description
J101	Low-voltage power supply (LVPS)	J122	Pickup motor
J102	Low-voltage power supply (LVPS)	J123	Tray 2 media size switch Laser scanner assembly
J103	Low-voltage power supply (LVPS)	J124	Tray 1 pickup solenoid Duplex feed sensor Tray 1 media out sensor Environment sensor Cartridge fan Tray 2 pickup clutch
J104	Formatter	J125	Input accessory E-label
J108	24V interlock switch	J131	Media sensor
J109	5V interlock switch	J132	Registration density sensor assembly

Item	Description	Item	Description
J110	Laser scanner assembly	J133	Duplex re-pickup clutch Registration sensor Registration media width sensor 1 Registration media width sensor 2
J112	High-voltage power supply D	J134	Tray 2 media out sensor
J113	High-voltage power supply T	J140	Not used
J114	High-voltage power supply T	J141	Not used
J116	Output accessory (MFP only)	J142	Not used
J117	Drum home position sensor Y Drum home position sensor MC Drum home position sensor K Developer alienation sensor	J152	Power supply switch FD1 media full sensor
J118	Drum motor 3 Fuser motor T1 roller alienation solenoid	J153	Duplex flapper position sensor Duplex switchback solenoid Duplex switchback motor
J119	Drum motor 1 Drum motor 2	J154	Fuser

Figure 4-62 DC controller PCA connectors—E65150/E65160/E67650/E67660

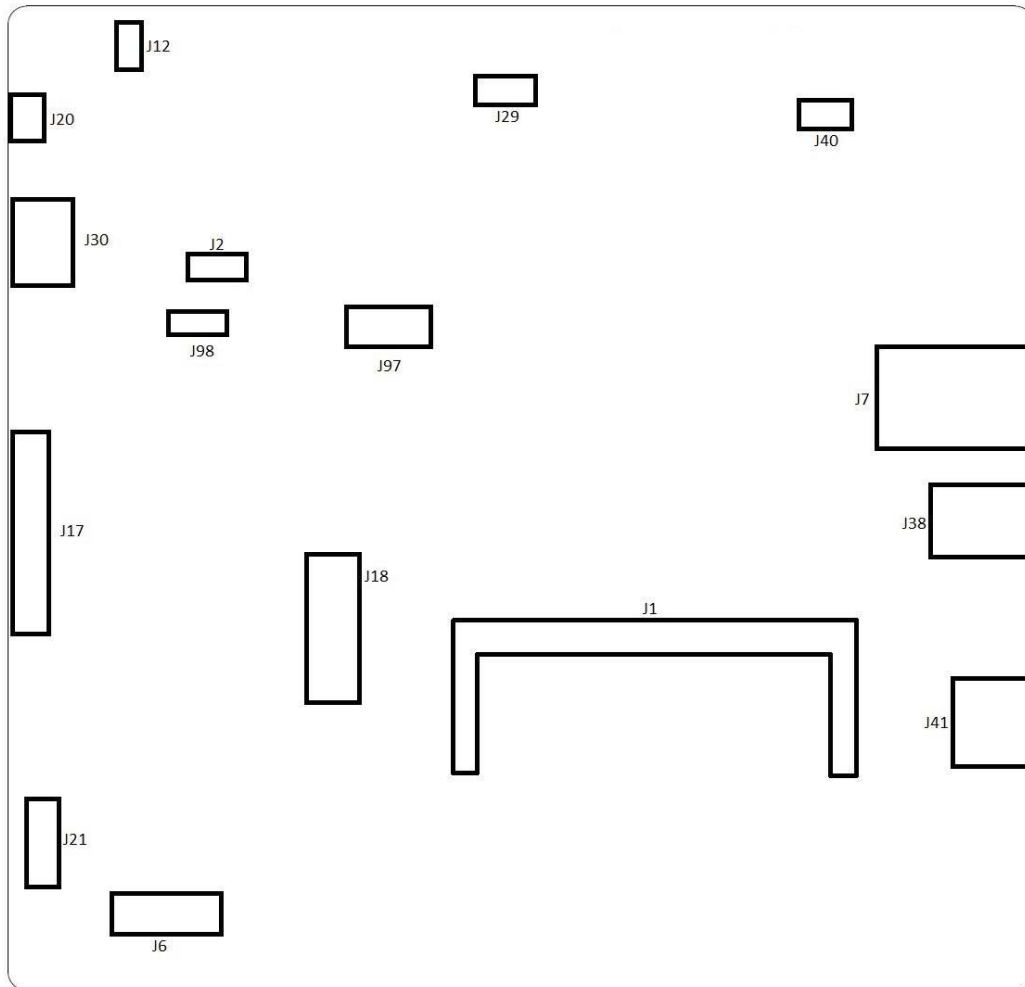


Item	Description	Item	Description
J101	Low-voltage power supply (LVPS)	J123	Tray 2 media size switch Laser scanner assembly
J102	Low-voltage power supply (LVPS)	J124	Tray 1 pickup solenoid Duplex feed sensor Tray 1 media out sensor Environment sensor Cartridge fan Tray 2 pickup clutch
J103	Low-voltage power supply (LVPS)	J125	Input accessory E-label
J104	Formatter	J131	Media sensor
J108	24V interlock switch	J132	Registration density sensor assembly

Item	Description	Item	Description
J109	5V interlock switch	J133	Duplex re-pickup clutch Registration sensor Registration media width sensor 1 Registration media width sensor 2
J110	Laser scanner assembly	J134	Tray 2 media out sensor
J112	High-voltage power supply D	J140	Not used
J113	High-voltage power supply T	J141	Not used
J114	High-voltage power supply T	J142	Not used
J115	Not used	J152	Power supply switch FD1 media full sensor
J116	Output accessory (MFP only)	J153	Duplex flapper position sensor Duplex switchback solenoid Duplex switchback motor
J117	Drum home position sensor Y Drum home position sensor MC Drum home position sensor K Developer alienation sensor	J154	Fuser
J118	Drum motor 3 Fuser motor T1 roller alienation solenoid	J9050	Not used
J119	Drum motor 1 Drum motor 2	J9051	Front door left lock solenoid Front door right lock solenoid
J122	Pickup motor		

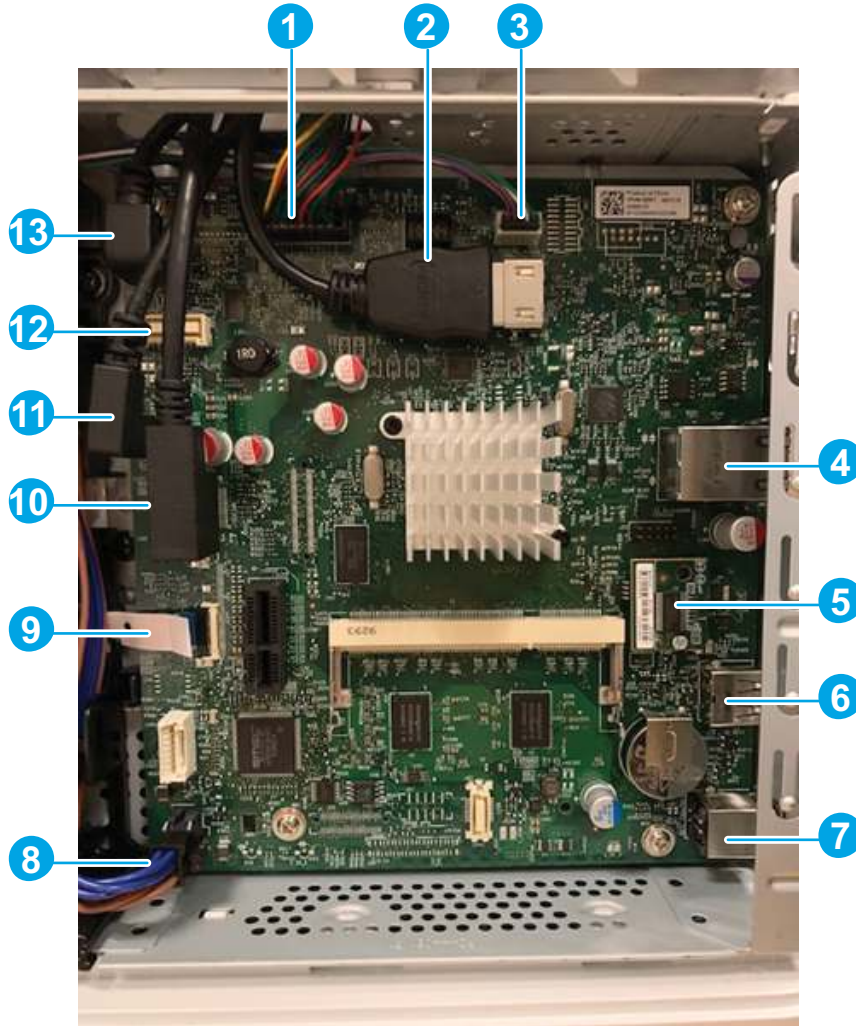
Formatter PCA connections

Figure 4-63 Formatter PCA (M652/M653/E65050/E65060/E65150/E65160)



Item	Description	Item	Description
J1	SO-DIMM	J21	Internal USB ports (AA module) connector
J2	Control panel power	J29	IOD connector
J6	Engine power	J30	Control panel HDMI
J7	Ethernet	J38	Host USB
J12	HIP cable connector	J40	Wireless/BLE module connector
J17	Engine VIF	J41	Device USB
J18	HDD riser connector	J97	eMMC connector
J20	Walkup USB cable connector	J98	Aux connector

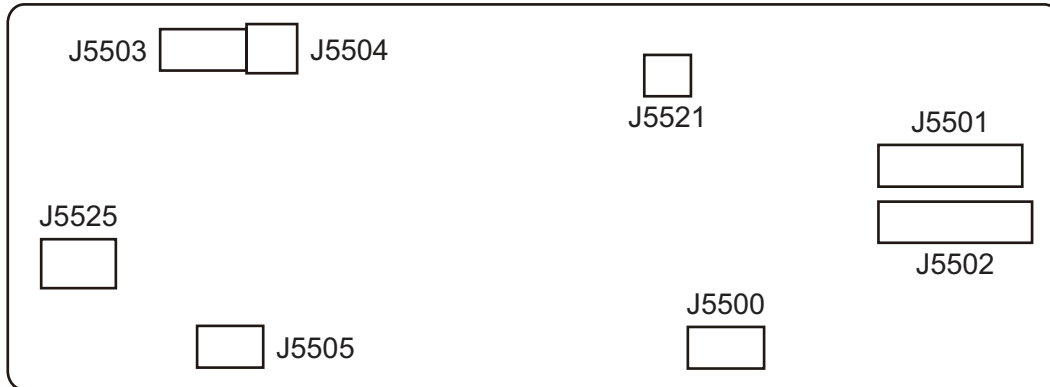
Figure 4-64 Formatter PCA–M681/M682/E67550/E67560/E67650/E67660



Item	Description	Item	Description
1	Control panel	8	Power
2	Control panel	9	Engine
3	IOD	10	Scan data
4	Network	11	HIP
5	TPM	12	eMMC
6	USB	13	Walkup USB
7	USB		

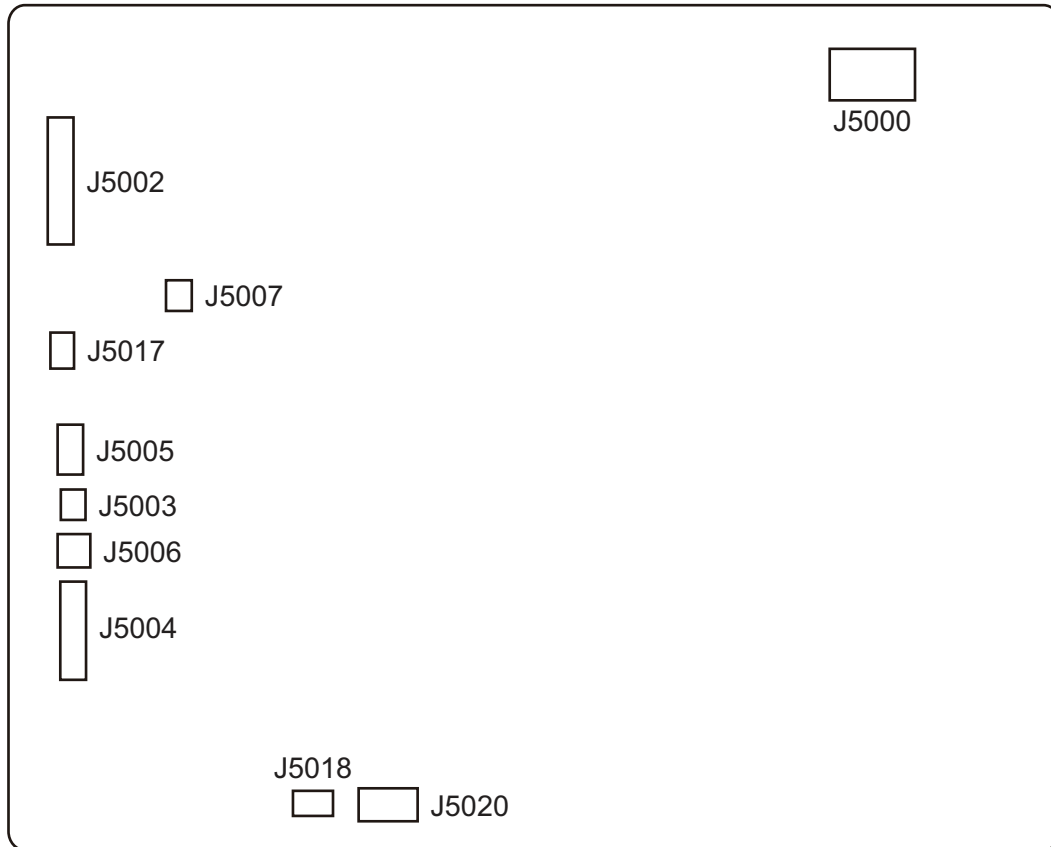
Input/output devices

Figure 4-65 1x550-sheet paper feeder controller PCA connections



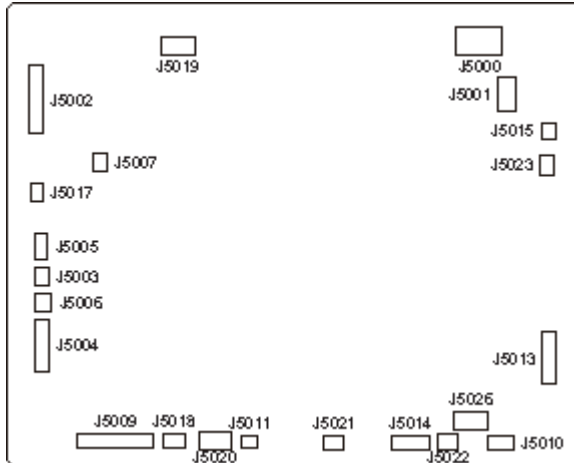
Item	Description	Item	Description
J5500	Not used	J5504	Paper feeder door switch
J5501	Printer or paper feeder	J5505	Paper feeder media size switch
J602	Paper feeder	J5521	Paper feeder pickup clutch
J5503	Paper feeder feed sensor Paper feeder media out sensor	J5525	Paper feeder feed motor

Figure 4-66 Paper deck controller PCA connectors, 1x550



Item	Description	Item	Description
J5000	Not used	J5006	Paper deck door switch
J5002	Printer	J5007	Paper deck cassette 1 lifter motor
J5003	Paper deck cassette 1 media size switch 2	J5017	Paper deck cassette 1 pickup clutch
J5004	Paper deck cassette 1 feed sensor Paper deck cassette 1 media out sensor Paper deck cassette 1 media surface sensor	J5018	Paper deck pickup roller alienation sensor
J5005	Paper deck cassette 1 media size switch 1	J5020	Paper deck feed motor 1

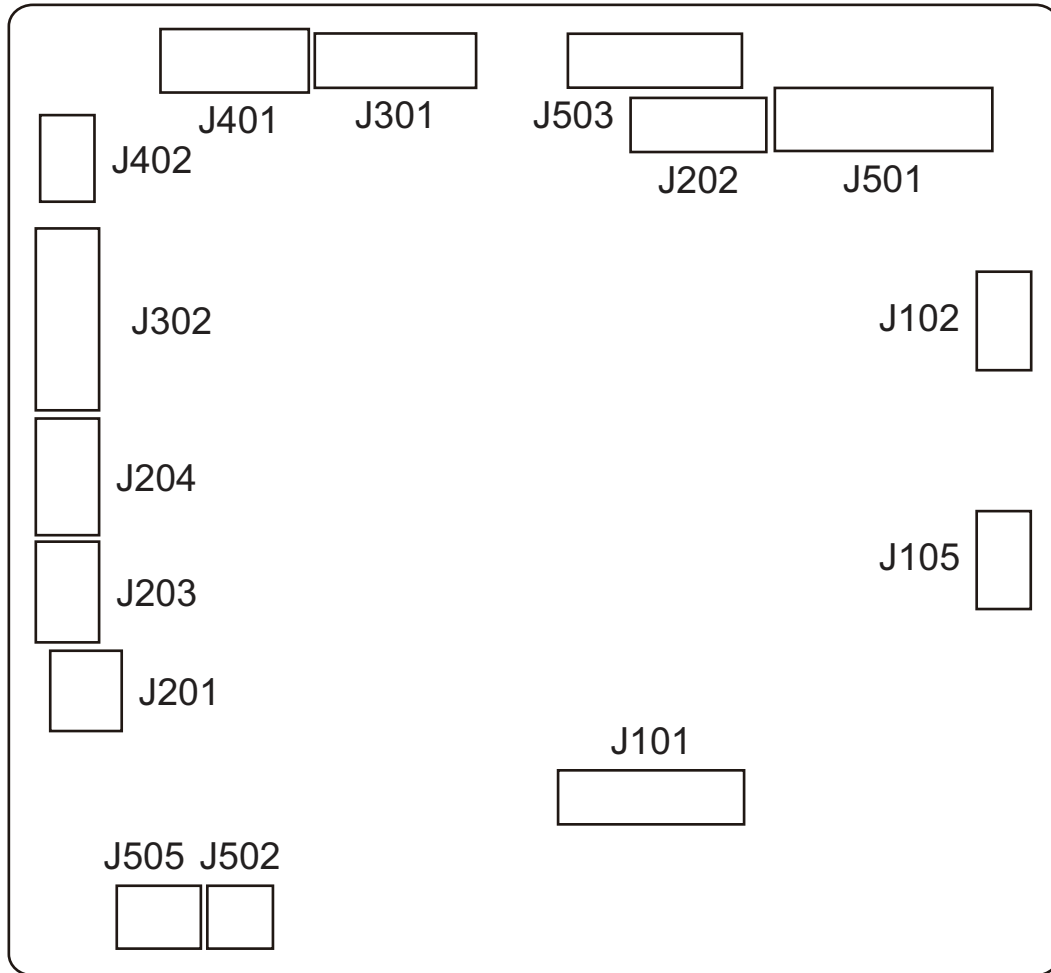
Figure 4-67 Paper deck controller PCA connectors, 3x550 and 2,550



Item	Description	Item	Description
J5000	Not used	J5013	Paper deck cassette 3 feed sensor (3x550-sheet paper deck only) Paper deck cassette 3 media out sensor (3x550-sheet paper deck only) Paper deck cassette 3 media surface sensor (3x550-sheet paper deck only)
J5001	Paper deck feed motor 3 (3x550-sheet paper deck only)	J5014	Paper deck cassette 3 media size switch 2 (3x550-sheet paper deck only) Paper deck cassette 3 media size switch 1 (3x550-sheet paper deck only)
J5002	Printer or paper feeder	J5015	Paper deck cassette 3 lifter motor (3x550-sheet paper deck only)
J5003	Paper deck cassette 1 media size switch 2	J5017	Paper deck cassette 1 pickup clutch
J5004	Paper deck cassette 1 feed sensor Paper deck cassette 1 media out sensor Paper deck cassette 1 media surface sensor	J5018	Paper deck pickup roller alienation sensor
J5005	Paper deck cassette 1 media size switch 1	J5019	Paper deck cassette 2 lifter motor (2,550-sheet paper deck only)
J5006	Paper deck door switch	J5020	Paper deck feed motor 1
J5007	Paper deck cassette 1 lifter motor	J5021	Paper deck cassette 2 pickup clutch

Item	Description	Item	Description
J5009	Paper deck cassette 2 feed sensor Paper deck cassette 2 media out sensor Paper deck cassette 2 media surface sensor	J5022	Paper deck cassette 2 media size switch 2 (3x550-sheet paper deck only)
J5010	Paper deck cassette 2 media size switch 1	J5023	Paper deck cassette 3 pickup clutch (3x550-sheet paper deck only)
J5011	Paper deck cassette 2 lifter motor (3x550-sheet paper deck only)	J5026	Paper deck feed motor 2

Figure 4-68 HP Stapling Mailbox controller PCA connectors

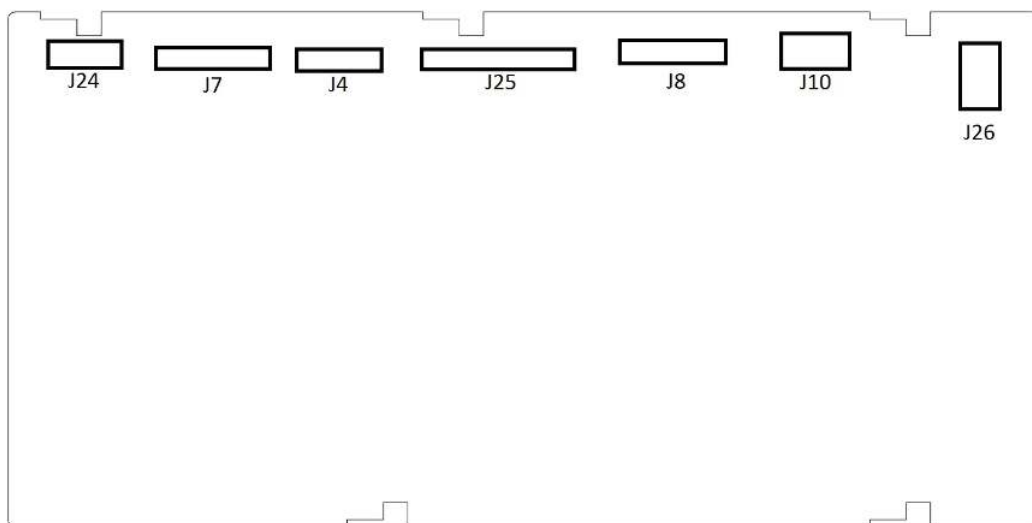


Item	Description	Item	Description
J101	Printer	J302	Y alignment motor Alienation home position sensor Stapler/stacker door switch

Item	Description	Item	Description
J102	Not used	J401	Jogger motor Jogger home position sensor
J105	Not used	J402	Stapler/stacker feed motor
J201	Staple door switch	J501	Bin 2 media presence sensor Bin 2 media full sensor Stapler/stacker inlet sensor Output bin 2 flapper solenoid
J202	Lifter motor Bin 1 upper limit sensor Bin 1 lower limit sensor	J502	Inlet flapper solenoid
J203	Stapler	J503	Bin 1 media presence sensor Stapler/stacker exit sensor Staple inlet sensor Stamp solenoid
J204	Stapler	J505	Mailbox fan
J301	Stapler/stacker output motor Y alignment home position sensor Bin 1 media full sensor		

Scanner assembly

Figure 4-69 Scanner controller PCA connectors



Item	Description	Item	Description
J4	ADF sensors	J24	ADF motor

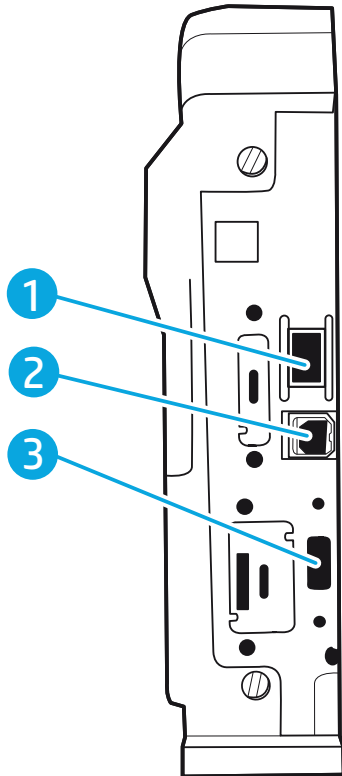
Item	Description	Item	Description
J4	ADF side 2 scan data	J25	Flatbed side1 scan data
J8	Flatbed motor and sensors	J26	Scanner power
J10	Scanner data		

Diagrams: External plug and port locations

View printer external plugs and ports diagrams.

M652/M653/E65050/E65060/E65150/E65160

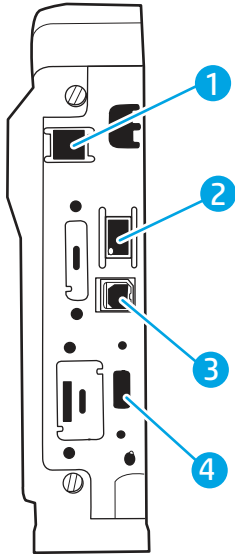
Figure 4-70 External plug and port locations



Item	Description
1	Local area network (LAN) Ethernet (RJ-45) network port
2	Hi-Speed USB 2.0 printing port
3	USB port for connecting external USB devices (this port might be covered) NOTE: For easy-access USB printing, use the USB port near the control panel.

M681/M682/E67550/E67560/E67650/E67660

Figure 4-71 External plug and port locations



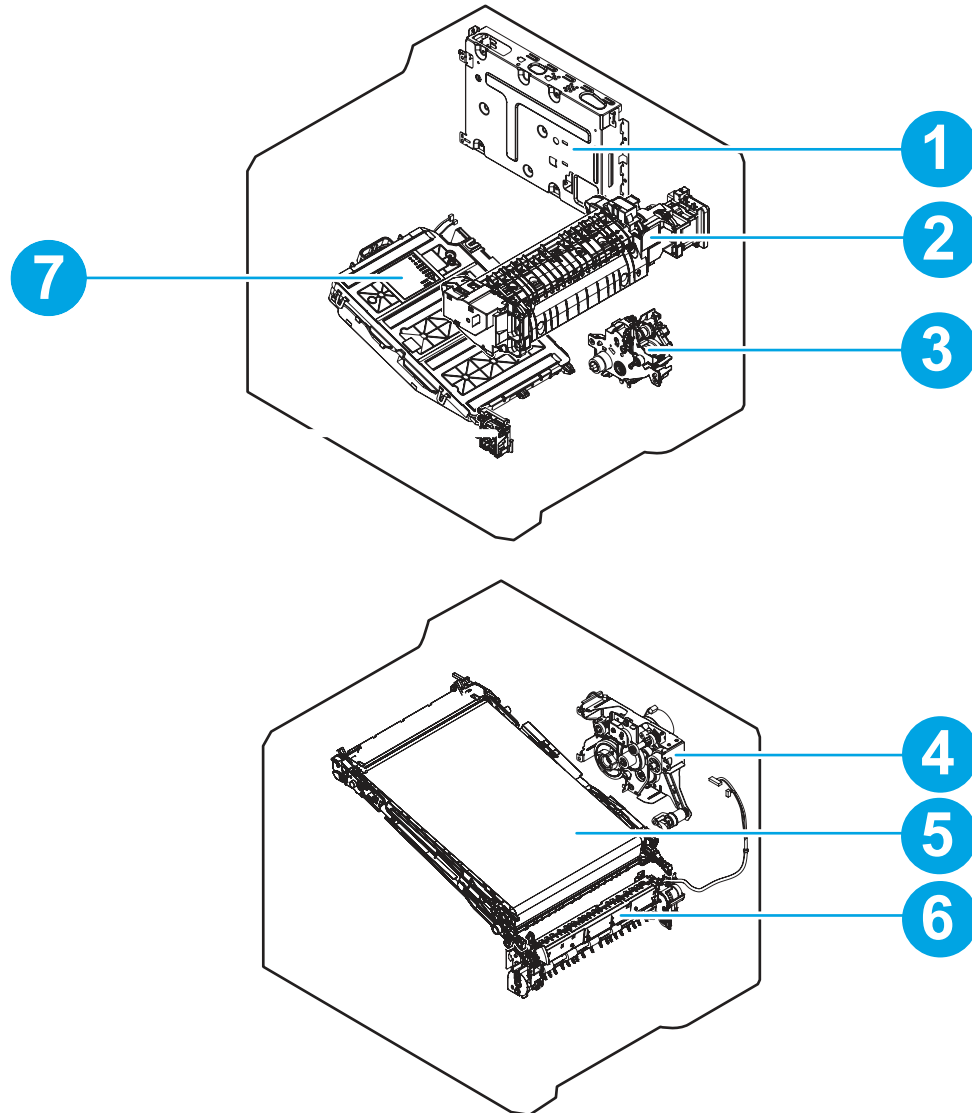
Item	Description
1	Fax port (f and z models only. The port is covered for the dh models.)
2	Local area network (LAN) Ethernet (RJ-45) network port
3	Hi-Speed USB 2.0 printing port
4	USB port for connecting external USB devices (this port might be covered) NOTE: For easy-access USB printing, use the USB port near the control panel.

Diagrams: Locations of major assemblies

View printer major component locations diagrams.

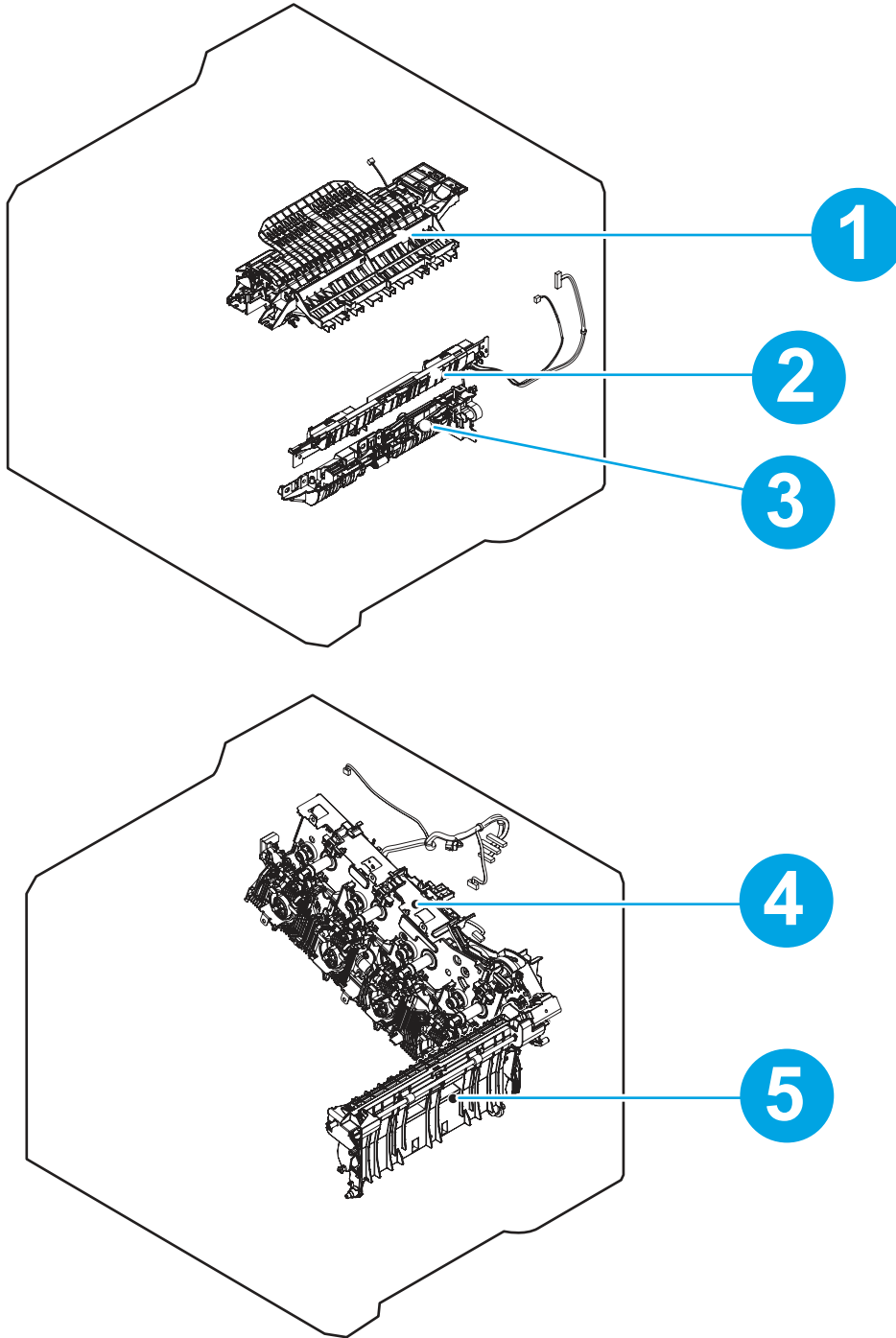
Main assemblies (printer base)

Figure 4-72 Main assemblies (printer base 1 of 2)



Item	Description	Item	Description
1	Formatter case assembly	5	ITB assembly
2	Fuser	6	Registration assembly
3	Lifter drive assembly	7	Laser scanner assembly
4	Fuser drive assembly		

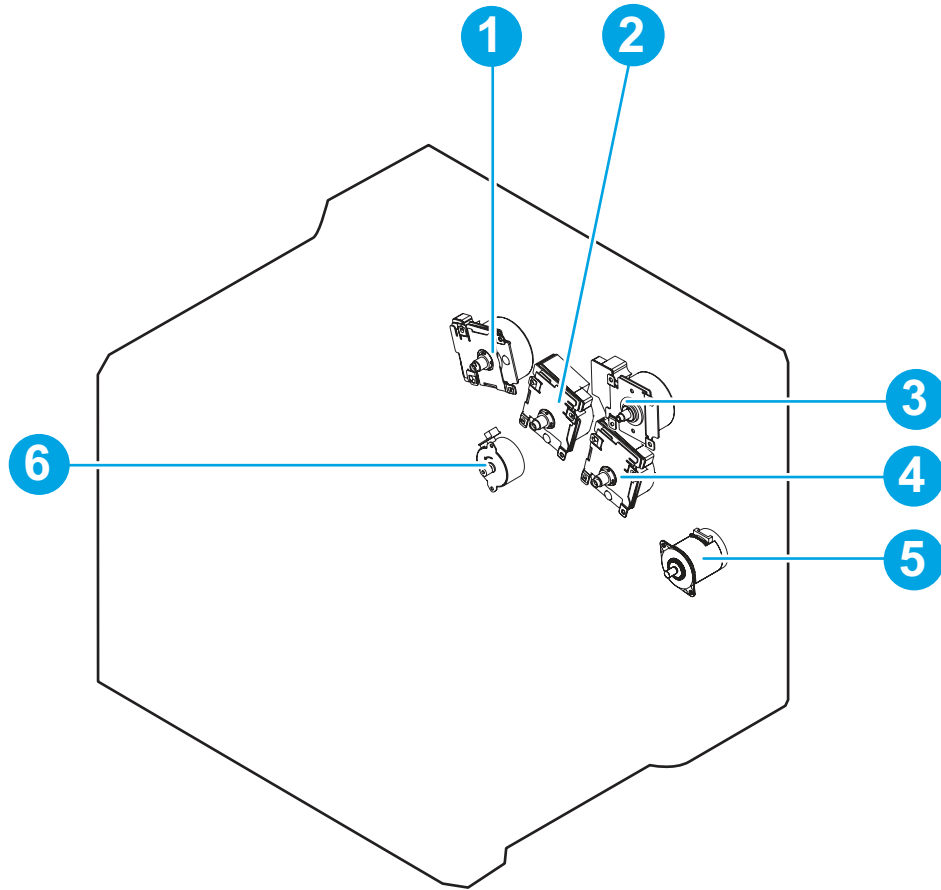
Figure 4-73 Main assemblies (printer base 2 of 2)



Item	Description	Item	Description
1	Delivery assembly	4	Main drive assembly
2	Registration density sensor assembly	5	T2 assembly assembly
3	Pickup assembly		

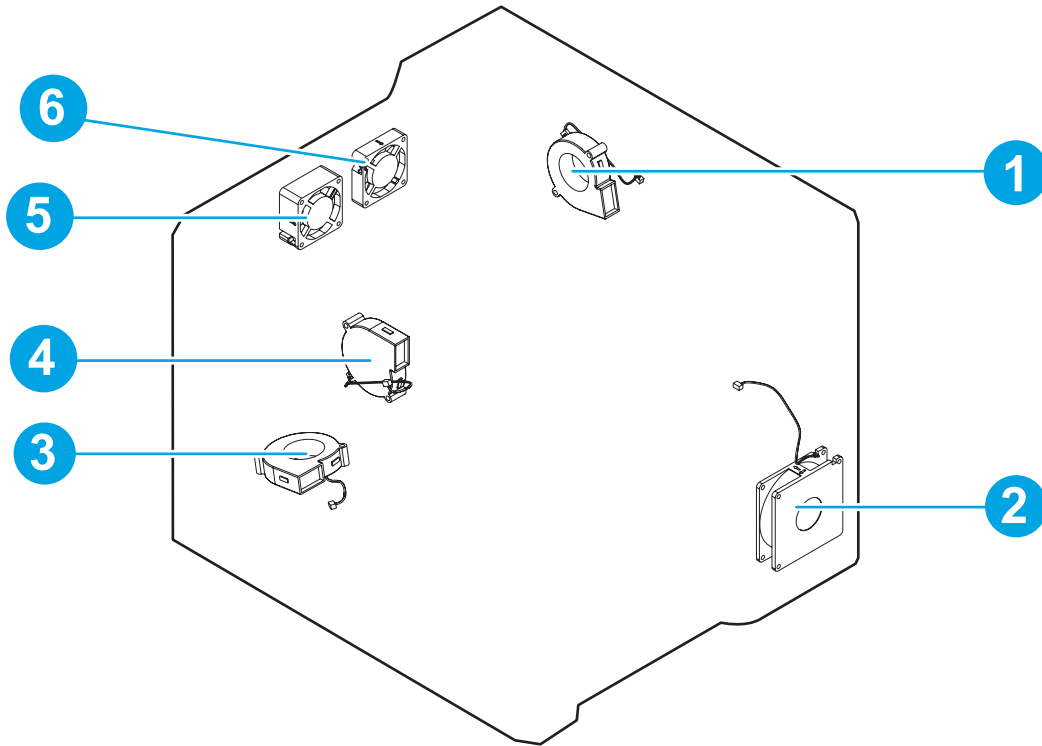
Motor and fans (printer base)

Figure 4-74 Motors (printer base)



Item	Description	Item	Description
1	Drum motor 1	4	Drum motor 3
2	Drum motor 2	5	Pickup motor
3	Fuser motor	6	Developer alienation motor

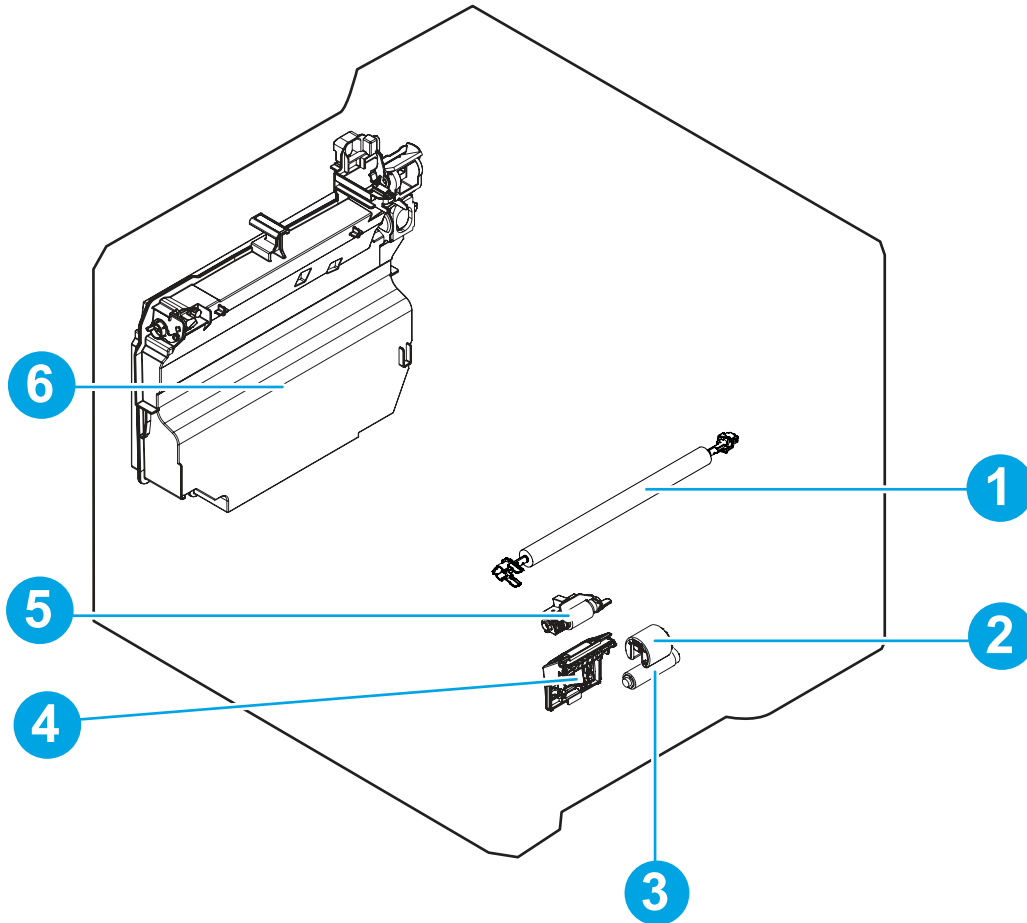
Figure 4-75 Fans (printer base)



Item	Description	Item	Description
1	Rear fan (FM6)	4	Front fan (FM5)
2	Power supply fan (FM1)	5	Left upper front fan (FM3)
3	Cartridge fan (FM2)	6	Left upper rear fan (FM4)

Rollers and toner collection unit (printer base)

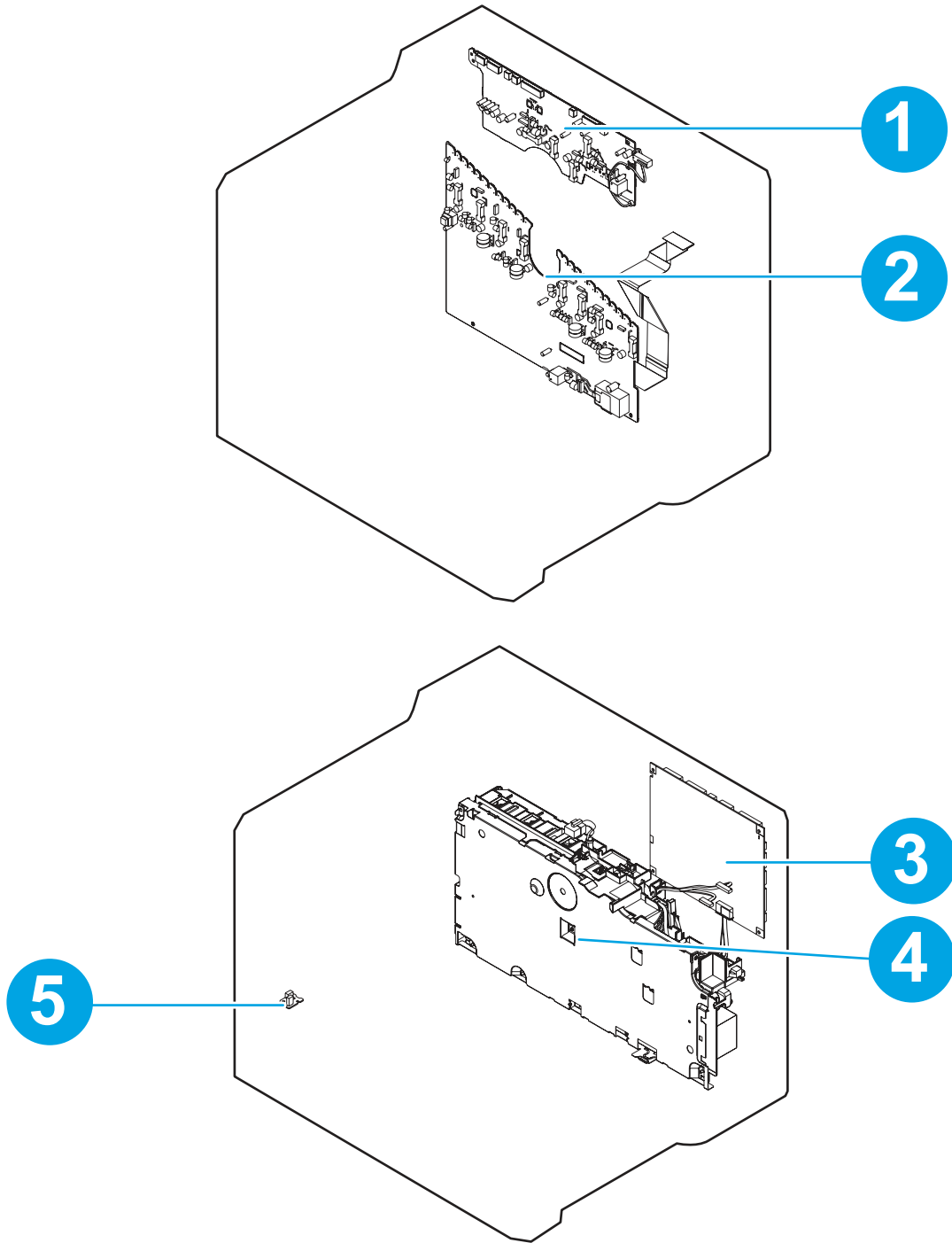
Figure 4-76 Rollers (printer base)



Item	Description	Item	Description
1	T2 roller assembly	4	Tray 2 separation roller assembly
2	Tray 1 pickup roller	5	Tray 2 pickup roller assembly
3	Tray 1 separation roller	6	Toner collection unit

Printed circuit assemblies (PCAs; printer base)

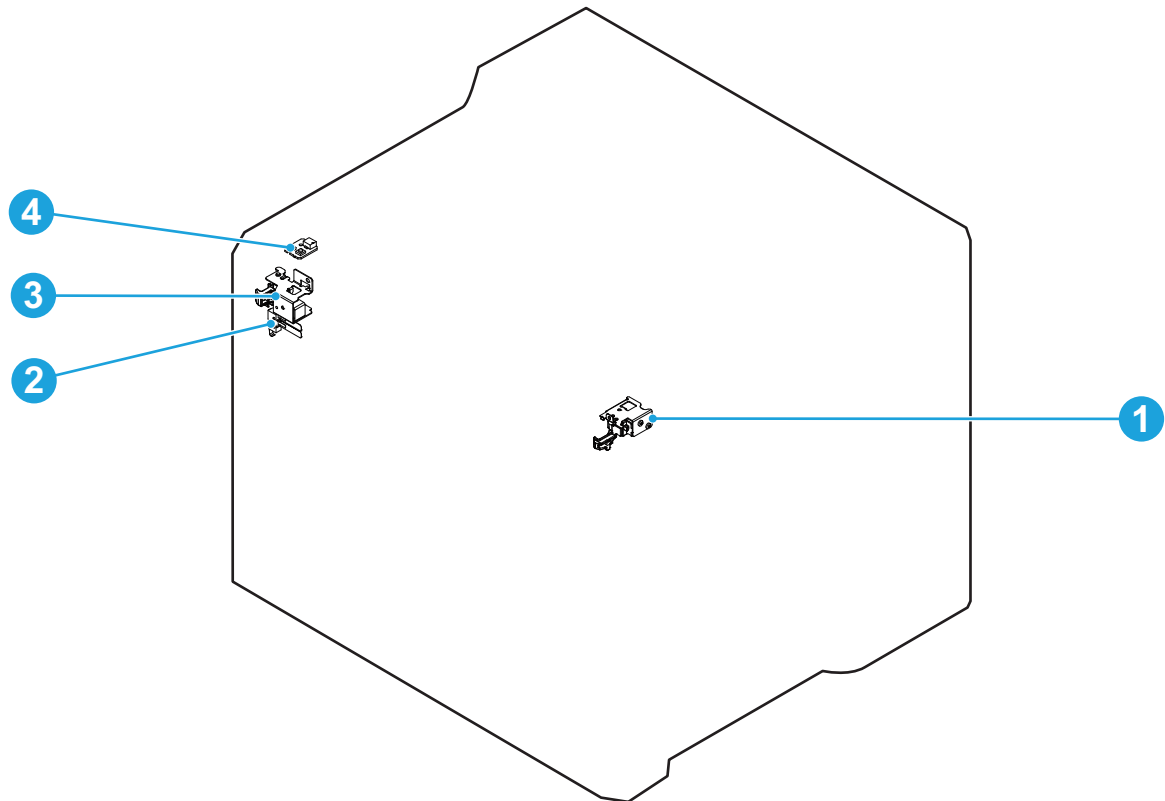
Figure 4-77 PCAs (printer base)



Item	Description	Item	Description
1	High-voltage power supply T (transfer) PCA	4	Low-voltage power supply
2	High-voltage power supply D (developer) PCA	5	Environment sensor
3	DC controller PCA		

Switches—E65150/E65160/E67650/E67660 models

Figure 4-78 Switches—E65150/E65160/E67650/E67660 models



Item	Description	Item	Description
1	Front door right lock	4	Front door left lock
2	5V left interlock switch	5	Cartridge access switch PCA

Diagrams: General timing chart

View the printer timing chart diagram.

Figure 4-79 Timing chart

Timing chart two consecutive prints on LTR paper (Full-color 1/1 speed mode)



Diagrams: General circuit diagrams

View the printer circuit diagram.

Figure 4-80 General circuit diagram for the M652/M653/M681/M682 printer base (1 of 3)

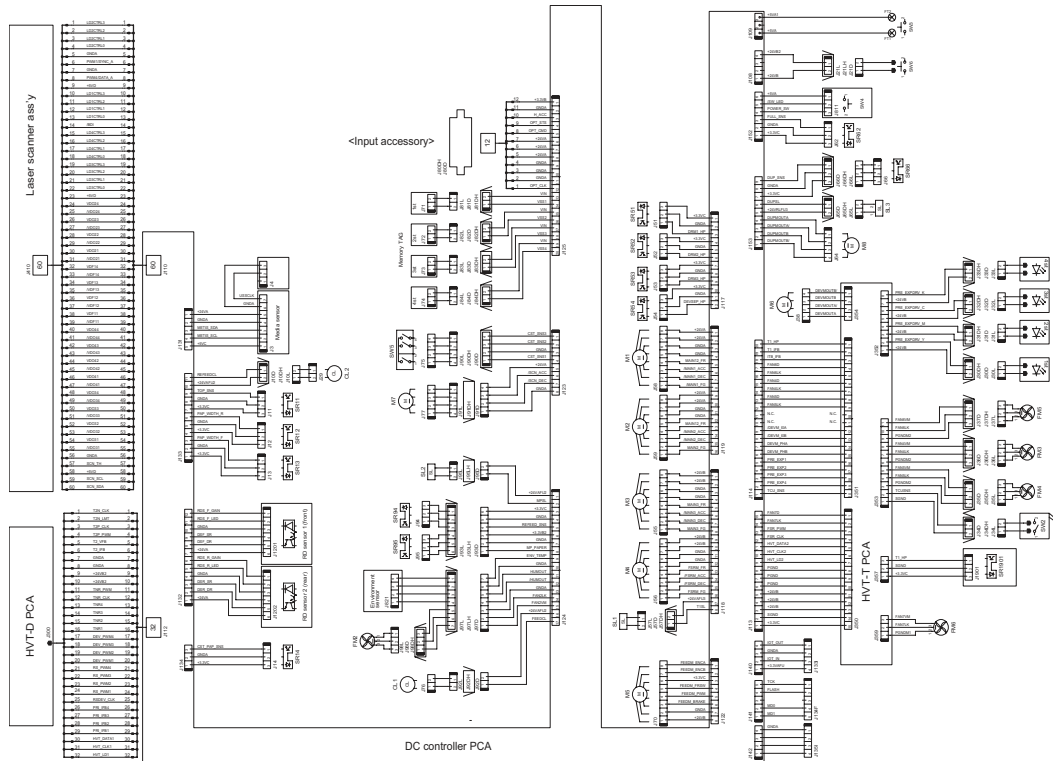


Figure 4-81 General circuit diagram for the M652/M653/M681/M682 printer base (2 of 3)

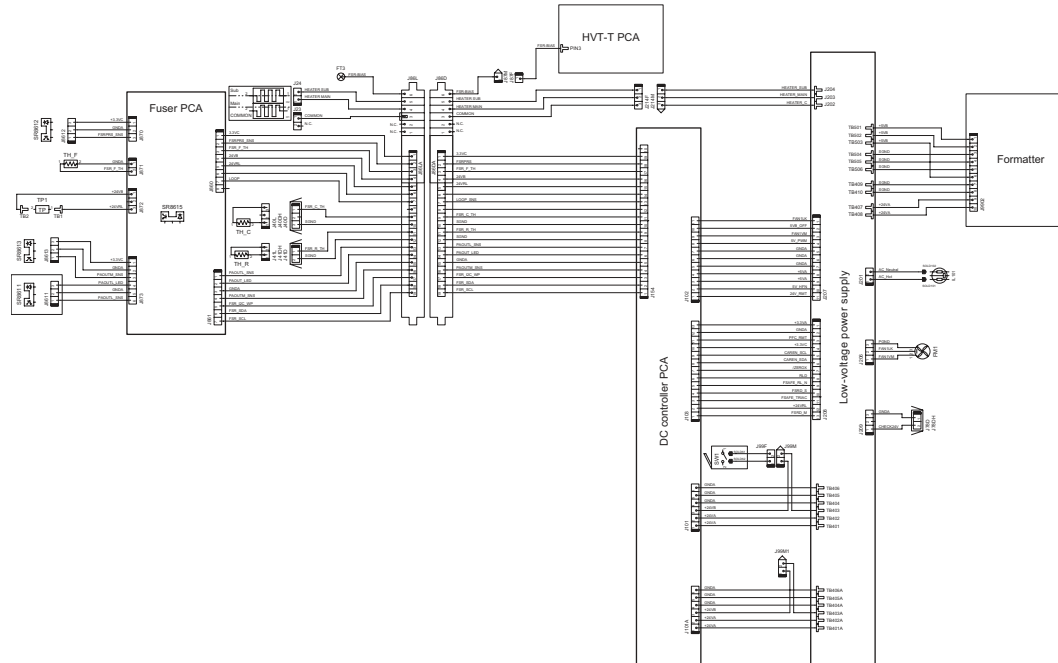


Figure 4-82 General circuit diagram for the M652/M653/M681/M682 printer base (3 of 3)

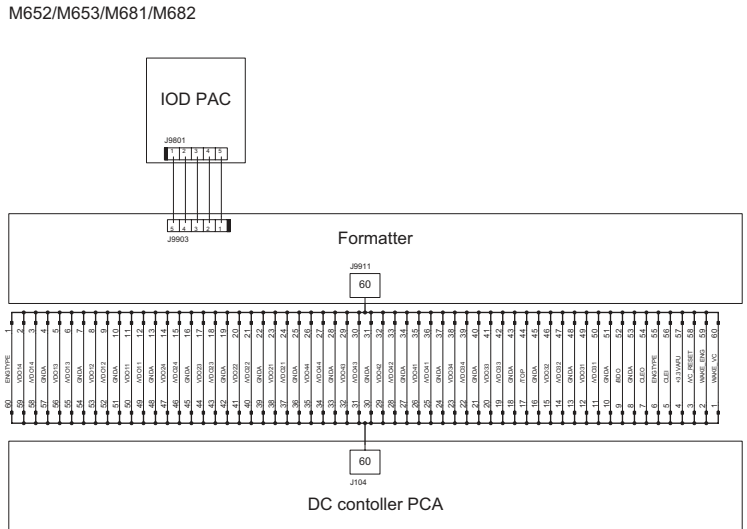
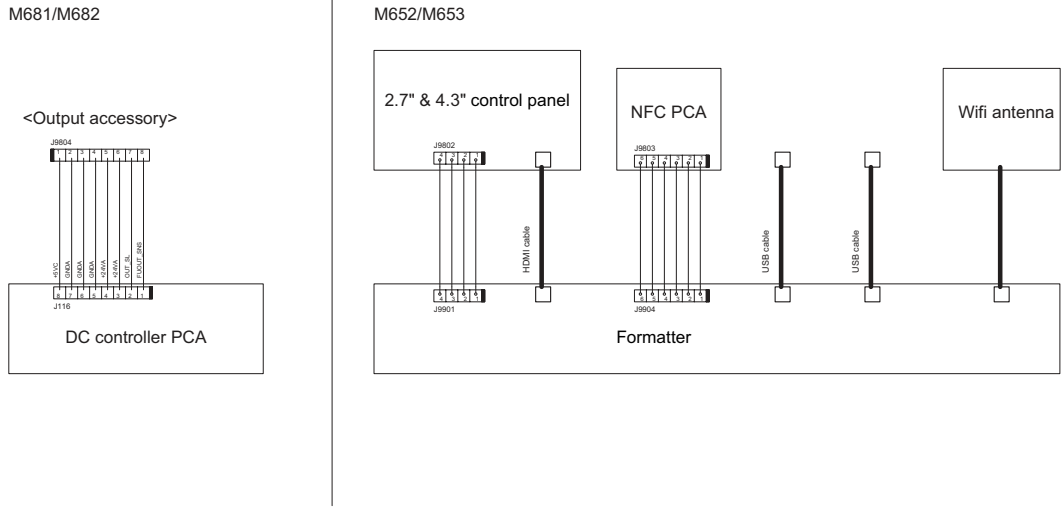


Figure 4-83 General circuit diagram for the E65150/E65160/E67650/E67660 printer base (1 of 4)

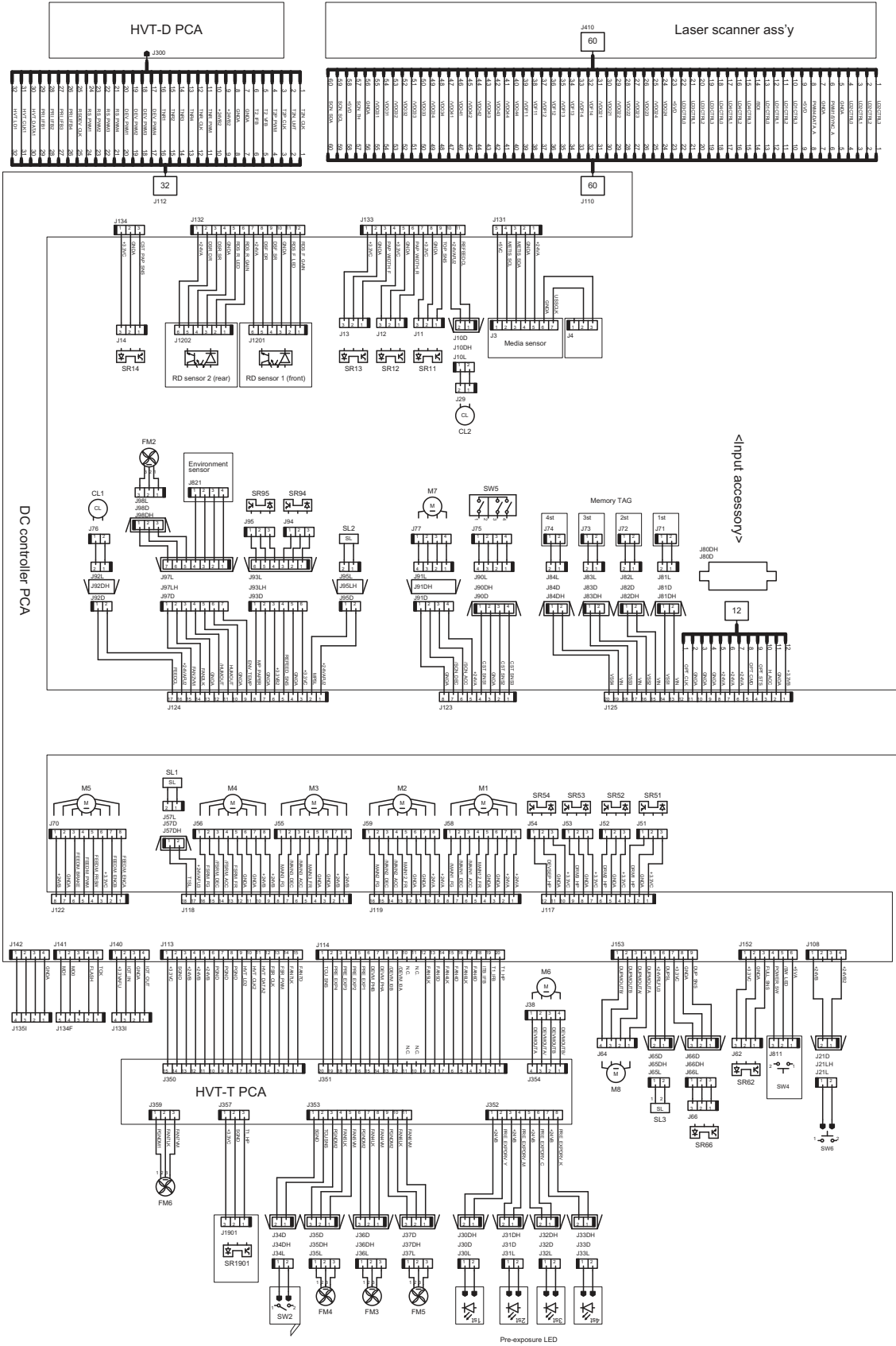


Figure 4-84 General circuit diagram for the E65150/E65160/E67650/E67660 printer base (2 of 4)

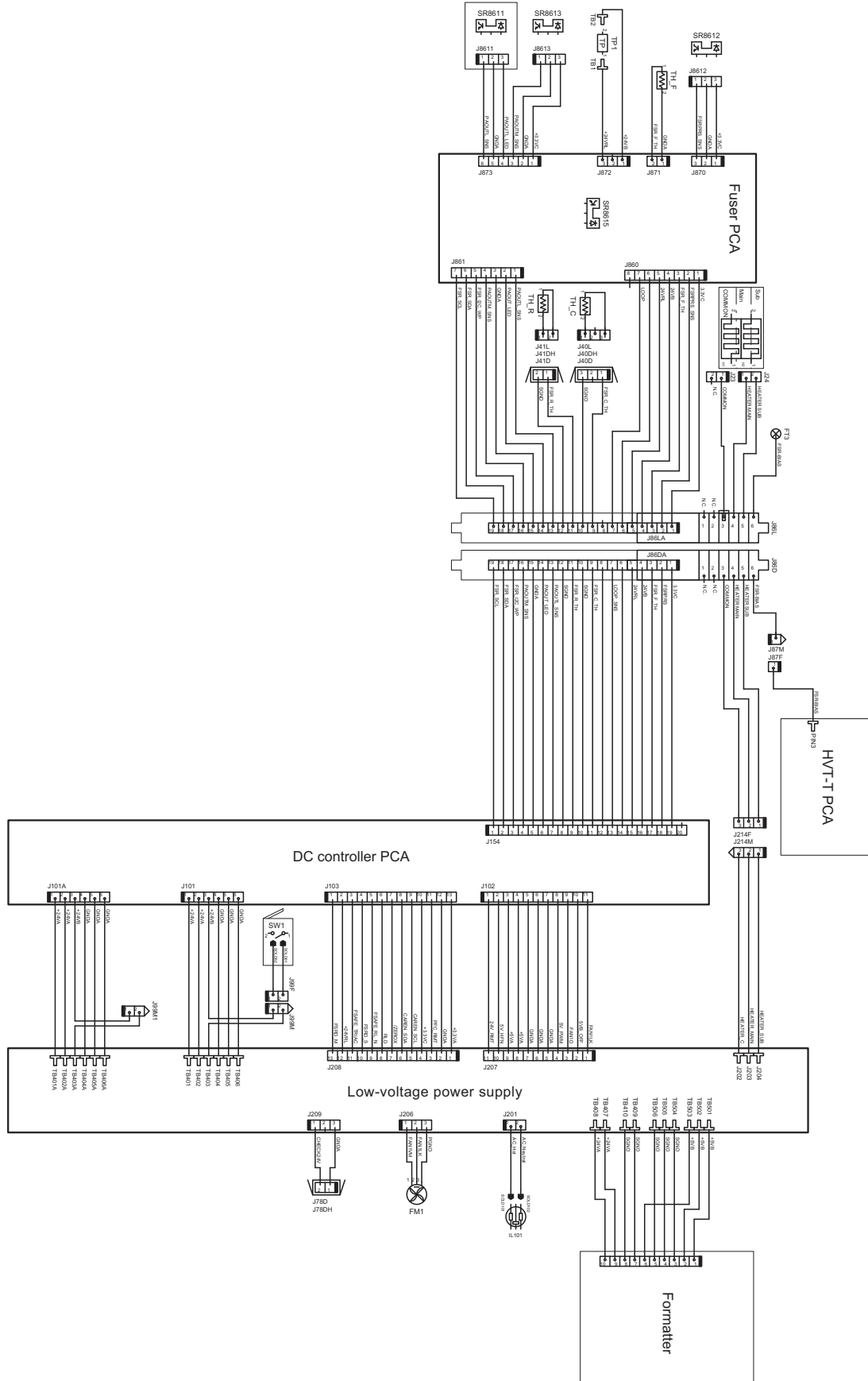


Figure 4-85 General circuit diagram for the E65150/E65160/E67650/E67660 printer base (3 of 4)

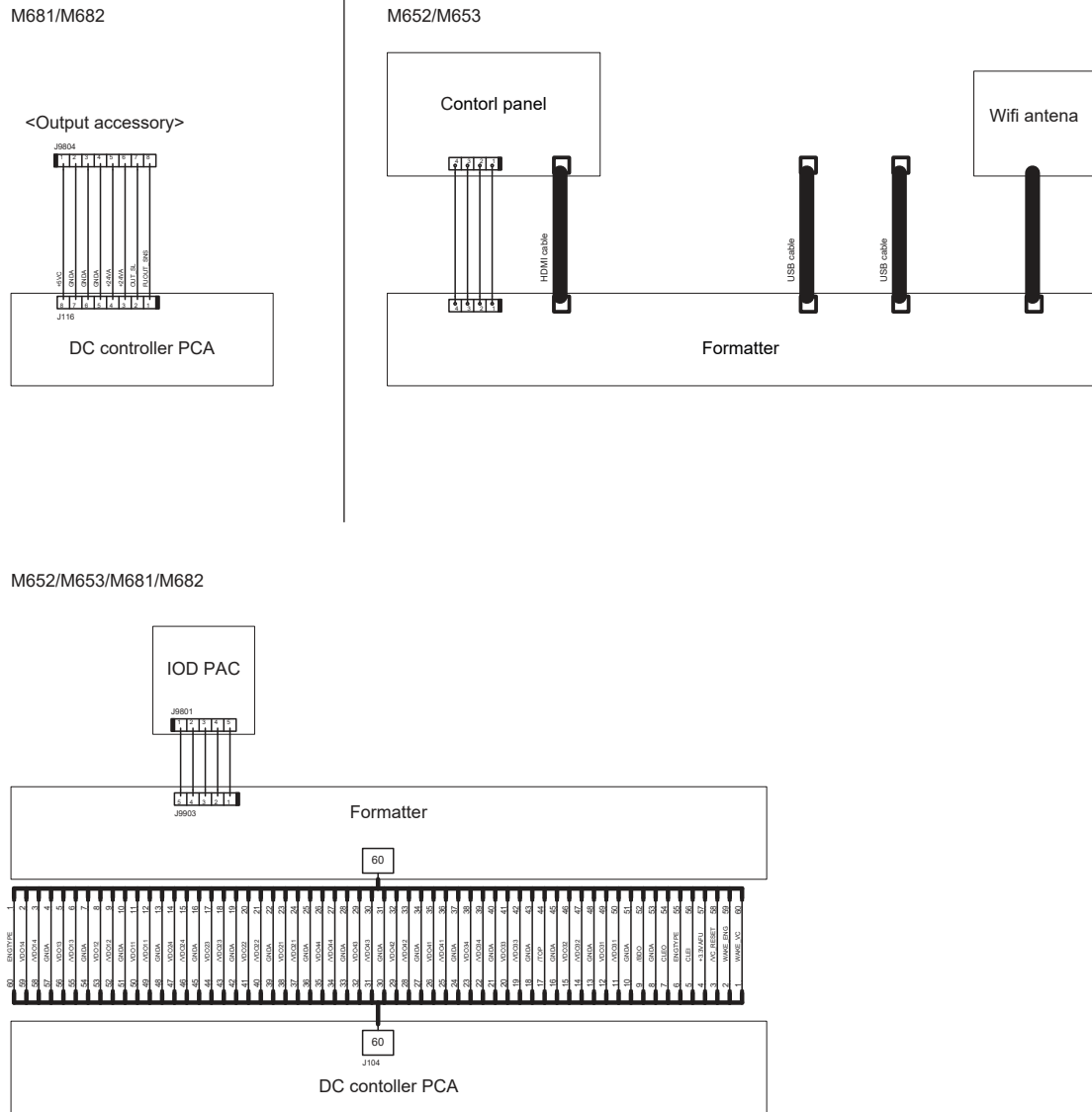
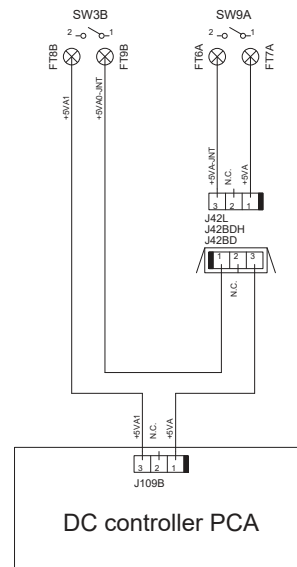
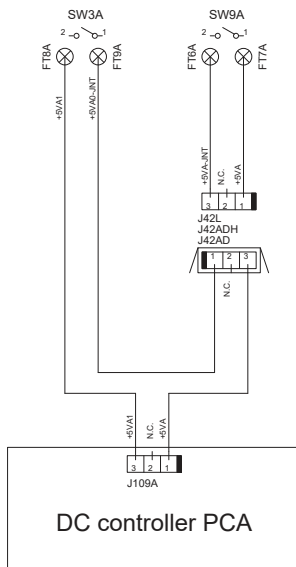


Figure 4-86 General circuit diagram for the E65150/E65160/E67650/E67660 printer base (4 of 4)
M681/M682 M652/M653



M652/M653/M681/M682

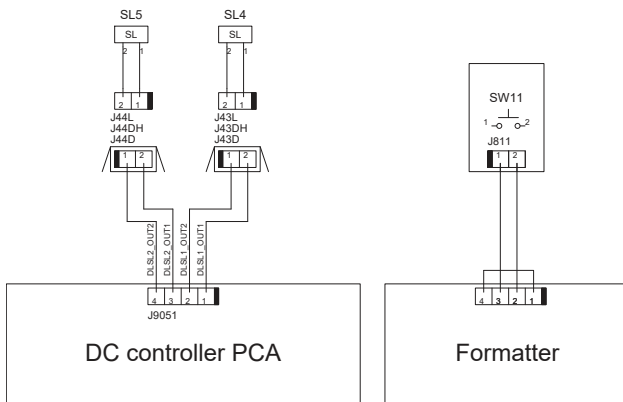


Figure 4-87 General circuit diagram for the 550-sheet feeder

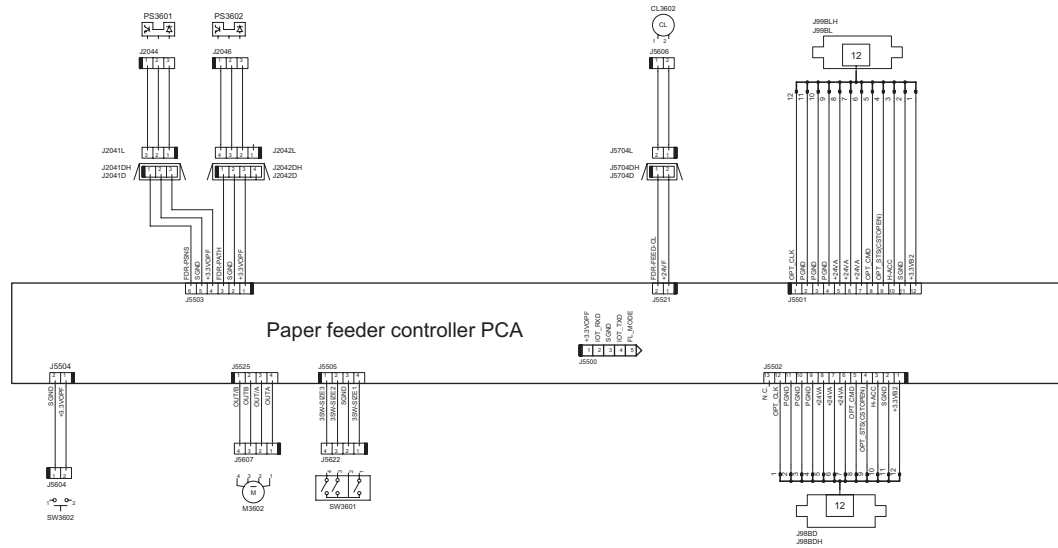


Figure 4-88 General circuit diagram for the 1x550-sheet and 3x550-sheet paper decks

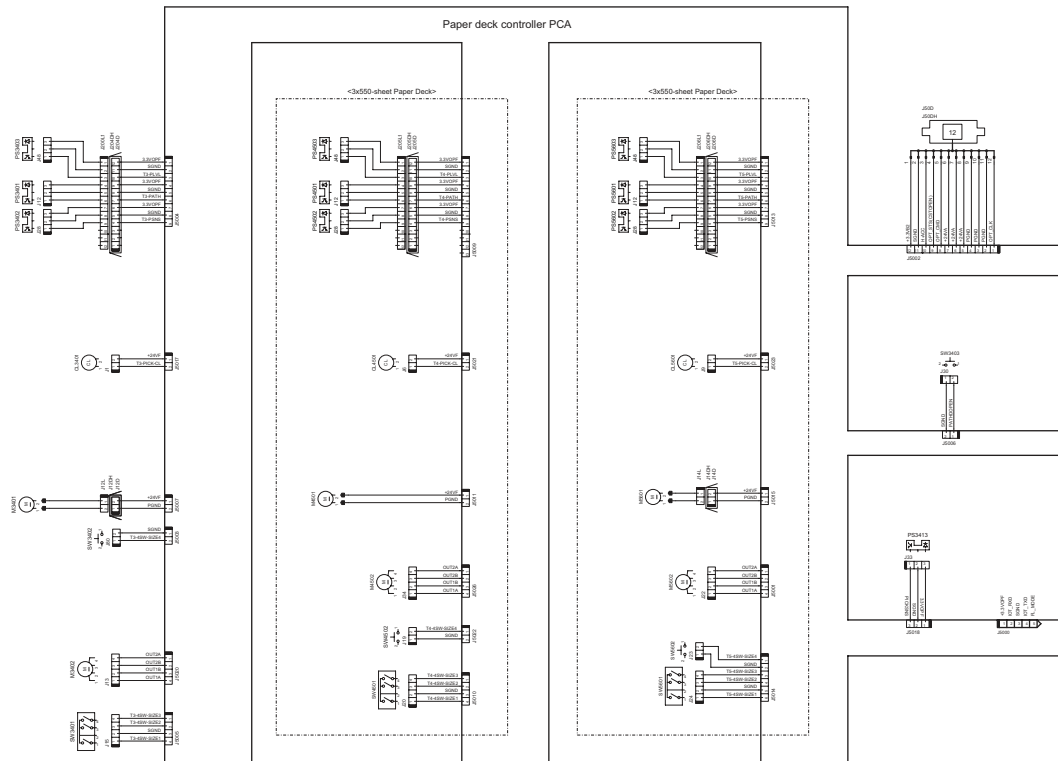


Figure 4-89 General circuit diagram for the 2,550-sheet paper deck

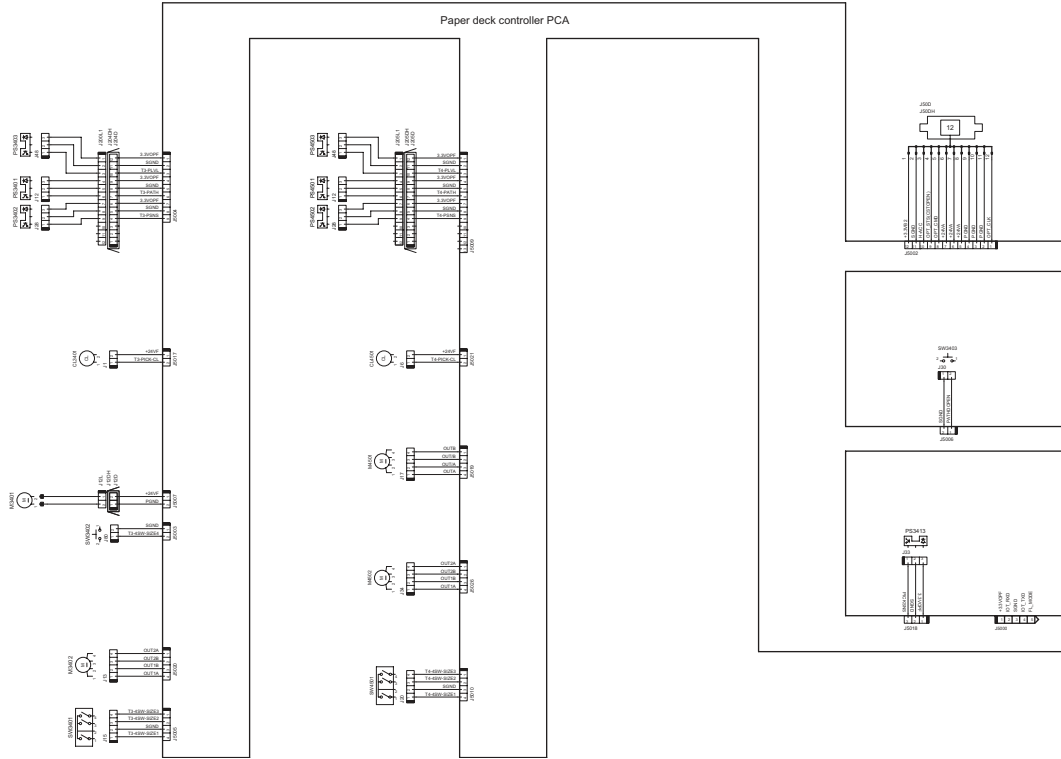
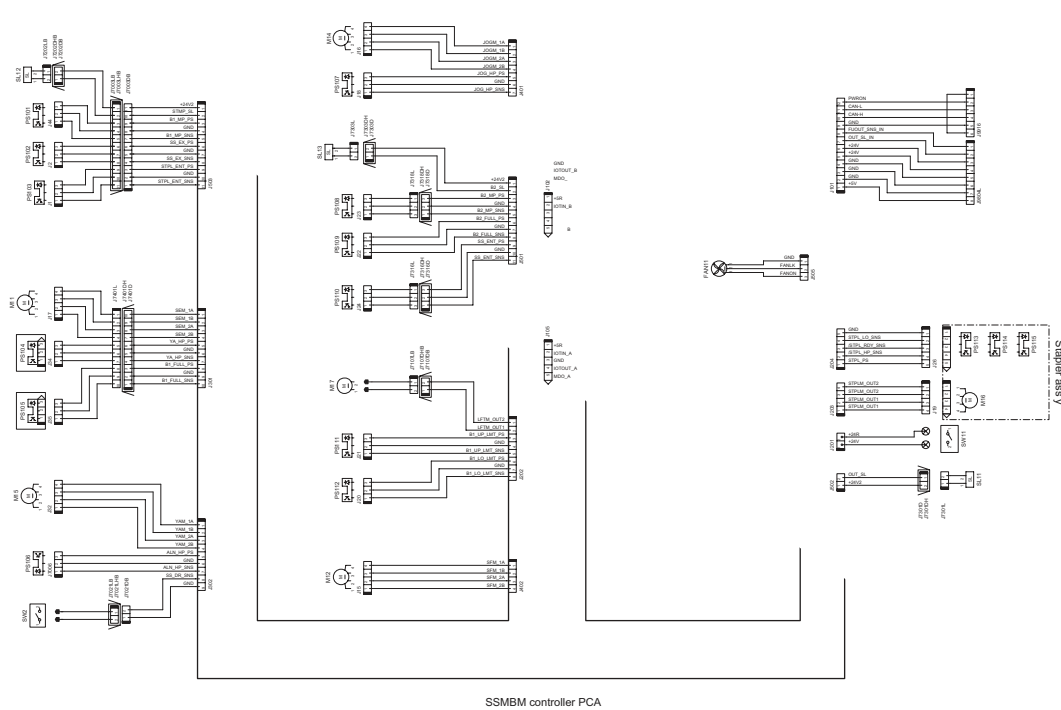


Figure 4-90 General circuit diagram for the stapling mailbox



Internal test and information pages

Learn about printer test and information pages.

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 fax accessory page (MFP fax models only), and the HP embedded Jetdirect configuration pages print.

Print a configuration page from a touchscreen control panel

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

1. From the Home screen on the printer control panel, scroll to and touch the [Reports](#) button.
2. Open the following menus:
 - [Configuration/Status pages](#)
3. Touch [Configuration Page](#) to select it.
4. Select the [View](#) button (touchscreens only) to view the information on the control panel, or select [Print](#) to print the pages

Print a configuration page from an LCD control panel

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

1. From the Home screen on the printer control panel, select [Reports](#).
2. Select [Configuration/Status Pages](#),
3. Select [Configuration Page](#).
4. Select [Print](#), and then select [OK](#) to print the pages.

Figure 4-91 Configuration page

Configuration Page
HP Color LaserJet M652
Page 1

1 Device Information

Product Name: HP Color LaserJet M652
 Device Name: HP Color LaserJet M652
 Model Number: CXXXXA
 [[cControlVersion]]: 7.118
 [[cControlVersion]]: 4.102
 Product Serial Number: XXXXXXXXXX
 [[cFormatterNumberColon]] XXXXXXXXXX
 Firmware Bundle Version: Beta
 Firmware Revision: 3464DLS_622240
 Firmware Datecode: 20160718
 HP FutureSmart Level: HP FutureSmart A
 NTC Revision: [[cNotInstalled]]
 Service ID: 0000
 Fuser Kit Interval: 15000
 Pages Since Last Fuser Maintenance: 0
 [[cSPStResetColor]] 500
 [[cEngineCyclesColor]] 2
 Color Engine Cycles*: 0
 Cartridge Protection: Off
 Cartridge Policy: Off
 Cartridge Index: QFP M6J
 *Not weighted for billing

2 Installed Personalities and Options

RCL: 20010402
 PCLXL: 20010402
 PCLXL: 20010402
 PDF: 20130901
 AirPrint: 2040201
 WebASTER: 2040201
 TIFF: 20150522
 Internal Disk: Hard Disk: Enabled
 Serial Number: A1829500
 Model: Toshiba 075092
 Capacity: 7496 MB
 Hard Disk Encryption Status: Disk cannot be encrypted
 Embedded HP Jetdirect: HP[457562
 Custom Color Table: [[cNotInstalled]]

3 HP Web Services

HP Web Services: Disabled
 ePrint: Disabled

4 Color Density

	C	M	Y	K
Highlights	0	0	0	0
Midtones	0	0	0	0
Shadows	0	0	0	0

5 Calibration Information

Last CR (Engine Cycles): 2
 Last CR: 12/9/2016 4:22:15 AM
 Last (Max/Dhalf) (Engine Cycles): 2
 Last (Max/Dhalf): 12/9/2016 4:22:15 AM

6 Memory

Total RAM: 1536 MB

7 Event Log

Number of Entries in Use: 63
 Three Most Recent Entries:


Number	Cycles	Event
63	2	42.80.01
62	2	42.80.01
61	0	33.02.02

8 Security

Hard Disk Encryption Status:
 Internal Disk: Disk cannot be encrypted
 Jaz Data Encryption Status: Encrypted (AES-128)
 Jaz Data Persistence: volatile (not persistent)
 File Erase Mode: Non-Secure Fast Erase (No Overwrite)
 Control Panel Password: Disabled
 Support Key: DA12-UK50-1Y4C
 Host USB plug and play: Enabled
 Device USB: Enabled
 Whitelisting: Development

9 Paper Trays and Options

Default Paper Size: Letter
 Tray 1 Size: Any Size
 Tray 1 Type: Any Type
 Tray 2 Size: Letter
 Tray 2 Type: Plain
 Tray 3 Size: Legal
 Tray 3 Type: Plain
 Duplex Unit:
 1. Output Bin 1, 500 Sheets, Standard bin

12/14/2016 01:51:24

English (United States)

Item	Description	Item	Description
1	Device Information , including the firmware version, usage statistics, and the service ID.	6	Memory
2	Installed Personalities and Options information, including installed printer languages and hard disk information.	7	Event Log information that shows the most recent entries in the log.
3	HP Web Services status information	8	Security information that includes encryption information and current security settings.
4	Calibration Information that shows when the printer most recently performed a calibration.	9	Paper Trays and Options information that shows installed trays and current paper size/type settings.
5	Color Density information		

HP embedded Jetdirect page

The third configuration page—this is the second page for non-fax models—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 4-92 HP embedded Jetdirect page

Item	Description
1	General Information indicates the printer 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, undeliverable packets, transmit collisions, and transmit late collisions.
4	TCP/IP information, including the IP address
5	IPv4 information
6	IPv6 information

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 printer. This information is on the various configuration pages.

Table 4-19 Important information on the configuration pages

Type of information	Specific information	Configuration page
<p>Firmware date codes</p> <p>When you use the remote firmware upgrade procedure, all of these firmware components are upgraded.</p>	<p>Engine firmware revision</p>	<p>Look on the configuration page, under "Device Information."</p>
<p>Firmware date codes</p> <p>When you use the remote firmware upgrade procedure, all of these firmware components are upgraded.</p>	<p>Firmware date code</p>	<p>Look on the configuration page, under "Device Information."</p>
<p>Firmware date codes</p> <p>When you use the remote firmware upgrade procedure, all of these firmware components are upgraded.</p>	<p>HP embedded Jetdirect firmware version</p>	<p>Look on the Embedded HP Jetdirect page, under "General Information."</p>
<p>Accessories and internal storage</p> <p>All optional devices that are installed on the printer should be listed on the main configuration page.</p> <p>In addition, separate pages print for the optional paper handling devices and the fax accessory. These pages list more-detailed information for those devices.</p>	<p>Embedded HP Jetdirect</p>	<p>Look on the configuration page, under "Installed Personalities and Options." Shows model and ID.</p>
<p>Accessories and internal storage</p> <p>All optional devices that are installed on the printer should be listed on the main configuration page.</p> <p>In addition, separate pages print for the optional paper handling devices and the fax accessory. These pages list more-detailed information for those devices.</p>	<p>Total RAM</p>	<p>Look on the configuration page, under "Memory."</p>
<p>Accessories and internal storage</p> <p>All optional devices that are installed on the printer should be listed on the main configuration page.</p> <p>In addition, separate pages print for the optional paper handling devices and the fax accessory. These pages list more-detailed information for those devices.</p>	<p>Duplex unit</p>	<p>Look on the main configuration page, under "Paper Trays and Options."</p>
<p>Finishing accessories</p>	<p>Installed finishing accessory type</p>	<p>Look on the main configuration page, under "Paper Trays and Options."</p>
<p>Engine cycles and event logs</p> <p>Total page counts and maintenance kit counts are important for ongoing printer maintenance.</p> <p>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.</p>	<p>Engine cycles</p>	<p>Look on the configuration page, under "Device Information."</p>

Table 4-19 Important information on the configuration pages (continued)

Type of Information	Specific Information	Configuration page
Event-log information	Event-log information	Look on the configuration page, under "Event Log."

Control panel menus

Learn about control panel menus.

You can perform basic printer setup by using the control panel menus. Use the HP Embedded Web Server for more advanced printer setup. To open the HP Embedded Web Server, enter the printer IP address or host name in the address bar of a web browser.



NOTE: Where applicable, the M681-M682 printer displays a [View](#) button.

Reports menu

Learn about the control-panel [Reports](#) menu.

To display: At the printer control panel, select [Reports](#).

Table 4-20 Reports menu

First level	Second level	Values	Description
Configuration/Status Pages	Settings Menu Map	Cancel	Shows a map of the entire control panel system and the selected values for each setting.
		View	
		Print	
Configuration/Status Pages	Current Settings Page	Cancel	Shows a summary of the current settings for the printer. This might be helpful if you plan to make changes and need a record of the present configuration.
		View	
		Print	
Configuration/Status Pages	Configuration Page	Cancel	Shows the printer settings and installed accessories.
		View	
		Print	
Configuration/Status Pages	How to Connect Page	Cancel	Shows the network information typically needed to connect the printer to a network.
		View	
		Print	

Table 4-20 Reports menu (continued)

First level	Second level	Values	Description
Configuration/Status Pages	Supplies Status Page	Cancel View Print	Shows the approximate remaining life for the supplies; reports 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 than the approximations provided.
Configuration/Status Pages	Usage Page	Cancel View Print	Shows a count of all paper sizes that have passed through the printer; lists whether they were simplex or duplex, and reports the page count.
Configuration/Status Pages	File Directory Page	Cancel View Print	Shows the file name and folder name for files that are stored in the printer memory.
Configuration/Status Pages	Web Services Status Page	Cancel View Print	Shows the detected Web Services for the printer.
Configuration/Status Pages	Color Usage Job Log	View Print	Shows color jobs completed by the printer
Fax Reports Fax models only	Fax Activity Log	Cancel View Print	Contains a list of the faxes that have been sent from or received by this printer.
Fax Reports Fax models only	Billing Codes Report	Cancel View Print	Provides a list of billing codes that have been used for outgoing faxes. This report shows how many sent faxes were billed to each code.
Fax Reports Fax models only	Blocked Fax List	Cancel View Print	A list of phone numbers that are blocked from sending faxes to this printer.
Fax Reports Fax models only	Speed Dial List	Cancel View Print	Shows the speed dials that have been set up for this printer.

Table 4-20 Reports menu (continued)

First level	Second level	Values	Description
Fax Reports	Fax Call Report	Cancel	A detailed report of the last fax operation, either sent or received.
Fax models only		View	
		Print	
Other Pages	Demonstration Page	Print	Prints a demonstration page.
Other Pages	RGB samples	Print	Prints color samples for different RGB values. Use the samples as a guide for matching printed colors.
Other Pages	CMYK samples	Print	Prints color samples for different CMYK values. Use the samples as a guide for matching printed colors.
Other Pages	PCL Font List	Cancel	Prints the available PCL fonts.
		Print	
Other Pages	PS Font List	Cancel	Prints the available PS fonts.
		Print	

Settings menu

Learn about the control-panel [Settings](#) menu.

Touchscreen: At the printer control panel, touch the [Settings](#) button.

Non-touchscreen: Use the arrow buttons to scroll to the [Settings](#) button, and then press the [OK](#) button.

Table 4-21 Settings menu

First level	Second level	Third level	Fourth level	Fifth level	Values	Description
General	Date/Time Settings	Date/Time Format			DD/MMM/YYYY MMM/DD/YYYY YYYY/MMM/DD	Use these items to specify the date and time and to configure date/time settings.
General	Date/Time Settings	Date/Time Format	Time Format		12 hour (AM/PM) 24 hours	Select the format that the printer uses to show the date and time, for example 12-hour format or 24-hour format.
General	Date/Time Settings	Date/Time	Date		Select the date from a pop-up calendar.	Select the time zone, date, and time that the printer uses.
General	Date/Time Settings	Date/Time	Time		Select the time from a pop-up keypad.	

Table 4-21 Settings menu (continued)

First level	Second level	Third level	Fourth level	Fifth level	Values	Description
General	Date/Time Settings	Date/Time	Time Zone		Select the time zone from a list.	
General	Energy Settings	Sleep Schedule	A list of scheduled events displays.	Select an event from the list to edit it.	For the selected event, change the time and days settings as desired. Done Select the trash can icon to delete the event.	Use to configure the printer to automatically wake up 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.
General	Energy Settings	Sleep Schedule	New event	Event Type		Create a printer Wake Event and/or Sleep Event schedule.
General	Energy Settings	Sleep Schedule	New event	Time		Set the wake or sleep event time parameters.
General	Energy Settings	Sleep Schedule	New event	Event Days	Select days of the week from a list.	Set the wake or sleep event day parameters.
General	Energy Settings	Sleep Settings	Sleep After Inactivity Auto Off After Sleep Select one of these items: <ul style="list-style-type: none"> • HP Auto Off/ Auto On (Wake on most events) • Shut down (Wake on power button only) 		Range: 1 to 110 minutes Default = 0 minutes	Set the number of minutes after which the printer enters Sleep or Auto Off mode. Touch the existing number to open the virtual keypad, and then increase or decrease the number of minutes.

Table 4-21 Settings menu (continued)

First level	Second level	Third level	Fourth level	Fifth level	Values	Description
General	Display Settings	Display Brightness	A sliding bar displays with the indicator set in the middle. Move the indicator with your finger to select the desired brightness and then select Done .			Use to specify the intensity of the LCD control panel display.
General	Display Settings	System Sound			On* Off	Use to specify whether you hear a sound when you touch the screen or press buttons on the control panel.
General	Display Settings	Language Settings	Language Keyboard Layout NOTE: M681z/ M682z only		Select from a list of languages that the printer supports. Each language has a default keyboard layout. To change it, select from a list of layouts.	Each language has a default keyboard layout. To change it, select from a list of layouts. Select the default keyboard layout that matches the language you want to use.
General	Display Settings	Information Screen			Show connection information Hide connection information	Determine whether the printer connection information appears on the control-panel display.
General	Display Settings	Display Date and Time NOTE: M681/M682/ E67550/ E67560/ E67650/ E67660 only			No Yes	Determine whether the date and time appears on the control-panel display.
General	Display Settings	Inactivity Timeout			Range: 10-300 seconds Default = 60 seconds	Specifies the amount of time that elapses between any activity on 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 printer is signed out.

Table 4-21 Settings menu (continued)

First level	Second level	Third level	Fourth level	Fifth level	Values	Description
General	Display Settings	Clearable Warnings			Display during job Display until cleared	Use this feature to set the period 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.
General	Display Settings	Continuable Events			Auto-continue (10 seconds) Touch OK to continue	Use this option to configure the printer behavior when the printer 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.
General	Jam Recovery				Auto Off On	This printer provides a jam recovery feature that reprints jammed pages. Select one of the following options: Auto : The printer attempts to reprint jammed pages when sufficient memory is available. This is the default setting. Off : The printer 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 printer runs out of paper and the job is being printed on both sides, some pages can be lost. On : The printer always reprints jammed pages. Additional memory is allocated to store the last few pages printed. This might cause a decrease in overall performance.
General	Auto Recovery				Enabled Disabled	The printer attempts to reprint jammed pages when sufficient memory is available. This is the default setting.

Table 4-21 Settings menu (continued)

First level	Second level	Third level	Fourth level	Fifth level	Values	Description
General	Enable AutoSend				Enabled Disabled	Browse to the HP Embedded Web Server AutoSend configuration page for advanced set up and the HP online Privacy Statement Information. Use the Enable AutoSend menu to enable or disable the AutoSend feature. The AutoSend feature enables your product to periodically send product configuration information including serial number, event logs, page usage counts and supplies status information to HP web addresses (URLs), or email addresses. Information sent to HP is used to improve products and services, and to monitor the product if you have a relationship with HP that provides you services such as proactive cartridge replacement, pay-per-page contracts, support agreements, or usage tracking.
General	Hold Off Print Job				Off On	Enable this feature if 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.
General	Reset Factory Settings				Cancel Reset	Touch Reset to reset current user-specified default settings to the factory default settings.
Copy/Print	Copy Settings	Image Preview				Display a preview of the image before printing it.
Copy/Print	Enable Device USB				Enabled Disabled	Enables the printer to open a file from a USB drive.
Copy/Print	Manage Stored Jobs	Job Sort Order			Job Name Date	This option allows you list the jobs either alphabetically or chronologically.
Copy/Print	Manage Stored Jobs	Retain Temporary Jobs After Reboot			Do not retain Personal jobs only All temporary jobs	Sets which temporary jobs will be retained in the event of a printer reboot.

Table 4-21 Settings menu (continued)

First level	Second level	Third level	Fourth level	Fifth level	Values	Description
Copy/Print	Manage Stored Jobs	Temporary Job Storage Limit			1-300 Default = 32	Configure global settings for jobs that are stored in the printer memory. The Temporary Job Storage Limit feature specifies the number of temporary jobs that can be stored on the printer. The maximum allowed value is 300.
Copy/Print	Manage Stored Jobs	Temporary Stored Job Retention			30 minutes 1 hour 4 hour 1 day 1 week 4 week	Configure global settings for jobs that are stored in the printer memory. The Temporary Stored Job Retention feature specifies the number of temporary jobs that can be stored on the printer. The maximum allowed value is 300.
Copy/Print	Manage Stored Jobs	Standard Stored Job Retention			30 minutes 1 hour 4 hour 1 day 1 week 4 week	Configure global settings for jobs that are stored in the printer memory. The Standard Stored Job Retention feature specifies the number of standard jobs that can be stored on the printer. The maximum allowed value is 300.
Copy/Print	Default Print Options	Number of Copies			Range: 1-32000 Default = 1	Sets the default number of copies for a copy job. This default applies when the Copy function or the Quick Copy function is initiated from the printer Home screen.
Copy/Print	Default Print Options	Paper Selection			Select from a list of sizes that the printer supports.	Configures the default paper size used for print jobs.
Copy/Print	Default Print Options	Default Custom Paper Size	X Dimension		Range: 3-8.5 inches Default = 8.5 inches	Configures the default paper size that is used when the user selects Custom as the paper size for a print job.
Copy/Print	Default Print Options	Default Custom Paper Size	Y Dimension		Range: 5-14 inches Default = 14 inches	Configures the default paper size that is used when the user selects Custom as the paper size for a print job.
Copy/Print	Default Print Options	Default Custom Paper Size	Use Inches		Enabled Disabled	Configures the default paper size that is used when the user selects Custom as the paper size for a print job.

Table 4-21 Settings menu (continued)

First level	Second level	Third level	Fourth level	Fifth level	Values	Description
Copy/Print	Default Print Options	Output Sides			1-sided 2-sided	Use to indicate whether the original document is printed on one or both sides, and whether the copies should be printed on one or both sides. For example, select the 1-sided original, 1-sided output option when the original is printed on one side, but you want to make two-sided copies.
Copy/Print	Default Print Options	Staple			None Top left Top right Top left or right	Sets the position of the staple on the page.
Copy/Print	Default Print Options	Output Bin			Automatically select Standard bin Upper bin Middle bin	
Copy/Print	Default Print Options	Resolution			FastRes1200 1200x1200dpi	Sets the resolution for sent documents. Higher resolution images have more dots per inch (dpi), so they show more detail. Lower 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 might automatically change to a valid value.
Copy/Print	Default Print Options	Edge-to-Edge			Normal (recommended) Edge-to-Edge output	Use to avoid shadows that can appear along the edges of copies when the original document is printed close to the edges.
Copy/Print	PCL and PostScript Settings	Courier Font			Regular Dark	Select which version of the Courier font you want to use. The factory default setting is Regular, which uses an average stroke width. The Dark setting can be used if a heavier Courier font is needed.

Table 4-21 Settings menu (continued)

First level	Second level	Third level	Fourth level	Fifth level	Values	Description
Copy/Print	PCL and PostScript Settings	Wide A4			Enabled Disabled	Changes the printable area of A4-size paper. If you enable this option, eighty 10-pitch characters can be printed on a single line of A4 paper.
Copy/Print	PCL and PostScript Settings	Print PS Errors			Enabled Disabled	Use this feature to select whether a PostScript (PS) error page is printed when the printer encounters a PS error.
Copy/Print	PCL and PostScript Settings	Print PDF Errors			Enabled Disabled	Selects whether a PDF error page is printed when the printer encounters a PDF error.
Copy/Print	PCL and PostScript Settings	Personality			Auto PCL PS PDF	Configures the default print language or personality for the printer. Normally you should not change the printer language. If you change the setting to a specific printer language, the printer does not automatically switch from one language to another unless specific software commands are sent to it.
Copy/Print	PCL and PostScript Settings	PCL	Font Settings	Font Source	Internal Disk resident	Selects the font source for the user-soft default font. The list of available options varies depending on the installed printer options.
Copy/Print	PCL and PostScript Settings	PCL	Font Settings	Font Number	Range: 0-110 Default = 0	Specifies the font number for the user-soft default font using the source that is specified in the Font Source menu. The printer 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.
Copy/Print	PCL and PostScript Settings	PCL	Font Settings	Font Pitch	Range: 0.44-99.99 Default = 10	If the Font Source option and the Font Number setting indicate a contour font, then use this feature to select a default pitch (for a fixed-spaced font).
Copy/Print	PCL and PostScript Settings	PCL	PCL Settings	Form Length	Range: 5-128 Default = 60	Controls the PCL print-command options. PCL is a set of printer commands that HP developed to provide access to printer features. Use the Form Length feature to select the user-soft default vertical form length.

Table 4-21 Settings menu (continued)

First level	Second level	Third level	Fourth level	Fifth level	Values	Description
Copy/Print	PCL and PostScript Settings	PCL	PCL Settings	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.
Copy/Print	PCL and PostScript Settings	PCL	PCL Settings	Symbol Set	Select from a list of symbol sets.	Select any one of several available 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.
Copy/Print	PCL and PostScript Settings	PCL	PCL Settings	Append CR to LF	No Yes	a carriage return (CR) is appended to each 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 each line feed.
Copy/Print	PCL and PostScript Settings	PCL	PCL Settings	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.
Copy/Print	PCL and PostScript Settings	PCL	PCL Settings	Media Source Mapping	Standard Classic	Use to select and maintain input trays by number when you are not using the printer 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.
Copy/Print	Print Quality	Adjust Color	Tonal Range	Highlights Midtones Shadows		

Table 4-21 Settings menu (continued)

First level	Second level	Third level	Fourth level	Fifth level	Values	Description
Copy/Print	Print Quality	Adjust Color	Cyan Magenta Yellow Black			
Copy/Print	Print Quality	Image Registration	Tray	Tray 1 Tray 2 Tray 3 Tray 4 Tray 5 Depends upon number of trays installed.		Specify tray to be adjusted.
Copy/Print	Print Quality	Image Registration	Front-side Horizontal Shift Front-side Vertical Shift Back-side Horizontal Shift Back-side Vertical Shift		-5.00 mm to 5.00 mm	<p>Shift the margin alignment to center the image on the page from top to bottom and from left to right. You can also align the image on the front with the image printed on the back.</p> <p>The direction that is perpendicular to the way the paper passes through the printer 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.</p> <p>The direction that the paper feeds through the printer 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.</p> <p>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 adjustments are necessary. You can adjust values for X1 Shift, X2 Shift, Y1 Shift, and Y2 Shift.</p>

Table 4-21 Settings menu (continued)

First level	Second level	Third level	Fourth level	Fifth level	Values	Description
Copy/Print	Print Quality	Image Registration		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.
Copy/Print	Print Quality	Auto Sense Behavior	Tray 1		Sense every page Sense first page Sense transparency only	
Copy/Print	Print Quality	Auto Sense Behavior	All Other Trays		Sense first page Sense transparency only	
Copy/Print	Print Quality	Adjust paper types			Select from a list of paper types Reset Paper Types	
Copy/Print	Print Quality	Optimize			Normal Paper Heavy paper Envelope control Tray 1 Background Background 1 Uniformity Control Tracking Control Registration Transfer Control Moisture Control Reset Optimize	

Table 4-21 Settings menu (continued)

First level	Second level	Third level	Fourth level	Fifth level	Values	Description
Copy/Print	Print Quality	Edge Control			Off Light Normal Maximum	
Copy/Print	Manage Trays	Use Requested Tray			Exclusively When available	Controls how the printer handles jobs that have specified a specific input tray. Two options are available: Exclusively: The printer never selects a different tray when the user has indicated that a specific tray should be used, even if that tray is empty. When available: The printer pulls from another tray if the specified tray is empty, even though the specific tray was indicated for the job.
Copy/Print	Manage Trays	Manually Feed Prompt			Always Prompt on mismatch	Indicate whether a prompt should appear when the type or size for a job does not match the specified tray and the printer pulls from the multipurpose tray instead. Two options are available: Always: A prompt always displays before using the multipurpose tray. Prompt on mismatch: A prompt displays only if the size or type do not match or the tray is empty.
Copy/Print	Manage Trays	Size/Type Prompt			Display Do not display	Controls whether the tray configuration 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.

Table 4-21 Settings menu (continued)

First level	Second level	Third level	Fourth level	Fifth level	Values	Description
Copy/Print	Manage Trays	Use Another Tray			Allow Do not allow	Use to turn on or off the control panel prompt to select another tray when the specified tray is empty. Two options are available: Allow: When this option is selected the user is prompted to either add paper to the selected tray or to choose a different tray. This is the factory default. Do not allow: When this option is selected, the user is not given the option of selecting a different tray. The printer prompts the user to add paper to the tray that was initially selected.
Copy/Print	Manage Trays	Alternative Letterhead Mode			Disabled Enabled	Use to load letterhead or preprinted paper into 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 printer for instructions about loading letterhead for printing on both sides. When this option is selected, the printer speed slows to the speed required for printing on both sides.
Copy/Print	Manage Trays	Duplex Blank Pages			Automatic Always	Controls how the printer handles two-sided jobs (duplexing). Two options are available: Automatic: Choose this option to skip printing blank sides during a two-sided print job. The printer can print jobs faster when blank sides are skipped. Always: Choose this option to print all sides of a two-sided job, even if one side is blank. This might be preferable for certain jobs that use paper types such as letterhead or prepunched paper.

Table 4-21 Settings menu (continued)

First level	Second level	Third level	Fourth level	Fifth level	Values	Description
Copy/Print	Manage Trays	Override A4/ Letter			Yes No	Prints on letter-size paper when an A4 job is sent but no A4-size paper is loaded in the printer (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 paper.
Scan/Digital Send	E-mail Settings Network Folder Settings SharePoint Settings Scan to USB Drive Settings NOTE: The same options are available for each of these features, except where noted.	E-mail Setup NOTE: Email Settings only				Use to configure settings that apply to sending documents through email or saving documents to a folder on the network or on a USB multi-drive. The E-mail Setup Wizard feature configures the printer to send scanned images as email attachments. To open the printer HP Embedded Web Server and set up the email notification server, enter the printer IP address into a Web browser.
Scan/Digital Send	E-mail Settings Network Folder Settings SharePoint Settings Scan to USB Drive Settings	Image Preview			Make optional Require preview Disable preview	Defines the default job options for each function. If you do not specify the job options 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 printer 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 printer. 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.

Table 4-21 Settings menu (continued)

First level	Second level	Third level	Fourth level	Fifth level	Values	Description
Scan/Digital Send	Digital Sending Software Setup	Allow Use of a DSS Server Allow Transfer to New DSS server			Disabled Enabled	Configure how the printer 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 Use of a DSS Server and Allow Transfer to New DSS server options to configure the printer to use HP DSS.
Fax	Internal Fax Modem Setup					Use this wizard to set up options for faxing. <ol style="list-style-type: none"> 1. Select your location from the list. Fax communication standards vary according to location. 2. Type your company name and fax number. This information is used in the fax header, which appears at the top of each page in the fax. 3. Verify that the date and time settings are correct. 4. If you need to use a dialing prefix, type the prefix number in the box. 5. Make sure that the printer is connected to a working phone line.
Fax	Fax Send Settings	Image Preview			Make optional Require preview Disable preview	Use the Image Preview feature to control the image preview behavior. Make optional : Previews are optional for all users. Require preview : Previews are required for all users. Disable preview : Previews are disabled for all users.
Fax	Fax Send Settings	Fax Dialing Settings	Redial on Error		Range: 0-9 Default = 2	These settings control how the fax modem dials the outgoing fax number when faxes are sent.
Fax	Fax Send Settings	Fax Dialing Settings	Redial on No Answer		Range: 0-2 Default = 0	

Table 4-21 Settings menu (continued)

First level	Second level	Third level	Fourth level	Fifth level	Values	Description
Fax	Fax Send Settings	Fax Dialing Settings	Redial on Busy		Range: 0-9 Default = 3	
Fax	Fax Send Settings	Fax Dialing Settings	Redial Interval		Range: 1-5 Default = 5	
Fax	Fax Send Settings	Fax Dialing Settings	Fax Send Speed		Fast (v.34-33.6k) Medium (v.17-14.4k) Slow (v.29-9.6k)	
Fax	Fax Send Settings	General Fax Send Settings	Fax Number Confirmation		Radio button to enable or disable.	If this feature is enabled, you must enter the fax number twice.
Fax	Fax Send Settings	General Fax Send Settings	PC Fax Send		Radio button to enable or disable.	Enables users who have the correct driver installed to send faxes through the printer from their computers.
Fax	Fax Send Settings	General Fax Send Settings	Error Correction Mode		Radio button to enable or disable.	When error-correction mode is enabled and an error occurs during fax transmission, the printer sends or receives the error portion again.
Fax	Fax Send Settings	General Fax Send Settings	Fax Header		Prepend Overlay	Use to prepend or overlay the fax header page.
Fax	Fax Send Settings	Billing Code Settings	Enable Billing Codes		Checkbox to enable or disable	When billing codes are 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 printer. The list is grouped by billing code and also shows fax details. This feature can be used for billing or usage tracking.
Fax	Fax Send Settings	Billing Code Settings	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.

Table 4-21 Settings menu (continued)

First level	Second level	Third level	Fourth level	Fifth level	Values	Description
Fax	Fax Send Settings	Billing Code Settings	Minimum Length		Range: 1-16 Default = 1	Specify the required length of the billing code. Billing codes can be between 1 and 16 characters long.
Fax	Fax Send Settings	Billing Code Settings	Allow users to edit billing codes		Checkbox to enable or disable.	
Fax	Fax Receive Settings	Rings To Answer			Range: 1-6 Default = 1	Use to configure settings for receiving faxes.
Fax	Fax Receive Settings	Fax Receive Setup	Ringer Volume		Off Low High	
Fax	Fax Receive Settings	Fax Receive Setup	Fax Receive Speed		Fast (v.34-33.6k) Medium (v.17-14.4k) Slow (v.29-9.6k)	Select Medium (v.17-14.4k) or Slow (v.29-9.6k) to improve the quality of received faxes.
Fax	Fax Receive Settings	Fax Printing Schedule			Always store Always print Use schedule	If you have concerns about the security of private faxes, use this feature to store faxes rather than having them automatically print. Open the Fax Printing Schedule sub-menu, 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.
Fax	Fax Receive Settings	Fax Printing Schedule	Schedule Touch this to set up a fax printing schedule if you selected the Use Fax Printing Schedule option.	New Event Done Delete (trash can)	Begin Printing Begin Storing Time Event Days	If you are using a fax printing schedule, use this menu to configure when to print faxes.

Table 4-21 Settings menu (continued)

First level	Second level	Third level	Fourth level	Fifth level	Values	Description
Fax	Fax Receive Settings	Blocked Fax Numbers	New Fax Number			<p>The blocked fax list can contain up to 30 numbers. When the printer receives a call 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.</p> <p>Add blocked numbers: Enter a fax number into the New Fax Number field, and then touch the arrow button to add a new number to the blocked fax list.</p> <p>To remove blocked numbers: Select a number and touch the trash can icon button to delete it from the blocked fax list.</p> <p>To clear all blocked numbers: Touch the Select All button to select all of the numbers from the blocked fax list, and then touch the trash can icon to delete the numbers.</p> <p>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 printer.</p>
Fax	Fax Receive Settings	Default Job Options	Notification		<p>Do not notify</p> <p>Notify when job completes</p> <p>Notify only if job fails</p>	<p>Configure to receive notification about the status of a sent document.</p> <p>Do not notify: Turns off this feature.</p> <p>Notify when job completes: Select to receive notification for this job only.</p> <p>Notify only if job fails: Select to receive notification notification notification only if the job is not sent successfully.</p>
Fax	Fax Receive Settings	Default Job Options			<p>Print</p> <p>E-mail</p>	<p>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.</p>

Table 4-21 Settings menu (continued)

First level	Second level	Third level	Fourth level	Fifth level	Values	Description
Fax	Fax Receive Settings	Default Job Options		Include Thumbnail		NOTE: When sending an analog fax, select Include Thumbnail to receive a thumbnail image of the first page of the fax in your notification.
Fax	Fax Receive Settings	Default Job Options		Notification E-mail address		Touch this text field, provide the email address to which you want notifications sent, and then touch the OK button.
Fax	Fax Receive Settings	Default Job Options	Stamp Received Faxes		On Off	Use this option to add the date, time, sender's phone number, and page number to each page of the faxes that this printer receives.
Fax	Fax Receive Settings	Default Job Options	Fit to Page		on Off	Use to shrink faxes 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.
Fax	Fax Receive Settings	Default Job Options	Paper Tray		Automatic Select from a list of the trays.	
Fax	Fax Receive Settings	Default Job Options	Output Bin		Automatically select Standard bin Upper bin Middle bin	
Fax	Fax Receive Settings	Default Job Options	Out 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.
Fax	Fax Forwarding	Enable Fax Forwarding			Disabled Enabled	Use to forward received faxes to another fax machine.
Fax	Fax Forwarding	Enable Fax Forwarding	Type of Fax Job to Forward		All faxes Sent faxes Received faxes	Use to select the type of fax jobs that you want forwarded.
Fax	Fax Forwarding	Enable Fax Forwarding	Fax Forwarding Number			Provide the forwarding phone number, and then touch the OK button.

Table 4-21 Settings menu (continued)

First level	Second level	Third level	Fourth level	Fifth level	Values	Description
Fax	Clear Fax Activity Log					Clears all events from the fax activity log.
Manage Supplies	Low Warning Thresholds			Black Cartridge Cyan Cartridge Magenta Cartridge Yellow Cartridge	1-100% Default = 596	Set the estimated percentage at which the printer notifies you when a toner cartridge is very low.
Manage Supplies	Low Warning Threshold Message				On Off	Displays a message on the control panel when a cartridge is very low.
Manage Supplies	Very Low Behavior	Black Cartridge Color Cartridges Transfer Kit Fuser Kit Document Feeder Kit			Stop Continue Prompt to continue	
Manage Supplies	Very Low Behavior	Staples			Stop Continue	
Manage Supplies	Restrict Color Use				Enable Disable Color Color if allowed	Use this feature to enable, restrict, or disable color printing or copying.

Table 4-21 Settings menu (continued)

First level	Second level	Third level	Fourth level	Fifth level	Values	Description
Manage Supplies	Color/Black Mix				Auto Mostly Color Pages Mostly Black Pages	Instructs the printer when to switch between color and monochrome printing modes for the best overall performance. Auto: Uses the mode that is appropriate for the first page of the job. If necessary, the printer switches modes during the middle of a job and then stays in that mode until the job is finished. Mostly Color Pages: The printer uses color mode for all jobs, even if the job contains no color pages. Mostly Black Pages: The printer uses monochrome mode until it detects a color page. The printer switches back to monochrome mode when it detects a sequence of several monochrome pages.
Manage Supplies	Store Usage Data				On supplies Not on supplies	The Store Usage Data provides a way to suppress the toner cartridges from storing most of the information gathered exclusively for the purpose of understanding the usage of the printer. Select the On supplies setting to store the data on the toner cartridge memory chip. Select the Not on supplies setting to suppress the information from being stored on the memory chip.
Manage Supplies	Cartridge Protection				Off Protect Cartridges	Select to permanently protect cartridges so that they can be used only in this product or fleet of products.
Manage Supplies	Cartridge Policy				Off Authorized HP	Select Authorized HP to allow only genuine HP cartridges to be used in this product.
Manage Stapler/Stacker	Operation Mode				Mailbox Stacker Function Separator	
Manage Stapler/Stacker	Job Offset				On Off	

Table 4-21 Settings menu (continued)

First level	Second level	Third level	Fourth level	Fifth level	Values	Description
Networking	Ethernet	Information	Print Security Report		Yes No	<p>Yes: Prints a page that contains the current security settings on the HP Jetdirect print server.</p> <p>No: A security settings page is not printed.</p>
Networking	Ethernet	TCP/IP	Host Name		Use the arrow buttons to edit the host name. NPIXXXXX	An alphanumeric string, up to 32 characters, used to identify the printer. 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.
Networking	Ethernet	TCP/IP	IPV4 Settings	Config Method	Bootp DHCP Auto IP Manual	<p>Specifies the method that TCP/IPv4 parameters will be configured on the HP Jetdirect print server.</p> <p>Bootp: (Bootstrap Protocol): Use for automatic configuration from a BootP server.</p> <p>DHCP: (Dynamic Host Configuration Protocol): Use for automatic configuration from a DHCPv4 server. If selected and a DHCP lease exists, the DHCP Release menu and the DHCP Renew menu are available to set DHCP lease options.</p> <p>Auto IP: Use for automatic link-local IPv4 addressing. An address in the form 169.254.x.x is assigned automatically.</p> <p>If you set this option to the Manual setting, use the Manual Settings menu to configure TCP/IPv4 parameters.</p>

Table 4-21 Settings menu (continued)

First level	Second level	Third level	Fourth level	Fifth level	Values	Description
Networking	Ethernet	TCP/IP	IPv4 Settings	Default IP	Auto IP Legacy	Specify the IP address 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 printers.
Networking	Ethernet	TCP/IP	IPv4 Settings	DHCP Release	Yes No	
Networking	Ethernet	TCP/IP	IPv4 Settings	DHCP Renew	Yes No	
Networking	Ethernet	TCP/IP	IPv4 Settings	Primary DNS	Range: 0-255 Default = xxx.xxx.xx.xx	Specify the IP address (n.n.n.n) of a Primary Domain Name System (DNS) Server.
Networking	Ethernet	TCP/IP	IPv4 Settings	Secondary DNS	Range: 0-255 Default = 0.0.0.0	Specify the IP address (n.n.n.n) of a Secondary DNS Server.
Networking	Ethernet	TCP/IP	IPv6 Settings	Enable	Off On	Use this item to enable or disable IPv6 operation on the print server. Off: IPv6 is disabled. On: IPv6 is enabled.
Networking	Ethernet	TCP/IP	IPv6 Settings	Address	Manual Settings Enable Address	Use this item to enable and manually configure a TCP/IPv6 address.

Table 4-21 Settings menu (continued)

First level	Second level	Third level	Fourth level	Fifth level	Values	Description
Networking	Ethernet	TCP/IP	IPV6 Settings	DHCPV6 Policy	Router Specified Router Unavailable Always	<p>Router Specified:</p> <p>The auto-configuration method to be used by the print server is determined by a router. The router specifies whether the print server obtains its address, its configuration information, or both from a DHCPv6 server.</p> <p>Router Unavailable: If a router is not available, the print server should attempt to obtain its configuration from a DHCPv6 server.</p> <p>Always: Whether a router is available, the print server always attempts to obtain its configuration from a DHCPv6 server.</p>
Networking	Ethernet	TCP/IP	IPV6 Settings	Primary DNS	Range: 0-255 Default = xxx.xxx.xx.xx	Specify the IP address (n.n.n.n) of a Primary Domain Name System (DNS) Server.
Networking	Ethernet	TCP/IP	IPV6 Settings	Secondary DNS	Range: 0-255 Default = 0.0.0.0	Specify the IP address (n.n.n.n) of a Secondary DNS Server.
Networking	Ethernet	TCP/IP	Proxy Server		Select from a provided list.	<p>Specifies the proxy server to be used by embedded applications in the printer. 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.</p> <p>To specify a proxy server, enter its IPv4 address or fully-qualified domain name. The name can be up to 255 octets.</p> <p>For some networks, you might need to contact your Internet Service Provider (ISP) for the proxy server address.</p>
Networking	Ethernet	TCP/IP	Proxy Port		Range: 1-65535 Default = 0080	Enter the port number used by the proxy server for client support. The port number identifies the port reserved for proxy activity on your network, and can be a value from 0 to 65535.

Table 4-21 Settings menu (continued)

First level	Second level	Third level	Fourth level	Fifth level	Values	Description
Networking	Ethernet	TCP/IP	Idle Timeout		Range: 0-3600 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).

Copy menu (MFP only)

Learn about the control-panel [Copy](#) menu (MFP).

To display: At the printer control panel, select the [Copy](#) menu.

In the following table, asterisks (*) indicate the factory default setting.

Table 4-22 Copy menu (MFP)

First level	Second level	Third level	Values	Description
Sides	Original Sides		1-sided* 2-sided	Use this item to indicate whether the original document is printed on one or both sides, and whether the copies should be printed on one or both sides.
Sides	Output Sides		1-sided* 2-sided	Use to indicate whether the copies should be printed on one or both sides.
Color/Black			Automatically detect* Color Black/Gray	Select how the copy should be printed. Automatically detect: Prints color documents in color, and black and white documents in black and white. For mixed documents, the printer will determine whether to print in color or black and white. Color: Prints documents in color. Black/Gray: Prints documents in black and white or grayscale.
Quick Sets and Defaults			Load Save	
Options	Sides	Original Sides	1-sided* 2-sided	
Options	Sides	Output Sides	1-sided* 2-sided	

Table 4-22 Copy menu (MFP) (continued)

First level	Second level	Third level	Values	Description
Options	Color/Black		Automatically detect* Color Black/Gray	Select how the copy should be printed. Automatically detect: Prints color documents in color, and black and white documents in black and white. For mixed documents, the printer will determine whether to print in color or black and white. Color: Prints documents in color. Black/Gray: Prints documents in black and white or grayscale.
Options	Staple		None Top left angled Top right angled	Use to enable/disable stapling and position the staple on the page.
Options	Scan Mode		Standard Document* Book Mode 2-sided ID	Use to describe the type of original. Book Mode: Allows the user to scan pages from a book. 2-sided ID: Allows the user to scan both sides of an identification card onto one sheet.
Options	Reduce/Enlarge		Automatic Manual	Use to scale the size of the document up or down. Select one of the predefined percentages, or select the Scaling field and type a percentage between 25 and 400. The Auto option automatically scales the image to fit the paper size in the tray. 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.
Options	Original Size		Choose from a list of sizes.	Use this to describe the size or sizes of the originals.
Options	Paper Selection		Paper Size Paper Type Paper Tray	For the best color and image quality, select the appropriate paper type from the control panel menu or from the print driver.
Options	Booklet	Booklet Format	(check box)	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 printer arranges the pages in the correct order. For example, if the original document has eight pages, the printer prints pages 1 and 8 on the same sheet.

Table 4-22 Copy menu (MFP) (continued)

First level	Second level	Third level	Values	Description
Options	Content Orientation		Automatically detect Portrait Landscape	For some features to work correctly, you must specify 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. In the Orientation area, select whether the original document has a portrait or landscape orientation.
Options	Pages per Sheet		One Two Four	Copies multiple pages onto one sheet of paper. NOTE: Before using this screen, use the Content Orientation screen to describe the original document orientation.
Options	Image Adjustment		Sharpness Darkness Contrast Background Cleanup	Use the sliders to adjust the values for these items. 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. Darkness: 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.
Options	Optimize Text/ Picture		Text Mixed Printed picture Photograph	Optimizes the output for a particular type of content. You can optimize the output for text, printed pictures, or a mixture. Text: Use to optimize the text portion of the copy where text and/or pictures are on the original. Mixed: Use for documents that contain a mix of text and graphics. 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
Options	Edge-to-Edge		Normal (recommended) Edge-to-Edge	Use to avoid shadows that can appear along the edges of copies when the original document is printed close to the edges.

Table 4-22 Copy menu (MFP) (continued)

First level	Second level	Third level	Values	Description
Options	Erase Edges	Front Side	Apply same width to all edges Top Edge Bottom Edge Left Edge Right Edge	Use this to remove blemishes, such as dark borders or staple marks, by cleaning the specified edges of the scanned image. In each of the text boxes enter the measurements, in inches, for how much of the top edge, bottom edge, left edge, and right edge to clean.
Options	Erase Edges	Back Side	Use inches Mirror front side Top Edge Bottom Edge Left Edge Right Edge	
Options	Collate		Collate on (Sets in page order) Collate off (Pages grouped)	If you are making more than one copy, select the Collate on 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.
Options	Multi-feed Detection		On* Off	This setting stops the scanning process if it detects multiple-page feeds through the document feeder.

Scan menu (MFP only)

Learn about the control-panel **Scan** menu (MFP).

To display: At the printer control panel, select the **Scan** menu.

In the following table, asterisks (*) indicate the factory default setting.

Table 4-23 Scan menu (MFP only)

First level	Second level	Third level	Fourth level	Values	Description
Scan to Email					Use this to scan the original and attach it to an email.
Scan to Network Folder	Folder Paths				Use this to scan the original and save it to a network folder.
Scan to Network Folder	File Name				

Table 4-23 Scan menu (MFP only) (continued)

First level	Second level	Third level	Fourth level	Values	Description
Scan to Network Folder	Quick Sets and Defaults				
Scan to Network Folder	Options	File Type and Resolution			
Scan to Network Folder	Options	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.
Scan to Network Folder	Options	Color/Black		Automaticall y detect color or black* Automaticall y detect color or gray Color Black/Gray Black	Use to enable or disable color scanning. <i>Automaticall y detect color or black:</i> When pages without color are detected, the printer creates an image of the page in 1-bit black if other settings allow. If the other settings don't allow (File Type, for example), the image is in grayscale. <i>Automaticall y detect color or gray:</i> When pages without color are detected, the printer creates an image of the page in grayscale. Select this option for the best image quality for non-color pages. <i>Color:</i> Scans documents in color. <i>Black/Gray:</i> Scans documents in grayscale <i>Black:</i> Scans documents in black and white with a compressed file size.
Scan to Network Folder	Options	Original Size		Select from a list of supported sizes.	Use to describe the page size of the original document.

Table 4-23 Scan menu (MFP only) (continued)

First level	Second level	Third level	Fourth level	Values	Description
Scan to Network Folder	Options	Content Orientation		Automatically Detect Portrait* Landscape	For some features to work correctly, you must specify 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. In the Orientation area, select whether the original document has a portrait or landscape orientation.
Scan to Network Folder	Options	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.
Scan to Network Folder	Options	Image Adjustment	Contrast		Adjust the Contrast setting to increase or decrease the difference between the lightest and darkest color on the page.
Scan to Network Folder	Options	Image Adjustment	Background Cleanup		Adjust the Background Cleanup setting if you are having trouble copying a faint image.
Scan to Network Folder	Options	Image Adjustment	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.
Scan to Network Folder	Options	Image Adjustment	Automatic Tone		The printer automatically adjusts the Darkness , Contrast , and Background Cleanup settings to the most appropriate for the scanned document.

Table 4-23 Scan menu (MFP only) (continued)

First level	Second level	Third level	Fourth level	Values	Description
Scan to Network Folder	Options	Optimize Text/Picture		Text Mixed Printed picture Photograph	<p>Text: Use for documents that contain mostly text. This option is also best suited for scanning documents with highlighter marks.</p> <p>Mixed: Use for documents that contain a mix of text and graphics.</p> <p>Printed picture: Use for line drawings and preprinted images, such as magazines clippings or pages from books.</p> <p>Photograph: Use for photographic prints.</p>
Scan to Network Folder	Options	Erase Edges		Apply same width to all edges (checkbox to enable or disable) Top Edge Bottom Edge Left Edge Right Edge	Use this menu item to remove blemishes, such as dark borders 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.
Scan to Network Folder	Options	Cropping Options		Do not crop Crop to content Crop to paper	Use this menu item to automatically crop the scan for digital sending. Use the Crop to content option to scan the smallest possible area that has detectable content.
Scan to Network Folder	Options	Automatically Straighten		Off* Automatically Straighten on	Enable this feature prior to scanning to automatically straighten the scanned image when pages are skewed during scanning.
Scan to Network Folder	Options	Blank Page Suppression		Off Suppress blank pages	Use to prevent blank pages in the original document from being included in the output document.
Scan to Network Folder	Options	Multi-feed Detection		On* Off	This setting stops the scanning process if it detects multiple-page feeds through the document feeder.

Table 4-23 Scan menu (MFP only) (continued)

First level	Second level	Third level	Fourth level	Values	Description
Scan to Network Folder	Options	Create Multiple Files		Disabled Enabled	Enable this item to scan pages into separate files based on a specified page limit. A page is one side of an original document. JPEG and TIFF have a limit of one page per file.
Scan to Network Folder	Options	Notification		Do not notify Notify when job completes Notify only if job fails Print E-mail	Configure to receive notification about the status of a sent document. 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. Print: Select to print the notification at this printer. E-mail: Select to receive the notification to an email account.
Scan to Network Folder	Options	Notification	Include Thumbnail		Select Include Thumbnail to receive a thumbnail image of the first page of the job in your notification.
Scan to Network Folder	Options	Notification	Notification Email		Notification Email: Select to receive the notification in an email. Touch the text box following Email Address, and then type the email address for the notification.
Scan to USB Drive	Destination				Use this to scan the original and save it to a USB drive.
Scan to USB Drive	Job Name				

Table 4-23 Scan menu (MFP only) (continued)

First level	Second level	Third level	Fourth level	Values	Description
Scan to USB Drive	Options	File Type and Resolution	PDF PDF/A (Archivable) Searchable PDF (OCR) Searchable PDF/A (OCR) JPEG TIFF MTIFF XPS Text (OCR) Unicode Text (OCR)	<p>NOTE: Not all of the following options are available for all file types.</p> <p>Resolution</p> <p>Quality and File Size</p> <p>High Compression (smaller file)</p> <p>PDF Encryption</p> <p>OCR Language</p> <p>Color/Grayscale TIFF/MTIFF Compression</p> <p>Black TIFF/MTIFF Compression</p>	<p>NOTE: Not all of the following options are available for all file types.</p> <p>Resolution: Choose from a list of resolution settings.</p> <p>Quality and File Size: Choose from High (large file), Medium*, or Low (small file).</p> <p>High Compression (smaller file): Checkbox to enable or disable.</p> <p>PDF Encryption: Checkbox to enable or disable. Password is required if enabled.</p> <p>OCR Language: Choose from a list of languages.</p> <p>Color/Grayscale TIFF/MTIFF Compression: Choose from LZW, TIFF 6.0, and TIFF (Post 6.0).</p> <p>Black TIFF/MTIFF Compression: Choose from Automatic, G3, G4, and LZW.</p>
Scan to USB Drive	Options	Original sides		1-sided* 2-sided	<p>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.</p>

Table 4-23 Scan menu (MFP only) (continued)

First level	Second level	Third level	Fourth level	Values	Description
Scan to USB Drive	Options	Color/Black		<p>Automatically detect color or black*</p> <p>Automatically detect color or gray</p> <p>Color</p> <p>Black/Gray</p> <p>Black</p>	<p>Use to enable or disable color scanning.</p> <p>Automatically detect color or black: When pages without color are detected, the printer creates an image of the page in 1-bit black if other settings allow. If the other settings don't allow (File Type, for example), the image is in grayscale.</p> <p>Automatically detect color or gray: When pages without color are detected, the printer creates an image of the page in grayscale. Select this option for the best image quality for non-color pages.</p> <p>Color: Scans documents in color.</p> <p>Black/Gray: Scans documents in grayscale</p> <p>Black: Scans documents in black and white with a compressed file size.</p>
Scan to USB Drive	Options	Original Size		Select from a list of supported sizes.	Use to describe the page size of the original document.
Scan to USB Drive	Options	Content Orientation	Orientation	<p>Automatically detect</p> <p>Portrait*</p> <p>Landscape</p>	<p>For some features to work correctly, you must specify 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. In the Orientation area, select whether the original document has a portrait or landscape orientation.</p>
Scan to USB Drive	Options	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.
Scan to USB Drive	Options	Image Adjustment	Contrast		Adjust the Contrast setting to increase or decrease the difference between the lightest and darkest color on the page.

Table 4-23 Scan menu (MFP only) (continued)

First level	Second level	Third level	Fourth level	Values	Description
Scan to USB Drive	Options	Image Adjustment	Background Cleanup		Adjust the Background Cleanup setting if you are having trouble copying a faint image.
Scan to USB Drive	Options	Image Adjustment	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.
Scan to USB Drive	Options	Image Adjustment	Automatic Tone		The printer automatically adjusts the Darkness , Contrast , and Background Cleanup settings to the most appropriate for the scanned document.
Scan to USB Drive	Options	Optimize Text/Picture		Text Mixed Printed picture Photograph	<p>Optimizes the output for a particular type of content. You can optimize the output for text, printed pictures, or a mixture.</p> <p>Text: Use for documents that contain mostly text. This option is also best suited for scanning documents with highlighter marks.</p> <p>Mixed: Use for documents that contain a mix of text and graphics.</p> <p>Printed picture: Use for line drawings and preprinted images, such as magazines clippings or pages from books.</p> <p>Photograph: Use for photographic prints.</p>
Scan to USB Drive	Options	Erase Edges		Apply same width to all edges Top Edge Bottom Edge Left Edge Right Edge	<p>Use this menu item to remove blemishes, such as dark borders 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.</p>

Table 4-23 Scan menu (MFP only) (continued)

First level	Second level	Third level	Fourth level	Values	Description
Scan to USB Drive	Options	Cropping Options		Do not crop Crop to content Crop to paper	Use this menu item to automatically crop the scan for digital sending. Use the Crop to content option to scan the smallest possible area that has detectable content.
Scan to USB Drive	Options	Automatically Straighten		Off* Automatically Straighten on	Enable this feature prior to scanning to automatically straighten the scanned image when pages are skewed during scanning.
Scan to USB Drive	Options	Blank Page Suppression		Off* Suppress blank pages	Use to prevent blank pages in the original document from being included in the output document.
Scan to USB Drive	Options	Multi-feed Detection		On* Off	This setting stops the scanning process if it detects multiple-page feeds through the document feeder.
Scan to USB Drive	Options	Create Multiple Files		Disabled Enabled	Enable this item to scan pages into separate files based on a specified page limit. A page is one side of an original document. JPEG and TIFF have a limit of one page per file.
Scan to USB Drive	Options	Notification		Do not notify Notify when job completes Notify only if job fails Print E-mail	Configure to receive notification about the status of a sent document. 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. Print : Select to print the notification at this printer. E-mail : Select to receive the notification to an email account.
Scan to USB Drive	Options	Notification	Include Thumbnail		Select Include Thumbnail to receive a thumbnail image of the first page of the job in your notification.

Table 4-23 Scan menu (MFP only) (continued)

First level	Second level	Third level	Fourth level	Values	Description
Scan to USB Drive	Options	Notification	Notification Email		Notification Email: Select to receive the notification in an email. Touch the text box following Email Address, and then type the email address for the notification.
Scan to Job Storage				Folder Job Name	Use this to scan the original and save it to the printer memory.
Scan to SharePoint	Quick Sets			Select from a list of quick sets.	NOTE: To use this menu, you must first enable Scan to SharePoint® from the printer's Embedded Web Server (EWS) and then set up at least one Quick Set. Log in as Administrator on the EWS and select the Scan/Digital Send tab to find these options. Use Scan to SharePoint® to scan a document and save it to a SharePoint® site. To specify a SharePoint® path, touch Load, and then select a Quick Set.
Scan to SharePoint	Filename				
Scan to SharePoint	Options	File Type and Resolution			
Scan to SharePoint	Options	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 4-23 Scan menu (MFP only) (continued)

First level	Second level	Third level	Fourth level	Values	Description
Scan to SharePoint	Options	Color/Black		<p>Automatically detect color or black*</p> <p>Automatically detect color or gray</p> <p>Color</p> <p>Black/Gray</p> <p>Black</p>	<p>Use to enable or disable color scanning.</p> <p>Automatically detect color or black: When pages without color are detected, the printer creates an image of the page in 1-bit black if other settings allow. If the other settings don't allow (File Type, for example), the image is in grayscale.</p> <p>Automatically detect color or gray: When pages without color are detected, the printer creates an image of the page in grayscale. Select this option for the best image quality for non-color pages.</p> <p>Color: Scans documents in color.</p> <p>Black/Gray: Scans documents in grayscale</p> <p>Black: Scans documents in black and white with a compressed file size.</p>
Scan to SharePoint	Options	Original Size		Select from a list of supported sizes.	Use to describe the page size of the original document.
Scan to SharePoint	Options	Content Orientation	Orientation	<p>Automatically detect</p> <p>Portrait*</p> <p>Landscape</p>	<p>For some features to work correctly, you must specify 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. In the Orientation area, select whether the original document has a portrait or landscape orientation.</p>
Scan to SharePoint	Options	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.
Scan to SharePoint	Options	Image Adjustment	Contrast		Adjust the Contrast setting to increase or decrease the difference between the lightest and darkest color on the page.

Table 4-23 Scan menu (MFP only) (continued)

First level	Second level	Third level	Fourth level	Values	Description
Scan to SharePoint	Options	Image Adjustment	Background Cleanup		Adjust the Background Cleanup setting if you are having trouble copying a faint image.
Scan to SharePoint	Options	Image Adjustment	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.
Scan to SharePoint	Options	Image Adjustment	Automatic Tone		The printer automatically adjusts the Darkness , Contrast , and Background Cleanup settings to the most appropriate for the scanned document.
Scan to SharePoint	Options	Optimize Text/Picture		Text Mixed Printed picture Photograph	Optimizes the output for a particular type of content. You can optimize the output for text, printed pictures, or a mixture. Text: Use for documents that contain mostly text. This option is also best suited for scanning documents with highlighter marks. Mixed: Use for documents that contain a mix of text and graphics. Printed picture: Use for line drawings and preprinted images, such as magazines clippings or pages from books. Photograph: Use for photographic prints.
Scan to SharePoint	Options	Erase Edges		Apply same width to all edges Top Edge Bottom Edge Left Edge Right Edge	Use this menu item to remove blemishes, such as dark borders 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.

Table 4-23 Scan menu (MFP only) (continued)

First level	Second level	Third level	Fourth level	Values	Description
Scan to SharePoint	Options	Cropping Options		Do not crop Crop to content Crop to paper	Use this menu item to automatically crop the scan for digital sending. Use the Crop to content option to scan the smallest possible area that has detectable content.
Scan to SharePoint	Options	Automatically Straighten		Off* Automatically Straighten on	Enable this feature prior to scanning to automatically straighten the scanned image when pages are skewed during scanning.
Scan to SharePoint	Options	Blank Page Suppression		Off* Suppress blank pages	Use to prevent blank pages in the original document from being included in the output document.
Scan to SharePoint	Options	Multi-feed Detection		On* Off	This setting stops the scanning process if it detects multiple-page feeds through the document feeder.
Scan to SharePoint	Options	Create Multiple Files		Disabled Enabled	Enable this item to scan pages into separate files based on a specified page limit. A page is one side of an original document. JPEG and TIFF have a limit of one page per file.
Scan to SharePoint	Options	Notification		Do not notify Notify when job completes Notify only if job fails Print E-mail	Configure to receive notification about the status of a sent document. 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. Print : Select to print the notification at this printer. E-mail : Select to receive the notification to an email account.
Scan to SharePoint	Options	Notification	Include Thumbnail		Select Include Thumbnail to receive a thumbnail image of the first page of the job in your notification.

Table 4-23 Scan menu (MFP only) (continued)

First level	Second level	Third level	Fourth level	Values	Description
Scan to SharePoint	Options	Notification	Notification Email		Notification Email: Select to receive the notification in an email. Touch the text box following Email Address, and then type the email address for the notification.

Fax menu (MFP only)

Learn about the control-panel **Fax** menu (MFP).

To display: At the printer control panel, select the **Fax** menu.

In the following table, asterisks (*) indicate the factory default setting.

Table 4-24 Scan menu (MFP only)

First level	Second level	Third level	Fourth level	Values	Description
Fax	Dialing Prefix Fax Recipients Quick Sets and Defaults				
Fax	Options	Resolution		Standard (100 x 200dpi)* Fine (200 x 200dpi) Superfine (300 x 300dpi)	Select the resolution for outgoing faxes. If you increase the resolution, faxes 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.
Fax	Options	Original size		Select from a list of sizes that the printer supports.	Use to describe the page size of the original document.
Fax	Options	Content Orientation		Portrait* Landscape	For some features to 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.

Table 4-24 Scan menu (MFP only) (continued)

First level	Second level	Third level	Fourth level	Values	Description
Fax	Options	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.
Fax	Options	Image Adjustment	Contrast		Adjust the Contrast setting to increase or decrease the difference between the lightest and darkest color on the page.
Fax	Options	Image Adjustment	Background Cleanup		Adjust the Background Cleanup setting if you are having trouble copying a faint image.
Fax	Options	Image Adjustment	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.
Fax	Options	Image Adjustment	Automatic Tone		The printer automatically adjusts the Darkness , Contrast , and Background Cleanup settings to the most appropriate for the scanned document.
Fax	Options	Optimize Text/Picture		Text Mixed Printed picture Photograph	<p>Text: Use for documents that contain mostly text. This option is also best suited for scanning documents with highlighter marks.</p> <p>Mixed: Use for documents that contain a mix of text and graphics.</p> <p>Printed picture: Use for line drawings and preprinted images, such as magazines clippings or pages from books.</p> <p>Photograph: Use for photographic prints.</p>
Fax	Options	Blank Page Suppression		Off Suppress blank pages	Use to prevent blank pages in the original document from being included in the output document.
Fax	Options	Multi-feed Detection		On* Off	This setting stops the scanning process if it detects multiple-page feeds through the document feeder.

Table 4-24 Scan menu (MFP only) (continued)

First level	Second level	Third level	Fourth level	Values	Description
Fax	Options	Notification		Do not notify Notify when job completes Notify only if job fails Print E-mail	Configure to receive notification about the status of a sent document. 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. Print: Select to print the notification at this printer. E-mail: Select to receive the notification to an email account.
Fax	Options	Notification	Include Thumbnail		Select Include Thumbnail to receive a thumbnail image of the first page of the job in your notification.
Fax	Options	Notification	Notification Email		Notification Email : Select to receive the notification in an email. Touch the text box following Email Address, and then type the email address for the notification.

Print menu

Learn about the control-panel [Print](#) menu.

To display: At the printer control panel, select the [Print](#) menu.

In the following table, asterisks (*) indicate the factory default setting.

Table 4-25 Print menu

First level	Second level	Values	Description
Print from Job Storage	Stored Job to Print	Untitled Stored Faxes	Print a job stored on the printer.
Print from USB Drive	Stored Job to Print	Choose file to print on USB drive.	Print a job stored on a USB drive.
Fax Polling	Fax Polling Number		

Supplies menu

Review the following information about the [Supplies](#) menu.

To display: At the printer control panel, select the [Supplies](#) menu.

In the following table, asterisks (*) indicate the factory default setting.

Table 4-26 Supplies menu

First level	Values	Description
Supplies Summary		
Black Cartridge	Status	
Cyan Cartridge	Order HP Part	
Magenta Cartridge	Pages Printed	
Yellow Cartridge	Approximate Pages Remaining	
Toner Collection Unit		
Transfer Kit	Order HP Part	
Fuser Kit		
Document Feeder Kit		
Stapler 1		

Trays menu

Review the following information about the [Trays](#) menu.

To display: At the printer control panel, select the [Trays](#) menu.

In the following table, asterisks (*) indicate the factory default setting.

Table 4-27 Trays menu

First level	Second level	Values	Description
Tray 1	Size	Select paper size from a list of supported sizes.	Choose the paper size for the tray
Tray 2-x			
Tray 1	Type	Select paper type from a list of supported types.	Choose the paper type for the tray.
Tray 2-x			

Support Tools menu

Learn about the control-panel [Support Tools](#) menu.



NOTE: The [Support Tools](#) sub-menu contains the options for maintaining the printer and troubleshooting printer problems.

Maintenance menu

Learn about the control-panel [Maintenance](#) menu.

Backup/Restore menu

Learn about the control-panel Backup/Restore menu.

To display: At the printer control panel, select the [Support Tools](#) menu, select the [Maintenance](#) menu, and then select the [Backup/Restore](#) menu.

In the following table, asterisks (*) indicate the factory default setting.

Table 4-28 Backup/Restore menu

First level	Second level	Values	Description
Back up Data	Back up Data	Back up Now	Initiate a backup.
		Cancel	
Restore Data		Insert a USB flash drive that contains the backup file in to the USB port near the control panel.	Restore data from an external source.

Calibration/Cleaning menu

Learn about the control-panel [Calibration/Cleaning](#) menu .

To display: At the printer control panel, select the [Support Tools](#) menu, select the [Maintenance](#) menu, and then select the [Calibration/Cleaning](#) menu.

In the following table, asterisks (*) indicate the factory default setting.

Table 4-29 Calibration/Cleaning menu

First level	Second level	Values	Description
Cleaning Page	Automatic Cleaning Interval	Off*	Use this menu to configure the settings for the product to automatically print a cleaning page.
		1000 pages	
		2000 pages	Select Off to disable automatic cleaning.
		5000 pages	Select a cleaning interval to set the number of pages to be printed before an automatic cleaning page is printed.
		10000 pages	
		20000 pages	
			NOTE: Cleaning pages print on the default paper size configured for the printer.

Table 4-29 Calibration/Cleaning menu (continued)

First level	Second level	Values	Description
Quick Calibration		Start	<p>The printer automatically calibrates itself at various times. However, the user can calibrate the printer immediately if the printer experiences problems with print quality. Use this feature to perform a partial calibration. Use this calibration if color density or tone seem incorrect.</p> <p>Before calibrating, make sure that the Ready indicator displays on the control panel display. If a job is in progress, the calibration occurs when that job is complete.</p>
Full Calibration		Start	<p>The printer automatically calibrates itself at various times. However, the user can calibrate the printer immediately if the printer experiences problems with print quality. Use this feature to perform a full calibration, which can take up to three minutes. Use this calibration if the color layers seem to be shifted on the page.</p> <p>Before calibrating, make sure that the Ready indicator displays on the control panel display. If a job is in progress, the calibration occurs when that job is complete.</p>
Power on Calibration		No delay Delay 15 minutes	<p>This feature controls the timing of calibration when the printer wakes up or is turned on.</p>
Calibrate Scanner (M681/M682/ E67550/ E67560/ E67650/ E67660 only)		Done Start	<p>Touch Start to calibrate the device scanner. Messages on the control panel display will lead you through the calibration process.</p>
Prepare for Shipping			<p>Touch Start to initiate a cleaning sequence that helps prepare the product for shipping. Excess toner will be transferred into the Toner Collection Unit to keep loose toner contained during shipping. This process takes about 2 minutes.</p>

Table 4-29 Calibration/Cleaning menu (continued)

First level	Second level	Values	Description
Reset Calibration		Reset	Use this feature to return the product to the factory-set default values for color calibration.
		Cancel	Select Reset to reset the color calibration. The printer will restart with the factory-set defaults.
			Select Cancel to close the menu without resetting the color calibration.
Clean Document Feeder Settings	Low Threshold Settings	Range: 0-100%	Configure cleaning settings for the document feeder.
		Default = 10%	
M681/M682/ E67550/ E67560/ E67650/ E67660 only			
Clean Document Feeder Settings	Very Low Settings	Stop	Configure the printer action if the document feeder requires cleaning.
		Prompt to continue*	
		Continue	

USB Firmware Upgrade menu

Learn about the control-panel [USB Firmware Upgrade](#) menu.

To display: At the printer control panel, select the [Support Tools](#) menu, select the [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.

Troubleshooting menu

Review the following information about the [Troubleshooting](#) menu.

To display: At the printer control panel, select the [Support Tools](#) menu, and then select the [Troubleshooting](#) menu.

In the following table, asterisks (*) indicate the factory default setting.

Table 4-30 Troubleshooting menu

First level	Second level	Third level	Values	Description
Reports	Configuration/Status Pages		Settings Menu Map	
			Current Settings Page	
			Configuration Page	
			How to Connect Page	
			Supplies Status Page	
			Usage Page	
			File Directory Page	
Reports	Fax Reports		Web Services Status Page	
			Color Usage Job Log	
			Fax Activity Log	
			Billing Codes Report	
			Blocked Fax List	
Reports	Configuration/Status Pages	Other Pages	Fax Call Report	
			Demonstration Page	
			RBG Samples	
			CMYK Samples	
			PCL Font List	
Fax Tools	Fax T.30 Trace	Print T.30 Report	PS Font List	
			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.
			Never automatically print*	
			Print after every fax	
			Print only after fax send jobs	
Fax Tools	Fax T.30 Trace	When to Print Report	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.

Table 4-30 Troubleshooting menu (continued)

First level	Second level	Third level	Values	Description
Fax Tools	Fax V.34		On Off*	Use to disable V.34 modulations if several fax failures have occurred or if phone line conditions require it.
Fax Tools	JBIG Compression		On Off*	The JBIG compression reduces fax-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.
Fax Tools	Fax Speaker Mode		Normal* Diagnostic	Used by a technician to evaluate and diagnose fax issues by listening to the sounds of fax modulations.
Fax Tools	Fax Service Log		Print* Cancel	The standard fax log 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	PQ Troubleshooting Pages		Print	Use to print pages that can help you resolve problems with print quality.
Print Quality Pages	Diagnostics Page		Print	Use to print a diagnostics page. The page includes color swatches, diagnostic information, and calibration information.
Print Quality Pages	Color Band Test		Print	Use to print a page that helps you resolve problems with print quality.
Event Log			Print Delete (trash can)	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.

Table 4-30 Troubleshooting menu (continued)

First level	Second level	Third level	Values	Description
Paper Path Page			Print	Shows how many pages were printed from each tray.
Diagnostic Tests	Disable Cartridge Check			Use this diagnostic test to print internal pages or send an external job to the printer when the toner cartridge is removed or exchanged. Supply errors are ignored while the printer is in this mode.
Diagnostic Tests	Paper Path Test	Number of Copies	Range: 1-500 Default = 1	Sets the default number of copies for a copy job. This default applies when the Copy or Quick Copy function is initiated from the printer Home screen. The factory default setting is 1.
Diagnostic Tests	Paper Path Test	Paper 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.
Diagnostic Tests	Paper Path Test	Output Sides	1-sided* 2-sided	
Diagnostic Tests	Paper Path Test	Staple	None* Top left or right	
Diagnostic Tests	Paper Path Test	Output Bin	All Bins Standard Bin* Upper Bin Middle Bin	
Diagnostic Tests	Print/Stop Test		Stop Next Print Job* Delay	
Diagnostic Tests	Paper Path Sensor Test		Select from a list of the printer sensors.	Initiates a test of the paper path sensors.

Table 4-30 Troubleshooting menu (continued)

First level	Second level	Third level	Values	Description
Diagnostic Tests	Manual Sensor Test		Select from a list of available components. Reset Sensors	Test the printer sensors and switches for correct operation. Each sensor is displayed on the control panel screen, along with its status. Manually trip each sensor and watch for it to change on the screen. Select the Stop button to abort the test.
Diagnostic Tests	Component Test		Select from a list of available components. Repeat	Use this item to exercise individual parts independently to isolate noise, leaking, or other issues. To start the test, select one of the components. The test will run the number of times specified by the Repeat option. The user might be prompted to remove parts from the printer during the test. Select the Stop button to abort the test.
Diagnostic Tests	Continuous Scan (M681/M682/E67550/ E67560/E67650/ E67660)		2-sided	
Diagnostic Tests	Run Fax Test (M681/M682/E67550/ E67560/E67650/ E67660)		Start	
Generate Debug Data			Start	
Retrieve Diagnostics Data			Send to email	Create files that contain information about the printer that can help identify the cause of problems.
Retrieve Fax Diagnostic Data (M681/M682/E67550/ E67560/E67650/ E67660)				Enter user access code to retrieve fax diagnostic data.

Service menu

Learn about the control-panel [Service](#) menu.

To display: At the printer control panel, select the [Support Tools](#) menu, and then select the [Service](#) menu.

The [Service](#) menu is locked and requires a personal identification number (PIN) for access. This menu is intended for use by authorized service personnel. See the Service menu section of this manual.

Resolve print-quality problems

Use the information below to troubleshoot print-quality problems, including issues with image quality and color quality.

Introduction

- Blank pages
- Black pages
- Colors that do not align
- Curled paper
- Dark or light bands
- Dark or light streaks
- Fuzzy print
- Gray background or dark print
- Light print
- Loose toner
- Missing toner
- Scattered dots of toner
- Skewed images
- Smears
- Streaks

Troubleshoot print quality

Use the information below to troubleshoot print-quality problems, including issues with image quality and color quality.

To resolve print-quality issues, try these steps in the order presented.

Update the printer firmware

Learn about troubleshooting print quality by upgrading the printer firmware.

Try updating the printer firmware. For more information, go to www.hp.com/support and select the option to **Get software and drivers**. Then follow the prompts to navigate to the firmware download for the printer.

Print from a different software program

Try printing from a different software program. If the page prints correctly, the problem is with the software program from which you were printing.

Check the paper type setting on the printer

Check the paper type setting on the printer control panel, and change the setting as needed.

1. Open the paper tray.
2. Verify that the tray is loaded with the correct type of paper.
3. Close the tray.
4. Follow the control panel instructions to confirm or modify the paper type settings for the tray.

Check the paper type setting (Windows)

Check the paper type setting for Windows, and change the setting as needed.



NOTE: The print driver settings will override any control panel settings.

1. From the software program, select the **Print** option.
2. Select the printer, and then click the **Properties** or **Preferences** button.
3. Click the **Paper/Quality** tab.
4. From the **Paper Type** drop-down list, click the **More...** option.
5. Expand the list of **Type Is:** options.
6. Expand the category of paper types that best describes your paper.
7. Select the option for the type of paper you are using, and click the **OK** button.
8. Click the **OK** button to close the **Document Properties** dialog box. In the **Print** dialog box, click the **OK** button to print the job.

Check the paper type setting (macOS)

Check the paper type setting for macOS, and change the setting as needed.

1. Click the **File** menu, and then click the **Print** option.
2. In the **Printer** menu, select the printer.
3. Click **Show Details** or **Copies & Pages**.
4. Open the menus drop-down list, and then click the **Paper/Quality** menu.
5. Select a type from the **Media Type** drop-down list.
6. Click the **Print** button.


Check toner-cartridge status

Follow these steps to check the estimated life remaining in the toner cartridges and if applicable, the status of other replaceable maintenance parts.

Step one: Print the supplies status page

The supplies status page indicates the cartridge status.

1. From the Home screen on the printer control panel, select the **Reports** menu.

2. Select the [Configuration/Status Pages](#) menu.
3. Select [Supplies Status Page](#), and then, select Print  to print the page.

Step two: Check supplies status

Check the supplies status report as follows.

1. Look at the supplies status report to check the percent of life remaining for the toner cartridges and, if applicable, the status of other replaceable maintenance parts.

Print quality problems can occur when using a toner cartridge that is at its estimated end of life. The supplies status page indicates when a supply level is very low. After an HP supply has reached the very low threshold, HP's premium protection warranty on that supply has ended.

The toner cartridge does not need to be replaced now unless the print quality is no longer acceptable. Consider having a replacement available to install when print quality is no longer acceptable.

If you determine that you need to replace a toner cartridge or other replaceable maintenance parts, the supplies status page lists the genuine HP part numbers.

2. Check to see if you are using a genuine HP cartridge.

A genuine HP toner cartridge has the word "HP" on it, or has the HP logo on it. For more information on identifying HP cartridges go to www.hp.com/go/learnaboutsupplies.

Print a cleaning page

Learn about the printer cleaning page.

During the printing process paper, toner, and dust particles can accumulate inside the printer and can cause print-quality issues such as toner specks or spatter, smears, streaks, lines, or repeating marks. Follow these steps to clean the printer's paper path.

Follow these steps to clean the printer's paper path.

1. From the Home screen on the printer control panel, select the [Support Tools](#) menu.
2. Select the following menus:
 - [Maintenance](#)
 - [Calibration/Cleaning](#)
 - [Cleaning Page](#)
3. Select [Print](#) to print the page.

A **Cleaning...** message displays on the printer control panel. The cleaning process takes a few minutes to complete. Do not turn the printer off until the cleaning process has finished. When it is finished, discard the printed page.

Visually inspect the toner cartridge or cartridges

Follow these steps to inspect each toner cartridge.

1. Remove the toner cartridges from the printer, and verify that the sealing tape has been removed.
2. Check the memory chip for damage.

3. Examine the surface of the green imaging drum.

⚠ CAUTION: Do not touch the imaging drum. Fingerprints on the imaging drum can cause print-quality problems.

4. If you see any scratches, fingerprints, or other damage on the imaging drum, replace the toner cartridge.
5. Reinstall the toner cartridge, and print a few pages to see if the problem has resolved.

Check paper and the printing environment

Use the following information to check the paper selection and the printing environment.

Step one: Use paper that meets HP specifications

Some print-quality problems arise from using paper that does not meet HP specifications.

- Always use a paper type and weight that this printer supports.
- Use paper that is of good quality and free of cuts, nicks, tears, spots, loose particles, dust, wrinkles, voids, staples, and curled or bent edges.
- Use paper that has not been previously printed on.
- Use paper that does not contain metallic material, such as glitter.
- Use paper that is designed for use in laser printers. Do not use paper that is designed only for use in Inkjet printers.
- Use paper that is not too rough. Using smoother paper generally results in better print quality.

Step two: Check the environment

The environment can directly affect print quality and is a common cause for print-quality or paper-feeding issues. Try the following solutions:

- Move the printer away from drafty locations, such as open windows or doors, or air-conditioning vents.
- Make sure the printer is not exposed to temperatures or humidity outside of printer specifications.
- Do not place the printer in a confined space, such as a cabinet.
- Place the printer on a sturdy, level surface.
- Remove anything that is blocking the vents on the printer. The printer requires good air flow on all sides, including the top.
- Protect the printer from airborne debris, dust, steam, grease, or other elements that can leave residue inside the printer.

Step three: Set the individual tray alignment

Follow these steps when text or images are not centered or aligned correctly on the printed page when printing from specific trays.

Follow these steps when text or images are not centered or aligned correctly on the printed page when printing from specific trays.

1. Load plain paper in Tray 1.
2. From the Home screen on the printer control panel, select the **Settings** menu.
3. Select the following menus:
 - **Copy/Print** or **Print**
 - **Print Quality**
 - **Image Registration**
4. Select **Tray**, and then select the tray to adjust.
5. Select **Print Test Page**, and then follow the instructions on the printed pages.
6. Select **Print Test Page** again to verify the results, and then make further adjustments if necessary.
7. Select **Done** to save the new settings.

Try a different print driver

Try a different print driver when printing from a software program and the printed pages have unexpected lines in graphics, missing text, missing graphics, incorrect formatting, or substituted fonts.

Download any of the following drivers from the HP Web site: www.hp.com/support/colorljM652 or www.hp.com/support/colorljM653 or www.hp.com/support/ljE65050 or www.hp.com/support/ljE65060 or www.hp.com/support/colorljE65150 or www.hp.com/support/colorljE65160 or www.hp.com/support/colorljM681MFP or www.hp.com/support/colorljM682MFP or www.hp.com/support/ljE67550MFP or www.hp.com/support/ljE67560MFP or www.hp.com/support/colorljE67650MFP or www.hp.com/support/colorljE67660MFP.

Table 4-31 Print drivers

Print driver	Description
HP PCL 6 V3 driver	This printer-specific print driver supports Windows 7 and newer operating systems that support version 3 drivers. For a list of supported operating systems, go to www.hp.com/go/support .
HP PCL-6 V4 driver	This product-specific print driver supports Windows 8 and newer operating systems that support version 4 drivers. For a list of supported operating systems, go to www.hp.com/go/support .
HP UPD PS driver	<ul style="list-style-type: none"> • Recommended for printing with Adobe software programs or with other highly graphics-intensive software programs • Provides support for printing from postscript emulation needs, or for postscript flash font support <p>NOTE: For the most consistent results, HP recommends downloading Adobe Reader and running it from a computer, rather than using the web-based software.</p>

Table 4-31 Print drivers (continued)

Print driver	Description
HP UPD PCL 6	<ul style="list-style-type: none"> • Recommended for printing in all Windows environments • Provides the overall best speed, print quality, and printer feature support for most users • Developed to align with Windows Graphic Device Interface (GDI) for best speed in Windows environments • Might not be fully compatible with third-party and custom software programs that are based on PCL 5

Troubleshoot image defects

Review examples of image defects and steps to resolve these defects.

Table 4-32 Image defects table quick reference



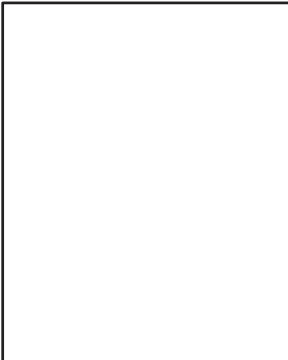

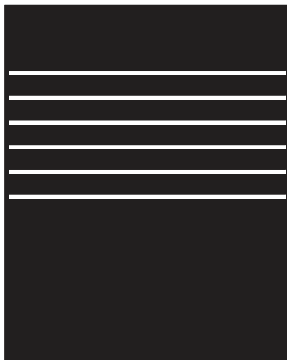
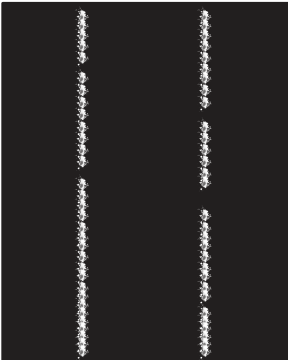
Defect	Defect	Defect
Table 4-41 Light print 	Table 4-39 Gray background or dark print 	Table 4-35 Blank page – No print 
Table 4-34 Black page 	Table 4-33 Banding defects 	Table 4-43 Streak defects 

Table 4-32 Image defects table quick reference (continued)

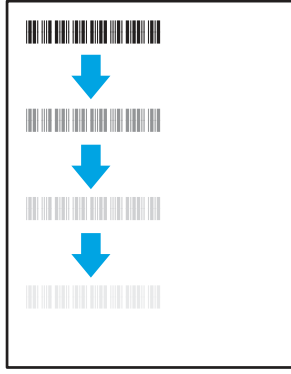


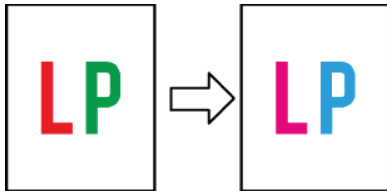
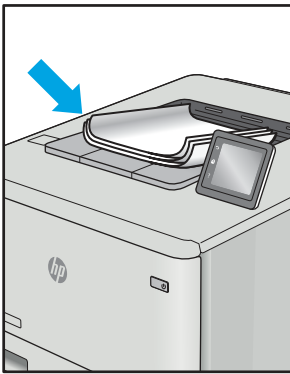

Defect	Defect	Defect
Table 4-38 Fixing/fuser defects	Table 4-40 Image placement defects	Table 4-36 Color plane registrations defects (color models only)
		
Table 4-37 Wrong color	Table 4-42 Output defects	
		

Image defects, no matter the cause, can often be resolved using the same steps. Use the following steps as a starting point for solving image defect issues.

1. Reprint the document. Print quality defects can be intermittent in nature or can go away completely with continued printing.
2. Check the condition of the cartridge or cartridges. If a cartridge is in a **Very Low** state (it has passed the rated life), replace the cartridge.
3. Make sure that the driver and tray print mode settings match the media that is loaded in the tray. Try using a different ream of media or a different tray. Try using a different print mode.
4. Make sure that the printer is within the supported operating temperature/humidity range.
5. Make sure that the paper type, size, and weight are supported by the printer. See the printer support page at support.hp.com for a list of the supported paper sizes and types for the printer.

 **NOTE:** The term “fusing” refers to the part of the printing process where toner is affixed to paper.

The following examples depict letter-size paper that has passed through the printer short-edge first.

Table 4-33 Banding defects


Sample	Description	Possible solutions
	Dark or light lines which repeat down the length of the page, and are wide-pitch and/or impulse bands. They might be sharp or soft in nature. The defect displays only in areas of fill, not in text or sections with no printed content.	<ol style="list-style-type: none">1. Reprint the document.2. Try printing from another tray.3. Replace the cartridge.4. Use a different paper type.5. Enterprise models only: From the Home screen on the printer control panel, go to the Adjust Paper Types menu, and then choose a print mode that is designed for a slightly heavier media than what you are using. This slows the print speed and might improve the print quality.6. If the issue persists, go to support.hp.com.

Table 4-34 Black page


Sample	Description	Possible solutions
	The entire printed page is black.	<ol style="list-style-type: none">1. Visually inspect the cartridge to check for damage.2. Make sure that the cartridge is installed correctly.3. Replace the cartridge4. If the issue persists, go to support.hp.com.

Table 4-35 Blank page – No print

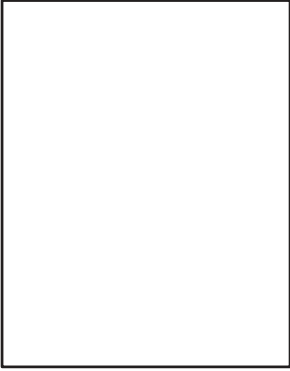
Sample	Description	Possible solutions
	The page is completely blank and contains no printed content.	<ol style="list-style-type: none">1. Make sure that the cartridges are genuine HP cartridges.2. Make sure that the cartridge is installed correctly.3. Print with a different cartridge.4. Check the paper type in the paper tray and adjust the printer settings to match. If necessary, select a lighter paper type.5. If the issue persists, go to support.hp.com.

Table 4-36 Color plane registrations defects (color models only)


Sample	Description	Possible solutions
	One or more color plane(s) is not aligned with the other color planes. This registration error will typically occur with yellow.	<ol style="list-style-type: none">1. Reprint the document.2. From the printer control panel, calibrate the printer.3. If a cartridge has reached a Very Low state, or the printed output is severely faded, replace the cartridge.4. From the printer control panel use the Restore Calibration feature to reset the printer's calibration settings to the factory defaults.5. If the issue persists, go to support.hp.com.

Table 4-37 Wrong color

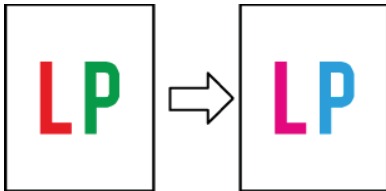
Sample	Description	Possible solutions
	<p>One or more colors does not print the correct color.</p>	<ol style="list-style-type: none"> 1. Reprint the document. 2. From the printer control panel, calibrate the printer. 3. If a cartridge or imaging drum has reached a Very Low state, or the printed output is severely faded, replace the cartridge or drum. 4. From the printer control panel use the Restore Calibration feature to reset the printer's calibration settings to the factory defaults. 5. Verify that the customer is not using a custom color table. 6. If the issue persists, go to support.hp.com.

Table 4-38 Fixing/fuser defects

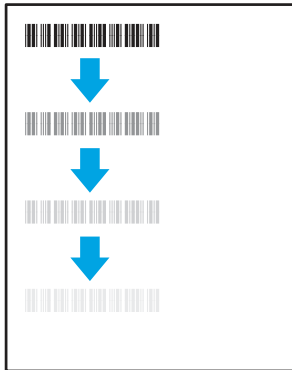
Sample	Description	Possible solutions
	<p>Slight shadows or offsets of the image are repeated down the page. The repeated image might fade with each recurrence.</p>	<ol style="list-style-type: none"> 1. Reprint the document. 2. Check the paper type in the paper tray and adjust the printer settings to match. If necessary, select a lighter paper type. 3. If the issue persists, go to support.hp.com.

Table 4-38 Fixing/fuser defects (continued)

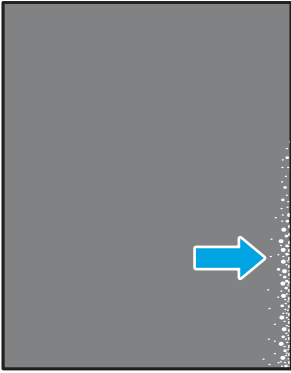
Sample	Description	Possible solutions
	<p>Toner rubs off along either edge of the page. This defect is more common at the edges of high-coverage jobs, and on light media types, but can occur anywhere on the page.</p>	<ol style="list-style-type: none"> 1. Reprint the document. 2. Check the paper type in the paper tray and adjust the printer settings to match. If necessary, select a heavier paper type (for example, bond). 3. Enterprise models only: From the printer control panel, go to the Edge-to-Edge menu and then select Normal. Reprint the document. 4. Enterprise models only: From the printer control panel, select Auto Include Margins and then reprint the document. 5. Verify that the printed content is not outside the printable region of the printer. 6. If the issue persists, go to support.hp.com.

Table 4-39 Gray background or dark print


Sample	Description	Possible solutions
	<p>The image or text is darker than expected and/or the background is gray.</p>	<ol style="list-style-type: none"> 1. Make sure that the paper in the trays has not already been run through the printer. 2. Use a different paper type (for example, rougher paper will help this problem). 3. Reprint the document. 4. Mono models only: From the Home screen on the printer control panel, go to the Adjust Toner Density menu, and then adjust the toner density to a lower level. 5. Make sure that the printer is within the supported operating temperature and humidity range (reduce humidity or load freshly opened paper). 6. Replace the cartridge. 7. If the issue persists, go to support.hp.com.

Table 4-40 Image placement defects


Sample	Description	Possible solutions
	<p>The image is not centered, or is skewed on the page. The defect occurs when the paper is not positioned properly as it is pulled from the tray and moves through the paper path.</p>	<ol style="list-style-type: none"> 1. Reprint the document. 2. Remove the paper and then reload the tray. Make sure that all the paper edges are even on all sides. 3. Make sure that the top of the paper stack is below the tray-full indicator. Do not overfill the tray. 4. Make sure that the paper guides are adjusted to the correct size for the paper. Do not adjust the paper guides tightly against the paper stack. Adjust them to the indentations or markings in the tray. 5. If the issue persists, go to support.hp.com.

Table 4-41 Light print


Sample	Description	Possible solutions
	<p>The printed content is light or faded on the entire page.</p>	<ol style="list-style-type: none"> 1. Reprint the document. 2. Remove the cartridge, and then shake it to redistribute the toner. 3. Mono models only: Make sure that the EconoMode setting is disabled, both at the printer control panel and in the print driver. 4. Make sure that the cartridge is installed correctly. 5. Print a Supplies Status Page and check the life and usage of the cartridge. 6. Replace the cartridge. 7. If the issue persists, go to support.hp.com.

Table 4-42 Output defects


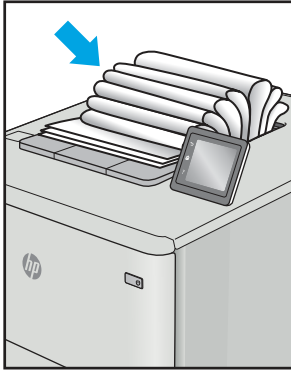
Sample	Description	Possible solutions
	<p>Printed pages have curled edges. The curled edge can be along the short or long side of the paper. Two types of curl are possible:</p> <ul style="list-style-type: none"> • Positive curl: The paper curls toward the printed side. The defect occurs in dry environments or when printing high-coverage pages. • Negative curl: The paper curls away from the printed side. The defect occurs in high-humidity environments or when printing low-coverage pages. 	<ol style="list-style-type: none"> 1. Reprint the document. 2. Positive curl: From the printer control panel, select a heavier paper type. The heavier paper type creates a higher temperature for printing. Negative curl: From the printer control panel, select a lighter paper type. The lighter paper type creates a lower temperature for printing. Try storing the paper in a dry environment prior to use, or use freshly-opened paper. 3. Print in duplex mode. 4. If the issue persists, go to support.hp.com.
	<p>The paper does not stack well in the output tray. The stack might be uneven, skewed, or the pages might be pushed out of the tray and onto the floor. Any of the following conditions can cause this defect:</p> <ul style="list-style-type: none"> • Extreme paper curl • The paper in the tray is wrinkled or deformed • The paper is a non-standard paper type, such as envelopes • The output tray is too full 	<ol style="list-style-type: none"> 1. Reprint the document. 2. Extend the output bin extension. 3. If the defect is caused by extreme paper curl, refer to the troubleshooting steps for "Output curl." 4. Use a different paper type. 5. Use freshly-opened paper. 6. Remove the paper from the output tray before the tray gets too full. 7. If the issue persists, go to support.hp.com.

Table 4-43 Streak defects

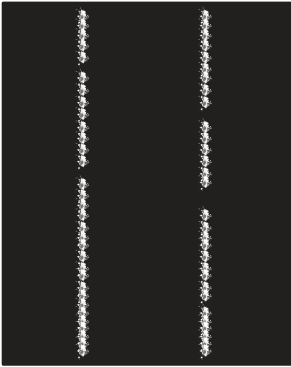
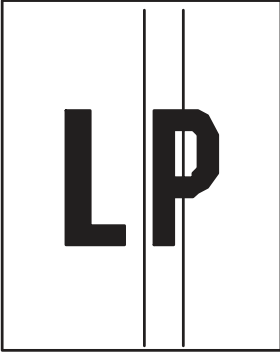
Sample	Description	Possible solutions
	<p>Light vertical streaks that usually span the length of the page. The defect displays only in areas of fill, not in text or sections with no printed content.</p>	<ol style="list-style-type: none"> 1. Reprint the document. 2. Remove the cartridge, and then shake it to redistribute the toner. 3. If the issue persists, go to support.hp.com. <p>NOTE: Both light and dark vertical streaks can occur when the printing environment is outside the specified range for temperature or humidity. Refer to your printer's environmental specifications for allowable temperature and humidity levels.</p>

Table 4-43 Streak defects (continued)

Sample	Description	Possible solutions
	Dark vertical lines which occur down the length of the page. The defect might occur anywhere on the page, in areas of fill or in sections with no printed content. On color models, these lines or streaks will also be visible on the ITB cleaning page.	<ol style="list-style-type: none">1. Reprint the document.2. Remove the cartridge, and then shake it to redistribute the toner.3. Print a cleaning page.4. Check the toner level in the cartridge.5. If the issue persists, go to support.hp.com.

Clean the printer

Review the following information about cleaning the printer.



NOTE: To clean the printer exterior, use a soft, water-moistened cloth.

Clean the paper path

Over time, particles of toner and paper accumulate inside the printer. This can cause print-quality problems during printing. Cleaning the paper path eliminates or reduces these problems.

Clean the paper path and toner-cartridge areas every time that a toner cartridge is changed or whenever print-quality problems occur. As much as possible, keep the printer free from dust and debris.

Print a cleaning page

Learn about cleaning the printer paper path.

Print the cleaning page from a touchscreen control panel

1. From the Home screen on the printer control panel, select the **Support Tools** menu.
2. Open the following menus:
 - **Maintenance**
 - **Calibration/Cleaning**
 - **Cleaning Page**
3. Select **Print** to print the page.

A **Cleaning...** message displays on the printer control panel. The cleaning process takes a few minutes to complete. Do not turn the printer off until the cleaning process has finished. When it is finished, discard the printed page.

Print the cleaning page from an LCD control panel

1. From the Home screen on the printer control panel, use the arrow buttons to scroll to **Device Maintenance**, and then press the **OK** button.

2. Use the arrow buttons to scroll to [Calibration/Cleaning](#), and then press the **OK** button.
3. If necessary, use the arrow buttons to scroll to [Cleaning](#), and then press the **OK** button to print the page.
4. Follow the instruction on the printed cleaning page to finish the cleaning page process.

Enable and configure auto cleaning (touchscreen control panels only)

Learn about auto cleaning the printer paper path.

1. From the Home screen on the printer control panel, select the [Support Tools](#) menu.
2. Open the following menus:
 - [Maintenance](#)
 - [Calibration/Cleaning](#)
 - [Cleaning Page](#)
3. Select [Print](#) to print the page.

A **Cleaning...** message displays on the printer control panel. The cleaning process takes a few minutes to complete. Do not turn the printer off until the cleaning process has finished. When it is finished, discard the printed page.

Check the scanner glass for dirt and smudges

Learn about solving copy-quality debris problems.

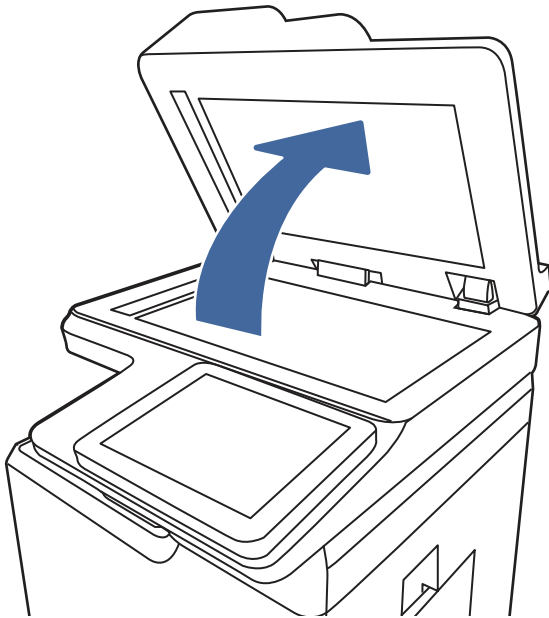
Over time, specks of debris might collect on the scanner glass and document feeder white plastic backing, which might cause print defects. Use the following procedure to clean the scanner if the printed pages have streaks, unwanted lines, black dots, poor print quality, or unclear text.

 [View a video of cleaning the document feeder glass and flatbed glass.](#)

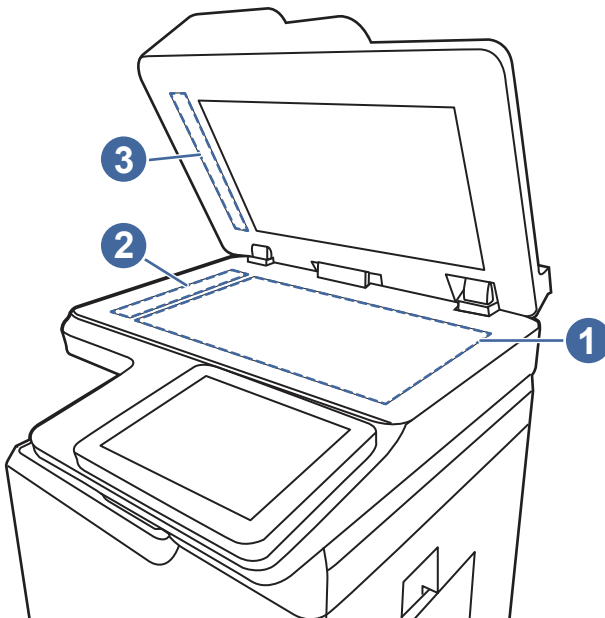
1. Press the power button to turn the printer off, and then disconnect the power cable from the electrical outlet.



2. Open the scanner lid.



3. Clean the scanner glass (callout 1) and the document feeder strips (callout 2, callout 3) with a soft cloth or sponge that has been moistened with nonabrasive glass cleaner.



⚠ CAUTION: Do not use abrasives, acetone, benzene, ammonia, ethyl alcohol, or carbon tetrachloride on any part of the printer; these can damage the printer. Do not place liquids directly on the glass or platen. They might seep and damage the printer.

📝 NOTE: If you are having trouble with streaks on copies when you are using the document feeder, be sure to clean the small strips of glass on the left side of the scanner (callout 2, callout 3).

4. Dry the glass and white plastic parts with a chamois or a cellulose sponge to prevent spotting.


5. Connect the power cable to an outlet, and then press the power button to turn the printer on.



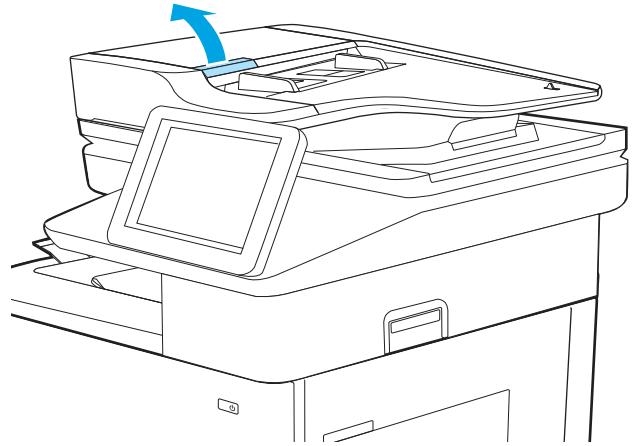
Clean the pickup rollers and separation pad in the document feeder (MFP)

Learn about cleaning the document feeder rollers and pads.

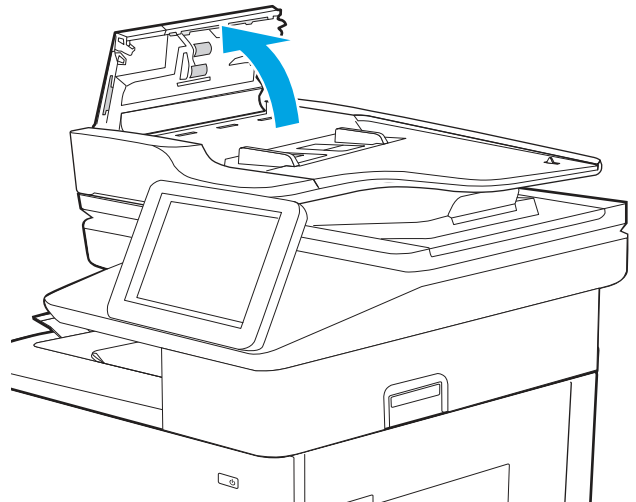
Over time, specks of debris might collect on the document feeder rollers and pads which can affect performance.

 **NOTE:** The figures in this topic show a typical MFP printer. However, the procedure is correct for all MFP printers.

1. Lift the document-feeder latch.



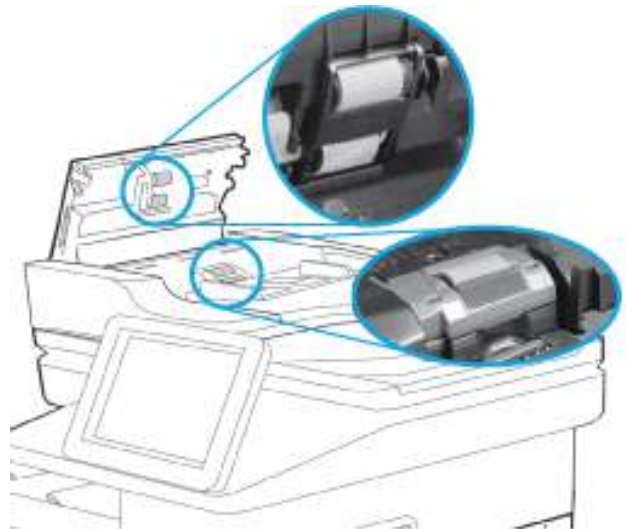
2. Open the document-feeder cover.



- Remove any visible lint or dust from each of the feed rollers and the separation pad using compressed air or a clean lint-free cloth moistened with warm water.



NOTE: Lift up the roller assembly to access and clean the second roller.



- Close the document-feeder cover.

Solve paper handling problems

Review the following information to solve paper handling problems.

Printer feeds incorrect page size

Review the following information when the printer feeds an incorrect page size.



NOTE: To print using an HP Plus printer, the printer must have genuine original HP toner cartridges installed, must have an ongoing internet connection and an active HP Plus account (for more information, go to hp.com/plus).

Table 4-44 Printer feeds incorrect page size

Cause	Solution
The correct size paper is not loaded in the tray.	Load the correct size paper in the tray.
The correct size paper is not selected in the software program or printer driver.	Confirm that the settings in the software program and printer driver are correct, because the software program settings override the printer driver and control panel settings, and the printer driver settings override the control panel settings.
The correct size paper for the tray is not selected in the printer control panel.	From the control panel, select the correct size paper for the tray.
The paper size is not configured correctly for the tray.	Print a configuration page to determine the paper size for which the tray is configured.
The guides in the tray are not against the paper.	Verify that the paper guides are touching the paper.

Printer pulls from incorrect tray

Review the following information when the printer pulls from an incorrect tray.



NOTE: To print using an HP Plus printer, the printer must have genuine original HP toner cartridges installed, must have an ongoing internet connection and an active HP Plus account (for more information, go to hp.com/plus).

Table 4-45 Printer pulls from incorrect tray

Cause	Solution
A driver for a different printer is in use.	Use a driver for this printer.
The specified tray is empty.	Load paper in the specified tray.
The paper size is not configured correctly for the input tray.	Print a configuration page or use the control panel to determine the paper size for which the tray is configured.
The guides in the tray are not against the paper.	Verify that the guides are touching the paper.

Printer will not duplex or duplexes incorrectly (duplex models)

Review the following information when the printer will not duplex or duplexes incorrectly.

Table 4-46 Printer will not duplex (print 2-sided jobs) or duplexes incorrectly

Cause	Solution
The duplex job is trying to use unsupported paper.	Verify that the paper is supported for duplex printing.
The printer driver is not set up for duplex printing.	Set up the printer driver to enable duplex printing.
The first page is printing on the back of preprinted forms or letterhead.	Load preprinted forms and letterhead in Tray 1 with the letterhead or printed side down, with the top of the page leading into the printer. For Tray 2-X, load the paper printed side up with the top of the page toward the right of the printer.
The printer model does not support automatic 2-sided printing.	The printer model does not support automatic 2-sided printing.

Paper does not feed from Tray 2-X

Review the following information when the paper does not feed from Tray 2-X.



NOTE: To print using an HP Plus printer, the printer must have genuine original HP toner cartridges installed, must have an ongoing internet connection and an active HP Plus account (for more information, go to hp.com/plus).

Table 4-47 Paper does not feed from Tray 2-X

Cause	Solution
The correct size paper is not loaded.	Load the correct size paper.
The input tray is empty.	Load paper in the input tray.
The correct paper type for the input tray is not selected in the printer control panel.	From the printer control panel, select the correct paper type for the input tray. Trays configured for a paper type with a specific weight range will not match a print job that specifies an exact weight, even if the specified weight is within the weight range.
Paper from a previous jam has not been completely removed.	Open the printer and remove any paper in the paper path. Closely inspect the fuser area for jams.

Table 4-47 Paper does not feed from Tray 2-X (continued)

Cause	Solution
None of the optional trays appear as input tray options.	The optional trays only display as available if they are installed. Verify that any optional trays are correctly installed. Verify that the printer driver has been configured to recognize the optional trays.
An optional tray is incorrectly installed.	Print a configuration page to confirm that the optional tray is installed. If not, verify that the tray is correctly attached to the printer.
The paper size is not configured correctly for the input tray.	Print a configuration page or use the control panel to determine the paper size for which the tray is configured.
The guides in the tray are not against the paper.	Verify that the guides are touching the paper.

Output is curled or wrinkled


Review the following information when the output is curled or wrinkled.

Table 4-48 Output is curled or wrinkled

Cause	Solution
Paper does not meet the specifications for this printer.	Use only paper that meets the HP paper specifications for this printer. Non-recycled, 75 g/m ² (20 lb) paper is optimal for office use.
The correct paper type for the input tray is not selected in the printer control panel.	From the printer control panel, select the correct paper type for the input tray. Trays configured for a paper type with a specific weight range will not match a print job that specifies an exact weight, even if the specified weight is within the weight range.
Paper is damaged or in poor condition.	Remove paper from the input tray and load paper that is in good condition.
The printer is operating in an excessively humid environment.	Verify that the printing environment is within humidity specifications.
The print job consist of large, solid-filled areas.	Large, solid-filled areas can cause excessive curl. Try using a different pattern.
Paper used was not stored correctly and might have absorbed moisture.	Remove paper and replace it with paper from a fresh, unopened package. Store paper in a plastic bag to protect it from humidity.
Paper has poorly cut edges.	Remove paper, flex it, rotate it 180 degrees or turn it over, and then reload it into the input tray. Do not fan paper. If the problem persists, replace the paper.
The specific paper type was not configured for the tray or selected in the software.	Configure the software for the paper (see the software documentation). Configure the tray for the paper.
The paper has previously been used for a print job.	Do not re-use paper.

The printer does not pick up paper

If the printer does not pick up paper from the tray, try these solutions.


 **NOTE:** Tray 1 and Tray 2 are optimal for paper pickup when using special paper or media other than 20lb plain paper. For Tray 1 and Tray 2 the printer increases the number of attempts to pick up a page, which increases the reliability of successfully picking the page from the tray and decreases the possibility of a mispick jam.

HP recommends using Tray 1 or Tray 2 if the printer is experiencing excessive or reoccurring jams from trays other than Tray 1 and Tray 2, or for print jobs that require media other than 20lb plain paper.

1. Open the printer and remove any jammed sheets of paper.
2. Load the tray with the correct size of paper for the job.
3. Make sure the paper size and type are set correctly on the printer control panel.
4. 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.
5. Check the printer control panel to see if the printer is waiting for an acknowledgment to the feed the paper manually prompt. Load paper, and continue.
6. The rollers above the tray might be contaminated. Clean the rollers with a lint-free cloth dampened with warm water.

Clear paper jams

Use the procedures in this section to clear jammed paper from the printer paper path.

 **NOTE:** To avoid tearing the paper, pull the jammed paper out slowly and gently.

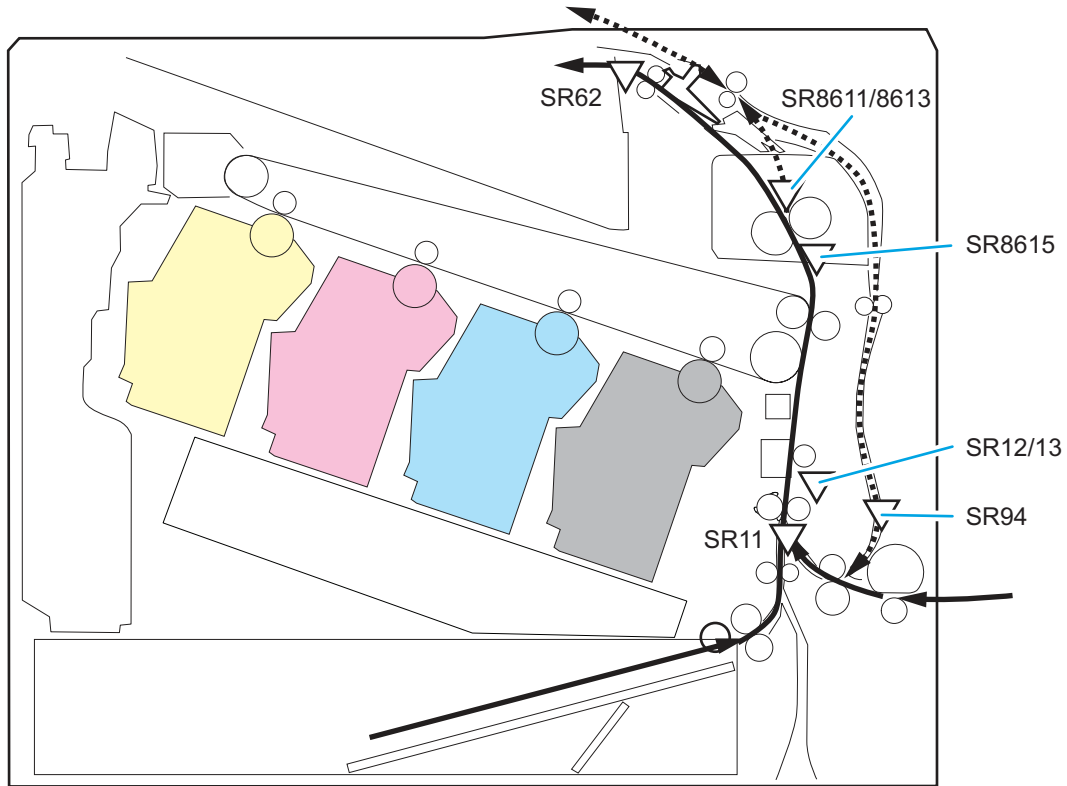
Figures in this section are representational only. The actual printer being serviced might look slightly different depending on the model and installed accessories.

Paper path jam sensor locations

View document feeder, printer, and paper feeder sensor and switch diagrams.

Sensors (printer base)

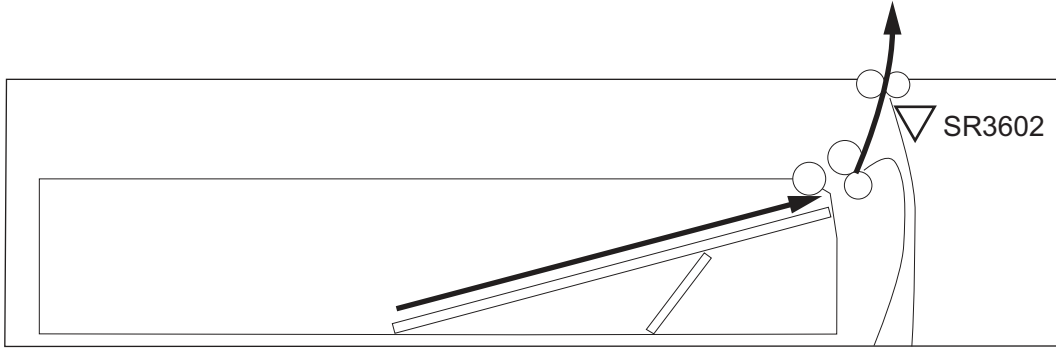
Figure 4-93 Sensors (printer base)



Item	Description	Item	Description
SR11	Registration sensor	SR94	Duplex feed sensor (duplex models only)
SR12	Registration media width sensor 1	SR8611	Fuser output sensor 1
SR13	Registration media width sensor 2	SR8613	Fuser output sensor 2
SR62	FD1 media full sensor	SR8615	Fuser loop sensor

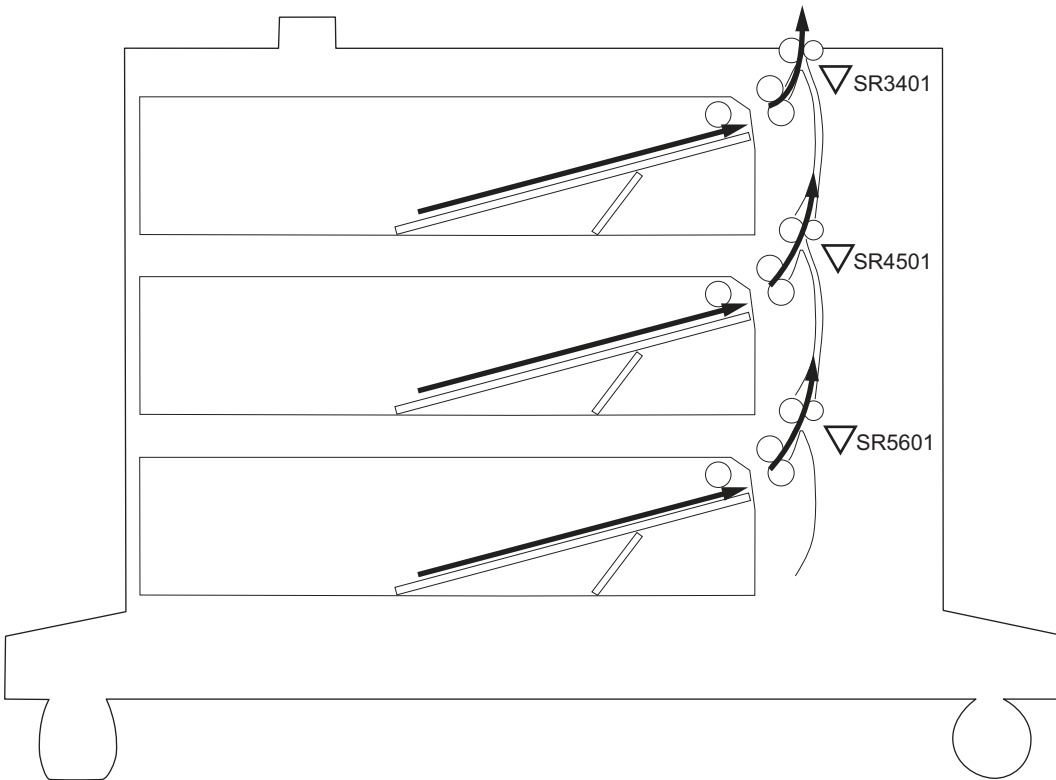
Sensors (input and output devices)

Figure 4-94 1x550-sheet paper feeder, sensors



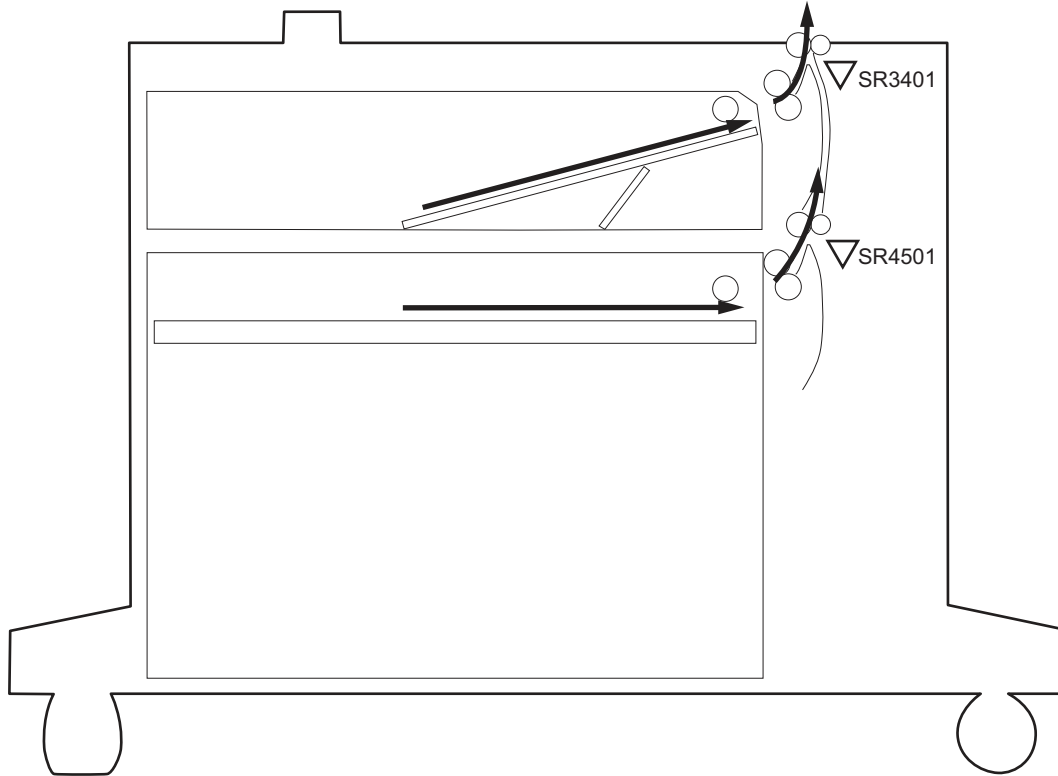
Item	Description
PS3602	Paper feeder sensor (550-sheet feeder only)

Figure 4-95 Paper deck, sensors



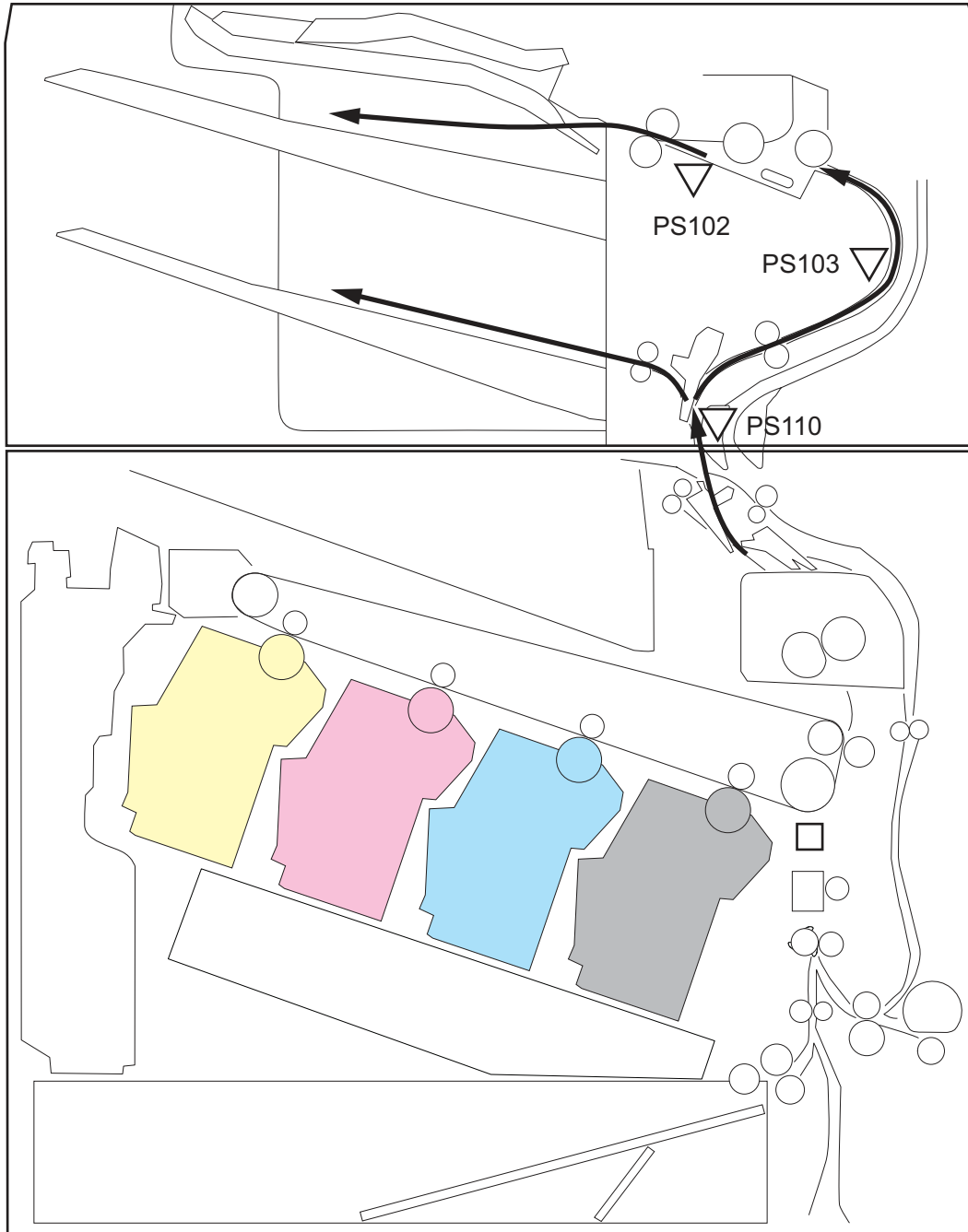
Item	Description
PS3401	Paper deck cassette 1 feed sensor (1x550-sheet paper deck, 3x550-sheet paper deck, and HCI only)
PS4501	Paper deck cassette 2 feed sensor (3x550-sheet paper deck and HCI only)
PS5601	Paper deck cassette 3 feed sensor (3x550-sheet paper deck only)

Figure 4-96 HCl, sensors



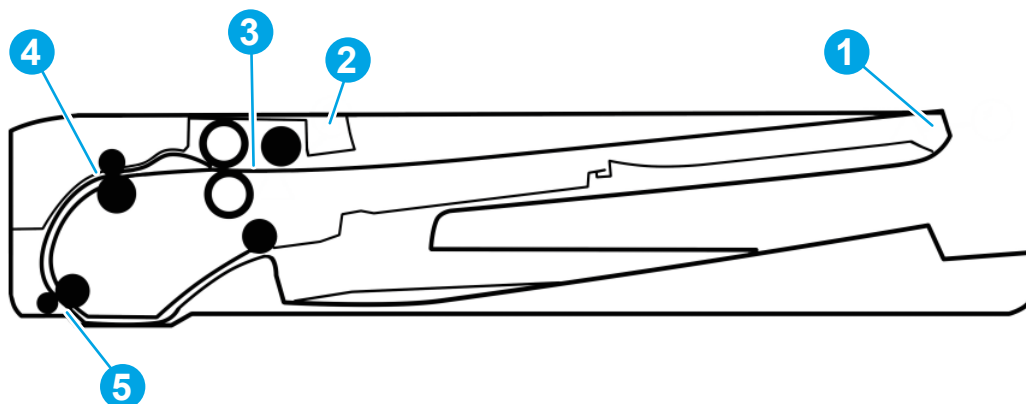
Item	Description
PS3401	HCl cassette 1 feed sensor
PS4501	HCl cassette 2 feed sensor

Figure 4-97 HP Stapling Mailbox, sensors



Item	Description
PS102	Stapler/stacker exit sensor
PS103	Staple inlet sensor
PS110	Stapler/stacker inlet sensor

Figure 4-98 Document feeder sensors



Item	Description
1	Length sensor
2	Jam cover sensor
3	Paper present sensor
4	Deskew sensor
5	Paper path sensor

Auto-navigation for clearing paper jams

Learn about printer jam clearing auto-navigation.

The auto-navigation feature assists in clearing jams by providing step-by-step instructions on the control panel.

When you complete a step, the printer 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.



[View a video that demonstrates how to load paper in a way that reduces the number of paper jams](#)

1. Use only paper that meets HP specifications for this printer.
2. Use paper that is not wrinkled, folded, or damaged. If necessary, use paper from a different package.
3. Use paper that has not previously been printed or copied on.
4. 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.
5. 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.
6. Make sure that the tray is fully inserted in the printer.

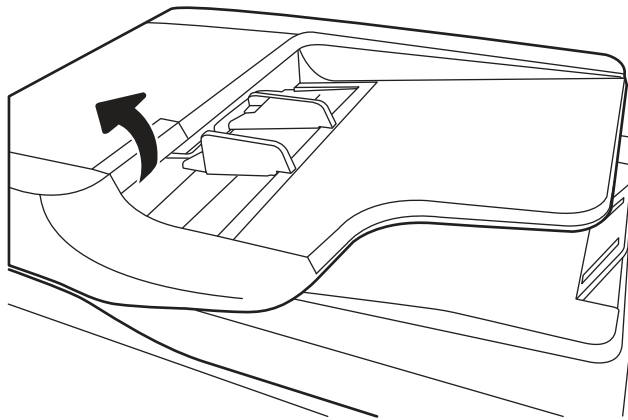
7. If you are printing on heavy, embossed, or perforated paper, use the manual feed feature and feed sheets one at a time.
8. Open the **Trays** menu on the printer control panel. Verify that the tray is configured correctly for the paper type and size.
9. Make sure the printing environment is within recommended specifications.

Clear paper jams in the document feeder

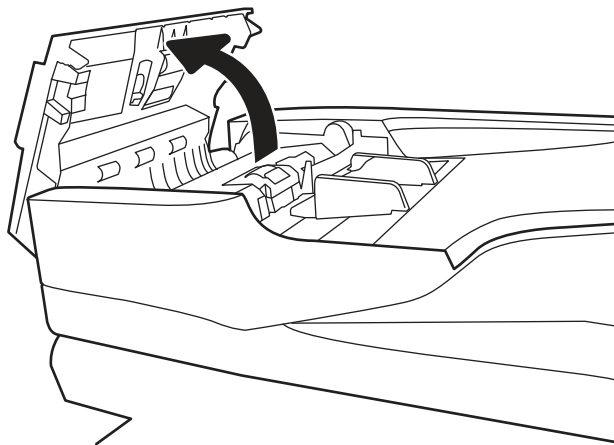
Learn about clearing jams in the document feeder.

The following information describes how to clear paper jams in the document feeder. When a jam occurs, the control panel displays the following message and an animation that assists in clearing the jam.

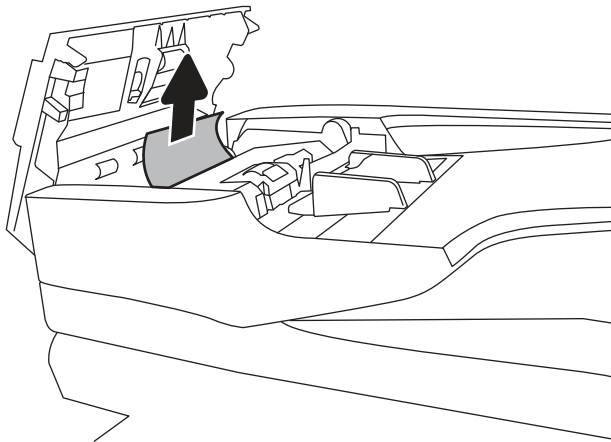
- **3113.XX Jam in Document Feeder**
1. Lift the latch to release the document-feeder cover.



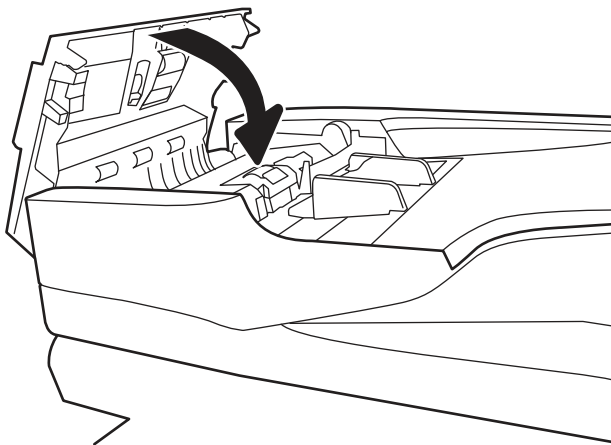
2. Open the document feeder cover.





3. Remove any jammed paper.



4. 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.

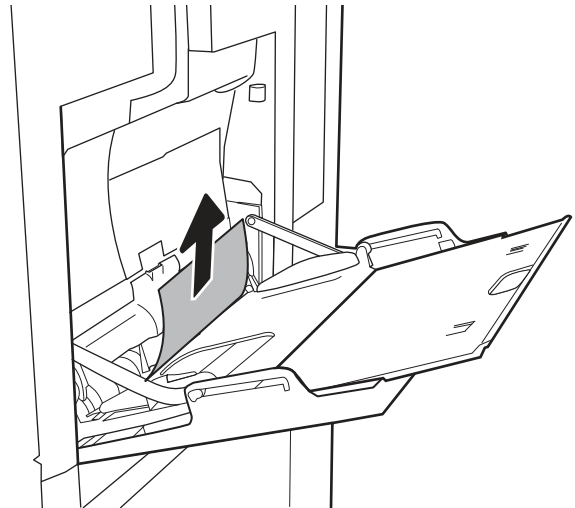
13.A1 tray 1 paper jam

Learn about clearing jams in Tray 1.

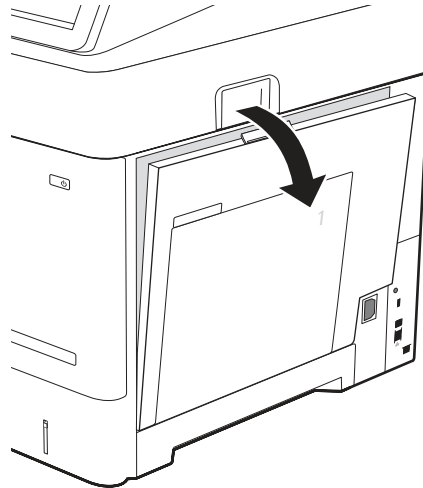
The following information describes how to clear paper jams in Tray 1. When a jam occurs, the control panel displays the following message and an animation that assists in clearing the jam.

- **13.A1.XX Jam in Tray 1**

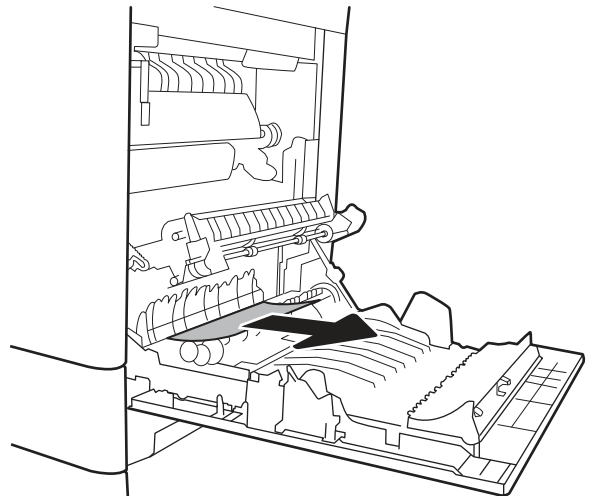
1. If jammed paper is visible in Tray 1, clear the jam by gently pulling the paper straight out.



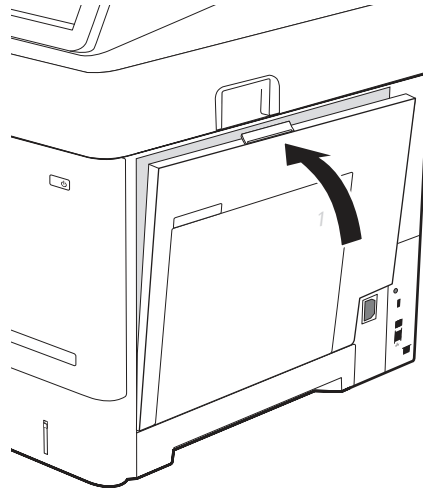
2. If the paper remains stuck, or if no jammed paper is visible in Tray 1, remove any remaining paper in the tray, and then close Tray 1 and open the right door.



3. Gently pull out any jammed paper.



4. Close the right door.



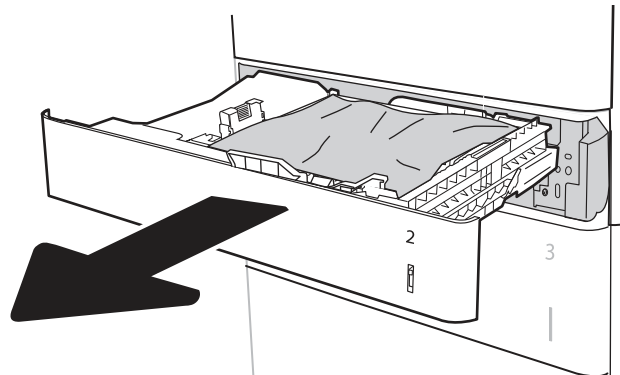
13.A2 tray 2 paper jam

Learn about clearing jams in Tray 2.

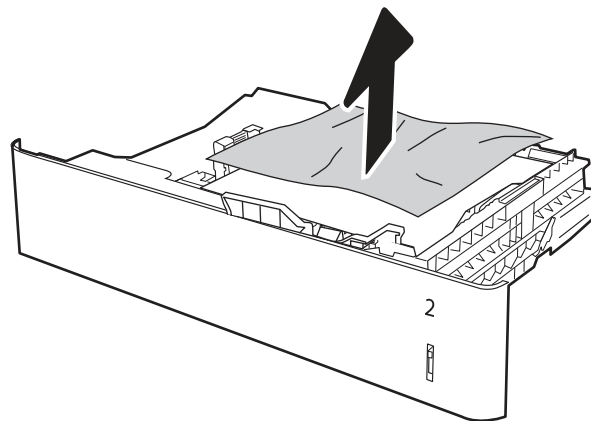
The following information describes how to clear paper jams in Tray 2. When a jam occurs, the control panel displays the following message and an animation that assists in clearing the jam.

- **13.A2.XX Jam in Tray 2**

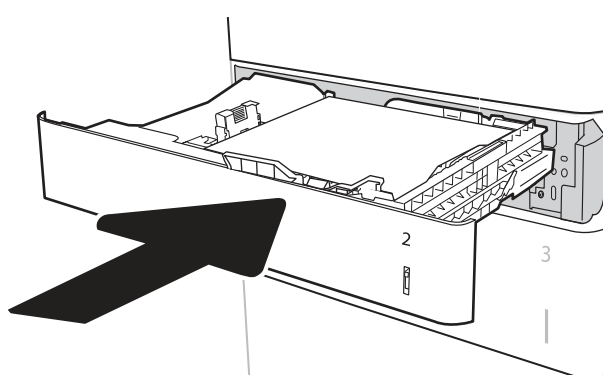
1. Pull the tray completely out of the printer by pulling and lifting it up slightly.



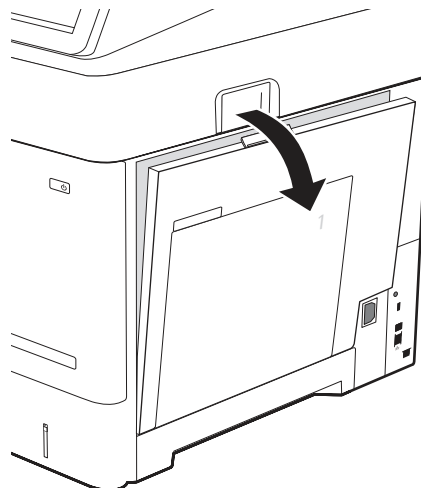
2. Remove any jammed or damaged sheets of paper from the tray. Verify that the tray is not overfilled and that the paper guides are adjusted correctly.



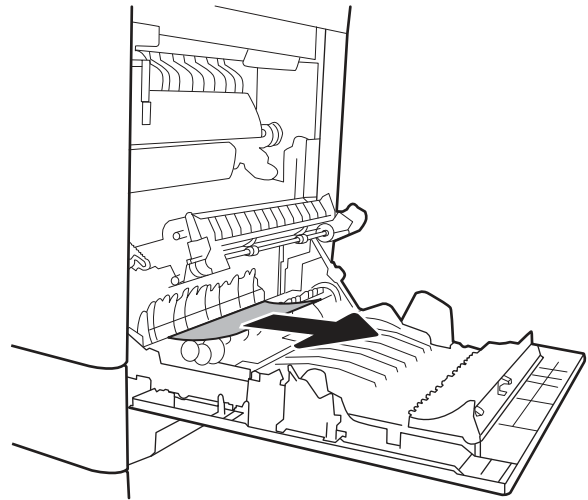
3. Gently remove any paper from the feed rollers inside the printer. First pull the paper to the left to release it, and then pull it forward to remove it.
4. Reinsert and close the tray.



5. Open the right door.

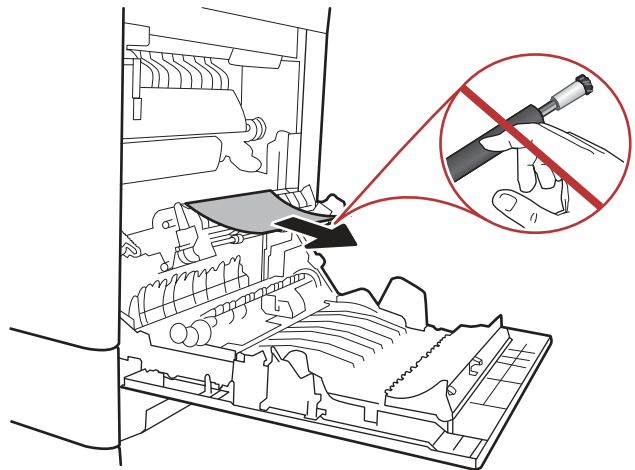


6. If jammed paper is present, gently pull it out.

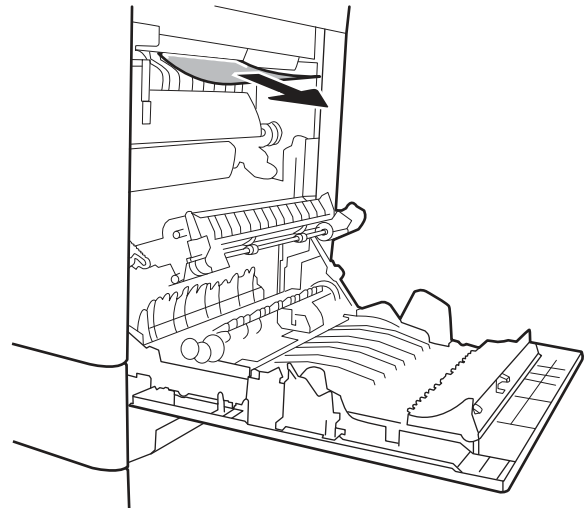


7. If paper is visible entering the bottom of the fuser, gently pull downward to remove it.

CAUTION: Do not touch the rollers on the transfer roller. Contaminants can affect print quality.

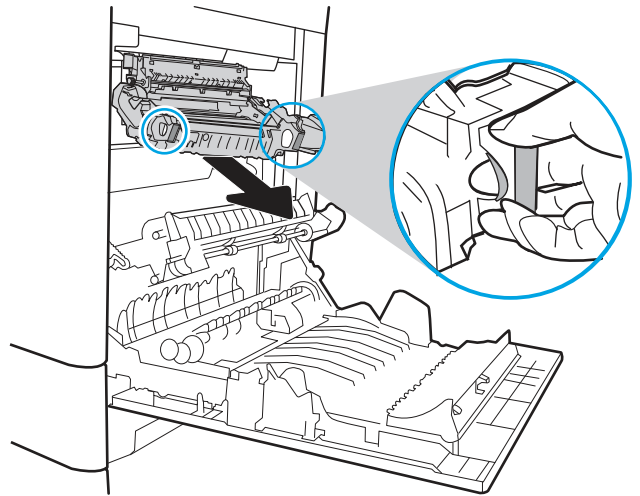


8. If paper is jammed as it enters the output bin, gently pull the paper out to remove it.



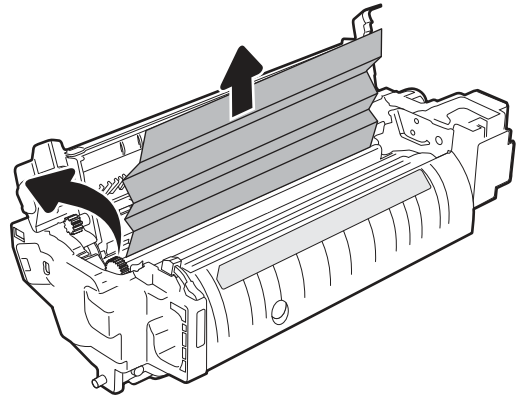
9. Paper could be jammed inside the fuser where it would not be visible. Grasp the fuser handles, lift up slightly, and then pull straight out to remove the fuser.

CAUTION: The fuser can be hot while the printer is in use. Wait for the fuser to cool before handling it.

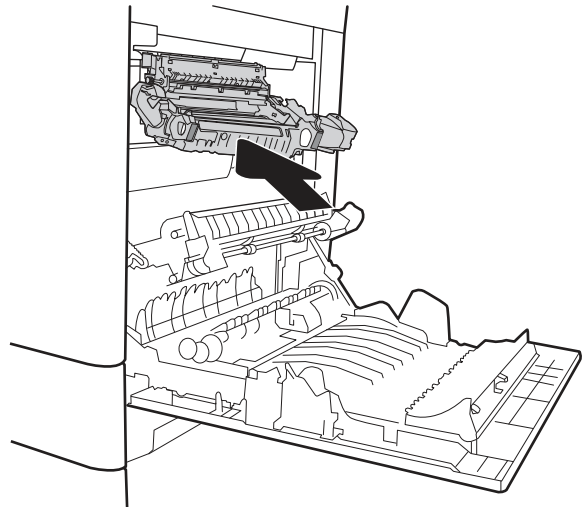


10. Open the jam-access door on the fuser. If paper is jammed inside the fuser, gently pull it straight up to remove it. If the paper tears, remove all paper fragments.

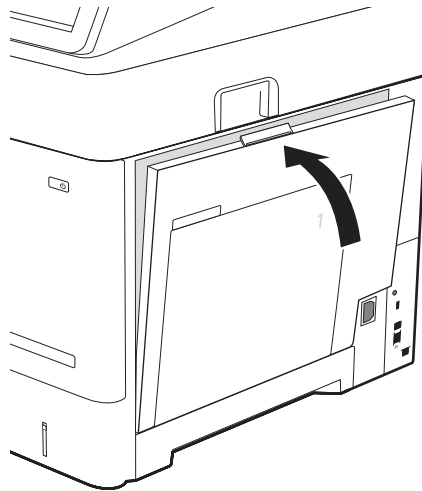
CAUTION: Even if the body of the fuser has cooled, the rollers that are inside could still be hot. Do not touch the fuser rollers until they have cooled.



11. Close the jam-access door on the fuser, and push the fuser completely into the printer until it clicks into place.



12. Close the right door.



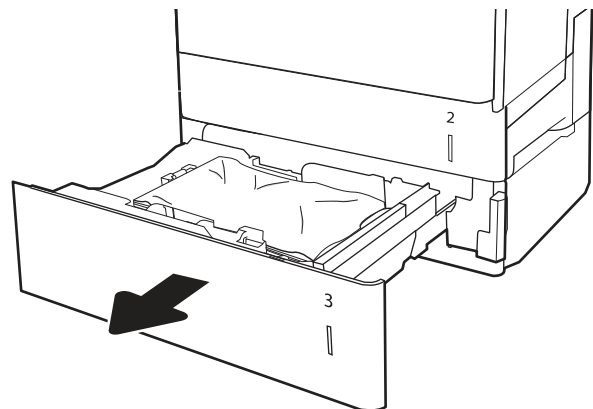
13.A3, 13.A4, 13.A5 tray 3, tray 4, tray 5 paper jam

Learn about clearing jams in Trays 3/4/5.

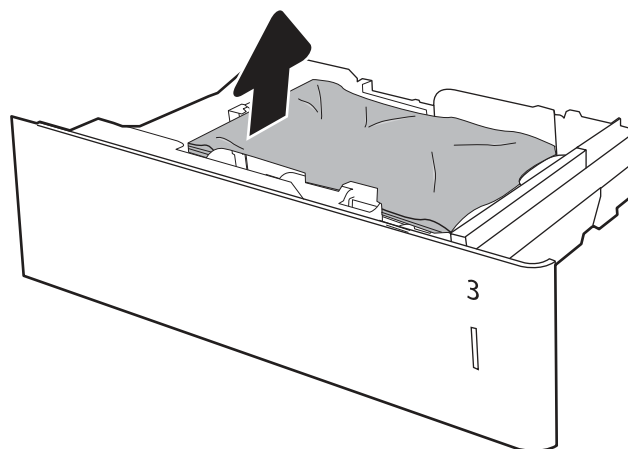
The following information describes how to clear paper jams in Trays 3/4/5. When a jam occurs, the control panel displays the following message and an animation that assists in clearing the jam.

- 13.A3.XX Jam in Tray 3
- 13.A4.XX Jam in Tray 4
- 13.A5.XX Jam in Tray 5

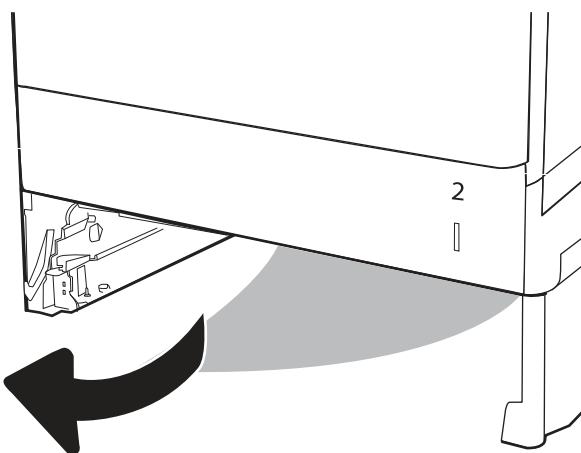
1. Pull the tray completely out of the printer by pulling and lifting it up slightly.



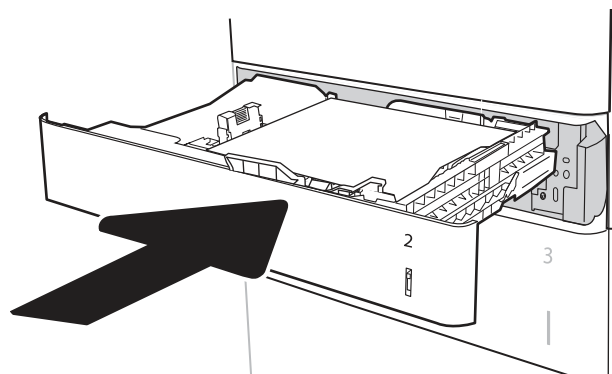
2. Remove any jammed or damaged sheets of paper from the tray. Verify that the tray is not overfilled and that the paper guides are adjusted correctly.



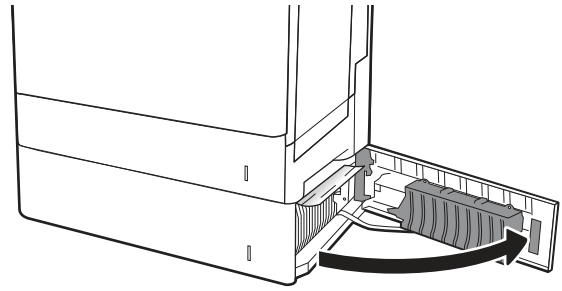
3. Remove any paper from the feed rollers inside the printer. First pull the paper to the left to release it, and then pull it forward to remove it.



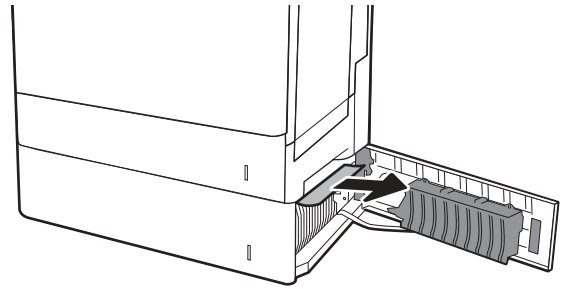
4. Reinsert and close the tray.



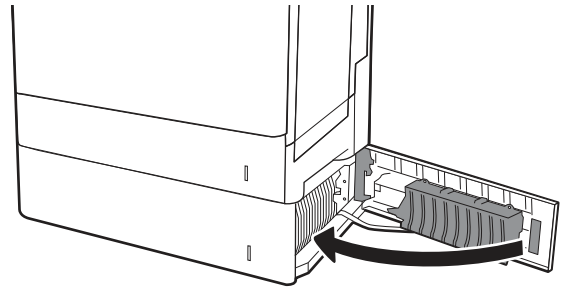
5. Open the lower right door.



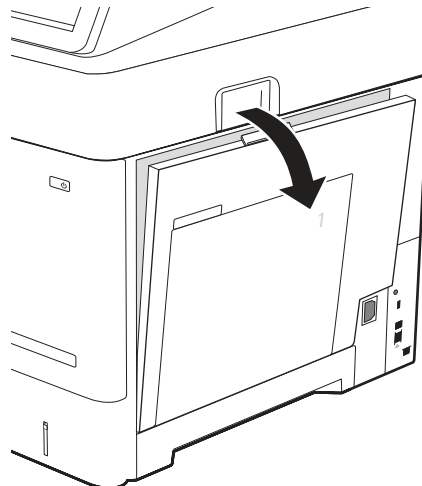
6. Gently pull out any jammed paper.



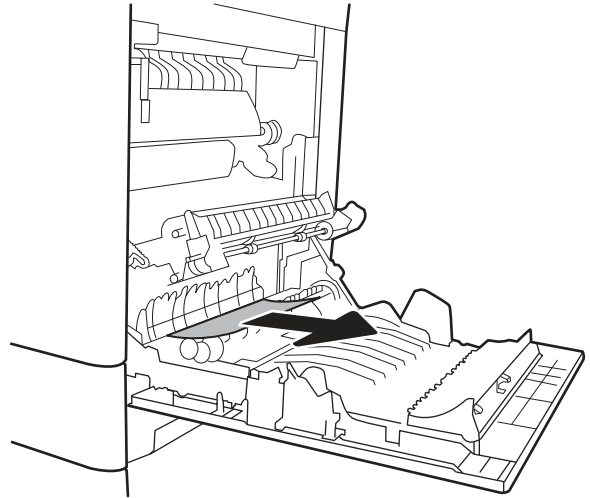
7. Close the lower right door.



8. Open the right door.

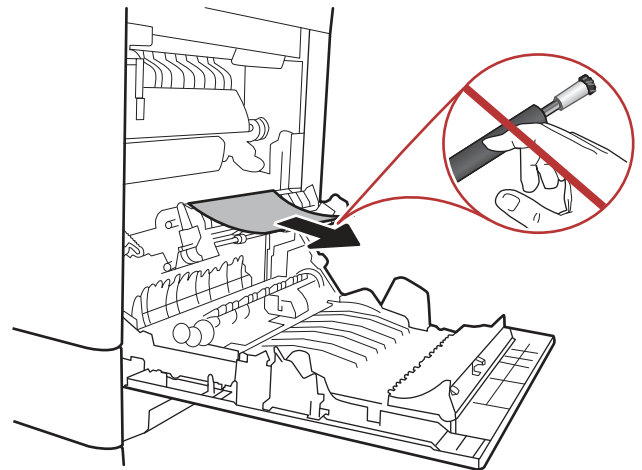


9. If paper is jammed as it enters the output bin, gently pull the paper out to remove it.

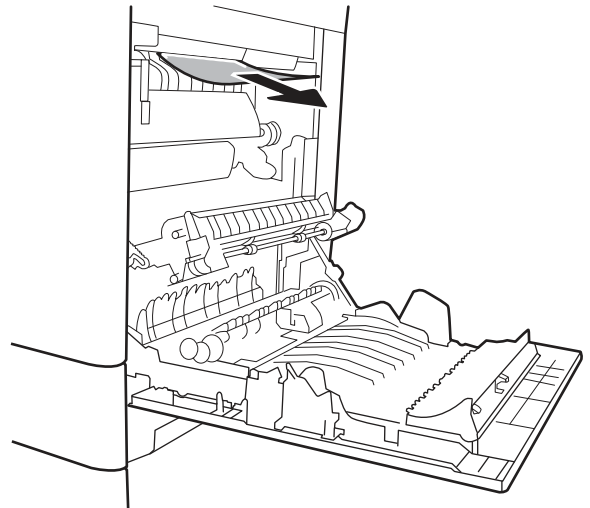


10. If paper is visible entering the bottom of the fuser, gently pull downward to remove it.

CAUTION: Do not touch the rollers on the transfer roller. Contaminants can affect print quality.

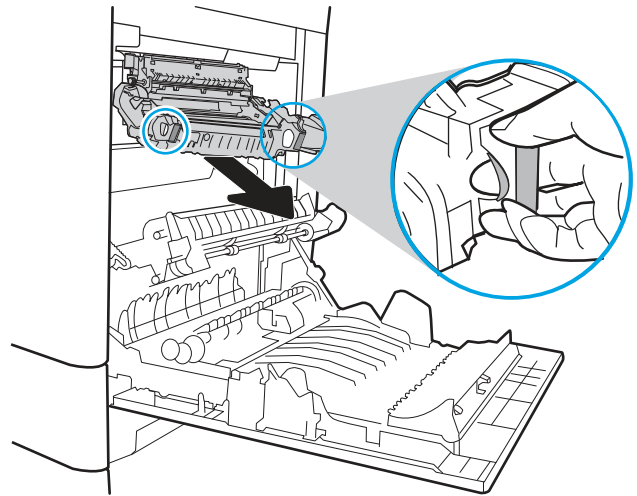


11. If paper is jammed as it enters the output bin, gently pull the paper out to remove it.



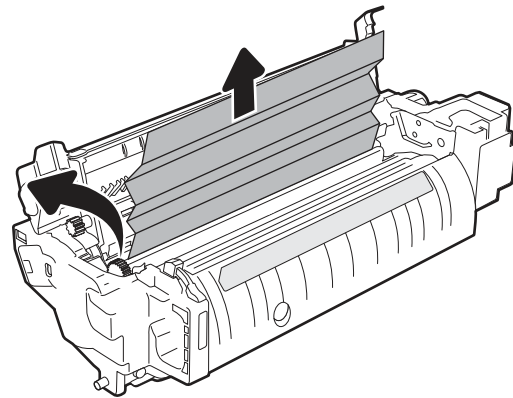
12. Paper could be jammed inside the fuser where it would not be visible. Grasp the fuser handles, lift up slightly, and then pull straight out to remove the fuser.

CAUTION: The fuser can be hot while the printer is in use. Wait for the fuser to cool before handling it.

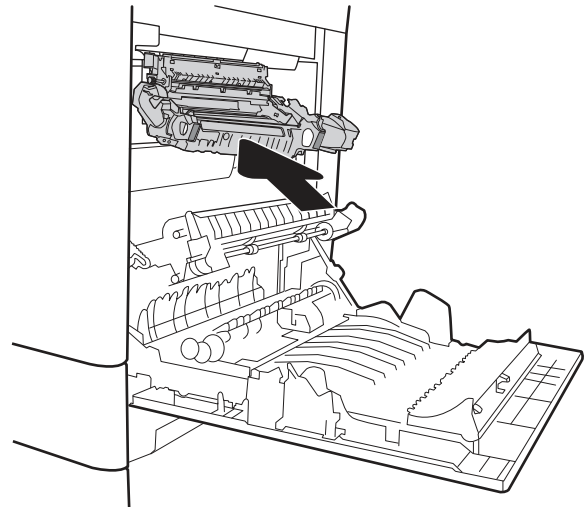


13. Open the jam-access door on the fuser. If paper is jammed inside the fuser, gently pull it straight up to remove it. If the paper tears, remove all paper fragments.

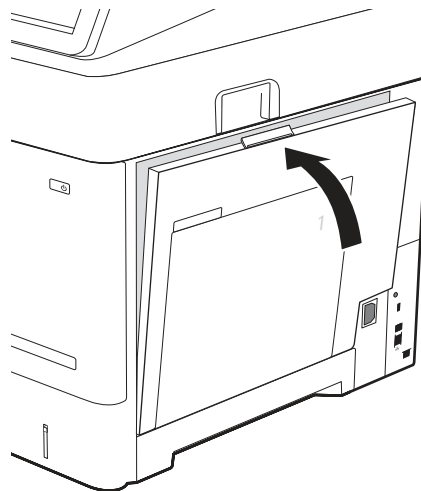
CAUTION: Even if the body of the fuser has cooled, the rollers that are inside could still be hot. Do not touch the fuser rollers until they have cooled.



14. Close the jam-access door on the fuser, and push the fuser completely into the printer until it clicks into place.



15. Close the right door.



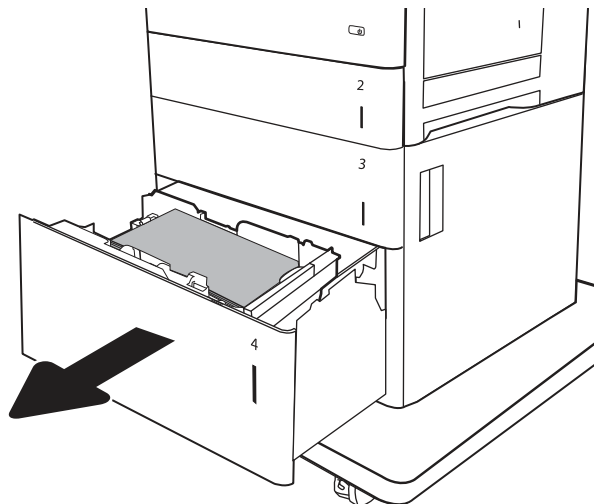
13.A 2000-sheet tray paper jam

Learn about clearing jams in 2,000-sheet high-capacity input tray .

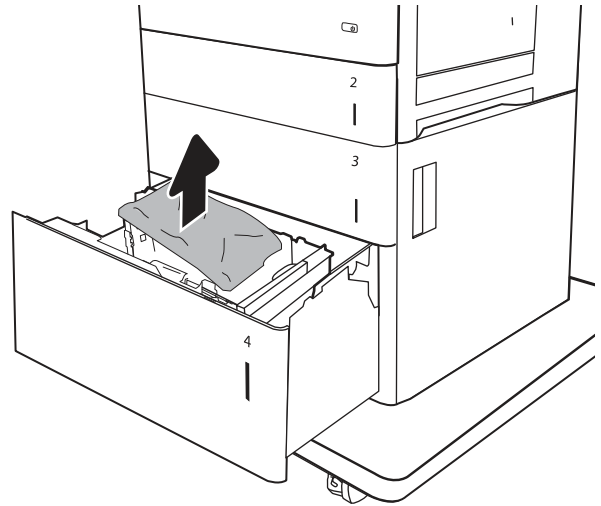
The following information describes how to clear paper jams in 2,000-sheet high-capacity input tray. When a jam occurs, the control panel displays the following message and an animation that assists in clearing the jam.

- **13.A4.XX Jam in tray 4**

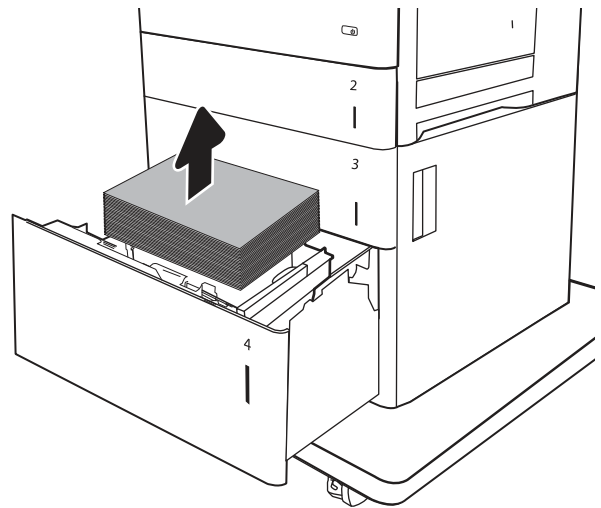
1. Open the 2,000-sheet high-capacity input tray.



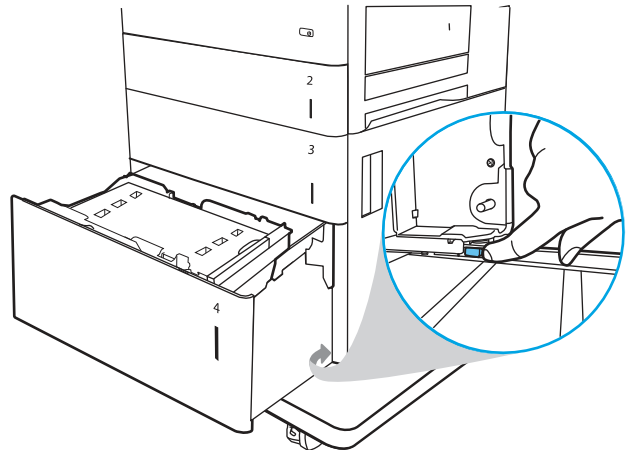
2. Remove and discard any damaged sheets.



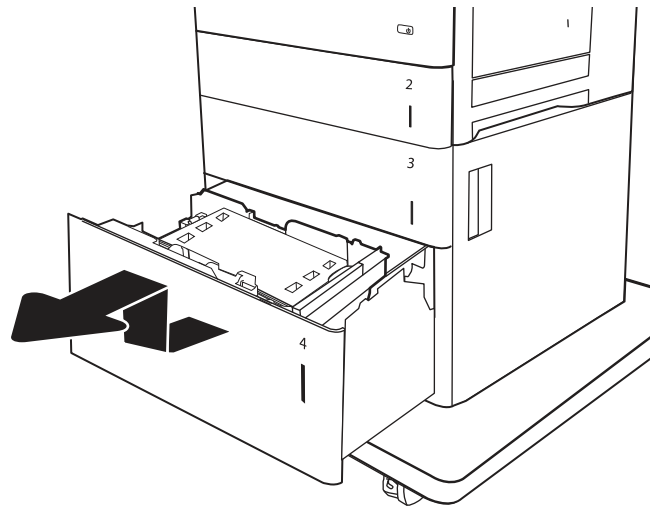
3. Remove the paper from the tray.



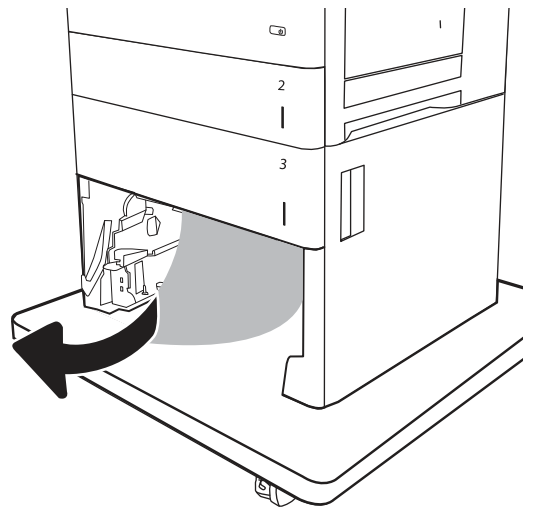
4. Press the release latch on the side of the tray to release it.



5. Lift the tray up and then pull it straight out to remove it.



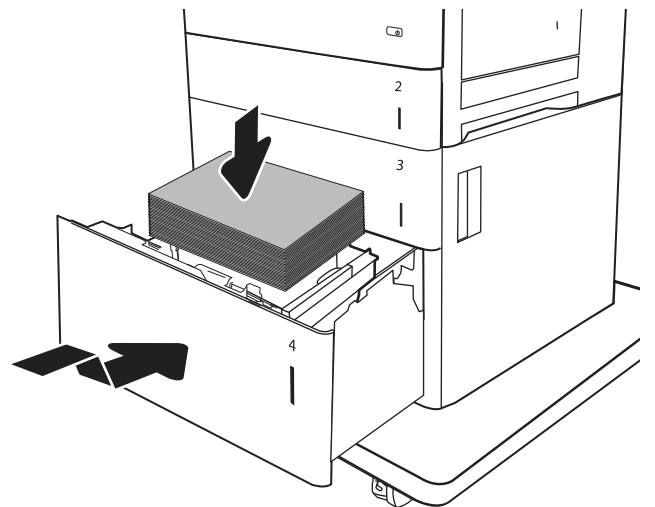
6. If jammed paper is in the feed area, pull it down to remove it.



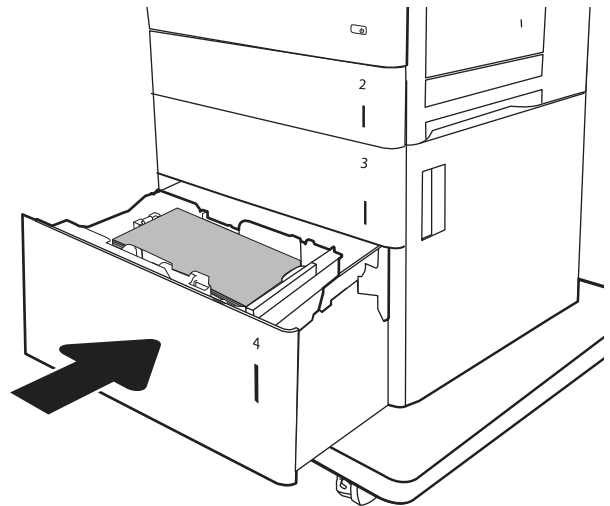
7. Install the tray, and then load full reams of paper into the tray. Verify that the tray is not overfilled and that the paper guides are adjusted correctly.



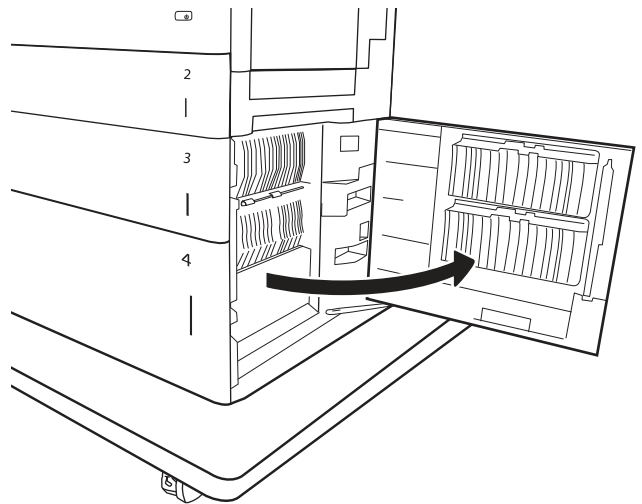
NOTE: The tray holds 2,000 sheets of paper. For best results, load full reams of paper. Avoid dividing reams into smaller sections.



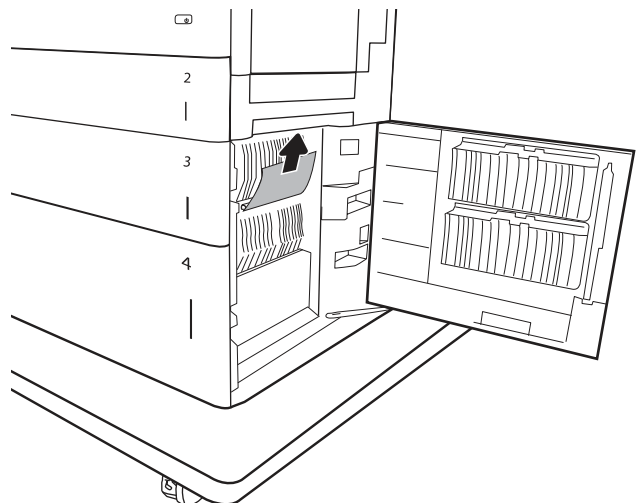
8. Close the tray.



9. Open the lower-right door.



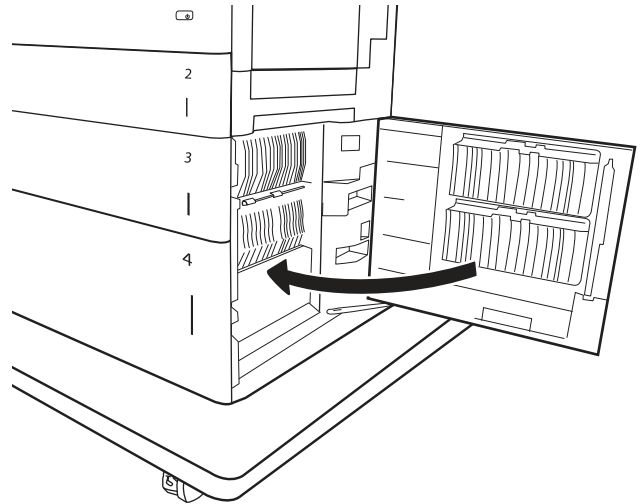
10. Remove any jammed paper.



11. Close the lower-right door.



NOTE: If, after clearing the jam, the printer control panel displays a message that there is no paper in the tray or the tray is overfilled, remove the tray and look behind it for any remaining paper.



13.B9, 13.B2, 13.FF fuser paper jam

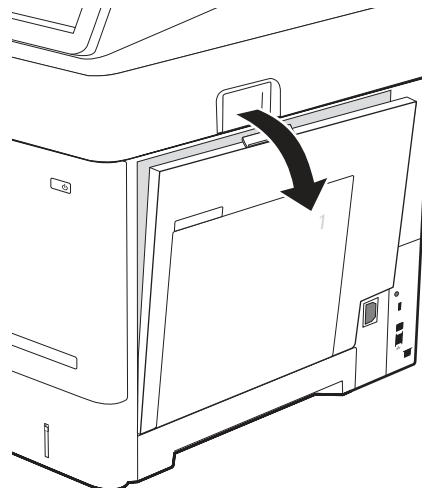
Learn about clearing jams in the rear door and fuser area.

CAUTION: The fuser is hot while the printer is in use. Wait for the fuser to cool before clearing jams.

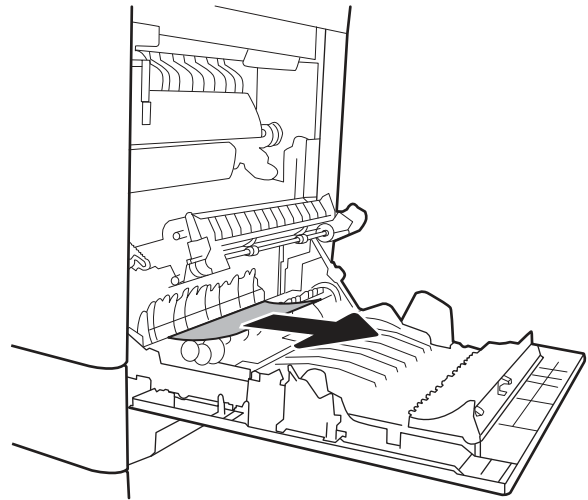
The following information describes how to clear paper jams in the rear door and fuser area. When a jam occurs, the control panel displays the following message and an animation that assists in clearing the jam.

- 13.B9.XX Jam in Fuser
- 13.B2.XX Jam in <cover or door>
- 13.FF.XX Door Open Jam

1. Open the right door.

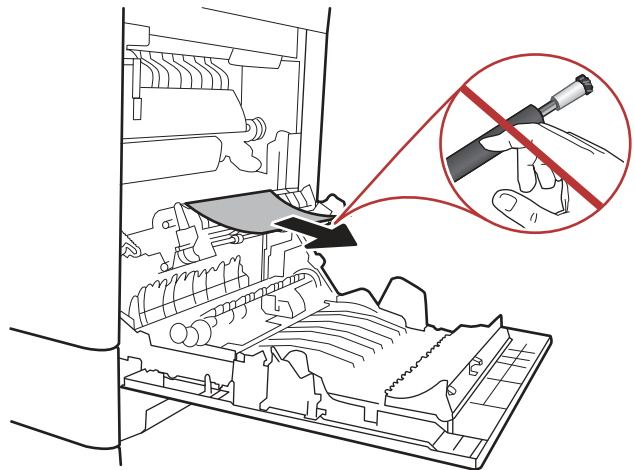


2. Gently pull out any jammed paper.

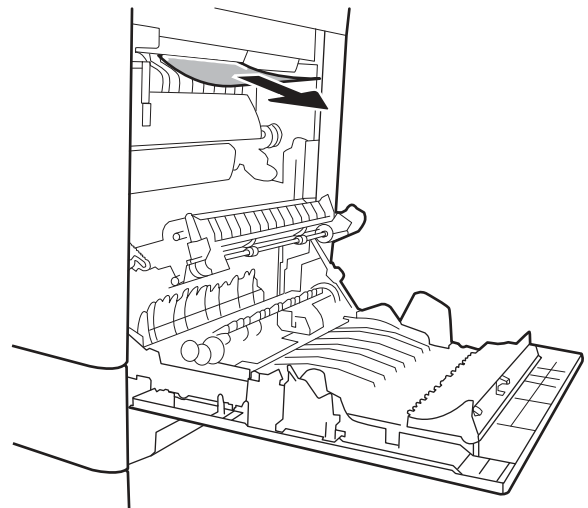


3. If paper is visible entering the bottom of the fuser, gently pull downward to remove it.

CAUTION: Do not touch the rollers on the transfer roller. Contaminants can affect print quality.

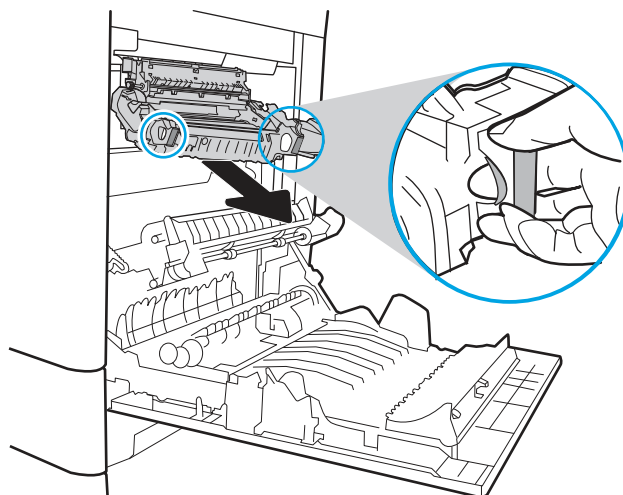


4. If paper is jammed as it enters the output bin, gently pull the paper out to remove it.



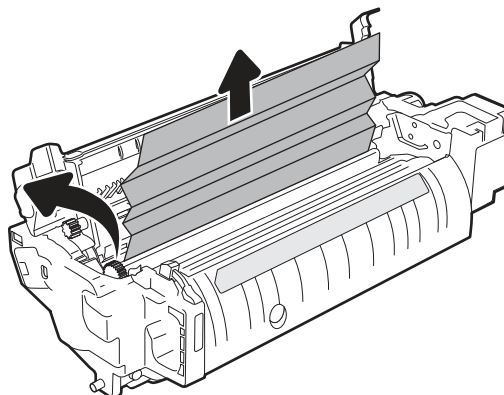
5. Paper could be jammed inside the fuser where it would not be visible. Grasp the fuser handles, lift up slightly, and then pull straight out to remove the fuser.

CAUTION: The fuser can be hot while the printer is in use. Wait for the fuser to cool before handling it.

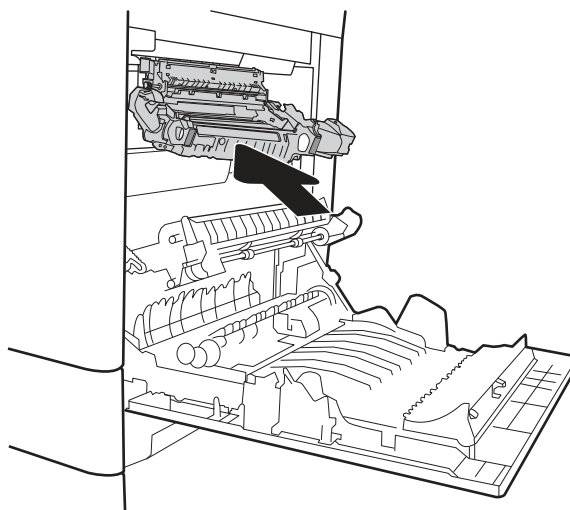


6. Open the jam-access door on the fuser. If paper is jammed inside the fuser, gently pull it straight up to remove it. If the paper tears, remove all paper fragments.

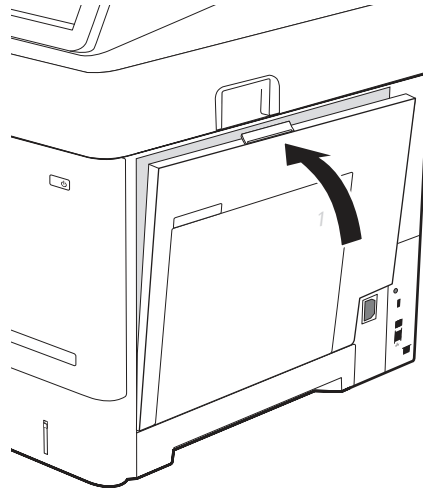
CAUTION: Even if the body of the fuser has cooled, the rollers that are inside could still be hot. Do not touch the fuser rollers until they have cooled.



7. Close the jam-access door on the fuser, and push the fuser completely into the printer until it clicks into place.



8. Close the right door.



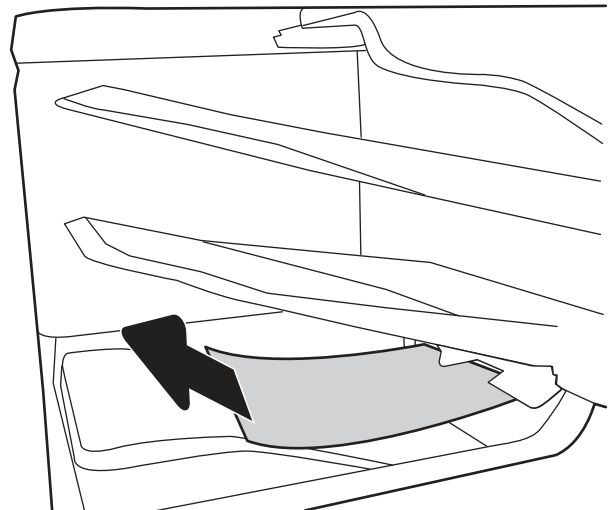
Clear paper jams in the output bin

Learn about clearing jams in the output bin.

The following information describes how to clear paper jams in the output bin. When a jam occurs, the control panel displays the following message and an animation that assists in clearing the jam.

- **13.E1.XX Jam at Standard Output Bin**

1. If paper is visible in the output bin, grasp the leading edge and remove it.



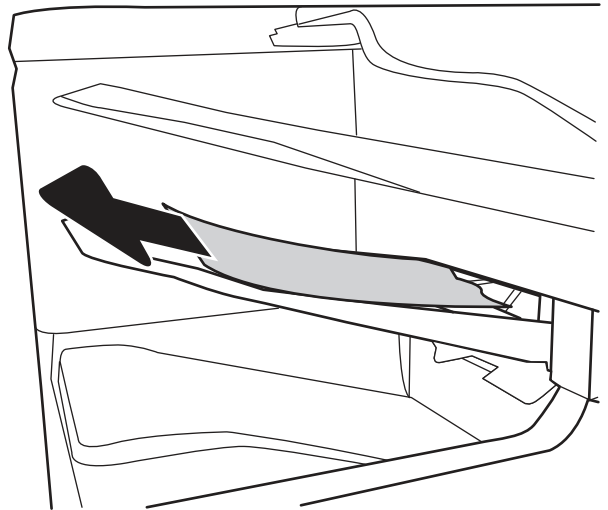
13.70.stapler/stacker paper jam

Learn about clearing jams in the stapling mailbox.

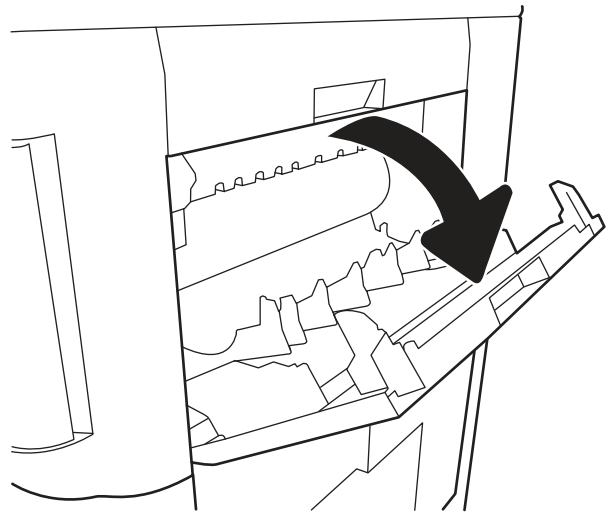
The following information describes how to clear paper jams in the stapling mailbox. When a jam occurs, the control panel displays the following message and an animation that assists in clearing the jam.

- **13.70.XX Jam in at 3-bin stapler/stacker**

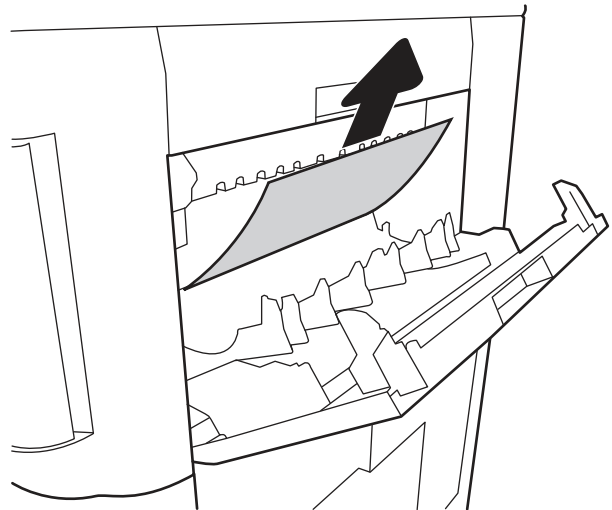
1. Gently remove any jammed paper from the stapler/stacker bins.



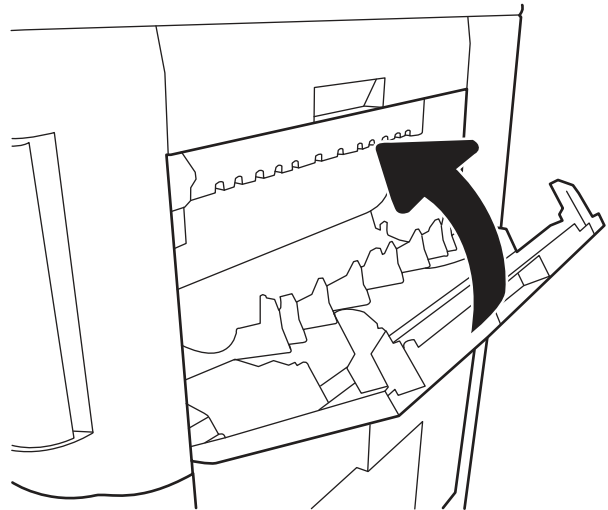
2. Open the stapler/stacker-right door.



3. If jammed paper is visible, gently pull it straight out.



4. Close the stapler/stacker-right door.

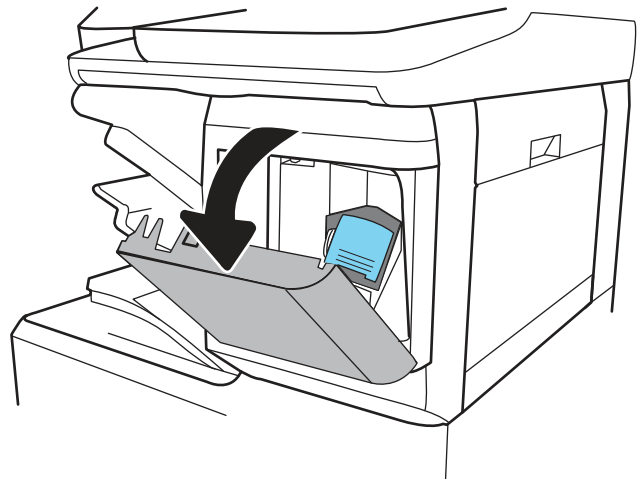


Clear staple jams in the 3-bin stapler/stacker

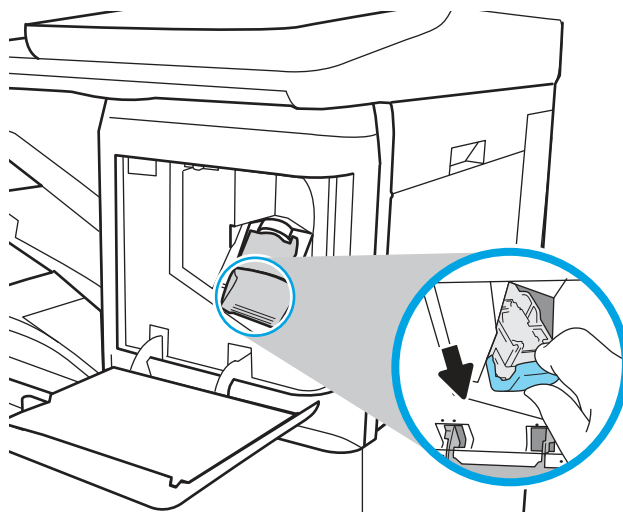
Learn about clearing staple jams.

The following information describes how to clear staple jams. When a jam occurs, the control panel displays the following message and an animation that assists in clearing the jam.

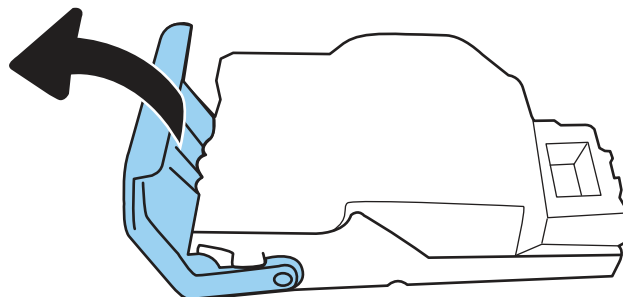
1. Open the staple-cartridge door.



2. Grasp the colored tab on the staple cartridge, and then pull the staple cartridge straight out.



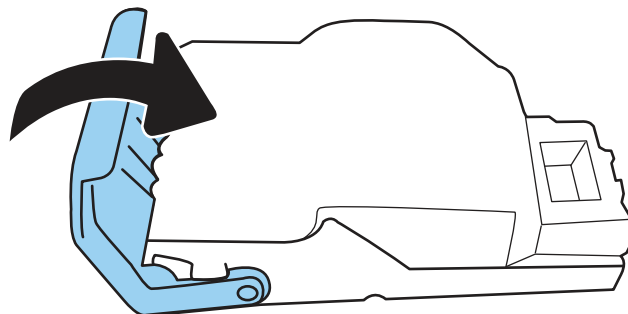
3. Lift up on the small lever at the back of the staple cartridge. Remove the jammed staples.



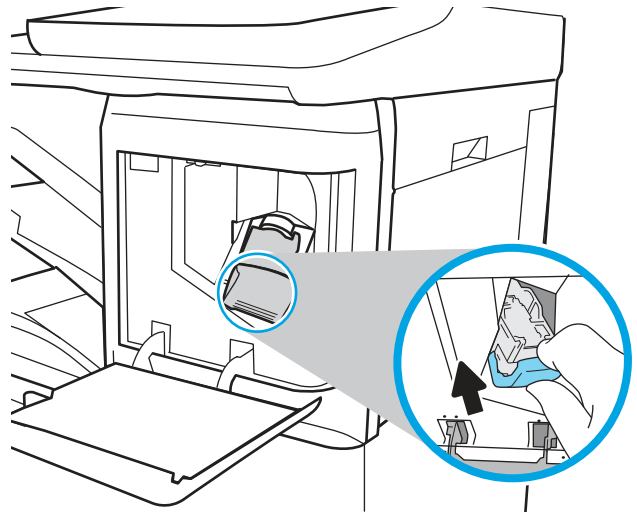
4. Remove the jammed staples, and then close the lever at the back of the staple cartridge.



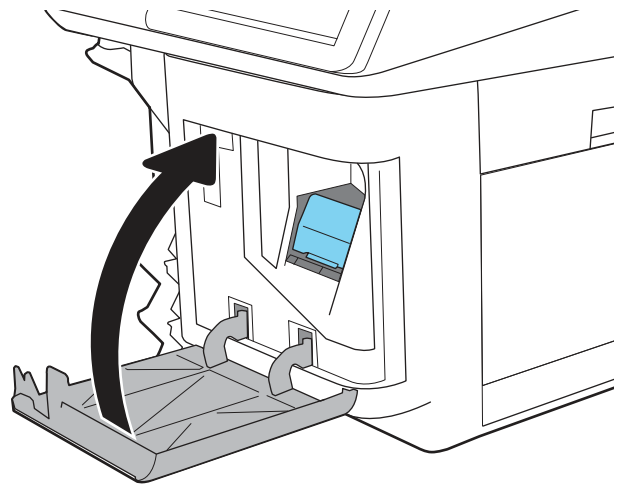
NOTE: Be sure that it snaps into place.



5. Insert the staple cartridge into the stapler and press the colored handle toward the printer until it snaps into place



6. Close the staple-cartridge door.



Change jam recovery


Learn about the jam recovery feature.

This printer provides a jam recovery feature that reprints jammed pages.

Change jam recovery from a touchscreen control panel

1. From the Home screen on the printer control panel, scroll to and touch the [Settings](#) button.
2. Open the [General](#) menu, and then open the [Jam recovery](#) menu.
3. Select one of the following options:
 - [Automatic](#) – The printer attempts to reprint jammed pages when sufficient memory is available. This is the default setting.


- **Off** – The printer does not attempt to reprint jammed pages. Because no memory is used to store the most recent pages, performance is optimal.

 **NOTE:** Some pages can be lost if the printer runs out of paper while printing a duplex job with **Jam Recovery** set to **Off**.

- **On** – The printer always reprints jammed pages. Additional memory is allocated to store the last few pages printed.

Change jam recovery from an LCD control panel


1. From the **Home** screen on the printer control panel, use the arrow buttons to navigate to **Settings**, and then press the **OK** button.
2. Use the arrow buttons to scroll to **General**, and then press the **OK** button.
3. Use the arrow buttons to scroll to **Jam Recovery**, and then press the **OK** button.
4. Use the arrow buttons to scroll to an option, and then press the **OK** button to select it.
 - **Automatic** – The printer attempts to reprint jammed pages when sufficient memory is available. This is the default setting.
 - **Off** – The printer does not attempt to reprint jammed pages. Because no memory is used to store the most recent pages, performance is optimal.

 **NOTE:** Some pages can be lost if the printer runs out of paper while printing a duplex job with **Jam Recovery** set to **Off**.

- **On** – The printer always reprints jammed pages. Additional memory is allocated to store the last few pages printed.

Solve performance problems

Review the following information and procedures to solve performance problems.

 **NOTE:** Tray 1 and Tray 2 are optimal for paper pickup when using special paper or media other than 75-80gsm (20lb) plain paper. For Tray 1 and Tray 2 the printer increases the number of attempts to pick up a page, which increases the reliability of successfully picking the page from the tray and decreases the possibility of a mis-pick jam.

HP recommends using Tray 1 or Tray 2 if the printer is experiencing excessive or reoccurring jams from trays other than Tray 1 and Tray 2, or for print jobs that require media other than 75-80gsm (20lb) plain paper.

Factors affecting print performance

Review the following information about factors affecting print performance.


 **NOTE:** To print using an HP Plus printer, the printer must have genuine original HP toner cartridges installed, must have an ongoing internet connection and an active HP Plus account (for more information, go to hp.com/plus).

Table 4-49 Solve performance problems

Problem	Cause	Solution
Pages print but are totally blank.	The document might contain blank pages.	Check the original document to see if content is present on all of the pages.
Pages print but are totally blank.	The printer might be malfunctioning.	To check the printer, print a Configuration page.
Pages print but are totally blank.	Make sure that the printer is not feeding multiple pages (especially if very thin paper is used).	<p>Make sure that the paper meets HP specifications for this printer.</p> <p>For a complete list of specific HP-brand paper that this printer supports, go to www.hp.com/support/colorljM652 or www.hp.com/support/colorljM653 or www.hp.com/support/ljE65050 or www.hp.com/support/ljE65060 or www.hp.com/support/colorljE65150 or www.hp.com/support/colorljE65160 or www.hp.com/support/colorljM681MFP or www.hp.com/support/colorljM682MFP or www.hp.com/support/ljE67550MFP or www.hp.com/support/ljE67560MFP or www.hp.com/support/colorljE67650MFP or www.hp.com/support/colorljE67660MFP.</p>
Pages print very slowly. NOTE: Some software programs process print jobs slowly.	Heavier paper types can slow the print job.	Print on a different type of paper.
Pages print very slowly. NOTE: Some software programs process print jobs slowly.	Complex pages can print slowly.	Proper fusing might require a slower print speed to ensure the best print quality.
Pages print very slowly. NOTE: Some software programs process print jobs slowly.	Large batches, narrow paper, and special paper such as gloss, transparency, cardstock, and HP Tough Paper can slow the print job.	Print in smaller batches, on a different type of paper, or on a different size of paper.
Pages did not print.	The printer might not be pulling paper correctly.	Make sure paper is loaded in the tray correctly.
Pages did not print.	The paper is jamming in the printer.	Clear the jam.
Pages did not print.	The USB cable might be defective or incorrectly connected.	<ul style="list-style-type: none"> • Disconnect the USB cable at both ends and reconnect it. • Try printing a job that has printed in the past. • Try using a different USB cable.
Pages did not print.	Other devices are running on the host computer.	The printer might not share a USB port. If an external hard drive or network switchbox is connected to the same port as the printer, the other device might be interfering with the printer. To connect and use the printer, disconnect the other device or use two USB ports on the host computer.
Pages did not print.	The print job might not have arrived at the printer.	Check the printer status queue. Also, the Printing message should appear on the control panel display.

Print speeds

Print speed is the number of pages that print in one minute. Print speed depends on different engine-process speeds or operational pauses between printed pages during normal printer operation. Factors that determine the print speed of the printer include the following:

- Page formatting time

The printer must pause for each page to be formatted before it prints. Complex pages take more time to format, resulting in reduced print speed. However, most jobs print at full engine speed.

- Media size

Legal-size media reduces print speed because it is longer than the standard Letter- or A4-size media. A reduced print speed is used when printing on narrow media to prevent the edges of the fuser from overheating.

- Media mode

Some media types require a reduced print speed to achieve maximum print quality on that media. For example, glossy, heavy, and specialty media (for example, envelopes or photos) require a reduced print speed. To maximize the print speed for special media types, make sure that the correct media type in the print driver is selected.

- Printer temperature

To prevent printer damage, print speed is reduced if the printer reaches a specific internal temperature (thermal slow down). The starting temperature of the printer, ambient environment temperature, and the print job size effect the number of pages that can be printed before the printer reduces the print speed. Thermal slow down reduces print speed by printing four pages and then pausing for an amount of time before printing continues.

- Other print speed reduction factors

Other factors (especially during large print jobs) that can cause reduced print speeds include:

- Density control sequence; occurs every 150 pages and takes about 120 seconds

The printer does not print

If the printer does not print at all, try the following solutions.



NOTE: To print using an HP Plus printer, the printer must have genuine original HP toner cartridges installed, must have an ongoing internet connection and an active HP Plus account (for more information, go to hp.com/plus).

1. Make sure the printer is turned on and that the control panel indicates it is ready.
 - If the control panel does not indicate the printer is ready, turn the printer off and then on again.
 - If the control panel indicates the printer is ready, try sending the job again.
2. If the control panel indicates the printer has an error, resolve the error and then try sending the job again.

3. Make sure the cables are all connected correctly. If the printer is connected to a network, check the following items:
 - Check the bottom LED next to the network connection on the printer. If the network is active, the light is green.
 - Make sure that a network cable and not a phone cord is used to connect to the network.
 - Make sure the network router, hub, or switch is turned on and that it is working correctly.
4. Install the HP software for the printer. Using generic printer drivers can cause delays clearing jobs from the print queue.
5. From the list of printers on your computer, right-click the name of this product, click **Properties**, and open the **Ports** tab.
 - If a network cable is used to connect to the network, make sure the printer name listed on the **Ports** tab matches the one on the printer configuration page.
 - If a USB cable is used, and the printer is connected to a wireless network, make sure the box is checked next to **Virtual printer port for USB**.
6. If a personal firewall system on the computer is used, it might be blocking communication with the printer. Try temporarily disabling the firewall to see if it is the source of the problem.
7. If the host computer or the printer is connected to a wireless network, low signal quality or interference might be delaying print jobs.

The printer prints slowly

If the printer prints, but it seems slow, try the following solutions.

1. Make sure the computer meets the minimum specifications for this printer. For a list of specifications, go to this Web site: www.hp.com/support/colorIJM652 or www.hp.com/support/colorIJM653 or www.hp.com/support/IJ65050 or www.hp.com/support/IJ65060 or www.hp.com/support/colorIJ65150 or www.hp.com/support/colorIJ65160 or www.hp.com/support/colorIJM681MFP or www.hp.com/support/colorIJM682MFP or www.hp.com/support/IJ67550MFP or www.hp.com/support/IJ67560MFP or www.hp.com/support/colorIJ67650MFP or www.hp.com/support/colorIJ67660MFP.
2. When the printer is configured to print on some paper types, such as heavy paper, the printer prints more slowly so it can correctly fuse the toner to the paper. If the paper type setting is not correct for the type of paper you are using, change the setting to the correct paper type.
3. If the host computer or the printer is connected to a wireless network, low signal quality or interference might be delaying print jobs.

Solve wired network problems

Review the following information and procedures to solve wired network problems.

Introduction

Learn about solving wired network problems.

Certain types of problems can indicate there is a network communication problem. These problems include the following issues:

- The periodic loss of ability to communicate with the printer
- The printer cannot be found during driver installation
- A periodic failure to print

Check the items in this topic to verify that the printer is communicating with the network. Before beginning, print a configuration page from the printer control panel and locate the printer IP address that is listed on this page.



NOTE: To print using an HP Plus printer, the printer must have genuine original HP toner cartridges installed, must have an ongoing internet connection and an active HP Plus account (for more information, go to hp.com/plus).

Poor physical connection

Use the following procedure when the printer has a poor physical connection.

1. Verify that the printer is attached to the correct network port using a cable of the correct length.
2. Verify that cable connections are secure.
3. Look at the network port connection on the back of the printer, and verify that the amber activity light and the green link-status light are lit.
4. If the problem continues, try a different cable or port on the hub.

The computer is using the incorrect IP address for the printer

Use the following procedure when the computer is using the incorrect IP address for the printer.

1. Open the printer properties and click the **Ports** tab. Verify that the current IP address for the printer is selected. The printer IP address is listed on the printer configuration page.



NOTE: To print a configuration page using an HP Plus printer, the printer must have genuine original HP toner cartridges installed, must have an ongoing internet connection and an active HP Plus account (for more information, go to hp.com/plus).

2. If you installed the printer using the HP standard TCP/IP port, select the box labeled **Always print to this printer, even if its IP address changes**.
3. If you installed the printer using a Microsoft standard TCP/IP port, use the hostname instead of the IP address.
4. If the IP address is correct, delete the printer and then add it again.

The computer is unable to communicate with the printer

Use the following procedure when the computer is unable to communicate with the printer.

1. Test network communication by pinging the network.
 - a. Open a command-line prompt on your computer.
 - For Windows, click **Start**, click **Run**, type `cmd`, and then press **Enter**.
 - For macOS, go to **Applications**, then **Utilities**, and open **Terminal**.
 - b. Type `ping` followed by the IP address for your printer.

- c. If the window displays round-trip times, the network is working.
2. If the ping command failed, verify that the network hubs are on, and then verify that the network settings, the printer, and the computer are all configured for the same network.

The printer is using incorrect link and duplex settings for the network

HP recommends leaving these settings 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 print driver.

The computer or workstation might be set up incorrectly

Use the following procedure when the computer or workstation might be set up incorrectly.

1. Check the network drivers, print drivers, and the network redirection settings.
2. Verify that the operating system is configured correctly.

The printer is disabled, or other network settings are incorrect

Use the following procedure when the printer is disabled, or other network settings are incorrect.

1. Review the configuration page to check the status of the network protocol. Enable it if necessary.



NOTE: To print a configuration page using an HP Plus printer, the printer must have genuine original HP toner cartridges installed, must have an ongoing internet connection and an active HP Plus account (for more information, go to hp.com/plus).

2. Reconfigure the network settings if necessary.

Service mode functions

Review the following information about service mode functions.

Service menu

Learn about the Service menu.

The **Service** menu is PIN-protected for added security. Only authorized service people have access to the Service menu. When selecting **Service** from the list of menus, the printer prompts the user to enter an eight-digit personal identification number (PIN).



NOTE: The printer automatically exits the **Service** menu after about one minute if no items are selected or changed.

Open the Service menu from a touchscreen control panel

1. From the Home screen on the printer control panel, scroll to and touch the **Support Tools** button.
2. Open the **Service** menu.
3. On the sign-in screen, select **Service Access Code** from the drop-down list.

4. Enter the following service access code for the printer:
 - 05065217 (M652/E65050/E65150)
 - 05065317 (M653/E65060/E65160)
 - 05068117 (M681/E67550/E67650)
 - 05068217 (M682/E67560/E67660)

Open the service menu from an LCD control panel

1. From the Home screen on the printer control panel, use the arrow buttons to navigate to [Support Tools](#), and then press the [OK](#) button.
2. Use the arrow buttons to scroll to [Service](#), and then press the [OK](#) button.
3. Use the arrow buttons to scroll to [Service Access Code](#), and then press the [OK](#) button.
4. Enter the following service access code for the printer:
 - 05065217 (M652/E65050/E65150)
 - 05065317 (M653/E65060/E65160)
 - 05068117 (M681/E67550/E67650)
 - 05068217 (M682/E67560/E67660)

Service menu

Table 4-50 [Service menu](#)

First level	Second level	Value	Description
Event Log	Print		Print the event log.
Clear Event Log	Clear		Use this item to clear the printer event log.
Cycle Counts	Total Engine Cycles		Set the page count that was stored in NVRAM prior to installing a new formatter.
Cycle Counts	Mono Cycle Count		Set the mono page printed count.
Cycle Counts	Color Cycle Count		Set the color page printed count.
Cycle Counts	Refurbish Cycle Count		Use this item to record the page count when the printer was refurbished.
Serial number			Set the serial number.
Service ID			Use this item to show the date that the printer was first used on the control panel. This eliminates the need for users to keep paper receipts for proof of warranty.

Table 4-50 Service menu (continued)

First level	Second level	Value	Description
Locked tray sizes (Managed printers only)	Lock Tray 2 size check box		Select the Lock Tray 2 size check box to enable the lock feature. Select a paper size from the drop-down menu, and then select Save.
Cold Reset Paper			When you perform a cold reset, the paper size that is stored in NVRAM is reset to the default factory setting. If you replace a formatter board in a country/region that uses A4 as the standard paper size, use this menu to reset the default paper size to A4. LETTER and A4 are the only available values.
New Registration Roller		Yes No	Reset the counter for the registration roller after replacing the registration assembly.
New Transfer Kit		Yes No	Reset the counter for the registration roller after replacing the transfer kit.
Low Alerts		Enable Disable	Turn on (or off) low alerts (for supplies).
Reset Low Alerts			<ul style="list-style-type: none"> • Reset to level 1 • Reset to level 2 • Reset to level 3 • Set to non-HP managed mode
Test Support	Continuous Print from USB		
Test Support	Automatic Calibrations	Enable* Disable	
MPS Settings	Low Alerts	On Off	Use this to configure managed services specific settings.
MPS Settings	Reset Supplies Level	Reset to Level 1 Reset to Level 2 Reset to Level 3 Reset to Non-HP Managed Mode	

Table 4-50 Service menu (continued)

First level	Second level	Value	Description
MPS Settings	Consumables Access Control	Enable consumables access control	<p>Use this feature to lock the printer front door to help prevent premature toner cartridge replacement.</p> <p>Select the Enable consumables access control check box to enable the lock feature.</p> <p>Under Replacement Threshold, select one of the following options.</p> <ul style="list-style-type: none"> • Normal Delayed

Printer resets

Review the following information and procedures about printer resets.

Restore factory-set defaults

Learn about factory-set defaults.



NOTE: The printer restarts automatically after the reset operation completes.

Restore factory-set defaults from a touchscreen control panel

1. From the Home screen on the printer control panel, scroll to and touch the [Settings](#) button.
2. Open the following menus:
 - [General](#)
 - [Reset Factory Settings](#)
3. A verification message advises that completing the reset function might result in loss of data. Touch the [Reset](#) button to complete the process.

Restore factory-set defaults from an LCD control panel

1. From the Home screen on the printer control panel, use the arrow buttons to navigate to [Settings](#), and then press the [OK](#) button.
2. Use the arrow buttons to scroll to [General](#), and then press the [OK](#) button.
3. Use the arrow buttons to scroll to [Reset Factory Settings](#), and then press the [OK](#) button.
4. Use the arrow buttons to scroll to [Reset](#), and then press the [OK](#) button to select it.
5. A verification message advises that completing the reset function might result in loss of data. Touch the [Reset](#) button to complete the process.

Restore the service ID

Use the following procedure to restore the service ID.

Restore the service ID

When replacing the formatter, the service ID is lost. Use the **Service ID** menu item in the **Service** menu to reset the service ID to reflect the original date that the printer 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 printer 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: $9 \times 30 = 270$ or add 17 to 270: $270 + 17 = 287$. Thus, $DDD = 287$.

Convert the service ID to an actual date


Use the printer Service ID number to determine whether the printer 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 printer 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.

 **NOTE:** A six-day grace period is built into the date system.

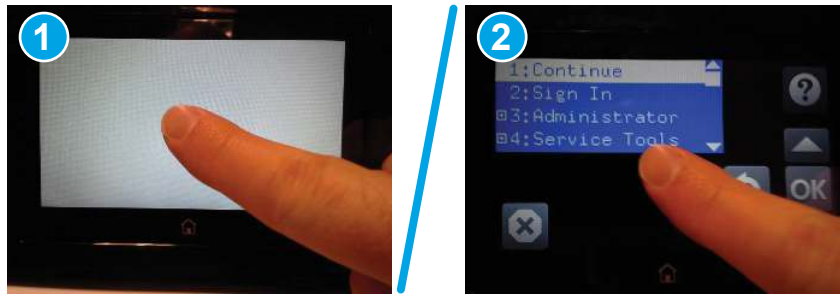
Cold reset using the Pre-boot menu from a touchscreen control panel (M856/E85055/M776)

Use the following procedure to perform a cold reset using the **Pre-boot** menu from a touchscreen control panel.


 **CAUTION:** This procedure resets all printer configurations and settings to factory defaults (customer configurations and settings are lost).

1. Touch the middle of the control-panel display when you see the 1/8 under the logo.

Figure 4-99 Open the Pre-boot menu




2. Use the down arrow ▼ button to highlight the +3:Administrator item, and then touch the OK button.
3. Use the down arrow ▼ button to highlight the +8:Startup Options item, and then touch the OK button.
4. Use the down arrow ▼ button to highlight the 2 Cold Reset item, and then touch the OK button to select it.
5. Touch the Home button to return to the main Pre-boot menu and highlight the 1:Continue item, and then touch the OK button.

 **NOTE:** The printer will initialize.

Format Disk and Partial Clean functions

Review the following information about the [Format Disk](#) and [Partial Clean](#) functions.

 **NOTE:** Only for printers with an optional hard-disk drive (HDD) installed).

Active and repository firmware locations


The firmware bundle consists of multiple parts. The main components are the Windows CE Operating System and the printer/peripheral firmware files.

There are two locations/partitions on the hard drive where the firmware components are stored:

- The Active, where the operating system and firmware currently are executing.
- The Repository, the recovery location.

If the Active location is damaged, or a [Partial Clean](#) was performed, the printer automatically copies over the OS and firmware files from the Repository location and the printer recovers.

If both the Active and Repository locations are damaged, or a [Format Disk](#) was performed, then both locations are gone and the error message **99.09.67** displays on the control-panel display. The user must upload the firmware to the printer in order for it to function again.

 **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.

Partial Clean

The [Partial Clean](#) option erases all partitions and data on the disk drive, except for the firmware repository where a backup copy of the firmware file is stored. This allows the disk drive to be reformatted without having to download a firmware upgrade file to return the printer to a bootable state.


Characteristics of a [Partial Clean](#)

- Customer-defined settings, third-party solutions, firmware files, and the operating system are deleted.
- Rebooting the printer restores the firmware files from the Repository location, but does not restore any customer-defined settings.
- For previous HP printers, a Hard Disk Initialization is similar to executing the [Partial Clean](#) function for this printer.

⚠ CAUTION: HP recommends backing-up printer configuration data before executing a [Partial Clean](#) to retain customer-defined settings (if needed). See the [Backup/Restore](#) item in the [Device Maintenance](#) menu.

Reasons for performing [Partial Clean](#)

- The printer continually boots up in an error state.

 **NOTE:** Try clearing the error prior to executing a [Partial Clean](#).


- The printer will not respond to commands from the control panel.
- Executing the [Partial Clean](#) function is helpful for troubleshooting hard disk problems.
- To reset the printer by deleting all solutions and customer-defined settings.
- The printer default settings are not properly working.

Execute a [Partial Clean](#) from an LCD control panel (M751/E75245)

Use the following procedure to execute a [Partial Clean](#) from an LCD control panel.

⚠ CAUTION: This procedure resets all printer configurations and settings to factory defaults (customer configurations and settings are lost).

1. Press the [Cancel](#) **X** button when you see the 1/8 under the logo.
2. Use the down arrow **▼** button to highlight the [+3:Administrator](#) item, and then press the [OK](#) button.
3. Use the down arrow **▼** button to highlight [Partial Clean](#) and then press the [OK](#) button.
4. Press the [OK](#) button again.
5. Press the Home button to highlight [Continue](#), and then press the [OK](#) button.

 **NOTE:** The printer initializes.

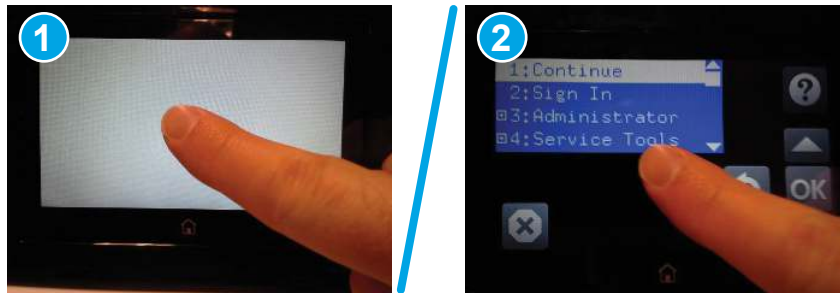
Execute a [Partial Clean](#) from a touchscreen control panel (M856/E85055/M776)

Use the following procedure to execute a [Partial Clean](#) from a touchscreen control panel.


⚠ CAUTION: This procedure resets all printer configurations and settings to factory defaults (customer configurations and settings are lost).

1. Touch the middle of the control-panel display when you see the 1/8 under the logo.

Figure 4-100 Open the Pre-boot menu



2. Use the down arrow ▼ button to highlight the +3:Administrator item, and then press the OK button.
3. Use the down arrow ▼ button to highlight Partial Clean and then press the OK button.
4. Press the OK button again.
5. Press the Home button to highlight Continue, and then press the OK button.

 **NOTE:** The printer initializes.


Format Disk

The [Format Disk](#) option erases the entire disk drive.

⚠ CAUTION: After executing a [Format Disk](#) option, the printer is *not* bootable.

Characteristics of a [Format Disk](#)

- Customer-defined settings, third-party solutions, firmware files, and the operating system are deleted.

 **NOTE:** Rebooting the printer *does not* restore the firmware files.


- Rebooting the printer restores the firmware files from the Repository location, but does not restore any customer-defined settings.
- After executing the [Format Disk](#) function, the message **99.09.67** displays on the control panel.
- After executing the [Format Disk](#) function, the printer firmware must be reloaded.

⚠ CAUTION: HP recommends not using the [Format Disk](#) option unless an error occurs and the solution in the printer service manual recommends this solution. After executing the [Format Disk](#) function, the printer is unusable.

HP recommends backing-up printer configuration data before executing a [Format Disk](#) to retain customer-defined settings (if needed). See the [Backup/Restore](#) item in the [Device Maintenance](#) menu.

Reasons for performing [Format Disk](#)


- The printer continually boots up in an error state.




 **NOTE:** Try clearing the error prior to executing a [Format Disk](#).


- The printer will not respond to commands from the control panel.
- Executing the [Format Disk](#) function is helpful for troubleshooting hard disk problems.
- To reset the printer by deleting all solutions and customer-defined settings.

Execute a Format Disk from an LCD control panel (M751/E75245)

Use the following procedure to execute a [Format Disk](#) from an LCD control panel.


 **CAUTION:** This procedure resets all printer configurations and settings to factory defaults (customer configurations and settings are lost).

1. Press the [Cancel](#)  button when you see the [1/8](#) under the logo.
2. Use the down arrow  button to highlight the [+3:Administrator](#) item, and then press the [OK](#) button.
3. Use the down arrow  button to highlight [Format Disk](#), and then press the [OK](#) button.
4. Press the [OK](#) button again.

 **NOTE:** When the [Format Disk](#) operation is complete, reload the printer firmware.

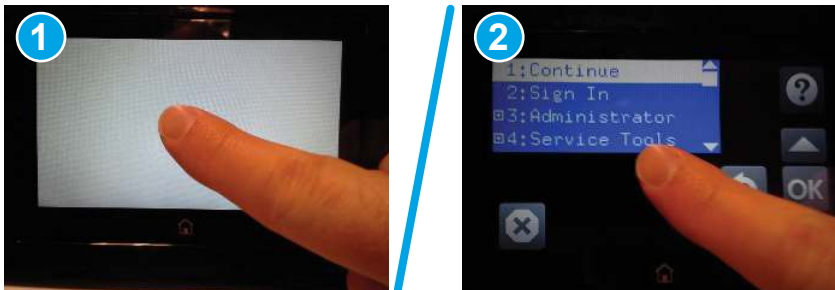
Execute a Format Disk from a touchscreen control panel (M856/E85055/M776)



Use the following procedure to execute a [Format Disk](#) from a touchscreen control panel.


 **CAUTION:** This procedure resets all printer configurations and settings to factory defaults (customer configurations and settings are lost).

1. Touch the middle of the control-panel display when you see the [1/8](#) under the logo.

Figure 4-101 Open the [Pre-boot](#) menu



2. Use the down arrow  button to highlight the [+3:Administrator](#) item, and then press the [OK](#) button.
3. Use the down arrow  button to highlight [Format Disk](#), and then press the [OK](#) button.
4. Press the [OK](#) button again.

 **NOTE:** When the [Format Disk](#) operation is complete, reload the printer firmware.

Firmware upgrades

Learn about printer firmware upgrades.

To download the most recent firmware upgrade for the printer, go to:

- In the US, go to www.hp.com/support/colorIjM652 or www.hp.com/support/colorIjM653 or www.hp.com/support/IjE65050 or www.hp.com/support/IjE65060 or www.hp.com/support/colorIjE65150 or www.hp.com/support/colorIjE65160 or www.hp.com/support/colorIjM681MFP or www.hp.com/support/colorIjM682MFP or www.hp.com/support/IjE67550MFP or www.hp.com/support/IjE67560MFP or www.hp.com/support/colorIjE67650MFP or www.hp.com/support/colorIjE67660MFP.

- a. Select **Get drivers, Software, and Firmware**, and then select the appropriate product by name.



NOTE: More than one printer model might be listed. Make sure to select the correct model so that the upgraded firmware supports all of the printer functions.

- b. Select the driver language and operating system.
- c. Locate the firmware download, and then select **Download**.

- Outside the U.S., go to www.hp.com/support.

- Select your country/region.
- Select **Drivers & Downloads**.
- Enter the product name in the **Find my product** dialogue box, and then select **Go**.



TIP: Click on the **How do I find my product name/number?** link to see a short video on identifying the printer's name and number.

- Select the appropriate product by name.



NOTE: More than one printer model might be listed. Make sure to select the correct model so that the upgraded firmware supports all of the printer functions.

- Select the driver language and operating system.
- Locate the firmware download, and then select **Download**.

Determine the installed revision of firmware


Learn about how to determine the version of installed printer firmware.

Print a configuration page to determine the installed revision of firmware.

Print the configuration page from an touchscreen control panel

1. From the Home screen on the printer control panel, scroll to and touch the **Reports** button.
2. Open the following menus:
 - [Configuration/Status pages](#)

3. Touch [Configuration Page](#) to select it.

 **TIP:** Multiple report pages can be selected, and then printed together.

4. Touch the print button to print the pages.

Print the configuration page from a LCD control panel

1. From the Home screen on the printer control panel, use the arrow keys to navigate to [Reports](#), and then press the [OK](#) button.
2. Use the arrow buttons to scroll to [Configuration/Status Pages](#), and then press the [OK](#) button.
3. Use the arrow buttons to scroll to [Configuration Page](#), and then press the [OK](#) button.
4. Use the arrow buttons to scroll to print, and then press the [OK](#) button to print the pages.


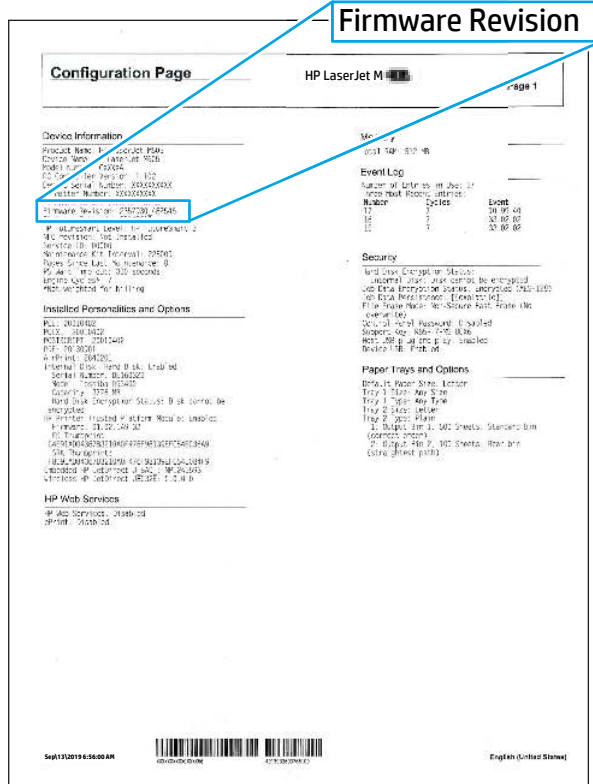

 **TIP:** Multiple report pages can be selected, and then printed together.

Figure 4-102 Configuration page firmware version




HP Embedded Web Server

Learn how to perform a firmware upgrade using the HP Embedded Web Server.

 **NOTE:** The printer should be at the **Ready** state.

The firmware update might take 10 minutes or longer based on the input/output (I/O) transfer rates and the time it takes for the printer to reinitialize.


1. Open an Internet browser window.
2. Enter the printer IP address in the URL line.
3. Select the **Firmware Upgrade** link from the **General** tab or from the **Troubleshooting** tab.
4. Browse to the location that the firmware upgrade file was downloaded to, and then select the firmware file. The file has a .bdl file extension. Select the **Install** button to perform the upgrade.


 **NOTE:** Do not close the browser window OR interrupt communication until the HP Embedded Web Server (EWS) displays the confirmation page.

5. After the printer reinitializes, print a configuration page and verify that the latest firmware version has been installed.

USB flash drive (control-panel menu)


Learn about firmware upgrades using a USB flash drive.

 **NOTE:** USB flash drives that are not using a FAT32 format, or do not have a CD formatted partition, might not be recognized by the printer. If the printer does not recognize a USB flash drive, try using a different USB flash drive.


 **TIP:** The USB port on the printer must be enabled. If it is disabled, use the [Enable Retrieve from USB](#) item in the [General Settings](#) menu to enable it.

USB flash drive firmware (control-panel menu) update from a touchscreen control panel

1. Copy the .bdl file to a portable USB flash drive.
2. Turn the printer on, and then wait until it initializes.
3. From the Home screen on the printer control panel, scroll to and touch the [Support Tools](#) button.
4. Open the following menus:
 - [Maintenance](#)
 - [USB Firmware Upgrade](#)
5. Insert the USB flash drive with the .bdl file on it into the USB port on the printer.
6. Touch the .bdl file, and then touch the **Install** button.

 **NOTE:** If there is more than one .bdl file on the storage device, make sure to select the correct file for this printer.


7. When the upgrade is complete, the printer restarts.

 **TIP:** Print a configuration page and verify that the upgrade firmware version was installed.


USB flash drive firmware (control-panel menu) update from a LCD control panel

1. Copy the .bdl file to a portable USB flash drive.
2. From the Home screen on the printer control panel, use the arrow buttons to select the [Print](#) menu.
3. Use the arrow buttons to scroll to [Support Tools](#) menu, and then press the **OK** button.

4. Use the arrow buttons to scroll to **Maintenance** menu, and then press the **OK** button.
5. Use the arrow buttons to scroll to **USB Firmware Upgrade**, and then press the **OK** button.
6. Insert the USB flash drive with the .bdl file on it into the USB port on the printer.
7. Use the arrow buttons to scroll to the appropriate .bdl file, and then press the **OK** button to select.

 **NOTE:** If there is more than one .bdl file on the storage device, make sure to select the correct file for this printer.

8. Use the arrow buttons to scroll to **Install**, and then press the **OK** button to start the firmware upgrade.

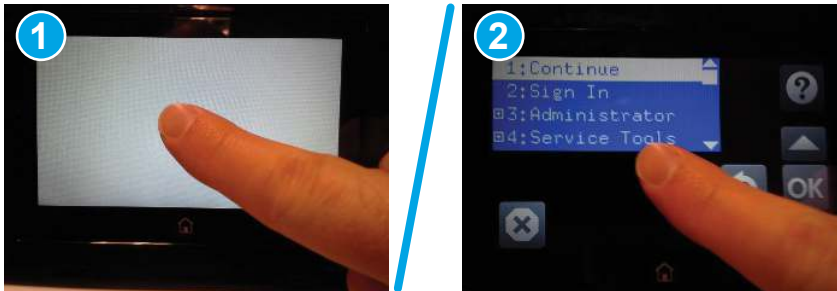
 **TIP:** Print a configuration page and verify that the upgrade firmware version was installed.

USB flash drive firmware (Pre-boot menu) (MFP)

Learn how to perform a USB flash drive firmware (Pre-boot menu) update from an MFP control panel.

1. Copy the .bdl file to a portable USB flash drive.
2. Touch the middle of the control panel display when you see the 1/8 under the logo.


Figure 4-103 Open the Pre-boot menu




3. Use the arrow buttons to highlight **+3 Administrator**, and then touch the **OK** button.
4. Use the arrow buttons to highlight **+1 Download**, and then touch the **OK** button.
5. Insert the USB flash drive with the .bdl file on it into the USB port on the printer.

 **NOTE:** If the error message **No USB Thumbdrive Files Found** displays on the control panel display, try using a different portable storage device.

6. Use the arrow buttons to highlight **USB Thumbdrive**, and then touch the **OK** button.
7. Use the arrow buttons to highlight the .bdl file, and then touch the **OK** button.

 **NOTE:** The upgrade process can take 10 minutes or longer to complete.

 **TIP:** If there is more than one .bdl file on the storage device, make sure to select the correct file for this printer.

8. When the message **Complete** displays on the control panel display, touch the down arrow ▼ button several times until the message **Continue** displays.

9. Touch the **OK** button to begin the upgrade. When the upgrade is complete, the printer will initialize to the **Ready** state.
10. When the upgrade process is complete, print a configuration page and verify that the upgrade firmware version was installed.

USB flash drive firmware (Pre-boot menu) (SFP)

Learn how to perform a USB flash drive firmware (Pre-boot menu) update using a SFP control panel.

1. Press the **Cancel** button when you see the 1/8 under the logo.
2. Use the arrow buttons to highlight **+3 Administrator**, and then press the **OK** button.
3. Use the arrow buttons to highlight **+1 Download**, and then press the **OK** button.
4. Insert the USB flash drive with the .bdl file on it into the USB port on the printer.



NOTE: If the error message **No USB Thumbdrive Files Found** displays on the control panel display, try using a different portable storage device.

5. Use the arrow buttons to highlight **USB Thumbdrive**, and then press the **OK** button.
6. Use the arrow buttons to highlight the .bdl file, and then press the **OK** button.



NOTE: The upgrade process can take 10 minutes or longer to complete.



TIP: If there is more than one .bdl file on the storage device, make sure to select the correct file for this printer.

7. When the message **Complete** displays on the control panel display, turn the printer power off, and then on again.
8. When the upgrade process is complete, print a configuration page and verify that the upgrade firmware version was installed.

Solve fax or email problems

Fax or email troubleshooting information is not provided in this service manual. The most current information is available in WISE or HP Channel Services Network (CSN). Search using model number then use "fax troubleshooting" as the search term.

Additional service and support for HP internal personnel

HP internal personnel, go to one of the following Web-based Interactive Search Engine (WISE) sites:

Americas (AMS)

- [WISE - English](#)
- [WISE - Spanish](#)
- [WISE - Portuguese](#)
- [WISE - French](#)

Asia Pacific / Japan (APJ)

- [WISE - English](#)
- [WISE - Japanese](#)
- [WISE - Korean](#)
- [WISE - Chinese \(simplified\)](#)
- [WISE - Chinese \(traditional\)](#)
- [WISE - Thai](#)

Europe / Middle East / Africa (EMEA)

- [WISE - English](#)

5 Removal and replacement

When servicing the printer, several items must be considered to ensure a successful repair and to avoid damage to the printer or personal injury. Learn about these considerations and find detailed instructions for removing and replacing printer parts.

HP service and support

Learn about HP access to additional service and support information.

Additional service and support for channel partners

Channel partners go to partner.hp.com, and then use the steps below to access the HP Web-based Interactive Search Engine (WISE).



[View a video of how to use the HP Partner First Portal to access WISE.](#)

Access WISE for Channel partners

1. Select [Services & Support](#) (near the top of the screen).
2. Under [Services Delivery](#), select [Technical Support](#).
3. Select [Technical Documentation](#).

Find information about the following topics

- Service manuals
- Service advisories
- Up-to-date control panel message (CPMD) troubleshooting
- Solutions for printer issues and emerging issues
- Remove and replace part instructions and videos
- Install and configure
- Printer specifications
- Warranty and regulatory information

Additional service and support for HP internal personnel

HP internal personnel, go to one of the following Web-based Interactive Search Engine (WISE) sites:

 [View a video of how to access WISE for internal HP users.](#)

Americas (AMS)

- [WISE - English](#)
- [WISE - Spanish](#)
- [WISE - Portuguese](#)
- [WISE - French](#)

Asia Pacific / Japan (APJ)

- [WISE - English](#)
- [WISE - Japanese](#)
- [WISE - Korean](#)
- [WISE - Chinese \(simplified\)](#)
- [WISE - Chinese \(traditional\)](#)
- [WISE - Thai](#)

Europe / Middle East / Africa (EMEA)

- [WISE - English](#)

Additional technical support WISE videos

The videos below provide additional ways to access printer information using WISE.

 [View a video of how to use WISE to find technical support videos \(model number search\).](#)

 [View a video of ow to use WISE to find technical support videos \(Product detail page \[PDP\] search\).](#)

Removal and replacement strategy

The printer uses a field repair strategy. Defective parts are diagnosed and replaced at the Field Replaceable Unit (FRU) assembly level. Follow basic safety precautions to avoid injury or printer damage. Learn about the tools required to service the printer and the types of fasteners used.


Introduction

Learn the overall process for troubleshooting failures and replacing parts, as well as items of note related to installing and tracking printer supplies

Repair normally begins by using the printer internal diagnostics and the following two-step process:

1. Isolate the problem to the major system (for example, the network, the server, or the printer).

2. Identify the cause of failures according to the troubleshooting section in the printer service manual, and follow the disassembly procedures to replace the defective parts or the consumable parts.

 **IMPORTANT:** See the separate control panel message document (CPMD) for this printer for control panel error message descriptions and solutions (also available online).

After locating a faulty part, the printer can usually be repaired at the assembly level by replacing the field replaceable unit (FRUs). HP does not support replacement of components on the printed circuit assemblies (PCAs).

The user replaces supplies (cartridges) as they are depleted. Additional instructions about other user-replaceable parts are provided in this section.

The printer tracks the amount of use on the customer-replaceable supplies by keeping a page count. The printer prompts the user to replace certain items when a supply is depleted or a specific number of pages have been printed.

Swapping supplies between products might be necessary in some test scenarios. However, this might cause a misrepresentation of supply life values, and is not recommended.


Considerations during removal and replacement

Understand the items to take into account when removing and replacing parts.

This chapter describes the FRUs.


Reinstalling FRUs is generally the reverse of removal. Notes are included to provide directions for difficult or critical replacement procedures.

HP does not support repairing individual subassemblies or troubleshooting at the PCA component level.

 **WARNING!** Never operate or service the printer with the protective cover removed from the laser scanner assembly. The reflected beam, although invisible, can cause damage to the eyes.


The sheet-metal parts can have sharp edges. Be careful when handling sheet-metal parts.

Turn the printer off, wait five seconds, and then remove the power cord before attempting to service the printer. **If this warning is not followed, severe injury can result as well as damage to the printer.** The power must be on for certain functional checks during troubleshooting. However, the power cord must be disconnected during parts removal. AC voltage is still present inside the printer when the power switch is in the off position. The power cord must be disconnected before servicing the printer.

 **CAUTION:** Incorrectly routed or loose wire harnesses or flat flexible cables (FFCs) might interfere with other internal components or assemblies and can be damaged, pinched, or frayed. Make sure that wire harnesses are correctly routed and retained when installing assemblies.


Do not bend or fold the FFCs during removal or installation.

Do not expose the toner cartridges or imaging drums to strong light even for a short time.


 **IMPORTANT:** When an assembly is removed that includes a rating plate, tag, or a printer code label, make sure to transfer the plate, tag, or code label to the replacement assembly.

Do not replace the formatter, DC controller, memory PCA (island of data), eMMC PCA, or hard-disk drive (HDD) simultaneously during a single printer servicing. Doing so might cause the printer to become unstable or inoperable.

When replacing the formatter, make sure that all accessories installed on the formatter, such as the fax PCA, hard disk drive, trusted platform module, and DIMM, are removed from the defective formatter and installed on the replacement formatter. Make sure that the formatter is a new service part that has not been installed in a different device.



 **NOTE:** During assembly removal and replacement, or if the printer is moved, remove the toner cartridges, the imaging drums, and the toner collection unit.

Toner is a non-poisonous substance composed of plastic and a small number of colored components. If toner gets on the skin or clothing, wipe it off with dry tissue paper and wash in cold water. Hot water sets toner and it might be difficult, or impossible, to remove. Toner easily breaks down vinyl materials, so avoid letting toner contact vinyl.

 **TIP:** Some figures might show assemblies removed or installed that have not yet been removed or installed at that specific step. However, the procedures are correct for this printer and the target assembly. Always thoroughly read the instructions that accompany each figure.

Electrostatic discharge

Learn how to protect sensitive parts against damage from electrostatic discharge.

 **CAUTION:**  Some parts are sensitive to electrostatic discharge (ESD). Look for the ESD reminder when removing printer parts. Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly.

Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

Required tools

Find information about the tools required to remove and replace parts on the printer.

- #2 Phillips screwdriver with a magnetic tip
- Small, flat-blade screwdriver
- Needle-nose pliers
- ESD strap (if one is available)
- Penlight


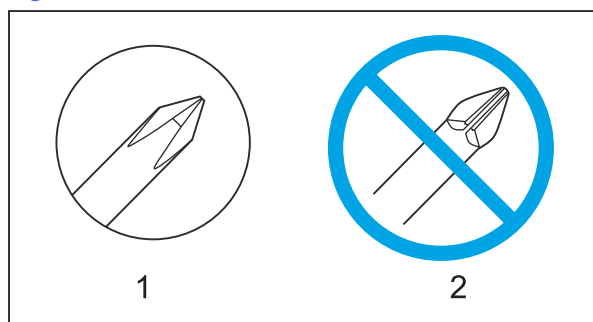
 **CAUTION:** Always use a #2 Phillips screwdriver (callout 1). Do not use a Pozidriv screwdriver (callout 2) or any motorized screwdriver. These can damage screws or screw threads.

Figure 5-1 Screwdrivers



Fasteners used in this printer

Learn about the different types of screws used in the printer and the importance of installing the correct type of screw in the correct location when replacing a part.

⚠ WARNING! Make sure that assemblies are replaced with the correct screw type. Using the incorrect screw (for example, substituting a long screw for the correct shorter screw) can cause damage to the printer or interfere with printer operation. Do not intermix screws that are removed from one assembly with the screws that are removed from another assembly.

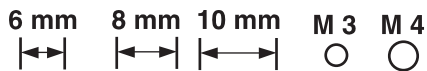
📝 NOTE: To install a self-tapping screw, first turn it counterclockwise to align it with the existing thread pattern, and then carefully turn it clockwise to tighten. Do not overtighten. If a self-tapping screw hole becomes stripped, repair the screw hole or replace the affected assembly.

Always take note of the length, diameter, color, type, and location of each removed screw. Make sure that screws are installed in their original location during reinstallation.

Types of screws used in the printer

- Screw, BH M3x10
- Screw, with washer, M3X8
- Screw, D M3X8
- Screw, machine, truss head, M3X6

Figure 5-2 Screw size chart



Service approach

Follow these steps before and after performing service on the printer to prevent damage to the printer and ensure that the repair was successful.

Before performing service

Follow these steps before performing any type of service on the printer.

⚠ WARNING! Turn the printer off, wait five seconds, and then remove the power cord before attempting to service the printer. **If this warning is not followed, severe injury can result as well as damage to the printer.** The power must be on for certain functional checks during troubleshooting. However, the power cord must be disconnected during parts removal. AC voltage is still present inside the printer when the power switch is in the off position. The power cord must be disconnected before servicing the printer.

1. Remove all paper from the trays.
2. Place the product on an ESD workstation or mat, or use an ESD strap (if one is available). If an ESD workstation, mat, or strap is not available, ground yourself by touching the sheet-metal chassis before touching an ESD-sensitive part.
3. Remove the toner cartridge or toner cartridges and place a sheet of paper over the exposed drums to protect them from excessive light exposure.
4. Remove the trays.

After performing service

Follow these steps after performing service on the printer.

1. Reinstall the toner cartridge or toner cartridges.
2. Reinstall the trays.
3. Return all paper to the trays.
4. Plug in the power cable and interface cable or cables.
5. Perform print-quality tests by printing from a host computer or by printing internal configuration and demo pages.

Print quality test

Ensure that the print quality is acceptable after performing printer repairs.

Use the printer internal print quality pages to help diagnose and solve print-quality problems. For more information, see the troubleshooting section in the service manual.



NOTE: To get further assistance in print quality troubleshooting, go to www.hp.com/support/colorijM652 or www.hp.com/support/colorijM653 or www.hp.com/support/ljE65050 or www.hp.com/support/ljE65060 or www.hp.com/support/colorijE65150 or www.hp.com/support/colorijE65160 or www.hp.com/support/colorijM681MFP or www.hp.com/support/colorijM682MFP or www.hp.com/support/ljE67550MFP or www.hp.com/support/ljE67560MFP or www.hp.com/support/colorijE67650MFP or www.hp.com/support/colorijE67660MFP. Select **Troubleshooting**, select **Print**, and then select **Print Quality**.

Copy-quality test (M681/M682/E67550/E67560/E67650/E67660 models)

1. Verify that you have completed the necessary reassembly steps.
2. Ensure that the input tray contains clean, unmarked paper.
3. With the power cord attached, turn on the printer.
4. Verify that the expected start up sounds occur.
5. Print a configuration page, and then verify that the expected printing sounds occur.
6. Place the configuration page in the document feeder, print a copy job, and then verify the results.
7. Place the configuration page on the flatbed glass, print a copy job, and then verify the results.

Fax-quality test (M681/M682/E67550/E67560/E67650/E67660 models)

1. Place the configuration page in the document feeder.
2. Type a valid fax number, and send the fax job.
3. Verify that the send quality and the receive quality meet expectations.

Parts removal orientation

Learn about printer orientation for parts removal.

For procedures and/or steps that require identifying the right, left, or rear side of the printer, face the front of the printer for correct orientation.

Customer self-repair (CSR) A parts and accessories

Customer self-repair (CSR) A parts are parts that a customer replaces without assistance from a field technician. These parts can be replaced without the use of any tools.

Install accessory: 1x550-sheet paper feeder

Learn how to install the 1x550-sheet paper feeder.

Mean time to repair: 5 minutes

Service level: Basic



IMPORTANT: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off.
- Disconnect the power cable.

⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-1 Part information

Part number	Part description
P1B09-67901	1x550 sheet feeder

Required tools

- No special tools are needed to remove or install this assembly.

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Make sure that the printer initializes to a **Ready** state.

Print a page from the feeder to make sure that the printer is functioning correctly.

1. Remove the accessory from its package

Follow these steps to remove the accessory from its package.

1. Save all packaging for recycling.

2. For complete information about HP recycling programs, go to <http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>.

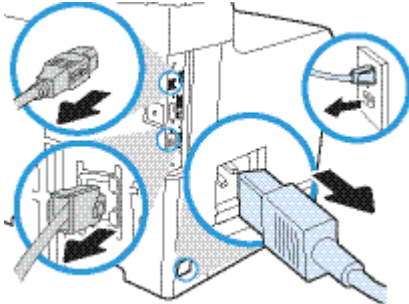
2. Install the 1x550-sheet paper feeder

Follow these steps to install the 1x550-sheet paper feeder.

- ⚠ CAUTION:** Do not extend more than one paper tray at a time. Do not use paper tray as a step. Keep hands out of paper trays when closing. All trays must be closed when moving the printer.

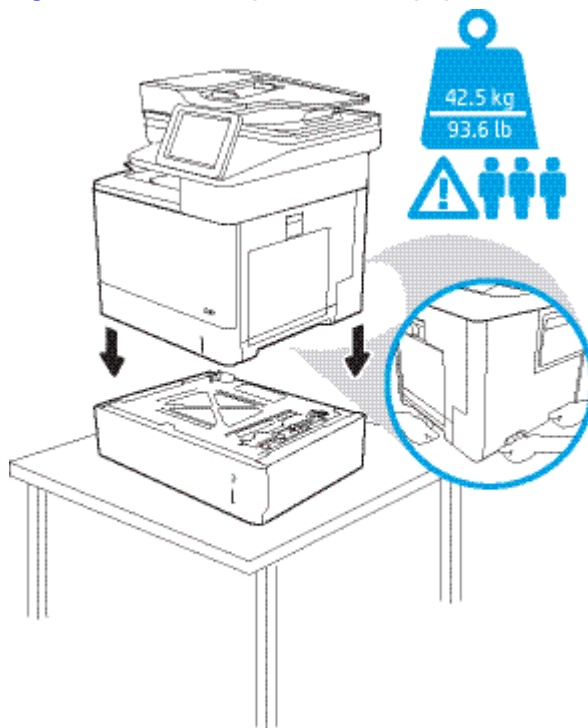
1. Unplug all of the cables attached to the printer.

Figure 5-3 Unplug all of the cables



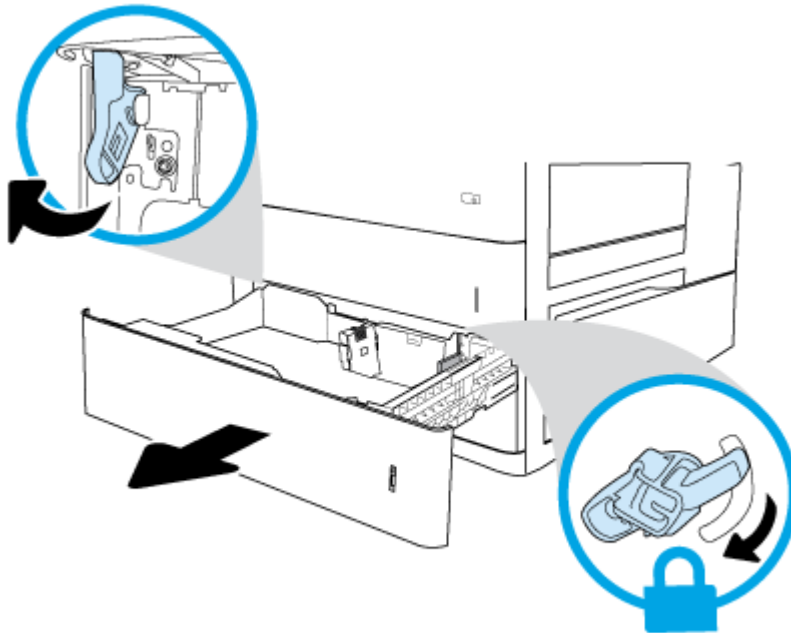
2. Place the paper feeder on a sturdy, level surface. Lift the printer and place it on top of the paper feeder.

Figure 5-4 Place the printer on the paper feeder



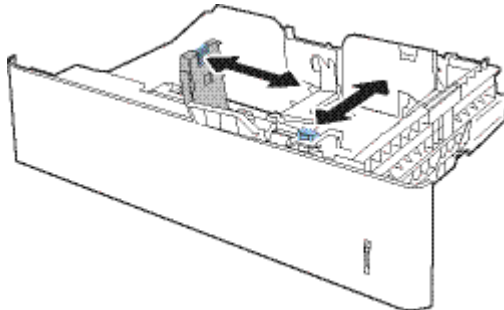
3. Remove the paper tray in the paper feeder, and then engage two locks at the front of the tray opening to secure the printer to the paper feeder.

Figure 5-5 Engage two locks



4. Before loading paper, open the paper guides by squeezing the blue adjustment latches and sliding the guides out as far as they will go.

Figure 5-6 Open the paper guides



5. Load paper into the tray.


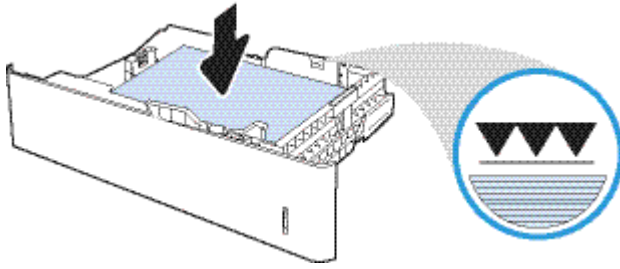
 **NOTE:** To prevent jams, do not overfill the tray. Be sure that the top of the stack is below the tray full indicator.

Figure 5-7 Load paper into the tray

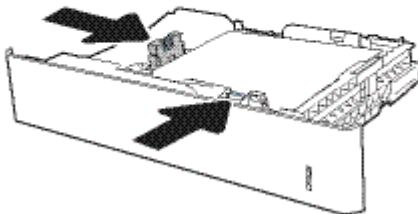


6. Adjust the paper guides so that the guides lightly touch the stack, but do not bend it.



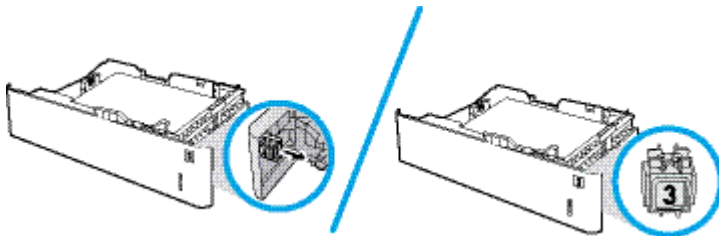
NOTE: Do not adjust the paper guides tightly against the paper stack. Adjust them to the indentations or markings in the tray.

Figure 5-8 Adjust the paper guides



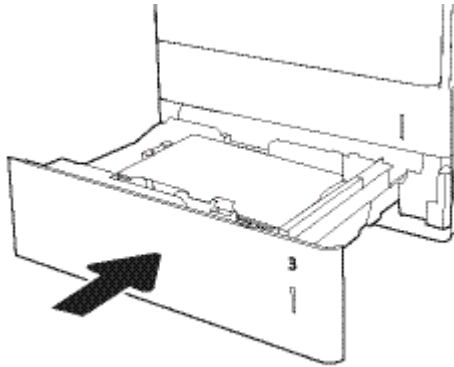
7. If necessary, remove the paper tray number indicator on the tray, and then rotate the indicator so that the tray number correctly reflects the printer's tray configuration. Install the indicator in the tray with the correct tray number facing outward.

Figure 5-9 Remove the paper tray number indicator



8. Install the paper tray.

Figure 5-10 Install the paper tray




Install accessory: 1x550-sheet paper feeder with stand

Learn how to install the 1x550-sheet paper feeder with stand.


Mean time to repair: 5 minutes

Service level: Basic

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off.
- Disconnect the power cable.

 **WARNING!** To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-2 Part information

Part number	Part description
P1B10-67901	1x550 sheet stand

Required tools

- No special tools are needed to remove or install this assembly.

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Make sure that the printer initializes to a **Ready** state.

Print a page from the feeder to make sure that the printer is functioning correctly.

1. Remove the accessory from its package

Follow these steps to remove the accessory from its package.

1. Save all packaging for recycling.
2. For complete information about HP recycling programs, go to <http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>.

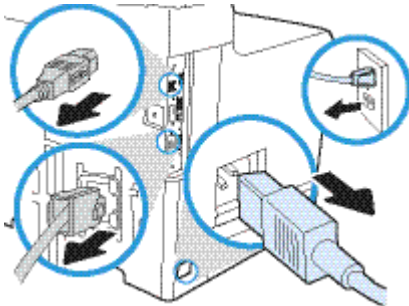
2. Install the 1x550-sheet paper feeder with stand

Follow these steps to install the 1x550-sheet paper feeder with stand.

CAUTION: Do not extend more than one paper tray at a time. Do not use paper tray as a step. Keep hands out of paper trays when closing. All trays must be closed when moving the printer.

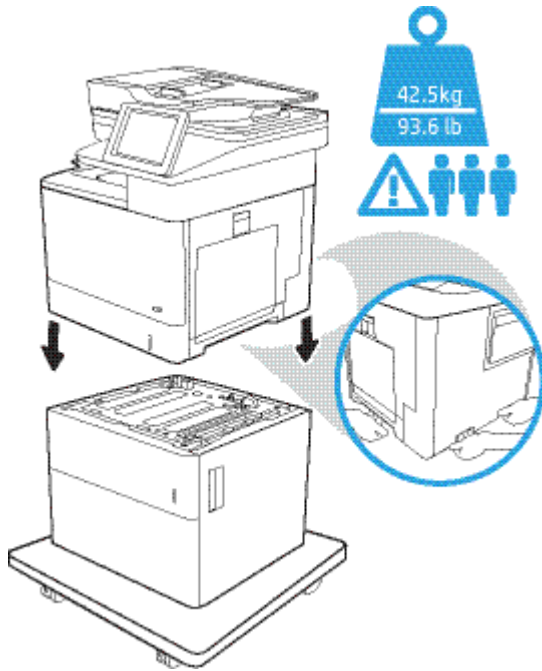
1. Unplug all of the cables attached to the printer.

Figure 5-11 Unplug all of the cables



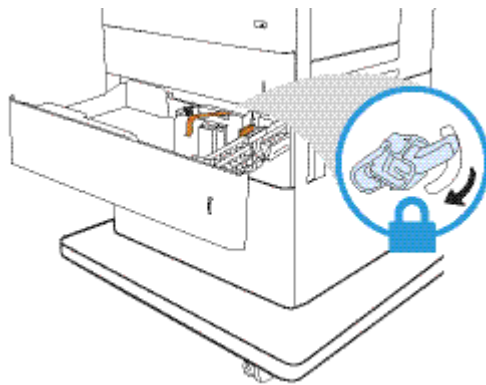
2. Lift the printer and place it on top of the paper feeder.

Figure 5-12 Place the printer on the paper feeder



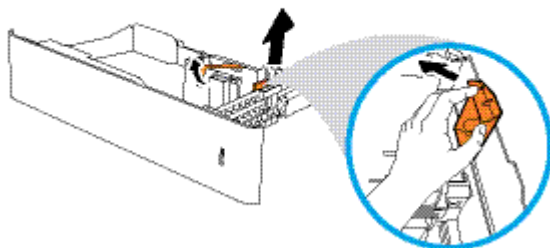
3. Remove the paper tray in the paper feeder, and then engage one lock at the front of the tray opening to secure the printer to the paper feeder.

Figure 5-13 Engage one lock



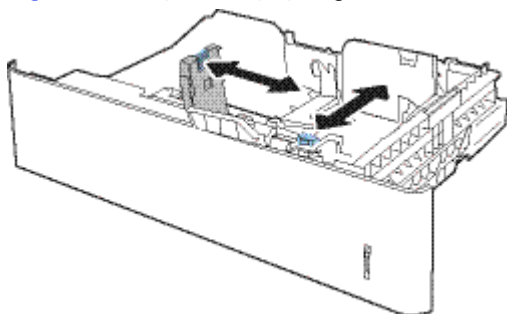
4. Locate the orange shipping lock inside the paper tray. Twist the lock to release it, and then lift it straight up to remove it. Remove all other packing material inside the tray.

Figure 5-14 Remove the orange shipping lock



5. Before loading paper, open the paper guides by squeezing the blue adjustment latches and sliding the guides out as far as they will go.

Figure 5-15 Open the paper guides



6. Load paper into the tray.


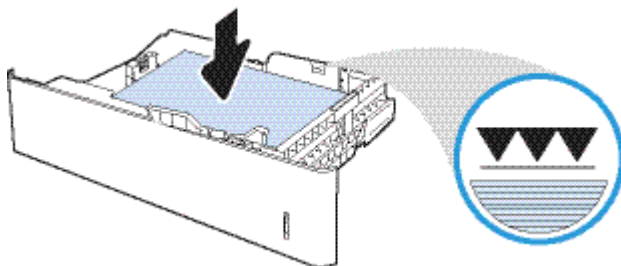
 **NOTE:** To prevent jams, do not overfill the tray. Be sure that the top of the stack is below the tray full indicator.

Figure 5-16 Load paper into the tray



7. Adjust the paper guides so that the guides lightly touch the stack, but do not bend it.


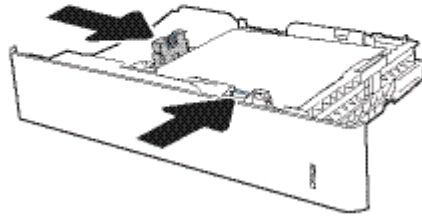
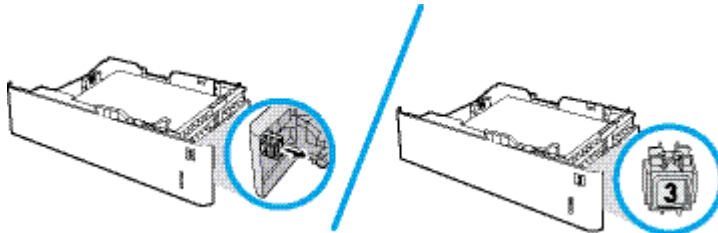
 **NOTE:** Do not adjust the paper guides tightly against the paper stack. Adjust them to the indentations or markings in the tray.

Figure 5-17 Adjust the paper guides



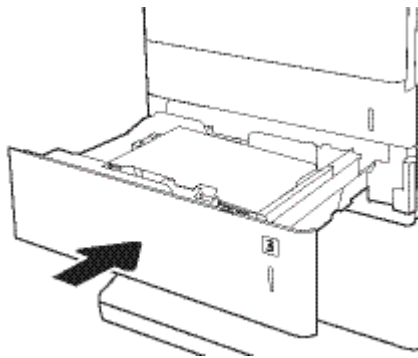
8. If necessary, remove the paper tray number indicator on the tray, and then rotate the indicator so that the tray number correctly reflects the printer's tray configuration. Install the indicator in the tray with the correct tray number facing outward.

Figure 5-18 Remove the paper tray number indicator



9. Install the paper tray.

Figure 5-19 Install the paper tray



Install accessory: 3x550-sheet paper feeder with stand

Learn how to install the 3x550-sheet paper feeder with stand.

Mean time to repair: 5 minutes

Service level: Basic



IMPORTANT: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off.
- Disconnect the power cable.

⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-3 Part information

Part number	Part description
P1B11-67901	3x550 sheet stand

Required tools

- No special tools are needed to remove or install this assembly.

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Make sure that the printer initializes to a **Ready** state.

Print a page from the feeder to make sure that the printer is functioning correctly.

1. Remove the accessory from its package

Follow these steps to remove the accessory from its package.

1. Save all packaging for recycling.
2. For complete information about HP recycling programs, go to <http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>.

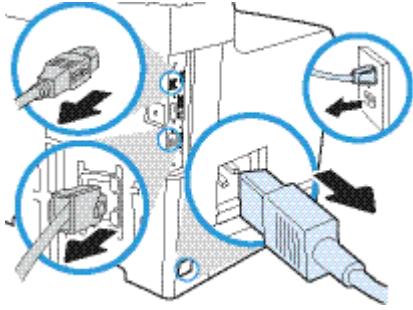
2. Install the 3x550-sheet paper feeder with stand

Follow these steps to install the 3x550-sheet paper feeder with stand.

⚠ CAUTION: Do not extend more than one paper tray at a time. Do not use paper tray as a step. Keep hands out of paper trays when closing. All trays must be closed when moving the printer.

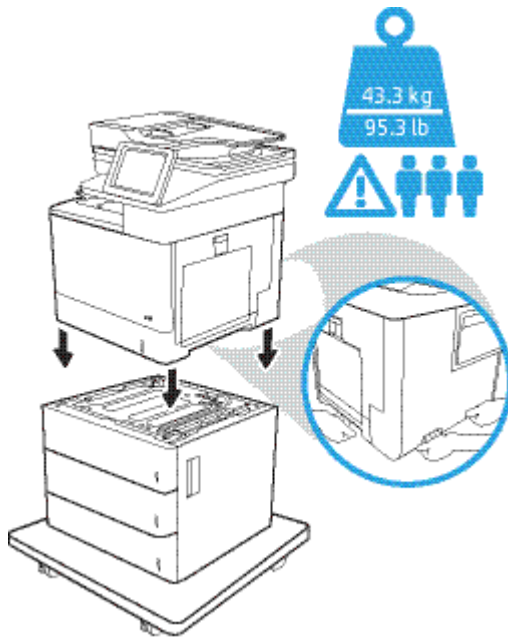
1. Unplug all of the cables attached to the printer.

Figure 5-20 Unplug all of the cables



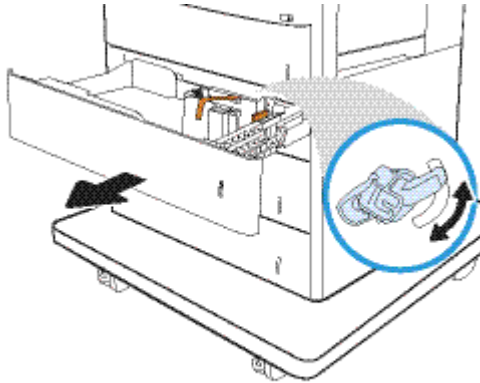
2. Lift the printer and place it on top of the paper feeder.

Figure 5-21 Place the printer on the paper feeder



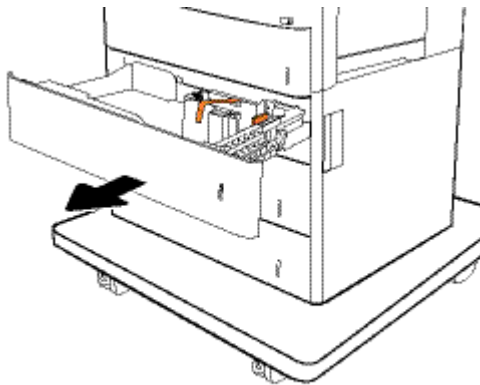
3. Open the top paper tray in the paper feeder, and then engage one lock at the front of the tray opening to secure the printer to the paper feeder.

Figure 5-22 Engage one lock



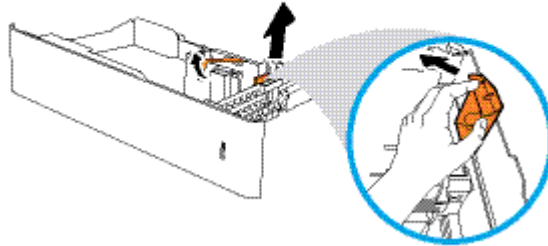
4. Repeat the following steps for each paper tray:
 - a. Remove the paper tray

Figure 5-23 Remove the paper tray



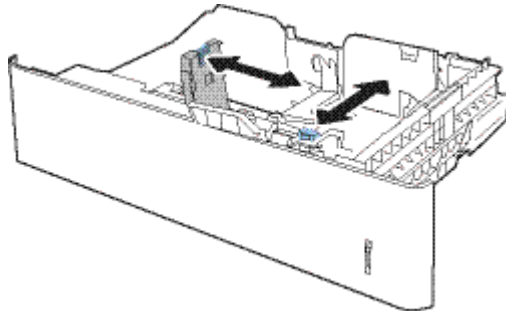
- b. Locate the orange shipping lock inside the paper tray. Twist the lock to release it, and then lift it straight up to remove it. Remove all other packing material inside the tray.

Figure 5-24 Remove the orange shipping lock



- c. Before loading paper, open the paper guides by squeezing the blue adjustment latches and sliding the guides out as far as they will go.

Figure 5-25 Open the paper guides



- d. Load paper into the tray.


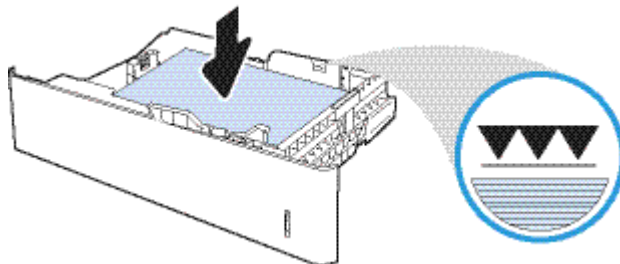
 **NOTE:** To prevent jams, do not overfill the tray. Be sure that the top of the stack is below the tray full indicator.

Figure 5-26 Load paper into the tray



- e. Adjust the paper guides so that the guides lightly touch the stack, but do not bend it.


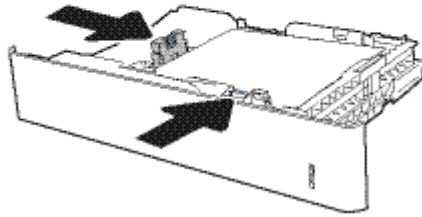
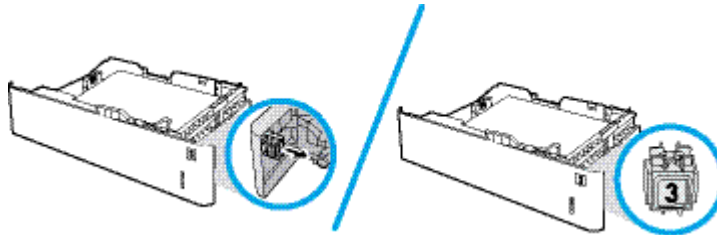
 **NOTE:** Do not adjust the paper guides tightly against the paper stack. Adjust them to the indentations or markings in the tray.

Figure 5-27 Adjust the paper guides



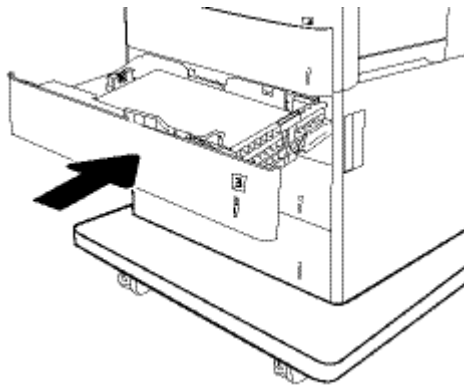
- f. If necessary, remove the paper tray number indicator on the tray, and then rotate the indicator so that the tray number correctly reflects the printer's tray configuration. Install the indicator in the tray with the correct tray number facing outward.

Figure 5-28 Remove the paper tray number indicator



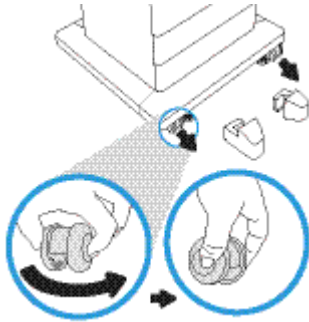
- g. Install the paper tray.

Figure 5-29 Install the paper tray



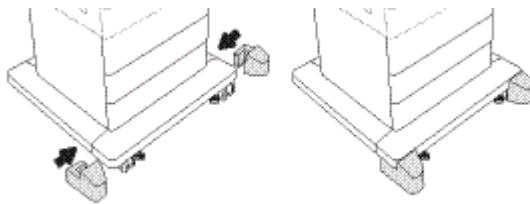
5. In preparation for installing the caster covers, at the front of the paper feeder, position the wheels so they face forward.

Figure 5-30 Position the wheels



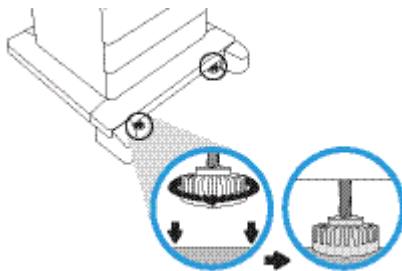
6. Position the caster covers, and then slide them toward the paper feeder to install them.

Figure 5-31 Install the caster covers



7. Lower the legs on the paper feeder so that they rest securely on the floor.

Figure 5-32 Lower the legs




Install accessory: 2,550-sheet paper feeder with stand

Learn how to install the 2,550-sheet paper feeder with stand.

Mean time to repair: 5 minutes

Service level: Basic

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off.

- Disconnect the power cable.

⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-4 Part information

Part number	Part description
PIB12-67901	HCI stand

Required tools

- No special tools are needed to remove or install this assembly.

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Make sure that the printer initializes to a **Ready** state.

Print a page from the feeder to make sure that the printer is functioning correctly.

1. Remove the accessory from its package

Follow these steps to remove the accessory from its package.

1. Save all packaging for recycling.
2. For complete information about HP recycling programs, go to <http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>.

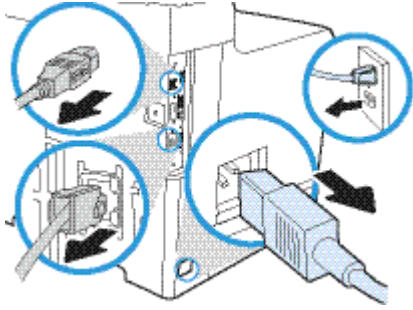
2. Install the 2,550-sheet paper feeder with stand

Follow these steps to install the 2,550-sheet paper feeder with stand.

⚠ CAUTION: Do not extend more than one paper tray at a time. Do not use paper tray as a step. Keep hands out of paper trays when closing. All trays must be closed when moving the printer.

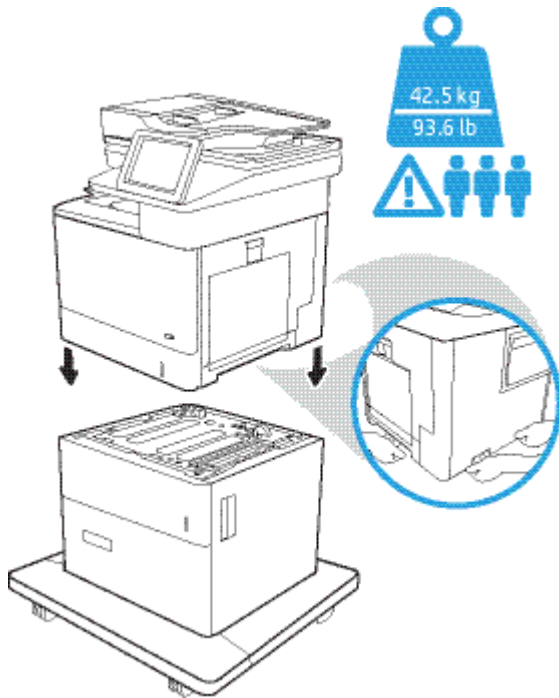
1. Unplug all of the cables attached to the printer.

Figure 5-33 Unplug all of the cables



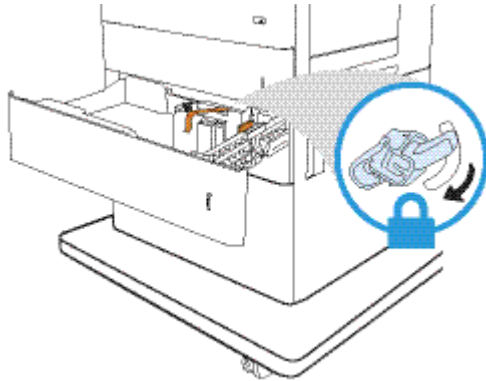
2. Lift the printer and place it on top of the paper feeder.

Figure 5-34 Place the printer on the paper feeder



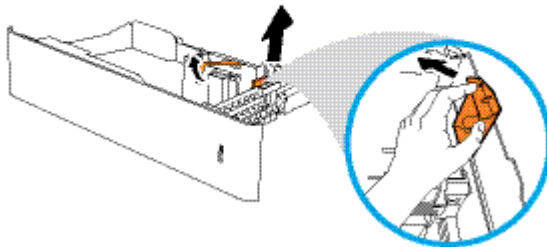
3. Remove the top paper tray in the paper feeder, and then engage one lock at the front of the tray opening to secure the printer to the paper feeder.

Figure 5-35 Engage one lock



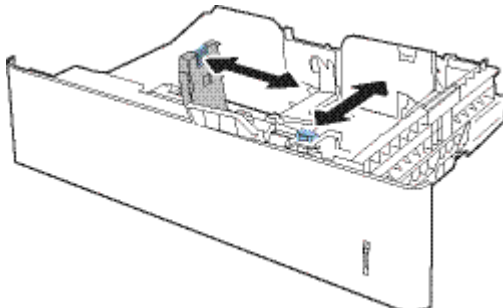
4. Locate the orange shipping lock inside the paper tray. Twist the lock to release it, and then lift it straight up to remove it. Remove all other packing material inside the tray.

Figure 5-36 Remove the orange shipping lock



5. Before loading paper, open the paper guides by squeezing the blue adjustment latches and sliding the guides out as far as they will go.

Figure 5-37 Open the paper guides

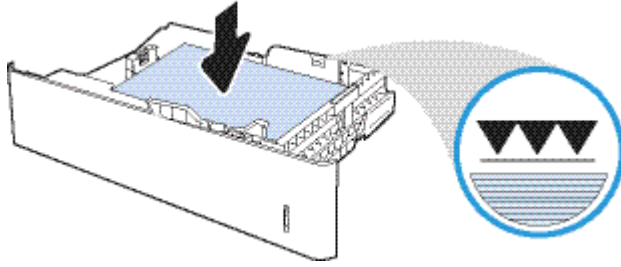


6. Load paper into the tray.



NOTE: To prevent jams, do not overfill the tray. Be sure that the top of the stack is below the tray full indicator.

Figure 5-38 Load paper into the tray



7. Adjust the paper guides so that the guides lightly touch the stack, but do not bend it.


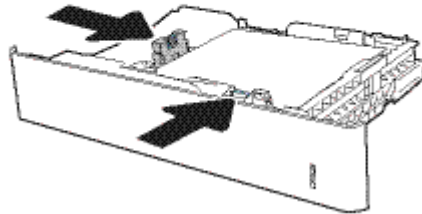
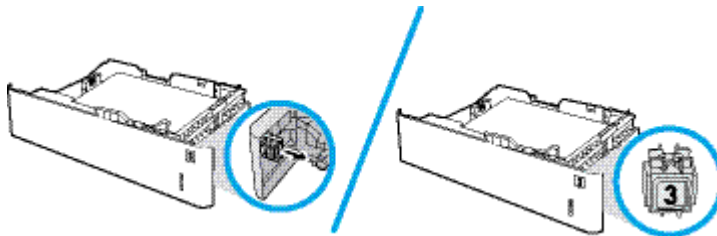
 **NOTE:** Do not adjust the paper guides tightly against the paper stack. Adjust them to the indentations or markings in the tray.

Figure 5-39 Adjust the paper guides



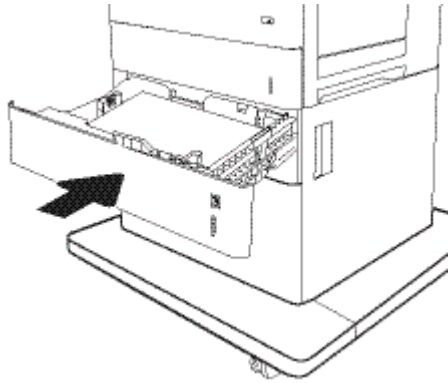
8. If necessary, remove the paper tray number indicator on the tray, and then rotate the indicator so that the tray number correctly reflects the printer's tray configuration. Install the indicator in the tray with the correct tray number facing outward.

Figure 5-40 Remove the paper tray number indicator



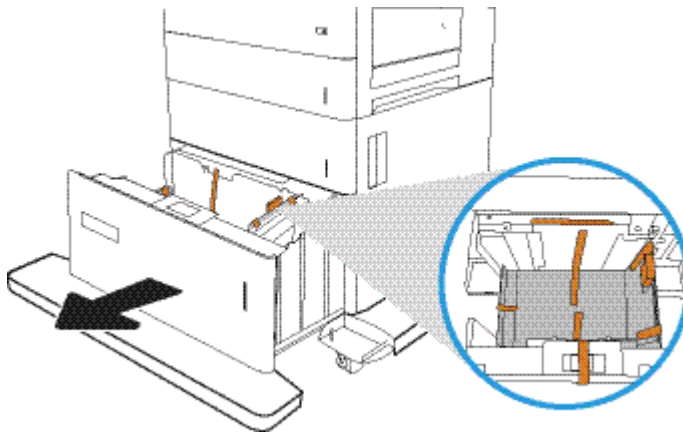
9. Install the paper tray.

Figure 5-41 Install the paper tray



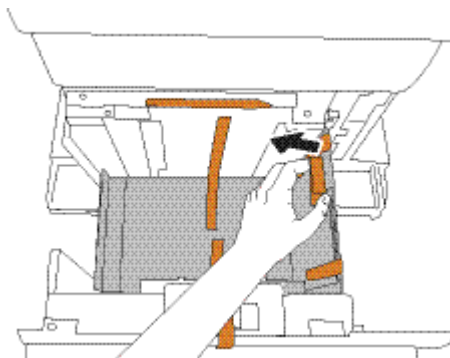
10. Open the lower paper tray and locate the shipping material inside of the tray.

Figure 5-42 Open the lower paper tray



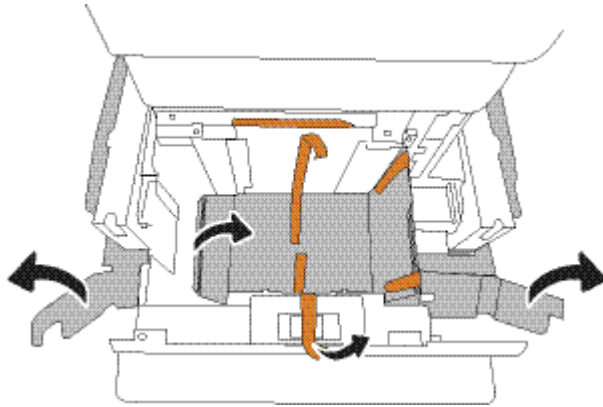
11. Remove the shipping lock inside the tray on the upper right side.

Figure 5-43 Remove the shipping lock



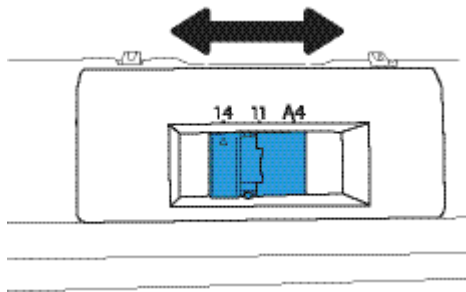
12. Remove all of the packing material inside the tray.

Figure 5-44 Remove all of the packing material



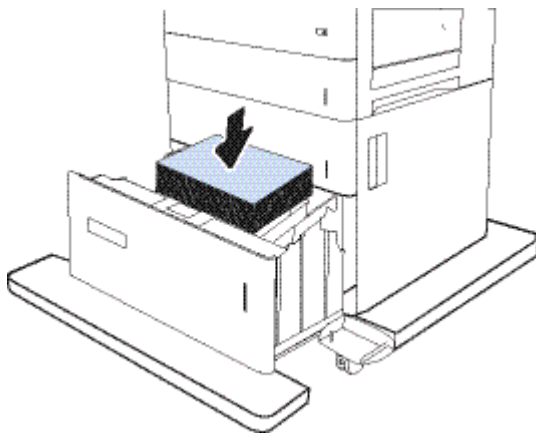
13. Move the size-selector lever to correspond with the size of paper that will be installed in the tray.

Figure 5-45 Move the size-selector lever



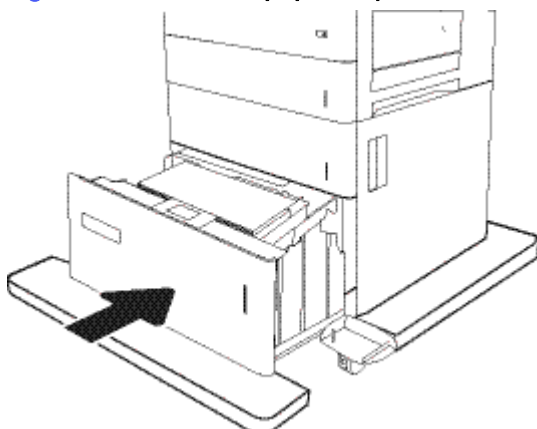
14. Load paper into the tray.

Figure 5-46 Load paper into the tray



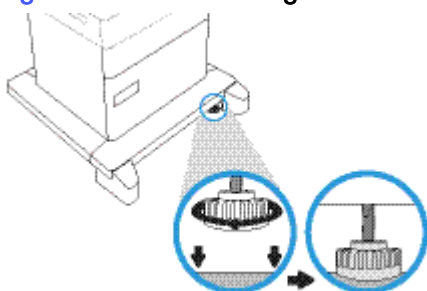
15. Close the paper tray.

Figure 5-47 Close the paper tray



16. Lower the legs on the paper feeder so that they rest securely on the floor.

Figure 5-48 Lower the legs




Install accessory: Jetdirect USB wireless print server

Learn how to install the Jetdirect USB wireless print server.


Mean time to repair: 5 minutes

Service level: Basic

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off.
- Disconnect the power cable.

 **WARNING!** To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-5 Part information

Part number	Part description
J8031-61001	Jetdirect USB wireless print server

Required tools

- No special tools are needed to remove or install this assembly.

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Verify that the host computer can successfully access the printer through the network.

1. Remove the accessory from its package

Follow these steps to remove the accessory from its package.

1. Save all packaging for recycling.
2. For complete information about HP recycling programs, go to <http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>.

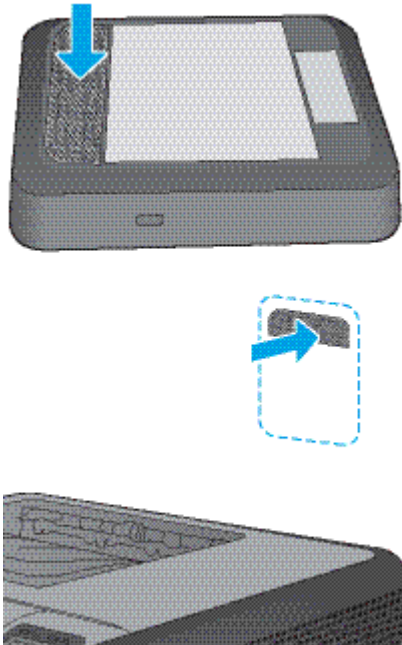
2. Install the Jetdirect USB wireless print server

Follow these steps to install the Jetdirect USB wireless print server.

1. If the print server will be mounted on the wall, do the following:

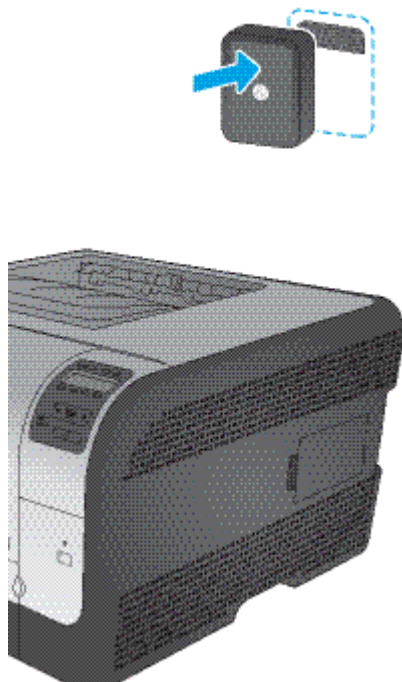
- a. Attach one of the fastener strips provided in the kit to the back of the print server. Attach the other fastener strip to a smooth, non-metal wall near the printer.

Figure 5-49 Attach fastener strips



- b. Attach the print server to the fastener strip on the wall.

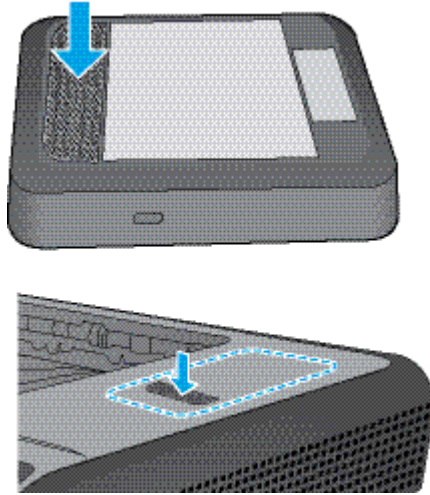
Figure 5-50 Attach the print server to the wall



2. If the print server will be mounted on the printer, do the following:

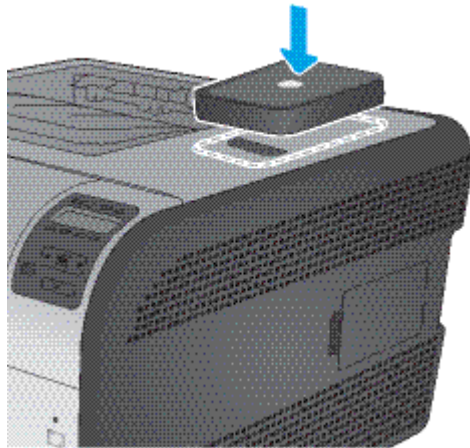
- a. Attach one of the fastener strips provided in the kit to the back of the print server. Attach the second fastener strip to the location on the printer where the print server will be installed.

Figure 5-51 Attach fastener strips



- b. Attach the print server to the fastener strip on the printer.

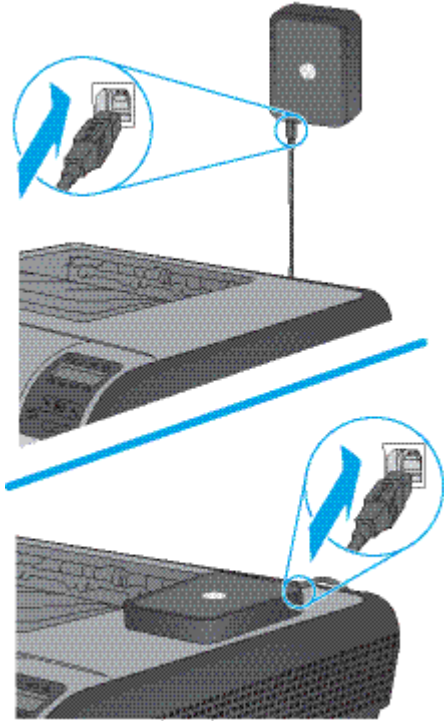
Figure 5-52 Attach the print server to the printer



3. If the print server is connected only to the wireless network, do the following:

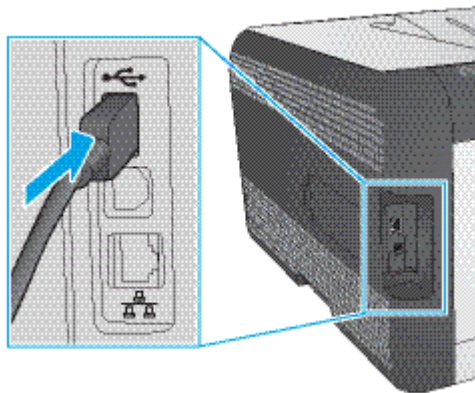
- a. Attach the USB Type-B (rounded) end of the cable provided in the kit to the USB port on the back of the printer server.

Figure 5-53 Attach the USB cable to the print server



- b. Attach the USB Type-A (flat) end of the cable to the USB accessory port on the printer.

Figure 5-54 Attach the USB cable to the printer



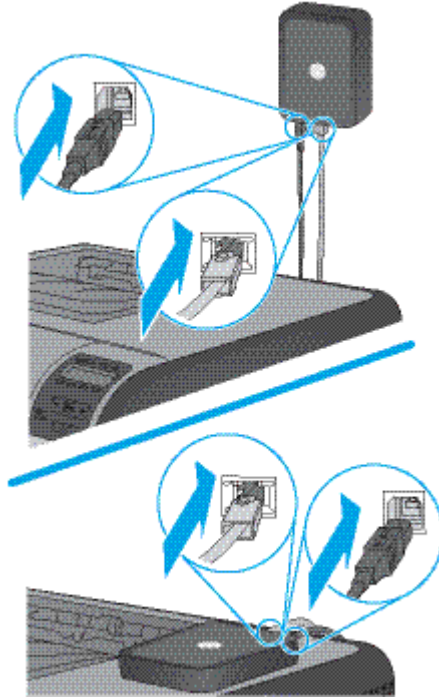
4. If the print server is connected to both the wireless network and the wired network, do the following:



NOTE: A wired network connection enables connection to a wireless network/LAN and to one or more wired networks/LANs.

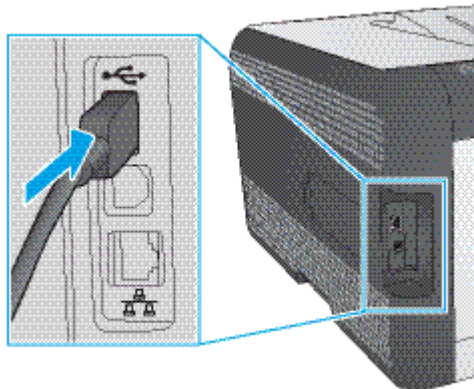
- a. Attach the USB Type-B (rounded) end of the cable provided in the kit to the USB port on the back of the printer server. Also attach an Ethernet cable (not provided in the kit) to the Ethernet port on the back of the server.

Figure 5-55 Attach the USB and network cables to the print server



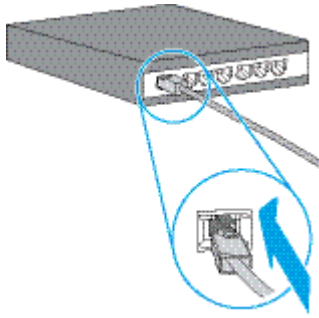
- b. Attach the USB Type-A (flat) end of the cable to the USB accessory port on the printer.

Figure 5-56 Attach the USB cable to the printer



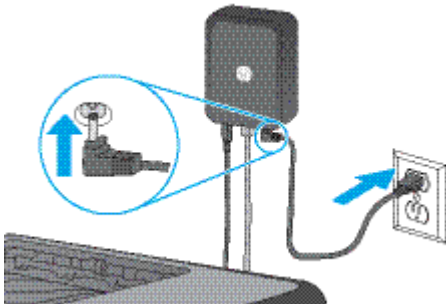
- c. Attach other end of the Ethernet cable to the network.

Figure 5-57 Attach the Ethernet cable to the network



5. Attach the power supply cable provided in the kit to the print server, and then connect the power cord to the power source.

Figure 5-58 Connect the power cable




Install accessory: Jetdirect USB wireless print server with NFC

Learn how to install the Jetdirect USB wireless print server with NFC.


Mean time to repair: 5 minutes

Service level: Basic

-  **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off.
- Disconnect the power cable.

-  **WARNING!** To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-6 Part information

Part number	Part description
J8030-61001	Jetdirect USB wireless print server with NFC

Required tools

- Small, flat-blade screwdriver

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Verify that the host computer can successfully access the printer through the network and that the NFC functionality works correctly.

1. Remove the accessory from its package

Follow these steps to remove the accessory from its package.

1. Save all packaging for recycling.
2. For complete information about HP recycling programs, go to <http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>.

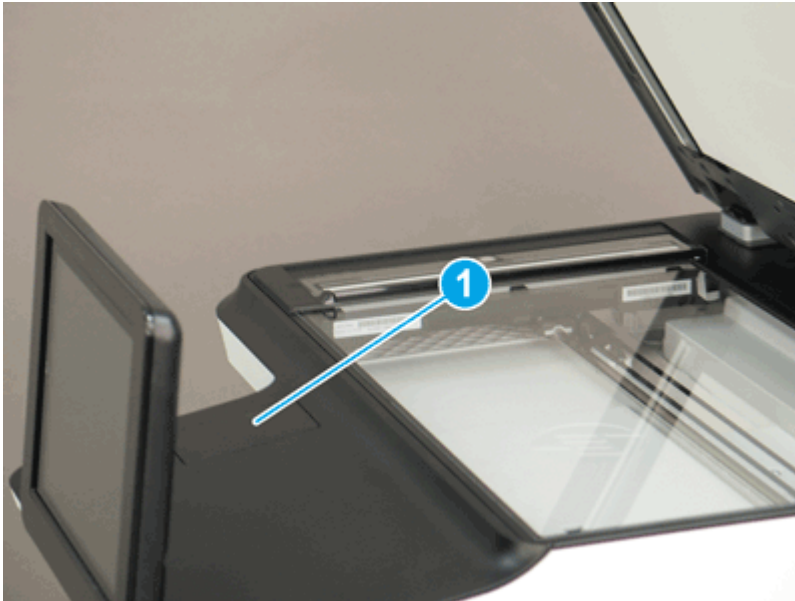
2. Install the Jetdirect USB wireless print server with NFC

Follow these steps to install the Jetdirect USB wireless print server with NFC.

1. To install the print server in the hardware integration pocket (HIP), do the following:

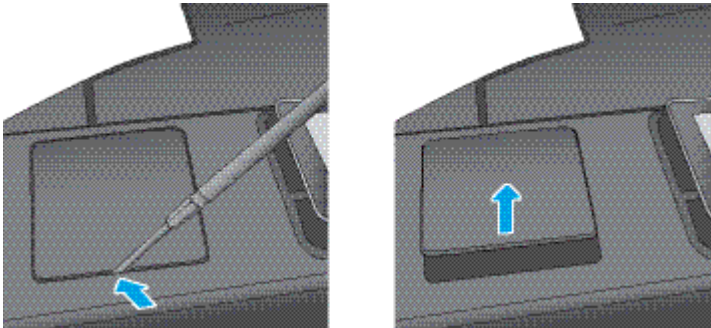
- a. Locate the hardware integration pocket (HIP) (callout 1).

Figure 5-59 Locate the HIP



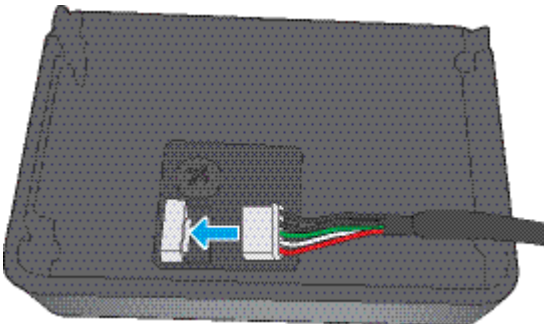
- b. Using a small, flat-blade screwdriver along either short edge, gently pry the HIP cover off.

Figure 5-60 Remove the HIP cover



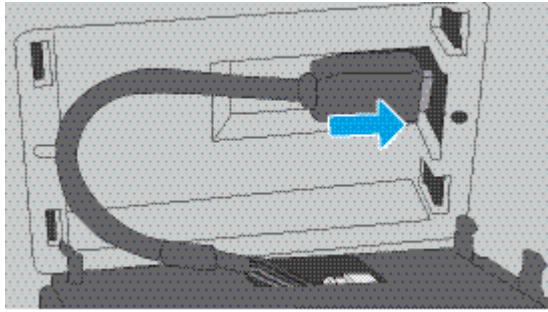
- c. Connect the white connector on the short USB cable provided in the kit to the print server.

Figure 5-61 Connect the USB cable to the print server



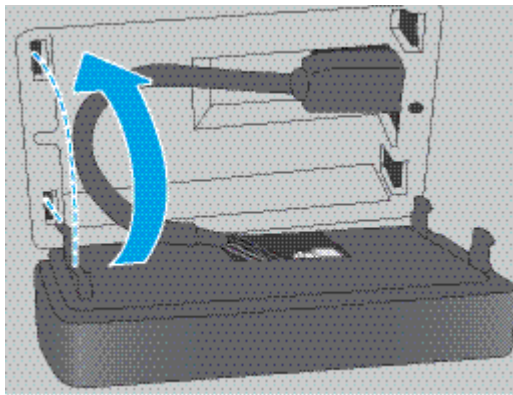
- d. Connect the USB connector on the short USB cable to the socket in the printer's HIP.

Figure 5-62 Connect the USB cable to the printer



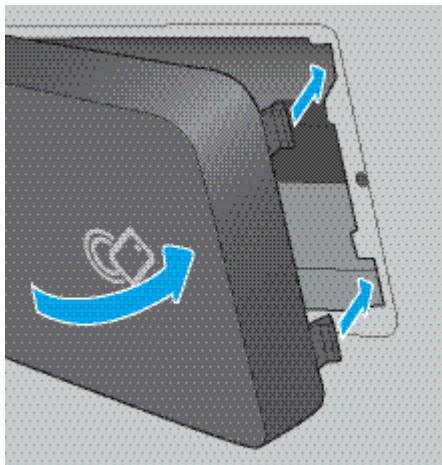
- e. Insert the hook-shaped clips of print server into the HIP recess.

Figure 5-63 Install the clips



- f. Gently push the print server onto the rounded clips so that it is held securely in place in the HIP.

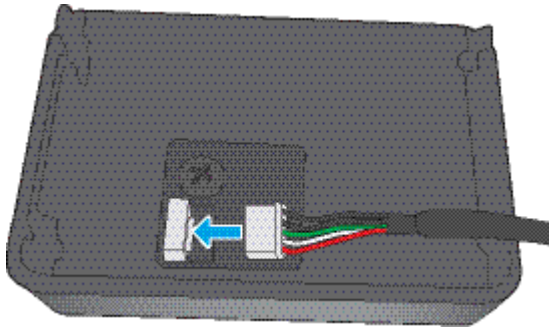
Figure 5-64 Install the print server



- 2. To install the print server on the outside of the printer, do the following:

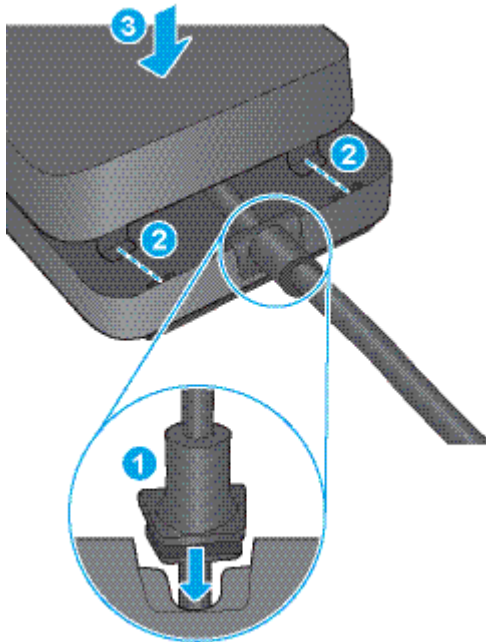
- a. Connect the white connector on the long USB cable provided in the kit to the print server.

Figure 5-65 Connect the USB cable to the print server



- b. Push the long USB cable into the slot on the accessory cover provided in the kit out (callout 1), and then insert the hook-shaped clips of the print server into the accessory cover (callout 2). Press down to firmly attach the print server to the accessory cover (callout 3).

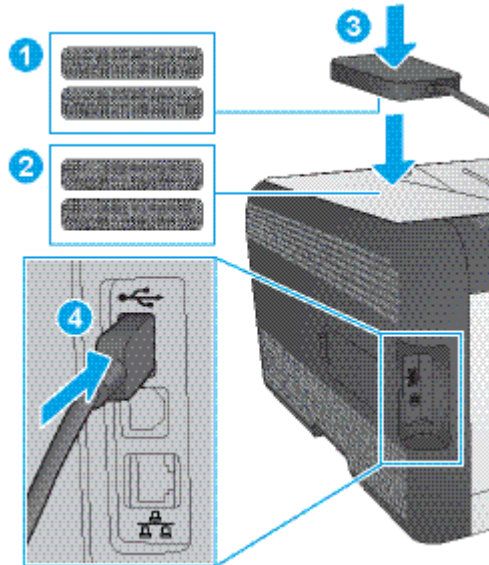
Figure 5-66 Attach the accessory cover



- c. Attach the fastener strips provided in the kit to the bottom of the print server (callout 1). Remove the backing paper in order to attach the bottom set of fastener strips to the top of the

printer (callout 2). Place the print server on the printer (callout 3). Connect the USB connector on the long USB cable to the USB accessory port on the printer (callout 4).

Figure 5-67 Attach the print server to the printer




Install accessory: Trusted platform module (TPM)

Learn how to install the trusted platform module (TPM).

 [View a video of how to remove and replace the TPM.](#)


Mean time to repair: 5 minutes

Service level: Basic

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off.
- Disconnect the power cable.

 **WARNING!** To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-7 Part information

Part numbers	Part description
F5S62-61001	Trusted platform module (TPM)

Required tools

- No special tools are needed to remove or install this assembly.

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Make sure that the printer initializes to a **Ready** state.

Print a configuration page to make sure that the printer is functioning correctly.

1. Remove the formatter cover

Follow these steps to remove the formatter cover.

- Unscrew two thumbscrews (callout 1), and then slide the formatter cover (callout 2) away from the printer to remove it.


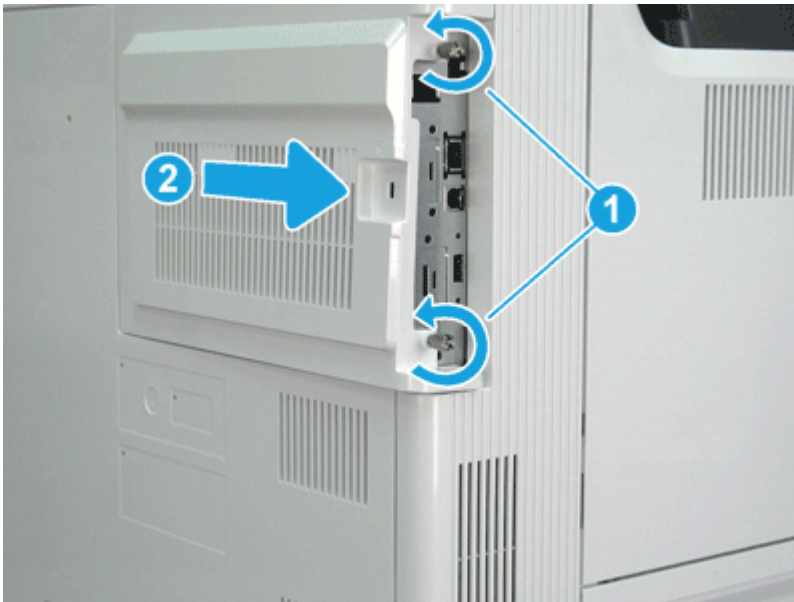
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-68 Remove the formatter cover



2. Remove the TPM

Follow these steps to remove the TPM.

 **CAUTION:**

Figure 5-69 ESD symbol



ESD sensitive part.

The TPM is available as an accessory for the M652/M653/M681/M682 models, and it is included as a standard component for the E65150/E65160/E67650/E67660 models. If your printer does not have a previously installed TPM, proceed to the next section.

- Locate the TPM card on the formatter, and then pull it straight off of the formatter to remove it.

Figure 5-70 Remove the TPM



3. Remove the accessory from its package

Follow these steps to remove the accessory from its package.

1. Save all packaging for recycling.
2. For complete information about HP recycling programs, go to <http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>.

4. Install the TPM

Follow these steps to install the TPM.

 **CAUTION:**  ESD sensitive part.

1. Note the location on the formatter where the TPM will be installed.

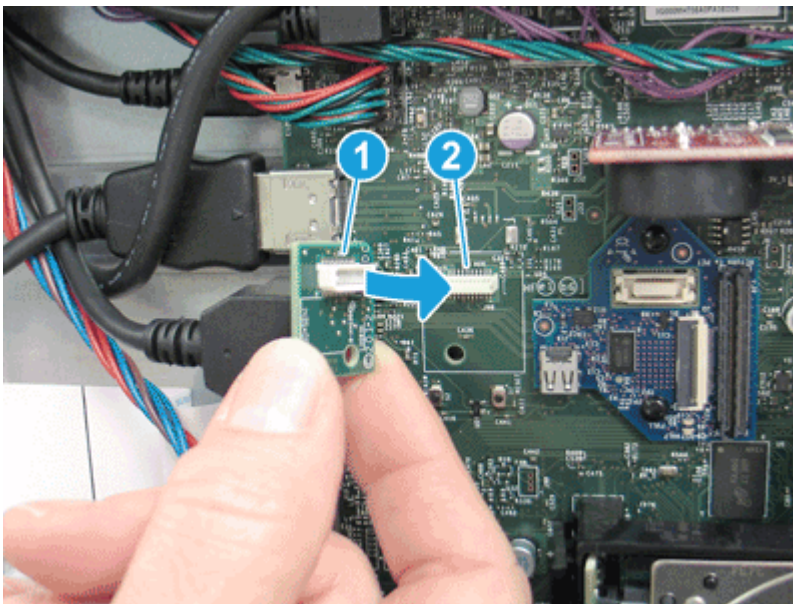
Figure 5-71 TPM location



2. Align the connector on the TPM (callout 1) with the connector on the formatter (callout 2).

 **NOTE:** The TPM can only be installed in one direction on the formatter.

Figure 5-72 Align the connectors



3. Push the TPM onto the formatter to install it.


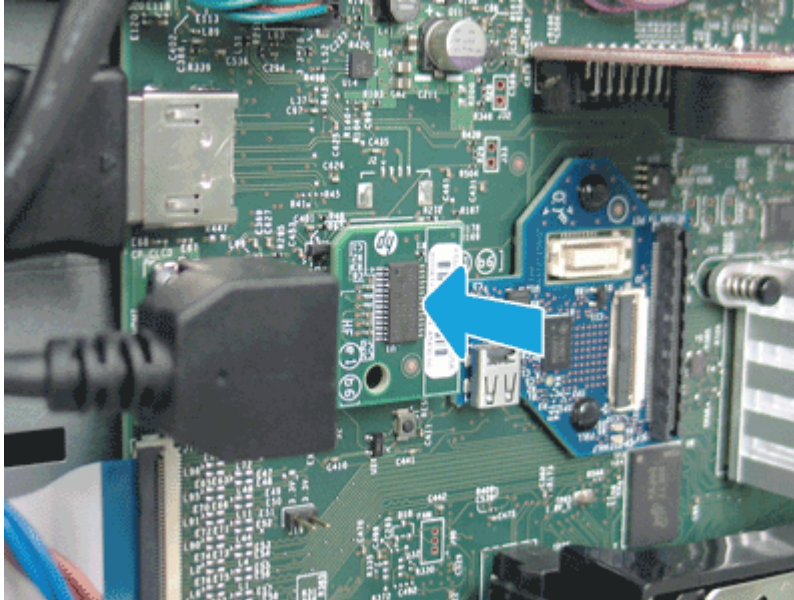
 **IMPORTANT:** Press on the top part of the TPM to ensure it is fully seated in the connector.

Figure 5-73 Install the TPM

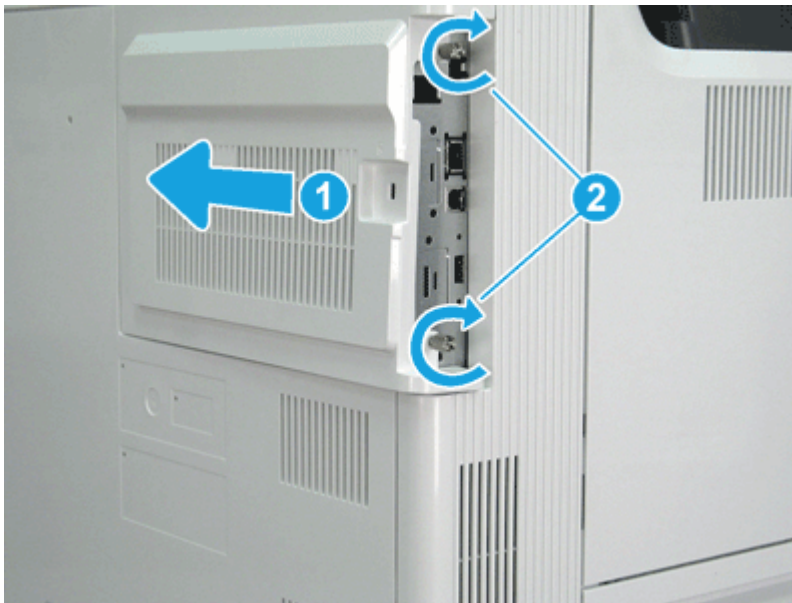


5. Install the formatter cover

Follow these steps to install the formatter cover.

- Slide the formatter cover (callout 1) toward the printer to install it, and then tighten two thumbscrews (callout 2).

Figure 5-74 Install the formatter cover



Install accessory: Internal USB ports


Learn how to install the internal USB ports.



[View a video of how to remove and replace the internal USB ports.](#)


Mean time to repair: 5 minutes

Service level: Basic

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Disconnect the power cable.

 **WARNING!** To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-8 Part information

Part number	Part description
B5L28-67902	Two internal USB ports

Required tools

- No special tools are needed to remove or install this assembly.

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Make sure that the printer initializes to a **Ready** state.

Print a configuration page to make sure that the printer is functioning correctly.

1. Remove the formatter cover

Follow these steps to remove the formatter cover.

- Unscrew two thumbscrews (callout 1), and then slide the formatter cover (callout 2) away from the printer to remove it.


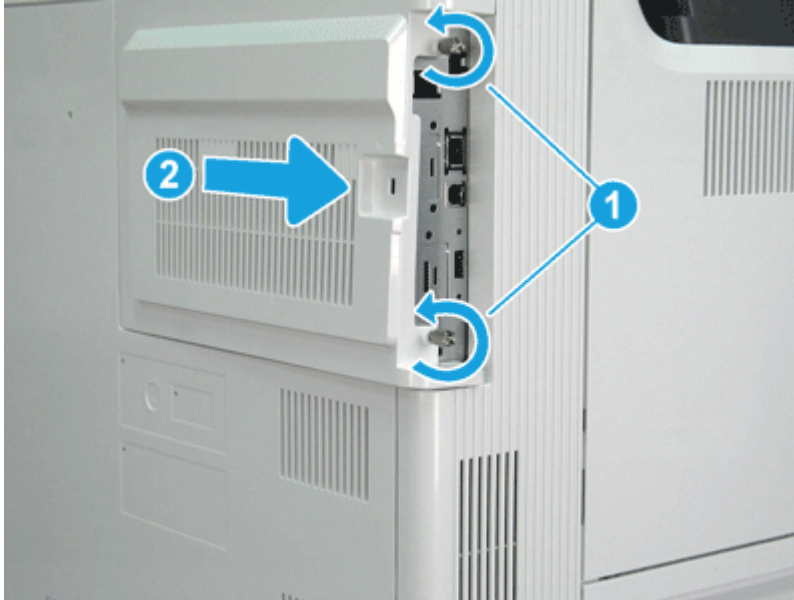
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-75 Remove the formatter cover



2. Remove the accessory from its package


Follow these steps to remove the accessory from its package.

1. Save all packaging for recycling.
2. For complete information about HP recycling programs, go to <http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>.

3. Install the internal USB ports

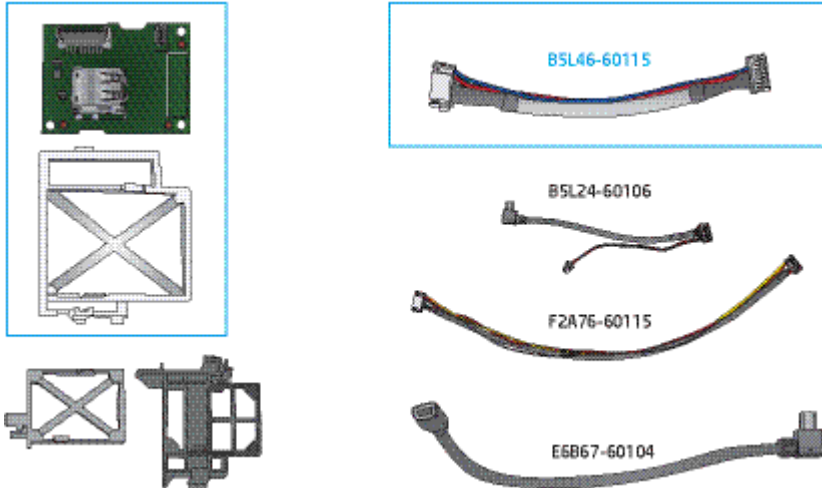
Follow these steps to install the internal USB ports.

 **CAUTION:**  ESD sensitive part.

 **NOTE:** The M682 is shown in the figures below. The procedure is also correct for the M681 and M652/M653 models.

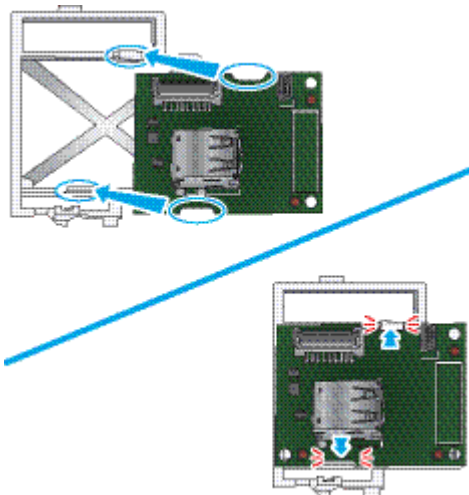
1. Remove the following items from the accessory kit:
 - The small PCA board
 - The PCA mounting cradle
 - The shortest single cable (B5L46-60115)

Figure 5-76 Select accessory kit items



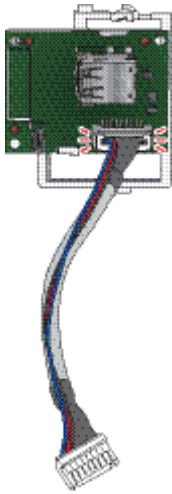
2. Do the following:
 - a. Hold the small PCA and the PCA mounting cradle in the correct orientation.
 - b. Align the top and bottom cutouts of the PCA on the tabs of the PCA mounting cradle.
 - c. Secure the small PCA on the PCA mounting cradle until it snaps in place.

Figure 5-77 Mount the PCA on the PCA mounting cradle and snap it in place



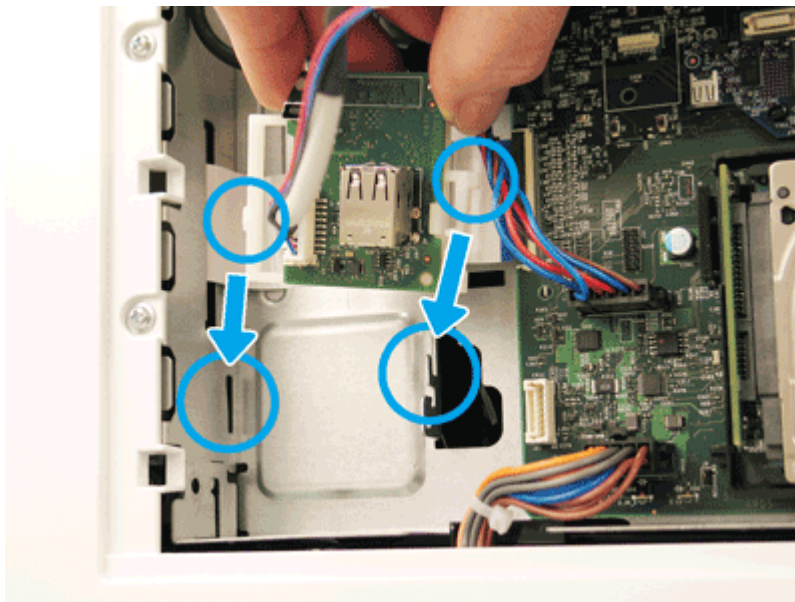
3. Connect the cable to the small PCA.

Figure 5-78 Connect the cable



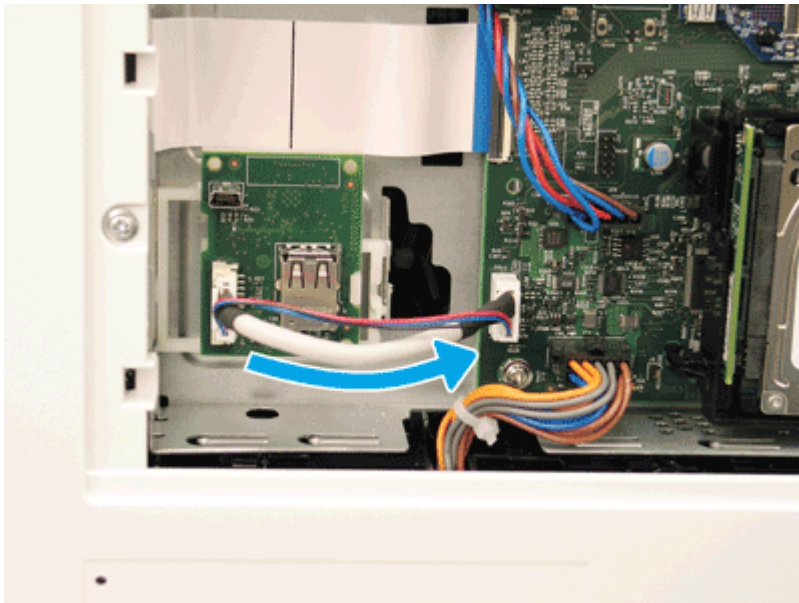
4. Do the following:
 - a. Hold the small PCA attached to the PCA mounting cradle in the correct orientation.
 - b. On the left side of the formatter case area, locate the sheet metal hooks.
 - c. Install the assembly so that the tabs on the PCA mounting cradle slide into the sheet metal hooks.

Figure 5-79 Mount the assembly on the sheet metal hooks



5. Connect the cable to the formatter.

Figure 5-80 Connect the cable

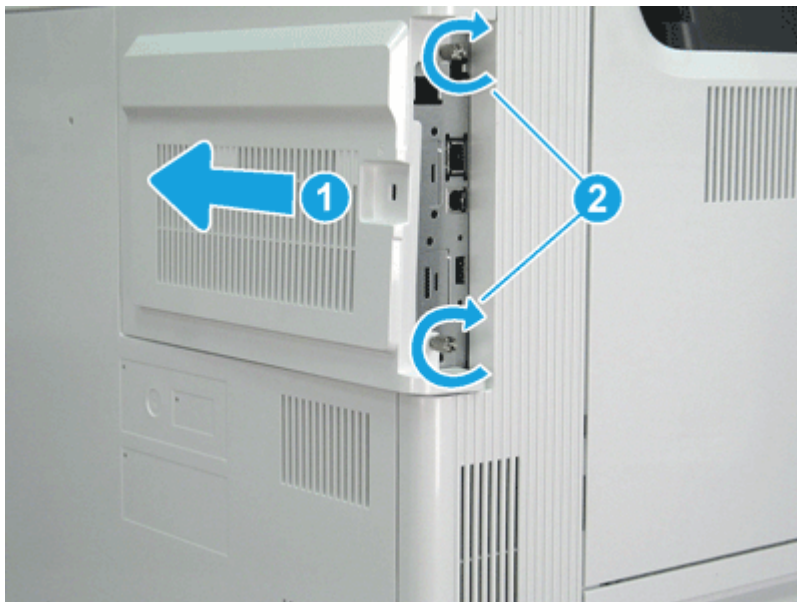


4. Install the formatter cover

Follow these steps to install the formatter cover.

- Slide the formatter cover (callout 1) toward the printer to install it, and then tighten two thumbscrews (callout 2).

Figure 5-81 Install the formatter cover



Install accessory: Foreign interface harness (FIH)


Learn how to install the foreign interface harness (FIH).



[View a video of how to remove and replace the foreign interface harness \(FIH\).](#)


Mean time to repair: 5 minutes

Service level: Basic

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Disconnect the power cable.

 **WARNING!** To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-9 Part information

Part number	Part description
B5L31-67902	Foreign interface harness (FIH)

Required tools

- No special tools are needed to remove or install this assembly.

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

No post service test is available for this assembly.

1. Remove the accessory from its package

Follow these steps to remove the accessory from its package.

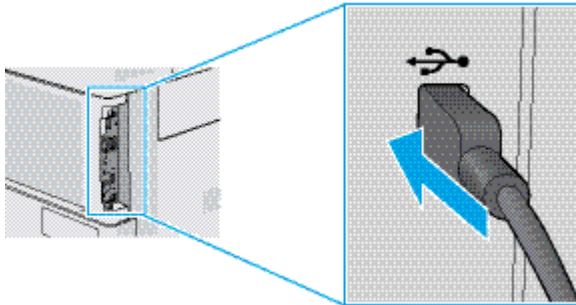
1. Save all packaging for recycling.
2. For complete information about HP recycling programs, go to <http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>.

2. Install the foreign interface harness (FIH)

Follow these steps to install the foreign interface harness (FIH).


- Locate the USB port on the printer, and then plug the USB end of the FIH cable into the printer USB port.

Figure 5-82 Plug the FIH cable into the printer USB port



Removal and replacement: Staple cartridge and carrier


Learn how to remove and replace the staple cartridge and carrier.

 **NOTE:** The process demonstrated in the video below also applies to the HP LaserJet Enterprise MFP M631, M632, M633 printers.

 [View a video of how to remove and replace the staple cartridge and carrier.](#)


Mean time to repair: 5 minutes

Service level: Basic

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Disconnect the power cable.


 **WARNING!** To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

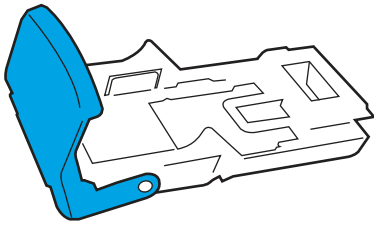
Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

 **NOTE:** The staple carrier is refillable. Do not discard the staple carrier.

Table 5-10 Part information

Part numbers	Part description
J8J96A	Staple cartridge refill
J7Z09-67933	Kit-Staple Cartridge In Cave SS

 **NOTE:** Do not dispose of the staple carrier/sled. The sled is not an orderable or replaceable part. If the sled is disposed of, the entire staple cartridge will need to be replaced.



Required tools

- No special tools are needed to remove or install this assembly.

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.


Post service test

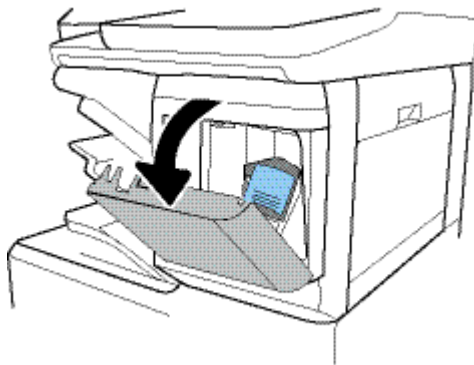
Print a multiple page document and request that it is stapled. Verify that the document is correctly stapled.

1. Remove the staple cartridge and carrier

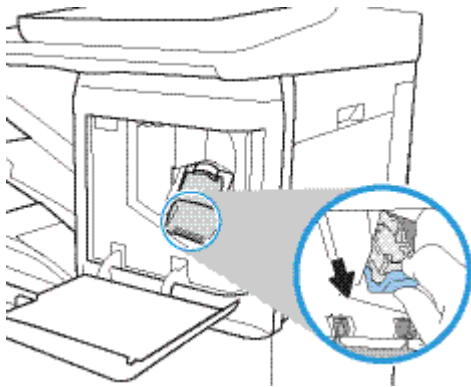
Follow these steps to remove the staple cartridge and carrier.

1. Open the staple-cartridge door.

 **NOTE:** Opening the staple-cartridge door disables the stapler.



2. Grasp the colored tab on the staple cartridge, and then pull the staple cartridge straight out.



3. Lift two tabs on the staple cartridge, and then lift up to remove the empty staple cartridge from the staple cartridge carriage assembly.


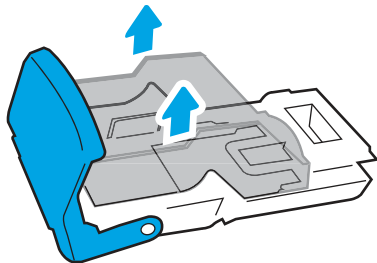

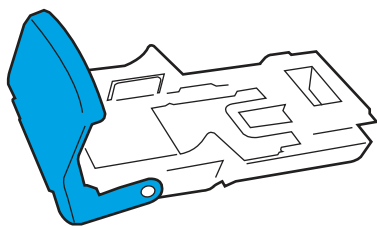
 **NOTE:** Do not discard the staple carrier.

Figure 5-83 Release the staple cartridge refill




 **IMPORTANT:** Do not dispose of the staple carrier/sled. The sled is not an orderable or replaceable part.



2. Unpack the replacement assembly


Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

 **NOTE:** HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.

⚠ CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

✍ IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

✍ NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

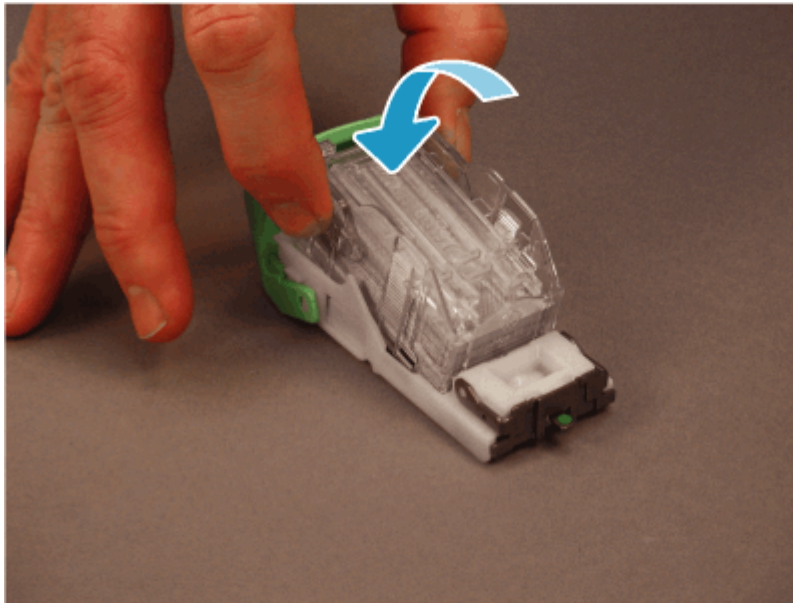
✍ NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

3. Install the staple cartridge

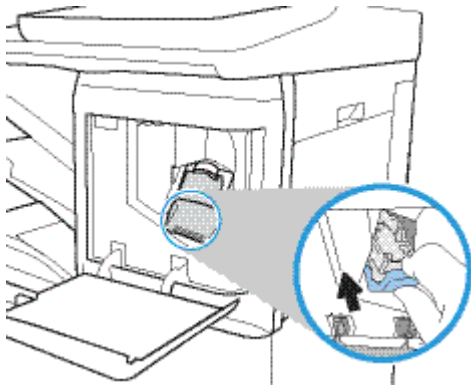
Follow these steps to install the staple cartridge.

1. Insert the new staple cartridge into the staple cartridge carriage.

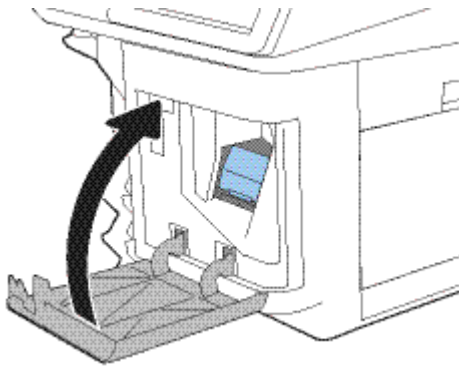
Figure 5-84 Install the staple cartridge refill



2. Insert the staple cartridge into the stapler and press the colored handle toward the printer until it snaps into place.



3. Close the staple-cartridge door.




Removal and replacement: embedded MultiMedia Card (eMMC)

Learn how to remove and replace the embedded MultiMedia Card (eMMC).

 [View a video of how to remove and replace the eMMC.](#)


Mean time to repair: 5 minutes

Service level: Basic

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Disconnect the power cable.

 **WARNING!** To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-11 Part information

Part number	Part description
B5L32-60003	8 GB embedded MultiMedia Card (eMMC)

Required tools

- No special tools are needed to remove or install this assembly.

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Make sure that the printer initializes to a **Ready** state.

Print a configuration page to make sure that the printer is functioning correctly.

1. Remove the formatter cover

Follow these steps to remove the formatter cover.

- Unscrew two thumbscrews (callout 1), and then slide the formatter cover (callout 2) away from the printer to remove it.


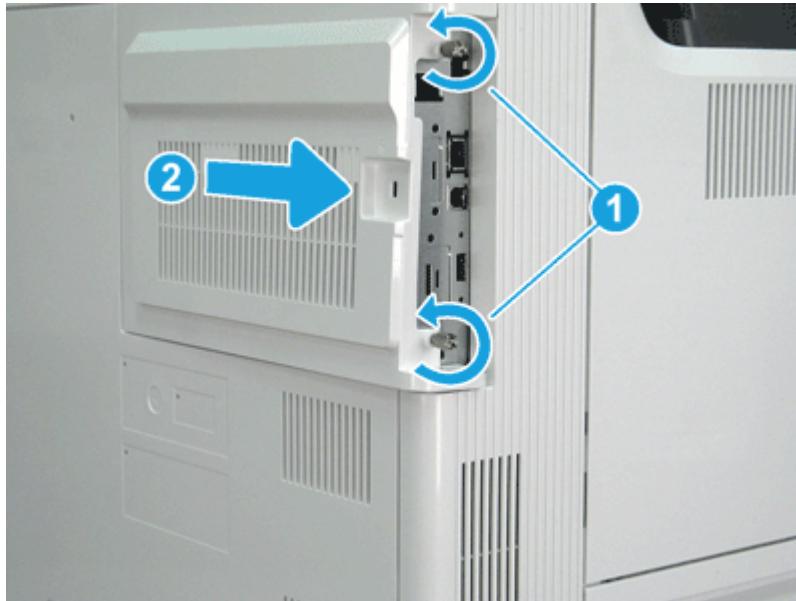
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-85 Remove the formatter cover



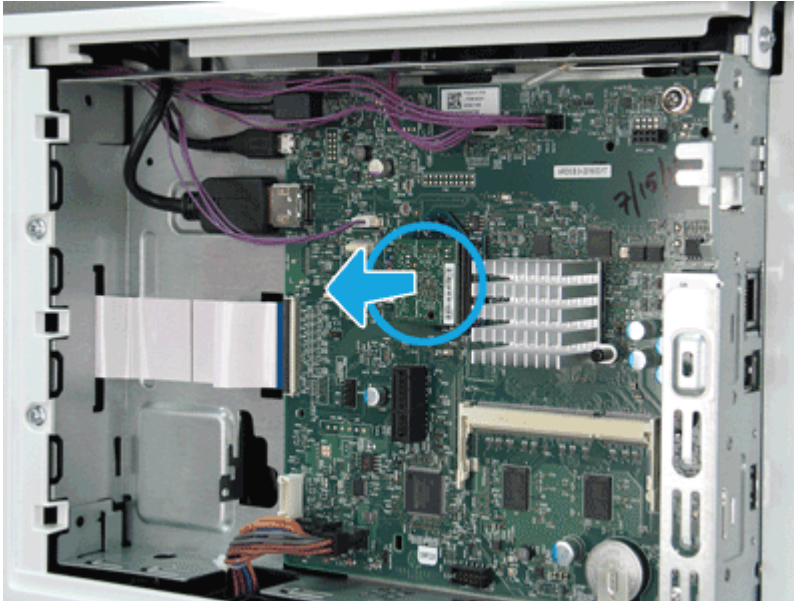
2. Remove the embedded MultiMedia Card (eMMC)

Follow these steps to remove the embedded MultiMedia Card (eMMC).

⚠ **CAUTION:**  ESD sensitive part.

- Locate the eMMC component on the formatter, and then pull it straight off of the formatter to remove it.


Figure 5-86 Remove the eMMC



3. Unpack the replacement assembly


Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.


 **NOTE:** HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>


2. Unpack the replacement part from the packaging.

⚠ **CAUTION:**  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

 **IMPORTANT:** Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

 **NOTE:** If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

 **NOTE:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

4. Install the eMMC

Follow these steps to install the eMMC.

 **CAUTION:**  ESD sensitive part.

1. Align the connector on the replacement eMMC (callout 1) with the connector on the formatter (callout 2).


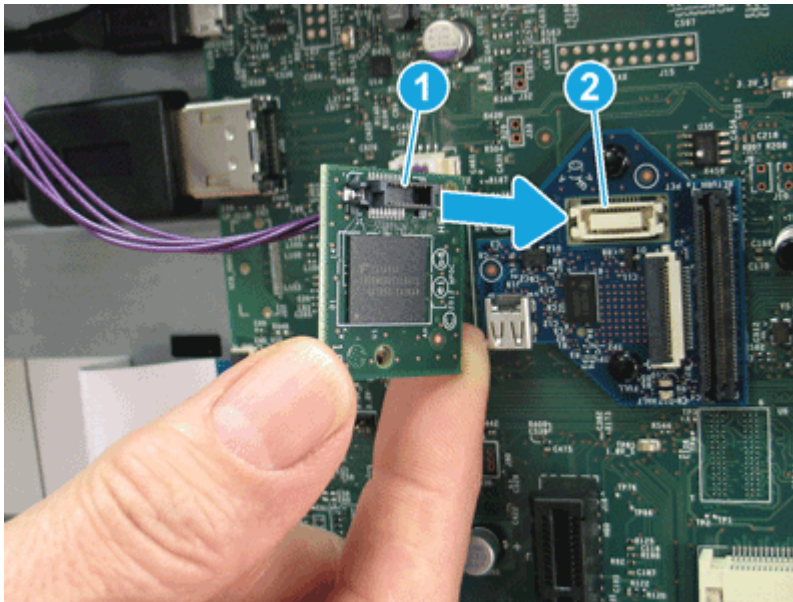
 **NOTE:** The eMMC can only be installed in one direction on the formatter.

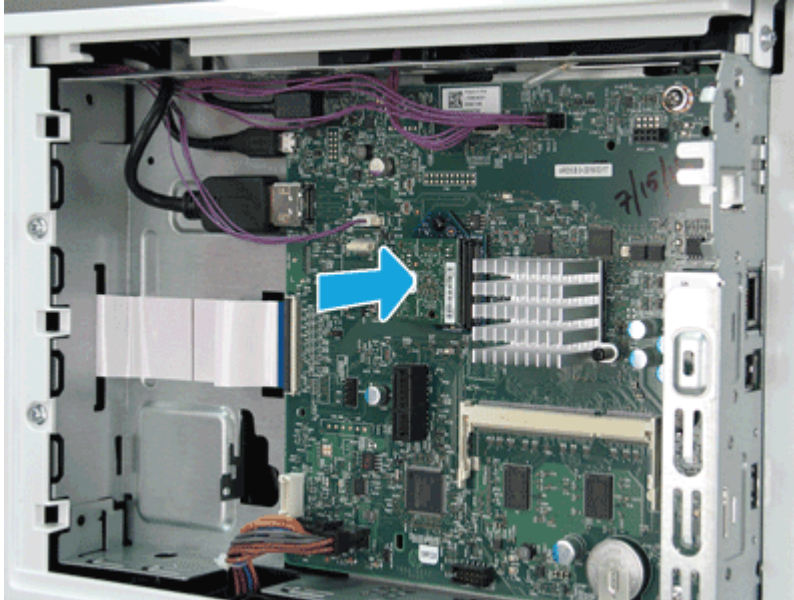
Figure 5-87 Align the connectors



2. Push the eMMC onto the formatter to install it.

 **IMPORTANT:** Press on the top part of the eMMC to ensure it is fully seated in the connector.

Figure 5-88 Install the eMMC

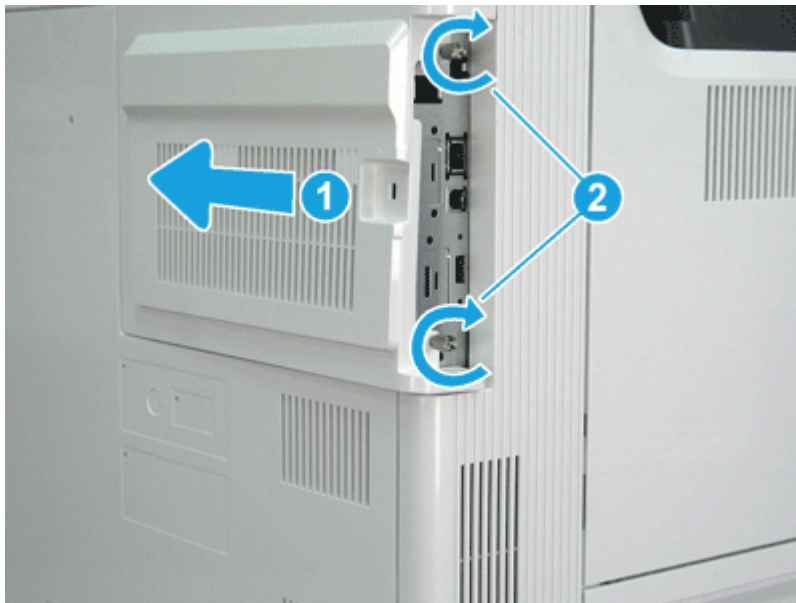


5. Install the formatter cover

Follow these steps to install the formatter cover.


- Slide the formatter cover (callout 1) toward the printer to install it, and then tighten two thumbscrews (callout 2).

Figure 5-89 Install the formatter cover



6. Reinstall the printer firmware

Follow these steps to reinstall the printer firmware.

 **NOTE:** If this installation is a replacement HDD, use the following steps to reinstall the firmware.

To view installation instructions, go to www.hp.com/go/futuresmart. Select **Upgrade now**, and then select **How to perform a firmware update**.

1. Go to www.hp.com/go/futuresmart.
2. Select **Upgrade now**.
3. Find your Enterprise printer model.
4. Select the link to open the firmware download page.
5. Select **OS Independent** from the list of operating systems.
6. Under the **Firmware** section, find the file for multiple operating systems.
7. Select **Download**.

 **NOTE:** To view installation instructions, go to www.hp.com/go/futuresmart. Select **Upgrade now**, and then select **How to perform a firmware update**.


Removal and replacement: Hard disk drive (HDD)

Learn how to remove and replace the hard disk drive (HDD).

 [View a video of how to remove and replace the HDD.](#)


Mean time to repair: 5 minutes

Service level: Basic

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Disconnect the power cable.

 **WARNING!** To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-12 Part information

Part numbers	Part description
5851-6712	320 GB Hard Disk Drive
B5L29-67903	500 GB Secure Hard Disk Drive

Required tools

- No special tools are needed to remove or install this assembly.

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Make sure that the printer initializes to a **Ready** state.

Print a configuration page to make sure that the printer is functioning correctly.

1. Remove the formatter cover

Follow these steps to remove the formatter cover.

- Unscrew two thumbscrews (callout 1), and then slide the formatter cover (callout 2) away from the printer to remove it.


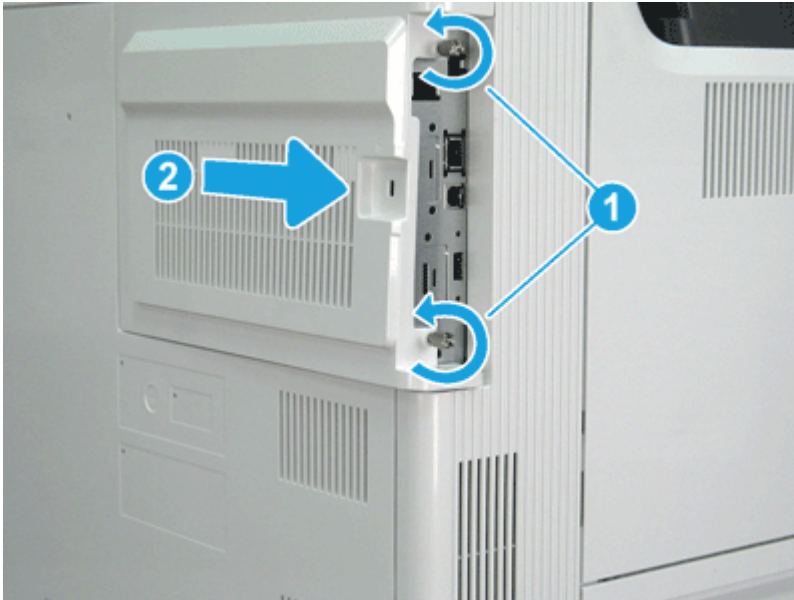
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-90 Remove the formatter cover

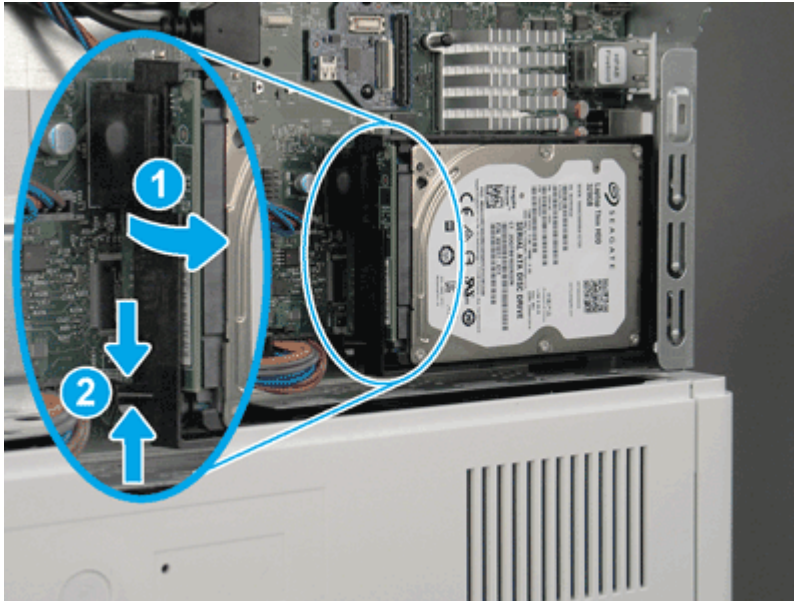


2. Remove the hard disk drive (HDD; M653dh/M681/M682/E67550/E67560/E67650/E67660)

Follow these steps to remove the hard disk drive (HDD; M653dh/M681/M682/E67550/E67560/E67650/E67660).

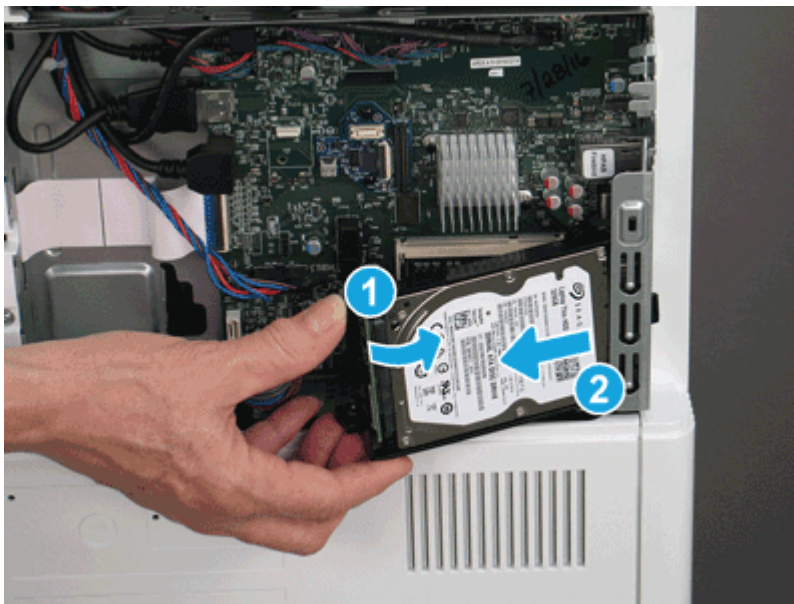
1. Release the locking connector (callout 1), and then pinch the retainer (callout 2) to release it.

Figure 5-91 Release the HDD



2. Rotate the connector end of the HDD out and away from the formatter (callout 1), and then slide it to the left (callout 2) to remove it.

Figure 5-92 Remove the HDD



3. Unpack the replacement assembly


Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.


2. Unpack the replacement part from the packaging.

CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT:  Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE:  If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

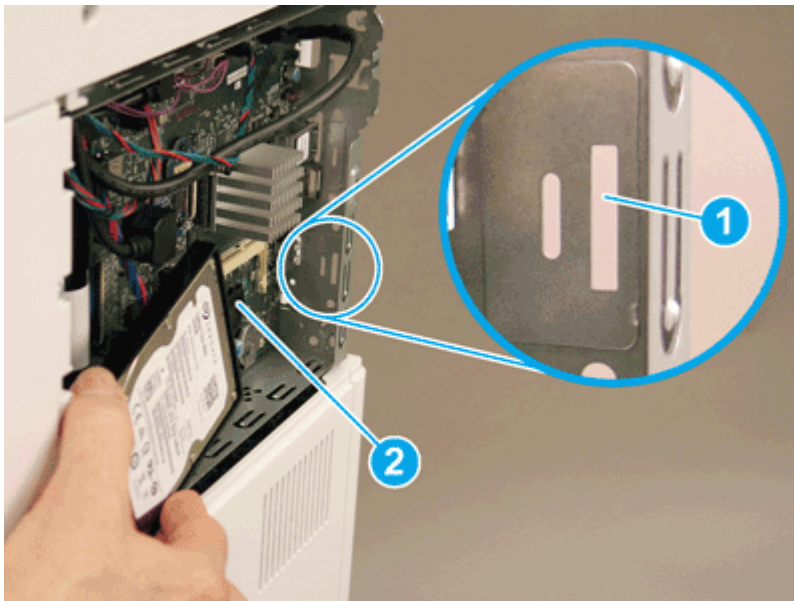
NOTE:  When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

4. Install the HDD

Follow these steps to install the HDD.

1. Before proceeding, take note of the location of the slot (callout 1) in the sheet-metal where the HDD cradle mounting tab (callout 2) must be installed.

Figure 5-93 Locate the slot in the sheet metal



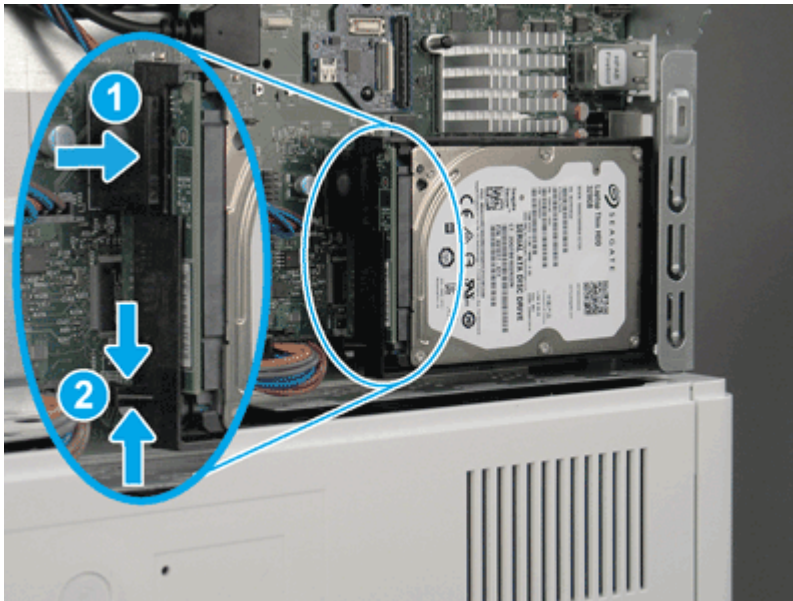
2. Insert the HDD cradle mounting tab in the slot in the sheet-metal, slide the HDD to the right (callout 1) to fully install the tab in the sheet metal, and then rotate the connector end (callout 2) of the HDD toward the formatter.

Figure 5-94 Install the HDD



3. Make sure that the locking connector (callout 1) latches and that the standoff (callout 2) engages with the slot in the formatter (it might be necessary to pinch the retainer to engage it with the slot).

Figure 5-95 Check the HDD connector

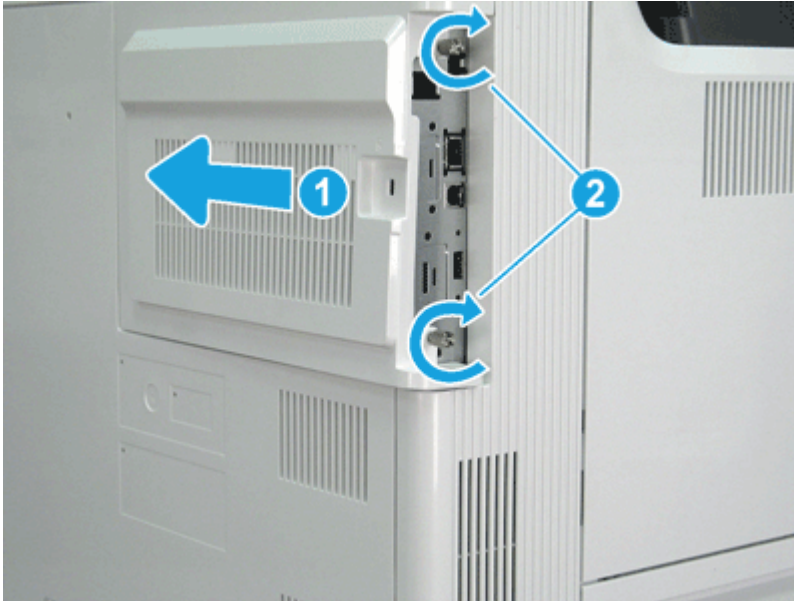


5. Install the formatter cover

Follow these steps to install the formatter cover.

- Slide the formatter cover (callout 1) toward the printer to install it, and then tighten two thumbscrews (callout 2).

Figure 5-96 Install the formatter cover



6. Reinstall the printer firmware

Follow these steps to reinstall the printer firmware.

 **NOTE:** If this installation is a replacement HDD, use the following steps to reinstall the firmware.

To view installation instructions, go to www.hp.com/go/futuresmart. Select **Upgrade now**, and then select **How to perform a firmware update**.

1. Go to www.hp.com/go/futuresmart.
2. Select **Upgrade now**.
3. Find your Enterprise printer model.
4. Select the link to open the firmware download page.
5. Select **OS Independent** from the list of operating systems.
6. Under the **Firmware** section, find the file for multiple operating systems.
7. Select **Download**.

 **NOTE:** To view installation instructions, go to www.hp.com/go/futuresmart. Select **Upgrade now**, and then select **How to perform a firmware update**.

Removal and replacement: Dual in-line memory module (DIMM)

Learn how to remove and replace the dual in-line memory module (DIMM).

 [View a video of how to remove and replace the DIMM.](#)

Mean time to repair: 5 minutes

Service level: Basic



IMPORTANT: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Disconnect the power cable.



WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-13 Part information

Part numbers	Part description
E5K48-67902	1 GB DDR3 SODIMM
E5K49-67901	2 GB DDR3 SODIMM

Required tools

- No special tools are needed to remove or install this assembly.

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Make sure that the printer initializes to a **Ready** state.

Print a configuration page to make sure that the printer is functioning correctly.

1. Remove the formatter cover

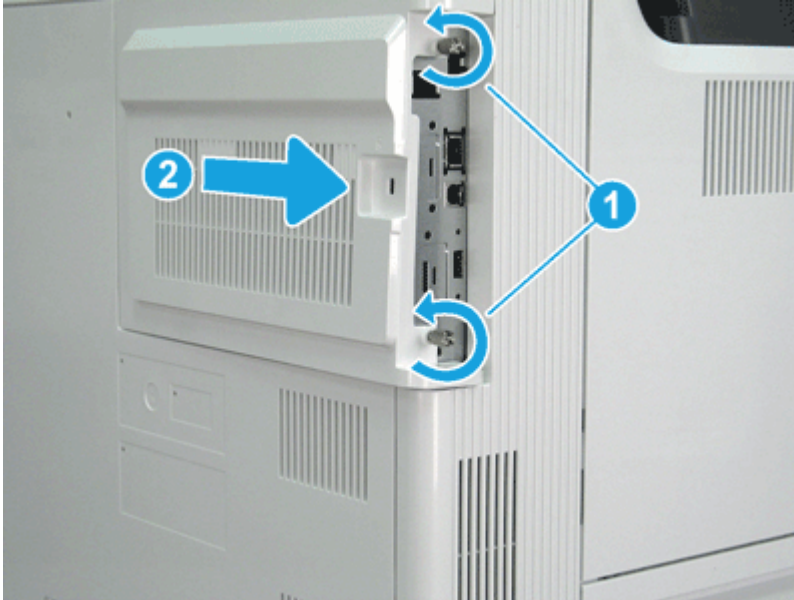
Follow these steps to remove the formatter cover.

- Unscrew two thumbscrews (callout 1), and then slide the formatter cover (callout 2) away from the printer to remove it.



TIP: Reverse the removal steps to install the assembly.

Figure 5-97 Remove the formatter cover

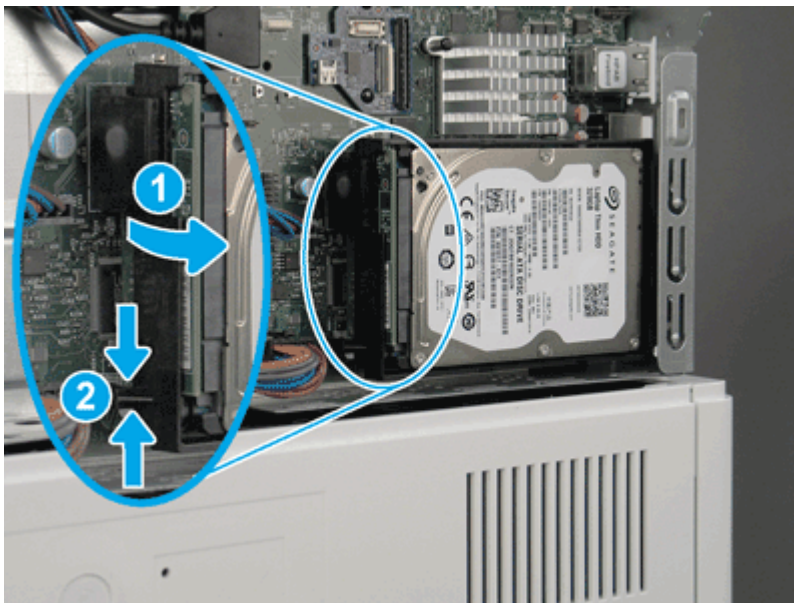


2. Remove the hard disk drive (HDD; M653dh/M681/M682/E67550/E67560/E67650/E67660)

Follow these steps to remove the hard disk drive (HDD; M653dh/M681/M682/E67550/E67560/E67650/E67660).

1. Release the locking connector (callout 1), and then pinch the retainer (callout 2) to release it.

Figure 5-98 Release the HDD



2. Rotate the connector end of the HDD out and away from the formatter (callout 1), and then slide it to the left (callout 2) to remove it.

Figure 5-99 Remove the HDD

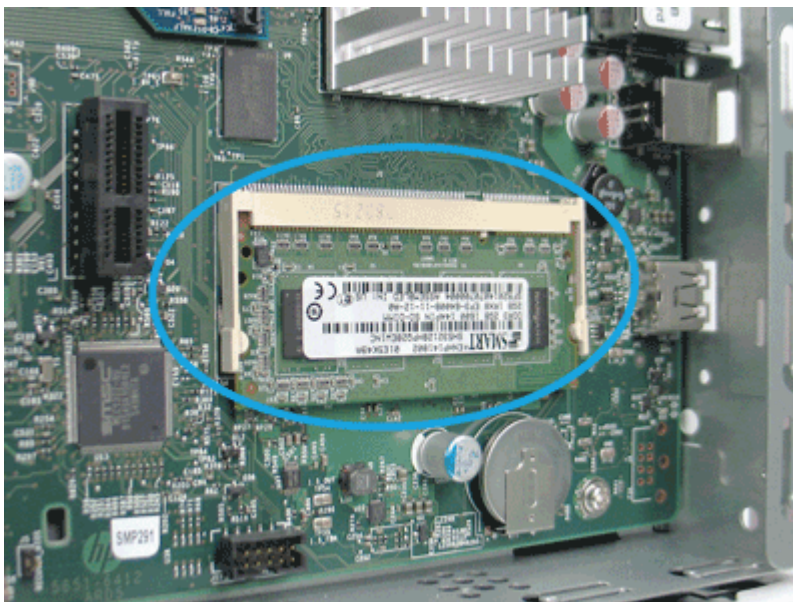


3. Remove the dual in-line memory module (DIMM)

Follow these steps to remove the dual in-line memory module (DIMM).

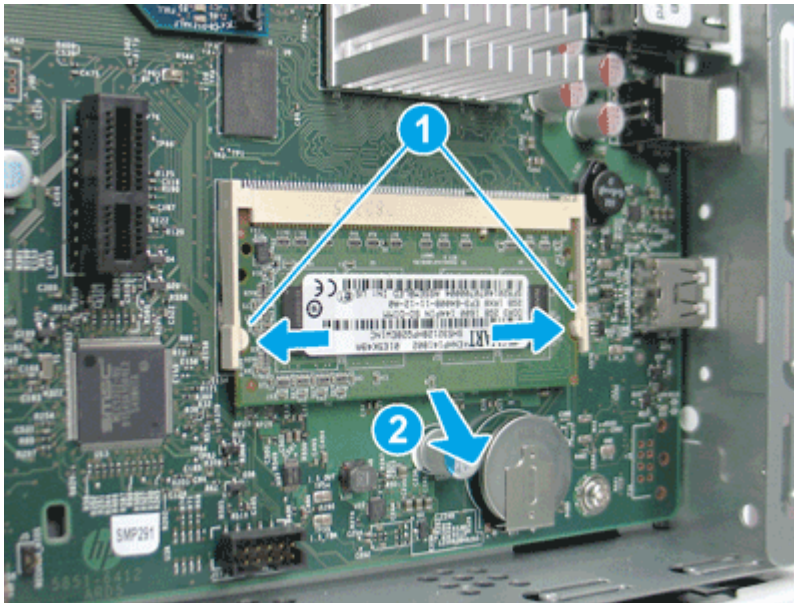
1. Locate the DIMM on the formatter.

Figure 5-100 Locate the DIMM



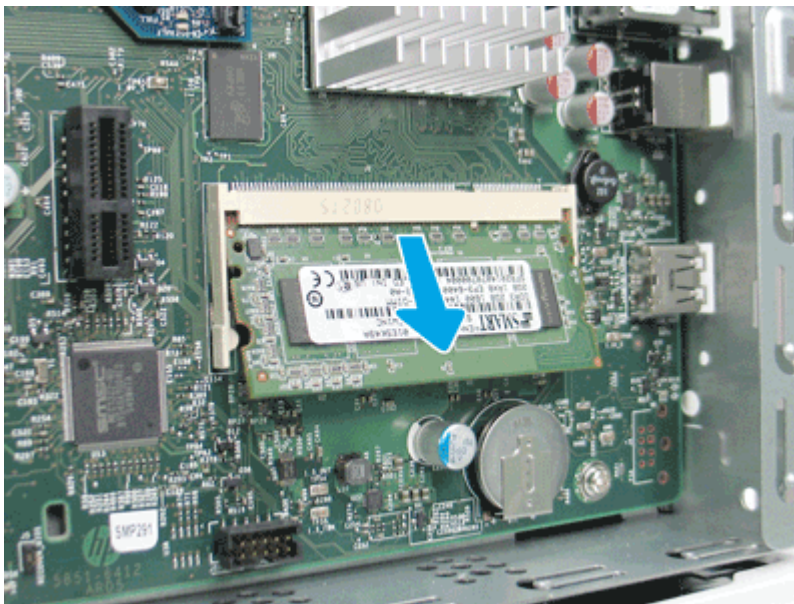
2. Release two locking arms (callout 1), and then allow the edge of the DIMM to rotate away from the holder (callout 2).

Figure 5-101 Release two locking arms



3. Pull the DIMM down and away from the holder to remove it.


Figure 5-102 Remove the DIMM




4. Unpack the replacement assembly


Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.

 **NOTE:** HP recommends responsible disposal of the defective part.


2. Unpack the replacement part from the packaging.

CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT:  Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE:  If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE:  When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

5. Install the DIMM

Follow these steps to install the DIMM.

1. Insert the top edge of the DIMM in the holder.


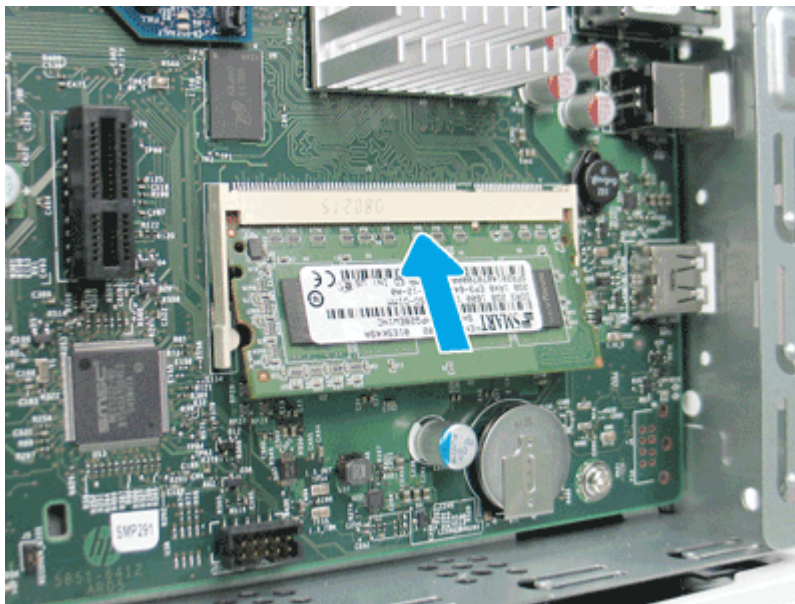
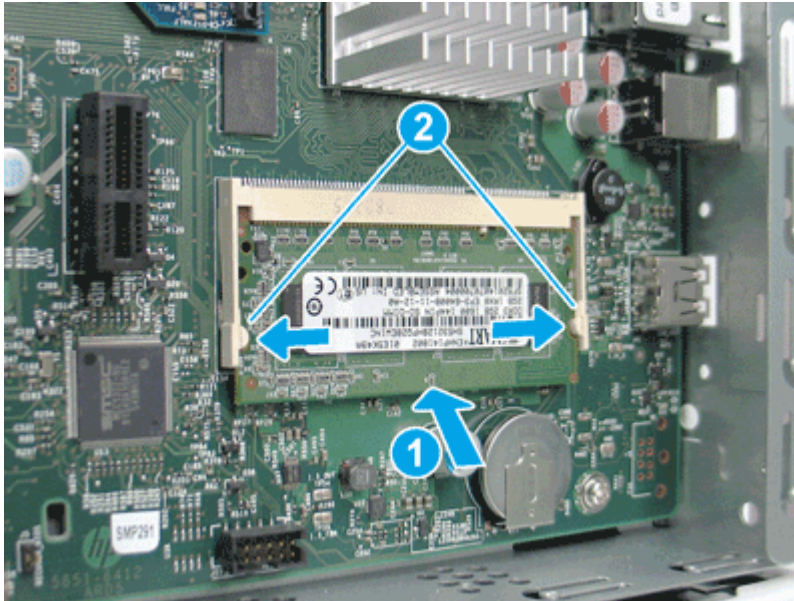
TIP:  The DIMM is keyed and can only be inserted in the holder one way.

Figure 5-103 Insert the DIMM



2. Pivot the bottom edge of the DIMM toward the holder (callout 1), and then make sure that the two locking arms snap into place (callout 2).

Figure 5-104 Install the DIMM

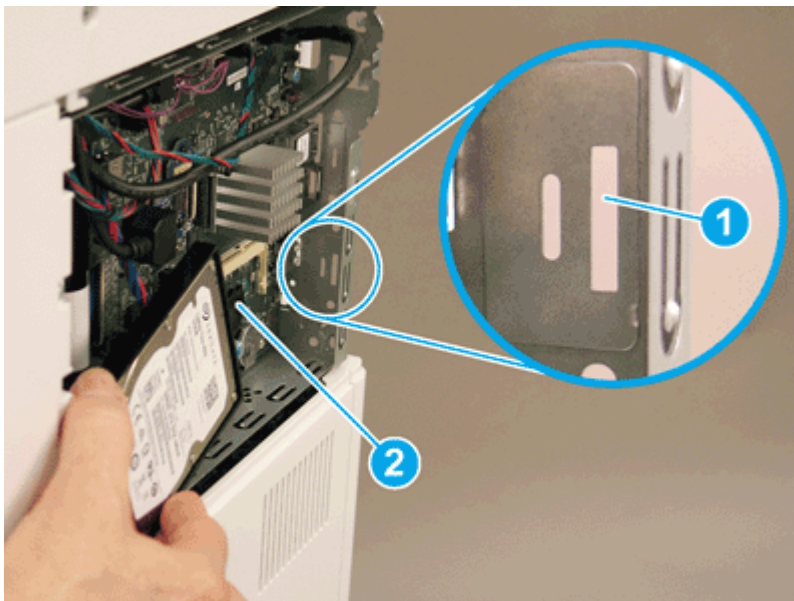


6. Install the HDD

Follow these steps to install the HDD.

1. Before proceeding, take note of the location of the slot (callout 1) in the sheet-metal where the HDD cradle mounting tab (callout 2) must be installed.

Figure 5-105 Locate the slot in the sheet metal



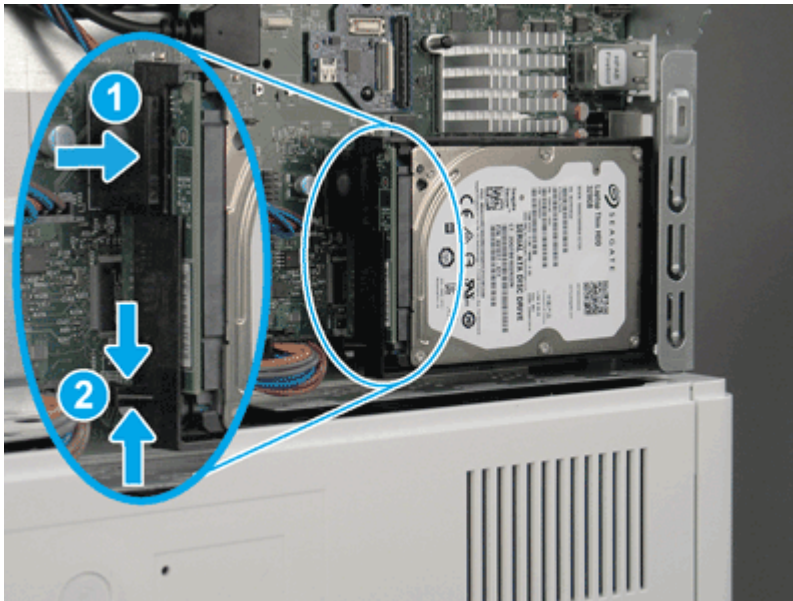
2. Insert the HDD cradle mounting tab in the slot in the sheet-metal, slide the HDD to the right (callout 1) to fully install the tab in the sheet metal, and then rotate the connector end (callout 2) of the HDD toward the formatter.

Figure 5-106 Install the HDD



3. Make sure that the locking connector (callout 1) latches and that the standoff (callout 2) engages with the slot in the formatter (it might be necessary to pinch the retainer to engage it with the slot).

Figure 5-107 Check the HDD connector

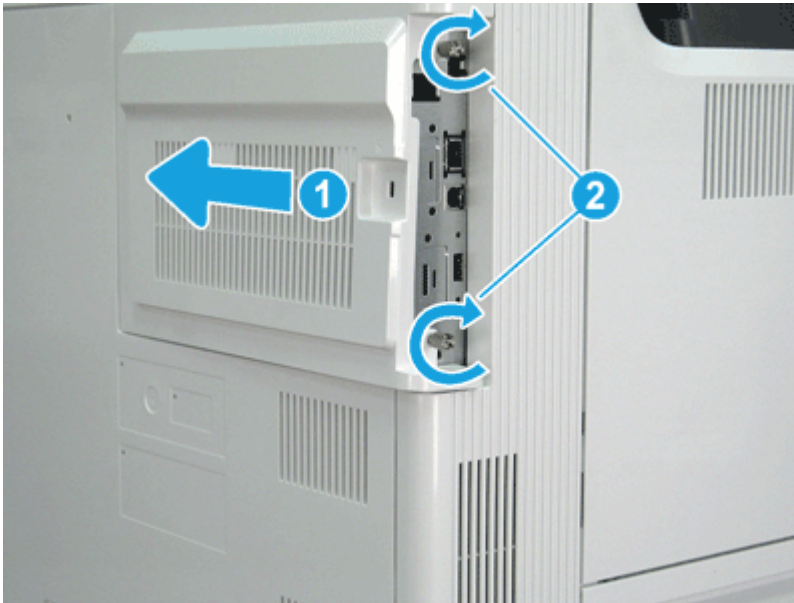


7. Install the formatter cover

Follow these steps to install the formatter cover.

- Slide the formatter cover (callout 1) toward the printer to install it, and then tighten two thumbscrews (callout 2).

Figure 5-108 Install the formatter cover




Removal and replacement: Fax PCA (M681f/Flow M681f/Flow M681z/Flow M682z)

Learn how to remove and replace the fax PCA.

 [View a video of how to remove and replace the fax PCA.](#)


Mean time to repair: 5 minutes

Service level: Basic

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Disconnect the power cable.

 **WARNING!** To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-14 Part information

Part number	Part description
B5L53-67901	Fax PCA

Required tools

- No special tools are needed to remove or install this assembly.

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Make sure that the printer initializes to a **Ready** state.

Print a configuration page to make sure that the printer is functioning correctly.

1. Remove the formatter cover

Follow these steps to remove the formatter cover.

- Unscrew two thumbscrews (callout 1), and then slide the formatter cover (callout 2) away from the printer to remove it.


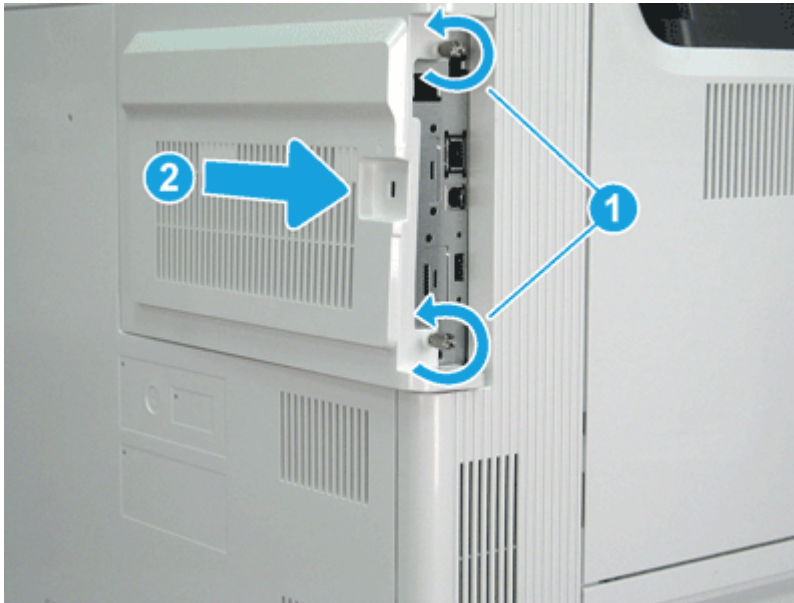

 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-109 Remove the formatter cover



2. Remove the fax PCA (M681f/Flow M681f/Flow M681z/Flow M682z)

Follow these steps to remove the fax PCA (M681f/Flow M681f/Flow M681z/Flow M682z).

 **NOTE:** This step is for the M681/M682/E67550/E67560/E67650/E67660 printers. For the M652/M653/E65050/E65060/E65150/E65160 printers, skip this step.

1. Locate the fax PCA on the formatter.

Figure 5-110 Locate the fax PCA



2. Rotate end left end of the fax PCA away from the formatter (callout 1) to disconnect the connector, and then slide the card away from the formatter (callout 2) to remove it.


Figure 5-111 Remove the fax PCA




3. Unpack the replacement assembly


Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.

 **NOTE:** HP recommends responsible disposal of the defective part.


2. Unpack the replacement part from the packaging.

CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT:  Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE:  If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

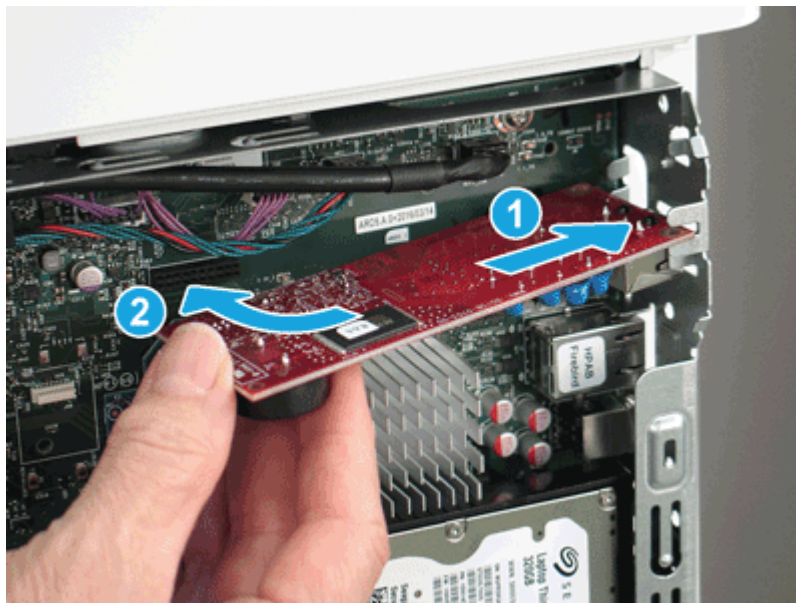
NOTE:  When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

4. Install the fax PCA

Follow these steps to install the fax PCA.

- Position the telephone port on the right end of the fax PCA through the sheet metal in the formatter case (callout 1). Rotate the connector end of the fax PCA toward the formatter (callout 2), and then install the connector on the fax PCA into the connector on the formatter.

Figure 5-112 Install the fax PCA

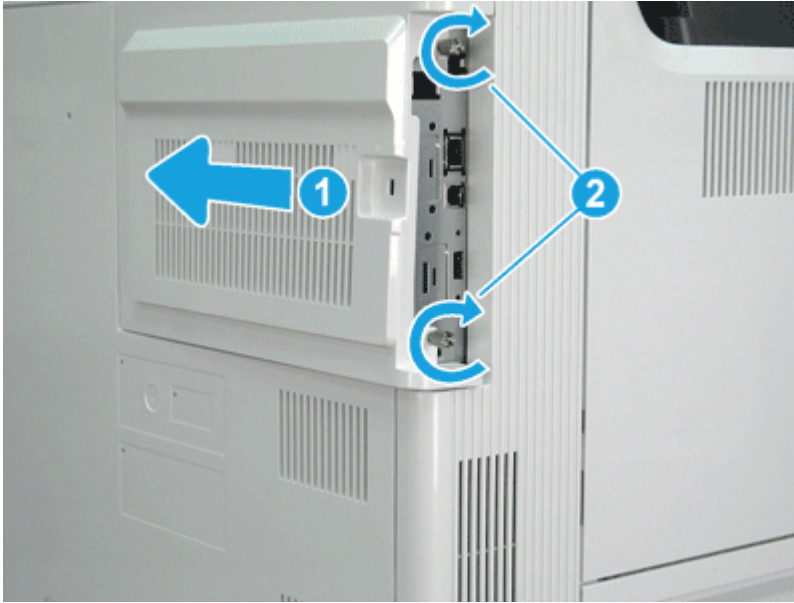


5. Install the formatter cover

Follow these steps to install the formatter cover.

- Slide the formatter cover (callout 1) toward the printer to install it, and then tighten two thumbscrews (callout 2).

Figure 5-113 Install the formatter cover




Removal and replacement: Document feeder rollers

Learn how to remove and replace the document feeder rollers.

 [View a video of how to remove and replace the document feeder rollers.](#)


Mean time to repair: 5 minutes

Service level: Basic

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Disconnect the power cable.

 **WARNING!** To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-15 Part information

Part number	Part description
5851-7202	Document feeder rollers with instruction guide

Required tools

- No special tools are needed to remove or install this assembly.

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

No post service test is available for this assembly.

1. Remove the document feeder rollers

Follow these steps to remove the document feeder rollers.

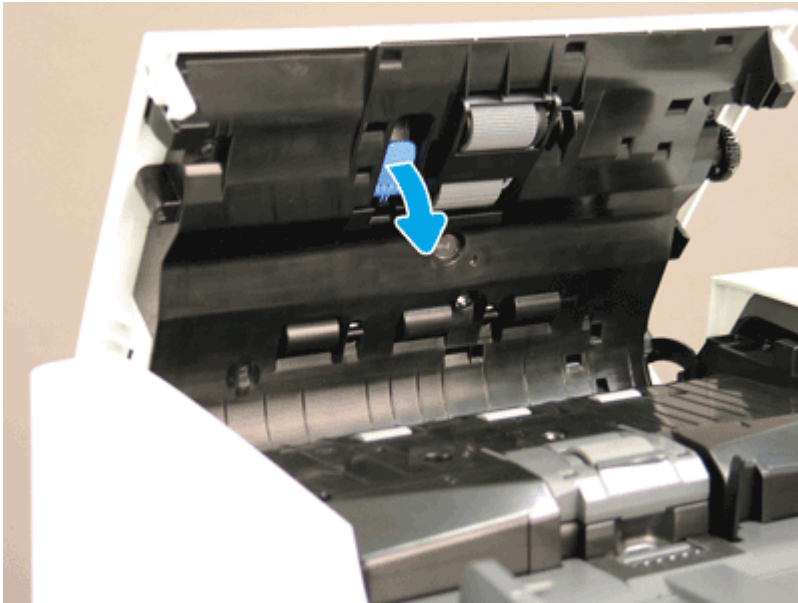
1. Open the document feeder cover.

Figure 5-114 Open the document feeder cover



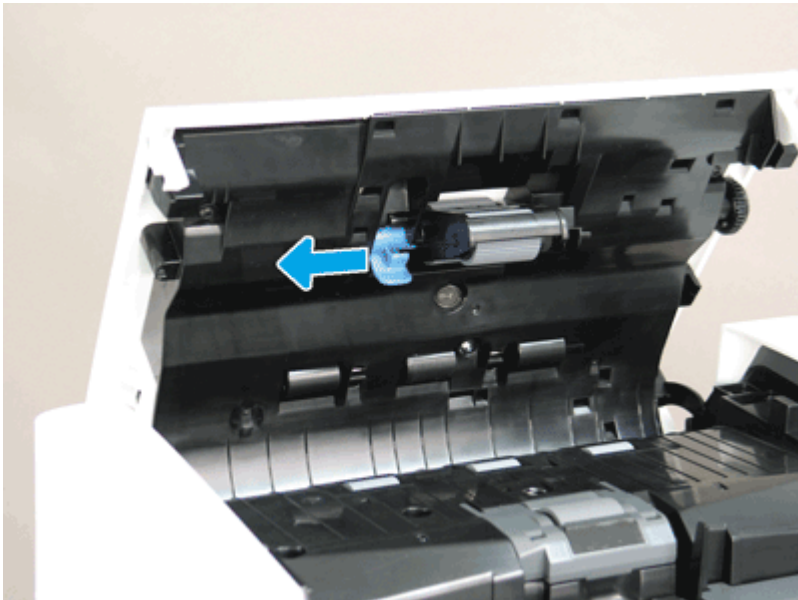
2. Rotate the blue locking lever down.

Figure 5-115 Rotate the blue locking lever down



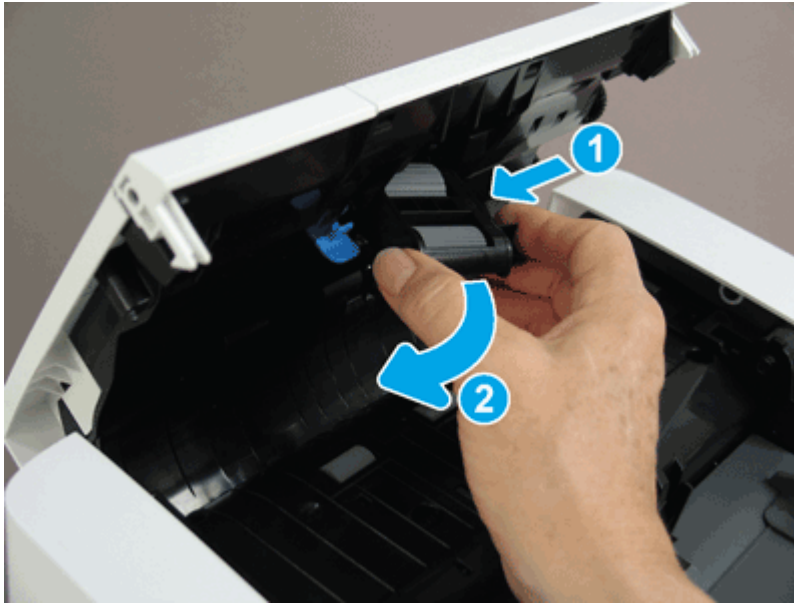
3. Slide the locking lever toward the front of the printer.

Figure 5-116 Slide the locking lever toward the front



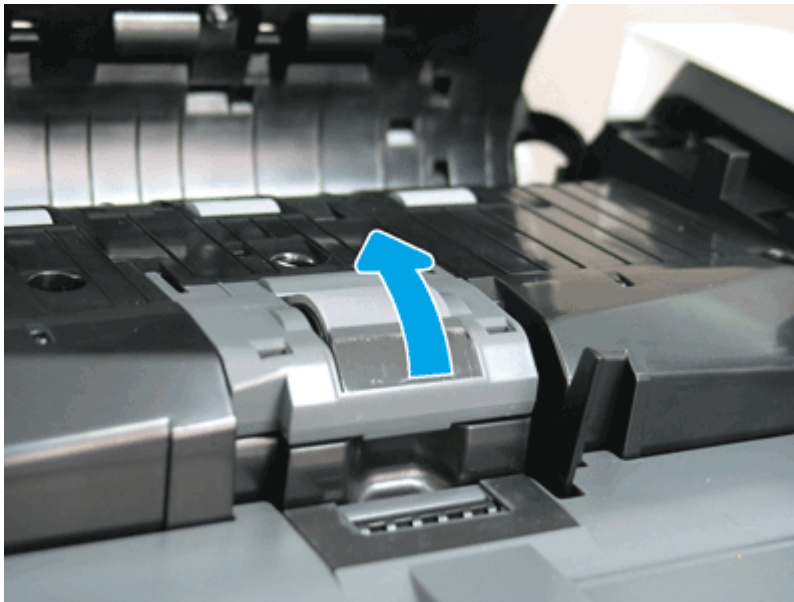
4. Slide the roller to the left (callout 1), and then rotate it away from the document feeder to remove it (callout 2).

Figure 5-117 Remove the pick roller



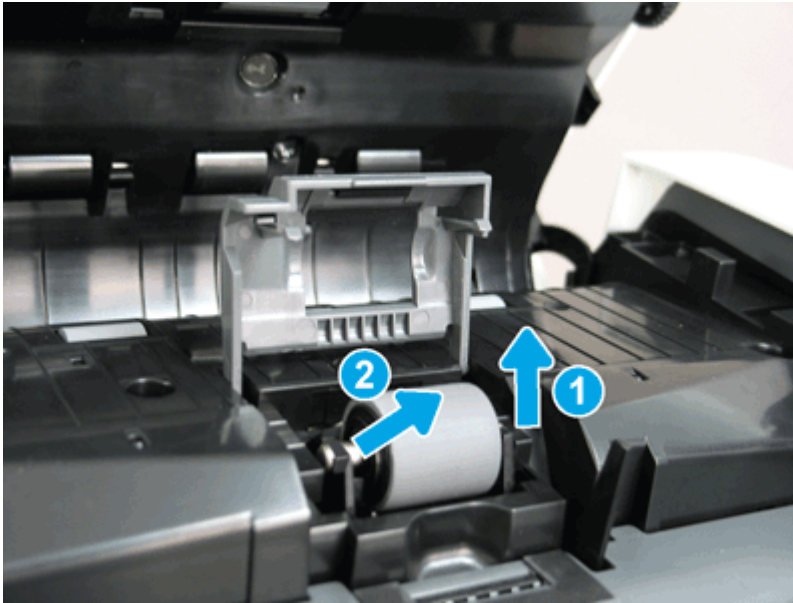
5. Open the document feeder separation roller cover.

Figure 5-118 Open the separation roller cover



6. Raise the right edge of the separation roller (callout 1), and then slide the roller to the right (callout 2) to remove it.

Figure 5-119 Remove the separation roller cover



2. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



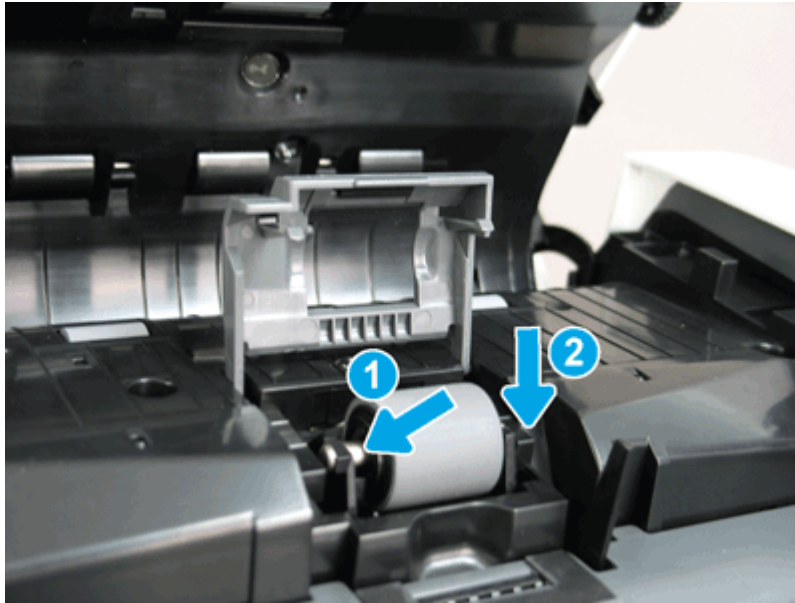
NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

3. Install the document feeder rollers

Follow these steps to install the document feeder rollers.

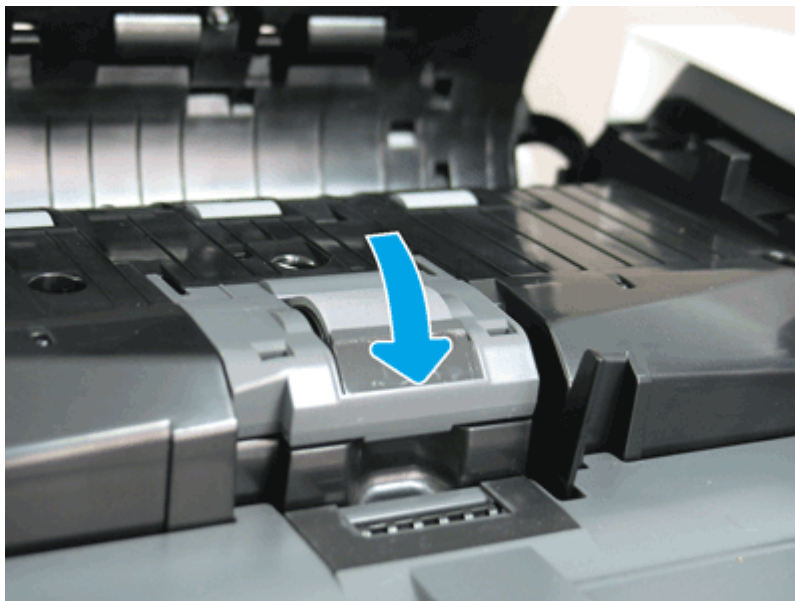
1. Install the left end of the replacement separation roller into the holder (callout 1), and then press the right side of the roller down (callout 2).

Figure 5-120 Install the separation roller



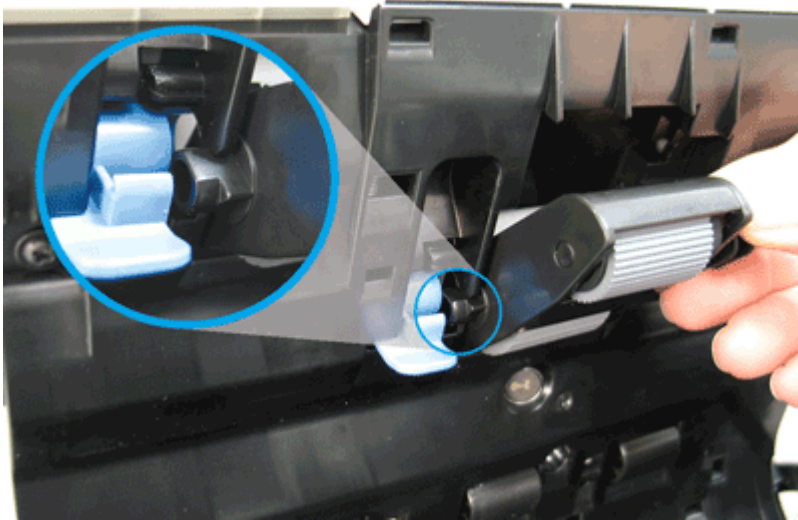
2. Close the roller cover.

Figure 5-121 Close the roller cover



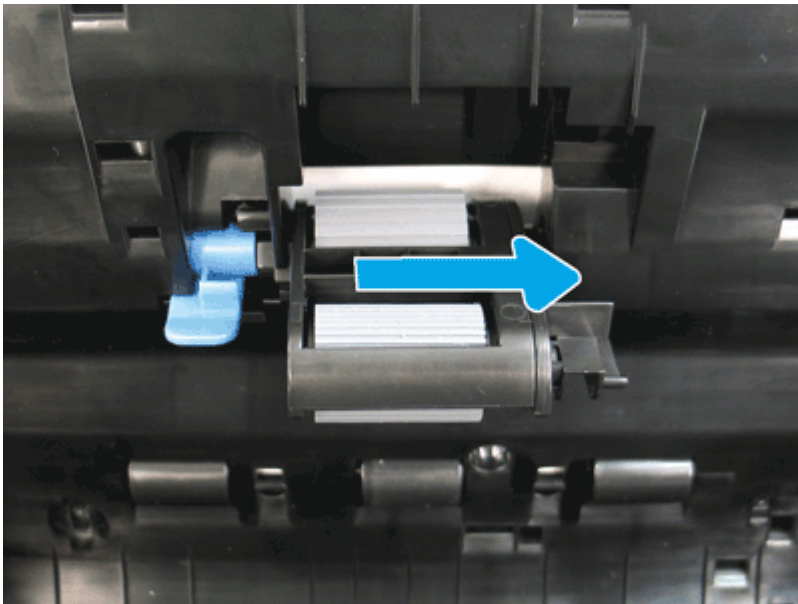
3. Install the tab on the left end of the replacement pick roller assembly into the slot in the document feeder.

Figure 5-122 Install the pick roller



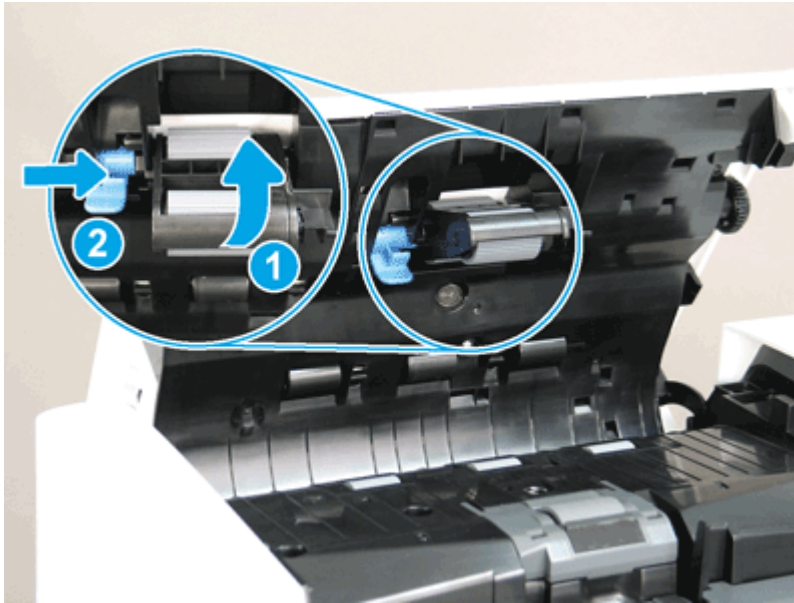
4. Slide the locking lever toward the back of the printer to secure the pick roller.

Figure 5-123 Slide the locking lever toward the back



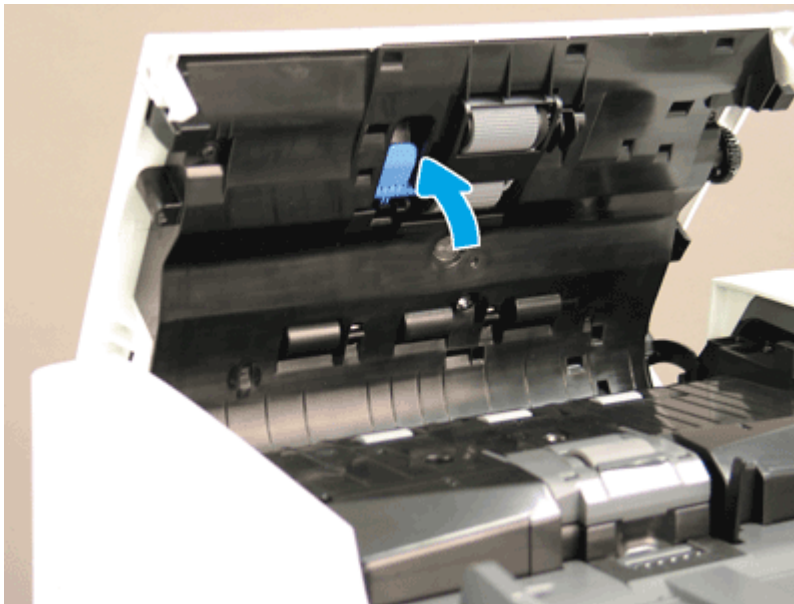
5. Rotate the pick roller assembly up into the holder (callout 1), and then slide the blue locking lever toward the back of the printer (callout 2).

Figure 5-124 Rotate the pick roller up and slide the blue locking lever towards the back



6. Rotate the blue locking lever up, and then close the document feeder cover.

Figure 5-125 Rotate the blue locking lever up



Removal and replacement: Document feeder separation roller cover

Learn how to remove and replace the document feeder separation roller cover.



[View a video of how to remove and replace the document feeder separation roller cover.](#)

Mean time to repair: 5 minutes

Service level: Basic



IMPORTANT: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Disconnect the power cable.

⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-16 Part information

Part number	Part description
J1H98-60026	ADF separation roller cover

Required tools

- No special tools are needed to remove or install this assembly.

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

No post service test is available for this assembly.

1. Remove the document feeder separation roller cover

Follow these steps to remove the document feeder separation roller cover.

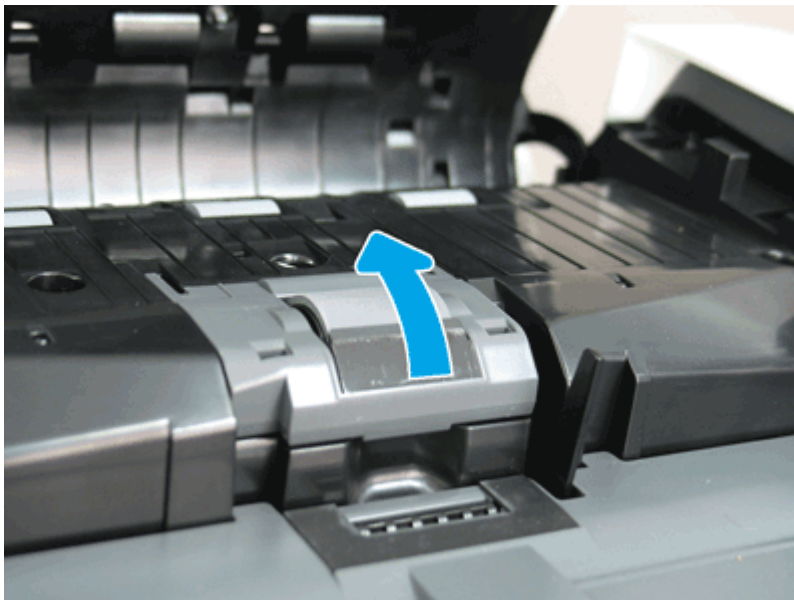
1. Open the document feeder cover.

Figure 5-126 Open the document feeder cover



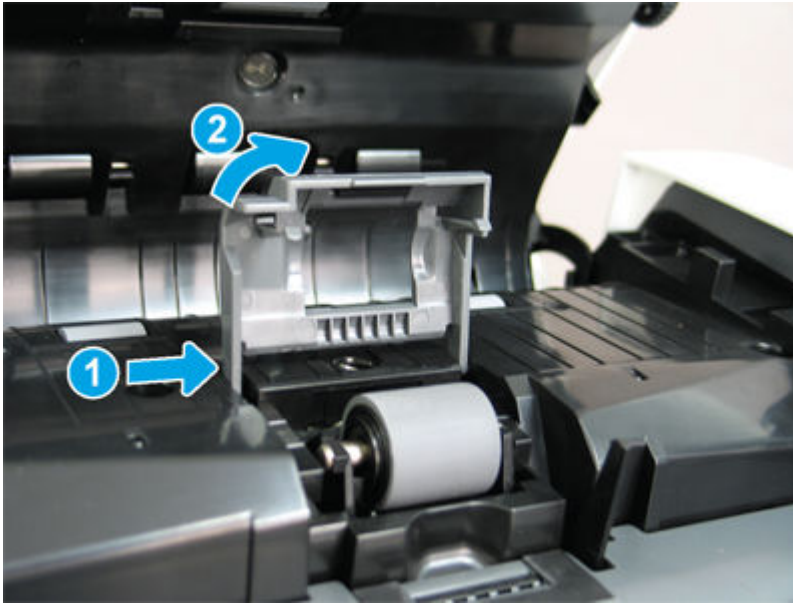
2. Open the document feeder separation roller cover.

Figure 5-127 Open the separation roller cover



3. Release the hinge pin (callout 1), and then rotate the cover to the right (callout 2) to remove it.

Figure 5-128 Remove the separation roller cover



2. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



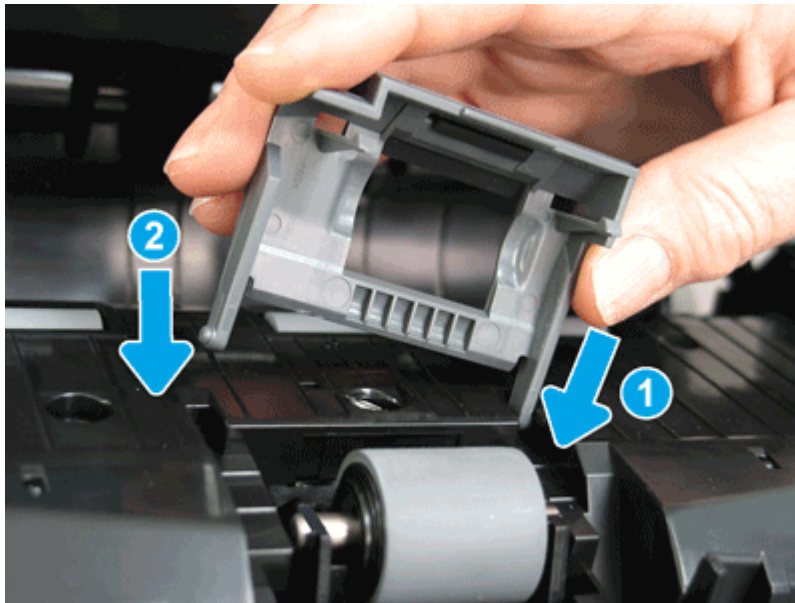
NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

3. Install the document feeder separation roller cover

Follow these steps to install the document feeder separation roller cover.

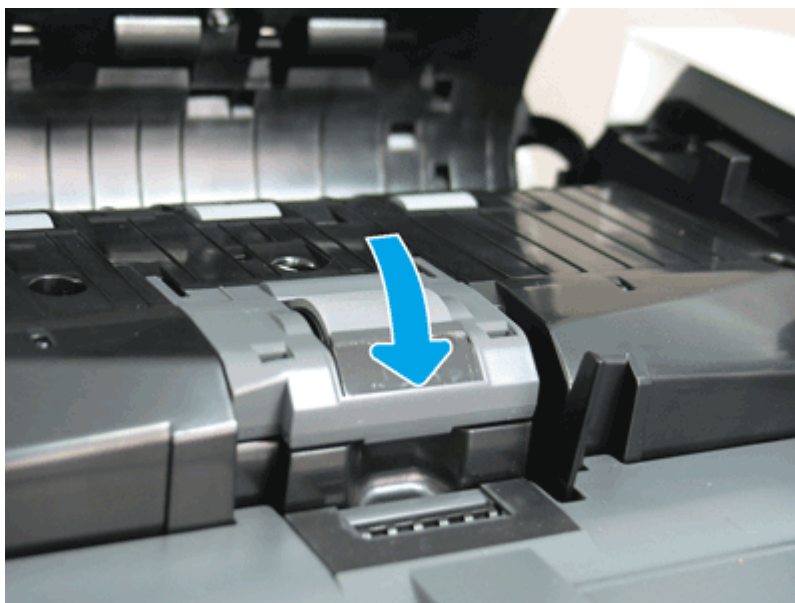
1. Position the right side of the cover in the opening in the document feeder (callout 1), and then lower the left side of the cover (callout 2) to install the hinge pin.

Figure 5-129 Install the separation roller cover



2. Close the roller cover.

Figure 5-130 Close the roller cover



3. Close the document feeder cover.

Figure 5-131 Close the document feeder cover



Removal and replacement: Secondary transfer roller

This document provides the procedures to remove and replace the secondary transfer roller.



[View a video of how to remove and replace the secondary transfer roller.](#)

Mean time to repair: 5 minutes

Service level: Basic



IMPORTANT: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Disconnect the power cable.

⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-17 Part Information

Part number	Part description
RM2-6561-000CN	Secondary transfer roller

Required tools

- No special tools are needed to remove or install this assembly.

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

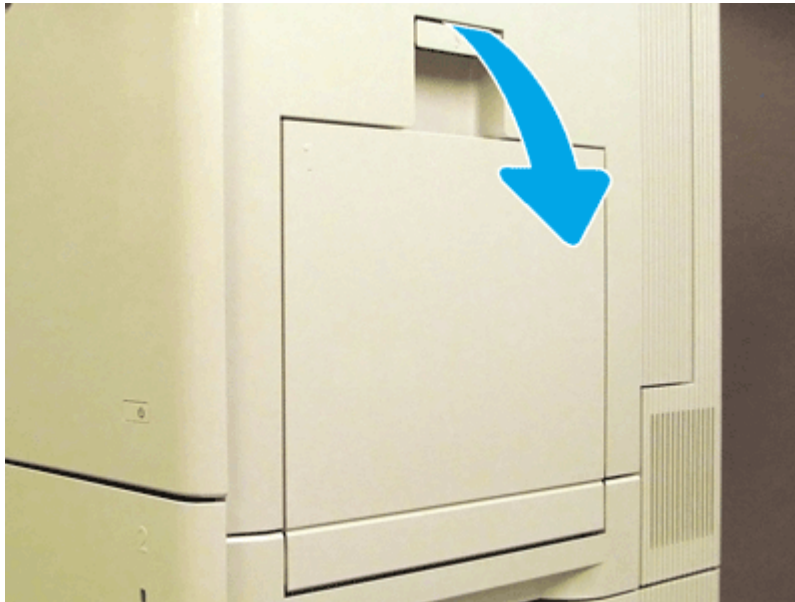
Print a page and verify that the print quality is acceptable.

1. Remove the secondary transfer roller

Follow these steps to remove the secondary transfer roller.

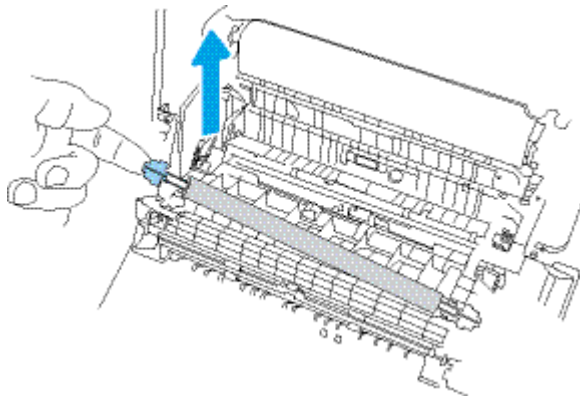
1. Open the right door.

Figure 5-132 Open the right door



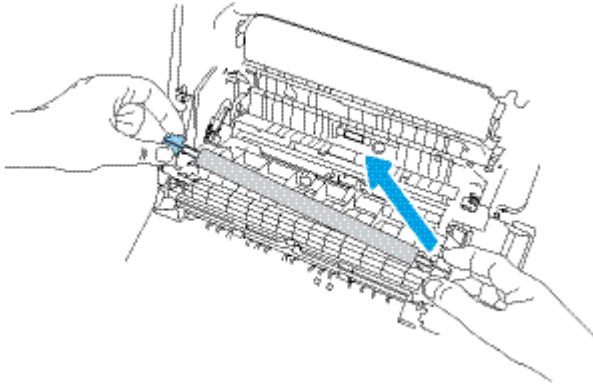
2. Lift up the left edge of the secondary transfer roller.

Figure 5-133 Lift the left edge



3. Slide the roller up and to the left to remove it from the holder.

Figure 5-134 Remove the transfer roller



2. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

3. Install the secondary transfer roller

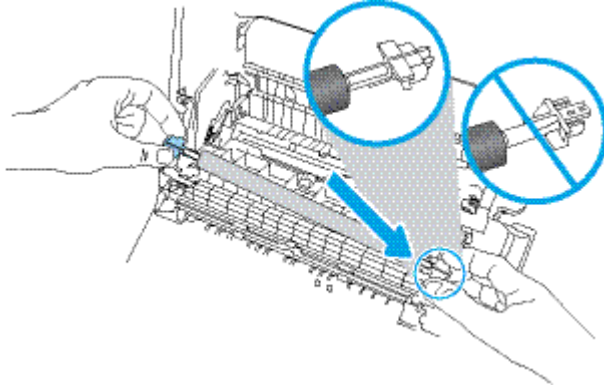
Follow these steps to install the secondary transfer roller.

1. Insert the right end (white plastic) of the replacement roller into the holder.



CAUTION: Do not touch the transfer roller. Skin oils and fingerprints on the roller can cause print-quality problems.

Figure 5-135 Insert the right end into the holder



2. Hold the left end of the roller, and then slide the roller to the right (callout 1) to fully install it in the holder. Push down on the left end (blue plastic clip; callout 2) until the roller snaps into place.


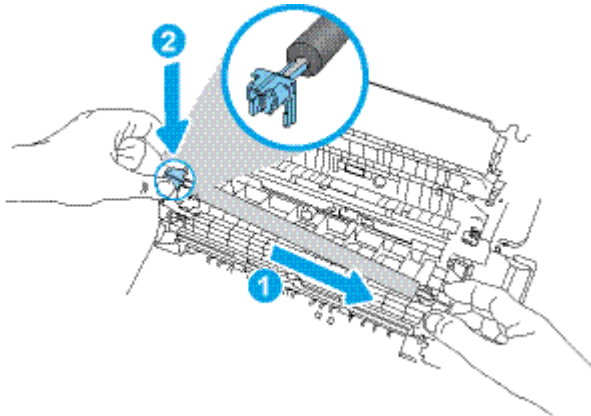
 **IMPORTANT:** Make sure that both ends of the roller assembly are fully seated in the holders.

Figure 5-136 Install the transfer roller



3. Close the right door.

Figure 5-137 Close the right door




Removal and replacement: Intermediate transfer belt (ITB)

This document provides the procedures to remove and replace the intermediate transfer belt (ITB).

 [View a video of how to remove and replace the ITB.](#)


Mean time to repair: 5 minutes

Service level: Basic

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Disconnect the power cable.

 **WARNING!** To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-18 Part information

Part number	Part description
PIB93-67901	Intermediate transfer belt

Required tools

- No special tools are needed to remove or install this assembly.

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

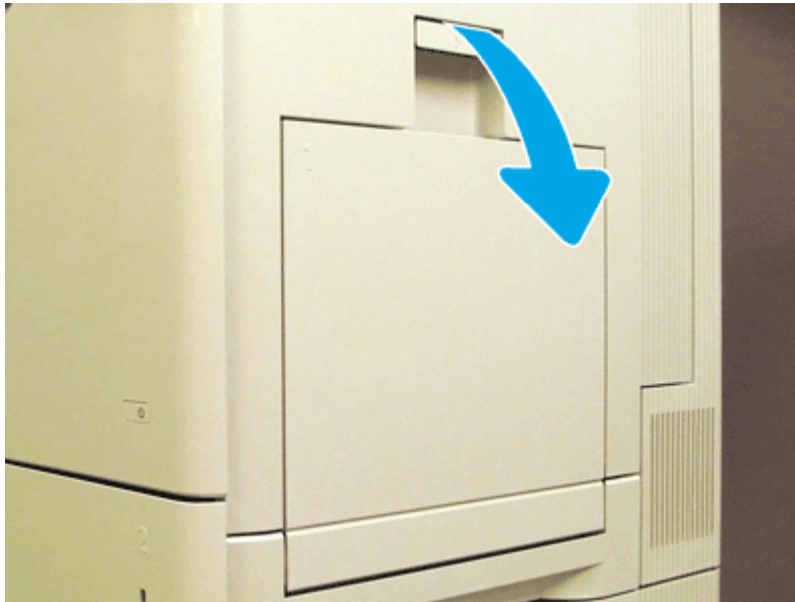
Print a page and verify that the print quality is acceptable.

1. Remove the intermediate transfer belt (ITB)

Follow these steps to remove the intermediate transfer belt (ITB).

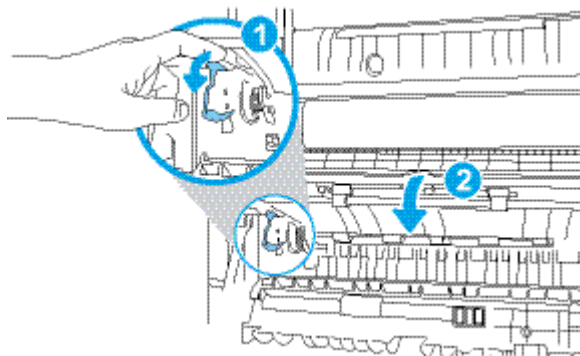
1. Open the right door.

Figure 5-138 Open the right door



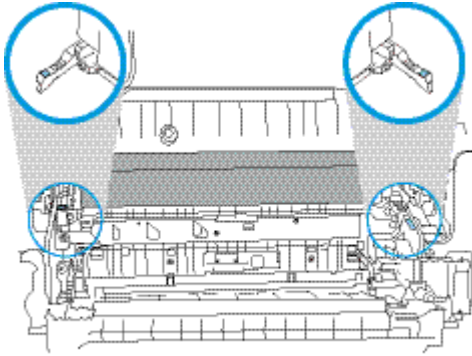
2. Release the blue latch (callout 1), and then lower the transfer assembly (callout 2).

Figure 5-139 Lower the transfer assembly



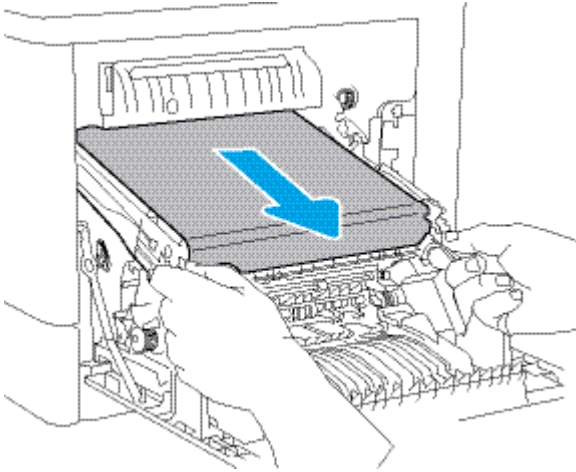
3. Grasp the two blue handles on the ITB.

Figure 5-140 Grasp the two blue handles



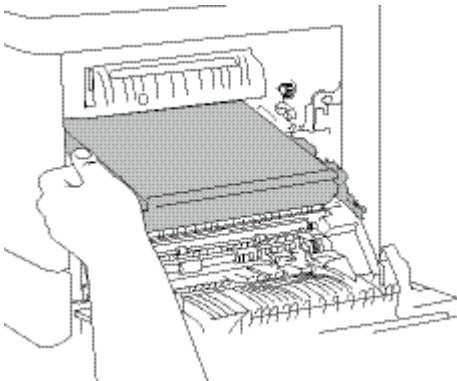
4. Pull the ITB partially out of the printer.

Figure 5-141 Pull the ITB partially out of the printer



5. Grasp the outside edges of the ITB to support it, and then remove the ITB from the printer.


Figure 5-142 Remove the ITB



2. Unpack the replacement assembly



Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.


 **NOTE:** HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>


2. Unpack the replacement part from the packaging.

 **CAUTION:**  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

 **IMPORTANT:** Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

 **NOTE:** If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

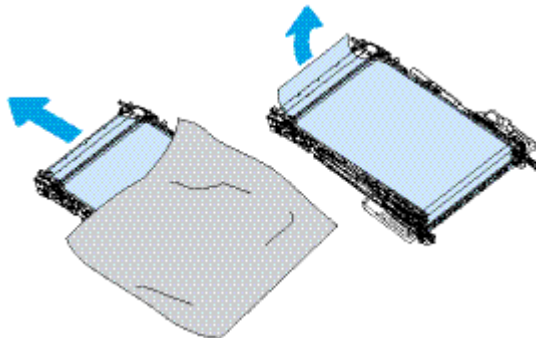
 **NOTE:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

3. Install the ITB

Follow these steps to install the ITB.

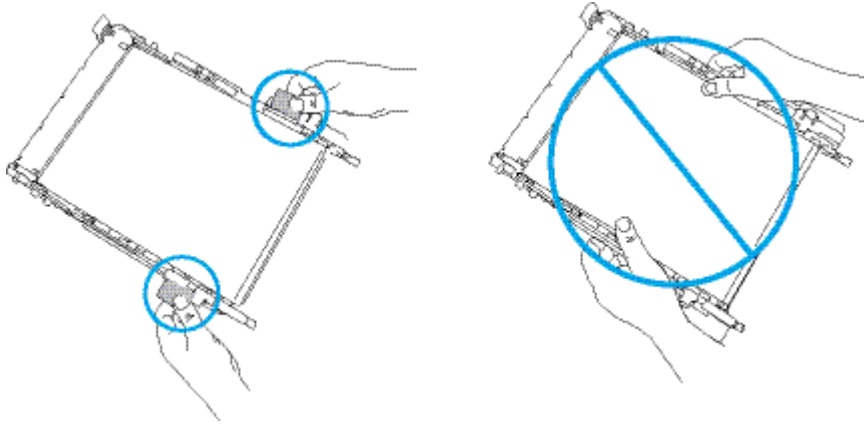
1. Remove the ITB from the packaging, and then remove the protective film around the ITB.

Figure 5-143 Remove the protective film



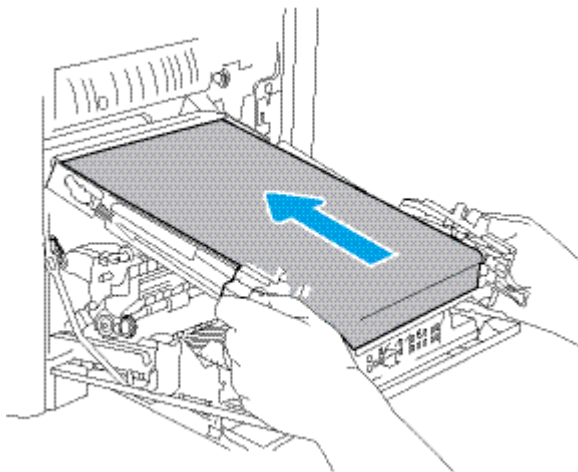
2. Handle the replacement ITB by the orange handles. Do not touch the grey-plastic belt. Skin oils and fingerprints on the belt can cause print-quality problems.

Figure 5-144 Remove all packing materials



3. Align the ITB with guides inside the printer, and then carefully push it into the printer until the orange handles stop it.

Figure 5-145 Align the ITB



4. Remove the orange handle. Repeat this step for the remaining orange handle.


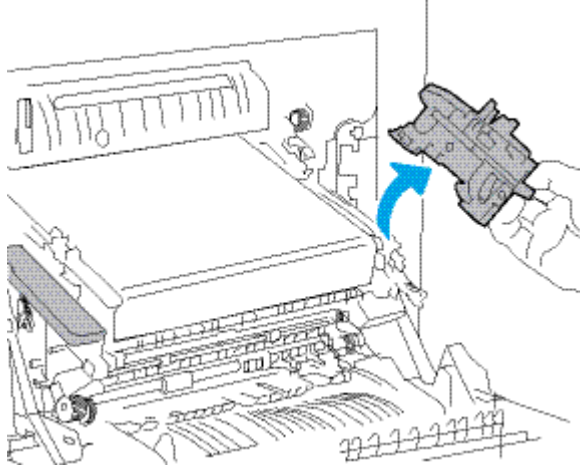
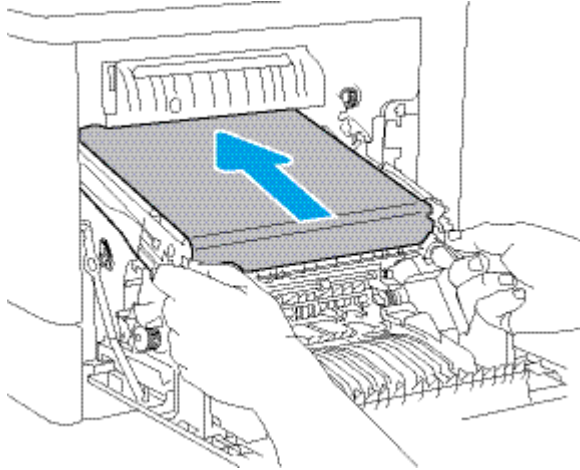
 **TIP:** HP recommends recycling the plastic handles.

Figure 5-146 Remove the orange handles



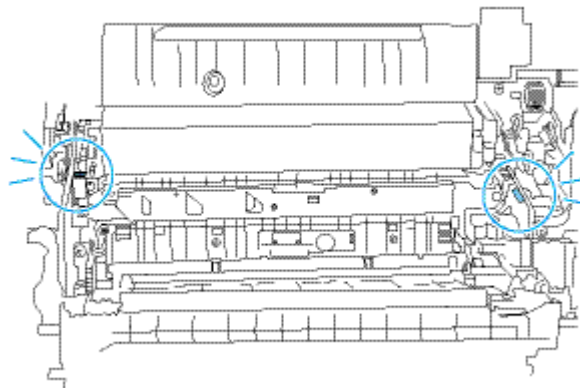
5. Using the blue handles, continue to carefully push the ITB into the printer.

Figure 5-147 Push the ITB into the printer



6. Continue to push the ITB into the printer until you hear a click, confirming it is fully installed.

Figure 5-148 Make sure the ITB clicks into place



7. Close the right door.

Figure 5-149 Close the right door




Removal and replacement: Control panels (M652/M653/E65050/E65060/E65150/E65160)

This document provides the procedures to remove and replace the control panels for the M652, M653, Managed E65050, E65060, E65150, E65160 models.

 [View a video of how to remove and replace the control panel.](#)


Mean time to repair: 5 minutes

Service level: Basic

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Disconnect the power cable.

 **WARNING!** To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-19 Part information

Part number	Part description
5851-7252	Control panel (4.3 in display)
5851-7253	Control panel (2.7 in display with keypad)

Table 5-19 Part information (continued)

Part number	Part description
RM2-1267-010CN	Control panel (2.7 inch)

Required tools

- No special tools are needed to remove or install this assembly.

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.


Post service test

Make sure that the printer initializes to a **Ready** state.

Access the menus by using the printer control panel, and then print a configuration page to make sure that the printer is functioning correctly.

1. Remove the control panel (M652/M653/E65050/E65060/E65150/E65160)

Follow these steps to remove the control panel (M652/M653/E65050/E65060/E65150/E65160).

 **NOTE:** This step is for the M652/M653/E65050/E65060/E65150/E65160 printers. For the M681/M682/E67550/E67560/E67650/E67660 printers, skip this step.

The figures below show the touchscreen control panel. The procedure is also correct for the keypad control panel.

1. Tilt the control panel to the fully raised position.

Figure 5-150 Tilt the control panel up



2. Use a coin to release the cover, and then remove the cover.

Figure 5-151 Remove the cover



3. Remove one thumbscrew (callout 1)



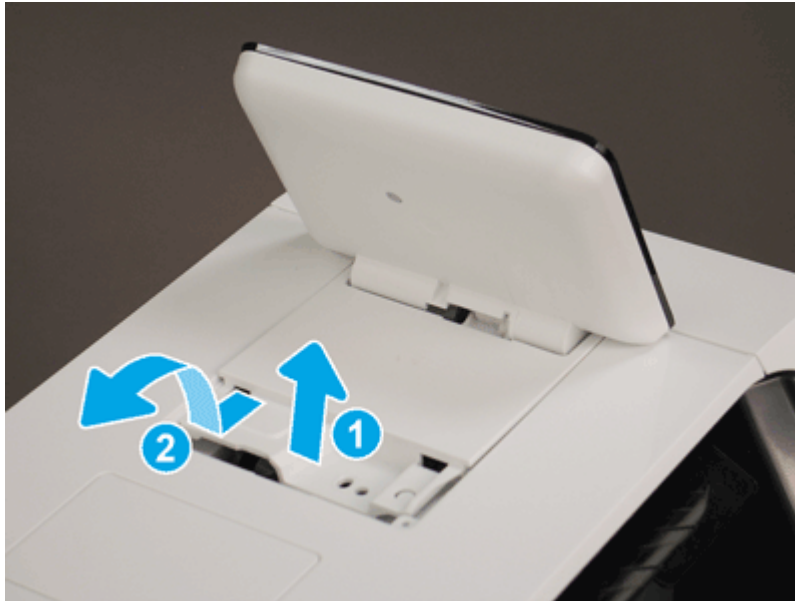
NOTE: Store the screw in a secure place where it cannot fall down into the printer.

Figure 5-152 Remove one thumbscrew



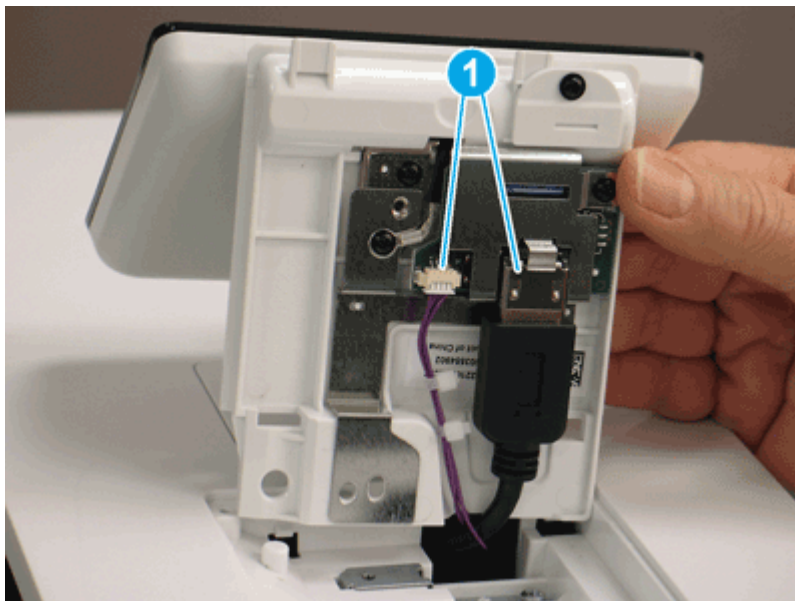
4. Lift the back edge of the control panel up (callout 1), and then slide it toward the back of the printer (callout 2) to release it.

Figure 5-153 Release the control panel



5. Turn the control panel over to gain access to the bottom side. Disconnect two connectors (callout 1).

Figure 5-154 Disconnect two connectors



6. Remove the control panel.

Figure 5-155 Remove the control panel



2. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



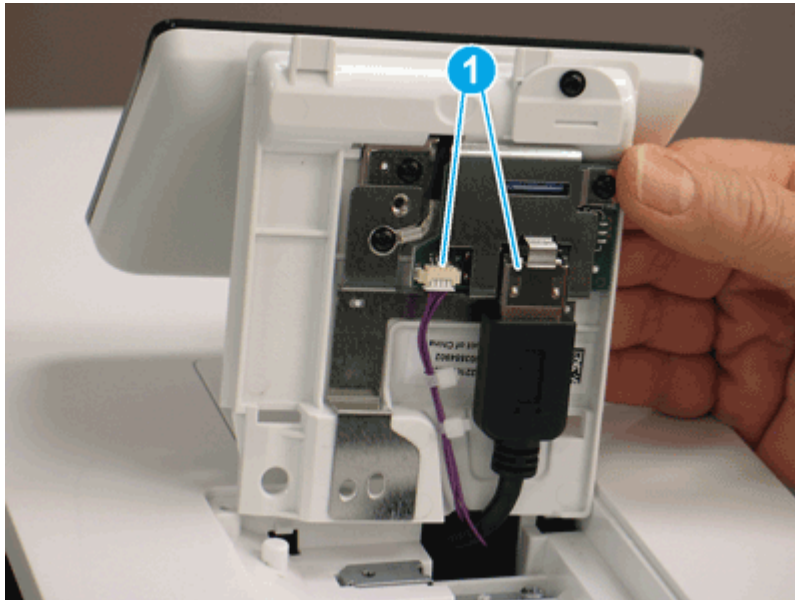
NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

3. Install the control panel

Follow these steps to install the control panel.

1. Connect two connectors (callout 1).

Figure 5-156 Connect two connectors



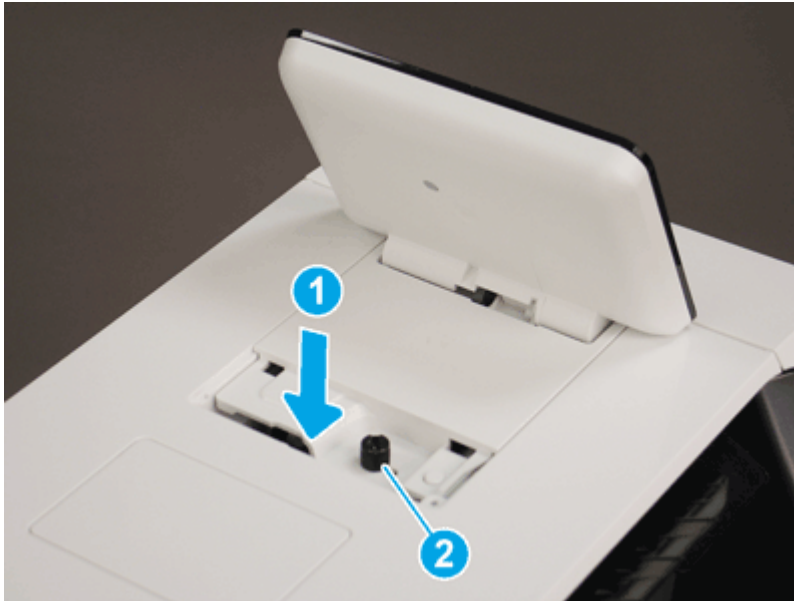
2. Install the tabs on the front of the control panel in the slots on the printer top cover.

Figure 5-157 Install the tabs



3. Lower the back edge of the control panel down (callout 1), and then install one thumbscrew (callout 2).

Figure 5-158 Install one thumbscrew



4. Align the tabs on the front of the control panel cover with the slots in the printer, and then pivot the cover down to install it.

Figure 5-159 Install the cover



Removal and replacement: Fuser

This document provides the procedures to remove and replace the fuser.

 [View a video of how to remove and replace the fuser.](#)

Mean time to repair: 5 minutes

Service level: Basic



IMPORTANT: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Disconnect the power cable.

⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-20 Part information

Part number	Part description
RM2-1928-000CN	Fuser kit (110V)
RM2-1929-000CN	Fuser kit (220V)

Required tools

- No special tools are needed to remove or install this assembly.

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

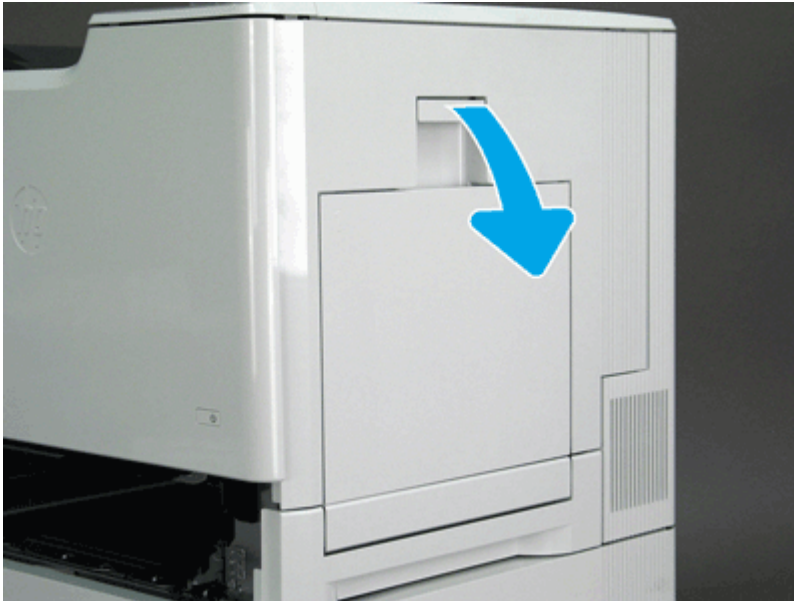
Print a page and make sure that the toner is fused to the page properly.

1. Remove the fuser

Follow these steps to remove the fuser.

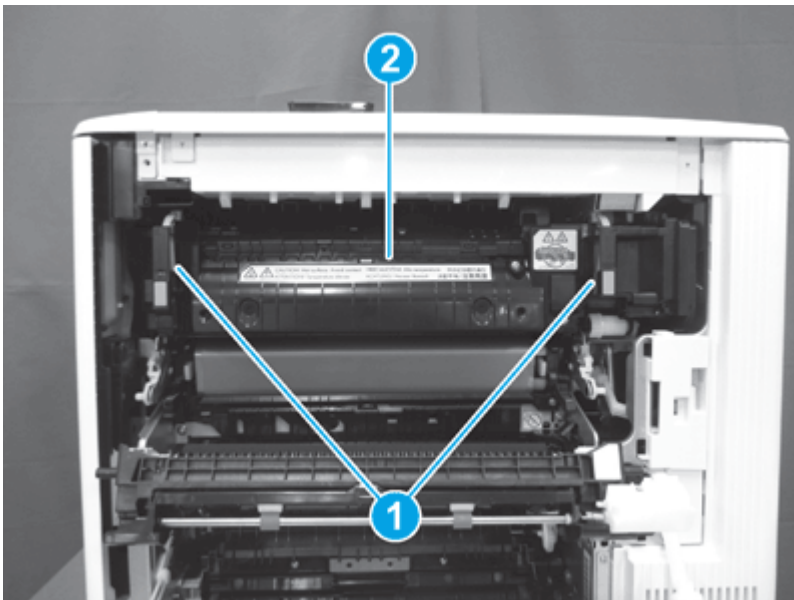
1. Open the right door.

Figure 5-160 Open the right door



2. Grasp the handles (callout 1), and then pull away from the printer to remove the fuser (callout 2).

Figure 5-161 Remove the fuser



2. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.





NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>


2. Unpack the replacement part from the packaging.

CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT:  Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE:  If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

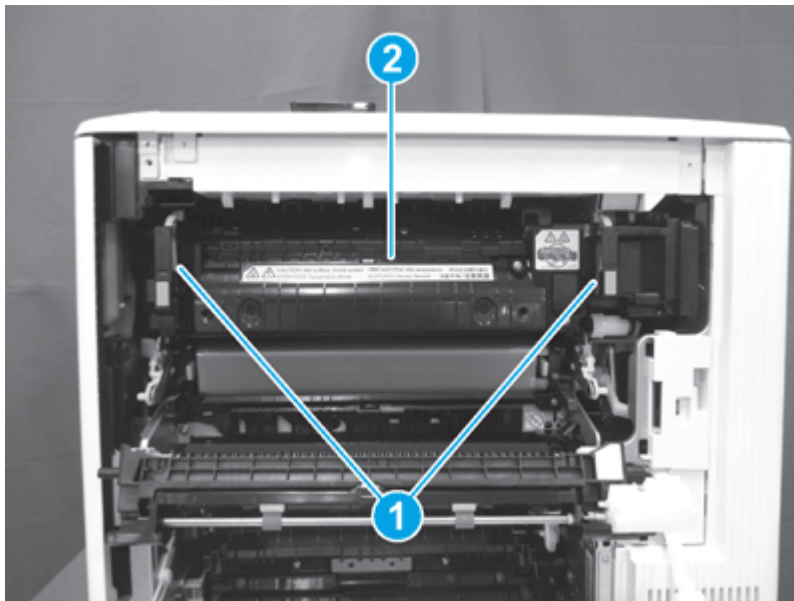
NOTE:  When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

3. Install the fuser

Follow these steps to install the fuser.

1. Grasp the handles (callout 1), and then position the fuser (callout 2) in the printer. Press the fuser toward the printer to install it.

Figure 5-162 Install the fuser



2. Close the right door.

Figure 5-163 Close the right door




Removal and replacement: White backing

This document provides the procedures to remove and replace the white backing.

 [View a video of how to remove and replace the white backing.](#)


Mean time to repair: 5 minutes

Service level: Basic

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Disconnect the power cable.

 **WARNING!** To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-21 Part information

Part number	Part description
5851-7206	White backing A4 kit
5851-7207	White backing retention clips

Required tools

- No special tools are needed to remove or install this assembly.

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

No post service test is available for this assembly.

1. Remove the white backing

Follow these steps to remove the white backing.

1. Open the document feeder.

Figure 5-164 Open the document feeder

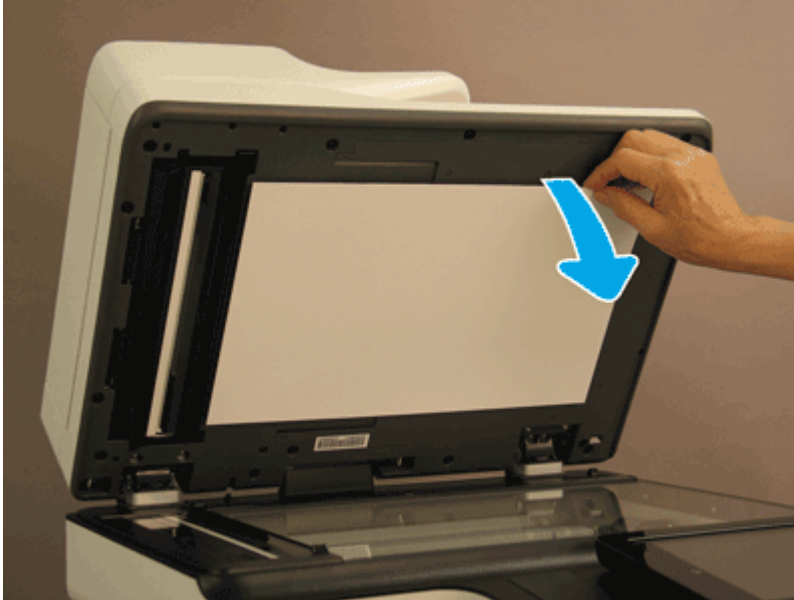


2. Grasp the edge of the white backing, and then firmly pull it away from the document feeder to remove the backing and the retention clips.



NOTE: The clips are still attached to the white backing when it is removed.

Figure 5-165 Remove the white backing



2. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



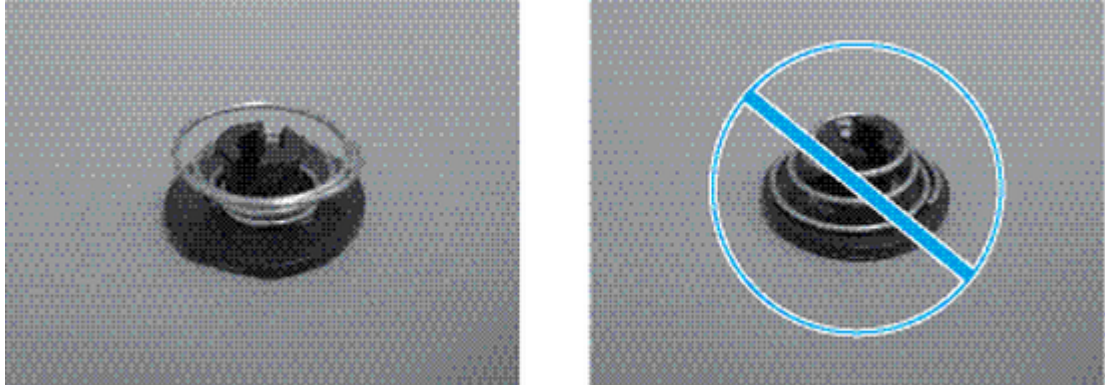
NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

3. Install the white backing

Follow these steps to install the white backing.

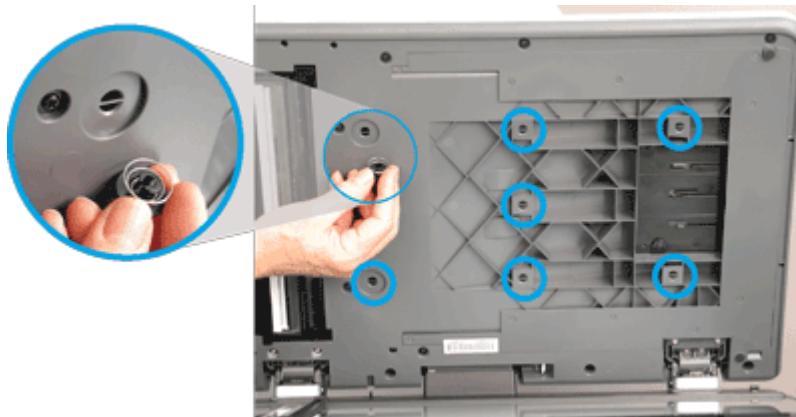
1. Verify that the springs are positioned correctly on each of the retention clips provided in the replacement kit.

Figure 5-166 Verify spring positions



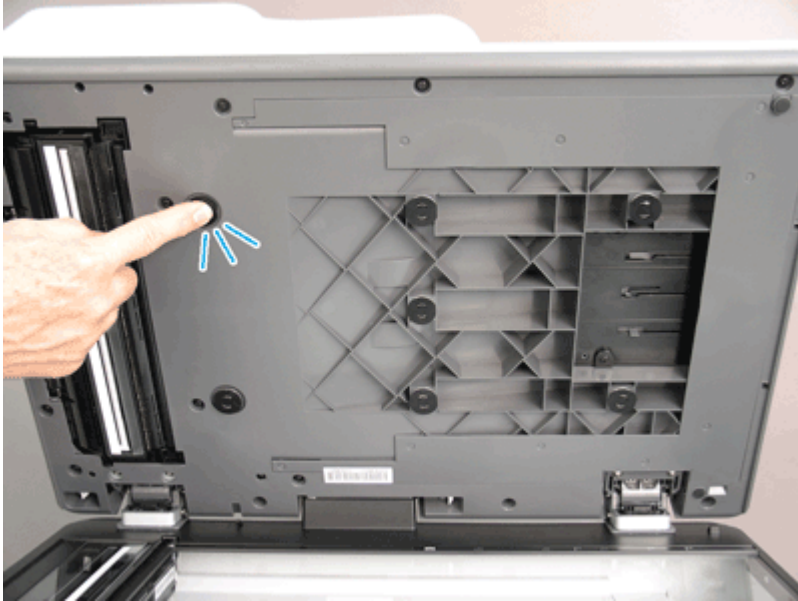
2. In the location where the white backing was removed, install seven retention clips in the document feeder. Align the tabs on the clip with the slots in the document feeder.

Figure 5-167 Install seven clips



3. Press on each retention clip to make sure that they are fully installed. You will hear an audible click when the clip is correctly installed.

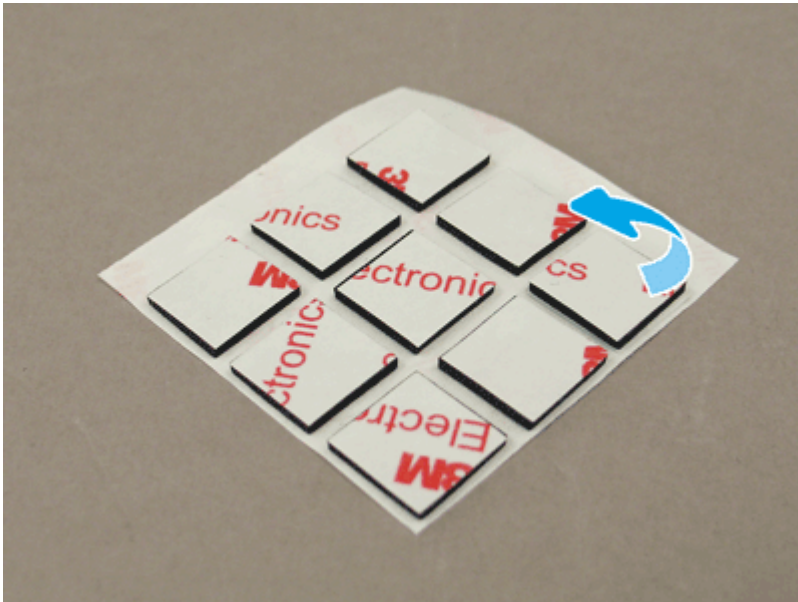
Figure 5-168 Press on each clip



4. Peel an adhesive square off of the backing sheet.

 **NOTE:** Do not remove the protective film off of the top of the adhesive square yet.

Figure 5-169 Remove an adhesive square



5. Attach an adhesive square to each retention clip on the document feeder.

Figure 5-170 Attach adhesive squares



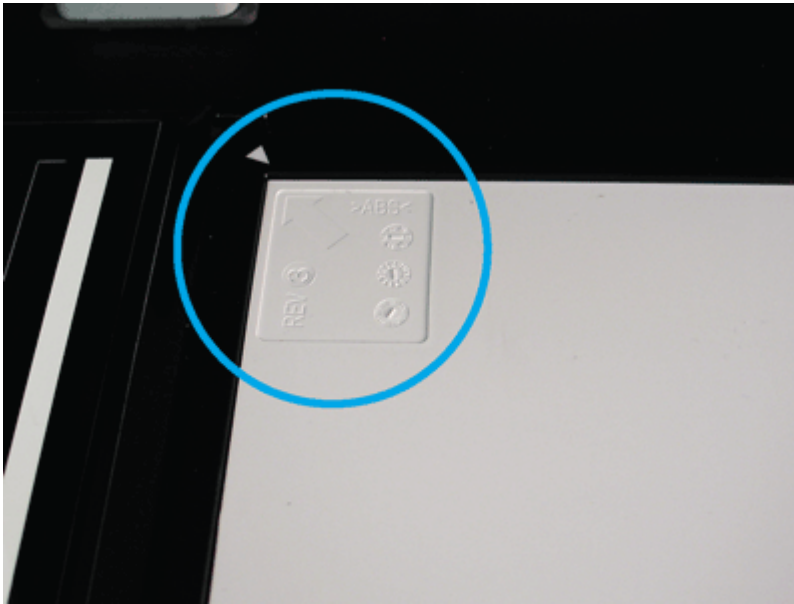
6. Remove the protective film off of each adhesive square.

Figure 5-171 Remove the protective film



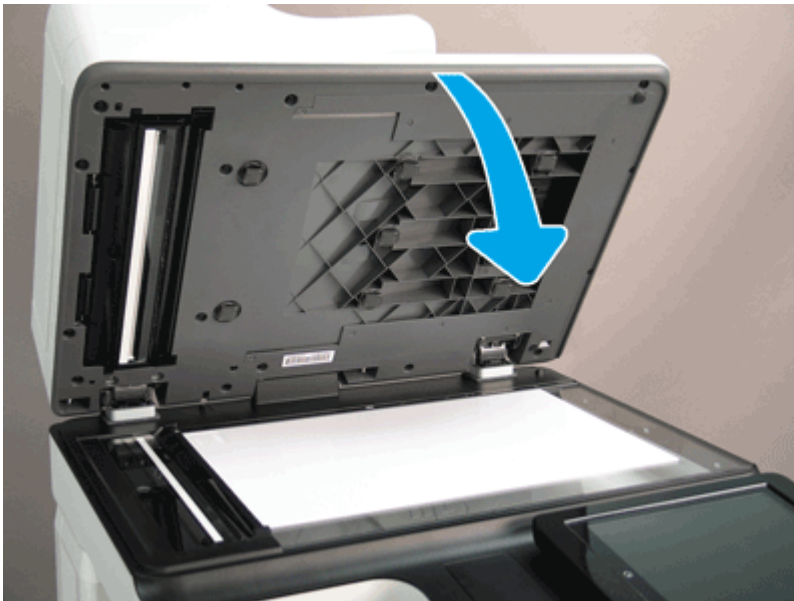
7. Position the white backing on the image scanner glass. Make sure that the corner with the embossed arrow on the backing is positioned against the corner with the white arrow on the scanner.

Figure 5-172 Position the white backing



8. Close the document feeder.

Figure 5-173 Close the document feeder



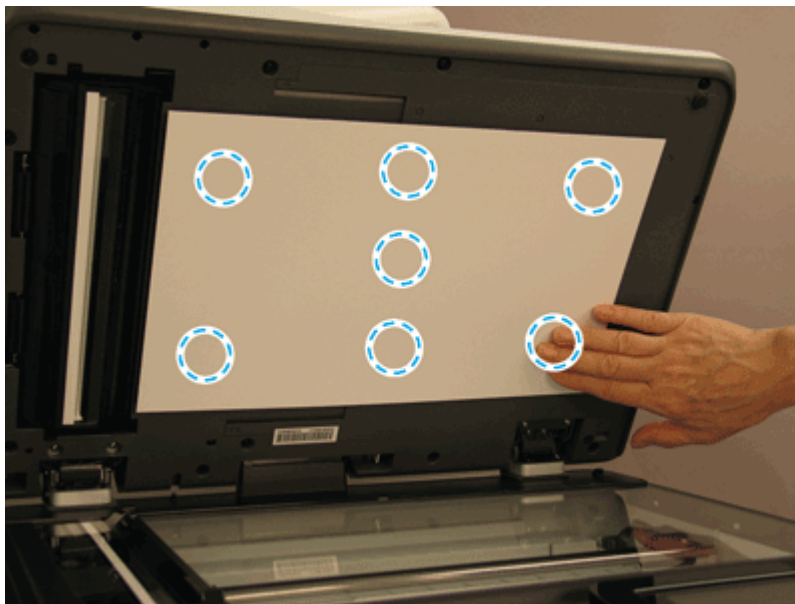
9. Open the document feeder.

Figure 5-174 Open the document feeder



10. Press on the white backing at the location of each retention clip to ensure that the backing is securely attached to the adhesive on the clips.

Figure 5-175 Press on the white backing



11. Close the document feeder.

Figure 5-176 Close the document feeder




Removal and replacement: Toner cartridges

Learn how to remove and replace the toner cartridges.

 [View a video of how to remove and replace the toner cartridges.](#)

Mean time to repair: 5 minutes

Service level: Basic

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer off.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-22 Part information

Part number	Part description
CF450-67901	HP 655A Black Original LaserJet Toner Cartridge (12,500 pages) (M652/M653)
CF451-67901	HP 655A Cyan Original LaserJet Toner Cartridge (10,500 pages) (M652/M653)
CF452-67901	HP 655A Yellow Original LaserJet Toner Cartridge (10,500 pages) (M652/M653)
CF453-67901	HP 655A Magenta Original LaserJet Toner Cartridge (10,500 pages) (M652/M653)
CF460-67901	HP 656X High Yield Black Original LaserJet Toner Cartridge (27,000 pages) (M652/M653)

Table 5-22 Part information (continued)

Part number	Part description
CF461-67901	HP 656X High Yield Cyan Original LaserJet Toner Cartridge (22,000 pages) (M652/M653)
CF462-67901	HP 656X High Yield Yellow Original LaserJet Toner Cartridge (22,000 pages) (M652/M653)
CF463-67901	HP 656X High Yield Magenta Original LaserJet Toner Cartridge (22,000 pages) (M652/M653)
CF470-67901	HP 657X High Yield Black Original LaserJet Toner Cartridge (27,000 pages) (M681/M682)
CF471-67901	HP 657X High Yield Cyan Original LaserJet Toner Cartridge (27,000 pages) (M681/M682)
CF472-67901	HP 657X High Yield Yellow Original LaserJet Toner Cartridge (27,000 pages) (M681/M682)
CF473-67901	HP 657X High Yield Magenta Original LaserJet Toner Cartridge (27,000 pages) (M681/M682)

Required tools

- No special tools are needed to remove or install this assembly.

After performing service

- Turn the printer on.

Post service test

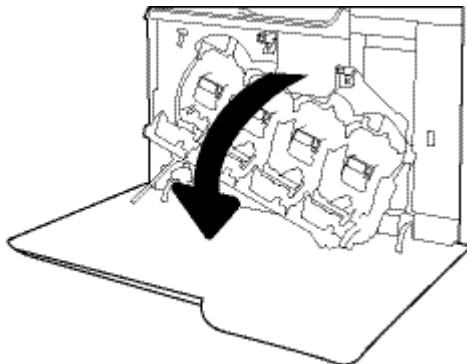
No post service test is available for this assembly.

1. Remove a toner cartridge

Follow these steps to remove a toner cartridge.

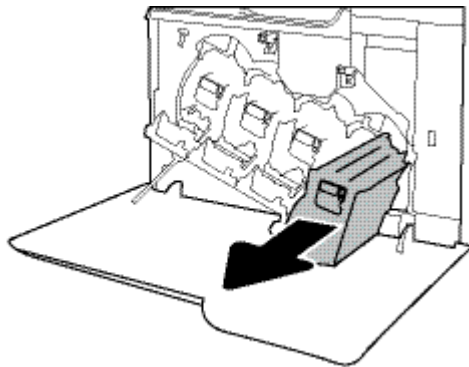
1. Open the front door.

Figure 5-177 Open the front door



2. Grasp the handle of the used toner cartridge and pull out to remove it.

Figure 5-178 Remove the toner cartridge



2. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



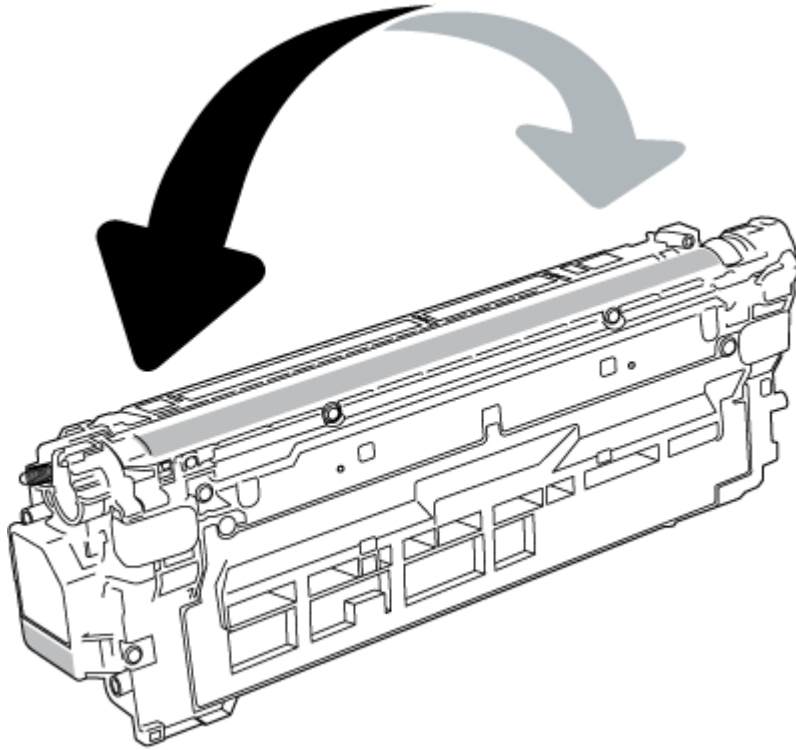
NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

3. Install a toner cartridge

Follow these steps to install a toner cartridge.

1. Hold both ends of the toner cartridge and rock it 5-6 times.

Figure 5-179 Rock the toner cartridge



2. Support the toner cartridge underneath with one hand while holding the cartridge handle with the other. Align the toner cartridge with its slot on the shelf, and then insert the toner cartridge into the printer.


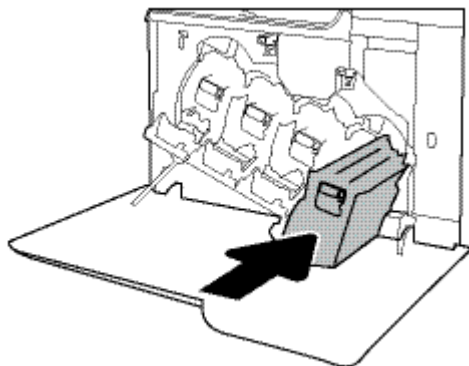
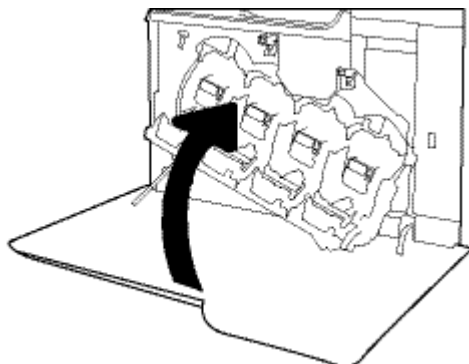
 **NOTE:** Avoid touching the green imaging drum. Fingerprints on the imaging drum can cause print defects.

Figure 5-180 Install the toner cartridge



3. Close the front door.

Figure 5-181 Close the front door




Removal and replacement: Toner collection unit (TCU)

Learn how to remove and replace the toner collection unit (TCU).

 [View a video of how to remove and replace the TCU.](#)

Mean time to repair: 5 minutes

Service level: Basic

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer off.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-23 Part information

Part number	Part description
RM2-6613-000CN	Toner collection unit kit

Required tools

- No special tools are needed to remove or install this assembly.

After performing service

- Turn the printer on.

Post service test

No post service test is available for this assembly.

1. Remove the TCU

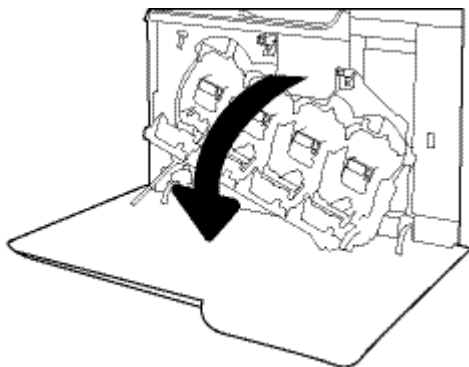
Follow these steps to remove the TCU.

⚠ CAUTION: If toner gets on clothing, wipe it off by using a dry cloth and wash the clothes in cold water. Hot water sets toner into fabric.

📝 NOTE: The toner collection unit is designed for a single use. Do not attempt to empty the toner collection unit and reuse it. Doing so could lead to toner being spilled inside the printer, which could result in reduced print quality. After use, return the toner collection unit to HP's Planet Partners program for recycling.

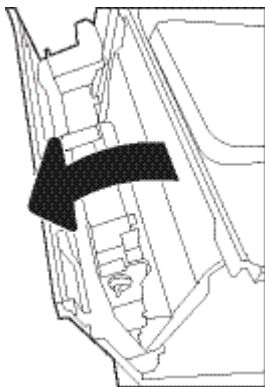
1. Open the front door.

Figure 5-182 Open the front door



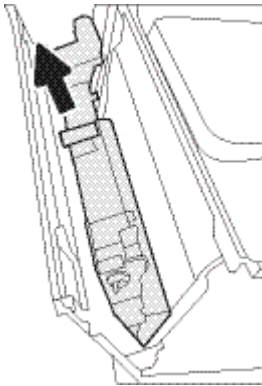
2. Open the left door.

Figure 5-183 Open the left door



3. Grasp the top of the TCU and remove it from the printer.

Figure 5-184 Remove the TCU



2. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



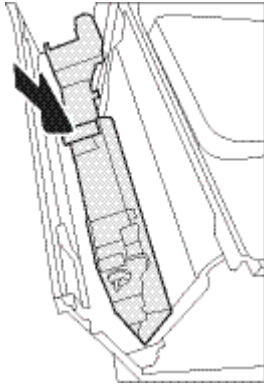
NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

3. Install the TCU

Follow these steps to install the TCU.

1. Install the new unit into the printer. Make sure the TCU is firmly in place.

Figure 5-185 Install the TCU



2. Close the left door.


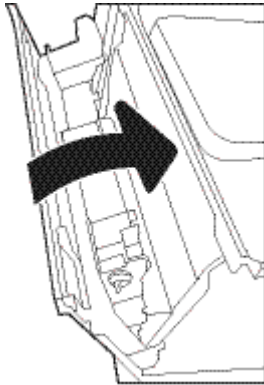
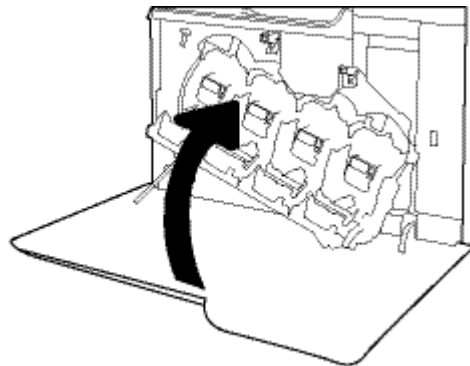
 **NOTE:** If the TCU is not installed correctly, the left door does not close completely.

Figure 5-186 Close the left door



3. Close the front door.

Figure 5-187 Close the front door




Removal and replacement: Keyboard (Flow M681z/Flow M682z/Flow E67660z)

Learn how to remove and replace the keyboard for the Flow M681z, Flow M682z and Flow E67660z models.

 [View a video of how to remove and replace the keyboard.](#)


Mean time to repair: 5 minutes

Service level: Basic

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Disconnect the power cable.

 **WARNING!** To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-24 Part information

Part number	Part description
B5L47-67019	US English keyboard
B5L47-67020	UK English keyboard

Required tools

- No special tools are needed to remove or install this assembly.

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Make sure that the printer initializes to a **Ready** state.

Access the menus by using the printer control panel, and then print a configuration page to make sure that the printer is functioning correctly.

1. Remove the keyboard (MFP)

Follow these steps to remove the keyboard (MFP).

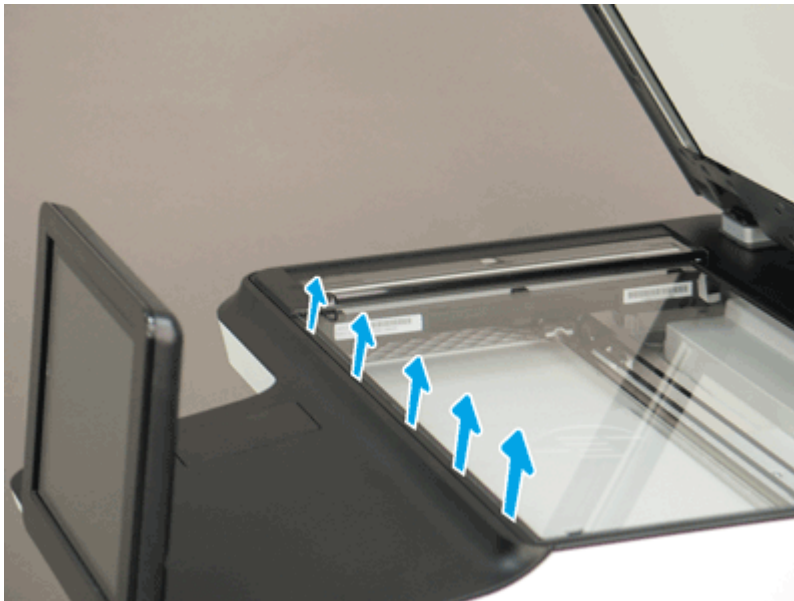
1. If the control panel is not fully tilted forward, tilt it forward now (callout 1) until it stops. Open the document feeder (callout 2).

Figure 5-188 Tilt the control panel and open the document feeder



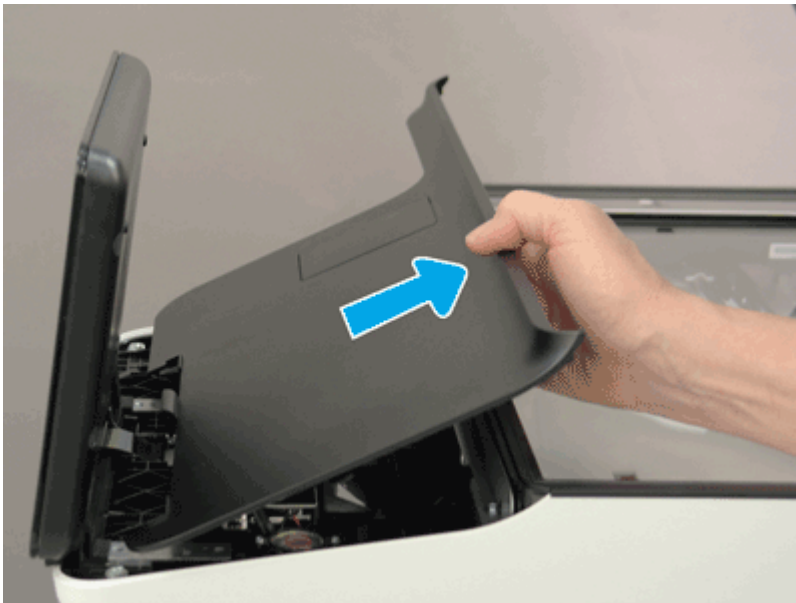
2. Beginning at the right side of the control-panel cover, carefully release five tabs along the top edge of the cover.

Figure 5-189 Release five tabs



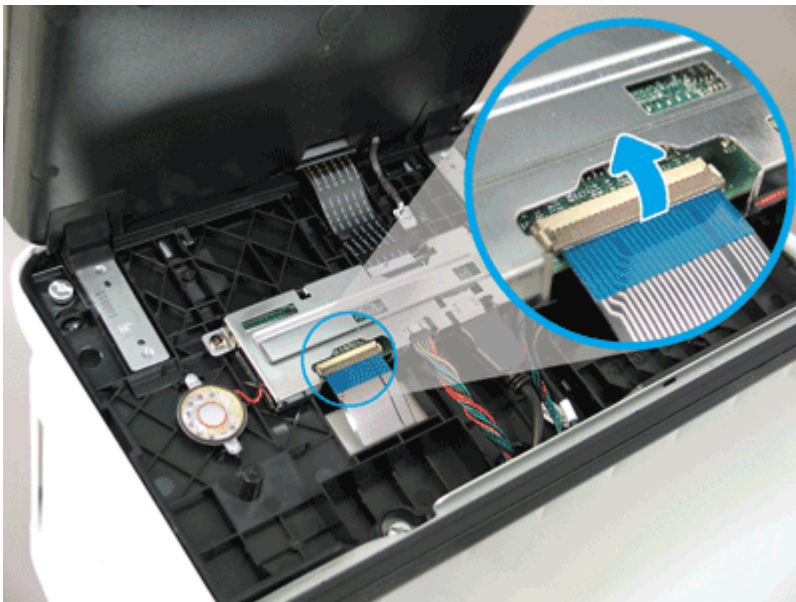
3. Continue to rotate the top edge of the cover away from the printer, and then remove the cover.

Figure 5-190 Remove the cover



4. Open the connector latch to release the keyboard flat cable.

Figure 5-191 Disconnect the keyboard flat cable



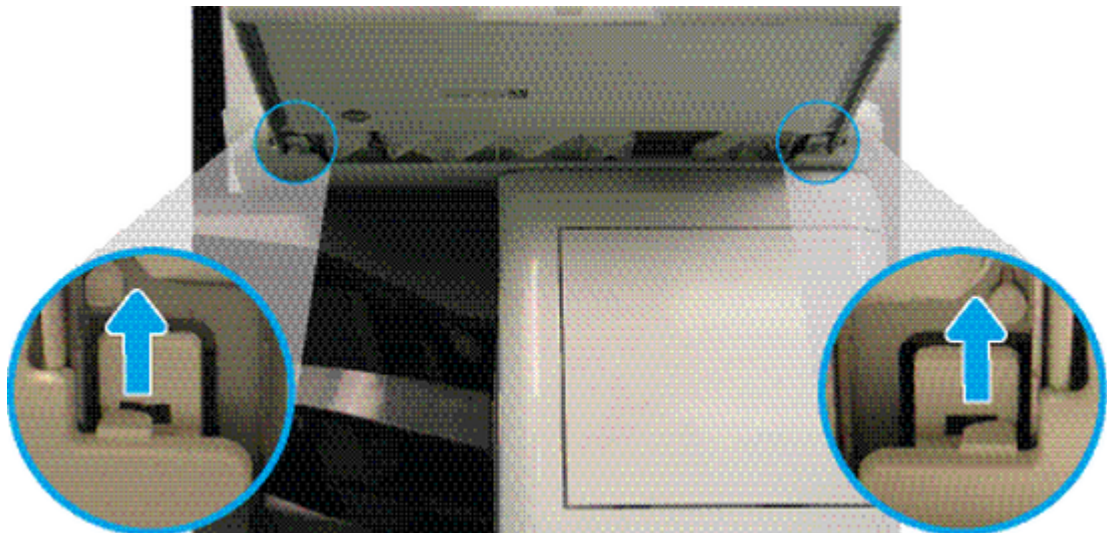
5. Slide the keyboard tray out until it stops.

Figure 5-192 Slide the keyboard tray out



6. Push up on the keyboard tray to release two tabs on the bottom of the tray, and then slide the tray toward you to disengage the tabs.

Figure 5-193 Release two tabs



7. Slide the keyboard tray all the way out of the printer to remove it.

Figure 5-194 Remove the keyboard



2. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

3. Install the keyboard

Follow these steps to install the keyboard.

1. Position the flat cable on the keyboard into the keyboard slot.

Figure 5-195 Position the flat cable in the slot



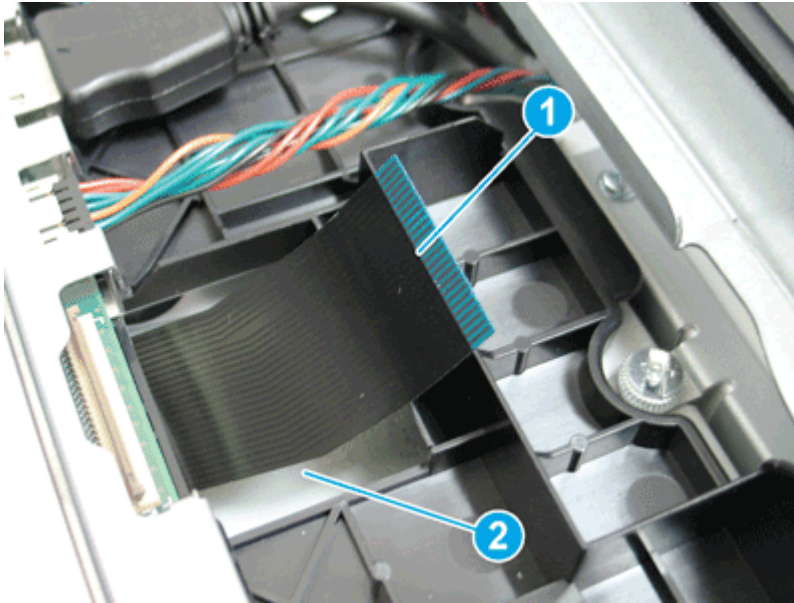
2. Slide the keyboard tray into the slot.

Figure 5-196 Slide the keyboard tray into the slot




3. Make sure to feed the keyboard flat cable (callout 1) through the opening (callout 2) in the control-panel base when installing the keyboard.

Figure 5-197 Check the keyboard flat cable

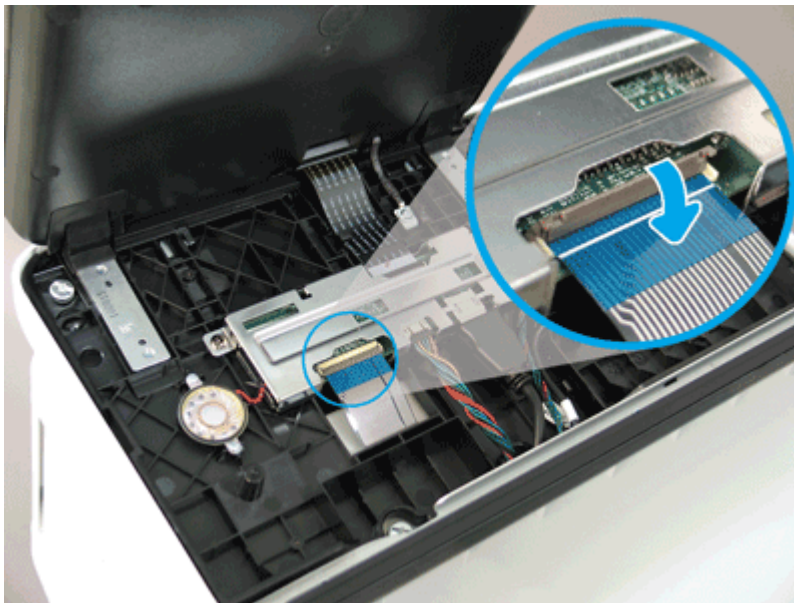


4. Position the keyboard flat cable in the connector, and then close the connector latch to secure it.

 **IMPORTANT:** Slightly tug on the cable to make sure that it is fully captured in the connector.

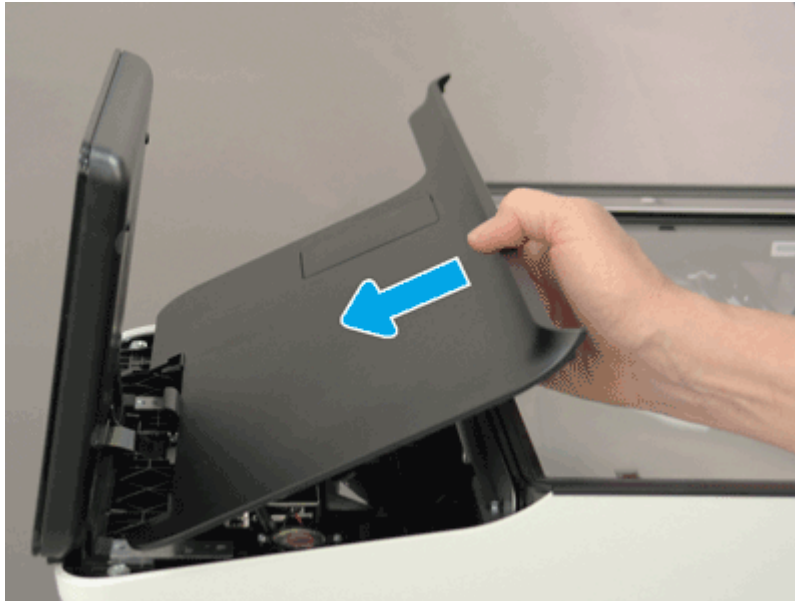
When the connector latch is closed and the cable is correctly installed, the white line on the cable is parallel to the connector latch.

Figure 5-198 Connect the keyboard flat cable



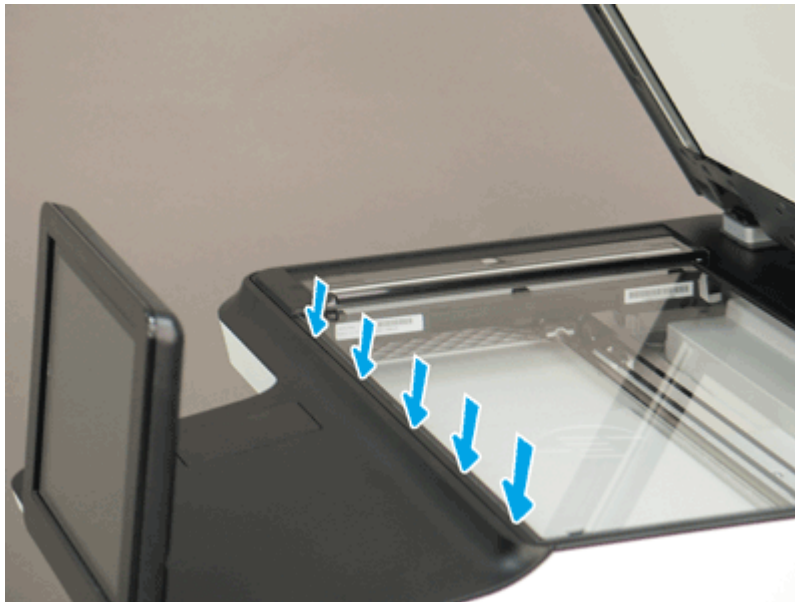
5. Position the control-panel cover on the printer.

Figure 5-199 Install the cover




6. Beginning at the right side of the control-panel cover, install five tabs along the top edge of the cover.

Figure 5-200 Install five tabs



7. Close the document feeder.

 **NOTE:** Adjust the control panel to the desired angle.


 **TIP:** If the keyboard is unresponsive after turning the printer on, check the flat cable installed previously. Reinstall the cable if necessary.

Figure 5-201 Close the document feeder




Install: Keyboard overlay (Flow M681z/Flow M682z/Flow E67660z)

Learn how to remove and replace the keyboard overlay.

Mean time to repair: 5 minutes

Service level: Basic

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.
- ⚠ **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.
- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-25 Part information

Part numbers	Part description
5851-6019	Kit - Keyboard Overlay (FR, IT, RU, DE, ES: UK Kybd) (EMEA)
5851-6020	Kit - Keyboard Overlay (FR-CN, ES-LA, ES: US Kybd) (NA)
5851-6021	Kit - Keyboard Overlay (FR-SW, DE-SW, DA: UK Kybd) (EMEA)
5851-6022	Kit - Keyboard Overlay (ZHTW, ZHCN) (AP)

Table 5-25 Part information (continued)

Part numbers	Part description
5851-6023	Kit - Keyboard Overlay (ES, PT) (EMEA)
5851-6024	Kit - Keyboard Overlay (JA-KG, JA-KT) (AP)
A7W12-67901	Kit - Keyboard Overlay Chinese
A7W14-67901	Kit - Keyboard Overlay Sweden

Required tools

- No special tools are needed to remove or install this assembly.

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

No post service test is available for this assembly.

1. Unpack the keyboard overlay

Follow these steps to unpack the keyboard overlay.

- Remove the new part from its package. Save all packaging for recycling.

For complete information on HP's recycling programs, go to [Product return and recycling](#).

2. Install the keyboard overlay

Follow these steps to install the keyboard overlay.

1. Slide the keyboard tray out until it stops.

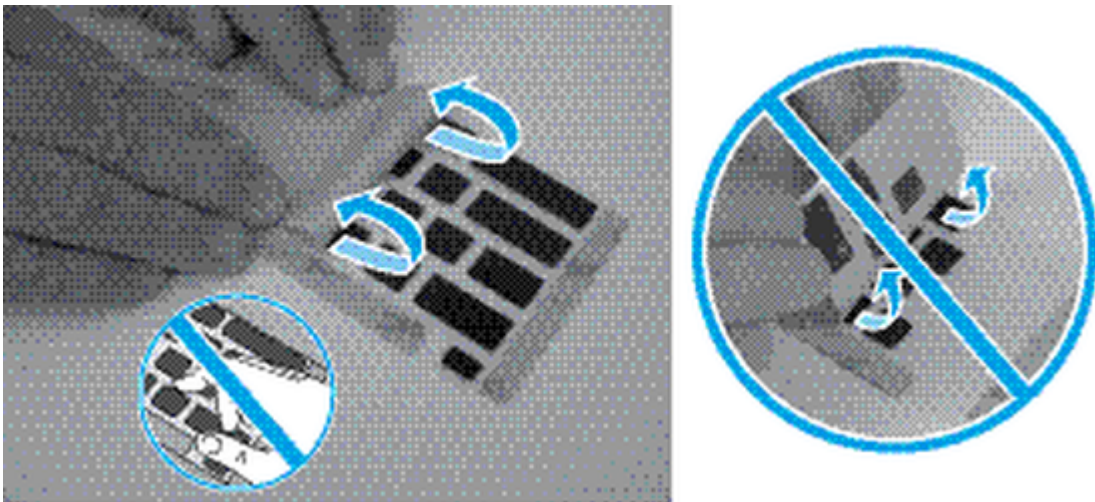
Figure 5-202 Slide the keyboard tray out



2. Carefully peel the backing from the control panel overlay.

CAUTION: Do not touch the adhesive squares and be careful so that the adhesive squares do not come off with the backing.

Figure 5-203 Remove the backing



3. Position the keyboard overlay on the keyboard by aligning the upper corners of the overlay with the edges of the keyboard.

NOTE: A different model of keyboard is pictured in the figure below. The procedure is still correct for the Flow M681z and Flow M682z models.

Figure 5-204 Position the keyboard overlay

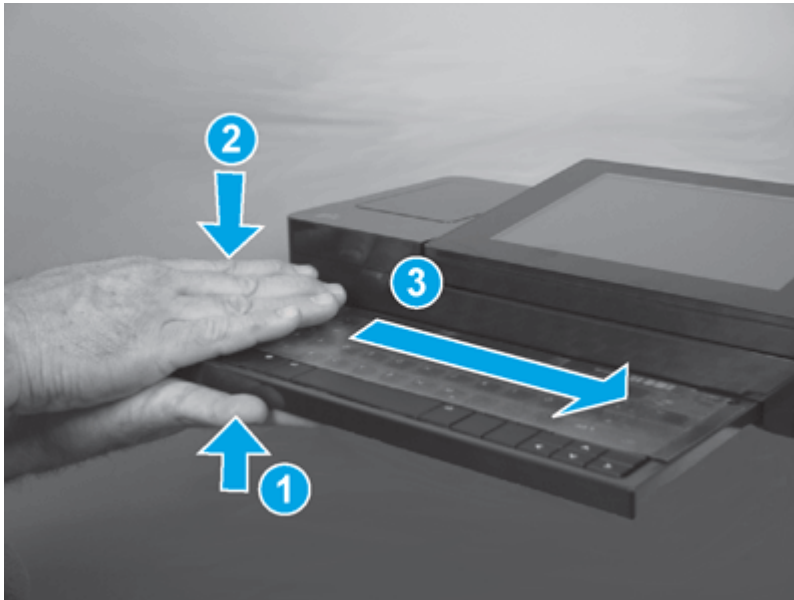


4. Place one hand under the keyboard and press upward (callout 1). Place the other hand on top of the keyboard and press downward (callout 2). Continue to press while sliding both hands to the right to adhere the keyboard overlay to the keyboard.



NOTE: A different model of keyboard is pictured in the figure below. The procedure is still correct for the Flow M681z and Flow M682z models.

Figure 5-205 Apply the keyboard overlay



5. Carefully remove the protective top sheet from the keyboard overlay.



CAUTION: Make sure that the adhesive squares do not come off of the keyboard with the protective sheet.


 **NOTE:** A different model of keyboard is pictured in the figure below. The procedure is still correct for the Flow M681z and Flow M682z models.

Figure 5-206 Apply the keyboard overlay



Customer self-repair (CSR) B parts and accessories

Customer self-repair (CSR) B parts are parts that a customer replaces without assistance from a field technician. These parts might require the use of tools.


Removal and replacement: Control panel (M681/M682/E67550/E67560/E67650/E67660)

Learn how to remove and replace the control panel for the M681/M682/E67550/ E67560/E67650/E67660 models.

 [View a video of how to remove and replace the control panel.](#)


Mean time to repair: 5 minutes

Service level: Basic

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Disconnect the power cable.

 **WARNING!** To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-26 Part information

Part number	Part description
B5L47-67018	Control panel (203 mm 8 in display)

Required tools

- No special tools are needed to remove or install this assembly.

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.


Post service test

Make sure that the printer initializes to a **Ready** state.

Access the menus by using the printer control panel, and then print a configuration page to make sure that the printer is functioning correctly.

1. Remove the control panel (M681/M682/E67550/E67560/E67650/E67660)

Follow these steps to remove the control panel (M681/M682/E67550/E67560/E67650/E67660).

 **NOTE:** This step is for the M681/M682/E67550/E67560/E67650/E67660 printers. For the M652/M653/E65050/E65060/E65150/E65160 printers, skip this step.

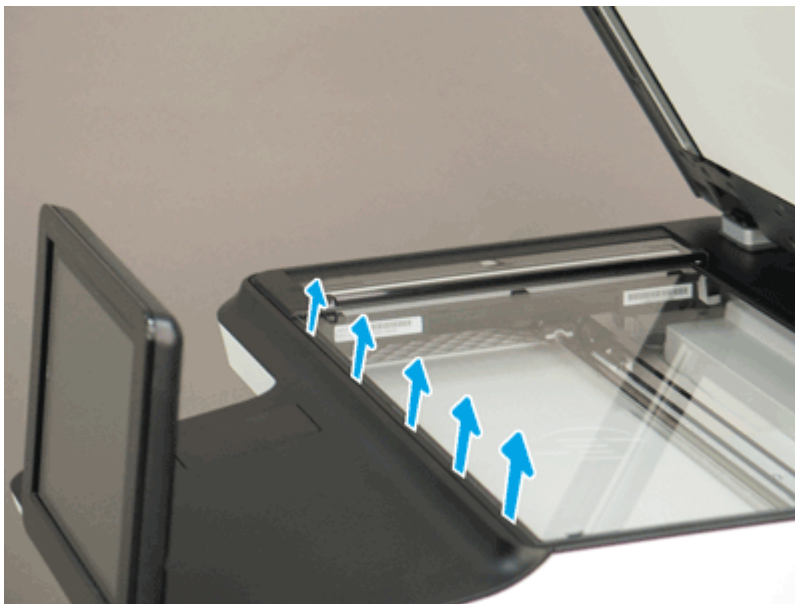
1. Tilt the control panel forward (callout 1), and then open the document feeder (callout 2).

Figure 5-207 Tilt the control panel forward and open the document feeder



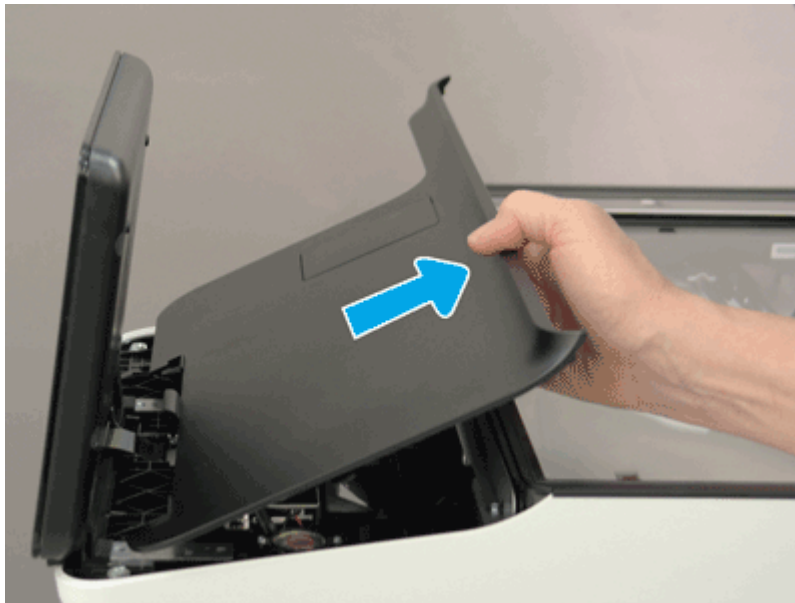
2. Beginning at the right side of the control-panel cover, carefully release five tabs along the top edge of the cover.

Figure 5-208 Release five tabs



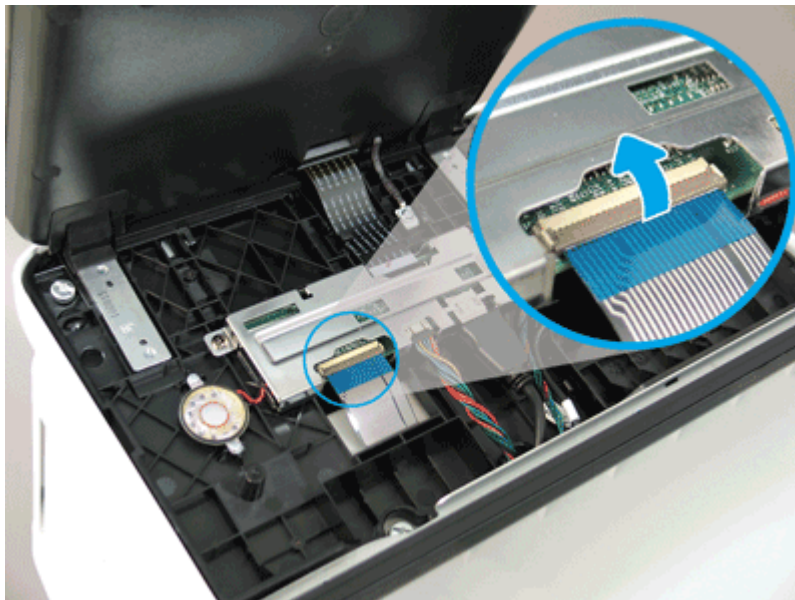
3. Continue to rotate the top edge of the cover away from the printer, and then remove the cover.

Figure 5-209 Remove the cover



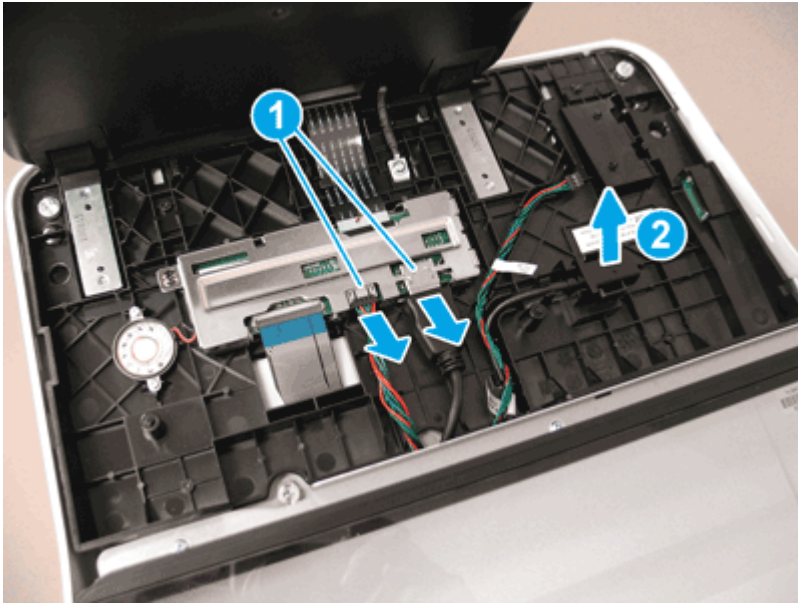
4. **Keyboard models only:** Lift up on the small, gray gate to release the keyboard flat cable.

Figure 5-210 Disconnect the keyboard flat cable (keyboard models only)



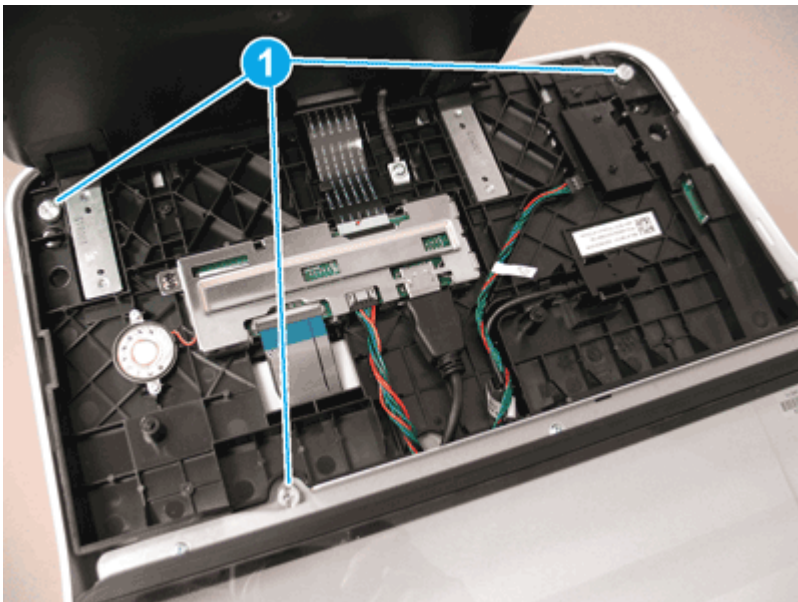
5. Disconnect two connectors (callout 1), and then release the USB cable (callout 2) from the holder.

Figure 5-211 Disconnect connectors



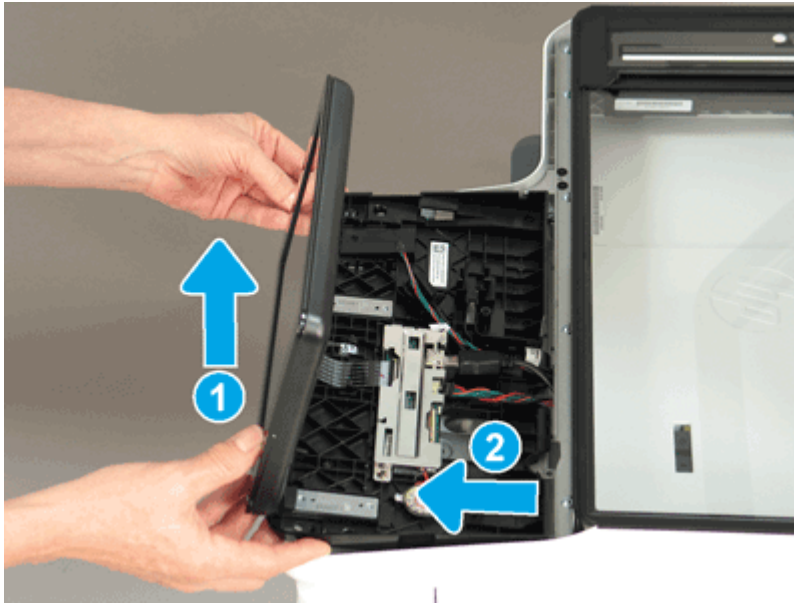
6. Remove three thumbscrews (callout 1).

Figure 5-212 Remove three thumbscrews



7. Lift the front of the control panel off of the printer (callout 1), and then slide it toward the front of the printer (callout 2) to remove it.

Figure 5-213 Remove the control panel



2. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

3. Install the control panel

Follow these steps to install the control panel.

1. Tilt the replacement control panel away from the base plate.

Figure 5-214 Tilt the control panel



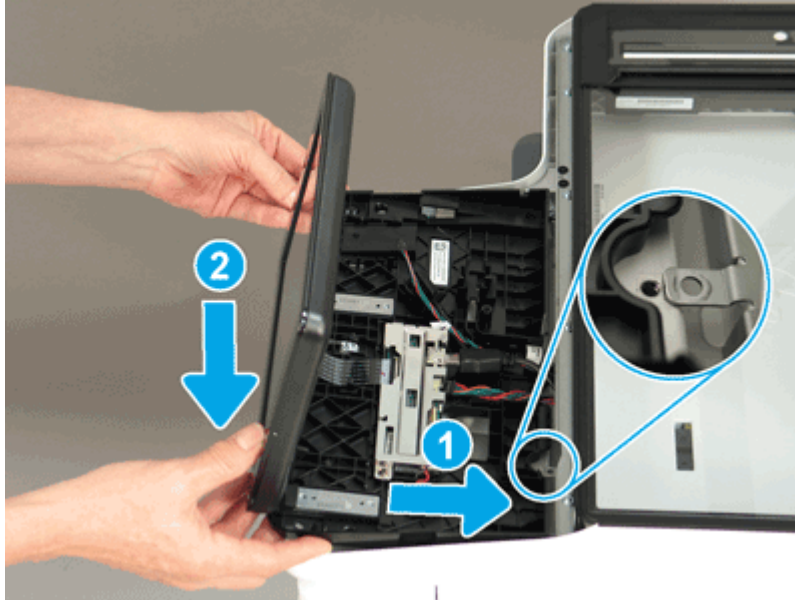
2. Position the rear edge of the control panel in the printer (callout 1), and then lower the front edge down (callout 2) to install it.



NOTE: Make sure that the control panel frame fits under the sheet metal tab on the right rear.

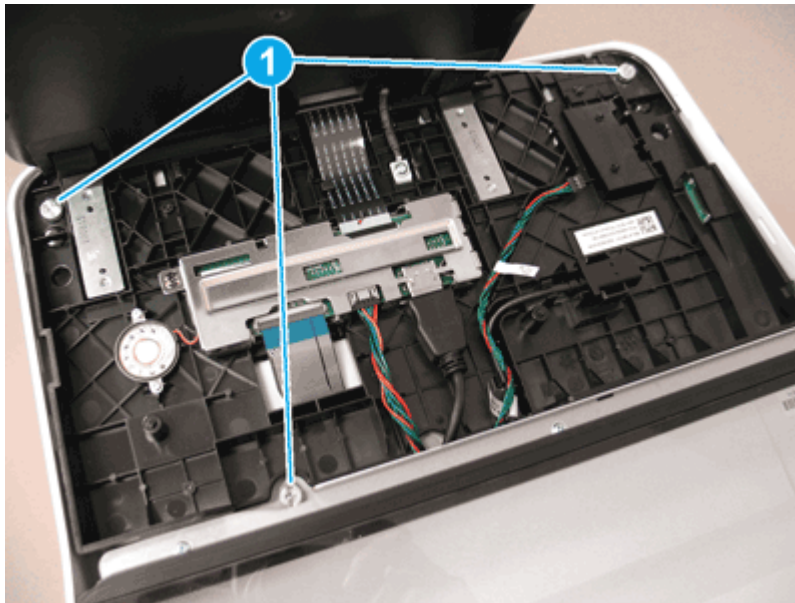
Keyboard models only: Make sure that the keyboard flat cable is accessible through the opening in the control panel base before installing the screws in the next step.

Figure 5-215 Install the control panel



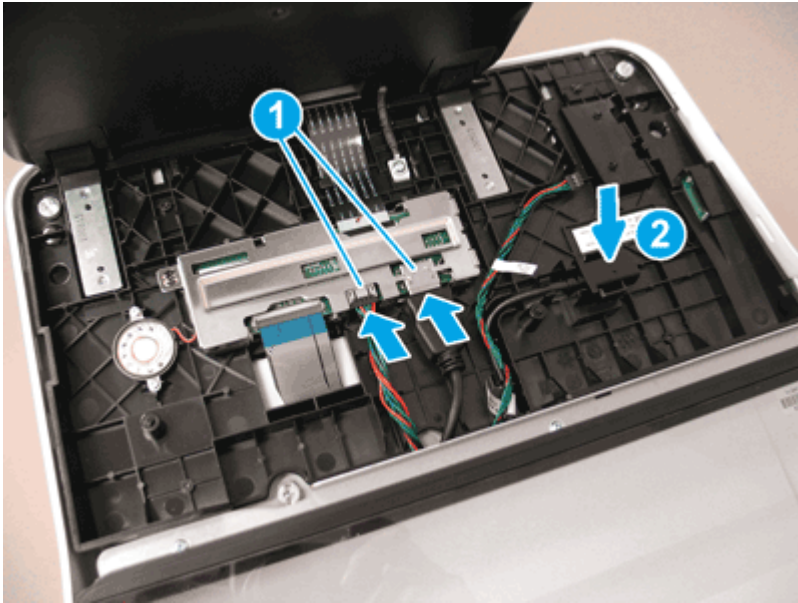
3. Install three thumbscrews (callout 1).

Figure 5-216 Install three thumbscrews



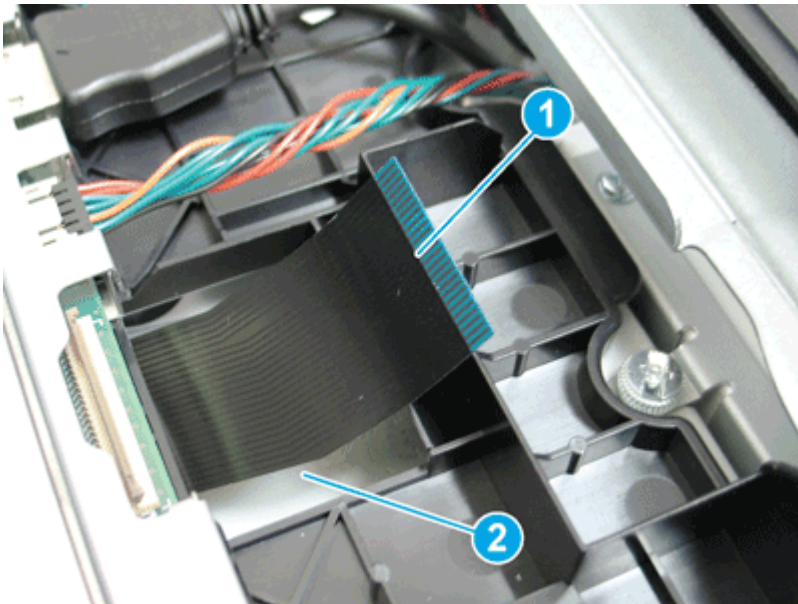
4. Connect two connectors (callout 1) and install the USB cable (callout 2) in the holder.

Figure 5-217 Connect connectors



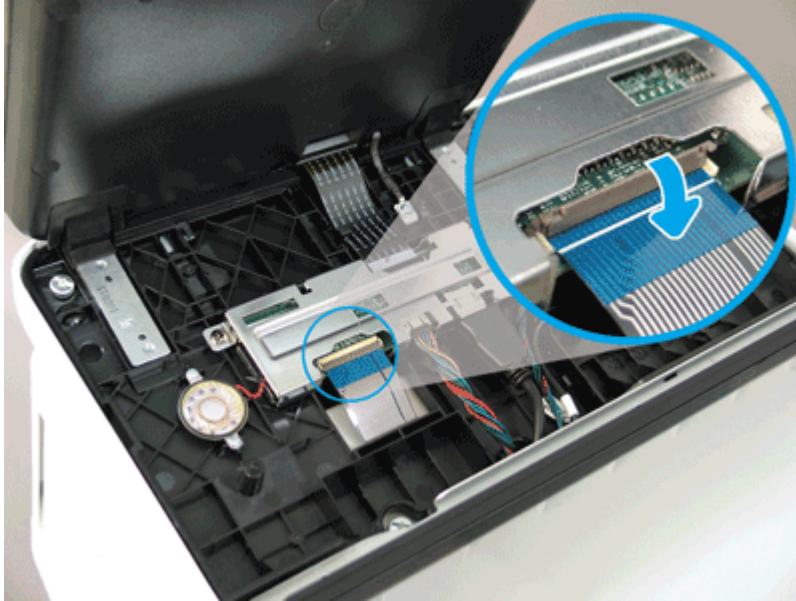
5. **Keyboard models only:** Make sure that the keyboard flat cable (callout 1) is fed through the opening (callout 2) in the control panel base.

Figure 5-218 Check the keyboard flat cable (keyboard models only)



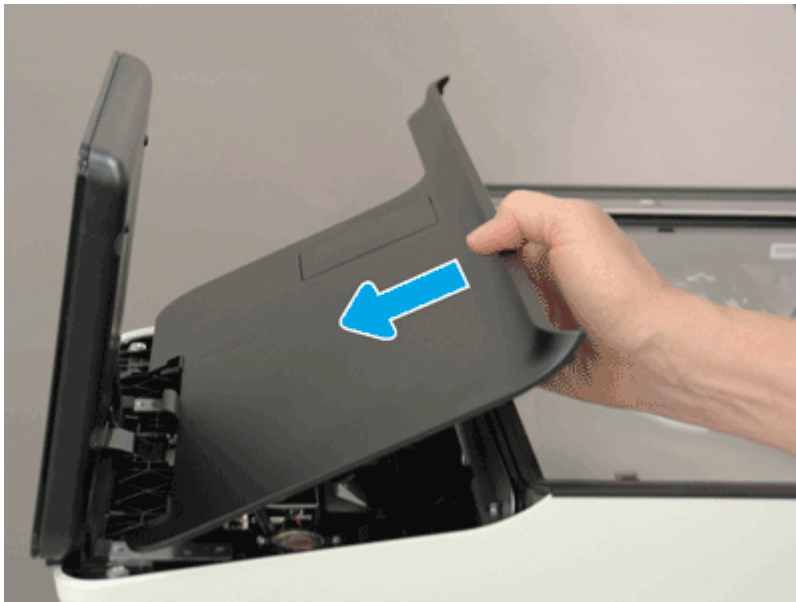
6. **Keyboard models only:** Position the keyboard flat cable in the connector, and then close the connector latch to secure it.

Figure 5-219 Connect the keyboard flat cable (keyboard models only)



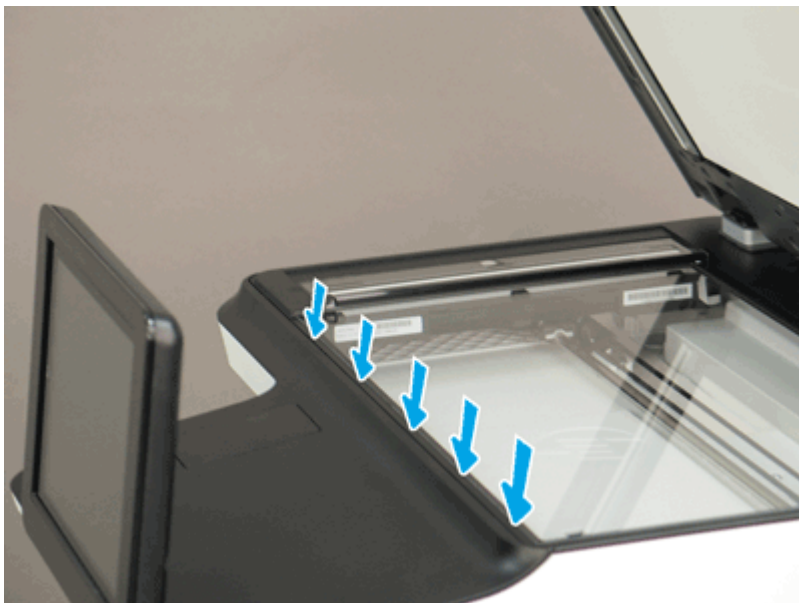
7. Position the control panel cover on the printer.

Figure 5-220 Position the cover on the printer



8. Beginning at the right side of the control panel cover, install five tabs along the top edge of the cover.

Figure 5-221 Install five tabs



9. Close the document feeder.

 **NOTE:** Adjust the control panel to the desired angle.

Keyboard models only: If the keyboard is unresponsive after turning the printer on, check the flat cable installed previously. Reinstall the cable if necessary.

Figure 5-222 Close the document feeder



Removal and replacement: Trays 2 and 3 pickup and separation rollers


Learn how to remove and replace the Trays 2 and 3 pickup and separation rollers.



[View a video of how to remove and replace the Trays 2 and 3 pickup and separation rollers.](#)


Mean time to repair: 5 minutes

Service level: Basic

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Disconnect the power cable.

 **WARNING!** To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-27 Part information

Part number	Part description
J7Z98-67902	Kit- LJ Trays 2-x rollers

Required tools

- No special tools are needed to remove or install this assembly.

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

No post service test is available for this assembly.

1. Remove the Tray 2 pickup rollers

Follow these steps to remove the Tray 2 pickup rollers.

1. Open Tray 2 until it stops, and then slightly lift and pull the tray out of the printer.


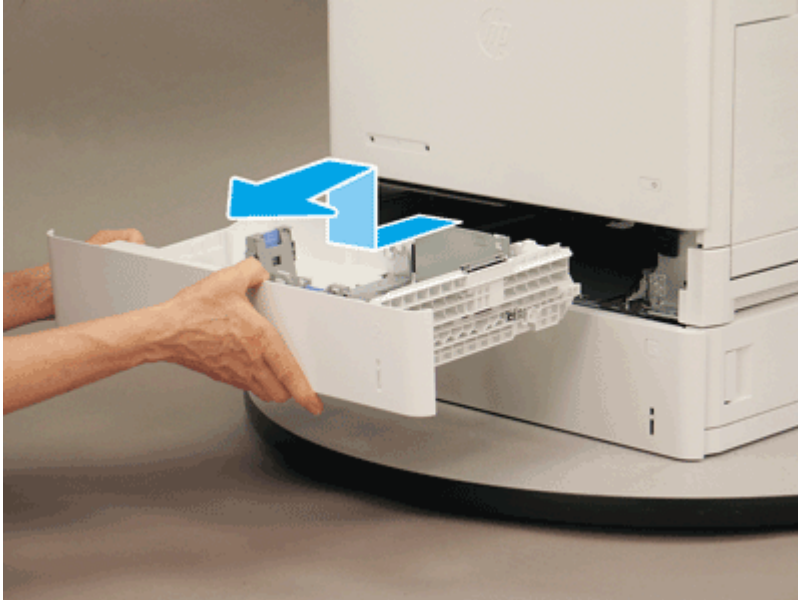
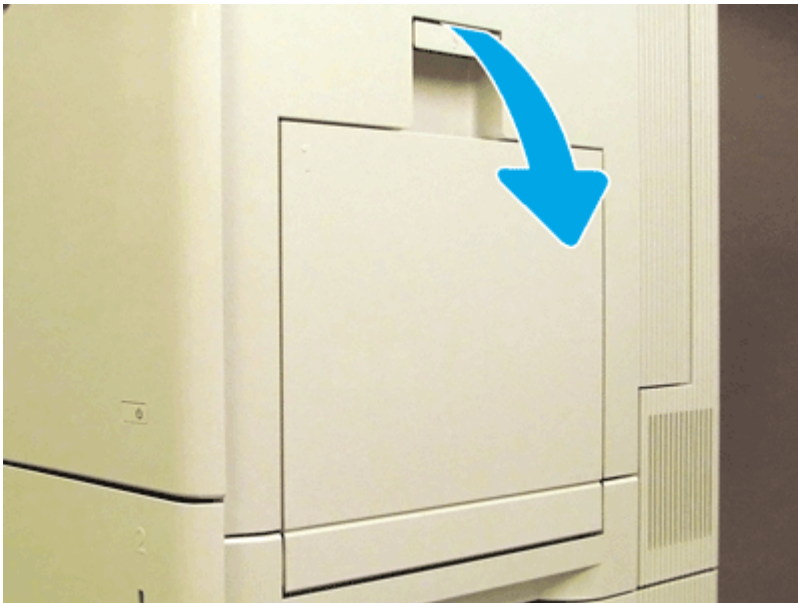
 **CAUTION:** Do not extend more than one paper tray at a time. Do not use the paper tray as a step. Keep hands out of the paper trays when closing. All trays must be closed when moving the printer.

Figure 5-223 Remove Tray 2



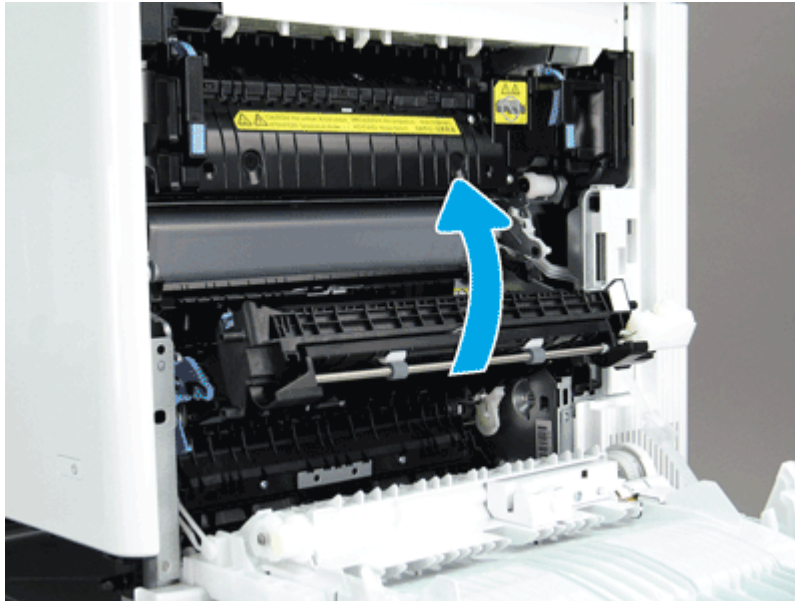
2. Open the right door.

Figure 5-224 Open the right door



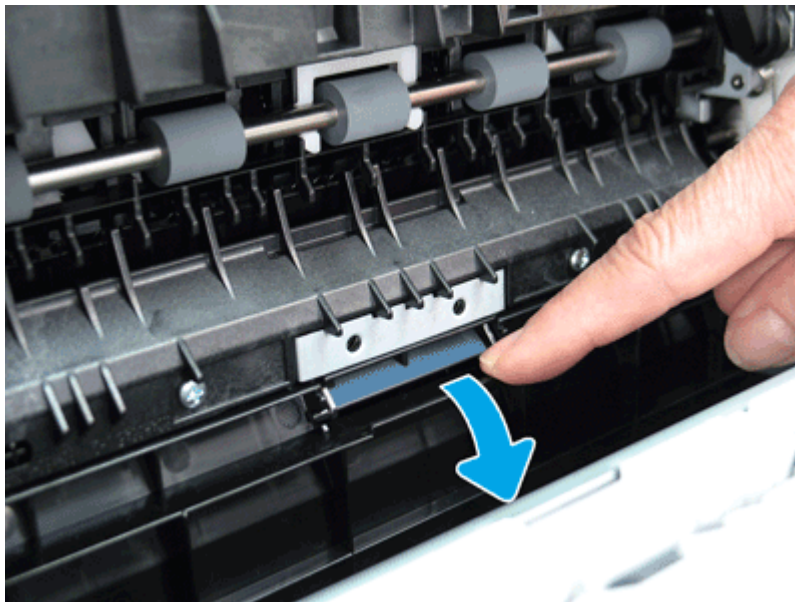
3. Carefully raise the transfer roller assembly until it locks in an upright position.

Figure 5-225 Raise the transfer roller assembly



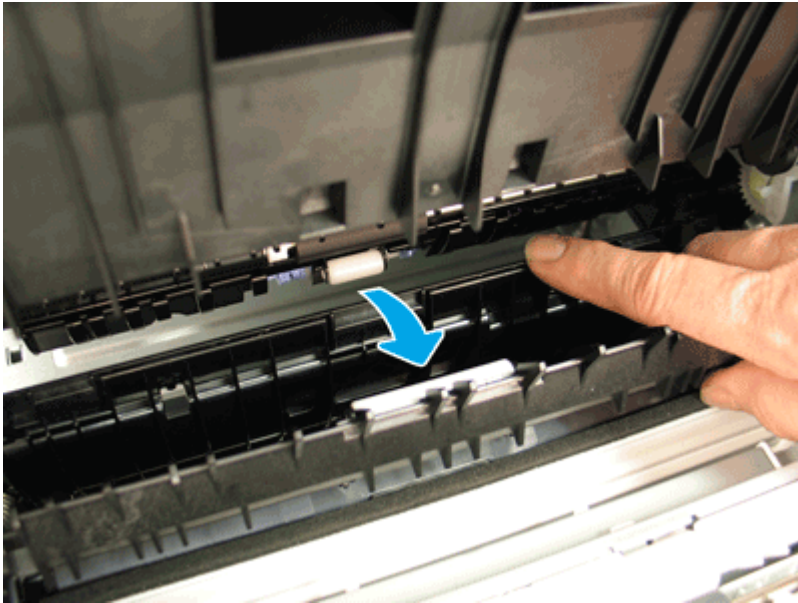
4. Lower the outer paper guide.

Figure 5-226 Lower the outer paper guide



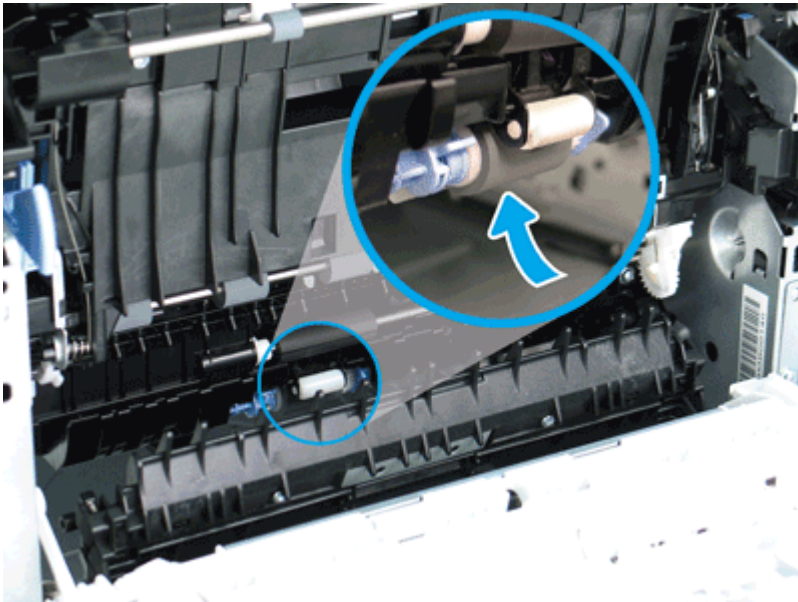
5. Lower the inner paper guide.

Figure 5-227 Lower the outer paper guide



6. Locate the tray pickup roller assembly, consisting of two gray rollers in a blue case.

Figure 5-228 Locate the pickup roller assembly



7. To remove the roller assembly, hold the rollers with your fingers and pull them back towards the front of the printer to compress the spring loaded shaft (callout 1). Rotate the right end of the assembly down (callout 2), and then remove the assembly.


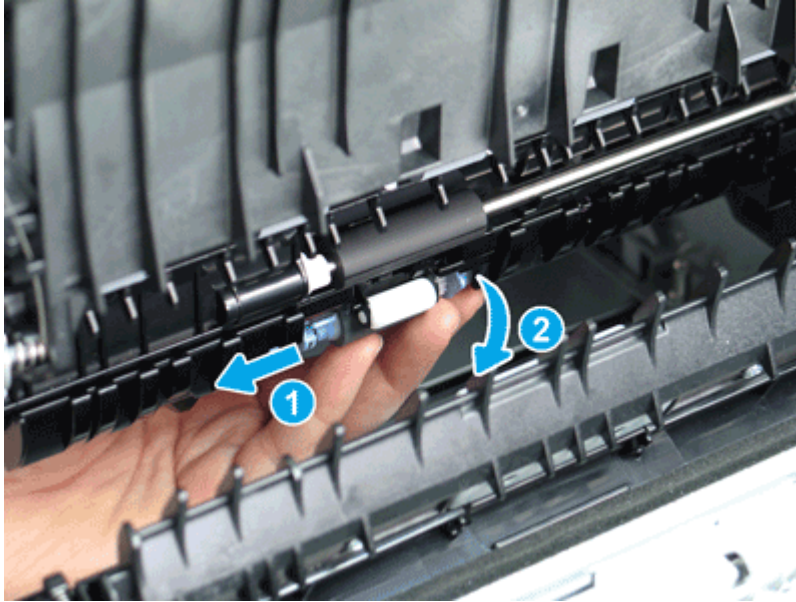
 **IMPORTANT:** The roller assembly must be accessed through the tray opening, while viewing it through the right door opening.

Figure 5-229 Remove the pickup roller assembly



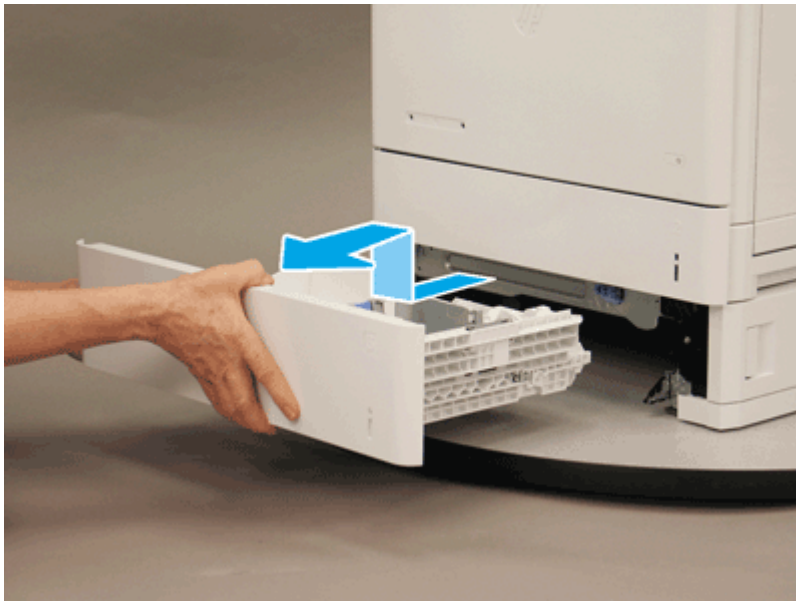
2. Remove the Tray 3 pickup rollers

Follow these steps to remove the Tray 3 pickup rollers.

1. Open Tray 3 until it stops, and then slightly lift and pull the tray out of the printer.

⚠ CAUTION: Do not extend more than one paper tray at a time. Do not use the paper tray as a step. Keep hands out of the paper trays when closing. All trays must be closed when moving the printer.

Figure 5-230 Remove Tray 3



2. Open the Tray 3 right door.

Figure 5-231 Open the Tray 3 right door



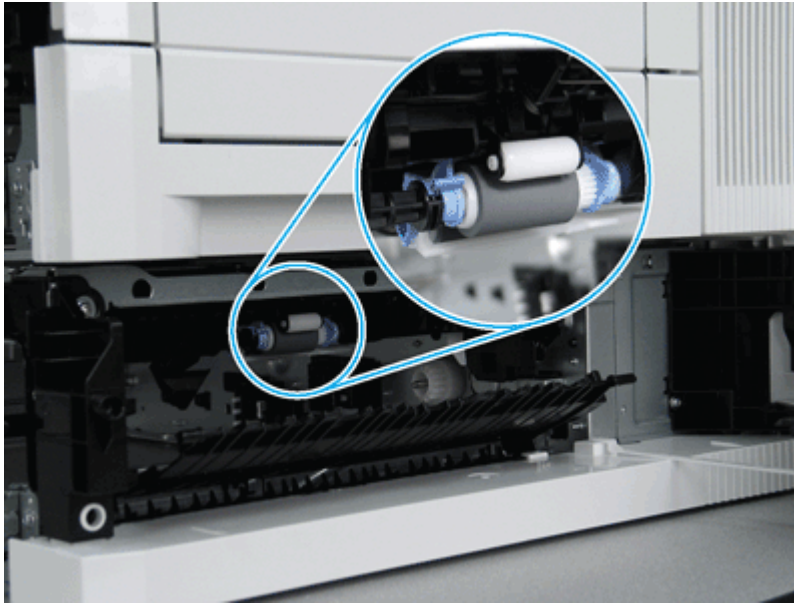
3. Locate the green tab on the feed assembly cover. Pull down and towards you to release the green tab and lower the assembly cover.

Figure 5-232 Lower the assembly cover



4. Locate the tray pickup roller assembly, consisting of two gray rollers in a blue case.

Figure 5-233 Locate the pickup roller assembly



5. To remove the roller assembly, hold the rollers with your fingers and pull them back towards the front of the printer to compress the spring loaded shaft (callout 1). Rotate the right end of the assembly down (callout 2), and then remove the assembly.


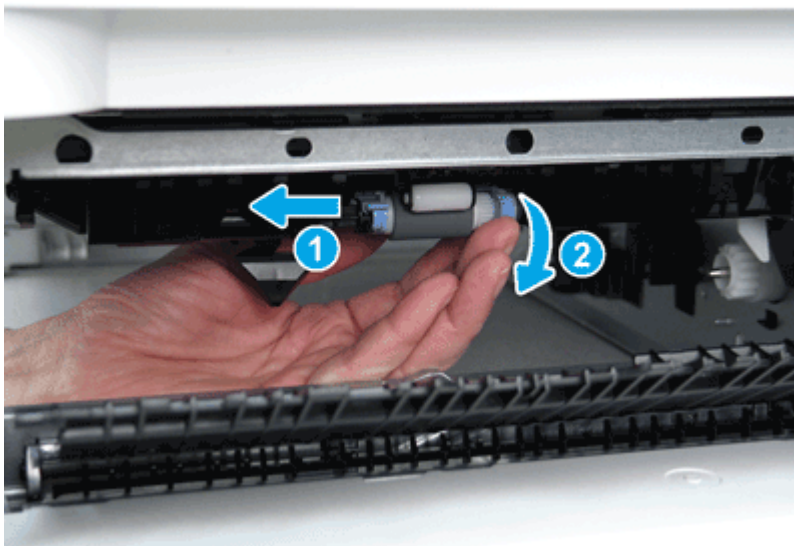
 **IMPORTANT:** The roller assembly must be accessed through the tray opening, while viewing it through the right door opening.

Figure 5-234 Remove the pickup roller assembly

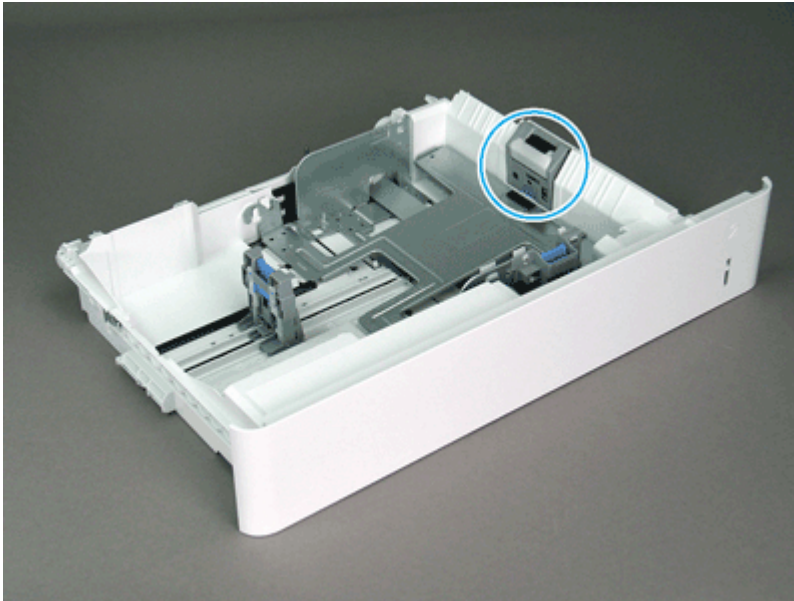


3. Remove the Tray 2 or 3 separation rollers

Follow these steps to remove the Tray 2 or 3 separation rollers.

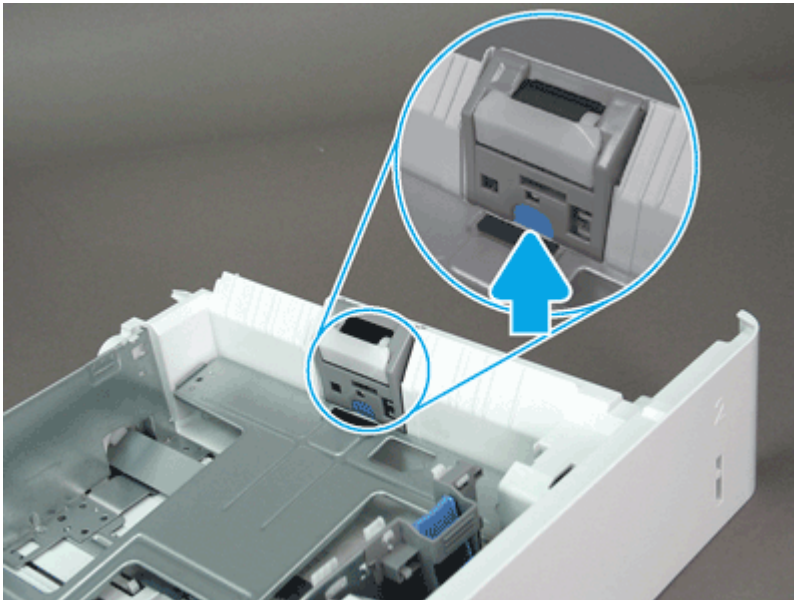
1. Locate the tray separation roller in the tray.

Figure 5-235 Locate the tray separation roller



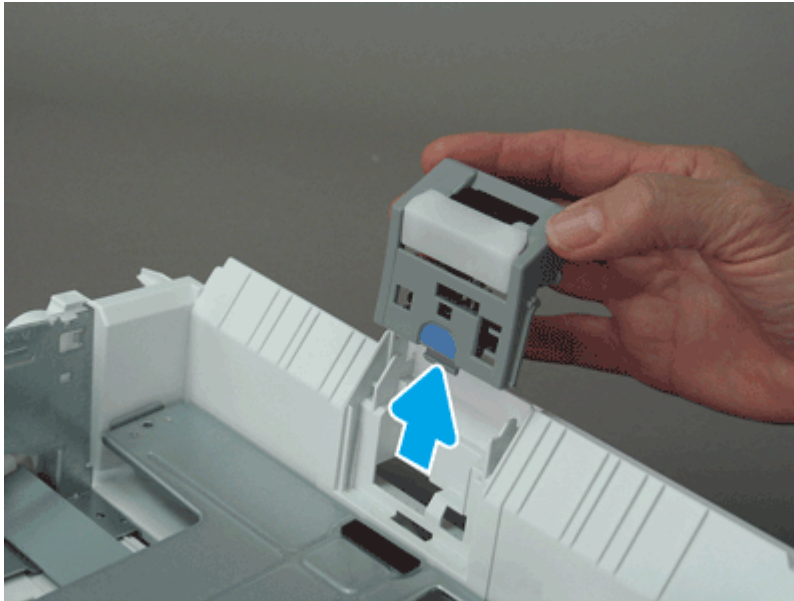
2. Push in on the blue label and push up slightly to release the roller assembly.

Figure 5-236 Release the roller assembly



3. Slide the roller assembly straight up to remove it.

Figure 5-237 Remove the roller assembly



4. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



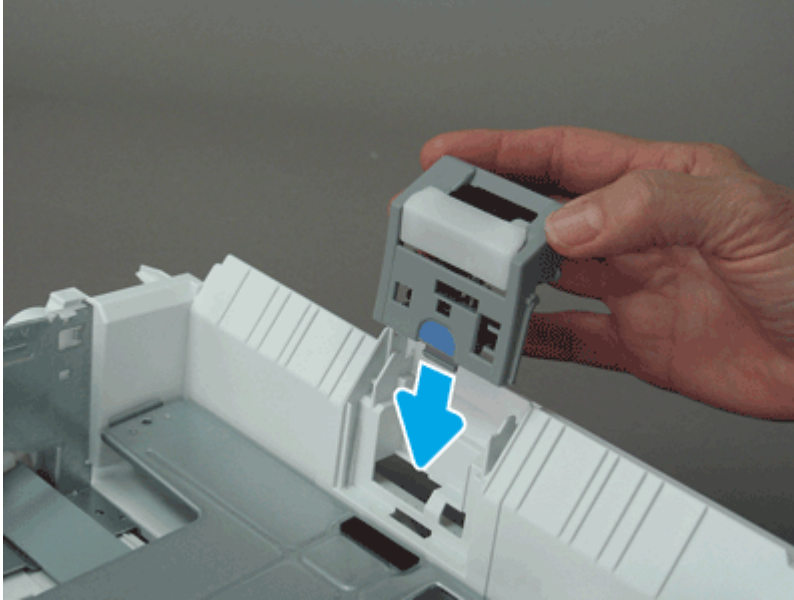
NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

5. Install the Tray 2 or 3 separation rollers

Follow these steps to install the Tray 2 or 3 separation rollers.

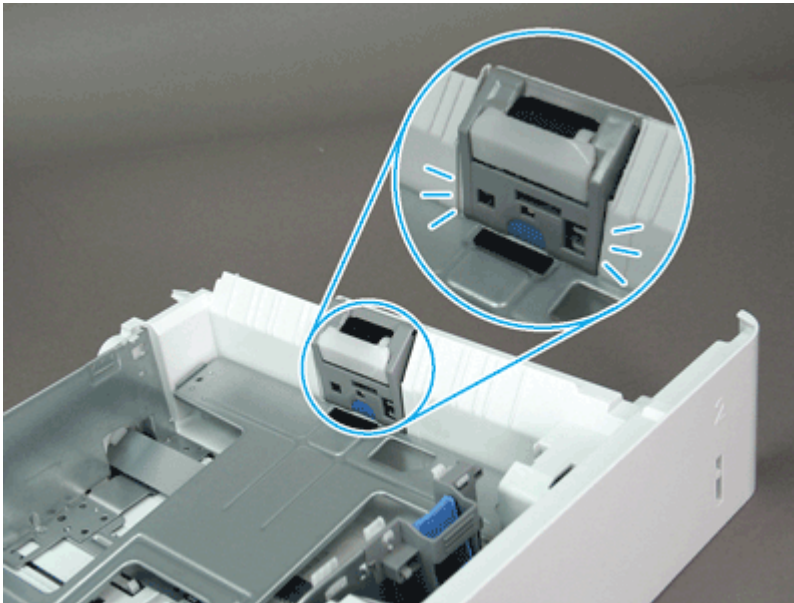
1. Slide the roller assembly straight into the tray to install it.

Figure 5-238 Install the roller assembly



2. Press down to make sure that the roller assembly snaps into place and is fully seated.

Figure 5-239 Make sure that the roller is seated

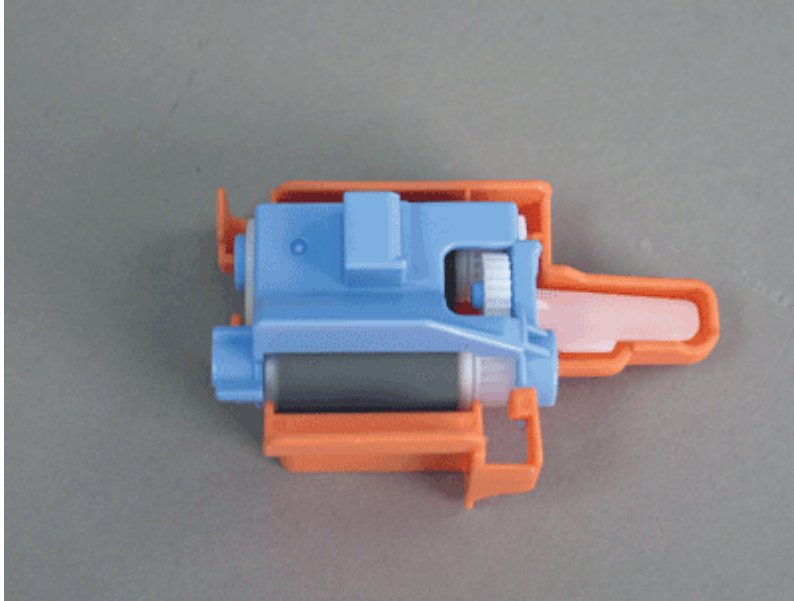


6. Install the Tray 3 pickup rollers

Follow these steps to install the Tray 3 pickup rollers.

1. The roller assembly is in an orange installation tray. Do not remove the orange installation tray until the roller assembly has been installed.

Figure 5-240 Do not remove the orange installation tray



2. In the printer, position the roller assembly so that the blue, spring-loaded shaft fits into the opening on the left side of the roller assembly (callout 1). With the shaft in the opening, pull toward the front of the printer to compress the shaft, and then pivot the right end of the assembly up (callout 2).


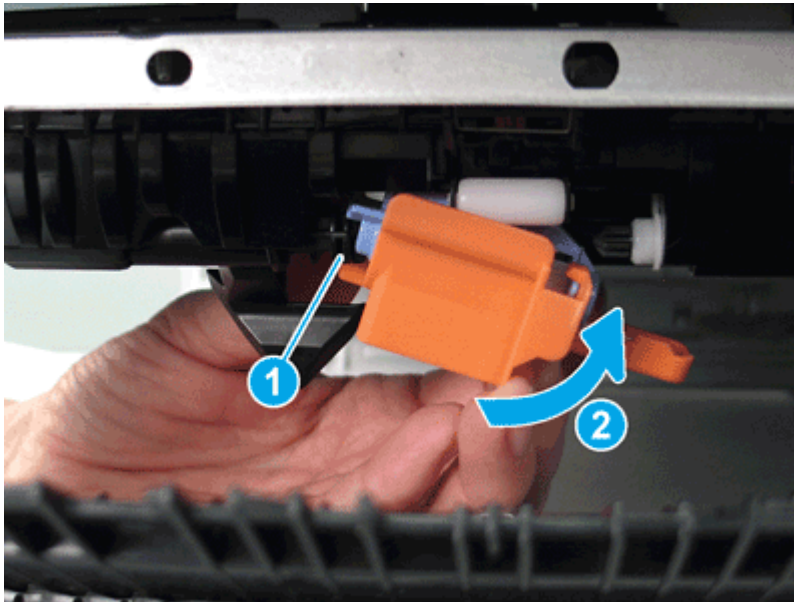
 **IMPORTANT:** The roller must be accessed through the tray opening, while viewing it through the right door opening.

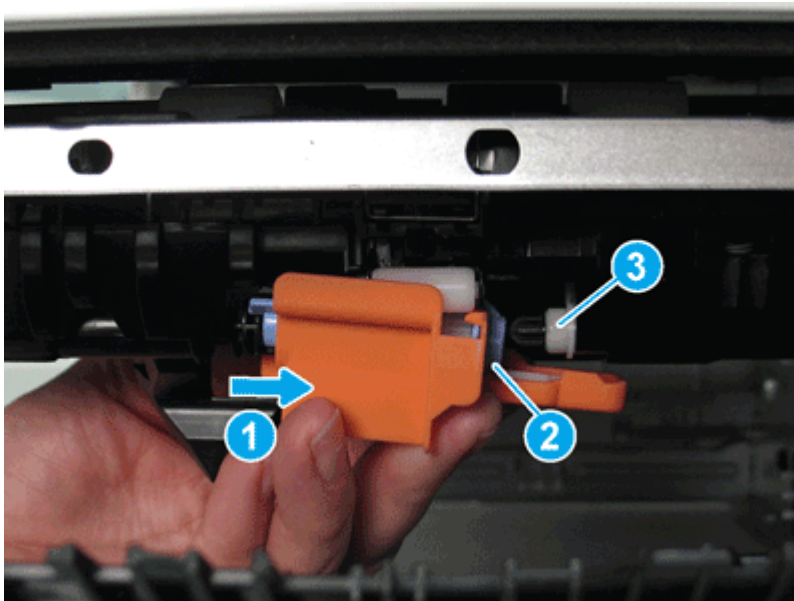
Figure 5-241 Position the roller



3. While holding the roller assembly in place against the printer, carefully allow the spring-loaded shaft to push the roller assembly forward (callout 1) until the front side (callout 2) comes to rest on

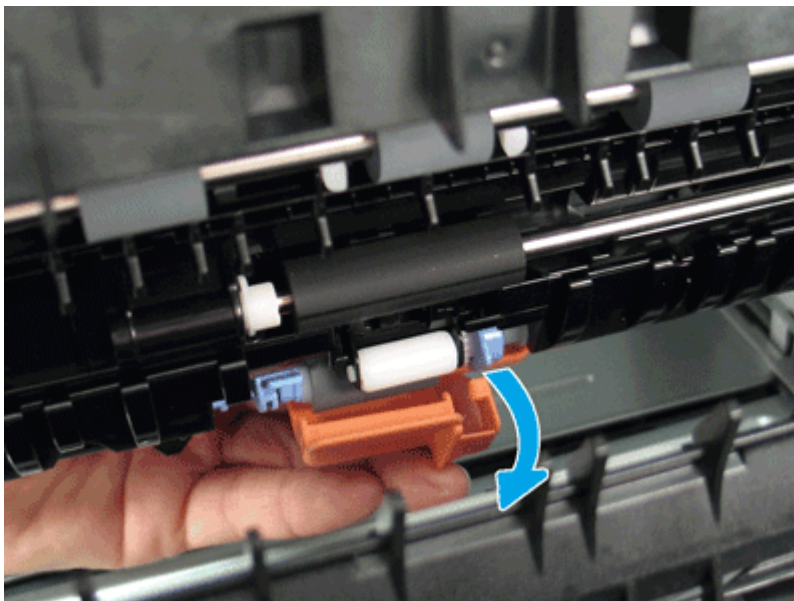
a black shaft (callout 3). Gently move the assembly side to side to ensure both ends of the roller assembly are seated.

Figure 5-242 Install the roller assembly



4. Gently pinch and twist the orange installation tray, and then pull downward to remove it from the roller assembly.

Figure 5-243 Remove the orange installation tray



5. Look inside the printer through the tray opening and make sure that the roller assembly is correctly installed. It must not hang down into the tray opening. If the roller hangs down into the tray cavity, remove it, reinstall it in the orange installation tray, and then reinstall it in the printer.

⚠ CAUTION: If the roller assembly is not correctly installed, it might be damaged when the tray is installed.

Figure 5-244 Roller correct and incorrect installation

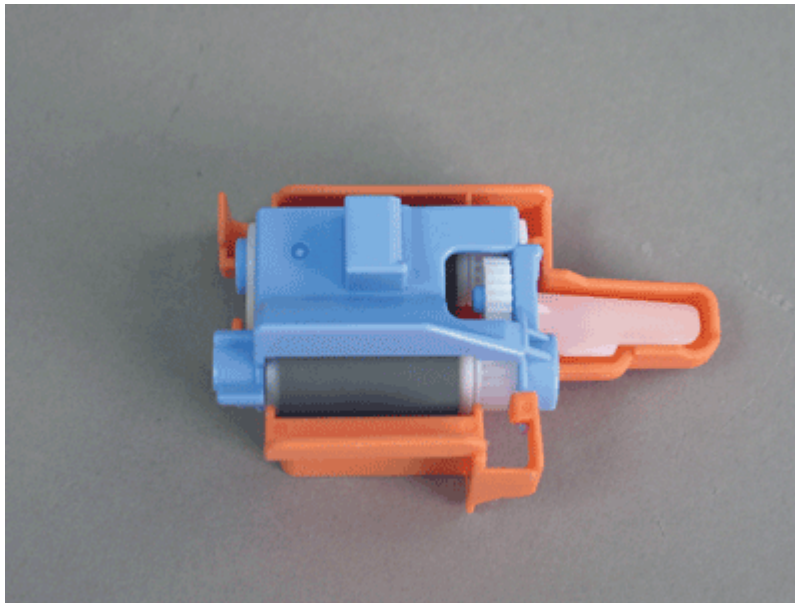


7. Install the Tray 2 pickup rollers

Follow these steps to install the Tray 2 pickup rollers.

1. The roller assembly is in an orange installation tray. Do not remove the orange installation tray until the roller assembly has been installed.

Figure 5-245 Do not remove the orange installation tray



2. In the printer, position the roller assembly so that the blue, spring-loaded shaft fits into the opening on the left side of the roller assembly (callout 1). With the shaft in the opening, pull toward the front of the printer to compress the shaft, and then pivot the right end of the assembly up (callout 2).


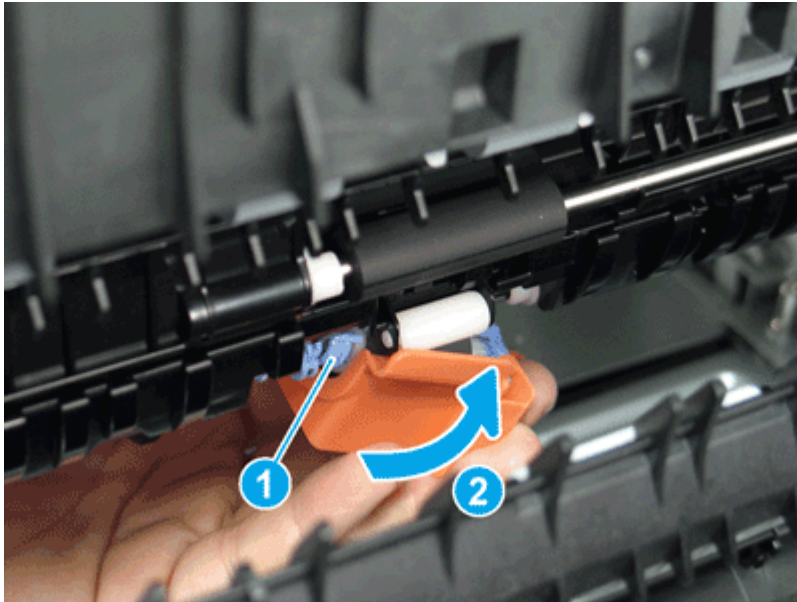
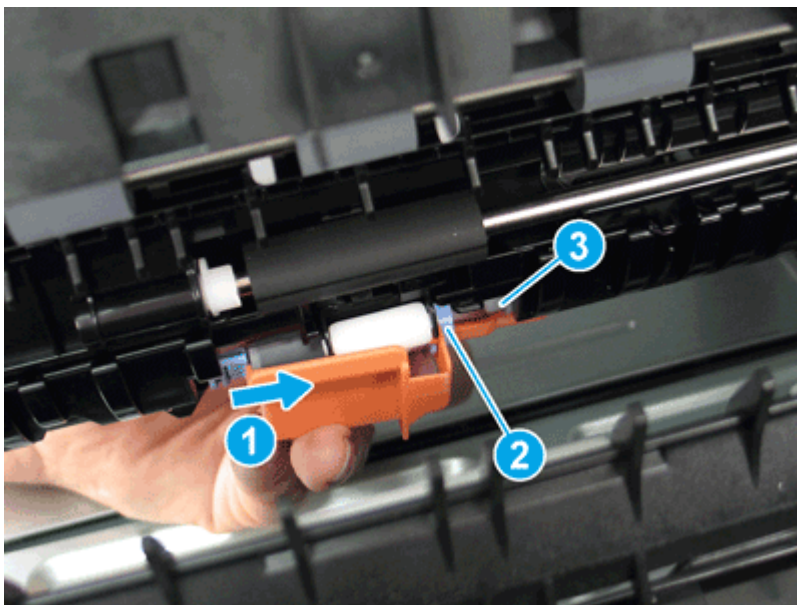
 **IMPORTANT:** The roller must be accessed through the tray opening, while viewing it through the right door opening.

Figure 5-246 Position the roller



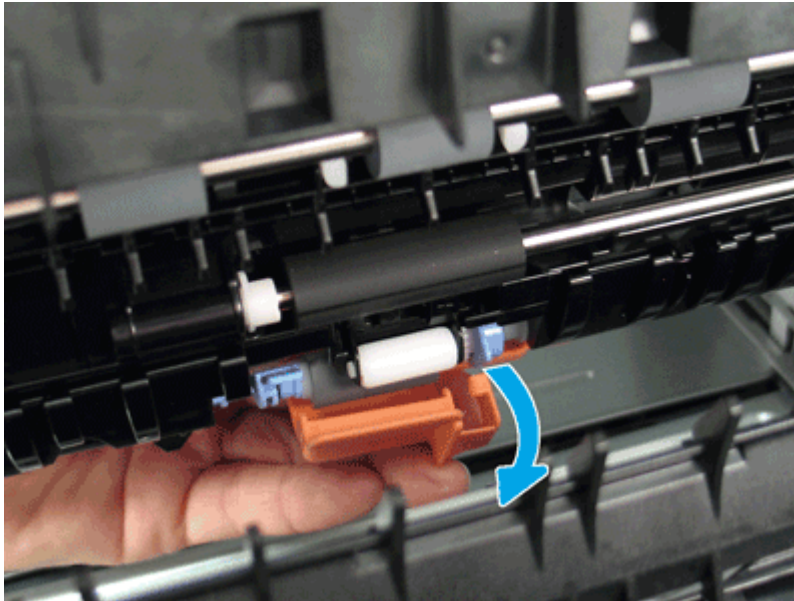
3. While holding the roller assembly in place against the printer, carefully allow the spring-loaded shaft to push the roller assembly forward (callout 1) until the front side (callout 2) comes to rest on a black shaft (callout 3). Gently move the assembly side to side to ensure both ends of the roller assembly are seated.

Figure 5-247 Install the roller assembly



4. Gently pinch and twist the orange installation tray, and then pull downward to remove it from the roller assembly.

Figure 5-248 Remove the orange installation tray



5. Look inside the printer through the tray opening and make sure that the roller assembly is correctly installed. It must not hang down into the tray opening. If the roller hangs down into the tray cavity, remove it, reinstall it in the orange installation tray, and then reinstall it in the printer.

CAUTION: If the roller assembly is not correctly installed, it might be damaged when the tray is installed.

Figure 5-249 Roller correct and incorrect installation



Removal and replacement: Trays 3-5 paper feeder stand pickup and separation rollers

Learn how to remove and replace the Trays 3-5 paper feeder stand pickup and separation rollers.

Mean time to repair: 5 minutes

Service level: Basic

IMPORTANT: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Disconnect the power cable.

⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-28 Part information

Part number	Part description
J7Z98-67902	Kit-LJ Trays 2-x rollers

Required tools

- No special tools are needed to remove or install this assembly.

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

No post service test is available for this assembly.

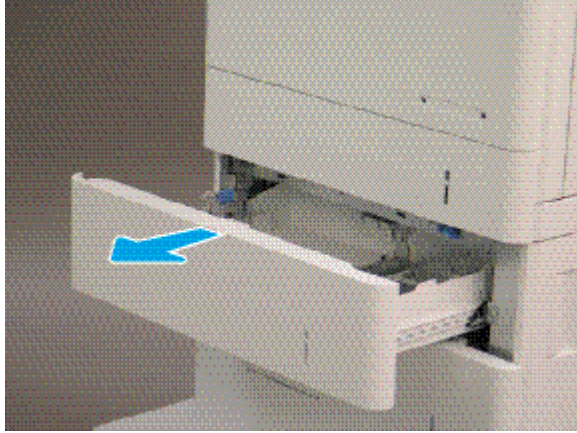
1. Remove the Trays 3-5 paper feeder stand pickup and separation rollers

Follow these steps to remove the Trays 3-5 paper feeder stand pickup and separation rollers.

1. Do one of the following:
 - a. Open the paper tray.

⚠ CAUTION: Do not extend more than one paper tray at a time. Do not use the paper tray as a step. Keep hands out of the paper trays when closing. All trays must be closed when moving the printer.

Figure 5-250 Open the paper tray



- b. Open the high-capacity paper tray.

Figure 5-251 Open the high-capacity paper tray



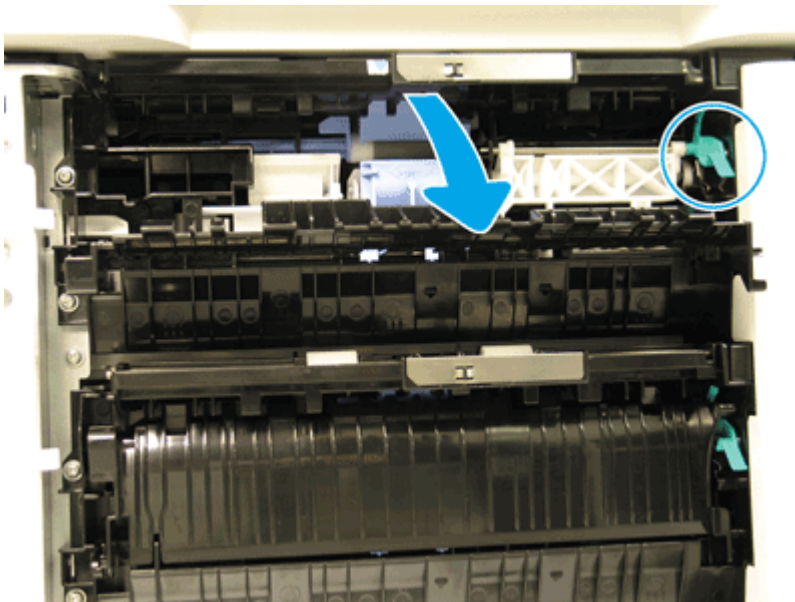
2. Open the right door of the paper feeder

Figure 5-252 Open the right door



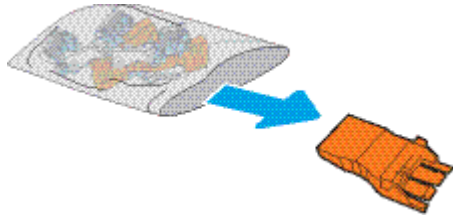
3. Locate the green tab on the feed assembly cover. Release the tab to lower the assembly cover.

Figure 5-253 Lower the feed assembly cover



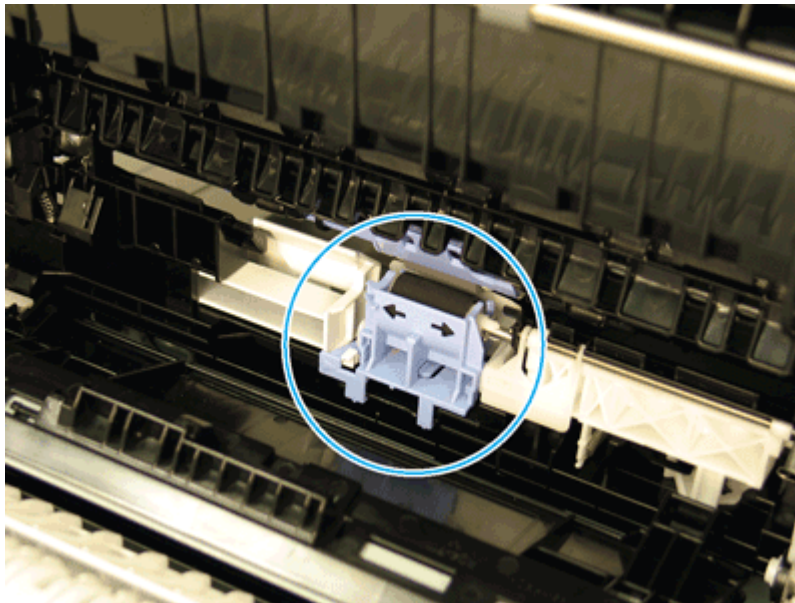
4. Remove the orange separation roller tool from the packaging.

Figure 5-254 Remove the tool from the packaging



5. Locate the separation roller.

Figure 5-255 Locate the separation roller



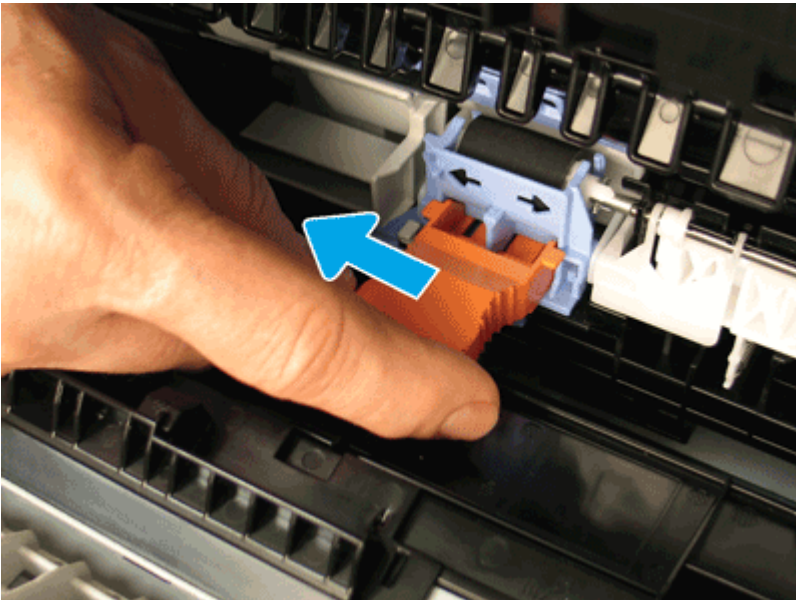
6. Install the orange tool in the separation roller until it snaps into place.

Figure 5-256 Install the orange tool



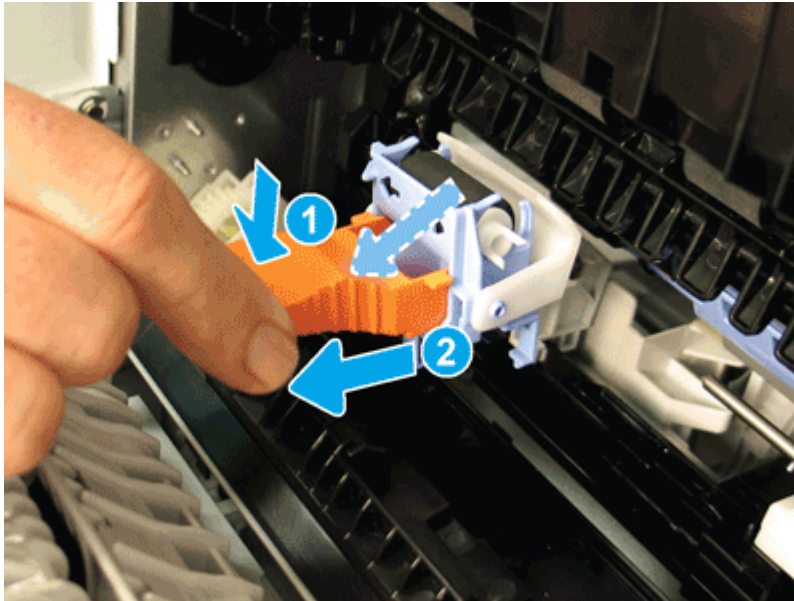
7. Slide the roller to the left.

Figure 5-257 Slide the roller to the left



8. Tilt the end of the tool down (callout 1), and then pull straight out of the printer (callout 2) to remove the separation roller.

Figure 5-258 Remove the separation roller

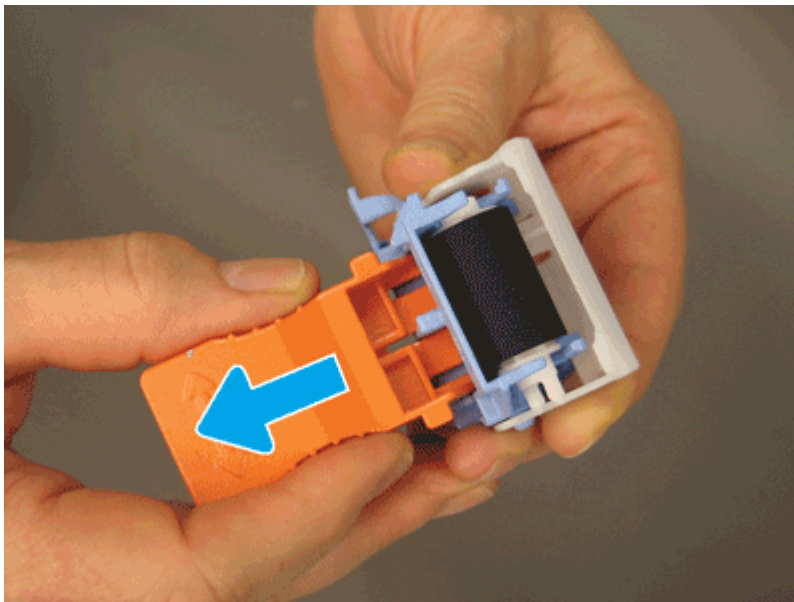


9. Remove the orange tool from the separation roller.



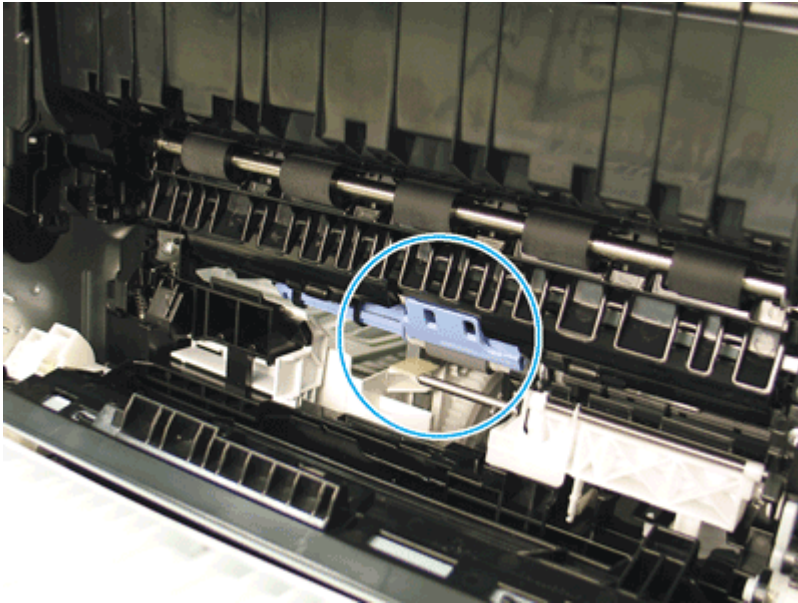
NOTE: The tool will be used to install the new separation roller.

Figure 5-259 Remove the orange tool



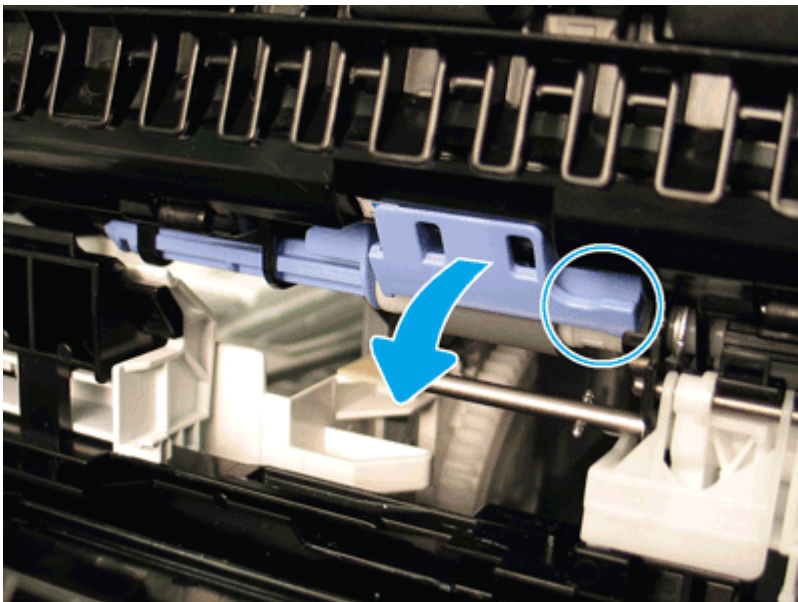
10. Locate the pickup and feed rollers.

Figure 5-260 Locate the pickup and feed rollers



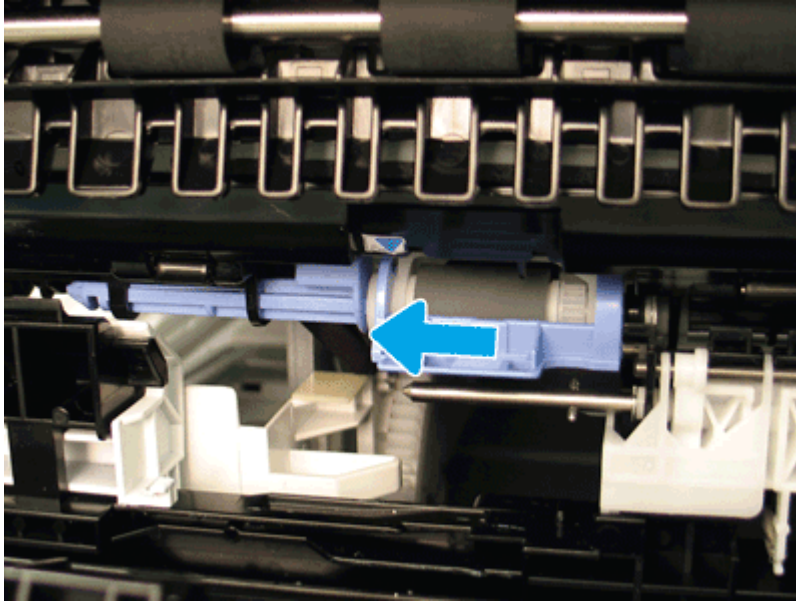
11. Locate and pull down the blue tab to unlock the pickup and feed rollers.

Figure 5-261 Unlock the pickup and feed rollers



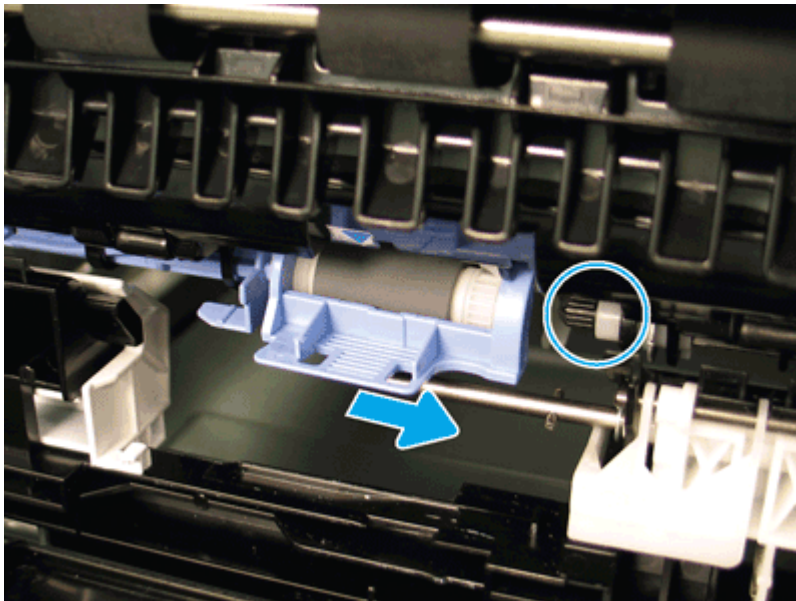
12. Use the blue tab as a handle to slide the rollers to the left to compress the left blue post until it clicks into place.

Figure 5-262 Slide the blue tab left, compressing the left blue post until it clicks



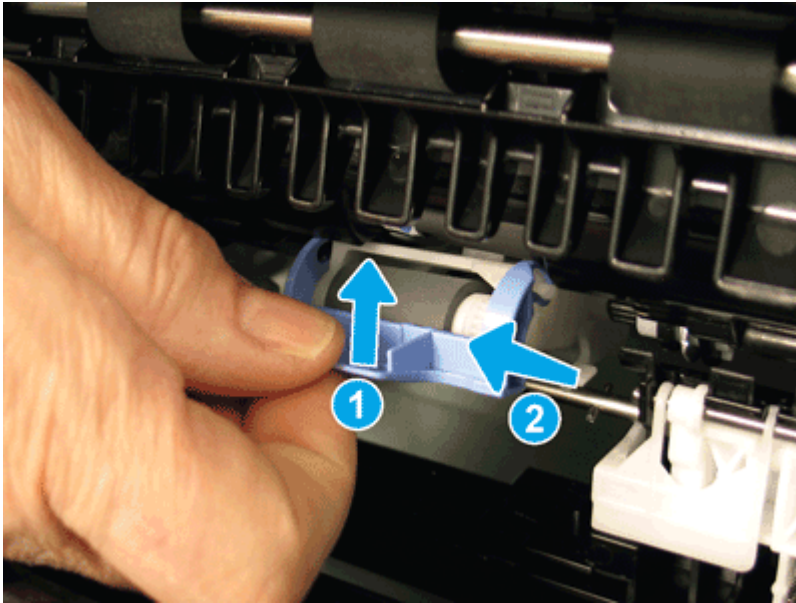
13. Slightly move the rollers to the right to free them from the blue post. Make sure that the roller is clear of the black post on the right.

Figure 5-263 Slightly move the rollers to the right to free them from the blue post



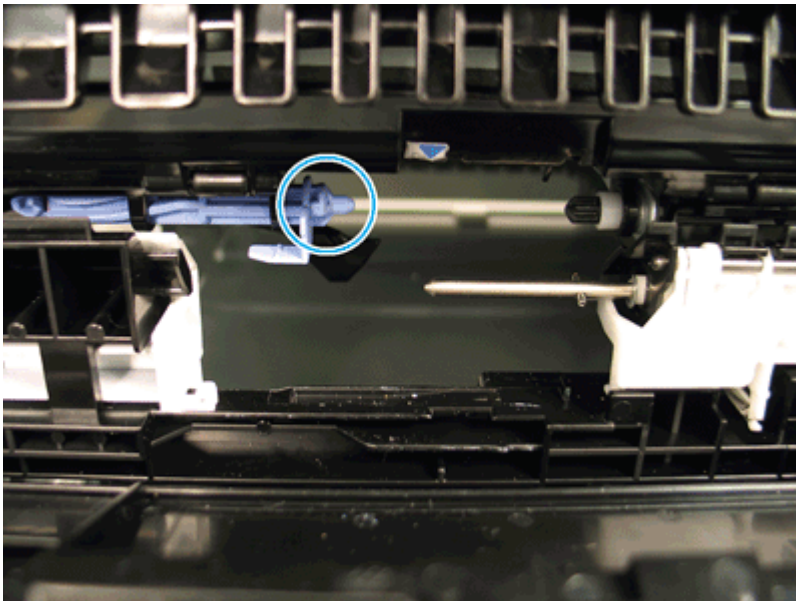
14. Slightly lift up the front of the roller assembly (callout 1), and then pull the assembly away from the printer (callout 2) to remove it.

Figure 5-264 Remove the roller assembly



15. If the left post does not stay in the locked position, press the end of the post left until it clicks into place.


Figure 5-265 Lock the left post




2. Unpack the replacement assembly


Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.

 **NOTE:** HP recommends responsible disposal of the defective part.


2. Unpack the replacement part from the packaging.

CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT:  Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE:  If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

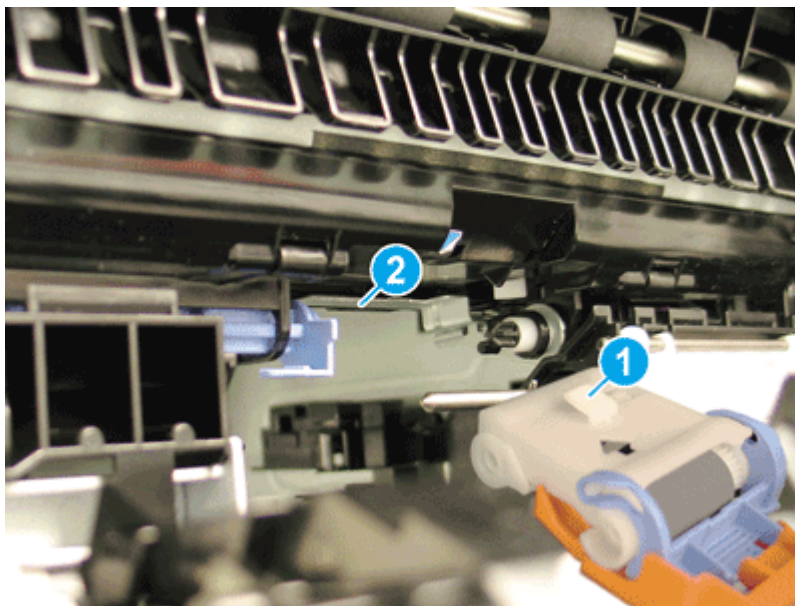
NOTE:  When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

3. Install the Trays 3-5 paper feeder stand pickup and separation rollers

Follow these steps to install the Trays 3-5 paper feeder stand pickup and separation rollers.

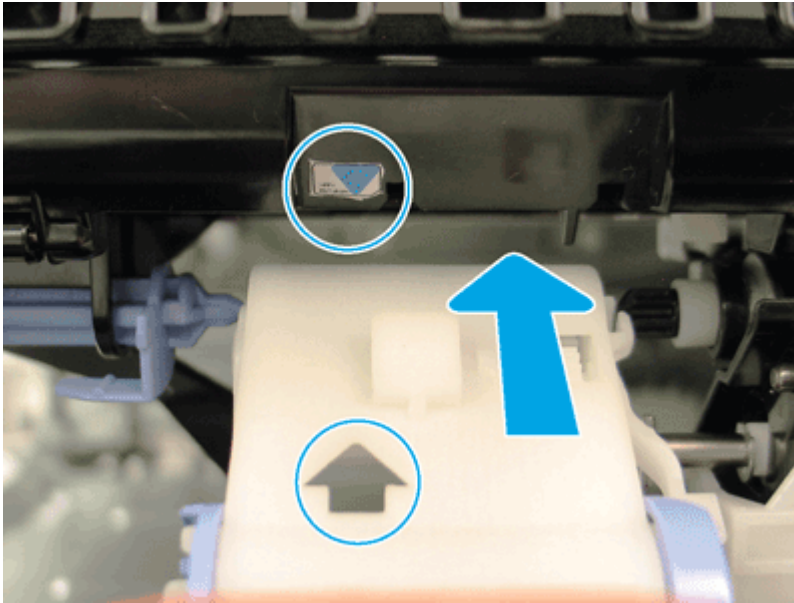
1. The white hook on the top of the roller assembly (callout 1) will hook onto a sheet metal plate (callout 2) when installed correctly.

Figure 5-266 White hook installation position



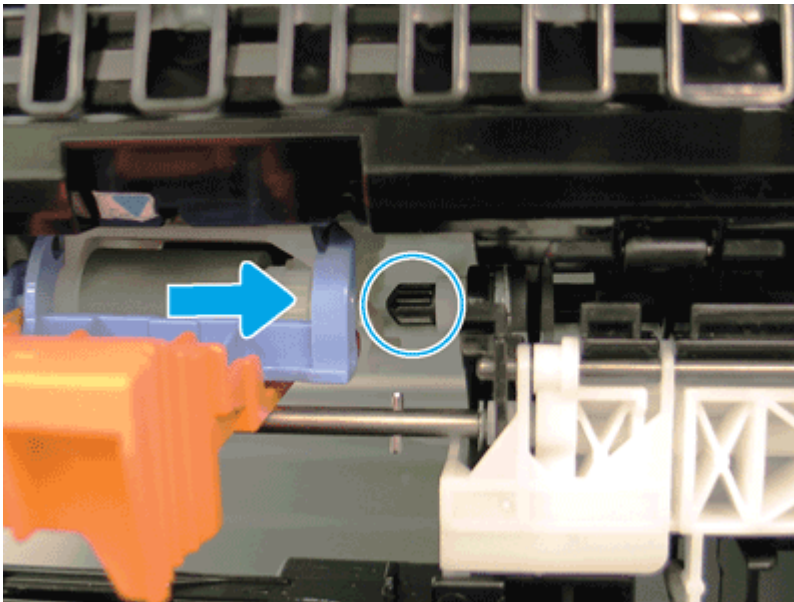
2. Align the arrow on the roller assembly with the arrow in the printer, and then slide the rollers into the printer.

Figure 5-267 Align the roller assembly



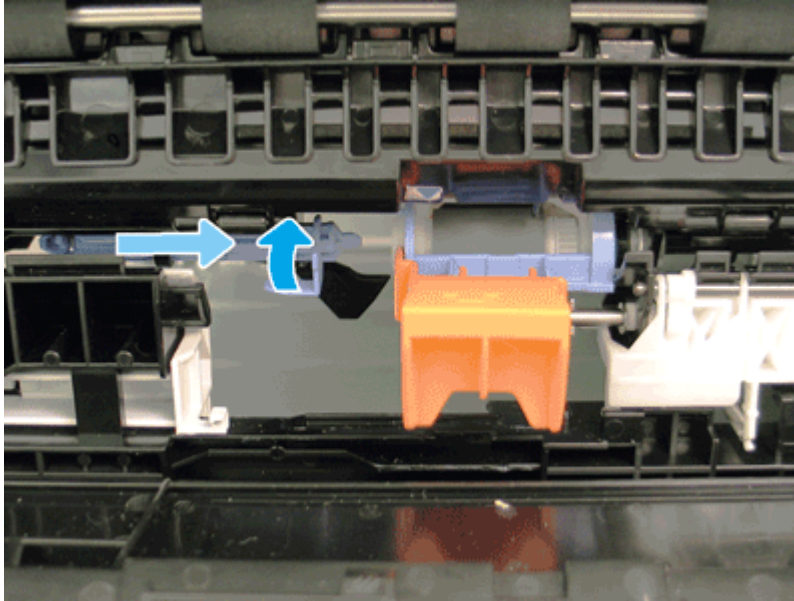
3. Slide the rollers to the right onto the black shaft.

Figure 5-268 Slide the rollers to the right onto the black shaft



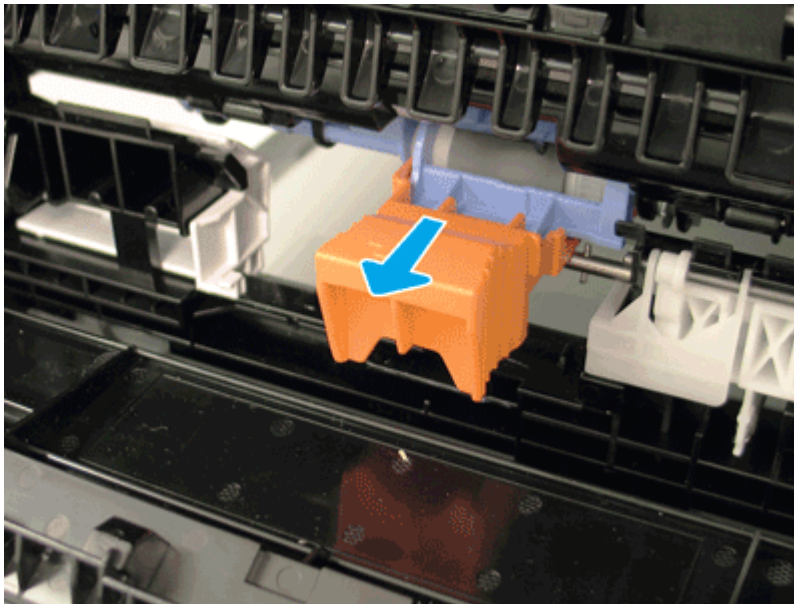
4. Locate the lever on the blue shaft on the left, and then release the lever by pressing upward. The blue shaft should spring to the right to click into position to hold the rollers in place.

Figure 5-269 Release the lever



5. Remove the orange tool from the roller assembly by pulling it away from the printer.

Figure 5-270 Remove the orange tool



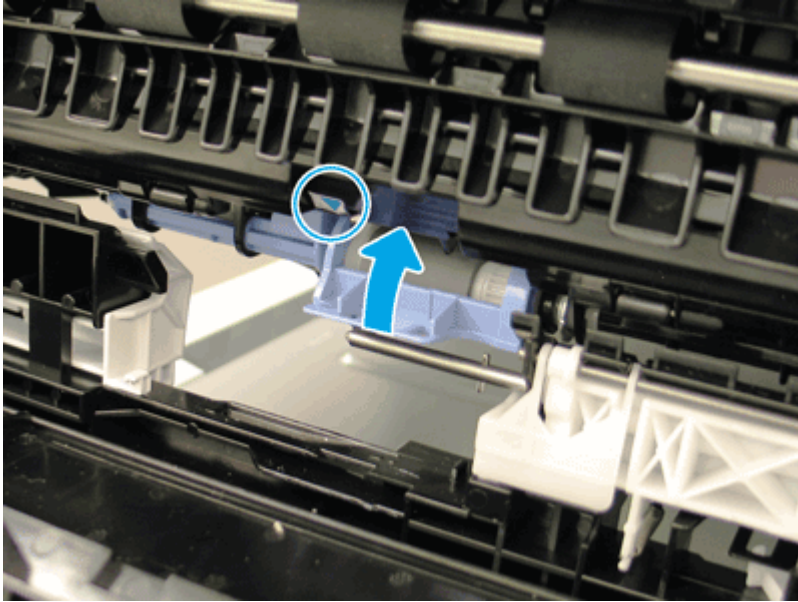
6. Pivot the tab up and snap it into place against the rollers to correctly lock the rollers in place.



NOTE: The blue arrow on the printer is hidden when the cover is correctly snapped into place.

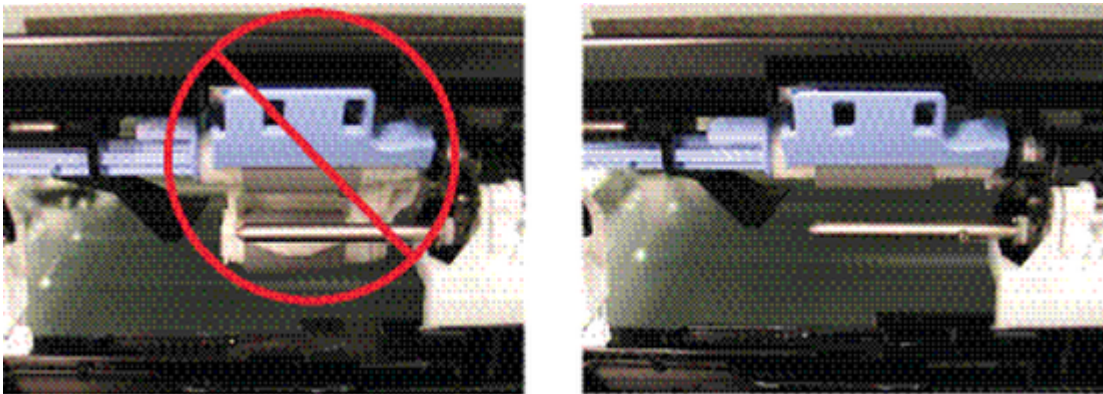
If the rollers are hanging, or at an angle, they are not installed correctly. Make sure that the hook on the top of the rollers is attached to the metal chassis plate inside the printer. If the rollers are not installed correctly, go back to step 16 and reinstall the assembly.

Figure 5-271 Pivot the tab up and snap it to lock the rollers correctly in place



7. If the rollers are hanging, or at an angle, they are not installed correctly. Make sure that the hook on the top of the rollers is attached to the metal chassis plate inside the printer. If the rollers are not installed correctly, go back to step 2 and reinstall the assembly.

Figure 5-272 Roller incorrect and correct installation

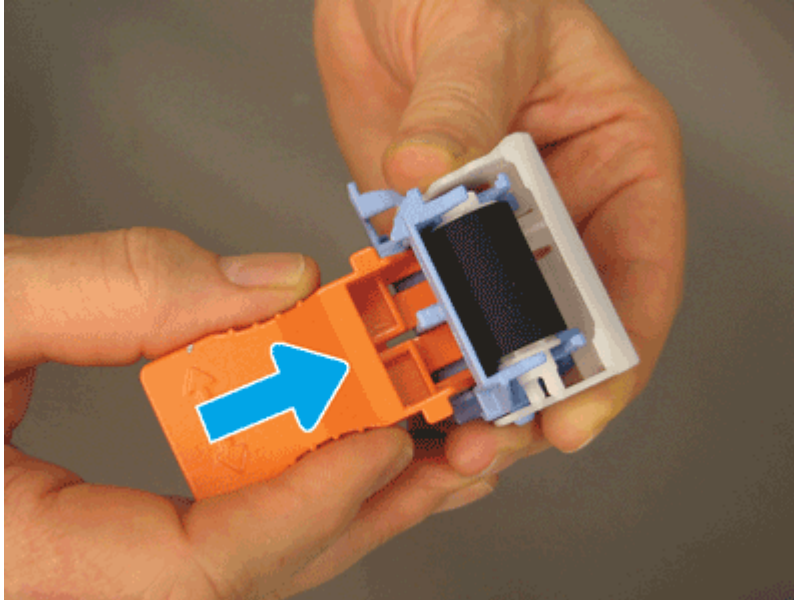


8. Install the orange separation roller tool onto the replacement separation roller.



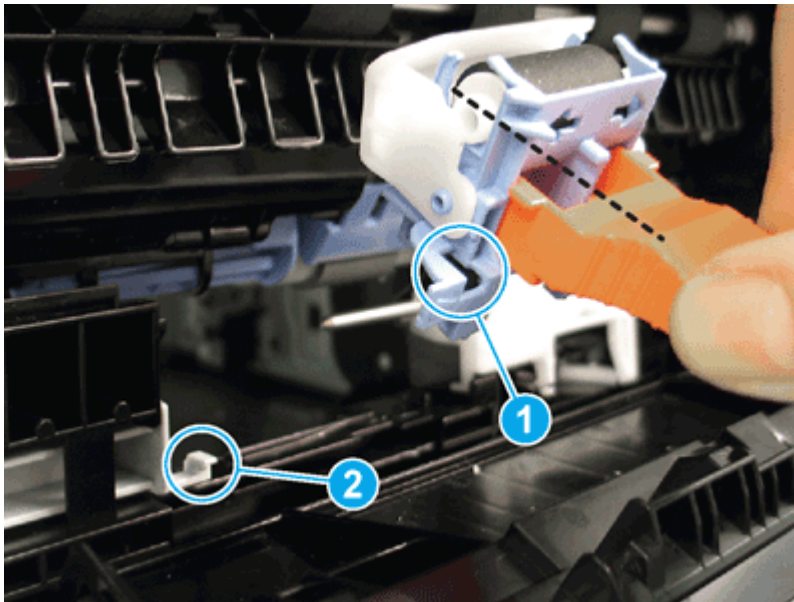
NOTE: The tool will snap into place when it is fully installed.

Figure 5-273 Install the orange tool



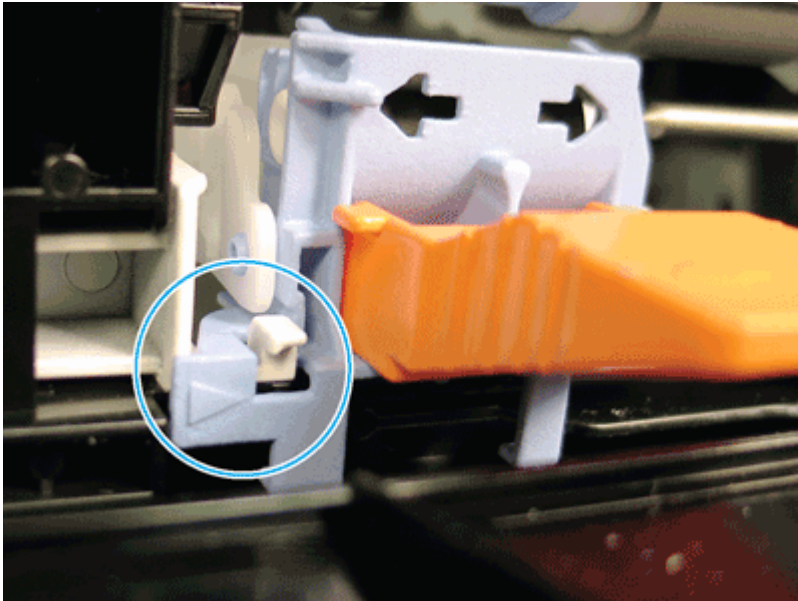
9. Tilt the orange tool slightly away from the printer, and then install the roller into the printer so that the opening in the roller (callout 1) fits over the white tab (callout 2) on the printer rail.

Figure 5-274 Position the roller



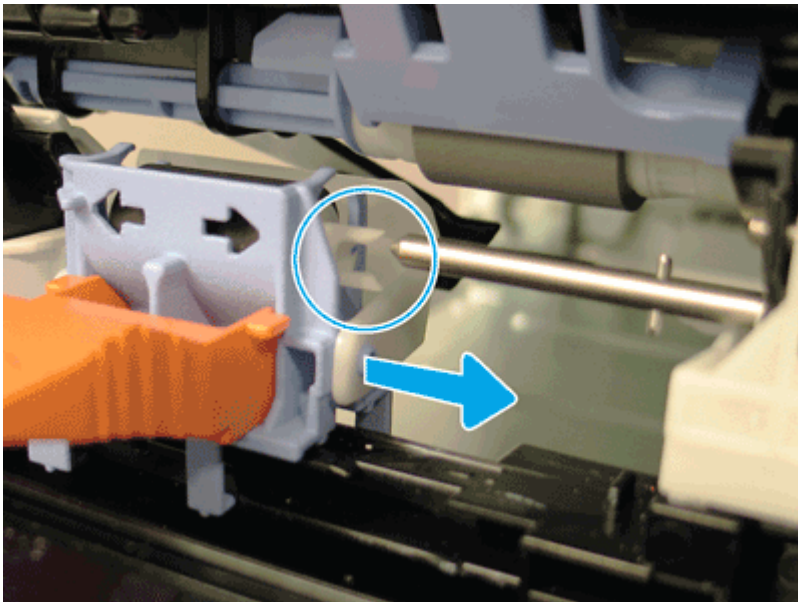
10. When installed correctly, the embossed arrow on the roller case aligns with the white tab on the rail.

Figure 5-275 Check roller alignment



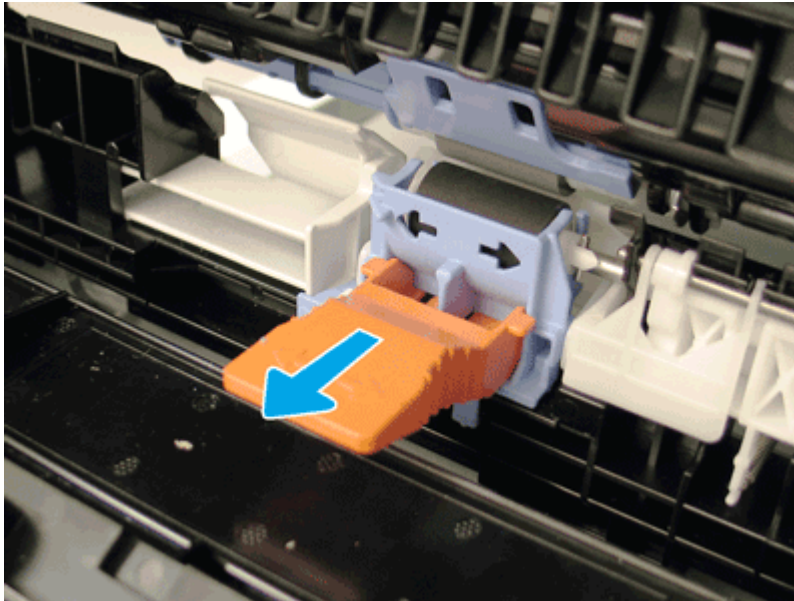
11. Align the center of the roller with the end of the metal shaft. Slide the roller to the right onto the metal shaft until it snaps into place.

Figure 5-276 Slide the roller on the metal shaft



12. Remove the orange tool by pulling it away from the printer.

Figure 5-277 Remove the orange tool



13. Close the feed assembly cover.

Figure 5-278 Close the feed assembly cover



14. Close the right door of the paper feeder.

Figure 5-279 Close the right door



15. Do one of the following:

- a. Close the paper tray.

Figure 5-280 Close the paper tray



- b. Close the high-capacity paper tray.

Figure 5-281 Close the high-capacity paper tray



Removal and replacement: External panels, covers, and doors (base printer)

Learn how to remove and replace the printer external panels, covers, and doors.


Removal and replacement: Formatter cover

Learn how to remove and replace the formatter cover.

 [View a video of how to remove and replace the formatter cover.](#)


Mean time to repair: 5 minutes

Service level: Basic

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off.
- Disconnect the power cable.

 **WARNING!** To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-29 Part information

Part number	Part description
RM2-6657-000CN	Formatter cover

Required tools

- No special tools are needed to remove or install this assembly.

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

No post service test is available for this assembly.

1. Remove the formatter cover

Follow these steps to remove the formatter cover.

- Unscrew two thumbscrews (callout 1), and then slide the formatter cover (callout 2) away from the printer to remove it.


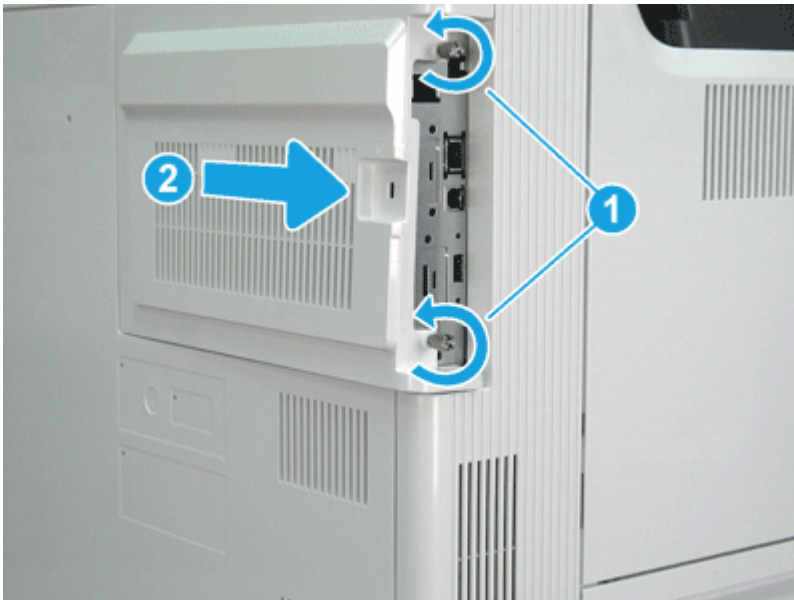
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-282 Remove the formatter cover



2. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Face-down front cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Learn how to remove and replace the face-down front cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

Mean time to repair: 15 minutes

Service level: Advanced



IMPORTANT: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Disconnect the power cable.



WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-30 Part information

Part number	Part description
RC5-1842-000CN	Face-down front cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

No post service test is available for this assembly.

1. Remove the keyboard (MFP)

Follow these steps to remove the keyboard (MFP).

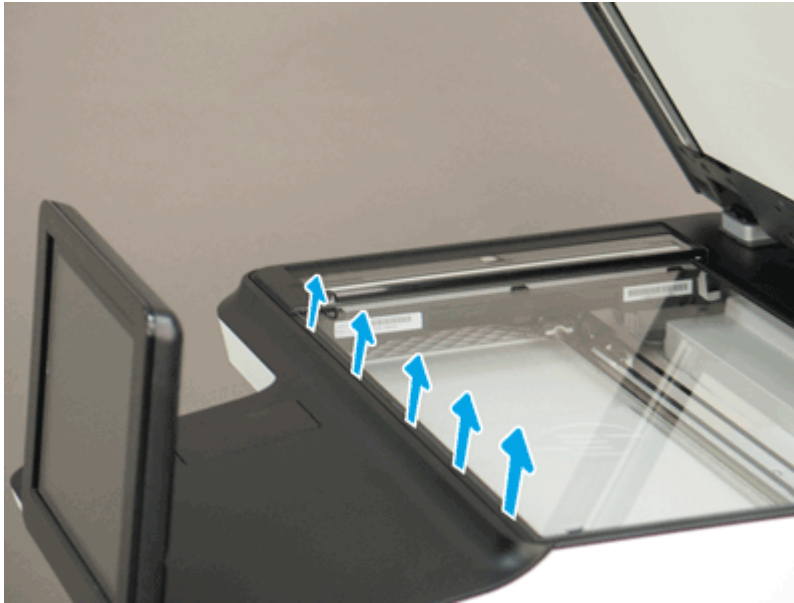
1. If the control panel is not fully tilted forward, tilt it forward now (callout 1) until it stops. Open the document feeder (callout 2).

Figure 5-283 Tilt the control panel and open the document feeder



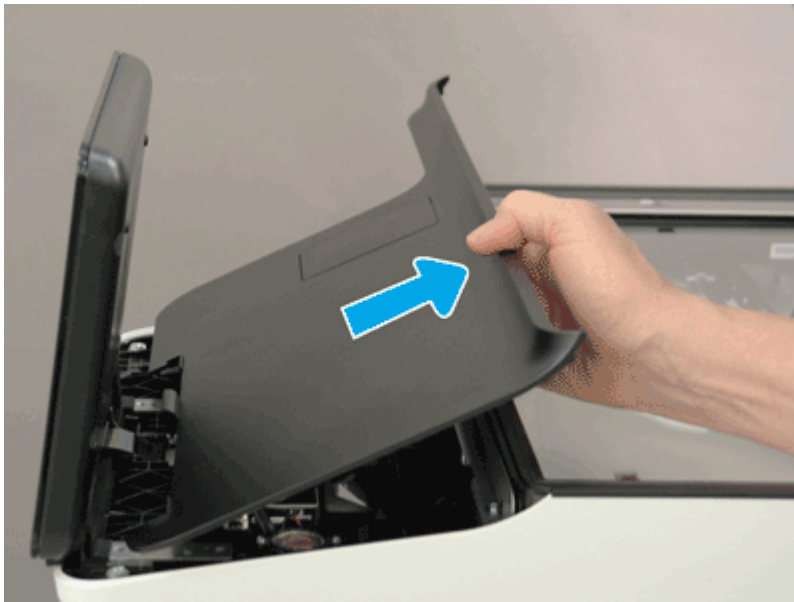
2. Beginning at the right side of the control-panel cover, carefully release five tabs along the top edge of the cover.

Figure 5-284 Release five tabs



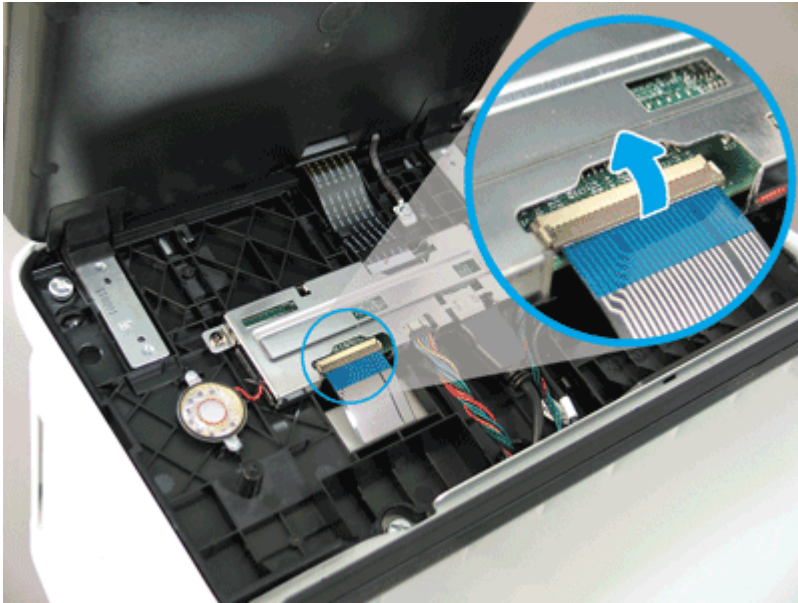
3. Continue to rotate the top edge of the cover away from the printer, and then remove the cover.

Figure 5-285 Remove the cover



4. Open the connector latch to release the keyboard flat cable.

Figure 5-286 Disconnect the keyboard flat cable



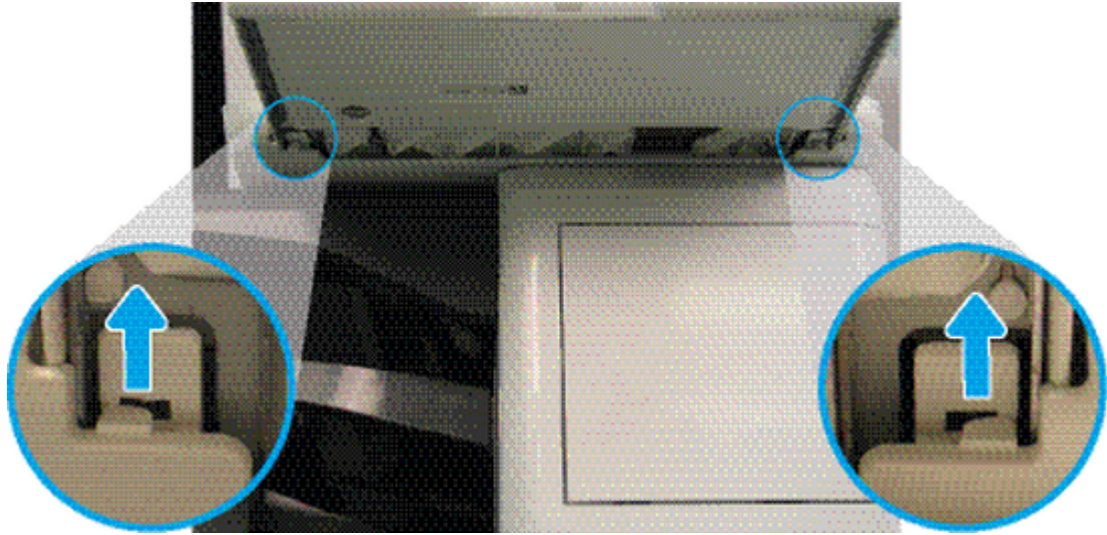
5. Slide the keyboard tray out until it stops.

Figure 5-287 Slide the keyboard tray out



6. Push up on the keyboard tray to release two tabs on the bottom of the tray, and then slide the tray toward you to disengage the tabs.

Figure 5-288 Release two tabs




7. Slide the keyboard tray all the way out of the printer to remove it.

Figure 5-289 Remove the keyboard



2. Remove the control panel (M681/M682/E67550/E67560/E67650/E67660)

Follow these steps to remove the control panel (M681/M682/E67550/E67560/E67650/E67660).

 **NOTE:** This step is for the M681/M682/E67550/E67560/E67650/E67660 printers. For the M652/M653/E65050/E65060/E65150/E65160 printers, skip this step.

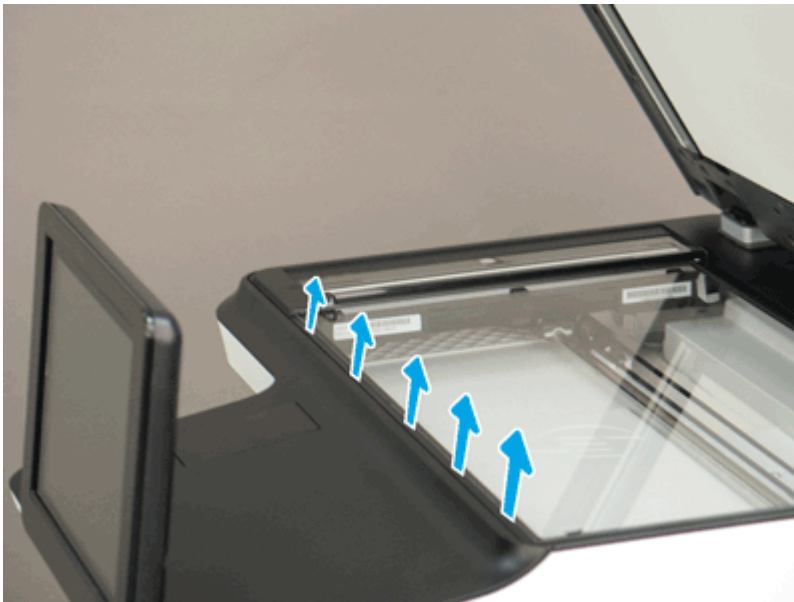
1. Tilt the control panel forward (callout 1), and then open the document feeder (callout 2).

Figure 5-290 Tilt the control panel forward and open the document feeder



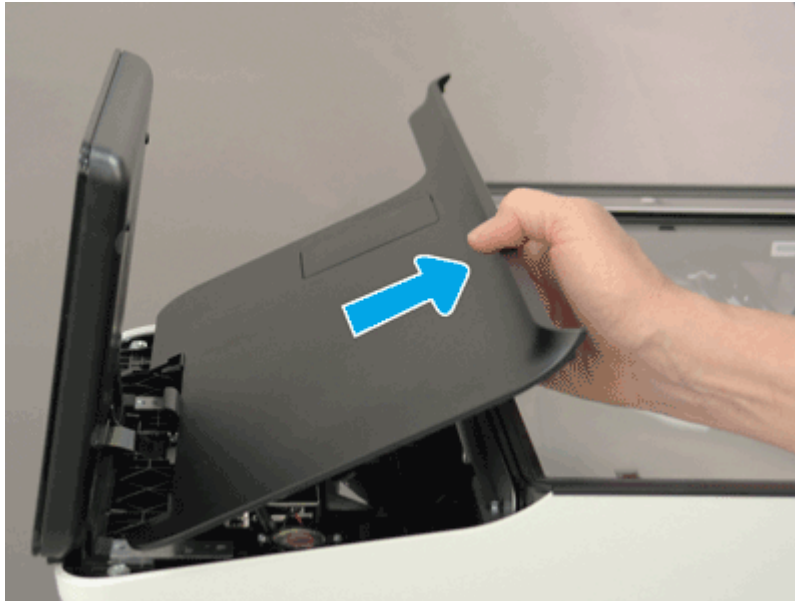
2. Beginning at the right side of the control-panel cover, carefully release five tabs along the top edge of the cover.

Figure 5-291 Release five tabs



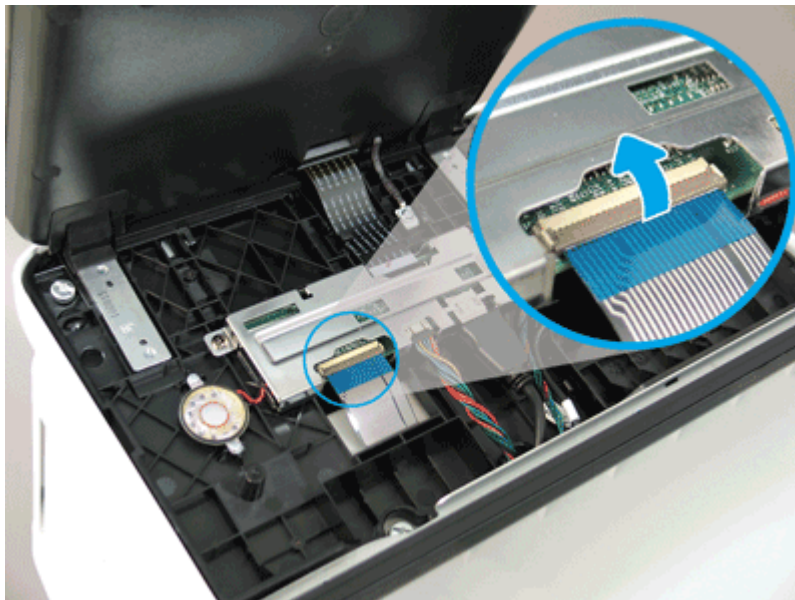
3. Continue to rotate the top edge of the cover away from the printer, and then remove the cover.

Figure 5-292 Remove the cover



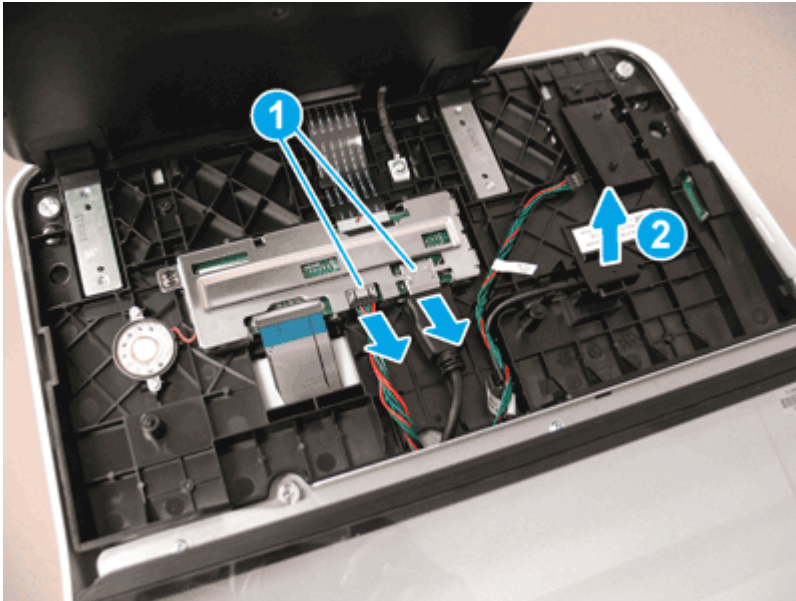
4. **Keyboard models only:** Lift up on the small, gray gate to release the keyboard flat cable.

Figure 5-293 Disconnect the keyboard flat cable (keyboard models only)



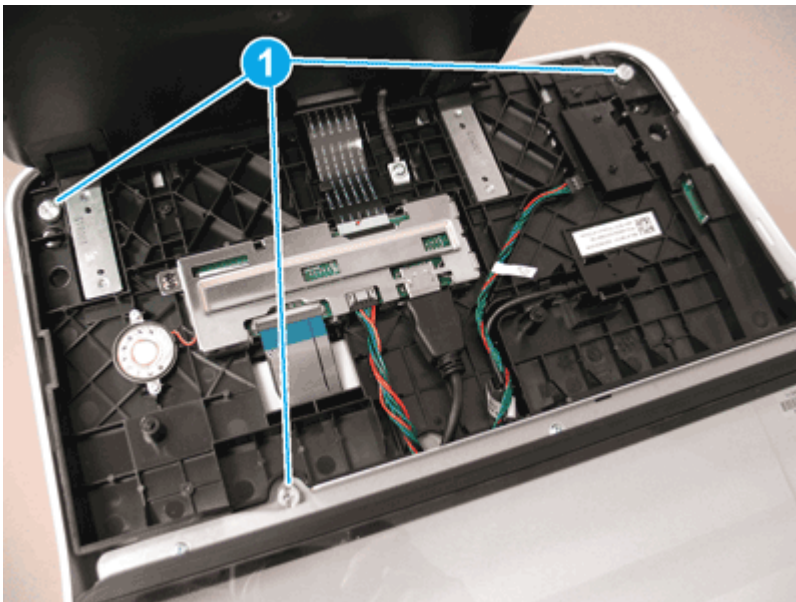
5. Disconnect two connectors (callout 1), and then release the USB cable (callout 2) from the holder.

Figure 5-294 Disconnect connectors



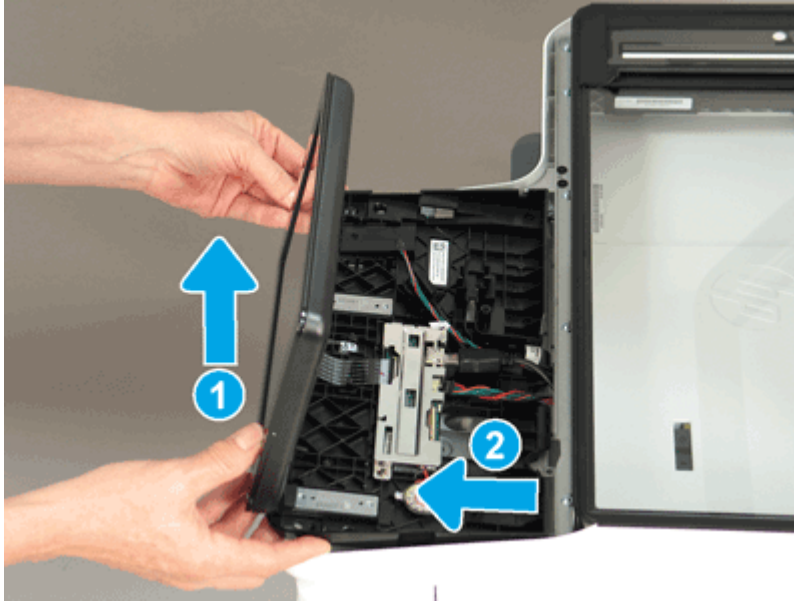
6. Remove three thumbscrews (callout 1).

Figure 5-295 Remove three thumbscrews



7. Lift the front of the control panel off of the printer (callout 1), and then slide it toward the front of the printer (callout 2) to remove it.

Figure 5-296 Remove the control panel

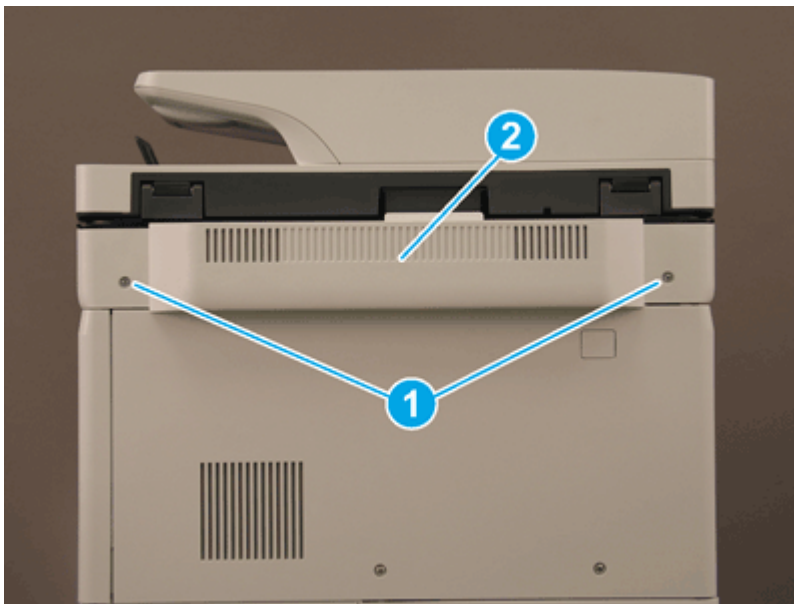


3. Remove the document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660)

Follow these steps to remove the document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660).

1. Remove two screws (callout 1), and then remove the scanner control board (SCB) cover (callout 2).

Figure 5-297 Remove the SCB cover



2. Flow M681z and Flow M682z models only: Do the following:

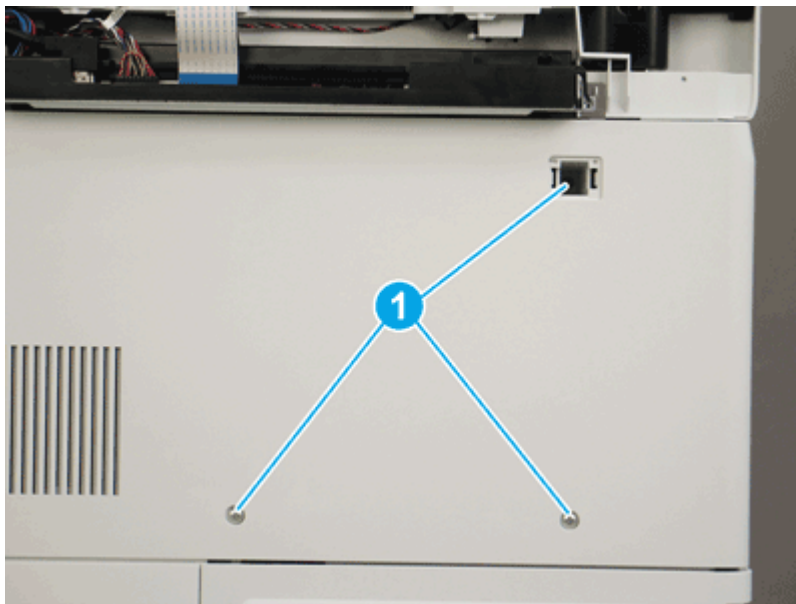
- a. At the back of the printer, remove one small cover (callout 1).

Figure 5-298 Remove the small cover



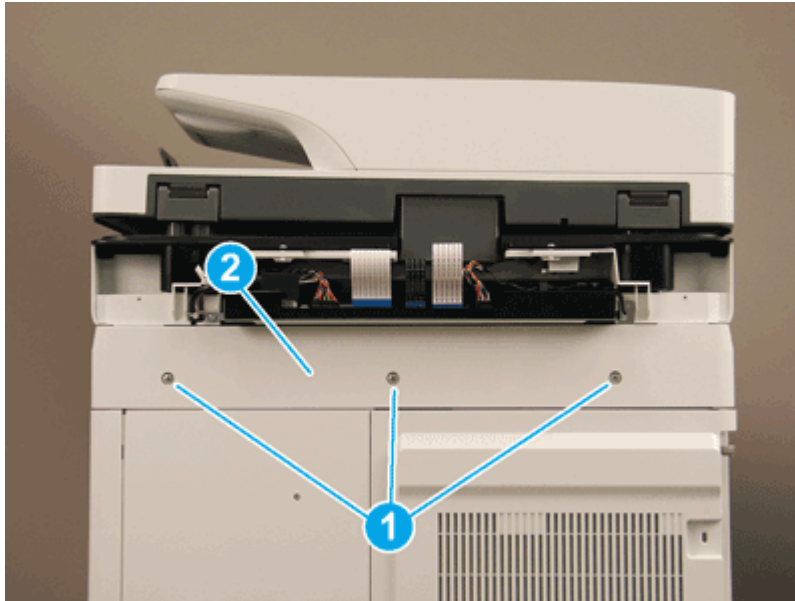
- b. **Flow M681z and Flow M682z only** : Remove three screws (callout 1), and then remove the stapler/stacker rear cover (callout 2).

Figure 5-299 Remove the stapler/stacker rear cover



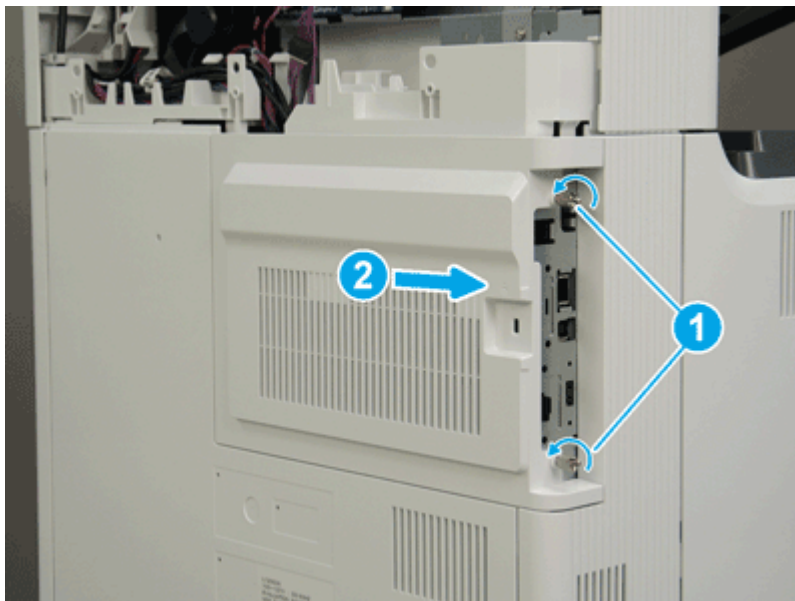
3. **M681dh, M681f, M682dh, and Flow M681f models only:** Remove three screws (callout 1), and then remove the upper rear cover (callout 2).

Figure 5-300 Remove the upper rear cover



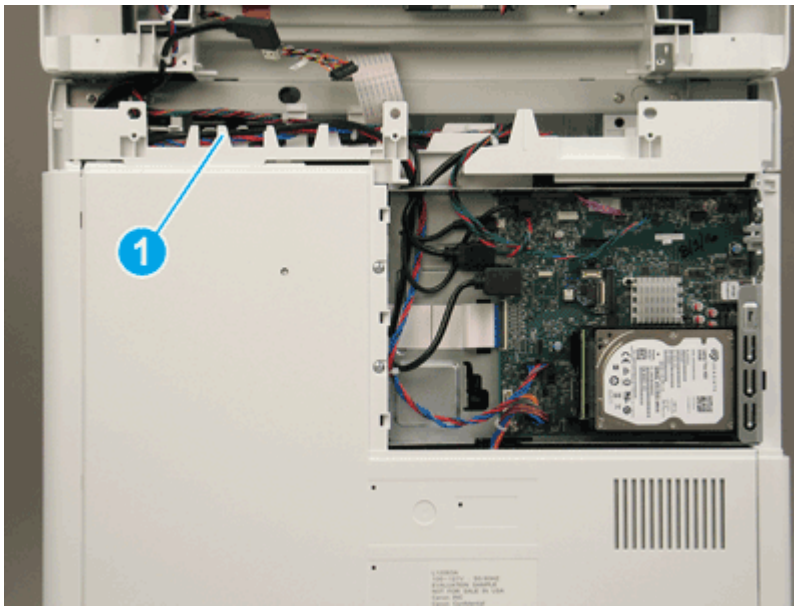
4. Loosen two thumbscrews (callout 1), and then slide the formatter cover away from the printer to remove it (callout 2).

Figure 5-301 Remove the formatter cover



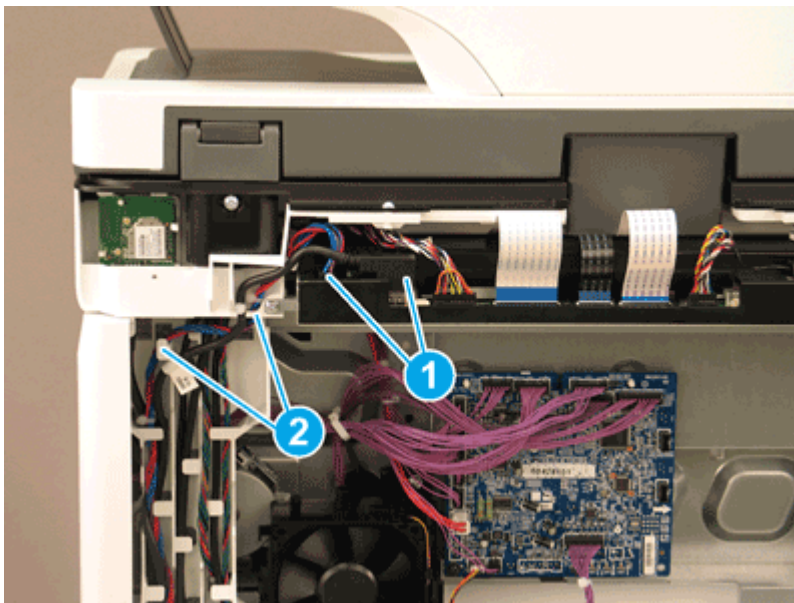
5. The remaining figures in this procedure show the Flow M682z model. While the cable routing (callout 1) on the M681dh, M681f, M682dh, and Flow M681f models is different, the removal procedures are the same for all models.

Figure 5-302 Cable routing for M681dh, M681f, and Flow M681f



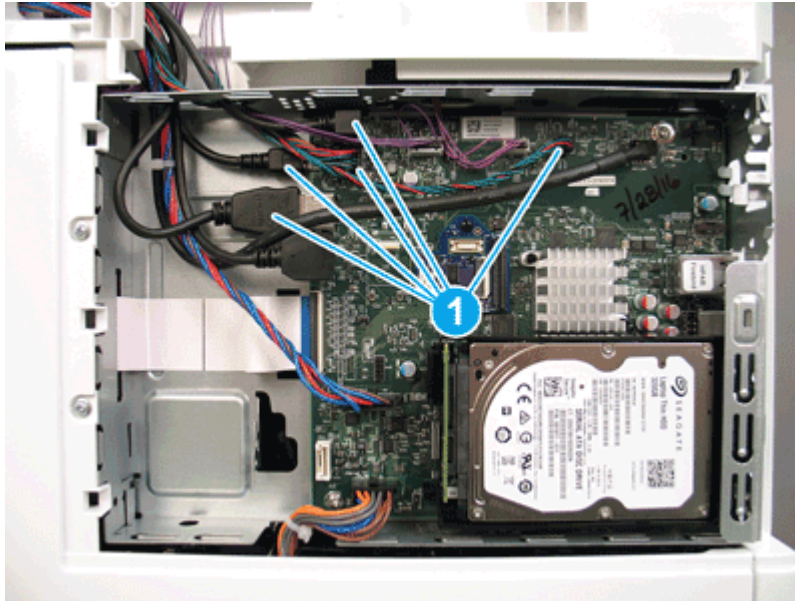
6. Disconnect two connectors (callout 1) on the SCB, and then release the cables from the guides (callout 2).

Figure 5-303 Disconnect two connectors



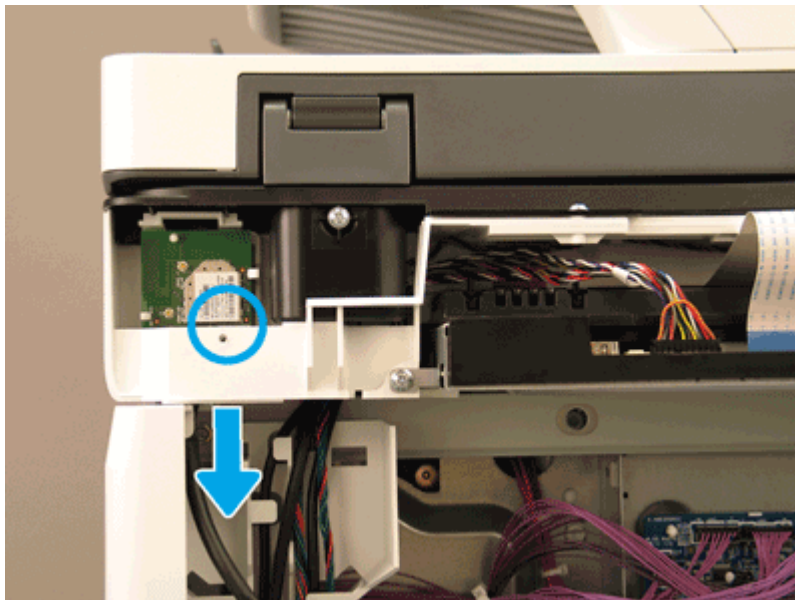
7. Disconnect five connectors on the formatter (callout 1).

Figure 5-304 Disconnect five connectors



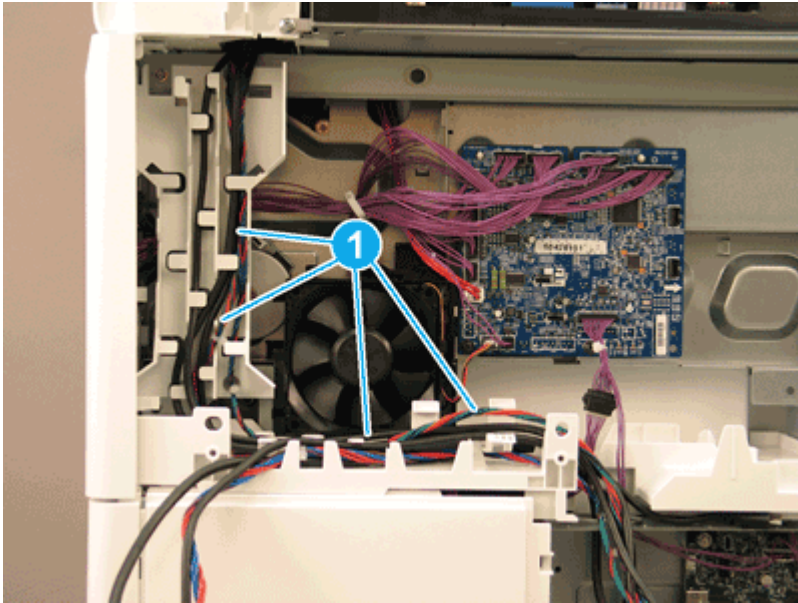
8. Flow M682z only: Gently pull down on the cable to disconnect the wireless connector.

Figure 5-305 Disconnect the wireless connector



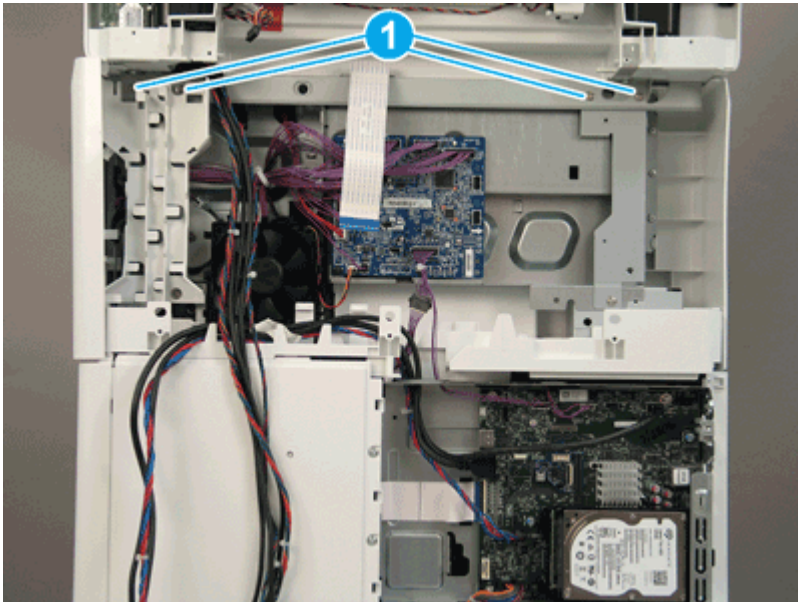
9. Release all of the cables from the cable guides (callout 1).

Figure 5-306 Release the cables



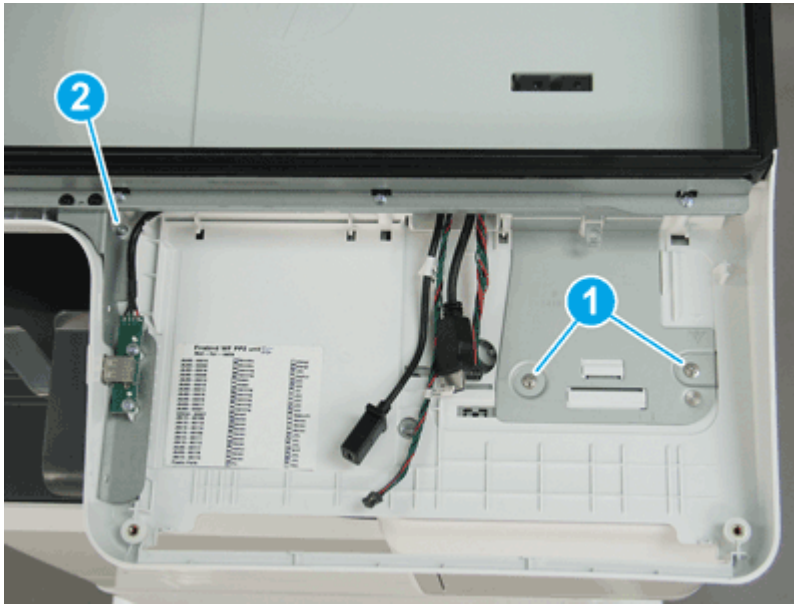
10. At the back of the printer, remove four screws (callout 1).

Figure 5-307 Remove four screws



11. On the top of the image scanner assembly, at the location where the control panel was removed, remove two sheet metal screws (callout 1). **Flow M681z and Flow M682z only:** Remove one self-tapping screw (callout 2).

Figure 5-308 Remove three screws




12. Lift the document feeder and image scanner off of the printer to remove them.

Figure 5-309 Remove the document feeder and image scanner



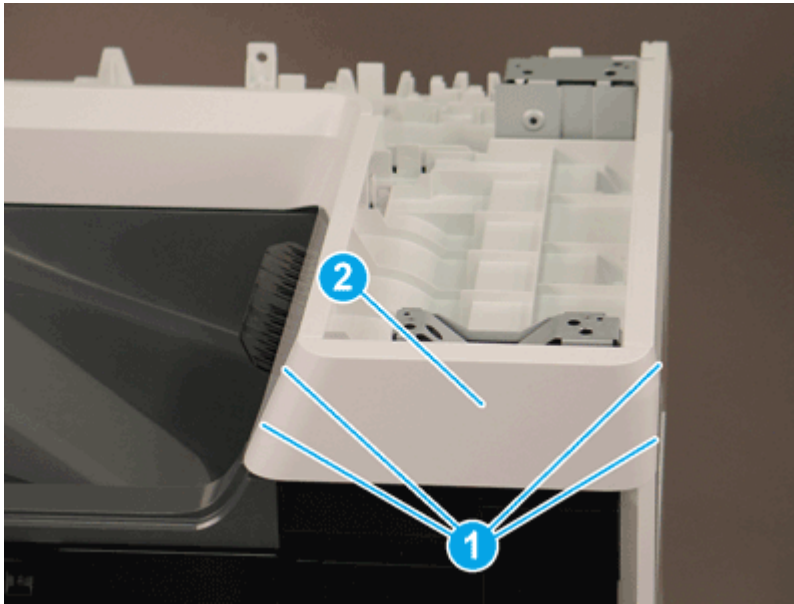
4. Remove the face-down front cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the face-down front cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

 **NOTE:** This step is for the M681/M682/E67550/E67560/E67650/E67660 printers. For the M652/M653/E65050/E65060/E65150/E65160 printers, skip this step.

1. Open the front door.
2. Release two tabs on each side (callout 1), and then remove the face-down front cover (callout 2).


Figure 5-310 Remove the face-down front cover



5. Unpack the replacement assembly



Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.


 **NOTE:** HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>


2. Unpack the replacement part from the packaging.

 **CAUTION:**  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

 **IMPORTANT:** Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

 **NOTE:** If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

 **NOTE:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

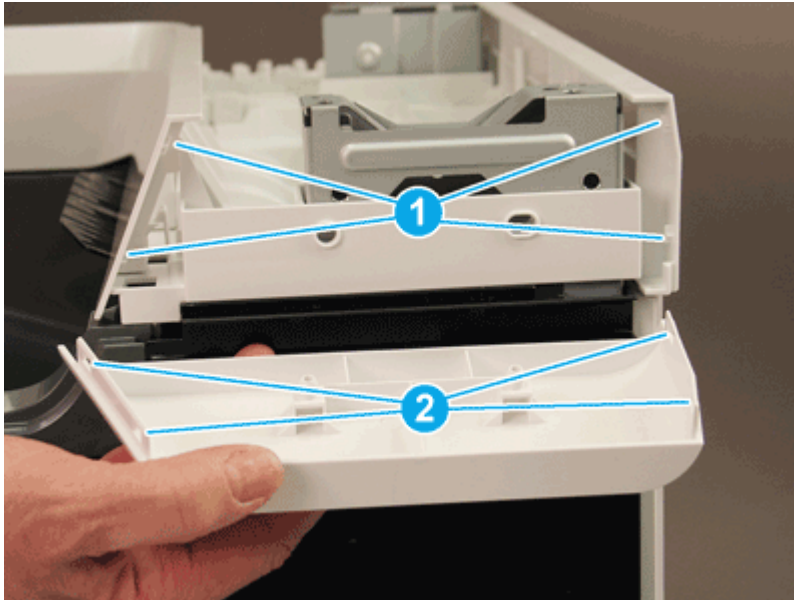
6. Reverse the removal steps to install the assembly

Also use the following **special installation instructions**.

Face-down front cover

- When reinstalling the cover, position the tabs (callout 1) on the printer into the slots (callout 2) on the cover.

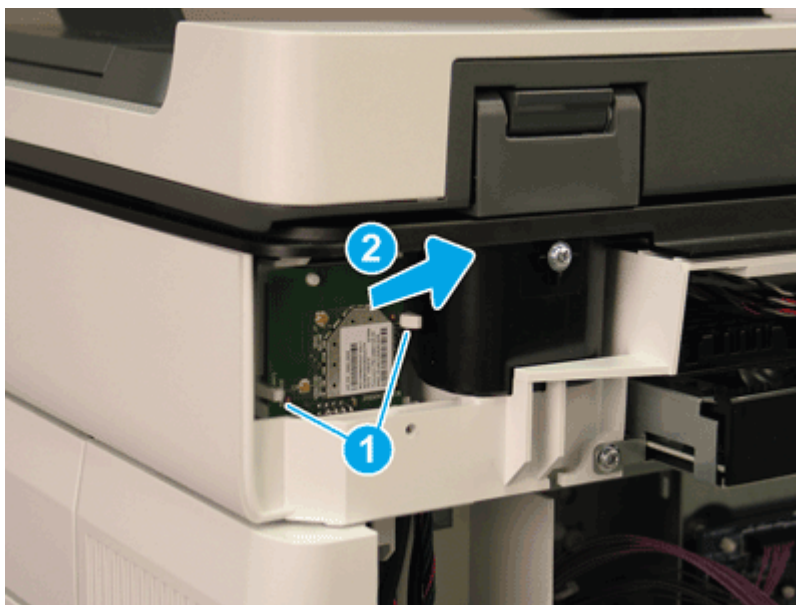
Figure 5-311 Install the cover



Document feeder and image scanner

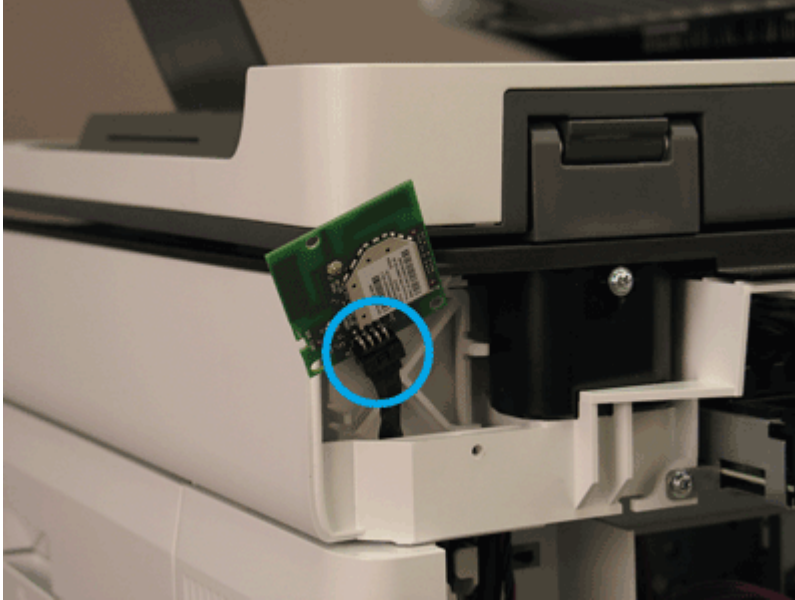
1. **Flow M682z only:** When reconnecting the wireless card cable, do the following:
 - a. Release two tabs (callout 1), and then remove the wireless card (callout 2).

Figure 5-312 Remove the wireless card



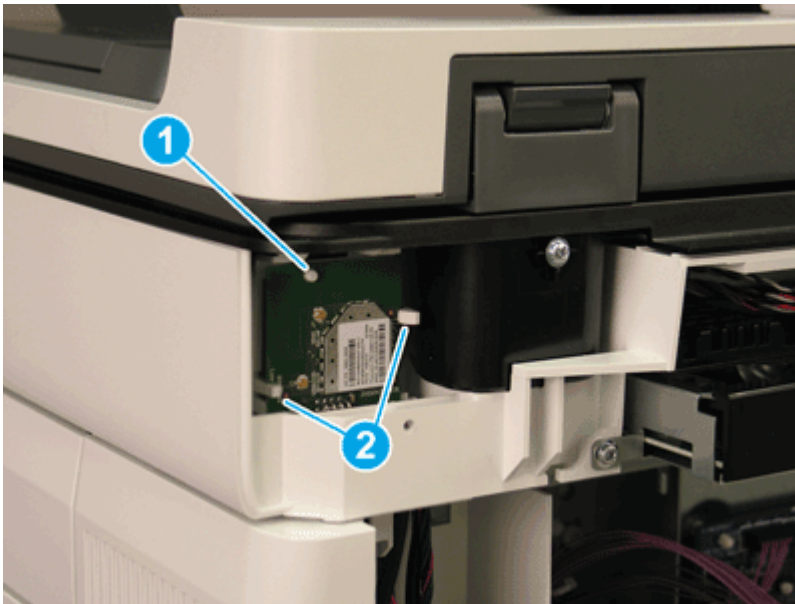
- b. Connect the cable to the wireless card (callout 1).

Figure 5-313 Connect the wireless card connector



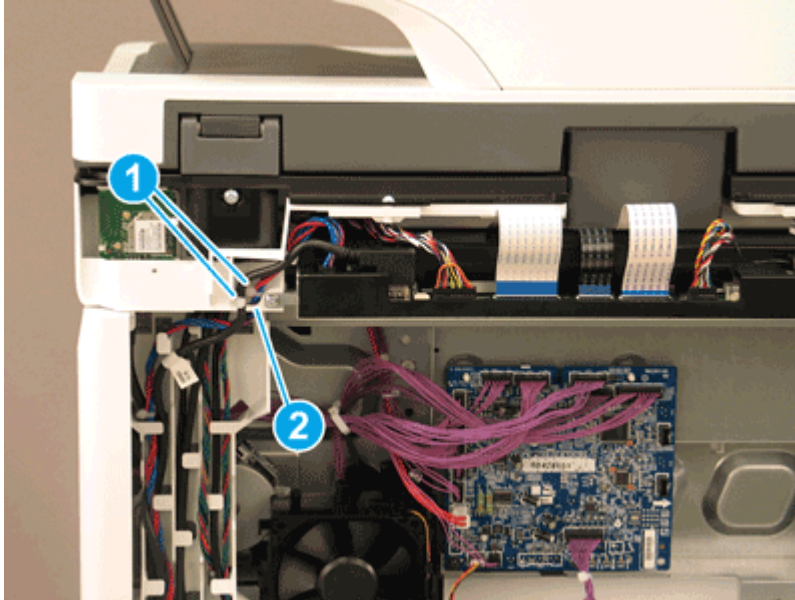
- c. Reinstall the wireless card. Make sure that the hole in the card is positioned over the peg (callout 1), and that the card is under the two tabs (callout 2).


Figure 5-314 Reinstall the wireless card



- 2. When reinstalling the SCB cables, make sure that the wire retainers (callout 1) on the cables are positioned above the plastic guide (callout 2).

Figure 5-315 Install the SCB cables



 **NOTE:** Continue to reverse the removal steps to finish installing the assembly.


Removal and replacement: Top cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

This document provides the procedures to remove and replace the top cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

 [View a video of how to remove and replace the top cover.](#)


Mean time to repair: 15 minutes

Service level: Intermediate

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Disconnect the power cable.

 **WARNING!** To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-31 Part information

Part number	Part description
RC4-6865-000CN	Top cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

No post service test is available for this assembly.

1. Remove the keyboard (MFP)

Follow these steps to remove the keyboard (MFP).

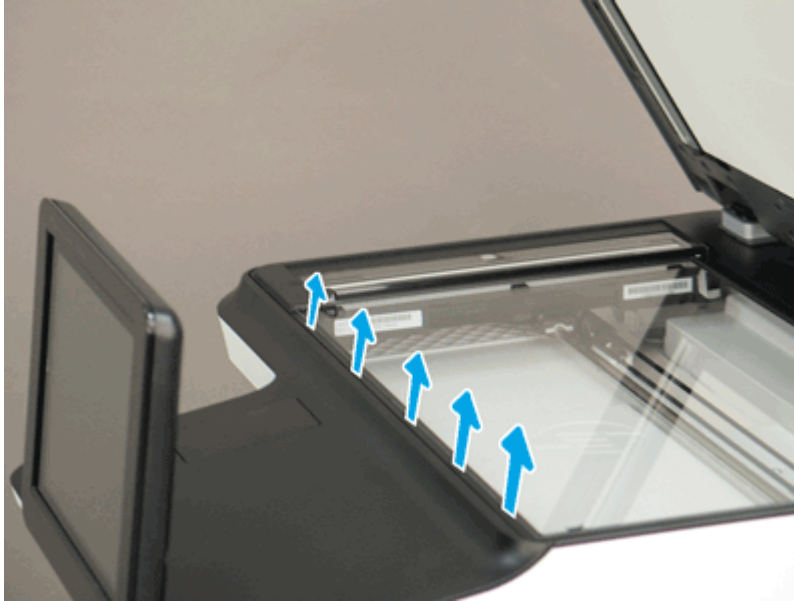
1. If the control panel is not fully tilted forward, tilt it forward now (callout 1) until it stops. Open the document feeder (callout 2).

Figure 5-316 Tilt the control panel and open the document feeder



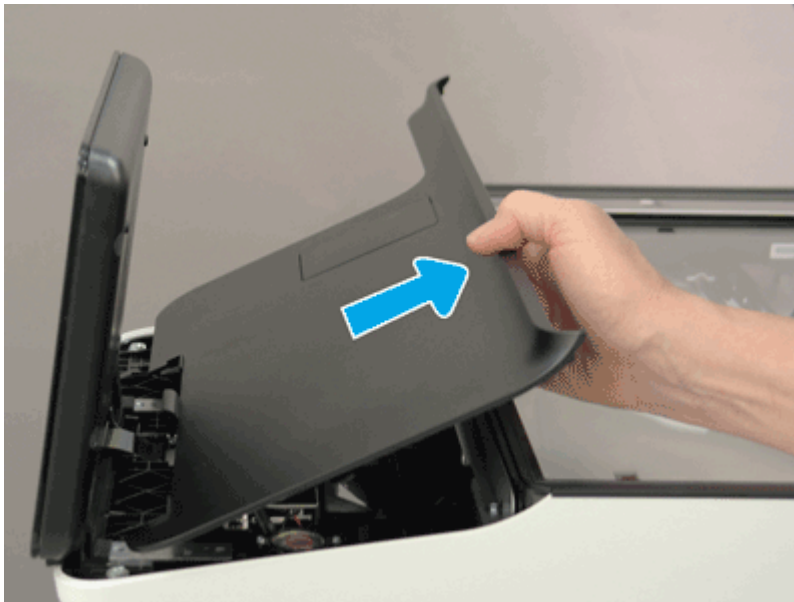
2. Beginning at the right side of the control-panel cover, carefully release five tabs along the top edge of the cover.

Figure 5-317 Release five tabs



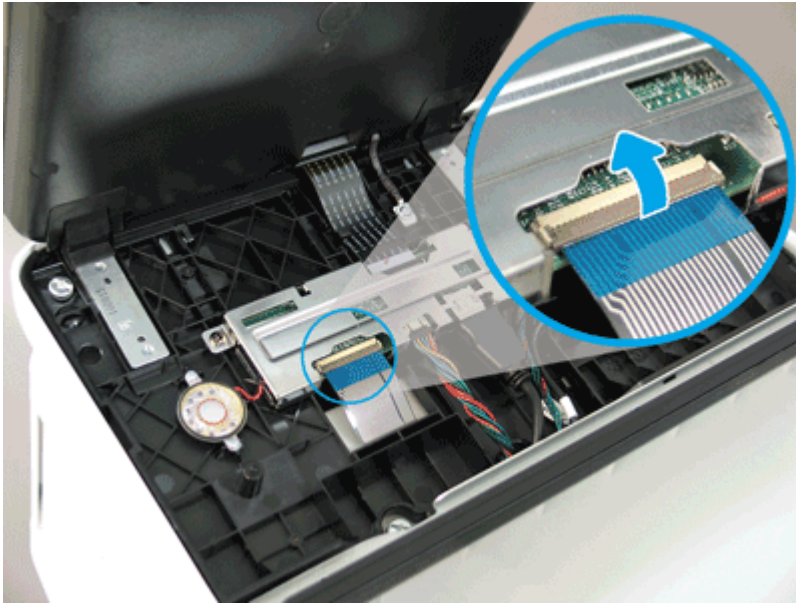
3. Continue to rotate the top edge of the cover away from the printer, and then remove the cover.

Figure 5-318 Remove the cover



4. Open the connector latch to release the keyboard flat cable.

Figure 5-319 Disconnect the keyboard flat cable



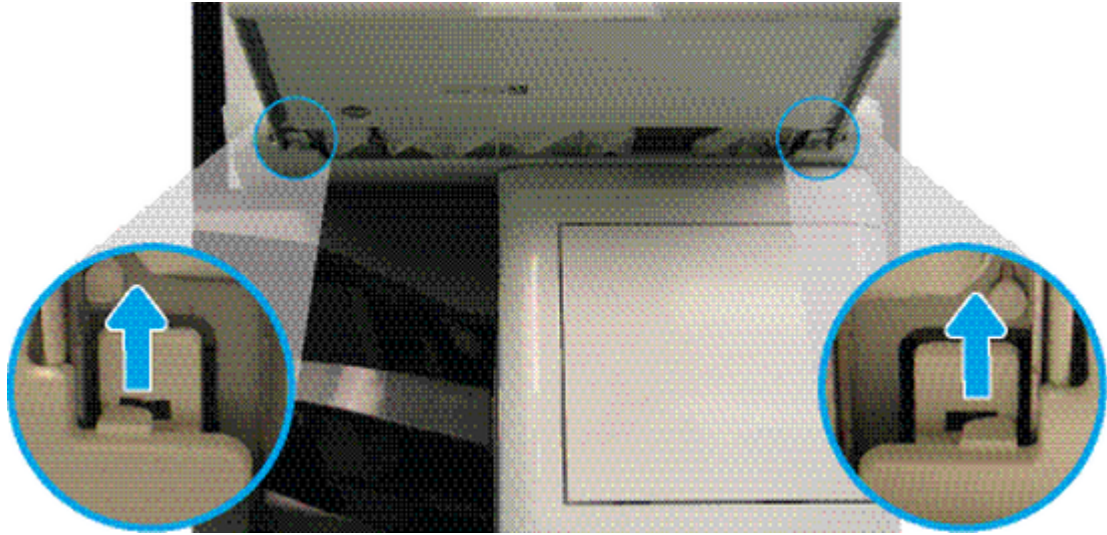
5. Slide the keyboard tray out until it stops.

Figure 5-320 Slide the keyboard tray out



6. Push up on the keyboard tray to release two tabs on the bottom of the tray, and then slide the tray toward you to disengage the tabs.

Figure 5-321 Release two tabs




7. Slide the keyboard tray all the way out of the printer to remove it.

Figure 5-322 Remove the keyboard



2. Remove the control panel (M681/M682/E67550/E67560/E67650/E67660)

Follow these steps to remove the control panel (M681/M682/E67550/E67560/E67650/E67660).

 **NOTE:** This step is for the M681/M682/E67550/E67560/E67650/E67660 printers. For the M652/M653/E65050/E65060/E65150/E65160 printers, skip this step.

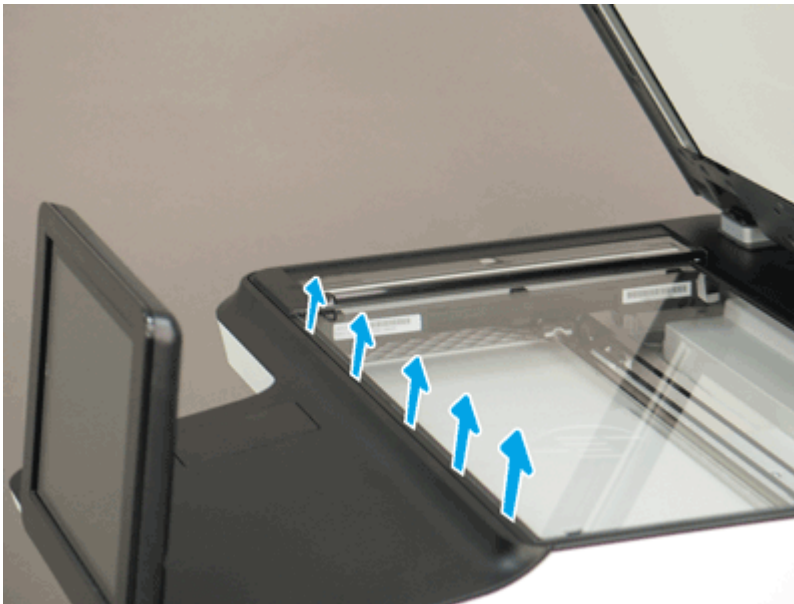
1. Tilt the control panel forward (callout 1), and then open the document feeder (callout 2).

Figure 5-323 Tilt the control panel forward and open the document feeder



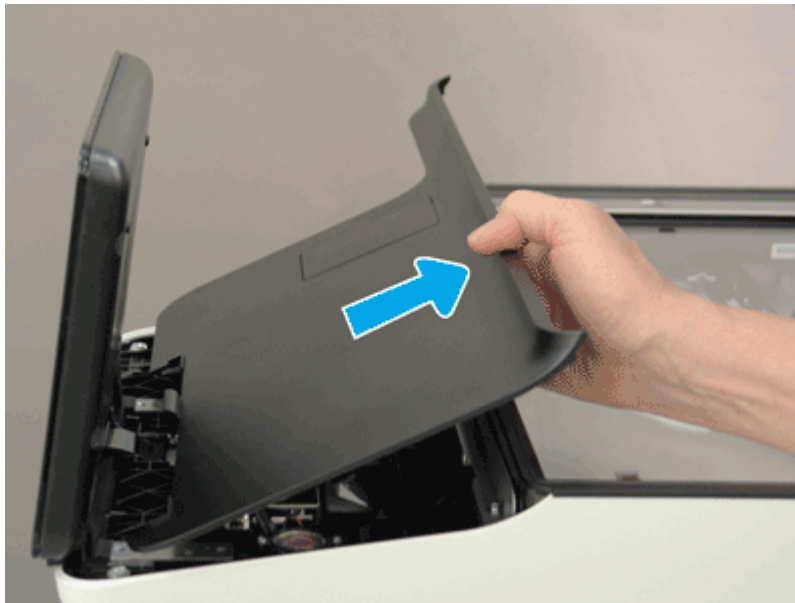
2. Beginning at the right side of the control-panel cover, carefully release five tabs along the top edge of the cover.

Figure 5-324 Release five tabs



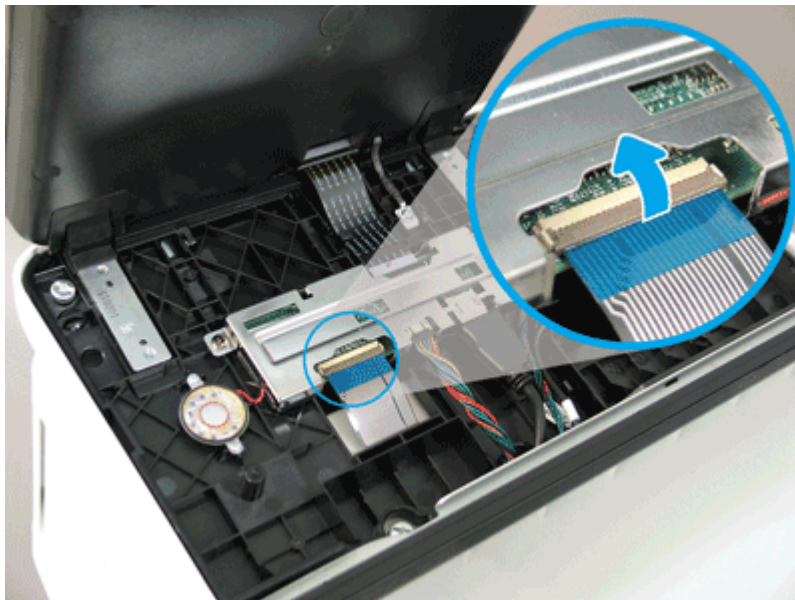
3. Continue to rotate the top edge of the cover away from the printer, and then remove the cover.

Figure 5-325 Remove the cover



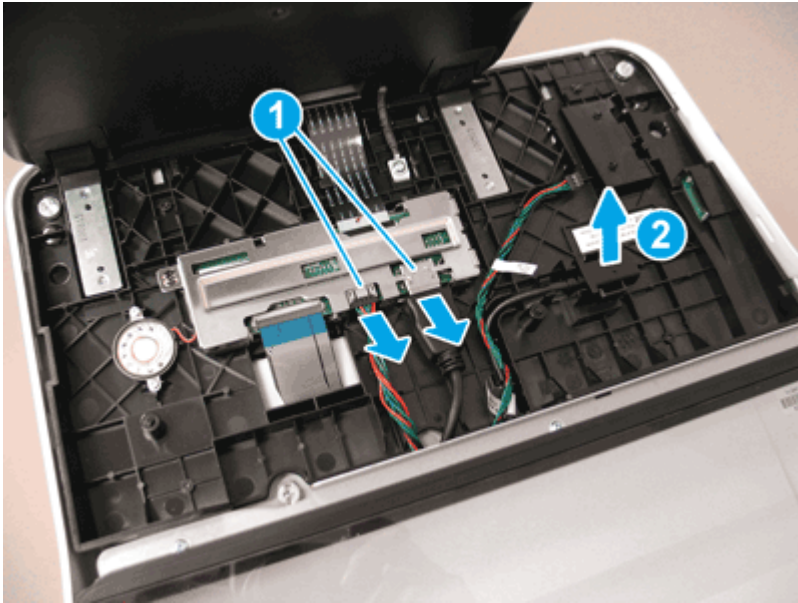
4. **Keyboard models only:** Lift up on the small, gray gate to release the keyboard flat cable.

Figure 5-326 Disconnect the keyboard flat cable (keyboard models only)



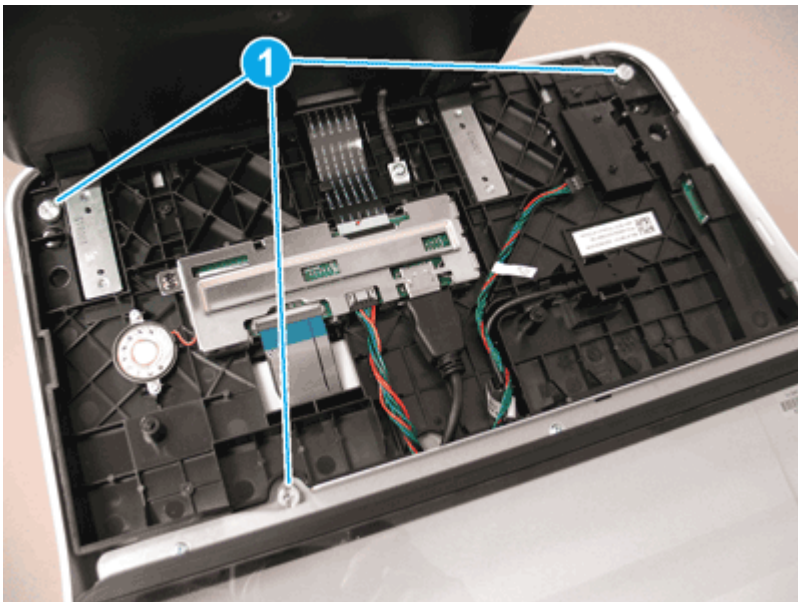
5. Disconnect two connectors (callout 1), and then release the USB cable (callout 2) from the holder.

Figure 5-327 Disconnect connectors



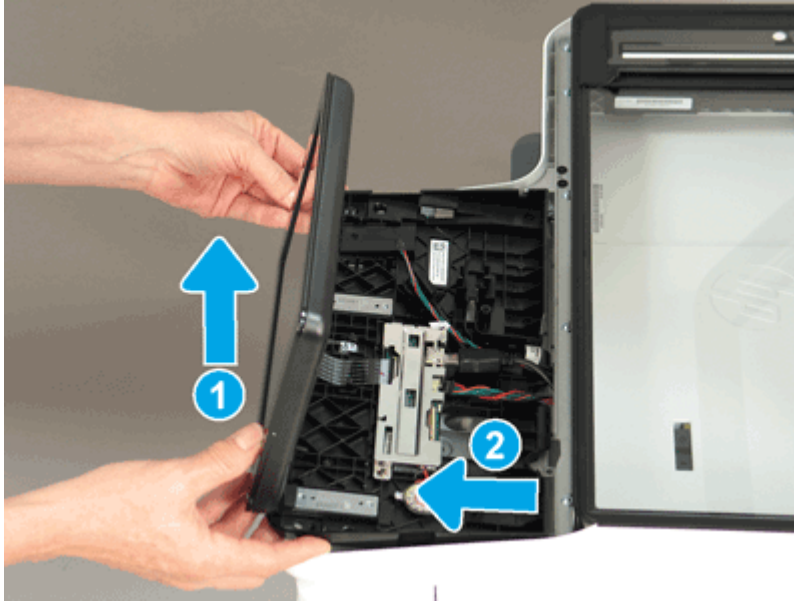
6. Remove three thumbscrews (callout 1).

Figure 5-328 Remove three thumbscrews



7. Lift the front of the control panel off of the printer (callout 1), and then slide it toward the front of the printer (callout 2) to remove it.

Figure 5-329 Remove the control panel

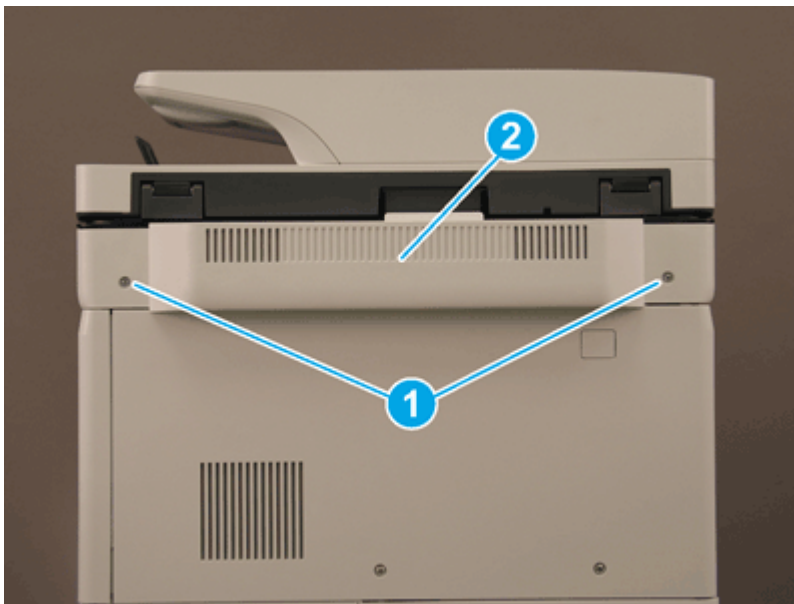


3. Remove the document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660)

Follow these steps to remove the document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660).

1. Remove two screws (callout 1), and then remove the scanner control board (SCB) cover (callout 2).

Figure 5-330 Remove the SCB cover



2. Flow M681z/Flow M682z/Flow E67660z models only: Do the following:

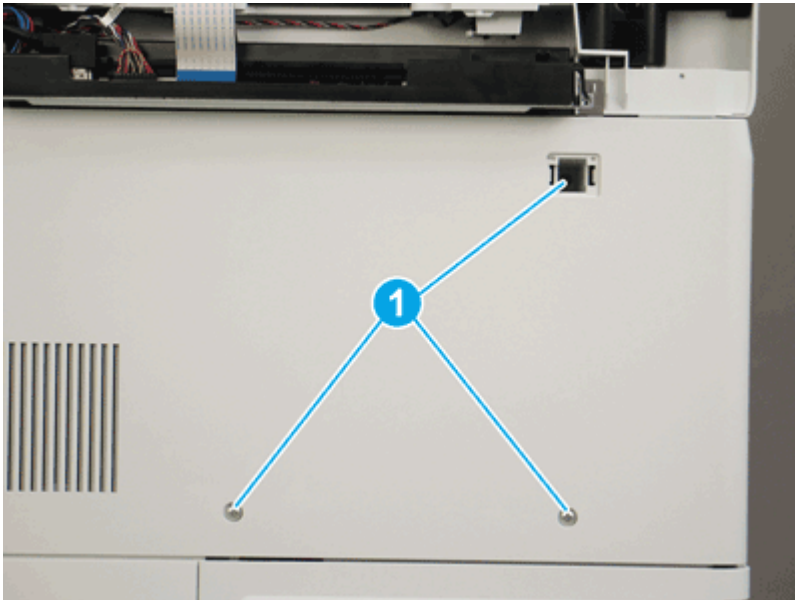
- a. At the back of the printer, remove one small cover (callout 1).

Figure 5-331 Remove the small cover



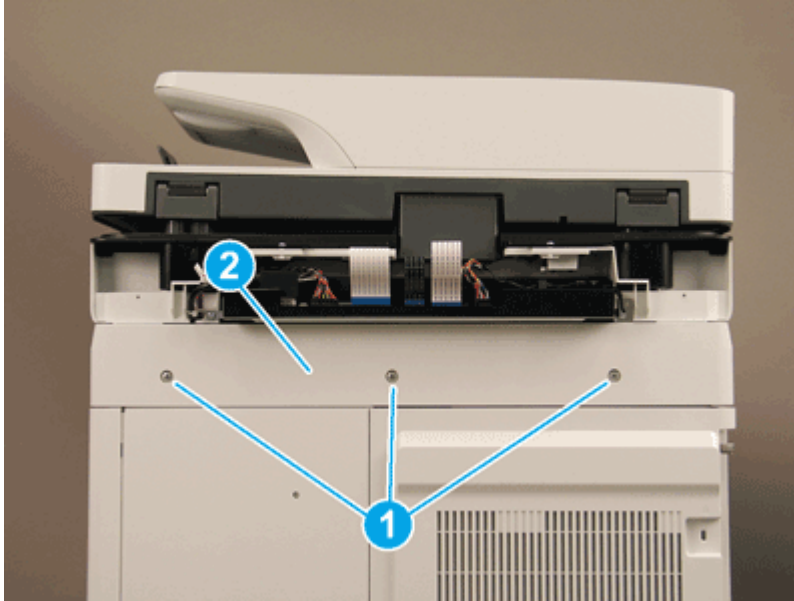
- b. Remove three screws (callout 1), and then remove the stapler/stacker rear cover (callout 2).

Figure 5-332 Remove the stapler/stacker rear cover



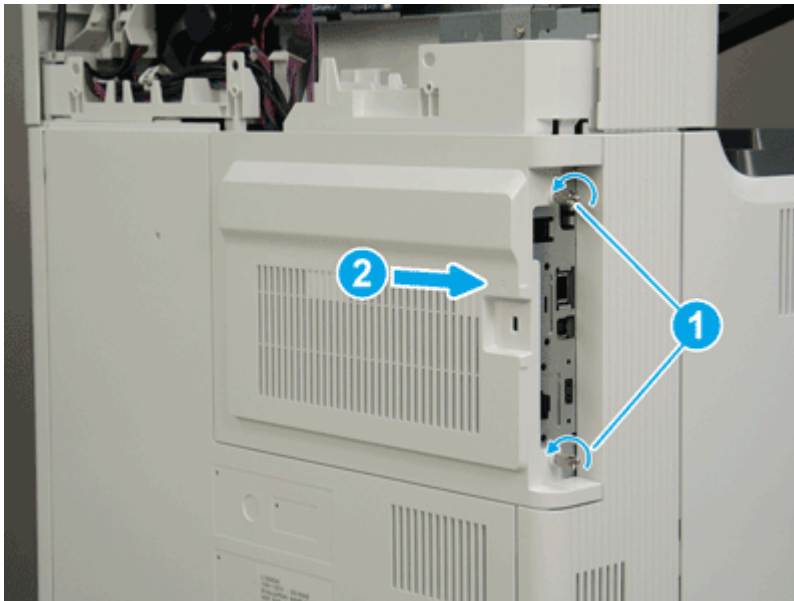
3. **M681dh/M681f/M682dh/Flow M681f/E67650dh models only:** Remove three screws (callout 1), and then remove the upper rear cover (callout 2).

Figure 5-333 Remove the upper rear cover



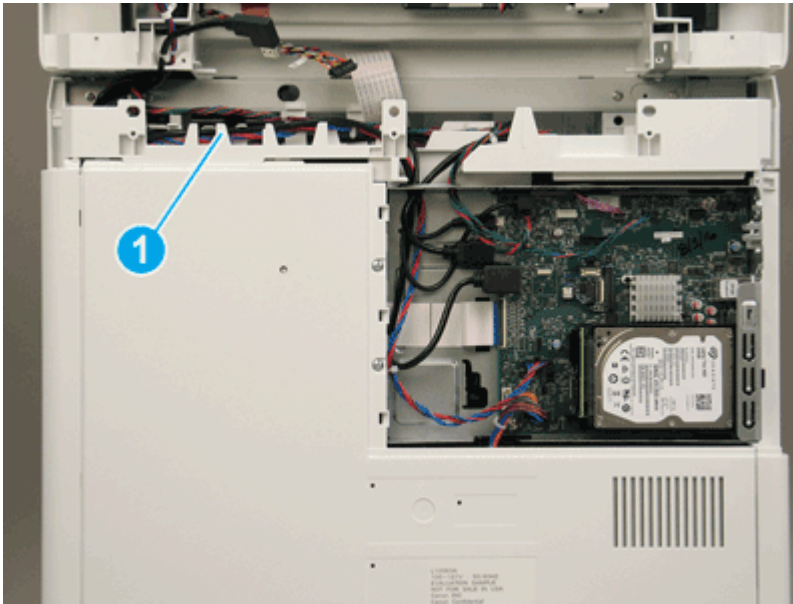
4. Loosen two thumbscrews (callout 1), and then slide the formatter cover away from the printer to remove it (callout 2).

Figure 5-334 Remove the formatter cover



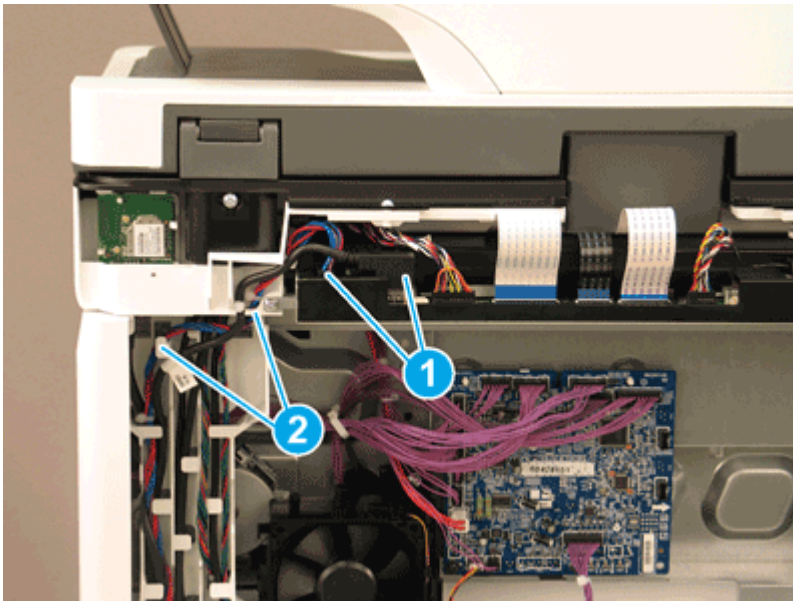
5. The remaining figures in this procedure show the Flow M682z model. While the cable routing (callout 1) on the M681dh, M681f, M682dh, Flow M681f, and E67650dh models is different, the removal procedures are the same for all models.

Figure 5-335 Cable routing for M681dh, M681f, Flow M681f, and E67650dh



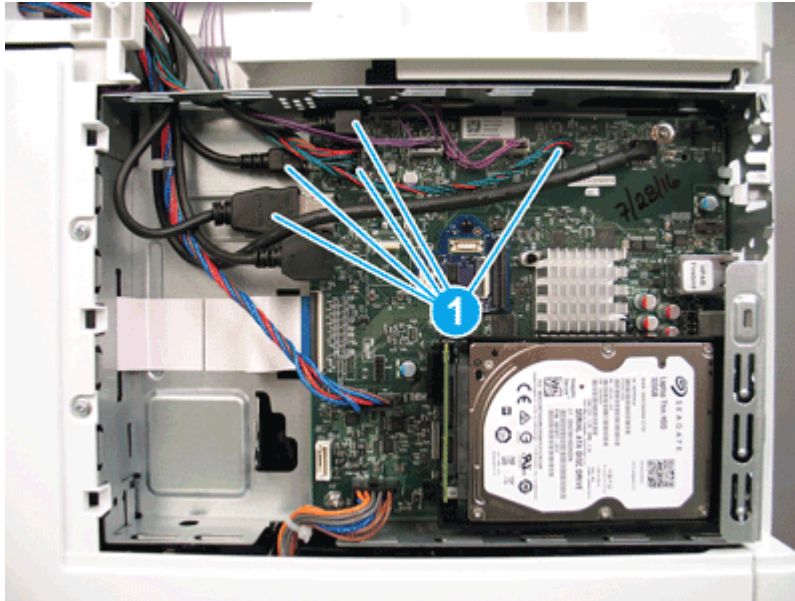
6. Disconnect two connectors (callout 1) on the SCB, and then release the cables from the guides (callout 2).

Figure 5-336 Disconnect two connectors



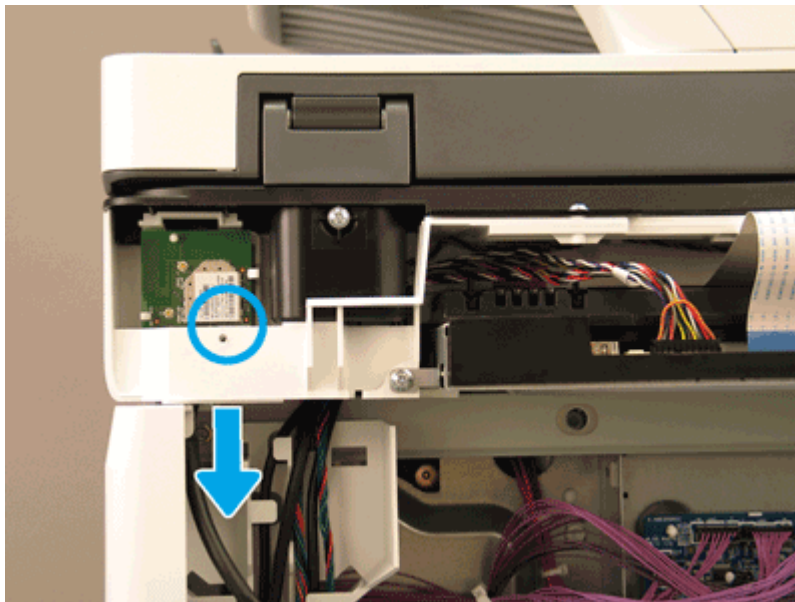
7. Disconnect five connectors on the formatter (callout 1).

Figure 5-337 Disconnect five connectors



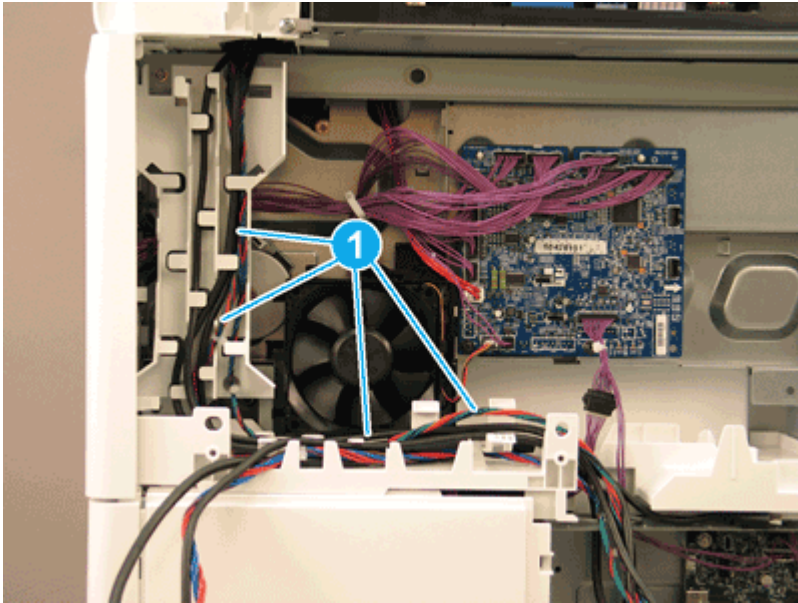
8. Flow M682z only: Gently pull down on the cable to disconnect the wireless connector.

Figure 5-338 Disconnect the wireless connector



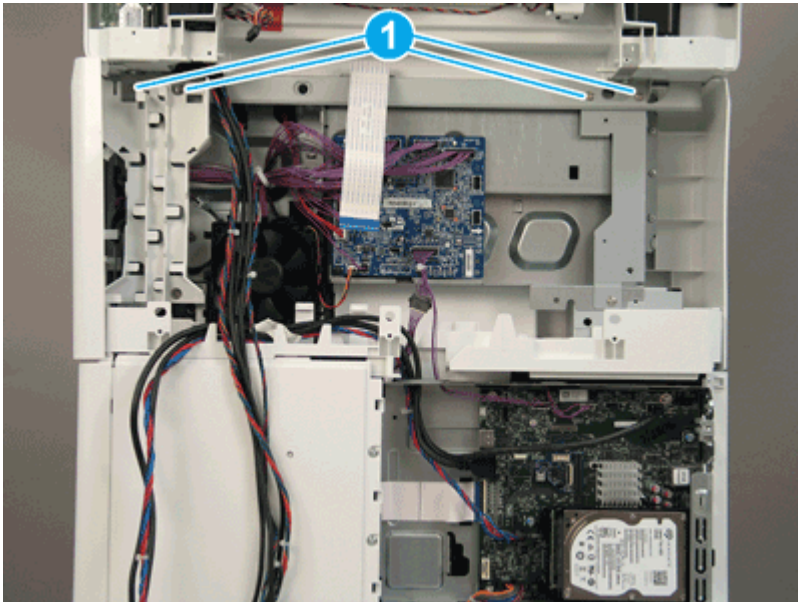
9. Release all of the cables from the cable guides (callout 1).

Figure 5-339 Release the cables



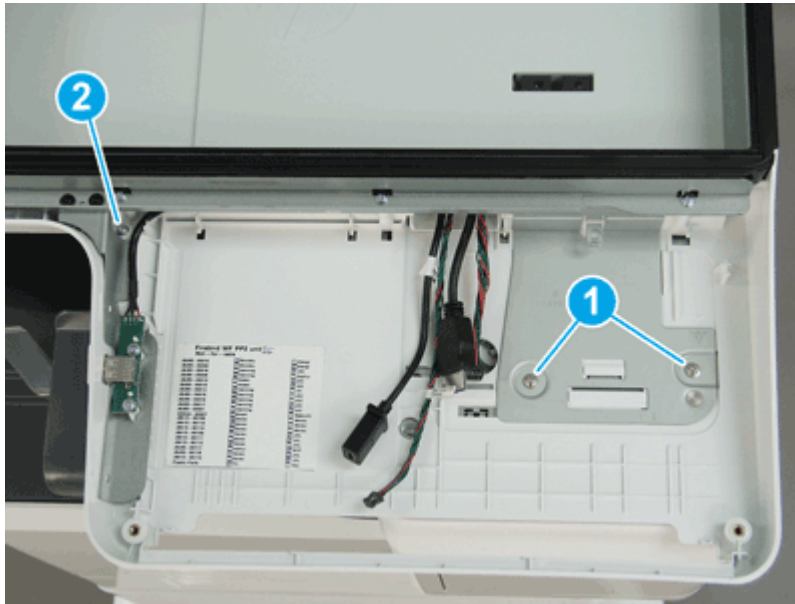
10. At the back of the printer, remove four screws (callout 1).

Figure 5-340 Remove four screws



11. On the top of the image scanner assembly, at the location where the control panel was removed, remove two sheet metal screws (callout 1). **Flow M681z/Flow M682z/Flow E67660z only:** Remove one self-tapping screw (callout 2).

Figure 5-341 Remove three screws



12. Lift the document feeder and image scanner off of the printer to remove them.

Figure 5-342 Remove the document feeder and image scanner



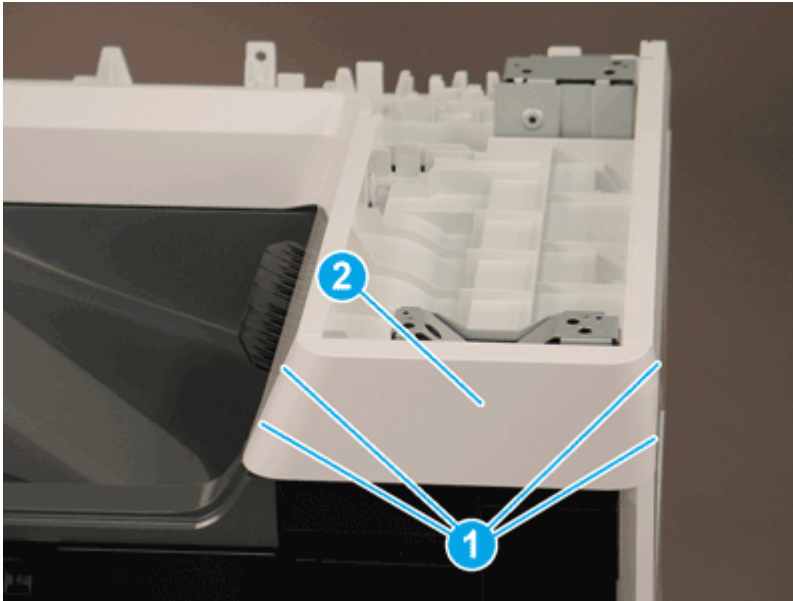
4. Remove the face-down front cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the face-down front cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

1. Open the front door.

2. Release two tabs on each side (callout 1), and then remove the face-down front cover (callout 2).

Figure 5-343 Remove the face-down front cover

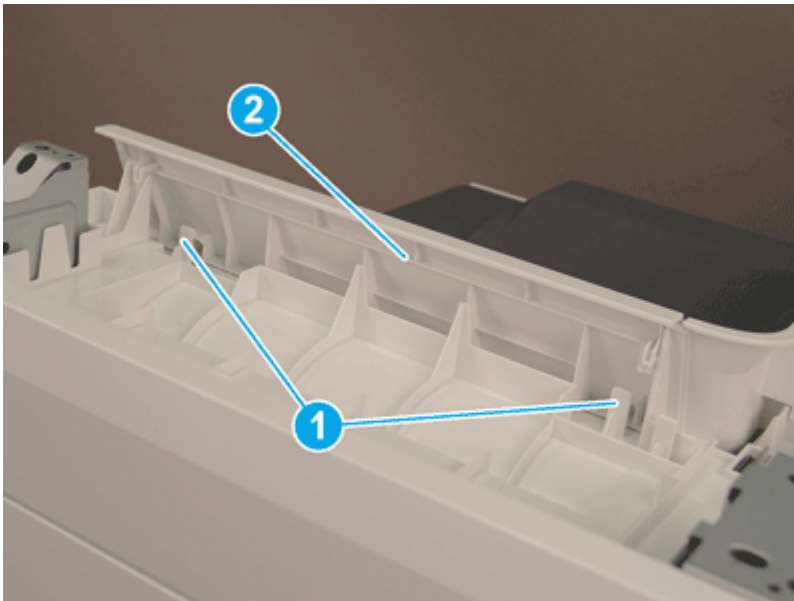


5. Remove the top cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the top cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

- Release two tabs (callout 1), and then remove the top cover (callout 2).

Figure 5-344 Remove the top cover



6. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

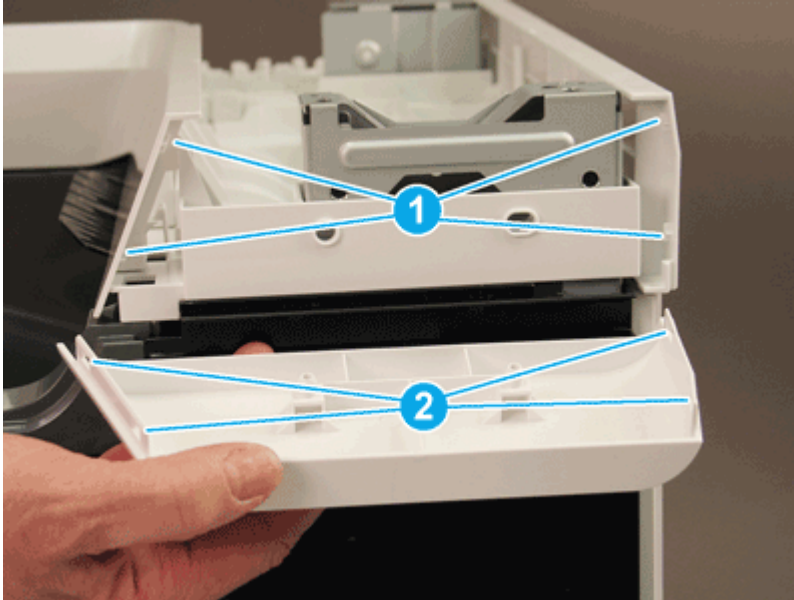
7. Reverse the removal steps to install the assembly

Also use the following **special installation instructions**.

Face-down front cover

- When reinstalling the cover, position the tabs (callout 1) on the printer into the slots (callout 2) on the cover.

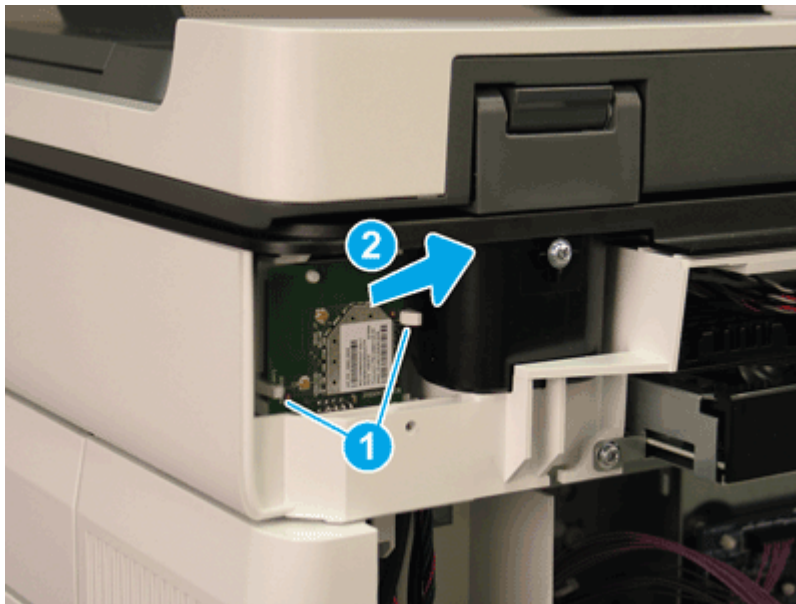
Figure 5-345 Install the cover



Document feeder and image scanner

1. **Flow M682z only:** When reconnecting the wireless card cable, do the following:
 - a. Release two tabs (callout 1), and then remove the wireless card (callout 2).

Figure 5-346 Remove the wireless card



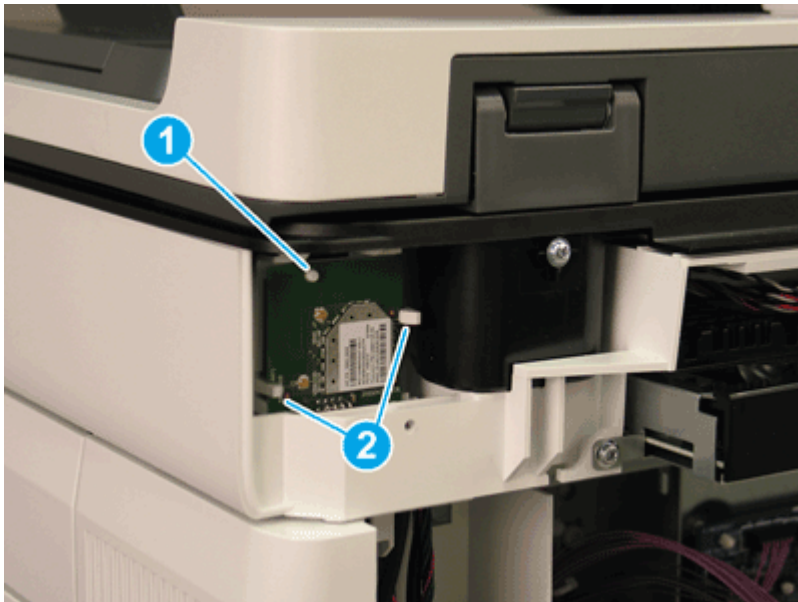
- b. Connect the cable to the wireless card (callout 1).

Figure 5-347 Connect the wireless card connector



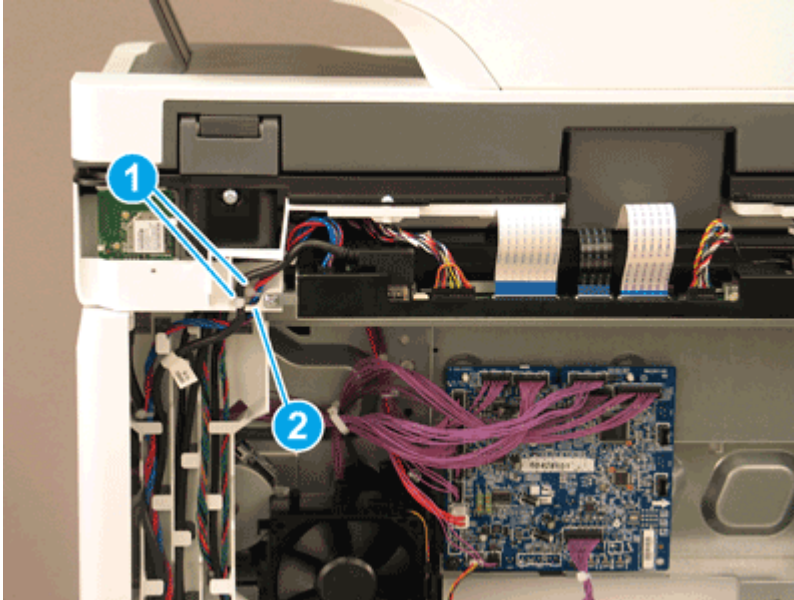
- c. Reinstall the wireless card. Make sure that the hole in the card is positioned over the peg (callout 1), and that the card is under the two tabs (callout 2).


Figure 5-348 Reinstall the wireless card



2. When reinstalling the SCB cables, make sure that the wire retainers (callout 1) on the cables are positioned above the plastic guide (callout 2).

Figure 5-349 Install the SCB cables



 **NOTE:** Continue to reverse the removal steps to finish installing the assembly.


Removal and replacement: Right cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

This document provides the procedures to remove and replace the right cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

 [View a video of how to remove and replace the right cover.](#)


Mean time to repair: 15 minutes

Service level: Intermediate

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Disconnect the power cable.

 **WARNING!** To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-32 Part Information

Part number	Part description
RC5-1843-000CN	Right cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

No post service test is available for this assembly.

1. Remove the keyboard (MFP)

Follow these steps to remove the keyboard (MFP).

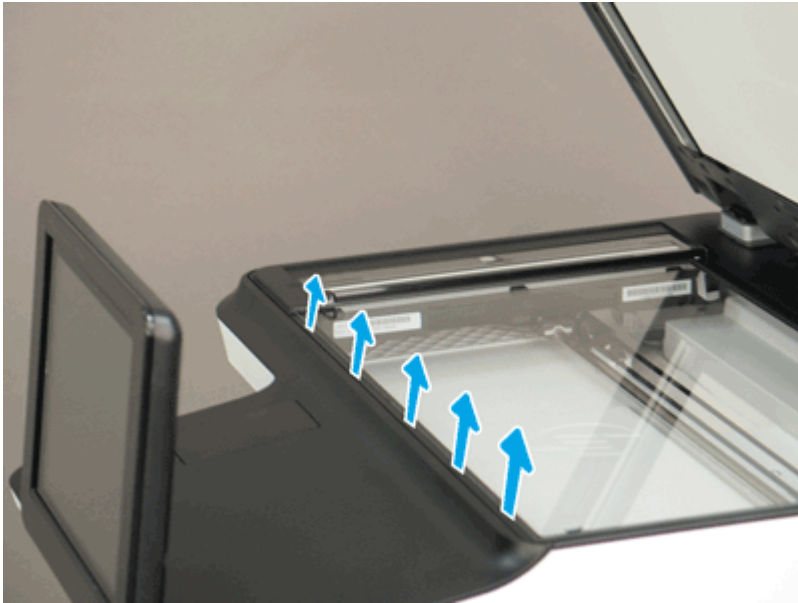
1. If the control panel is not fully tilted forward, tilt it forward now (callout 1) until it stops. Open the document feeder (callout 2).

Figure 5-350 Tilt the control panel and open the document feeder



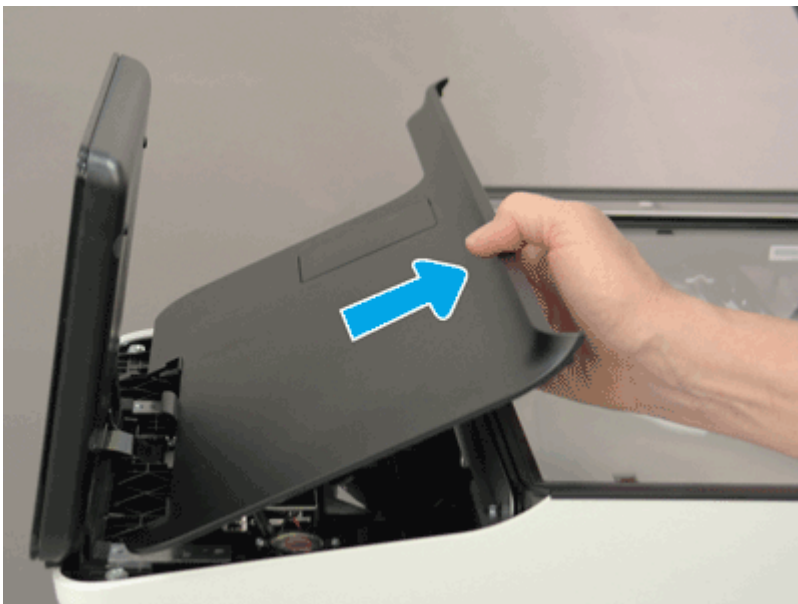
2. Beginning at the right side of the control-panel cover, carefully release five tabs along the top edge of the cover.

Figure 5-351 Release five tabs



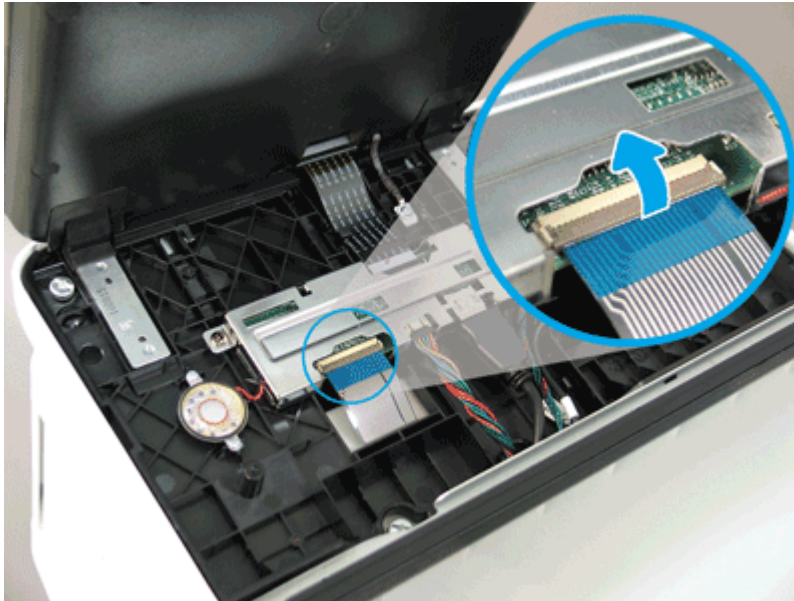
3. Continue to rotate the top edge of the cover away from the printer, and then remove the cover.

Figure 5-352 Remove the cover



4. Open the connector latch to release the keyboard flat cable.

Figure 5-353 Disconnect the keyboard flat cable



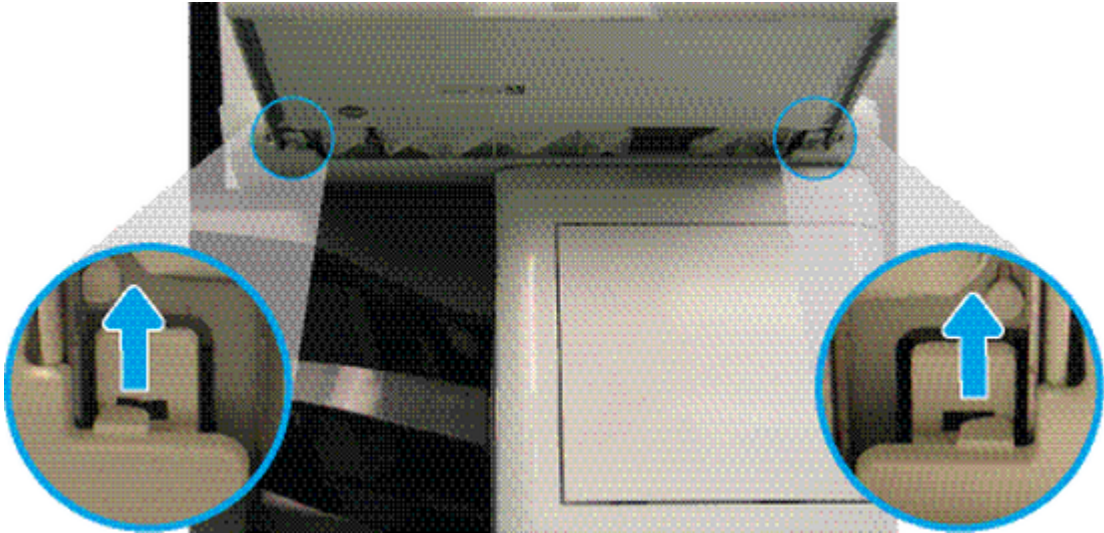
5. Slide the keyboard tray out until it stops.

Figure 5-354 Slide the keyboard tray out



6. Push up on the keyboard tray to release two tabs on the bottom of the tray, and then slide the tray toward you to disengage the tabs.

Figure 5-355 Release two tabs




7. Slide the keyboard tray all the way out of the printer to remove it.

Figure 5-356 Remove the keyboard



2. Remove the control panel (M681/M682/E67550/E67560/E67650/E67660)

Follow these steps to remove the control panel (M681/M682/E67550/E67560/E67650/E67660).

 **NOTE:** This step is for the M681/M682/E67550/E67560/E67650/E67660 printers. For the M652/M653/E65050/E65060/E65150/E65160 printers, skip this step.

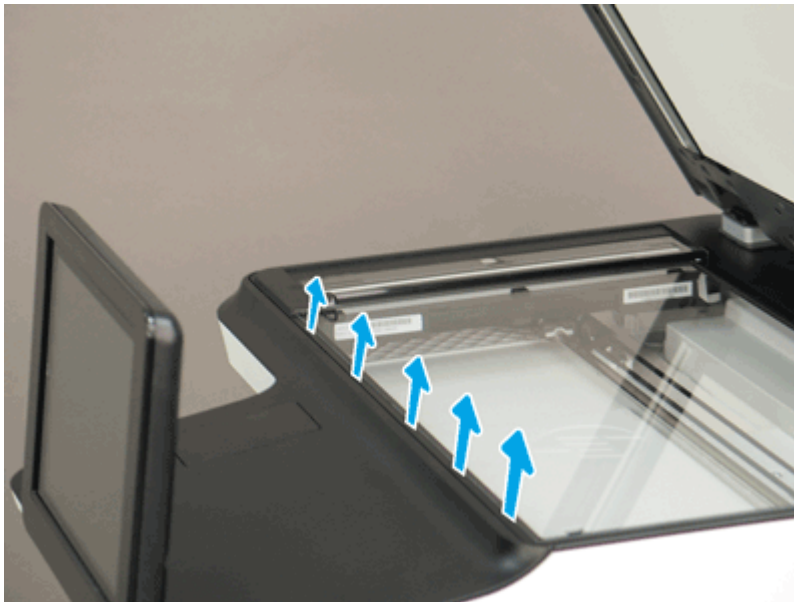
1. Tilt the control panel forward (callout 1), and then open the document feeder (callout 2).

Figure 5-357 Tilt the control panel forward and open the document feeder



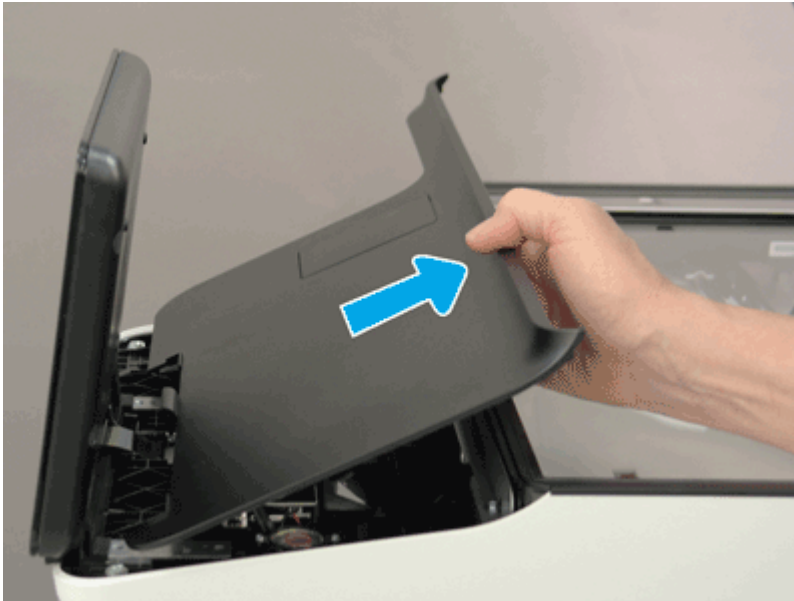
2. Beginning at the right side of the control-panel cover, carefully release five tabs along the top edge of the cover.

Figure 5-358 Release five tabs



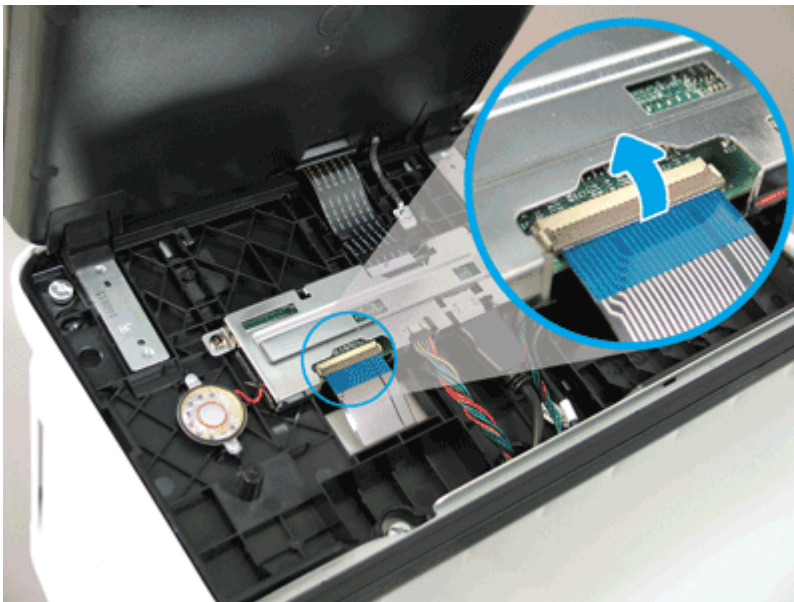
3. Continue to rotate the top edge of the cover away from the printer, and then remove the cover.

Figure 5-359 Remove the cover



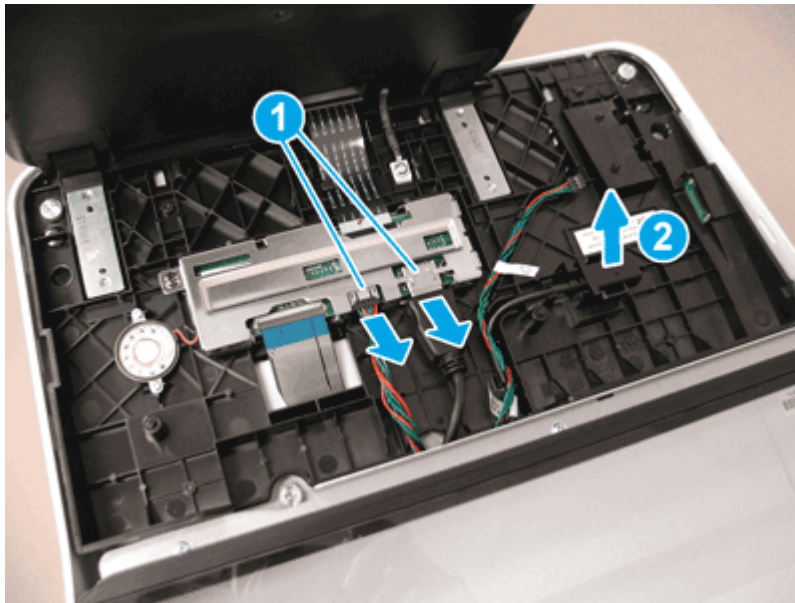
4. **Keyboard models only:** Lift up on the small, gray gate to release the keyboard flat cable.

Figure 5-360 Disconnect the keyboard flat cable (keyboard models only)



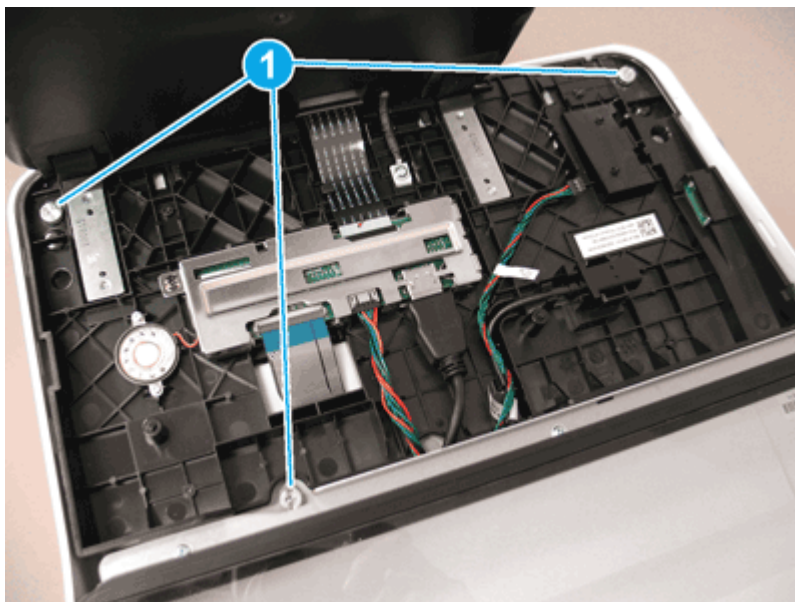
5. Disconnect two connectors (callout 1), and then release the USB cable (callout 2) from the holder.

Figure 5-361 Disconnect connectors



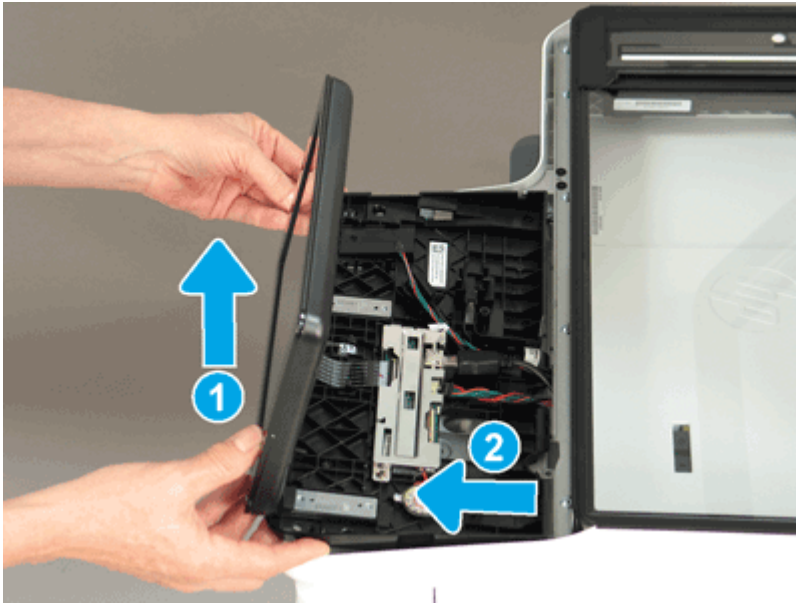
6. Remove three thumbscrews (callout 1).

Figure 5-362 Remove three thumbscrews



7. Lift the front of the control panel off of the printer (callout 1), and then slide it toward the front of the printer (callout 2) to remove it.

Figure 5-363 Remove the control panel

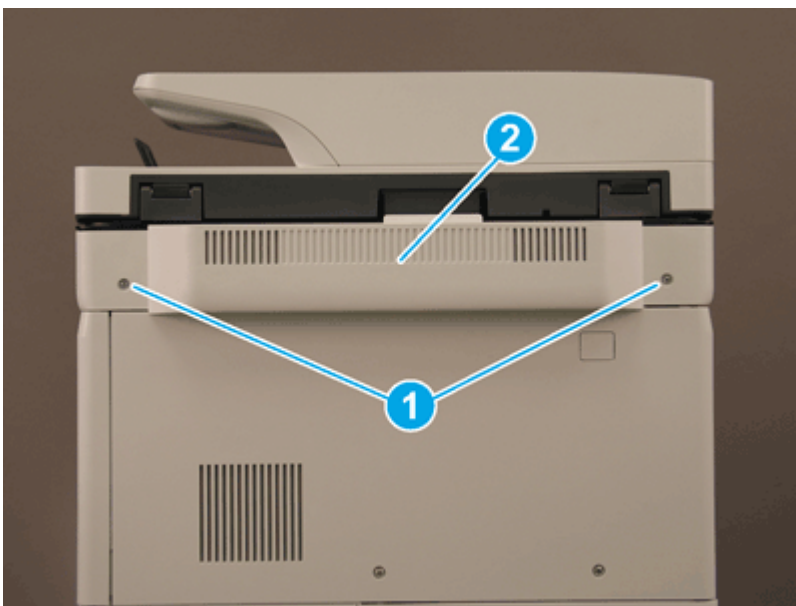


3. Remove the document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660)

Follow these steps to remove the document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660).

1. Remove two screws (callout 1), and then remove the scanner control board (SCB) cover (callout 2).

Figure 5-364 Remove the SCB cover



2. Flow M681z/Flow M682z/Flow E67660z models only: Do the following:

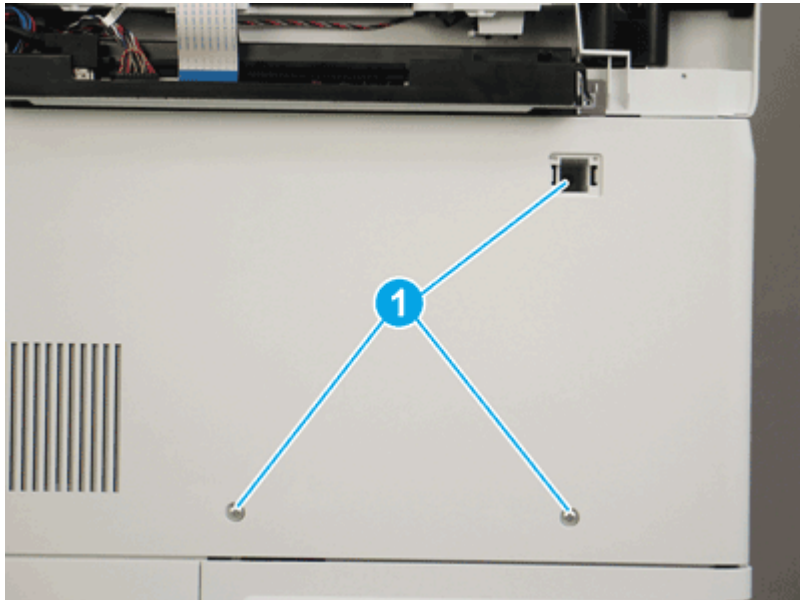
- a. At the back of the printer, remove one small cover (callout 1).

Figure 5-365 Remove the small cover



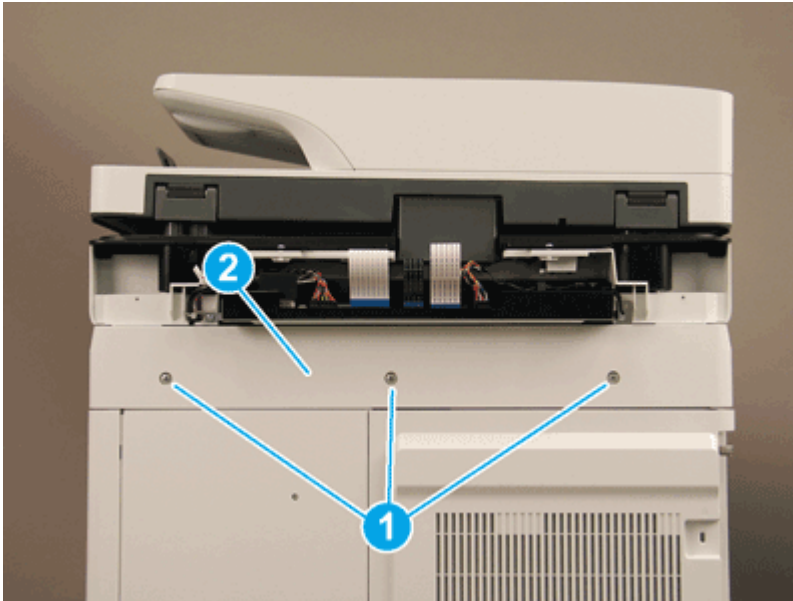
- b. Remove three screws (callout 1), and then remove the stapler/stacker rear cover (callout 2).

Figure 5-366 Remove the stapler/stacker rear cover



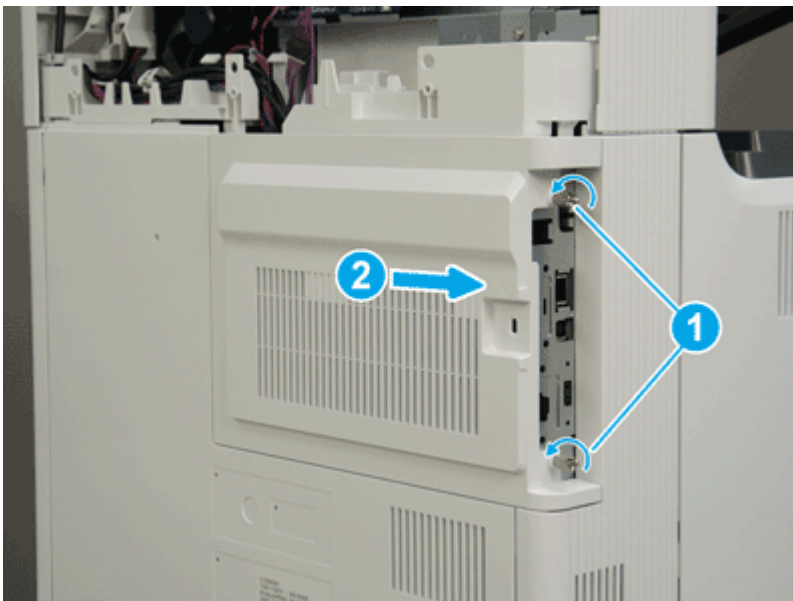
3. **M681dh/M681f/M682dh/Flow M681f/E67650dh models only:** Remove three screws (callout 1), and then remove the upper rear cover (callout 2).

Figure 5-367 Remove the upper rear cover



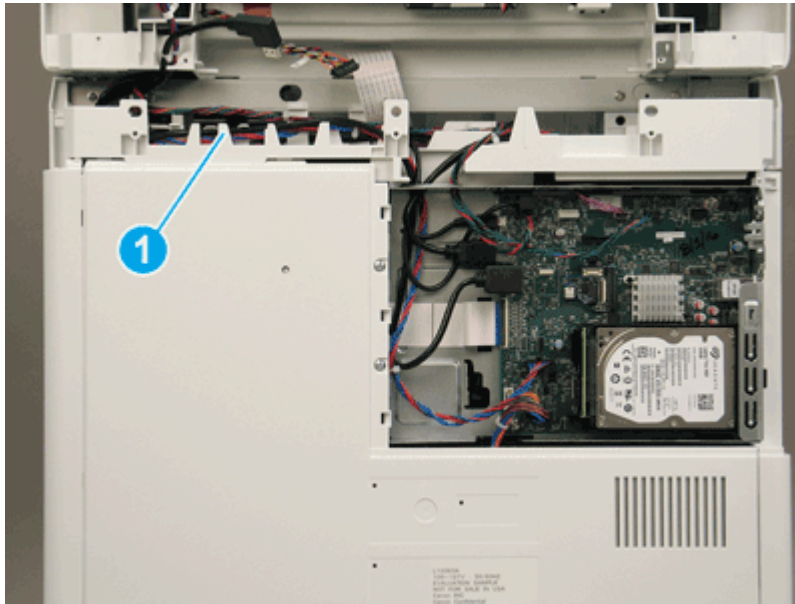
4. Loosen two thumbscrews (callout 1), and then slide the formatter cover away from the printer to remove it (callout 2).

Figure 5-368 Remove the formatter cover



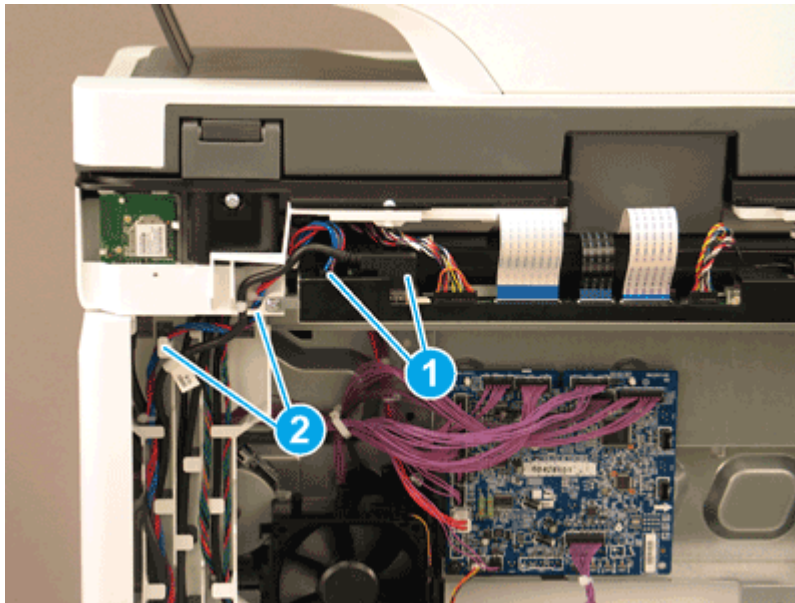
5. The remaining figures in this procedure show the Flow M682z model. While the cable routing (callout 1) on the M681dh, M681f, M682dh, Flow M681f, and E67650dh models is different, the removal procedures are the same for all models.

Figure 5-369 Cable routing for M681dh, M681f, Flow M681f, and E67650dh



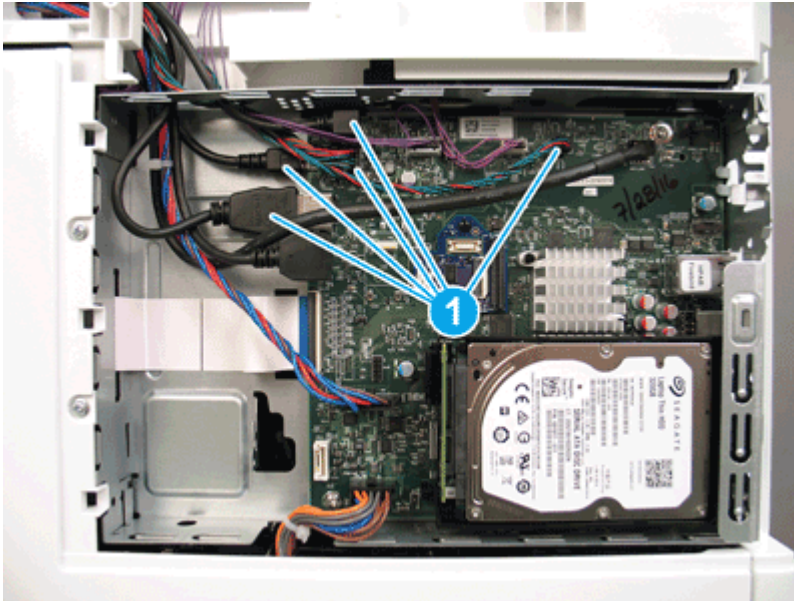
6. Disconnect two connectors (callout 1) on the SCB, and then release the cables from the guides (callout 2).

Figure 5-370 Disconnect two connectors



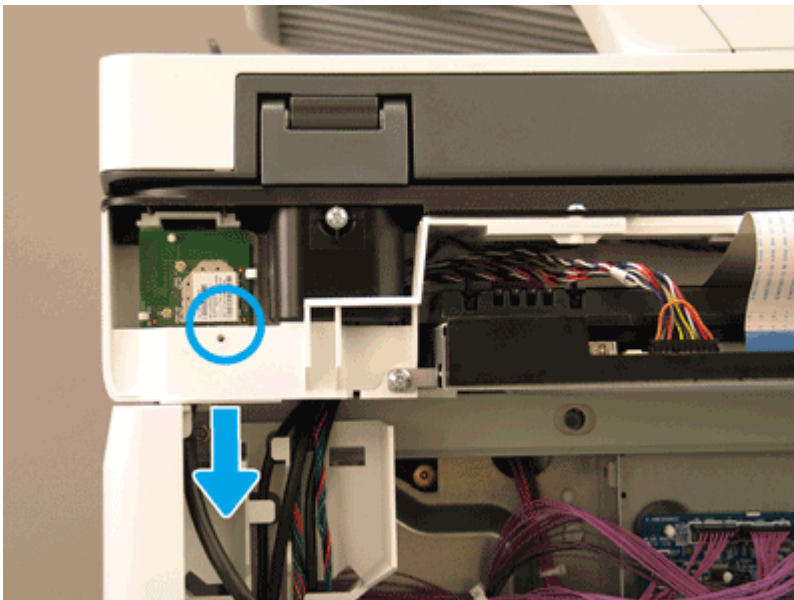
7. Disconnect five connectors on the formatter (callout 1).

Figure 5-371 Disconnect five connectors



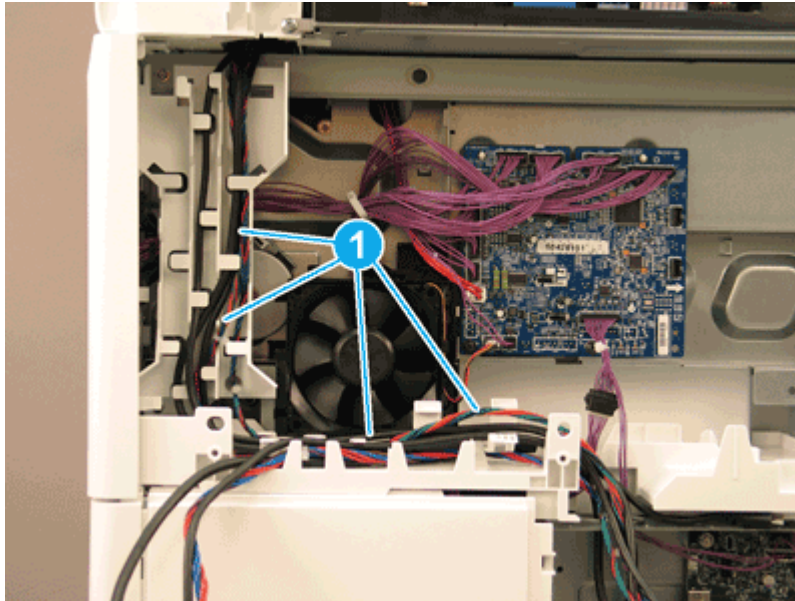
8. **Flow M682z only:** Gently pull down on the cable to disconnect the wireless connector.

Figure 5-372 Disconnect the wireless connector



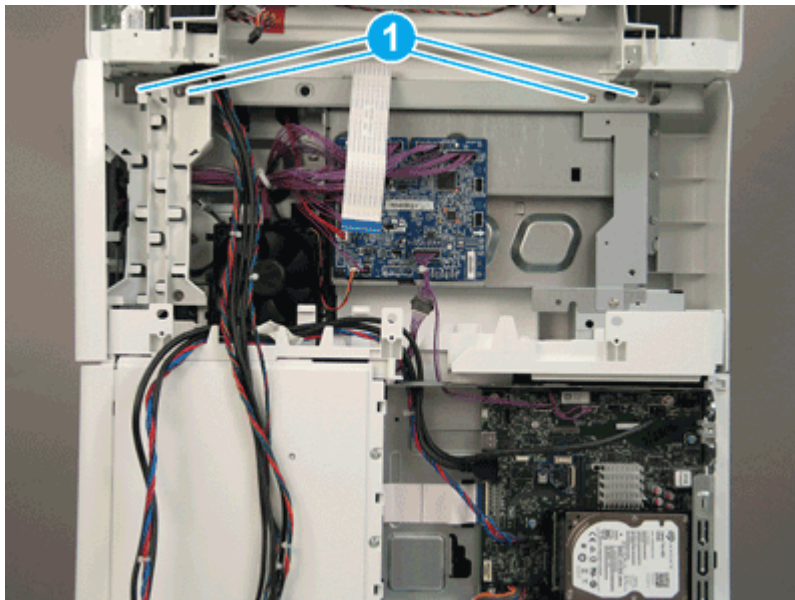
9. Release all of the cables from the cable guides (callout 1).

Figure 5-373 Release the cables



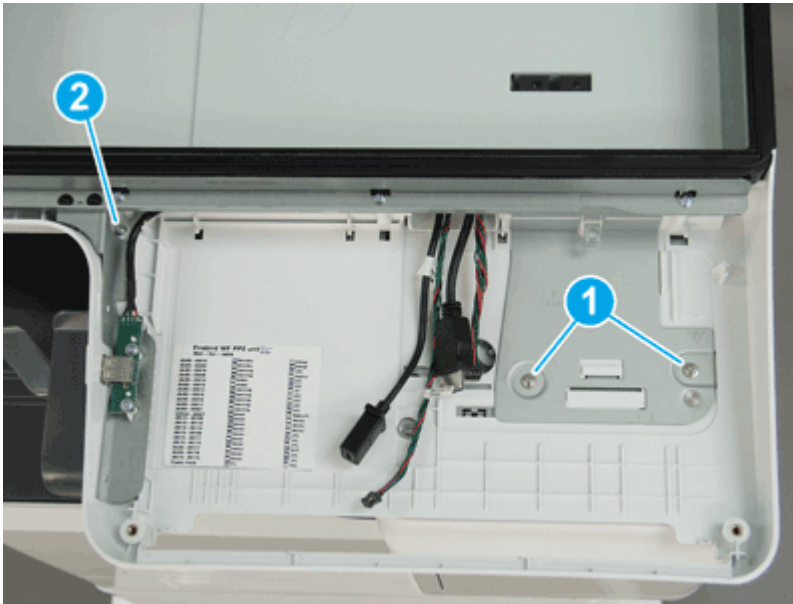
10. At the back of the printer, remove four screws (callout 1).

Figure 5-374 Remove four screws



11. On the top of the image scanner assembly, at the location where the control panel was removed, remove two sheet metal screws (callout 1). **Flow M681z/Flow M682z/Flow E67660z only:** Remove one self-tapping screw (callout 2).

Figure 5-375 Remove three screws



12. Lift the document feeder and image scanner off of the printer to remove them.

Figure 5-376 Remove the document feeder and image scanner



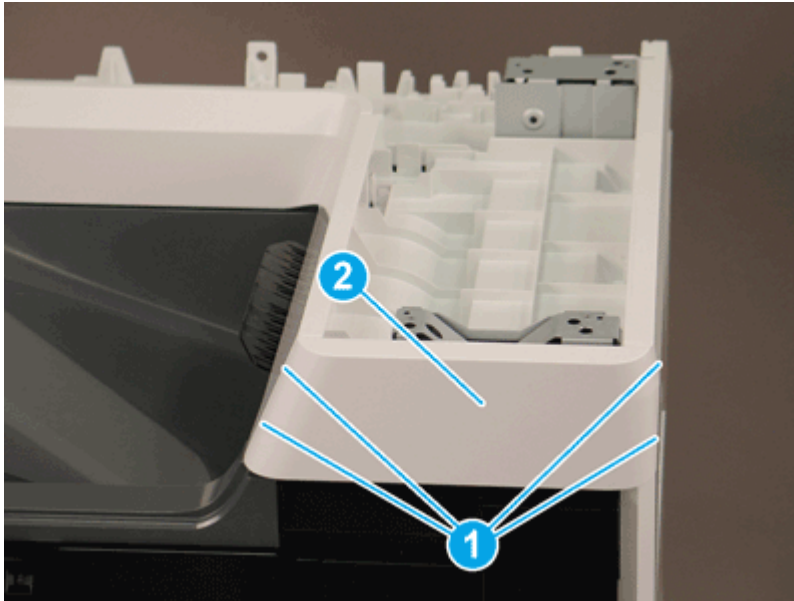
4. Remove the face-down front cover (M681dn/M681/M682dn/Flow M681f)

Follow these steps to remove the face-down front cover (M681dn/M681/M682dn/Flow M681f).

1. Open the front door.

2. Release two tabs on each side (callout 1), and then remove the face-down front cover (callout 2).

Figure 5-377 Remove the face-down front cover



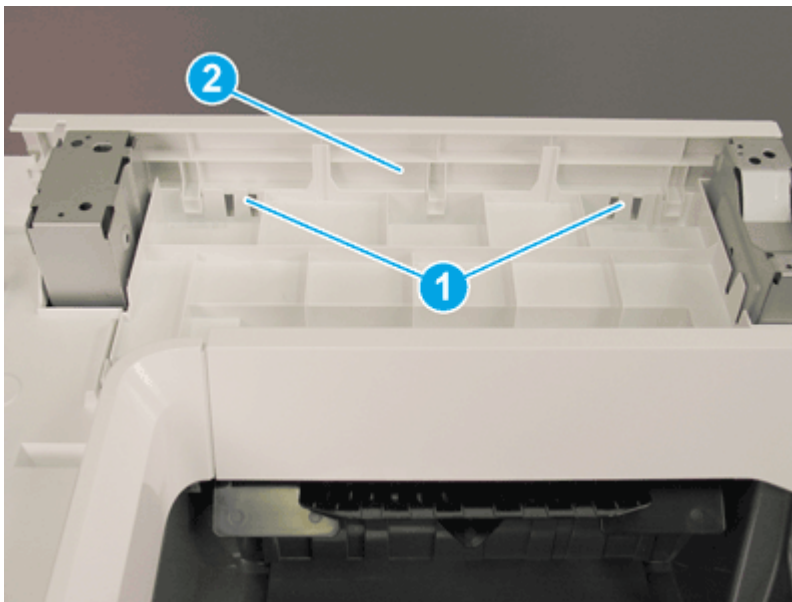
5. Remove the right cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the right cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

This step is for the M681/M682/E67550/E67560/E67650/E67660 printers. For the M652/M653/E65050/E65060/E65150/E65160 printers, skip this step.

- Release two tabs (callout 1), and then remove the right cover (callout 2).


Figure 5-378 Remove the right cover



6. Unpack the replacement assembly



Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.


 **NOTE:** HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>


2. Unpack the replacement part from the packaging.

 **CAUTION:**  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

 **IMPORTANT:** Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

 **NOTE:** If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

 **NOTE:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

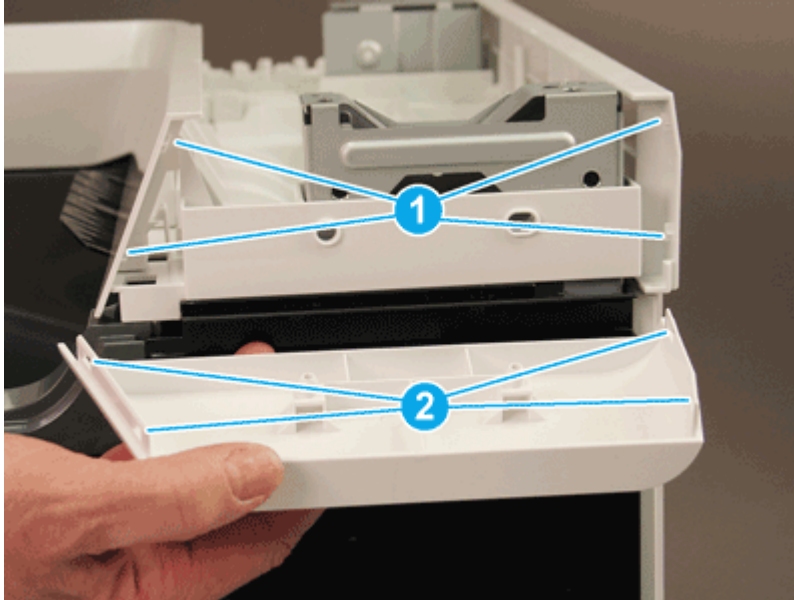
7. Reverse the removal steps to install the assembly

Also use the following **special installation instructions**.

Face-down front cover

- When reinstalling the cover, position the tabs (callout 1) on the printer into the slots (callout 2) on the cover.

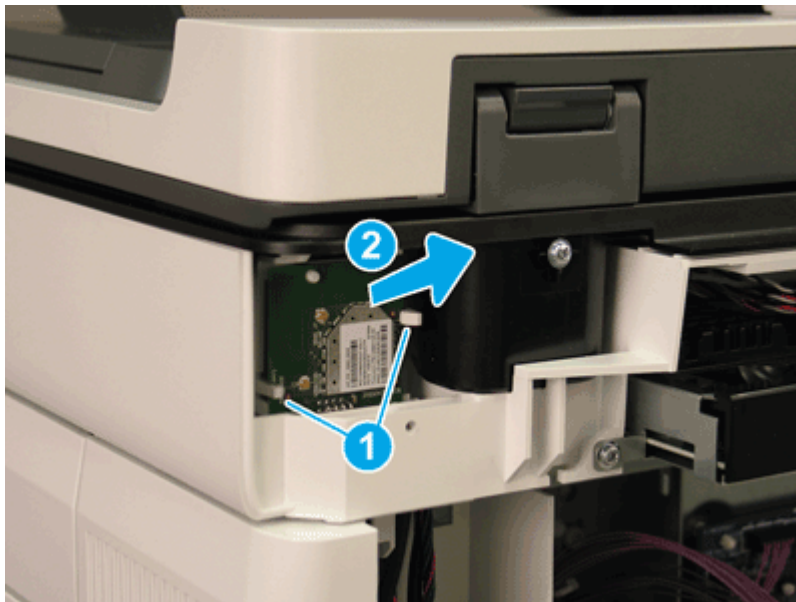
Figure 5-379 Install the cover



Document feeder and image scanner

1. **Flow M682z only:** When reconnecting the wireless card cable, do the following:
 - a. Release two tabs (callout 1), and then remove the wireless card (callout 2).

Figure 5-380 Remove the wireless card



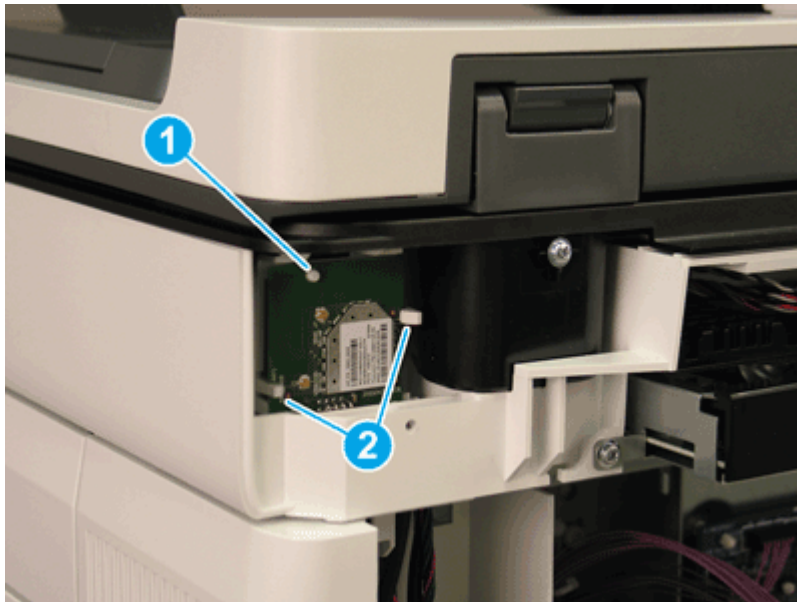
- b. Connect the cable to the wireless card (callout 1).

Figure 5-381 Connect the wireless card connector



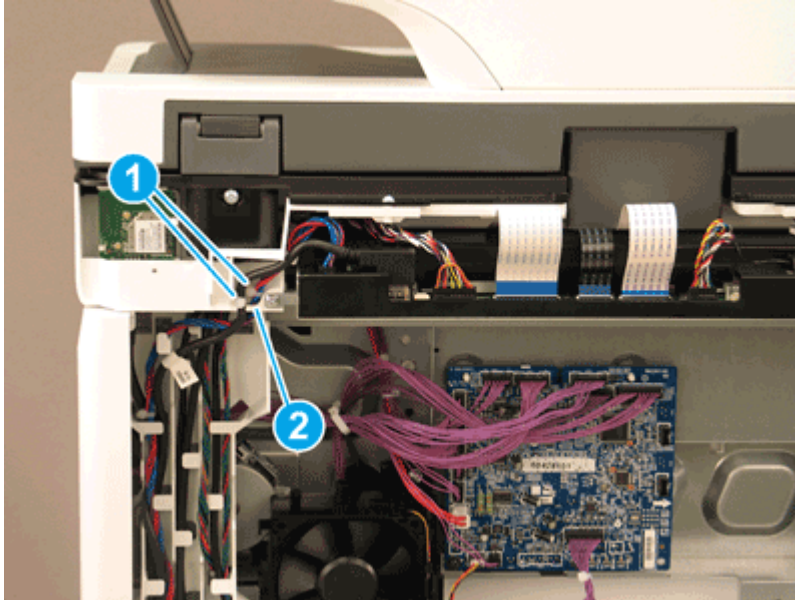
- c. Reinstall the wireless card. Make sure that the hole in the card is positioned over the peg (callout 1), and that the card is under the two tabs (callout 2).


Figure 5-382 Reinstall the wireless card



2. When reinstalling the SCB cables, make sure that the wire retainers (callout 1) on the cables are positioned above the plastic guide (callout 2).

Figure 5-383 Install the SCB cables



 **NOTE:** Continue to reverse the removal steps to finish installing the assembly.


Removal and replacement: Front cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Learn how to remove and replace the front cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

 [View a video of how to remove and replace the front cover.](#)


Mean time to repair: 15 minutes

Service level: Intermediate

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Disconnect the power cable.

 **WARNING!** To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-33 Part information

Part number	part description
RC4-6860-000CN	Front cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

No post service test is available for this assembly.

1. Remove the keyboard (MFP)

Follow these steps to remove the keyboard (MFP).

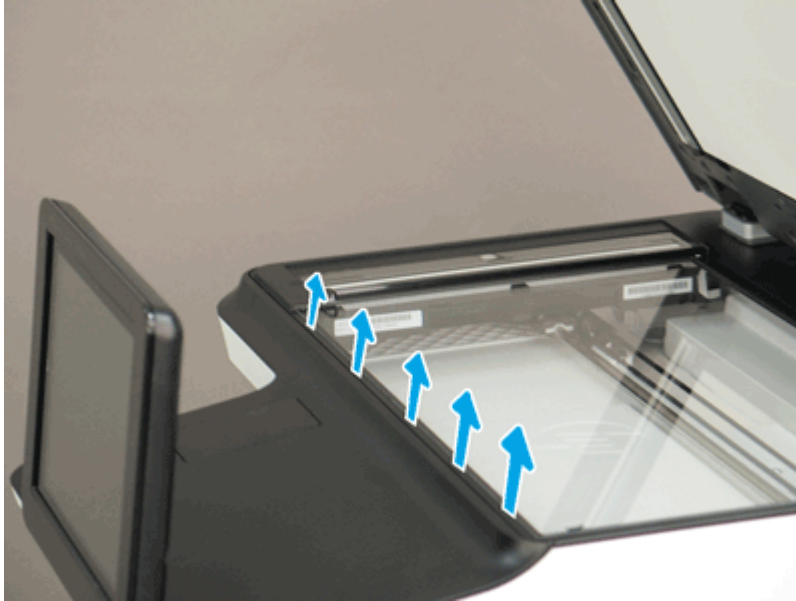
1. If the control panel is not fully tilted forward, tilt it forward now (callout 1) until it stops. Open the document feeder (callout 2).

Figure 5-384 Tilt the control panel and open the document feeder



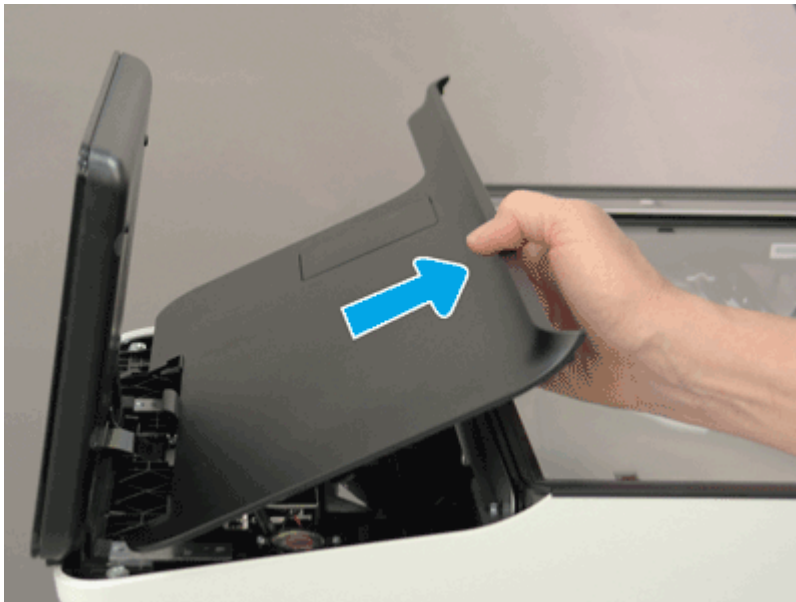
2. Beginning at the right side of the control-panel cover, carefully release five tabs along the top edge of the cover.

Figure 5-385 Release five tabs



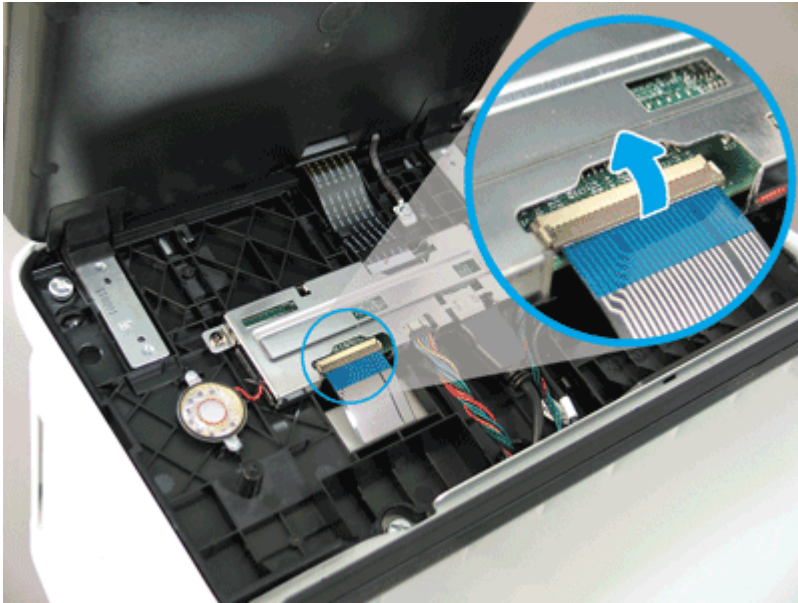
3. Continue to rotate the top edge of the cover away from the printer, and then remove the cover.

Figure 5-386 Remove the cover



4. Open the connector latch to release the keyboard flat cable.

Figure 5-387 Disconnect the keyboard flat cable



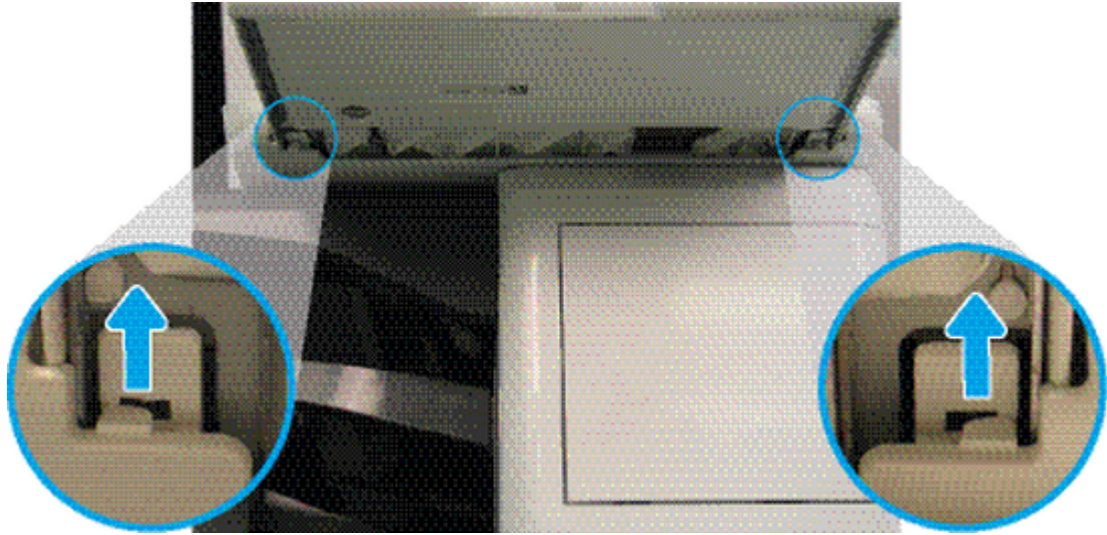
5. Slide the keyboard tray out until it stops.

Figure 5-388 Slide the keyboard tray out



6. Push up on the keyboard tray to release two tabs on the bottom of the tray, and then slide the tray toward you to disengage the tabs.

Figure 5-389 Release two tabs




7. Slide the keyboard tray all the way out of the printer to remove it.

Figure 5-390 Remove the keyboard



2. Remove the control panel (M681/M682/E67550/E67560/E67650/E67660)

Follow these steps to remove the control panel (M681/M682/E67550/E67560/E67650/E67660).

 **NOTE:** This step is for the M681/M682/E67550/E67560/E67650/E67660 printers. For the M652/M653/E65050/E65060/E65150/E65160 printers, skip this step.

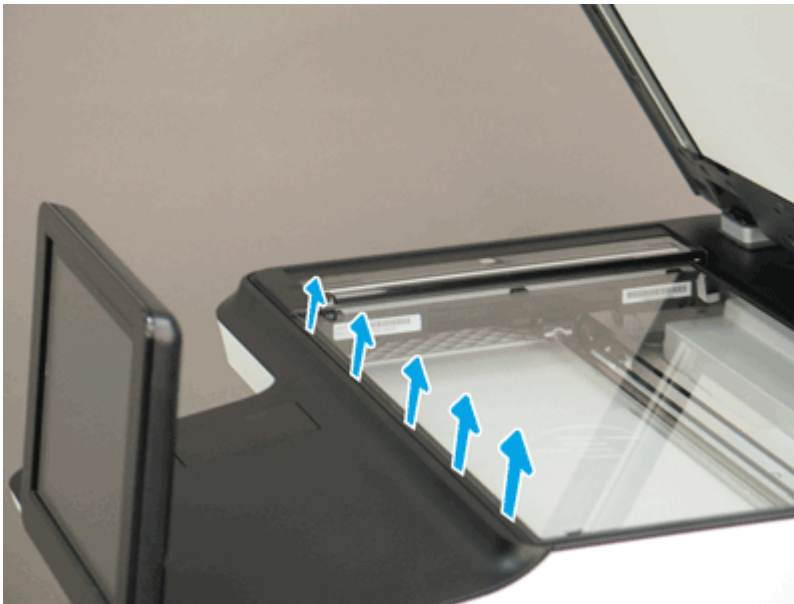
1. Tilt the control panel forward (callout 1), and then open the document feeder (callout 2).

Figure 5-391 Tilt the control panel forward and open the document feeder



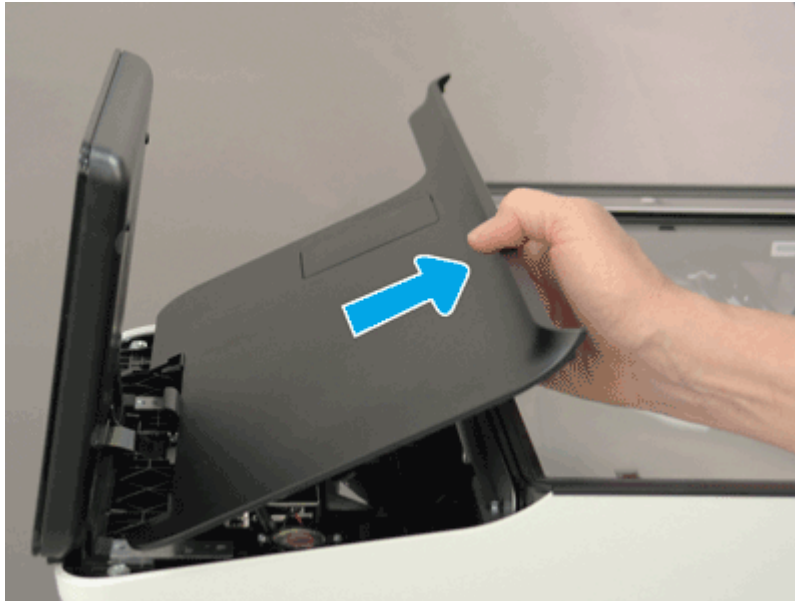
2. Beginning at the right side of the control-panel cover, carefully release five tabs along the top edge of the cover.

Figure 5-392 Release five tabs



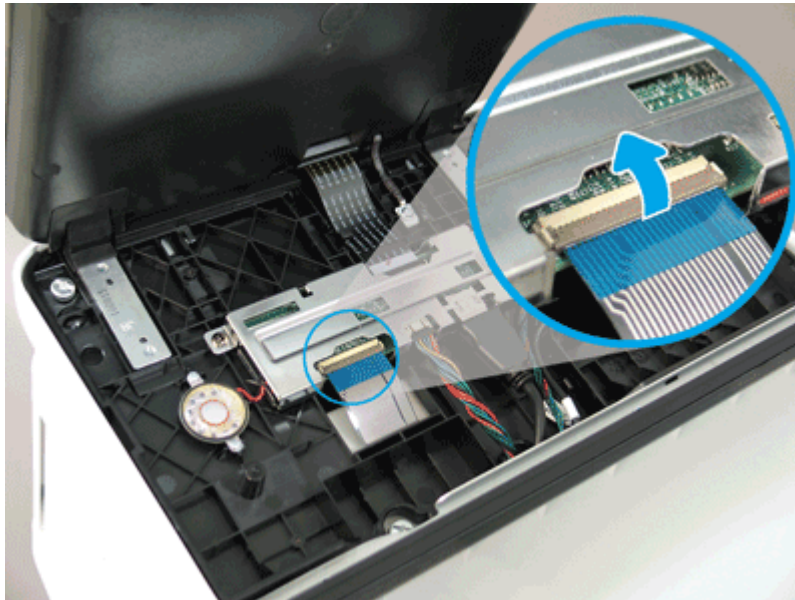
3. Continue to rotate the top edge of the cover away from the printer, and then remove the cover.

Figure 5-393 Remove the cover



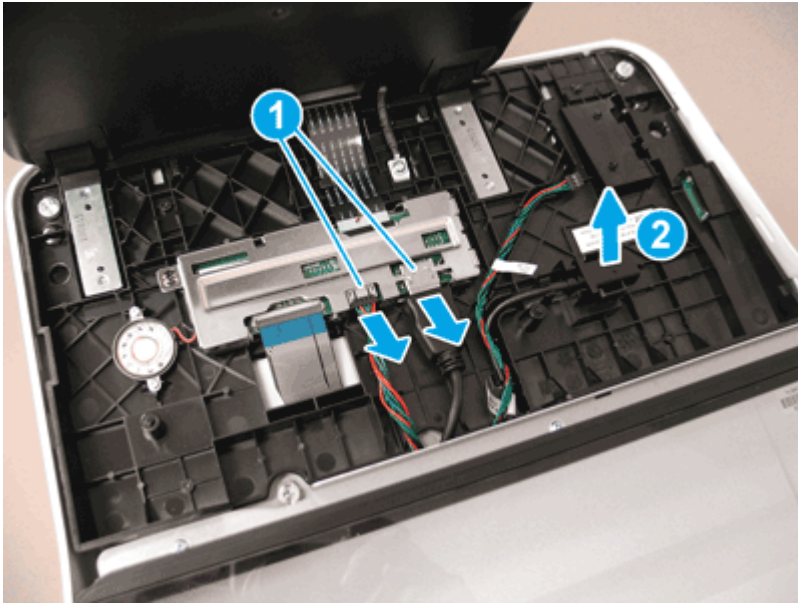
4. **Keyboard models only:** Lift up on the small, gray gate to release the keyboard flat cable.

Figure 5-394 Disconnect the keyboard flat cable (keyboard models only)



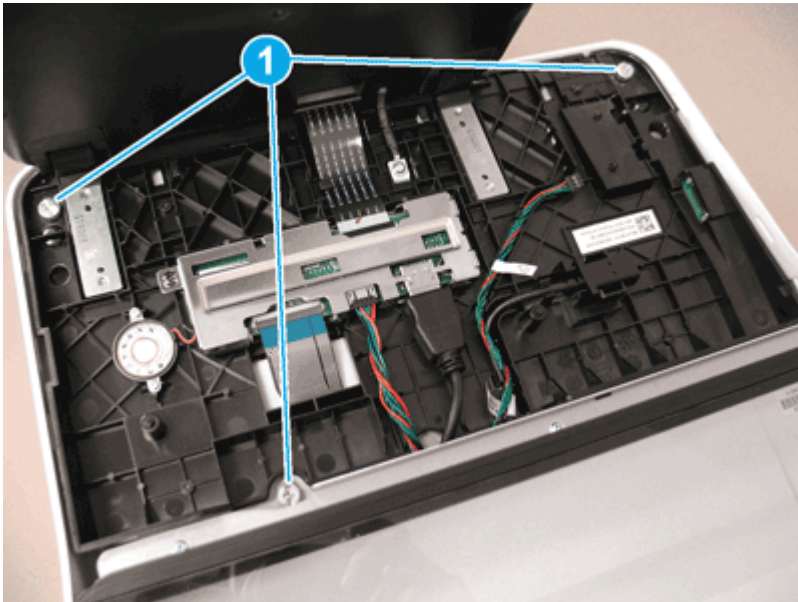
5. Disconnect two connectors (callout 1), and then release the USB cable (callout 2) from the holder.

Figure 5-395 Disconnect connectors



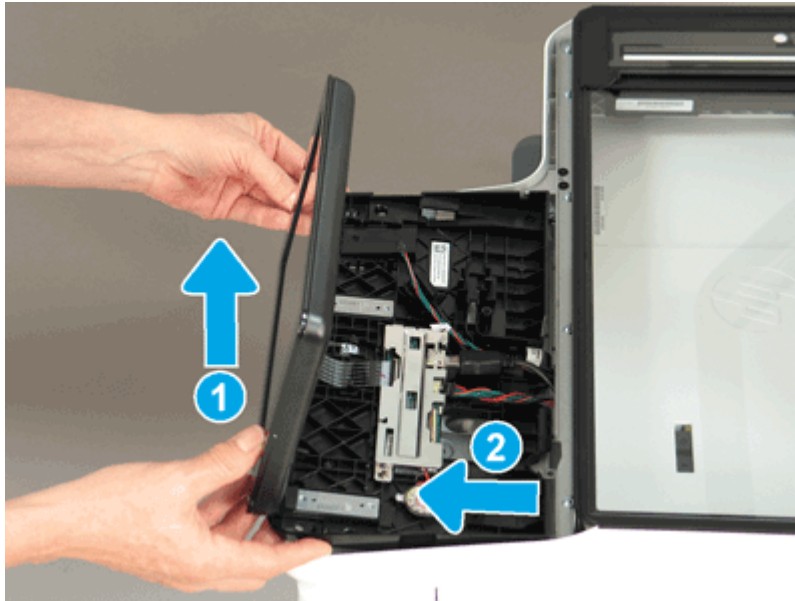
6. Remove three thumbscrews (callout 1).

Figure 5-396 Remove three thumbscrews



7. Lift the front of the control panel off of the printer (callout 1), and then slide it toward the front of the printer (callout 2) to remove it.

Figure 5-397 Remove the control panel

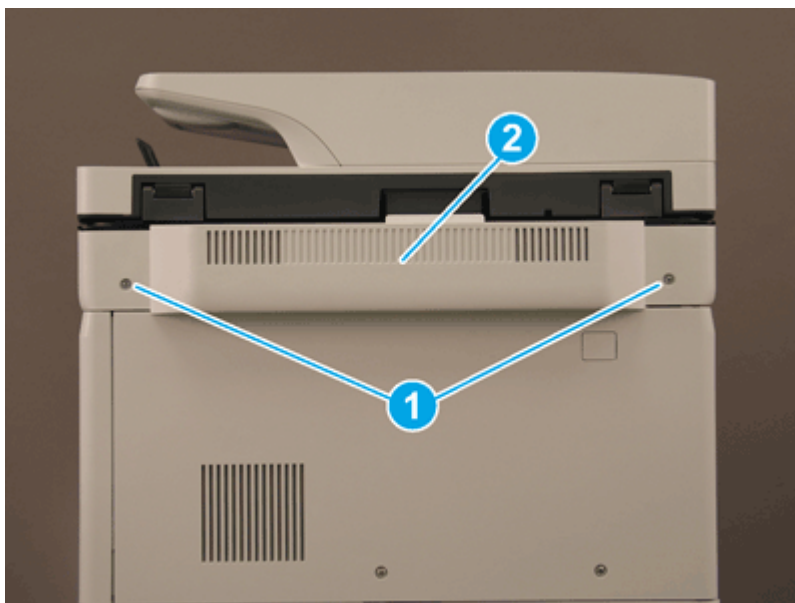


3. Remove the document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660)

Follow these steps to remove the document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660).

1. Remove two screws (callout 1), and then remove the scanner control board (SCB) cover (callout 2).

Figure 5-398 Remove the SCB cover



2. Flow M681z and Flow M682z models only: Do the following:

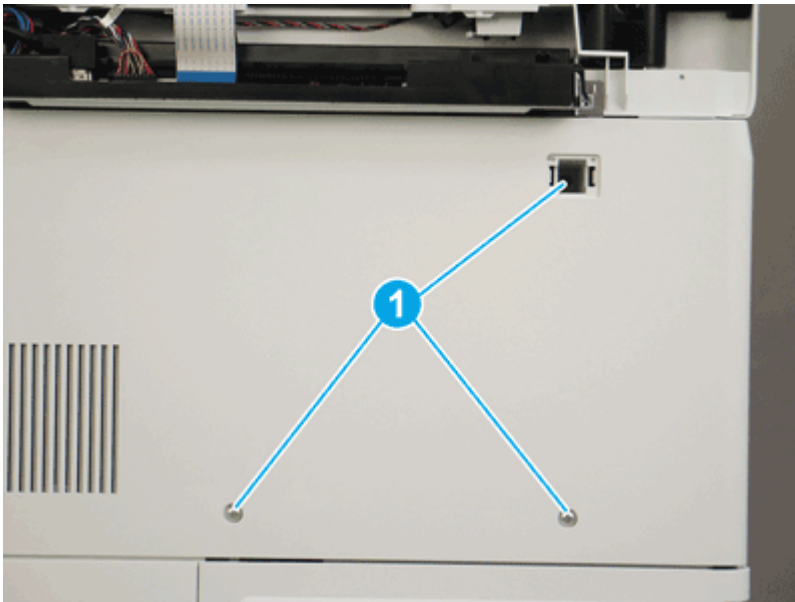
- a. At the back of the printer, remove one small cover (callout 1).

Figure 5-399 Remove the small cover



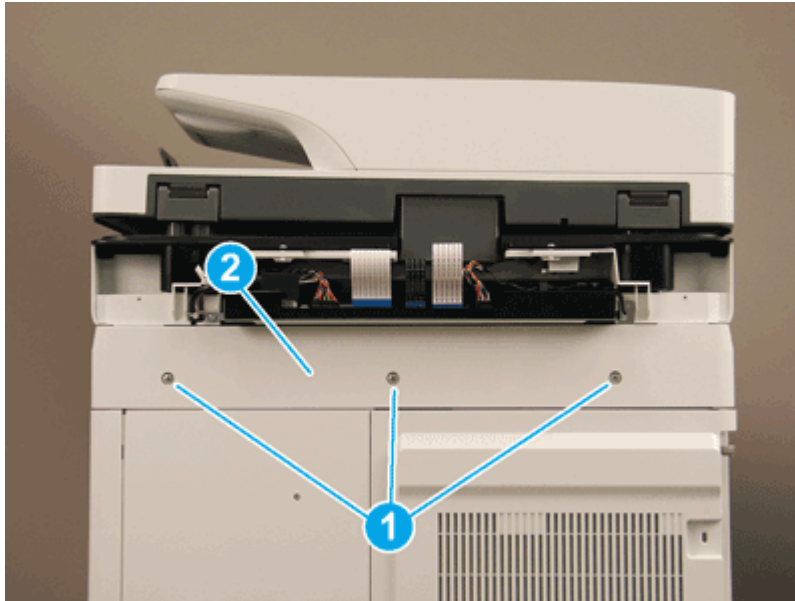
- b. **Flow M681z and Flow M682z only** : Remove three screws (callout 1), and then remove the stapler/stacker rear cover (callout 2).

Figure 5-400 Remove the stapler/stacker rear cover



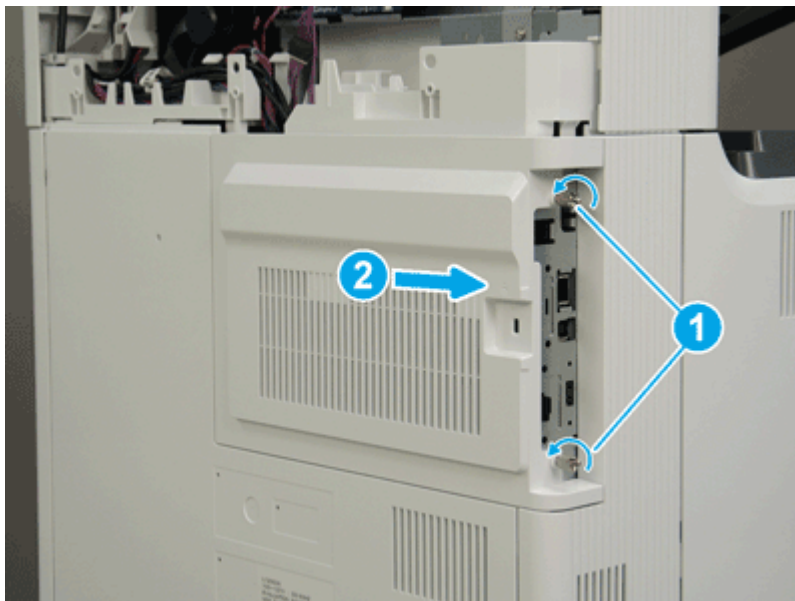
3. **M681dh, M681f, M682dh, and Flow M681f models only:** Remove three screws (callout 1), and then remove the upper rear cover (callout 2).

Figure 5-401 Remove the upper rear cover



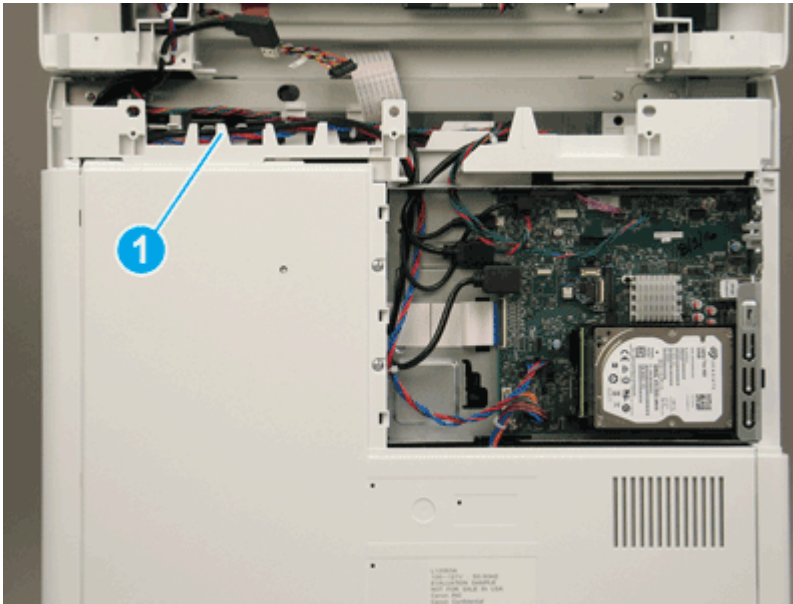
4. Loosen two thumbscrews (callout 1), and then slide the formatter cover away from the printer to remove it (callout 2).

Figure 5-402 Remove the formatter cover



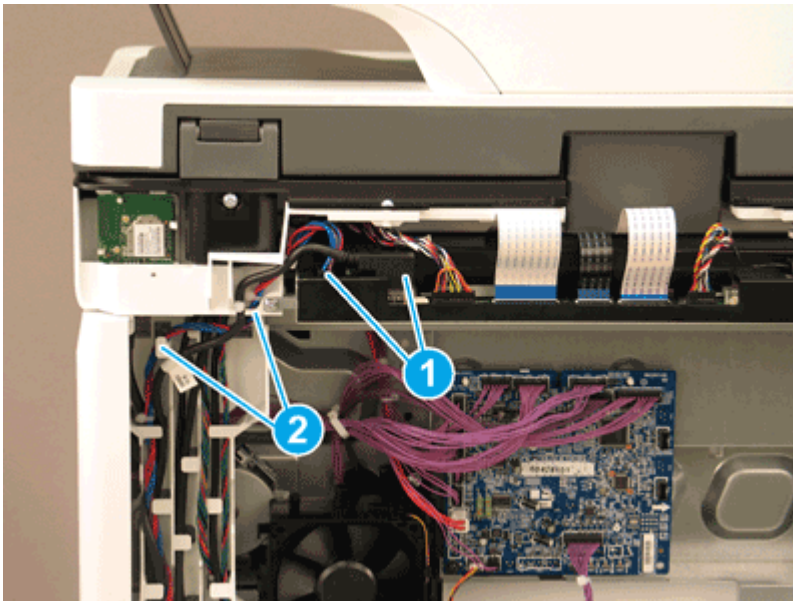
5. The remaining figures in this procedure show the Flow M682z model. While the cable routing (callout 1) on the M681dh, M681f, M682dh, and Flow M681f models is different, the removal procedures are the same for all models.

Figure 5-403 Cable routing for M681dh, M681f, and Flow M681f



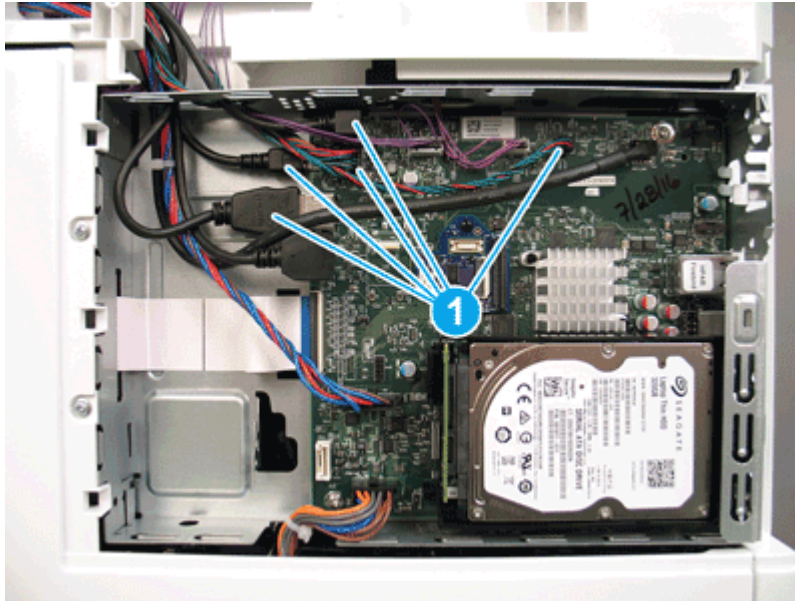
6. Disconnect two connectors (callout 1) on the SCB, and then release the cables from the guides (callout 2).

Figure 5-404 Disconnect two connectors



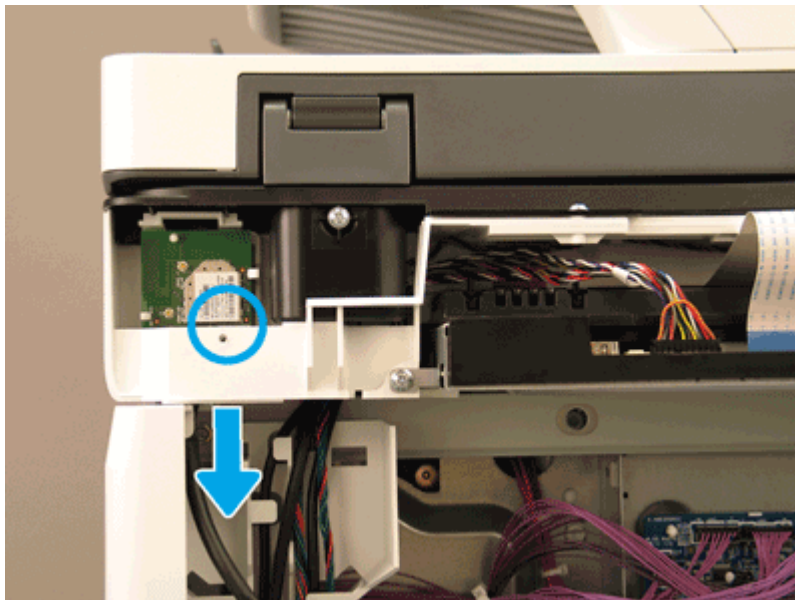
7. Disconnect five connectors on the formatter (callout 1).

Figure 5-405 Disconnect five connectors



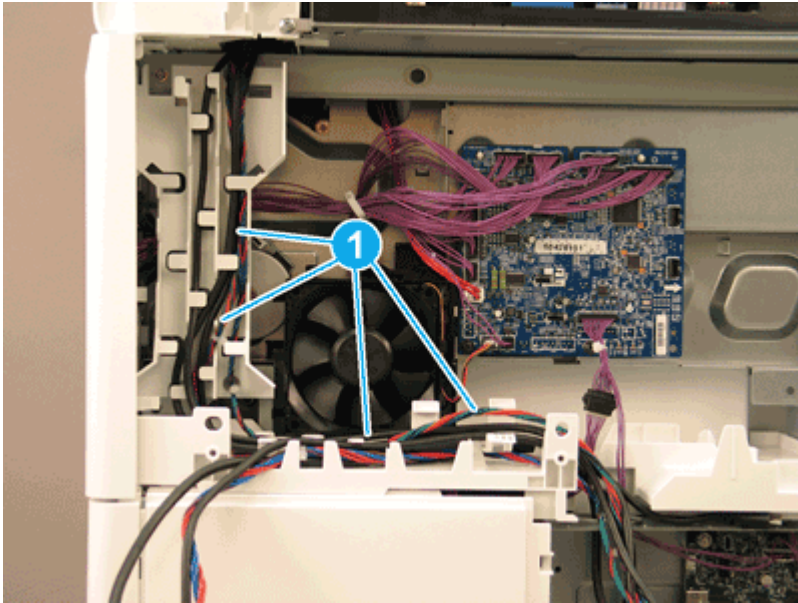
8. Flow M682z only: Gently pull down on the cable to disconnect the wireless connector.

Figure 5-406 Disconnect the wireless connector



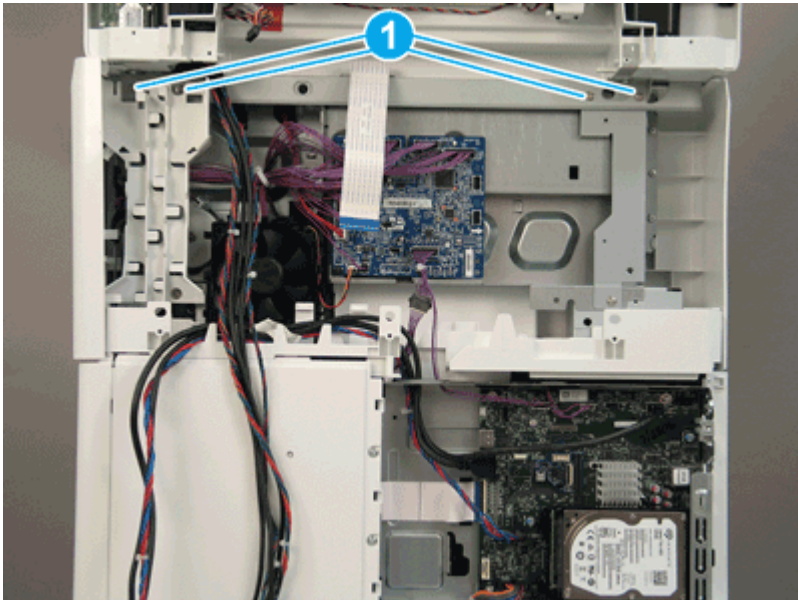
9. Release all of the cables from the cable guides (callout 1).

Figure 5-407 Release the cables



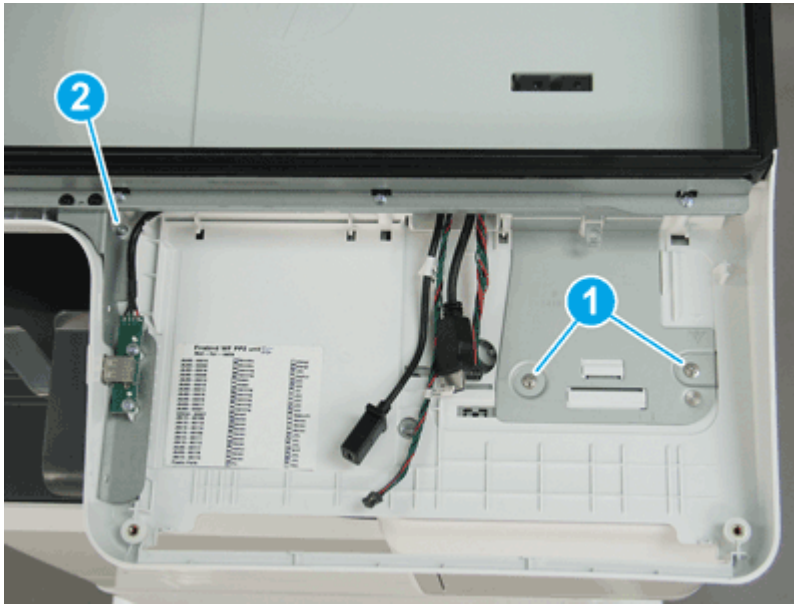
10. At the back of the printer, remove four screws (callout 1).

Figure 5-408 Remove four screws



11. On the top of the image scanner assembly, at the location where the control panel was removed, remove two sheet metal screws (callout 1). **Flow M681z and Flow M682z only:** Remove one self-tapping screw (callout 2).

Figure 5-409 Remove three screws



12. Lift the document feeder and image scanner off of the printer to remove them.

Figure 5-410 Remove the document feeder and image scanner



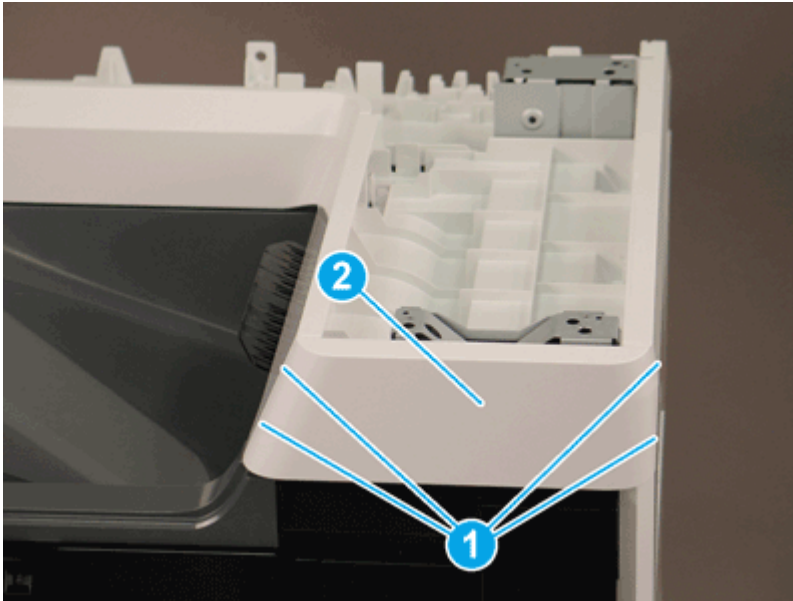
4. Remove the face-down front cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the face-down front cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

1. Open the front door.

2. Release two tabs on each side (callout 1), and then remove the face-down front cover (callout 2).

Figure 5-411 Remove the face-down front cover

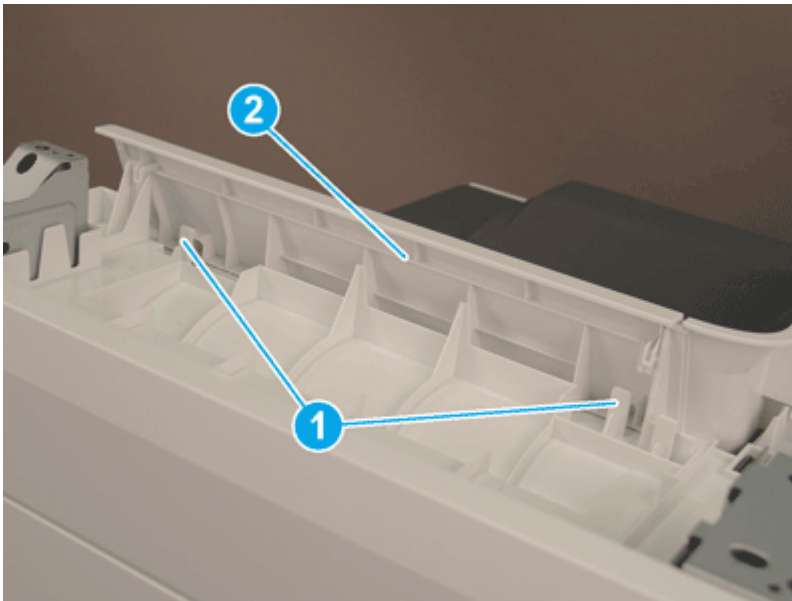


5. Remove the top cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the top cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

- Release two tabs (callout 1), and then remove the top cover (callout 2).

Figure 5-412 Remove the top cover



6. Remove the front cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the front cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

- Release two tabs (callout 1), and then remove the front cover (callout 2).


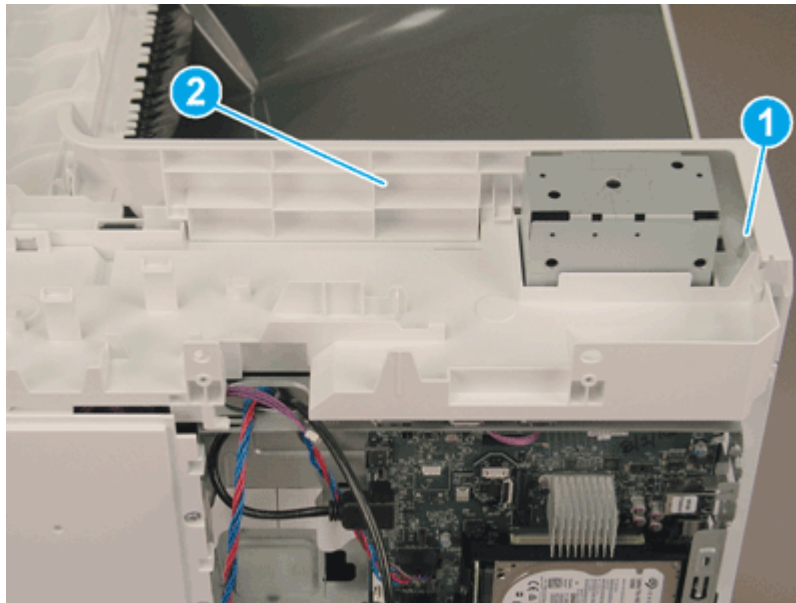
 **TIP:** Reverse the removal steps to install the assembly.


Figure 5-413 Remove the front cover



7. Unpack the replacement assembly



Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.


 **NOTE:** HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>


2. Unpack the replacement part from the packaging.

 **CAUTION:**  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

 **IMPORTANT:** Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

 **NOTE:** If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

 **NOTE:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

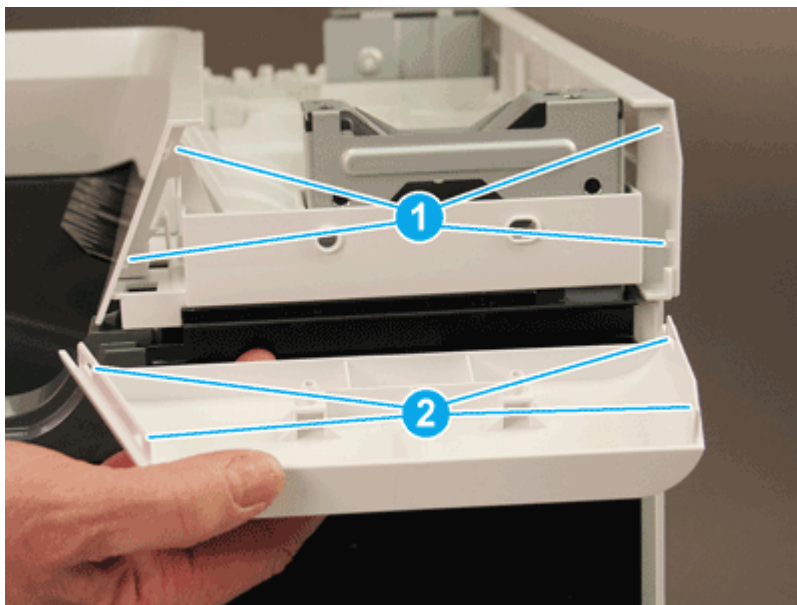
8. Reverse the removal steps to install the assembly

Also use the following **special installation instructions**.

Face-down front cover

- When reinstalling the cover, position the tabs (callout 1) on the printer into the slots (callout 2) on the cover.

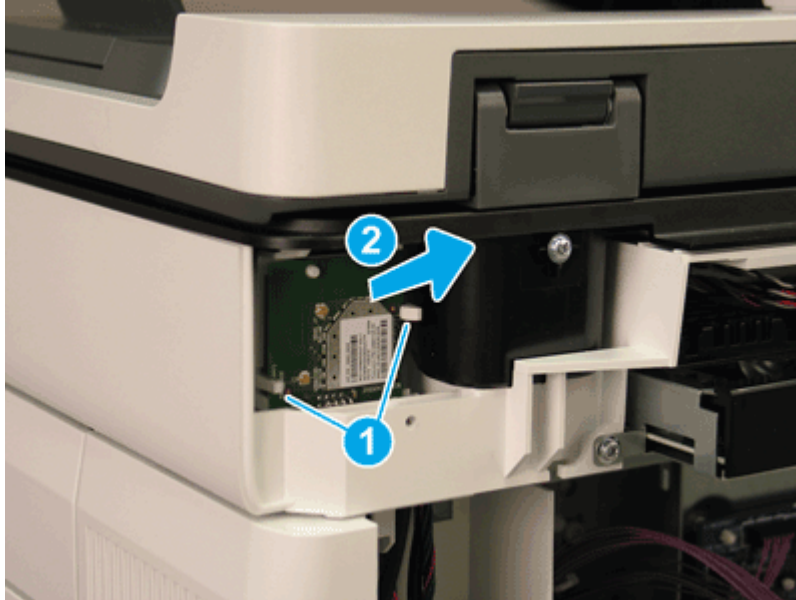
Figure 5-414 Install the cover



Document feeder and image scanner

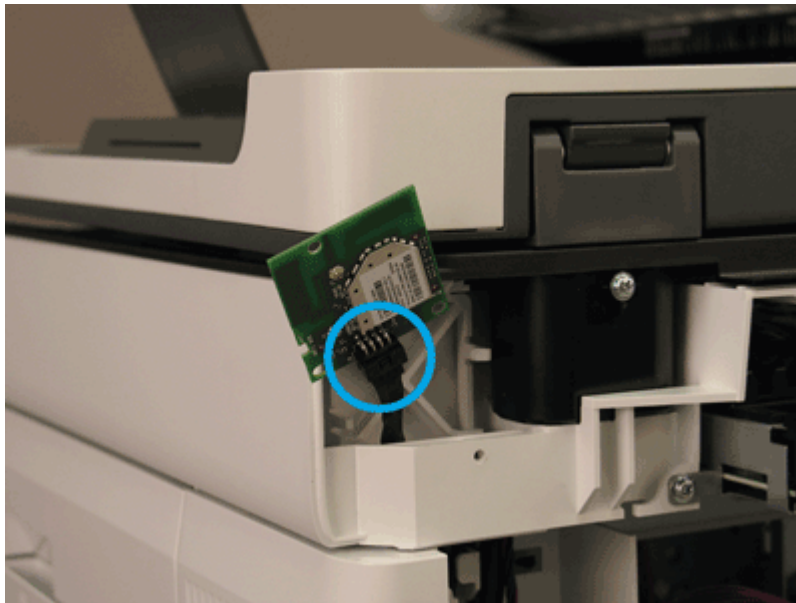
1. **Flow M682z only:** When reconnecting the wireless card cable, do the following:
 - a. Release two tabs (callout 1), and then remove the wireless card (callout 2).

Figure 5-415 Remove the wireless card



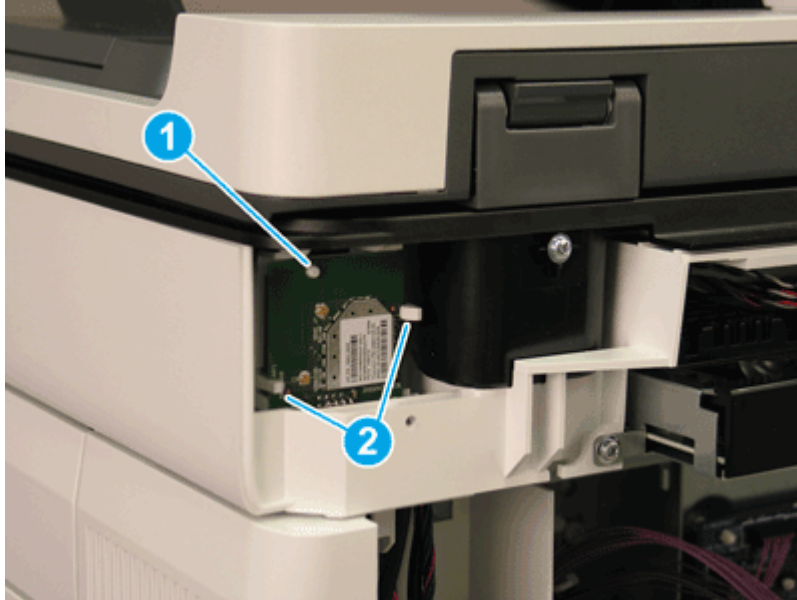
- b. Connect the cable to the wireless card (callout 1).

Figure 5-416 Connect the wireless card connector



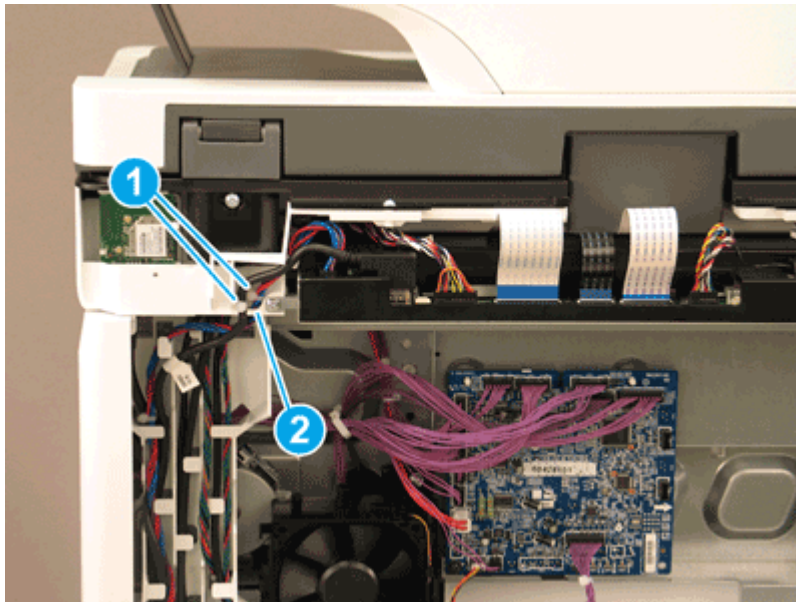
- c. Reinstall the wireless card. Make sure that the hole in the card is positioned over the peg (callout 1), and that the card is under the two tabs (callout 2).

Figure 5-417 Reinstall the wireless card



2. When reinstalling the SCB cables, make sure that the wire retainers (callout 1) on the cables are positioned above the plastic guide (callout 2).

Figure 5-418 Install the SCB cables



 **NOTE:** Continue to reverse the removal steps to finish installing the assembly.


Removal and replacement: Face-down cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Learn how to remove and replace the face-down cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

 [View a video of how to remove and replace the face-down cover.](#)


Mean time to repair: 15 minutes

Service level: Intermediate

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Disconnect the power cable.

 **WARNING!** To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-34 Part information

Part number	Part description
RC4-6860-000CN	Face-down cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

No post service test is available for this assembly.

1. Remove the keyboard (MFP)

Follow these steps to remove the keyboard (MFP).

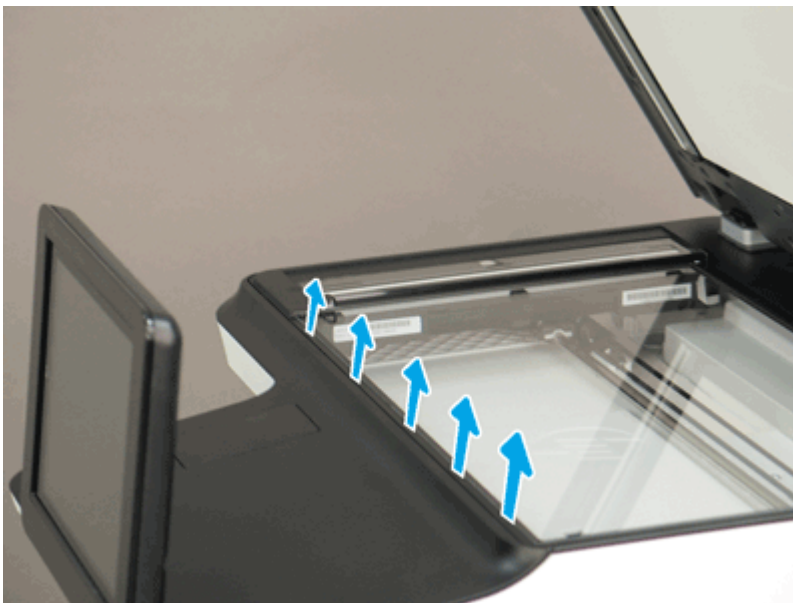
1. If the control panel is not fully tilted forward, tilt it forward now (callout 1) until it stops. Open the document feeder (callout 2).

Figure 5-419 Tilt the control panel and open the document feeder



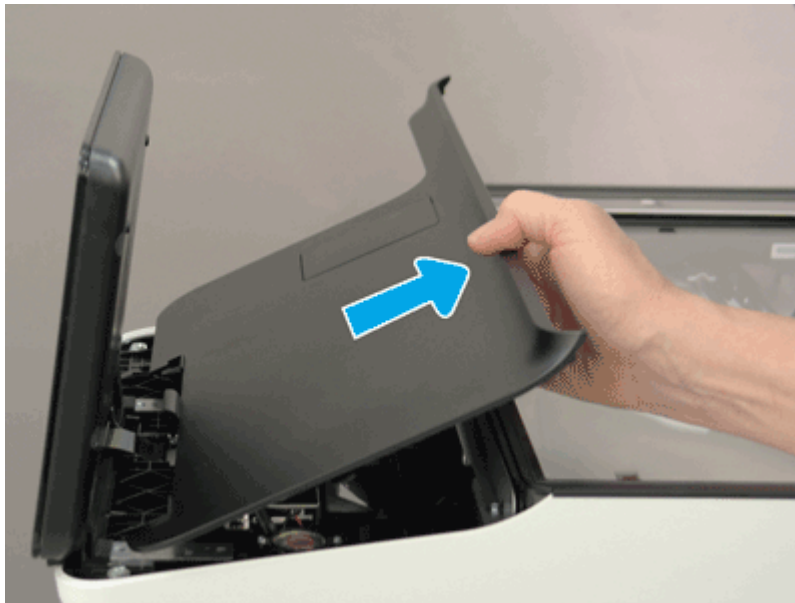
2. Beginning at the right side of the control-panel cover, carefully release five tabs along the top edge of the cover.

Figure 5-420 Release five tabs



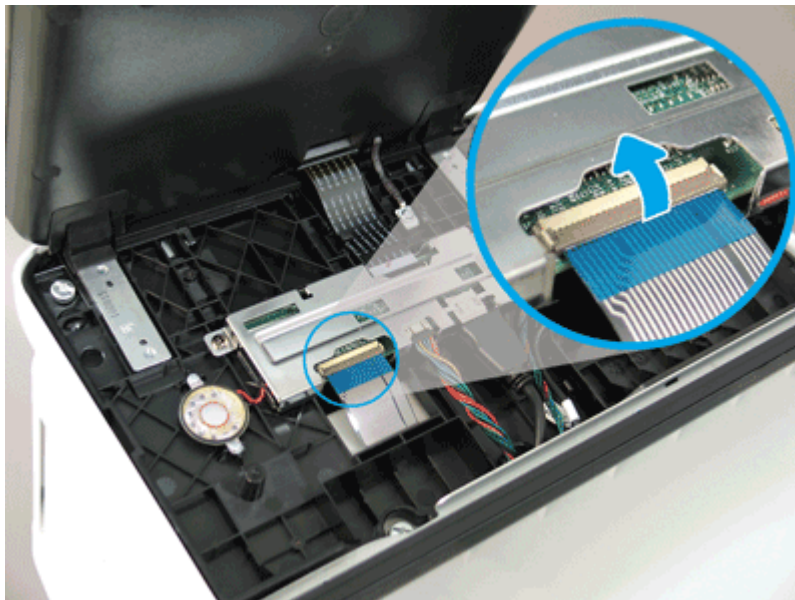
3. Continue to rotate the top edge of the cover away from the printer, and then remove the cover.

Figure 5-421 Remove the cover



4. Open the connector latch to release the keyboard flat cable.

Figure 5-422 Disconnect the keyboard flat cable



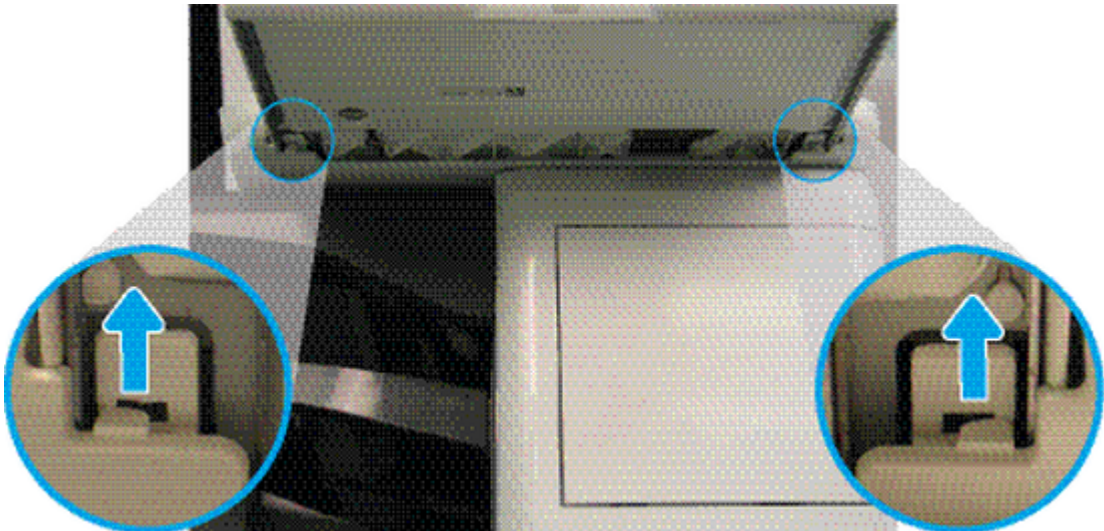
5. Slide the keyboard tray out until it stops.

Figure 5-423 Slide the keyboard tray out



6. Push up on the keyboard tray to release two tabs on the bottom of the tray, and then slide the tray toward you to disengage the tabs.

Figure 5-424 Release two tabs




7. Slide the keyboard tray all the way out of the printer to remove it.

Figure 5-425 Remove the keyboard



2. Remove the control panel (M681/M682/E67550/E67560/E67650/E67660)

Follow these steps to remove the control panel (M681/M682/E67550/E67560/E67650/E67660).

 **NOTE:** This step is for the M681/M682/E67550/E67560/E67650/E67660 printers. For the M652/M653/E65050/E65060/E65150/E65160 printers, skip this step.

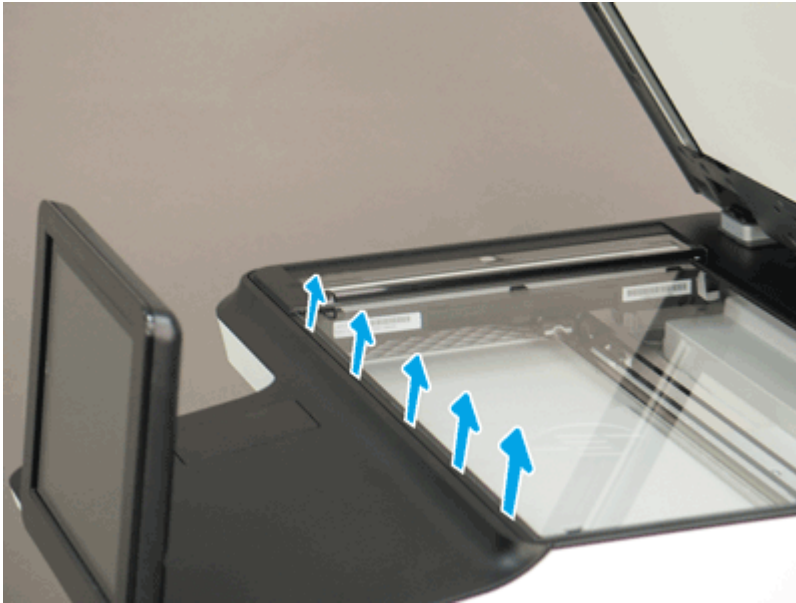
1. Tilt the control panel forward (callout 1), and then open the document feeder (callout 2).

Figure 5-426 Tilt the control panel forward and open the document feeder



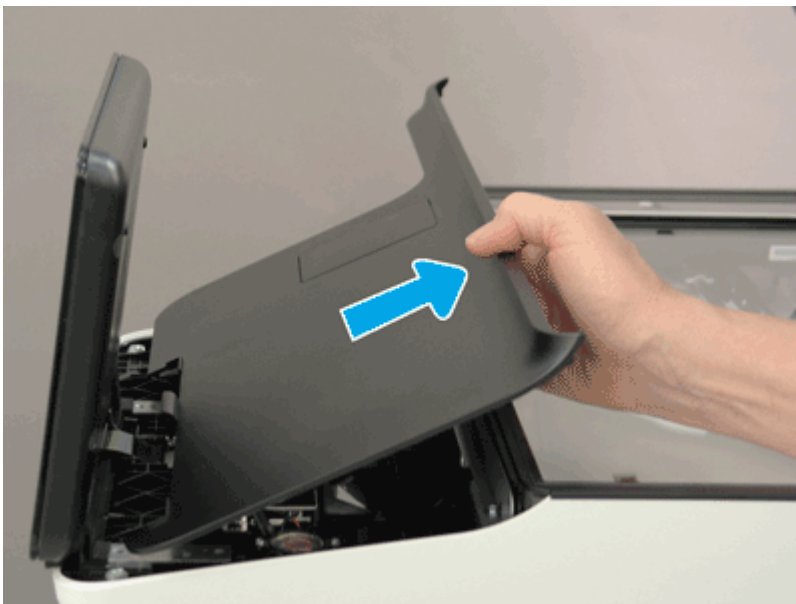
2. Beginning at the right side of the control-panel cover, carefully release five tabs along the top edge of the cover.

Figure 5-427 Release five tabs



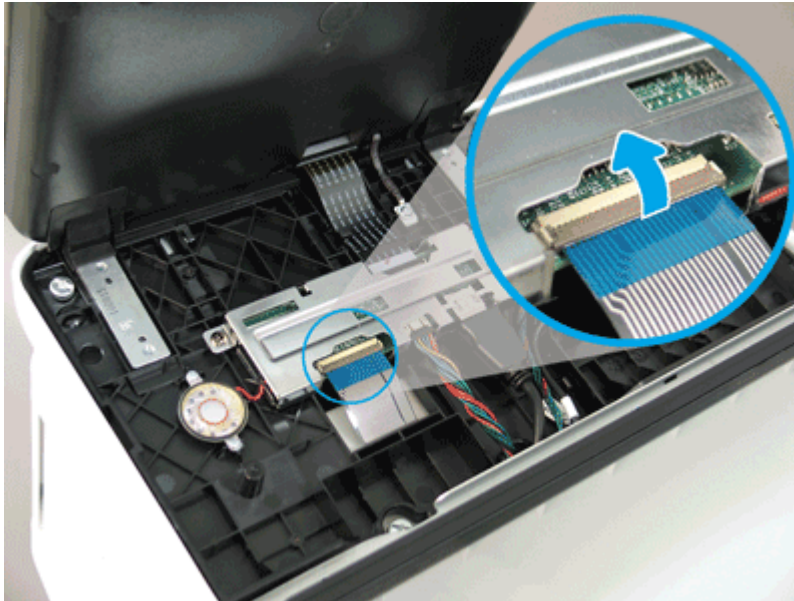
3. Continue to rotate the top edge of the cover away from the printer, and then remove the cover.

Figure 5-428 Remove the cover



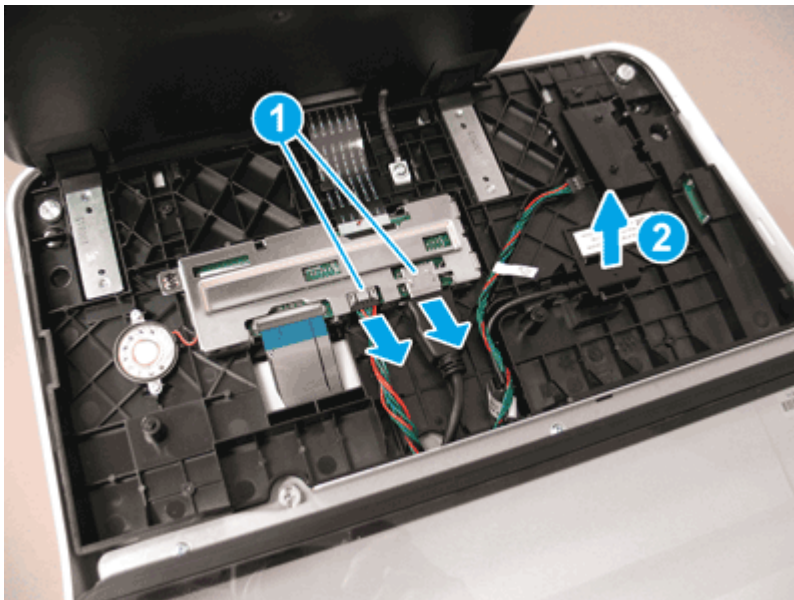
4. **Keyboard models only:** Lift up on the small, gray gate to release the keyboard flat cable.

Figure 5-429 Disconnect the keyboard flat cable (keyboard models only)



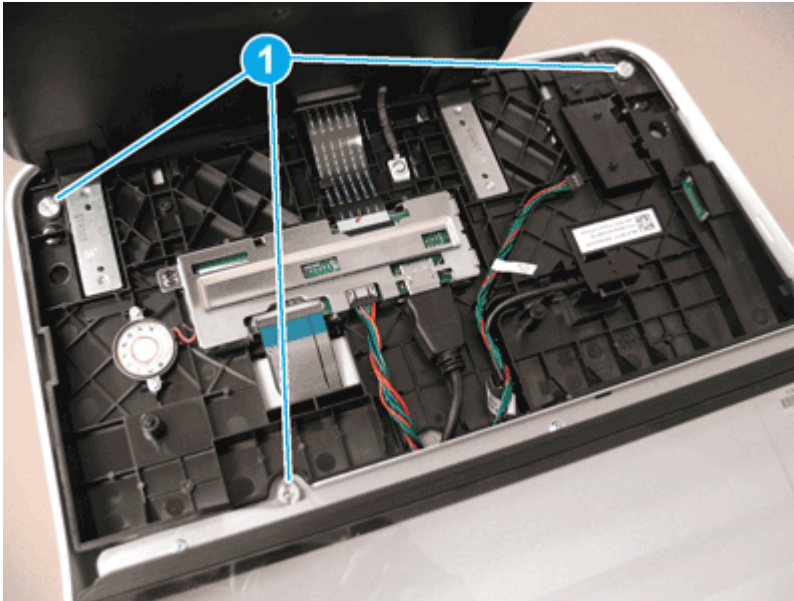
5. Disconnect two connectors (callout 1), and then release the USB cable (callout 2) from the holder.

Figure 5-430 Disconnect connectors



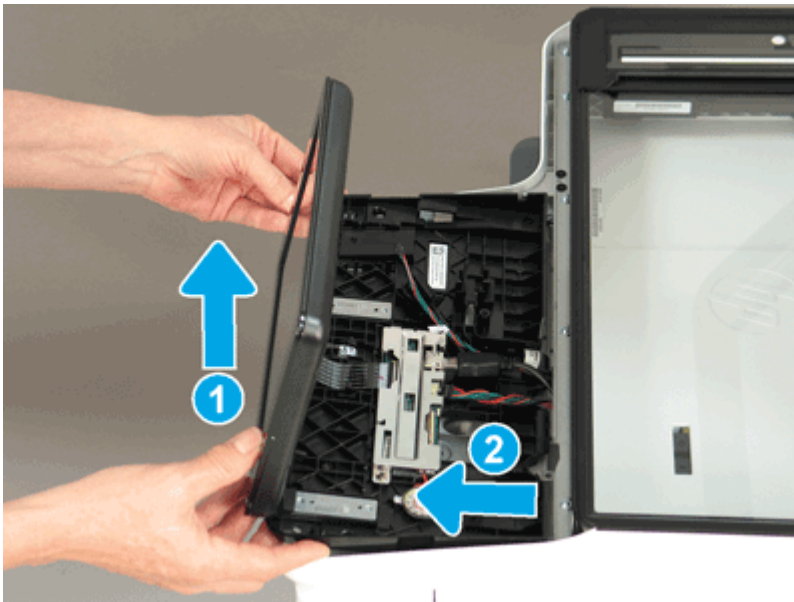
6. Remove three thumbscrews (callout 1).

Figure 5-431 Remove three thumbscrews



7. Lift the front of the control panel off of the printer (callout 1), and then slide it toward the front of the printer (callout 2) to remove it.

Figure 5-432 Remove the control panel

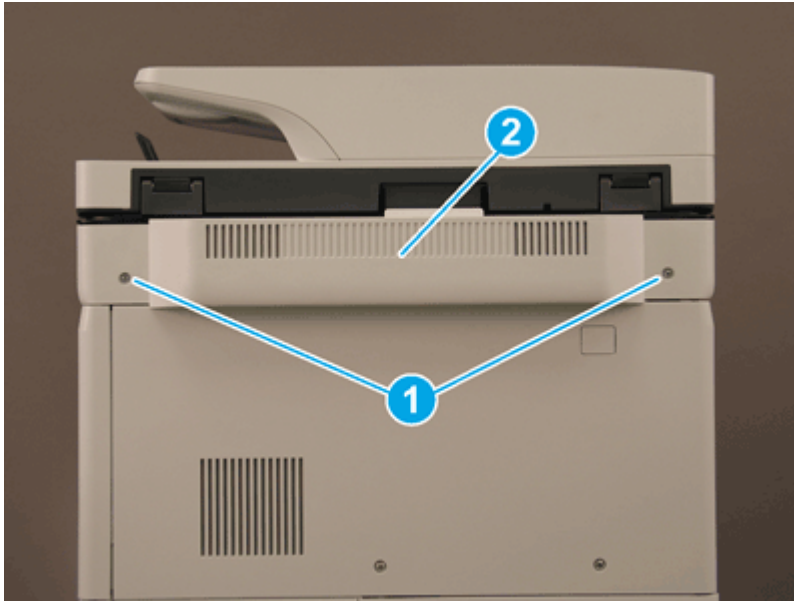


3. Remove the document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660)

Follow these steps to remove the document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660).

1. Remove two screws (callout 1), and then remove the scanner control board (SCB) cover (callout 2).

Figure 5-433 Remove the SCB cover



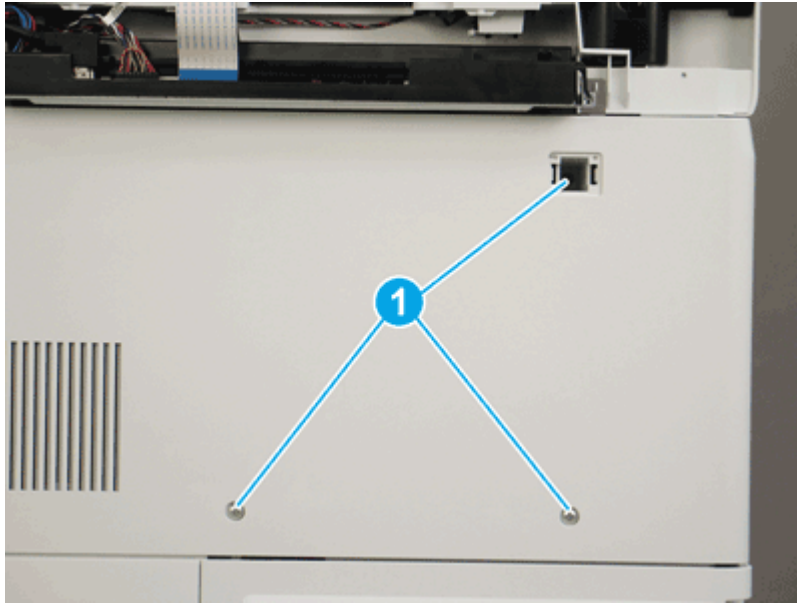
2. Flow M681z and Flow M682z models only: Do the following:
 - a. At the back of the printer, remove one small cover (callout 1).

Figure 5-434 Remove the small cover



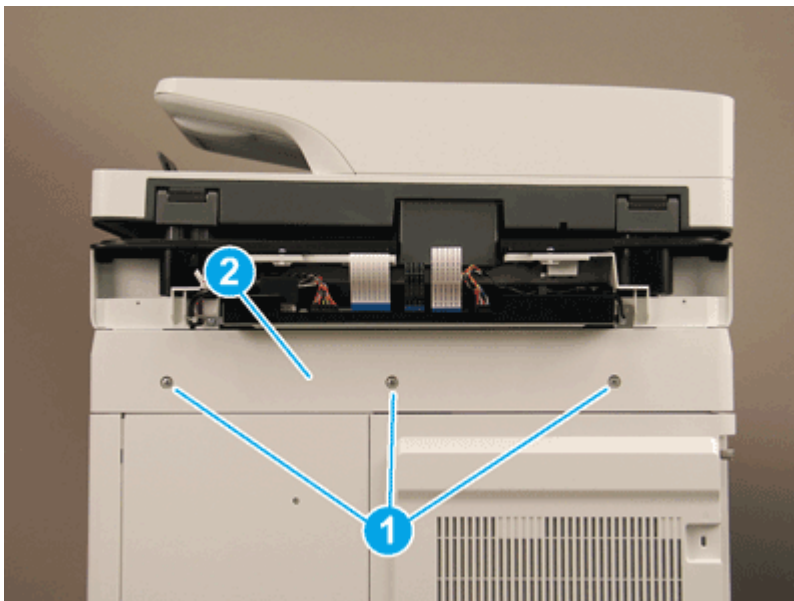
- b. **Flow M681z and Flow M682z only**: Remove three screws (callout 1), and then remove the stapler/stacker rear cover (callout 2).

Figure 5-435 Remove the stapler/stacker rear cover



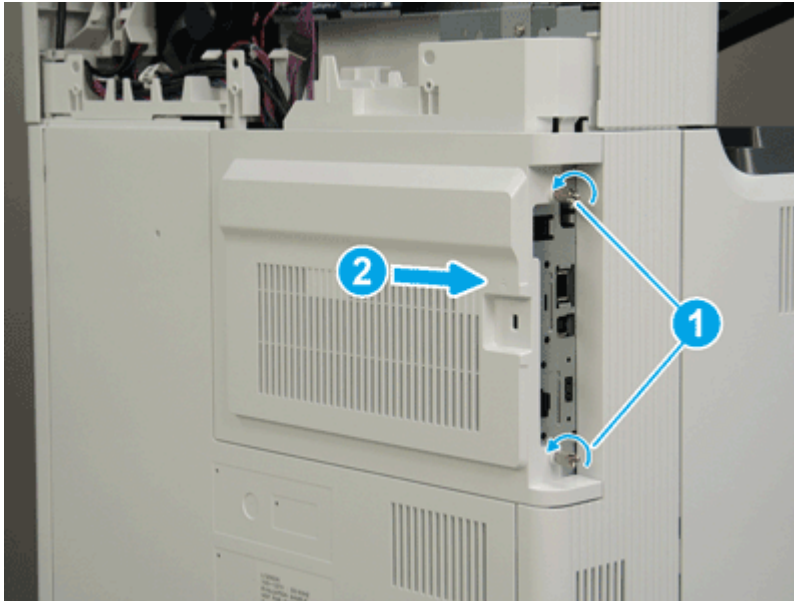
- 3. **M681dh, M681f, M682dh, and Flow M681f models only**: Remove three screws (callout 1), and then remove the upper rear cover (callout 2).

Figure 5-436 Remove the upper rear cover



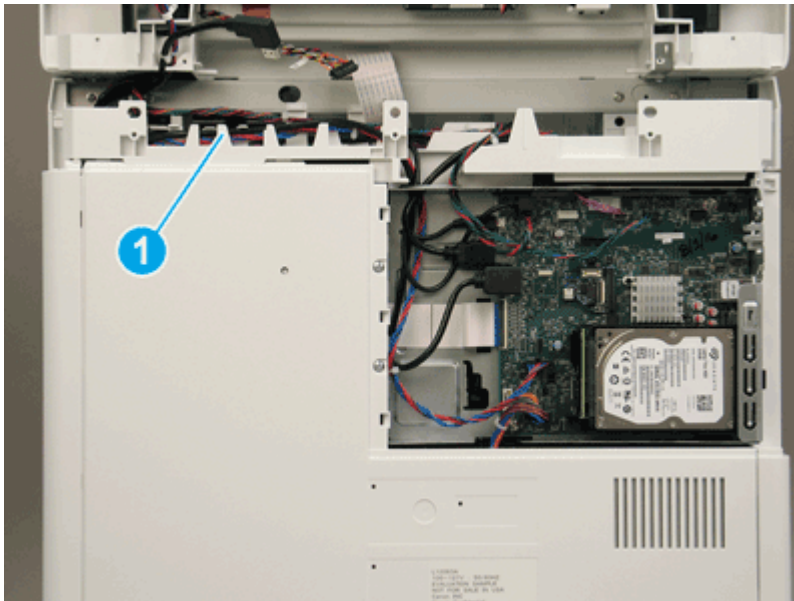
4. Loosen two thumbscrews (callout 1), and then slide the formatter cover away from the printer to remove it (callout 2).

Figure 5-437 Remove the formatter cover



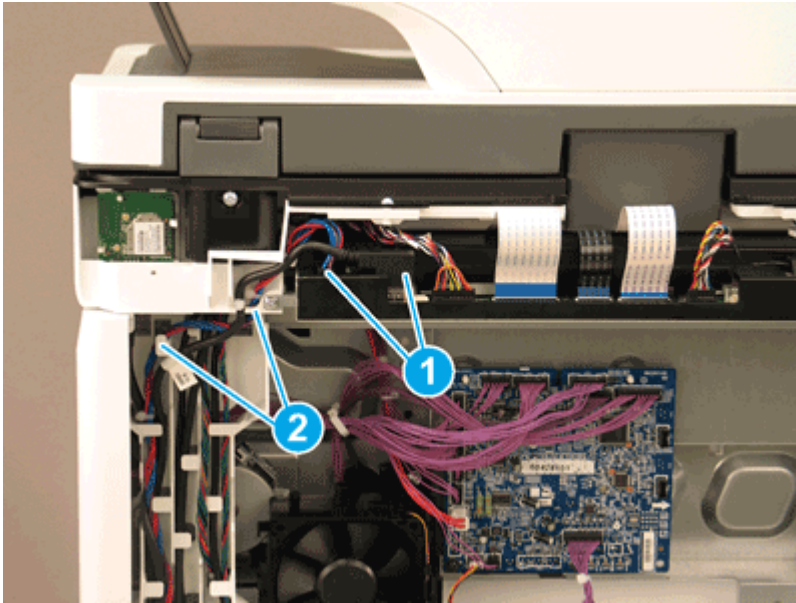
5. The remaining figures in this procedure show the Flow M682z model. While the cable routing (callout 1) on the M681dh, M681f, M682dh, and Flow M681f models is different, the removal procedures are the same for all models.

Figure 5-438 Cable routing for M681dh, M681f, and Flow M681f



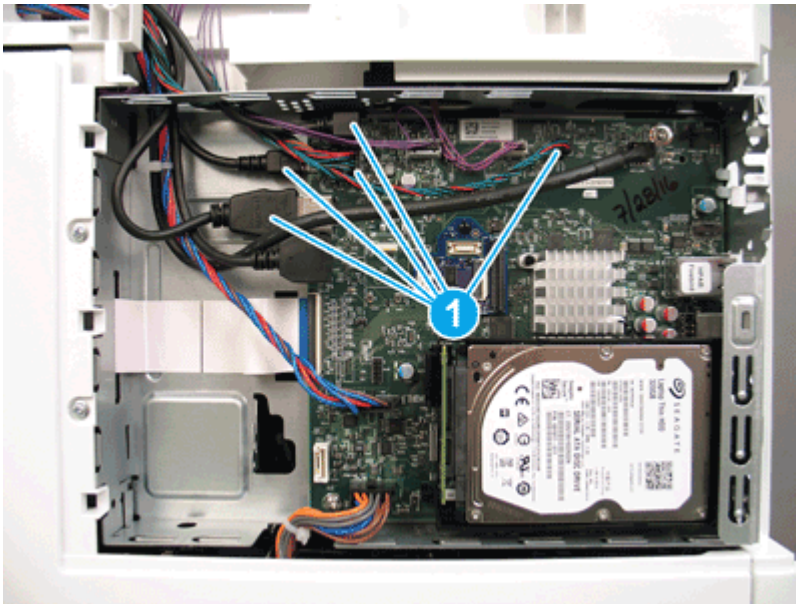
6. Disconnect two connectors (callout 1) on the SCB, and then release the cables from the guides (callout 2).

Figure 5-439 Disconnect two connectors



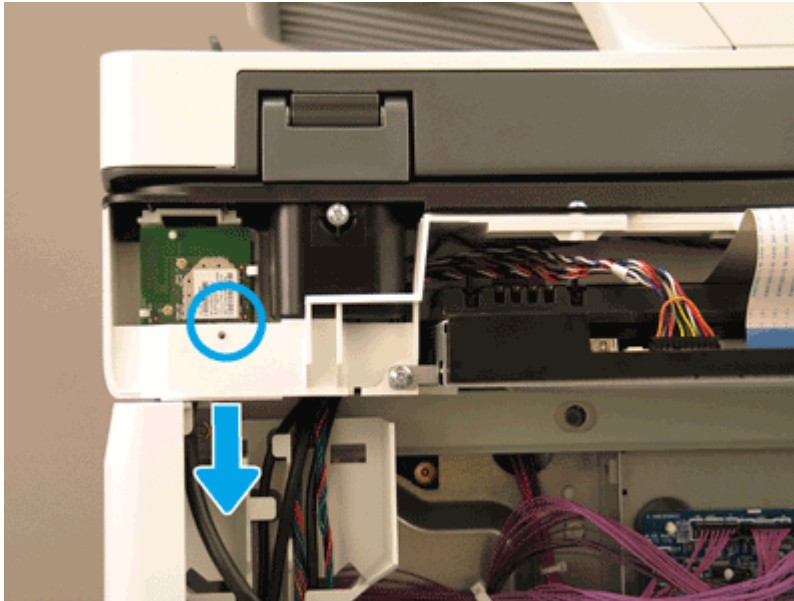
7. Disconnect five connectors on the formatter (callout 1).

Figure 5-440 Disconnect five connectors



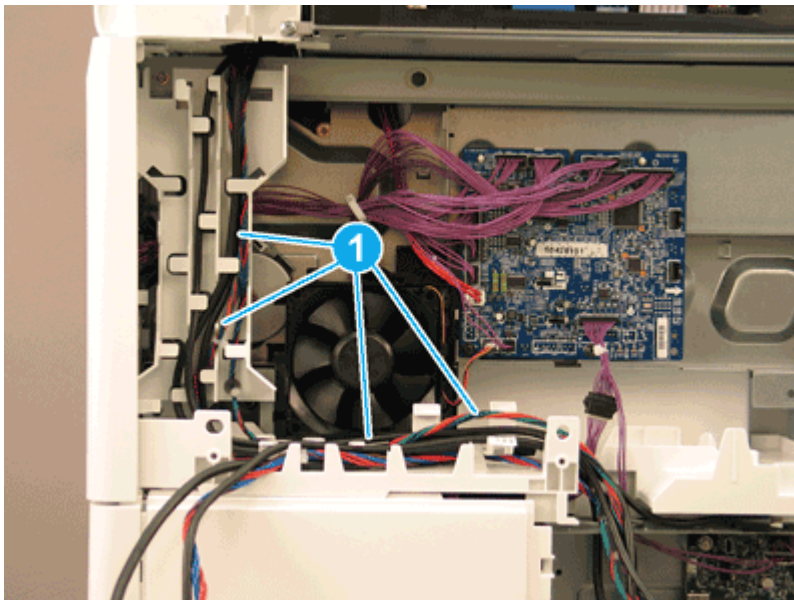
8. **Flow M682z only:** Gently pull down on the cable to disconnect the wireless connector.

Figure 5-441 Disconnect the wireless connector



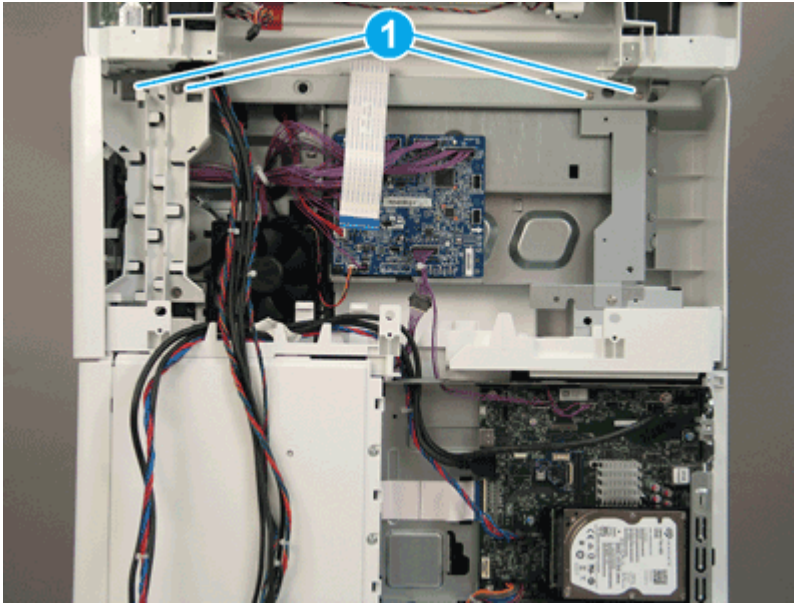
9. Release all of the cables from the cable guides (callout 1).

Figure 5-442 Release the cables



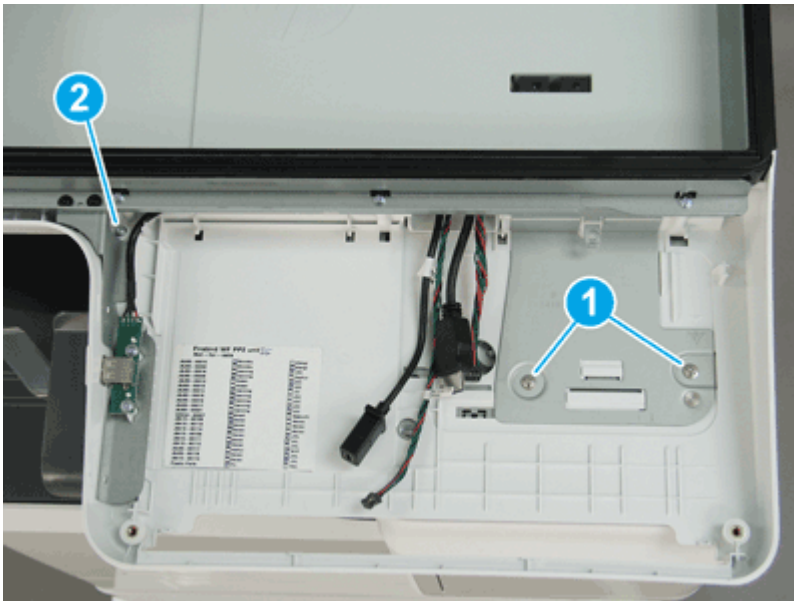
10. At the back of the printer, remove four screws (callout 1).

Figure 5-443 Remove four screws



11. On the top of the image scanner assembly, at the location where the control panel was removed, remove two sheet metal screws (callout 1). **Flow M681z and Flow M682z only:** Remove one self-tapping screw (callout 2).

Figure 5-444 Remove three screws



12. Lift the document feeder and image scanner off of the printer to remove them.

Figure 5-445 Remove the document feeder and image scanner



4. Remove the formatter cover

Follow these steps to remove the formatter cover.

- Unscrew two thumbscrews (callout 1), and then slide the formatter cover (callout 2) away from the printer to remove it.


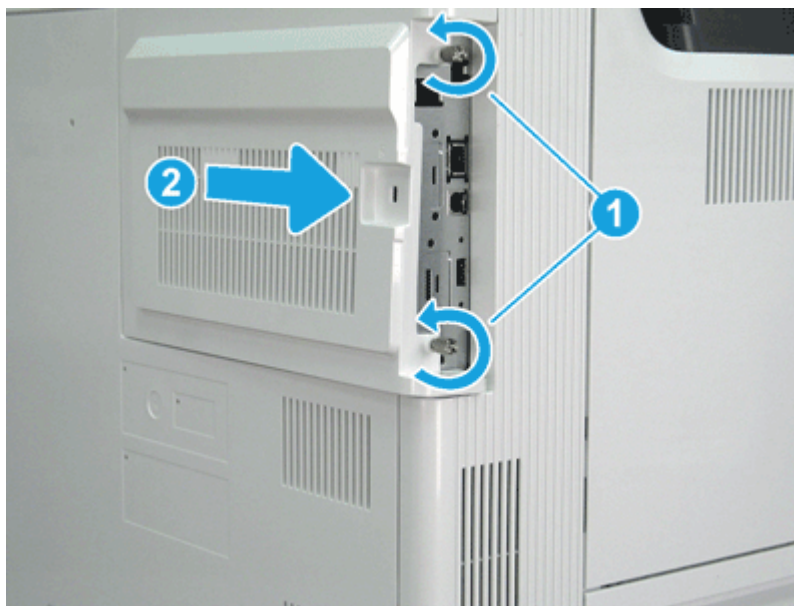

 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-446 Remove the formatter cover



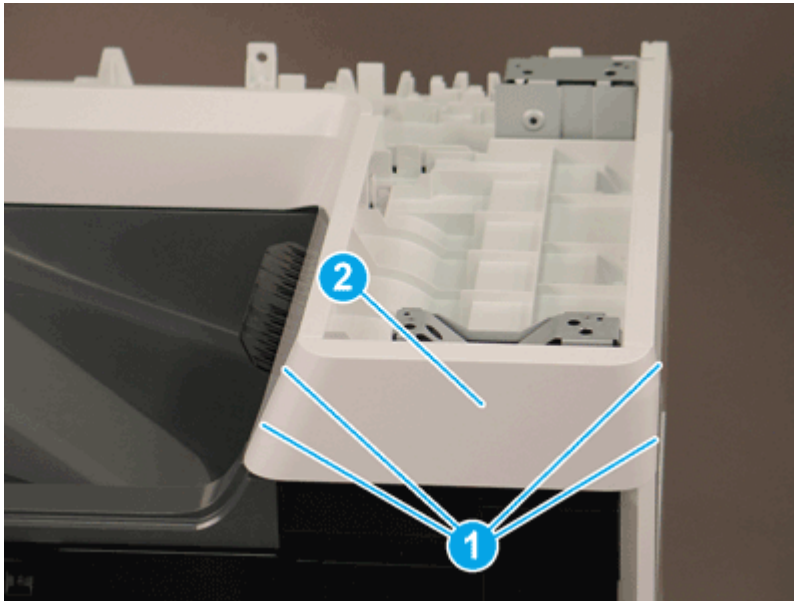
5. Remove the face-down front cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the face-down front cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

 **NOTE:** This step is for the M681/M682/E67550/E67560/E67650/E67660 printers. For the M652/M653/E65050/E65060/E65150/E65160 printers, skip this step.

1. Open the front door.
2. Release two tabs on each side (callout 1), and then remove the face-down front cover (callout 2).

Figure 5-447 Remove the face-down front cover

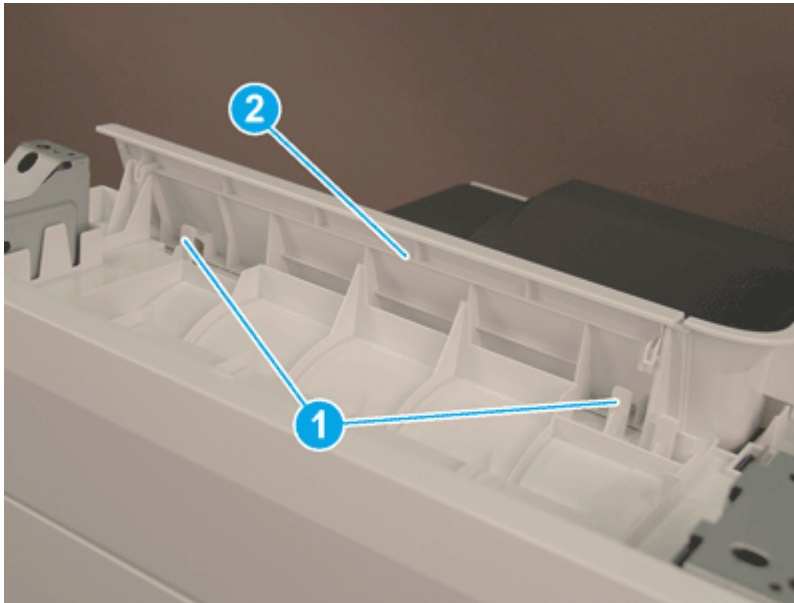


6. Remove the top cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the top cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

- Release two tabs (callout 1), and then remove the top cover (callout 2).

Figure 5-448 Remove the top cover



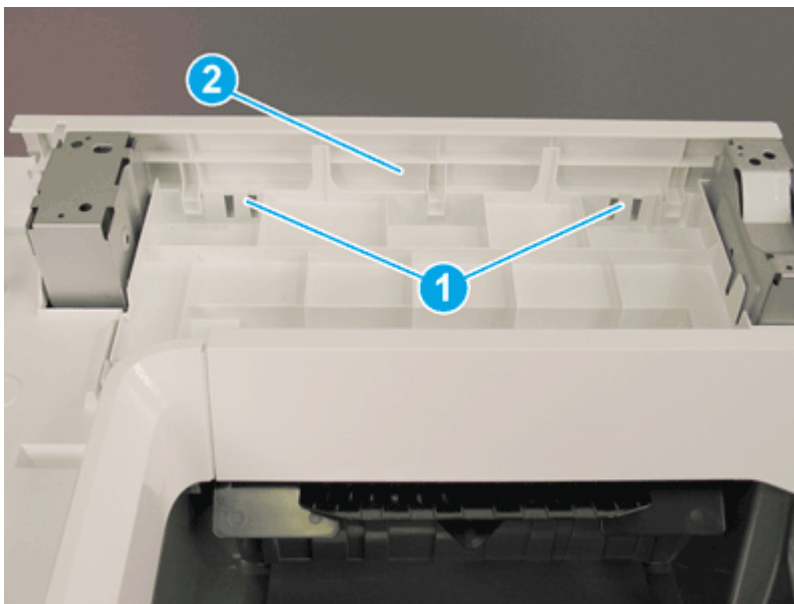
7. Remove the right cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the right cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

This step is for the M681/M682/E67550/E67560/E67650/E67660 printers. For the M652/M653/E65050/E65060/E65150/E65160 printers, skip this step.

- Release two tabs (callout 1), and then remove the right cover (callout 2).

Figure 5-449 Remove the right cover



8. Remove the front cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the front cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

- Release two tabs (callout 1), and then remove the front cover (callout 2).


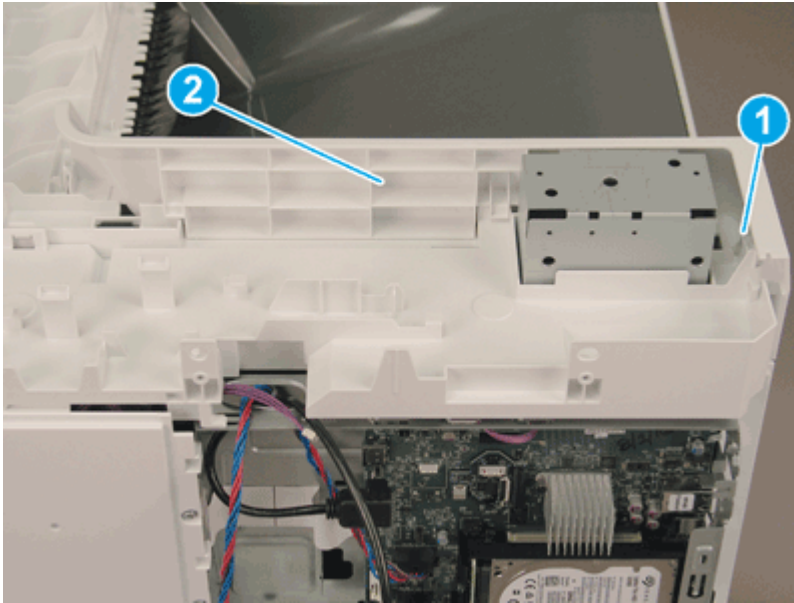

 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-450 Remove the front cover



9. Remove the face-down cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the face-down cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

 **NOTE:** This step is for the M681/M682/E67550/E67560/E67650/E67660 printers. For the M652/M653/E65050/E65060/E65150/E65160 printers, skip this step.

- Remove two screws (callout 1), release three tabs (callout 2), and then remove the face-down cover (callout 3).


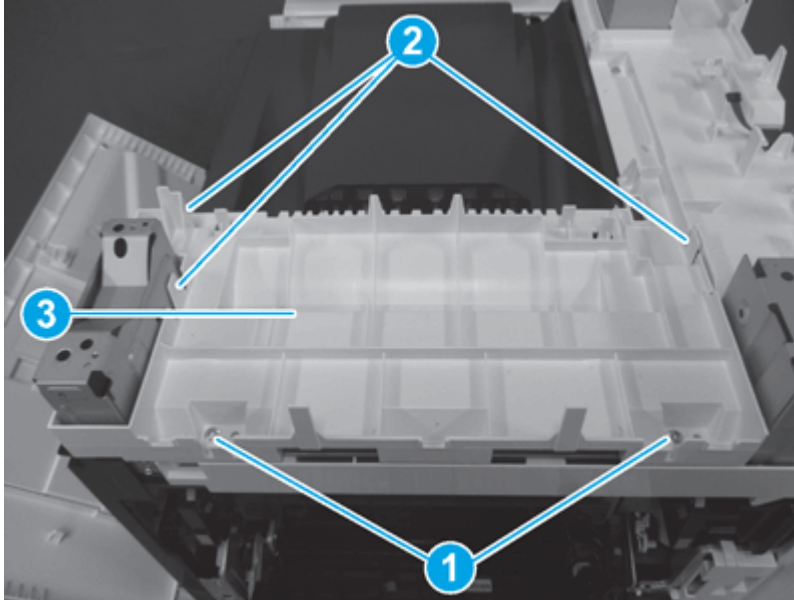
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-451 Remove two screws and the face-down cover



10. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

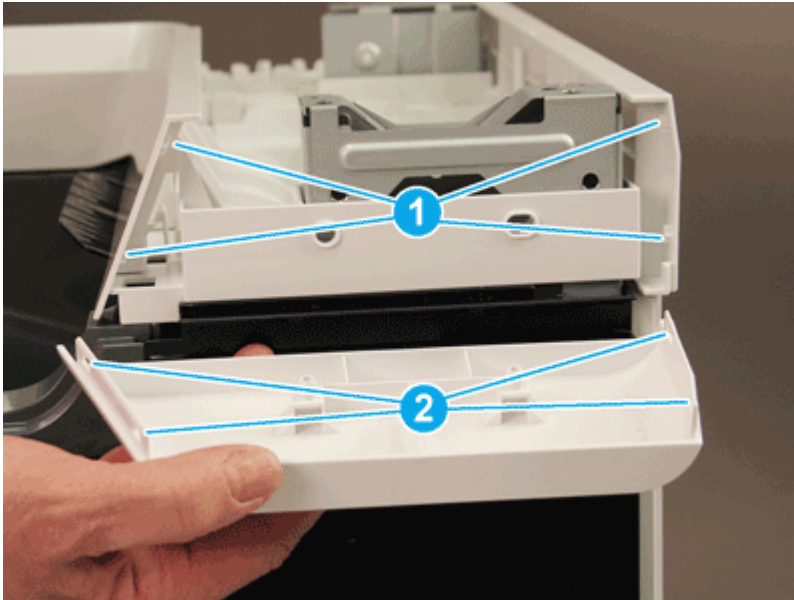
11. Reverse the removal steps to install the assembly

Also use the following **special installation instructions**.

Face-down front cover

- When reinstalling the cover, position the tabs (callout 1) on the printer into the slots (callout 2) on the cover.

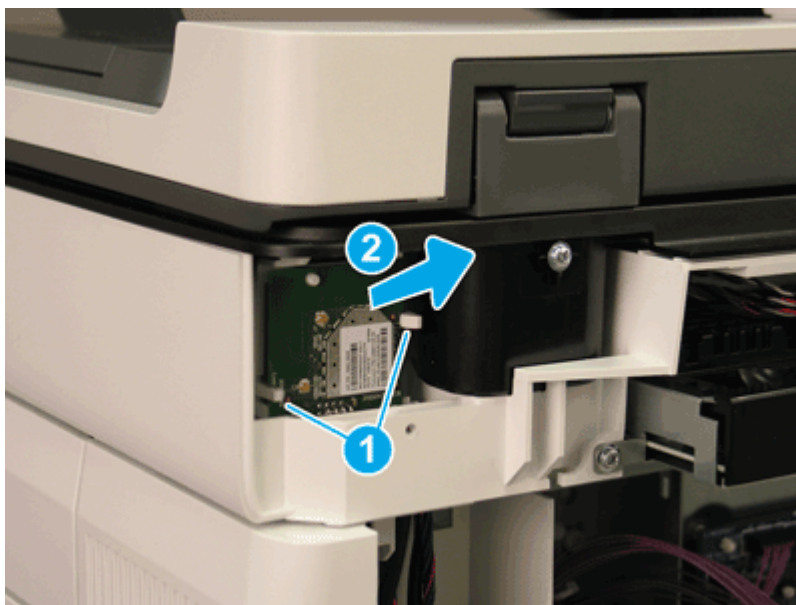
Figure 5-452 Install the cover



Document feeder and image scanner

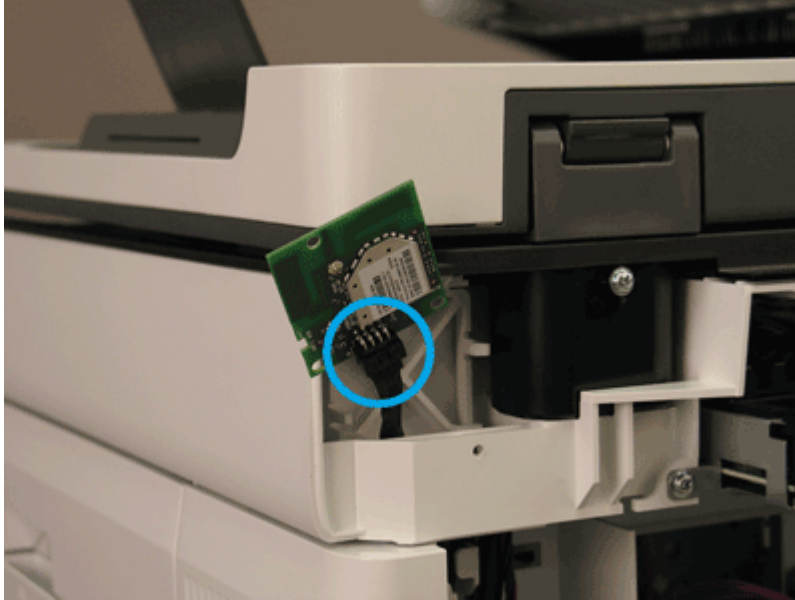
1. **Flow M682z only**: When reconnecting the wireless card cable, do the following:
 - a. Release two tabs (callout 1), and then remove the wireless card (callout 2).

Figure 5-453 Remove the wireless card



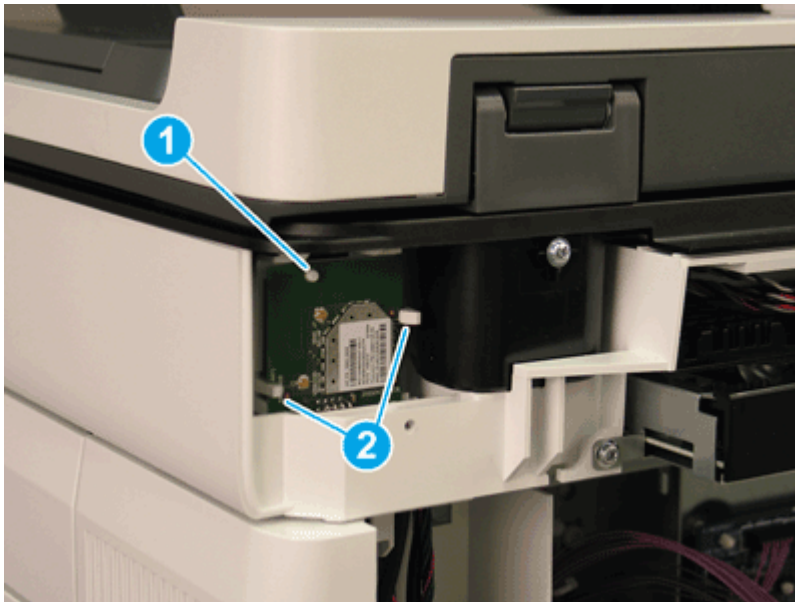
- b. Connect the cable to the wireless card (callout 1).

Figure 5-454 Connect the wireless card connector



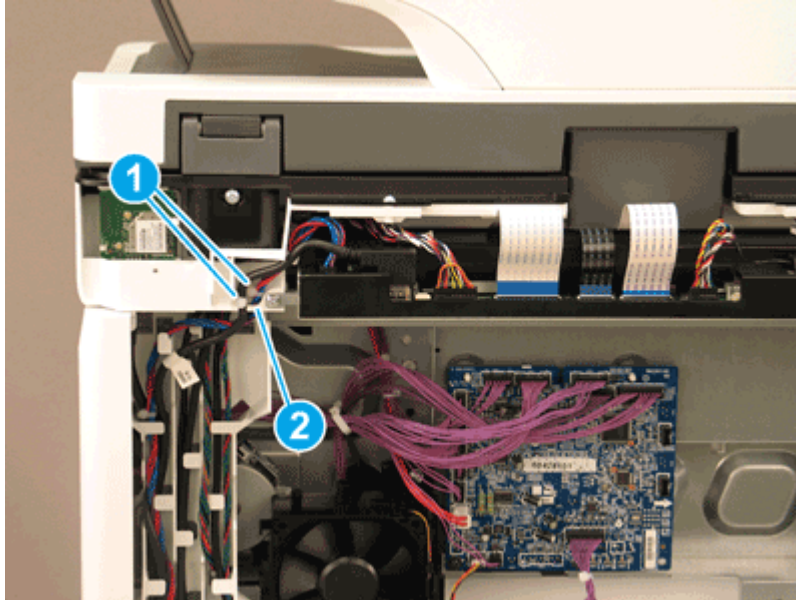
- c. Reinstall the wireless card. Make sure that the hole in the card is positioned over the peg (callout 1), and that the card is under the two tabs (callout 2).


Figure 5-455 Reinstall the wireless card



- 2. When reinstalling the SCB cables, make sure that the wire retainers (callout 1) on the cables are positioned above the plastic guide (callout 2).

Figure 5-456 Install the SCB cables




 **NOTE:** Continue to reverse the removal steps to finish installing the assembly.

Removal and replacement: Rear upper cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

This document provides the procedures to remove and replace the rear upper cover(M681dn/M681/M682dn/Flow M681f/E67650dh).


Mean time to repair: 15 minutes

Service level: Intermediate

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Disconnect the power cable.

 **WARNING!** To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-35 Part information

Part number	Part description
RC4-6862-000CN	Rear upper cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

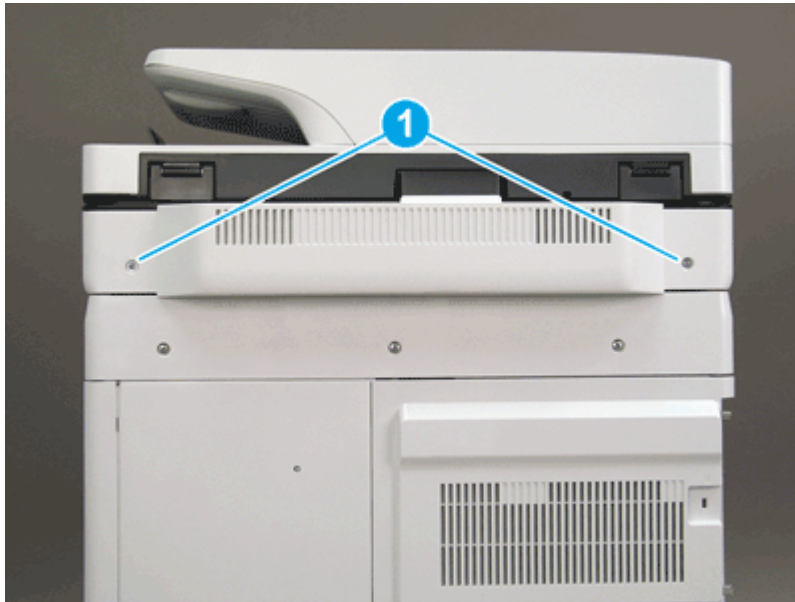
No post service test is available for this assembly.

1. Remove the image scanner rear cover

Follow these steps to remove the image scanner rear cover.

1. At the back of the printer, remove two screws (callout 1).

Figure 5-457 Remove two screws



2. Rotate the image scanner back cover up to remove it.

Figure 5-458 Remove the image scanner back cover



2. Remove the rear upper cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the rear upper cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

- Remove two screws (callout 1), and then remove the rear upper cover (callout 2).


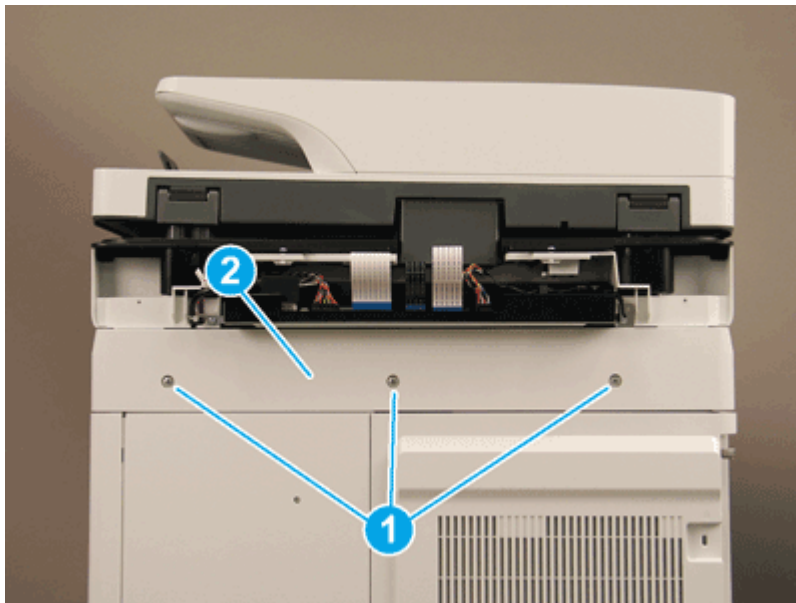
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-459 Remove the rear upper cover



3. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Main cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

This document provides the procedures to remove and replace the main cover (M681dn/M681/M682dn/Flow M681f/E67650dh).



[View a video of how to remove and replace the main cover.](#)

Mean time to repair: 15 minutes

Service level: Advanced



IMPORTANT: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Disconnect the power cable.



WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-36 Part information

Part number	Part description
RC4-6861-000CN	Main cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

No post service test is available for this assembly.

1. Remove the keyboard (MFP)

Follow these steps to remove the keyboard (MFP).

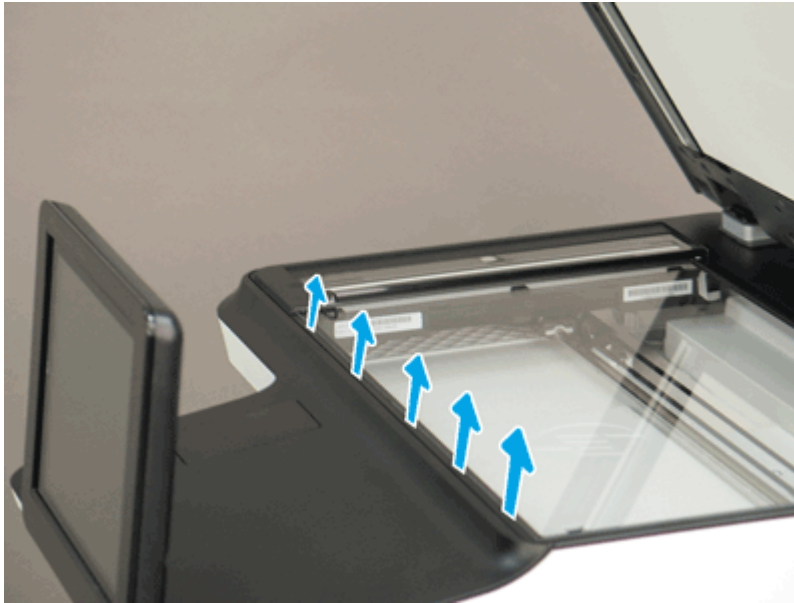
1. If the control panel is not fully tilted forward, tilt it forward now (callout 1) until it stops. Open the document feeder (callout 2).

Figure 5-460 Tilt the control panel and open the document feeder



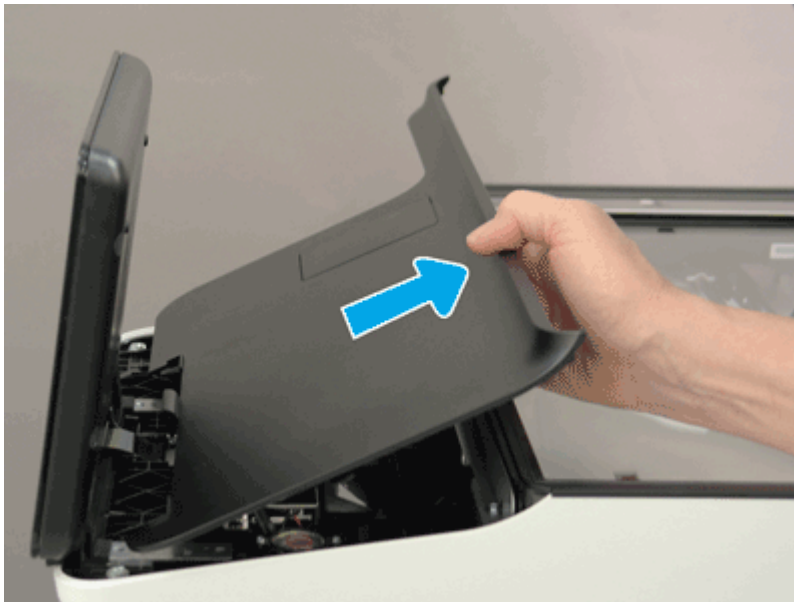
2. Beginning at the right side of the control-panel cover, carefully release five tabs along the top edge of the cover.

Figure 5-461 Release five tabs



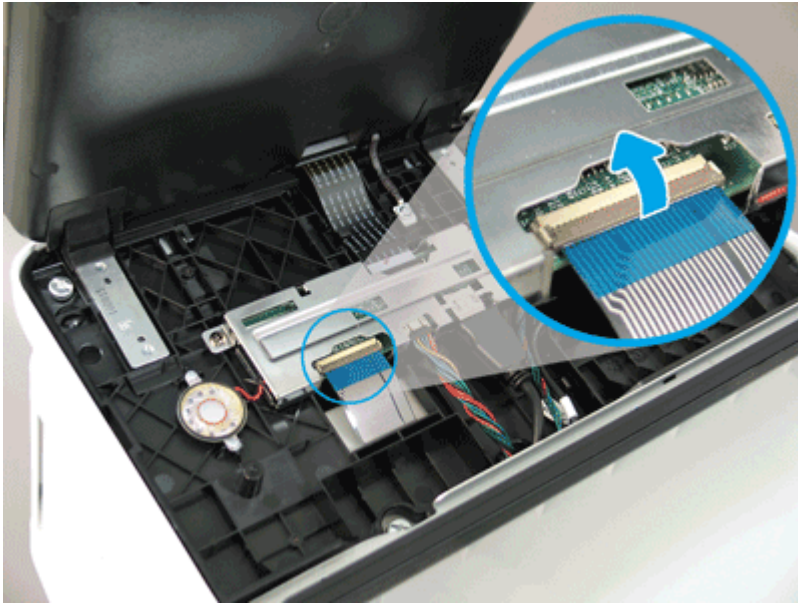
3. Continue to rotate the top edge of the cover away from the printer, and then remove the cover.

Figure 5-462 Remove the cover



4. Open the connector latch to release the keyboard flat cable.

Figure 5-463 Disconnect the keyboard flat cable



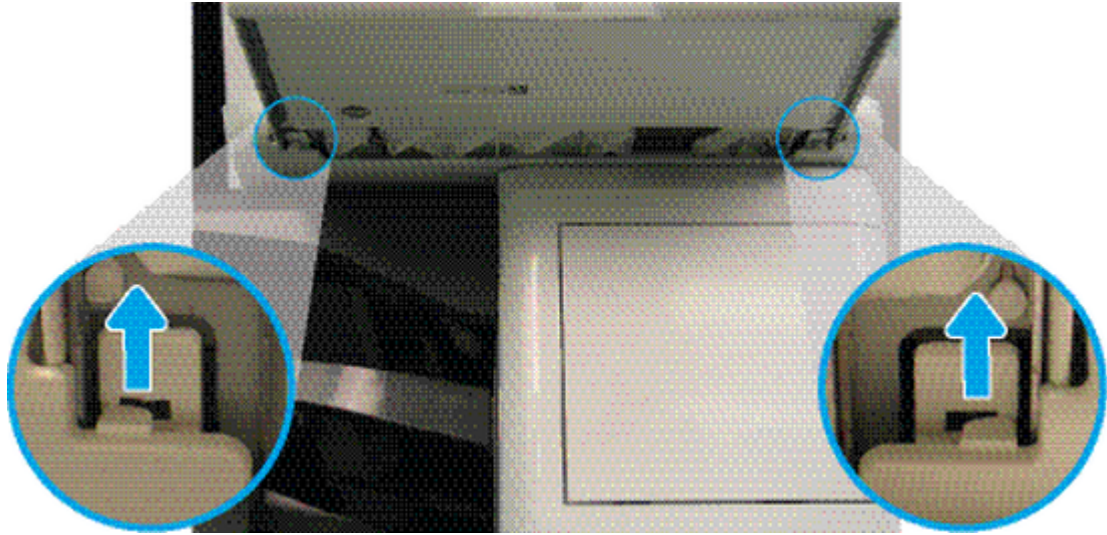
5. Slide the keyboard tray out until it stops.

Figure 5-464 Slide the keyboard tray out



6. Push up on the keyboard tray to release two tabs on the bottom of the tray, and then slide the tray toward you to disengage the tabs.

Figure 5-465 Release two tabs




7. Slide the keyboard tray all the way out of the printer to remove it.

Figure 5-466 Remove the keyboard



2. Remove the control panel (M681/M682/E67550/E67560/E67650/E67660)

Follow these steps to remove the control panel (M681/M682/E67550/E67560/E67650/E67660).

 **NOTE:** This step is for the M681/M682/E67550/E67560/E67650/E67660 printers. For the M652/M653/E65050/E65060/E65150/E65160 printers, skip this step.

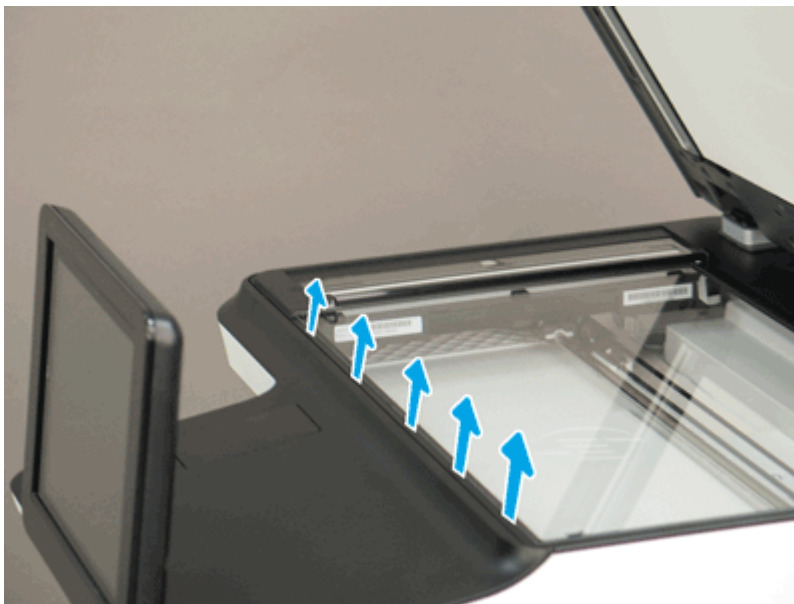
1. Tilt the control panel forward (callout 1), and then open the document feeder (callout 2).

Figure 5-467 Tilt the control panel forward and open the document feeder



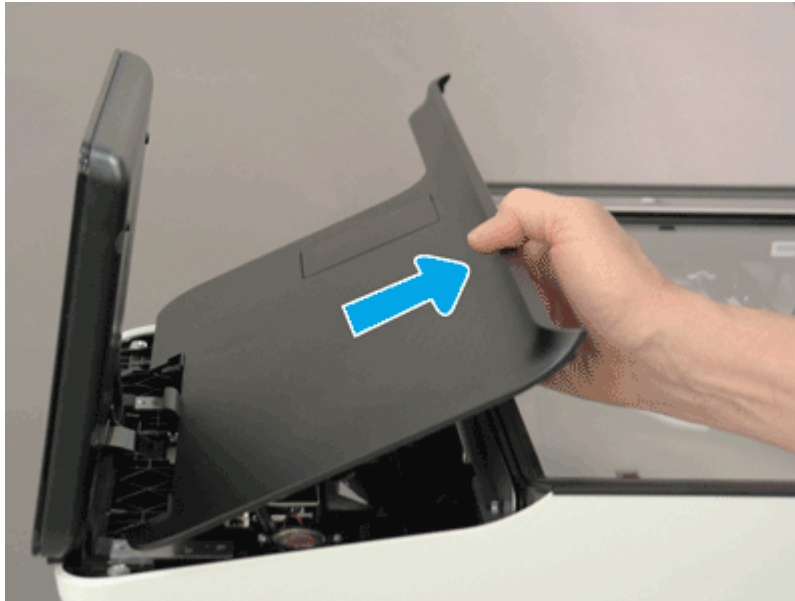
2. Beginning at the right side of the control-panel cover, carefully release five tabs along the top edge of the cover.

Figure 5-468 Release five tabs



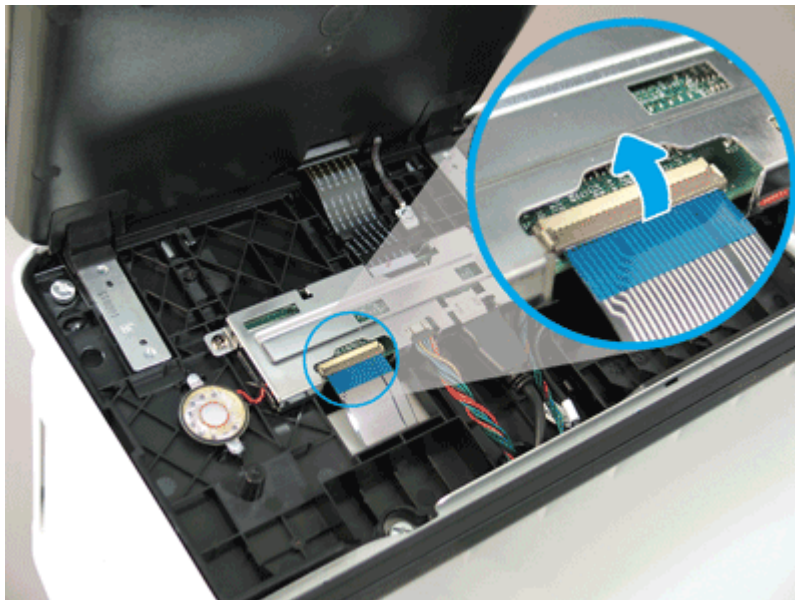
3. Continue to rotate the top edge of the cover away from the printer, and then remove the cover.

Figure 5-469 Remove the cover



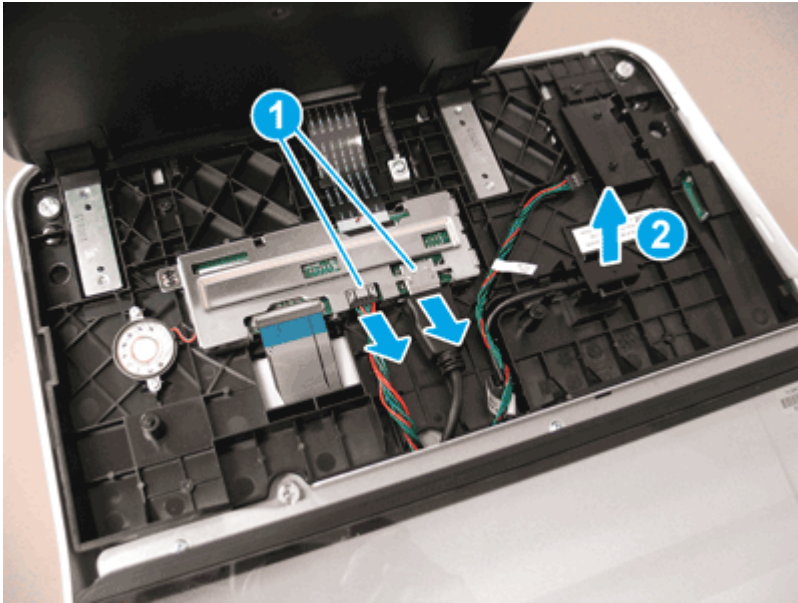
4. **Keyboard models only:** Lift up on the small, gray gate to release the keyboard flat cable.

Figure 5-470 Disconnect the keyboard flat cable (keyboard models only)



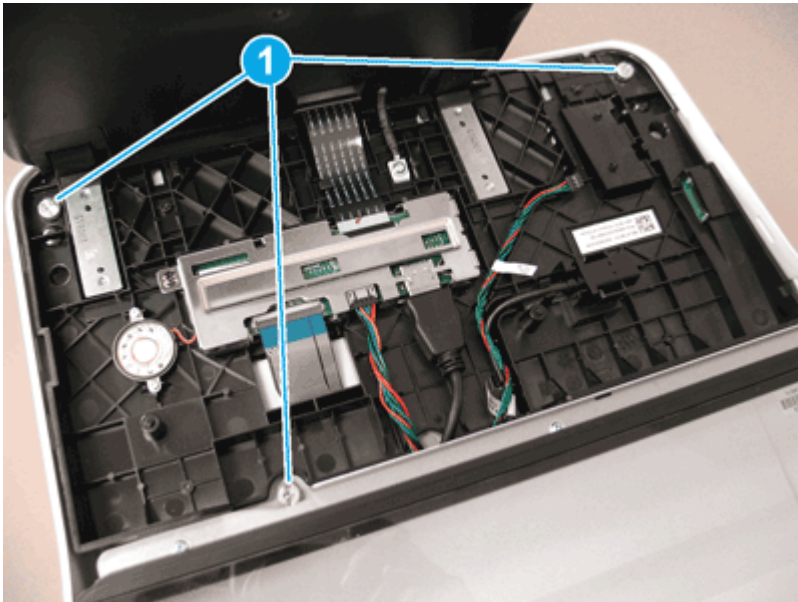
5. Disconnect two connectors (callout 1), and then release the USB cable (callout 2) from the holder.

Figure 5-471 Disconnect connectors



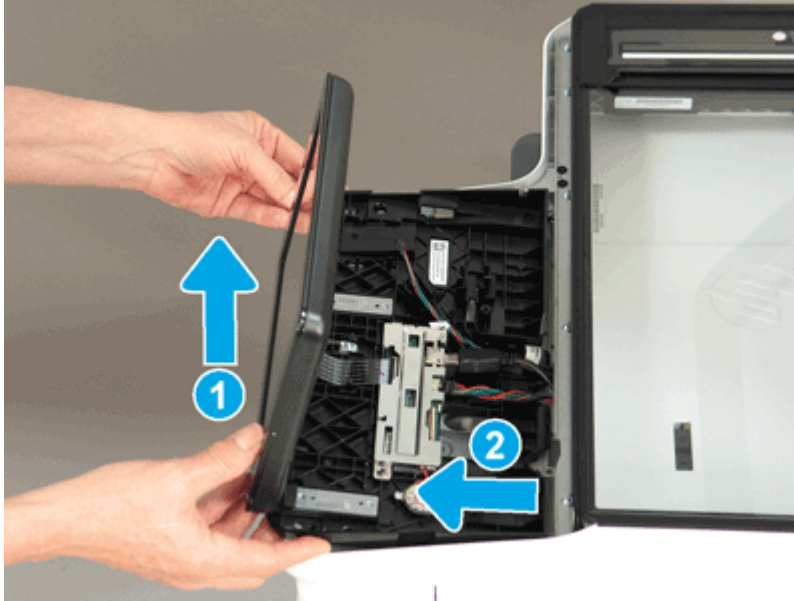
6. Remove three thumbscrews (callout 1).

Figure 5-472 Remove three thumbscrews



7. Lift the front of the control panel off of the printer (callout 1), and then slide it toward the front of the printer (callout 2) to remove it.

Figure 5-473 Remove the control panel

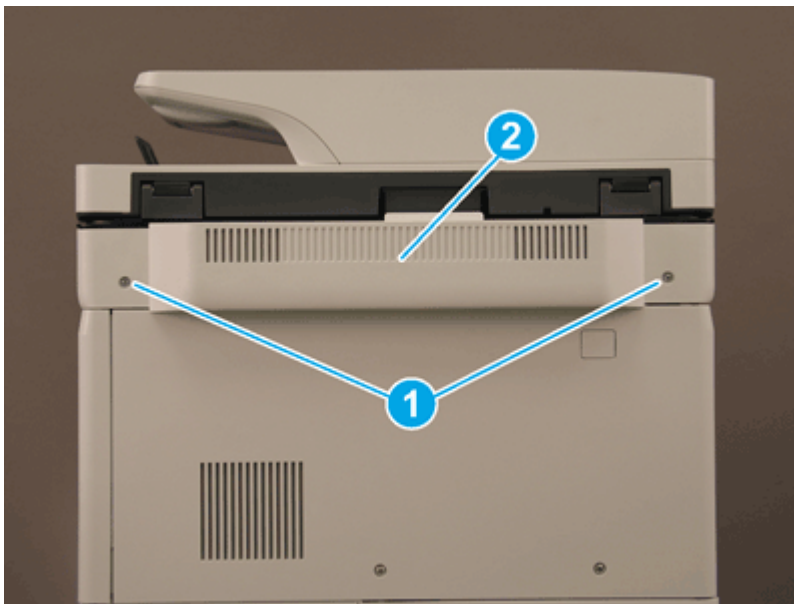


3. Remove the document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660)

Follow these steps to remove the document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660).

1. Remove two screws (callout 1), and then remove the scanner control board (SCB) cover (callout 2).

Figure 5-474 Remove the SCB cover



2. Flow M681z/Flow M682z/Flow E67660z models only: Do the following:

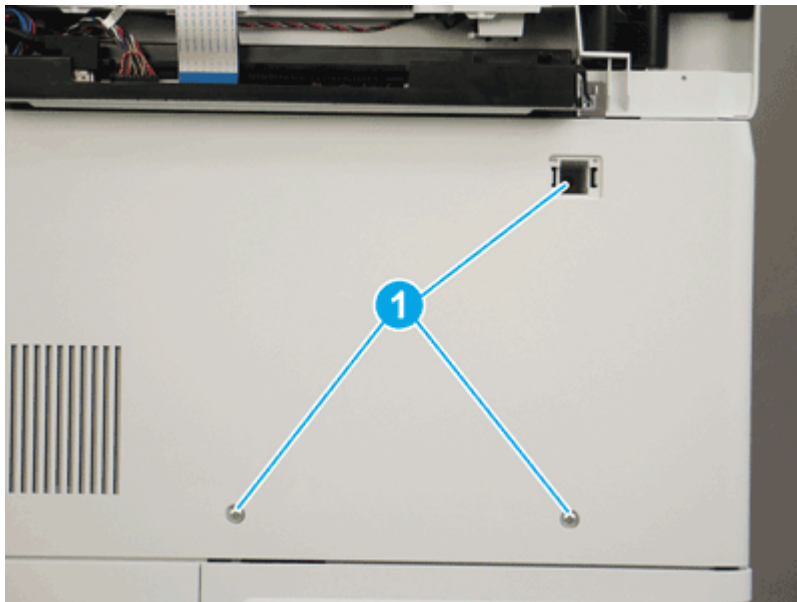
- a. At the back of the printer, remove one small cover (callout 1).

Figure 5-475 Remove the small cover



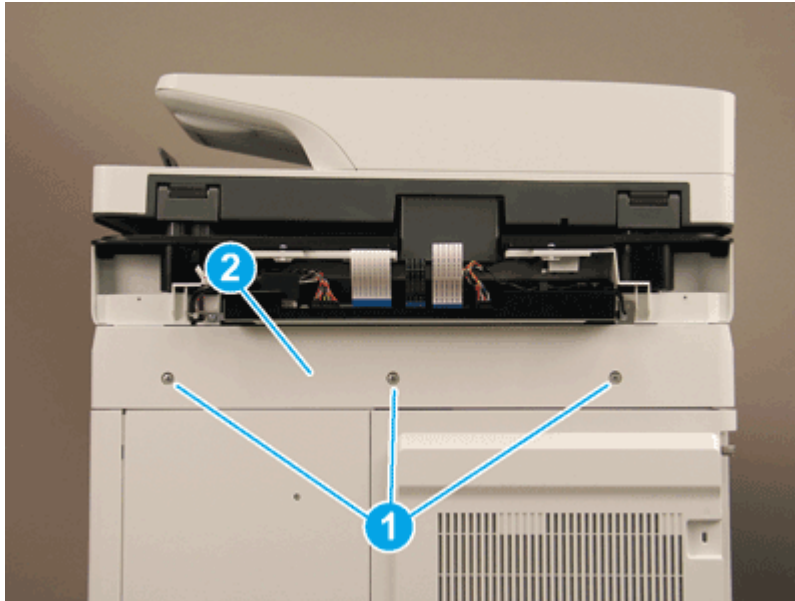
- b. Remove three screws (callout 1), and then remove the stapler/stacker rear cover (callout 2).

Figure 5-476 Remove the stapler/stacker rear cover



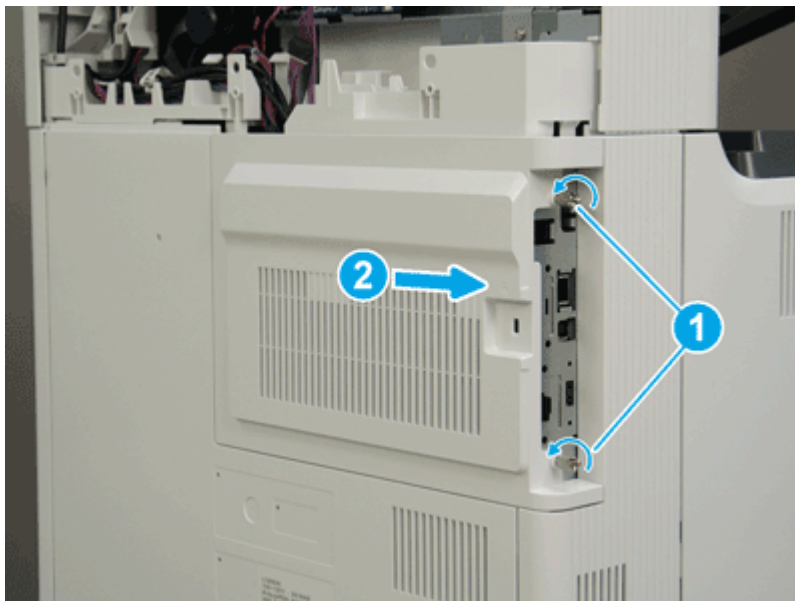
3. **M681dh/M681f/M682dh/Flow M681f/E67650dh models only:** Remove three screws (callout 1), and then remove the upper rear cover (callout 2).

Figure 5-477 Remove the upper rear cover



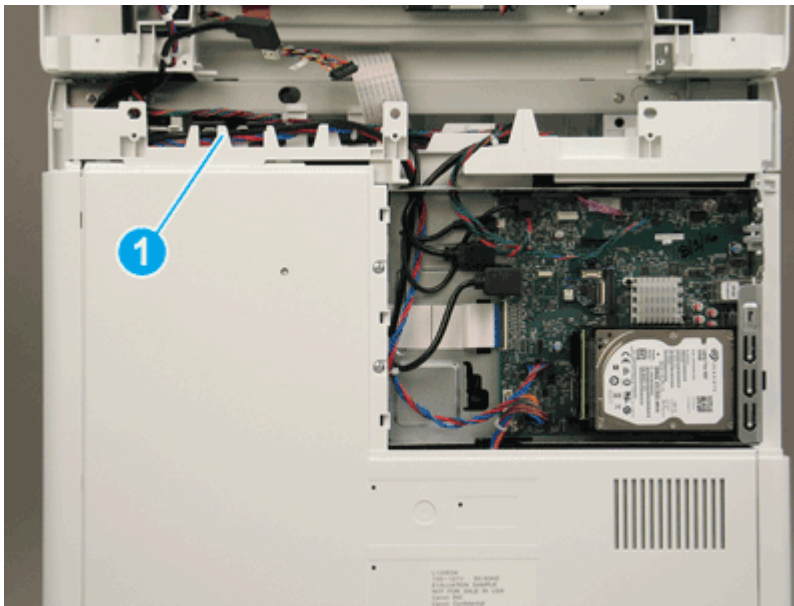
4. Loosen two thumbscrews (callout 1), and then slide the formatter cover away from the printer to remove it (callout 2).

Figure 5-478 Remove the formatter cover



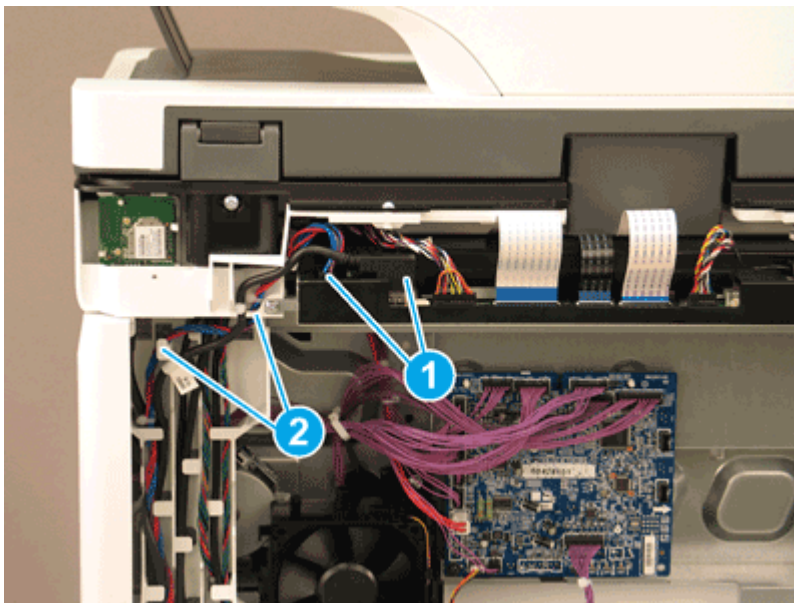
5. The remaining figures in this procedure show the Flow M682z model. While the cable routing (callout 1) on the M681dh, M681f, M682dh, Flow M681f, and E67650dh models is different, the removal procedures are the same for all models.

Figure 5-479 Cable routing for M681dh, M681f, Flow M681f, and E67650dh



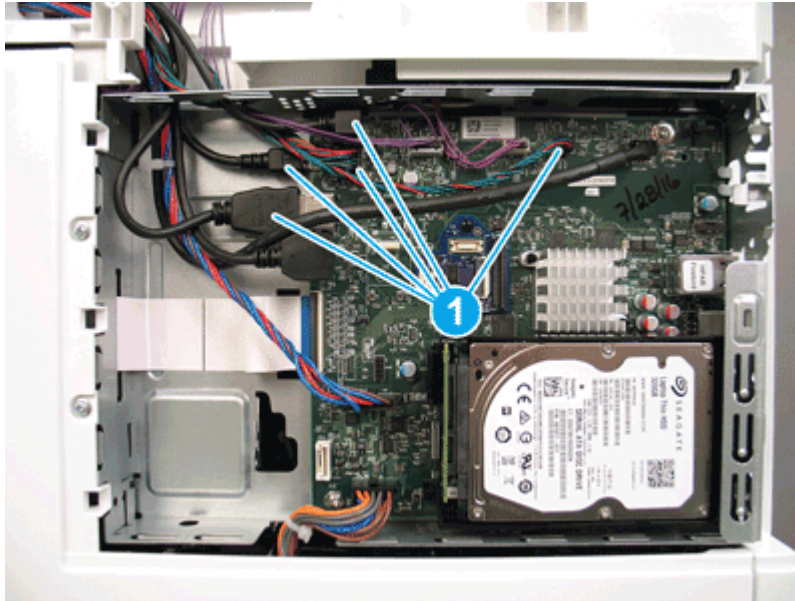
6. Disconnect two connectors (callout 1) on the SCB, and then release the cables from the guides (callout 2).

Figure 5-480 Disconnect two connectors



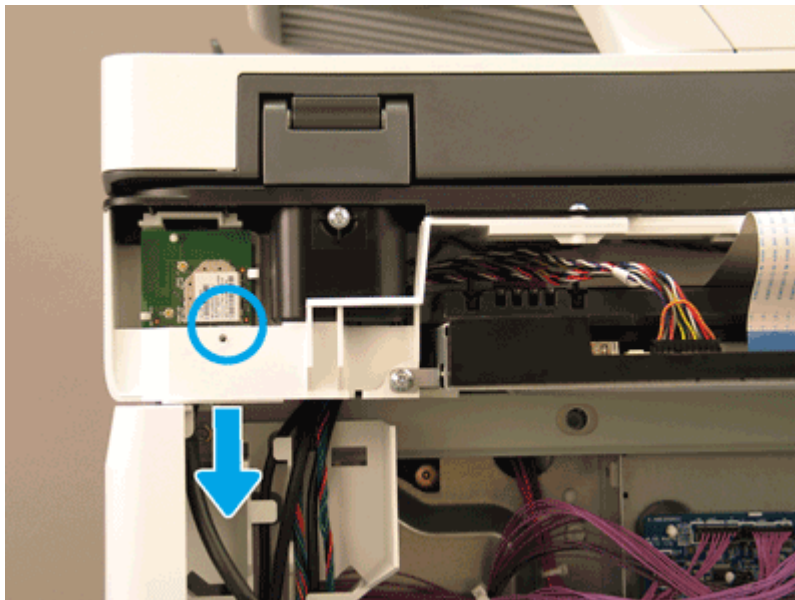
7. Disconnect five connectors on the formatter (callout 1).

Figure 5-481 Disconnect five connectors



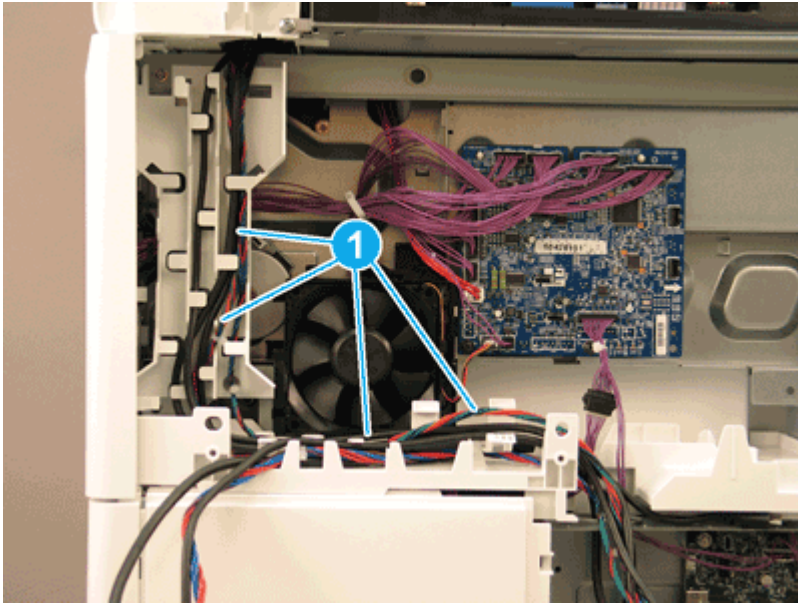
8. Flow M682z only: Gently pull down on the cable to disconnect the wireless connector.

Figure 5-482 Disconnect the wireless connector



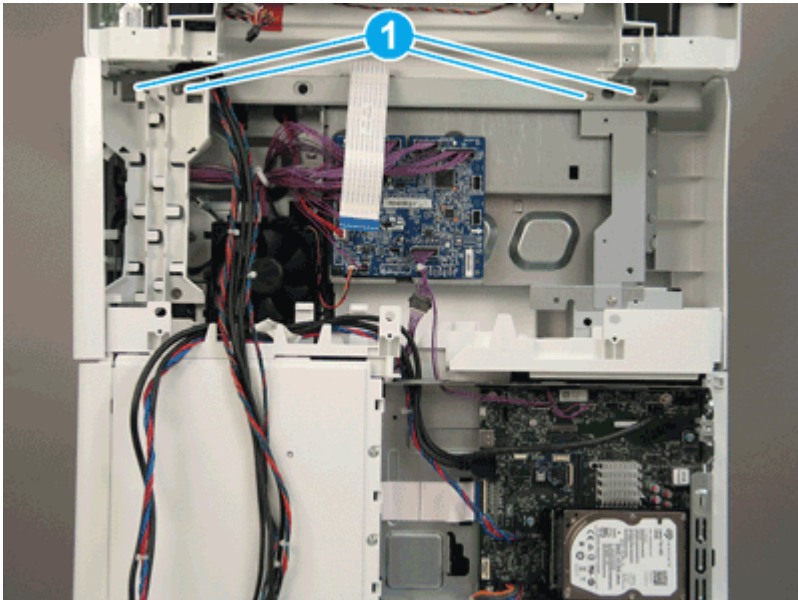
9. Release all of the cables from the cable guides (callout 1).

Figure 5-483 Release the cables



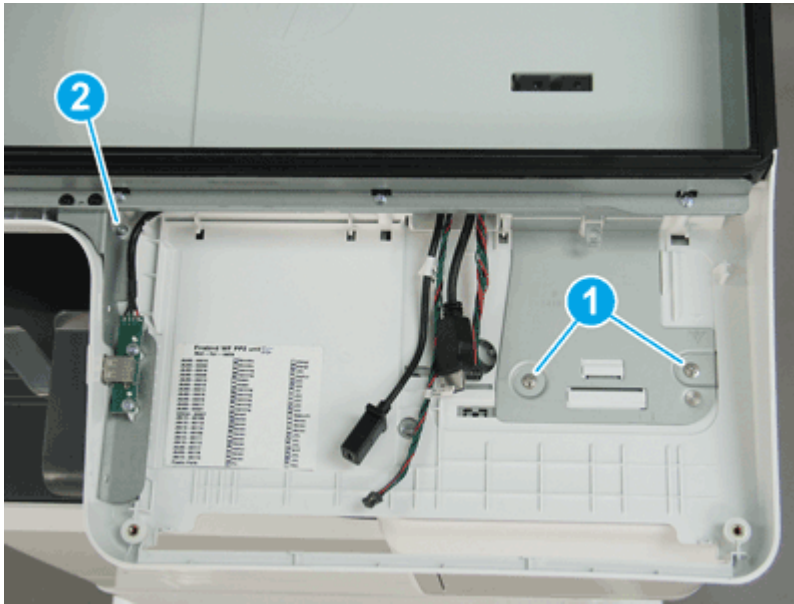
10. At the back of the printer, remove four screws (callout 1).

Figure 5-484 Remove four screws



11. On the top of the image scanner assembly, at the location where the control panel was removed, remove two sheet metal screws (callout 1). **Flow M681z/Flow M682z/Flow E67660z only:** Remove one self-tapping screw (callout 2).

Figure 5-485 Remove three screws



12. Lift the document feeder and image scanner off of the printer to remove them.

Figure 5-486 Remove the document feeder and image scanner

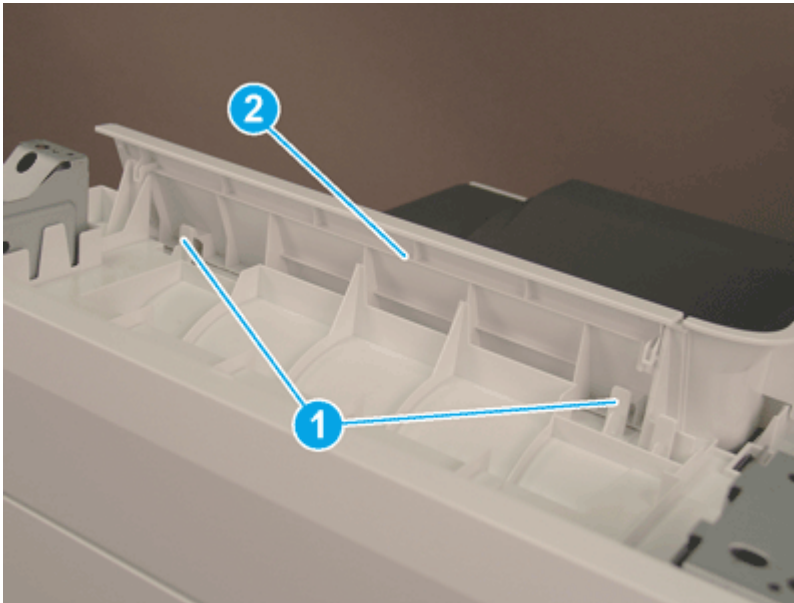


4. Remove the top cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the top cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

- Release two tabs (callout 1), and then remove the top cover (callout 2).

Figure 5-487 Remove the top cover



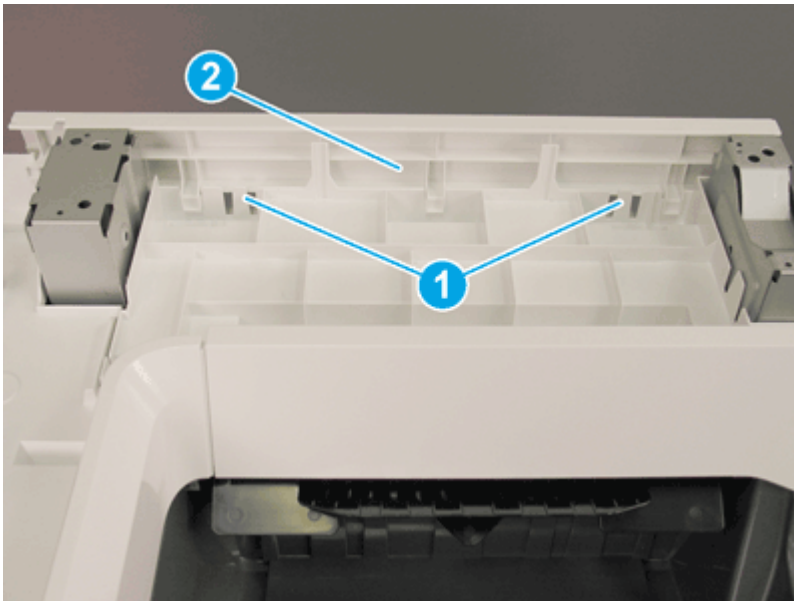
5. Remove the right cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the right cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

This step is for the M681/M682/E67550/E67560/E67650/E67660 printers. For the M652/M653/E65050/E65060/E65150/E65160 printers, skip this step.

- Release two tabs (callout 1), and then remove the right cover (callout 2).

Figure 5-488 Remove the right cover



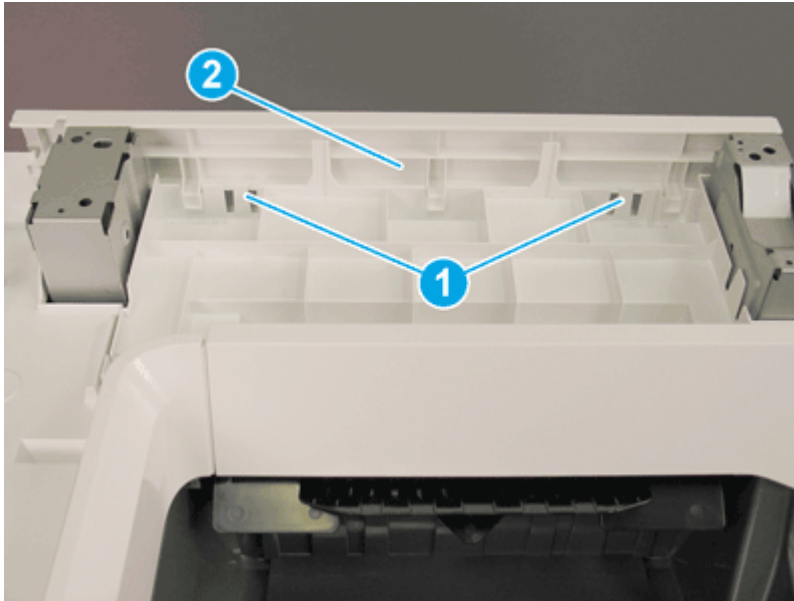
6. Remove the right cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the right cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

This step is for the M681/M682/E67550/E67560/E67650/E67660 printers. For the M652/M653/E65050/E65060/E65150/E65160 printers, skip this step.

- Release two tabs (callout 1), and then remove the right cover (callout 2).

Figure 5-489 Remove the right cover



7. Remove the front cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the front cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

- Release two tabs (callout 1), and then remove the front cover (callout 2).


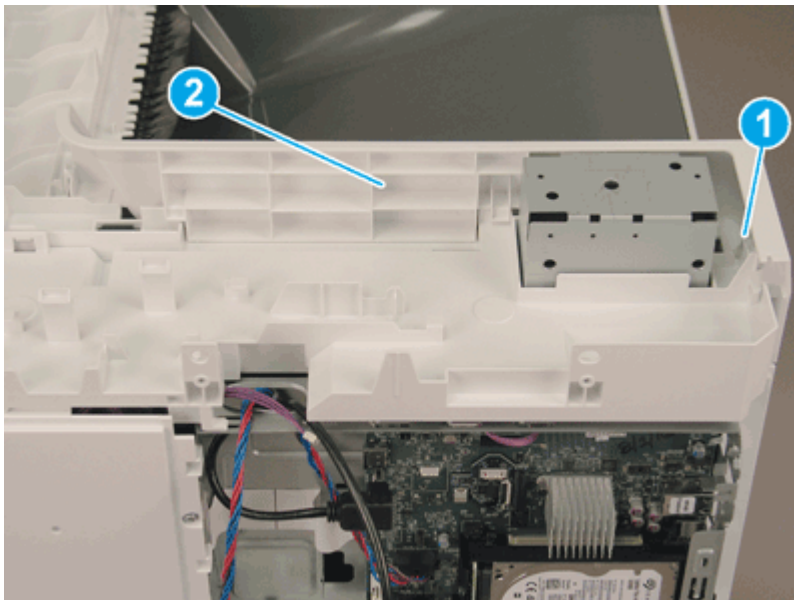
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-490 Remove the front cover



8. Remove the rear upper cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the rear upper cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

- Remove two screws (callout 1), and then remove the rear upper cover (callout 2).


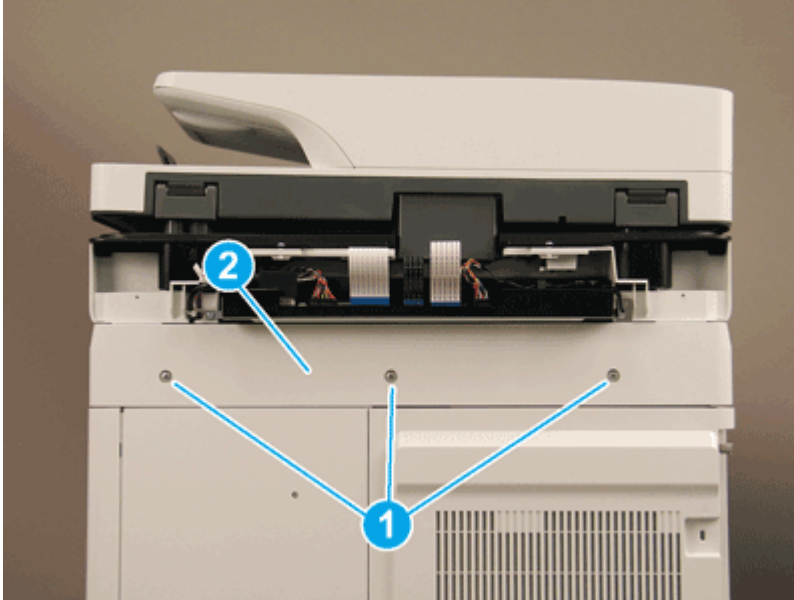

 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-491 Remove the rear upper cover



9. Remove the face-down cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the face-down cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

 **NOTE:** This step is for the M681/M682/E67550/E67560/E67650/E67660 printers. For the M652/M653/E65050/E65060/E65150/E65160 printers, skip this step.

- Remove two screws (callout 1), release three tabs (callout 2), and then remove the face-down cover (callout 3).


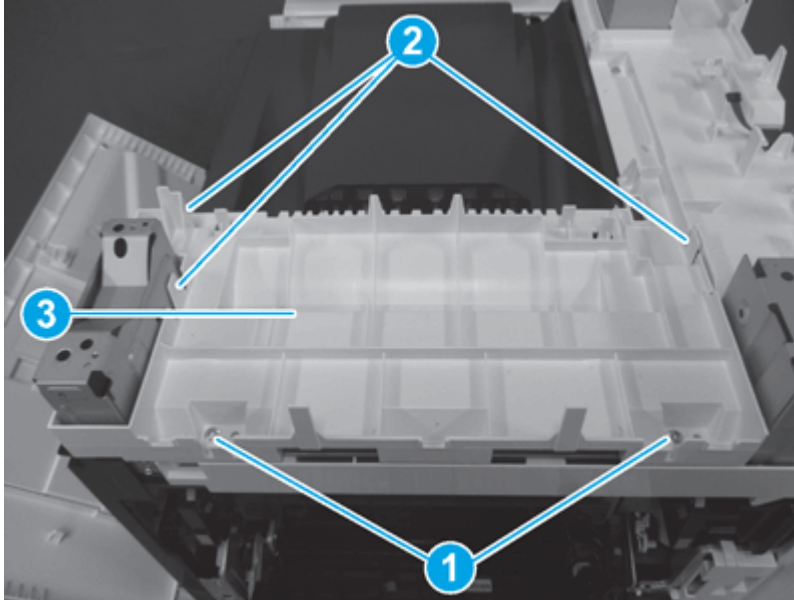
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-492 Remove two screws and the face-down cover



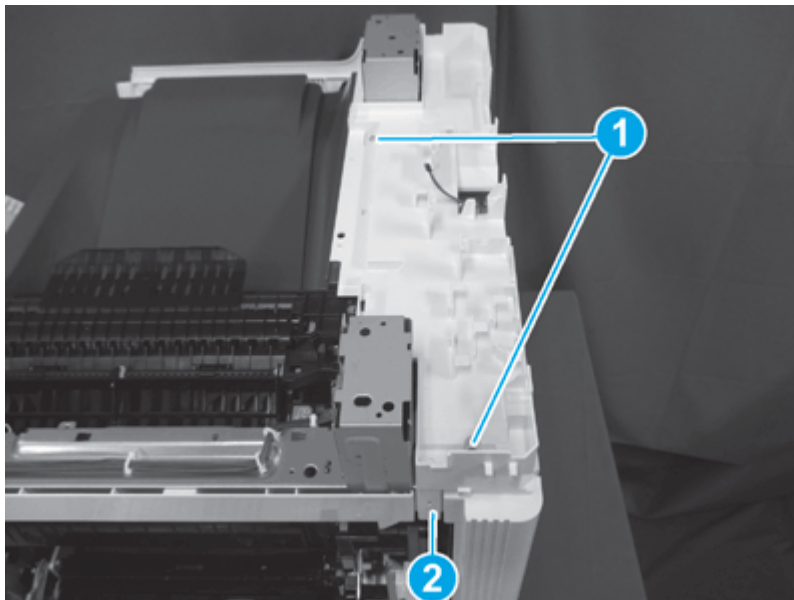
10. Remove the main cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the main cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

This step is for the M681/M682/E67550/E67560/E67650/E67660 printers. For the M652/M653/E65050/E65060/E65150/E65160 printers, skip this step.

1. Remove two screws (callout 1), and then release one tab (callout 2).

Figure 5-493 Remove two screws and release one tab



2. Remove one screw (callout 1), release two tabs (callout 2), and then remove the main cover (callout 3).


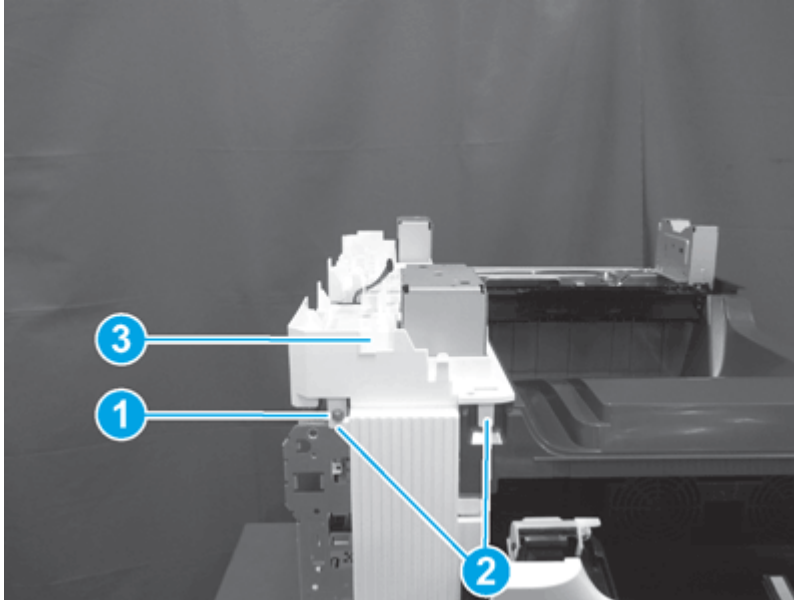
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-494 Remove one screw and the main cover



11. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

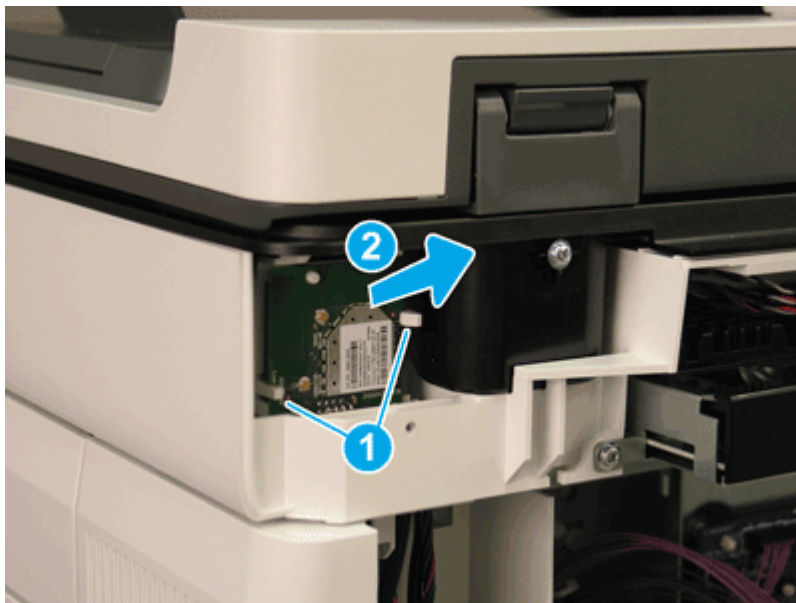
12. Reverse the removal steps to install the assembly

Also use the following **special installation instructions**.

Document feeder and image scanner

1. **Flow M682z only** : When reconnecting the wireless card cable, do the following:
 - a. Release two tabs (callout 1), and then remove the wireless card (callout 2).

Figure 5-495 Remove the wireless card



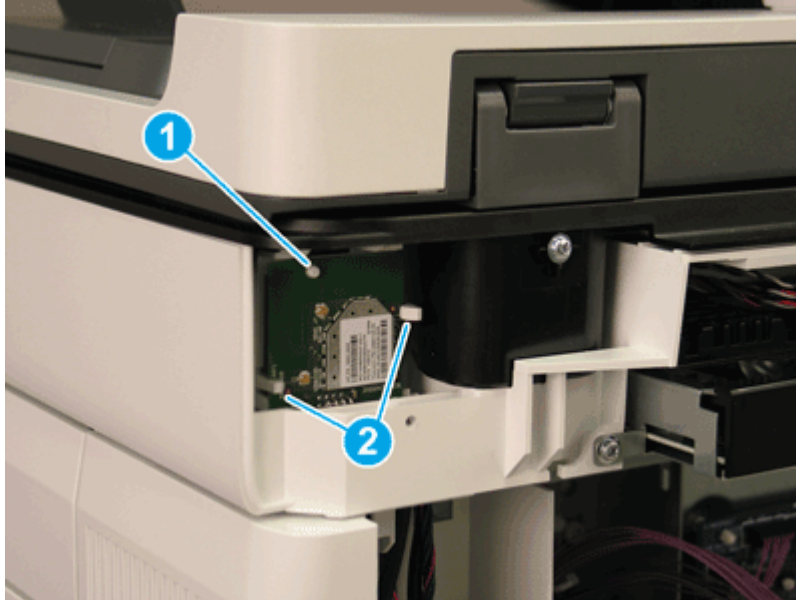
- b. Connect the cable to the wireless card (callout 1).

Figure 5-496 Connect the wireless card connector



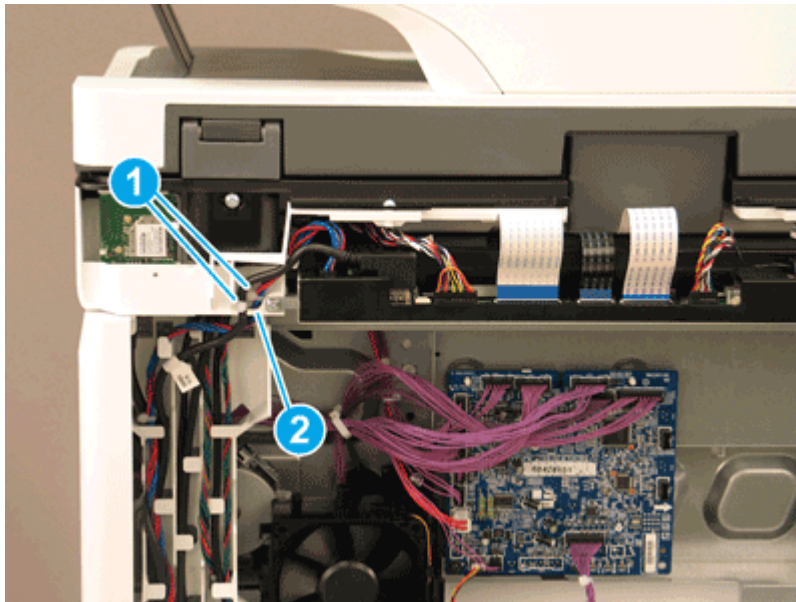
- c. Reinstall the wireless card. Make sure that the hole in the card is positioned over the peg (callout 1), and that the card is under the two tabs (callout 2).


Figure 5-497 Reinstall the wireless card



2. When reinstalling the SCB cables, make sure that the wire retainers (callout 1) on the cables are positioned above the plastic guide (callout 2).

Figure 5-498 Install the SCB cables



 **NOTE:** Continue to reverse the removal steps to install the assembly.


Removal and replacement: Front door

This document provides the procedures to remove and replace the front door.

 [View a video of how to remove and replace the front door.](#)


Mean time to repair: 5 minutes

Service level: Basic

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Disconnect the power cable.

 **WARNING!** To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-37 Part Information

Part number	Part description
RM2-6658-000CN	Front door

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.


Post service test

No post service test is available for this assembly.

1. Remove the front door

Follow these steps to remove the front door.

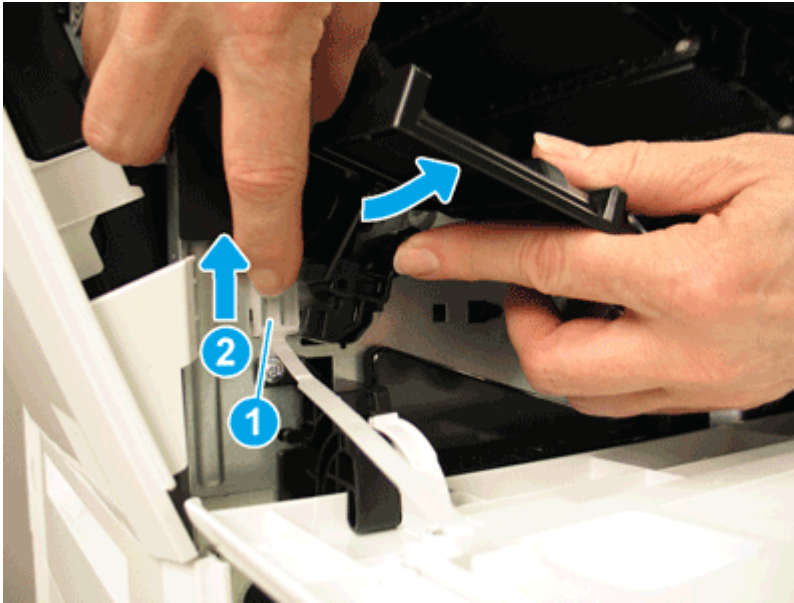
1. Remove Tray 2.
2. Open the following doors:

 **TIP:** The left door must be closed first in order to close the front door.

- Front door
- Left door

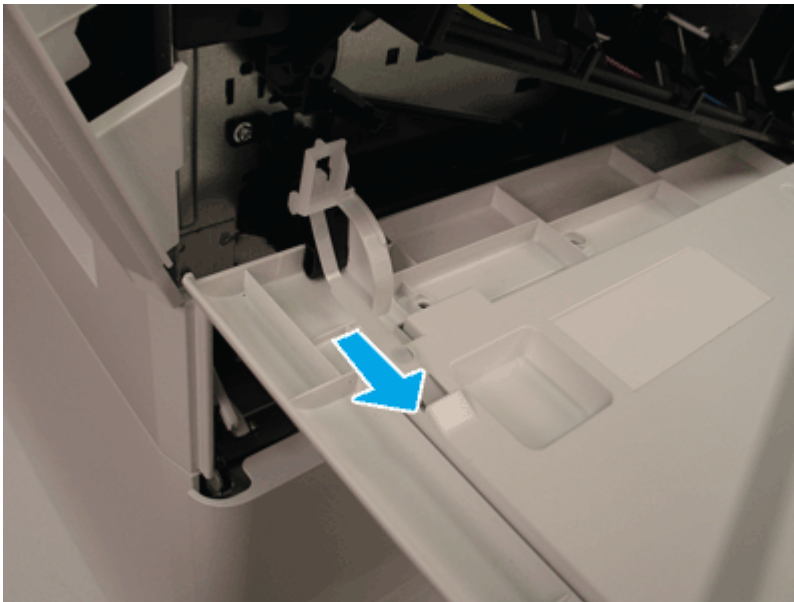
3. Hold the black shutter to one side, release one tab (callout 1), and then slide the link arm (callout 2) up to release it from the sheet metal.

Figure 5-499 Release the link arm



4. Slide the released link arm into the door.

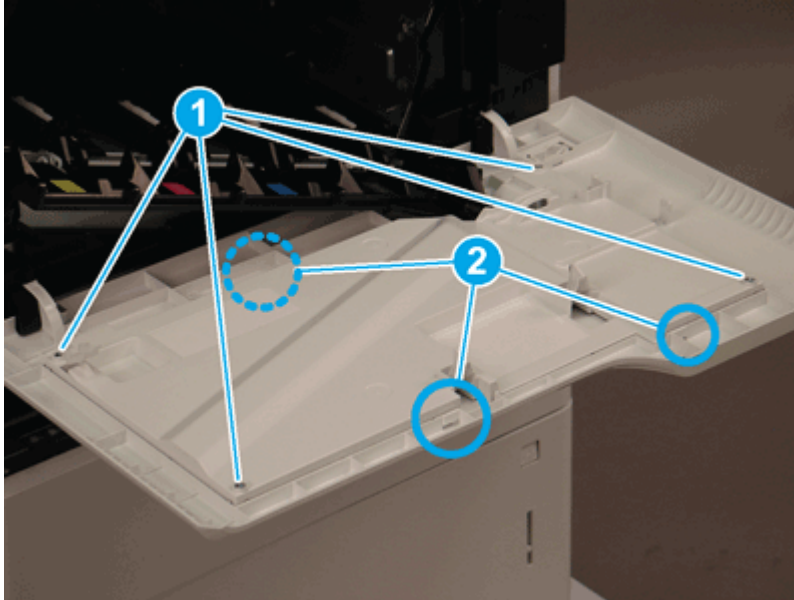
Figure 5-500 Slide the released link arm into the door



5. Remove four screws (callout 1), release three tabs (callout 2), and then remove the inner cover.

⚠ CAUTION: Use care when removing the inner cover. The black cartridge door is spring-loaded and may close abruptly when released from the inner cover.

Figure 5-501 Remove the inner cover



6. Remove one screw (callout 1), and then release one boss (callout 2). Slide the hinge (callout 3) up to release it.


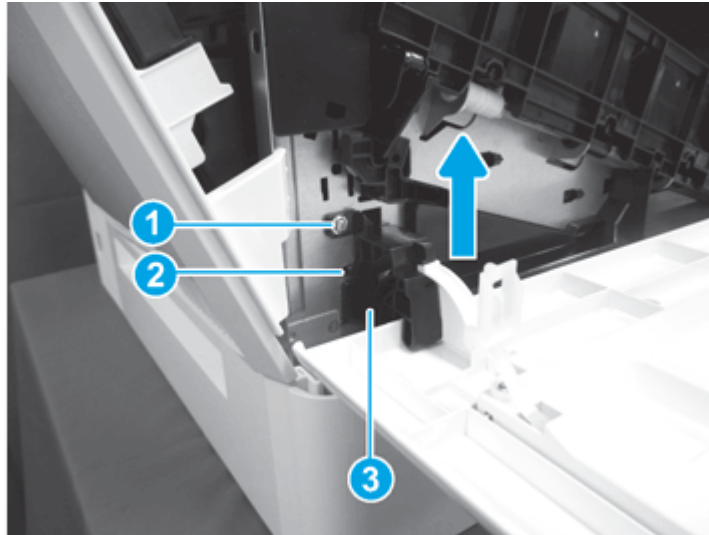

 **TIP:** Use a flat-blade screwdriver to release the boss, and then lift upwards on the corner of the door.

Figure 5-502 Release the hinge



7. Slide the front door (callout 1) to the right to remove it.

 **NOTE:** Remove the hinge (callout 2) and the link arm (callout 3) from the front door and install them on the replacement front door.


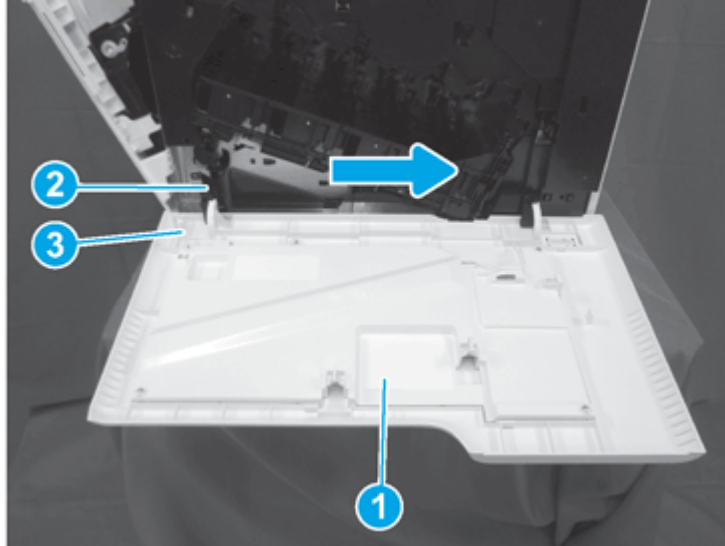
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-503 Remove the front door



2. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

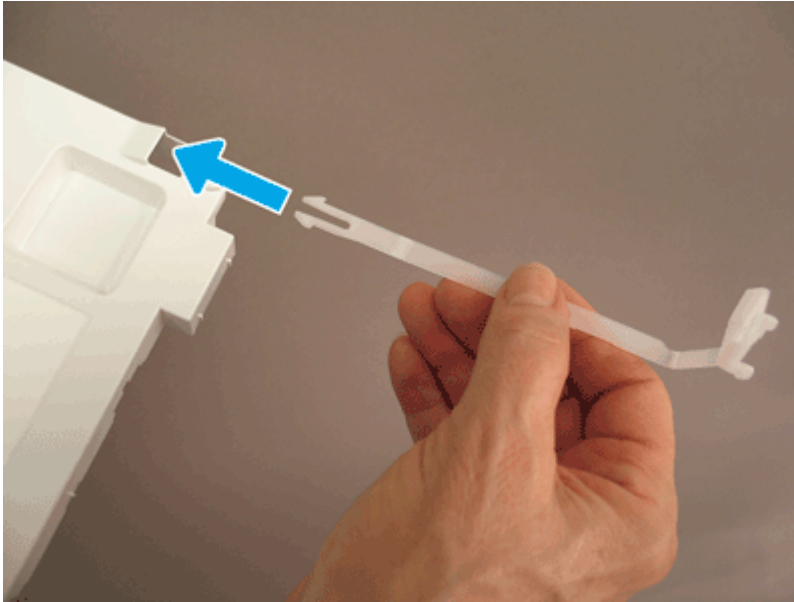
3. Reverse the removal steps to install the assembly

Also use the following **special installation instructions**.

Front door

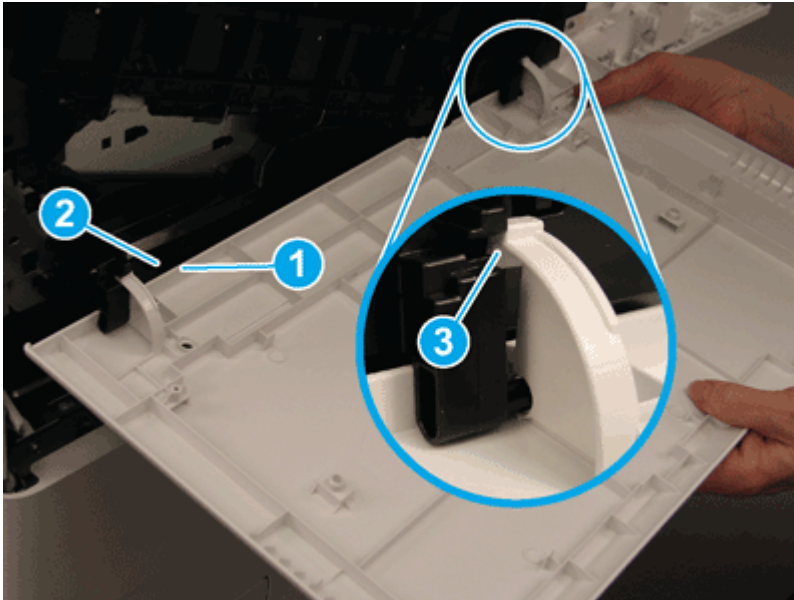
1. If the link arm becomes dislodged from the inner cover, reinstall it as shown in the figure below.

Figure 5-504 Reinstall the link arm



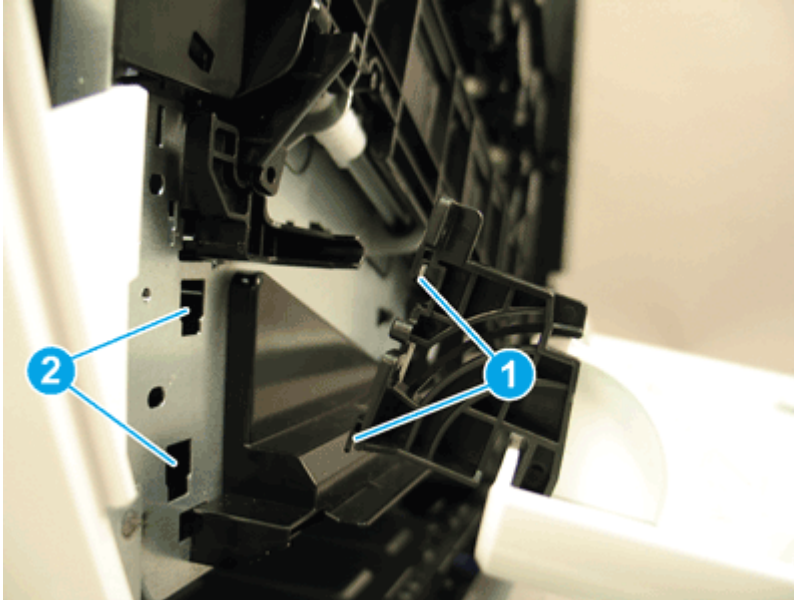
2. Install the right side of the door first. Position the edge of the door (callout 1) over the black lip (callout 2), and then slide the right hinge into the black arm (callout 3).


Figure 5-505 Install the right hinge



3. When reinstalling the left hinge, install the tabs (callout 1) on the hinge in the slots (callout 2) in the printer. Press down to lock the hinge in place.

Figure 5-506 Install the left hinge



 **NOTE:** Continue to reverse the removal steps to finish installing the assembly.


Removal and replacement: Right door

Learn how to remove and replace the right door.

 [View a video of how to remove and replace the right door .](#)


Mean time to repair: 5 minutes

Service level: Basic

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Disconnect the power cable.

 **WARNING!** To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-38 Part information

Part number	Part description
RM2-6622-000CN	Right door

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

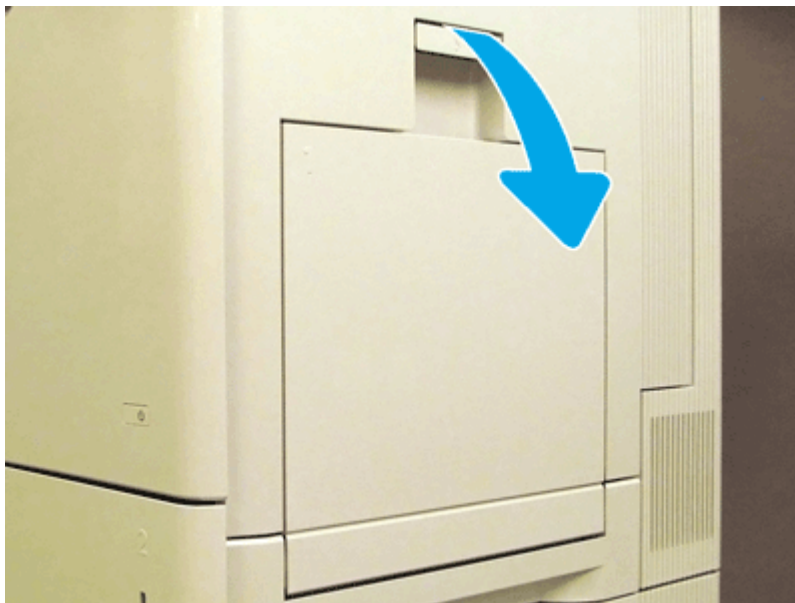
No post service test is available for this assembly.

1. Remove the right door

Follow these steps to remove the right door.

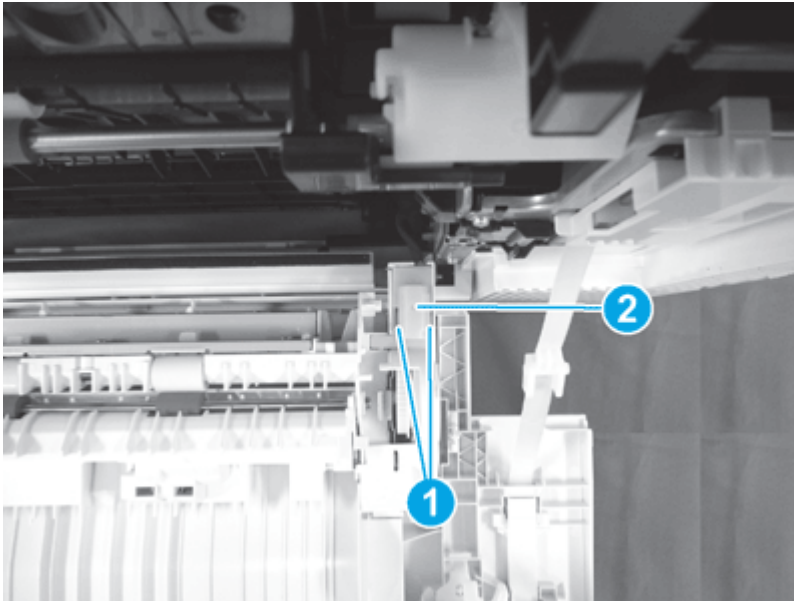
1. Open the right door.

Figure 5-507 Open the right door



2. Release two tabs (callout 1), and then remove the connector cover (callout 2).

Figure 5-508 Remove the connector cover

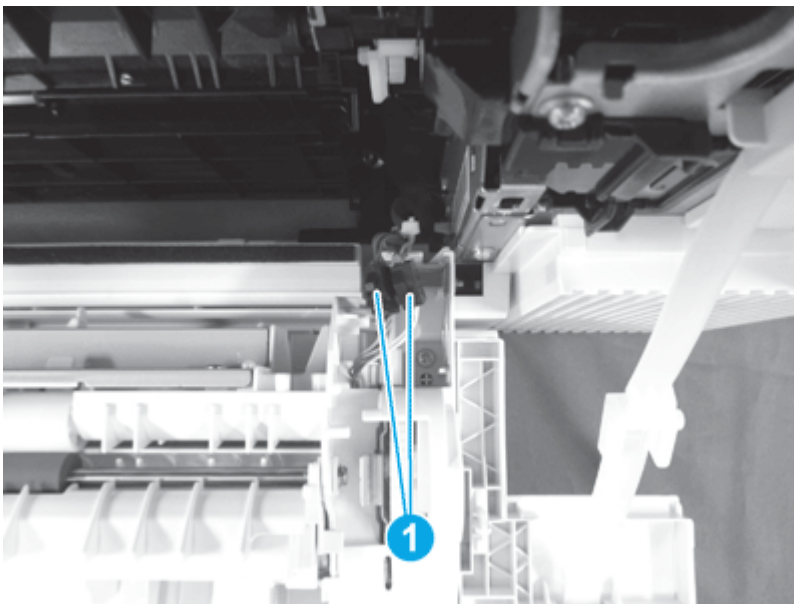


3. Disconnect two connectors (callout 1).



NOTE: Disconnect the connectors on the side closest to the printer

Figure 5-509 Disconnect two connectors

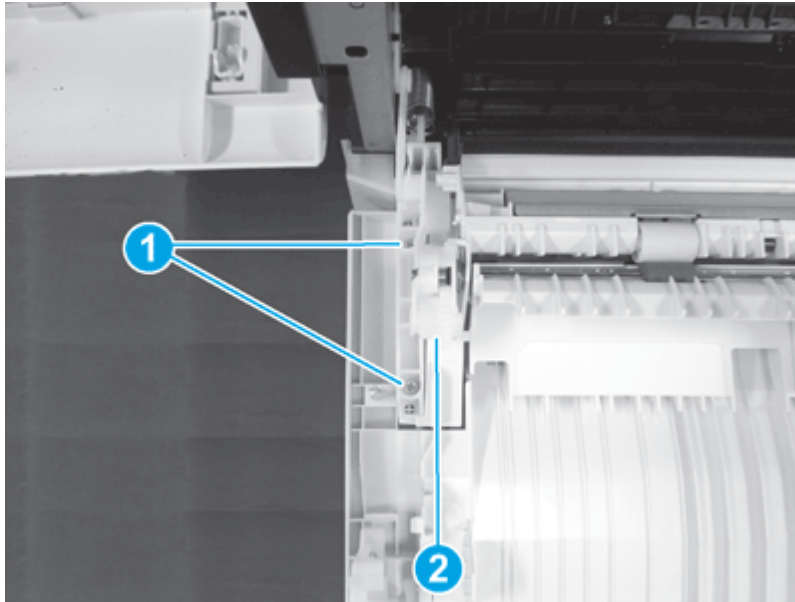


4. Remove two screws (callout 1), and then release the left link arm (callout 2) from the right door.



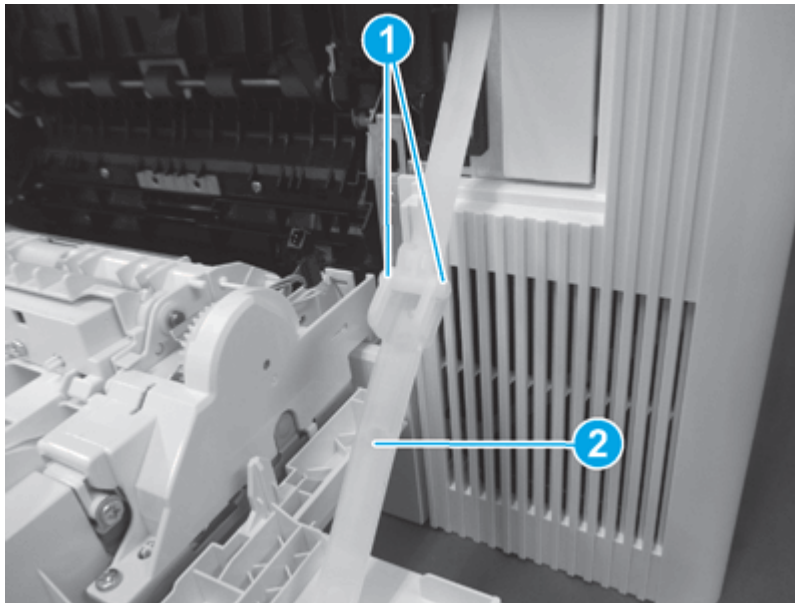
CAUTION: The left link arm is under tension. Hold onto the part when removing the screws and release it slowly to avoid damaging the printer or losing the screws.

Figure 5-510 Remove two screws and release the left link arm



5. Release two bosses (callout 1), and then release the right door strap (callout 2).

Figure 5-511 Release the right door strap

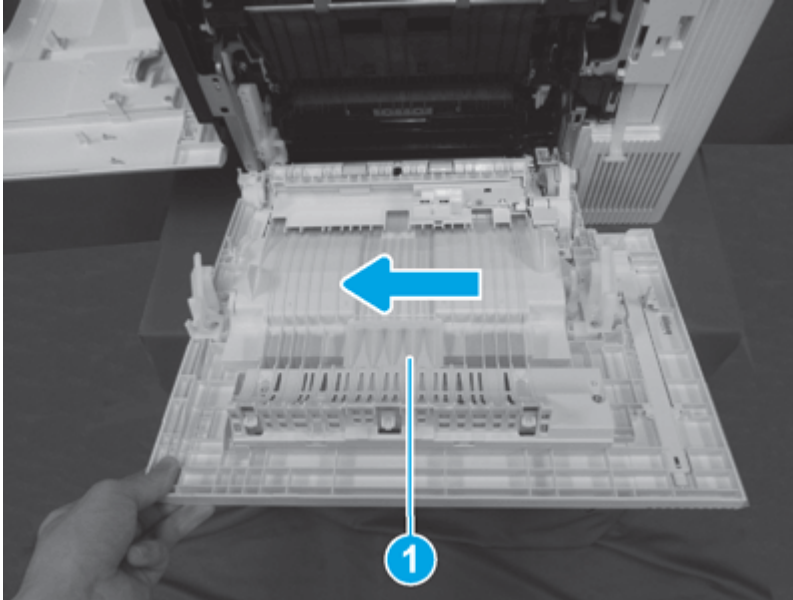


6. Slide the right door (callout 1) to the left to remove it.

⚠ CAUTION: The left hinge is under tension. Use care when moving it so it does not release suddenly and damage the printer.

💡 TIP: The left hinge can be moved to the left, away from the door assembly, to allow correctly positioning the molded door assembly parts. Place the hinge back into position to align with the alignment pins, and then reattach.

Figure 5-512 Remove the right door



2. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Left door

Learn how to remove and replace the left door.



[View a video of how to remove and replace the left door.](#)

Mean time to repair: 5 minutes

Service level: Basic



IMPORTANT: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Disconnect the power cable.

⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-39 Part information

Part number	Part description
RL2-1500-000CN	Left door

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

No post service test is available for this assembly.

1. Remove the TCU

Follow these steps to remove the TCU.



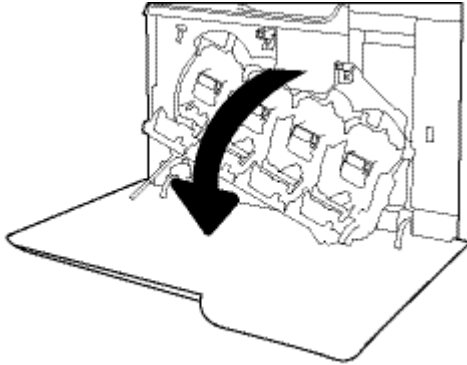
CAUTION: If toner gets on clothing, wipe it off by using a dry cloth and wash the clothes in cold water. Hot water sets toner into fabric.



NOTE: The toner collection unit is designed for a single use. Do not attempt to empty the toner collection unit and reuse it. Doing so could lead to toner being spilled inside the printer, which could result in reduced print quality. After use, return the toner collection unit to HP's Planet Partners program for recycling.

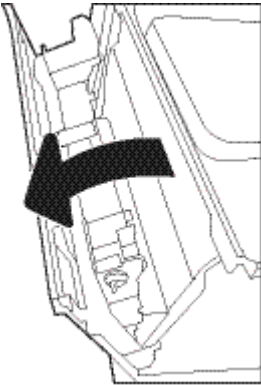
1. Open the front door.

Figure 5-513 Open the front door



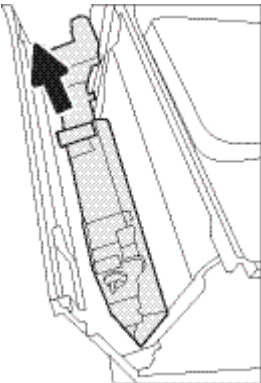
2. Open the left door.

Figure 5-514 Open the left door



3. Grasp the top of the TCU and remove it from the printer.

Figure 5-515 Remove the TCU



2. Remove the left door

Follow these steps to remove the left door.

1. Open front door.

Figure 5-516 Open front door



2. Press on the tab (callout 1) while sliding the left door (callout 2) to the right to remove it.


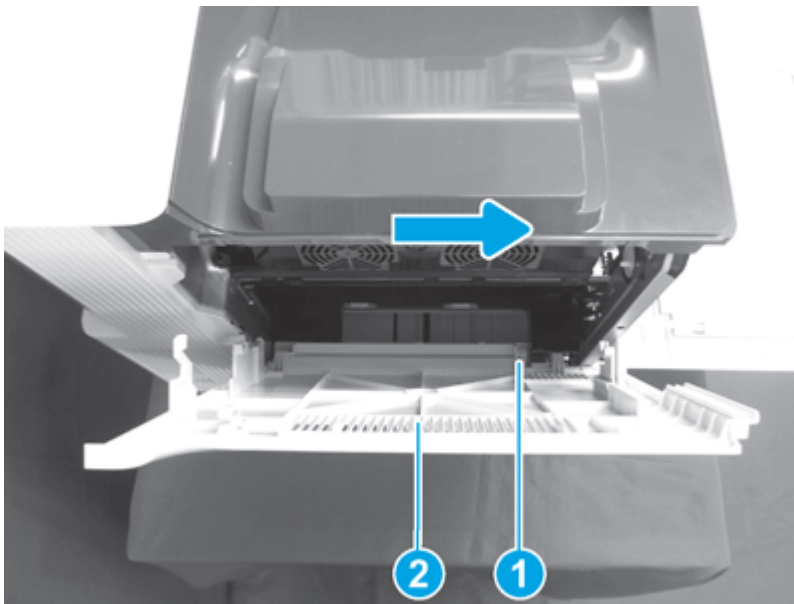
 **NOTE:** Make sure that the front door is not blocking the left door at the lower corner.


Figure 5-517 Remove the left door





3. Unpack the replacement assembly


Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.

 **NOTE:** HP recommends responsible disposal of the defective part.


2. Unpack the replacement part from the packaging.

 **CAUTION:**  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

 **IMPORTANT:** Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

 **NOTE:** If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

 **NOTE:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.


Removal and replacement: Top cover (M652/M653/E65050/E65060/E65150/E65160)

Learn how to remove and replace the top cover for the M652/M653/E65050/E65060/E65150/E65160 models.

 [View a video of how to remove and replace the top cover cover.](#)


Mean time to repair: 5 minutes

Service level: Basic

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Disconnect the power cable.

 **WARNING!** To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-40 Part information

Part number	Part description
RC4-6429-000CN	Top cover (M652/M653/E65050/E65060/E65150/E65160)

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

No post service test is available for this assembly.

1. Remove the formatter cover

Follow these steps to remove the formatter cover.

- Unscrew two thumbscrews (callout 1), and then slide the formatter cover (callout 2) away from the printer to remove it.


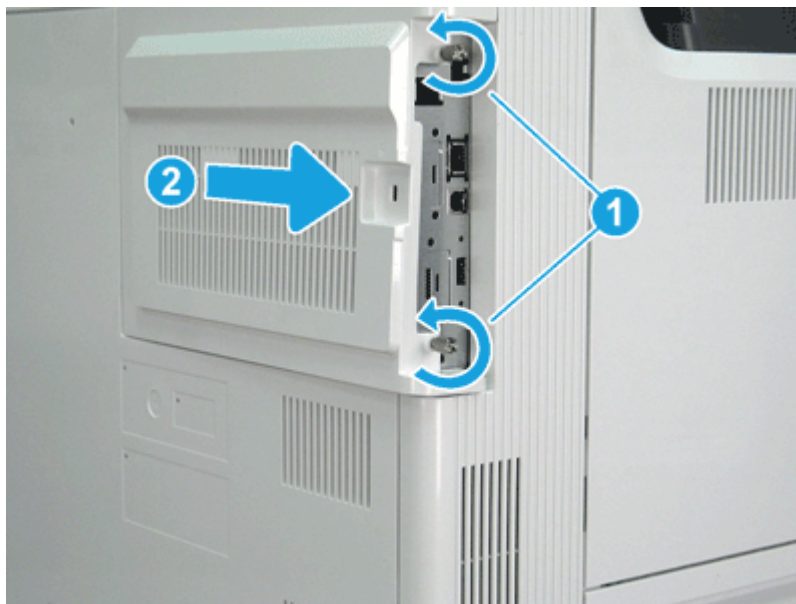

 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-518 Remove the formatter cover



2. Remove the control panel (M652/M653/E65050/E65060/E65150/E65160)

Follow these steps to remove the control panel (M652/M653/E65050/E65060/E65150/E65160).

 **NOTE:** This step is for the M652/M653/E65050/E65060/E65150/E65160 printers. For the M681/M682/E67550/E67560/E67650/E67660 printers, skip this step.

The figures below show the touchscreen control panel. The procedure is also correct for the keypad control panel.

1. Tilt the control panel to the fully raised position.

Figure 5-519 Tilt the control panel up



2. Use a coin to release the cover, and then remove the cover.

Figure 5-520 Remove the cover



3. Remove one thumbscrew (callout 1)



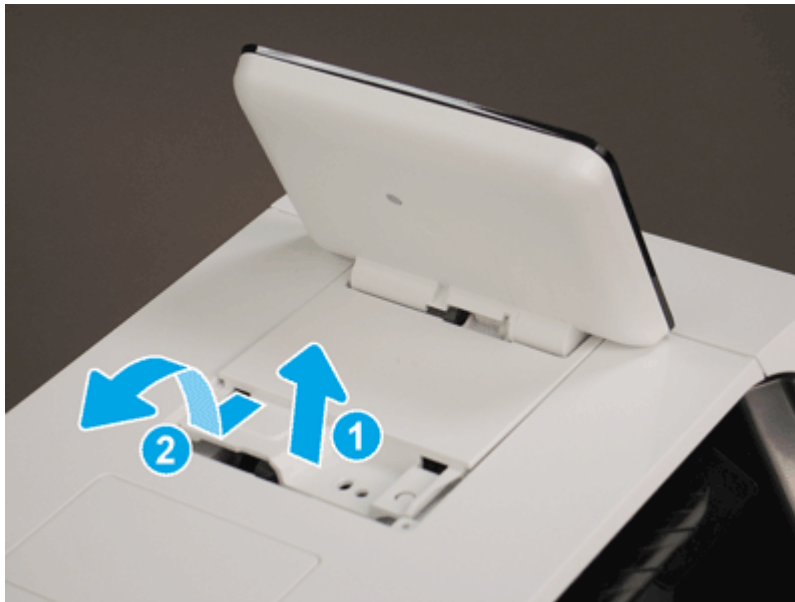
NOTE: Store the screw in a secure place where it cannot fall down into the printer.

Figure 5-521 Remove one thumbscrew



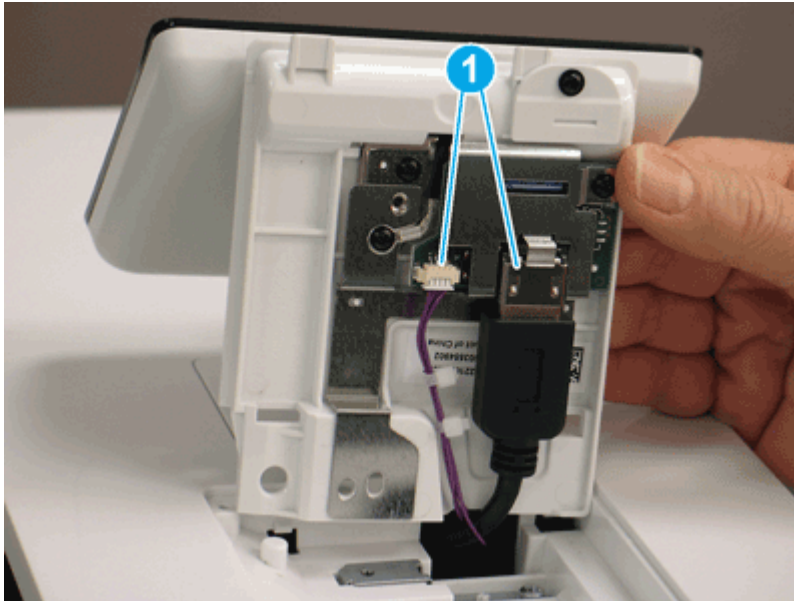
4. Lift the back edge of the control panel up (callout 1), and then slide it toward the back of the printer (callout 2) to release it.

Figure 5-522 Release the control panel



5. Turn the control panel over to gain access to the bottom side. Disconnect two connectors (callout 1).

Figure 5-523 Disconnect two connectors



6. Remove the control panel.

Figure 5-524 Remove the control panel



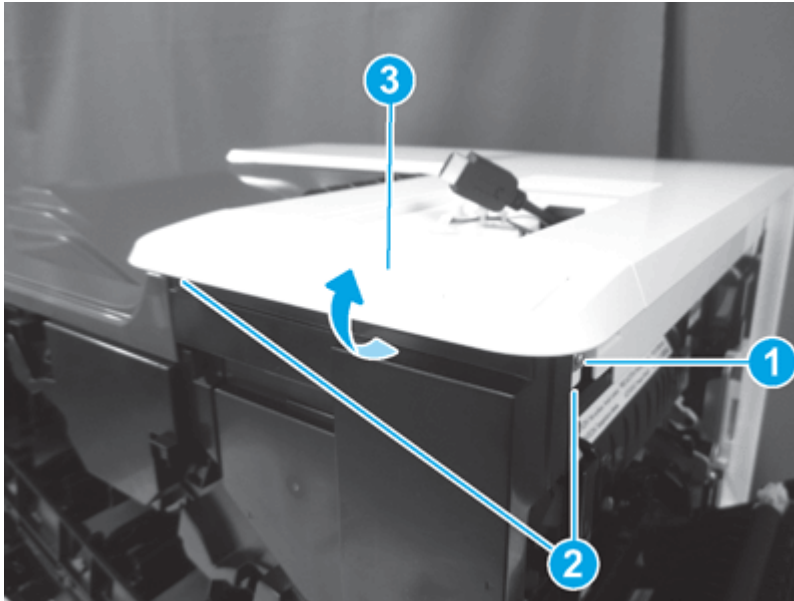
3. Remove the top cover (M652/M653/E65050/E65060/E65150/E65160)

Follow these steps to remove the top cover (M652/M653/E65050/E65060/E65150/E65160).

1. Open the following doors:
 - Front door
 - Left door

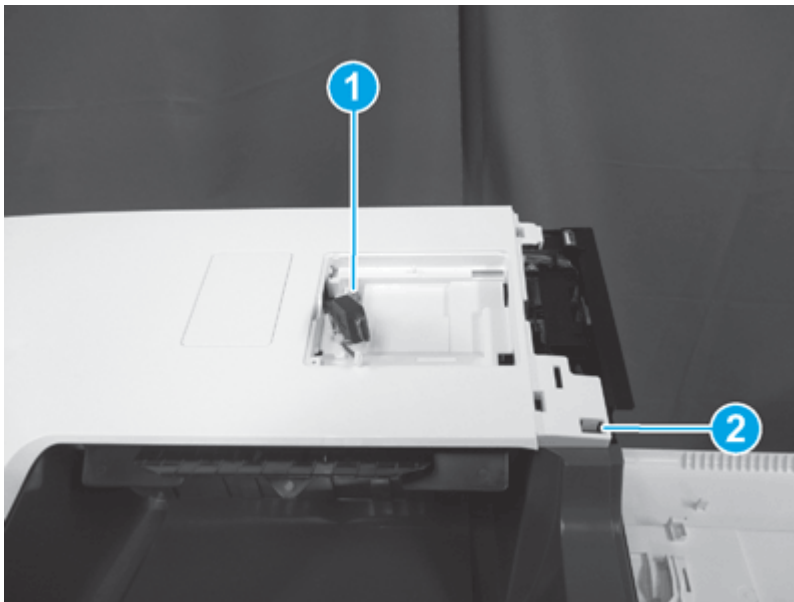
- Right door
2. Remove one screw (callout 1), release two tabs (callout 2), and then rotate the NFC cover (callout 3) up and away from the printer to remove it.

Figure 5-525 Remove the NFC cover



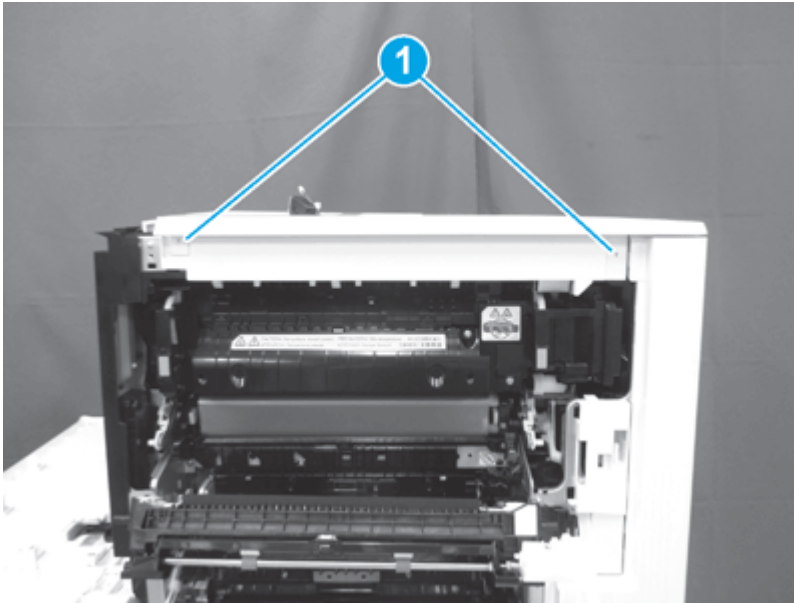
3. Remove one screw (callout 1), and then release one tab (callout 2).

Figure 5-526 Remove one screw and release one tab



4. Release two tabs (callout 1).

Figure 5-527 Release two tabs



5. Remove one screw (callout 1), release one tab (callout 2), release one tab behind the left door (callout 3), and then remove the top cover (callout 4).


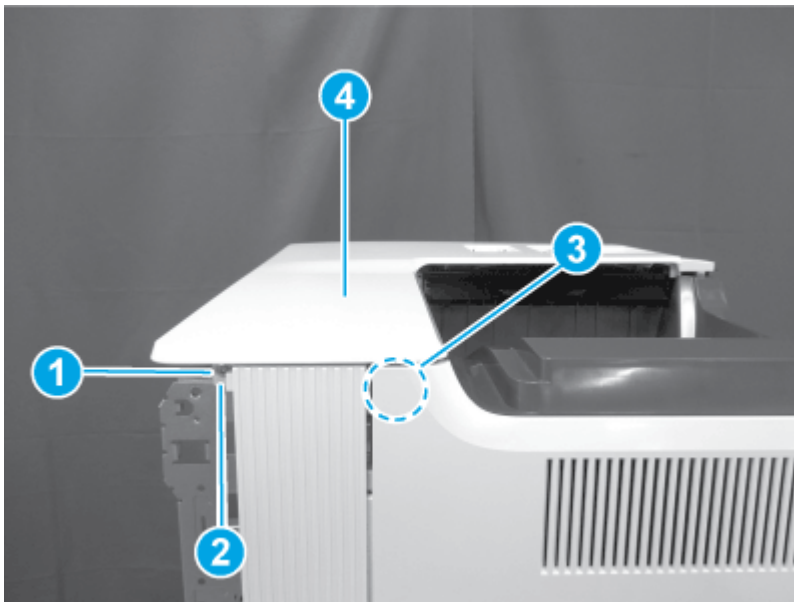
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-528 Remove the top cover



4. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Left rear cover

Learn how to remove and replace the left rear cover.



[View a video of how to remove and replace the left rear cover.](#)

Mean time to repair: 5 minutes

Service level: Basic



IMPORTANT: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Disconnect the power cable.



WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-41 Part information

Part number	Part description
RC4-6858-000CN	Left rear cover

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

No post service test is available for this assembly.

1. Remove the formatter cover

Follow these steps to remove the formatter cover.

- Unscrew two thumbscrews (callout 1), and then slide the formatter cover (callout 2) away from the printer to remove it.


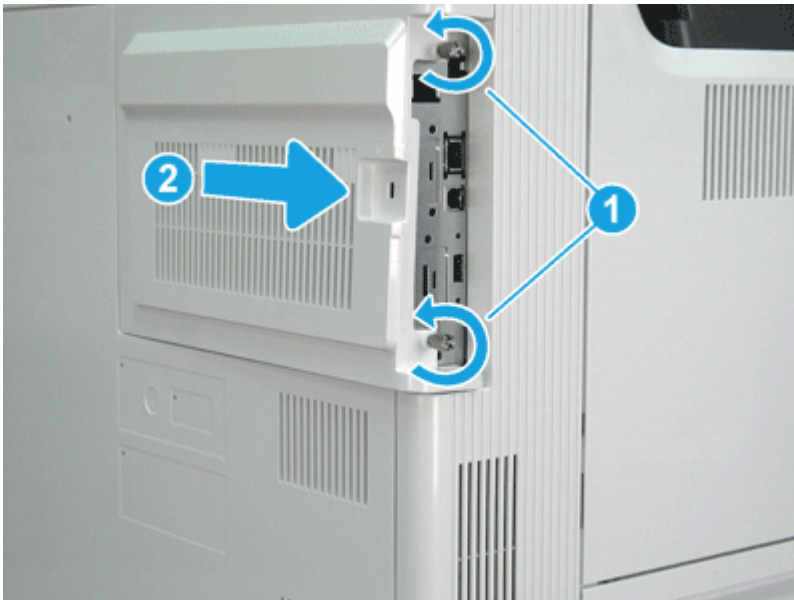
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-529 Remove the formatter cover

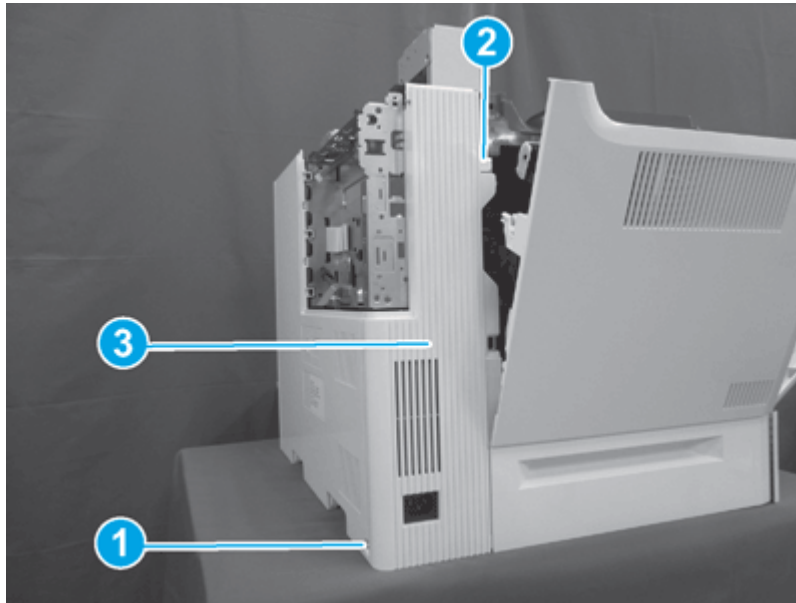


2. Remove the left rear cover

Follow these steps to remove the left rear cover.

- Open the left door. Remove one screw (callout 1), release one boss (callout 2), and then remove the left rear cover (callout 3).

Figure 5-530 Remove the left rear cover



3. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Output bin

learn how to remove and replace the output bin.



[View a video of how to remove and replace the output bin.](#)

Mean time to repair: 10 minutes

Service level: Intermediate



IMPORTANT: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Disconnect the power cable.

⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-42 Part information

Part number	Part description
RM2-1953-000CN	Output bin

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

No post service test is available for this assembly.

1. Remove the formatter cover

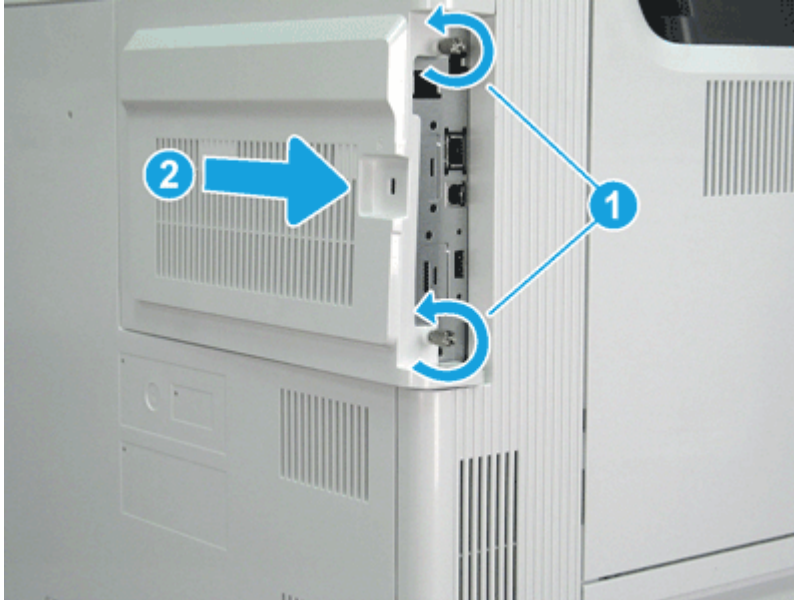
Follow these steps to remove the formatter cover.

- Unscrew two thumbscrews (callout 1), and then slide the formatter cover (callout 2) away from the printer to remove it.



TIP: Reverse the removal steps to install the assembly.

Figure 5-531 Remove the formatter cover



2. Remove the keyboard (MFP)

Follow these steps to remove the keyboard (MFP).

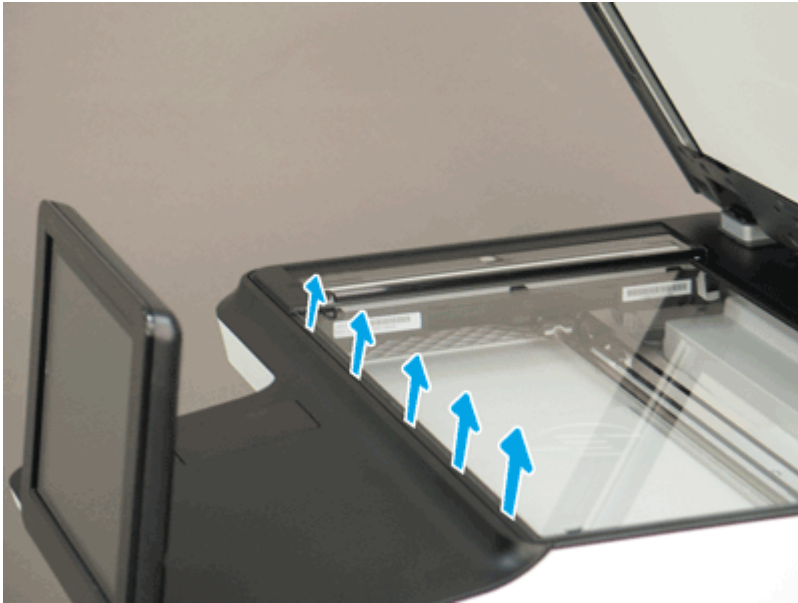
1. If the control panel is not fully tilted forward, tilt it forward now (callout 1) until it stops. Open the document feeder (callout 2).

Figure 5-532 Tilt the control panel and open the document feeder



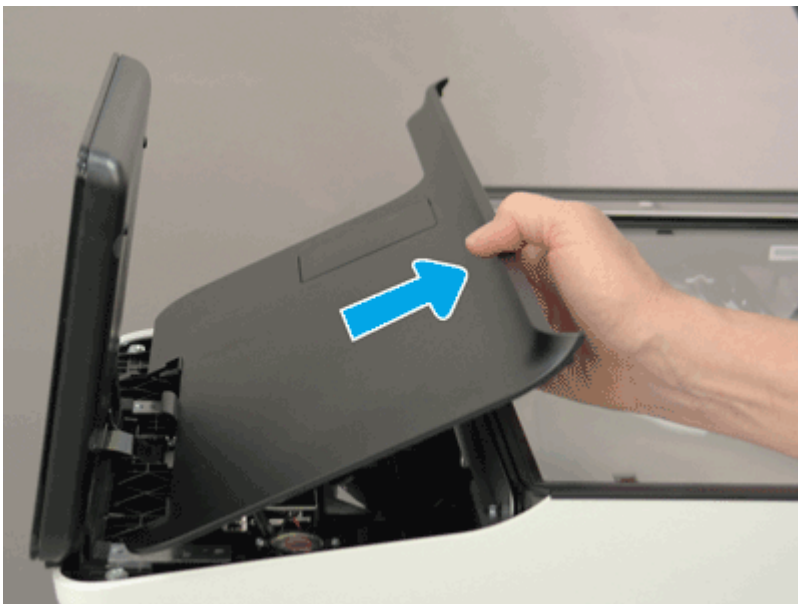
2. Beginning at the right side of the control-panel cover, carefully release five tabs along the top edge of the cover.

Figure 5-533 Release five tabs



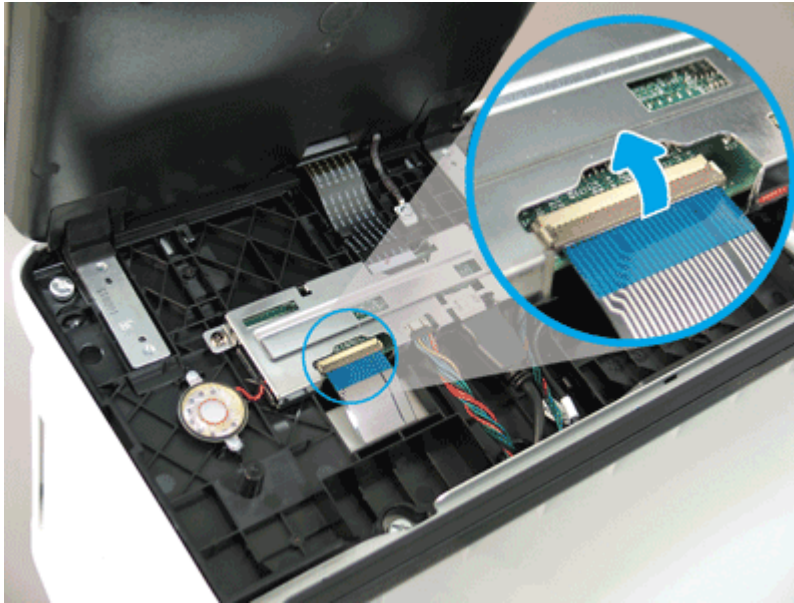
3. Continue to rotate the top edge of the cover away from the printer, and then remove the cover.

Figure 5-534 Remove the cover



4. Open the connector latch to release the keyboard flat cable.

Figure 5-535 Disconnect the keyboard flat cable



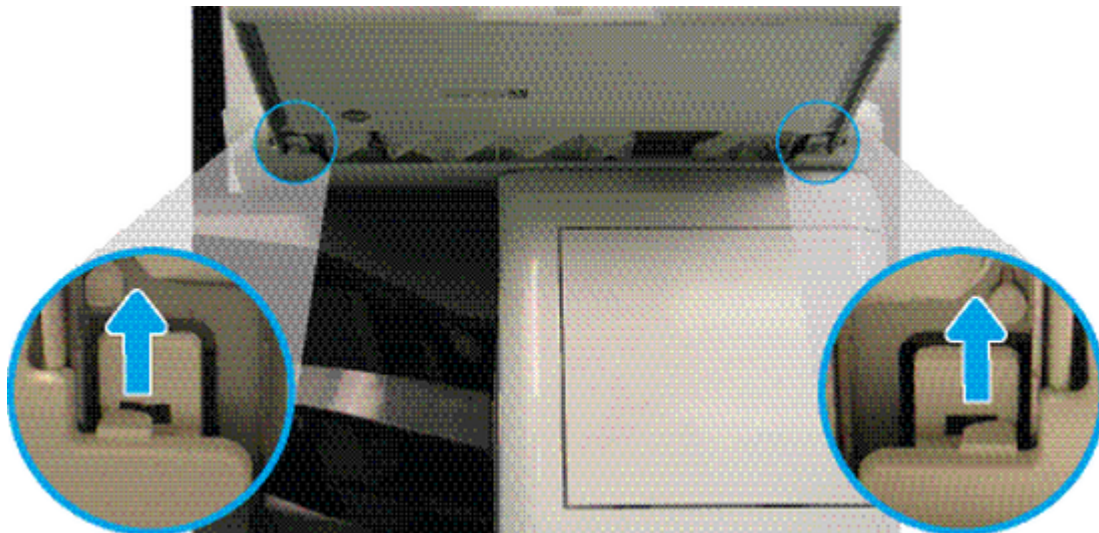
5. Slide the keyboard tray out until it stops.

Figure 5-536 Slide the keyboard tray out



6. Push up on the keyboard tray to release two tabs on the bottom of the tray, and then slide the tray toward you to disengage the tabs.

Figure 5-537 Release two tabs




7. Slide the keyboard tray all the way out of the printer to remove it.

Figure 5-538 Remove the keyboard



3. Remove the control panel (M681/M682/E67550/E67560/E67650/E67660)

Follow these steps to remove the control panel (M681/M682/E67550/E67560/E67650/E67660).

 **NOTE:** This step is for the M681/M682/E67550/E67560/E67650/E67660 printers. For the M652/M653/E65050/E65060/E65150/E65160 printers, skip this step.

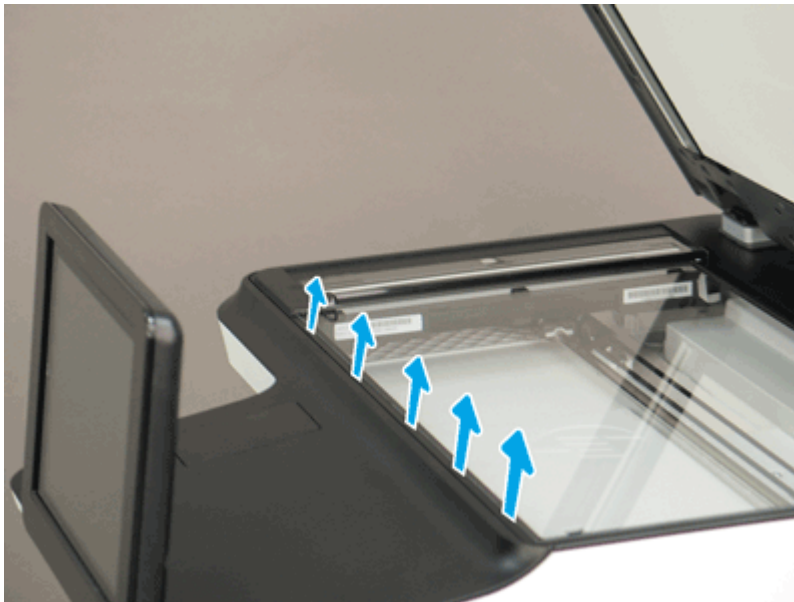
1. Tilt the control panel forward (callout 1), and then open the document feeder (callout 2).

Figure 5-539 Tilt the control panel forward and open the document feeder



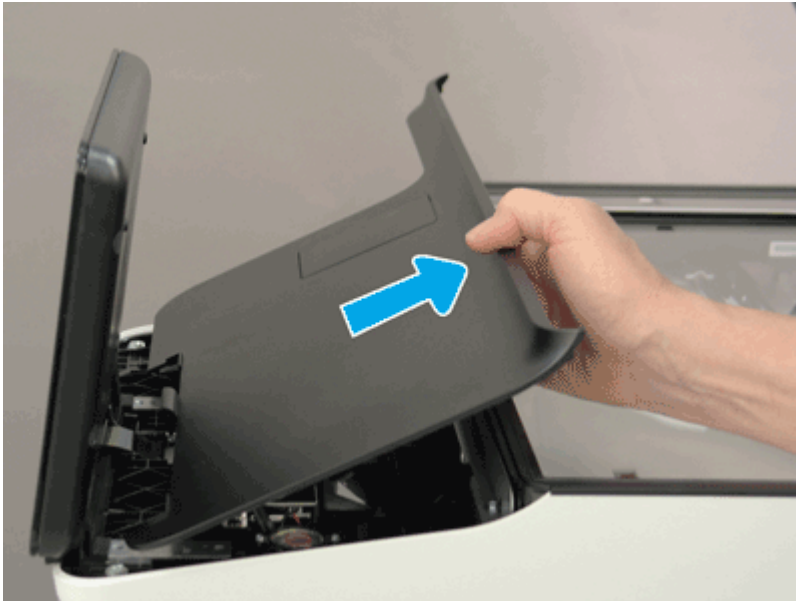
2. Beginning at the right side of the control-panel cover, carefully release five tabs along the top edge of the cover.

Figure 5-540 Release five tabs



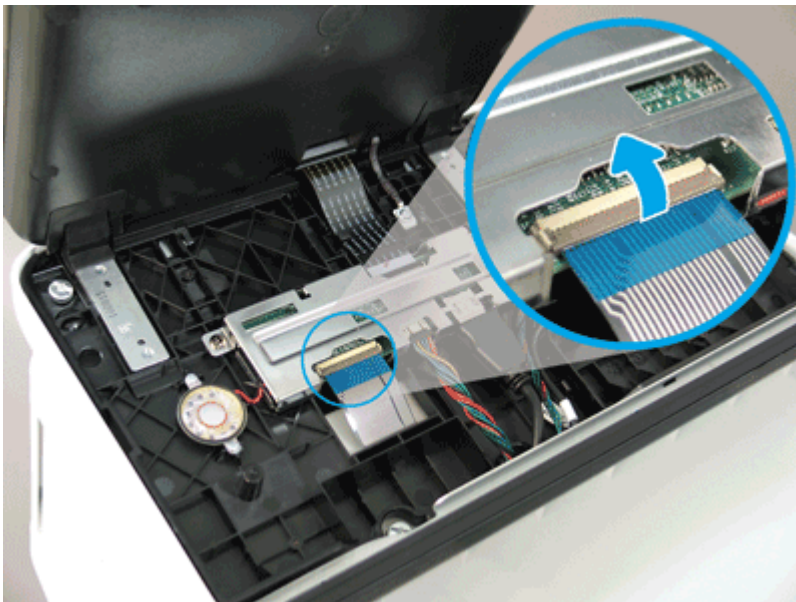
3. Continue to rotate the top edge of the cover away from the printer, and then remove the cover.

Figure 5-541 Remove the cover



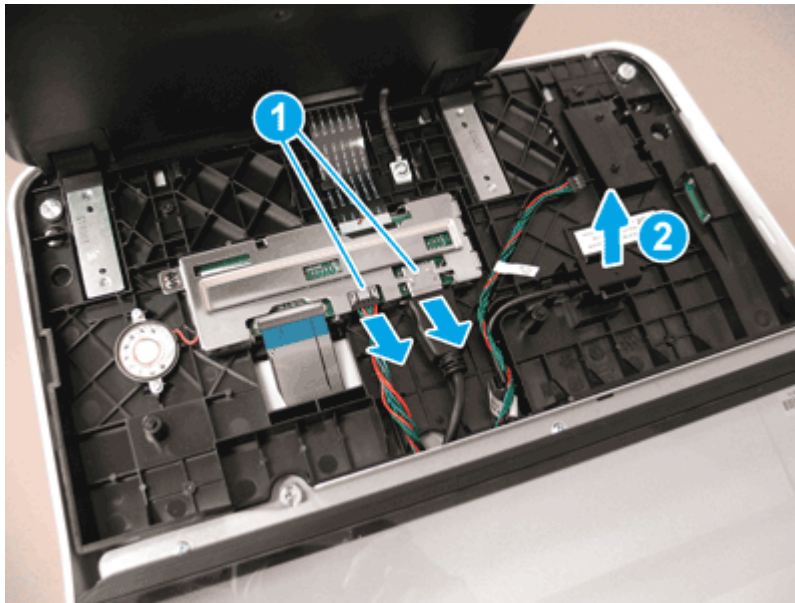
4. **Keyboard models only:** Lift up on the small, gray gate to release the keyboard flat cable.

Figure 5-542 Disconnect the keyboard flat cable (keyboard models only)



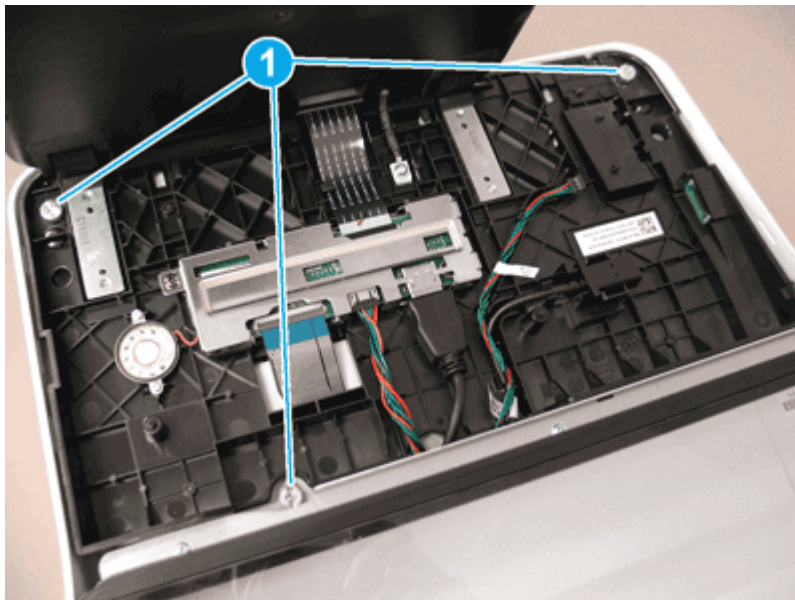
5. Disconnect two connectors (callout 1), and then release the USB cable (callout 2) from the holder.

Figure 5-543 Disconnect connectors



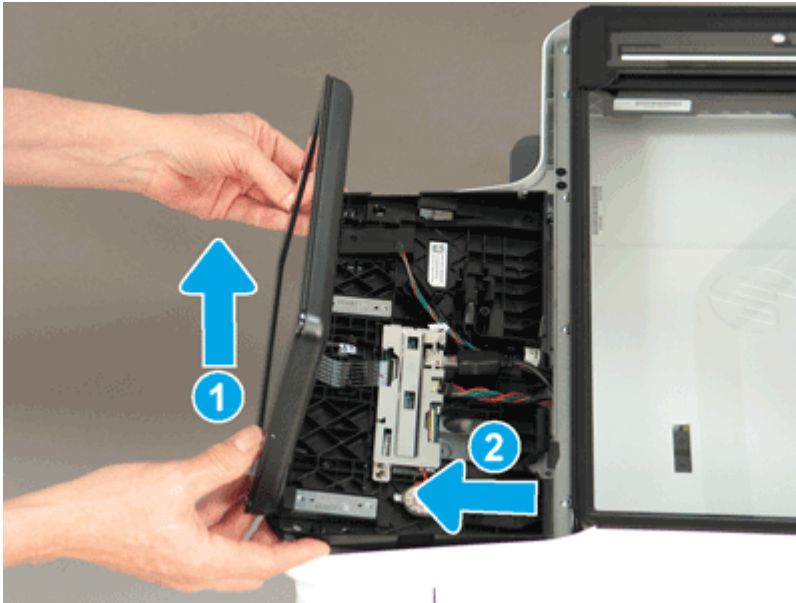
6. Remove three thumbscrews (callout 1).

Figure 5-544 Remove three thumbscrews



7. Lift the front of the control panel off of the printer (callout 1), and then slide it toward the front of the printer (callout 2) to remove it.

Figure 5-545 Remove the control panel

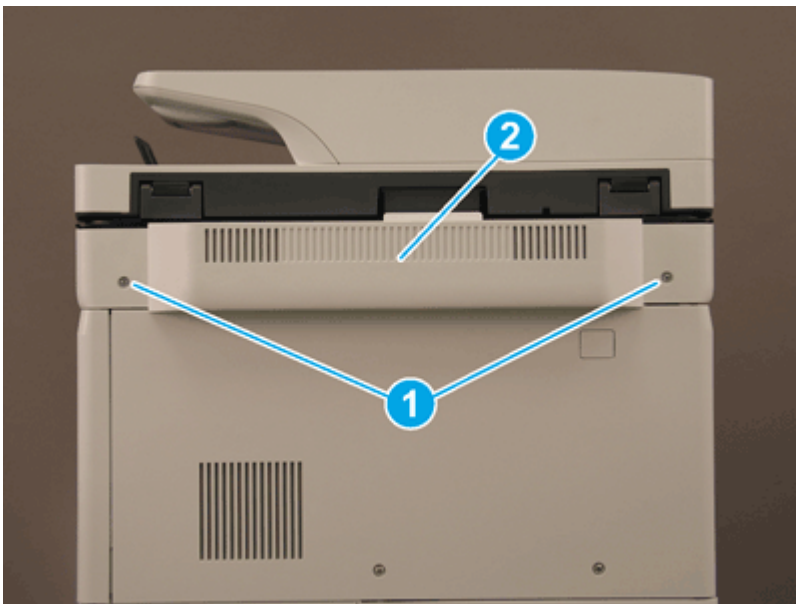


4. Remove the document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660)

Follow these steps to remove the document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660).

1. Remove two screws (callout 1), and then remove the scanner control board (SCB) cover (callout 2).

Figure 5-546 Remove the SCB cover



2. Flow M681z/Flow M682z/Flow E67660z models only: Do the following:

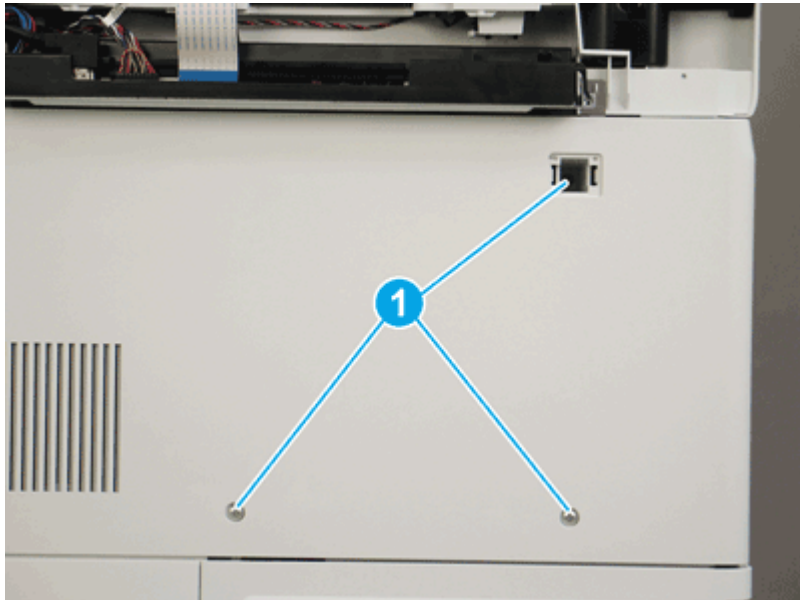
- a. At the back of the printer, remove one small cover (callout 1).

Figure 5-547 Remove the small cover



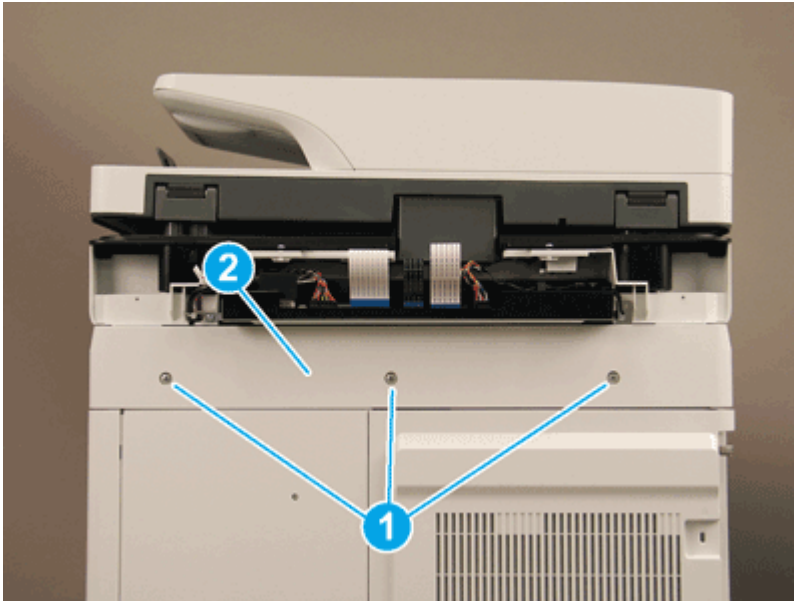
- b. Remove three screws (callout 1), and then remove the stapler/stacker rear cover (callout 2).

Figure 5-548 Remove the stapler/stacker rear cover



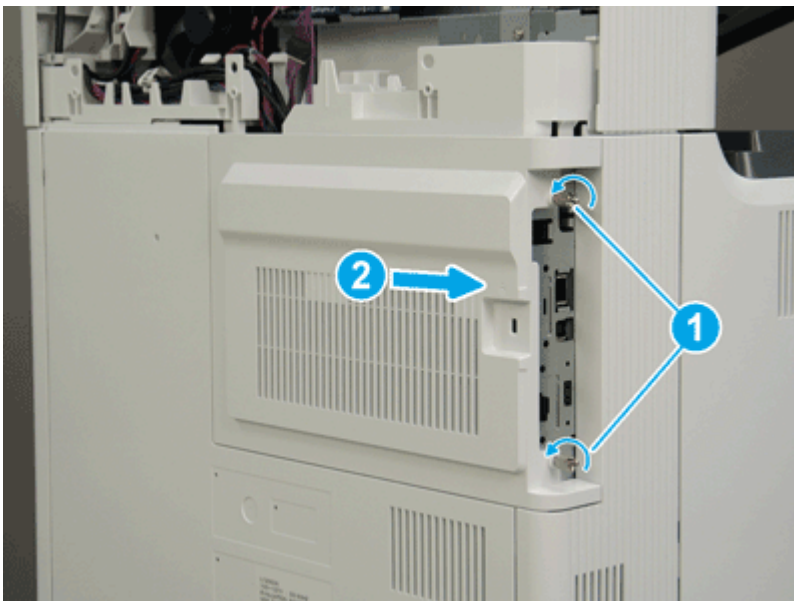
3. **M681dh/M681f/M682dh/Flow M681f/E67650dh models only:** Remove three screws (callout 1), and then remove the upper rear cover (callout 2).

Figure 5-549 Remove the upper rear cover



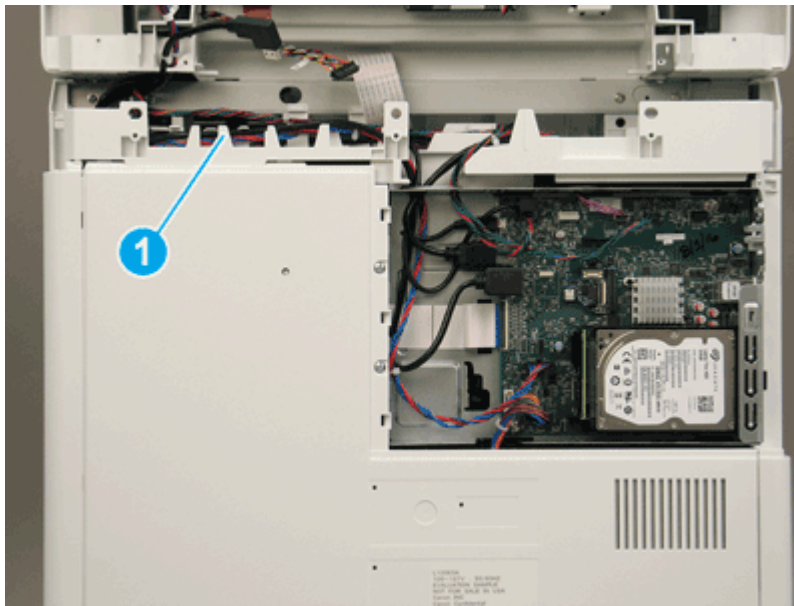
4. Loosen two thumbscrews (callout 1), and then slide the formatter cover away from the printer to remove it (callout 2).

Figure 5-550 Remove the formatter cover



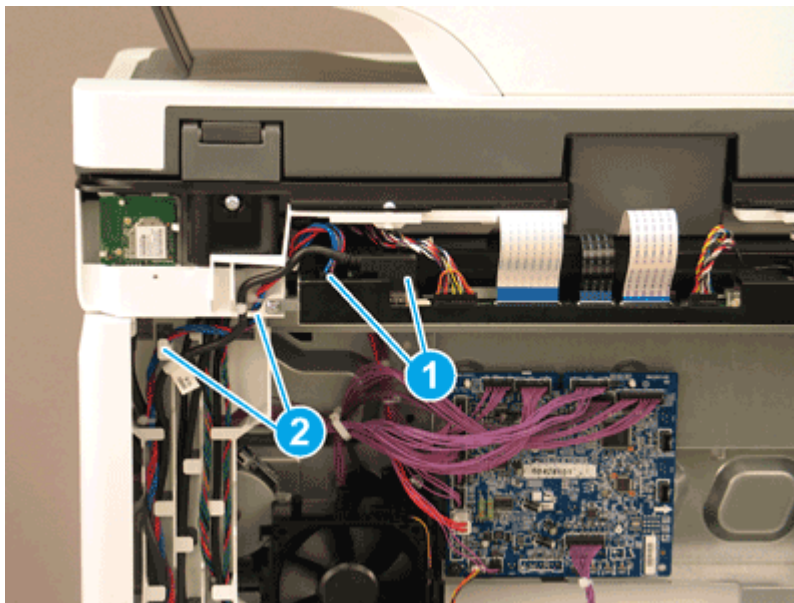
5. The remaining figures in this procedure show the Flow M682z model. While the cable routing (callout 1) on the M681dh, M681f, M682dh, Flow M681f, and E67650dh models is different, the removal procedures are the same for all models.

Figure 5-551 Cable routing for M681dh, M681f, Flow M681f, and E67650dh



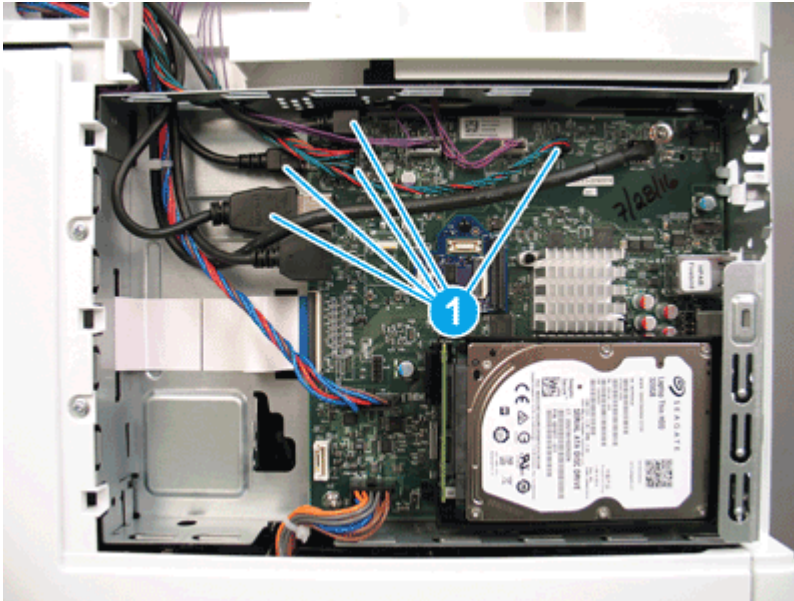
6. Disconnect two connectors (callout 1) on the SCB, and then release the cables from the guides (callout 2).

Figure 5-552 Disconnect two connectors



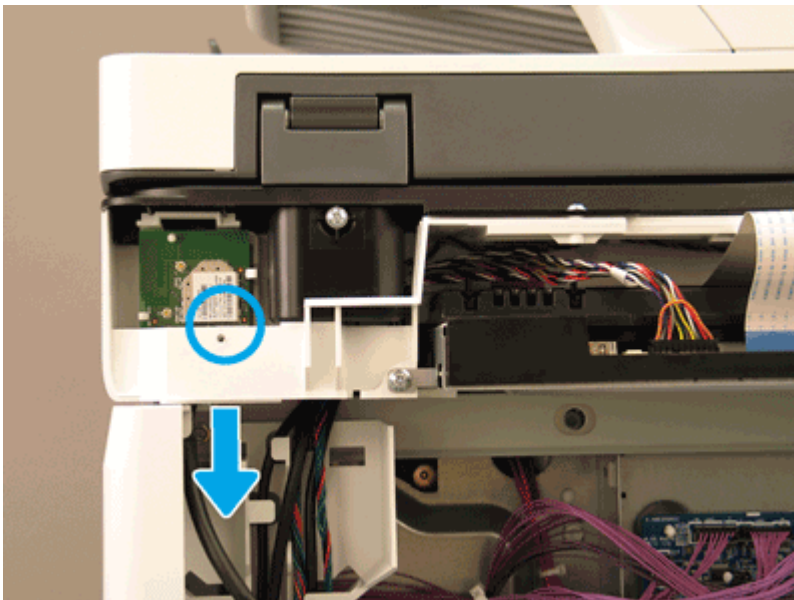
7. Disconnect five connectors on the formatter (callout 1).

Figure 5-553 Disconnect five connectors



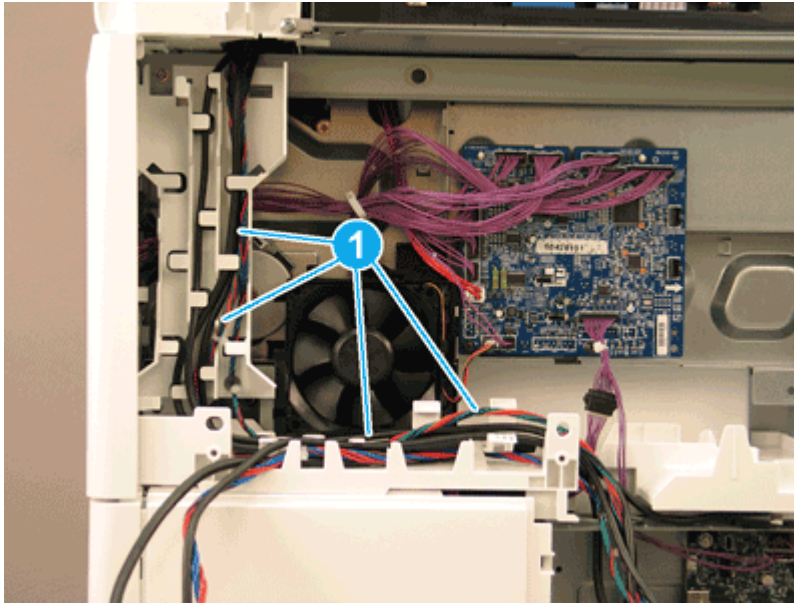
8. **Flow M682z only:** Gently pull down on the cable to disconnect the wireless connector.

Figure 5-554 Disconnect the wireless connector



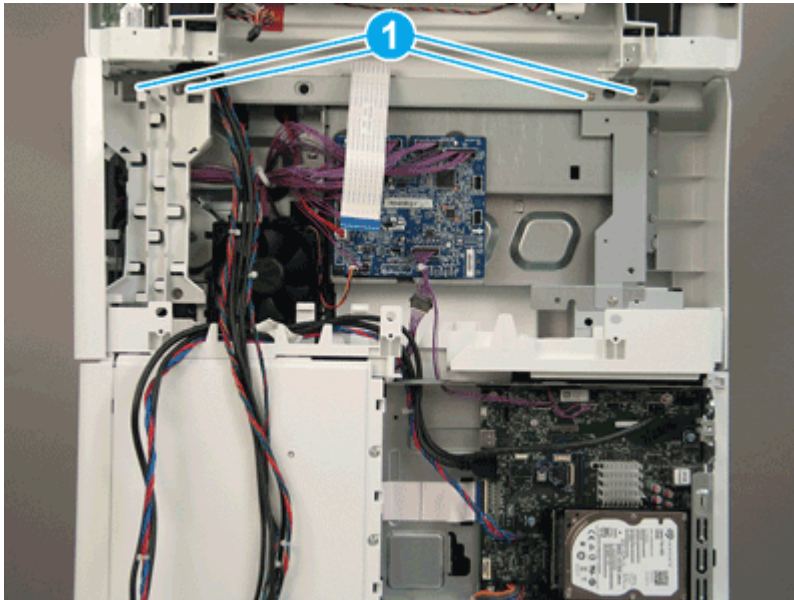
9. Release all of the cables from the cable guides (callout 1).

Figure 5-555 Release the cables



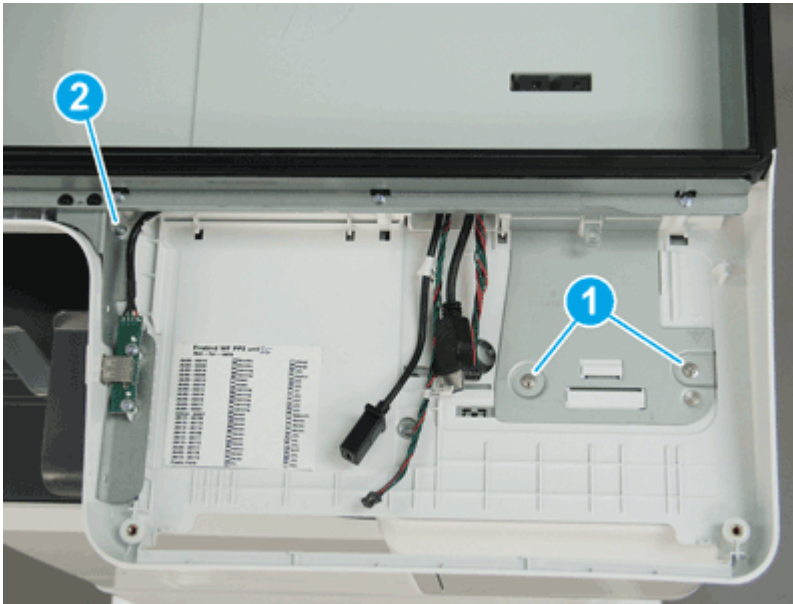
10. At the back of the printer, remove four screws (callout 1).

Figure 5-556 Remove four screws



11. On the top of the image scanner assembly, at the location where the control panel was removed, remove two sheet metal screws (callout 1). **Flow M681z/Flow M682z/Flow E67660z only:** Remove one self-tapping screw (callout 2).

Figure 5-557 Remove three screws



12. Lift the document feeder and image scanner off of the printer to remove them.

Figure 5-558 Remove the document feeder and image scanner



5. Remove the stapler/stacker (Flow M681z/Flow M682z/Flow E67660z)

Follow these steps to remove the stapler/stacker (Flow M681z/Flow M682z/Flow E67660z).

This step is for the M681/M682/E67550/E67560/E67650/E67660 printers. For the M652/M653/E65050/E65060/E65150/E65160 printers, skip this step.

1. Open the front door.

Figure 5-559 Open the front door



2. Open the stapler door.

Figure 5-560 Open the stapler door



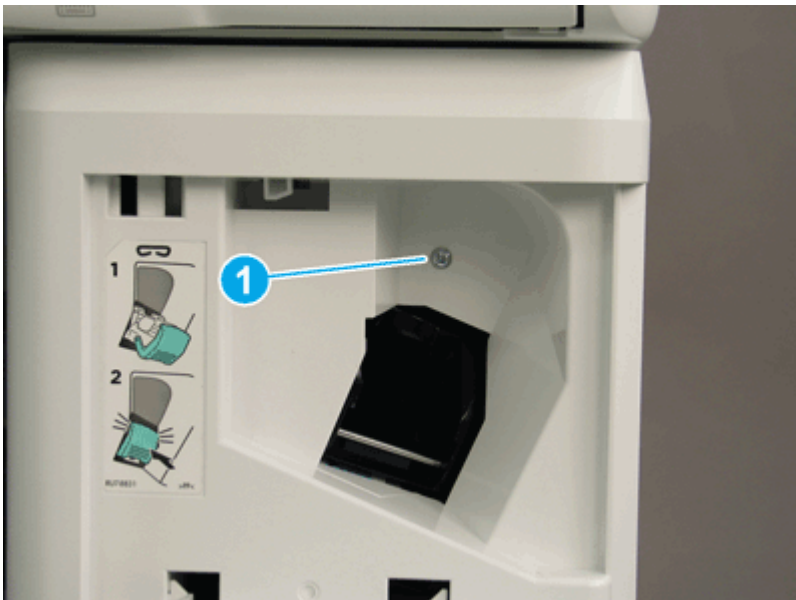
3. Release the latch, and then remove the staple cartridge.

Figure 5-561 Remove the staple cartridge



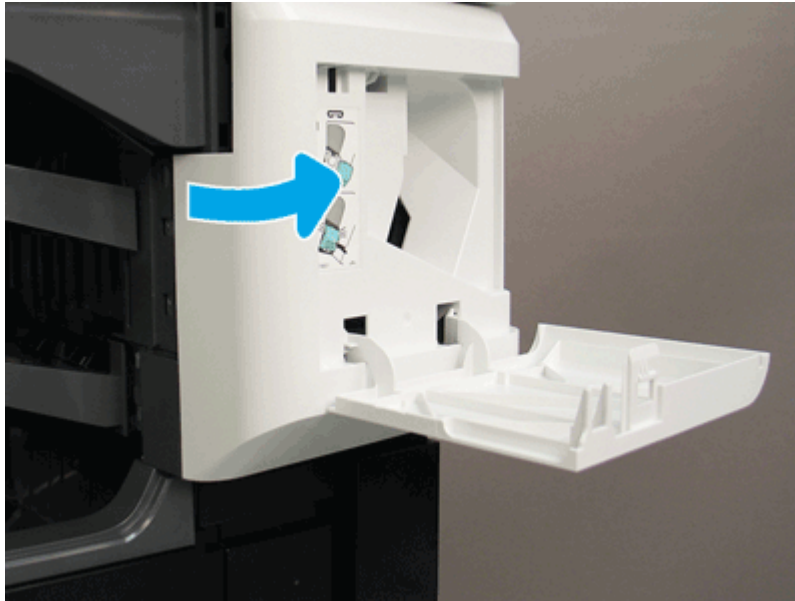
4. Remove one screw (callout 1).

Figure 5-562 Remove one screw



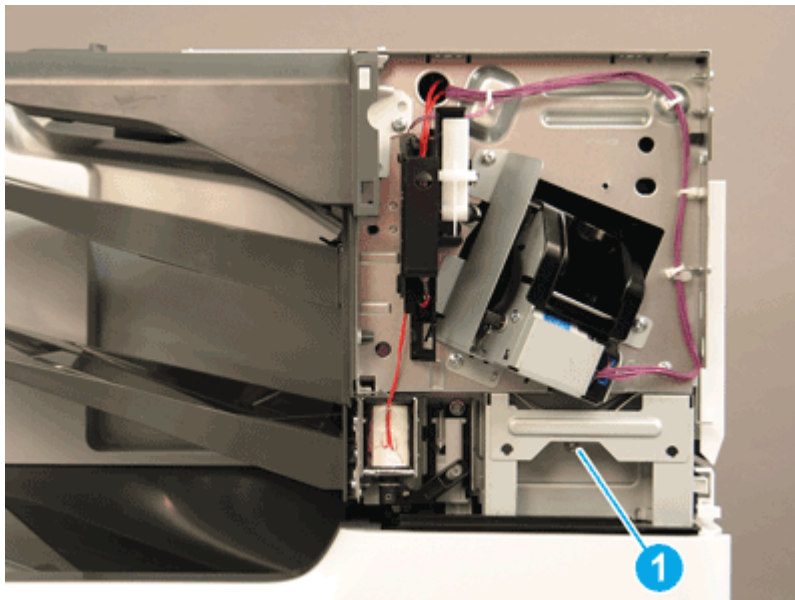
5. Rotate the stapler cover to the right to remove it.

Figure 5-563 Remove the stapler cover



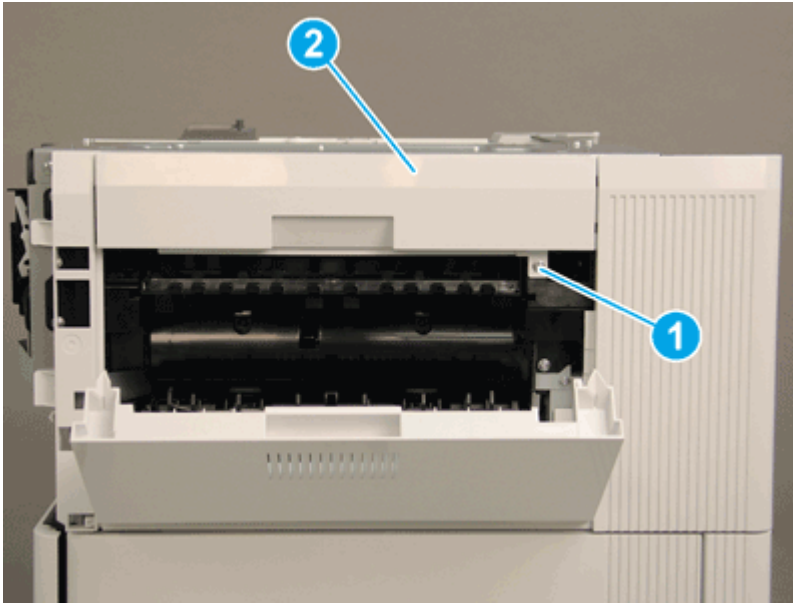
6. Remove one screw (callout 1).

Figure 5-564 Remove one screw



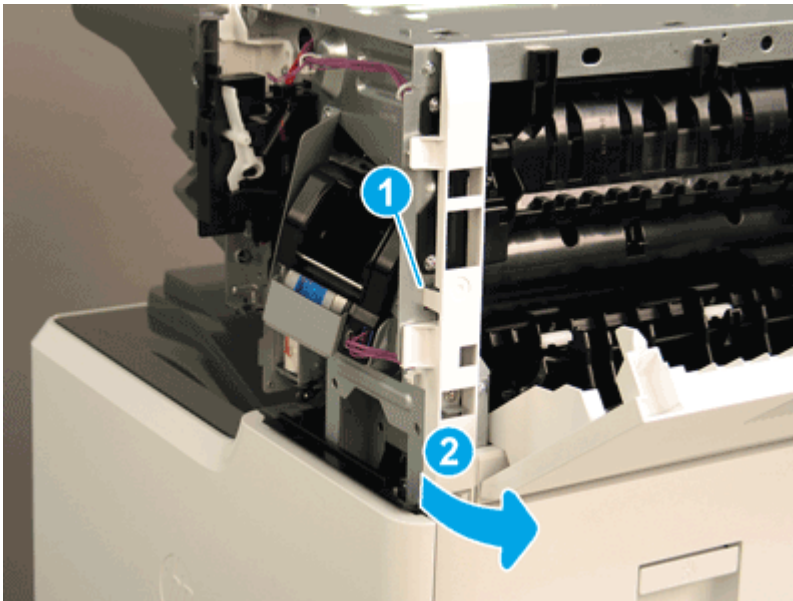
7. At the right side of the printer, remove one screw (callout 1), and then remove the stapler/stacker right upper cover (callout 2).

Figure 5-565 Remove the stapler/stacker right upper cover



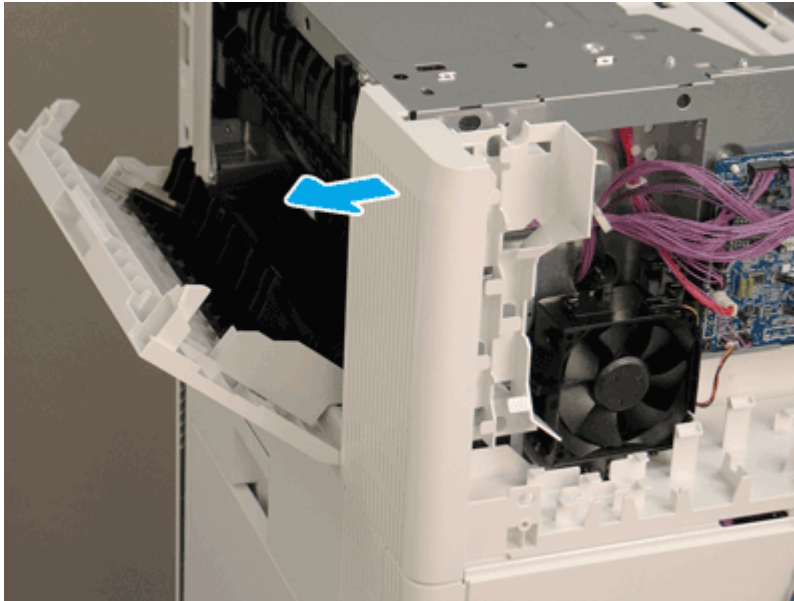
8. Release one tab (callout 1), and then rotate the stapler rear cover away from the printer (callout 2) to remove it.

Figure 5-566 Remove the stapler rear cover



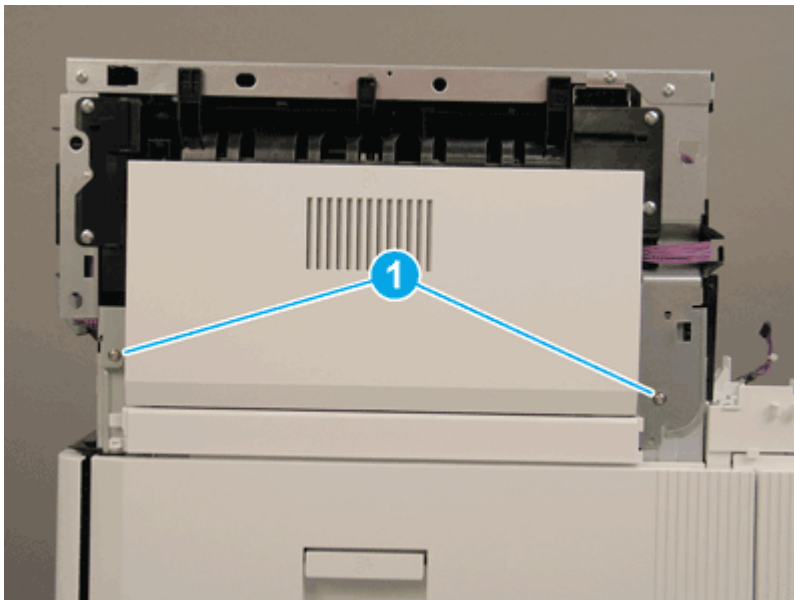
9. Pull the stapler/stacker rear corner cover away from the printer to remove it.

Figure 5-567 Remove the stapler/stacker rear corner cover



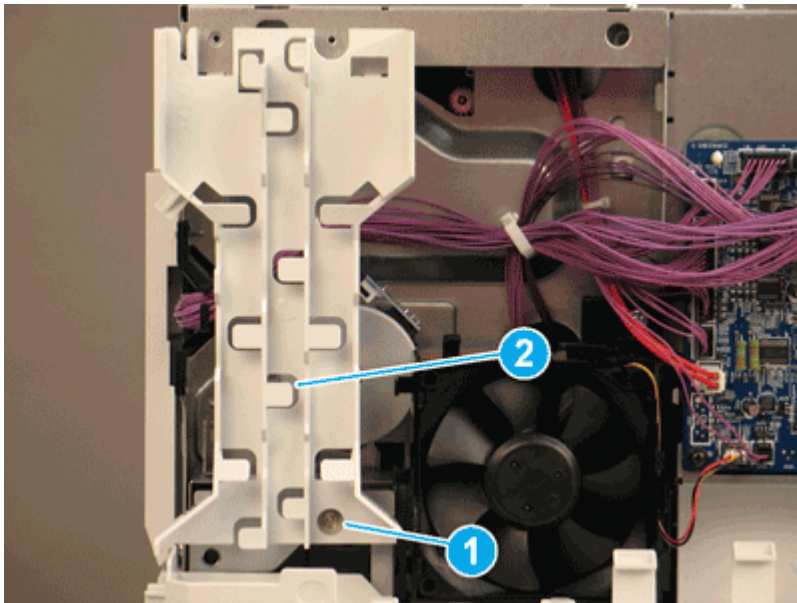
10. Remove two screws (callout 1).

Figure 5-568 Remove two screws



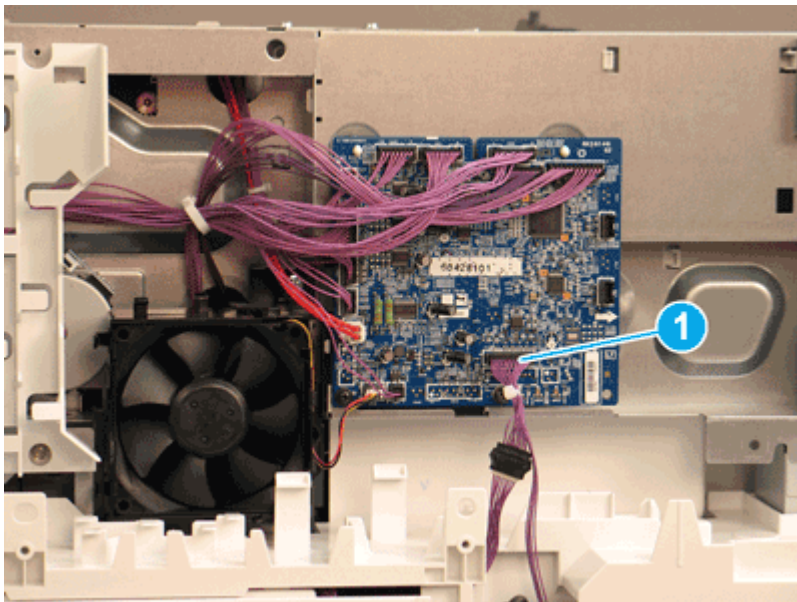
11. At the back of the printer, remove one screw (callout 1), and then remove the cable guide (callout 2).

Figure 5-569 Remove the cable guide



12. Disconnect one connector on the stapler/stacker PCA (callout 1).

Figure 5-570 Disconnect one connector

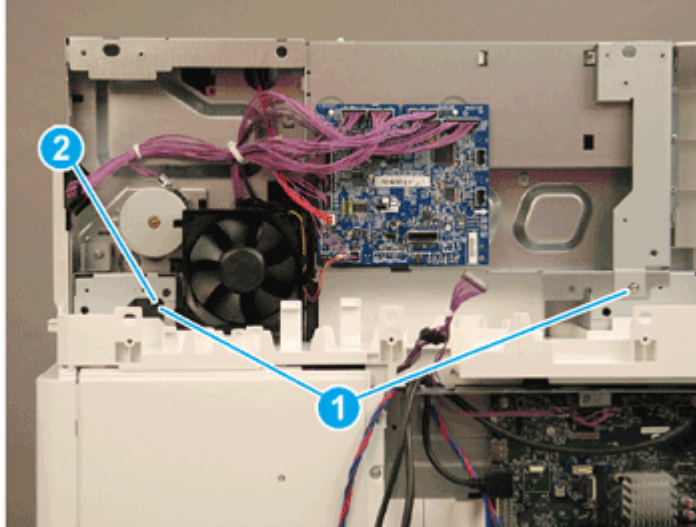


13. Remove two screws (callout 1).



TIP: The screw on the left (callout 2) is longer than the other screw. Make sure that this screw is installed in the correct location.

Figure 5-571 Remove two screws



14. Lift the stapler/stacker away from the printer.


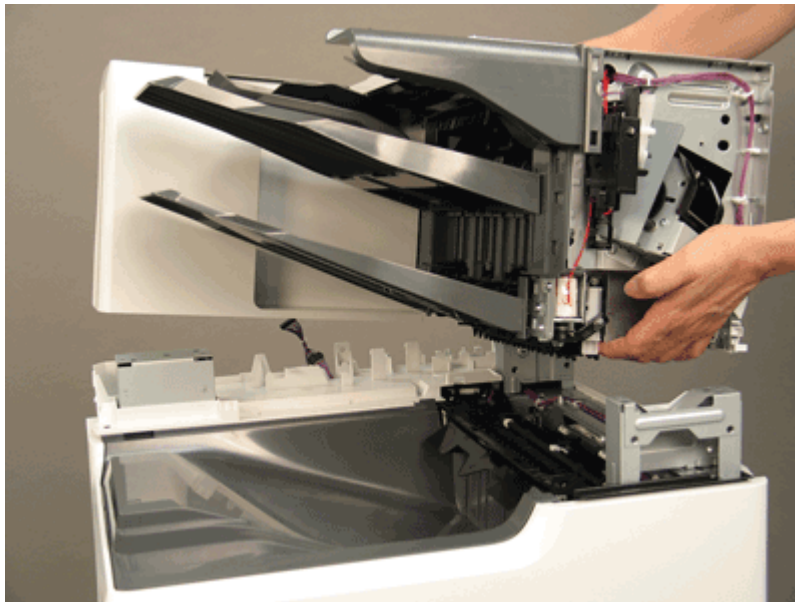
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-572 Remove the stapler/stacker



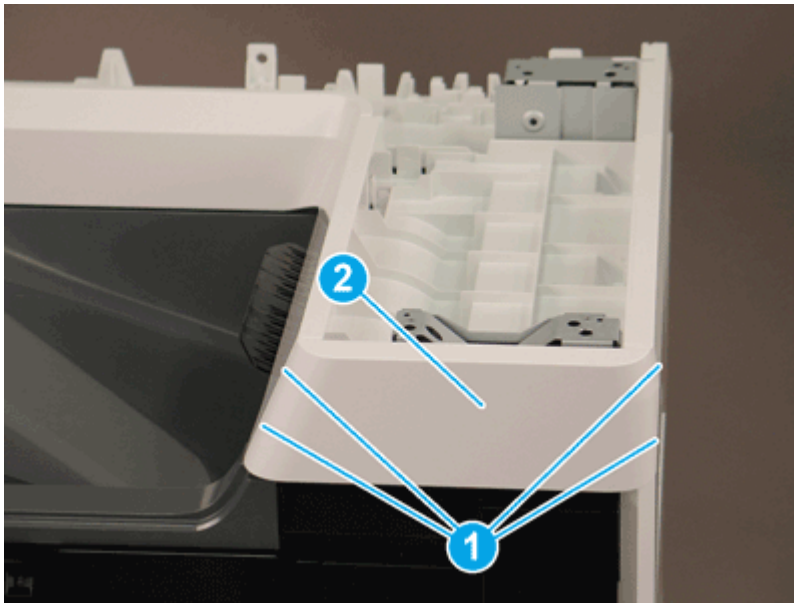
6. Remove the face-down front cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the face-down front cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

1. Open the front door.

2. Release two tabs on each side (callout 1), and then remove the face-down front cover (callout 2).

Figure 5-573 Remove the face-down front cover

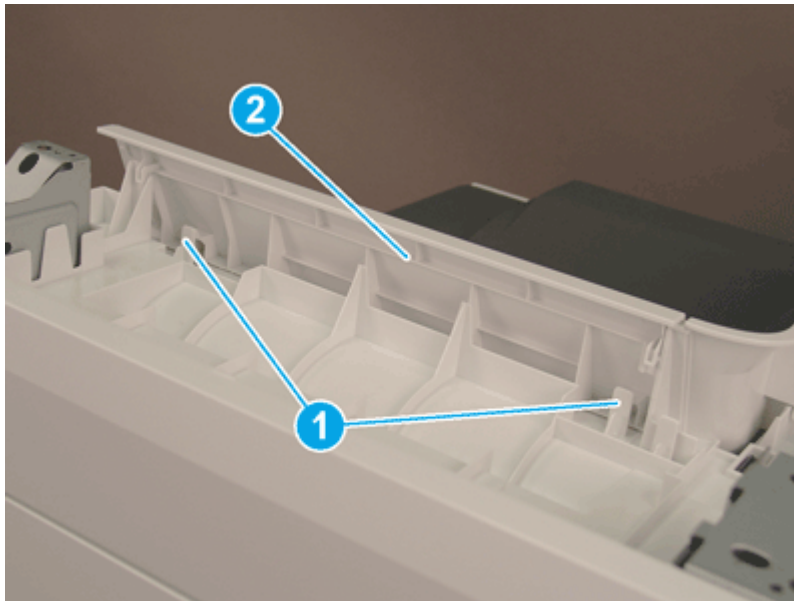


7. Remove the top cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the top cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

- Release two tabs (callout 1), and then remove the top cover (callout 2).

Figure 5-574 Remove the top cover



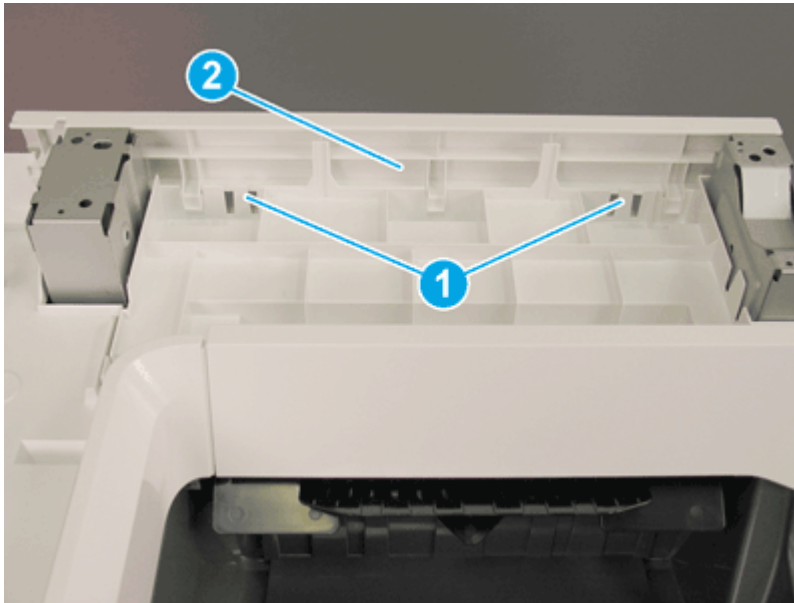
8. Remove the right cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the right cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

This step is for the M681/M682/E67550/E67560/E67650/E67660 printers. For the M652/M653/E65050/E65060/E65150/E65160 printers, skip this step.

- Release two tabs (callout 1), and then remove the right cover (callout 2).

Figure 5-575 Remove the right cover



9. Remove the front cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the front cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

- Release two tabs (callout 1), and then remove the front cover (callout 2).


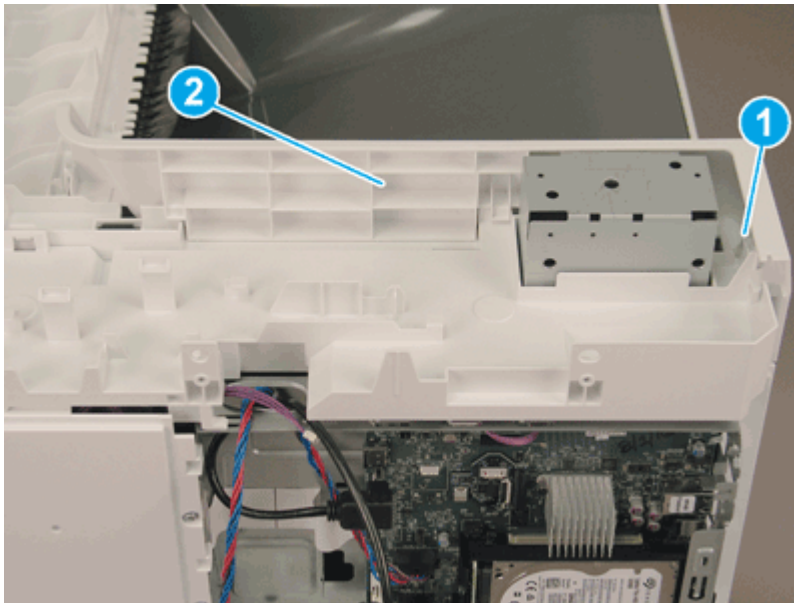
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-576 Remove the front cover



10. Remove the rear upper cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the rear upper cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

- Remove two screws (callout 1), and then remove the rear upper cover (callout 2).


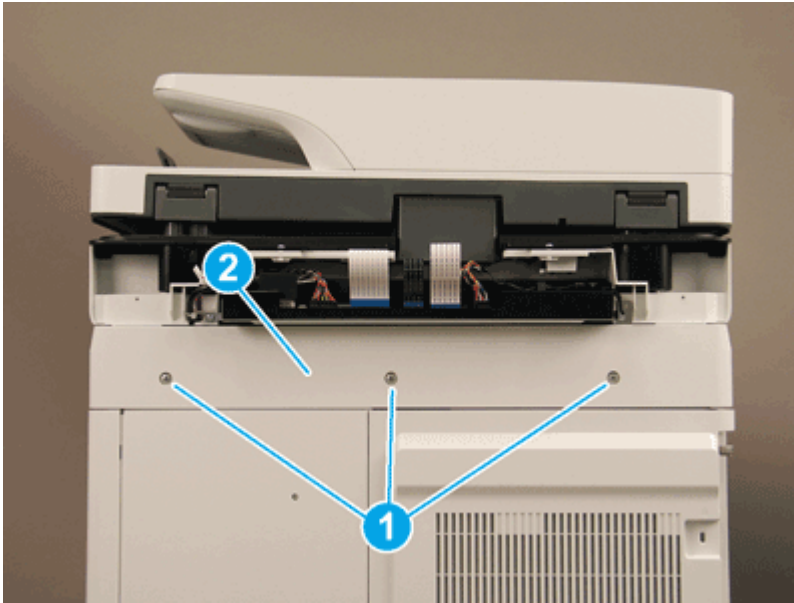
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-577 Remove the rear upper cover



11. Remove the rear upper cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the rear upper cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

- Remove two screws (callout 1), and then remove the rear upper cover (callout 2).


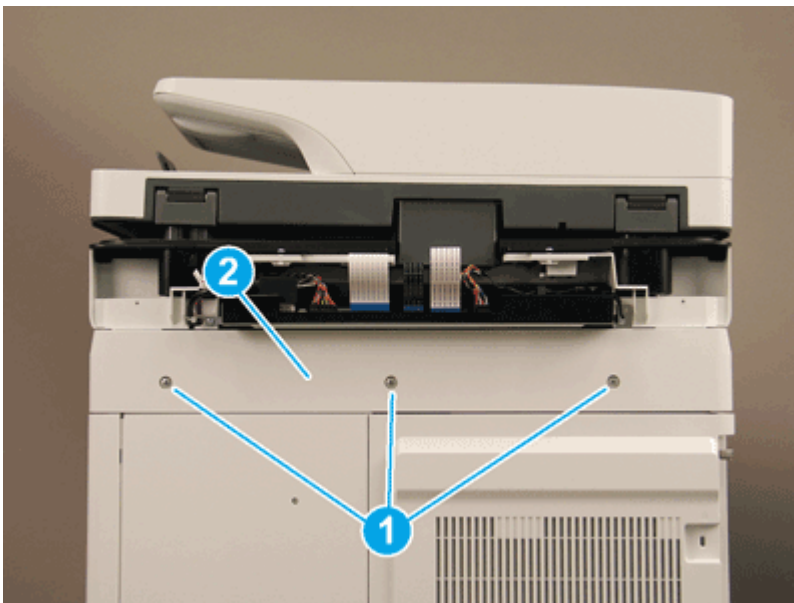

 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-578 Remove the rear upper cover



12. Remove the face-down cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the face-down cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

 **NOTE:** This step is for the M681/M682/E67550/E67560/E67650/E67660 printers. For the M652/M653/E65050/E65060/E65150/E65160 printers, skip this step.

- Remove two screws (callout 1), release three tabs (callout 2), and then remove the face-down cover (callout 3).


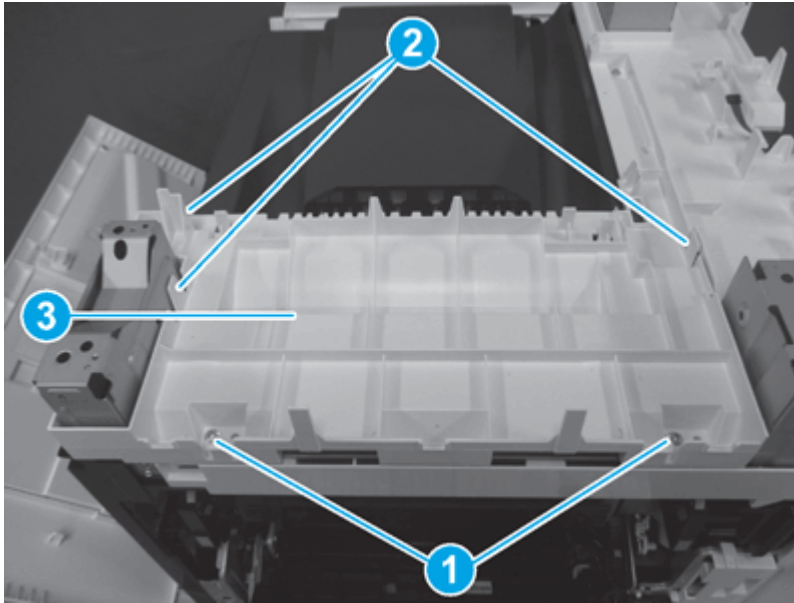
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-579 Remove two screws and the face-down cover



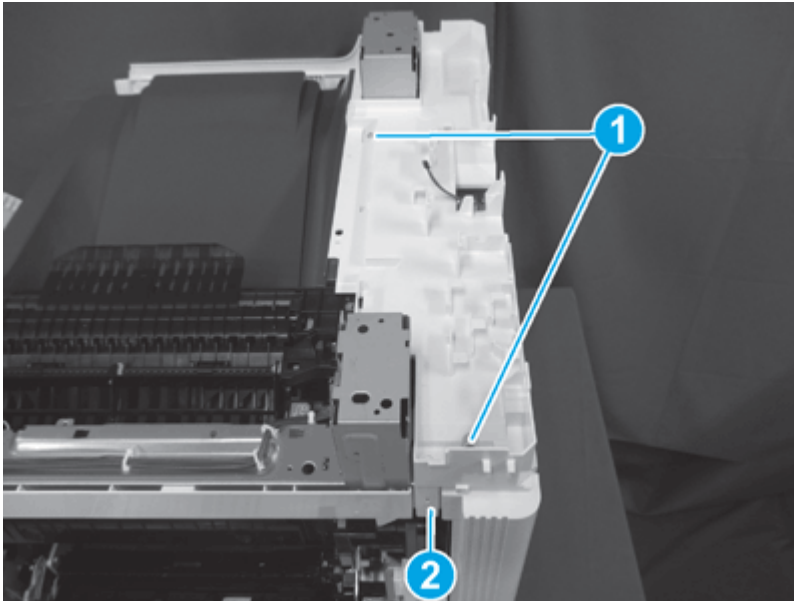
13. Remove the main cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the main cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

This step is for the M681/M682/E67550/E67560/E67650/E67660 printers. For the M652/M653/E65050/E65060/E65150/E65160 printers, skip this step.

1. Remove two screws (callout 1), and then release one tab (callout 2).

Figure 5-580 Remove two screws and release one tab



2. Remove one screw (callout 1), release two tabs (callout 2), and then remove the main cover (callout 3).


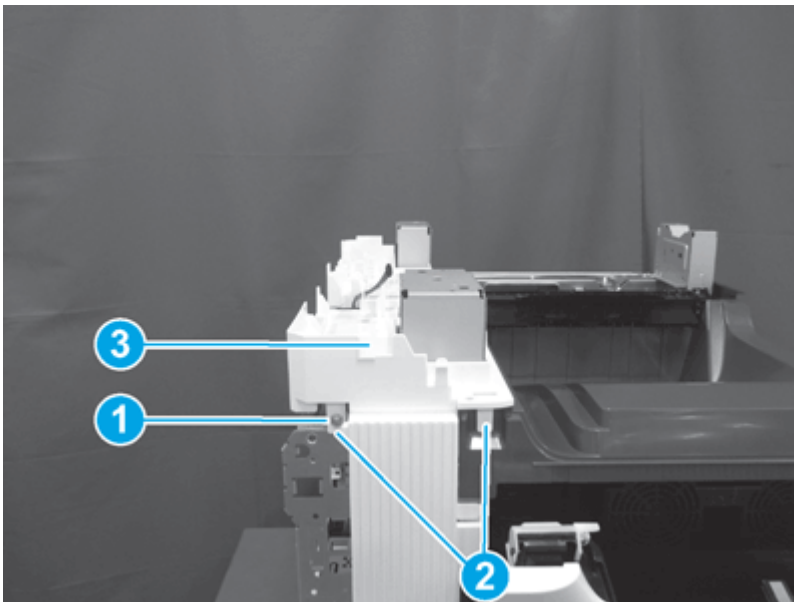

 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-581 Remove one screw and the main cover



14. Remove the control panel (M652/M653/E65050/E65060/E65150/E65160)

Follow these steps to remove the control panel (M652/M653/E65050/E65060/E65150/E65160).

 **NOTE:** This step is for the M652/M653/E65050/E65060/E65150/E65160 printers. For the M681/M682/E67550/E67560/E67650/E67660 printers, skip this step.

The figures below show the touchscreen control panel. The procedure is also correct for the keypad control panel.

1. Tilt the control panel to the fully raised position.

Figure 5-582 Tilt the control panel up



2. Use a coin to release the cover, and then remove the cover.

Figure 5-583 Remove the cover



3. Remove one thumbscrew (callout 1)



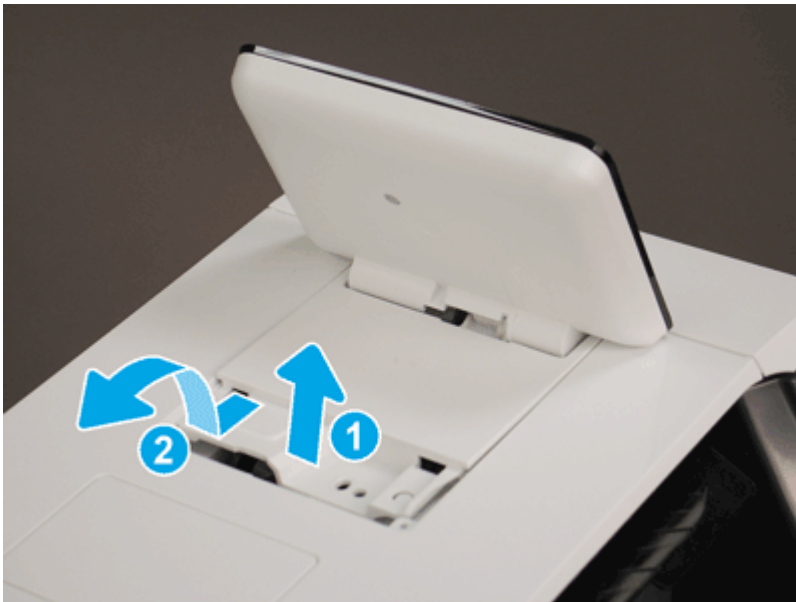
NOTE: Store the screw in a secure place where it cannot fall down into the printer.

Figure 5-584 Remove one thumbscrew



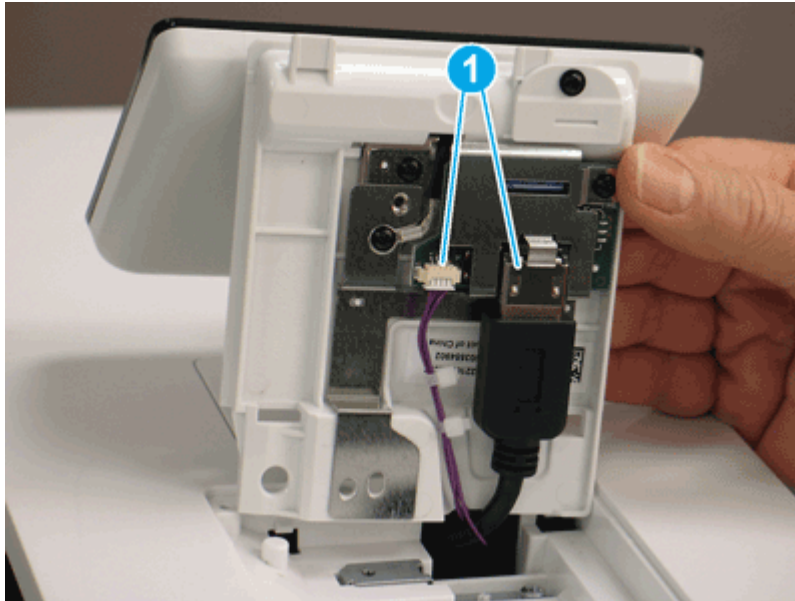
4. Lift the back edge of the control panel up (callout 1), and then slide it toward the back of the printer (callout 2) to release it.

Figure 5-585 Release the control panel



5. Turn the control panel over to gain access to the bottom side. Disconnect two connectors (callout 1).

Figure 5-586 Disconnect two connectors



6. Remove the control panel.

Figure 5-587 Remove the control panel



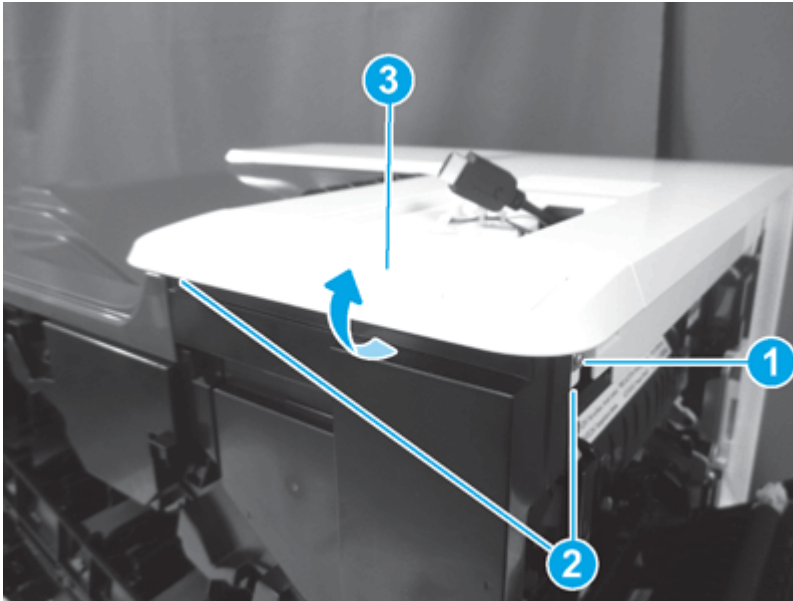
15. Remove the top cover (M652/M653/E65050/E65060/E65150/E65160)

Follow these steps to remove the top cover (M652/M653/E65050/E65060/E65150/E65160).

1. Open the following doors:
 - Front door
 - Left door

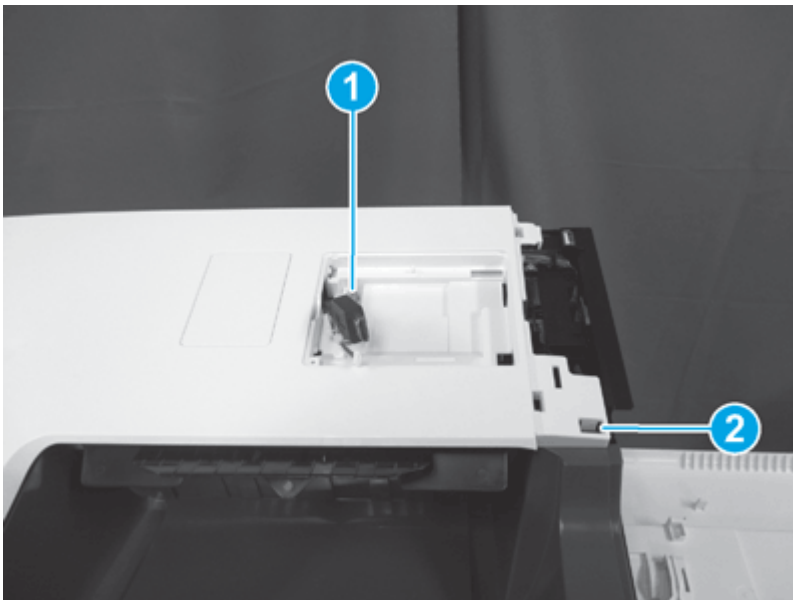
- Right door
2. Remove one screw (callout 1), release two tabs (callout 2), and then rotate the NFC cover (callout 3) up and away from the printer to remove it.

Figure 5-588 Remove the NFC cover



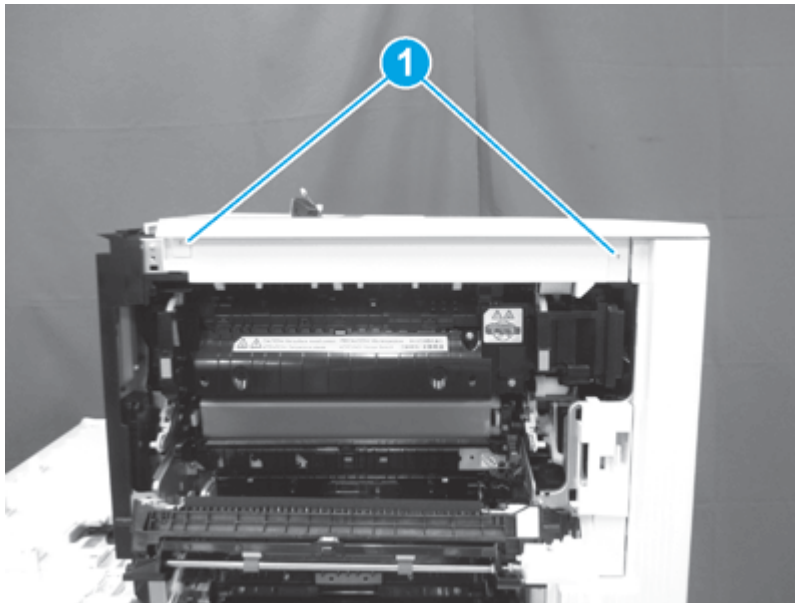
3. Remove one screw (callout 1), and then release one tab (callout 2).

Figure 5-589 Remove one screw and release one tab



4. Release two tabs (callout 1).

Figure 5-590 Release two tabs



5. Remove one screw (callout 1), release one tab (callout 2), release one tab behind the left door (callout 3), and then remove the top cover (callout 4).


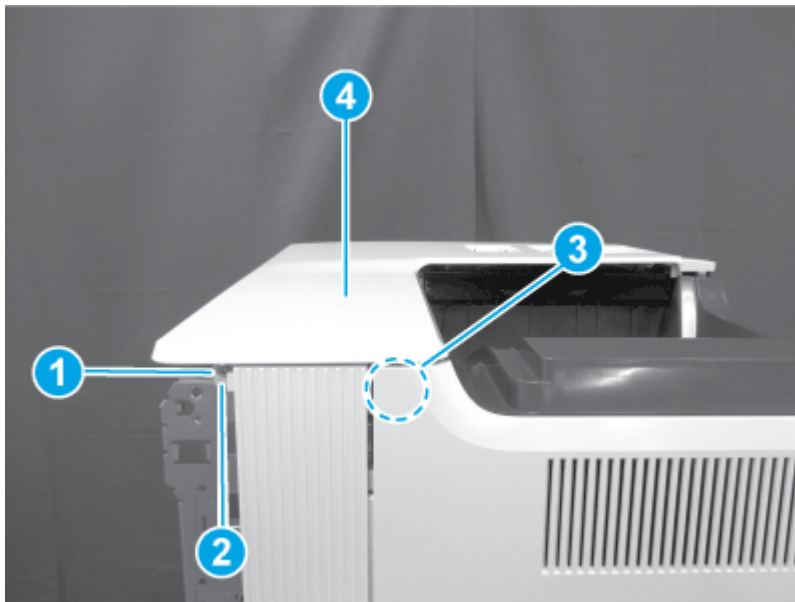
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-591 Remove the top cover



16. Remove the output bin

Follow these steps to remove the output bin.

1. Open the following doors:
 - Front door
 - Left door
 - Right door
2. Release two tabs (callout 1), and then remove the output bin (callout 2).


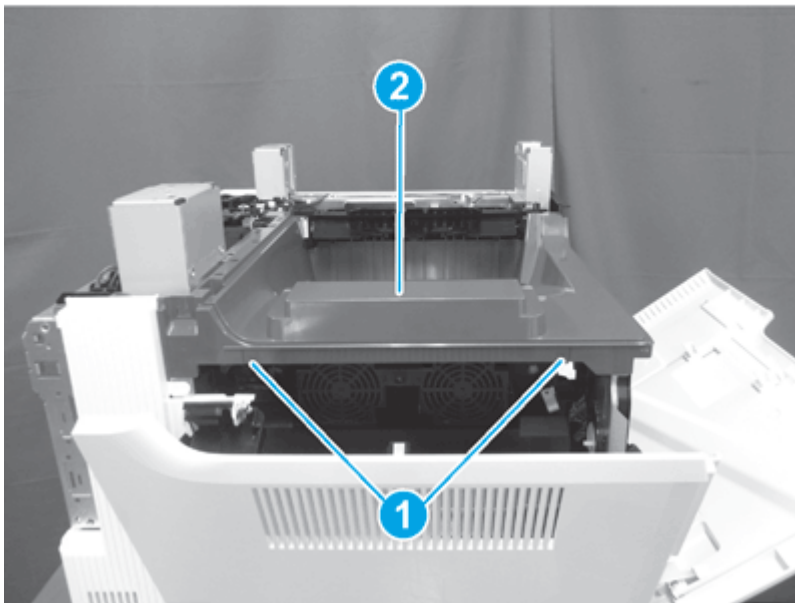
 **NOTE:** The M682 is shown in the figure below. The procedure is correct for all models.


Figure 5-592 Remove the output bin



17. Unpack the replacement assembly



Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.


 **NOTE:** HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>


2. Unpack the replacement part from the packaging.

 **CAUTION:**  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

 **IMPORTANT:** Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

 **NOTE:** If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

 **NOTE:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

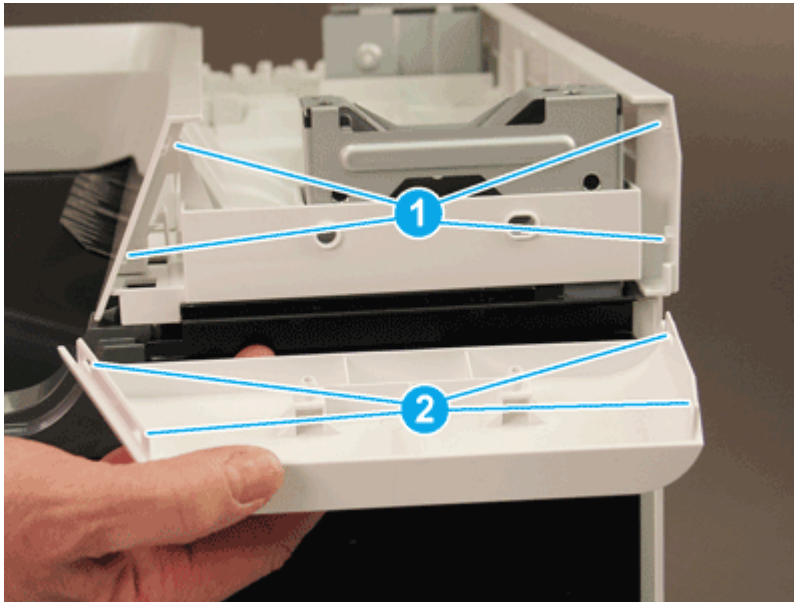
18. Reverse the removal steps to install the assembly

Also use the following **special installation instructions**.

Face-down front cover

- When reinstalling the cover, position the tabs (callout 1) on the printer into the slots (callout 2) on the cover.

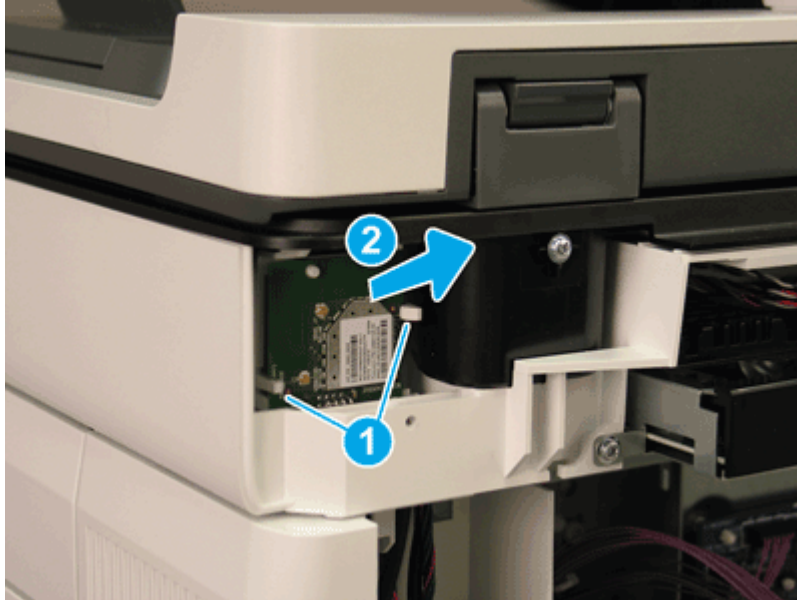
Figure 5-593 Install the cover



Document feeder and image scanner

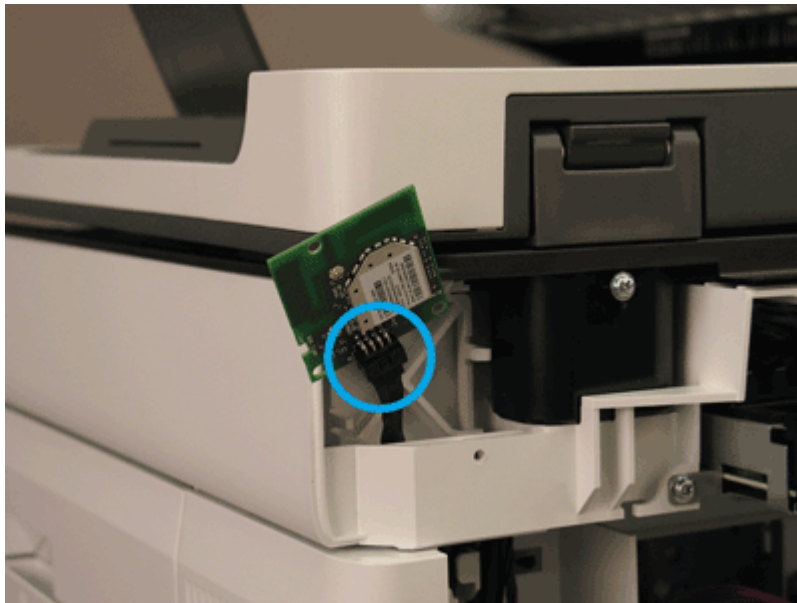
1. **Flow M682z only:** When reconnecting the wireless card cable, do the following:
 - a. Release two tabs (callout 1), and then remove the wireless card (callout 2).

Figure 5-594 Remove the wireless card



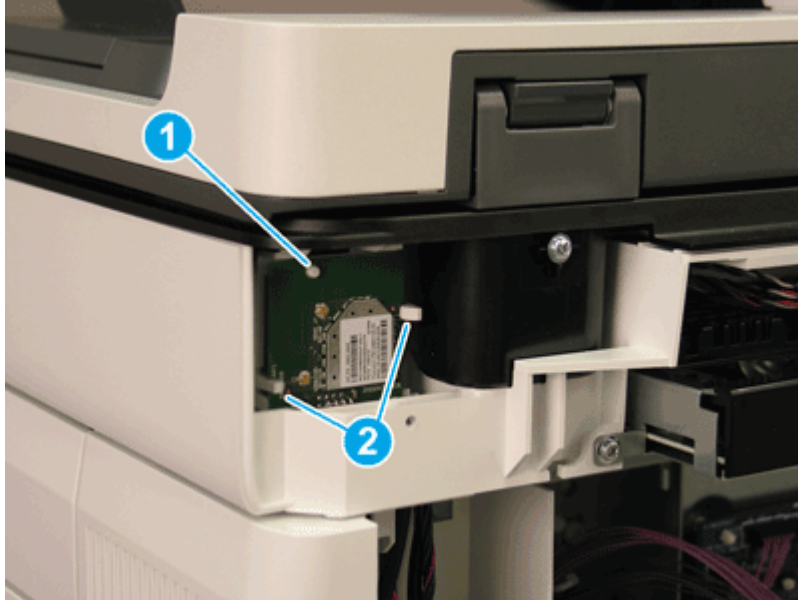
- b. Connect the cable to the wireless card (callout 1).

Figure 5-595 Connect the wireless card connector



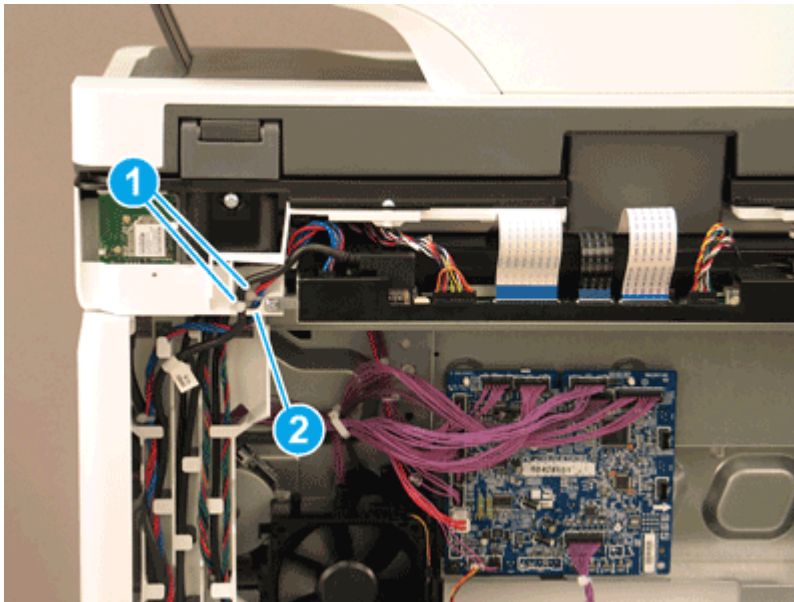
- c. Reinstall the wireless card. Make sure that the hole in the card is positioned over the peg (callout 1), and that the card is under the two tabs (callout 2).


Figure 5-596 Reinstall the wireless card



2. When reinstalling the SCB cables, make sure that the wire retainers (callout 1) on the cables are positioned above the plastic guide (callout 2).

Figure 5-597 Install the SCB cables



 **NOTE:** Continue to reverse the removal steps to finish installing the assembly.

Removal and replacement: Rear cover

Learn how to remove and replace the rear cover.

Mean time to repair: 5 minutes

Service level: Basic



IMPORTANT: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Disconnect the power cable.

⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-43 Part information

Part number	Part description
RM2-1951-000CN	Rear cover

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

No post service test is available for this assembly.

1. Remove the formatter cover

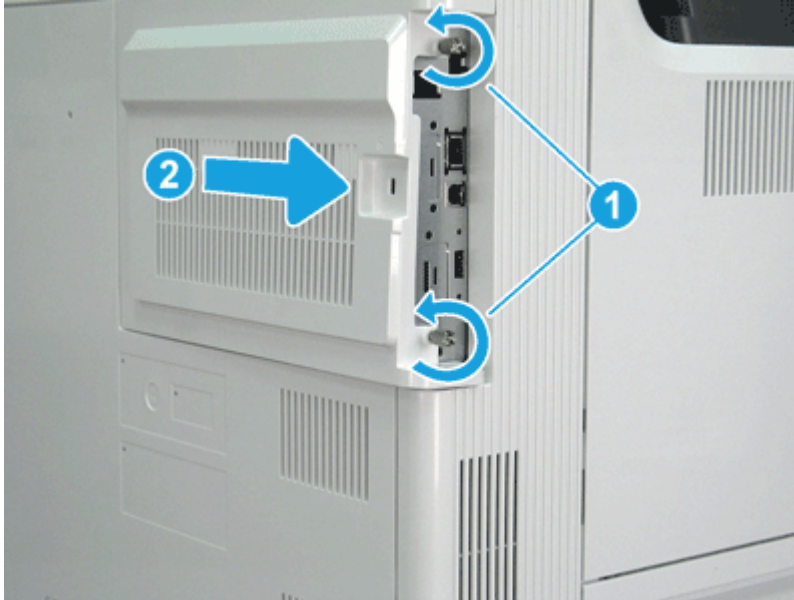
Follow these steps to remove the formatter cover.

- Unscrew two thumbscrews (callout 1), and then slide the formatter cover (callout 2) away from the printer to remove it.



TIP: Reverse the removal steps to install the assembly.

Figure 5-598 Remove the formatter cover

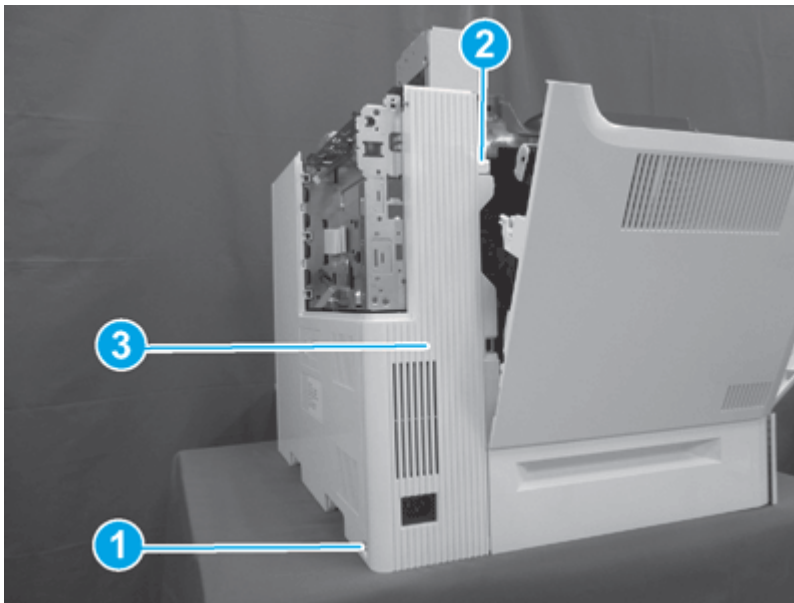


2. Remove the left rear cover

Follow these steps to remove the left rear cover.

- Open the left door. Remove one screw (callout 1), release one boss (callout 2), and then remove the left rear cover (callout 3).

Figure 5-599 Remove the left rear cover



3. Remove the rear cover

Follow these steps to remove the rear cover.

- Remove two screws (callout 1), and then slide the rear cover (callout 2) to the right to remove it.


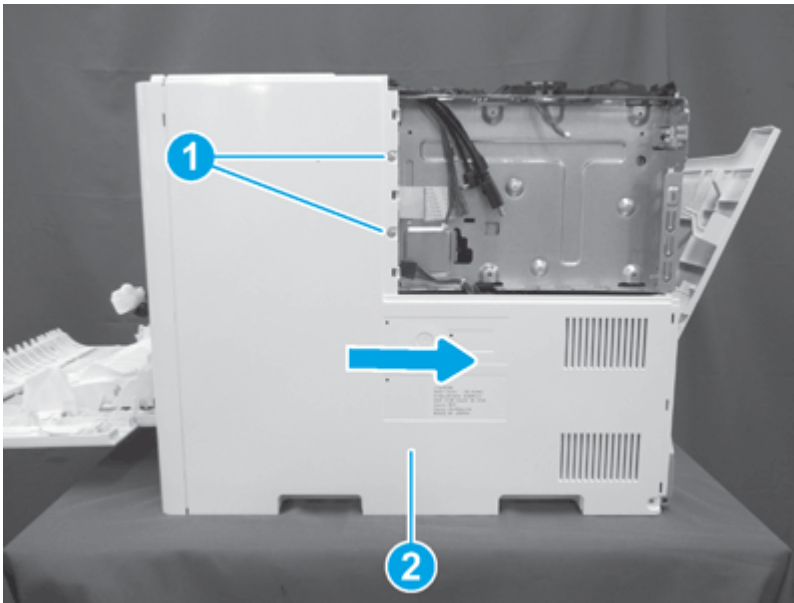
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-600 Remove two screws and the rear cover



4. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.




IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

- To install an assembly, reverse the removal steps.

 **NOTE:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

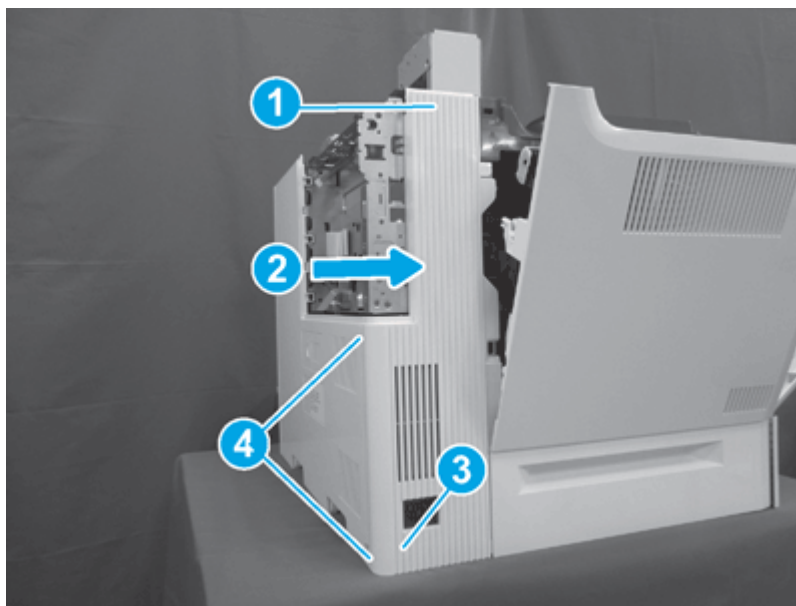
5. Reverse the removal steps to install the assembly


Also use the following **special installation instructions**.

Left rear cover

- Position the top of the cover (callout 1) first, and then slide the cover to the right (callout 2). Push the left lower corner (callout 3) toward the rear of the printer to engage two tabs (callout 4) in the slots on the rear cover.

Figure 5-601 Install the left rear cover



 **NOTE:** Continue to reverse the removal steps to finish installing the assembly.


Removal and replacement: Right rear cover

Learn how to remove and replace the right rear cover.

 [View a video of how to remove and replace the right rear cover.](#)

Mean time to repair: 5 minutes

Service level: Basic

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Disconnect the power cable.

⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-44 Part information

Part number	Part description
RC4-6425-000CN	Right rear cover

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

No post service test is available for this assembly.

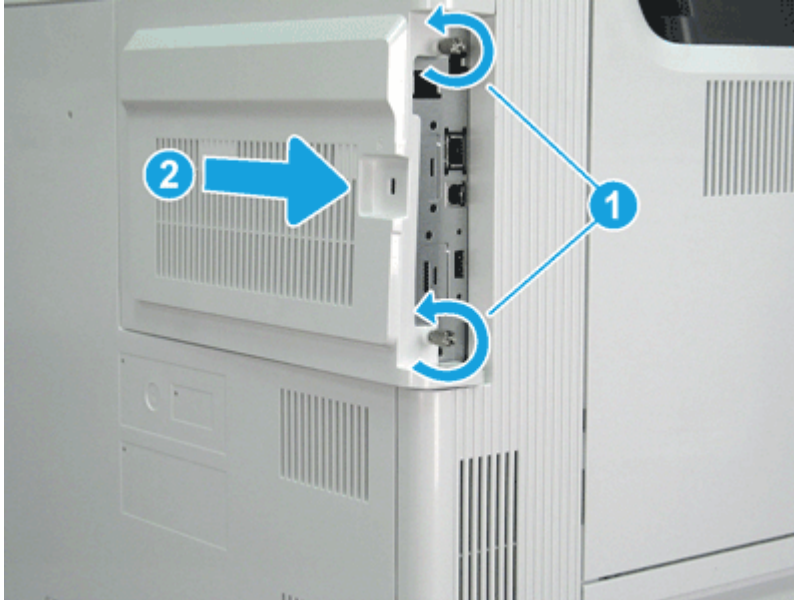
1. Remove the formatter cover

Follow these steps to remove the formatter cover.

- Unscrew two thumbscrews (callout 1), and then slide the formatter cover (callout 2) away from the printer to remove it.

💡 TIP: Reverse the removal steps to install the assembly.

Figure 5-602 Remove the formatter cover

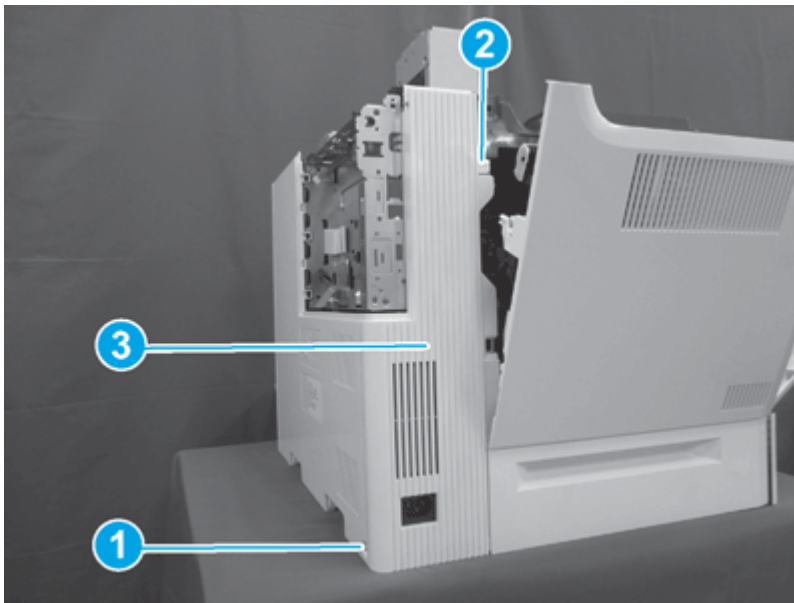


2. Remove the left rear cover

Follow these steps to remove the left rear cover.

- Open the left door. Remove one screw (callout 1), release one boss (callout 2), and then remove the left rear cover (callout 3).

Figure 5-603 Remove the left rear cover



3. Remove the rear cover

Follow these steps to remove the rear cover.

- Remove two screws (callout 1), and then slide the rear cover (callout 2) to the right to remove it.


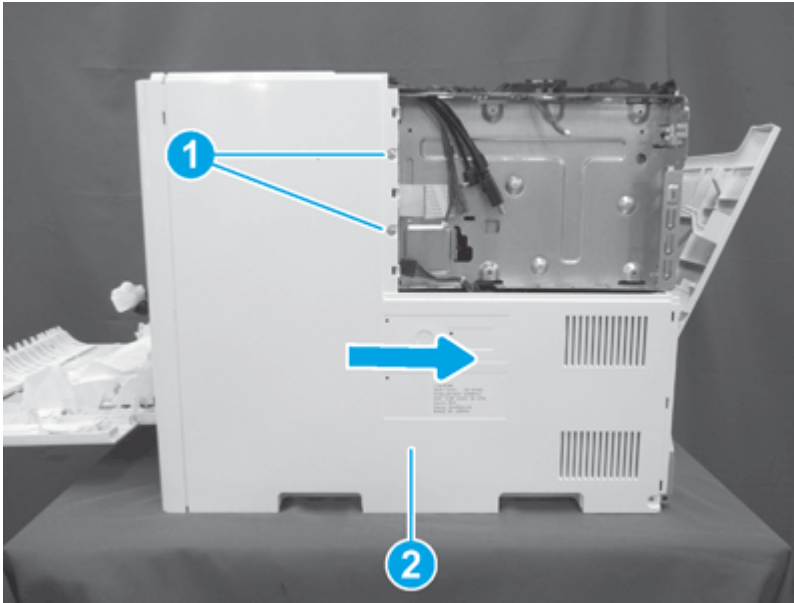
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-604 Remove two screws and the rear cover



4. Remove the right rear cover

Follow these steps to remove the right rear cover.

- Remove one screw (callout 1), and then slide the right rear cover (callout 2) to the right to remove it.


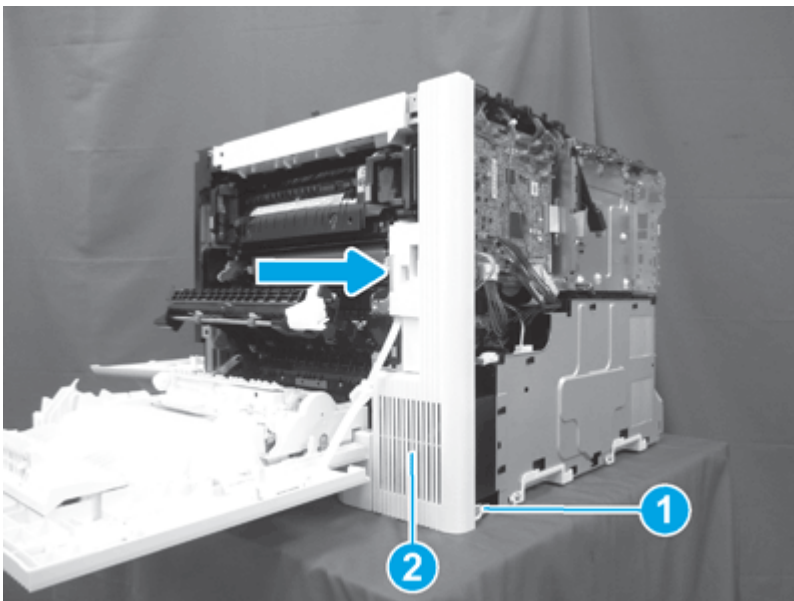
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-605 Remove one screw and the right rear cover



5. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

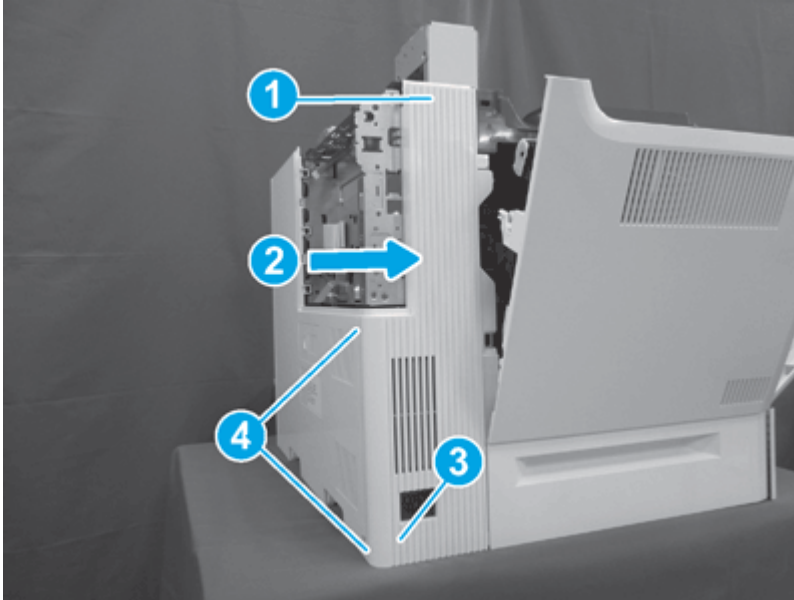
6. Reverse the removal steps to install the assembly


Also use the following **special installation instructions**.

Left rear cover

- Position the top of the cover (callout 1) first, and then slide the cover to the right (callout 2). Push the left lower corner (callout 3) toward the rear of the printer to engage two tabs (callout 4) in the slots on the rear cover.

Figure 5-606 Install the left rear cover



 **NOTE:** Continue to reverse the removal steps to finish installing the assembly.


Removal and replacement: Right handle

Learn how to remove and replace the right handle.

 [View a video of how to remove and replace the right handle.](#)


Mean time to repair: 5 minutes

Service level: Basic

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Disconnect the power cable.

 **WARNING!** To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-45 Part information

Part number	Part description
RM2-6659-000CN	Right handle

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

No post service test is available for this assembly.

1. Remove the formatter cover

Follow these steps to remove the formatter cover.

- Unscrew two thumbscrews (callout 1), and then slide the formatter cover (callout 2) away from the printer to remove it.


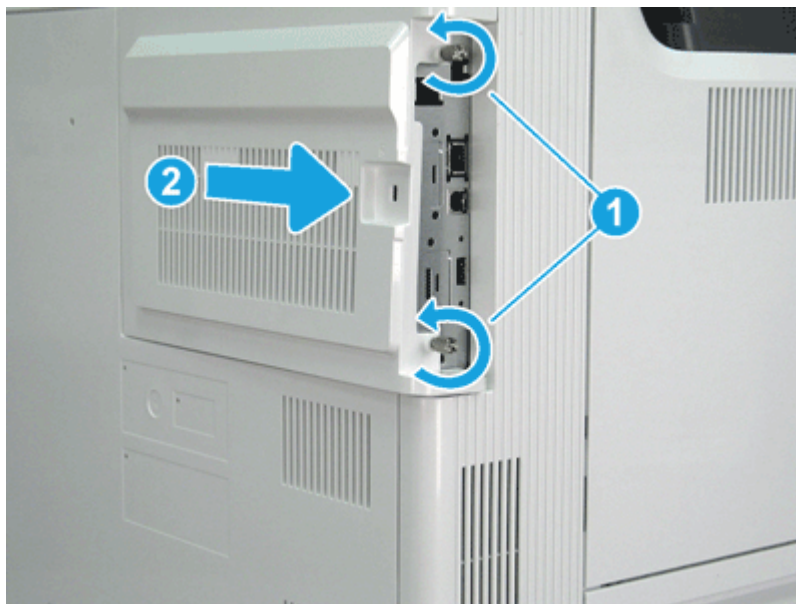
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-607 Remove the formatter cover

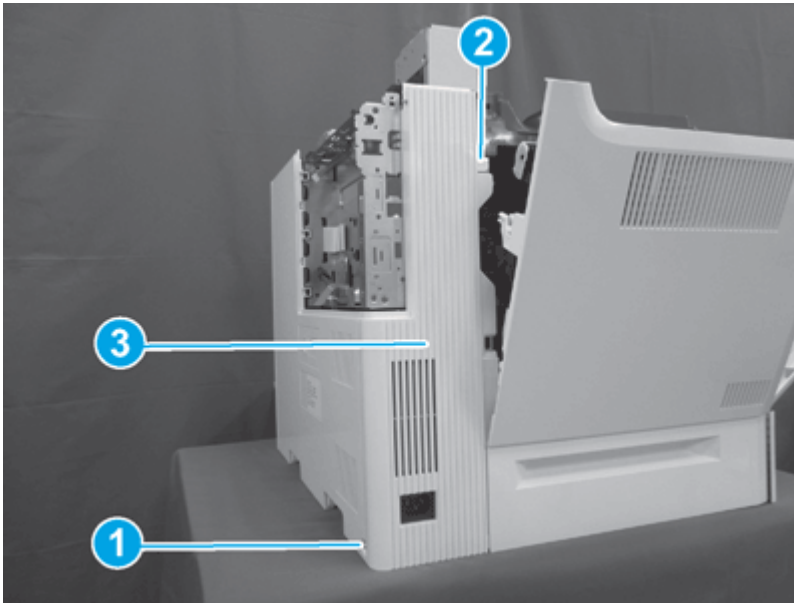


2. Remove the left rear cover

Follow these steps to remove the left rear cover.

- Open the left door. Remove one screw (callout 1), release one boss (callout 2), and then remove the left rear cover (callout 3).

Figure 5-608 Remove the left rear cover



3. Remove the rear cover

Follow these steps to remove the rear cover.

- Remove two screws (callout 1), and then slide the rear cover (callout 2) to the right to remove it.


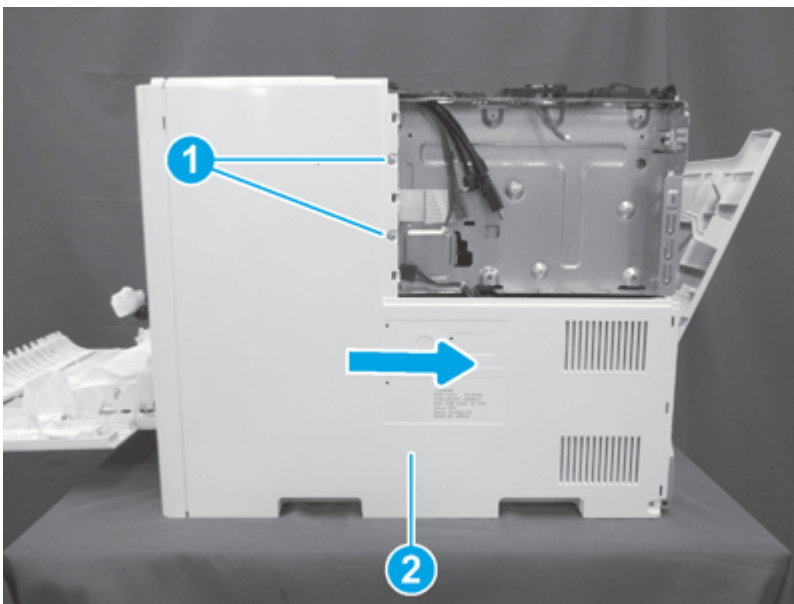
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-609 Remove two screws and the rear cover



4. Remove the right rear cover

Follow these steps to remove the right rear cover.

- Remove one screw (callout 1), and then slide the right rear cover (callout 2) to the right to remove it.


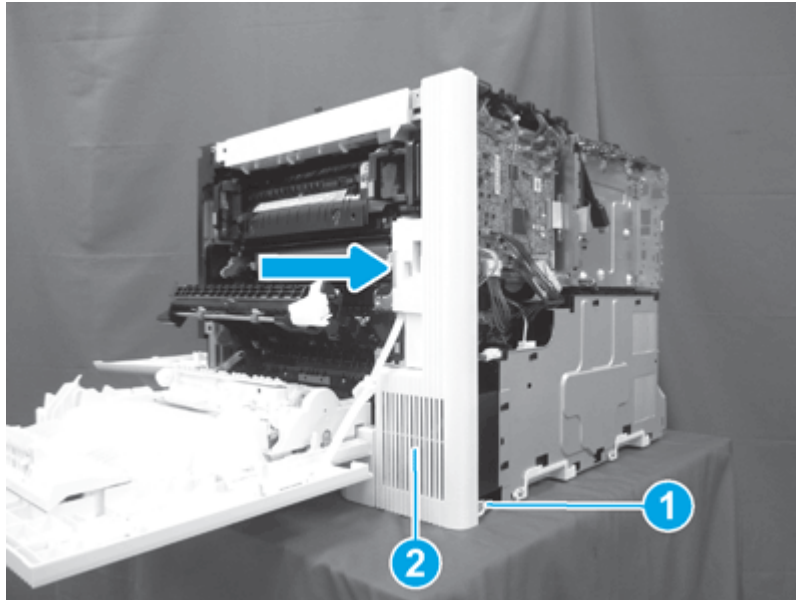
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-610 Remove one screw and the right rear cover

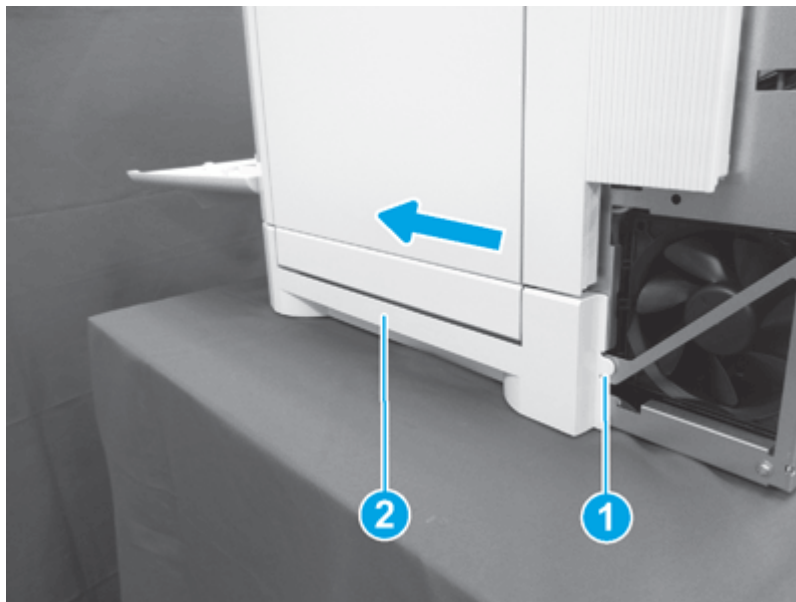


5. Remove the right handle

Follow these steps to remove the right handle.

- Release one boss (callout 1), and then slide the right handle (callout 2) to the left to remove it.

Figure 5-611 Remove the right handle



6. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

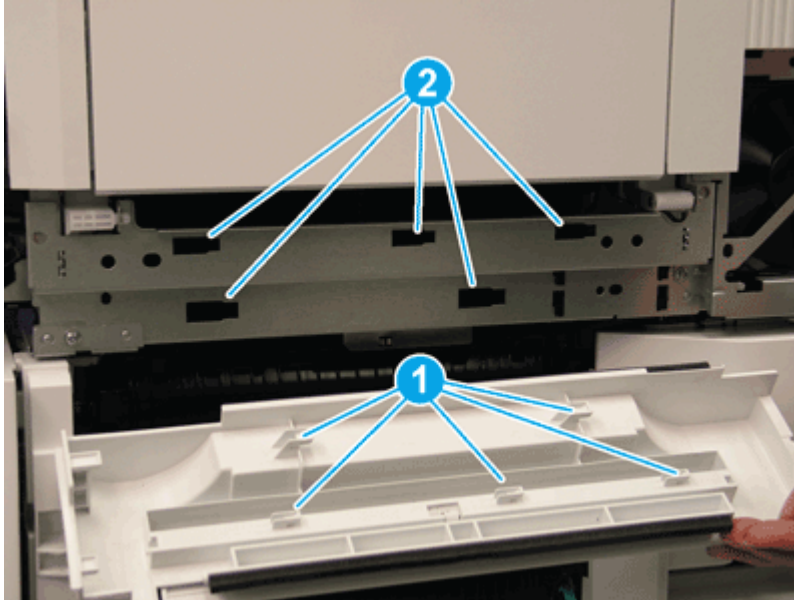
7. Reverse the removal steps to install the assembly

Also use the following **special installation instructions**.

Right handle

- When reinstalling the right handle, install the hooks (callout 1) on the handle in the slots (callout 2) in the printer. Align the lower, right-most hook first to ensure all the hooks are aligned, and then slide the handle to the left to lock it into position.

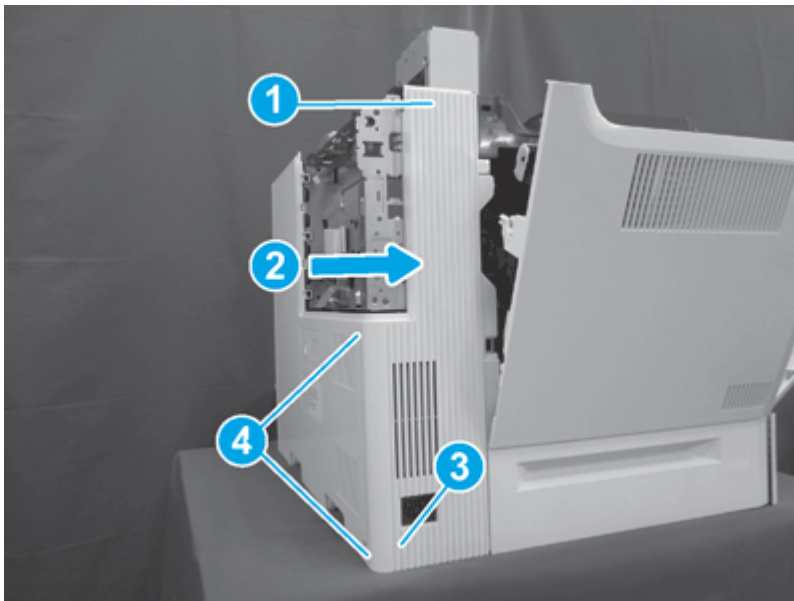
Figure 5-612 Install the right handle




Left rear cover

- Position the top of the cover (callout 1) first, and then slide the cover to the right (callout 2). Push the left lower corner (callout 3) toward the rear of the printer to engage two tabs (callout 4) in the slots on the rear cover.

Figure 5-613 Install the left rear cover



 **NOTE:** Continue to reverse the removal steps to finish installing the assembly.


Removal and replacement: Left handle

Learn how to remove and replace the left handle.

 [View a video of how to remove and replace the left handle.](#)


Mean time to repair: 5 minutes

Service level: Basic

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Disconnect the power cable.

 **WARNING!** To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-46 Part Information

Part number	Part description
RM2-1958-000CN	Left handle

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

Turn the printer power on


- Connect the power cable.
- Use the power switch to turn the power on.


Post service test

No post service test is available for this assembly.

1. Remove the TCU

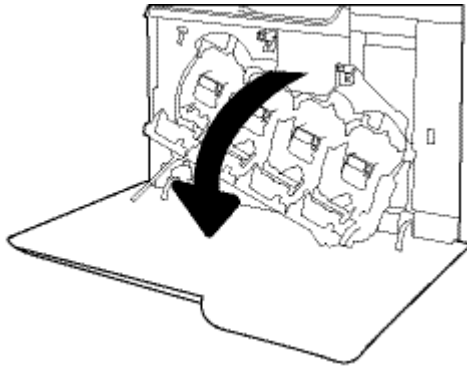
Follow these steps to remove the TCU.

 **CAUTION:** If toner gets on clothing, wipe it off by using a dry cloth and wash the clothes in cold water. Hot water sets toner into fabric.

 **NOTE:** The toner collection unit is designed for a single use. Do not attempt to empty the toner collection unit and reuse it. Doing so could lead to toner being spilled inside the printer, which could result in reduced print quality. After use, return the toner collection unit to HP's Planet Partners program for recycling.

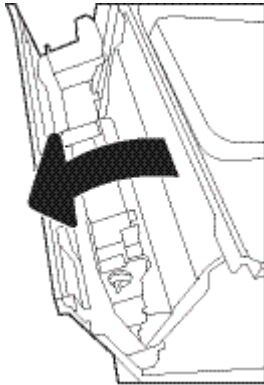
1. Open the front door.

Figure 5-614 Open the front door



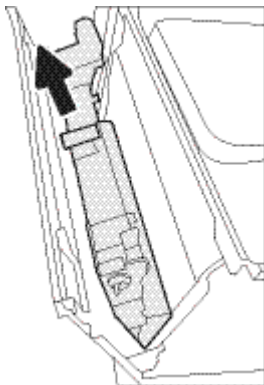
2. Open the left door.

Figure 5-615 Open the left door



3. Grasp the top of the TCU and remove it from the printer.

Figure 5-616 Remove the TCU

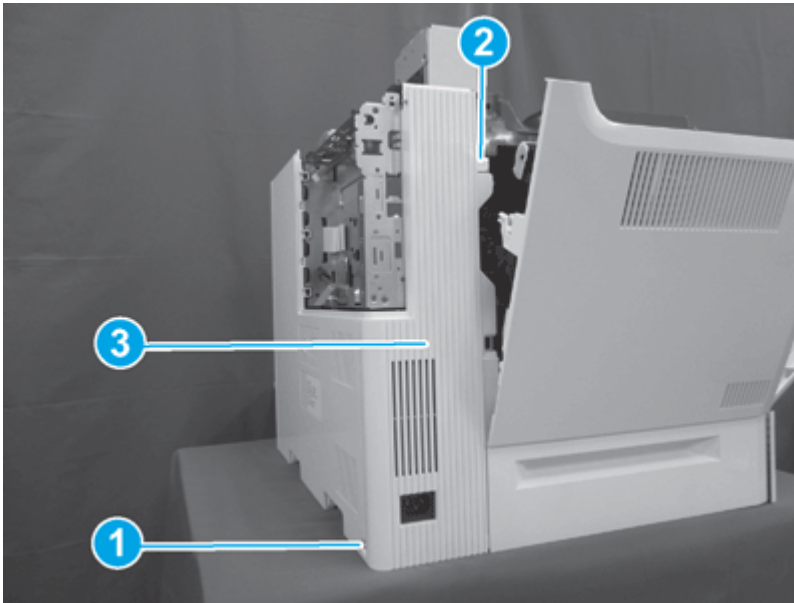


2. Remove the left rear cover

Follow these steps to remove the left rear cover.

- Open the left door. Remove one screw (callout 1), release one boss (callout 2), and then remove the left rear cover (callout 3).

Figure 5-617 Remove the left rear cover



3. Remove the left door

Follow these steps to remove the left door.

1. Open front door.

Figure 5-618 Open front door



2. Press on the tab (callout 1) while sliding the left door (callout 2) to the right to remove it.


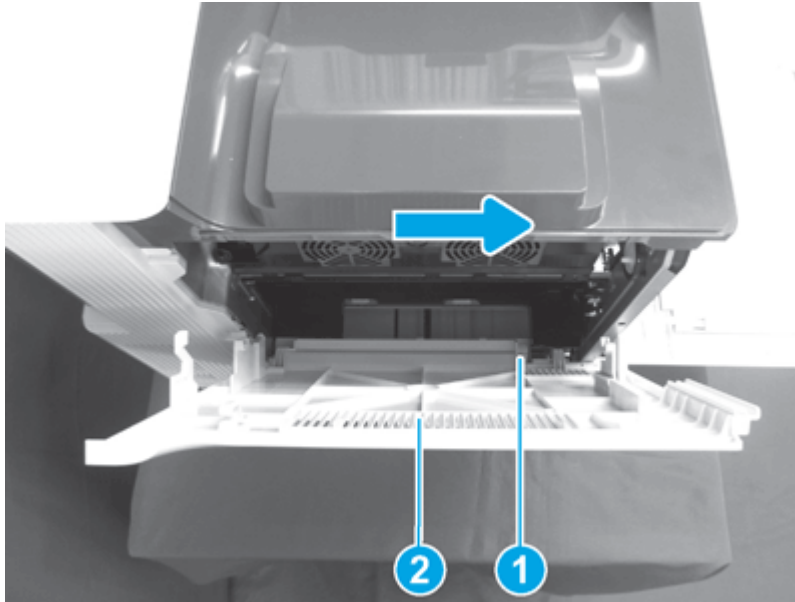
 **NOTE:** Make sure that the front door is not blocking the left door at the lower corner.

Figure 5-619 Remove the left door

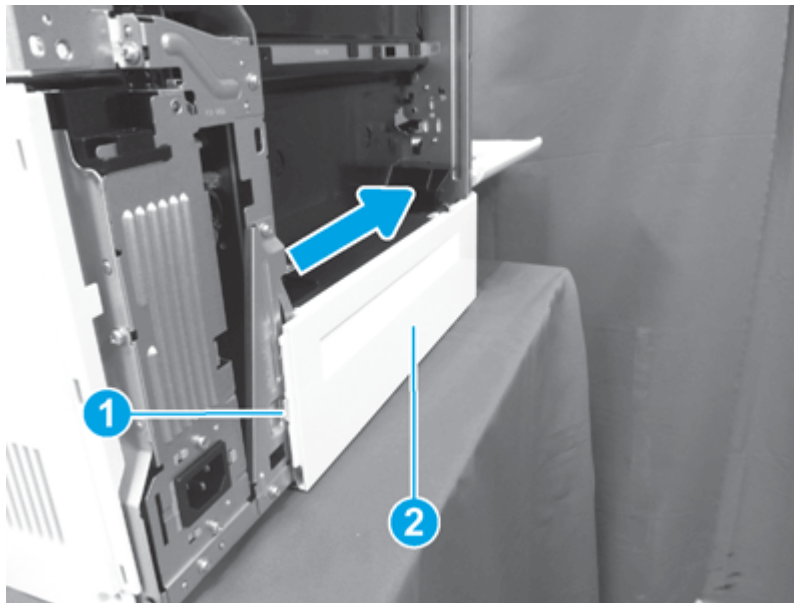


4. Remove the left handle

Follow these steps to remove the left handle.

- Release one tab (callout 1), and then gently lift the left side of the handle away from the sheet metal. Slide the left handle (callout 2) toward the front of the printer to remove it.


Figure 5-620 Remove the left handle



5. Unpack the replacement assembly



Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.


 **NOTE:** HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>


2. Unpack the replacement part from the packaging.

 **CAUTION:**  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

 **IMPORTANT:** Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

 **NOTE:** If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

 **NOTE:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

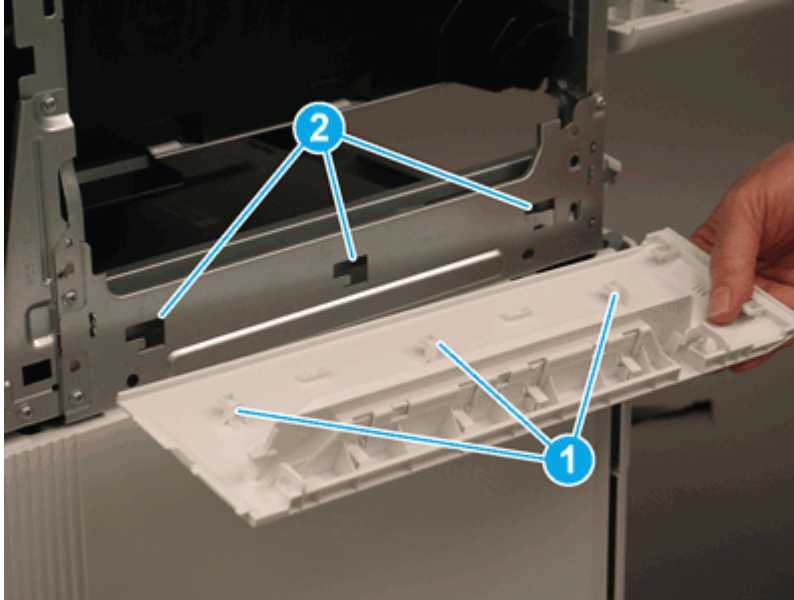
6. Reverse the removal steps to install the assembly

Also use the following **special installation instructions**.

Left handle

- When reinstalling the left handle, install the hooks (callout 1) on the handle in the slots (callout 2) in the printer. Align the right-most hook first to ensure all the hooks are aligned, and then slide the handle to the left to lock it into position.

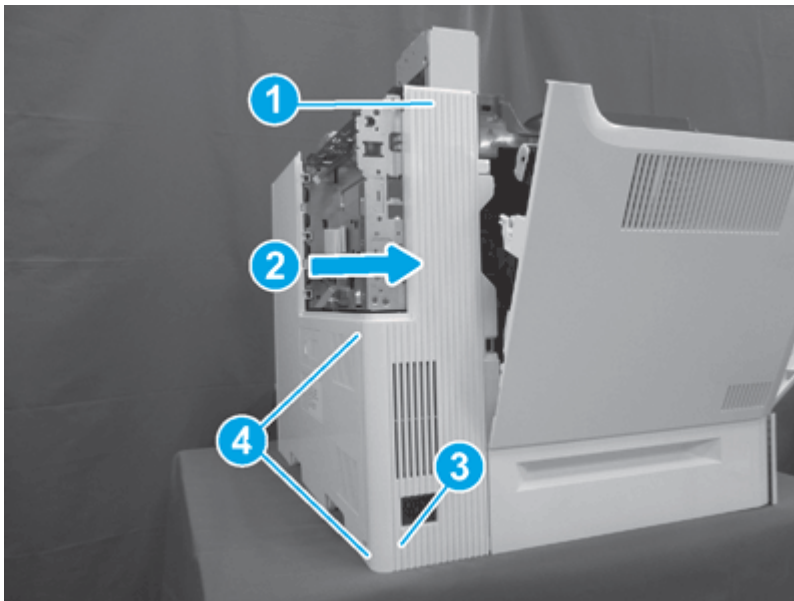
Figure 5-621 Install the left handle




Left rear cover

- Position the top of the cover (callout 1) first, and then slide the cover to the right (callout 2). Push the left lower corner (callout 3) toward the rear of the printer to engage two tabs (callout 4) in the slots on the rear cover.

Figure 5-622 Install the left rear cover



 **NOTE:** Continue to reverse the removal steps to finish installing the assembly.

Document feeder / scanner

Learn about document feeder and scanner parts removal and replacement.

Removal and replacement: Document feeder

Learn how to remove and replace the document feeder.



[View a video of how to remove and replace the document feeder.](#)

Mean time to repair: 10 minutes

Service level: Intermediate



IMPORTANT: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Disconnect the power cable.

⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-47 Part information

Part numbers	Part description
5851-7203	ADF whole unit kit (enterprise)
5851-7204	ADF whole unit kit (workflow)

Required tools

- #2 Phillips screwdriver with a magnetic tip
- Small, flat-blade screwdriver

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

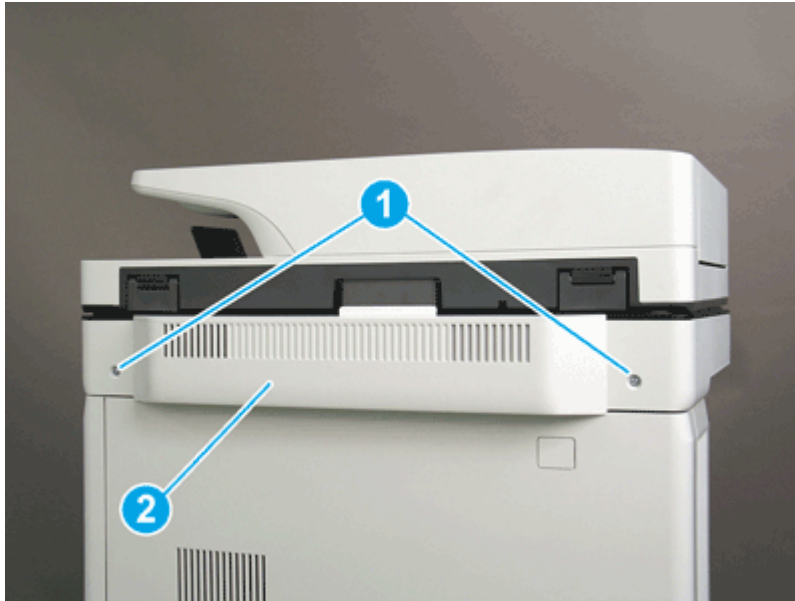
Place a document in the document feeder and scan it. Verify that the document feeder works correctly.

1. Remove the document feeder

Follow these steps to remove the document feeder.

1. At the back of the printer, remove two screws (callout 1), and then remove the scanner rear cover (callout 2).

Figure 5-623 Remove the scanner rear cover



2. Lift the latches up toward the back of the document feeder to release two flat cables (callout 1), and then disconnect one connector (callout 2).


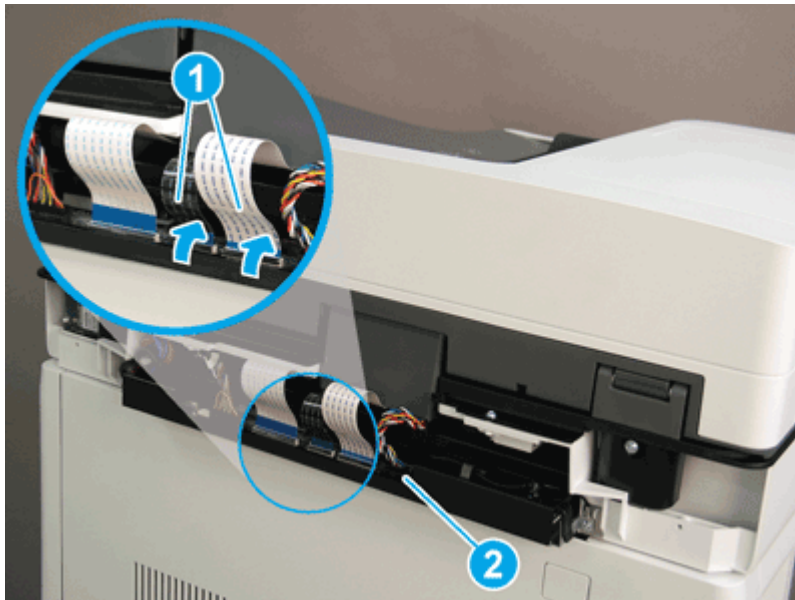
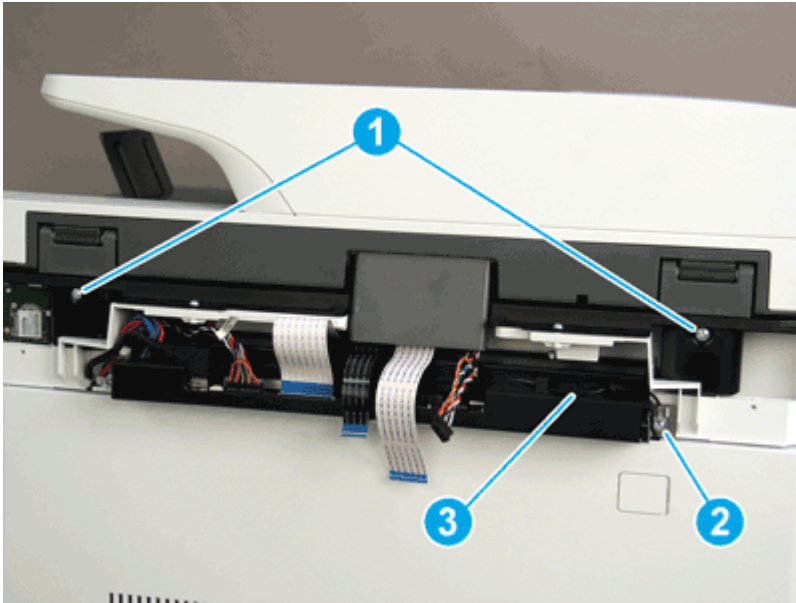
 **TIP:** When reinstalling the flat cables, lift the latches, install the cables, and then lower the latches to secure the cables.

Figure 5-624 Disconnect three connectors



3. Remove two screws (callout 1). Release one ground screw (callout 2), and then release the ground wire (callout 3) from the cable guide.

Figure 5-625 Remove three screws



4. Open the document feeder.

Figure 5-626 Open the document feeder




5. Tilt the document feeder back until it stops (callout 1), and then lift it up until it stops (callout 2).

Figure 5-627 Tilt and lift the document feeder



6. Support the left side of the document feeder with one hand, and then use a small, flat-blade screwdriver to release two tabs on the document feeder hinges.

 **TIP:** Release the right hinge first.


 **NOTE:** The tabs are located on the front side (scanner flatbed glass) of the hinges.

Figure 5-628 Release two tabs



7. Lift the document feeder up to remove it.


 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-629 Remove the document feeder



2. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

3. Reverse the removal steps to install the assembly

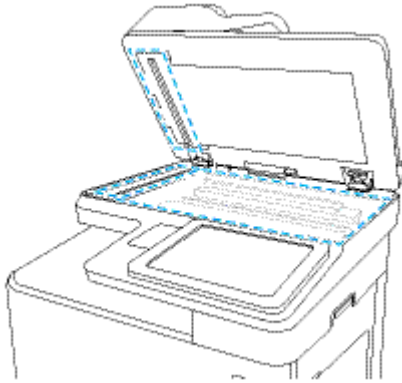
Also use the following **special installation instructions**.

Document feeder

- After installing the replacement document feeder, clean the scanner glass and the document feeder strips with a soft cloth or sponge that has been moistened with nonabrasive glass cleaner. Dry the glass and white plastic parts with a chamois or a cellulose sponge to prevent spotting.

⚠ **CAUTION:** Do not use abrasives, acetone, benzene, ammonia, ethyl alcohol, or carbon tetrachloride on any part of the printer; these can damage the printer. Do not place liquids directly on the glass or platen. They might seep and damage the printer.

Figure 5-630 Clean the scanner glass



Removal and replacement: Document feeder hinges

Learn how to remove and replace the document feeder hinges.

Mean time to repair: 15 minutes

Service level: Intermediate

📄 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Disconnect the power cable.

⚠ **WARNING!** To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-48 Part information

Part number	Part description
J1H98-60028	ADF right hinge
J1H98-60027	ADF left hinge

Required tools

- #2 Phillips screwdriver with a magnetic tip
- Small, flat-blade screwdriver

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

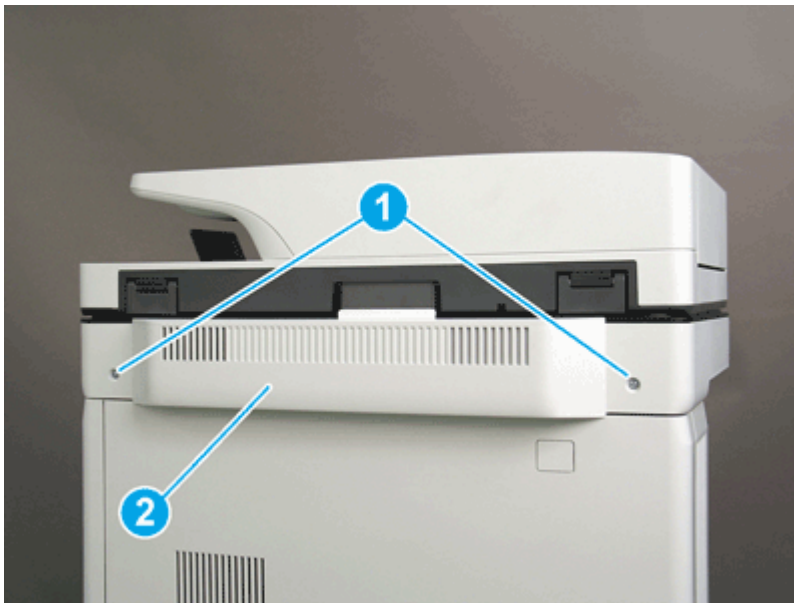
Place a document in the document feeder and scan it. Verify that the document feeder works correctly.

1. Remove the document feeder

Follow these steps to remove the document feeder.

1. At the back of the printer, remove two screws (callout 1), and then remove the scanner rear cover (callout 2).

Figure 5-631 Remove the scanner rear cover



2. Lift the latches up toward the back of the document feeder to release two flat cables (callout 1), and then disconnect one connector (callout 2).


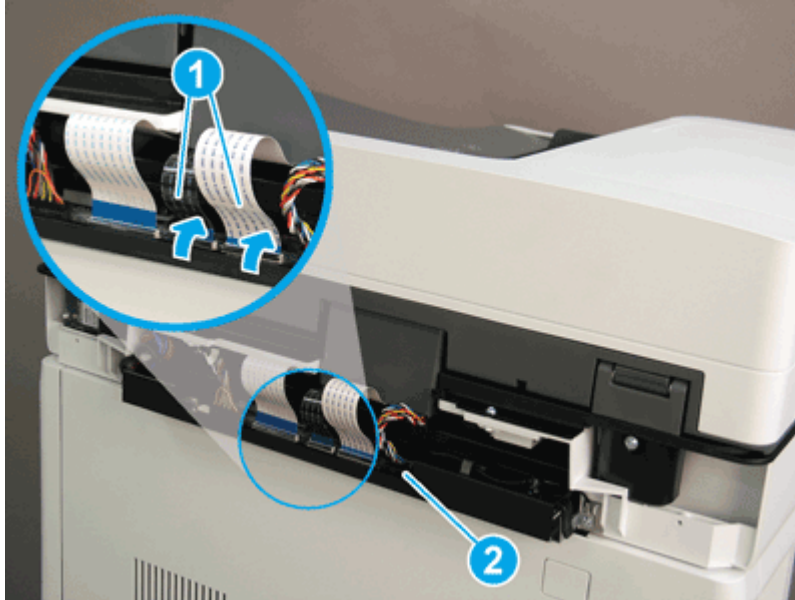
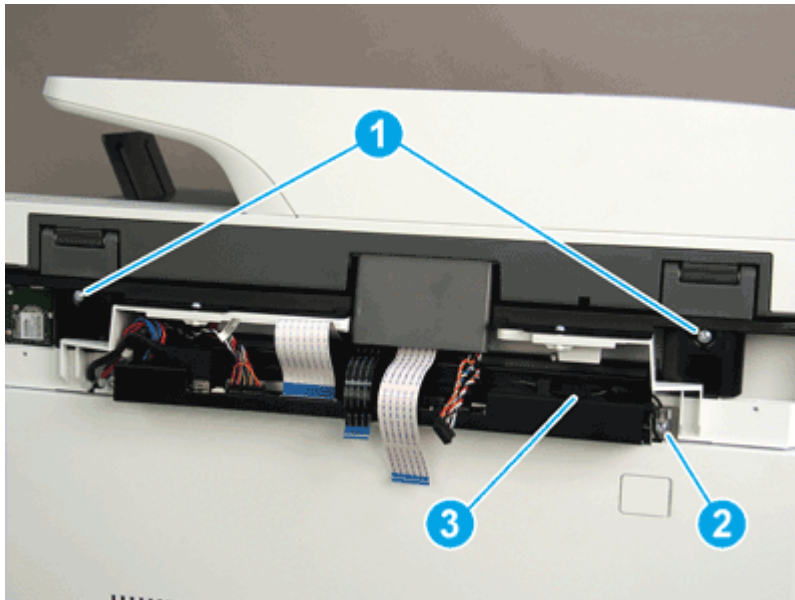
 **TIP:** When reinstalling the flat cables, lift the latches, install the cables, and then lower the latches to secure the cables.

Figure 5-632 Disconnect three connectors



3. Remove two screws (callout 1). Release one ground screw (callout 2), and then release the ground wire (callout 3) from the cable guide.

Figure 5-633 Remove three screws



4. Open the document feeder.

Figure 5-634 Open the document feeder




5. Tilt the document feeder back until it stops (callout 1), and then lift it up until it stops (callout 2).

Figure 5-635 Tilt and lift the document feeder



6. Support the left side of the document feeder with one hand, and then use a small, flat-blade screwdriver to release two tabs on the document feeder hinges.

 **TIP:** Release the right hinge first.

 **NOTE:** The tabs are located on the front side (scanner flatbed glass) of the hinges.

Figure 5-636 Release two tabs



7. Lift the document feeder up to remove it.


 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-637 Remove the document feeder

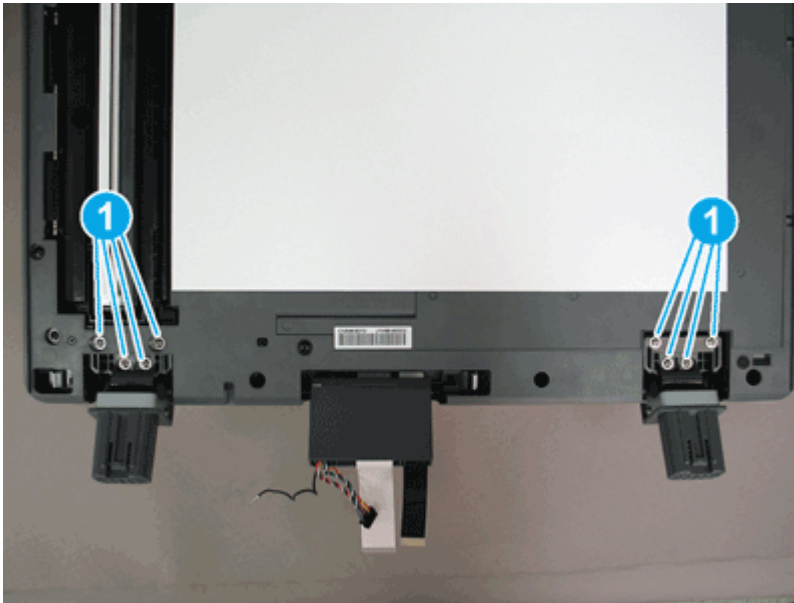


2. Remove the document feeder hinges

Follow these steps to remove the document feeder hinges.

- Lay the document feeder on a flat surface so that the white backing is facing up. Remove four screws on each hinge (callout 1), and then remove the hinges.

Figure 5-638 Remove eight screws



3. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.




NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

4. Reverse the removal steps to install the assembly

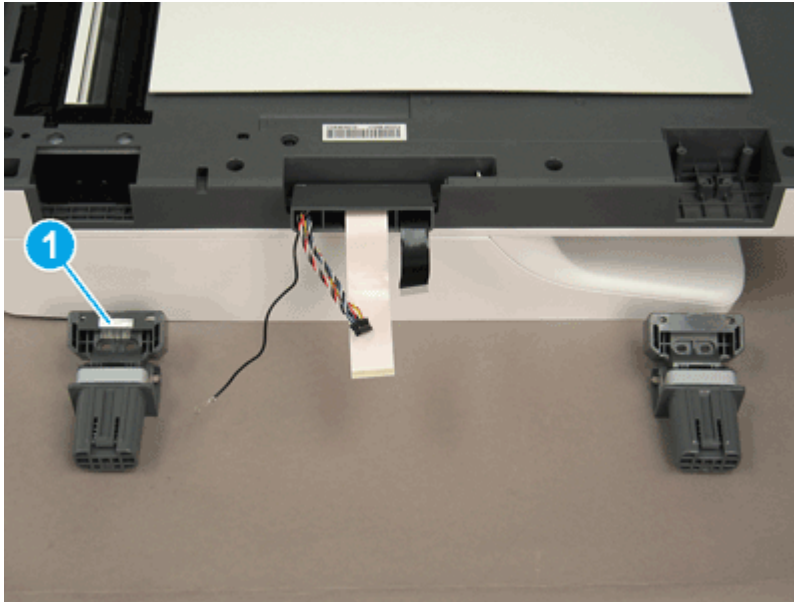
Also use the following **special installation instructions**.

Document feeder hinges

 **NOTE:** Continue to reverse the removal steps to finish installing the assembly.

- When installing the new hinges, note that the hinges are not identical. The left hinge has a brush attached to it (callout 1).

Figure 5-639 Note the hinge differences



Document feeder

- After installing the document feeder, clean the scanner glass and the document feeder strips with a soft cloth or sponge that has been moistened with nonabrasive glass cleaner. Dry the glass and white plastic parts with a chamois or a cellulose sponge to prevent spotting.


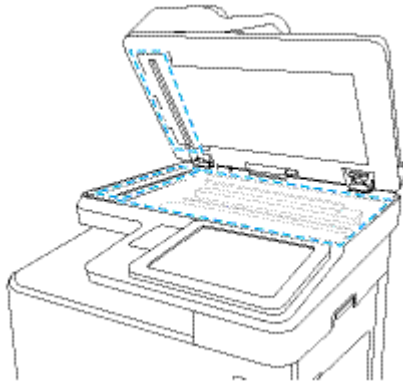
 **CAUTION:** Do not use abrasives, acetone, benzene, ammonia, ethyl alcohol, or carbon tetrachloride on any part of the printer; these can damage the printer. Do not place liquids directly on the glass or platen. They might seep and damage the printer.

Figure 5-640 Clean the scanner glass



Removal and replacement: Image scanner assembly

Learn how to remove and replace the image scanner assembly (ISA).



[View a video of how to remove and replace the ISA.](#)

Mean time to repair: 15 minutes

Service level: Intermediate



IMPORTANT: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Disconnect the power cable.

⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-49 Part information

Part number	Part description
J8A10-67901	Image scanner kit (Includes white backing and retention clips, keyboard cover, and rear cover.)

Required tools

- #2 Phillips screwdriver with a magnetic tip
- Small flat blade screwdriver

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

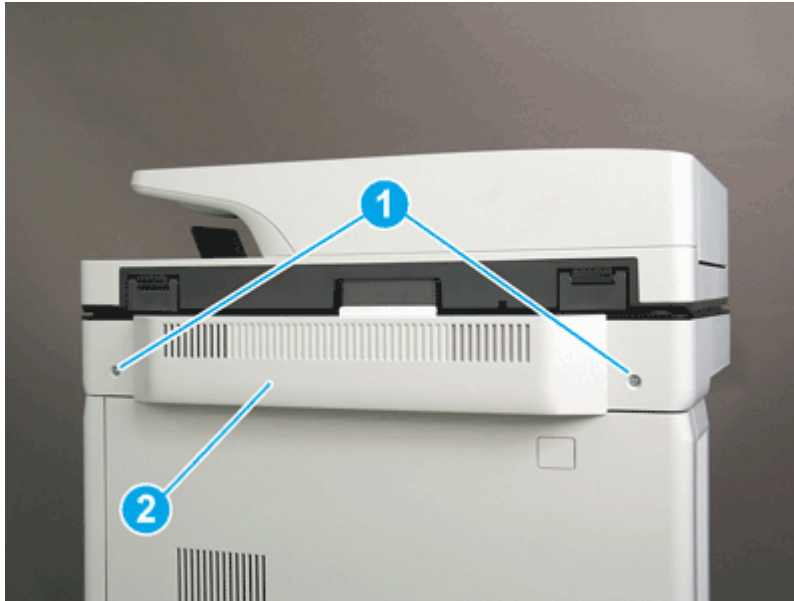
Place a document on the scanner glass and scan it. Verify the document scanned correctly.

1. Remove the document feeder

Follow these steps to remove the document feeder.

1. At the back of the printer, remove two screws (callout 1), and then remove the scanner rear cover (callout 2).

Figure 5-641 Remove the scanner rear cover



2. Lift the latches up toward the back of the document feeder to release two flat cables (callout 1), and then disconnect one connector (callout 2).


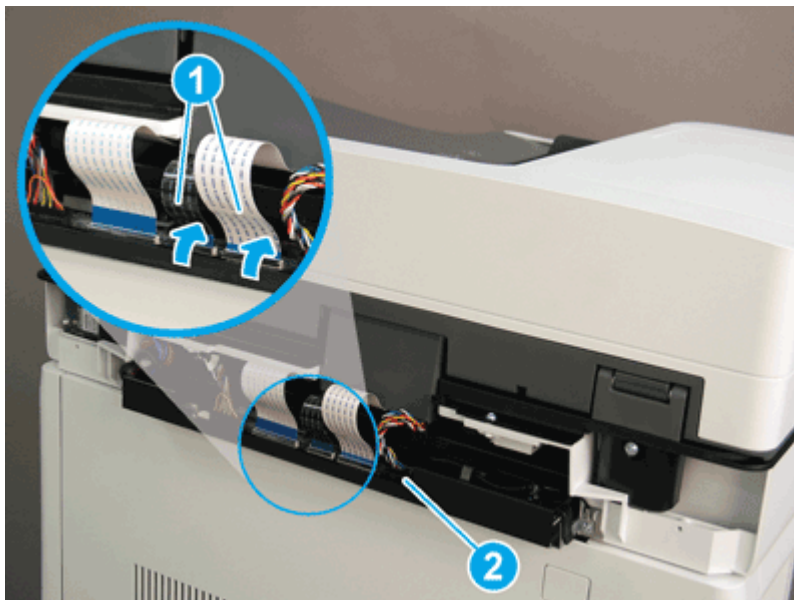
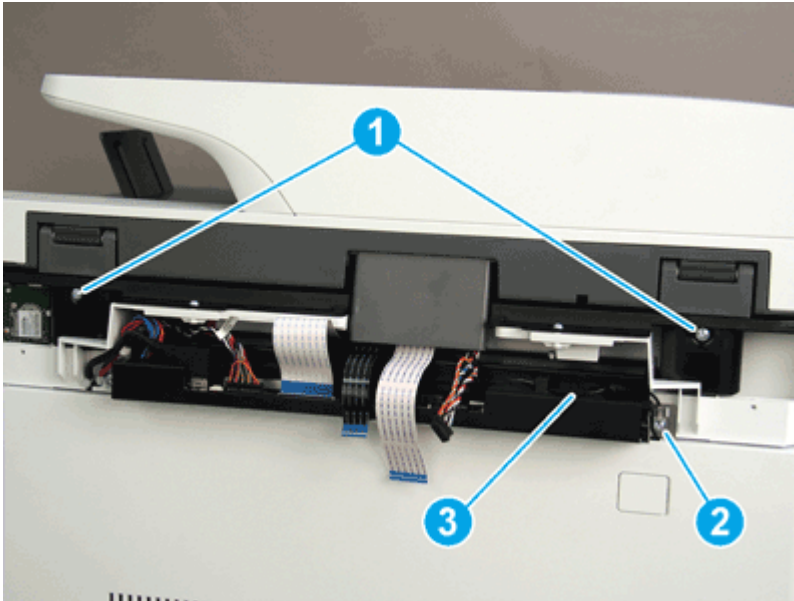
 **TIP:** When reinstalling the flat cables, lift the latches, install the cables, and then lower the latches to secure the cables.

Figure 5-642 Disconnect three connectors



3. Remove two screws (callout 1). Release one ground screw (callout 2), and then release the ground wire (callout 3) from the cable guide.

Figure 5-643 Remove three screws



4. Open the document feeder.

Figure 5-644 Open the document feeder




5. Tilt the document feeder back until it stops (callout 1), and then lift it up until it stops (callout 2).

Figure 5-645 Tilt and lift the document feeder



6. Support the left side of the document feeder with one hand, and then use a small, flat-blade screwdriver to release two tabs on the document feeder hinges.

 **TIP:** Release the right hinge first.

 **NOTE:** The tabs are located on the front side (scanner flatbed glass) of the hinges.

Figure 5-646 Release two tabs



7. Lift the document feeder up to remove it.


 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-647 Remove the document feeder



2. Remove the keyboard (MFP)

Follow these steps to remove the keyboard (MFP).

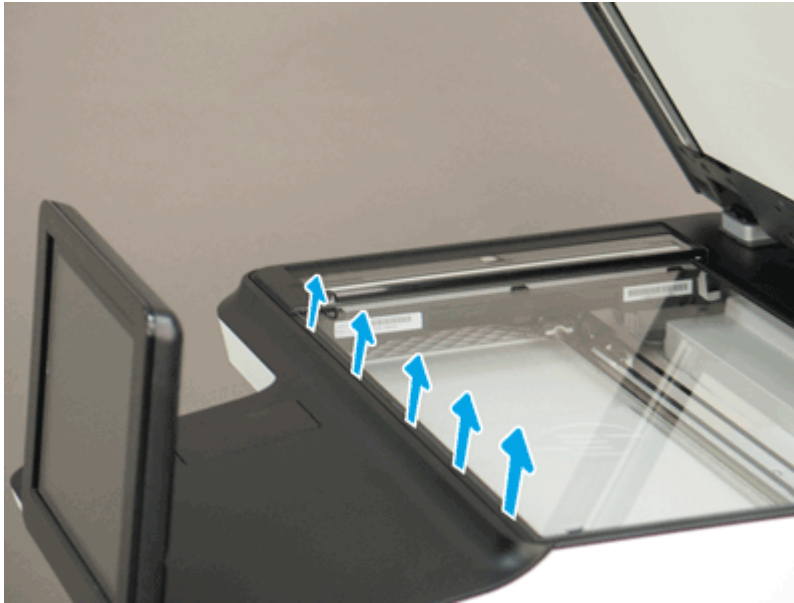
1. If the control panel is not fully tilted forward, tilt it forward now (callout 1) until it stops. Open the document feeder (callout 2).

Figure 5-648 Tilt the control panel and open the document feeder



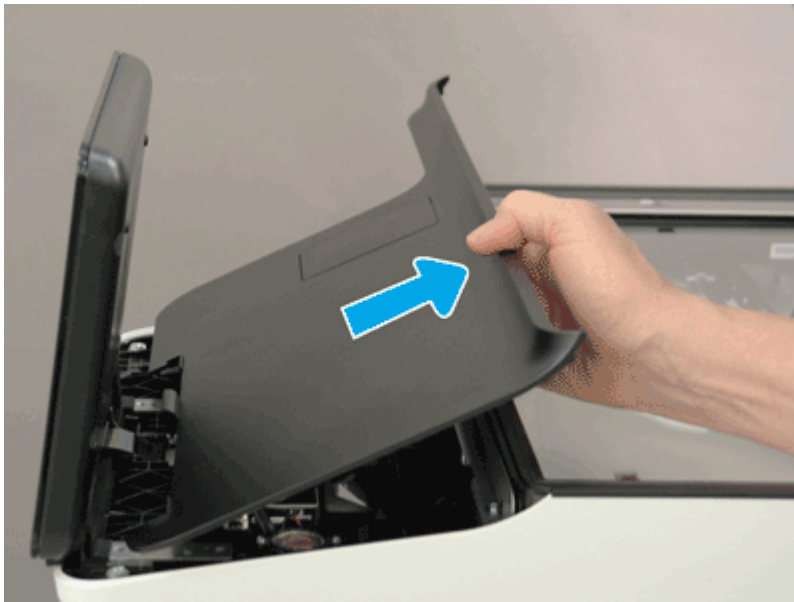
2. Beginning at the right side of the control-panel cover, carefully release five tabs along the top edge of the cover.

Figure 5-649 Release five tabs



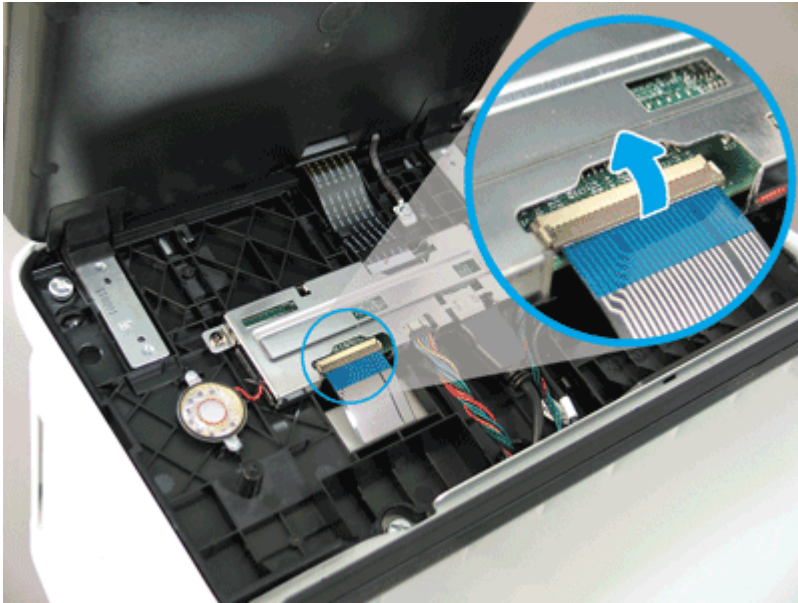
3. Continue to rotate the top edge of the cover away from the printer, and then remove the cover.

Figure 5-650 Remove the cover



4. Open the connector latch to release the keyboard flat cable.

Figure 5-651 Disconnect the keyboard flat cable



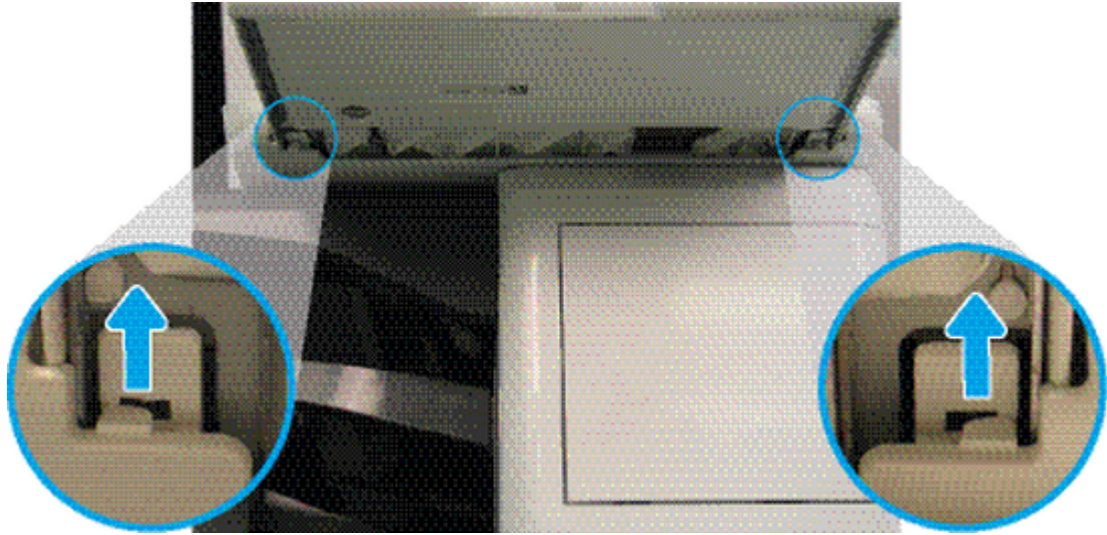
5. Slide the keyboard tray out until it stops.

Figure 5-652 Slide the keyboard tray out



6. Push up on the keyboard tray to release two tabs on the bottom of the tray, and then slide the tray toward you to disengage the tabs.

Figure 5-653 Release two tabs




7. Slide the keyboard tray all the way out of the printer to remove it.

Figure 5-654 Remove the keyboard



3. Remove the control panel (M681/M682/E67550/E67560/E67650/E67660)

Follow these steps to remove the control panel (M681/M682/E67550/E67560/E67650/E67660).

 **NOTE:** This step is for the M681/M682/E67550/E67560/E67650/E67660 printers. For the M652/M653/E65050/E65060/E65150/E65160 printers, skip this step.

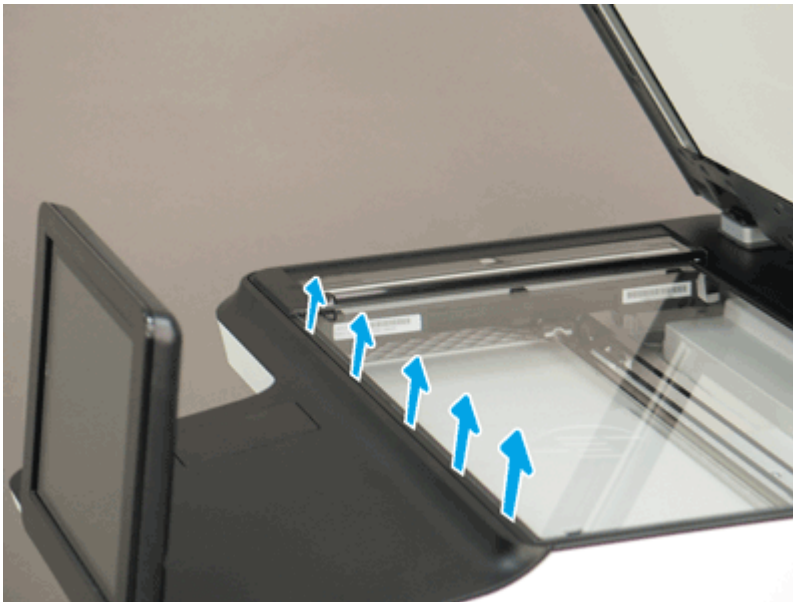
1. Tilt the control panel forward (callout 1), and then open the document feeder (callout 2).

Figure 5-655 Tilt the control panel forward and open the document feeder



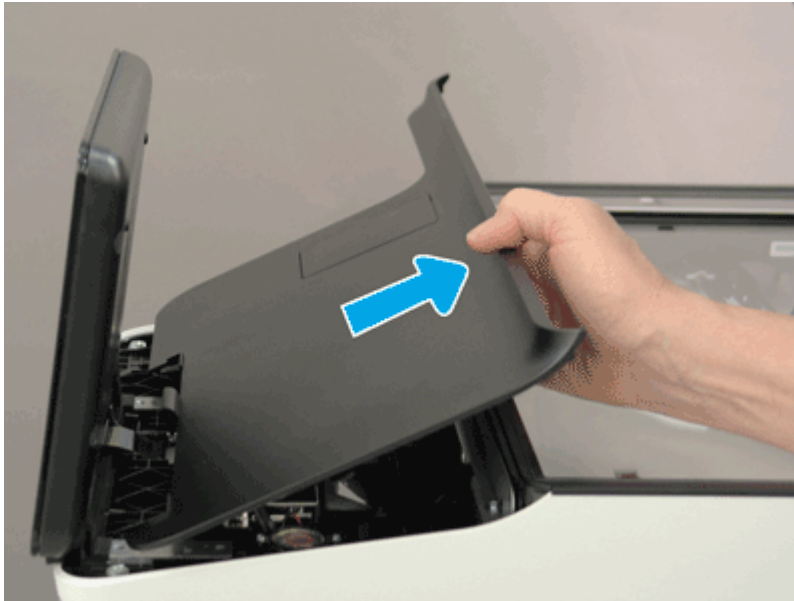
2. Beginning at the right side of the control-panel cover, carefully release five tabs along the top edge of the cover.

Figure 5-656 Release five tabs



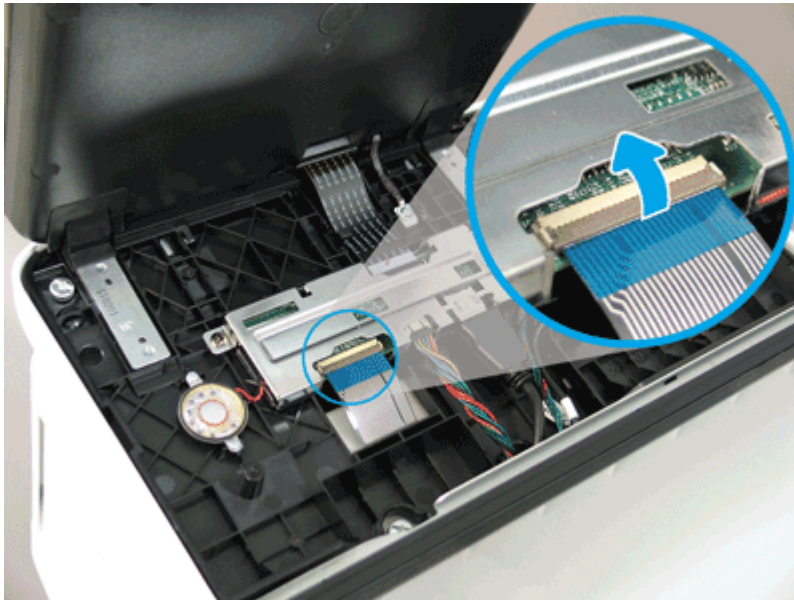
3. Continue to rotate the top edge of the cover away from the printer, and then remove the cover.

Figure 5-657 Remove the cover



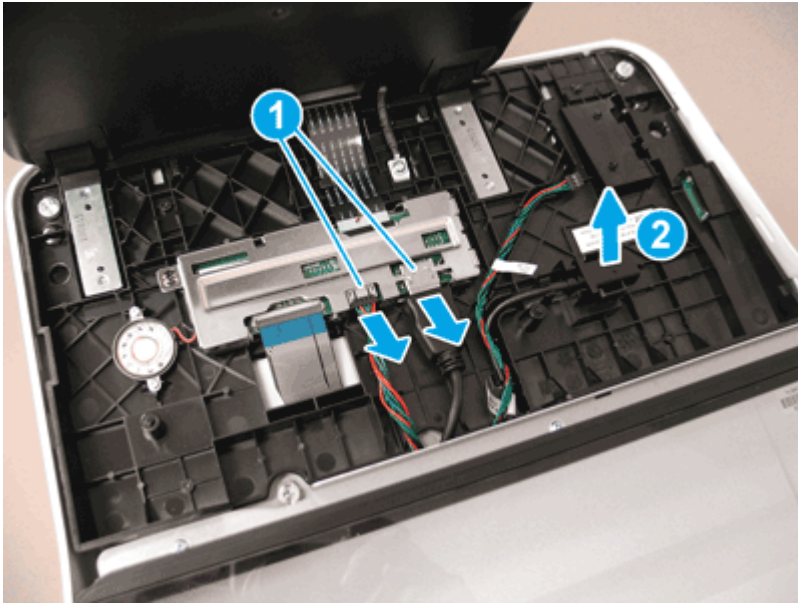
4. **Keyboard models only:** Lift up on the small, gray gate to release the keyboard flat cable.

Figure 5-658 Disconnect the keyboard flat cable (keyboard models only)



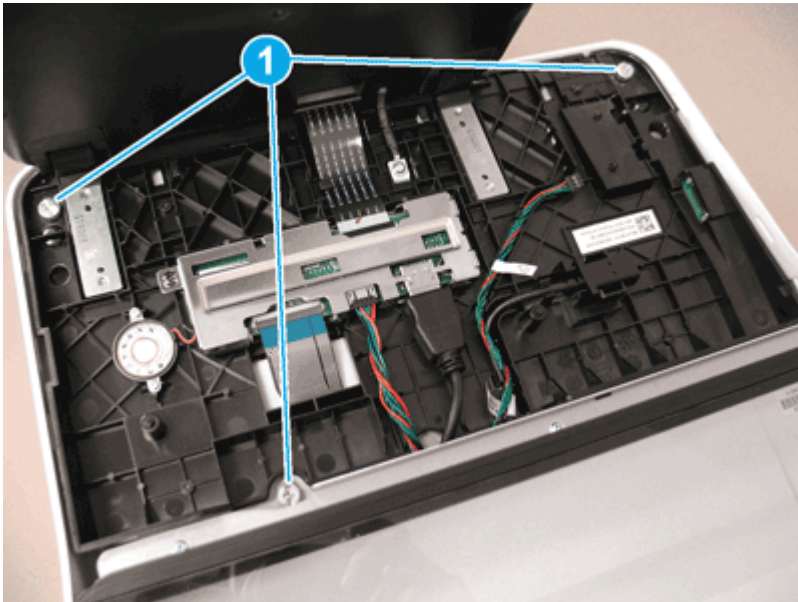
5. Disconnect two connectors (callout 1), and then release the USB cable (callout 2) from the holder.

Figure 5-659 Disconnect connectors



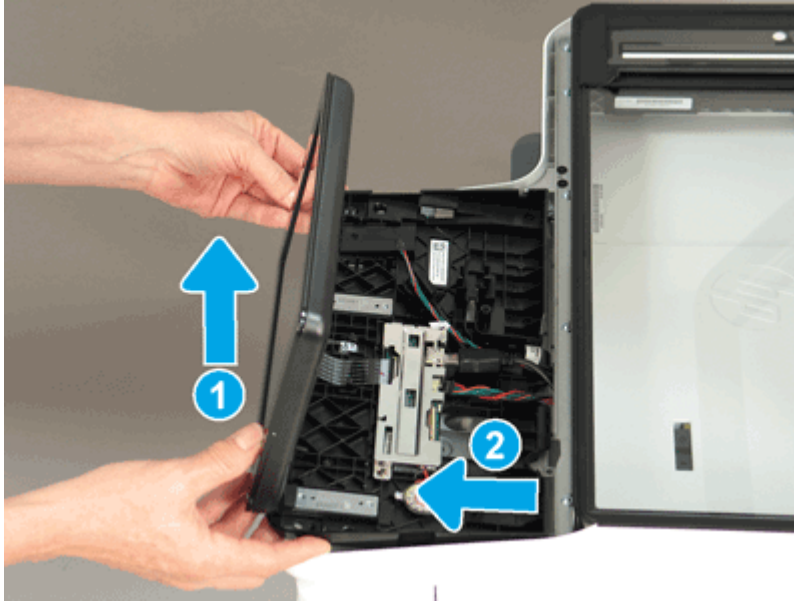
6. Remove three thumbscrews (callout 1).

Figure 5-660 Remove three thumbscrews



7. Lift the front of the control panel off of the printer (callout 1), and then slide it toward the front of the printer (callout 2) to remove it.

Figure 5-661 Remove the control panel

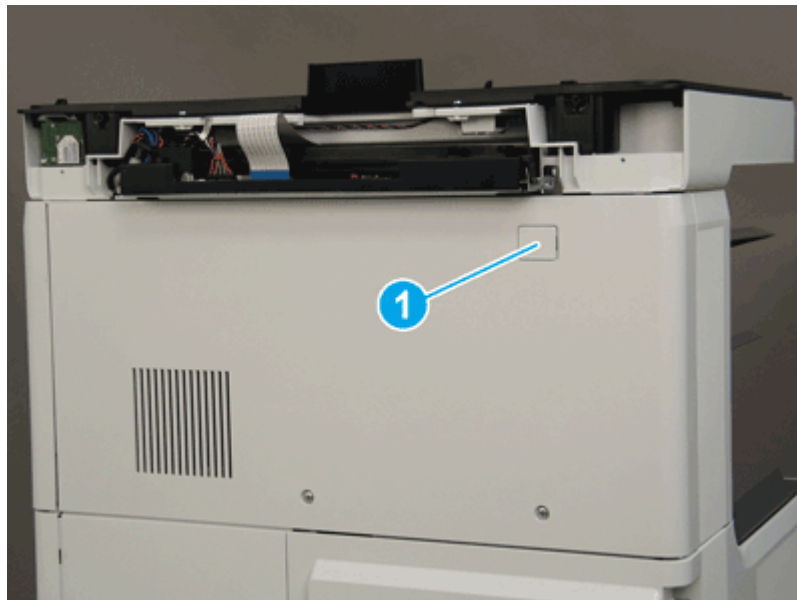


4. Remove the image scanner assembly (M681/M682/E67550/E67560/E67650/E67660)

Follow these steps to remove the image scanner assembly (M681/M682/E67550/E67560/E67650/E67660).

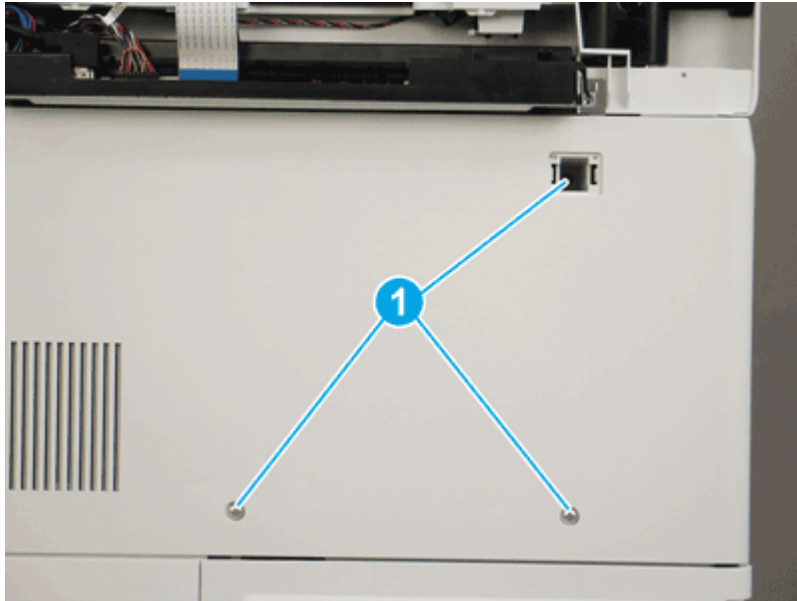
1. **Flow models only:** Do the following:
 - a. At the back of the printer, remove one small cover (callout 1).

Figure 5-662 Remove the small cover



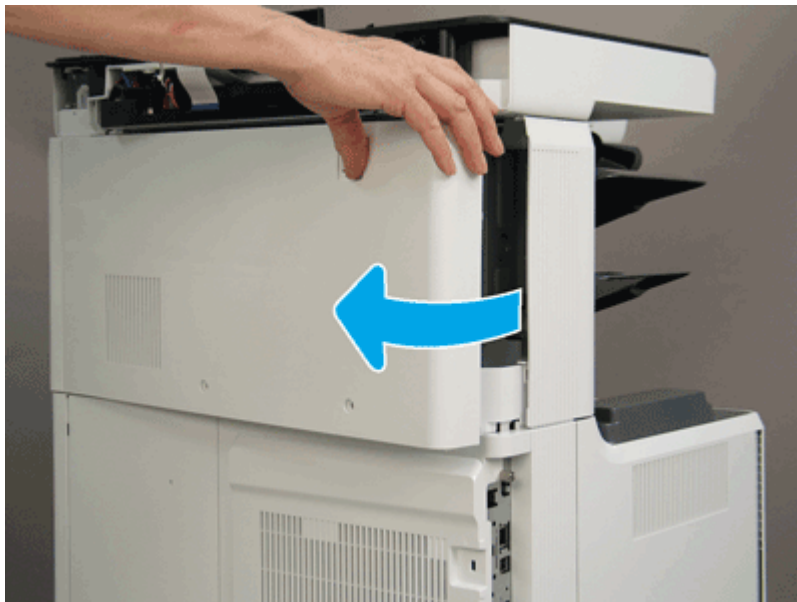
- b. Remove three screws (callout 1).

Figure 5-663 Remove three screws



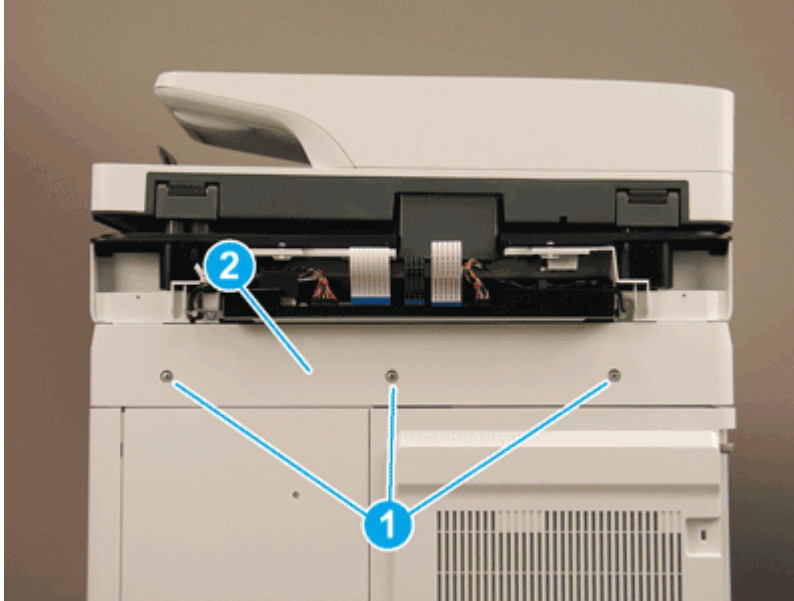
- c. Rotate the stapler/stacker rear cover away from the printer to remove it.

Figure 5-664 Remove the stapler/stacker rear cover



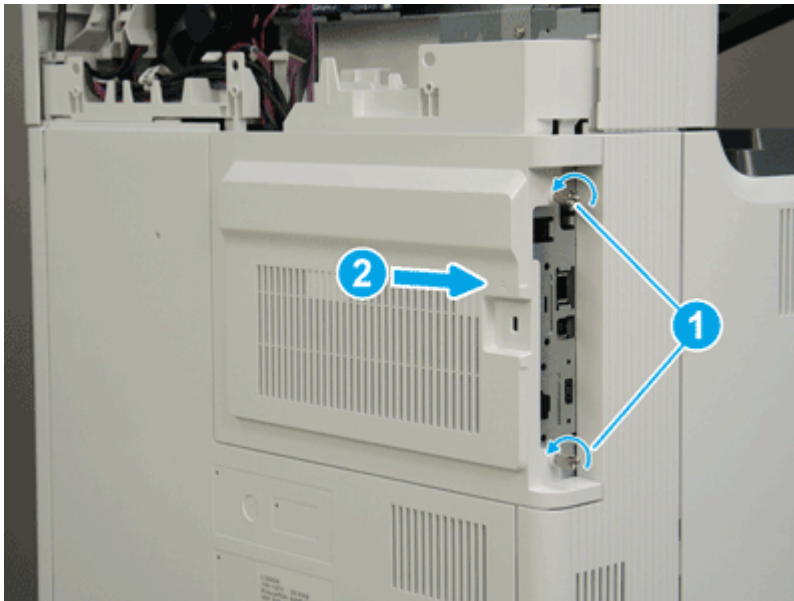
2. **M681dh, M681f, M682dh, Flow M681f, and E67650dh models only:** Remove three screws (callout 1), and then remove the upper rear cover (callout 2).

Figure 5-665 Remove the upper rear cover



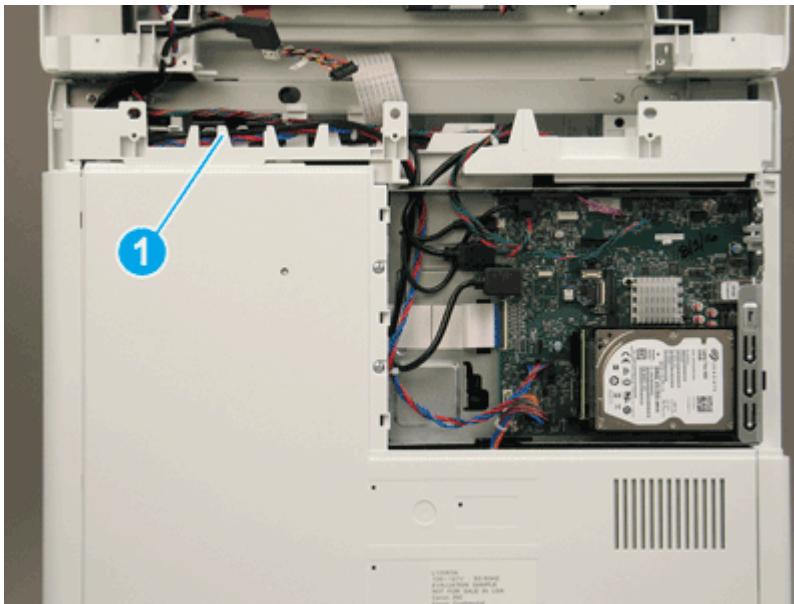
3. Loosen two thumbscrews (callout 1), and then slide the formatter cover away from the printer to remove it (callout 2).

Figure 5-666 Remove the formatter cover



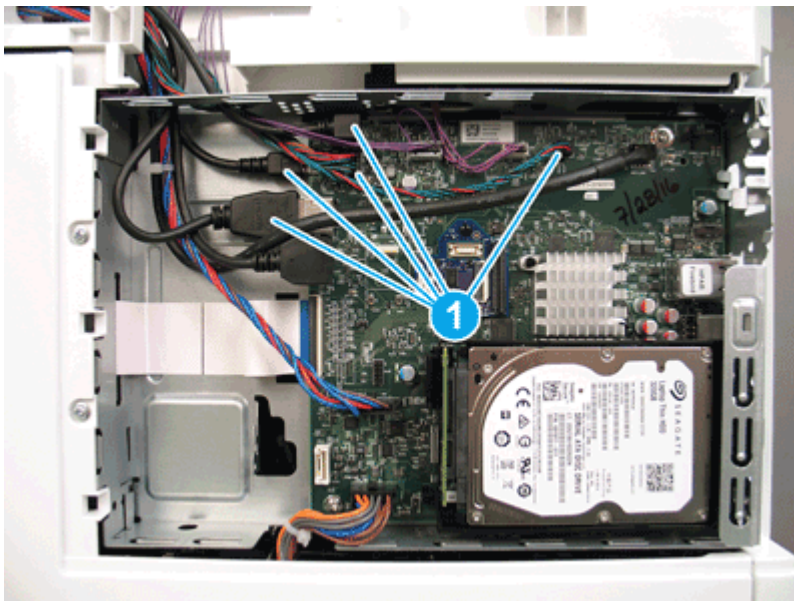
4. The remaining figures in this procedure show the Flow M682z model. While the cable routing (callout 1) on the M681dh, M681f, M682dh, Flow M681f, and E67650dh models is different, the removal procedures are the same for all models.

Figure 5-667 Cable routing for M681dh/M681f/Flow M681f/E67650dh



5. Disconnect five connectors on the formatter (callout 1).

Figure 5-668 Disconnect six connectors



6. Remove one screw (callout 1). Lift the latch on the flat cable connector to release the cable and then disconnect three connectors (callout 2). Slide the scanner control board (SCB) slightly away from the printer (callout 3), but do not completely remove it.

CAUTION: Do not completely remove the SCB. It is still connected to the printer.


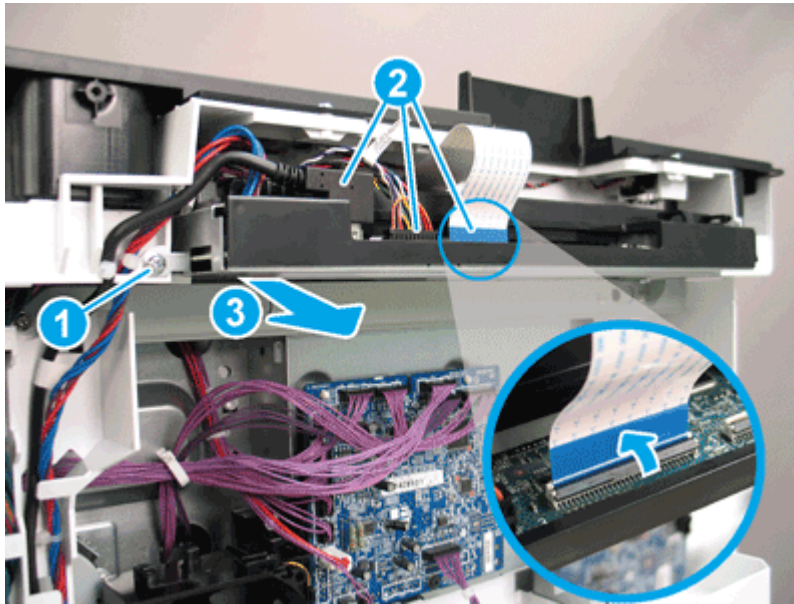
 **TIP:** When reinstalling the flat cable, lift the latch, install the cable, and then lower the latch to secure the cable.

Figure 5-669 Remove one screw and disconnect connectors



7. Release the locking tab, and then disconnect the connector.


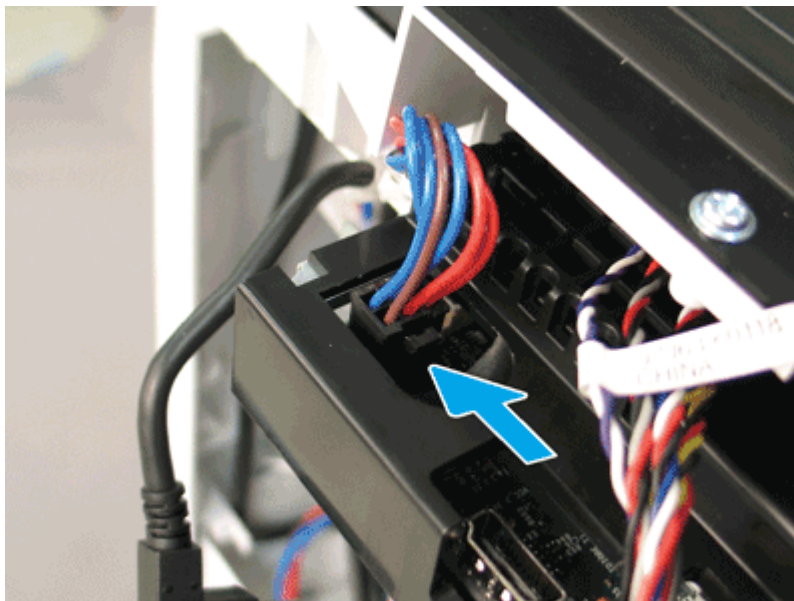
 **TIP:** When installing the image scanner, connect this cable first before sliding the SCB board into the scanner.

Figure 5-670 Disconnect one connector



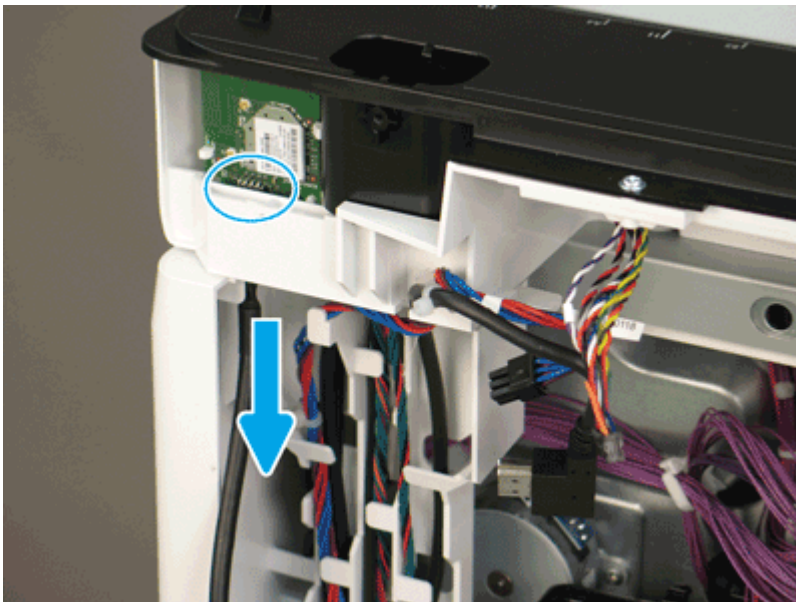
8. Slide the SCB away from the printer to remove it.

Figure 5-671 Remove the SCB



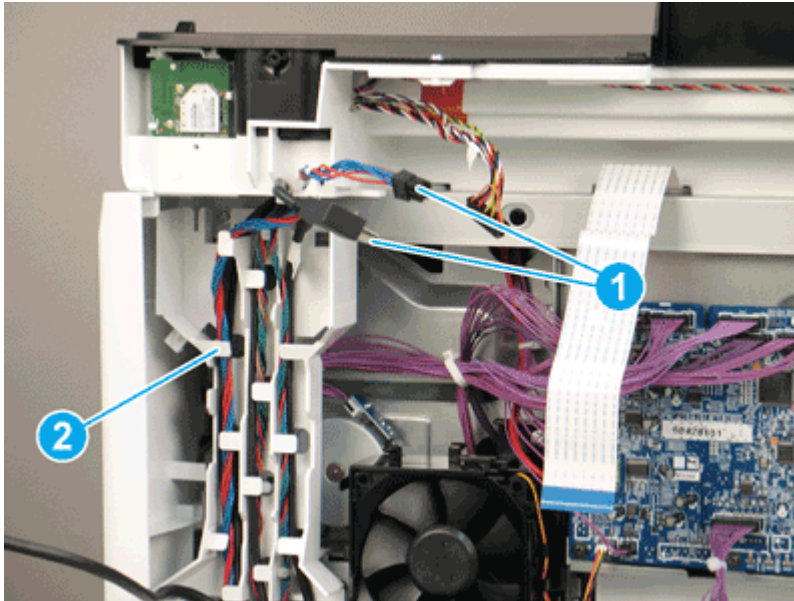
9. **Flow M682z only:** Gently pull down on the cable to disconnect the wireless connector.

Figure 5-672 Disconnect the wireless connector



10. Release the SCB cables (callout 1) from the cable guides (callout 2).

Figure 5-673 Release the SCB cables



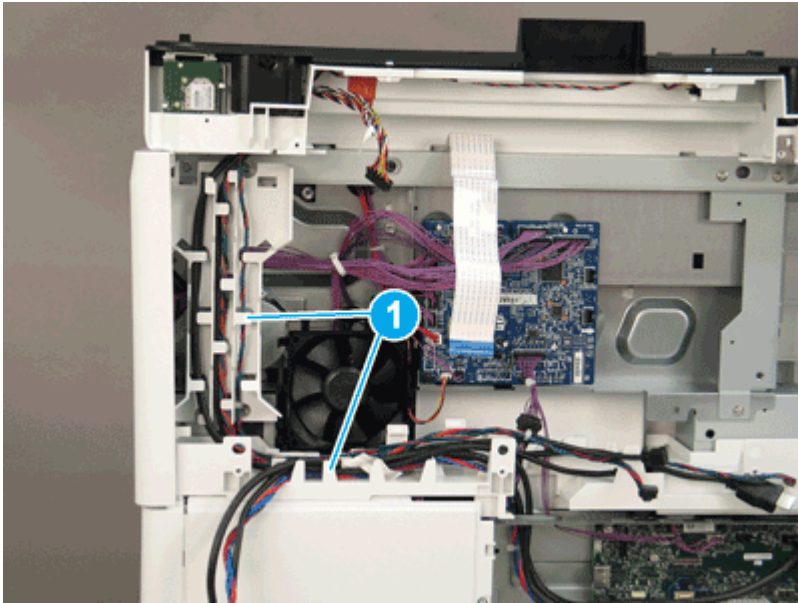
11. Allow the SCB cables and the wireless cable (Flow M682z only) to hang down without releasing them further (callout 1). Thread the disconnected formatter cables up through the opening in the top of the formatter case (callout 2).

Figure 5-674 Thread the cables



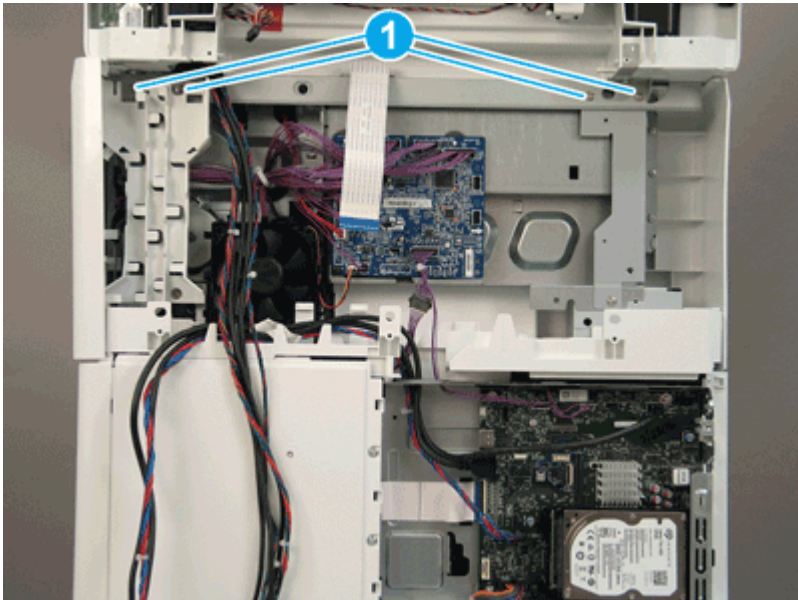
12. Release the formatter cables from the cable guides (callout 1).

Figure 5-675 Release the formatter cables



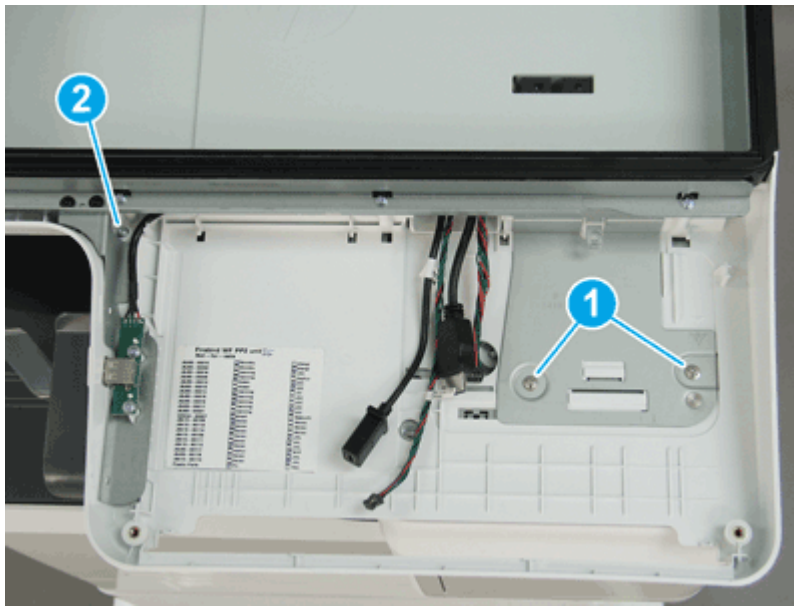
13. At the back of the printer, remove four screws (callout 1).

Figure 5-676 Remove four screws



14. **All M681/M682/E67550/E67560/E67650/E67660 models:** On the top of the image scanner assembly, at the location where the control panel was removed, remove two sheet metal screws (callout 1). **Flow M681z/Flow M682z/Flow E67660z only:** Remove one self-tapping screw (callout 2).

Figure 5-677 Remove three screws



15. Lift the image scanner assembly off of the printer to remove it.


 **IMPORTANT:** Make sure that all cables are released and free from the printer before lifting the image scanner assembly.


Figure 5-678 Remove the image scanner assembly



5. Unpack the replacement assembly



Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.


 **NOTE:** HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>


2. Unpack the replacement part from the packaging.

 **CAUTION:**  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

 **IMPORTANT:** Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

 **NOTE:** If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

 **NOTE:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

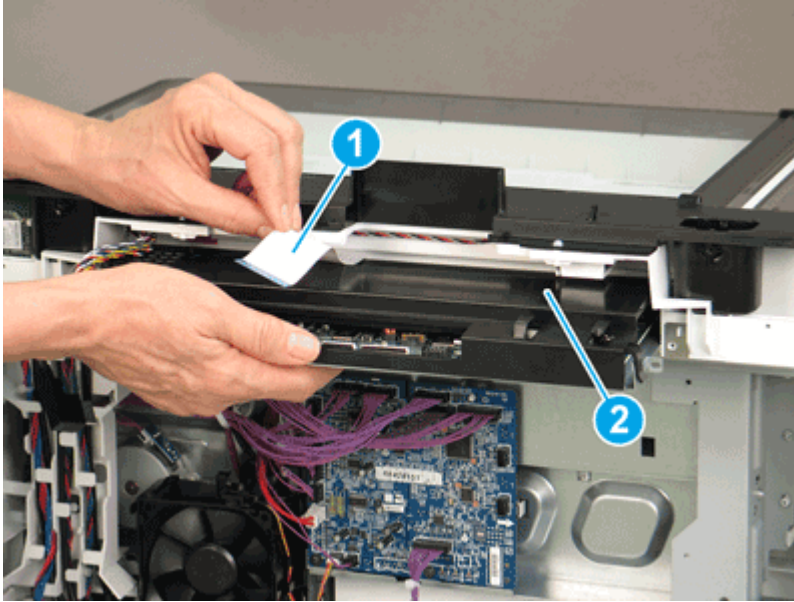
6. Reverse the removal steps to install the assembly

Also use the following **special installation instructions**.

Image scanner assembly

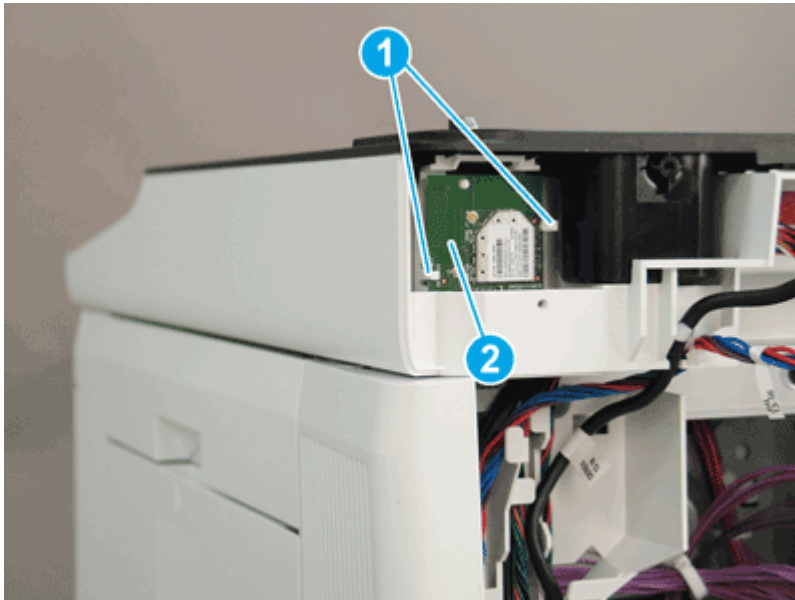
1. When reinstalling the SCB, make sure that the flat cable (callout 1) is positioned on top of the SCB (callout 2) before sliding it into place.

Figure 5-679 Position the flat cable



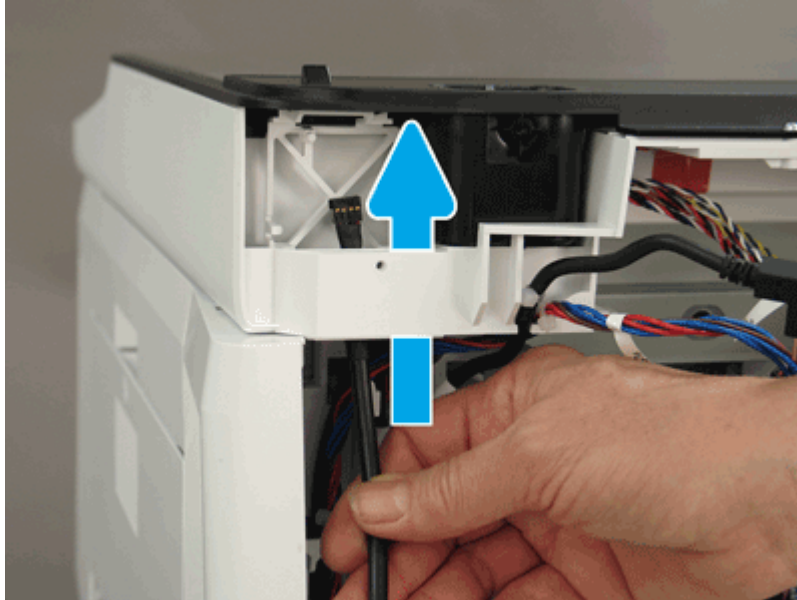
2. **Flow M682z only** : When reconnecting the wireless card cable, do the following:
 - a. Release two tabs (callout 1), and then remove the wireless card (callout 2).

Figure 5-680 Remove the wireless card



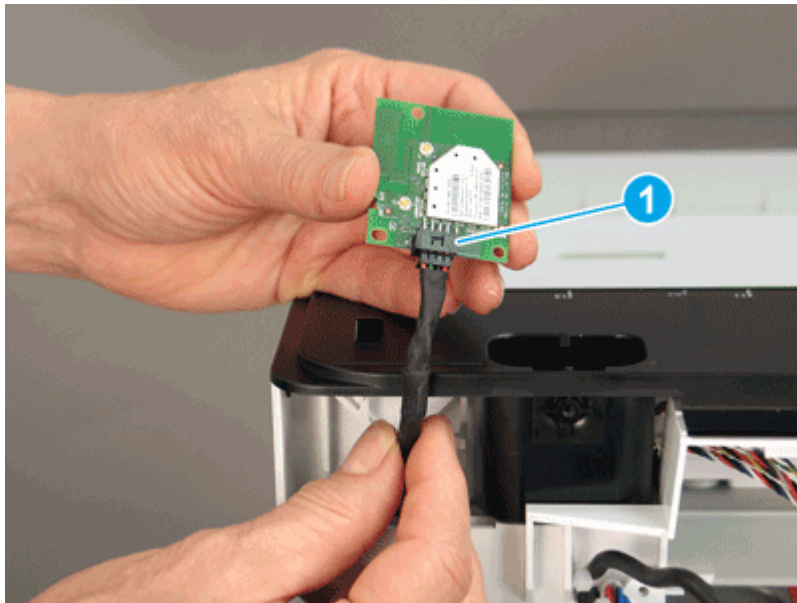
- b. Thread the wireless cable up through the opening in the image scanner.

Figure 5-681 Thread the wireless cable



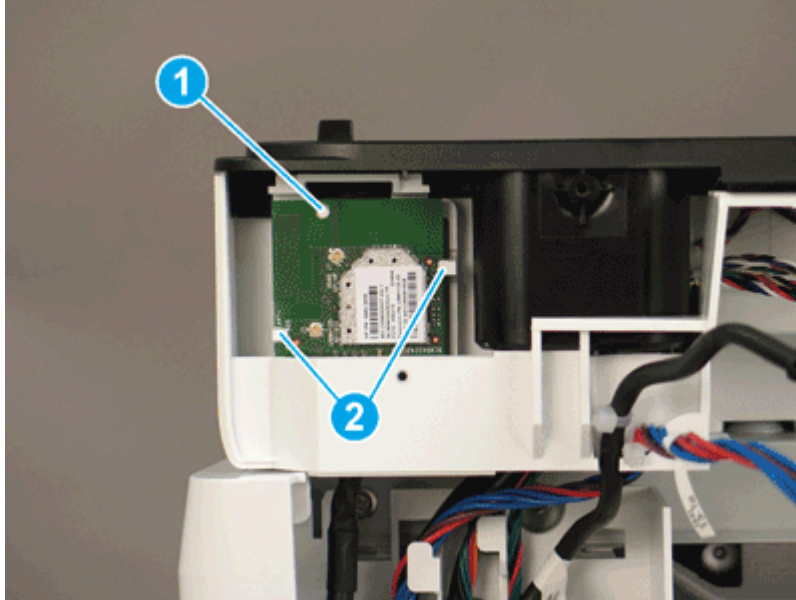
- c. Connect the cable to the wireless card (callout 1).

Figure 5-682 Connect the wireless card connector



- d. Reinstall the wireless card. Make sure that the hole in the card is positioned over the peg (callout 1), and that the card is under the two tabs (callout 2).

Figure 5-683 Reinstall the wireless card

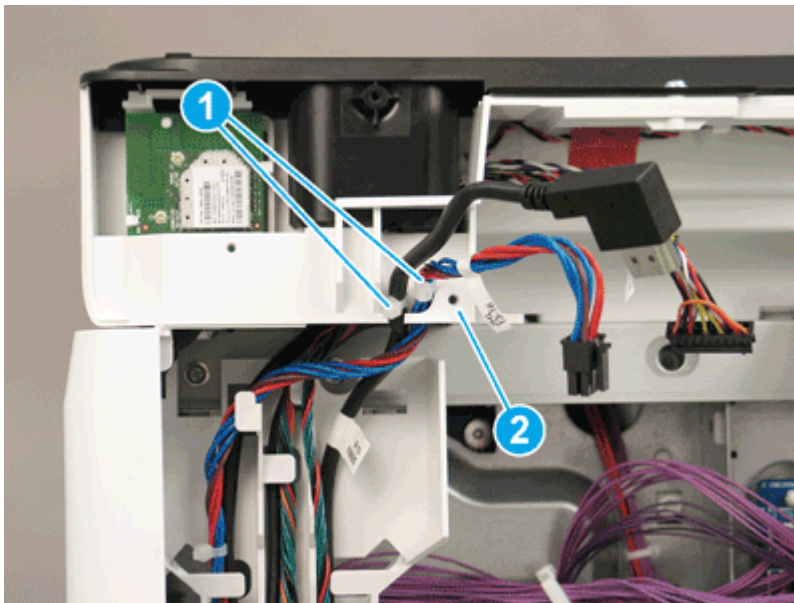


3. When reinstalling the SCB cables, make sure that the wire retainers (callout 1) on the cables are positioned above the plastic guide (callout 2).



NOTE: Continue to reverse the removal steps to finish installing the assembly.

Figure 5-684 Position the flat cable

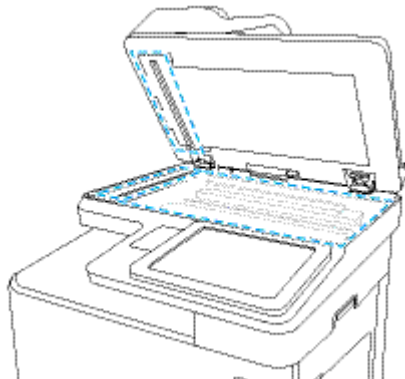


4. After installing the image scanner, clean the scanner glass and the document feeder strips with a soft cloth or sponge that has been moistened with nonabrasive glass cleaner. Dry the glass and white plastic parts with a chamois or a cellulose sponge to prevent spotting.



CAUTION: Do not use abrasives, acetone, benzene, ammonia, ethyl alcohol, or carbon tetrachloride on any part of the printer; these can damage the printer. Do not place liquids directly on the glass or platen. They might seep and damage the printer.

Figure 5-685 Clean the scanner glass




Removal and replacement: Scanner control board (SCB)

Learn how to remove and replace the scanner control board (SCB).

 [View a video of how to remove and replace the SCB.](#)


Mean time to repair: 10 minutes

Service level: Intermediate

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Disconnect the power cable.

 **WARNING!** To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-50 Part Information

Part number	Part description
5851-7208	Scanner control board (M681dh, M681f)
5851-7209	Scanner control board (Flow M681f, Flow M681z, Flow M682z)

Required tools

- #2 Phillips screwdriver with a magnetic tip
- Small flat blade screwdriver

After performing service

Turn the printer power on

- Connect the power cable.

- Use the power switch to turn the power on.

Post service test

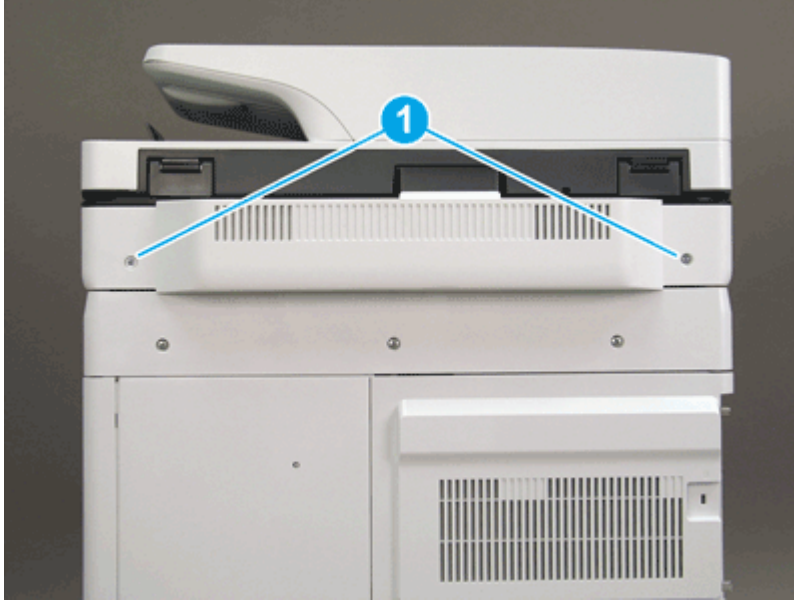
Place a document on the scanner glass and scan it. Verify the document scanned correctly.

1. Remove the image scanner rear cover

Follow these steps to remove the image scanner rear cover.

1. At the back of the printer, remove two screws (callout 1).

Figure 5-686 Remove two screws



2. Rotate the image scanner back cover up to remove it.

Figure 5-687 Remove the image scanner back cover

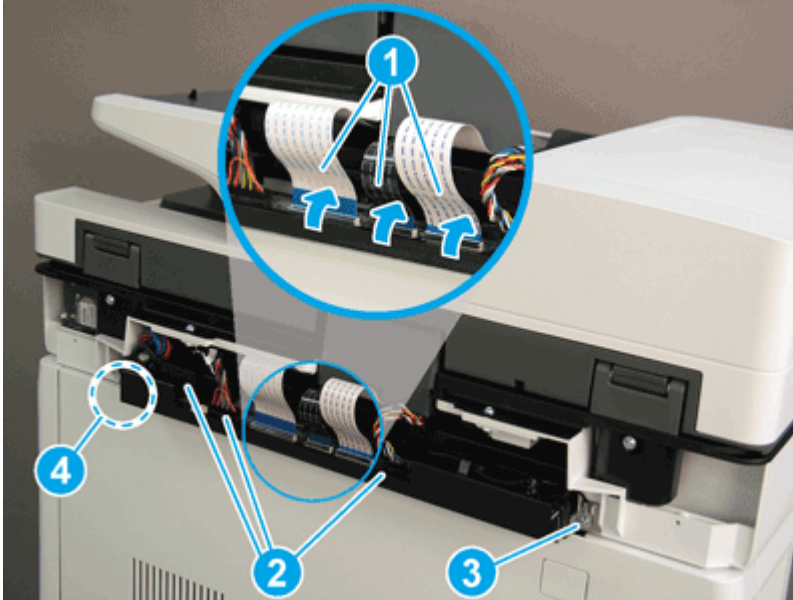


2. Remove the scanner control board (SCB)

Follow these steps to remove the scanner control board (SCB).

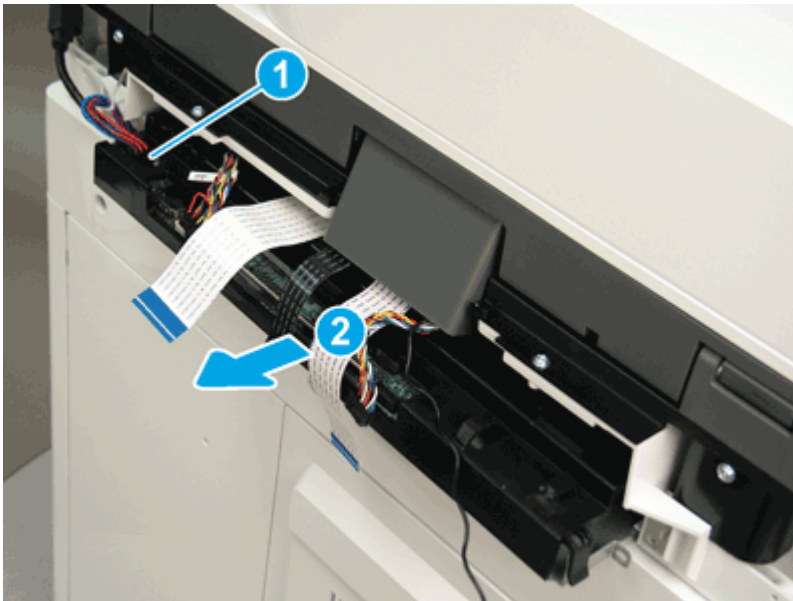
1. Lift the latches to release three flat cables (callout 1), and then disconnect them. Disconnect three connectors (callout 2). Remove one screw to release a grounding wire (callout 3), and then remove one screw on the left side of the SCB (callout 4).

Figure 5-688 Disconnect connectors and remove two screws



2. Partially slide the SCB out of the printer, and then release the locking tab to disconnect one connector (callout 1). Slide the SCB out of the printer to remove it (callout 2).

Figure 5-689 Remove the SCB



3. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

4. Reverse the removal steps to install the assembly

Also use the following **special installation instructions**.

Scanner control board

- When reinstalling the SCB, make sure all of the cables are positioned on top of the SCB before sliding it into the printer.



NOTE: Continue to reverse the removal steps to finish installing the assembly.

Figure 5-690 Check the cables when installing the SCB



Internal parts and assemblies


Learn how to remove and replace the printer internal parts and assemblies.

Removal and replacement: Tray 1 pickup roller

Learn how to remove and replace the Tray 1 pickup roller.


Mean time to repair: 5 minutes

Service level: Basic

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Disconnect the power cable.

 **WARNING!** To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-51 Part information

Part number	Part description
RL2-0034-000CN	Tray 1 pickup roller

Required tools

- No special tools are needed to remove or install this assembly.

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

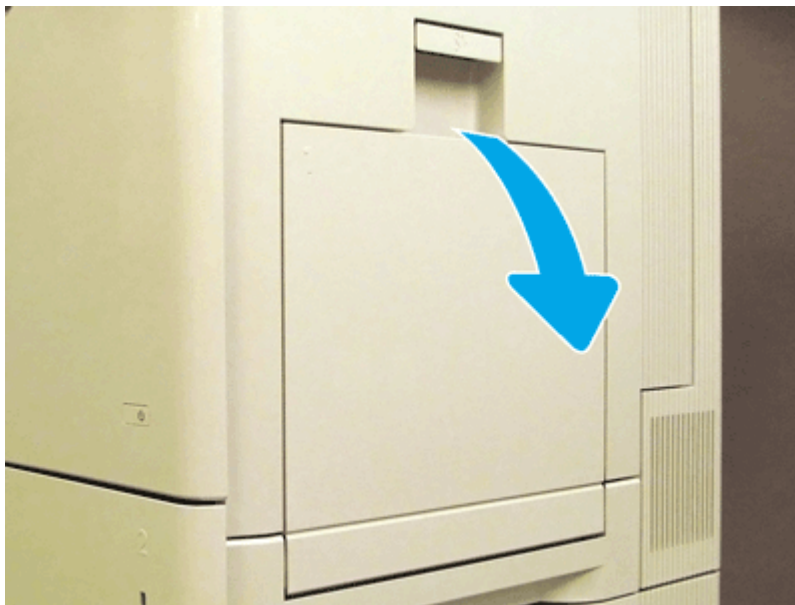
Print a document and select Tray 1 as the source. Verify that the paper correctly picks from Tray 1

1. Remove the Tray 1 pickup roller

Follow these steps to remove the Tray 1 pickup roller.

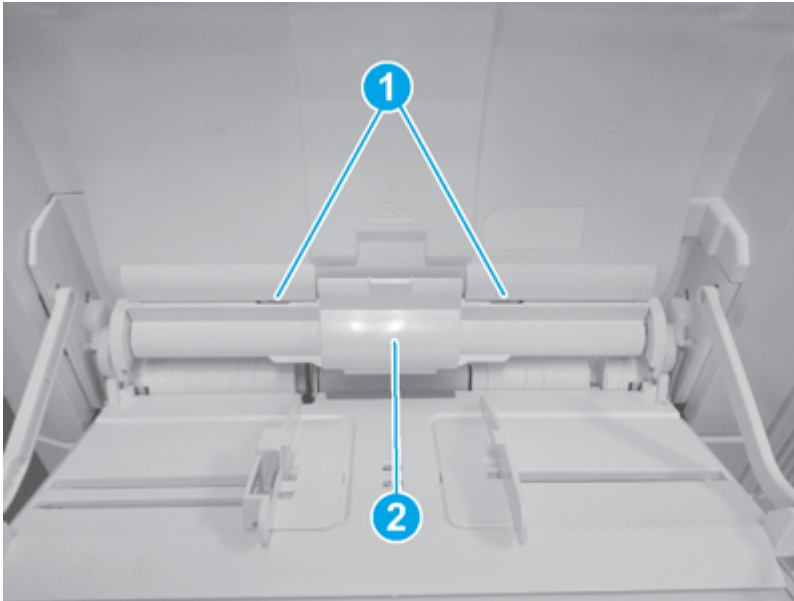
1. Open Tray 1.

Figure 5-691 Open Tray 1



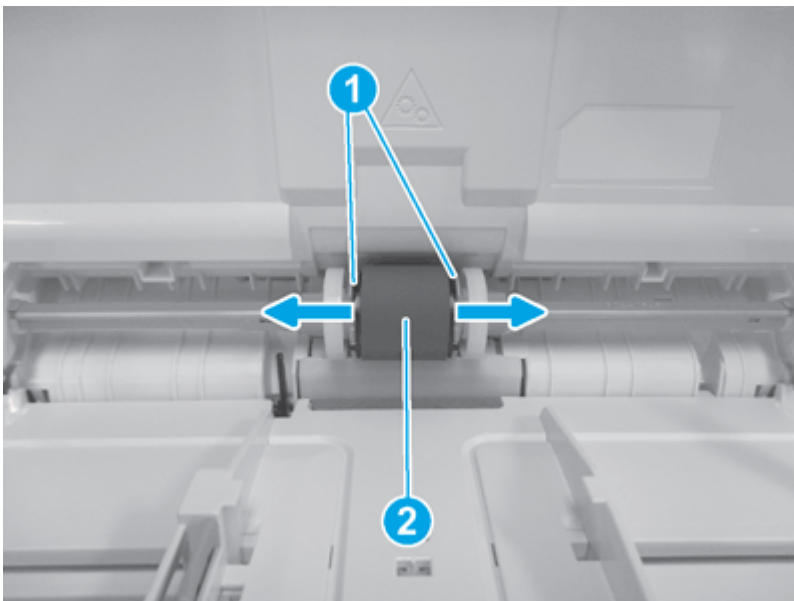
2. Place a finger in the center notch and gently pull down to release two tabs (callout 1) and remove the cover (callout 2).

Figure 5-692 Release two tabs and remove the cover



3. Use a small, flat-blade screwdriver to release two tabs (callout 1), and then use the screwdriver to gently pry and lift the roller (callout 2) up and out of the printer.


Figure 5-693 Remove the pickup roller




2. Unpack the replacement assembly


Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.

 **NOTE:** HP recommends responsible disposal of the defective part.


2. Unpack the replacement part from the packaging.

CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT:  Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE:  If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

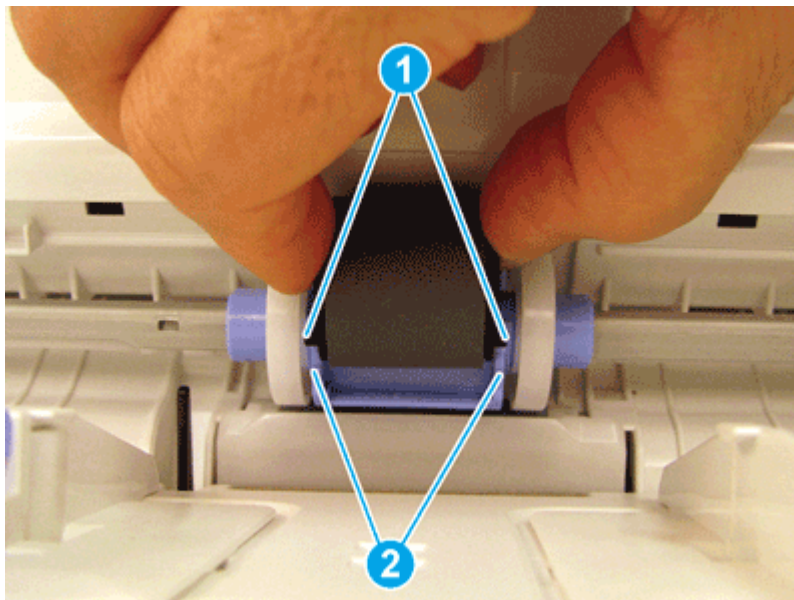
NOTE:  When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

3. Install the Tray 1 pickup roller

Learn about installing the Tray 1 pickup roller.

1. To install the roller, align the tabs (callout 1) on the roller with the slots (callout 2) in the printer.

Figure 5-694 Install the pickup roller




2. Reverse the removal steps to finish installing the assembly.

Removal and replacement: Tray 1 separation roller

Learn how to remove and replace the Tray 1 separation roller.


Mean time to repair: 5 minutes

Service level: Basic

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Disconnect the power cable.

 **WARNING!** To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-52 Part information

Part number	Part description
RL2-0079-000CN	Tray 1 separation roller

Required tools

- Small, flat-blade screwdriver

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

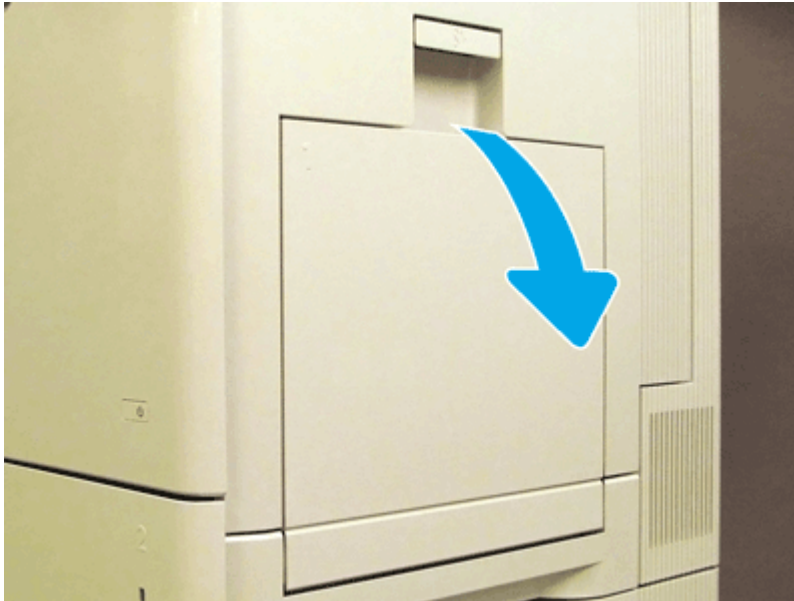
Print a document and select Tray 1 as the source. Verify that the paper correctly picks from Tray 1

1. Remove the Tray 1 separation roller

Follow these steps to remove the Tray 1 separation roller.

1. Open Tray 1.

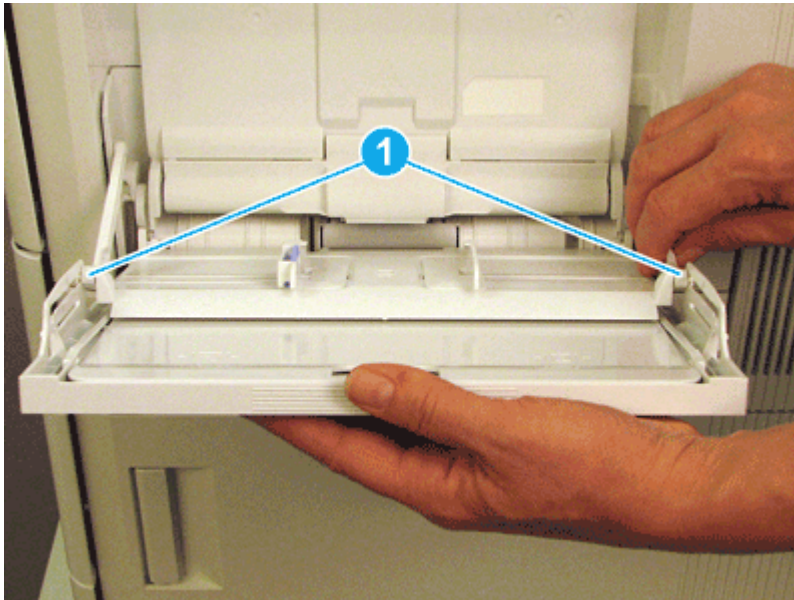
Figure 5-695 Open Tray 1



2. Slightly flex the slot guides to release two hinge pins (callout 1) from the guides.

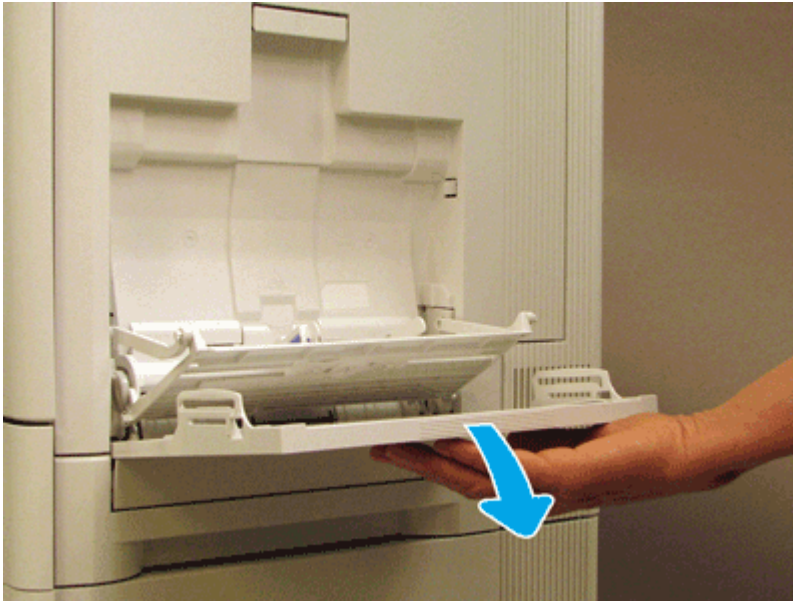
⚠ CAUTION: Support Tray 1 while releasing the hinge pins. The tray will drop and damage the printer if it is not supported.

Figure 5-696 Release two hinge pins



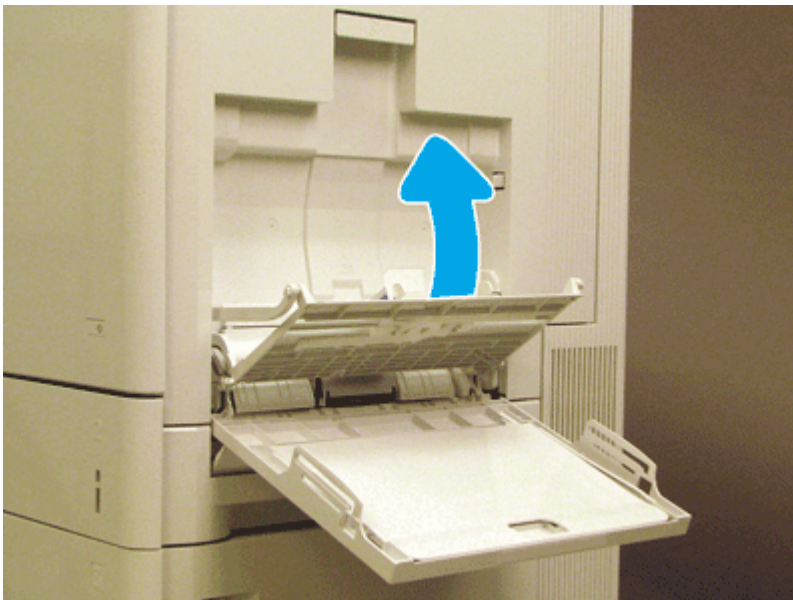
- Carefully lower the outer tray.

Figure 5-697 Lower the outer tray



- Raise the lifting plate up until it stays in position next to the printer.

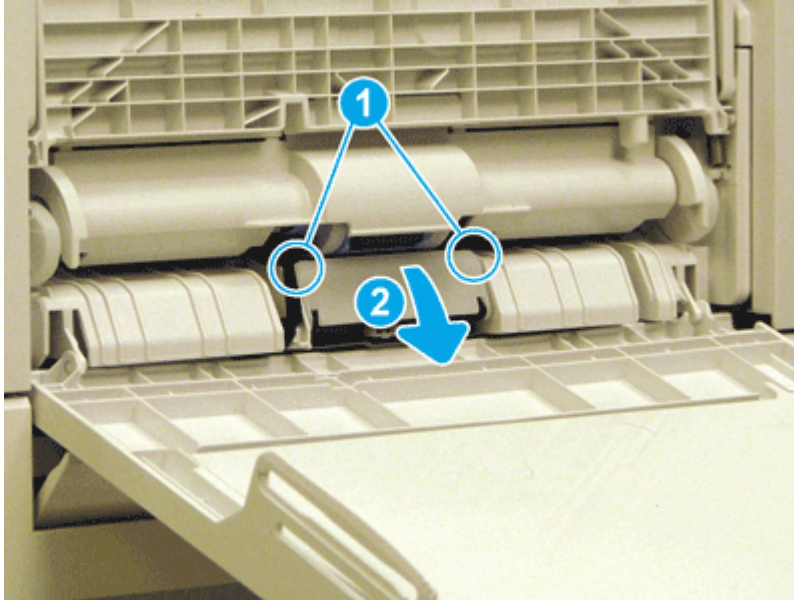
Figure 5-698 Raise the lifting plate



- Release two tabs (callout 1), and then open the separation roller door (callout 2).

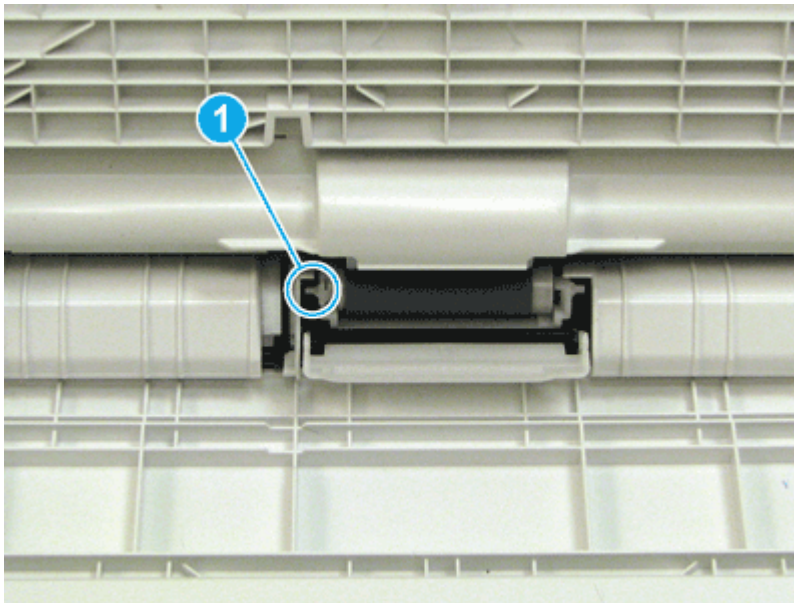
⚠ CAUTION: Use care when working in this area. The hinge pins on the outer door assembly are fragile and can easily break. Do not exert any pressure on the door assembly.

Figure 5-699 Open the separation roller door



6. Locate the tab (callout 1) on the left end of the roller.

Figure 5-700 Locate the tab



7. Use a small, flat-blade screwdriver to apply pressure to the left side of the roller, and then gently pry it away from the printer. Hold pressure on the roller until it clears the tab and the tray assembly.


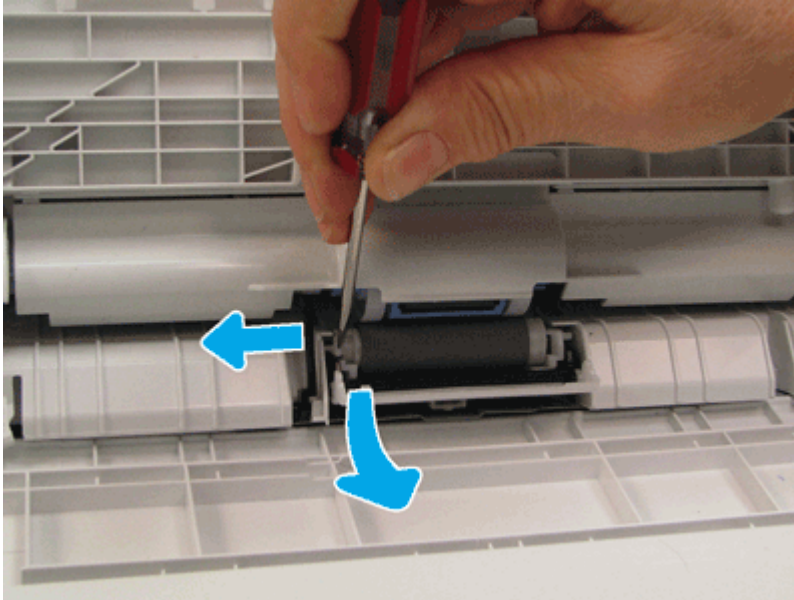
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-701 Remove the separation roller



2. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Formatter

This document provides the procedures to remove and replace the formatter.



[View a video of how to remove and replace the formatter.](#)

Mean time to repair: 15 minutes

Service level: Intermediate



IMPORTANT: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Disconnect the power cable.

⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-53 Part information

Formatter part number	
J7Z98-60001	Formatter kit (M652/M653)
J7Z98-67904	Formatter kit (M652/M653; India/China)
J8A10-60001	Formatter kit (M681/M682)
J8A10-67902	Formatter kit (M681/M682; India/China)

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Make sure that the printer initializes to a **Ready** state.

Print a configuration page to make sure that the printer is functioning correctly.

1. Remove the formatter cover

Follow these steps to remove the formatter cover.

- Unscrew two thumbscrews (callout 1), and then slide the formatter cover (callout 2) away from the printer to remove it.


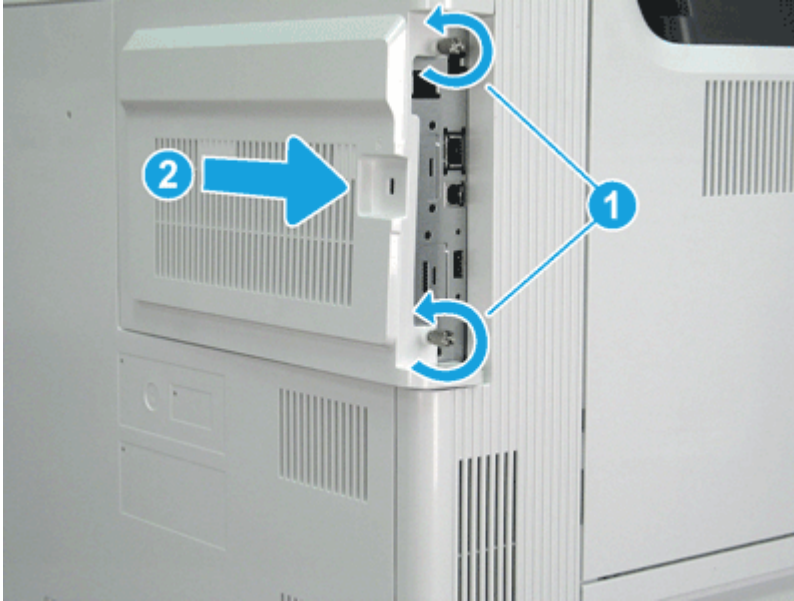

 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-702 Remove the formatter cover



2. Remove the fax PCA (M681f/Flow M681f/Flow M681z/Flow M682z)

Follow these steps to remove the fax PCA (M681f/Flow M681f/Flow M681z/Flow M682z).

 **NOTE:** This step is for the M681/M682/E67550/E67560/E67650/E67660 printers. For the M652/M653/E65050/E65060/E65150/E65160 printers, skip this step.

1. Locate the fax PCA on the formatter.

Figure 5-703 Locate the fax PCA



2. Rotate end left end of the fax PCA away from the formatter (callout 1) to disconnect the connector, and then slide the card away from the formatter (callout 2) to remove it.

Figure 5-704 Remove the fax PCA

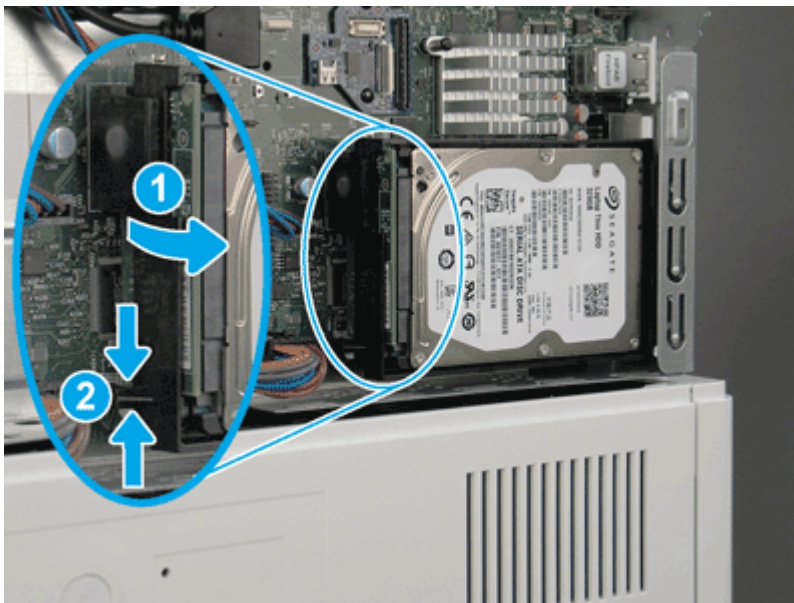


3. Remove the hard disk drive (HDD; M653dh/M681/M682/E67550/E67560/E67650/E67660)

Follow these steps to remove the hard disk drive (HDD; M653dh/M681/M682/E67550/E67560/E67650/E67660).

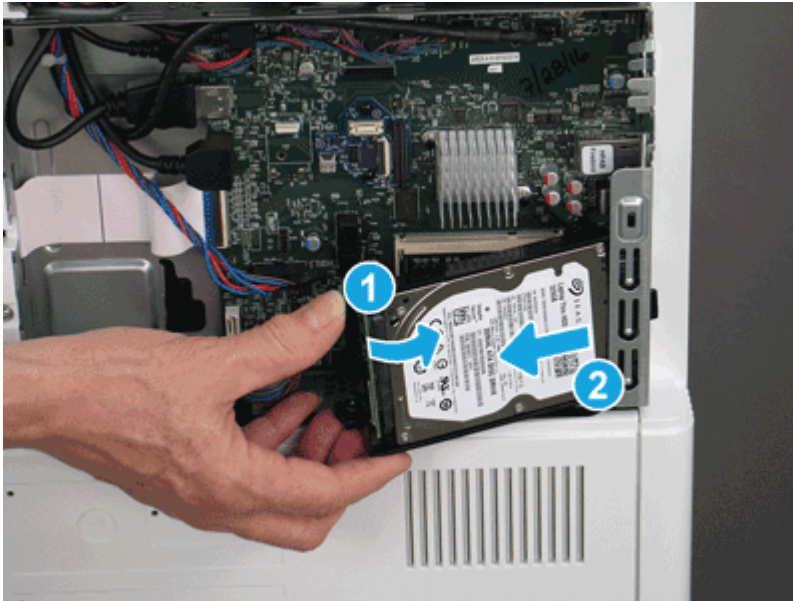
1. Release the locking connector (callout 1), and then pinch the retainer (callout 2) to release it.

Figure 5-705 Release the HDD



2. Rotate the connector end of the HDD out and away from the formatter (callout 1), and then slide it to the left (callout 2) to remove it.

Figure 5-706 Remove the HDD



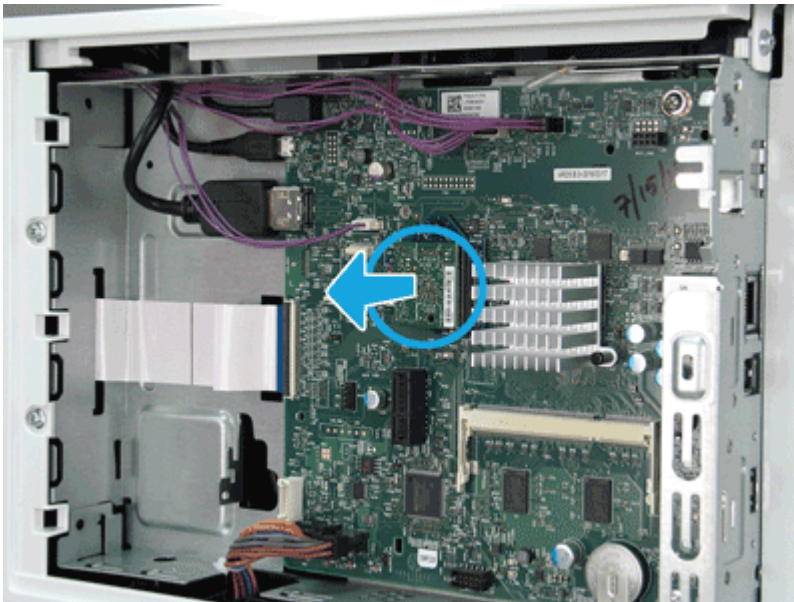
4. Remove the embedded MultiMedia Card (eMMC)

Follow these steps to remove the embedded MultiMedia Card (eMMC).

CAUTION:  ESD sensitive part.

- Locate the eMMC component on the formatter, and then pull it straight off of the formatter to remove it.

Figure 5-707 Remove the eMMC

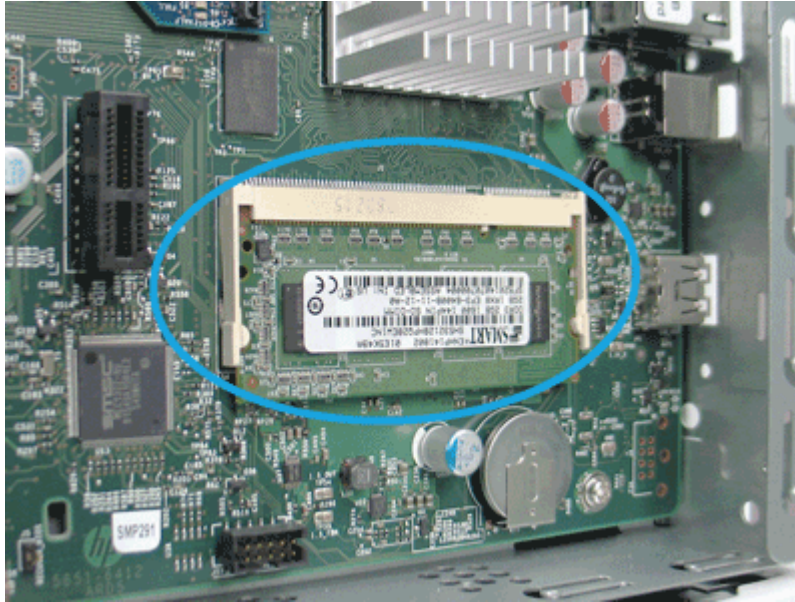


5. Remove the dual in-line memory module (DIMM)

Follow these steps to remove the dual in-line memory module (DIMM).

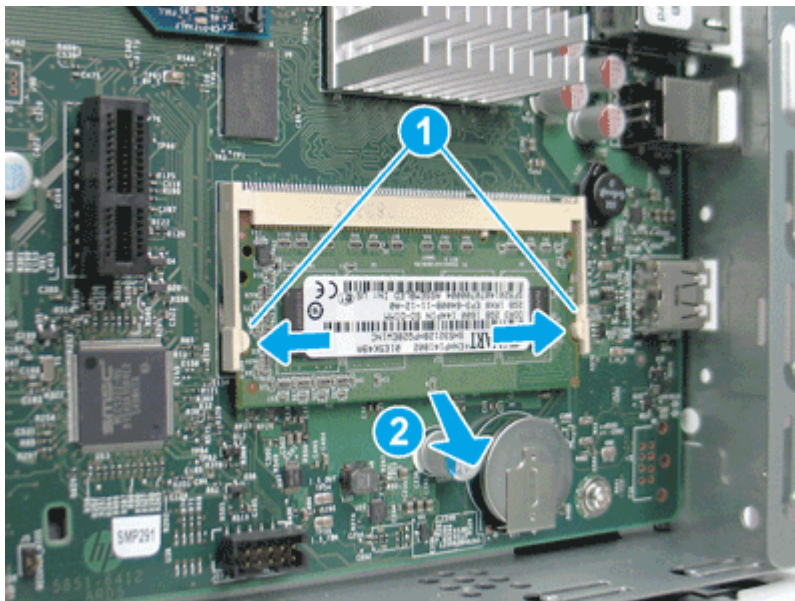
1. Locate the DIMM on the formatter.

Figure 5-708 Locate the DIMM



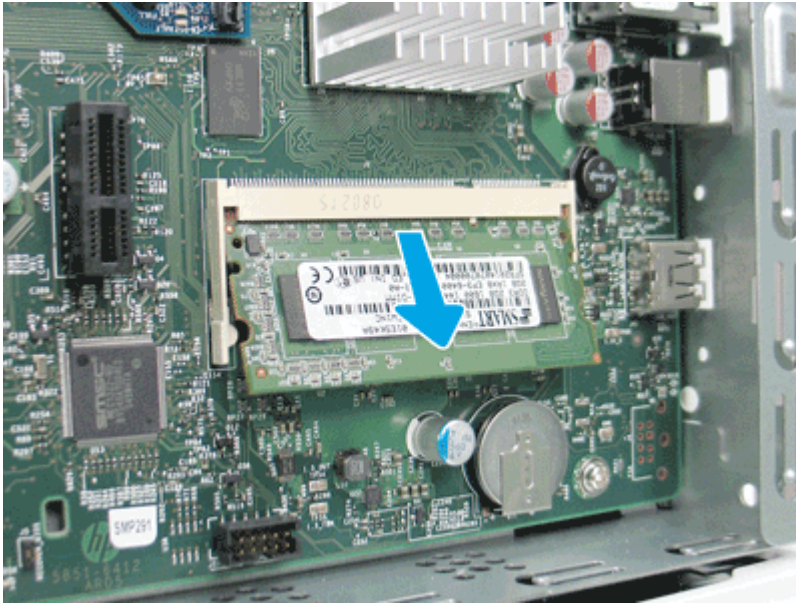
2. Release two locking arms (callout 1), and then allow the edge of the DIMM to rotate away from the holder (callout 2).

Figure 5-709 Release two locking arms



3. Pull the DIMM down and away from the holder to remove it.

Figure 5-710 Remove the DIMM

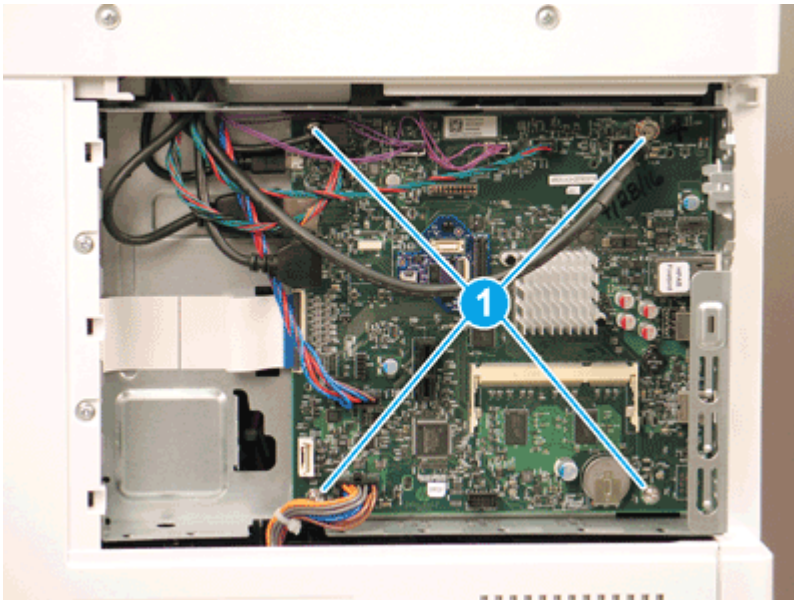


6. Remove the formatter

Follow these steps to remove the formatter.

- Disconnect all of the connectors on the formatter, remove four screws, and then remove the formatter.


Figure 5-711 Remove the formatter



7. Unpack the replacement assembly



Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.


 **NOTE:** HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>


2. Unpack the replacement part from the packaging.

 **CAUTION:**  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

 **IMPORTANT:** Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

 **NOTE:** If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.


 **NOTE:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Pre-exposure PCA assembly (black)

Learn how to remove and replace the pre-exposure PCA assembly (black).


Mean time to repair: 25 minutes

Service level: Advanced

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Disconnect the power cable.

 **WARNING!** To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-54 Part information

Part number	Part description
RM3-7047-000CN	Pre-exposure PCA assembly (black)

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

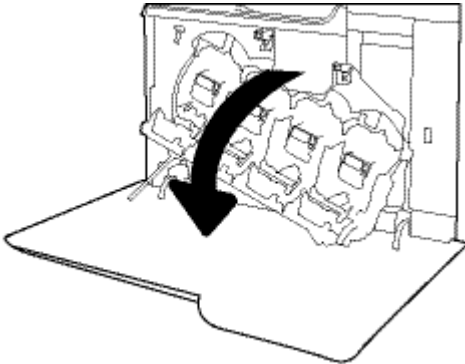
No post service test is available for this assembly.

1. Remove a toner cartridge

Follow these steps to remove a toner cartridge.

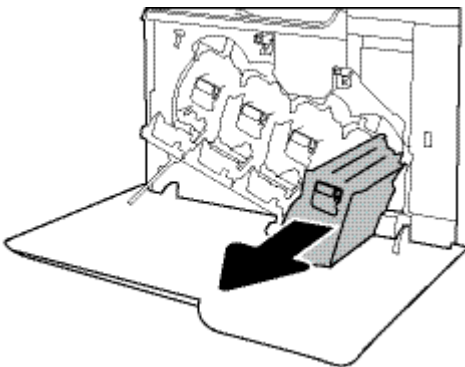
1. Open the front door.

Figure 5-712 Open the front door



2. Grasp the handle of the used toner cartridge and pull out to remove it.

Figure 5-713 Remove the toner cartridge




2. Remove the front door

Follow these steps to remove the front door.

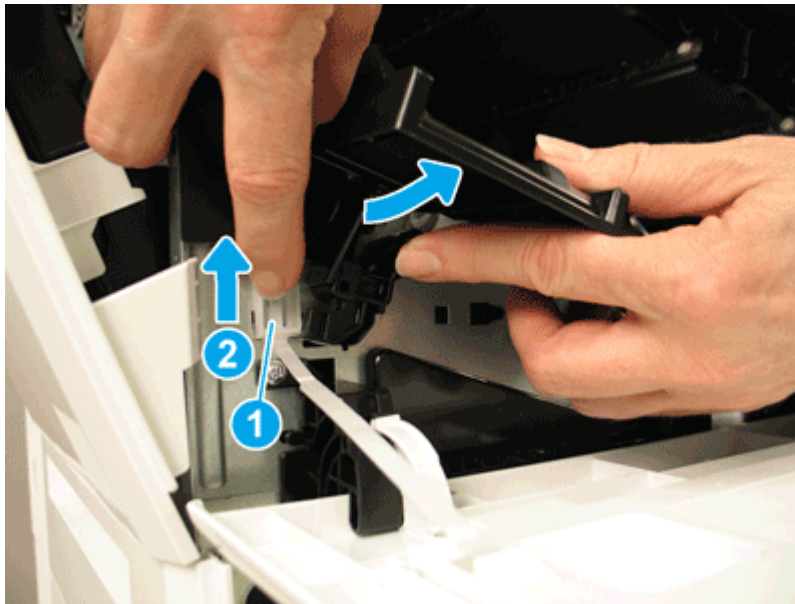
1. Remove Tray 2.

2. Open the following doors:

 **TIP:** The left door must be closed first in order to close the front door.

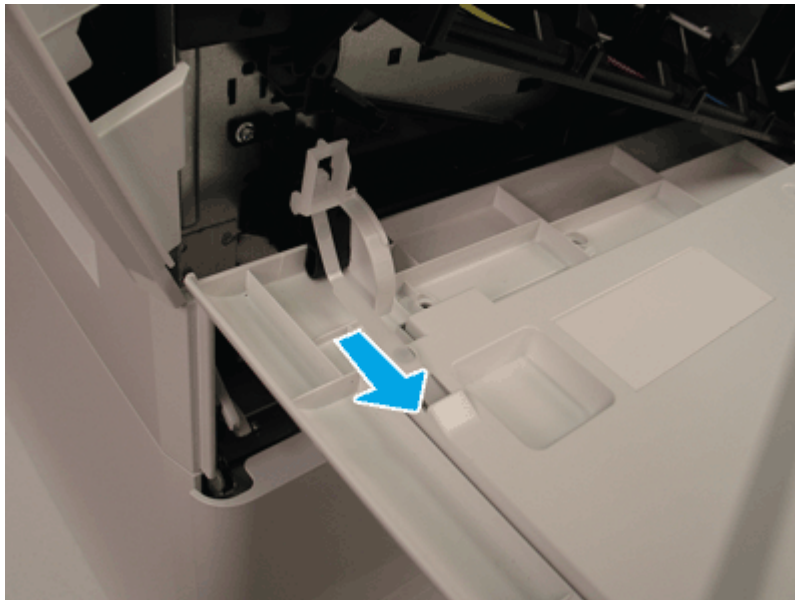
- Front door
 - Left door
3. Hold the black shutter to one side, release one tab (callout 1), and then slide the link arm (callout 2) up to release it from the sheet metal.

Figure 5-714 Release the link arm



4. Slide the released link arm into the door.

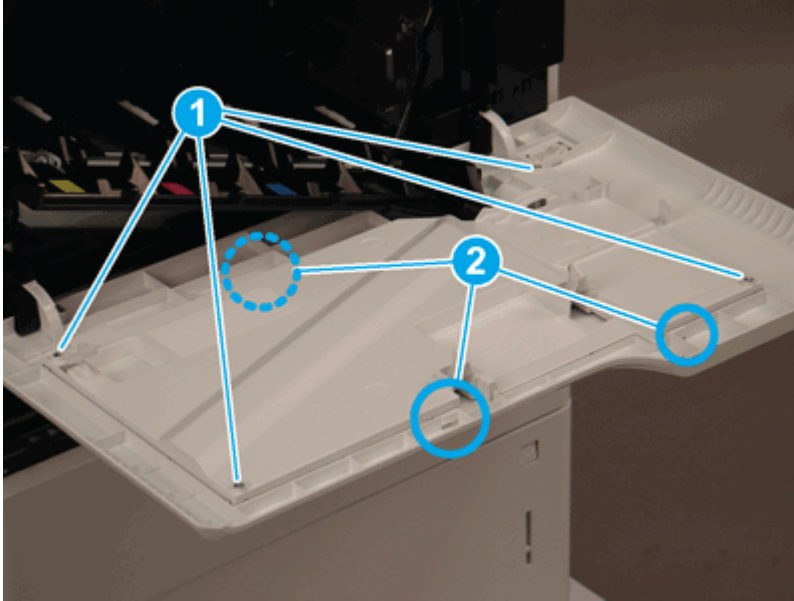
Figure 5-715 Slide the released link arm into the door



5. Remove four screws (callout 1), release three tabs (callout 2), and then remove the inner cover.

CAUTION: Use care when removing the inner cover. The black cartridge door is spring-loaded and may close abruptly when released from the inner cover.

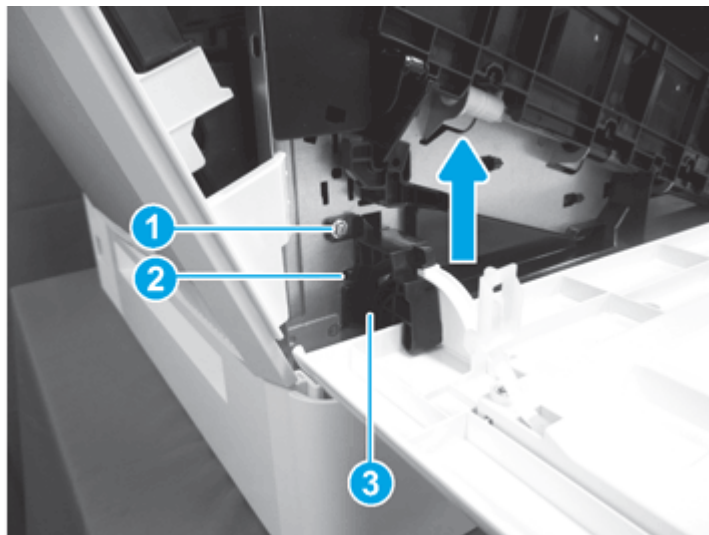
Figure 5-716 Remove the inner cover



6. Remove one screw (callout 1), and then release one boss (callout 2). Slide the hinge (callout 3) up to release it.

TIP: Use a flat-blade screwdriver to release the boss, and then lift upwards on the corner of the door.

Figure 5-717 Release the hinge



7. Slide the front door (callout 1) to the right to remove it.

NOTE: Remove the hinge (callout 2) and the link arm (callout 3) from the front door and install them on the replacement front door.


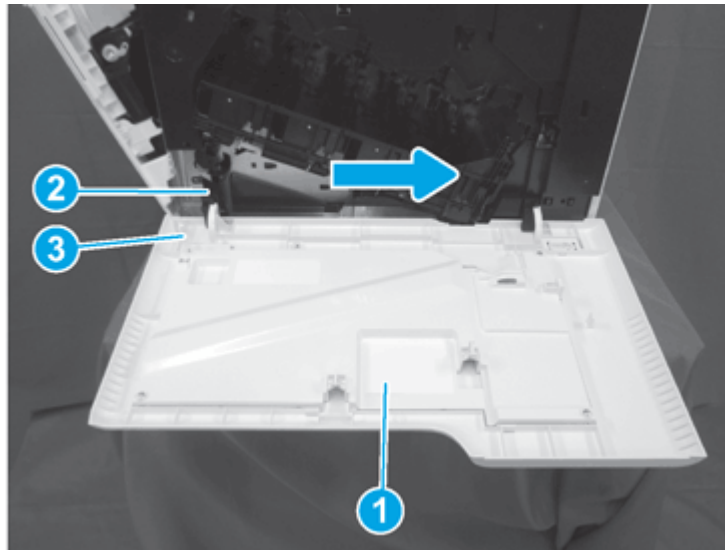
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-718 Remove the front door



3. Remove the front inner covers

Follow these steps to remove the front inner covers.

1. Open the following doors:
 - Right door
 - Left door
2. Release four tabs (callout 1).


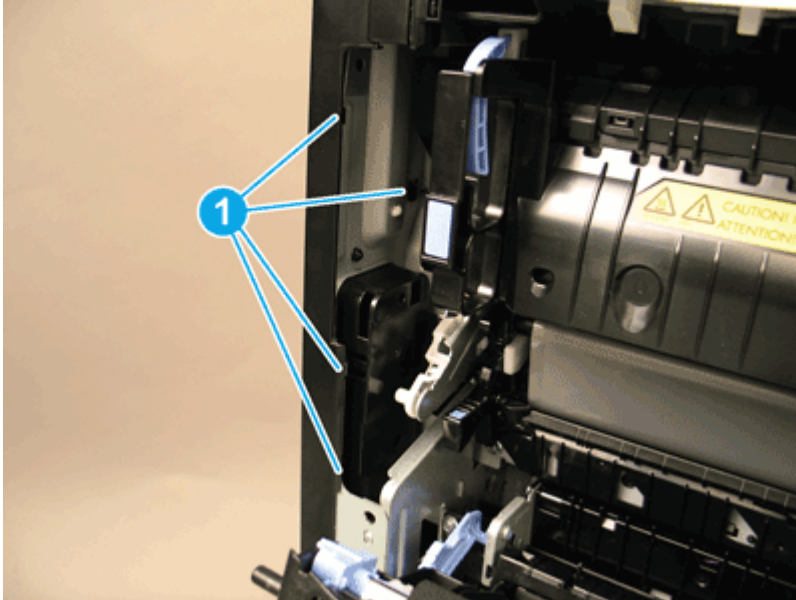

 **TIP:** Small, embossed arrows on the front of the cover indicate where the release tabs may be found.

Figure 5-719 Release four tabs

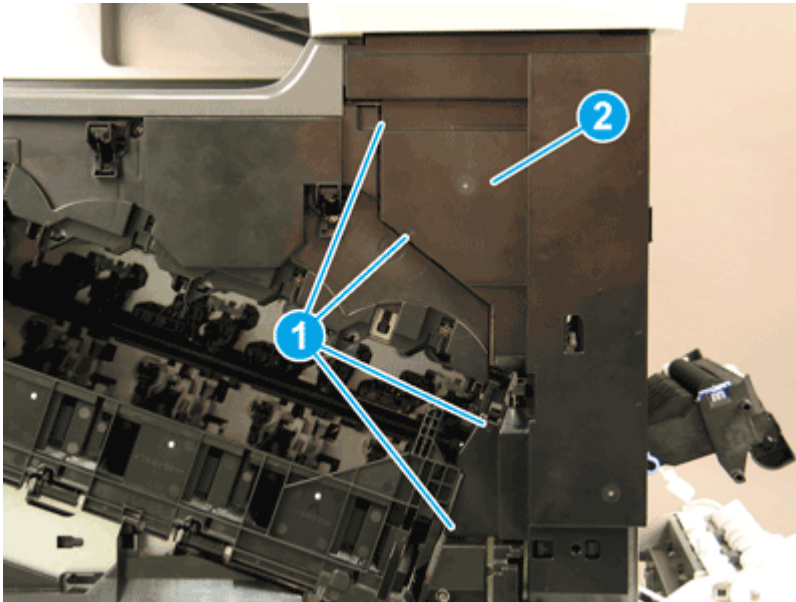


3. Release four bosses (callout 1), and then remove the front right inner cover (callout 2).

 **TIP:** Small, embossed arrows on the front of the cover indicate where the release tabs may be found.

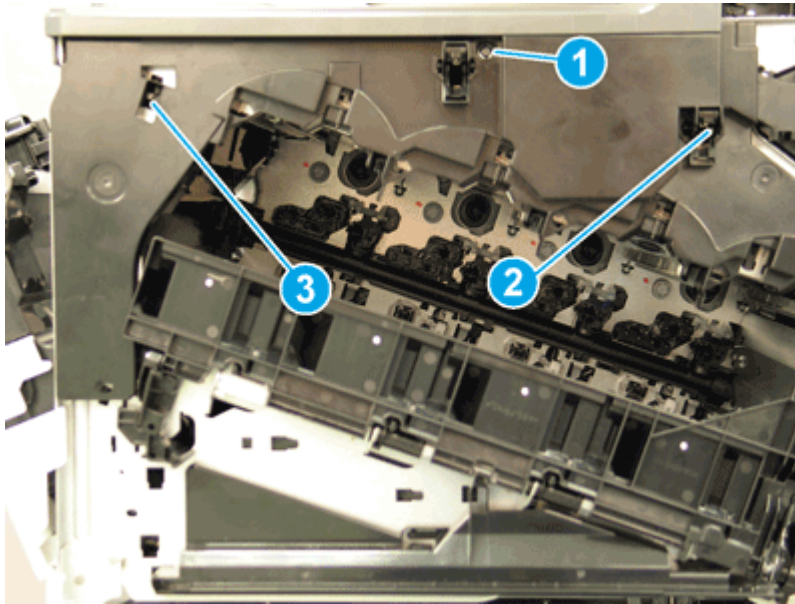
Push on the back side of the cover for easy release.

Figure 5-720 Remove the front right inner cover



4. Remove one screw (callout 1). Carefully pull the right side of the cover down and away from the printer to release one boss (callout 2). Continue to pull the cover away from the sheet metal to release the second boss (callout 3), and then remove the cover.

Figure 5-721 Remove the front inner cover



4. Remove the pre-exposure PCA assembly (black)

Follow these steps to remove the pre-exposure PCA assembly (black).

1. Lower the black cartridge shutter (previously connected to the front door) all the way down to keep it out of the way.
2. Disconnect one connector (callout 1), and then remove one screw (callout 2).


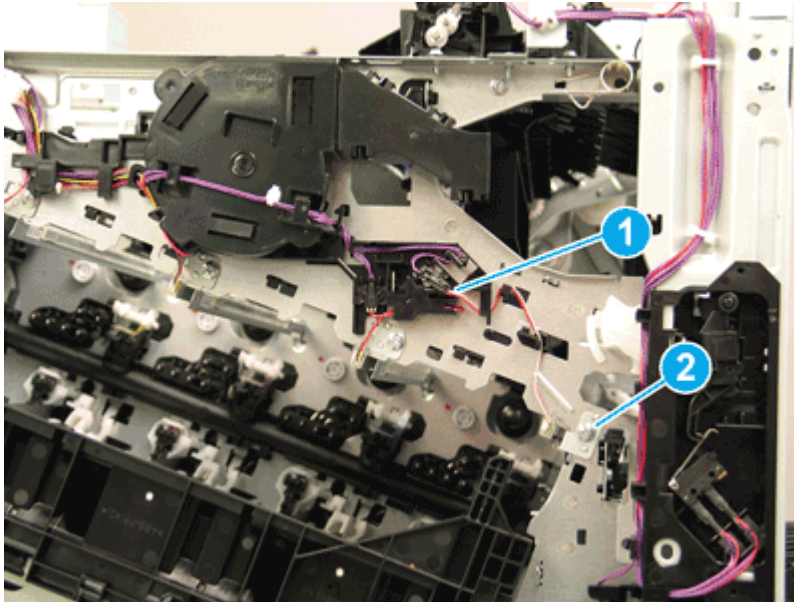
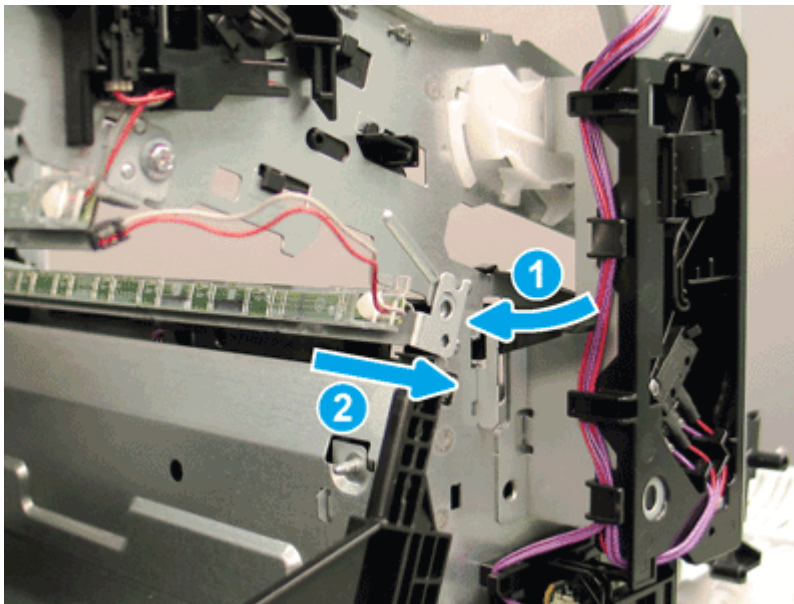
 **TIP:** When reinstalling the screw, do not press too hard or apply pressure from the back side to avoid bending the sheet metal.

Figure 5-722 Disconnect one connector and remove one screw



3. Pivot the outer end of the assembly left (callout 1) until it is almost in the center of the printer. Rock the end of the assembly still attached to the printer up and down several times to release the sheet metal tabs. Pull the assembly away from the printer (callout 2) to release it.

Figure 5-723 Release the pre-exposure PCA assembly



4. Remove the pre-exposure PCA assembly.


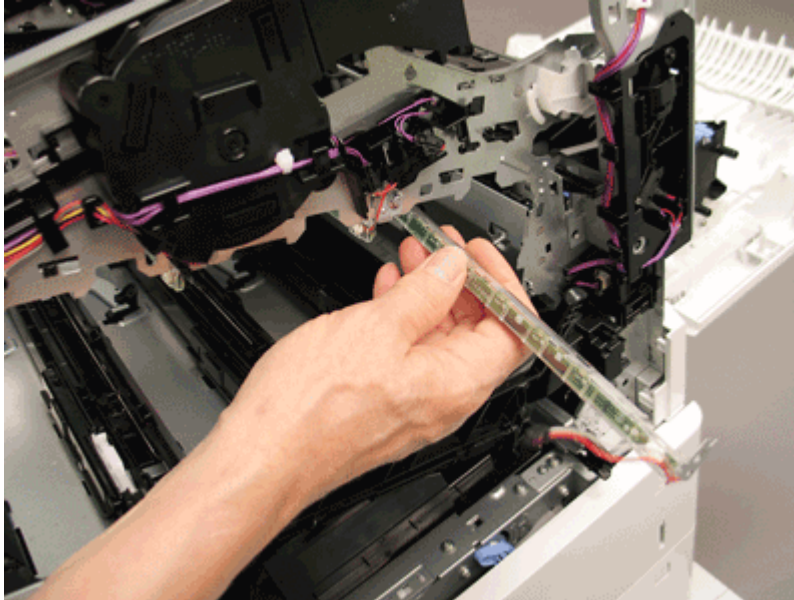
 **TIP:** When reinstalling the PCA, refer to the figure in Step 1 to verify that the cables are routed correctly.

Figure 5-724 Remove the pre-exposure PCA assembly



5. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

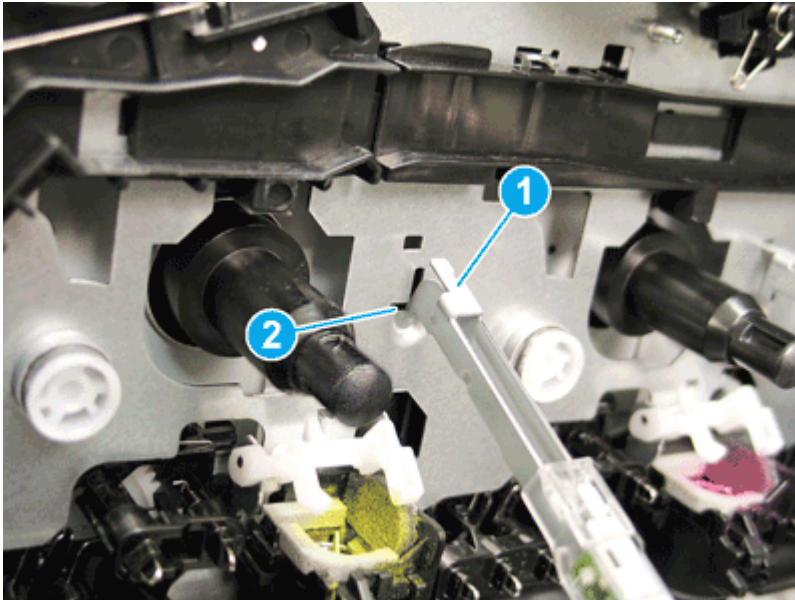
6. Reverse the removal steps to install the assembly

Also use the following **special installation instructions**.

Pre-exposure PCA assembly

- When reinstalling the pre-exposure PCA assembly, make sure that the metal tabs at the end of the assembly (callout 1) install in the openings in the sheet metal (callout 2).

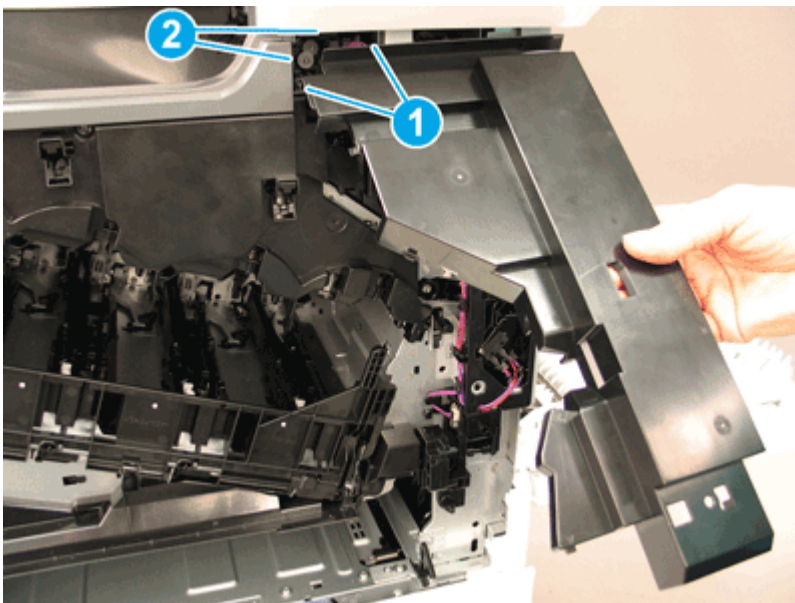
Figure 5-725 Install the pre-exposure PCA assembly



Front inner cover

- When reinstalling the front right inner cover, position the upper left edges of the cover (callout 1) under the edges of the printer covers (callout 2).

Figure 5-726 Install the front right inner cover



Front door

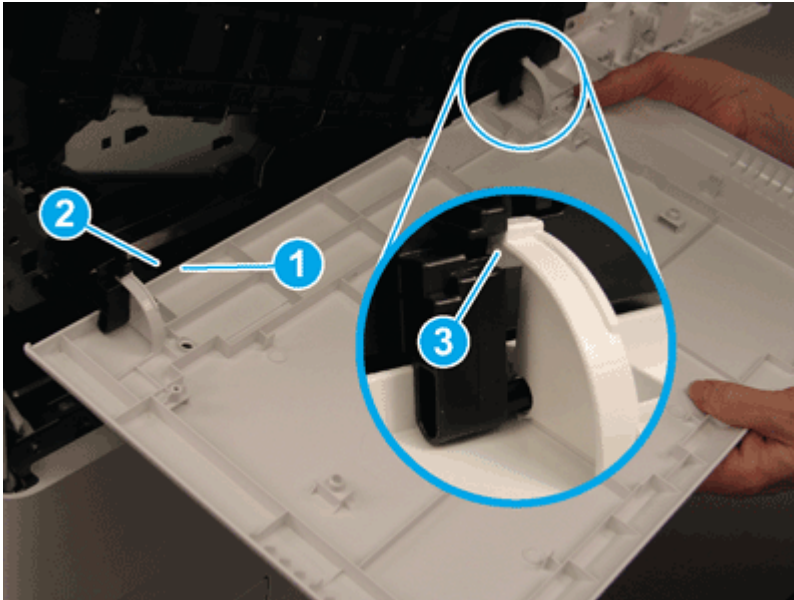
1. If the link arm becomes dislodged from the inner cover, reinstall it as shown in the figure below.

Figure 5-727 Reinstall the link arm



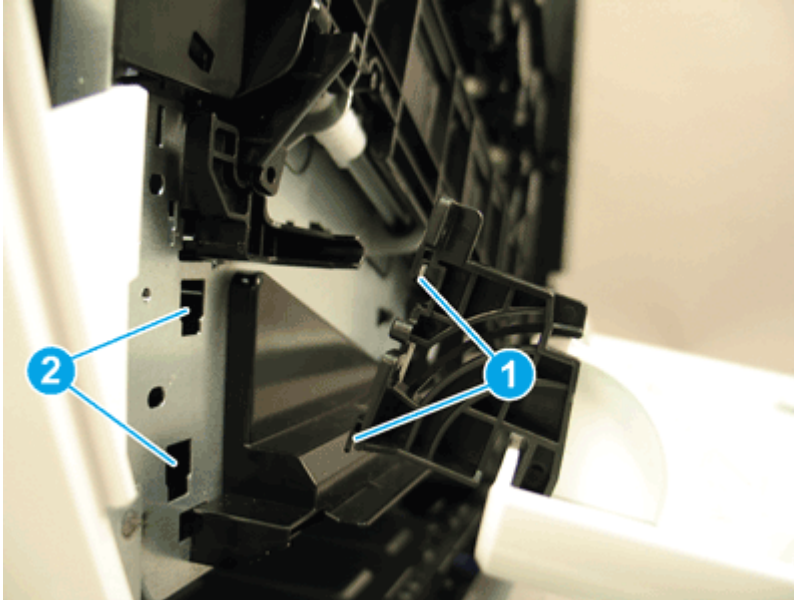
2. Install the right side of the door first. Position the edge of the door (callout 1) over the black lip (callout 2), and then slide the right hinge into the black arm (callout 3).


Figure 5-728 Install the right hinge



3. When reinstalling the left hinge, install the tabs (callout 1) on the hinge in the slots (callout 2) in the printer. Press down to lock the hinge in place.

Figure 5-729 Install the left hinge




 **NOTE:** Continue to reverse the removal steps to finish installing the assembly.

Removal and replacement: Pre-exposure PCA assembly (cyan, magenta, or yellow)

This document provides the procedures to remove and replace the pre-exposure PCA assembly (cyan, magenta, or yellow).


Mean time to repair: 25 minutes

Service level: Advanced

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Disconnect the power cable.

 **WARNING!** To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-55 Part information

Part number	Part description
RM3-7047-000CN	Pre-exposure PCA assembly (cyan, magenta, or yellow)

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

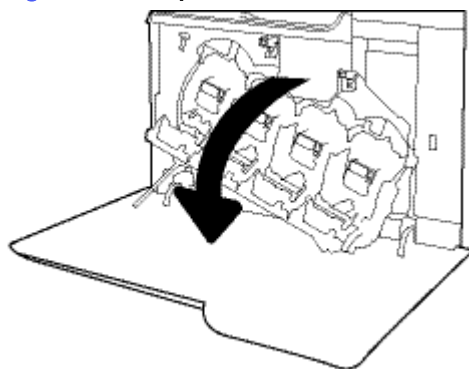
No post service test is available for this assembly.

1. Remove a toner cartridge

Follow these steps to remove a toner cartridge.

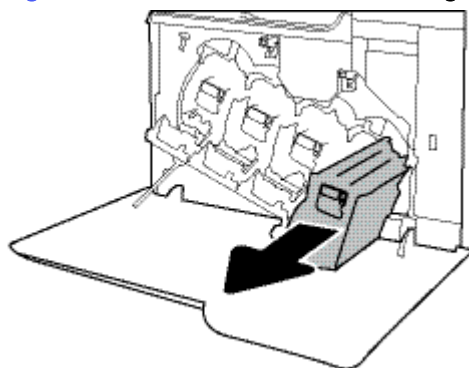
1. Open the front door.

Figure 5-730 Open the front door



2. Grasp the handle of the used toner cartridge and pull out to remove it.


Figure 5-731 Remove the toner cartridge



2. Remove the front door

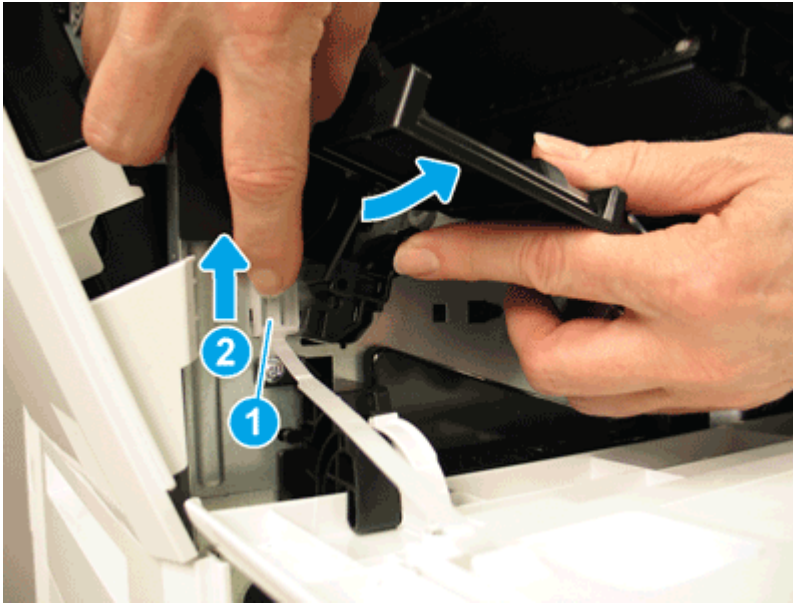
Follow these steps to remove the front door.

1. Remove Tray 2.
2. Open the following doors:

 **TIP:** The left door must be closed first in order to close the front door.

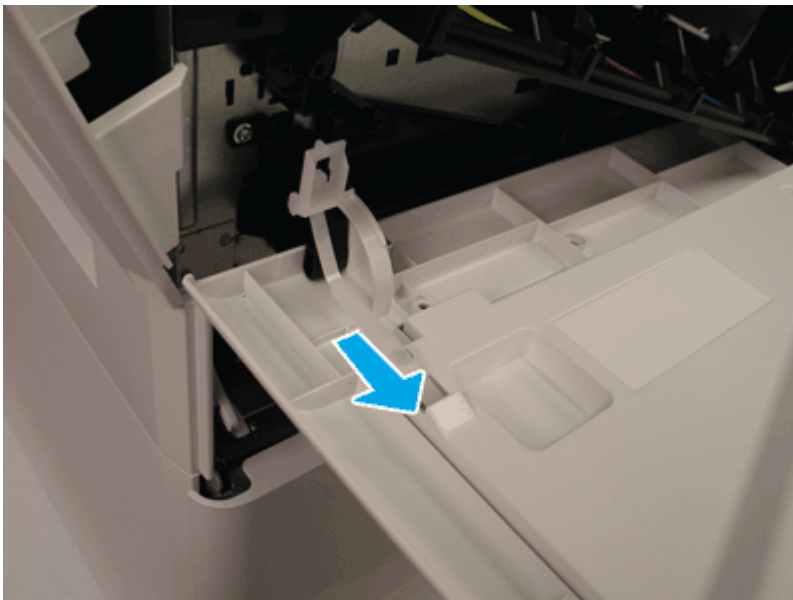
- Front door
 - Left door
3. Hold the black shutter to one side, release one tab (callout 1), and then slide the link arm (callout 2) up to release it from the sheet metal.

Figure 5-732 Release the link arm



4. Slide the released link arm into the door.

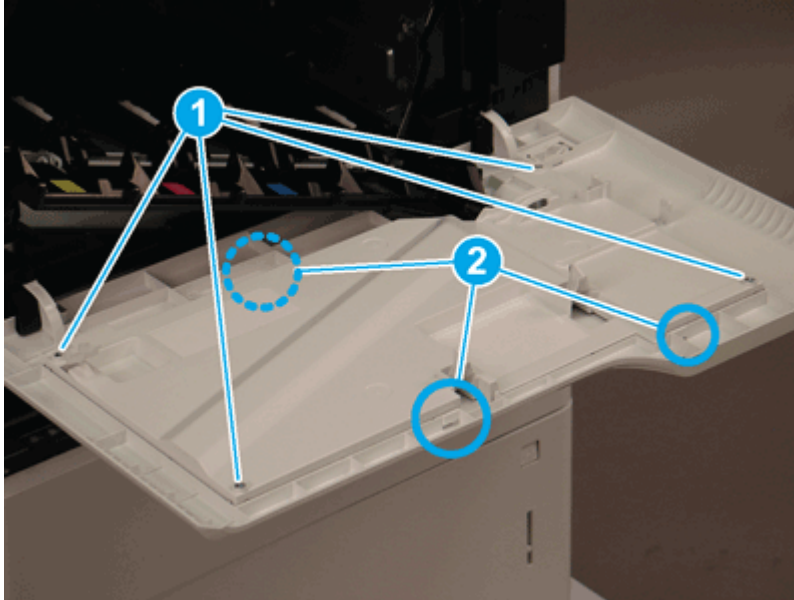
Figure 5-733 Slide the released link arm into the door



5. Remove four screws (callout 1), release three tabs (callout 2), and then remove the inner cover.

⚠ CAUTION: Use care when removing the inner cover. The black cartridge door is spring-loaded and may close abruptly when released from the inner cover.

Figure 5-734 Remove the inner cover



6. Remove one screw (callout 1), and then release one boss (callout 2). Slide the hinge (callout 3) up to release it.


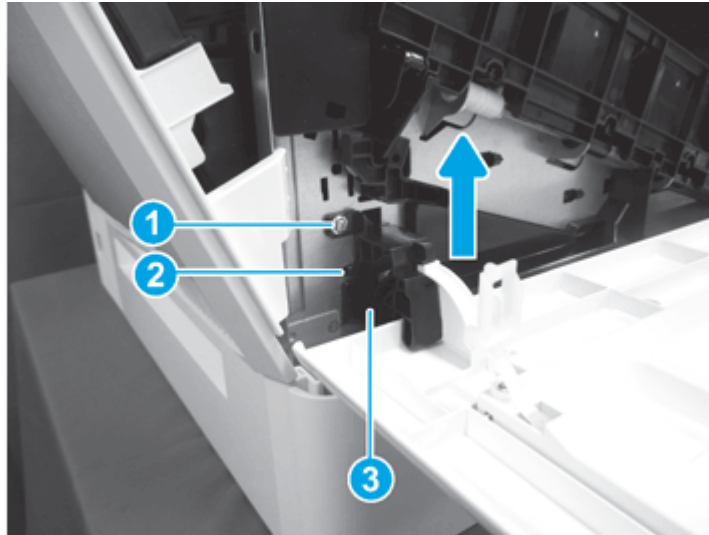

 **TIP:** Use a flat-blade screwdriver to release the boss, and then lift upwards on the corner of the door.

Figure 5-735 Release the hinge



7. Slide the front door (callout 1) to the right to remove it.

 **NOTE:** Remove the hinge (callout 2) and the link arm (callout 3) from the front door and install them on the replacement front door.


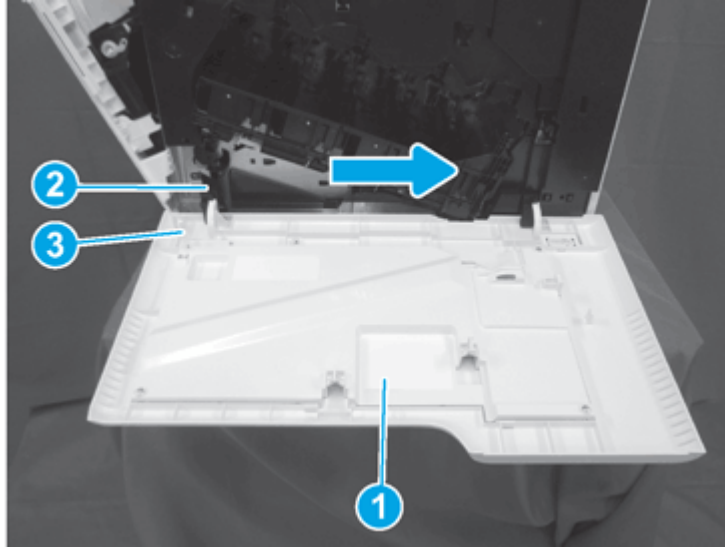
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-736 Remove the front door



3. Remove the front inner covers

Follow these steps to remove the front inner covers.

1. Open the following doors:
 - Right door
 - Left door
2. Release four tabs (callout 1).


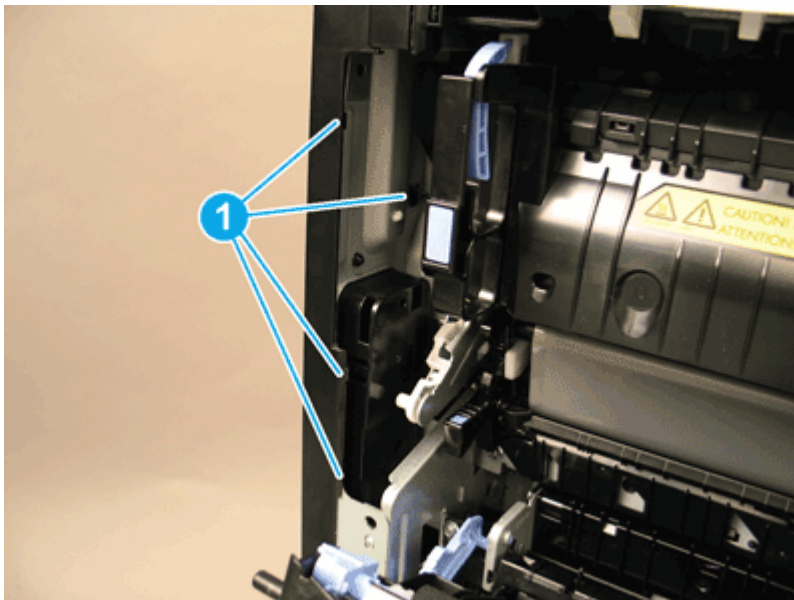

 **TIP:** Small, embossed arrows on the front of the cover indicate where the release tabs may be found.

Figure 5-737 Release four tabs

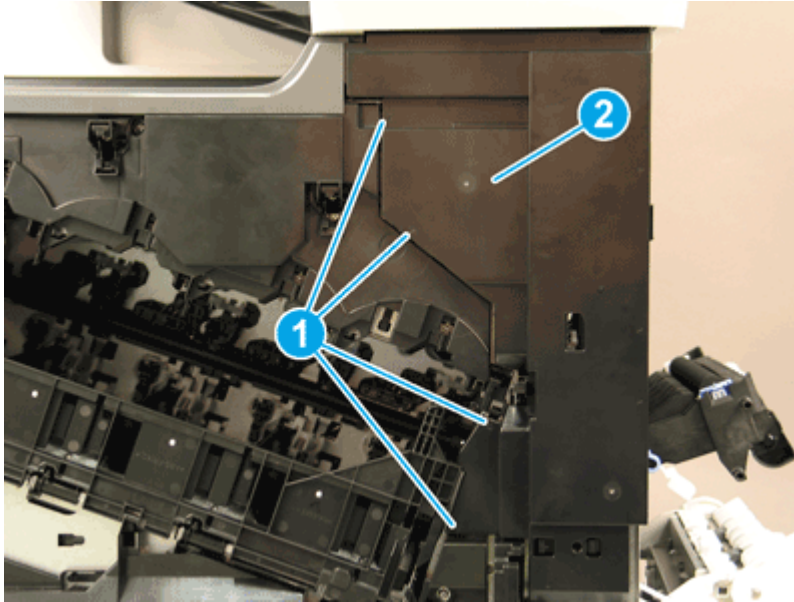


3. Release four bosses (callout 1), and then remove the front right inner cover (callout 2).

 **TIP:** Small, embossed arrows on the front of the cover indicate where the release tabs may be found.

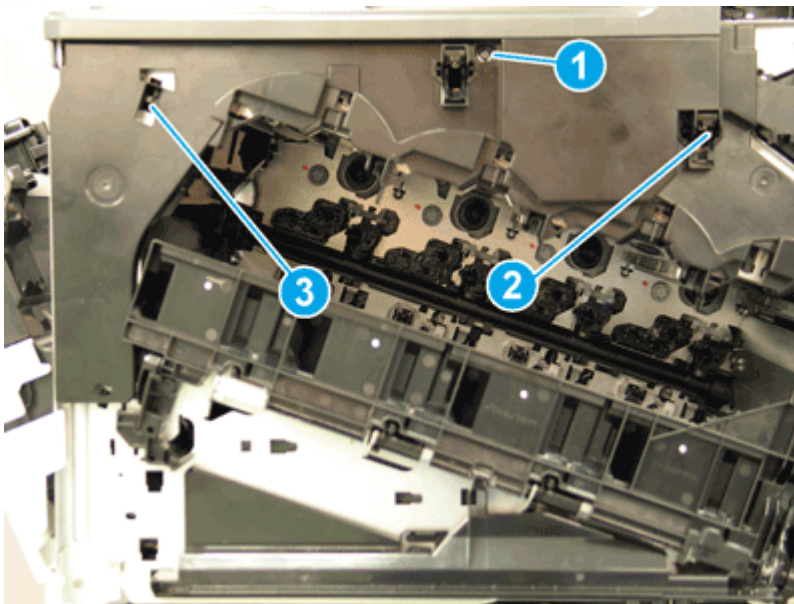
Push on the back side of the cover for easy release.

Figure 5-738 Remove the front right inner cover



4. Remove one screw (callout 1). Carefully pull the right side of the cover down and away from the printer to release one boss (callout 2). Continue to pull the cover away from the sheet metal to release the second boss (callout 3), and then remove the cover.

Figure 5-739 Remove the front inner cover



4. Remove the pre-exposure PCA assembly (cyan, magenta, or yellow)

Follow these steps to remove the pre-exposure PCA assembly (cyan, magenta, or yellow).

1. Lower the black cartridge shutter (previously connected to the front door) all the way down to keep it out of the way.
2. If replacing the **yellow** pre-exposure PCA assembly, disconnect one connector and remove one screw (callout 1). If replacing the **magenta** pre-exposure PCA assembly, disconnect one connector and remove one screw (callout 2). If replacing the **cyan** pre-exposure PCA assembly, disconnect one connector and remove one screw (callout 3).


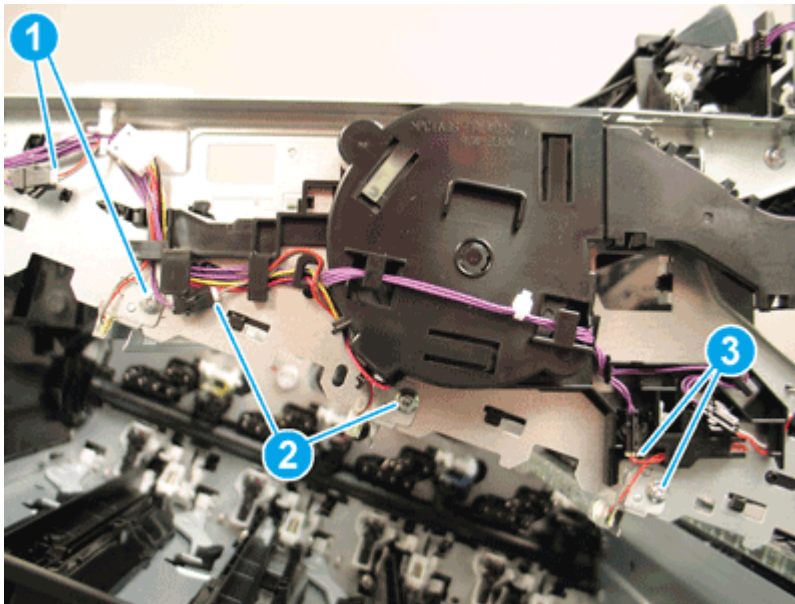
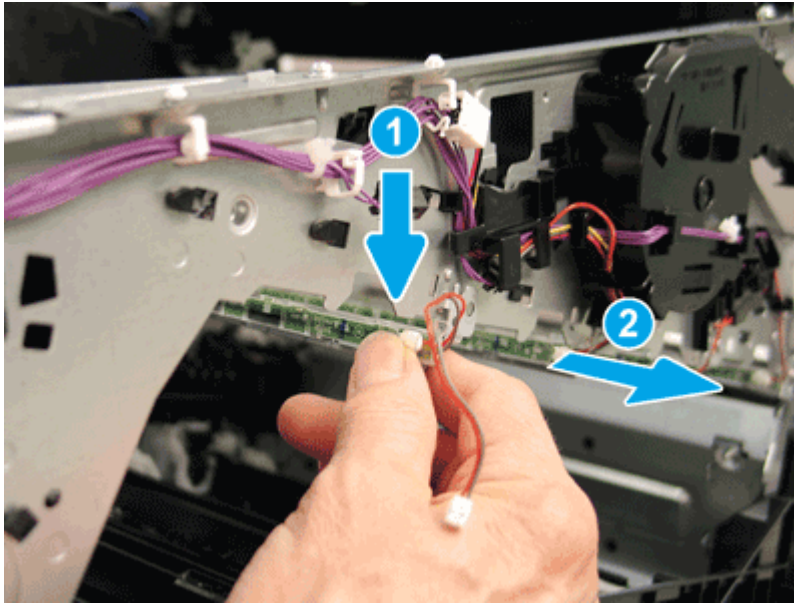
 **TIP:** When reinstalling the screws, do not press too hard or apply pressure from the back side to avoid bending the sheet metal.

Figure 5-740 Disconnect one connector and remove one screw



3. Rotate the end of the assembly down (callout 1), and then pull the assembly away from the printer (callout 2) to release it.

Figure 5-741 Release the pre-exposure PCA assembly



4. Remove the pre-exposure PCA assembly.


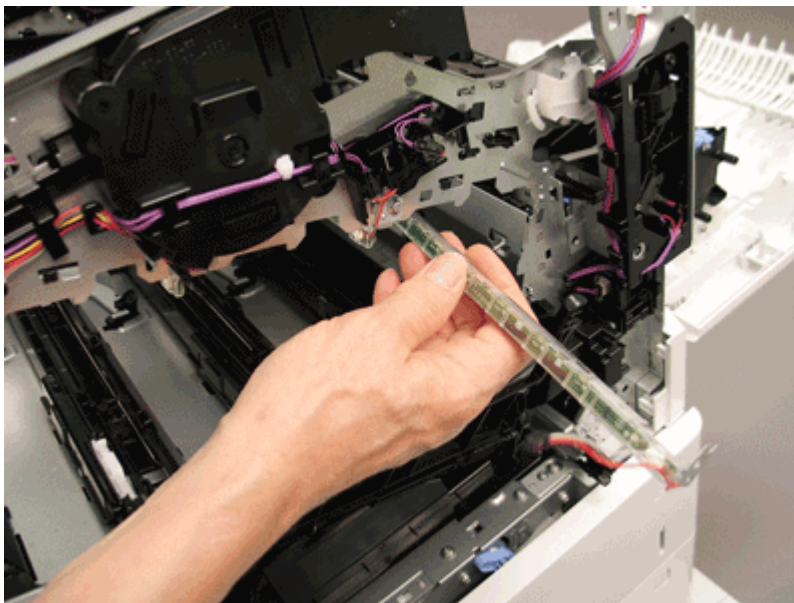
 **TIP:** When reinstalling the PCA, refer to the figure in Step 1 to verify that the cables are routed correctly.


Figure 5-742 Remove the pre-exposure PCA assembly



5. Unpack the replacement assembly



Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.


 **NOTE:** HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>


2. Unpack the replacement part from the packaging.

 **CAUTION:**  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

 **IMPORTANT:** Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

 **NOTE:** If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

 **NOTE:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

6. Reverse the removal steps to install the assembly

Also use the following **special installation instructions**.

Pre-exposure PCA assembly

- When reinstalling the pre-exposure PCA assembly, make sure that the metal tabs at the end of the assembly (callout 1) install in the openings in the sheet metal (callout 2).


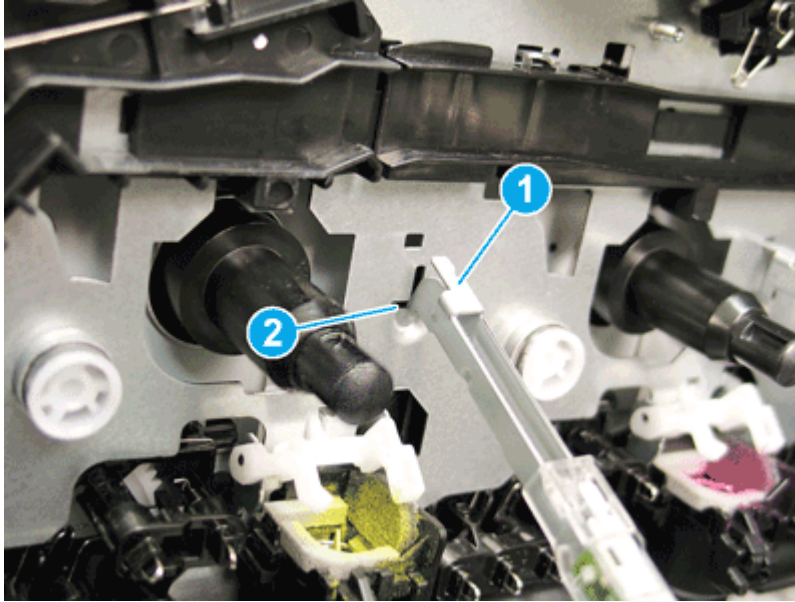
 **NOTE:** Continue to reverse the removal steps to finish installing the assembly.

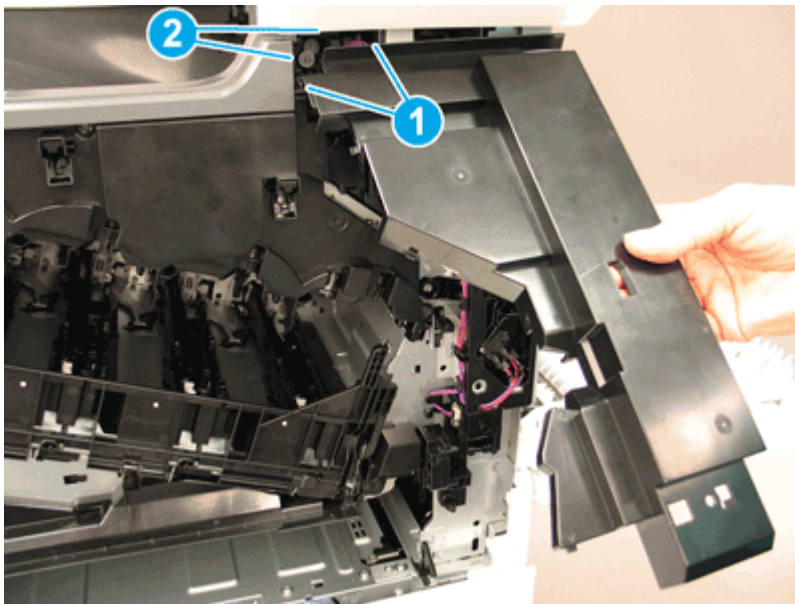
Figure 5-743 Install the pre-exposure PCA assembly



Front inner cover

- When reinstalling the front right inner cover, position the upper left edges of the cover (callout 1) under the edges of the printer covers (callout 2).

Figure 5-744 Install the front right inner cover



Front door

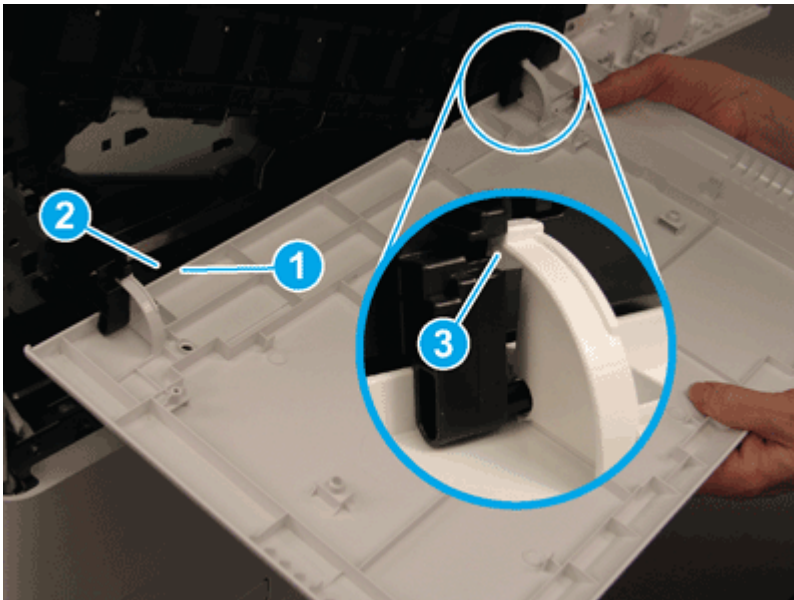
1. If the link arm becomes dislodged from the inner cover, reinstall it as shown in the figure below.

Figure 5-745 Reinstall the link arm



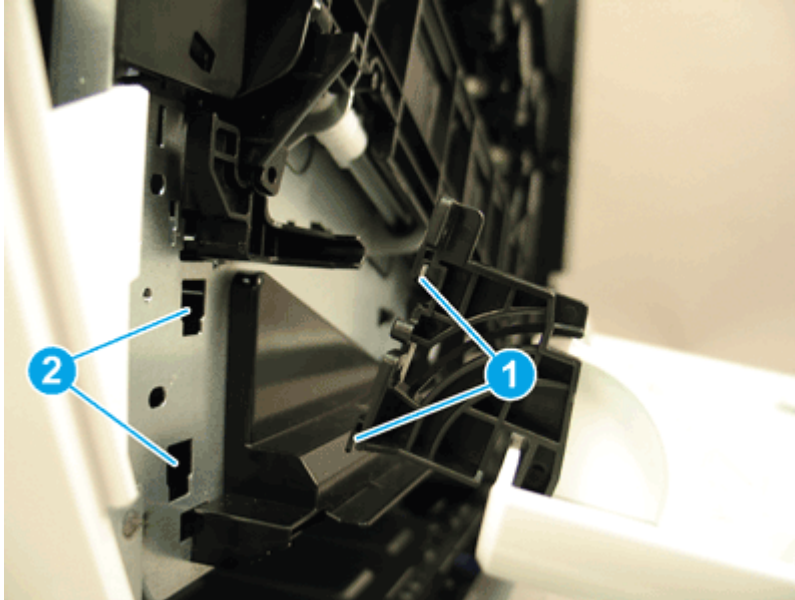
2. Install the right side of the door first. Position the edge of the door (callout 1) over the black lip (callout 2), and then slide the right hinge into the black arm (callout 3).


Figure 5-746 Install the right hinge



3. When reinstalling the left hinge, install the tabs (callout 1) on the hinge in the slots (callout 2) in the printer. Press down to lock the hinge in place.

Figure 5-747 Install the left hinge



 **NOTE:** Continue to reverse the removal steps to finish installing the assembly.


Removal and replacement: Power switch PCA

This document provides the procedures to remove and replace the power switch PCA.

 [View a video of how to remove and replace the power switch PCA.](#)


Mean time to repair: 15 minutes

Service level: Intermediate

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Disconnect the power cable.

 **WARNING!** To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-56 Part information

Part number	Part description
RK2-0535-000CN	Microswitch

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

No post service test is available for this assembly.

1. Remove the front door

Follow these steps to remove the front door.

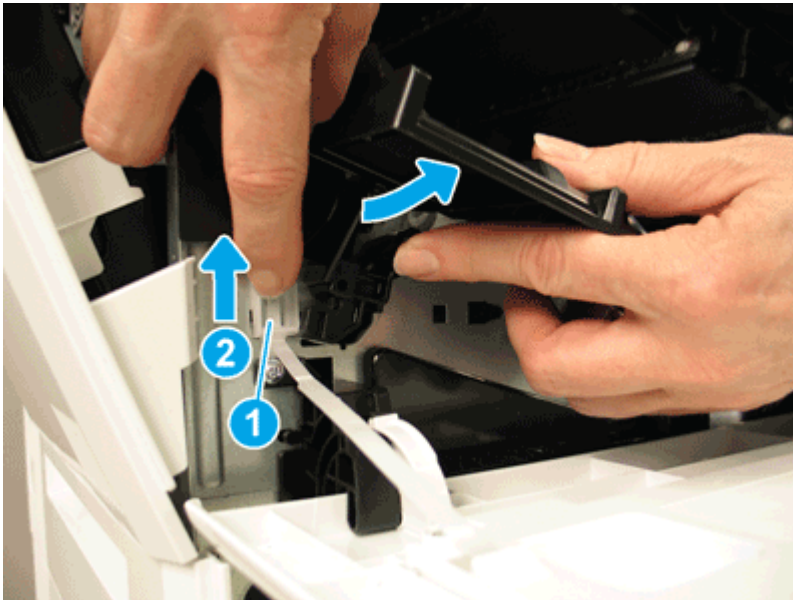
1. Remove Tray 2.
2. Open the following doors:



TIP: The left door must be closed first in order to close the front door.

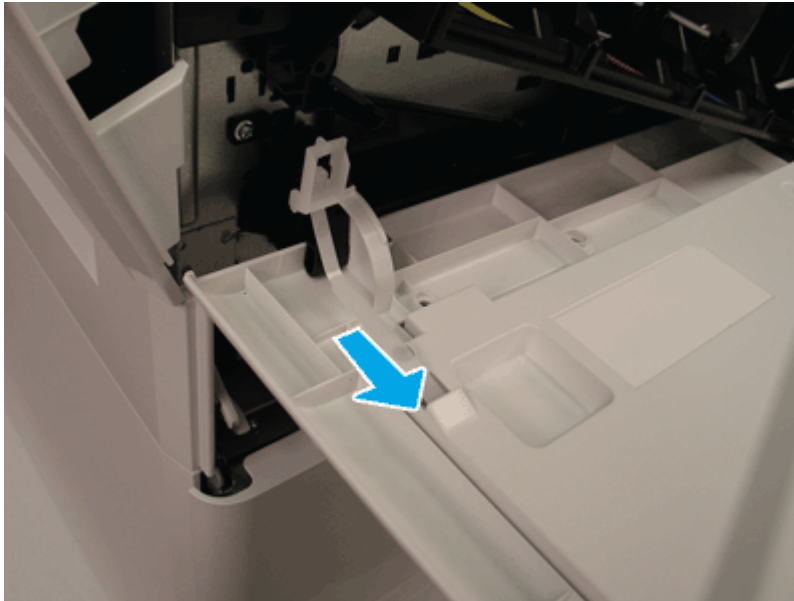
- Front door
 - Left door
3. Hold the black shutter to one side, release one tab (callout 1), and then slide the link arm (callout 2) up to release it from the sheet metal.

Figure 5-748 Release the link arm



- Slide the released link arm into the door.

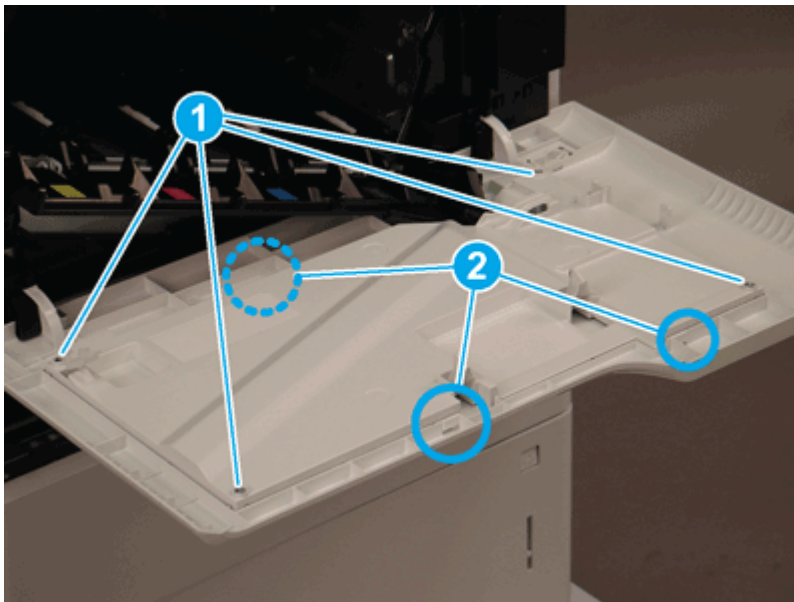
Figure 5-749 Slide the released link arm into the door



- Remove four screws (callout 1), release three tabs (callout 2), and then remove the inner cover.

CAUTION: Use care when removing the inner cover. The black cartridge door is spring-loaded and may close abruptly when released from the inner cover.

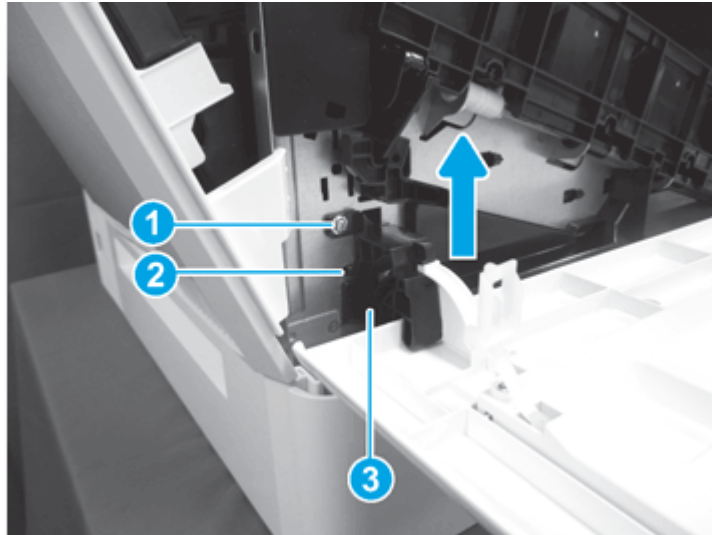
Figure 5-750 Remove the inner cover




- Remove one screw (callout 1), and then release one boss (callout 2). Slide the hinge (callout 3) up to release it.

TIP: Use a flat-blade screwdriver to release the boss, and then lift upwards on the corner of the door.

Figure 5-751 Release the hinge



7. Slide the front door (callout 1) to the right to remove it.

 **NOTE:** Remove the hinge (callout 2) and the link arm (callout 3) from the front door and install them on the replacement front door.


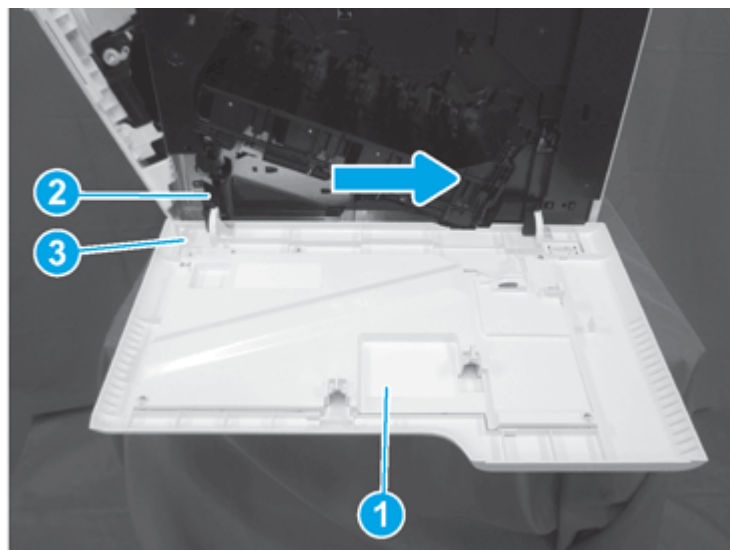

 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-752 Remove the front door



2. Remove the microswitch

Follow these steps to remove the microswitch.

 **NOTE:** HP recommends replacing both microswitches at the same time.

The front inner cover is missing in some of the figures below. However, it is not necessary to remove this cover to remove the microswitch.

1. Open the following doors:
 - Right door
 - Left door
2. Release four tabs (callout 1).


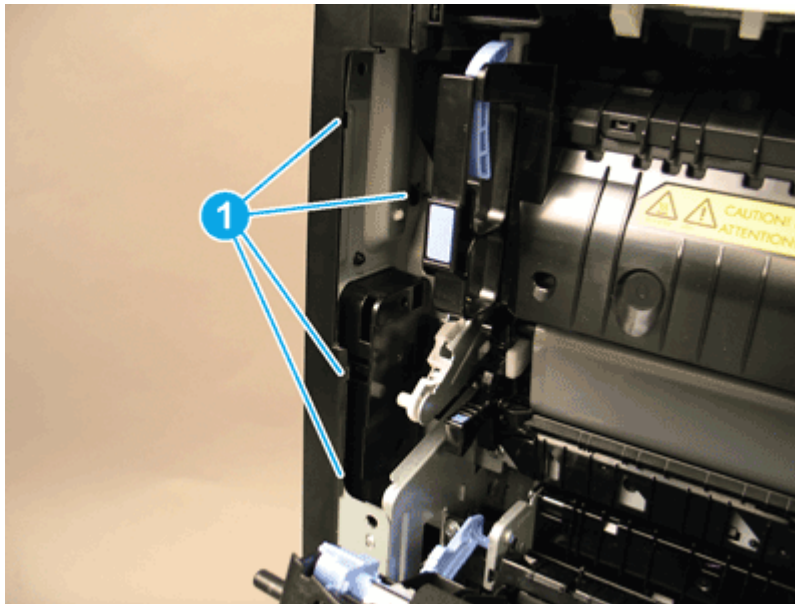

 **TIP:** Small, embossed arrows on the front of the cover indicate where the release tabs may be found.

Figure 5-753 Release four tabs

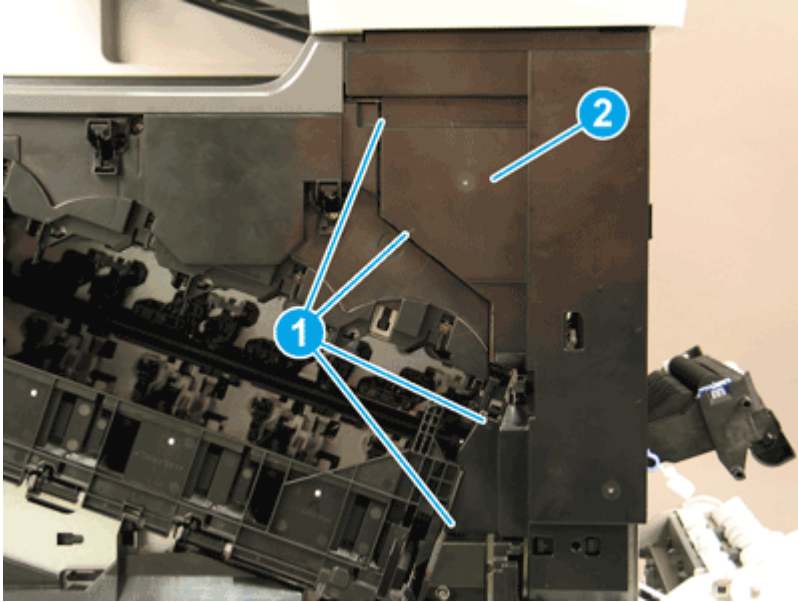


3. Release four bosses (callout 1), and then remove the front right inner cover (callout 2).

 **TIP:** Small, embossed arrows on the front of the cover indicate where the release tabs may be found.

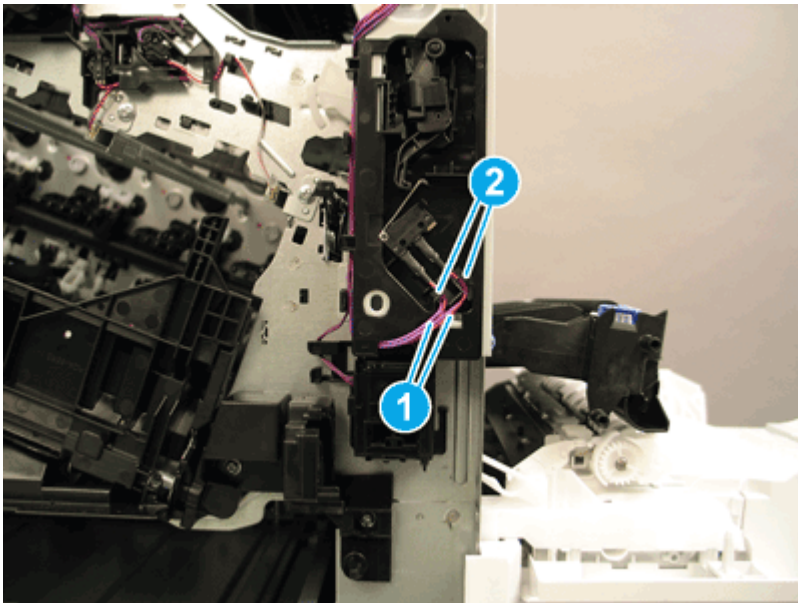
Push on the back side of the cover for easy release.

Figure 5-754 Remove the front right inner cover



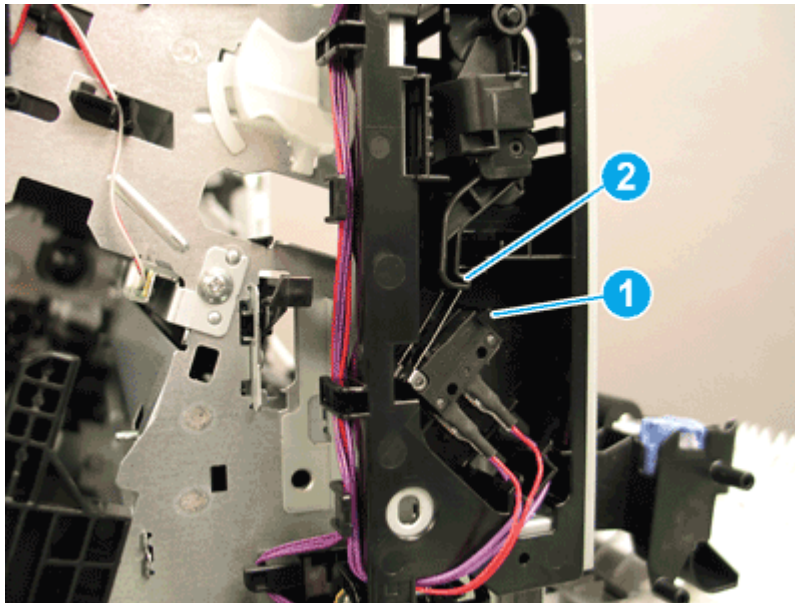
4. Release two cables (callout 1) from two hooks (callout 2).

Figure 5-755 Release two cables



5. Release one tab (callout 1) and raise one hook (callout 2) to release the front microswitch.

Figure 5-756 Release the front microswitch



6. Remove the front microswitch, and then disconnect two connectors.


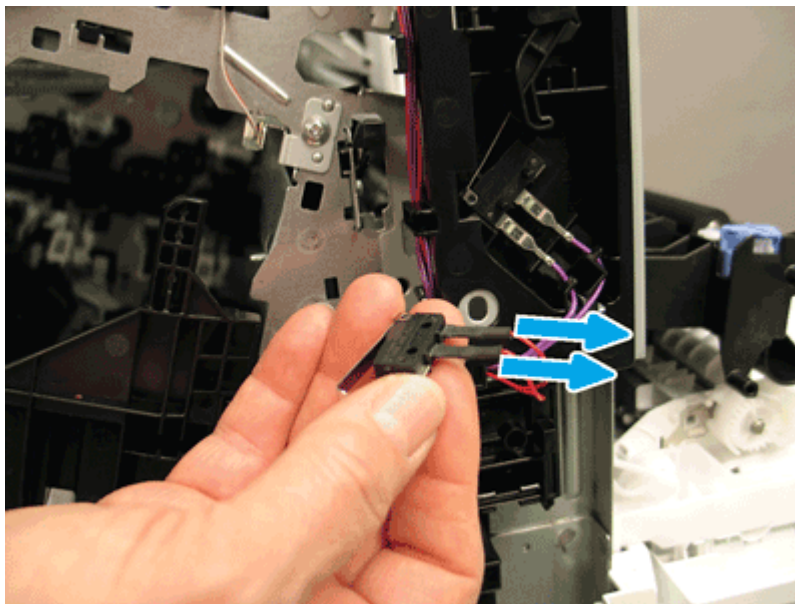
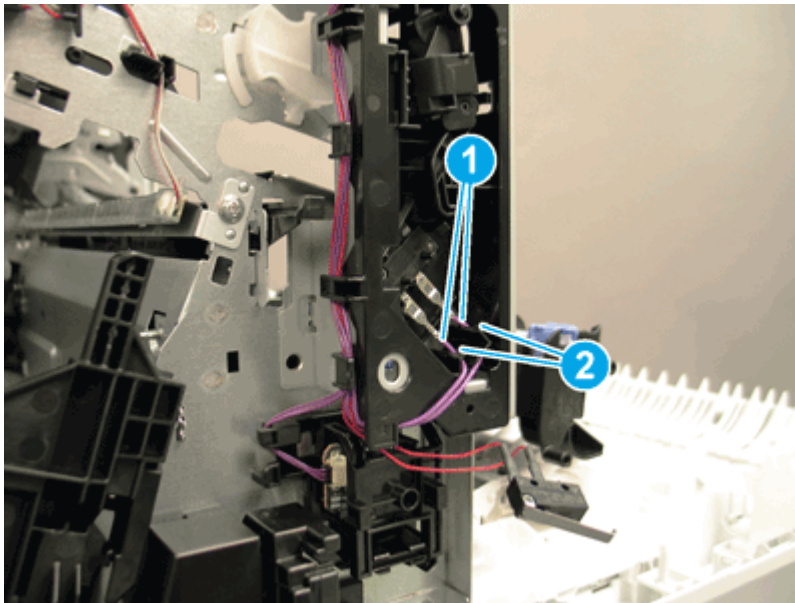
 **TIP:** Make sure that the red cables are reattached to the front microswitch.

Figure 5-757 Disconnect two connectors



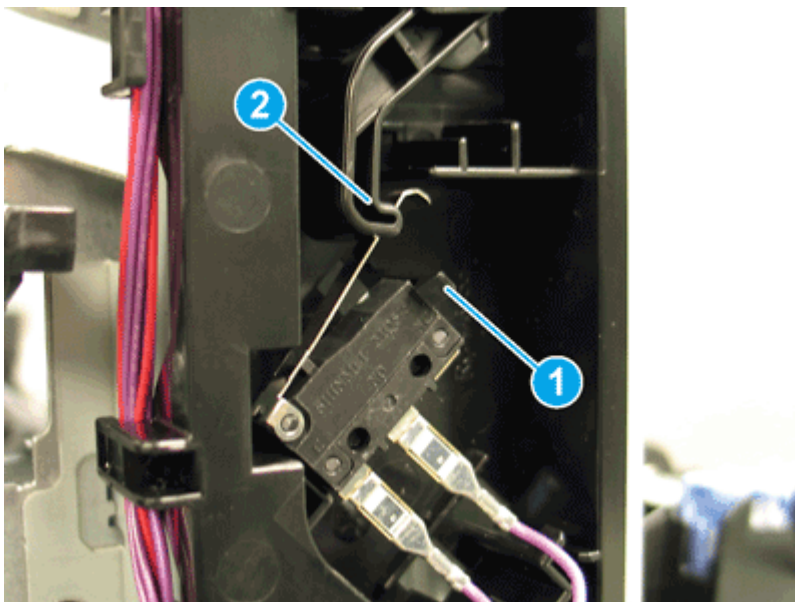
7. To remove the rear microswitch, release two cables (callout 1) from two hooks (callout 2).

Figure 5-758 Release two cables



8. Release one tab (callout 1) and raise one hook (callout 2) to release the rear microswitch.

Figure 5-759 Release the rear microswitch

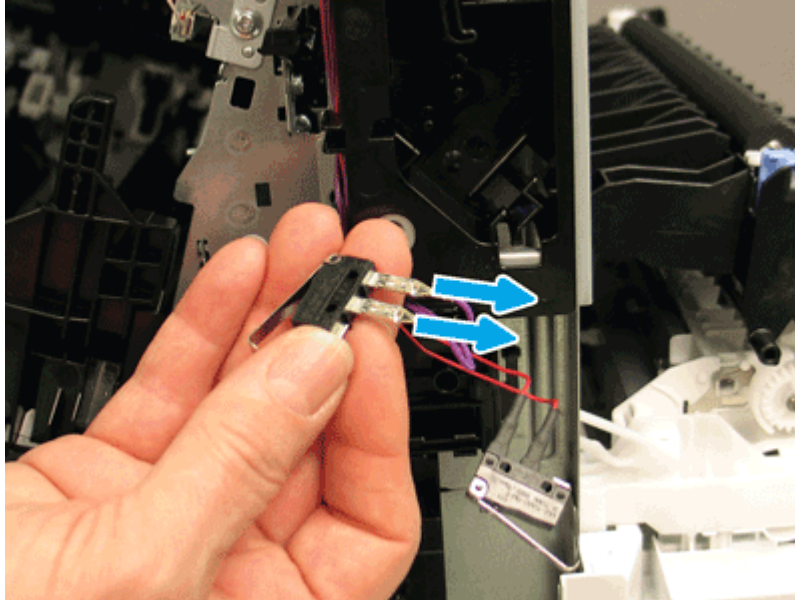


9. Remove the rear microswitch, and then disconnect two connectors.



TIP: Make sure that the purple cables are reattached to the rear microswitch.

Figure 5-760 Disconnect two connectors



3. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

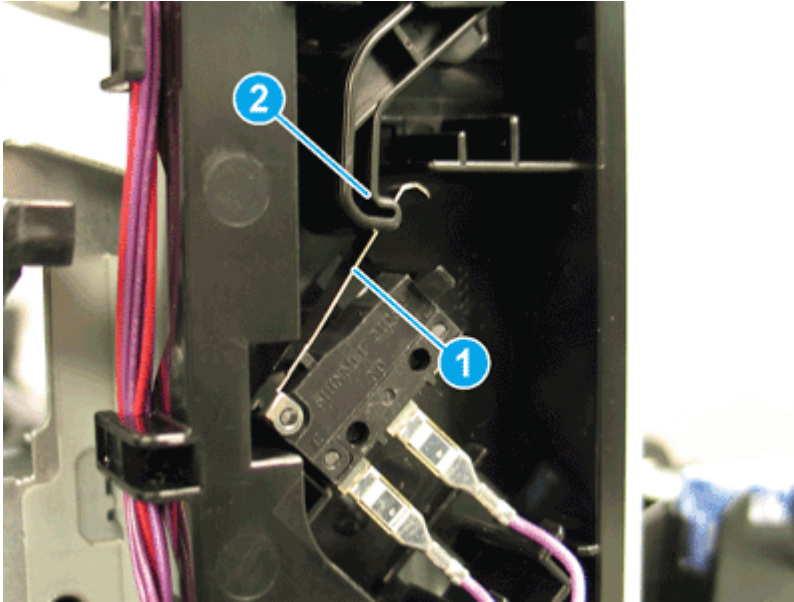
4. Reverse the removal steps to install the assembly

Also use the following **special installation instructions**.

Power switch PCA

1. When reinstalling a microswitch, make sure that the silver hook on the microswitch (callout 1) is installed behind the plastic hook (callout 2) in the printer.

Figure 5-761 Install the microswitch



2. When reinstalling the front right inner cover, position the upper left edges of the cover (callout 1) under the edges of the printer covers (callout 2).


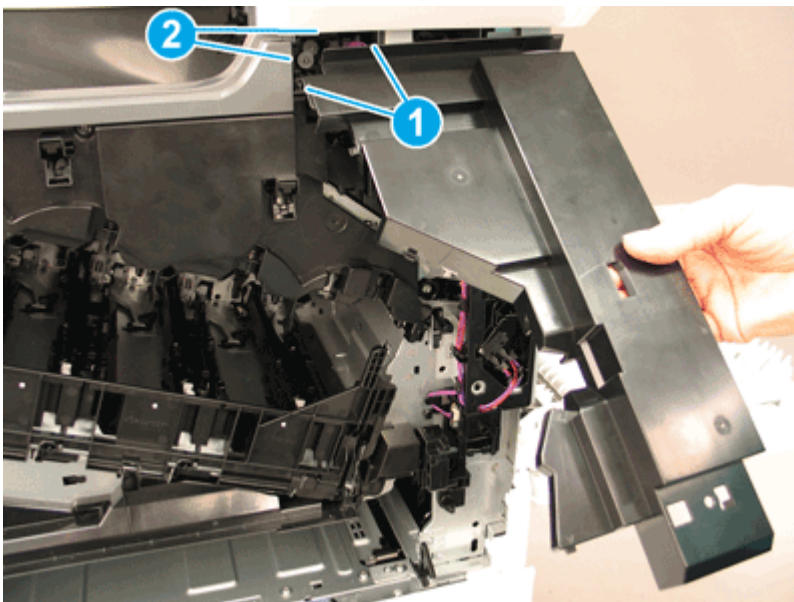
 **NOTE:** Continue to reverse the removal steps to finish installing the assembly.

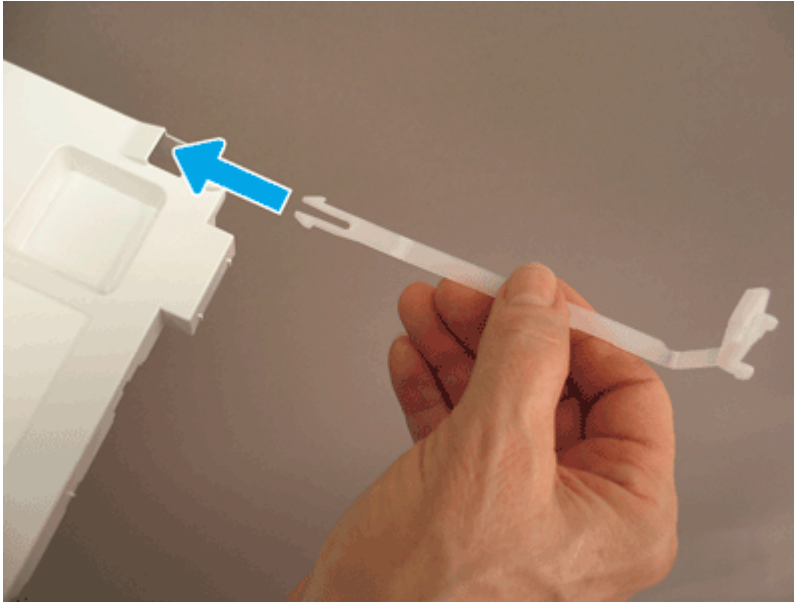
Figure 5-762 Install the front right inner cover



Front door

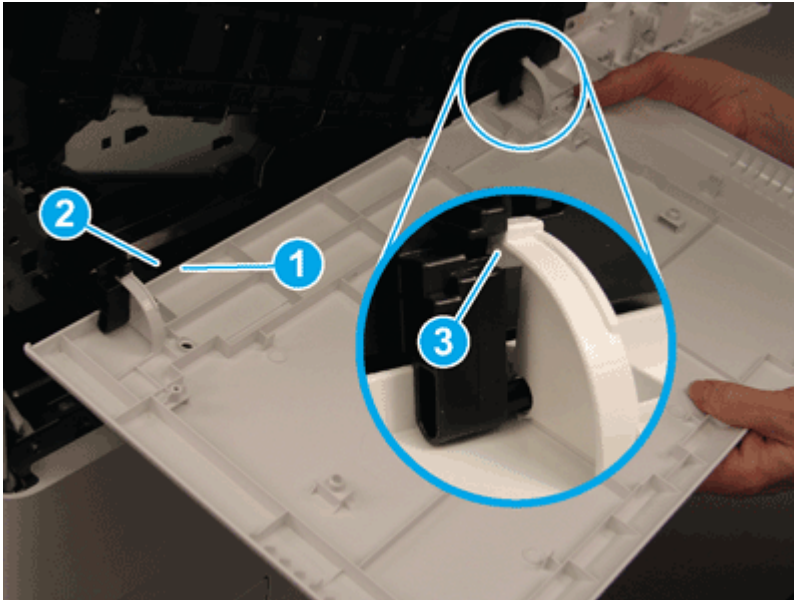
1. If the link arm becomes dislodged from the inner cover, reinstall it as shown in the figure below.

Figure 5-763 Reinstall the link arm



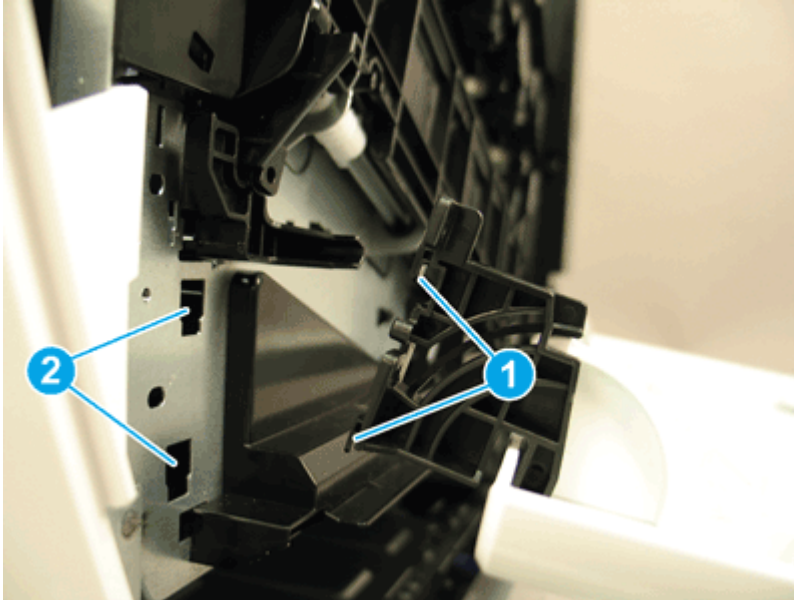
2. Install the right side of the door first. Position the edge of the door (callout 1) over the black lip (callout 2), and then slide the right hinge into the black arm (callout 3).

Figure 5-764 Install the right hinge



3. When reinstalling the left hinge, install the tabs (callout 1) on the hinge in the slots (callout 2) in the printer. Press down to lock the hinge in place.

Figure 5-765 Install the left hinge



 **NOTE:** Continue to reverse the removal steps to finish installing the assembly.


Removal and replacement: Left upper front and left upper rear fans

Learn how to remove and replace the left upper front and left upper rear fans.

 [View a video of removing and replacing the fans.](#)


Mean time to repair: 45 minutes

Service level: Advanced

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Disconnect the power cable.

 **WARNING!** To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-57 Part information

Part number	Part description
RK2-7951-000CN	Left upper front fan
RK2-7949-000CN	Left upper rear fan

Required tools

- #2 Phillips screwdriver with a magnetic tip
- Small, flat-blade screwdriver

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Make sure that the printer initializes to a **Ready** state.

Print a configuration page to make sure that the printer is functioning correctly.

1. Remove the TCU

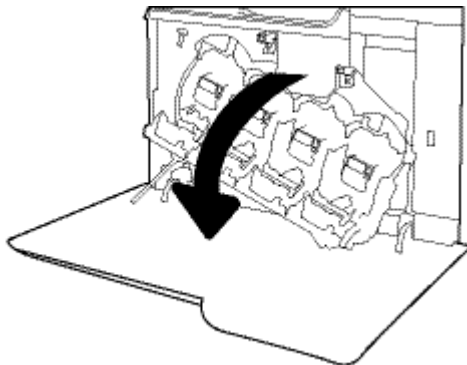
Follow these steps to remove the TCU.

⚠ CAUTION: If toner gets on clothing, wipe it off by using a dry cloth and wash the clothes in cold water. Hot water sets toner into fabric.

📝 NOTE: The toner collection unit is designed for a single use. Do not attempt to empty the toner collection unit and reuse it. Doing so could lead to toner being spilled inside the printer, which could result in reduced print quality. After use, return the toner collection unit to HP's Planet Partners program for recycling.

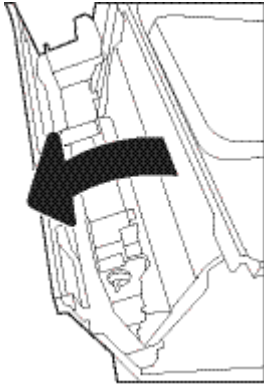
1. Open the front door.

Figure 5-766 Open the front door



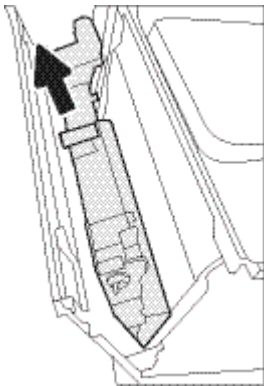
2. Open the left door.

Figure 5-767 Open the left door



3. Grasp the top of the TCU and remove it from the printer.

Figure 5-768 Remove the TCU



2. Remove the keyboard (MFP)

Follow these steps to remove the keyboard (MFP).

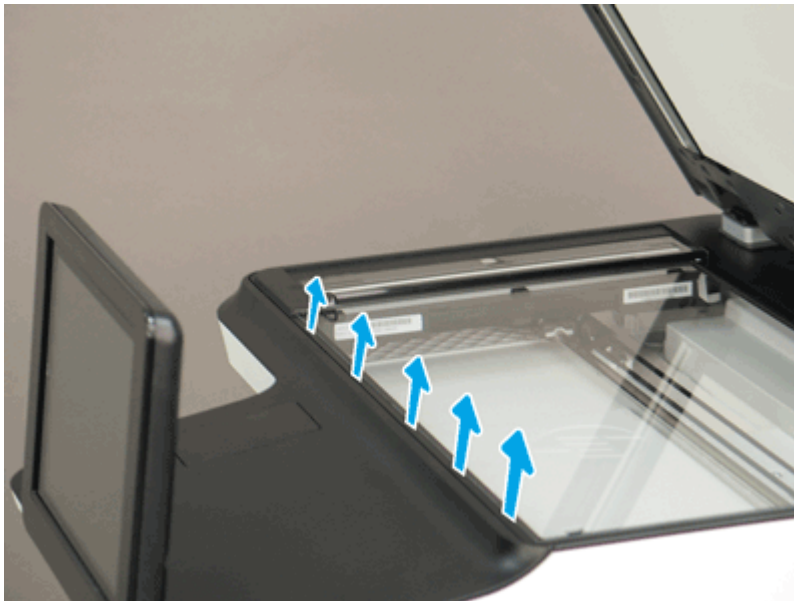
1. If the control panel is not fully tilted forward, tilt it forward now (callout 1) until it stops. Open the document feeder (callout 2).

Figure 5-769 Tilt the control panel and open the document feeder



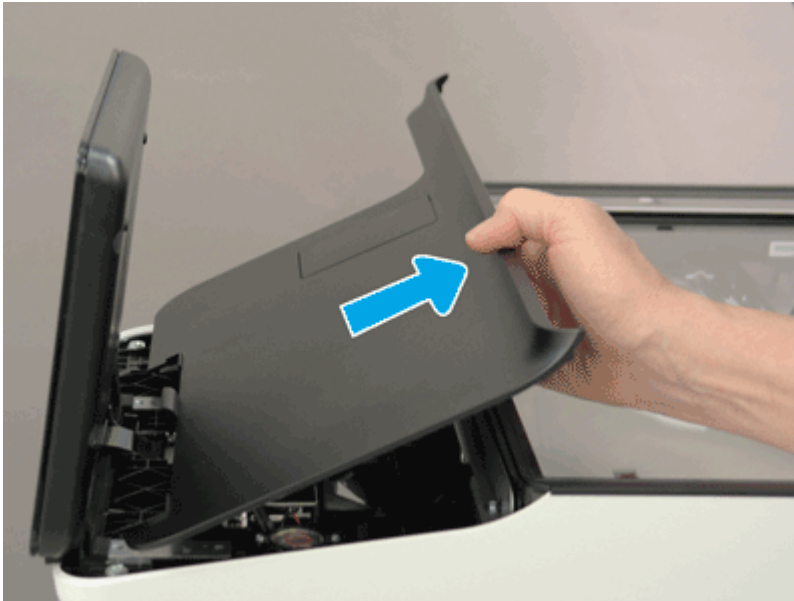
2. Beginning at the right side of the control-panel cover, carefully release five tabs along the top edge of the cover.

Figure 5-770 Release five tabs



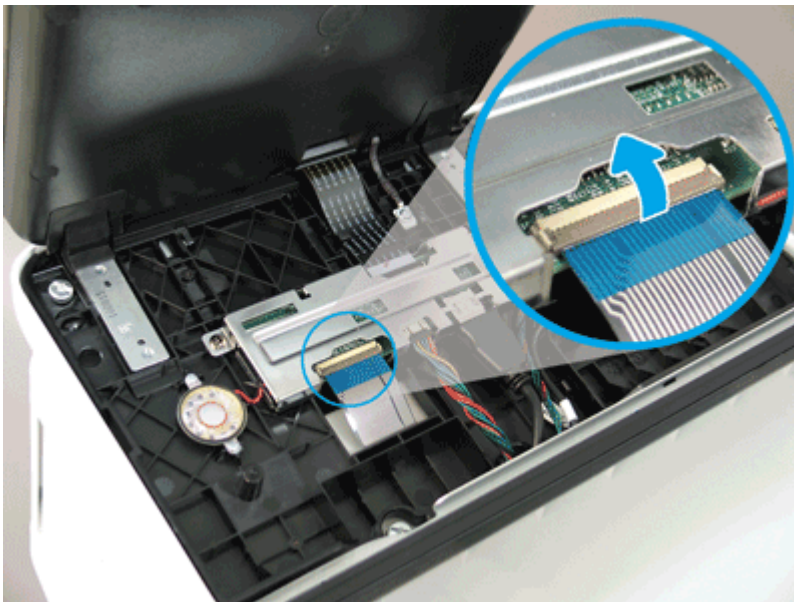
3. Continue to rotate the top edge of the cover away from the printer, and then remove the cover.

Figure 5-771 Remove the cover



4. Open the connector latch to release the keyboard flat cable.

Figure 5-772 Disconnect the keyboard flat cable



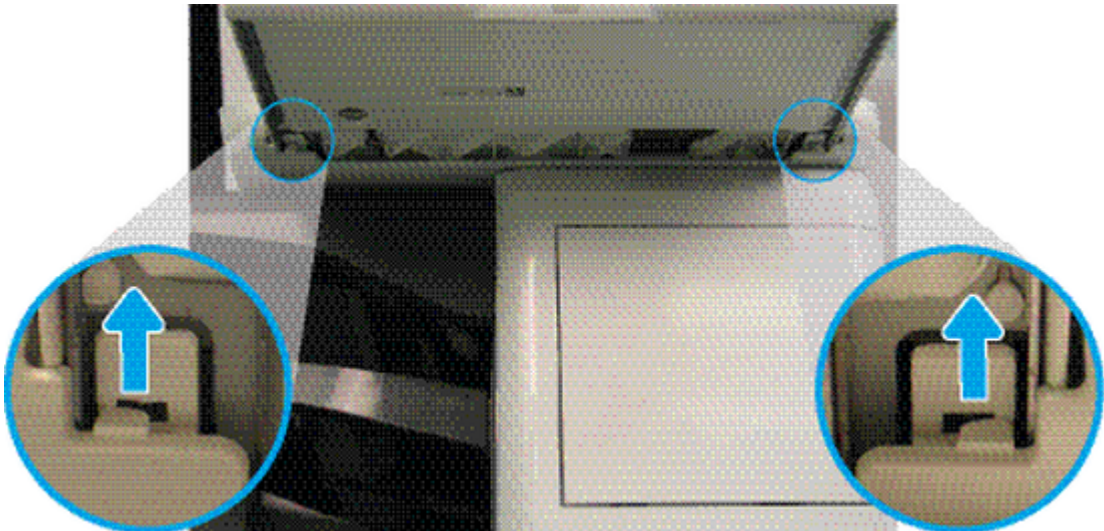
5. Slide the keyboard tray out until it stops.

Figure 5-773 Slide the keyboard tray out



6. Push up on the keyboard tray to release two tabs on the bottom of the tray, and then slide the tray toward you to disengage the tabs.

Figure 5-774 Release two tabs




7. Slide the keyboard tray all the way out of the printer to remove it.

Figure 5-775 Remove the keyboard



3. Remove the control panel (M681/M682/E67550/E67560/E67650/E67660)

Follow these steps to remove the control panel (M681/M682/E67550/E67560/E67650/E67660).

 **NOTE:** This step is for the M681/M682/E67550/E67560/E67650/E67660 printers. For the M652/M653/E65050/E65060/E65150/E65160 printers, skip this step.

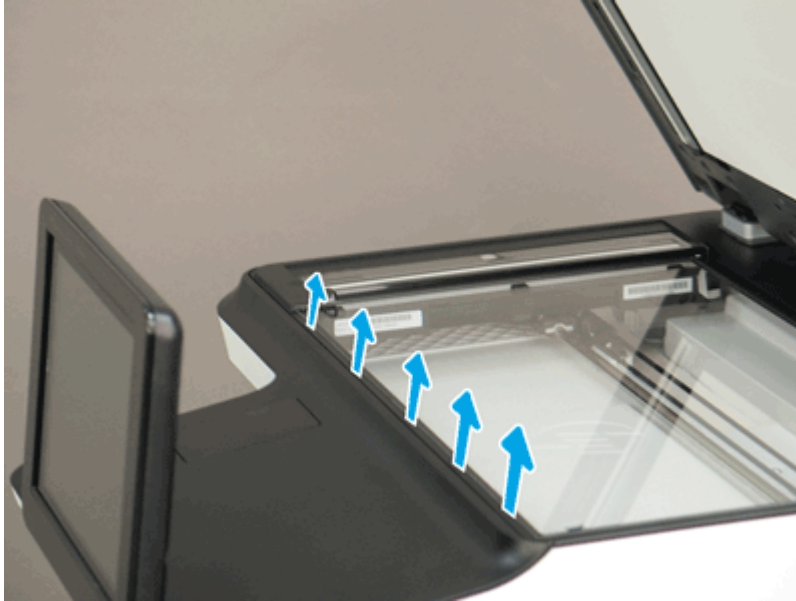
1. Tilt the control panel forward (callout 1), and then open the document feeder (callout 2).

Figure 5-776 Tilt the control panel forward and open the document feeder



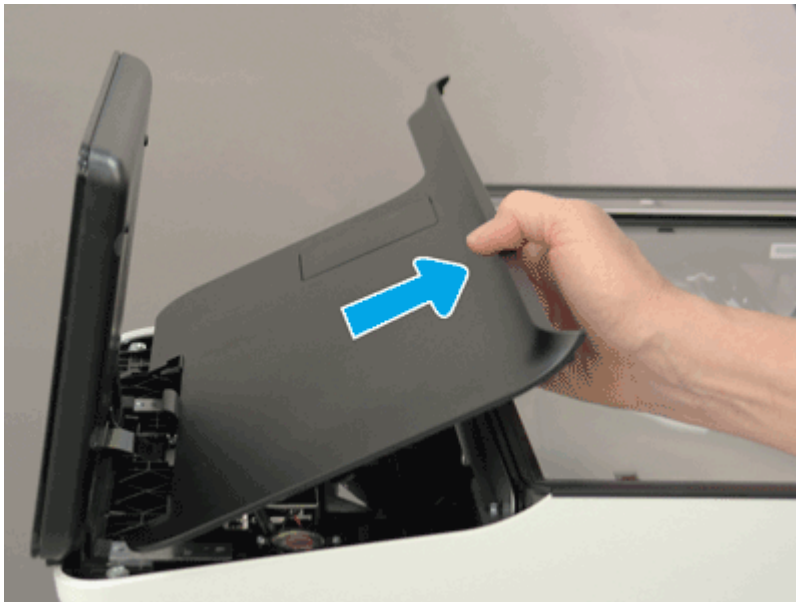
2. Beginning at the right side of the control-panel cover, carefully release five tabs along the top edge of the cover.

Figure 5-777 Release five tabs



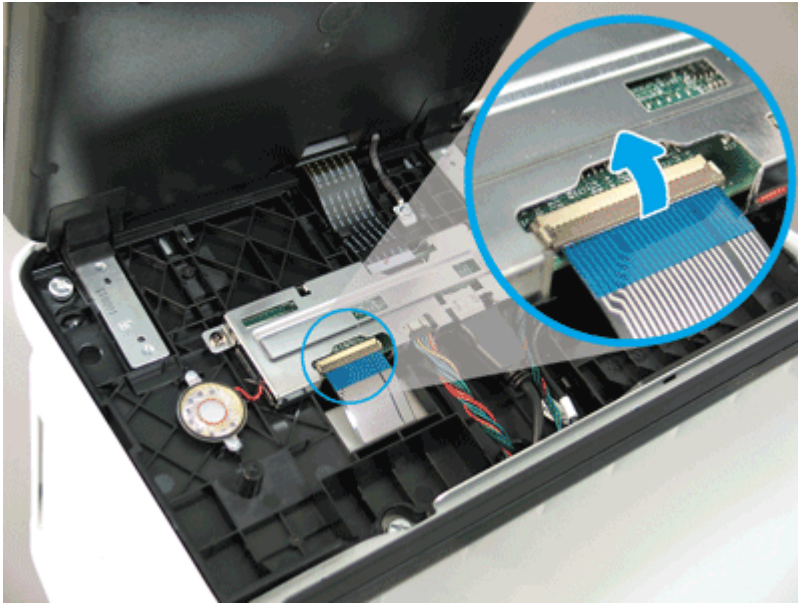
3. Continue to rotate the top edge of the cover away from the printer, and then remove the cover.

Figure 5-778 Remove the cover



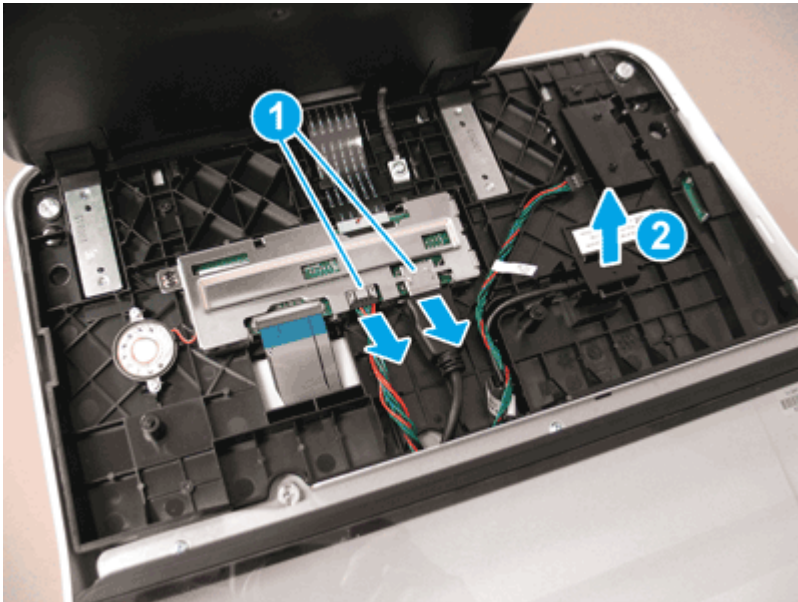
4. **Keyboard models only:** Lift up on the small, gray gate to release the keyboard flat cable.

Figure 5-779 Disconnect the keyboard flat cable (keyboard models only)



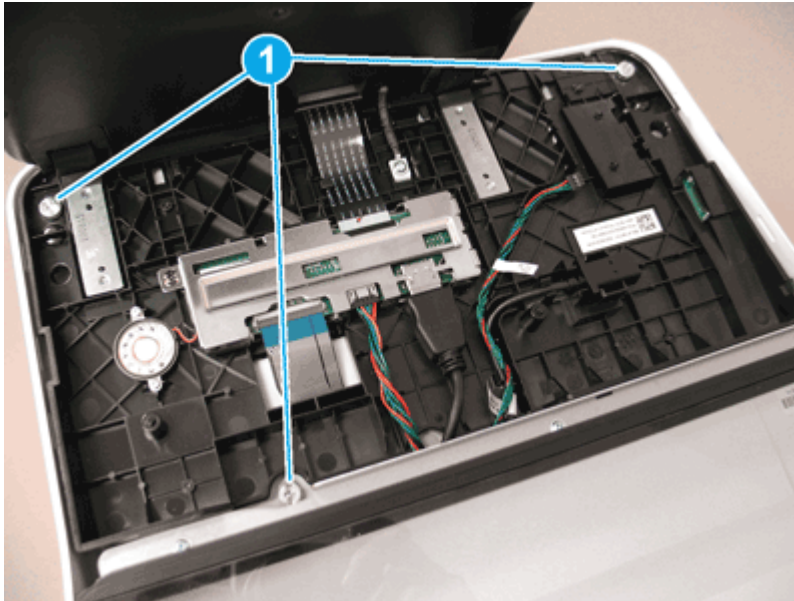
5. Disconnect two connectors (callout 1), and then release the USB cable (callout 2) from the holder.

Figure 5-780 Disconnect connectors



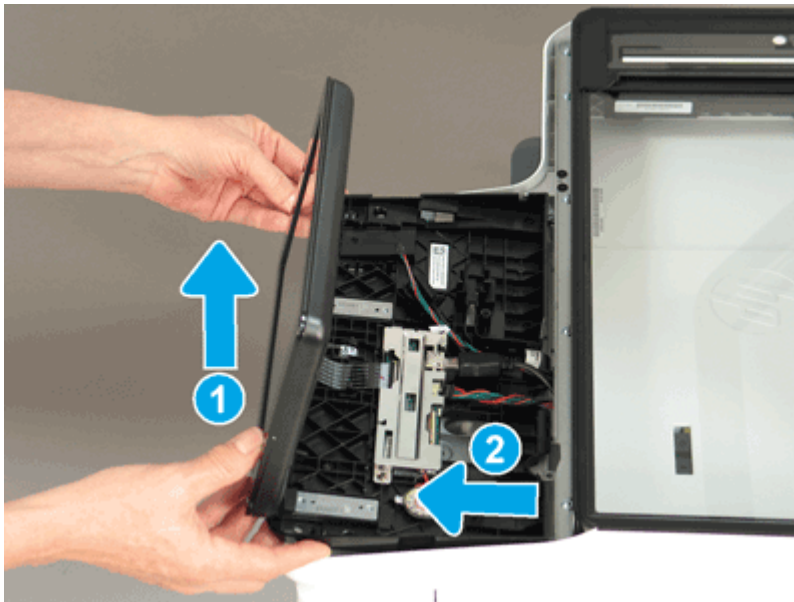
6. Remove three thumbscrews (callout 1).

Figure 5-781 Remove three thumbscrews



7. Lift the front of the control panel off of the printer (callout 1), and then slide it toward the front of the printer (callout 2) to remove it.

Figure 5-782 Remove the control panel

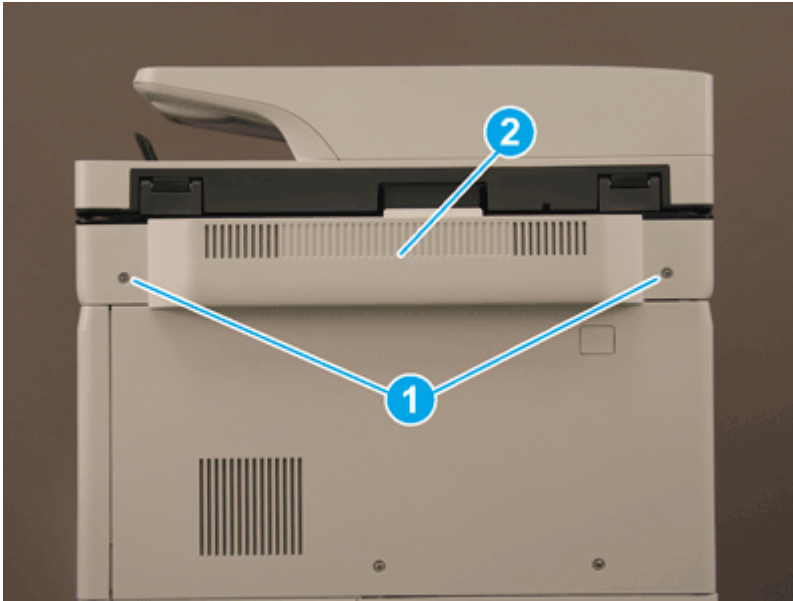


4. Remove the document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660)

Follow these steps to remove the document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660).

1. Remove two screws (callout 1), and then remove the scanner control board (SCB) cover (callout 2).

Figure 5-783 Remove the SCB cover



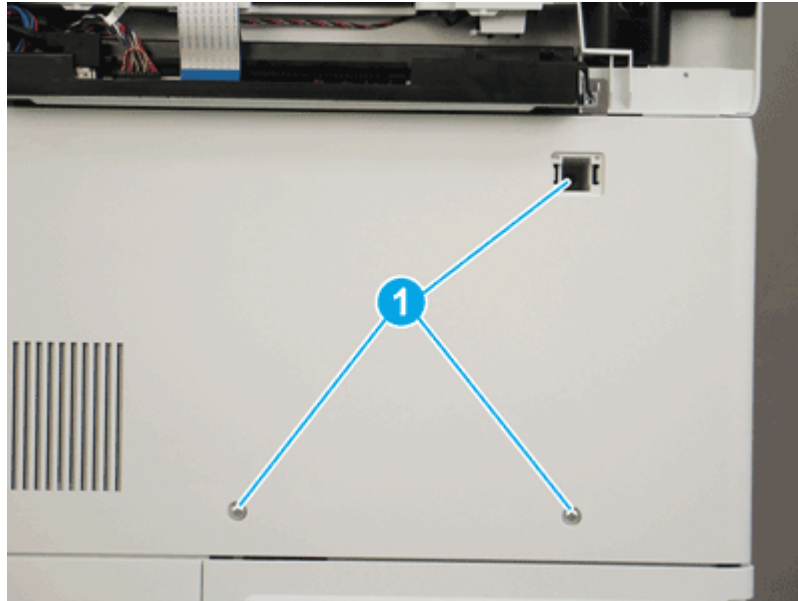
2. **Flow M681z/Flow M682z/Flow E67660z models only:** Do the following:
 - a. At the back of the printer, remove one small cover (callout 1).

Figure 5-784 Remove the small cover



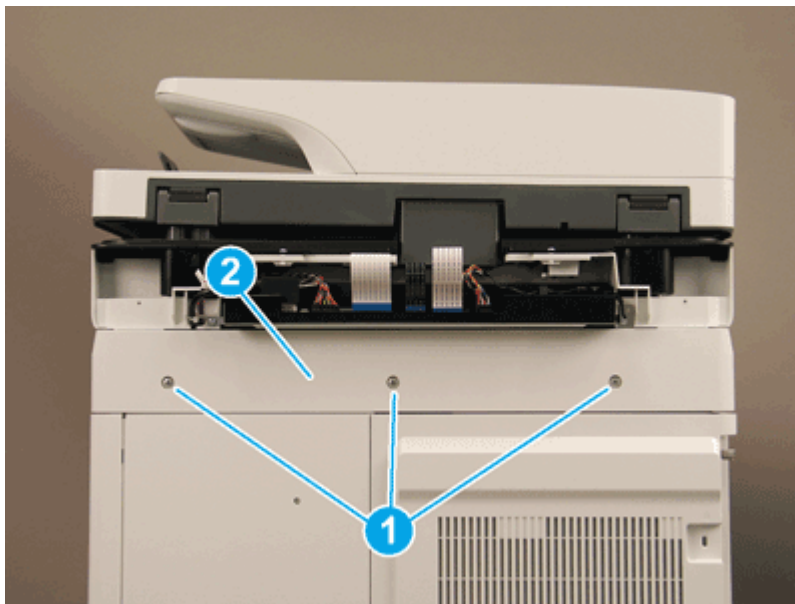
- b. Remove three screws (callout 1), and then remove the stapler/stacker rear cover (callout 2).

Figure 5-785 Remove the stapler/stacker rear cover



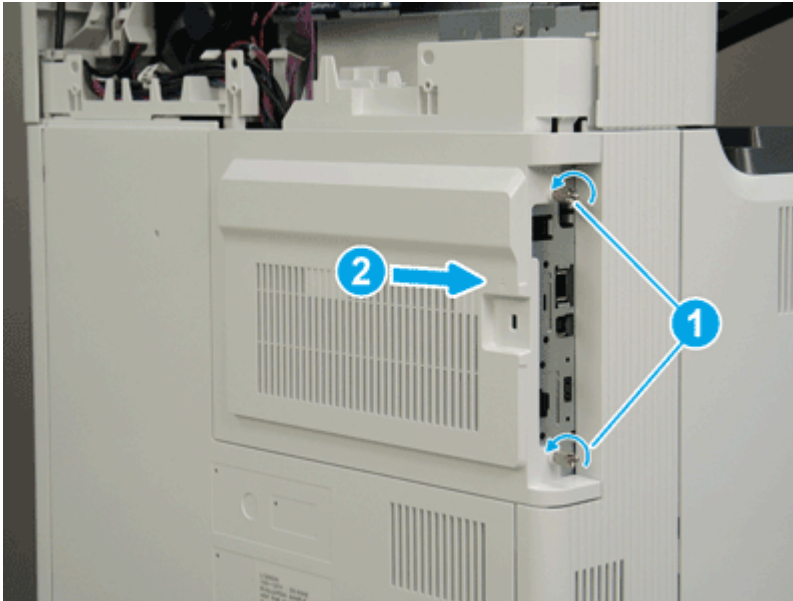
- 3. **M681dh/M681f/M682dh/Flow M681f/E67650dh models only:** Remove three screws (callout 1), and then remove the upper rear cover (callout 2).

Figure 5-786 Remove the upper rear cover



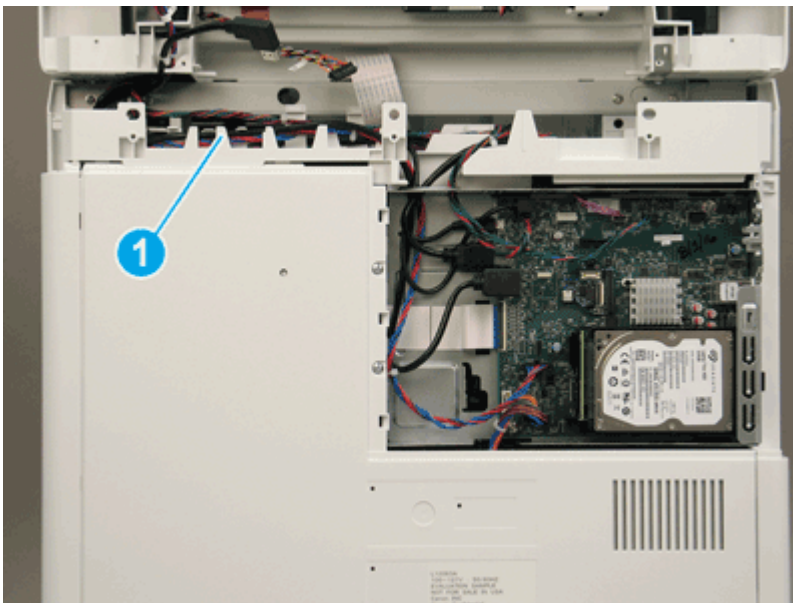
4. Loosen two thumbscrews (callout 1), and then slide the formatter cover away from the printer to remove it (callout 2).

Figure 5-787 Remove the formatter cover



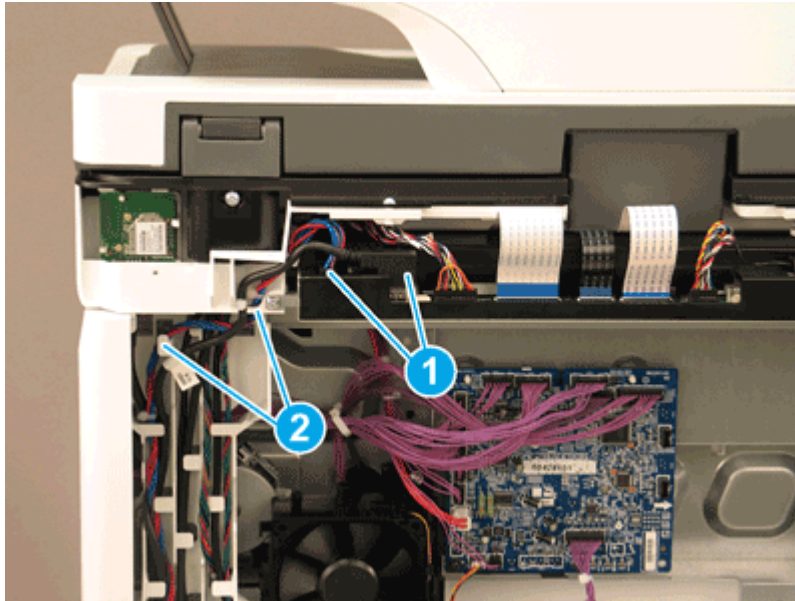
5. The remaining figures in this procedure show the Flow M682z model. While the cable routing (callout 1) on the M681dh, M681f, M682dh, Flow M681f, and E67650dh models is different, the removal procedures are the same for all models.

Figure 5-788 Cable routing for M681dh, M681f, Flow M681f, and E67650dh



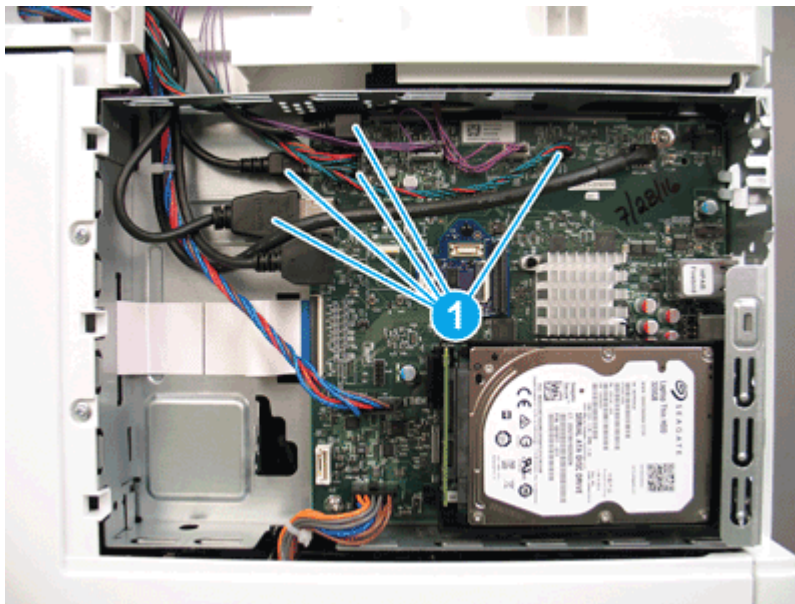
6. Disconnect two connectors (callout 1) on the SCB, and then release the cables from the guides (callout 2).

Figure 5-789 Disconnect two connectors



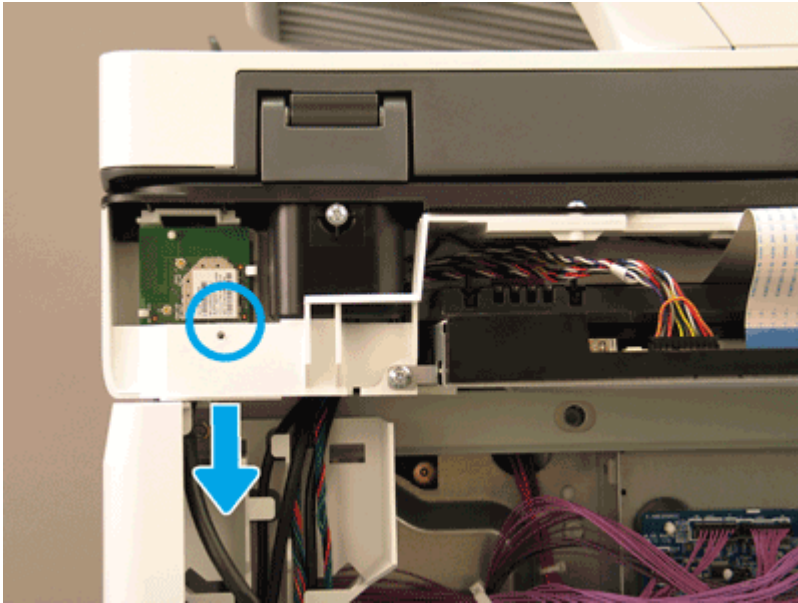
7. Disconnect five connectors on the formatter (callout 1).

Figure 5-790 Disconnect five connectors



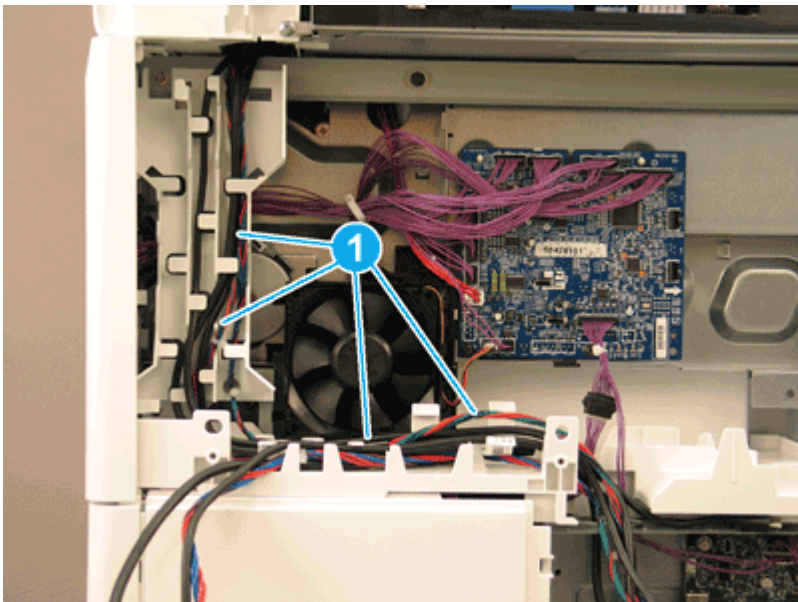
8. **Flow M682z only:** Gently pull down on the cable to disconnect the wireless connector.

Figure 5-791 Disconnect the wireless connector



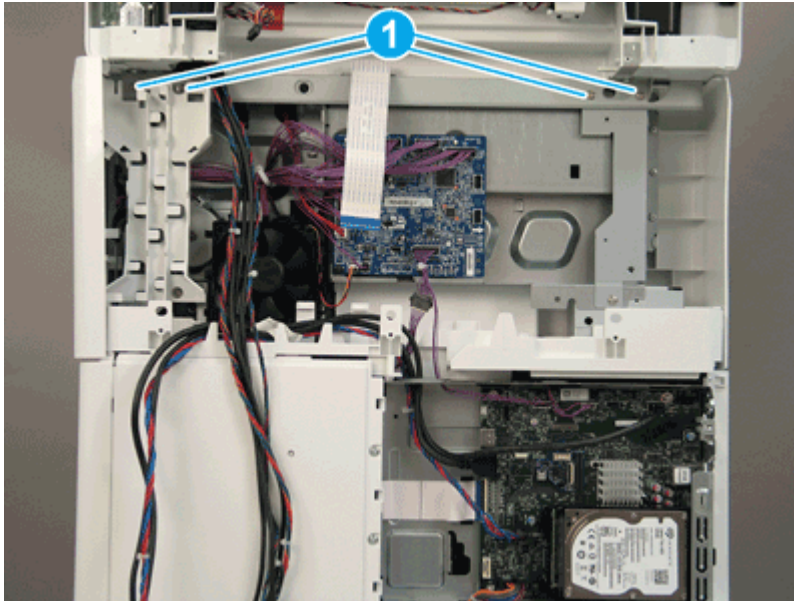
9. Release all of the cables from the cable guides (callout 1).

Figure 5-792 Release the cables



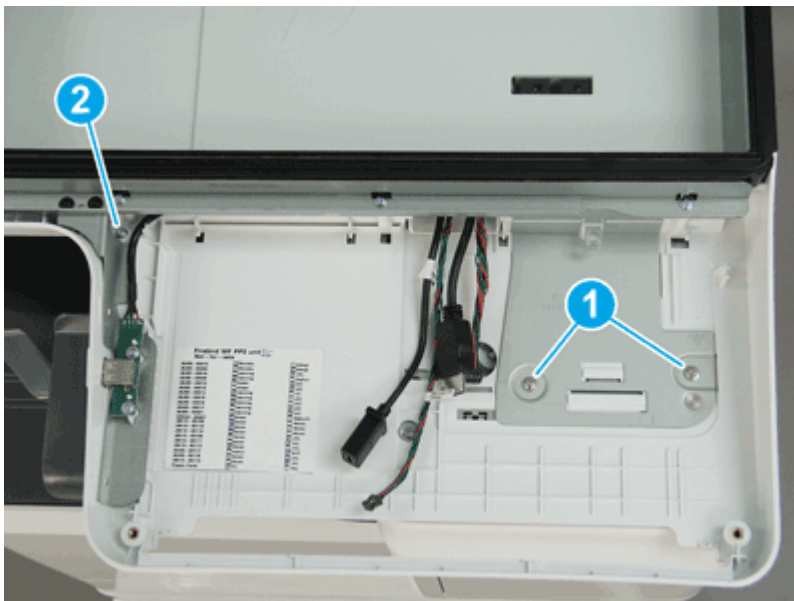
10. At the back of the printer, remove four screws (callout 1).

Figure 5-793 Remove four screws



11. On the top of the image scanner assembly, at the location where the control panel was removed, remove two sheet metal screws (callout 1). **Flow M681z/Flow M682z/Flow E67660z only:** Remove one self-tapping screw (callout 2).

Figure 5-794 Remove three screws



12. Lift the document feeder and image scanner off of the printer to remove them.

Figure 5-795 Remove the document feeder and image scanner



5. Remove the stapler/stacker (Flow M681z/Flow M682z/Flow E67660z)

Follow these steps to remove the stapler/stacker (Flow M681z/Flow M682z/Flow E67660z).

This step is for the M681/M682/E67550/E67560/E67650/E67660 printers. For the M652/M653/E65050/E65060/E65150/E65160 printers, skip this step.

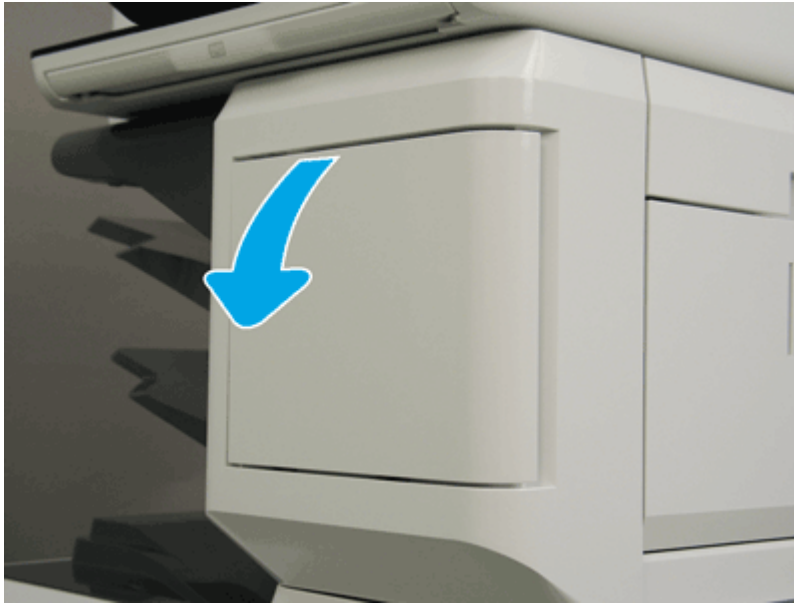
1. Open the front door.

Figure 5-796 Open the front door



2. Open the stapler door.

Figure 5-797 Open the stapler door



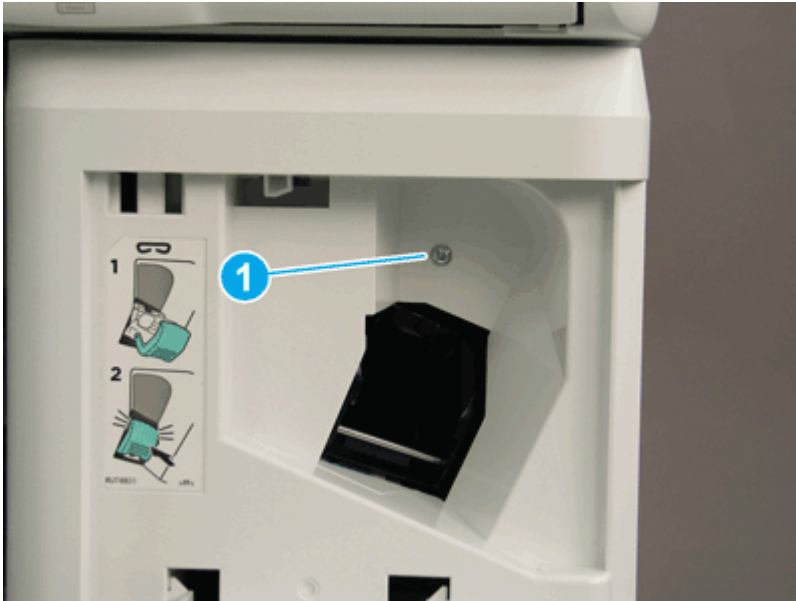
3. Release the latch, and then remove the staple cartridge.

Figure 5-798 Remove the staple cartridge



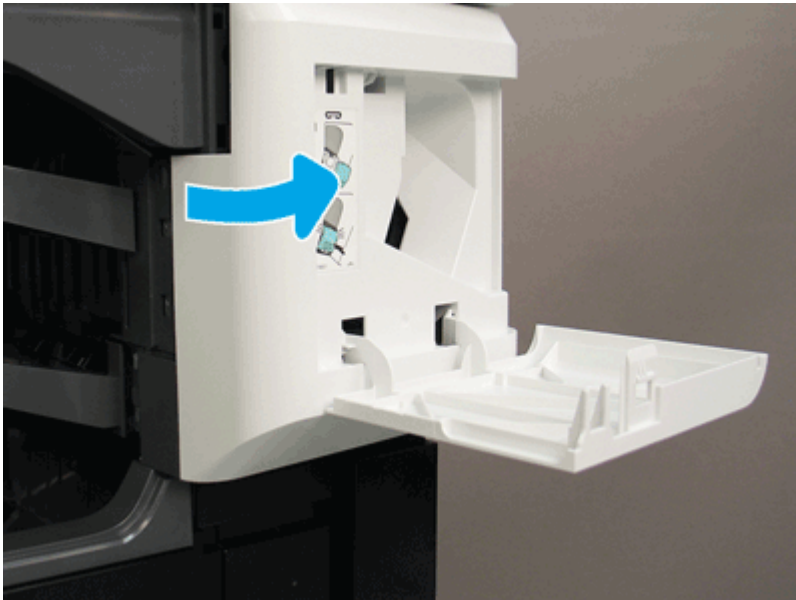
4. Remove one screw (callout 1).

Figure 5-799 Remove one screw



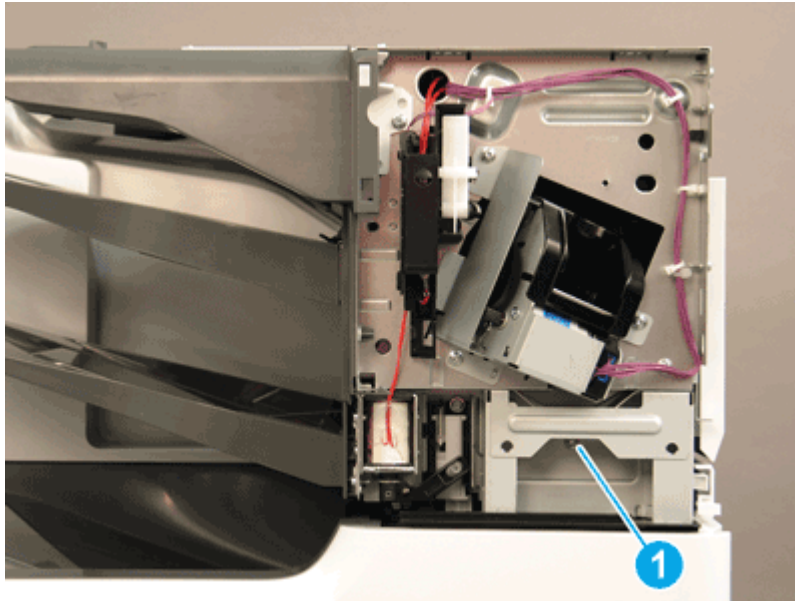
5. Rotate the stapler cover to the right to remove it.

Figure 5-800 Remove the stapler cover



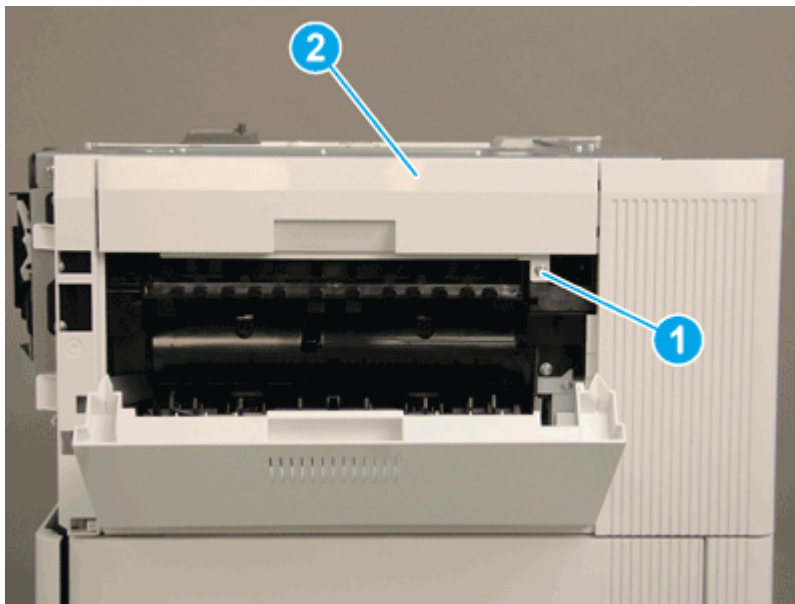
6. Remove one screw (callout 1).

Figure 5-801 Remove one screw



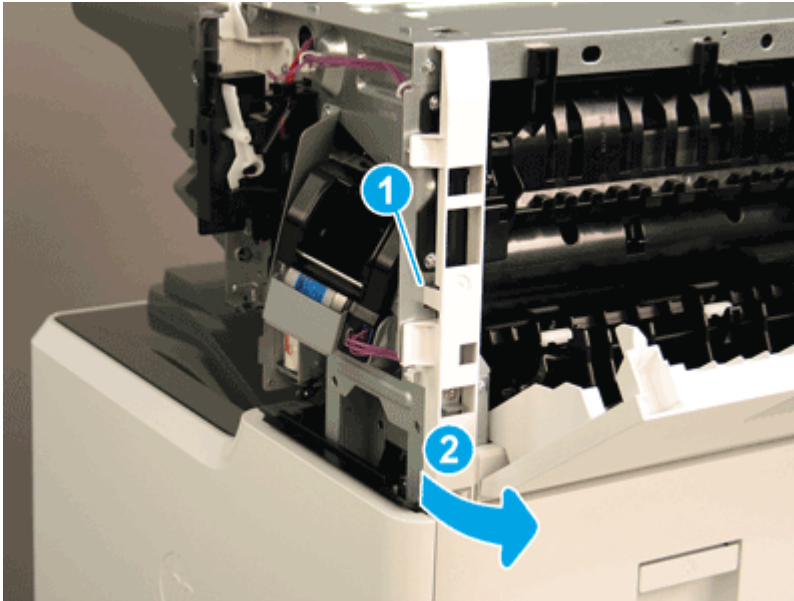
7. At the right side of the printer, remove one screw (callout 1), and then remove the stapler/stacker right upper cover (callout 2).

Figure 5-802 Remove the stapler/stacker right upper cover



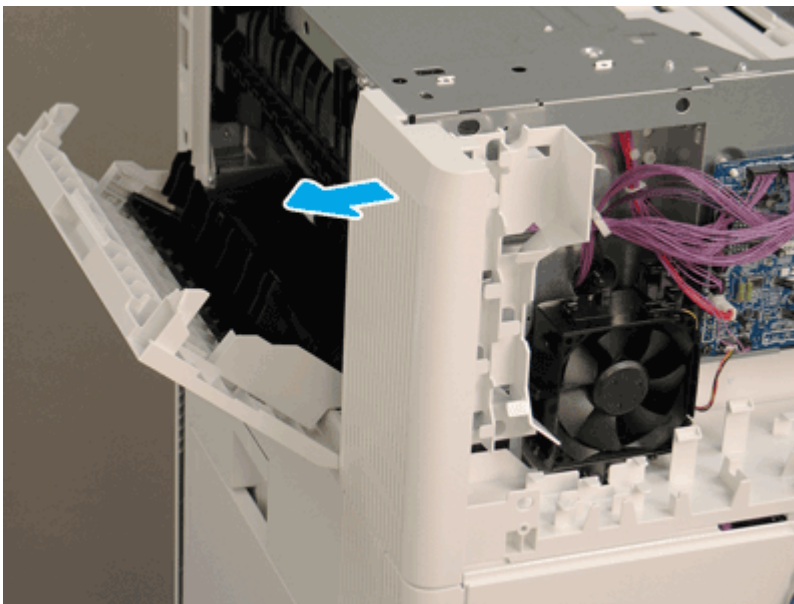
8. Release one tab (callout 1), and then rotate the stapler rear cover away from the printer (callout 2) to remove it.

Figure 5-803 Remove the stapler rear cover



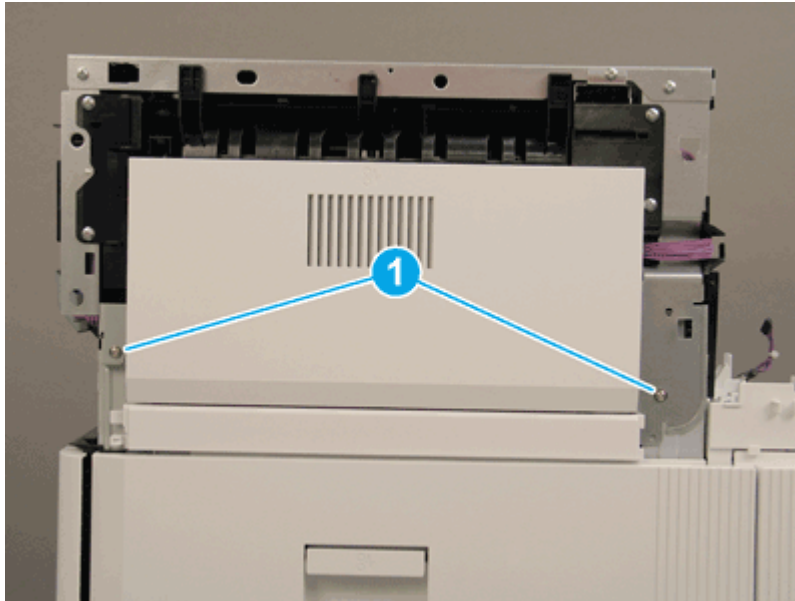
9. Pull the stapler/stacker rear corner cover away from the printer to remove it.

Figure 5-804 Remove the stapler/stacker rear corner cover



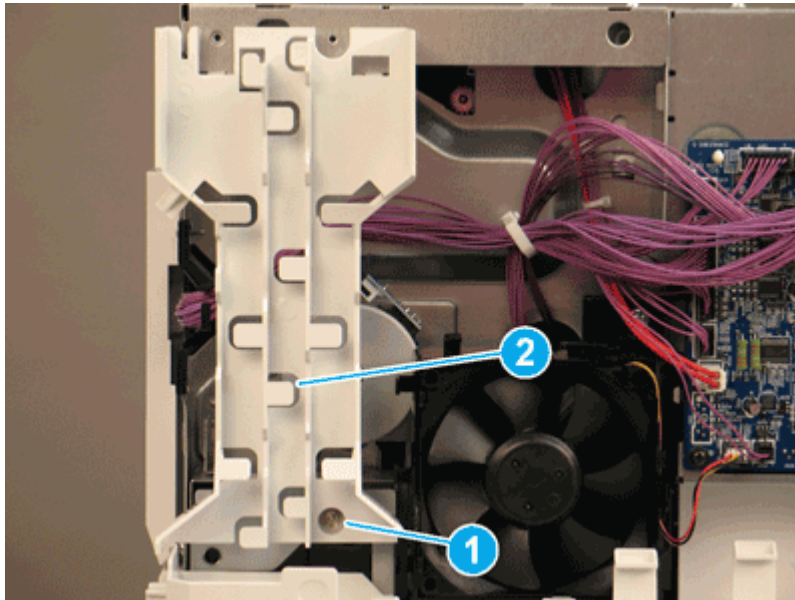
10. Remove two screws (callout 1).

Figure 5-805 Remove two screws



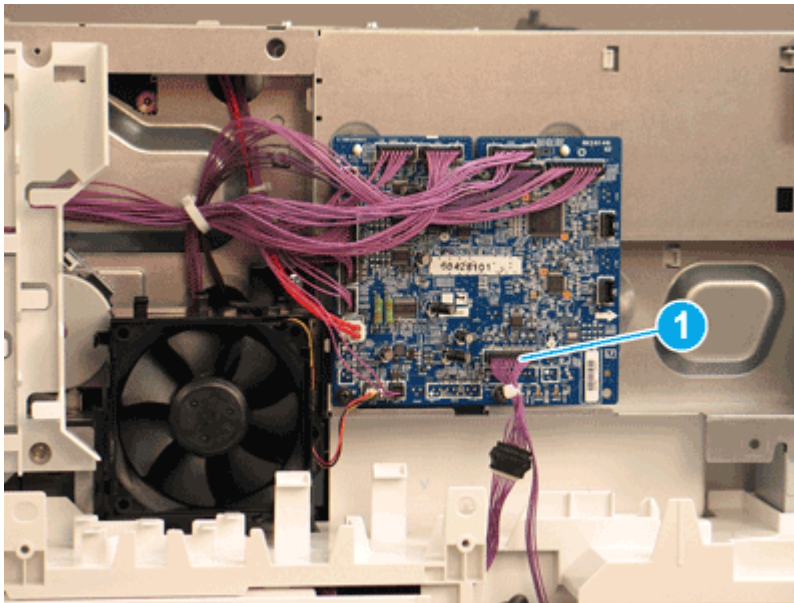
11. At the back of the printer, remove one screw (callout 1), and then remove the cable guide (callout 2).

Figure 5-806 Remove the cable guide



12. Disconnect one connector on the stapler/stacker PCA (callout 1).

Figure 5-807 Disconnect one connector



13. Remove two screws (callout 1).


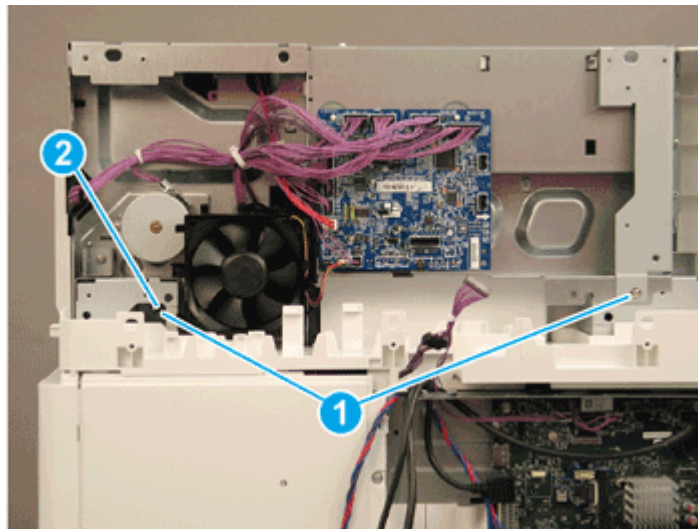
 **TIP:** The screw on the left (callout 2) is longer than the other screw. Make sure that this screw is installed in the correct location.

Figure 5-808 Remove two screws



14. Lift the stapler/stacker away from the printer.


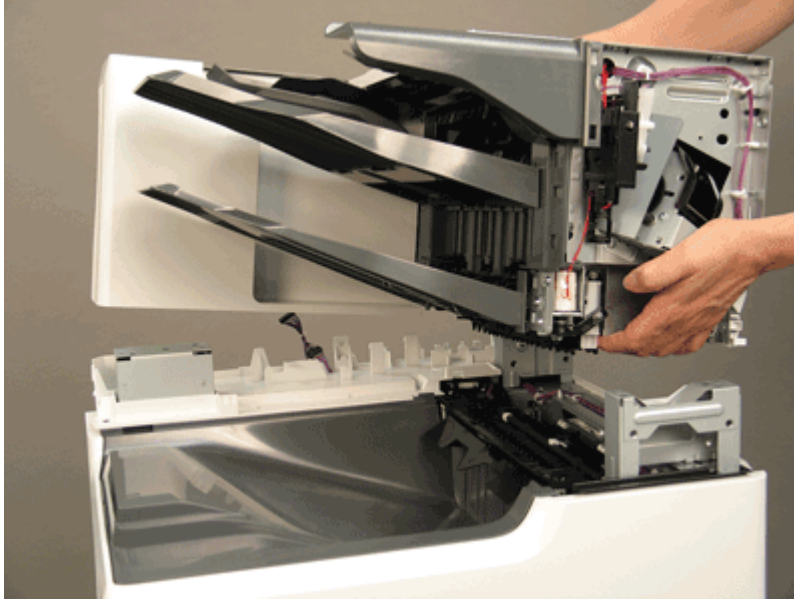
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-809 Remove the stapler/stacker

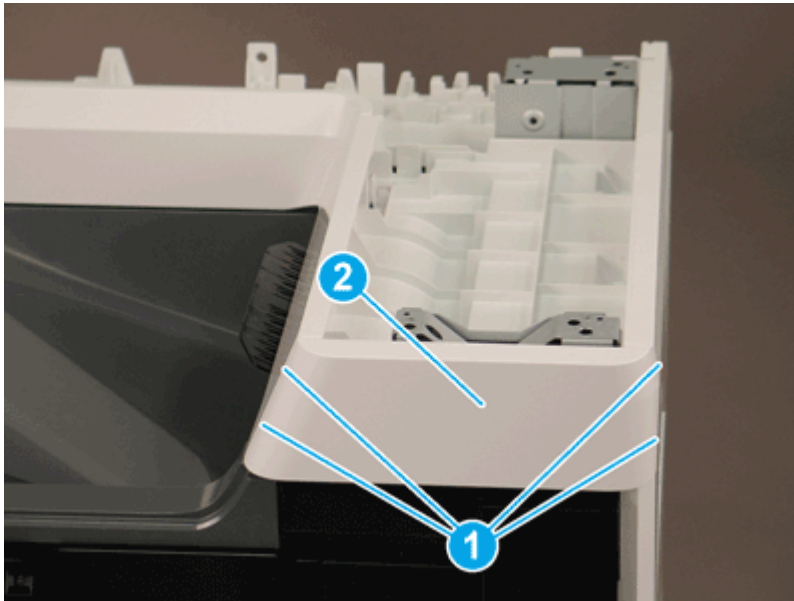


6. Remove the face-down front cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the face-down front cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

1. Open the front door.
2. Release two tabs on each side (callout 1), and then remove the face-down front cover (callout 2).

Figure 5-810 Remove the face-down front cover

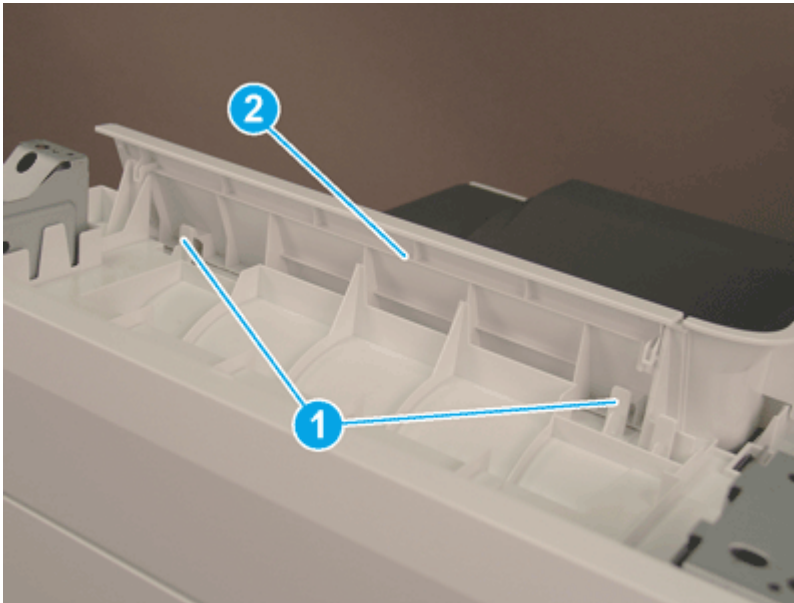


7. Remove the top cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the top cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

- Release two tabs (callout 1), and then remove the top cover (callout 2).

Figure 5-811 Remove the top cover



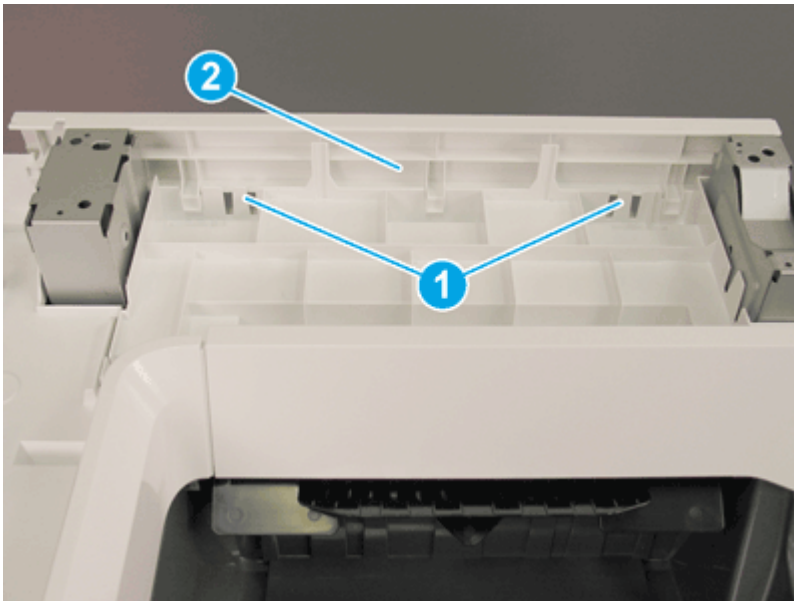
8. Remove the right cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the right cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

This step is for the M681/M682/E67550/E67560/E67650/E67660 printers. For the M652/M653/E65050/E65060/E65150/E65160 printers, skip this step.

- Release two tabs (callout 1), and then remove the right cover (callout 2).

Figure 5-812 Remove the right cover



9. Remove the front cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the front cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

- Release two tabs (callout 1), and then remove the front cover (callout 2).


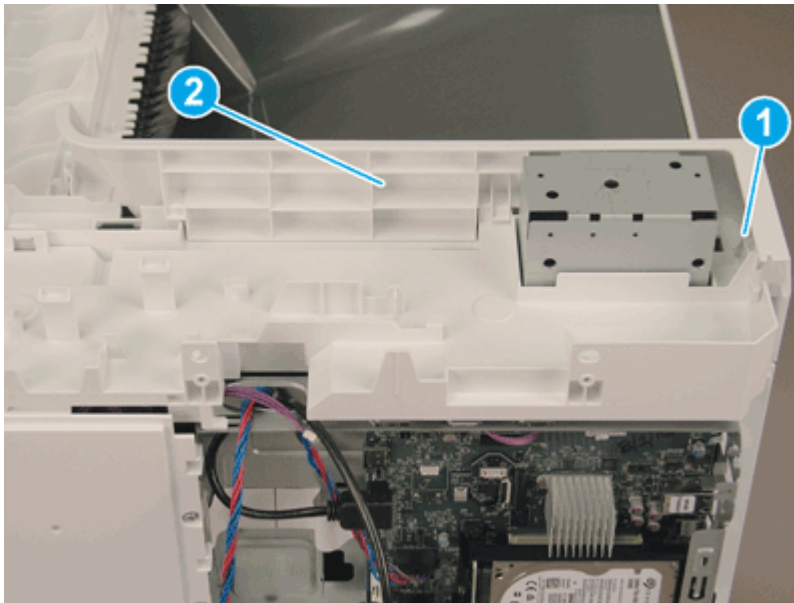
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-813 Remove the front cover



10. Remove the rear upper cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the rear upper cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

- Remove two screws (callout 1), and then remove the rear upper cover (callout 2).


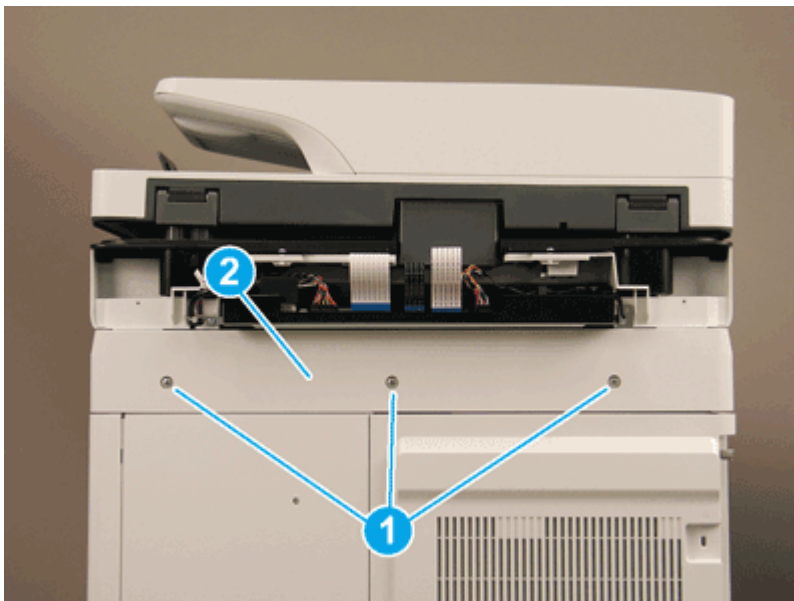

 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-814 Remove the rear upper cover



11. Remove the face-down cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the face-down cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

 **NOTE:** This step is for the M681/M682/E67550/E67560/E67650/E67660 printers. For the M652/M653/E65050/E65060/E65150/E65160 printers, skip this step.

- Remove two screws (callout 1), release three tabs (callout 2), and then remove the face-down cover (callout 3).


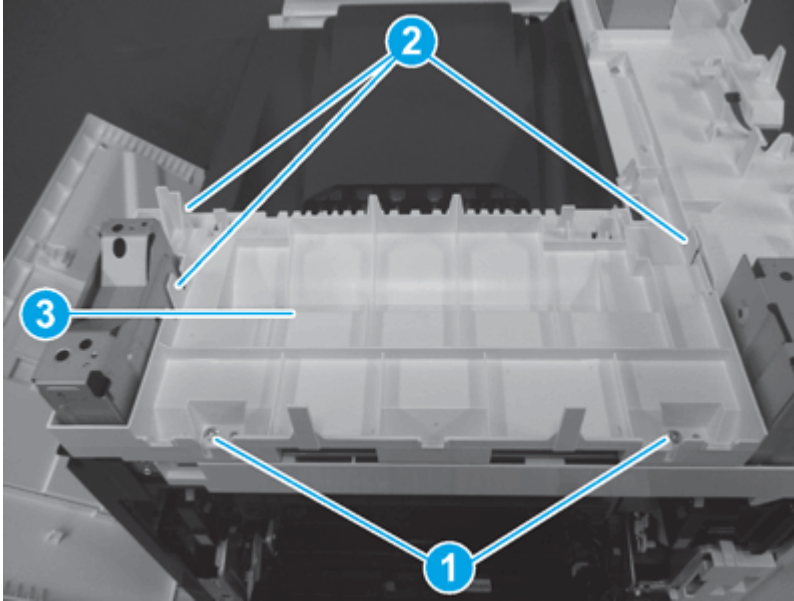
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-815 Remove two screws and the face-down cover



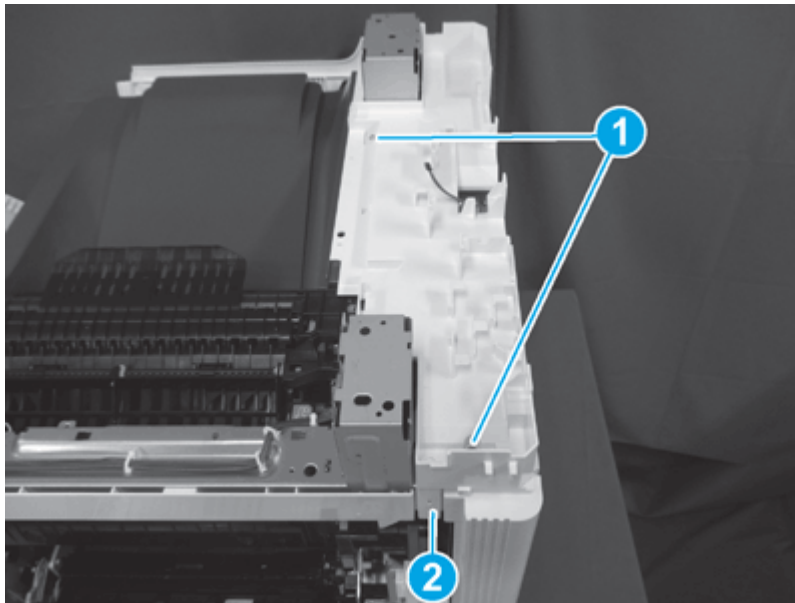
12. Remove the main cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the main cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

This step is for the M681/M682/E67550/E67560/E67650/E67660 printers. For the M652/M653/E65050/E65060/E65150/E65160 printers, skip this step.

1. Remove two screws (callout 1), and then release one tab (callout 2).

Figure 5-816 Remove two screws and release one tab



2. Remove one screw (callout 1), release two tabs (callout 2), and then remove the main cover (callout 3).


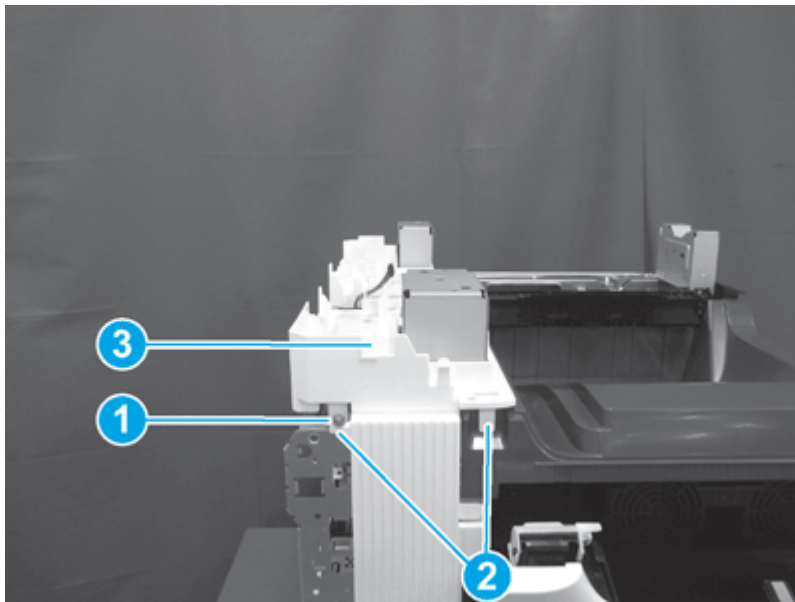

 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-817 Remove one screw and the main cover



13. Remove the control panel (M652/M653/E65050/E65060/E65150/E65160)

Follow these steps to remove the control panel (M652/M653/E65050/E65060/E65150/E65160).

 **NOTE:** This step is for the M652/M653/E65050/E65060/E65150/E65160 printers. For the M681/M682/E67550/E67560/E67650/E67660 printers, skip this step.

The figures below show the touchscreen control panel. The procedure is also correct for the keypad control panel.

1. Tilt the control panel to the fully raised position.

Figure 5-818 Tilt the control panel up



2. Use a coin to release the cover, and then remove the cover.

Figure 5-819 Remove the cover



3. Remove one thumbscrew (callout 1)



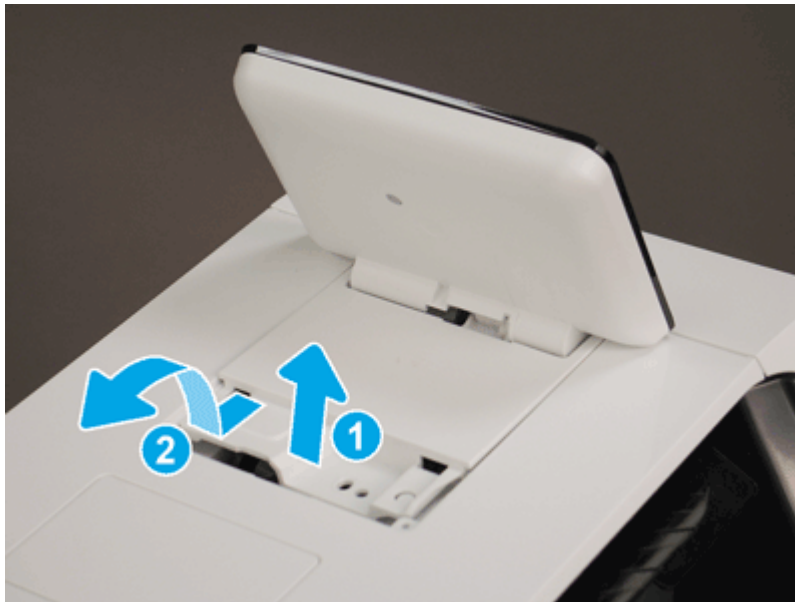
NOTE: Store the screw in a secure place where it cannot fall down into the printer.

Figure 5-820 Remove one thumbscrew



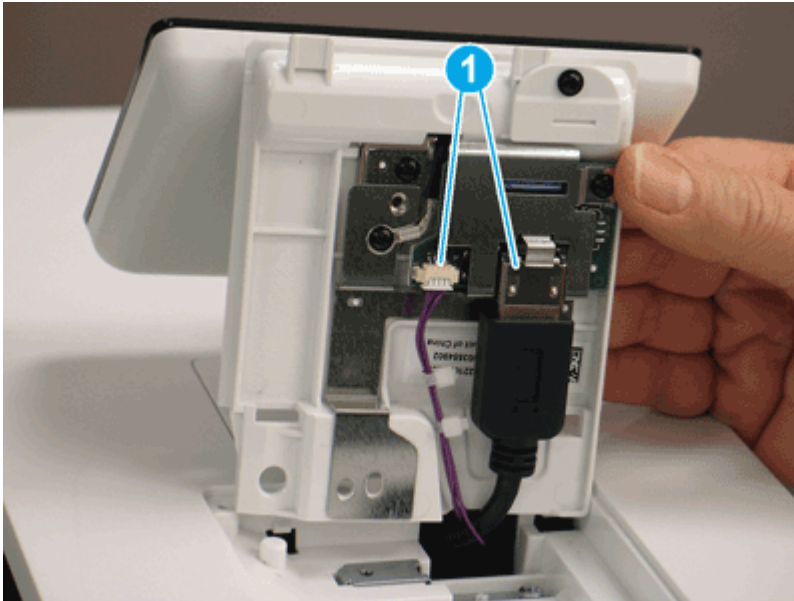
4. Lift the back edge of the control panel up (callout 1), and then slide it toward the back of the printer (callout 2) to release it.

Figure 5-821 Release the control panel



5. Turn the control panel over to gain access to the bottom side. Disconnect two connectors (callout 1).

Figure 5-822 Disconnect two connectors



6. Remove the control panel.

Figure 5-823 Remove the control panel



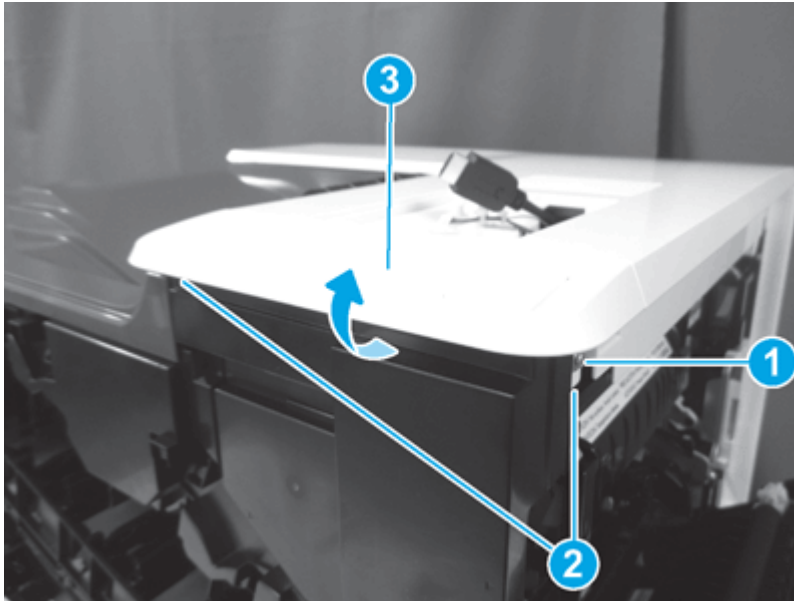
14. Remove the top cover (M652/M653/E65050/E65060/E65150/E65160)

Follow these steps to remove the top cover (M652/M653/E65050/E65060/E65150/E65160).

1. Open the following doors:
 - Front door
 - Left door

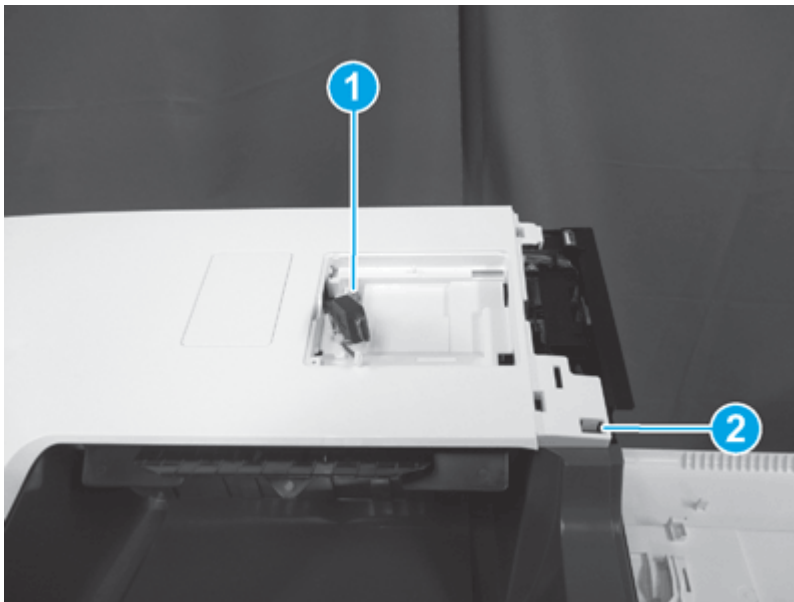
- Right door
2. Remove one screw (callout 1), release two tabs (callout 2), and then rotate the NFC cover (callout 3) up and away from the printer to remove it.

Figure 5-824 Remove the NFC cover



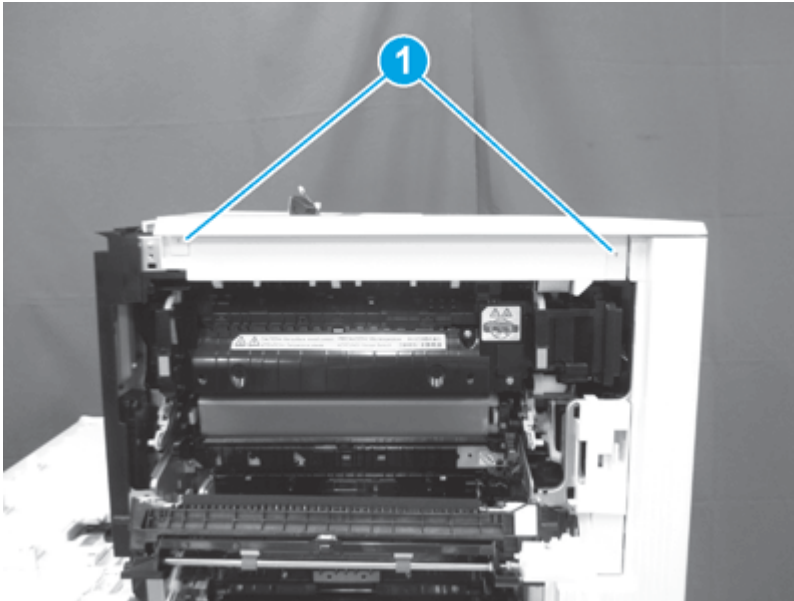
3. Remove one screw (callout 1), and then release one tab (callout 2).

Figure 5-825 Remove one screw and release one tab



4. Release two tabs (callout 1).

Figure 5-826 Release two tabs



5. Remove one screw (callout 1), release one tab (callout 2), release one tab behind the left door (callout 3), and then remove the top cover (callout 4).


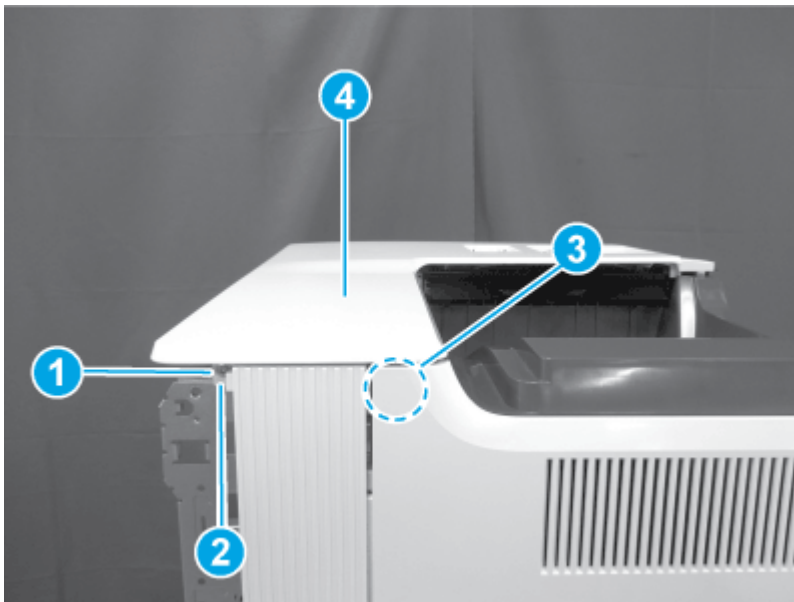
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-827 Remove the top cover



15. Remove the output bin

Follow these steps to remove the output bin.

1. Open the following doors:
 - Front door
 - Left door
 - Right door
2. Release two tabs (callout 1), and then remove the output bin (callout 2).


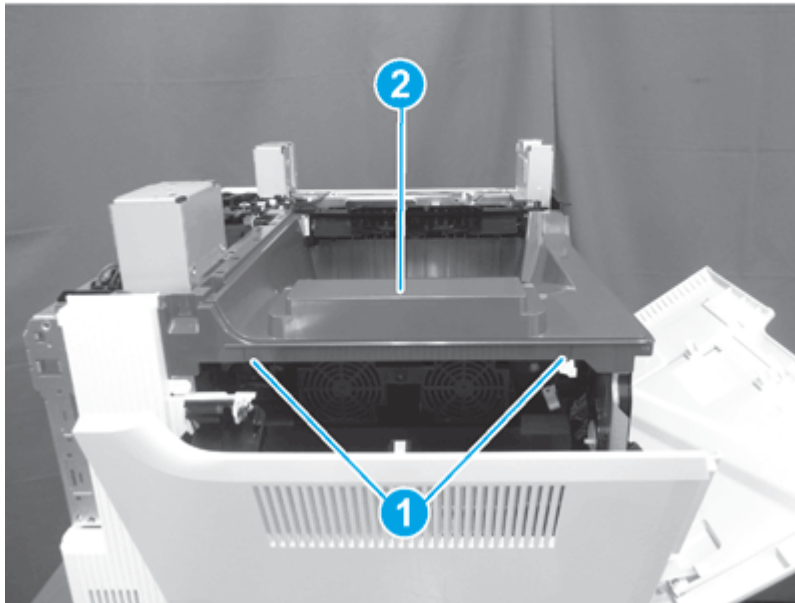
 **NOTE:** The M682 is shown in the figure below. The procedure is correct for all models.

Figure 5-828 Remove the output bin



16. Remove the formatter cover

Follow these steps to remove the formatter cover.

- Unscrew two thumbscrews (callout 1), and then slide the formatter cover (callout 2) away from the printer to remove it.


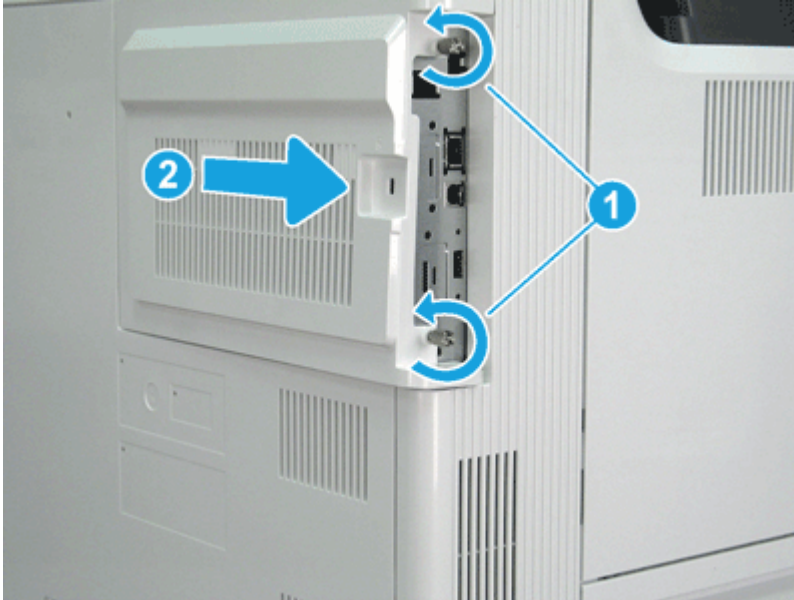
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-829 Remove the formatter cover



17. Remove the left door

Follow these steps to remove the left door.

1. Open front door.

Figure 5-830 Open front door



2. Press on the tab (callout 1) while sliding the left door (callout 2) to the right to remove it.


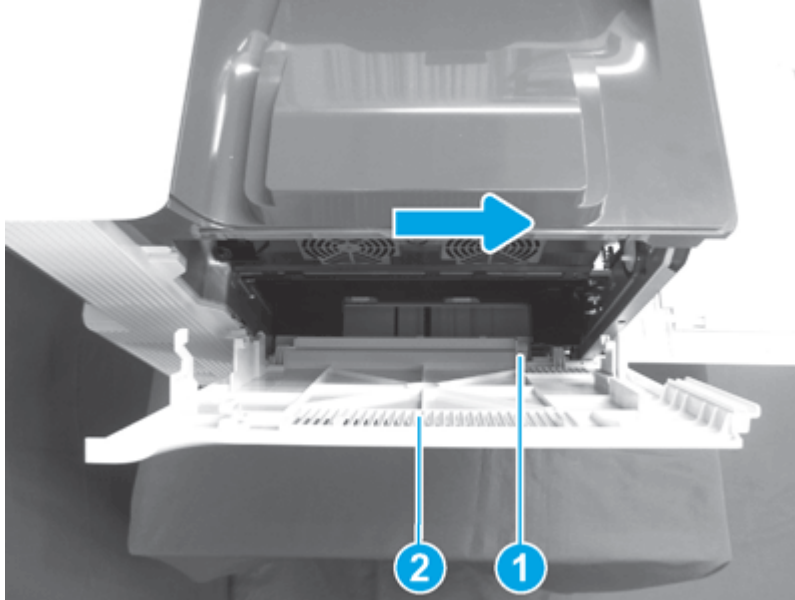
 **NOTE:** Make sure that the front door is not blocking the left door at the lower corner.

Figure 5-831 Remove the left door

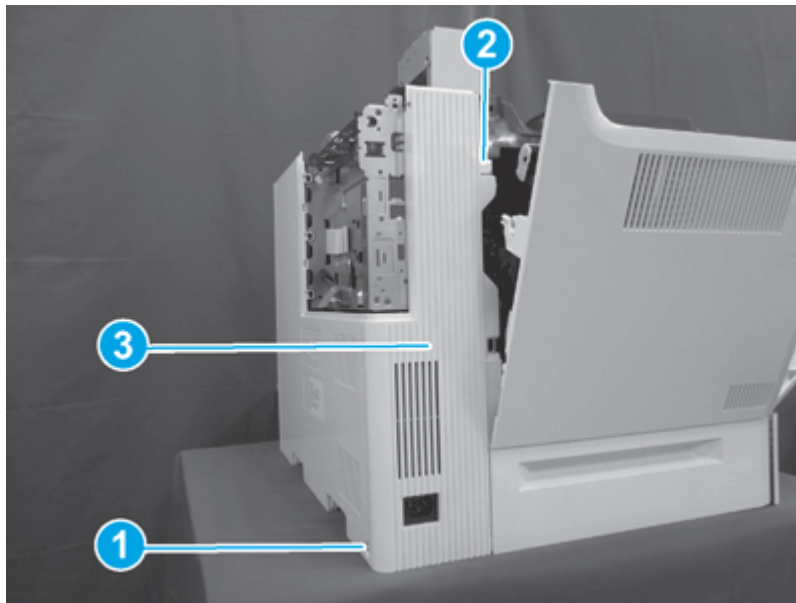


18. Remove the left rear cover

Follow these steps to remove the left rear cover.

- Open the left door. Remove one screw (callout 1), release one boss (callout 2), and then remove the left rear cover (callout 3).


Figure 5-832 Remove the left rear cover




19. Remove the left upper front and left upper rear fans

Follow these steps to remove the left upper front and left upper rear fans.

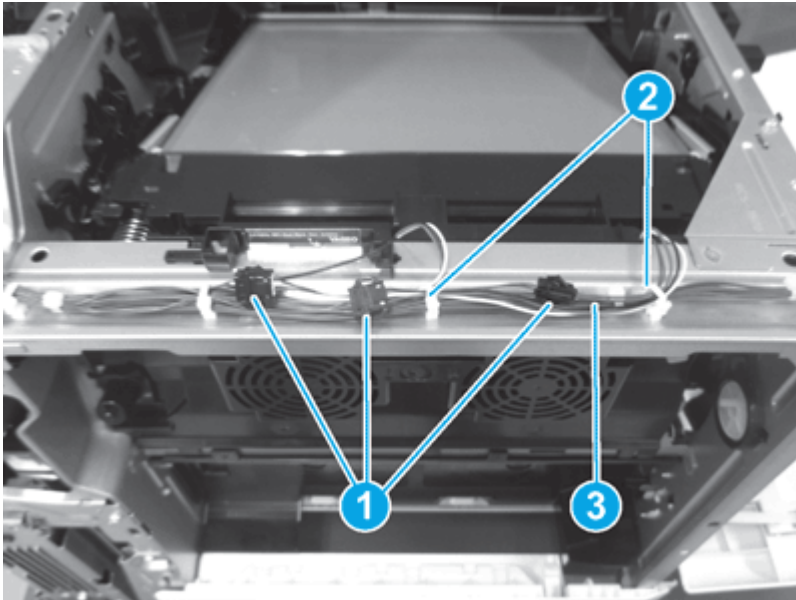
1. Disconnect three connectors (callout 1), open two retainers (callout 2), and then release the cable (callout 3) from the retainers.

 **NOTE:** Leave the black junction connectors attached to the cables on the printer.

 **TIP:** The two connectors on the left are both three-pin connectors. Make sure that the cables are connected to the correct connector.

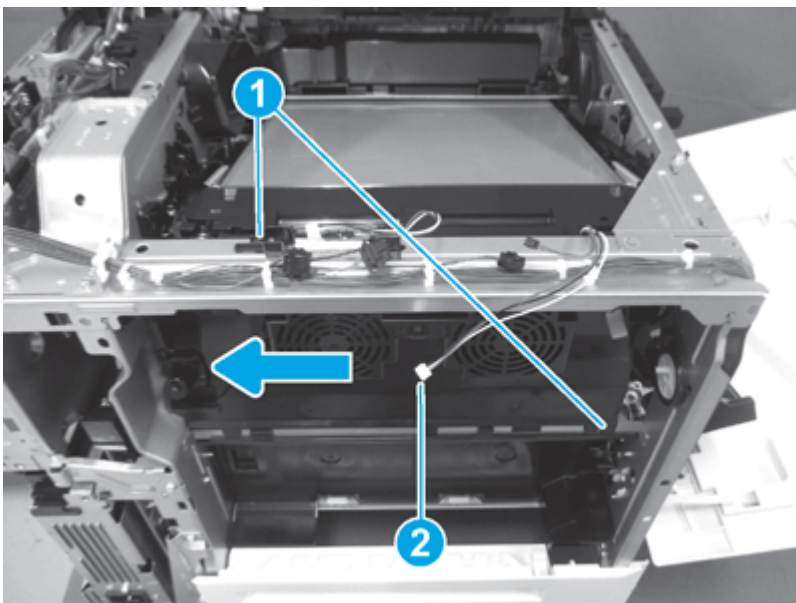
Make sure that the black junction connectors (callout 1) remain on the cables attached to the printer. These connectors are not provided on the new part.

Figure 5-833 Disconnect three connectors



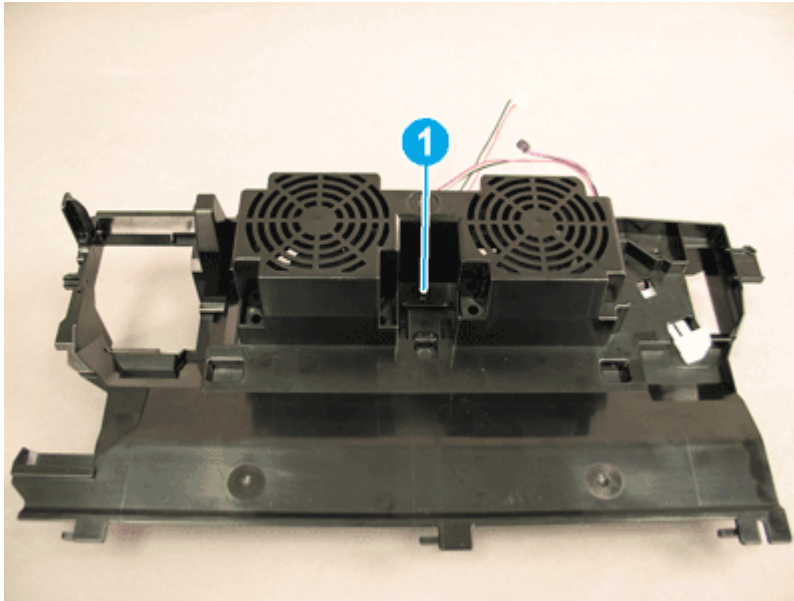
2. Release two tabs (callout 1). Slide the cartridge cover (callout 2) left, and then pull it away from the printer to remove it.

Figure 5-834 Remove the cartridge cover



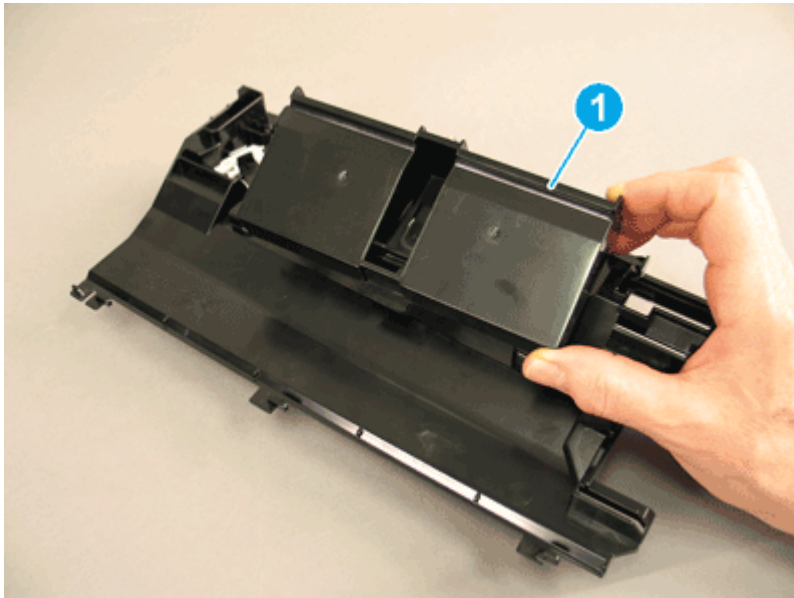
3. Release one tab (callout 1).

Figure 5-835 Release one tab



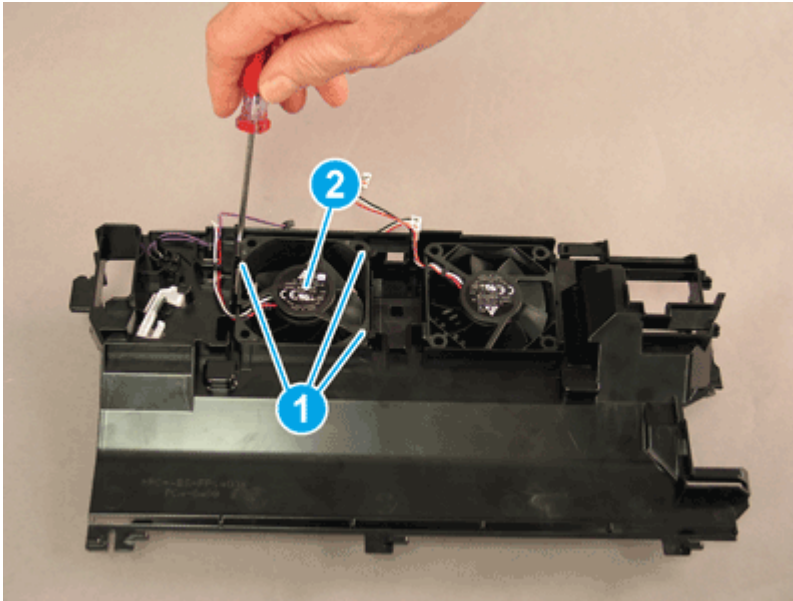
4. Turn the assembly over, and then remove the fan duct (callout 1).

Figure 5-836 Remove the fan duct



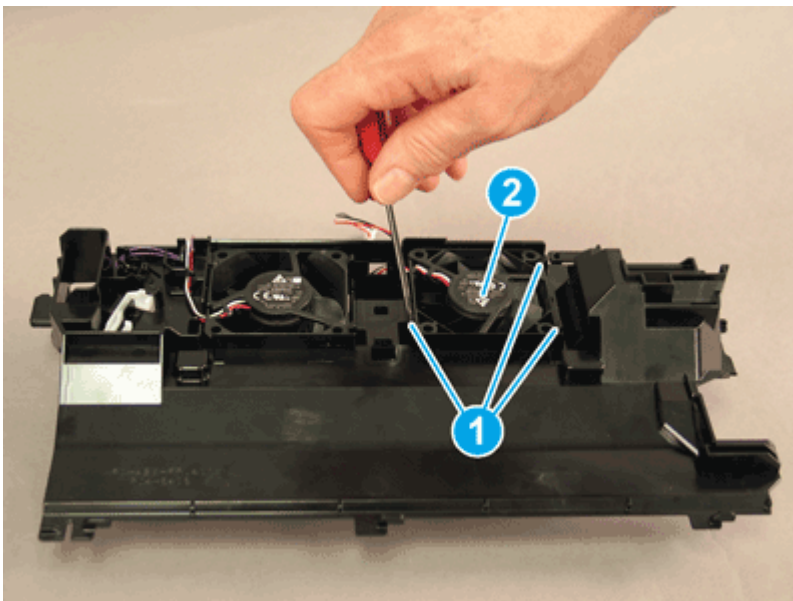
5. Use a small, flat-blade screwdriver to gently twist and release three tabs (callout 1), and then remove the left upper front fan (callout 2).

Figure 5-837 Remove the left upper front fan



6. Use a small, flat-blade screwdriver to gently twist and release three tabs (callout 1), and then remove the left upper rear fan (callout 2).


Figure 5-838 Remove the left upper rear fan




20. Unpack the replacement assembly


Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.

 **NOTE:** HP recommends responsible disposal of the defective part.


2. Unpack the replacement part from the packaging.

CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT:  Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE:  If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE:  When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

21. Reverse the removal steps to install the assembly

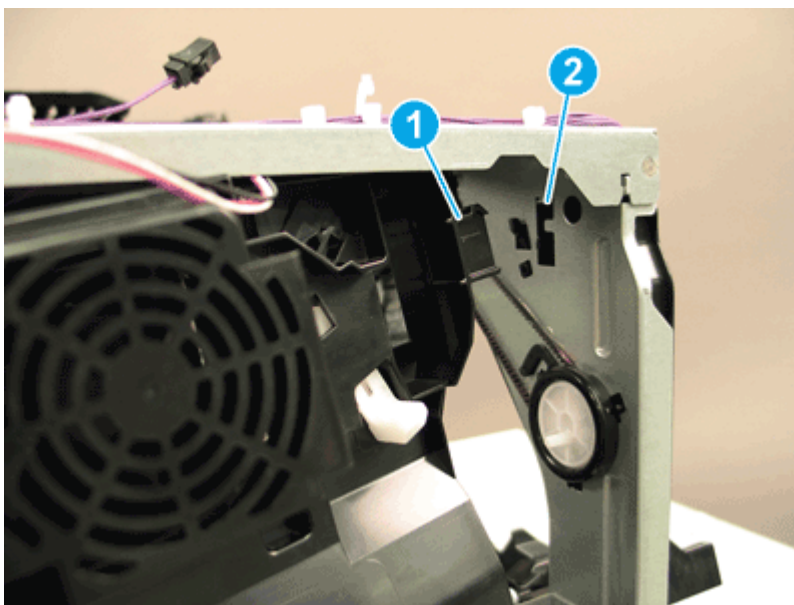
Also use the following **special installation instructions**.

Left upper front and left upper rear fans

- Install the right side of the fan assembly first. Position the tab (callout 1) on the fan assembly into the slot (callout 2) in the sheet metal frame.

NOTE:  Continue to reverse the removal steps to finish installing the assembly.

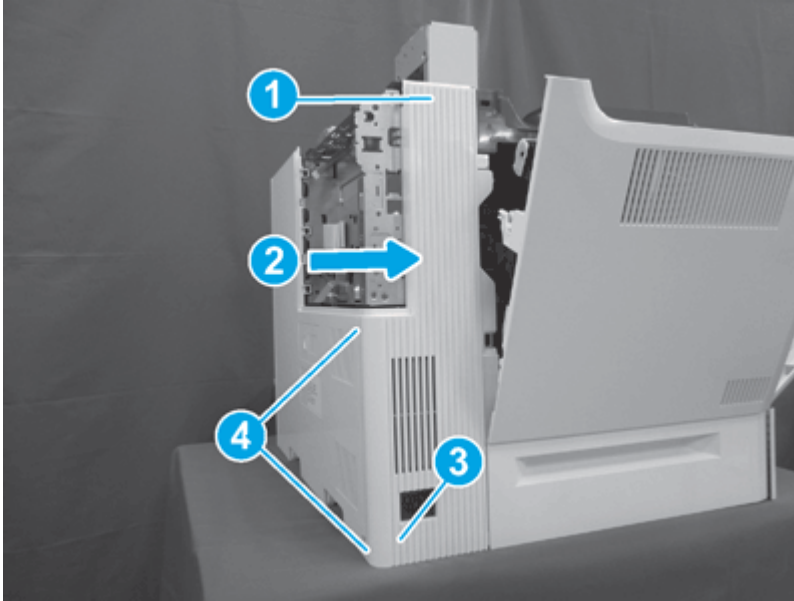
Figure 5-839 Install the fan assembly



Left rear cover

- Position the top of the cover (callout 1) first, and then slide the cover to the right (callout 2). Push the left lower corner (callout 3) toward the rear of the printer to engage two tabs (callout 4) in the slots on the rear cover.

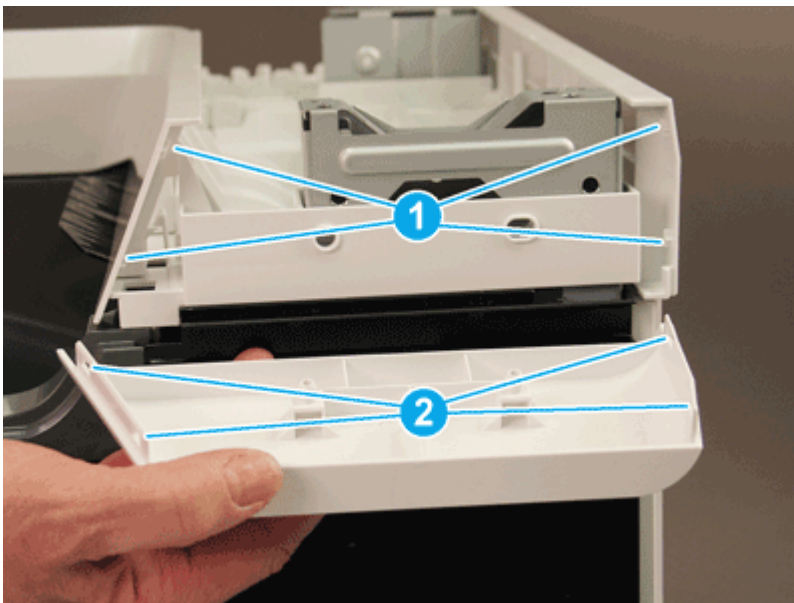
Figure 5-840 Install the left rear cover



Face-down front cover

- When reinstalling the cover, position the tabs (callout 1) on the printer into the slots (callout 2) on the cover.

Figure 5-841 Install the cover

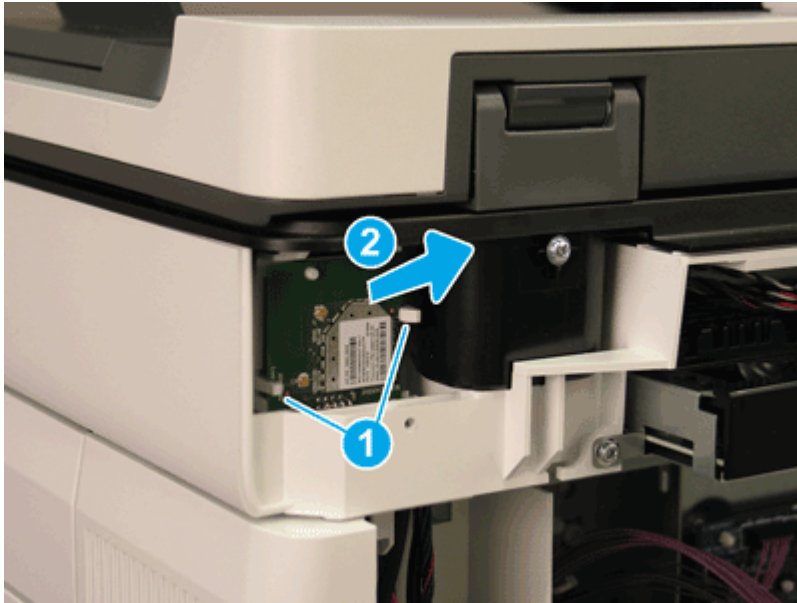


Document feeder and image scanner

1. **Flow M682z only**: When reconnecting the wireless card cable, do the following:

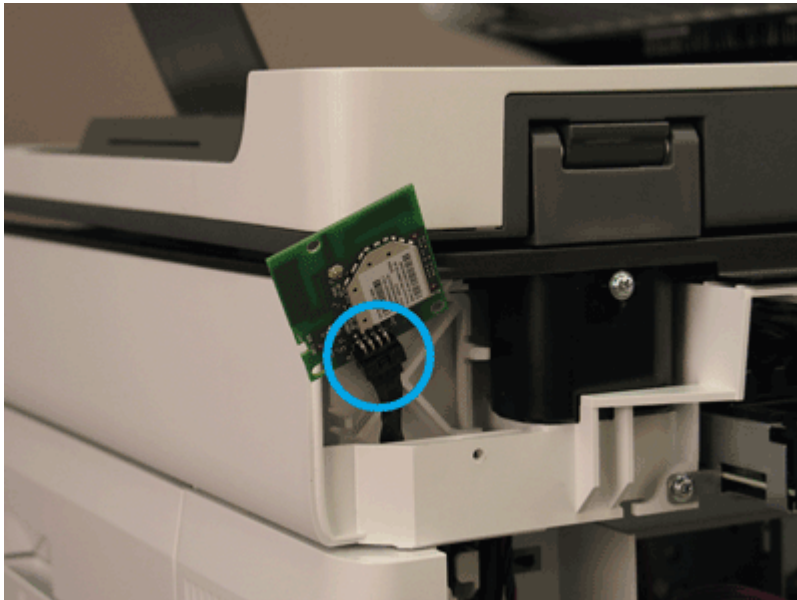
- a. Release two tabs (callout 1), and then remove the wireless card (callout 2).

Figure 5-842 Remove the wireless card



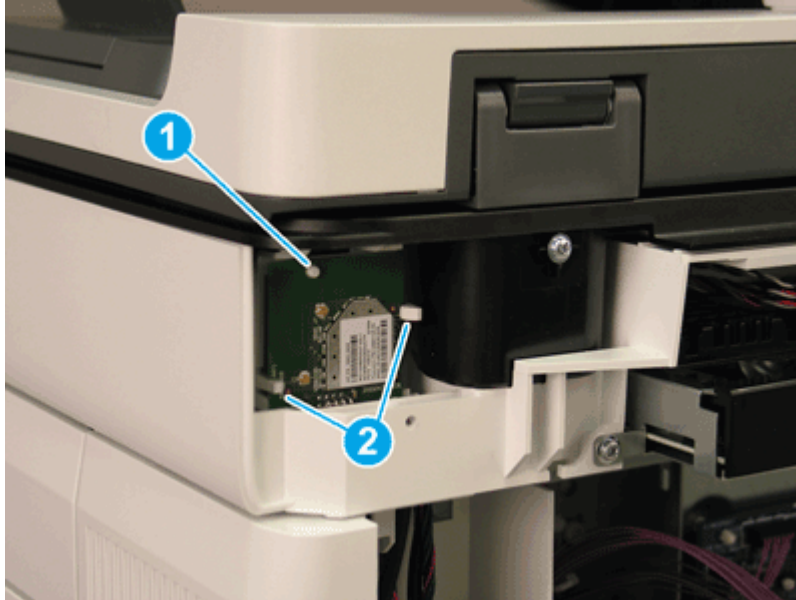
- b. Connect the cable to the wireless card (callout 1).

Figure 5-843 Connect the wireless card connector



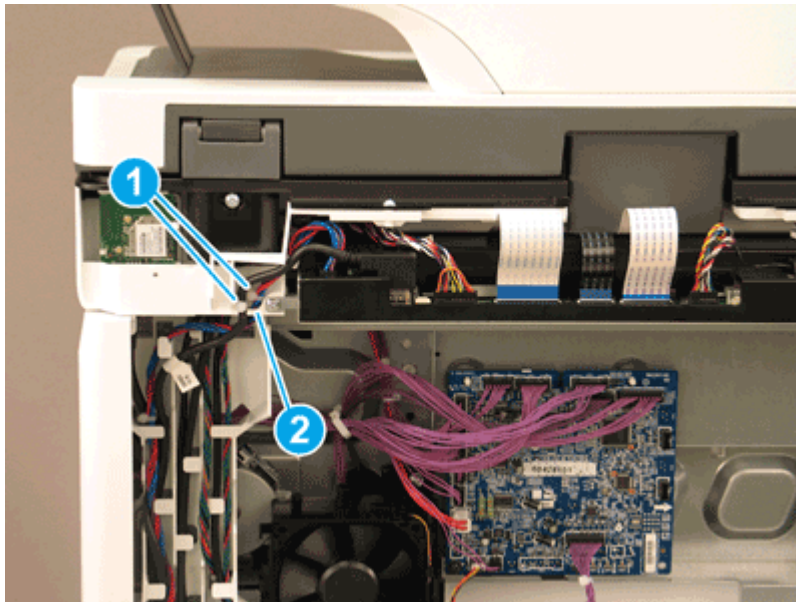
- c. Reinstall the wireless card. Make sure that the hole in the card is positioned over the peg (callout 1), and that the card is under the two tabs (callout 2).

Figure 5-844 Reinstall the wireless card



2. When reinstalling the SCB cables, make sure that the wire retainers (callout 1) on the cables are positioned above the plastic guide (callout 2).

Figure 5-845 Install the SCB cables



 **NOTE:** Continue to reverse the removal steps to finish installing the assembly.


Removal and replacement: Toner carry assembly

Learn how to remove and replace the toner carry assembly.

 [View a video of how to remove and replace the toner carry assembly.](#)


Mean time to repair: 45 minutes

Service level: Advanced

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Disconnect the power cable.

 **WARNING!** To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-58 Part information

Part number	Part description
RM2-6620-000CN	Toner carry assembly

Required tools

- #2 Phillips screwdriver with a magnetic tip
- Needle-nose pliers

After performing service

Turn the printer power on


- Connect the power cable.
- Use the power switch to turn the power on.


Post service test

Print a color page, and then remove the print cartridges. Look inside the printer and verify that no loose toner is present.

1. Remove the TCU

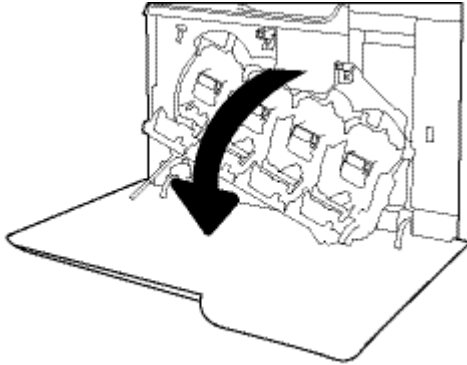
Follow these steps to remove the TCU.

 **CAUTION:** If toner gets on clothing, wipe it off by using a dry cloth and wash the clothes in cold water. Hot water sets toner into fabric.

 **NOTE:** The toner collection unit is designed for a single use. Do not attempt to empty the toner collection unit and reuse it. Doing so could lead to toner being spilled inside the printer, which could result in reduced print quality. After use, return the toner collection unit to HP's Planet Partners program for recycling.

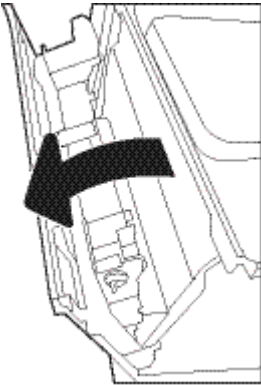
1. Open the front door.

Figure 5-846 Open the front door



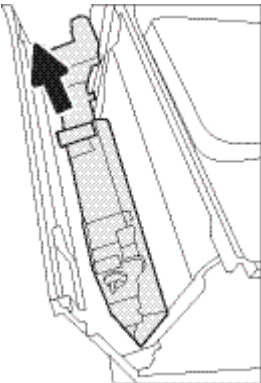
2. Open the left door.

Figure 5-847 Open the left door



3. Grasp the top of the TCU and remove it from the printer.

Figure 5-848 Remove the TCU



2. Remove the keyboard (MFP)

Follow these steps to remove the keyboard (MFP).

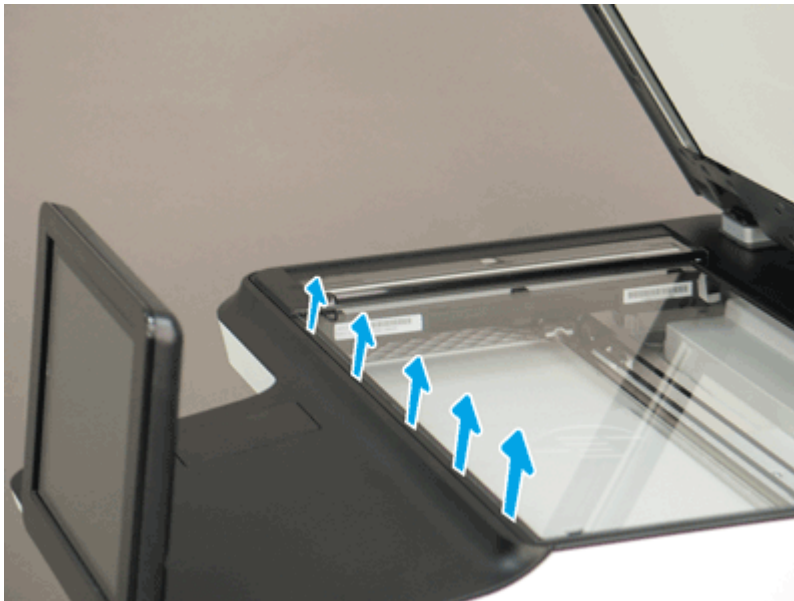
1. If the control panel is not fully tilted forward, tilt it forward now (callout 1) until it stops. Open the document feeder (callout 2).

Figure 5-849 Tilt the control panel and open the document feeder



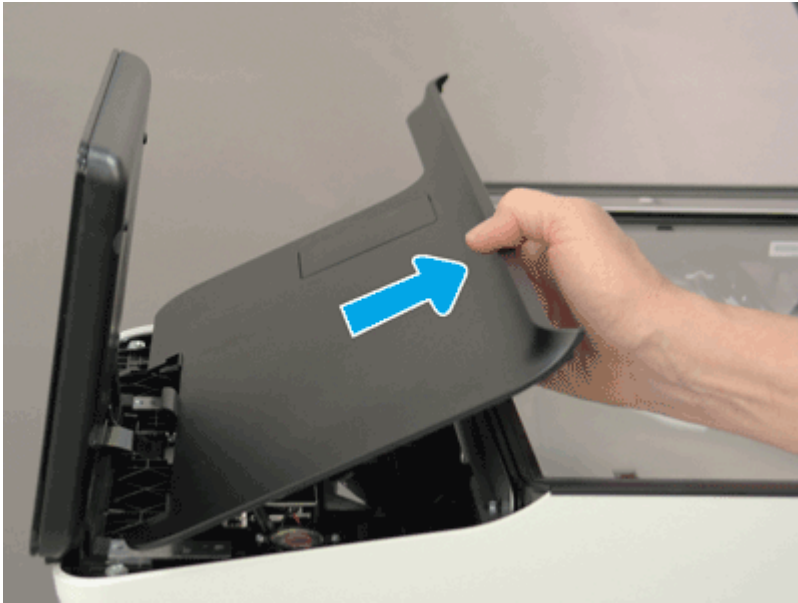
2. Beginning at the right side of the control-panel cover, carefully release five tabs along the top edge of the cover.

Figure 5-850 Release five tabs



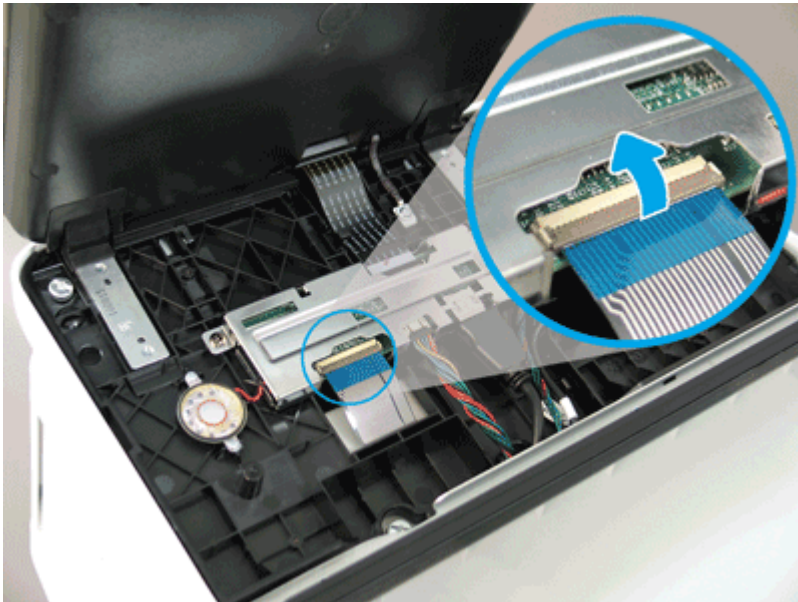
3. Continue to rotate the top edge of the cover away from the printer, and then remove the cover.

Figure 5-851 Remove the cover



4. Open the connector latch to release the keyboard flat cable.

Figure 5-852 Disconnect the keyboard flat cable



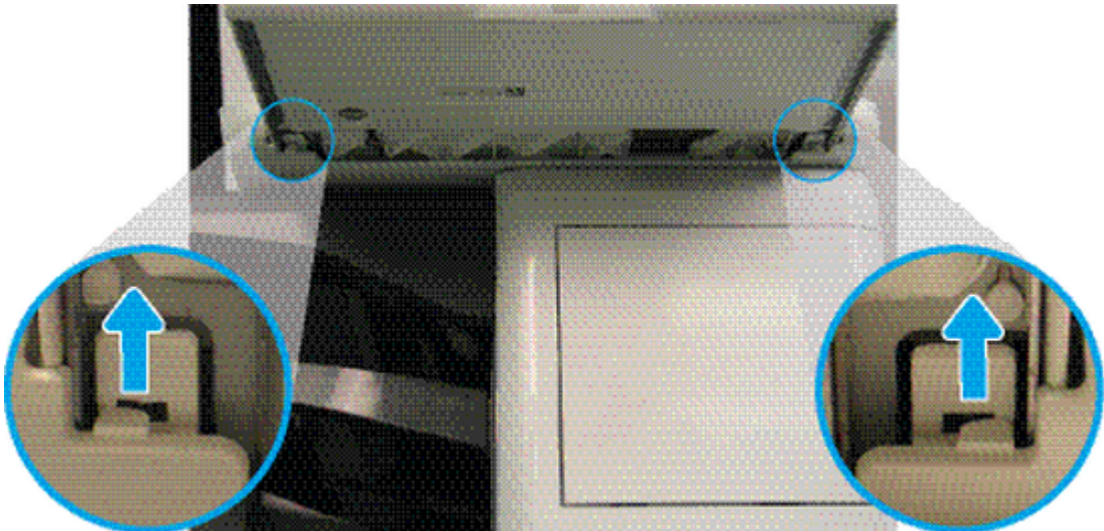
5. Slide the keyboard tray out until it stops.

Figure 5-853 Slide the keyboard tray out



6. Push up on the keyboard tray to release two tabs on the bottom of the tray, and then slide the tray toward you to disengage the tabs.

Figure 5-854 Release two tabs



7. Slide the keyboard tray all the way out of the printer to remove it.

Figure 5-855 Remove the keyboard

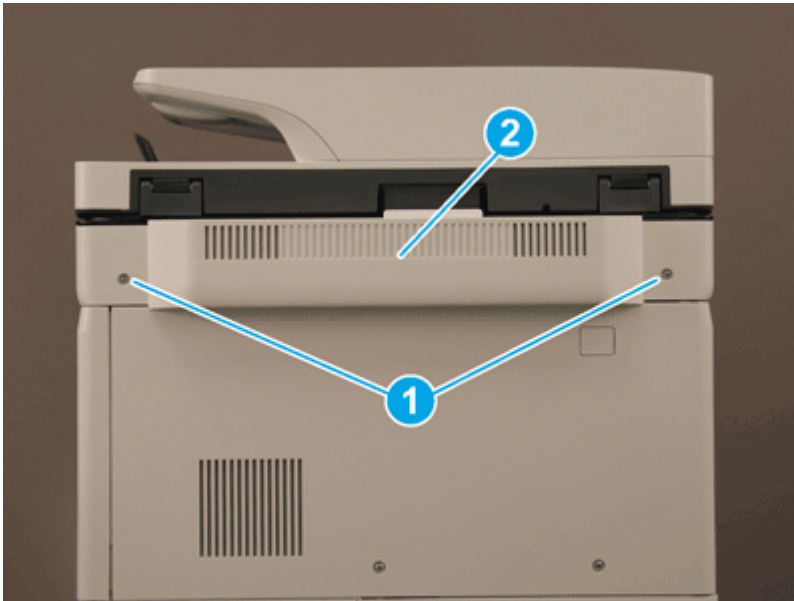


3. Remove the document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660)

Follow these steps to remove the document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660).

1. Remove two screws (callout 1), and then remove the scanner control board (SCB) cover (callout 2).

Figure 5-856 Remove the SCB cover



2. Flow M681z/Flow M682z/Flow E67660z models only: Do the following:

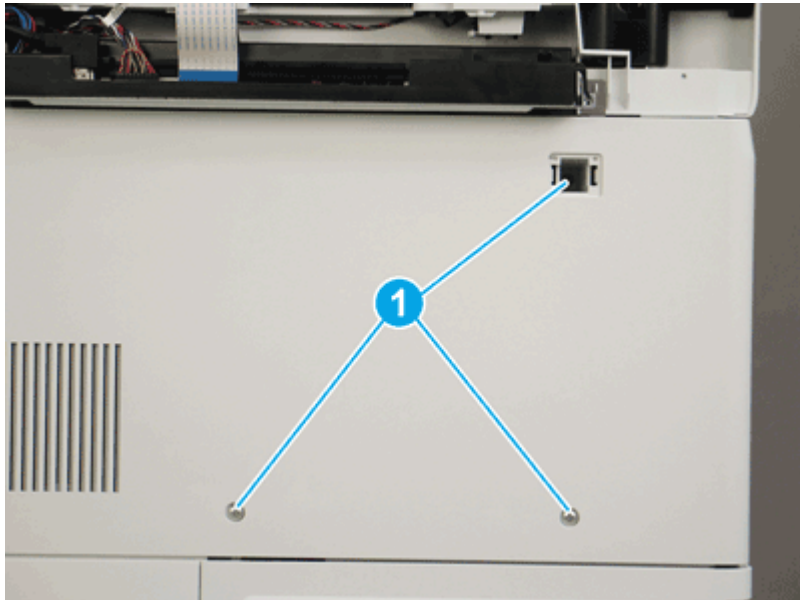
- a. At the back of the printer, remove one small cover (callout 1).

Figure 5-857 Remove the small cover



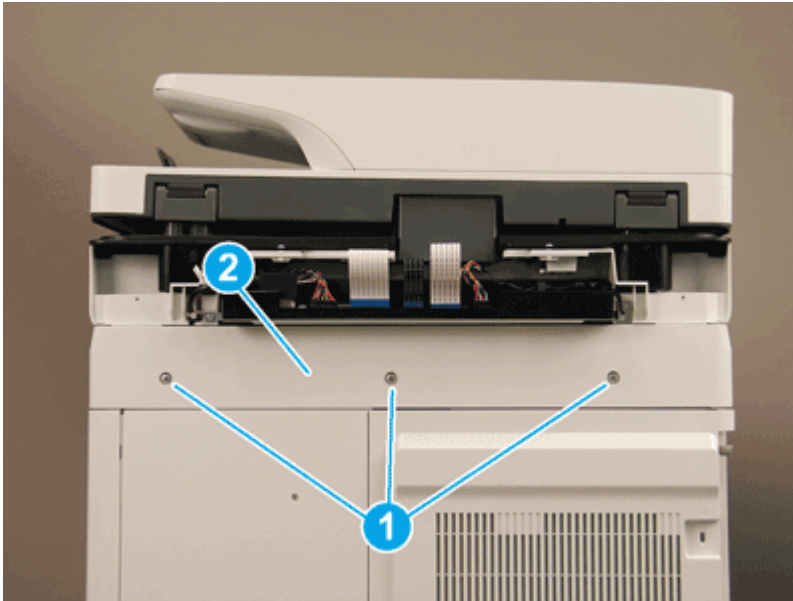
- b. Remove three screws (callout 1), and then remove the stapler/stacker rear cover (callout 2).

Figure 5-858 Remove the stapler/stacker rear cover



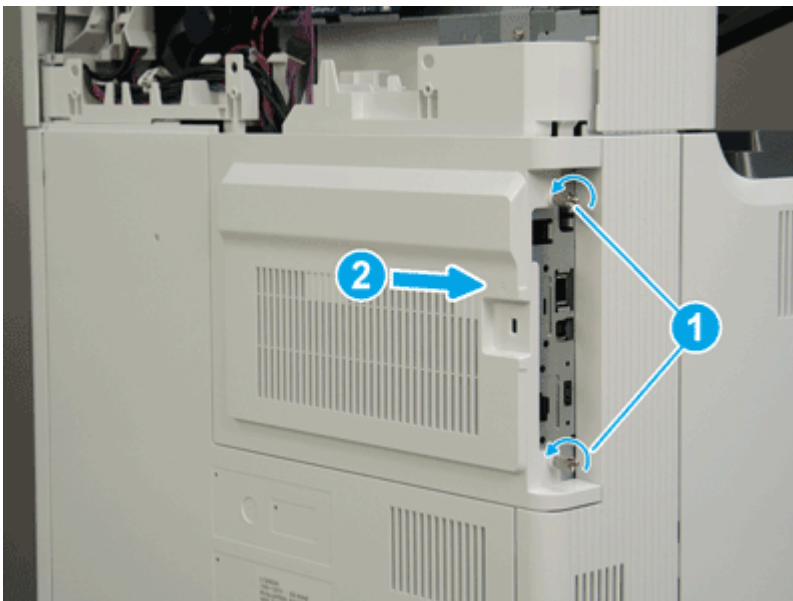
3. **M681dh/M681f/M682dh/Flow M681f/E67650dh models only:** Remove three screws (callout 1), and then remove the upper rear cover (callout 2).

Figure 5-859 Remove the upper rear cover



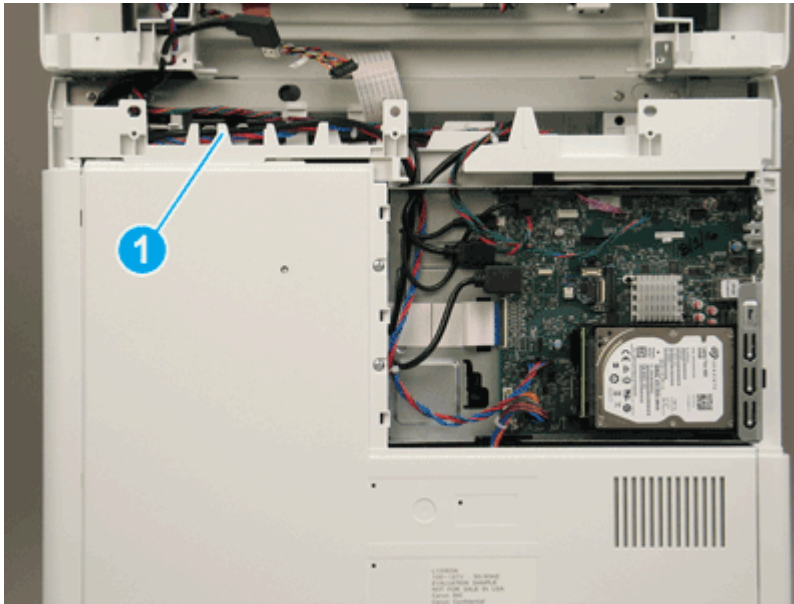
4. Loosen two thumbscrews (callout 1), and then slide the formatter cover away from the printer to remove it (callout 2).

Figure 5-860 Remove the formatter cover



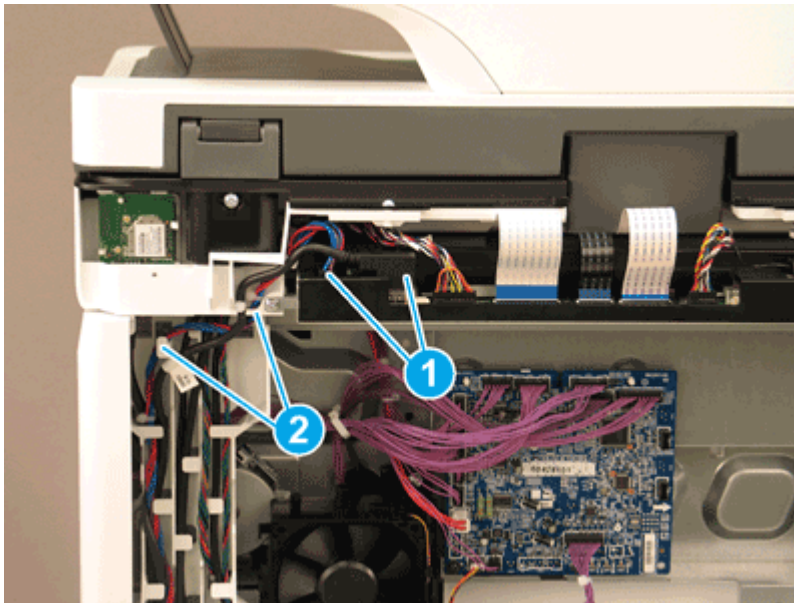
5. The remaining figures in this procedure show the Flow M682z model. While the cable routing (callout 1) on the M681dh, M681f, M682dh, Flow M681f, and E67650dh models is different, the removal procedures are the same for all models.

Figure 5-861 Cable routing for M681dh, M681f, Flow M681f, and E67650dh



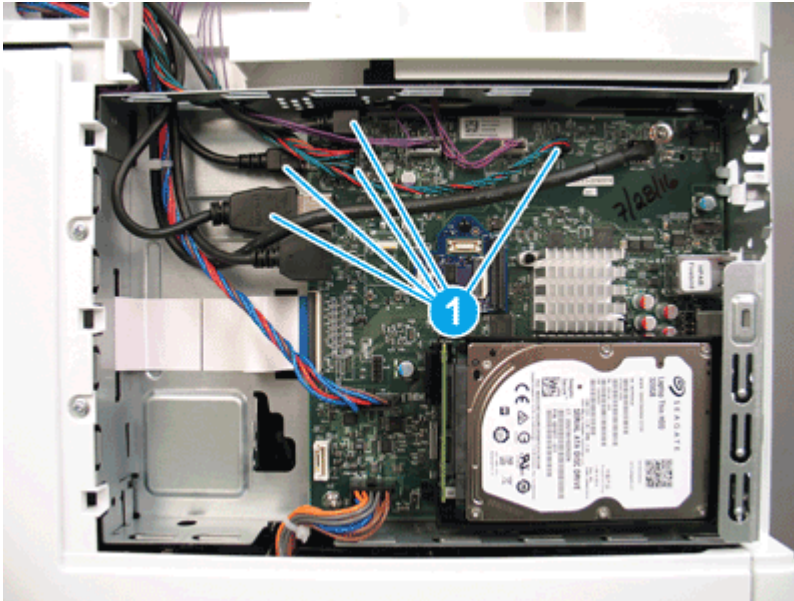
6. Disconnect two connectors (callout 1) on the SCB, and then release the cables from the guides (callout 2).

Figure 5-862 Disconnect two connectors



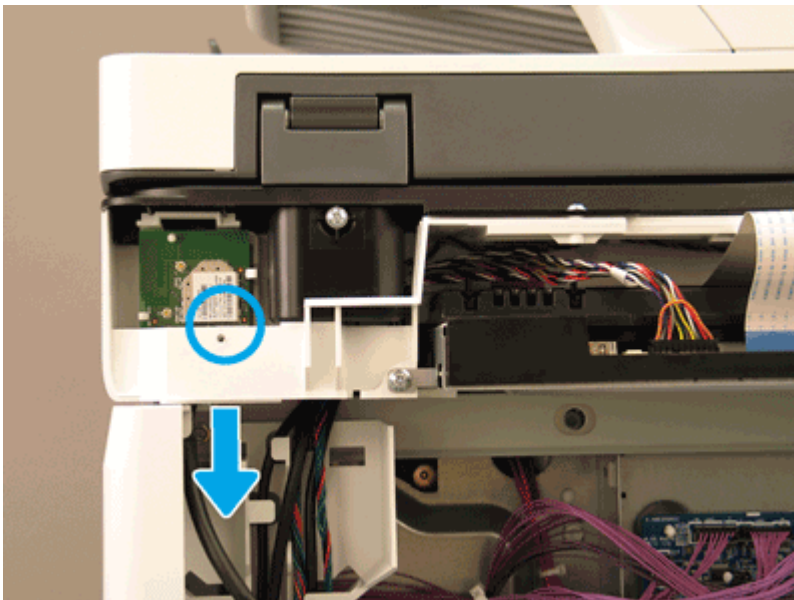
7. Disconnect five connectors on the formatter (callout 1).

Figure 5-863 Disconnect five connectors



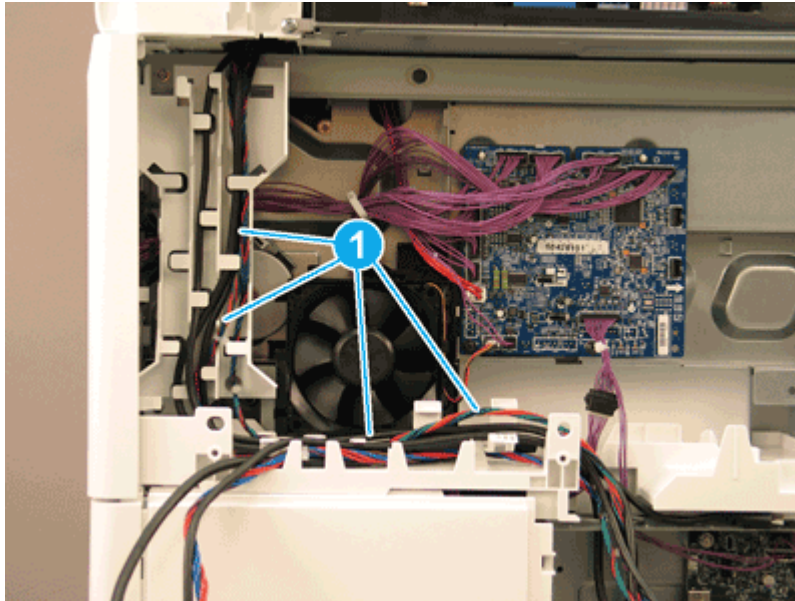
8. **Flow M682z only:** Gently pull down on the cable to disconnect the wireless connector.

Figure 5-864 Disconnect the wireless connector



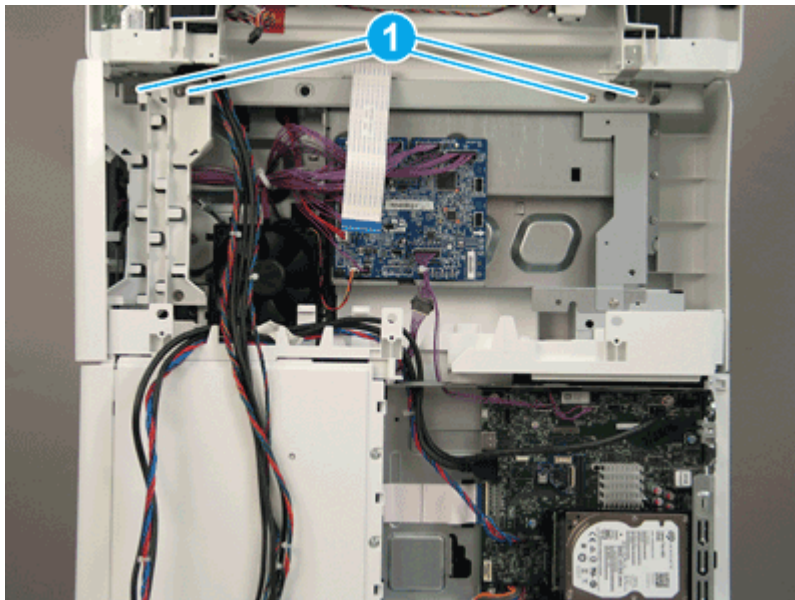
9. Release all of the cables from the cable guides (callout 1).

Figure 5-865 Release the cables



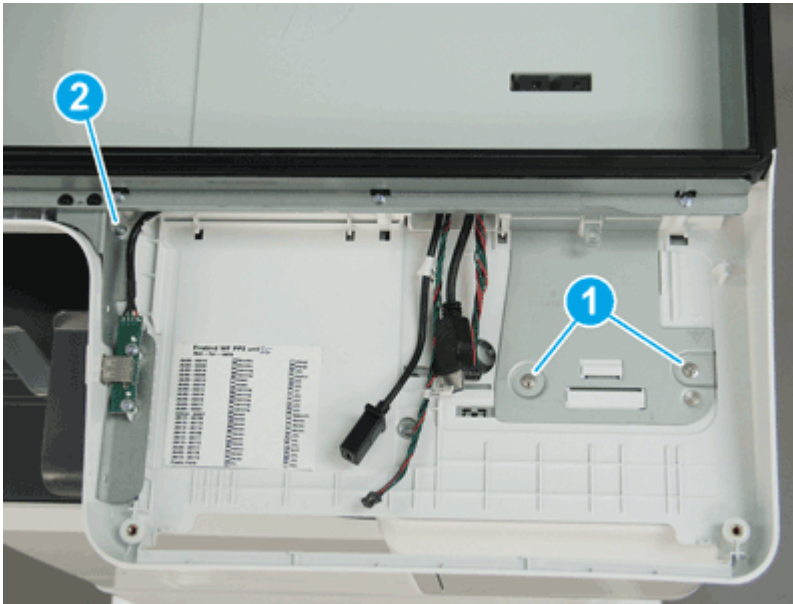
10. At the back of the printer, remove four screws (callout 1).

Figure 5-866 Remove four screws



11. On the top of the image scanner assembly, at the location where the control panel was removed, remove two sheet metal screws (callout 1). **Flow M681z/Flow M682z/Flow E67660z only:** Remove one self-tapping screw (callout 2).

Figure 5-867 Remove three screws



12. Lift the document feeder and image scanner off of the printer to remove them.

Figure 5-868 Remove the document feeder and image scanner



4. Remove the stapler/stacker (Flow M681z/Flow M682z/Flow E67660z)

Follow these steps to remove the stapler/stacker (Flow M681z/Flow M682z/Flow E67660z).

This step is for the M681/M682/E67550/E67560/E67650/E67660 printers. For the M652/M653/E65050/E65060/E65150/E65160 printers, skip this step.

1. Open the front door.

Figure 5-869 Open the front door



2. Open the stapler door.

Figure 5-870 Open the stapler door



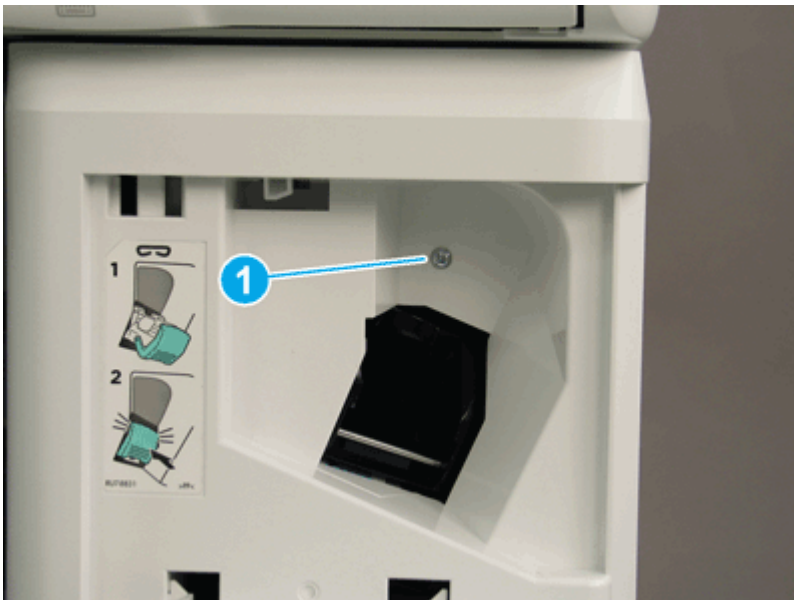
3. Release the latch, and then remove the staple cartridge.

Figure 5-871 Remove the staple cartridge



4. Remove one screw (callout 1).

Figure 5-872 Remove one screw



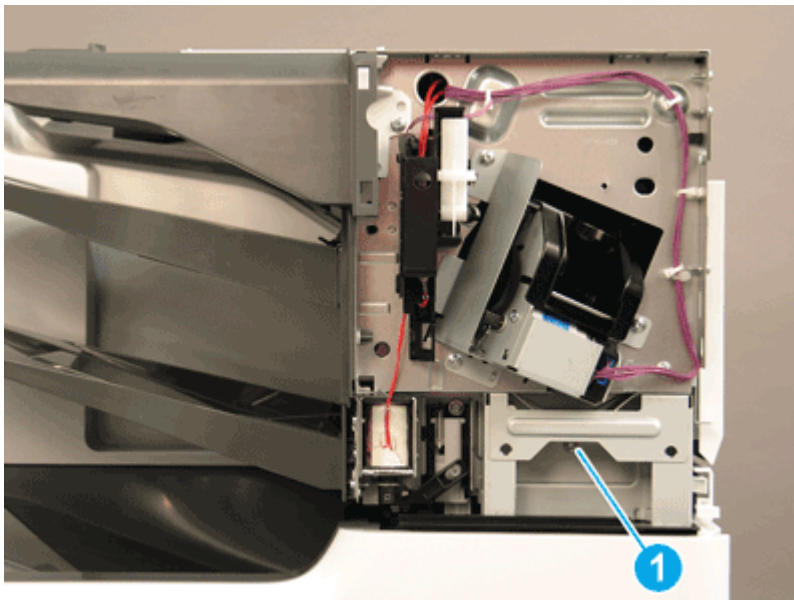
5. Rotate the stapler cover to the right to remove it.

Figure 5-873 Remove the stapler cover



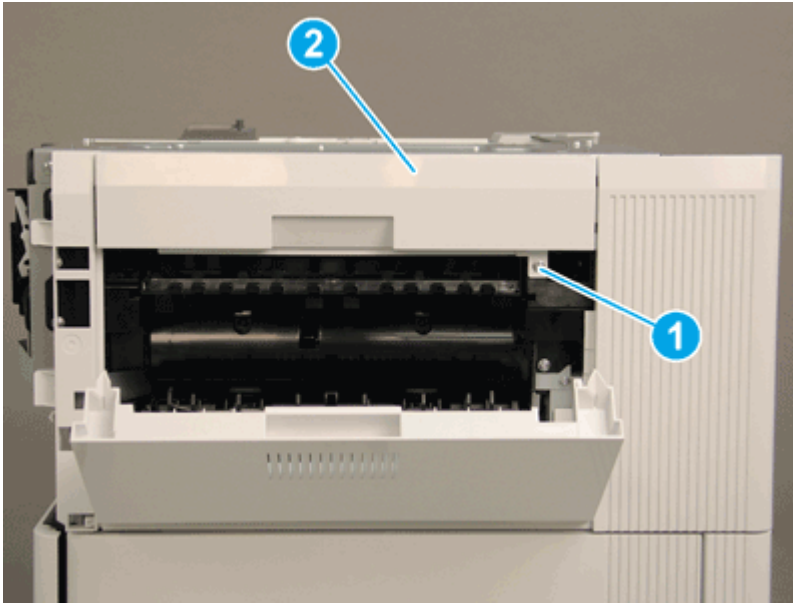
6. Remove one screw (callout 1).

Figure 5-874 Remove one screw



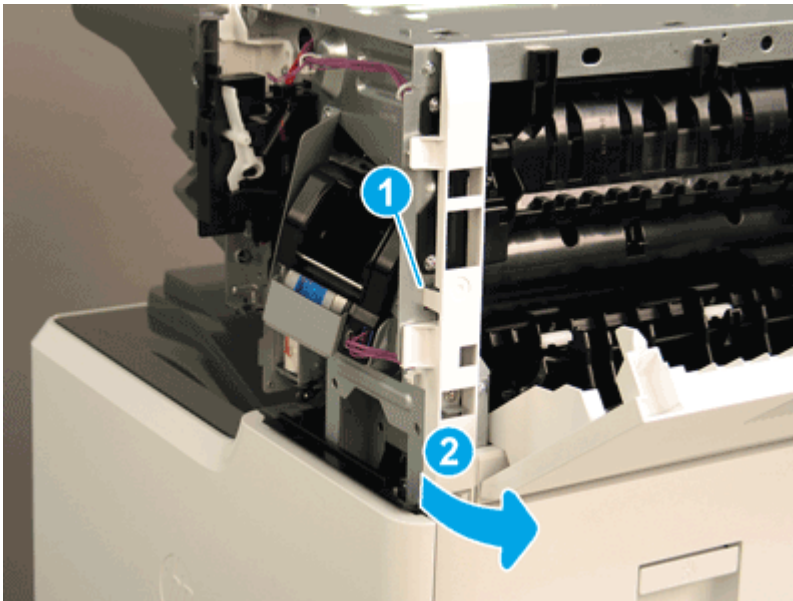
7. At the right side of the printer, remove one screw (callout 1), and then remove the stapler/stacker right upper cover (callout 2).

Figure 5-875 Remove the stapler/stacker right upper cover



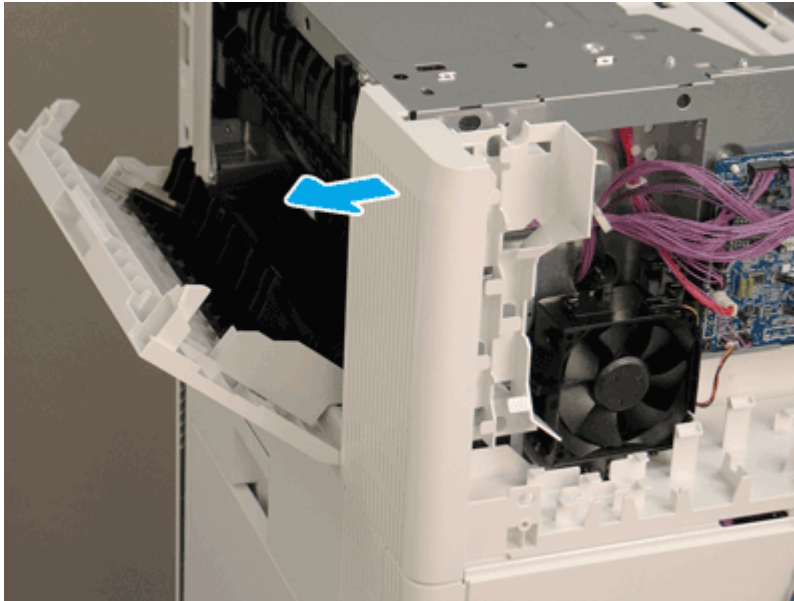
8. Release one tab (callout 1), and then rotate the stapler rear cover away from the printer (callout 2) to remove it.

Figure 5-876 Remove the stapler rear cover



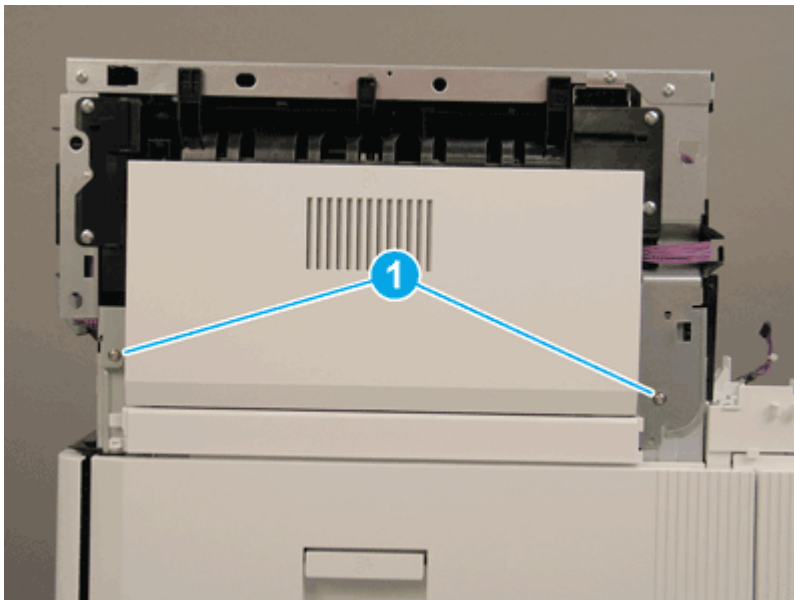
9. Pull the stapler/stacker rear corner cover away from the printer to remove it.

Figure 5-877 Remove the stapler/stacker rear corner cover



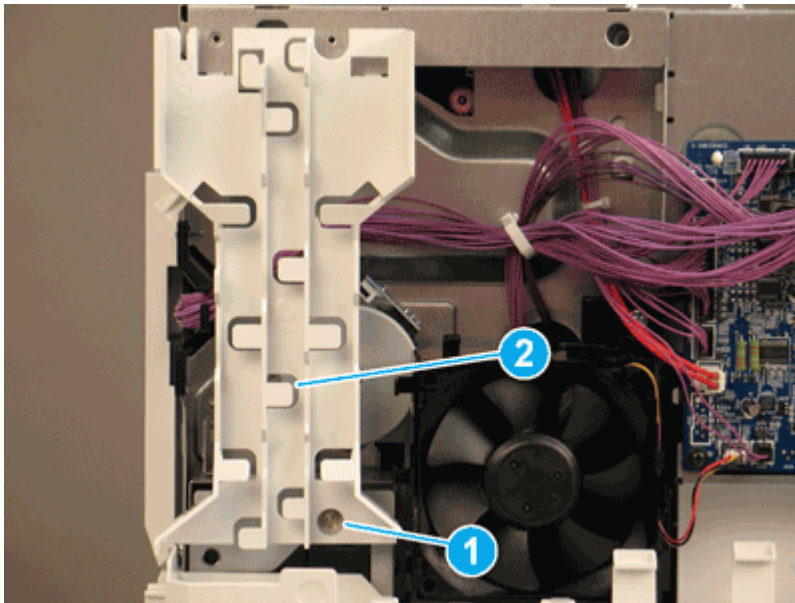
10. Remove two screws (callout 1).

Figure 5-878 Remove two screws



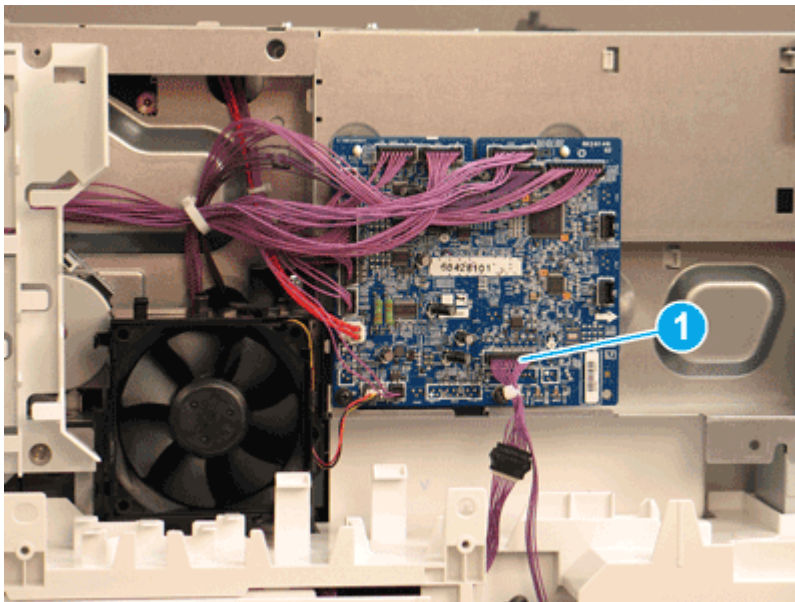
11. At the back of the printer, remove one screw (callout 1), and then remove the cable guide (callout 2).

Figure 5-879 Remove the cable guide



12. Disconnect one connector on the stapler/stacker PCA (callout 1).

Figure 5-880 Disconnect one connector

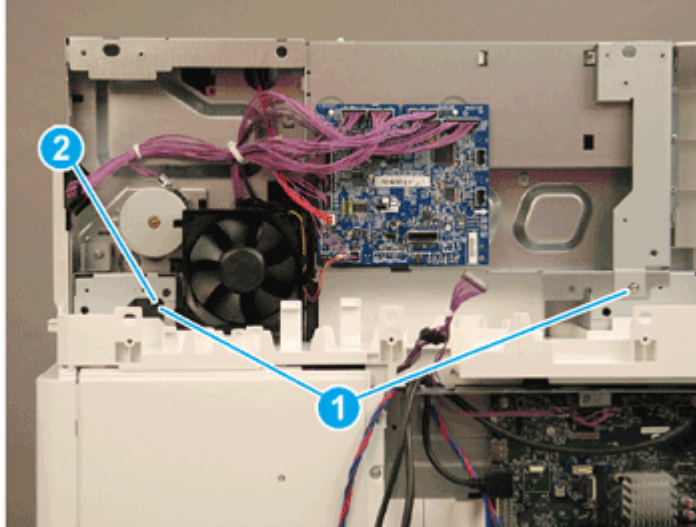


13. Remove two screws (callout 1).



TIP: The screw on the left (callout 2) is longer than the other screw. Make sure that this screw is installed in the correct location.

Figure 5-881 Remove two screws



14. Lift the stapler/stacker away from the printer.


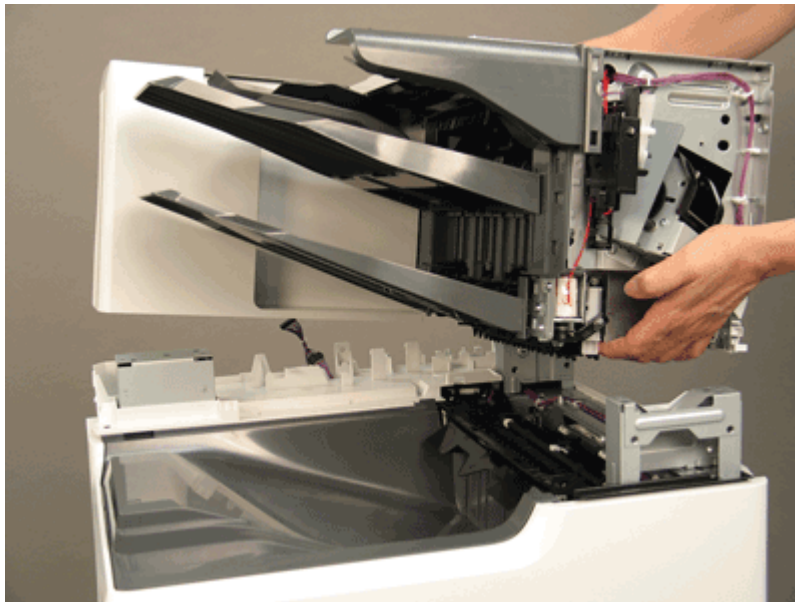
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-882 Remove the stapler/stacker



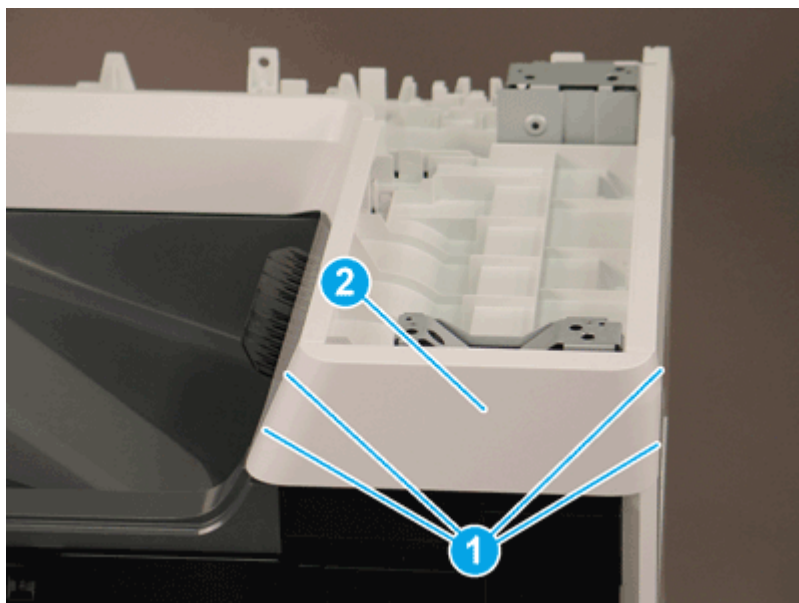
5. Remove the face-down front cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the face-down front cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

1. Open the front door.

2. Release two tabs on each side (callout 1), and then remove the face-down front cover (callout 2).

Figure 5-883 Remove the face-down front cover

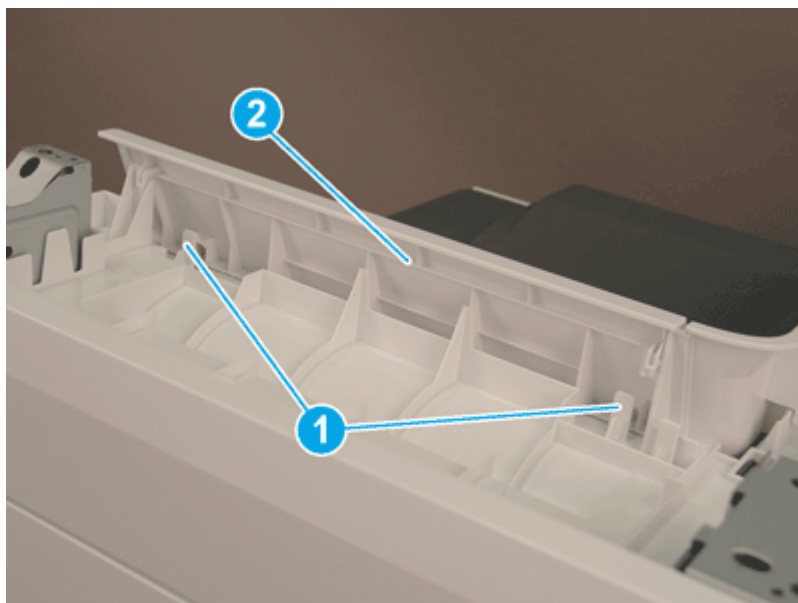


6. Remove the top cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the top cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

- Release two tabs (callout 1), and then remove the top cover (callout 2).

Figure 5-884 Remove the top cover



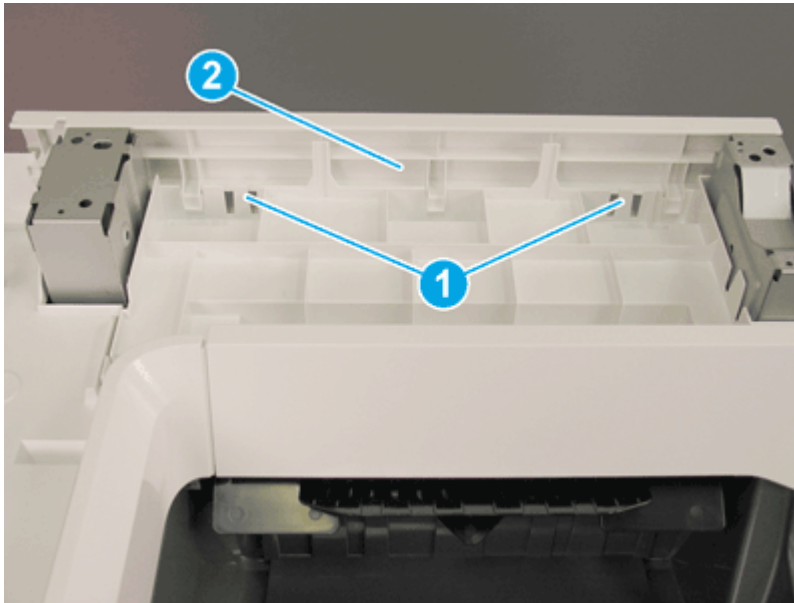
7. Remove the right cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the right cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

This step is for the M681/M682/E67550/E67560/E67650/E67660 printers. For the M652/M653/E65050/E65060/E65150/E65160 printers, skip this step.

- Release two tabs (callout 1), and then remove the right cover (callout 2).

Figure 5-885 Remove the right cover



8. Remove the front cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the front cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

- Release two tabs (callout 1), and then remove the front cover (callout 2).


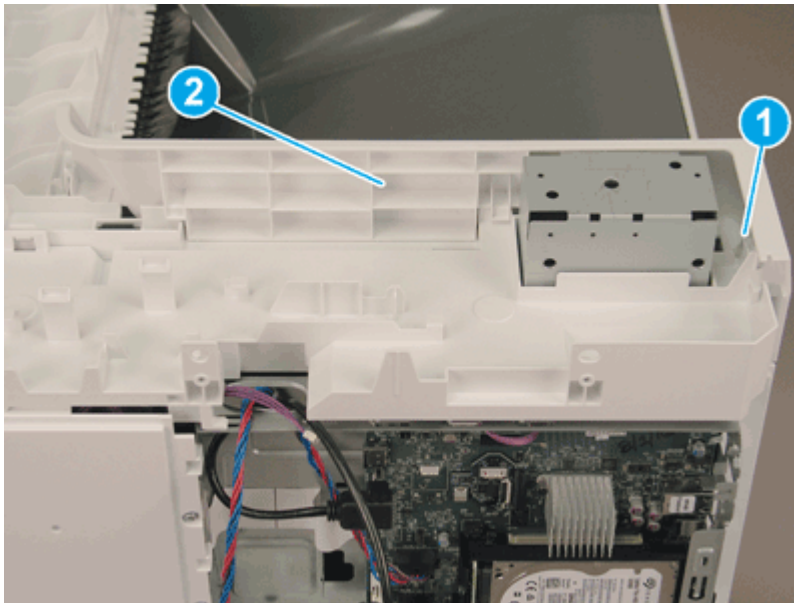
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-886 Remove the front cover



9. Remove the rear upper cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the rear upper cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

- Remove two screws (callout 1), and then remove the rear upper cover (callout 2).


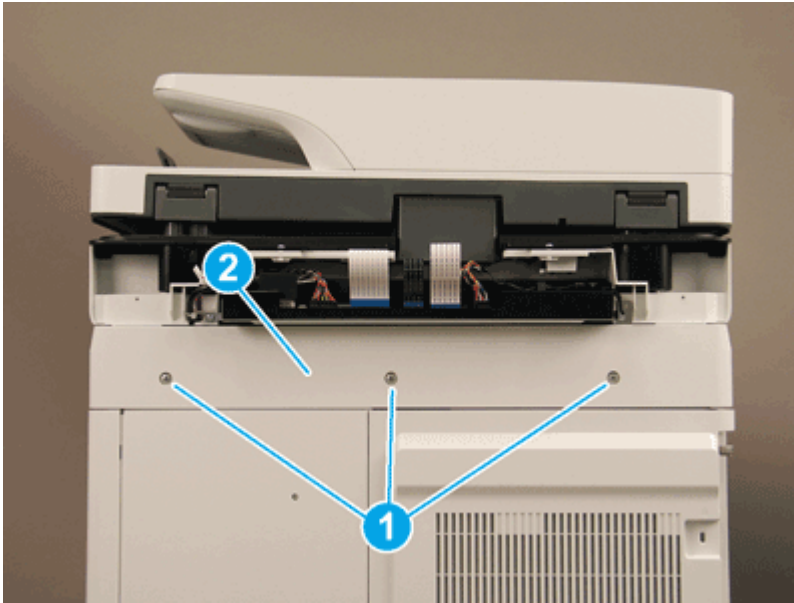

 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-887 Remove the rear upper cover



10. Remove the face-down cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the face-down cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

 **NOTE:** This step is for the M681/M682/E67550/E67560/E67650/E67660 printers. For the M652/M653/E65050/E65060/E65150/E65160 printers, skip this step.

- Remove two screws (callout 1), release three tabs (callout 2), and then remove the face-down cover (callout 3).


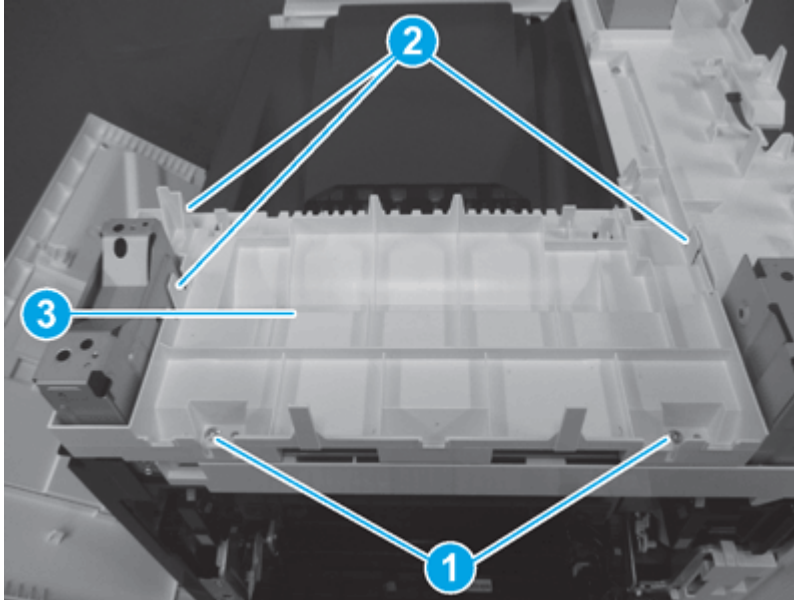
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-888 Remove two screws and the face-down cover



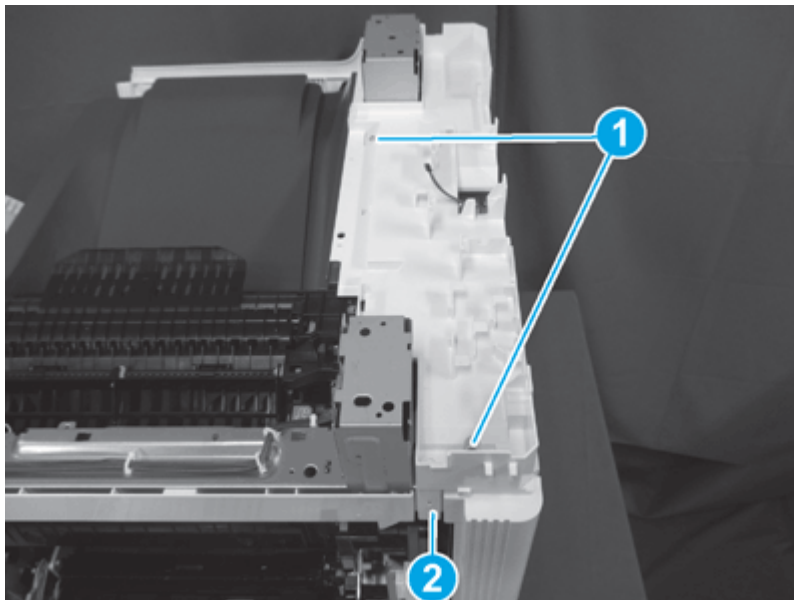
11. Remove the main cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the main cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

This step is for the M681/M682/E67550/E67560/E67650/E67660 printers. For the M652/M653/E65050/E65060/E65150/E65160 printers, skip this step.

1. Remove two screws (callout 1), and then release one tab (callout 2).

Figure 5-889 Remove two screws and release one tab



2. Remove one screw (callout 1), release two tabs (callout 2), and then remove the main cover (callout 3).


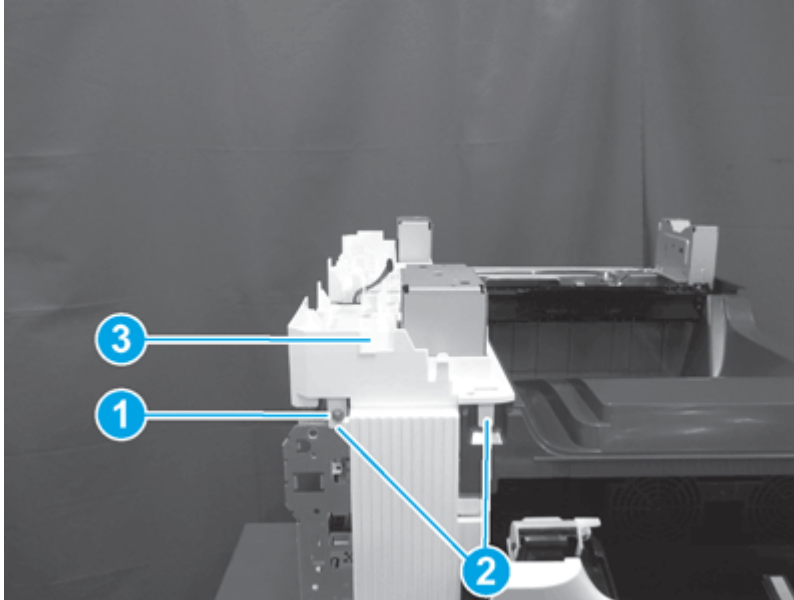

 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-890 Remove one screw and the main cover



12. Remove the control panel (M652/M653/E65050/E65060/E65150/E65160)

Follow these steps to remove the control panel (M652/M653/E65050/E65060/E65150/E65160).

 **NOTE:** This step is for the M652/M653/E65050/E65060/E65150/E65160 printers. For the M681/M682/E67550/E67560/E67650/E67660 printers, skip this step.

The figures below show the touchscreen control panel. The procedure is also correct for the keypad control panel.

1. Tilt the control panel to the fully raised position.

Figure 5-891 Tilt the control panel up



2. Use a coin to release the cover, and then remove the cover.

Figure 5-892 Remove the cover



3. Remove one thumbscrew (callout 1)


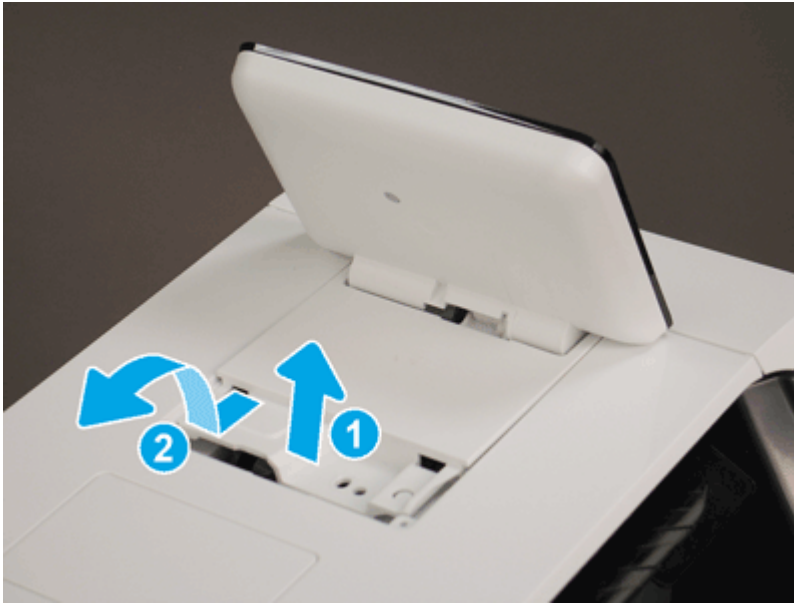
 **NOTE:** Store the screw in a secure place where it cannot fall down into the printer.

Figure 5-893 Remove one thumbscrew



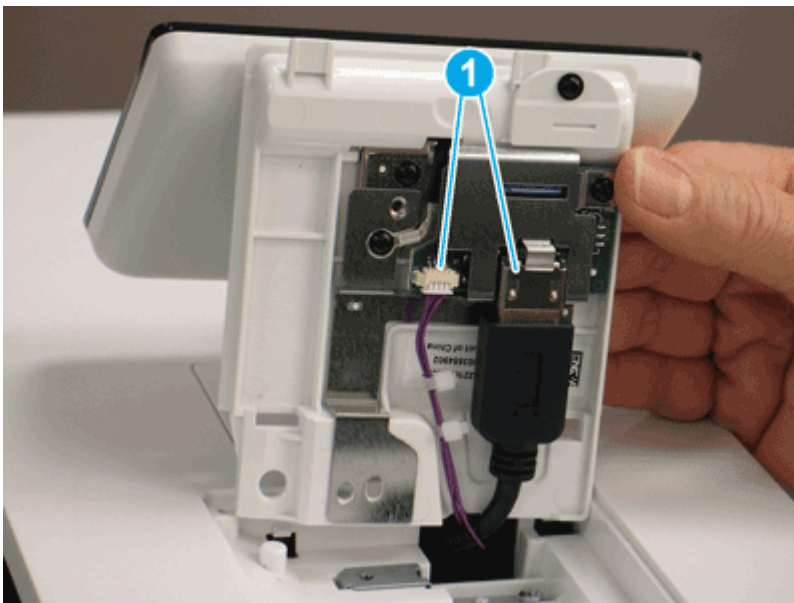
4. Lift the back edge of the control panel up (callout 1), and then slide it toward the back of the printer (callout 2) to release it.

Figure 5-894 Release the control panel



5. Turn the control panel over to gain access to the bottom side. Disconnect two connectors (callout 1).

Figure 5-895 Disconnect two connectors



6. Remove the control panel.

Figure 5-896 Remove the control panel



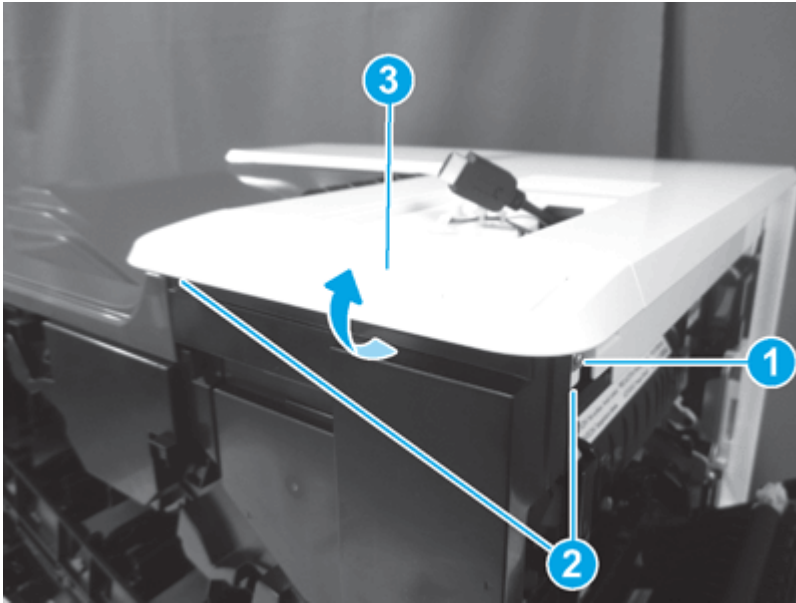
13. Remove the top cover (M652/M653/E65050/E65060/E65150/E65160)

Follow these steps to remove the top cover (M652/M653/E65050/E65060/E65150/E65160).

1. Open the following doors:
 - Front door
 - Left door
 - Right door

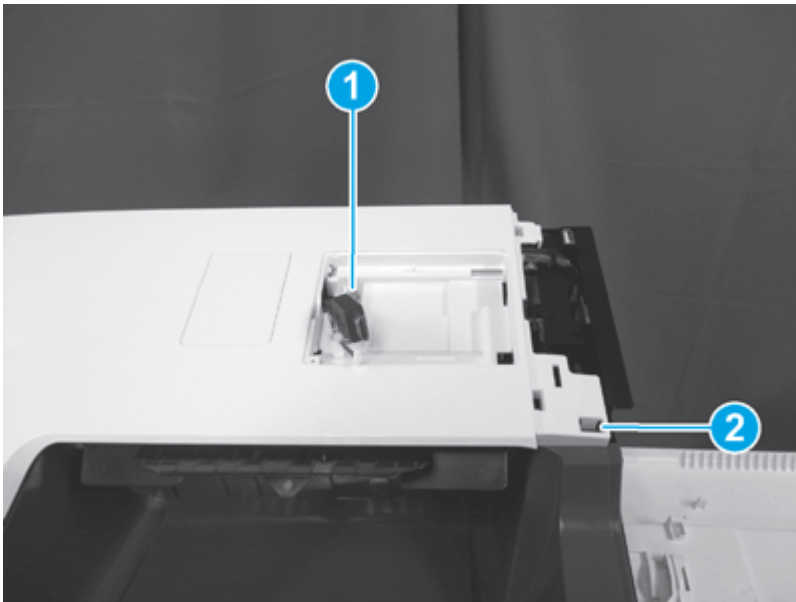
2. Remove one screw (callout 1), release two tabs (callout 2), and then rotate the NFC cover (callout 3) up and away from the printer to remove it.

Figure 5-897 Remove the NFC cover



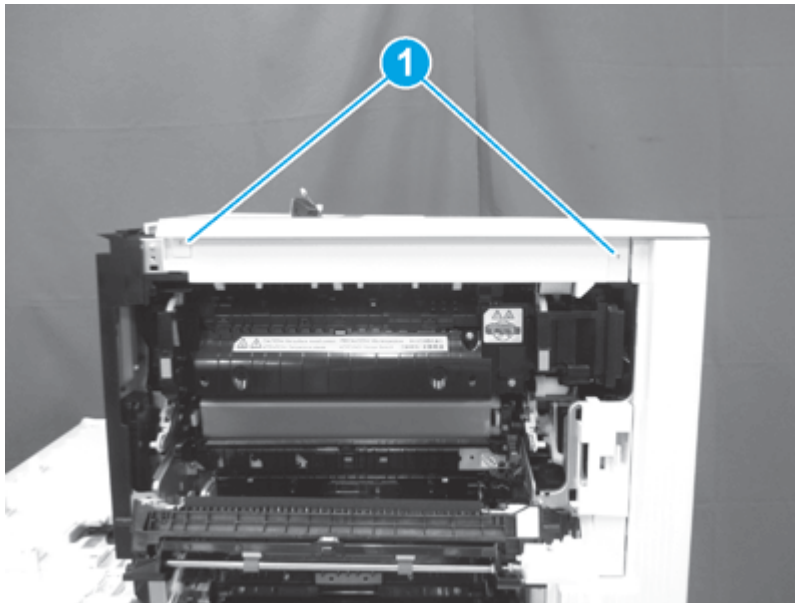
3. Remove one screw (callout 1), and then release one tab (callout 2).

Figure 5-898 Remove one screw and release one tab



4. Release two tabs (callout 1).

Figure 5-899 Release two tabs



5. Remove one screw (callout 1), release one tab (callout 2), release one tab behind the left door (callout 3), and then remove the top cover (callout 4).


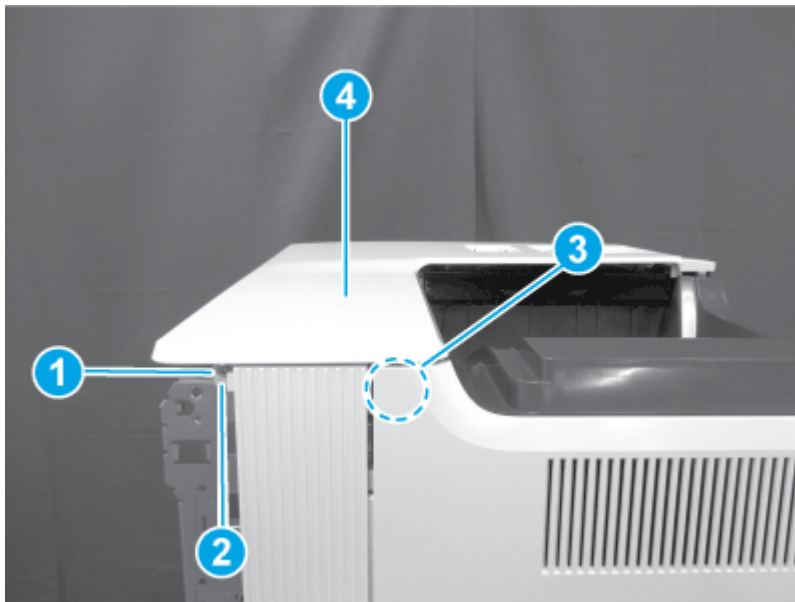
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-900 Remove the top cover



14. Remove the output bin

Follow these steps to remove the output bin.

1. Open the following doors:
 - Front door
 - Left door
 - Right door
2. Release two tabs (callout 1), and then remove the output bin (callout 2).


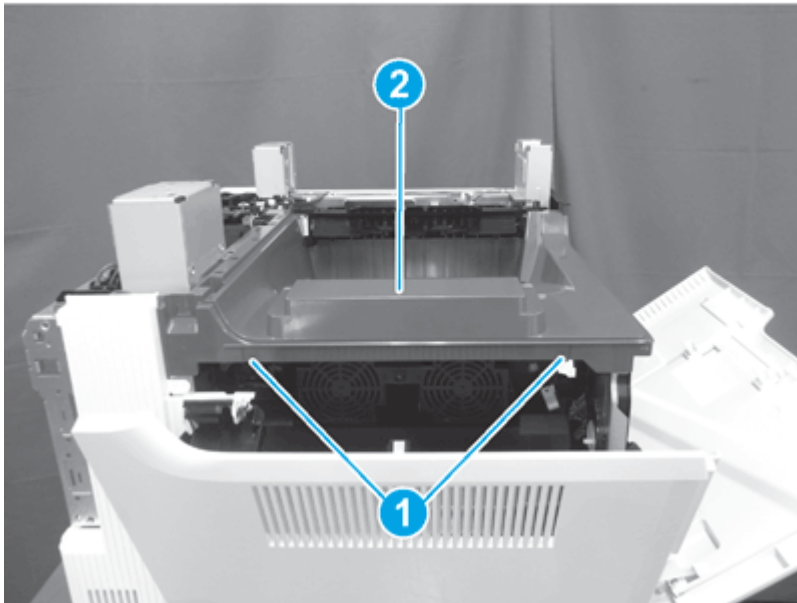
 **NOTE:** The M682 is shown in the figure below. The procedure is correct for all models.

Figure 5-901 Remove the output bin



15. Remove the formatter cover

Follow these steps to remove the formatter cover.

- Unscrew two thumbscrews (callout 1), and then slide the formatter cover (callout 2) away from the printer to remove it.


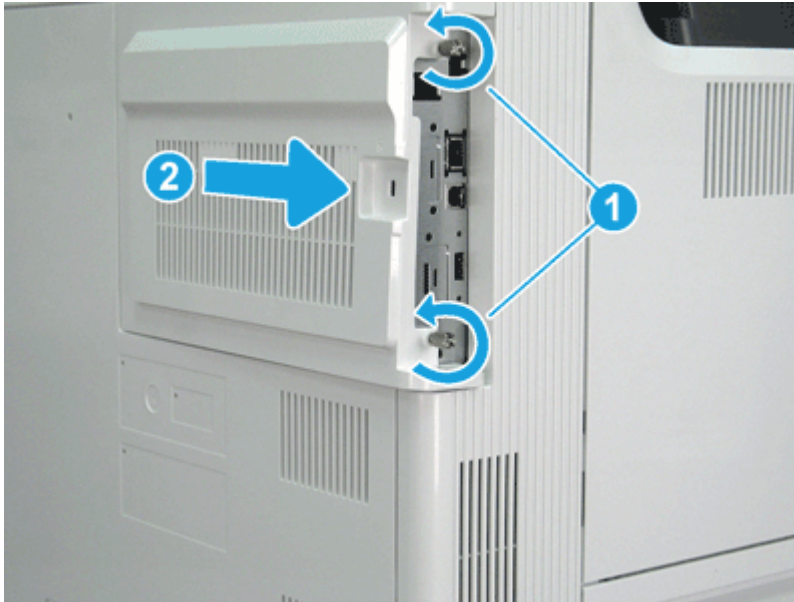
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-902 Remove the formatter cover



16. Remove the left door

Follow these steps to remove the left door.

1. Open front door.

Figure 5-903 Open front door



2. Press on the tab (callout 1) while sliding the left door (callout 2) to the right to remove it.


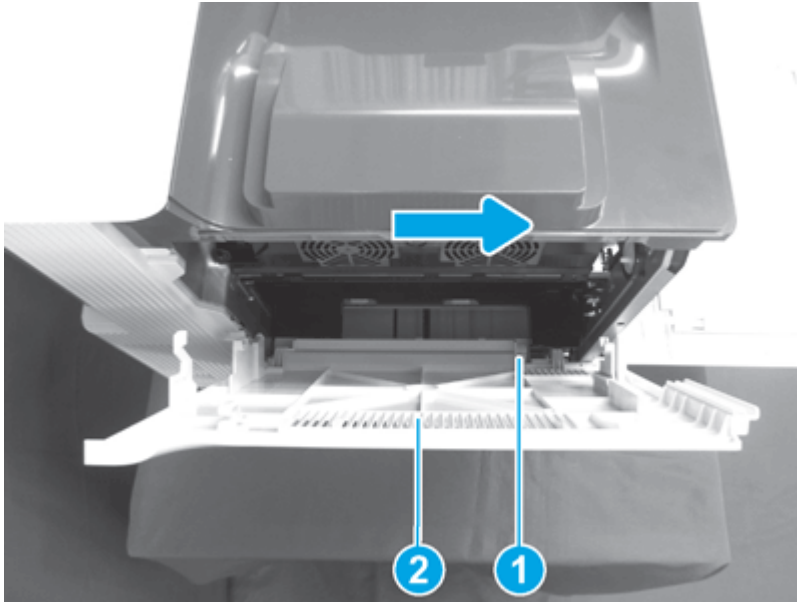
 **NOTE:** Make sure that the front door is not blocking the left door at the lower corner.

Figure 5-904 Remove the left door

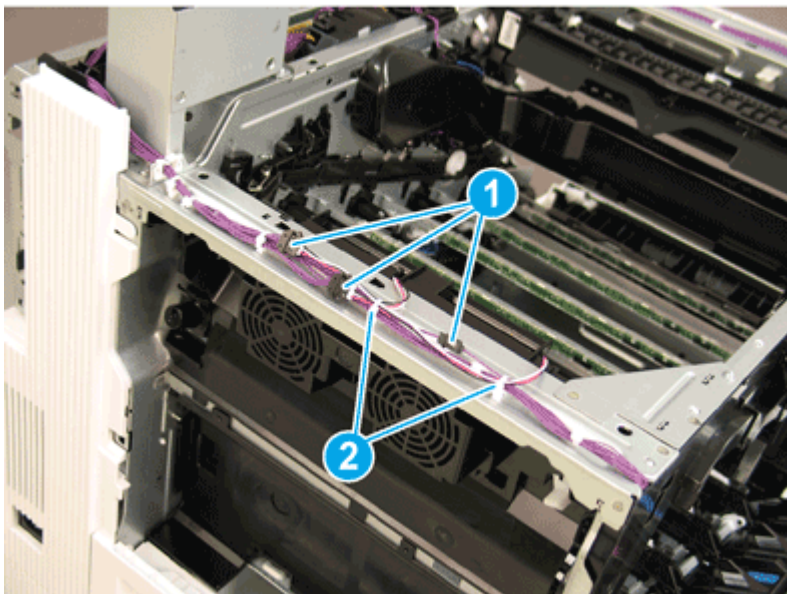


17. Remove the toner carry assembly

Follow these steps to remove the toner carry assembly.

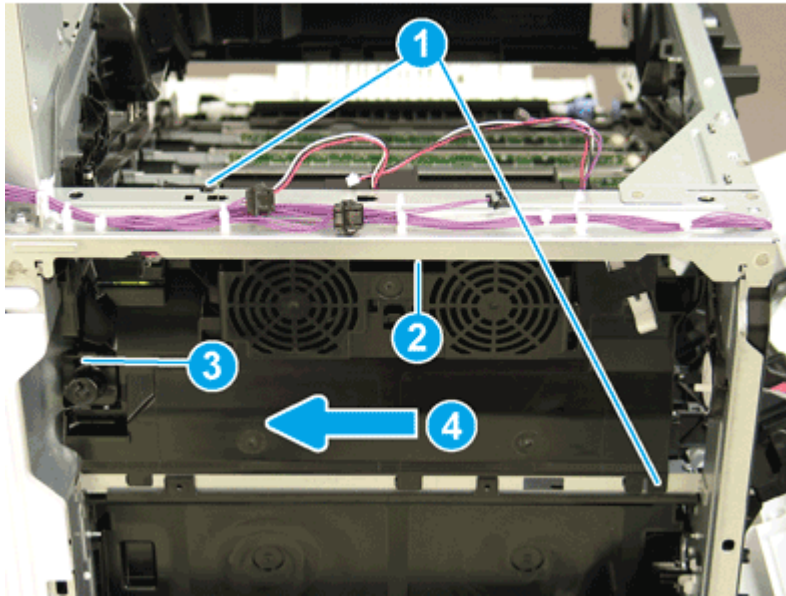
1. Disconnect three connectors (callout 1), and then release the cables from two retainers (callout 2).

Figure 5-905 Disconnect three connectors



2. Release two tabs (callout 1). Make sure that the top edge of the panel is below the sheet metal frame (callout 2). Release the left side of the panel (callout 3), and then slide the cartridge panel to the left (callout 4) to remove it.

Figure 5-906 Remove the cartridge panel



3. Inside the printer, release one tab (callout 1), and then slide the toner carry assembly toward the left door opening (callout 2).


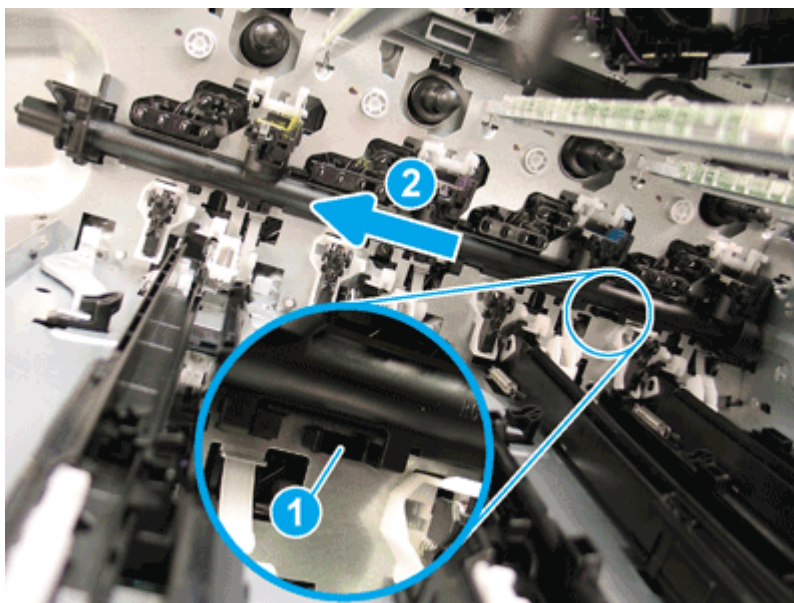
 **TIP:** Use a pair of needle-nose pliers to lightly pull the tab away from the printer.

Figure 5-907 Release the toner carry assembly



4. Remove the toner carry assembly.


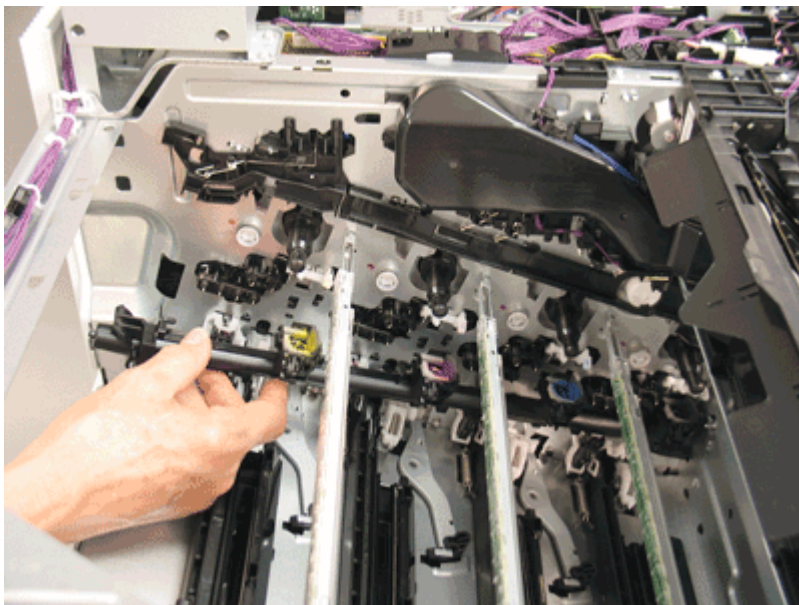
 **IMPORTANT:** Keep the toner carry assembly in an upright position to avoid spilling toner.


Figure 5-908 Remove the toner carry assembly



18. Unpack the replacement assembly



Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.


 **NOTE:** HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>


2. Unpack the replacement part from the packaging.

 **CAUTION:**  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

 **IMPORTANT:** Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

 **NOTE:** If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

 **NOTE:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

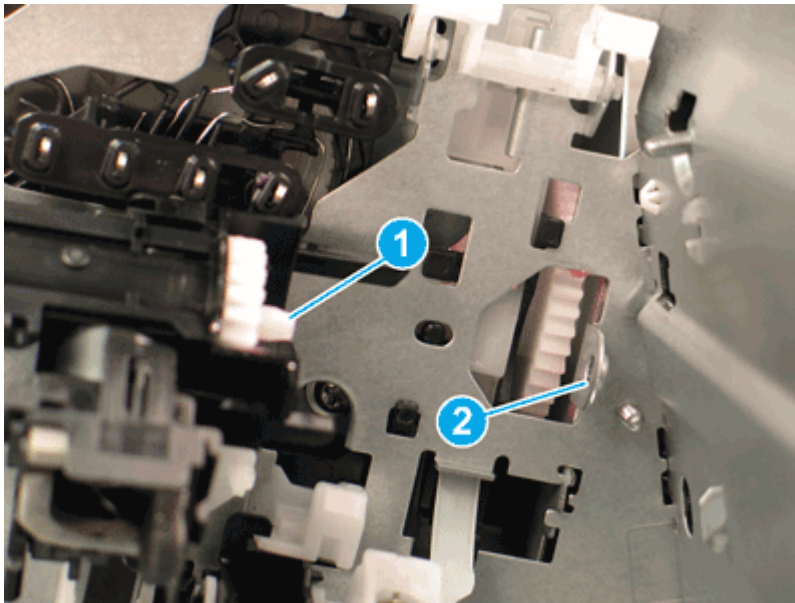
19. Reverse the removal steps to install the assembly

Also use the following **special installation instructions**.

Toner carry assembly

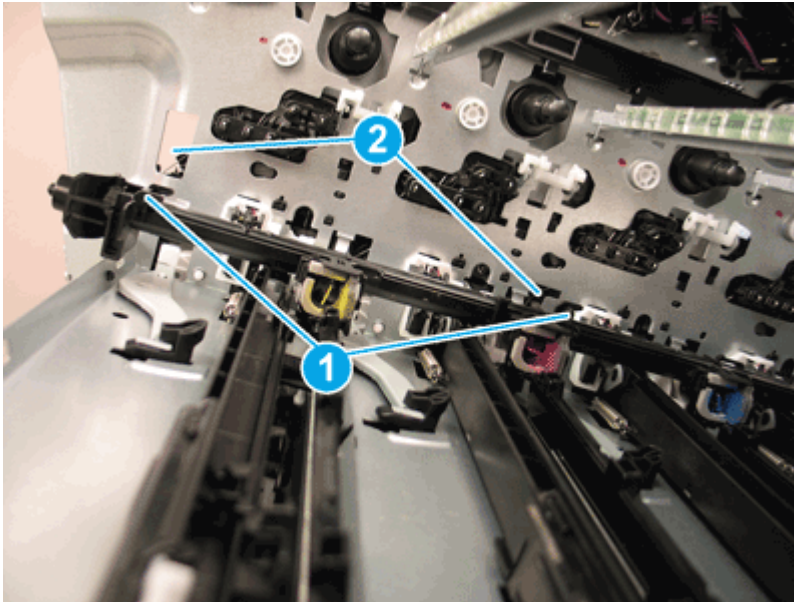
1. When reinstalling the toner carry assembly, make sure that the tab on the gear at the end of the assembly (callout 1) aligns with the opening (callout 2) next to the gear in the printer.

Figure 5-909 Align the gears



2. Align the tabs (callout 1) on the toner carry assembly with the slots (callout 2) in the printer, and then slide the assembly toward the right of the printer to install it.

Figure 5-910 Align the tabs

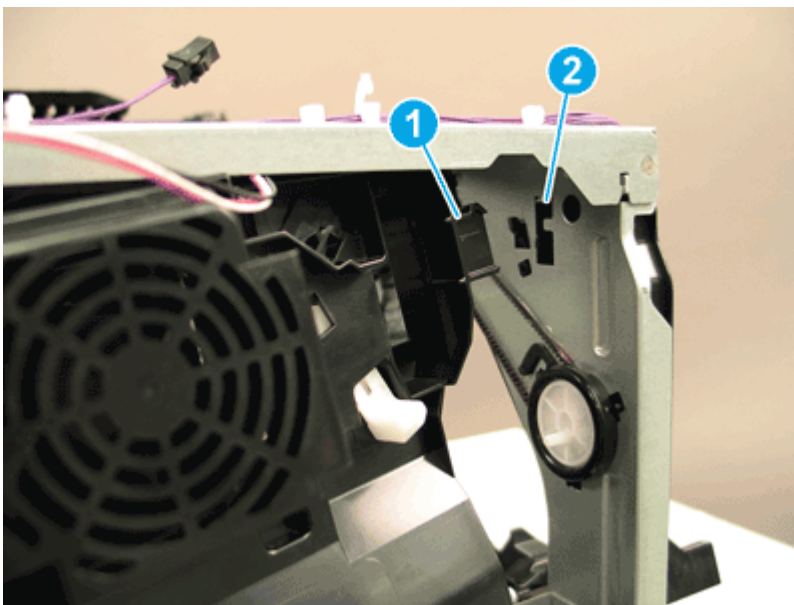


3. Install the right side of the carriage panel first. Position the tab (callout 1) on the carriage panel into the slot (callout 2) in the sheet metal frame.



NOTE: Continue to reverse the removal steps to finish installing the assembly.

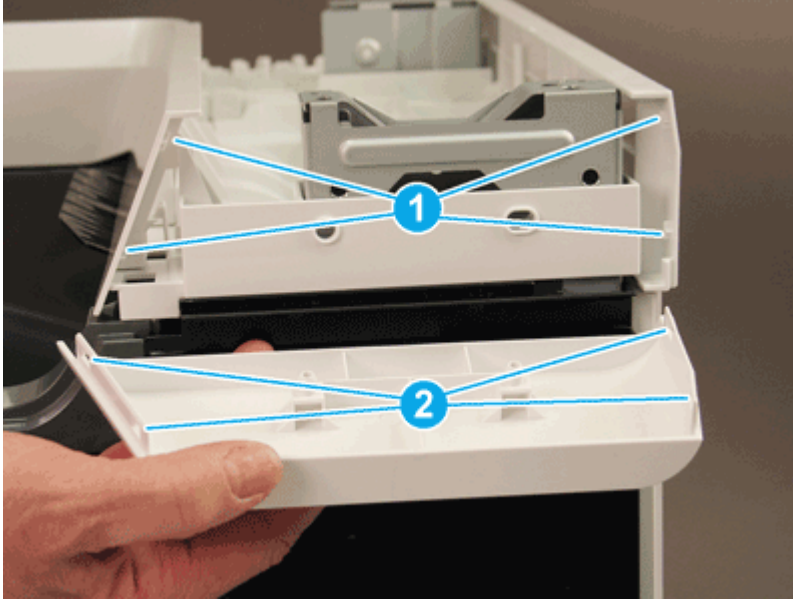
Figure 5-911 Install the cartridge panel



Face-down front cover

- When reinstalling the cover, position the tabs (callout 1) on the printer into the slots (callout 2) on the cover.

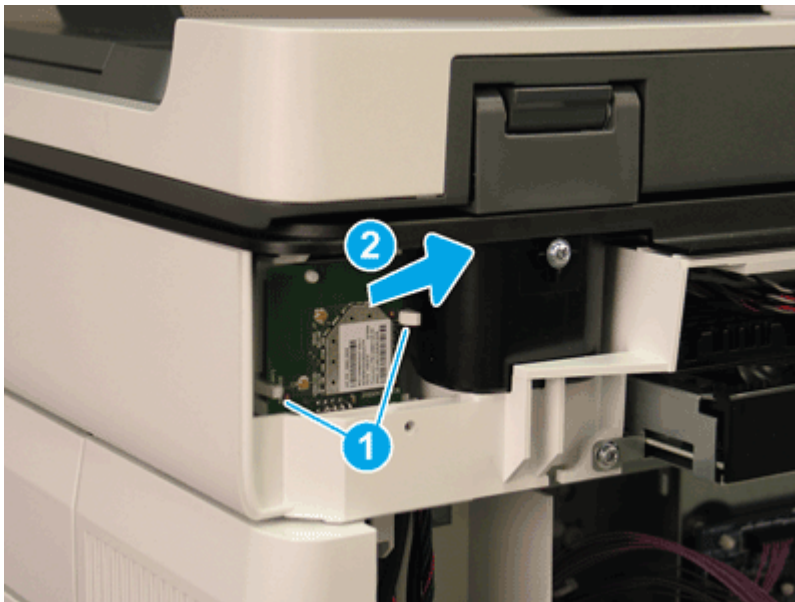
Figure 5-912 Install the cover



Document feeder and image scanner

1. **Flow M682z only**: When reconnecting the wireless card cable, do the following:
 - a. Release two tabs (callout 1), and then remove the wireless card (callout 2).

Figure 5-913 Remove the wireless card



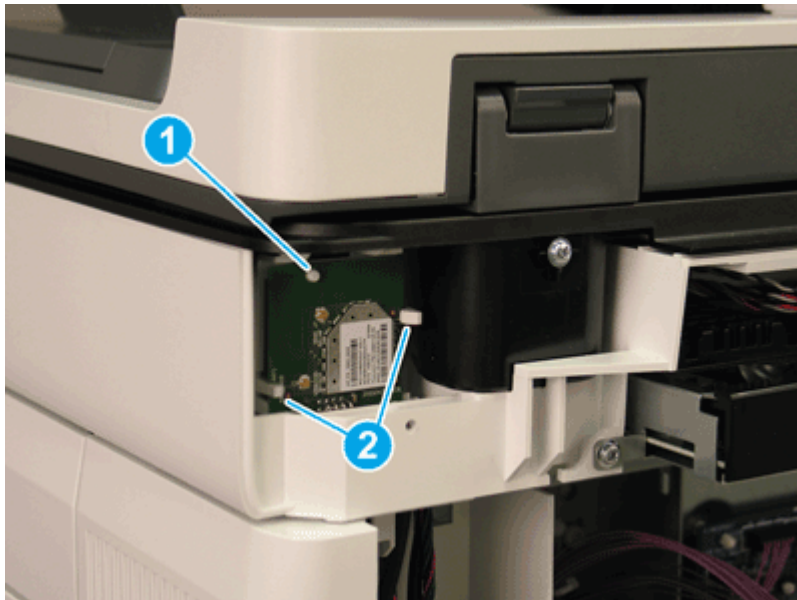
- b. Connect the cable to the wireless card (callout 1).

Figure 5-914 Connect the wireless card connector



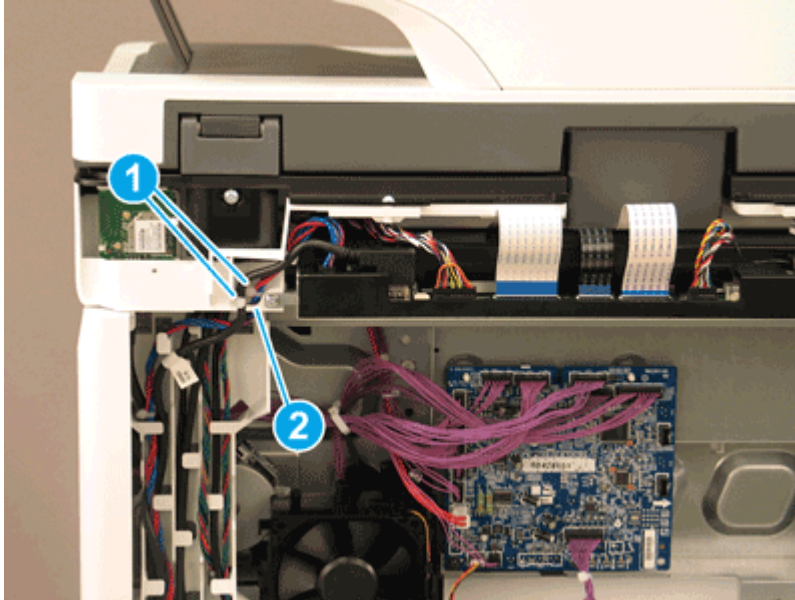
- c. Reinstall the wireless card. Make sure that the hole in the card is positioned over the peg (callout 1), and that the card is under the two tabs (callout 2).


Figure 5-915 Reinstall the wireless card



2. When reinstalling the SCB cables, make sure that the wire retainers (callout 1) on the cables are positioned above the plastic guide (callout 2).

Figure 5-916 Install the SCB cables



 **NOTE:** Continue to reverse the removal steps to finish installing the assembly.


Removal and replacement: Estrangement detect PCA

Learn how to remove and replace the estrangement detect PCA.

 [View a video of how to remove and replace the estrangement detect PCA.](#)


Mean time to repair: 25 minutes

Service level: Advanced

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Disconnect the power cable.

 **WARNING!** To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-59 Part information

Part number	Part description
RM2-7157-000CN	Estrangement detect PCA

Required tools

- #2 Phillips screwdriver with a magnetic tip
- Small, flat-blade screwdriver

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

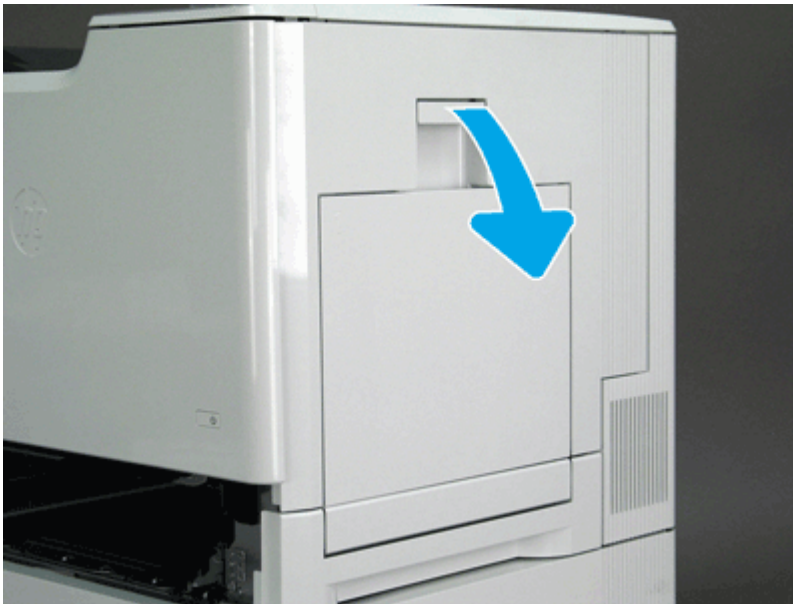
No post service test is available for this assembly.

1. Remove the fuser

Follow these steps to remove the fuser.

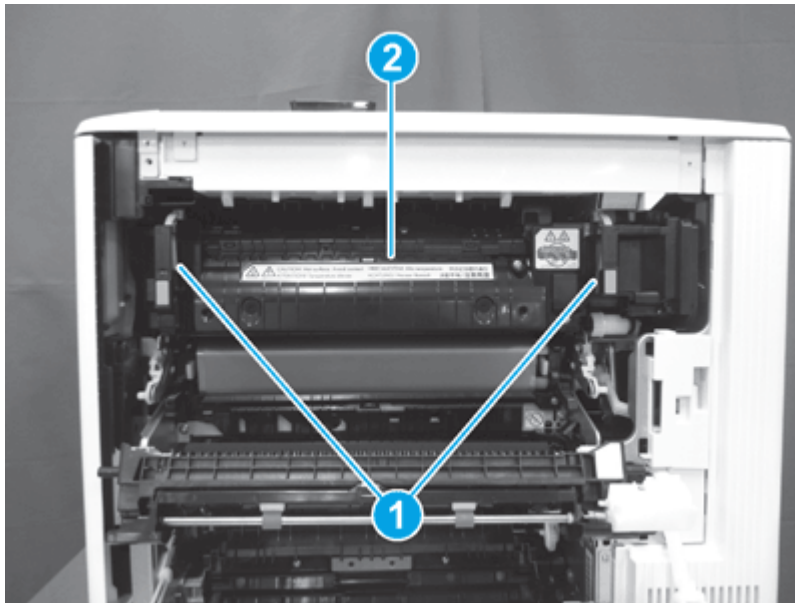
1. Open the right door.

Figure 5-917 Open the right door



2. Grasp the handles (callout 1), and then pull away from the printer to remove the fuser (callout 2).

Figure 5-918 Remove the fuser



2. Remove the keyboard (MFP)

Follow these steps to remove the keyboard (MFP).

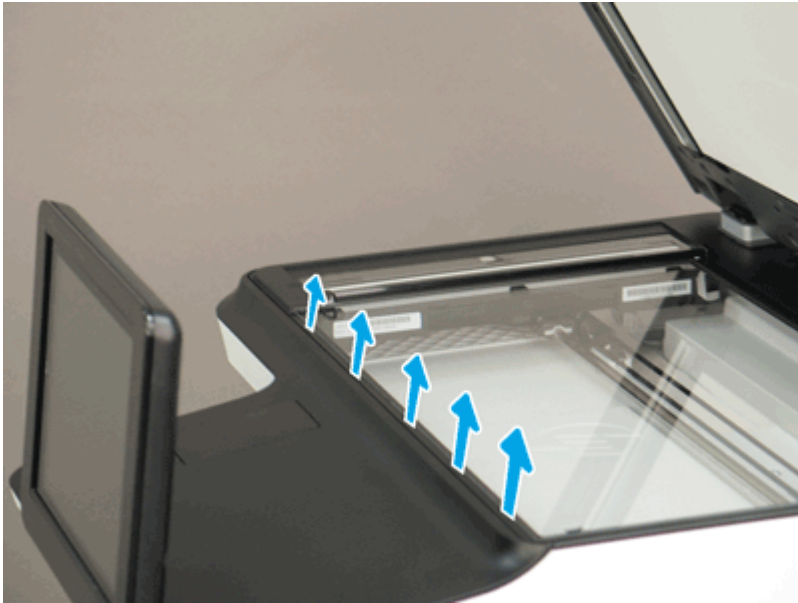
1. If the control panel is not fully tilted forward, tilt it forward now (callout 1) until it stops. Open the document feeder (callout 2).

Figure 5-919 Tilt the control panel and open the document feeder



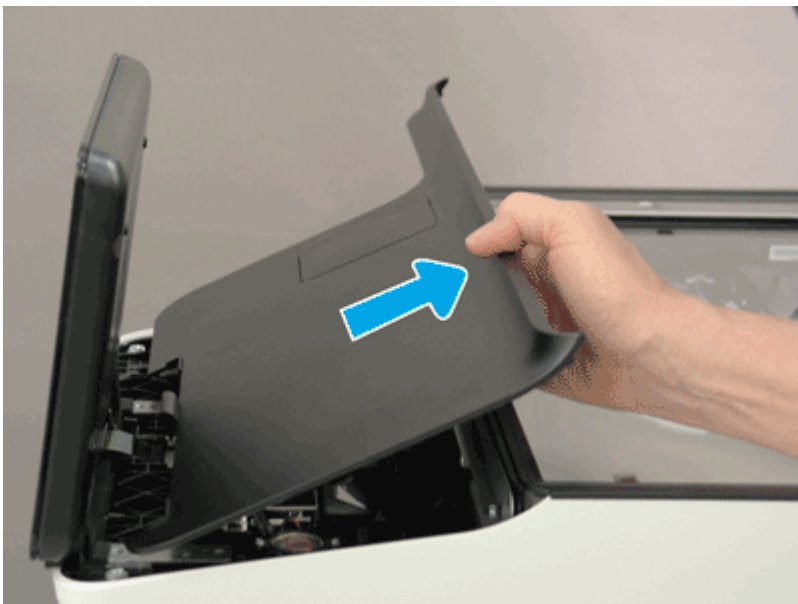
2. Beginning at the right side of the control-panel cover, carefully release five tabs along the top edge of the cover.

Figure 5-920 Release five tabs



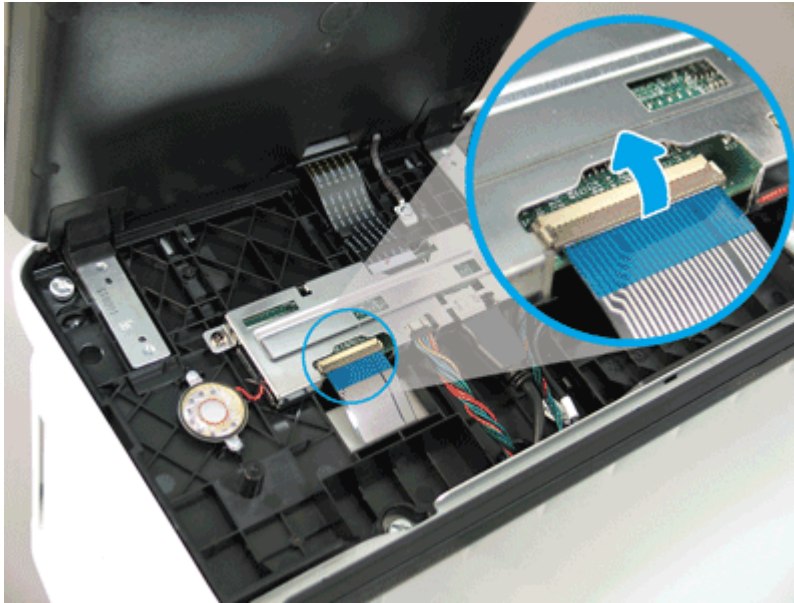
3. Continue to rotate the top edge of the cover away from the printer, and then remove the cover.

Figure 5-921 Remove the cover



4. Open the connector latch to release the keyboard flat cable.

Figure 5-922 Disconnect the keyboard flat cable



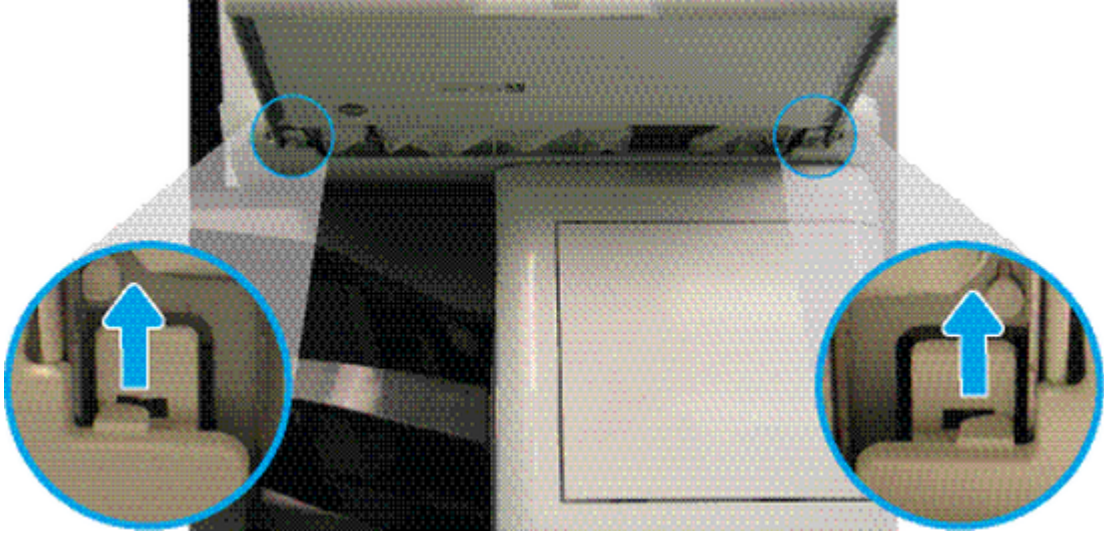
5. Slide the keyboard tray out until it stops.

Figure 5-923 Slide the keyboard tray out



6. Push up on the keyboard tray to release two tabs on the bottom of the tray, and then slide the tray toward you to disengage the tabs.

Figure 5-924 Release two tabs




7. Slide the keyboard tray all the way out of the printer to remove it.

Figure 5-925 Remove the keyboard



3. Remove the control panel (M681/M682/E67550/E67560/E67650/E67660)

Follow these steps to remove the control panel (M681/M682/E67550/E67560/E67650/E67660).

 **NOTE:** This step is for the M681/M682/E67550/E67560/E67650/E67660 printers. For the M652/M653/E65050/E65060/E65150/E65160 printers, skip this step.

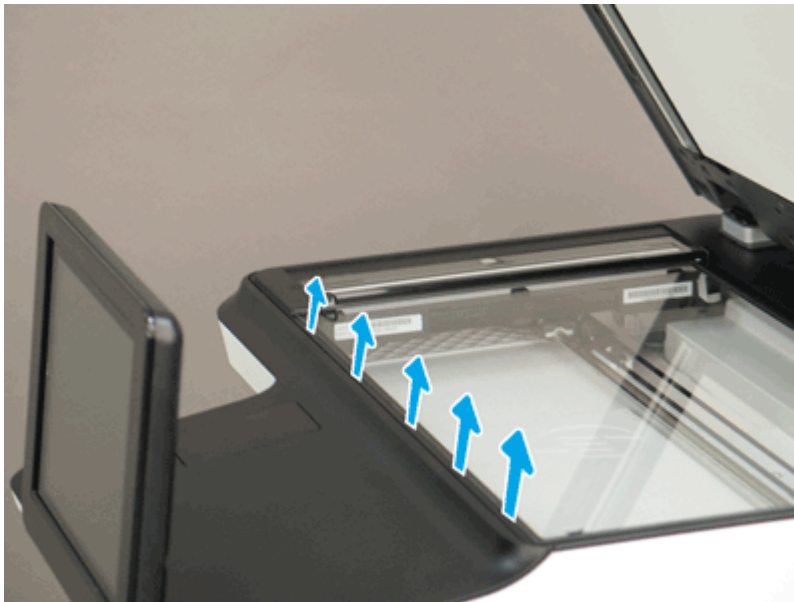
1. Tilt the control panel forward (callout 1), and then open the document feeder (callout 2).

Figure 5-926 Tilt the control panel forward and open the document feeder



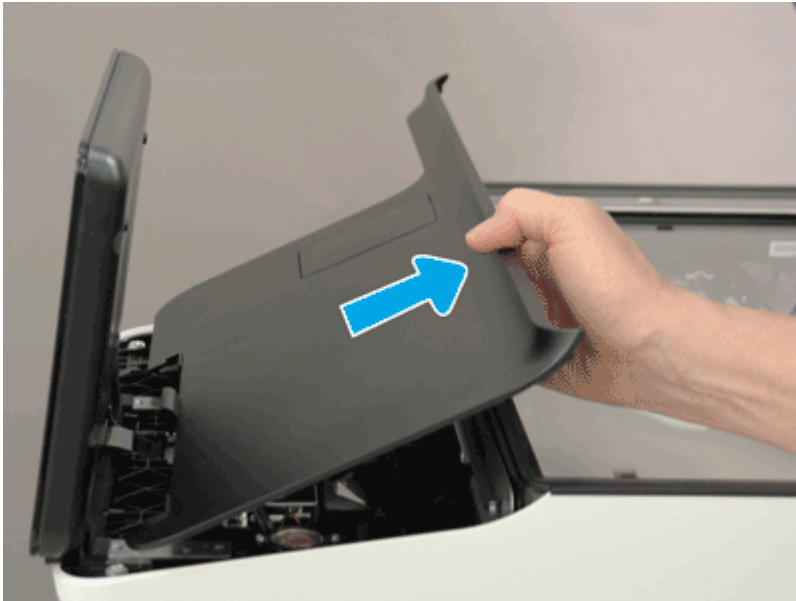
2. Beginning at the right side of the control-panel cover, carefully release five tabs along the top edge of the cover.

Figure 5-927 Release five tabs



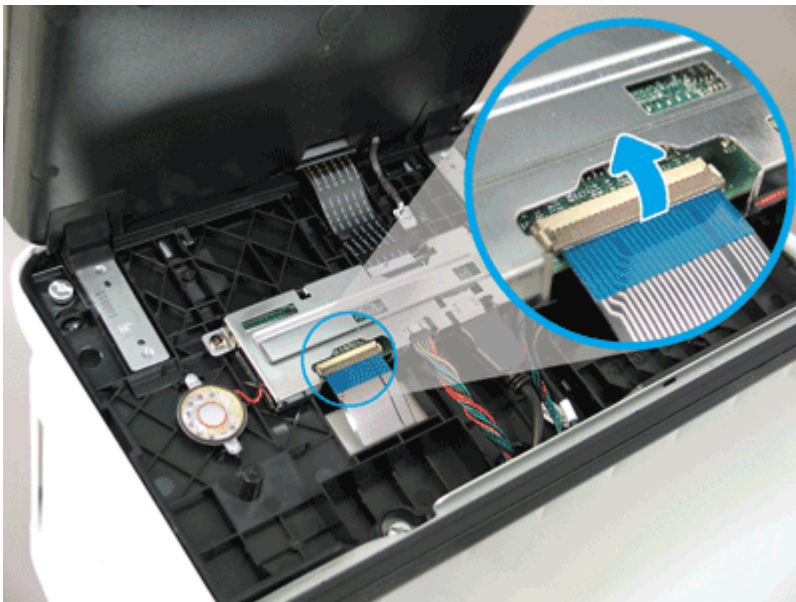
3. Continue to rotate the top edge of the cover away from the printer, and then remove the cover.

Figure 5-928 Remove the cover



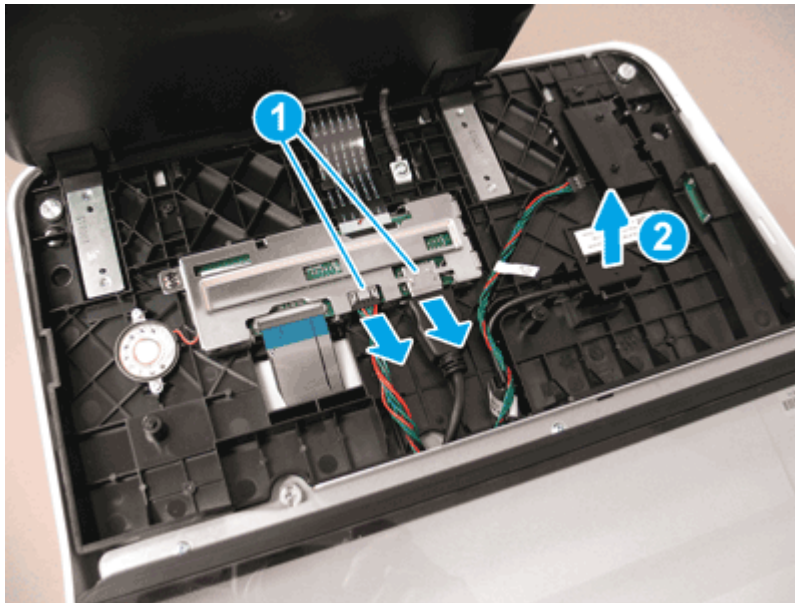
4. **Keyboard models only:** Lift up on the small, gray gate to release the keyboard flat cable.

Figure 5-929 Disconnect the keyboard flat cable (keyboard models only)



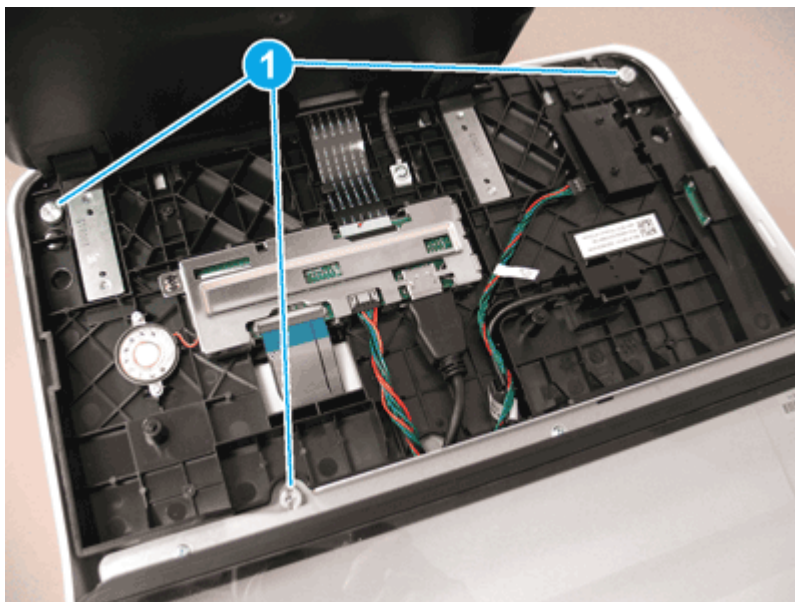
5. Disconnect two connectors (callout 1), and then release the USB cable (callout 2) from the holder.

Figure 5-930 Disconnect connectors



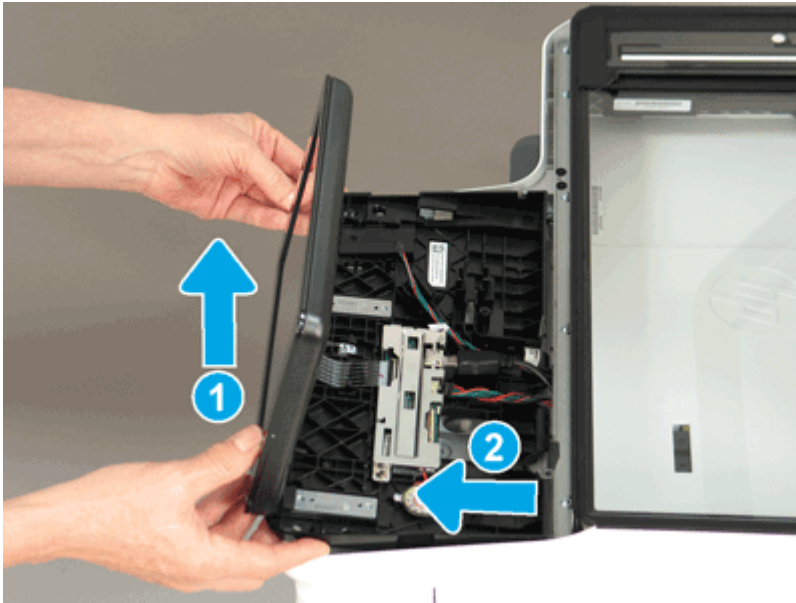
6. Remove three thumbscrews (callout 1).

Figure 5-931 Remove three thumbscrews



7. Lift the front of the control panel off of the printer (callout 1), and then slide it toward the front of the printer (callout 2) to remove it.

Figure 5-932 Remove the control panel

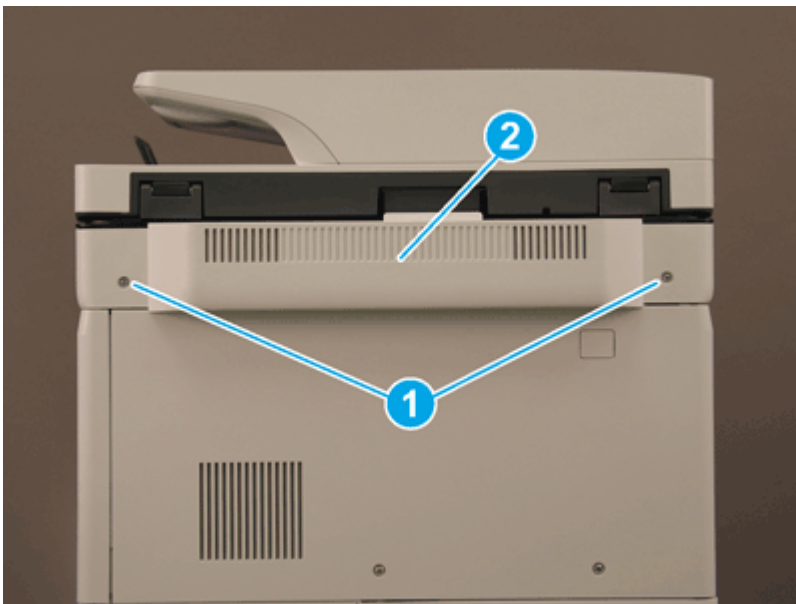


4. Remove the document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660)

Follow these steps to remove the document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660).

1. Remove two screws (callout 1), and then remove the scanner control board (SCB) cover (callout 2).

Figure 5-933 Remove the SCB cover



2. Flow M681z and Flow M682z models only: Do the following:

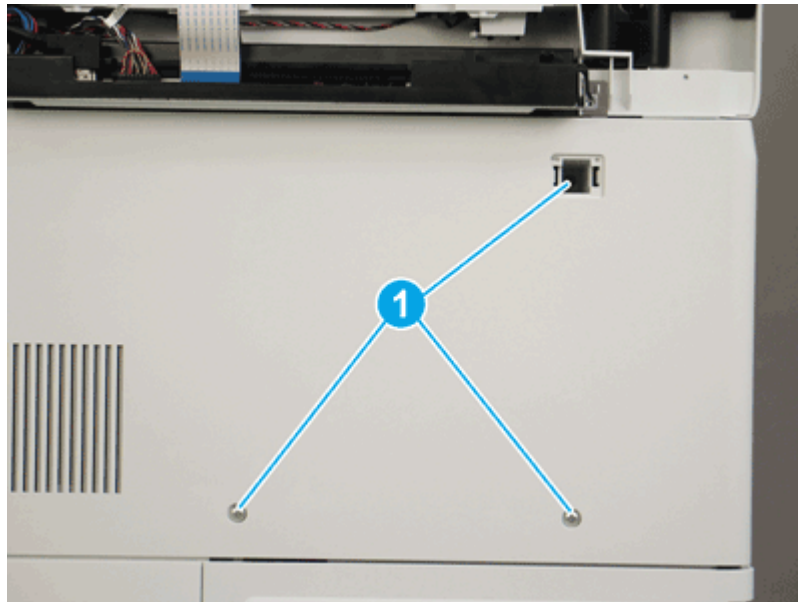
- a. At the back of the printer, remove one small cover (callout 1).

Figure 5-934 Remove the small cover



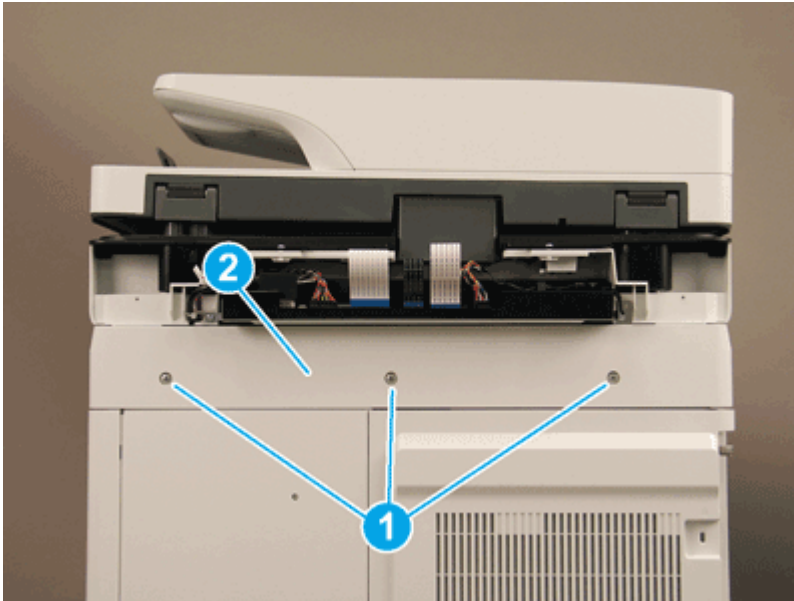
- b. **Flow M681z and Flow M682z only** : Remove three screws (callout 1), and then remove the stapler/stacker rear cover (callout 2).

Figure 5-935 Remove the stapler/stacker rear cover



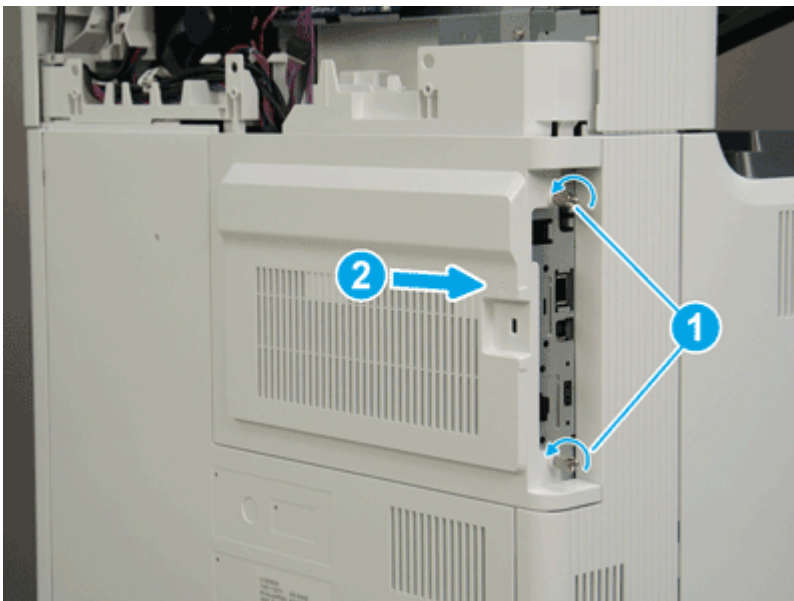
3. **M681dh, M681f, M682dh, and Flow M681f models only:** Remove three screws (callout 1), and then remove the upper rear cover (callout 2).

Figure 5-936 Remove the upper rear cover



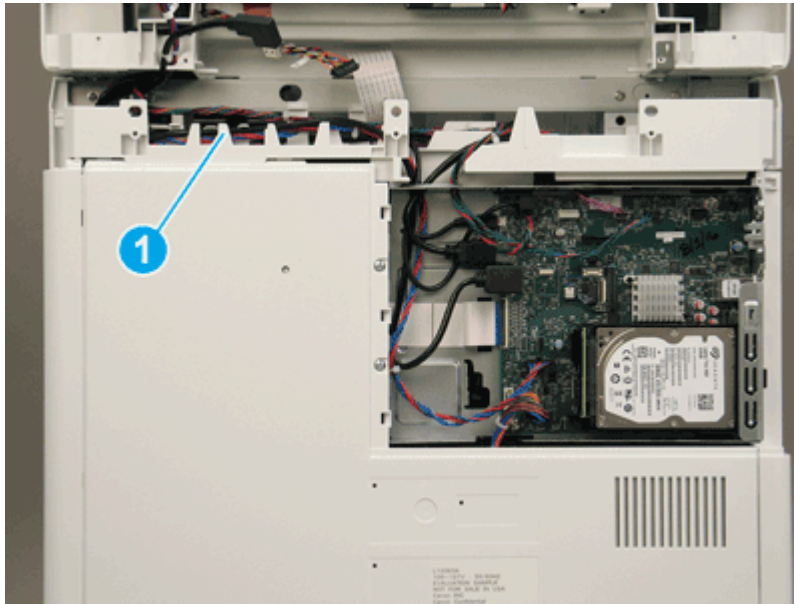
4. Loosen two thumbscrews (callout 1), and then slide the formatter cover away from the printer to remove it (callout 2).

Figure 5-937 Remove the formatter cover



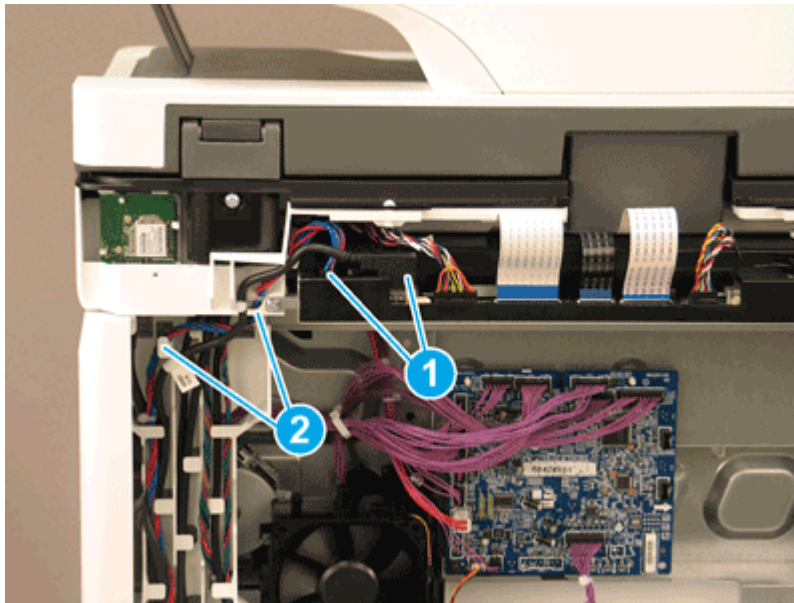
5. The remaining figures in this procedure show the Flow M682z model. While the cable routing (callout 1) on the M681dh, M681f, M682dh, and Flow M681f models is different, the removal procedures are the same for all models.

Figure 5-938 Cable routing for M681dh, M681f, and Flow M681f



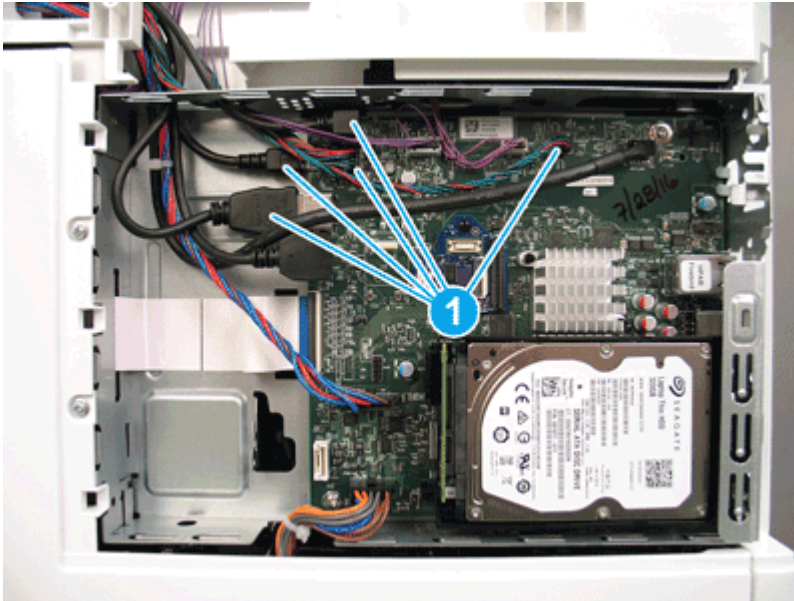
6. Disconnect two connectors (callout 1) on the SCB, and then release the cables from the guides (callout 2).

Figure 5-939 Disconnect two connectors



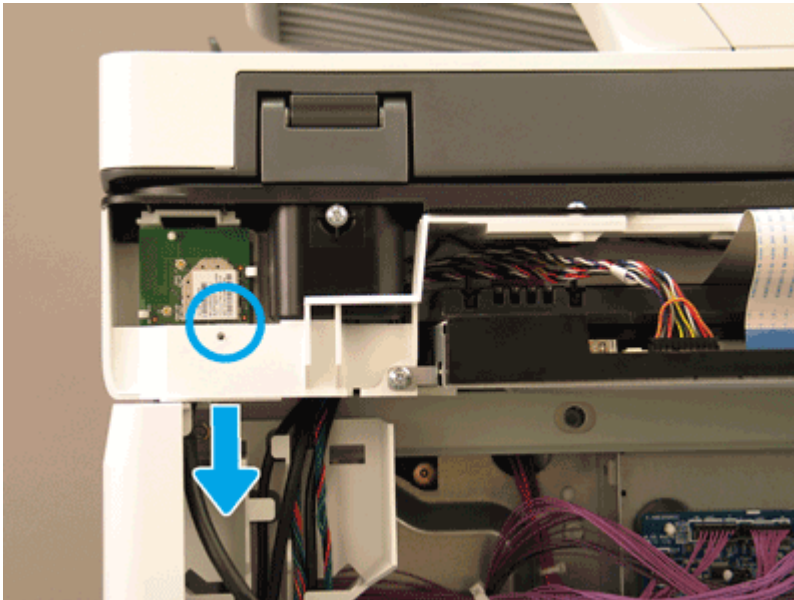
7. Disconnect five connectors on the formatter (callout 1).

Figure 5-940 Disconnect five connectors



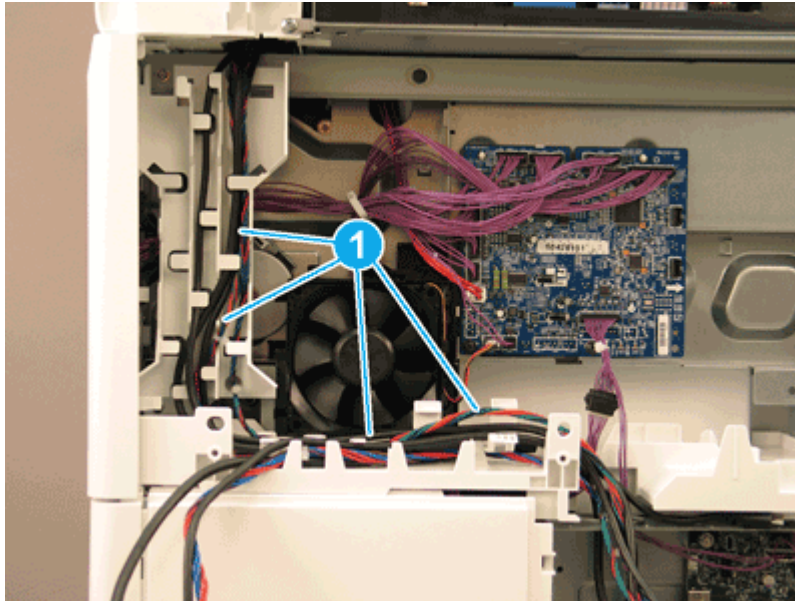
8. **Flow M682z only:** Gently pull down on the cable to disconnect the wireless connector.

Figure 5-941 Disconnect the wireless connector



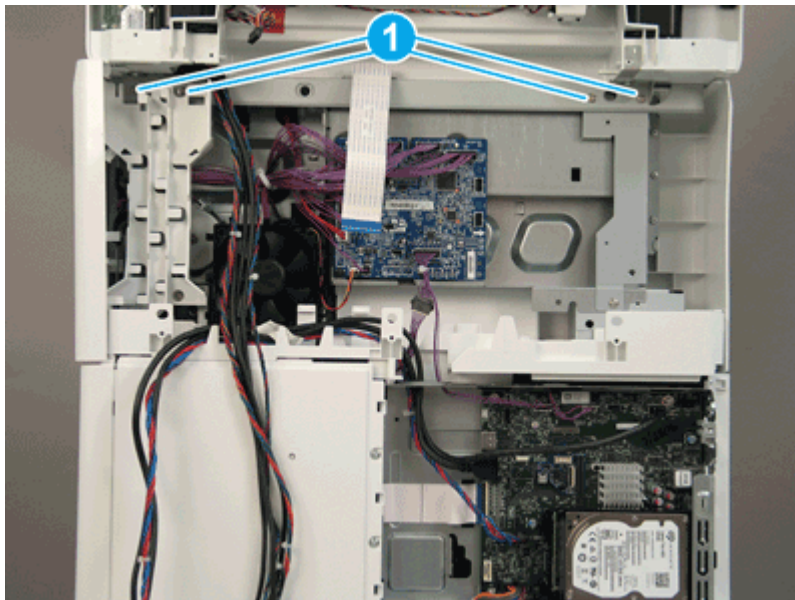
9. Release all of the cables from the cable guides (callout 1).

Figure 5-942 Release the cables



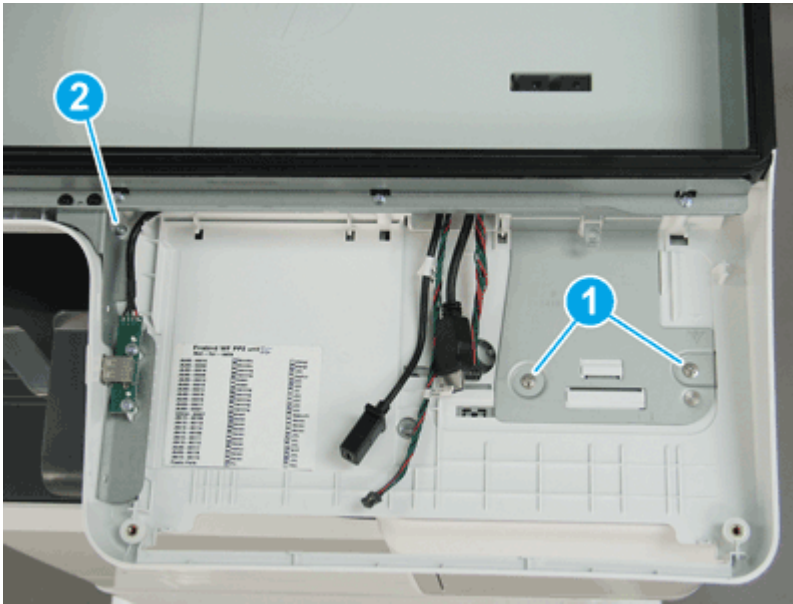
10. At the back of the printer, remove four screws (callout 1).

Figure 5-943 Remove four screws



11. On the top of the image scanner assembly, at the location where the control panel was removed, remove two sheet metal screws (callout 1). **Flow M681z and Flow M682z only:** Remove one self-tapping screw (callout 2).

Figure 5-944 Remove three screws



12. Lift the document feeder and image scanner off of the printer to remove them.

Figure 5-945 Remove the document feeder and image scanner



5. Remove the stapler/stacker (Flow M681z/Flow M682z/Flow E67660z)

Follow these steps to remove the stapler/stacker (Flow M681z/Flow M682z/Flow E67660z).

This step is for the M681/M682/E67550/E67560/E67650/E67660 printers. For the M652/M653/E65050/E65060/E65150/E65160 printers, skip this step.

1. Open the front door.

Figure 5-946 Open the front door



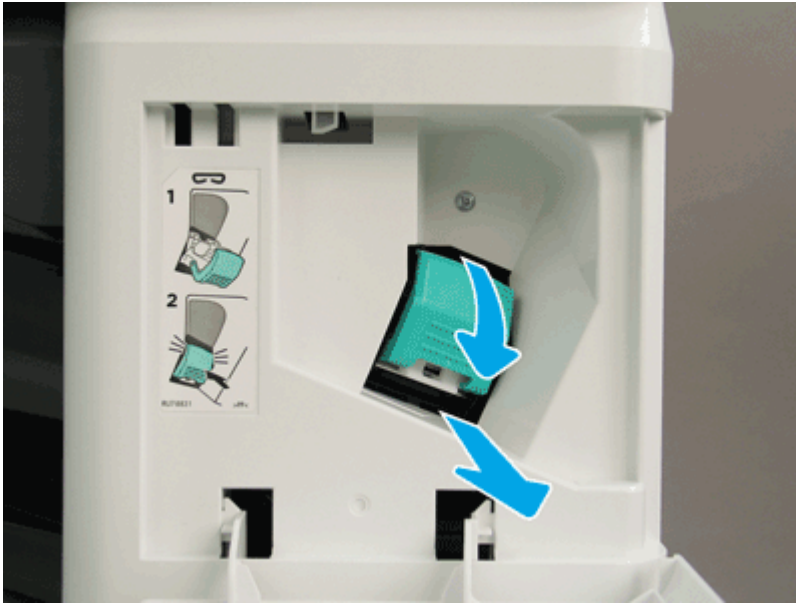
2. Open the stapler door.

Figure 5-947 Open the stapler door



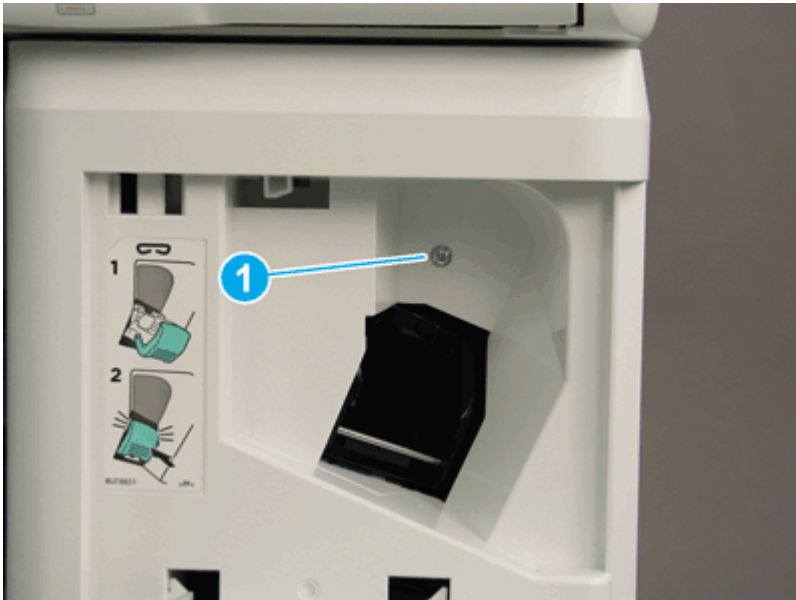
3. Release the latch, and then remove the staple cartridge.

Figure 5-948 Remove the staple cartridge



4. Remove one screw (callout 1).

Figure 5-949 Remove one screw



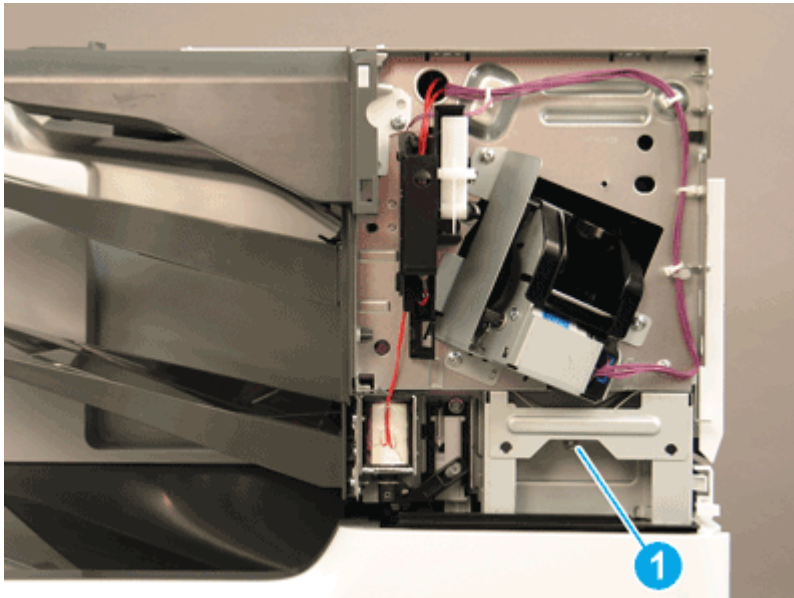
5. Rotate the stapler cover to the right to remove it.

Figure 5-950 Remove the stapler cover



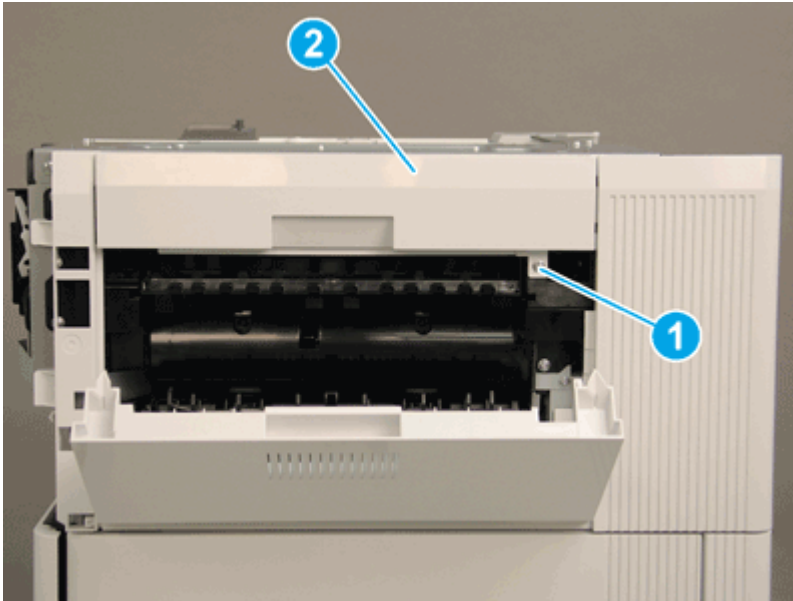
6. Remove one screw (callout 1).

Figure 5-951 Remove one screw



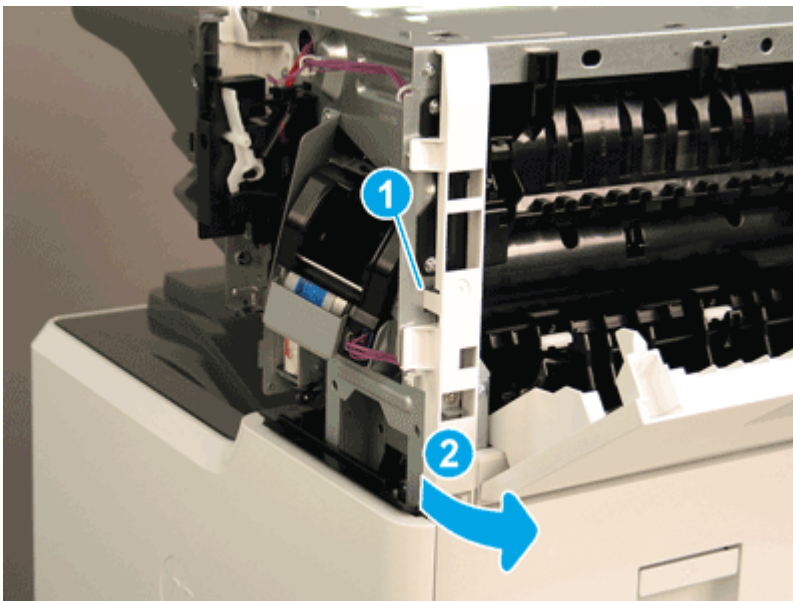
7. At the right side of the printer, remove one screw (callout 1), and then remove the stapler/stacker right upper cover (callout 2).

Figure 5-952 Remove the stapler/stacker right upper cover



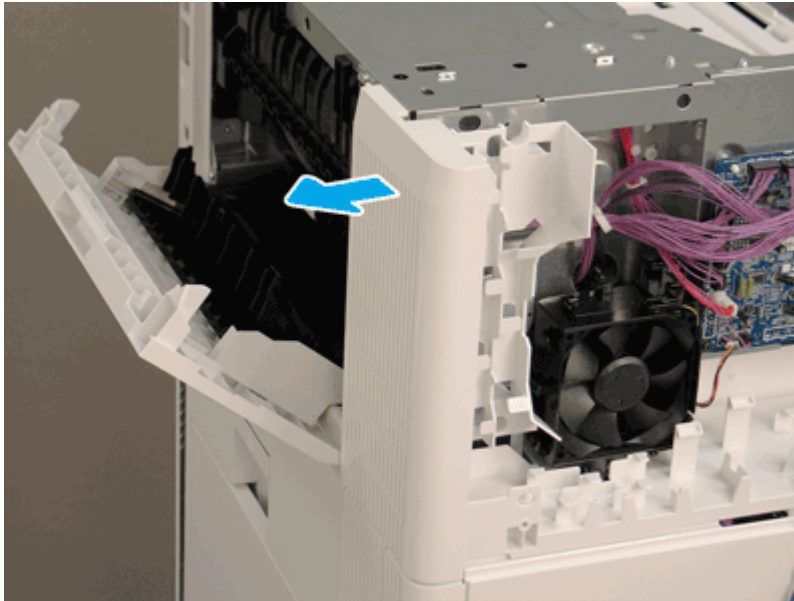
8. Release one tab (callout 1), and then rotate the stapler rear cover away from the printer (callout 2) to remove it.

Figure 5-953 Remove the stapler rear cover



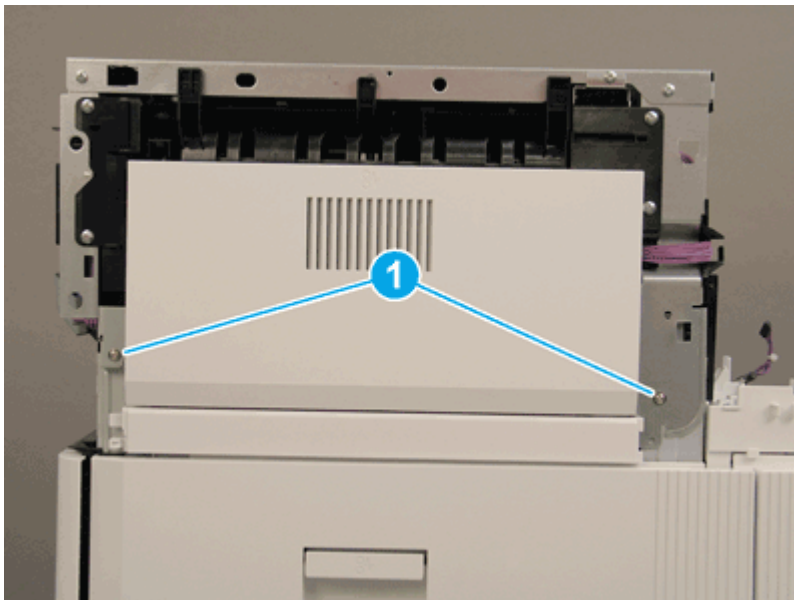
9. Pull the stapler/stacker rear corner cover away from the printer to remove it.

Figure 5-954 Remove the stapler/stacker rear corner cover



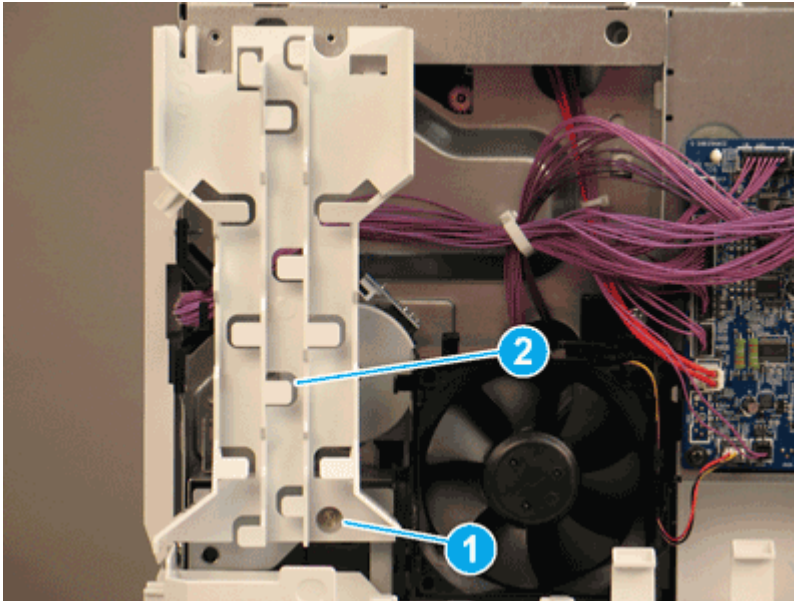
10. Remove two screws (callout 1).

Figure 5-955 Remove two screws



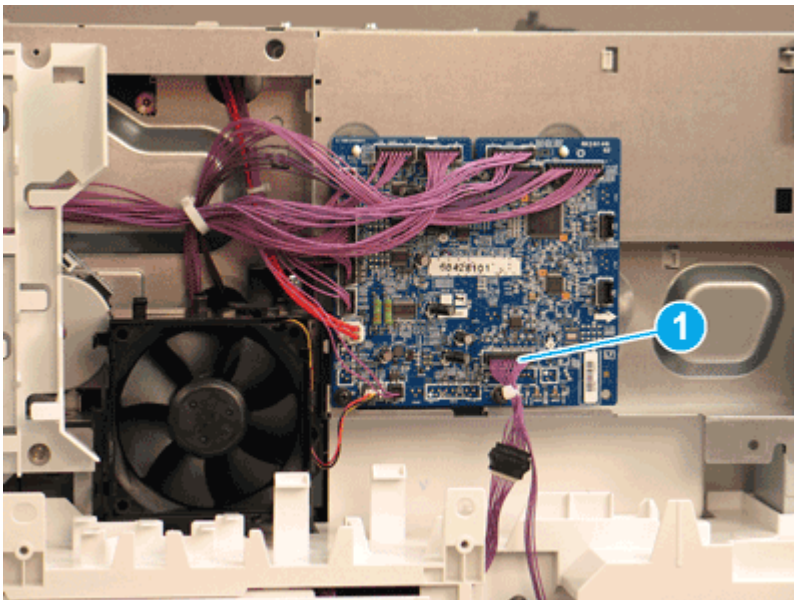
11. At the back of the printer, remove one screw (callout 1), and then remove the cable guide (callout 2).

Figure 5-956 Remove the cable guide



12. Disconnect one connector on the stapler/stacker PCA (callout 1).

Figure 5-957 Disconnect one connector

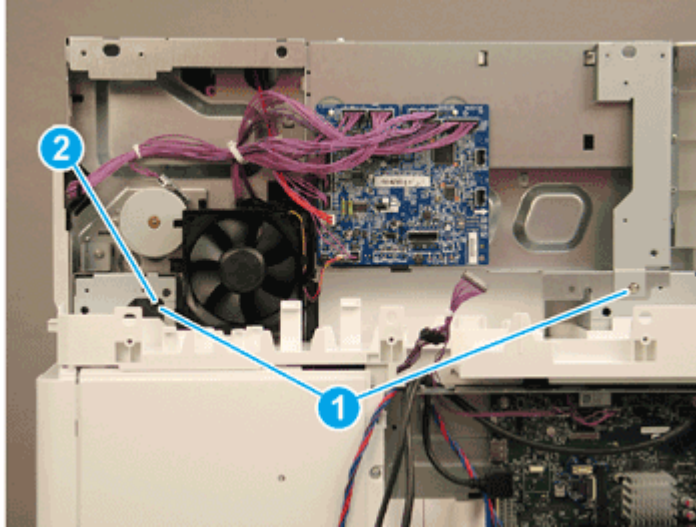


13. Remove two screws (callout 1).



TIP: The screw on the left (callout 2) is longer than the other screw. Make sure that this screw is installed in the correct location.

Figure 5-958 Remove two screws



14. Lift the stapler/stacker away from the printer.


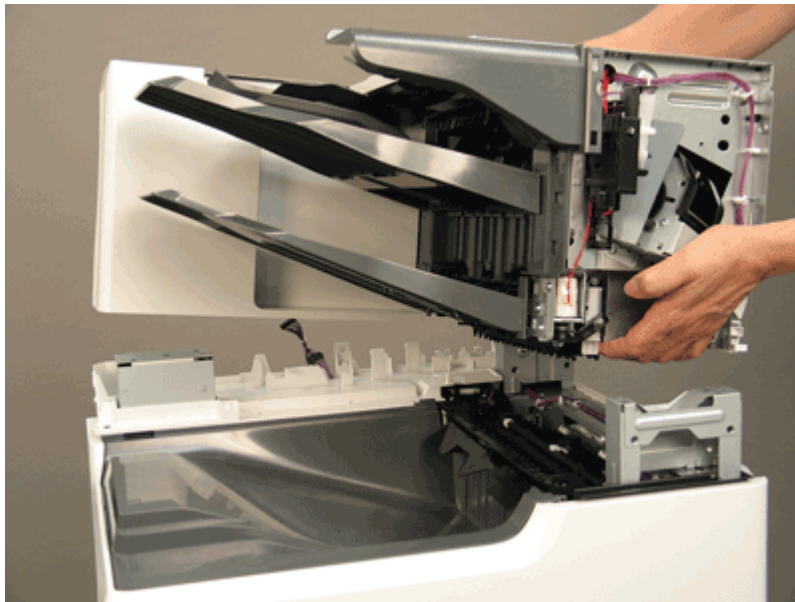

 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-959 Remove the stapler/stacker



6. Remove the face-down front cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

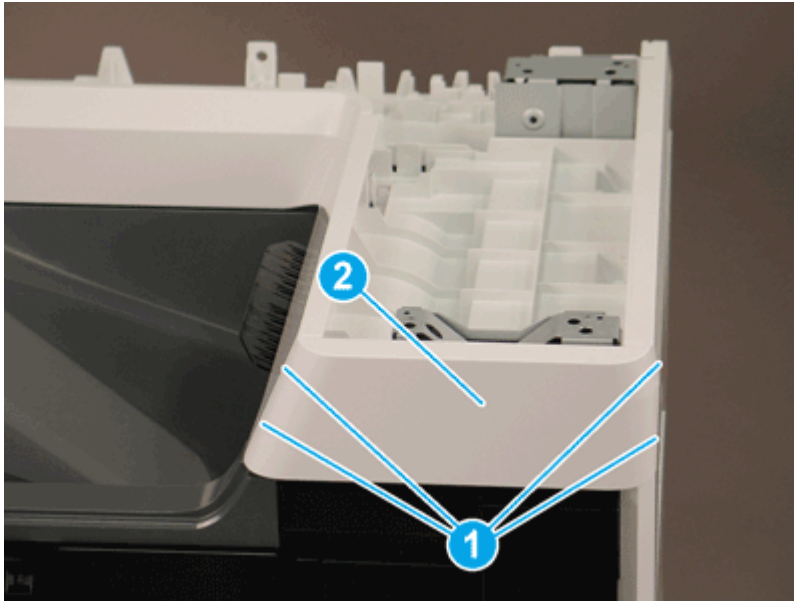
Follow these steps to remove the face-down front cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

 **NOTE:** This step is for the M681/M682/E67550/E67560/E67650/E67660 printers. For the M652/M653/E65050/E65060/E65150/E65160 printers, skip this step.

1. Open the front door.

2. Release two tabs on each side (callout 1), and then remove the face-down front cover (callout 2).

Figure 5-960 Remove the face-down front cover

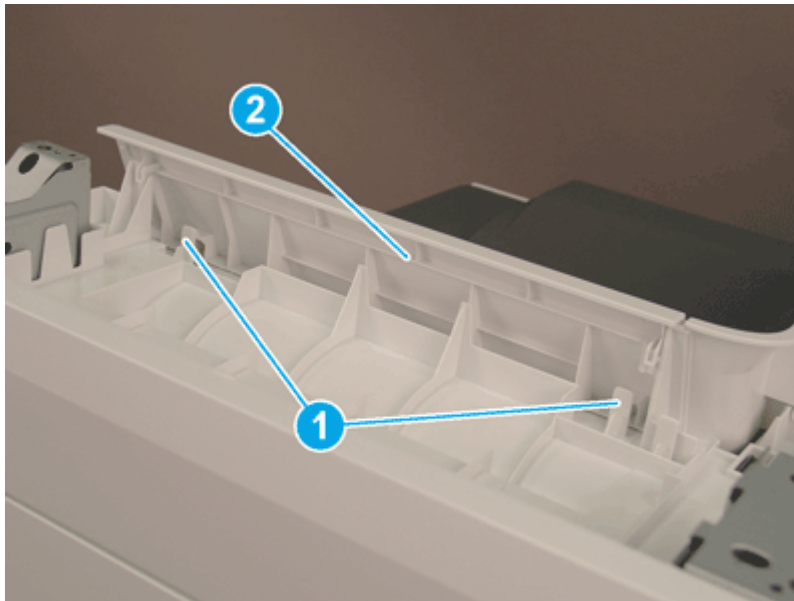


7. Remove the top cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the top cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

- Release two tabs (callout 1), and then remove the top cover (callout 2).

Figure 5-961 Remove the top cover



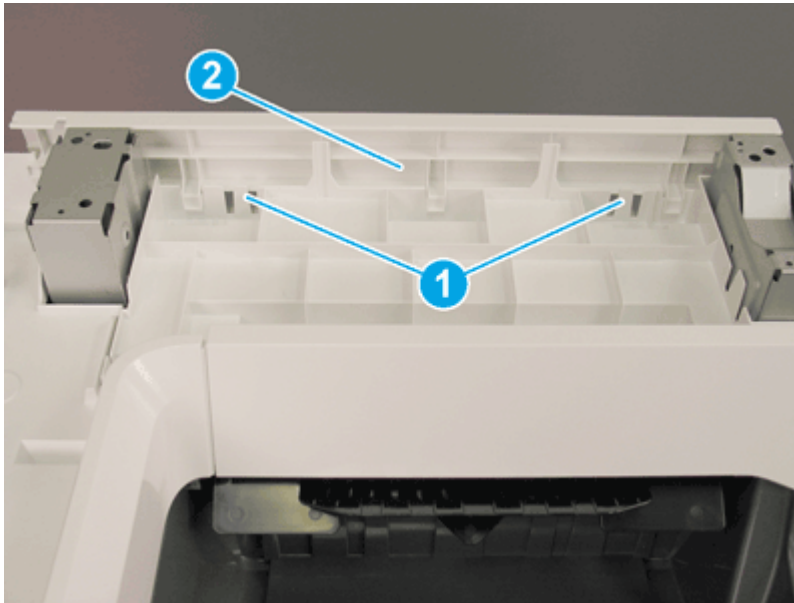
8. Remove the right cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the right cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

This step is for the M681/M682/E67550/E67560/E67650/E67660 printers. For the M652/M653/E65050/E65060/E65150/E65160 printers, skip this step.

- Release two tabs (callout 1), and then remove the right cover (callout 2).

Figure 5-962 Remove the right cover



9. Remove the front cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the front cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

- Release two tabs (callout 1), and then remove the front cover (callout 2).


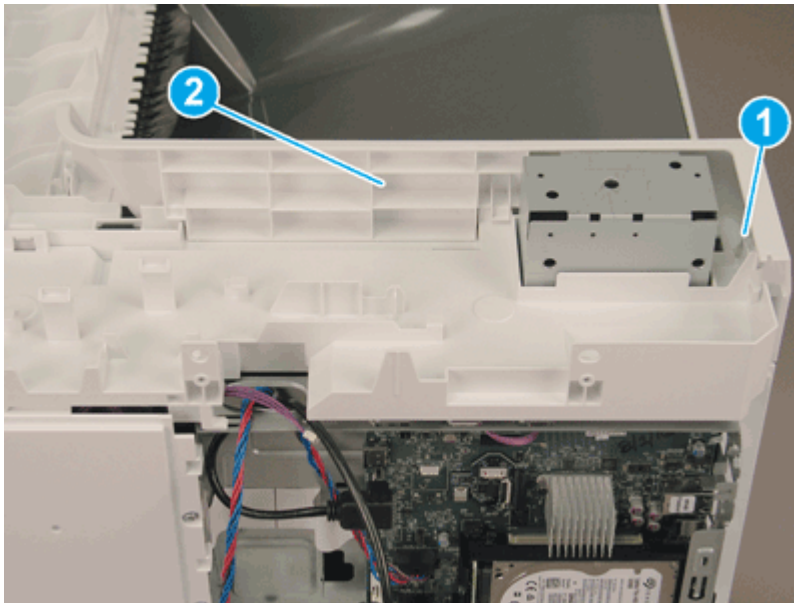
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-963 Remove the front cover



10. Remove the rear upper cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the rear upper cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

- Remove two screws (callout 1), and then remove the rear upper cover (callout 2).


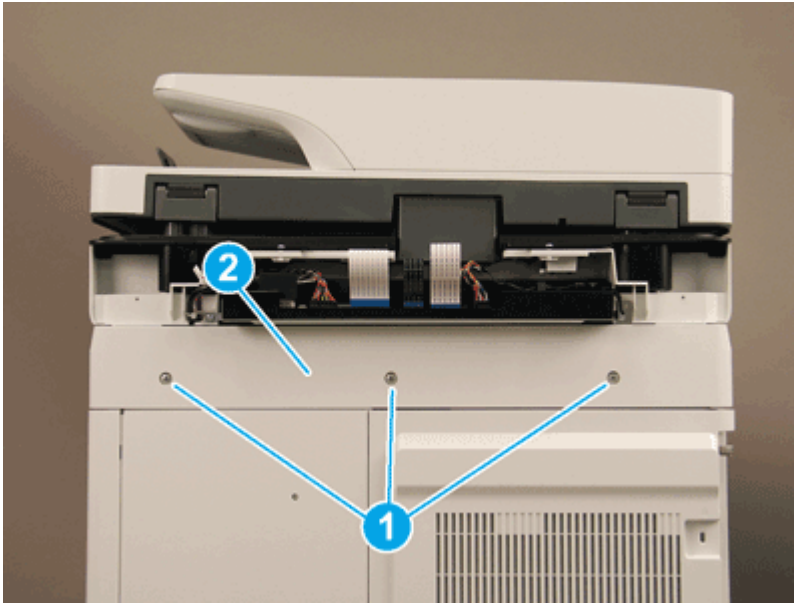

 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-964 Remove the rear upper cover



11. Remove the face-down cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the face-down cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

 **NOTE:** This step is for the M681/M682/E67550/E67560/E67650/E67660 printers. For the M652/M653/E65050/E65060/E65150/E65160 printers, skip this step.

- Remove two screws (callout 1), release three tabs (callout 2), and then remove the face-down cover (callout 3).


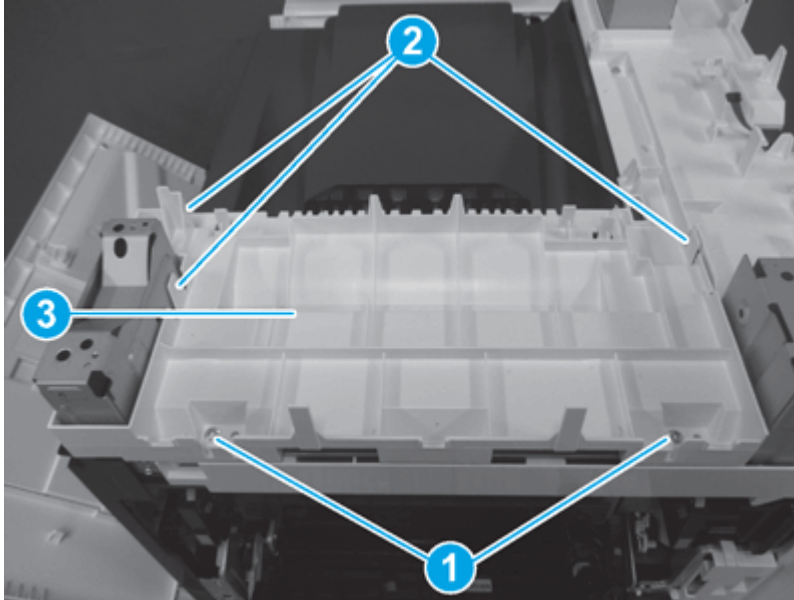
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-965 Remove two screws and the face-down cover



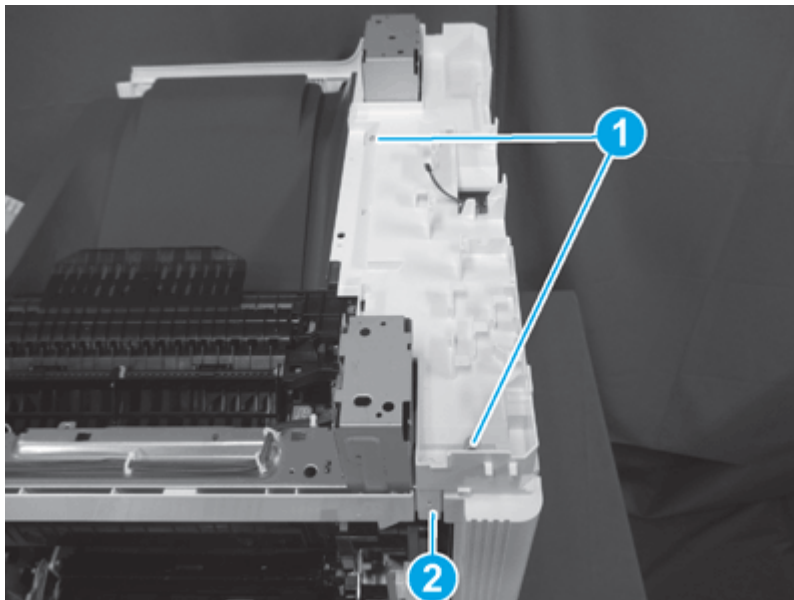
12. Remove the main cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the main cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

This step is for the M681/M682/E67550/E67560/E67650/E67660 printers. For the M652/M653/E65050/E65060/E65150/E65160 printers, skip this step.

1. Remove two screws (callout 1), and then release one tab (callout 2).

Figure 5-966 Remove two screws and release one tab



2. Remove one screw (callout 1), release two tabs (callout 2), and then remove the main cover (callout 3).


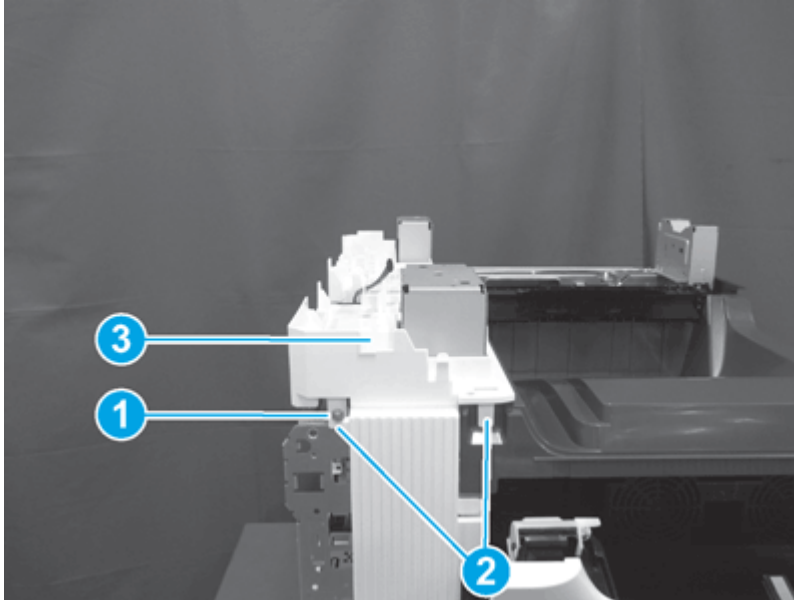

 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-967 Remove one screw and the main cover



13. Remove the control panel (M652/M653/E65050/E65060/E65150/E65160)

Follow these steps to remove the control panel (M652/M653/E65050/E65060/E65150/E65160).

 **NOTE:** This step is for the M652/M653/E65050/E65060/E65150/E65160 printers. For the M681/M682/E67550/E67560/E67650/E67660 printers, skip this step.

The figures below show the touchscreen control panel. The procedure is also correct for the keypad control panel.

1. Tilt the control panel to the fully raised position.

Figure 5-968 Tilt the control panel up



2. Use a coin to release the cover, and then remove the cover.

Figure 5-969 Remove the cover



3. Remove one thumbscrew (callout 1)


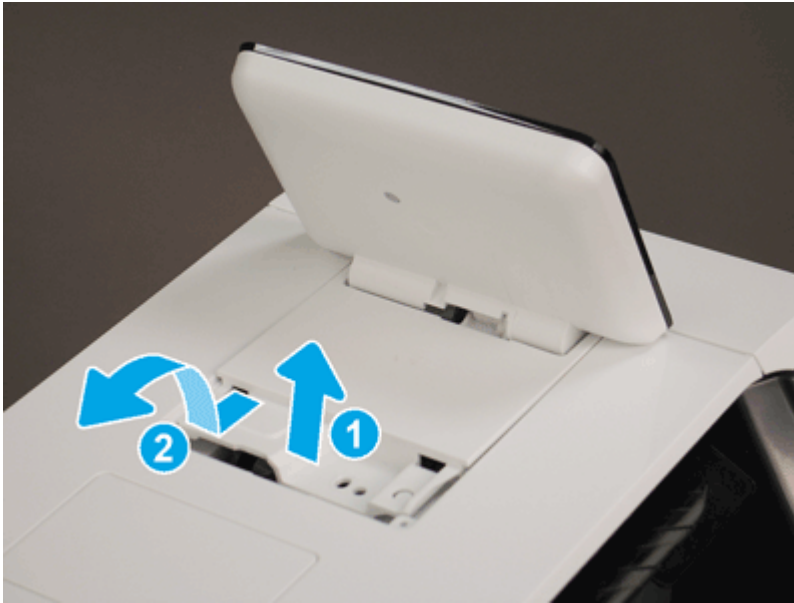
 **NOTE:** Store the screw in a secure place where it cannot fall down into the printer.

Figure 5-970 Remove one thumbscrew



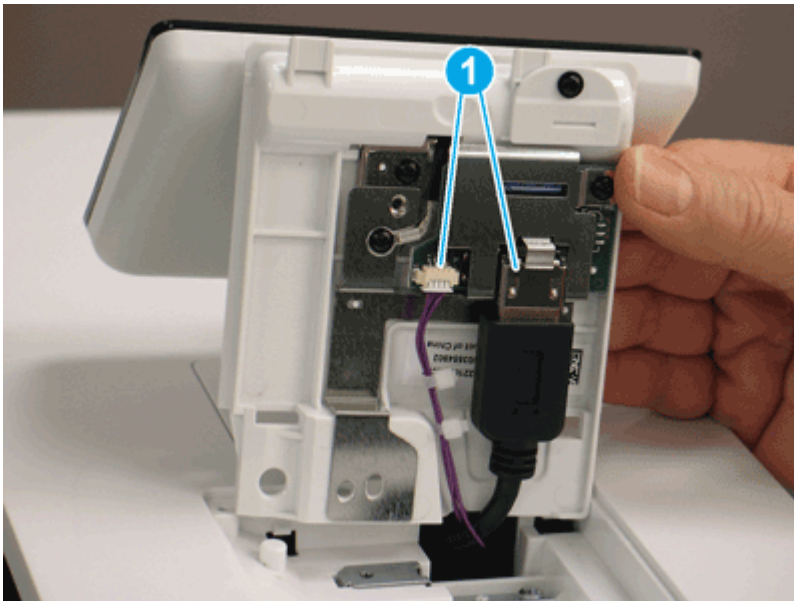
4. Lift the back edge of the control panel up (callout 1), and then slide it toward the back of the printer (callout 2) to release it.

Figure 5-971 Release the control panel



5. Turn the control panel over to gain access to the bottom side. Disconnect two connectors (callout 1).

Figure 5-972 Disconnect two connectors



6. Remove the control panel.

Figure 5-973 Remove the control panel



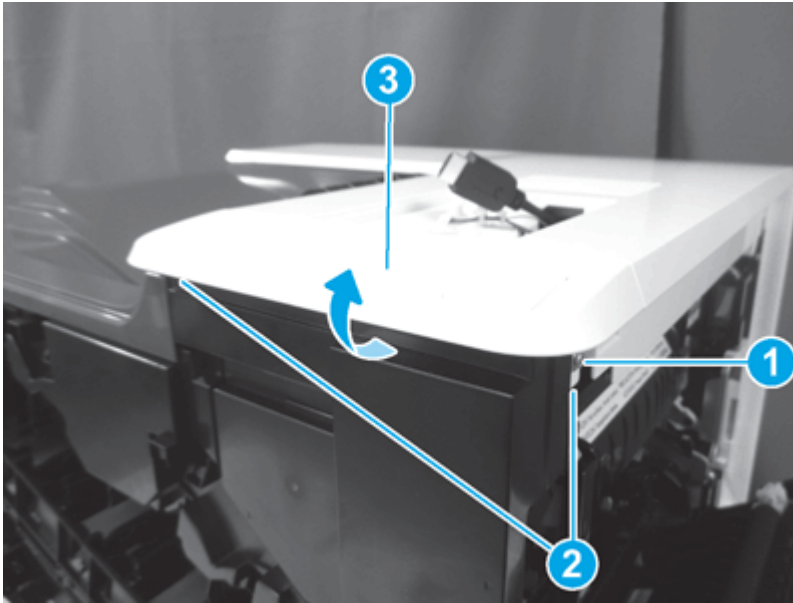
14. Remove the top cover (M652/M653/E65050/E65060/E65150/E65160)

Follow these steps to remove the top cover (M652/M653/E65050/E65060/E65150/E65160).

1. Open the following doors:
 - Front door
 - Left door
 - Right door

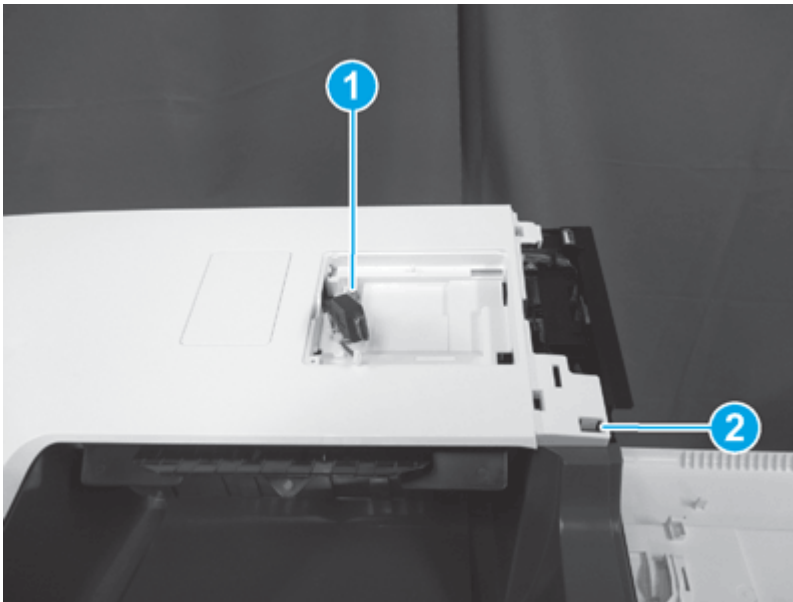
2. Remove one screw (callout 1), release two tabs (callout 2), and then rotate the NFC cover (callout 3) up and away from the printer to remove it.

Figure 5-974 Remove the NFC cover



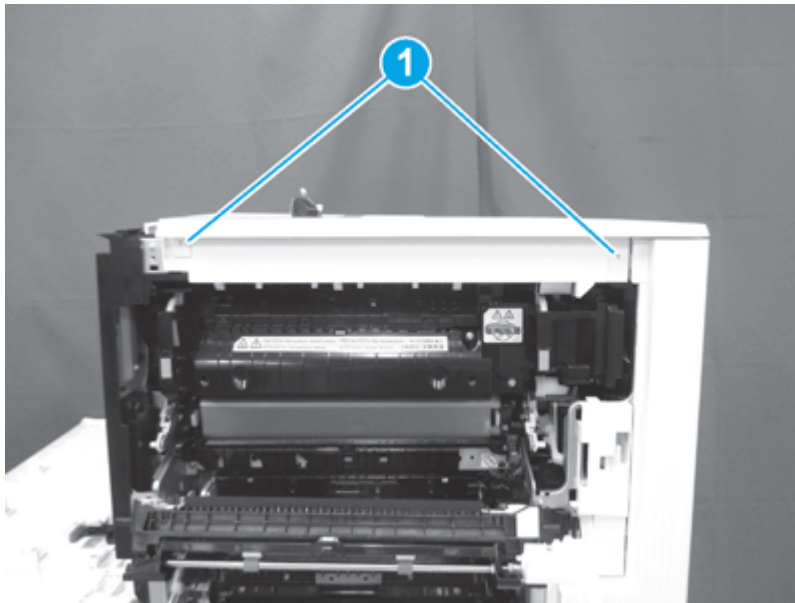
3. Remove one screw (callout 1), and then release one tab (callout 2).

Figure 5-975 Remove one screw and release one tab



4. Release two tabs (callout 1).

Figure 5-976 Release two tabs



5. Remove one screw (callout 1), release one tab (callout 2), release one tab behind the left door (callout 3), and then remove the top cover (callout 4).


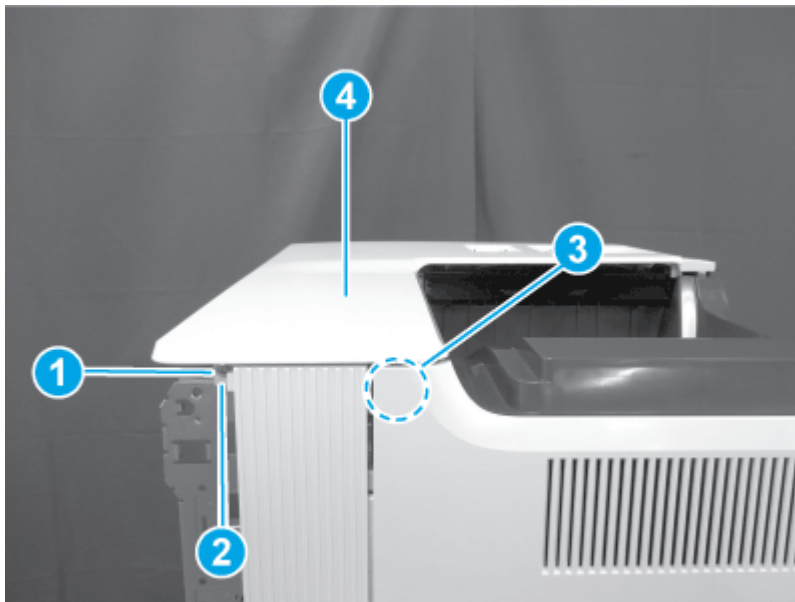
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-977 Remove the top cover



15. Remove the output bin

Follow these steps to remove the output bin.

1. Open the following doors:
 - Front door
 - Left door
 - Right door
2. Release two tabs (callout 1), and then remove the output bin (callout 2).


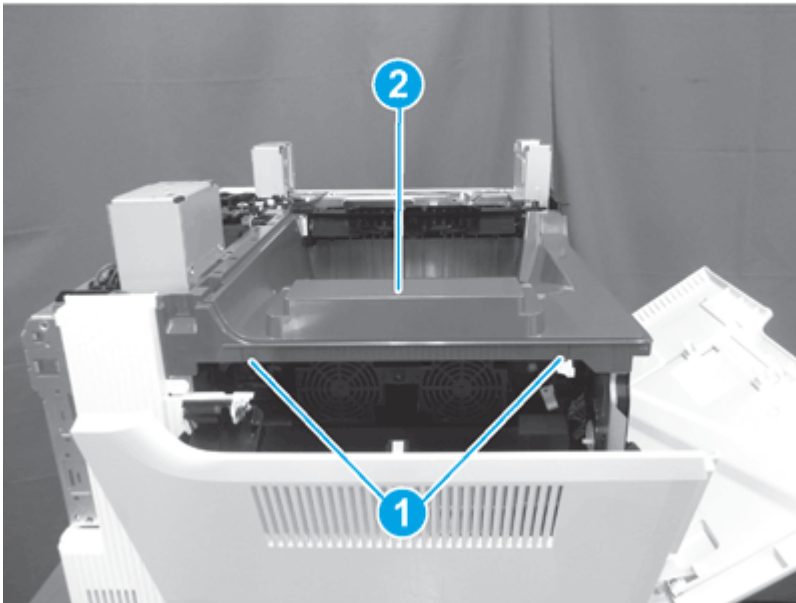
 **NOTE:** The M682 is shown in the figure below. The procedure is correct for all models.

Figure 5-978 Remove the output bin



16. Remove the formatter cover

Follow these steps to remove the formatter cover.

- Unscrew two thumbscrews (callout 1), and then slide the formatter cover (callout 2) away from the printer to remove it.


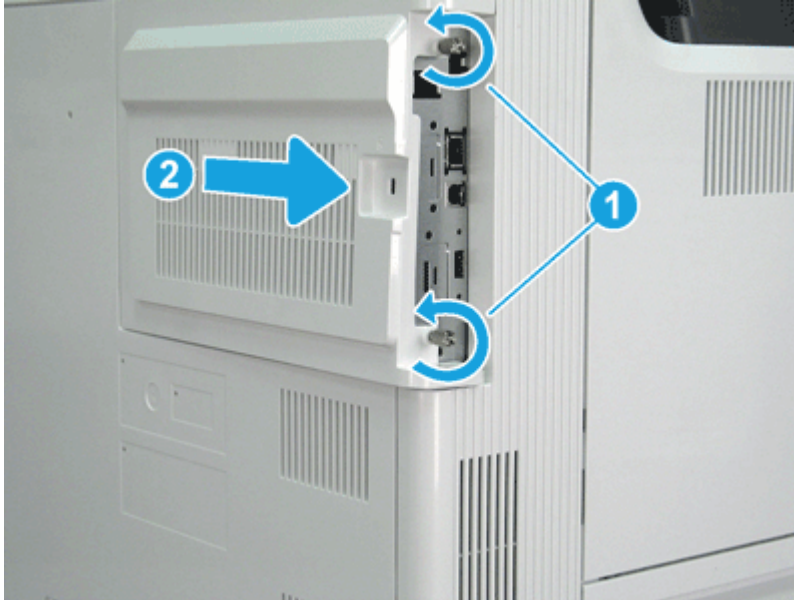
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-979 Remove the formatter cover

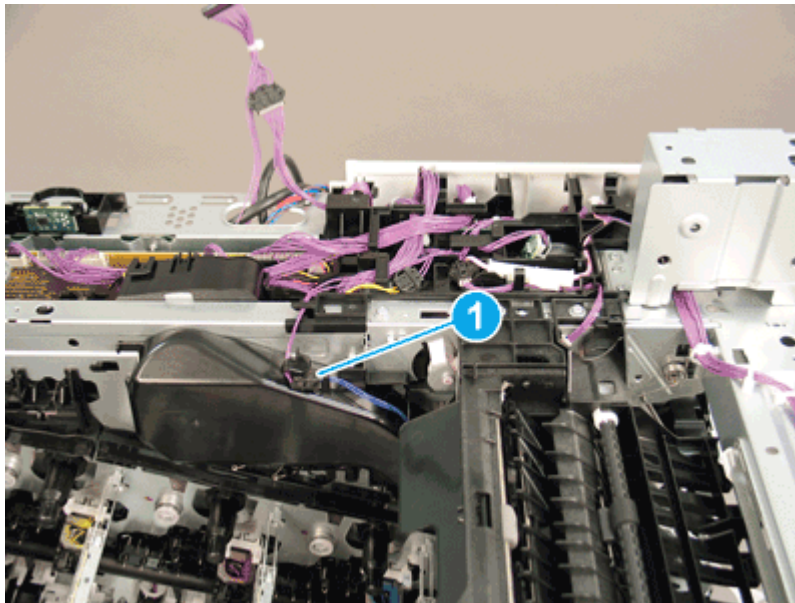


17. Remove the estrangement detect PCA

Follow these steps to remove the estrangement detect PCA.

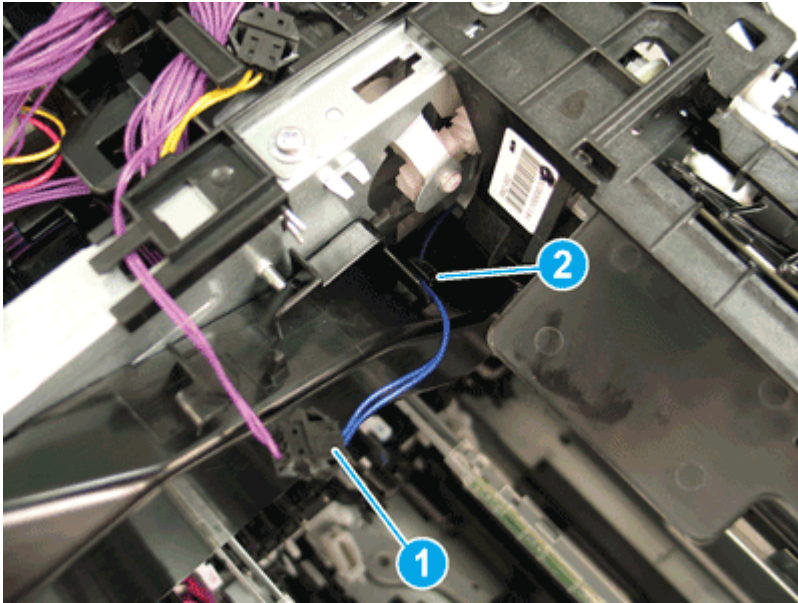
1. Release one connector (callout 1) from a retainer.

Figure 5-980 Release one connector



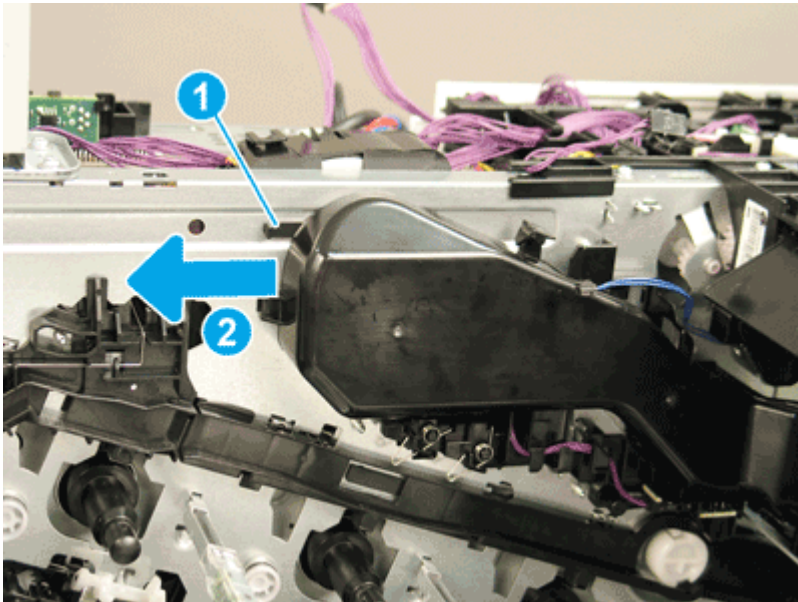
2. Disconnect one connector (callout 1), and then release the cable from the guide (callout 2).

Figure 5-981 Disconnect one connector and release the cable.



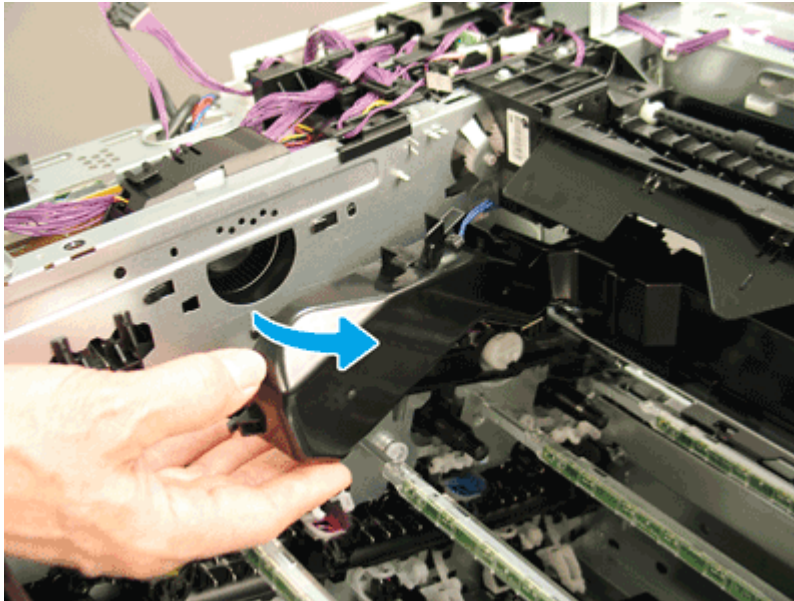
3. Release one tab (callout 1), and then slide the fan shroud to the left (callout 2).

Figure 5-982 Release one tab and slide the shroud



4. Rotate the fan shroud away from the printer to remove it.

Figure 5-983 Remove the fan shroud



5. Release two tabs (callout 1).


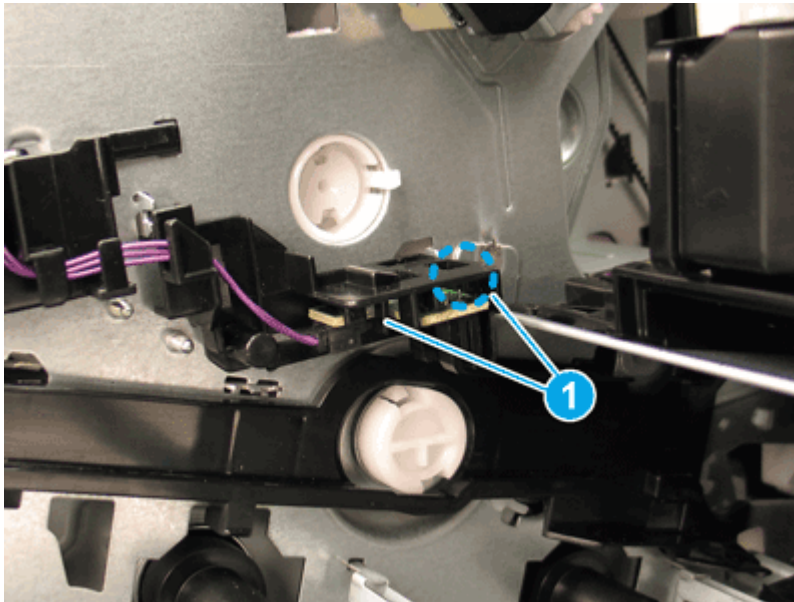
 **TIP:** Carefully slide a small, flat-blade screwdriver on the right side of the PCA to gently release the right tab.

Figure 5-984 Release two tabs



6. Remove the estrangement detect PCA, and then disconnect one connector (callout 1).


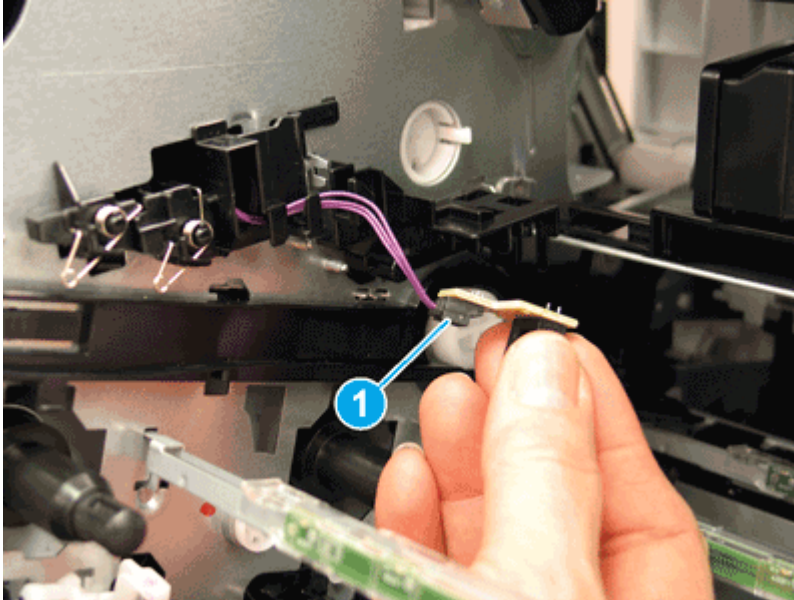
 **TIP:** Connect the connector to the replacement part before installing the PCA in the holder.


Figure 5-985 Remove the PCA and disconnect one connector



18. Unpack the replacement assembly



Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.


 **NOTE:** HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>


2. Unpack the replacement part from the packaging.

 **CAUTION:**  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

 **IMPORTANT:** Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

 **NOTE:** If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

 **NOTE:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

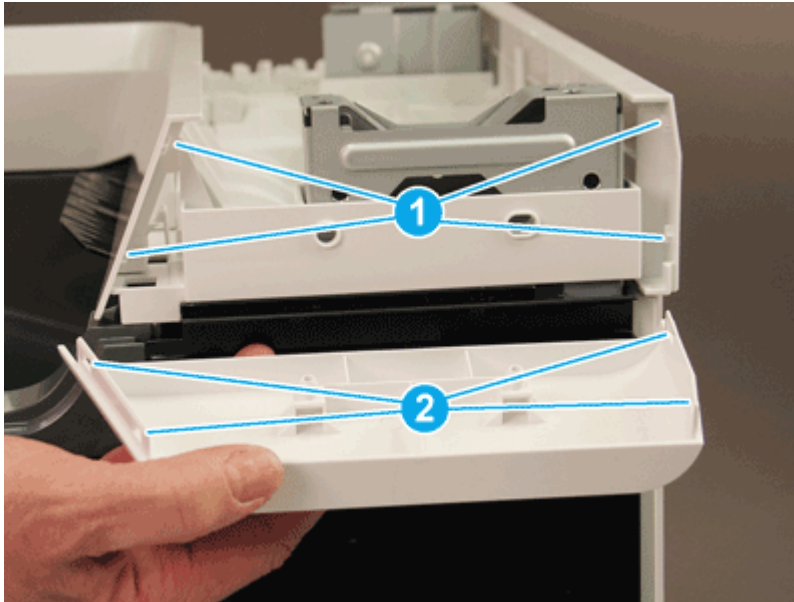
19. Reverse the removal steps to install the assembly

Also use the following **special installation instructions**.

Face-down front cover

- When reinstalling the cover, position the tabs (callout 1) on the printer into the slots (callout 2) on the cover.

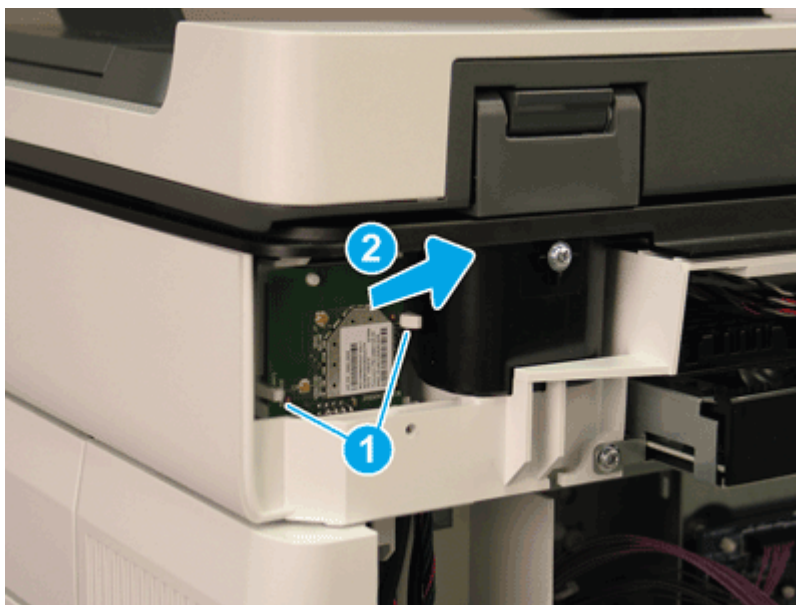
Figure 5-986 Install the cover



Document feeder and image scanner

1. **Flow M682z only**: When reconnecting the wireless card cable, do the following:
 - a. Release two tabs (callout 1), and then remove the wireless card (callout 2).

Figure 5-987 Remove the wireless card



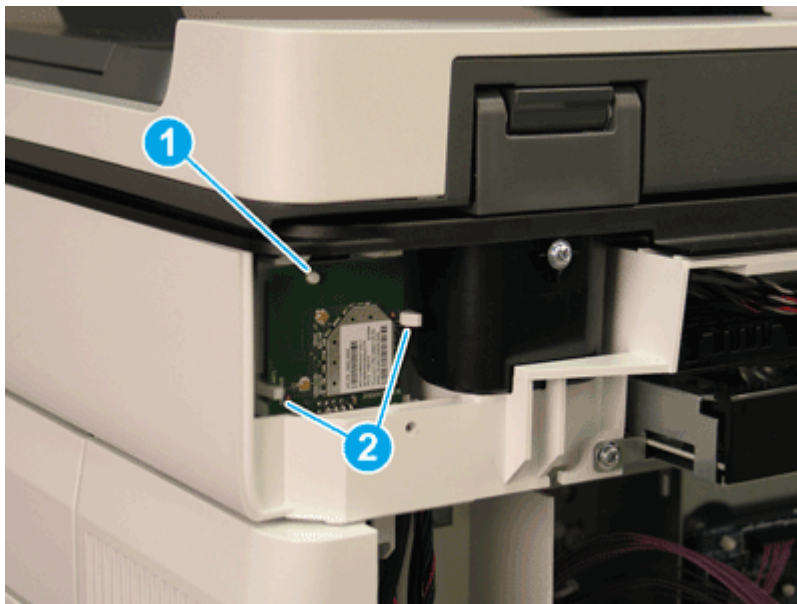
- b. Connect the cable to the wireless card (callout 1).

Figure 5-988 Connect the wireless card connector



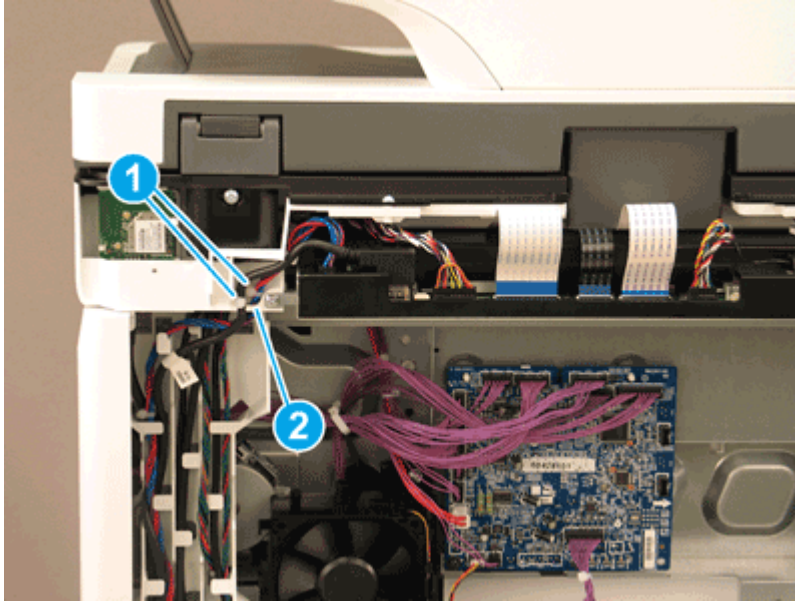
- c. Reinstall the wireless card. Make sure that the hole in the card is positioned over the peg (callout 1), and that the card is under the two tabs (callout 2).

Figure 5-989 Reinstall the wireless card



- 2. When reinstalling the SCB cables, make sure that the wire retainers (callout 1) on the cables are positioned above the plastic guide (callout 2).


Figure 5-990 Install the SCB cables



 **NOTE:** Continue to reverse the removal steps to finish installing the assembly.


Removal and replacement: Environmental sensor PCA

Learn how to remove and replace the environmental sensor PCA.

 [View a video of how to remove and replace the environmental sensor.](#)


Mean time to repair: 15 minutes

Service level: Intermediate

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Disconnect the power cable.

 **WARNING!** To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-60 Part information

Part number	Part description
RM2-8440-000CN	Environmental sensor PCA

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Make sure that the printer initializes to a **Ready** state.

Print a configuration page to make sure that the printer is functioning correctly.

1. Remove the TCU

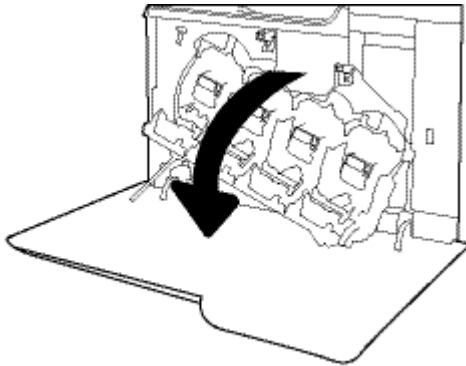
Follow these steps to remove the TCU.

CAUTION: If toner gets on clothing, wipe it off by using a dry cloth and wash the clothes in cold water. Hot water sets toner into fabric.

NOTE: The toner collection unit is designed for a single use. Do not attempt to empty the toner collection unit and reuse it. Doing so could lead to toner being spilled inside the printer, which could result in reduced print quality. After use, return the toner collection unit to HP's Planet Partners program for recycling.

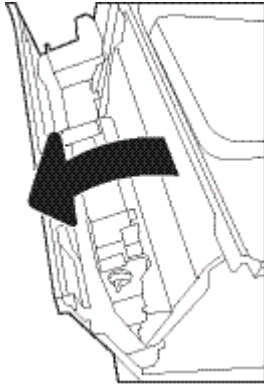
1. Open the front door.

Figure 5-991 Open the front door



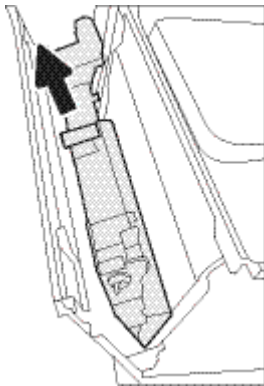
2. Open the left door.

Figure 5-992 Open the left door



3. Grasp the top of the TCU and remove it from the printer.

Figure 5-993 Remove the TCU

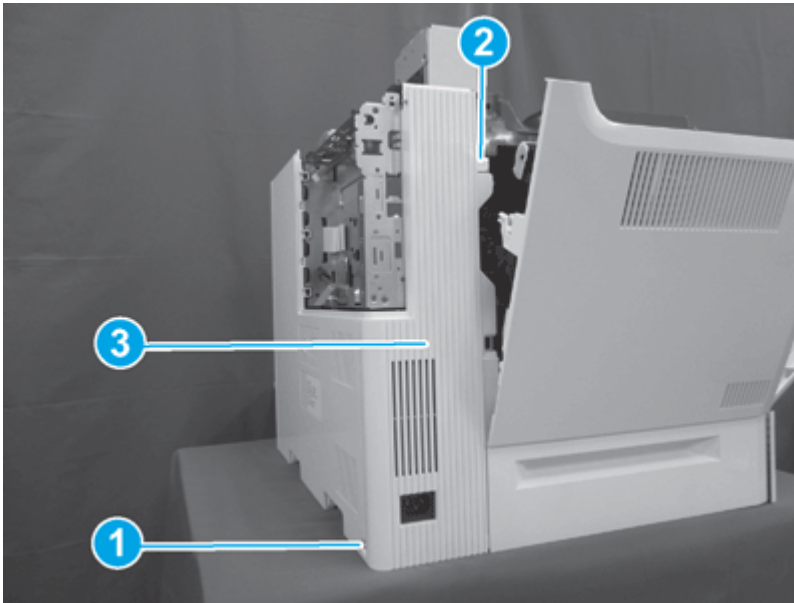


2. Remove the left rear cover

Follow these steps to remove the left rear cover.

- Open the left door. Remove one screw (callout 1), release one boss (callout 2), and then remove the left rear cover (callout 3).

Figure 5-994 Remove the left rear cover



3. Remove the left door

Follow these steps to remove the left door.

1. Open front door.

Figure 5-995 Open front door



2. Press on the tab (callout 1) while sliding the left door (callout 2) to the right to remove it.


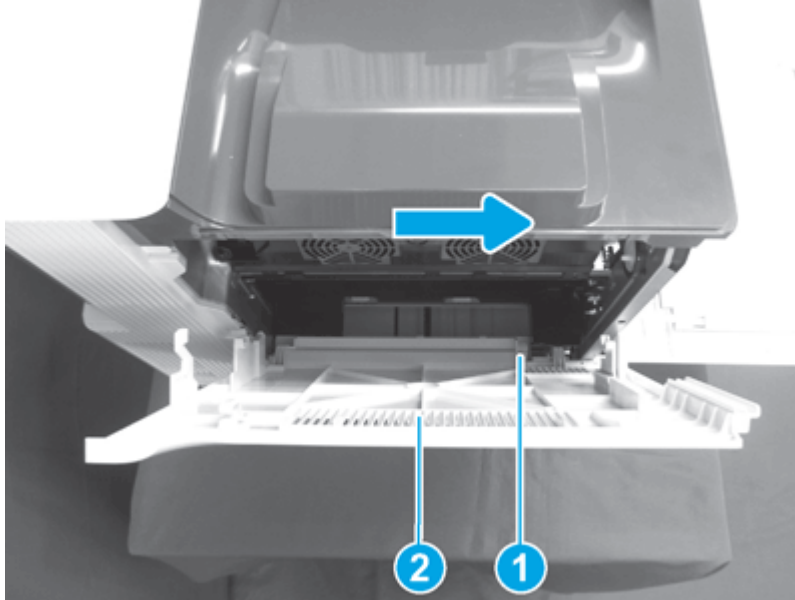
 **NOTE:** Make sure that the front door is not blocking the left door at the lower corner.

Figure 5-996 Remove the left door

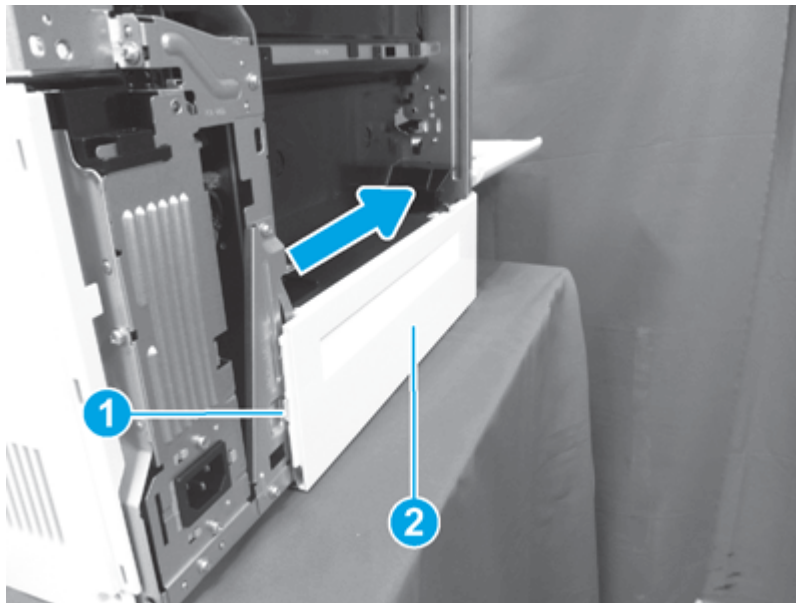


4. Remove the left handle

Follow these steps to remove the left handle.

- Release one tab (callout 1), and then gently lift the left side of the handle away from the sheet metal. Slide the left handle (callout 2) toward the front of the printer to remove it.

Figure 5-997 Remove the left handle

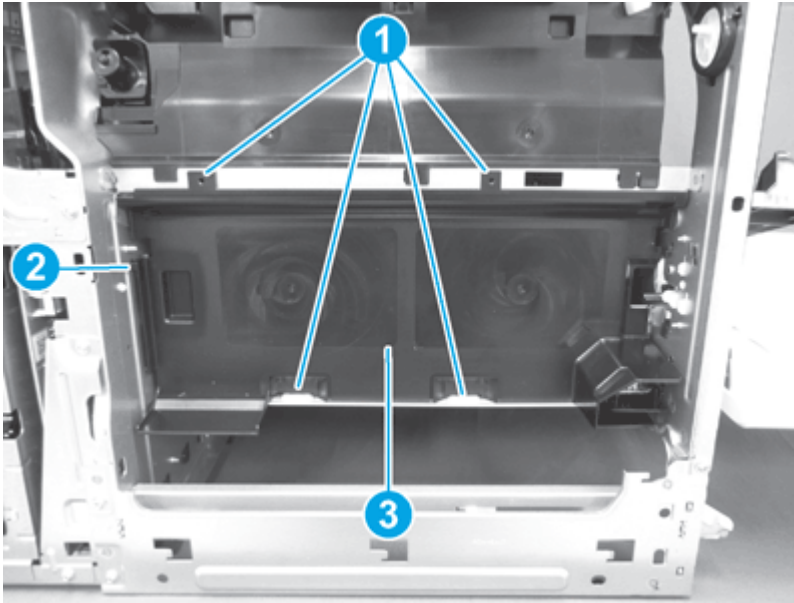


5. Remove the environmental sensor PCA

Follow these steps to remove the environmental sensor PCA.

1. Release four tabs (callout 1). Release one boss (callout 2), pivot the left side of the cover away from the printer, and then remove the scanner cover (callout 3).

Figure 5-998 Remove the scanner cover



2. Release the environmental sensor (callout 1) from the printer, and then disconnect one connector (callout 2).


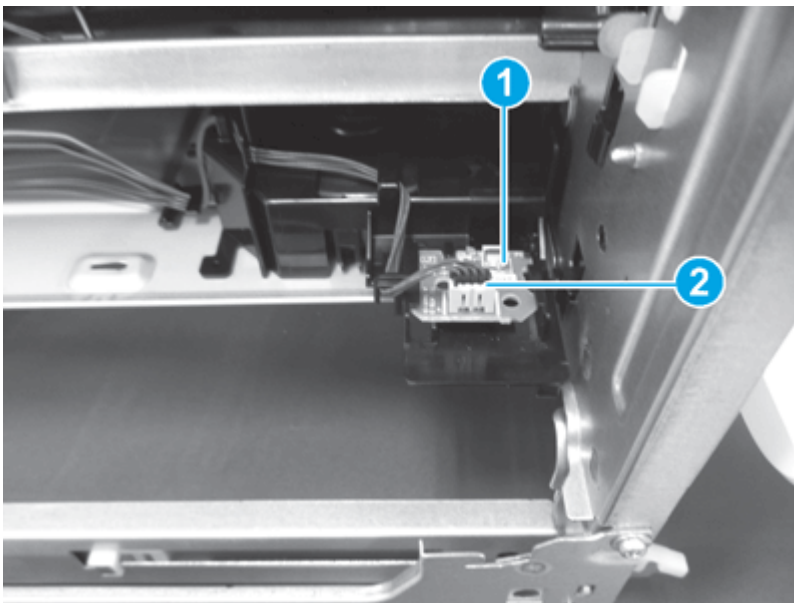
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-999 Remove the environmental sensor



6. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

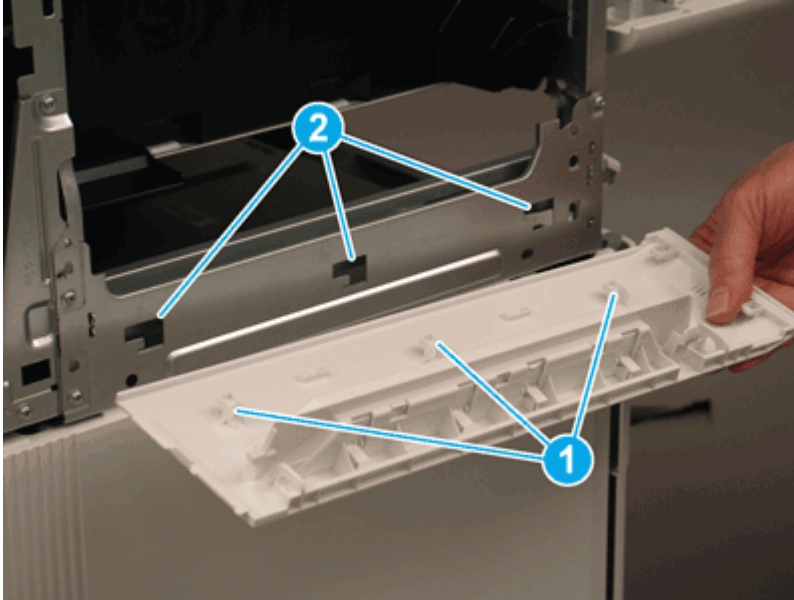
7. Reverse the removal steps to install the assembly

Also use the following **special installation instructions**.

Left handle

- When reinstalling the left handle, install the hooks (callout 1) on the handle in the slots (callout 2) in the printer. Align the right-most hook first to ensure all the hooks are aligned, and then slide the handle to the left to lock it into position.

Figure 5-1000 Install the left handle



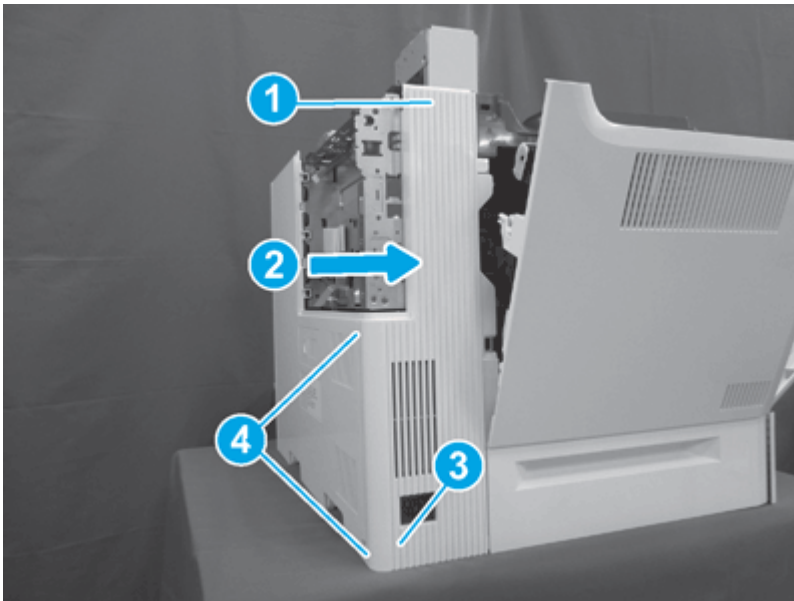
Left rear cover



NOTE: Continue to reverse the removal steps to finish installing the assembly.

- Position the top of the cover (callout 1) first, and then slide the cover to the right (callout 2). Push the left lower corner (callout 3) toward the rear of the printer to engage two tabs (callout 4) in the slots on the rear cover.

Figure 5-1001 Install the left rear cover



NOTE: Continue to reverse the removal steps to finish installing the assembly.

Removal and replacement: Cartridge fan

Learn how to remove and replace the cartridge fan.



[View a video of how to remove and replace the toner carry assembly.](#)

Mean time to repair: 15 minutes

Service level: Intermediate



IMPORTANT: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Disconnect the power cable.



WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-61 Part information

Part number	Part description
RK2-6124-000CN	Cartridge fan

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Make sure that the printer initializes to a **Ready** state.

Print a configuration page to make sure that the printer is functioning correctly.

1. Remove the TCU

Follow these steps to remove the TCU.



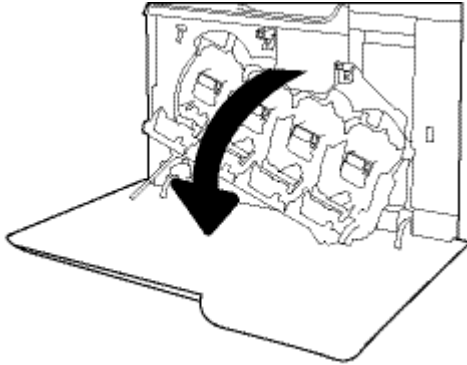
CAUTION: If toner gets on clothing, wipe it off by using a dry cloth and wash the clothes in cold water. Hot water sets toner into fabric.



NOTE: The toner collection unit is designed for a single use. Do not attempt to empty the toner collection unit and reuse it. Doing so could lead to toner being spilled inside the printer, which could result in reduced print quality. After use, return the toner collection unit to HP's Planet Partners program for recycling.

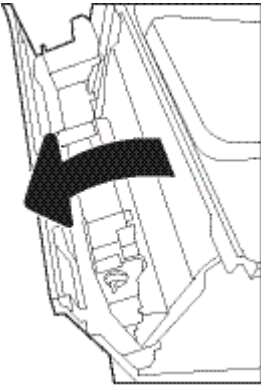
1. Open the front door.

Figure 5-1002 Open the front door



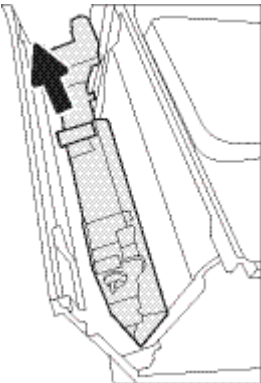
2. Open the left door.

Figure 5-1003 Open the left door



3. Grasp the top of the TCU and remove it from the printer.

Figure 5-1004 Remove the TCU

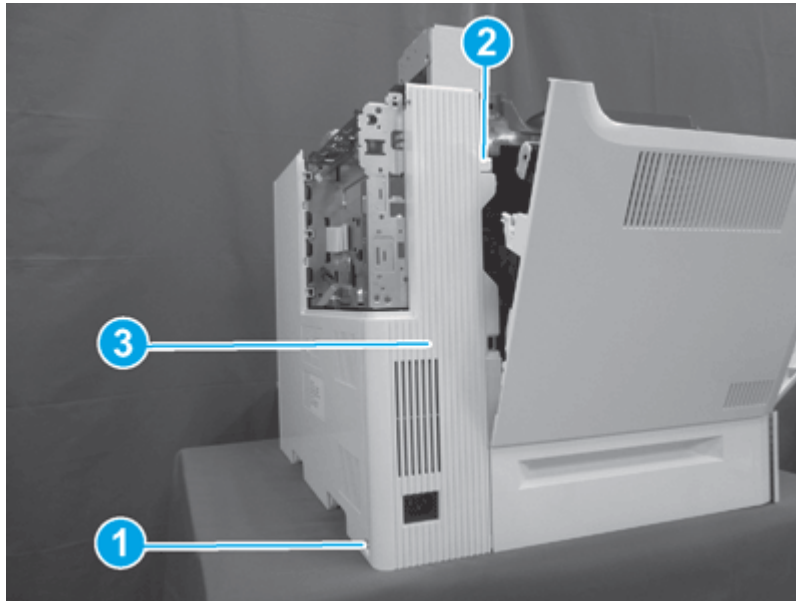


2. Remove the left rear cover

Follow these steps to remove the left rear cover.

- Open the left door. Remove one screw (callout 1), release one boss (callout 2), and then remove the left rear cover (callout 3).

Figure 5-1005 Remove the left rear cover



3. Remove the left door

Follow these steps to remove the left door.

1. Open front door.

Figure 5-1006 Open front door



2. Press on the tab (callout 1) while sliding the left door (callout 2) to the right to remove it.


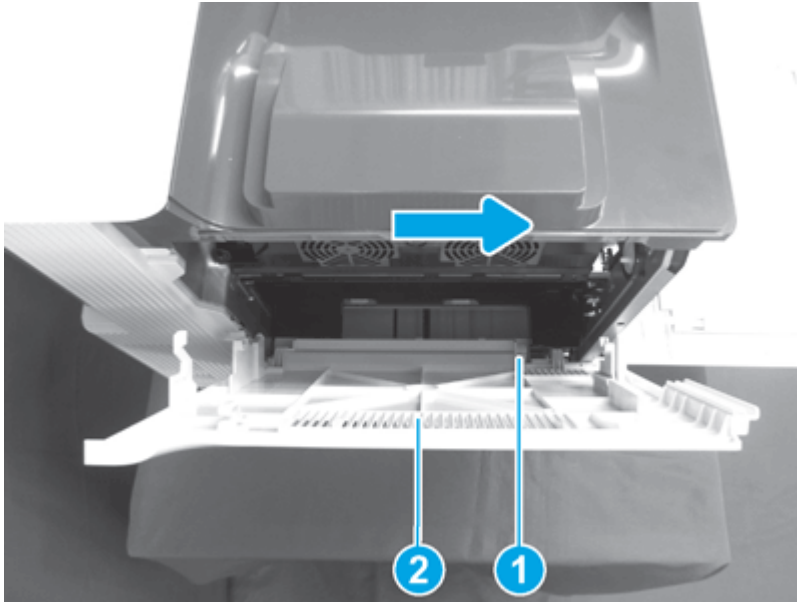
 **NOTE:** Make sure that the front door is not blocking the left door at the lower corner.

Figure 5-1007 Remove the left door

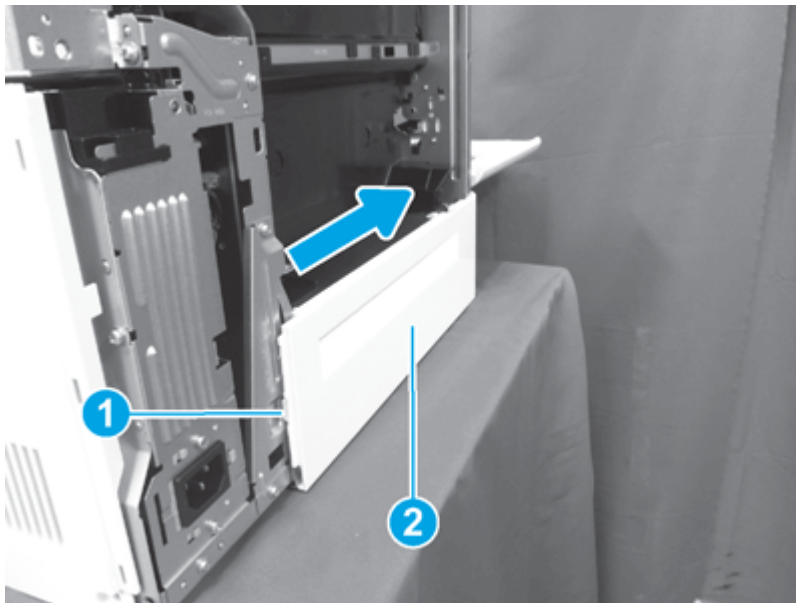


4. Remove the left handle

Follow these steps to remove the left handle.

- Release one tab (callout 1), and then gently lift the left side of the handle away from the sheet metal. Slide the left handle (callout 2) toward the front of the printer to remove it.

Figure 5-1008 Remove the left handle

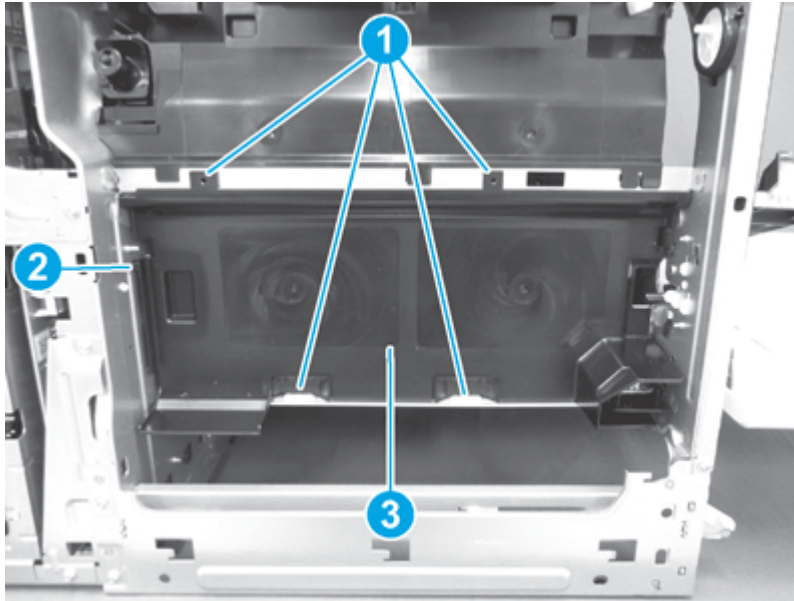


5. Remove the cartridge fan

Follow these steps to remove the cartridge fan.

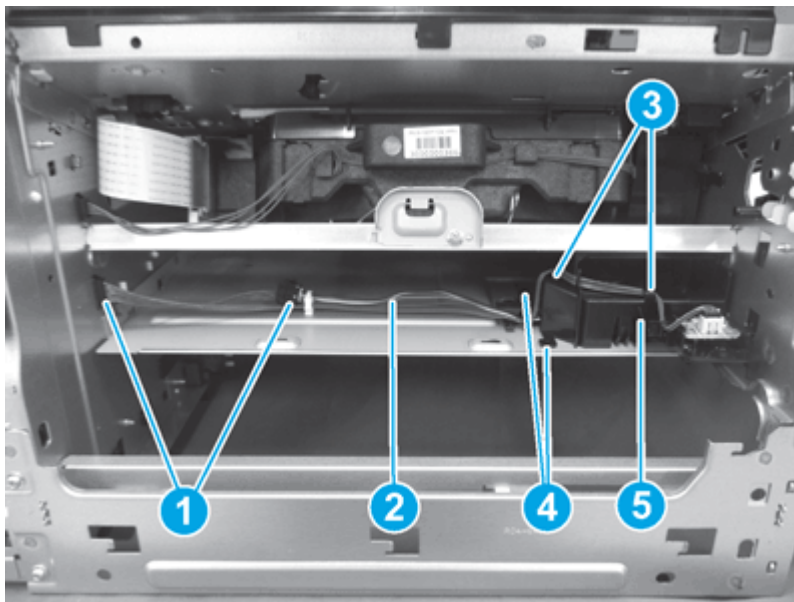
1. Release four tabs (callout 1). Release one boss (callout 2), pivot the left side of the cover away from the printer, and then remove the scanner cover (callout 3).

Figure 5-1009 Remove the scanner cover




2. Disconnect two connectors (callout 1), and then release the cable (callout 2) from the cable guide (callout 3). Release two bosses (callout 4), and then slide the fan holder (callout 5) towards the front of the printer to release tension on the holder. Slide the fan holder towards the left side of the printer to remove it.

Figure 5-1010 Remove the fan holder



3. Release three tabs (callout 1), and then remove the cartridge fan (callout 2) from the fan holder (callout 3).

 **TIP:** Insert a finger between the fan and the housing and push from the back side to pop the fan out of the housing.


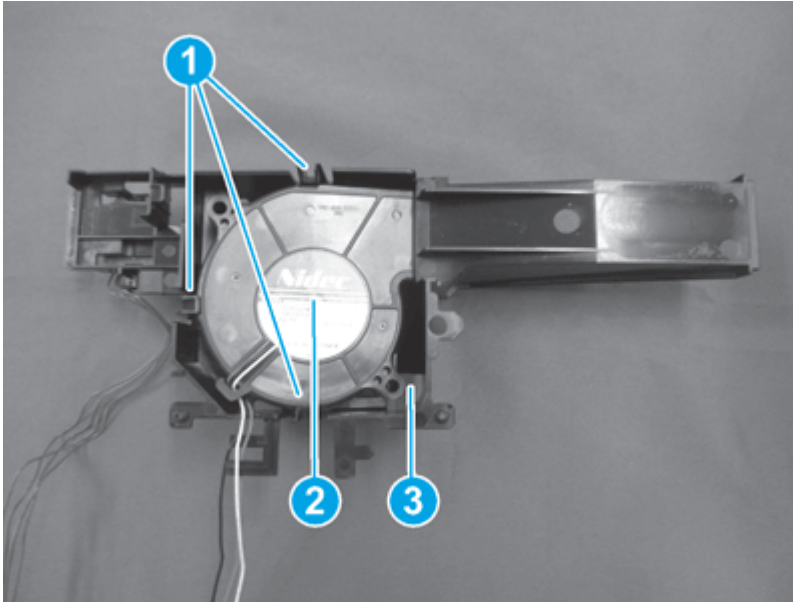
 **TIP:** If you are replacing the fan and holder, remove the environmental PCA and install it on the replacement part.


Figure 5-1011 Remove the cartridge fan from the holder



6. Unpack the replacement assembly



Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.


 **NOTE:** HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>


2. Unpack the replacement part from the packaging.

 **CAUTION:**  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

 **IMPORTANT:** Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

 **NOTE:** If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

 **NOTE:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

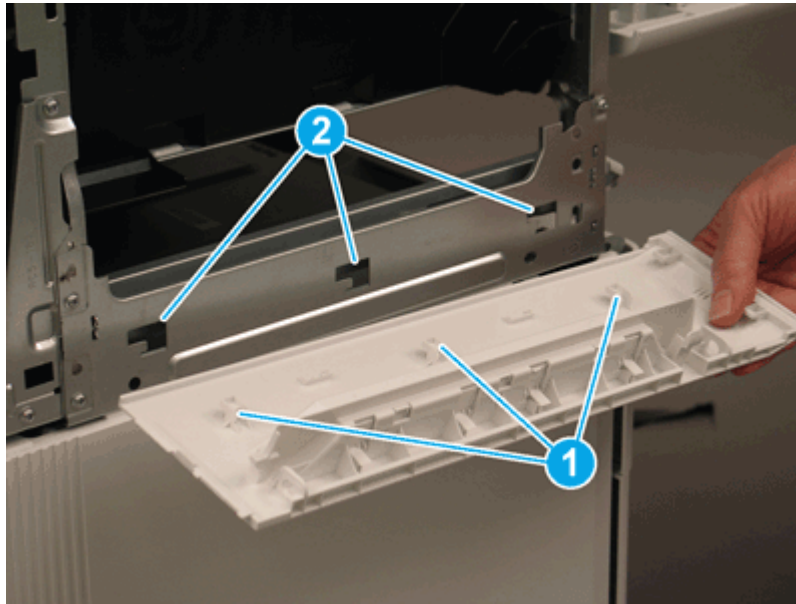
7. Reverse the removal steps to install the assembly

Also use the following **special installation instructions**.

Left handle

- When reinstalling the left handle, install the hooks (callout 1) on the handle in the slots (callout 2) in the printer. Align the right-most hook first to ensure all the hooks are aligned, and then slide the handle to the left to lock it into position.

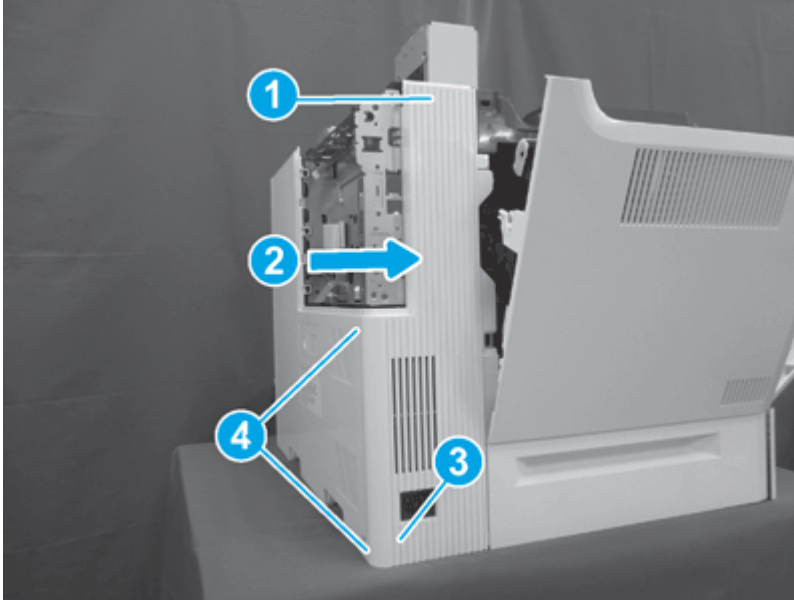
Figure 5-1012 Install the left handle



Left rear cover

- Position the top of the cover (callout 1) first, and then slide the cover to the right (callout 2). Push the left lower corner (callout 3) toward the rear of the printer to engage two tabs (callout 4) in the slots on the rear cover.

Figure 5-1013 Install the left rear cover




 **NOTE:** Continue to reverse the removal steps to finish installing the assembly.

Removal and replacement: Front fan

Learn how to remove and replace the front fan.


Mean time to repair: 20 minutes

Service level: Advanced

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Disconnect the power cable.

 **WARNING!** To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-62 Part information

Part number	Part description
RK2-6124-000CN	Front fan

Required tools

- #2 Phillips screwdriver with a magnetic tip

- Small, flat-blade screwdriver

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test


Make sure that the printer initializes to a **Ready** state.

Print a configuration page to make sure that the printer is functioning correctly.

1. Remove the front door

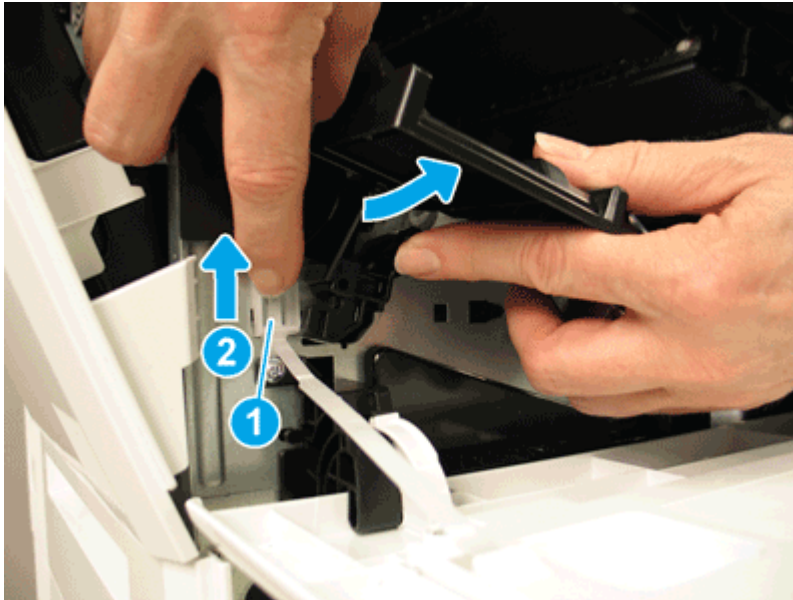
Follow these steps to remove the front door.

1. Remove Tray 2.
2. Open the following doors:

 **TIP:** The left door must be closed first in order to close the front door.

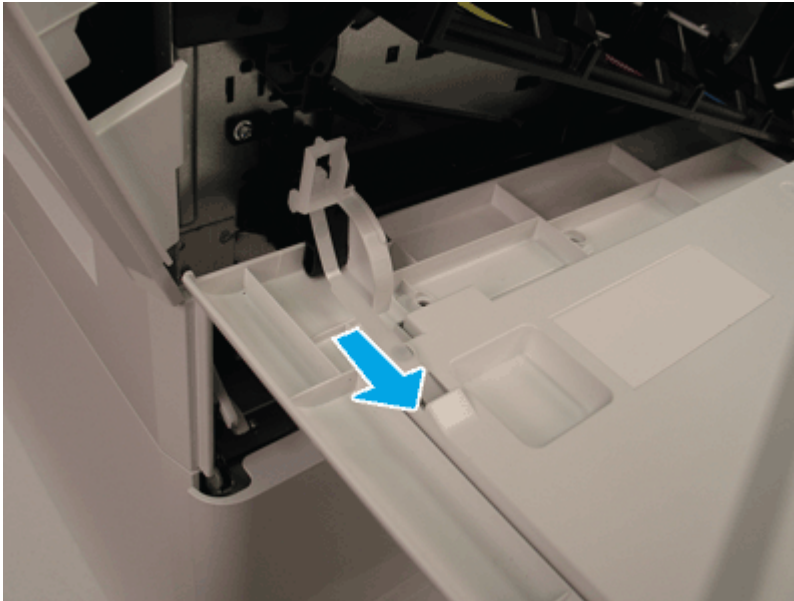
- Front door
 - Left door
3. Hold the black shutter to one side, release one tab (callout 1), and then slide the link arm (callout 2) up to release it from the sheet metal.

Figure 5-1014 Release the link arm



4. Slide the released link arm into the door.

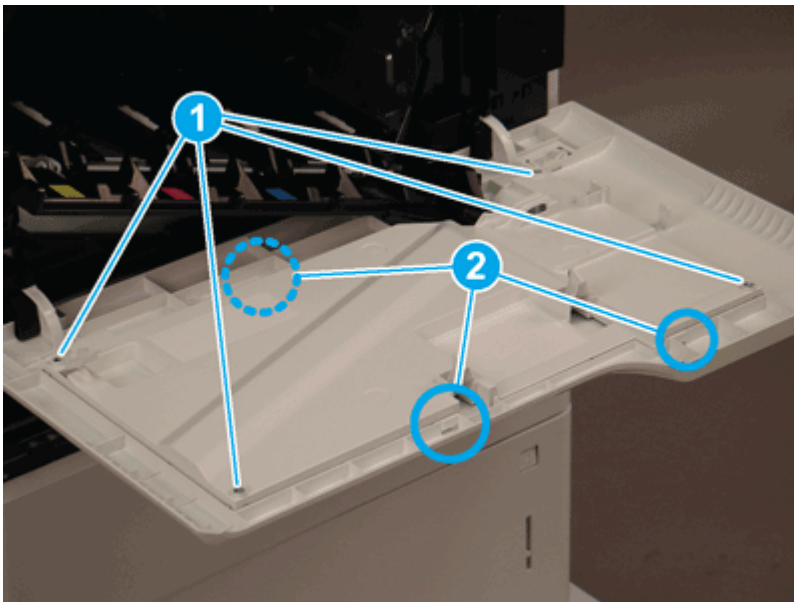
Figure 5-1015 Slide the released link arm into the door



5. Remove four screws (callout 1), release three tabs (callout 2), and then remove the inner cover.

⚠ CAUTION: Use care when removing the inner cover. The black cartridge door is spring-loaded and may close abruptly when released from the inner cover.

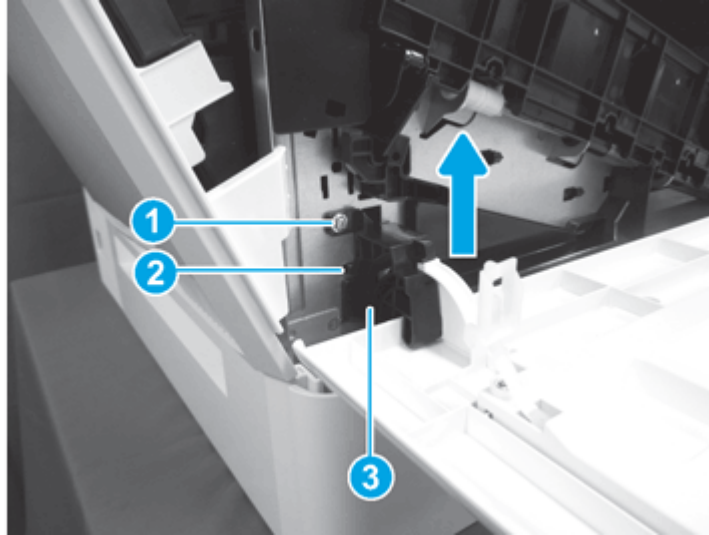
Figure 5-1016 Remove the inner cover




6. Remove one screw (callout 1), and then release one boss (callout 2). Slide the hinge (callout 3) up to release it.

💡 TIP: Use a flat-blade screwdriver to release the boss, and then lift upwards on the corner of the door.

Figure 5-1017 Release the hinge



7. Slide the front door (callout 1) to the right to remove it.

 **NOTE:** Remove the hinge (callout 2) and the link arm (callout 3) from the front door and install them on the replacement front door.


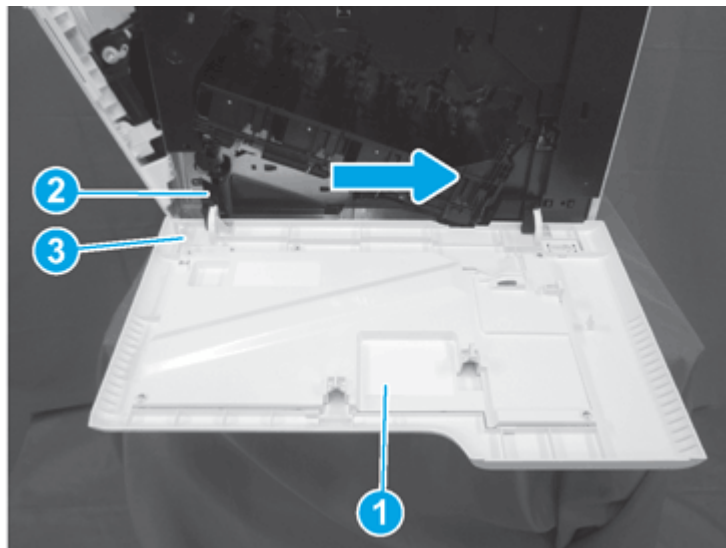
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1018 Remove the front door



2. Remove the front inner covers

Follow these steps to remove the front inner covers.

1. Open the following doors:
 - Right door
 - Left door

2. Release four tabs (callout 1).


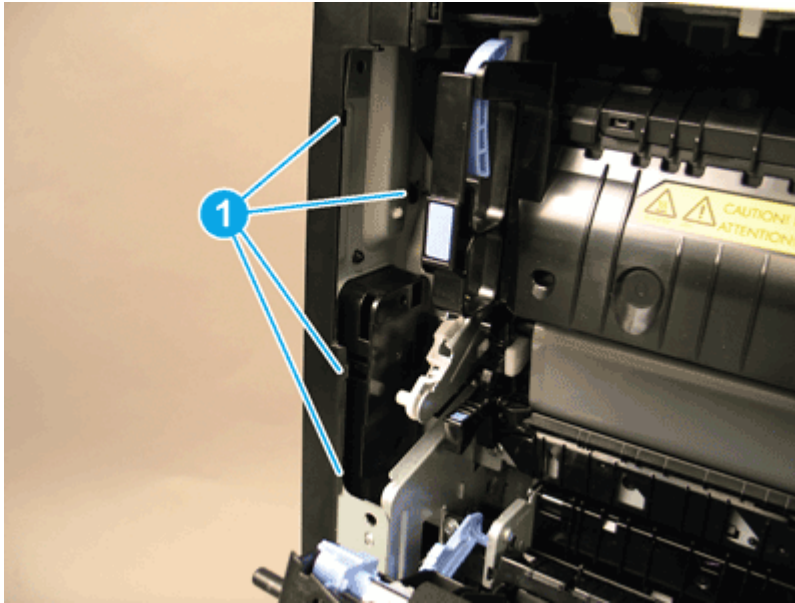

 **TIP:** Small, embossed arrows on the front of the cover indicate where the release tabs may be found.

Figure 5-1019 Release four tabs

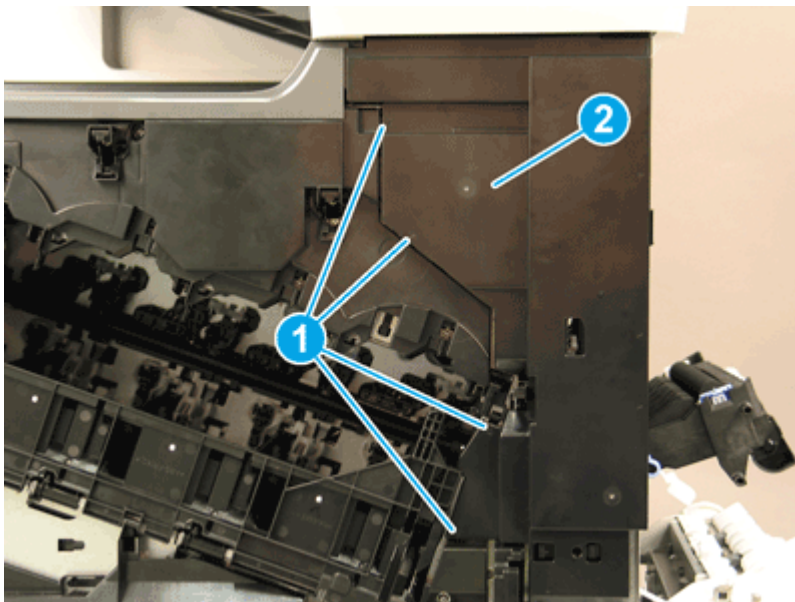


3. Release four bosses (callout 1), and then remove the front right inner cover (callout 2).

 **TIP:** Small, embossed arrows on the front of the cover indicate where the release tabs may be found.

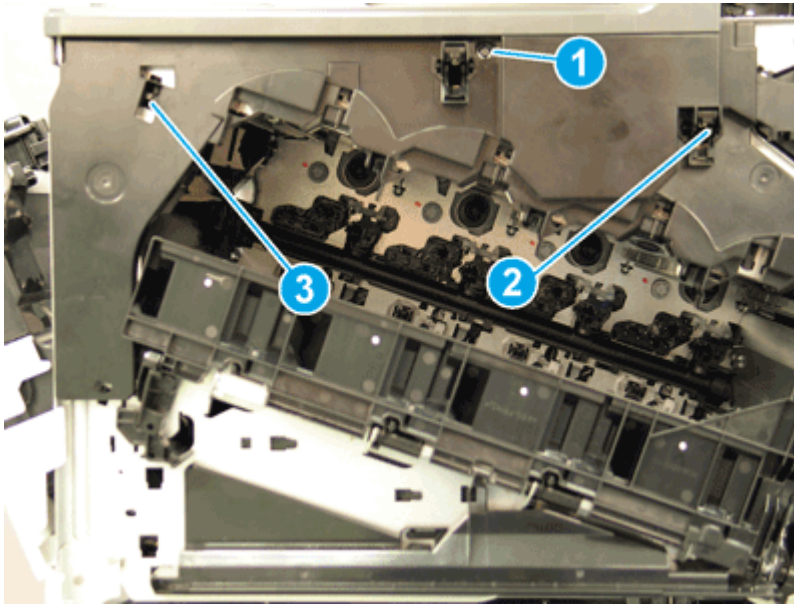
Push on the back side of the cover for easy release.

Figure 5-1020 Remove the front right inner cover



4. Remove one screw (callout 1). Carefully pull the right side of the cover down and away from the printer to release one boss (callout 2). Continue to pull the cover away from the sheet metal to release the second boss (callout 3), and then remove the cover.

Figure 5-1021 Remove the front inner cover

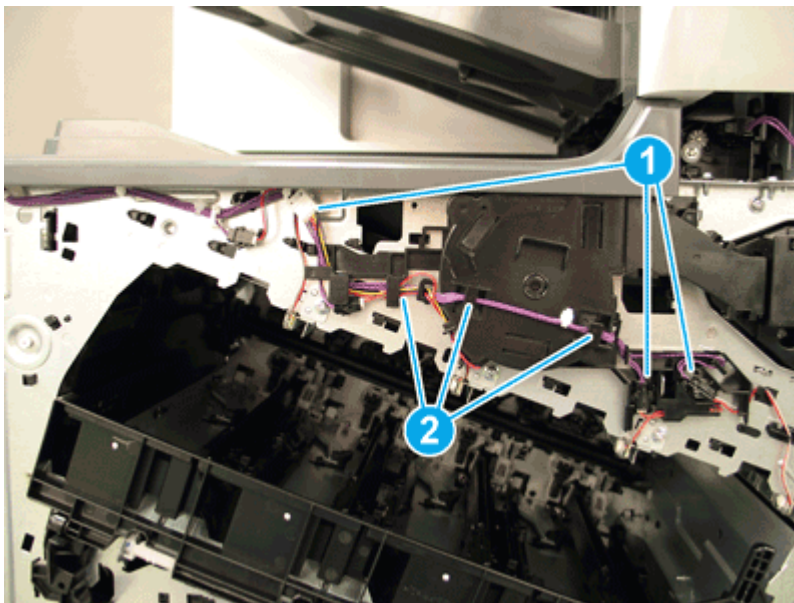


3. Remove the front fan

Follow these steps to remove the front fan.

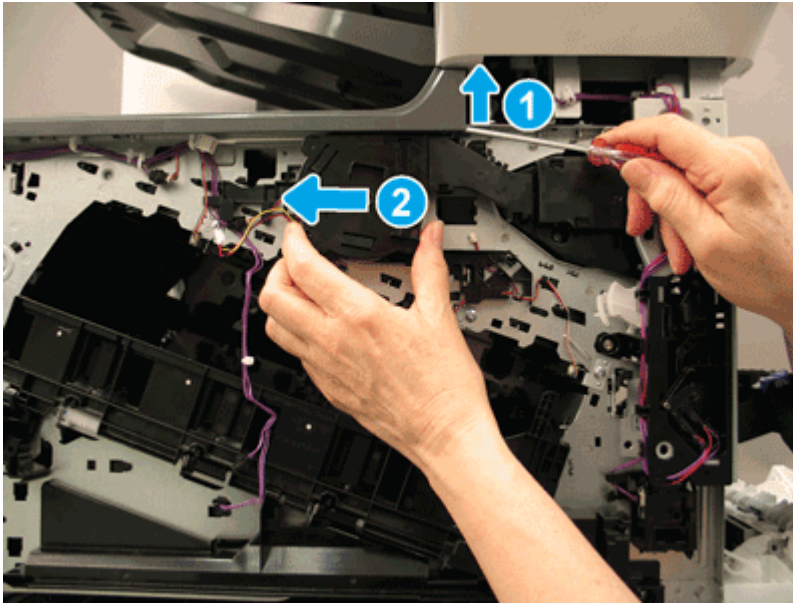
1. Disconnect three connectors (callout 1), and then release the cable from the cable guides (callout 2).

Figure 5-1022 Disconnect three connectors and release cables



2. Insert a small, flat-blade screwdriver between the fan holder and the sheet metal (callout 1) to release the fan holder. Slide the fan holder to the left (callout 2) to remove it.

Figure 5-1023 Remove the fan holder



3. Remove the front fan (callout 1) from the fan holder (callout 2).


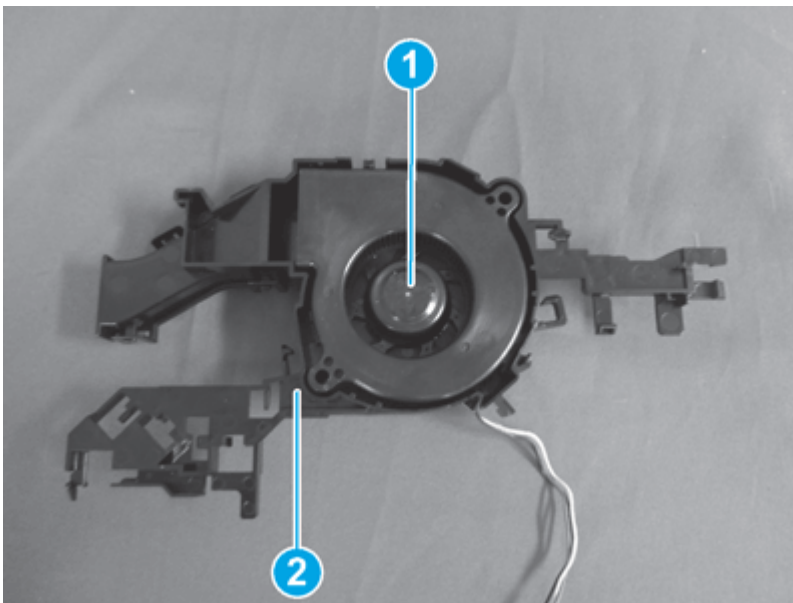
 **TIP:** Make sure that the cables are routed correctly to avoid pinching. Refer to the figure in Step 5 for correct cable routing.

Figure 5-1024 Remove the front fan



4. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

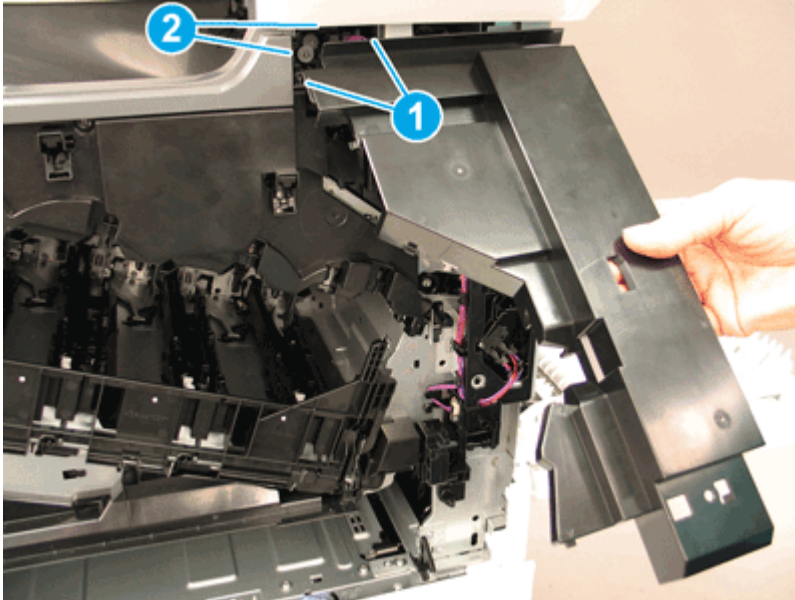
5. Reverse the removal steps to install the assembly

Also use the following **special installation instructions**.

Front inner cover

- When reinstalling the front right inner cover, position the upper left edges of the cover (callout 1) under the edges of the printer covers (callout 2).

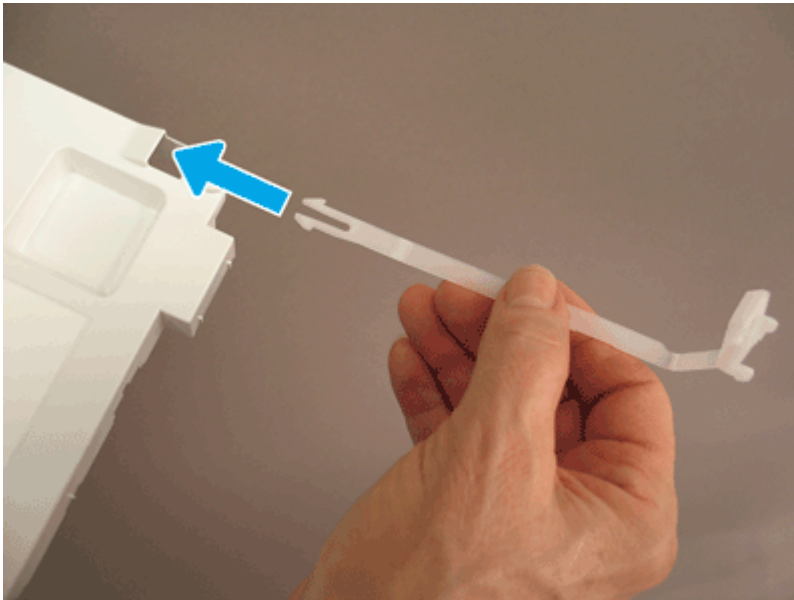
Figure 5-1025 Install the front right inner cover



Front door

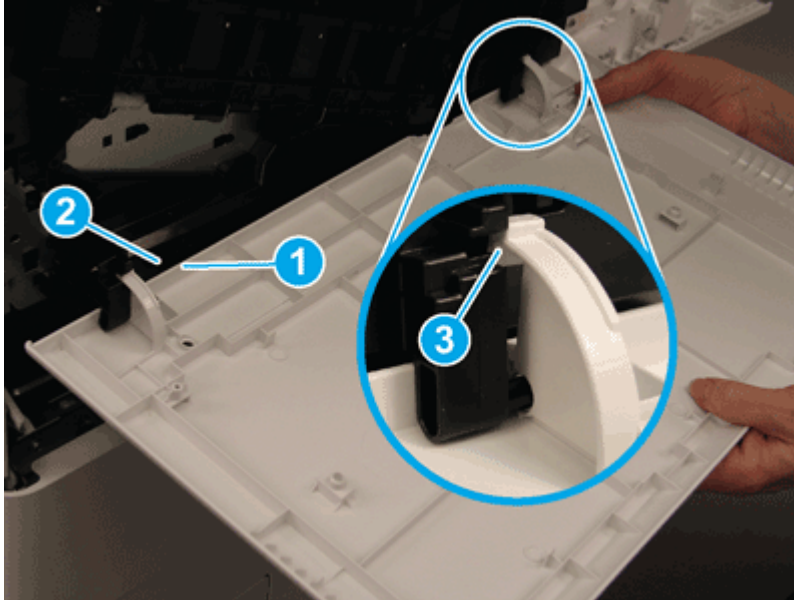
1. If the link arm becomes dislodged from the inner cover, reinstall it as shown in the figure below.

Figure 5-1026 Reinstall the link arm



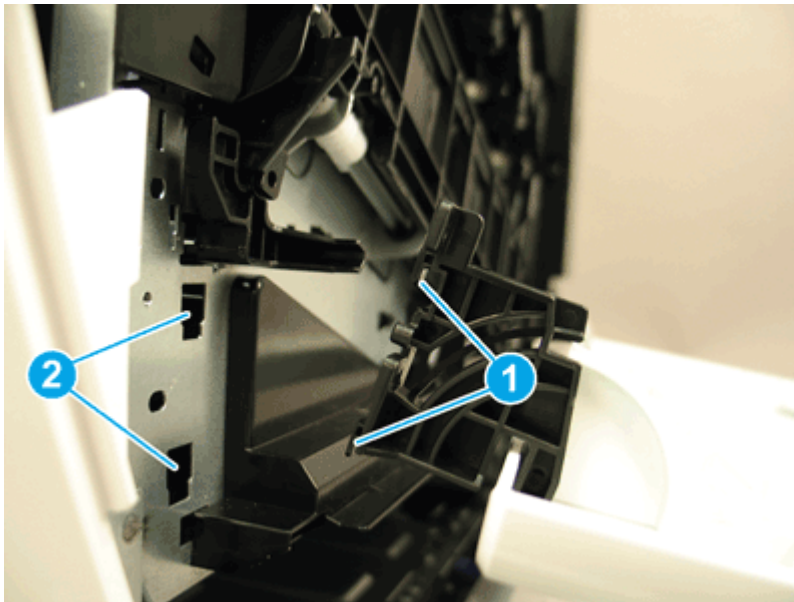
2. Install the right side of the door first. Position the edge of the door (callout 1) over the black lip (callout 2), and then slide the right hinge into the black arm (callout 3).


Figure 5-1027 Install the right hinge



3. When reinstalling the left hinge, install the tabs (callout 1) on the hinge in the slots (callout 2) in the printer. Press down to lock the hinge in place.

Figure 5-1028 Install the left hinge



 **NOTE:** Continue to reverse the removal steps to finish installing the assembly.

Removal and replacement: Power supply fan

This document provides the procedures to remove and replace the power supply fan.

 [View a video of how to remove and replace the power supply fan.](#)

Mean time to repair: 20 minutes

Service level: Advanced



IMPORTANT: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Disconnect the power cable.

⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-63 Part Information

Part number	Part description
RK2-7953-000CN	Power supply fan

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Make sure that the printer initializes to a **Ready** state.

Print a configuration page to make sure that the printer is functioning correctly.

1. Remove the formatter cover

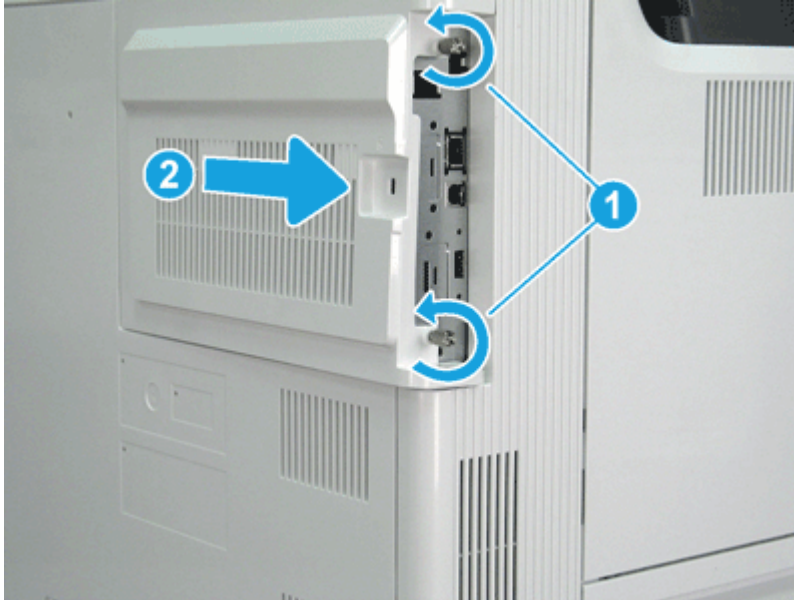
Follow these steps to remove the formatter cover.

- Unscrew two thumbscrews (callout 1), and then slide the formatter cover (callout 2) away from the printer to remove it.



TIP: Reverse the removal steps to install the assembly.

Figure 5-1029 Remove the formatter cover

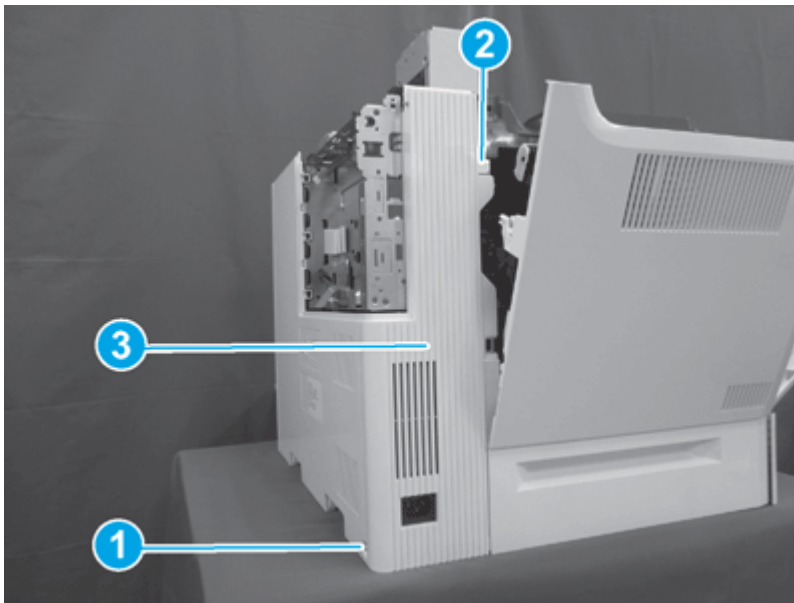


2. Remove the left rear cover

Follow these steps to remove the left rear cover.

- Open the left door. Remove one screw (callout 1), release one boss (callout 2), and then remove the left rear cover (callout 3).

Figure 5-1030 Remove the left rear cover



3. Remove the rear cover

Follow these steps to remove the rear cover.

- Remove two screws (callout 1), and then slide the rear cover (callout 2) to the right to remove it.


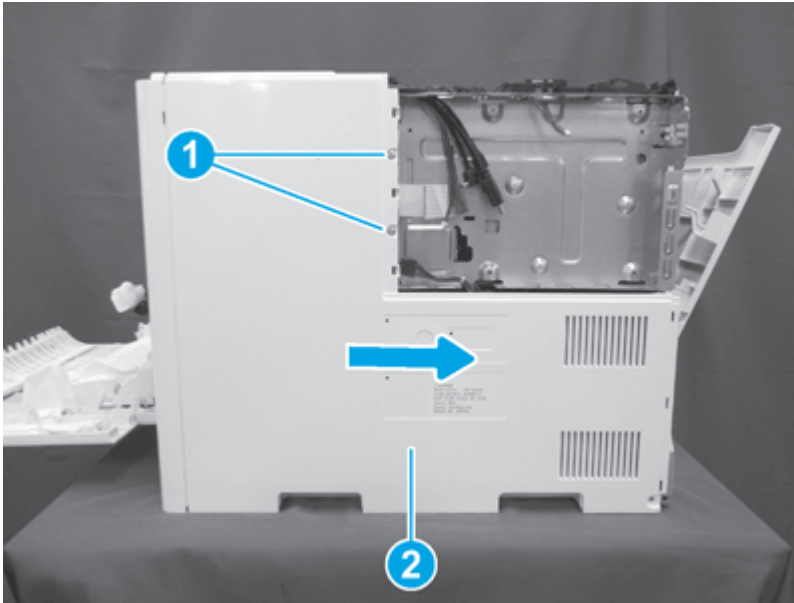
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1031 Remove two screws and the rear cover

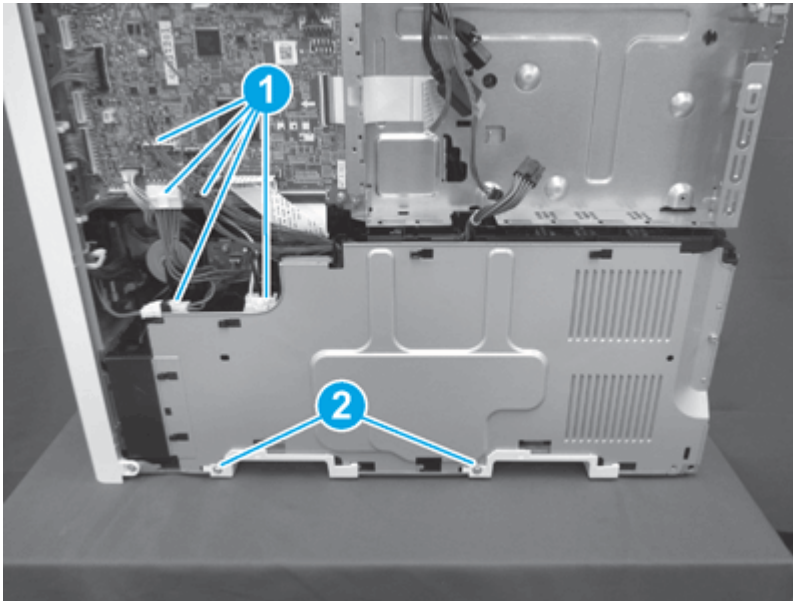


4. Remove the low-voltage power supply (LVPS) and fan

Follow these steps to remove the low-voltage power supply (LVPS) and fan.

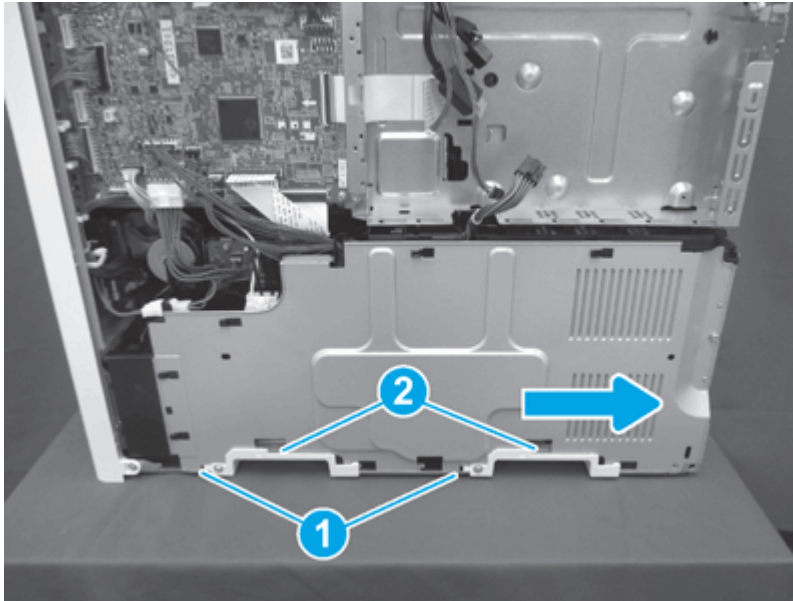
1. Disconnect five connectors (callout 1), and then remove two screws (callout 2).

Figure 5-1032 Disconnect five connectors and remove two screws



2. Release two tabs (callout 1), and then slide two handles (callout 2) to the right to remove them.

Figure 5-1033 Remove two handles



3. Remove two screws (callout 1). Remove the low-voltage power supply (callout 2) together with the power supply fan (callout 3) and the low-voltage power supply cover (callout 4).


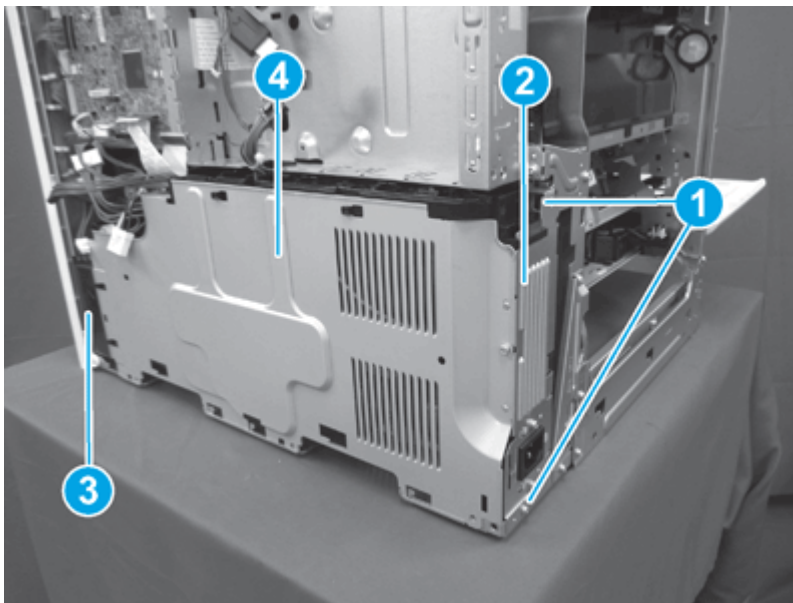
 **NOTE:** The upper screw is recessed inside the printer just above the upper right corner of the LVPS. The lower screw is located between the locator pins at the bottom of the assembly.

Figure 5-1034 Remove the low-voltage power supply

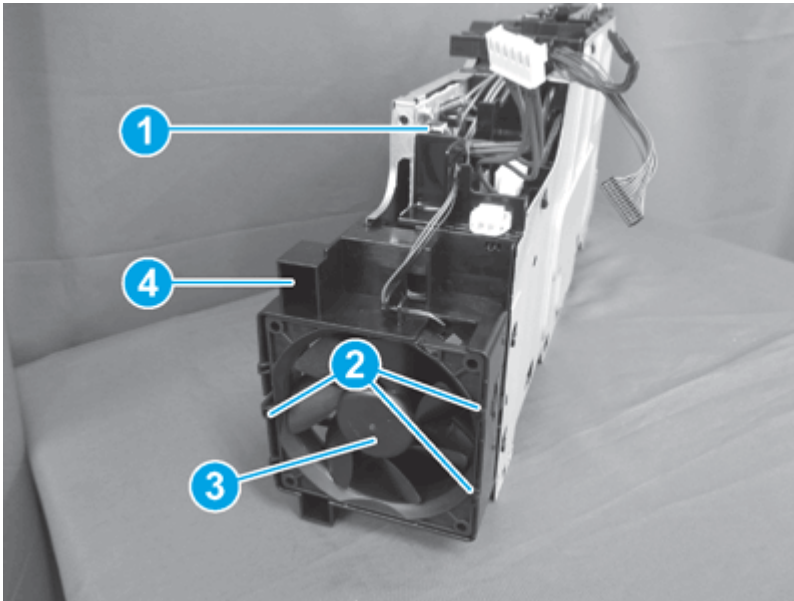


5. Remove the power supply fan

Follow these steps to remove the power supply fan.

- Disconnect one connector (callout 1), release three tabs (callout 2), and then remove the power supply fan (callout 3) from the fan holder (callout 4).

Figure 5-1035 Remove the power supply fan



6. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

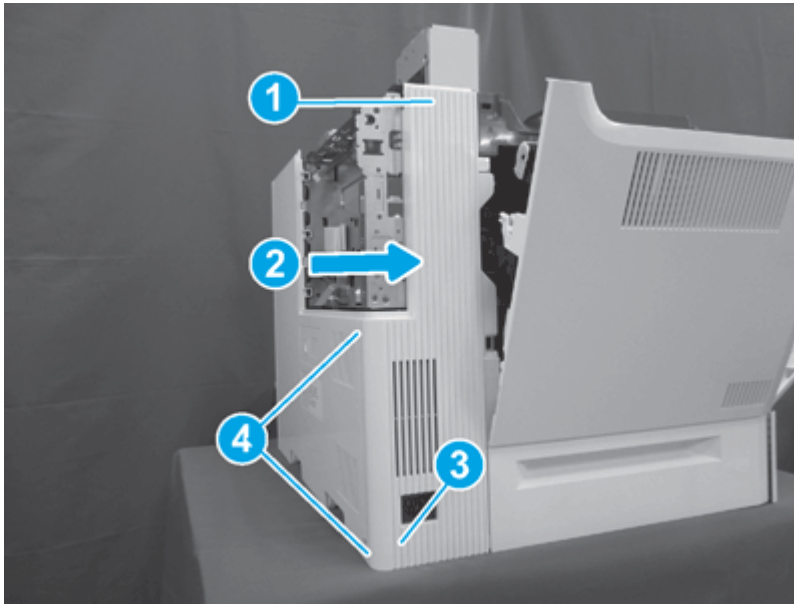
7. Reverse the removal steps to install the assembly

Also use the following **special installation instructions**.

Left rear cover

- Position the top of the cover (callout 1) first, and then slide the cover to the right (callout 2). Push the left lower corner (callout 3) toward the rear of the printer to engage two tabs (callout 4) in the slots on the rear cover.

Figure 5-1036 Install the left rear cover



 **NOTE:** Continue to reverse the removal steps to finish installing the assembly.


Removal and replacement: DC controller PCA

Learn how to remove and replace the DC controller PCA.

 [View a video of how to remove and replace the DC controller PCA.](#)


Mean time to repair: 20 minutes

Service level: Advanced

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Disconnect the power cable.

 **WARNING!** To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-64 Part information

Part number	Part description
RM3-7030-000CN	DC controller PCA (M652/M653)
RM3-7031-000CN	DC controller PCA (M681/M682)
RM3-7603-000CN	DC controller PCA (E65150/E65160)
RM3-7606-000CN	DC controller PCA (E67650/E67660)

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Make sure that the printer initializes to a **Ready** state.

Print a configuration page to make sure that the printer is functioning correctly.

1. Remove the formatter cover

Follow these steps to remove the formatter cover.

- Unscrew two thumbscrews (callout 1), and then slide the formatter cover (callout 2) away from the printer to remove it.


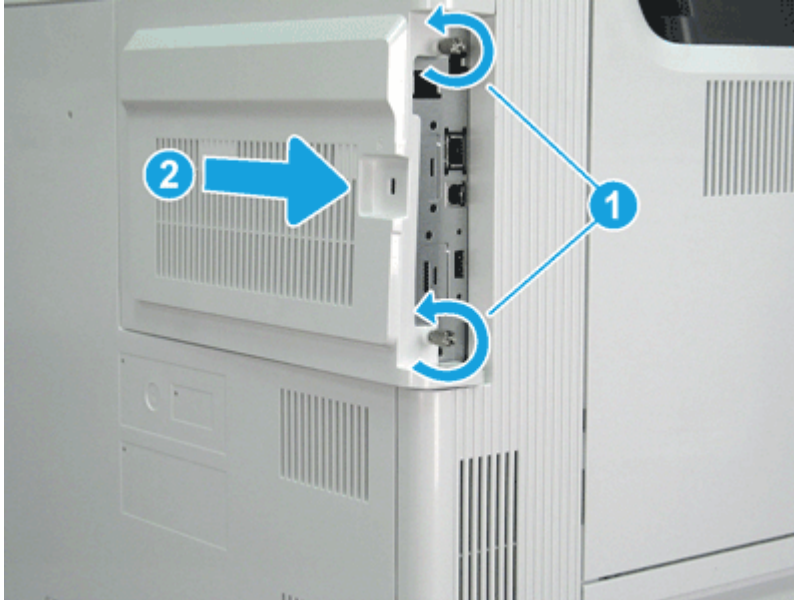
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1037 Remove the formatter cover

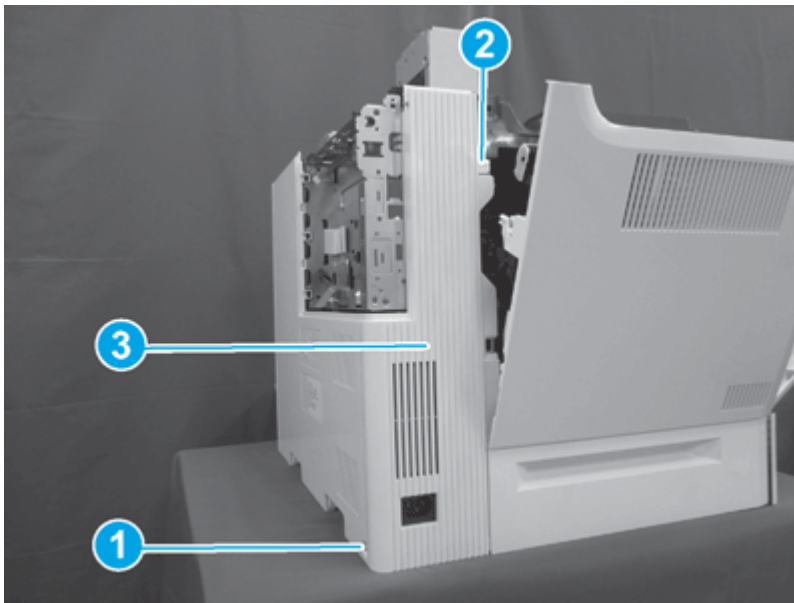


2. Remove the left rear cover

Follow these steps to remove the left rear cover.

- Open the left door. Remove one screw (callout 1), release one boss (callout 2), and then remove the left rear cover (callout 3).

Figure 5-1038 Remove the left rear cover



3. Remove the rear cover

Follow these steps to remove the rear cover.

- Remove two screws (callout 1), and then slide the rear cover (callout 2) to the right to remove it.


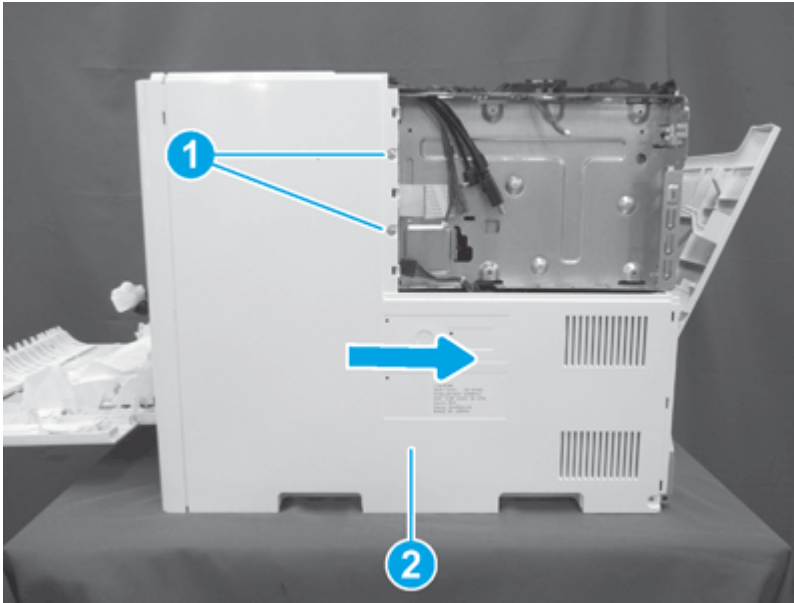
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1039 Remove two screws and the rear cover

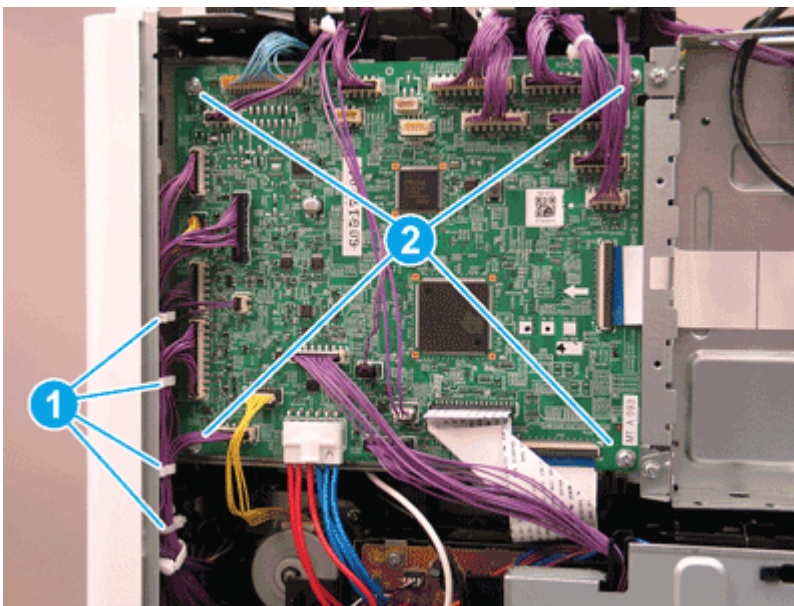


4. Remove the DC controller PCA

Follow these steps to remove the DC controller PCA.

- Release four retainers (callout 1), and then disconnect all connectors on the DC controller PCA. Remove four screws (callout 2), and then remove the DC controller PCA.

Figure 5-1040 Remove the DC controller PCA



5. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

6. Reverse the removal steps to install the assembly

Also use the following **special installation instructions**.

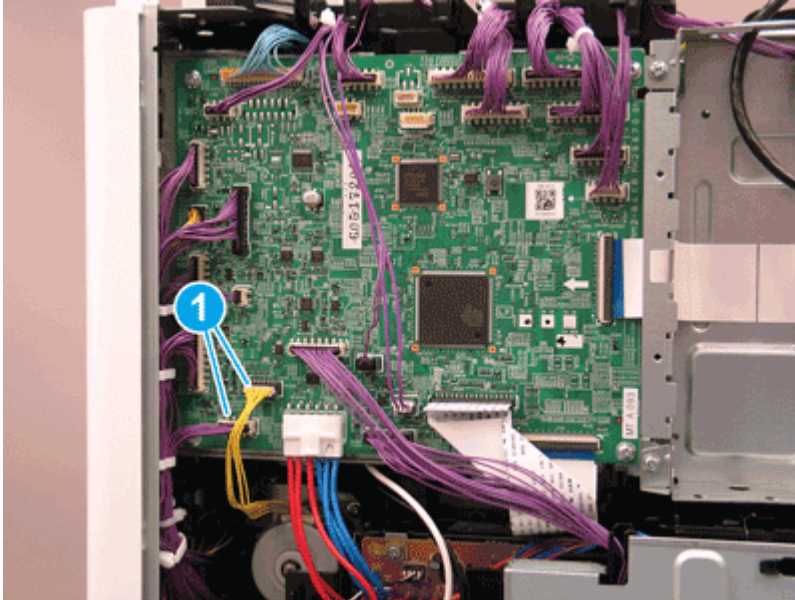
DC controller

- Two cables (callout 1) will fit in more than one connector. Make sure that these cables are installed in the correct connectors.



NOTE: Continue to reverse the removal steps to finish installing the assembly.

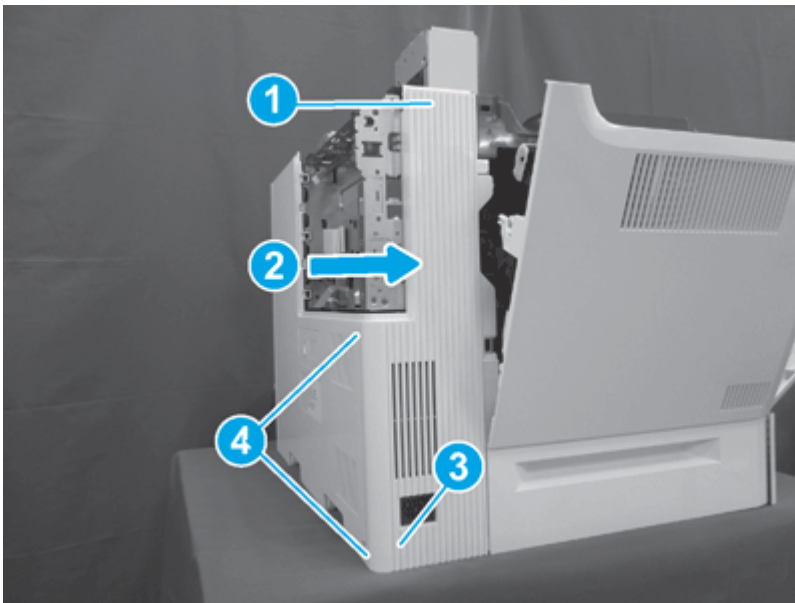
Figure 5-1041 Check the yellow cable




Left rear cover

- Position the top of the cover (callout 1) first, and then slide the cover to the right (callout 2). Push the left lower corner (callout 3) toward the rear of the printer to engage two tabs (callout 4) in the slots on the rear cover.

Figure 5-1042 Install the left rear cover




 **NOTE:** Continue to reverse the removal steps to finish installing the assembly.

Removal and replacement: Low-voltage power supply (LVPS)

Learn how to remove and replace the low-voltage power supply (LVPS).


Mean time to repair: 20 minutes

Service level: Advanced

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Disconnect the power cable.

 **WARNING!** To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-65 Part information

Part number	part description
RM2-8421-000CN	Low-voltage power supply (110V-127V)
RM2-8422-000CN	Low-voltage power supply (220V-240V)

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Make sure that the printer initializes to a **Ready** state.

Print a configuration page to make sure that the printer is functioning correctly.

1. Remove the formatter cover

Follow these steps to remove the formatter cover.

- Unscrew two thumbscrews (callout 1), and then slide the formatter cover (callout 2) away from the printer to remove it.


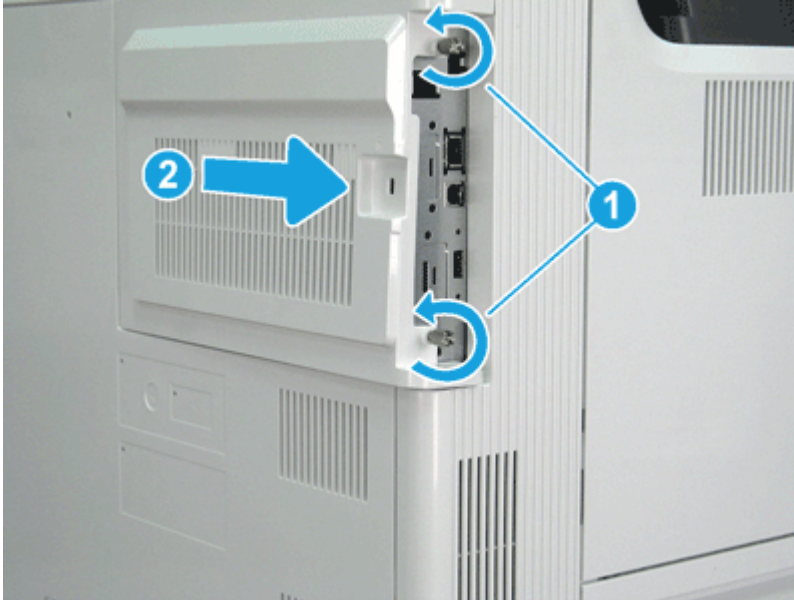
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1043 Remove the formatter cover

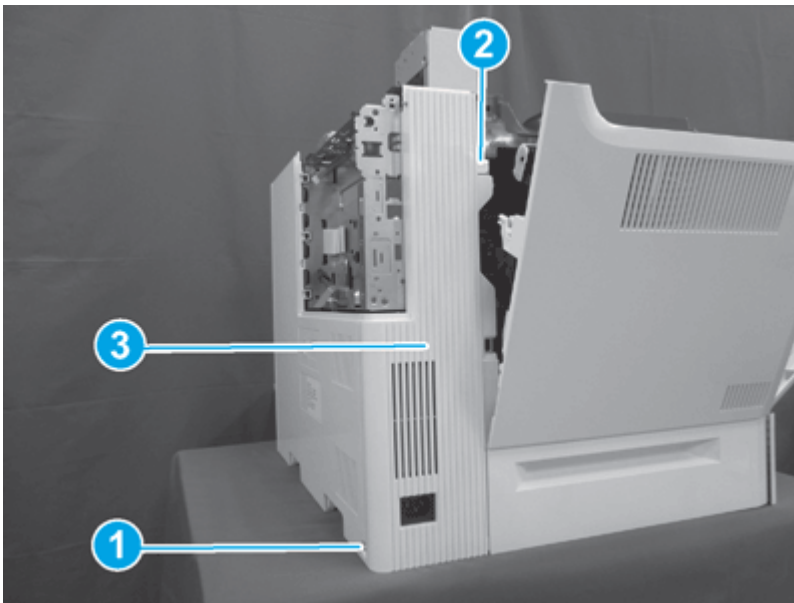


2. Remove the left rear cover

Follow these steps to remove the left rear cover.

- Open the left door. Remove one screw (callout 1), release one boss (callout 2), and then remove the left rear cover (callout 3).

Figure 5-1044 Remove the left rear cover



3. Remove the rear cover

Follow these steps to remove the rear cover.

- Remove two screws (callout 1), and then slide the rear cover (callout 2) to the right to remove it.


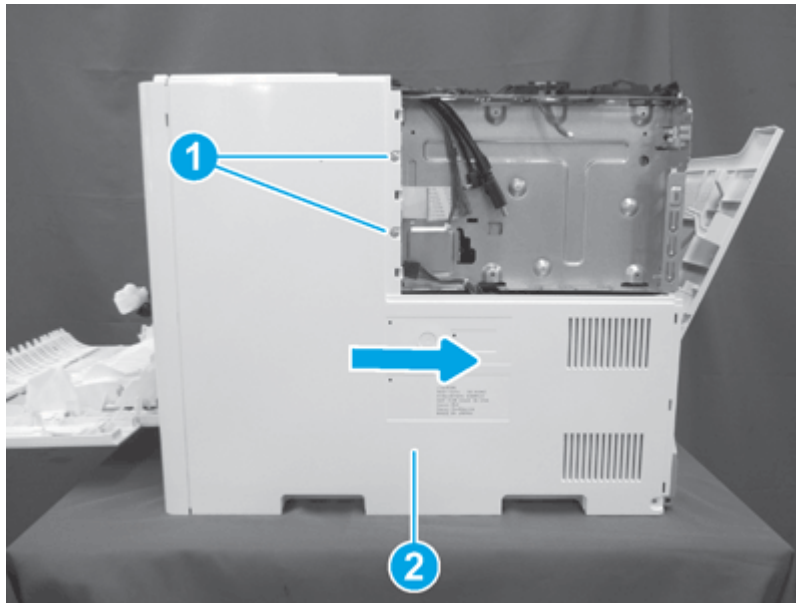
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1045 Remove two screws and the rear cover

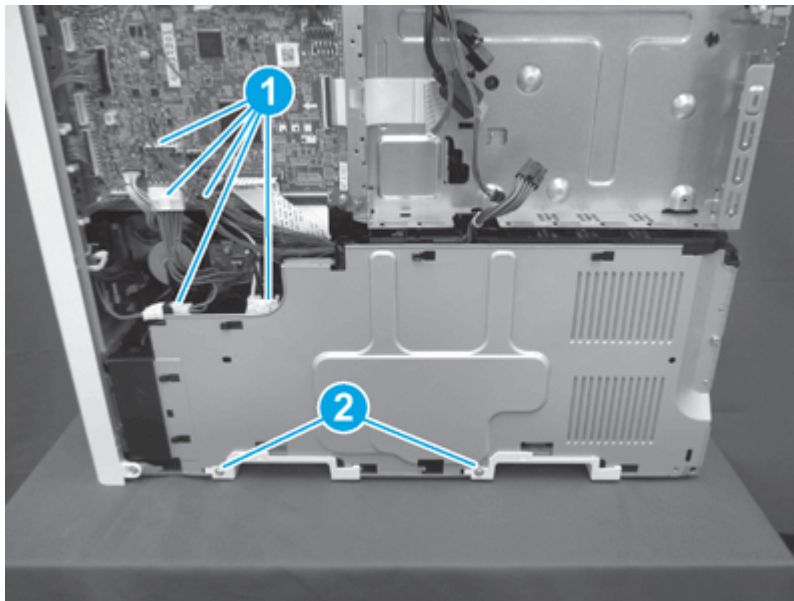


4. Remove the low-voltage power supply (LVPS) and fan

Follow these steps to remove the low-voltage power supply (LVPS) and fan.

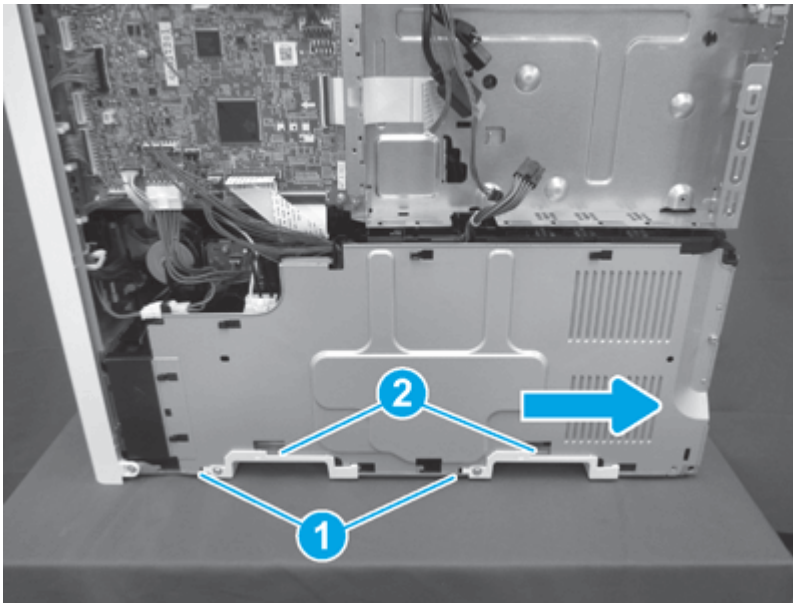
1. Disconnect five connectors (callout 1), and then remove two screws (callout 2).

Figure 5-1046 Disconnect five connectors and remove two screws



2. Release two tabs (callout 1), and then slide two handles (callout 2) to the right to remove them.

Figure 5-1047 Remove two handles



3. Remove two screws (callout 1). Remove the low-voltage power supply (callout 2) together with the power supply fan (callout 3) and the low-voltage power supply cover (callout 4).


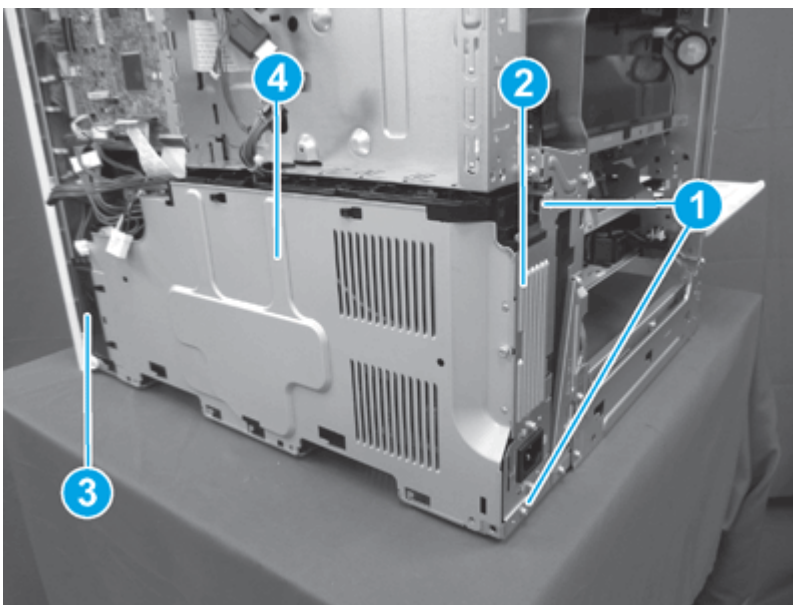
 **NOTE:** The upper screw is recessed inside the printer just above the upper right corner of the LVPS. The lower screw is located between the locator pins at the bottom of the assembly.

Figure 5-1048 Remove the low-voltage power supply



5. Remove the low-voltage power supply (LVPS)

Follow these steps to remove the low-voltage power supply (LVPS).

1. Disconnect one connector (callout 1), and then remove one screw (callout 2).


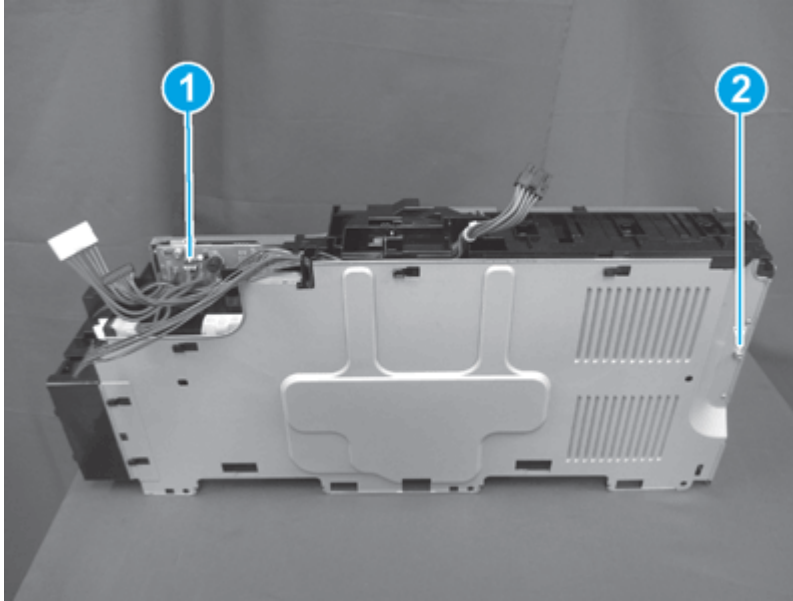

 **TIP:** One of the screws (callout 2) is a grounding screw with a washer attached. Make sure that this screw and washer are installed in the correct position.

Figure 5-1049 Disconnect one connector and remove one screw



2. Unhook one spring on the top of the LVPS (callout 1).

 **IMPORTANT:** Do not lose this spring. It is not included with the replacement part.


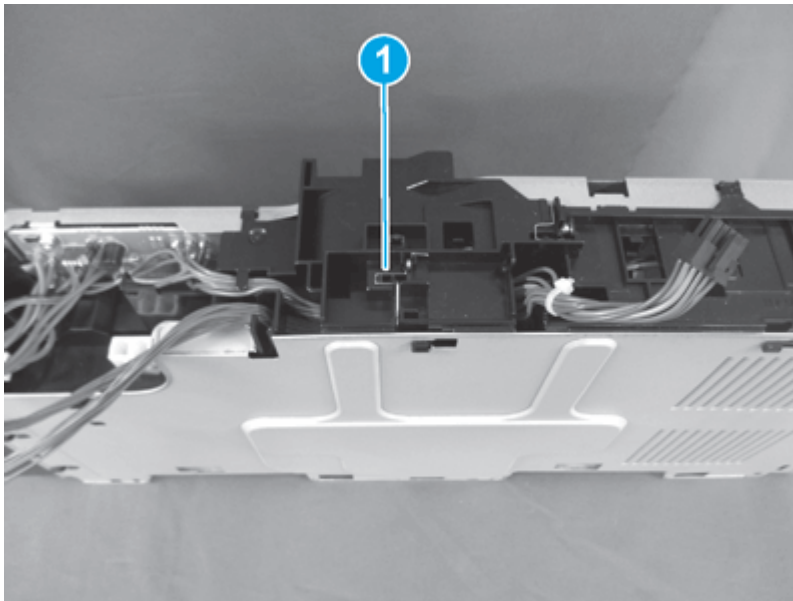
 **TIP:** Make sure that this spring is fully installed on the replacement LVPS.

Figure 5-1050 Unhook one spring



3. Remove the power supply fan holder (callout 1). Lift on the right side of the LVPS cover (callout 2), and then slide the cover to the left to remove it from the LVPS (callout 3).


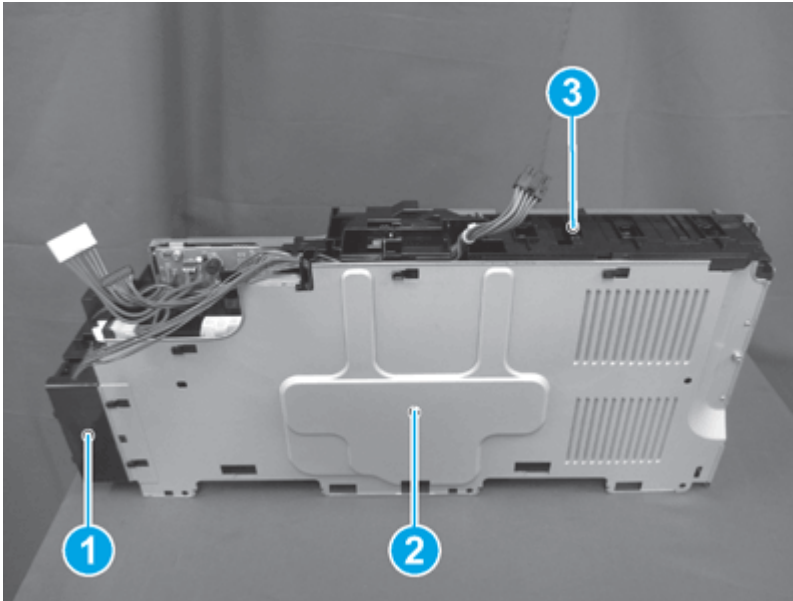
 **TIP:** Reverse the removal steps to install the assembly.


Figure 5-1051 Remove the power supply fan holder and LVPS cover



6. Unpack the replacement assembly



Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.


 **NOTE:** HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>


2. Unpack the replacement part from the packaging.

 **CAUTION:**  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

 **IMPORTANT:** Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

3. To install an assembly, reverse the removal steps.

 **NOTE:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

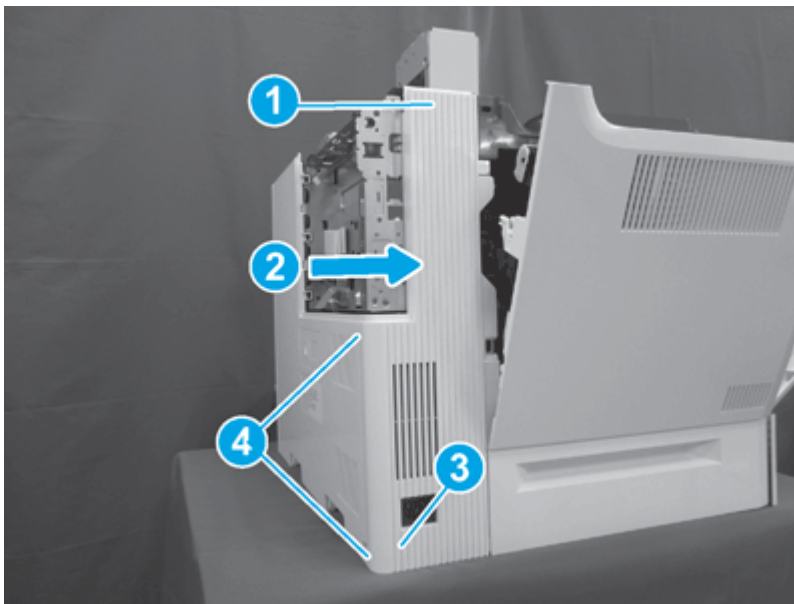
7. Reverse the removal steps to install the assembly


Also use the following **special installation instructions**.

Left rear cover

- Position the top of the cover (callout 1) first, and then slide the cover to the right (callout 2). Push the left lower corner (callout 3) toward the rear of the printer to engage two tabs (callout 4) in the slots on the rear cover.

Figure 5-1052 Install the left rear cover



 **NOTE:** Continue to reverse the removal steps to finish installing the assembly.


Removal and replacement: Lower high-voltage power supply (HVPS)

Learn how to remove and replace the lower high-voltage power supply (HVPS).

 [View a video of how to remove and replace the lower HVPS.](#)


Mean time to repair: 30 minutes

Service level: Advanced

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Disconnect the power cable.

 **WARNING!** To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-66 Part information

Part number	Part description
RM3-7006-000CN	Lower high-voltage power supply

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Make sure that the printer initializes to a **Ready** state.

Print a configuration page to make sure that the printer is functioning correctly.

1. Remove the formatter cover

Follow these steps to remove the formatter cover.

- Unscrew two thumbscrews (callout 1), and then slide the formatter cover (callout 2) away from the printer to remove it.


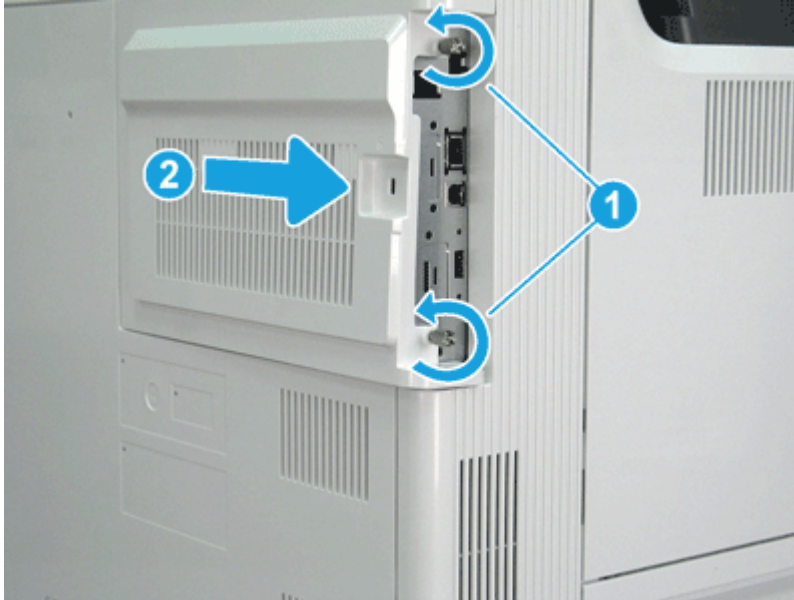
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1053 Remove the formatter cover

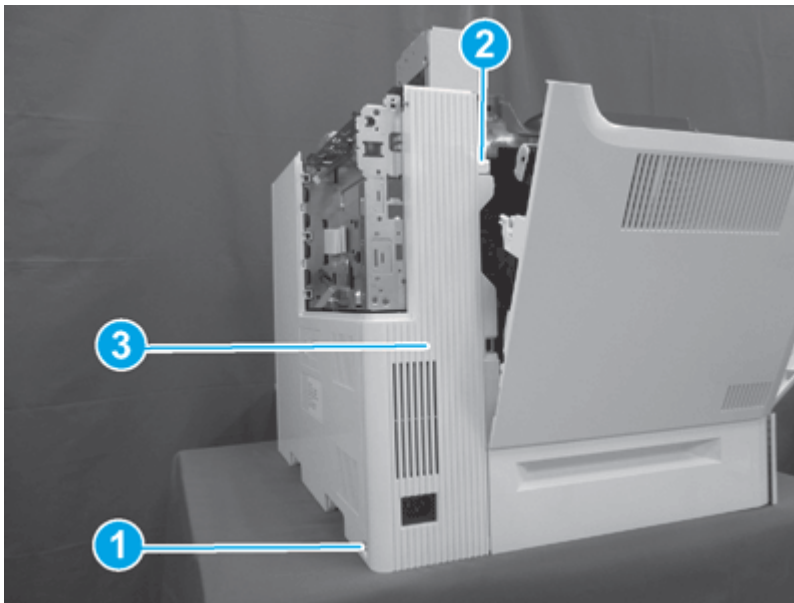


2. Remove the left rear cover

Follow these steps to remove the left rear cover.

- Open the left door. Remove one screw (callout 1), release one boss (callout 2), and then remove the left rear cover (callout 3).

Figure 5-1054 Remove the left rear cover



3. Remove the rear cover

Follow these steps to remove the rear cover.

- Remove two screws (callout 1), and then slide the rear cover (callout 2) to the right to remove it.


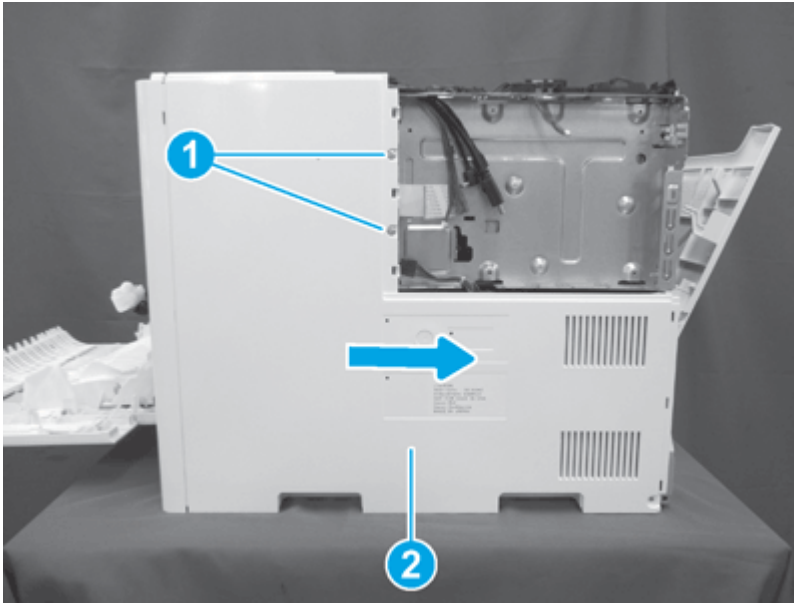
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1055 Remove two screws and the rear cover

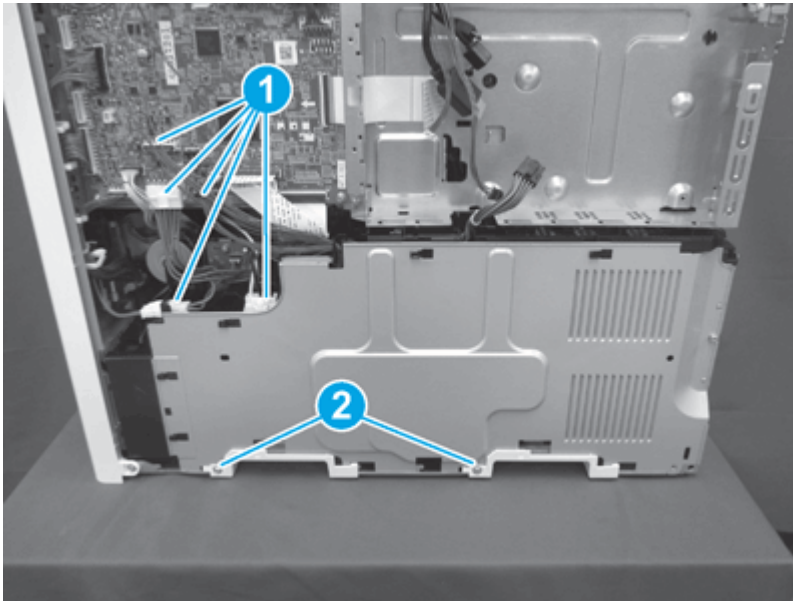


4. Remove the low-voltage power supply (LVPS) and fan

Follow these steps to remove the low-voltage power supply (LVPS) and fan.

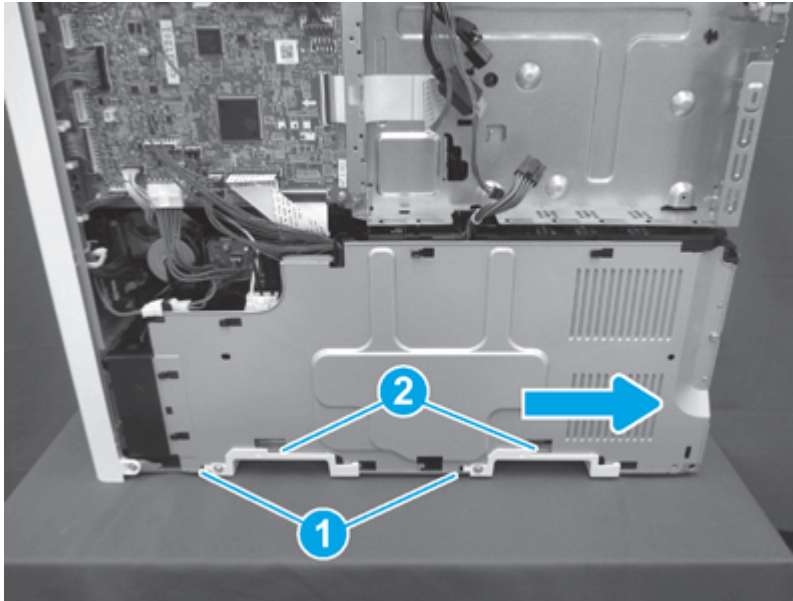
1. Disconnect five connectors (callout 1), and then remove two screws (callout 2).

Figure 5-1056 Disconnect five connectors and remove two screws



2. Release two tabs (callout 1), and then slide two handles (callout 2) to the right to remove them.

Figure 5-1057 Remove two handles



3. Remove two screws (callout 1). Remove the low-voltage power supply (callout 2) together with the power supply fan (callout 3) and the low-voltage power supply cover (callout 4).


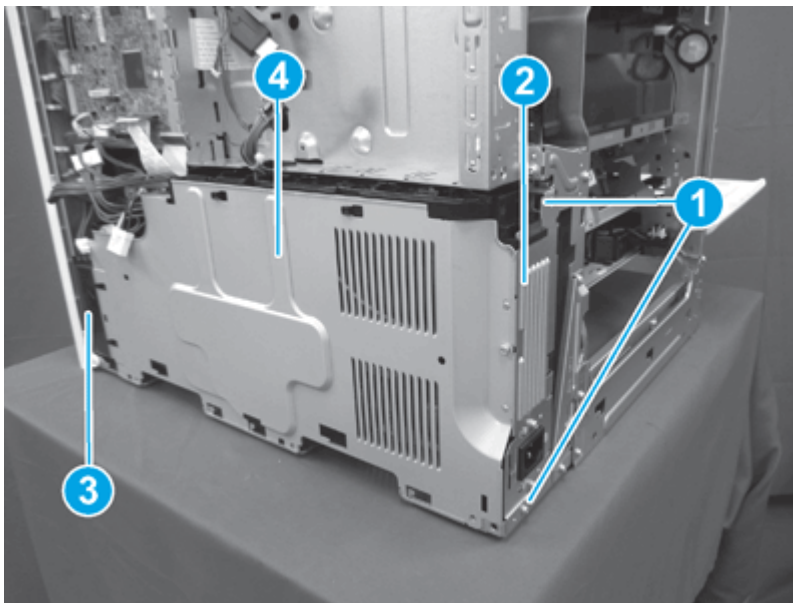
 **NOTE:** The upper screw is recessed inside the printer just above the upper right corner of the LVPS. The lower screw is located between the locator pins at the bottom of the assembly.

Figure 5-1058 Remove the low-voltage power supply

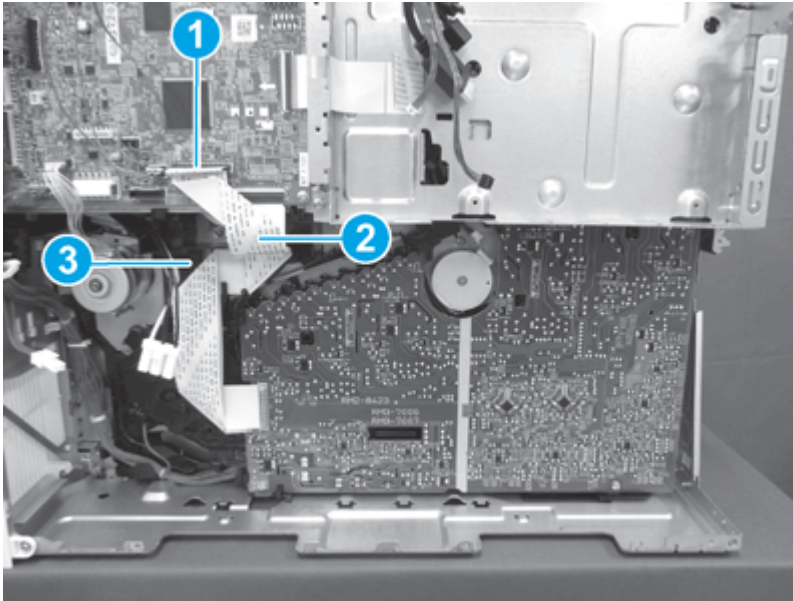


5. Remove the lower high voltage power supply (HVPS)

Follow these steps to remove the lower high voltage power supply (HVPS).

1. Disconnect one connector (callout 1), and then remove the flat cable (callout 2) from the cable guide (callout 3).

Figure 5-1059 Disconnect one connector



2. Remove two screws (callout 1), release one tab (callout 2), and then remove the lower HVPS (callout 3).


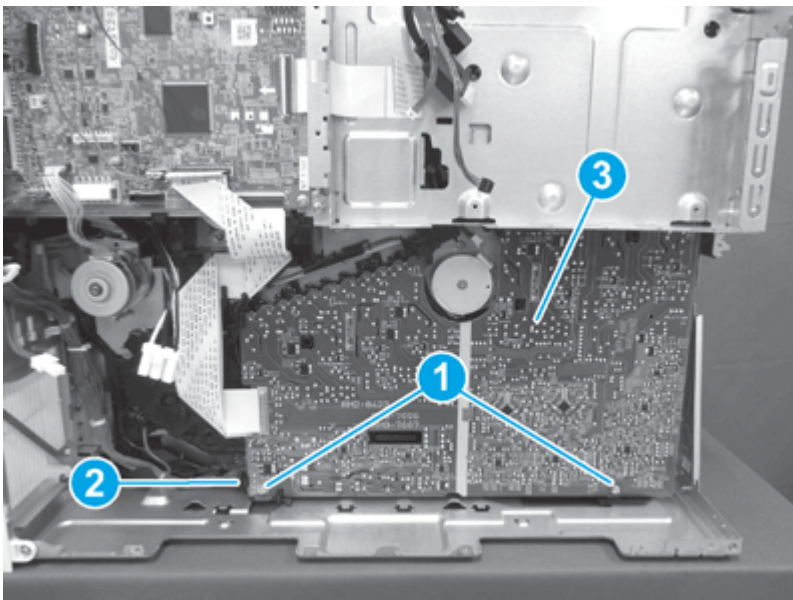
 **NOTE:** These screws have washers attached. Make sure that they are reinstalled in the lower HVPS board.

Figure 5-1060 Remove two screws and release one tab



6. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

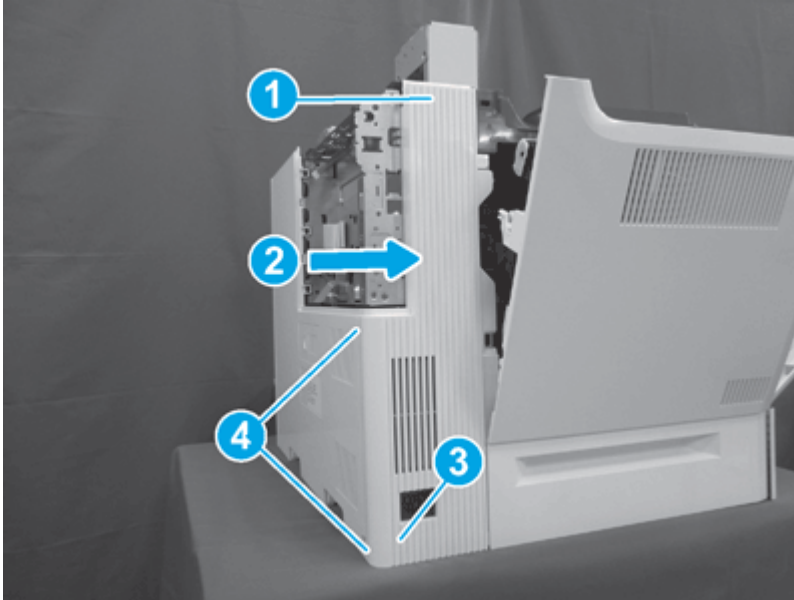
7. Reverse the removal steps to install the assembly


Also use the following **special installation instructions**.

Left rear cover

- Position the top of the cover (callout 1) first, and then slide the cover to the right (callout 2). Push the left lower corner (callout 3) toward the rear of the printer to engage two tabs (callout 4) in the slots on the rear cover.

Figure 5-1061 Install the left rear cover



 **NOTE:** Continue to reverse the removal steps to finish installing the assembly.


Removal and replacement: Upper high-voltage power supply (HVPS)

Learn how to remove and replace the upper high-voltage power supply (HVPS).

 [View a video of how to remove and replace the upper HVPS.](#)


Mean time to repair: 30 minutes

Service level: Advanced

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Disconnect the power cable.

 **WARNING!** To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-67 Part information

Part number	Part description
RM2-8424-000CN	Upper high-voltage power supply (HVPS)

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Make sure that the printer initializes to a **Ready** state.

Print a configuration page to make sure that the printer is functioning correctly.

1. Remove the keyboard (MFP)

Follow these steps to remove the keyboard (MFP).

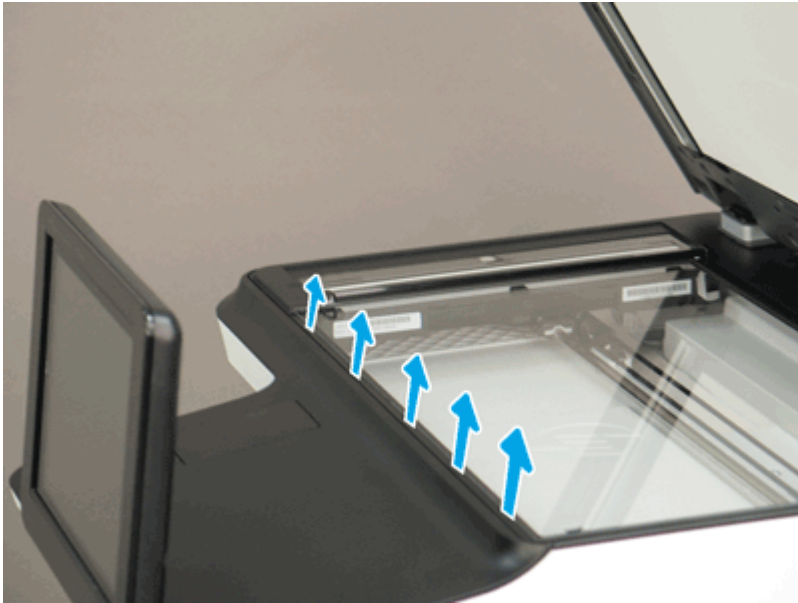
1. If the control panel is not fully tilted forward, tilt it forward now (callout 1) until it stops. Open the document feeder (callout 2).

Figure 5-1062 Tilt the control panel and open the document feeder



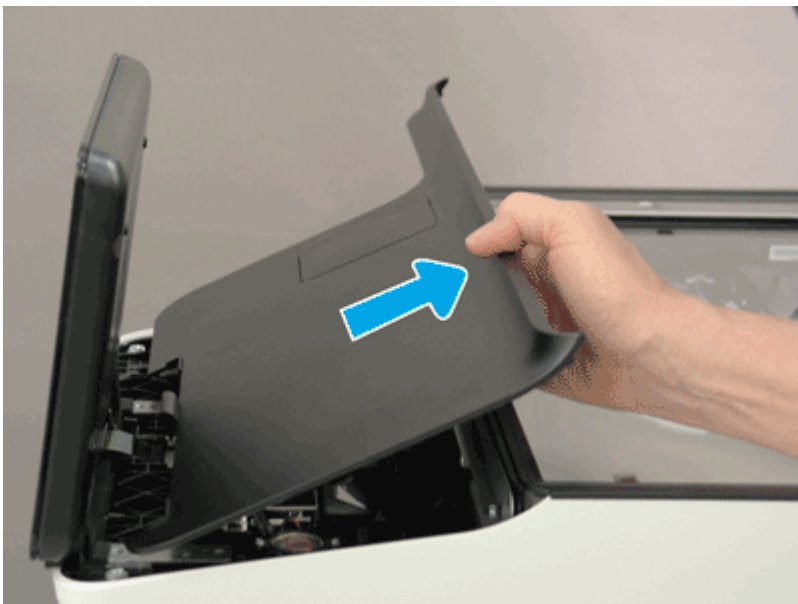
2. Beginning at the right side of the control-panel cover, carefully release five tabs along the top edge of the cover.

Figure 5-1063 Release five tabs



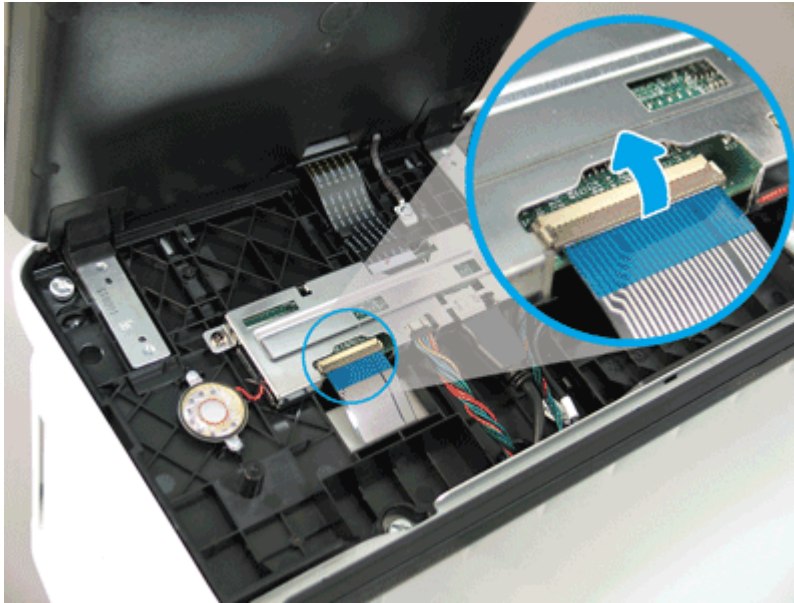
3. Continue to rotate the top edge of the cover away from the printer, and then remove the cover.

Figure 5-1064 Remove the cover



4. Open the connector latch to release the keyboard flat cable.

Figure 5-1065 Disconnect the keyboard flat cable



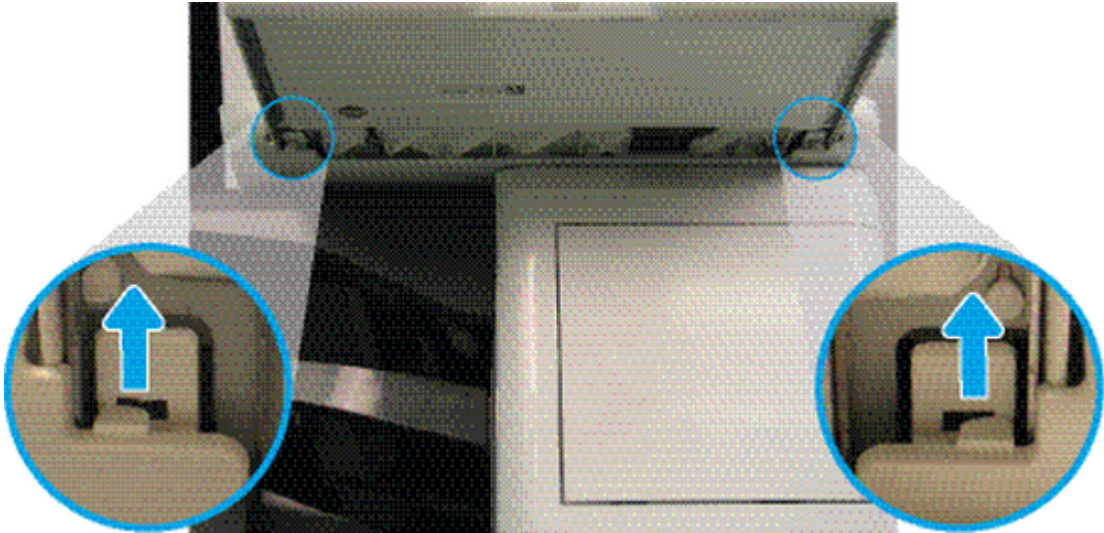
5. Slide the keyboard tray out until it stops.

Figure 5-1066 Slide the keyboard tray out



6. Push up on the keyboard tray to release two tabs on the bottom of the tray, and then slide the tray toward you to disengage the tabs.

Figure 5-1067 Release two tabs




7. Slide the keyboard tray all the way out of the printer to remove it.

Figure 5-1068 Remove the keyboard



2. Remove the control panel (M681/M682/E67550/E67560/E67650/E67660)

Follow these steps to remove the control panel (M681/M682/E67550/E67560/E67650/E67660).

 **NOTE:** This step is for the M681/M682/E67550/E67560/E67650/E67660 printers. For the M652/M653/E65050/E65060/E65150/E65160 printers, skip this step.

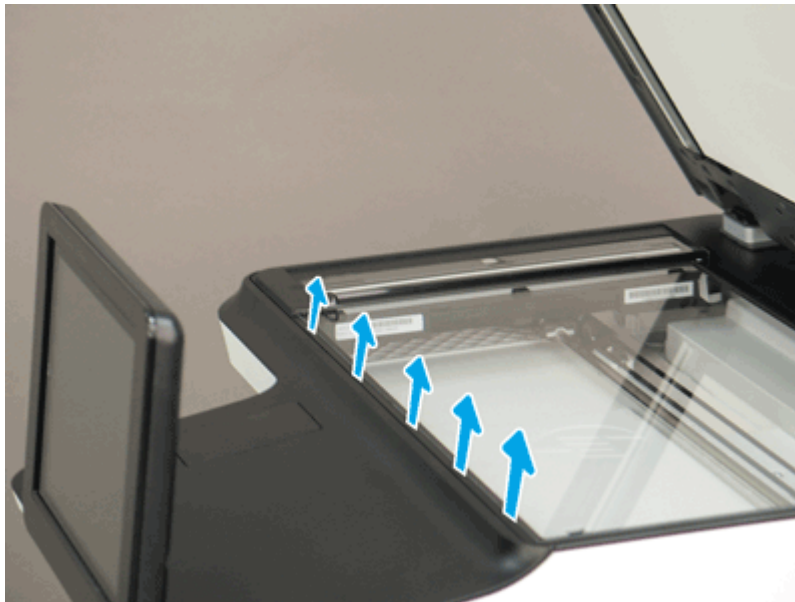
1. Tilt the control panel forward (callout 1), and then open the document feeder (callout 2).

Figure 5-1069 Tilt the control panel forward and open the document feeder



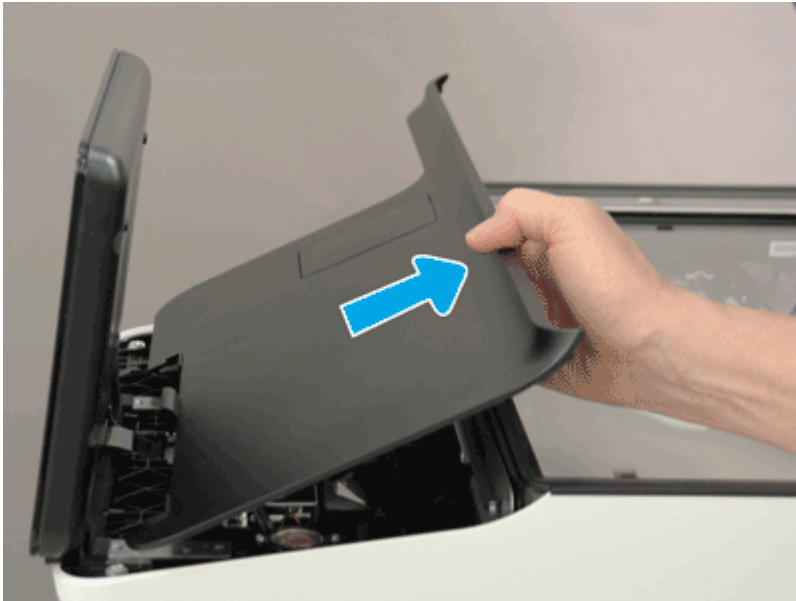
2. Beginning at the right side of the control-panel cover, carefully release five tabs along the top edge of the cover.

Figure 5-1070 Release five tabs



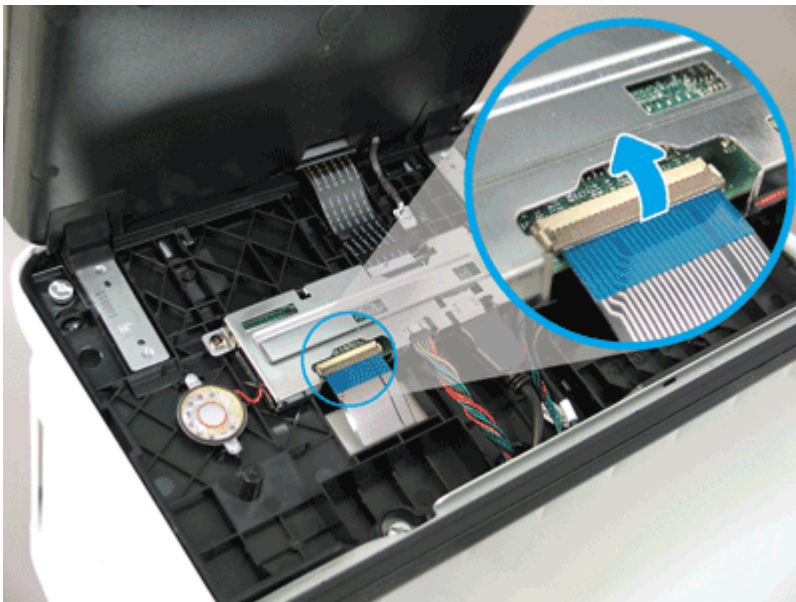
3. Continue to rotate the top edge of the cover away from the printer, and then remove the cover.

Figure 5-1071 Remove the cover



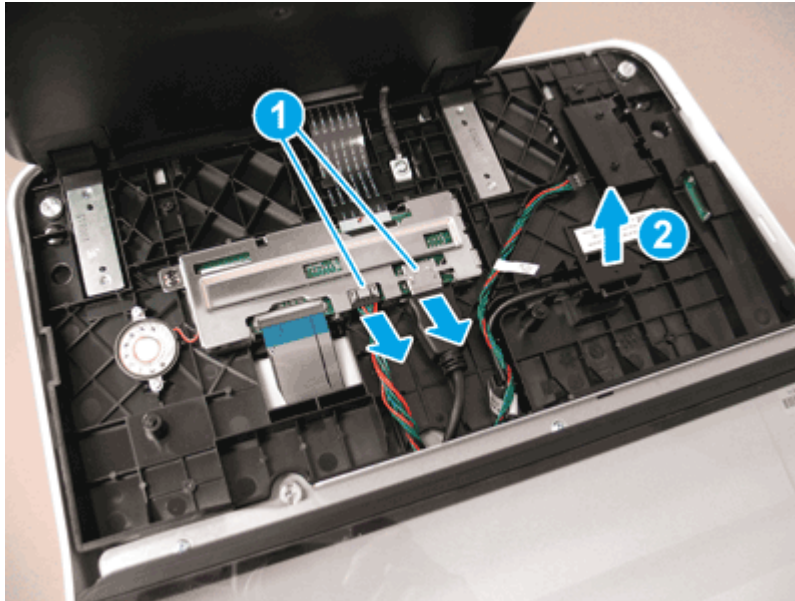
4. **Keyboard models only:** Lift up on the small, gray gate to release the keyboard flat cable.

Figure 5-1072 Disconnect the keyboard flat cable (keyboard models only)



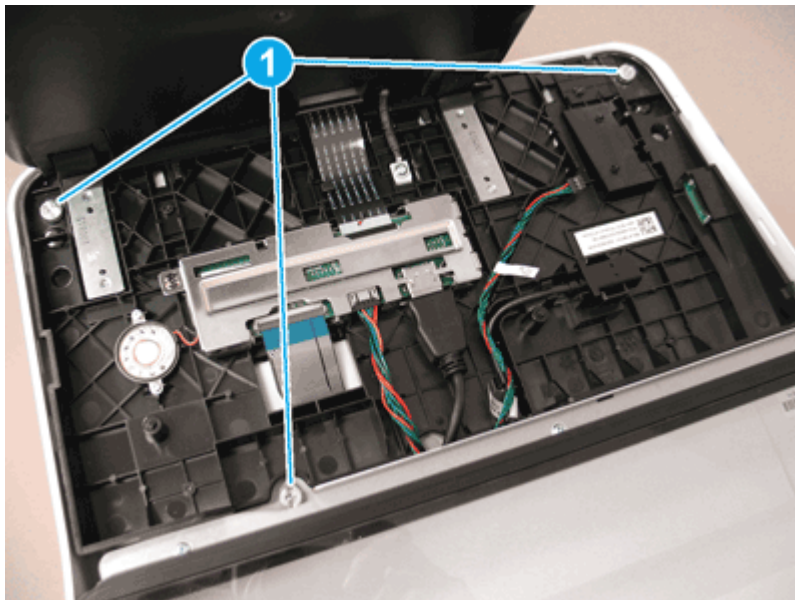
5. Disconnect two connectors (callout 1), and then release the USB cable (callout 2) from the holder.

Figure 5-1073 Disconnect connectors



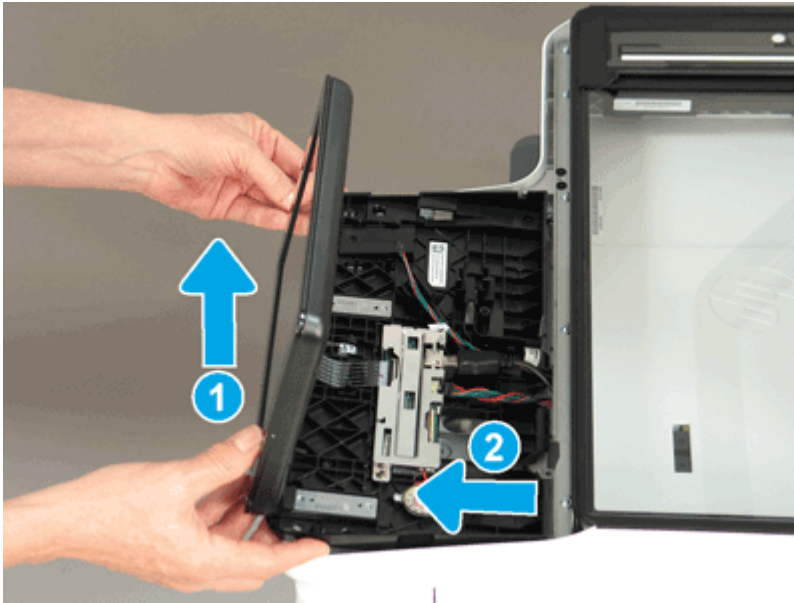
6. Remove three thumbscrews (callout 1).

Figure 5-1074 Remove three thumbscrews



7. Lift the front of the control panel off of the printer (callout 1), and then slide it toward the front of the printer (callout 2) to remove it.

Figure 5-1075 Remove the control panel

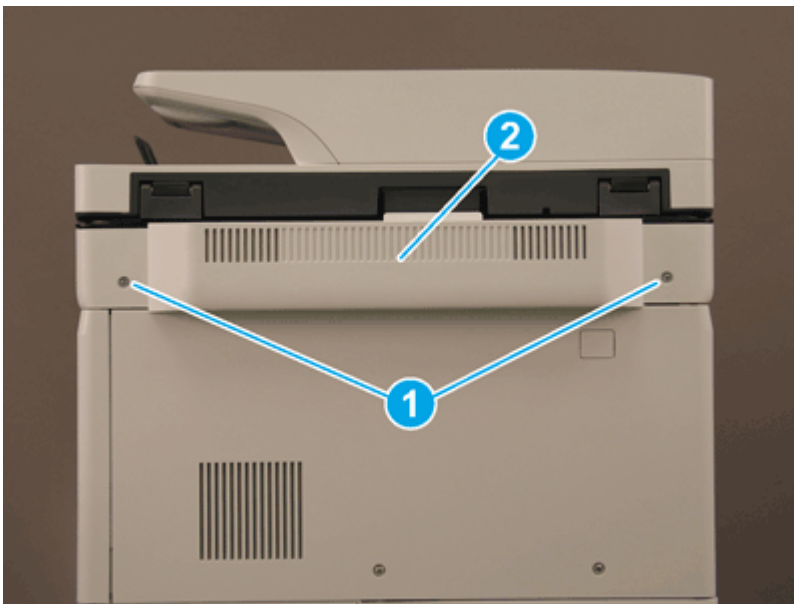


3. Remove the document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660)

Follow these steps to remove the document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660).

1. Remove two screws (callout 1), and then remove the scanner control board (SCB) cover (callout 2).

Figure 5-1076 Remove the SCB cover



2. Flow M681z and Flow M682z models only: Do the following:

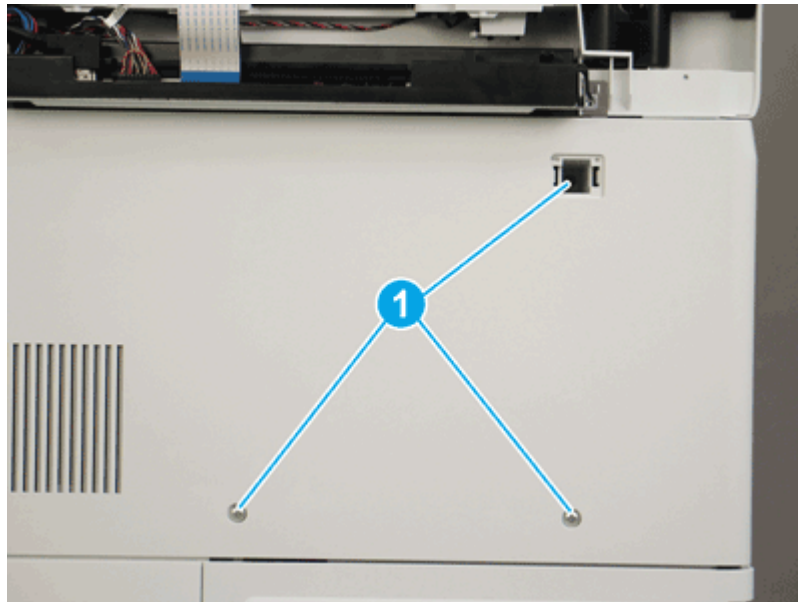
- a. At the back of the printer, remove one small cover (callout 1).

Figure 5-1077 Remove the small cover



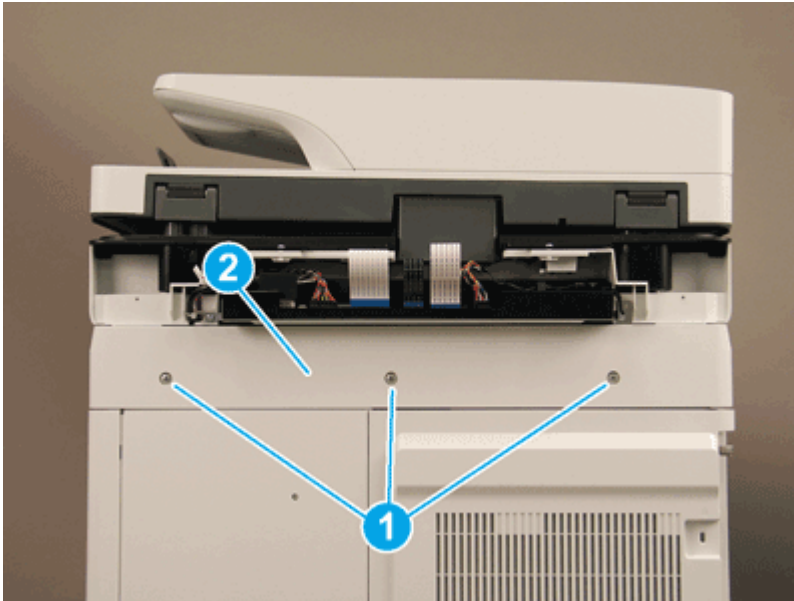
- b. **Flow M681z and Flow M682z only** : Remove three screws (callout 1), and then remove the stapler/stacker rear cover (callout 2).

Figure 5-1078 Remove the stapler/stacker rear cover



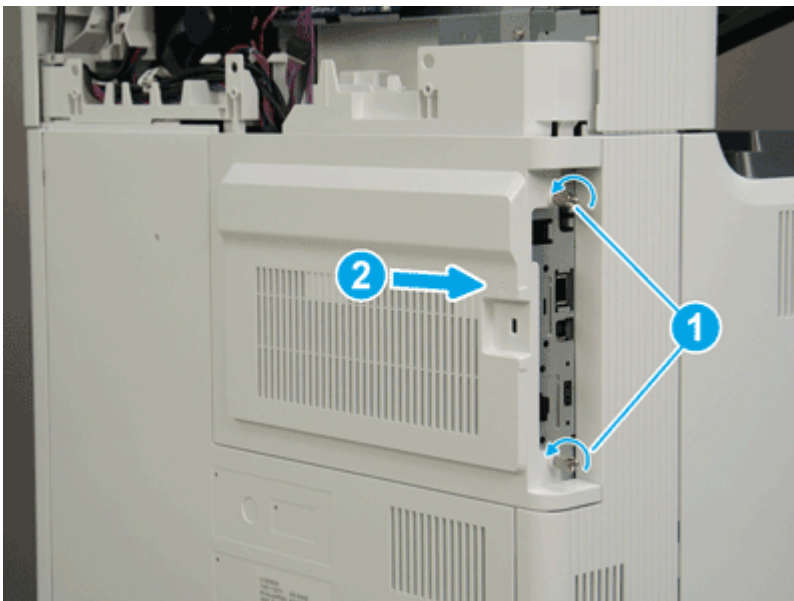
3. **M681dh, M681f, M682dh, and Flow M681f models only:** Remove three screws (callout 1), and then remove the upper rear cover (callout 2).

Figure 5-1079 Remove the upper rear cover



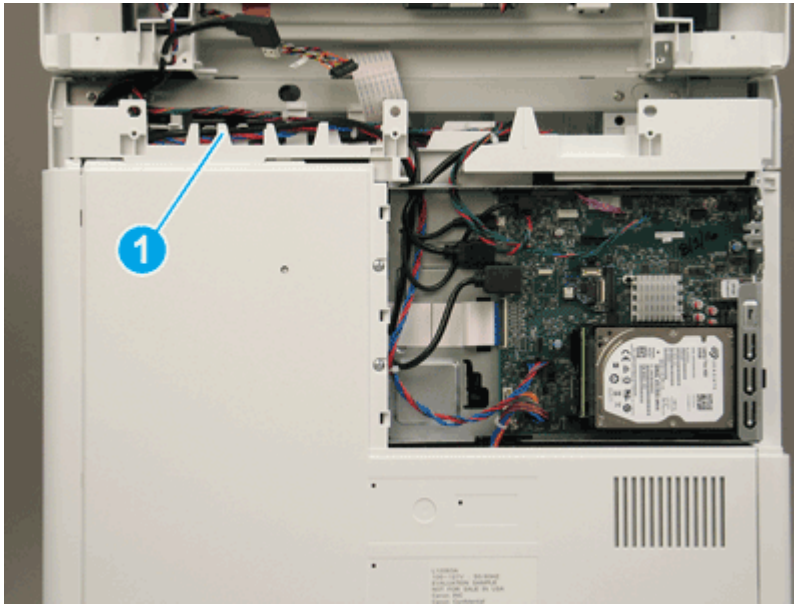
4. Loosen two thumbscrews (callout 1), and then slide the formatter cover away from the printer to remove it (callout 2).

Figure 5-1080 Remove the formatter cover



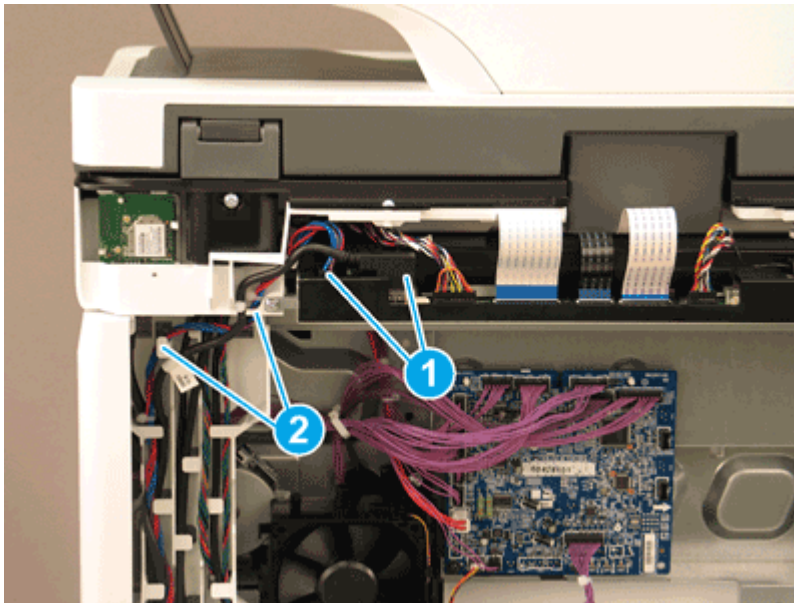
5. The remaining figures in this procedure show the Flow M682z model. While the cable routing (callout 1) on the M681dh, M681f, M682dh, and Flow M681f models is different, the removal procedures are the same for all models.

Figure 5-1081 Cable routing for M681dh, M681f, and Flow M681f



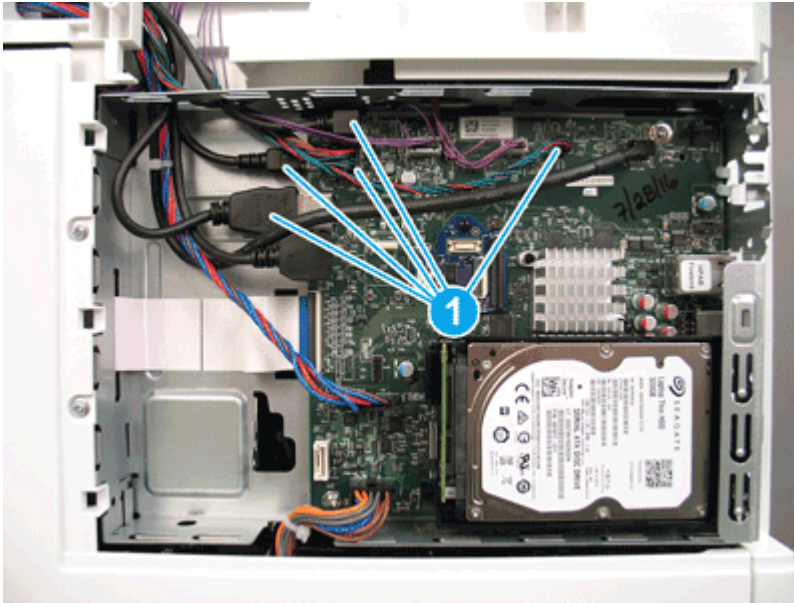
6. Disconnect two connectors (callout 1) on the SCB, and then release the cables from the guides (callout 2).

Figure 5-1082 Disconnect two connectors



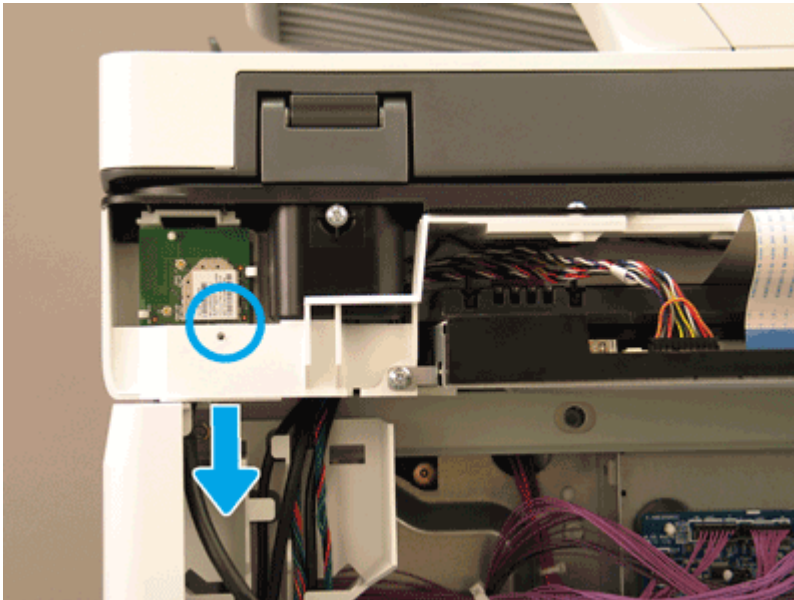
7. Disconnect five connectors on the formatter (callout 1).

Figure 5-1083 Disconnect five connectors



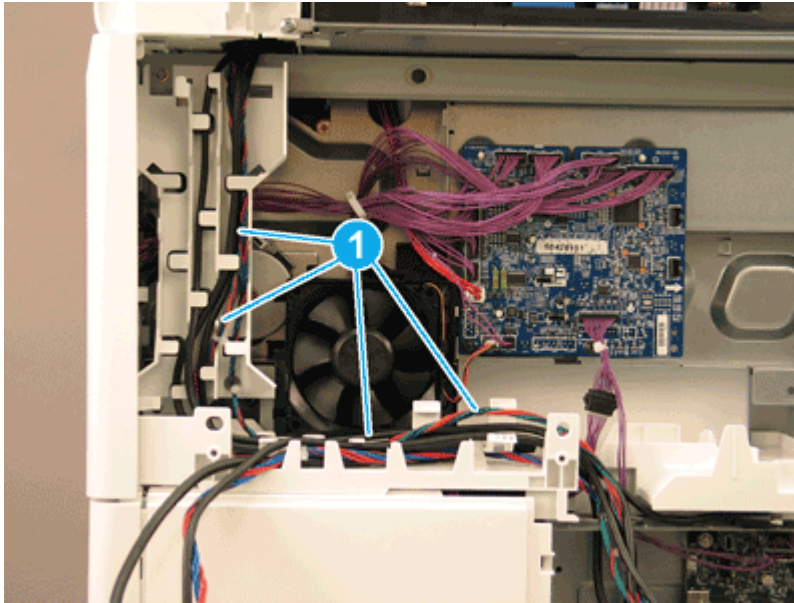
8. **Flow M682z only:** Gently pull down on the cable to disconnect the wireless connector.

Figure 5-1084 Disconnect the wireless connector



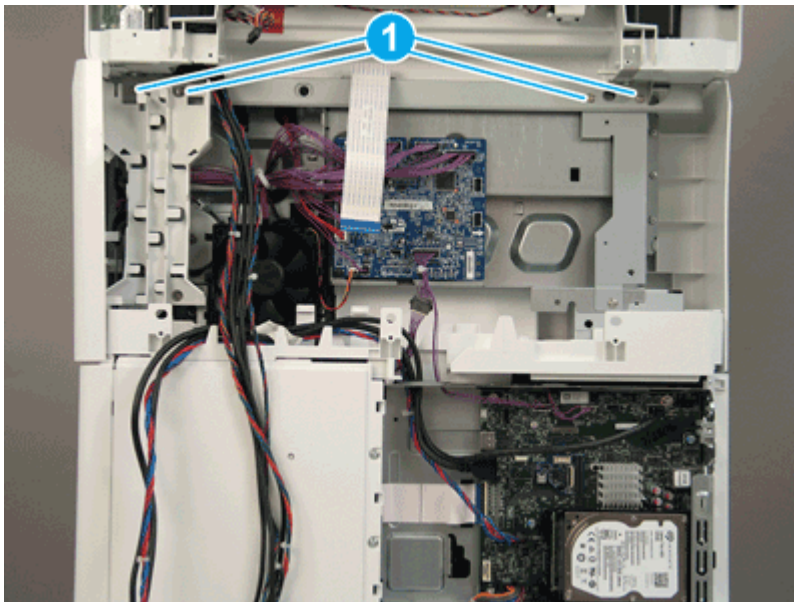
9. Release all of the cables from the cable guides (callout 1).

Figure 5-1085 Release the cables



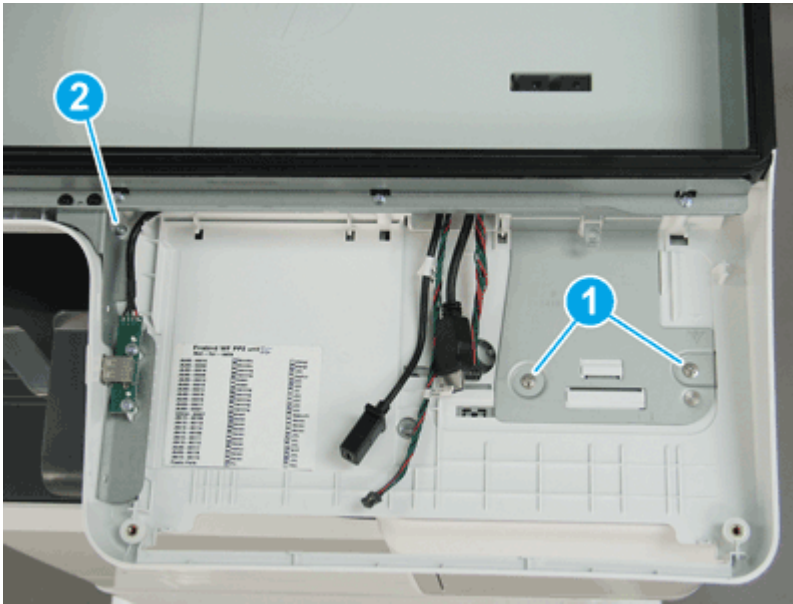
10. At the back of the printer, remove four screws (callout 1).

Figure 5-1086 Remove four screws



11. On the top of the image scanner assembly, at the location where the control panel was removed, remove two sheet metal screws (callout 1). **Flow M681z and Flow M682z only:** Remove one self-tapping screw (callout 2).

Figure 5-1087 Remove three screws



12. Lift the document feeder and image scanner off of the printer to remove them.

Figure 5-1088 Remove the document feeder and image scanner



4. Remove the stapler/stacker

Follow these steps to remove the stapler/stacker.

1. Open the front door.

Figure 5-1089 Open the front door



2. Open the stapler door.

Figure 5-1090 Open the stapler door



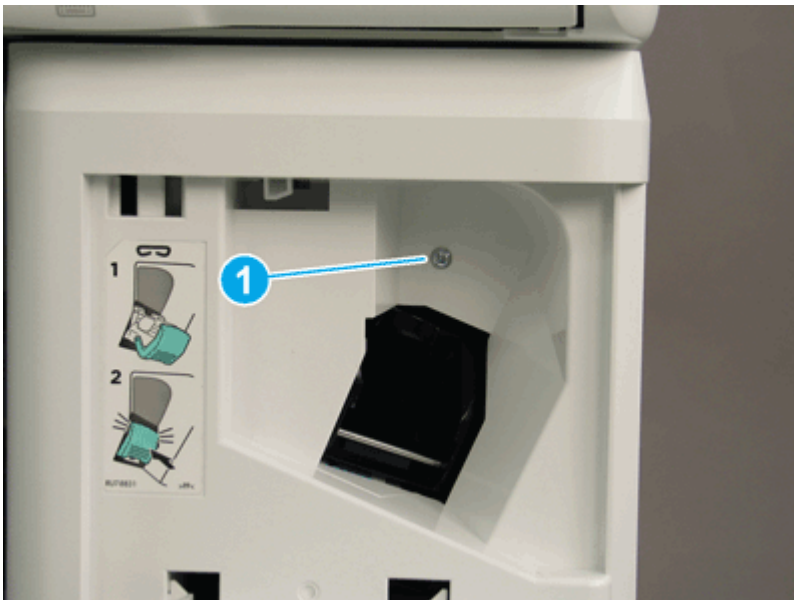
3. Release the latch, and then remove the staple cartridge.

Figure 5-1091 Remove the staple cartridge



4. Remove one screw (callout 1).

Figure 5-1092 Remove one screw



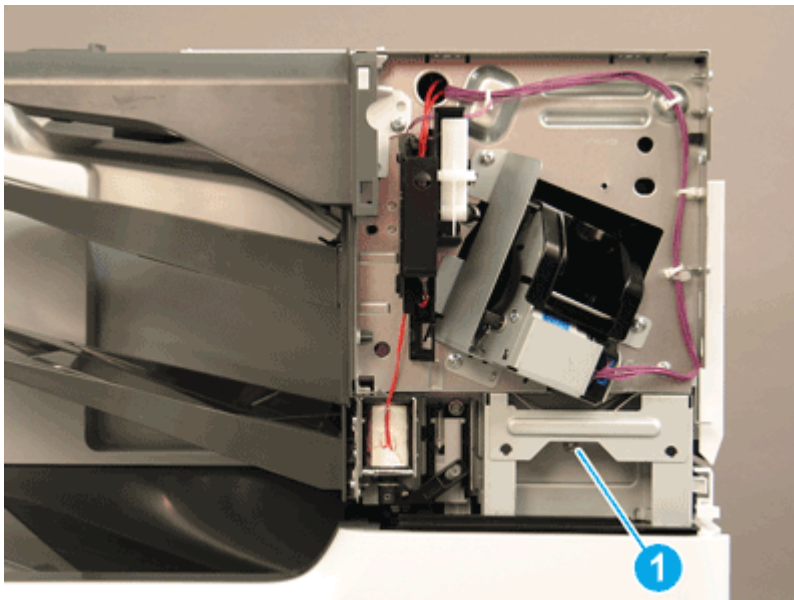
5. Rotate the stapler cover to the right to remove it.

Figure 5-1093 Remove the stapler cover



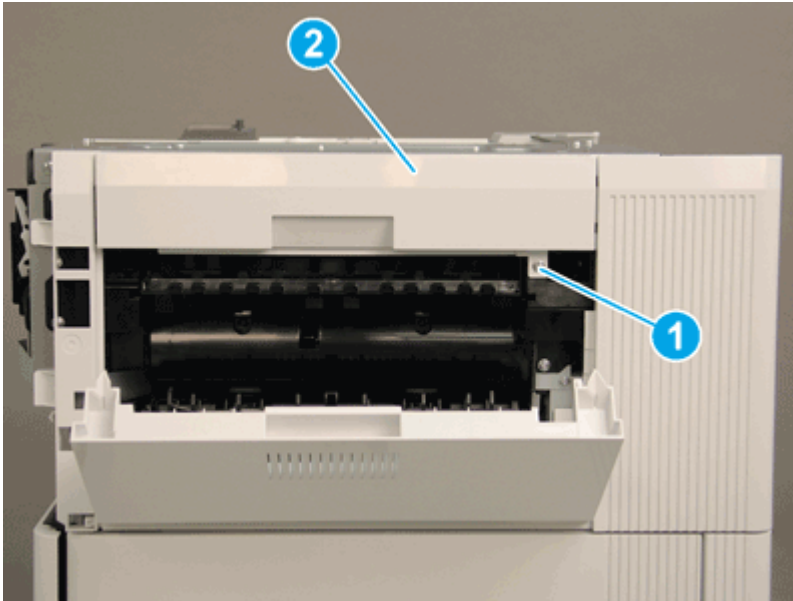
6. Remove one screw (callout 1).

Figure 5-1094 Remove one screw



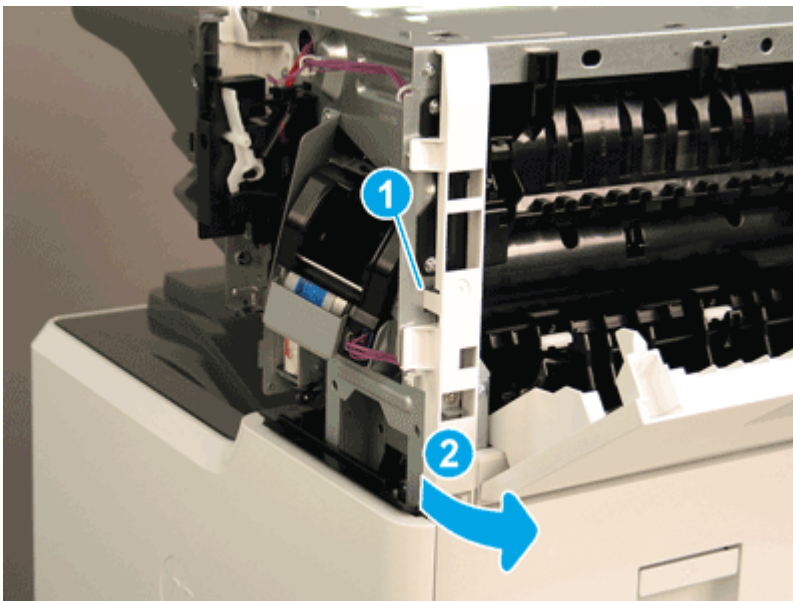
7. At the right side of the printer, remove one screw (callout 1), and then remove the stapler/stacker right upper cover (callout 2).

Figure 5-1095 Remove the stapler/stacker right upper cover



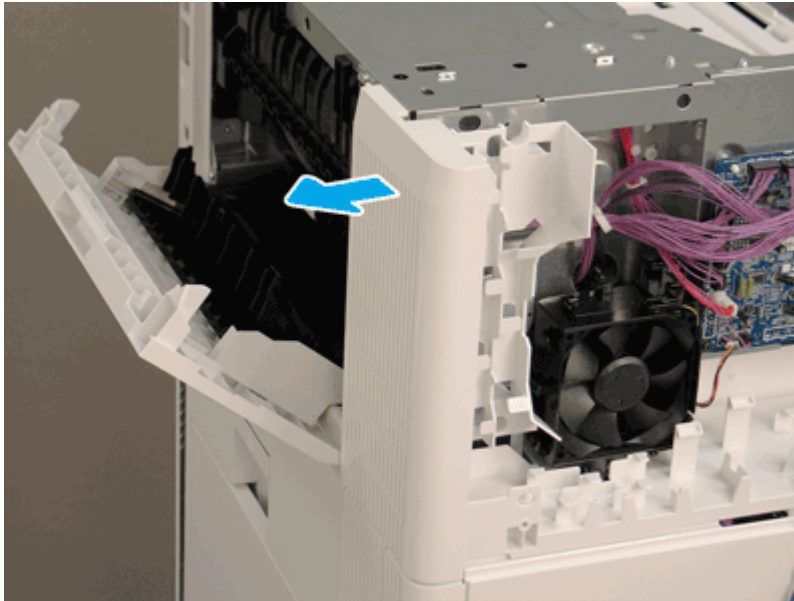
8. Release one tab (callout 1), and then rotate the stapler rear cover away from the printer (callout 2) to remove it.

Figure 5-1096 Remove the stapler rear cover



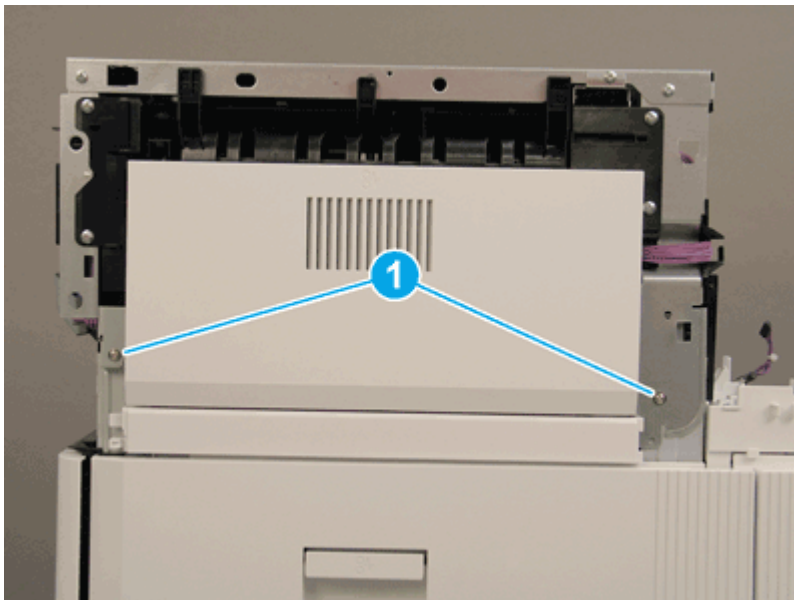
9. Pull the stapler/stacker rear corner cover away from the printer to remove it.

Figure 5-1097 Remove the stapler/stacker rear corner cover



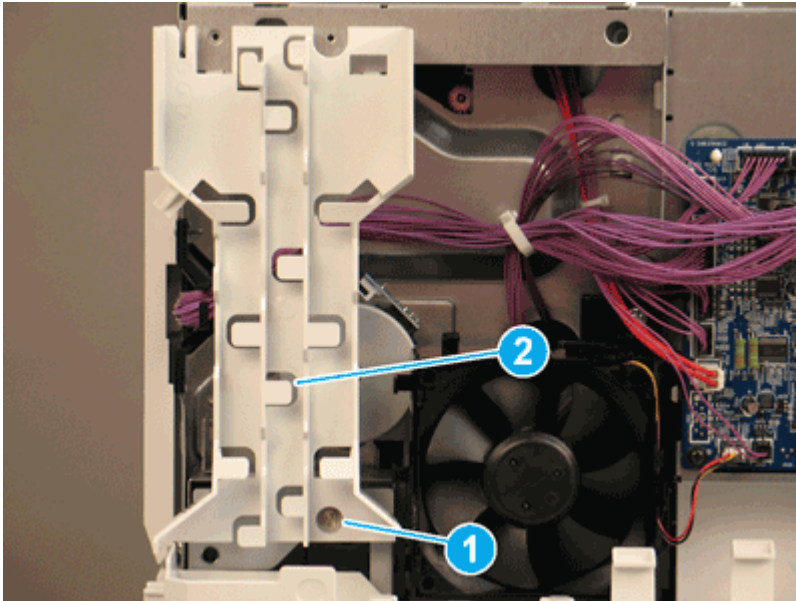
10. Remove two screws (callout 1).

Figure 5-1098 Remove two screws



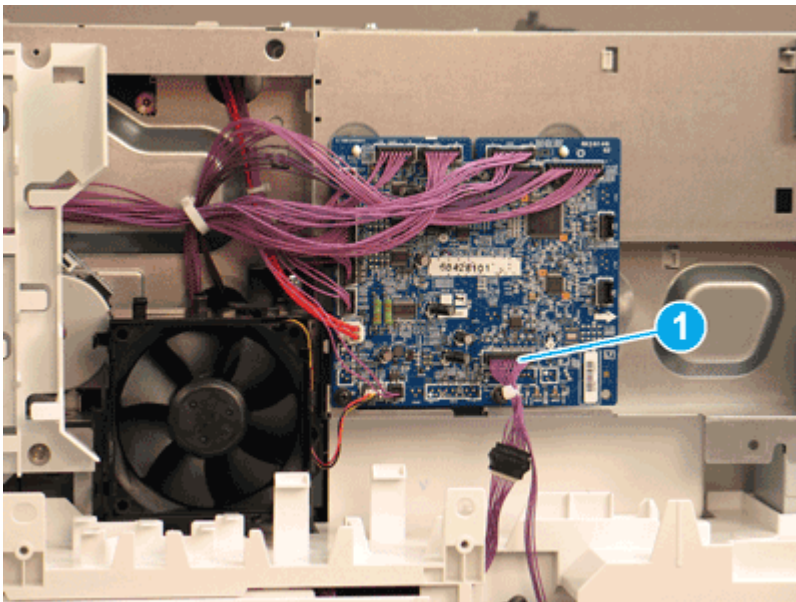
11. At the back of the printer, remove one screw (callout 1), and then remove the cable guide (callout 2).

Figure 5-1099 Remove the cable guide



12. Disconnect one connector on the stapler/stacker PCA (callout 1).

Figure 5-1100 Disconnect one connector

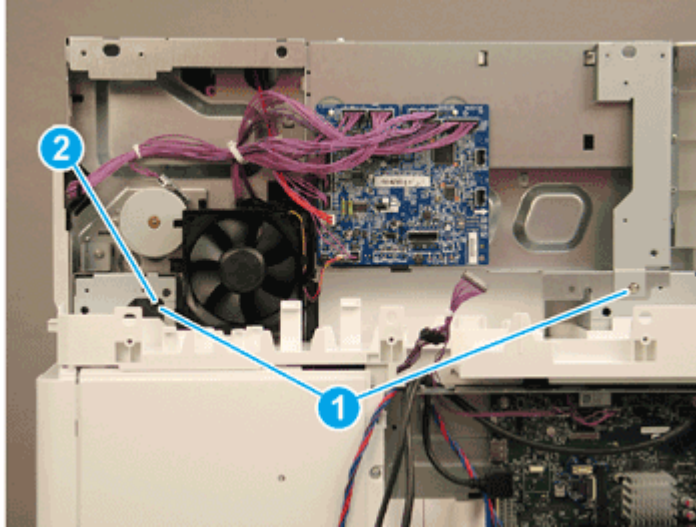


13. Remove two screws (callout 1).



TIP: The screw on the left (callout 2) is longer than the other screw. Make sure that this screw is installed in the correct location.

Figure 5-1101 Remove two screws



14. Lift the stapler/stacker away from the printer.


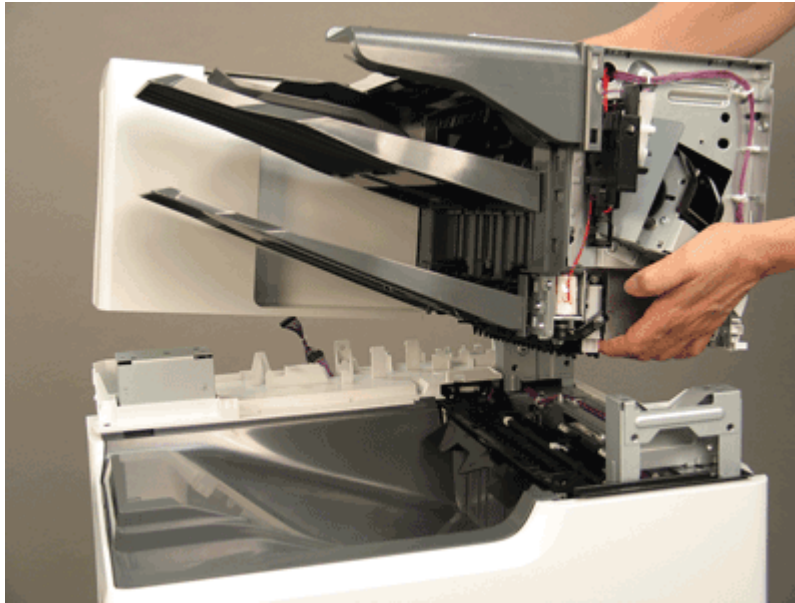
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1102 Remove the stapler/stacker



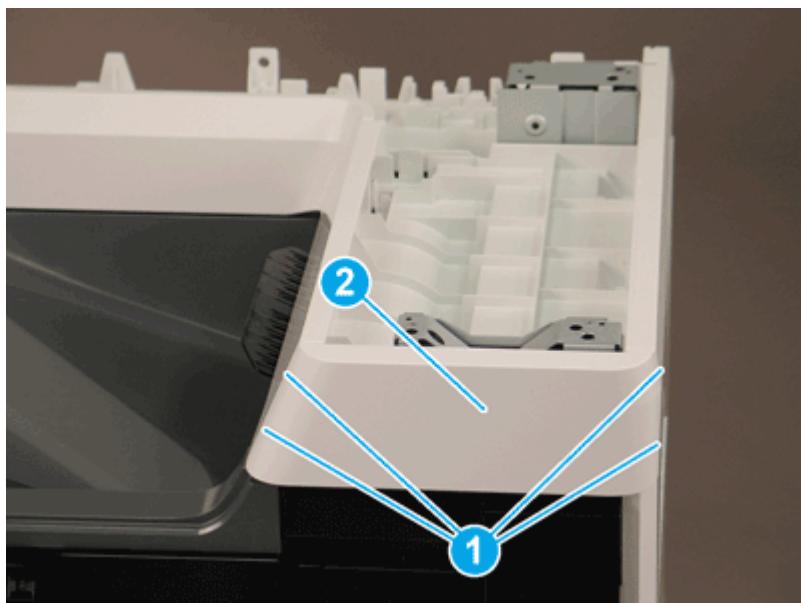
5. Remove the face-down front cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the face-down front cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

1. Open the front door.

2. Release two tabs on each side (callout 1), and then remove the face-down front cover (callout 2).

Figure 5-1103 Remove the face-down front cover

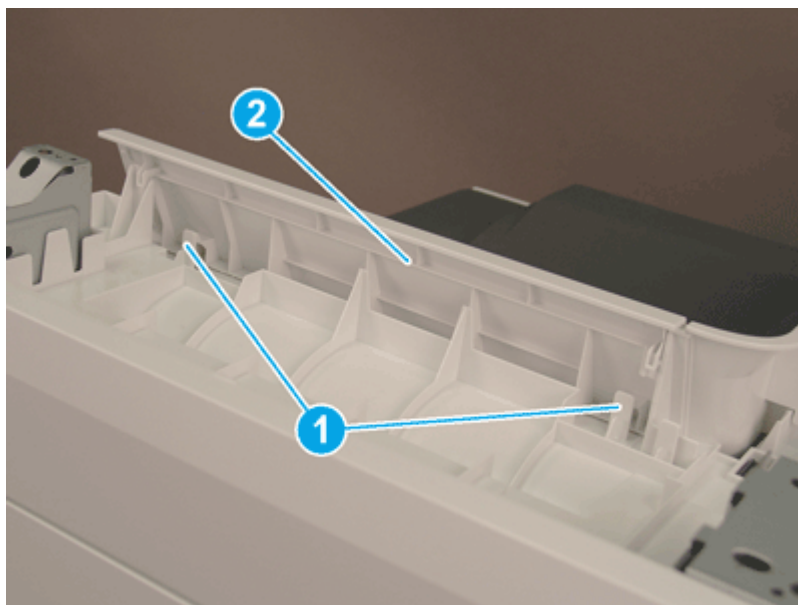


6. Remove the top cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the top cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

- Release two tabs (callout 1), and then remove the top cover (callout 2).

Figure 5-1104 Remove the top cover



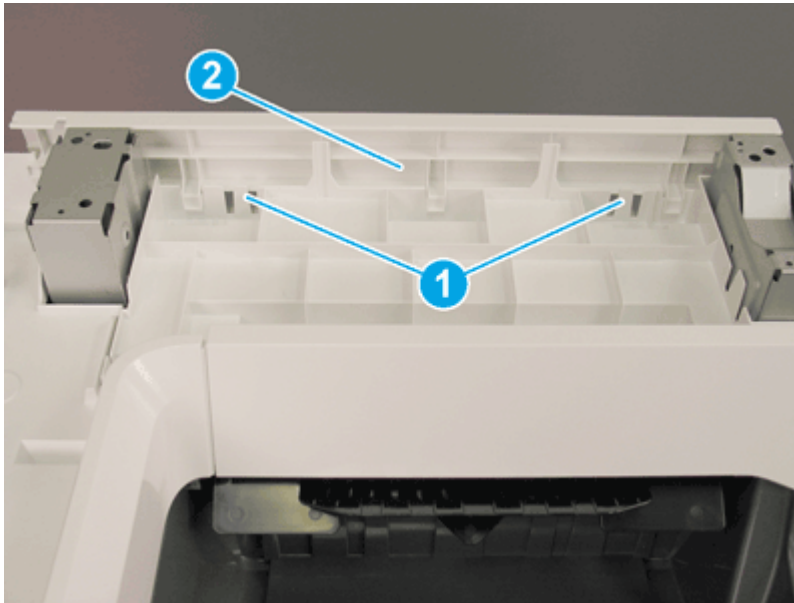
7. Remove the right cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the right cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

This step is for the M681/M682/E67550/E67560/E67650/E67660 printers. For the M652/M653/E65050/E65060/E65150/E65160 printers, skip this step.

- Release two tabs (callout 1), and then remove the right cover (callout 2).

Figure 5-1105 Remove the right cover



8. Remove the front cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the front cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

- Release two tabs (callout 1), and then remove the front cover (callout 2).


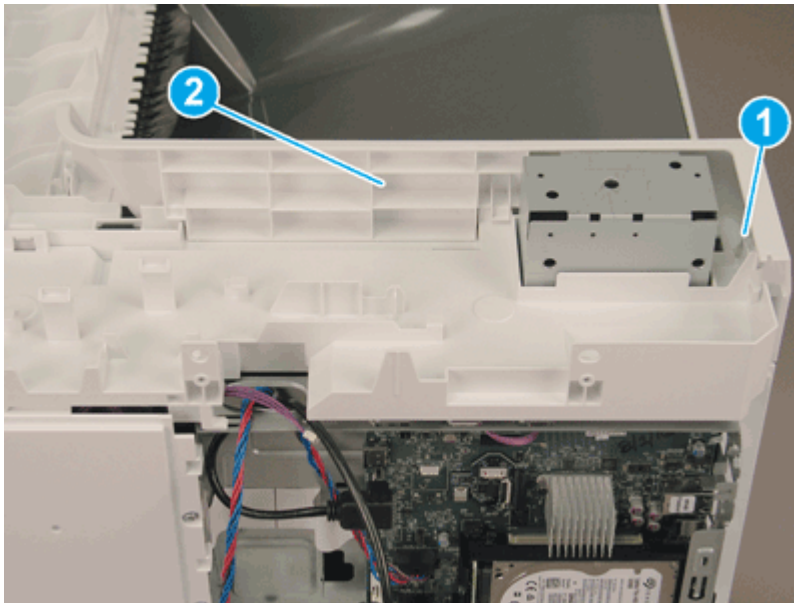
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1106 Remove the front cover



9. Remove the rear upper cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the rear upper cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

- Remove two screws (callout 1), and then remove the rear upper cover (callout 2).


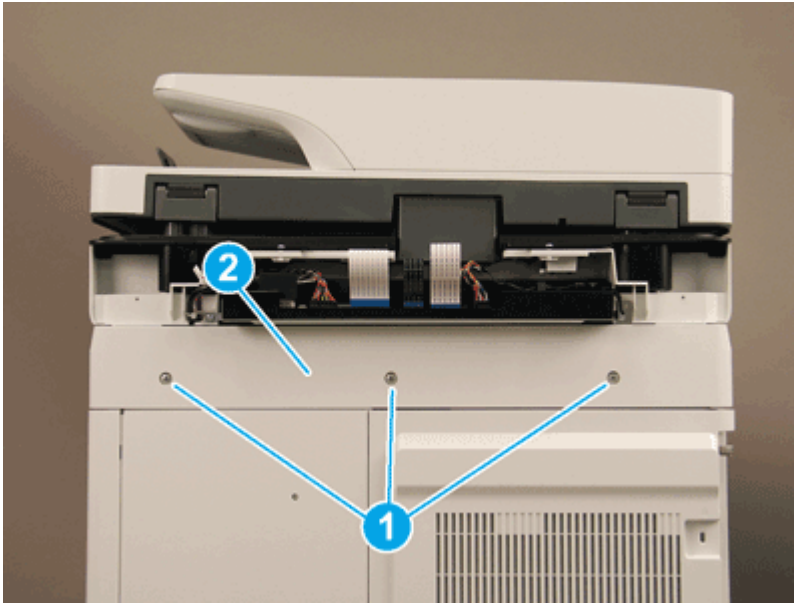

 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1107 Remove the rear upper cover



10. Remove the face-down cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the face-down cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

 **NOTE:** This step is for the M681/M682/E67550/E67560/E67650/E67660 printers. For the M652/M653/E65050/E65060/E65150/E65160 printers, skip this step.

- Remove two screws (callout 1), release three tabs (callout 2), and then remove the face-down cover (callout 3).


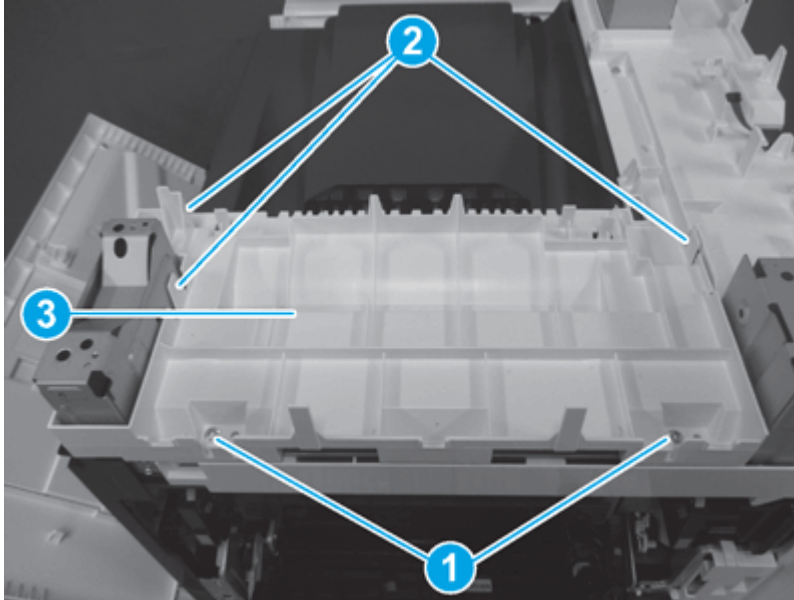
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1108 Remove two screws and the face-down cover



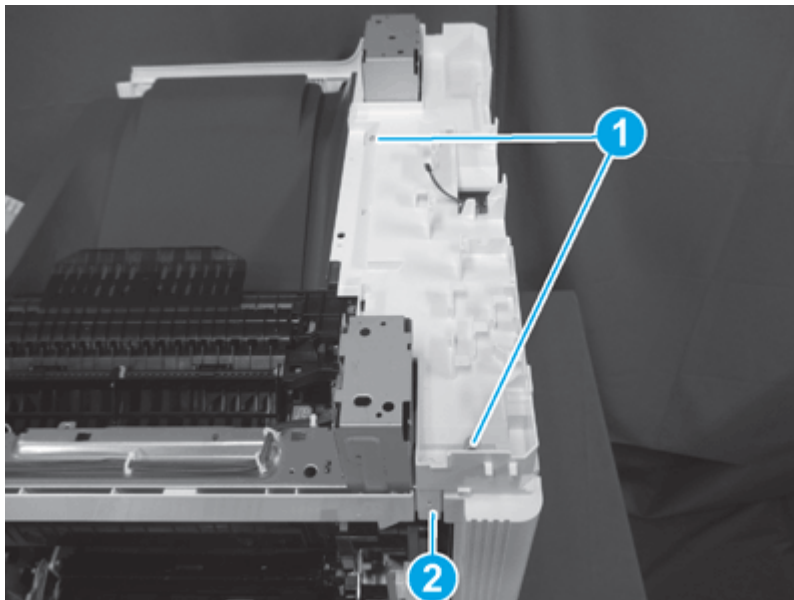
11. Remove the main cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the main cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

This step is for the M681/M682/E67550/E67560/E67650/E67660 printers. For the M652/M653/E65050/E65060/E65150/E65160 printers, skip this step.

1. Remove two screws (callout 1), and then release one tab (callout 2).

Figure 5-1109 Remove two screws and release one tab



2. Remove one screw (callout 1), release two tabs (callout 2), and then remove the main cover (callout 3).


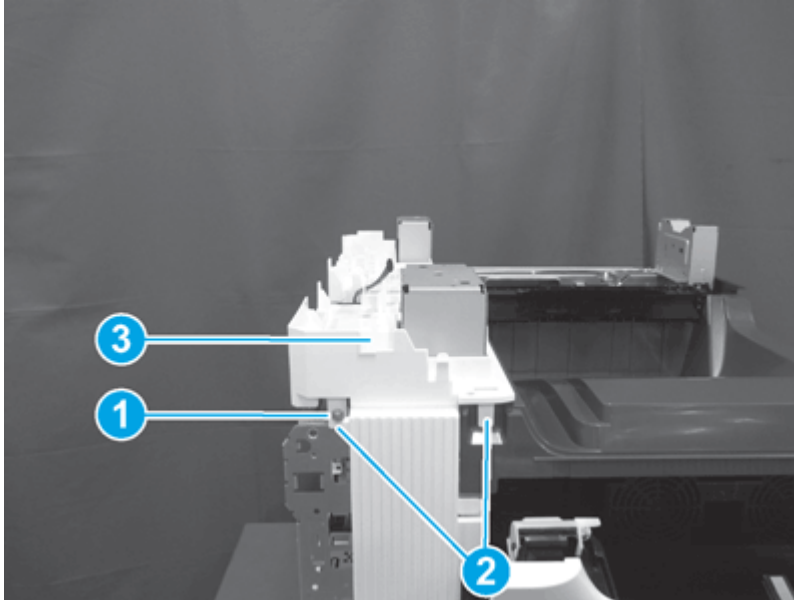

 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1110 Remove one screw and the main cover



12. Remove the control panel (M652/M653/E65050/E65060/E65150/E65160)

Follow these steps to remove the control panel (M652/M653/E65050/E65060/E65150/E65160).

 **NOTE:** This step is for the M652/M653/E65050/E65060/E65150/E65160 printers. For the M681/M682/E67550/E67560/E67650/E67660 printers, skip this step.

The figures below show the touchscreen control panel. The procedure is also correct for the keypad control panel.

1. Tilt the control panel to the fully raised position.

Figure 5-1111 Tilt the control panel up



2. Use a coin to release the cover, and then remove the cover.

Figure 5-1112 Remove the cover



3. Remove one thumbscrew (callout 1)


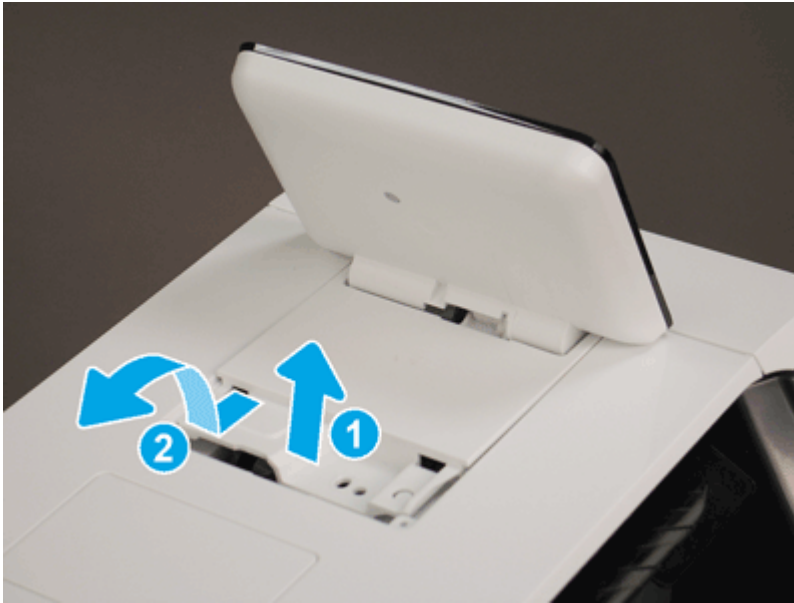
 **NOTE:** Store the screw in a secure place where it cannot fall down into the printer.

Figure 5-1113 Remove one thumbscrew



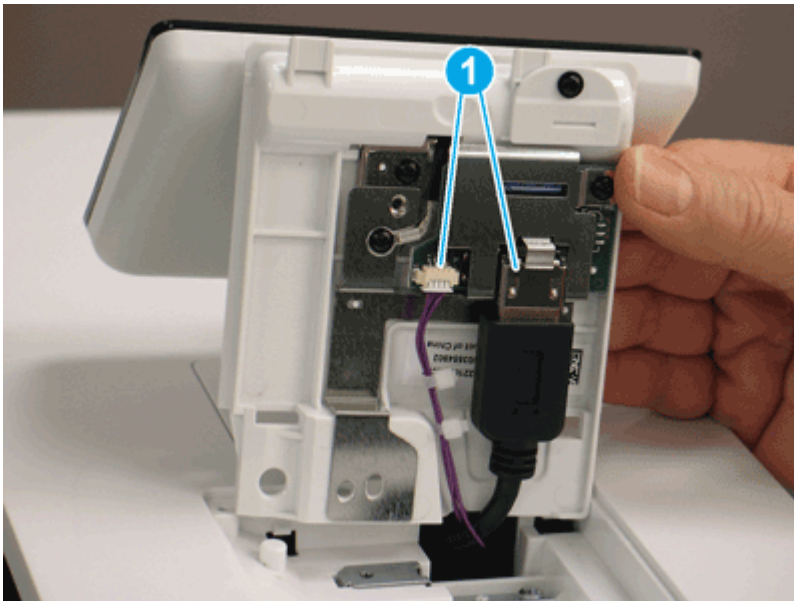
4. Lift the back edge of the control panel up (callout 1), and then slide it toward the back of the printer (callout 2) to release it.

Figure 5-1114 Release the control panel



5. Turn the control panel over to gain access to the bottom side. Disconnect two connectors (callout 1).

Figure 5-1115 Disconnect two connectors



6. Remove the control panel.

Figure 5-1116 Remove the control panel



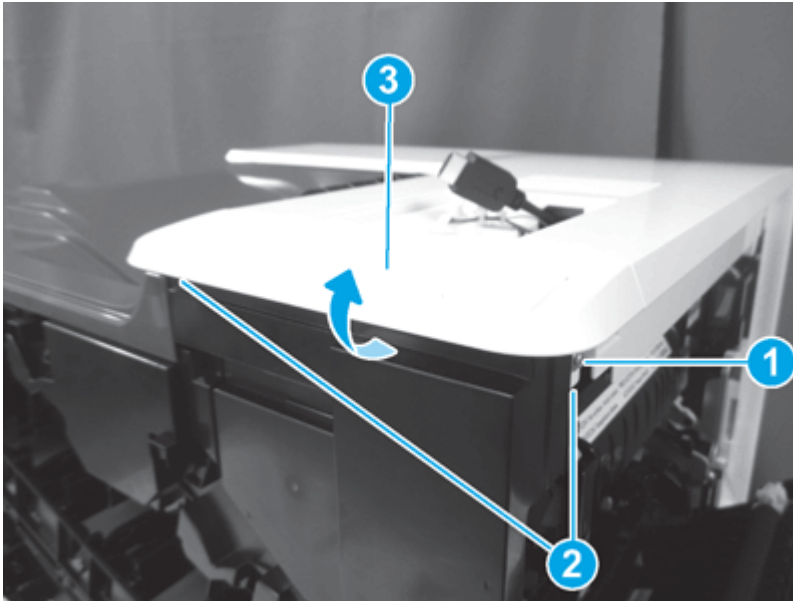
13. Remove the top cover (M652/M653/E65050/E65060/E65150/E65160)

Follow these steps to remove the top cover (M652/M653/E65050/E65060/E65150/E65160).

1. Open the following doors:
 - Front door
 - Left door
 - Right door

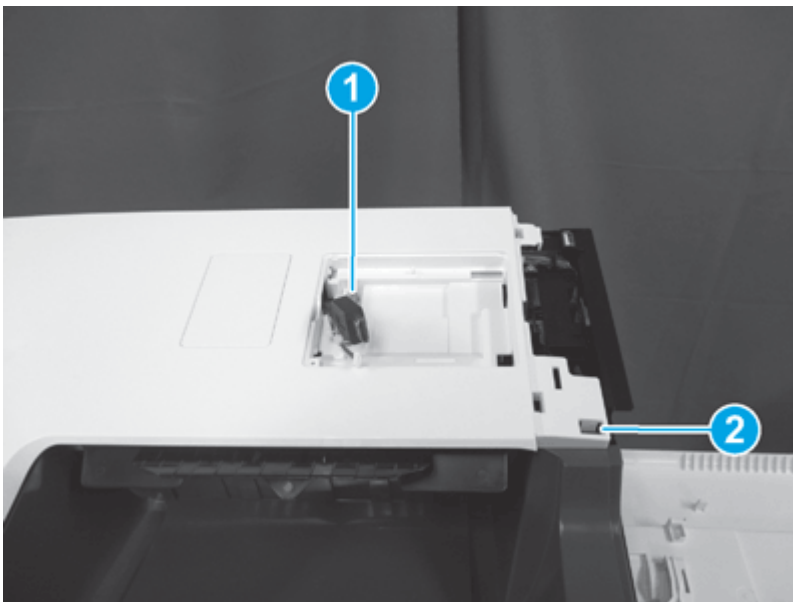
2. Remove one screw (callout 1), release two tabs (callout 2), and then rotate the NFC cover (callout 3) up and away from the printer to remove it.

Figure 5-1117 Remove the NFC cover



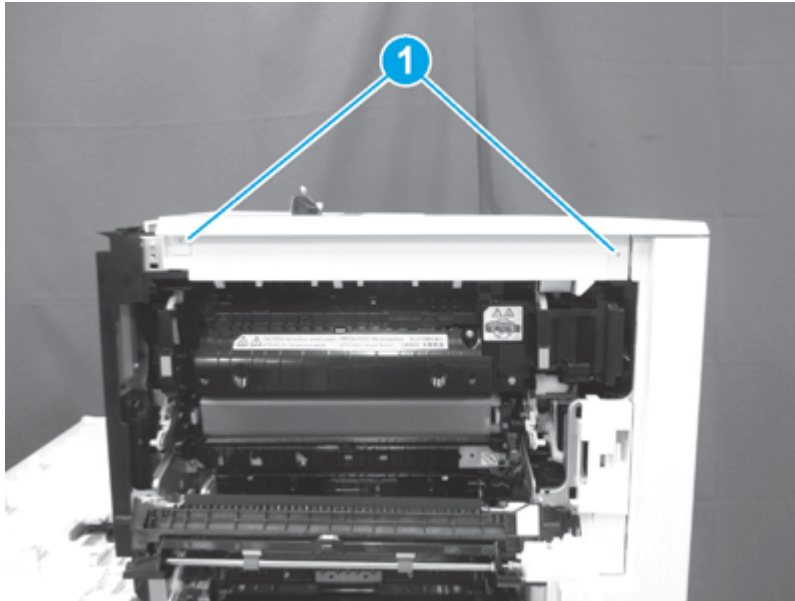
3. Remove one screw (callout 1), and then release one tab (callout 2).

Figure 5-1118 Remove one screw and release one tab



4. Release two tabs (callout 1).

Figure 5-1119 Release two tabs



5. Remove one screw (callout 1), release one tab (callout 2), release one tab behind the left door (callout 3), and then remove the top cover (callout 4).


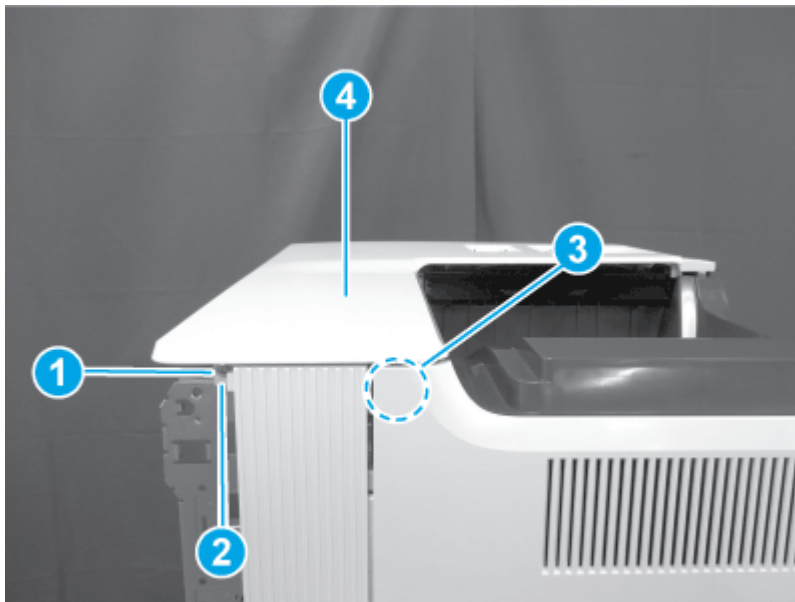
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1120 Remove the top cover



14. Remove the output bin

Follow these steps to remove the output bin.

1. Open the following doors:
 - Front door
 - Left door
 - Right door
2. Release two tabs (callout 1), and then remove the output bin (callout 2).


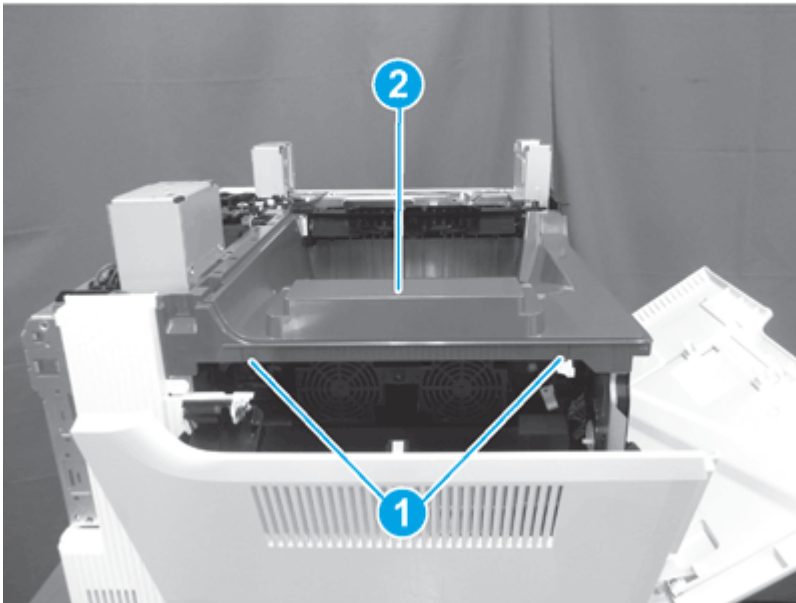
 **NOTE:** The M682 is shown in the figure below. The procedure is correct for all models.

Figure 5-1121 Remove the output bin



15. Remove the formatter cover

Follow these steps to remove the formatter cover.

- Unscrew two thumbscrews (callout 1), and then slide the formatter cover (callout 2) away from the printer to remove it.


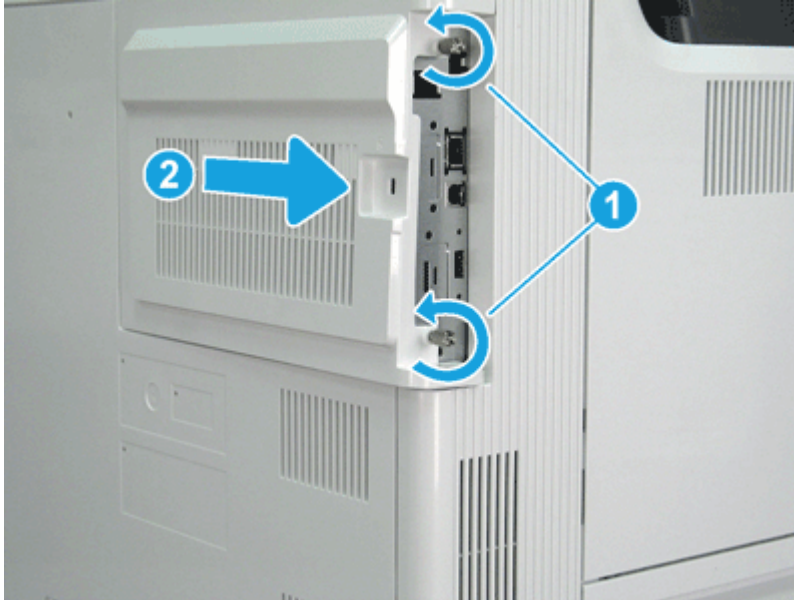
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1122 Remove the formatter cover

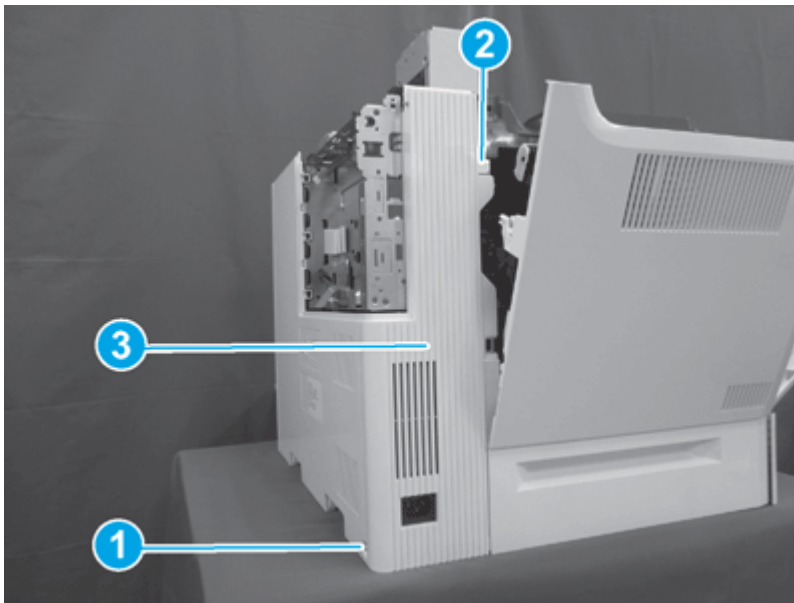


16. Remove the left rear cover

Follow these steps to remove the left rear cover.

- Open the left door. Remove one screw (callout 1), release one boss (callout 2), and then remove the left rear cover (callout 3).

Figure 5-1123 Remove the left rear cover



17. Remove the rear cover

Follow these steps to remove the rear cover.

- Remove two screws (callout 1), and then slide the rear cover (callout 2) to the right to remove it.


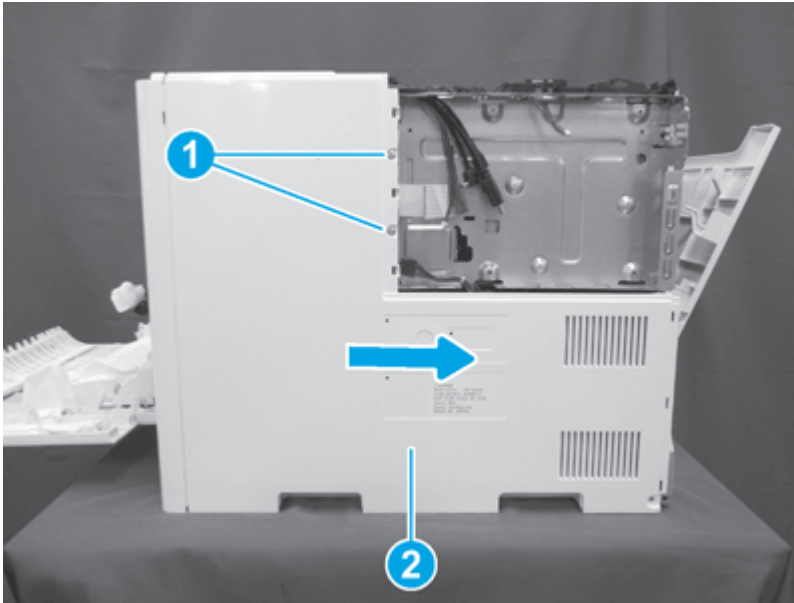

 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1124 Remove two screws and the rear cover



18. Remove the fax PCA (M681f/Flow M681f/Flow M681z/Flow M682z)

Follow these steps to remove the fax PCA (M681f/Flow M681f/Flow M681z/Flow M682z).

 **NOTE:** This step is for the M681/M682/E67550/E67560/E67650/E67660 printers. For the M652/M653/E65050/E65060/E65150/E65160 printers, skip this step.

1. Locate the fax PCA on the formatter.

Figure 5-1125 Locate the fax PCA



2. Rotate end left end of the fax PCA away from the formatter (callout 1) to disconnect the connector, and then slide the card away from the formatter (callout 2) to remove it.

Figure 5-1126 Remove the fax PCA

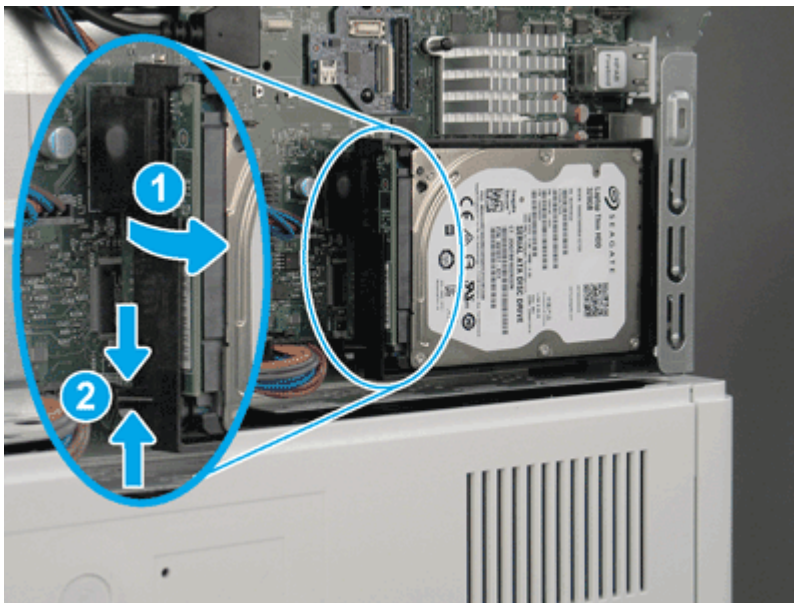


19. Remove the hard disk drive (HDD; M653dh/M681/M682/E67550/E67560/E67650/E67660)

Follow these steps to remove the hard disk drive (HDD; M653dh/M681/M682/E67550/E67560/E67650/E67660).

1. Release the locking connector (callout 1), and then pinch the retainer (callout 2) to release it.

Figure 5-1127 Release the HDD



2. Rotate the connector end of the HDD out and away from the formatter (callout 1), and then slide it to the left (callout 2) to remove it.

Figure 5-1128 Remove the HDD

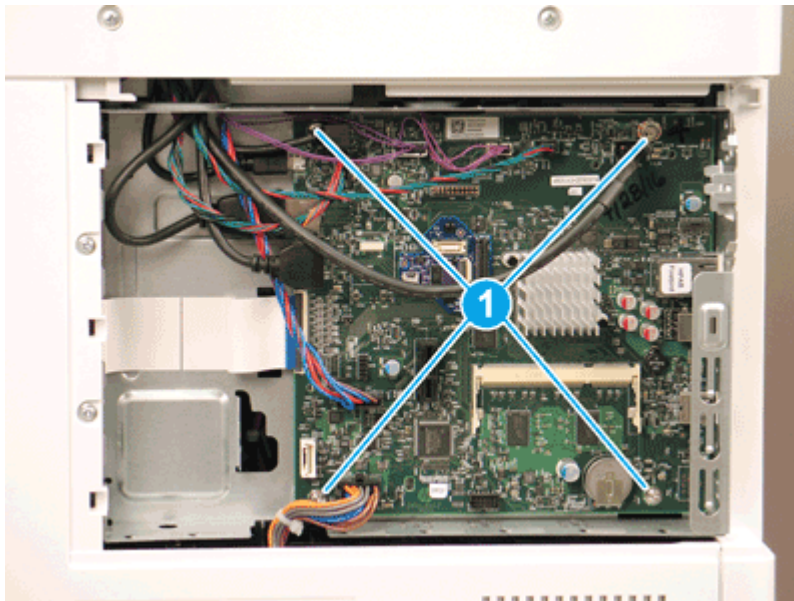


20. Remove the formatter

Follow these steps to remove the formatter.

- Disconnect all of the connectors on the formatter, remove four screws, and then remove the formatter.

Figure 5-1129 Remove the formatter



21. Remove the formatter case

Follow these steps to remove the formatter case.

1. Disconnect one connector (callout 1), remove two screws on the left side of the case (callout 2), and then remove two screws on the right end of the case (callout 3).


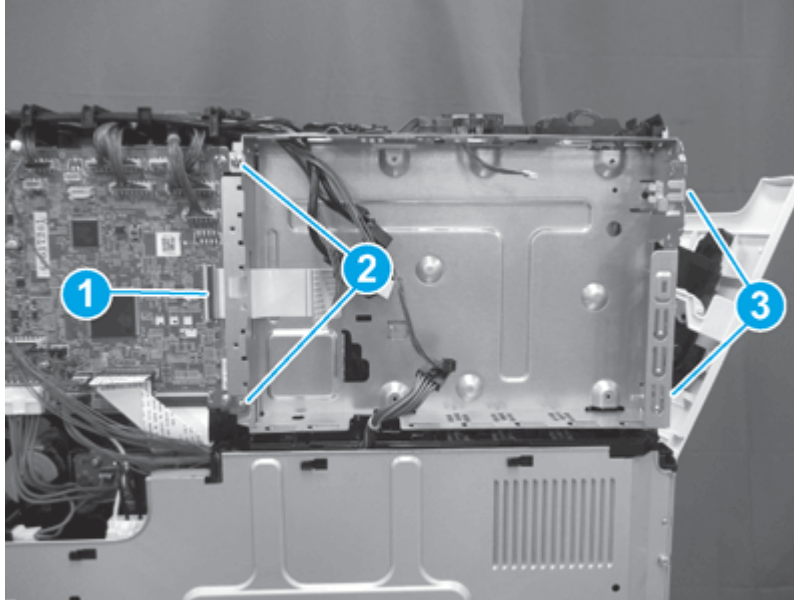
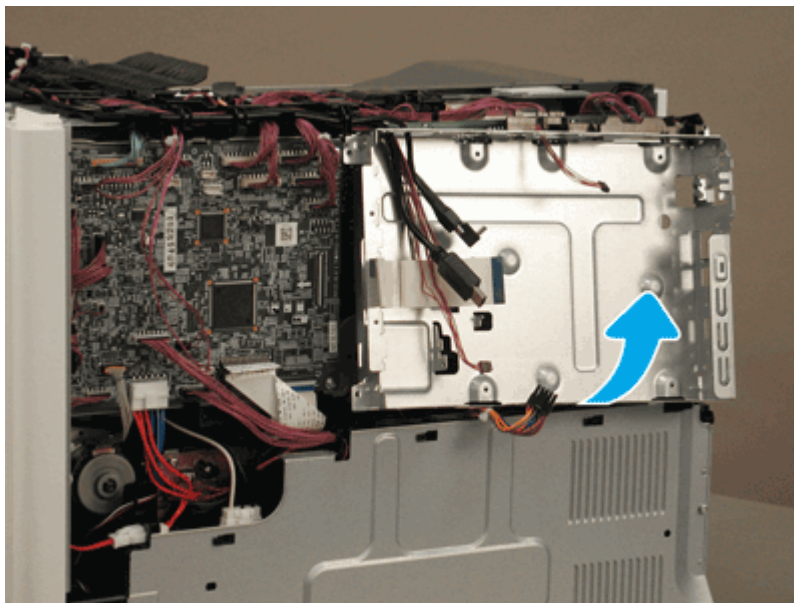
 **NOTE:** These screws are gold tinted to provide additional grounding. Make sure that these screws are reinstalled in the correct locations.

Figure 5-1130 Disconnect one connector and remove four screws



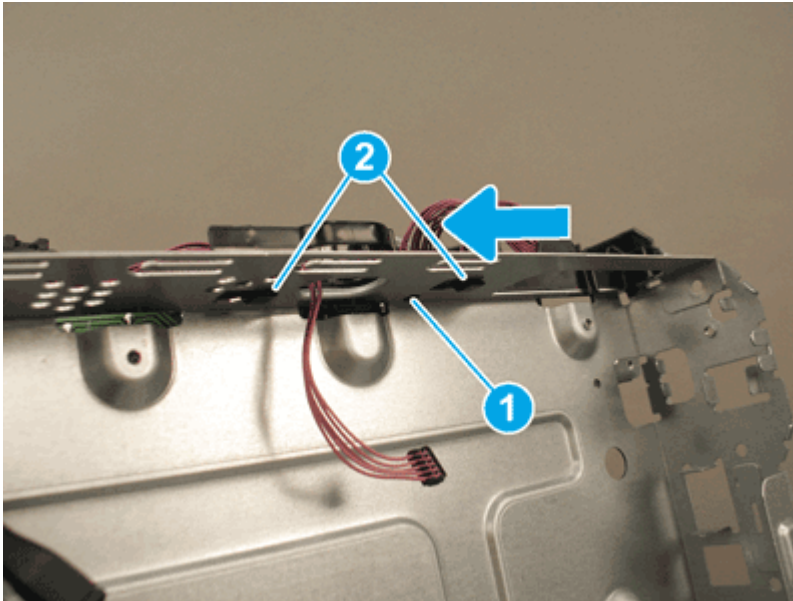
2. Tilt the bottom of the formatter case away from the printer.

Figure 5-1131 Tilt the formatter case



3. Locate one round boss (callout 1) and two hooks (callout 2) on the cable guide. Push up on the boss, and then slide the cable guide to the left to remove it. Remove the formatter case.

Figure 5-1132 Remove the cable guide

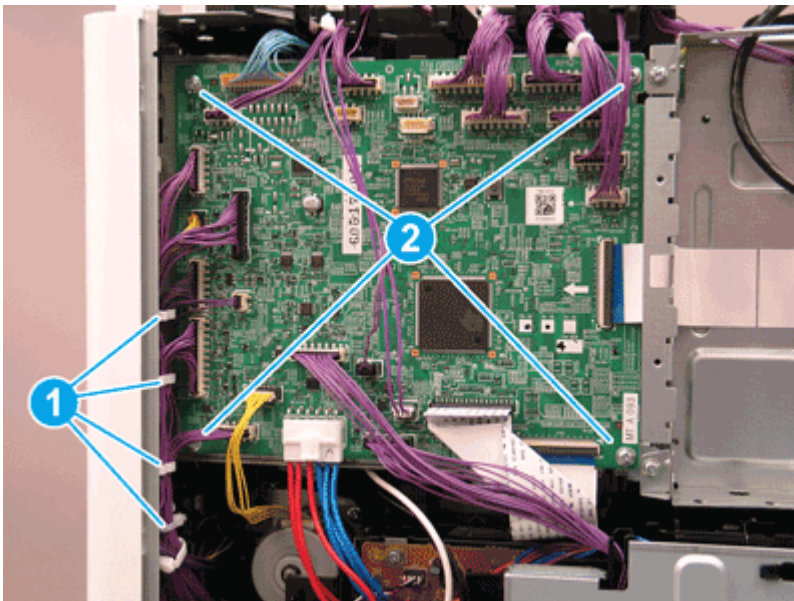


22. Remove the DC controller PCA

Follow these steps to remove the DC controller PCA.

- Release four retainers (callout 1), and then disconnect all connectors on the DC controller PCA. Remove four screws (callout 2), and then remove the DC controller PCA.

Figure 5-1133 Remove the DC controller PCA

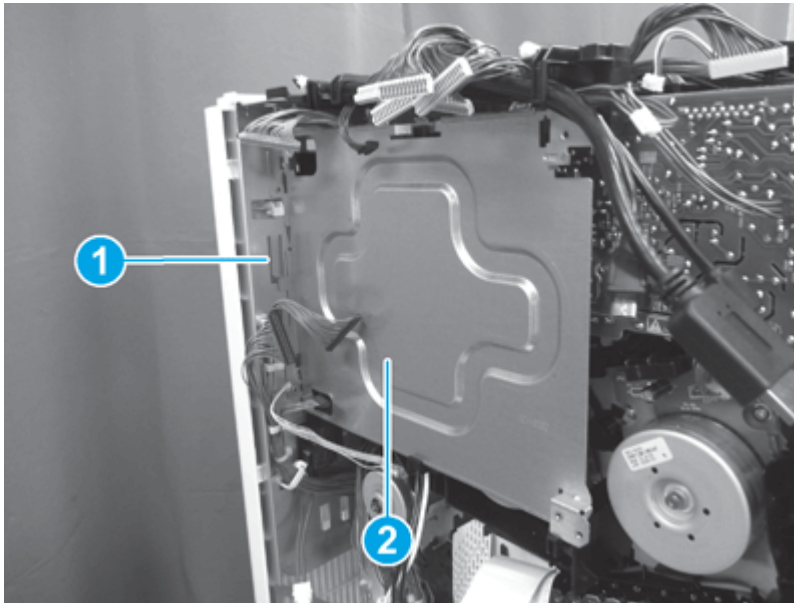


23. Remove the DC controller stay

Follow these steps to remove the DC controller stay.

- Gently push out on the sheet metal tab (callout 1) to release the DC controller stay (callout 2), and then lift up to remove it.

Figure 5-1134 Remove the DC controller stay

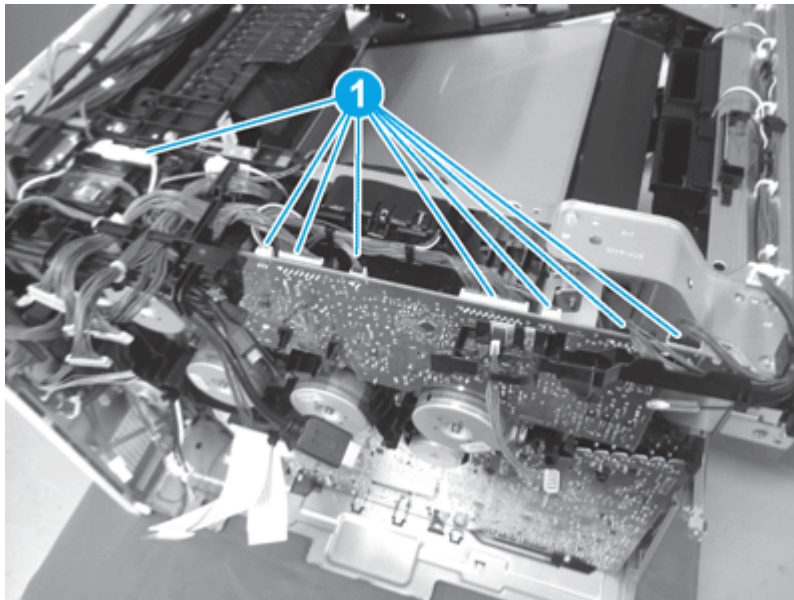


24. Remove the upper high-voltage power supply (HVPS)

Follow these steps to remove the upper high-voltage power supply (HVPS).

1. Disconnect eight connectors (callout 1).

Figure 5-1135 Disconnect eight connectors



2. Release the cable (callout 1) from the retainer (callout 2). Remove one screw (callout 3), release five tabs (callout 4), and then remove the upper HVPS (callout 5).


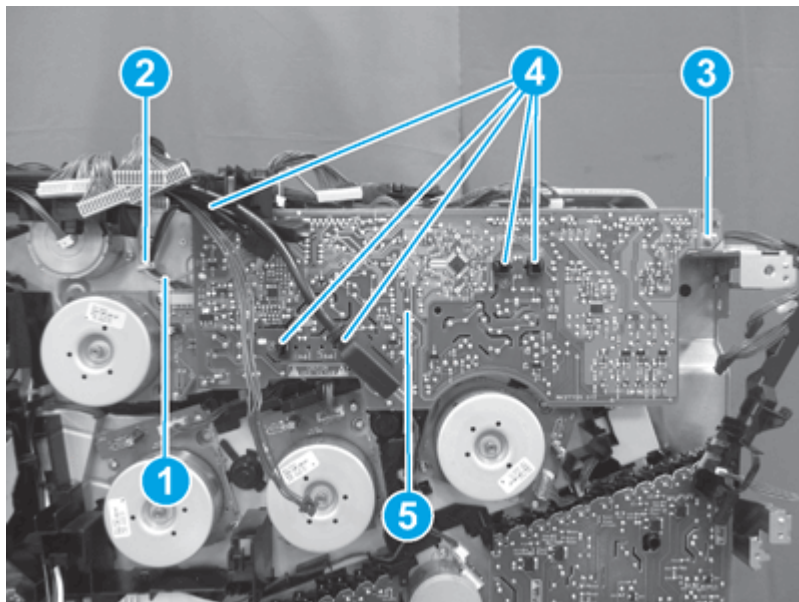
 **TIP:** The screw (callout 3) is a grounding screw with a washer attached. Make sure that this screw and washer are installed in the correct position.

Figure 5-1136 Remove the upper HVPS



25. Unpack the replacement assembly



Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.


 **NOTE:** HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>


2. Unpack the replacement part from the packaging.

 **CAUTION:**  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

 **IMPORTANT:** Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

 **NOTE:** If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

- To install an assembly, reverse the removal steps.

 **NOTE:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

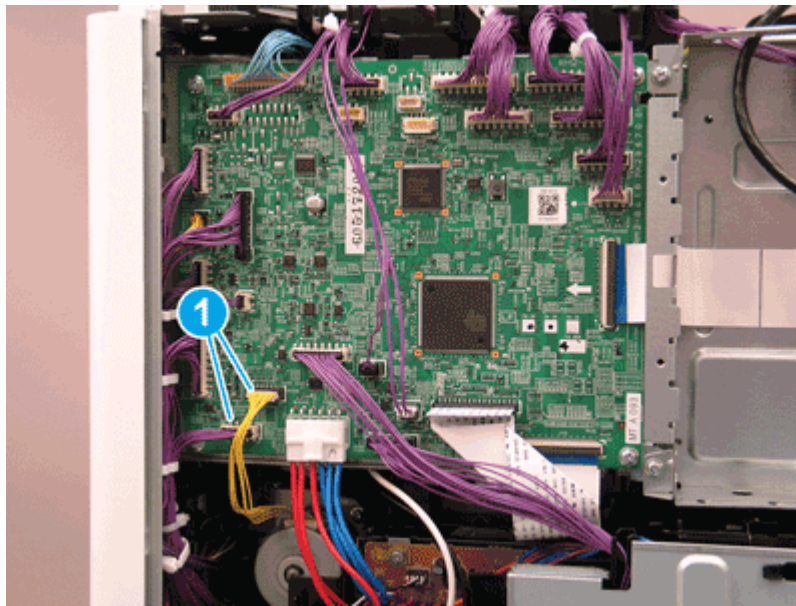
26. Reverse the removal steps to install the assembly

Also use the following **special installation instructions**.

DC controller PCA

- Two cables (callout 1) will fit in more than one connector. Make sure that these cables are installed in the correct connectors.

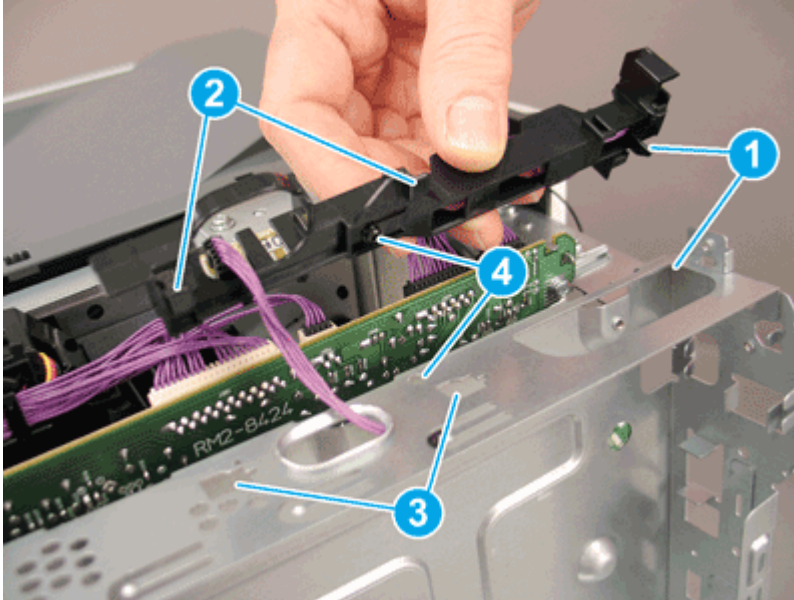
Figure 5-1137 Check the yellow cable



Formatter case

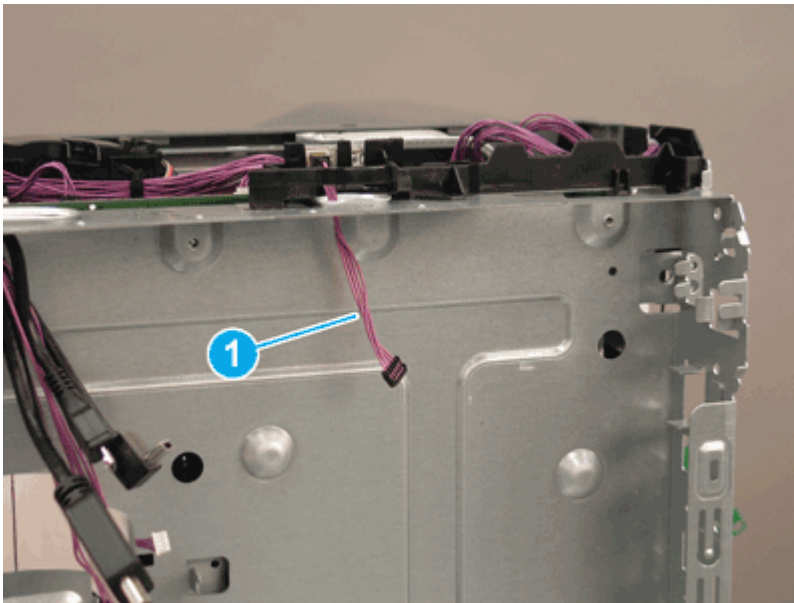
- Align the hook on the right side of the cable guide with the slot in the formatter case (callout 1). Align two tabs (callout 2) with the slots (callout 3) in the top of the formatter case. Align the boss with the opening in the sheet metal (callout 4). Slide the cable guide to the right to lock it into position.

Figure 5-1138 Install the cable guide



2. Make sure that the island of data (IOD) cable (callout 1) is routed through the formatter case.

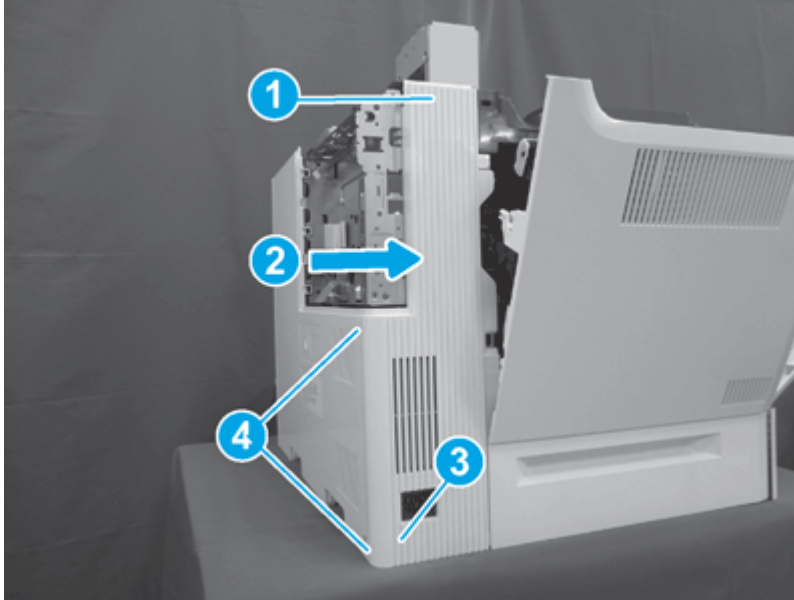
Figure 5-1139 Check the IOD cable



Left rear cover

- Position the top of the cover (callout 1) first, and then slide the cover to the right (callout 2). Push the left lower corner (callout 3) toward the rear of the printer to engage two tabs (callout 4) in the slots on the rear cover.

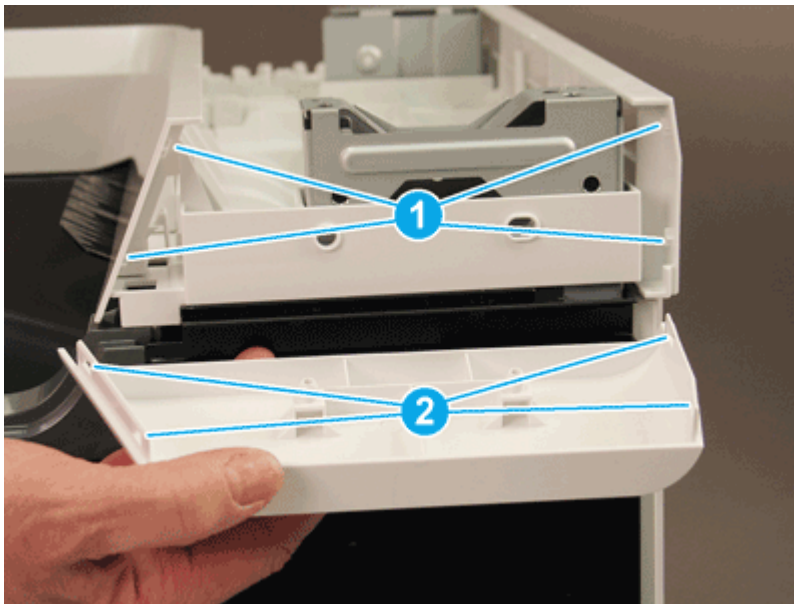
Figure 5-1140 Install the left rear cover



Face-down front cover

- When reinstalling the cover, position the tabs (callout 1) on the printer into the slots (callout 2) on the cover.

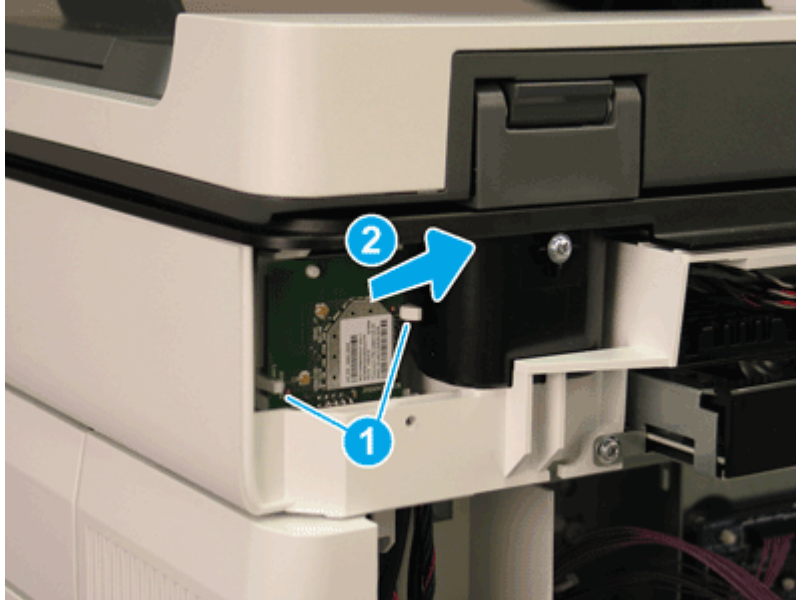
Figure 5-1141 Install the cover



Document feeder and image scanner

1. **Flow M682z only:** When reconnecting the wireless card cable, do the following:
 - a. Release two tabs (callout 1), and then remove the wireless card (callout 2).

Figure 5-1142 Remove the wireless card



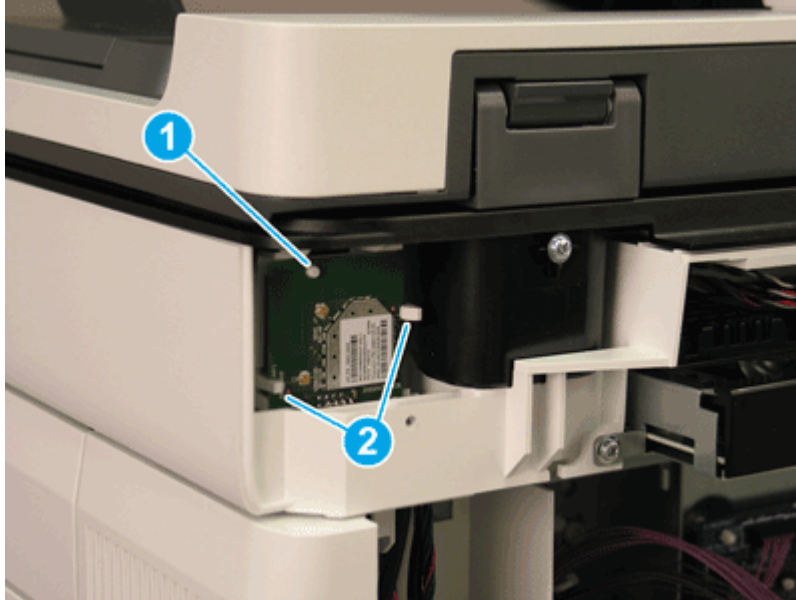
- b. Connect the cable to the wireless card (callout 1).

Figure 5-1143 Connect the wireless card connector



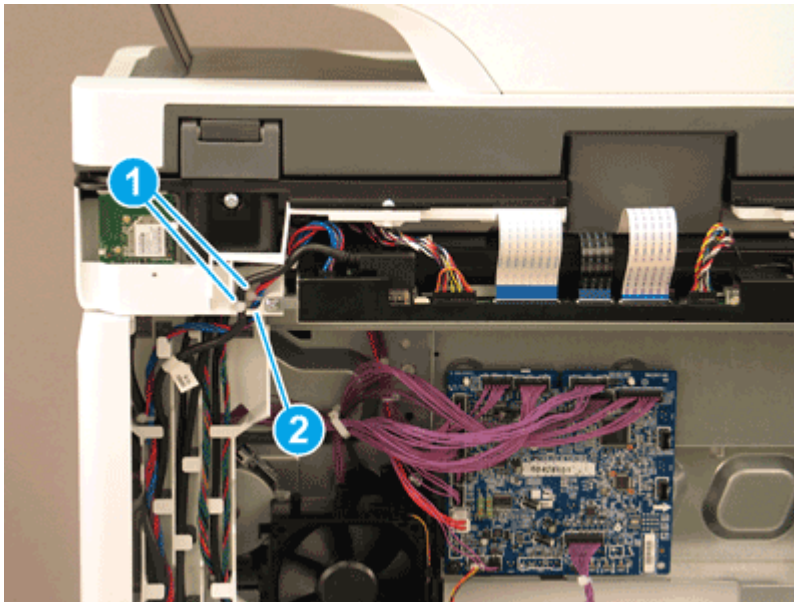
- c. Reinstall the wireless card. Make sure that the hole in the card is positioned over the peg (callout 1), and that the card is under the two tabs (callout 2).


Figure 5-1144 Reinstall the wireless card



2. When reinstalling the SCB cables, make sure that the wire retainers (callout 1) on the cables are positioned above the plastic guide (callout 2).

Figure 5-1145 Install the SCB cables



 **NOTE:** Continue to reverse the removal steps to finish installing the assembly.

Removal and replacement: Rear fan

Learn how to remove and replace the rear fan.

 [View a video of how to remove and replace the rear fan.](#)

Mean time to repair: 35 minutes

Service level: Advanced



IMPORTANT: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Disconnect the power cable.

⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-68 Part information

Part number	Part description
RK2-6124-000CN	Rear fan

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Make sure that the printer initializes to a **Ready** state.

Print a configuration page to make sure that the printer is functioning correctly.

1. Remove the keyboard (MFP)

Follow these steps to remove the keyboard (MFP).

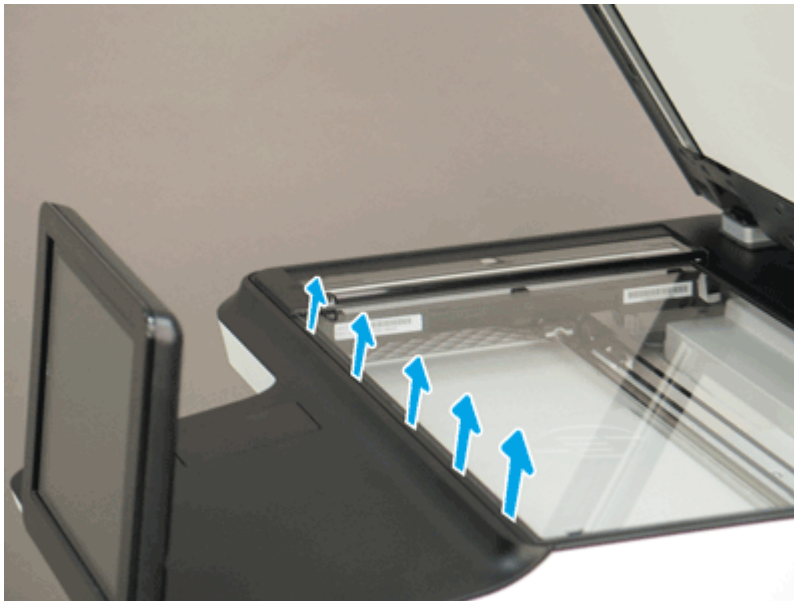
1. If the control panel is not fully tilted forward, tilt it forward now (callout 1) until it stops. Open the document feeder (callout 2).

Figure 5-1146 Tilt the control panel and open the document feeder



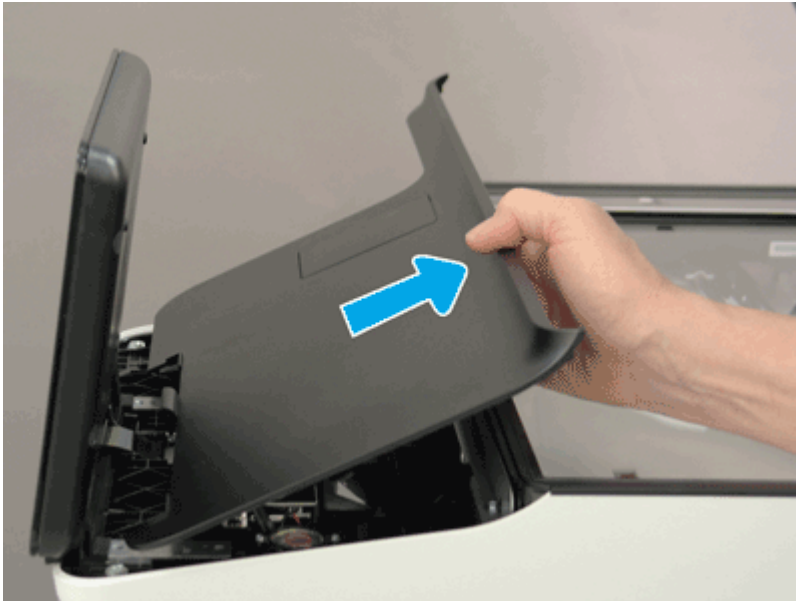
2. Beginning at the right side of the control-panel cover, carefully release five tabs along the top edge of the cover.

Figure 5-1147 Release five tabs



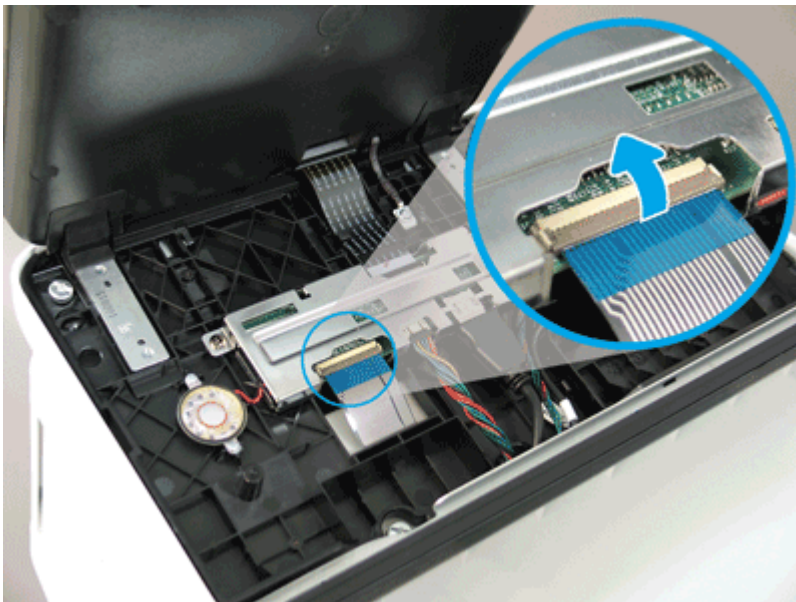
3. Continue to rotate the top edge of the cover away from the printer, and then remove the cover.

Figure 5-1148 Remove the cover



4. Open the connector latch to release the keyboard flat cable.

Figure 5-1149 Disconnect the keyboard flat cable



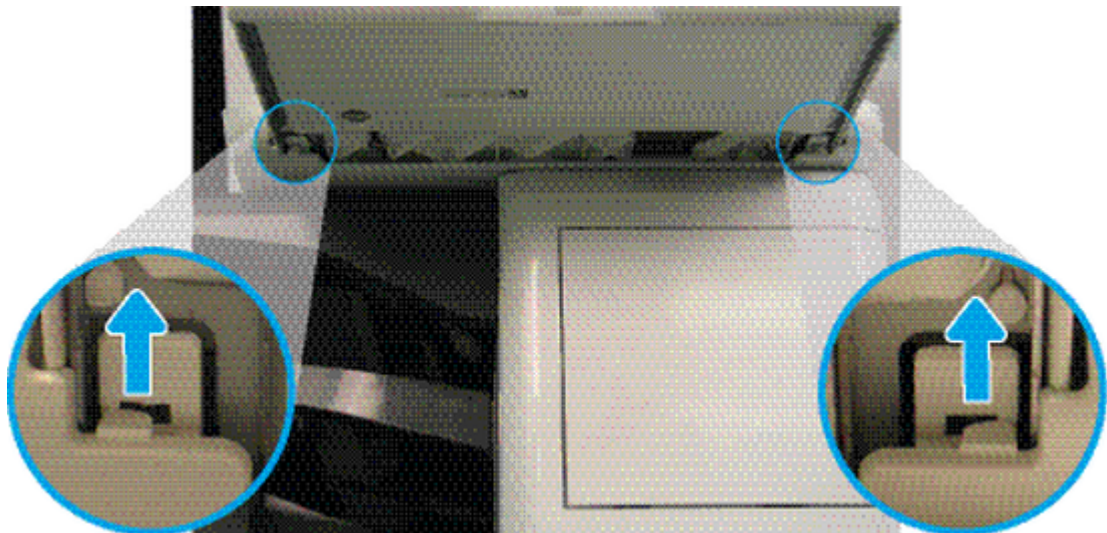
5. Slide the keyboard tray out until it stops.

Figure 5-1150 Slide the keyboard tray out



6. Push up on the keyboard tray to release two tabs on the bottom of the tray, and then slide the tray toward you to disengage the tabs.

Figure 5-1151 Release two tabs




7. Slide the keyboard tray all the way out of the printer to remove it.

Figure 5-1152 Remove the keyboard



2. Remove the control panel (M681/M682/E67550/E67560/E67650/E67660)

Follow these steps to remove the control panel (M681/M682/E67550/E67560/E67650/E67660).

 **NOTE:** This step is for the M681/M682/E67550/E67560/E67650/E67660 printers. For the M652/M653/E65050/E65060/E65150/E65160 printers, skip this step.

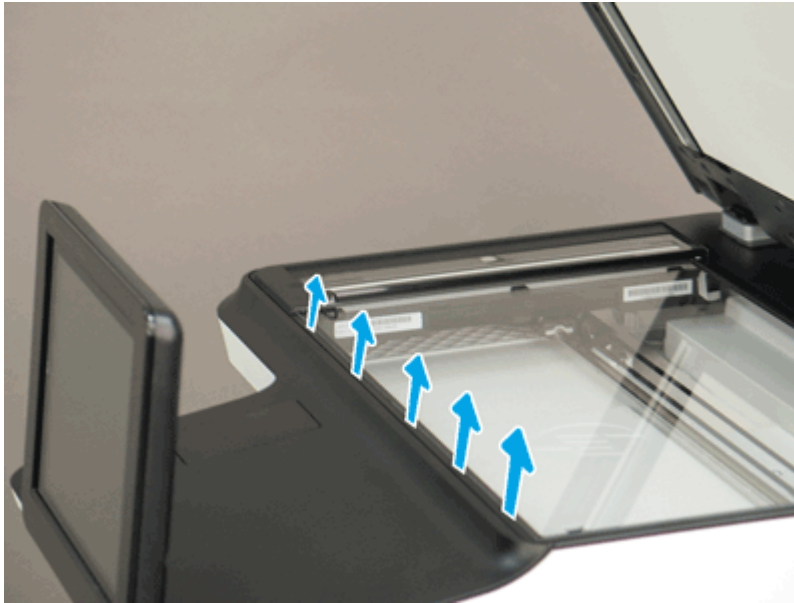
1. Tilt the control panel forward (callout 1), and then open the document feeder (callout 2).

Figure 5-1153 Tilt the control panel forward and open the document feeder



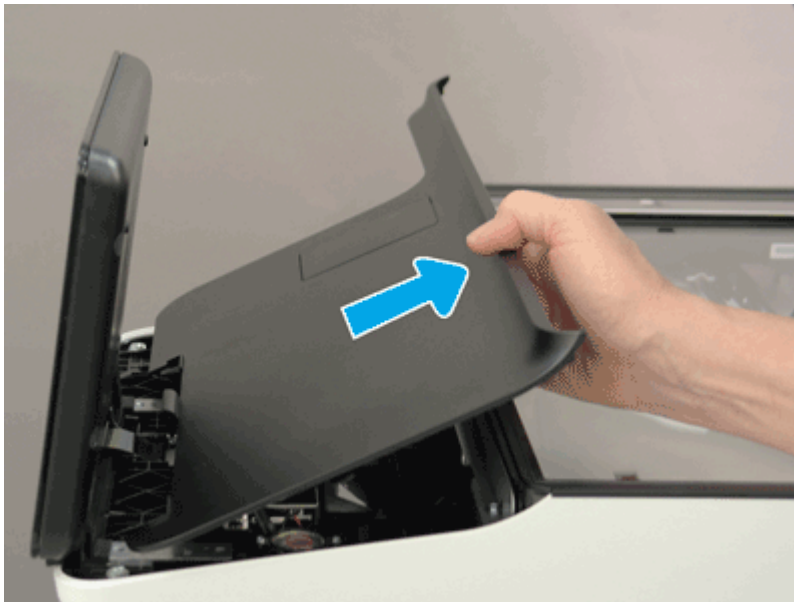
2. Beginning at the right side of the control-panel cover, carefully release five tabs along the top edge of the cover.

Figure 5-1154 Release five tabs



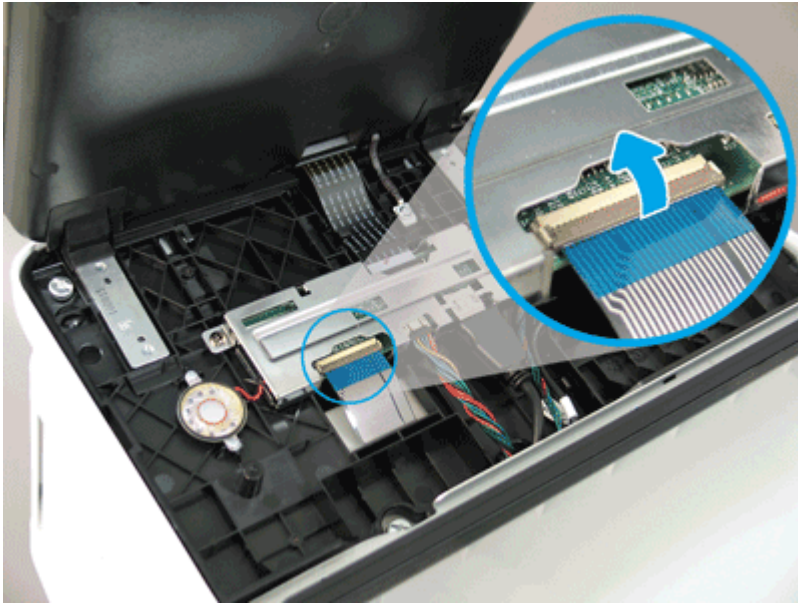
3. Continue to rotate the top edge of the cover away from the printer, and then remove the cover.

Figure 5-1155 Remove the cover



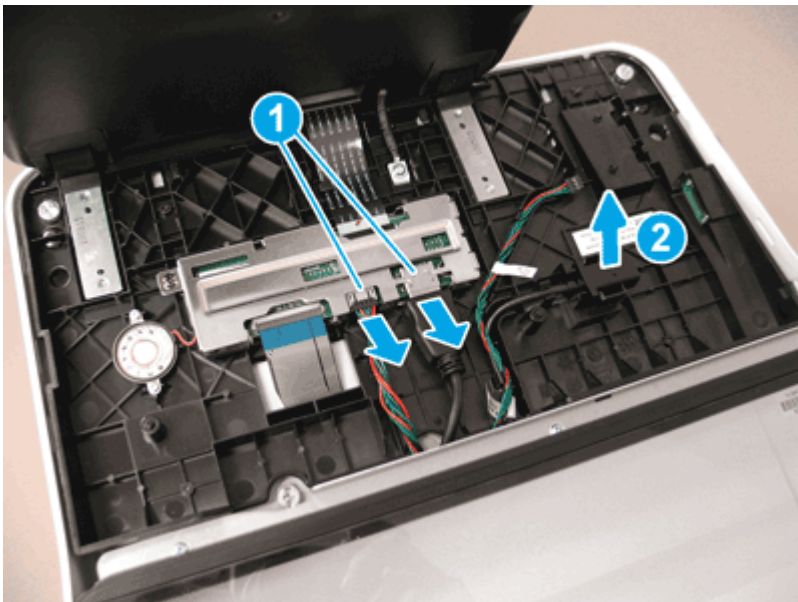
4. **Keyboard models only:** Lift up on the small, gray gate to release the keyboard flat cable.

Figure 5-1156 Disconnect the keyboard flat cable (keyboard models only)



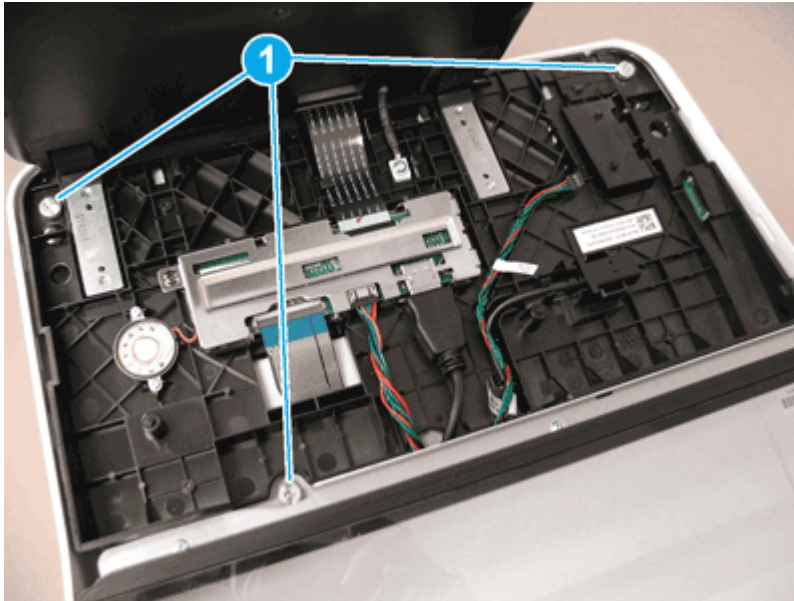
5. Disconnect two connectors (callout 1), and then release the USB cable (callout 2) from the holder.

Figure 5-1157 Disconnect connectors



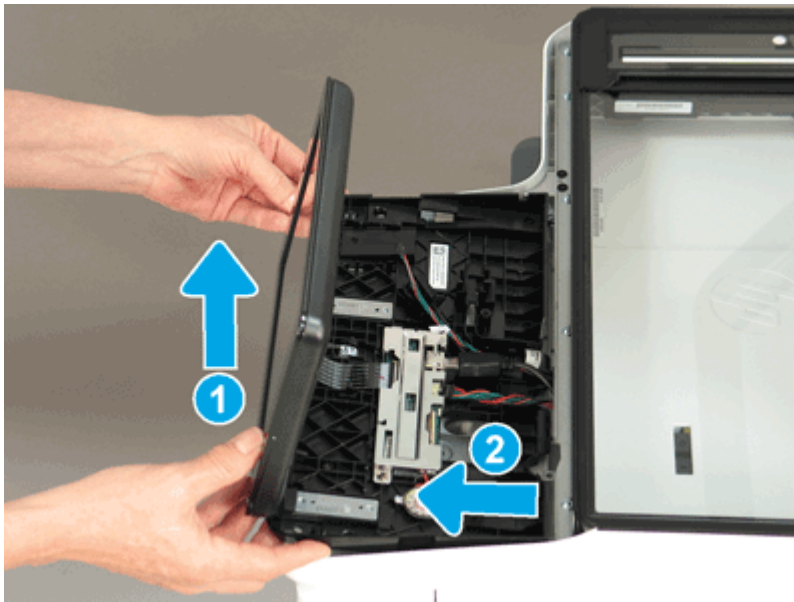
6. Remove three thumbscrews (callout 1).

Figure 5-1158 Remove three thumbscrews



7. Lift the front of the control panel off of the printer (callout 1), and then slide it toward the front of the printer (callout 2) to remove it.

Figure 5-1159 Remove the control panel

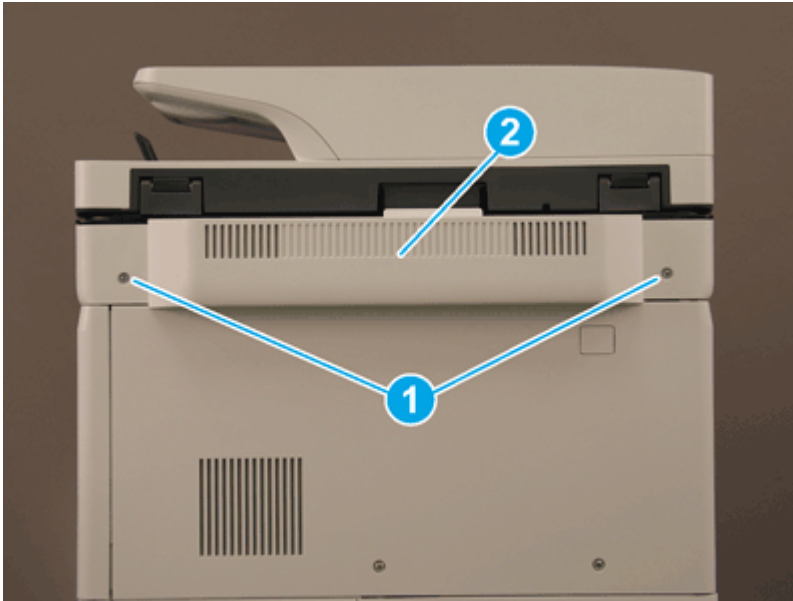


3. Remove the document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660)

Follow these steps to remove the document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660).

1. Remove two screws (callout 1), and then remove the scanner control board (SCB) cover (callout 2).

Figure 5-1160 Remove the SCB cover



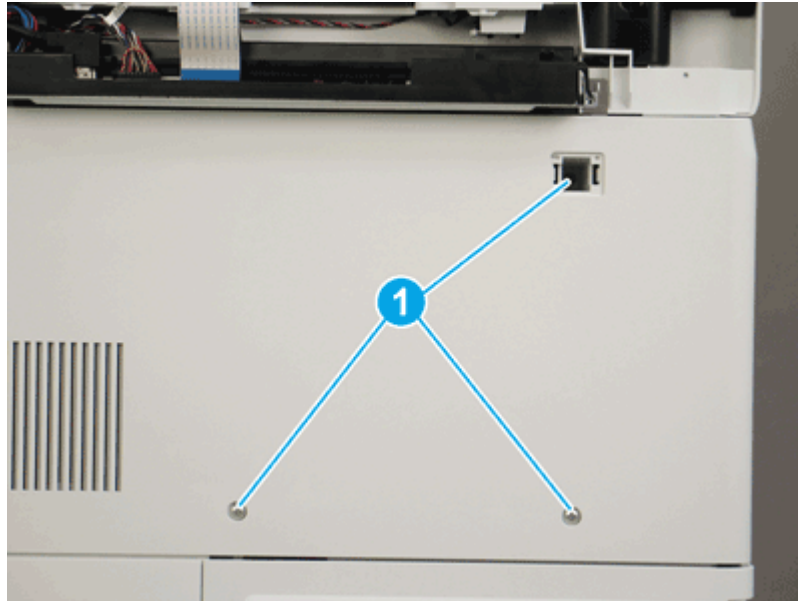
2. **Flow M681z/Flow M682z/Flow E67660z models only:** Do the following:
 - a. At the back of the printer, remove one small cover (callout 1).

Figure 5-1161 Remove the small cover



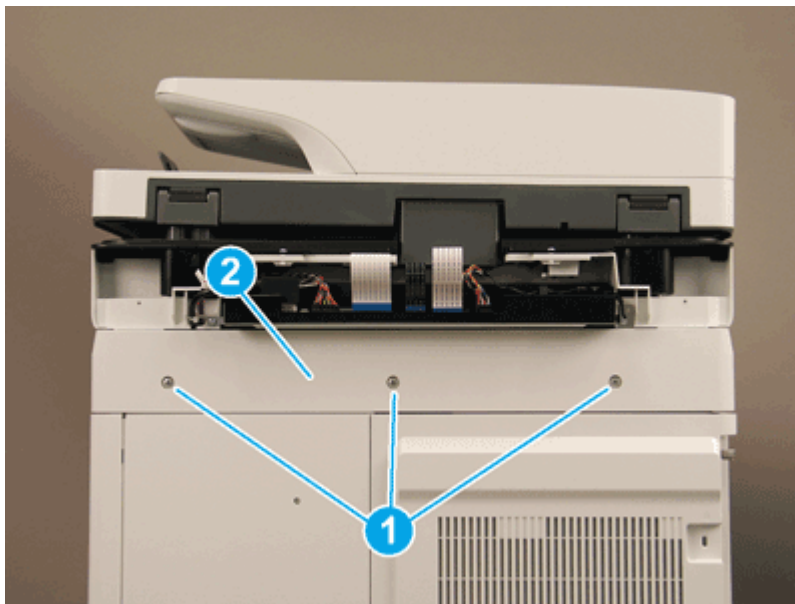
- b. Remove three screws (callout 1), and then remove the stapler/stacker rear cover (callout 2).

Figure 5-1162 Remove the stapler/stacker rear cover



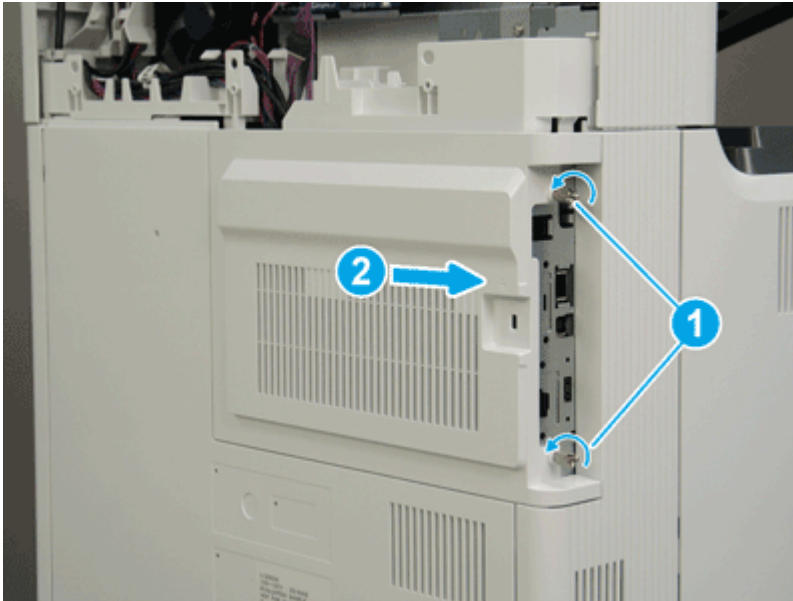
- 3. **M681dh/M681f/M682dh/Flow M681f/E67650dh models only:** Remove three screws (callout 1), and then remove the upper rear cover (callout 2).

Figure 5-1163 Remove the upper rear cover



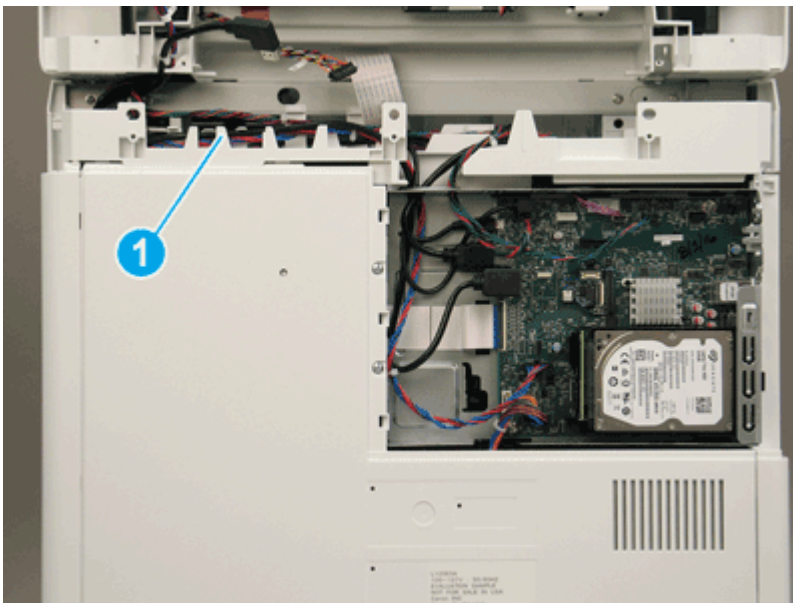
4. Loosen two thumbscrews (callout 1), and then slide the formatter cover away from the printer to remove it (callout 2).

Figure 5-1164 Remove the formatter cover



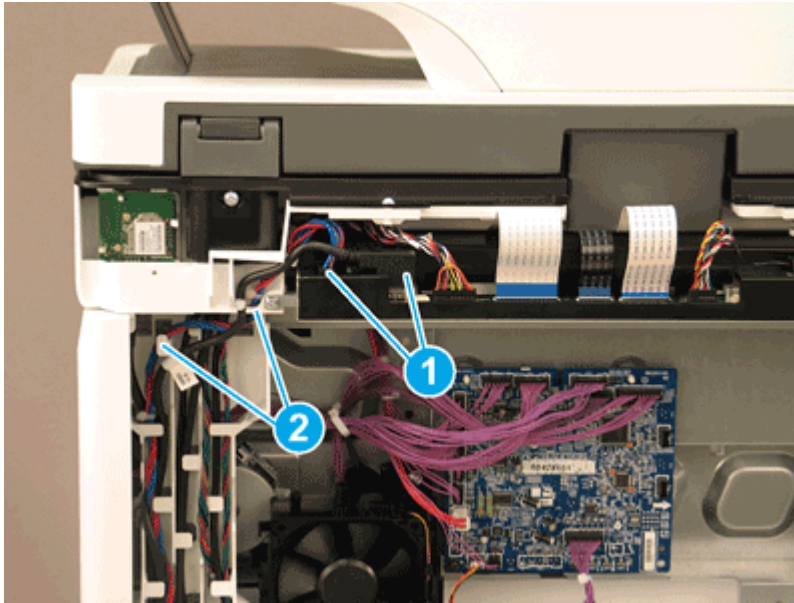
5. The remaining figures in this procedure show the Flow M682z model. While the cable routing (callout 1) on the M681dh, M681f, M682dh, Flow M681f, and E67650dh models is different, the removal procedures are the same for all models.

Figure 5-1165 Cable routing for M681dh, M681f, Flow M681f, and E67650dh



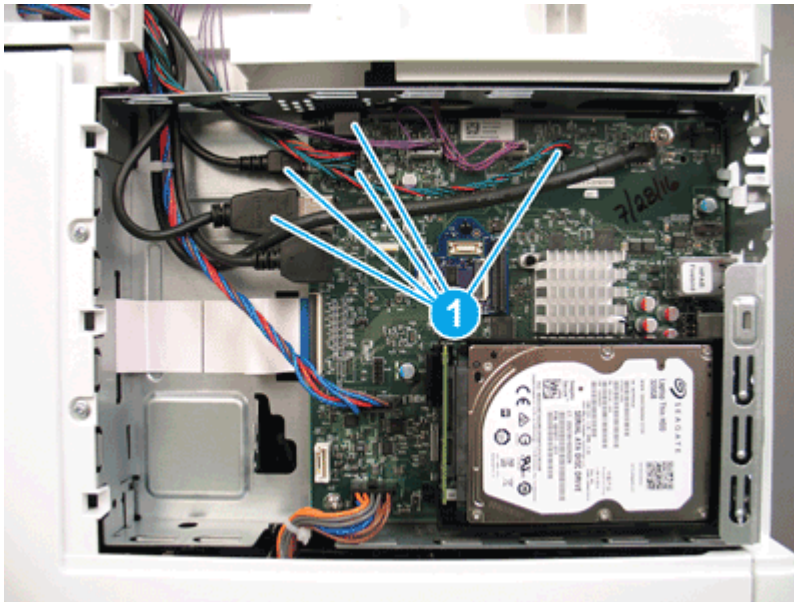
6. Disconnect two connectors (callout 1) on the SCB, and then release the cables from the guides (callout 2).

Figure 5-1166 Disconnect two connectors



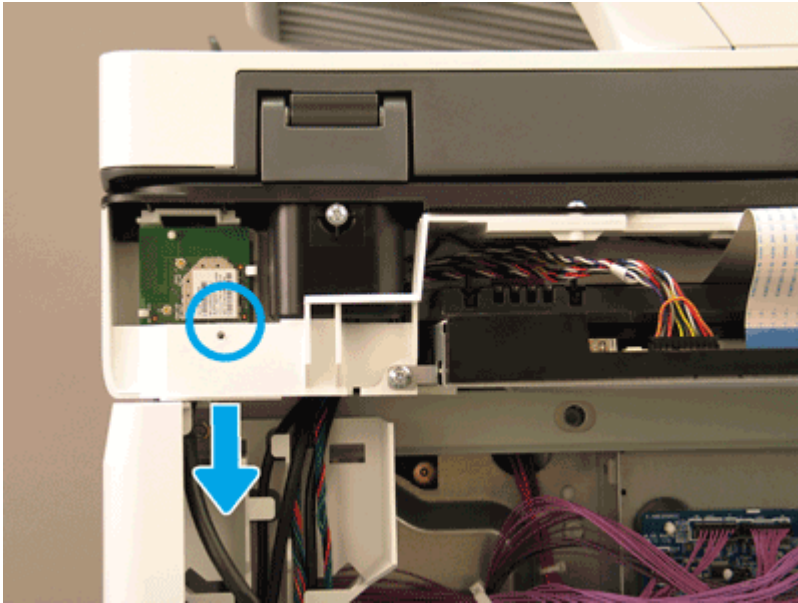
7. Disconnect five connectors on the formatter (callout 1).

Figure 5-1167 Disconnect five connectors



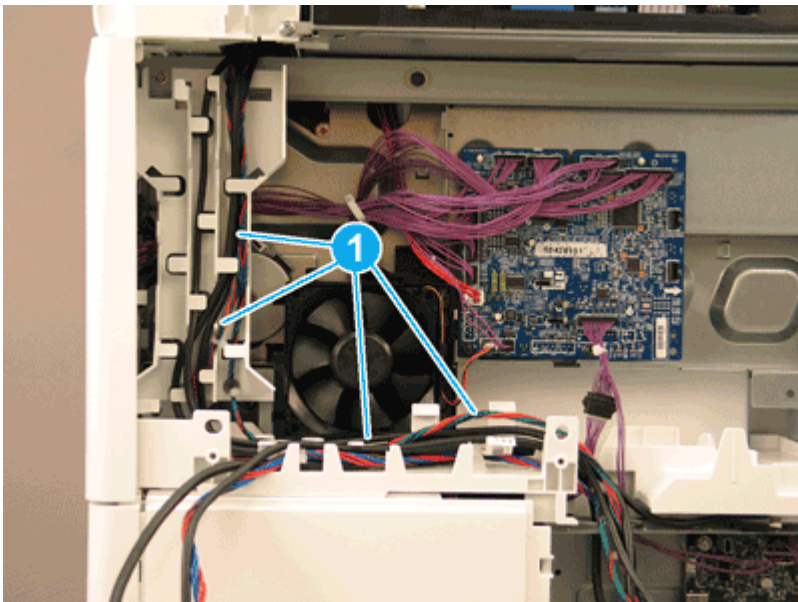
8. **Flow M682z only:** Gently pull down on the cable to disconnect the wireless connector.

Figure 5-1168 Disconnect the wireless connector



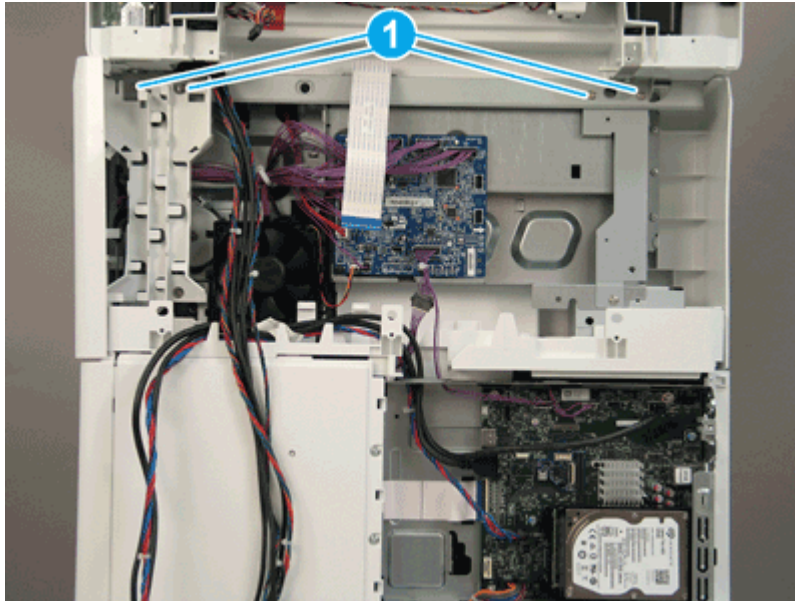
9. Release all of the cables from the cable guides (callout 1).

Figure 5-1169 Release the cables



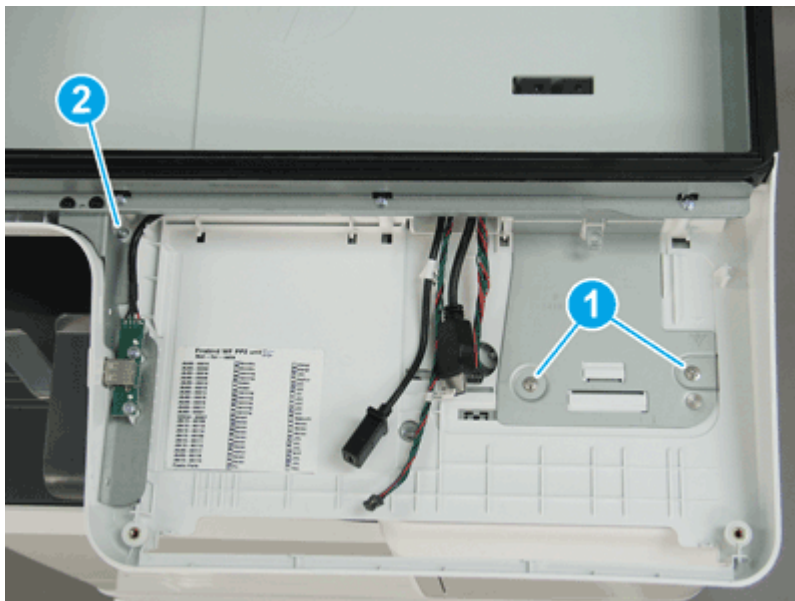
10. At the back of the printer, remove four screws (callout 1).

Figure 5-1170 Remove four screws



11. On the top of the image scanner assembly, at the location where the control panel was removed, remove two sheet metal screws (callout 1). **Flow M681z/Flow M682z/Flow E67660z only:** Remove one self-tapping screw (callout 2).

Figure 5-1171 Remove three screws



12. Lift the document feeder and image scanner off of the printer to remove them.

Figure 5-1172 Remove the document feeder and image scanner



4. Remove the stapler/stacker (Flow M681z/Flow M682z/Flow E67660z)

Follow these steps to remove the stapler/stacker (Flow M681z/Flow M682z/Flow E67660z).

This step is for the M681/M682/E67550/E67560/E67650/E67660 printers. For the M652/M653/E65050/E65060/E65150/E65160 printers, skip this step.

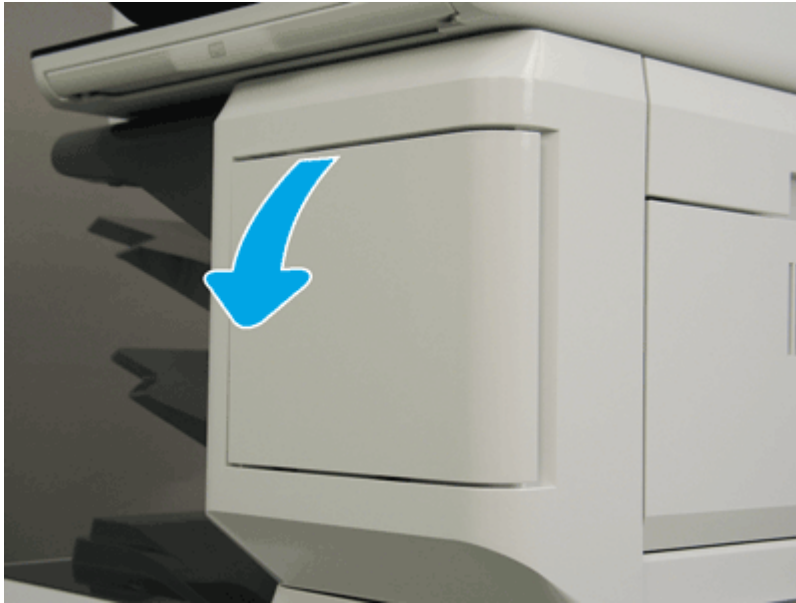
1. Open the front door.

Figure 5-1173 Open the front door



2. Open the stapler door.

Figure 5-1174 Open the stapler door



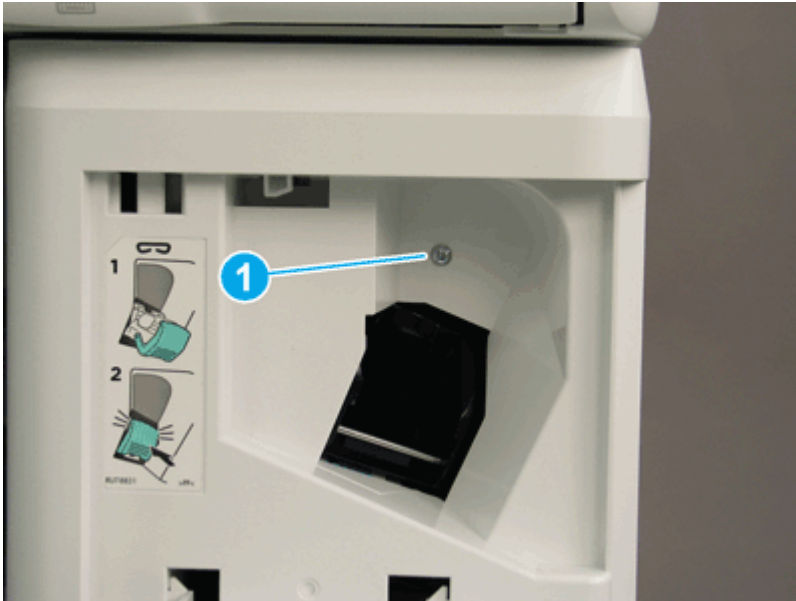
3. Release the latch, and then remove the staple cartridge.

Figure 5-1175 Remove the staple cartridge



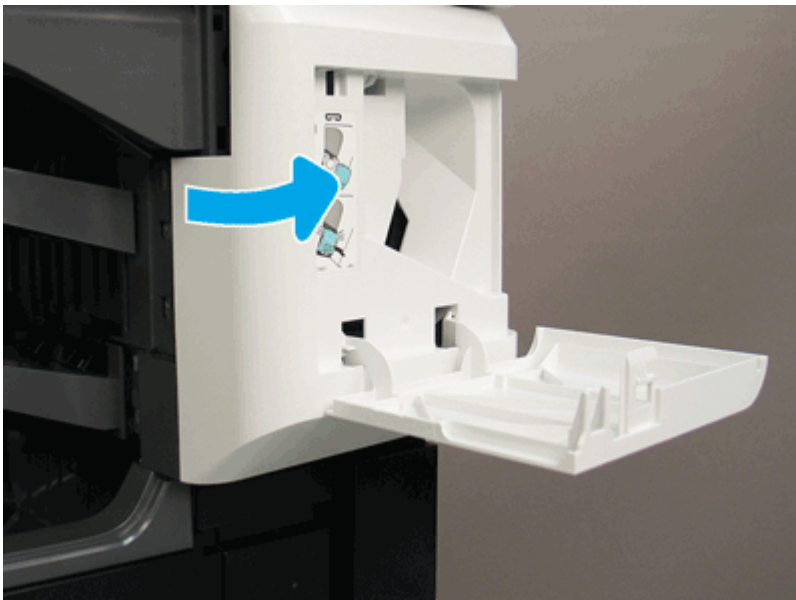
4. Remove one screw (callout 1).

Figure 5-1176 Remove one screw



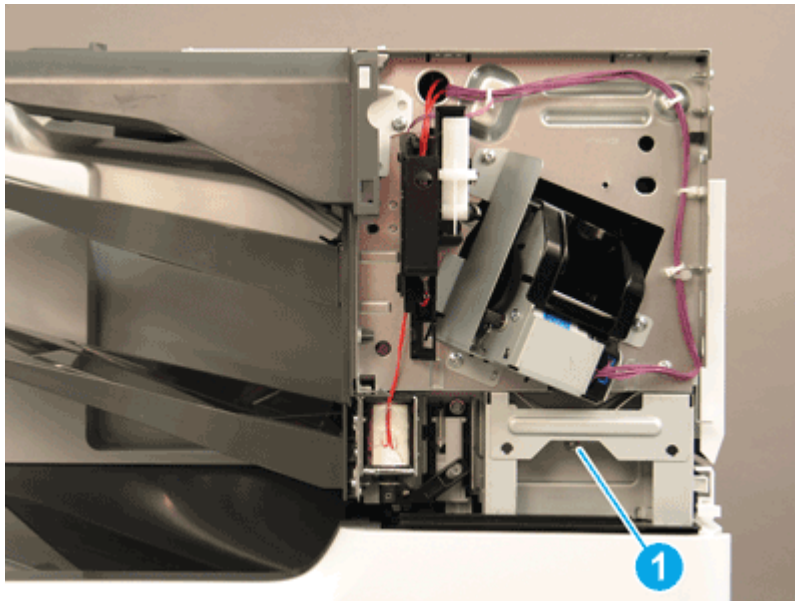
5. Rotate the stapler cover to the right to remove it.

Figure 5-1177 Remove the stapler cover



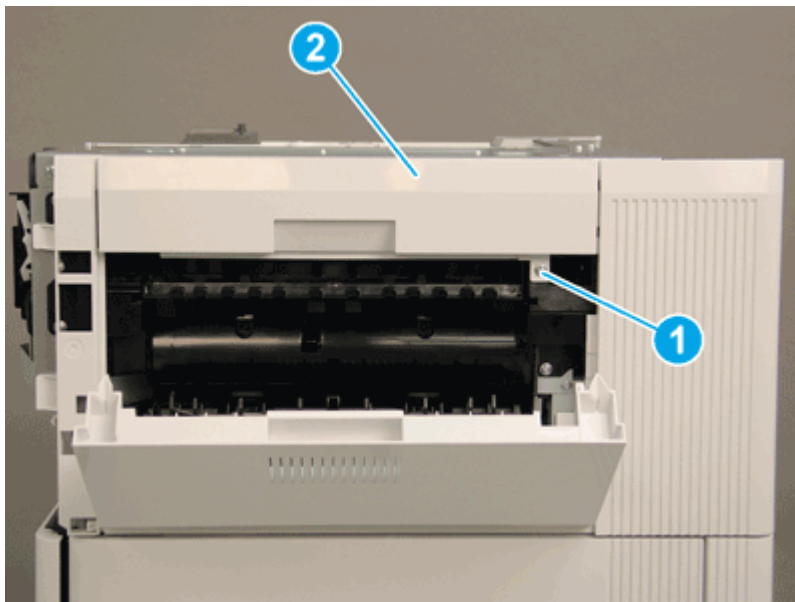
6. Remove one screw (callout 1).

Figure 5-1178 Remove one screw



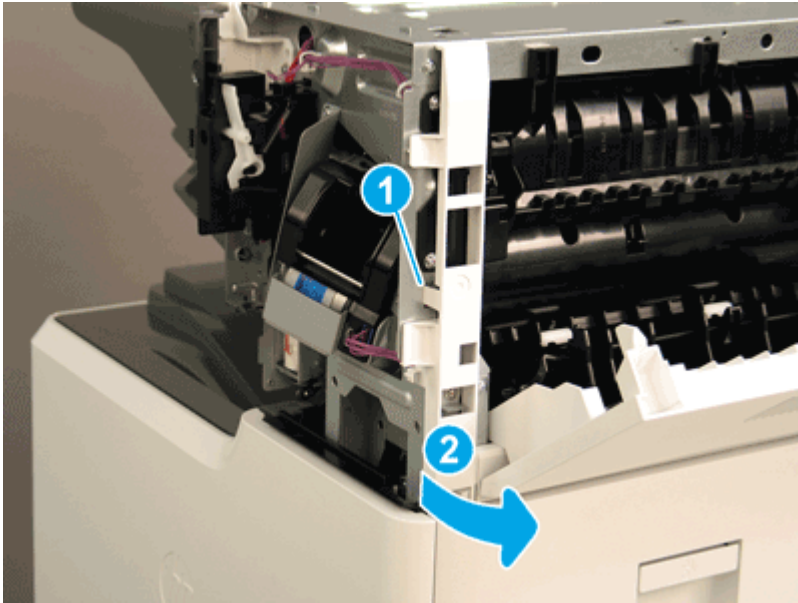
7. At the right side of the printer, remove one screw (callout 1), and then remove the stapler/stacker right upper cover (callout 2).

Figure 5-1179 Remove the stapler/stacker right upper cover



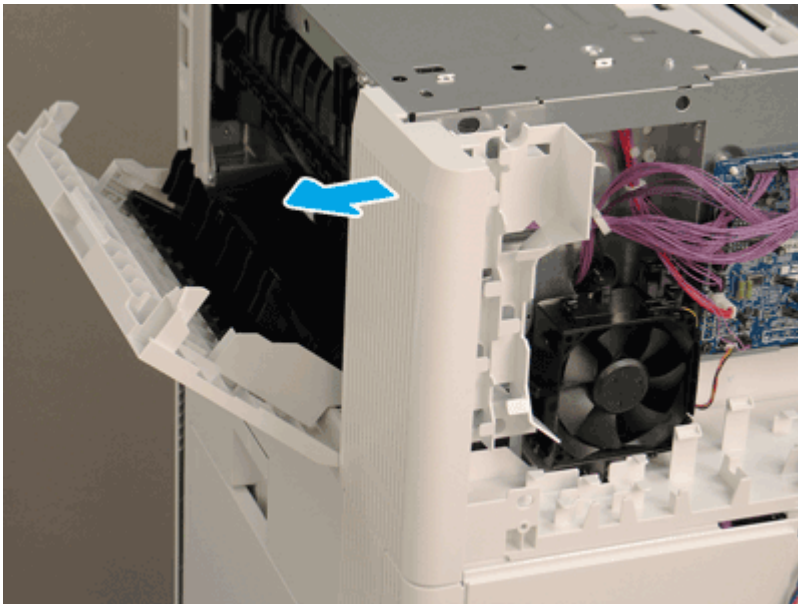
8. Release one tab (callout 1), and then rotate the stapler rear cover away from the printer (callout 2) to remove it.

Figure 5-1180 Remove the stapler rear cover



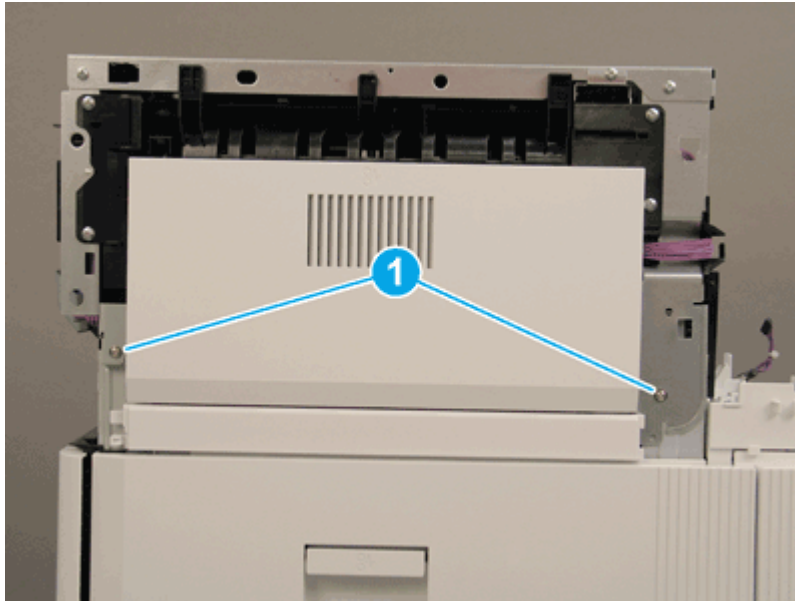
9. Pull the stapler/stacker rear corner cover away from the printer to remove it.

Figure 5-1181 Remove the stapler/stacker rear corner cover



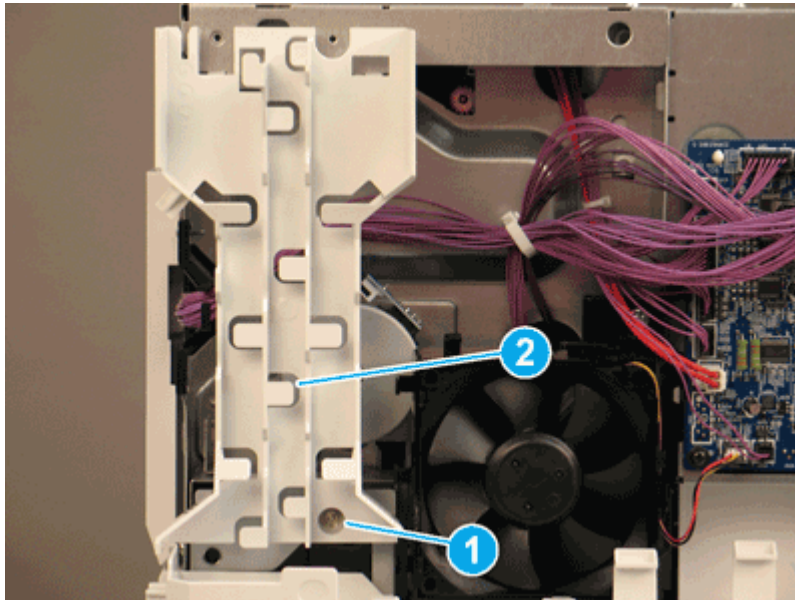
10. Remove two screws (callout 1).

Figure 5-1182 Remove two screws



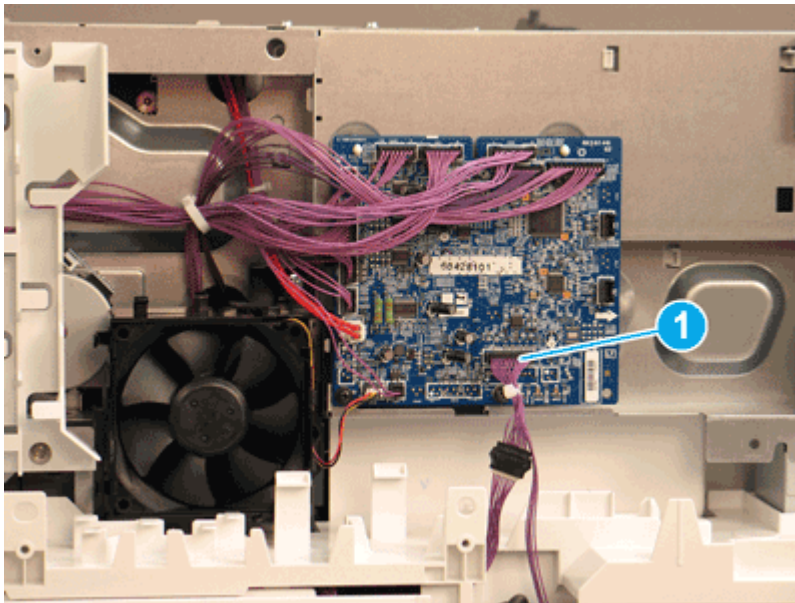
11. At the back of the printer, remove one screw (callout 1), and then remove the cable guide (callout 2).

Figure 5-1183 Remove the cable guide



12. Disconnect one connector on the stapler/stacker PCA (callout 1).

Figure 5-1184 Disconnect one connector



13. Remove two screws (callout 1).


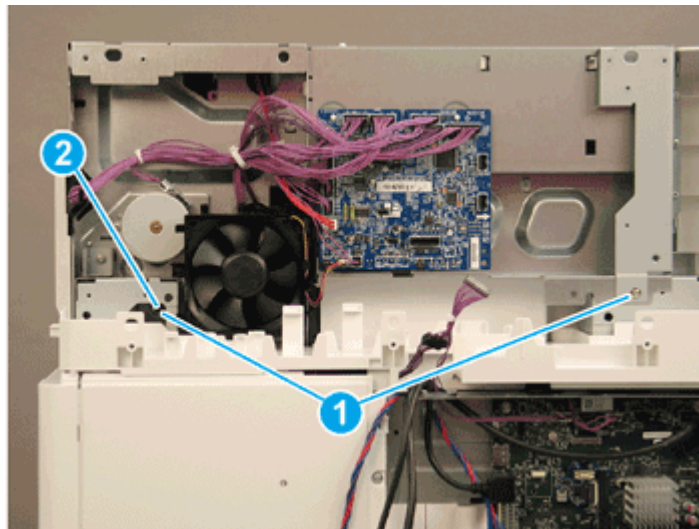
 **TIP:** The screw on the left (callout 2) is longer than the other screw. Make sure that this screw is installed in the correct location.

Figure 5-1185 Remove two screws



14. Lift the stapler/stacker away from the printer.


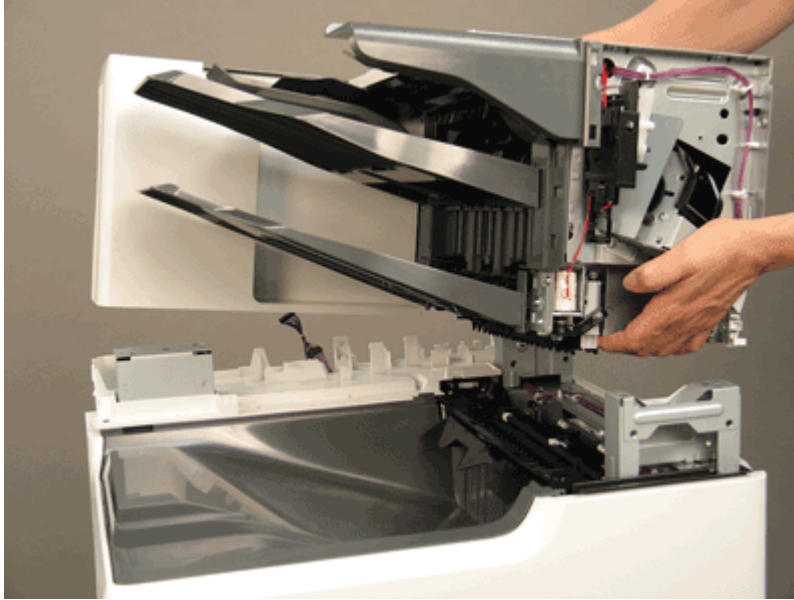
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1186 Remove the stapler/stacker

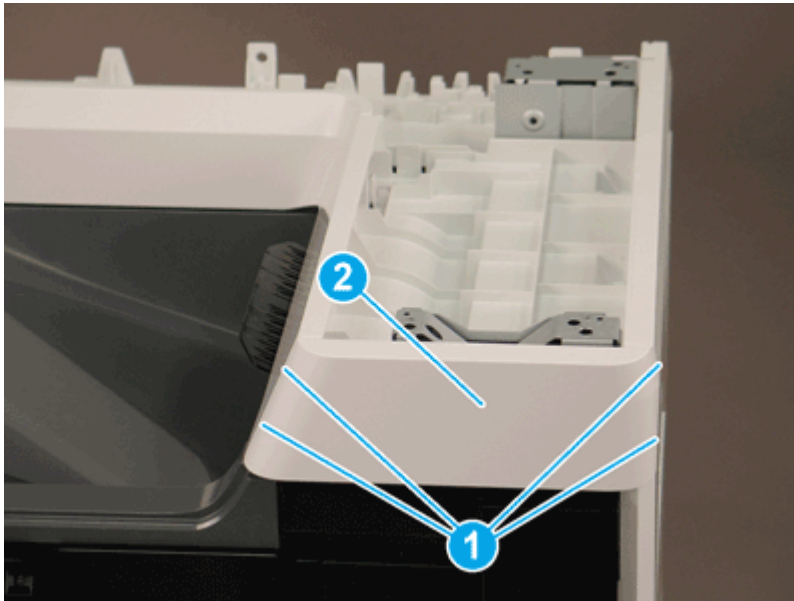


5. Remove the face-down front cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the face-down front cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

1. Open the front door.
2. Release two tabs on each side (callout 1), and then remove the face-down front cover (callout 2).

Figure 5-1187 Remove the face-down front cover

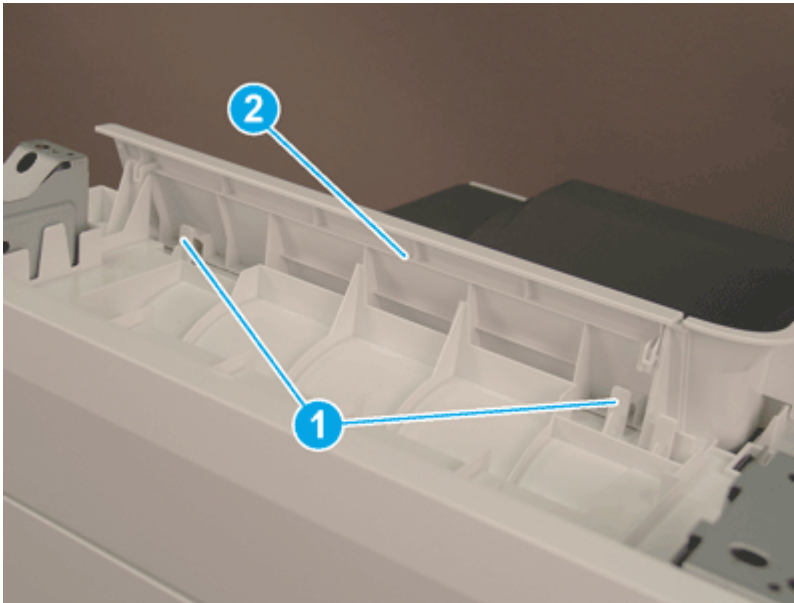


6. Remove the top cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the top cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

- Release two tabs (callout 1), and then remove the top cover (callout 2).

Figure 5-1188 Remove the top cover



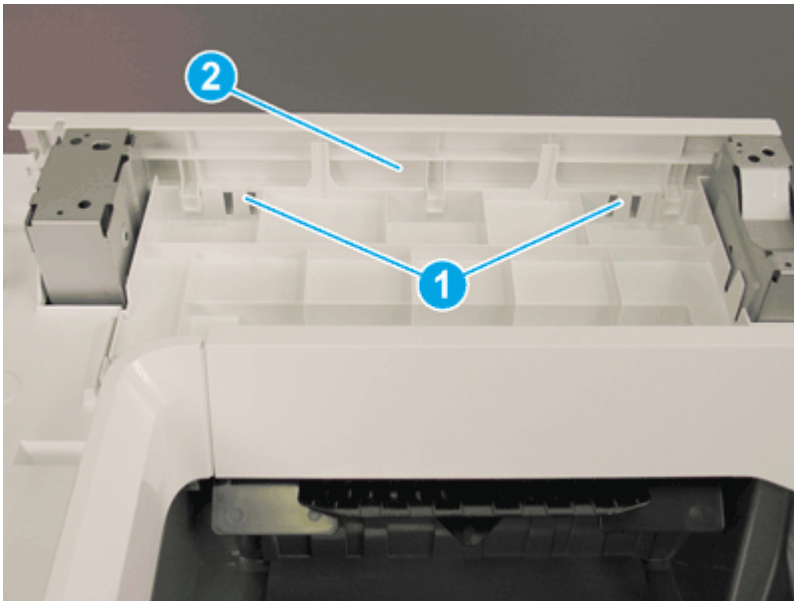
7. Remove the right cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the right cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

This step is for the M681/M682/E67550/E67560/E67650/E67660 printers. For the M652/M653/E65050/E65060/E65150/E65160 printers, skip this step.

- Release two tabs (callout 1), and then remove the right cover (callout 2).

Figure 5-1189 Remove the right cover



8. Remove the front cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the front cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

- Release two tabs (callout 1), and then remove the front cover (callout 2).


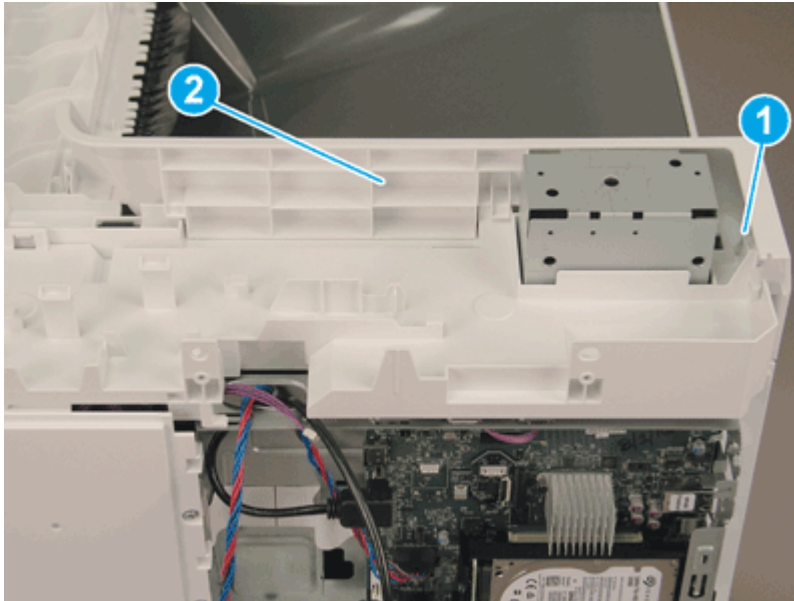
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1190 Remove the front cover



9. Remove the rear upper cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the rear upper cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

- Remove two screws (callout 1), and then remove the rear upper cover (callout 2).


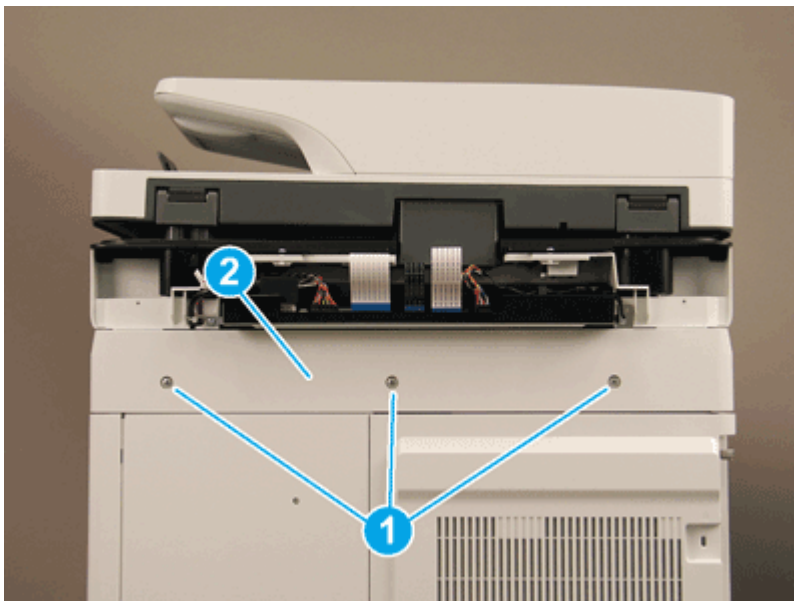

 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1191 Remove the rear upper cover



10. Remove the face-down cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the face-down cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

 **NOTE:** This step is for the M681/M682/E67550/E67560/E67650/E67660 printers. For the M652/M653/E65050/E65060/E65150/E65160 printers, skip this step.

- Remove two screws (callout 1), release three tabs (callout 2), and then remove the face-down cover (callout 3).


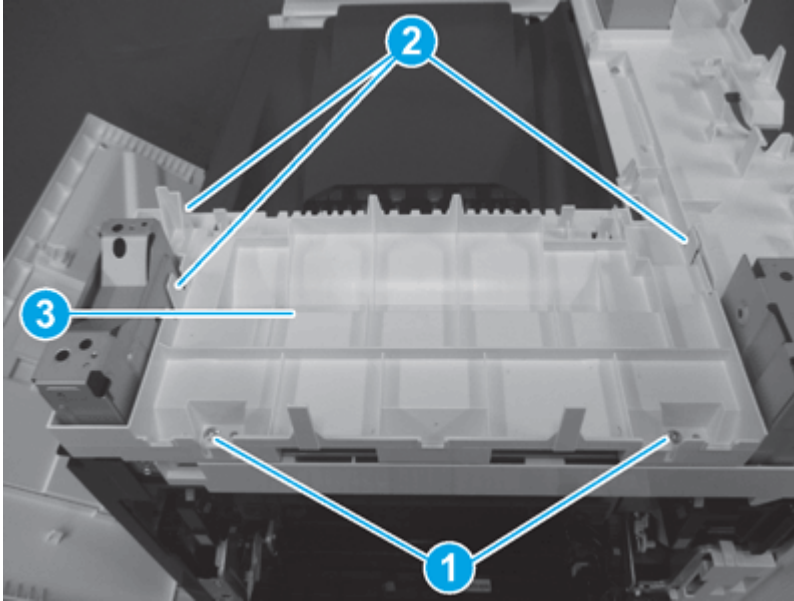
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1192 Remove two screws and the face-down cover



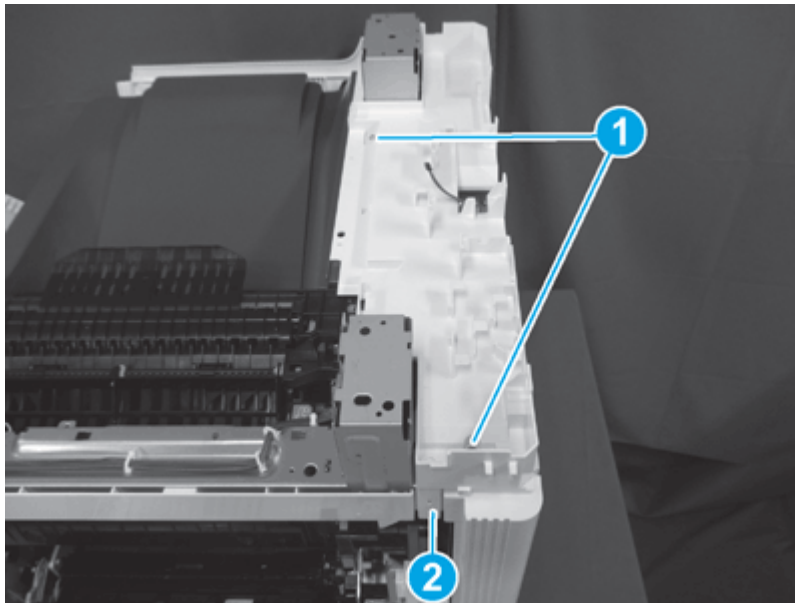
11. Remove the main cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the main cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

This step is for the M681/M682/E67550/E67560/E67650/E67660 printers. For the M652/M653/E65050/E65060/E65150/E65160 printers, skip this step.

1. Remove two screws (callout 1), and then release one tab (callout 2).

Figure 5-1193 Remove two screws and release one tab



2. Remove one screw (callout 1), release two tabs (callout 2), and then remove the main cover (callout 3).


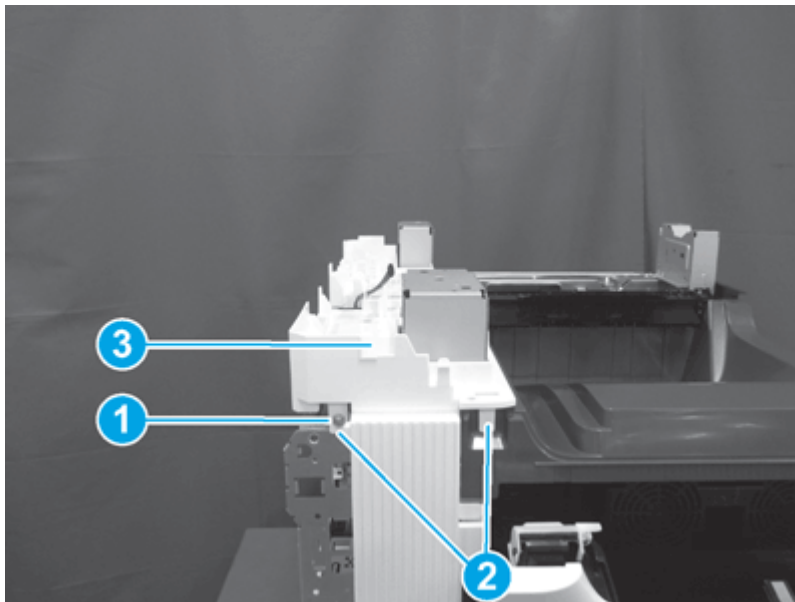

 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1194 Remove one screw and the main cover



12. Remove the control panel (M652/M653/E65050/E65060/E65150/E65160)

Follow these steps to remove the control panel (M652/M653/E65050/E65060/E65150/E65160).

 **NOTE:** This step is for the M652/M653/E65050/E65060/E65150/E65160 printers. For the M681/M682/E67550/E67560/E67650/E67660 printers, skip this step.

The figures below show the touchscreen control panel. The procedure is also correct for the keypad control panel.

1. Tilt the control panel to the fully raised position.

Figure 5-1195 Tilt the control panel up



2. Use a coin to release the cover, and then remove the cover.

Figure 5-1196 Remove the cover



3. Remove one thumbscrew (callout 1)



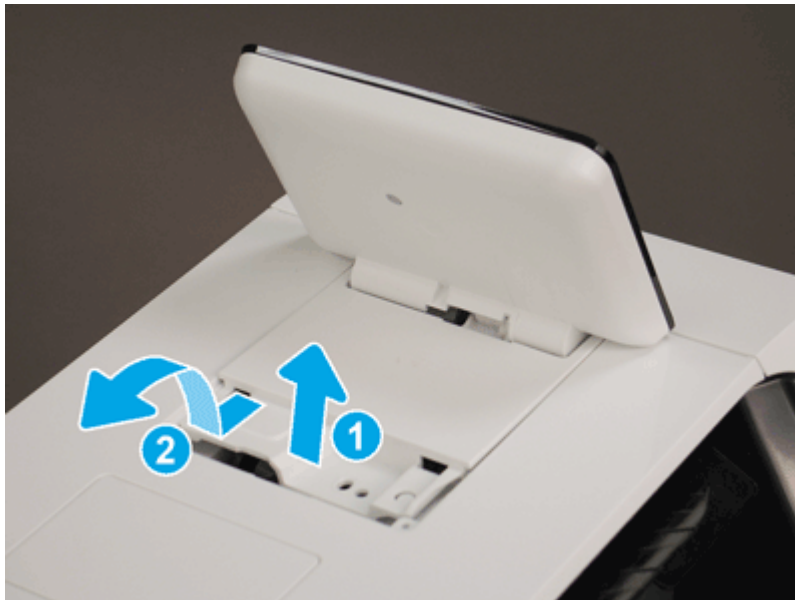
NOTE: Store the screw in a secure place where it cannot fall down into the printer.

Figure 5-1197 Remove one thumbscrew



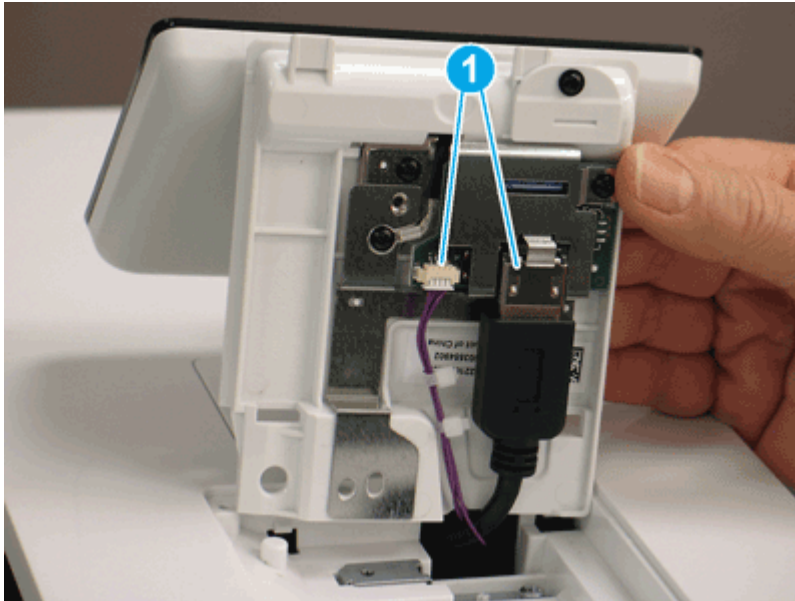
4. Lift the back edge of the control panel up (callout 1), and then slide it toward the back of the printer (callout 2) to release it.

Figure 5-1198 Release the control panel



5. Turn the control panel over to gain access to the bottom side. Disconnect two connectors (callout 1).

Figure 5-1199 Disconnect two connectors



6. Remove the control panel.

Figure 5-1200 Remove the control panel



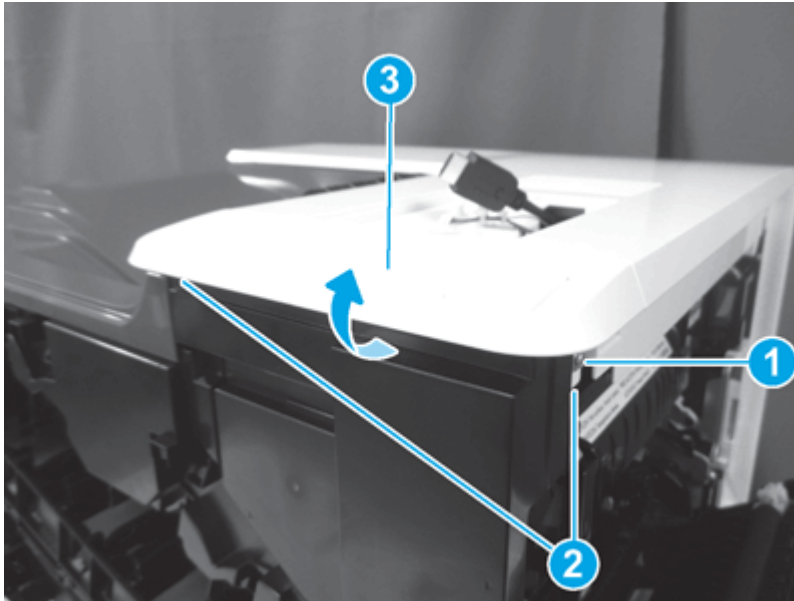
13. Remove the top cover (M652/M653/E65050/E65060/E65150/E65160)

Follow these steps to remove the top cover (M652/M653/E65050/E65060/E65150/E65160).

1. Open the following doors:
 - Front door
 - Left door

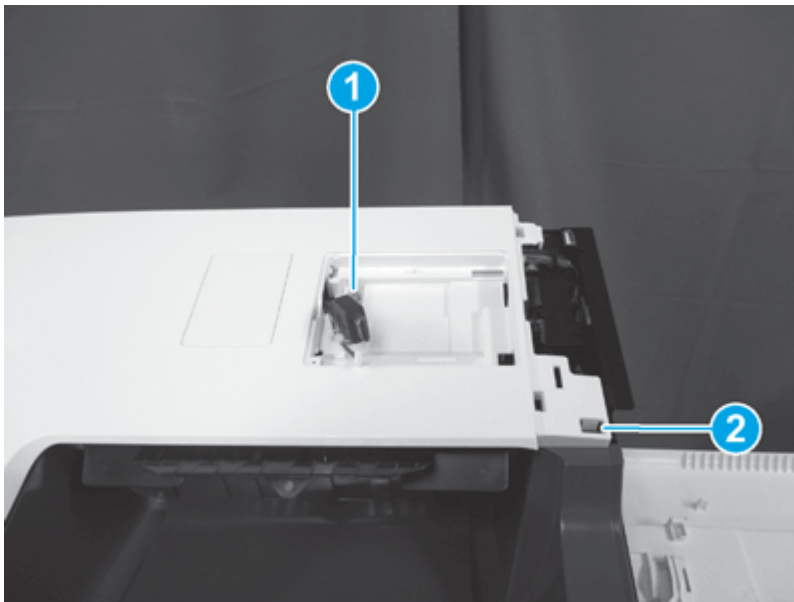
- Right door
2. Remove one screw (callout 1), release two tabs (callout 2), and then rotate the NFC cover (callout 3) up and away from the printer to remove it.

Figure 5-1201 Remove the NFC cover



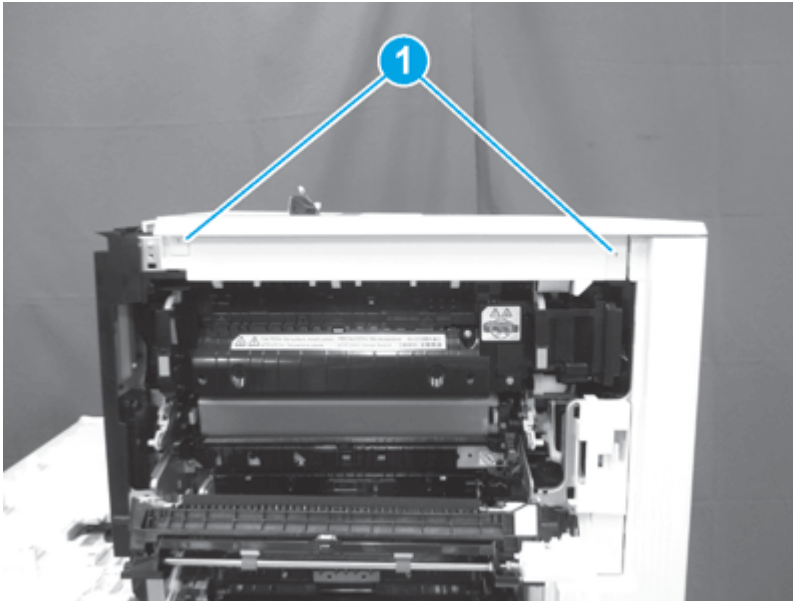
3. Remove one screw (callout 1), and then release one tab (callout 2).

Figure 5-1202 Remove one screw and release one tab



4. Release two tabs (callout 1).

Figure 5-1203 Release two tabs



5. Remove one screw (callout 1), release one tab (callout 2), release one tab behind the left door (callout 3), and then remove the top cover (callout 4).


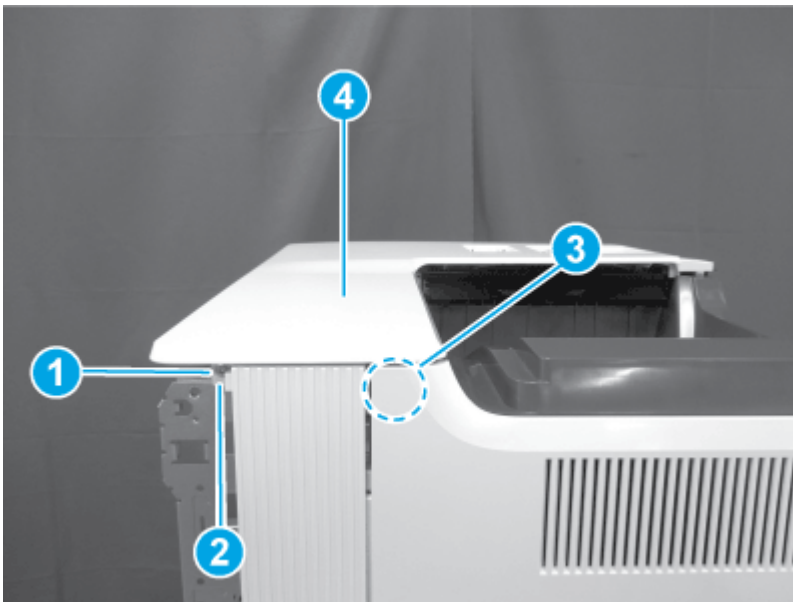
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1204 Remove the top cover



14. Remove the output bin

Follow these steps to remove the output bin.

1. Open the following doors:
 - Front door
 - Left door
 - Right door
2. Release two tabs (callout 1), and then remove the output bin (callout 2).


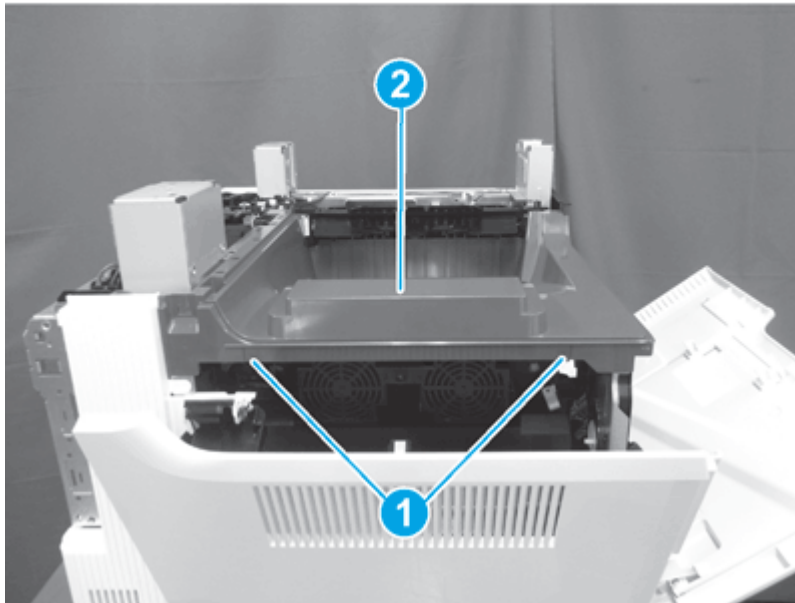
 **NOTE:** The M682 is shown in the figure below. The procedure is correct for all models.

Figure 5-1205 Remove the output bin



15. Remove the formatter cover

Follow these steps to remove the formatter cover.

- Unscrew two thumbscrews (callout 1), and then slide the formatter cover (callout 2) away from the printer to remove it.


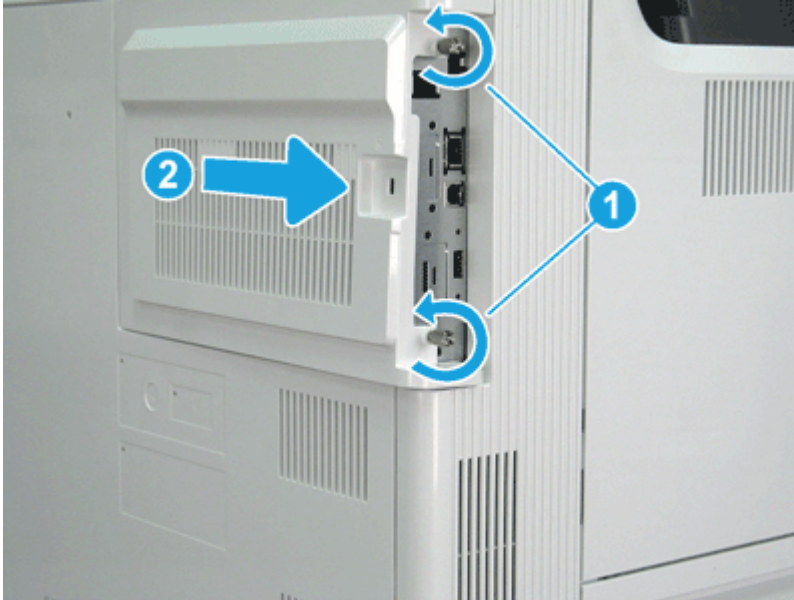
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1206 Remove the formatter cover

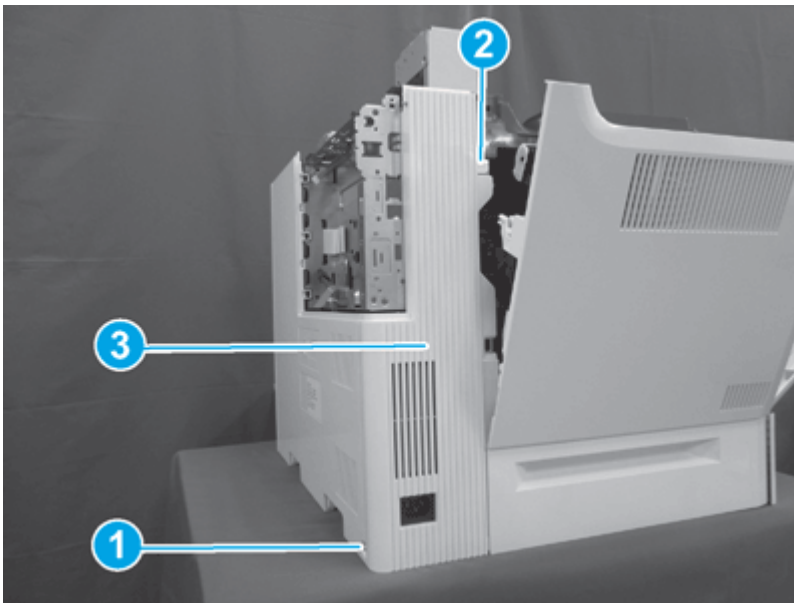


16. Remove the left rear cover

Follow these steps to remove the left rear cover.

- Open the left door. Remove one screw (callout 1), release one boss (callout 2), and then remove the left rear cover (callout 3).

Figure 5-1207 Remove the left rear cover



17. Remove the rear cover

Follow these steps to remove the rear cover.

- Remove two screws (callout 1), and then slide the rear cover (callout 2) to the right to remove it.


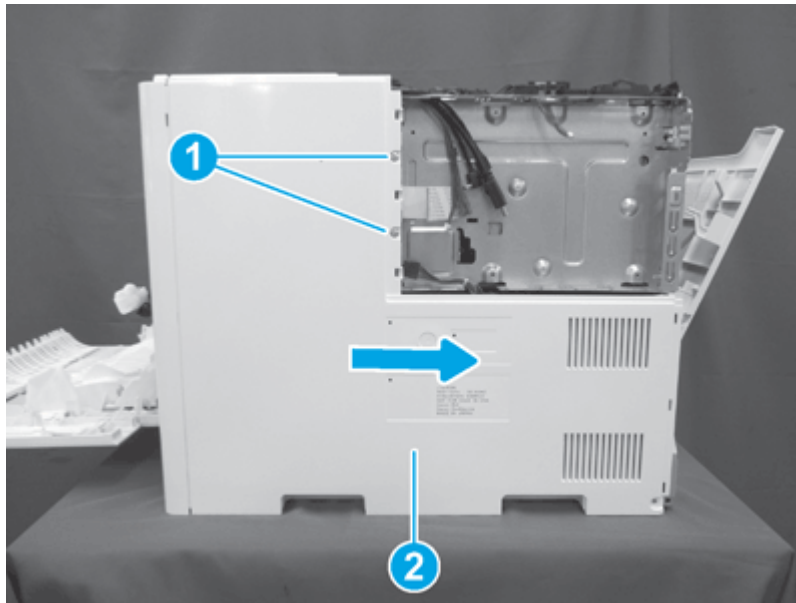

 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1208 Remove two screws and the rear cover



18. Remove the fax PCA (M681f/Flow M681f/Flow M681z/Flow M682z)

Follow these steps to remove the fax PCA (M681f/Flow M681f/Flow M681z/Flow M682z).

 **NOTE:** This step is for the M681/M682/E67550/E67560/E67650/E67660 printers. For the M652/M653/E65050/E65060/E65150/E65160 printers, skip this step.

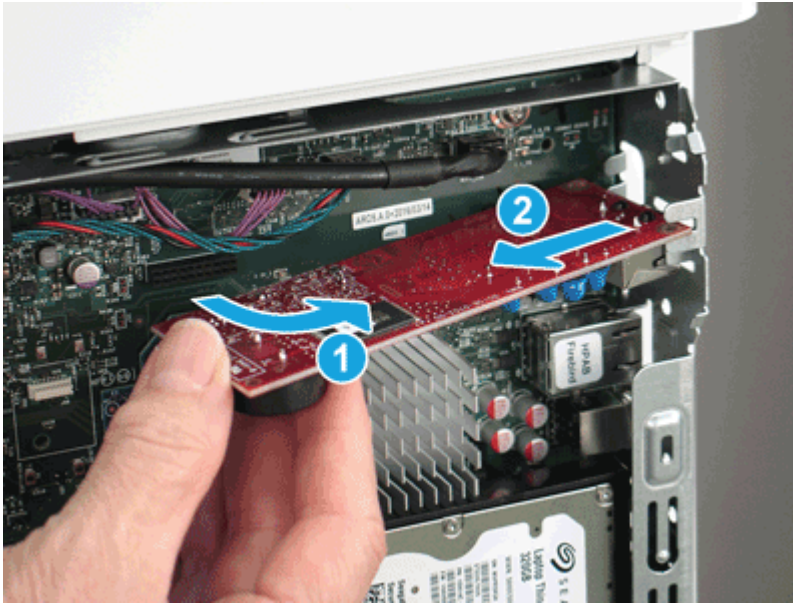
1. Locate the fax PCA on the formatter.

Figure 5-1209 Locate the fax PCA



2. Rotate end left end of the fax PCA away from the formatter (callout 1) to disconnect the connector, and then slide the card away from the formatter (callout 2) to remove it.

Figure 5-1210 Remove the fax PCA

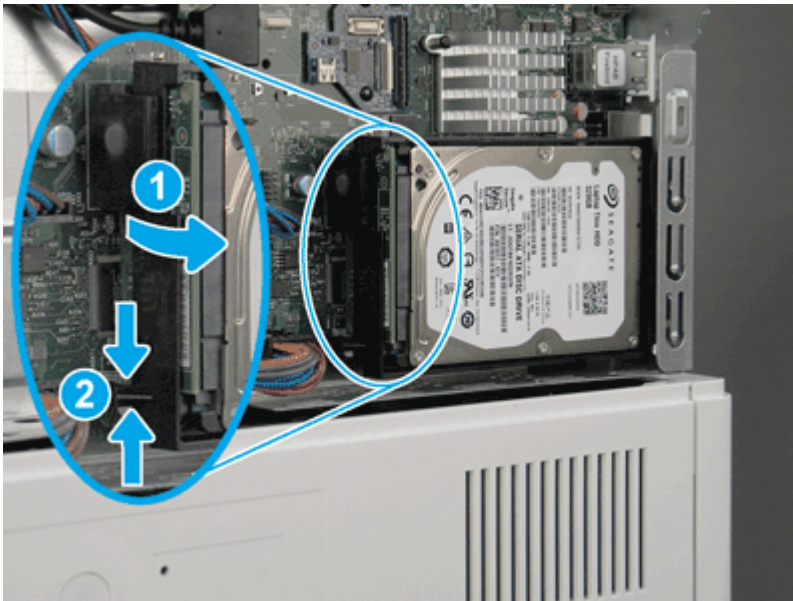


19. Remove the hard disk drive (HDD; M653dh/M681/M682/E67550/E67560/E67650/E67660)

Follow these steps to remove the hard disk drive (HDD; M653dh/M681/M682/E67550/E67560/E67650/E67660).

1. Release the locking connector (callout 1), and then pinch the retainer (callout 2) to release it.

Figure 5-1211 Release the HDD



2. Rotate the connector end of the HDD out and away from the formatter (callout 1), and then slide it to the left (callout 2) to remove it.

Figure 5-1212 Remove the HDD

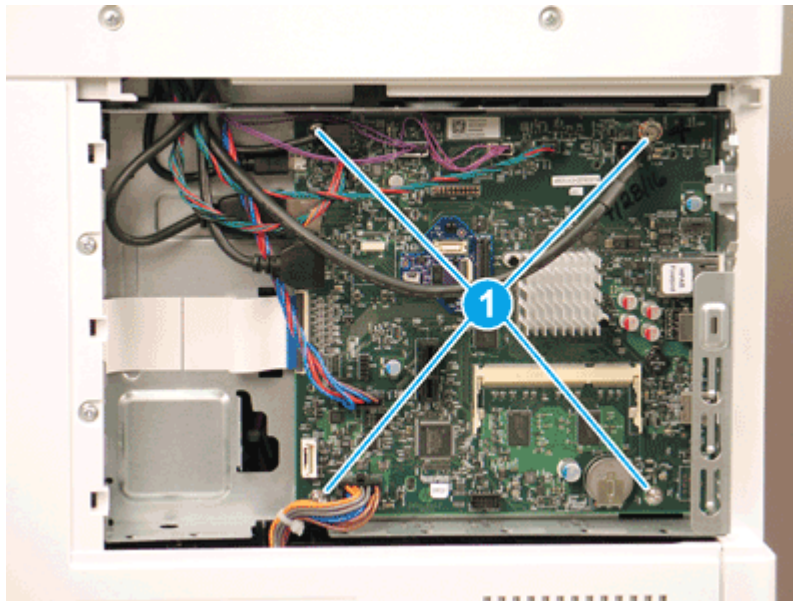


20. Remove the formatter

Follow these steps to remove the formatter.

- Disconnect all of the connectors on the formatter, remove four screws, and then remove the formatter.

Figure 5-1213 Remove the formatter



21. Remove the formatter case

Follow these steps to remove the formatter case.

1. Disconnect one connector (callout 1), remove two screws on the left side of the case (callout 2), and then remove two screws on the right end of the case (callout 3).


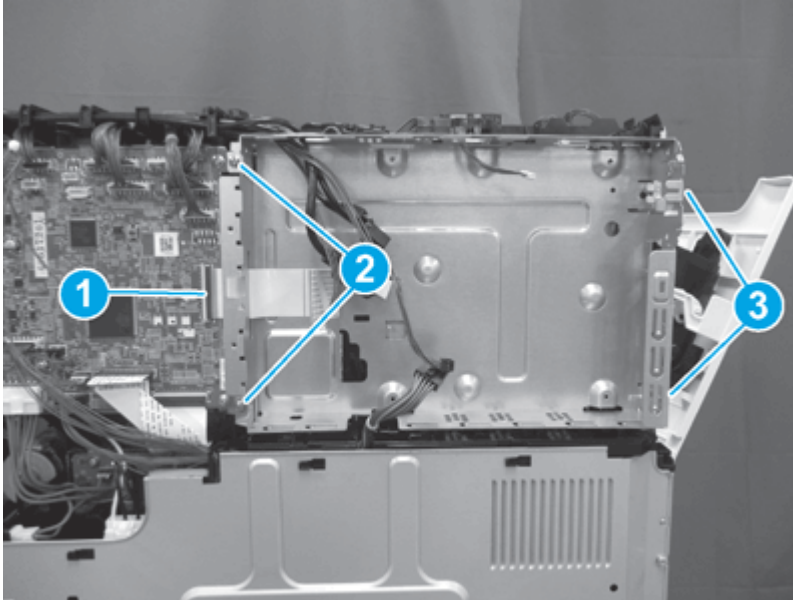
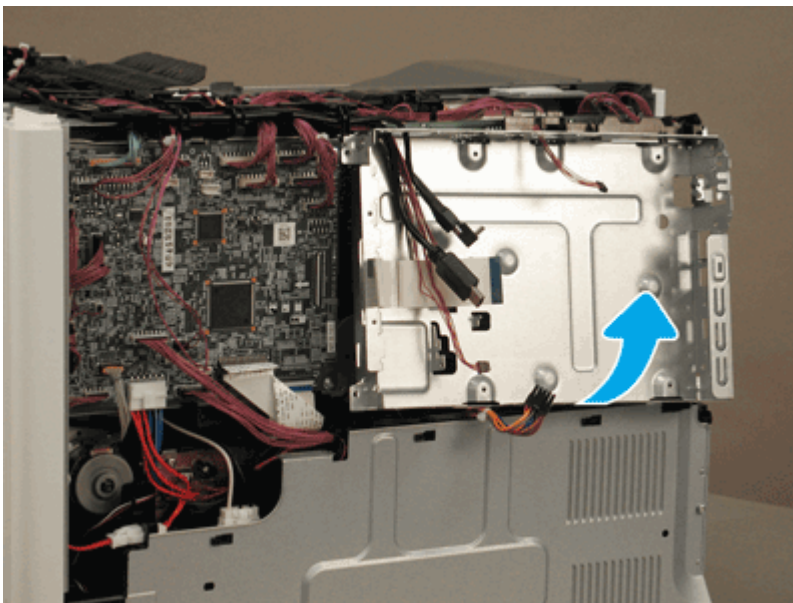
 **NOTE:** These screws are gold tinted to provide additional grounding. Make sure that these screws are reinstalled in the correct locations.

Figure 5-1214 Disconnect one connector and remove four screws



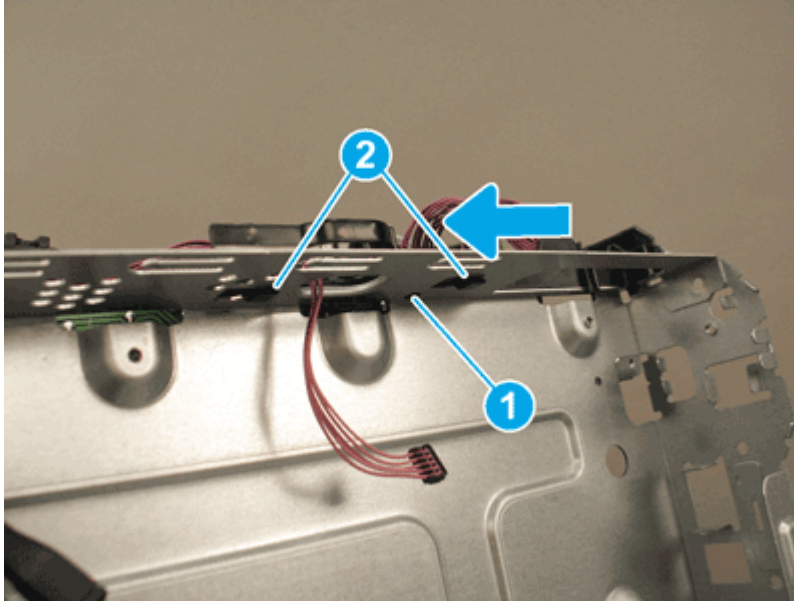
2. Tilt the bottom of the formatter case away from the printer.

Figure 5-1215 Tilt the formatter case



3. Locate one round boss (callout 1) and two hooks (callout 2) on the cable guide. Push up on the boss, and then slide the cable guide to the left to remove it. Remove the formatter case.

Figure 5-1216 Remove the cable guide

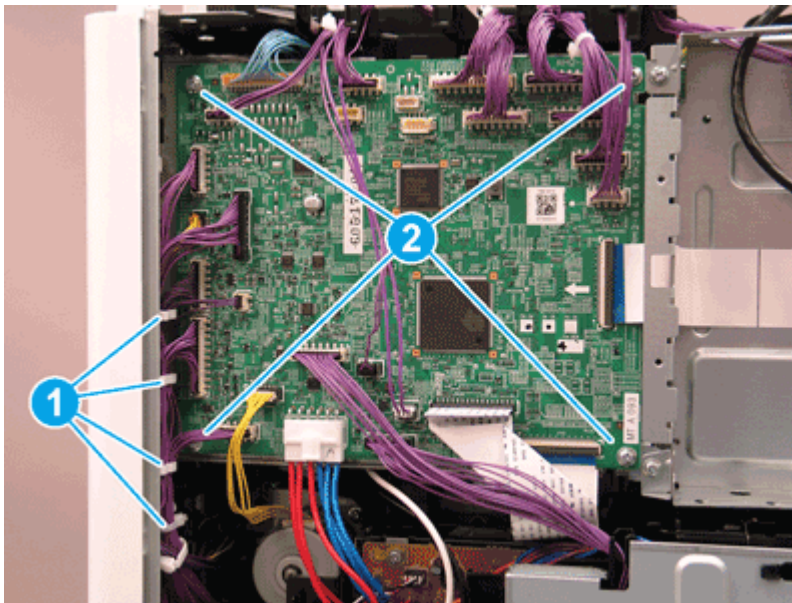


22. Remove the DC controller PCA

Follow these steps to remove the DC controller PCA.

- Release four retainers (callout 1), and then disconnect all connectors on the DC controller PCA. Remove four screws (callout 2), and then remove the DC controller PCA.

Figure 5-1217 Remove the DC controller PCA

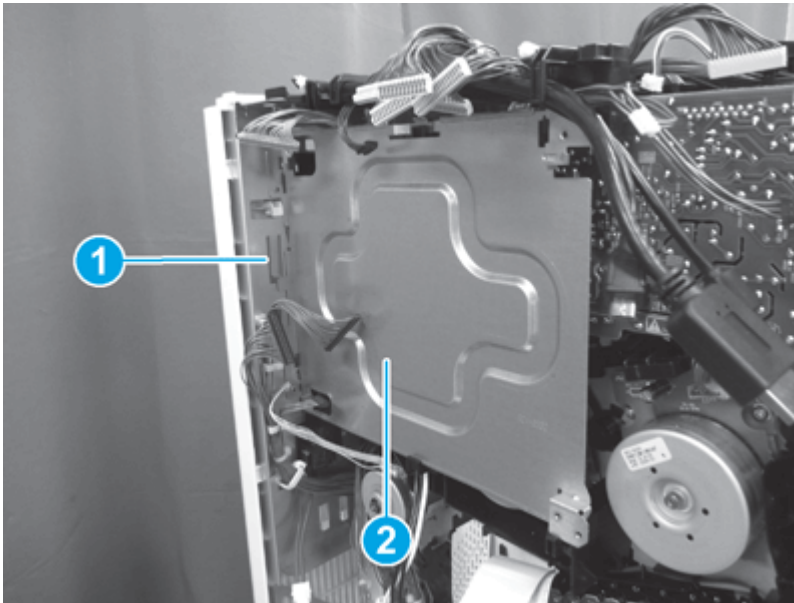


23. Remove the DC controller stay

Follow these steps to remove the DC controller stay.

- Gently push out on the sheet metal tab (callout 1) to release the DC controller stay (callout 2), and then lift up to remove it.

Figure 5-1218 Remove the DC controller stay

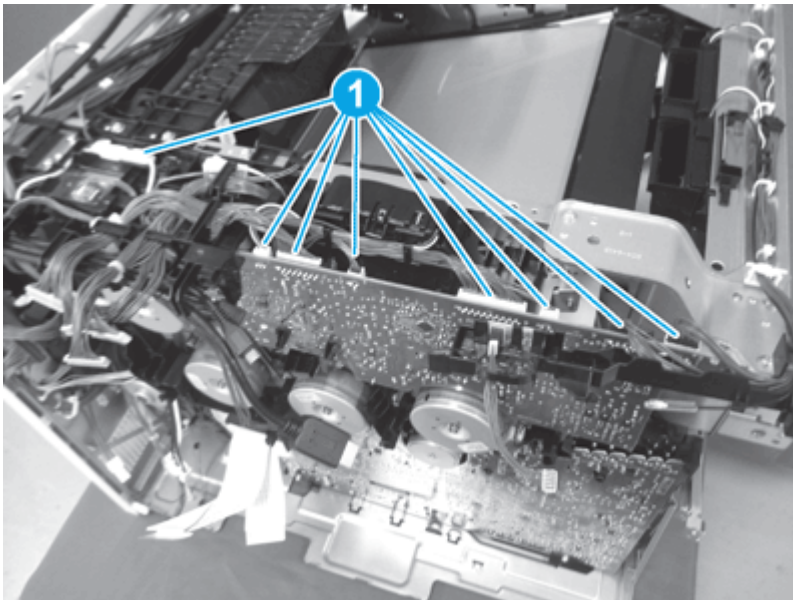


24. Remove the upper high-voltage power supply (HVPS)

Follow these steps to remove the upper high-voltage power supply (HVPS).

1. Disconnect eight connectors (callout 1).

Figure 5-1219 Disconnect eight connectors



2. Release the cable (callout 1) from the retainer (callout 2). Remove one screw (callout 3), release five tabs (callout 4), and then remove the upper HVPS (callout 5).


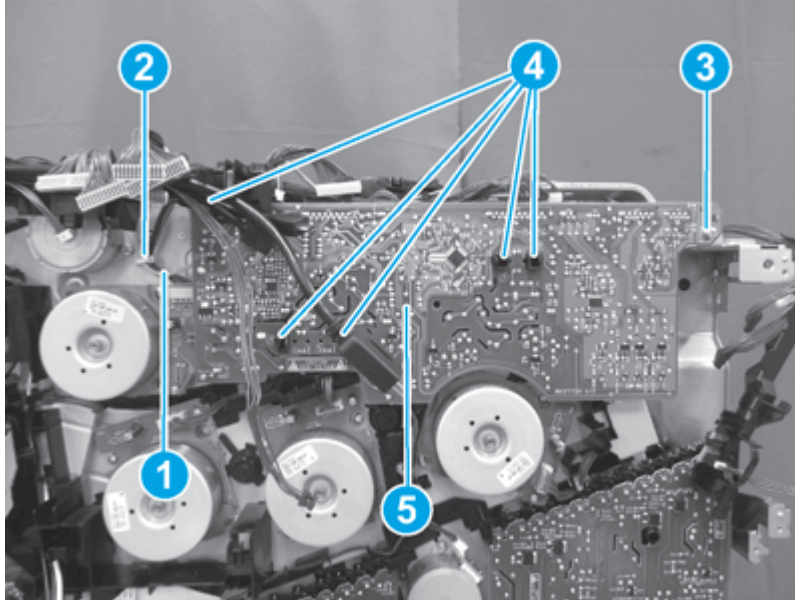
 **TIP:** The screw (callout 3) is a grounding screw with a washer attached. Make sure that this screw and washer are installed in the correct position.

Figure 5-1220 Remove the upper HVPS



25. Remove the rear fan

Follow these steps to remove the rear fan.

1. Release the cable (callout 1) from the cable guide (callout 2).


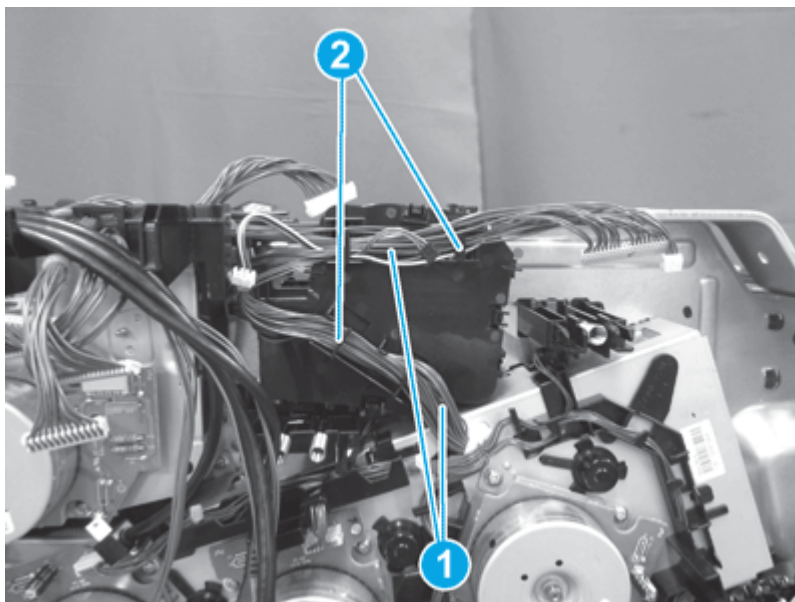
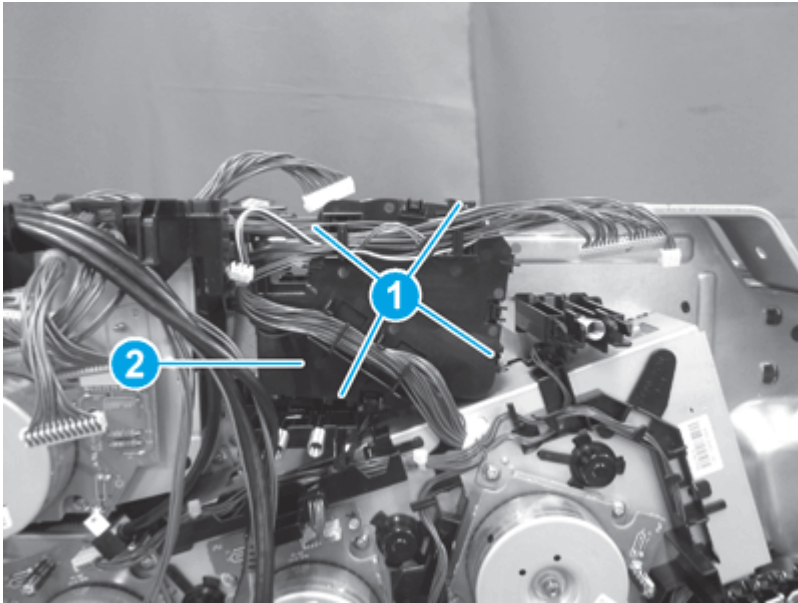
 **TIP:** Carefully note the routing of the cables so they routed correctly when the fan is installed.

Figure 5-1221 Release the cable



2. Release four retention points (callout 1), and then remove the fan cover (callout 2).

Figure 5-1222 Remove the fan cover



3. Release three tabs (callout 1), and then remove the rear fan (callout 2) from the fan holder (callout 3).


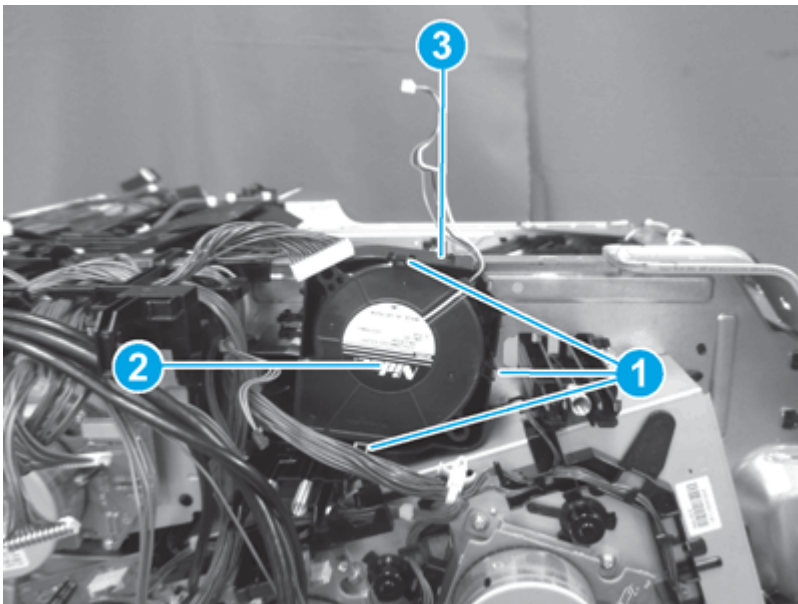
 **TIP:** Easily remove the fan by pressing outward from inside the printer through a crescent-shaped opening in the sheet metal.

Figure 5-1223 Remove the rear fan



26. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

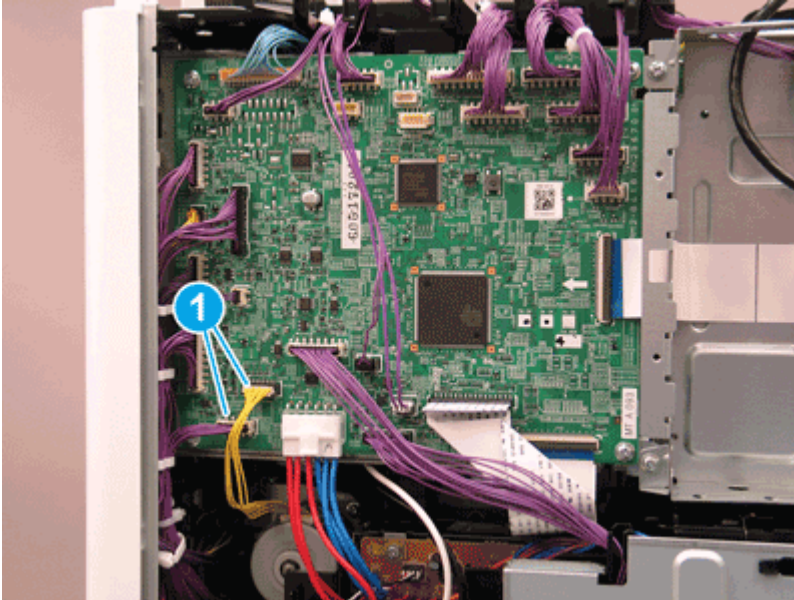
27. Reverse the removal steps to install the assembly

Also use the following **special installation instructions**.

DC controller PCA

- Two cables (callout 1) will fit in more than one connector. Make sure that these cables are installed in the correct connectors.

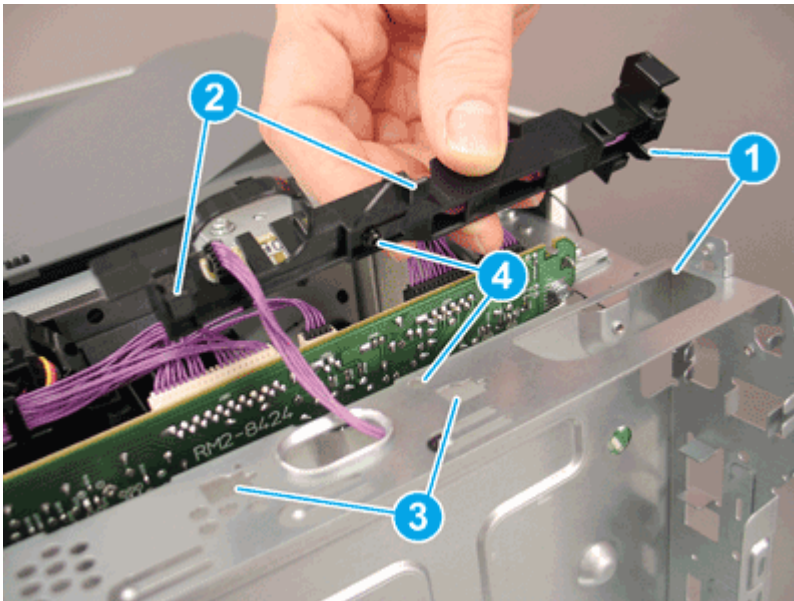
Figure 5-1224 Check the yellow cable



Formatter case

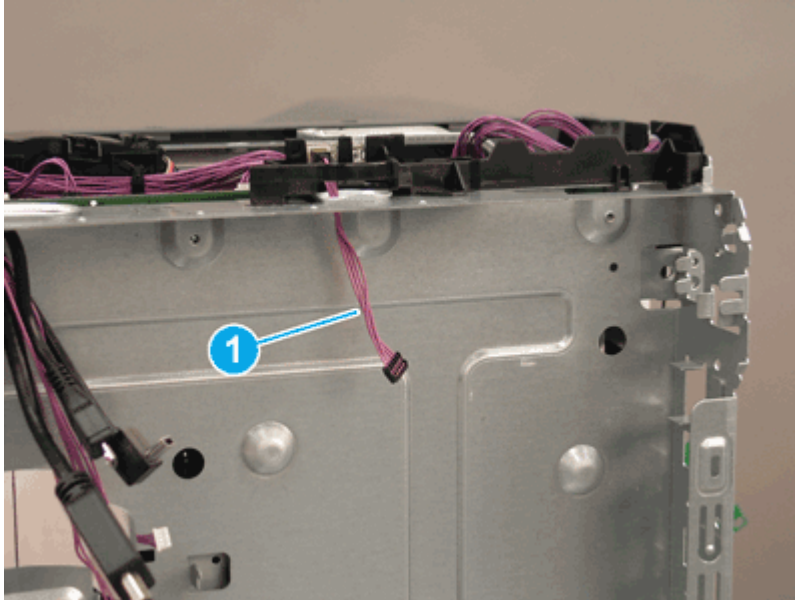
1. Align the hook on the right side of the cable guide with the slot in the formatter case (callout 1). Align two tabs (callout 2) with the slots (callout 3) in the top of the formatter case. Align the boss with the opening in the sheet metal (callout 4). Slide the cable guide to the right to lock it into position.

Figure 5-1225 Install the cable guide



2. Make sure that the island of data (IOD) cable (callout 1) is routed through the formatter case.

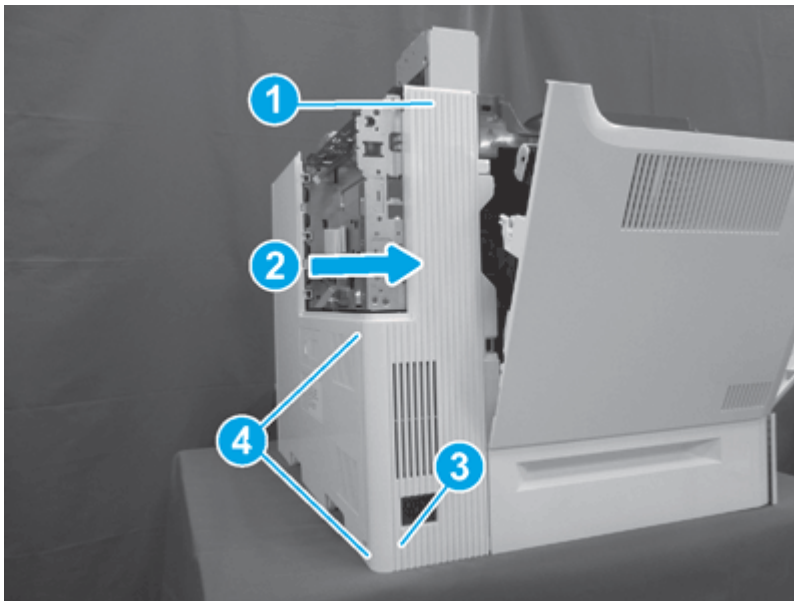
Figure 5-1226 Check the IOD cable



Left rear cover

- Position the top of the cover (callout 1) first, and then slide the cover to the right (callout 2). Push the left lower corner (callout 3) toward the rear of the printer to engage two tabs (callout 4) in the slots on the rear cover.

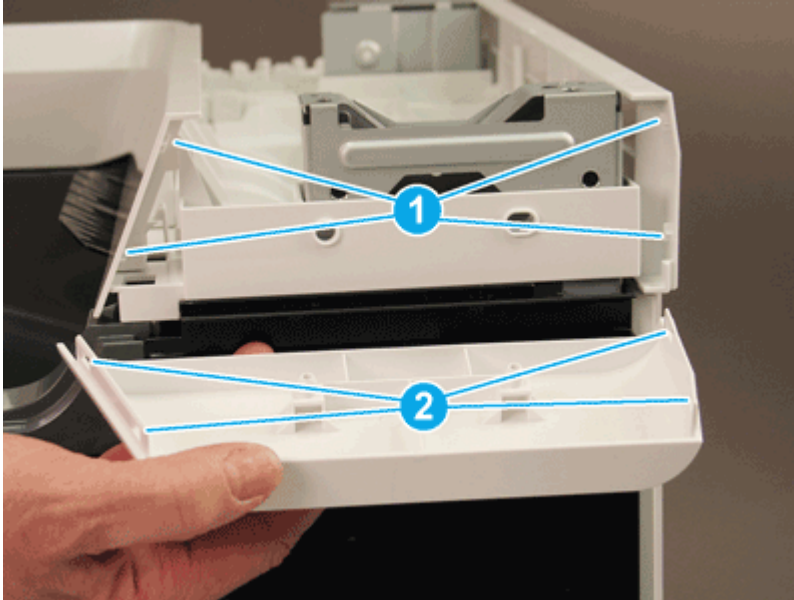
Figure 5-1227 Install the left rear cover



Face-down front cover

- When reinstalling the cover, position the tabs (callout 1) on the printer into the slots (callout 2) on the cover.

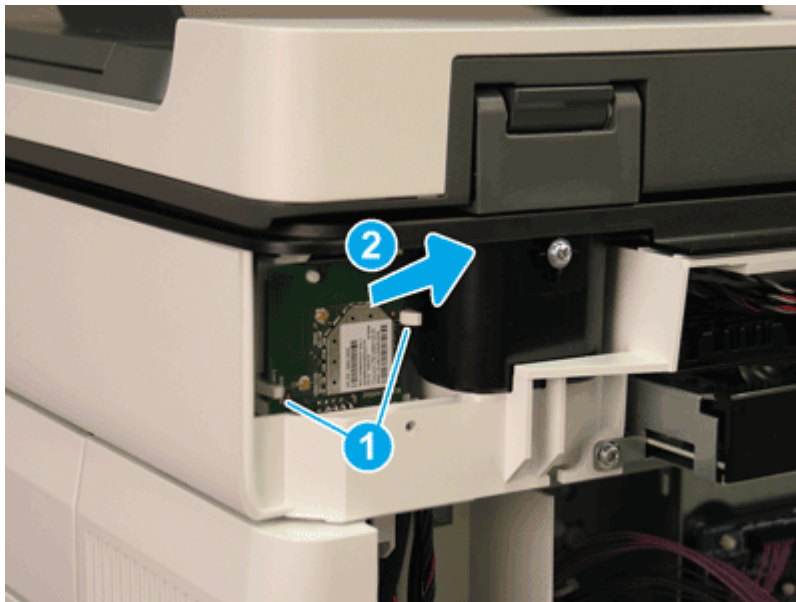
Figure 5-1228 Install the cover



Document feeder and image scanner

1. **Flow M682z only**: When reconnecting the wireless card cable, do the following:
 - a. Release two tabs (callout 1), and then remove the wireless card (callout 2).

Figure 5-1229 Remove the wireless card



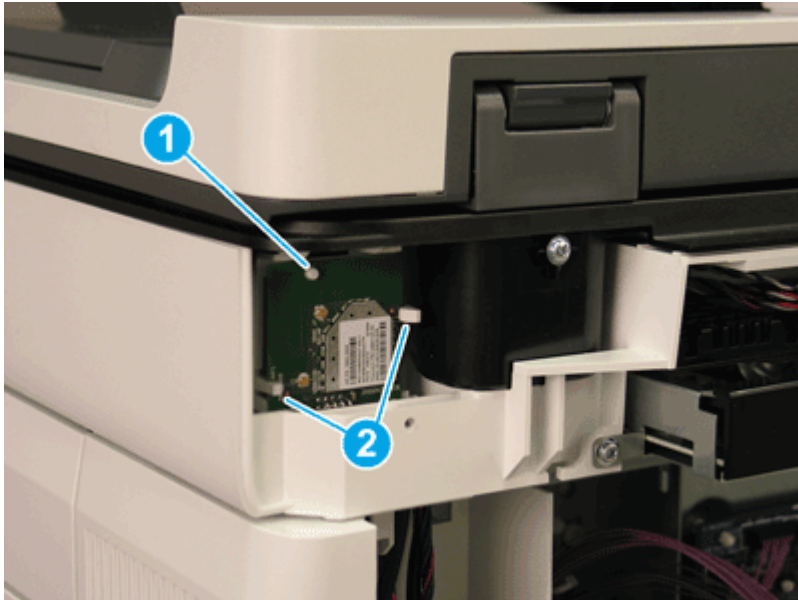
- b. Connect the cable to the wireless card (callout 1).

Figure 5-1230 Connect the wireless card connector



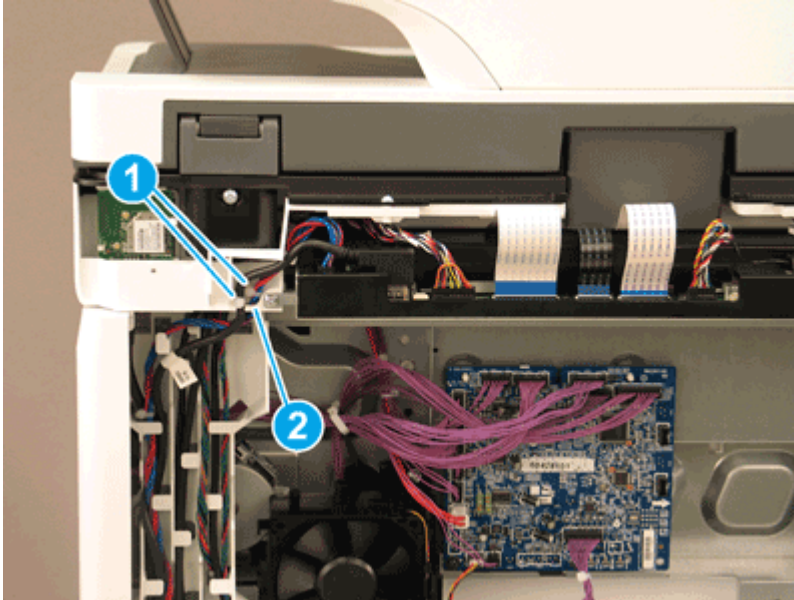
- c. Reinstall the wireless card. Make sure that the hole in the card is positioned over the peg (callout 1), and that the card is under the two tabs (callout 2).


Figure 5-1231 Reinstall the wireless card



- 2. When reinstalling the SCB cables, make sure that the wire retainers (callout 1) on the cables are positioned above the plastic guide (callout 2).

Figure 5-1232 Install the SCB cables



 **NOTE:** Continue to reverse the removal steps to finish installing the assembly.


Removal and replacement: Lifter drive assembly

Learn how to remove and replace the lifter drive assembly.

 [View a video of how to remove and replace the lifter drive assembly.](#)


Mean time to repair: 30 minutes

Service level: Advanced

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Disconnect the power cable.

 **WARNING!** To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-69 Part Information

Part number	Part description
RM2-6669-000CN	Lifter drive assembly

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Make sure that the printer initializes to a **Ready** state.

Print a configuration page to make sure that the printer is functioning correctly.

1. Remove the formatter cover

Follow these steps to remove the formatter cover.

- Unscrew two thumbscrews (callout 1), and then slide the formatter cover (callout 2) away from the printer to remove it.


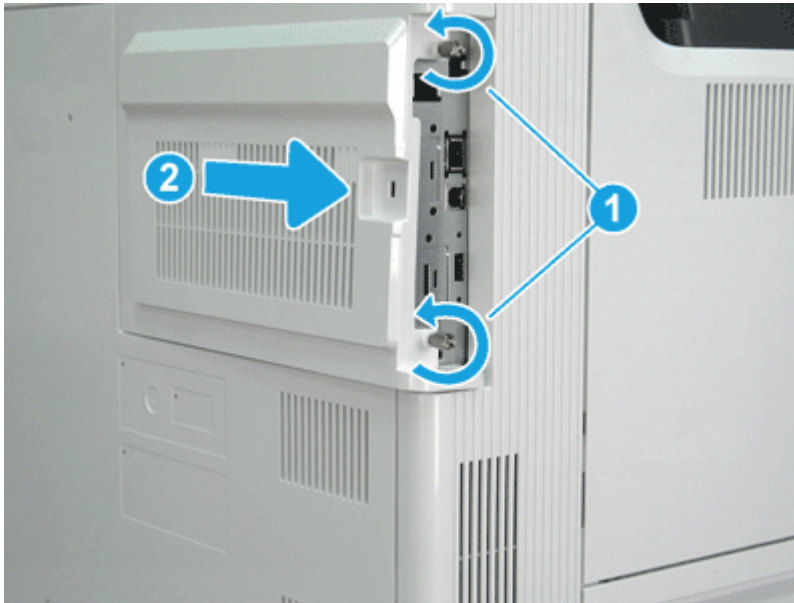
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1233 Remove the formatter cover

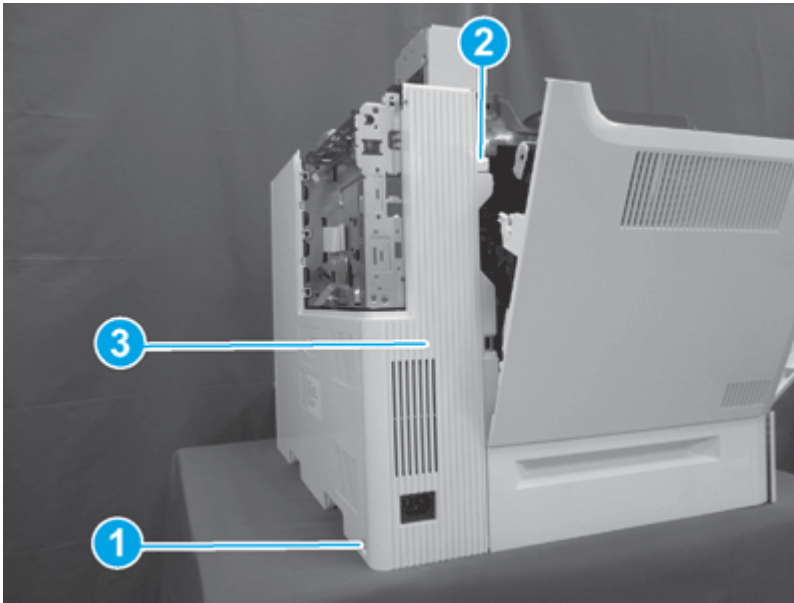


2. Remove the left rear cover

Follow these steps to remove the left rear cover.

- Open the left door. Remove one screw (callout 1), release one boss (callout 2), and then remove the left rear cover (callout 3).

Figure 5-1234 Remove the left rear cover



3. Remove the rear cover

Follow these steps to remove the rear cover.

- Remove two screws (callout 1), and then slide the rear cover (callout 2) to the right to remove it.


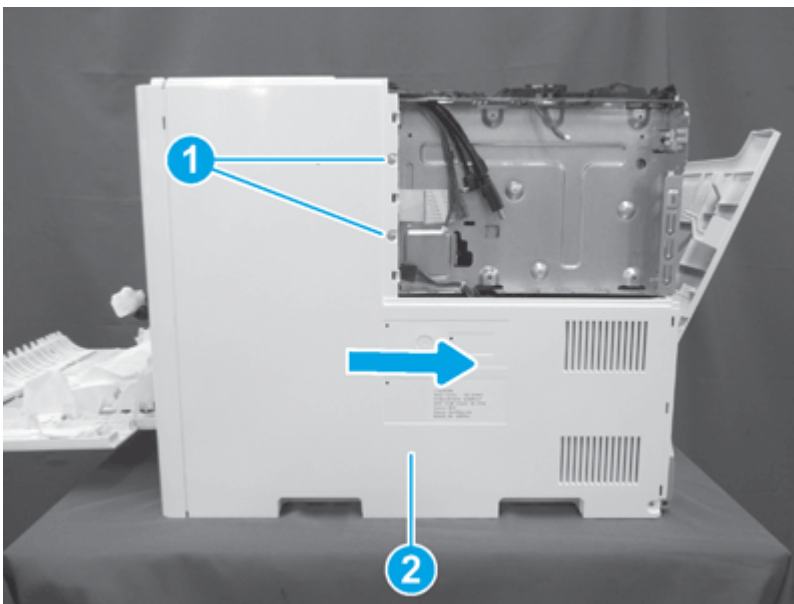
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1235 Remove two screws and the rear cover

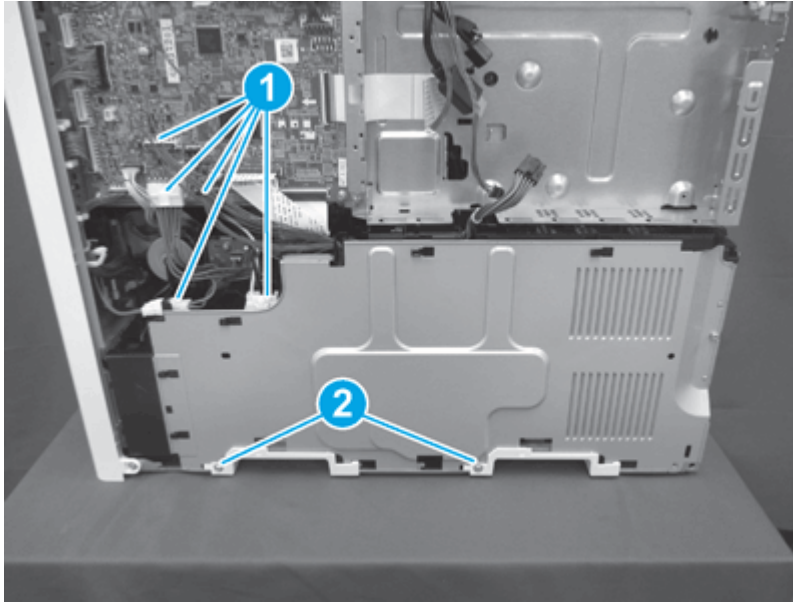


4. Remove the low-voltage power supply (LVPS) and fan

Follow these steps to remove the low-voltage power supply (LVPS) and fan.

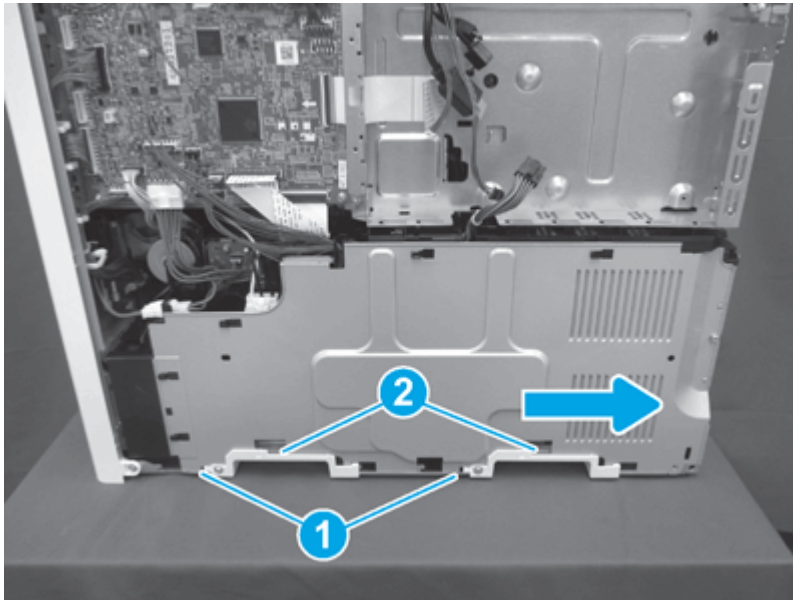
1. Disconnect five connectors (callout 1), and then remove two screws (callout 2).

Figure 5-1236 Disconnect five connectors and remove two screws



2. Release two tabs (callout 1), and then slide two handles (callout 2) to the right to remove them.

Figure 5-1237 Remove two handles

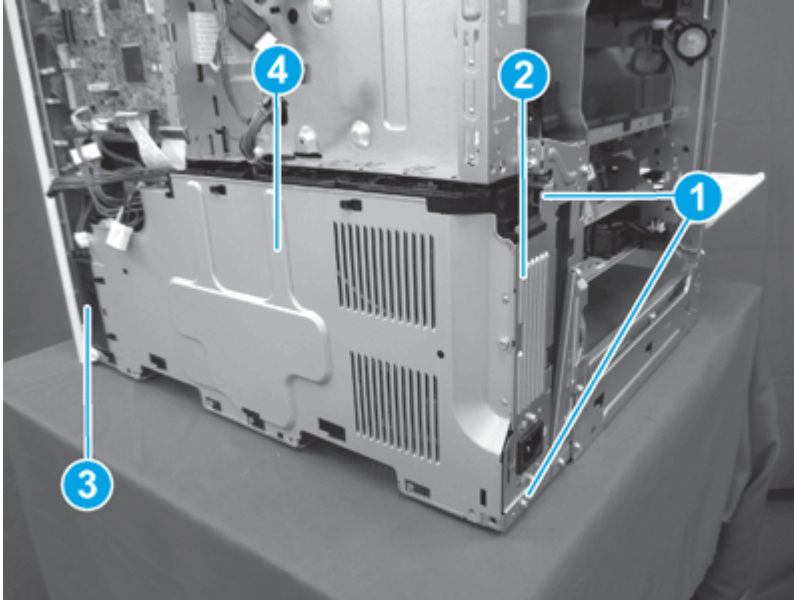


3. Remove two screws (callout 1). Remove the low-voltage power supply (callout 2) together with the power supply fan (callout 3) and the low-voltage power supply cover (callout 4).



NOTE: The upper screw is recessed inside the printer just above the upper right corner of the LVPS. The lower screw is located between the locator pins at the bottom of the assembly.

Figure 5-1238 Remove the low-voltage power supply

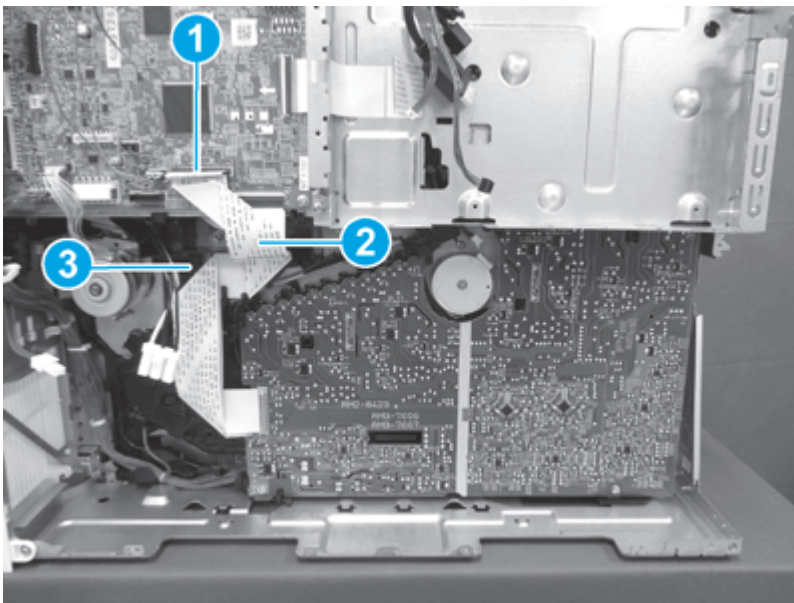


5. Remove the lower high voltage power supply (HVPS)

Follow these steps to remove the lower high voltage power supply (HVPS).

1. Disconnect one connector (callout 1), and then remove the flat cable (callout 2) from the cable guide (callout 3).

Figure 5-1239 Disconnect one connector



2. Remove two screws (callout 1), release one tab (callout 2), and then remove the lower HVPS (callout 3).


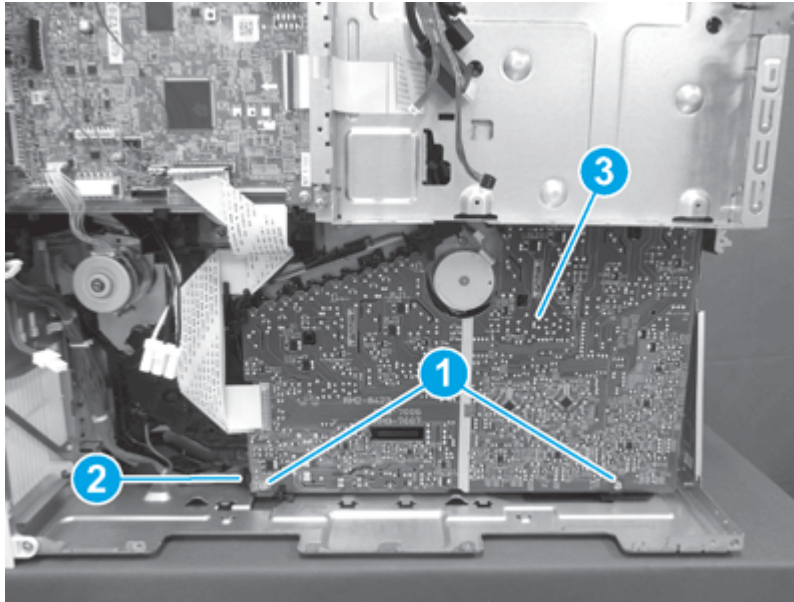
 **NOTE:** These screws have washers attached. Make sure that they are reinstalled in the lower HVPS board.

Figure 5-1240 Remove two screws and release one tab



6. Remove the lifter drive assembly

Follow these steps to remove the lifter drive assembly.

1. Open the latch to disconnect one flat cable (callout 1), and then disconnect one connector (callout 2). Remove the flat cable (callout 3) from the cable guides (callout 4).


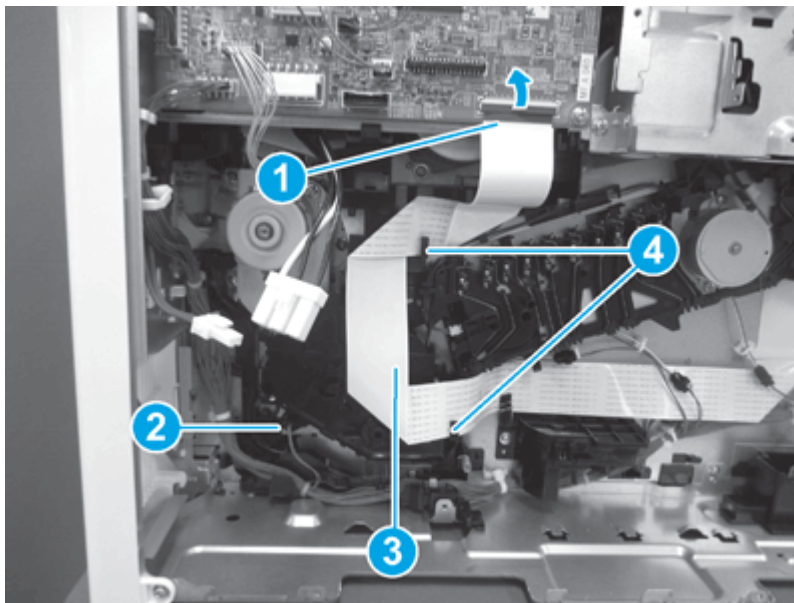
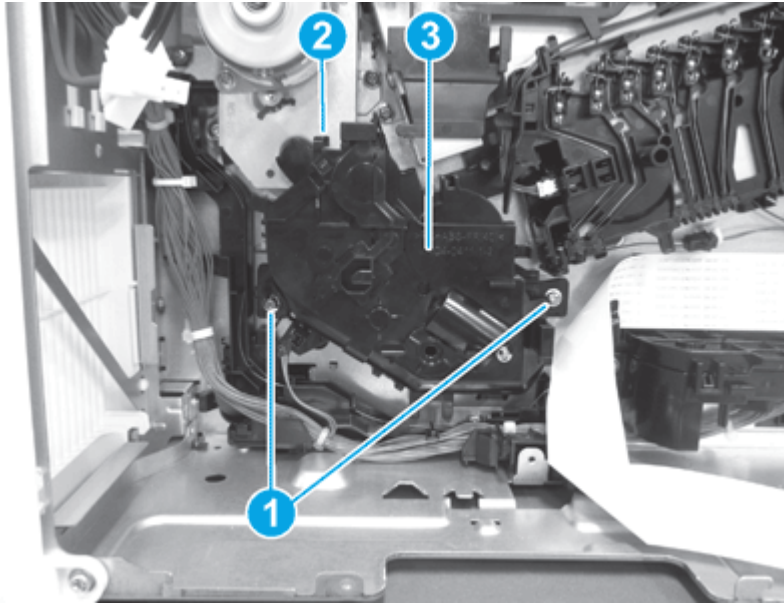
 **TIP:** When reinstalling the flat cable, open the latch, install the flat cable, and then close the latch to secure the cable.

Figure 5-1241 Disconnect two connectors



2. Remove two screws (callout 1), release one tab (callout 2), and then remove the lifter drive assembly (callout 3).

Figure 5-1242 Remove the lifter drive assembly



7. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

8. Reverse the removal steps to install the assembly

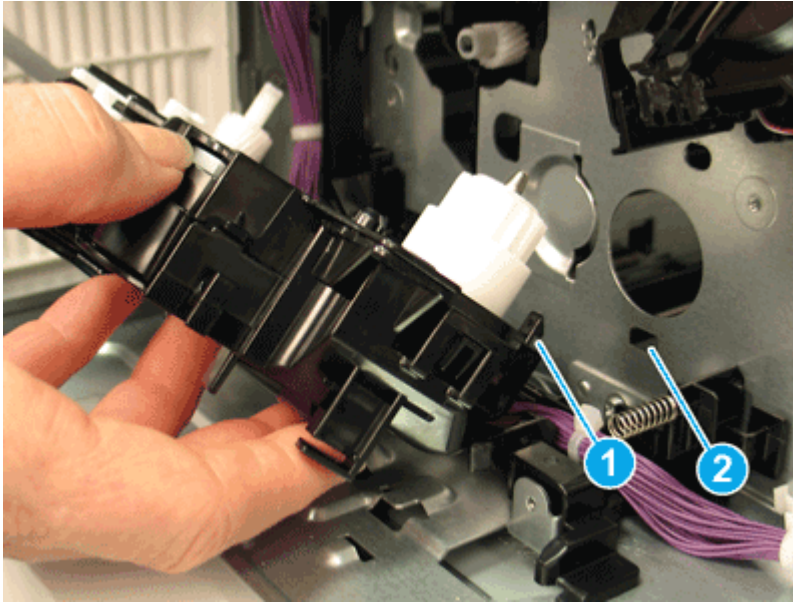
Also use the following **special installation instructions**.

Lifter drive assembly

- Position the tab on the assembly (callout 1) in the slot (callout 2) in the printer. Pivot the assembly into the correct position. Make sure that the assembly is completely installed against the sheet metal before installing the screws.

 **NOTE:** Continue to reverse the removal steps to finish installing the assembly.

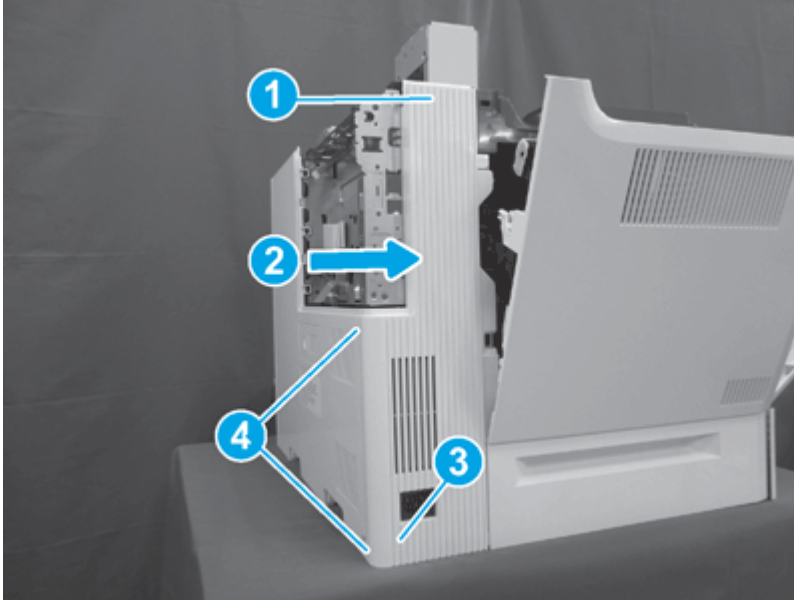
Figure 5-1243 Position the tab




Left rear cover

- Position the top of the cover (callout 1) first, and then slide the cover to the right (callout 2). Push the left lower corner (callout 3) toward the rear of the printer to engage two tabs (callout 4) in the slots on the rear cover.

Figure 5-1244 Install the left rear cover



 **NOTE:** Continue to reverse the removal steps to finish installing the assembly.


Removal and replacement: Laser scanner

Learn how to remove and replace the laser scanner.

 [View a video of how to remove and replace the laser scanner.](#)


Mean time to repair: 20 minutes

Service level: Advanced

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Disconnect the power cable.

 **WARNING!** To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-70 Part information

Part number	Part description
RM2-1237-000CN	Laser scanner

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Make sure that the printer initializes to a **Ready** state.

Print a configuration page to make sure that the printer is functioning correctly.

1. Remove the TCU

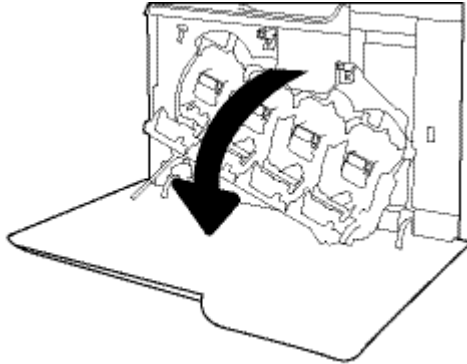
Follow these steps to remove the TCU.

⚠ CAUTION: If toner gets on clothing, wipe it off by using a dry cloth and wash the clothes in cold water. Hot water sets toner into fabric.

📝 NOTE: The toner collection unit is designed for a single use. Do not attempt to empty the toner collection unit and reuse it. Doing so could lead to toner being spilled inside the printer, which could result in reduced print quality. After use, return the toner collection unit to HP's Planet Partners program for recycling.

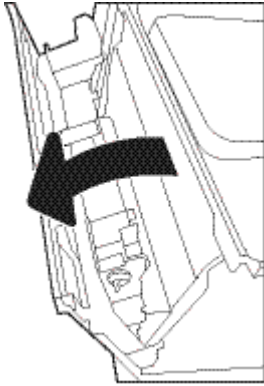
1. Open the front door.

Figure 5-1245 Open the front door



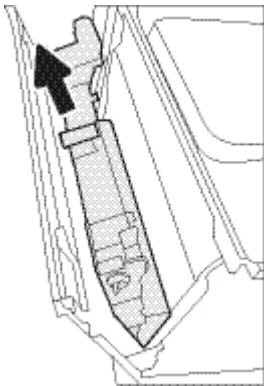
2. Open the left door.

Figure 5-1246 Open the left door



3. Grasp the top of the TCU and remove it from the printer.

Figure 5-1247 Remove the TCU



2. Remove the left door

Follow these steps to remove the left door.

1. Open front door.

Figure 5-1248 Open front door



2. Press on the tab (callout 1) while sliding the left door (callout 2) to the right to remove it.


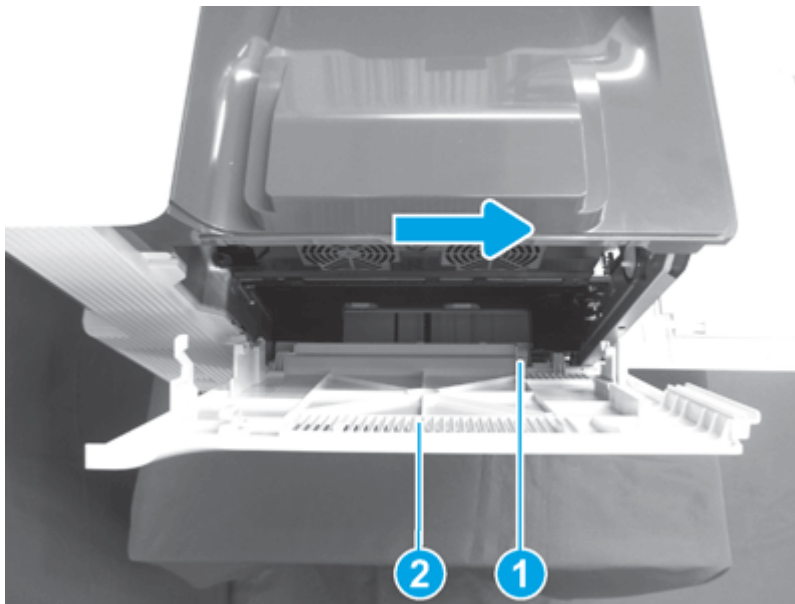
 **NOTE:** Make sure that the front door is not blocking the left door at the lower corner.

Figure 5-1249 Remove the left door

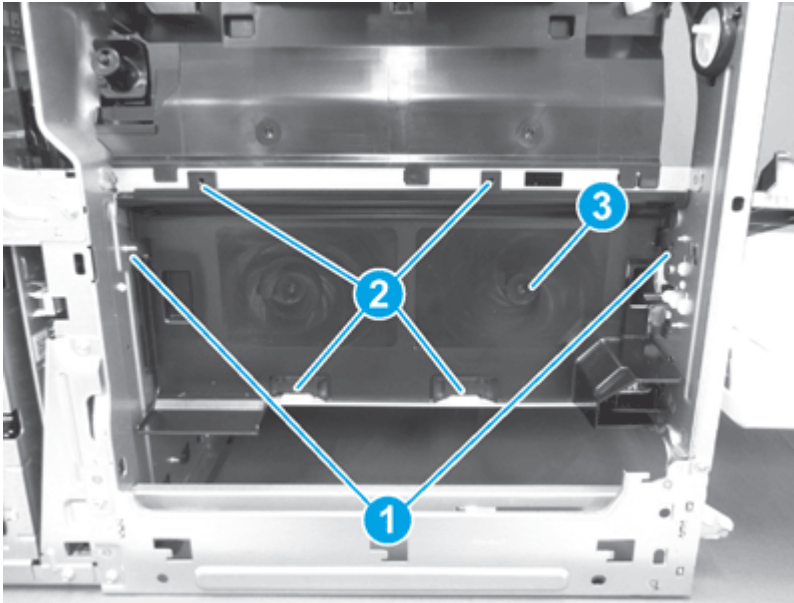


3. Remove the laser scanner

Follow these steps to remove the laser scanner.

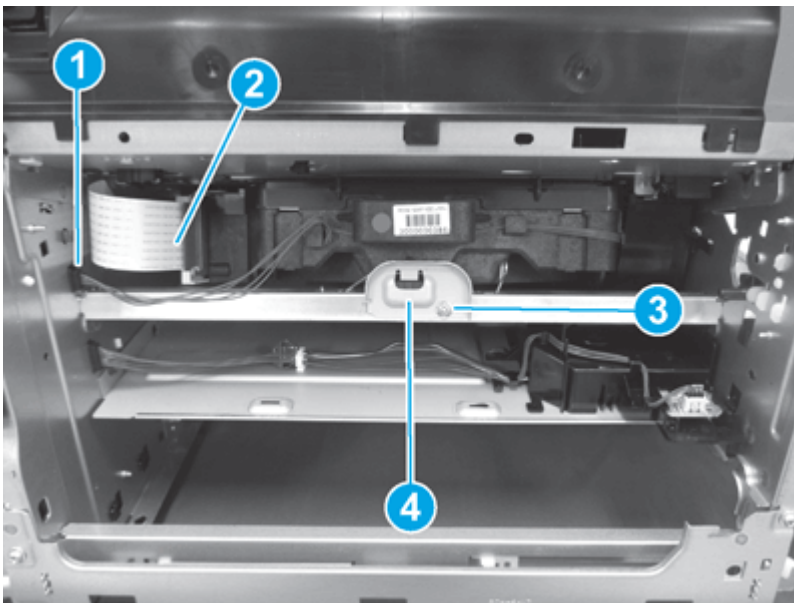
1. Release two tabs (callout 1), release four bosses (callout 2), and then remove the scanner cover (callout 3).

Figure 5-1250 Remove the scanner cover





2. Disconnect one connector (callout 1), and then lift the gray latch and release one flat cable (callout 2). Remove one screw (callout 3), and then remove the plate (callout 4).

Figure 5-1251 Disconnect two connectors and remove one screw



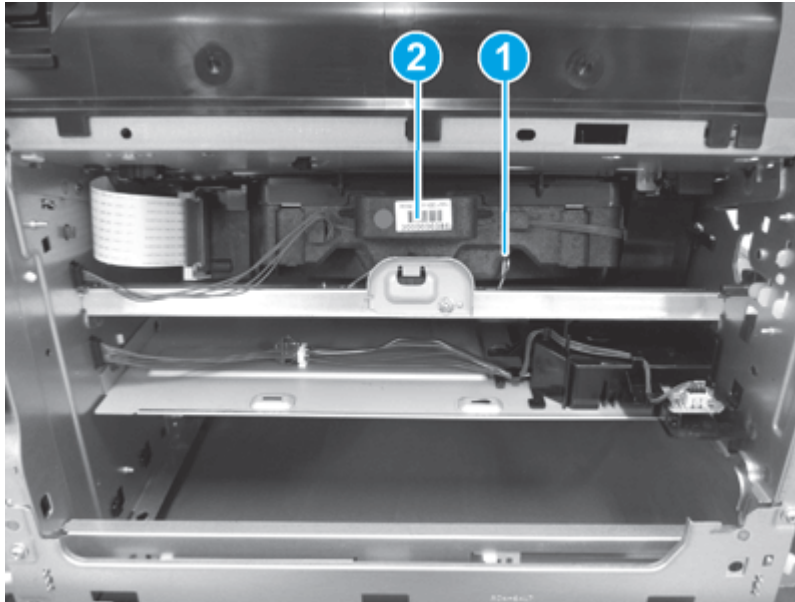
3. Unhook one spring (callout 1), and then pull the laser scanner (callout 2) away from the printer to remove it.

 **NOTE:** The spring is not retained. Do not lose the spring.

 **TIP:** Close all printer doors before turning the printer power on for the first time after replacing the laser scanner.

Reverse the removal steps to install the assembly.

Figure 5-1252 Remove the laser scanner



4. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Drum motor 1

Learn how to remove and replace drum motor 1.



[View a video of how to remove and replace the drum motor 1.](#)

Mean time to repair: 45 minutes

Service level: Advanced



IMPORTANT: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Disconnect the power cable.

⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-71 Part information

Part number	Part description
RM2-1956-000CN	Drum motor 1

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Make sure that the printer initializes to a **Ready** state.

Print a configuration page to make sure that the printer is functioning correctly.

1. Remove the keyboard (MFP)

Follow these steps to remove the keyboard (MFP).

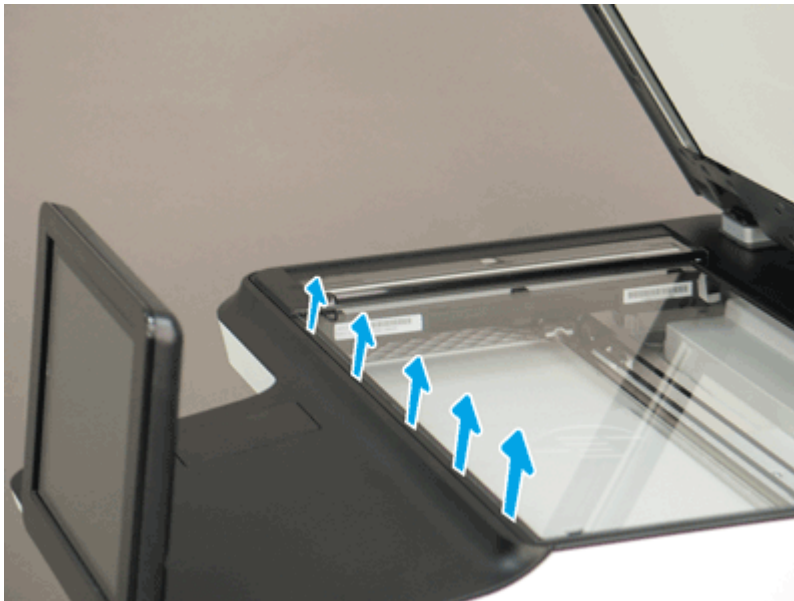
1. If the control panel is not fully tilted forward, tilt it forward now (callout 1) until it stops. Open the document feeder (callout 2).

Figure 5-1253 Tilt the control panel and open the document feeder



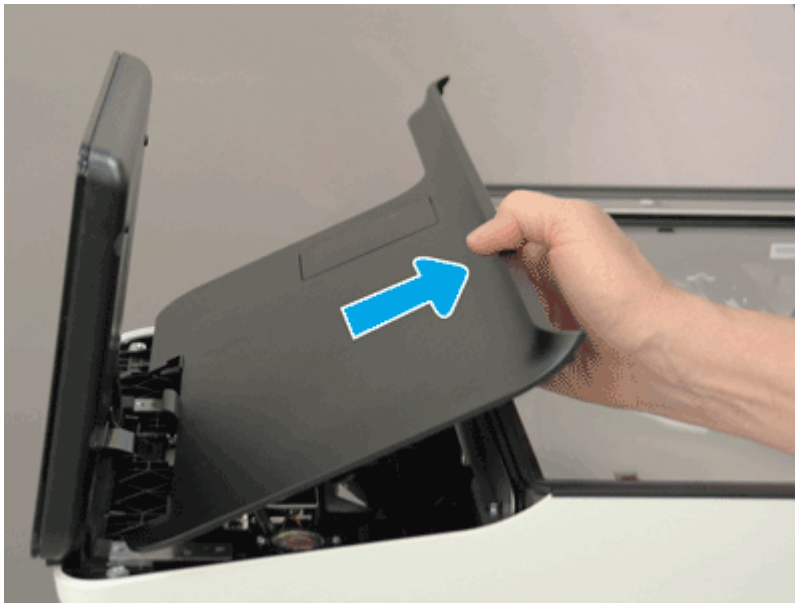
2. Beginning at the right side of the control-panel cover, carefully release five tabs along the top edge of the cover.

Figure 5-1254 Release five tabs



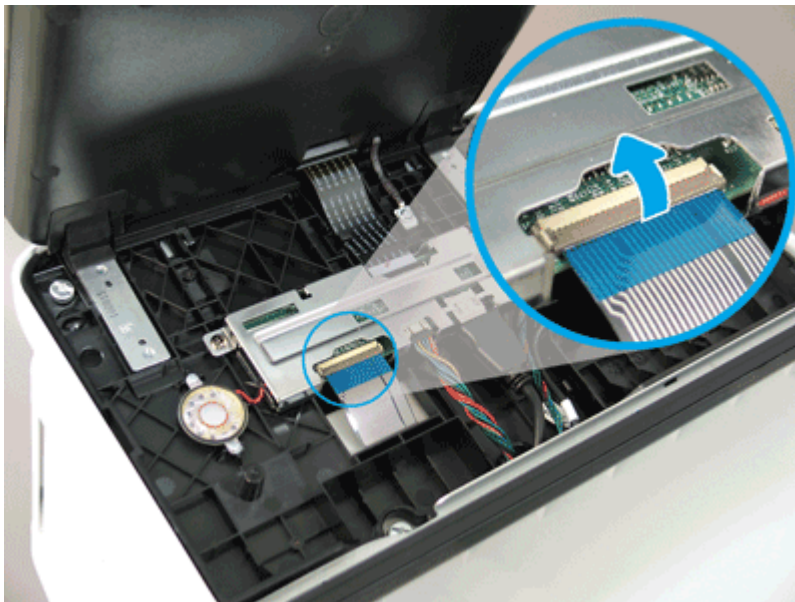
3. Continue to rotate the top edge of the cover away from the printer, and then remove the cover.

Figure 5-1255 Remove the cover



4. Open the connector latch to release the keyboard flat cable.

Figure 5-1256 Disconnect the keyboard flat cable



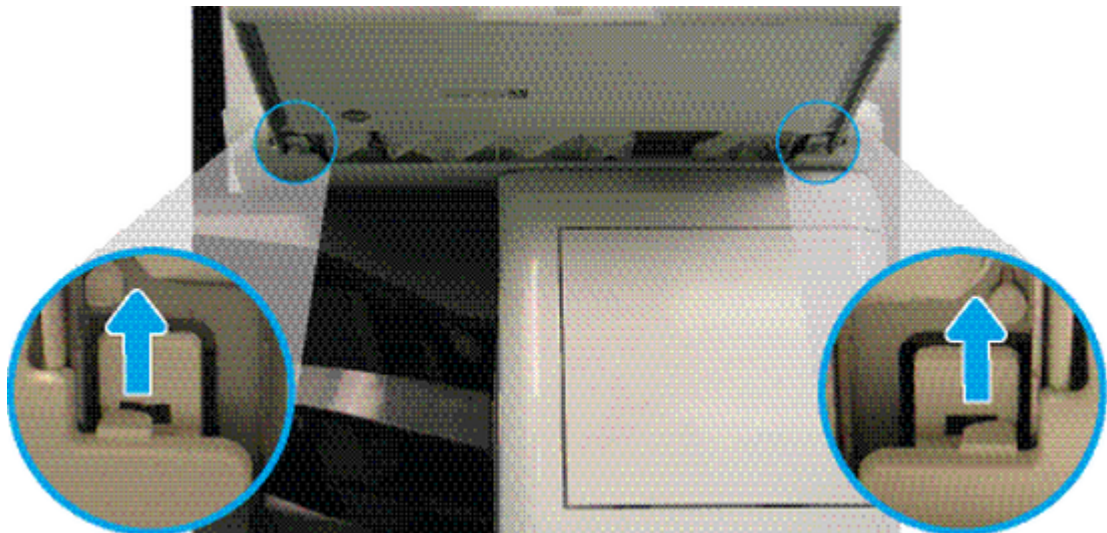
5. Slide the keyboard tray out until it stops.

Figure 5-1257 Slide the keyboard tray out



6. Push up on the keyboard tray to release two tabs on the bottom of the tray, and then slide the tray toward you to disengage the tabs.

Figure 5-1258 Release two tabs




7. Slide the keyboard tray all the way out of the printer to remove it.

Figure 5-1259 Remove the keyboard



2. Remove the control panel (M681/M682/E67550/E67560/E67650/E67660)

Follow these steps to remove the control panel (M681/M682/E67550/E67560/E67650/E67660).

 **NOTE:** This step is for the M681/M682/E67550/E67560/E67650/E67660 printers. For the M652/M653/E65050/E65060/E65150/E65160 printers, skip this step.

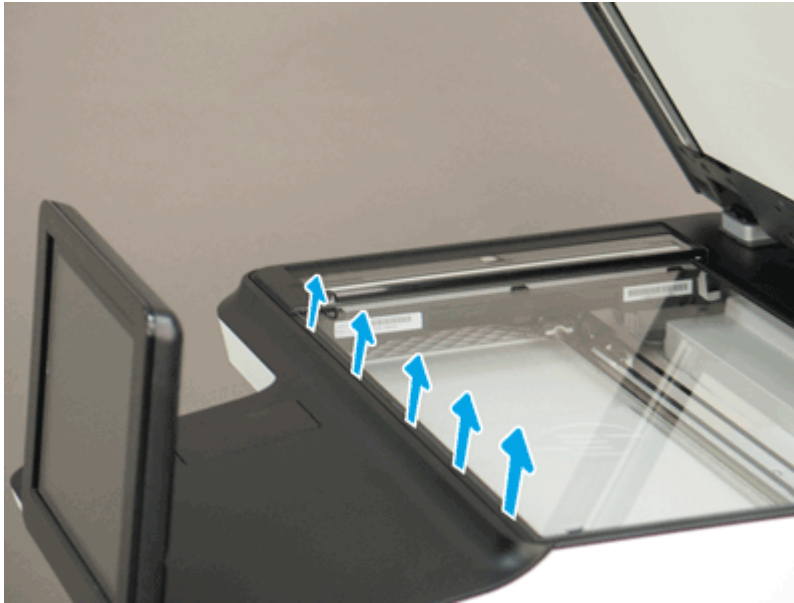
1. Tilt the control panel forward (callout 1), and then open the document feeder (callout 2).

Figure 5-1260 Tilt the control panel forward and open the document feeder



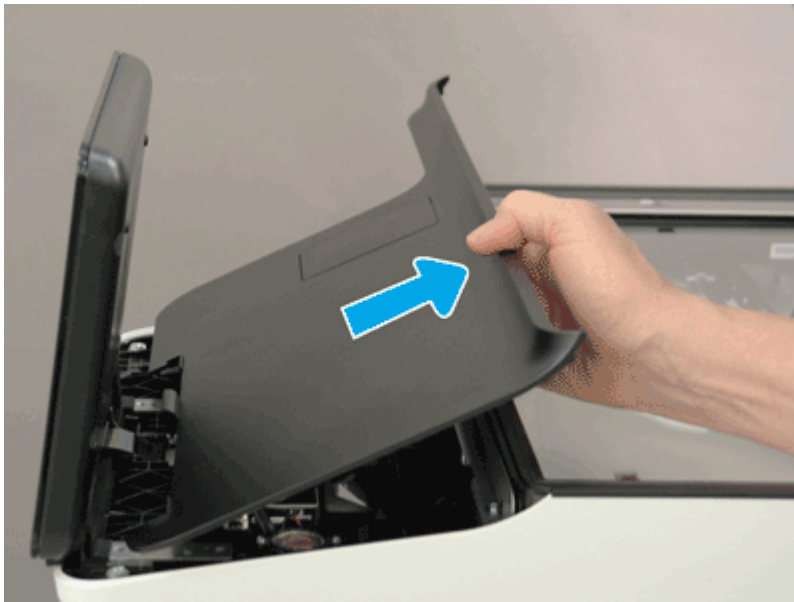
2. Beginning at the right side of the control-panel cover, carefully release five tabs along the top edge of the cover.

Figure 5-1261 Release five tabs



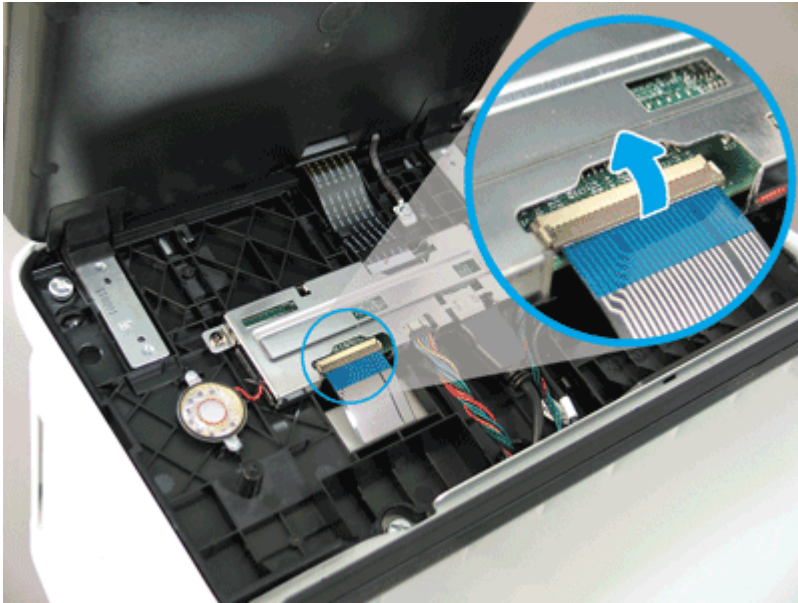
3. Continue to rotate the top edge of the cover away from the printer, and then remove the cover.

Figure 5-1262 Remove the cover



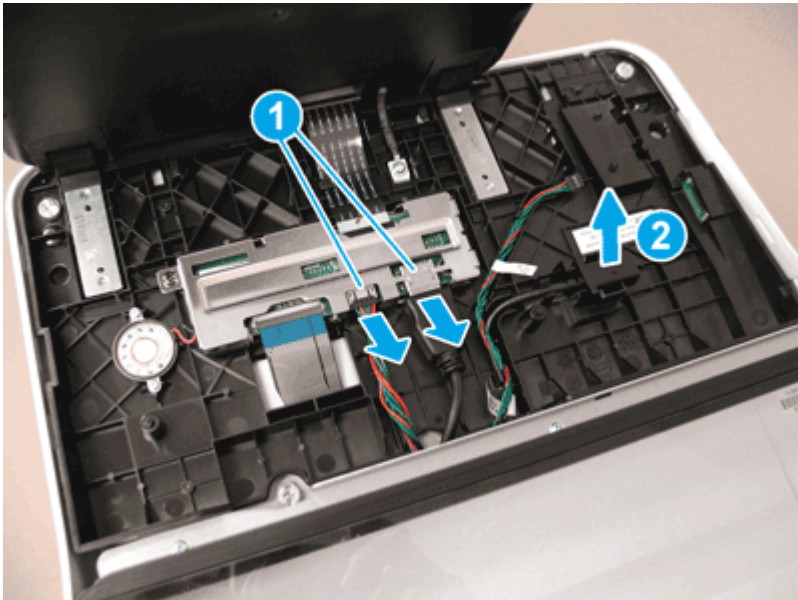
4. **Keyboard models only:** Lift up on the small, gray gate to release the keyboard flat cable.

Figure 5-1263 Disconnect the keyboard flat cable (keyboard models only)



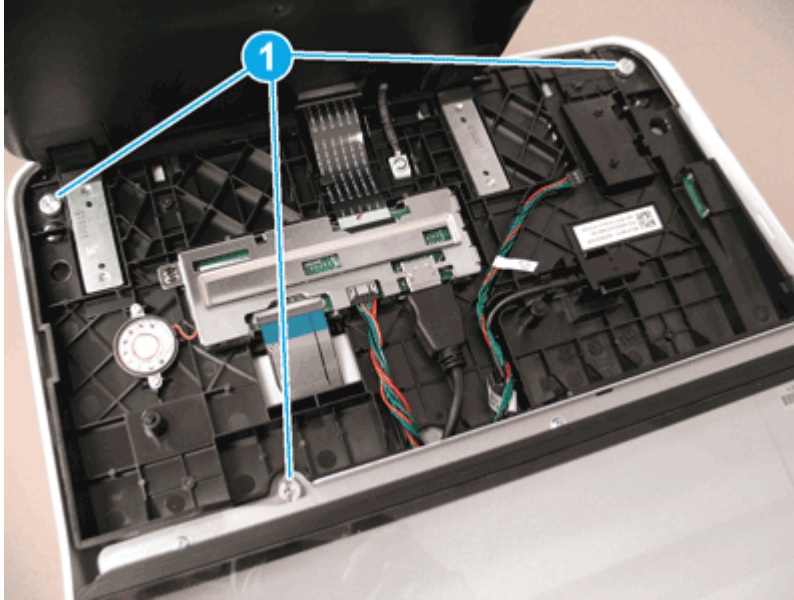
5. Disconnect two connectors (callout 1), and then release the USB cable (callout 2) from the holder.

Figure 5-1264 Disconnect connectors



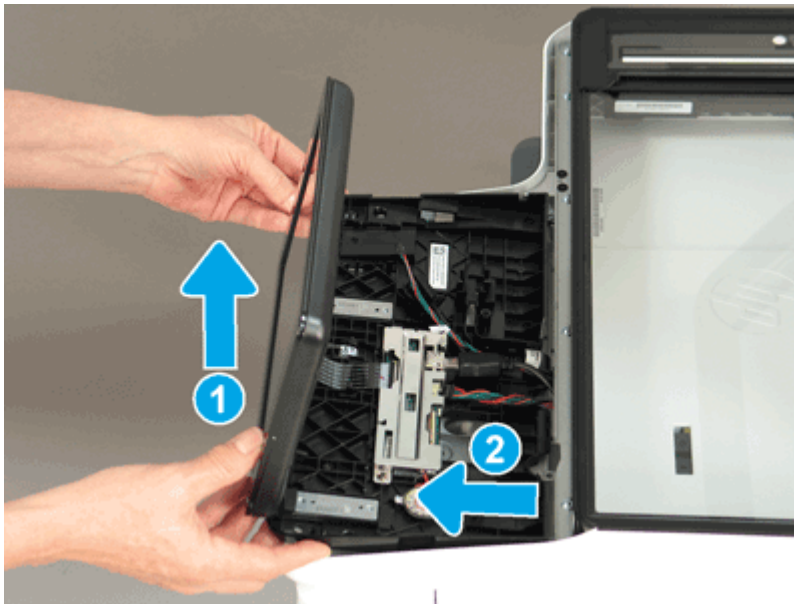
6. Remove three thumbscrews (callout 1).

Figure 5-1265 Remove three thumbscrews



7. Lift the front of the control panel off of the printer (callout 1), and then slide it toward the front of the printer (callout 2) to remove it.

Figure 5-1266 Remove the control panel

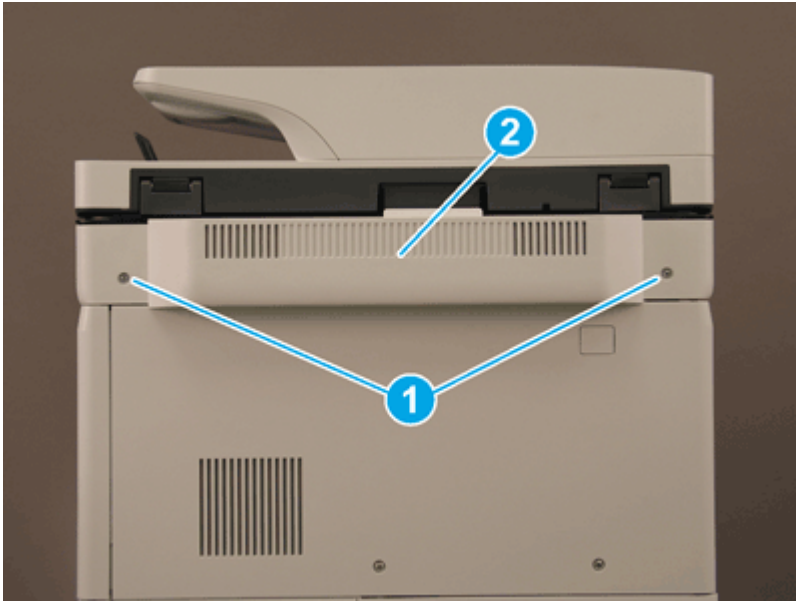


3. Remove the document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660)

Follow these steps to remove the document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660).

1. Remove two screws (callout 1), and then remove the scanner control board (SCB) cover (callout 2).

Figure 5-1267 Remove the SCB cover



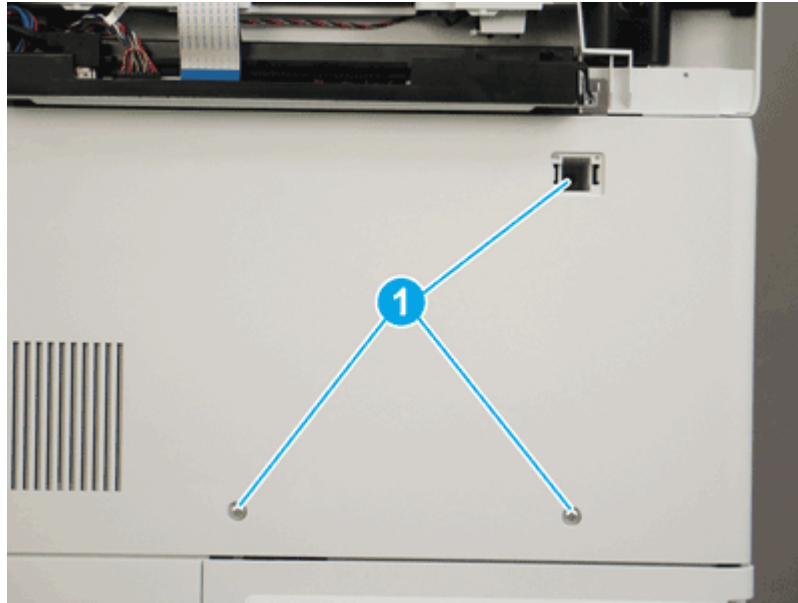
2. **Flow M681z and Flow M682z models only:** Do the following:
 - a. At the back of the printer, remove one small cover (callout 1).

Figure 5-1268 Remove the small cover



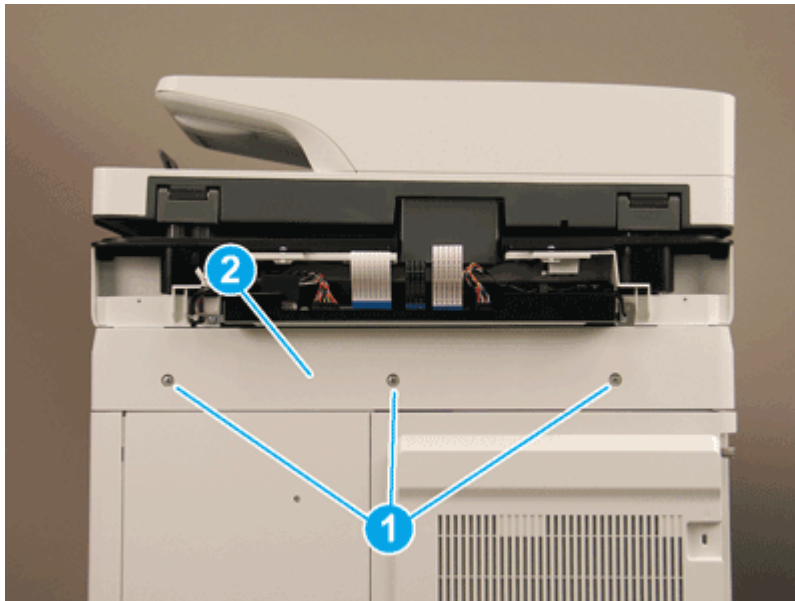
- b. **Flow M681z and Flow M682z only**: Remove three screws (callout 1), and then remove the stapler/stacker rear cover (callout 2).

Figure 5-1269 Remove the stapler/stacker rear cover



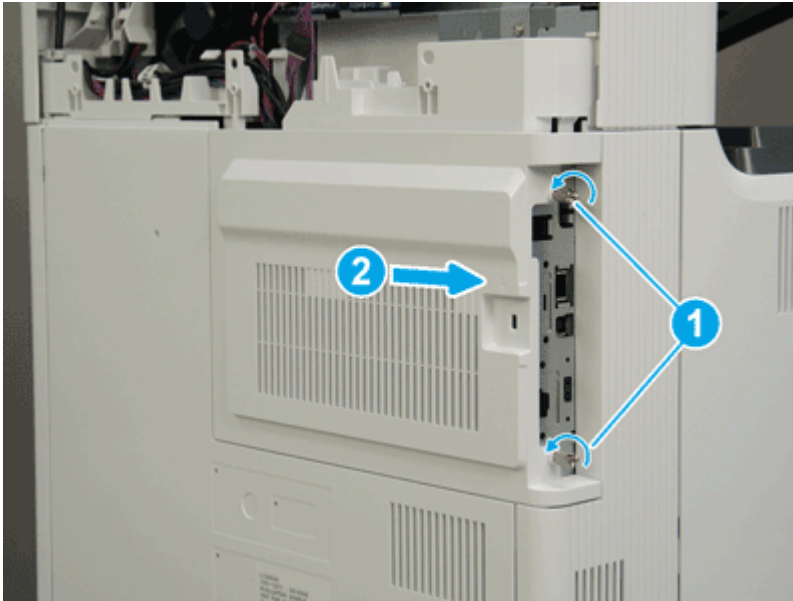
- 3. **M681dh, M681f, M682dh, and Flow M681f models only**: Remove three screws (callout 1), and then remove the upper rear cover (callout 2).

Figure 5-1270 Remove the upper rear cover



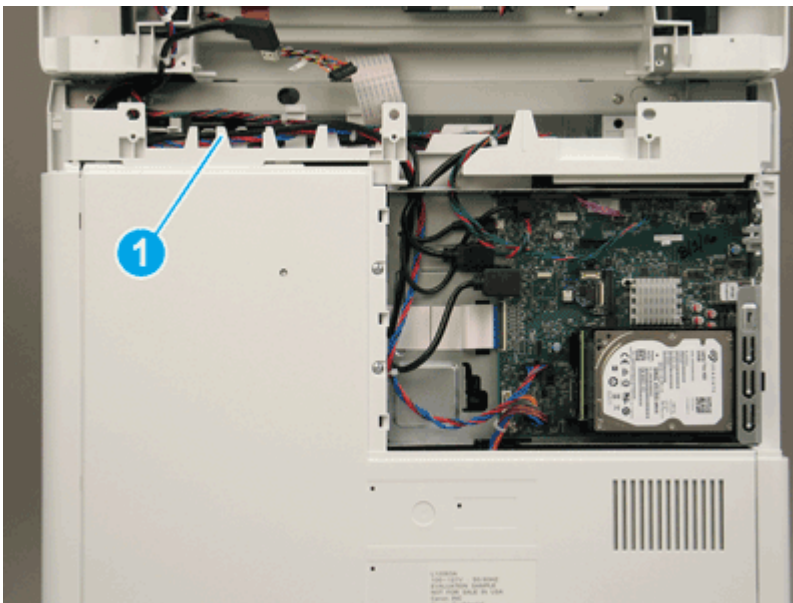
4. Loosen two thumbscrews (callout 1), and then slide the formatter cover away from the printer to remove it (callout 2).

Figure 5-1271 Remove the formatter cover



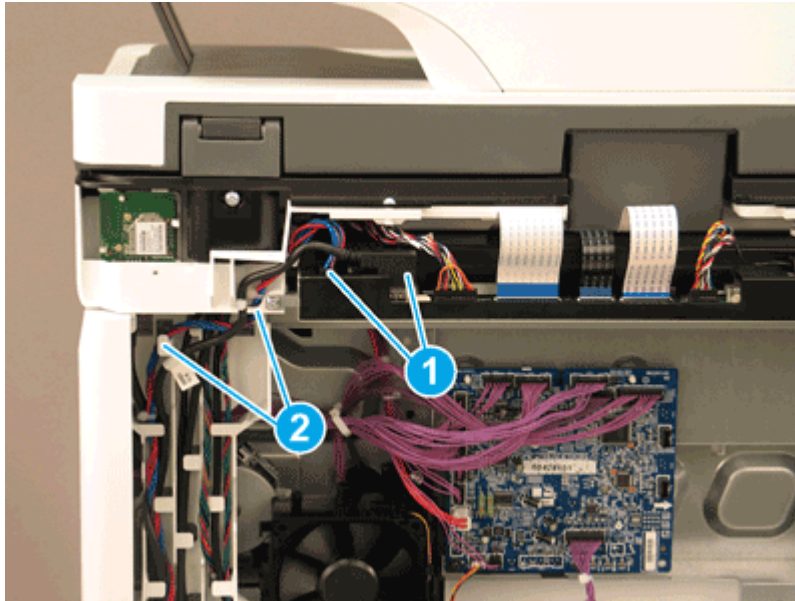
5. The remaining figures in this procedure show the Flow M682z model. While the cable routing (callout 1) on the M681dh, M681f, M682dh, and Flow M681f models is different, the removal procedures are the same for all models.

Figure 5-1272 Cable routing for M681dh, M681f, and Flow M681f



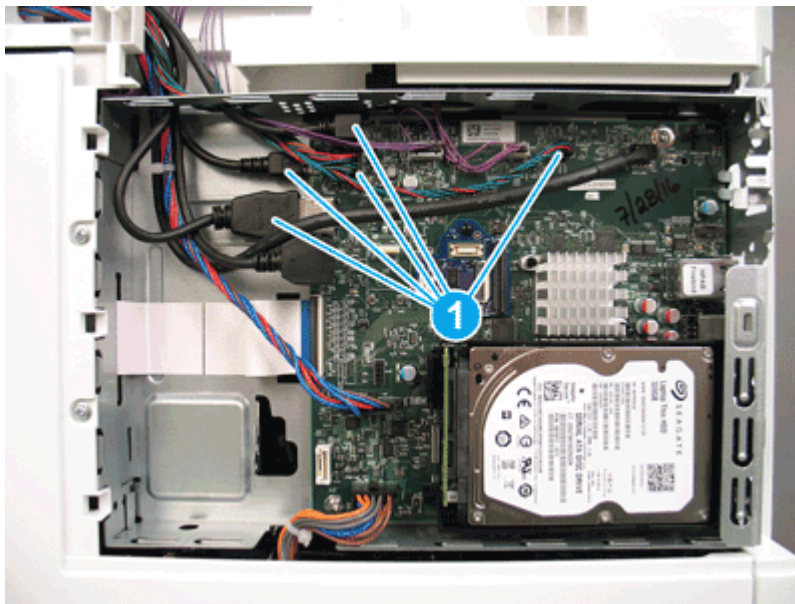
6. Disconnect two connectors (callout 1) on the SCB, and then release the cables from the guides (callout 2).

Figure 5-1273 Disconnect two connectors



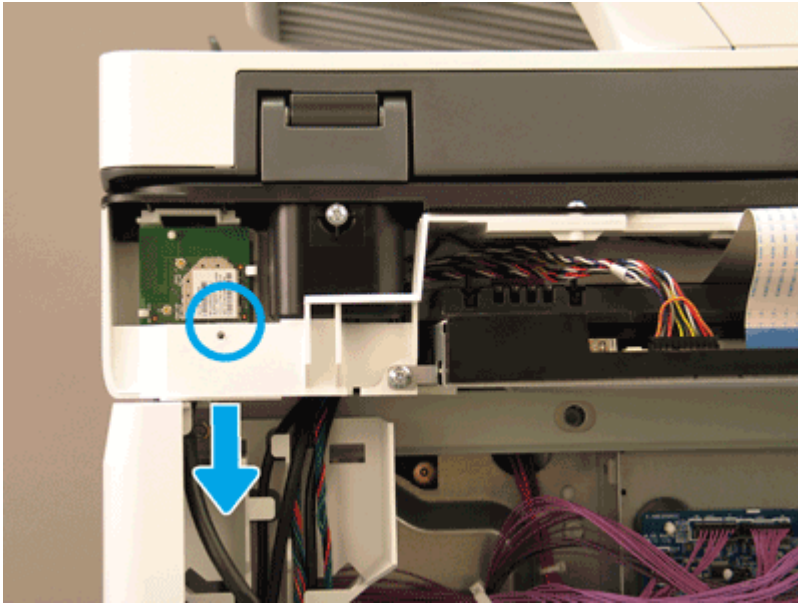
7. Disconnect five connectors on the formatter (callout 1).

Figure 5-1274 Disconnect five connectors



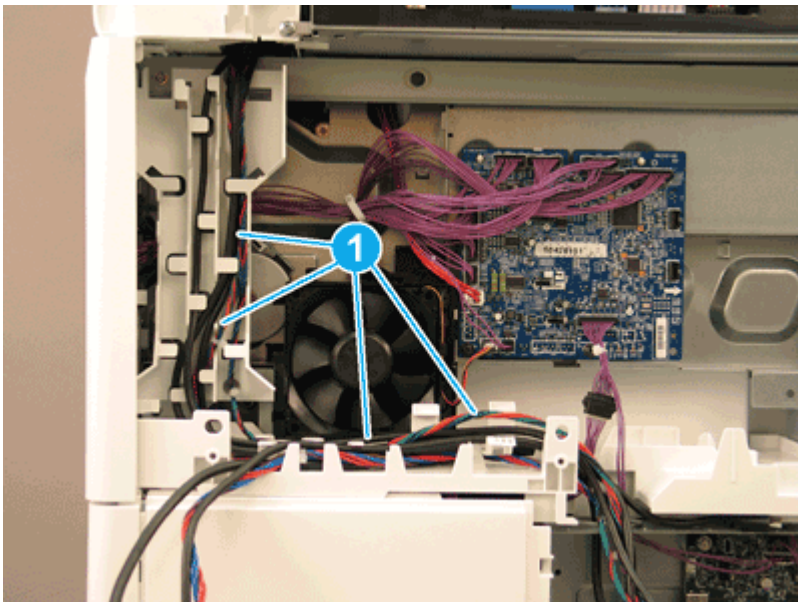
8. **Flow M682z only:** Gently pull down on the cable to disconnect the wireless connector.

Figure 5-1275 Disconnect the wireless connector



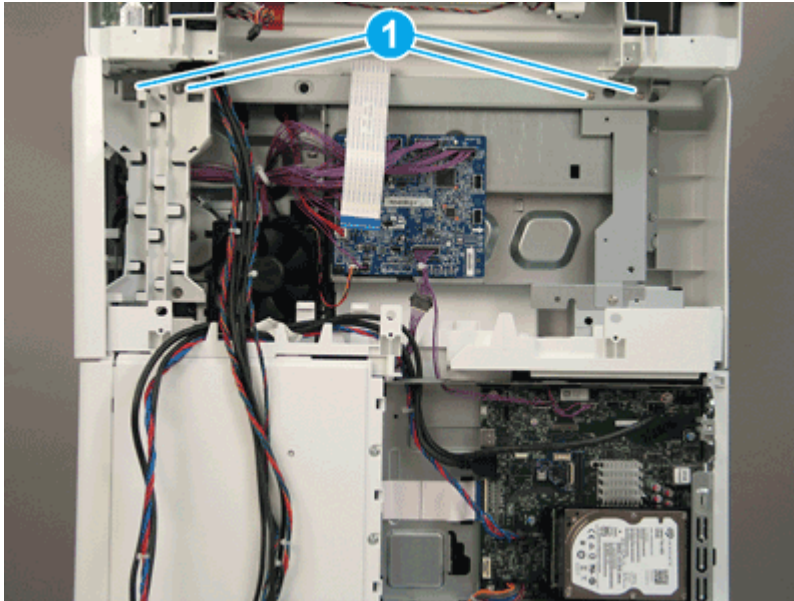
9. Release all of the cables from the cable guides (callout 1).

Figure 5-1276 Release the cables



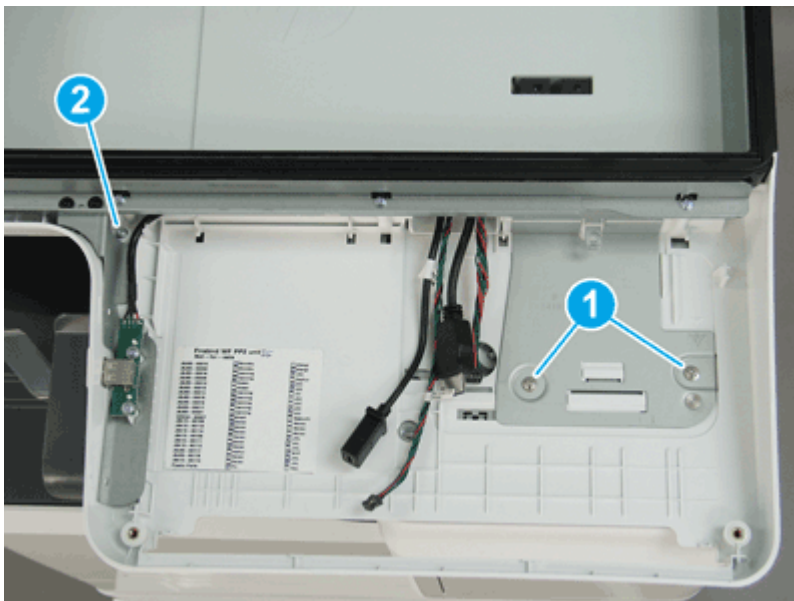
10. At the back of the printer, remove four screws (callout 1).

Figure 5-1277 Remove four screws



11. On the top of the image scanner assembly, at the location where the control panel was removed, remove two sheet metal screws (callout 1). **Flow M681z and Flow M682z only:** Remove one self-tapping screw (callout 2).

Figure 5-1278 Remove three screws



12. Lift the document feeder and image scanner off of the printer to remove them.

Figure 5-1279 Remove the document feeder and image scanner



4. Remove the stapler/stacker (Flow M681z/Flow M682z/Flow E67660z)

Follow these steps to remove the stapler/stacker (Flow M681z/Flow M682z/Flow E67660z).

This step is for the M681/M682/E67550/E67560/E67650/E67660 printers. For the M652/M653/E65050/E65060/E65150/E65160 printers, skip this step.

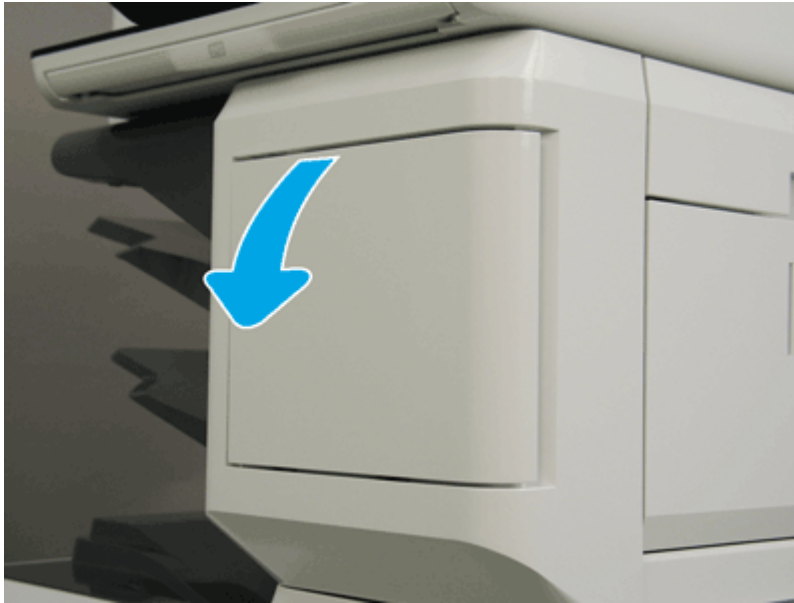
1. Open the front door.

Figure 5-1280 Open the front door



2. Open the stapler door.

Figure 5-1281 Open the stapler door



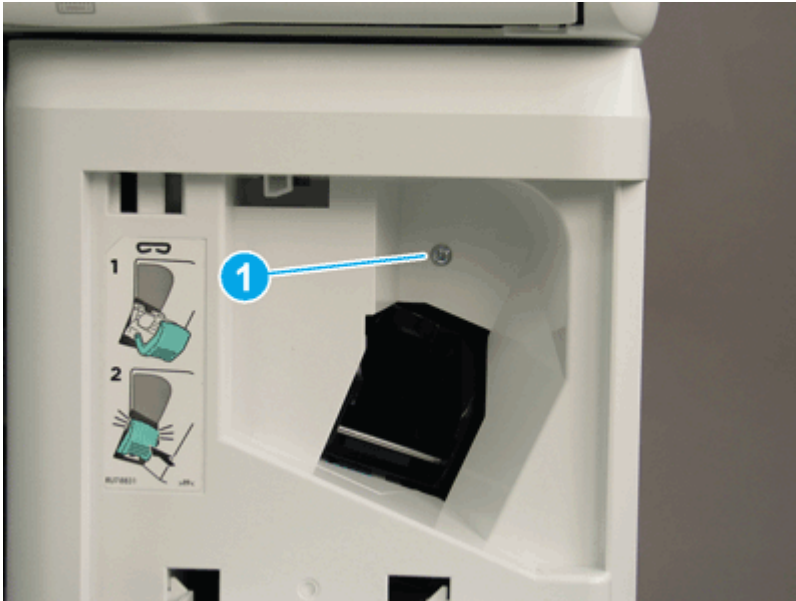
3. Release the latch, and then remove the staple cartridge.

Figure 5-1282 Remove the staple cartridge



4. Remove one screw (callout 1).

Figure 5-1283 Remove one screw



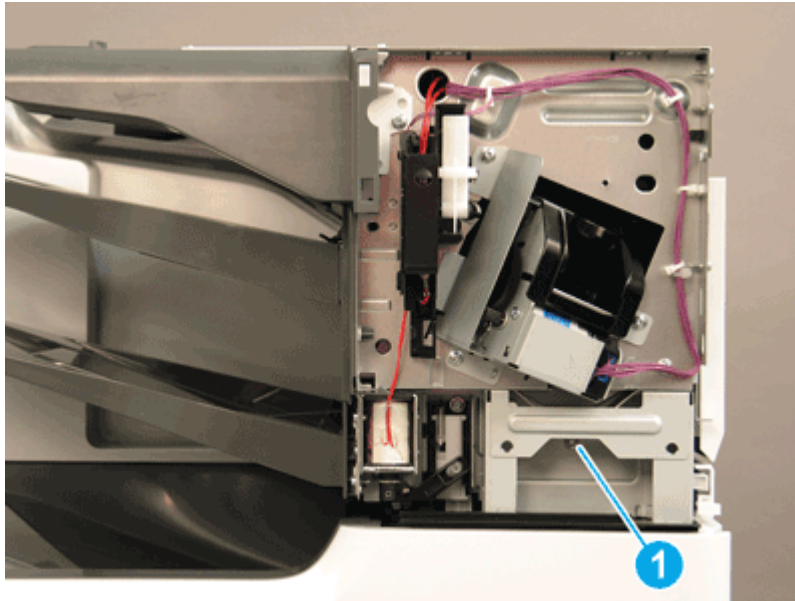
5. Rotate the stapler cover to the right to remove it.

Figure 5-1284 Remove the stapler cover



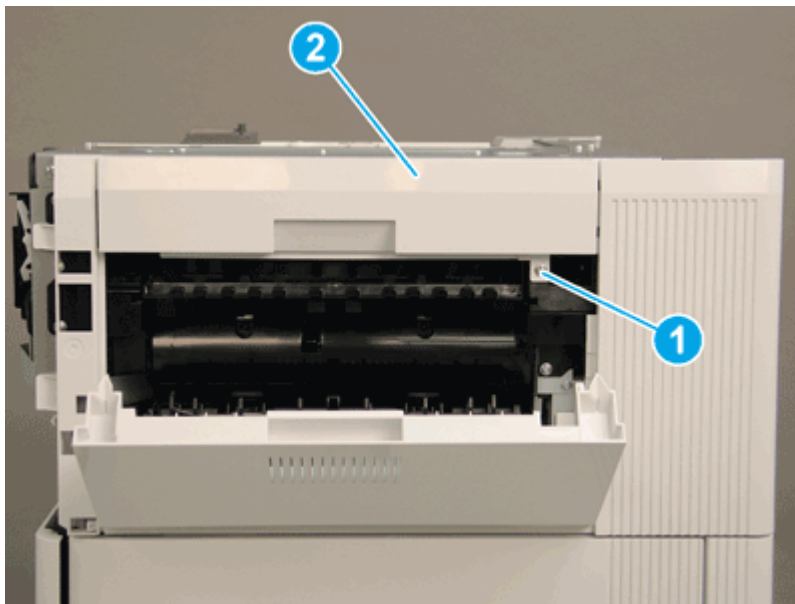
6. Remove one screw (callout 1).

Figure 5-1285 Remove one screw



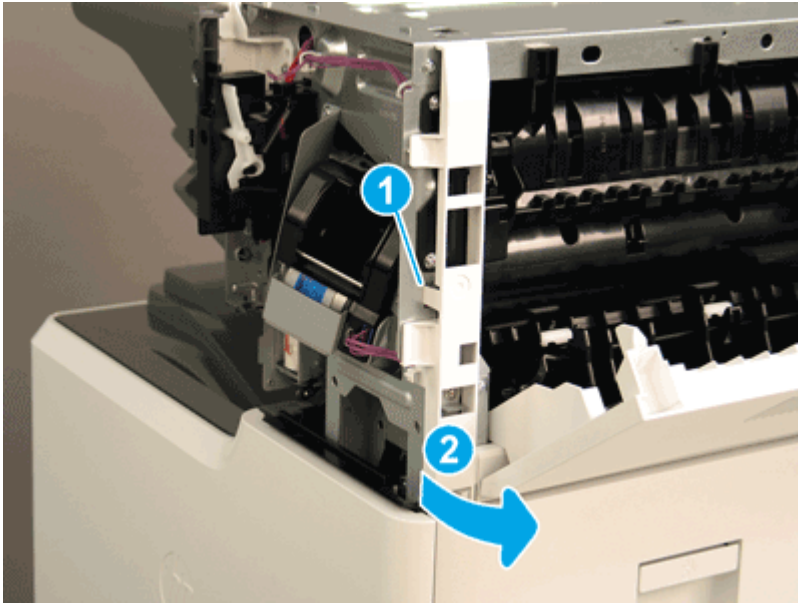
7. At the right side of the printer, remove one screw (callout 1), and then remove the stapler/stacker right upper cover (callout 2).

Figure 5-1286 Remove the stapler/stacker right upper cover



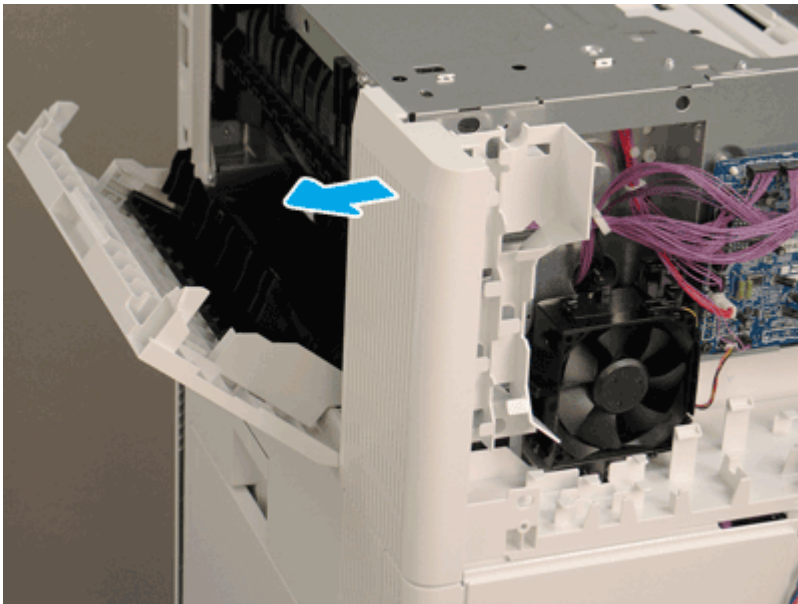
8. Release one tab (callout 1), and then rotate the stapler rear cover away from the printer (callout 2) to remove it.

Figure 5-1287 Remove the stapler rear cover



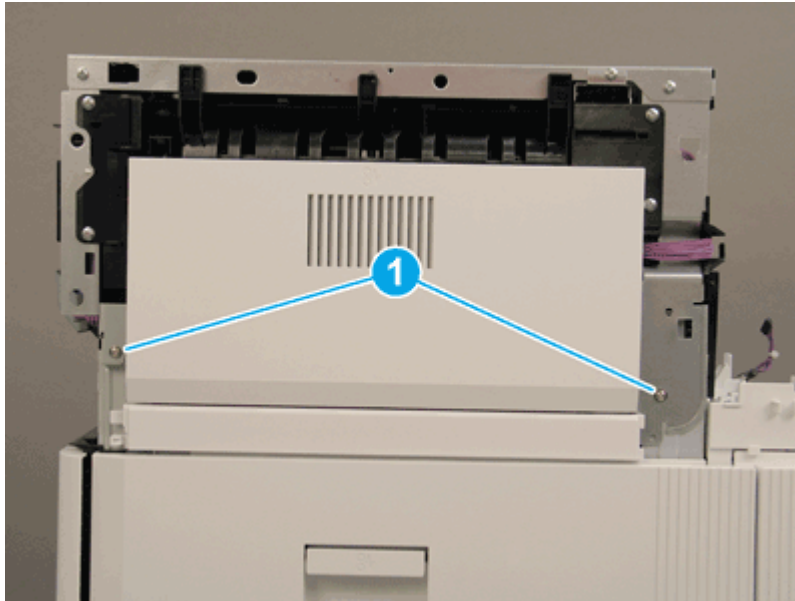
9. Pull the stapler/stacker rear corner cover away from the printer to remove it.

Figure 5-1288 Remove the stapler/stacker rear corner cover



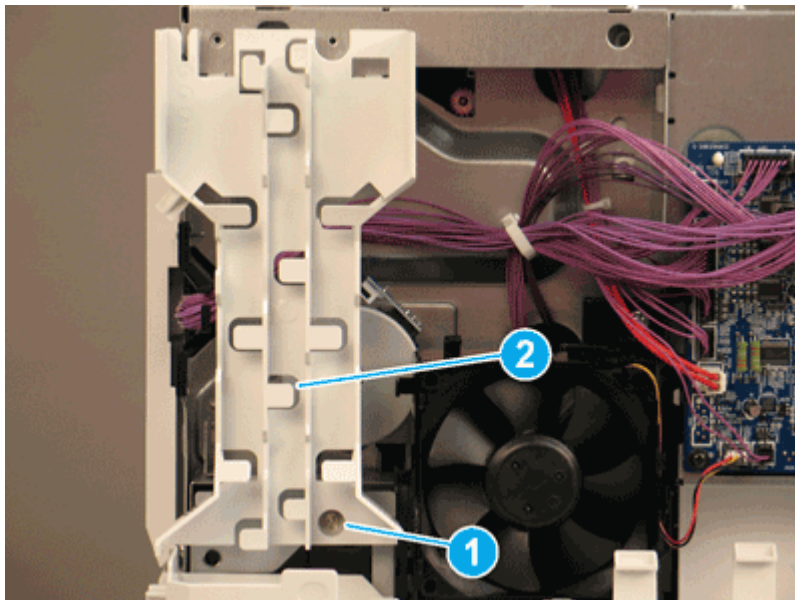
10. Remove two screws (callout 1).

Figure 5-1289 Remove two screws



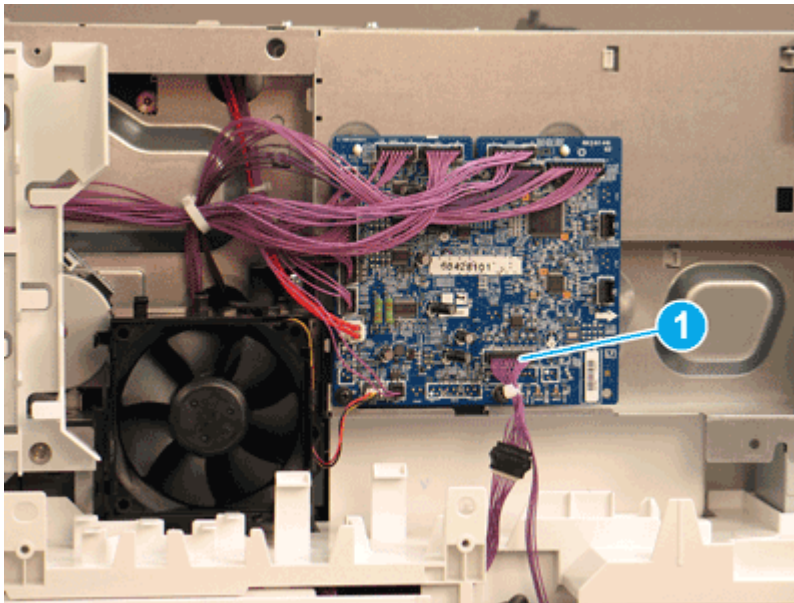
11. At the back of the printer, remove one screw (callout 1), and then remove the cable guide (callout 2).

Figure 5-1290 Remove the cable guide



12. Disconnect one connector on the stapler/stacker PCA (callout 1).

Figure 5-1291 Disconnect one connector



13. Remove two screws (callout 1).


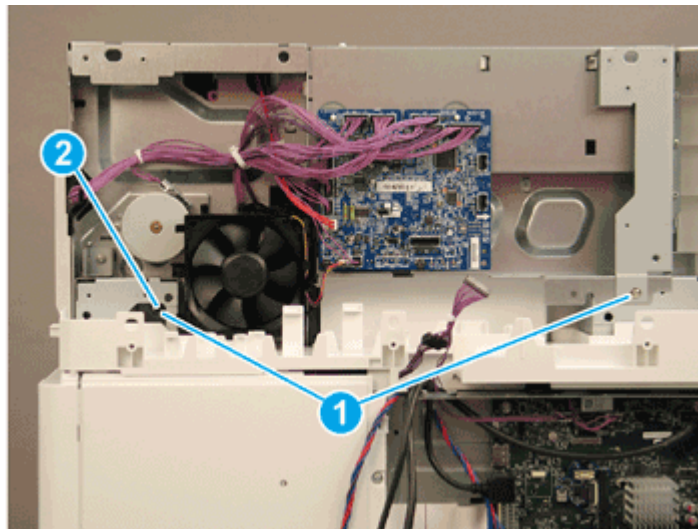
 **TIP:** The screw on the left (callout 2) is longer than the other screw. Make sure that this screw is installed in the correct location.

Figure 5-1292 Remove two screws



14. Lift the stapler/stacker away from the printer.


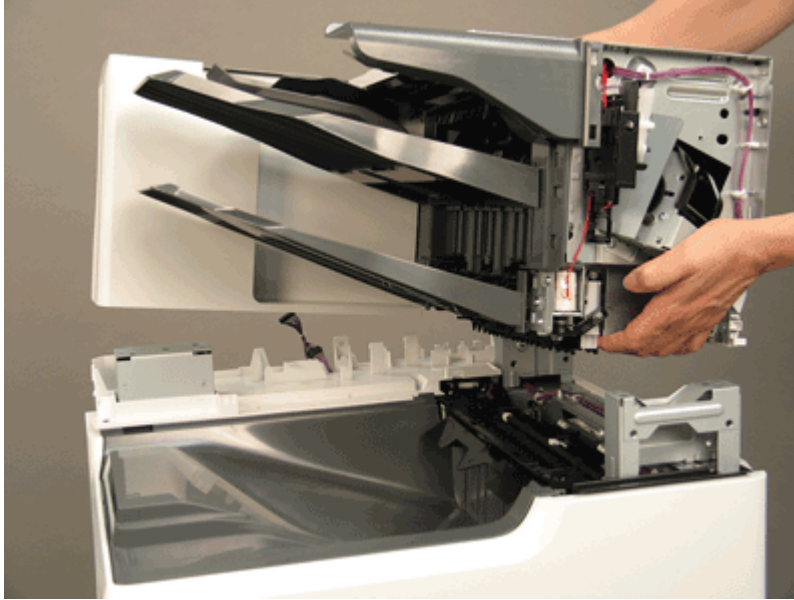

 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1293 Remove the stapler/stacker



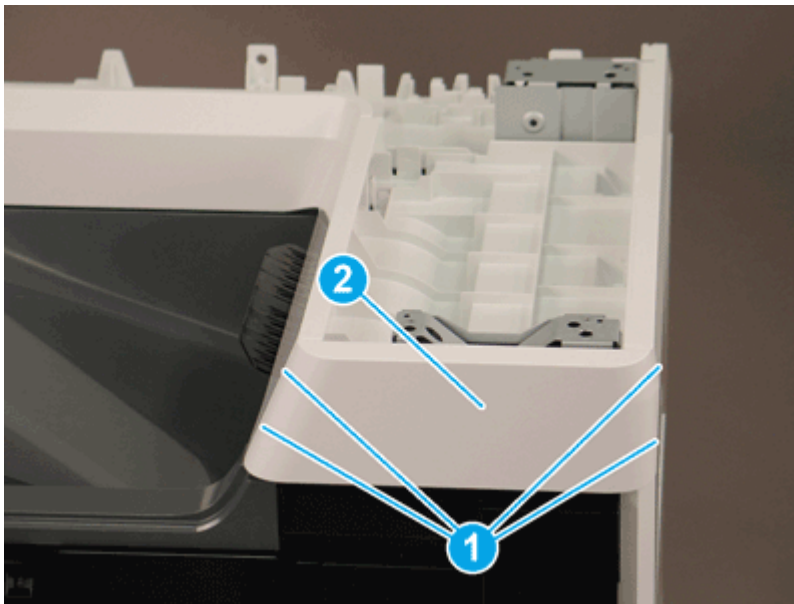
5. Remove the face-down front cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the face-down front cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

 **NOTE:** This step is for the M681/M682/E67550/E67560/E67650/E67660 printers. For the M652/M653/E65050/E65060/E65150/E65160 printers, skip this step.

1. Open the front door.
2. Release two tabs on each side (callout 1), and then remove the face-down front cover (callout 2).

Figure 5-1294 Remove the face-down front cover



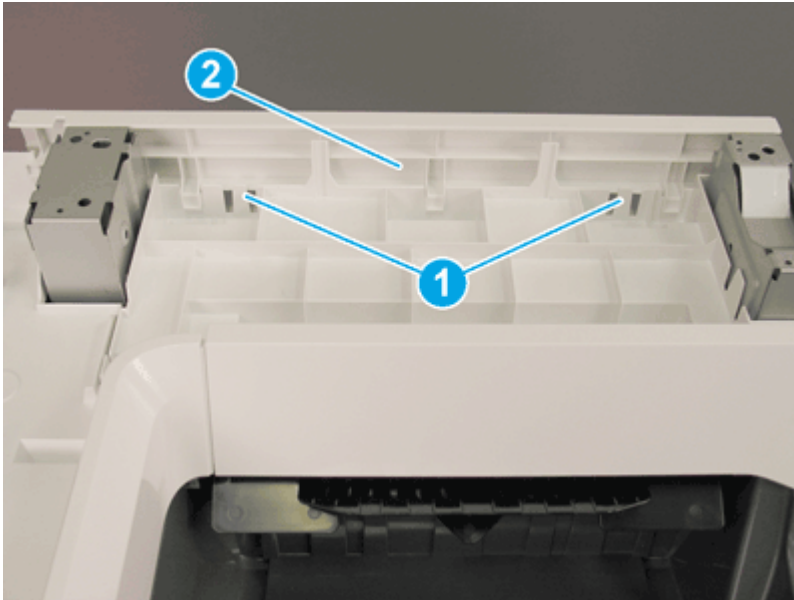
6. Remove the right cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the right cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

This step is for the M681/M682/E67550/E67560/E67650/E67660 printers. For the M652/M653/E65050/E65060/E65150/E65160 printers, skip this step.

- Release two tabs (callout 1), and then remove the right cover (callout 2).

Figure 5-1295 Remove the right cover



7. Remove the front cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the front cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

- Release two tabs (callout 1), and then remove the front cover (callout 2).


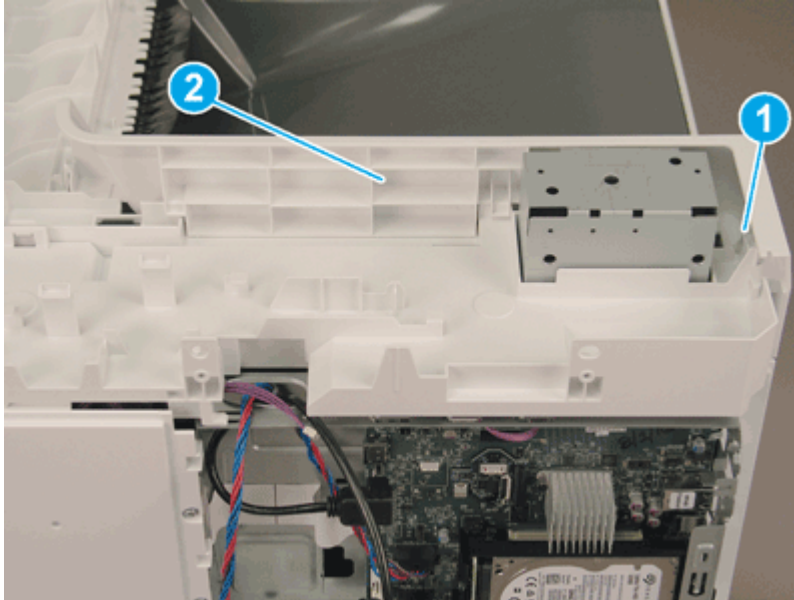
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1296 Remove the front cover



8. Remove the rear upper cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the rear upper cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

- Remove two screws (callout 1), and then remove the rear upper cover (callout 2).


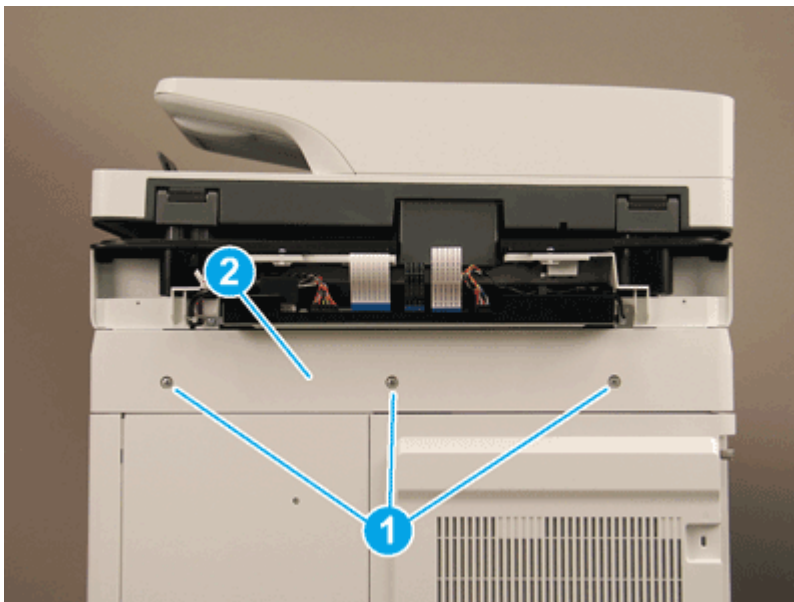

 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1297 Remove the rear upper cover



9. Remove the face-down cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the face-down cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

 **NOTE:** This step is for the M681/M682/E67550/E67560/E67650/E67660 printers. For the M652/M653/E65050/E65060/E65150/E65160 printers, skip this step.

- Remove two screws (callout 1), release three tabs (callout 2), and then remove the face-down cover (callout 3).


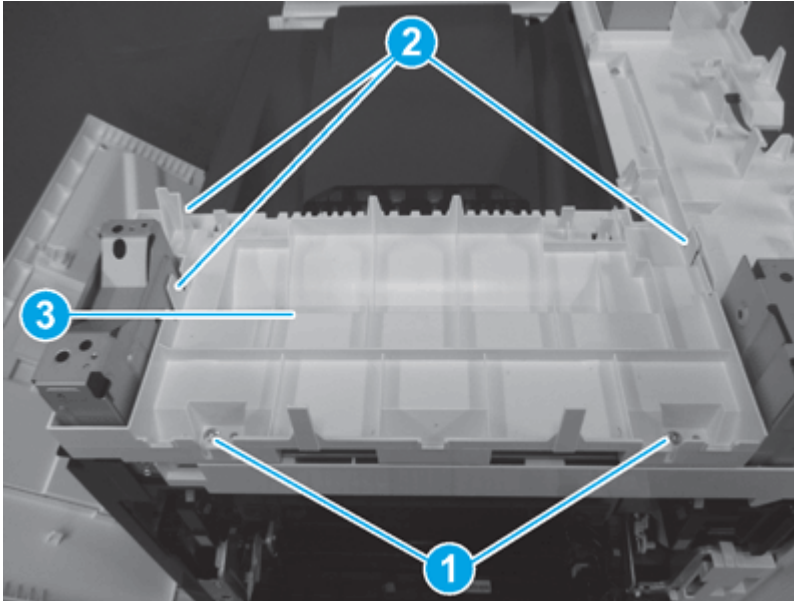
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1298 Remove two screws and the face-down cover



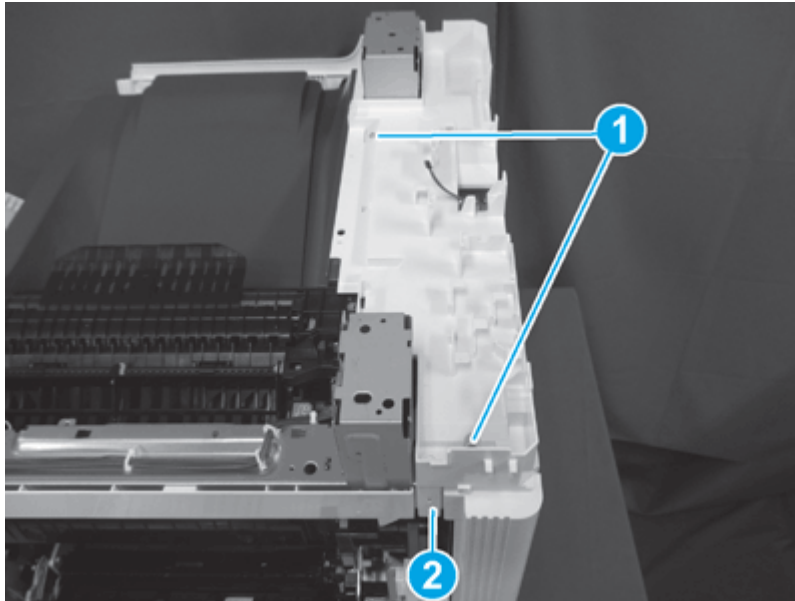
10. Remove the main cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the main cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

This step is for the M681/M682/E67550/E67560/E67650/E67660 printers. For the M652/M653/E65050/E65060/E65150/E65160 printers, skip this step.

1. Remove two screws (callout 1), and then release one tab (callout 2).

Figure 5-1299 Remove two screws and release one tab



2. Remove one screw (callout 1), release two tabs (callout 2), and then remove the main cover (callout 3).


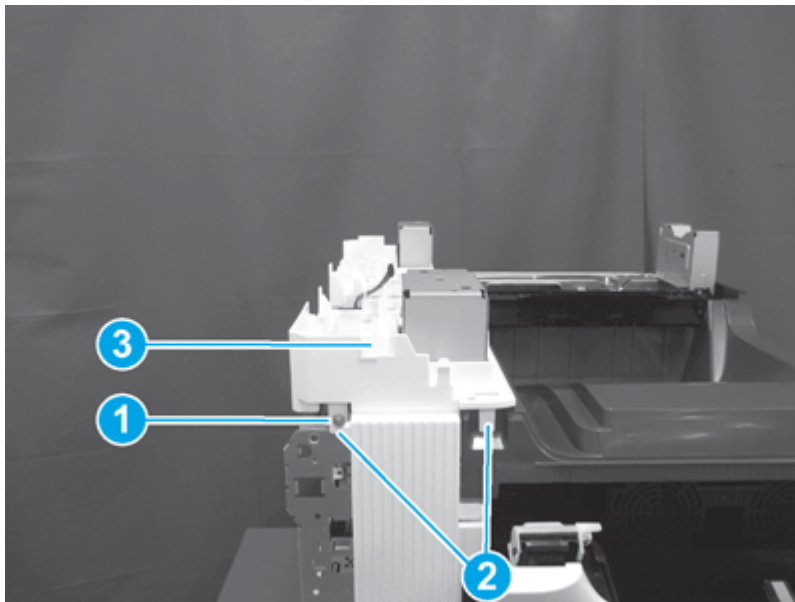

 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1300 Remove one screw and the main cover



11. Remove the control panel (M652/M653/E65050/E65060/E65150/E65160)

Follow these steps to remove the control panel (M652/M653/E65050/E65060/E65150/E65160).

 **NOTE:** This step is for the M652/M653/E65050/E65060/E65150/E65160 printers. For the M681/M682/E67550/E67560/E67650/E67660 printers, skip this step.

The figures below show the touchscreen control panel. The procedure is also correct for the keypad control panel.

1. Tilt the control panel to the fully raised position.

Figure 5-1301 Tilt the control panel up



2. Use a coin to release the cover, and then remove the cover.

Figure 5-1302 Remove the cover



3. Remove one thumbscrew (callout 1)



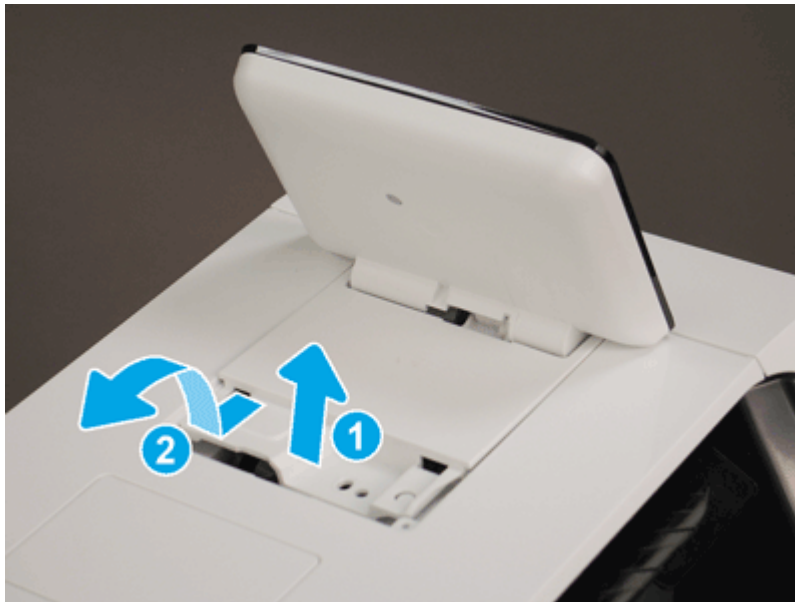
NOTE: Store the screw in a secure place where it cannot fall down into the printer.

Figure 5-1303 Remove one thumbscrew



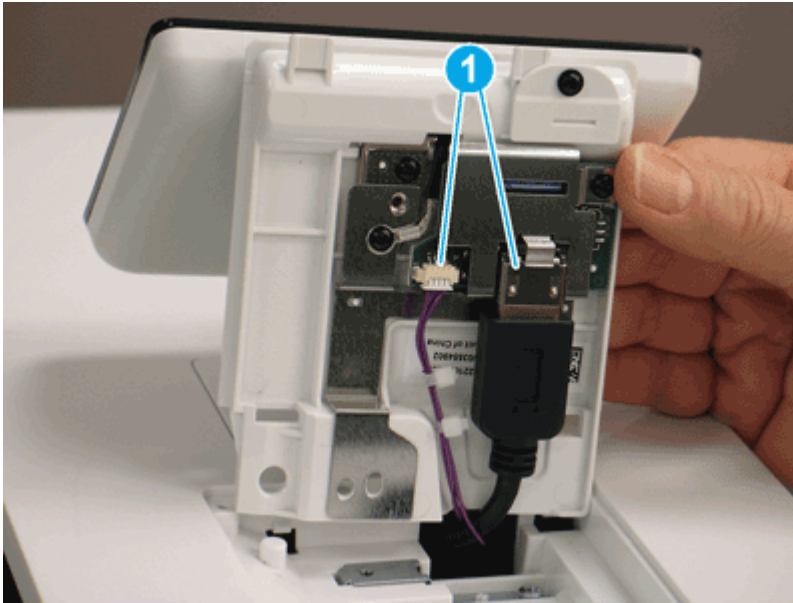
4. Lift the back edge of the control panel up (callout 1), and then slide it toward the back of the printer (callout 2) to release it.

Figure 5-1304 Release the control panel



5. Turn the control panel over to gain access to the bottom side. Disconnect two connectors (callout 1).

Figure 5-1305 Disconnect two connectors



6. Remove the control panel.

Figure 5-1306 Remove the control panel

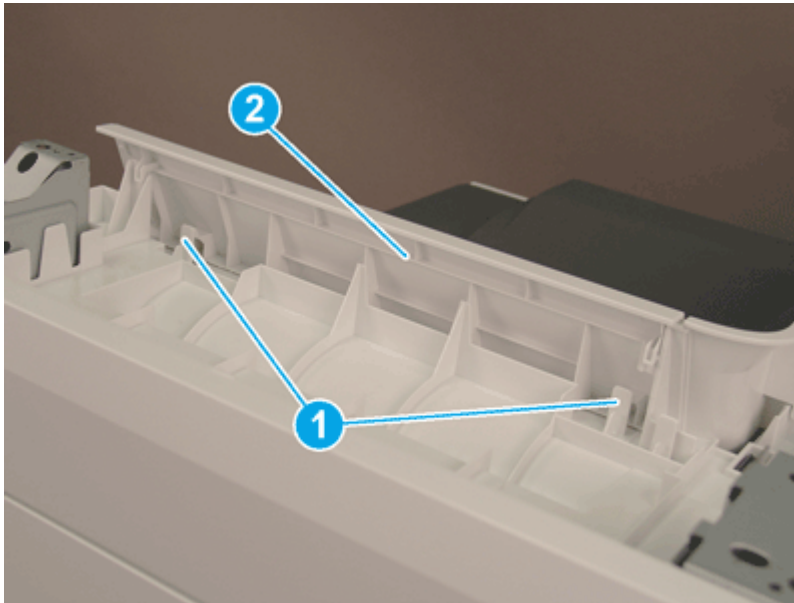


12. Remove the top cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the top cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

- Release two tabs (callout 1), and then remove the top cover (callout 2).

Figure 5-1307 Remove the top cover



13. Remove the output bin

Follow these steps to remove the output bin.

1. Open the following doors:
 - Front door
 - Left door
 - Right door
2. Release two tabs (callout 1), and then remove the output bin (callout 2).


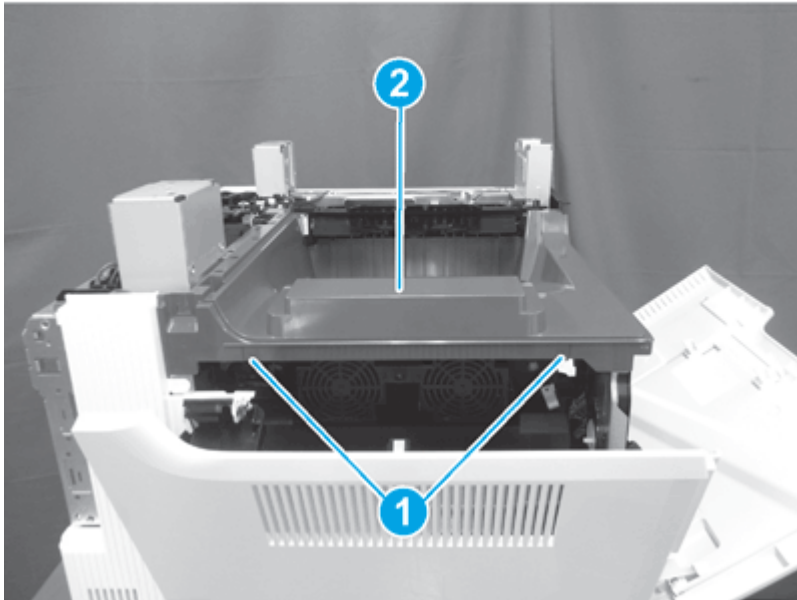
 **NOTE:** The M682 is shown in the figure below. The procedure is correct for all models.

Figure 5-1308 Remove the output bin



14. Remove the formatter cover

Follow these steps to remove the formatter cover.

- Unscrew two thumbscrews (callout 1), and then slide the formatter cover (callout 2) away from the printer to remove it.


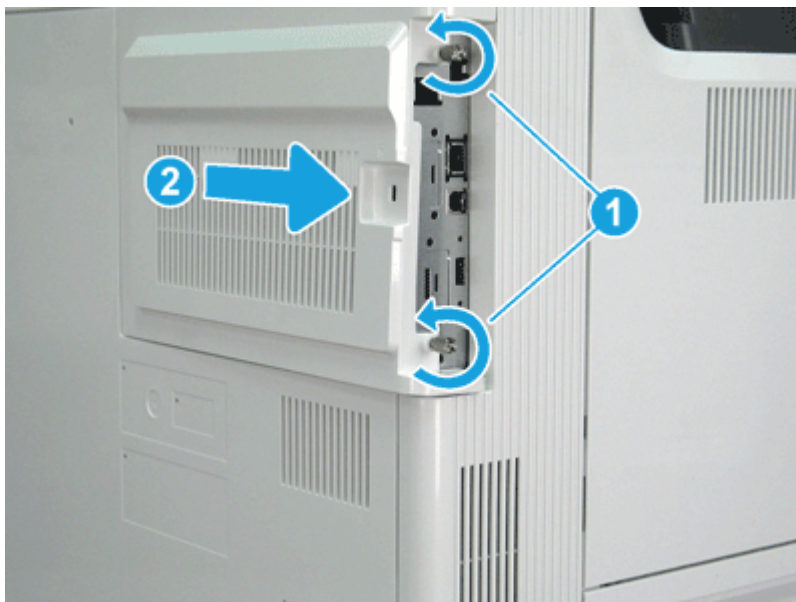
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1309 Remove the formatter cover

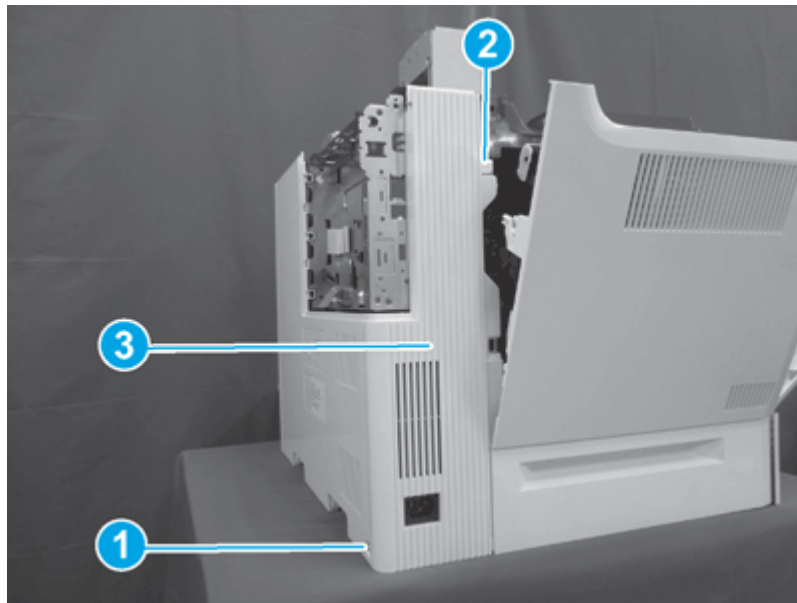


15. Remove the left rear cover

Follow these steps to remove the left rear cover.

- Open the left door. Remove one screw (callout 1), release one boss (callout 2), and then remove the left rear cover (callout 3).

Figure 5-1310 Remove the left rear cover



16. Remove the rear cover

Follow these steps to remove the rear cover.

- Remove two screws (callout 1), and then slide the rear cover (callout 2) to the right to remove it.


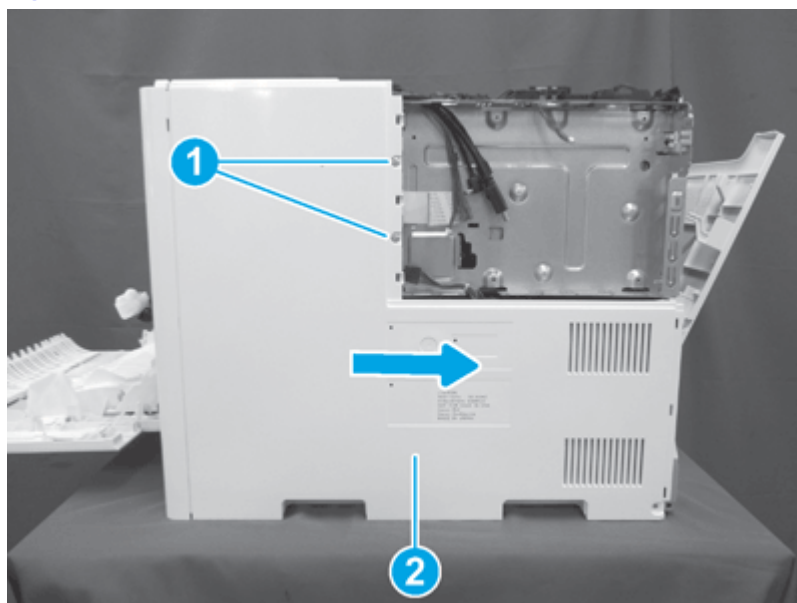

 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1311 Remove two screws and the rear cover



17. Remove the fax PCA (M681f/Flow M681f/Flow M681z/Flow M682z)

Follow these steps to remove the fax PCA (M681f/Flow M681f/Flow M681z/Flow M682z).

 **NOTE:** This step is for the M681/M682/E67550/E67560/E67650/E67660 printers. For the M652/M653/E65050/E65060/E65150/E65160 printers, skip this step.

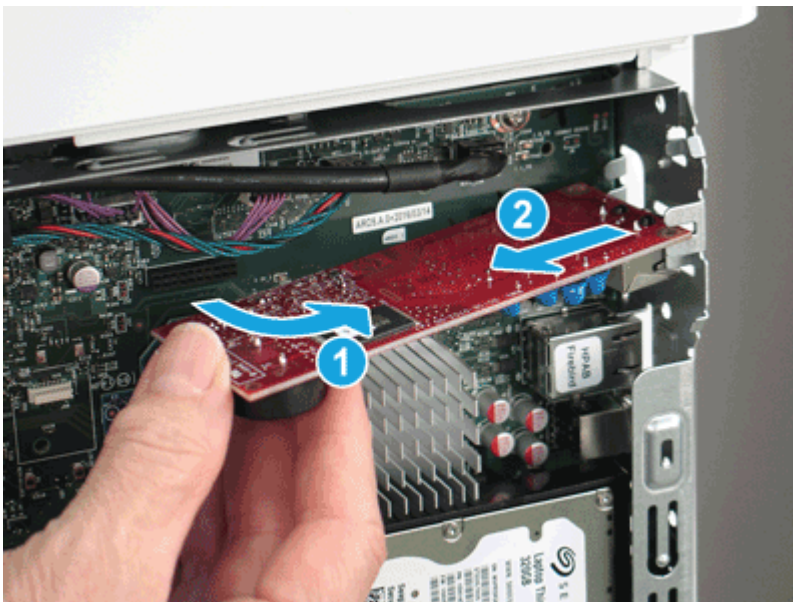
1. Locate the fax PCA on the formatter.

Figure 5-1312 Locate the fax PCA



2. Rotate end left end of the fax PCA away from the formatter (callout 1) to disconnect the connector, and then slide the card away from the formatter (callout 2) to remove it.

Figure 5-1313 Remove the fax PCA

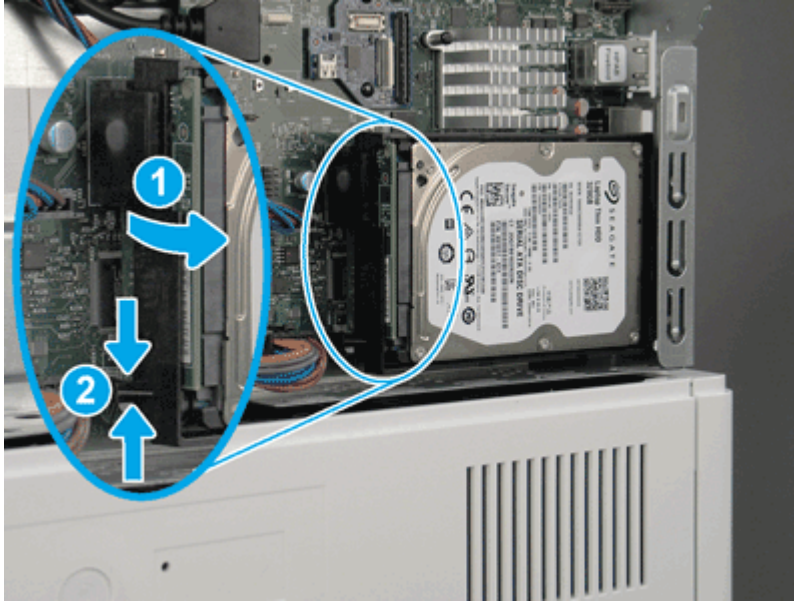


18. Remove the hard disk drive (HDD; M653dh/M681/M682/E67550/E67560/E67650/E67660)

Follow these steps to remove the hard disk drive (HDD; M653dh/M681/M682/E67550/E67560/E67650/E67660).

1. Release the locking connector (callout 1), and then pinch the retainer (callout 2) to release it.

Figure 5-1314 Release the HDD



2. Rotate the connector end of the HDD out and away from the formatter (callout 1), and then slide it to the left (callout 2) to remove it.

Figure 5-1315 Remove the HDD

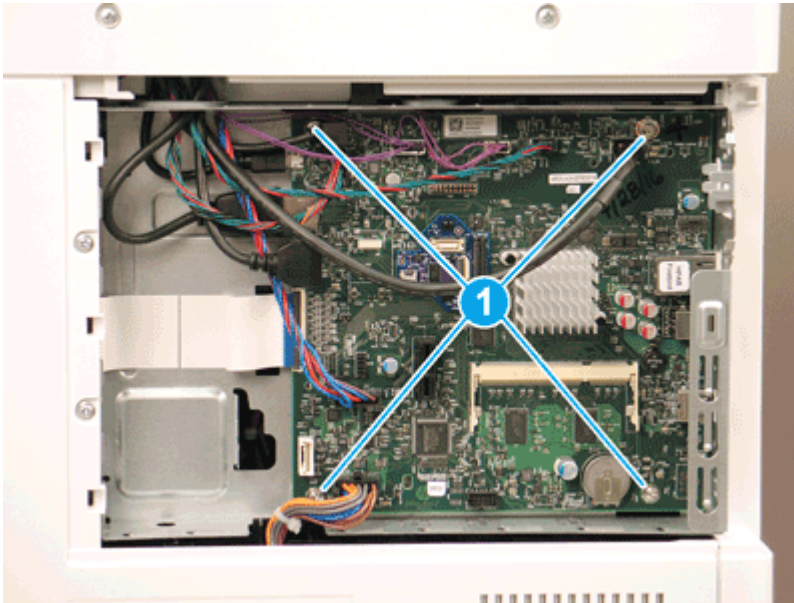


19. Remove the formatter

Follow these steps to remove the formatter.

- Disconnect all of the connectors on the formatter, remove four screws, and then remove the formatter.

Figure 5-1316 Remove the formatter



20. Remove the formatter case

Follow these steps to remove the formatter case.

1. Disconnect one connector (callout 1), remove two screws on the left side of the case (callout 2), and then remove two screws on the right end of the case (callout 3).


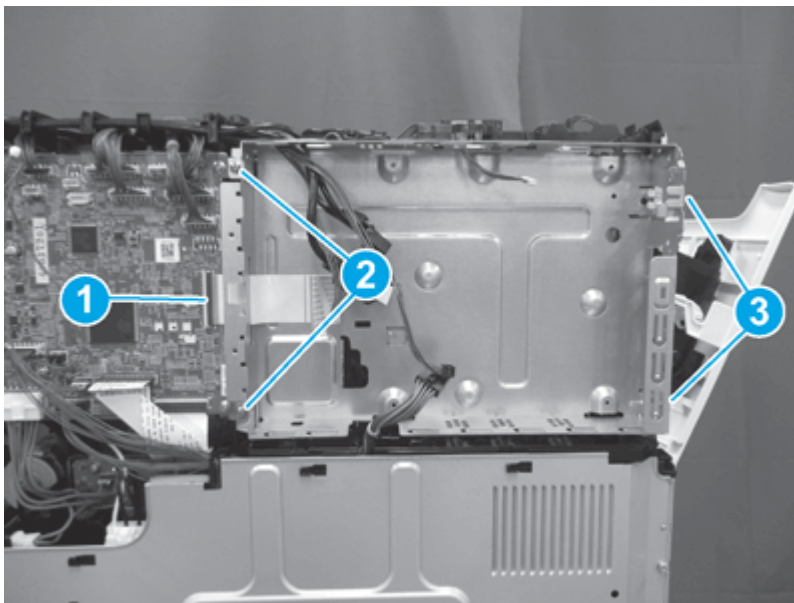
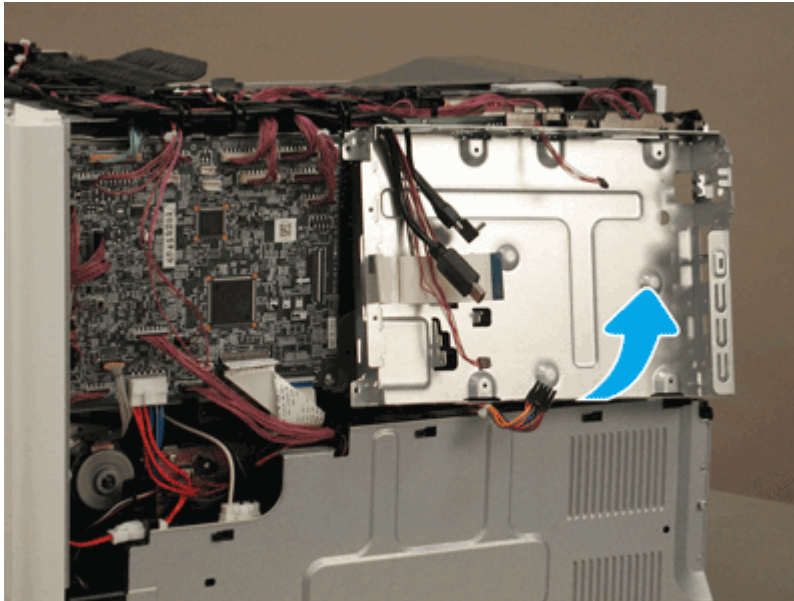
 **NOTE:** These screws are gold tinted to provide additional grounding. Make sure that these screws are reinstalled in the correct locations.

Figure 5-1317 Disconnect one connector and remove four screws



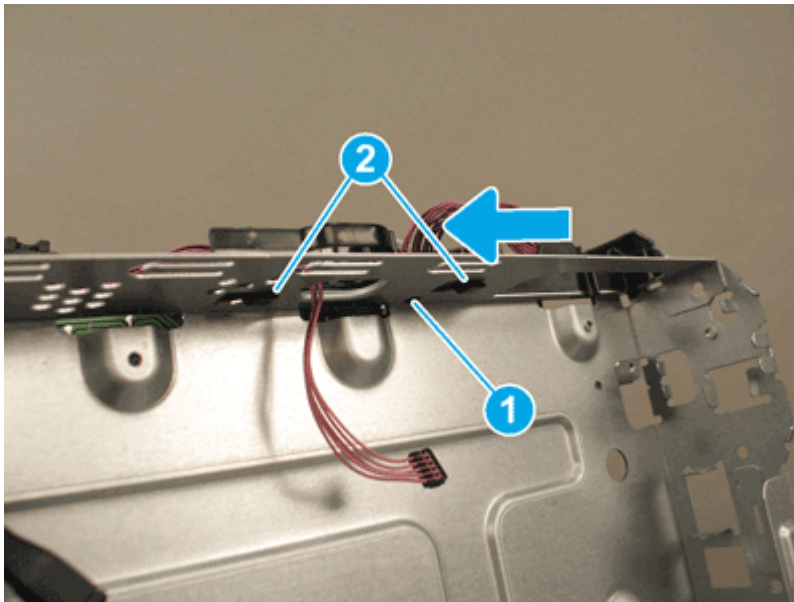
2. Tilt the bottom of the formatter case away from the printer.

Figure 5-1318 Tilt the formatter case



3. Locate one round boss (callout 1) and two hooks (callout 2) on the cable guide. Push up on the boss, and then slide the cable guide to the left to remove it. Remove the formatter case.

Figure 5-1319 Remove the cable guide

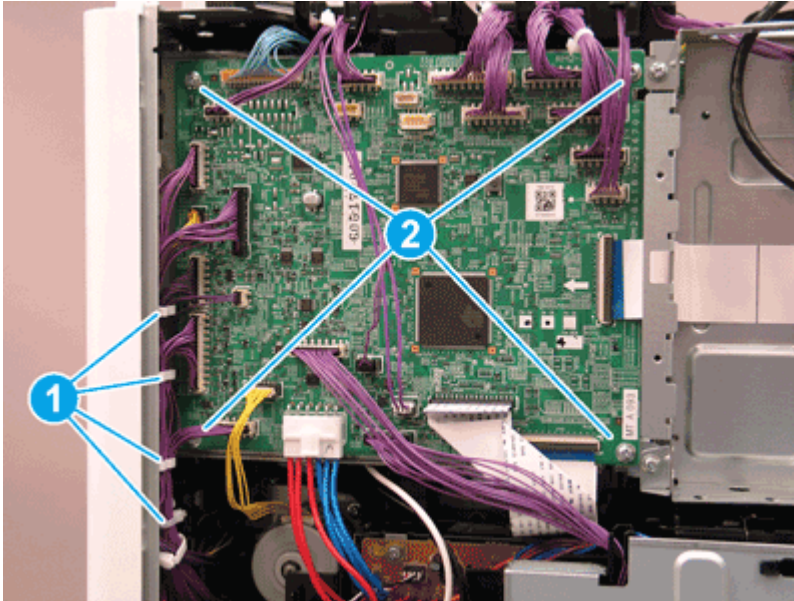


21. Remove the DC controller PCA

Follow these steps to remove the DC controller PCA.

- Release four retainers (callout 1), and then disconnect all connectors on the DC controller PCA. Remove four screws (callout 2), and then remove the DC controller PCA.

Figure 5-1320 Remove the DC controller PCA

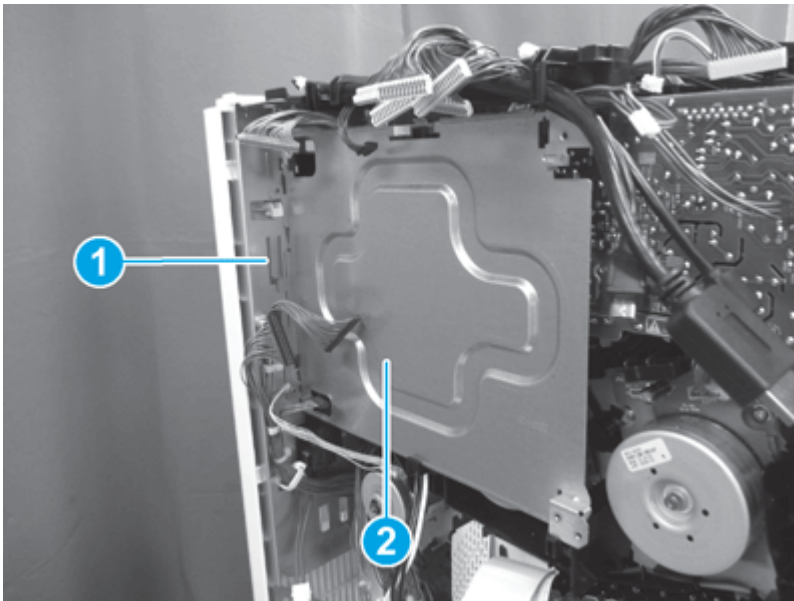


22. Remove the DC controller stay

Follow these steps to remove the DC controller stay.

- Gently push out on the sheet metal tab (callout 1) to release the DC controller stay (callout 2), and then lift up to remove it.

Figure 5-1321 Remove the DC controller stay

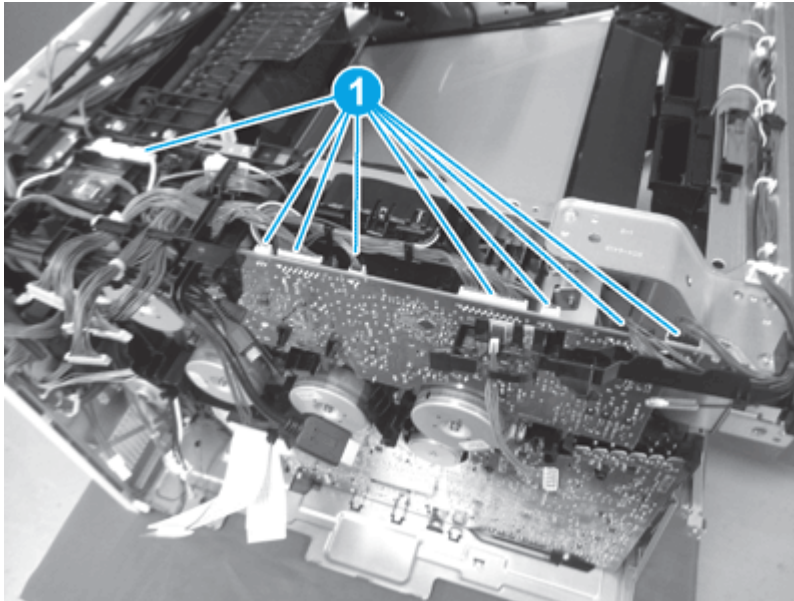


23. Remove the upper high-voltage power supply (HVPS)

Follow these steps to remove the upper high-voltage power supply (HVPS).

1. Disconnect eight connectors (callout 1).

Figure 5-1322 Disconnect eight connectors



2. Release the cable (callout 1) from the retainer (callout 2). Remove one screw (callout 3), release five tabs (callout 4), and then remove the upper HVPS (callout 5).


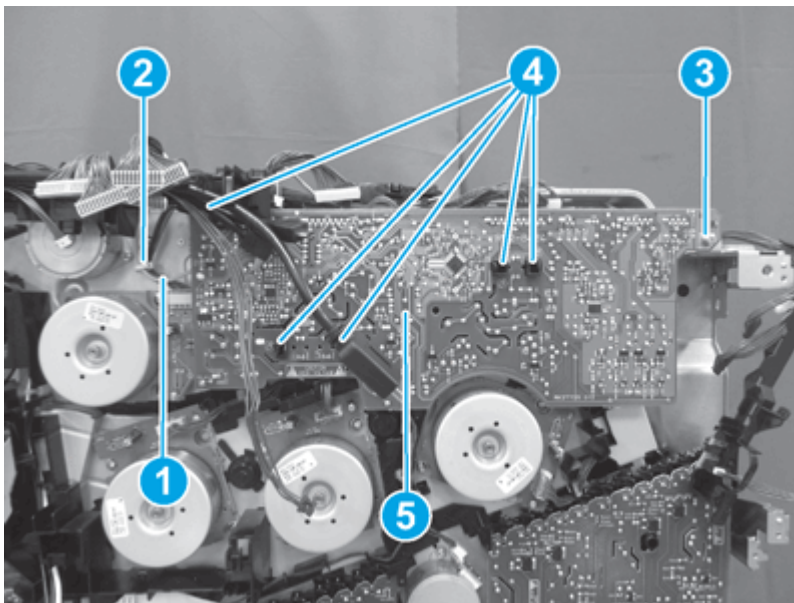
 **TIP:** The screw (callout 3) is a grounding screw with a washer attached. Make sure that this screw and washer are installed in the correct position.

Figure 5-1323 Remove the upper HVPS

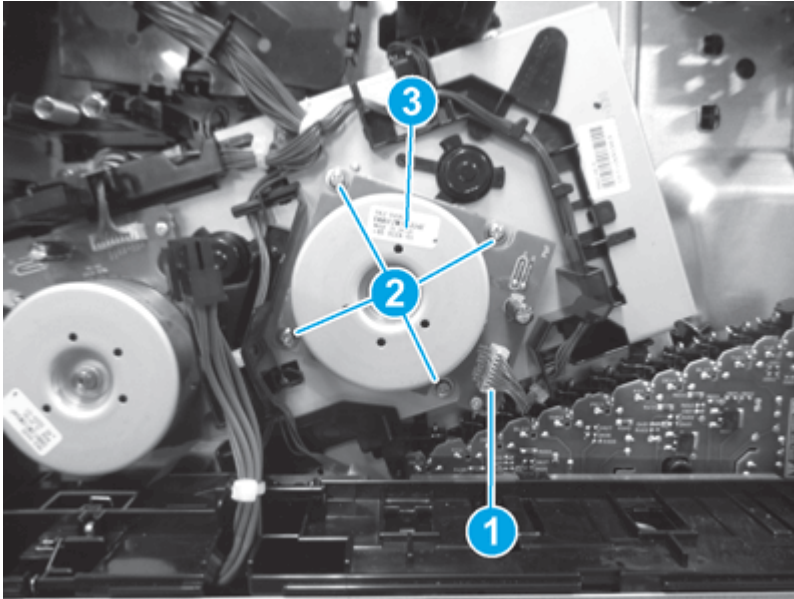


24. Remove drum motor 1

Follow these steps to remove drum motor 1.

- Disconnect one connector (callout 1), remove four screws (callout 2), and then remove drum motor 1 (callout 3).

Figure 5-1324 Remove drum motor 1



25. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

26. Reverse the removal steps to install the assembly

Also use the following **special installation instructions**.

DC controller

- Two cables (callout 1) will fit in more than one connector. Make sure that these cables are installed in the correct connectors.


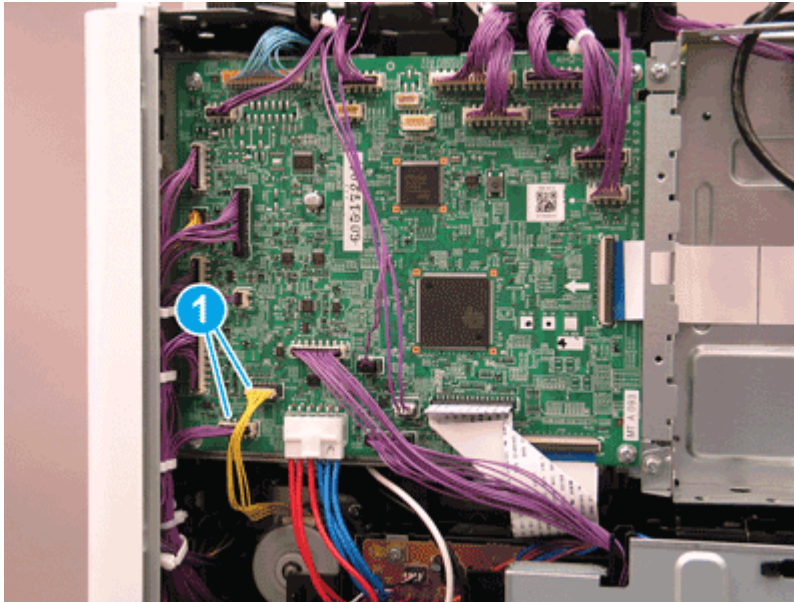
 **NOTE:** Continue to reverse the removal steps to finish installing the assembly.

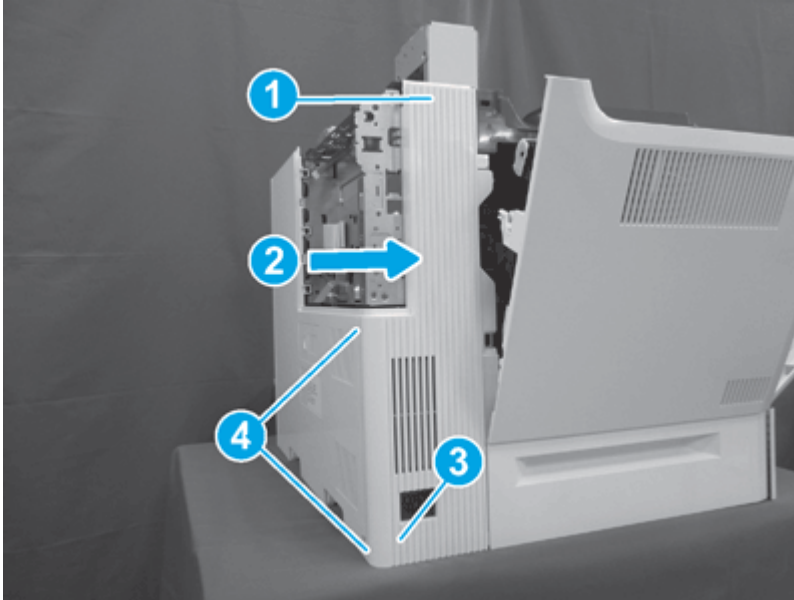
Figure 5-1325 Check the yellow cable



Left rear cover

- Position the top of the cover (callout 1) first, and then slide the cover to the right (callout 2). Push the left lower corner (callout 3) toward the rear of the printer to engage two tabs (callout 4) in the slots on the rear cover.

Figure 5-1326 Install the left rear cover



 **NOTE:** Continue to reverse the removal steps to finish installing the assembly.


Removal and replacement: Drum motor 2

Learn how to remove and replace drum motor 2.

 [View a video of how to remove and replace the drum motor 2.](#)


Mean time to repair: 45 minutes

Service level: Advanced

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Disconnect the power cable.

 **WARNING!** To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-72 Part information

Part number	Part description
RM2-1956-000CN	Drum motor 2

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Make sure that the printer initializes to a **Ready** state.

Print a configuration page to make sure that the printer is functioning correctly.

1. Remove the formatter cover

Follow these steps to remove the formatter cover.

- Unscrew two thumbscrews (callout 1), and then slide the formatter cover (callout 2) away from the printer to remove it.


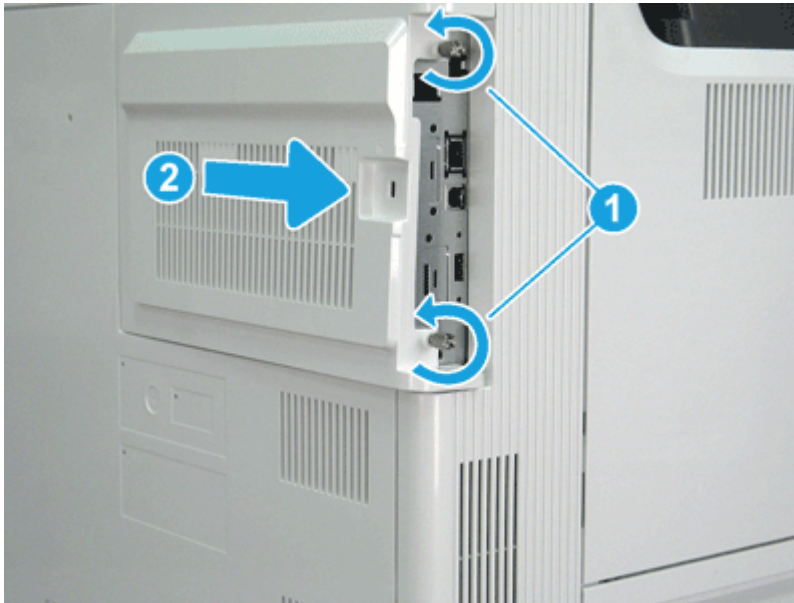
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1327 Remove the formatter cover

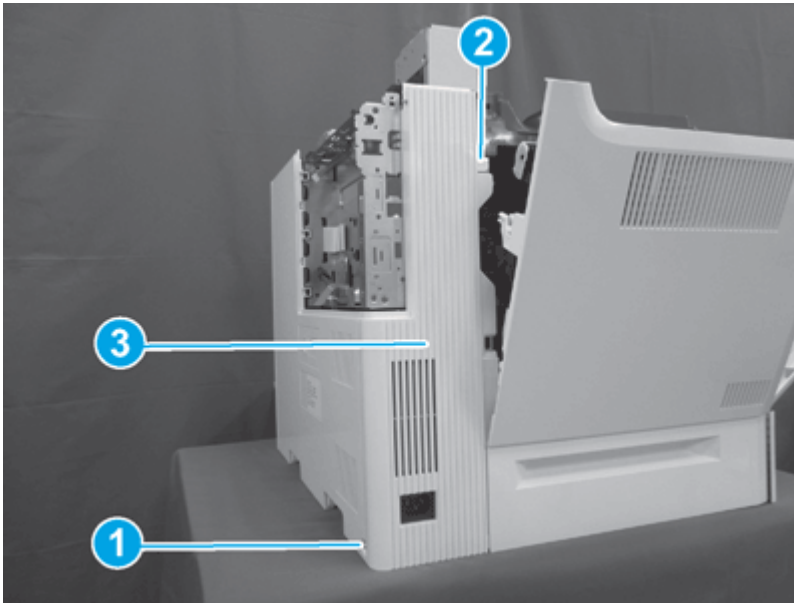


2. Remove the left rear cover

Follow these steps to remove the left rear cover.

- Open the left door. Remove one screw (callout 1), release one boss (callout 2), and then remove the left rear cover (callout 3).

Figure 5-1328 Remove the left rear cover



3. Remove the rear cover

Follow these steps to remove the rear cover.

- Remove two screws (callout 1), and then slide the rear cover (callout 2) to the right to remove it.


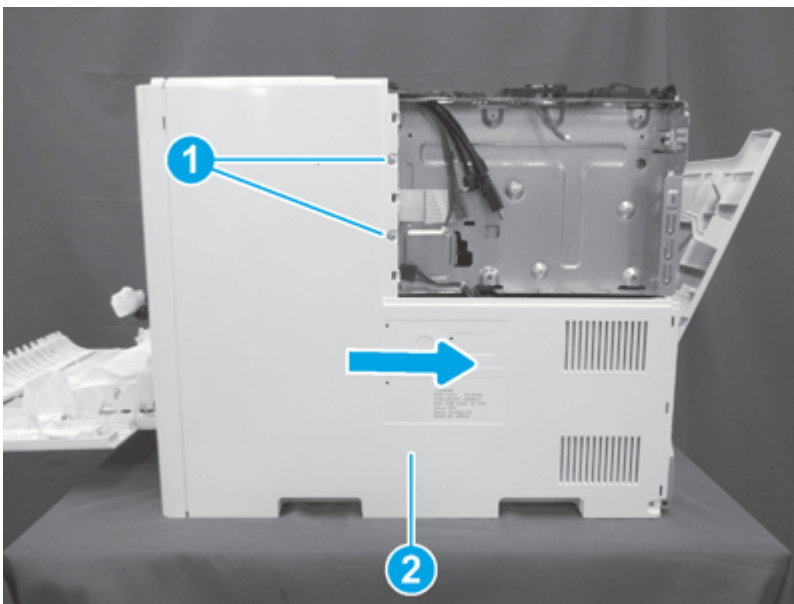

 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1329 Remove two screws and the rear cover



4. Remove the fax PCA (M681f/Flow M681f/Flow M681z/Flow M682z)

Follow these steps to remove the fax PCA (M681f/Flow M681f/Flow M681z/Flow M682z).

 **NOTE:** This step is for the M681/M682/E67550/E67560/E67650/E67660 printers. For the M652/M653/E65050/E65060/E65150/E65160 printers, skip this step.

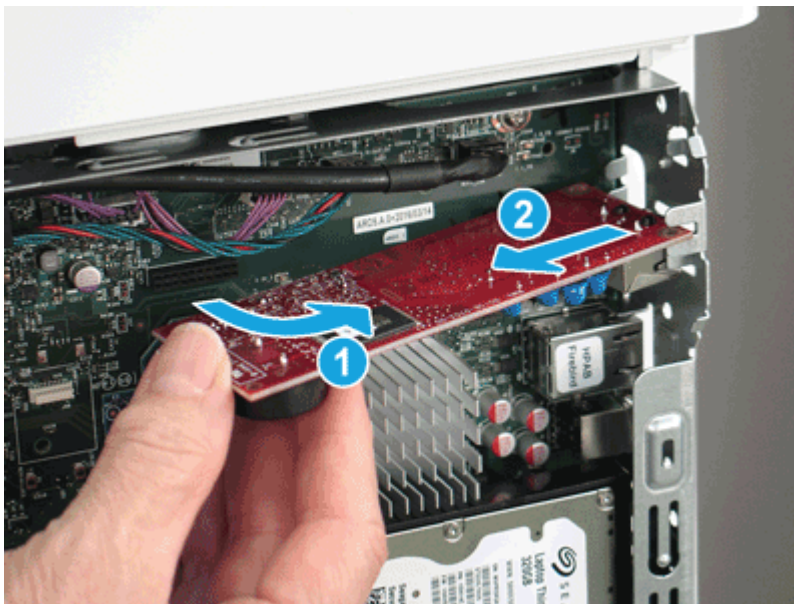
1. Locate the fax PCA on the formatter.

Figure 5-1330 Locate the fax PCA



2. Rotate end left end of the fax PCA away from the formatter (callout 1) to disconnect the connector, and then slide the card away from the formatter (callout 2) to remove it.

Figure 5-1331 Remove the fax PCA

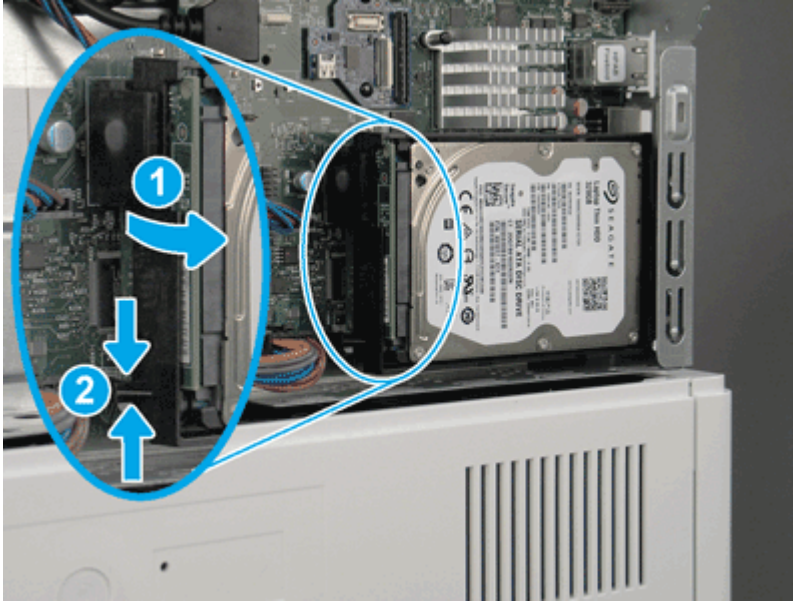


5. Remove the hard disk drive (HDD; M653dh/M681/M682/E67550/E67560/E67650/E67660)

Follow these steps to remove the hard disk drive (HDD; M653dh/M681/M682/E67550/E67560/E67650/E67660).

1. Release the locking connector (callout 1), and then pinch the retainer (callout 2) to release it.

Figure 5-1332 Release the HDD



2. Rotate the connector end of the HDD out and away from the formatter (callout 1), and then slide it to the left (callout 2) to remove it.

Figure 5-1333 Remove the HDD

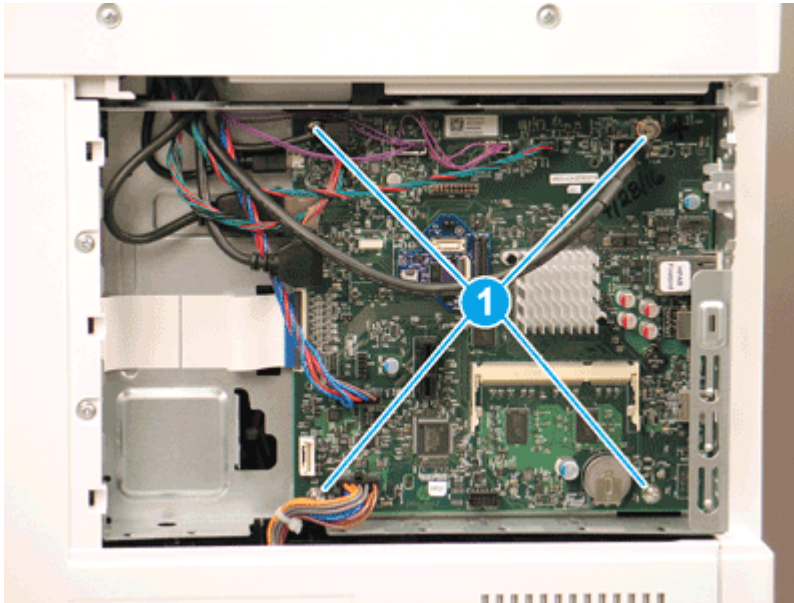


6. Remove the formatter

Follow these steps to remove the formatter.

- Disconnect all of the connectors on the formatter, remove four screws, and then remove the formatter.

Figure 5-1334 Remove the formatter



7. Remove the formatter case

Follow these steps to remove the formatter case.

1. Disconnect one connector (callout 1), remove two screws on the left side of the case (callout 2), and then remove two screws on the right end of the case (callout 3).


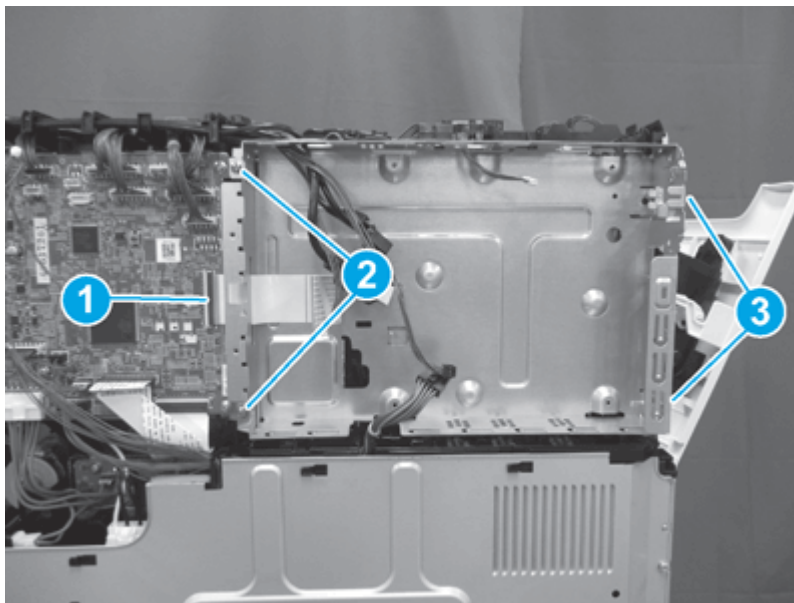
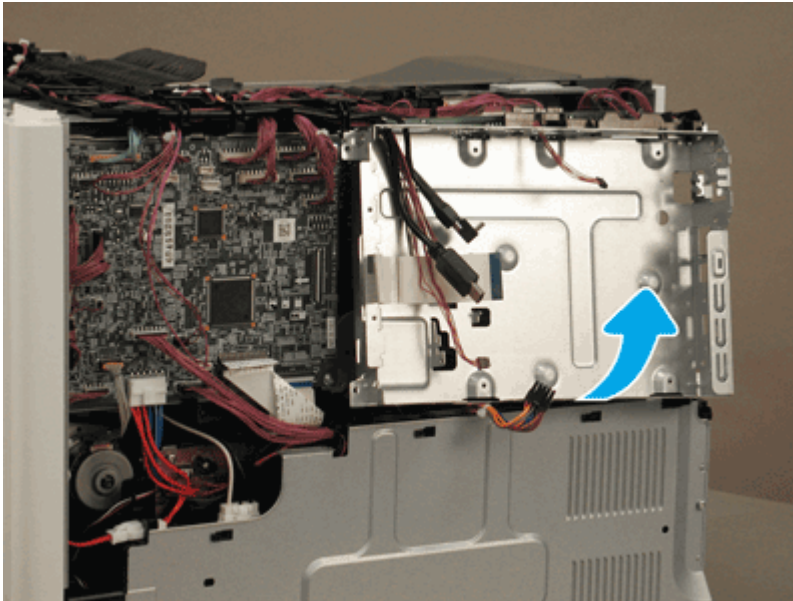
 **NOTE:** These screws are gold tinted to provide additional grounding. Make sure that these screws are reinstalled in the correct locations.

Figure 5-1335 Disconnect one connector and remove four screws



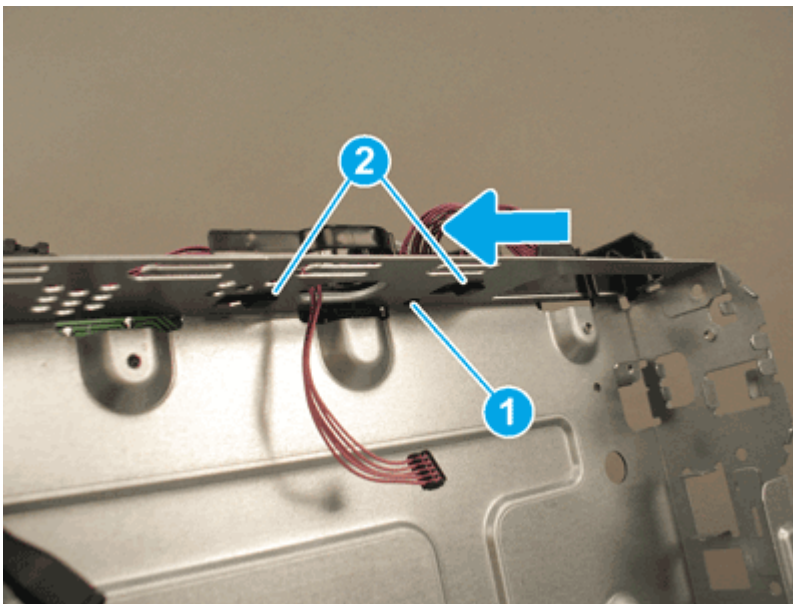
2. Tilt the bottom of the formatter case away from the printer.

Figure 5-1336 Tilt the formatter case



3. Locate one round boss (callout 1) and two hooks (callout 2) on the cable guide. Push up on the boss, and then slide the cable guide to the left to remove it. Remove the formatter case.

Figure 5-1337 Remove the cable guide

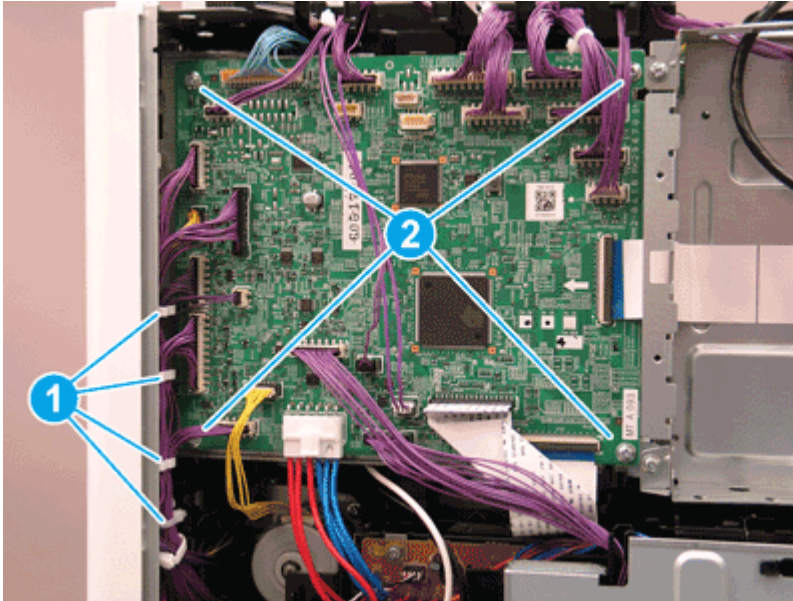


8. Remove the DC controller PCA

Follow these steps to remove the DC controller PCA.

- Release four retainers (callout 1), and then disconnect all connectors on the DC controller PCA. Remove four screws (callout 2), and then remove the DC controller PCA.

Figure 5-1338 Remove the DC controller PCA

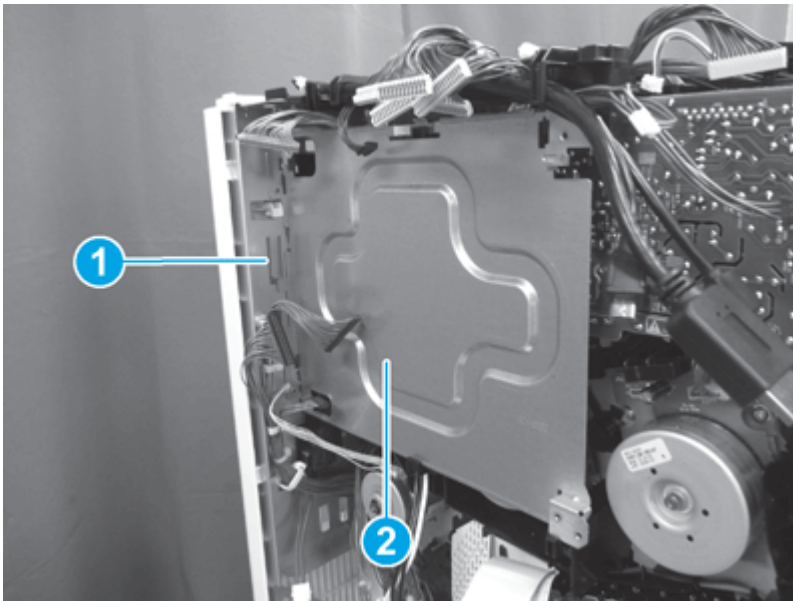


9. Remove the DC controller stay

Follow these steps to remove the DC controller stay.

- Gently push out on the sheet metal tab (callout 1) to release the DC controller stay (callout 2), and then lift up to remove it.

Figure 5-1339 Remove the DC controller stay



10. Remove drum motor 2

Follow these steps to remove drum motor 2.

- Disconnect one connector (callout 1), remove four screws (callout 2), and then remove drum motor 2 (callout 3).


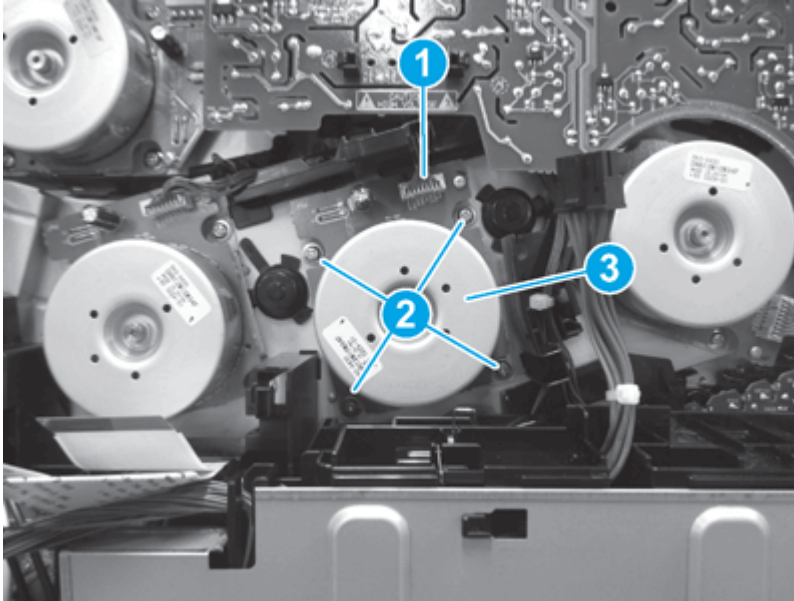
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1340 Remove drum motor 2



11. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.




IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

- To install an assembly, reverse the removal steps.

 **NOTE:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

12. Reverse the removal steps to install the assembly

Also use the following **special installation instructions**.

DC controller

- Two cables (callout 1) will fit in more than one connector. Make sure that these cables are installed in the correct connectors.


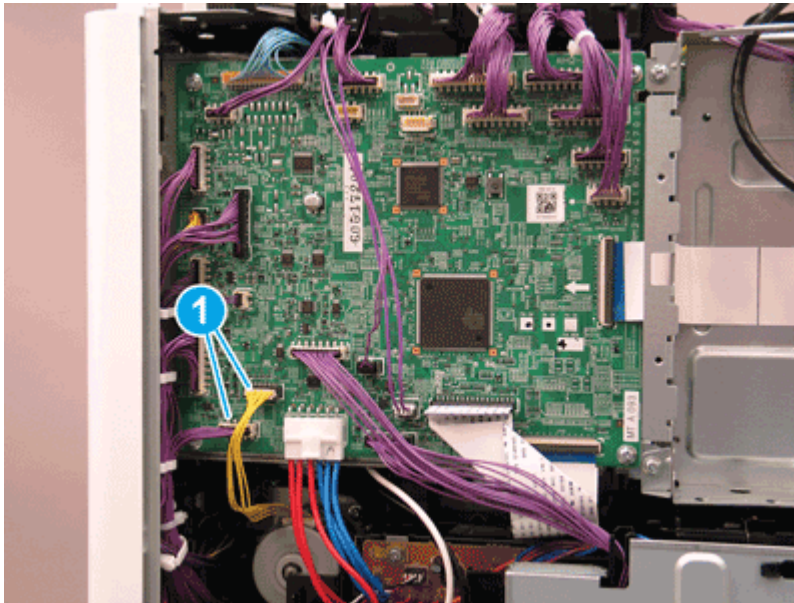
 **NOTE:** Continue to reverse the removal steps to finish installing the assembly.

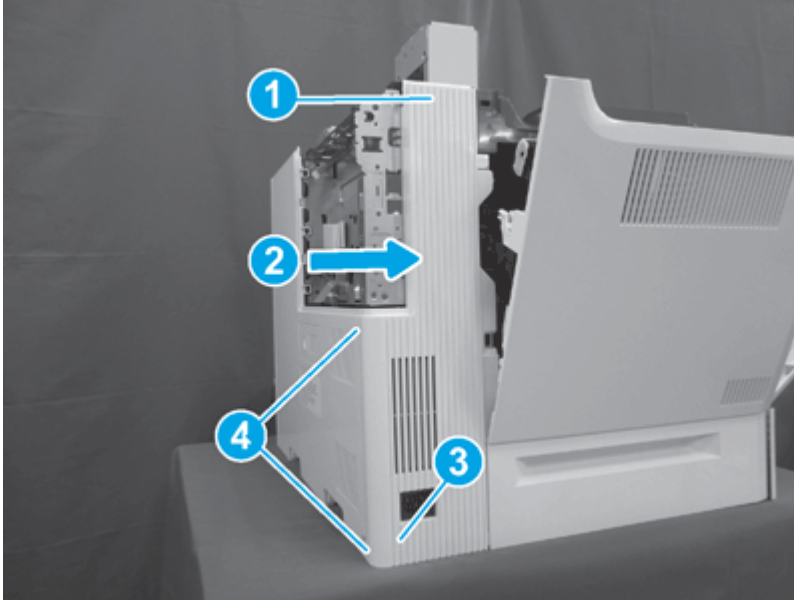
Figure 5-1341 Check the yellow cable




Left rear cover

- Position the top of the cover (callout 1) first, and then slide the cover to the right (callout 2). Push the left lower corner (callout 3) toward the rear of the printer to engage two tabs (callout 4) in the slots on the rear cover.

Figure 5-1342 Install the left rear cover



 **NOTE:** Continue to reverse the removal steps to finish installing the assembly.


Removal and replacement: Drum motor 3

Learn how to remove and replace drum motor 3.

 [View a video of how to remove and replace the drum motor 3.](#)


Mean time to repair: 45 minutes

Service level: Advanced

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Disconnect the power cable.

 **WARNING!** To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-73 Part information

Part number	Part description
RM2-1956-000CN	Drum motor 3

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Make sure that the printer initializes to a **Ready** state.

Print a configuration page to make sure that the printer is functioning correctly.

1. Remove the formatter cover

Follow these steps to remove the formatter cover.

- Unscrew two thumbscrews (callout 1), and then slide the formatter cover (callout 2) away from the printer to remove it.


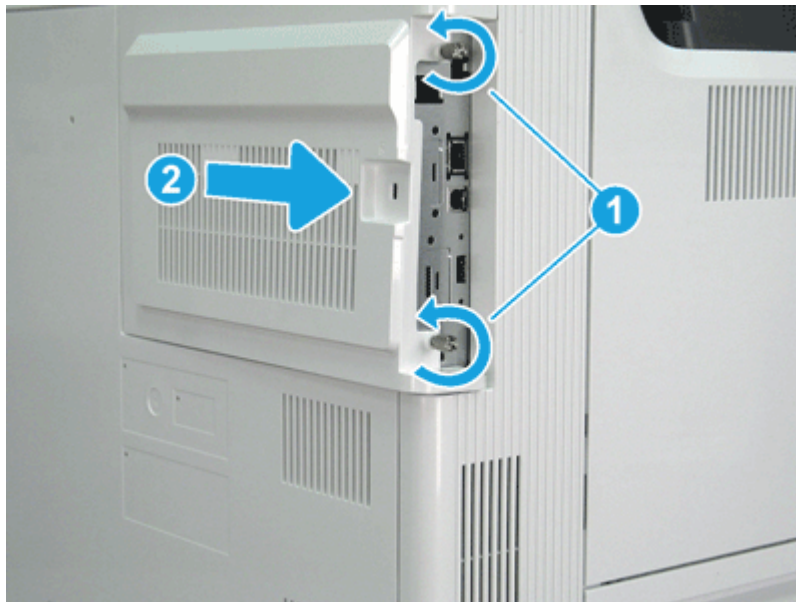
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1343 Remove the formatter cover

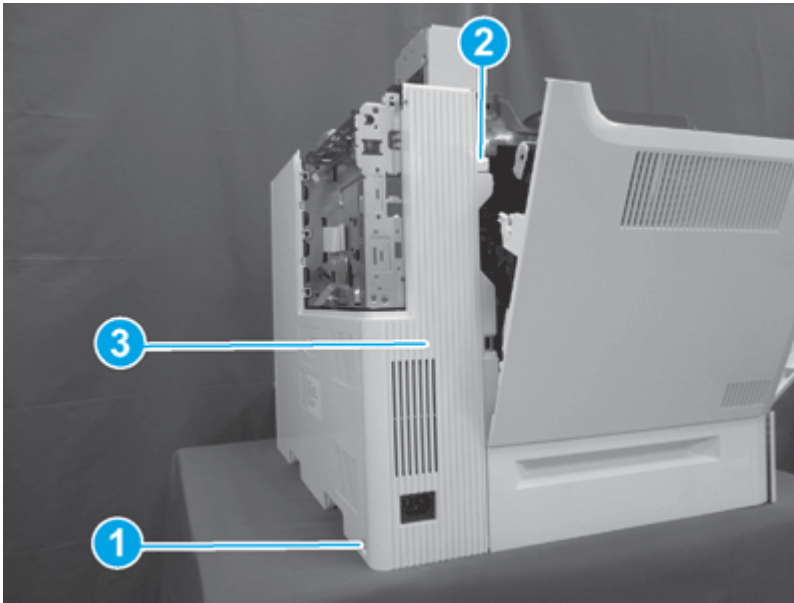


2. Remove the left rear cover

Follow these steps to remove the left rear cover.

- Open the left door. Remove one screw (callout 1), release one boss (callout 2), and then remove the left rear cover (callout 3).

Figure 5-1344 Remove the left rear cover



3. Remove the rear cover

Follow these steps to remove the rear cover.

- Remove two screws (callout 1), and then slide the rear cover (callout 2) to the right to remove it.


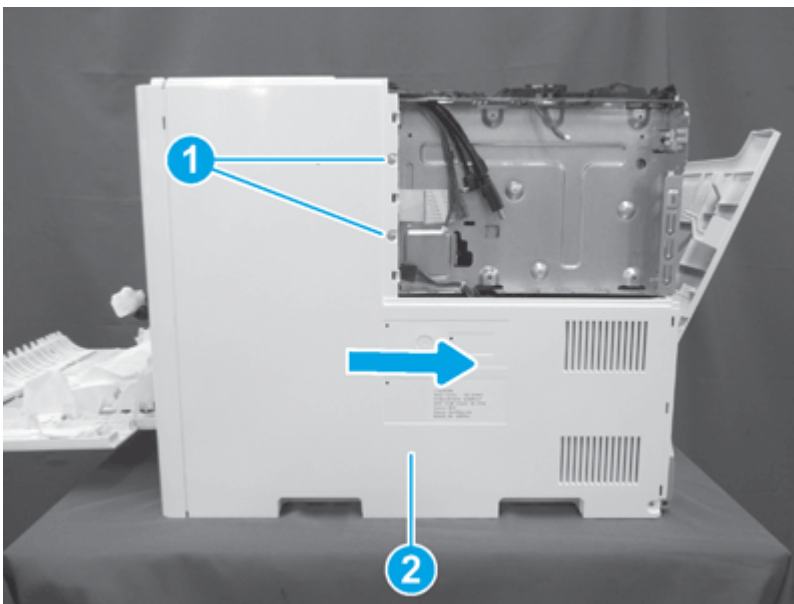

 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1345 Remove two screws and the rear cover



4. Remove the fax PCA (M681f/Flow M681f/Flow M681z/Flow M682z)

Follow these steps to remove the fax PCA (M681f/Flow M681f/Flow M681z/Flow M682z).

 **NOTE:** This step is for the M681/M682/E67550/E67560/E67650/E67660 printers. For the M652/M653/E65050/E65060/E65150/E65160 printers, skip this step.

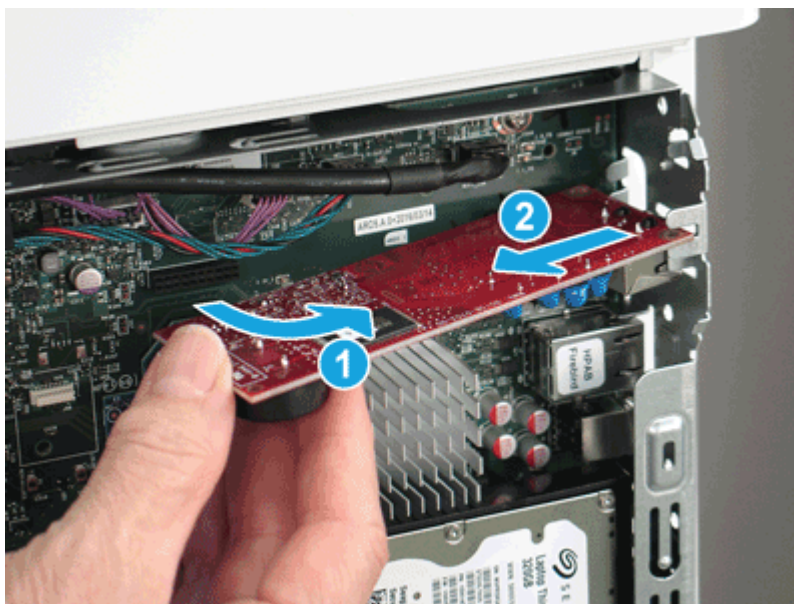
1. Locate the fax PCA on the formatter.

Figure 5-1346 Locate the fax PCA



2. Rotate end left end of the fax PCA away from the formatter (callout 1) to disconnect the connector, and then slide the card away from the formatter (callout 2) to remove it.

Figure 5-1347 Remove the fax PCA

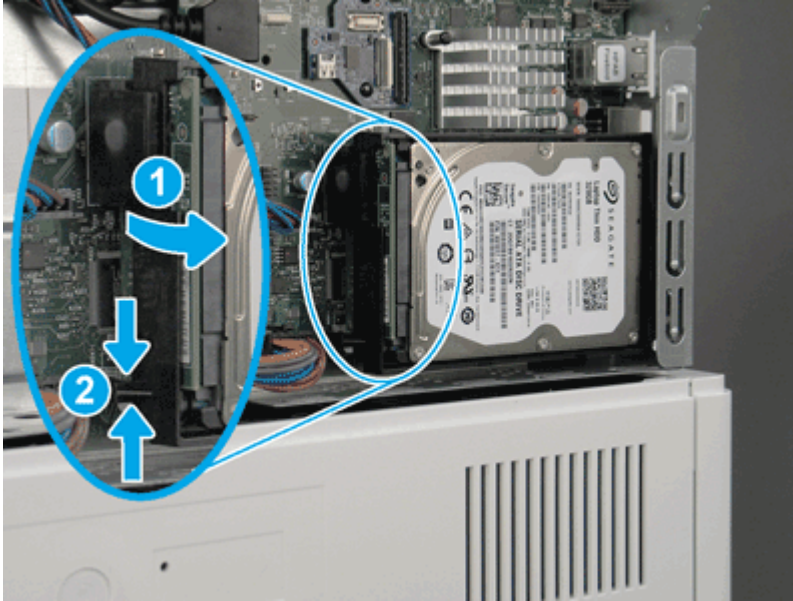


5. Remove the hard disk drive (HDD; M653dh/M681/M682/E67550/E67560/E67650/E67660)

Follow these steps to remove the hard disk drive (HDD; M653dh/M681/M682/E67550/E67560/E67650/E67660).

1. Release the locking connector (callout 1), and then pinch the retainer (callout 2) to release it.

Figure 5-1348 Release the HDD



2. Rotate the connector end of the HDD out and away from the formatter (callout 1), and then slide it to the left (callout 2) to remove it.

Figure 5-1349 Remove the HDD

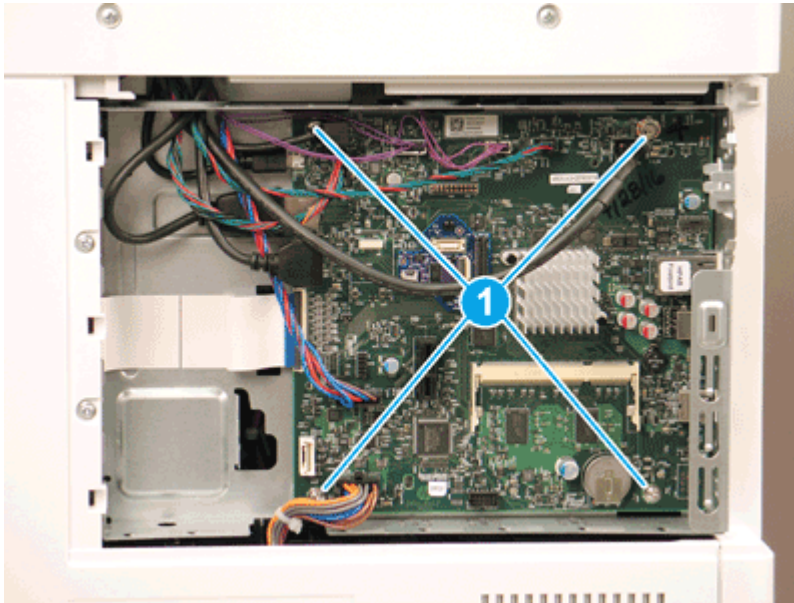


6. Remove the formatter

Follow these steps to remove the formatter.

- Disconnect all of the connectors on the formatter, remove four screws, and then remove the formatter.

Figure 5-1350 Remove the formatter



7. Remove the formatter case

Follow these steps to remove the formatter case.

1. Disconnect one connector (callout 1), remove two screws on the left side of the case (callout 2), and then remove two screws on the right end of the case (callout 3).


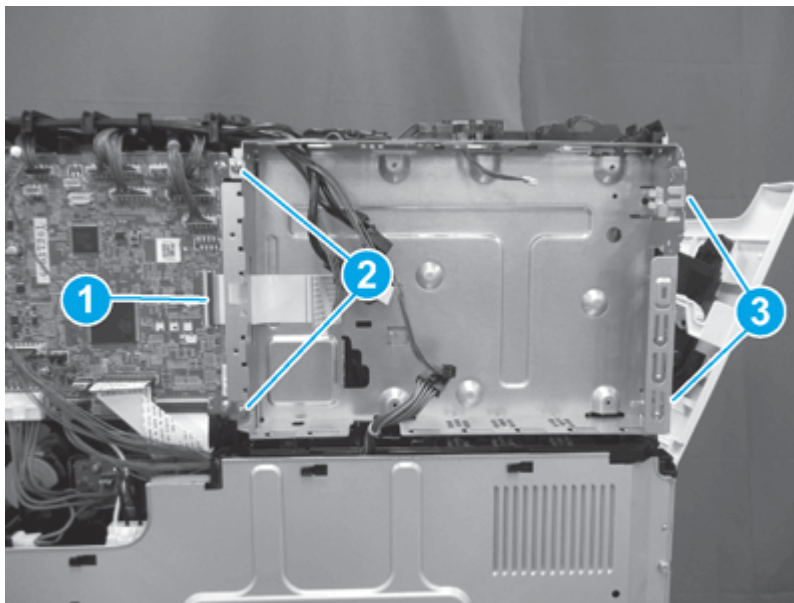
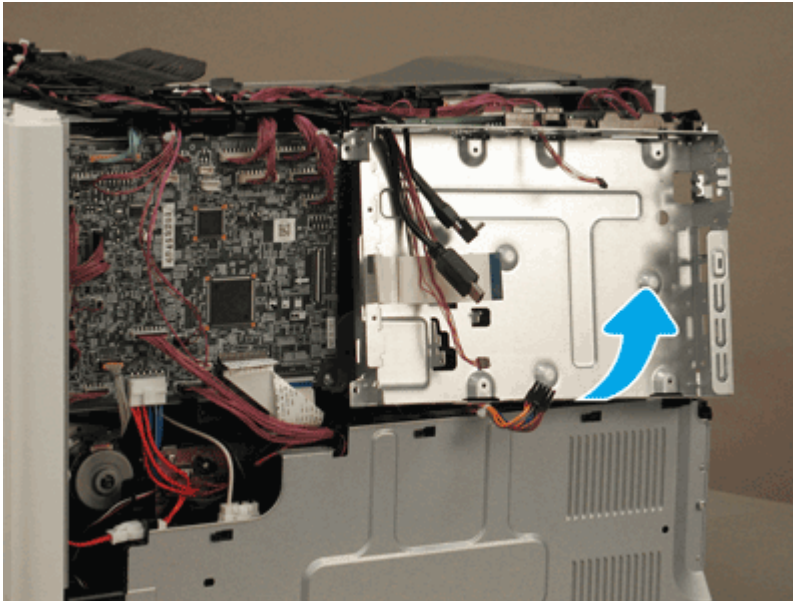
 **NOTE:** These screws are gold tinted to provide additional grounding. Make sure that these screws are reinstalled in the correct locations.

Figure 5-1351 Disconnect one connector and remove four screws



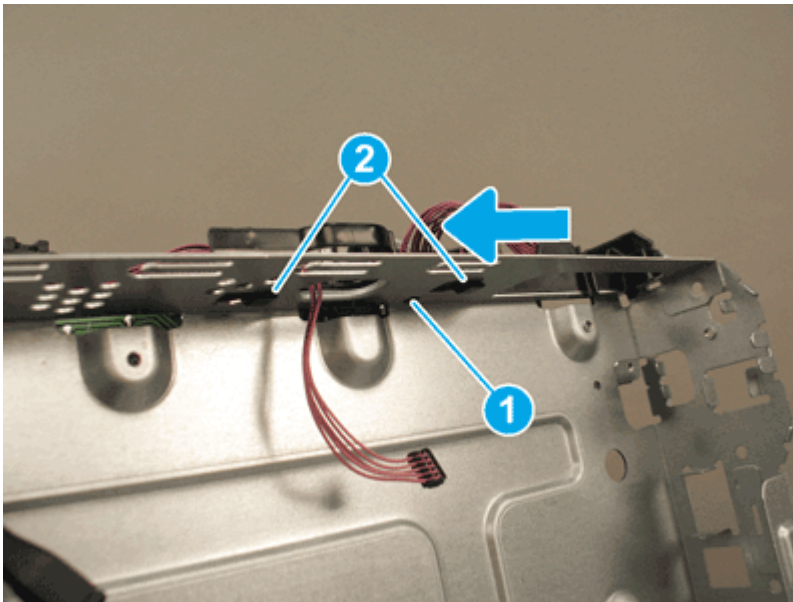
2. Tilt the bottom of the formatter case away from the printer.

Figure 5-1352 Tilt the formatter case



3. Locate one round boss (callout 1) and two hooks (callout 2) on the cable guide. Push up on the boss, and then slide the cable guide to the left to remove it. Remove the formatter case.

Figure 5-1353 Remove the cable guide

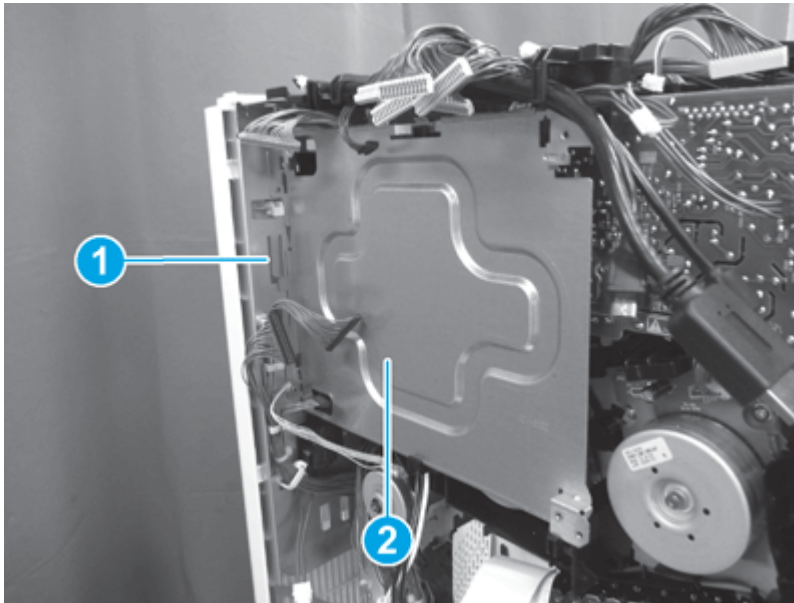


8. Remove the DC controller stay

Follow these steps to remove the DC controller stay.

- Gently push out on the sheet metal tab (callout 1) to release the DC controller stay (callout 2), and then lift up to remove it.

Figure 5-1354 Remove the DC controller stay

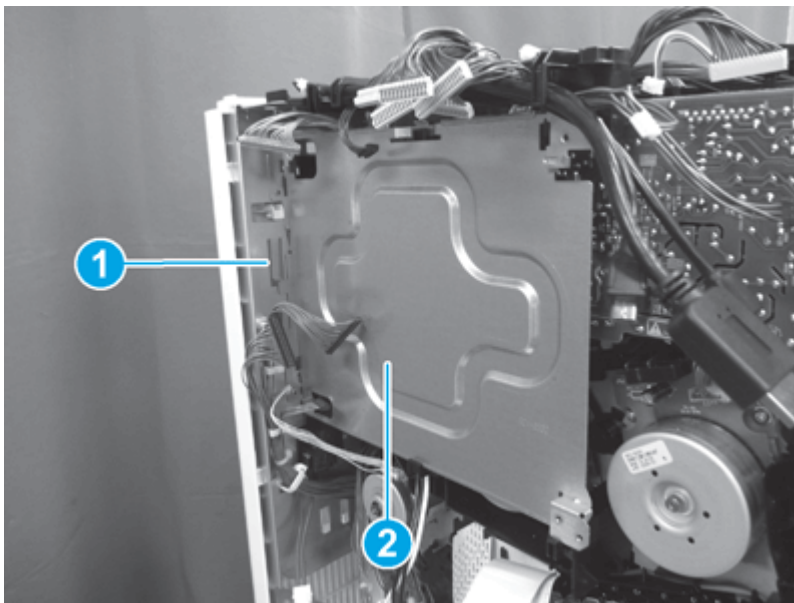


9. Remove the DC controller stay

Follow these steps to remove the DC controller stay.

- Gently push out on the sheet metal tab (callout 1) to release the DC controller stay (callout 2), and then lift up to remove it.

Figure 5-1355 Remove the DC controller stay



10. Remove drum motor 3

Follow these steps to remove drum motor 3.

- Disconnect one connector (callout 1), remove four screws (callout 2), and then remove drum motor 3 (callout 3).


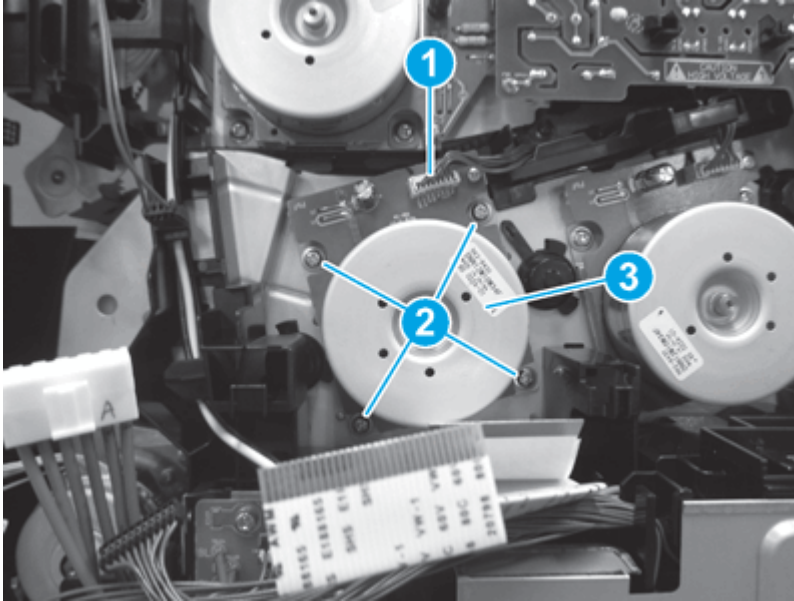
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1356 Remove drum motor 3



11. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.




IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

 **NOTE:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

12. Reverse the removal steps to install the assembly

Also use the following **special installation instructions**.

DC controller

- Two cables (callout 1) will fit in more than one connector. Make sure that these cables are installed in the correct connectors.


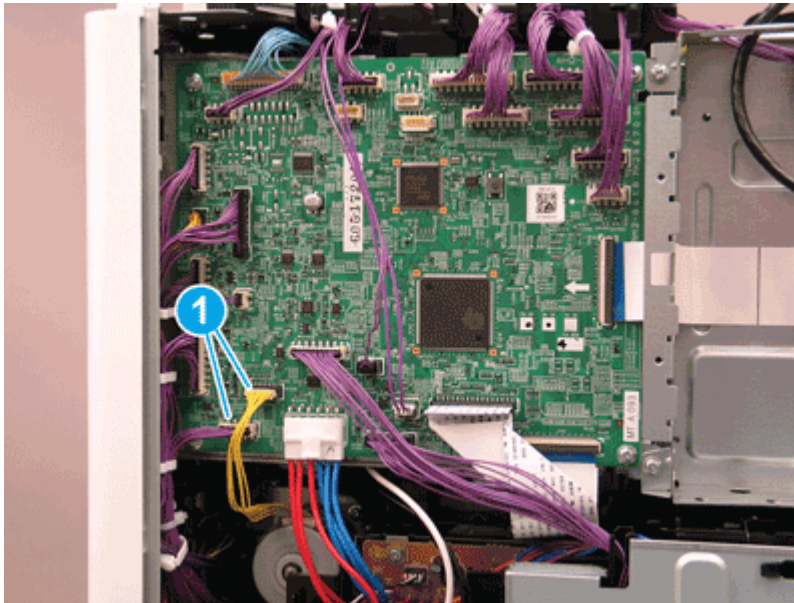
 **NOTE:** Continue to reverse the removal steps to finish installing the assembly.

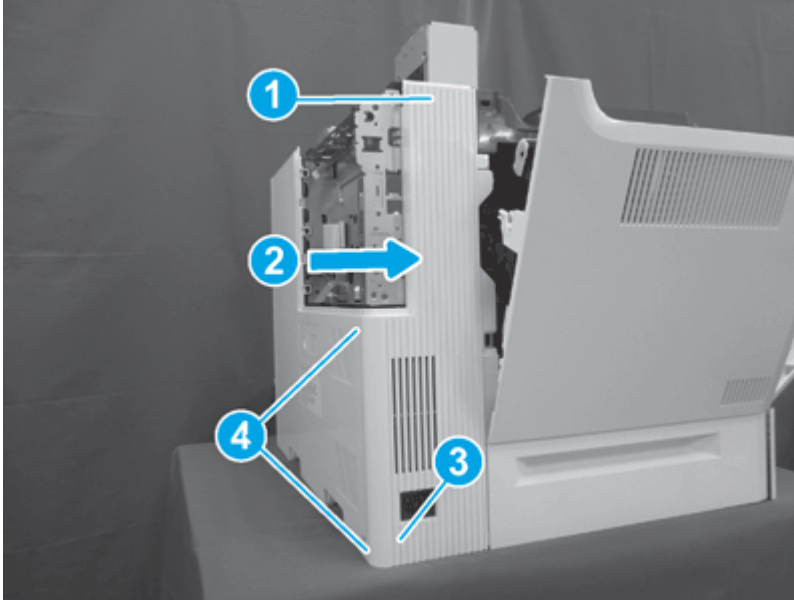
Figure 5-1357 Check the yellow cable



Left rear cover

- Position the top of the cover (callout 1) first, and then slide the cover to the right (callout 2). Push the left lower corner (callout 3) toward the rear of the printer to engage two tabs (callout 4) in the slots on the rear cover.

Figure 5-1358 Install the left rear cover



 **NOTE:** Continue to reverse the removal steps to finish installing the assembly.


Removal and replacement: Main drive assembly

Learn how to remove and replace the main drive assembly.

 [View a video of how to remove and replace the main drive assembly.](#)


Mean time to repair: 45 minutes

Service level: Advanced

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Disconnect the power cable.

 **WARNING!** To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-74 Part information

Part number	Part description
RM2-1927-000CN	Main drive assembly

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Make sure that the printer initializes to a **Ready** state.

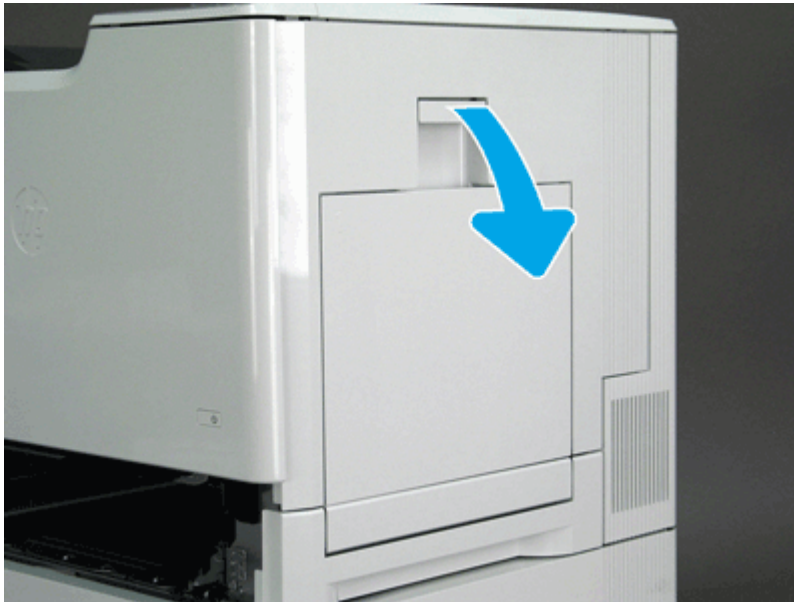
Print a configuration page to make sure that the printer is functioning correctly.

1. Remove the fuser

Follow these steps to remove the fuser.

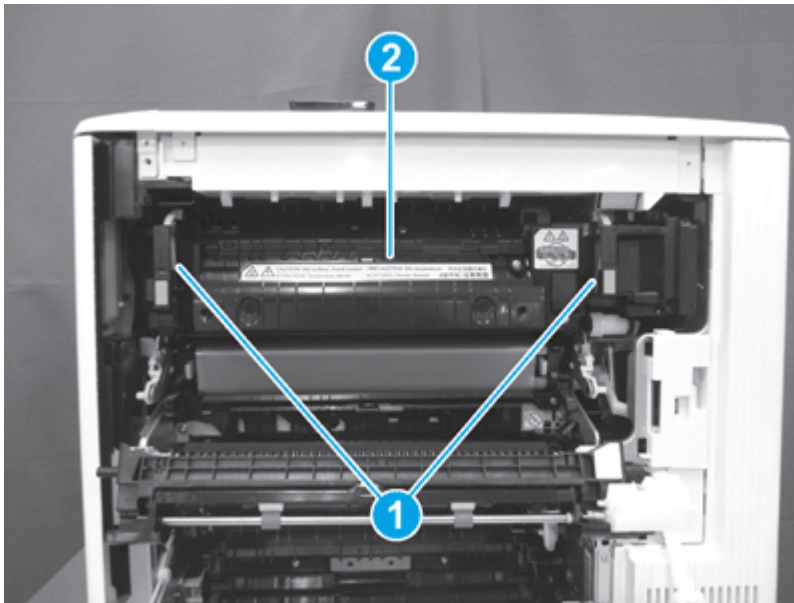
1. Open the right door.

Figure 5-1359 Open the right door



2. Grasp the handles (callout 1), and then pull away from the printer to remove the fuser (callout 2).

Figure 5-1360 Remove the fuser

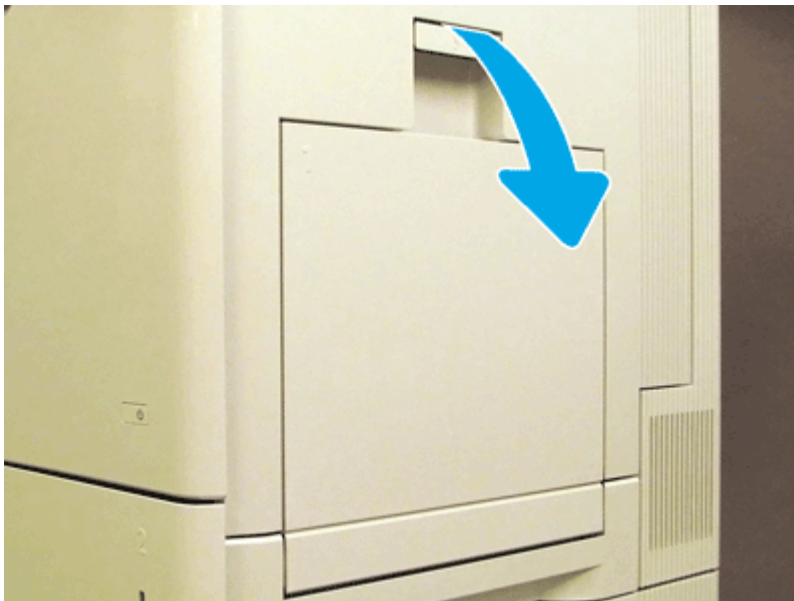


2. Remove the intermediate transfer belt (ITB)

Follow these steps to remove the intermediate transfer belt (ITB).

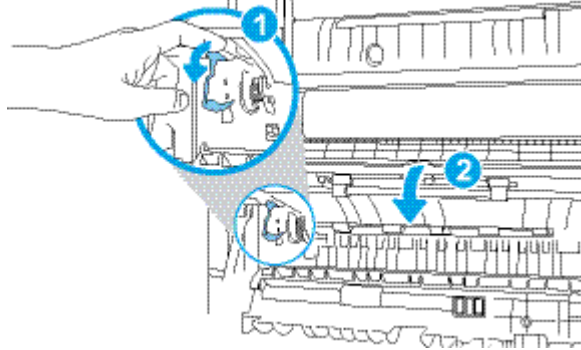
1. Open the right door.

Figure 5-1361 Open the right door



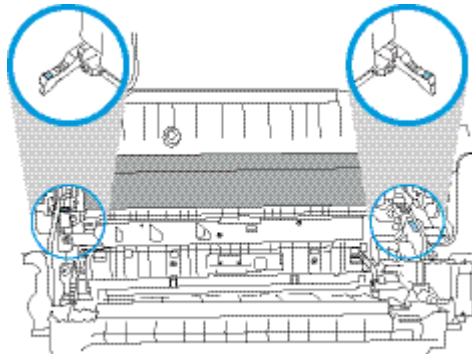
2. Release the blue latch (callout 1), and then lower the transfer assembly (callout 2).

Figure 5-1362 Lower the transfer assembly



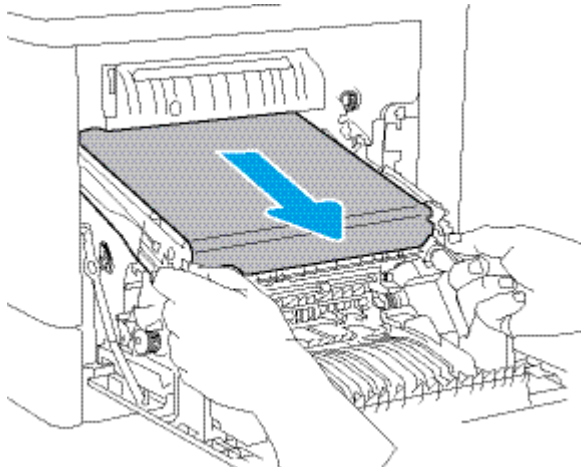
3. Grasp the two blue handles on the ITB.

Figure 5-1363 Grasp the two blue handles



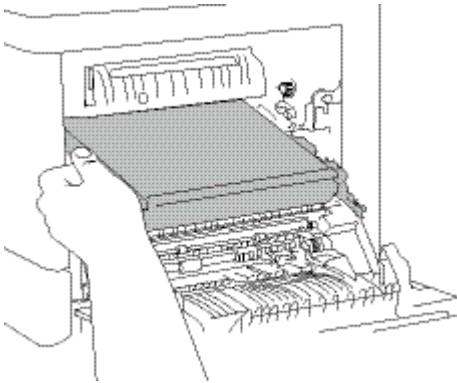
4. Pull the ITB partially out of the printer.

Figure 5-1364 Pull the ITB partially out of the printer



5. Grasp the outside edges of the ITB to support it, and then remove the ITB from the printer.

Figure 5-1365 Remove the ITB



3. Remove the keyboard (MFP)

Follow these steps to remove the keyboard (MFP).

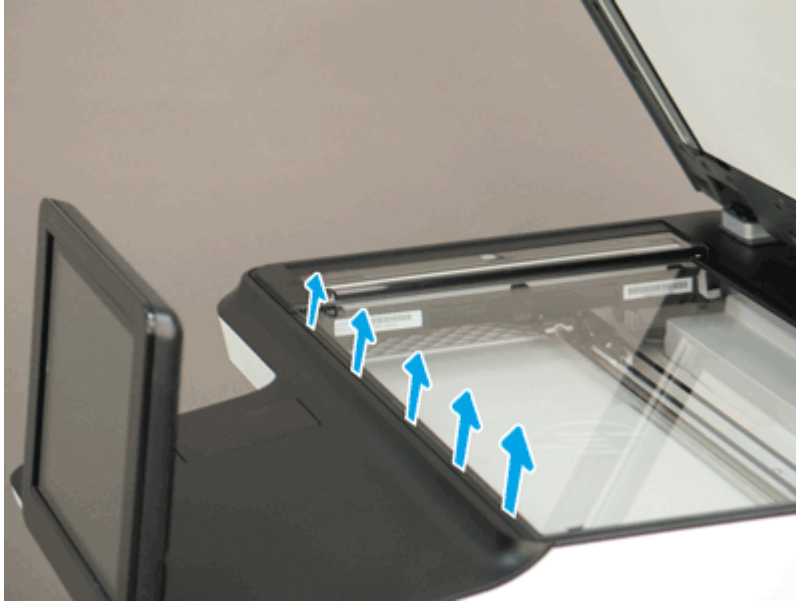
1. If the control panel is not fully tilted forward, tilt it forward now (callout 1) until it stops. Open the document feeder (callout 2).

Figure 5-1366 Tilt the control panel and open the document feeder



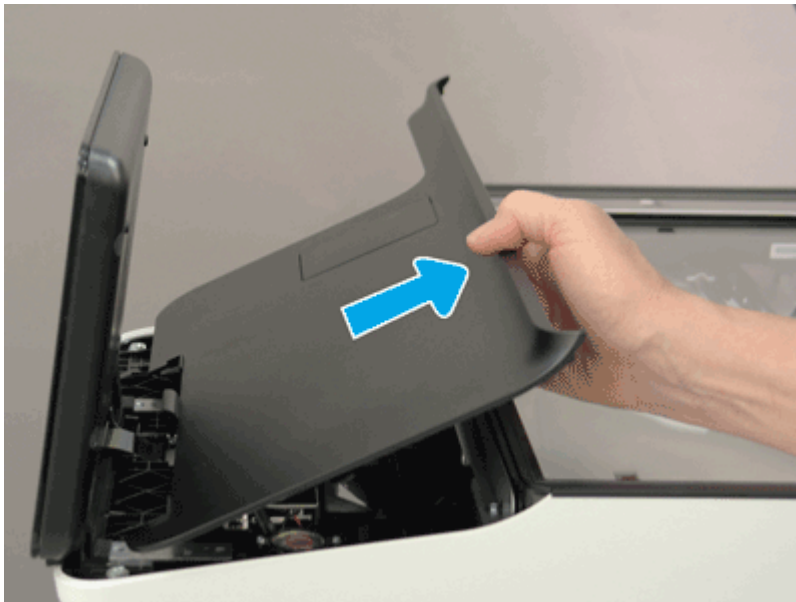
2. Beginning at the right side of the control-panel cover, carefully release five tabs along the top edge of the cover.

Figure 5-1367 Release five tabs



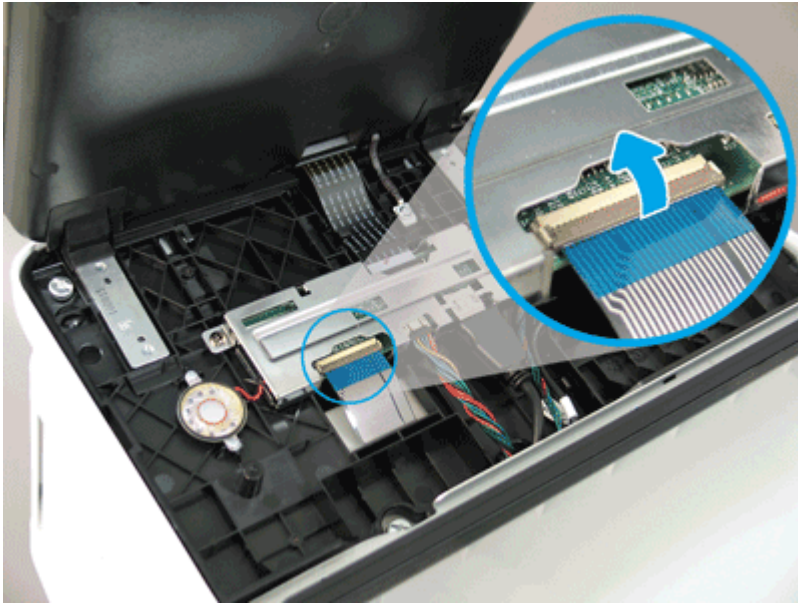
3. Continue to rotate the top edge of the cover away from the printer, and then remove the cover.

Figure 5-1368 Remove the cover



4. Open the connector latch to release the keyboard flat cable.

Figure 5-1369 Disconnect the keyboard flat cable



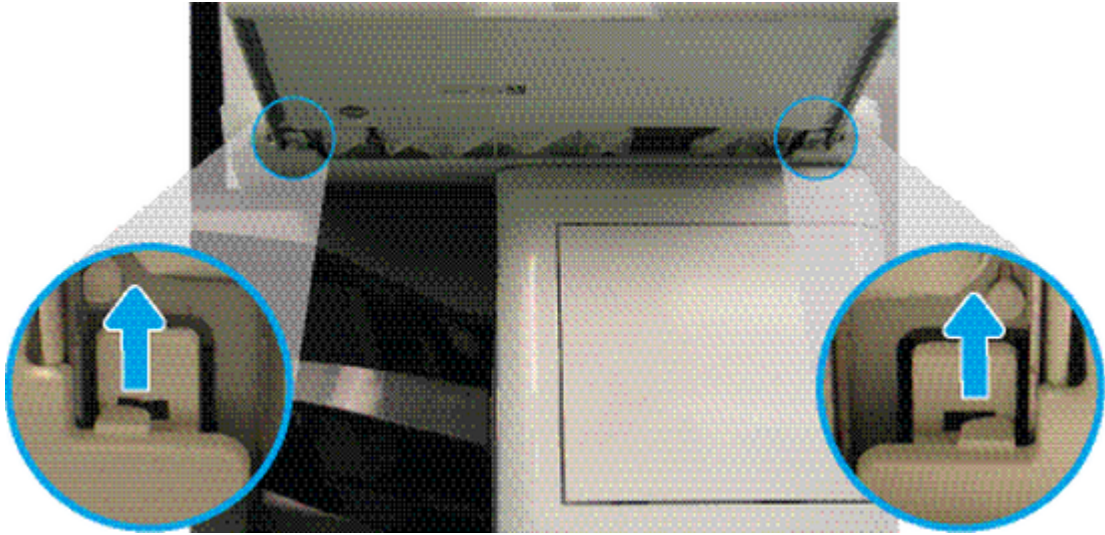
5. Slide the keyboard tray out until it stops.

Figure 5-1370 Slide the keyboard tray out



6. Push up on the keyboard tray to release two tabs on the bottom of the tray, and then slide the tray toward you to disengage the tabs.

Figure 5-1371 Release two tabs




7. Slide the keyboard tray all the way out of the printer to remove it.

Figure 5-1372 Remove the keyboard



4. Remove the control panel (M681/M682/E67550/E67560/E67650/E67660)

Follow these steps to remove the control panel (M681/M682/E67550/E67560/E67650/E67660).

 **NOTE:** This step is for the M681/M682/E67550/E67560/E67650/E67660 printers. For the M652/M653/E65050/E65060/E65150/E65160 printers, skip this step.

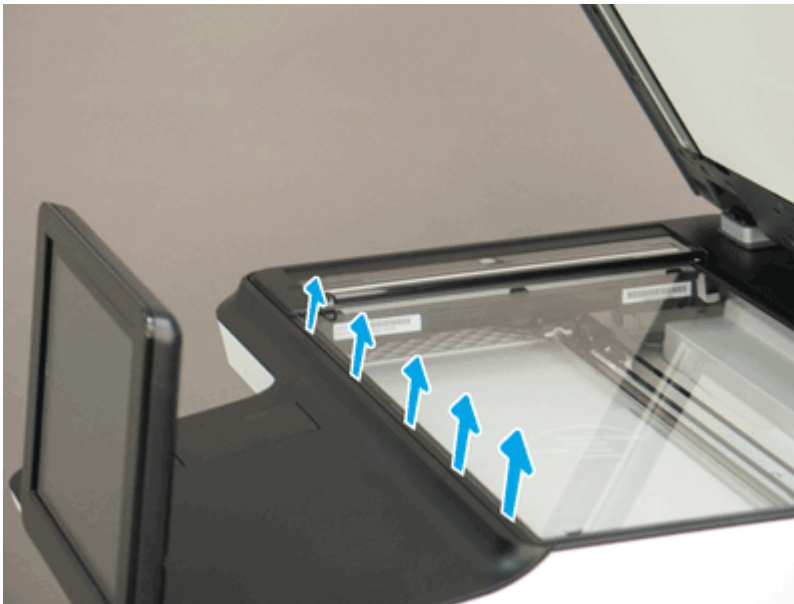
1. Tilt the control panel forward (callout 1), and then open the document feeder (callout 2).

Figure 5-1373 Tilt the control panel forward and open the document feeder



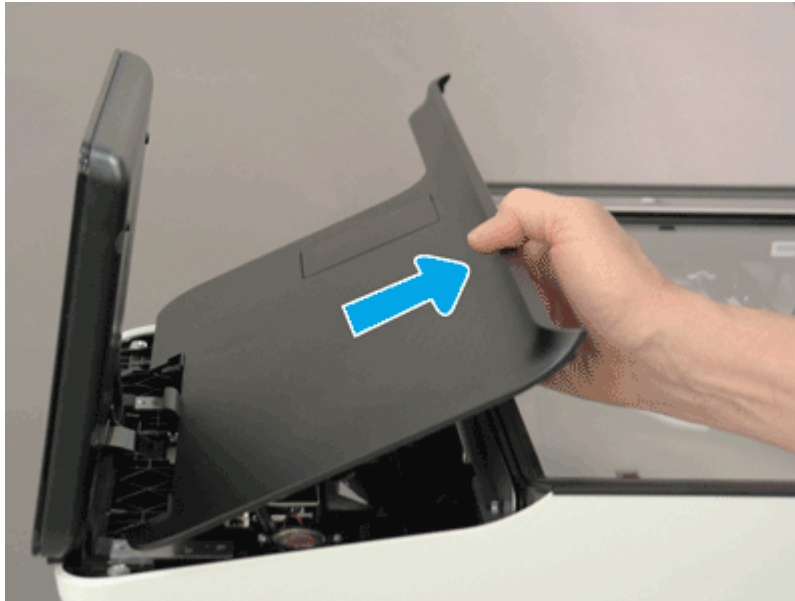
2. Beginning at the right side of the control-panel cover, carefully release five tabs along the top edge of the cover.

Figure 5-1374 Release five tabs



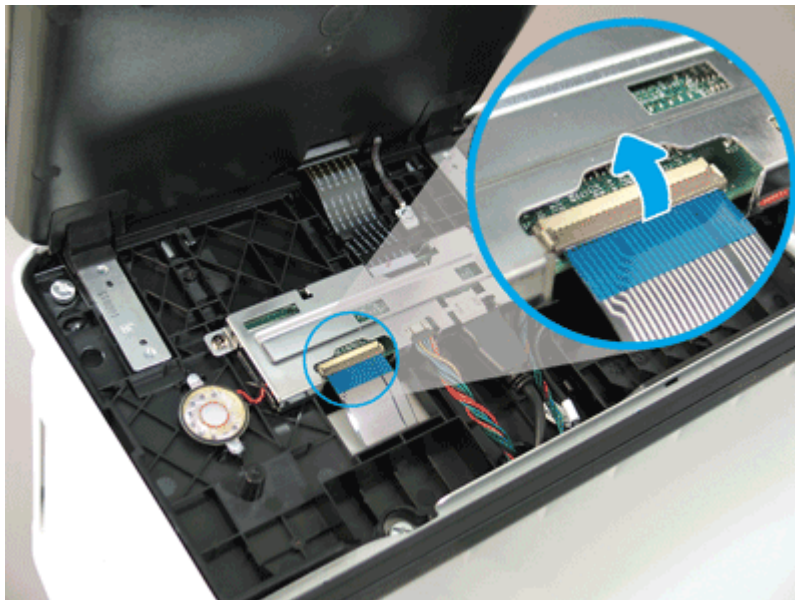
3. Continue to rotate the top edge of the cover away from the printer, and then remove the cover.

Figure 5-1375 Remove the cover



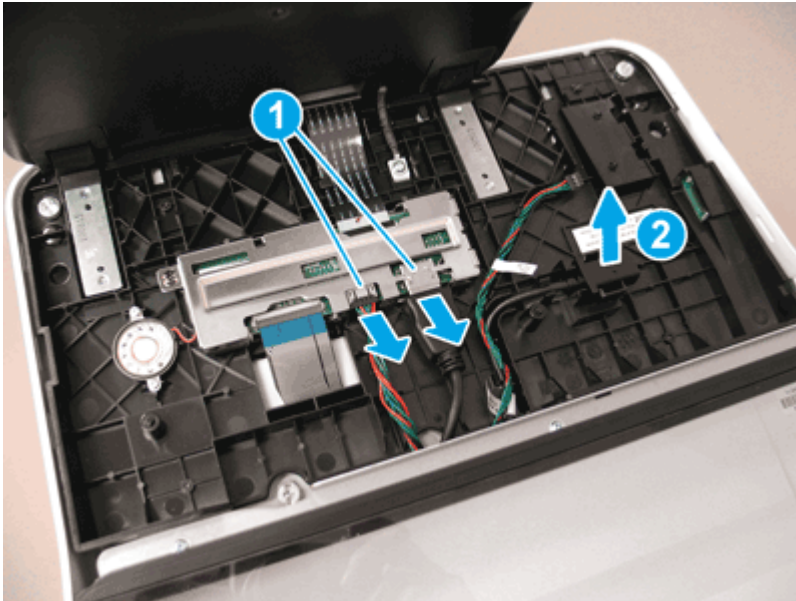
4. **Keyboard models only:** Lift up on the small, gray gate to release the keyboard flat cable.

Figure 5-1376 Disconnect the keyboard flat cable (keyboard models only)



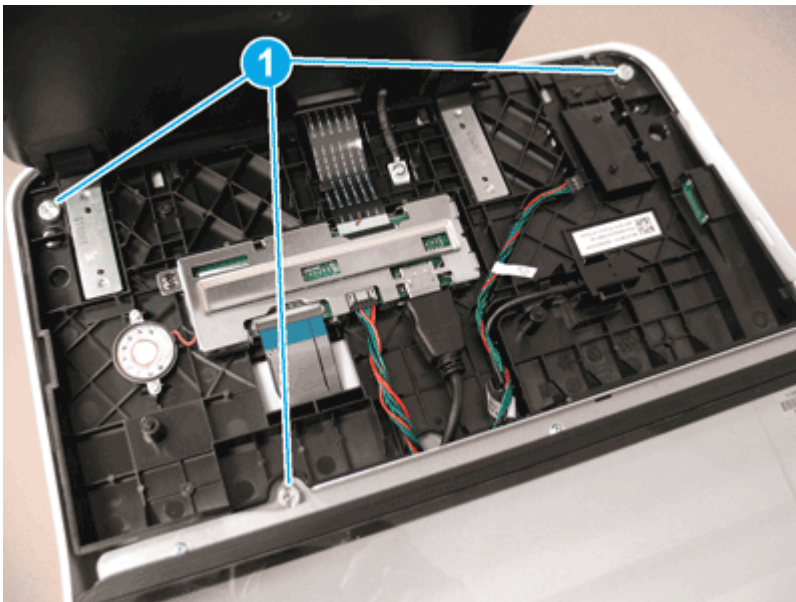
5. Disconnect two connectors (callout 1), and then release the USB cable (callout 2) from the holder.

Figure 5-1377 Disconnect connectors



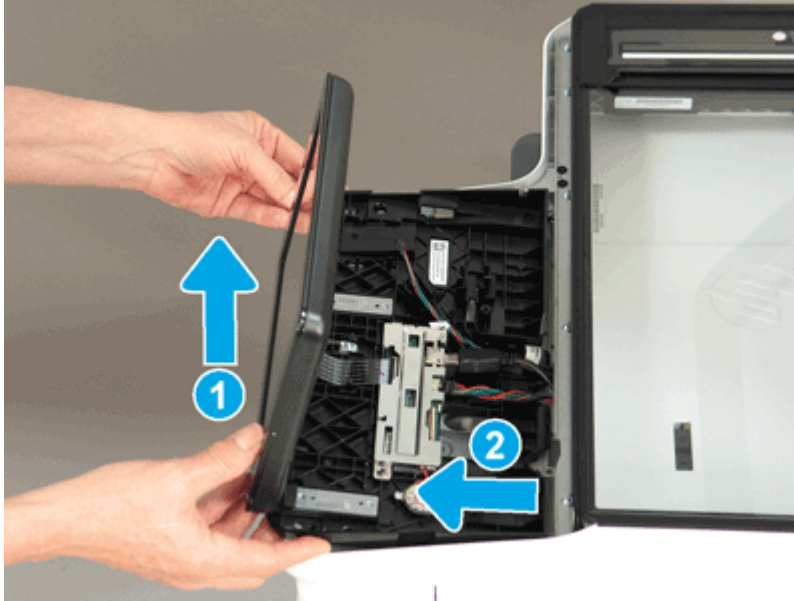
6. Remove three thumbscrews (callout 1).

Figure 5-1378 Remove three thumbscrews



7. Lift the front of the control panel off of the printer (callout 1), and then slide it toward the front of the printer (callout 2) to remove it.

Figure 5-1379 Remove the control panel

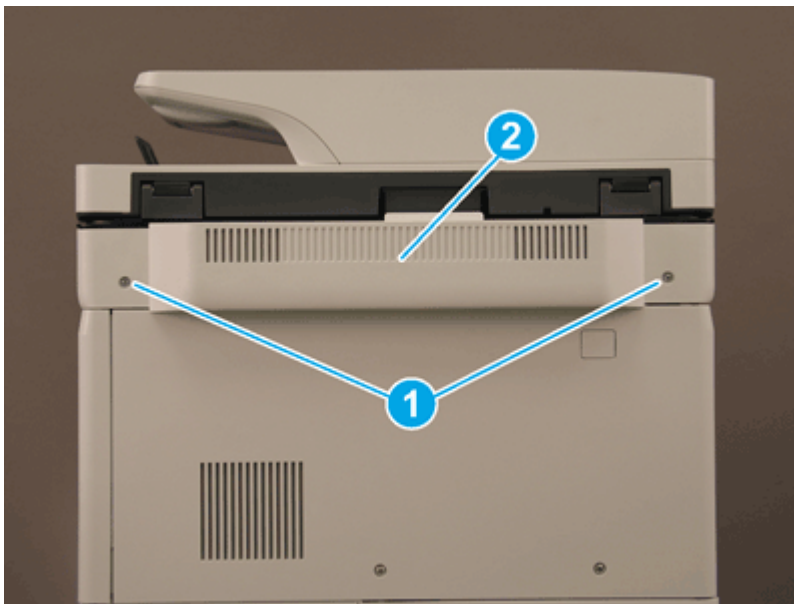


5. Remove the document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660)

Follow these steps to remove the document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660).

1. Remove two screws (callout 1), and then remove the scanner control board (SCB) cover (callout 2).

Figure 5-1380 Remove the SCB cover



2. Flow M681z/Flow M682z/Flow E67660z models only: Do the following:

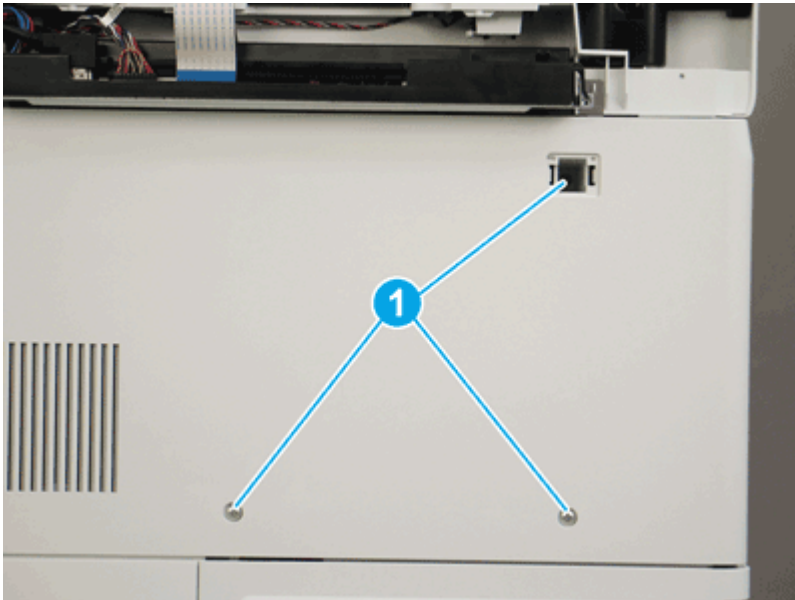
- a. At the back of the printer, remove one small cover (callout 1).

Figure 5-1381 Remove the small cover



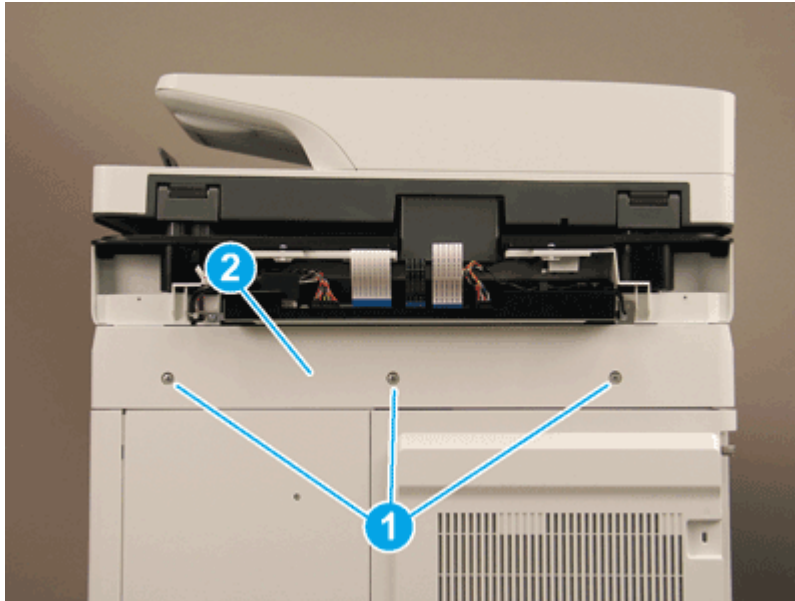
- b. Remove three screws (callout 1), and then remove the stapler/stacker rear cover (callout 2).

Figure 5-1382 Remove the stapler/stacker rear cover



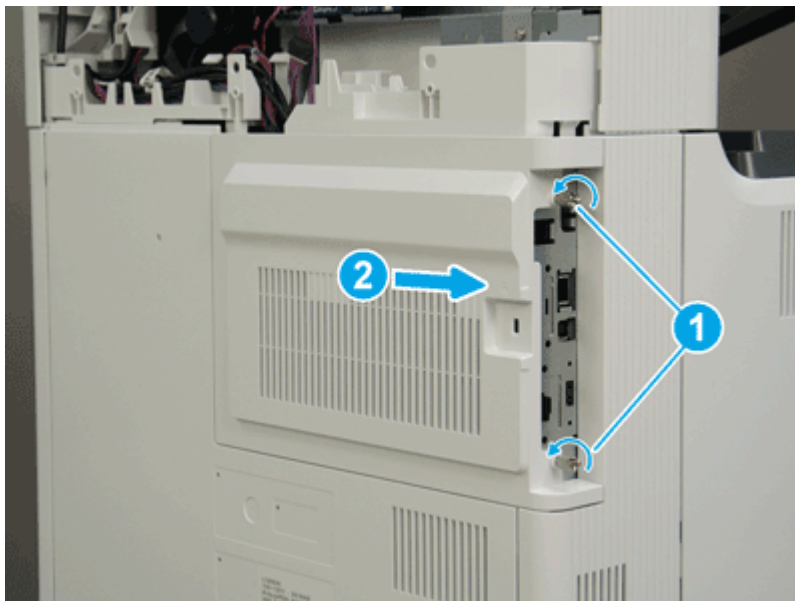
3. **M681dh/M681f/M682dh/Flow M681f/E67650dh models only:** Remove three screws (callout 1), and then remove the upper rear cover (callout 2).

Figure 5-1383 Remove the upper rear cover



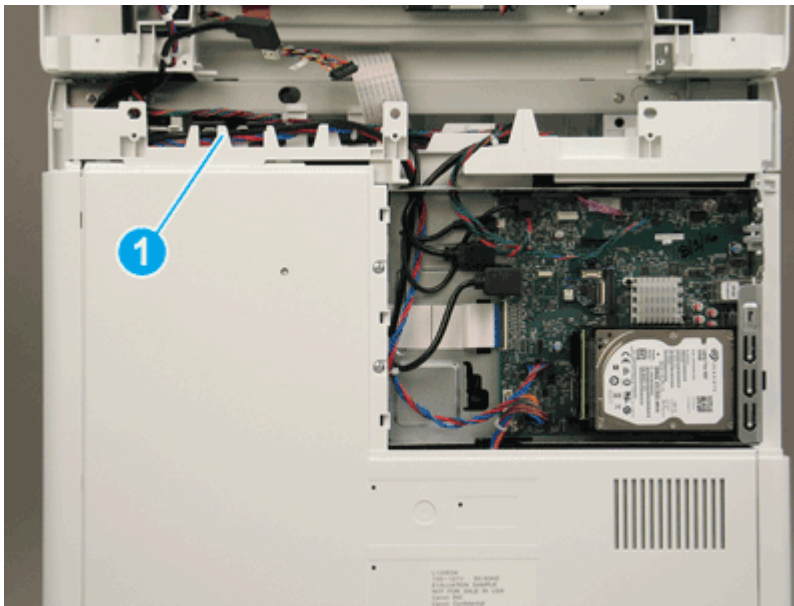
4. Loosen two thumbscrews (callout 1), and then slide the formatter cover away from the printer to remove it (callout 2).

Figure 5-1384 Remove the formatter cover



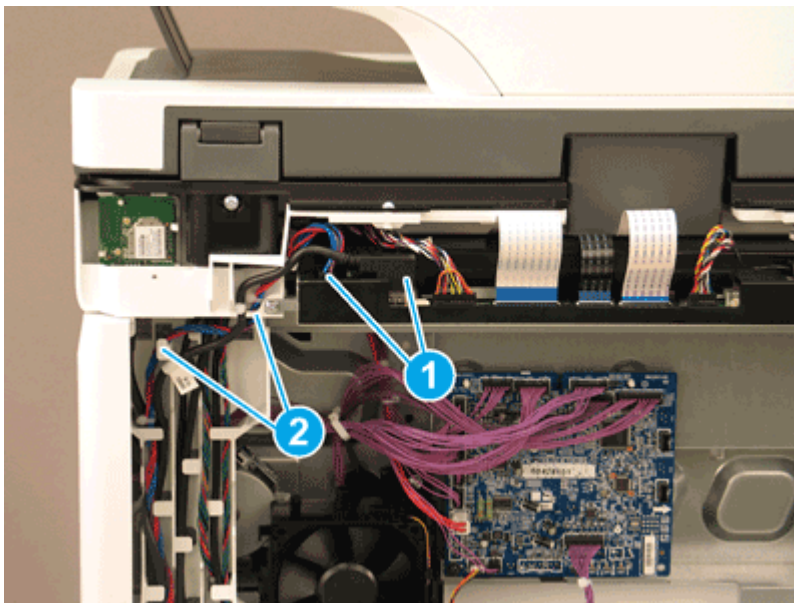
5. The remaining figures in this procedure show the Flow M682z model. While the cable routing (callout 1) on the M681dh, M681f, M682dh, Flow M681f, and E67650dh models is different, the removal procedures are the same for all models.

Figure 5-1385 Cable routing for M681dh, M681f, Flow M681f, and E67650dh



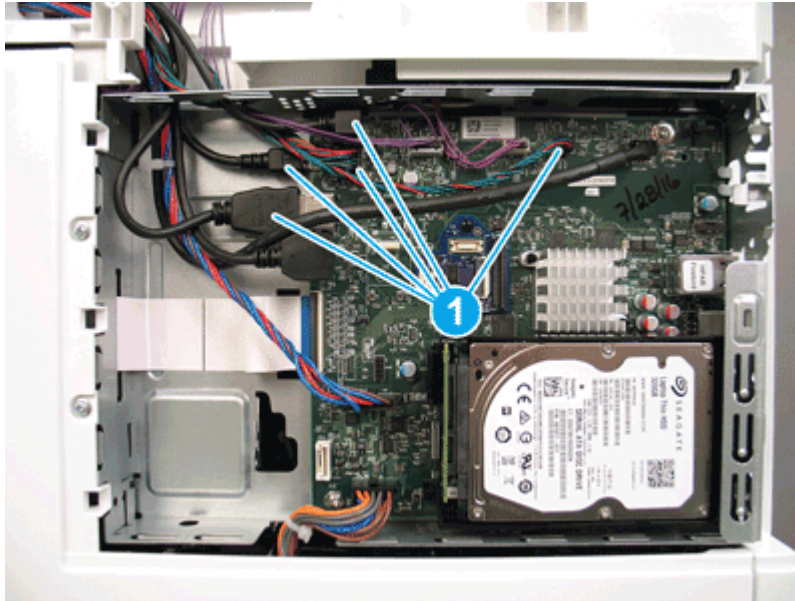
6. Disconnect two connectors (callout 1) on the SCB, and then release the cables from the guides (callout 2).

Figure 5-1386 Disconnect two connectors



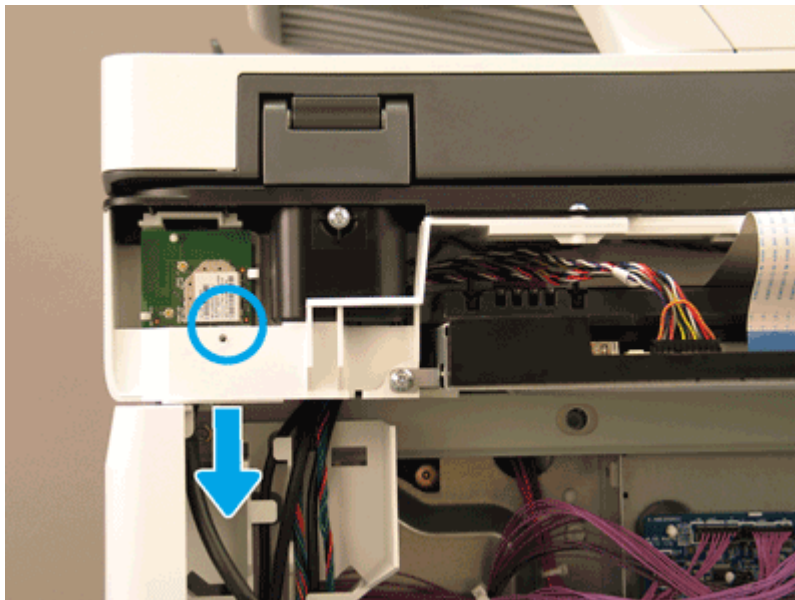
7. Disconnect five connectors on the formatter (callout 1).

Figure 5-1387 Disconnect five connectors



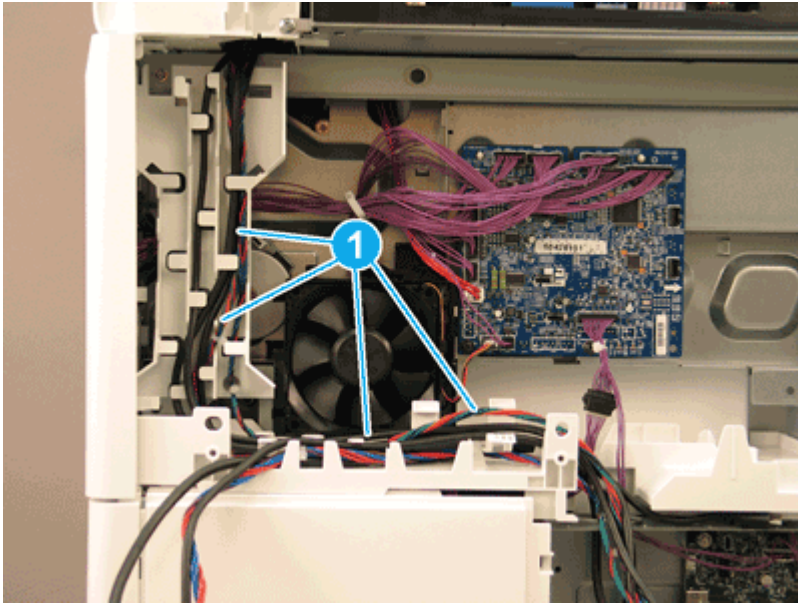
8. Flow M682z only: Gently pull down on the cable to disconnect the wireless connector.

Figure 5-1388 Disconnect the wireless connector



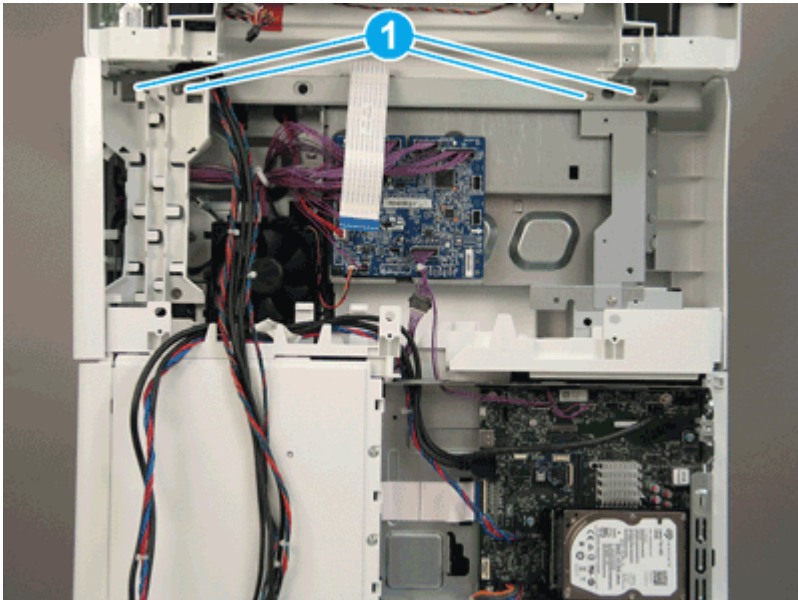
9. Release all of the cables from the cable guides (callout 1).

Figure 5-1389 Release the cables



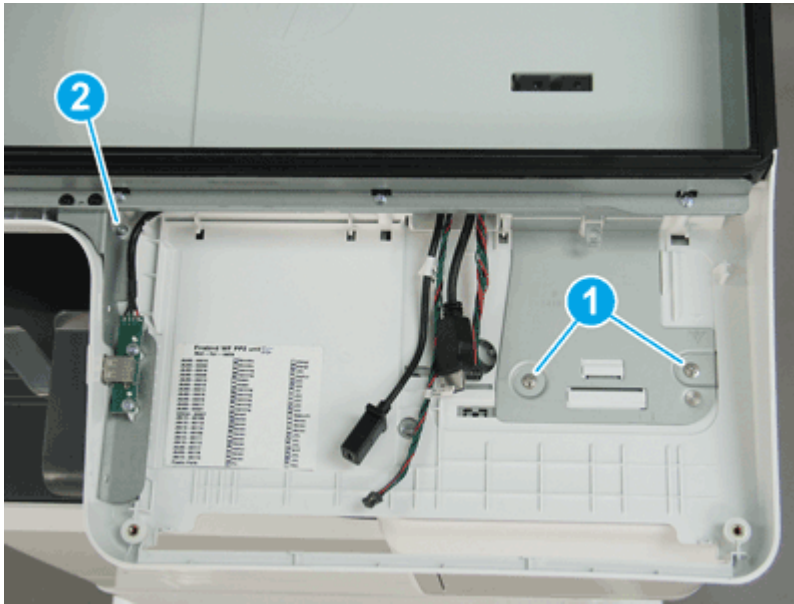
10. At the back of the printer, remove four screws (callout 1).

Figure 5-1390 Remove four screws



11. On the top of the image scanner assembly, at the location where the control panel was removed, remove two sheet metal screws (callout 1). **Flow M681z/Flow M682z/Flow E67660z only:** Remove one self-tapping screw (callout 2).

Figure 5-1391 Remove three screws



12. Lift the document feeder and image scanner off of the printer to remove them.

Figure 5-1392 Remove the document feeder and image scanner



6. Remove the stapler/stacker (Flow M681z/Flow M682z/Flow E67660z)

Follow these steps to remove the stapler/stacker (Flow M681z/Flow M682z/Flow E67660z).

This step is for the M681/M682/E67550/E67560/E6750/E67660 printers. For the M652/M653/E65050/E65060/E65150/E65160 printers, skip this step.

1. Open the front door.

Figure 5-1393 Open the front door



2. Open the stapler door.

Figure 5-1394 Open the stapler door



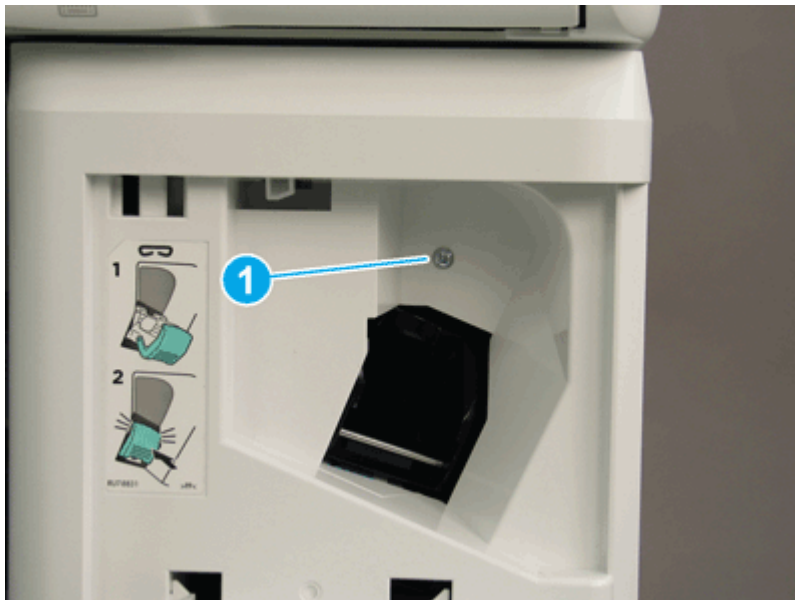
3. Release the latch, and then remove the staple cartridge.

Figure 5-1395 Remove the staple cartridge



4. Remove one screw (callout 1).

Figure 5-1396 Remove one screw



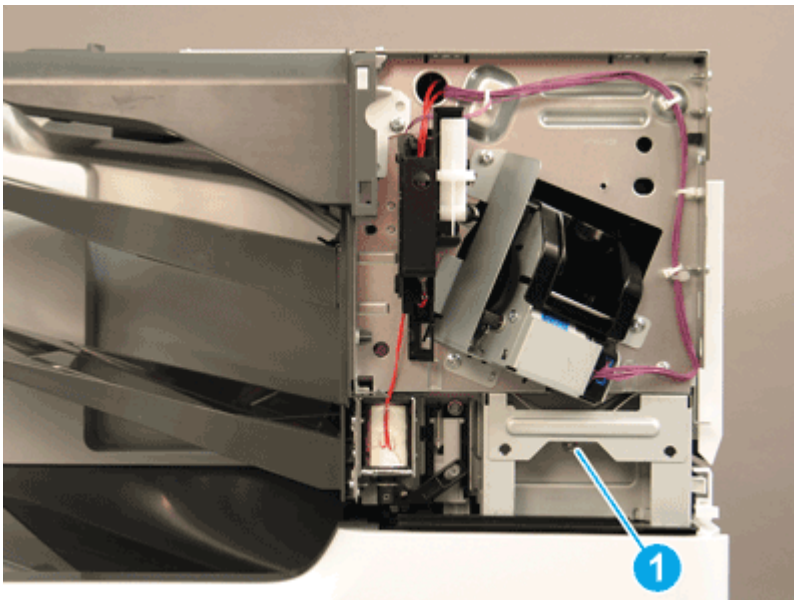
5. Rotate the stapler cover to the right to remove it.

Figure 5-1397 Remove the stapler cover



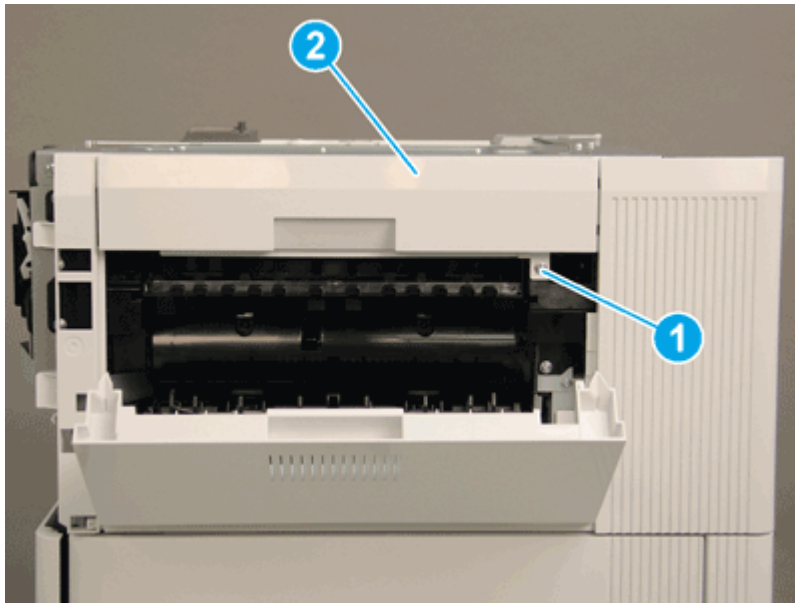
6. Remove one screw (callout 1).

Figure 5-1398 Remove one screw



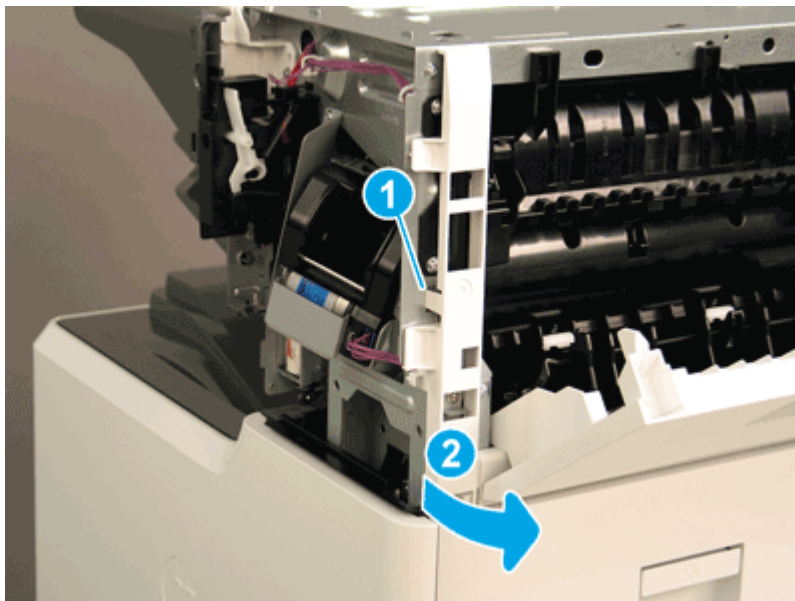
7. At the right side of the printer, remove one screw (callout 1), and then remove the stapler/stacker right upper cover (callout 2).

Figure 5-1399 Remove the stapler/stacker right upper cover



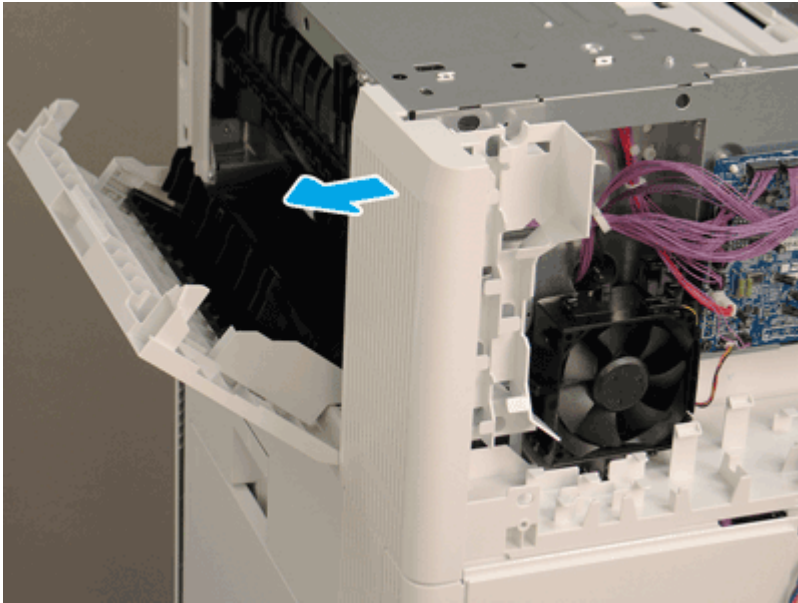
8. Release one tab (callout 1), and then rotate the stapler rear cover away from the printer (callout 2) to remove it.

Figure 5-1400 Remove the stapler rear cover



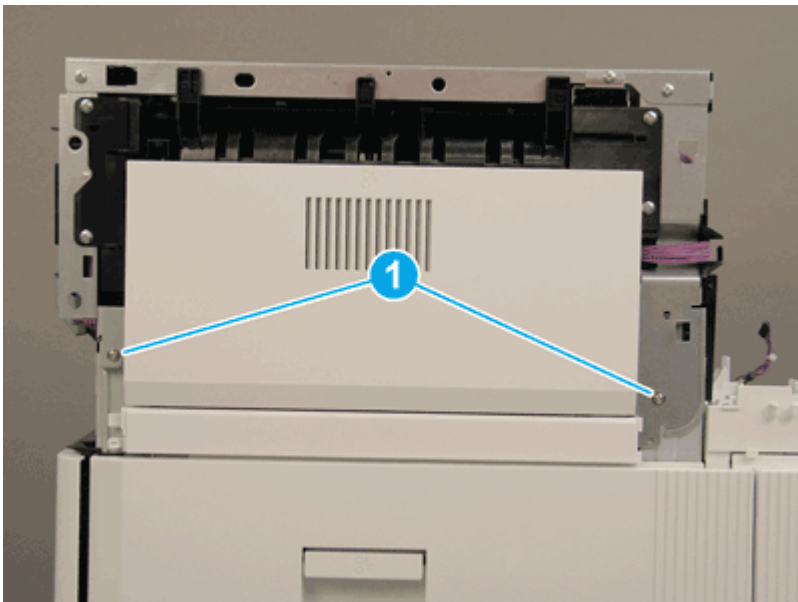
9. Pull the stapler/stacker rear corner cover away from the printer to remove it.

Figure 5-1401 Remove the stapler/stacker rear corner cover



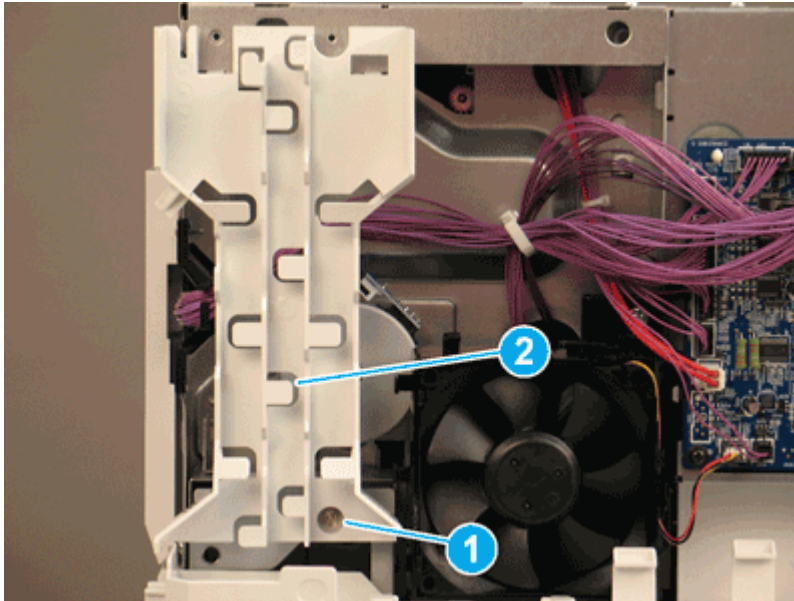
10. Remove two screws (callout 1).

Figure 5-1402 Remove two screws



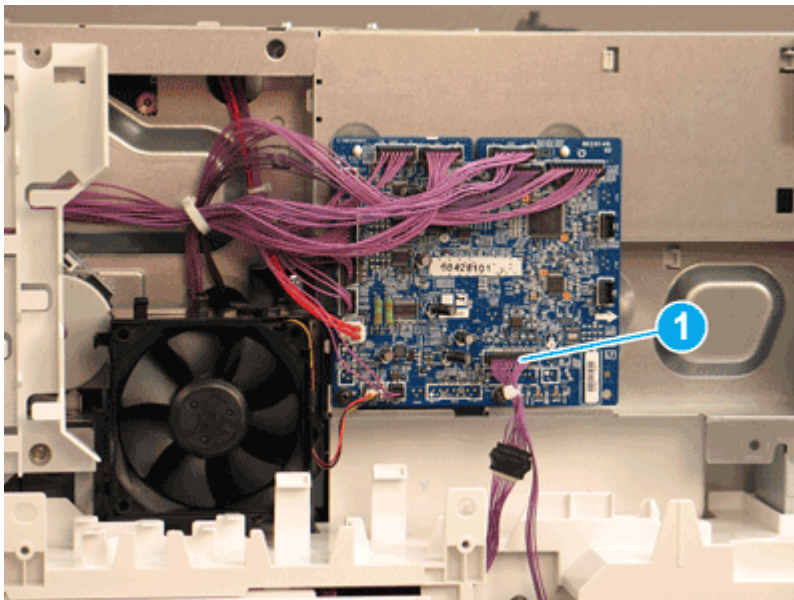
11. At the back of the printer, remove one screw (callout 1), and then remove the cable guide (callout 2).

Figure 5-1403 Remove the cable guide



12. Disconnect one connector on the stapler/stacker PCA (callout 1).

Figure 5-1404 Disconnect one connector



13. Remove two screws (callout 1).


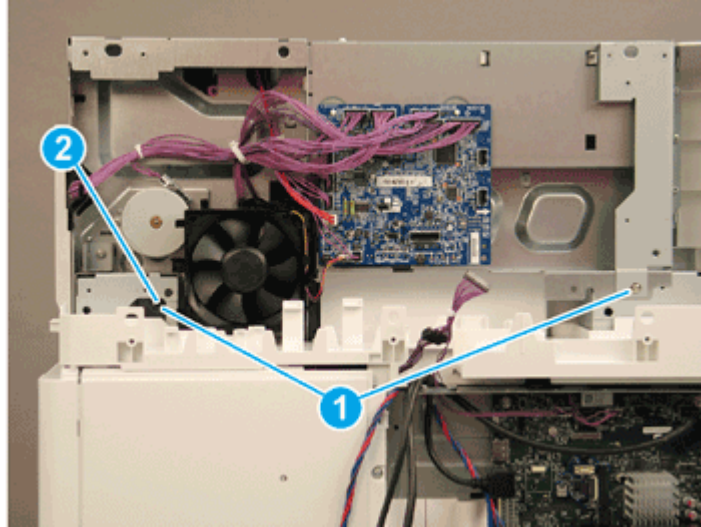
 **TIP:** The screw on the left (callout 2) is longer than the other screw. Make sure that this screw is installed in the correct location.

Figure 5-1405 Remove two screws



14. Lift the stapler/stacker away from the printer.


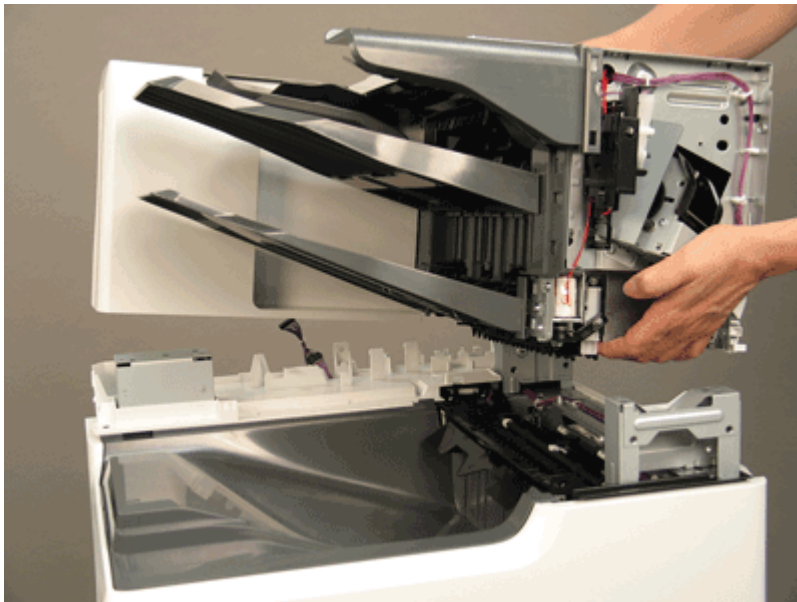
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1406 Remove the stapler/stacker



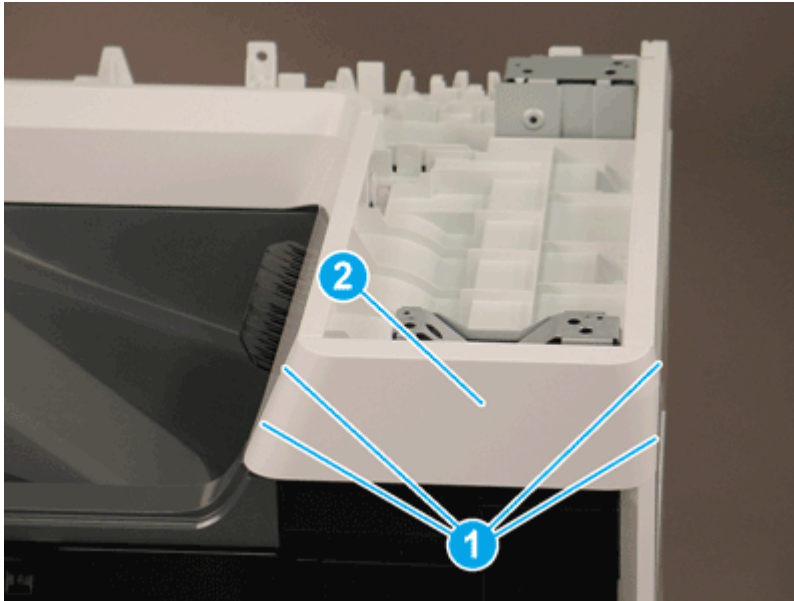
7. Remove the face-down front cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the face-down front cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

1. Open the front door.

2. Release two tabs on each side (callout 1), and then remove the face-down front cover (callout 2).

Figure 5-1407 Remove the face-down front cover

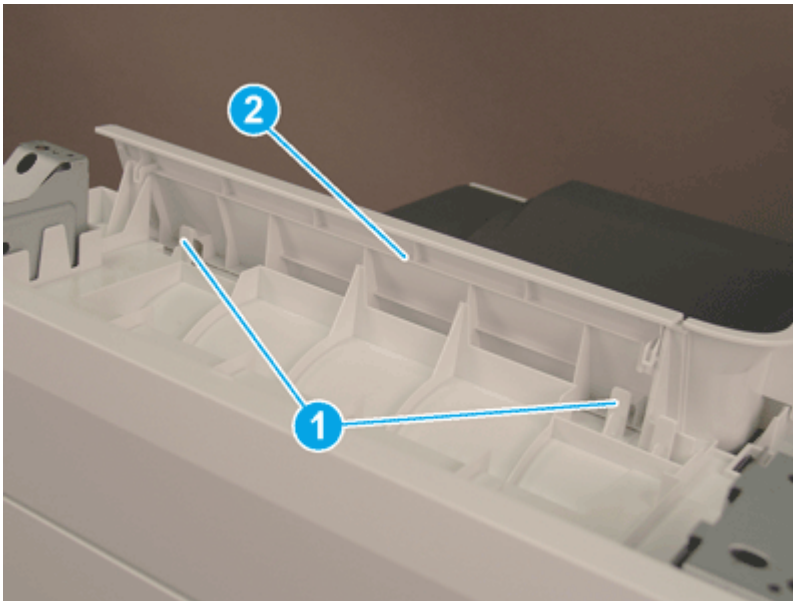


8. Remove the top cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the top cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

- Release two tabs (callout 1), and then remove the top cover (callout 2).

Figure 5-1408 Remove the top cover



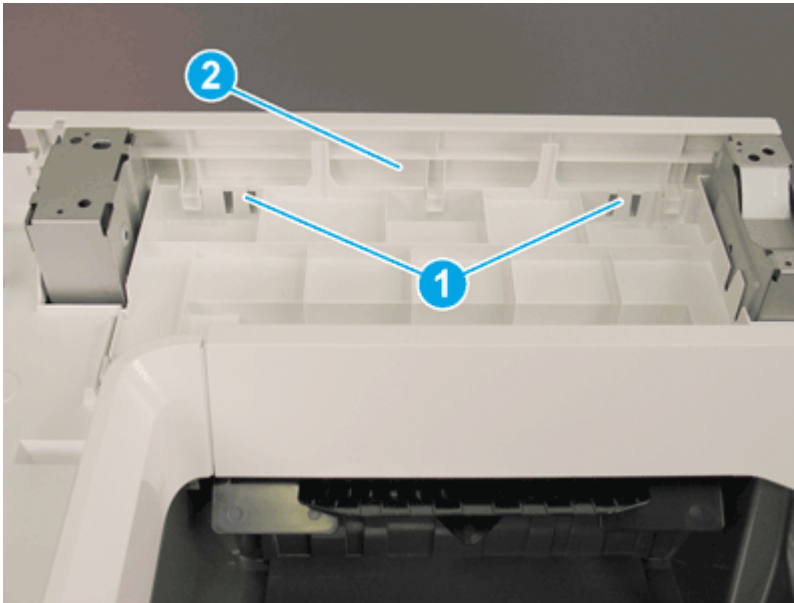
9. Remove the right cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the right cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

This step is for the M681/M682/E67550/E67560/E67650/E67660 printers. For the M652/M653/E65050/E65060/E65150/E65160 printers, skip this step.

- Release two tabs (callout 1), and then remove the right cover (callout 2).

Figure 5-1409 Remove the right cover



10. Remove the front cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the front cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

- Release two tabs (callout 1), and then remove the front cover (callout 2).


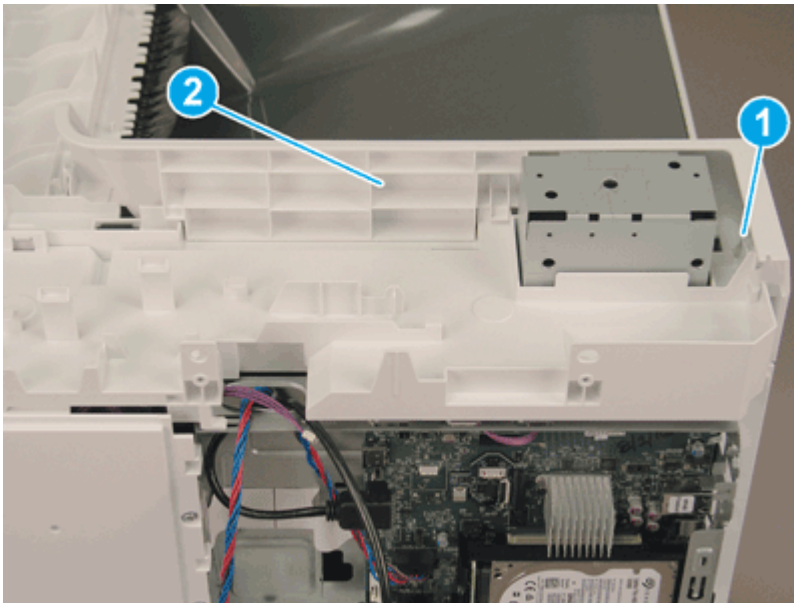
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1410 Remove the front cover



11. Remove the rear upper cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the rear upper cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

- Remove two screws (callout 1), and then remove the rear upper cover (callout 2).


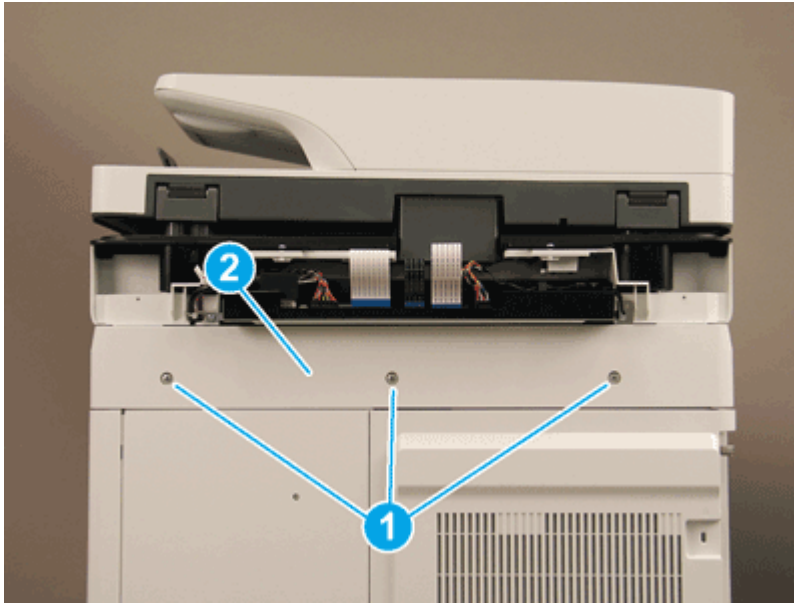

 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1411 Remove the rear upper cover



12. Remove the face-down cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the face-down cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

 **NOTE:** This step is for the M681/M682/E67550/E67560/E67650/E67660 printers. For the M652/M653/E65050/E65060/E65150/E65160 printers, skip this step.

- Remove two screws (callout 1), release three tabs (callout 2), and then remove the face-down cover (callout 3).


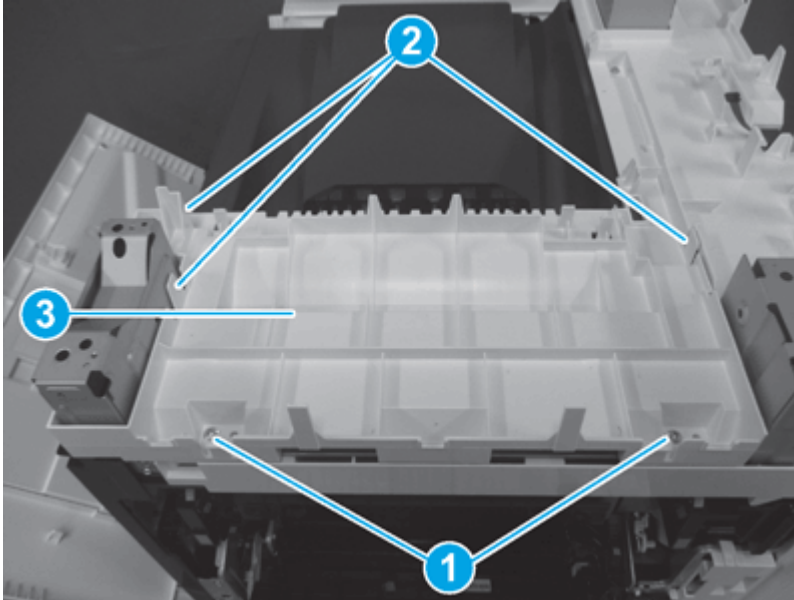
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1412 Remove two screws and the face-down cover



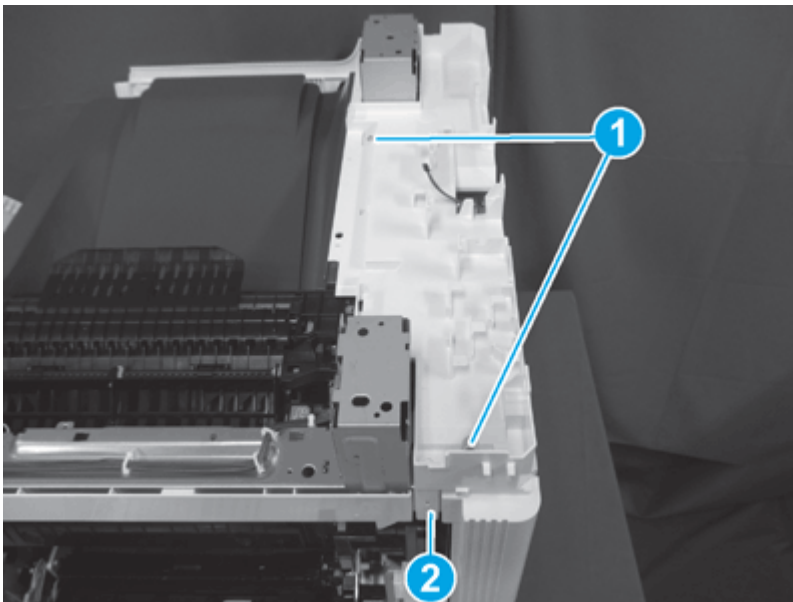
13. Remove the main cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the main cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

This step is for the M681/M682/E67550/E67560/E67650/E67660 printers. For the M652/M653/E65050/E65060/E65150/E65160 printers, skip this step.

1. Remove two screws (callout 1), and then release one tab (callout 2).

Figure 5-1413 Remove two screws and release one tab



2. Remove one screw (callout 1), release two tabs (callout 2), and then remove the main cover (callout 3).


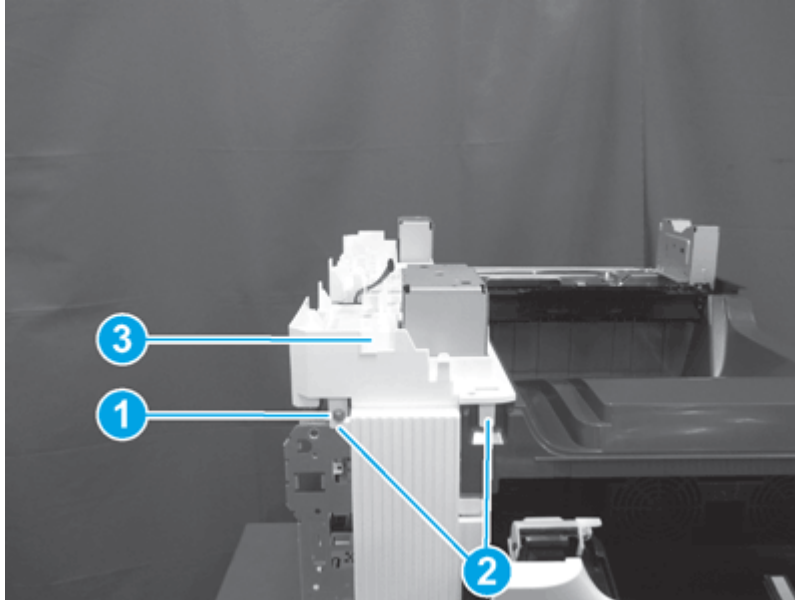

 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1414 Remove one screw and the main cover



14. Remove the control panel (M652/M653/E65050/E65060/E65150/E65160)

Follow these steps to remove the control panel (M652/M653/E65050/E65060/E65150/E65160).

 **NOTE:** This step is for the M652/M653/E65050/E65060/E65150/E65160 printers. For the M681/M682/E67550/E67560/E67650/E67660 printers, skip this step.

The figures below show the touchscreen control panel. The procedure is also correct for the keypad control panel.

1. Tilt the control panel to the fully raised position.

Figure 5-1415 Tilt the control panel up



2. Use a coin to release the cover, and then remove the cover.

Figure 5-1416 Remove the cover



3. Remove one thumbscrew (callout 1)



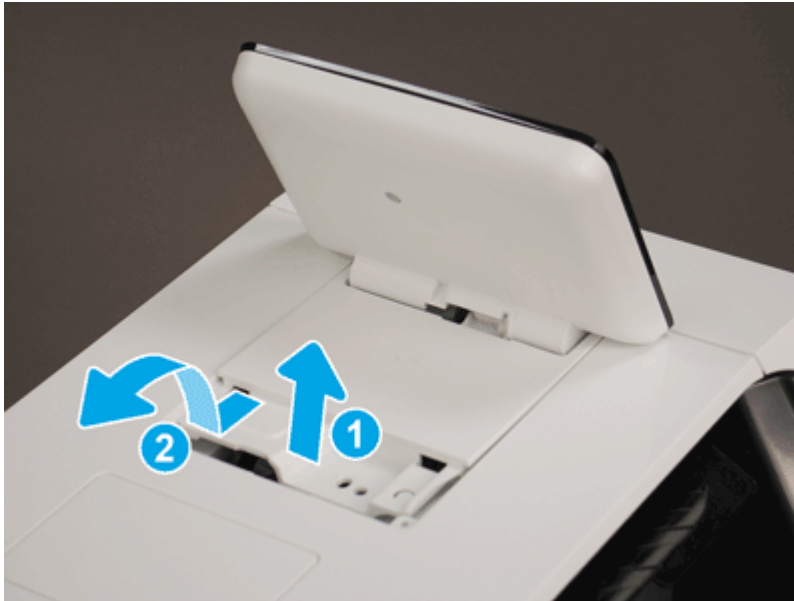
NOTE: Store the screw in a secure place where it cannot fall down into the printer.

Figure 5-1417 Remove one thumbscrew



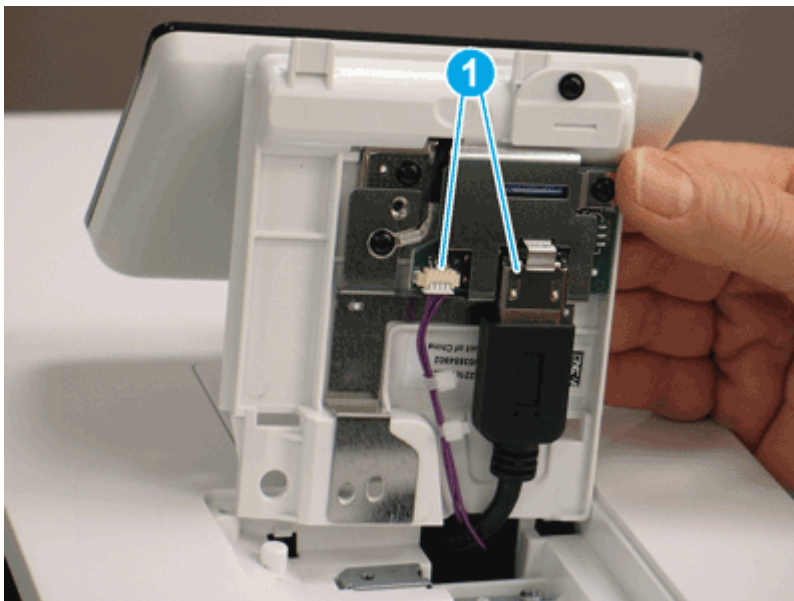
4. Lift the back edge of the control panel up (callout 1), and then slide it toward the back of the printer (callout 2) to release it.

Figure 5-1418 Release the control panel



5. Turn the control panel over to gain access to the bottom side. Disconnect two connectors (callout 1).

Figure 5-1419 Disconnect two connectors



6. Remove the control panel.

Figure 5-1420 Remove the control panel



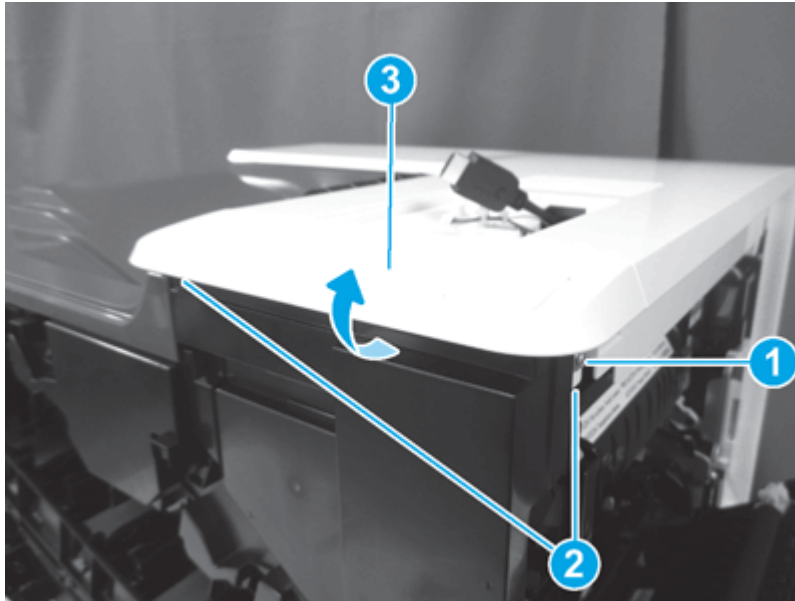
15. Remove the top cover (M652/M653/E65050/E65060/E65150/E65160)

Follow these steps to remove the top cover (M652/M653/E65050/E65060/E65150/E65160).

1. Open the following doors:
 - Front door
 - Left door
 - Right door

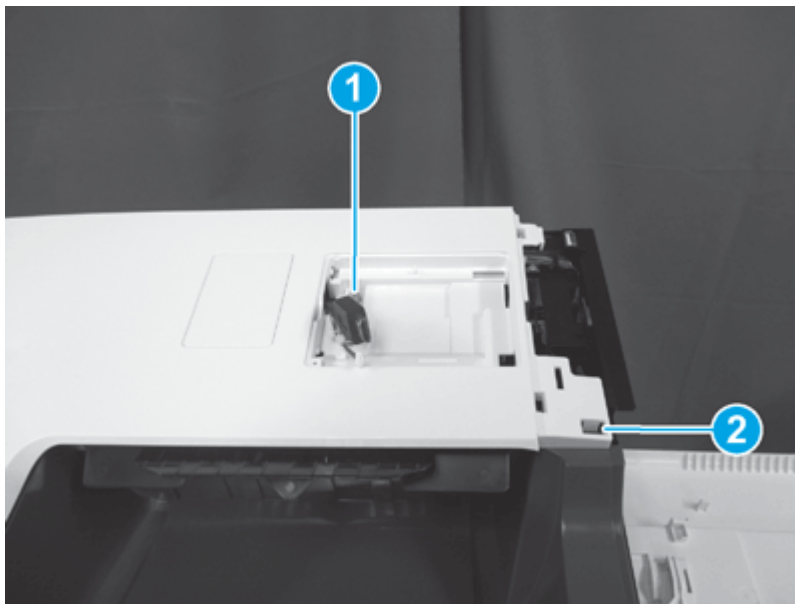
2. Remove one screw (callout 1), release two tabs (callout 2), and then rotate the NFC cover (callout 3) up and away from the printer to remove it.

Figure 5-1421 Remove the NFC cover



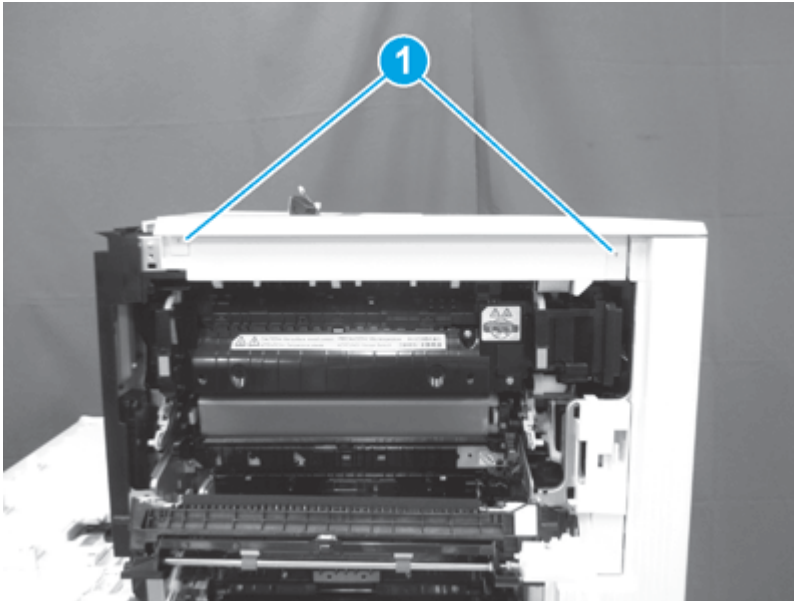
3. Remove one screw (callout 1), and then release one tab (callout 2).

Figure 5-1422 Remove one screw and release one tab



4. Release two tabs (callout 1).

Figure 5-1423 Release two tabs



5. Remove one screw (callout 1), release one tab (callout 2), release one tab behind the left door (callout 3), and then remove the top cover (callout 4).


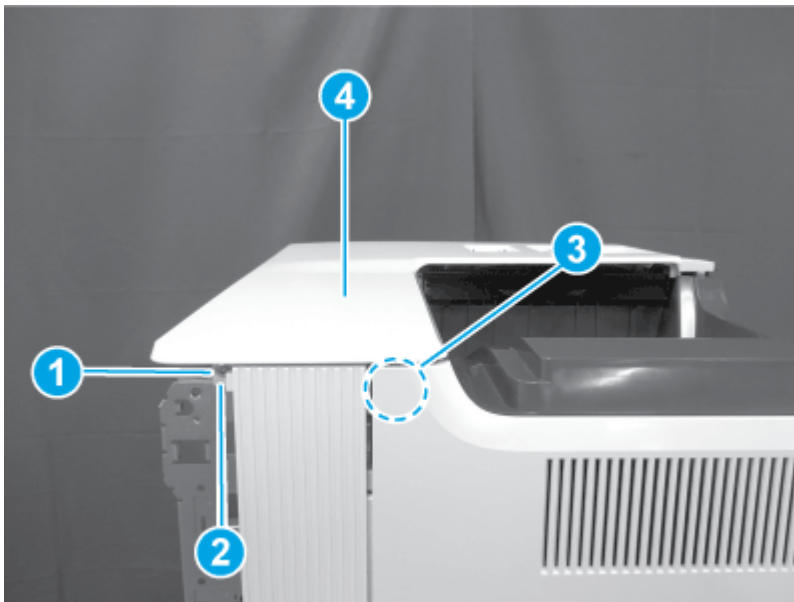
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1424 Remove the top cover



16. Remove the output bin

Follow these steps to remove the output bin.

1. Open the following doors:
 - Front door
 - Left door
 - Right door
2. Release two tabs (callout 1), and then remove the output bin (callout 2).


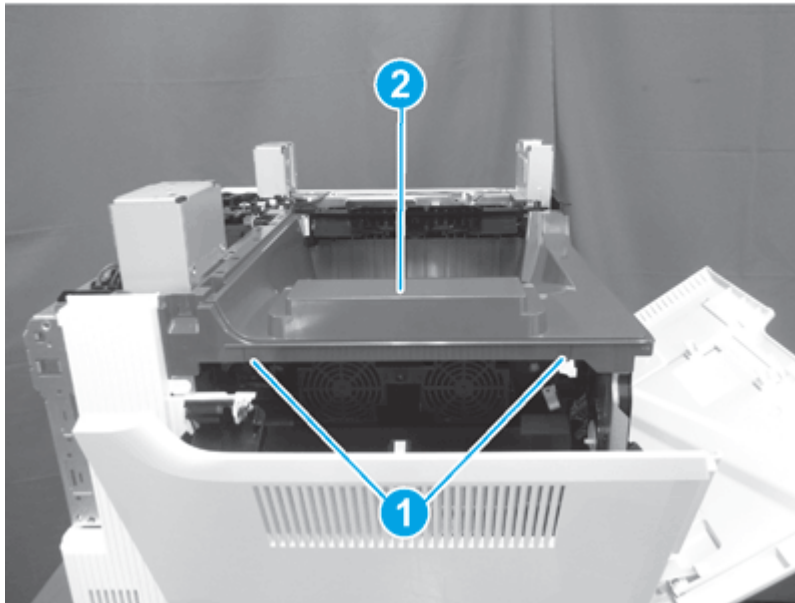
 **NOTE:** The M682 is shown in the figure below. The procedure is correct for all models.

Figure 5-1425 Remove the output bin



17. Remove the formatter cover

Follow these steps to remove the formatter cover.

- Unscrew two thumbscrews (callout 1), and then slide the formatter cover (callout 2) away from the printer to remove it.


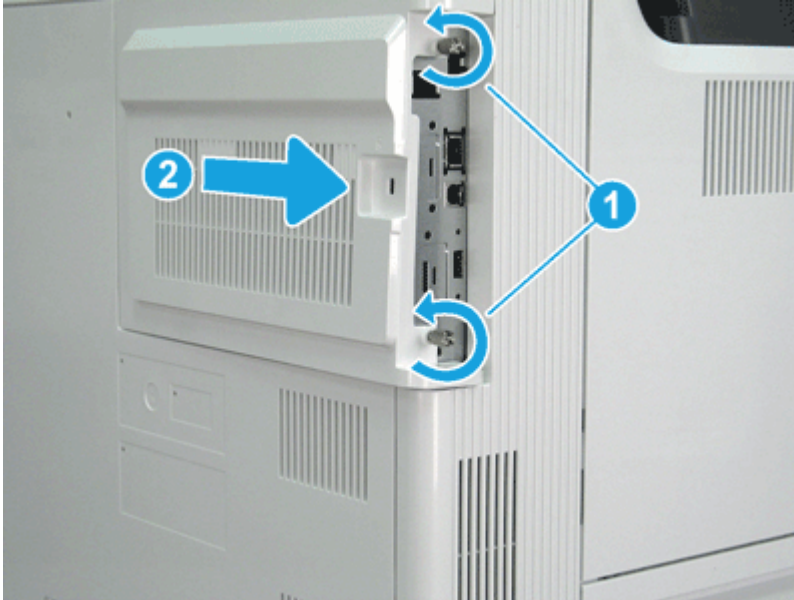
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1426 Remove the formatter cover

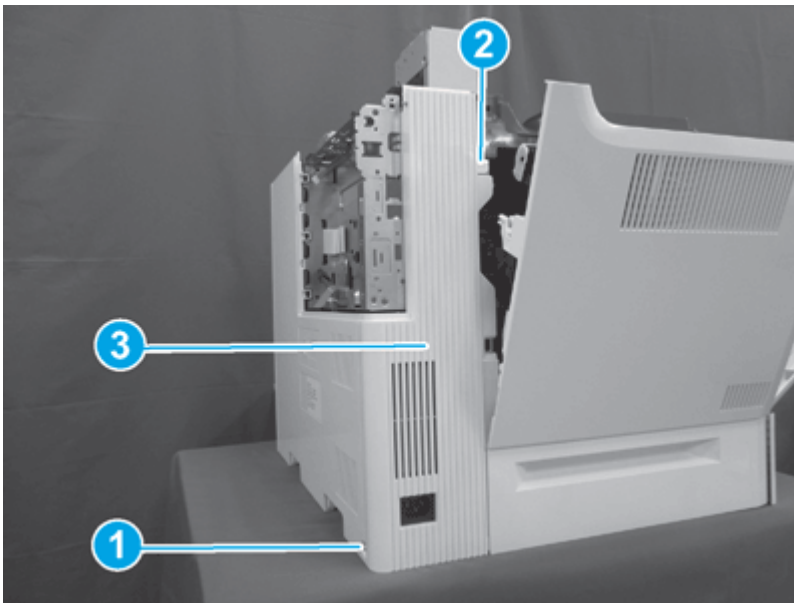


18. Remove the left rear cover

Follow these steps to remove the left rear cover.

- Open the left door. Remove one screw (callout 1), release one boss (callout 2), and then remove the left rear cover (callout 3).

Figure 5-1427 Remove the left rear cover



19. Remove the rear cover

Follow these steps to remove the rear cover.

- Remove two screws (callout 1), and then slide the rear cover (callout 2) to the right to remove it.


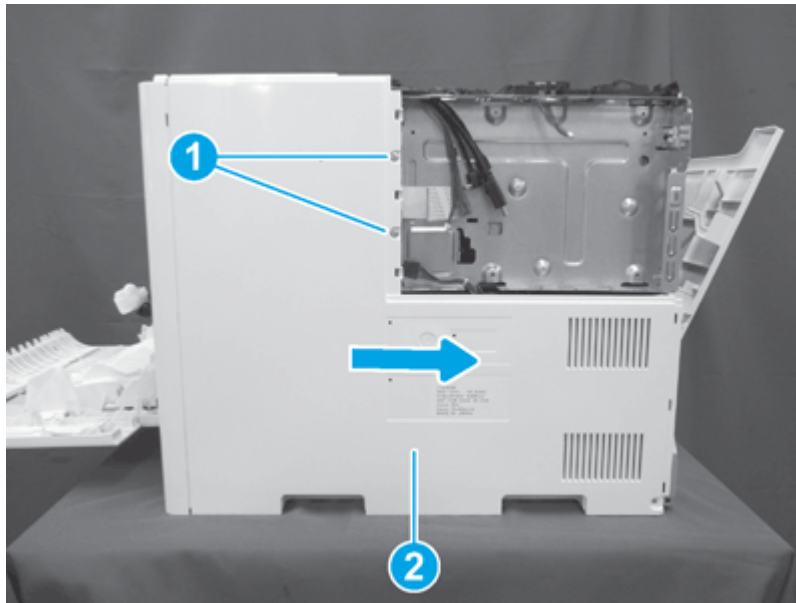

 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1428 Remove two screws and the rear cover



20. Remove the fax PCA (M681f/Flow M681f/Flow M681z/Flow M682z)

Follow these steps to remove the fax PCA (M681f/Flow M681f/Flow M681z/Flow M682z).

 **NOTE:** This step is for the M681/M682/E67550/E67560/E67650/E67660 printers. For the M652/M653/E65050/E65060/E65150/E65160 printers, skip this step.

1. Locate the fax PCA on the formatter.

Figure 5-1429 Locate the fax PCA



2. Rotate end left end of the fax PCA away from the formatter (callout 1) to disconnect the connector, and then slide the card away from the formatter (callout 2) to remove it.

Figure 5-1430 Remove the fax PCA

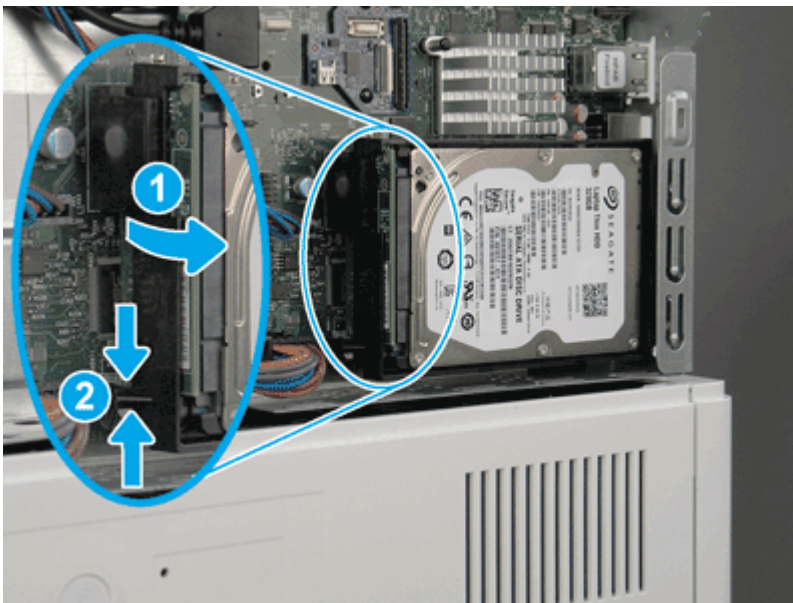


21. Remove the hard disk drive (HDD; M653dh/M681/M682/E67550/E67560/E67650/E67660)

Follow these steps to remove the hard disk drive (HDD; M653dh/M681/M682/E67550/E67560/E67650/E67660).

1. Release the locking connector (callout 1), and then pinch the retainer (callout 2) to release it.

Figure 5-1431 Release the HDD



2. Rotate the connector end of the HDD out and away from the formatter (callout 1), and then slide it to the left (callout 2) to remove it.

Figure 5-1432 Remove the HDD

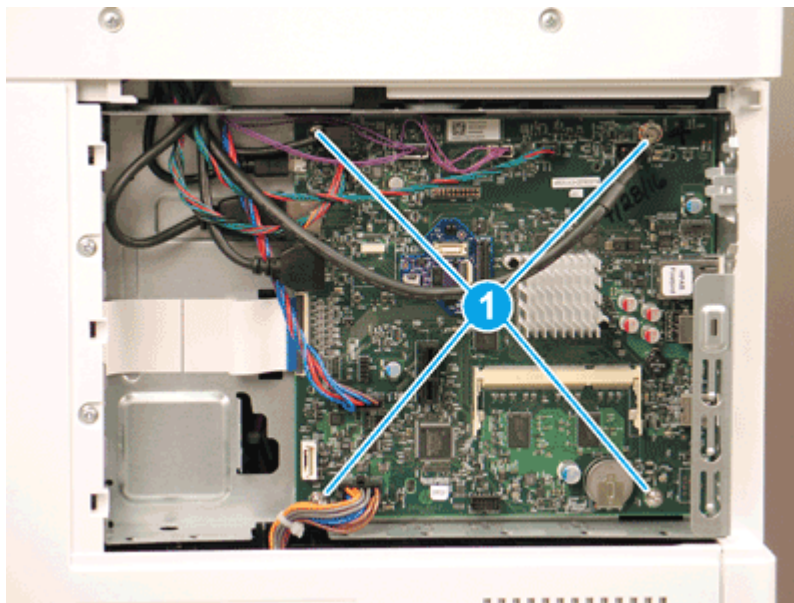


22. Remove the formatter

Follow these steps to remove the formatter.

- Disconnect all of the connectors on the formatter, remove four screws, and then remove the formatter.

Figure 5-1433 Remove the formatter



23. Remove the formatter case

Follow these steps to remove the formatter case.

1. Disconnect one connector (callout 1), remove two screws on the left side of the case (callout 2), and then remove two screws on the right end of the case (callout 3).


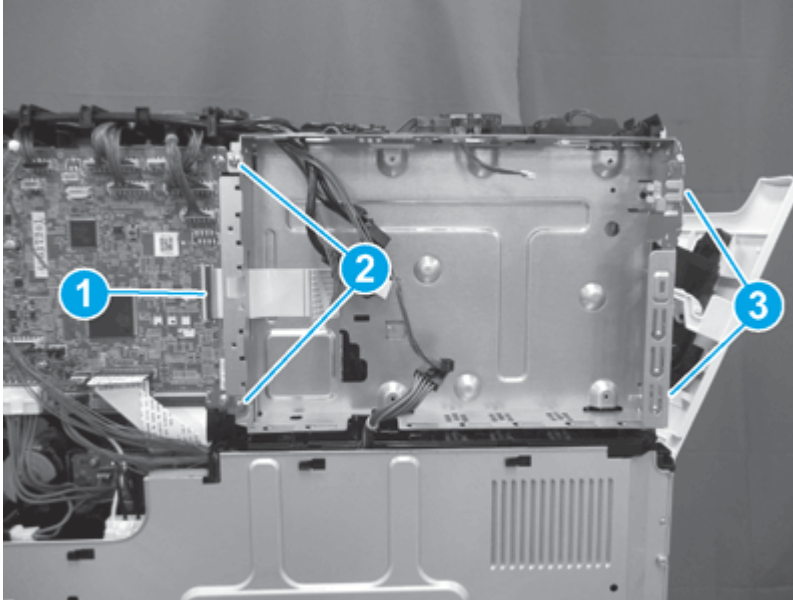
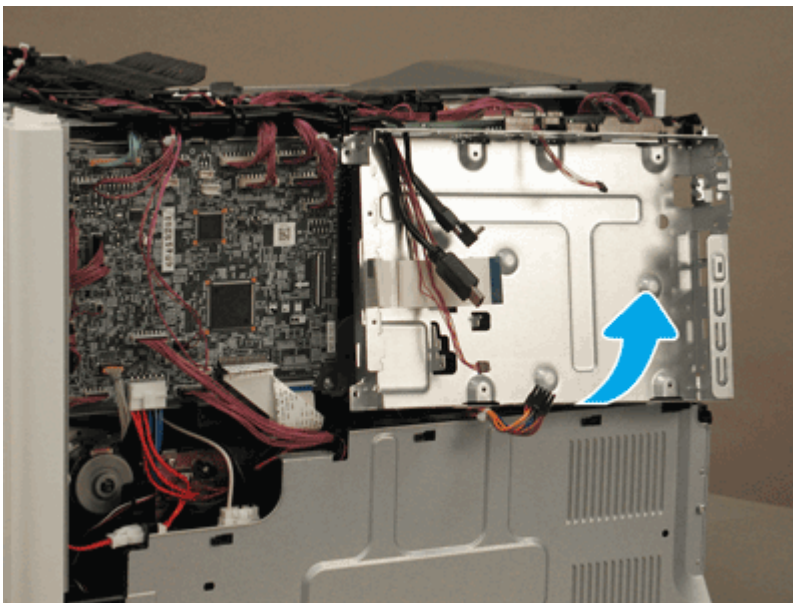
 **NOTE:** These screws are gold tinted to provide additional grounding. Make sure that these screws are reinstalled in the correct locations.

Figure 5-1434 Disconnect one connector and remove four screws



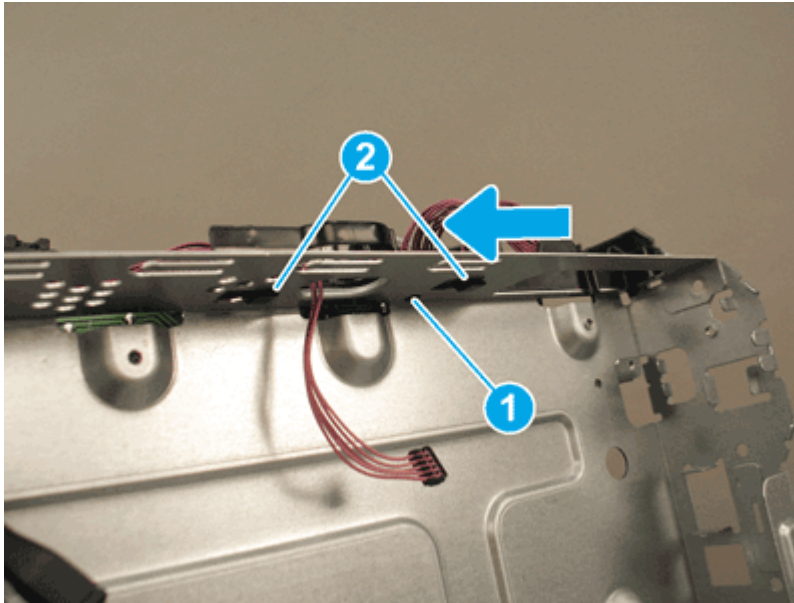
2. Tilt the bottom of the formatter case away from the printer.

Figure 5-1435 Tilt the formatter case



3. Locate one round boss (callout 1) and two hooks (callout 2) on the cable guide. Push up on the boss, and then slide the cable guide to the left to remove it. Remove the formatter case.

Figure 5-1436 Remove the cable guide

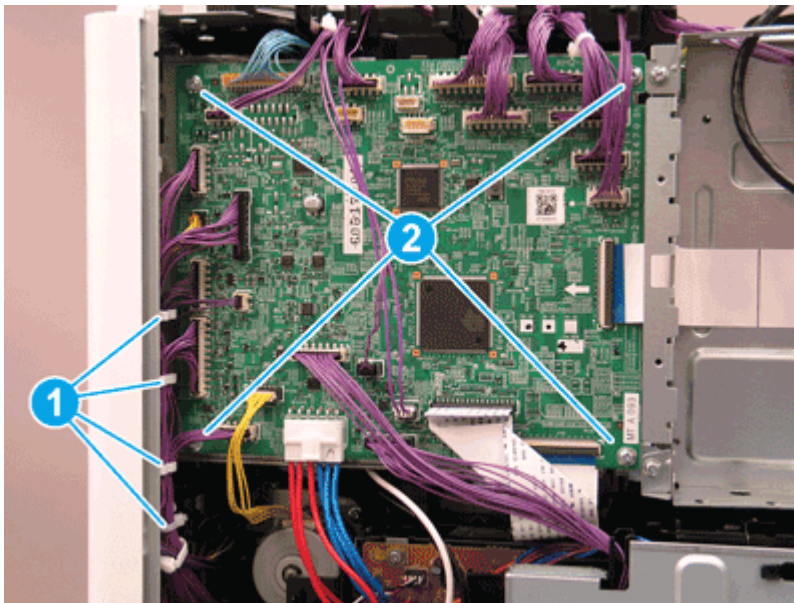


24. Remove the DC controller PCA

Follow these steps to remove the DC controller PCA.

- Release four retainers (callout 1), and then disconnect all connectors on the DC controller PCA. Remove four screws (callout 2), and then remove the DC controller PCA.

Figure 5-1437 Remove the DC controller PCA

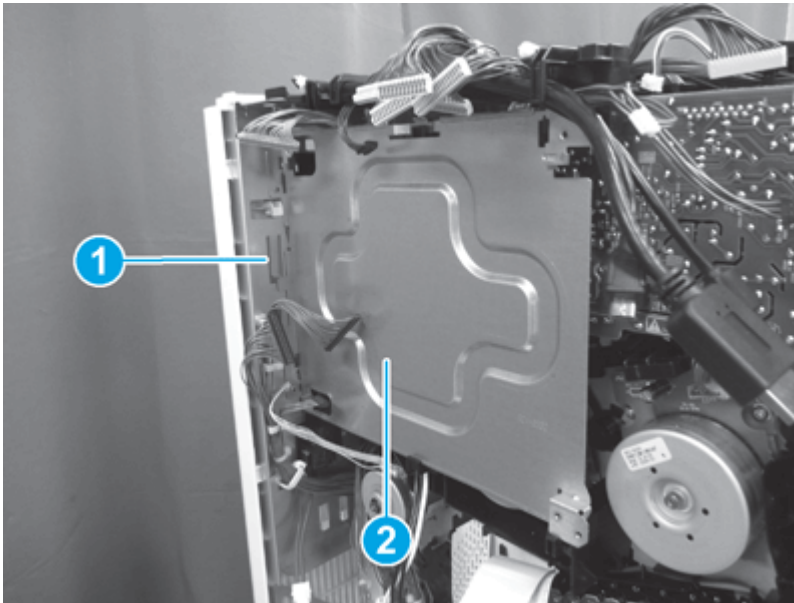


25. Remove the DC controller stay

Follow these steps to remove the DC controller stay.

- Gently push out on the sheet metal tab (callout 1) to release the DC controller stay (callout 2), and then lift up to remove it.

Figure 5-1438 Remove the DC controller stay

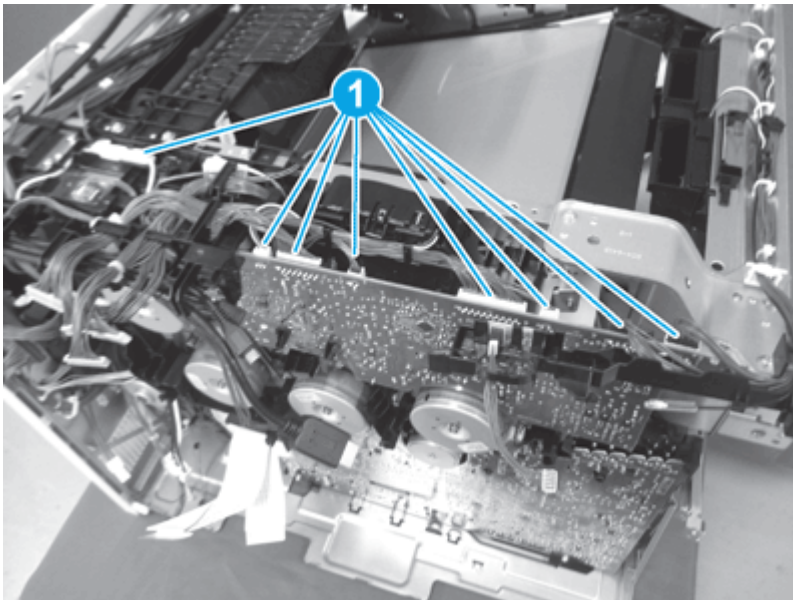


26. Remove the upper high-voltage power supply (HVPS)

Follow these steps to remove the upper high-voltage power supply (HVPS).

1. Disconnect eight connectors (callout 1).

Figure 5-1439 Disconnect eight connectors



2. Release the cable (callout 1) from the retainer (callout 2). Remove one screw (callout 3), release five tabs (callout 4), and then remove the upper HVPS (callout 5).


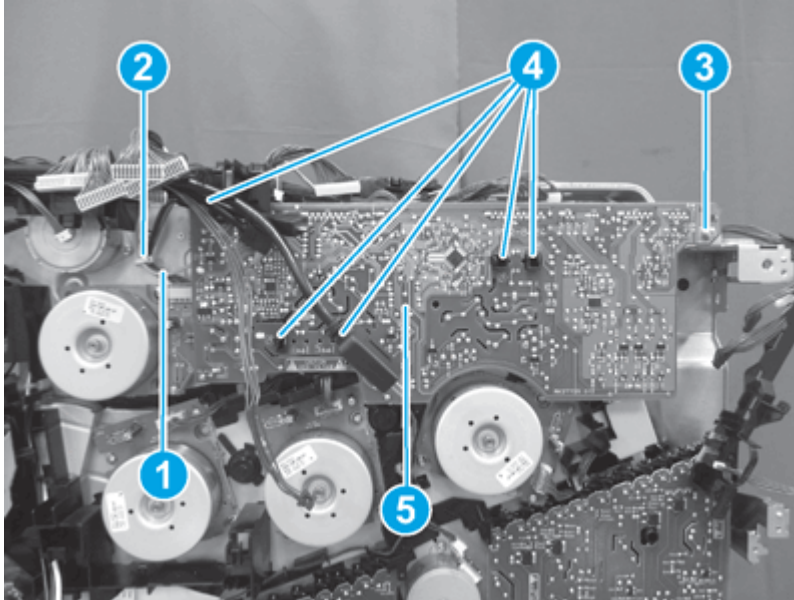
 **TIP:** The screw (callout 3) is a grounding screw with a washer attached. Make sure that this screw and washer are installed in the correct position.

Figure 5-1440 Remove the upper HVPS

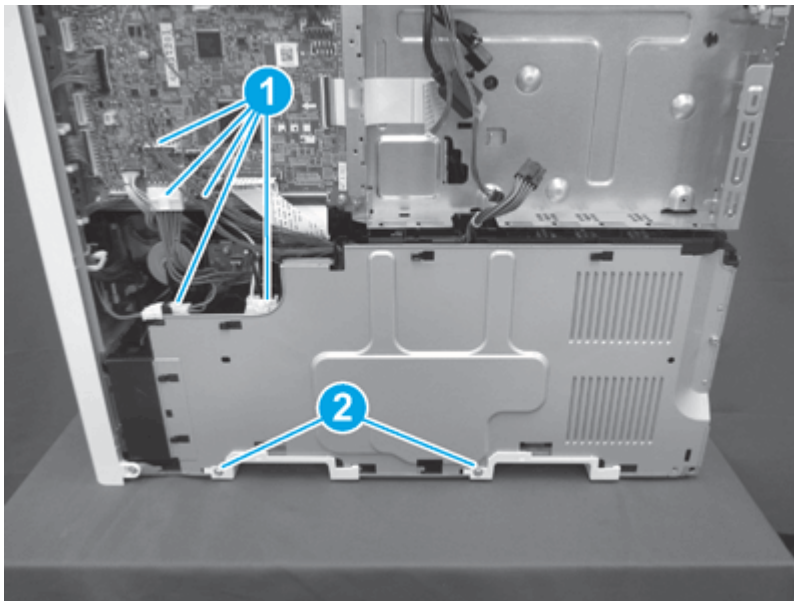


27. Remove the low-voltage power supply (LVPS) and fan

Follow these steps to remove the low-voltage power supply (LVPS) and fan.

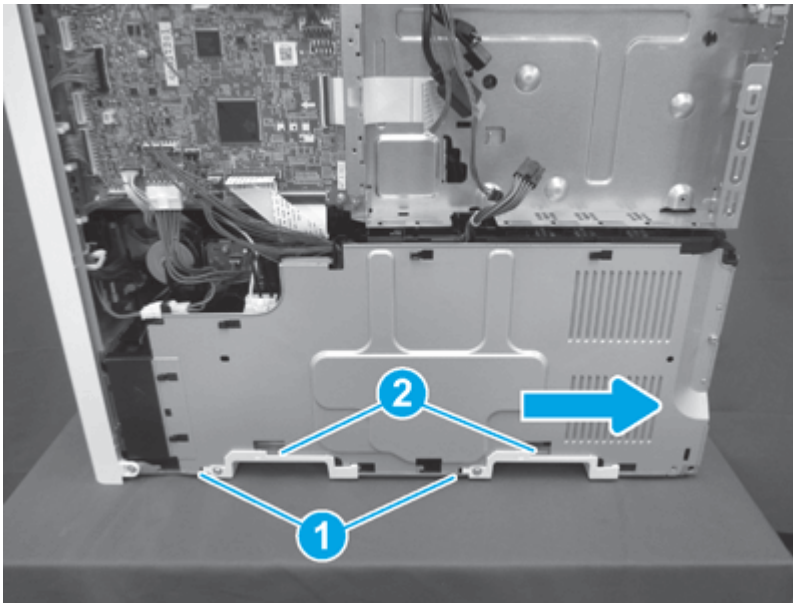
1. Disconnect five connectors (callout 1), and then remove two screws (callout 2).

Figure 5-1441 Disconnect five connectors and remove two screws



2. Release two tabs (callout 1), and then slide two handles (callout 2) to the right to remove them.

Figure 5-1442 Remove two handles



3. Remove two screws (callout 1). Remove the low-voltage power supply (callout 2) together with the power supply fan (callout 3) and the low-voltage power supply cover (callout 4).


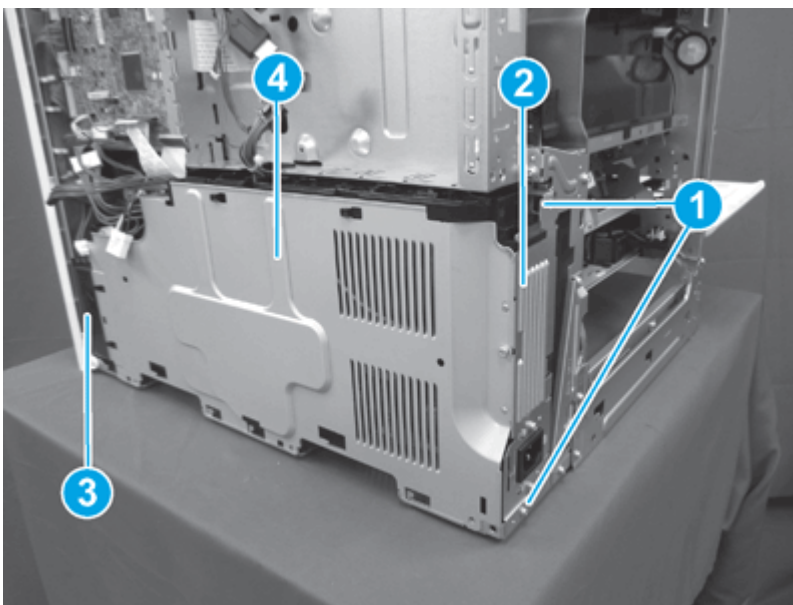
 **NOTE:** The upper screw is recessed inside the printer just above the upper right corner of the LVPS. The lower screw is located between the locator pins at the bottom of the assembly.

Figure 5-1443 Remove the low-voltage power supply

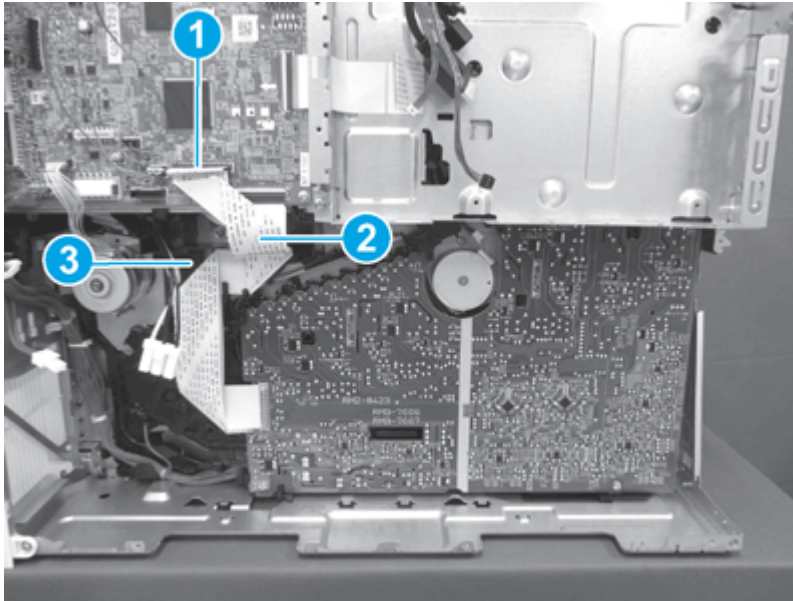


28. Remove the lower high voltage power supply (HVPS)

Follow these steps to remove the lower high voltage power supply (HVPS).

1. Disconnect one connector (callout 1), and then remove the flat cable (callout 2) from the cable guide (callout 3).

Figure 5-1444 Disconnect one connector

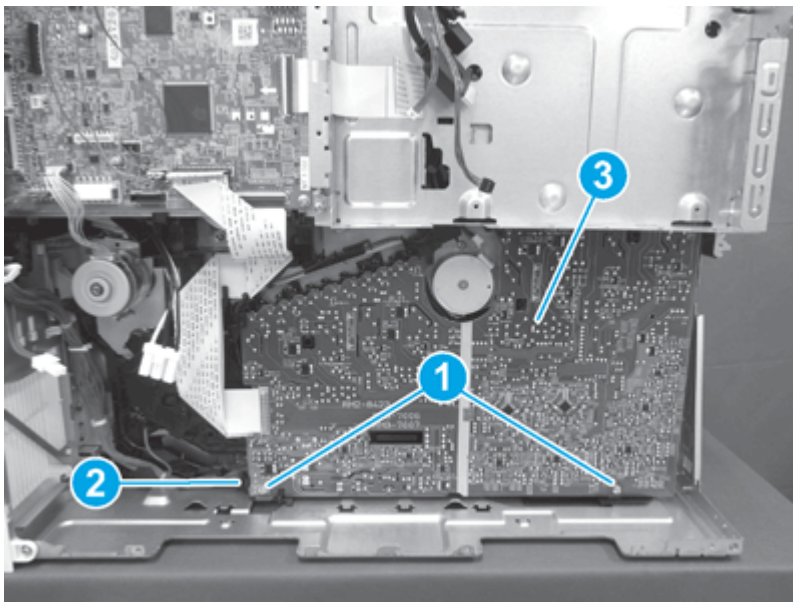


2. Remove two screws (callout 1), release one tab (callout 2), and then remove the lower HVPS (callout 3).



NOTE: These screws have washers attached. Make sure that they are reinstalled in the lower HVPS board.

Figure 5-1445 Remove two screws and release one tab

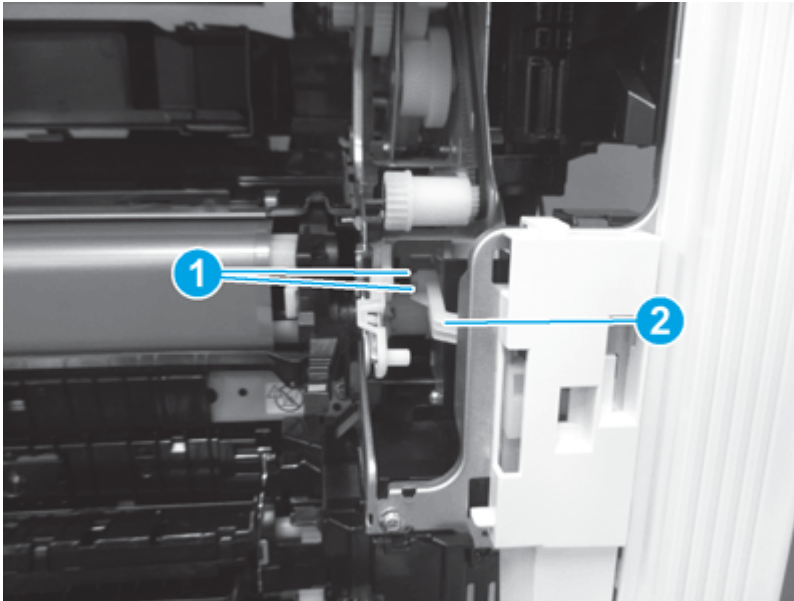


29. Remove the main drive assembly

Follow these steps to remove the main drive assembly.

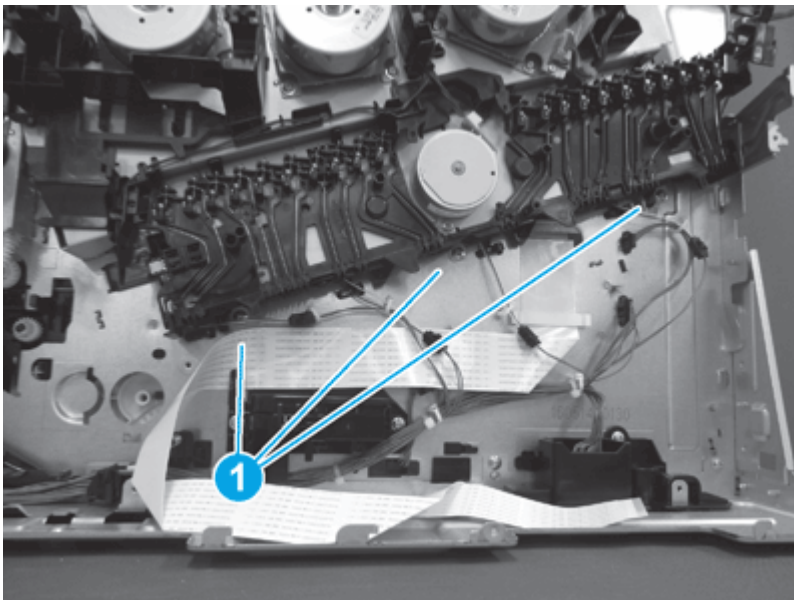
1. Release two tabs (callout 1), and then remove the link arm (callout 2).

Figure 5-1446 Remove the link arm



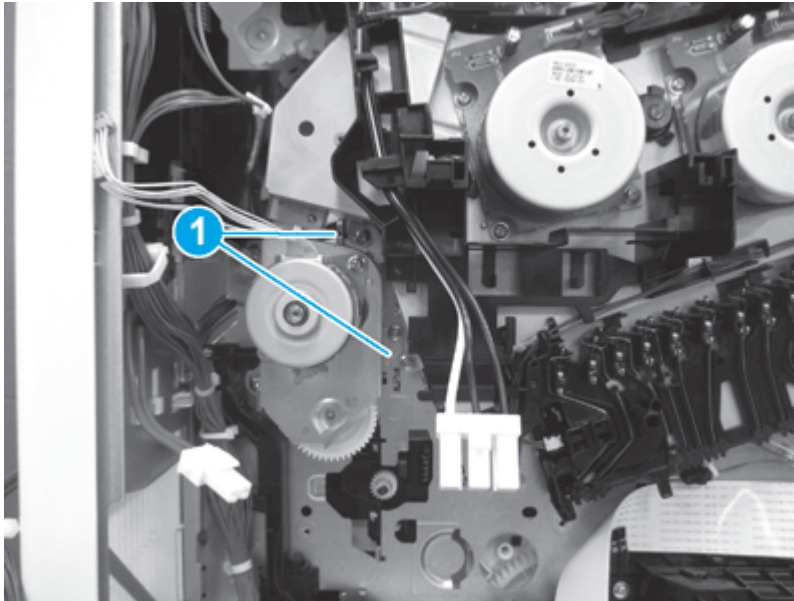
2. Remove three screws (callout 1).

Figure 5-1447 Remove three screws



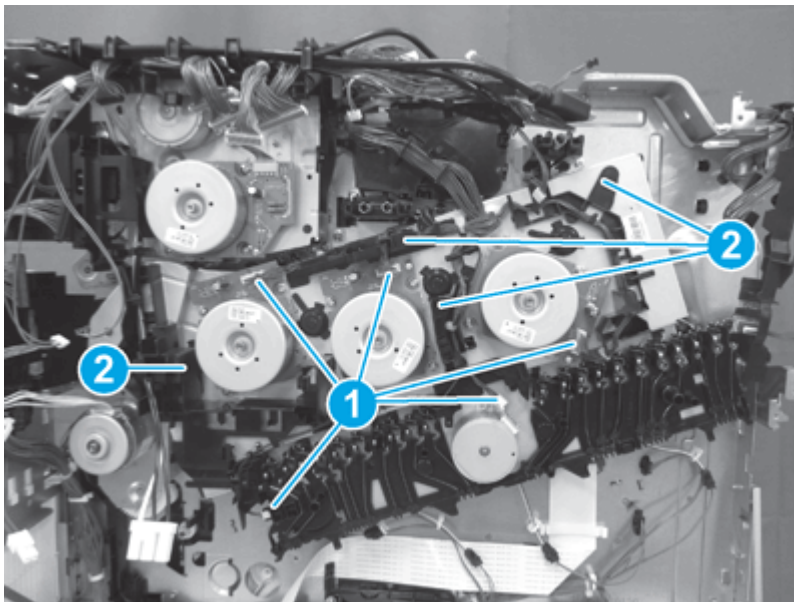
3. Remove two screws (callout 1).

Figure 5-1448 Remove two screws



4. Disconnect five connectors (callout 1), and then release all cables from the cable guides (callout 2).

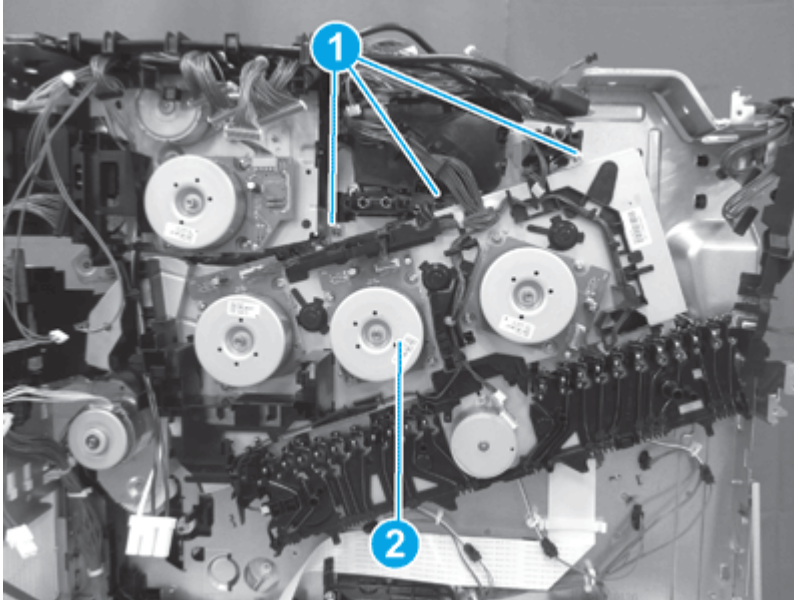
Figure 5-1449 Disconnect five connectors and release cables



5. Remove three screws (callout 1), and then lift the main drive assembly (callout 2) slightly away from the printer.

CAUTION: Do not completely remove the main drive assembly. It is still connected to the printer.

Figure 5-1450 Remove three screws

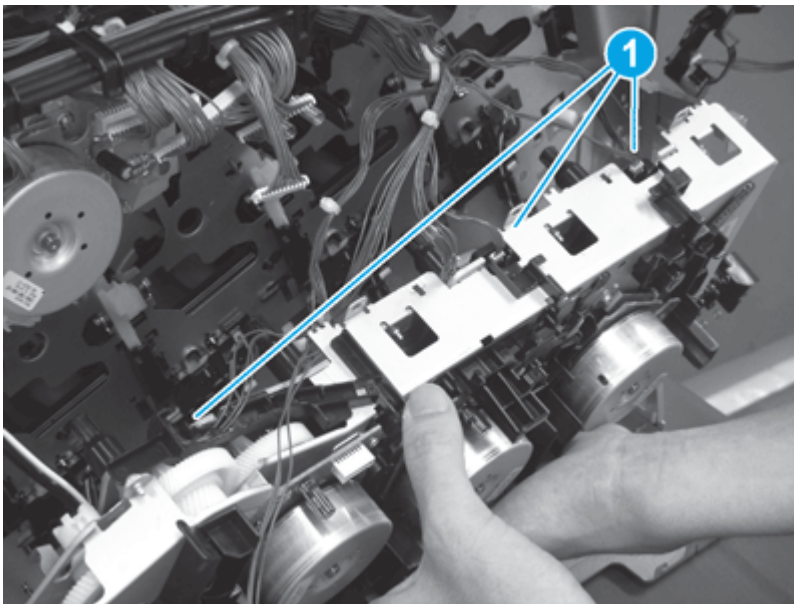


6. Disconnect three connectors (callout 1), and then remove the main drive assembly.

⚠ CAUTION: Use care when disconnecting the connector on the left side. It is attached to a small, square retainer that fits loosely in the main drive assembly. This retainer can easily be dislodged when the cable is disconnected. If the retainer becomes dislodged, reinstall it in the main drive assembly.

💡 TIP: Before reinstalling the main drive assembly, don't forget to connect the three cables running through the cable harness on the front to the three connectors on the back.

Figure 5-1451 Disconnect three connectors



30. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

31. Reverse the removal steps to install the assembly

Also use the following **special installation instructions**.

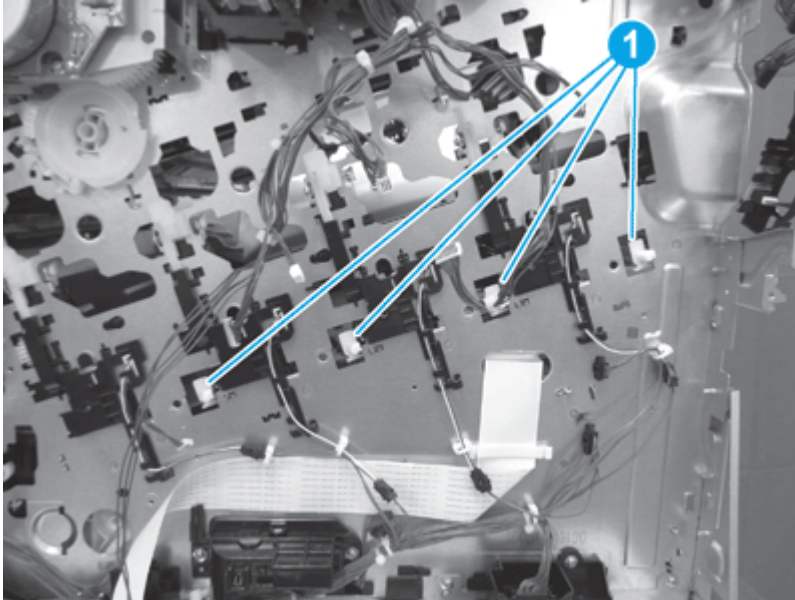
Main drive assembly

- When reinstalling the main drive assembly, make sure that the four alienation levers (callout 1) are positioned on the right side of the sheet metal openings. If these levers are not positioned as shown, it is not possible to install the main drive assembly.



NOTE: Continue to reverse the removal steps to finish installing the assembly.

Figure 5-1452 Alienation lever positions



DC controller PCA

- Two cables (callout 1) will fit in more than one connector. Make sure that these cables are installed in the correct connectors.


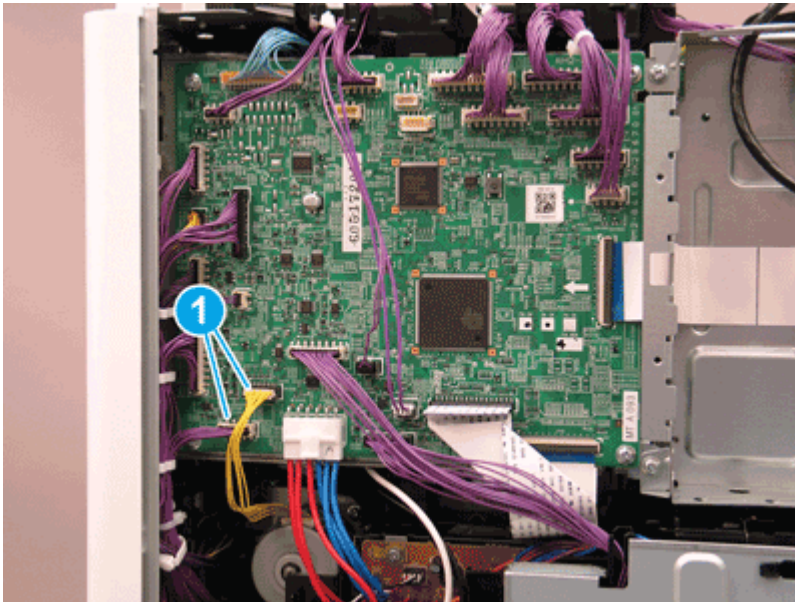
 **NOTE:** Continue to reverse the removal steps to finish installing the assembly.

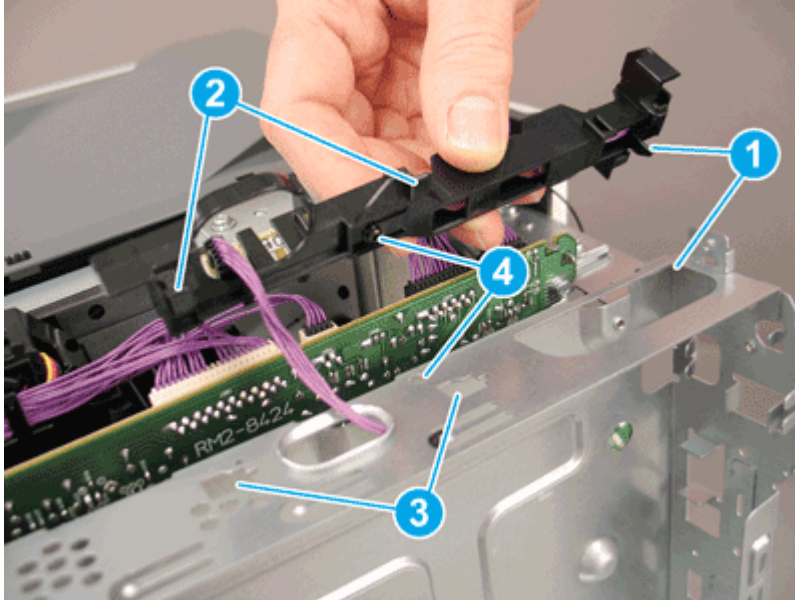
Figure 5-1453 Check the yellow cable



Formatter case

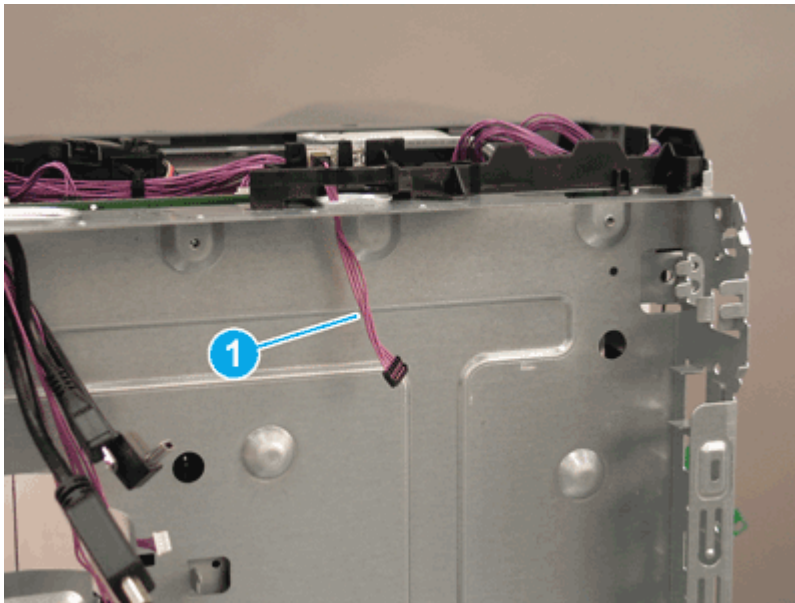
1. Align the hook on the right side of the cable guide with the slot in the formatter case (callout 1). Align two tabs (callout 2) with the slots (callout 3) in the top of the formatter case. Align the boss with the opening in the sheet metal (callout 4). Slide the cable guide to the right to lock it into position.

Figure 5-1454 Install the cable guide



2. Make sure that the island of data (IOD) cable (callout 1) is routed through the formatter case.

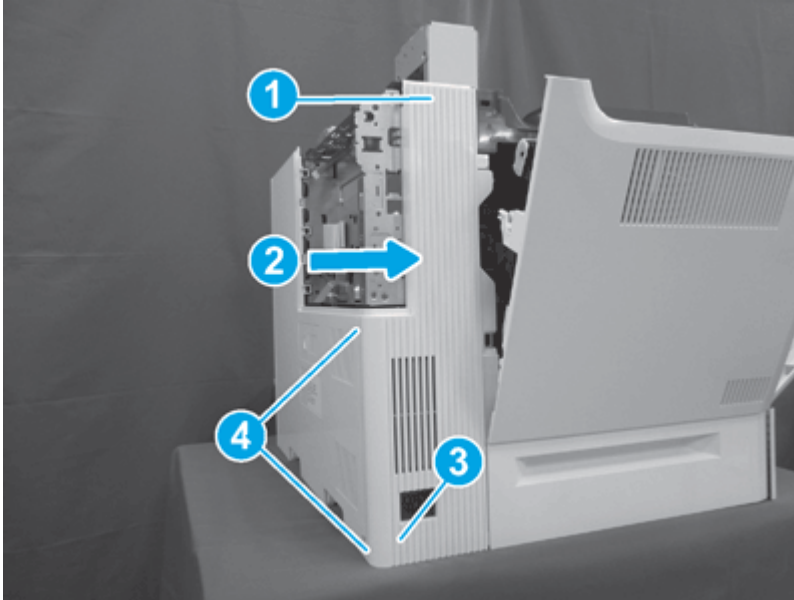
Figure 5-1455 Check the IOD cable



Left rear cover

- Position the top of the cover (callout 1) first, and then slide the cover to the right (callout 2). Push the left lower corner (callout 3) toward the rear of the printer to engage two tabs (callout 4) in the slots on the rear cover.

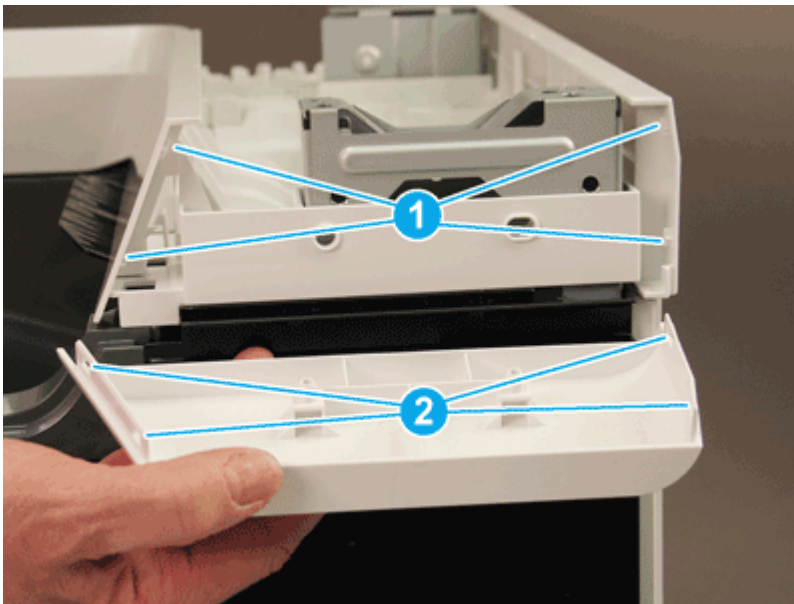
Figure 5-1456 Install the left rear cover



Face-down front cover

- When reinstalling the cover, position the tabs (callout 1) on the printer into the slots (callout 2) on the cover.

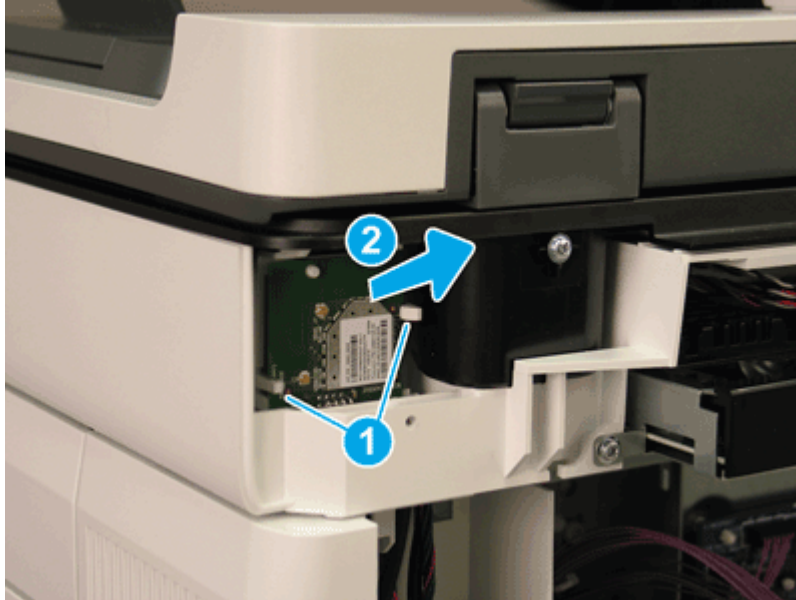
Figure 5-1457 Install the cover



Document feeder and image scanner

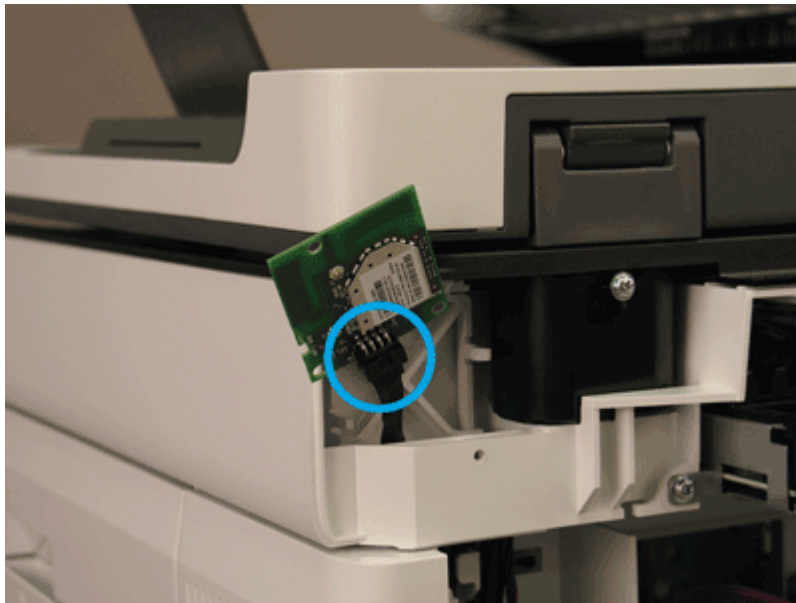
1. **Flow M682z only**: When reconnecting the wireless card cable, do the following:
 - a. Release two tabs (callout 1), and then remove the wireless card (callout 2).

Figure 5-1458 Remove the wireless card



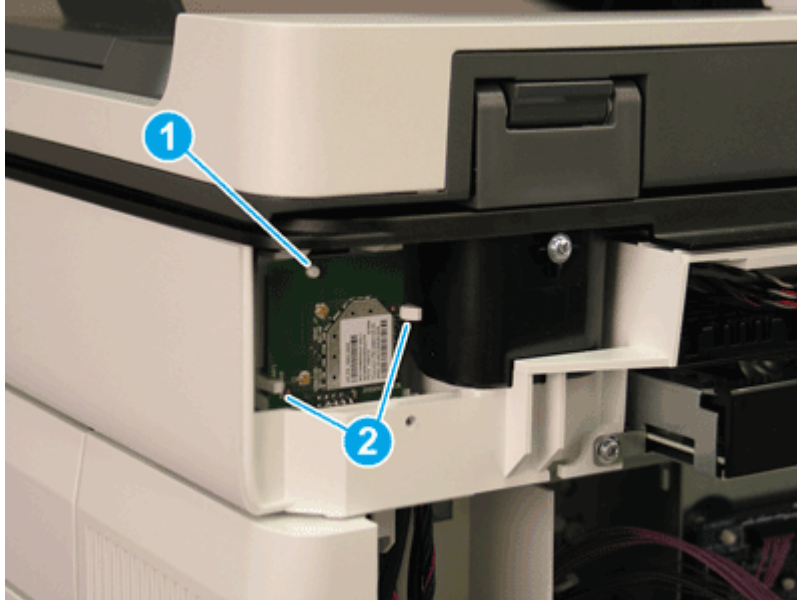
- b. Connect the cable to the wireless card (callout 1).

Figure 5-1459 Connect the wireless card connector



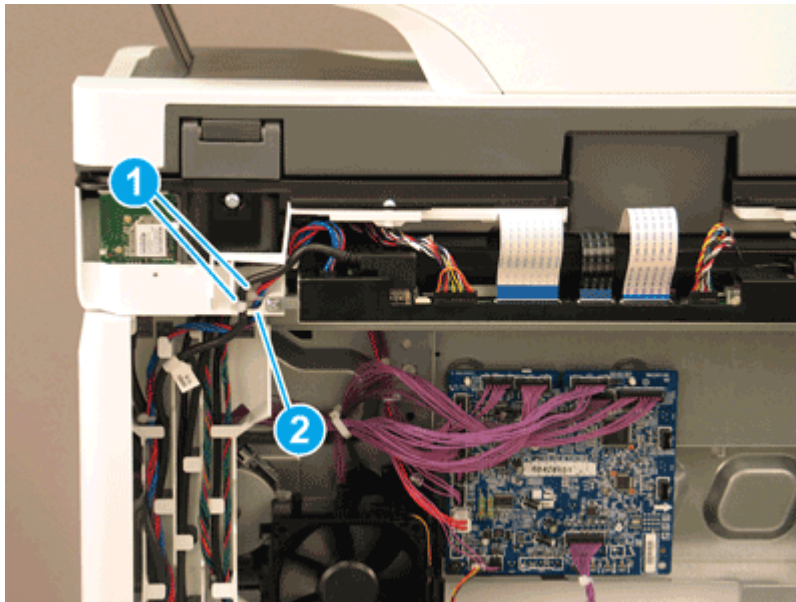
- c. Reinstall the wireless card. Make sure that the hole in the card is positioned over the peg (callout 1), and that the card is under the two tabs (callout 2).


Figure 5-1460 Reinstall the wireless card



2. When reinstalling the SCB cables, make sure that the wire retainers (callout 1) on the cables are positioned above the plastic guide (callout 2).

Figure 5-1461 Install the SCB cables



 **NOTE:** Continue to reverse the removal steps to finish installing the assembly.

Removal and replacement: Fuser motor

Learn how to remove and replace fuser motor.

Mean time to repair: 45 minutes

Service level: Advanced



IMPORTANT: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Disconnect the power cable.

⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-75 Part Information

Part number	Part description
RM21955-000CN	Fuser motor

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Make sure that the printer initializes to a **Ready** state.

Print a configuration page to make sure that the printer is functioning correctly.

1. Remove the formatter cover

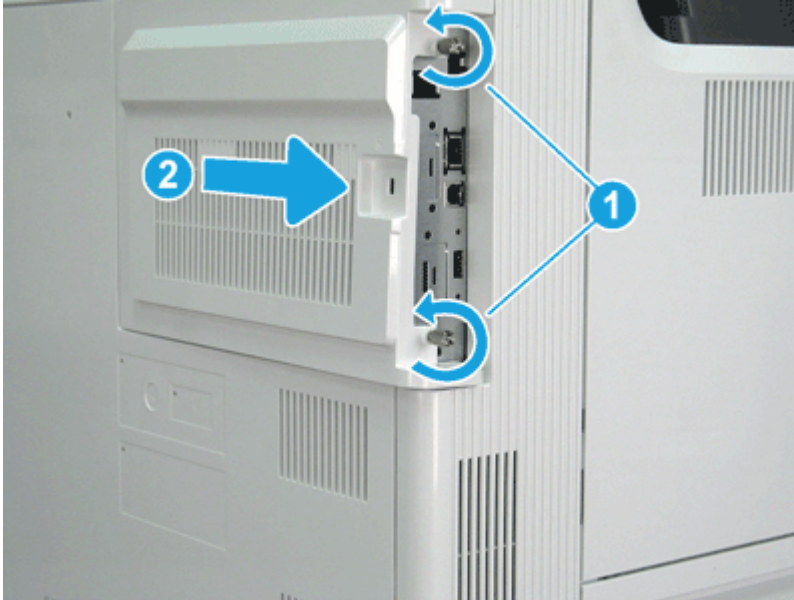
Follow these steps to remove the formatter cover.

- Unscrew two thumbscrews (callout 1), and then slide the formatter cover (callout 2) away from the printer to remove it.



TIP: Reverse the removal steps to install the assembly.

Figure 5-1462 Remove the formatter cover

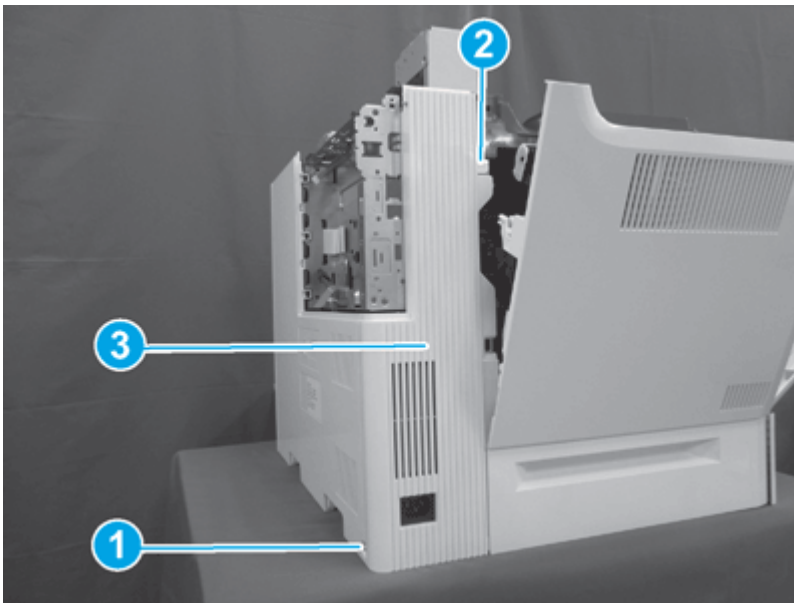


2. Remove the left rear cover

Follow these steps to remove the left rear cover.

- Open the left door. Remove one screw (callout 1), release one boss (callout 2), and then remove the left rear cover (callout 3).

Figure 5-1463 Remove the left rear cover



3. Remove the rear cover

Follow these steps to remove the rear cover.

- Remove two screws (callout 1), and then slide the rear cover (callout 2) to the right to remove it.


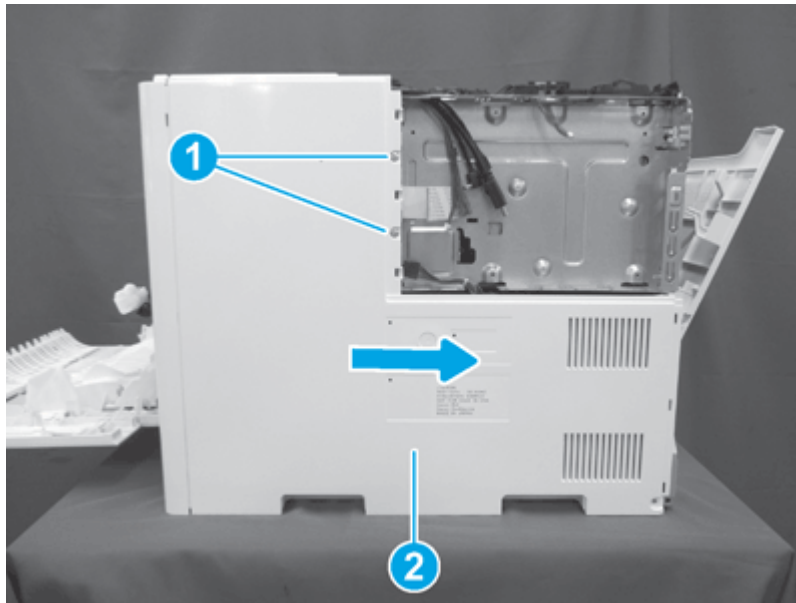

 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1464 Remove two screws and the rear cover



4. Remove the fax PCA (M681f/Flow M681f/Flow M681z/Flow M682z)

Follow these steps to remove the fax PCA (M681f/Flow M681f/Flow M681z/Flow M682z).

 **NOTE:** This step is for the M681/M682/E67550/E67560/E67650/E67660 printers. For the M652/M653/E65050/E65060/E65150/E65160 printers, skip this step.

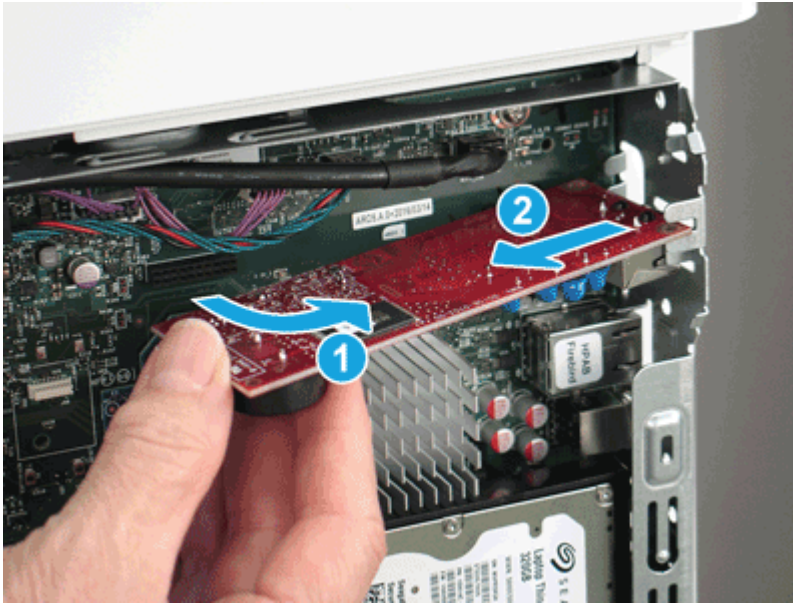
1. Locate the fax PCA on the formatter.

Figure 5-1465 Locate the fax PCA



2. Rotate end left end of the fax PCA away from the formatter (callout 1) to disconnect the connector, and then slide the card away from the formatter (callout 2) to remove it.

Figure 5-1466 Remove the fax PCA

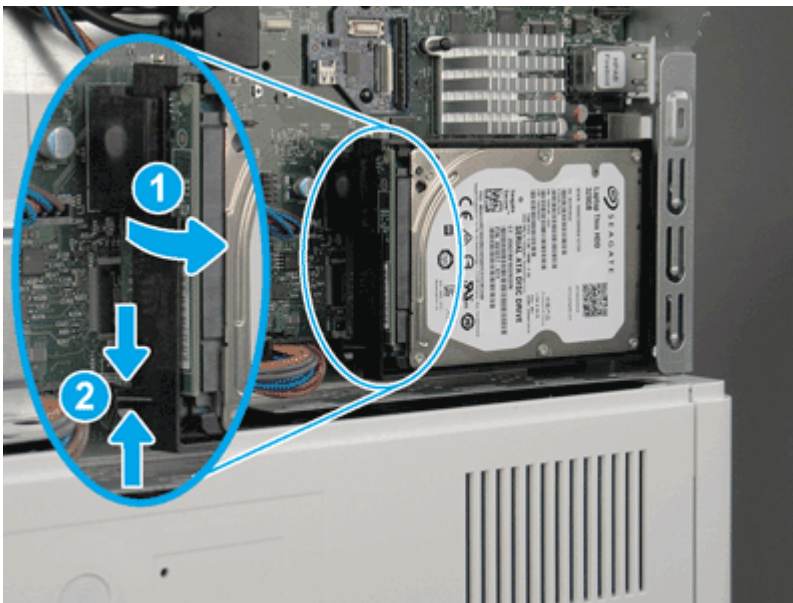


5. Remove the hard disk drive (HDD; M653dh/M681/M682/E67550/E67560/E67650/E67660)

Follow these steps to remove the hard disk drive (HDD; M653dh/M681/M682/E67550/E67560/E67650/E67660).

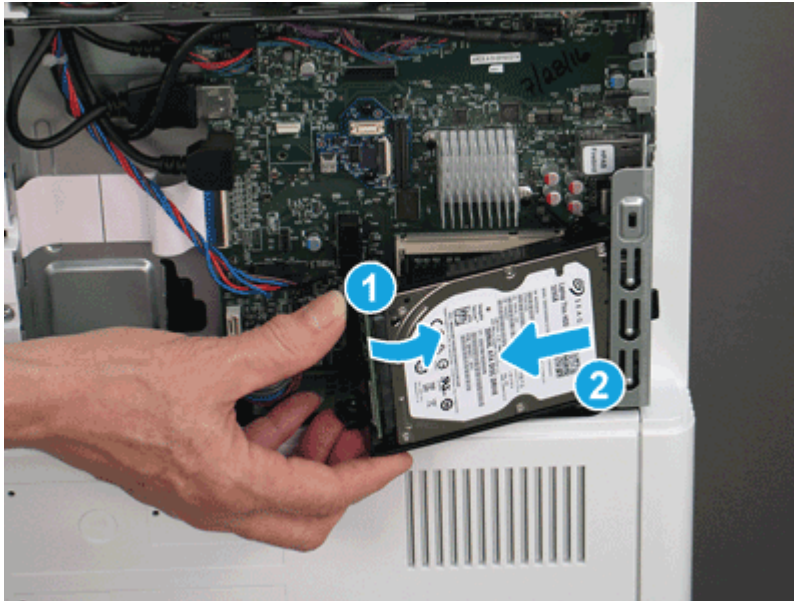
1. Release the locking connector (callout 1), and then pinch the retainer (callout 2) to release it.

Figure 5-1467 Release the HDD



2. Rotate the connector end of the HDD out and away from the formatter (callout 1), and then slide it to the left (callout 2) to remove it.

Figure 5-1468 Remove the HDD

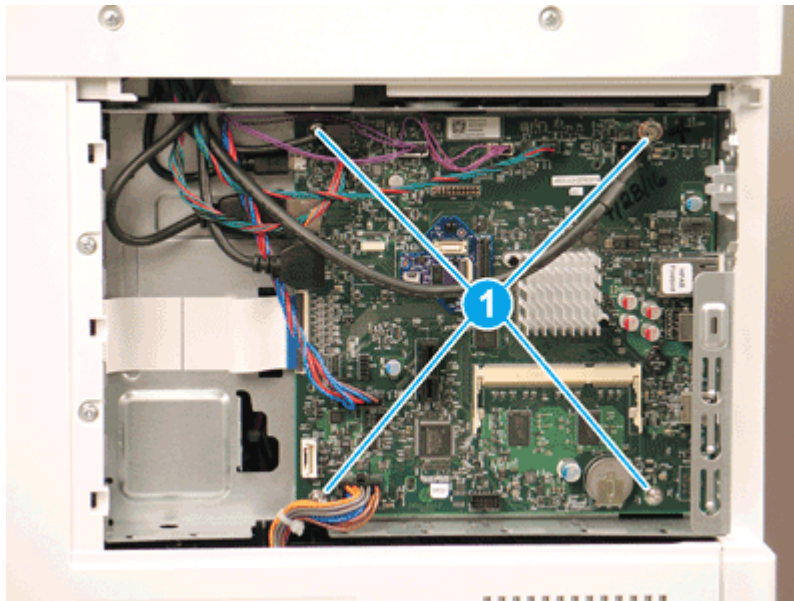


6. Remove the formatter

Follow these steps to remove the formatter.

- Disconnect all of the connectors on the formatter, remove four screws, and then remove the formatter.

Figure 5-1469 Remove the formatter



7. Remove the formatter case

Follow these steps to remove the formatter case.

1. Disconnect one connector (callout 1), remove two screws on the left side of the case (callout 2), and then remove two screws on the right end of the case (callout 3).


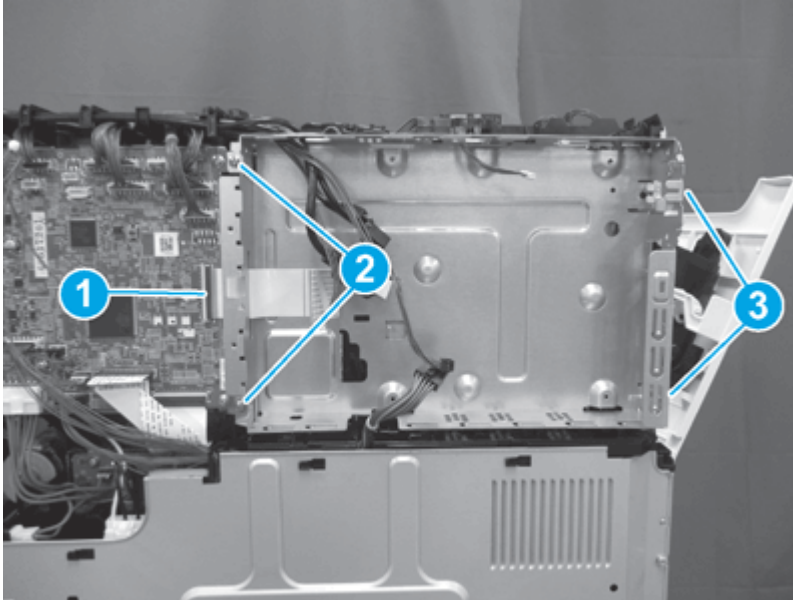
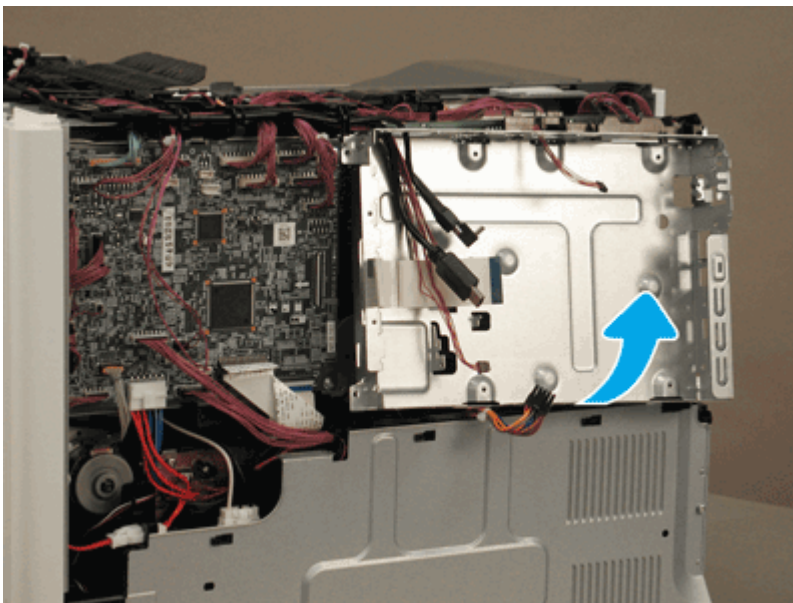
 **NOTE:** These screws are gold tinted to provide additional grounding. Make sure that these screws are reinstalled in the correct locations.

Figure 5-1470 Disconnect one connector and remove four screws



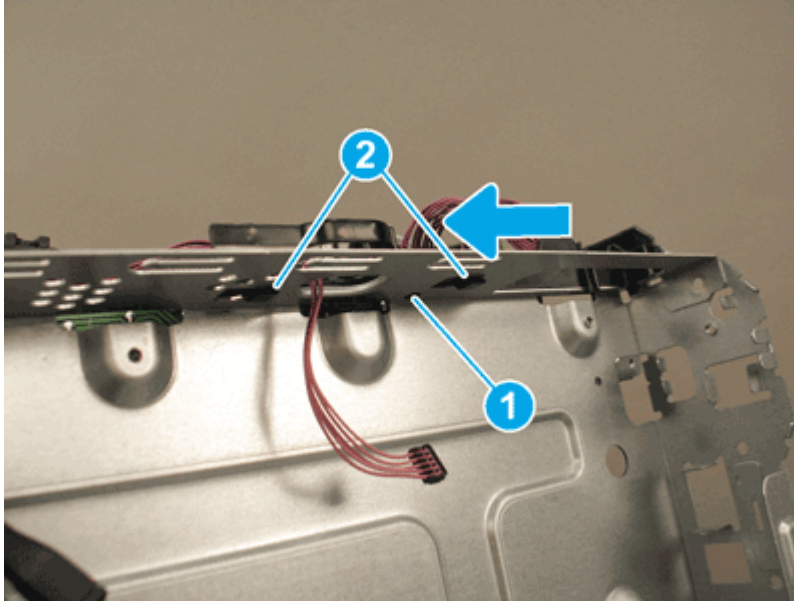
2. Tilt the bottom of the formatter case away from the printer.

Figure 5-1471 Tilt the formatter case



3. Locate one round boss (callout 1) and two hooks (callout 2) on the cable guide. Push up on the boss, and then slide the cable guide to the left to remove it. Remove the formatter case.

Figure 5-1472 Remove the cable guide

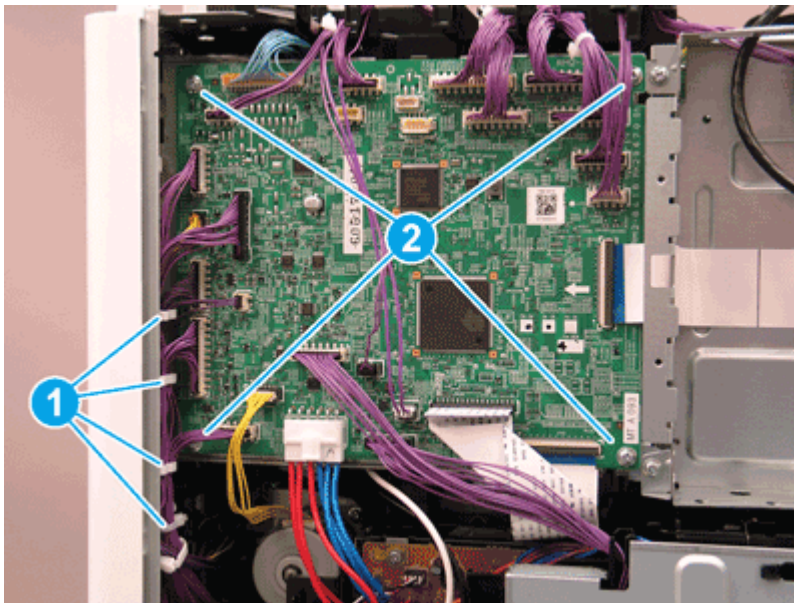


8. Remove the DC controller PCA

Follow these steps to remove the DC controller PCA.

- Release four retainers (callout 1), and then disconnect all connectors on the DC controller PCA. Remove four screws (callout 2), and then remove the DC controller PCA.

Figure 5-1473 Remove the DC controller PCA

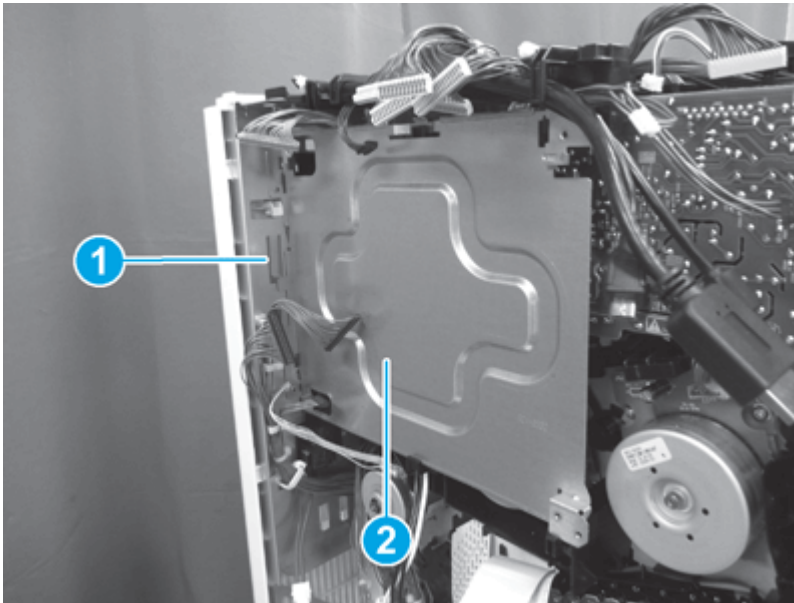


9. Remove the DC controller stay

Follow these steps to remove the DC controller stay.

- Gently push out on the sheet metal tab (callout 1) to release the DC controller stay (callout 2), and then lift up to remove it.

Figure 5-1474 Remove the DC controller stay

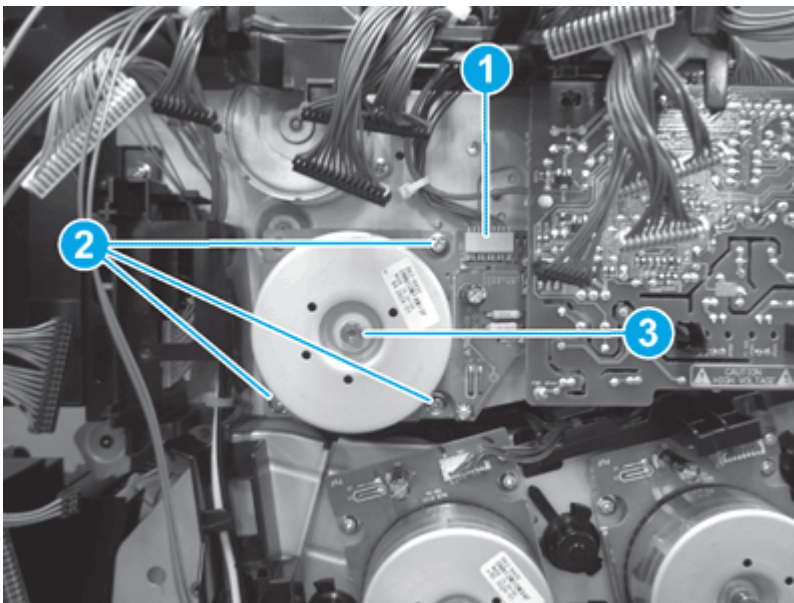


10. Remove the fuser motor

Follow these steps to remove the fuser motor.

- Disconnect one connector (callout 1), remove three screws (callout 2), and then remove the fuser motor (callout 3).

Figure 5-1475 Remove the fuser motor



11. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

12. Reverse the removal steps to install the assembly

Also use the following **special installation instructions**.

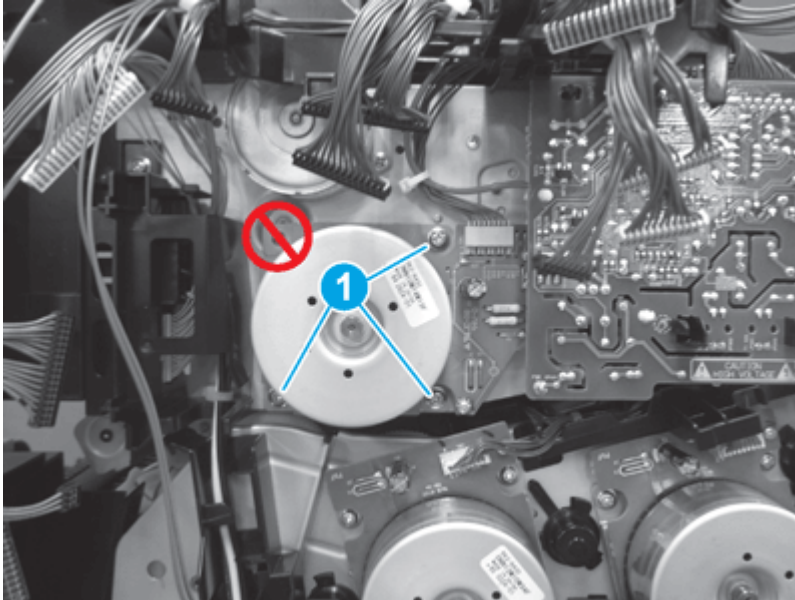
Fuser motor

- Reinstall the screws in the correct locations (callout 1). Do not install a screw in the hole in the upper left corner



NOTE: Continue to reverse the removal steps to finish installing the assembly.

Figure 5-1476 Reinstall the screws



DC controller PCA

- Two cables (callout 1) will fit in more than one connector. Make sure that these cables are installed in the correct connectors.


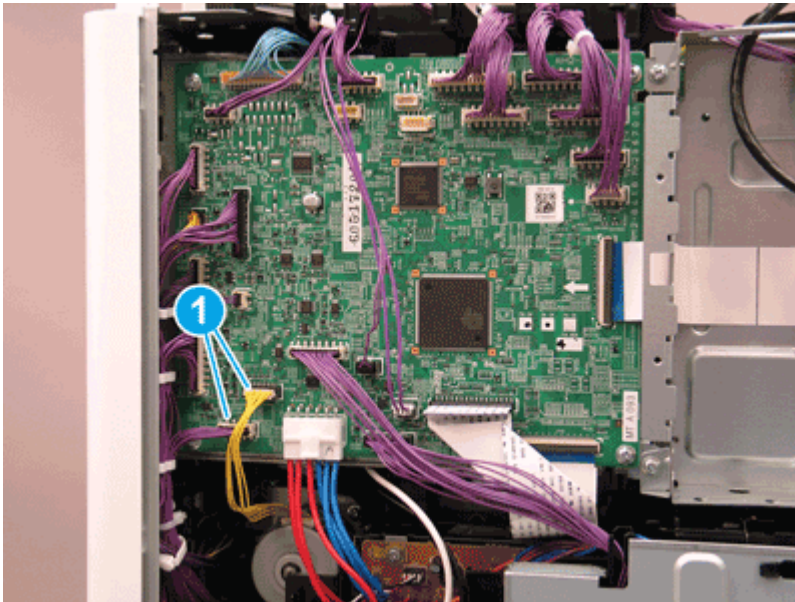
 **NOTE:** Continue to reverse the removal steps to finish installing the assembly.

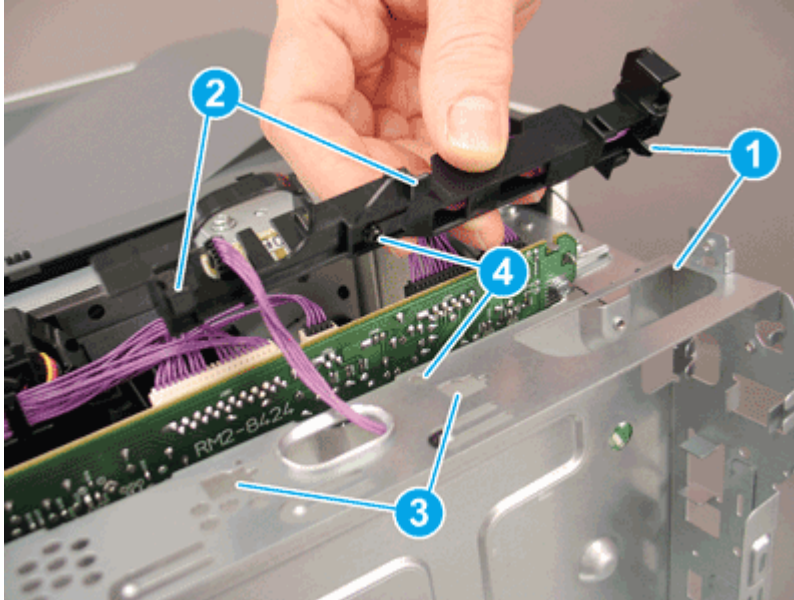
Figure 5-1477 Check the yellow cable



Formatter case

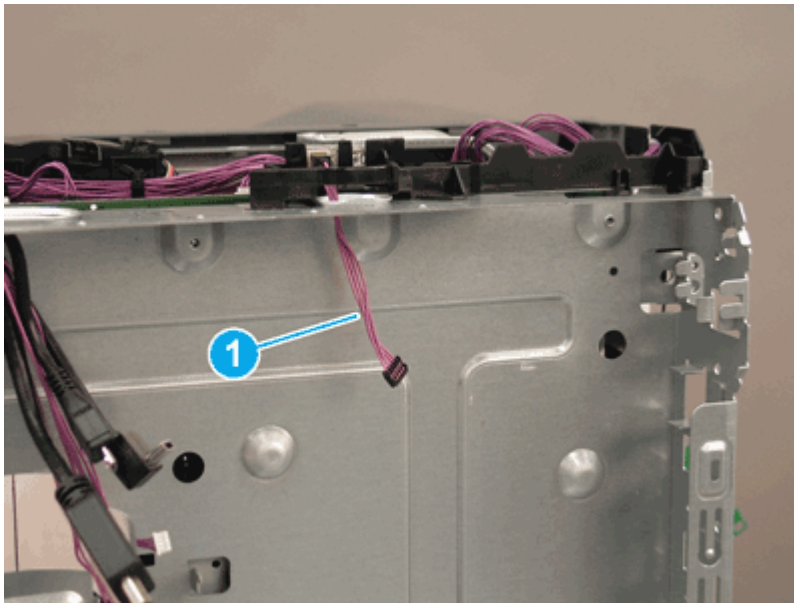
1. Align the hook on the right side of the cable guide with the slot in the formatter case (callout 1). Align two tabs (callout 2) with the slots (callout 3) in the top of the formatter case. Align the boss with the opening in the sheet metal (callout 4). Slide the cable guide to the right to lock it into position.

Figure 5-1478 Install the cable guide



2. Make sure that the island of data (IOD) cable (callout 1) is routed through the formatter case.

Figure 5-1479 Check the IOD cable



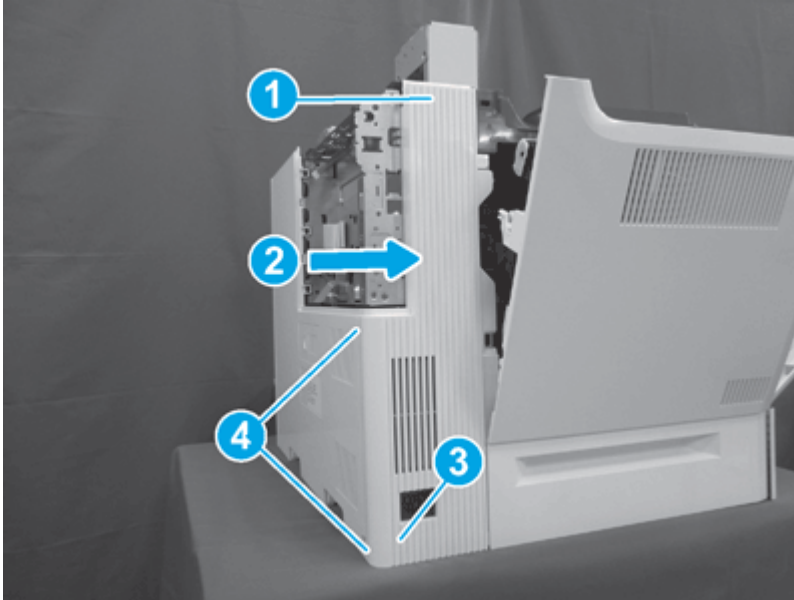
Left rear cover



NOTE: Continue to reverse the removal steps to finish installing the assembly.

- Position the top of the cover (callout 1) first, and then slide the cover to the right (callout 2). Push the left lower corner (callout 3) toward the rear of the printer to engage two tabs (callout 4) in the slots on the rear cover.

Figure 5-1480 Install the left rear cover




Removal and replacement: Fuser drive assembly

Learn how to remove and replace the fuser drive assembly.

 [View a video of how to remove and replace the fuser drive assembly.](#)


Mean time to repair: 45 minutes

Service level: Advanced

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Disconnect the power cable.

 **WARNING!** To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-76 Part information

Part number	Part description
RM2-1934-000CN	Fuser drive assembly

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Make sure that the printer initializes to a **Ready** state.

Print a configuration page to make sure that the printer is functioning correctly.

1. Remove the fuser

Follow these steps to remove the fuser.

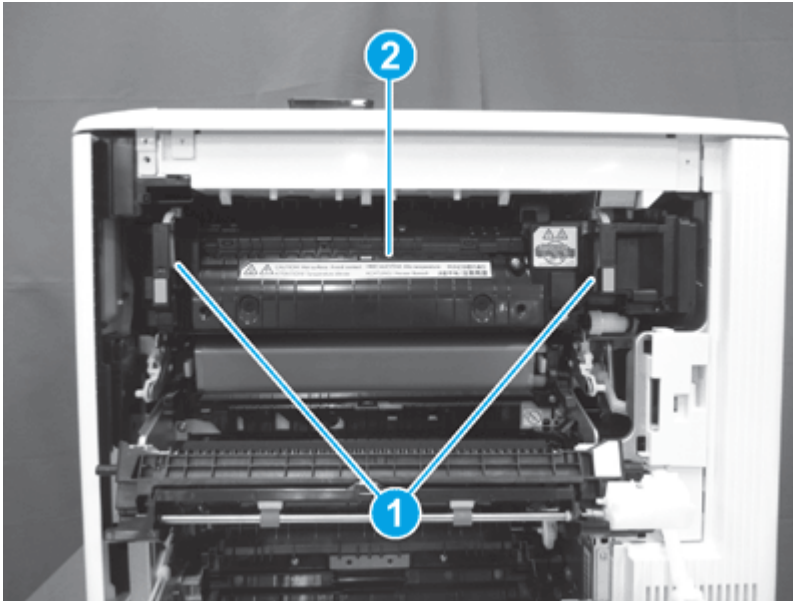
1. Open the right door.

Figure 5-1481 Open the right door



2. Grasp the handles (callout 1), and then pull away from the printer to remove the fuser (callout 2).

Figure 5-1482 Remove the fuser

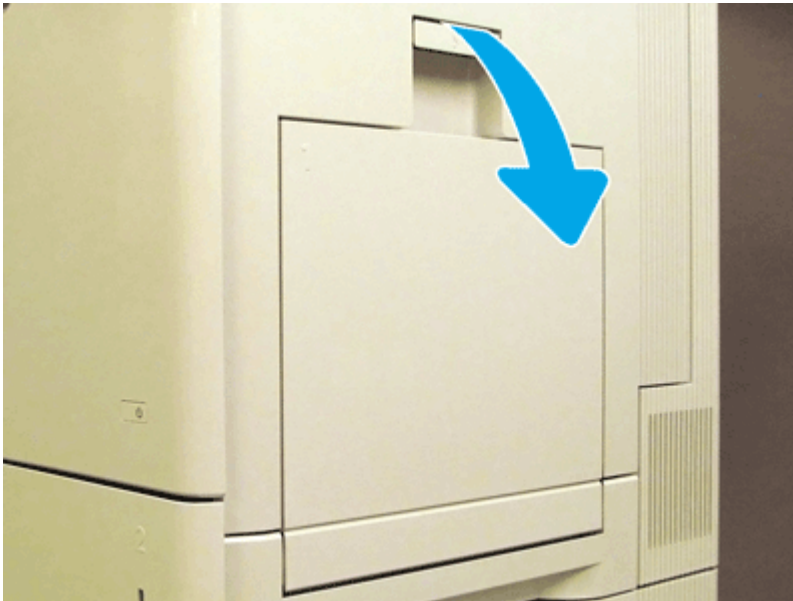


2. Remove the intermediate transfer belt (ITB)

Follow these steps to remove the intermediate transfer belt (ITB).

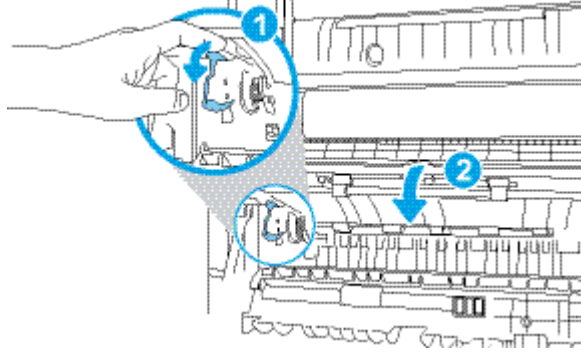
1. Open the right door.

Figure 5-1483 Open the right door



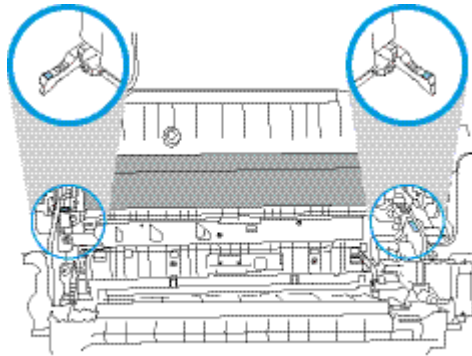
2. Release the blue latch (callout 1), and then lower the transfer assembly (callout 2).

Figure 5-1484 Lower the transfer assembly



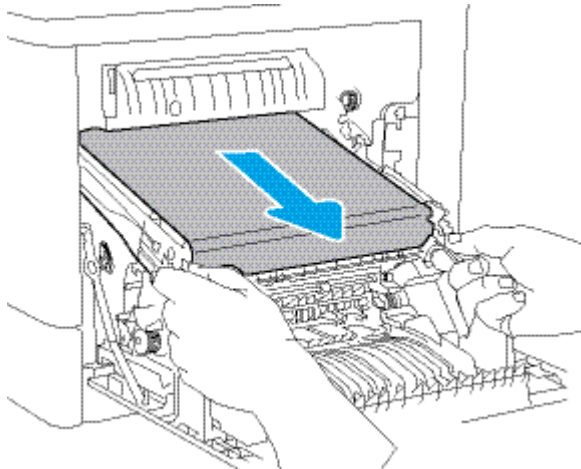
3. Grasp the two blue handles on the ITB.

Figure 5-1485 Grasp the two blue handles



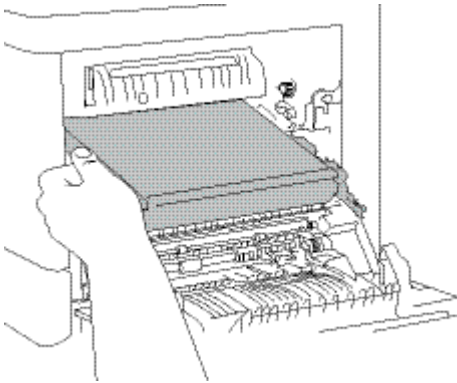
4. Pull the ITB partially out of the printer.

Figure 5-1486 Pull the ITB partially out of the printer



5. Grasp the outside edges of the ITB to support it, and then remove the ITB from the printer.

Figure 5-1487 Remove the ITB



3. Remove the keyboard (MFP)

Follow these steps to remove the keyboard (MFP).

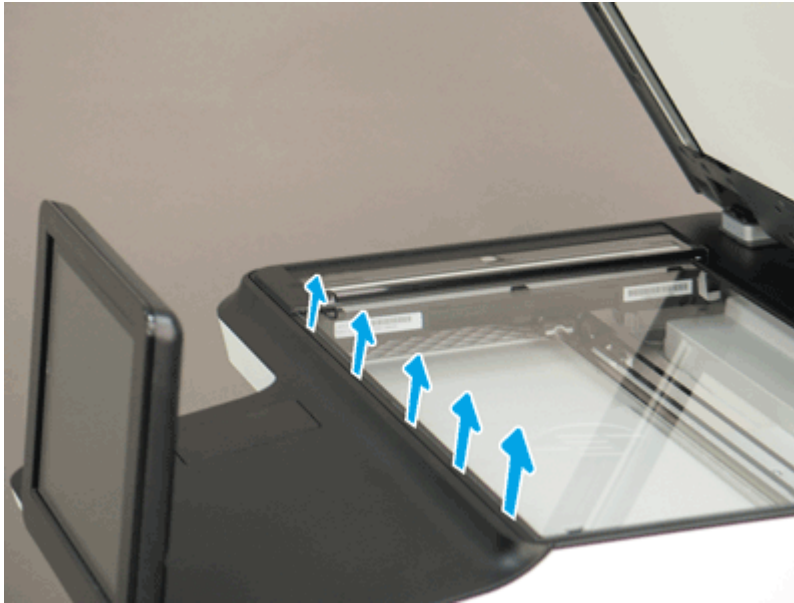
1. If the control panel is not fully tilted forward, tilt it forward now (callout 1) until it stops. Open the document feeder (callout 2).

Figure 5-1488 Tilt the control panel and open the document feeder



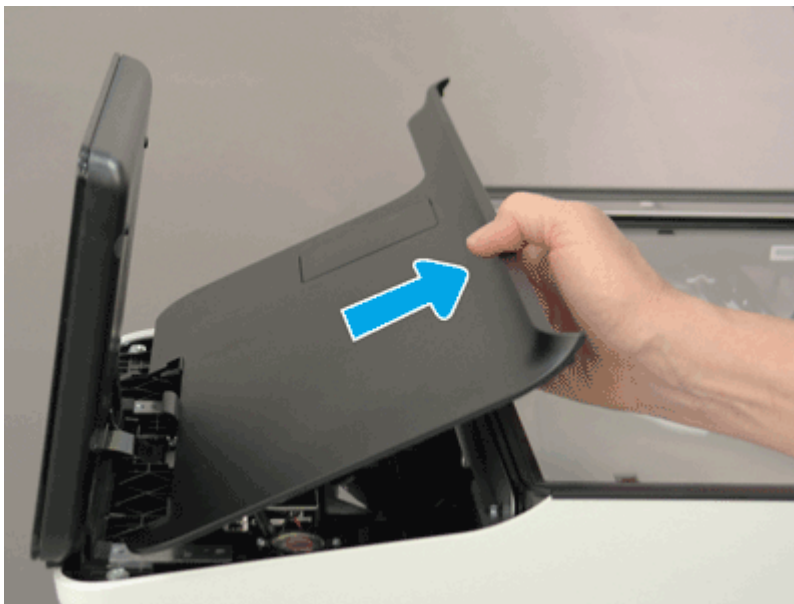
2. Beginning at the right side of the control-panel cover, carefully release five tabs along the top edge of the cover.

Figure 5-1489 Release five tabs



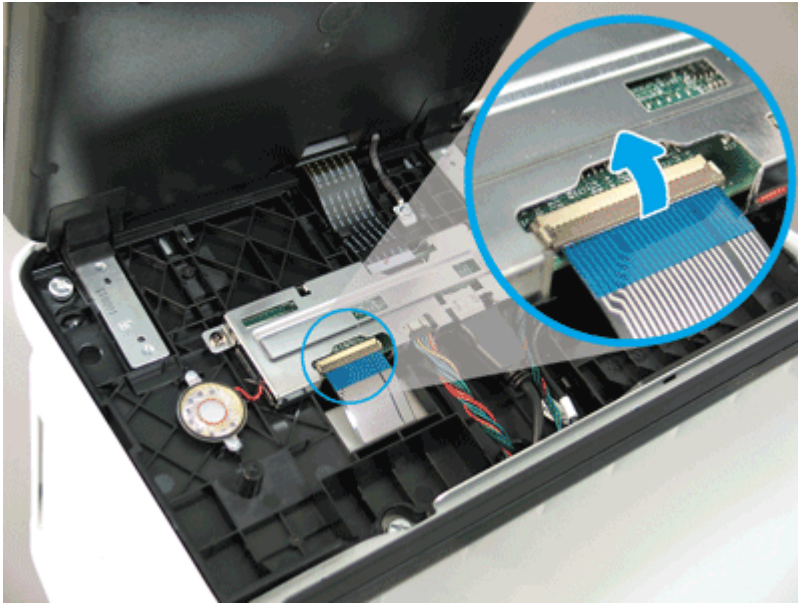
3. Continue to rotate the top edge of the cover away from the printer, and then remove the cover.

Figure 5-1490 Remove the cover



4. Open the connector latch to release the keyboard flat cable.

Figure 5-1491 Disconnect the keyboard flat cable



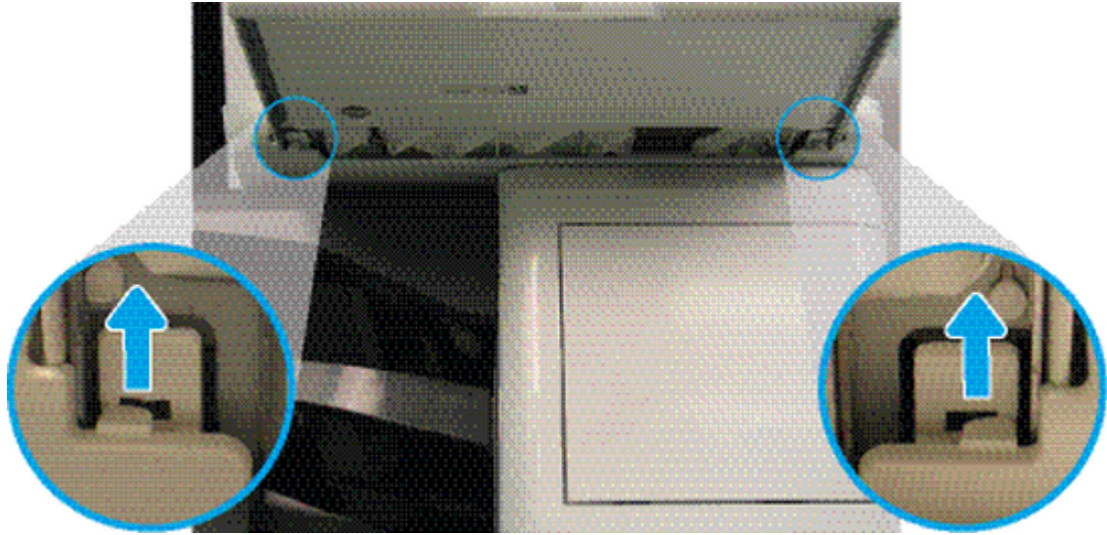
5. Slide the keyboard tray out until it stops.

Figure 5-1492 Slide the keyboard tray out



6. Push up on the keyboard tray to release two tabs on the bottom of the tray, and then slide the tray toward you to disengage the tabs.

Figure 5-1493 Release two tabs




7. Slide the keyboard tray all the way out of the printer to remove it.

Figure 5-1494 Remove the keyboard



4. Remove the control panel (M681/M682/E67550/E67560/E67650/E67660)

Follow these steps to remove the control panel (M681/M682/E67550/E67560/E67650/E67660).

 **NOTE:** This step is for the M681/M682/E67550/E67560/E67650/E67660 printers. For the M652/M653/E65050/E65060/E65150/E65160 printers, skip this step.

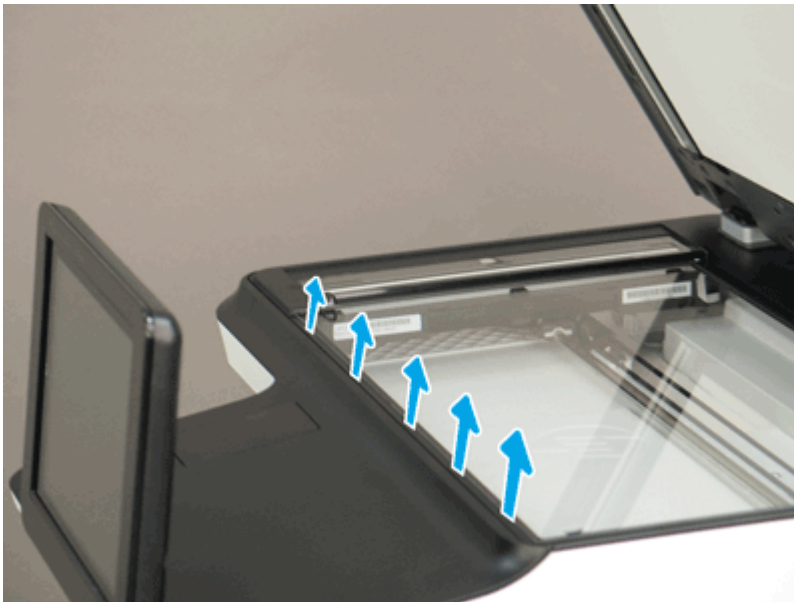
1. Tilt the control panel forward (callout 1), and then open the document feeder (callout 2).

Figure 5-1495 Tilt the control panel forward and open the document feeder



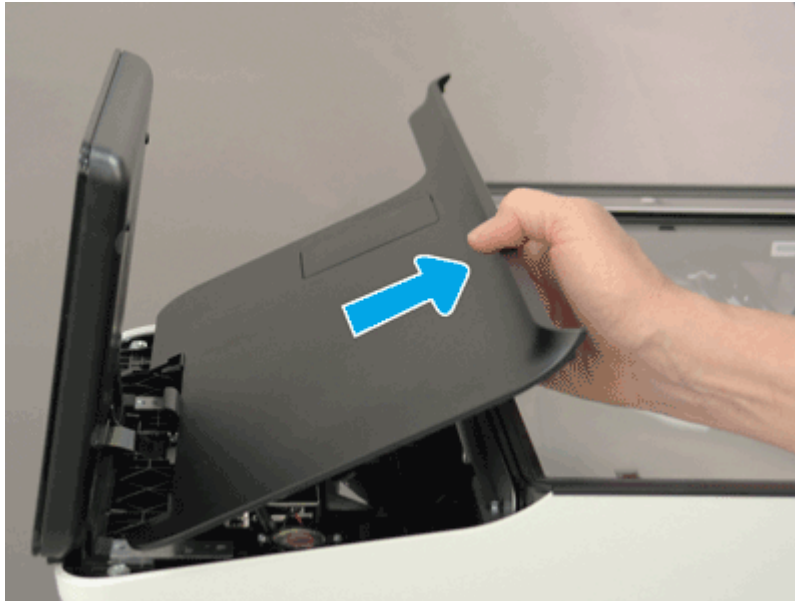
2. Beginning at the right side of the control-panel cover, carefully release five tabs along the top edge of the cover.

Figure 5-1496 Release five tabs



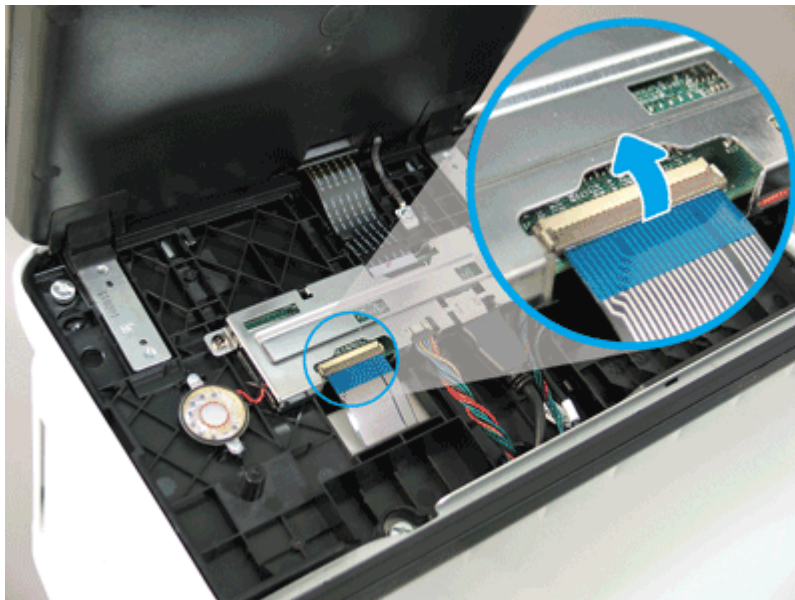
3. Continue to rotate the top edge of the cover away from the printer, and then remove the cover.

Figure 5-1497 Remove the cover



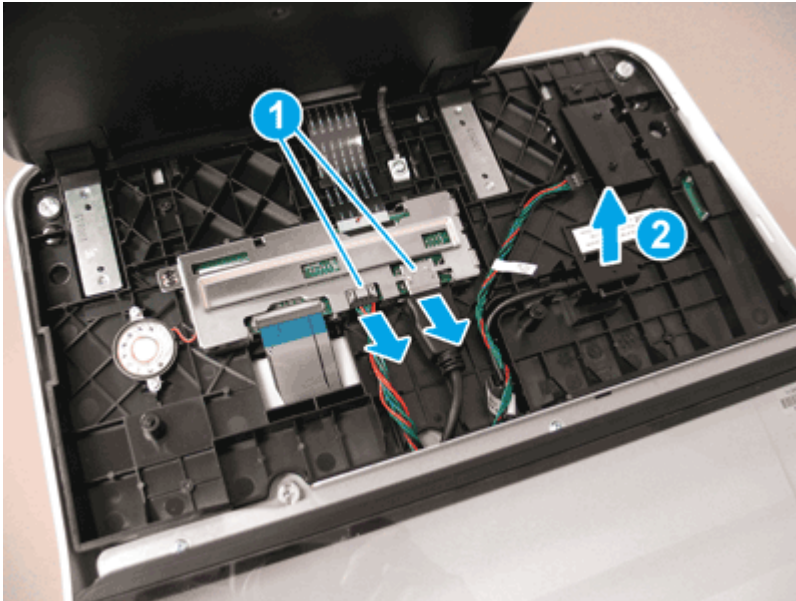
4. **Keyboard models only:** Lift up on the small, gray gate to release the keyboard flat cable.

Figure 5-1498 Disconnect the keyboard flat cable (keyboard models only)



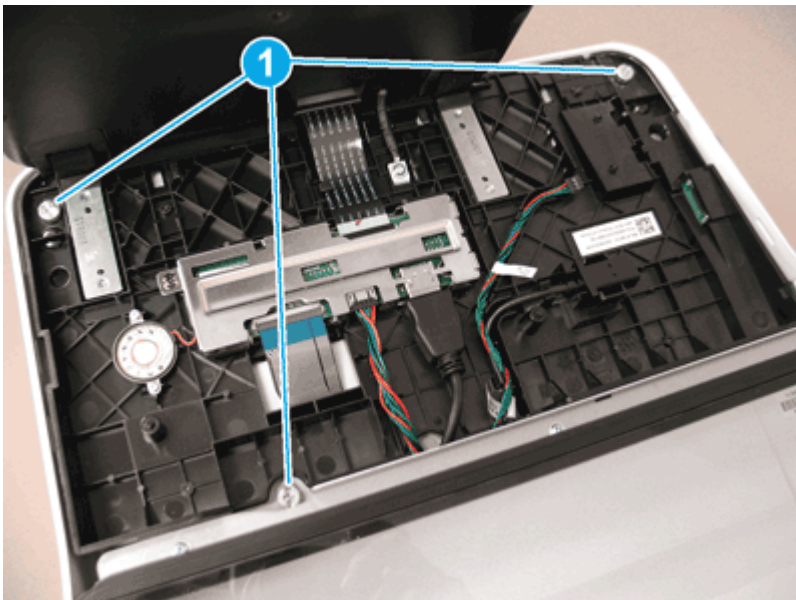
5. Disconnect two connectors (callout 1), and then release the USB cable (callout 2) from the holder.

Figure 5-1499 Disconnect connectors



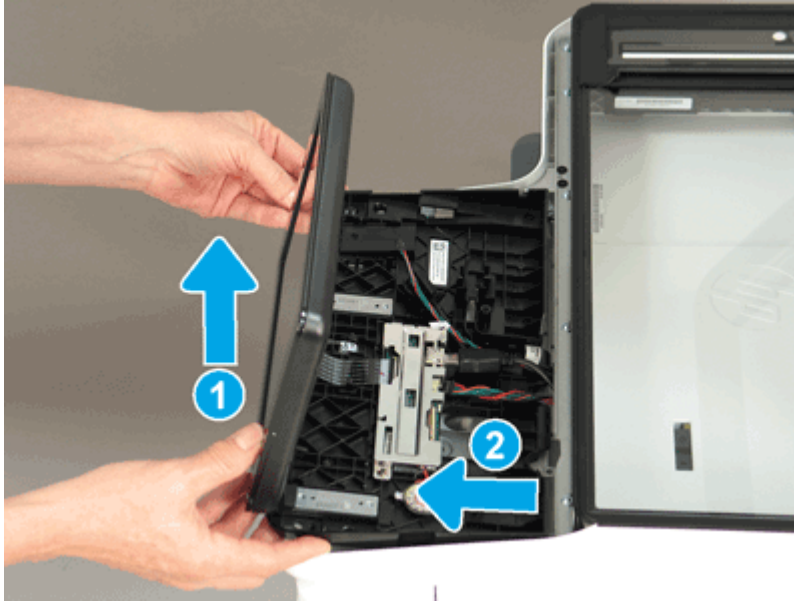
6. Remove three thumbscrews (callout 1).

Figure 5-1500 Remove three thumbscrews



7. Lift the front of the control panel off of the printer (callout 1), and then slide it toward the front of the printer (callout 2) to remove it.

Figure 5-1501 Remove the control panel

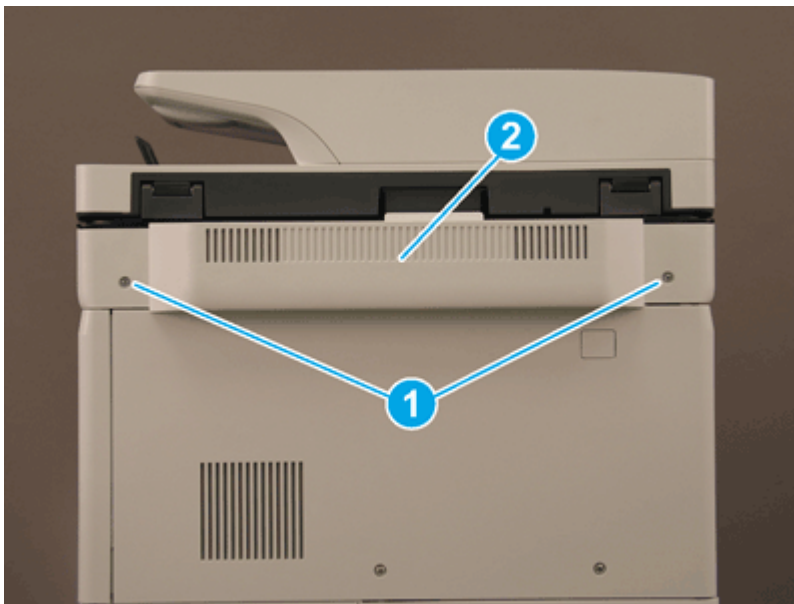


5. Remove the document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660)

Follow these steps to remove the document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660).

1. Remove two screws (callout 1), and then remove the scanner control board (SCB) cover (callout 2).

Figure 5-1502 Remove the SCB cover



2. Flow M681z and Flow M682z models only: Do the following:

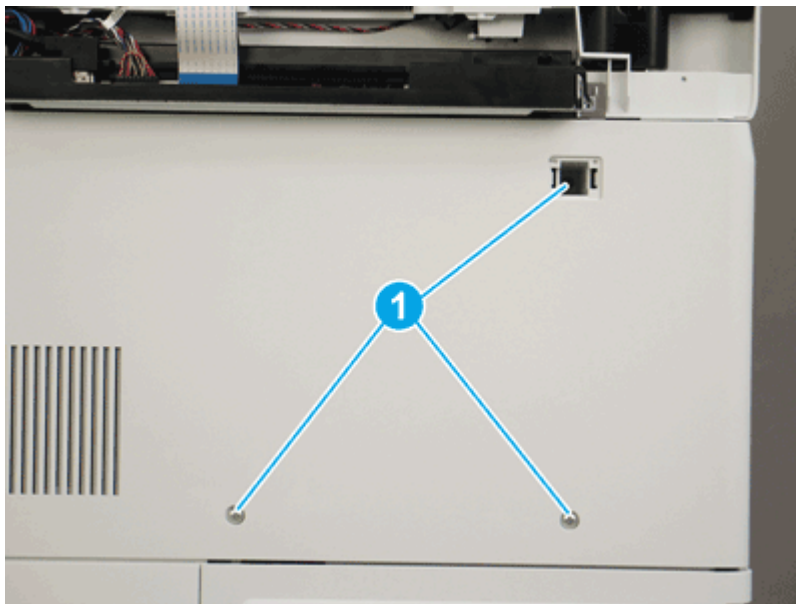
- a. At the back of the printer, remove one small cover (callout 1).

Figure 5-1503 Remove the small cover



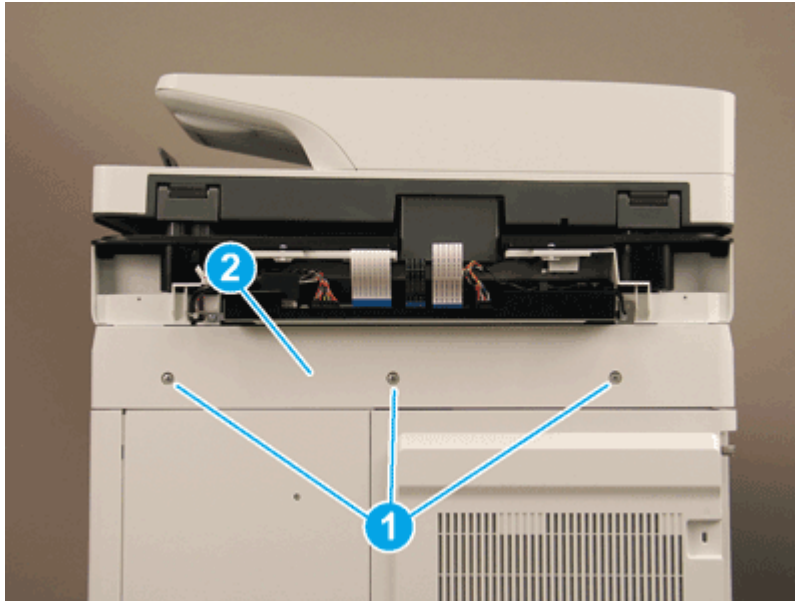
- b. **Flow M681z and Flow M682z only** : Remove three screws (callout 1), and then remove the stapler/stacker rear cover (callout 2).

Figure 5-1504 Remove the stapler/stacker rear cover



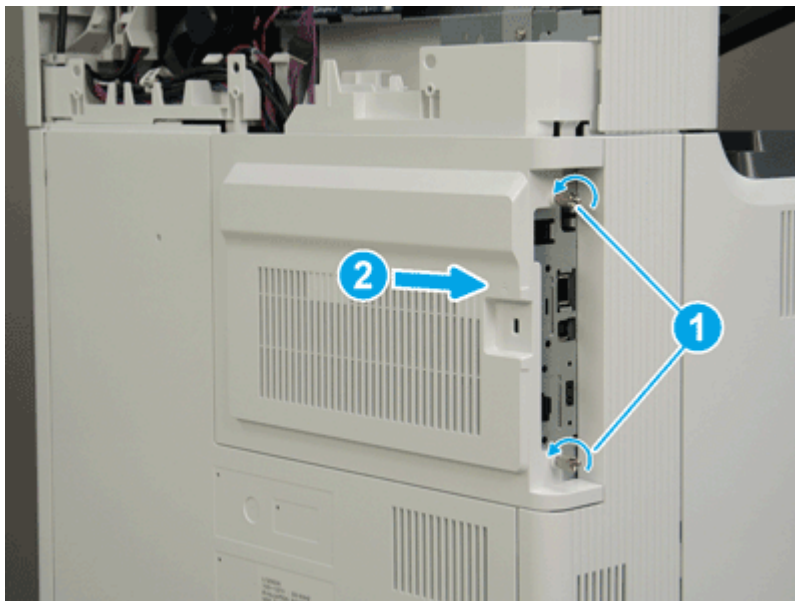
3. **M681dh, M681f, M682dh, and Flow M681f models only:** Remove three screws (callout 1), and then remove the upper rear cover (callout 2).

Figure 5-1505 Remove the upper rear cover



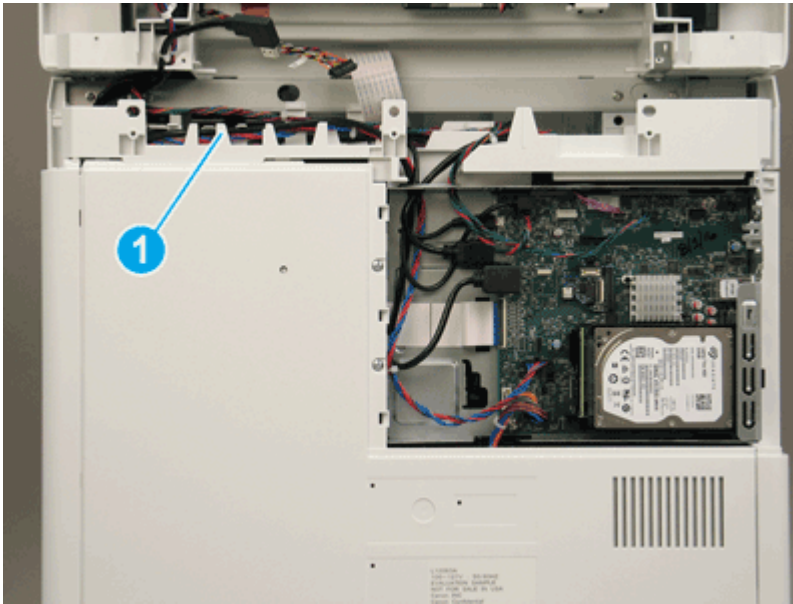
4. Loosen two thumbscrews (callout 1), and then slide the formatter cover away from the printer to remove it (callout 2).

Figure 5-1506 Remove the formatter cover



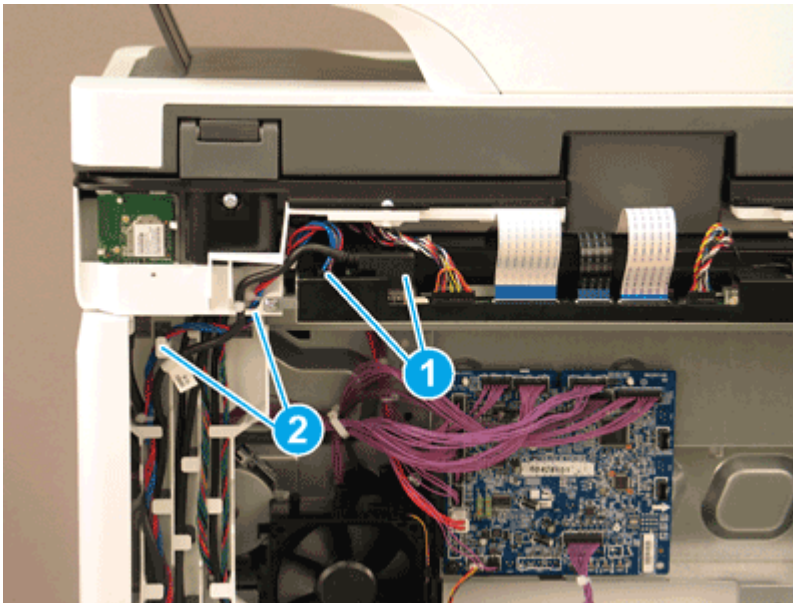
5. The remaining figures in this procedure show the Flow M682z model. While the cable routing (callout 1) on the M681dh, M681f, M682dh, and Flow M681f models is different, the removal procedures are the same for all models.

Figure 5-1507 Cable routing for M681dh, M681f, and Flow M681f



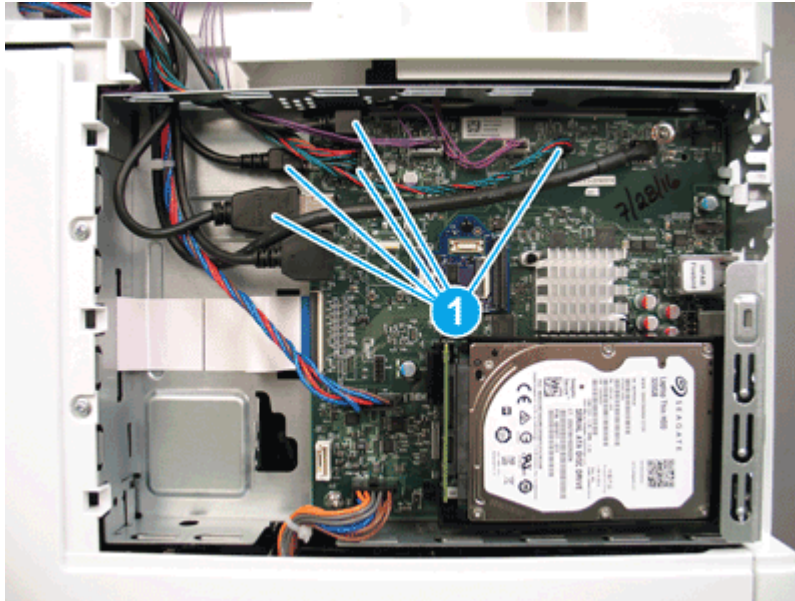
6. Disconnect two connectors (callout 1) on the SCB, and then release the cables from the guides (callout 2).

Figure 5-1508 Disconnect two connectors



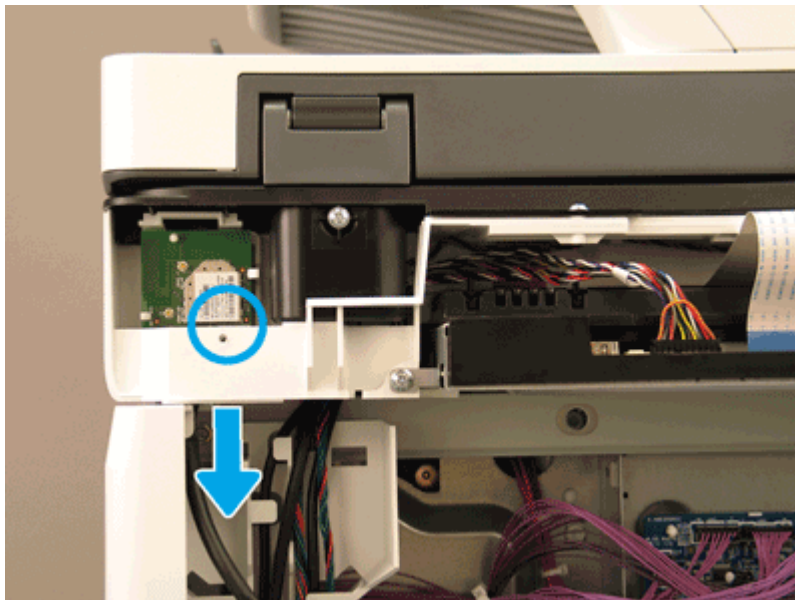
7. Disconnect five connectors on the formatter (callout 1).

Figure 5-1509 Disconnect five connectors



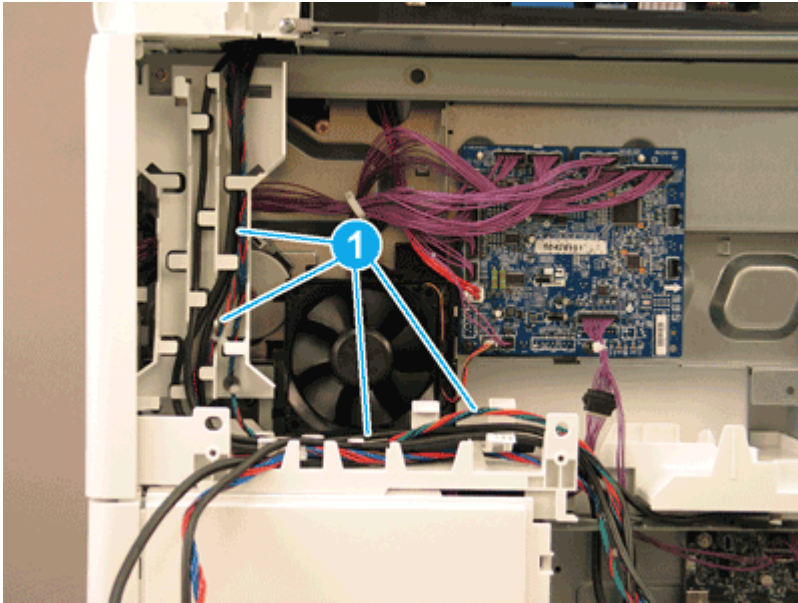
8. Flow M682z only: Gently pull down on the cable to disconnect the wireless connector.

Figure 5-1510 Disconnect the wireless connector



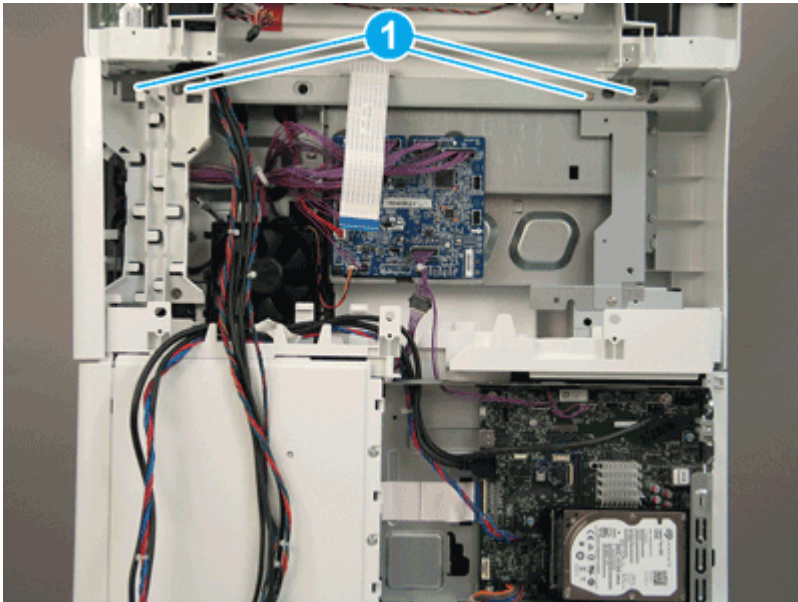
9. Release all of the cables from the cable guides (callout 1).

Figure 5-1511 Release the cables



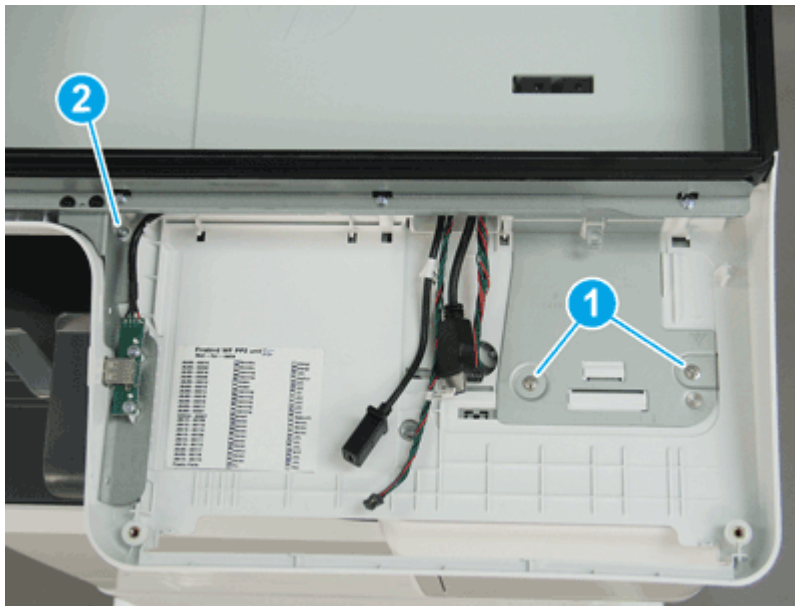
10. At the back of the printer, remove four screws (callout 1).

Figure 5-1512 Remove four screws



11. On the top of the image scanner assembly, at the location where the control panel was removed, remove two sheet metal screws (callout 1). **Flow M681z and Flow M682z only:** Remove one self-tapping screw (callout 2).

Figure 5-1513 Remove three screws



12. Lift the document feeder and image scanner off of the printer to remove them.

Figure 5-1514 Remove the document feeder and image scanner



6. Remove the stapler/stacker (Flow M681z/Flow M682z/Flow E67660z)

Follow these steps to remove the stapler/stacker (Flow M681z/Flow M682z/Flow E67660z).

This step is for the M681/M682/E67550/E67560/E6750/E67660 printers. For the M652/M653/E65050/E65060/E65150/E65160 printers, skip this step.

1. Open the front door.

Figure 5-1515 Open the front door



2. Open the stapler door.

Figure 5-1516 Open the stapler door



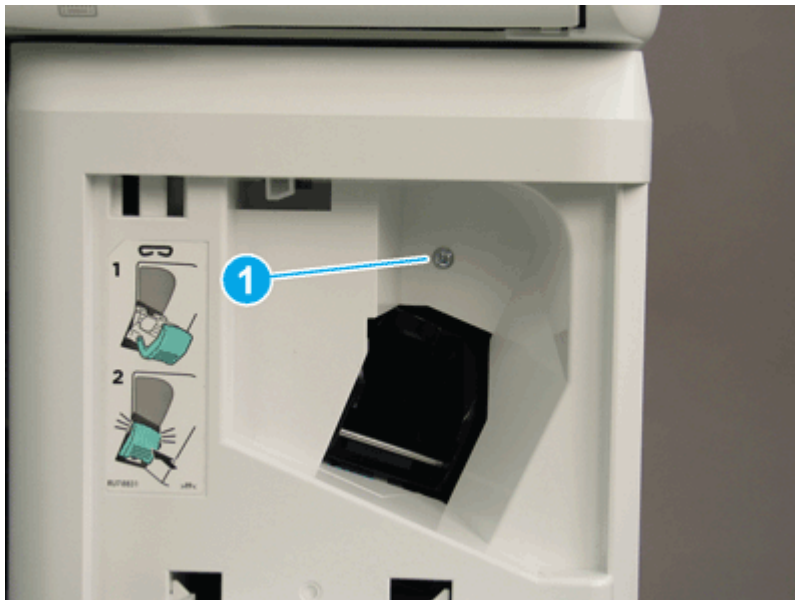
3. Release the latch, and then remove the staple cartridge.

Figure 5-1517 Remove the staple cartridge



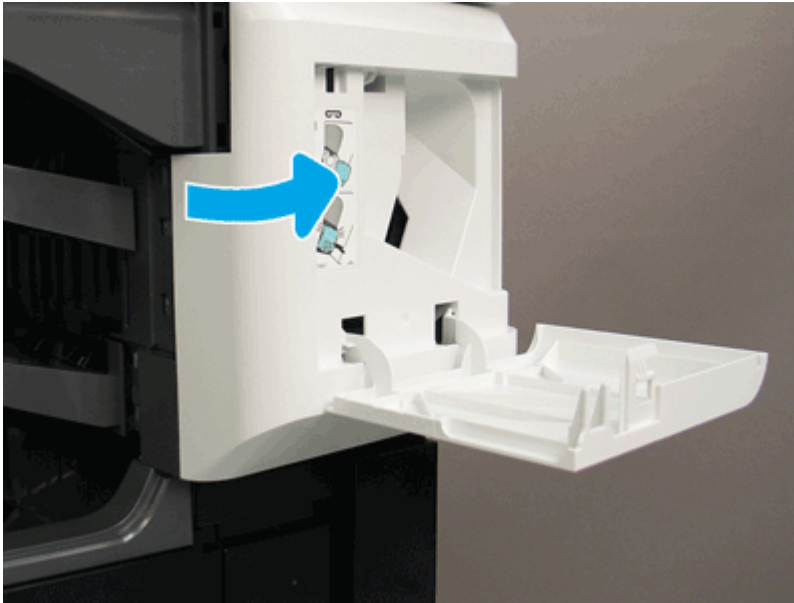
4. Remove one screw (callout 1).

Figure 5-1518 Remove one screw



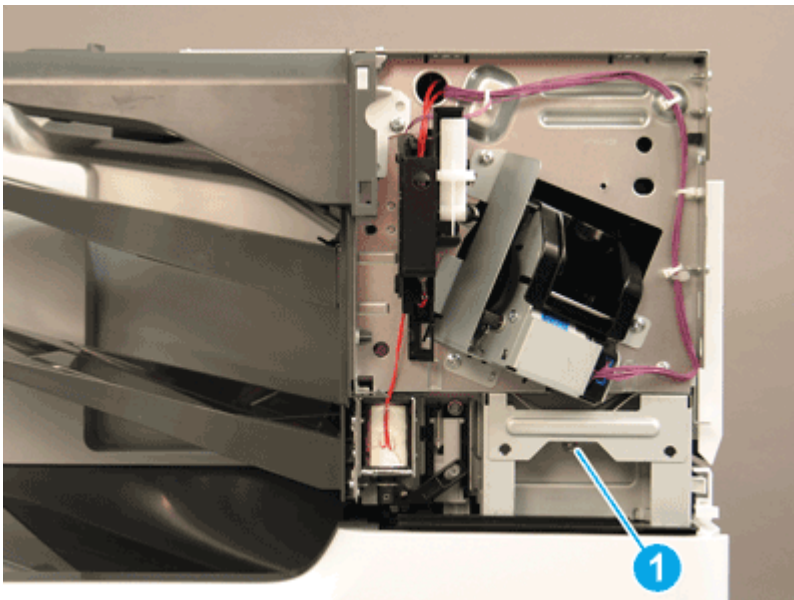
5. Rotate the stapler cover to the right to remove it.

Figure 5-1519 Remove the stapler cover



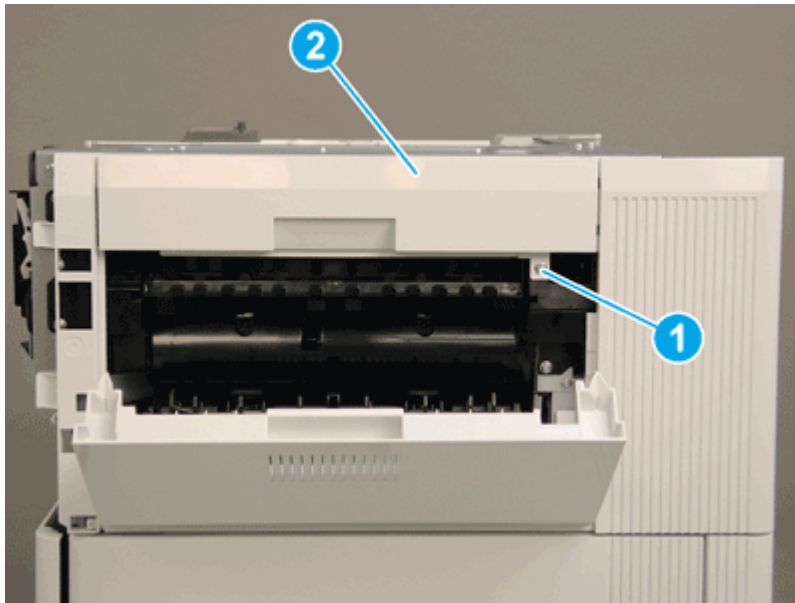
6. Remove one screw (callout 1).

Figure 5-1520 Remove one screw



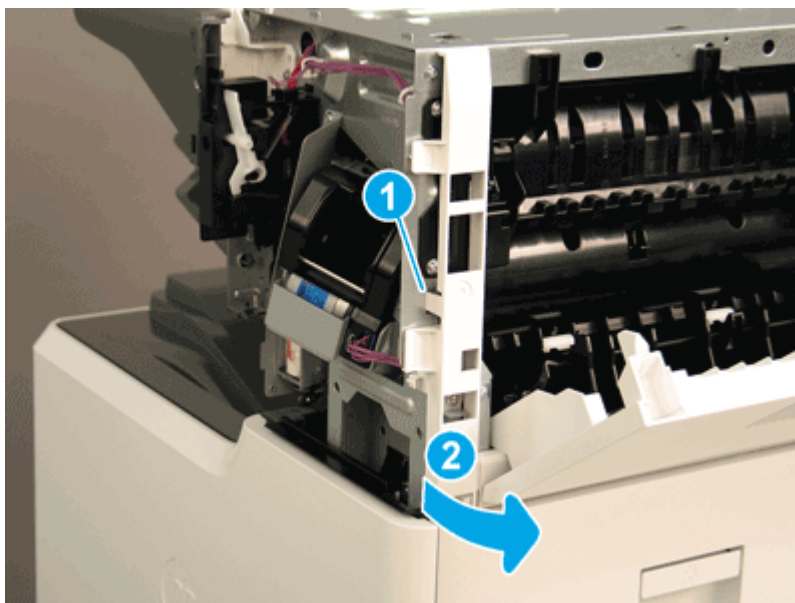
7. At the right side of the printer, remove one screw (callout 1), and then remove the stapler/stacker right upper cover (callout 2).

Figure 5-1521 Remove the stapler/stacker right upper cover



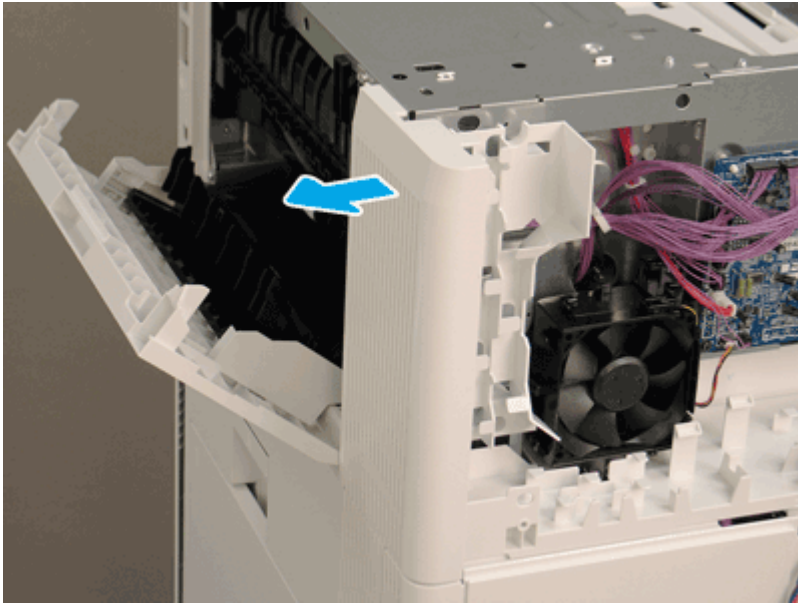
8. Release one tab (callout 1), and then rotate the stapler rear cover away from the printer (callout 2) to remove it.

Figure 5-1522 Remove the stapler rear cover



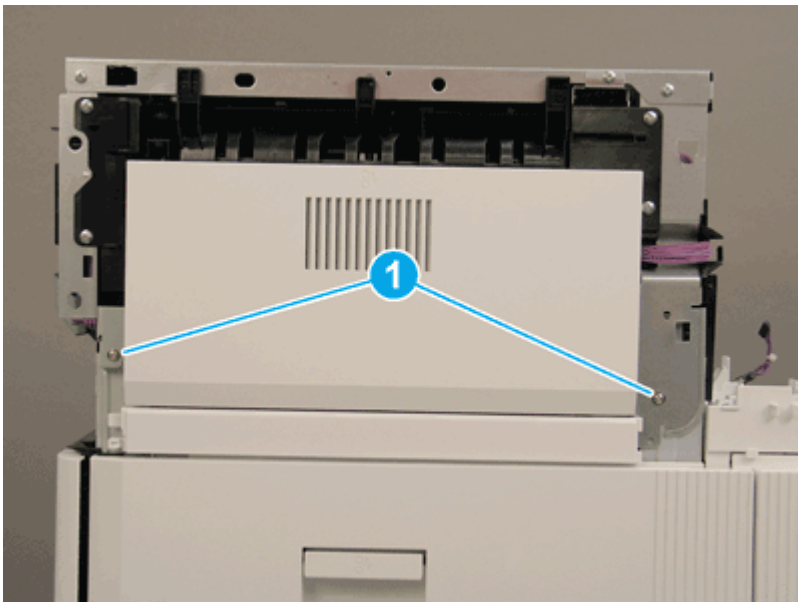
9. Pull the stapler/stacker rear corner cover away from the printer to remove it.

Figure 5-1523 Remove the stapler/stacker rear corner cover



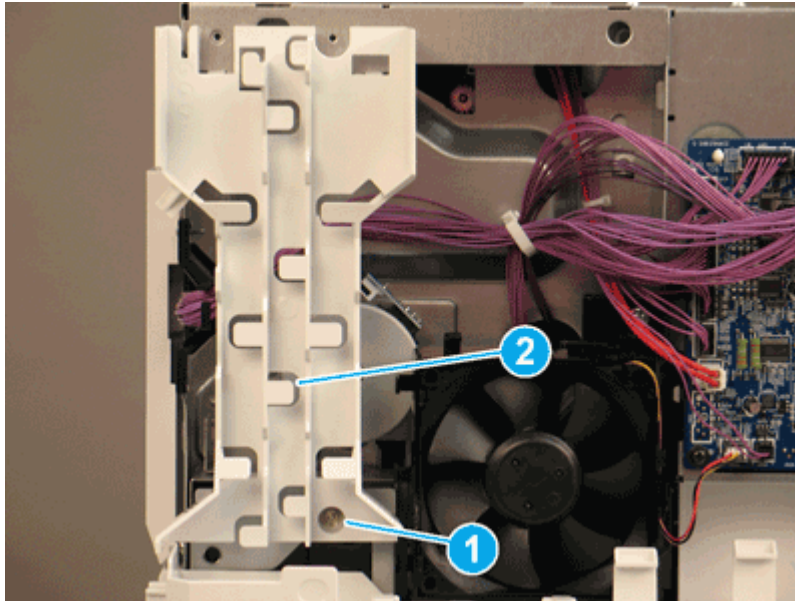
10. Remove two screws (callout 1).

Figure 5-1524 Remove two screws



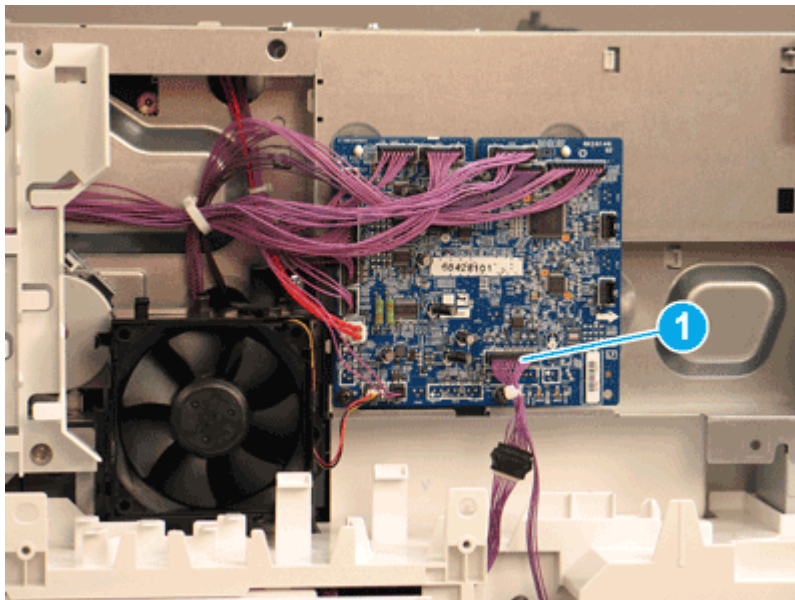
11. At the back of the printer, remove one screw (callout 1), and then remove the cable guide (callout 2).

Figure 5-1525 Remove the cable guide



12. Disconnect one connector on the stapler/stacker PCA (callout 1).

Figure 5-1526 Disconnect one connector



13. Remove two screws (callout 1).


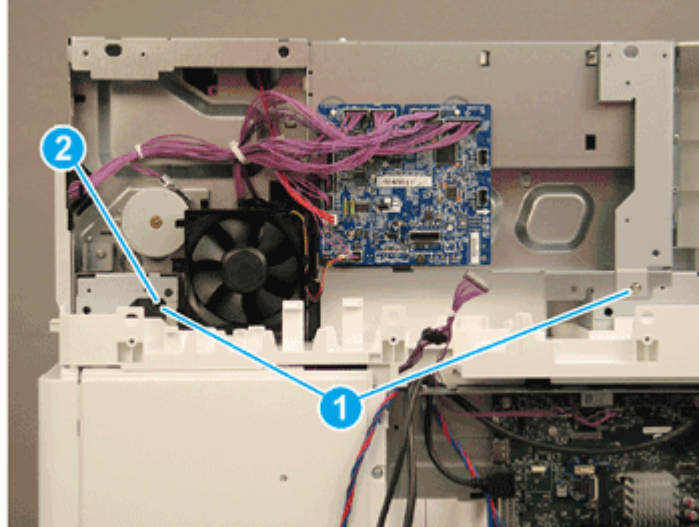
 **TIP:** The screw on the left (callout 2) is longer than the other screw. Make sure that this screw is installed in the correct location.

Figure 5-1527 Remove two screws



14. Lift the stapler/stacker away from the printer.


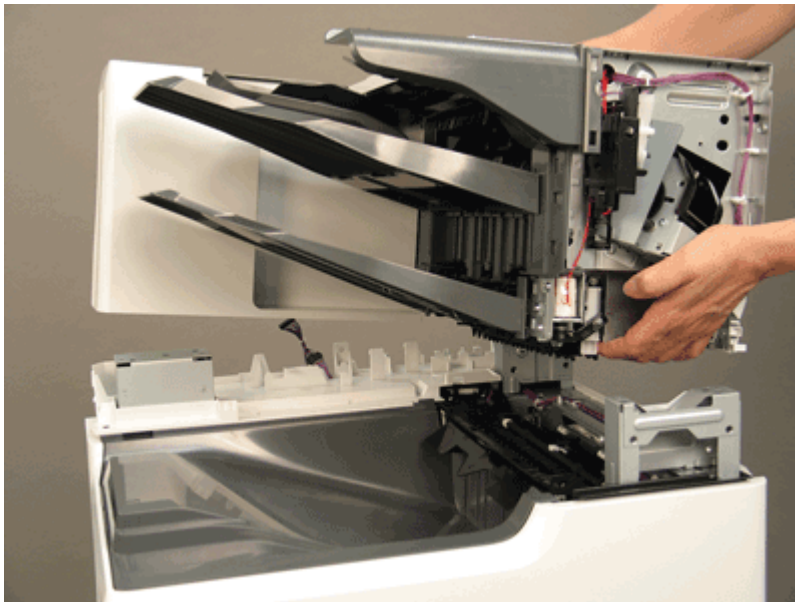

 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1528 Remove the stapler/stacker



7. Remove the face-down cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the face-down cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

 **NOTE:** This step is for the M681/M682/E67550/E67560/E67650/E67660 printers. For the M652/M653/E65050/E65060/E65150/E65160 printers, skip this step.

- Remove two screws (callout 1), release three tabs (callout 2), and then remove the face-down cover (callout 3).


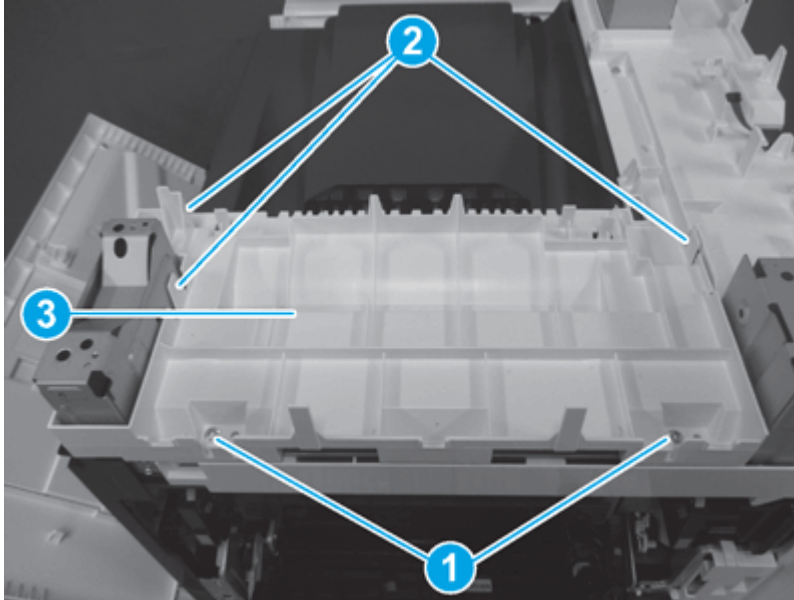
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1529 Remove two screws and the face-down cover

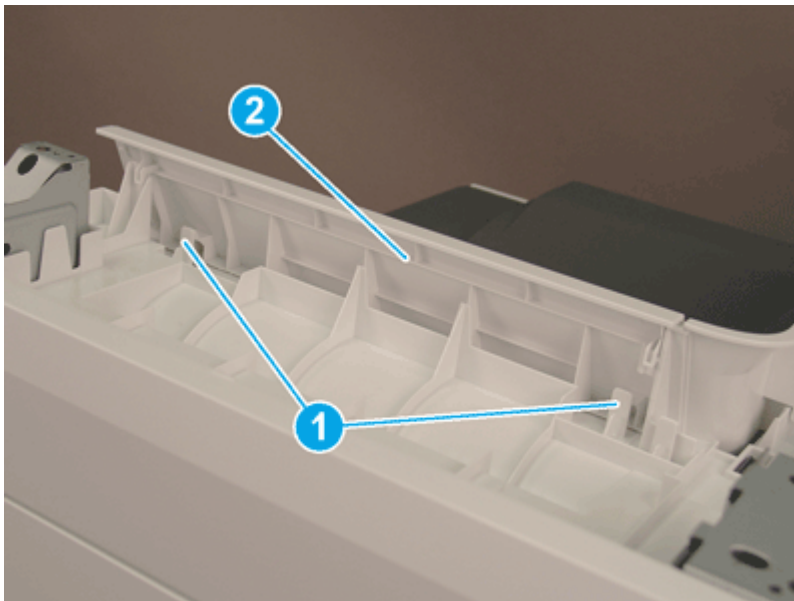


8. Remove the top cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the top cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

- Release two tabs (callout 1), and then remove the top cover (callout 2).

Figure 5-1530 Remove the top cover



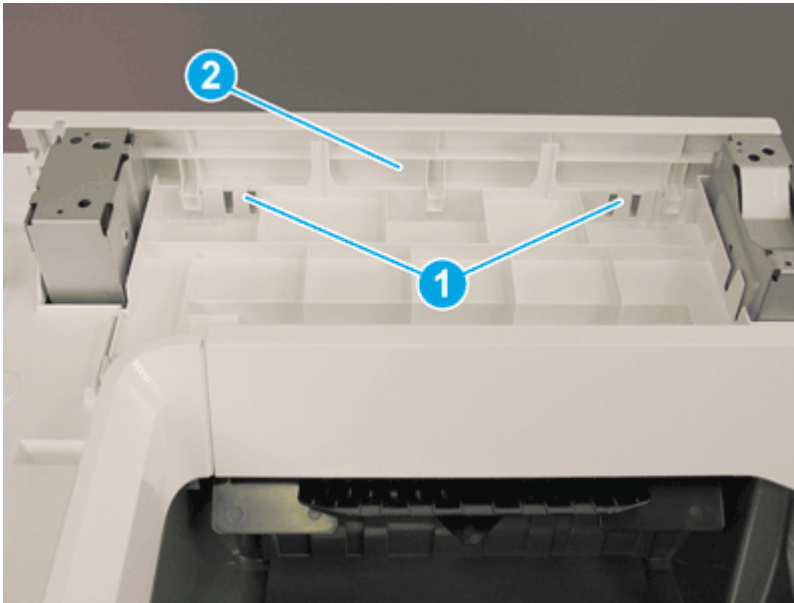
9. Remove the right cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the right cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

This step is for the M681/M682/E67550/E67560/E67650/E67660 printers. For the M652/M653/E65050/E65060/E65150/E65160 printers, skip this step.

- Release two tabs (callout 1), and then remove the right cover (callout 2).

Figure 5-1531 Remove the right cover



10. Remove the front cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the front cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

- Release two tabs (callout 1), and then remove the front cover (callout 2).


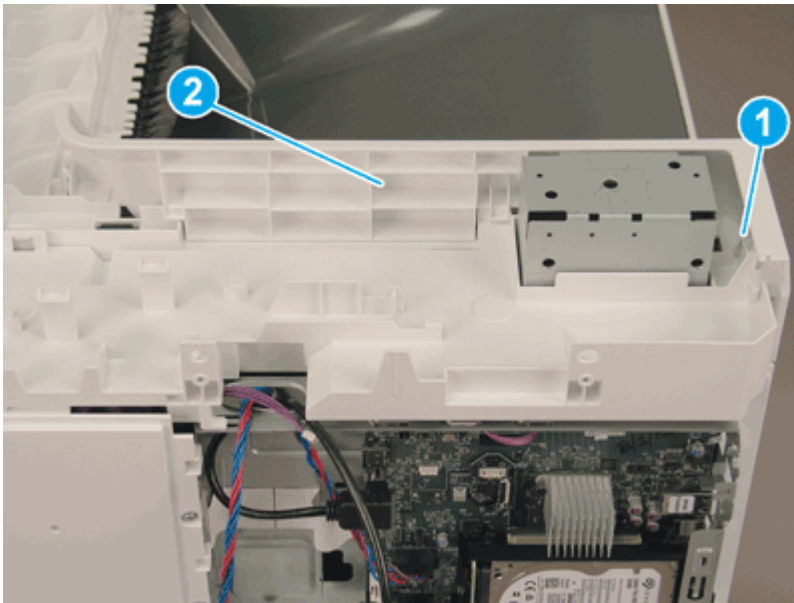
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1532 Remove the front cover



11. Remove the rear upper cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the rear upper cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

- Remove two screws (callout 1), and then remove the rear upper cover (callout 2).


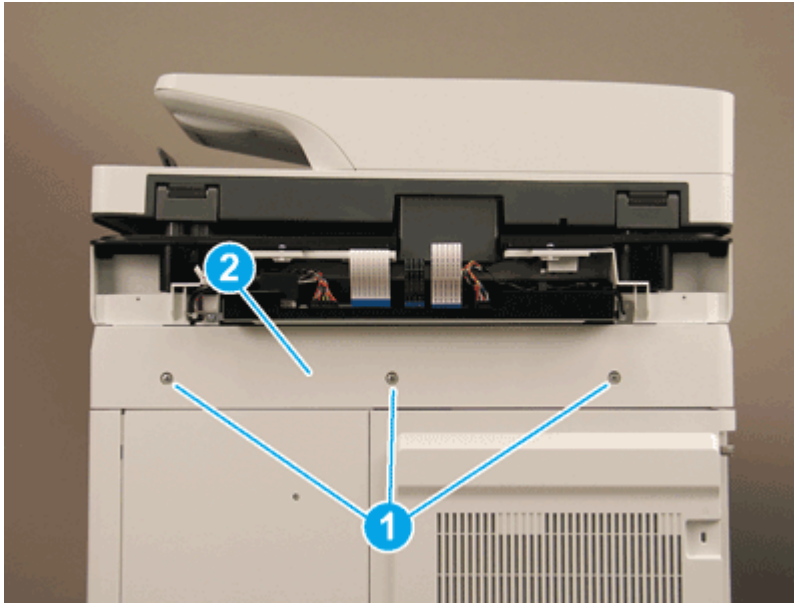

 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1533 Remove the rear upper cover



12. Remove the face-down cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the face-down cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

 **NOTE:** This step is for the M681/M682/E67550/E67560/E67650/E67660 printers. For the M652/M653/E65050/E65060/E65150/E65160 printers, skip this step.

- Remove two screws (callout 1), release three tabs (callout 2), and then remove the face-down cover (callout 3).


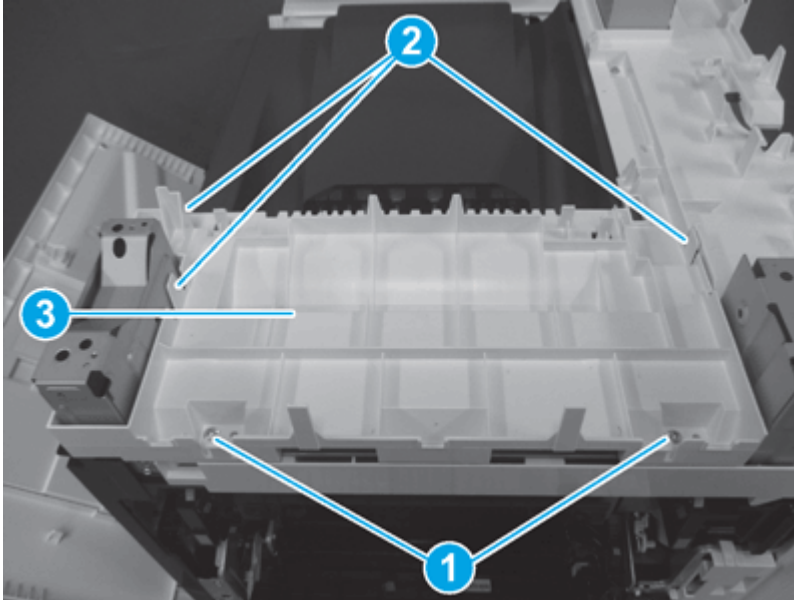
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1534 Remove two screws and the face-down cover



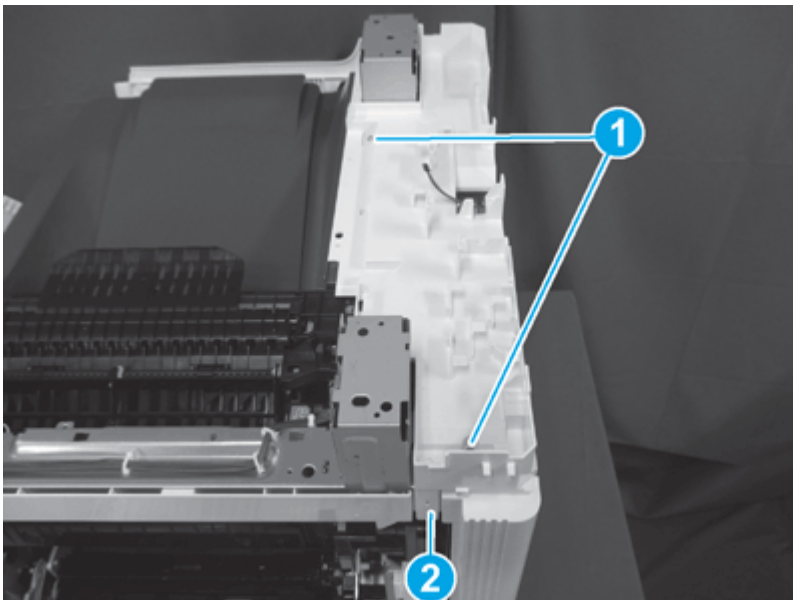
13. Remove the main cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the main cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

This step is for the M681/M682/E67550/E67560/E67650/E67660 printers. For the M652/M653/E65050/E65060/E65150/E65160 printers, skip this step.

1. Remove two screws (callout 1), and then release one tab (callout 2).

Figure 5-1535 Remove two screws and release one tab



2. Remove one screw (callout 1), release two tabs (callout 2), and then remove the main cover (callout 3).


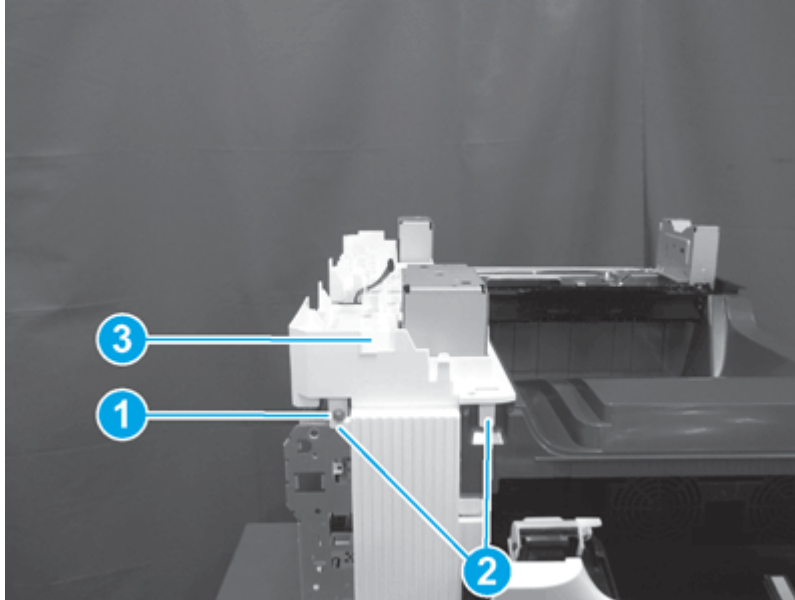

 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1536 Remove one screw and the main cover



14. Remove the control panel (M652/M653/E65050/E65060/E65150/E65160)

Follow these steps to remove the control panel (M652/M653/E65050/E65060/E65150/E65160).

 **NOTE:** This step is for the M652/M653/E65050/E65060/E65150/E65160 printers. For the M681/M682/E67550/E67560/E67650/E67660 printers, skip this step.

The figures below show the touchscreen control panel. The procedure is also correct for the keypad control panel.

1. Tilt the control panel to the fully raised position.

Figure 5-1537 Tilt the control panel up



2. Use a coin to release the cover, and then remove the cover.

Figure 5-1538 Remove the cover



3. Remove one thumbscrew (callout 1)



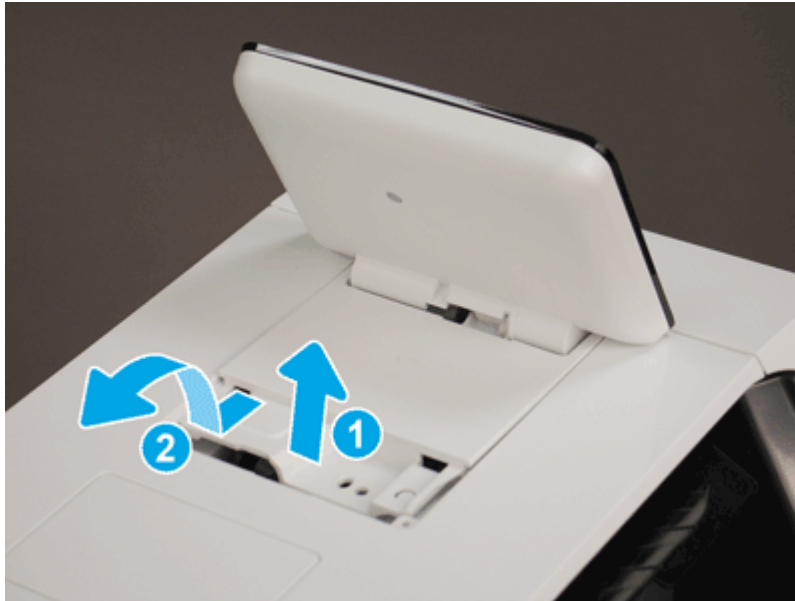
NOTE: Store the screw in a secure place where it cannot fall down into the printer.

Figure 5-1539 Remove one thumbscrew



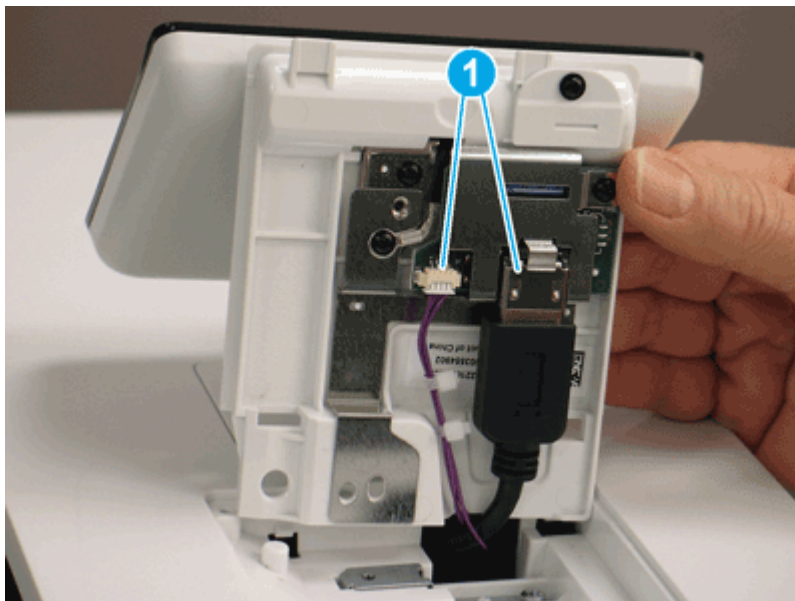
4. Lift the back edge of the control panel up (callout 1), and then slide it toward the back of the printer (callout 2) to release it.

Figure 5-1540 Release the control panel



5. Turn the control panel over to gain access to the bottom side. Disconnect two connectors (callout 1).

Figure 5-1541 Disconnect two connectors



6. Remove the control panel.

Figure 5-1542 Remove the control panel

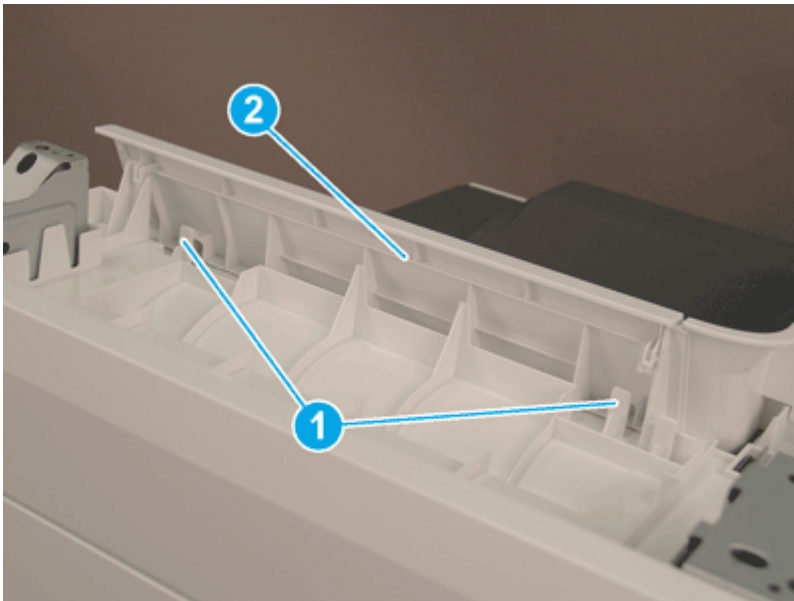


15. Remove the top cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the top cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

- Release two tabs (callout 1), and then remove the top cover (callout 2).

Figure 5-1543 Remove the top cover



16. Remove the output bin

Follow these steps to remove the output bin.

1. Open the following doors:
 - Front door
 - Left door
 - Right door
2. Release two tabs (callout 1), and then remove the output bin (callout 2).


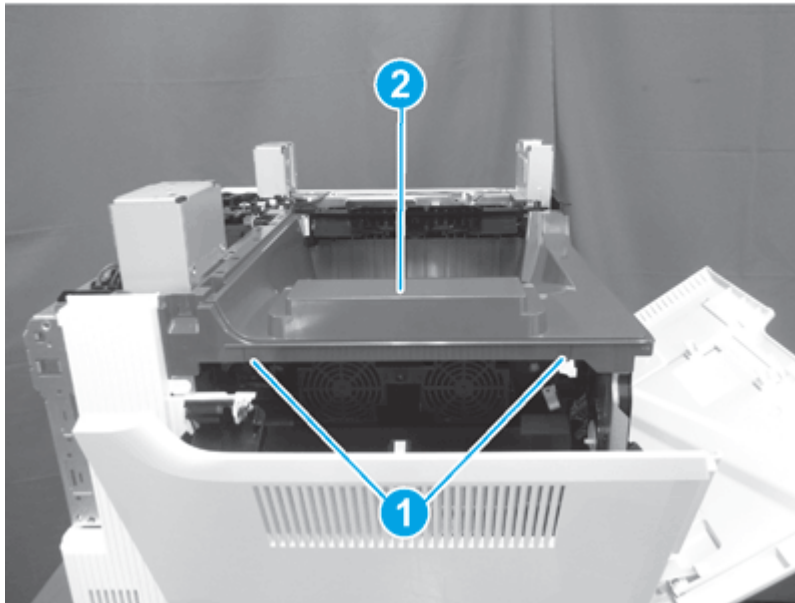
 **NOTE:** The M682 is shown in the figure below. The procedure is correct for all models.

Figure 5-1544 Remove the output bin



17. Remove the formatter cover

Follow these steps to remove the formatter cover.

- Unscrew two thumbscrews (callout 1), and then slide the formatter cover (callout 2) away from the printer to remove it.


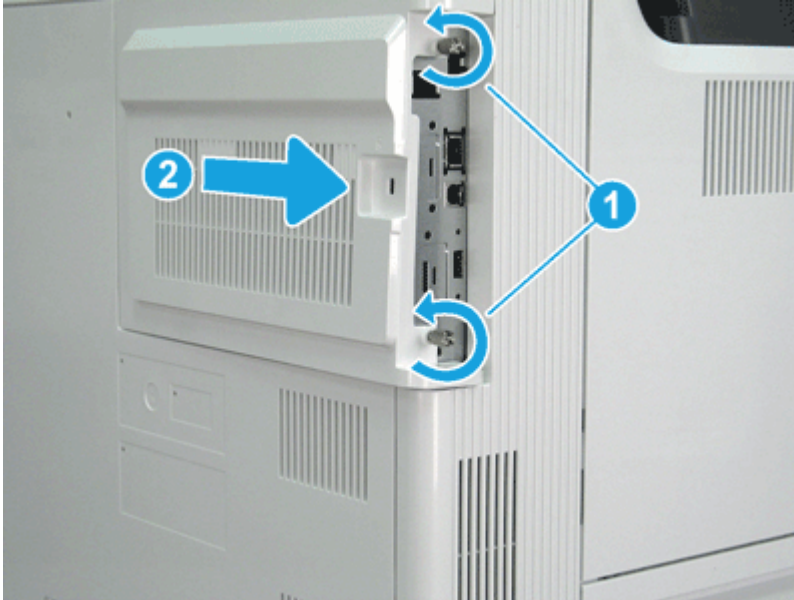
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1545 Remove the formatter cover

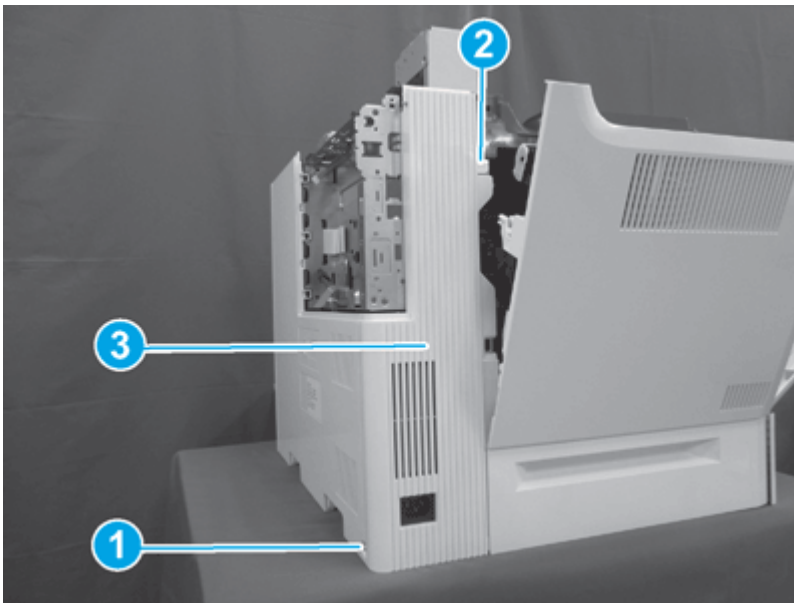


18. Remove the left rear cover

Follow these steps to remove the left rear cover.

- Open the left door. Remove one screw (callout 1), release one boss (callout 2), and then remove the left rear cover (callout 3).

Figure 5-1546 Remove the left rear cover



19. Remove the rear cover

Follow these steps to remove the rear cover.

- Remove two screws (callout 1), and then slide the rear cover (callout 2) to the right to remove it.


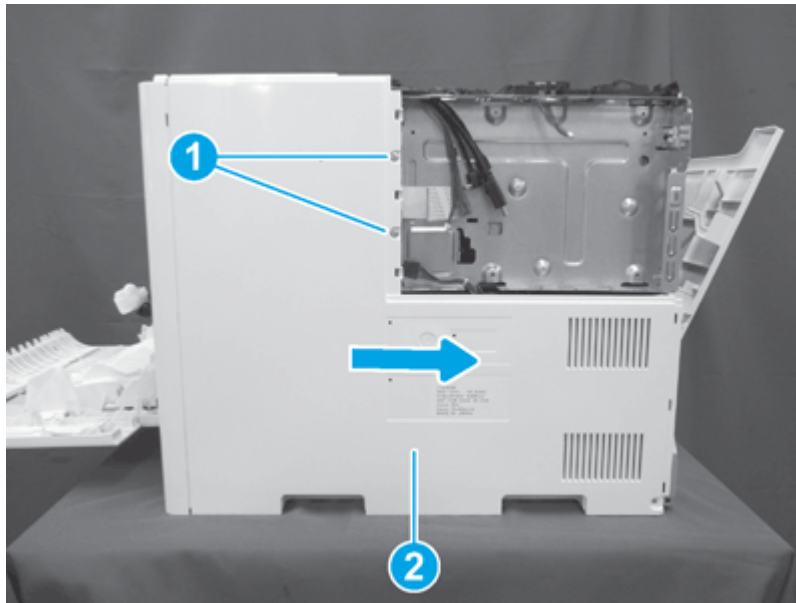

 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1547 Remove two screws and the rear cover



20. Remove the fax PCA (M681f/Flow M681f/Flow M681z/Flow M682z)

Follow these steps to remove the fax PCA (M681f/Flow M681f/Flow M681z/Flow M682z).

 **NOTE:** This step is for the M681/M682/E67550/E67560/E67650/E67660 printers. For the M652/M653/E65050/E65060/E65150/E65160 printers, skip this step.

1. Locate the fax PCA on the formatter.

Figure 5-1548 Locate the fax PCA



2. Rotate end left end of the fax PCA away from the formatter (callout 1) to disconnect the connector, and then slide the card away from the formatter (callout 2) to remove it.

Figure 5-1549 Remove the fax PCA

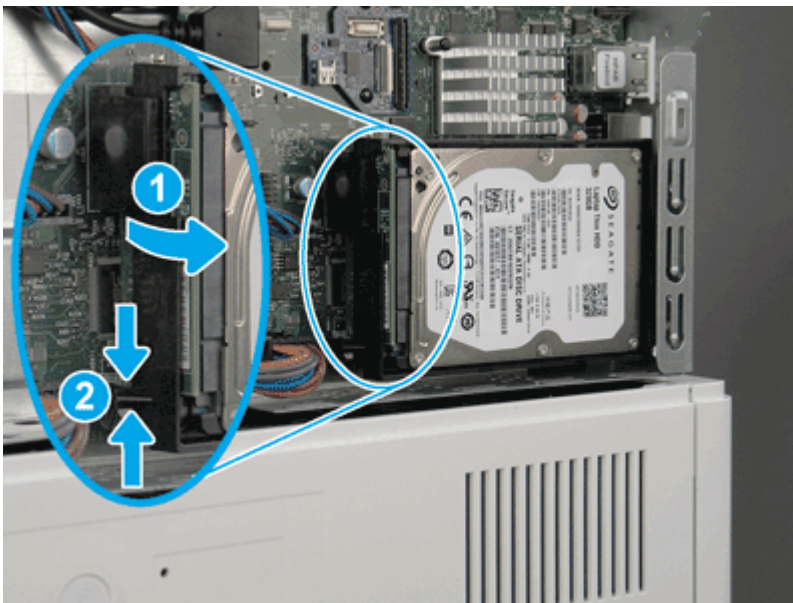


21. Remove the hard disk drive (HDD; M653dh/M681/M682/E67550/E67560/E67650/E67660)

Follow these steps to remove the hard disk drive (HDD; M653dh/M681/M682/E67550/E67560/E67650/E67660).

1. Release the locking connector (callout 1), and then pinch the retainer (callout 2) to release it.

Figure 5-1550 Release the HDD



2. Rotate the connector end of the HDD out and away from the formatter (callout 1), and then slide it to the left (callout 2) to remove it.

Figure 5-1551 Remove the HDD

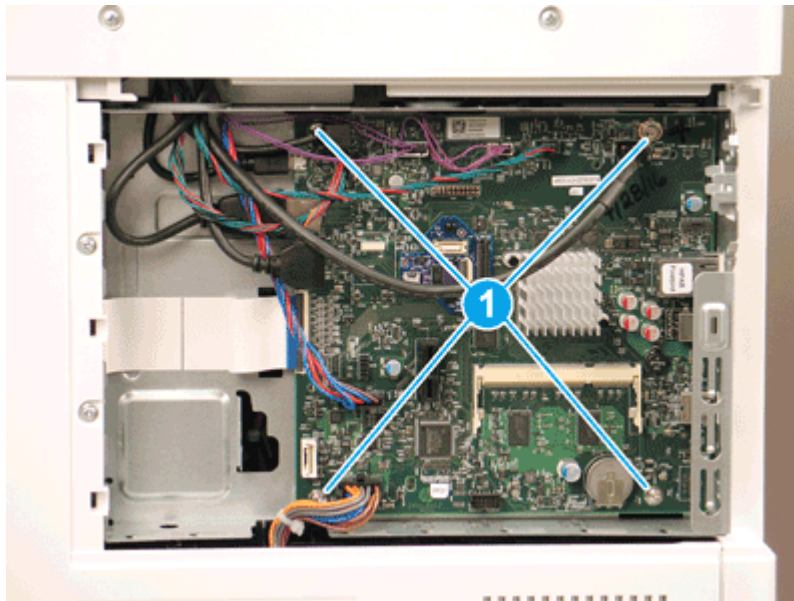


22. Remove the formatter

Follow these steps to remove the formatter.

- Disconnect all of the connectors on the formatter, remove four screws, and then remove the formatter.

Figure 5-1552 Remove the formatter



23. Remove the formatter case

Follow these steps to remove the formatter case.

1. Disconnect one connector (callout 1), remove two screws on the left side of the case (callout 2), and then remove two screws on the right end of the case (callout 3).


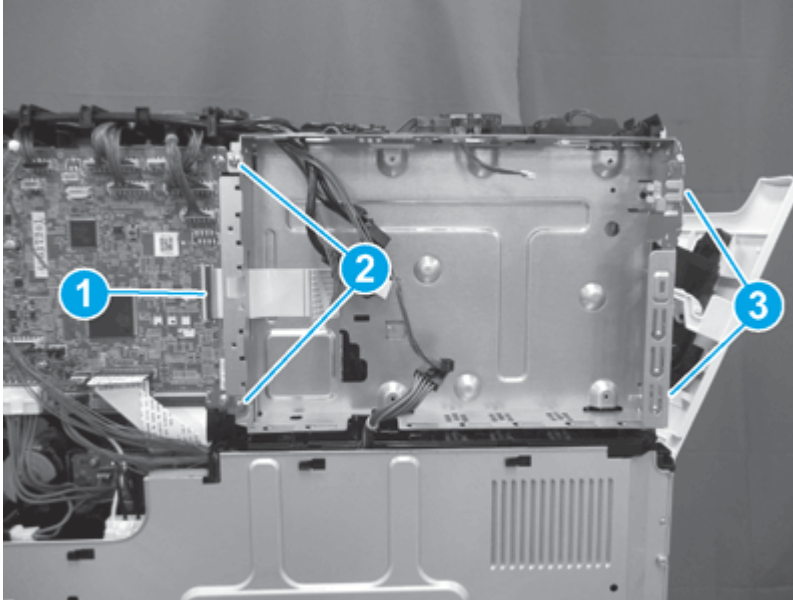
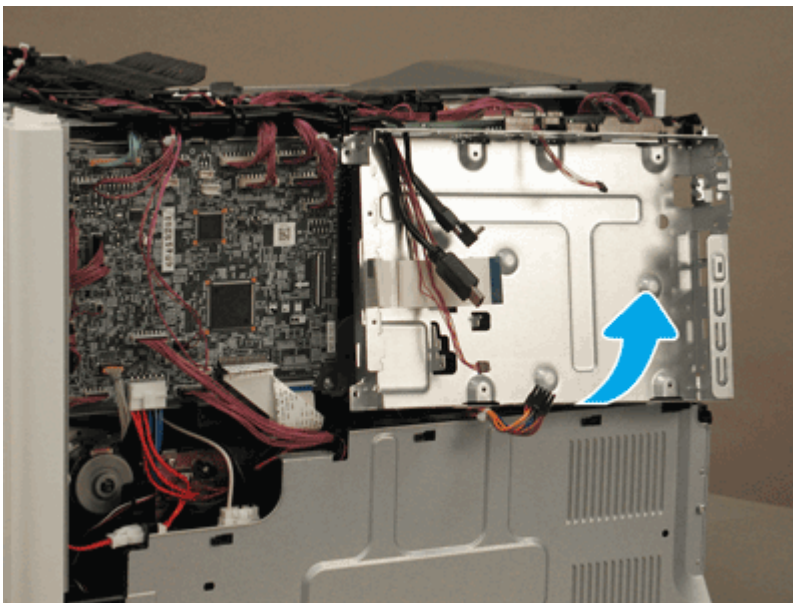
 **NOTE:** These screws are gold tinted to provide additional grounding. Make sure that these screws are reinstalled in the correct locations.

Figure 5-1553 Disconnect one connector and remove four screws



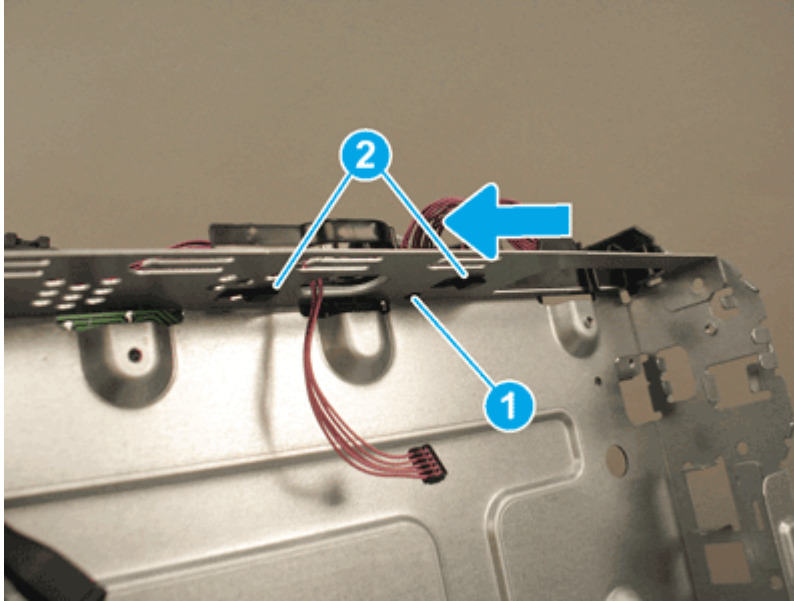
2. Tilt the bottom of the formatter case away from the printer.

Figure 5-1554 Tilt the formatter case



3. Locate one round boss (callout 1) and two hooks (callout 2) on the cable guide. Push up on the boss, and then slide the cable guide to the left to remove it. Remove the formatter case.

Figure 5-1555 Remove the cable guide

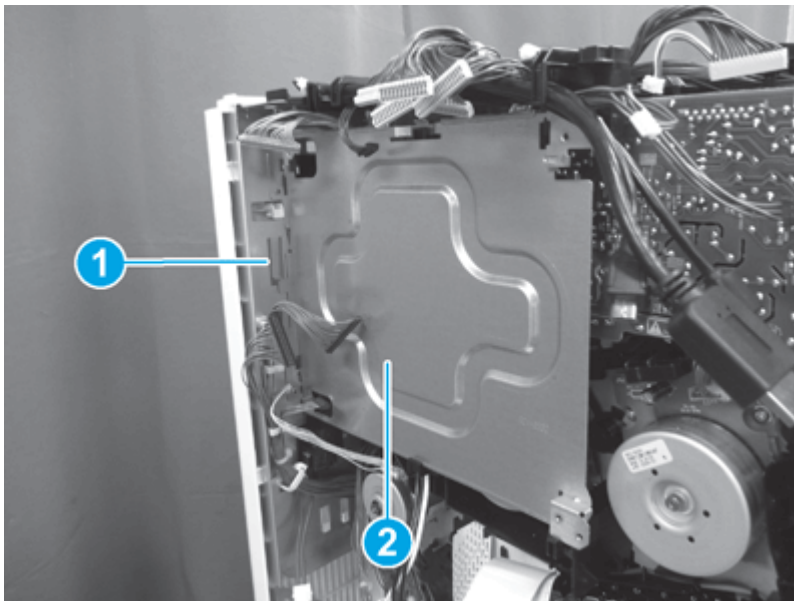


24. Remove the DC controller stay

Follow these steps to remove the DC controller stay.

- Gently push out on the sheet metal tab (callout 1) to release the DC controller stay (callout 2), and then lift up to remove it.

Figure 5-1556 Remove the DC controller stay

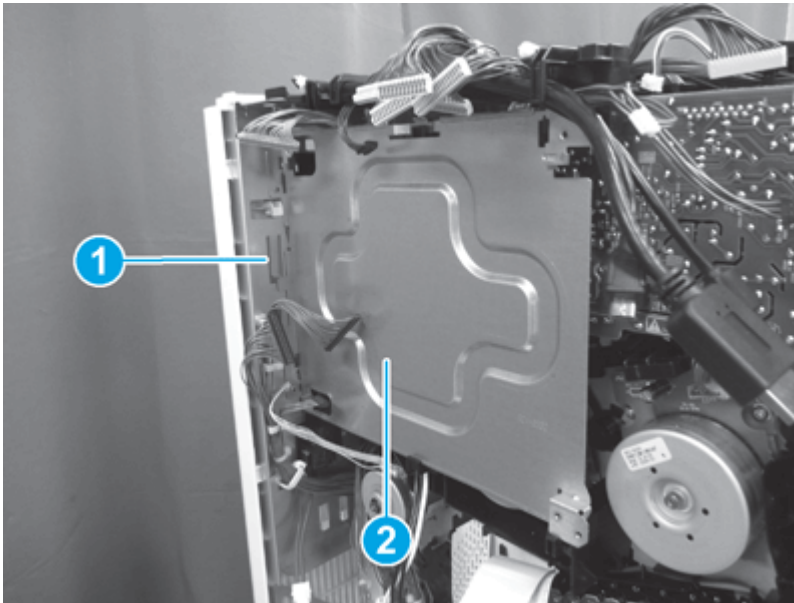


25. Remove the DC controller stay

Follow these steps to remove the DC controller stay.

- Gently push out on the sheet metal tab (callout 1) to release the DC controller stay (callout 2), and then lift up to remove it.

Figure 5-1557 Remove the DC controller stay

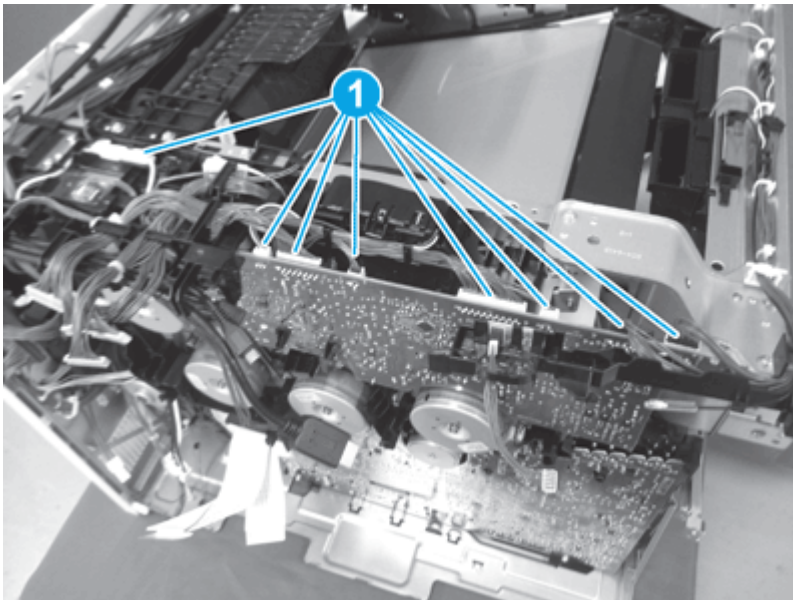


26. Remove the upper high-voltage power supply (HVPS)

Follow these steps to remove the upper high-voltage power supply (HVPS).

1. Disconnect eight connectors (callout 1).

Figure 5-1558 Disconnect eight connectors



2. Release the cable (callout 1) from the retainer (callout 2). Remove one screw (callout 3), release five tabs (callout 4), and then remove the upper HVPS (callout 5).


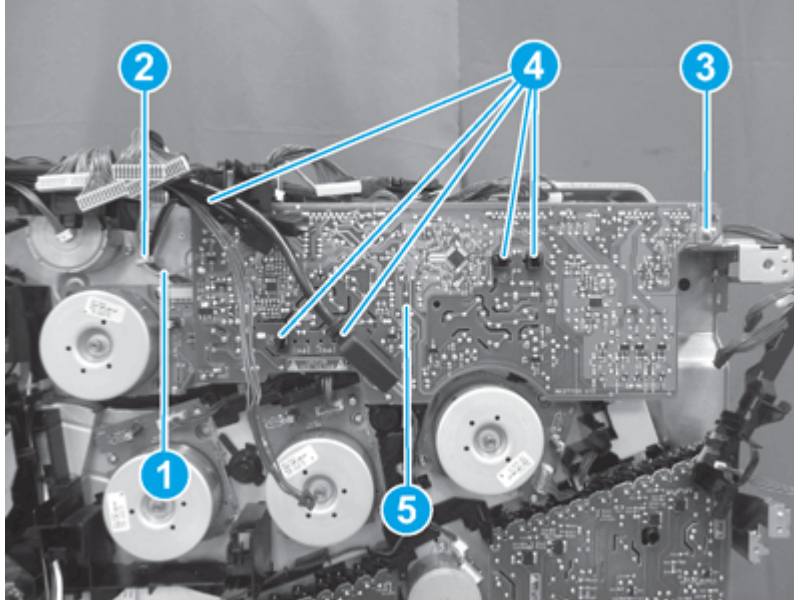
 **TIP:** The screw (callout 3) is a grounding screw with a washer attached. Make sure that this screw and washer are installed in the correct position.

Figure 5-1559 Remove the upper HVPS



27. Remove the fuser drive assembly

Follow these steps to remove the fuser drive assembly.

1. Disconnect two connectors (callout 1), and then release the cable (callout 2) from the cable guide (callout 3). Remove one screw (callout 4), and then remove the connector cover (callout 5).


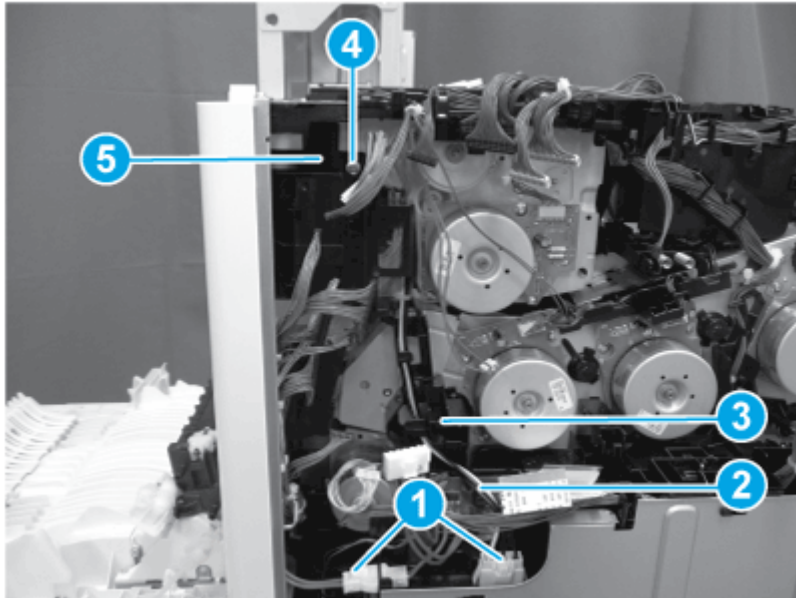
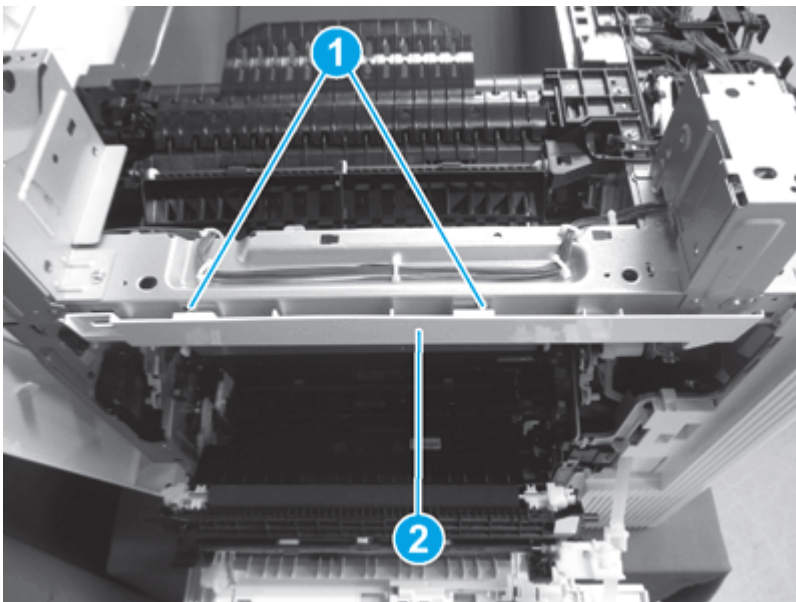
 **NOTE:** The yellow cable can easily be lost once the motor assembly is installed. This cable feeds up to attach to the black connector tied to a purple wire on top of the assembly (within the cable guide on top).

Figure 5-1560 Remove the connector cover



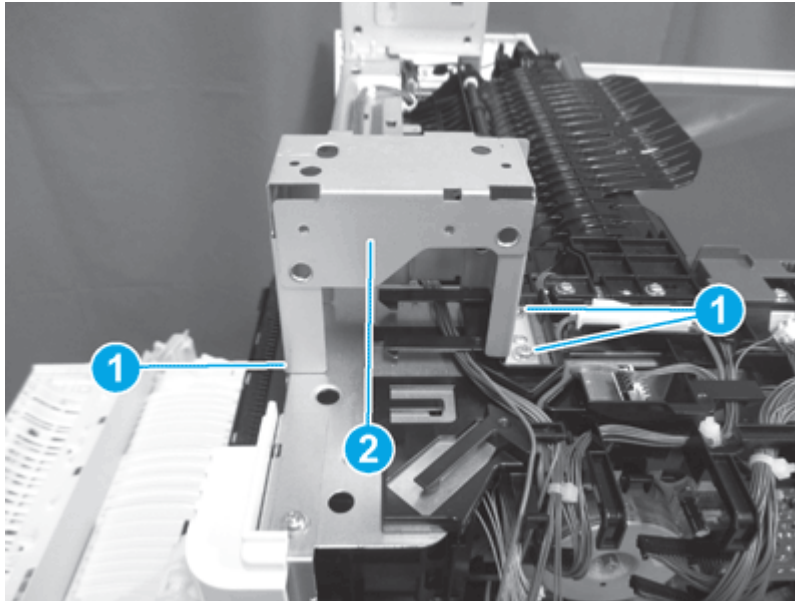
2. **M681/M682 only:** Release two bosses (callout 1), and then rotate the upper right inner cover (callout 2) away from the printer to remove it.

Figure 5-1561 Remove the upper right inner cover



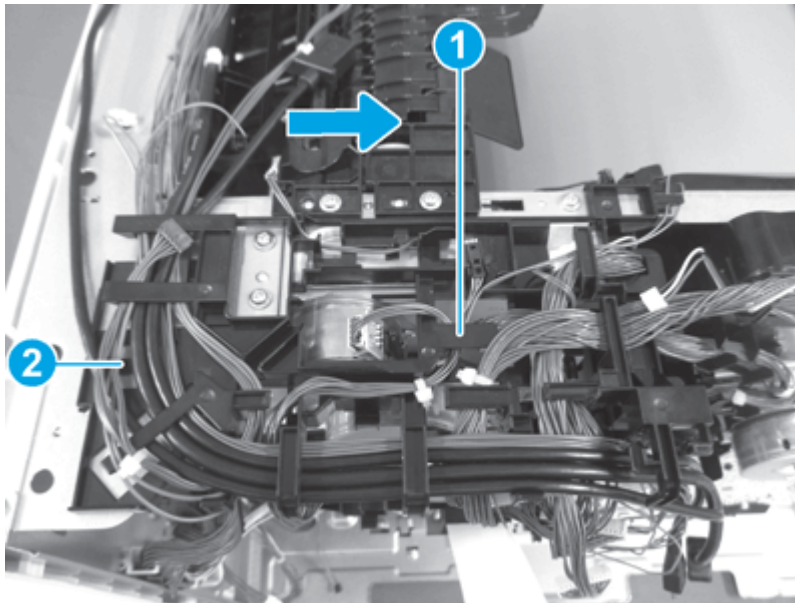
3. **M681/M682 only:** Remove three screws (callout 1), and then remove the stay (callout 2).

Figure 5-1562 Remove three screws and the stay



4. Release all cables from the cable guide (callout 1). Release one tab (callout 2), and then slide the cable guide (callout 3) right to release it from the sheet metal. When the guide is released, gently pull the right corner forward and away from the printer. Pivot the cable guide and cables upwards to provide access to the fuser drive assembly.

Figure 5-1563 Release the cable guide



5. Remove four screws (callout 1), and then remove the fuser drive assembly (callout 2).


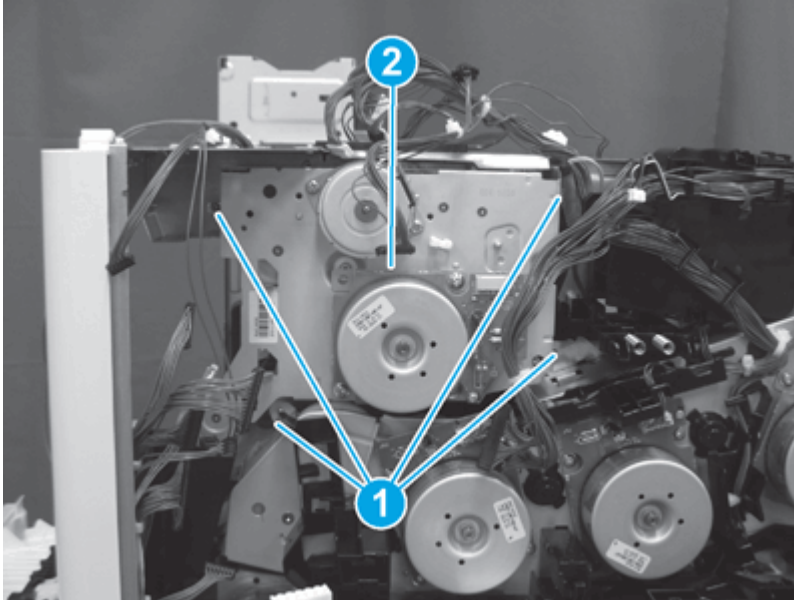
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1564 Remove the fuser drive assembly



28. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

29. Reverse the removal steps to install the assembly

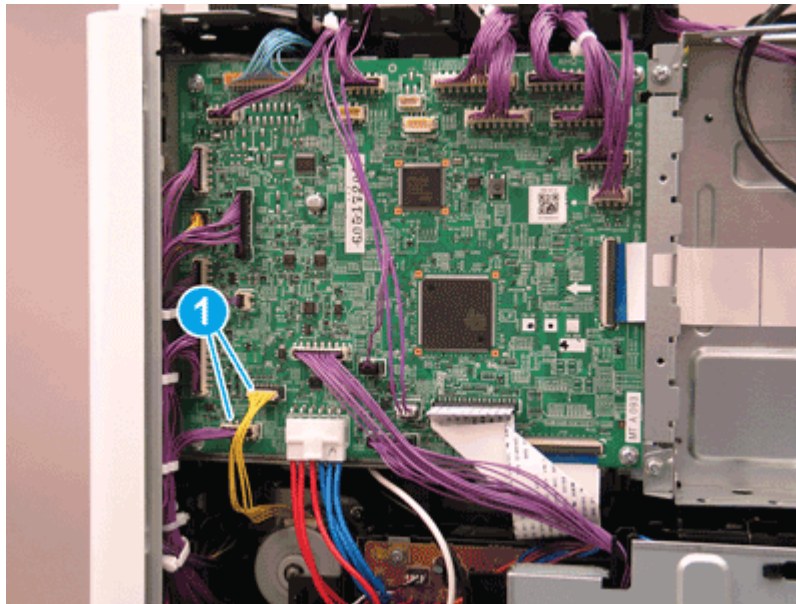
Also use the following **special installation instructions**.

DC controller PCA

- Two cables (callout 1) will fit in more than one connector. Make sure that these cables are installed in the correct connectors.

 **NOTE:** Continue to reverse the removal steps to finish installing the assembly.

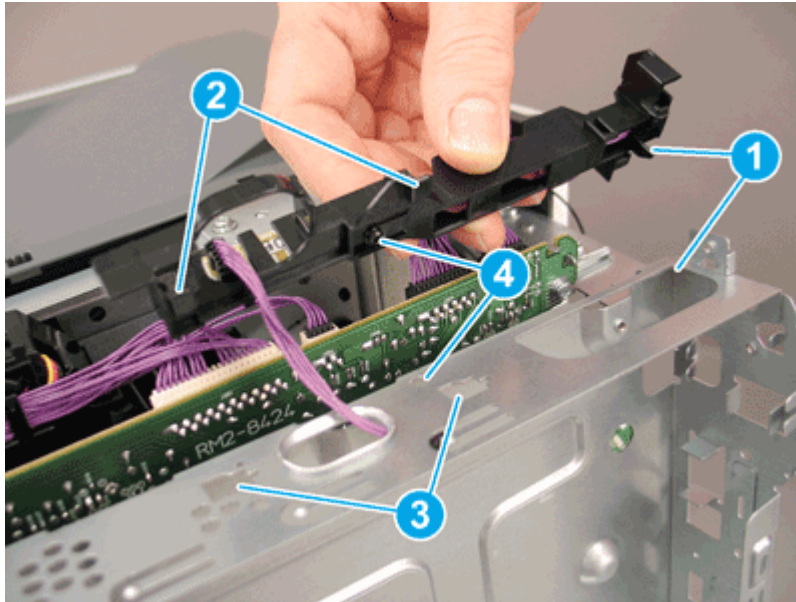
Figure 5-1565 Check the yellow cable



Formatter case

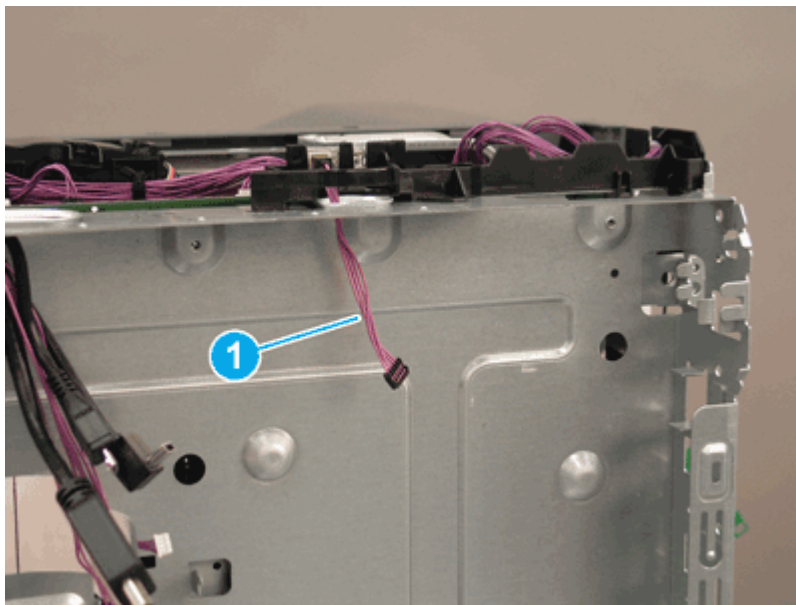
1. Align the hook on the right side of the cable guide with the slot in the formatter case (callout 1). Align two tabs (callout 2) with the slots (callout 3) in the top of the formatter case. Align the boss with the opening in the sheet metal (callout 4). Slide the cable guide to the right to lock it into position.

Figure 5-1566 Install the cable guide



2. Make sure that the island of data (IOD) cable (callout 1) is routed through the formatter case.

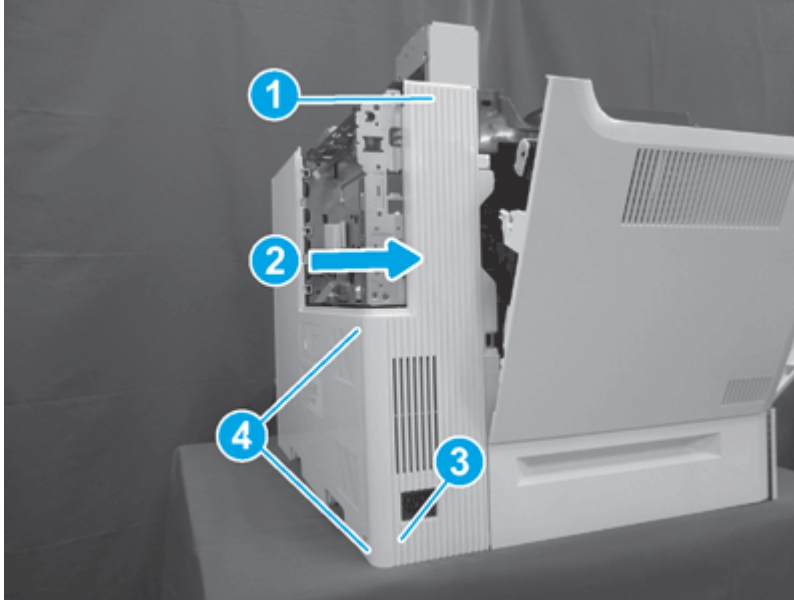
Figure 5-1567 Check the IOD cable



Left rear cover

- Position the top of the cover (callout 1) first, and then slide the cover to the right (callout 2). Push the left lower corner (callout 3) toward the rear of the printer to engage two tabs (callout 4) in the slots on the rear cover.

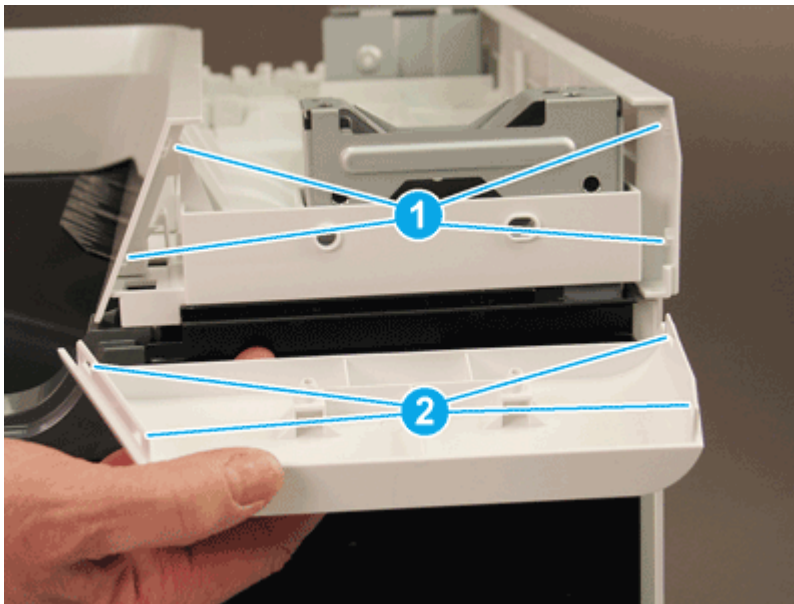
Figure 5-1568 Install the left rear cover



Face-down front cover

- When reinstalling the cover, position the tabs (callout 1) on the printer into the slots (callout 2) on the cover.

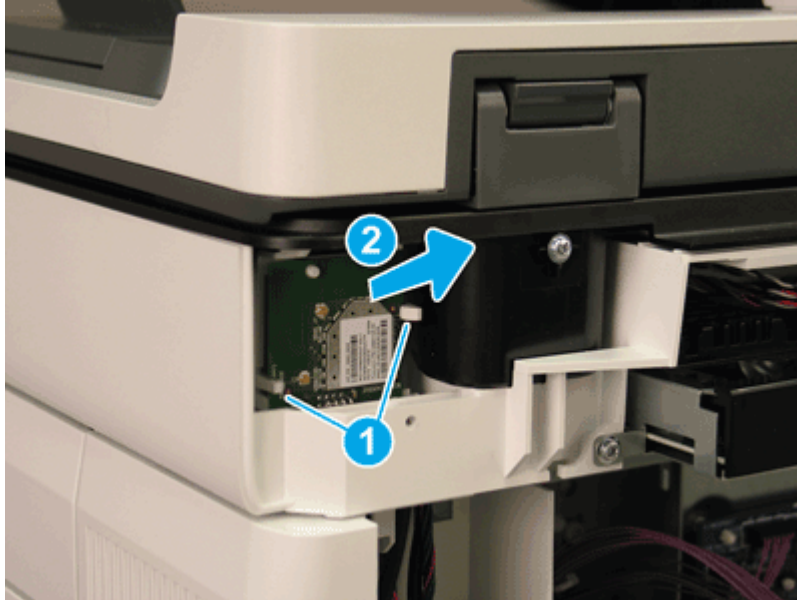
Figure 5-1569 Install the cover



Document feeder and image scanner

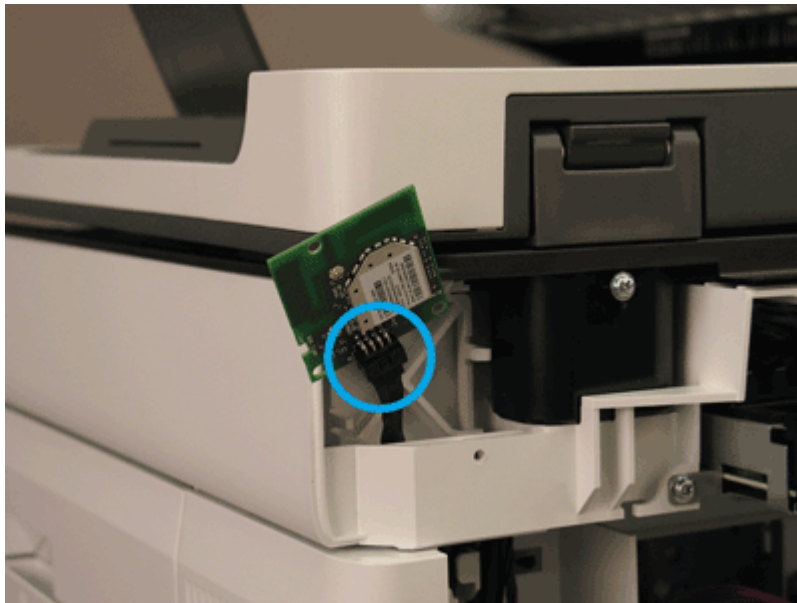
1. **Flow M682z only:** When reconnecting the wireless card cable, do the following:
 - a. Release two tabs (callout 1), and then remove the wireless card (callout 2).

Figure 5-1570 Remove the wireless card



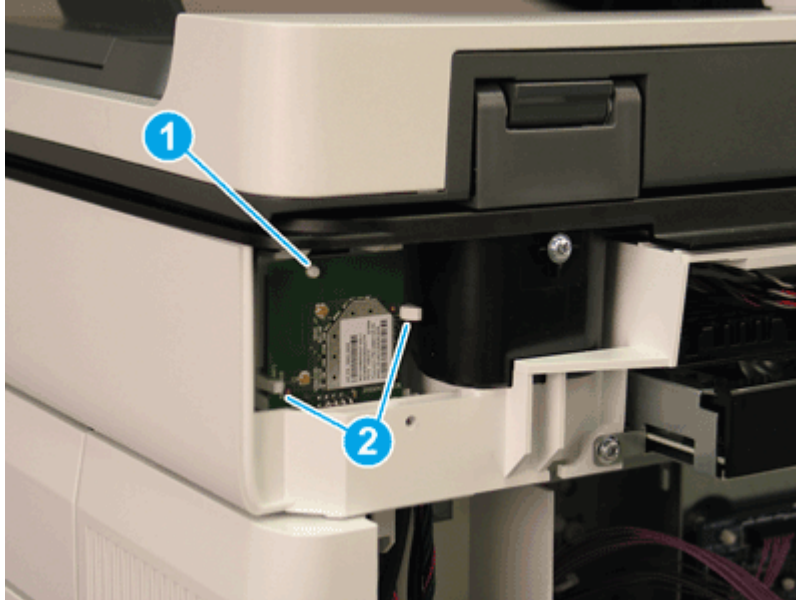
- b. Connect the cable to the wireless card (callout 1).

Figure 5-1571 Connect the wireless card connector



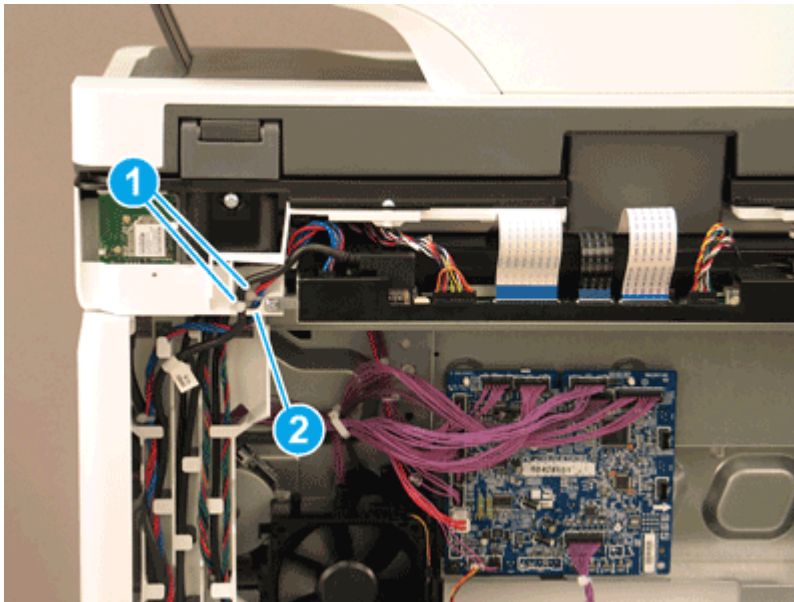
- c. Reinstall the wireless card. Make sure that the hole in the card is positioned over the peg (callout 1), and that the card is under the two tabs (callout 2).


Figure 5-1572 Reinstall the wireless card



2. When reinstalling the SCB cables, make sure that the wire retainers (callout 1) on the cables are positioned above the plastic guide (callout 2).

Figure 5-1573 Install the SCB cables



 **NOTE:** Continue to reverse the removal steps to finish installing the assembly.

Removal and replacement: Developer alienation motor

Learn how to remove and replace the developer alienation motor.

 [View a video of how to remove and replace the developer alienation motor.](#)

Mean time to repair: 45 minutes

Service level: Advanced



IMPORTANT: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Disconnect the power cable.

⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-77 Part Information

Part number	Part description
RK2-6027-000CN	Developer alienation motor

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Make sure that the printer initializes to a **Ready** state.

Print a configuration page to make sure that the printer is functioning correctly.

1. Remove the formatter cover

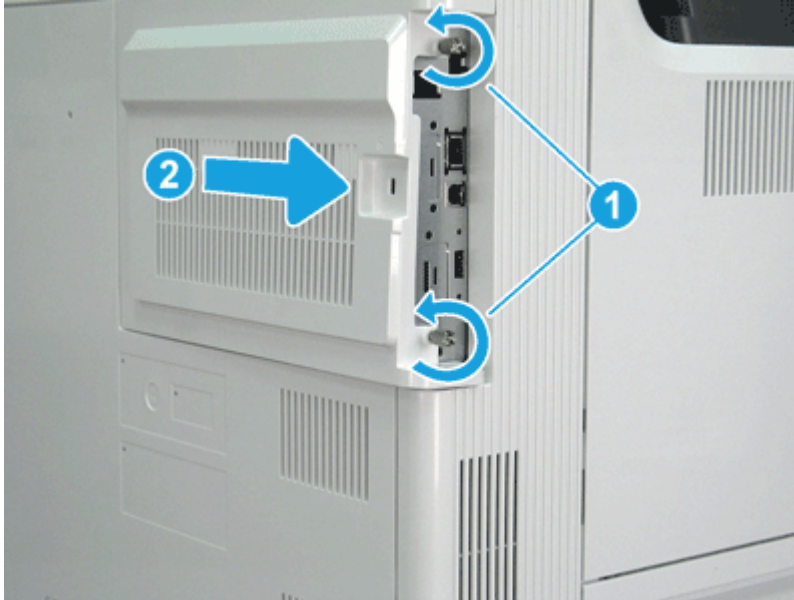
Follow these steps to remove the formatter cover.

- Unscrew two thumbscrews (callout 1), and then slide the formatter cover (callout 2) away from the printer to remove it.



TIP: Reverse the removal steps to install the assembly.

Figure 5-1574 Remove the formatter cover

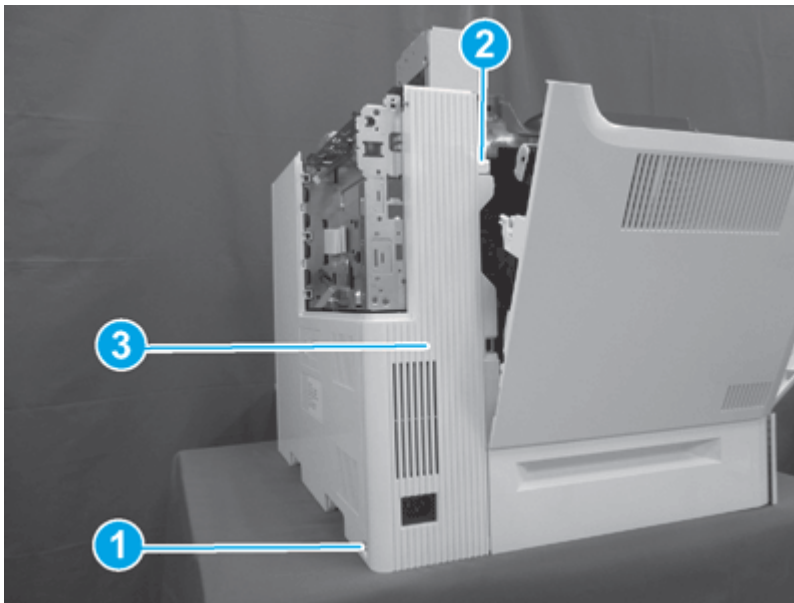


2. Remove the left rear cover

Follow these steps to remove the left rear cover.

- Open the left door. Remove one screw (callout 1), release one boss (callout 2), and then remove the left rear cover (callout 3).

Figure 5-1575 Remove the left rear cover



3. Remove the rear cover

Follow these steps to remove the rear cover.

- Remove two screws (callout 1), and then slide the rear cover (callout 2) to the right to remove it.


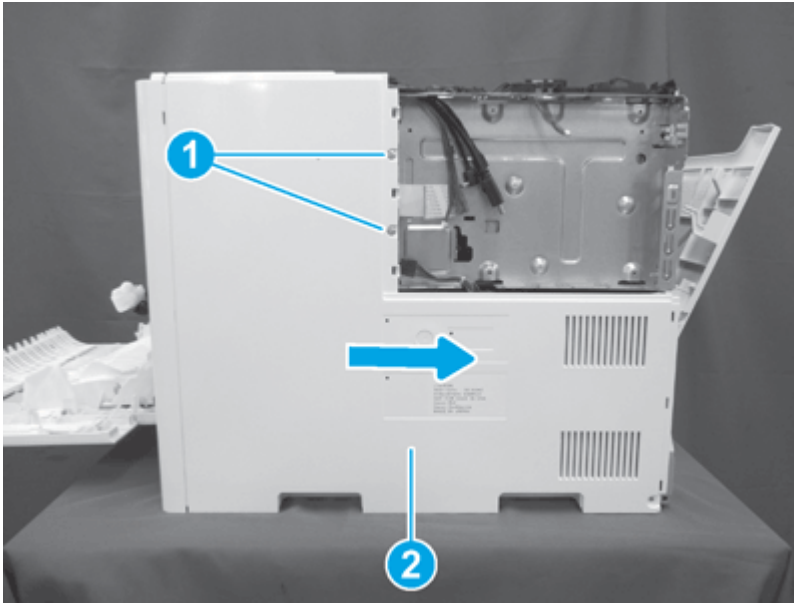
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1576 Remove two screws and the rear cover

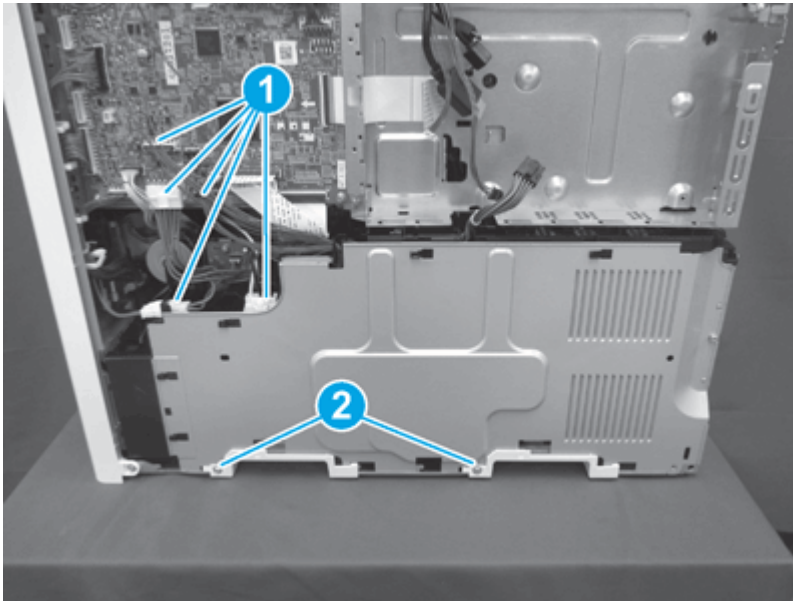


4. Remove the low-voltage power supply (LVPS) and fan

Follow these steps to remove the low-voltage power supply (LVPS) and fan.

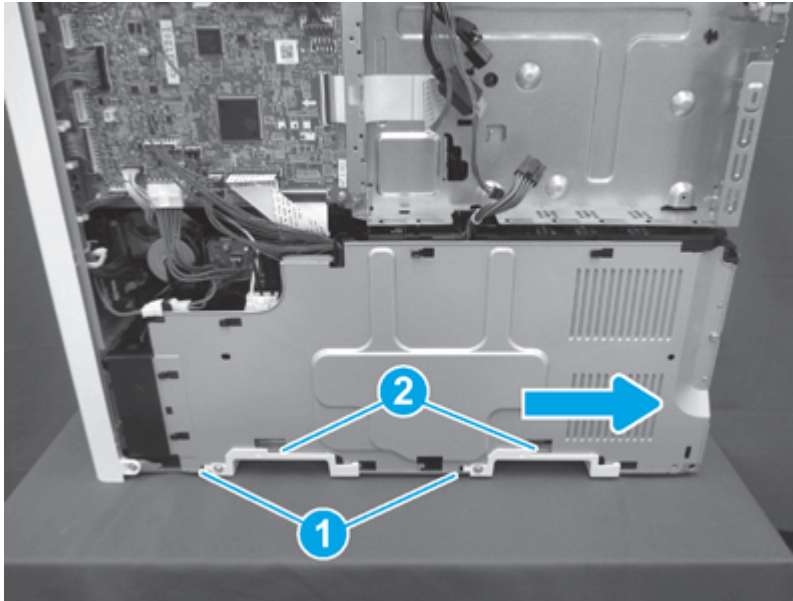
1. Disconnect five connectors (callout 1), and then remove two screws (callout 2).

Figure 5-1577 Disconnect five connectors and remove two screws



2. Release two tabs (callout 1), and then slide two handles (callout 2) to the right to remove them.

Figure 5-1578 Remove two handles

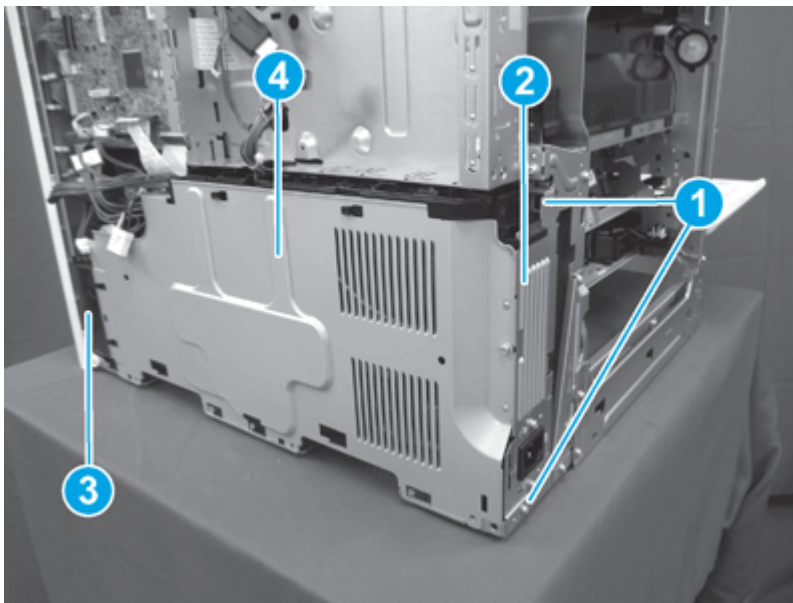


3. Remove two screws (callout 1). Remove the low-voltage power supply (callout 2) together with the power supply fan (callout 3) and the low-voltage power supply cover (callout 4).



NOTE: The upper screw is recessed inside the printer just above the upper right corner of the LVPS. The lower screw is located between the locator pins at the bottom of the assembly.

Figure 5-1579 Remove the low-voltage power supply



5. Remove the developer alienation motor

Follow these steps to remove the developer alienation motor.

- Disconnect one connector (callout 1), remove two screws (callout 2), and then remove the developer alienation motor (callout 3).


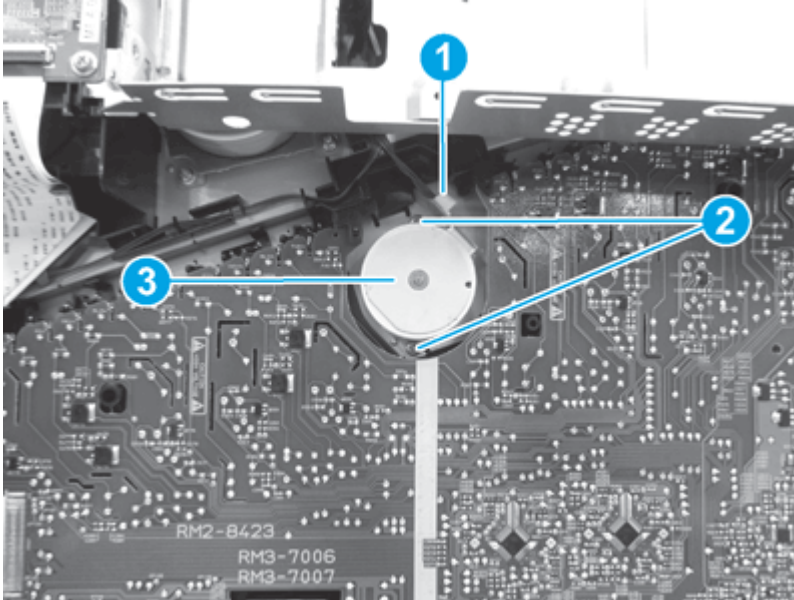
 **NOTE:** The two screws (callout 2) do not have a flange on them. Make sure these screws are reinstalled on this motor.


Figure 5-1580 Remove the developer alienation motor



6. Unpack the replacement assembly



Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.


 **NOTE:** HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>


2. Unpack the replacement part from the packaging.

 **CAUTION:**  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

 **IMPORTANT:** Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

 **NOTE:** If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

 **NOTE:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Pickup motor


Learn how to remove and replace the pickup motor.



[View a video of how to remove and replace the pickup motor.](#)


Mean time to repair: 30 minutes

Service level: Advanced

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Disconnect the power cable.

 **WARNING!** To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-78 Part information

Part number	Part description
RK2-7757-000CN	Pickup motor

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Make sure that the printer initializes to a **Ready** state.

Print a configuration page to make sure that the printer is functioning correctly.

1. Remove the formatter cover

Follow these steps to remove the formatter cover.

- Unscrew two thumbscrews (callout 1), and then slide the formatter cover (callout 2) away from the printer to remove it.


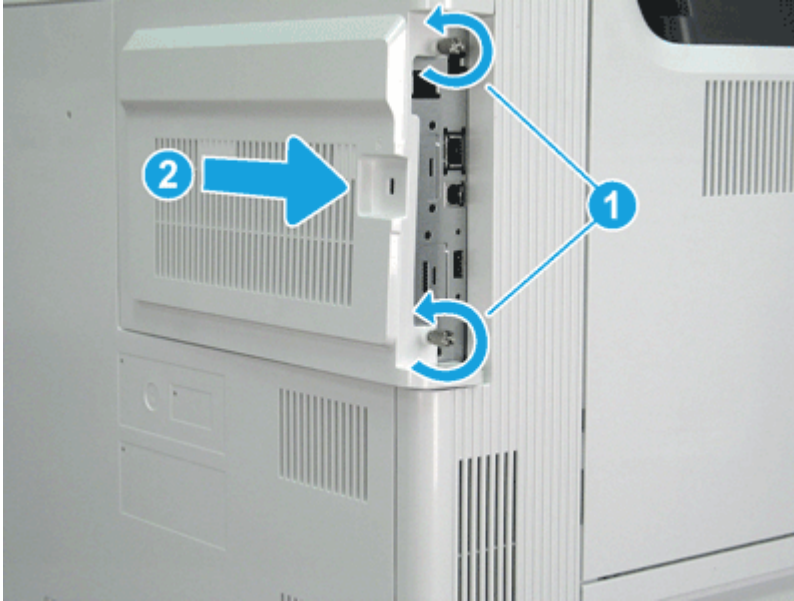
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1581 Remove the formatter cover

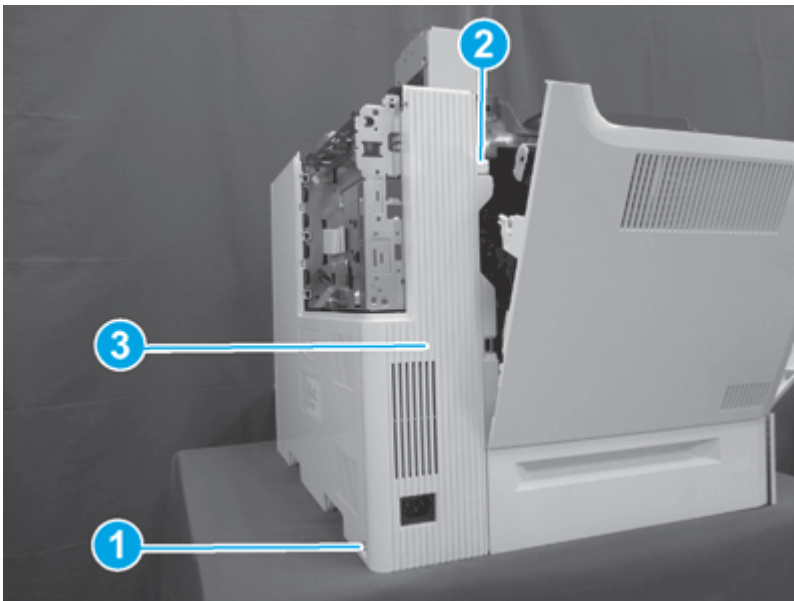


2. Remove the left rear cover

Follow these steps to remove the left rear cover.

- Open the left door. Remove one screw (callout 1), release one boss (callout 2), and then remove the left rear cover (callout 3).

Figure 5-1582 Remove the left rear cover



3. Remove the rear cover

Follow these steps to remove the rear cover.

- Remove two screws (callout 1), and then slide the rear cover (callout 2) to the right to remove it.


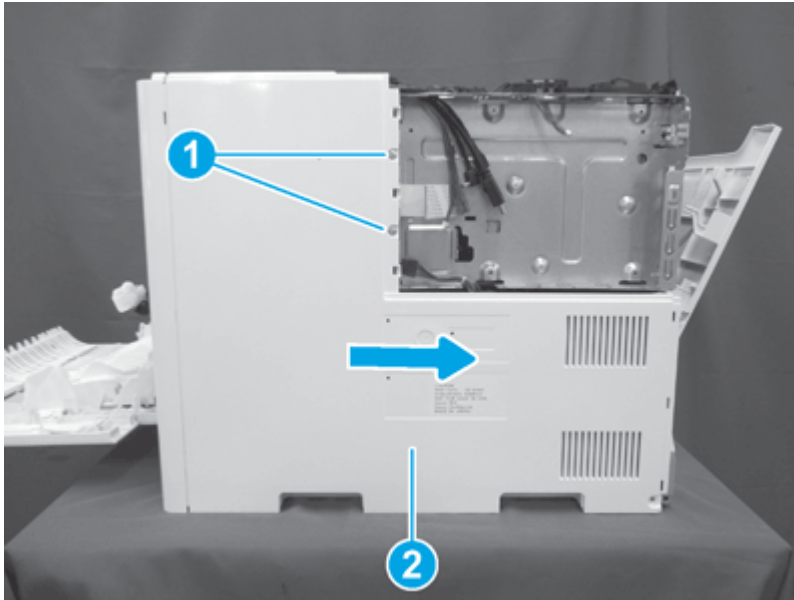
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1583 Remove two screws and the rear cover

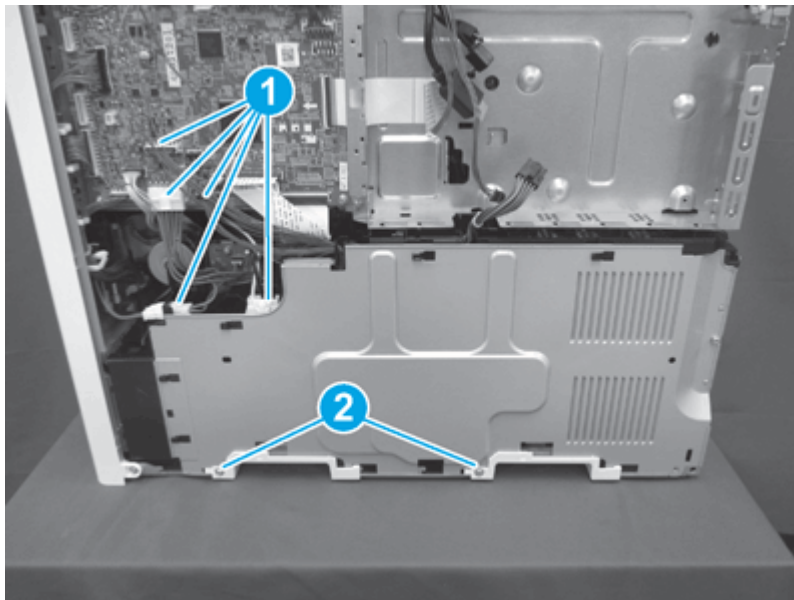


4. Remove the low-voltage power supply (LVPS) and fan

Follow these steps to remove the low-voltage power supply (LVPS) and fan.

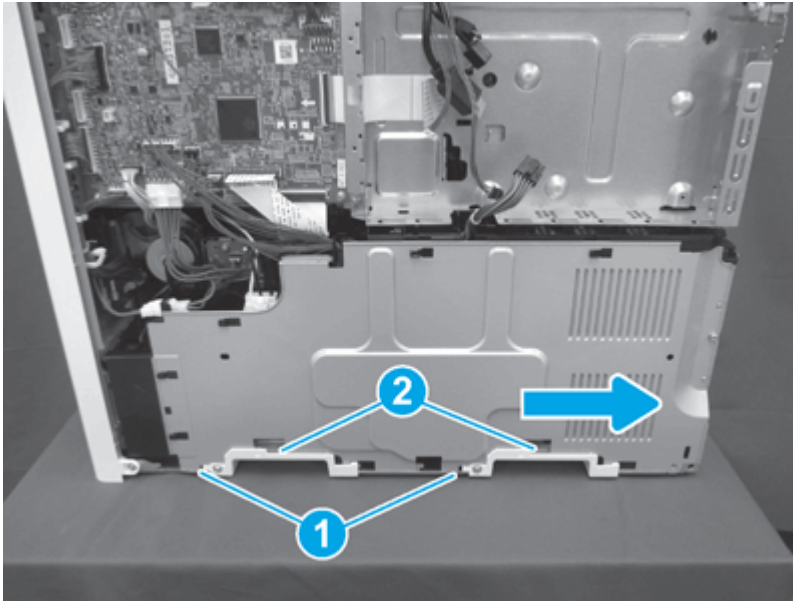
1. Disconnect five connectors (callout 1), and then remove two screws (callout 2).

Figure 5-1584 Disconnect five connectors and remove two screws



2. Release two tabs (callout 1), and then slide two handles (callout 2) to the right to remove them.

Figure 5-1585 Remove two handles



3. Remove two screws (callout 1). Remove the low-voltage power supply (callout 2) together with the power supply fan (callout 3) and the low-voltage power supply cover (callout 4).


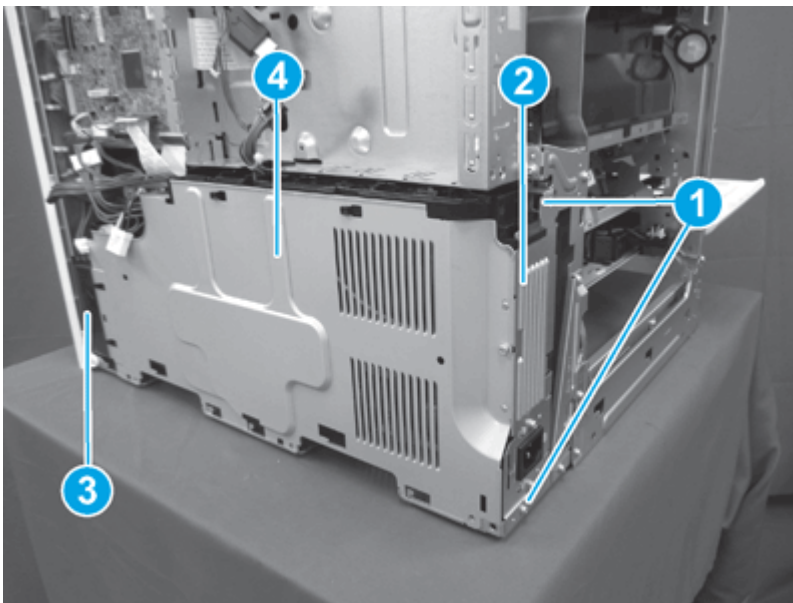
 **NOTE:** The upper screw is recessed inside the printer just above the upper right corner of the LVPS. The lower screw is located between the locator pins at the bottom of the assembly.

Figure 5-1586 Remove the low-voltage power supply



5. Remove the pickup motor

Follow these steps to remove the pickup motor.

- Disconnect one connector (callout 1), remove two screws (callout 2), and then remove the pickup motor (callout 3).


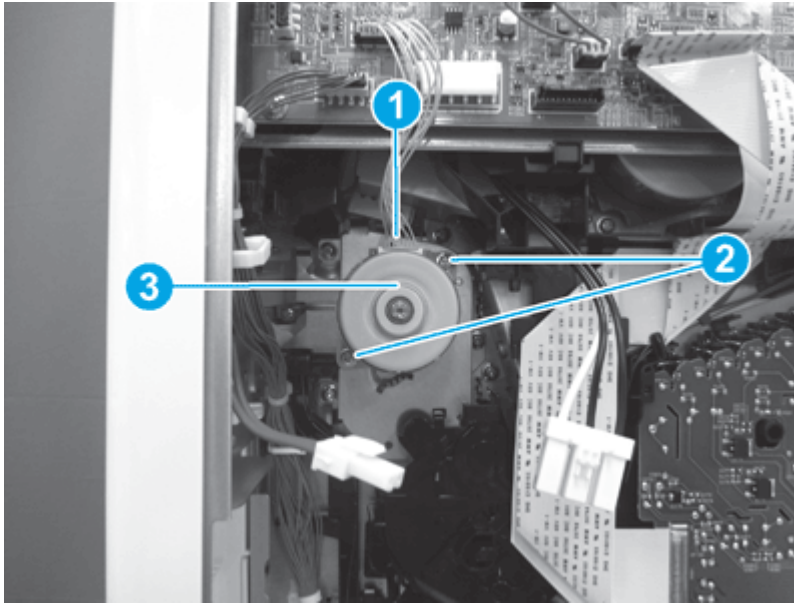
 **TIP:** Reverse the removal steps to install the assembly.


Figure 5-1587 Remove the pickup motor



6. Unpack the replacement assembly



Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.


 **NOTE:** HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>


2. Unpack the replacement part from the packaging.

 **CAUTION:**  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

 **IMPORTANT:** Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

 **NOTE:** If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

- To install an assembly, reverse the removal steps.

 **NOTE:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

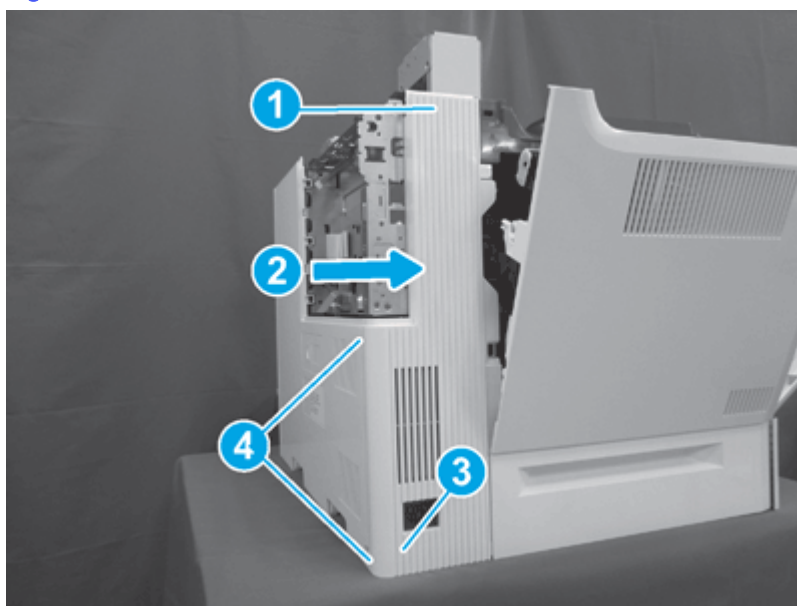
7. Reverse the removal steps to install the assembly

Also use the following **special installation instructions**.

Left rear cover

- Position the top of the cover (callout 1) first, and then slide the cover to the right (callout 2). Push the left lower corner (callout 3) toward the rear of the printer to engage two tabs (callout 4) in the slots on the rear cover.

Figure 5-1588 Install the left rear cover



 **NOTE:** Continue to reverse the removal steps to finish installing the assembly.


Removal and replacement: Delivery assembly (M652/M653/E65050/E65060/E65150/E65160)

Learn how to remove and replace the delivery assembly.

 [View a video of how to remove and replace the delivery assembly.](#)


Mean time to repair: 45 minutes

Service level: Advanced

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Disconnect the power cable.

 **WARNING!** To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-79 Part information

Part number	Part description
RM2-6621-000CN	Delivery assembly

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.


Post service test

Make sure that the printer initializes to a **Ready** state.

Print a configuration page to make sure that the printer is functioning correctly.

1. Remove the control panel (M652/M653/E65050/E65060/E65150/E65160)

Follow these steps to remove the control panel (M652/M653/E65050/E65060/E65150/E65160).

 **NOTE:** This step is for the M652/M653/E65050/E65060/E65150/E65160 printers. For the M681/M682/E67550/E67560/E67650/E67660 printers, skip this step.

The figures below show the touchscreen control panel. The procedure is also correct for the keypad control panel.

1. Tilt the control panel to the fully raised position.

Figure 5-1589 Tilt the control panel up



2. Use a coin to release the cover, and then remove the cover.

Figure 5-1590 Remove the cover



3. Remove one thumbscrew (callout 1)



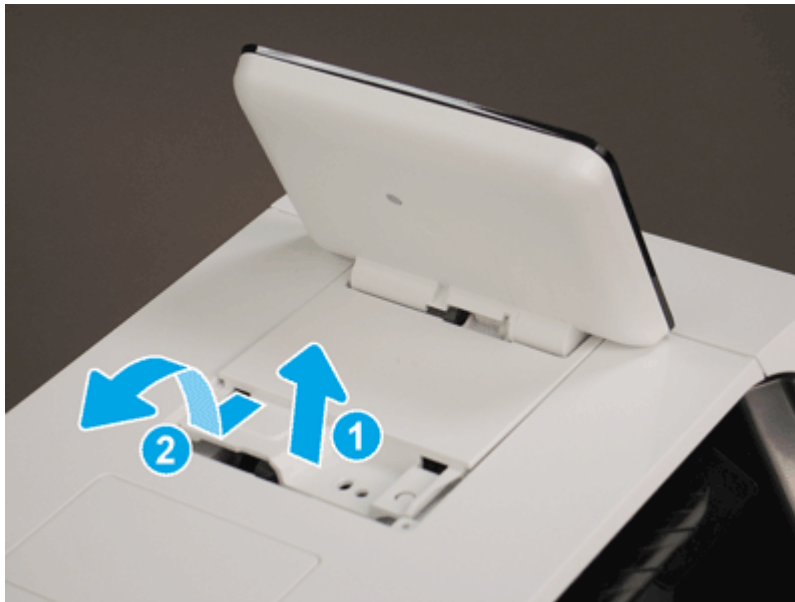
NOTE: Store the screw in a secure place where it cannot fall down into the printer.

Figure 5-1591 Remove one thumbscrew



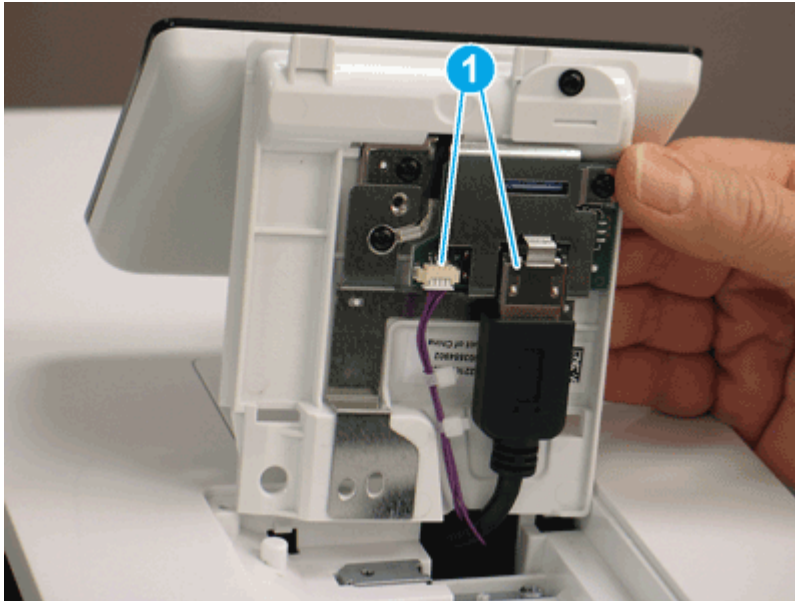
4. Lift the back edge of the control panel up (callout 1), and then slide it toward the back of the printer (callout 2) to release it.

Figure 5-1592 Release the control panel



5. Turn the control panel over to gain access to the bottom side. Disconnect two connectors (callout 1).

Figure 5-1593 Disconnect two connectors



6. Remove the control panel.

Figure 5-1594 Remove the control panel



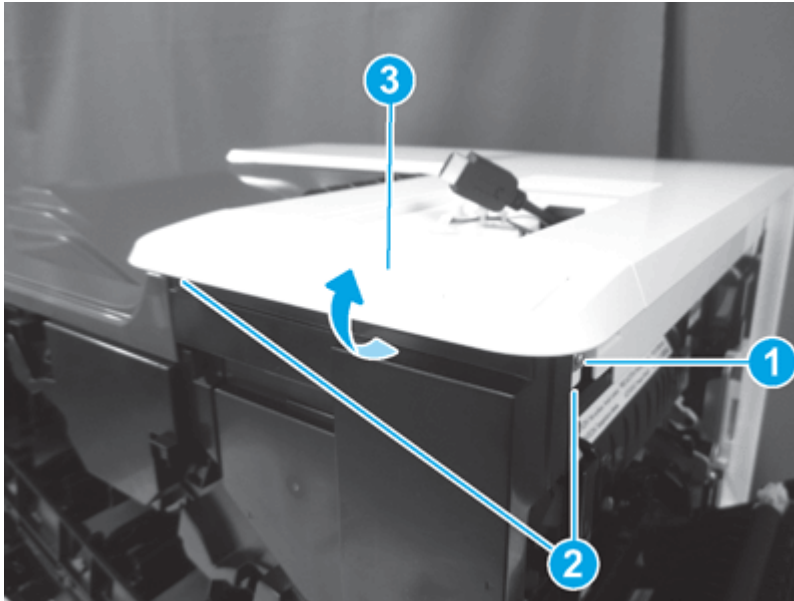
2. Remove the top cover (M652/M653/E65050/E65060/E65150/E65160)

Follow these steps to remove the top cover (M652/M653/E65050/E65060/E65150/E65160).

1. Open the following doors:
 - Front door
 - Left door

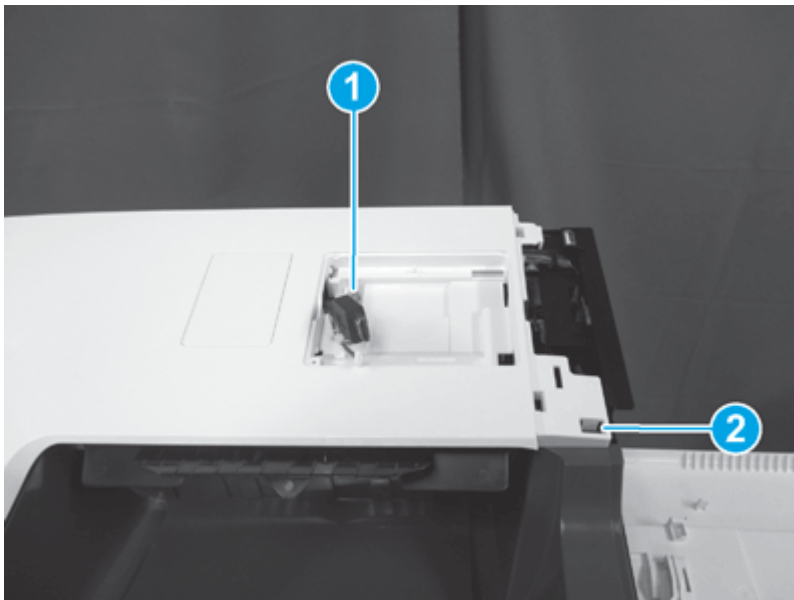
- Right door
2. Remove one screw (callout 1), release two tabs (callout 2), and then rotate the NFC cover (callout 3) up and away from the printer to remove it.

Figure 5-1595 Remove the NFC cover



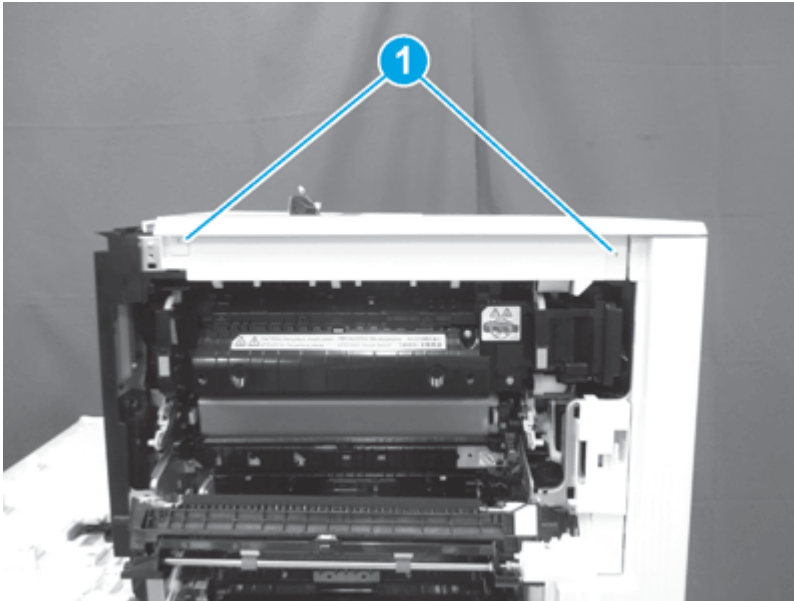
3. Remove one screw (callout 1), and then release one tab (callout 2).

Figure 5-1596 Remove one screw and release one tab



4. Release two tabs (callout 1).

Figure 5-1597 Release two tabs



5. Remove one screw (callout 1), release one tab (callout 2), release one tab behind the left door (callout 3), and then remove the top cover (callout 4).


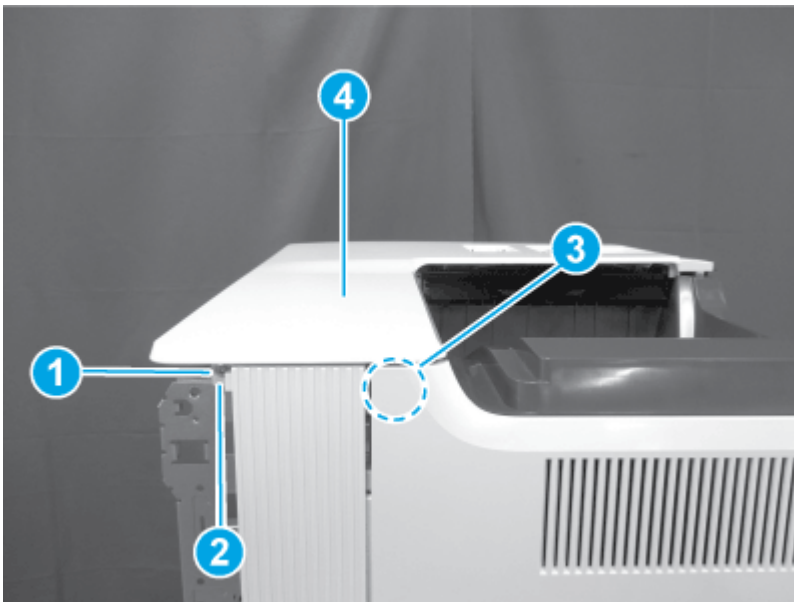
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1598 Remove the top cover



3. Remove the formatter cover

Follow these steps to remove the formatter cover.

- Unscrew two thumbscrews (callout 1), and then slide the formatter cover (callout 2) away from the printer to remove it.


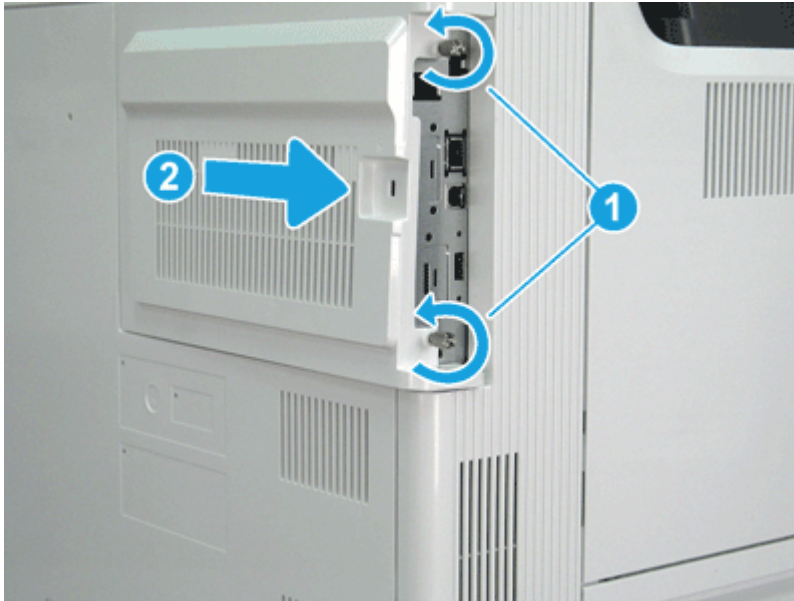
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1599 Remove the formatter cover



4. Remove the fuser

Follow these steps to remove the fuser.

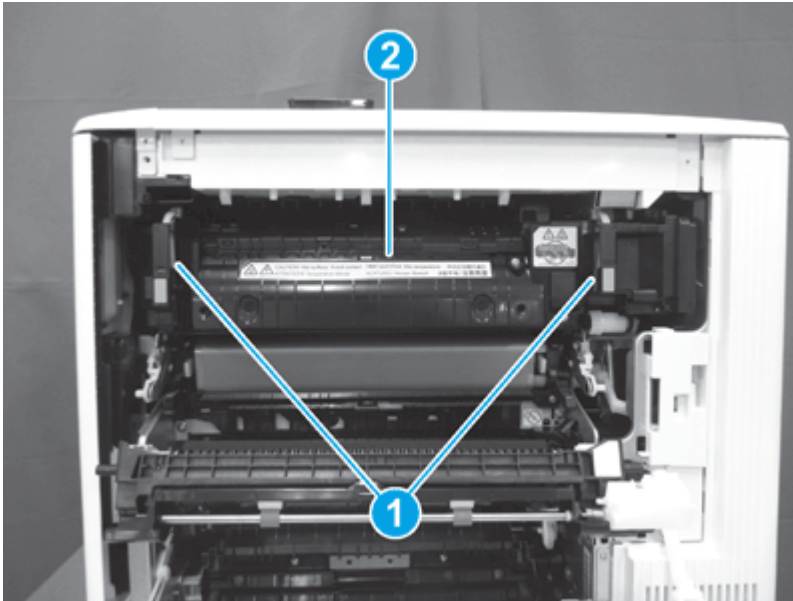
1. Open the right door.

Figure 5-1600 Open the right door



2. Grasp the handles (callout 1), and then pull away from the printer to remove the fuser (callout 2).

Figure 5-1601 Remove the fuser

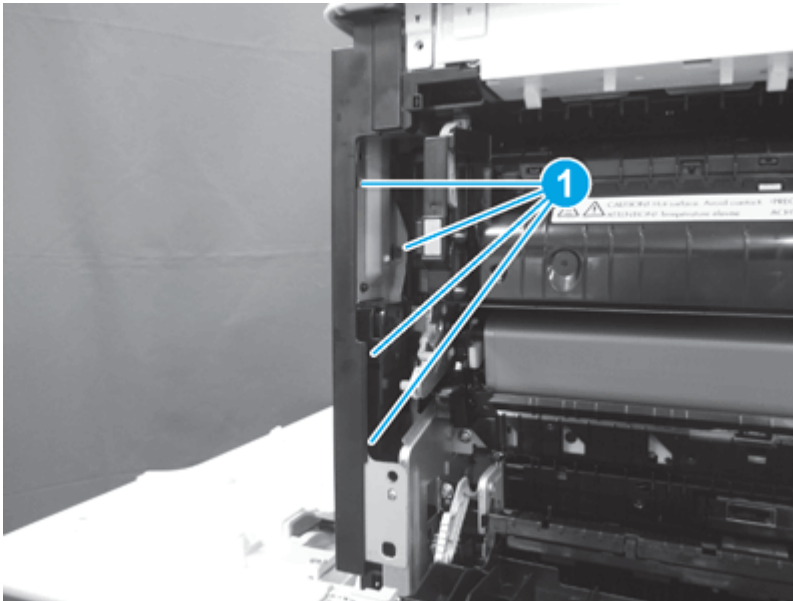


5. Remove the delivery assembly

Follow these steps to remove the delivery assembly.

1. Release four tabs (callout 1).

Figure 5-1602 Release four tabs



2. Release four tabs (callout 1), and then remove the front right inner cover (callout 2).


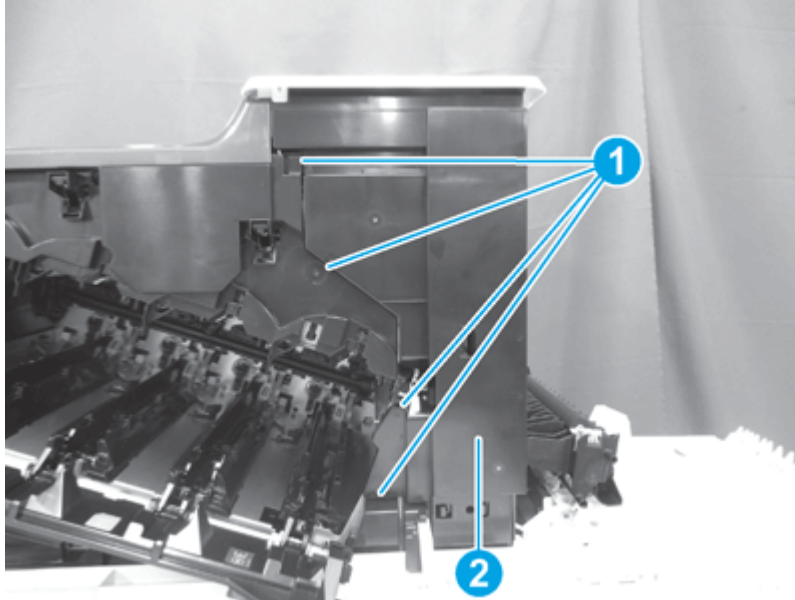
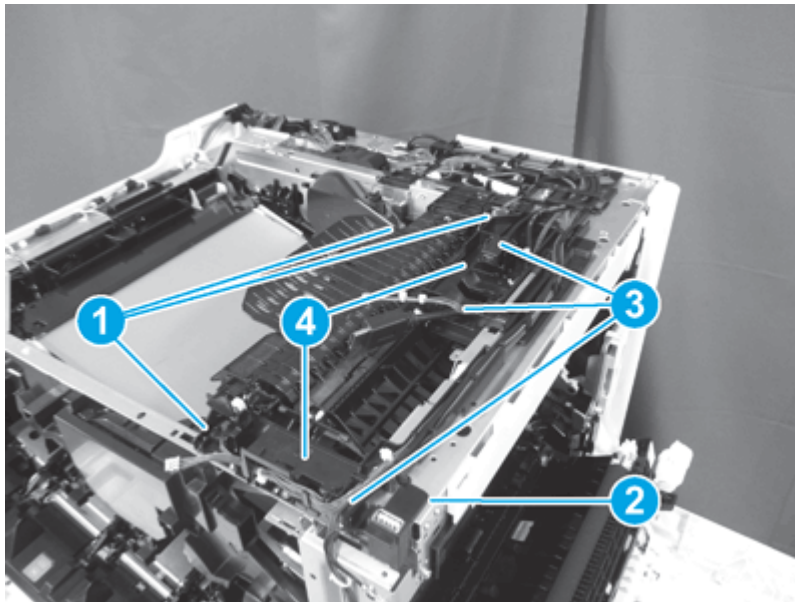
 **TIP:** Push on the back side of the cover for easy release.

Figure 5-1603 Remove the front right inner cover



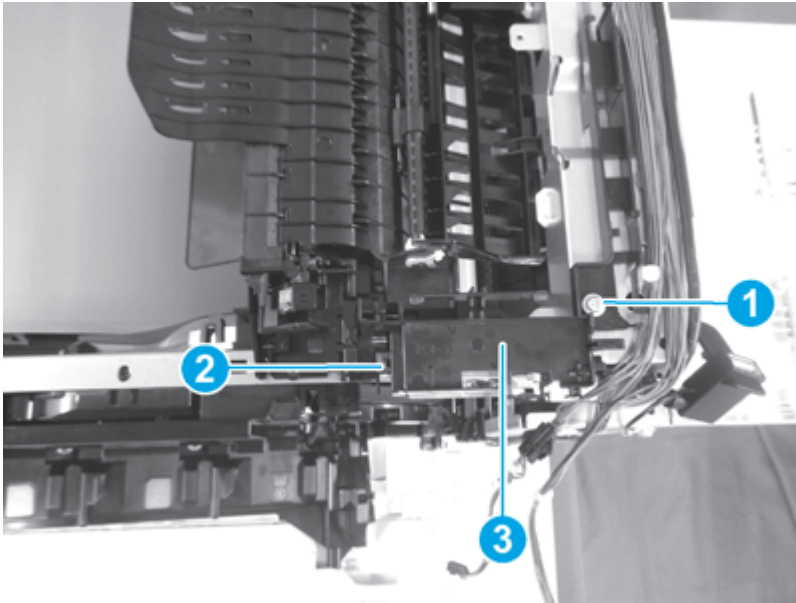
3. Disconnect three connectors (callout 1), and then release one boss (callout 2). Release the cable (callout 3) from the cable guide (callout 4).

Figure 5-1604 Disconnect three connectors and release one boss



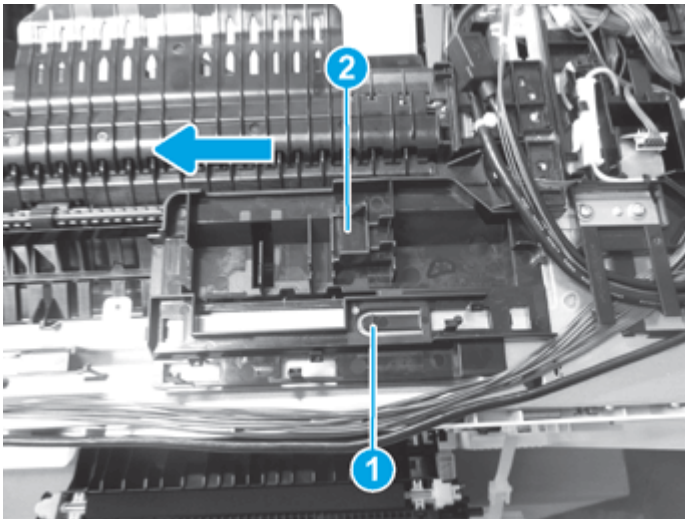
4. Remove one screw (callout 1), release one tab (callout 2), and then remove the cable guide (callout 3).

Figure 5-1605 Remove the cable guide



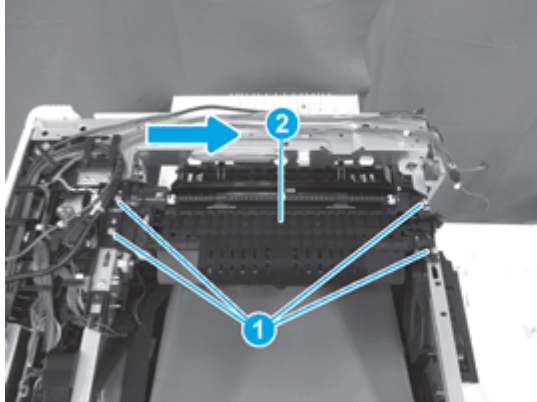
5. Release one boss (callout 1), and then slide the cable guide (callout 2) to the left to remove it.

Figure 5-1606 Remove the cable guide



6. Remove four screws (callout 1), and then slide the delivery assembly (callout 2) to the right to remove it.

Figure 5-1607 Remove four screws and the delivery assembly



6. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

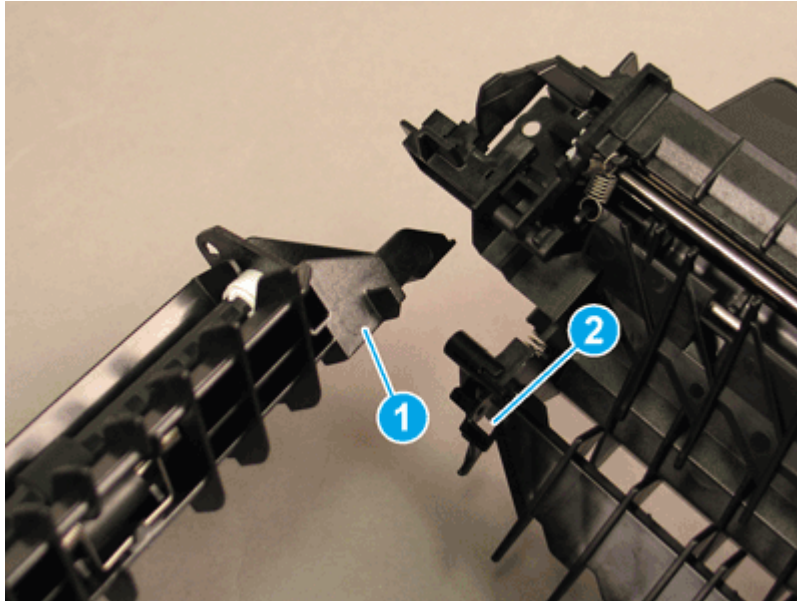
7. Reverse the removal steps to install the assembly

Also use the following **special installation instructions**.

Delivery assembly

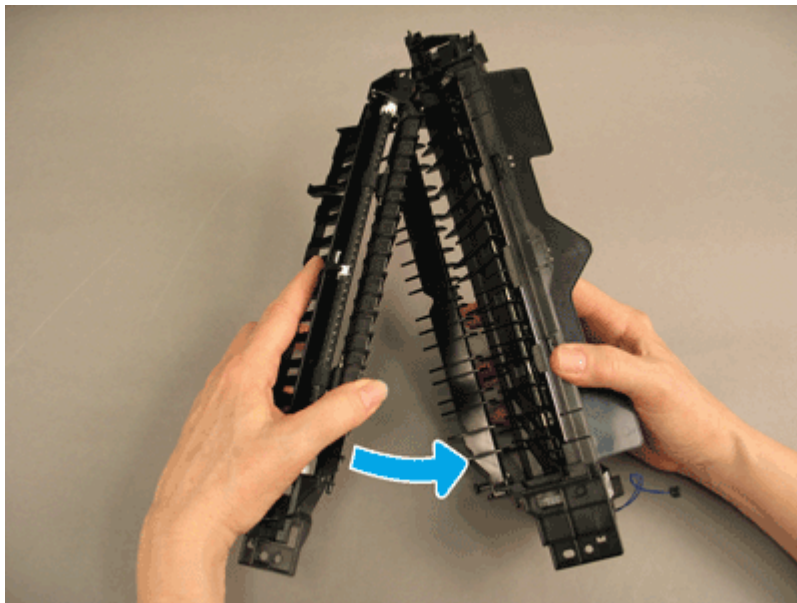
1. The delivery assembly is actually a three-piece unit. If the parts become separated after removing, follow these instructions to reassemble them:
 - a. Position the tab (callout 1) on the end of the lower portion in the slot (callout 2) on the end of the upper portion.

Figure 5-1608 Position the tab



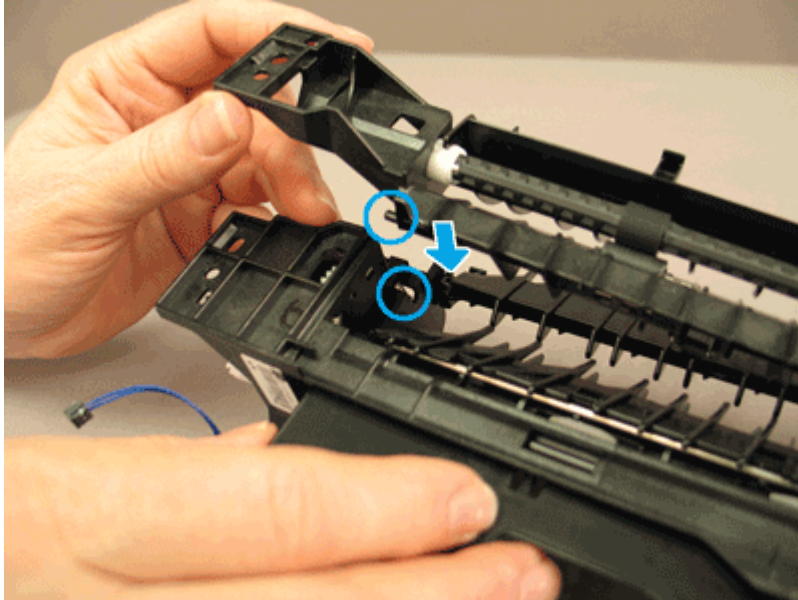
- b. Rotate the ends of the upper and lower parts together.

Figure 5-1609 Rotate the upper and lower parts together



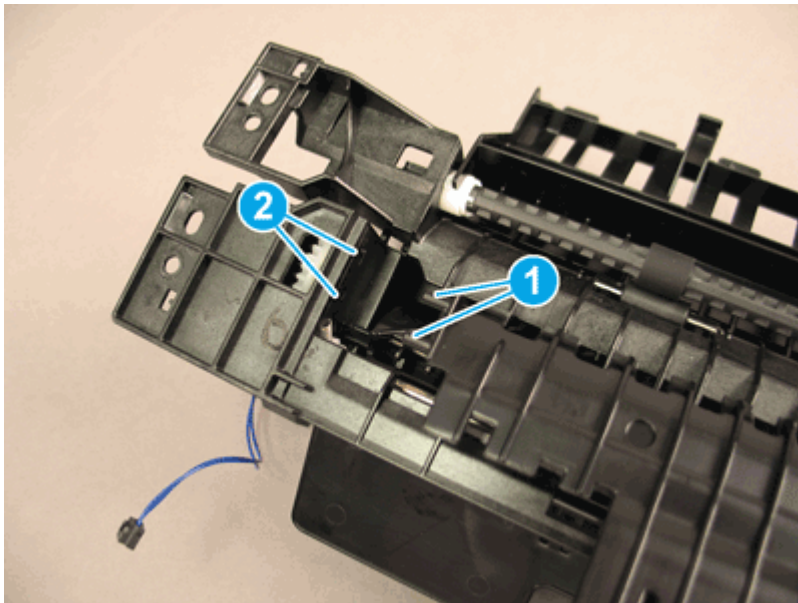
- c. Install the tab on the lower part into the slot on the upper part to join the parts together.

Figure 5-1610 Connect the upper and lower parts



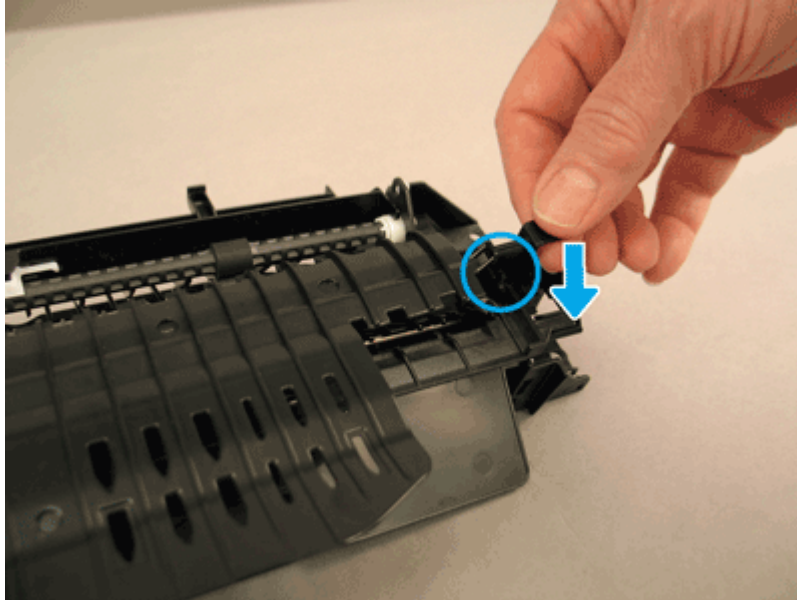
- d. Install the tabs (callout 1) on the lower shield into the slots (callout 2) in the delivery assembly.

Figure 5-1611 Install the tabs on the lower shield



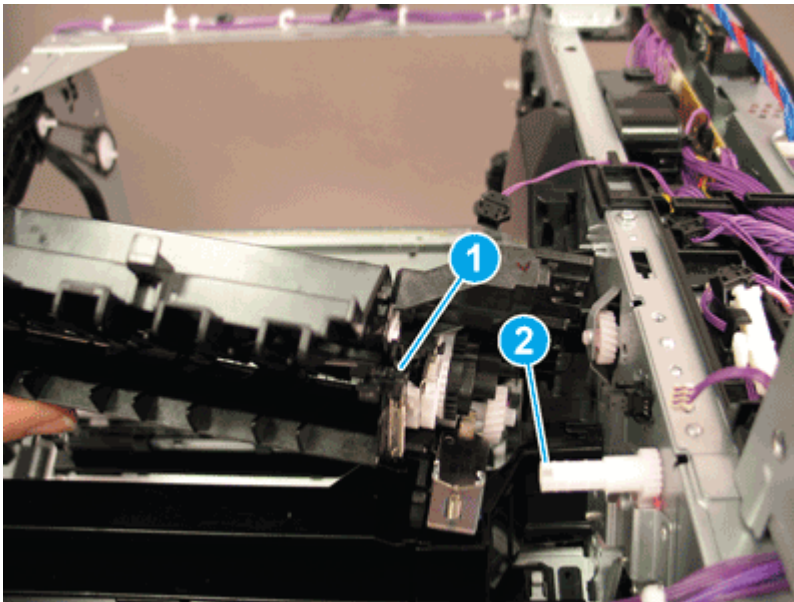
- e. Lower the end of the lower shield into the slot in the delivery assembly.

Figure 5-1612 Lower the end



2. Before reinstalling the delivery assembly, note the keyed shaft (callout 1) on the delivery assembly that must be aligned to fit into the slot (callout 2) on the drive gear.

Figure 5-1613 Note the keyed shaft

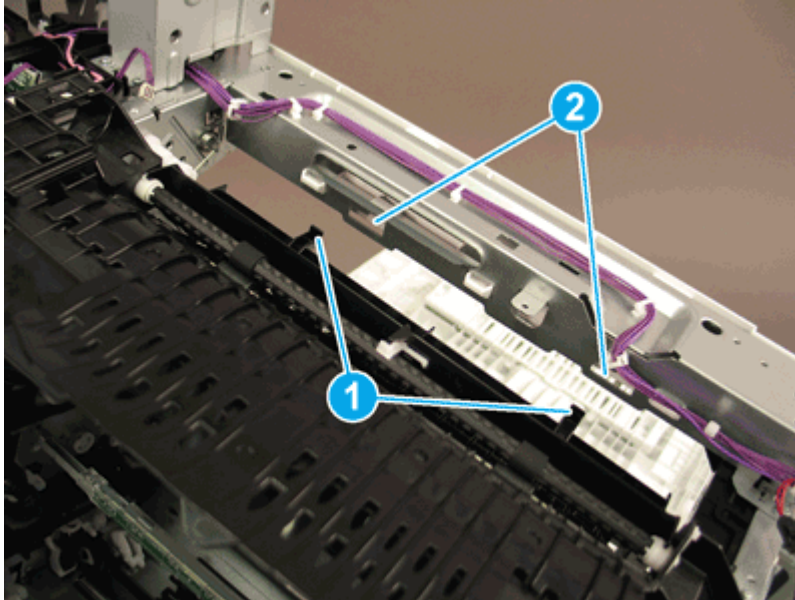


3. Install the hooks on the delivery assembly (callout 1) into the slots (callout 2) in the sheet metal frame.



NOTE: Continue to reverse the removal steps to finish installing the assembly.

Figure 5-1614 Install the hooks in the slots



Removal and replacement: Delivery assembly (M681/M682/E67550/E67560/E67650/E67660)

Learn how to remove and replace the delivery assembly.



[View a video of how to remove and replace the delivery assembly.](#)

Mean time to repair: 45 minutes

Service level: Advanced



IMPORTANT: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Disconnect the power cable.

⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-80 Part information

Part number	Part description
RM2-6621-000CN	Delivery assembly

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Make sure that the printer initializes to a **Ready** state.

Print a configuration page to make sure that the printer is functioning correctly.

1. Remove the formatter cover

Follow these steps to remove the formatter cover.

- Unscrew two thumbscrews (callout 1), and then slide the formatter cover (callout 2) away from the printer to remove it.


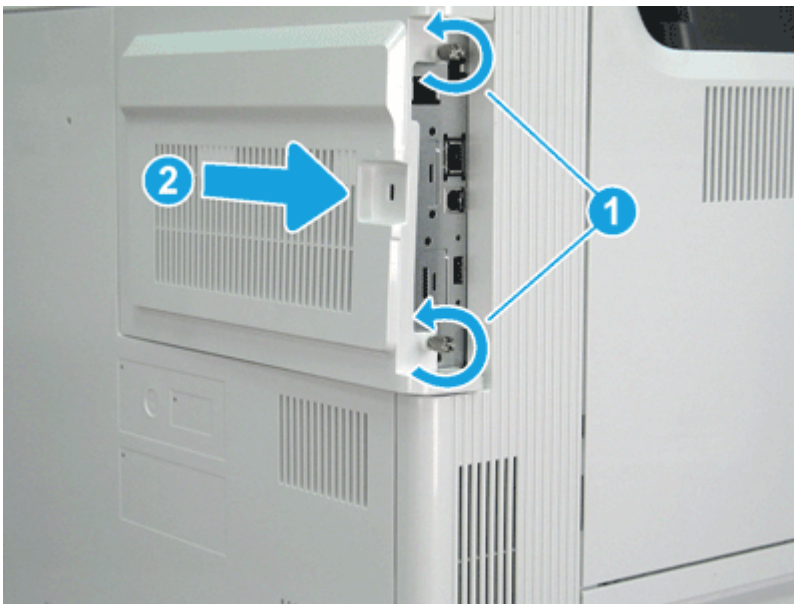
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1615 Remove the formatter cover



2. Remove the keyboard (MFP)

Follow these steps to remove the keyboard (MFP).

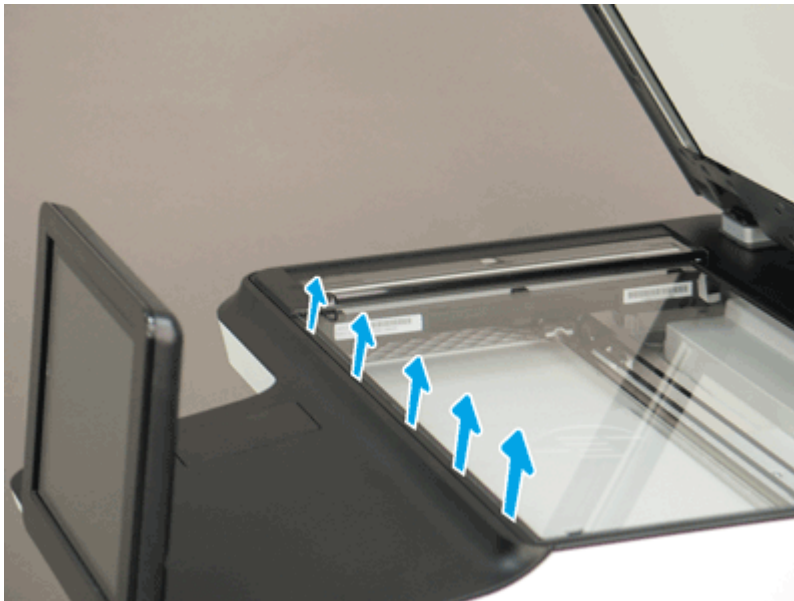
1. If the control panel is not fully tilted forward, tilt it forward now (callout 1) until it stops. Open the document feeder (callout 2).

Figure 5-1616 Tilt the control panel and open the document feeder



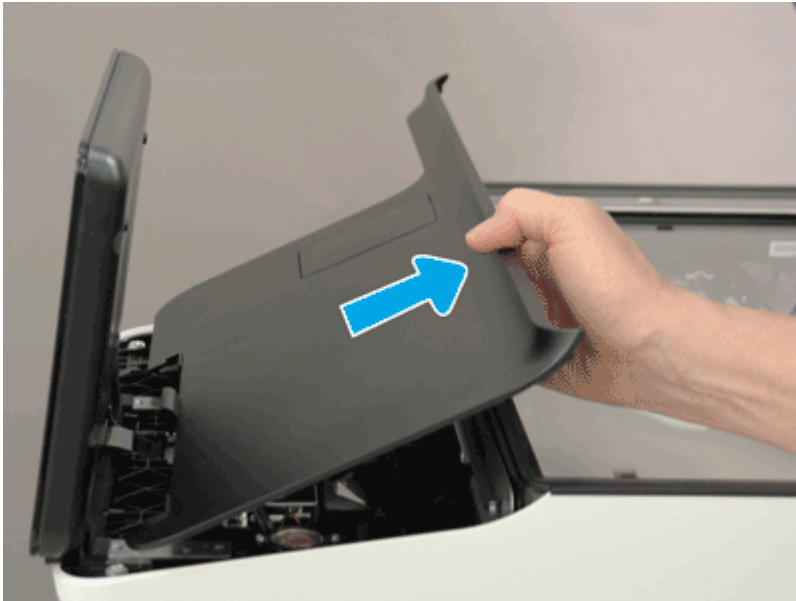
2. Beginning at the right side of the control-panel cover, carefully release five tabs along the top edge of the cover.

Figure 5-1617 Release five tabs



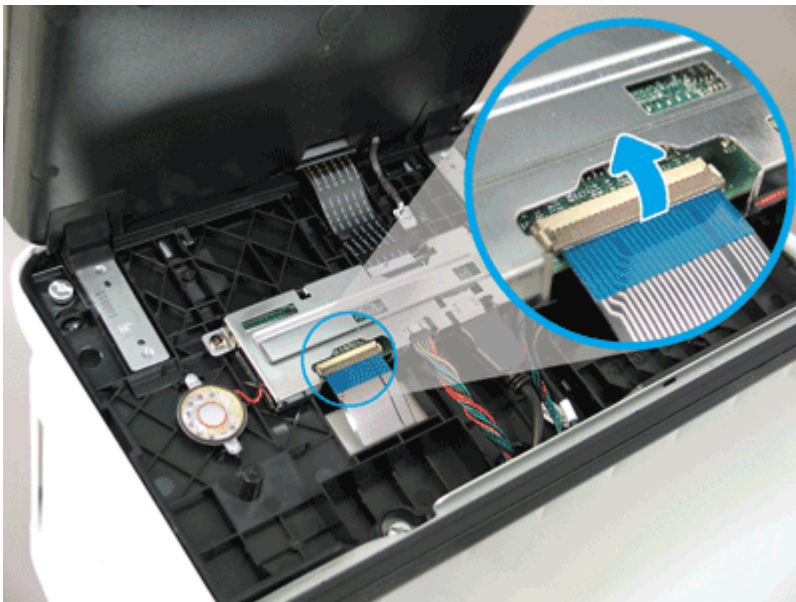
3. Continue to rotate the top edge of the cover away from the printer, and then remove the cover.

Figure 5-1618 Remove the cover



4. Open the connector latch to release the keyboard flat cable.

Figure 5-1619 Disconnect the keyboard flat cable



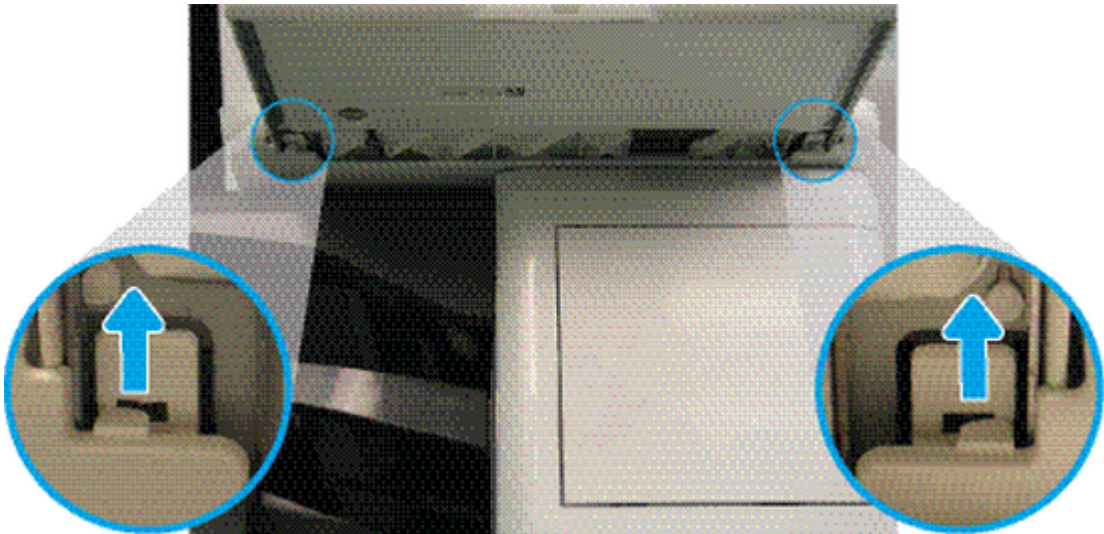
5. Slide the keyboard tray out until it stops.

Figure 5-1620 Slide the keyboard tray out



6. Push up on the keyboard tray to release two tabs on the bottom of the tray, and then slide the tray toward you to disengage the tabs.

Figure 5-1621 Release two tabs




7. Slide the keyboard tray all the way out of the printer to remove it.

Figure 5-1622 Remove the keyboard



3. Remove the control panel (M681/M682/E67550/E67560/E67650/E67660)

Follow these steps to remove the control panel (M681/M682/E67550/E67560/E67650/E67660).

 **NOTE:** This step is for the M681/M682/E67550/E67560/E67650/E67660 printers. For the M652/M653/E65050/E65060/E65150/E65160 printers, skip this step.

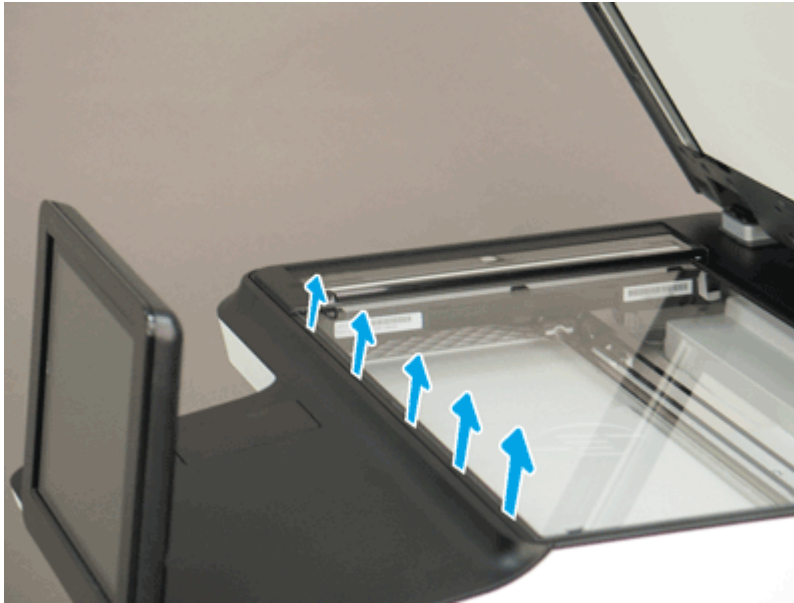
1. Tilt the control panel forward (callout 1), and then open the document feeder (callout 2).

Figure 5-1623 Tilt the control panel forward and open the document feeder



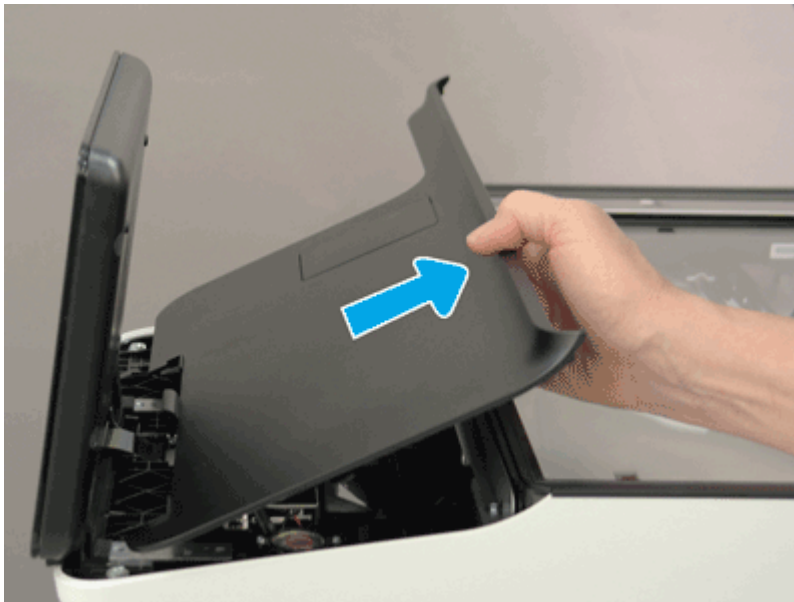
2. Beginning at the right side of the control-panel cover, carefully release five tabs along the top edge of the cover.

Figure 5-1624 Release five tabs



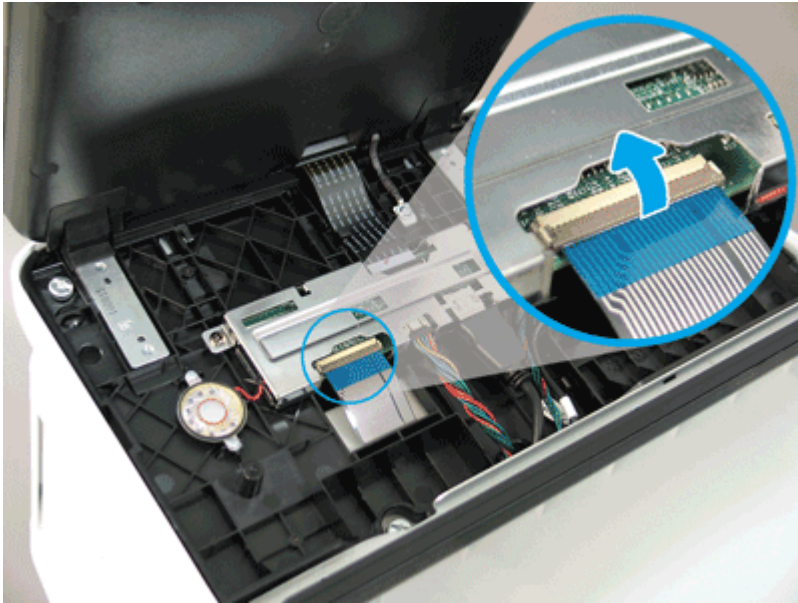
3. Continue to rotate the top edge of the cover away from the printer, and then remove the cover.

Figure 5-1625 Remove the cover



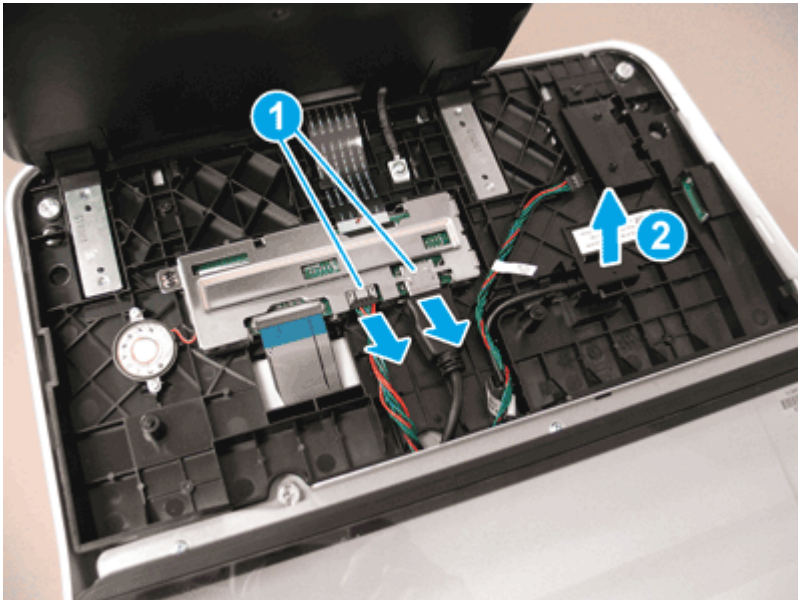
4. **Keyboard models only:** Lift up on the small, gray gate to release the keyboard flat cable.

Figure 5-1626 Disconnect the keyboard flat cable (keyboard models only)



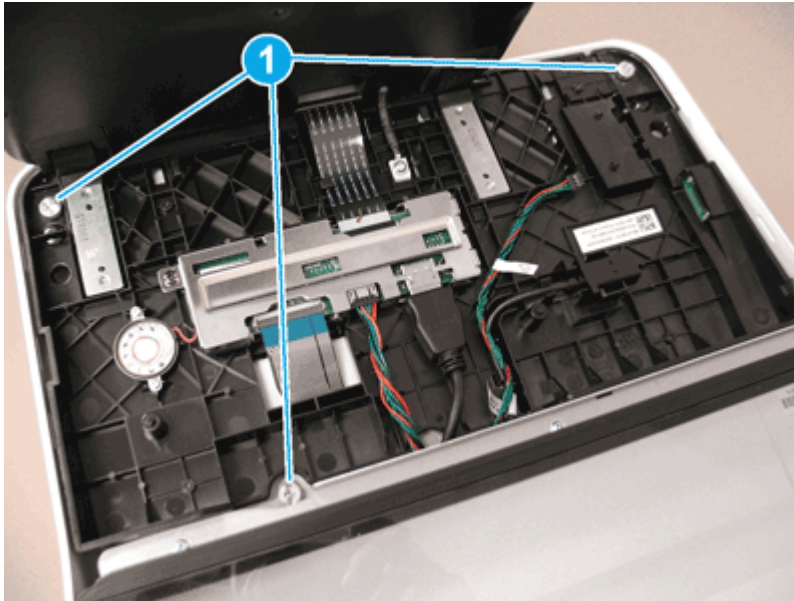
5. Disconnect two connectors (callout 1), and then release the USB cable (callout 2) from the holder.

Figure 5-1627 Disconnect connectors



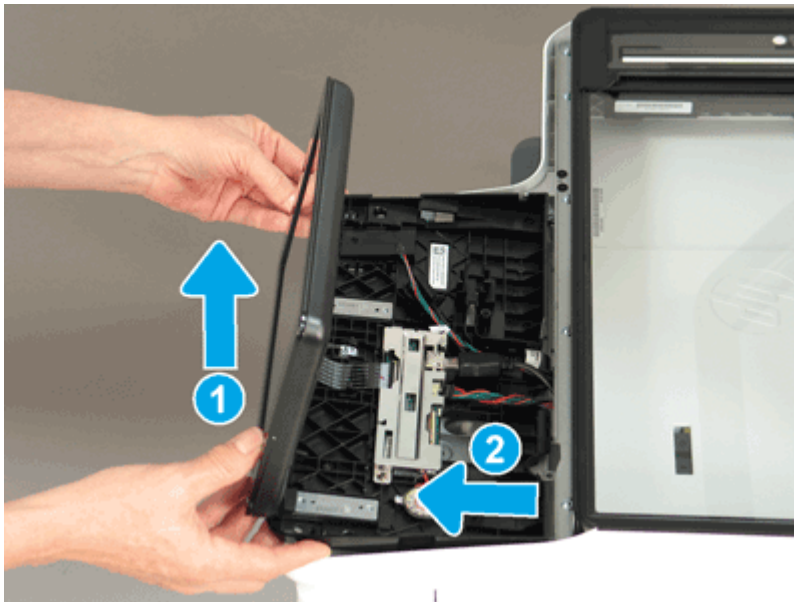
6. Remove three thumbscrews (callout 1).

Figure 5-1628 Remove three thumbscrews



7. Lift the front of the control panel off of the printer (callout 1), and then slide it toward the front of the printer (callout 2) to remove it.

Figure 5-1629 Remove the control panel

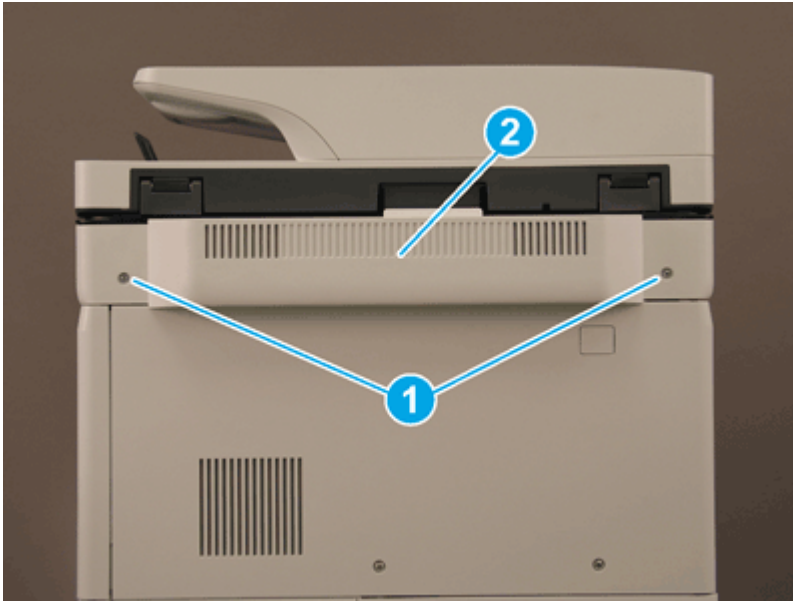


4. Remove the document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660)

Follow these steps to remove the document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660).

1. Remove two screws (callout 1), and then remove the scanner control board (SCB) cover (callout 2).

Figure 5-1630 Remove the SCB cover



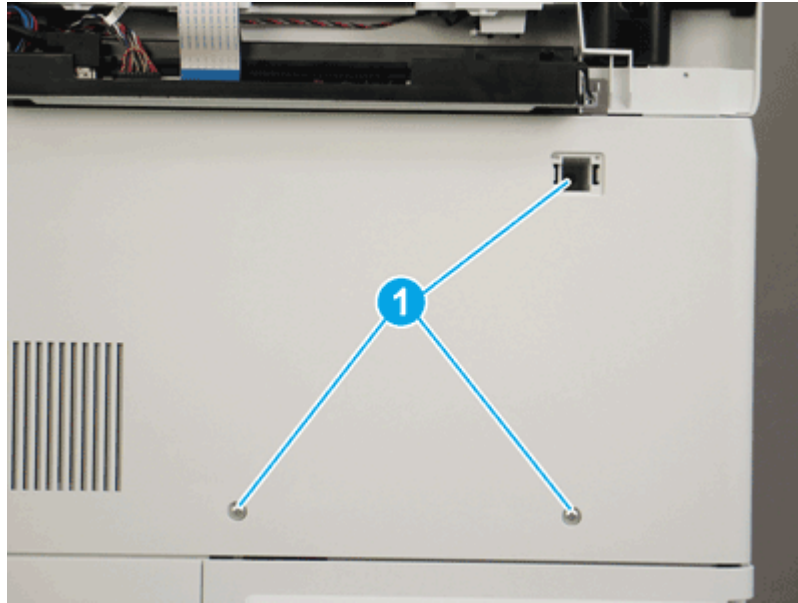
2. **Flow M681z and Flow M682z models only:** Do the following:
 - a. At the back of the printer, remove one small cover (callout 1).

Figure 5-1631 Remove the small cover



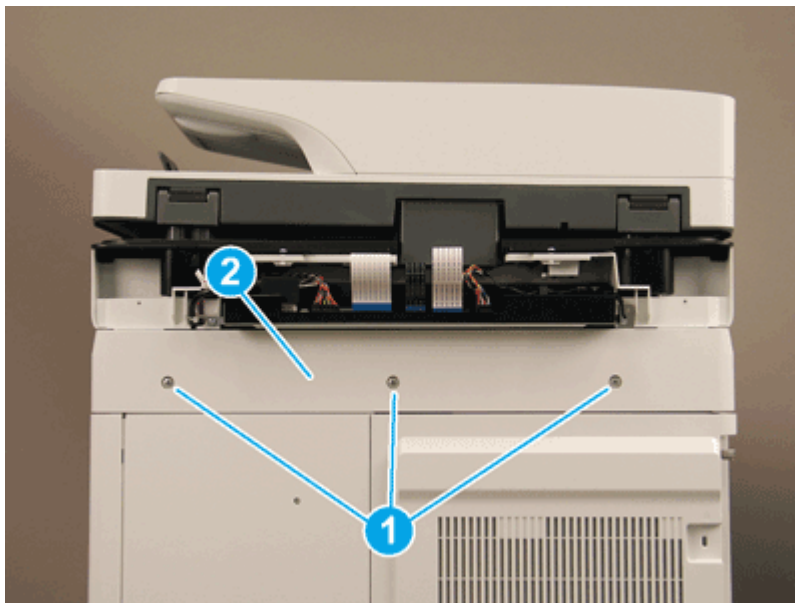
- b. **Flow M681z and Flow M682z only**: Remove three screws (callout 1), and then remove the stapler/stacker rear cover (callout 2).

Figure 5-1632 Remove the stapler/stacker rear cover



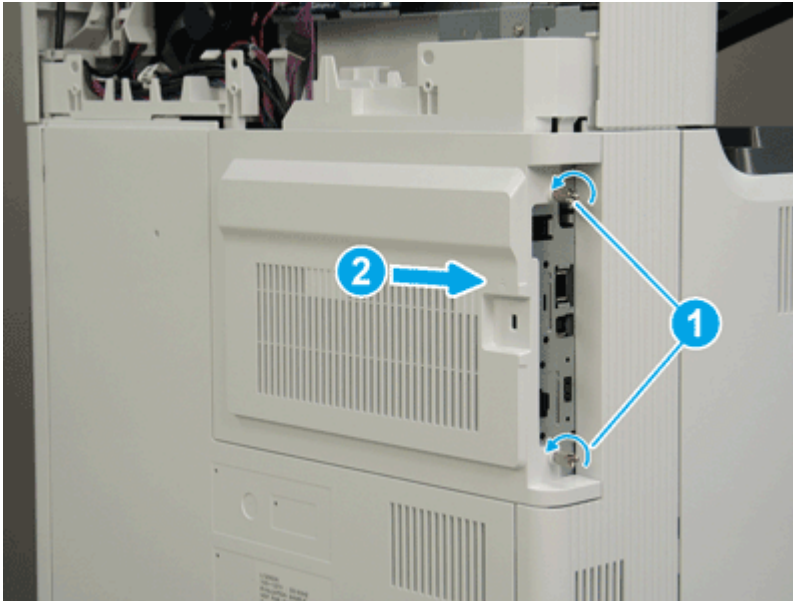
- 3. **M681dh, M681f, M682dh, and Flow M681f models only**: Remove three screws (callout 1), and then remove the upper rear cover (callout 2).

Figure 5-1633 Remove the upper rear cover



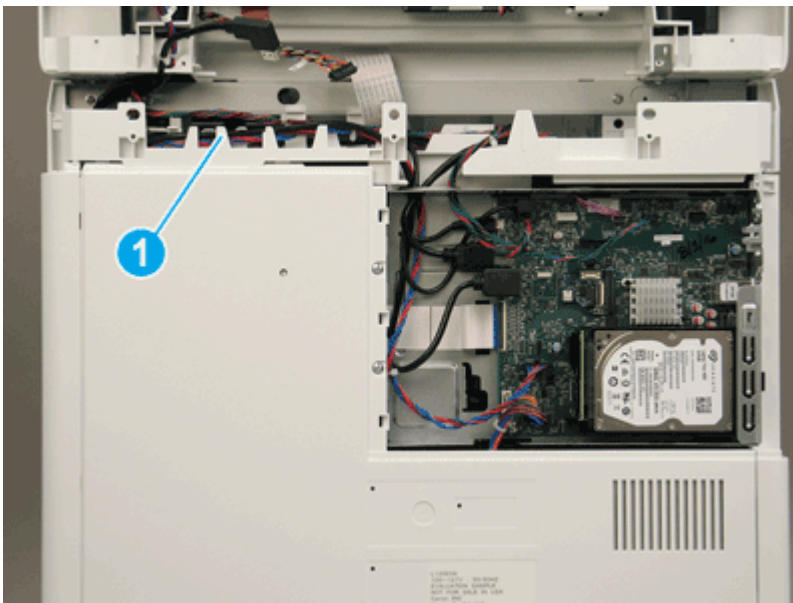
4. Loosen two thumbscrews (callout 1), and then slide the formatter cover away from the printer to remove it (callout 2).

Figure 5-1634 Remove the formatter cover



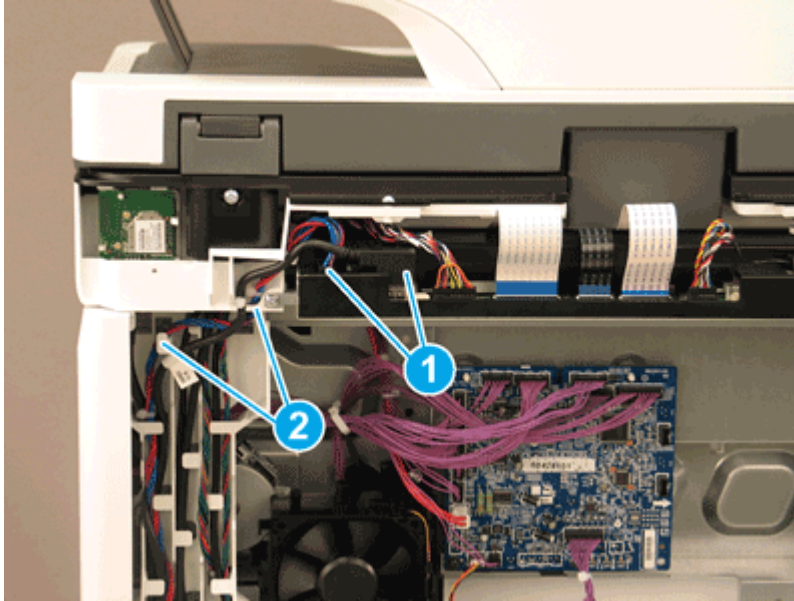
5. The remaining figures in this procedure show the Flow M682z model. While the cable routing (callout 1) on the M681dh, M681f, M682dh, and Flow M681f models is different, the removal procedures are the same for all models.

Figure 5-1635 Cable routing for M681dh, M681f, and Flow M681f



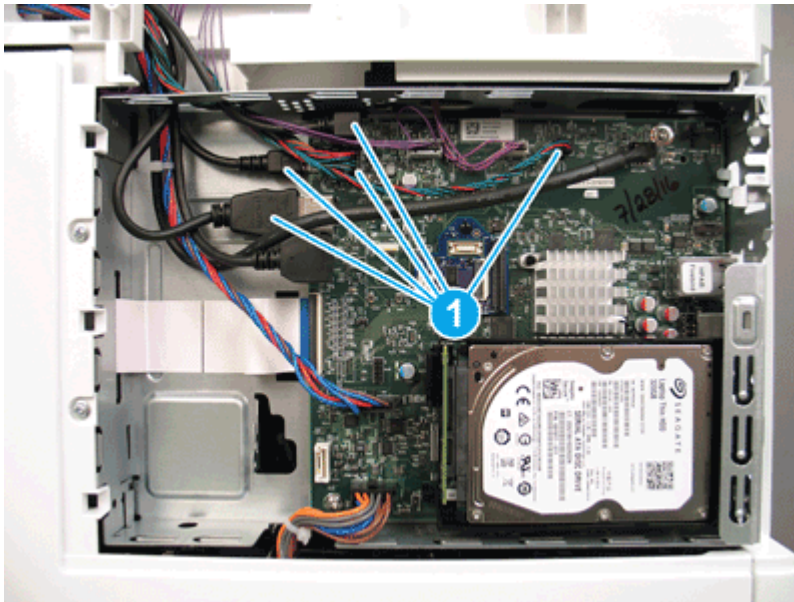
6. Disconnect two connectors (callout 1) on the SCB, and then release the cables from the guides (callout 2).

Figure 5-1636 Disconnect two connectors



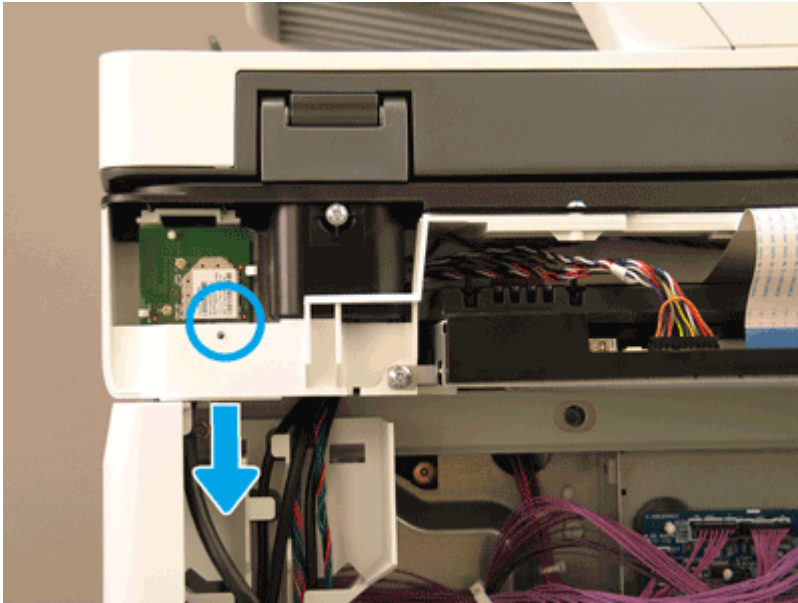
7. Disconnect five connectors on the formatter (callout 1).

Figure 5-1637 Disconnect five connectors



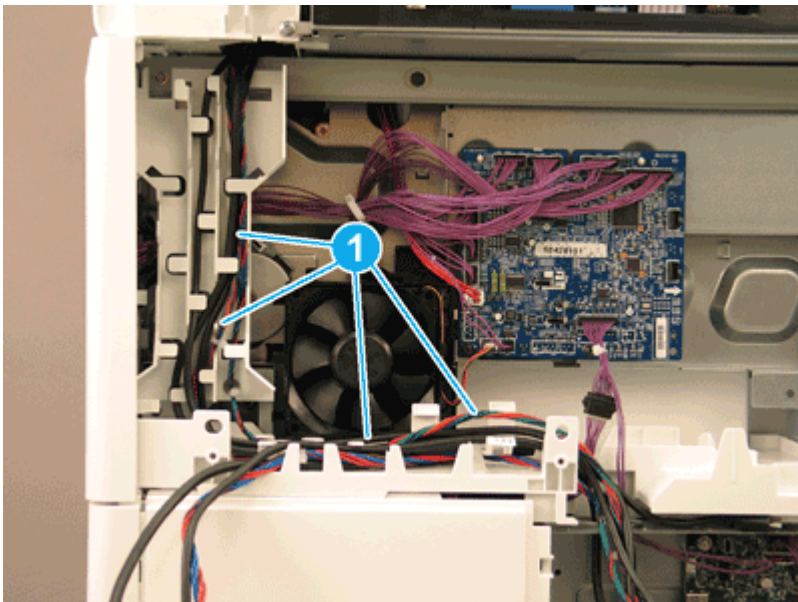
8. **Flow M682z only:** Gently pull down on the cable to disconnect the wireless connector.

Figure 5-1638 Disconnect the wireless connector



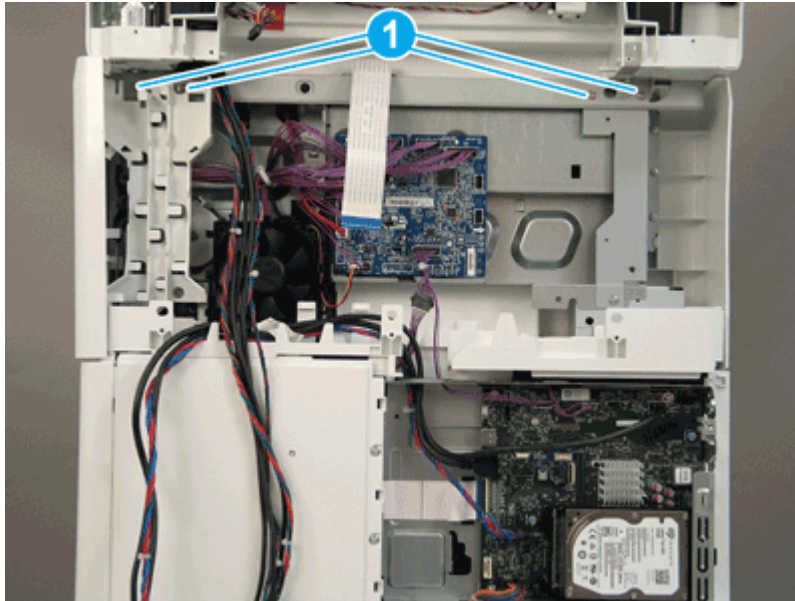
9. Release all of the cables from the cable guides (callout 1).

Figure 5-1639 Release the cables



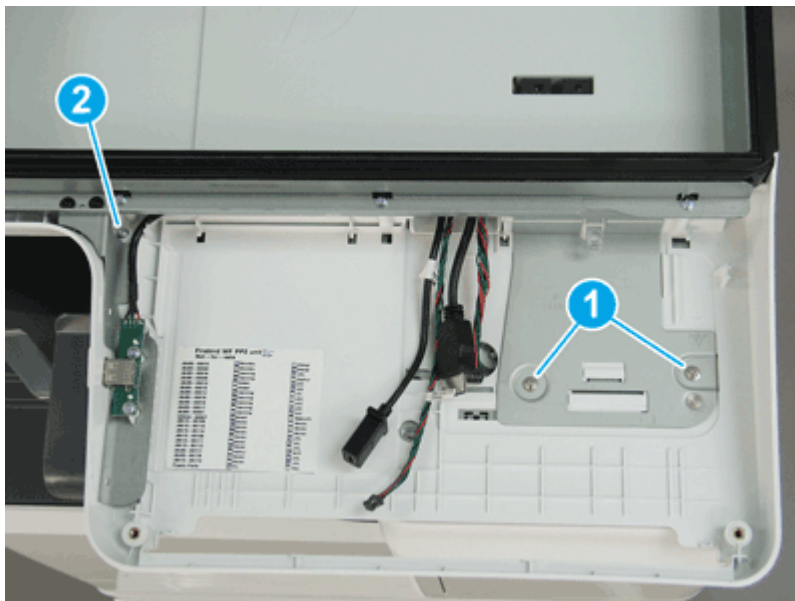
10. At the back of the printer, remove four screws (callout 1).

Figure 5-1640 Remove four screws



11. On the top of the image scanner assembly, at the location where the control panel was removed, remove two sheet metal screws (callout 1). **Flow M681z and Flow M682z only:** Remove one self-tapping screw (callout 2).

Figure 5-1641 Remove three screws



12. Lift the document feeder and image scanner off of the printer to remove them.

Figure 5-1642 Remove the document feeder and image scanner



5. Remove the stapler/stacker (Flow M681z/Flow M682z/Flow E67660z)

Follow these steps to remove the stapler/stacker (Flow M681z/Flow M682z/Flow E67660z).

This step is for the M681/M682/E67550/E67560/E67650/E67660 printers. For the M652/M653/E65050/E65060/E65150/E65160 printers, skip this step.

1. Open the front door.

Figure 5-1643 Open the front door



2. Open the stapler door.

Figure 5-1644 Open the stapler door



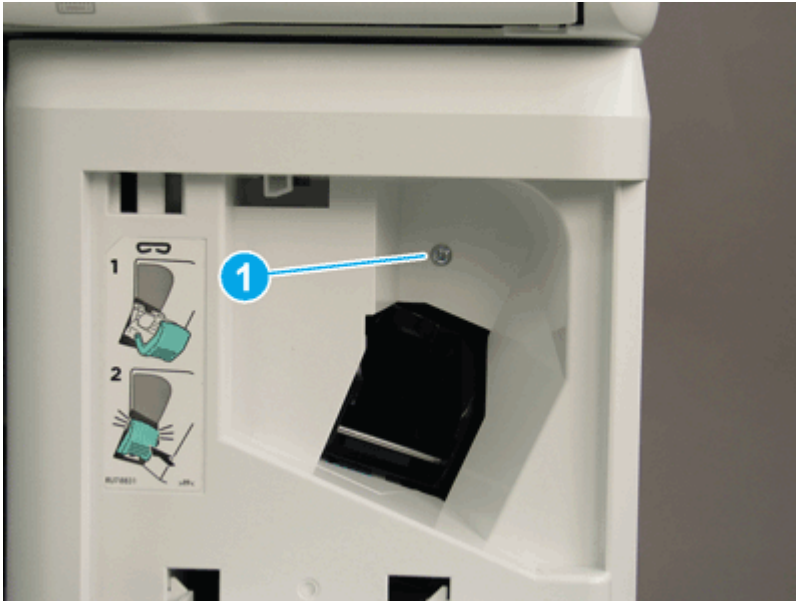
3. Release the latch, and then remove the staple cartridge.

Figure 5-1645 Remove the staple cartridge



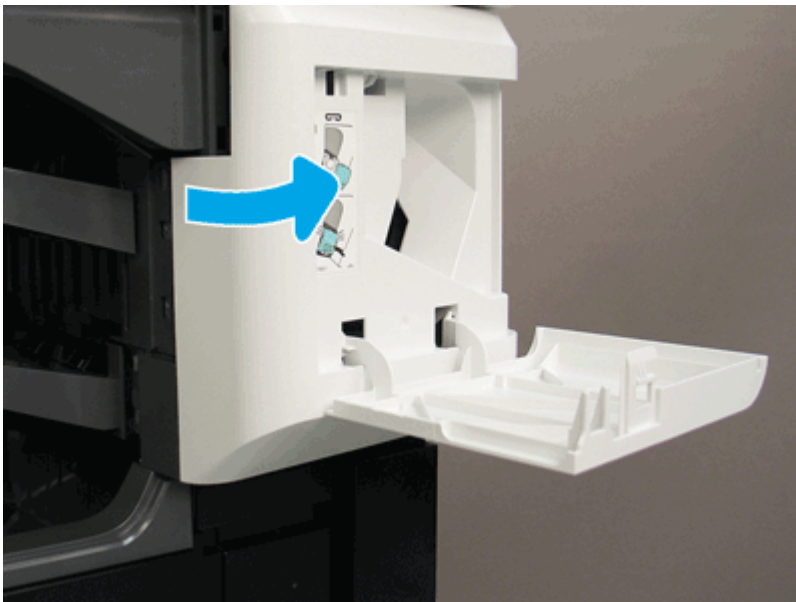
4. Remove one screw (callout 1).

Figure 5-1646 Remove one screw



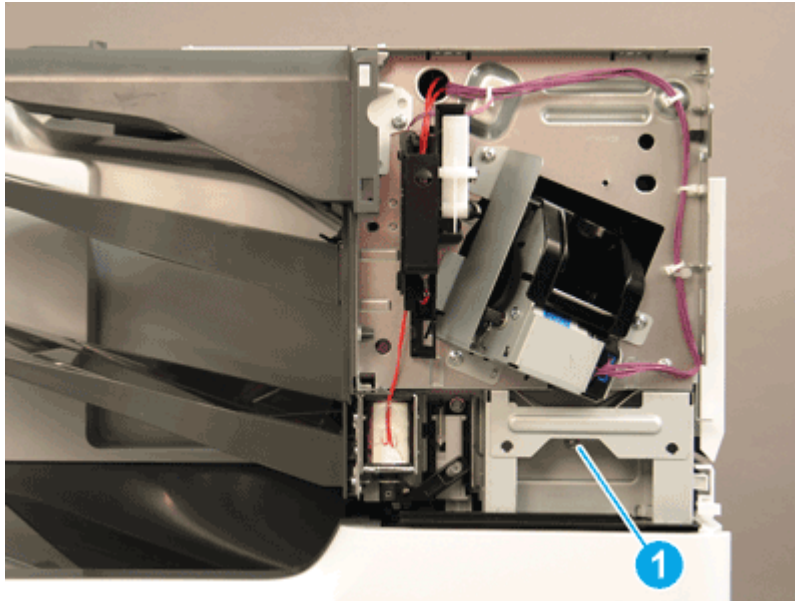
5. Rotate the stapler cover to the right to remove it.

Figure 5-1647 Remove the stapler cover



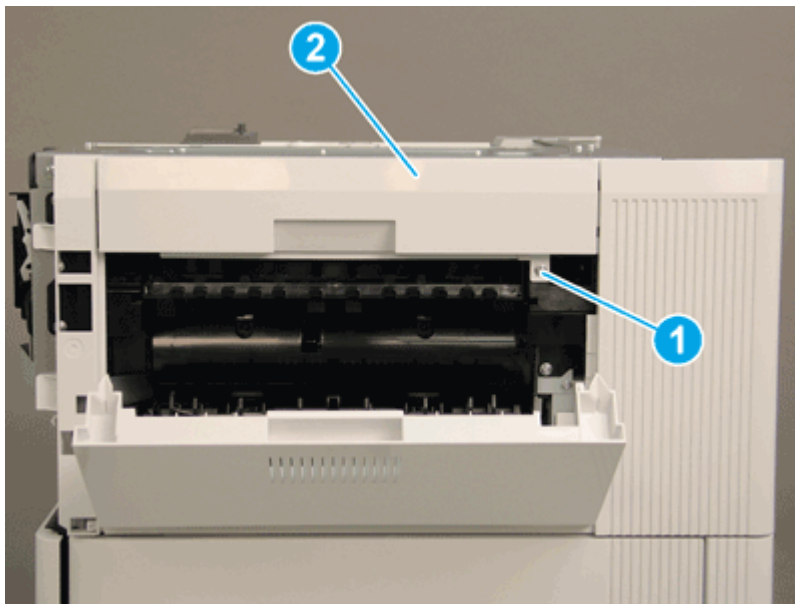
6. Remove one screw (callout 1).

Figure 5-1648 Remove one screw



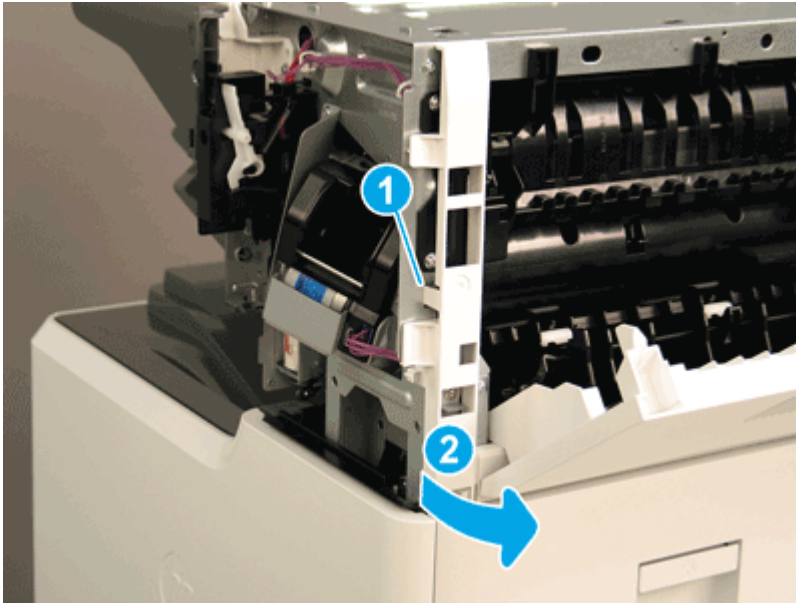
7. At the right side of the printer, remove one screw (callout 1), and then remove the stapler/stacker right upper cover (callout 2).

Figure 5-1649 Remove the stapler/stacker right upper cover



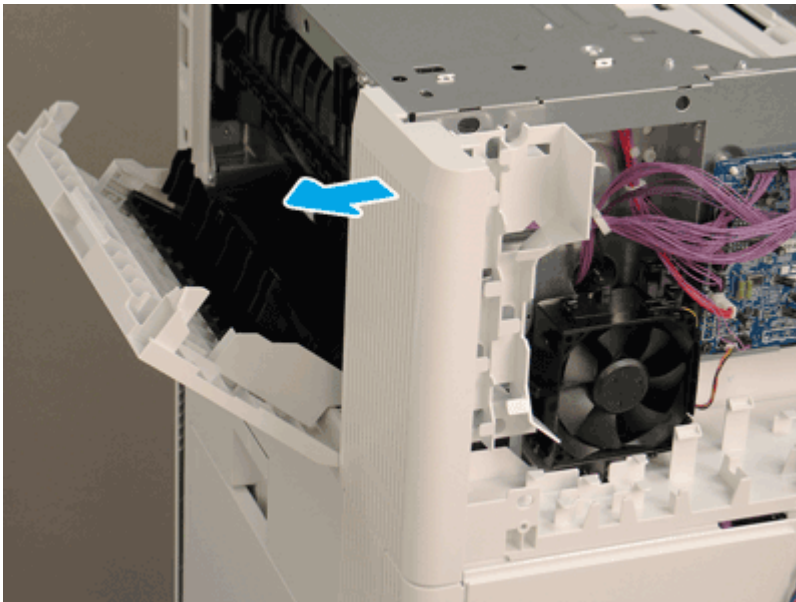
8. Release one tab (callout 1), and then rotate the stapler rear cover away from the printer (callout 2) to remove it.

Figure 5-1650 Remove the stapler rear cover



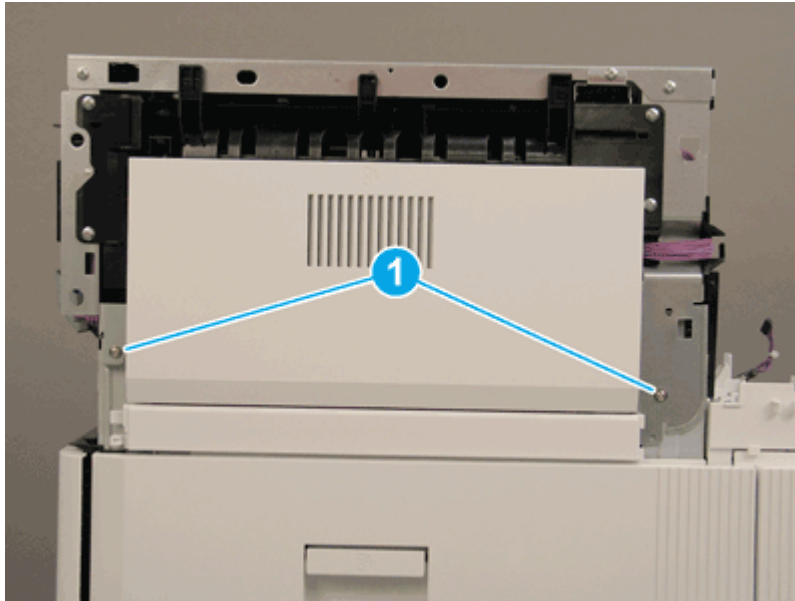
9. Pull the stapler/stacker rear corner cover away from the printer to remove it.

Figure 5-1651 Remove the stapler/stacker rear corner cover



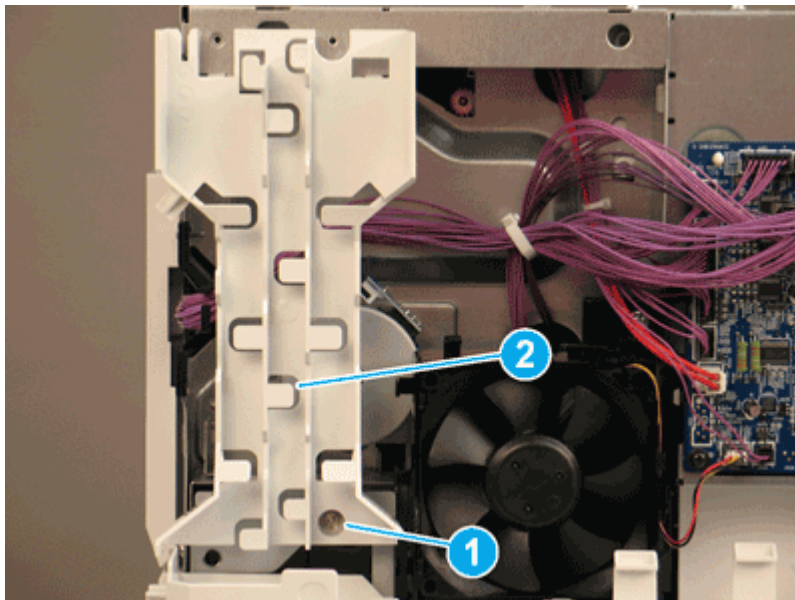
10. Remove two screws (callout 1).

Figure 5-1652 Remove two screws



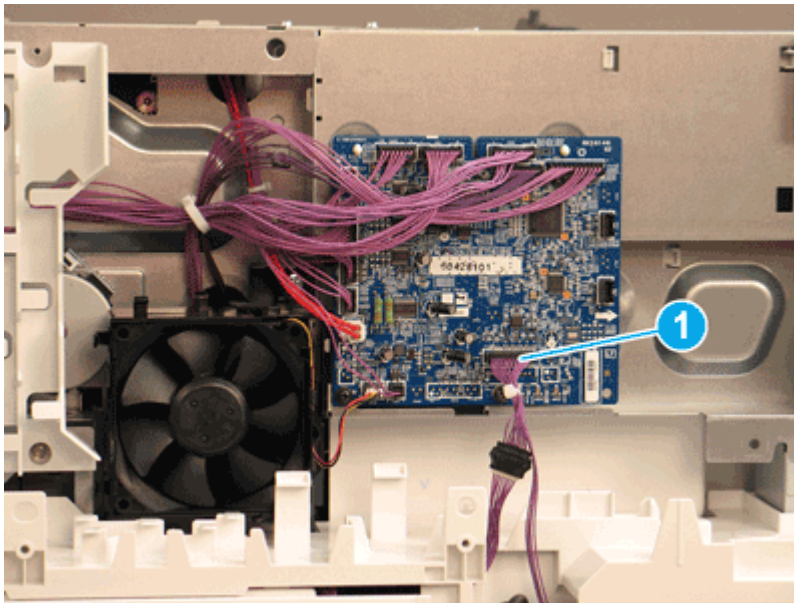
11. At the back of the printer, remove one screw (callout 1), and then remove the cable guide (callout 2).

Figure 5-1653 Remove the cable guide



12. Disconnect one connector on the stapler/stacker PCA (callout 1).

Figure 5-1654 Disconnect one connector



13. Remove two screws (callout 1).


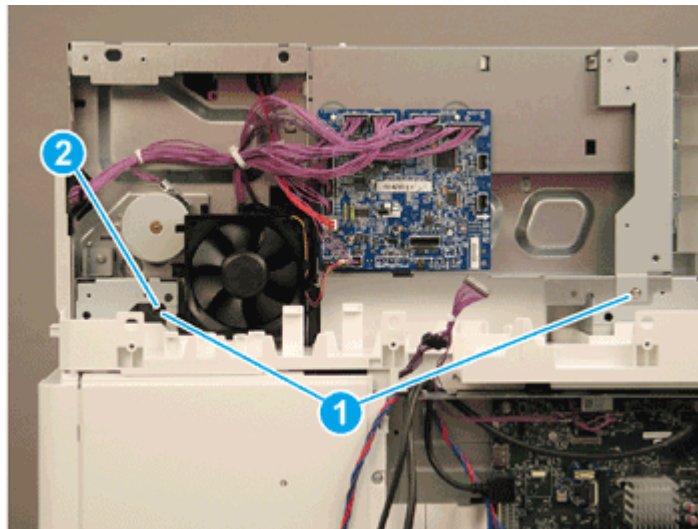
 **TIP:** The screw on the left (callout 2) is longer than the other screw. Make sure that this screw is installed in the correct location.

Figure 5-1655 Remove two screws



14. Lift the stapler/stacker away from the printer.


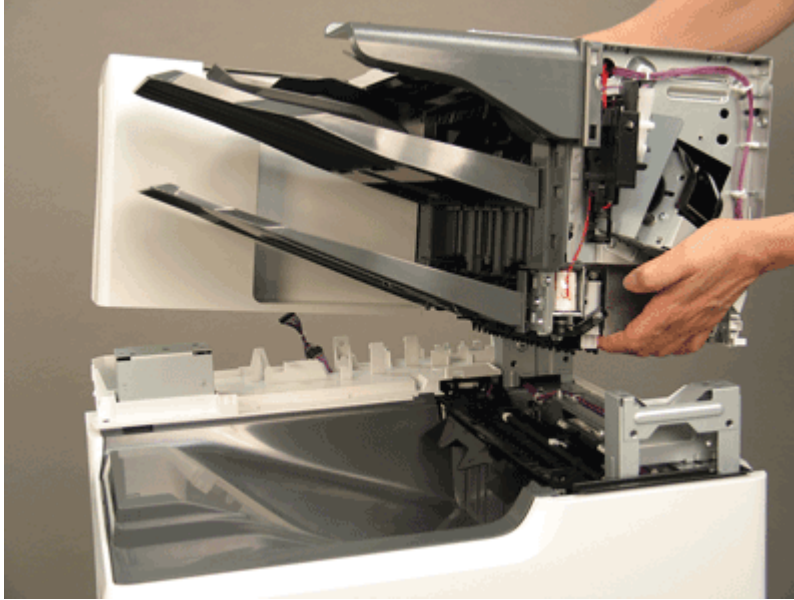
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1656 Remove the stapler/stacker

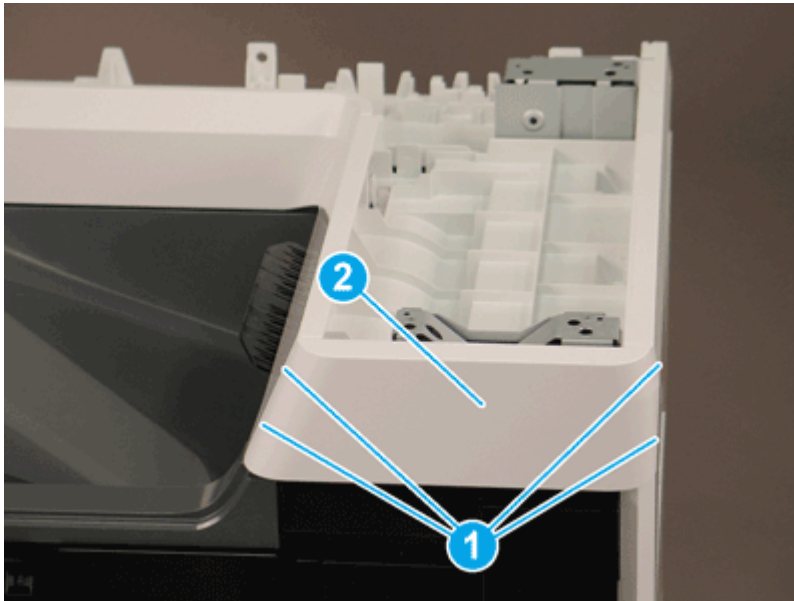


6. Remove the face-down front cover (M681dn/M681/M682dn/Flow M681f)

Follow these steps to remove the face-down front cover (M681dn/M681/M682dn/Flow M681f).

1. Open the front door.
2. Release two tabs on each side (callout 1), and then remove the face-down front cover (callout 2).

Figure 5-1657 Remove the face-down front cover

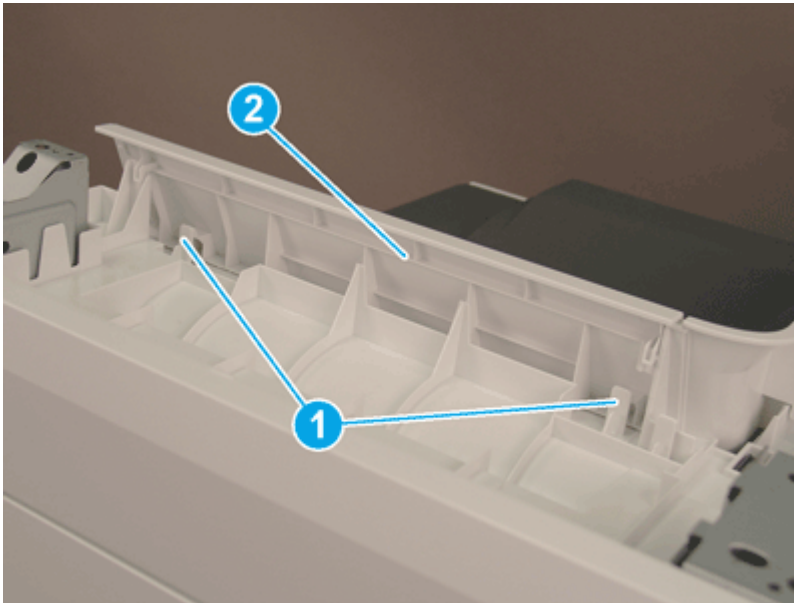


7. Remove the top cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the top cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

- Release two tabs (callout 1), and then remove the top cover (callout 2).

Figure 5-1658 Remove the top cover



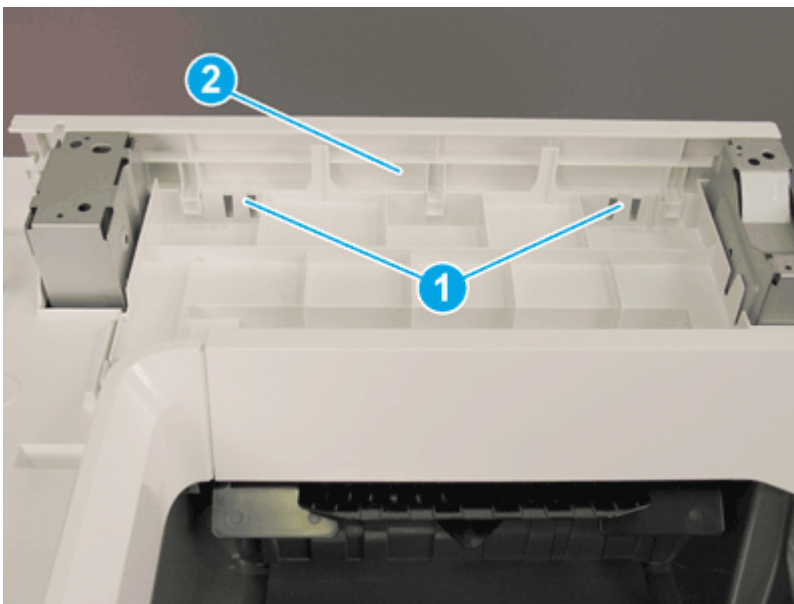
8. Remove the right cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the right cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

This step is for the M681/M682/E67550/E67560/E67650/E67660 printers. For the M652/M653/E65050/E65060/E65150/E65160 printers, skip this step.

- Release two tabs (callout 1), and then remove the right cover (callout 2).

Figure 5-1659 Remove the right cover



9. Remove the front cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the front cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

- Release two tabs (callout 1), and then remove the front cover (callout 2).


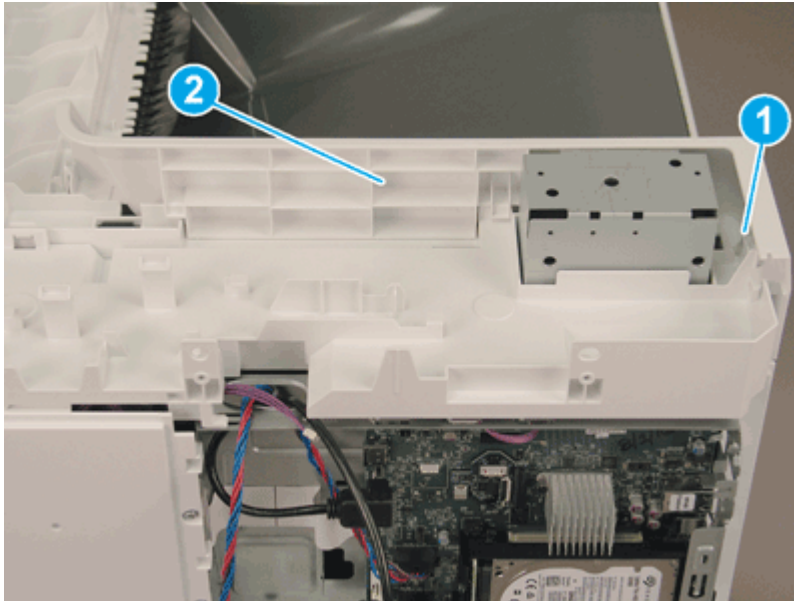
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1660 Remove the front cover



10. Remove the rear upper cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the rear upper cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

- Remove two screws (callout 1), and then remove the rear upper cover (callout 2).


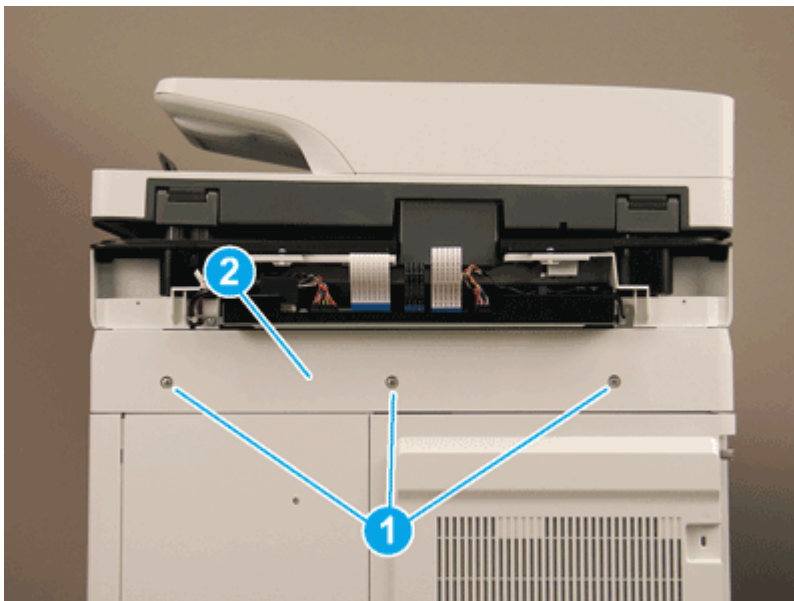

 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1661 Remove the rear upper cover



11. Remove the face-down cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the face-down cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

 **NOTE:** This step is for the M681/M682/E67550/E67560/E67650/E67660 printers. For the M652/M653/E65050/E65060/E65150/E65160 printers, skip this step.

- Remove two screws (callout 1), release three tabs (callout 2), and then remove the face-down cover (callout 3).


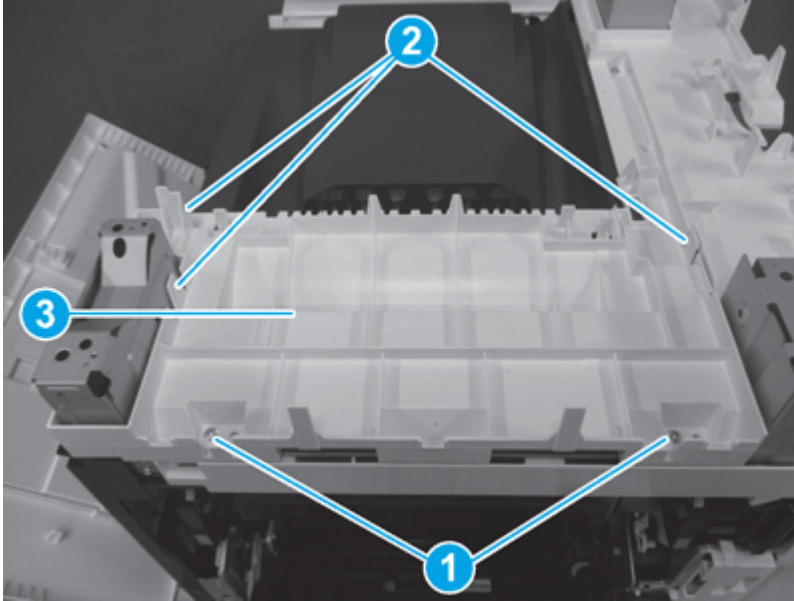
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1662 Remove two screws and the face-down cover



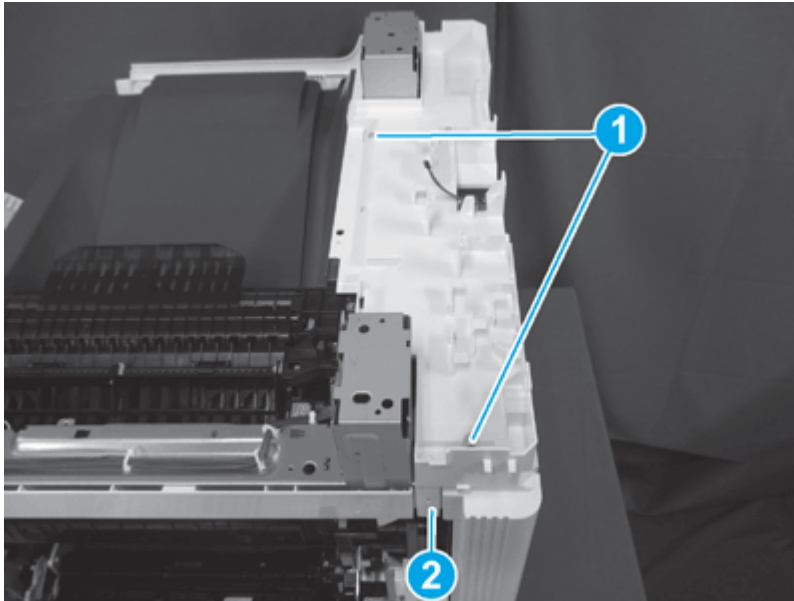
12. Remove the main cover (M681dn/M681/M682dn/Flow M681f/E67650dh)

Follow these steps to remove the main cover (M681dn/M681/M682dn/Flow M681f/E67650dh).

This step is for the M681/M682/E67550/E67560/E67650/E67660 printers. For the M652/M653/E65050/E65060/E65150/E65160 printers, skip this step.

1. Remove two screws (callout 1), and then release one tab (callout 2).

Figure 5-1663 Remove two screws and release one tab



2. Remove one screw (callout 1), release two tabs (callout 2), and then remove the main cover (callout 3).


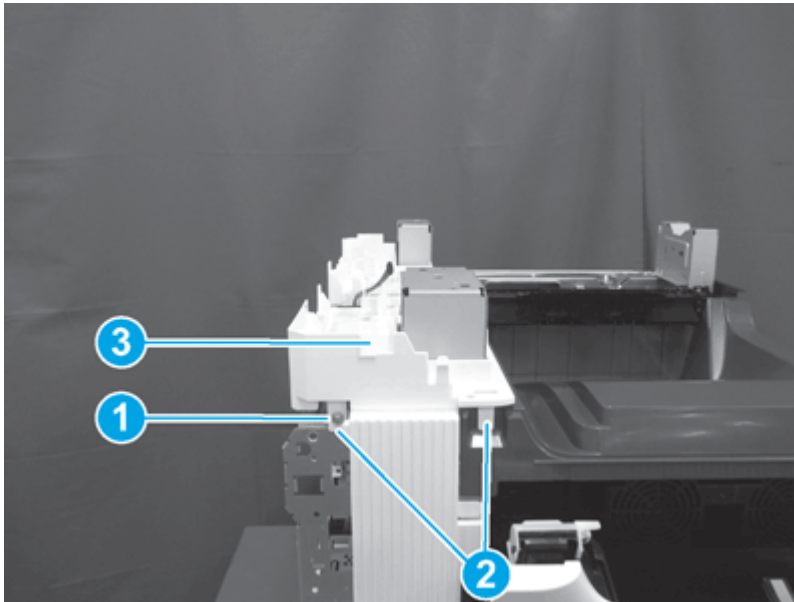
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1664 Remove one screw and the main cover



13. Remove the output bin

Follow these steps to remove the output bin.

1. Open the following doors:
 - Front door
 - Left door
 - Right door
2. Release two tabs (callout 1), and then remove the output bin (callout 2).


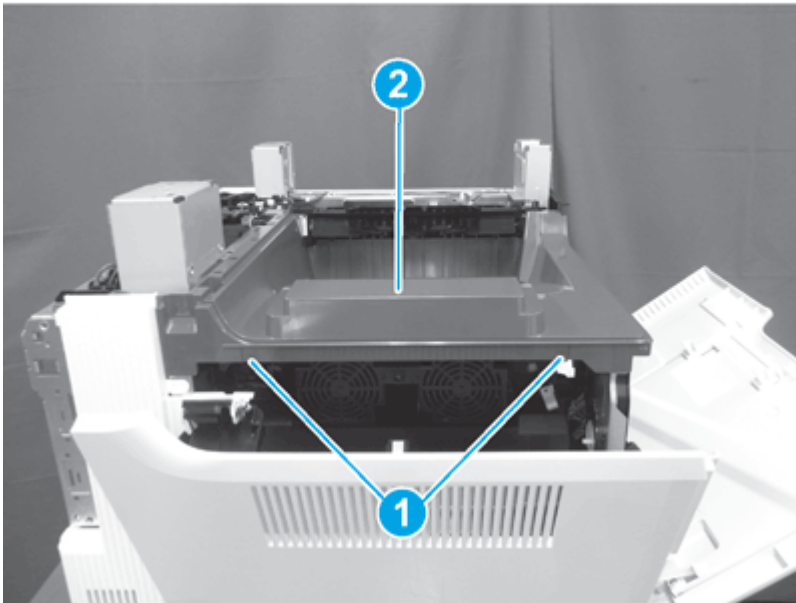
 **NOTE:** The M682 is shown in the figure below. The procedure is correct for all models.

Figure 5-1665 Remove the output bin

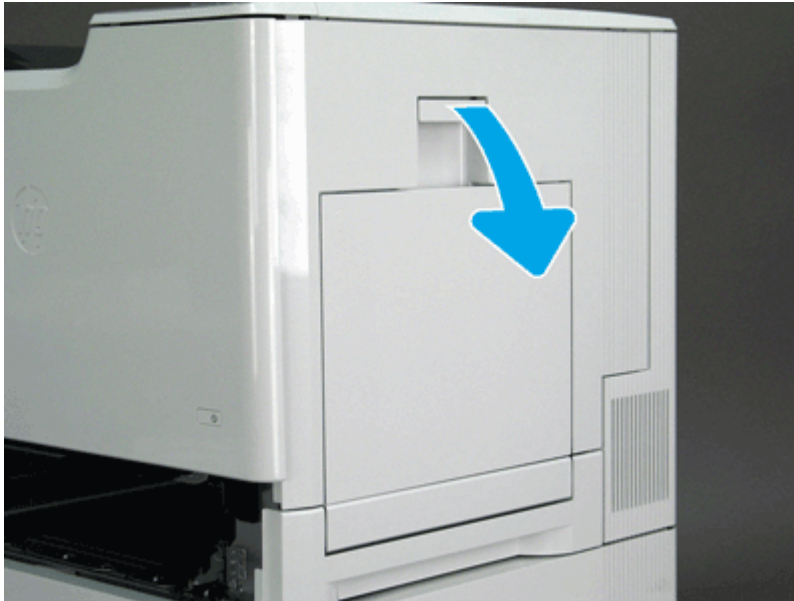


14. Remove the fuser

Follow these steps to remove the fuser.

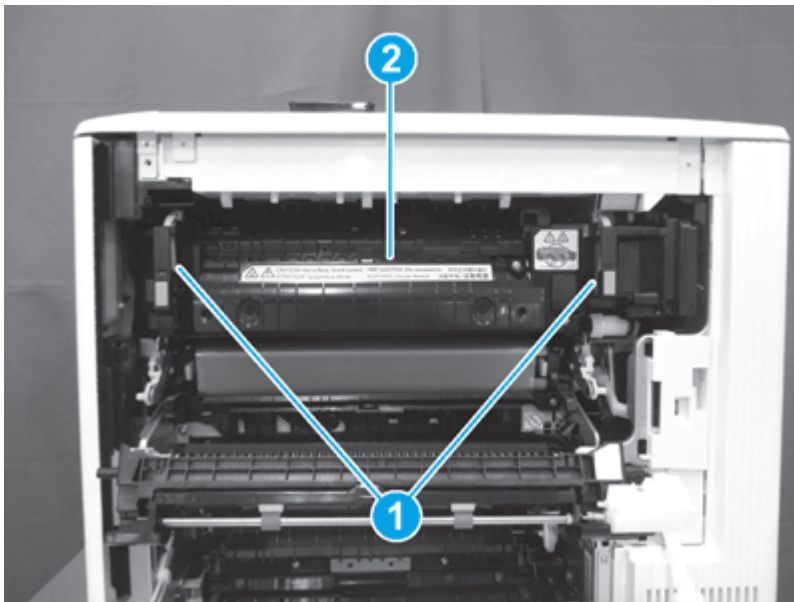
1. Open the right door.

Figure 5-1666 Open the right door



2. Grasp the handles (callout 1), and then pull away from the printer to remove the fuser (callout 2).

Figure 5-1667 Remove the fuser

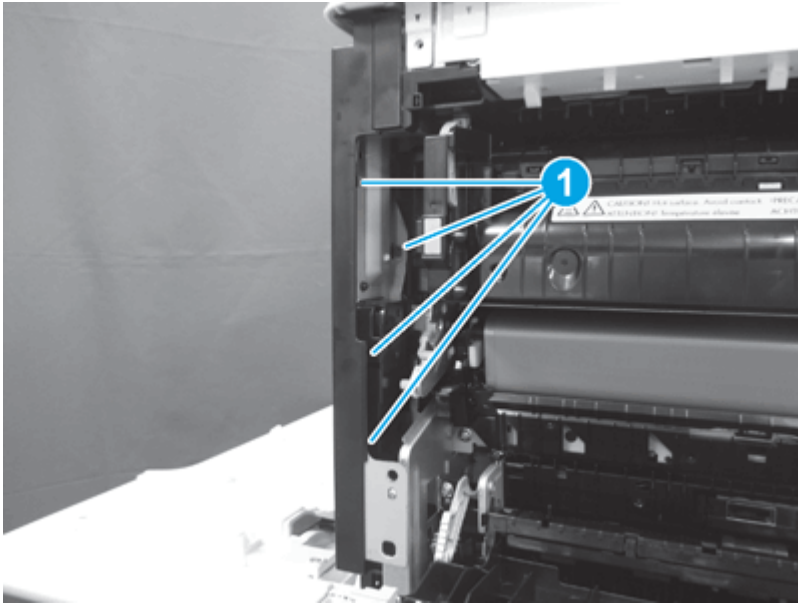


15. Remove the delivery assembly

Follow these steps to remove the delivery assembly.

1. Release four tabs (callout 1).

Figure 5-1668 Release four tabs



2. Release four tabs (callout 1), and then remove the front right inner cover (callout 2).


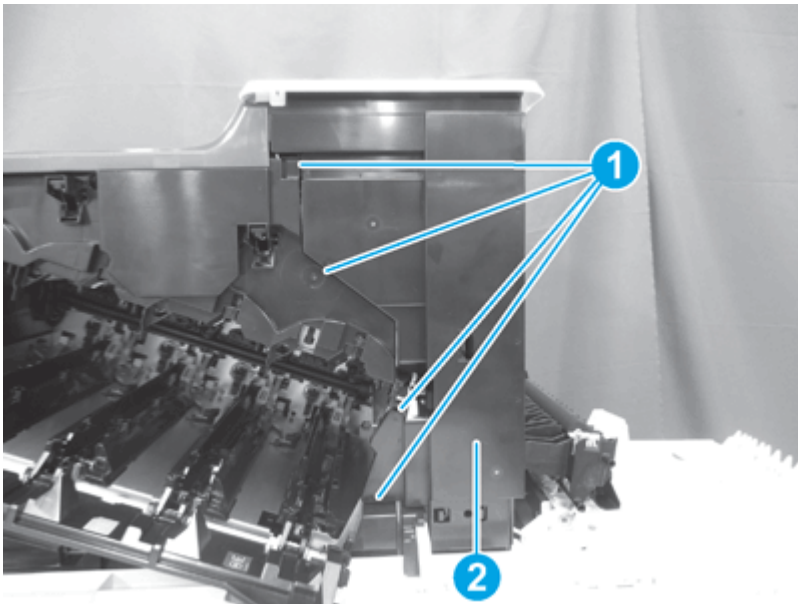
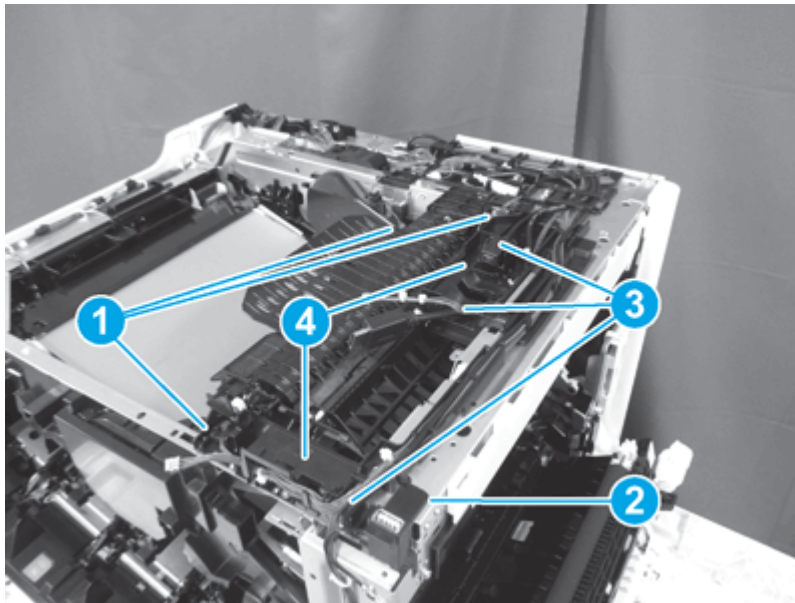
 **TIP:** Push on the back side of the cover for easy release.

Figure 5-1669 Remove the front right inner cover



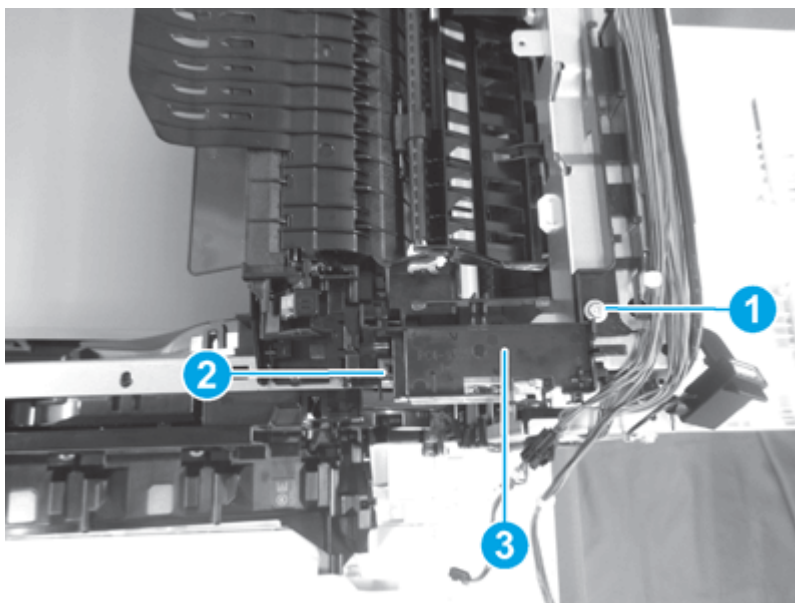
3. Disconnect three connectors (callout 1), and then release one boss (callout 2). Release the cable (callout 3) from the cable guide (callout 4).

Figure 5-1670 Disconnect three connectors and release one boss



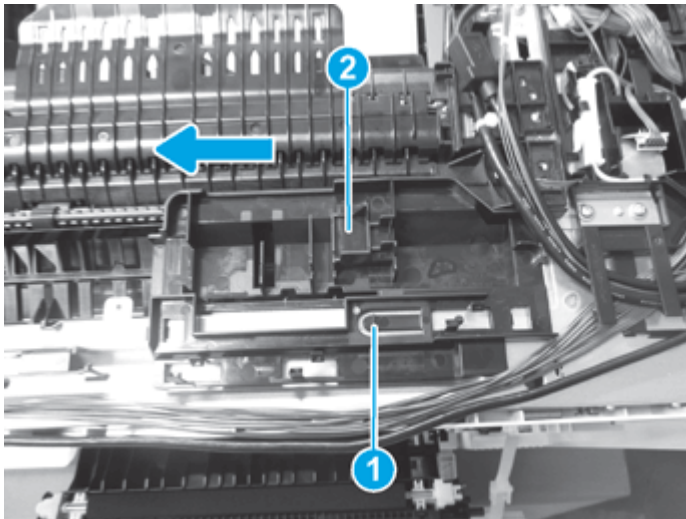
4. Remove one screw (callout 1), release one tab (callout 2), and then remove the cable guide (callout 3).

Figure 5-1671 Remove the cable guide



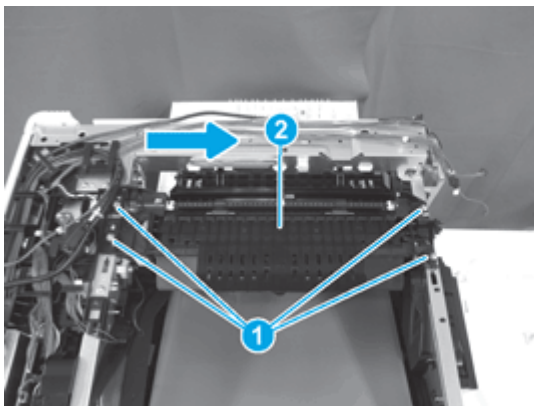
5. Release one boss (callout 1), and then slide the cable guide (callout 2) to the left to remove it.

Figure 5-1672 Remove the cable guide



6. Remove four screws (callout 1), and then slide the delivery assembly (callout 2) to the right to remove it.

Figure 5-1673 Remove four screws and the delivery assembly



16. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.





NOTE: HP recommends responsible disposal of the defective part.


<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.




CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

 **IMPORTANT:** Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

 **NOTE:** If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

 **NOTE:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

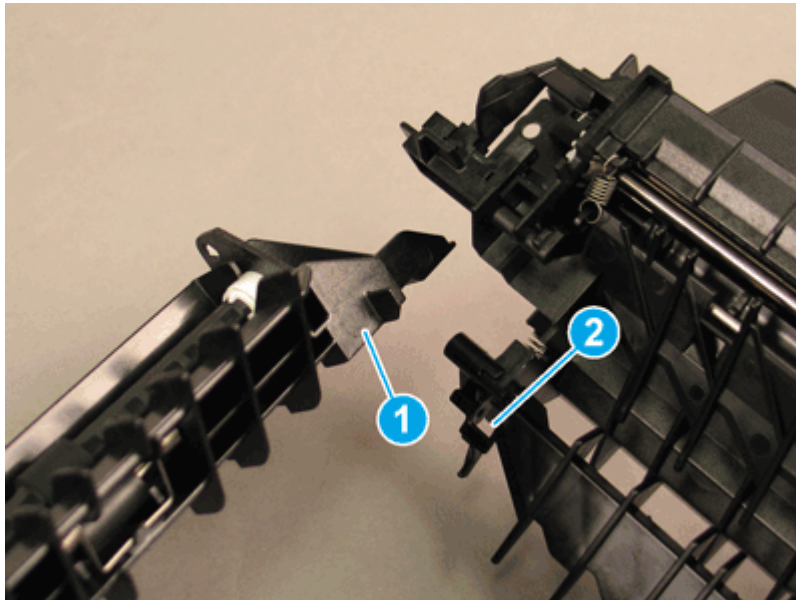
17. Reverse the removal steps to install the assembly

Also use the following **special installation instructions**.

Delivery assembly

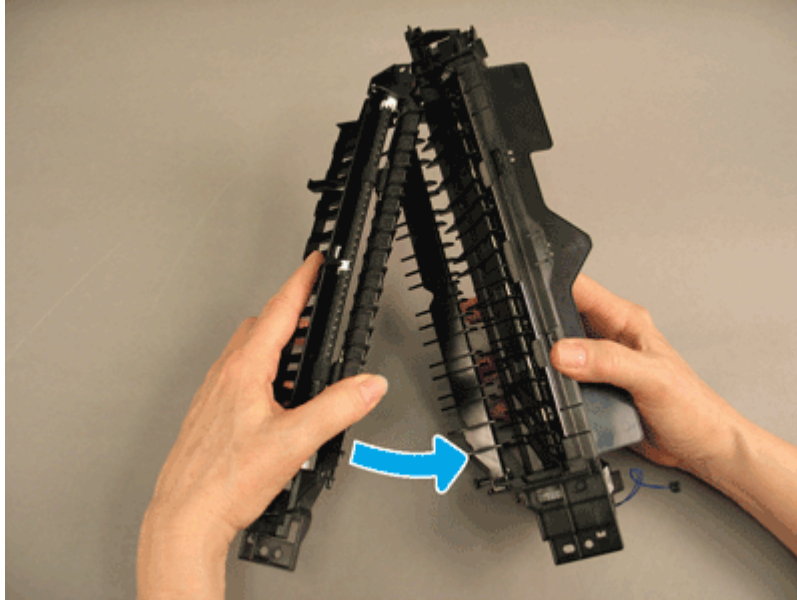
1. The delivery assembly is actually a three-piece unit. If the parts become separated after removing, follow these instructions to reassemble them:
 - a. Position the tab (callout 1) on the end of the lower portion in the slot (callout 2) on the end of the upper portion.

Figure 5-1674 Position the tab



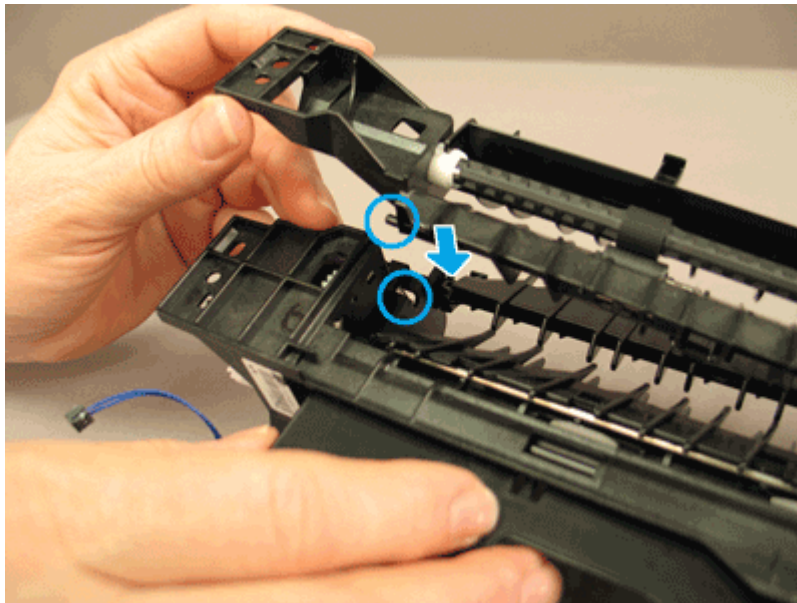
- b. Rotate the ends of the upper and lower parts together.

Figure 5-1675 Rotate the upper and lower parts together



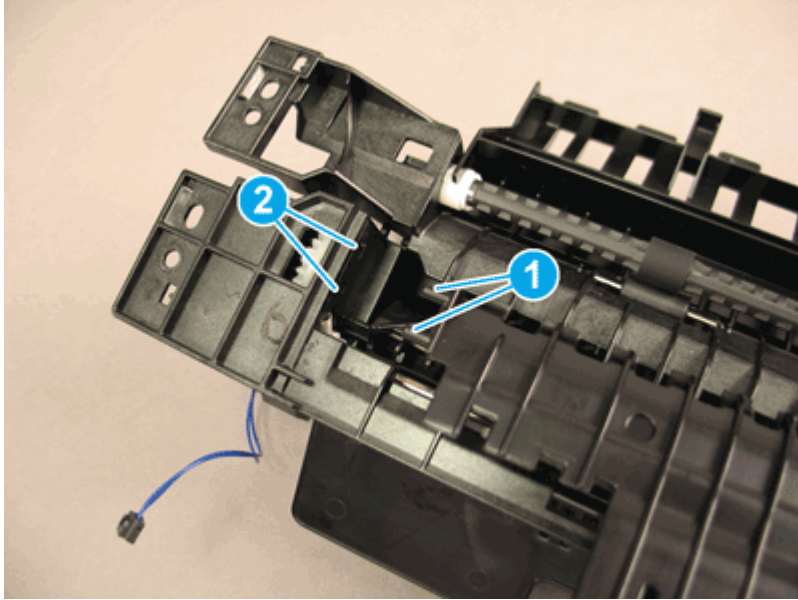
- c. Install the tab on the lower part into the slot on the upper part to join the parts together.

Figure 5-1676 Connect the upper and lower parts



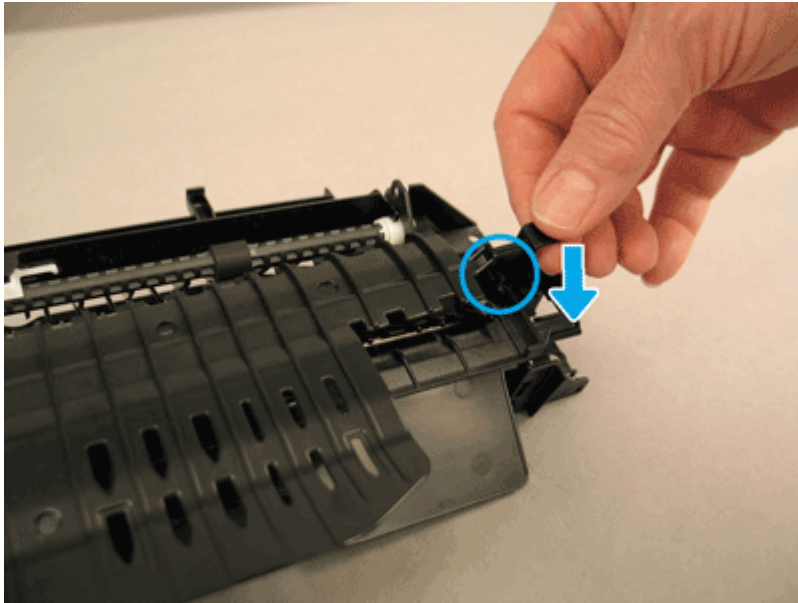
- d. Install the tabs (callout 1) on the lower shield into the slots (callout 2) in the delivery assembly.

Figure 5-1677 Install the tabs on the lower shield



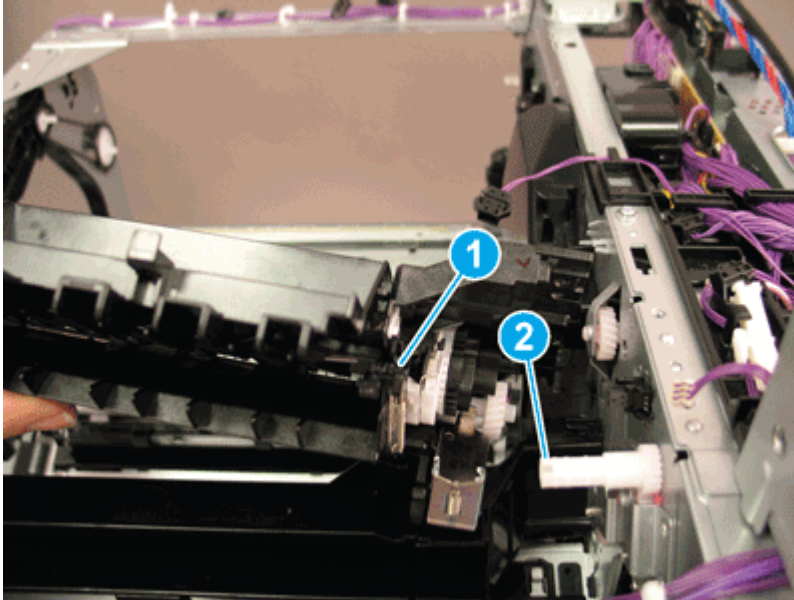
- e. Lower the end of the lower shield into the slot in the delivery assembly.

Figure 5-1678 Lower the end



- 2. Before reinstalling the delivery assembly, note the keyed shaft (callout 1) on the delivery assembly that must be aligned to fit into the slot (callout 2) on the drive gear.

Figure 5-1679 Note the keyed shaft

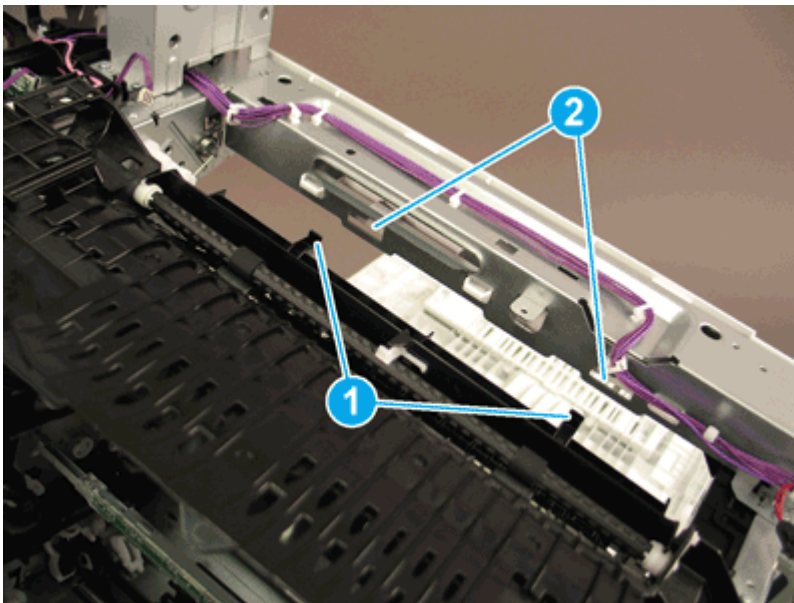


3. Install the hooks on the delivery assembly (callout 1) into the slots (callout 2) in the sheet metal frame.



NOTE: Continue to reverse the removal steps to finish installing the assembly.

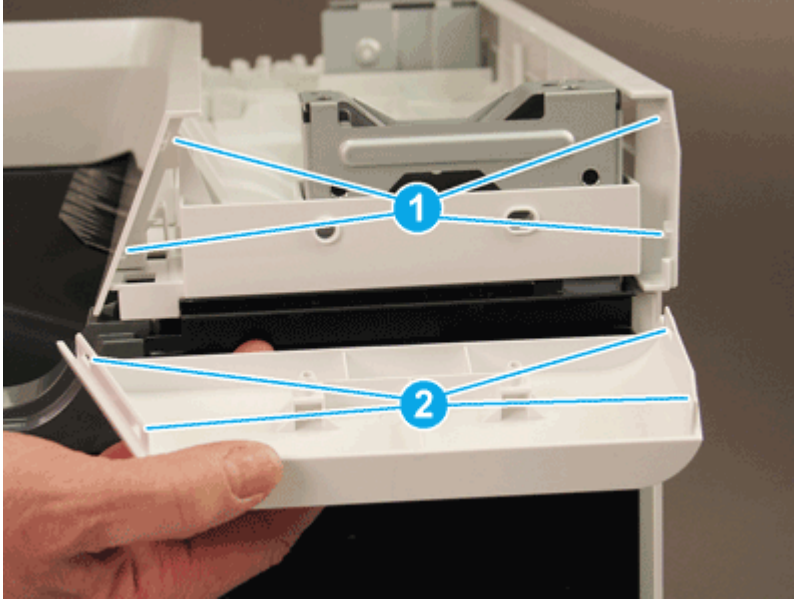
Figure 5-1680 Install the hooks in the slots



Face-down front cover

- When reinstalling the cover, position the tabs (callout 1) on the printer into the slots (callout 2) on the cover.

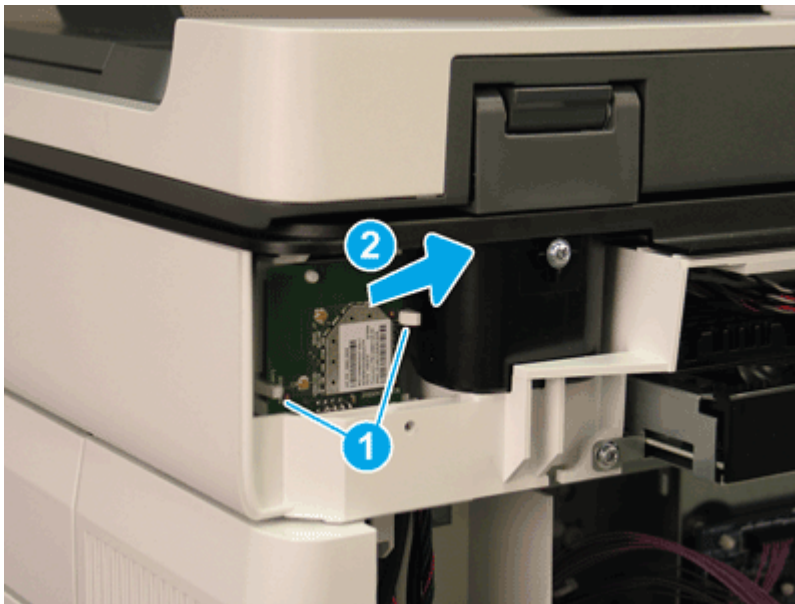
Figure 5-1681 Install the cover



Document feeder and image scanner

1. **Flow M682z only**: When reconnecting the wireless card cable, do the following:
 - a. Release two tabs (callout 1), and then remove the wireless card (callout 2).

Figure 5-1682 Remove the wireless card



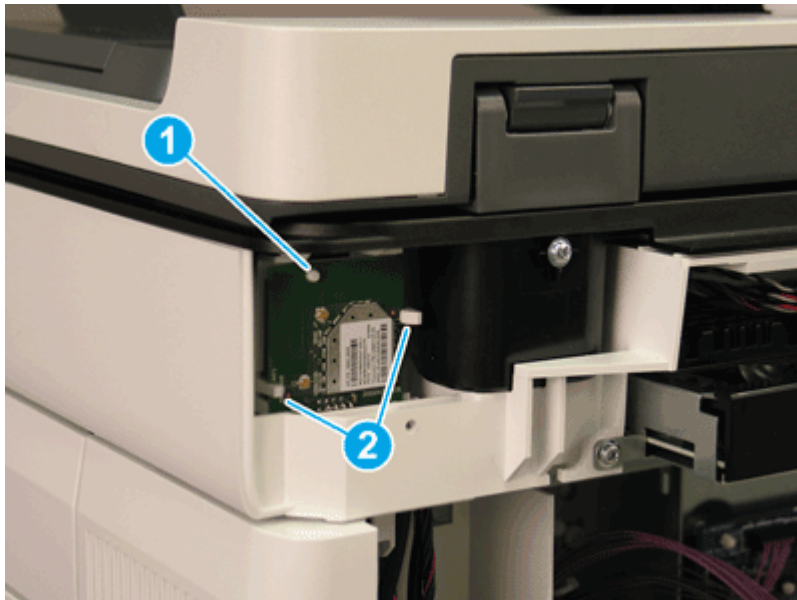
- b. Connect the cable to the wireless card (callout 1).

Figure 5-1683 Connect the wireless card connector



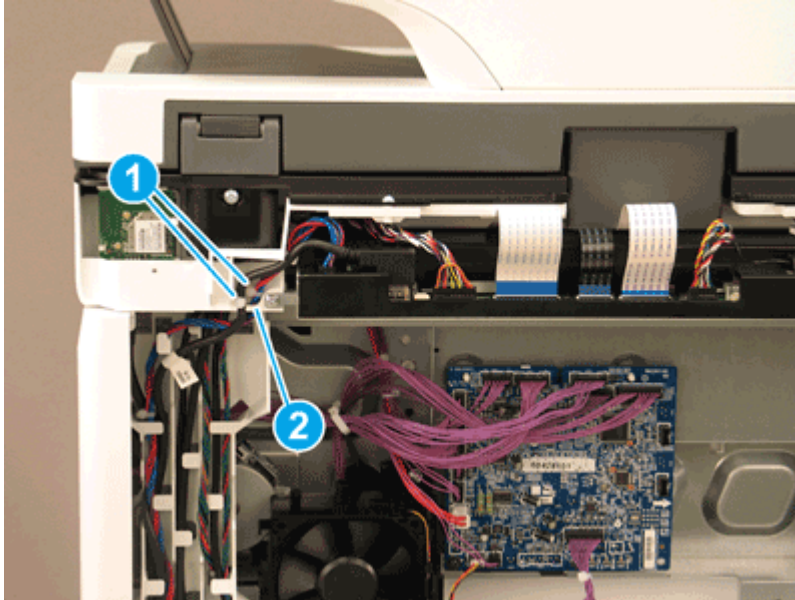
- c. Reinstall the wireless card. Make sure that the hole in the card is positioned over the peg (callout 1), and that the card is under the two tabs (callout 2).


Figure 5-1684 Reinstall the wireless card



2. When reinstalling the SCB cables, make sure that the wire retainers (callout 1) on the cables are positioned above the plastic guide (callout 2).

Figure 5-1685 Install the SCB cables



 **NOTE:** Continue to reverse the removal steps to finish installing the assembly.


Removal and replacement: Secondary transfer assembly

Learn how to remove and replace the secondary transfer assembly.

 [View a video of how to remove and replace the secondary transfer assembly.](#)


Mean time to repair: 10 minutes

Service level: Intermediate

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Disconnect the power cable.

 **WARNING!** To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-81 Part information

Part number	Part description
RM2-6682-000CN	Secondary transfer assembly

Required tools

- No special tools are needed to remove or install this assembly.

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Make sure that the printer initializes to a **Ready** state.

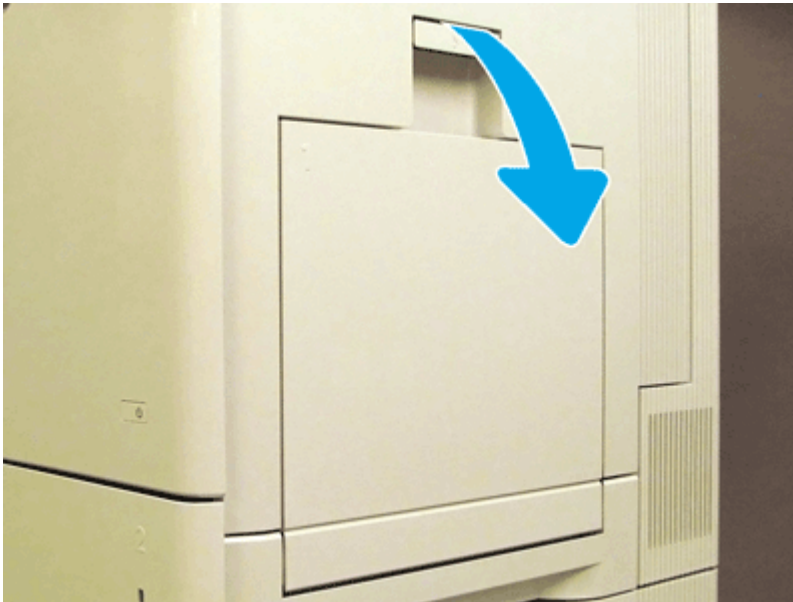
Print a configuration page to make sure that the printer is functioning correctly.

1. Remove the secondary transfer assembly

Follow these steps to remove the secondary transfer assembly.

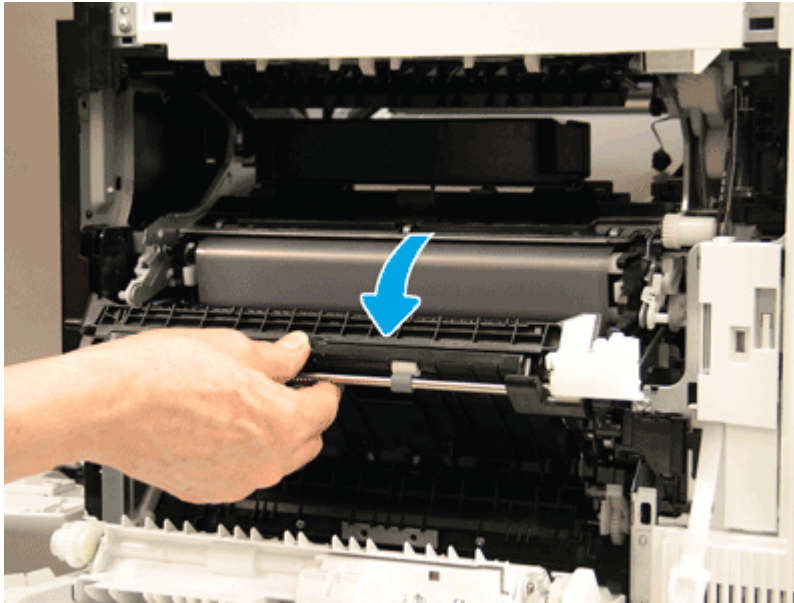
1. Open the right door.

Figure 5-1686 Open the right door



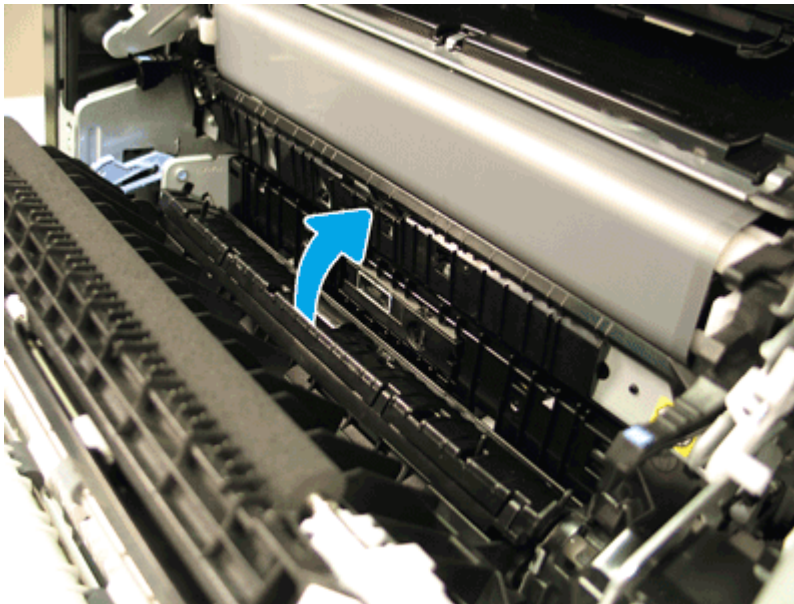
2. Lower the secondary transfer assembly to a 45° angle.

Figure 5-1687 Lower the secondary transfer



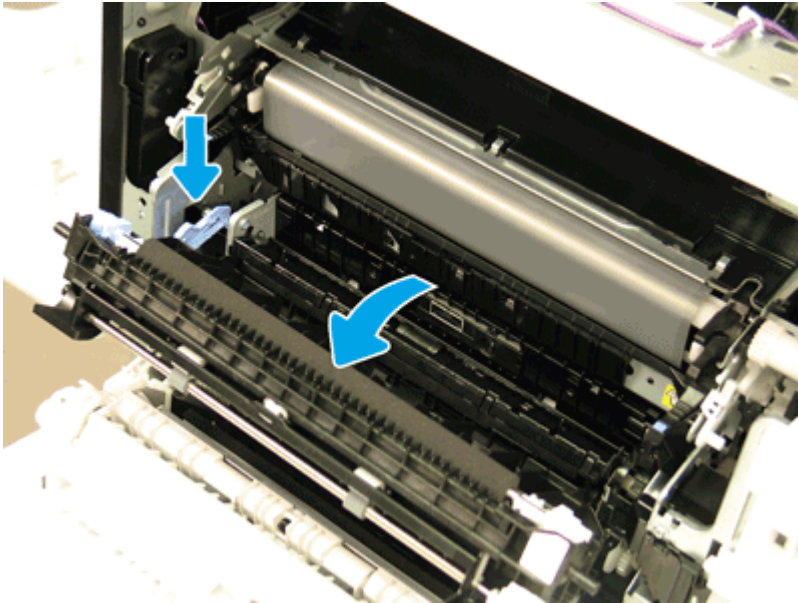
3. While holding the secondary transfer assembly, pivot the media detect assembly up and into the printer.

Figure 5-1688 Pivot the media detect assembly up



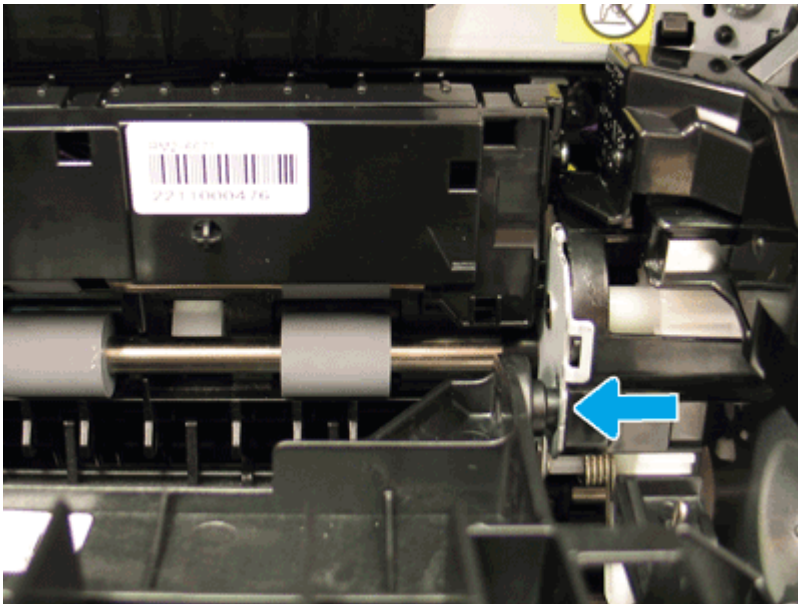
4. Lower the secondary transfer assembly and release it from the media detect assembly. Release the blue lever on the left, and then lower the secondary transfer assembly to the lowest position.

Figure 5-1689 Lower the secondary transfer assembly



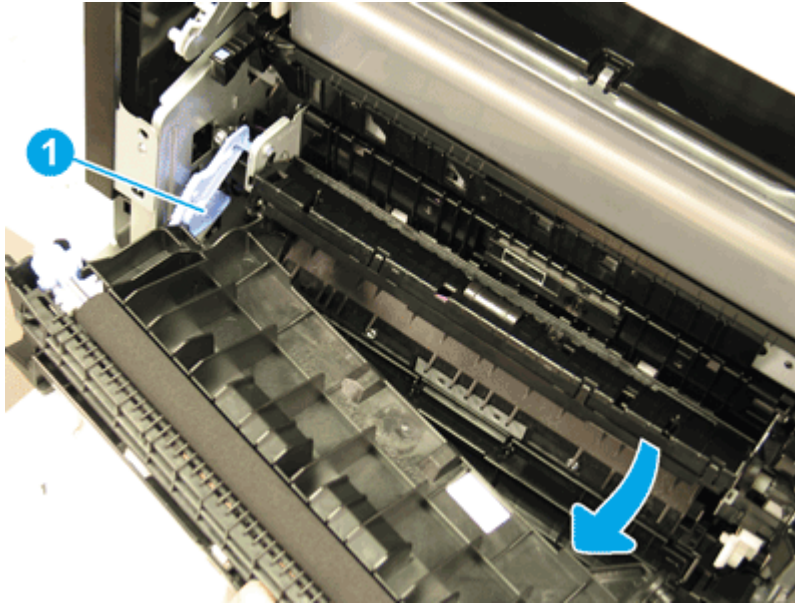
5. Release the right hinge by gently pushing left where the hinge attaches to the printer.

Figure 5-1690 Release the right hinge



6. Rotate the right side of the assembly away from the printer, and then release the left side of the assembly from the blue link arm (callout 1).

Figure 5-1691 Release the left side



7. Lift the secondary transfer assembly up to remove it.


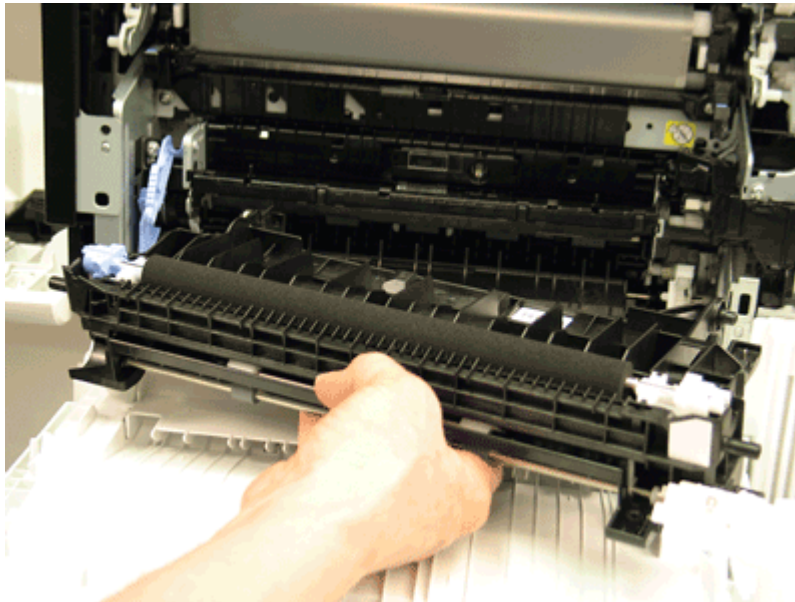
 **TIP:** Reverse the removal steps to install the assembly.


Figure 5-1692 Remove the secondary transfer assembly



2. Unpack the replacement assembly



Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.


 **NOTE:** HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>


2. Unpack the replacement part from the packaging.

 **CAUTION:**  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

 **IMPORTANT:** Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

 **NOTE:** If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

 **NOTE:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.


Removal and replacement: Registration assembly

This document provides the procedures to remove and replace the registration assembly.

 [View a video of how to remove and replace the registration assembly.](#)


Mean time to repair: 30 minutes

Service level: Advanced

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Disconnect the power cable.

 **WARNING!** To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-82 Part information

Part number	Part description
RM2-1957-000CN	Registration assembly

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Make sure that the printer initializes to a **Ready** state.

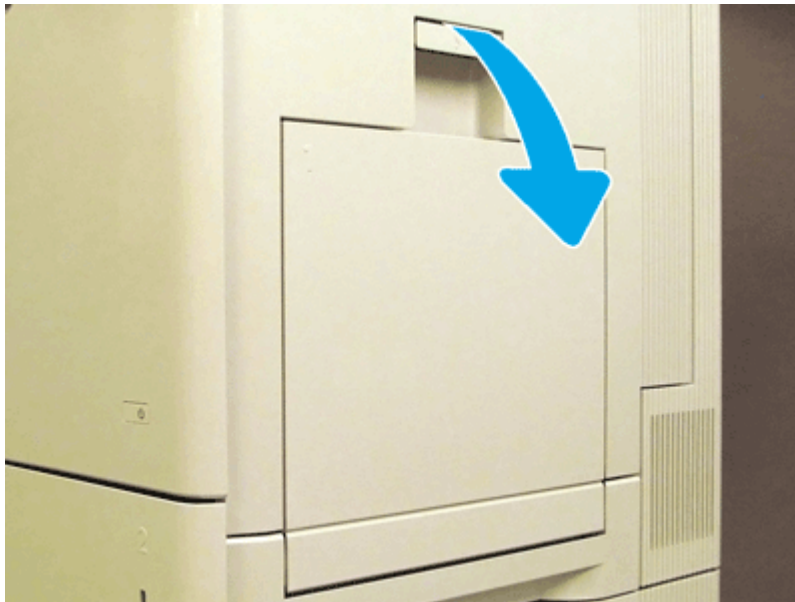
Print a configuration page to make sure that the printer is functioning correctly.

1. Remove the secondary transfer assembly

Follow these steps to remove the secondary transfer assembly.

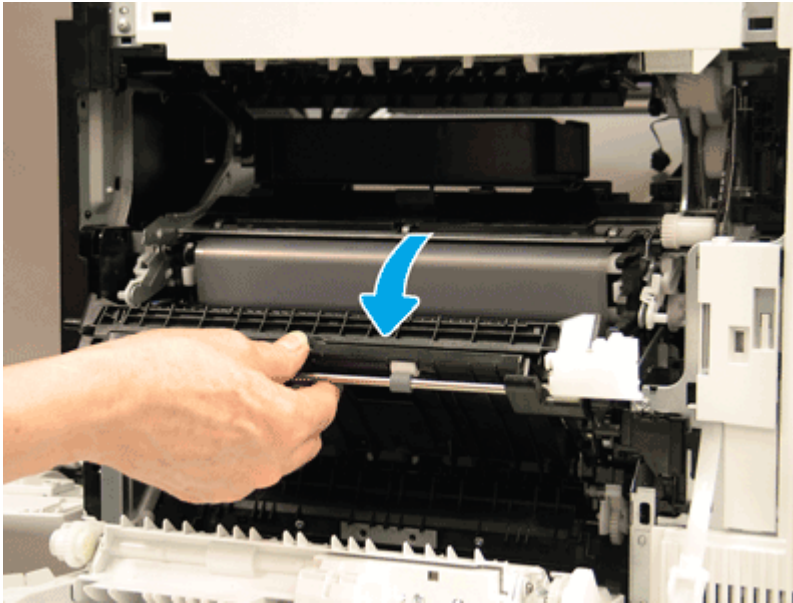
1. Open the right door.

Figure 5-1693 Open the right door



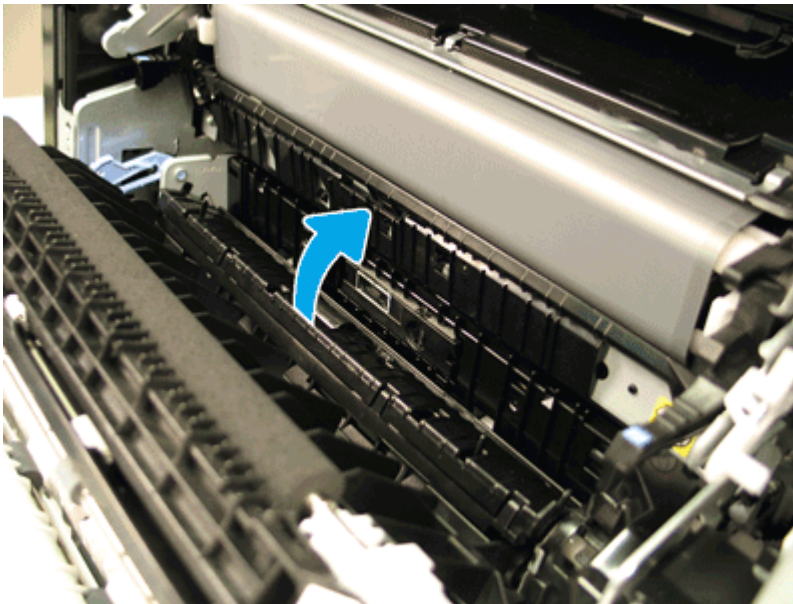
2. Lower the secondary transfer assembly to a 45° angle.

Figure 5-1694 Lower the secondary transfer



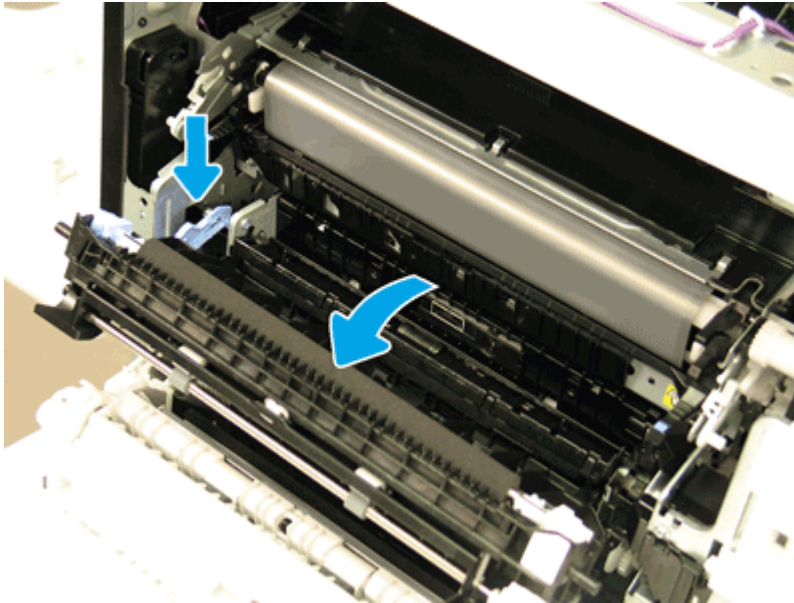
3. While holding the secondary transfer assembly, pivot the media detect assembly up and into the printer.

Figure 5-1695 Pivot the media detect assembly up



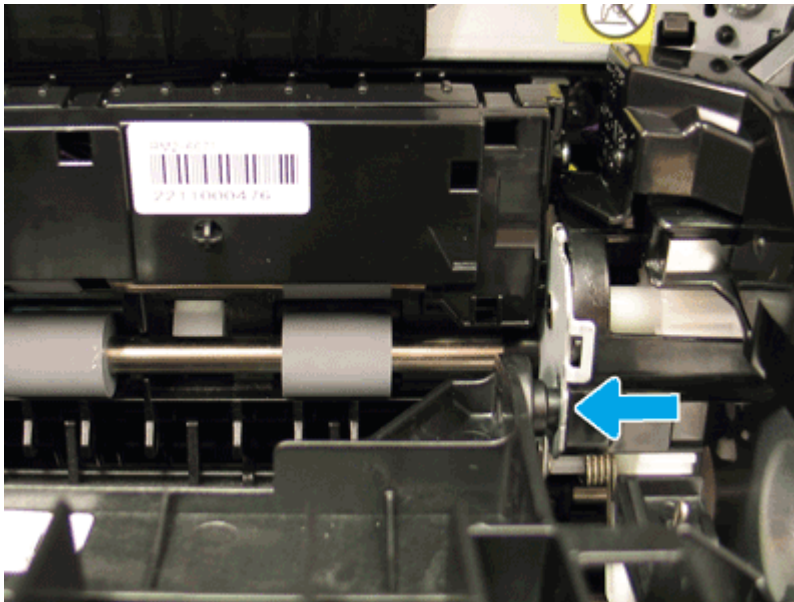
4. Lower the secondary transfer assembly and release it from the media detect assembly. Release the blue lever on the left, and then lower the secondary transfer assembly to the lowest position.

Figure 5-1696 Lower the secondary transfer assembly



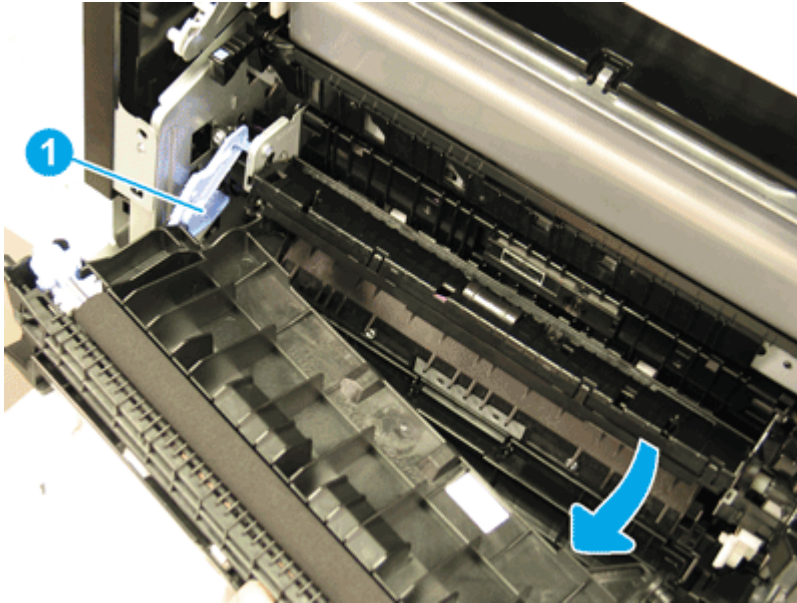
5. Release the right hinge by gently pushing left where the hinge attaches to the printer.

Figure 5-1697 Release the right hinge



6. Rotate the right side of the assembly away from the printer, and then release the left side of the assembly from the blue link arm (callout 1).

Figure 5-1698 Release the left side



7. Lift the secondary transfer assembly up to remove it.


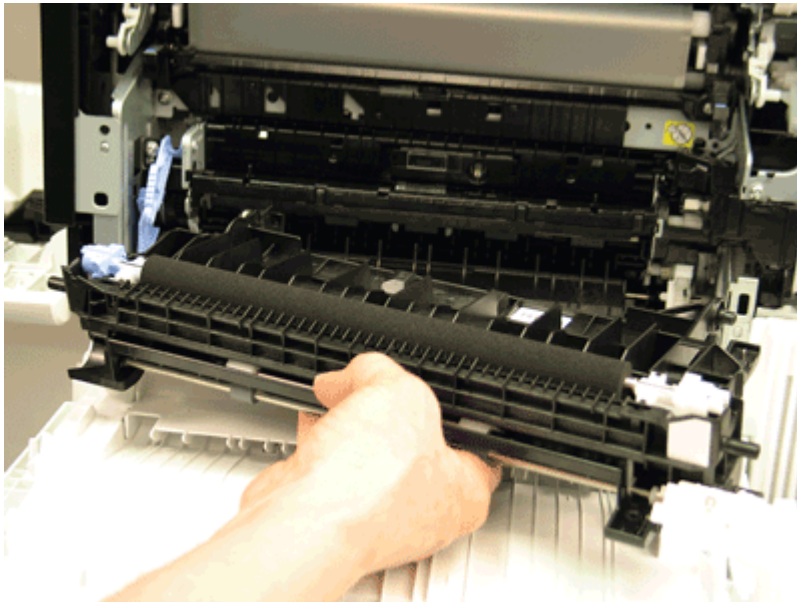
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1699 Remove the secondary transfer assembly



2. Remove the formatter cover

Follow these steps to remove the formatter cover.

- Unscrew two thumbscrews (callout 1), and then slide the formatter cover (callout 2) away from the printer to remove it.


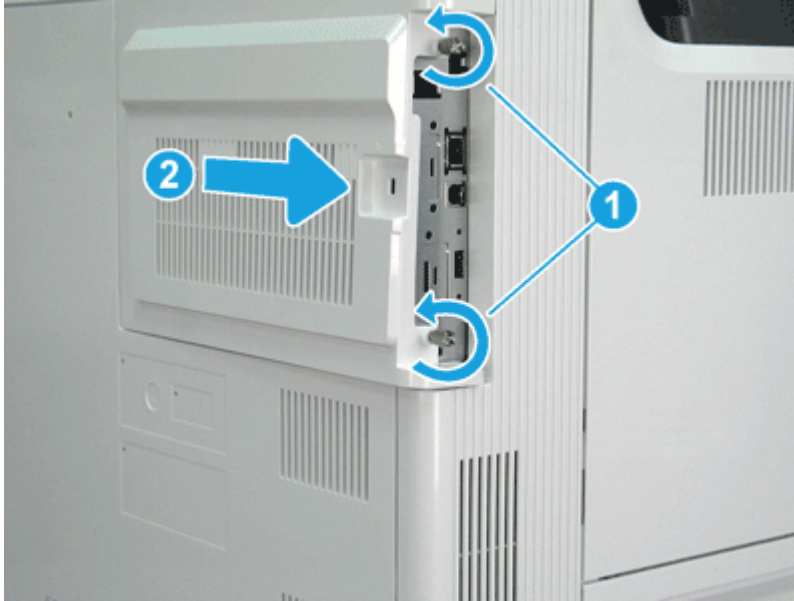
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1700 Remove the formatter cover

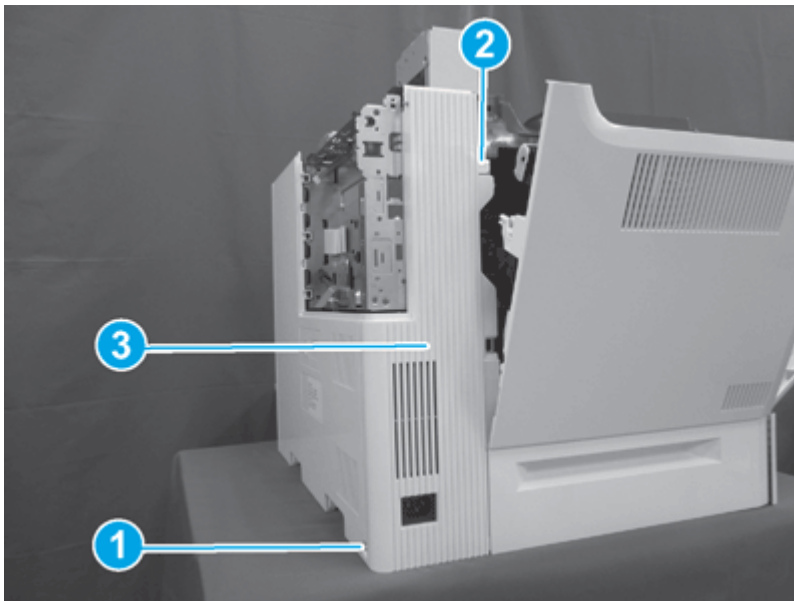


3. Remove the left rear cover

Follow these steps to remove the left rear cover.

- Open the left door. Remove one screw (callout 1), release one boss (callout 2), and then remove the left rear cover (callout 3).

Figure 5-1701 Remove the left rear cover



4. Remove the rear cover

Follow these steps to remove the rear cover.

- Remove two screws (callout 1), and then slide the rear cover (callout 2) to the right to remove it.


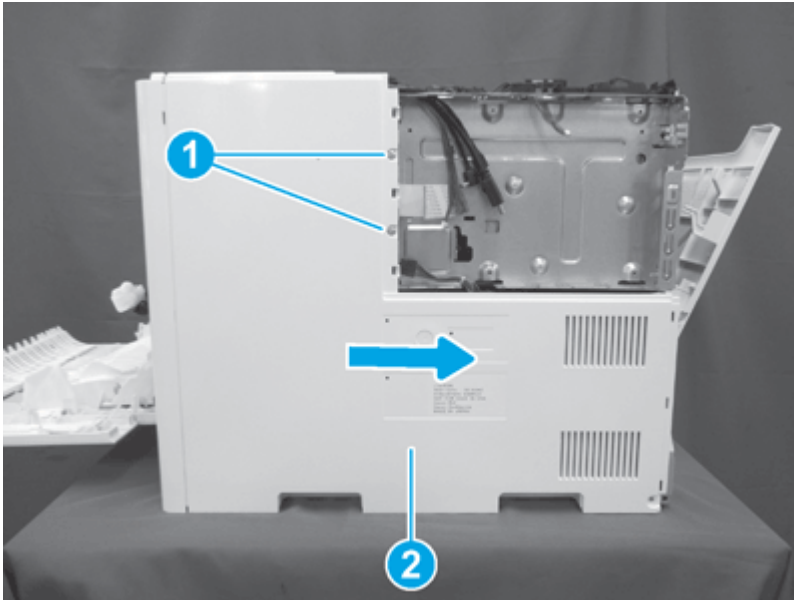
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1702 Remove two screws and the rear cover

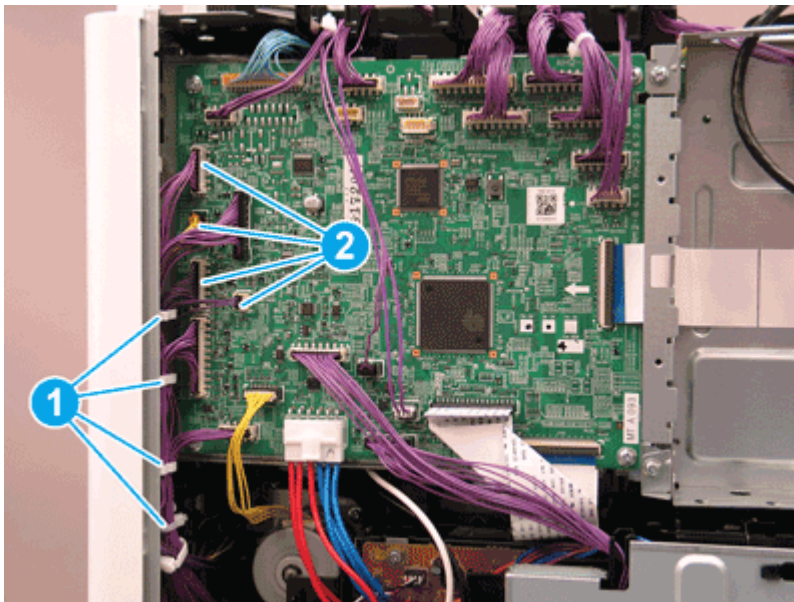


5. Remove the registration assembly

Follow these steps to remove the registration assembly.

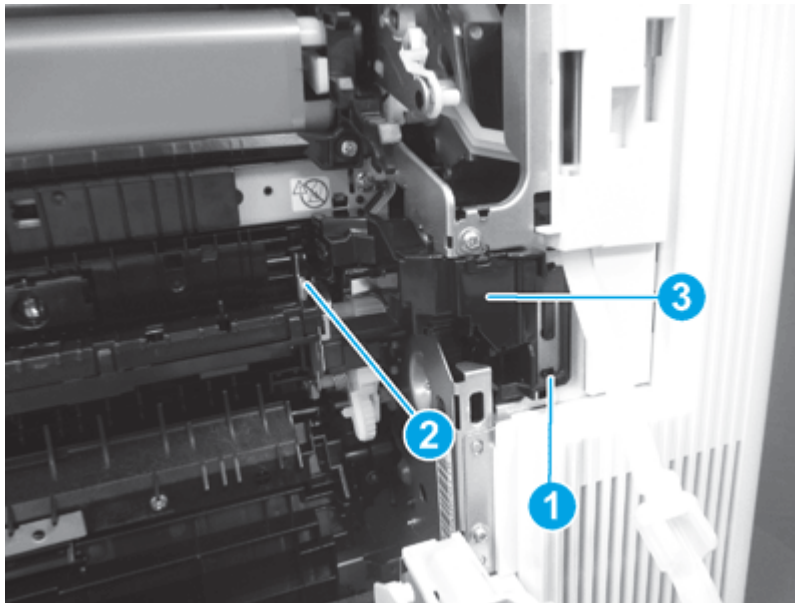
1. Release the cables from four retainers (callout 1), and then disconnect four connectors (callout 2).

Figure 5-1703 Disconnect four connectors



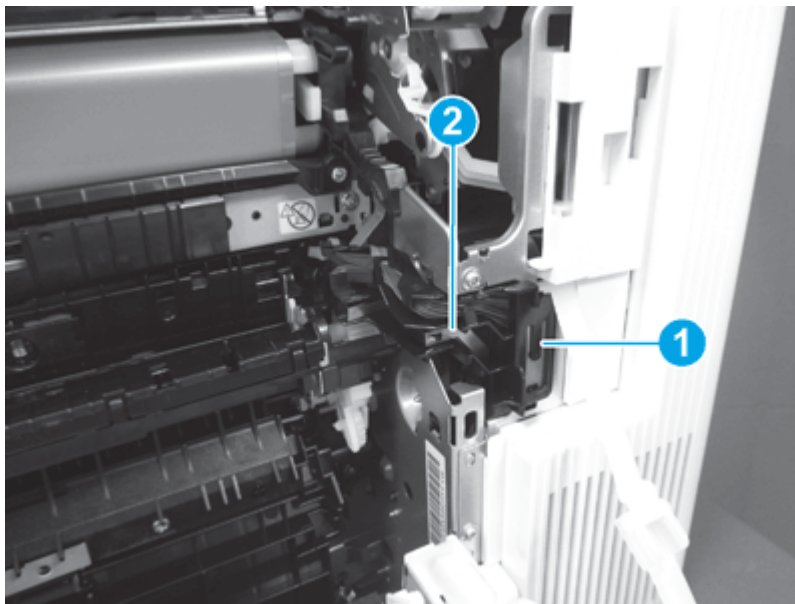
2. Release one tab (callout 1), release one boss (callout 2), and then remove the connector cover (callout 3).

Figure 5-1704 Remove the connector cover



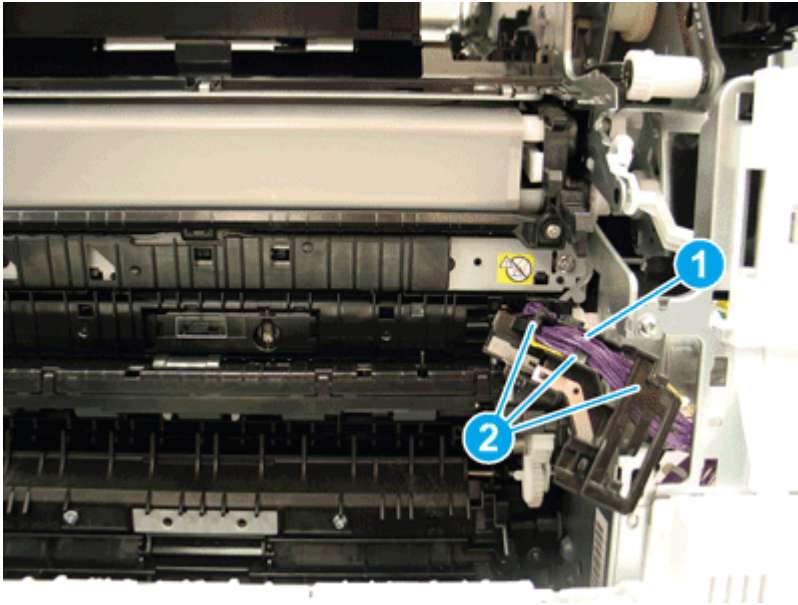
3. Release one tab (callout 1), and then slide the cable guide (callout 2) down to release it.

Figure 5-1705 Release the cable guide



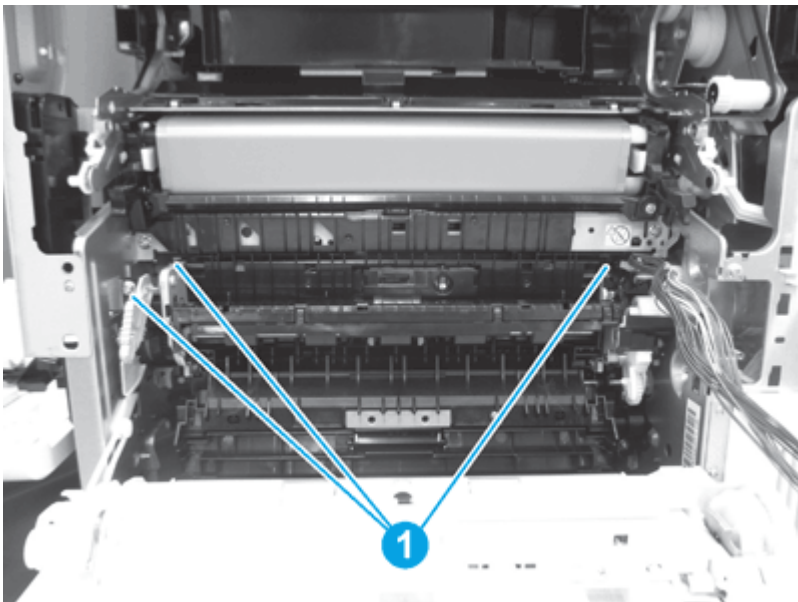
4. Release the cable (callout 1) from the cable guide (callout 2).

Figure 5-1706 Remove the cable guide



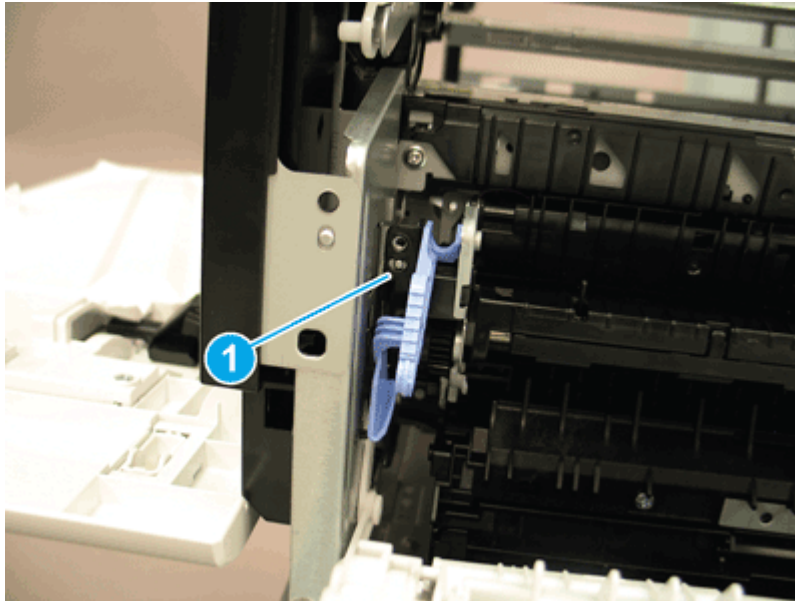
5. Remove three screws (callout 1).

Figure 5-1707 Remove three screws



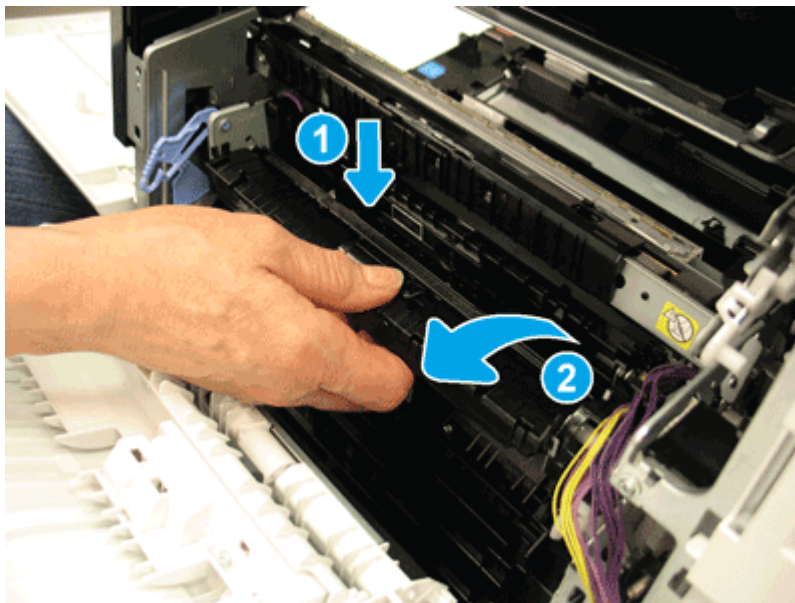
6. Release the assembly from the guide pin (callout 1) on the left side of the assembly.

Figure 5-1708 Release the assembly from the guide pin



7. Press downward on the left side of the assembly (callout 1), and then rotate the assembly away from the printer (callout 2) to release the hooks that go through the sheet metal on the back of the assembly. Remove the registration assembly.

Figure 5-1709 Remove the registration assembly



6. Unpack the replacement assembly


Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.


2. Unpack the replacement part from the packaging.

CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT:  Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE:  If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE:  When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

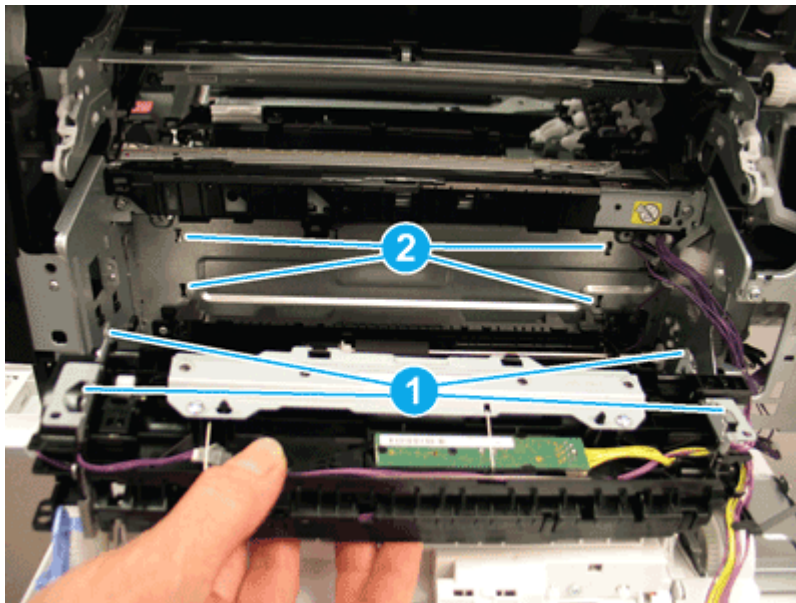
7. Reverse the removal steps to install the assembly

Also use the following **special installation instructions**.

Registration assembly

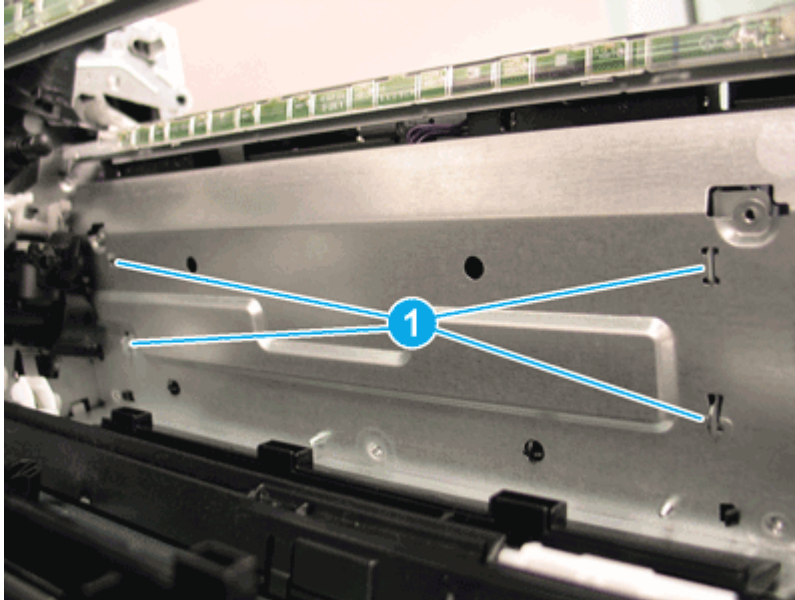
1. Install the tabs (callout 1) on the registration assembly into the slots (callout 2) in the printer.

Figure 5-1710 Install the tabs in the slots



2. Look inside the printer and make sure that the tabs (callout 1) are completely installed in the sheet metal before installing the screws.

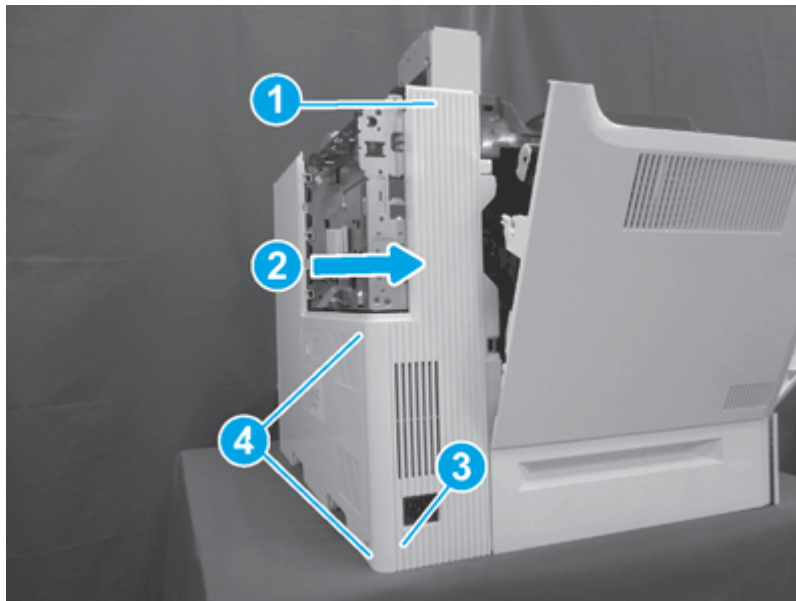
Figure 5-1711 Check the tabs




Left rear cover

- Position the top of the cover (callout 1) first, and then slide the cover to the right (callout 2). Push the left lower corner (callout 3) toward the rear of the printer to engage two tabs (callout 4) in the slots on the rear cover.

Figure 5-1712 Install the left rear cover



 **NOTE:** Continue to reverse the removal steps to finish installing the assembly.

Removal and replacement: Registration density sensor

Learn how to remove and replace the registration density sensor.


M652/M653:

 [View a video of how to remove and replace the registration density sensor.](#)

M681/M682:


Mean time to repair: 30 minutes

Service level: Advanced

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Disconnect the power cable.

 **WARNING!** To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-83 Part information

Part number	Part description
RM2-7160-000CN	Registration density sensor

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Make sure that the printer initializes to a **Ready** state.

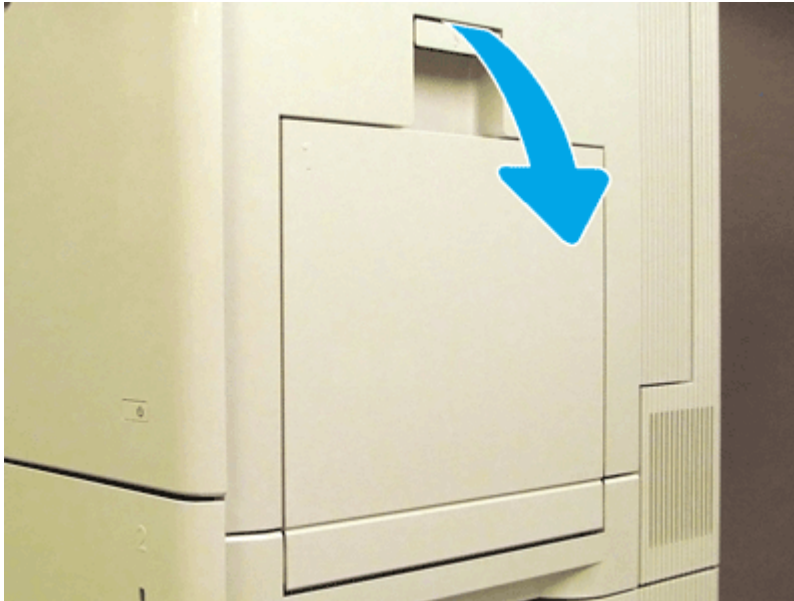
Print a configuration page to make sure that the printer is functioning correctly.

1. Remove the secondary transfer assembly

Follow these steps to remove the secondary transfer assembly.

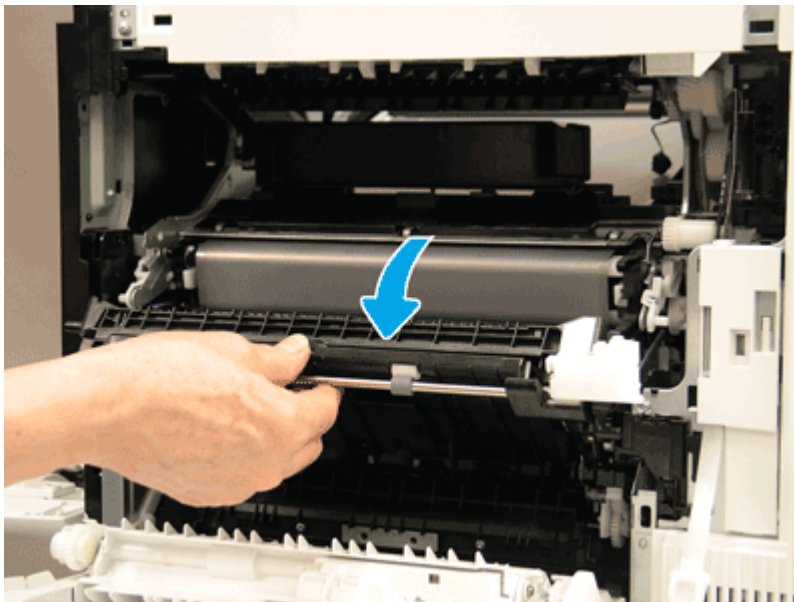
1. Open the right door.

Figure 5-1713 Open the right door



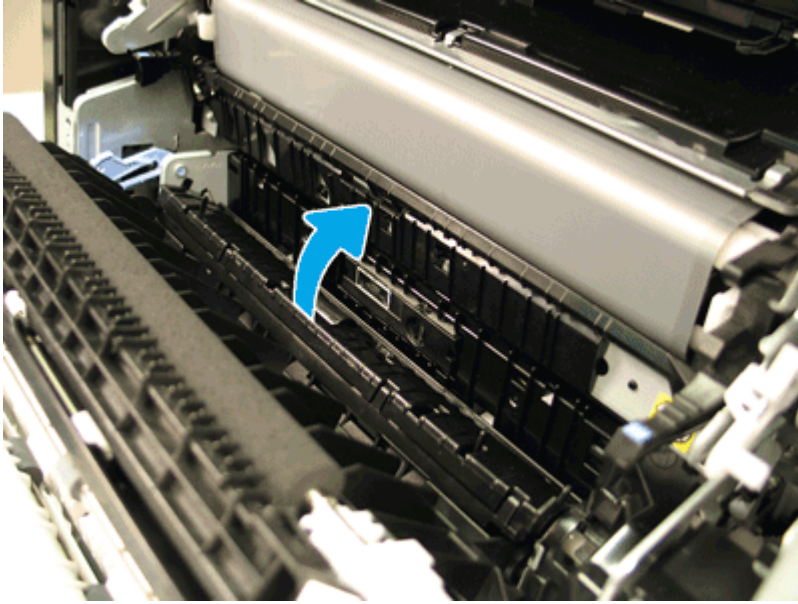
2. Lower the secondary transfer assembly to a 45° angle.

Figure 5-1714 Lower the secondary transfer



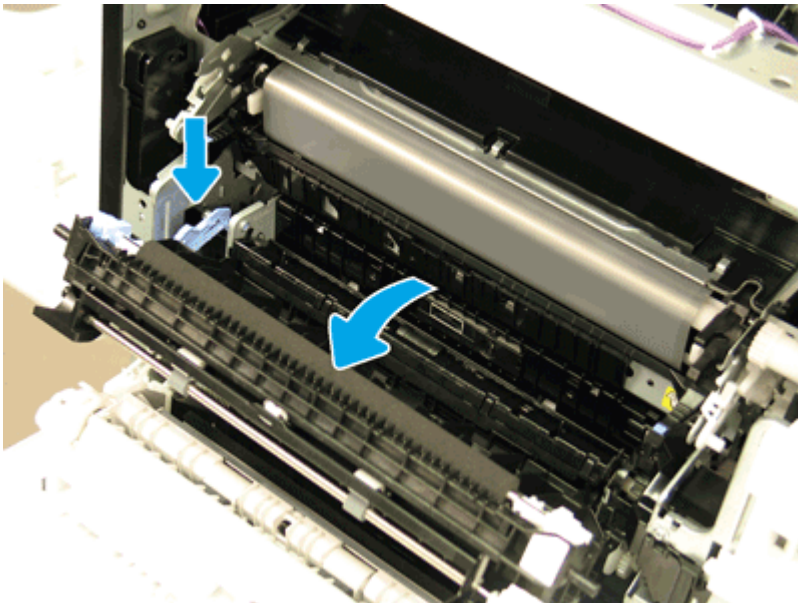
3. While holding the secondary transfer assembly, pivot the media detect assembly up and into the printer.

Figure 5-1715 Pivot the media detect assembly up



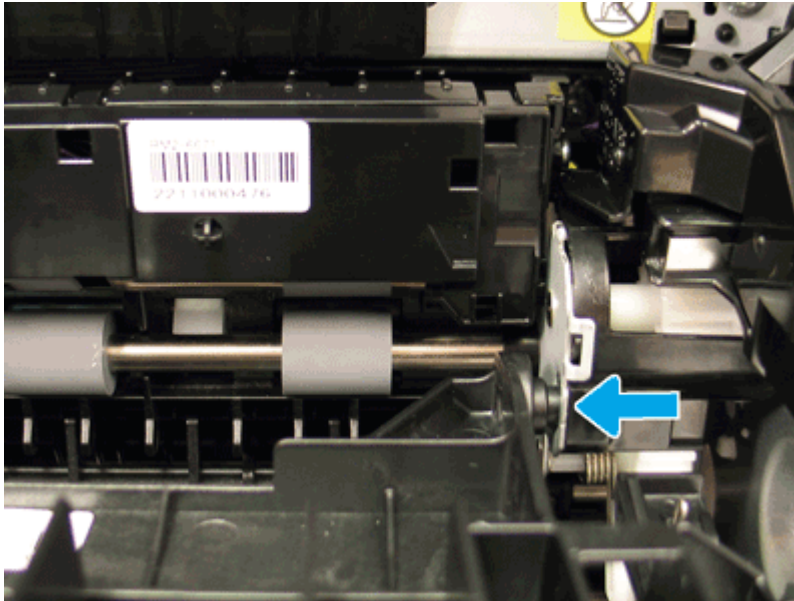
4. Lower the secondary transfer assembly and release it from the media detect assembly. Release the blue lever on the left, and then lower the secondary transfer assembly to the lowest position.

Figure 5-1716 Lower the secondary transfer assembly



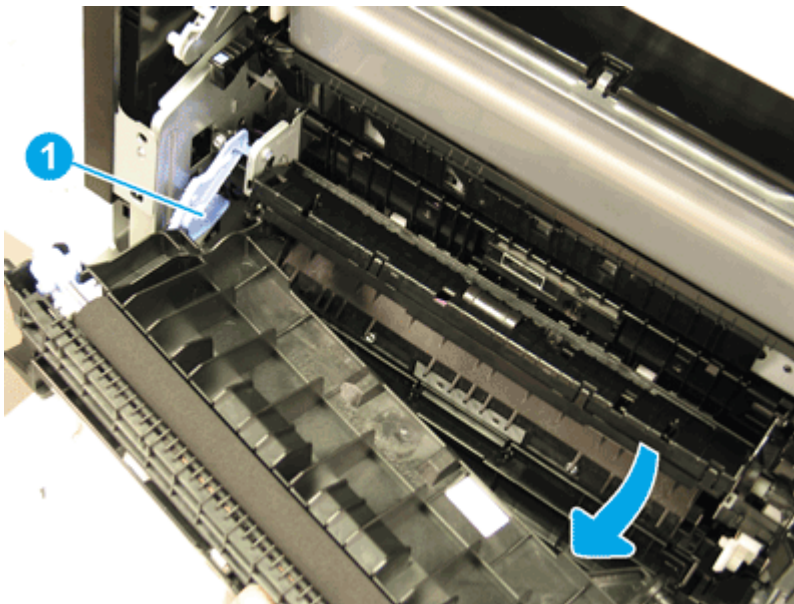
5. Release the right hinge by gently pushing left where the hinge attaches to the printer.

Figure 5-1717 Release the right hinge



6. Rotate the right side of the assembly away from the printer, and then release the left side of the assembly from the blue link arm (callout 1).

Figure 5-1718 Release the left side



7. Lift the secondary transfer assembly up to remove it.


 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1719 Remove the secondary transfer assembly



2. Remove the formatter cover

Follow these steps to remove the formatter cover.

- Unscrew two thumbscrews (callout 1), and then slide the formatter cover (callout 2) away from the printer to remove it.


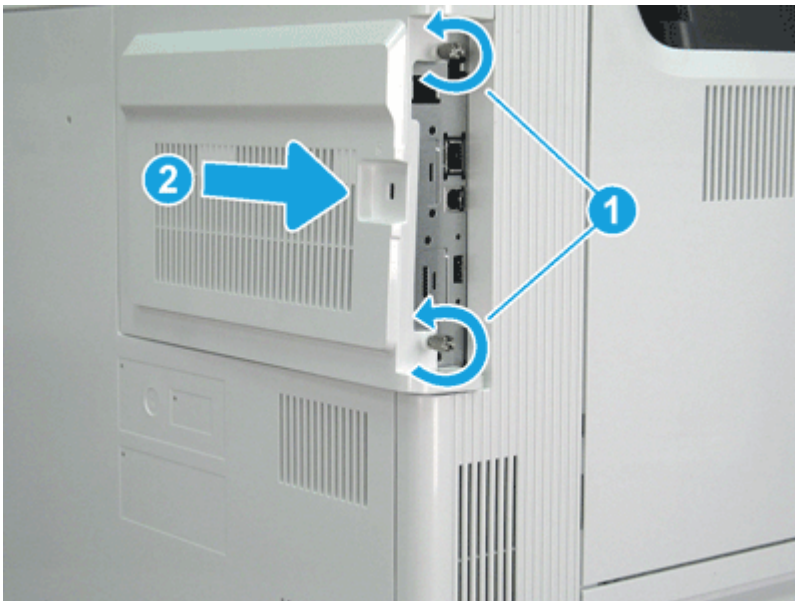
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1720 Remove the formatter cover

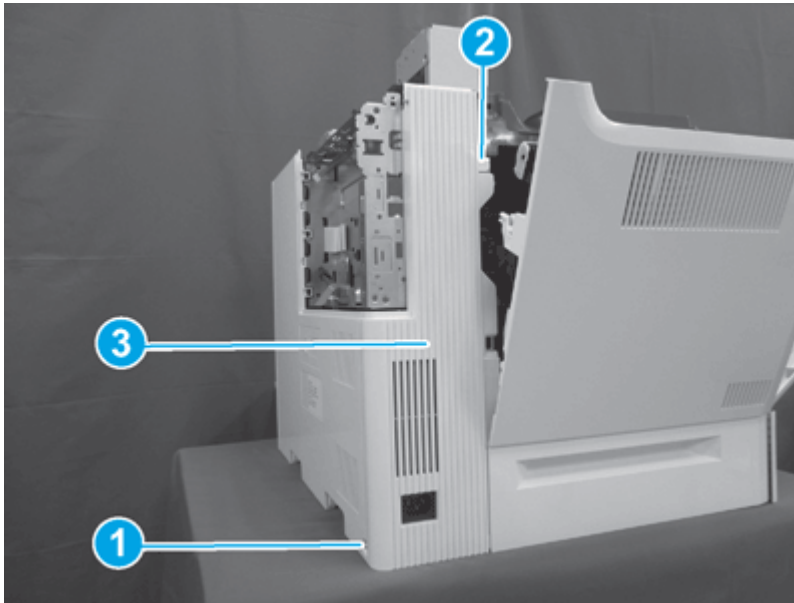


3. Remove the left rear cover

Follow these steps to remove the left rear cover.

- Open the left door. Remove one screw (callout 1), release one boss (callout 2), and then remove the left rear cover (callout 3).

Figure 5-1721 Remove the left rear cover



4. Remove the rear cover

Follow these steps to remove the rear cover.

- Remove two screws (callout 1), and then slide the rear cover (callout 2) to the right to remove it.


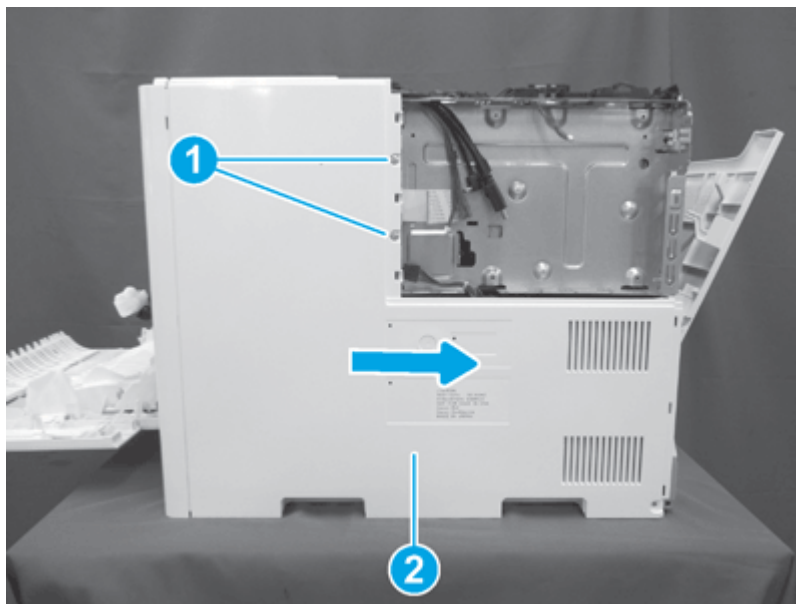
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1722 Remove two screws and the rear cover

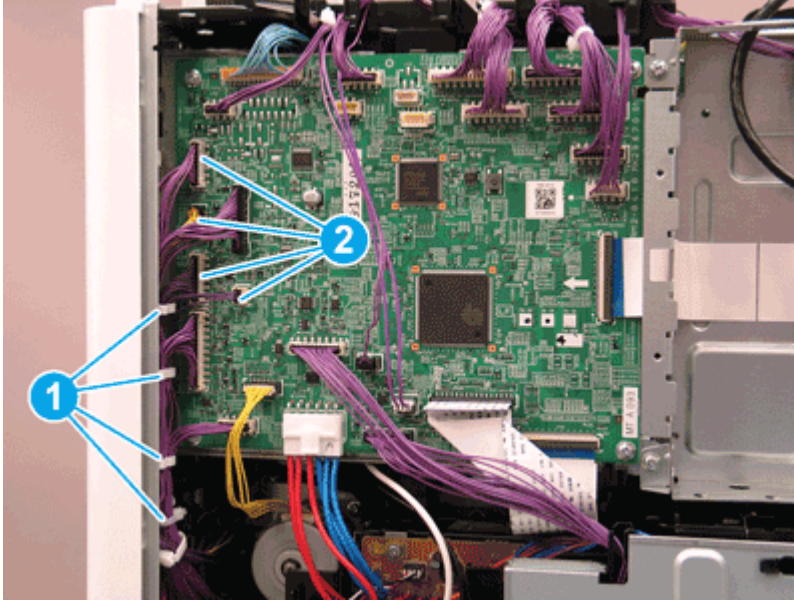


5. Remove the registration assembly

Follow these steps to remove the registration assembly.

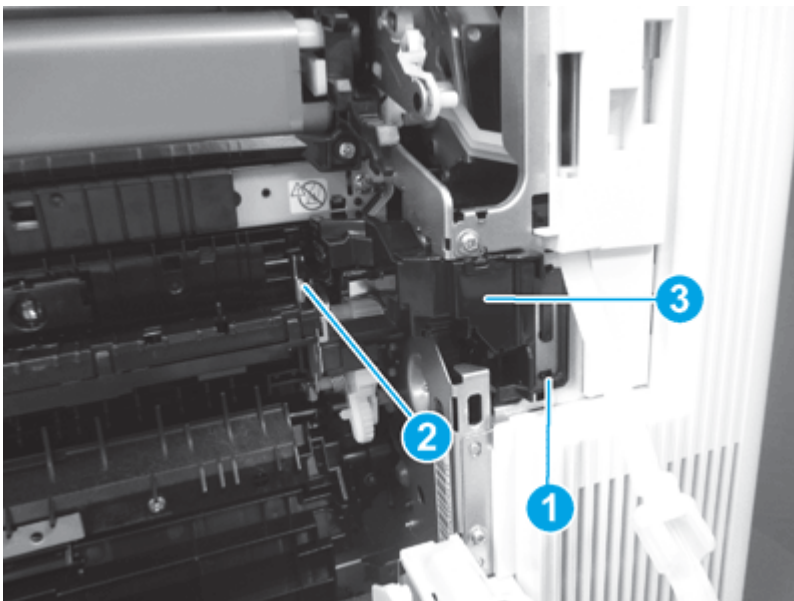
1. Release the cables from four retainers (callout 1), and then disconnect four connectors (callout 2).

Figure 5-1723 Disconnect four connectors



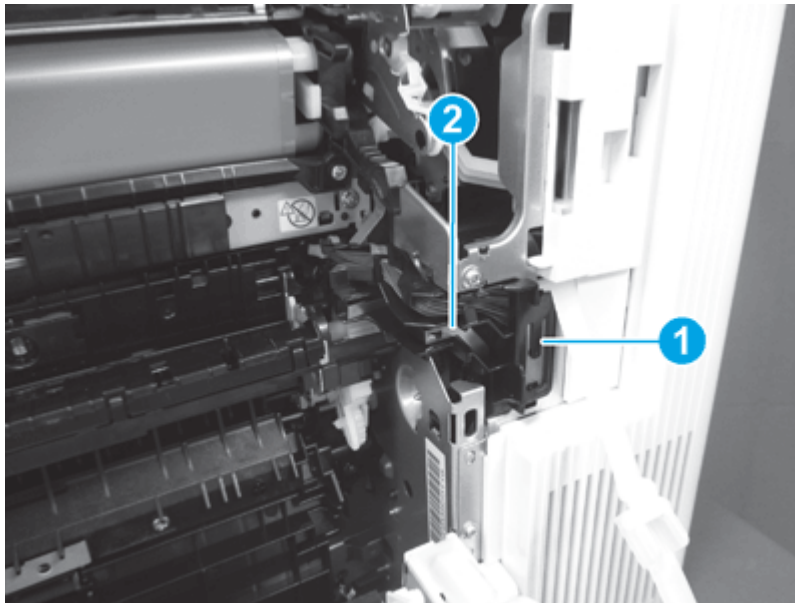
2. Release one tab (callout 1), release one boss (callout 2), and then remove the connector cover (callout 3).

Figure 5-1724 Remove the connector cover



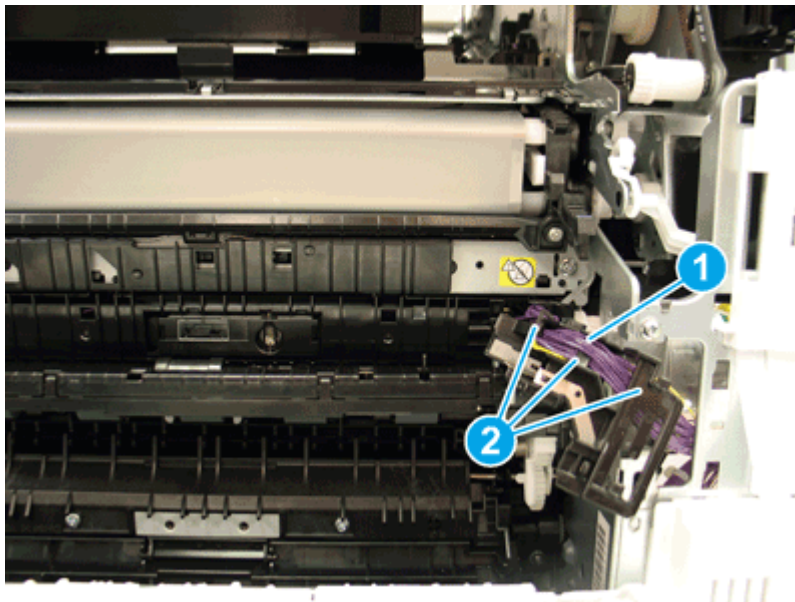
3. Release one tab (callout 1), and then slide the cable guide (callout 2) down to release it.

Figure 5-1725 Release the cable guide



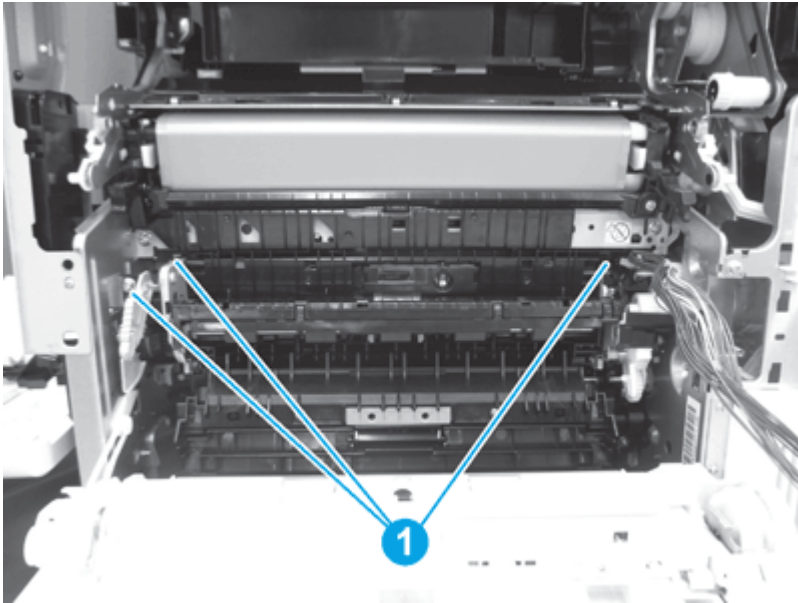
4. Release the cable (callout 1) from the cable guide (callout 2).

Figure 5-1726 Remove the cable guide



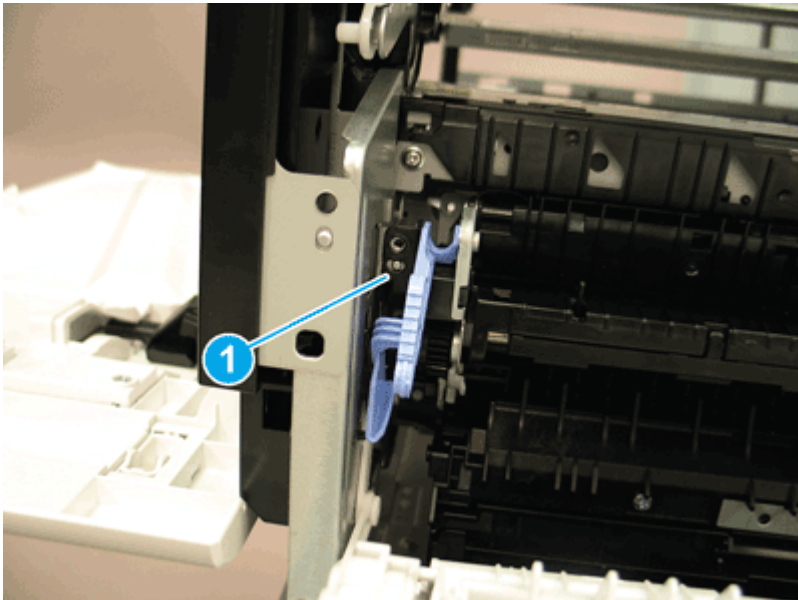
5. Remove three screws (callout 1).

Figure 5-1727 Remove three screws



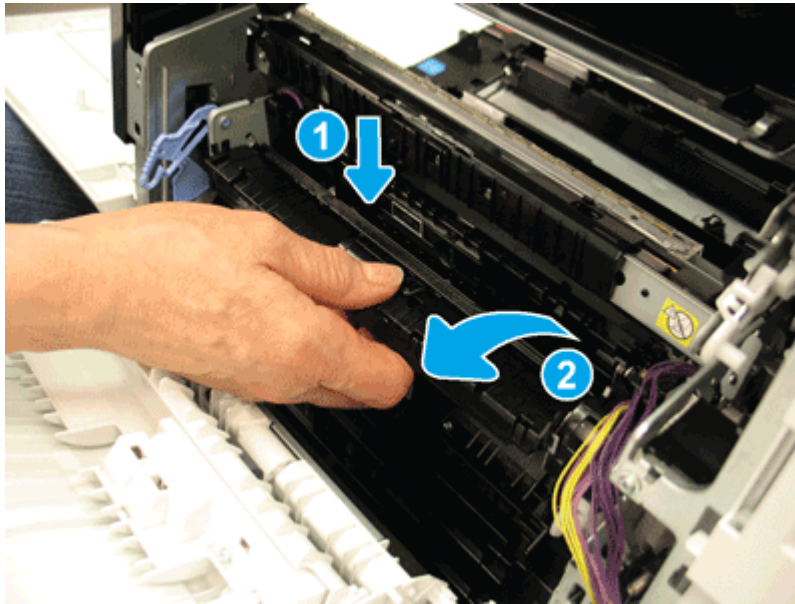
6. Release the assembly from the guide pin (callout 1) on the left side of the assembly.

Figure 5-1728 Release the assembly from the guide pin



7. Press downward on the left side of the assembly (callout 1), and then rotate the assembly away from the printer (callout 2) to release the hooks that go through the sheet metal on the back of the assembly. Remove the registration assembly.

Figure 5-1729 Remove the registration assembly



6. Remove the registration density sensor

Follow these steps to remove the registration density sensor.

- Remove two screws (callout 1), and then slide the registration density sensor (callout 2) to the right to remove it.


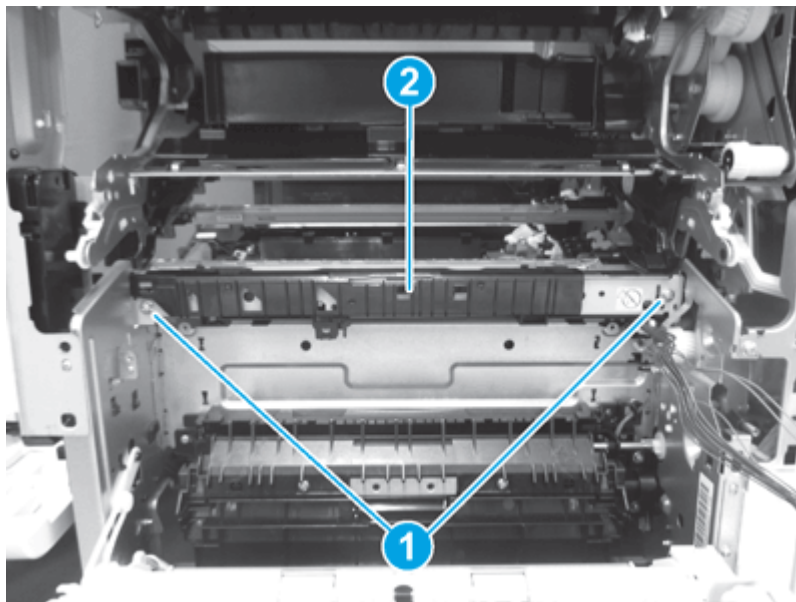
 **TIP:** Make sure that the guide pins on the back of the sensor are fully installed before installing the screws.

Figure 5-1730 Remove two screws and the registration density sensor



7. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

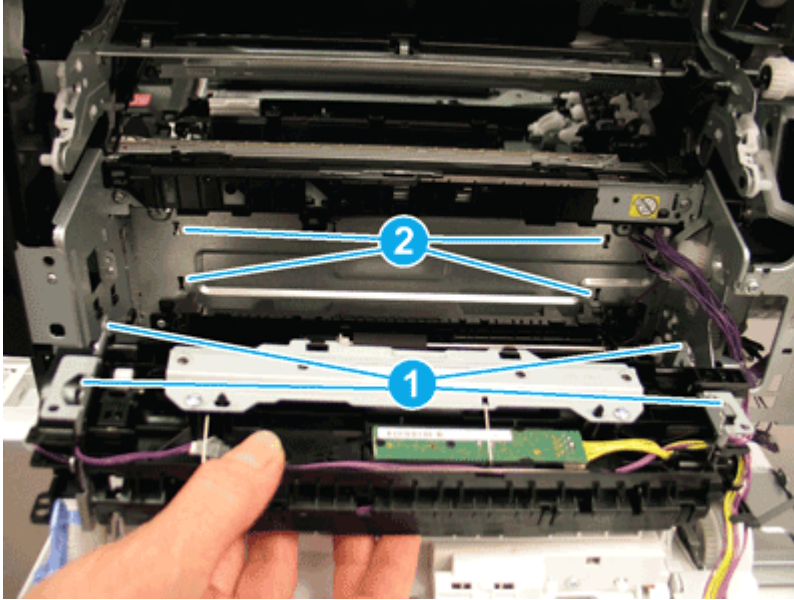
8. Reverse the removal steps to install the assembly

Also use the following **special installation instructions**.

Registration assembly

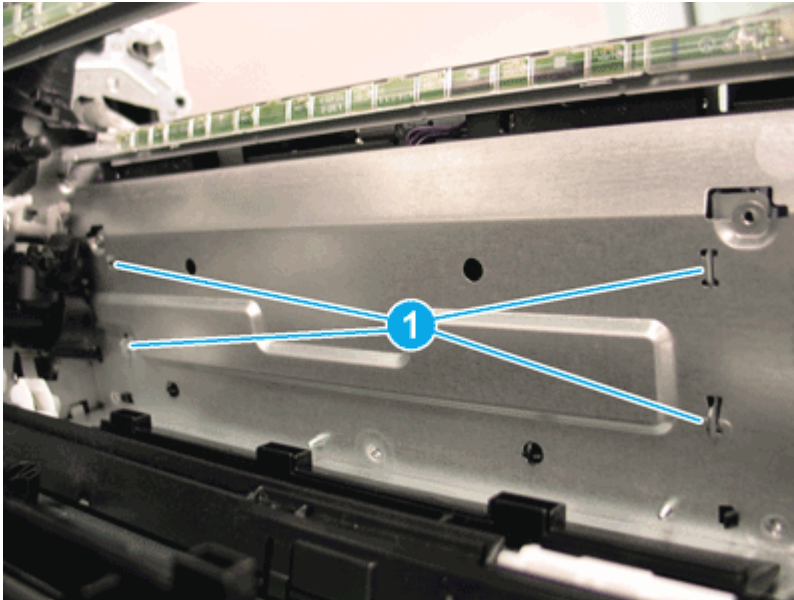
1. Install the tabs (callout 1) on the registration assembly into the slots (callout 2) in the printer.

Figure 5-1731 Install the tabs in the slots



2. Look inside the printer and make sure that the tabs (callout 1) are completely installed in the sheet metal before installing the screws.

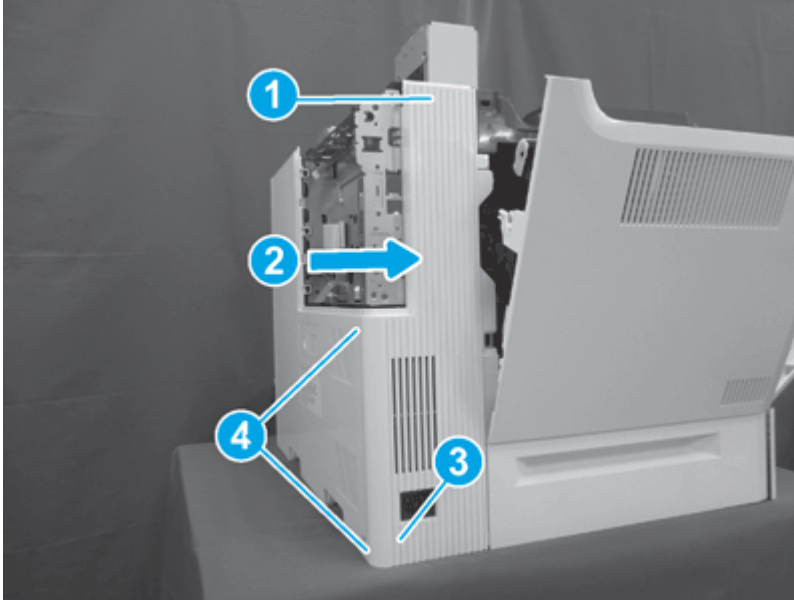
Figure 5-1732 Check the tabs



Left rear cover

- Position the top of the cover (callout 1) first, and then slide the cover to the right (callout 2). Push the left lower corner (callout 3) toward the rear of the printer to engage two tabs (callout 4) in the slots on the rear cover.

Figure 5-1733 Install the left rear cover



 **NOTE:** Continue to reverse the removal steps to finish installing the assembly.


Removal and replacement: Feed roller assembly

Learn how to remove and replace the feed roller assembly.

 [View a video of how to remove and replace the feed roller assembly.](#)


Mean time to repair: 30 minutes

Service level: Advanced

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Disconnect the power cable.

 **WARNING!** To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-84 Part information

Part number	Part description
RM2-6684-000CN	Feed roller assembly

Required tools

- #2 Phillips screwdriver with a magnetic tip
- Needle-nose pliers

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Make sure that the printer initializes to a **Ready** state.

Print a configuration page to make sure that the printer is functioning correctly.

1. Remove the formatter cover

Follow these steps to remove the formatter cover.

- Unscrew two thumbscrews (callout 1), and then slide the formatter cover (callout 2) away from the printer to remove it.


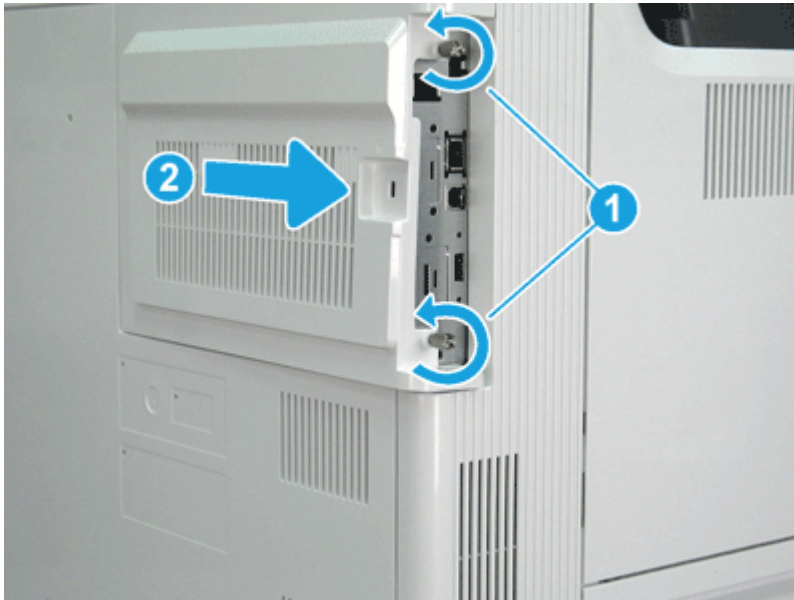
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1734 Remove the formatter cover

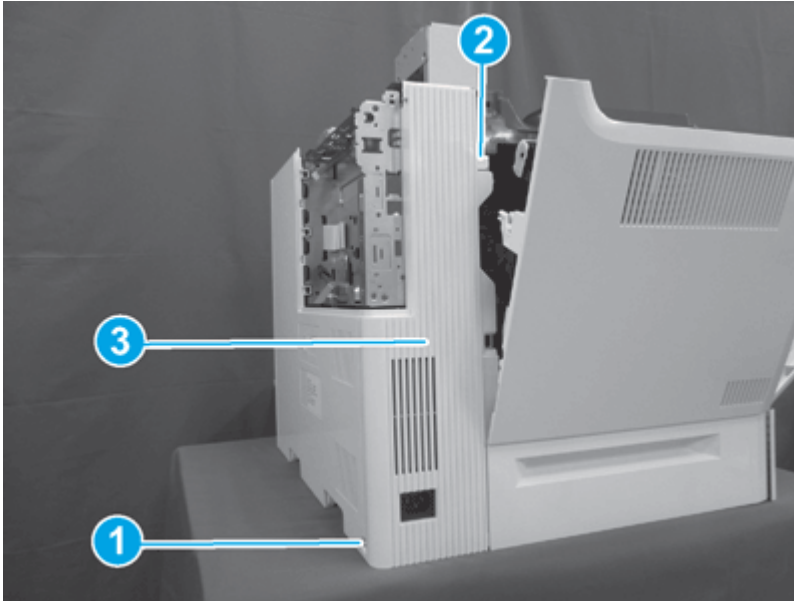


2. Remove the left rear cover

Follow these steps to remove the left rear cover.

- Open the left door. Remove one screw (callout 1), release one boss (callout 2), and then remove the left rear cover (callout 3).

Figure 5-1735 Remove the left rear cover



3. Remove the rear cover

Follow these steps to remove the rear cover.

- Remove two screws (callout 1), and then slide the rear cover (callout 2) to the right to remove it.


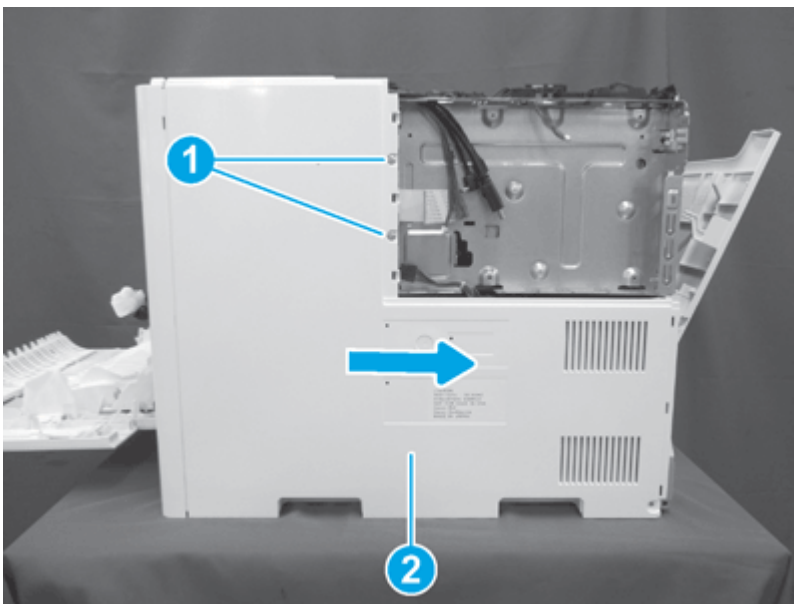
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1736 Remove two screws and the rear cover



4. Remove the right rear cover

Follow these steps to remove the right rear cover.

- Remove one screw (callout 1), and then slide the right rear cover (callout 2) to the right to remove it.


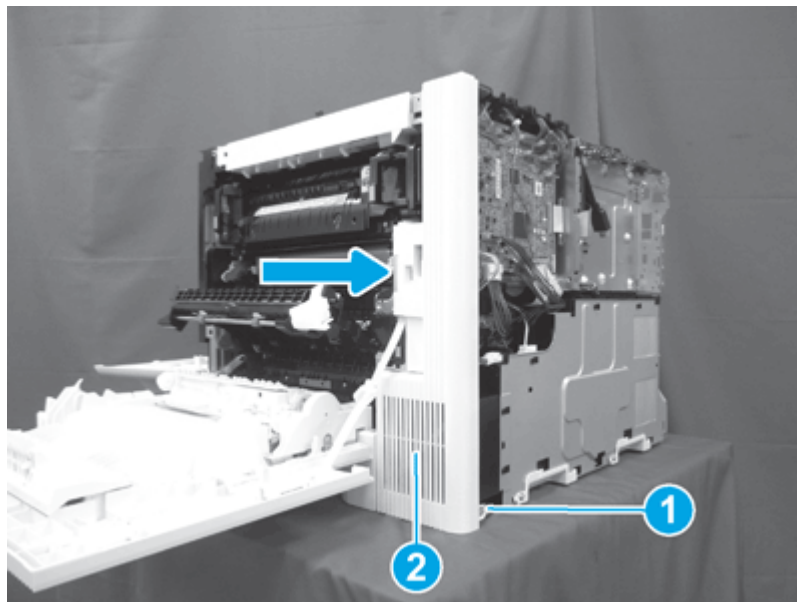
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1737 Remove one screw and the right rear cover

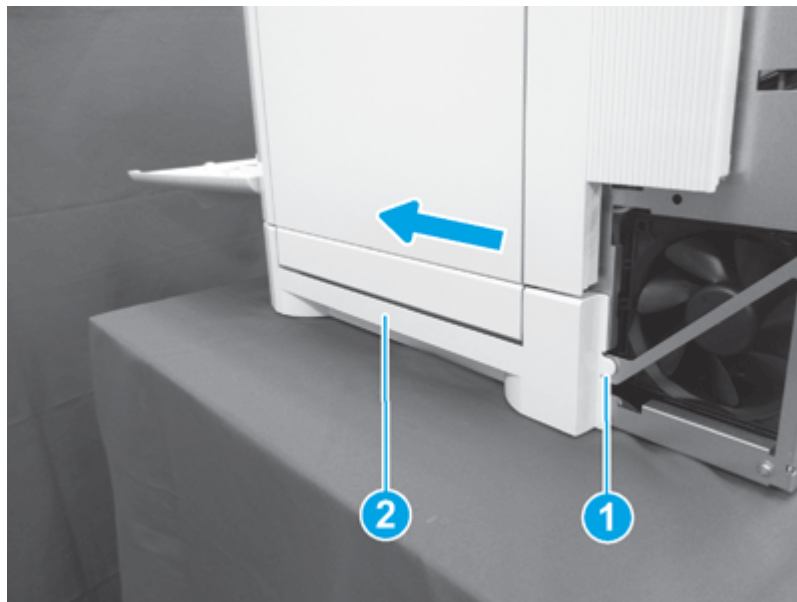


5. Remove the right handle

Follow these steps to remove the right handle.

- Release one boss (callout 1), and then slide the right handle (callout 2) to the left to remove it.

Figure 5-1738 Remove the right handle

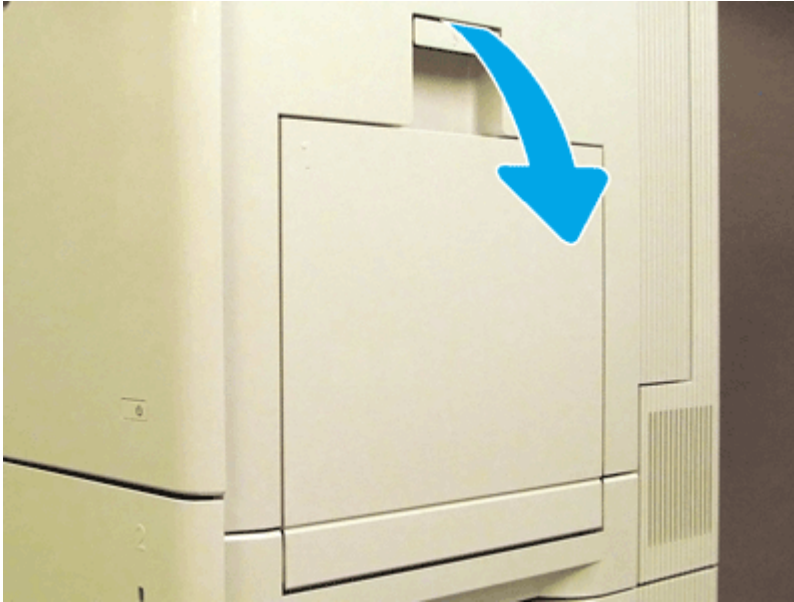


6. Remove the right door

Follow these steps to remove the right door.

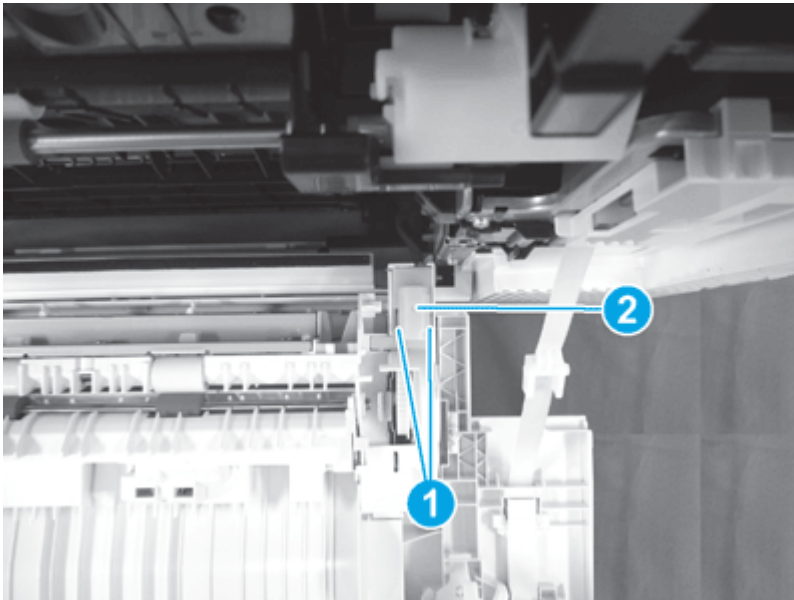
1. Open the right door.

Figure 5-1739 Open the right door



2. Release two tabs (callout 1), and then remove the connector cover (callout 2).

Figure 5-1740 Remove the connector cover

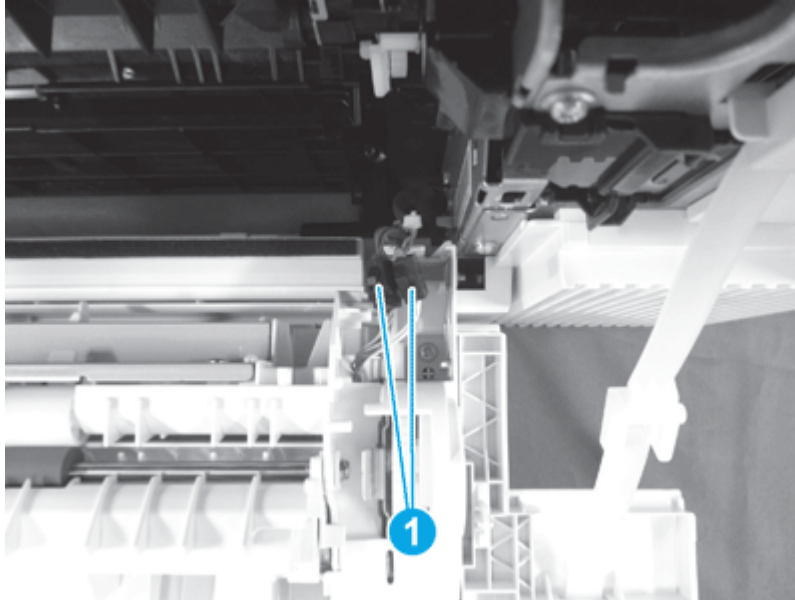


3. Disconnect two connectors (callout 1).



NOTE: Disconnect the connectors on the side closest to the printer

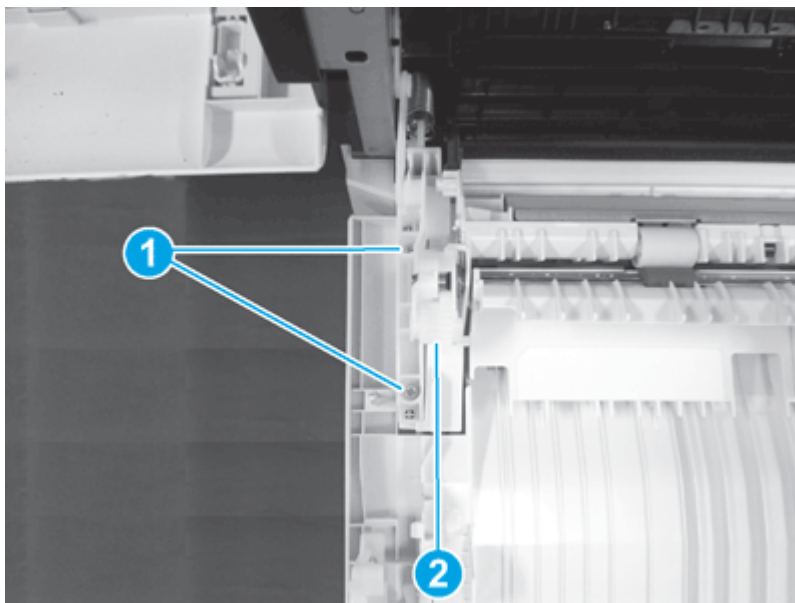
Figure 5-1741 Disconnect two connectors



4. Remove two screws (callout 1), and then release the left link arm (callout 2) from the right door.

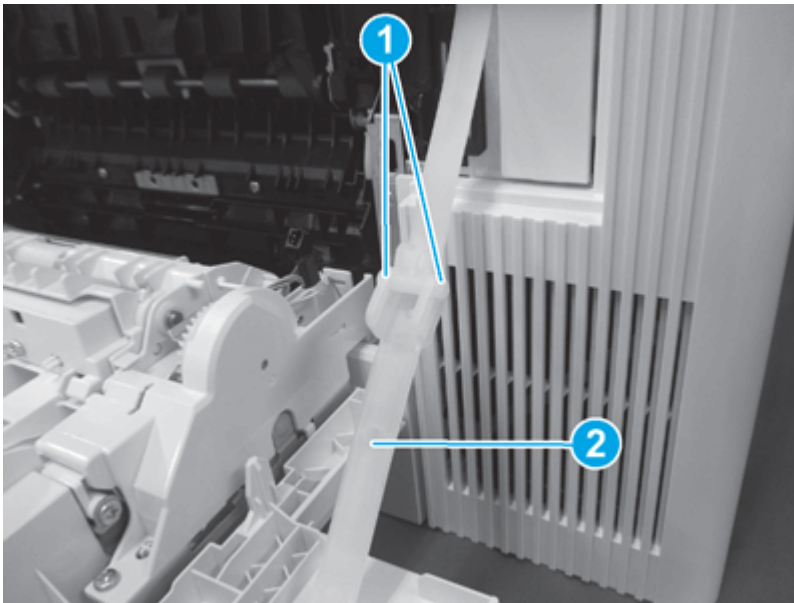
⚠ CAUTION: The left link arm is under tension. Hold onto the part when removing the screws and release it slowly to avoid damaging the printer or losing the screws.

Figure 5-1742 Remove two screws and release the left link arm



5. Release two bosses (callout 1), and then release the right door strap (callout 2).

Figure 5-1743 Release the right door strap

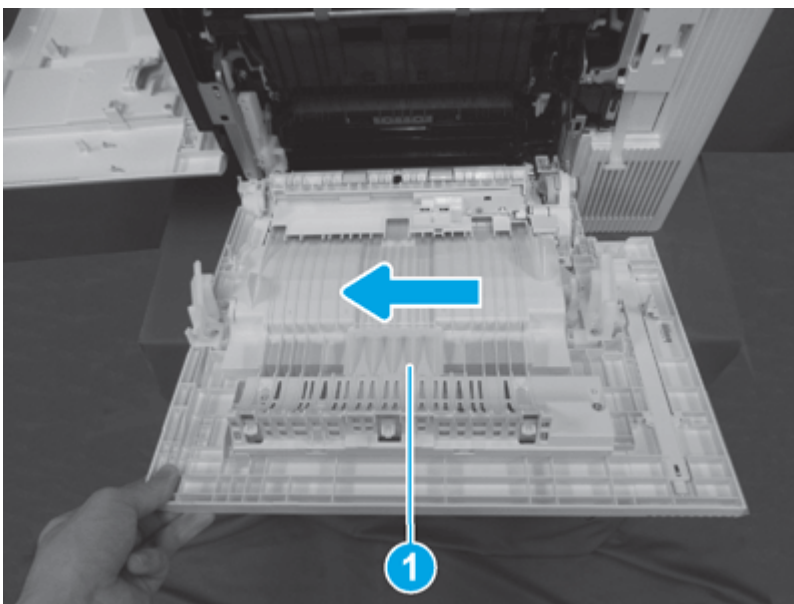


6. Slide the right door (callout 1) to the left to remove it.

⚠ CAUTION: The left hinge is under tension. Use care when moving it so it does not release suddenly and damage the printer.

💡 TIP: The left hinge can be moved to the left, away from the door assembly, to allow correctly positioning the molded door assembly parts. Place the hinge back into position to align with the alignment pins, and then reattach.

Figure 5-1744 Remove the right door

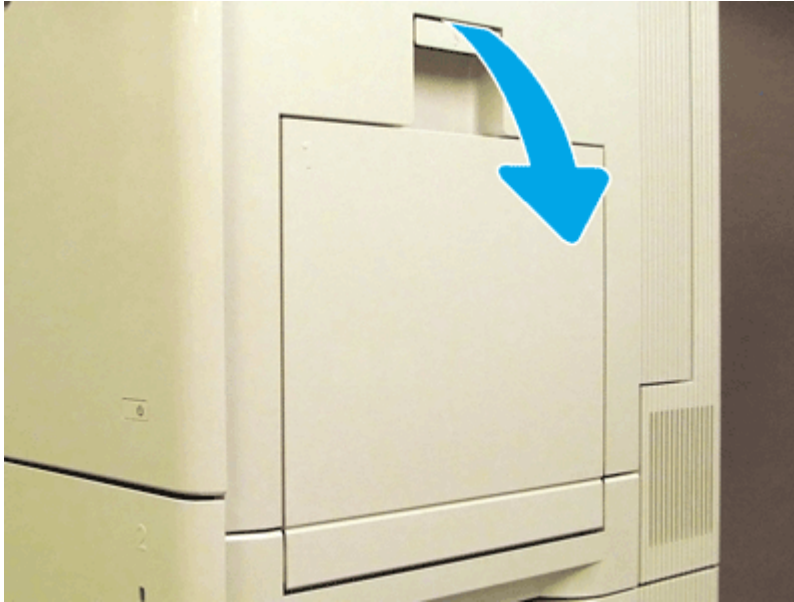


7. Remove the secondary transfer assembly

Follow these steps to remove the secondary transfer assembly.

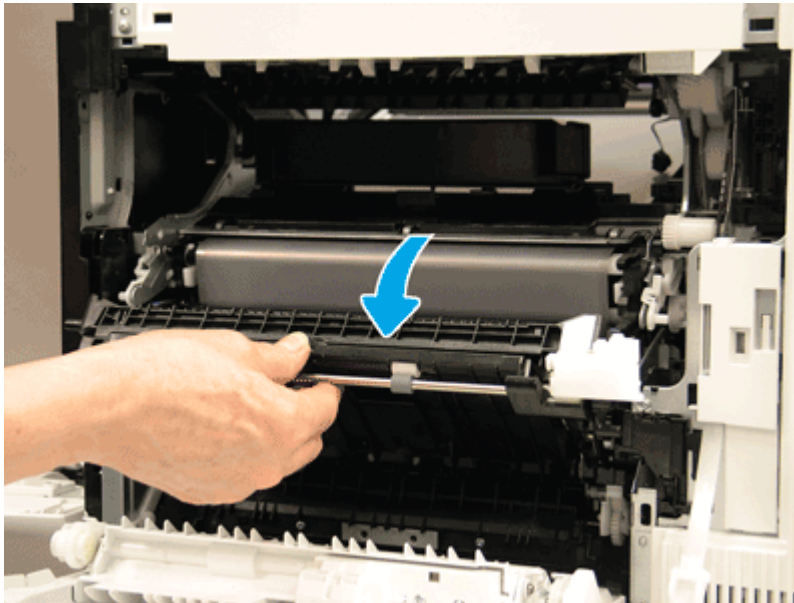
1. Open the right door.

Figure 5-1745 Open the right door



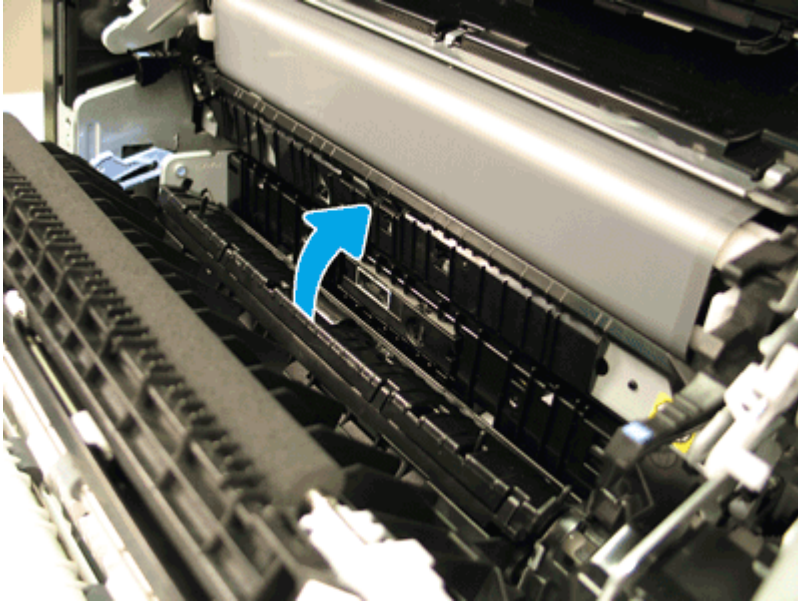
2. Lower the secondary transfer assembly to a 45° angle.

Figure 5-1746 Lower the secondary transfer assembly



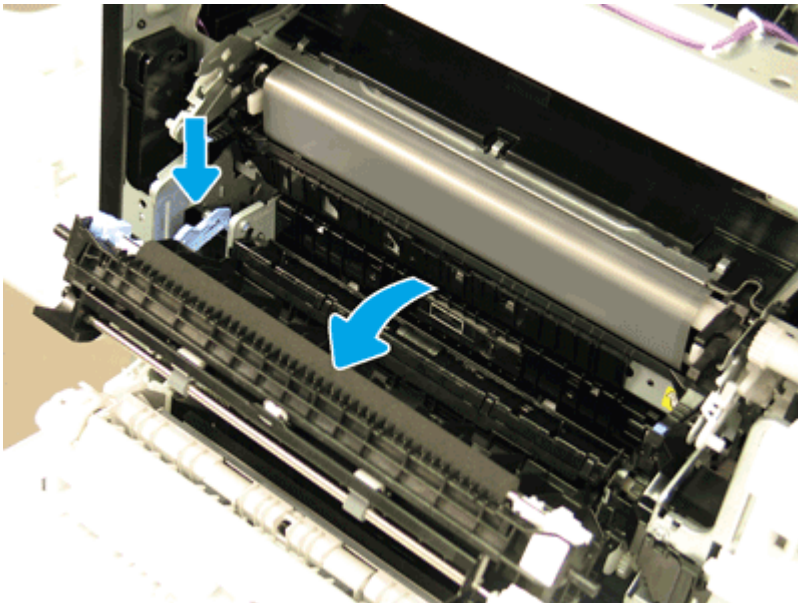
3. While holding the secondary transfer assembly, pivot the media detect assembly up and into the printer.

Figure 5-1747 Pivot the media detect assembly up



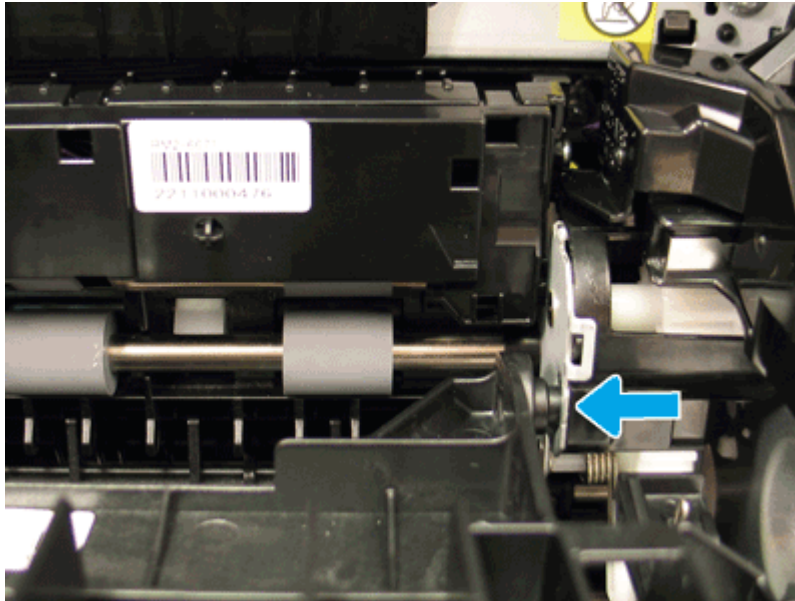
4. Lower the secondary transfer assembly and release it from the media detect assembly. Release the blue lever on the left, and then lower the secondary transfer assembly to the lowest position.

Figure 5-1748 Lower the secondary transfer assembly



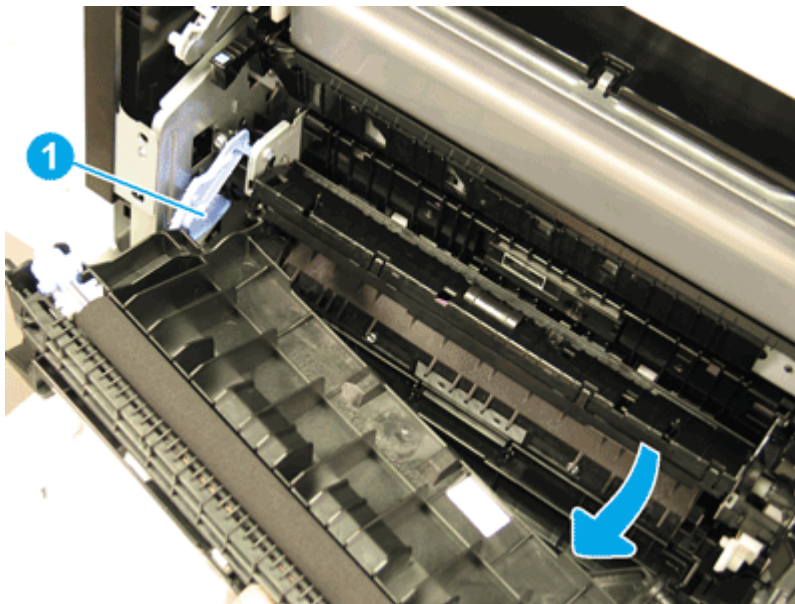
5. Release the right hinge by gently pushing left where the hinge attaches to the printer.

Figure 5-1749 Release the right hinge



6. Rotate the right side of the assembly away from the printer, and then release the left side of the assembly from the blue link arm (callout 1).

Figure 5-1750 Release the left side



7. Lift the secondary transfer assembly up to remove it.


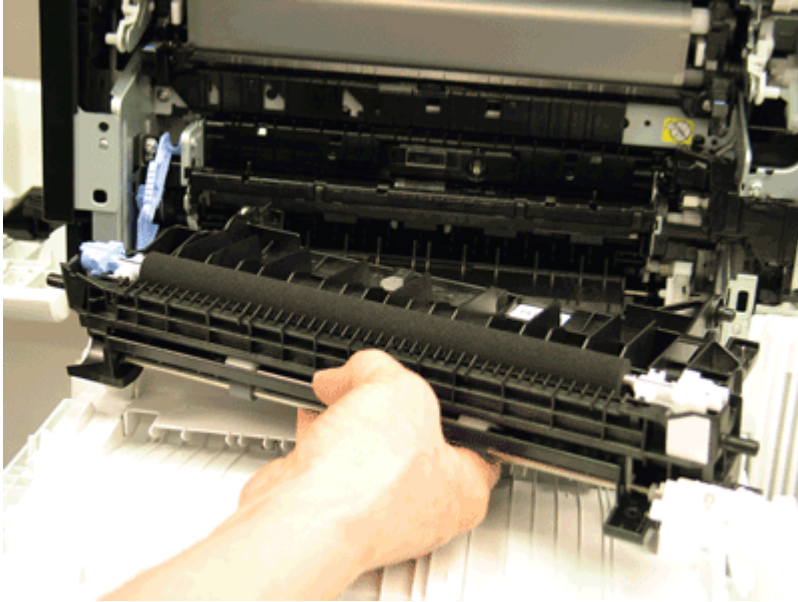
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1751 Remove the secondary transfer assembly

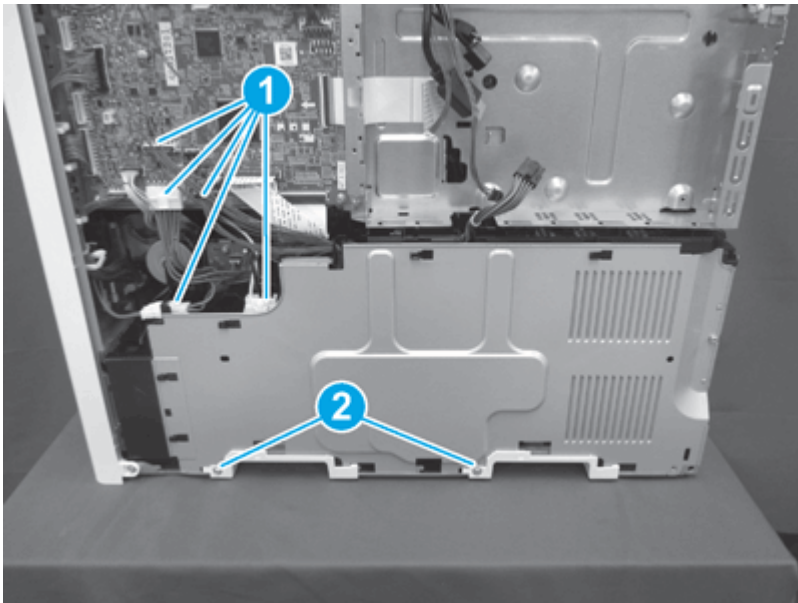


8. Remove the low-voltage power supply (LVPS) and fan

Follow these steps to remove the low-voltage power supply (LVPS) and fan.

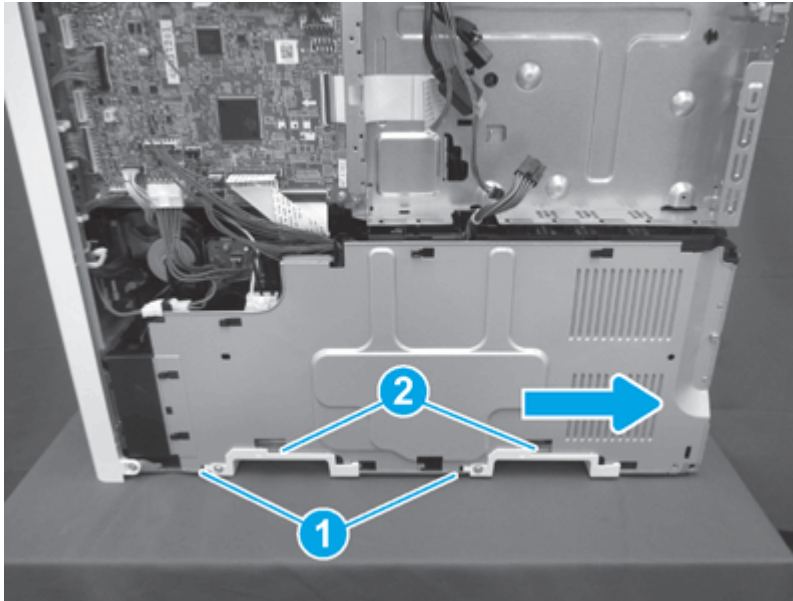
1. Disconnect five connectors (callout 1), and then remove two screws (callout 2).

Figure 5-1752 Disconnect five connectors and remove two screws



2. Release two tabs (callout 1), and then slide two handles (callout 2) to the right to remove them.

Figure 5-1753 Remove two handles



3. Remove two screws (callout 1). Remove the low-voltage power supply (callout 2) together with the power supply fan (callout 3) and the low-voltage power supply cover (callout 4).


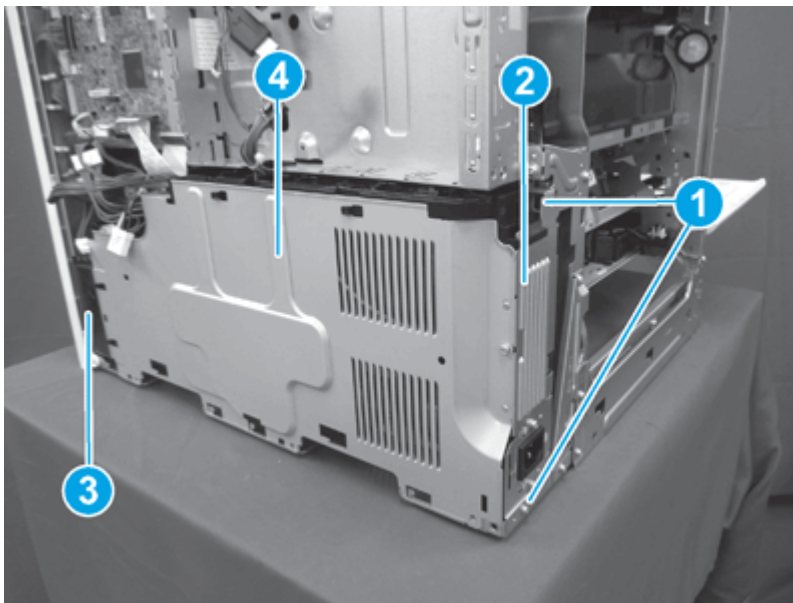
 **NOTE:** The upper screw is recessed inside the printer just above the upper right corner of the LVPS. The lower screw is located between the locator pins at the bottom of the assembly.

Figure 5-1754 Remove the low-voltage power supply

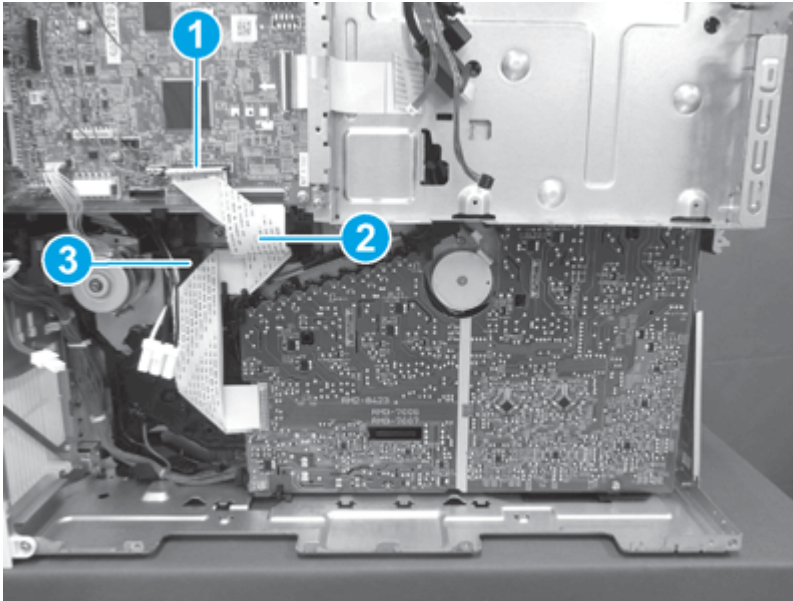


9. Remove the lower high voltage power supply (HVPS)

Follow these steps to remove the lower high voltage power supply (HVPS).

1. Disconnect one connector (callout 1), and then remove the flat cable (callout 2) from the cable guide (callout 3).

Figure 5-1755 Disconnect one connector



2. Remove two screws (callout 1), release one tab (callout 2), and then remove the lower HVPS (callout 3).


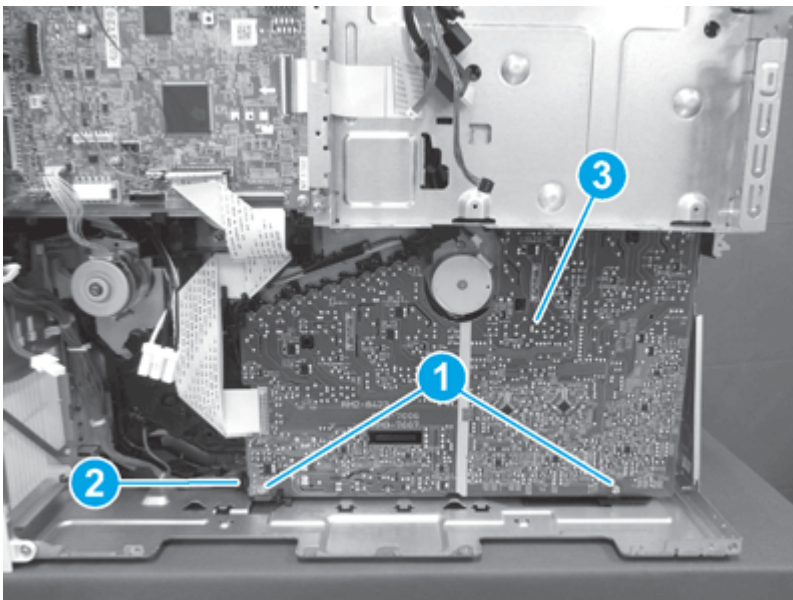
 **NOTE:** These screws have washers attached. Make sure that they are reinstalled in the lower HVPS board.

Figure 5-1756 Remove two screws and release one tab

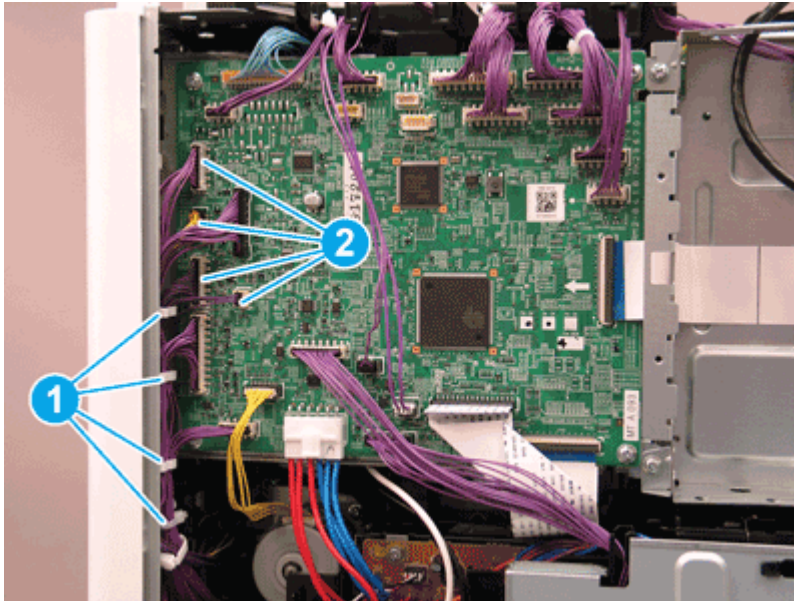


10. Remove the registration assembly

Follow these steps to remove the registration assembly.

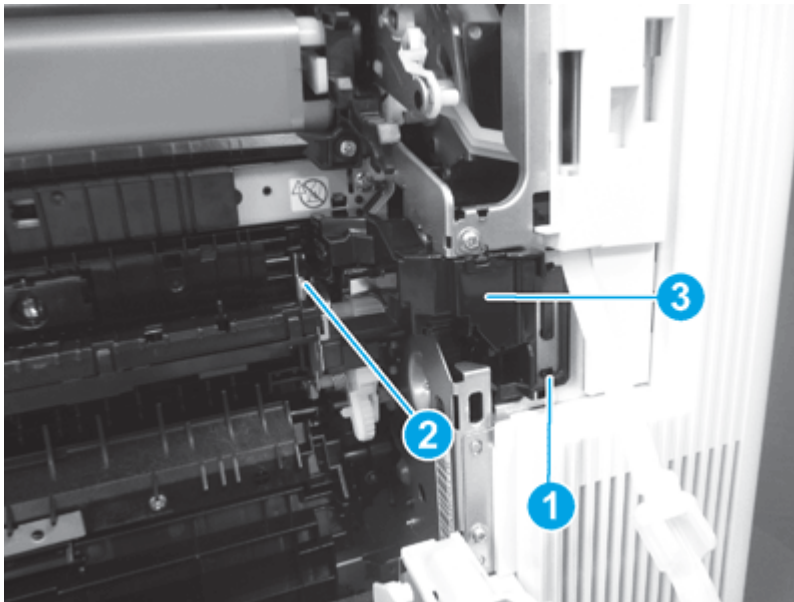
1. Release the cables from four retainers (callout 1), and then disconnect four connectors (callout 2).

Figure 5-1757 Disconnect four connectors



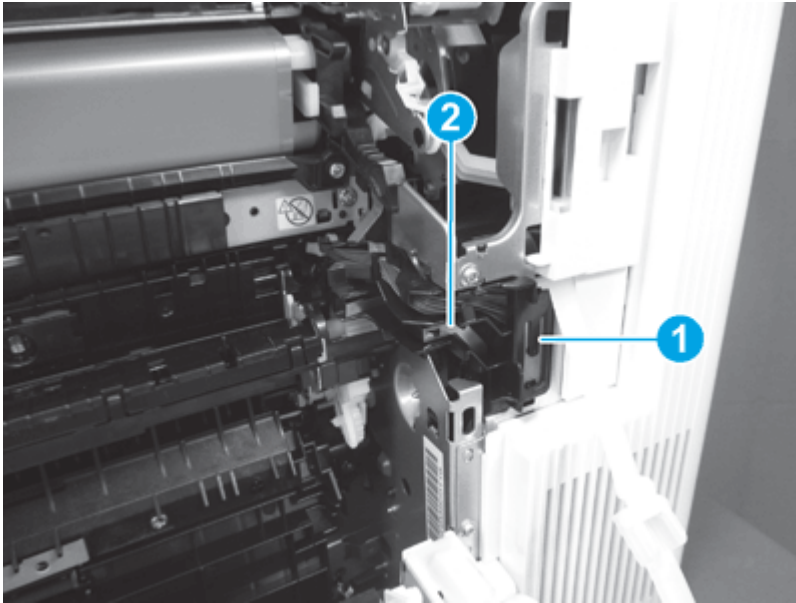
2. Release one tab (callout 1), release one boss (callout 2), and then remove the connector cover (callout 3).

Figure 5-1758 Remove the connector cover



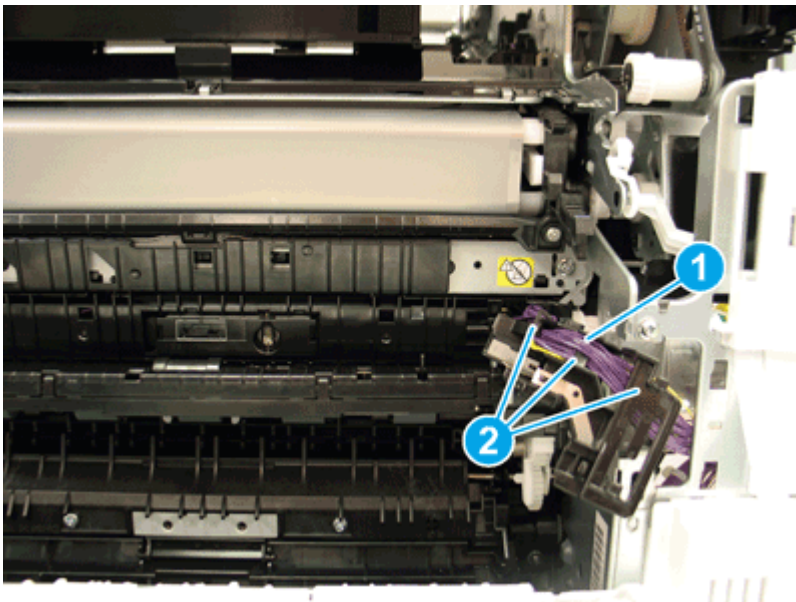
3. Release one tab (callout 1), and then slide the cable guide (callout 2) down to release it.

Figure 5-1759 Release the cable guide



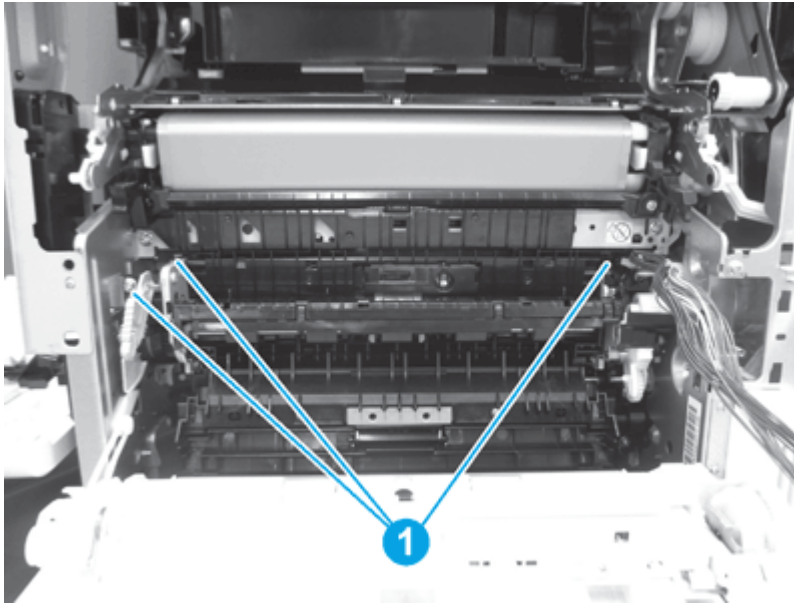
4. Release the cable (callout 1) from the cable guide (callout 2).

Figure 5-1760 Remove the cable guide



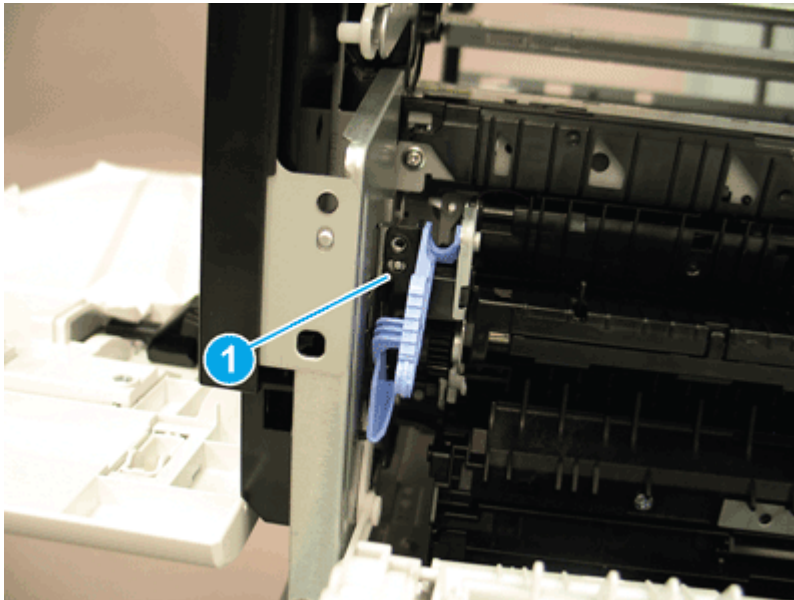
5. Remove three screws (callout 1).

Figure 5-1761 Remove three screws



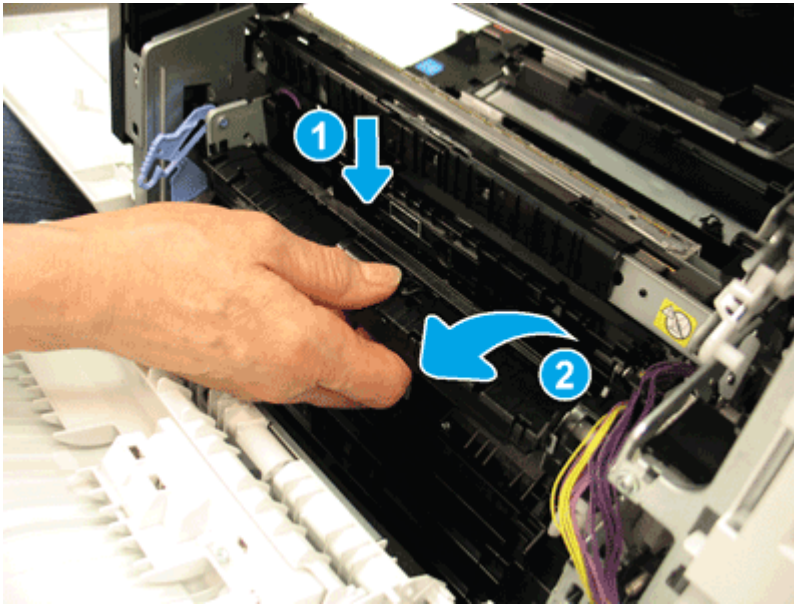
6. Release the assembly from the guide pin (callout 1) on the left side of the assembly.

Figure 5-1762 Release the assembly from the guide pin



7. Press downward on the left side of the assembly (callout 1), and then rotate the assembly away from the printer (callout 2) to release the hooks that go through the sheet metal on the back of the assembly. Remove the registration assembly.


Figure 5-1763 Remove the registration assembly



11. Remove the feed roller assembly

Follow these steps to remove the feed roller assembly.

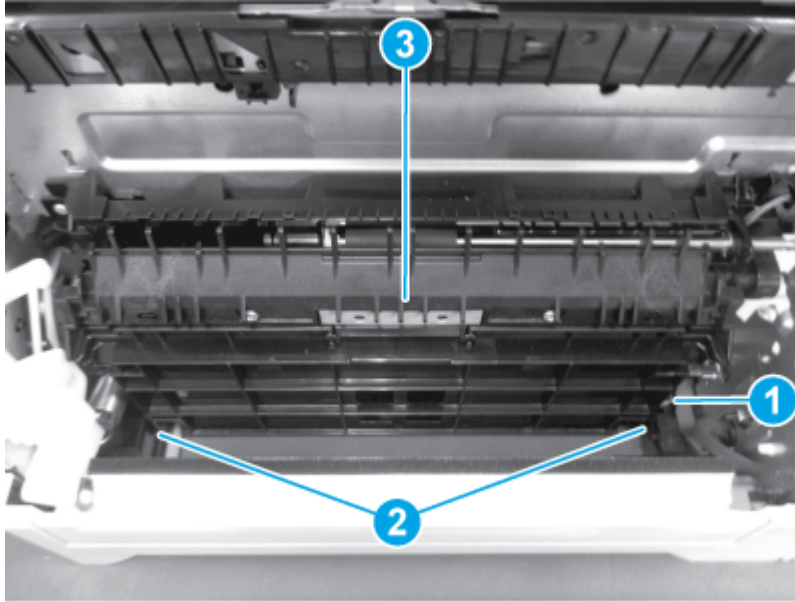
1. Unhook one spring (callout 1), release two hinge pins (callout 2), and then remove the feed guide (callout 3).

 **IMPORTANT:** The spring (callout 1) is not captive. Do not lose the spring.

 **TIP:** Needle-nose pliers work well for unhooking the spring.

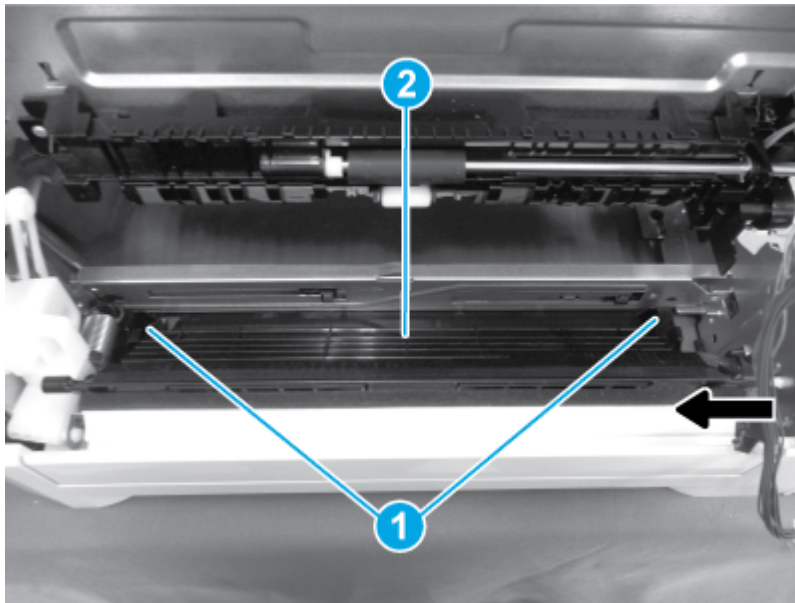
Make sure to reattach the spring (callout 1).

Figure 5-1764 Remove the feed guide



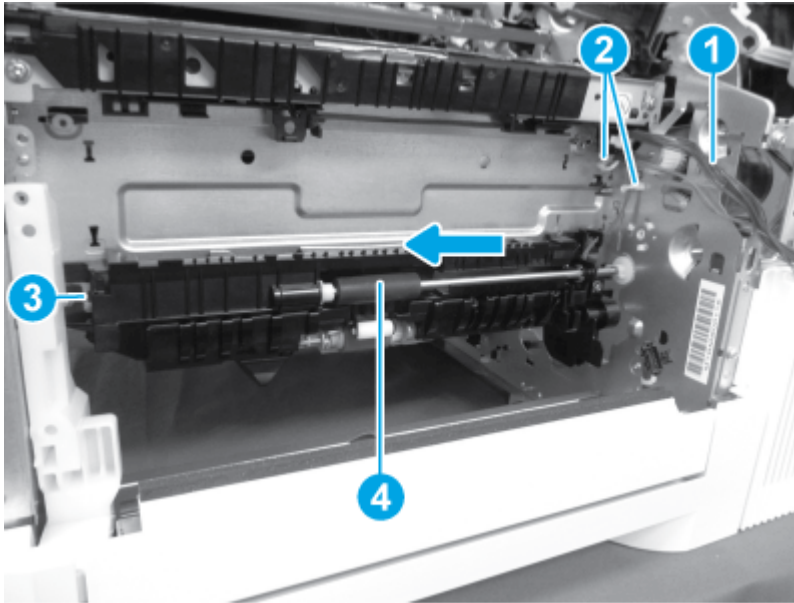
2. Release two hinge pins (callout 1), and then remove the feed guide (callout 2).

Figure 5-1765 Remove the feed guide



3. Release the cable (callout 1) from the retainers (callout 2). Release one tab (callout 3), and then slide the feed roller assembly (callout 4) to the left to remove it.

Figure 5-1766 Remove the feed roller assembly



12. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

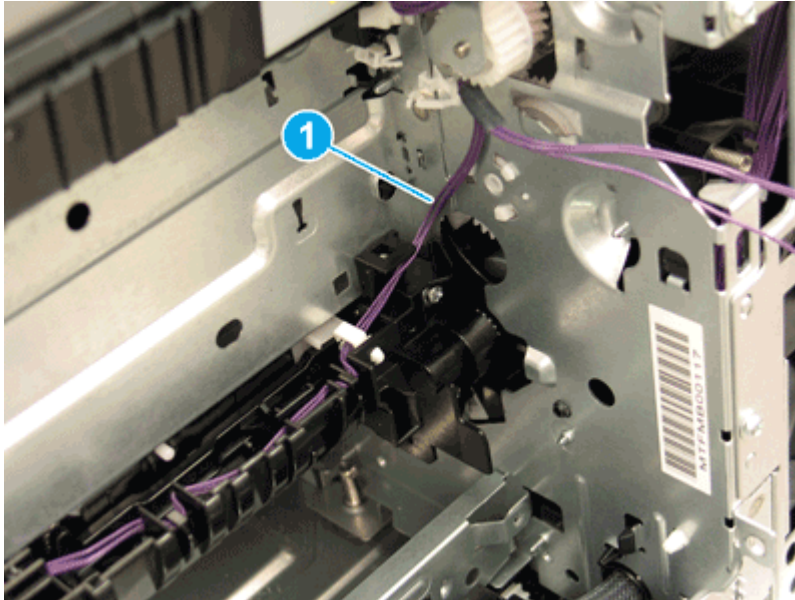
13. Reverse the removal steps to install the assembly

Also use the following **special installation instructions**.

Feed roller assembly

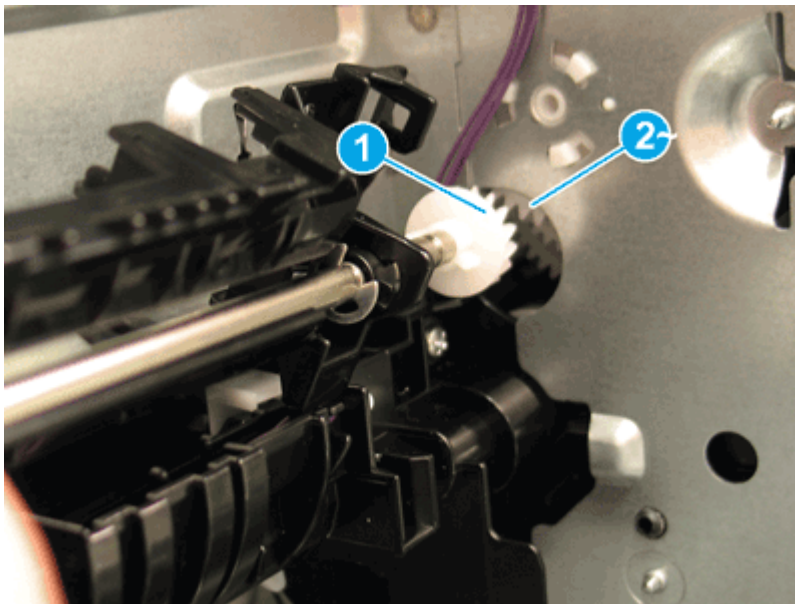
1. Before installing the feed roller assembly, make sure that the cable (callout 1) behind it is routed as shown so it is not pinched when the assembly is installed.

Figure 5-1767 Check the cable routing



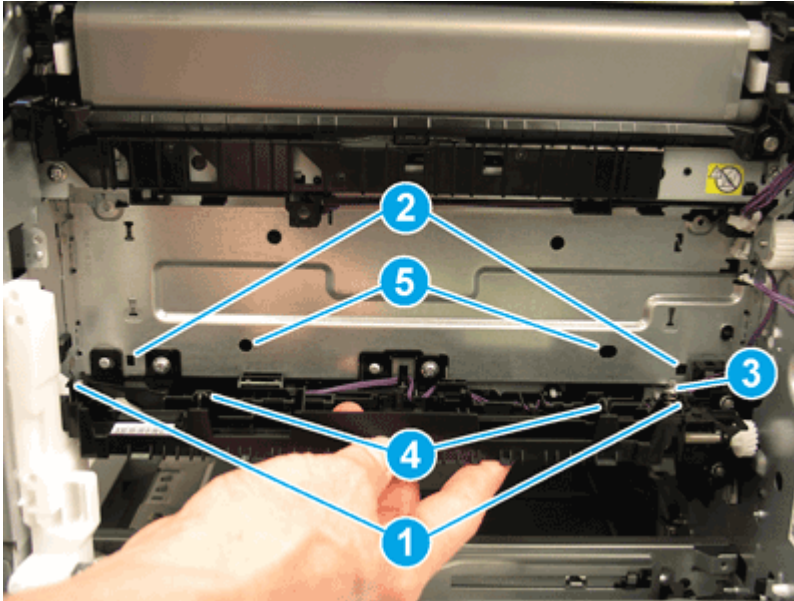
2. Align the gear (callout 1) with the gear (callout 2) through the opening in the sheet metal.

Figure 5-1768 Position the gear



3. Beginning at the right side, install the tabs (callout 1) on the assembly into the slots (callout 2) in the sheet metal. Make sure that the spring (callout 3) is not folded over. Position the right tab through the sheet metal and hold it, and then position the left tab near the sheet-metal hole. Gently push on the left tab to fully seat the guide pins (callout 4) in the holes (callout 5) in the assembly.

Figure 5-1769 Install the tabs

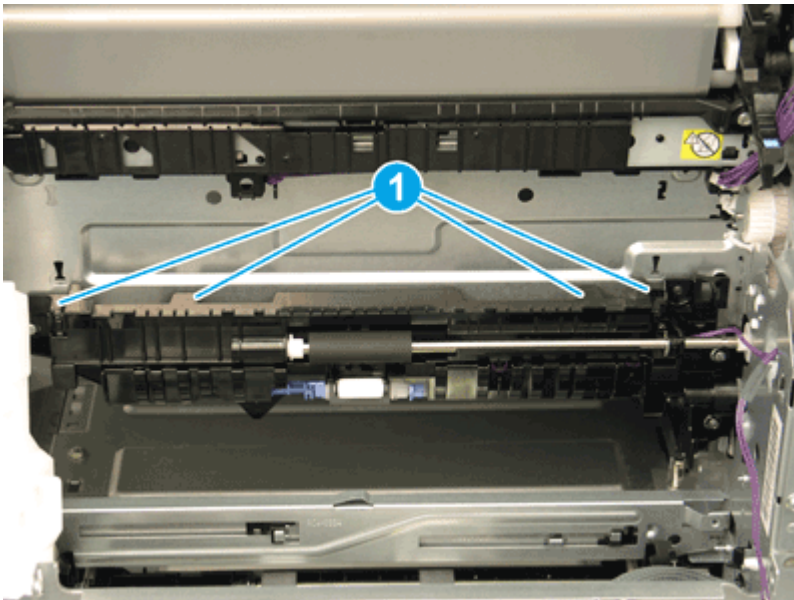


4. Make sure that the tabs (callout 1) are positioned correctly in the sheet metal slots.



NOTE: Continue to reverse the removal steps to finish installing the assembly.

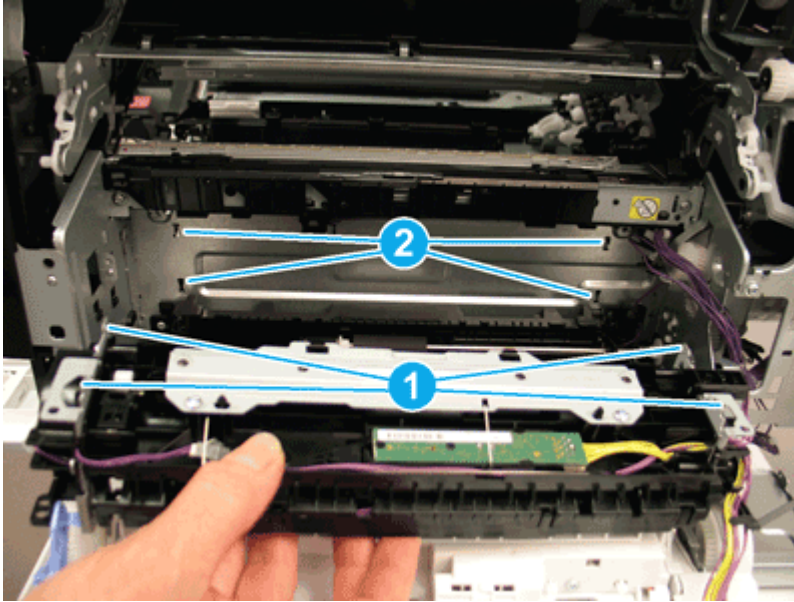
Figure 5-1770 Check the tabs



Registration assembly

1. Install the tabs (callout 1) on the registration assembly into the slots (callout 2) in the printer.

Figure 5-1771 Install the tabs in the slots

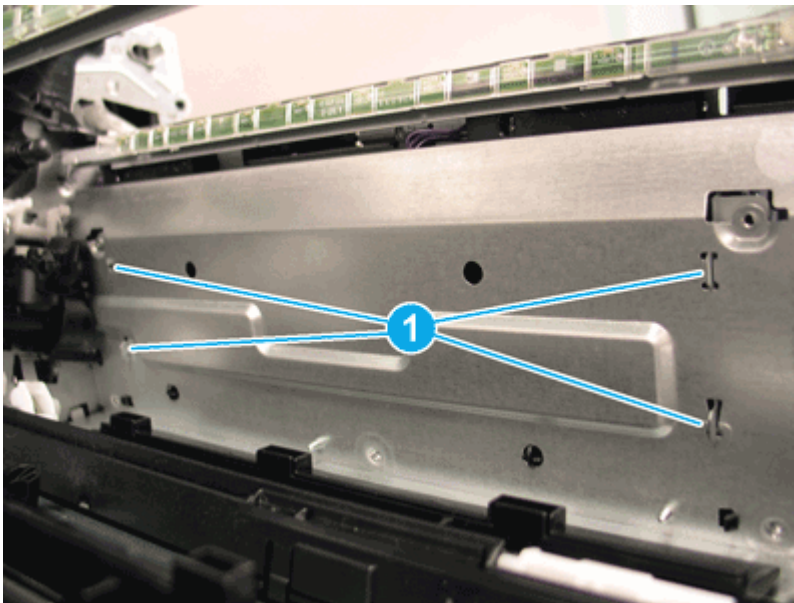


2. Look inside the printer and make sure that the tabs (callout 1) are completely installed in the sheet metal before installing the screws.



NOTE: Continue to reverse the removal steps to finish installing the assembly.

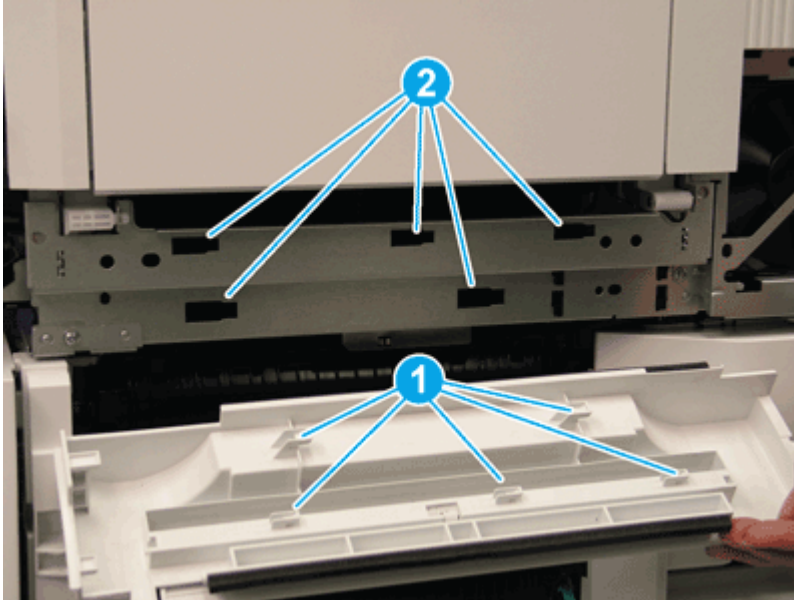
Figure 5-1772 Check the tabs



Right handle

- When reinstalling the right handle, install the hooks (callout 1) on the handle in the slots (callout 2) in the printer. Align the lower, right-most hook first to ensure all the hooks are aligned, and then slide the handle to the left to lock it into position.

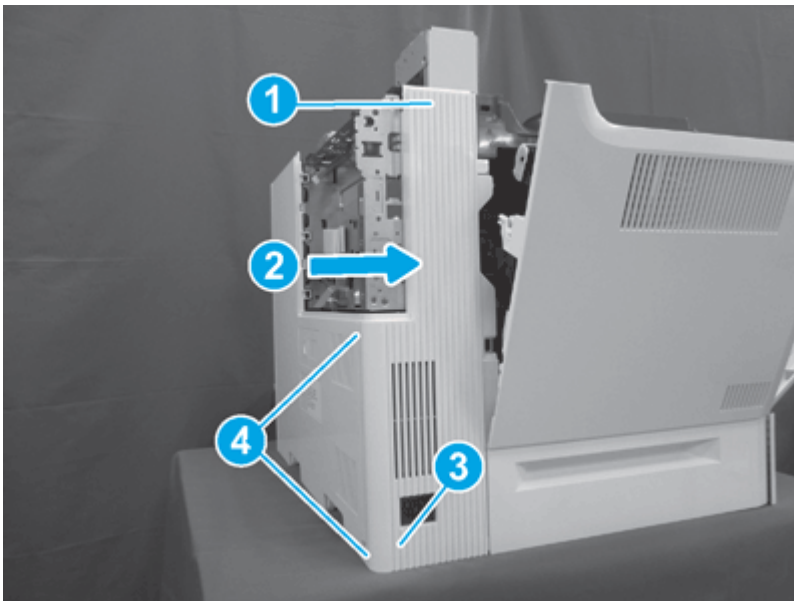
Figure 5-1773 Install the right handle




Left rear cover

- Position the top of the cover (callout 1) first, and then slide the cover to the right (callout 2). Push the left lower corner (callout 3) toward the rear of the printer to engage two tabs (callout 4) in the slots on the rear cover.

Figure 5-1774 Install the left rear cover



 **NOTE:** Continue to reverse the removal steps to finish installing the assembly.


Removal and replacement: Pickup assembly

Learn how to remove and replace the pickup assembly.

 [View a video of removing and replacing the pickup assembly.](#)


Mean time to repair: 30 minutes

Service level: Advanced

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Disconnect the power cable.

 **WARNING!** To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-85 Part information

Part number	Part description
RM2-6556-000CN	Pickup assembly

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Make sure that the printer initializes to a **Ready** state.

Print a configuration page to make sure that the printer is functioning correctly.

1. Remove the formatter cover

Follow these steps to remove the formatter cover.

- Unscrew two thumbscrews (callout 1), and then slide the formatter cover (callout 2) away from the printer to remove it.


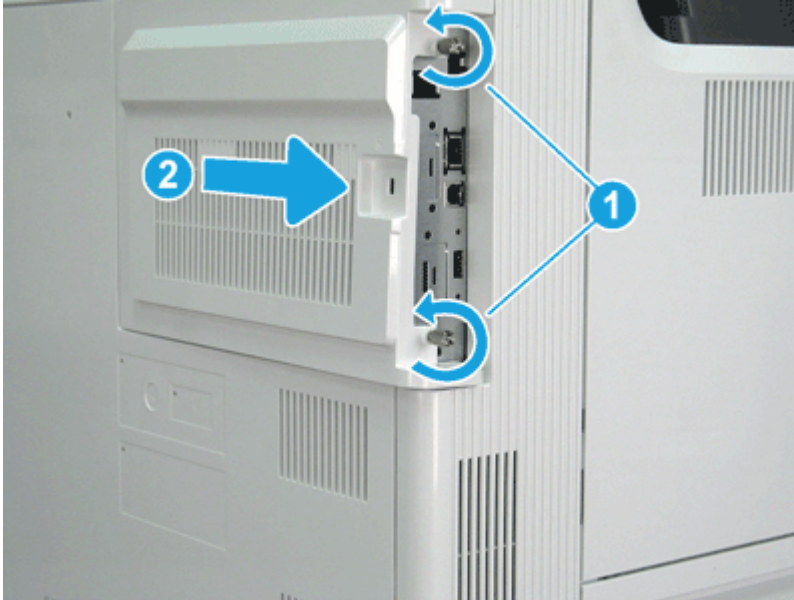
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1775 Remove the formatter cover

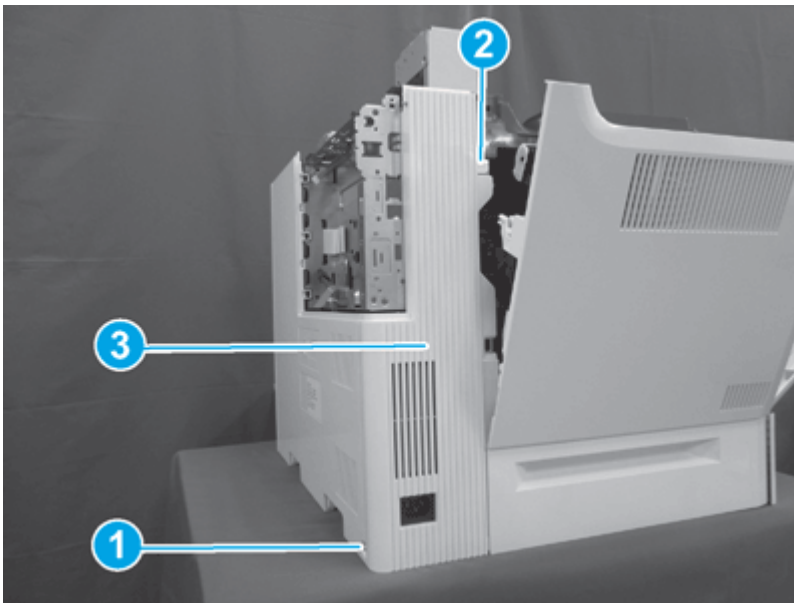


2. Remove the left rear cover

Follow these steps to remove the left rear cover.

- Open the left door. Remove one screw (callout 1), release one boss (callout 2), and then remove the left rear cover (callout 3).

Figure 5-1776 Remove the left rear cover



3. Remove the rear cover

Follow these steps to remove the rear cover.

- Remove two screws (callout 1), and then slide the rear cover (callout 2) to the right to remove it.


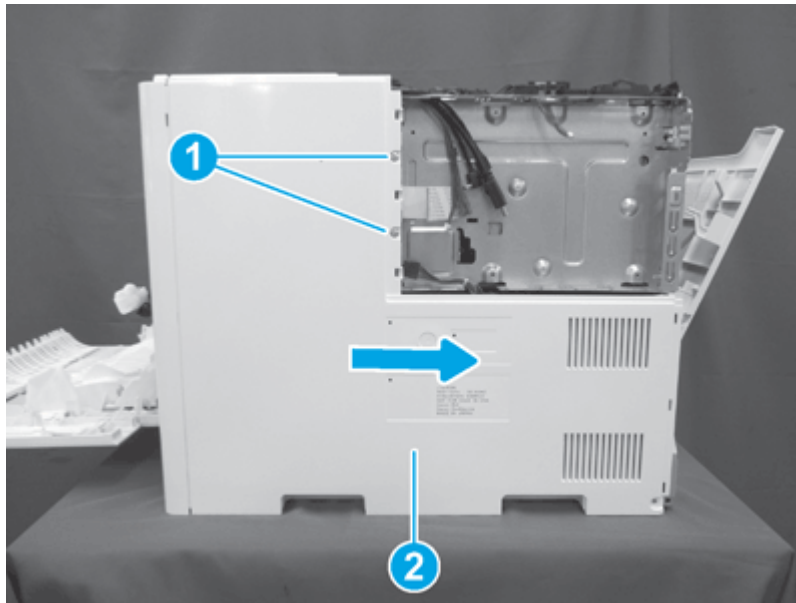
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1777 Remove two screws and the rear cover



4. Remove the right rear cover

Follow these steps to remove the right rear cover.

- Remove one screw (callout 1), and then slide the right rear cover (callout 2) to the right to remove it.


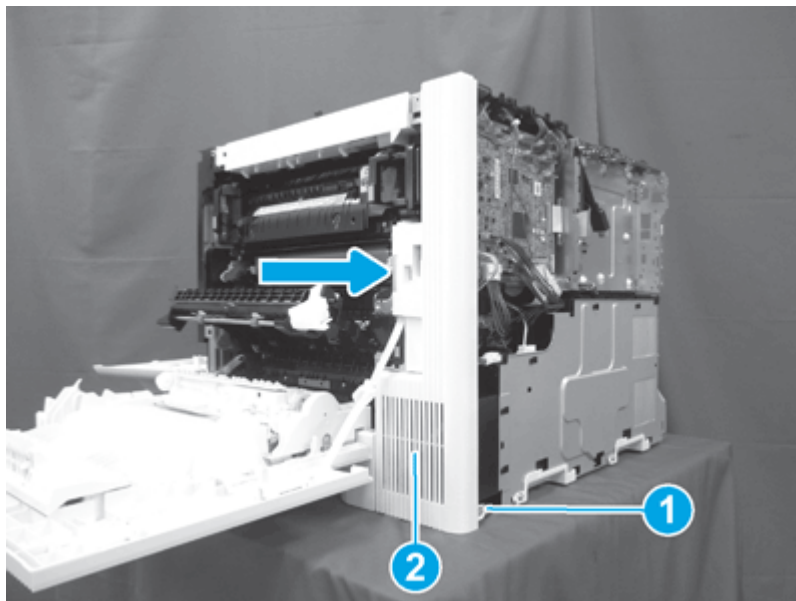
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1778 Remove one screw and the right rear cover

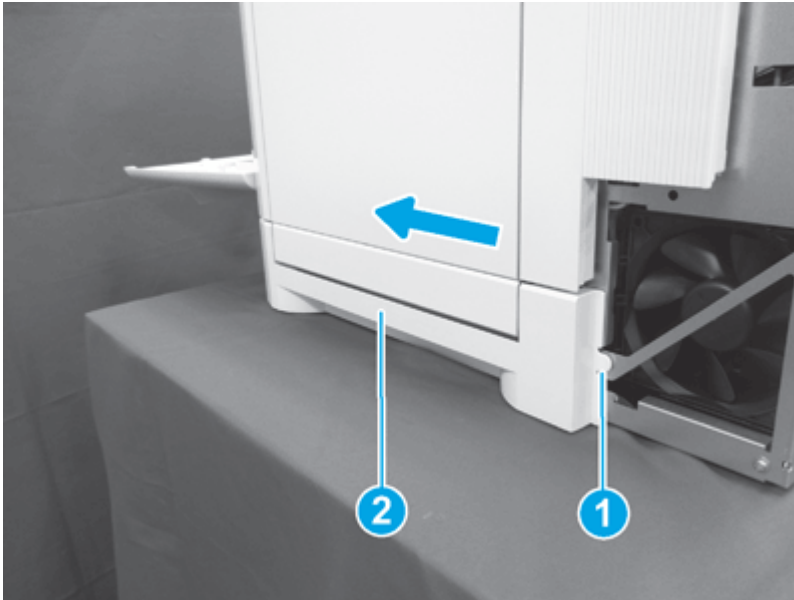


5. Remove the right handle

Follow these steps to remove the right handle.

- Release one boss (callout 1), and then slide the right handle (callout 2) to the left to remove it.

Figure 5-1779 Remove the right handle

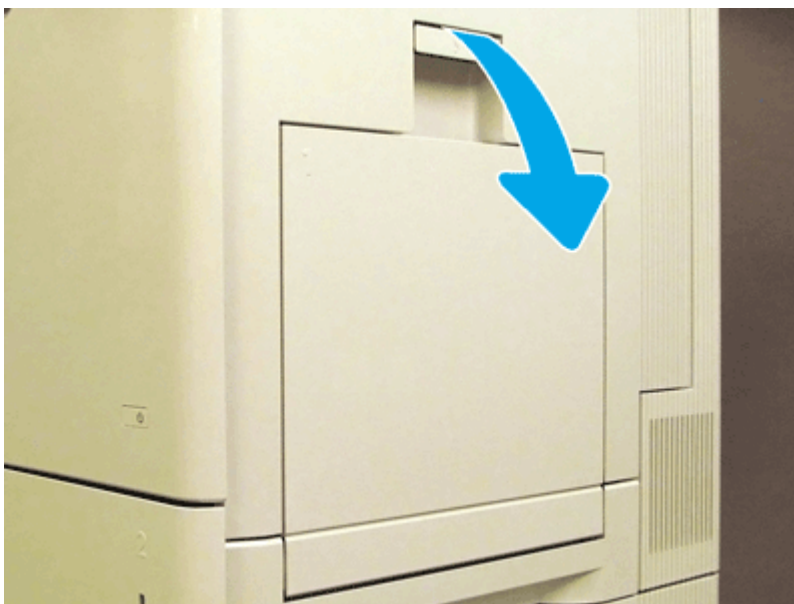


6. Remove the right door

Follow these steps to remove the right door.

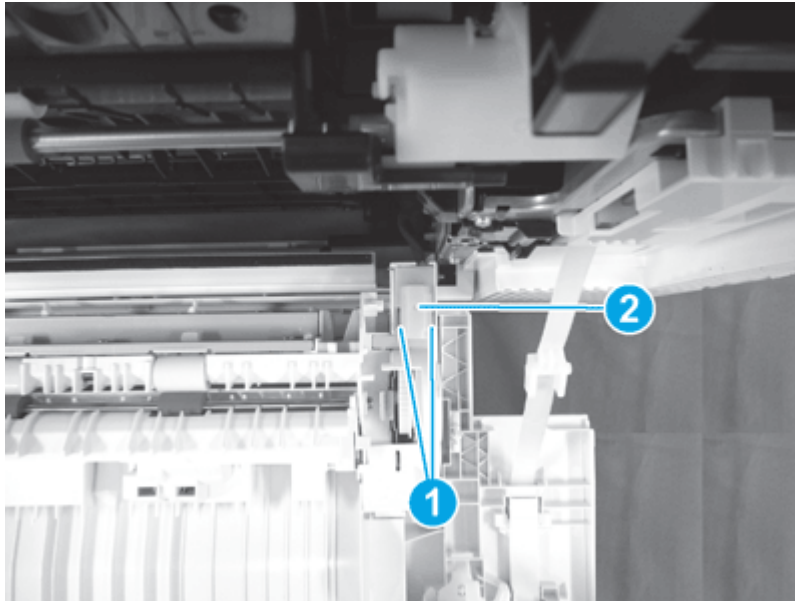
1. Open the right door.

Figure 5-1780 Open the right door



2. Release two tabs (callout 1), and then remove the connector cover (callout 2).

Figure 5-1781 Remove the connector cover

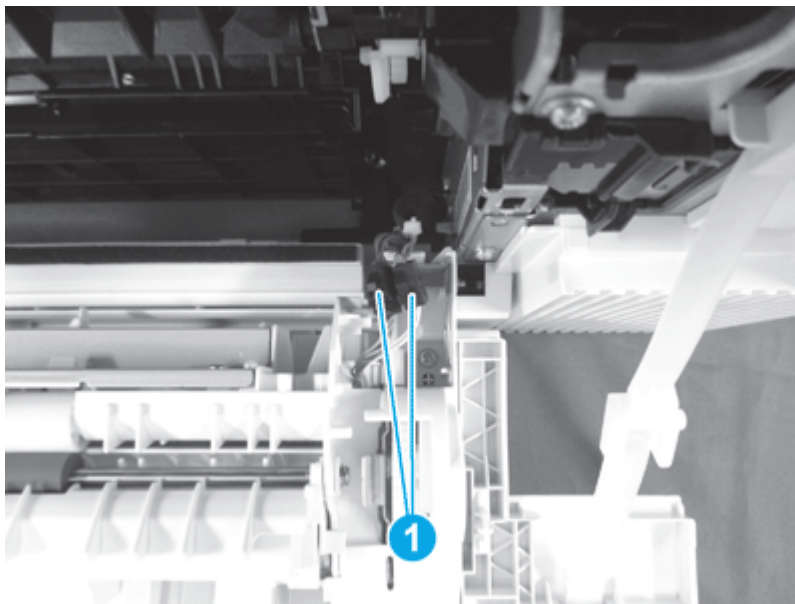


3. Disconnect two connectors (callout 1).



NOTE: Disconnect the connectors on the side closest to the printer

Figure 5-1782 Disconnect two connectors

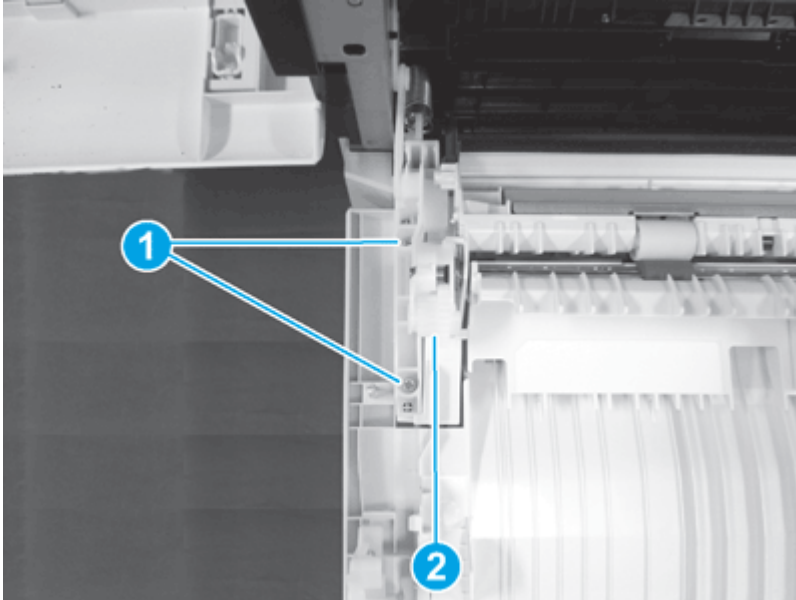


4. Remove two screws (callout 1), and then release the left link arm (callout 2) from the right door.



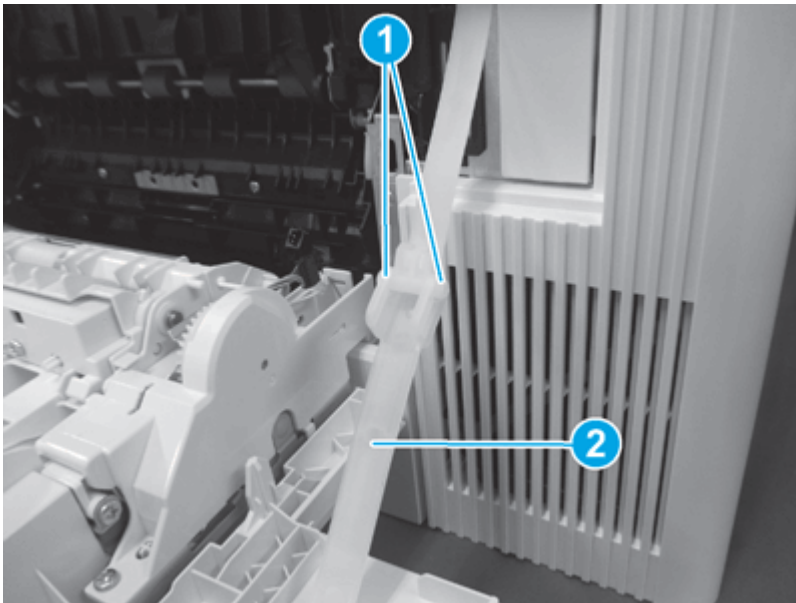
CAUTION: The left link arm is under tension. Hold onto the part when removing the screws and release it slowly to avoid damaging the printer or losing the screws.

Figure 5-1783 Remove two screws and release the left link arm



5. Release two bosses (callout 1), and then release the right door strap (callout 2).

Figure 5-1784 Release the right door strap

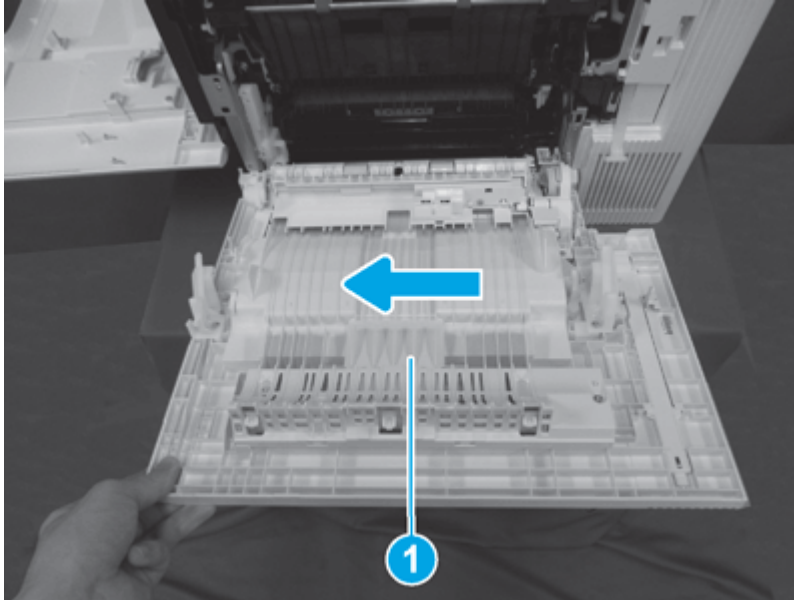


6. Slide the right door (callout 1) to the left to remove it.

⚠ CAUTION: The left hinge is under tension. Use care when moving it so it does not release suddenly and damage the printer.

💡 TIP: The left hinge can be moved to the left, away from the door assembly, to allow correctly positioning the molded door assembly parts. Place the hinge back into position to align with the alignment pins, and then reattach.

Figure 5-1785 Remove the right door

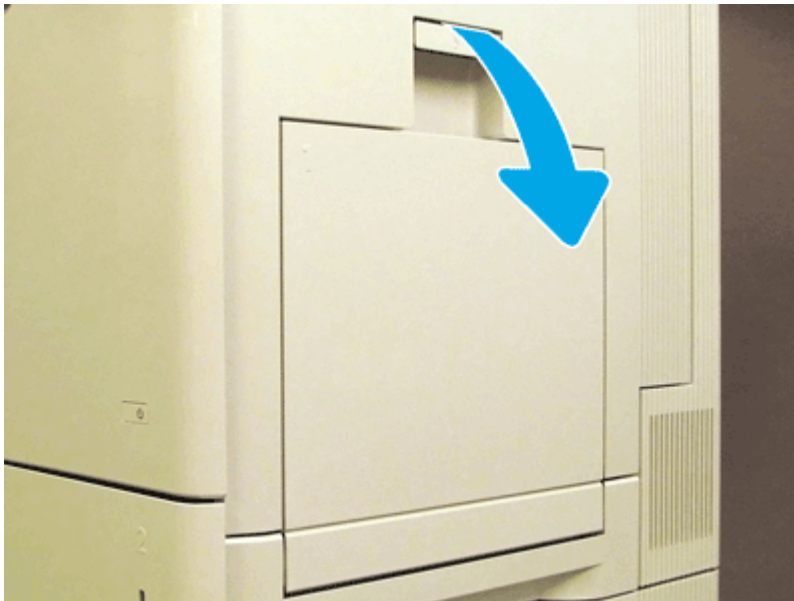


7. Remove the secondary transfer assembly

Follow these steps to remove the secondary transfer assembly.

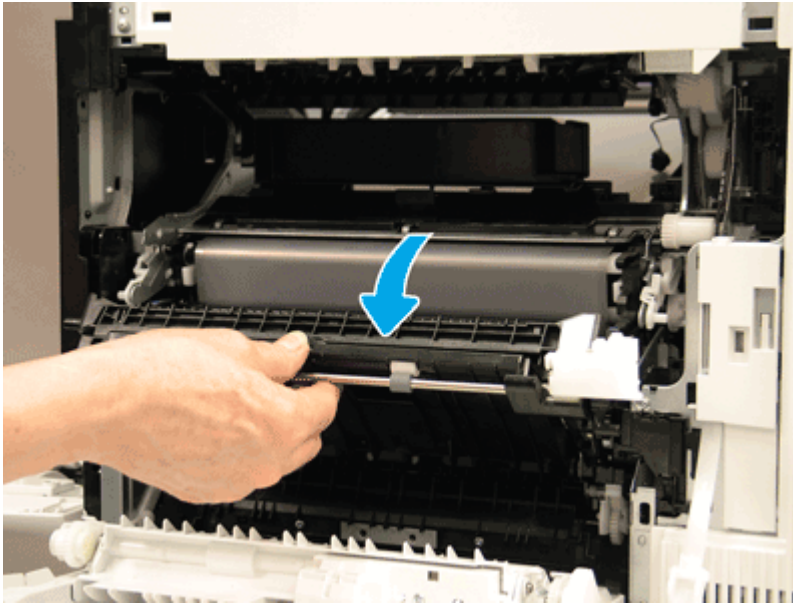
1. Open the right door.

Figure 5-1786 Open the right door



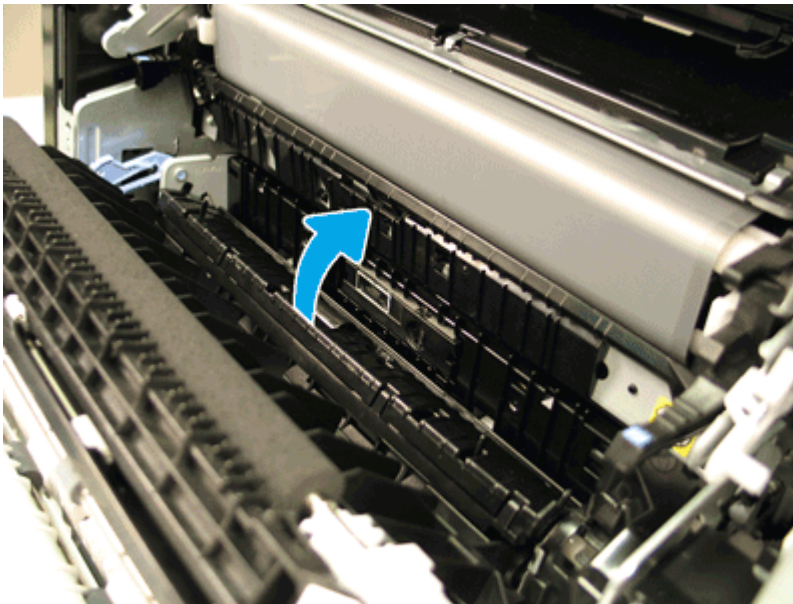
2. Lower the secondary transfer assembly to a 45° angle.

Figure 5-1787 Lower the secondary transfer



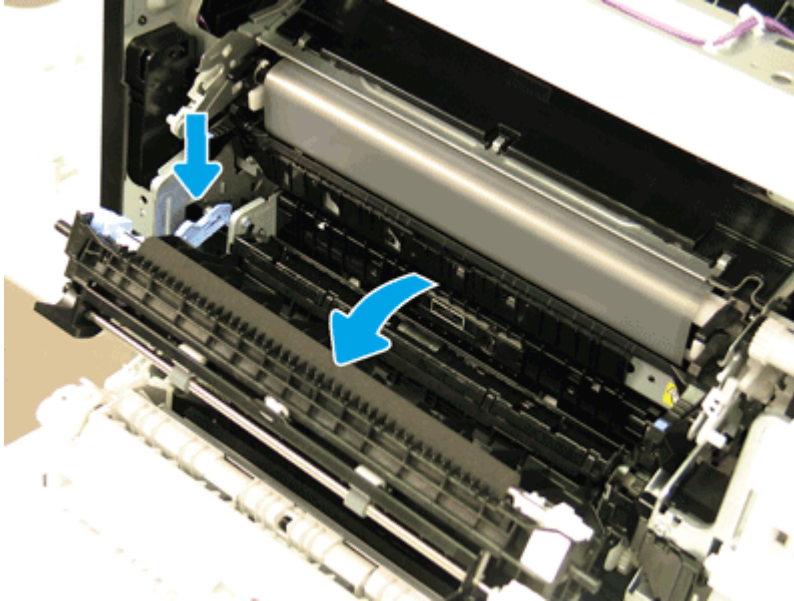
3. While holding the secondary transfer assembly, pivot the media detect assembly up and into the printer.

Figure 5-1788 Pivot the media detect assembly up



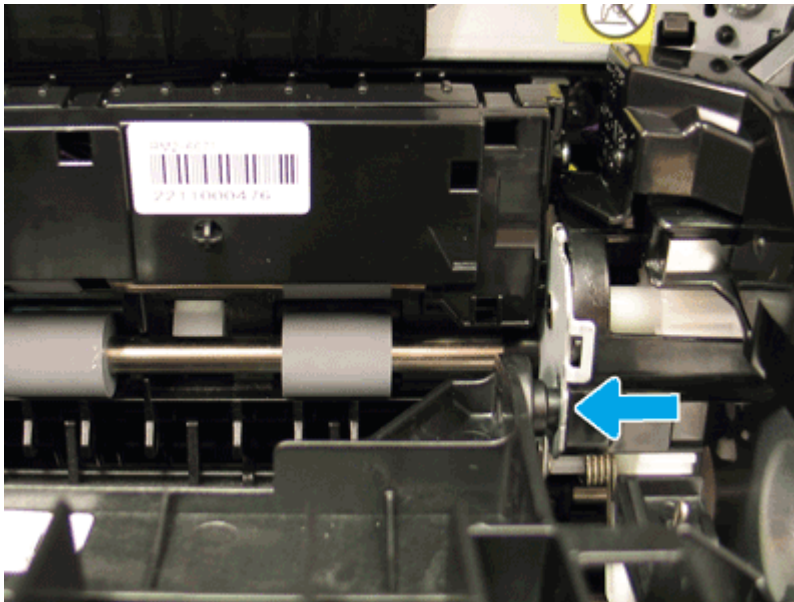
4. Lower the secondary transfer assembly and release it from the media detect assembly. Release the blue lever on the left, and then lower the secondary transfer assembly to the lowest position.

Figure 5-1789 Lower the secondary transfer assembly



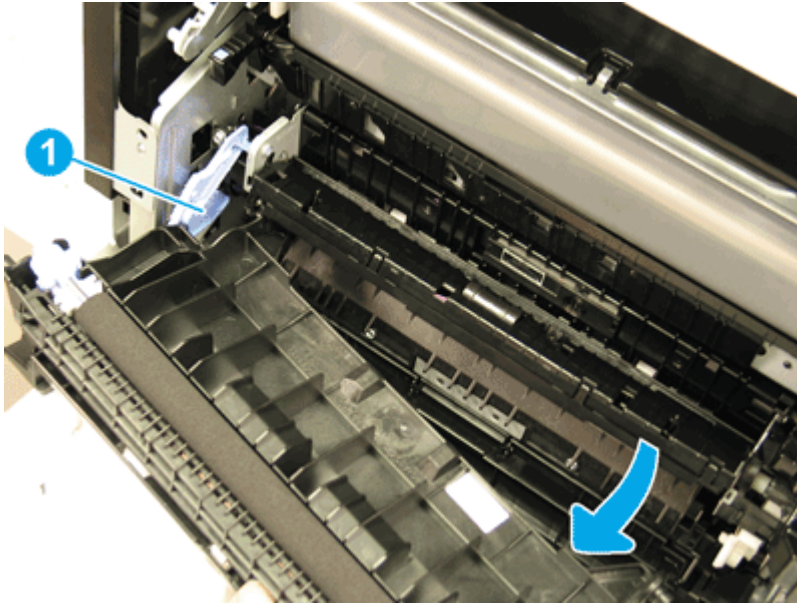
5. Release the right hinge by gently pushing left where the hinge attaches to the printer.

Figure 5-1790 Release the right hinge



6. Rotate the right side of the assembly away from the printer, and then release the left side of the assembly from the blue link arm (callout 1).

Figure 5-1791 Release the left side



7. Lift the secondary transfer assembly up to remove it.


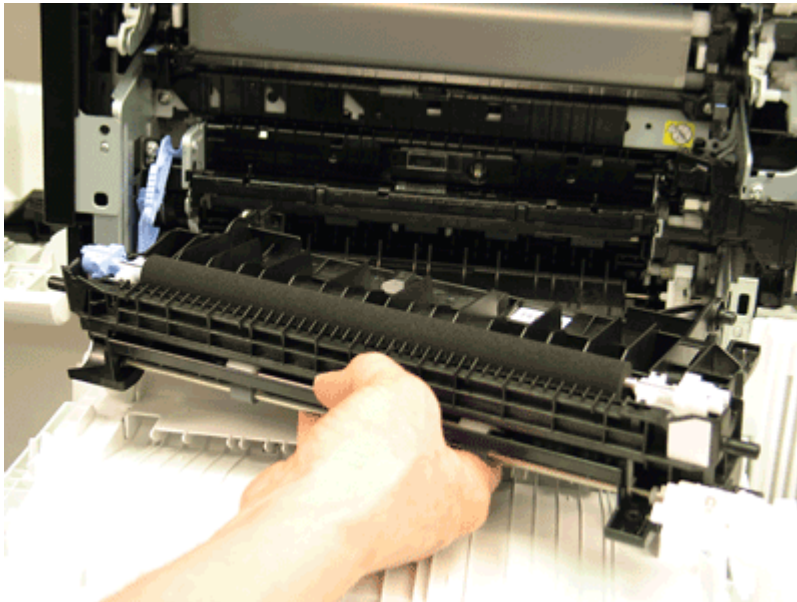
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1792 Remove the secondary transfer assembly

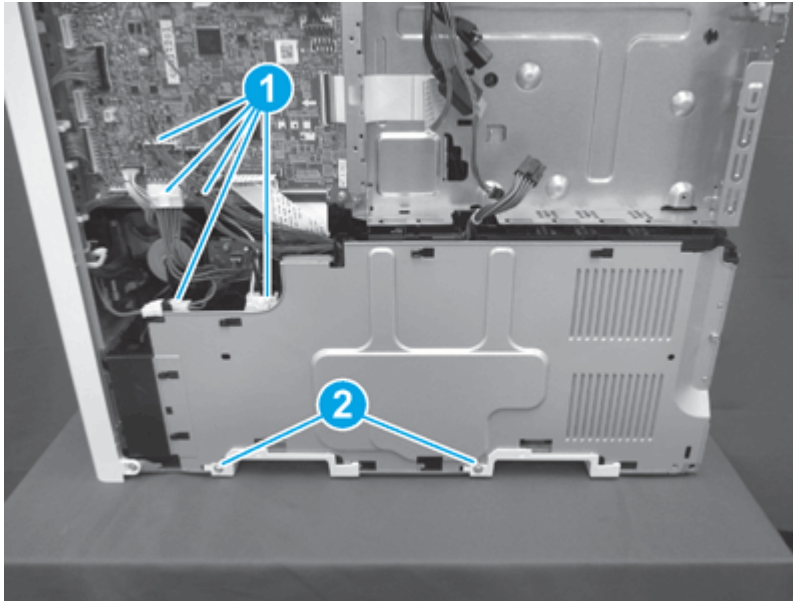


8. Remove the low-voltage power supply (LVPS) and fan

Follow these steps to remove the low-voltage power supply (LVPS) and fan.

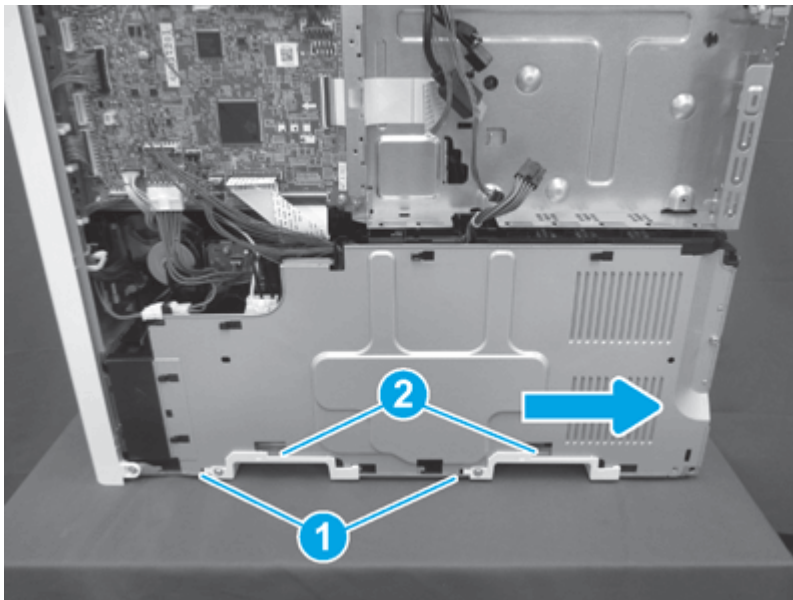
1. Disconnect five connectors (callout 1), and then remove two screws (callout 2).

Figure 5-1793 Disconnect five connectors and remove two screws



2. Release two tabs (callout 1) and then slide two handles (callout 2) to the right to remove them.

Figure 5-1794 Remove two handles



3. Remove two screws (callout 1). Remove the low-voltage power supply (callout 2) together with the power supply fan (callout 3) and the low-voltage power supply cover (callout 4).


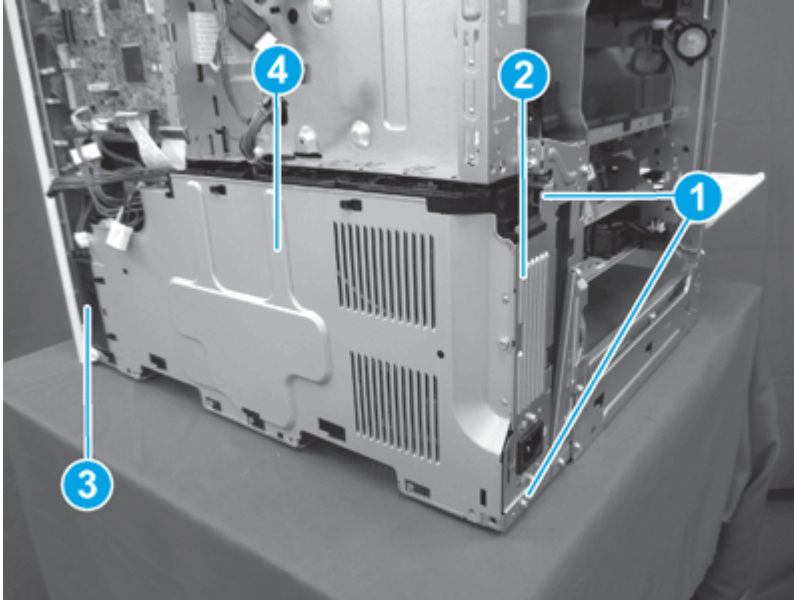
 **NOTE:** The upper screw is recessed inside the printer just above the upper right corner of the LVPS. The lower screw is located between the locator pins at the bottom of the assembly.

Figure 5-1795 Remove the low-voltage power supply

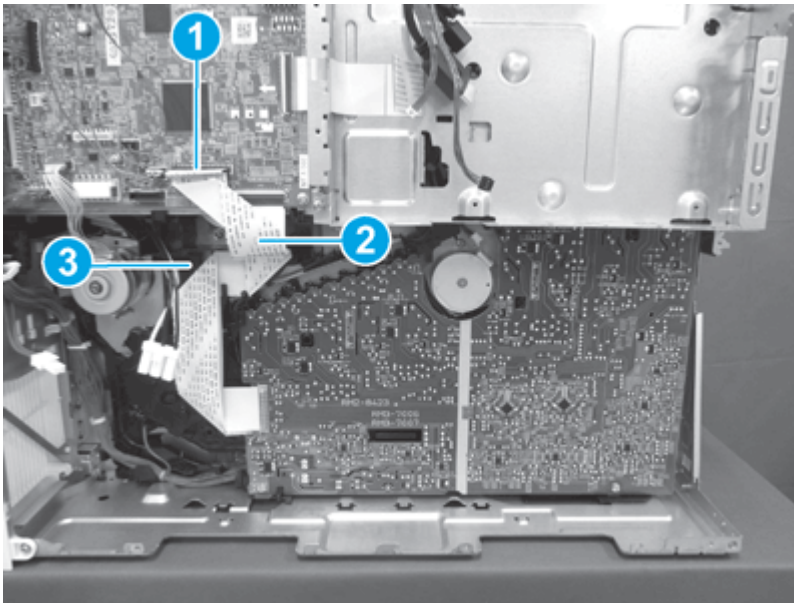


9. Remove the lower high voltage power supply (HVPS)

Follow these steps to remove the lower high voltage power supply (HVPS).

1. Disconnect one connector (callout 1), and then remove the flat cable (callout 2) from the cable guide (callout 3).

Figure 5-1796 Disconnect one connector

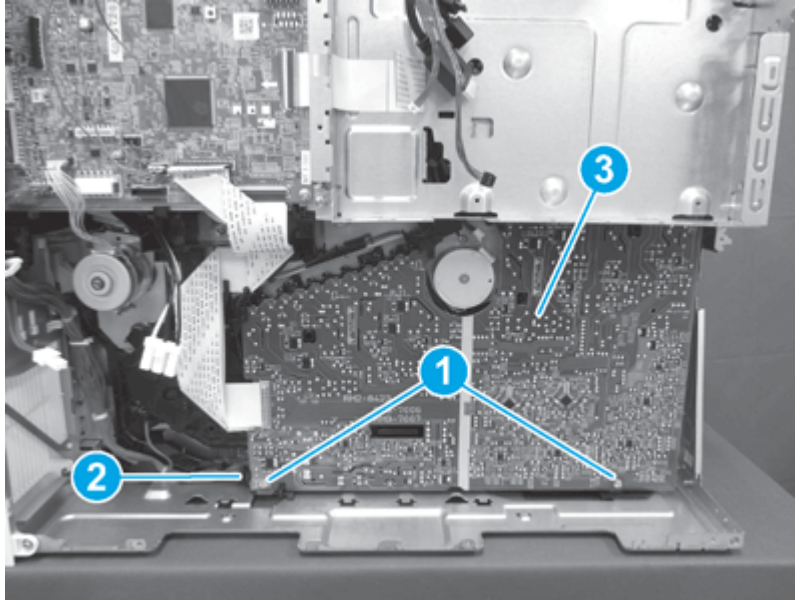


2. Remove two screws (callout 1), release one tab (callout 2), and then remove the lower HVPS (callout 3).



NOTE: These screws have washers attached. Make sure that they are reinstalled in the lower HVPS board.

Figure 5-1797 Remove two screws and release one tab

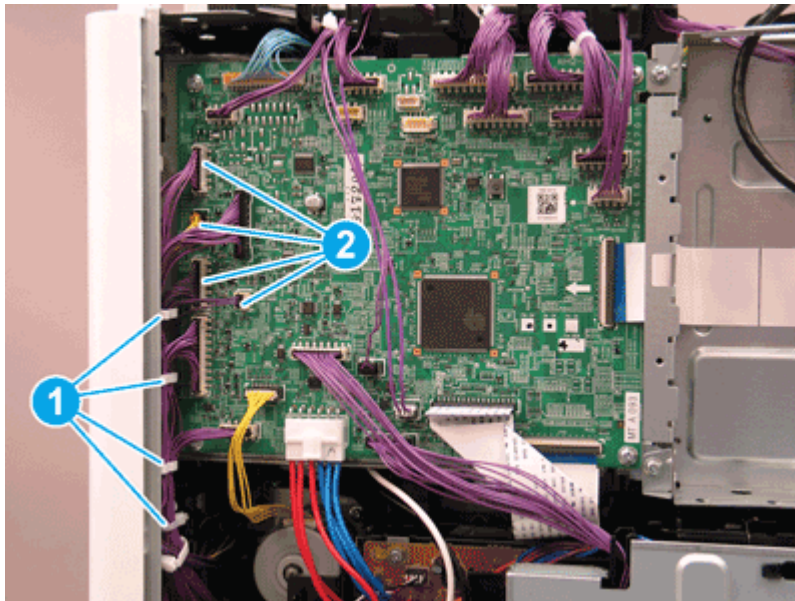


10. Remove the registration assembly

Follow these steps to remove the registration assembly.

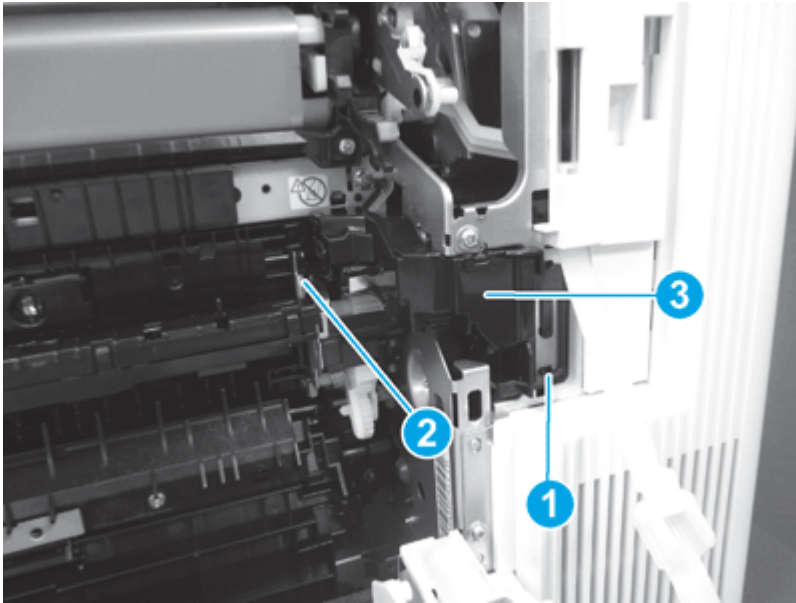
1. Release the cables from four retainers (callout 1), and then disconnect four connectors (callout 2).

Figure 5-1798 Disconnect four connectors



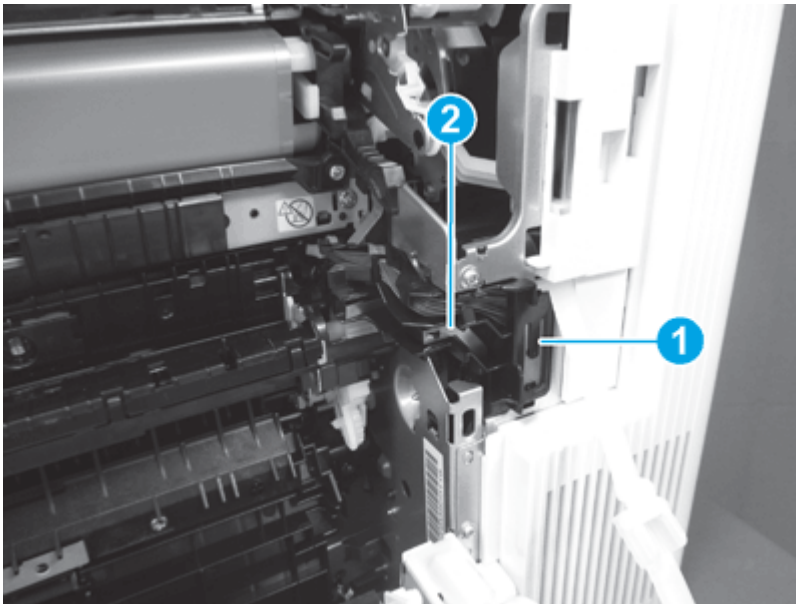
2. Release one tab (callout 1), release one boss (callout 2), and then remove the connector cover (callout 3).

Figure 5-1799 Remove the connector cover



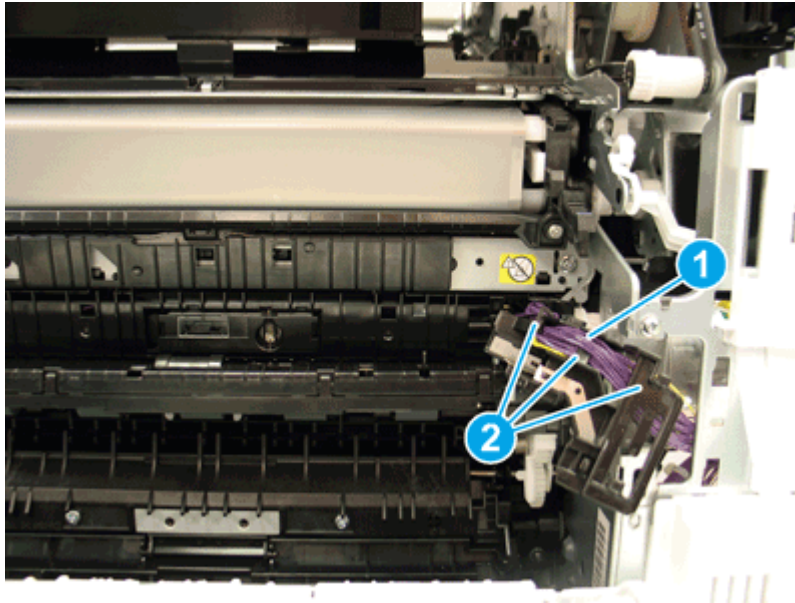
3. Release one tab (callout 1), and then slide the cable guide (callout 2) down to release it.

Figure 5-1800 Release the cable guide



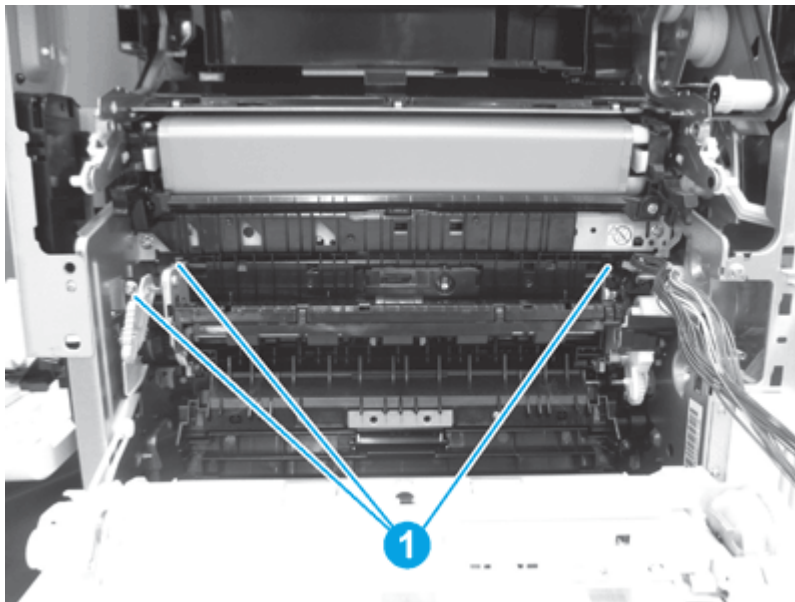
4. Release the cable (callout 1) from the cable guide (callout 2).

Figure 5-1801 Remove the cable guide



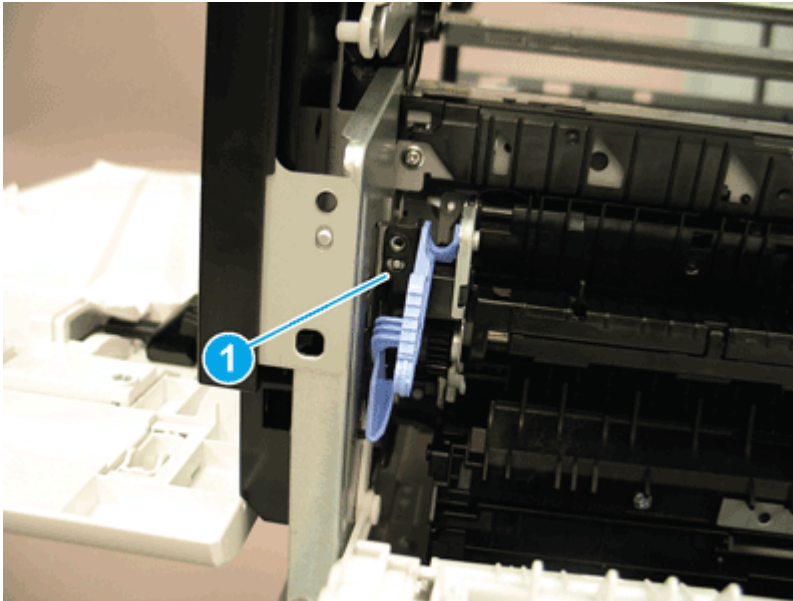
5. Remove three screws (callout 1).

Figure 5-1802 Remove three screws



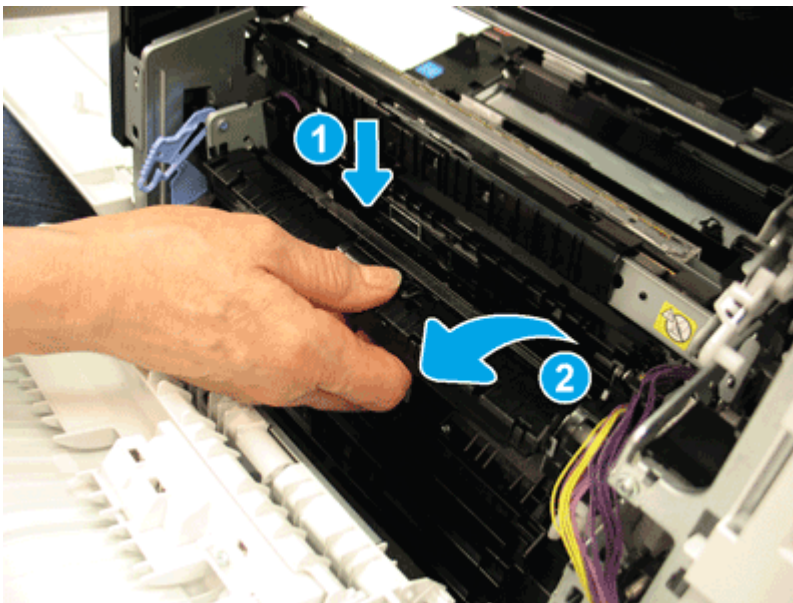
6. Release the assembly from the guide pin (callout 1) on the left side of the assembly.

Figure 5-1803 Release the assembly from the guide pin



7. Press downward on the left side of the assembly (callout 1), and then rotate the assembly away from the printer (callout 2) to release the hooks that go through the sheet metal on the back of the assembly. Remove the registration assembly.


Figure 5-1804 Remove the registration assembly



11. Remove the feed roller assembly

Follow these steps to remove the feed roller assembly.

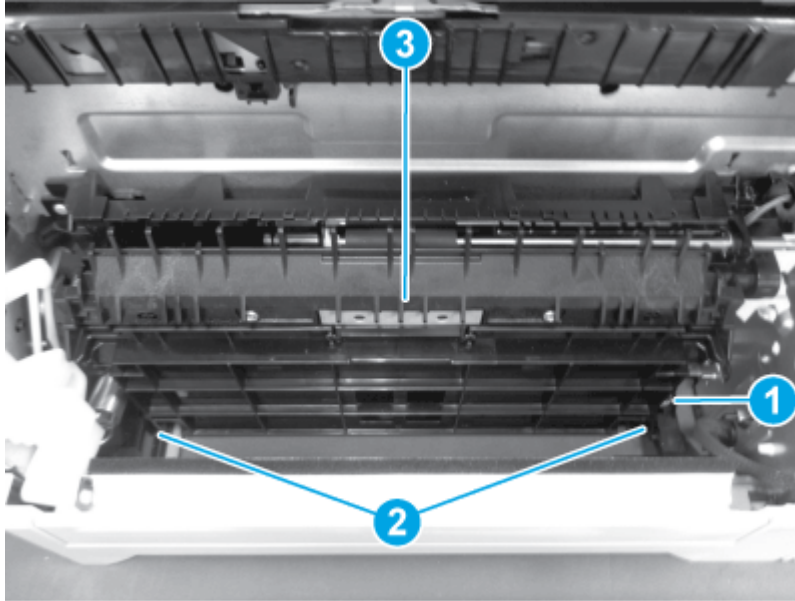
1. Unhook one spring (callout 1), release two hinge pins (callout 2), and then remove the feed guide (callout 3).

 **IMPORTANT:** The spring (callout 1) is not captive. Do not lose the spring.

 **TIP:** Needle-nose pliers work well for unhooking the spring.

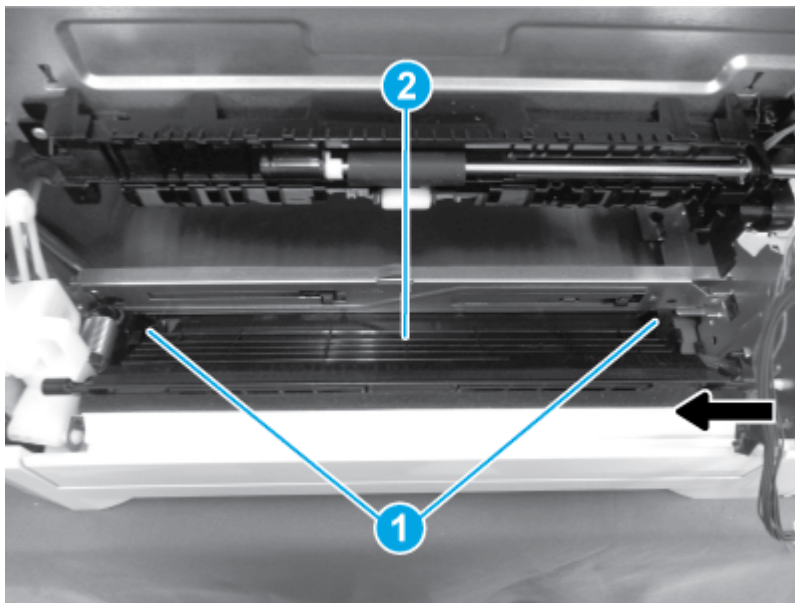
Make sure to reattach the spring (callout 1).

Figure 5-1805 Remove the feed guide



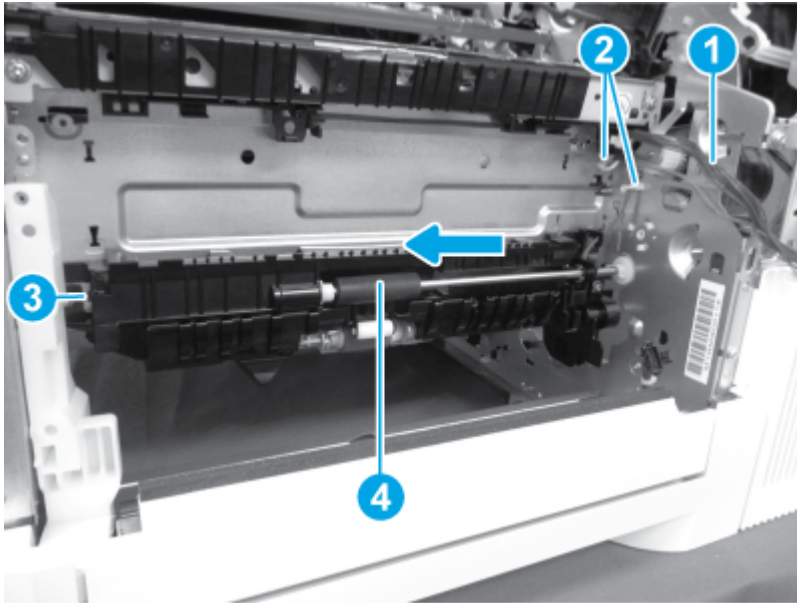
2. Release two hinge pins (callout 1), and then remove the feed guide (callout 2).

Figure 5-1806 Remove the feed guide



3. Release the cable (callout 1) from the retainers (callout 2). Release one tab (callout 3), and then slide the feed roller assembly (callout 4) to the left to remove it.

Figure 5-1807 Remove the feed roller assembly

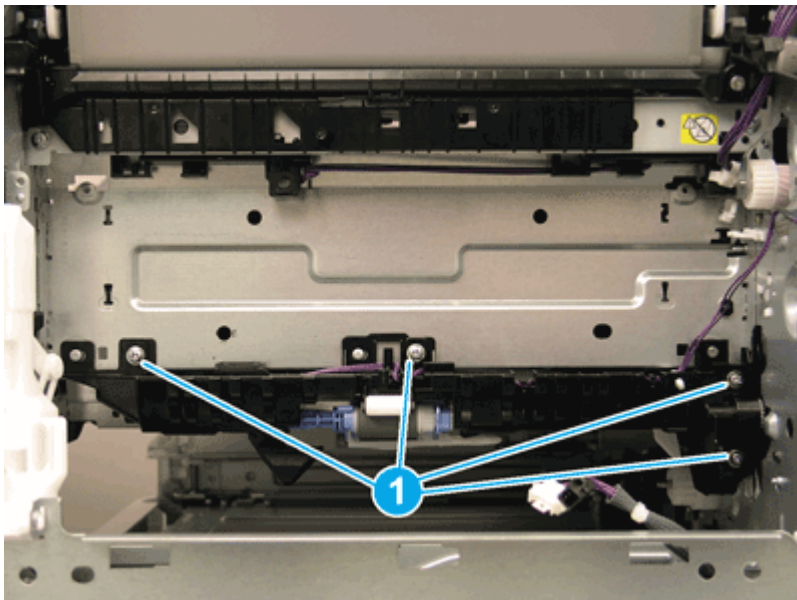


12. Remove the pickup assembly

Follow these steps to remove the pickup assembly.

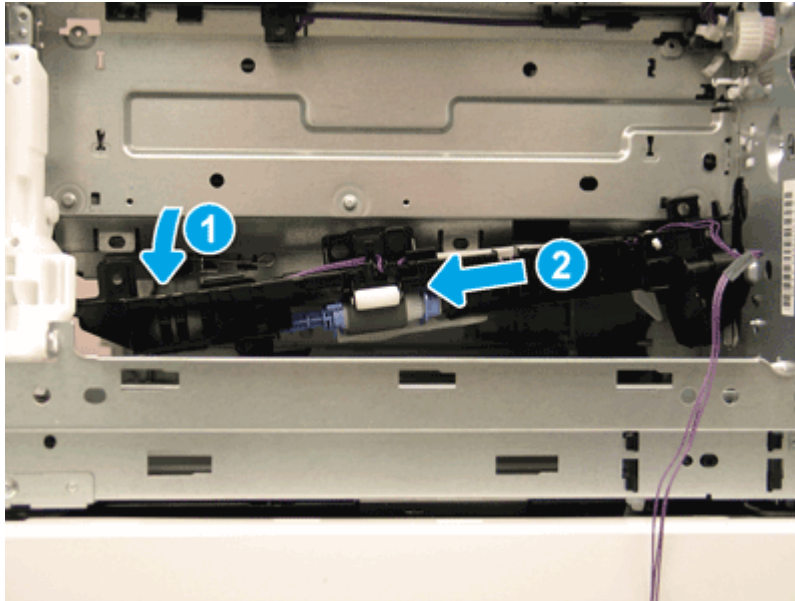
1. Remove four screws (callout 1).

Figure 5-1808 Remove four screws



2. Lower the left side of the assembly (callout 1), and then slide it to the left (callout 2) to remove it.

Figure 5-1809 Remove the pickup assembly



13. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

14. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

15. Reverse the removal steps to install the assembly

Also use the following **special installation instructions**.

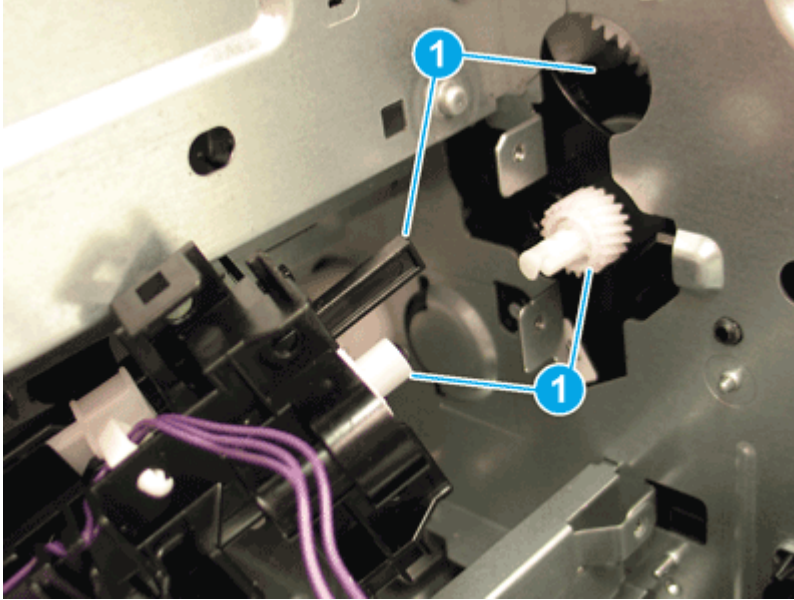
Pickup assembly

- Position the shaft on the assembly through the opening in the sheet metal (callout 1). Align the white gear on the assembly with the white gear (callout 2) on the printer.



NOTE: Continue to reverse the removal steps to finish installing the assembly.

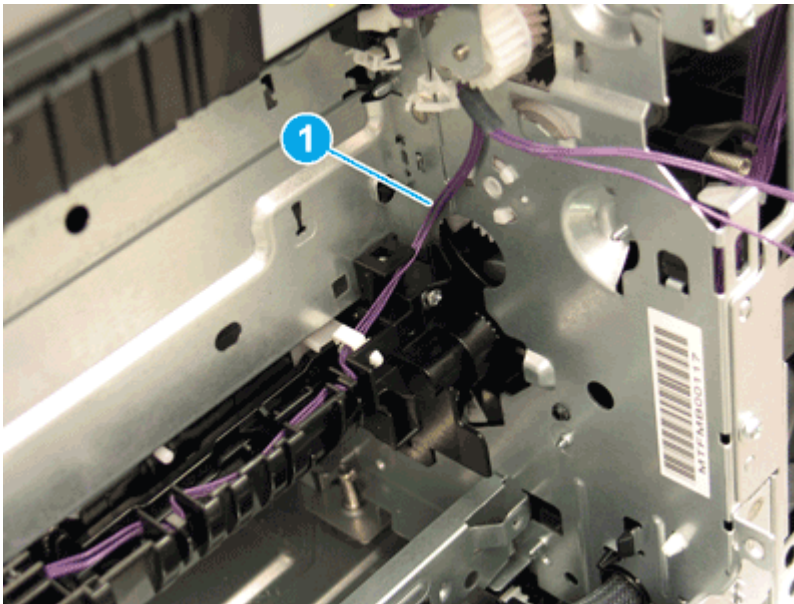
Figure 5-1810 Position the shaft and gear



Feed roller assembly

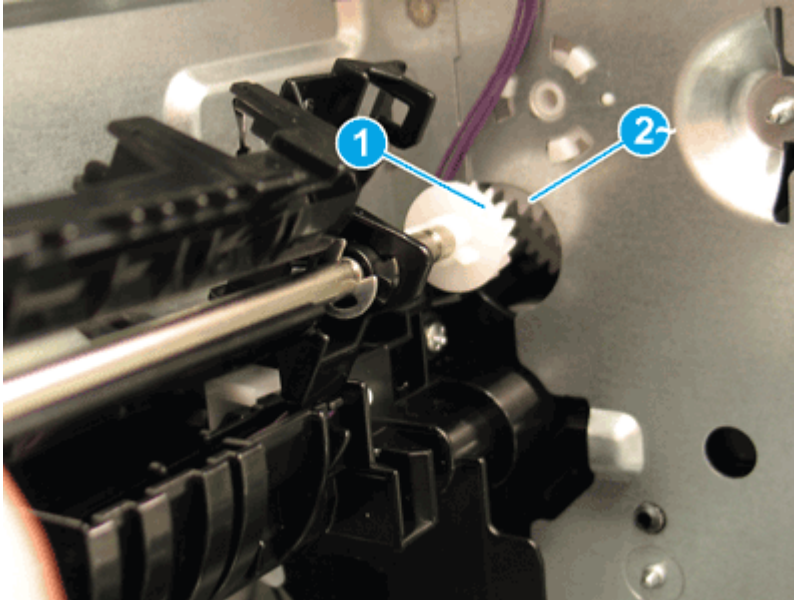
1. Before installing the feed roller assembly, make sure that the cable (callout 1) behind it is routed as shown so it is not pinched when the assembly is installed.

Figure 5-1811 Check the cable routing



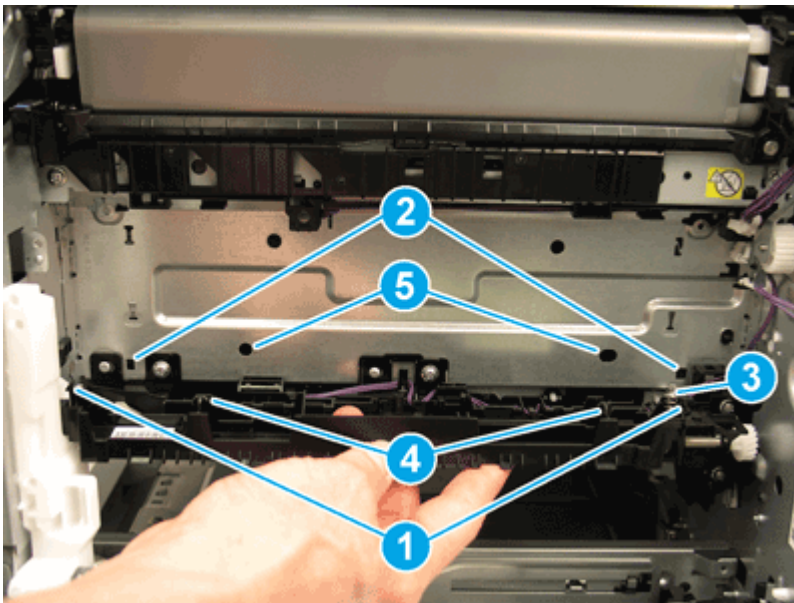
2. Align the gear (callout 1) with the gear (callout 2) through the opening in the sheet metal.

Figure 5-1812 Position the gear



3. Beginning at the right side, install the tabs (callout 1) on the assembly into the slots (callout 2) in the sheet metal. Make sure that the spring (callout 3) is not folded over. Position the right tab through the sheet metal and hold it, and then position the left tab near the sheet-metal hole. Gently push on the left tab to fully seat the guide pins (callout 4) in the holes (callout 5) in the assembly.

Figure 5-1813 Install the tabs

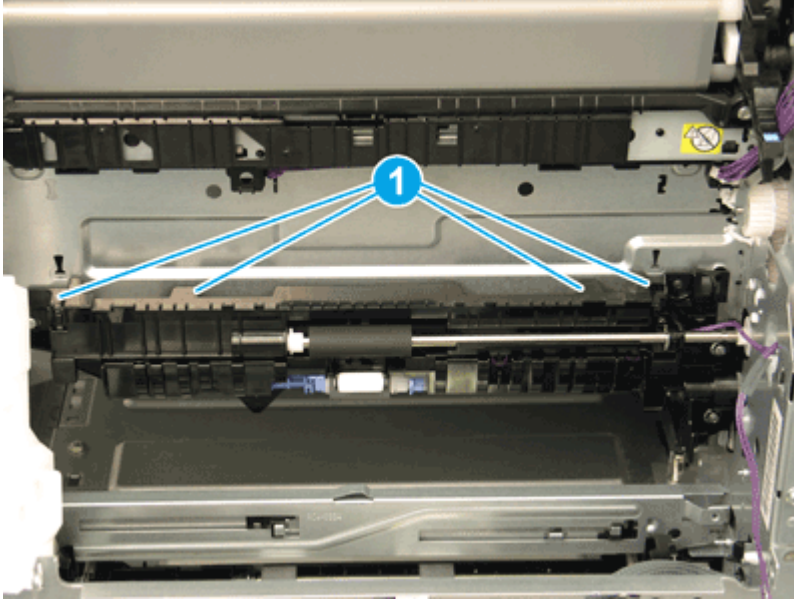


4. Make sure that the tabs (callout 1) are positioned correctly in the sheet metal slots.



NOTE: Continue to reverse the removal steps to finish installing the assembly.

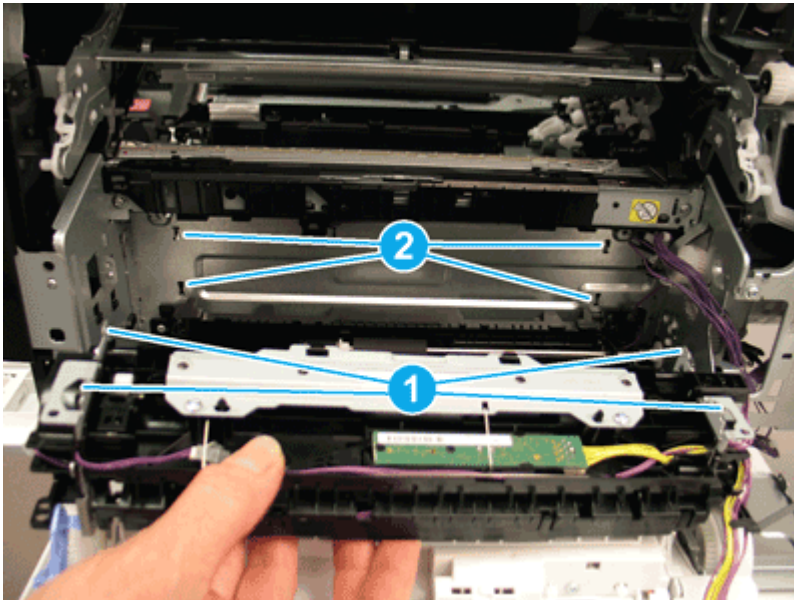
Figure 5-1814 Check the tabs



Registration assembly

1. Install the tabs (callout 1) on the registration assembly into the slots (callout 2) in the printer.

Figure 5-1815 Install the tabs in the slots



2. Look inside the printer and make sure that the tabs (callout 1) are completely installed in the sheet metal before installing the screws.


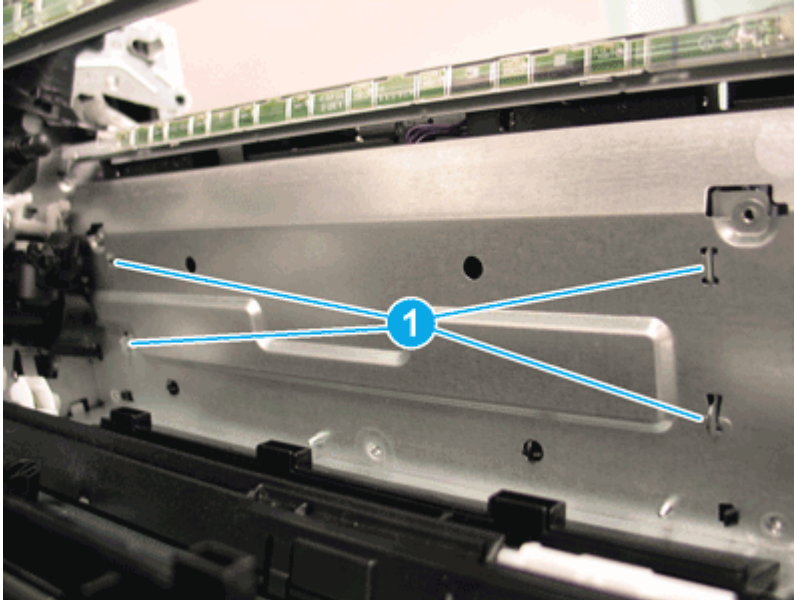
 **NOTE:** Continue to reverse the removal steps to finish installing the assembly.

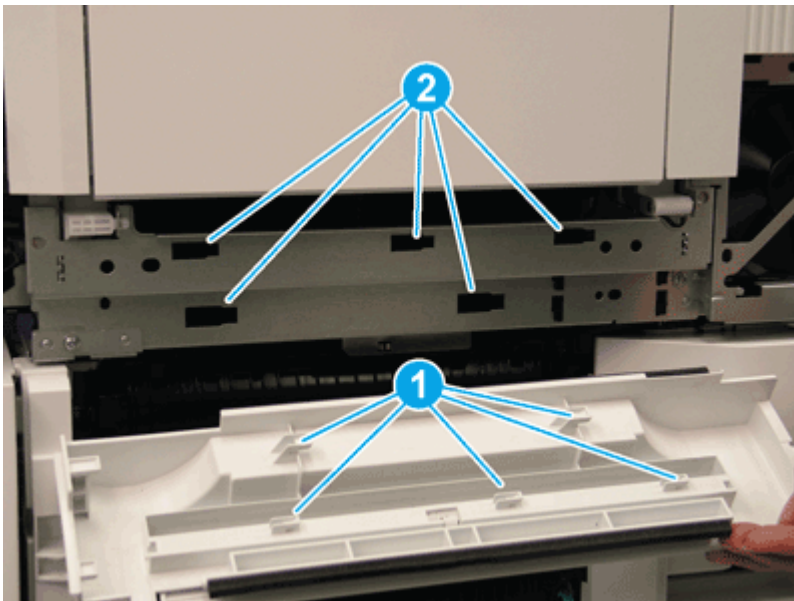
Figure 5-1816 Check the tabs



Right handle

- When reinstalling the right handle, install the hooks (callout 1) on the handle in the slots (callout 2) in the printer. Align the lower, right-most hook first to ensure all the hooks are aligned, and then slide the handle to the left to lock it into position.

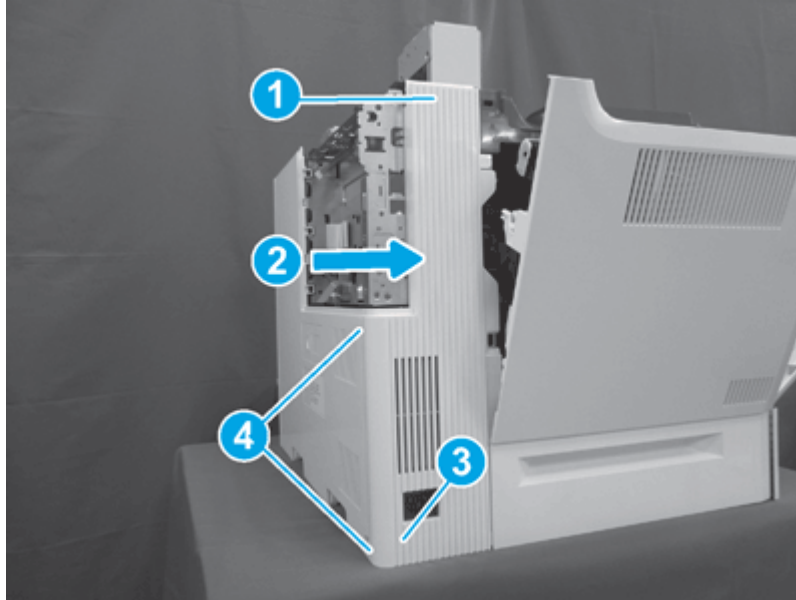
Figure 5-1817 Install the right handle




Left rear cover

- Position the top of the cover (callout 1) first, and then slide the cover to the right (callout 2). Push the left lower corner (callout 3) toward the rear of the printer to engage two tabs (callout 4) in the slots on the rear cover.

Figure 5-1818 Install the left rear cover



 **NOTE:** Continue to reverse the removal steps to finish installing the assembly.


Removal and replacement: Drawer connector and holder

Learn how to remove and replace the drawer connector and holder.

 [View a video of how to remove and replace the holder.](#)


Mean time to repair: 30 minutes

Service level: Advanced

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Disconnect the power cable.

 **WARNING!** To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-86 Part information

Part number	Part description
VS1-7258-012CN	Connector
RC4-6497-000CN	Drawer connector holder

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Make sure that the printer initializes to a **Ready** state.

Print a configuration page to make sure that the printer is functioning correctly.

1. Remove the formatter cover

Follow these steps to remove the formatter cover.

- Unscrew two thumbscrews (callout 1), and then slide the formatter cover (callout 2) away from the printer to remove it.


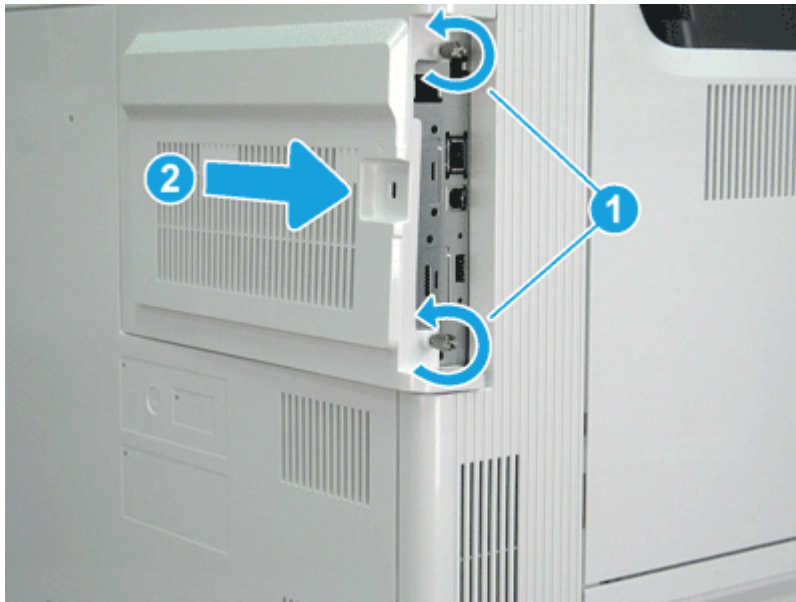
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1819 Remove the formatter cover

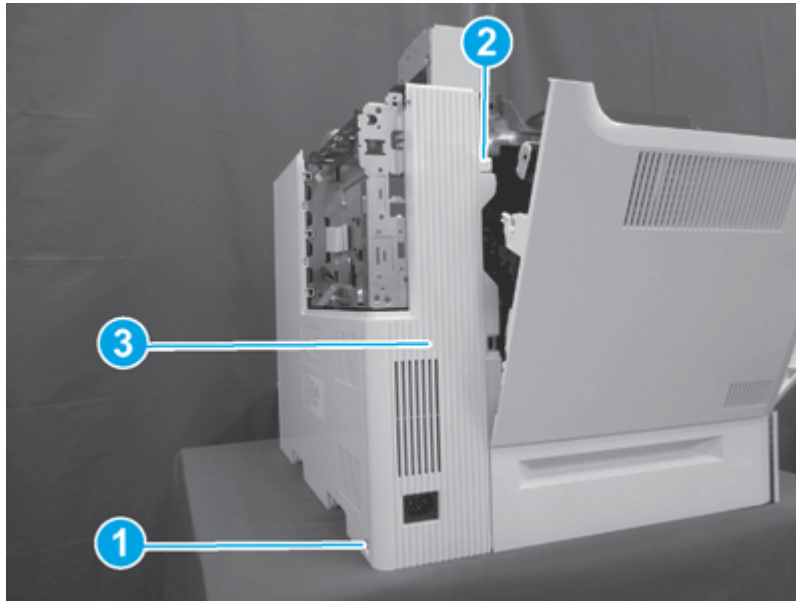


2. Remove the left rear cover

Follow these steps to remove the left rear cover.

- Open the left door. Remove one screw (callout 1), release one boss (callout 2), and then remove the left rear cover (callout 3).

Figure 5-1820 Remove the left rear cover



3. Remove the rear cover

Follow these steps to remove the rear cover.

- Remove two screws (callout 1), and then slide the rear cover (callout 2) to the right to remove it.


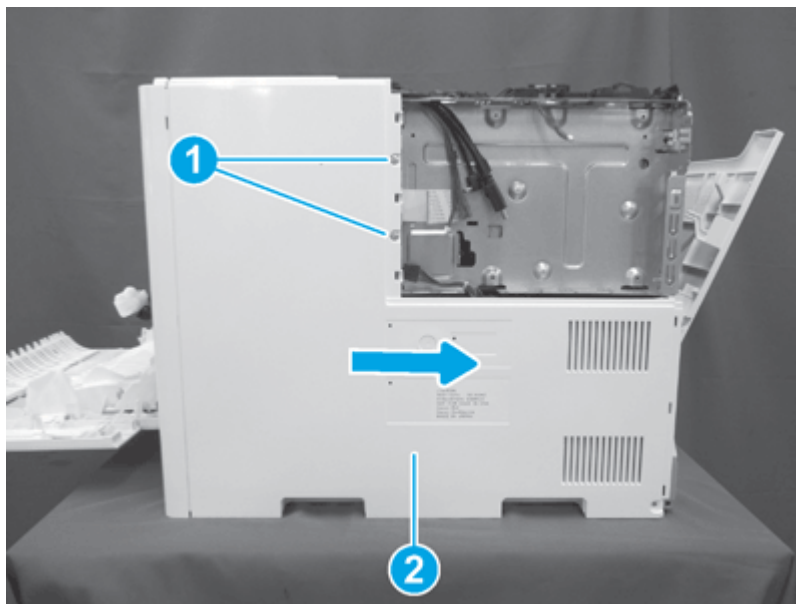
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1821 Remove two screws and the rear cover

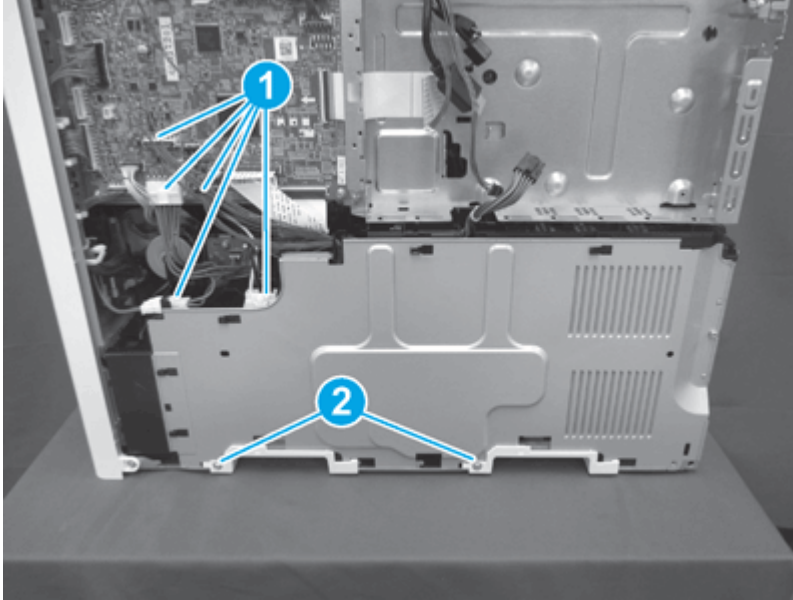


4. Remove the low-voltage power supply (LVPS) and fan

Follow these steps to remove the low-voltage power supply (LVPS) and fan.

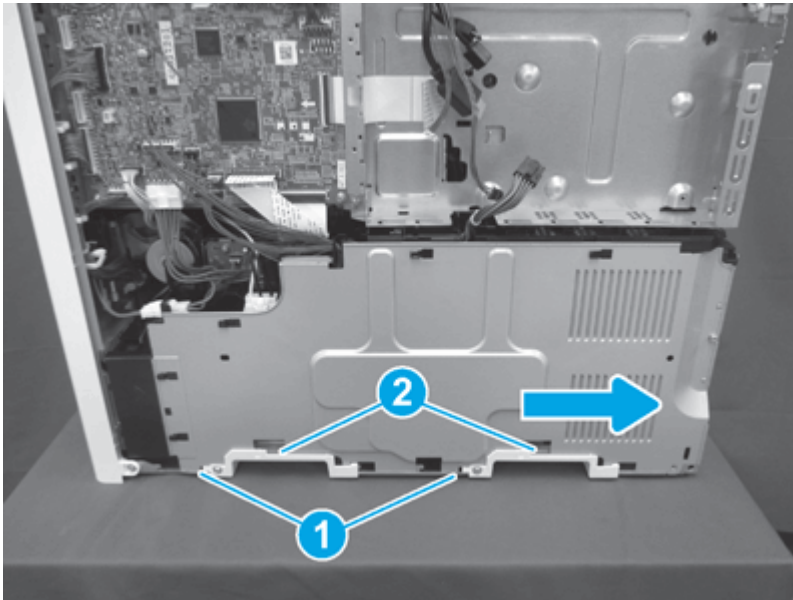
1. Disconnect five connectors (callout 1), and then remove two screws (callout 2).

Figure 5-1822 Disconnect five connectors and remove two screws



2. Release two tabs (callout 1), and then slide two handles (callout 2) to the right to remove them.

Figure 5-1823 Remove two handles

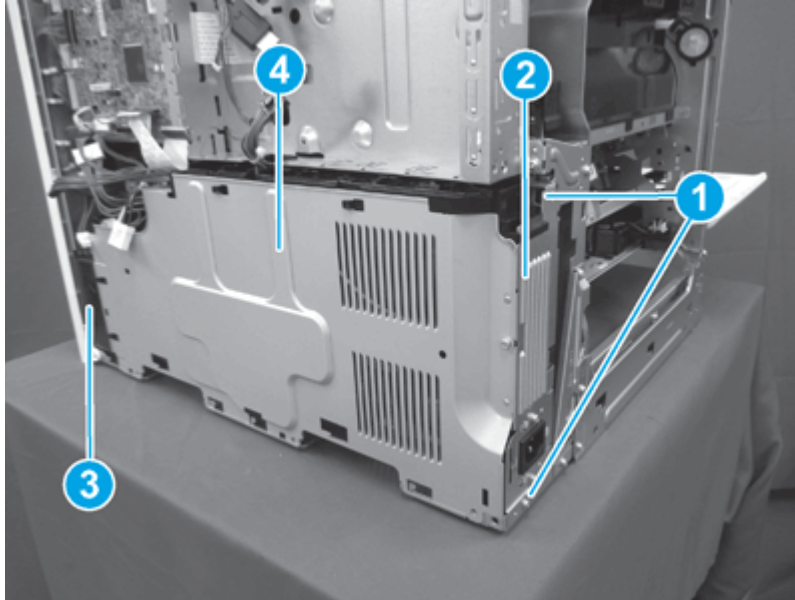


3. Remove two screws (callout 1). Remove the low-voltage power supply (callout 2) together with the power supply fan (callout 3) and the low-voltage power supply cover (callout 4).



NOTE: The upper screw is recessed inside the printer just above the upper right corner of the LVPS. The lower screw is located between the locator pins at the bottom of the assembly.

Figure 5-1824 Remove the low-voltage power supply

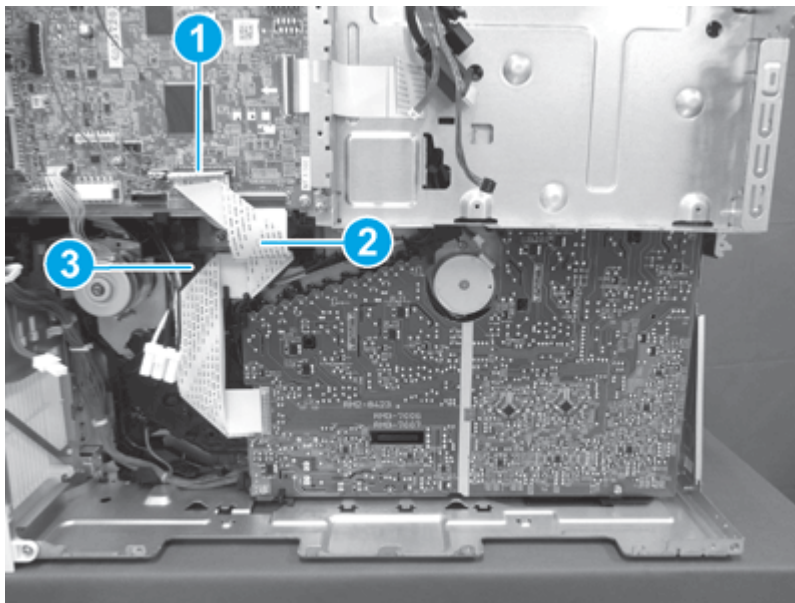


5. Remove the lower high voltage power supply (HVPS)

Follow these steps to remove the lower high voltage power supply (HVPS).

1. Disconnect one connector (callout 1), and then remove the flat cable (callout 2) from the cable guide (callout 3).

Figure 5-1825 Disconnect one connector

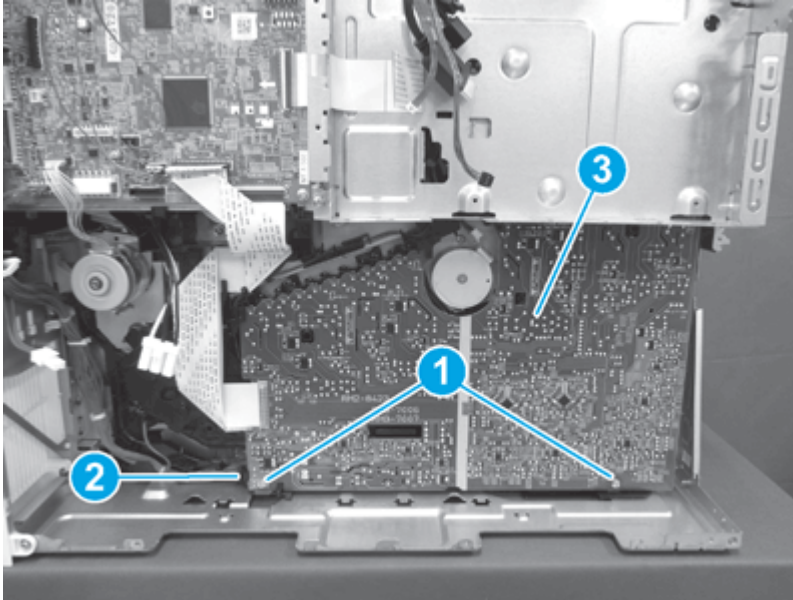


2. Remove two screws (callout 1), release one tab (callout 2), and then remove the lower HVPS (callout 3).



NOTE: These screws have washers attached. Make sure that they are reinstalled in the lower HVPS board.

Figure 5-1826 Remove two screws and release one tab

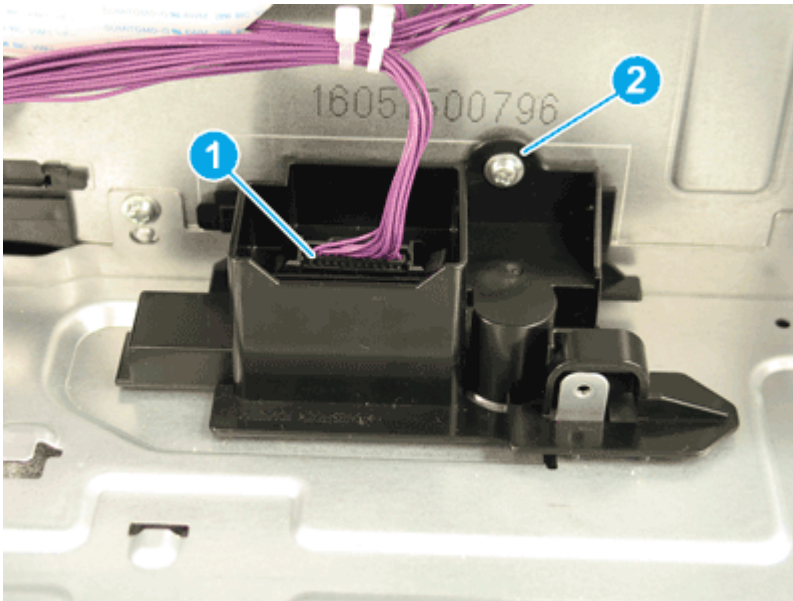


6. Remove the drawer connector and holder

Follow these steps to remove the drawer connector and holder.

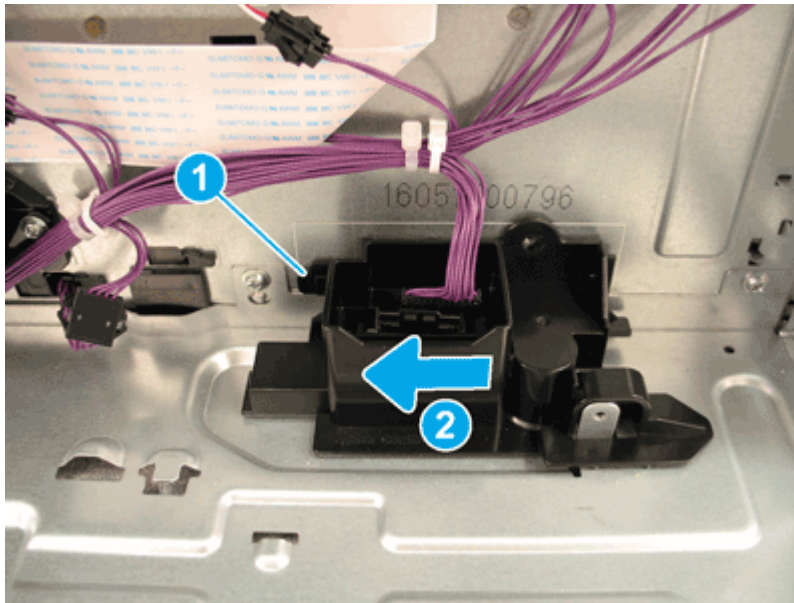
1. Disconnect one connector (callout 1), and then remove one screw (callout 2).

Figure 5-1827 Disconnect one connector and remove one screw



2. Release one tab (callout 1), and then slide the connector holder (callout 2) to the left to remove it.

Figure 5-1828 Remove the connector holder



3. Release two tabs (callout 1), and then remove the connector (callout 2) from the holder.


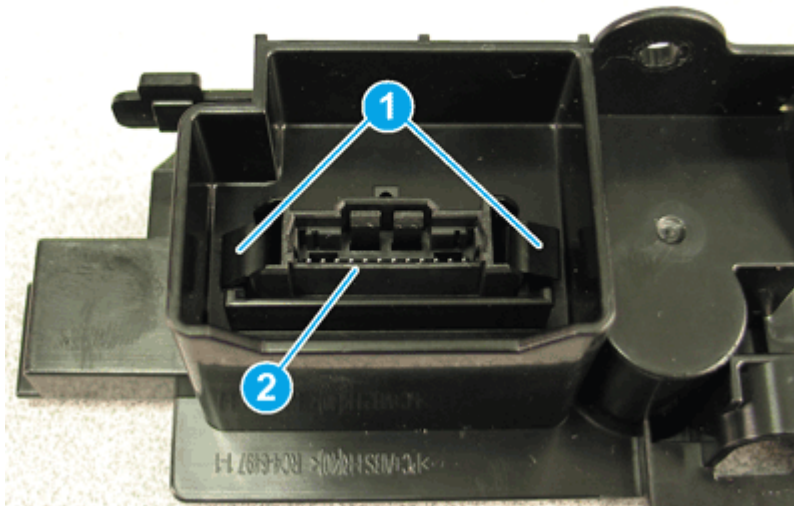
 **TIP:** Reverse the removal steps to install the assembly.


Figure 5-1829 Remove the connector from the holder





7. Unpack the replacement assembly


Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.

 **NOTE:** HP recommends responsible disposal of the defective part.


2. Unpack the replacement part from the packaging.

 **CAUTION:**  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

 **IMPORTANT:** Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

 **NOTE:** If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

 **NOTE:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

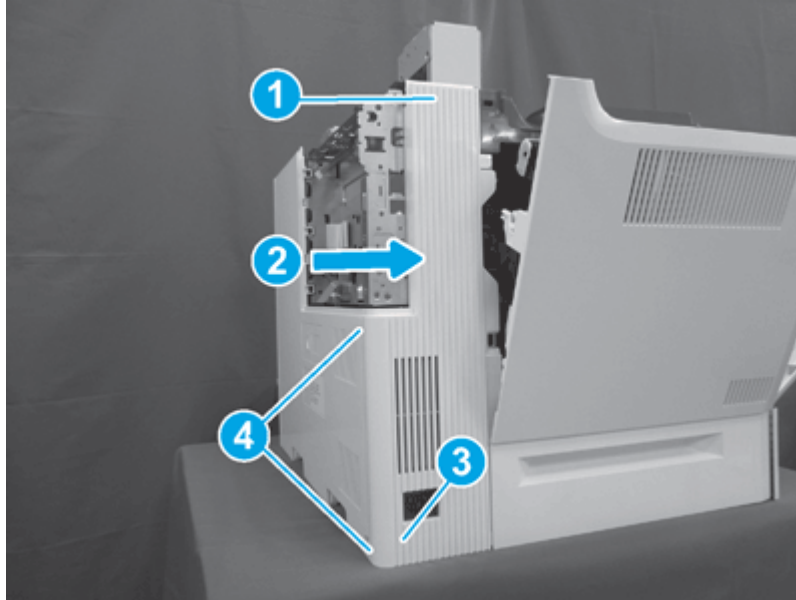
8. Reverse the removal steps to install the assembly


Also use the following **special installation instructions**.

Left rear cover

- Position the top of the cover (callout 1) first, and then slide the cover to the right (callout 2). Push the left lower corner (callout 3) toward the rear of the printer to engage two tabs (callout 4) in the slots on the rear cover.

Figure 5-1830 Install the left rear cover



 **NOTE:** Continue to reverse the removal steps to finish installing the assembly.

Remove and replacement: Trays


Learn how to remove and replace the printer trays.

Removal and replacement: Tray 2 and optional 550-sheet Trays 3-5

Learn how to remove and replace Tray 2 and optional 550-sheet Trays 3-5.

Mean time to repair: 10 minutes

Service level: Intermediate

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.
- ⚠ **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.
- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-87 Part information

Part number	Part description
RM2-6935-000CN	Cassette assembly (1x550-sheet paper feeder)
RM2-1231-000CN	Cassette assembly (3x550-sheet paper feeder with stand (middle/lower trays))
RM2-1219-000CN	Cassette assembly (1x550-sheet paper feeder with stand and 3x550-sheet paper feeder with stand upper tray)

Required tools

- No special tools are needed to remove or install this assembly.

After performing service


- Connect the printer power cable.
- Turn the printer power on.

Post service test

No post service test is available for this assembly.

1. Remove the 550-sheet paper tray

Follow these steps to remove the 550-sheet paper tray.

 **NOTE:** Tray 2 is shown in the figures below. The procedure is the same for all of the 550-sheet paper trays.

1. Pull the tray straight out of the printer until it stops.

Figure 5-1831 Pull the tray out



2. Lift the front of the tray, and then pull it out of the printer to remove it.


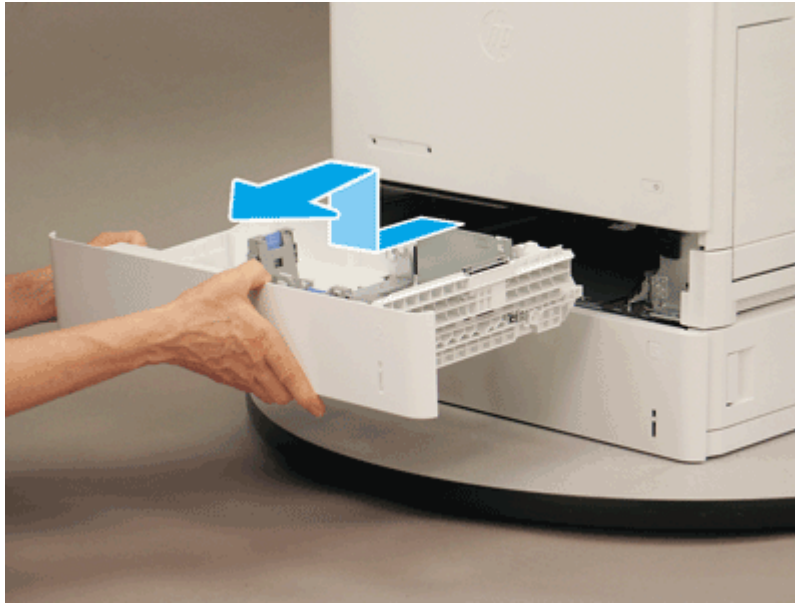
 **TIP:** Reverse the removal steps to install the assembly.


Figure 5-1832 Remove the tray



2. Unpack the replacement assembly



Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.


 **NOTE:** HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.

 **CAUTION:**  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

 **IMPORTANT:** Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

 **NOTE:** If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Tray 4 (2,500-sheet paper feeder with stand)

This document provides the procedures to remove and replace the Tray 4 in the 2,500-sheet paper feeder with stand.

Mean time to repair: 10 minutes

Service level: Intermediate



IMPORTANT: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.
- ⚠ **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.
- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-88 Part information

Tray 4 (2,500-sheet paper feeder with stand) part number	
RM2-1220-000CN	Tray assembly

Required tools

- No special tools are needed to remove or install this assembly.

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

No post service test is available for this assembly.

1. Remove Tray 4 (2,550-sheet paper feeder with stand)

Follow these steps to remove Tray 4 (2,550-sheet paper feeder with stand).

1. Open Tray 4.

2. Press the right and left release levers at the base of the tray (callout 1), and then pull Tray 4 (callout 2) away from the feeder to remove it.


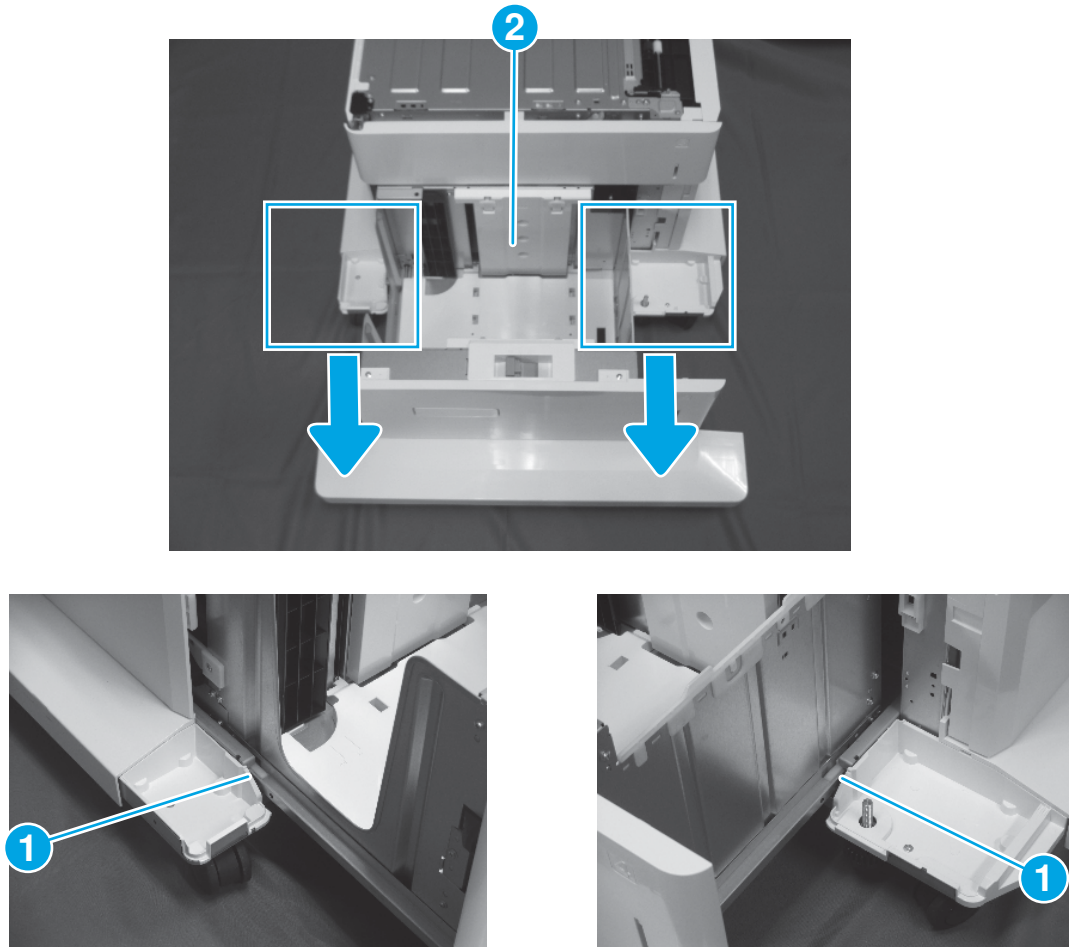
 **TIP:** Reverse the removal steps to install the assembly.


Figure 5-1833 Remove Tray 4



2. Unpack the replacement assembly



Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.


 **NOTE:** HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>


2. Unpack the replacement part from the packaging.

 **CAUTION:**  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

 **IMPORTANT:** Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

 **NOTE:** If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

 **NOTE:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Input device - 550-sheet paper feeder


Learn how to remove and replace the 550-sheet paper feeder parts and assemblies.

Removal and replacement: Right door link (550-sheet paper feeder)

Learn how to remove and replace the right door link on the 550-sheet paper feeder.


Mean time to repair: 10 minutes

Service level: Intermediate

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

○ Turn the printer power off. A shutting-down message appears on the control-panel display.

 **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.

○ Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-89 Part information

Part number	Part description
RC4-1778-000CN	Link, door

Required tools

● No special tools are needed to remove or install this assembly.

After performing service

○ Connect the printer power cable.

- Turn the printer power on.

Post service test

No post service test is available for this assembly.

1. Remove the right door link (550-sheet paper feeder)

Follow these steps to remove the right door link (550-sheet paper feeder).

1. Open the right door.
2. Slightly flex the slot in the lower edge of the right door (callout 1) and release the end of the link (callout 2) from the door.


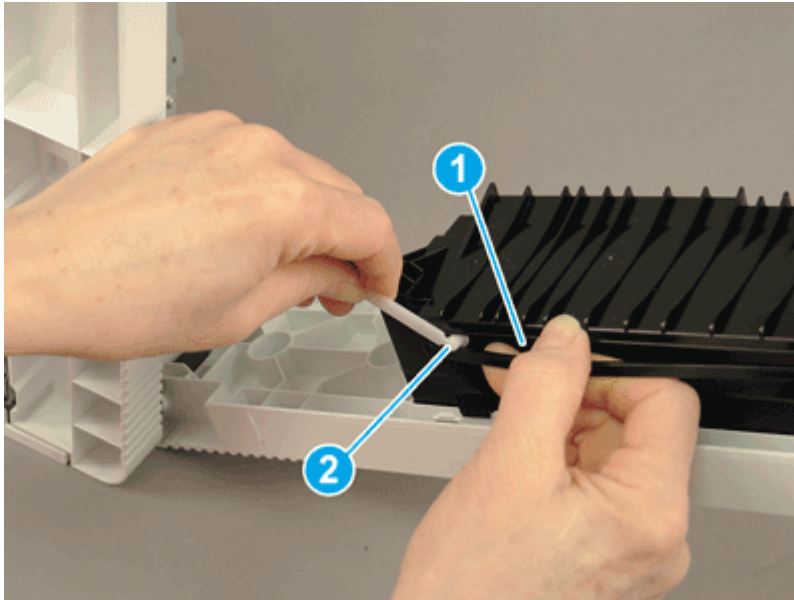
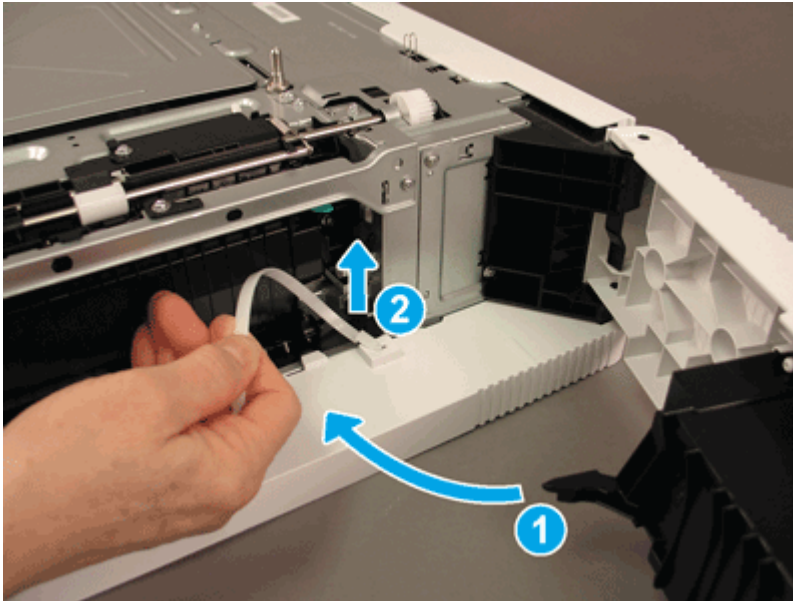
 **TIP:** Position the paper feeder with the back side facing down on a flat surface to allow easier access to the lower edge of the door.

Figure 5-1834 Release the link from the door



3. Rotate the link so that the tab on the link (callout 1) aligns with the opening in the paper feeder. Lift the link up (callout 2) to remove it.

Figure 5-1835 Remove the link



2. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.




NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Right door (550-sheet paper feeder)

Learn how to remove and replace the right door on the 550-sheet paper feeder.


Mean time to repair: 10 minutes

Service level: Intermediate

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.

 **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.

- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-90 Part Information

Part number	Part description
RM2-6937-000CN	Right door assembly

Required tools

- No special tools are needed to remove or install this assembly.

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

No post service test is available for this assembly.

1. Remove the right door link (550-sheet paper feeder)

Follow these steps to remove the right door link (550-sheet paper feeder).

1. Open the right door.
2. Slightly flex the slot in the lower edge of the right door (callout 1) and release the end of the link (callout 2) from the door.


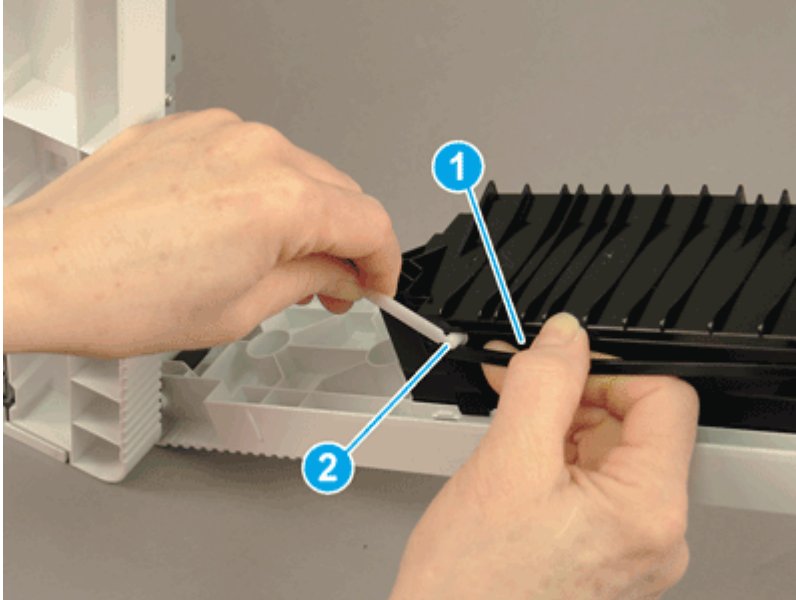
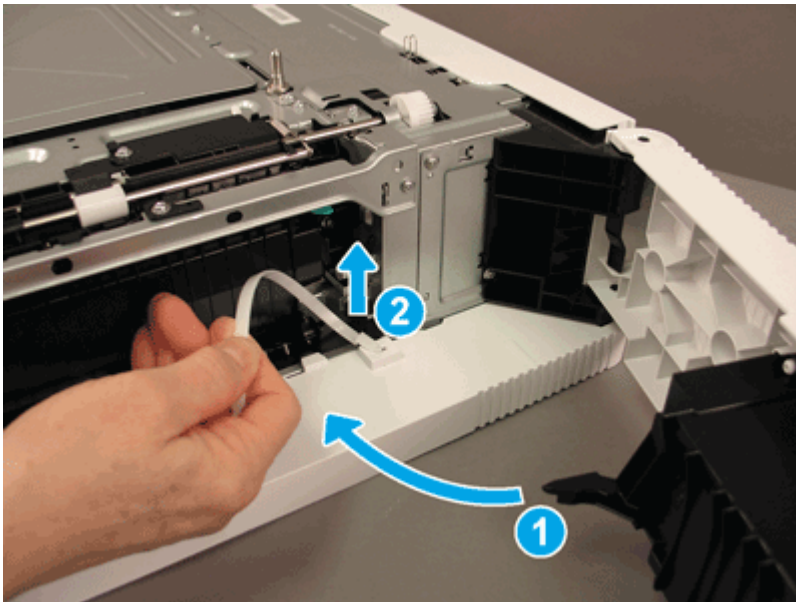
 **TIP:** Position the paper feeder with the back side facing down on a flat surface to allow easier access to the lower edge of the door.

Figure 5-1836 Release the link from the door



3. Rotate the link so that the tab on the link (callout 1) aligns with the opening in the paper feeder. Lift the link up (callout 2) to remove it.

Figure 5-1837 Remove the link

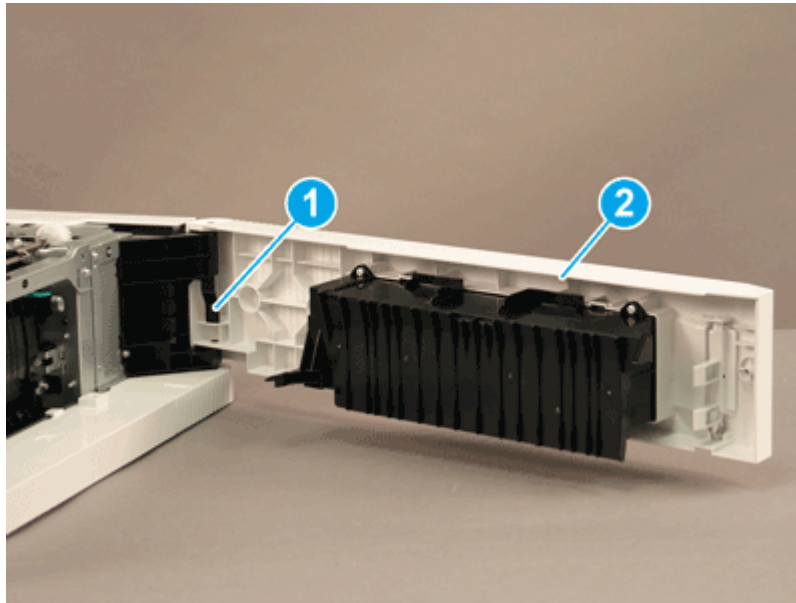


2. Remove the right door (550-sheet paper feeder)

Follow these steps to remove the right door (550-sheet paper feeder).

- Release one tab (callout 1), and then slide the right door (callout 2) up to remove it

Figure 5-1838 Release one tab and remove the right door



3. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.




NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Rear cover (550-sheet paper feeder)

Learn how to remove and replace the rear cover on the 550-sheet paper feeder.

Mean time to repair: 10 minutes

Service level: Intermediate

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.
- ⚠ **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.
- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-91 Part Information

Part number	Part description
RC4-7683-000CN	Cover, rear

Required tools

- No special tools are needed to remove or install this assembly.

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

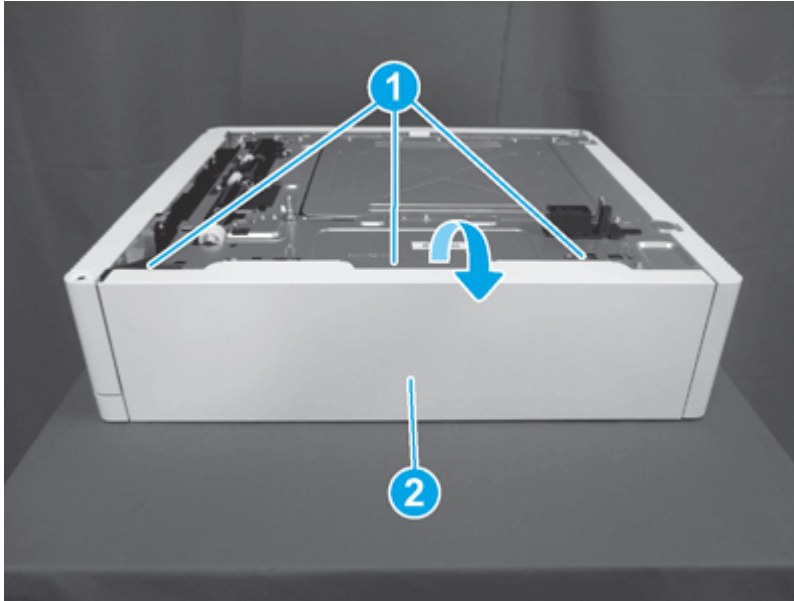
No post service test is available for this assembly.

1. Remove the rear cover (550-sheet paper feeder)

Follow these steps to remove the rear cover (550-sheet paper feeder).

- Release three tabs (callout 1), and then rotate the top of the rear cover (callout 2) out and away from the paper feeder to remove it.

Figure 5-1839 Remove the rear cover



2. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.




NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Left cover (550-sheet paper feeder)

Learn how to remove and replace the left cover for the 550-sheet paper feeder.

Mean time to repair: 10 minutes

Service level: Intermediate

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.
- ⚠ **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.
- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-92 Part Information

Part number	Part description
RC4-7682-000CN	Cover, left

Required tools

- No special tools are needed to remove or install this assembly.

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

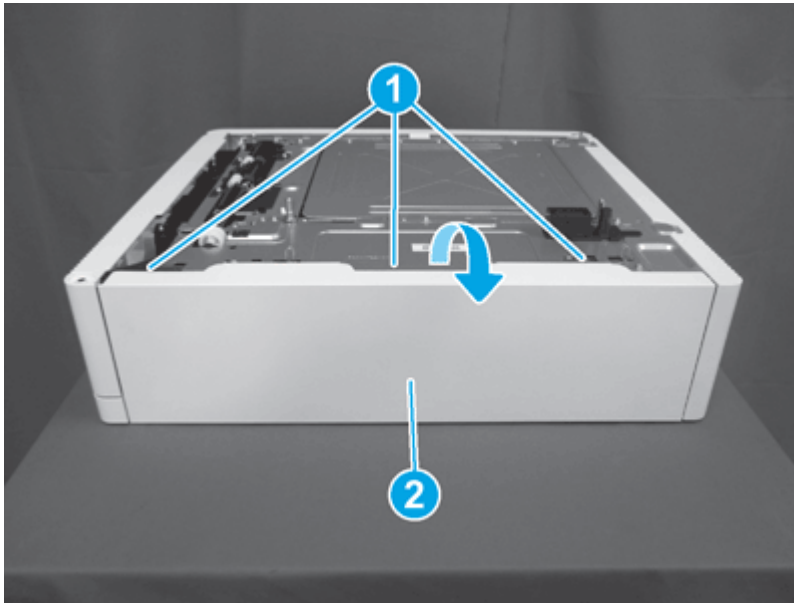
No post service test is available for this assembly.

1. Remove the rear cover (550-sheet paper feeder)

Follow these steps to remove the rear cover (550-sheet paper feeder).

- Release three tabs (callout 1), and then rotate the top of the rear cover (callout 2) out and away from the paper feeder to remove it.

Figure 5-1840 Remove the rear cover



2. Remove the left cover (550-sheet paper feeder)

Follow these steps to remove the left cover (550-sheet paper feeder).

1. Remove the 550-sheet paper feeder tray.
2. Release three tabs (callout 1), and then rotate the top of the left cover (callout 2) away from the paper feeder to remove it.


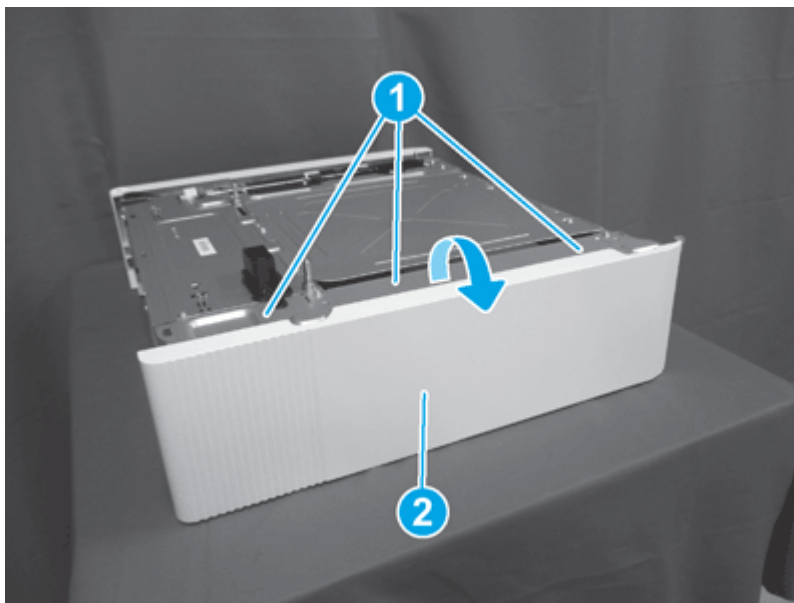
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1841 Release three tabs and remove the cover



3. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Right lower cover (550-sheet paper feeder)

Learn how to remove and replace the right lower cover on the 550-sheet paper feeder.

Mean time to repair: 10 minutes

Service level: Intermediate



IMPORTANT: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.
- △ **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.
- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-93 Part information

Part number	Part number
RC4-7684-000CN	Cover, right lower

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

Send a print job from the host computer to the 550-sheet paper feeder. Verify that a page prints.

1. Remove the right door link (550-sheet paper feeder)

Follow these steps to remove the right door link (550-sheet paper feeder).

1. Open the right door.
2. Slightly flex the slot in the lower edge of the right door (callout 1) and release the end of the link (callout 2) from the door.


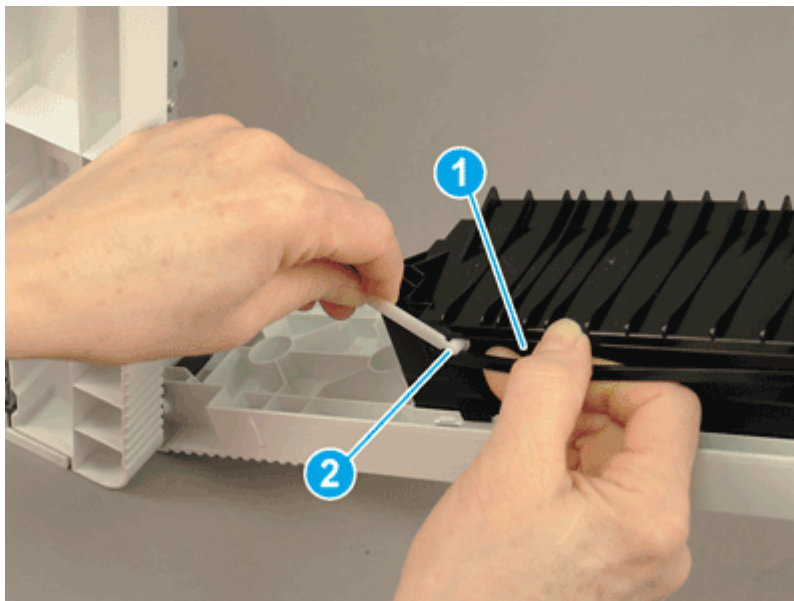
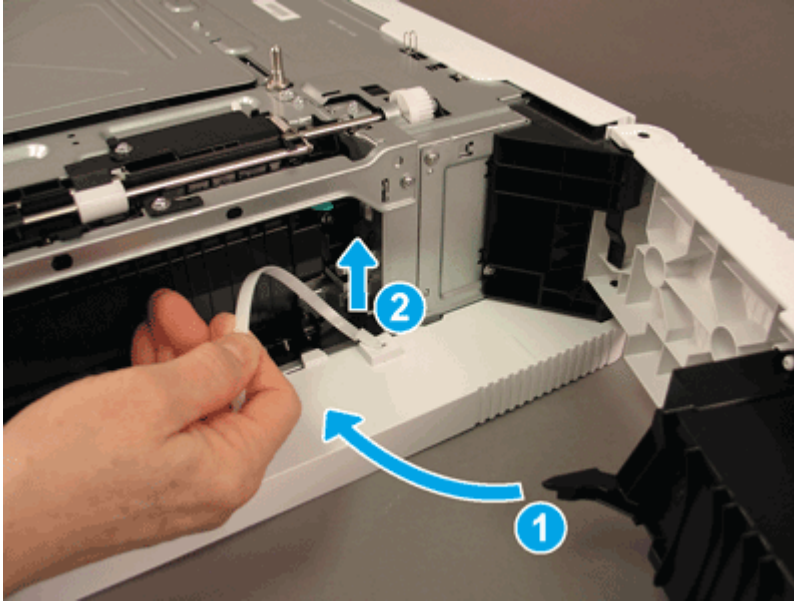
 **TIP:** Position the paper feeder with the back side facing down on a flat surface to allow easier access to the lower edge of the door.

Figure 5-1842 Release the link from the door



3. Rotate the link so that the tab on the link (callout 1) aligns with the opening in the paper feeder. Lift the link up (callout 2) to remove it.

Figure 5-1843 Remove the link

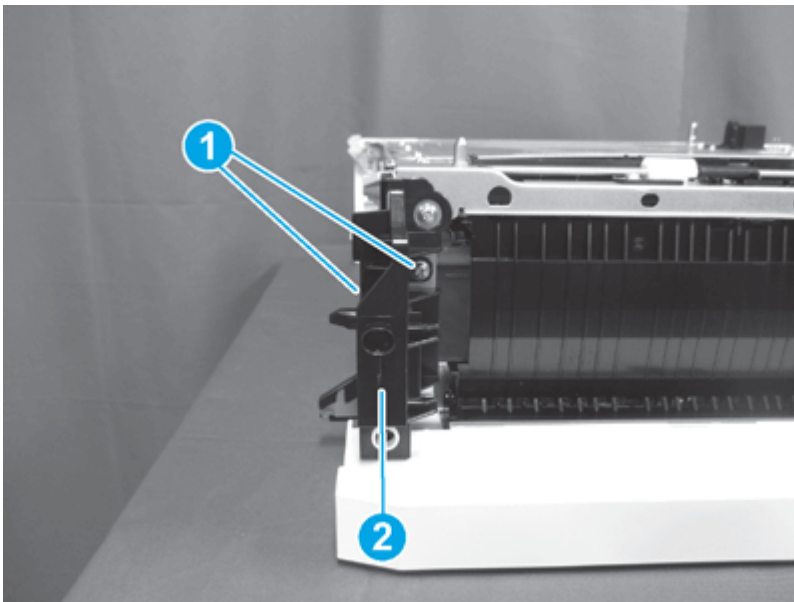


2. Remove the right lower cover

Follow these steps to remove the right lower cover.

1. Remove the 550-sheet paper feeder tray.
2. Remove two screws (callout 1), and then remove the front inner cover (callout 2).

Figure 5-1844 Remove two screws and the front inner cover



3. Release one tab (callout 1), and then slide the right lower cover (callout 2) toward the front of the paper feeder to remove it.


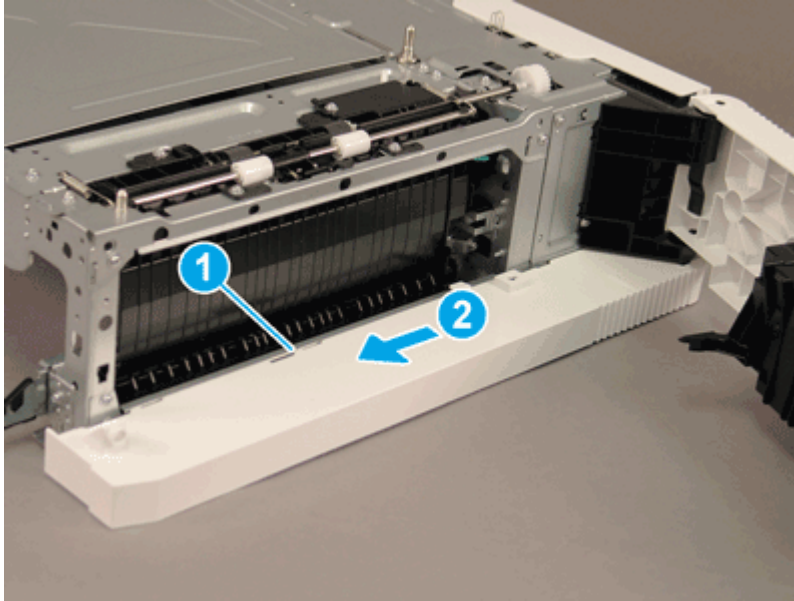
 **TIP:** Reverse the removal steps to install the assembly.


Figure 5-1845 Remove the right lower cover



3. Unpack the replacement assembly



Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.


 **NOTE:** HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.

 **CAUTION:**  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

 **IMPORTANT:** Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

 **NOTE:** If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Auto-close assembly (550-sheet paper feeder)

Learn how to remove and replace the auto-close assembly for the 550-sheet paper feeder.

Mean time to repair: 10 minutes

Service level: Intermediate



IMPORTANT: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.
- ⚠ **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.
- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-94 Part information

Part number	Part description
RM2-5147-000CN	Auto-close assembly

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

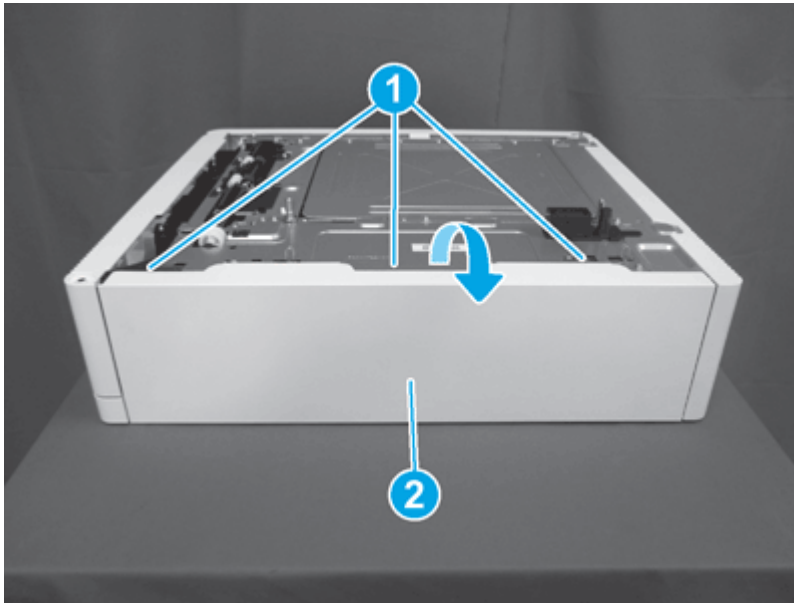
Slowly install the paper tray in the paper feeder. Verify that the auto-close assembly catches and pulls the tray completely closed.

1. Remove the rear cover (550-sheet paper feeder)

Follow these steps to remove the rear cover (550-sheet paper feeder).

- Release three tabs (callout 1), and then rotate the top of the rear cover (callout 2) out and away from the paper feeder to remove it.

Figure 5-1846 Remove the rear cover



2. Remove the auto-close assembly (550-sheet paper feeder)

Follow these steps to remove the auto-close assembly (550-sheet paper feeder).

1. Remove the 550-sheet paper feeder tray.
2. Disconnect one connector (callout 1), and then release the cable (callout 2) from the cable guide (callout 3). Remove two screws (callout 4), and then remove the auto-close assembly (callout 5).


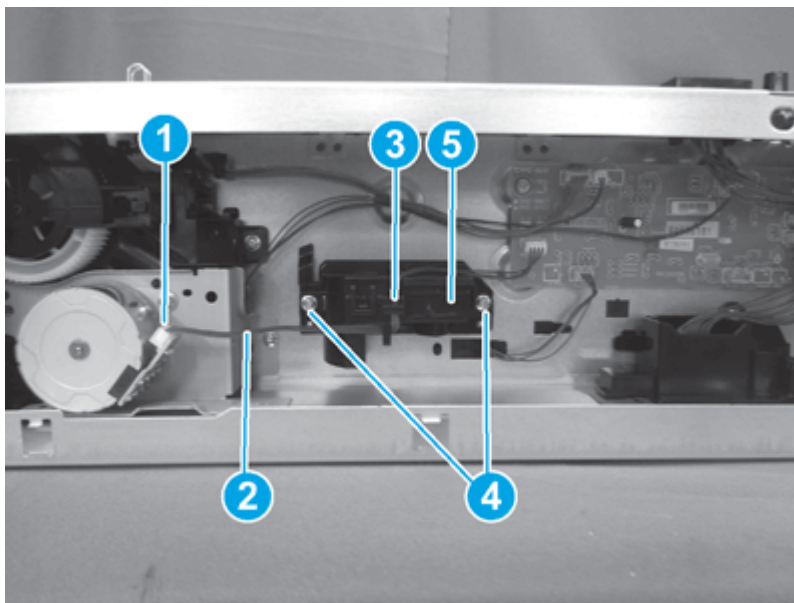
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1847 Remove the auto-close assembly



3. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Drive assembly (550-sheet paper feeder)

Learn how to remove and replace the drive assembly in the 550-sheet paper feeder.

Mean time to repair: 20 minutes

Service level: Advanced



IMPORTANT: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.



WARNING! To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.

- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to

www.hp.com/buy/parts

Table 5-95 Part information

Part number	Part description
RM2-6934-000CN	Drive assembly

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

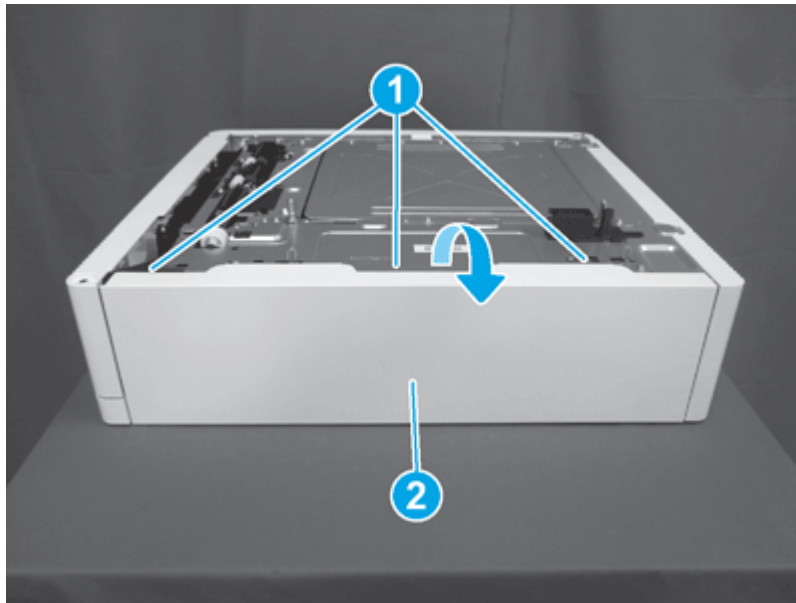
Send a print job from the host computer to the 550-sheet paper feeder. Verify that a page prints.

1. Remove the rear cover (550-sheet paper feeder)

Follow these steps to remove the rear cover (550-sheet paper feeder).

- Release three tabs (callout 1), and then rotate the top of the rear cover (callout 2) out and away from the paper feeder to remove it.

Figure 5-1848 Remove the rear cover



2. Remove the right door link (550-sheet paper feeder)

Follow these steps to remove the right door link (550-sheet paper feeder).

1. Open the right door.

2. Slightly flex the slot in the lower edge of the right door (callout 1) and release the end of the link (callout 2) from the door.


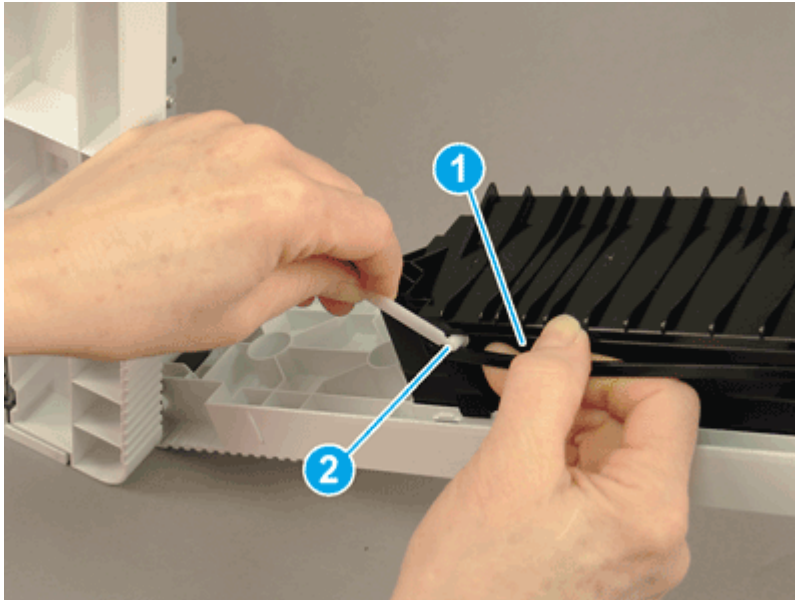
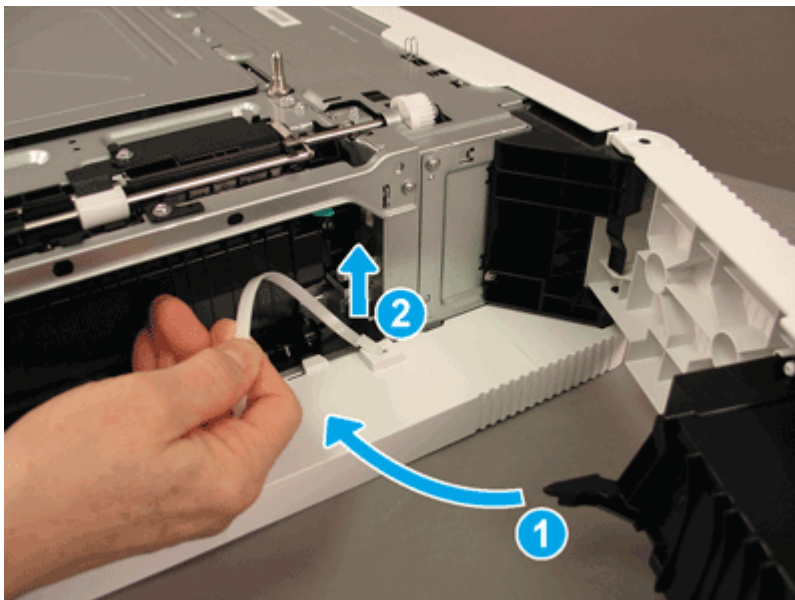
 **TIP:** Position the paper feeder with the back side facing down on a flat surface to allow easier access to the lower edge of the door.

Figure 5-1849 Release the link from the door



3. Rotate the link so that the tab on the link (callout 1) aligns with the opening in the paper feeder. Lift the link up (callout 2) to remove it.

Figure 5-1850 Remove the link

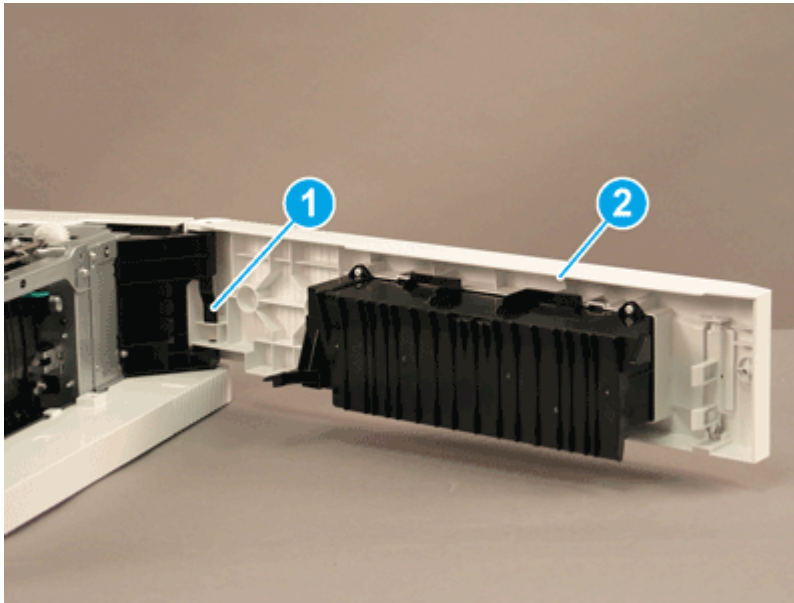


3. Remove the right door (550-sheet paper feeder)

Follow these steps to remove the right door (550-sheet paper feeder).

- Release one tab (callout 1), and then slide the right door (callout 2) up to remove it

Figure 5-1851 Release one tab and remove the right door

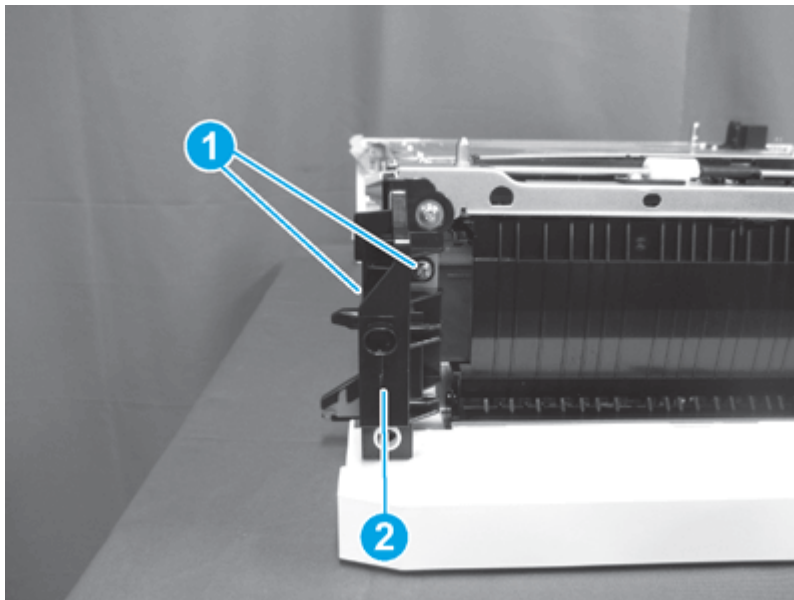


4. Remove the right lower cover (550-sheet paper feeder)

Follow these steps to remove the right lower cover (550-sheet paper feeder).

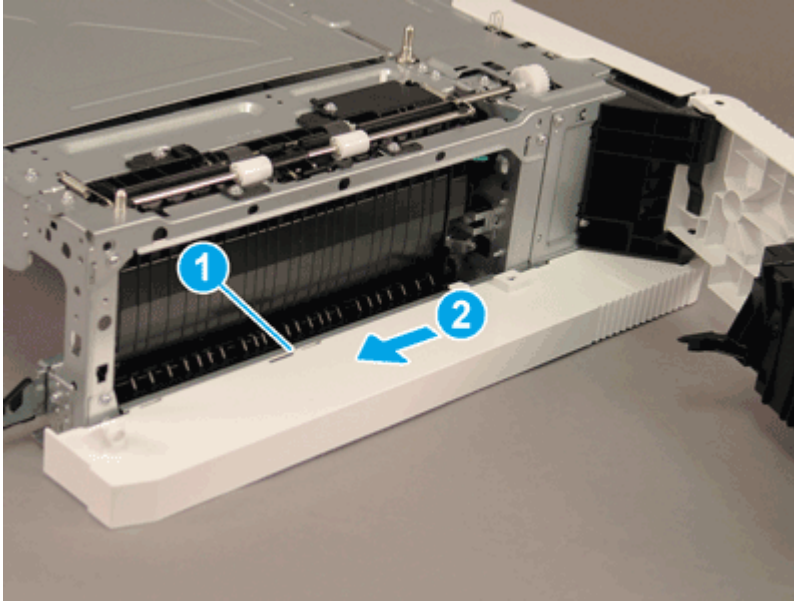
1. Remove the 550-sheet paper feeder tray.
2. Remove two screws (callout 1), and then remove the front inner cover (callout 2).

Figure 5-1852 Remove two screws and the front inner cover



3. Release one tab (callout 1), and then slide the right lower cover (callout 2) toward the front of the paper feeder to remove it.

Figure 5-1853 Remove the right lower cover

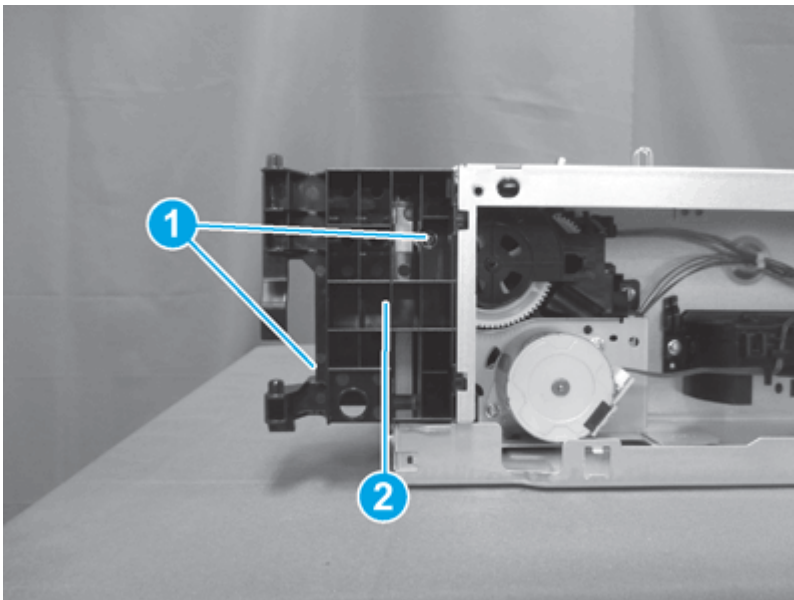


5. Remove the drive assembly

Follow these steps to remove the drive assembly.

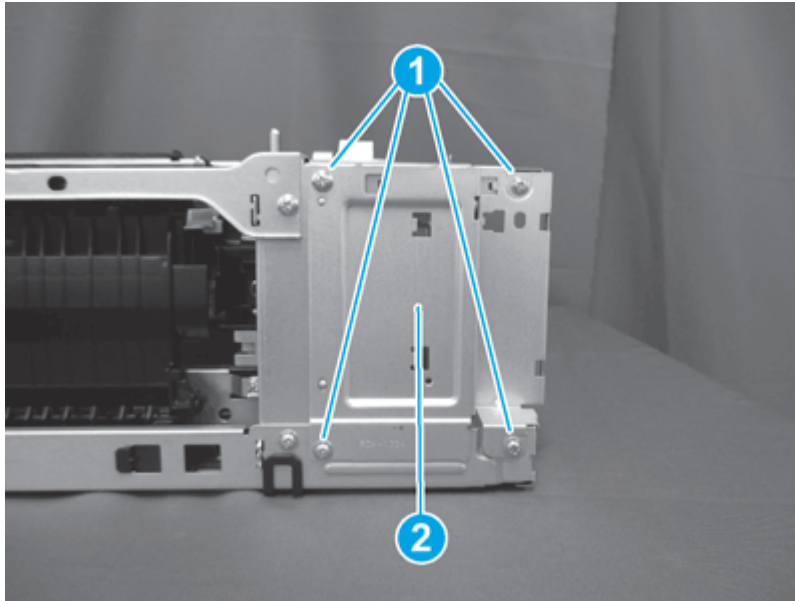
1. Remove two screws (callout 1), and then remove the hinge (callout 2).

Figure 5-1854 Remove two screws and the hinge



2. Remove four screws (callout 1), and then remove the plate (callout 2).

Figure 5-1855 Remove four screws and the plate



3. Disconnect one connector (callout 1), remove two screws (callout 2), and then remove the drive assembly (callout 3).


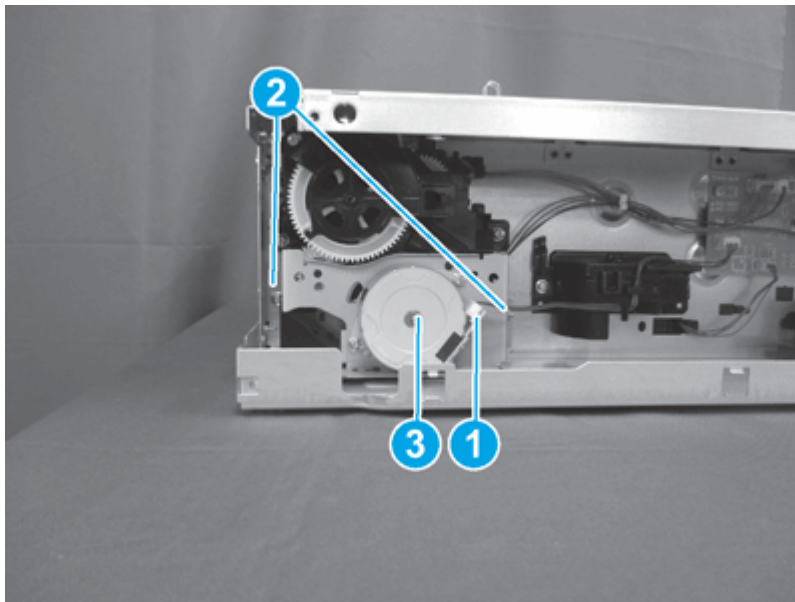
 **TIP:** Reverse the removal steps to install the assembly.


Figure 5-1856 Remove two screws and the drive assembly



6. Unpack the replacement assembly



Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.


 **NOTE:** HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>


2. Unpack the replacement part from the packaging.

 **CAUTION:**  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

 **IMPORTANT:** Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

 **NOTE:** If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.


 **NOTE:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Lifter drive assembly (550-sheet paper feeder)


Learn how to remove and replace the lifter drive assembly in the 550-sheet paper feeder.

Mean time to repair: 20 minutes

Service level: Advanced

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.
-  **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.
-
- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-96 Part information

Part number	Part description
RM2-6933-000CN	Lifter drive assembly

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

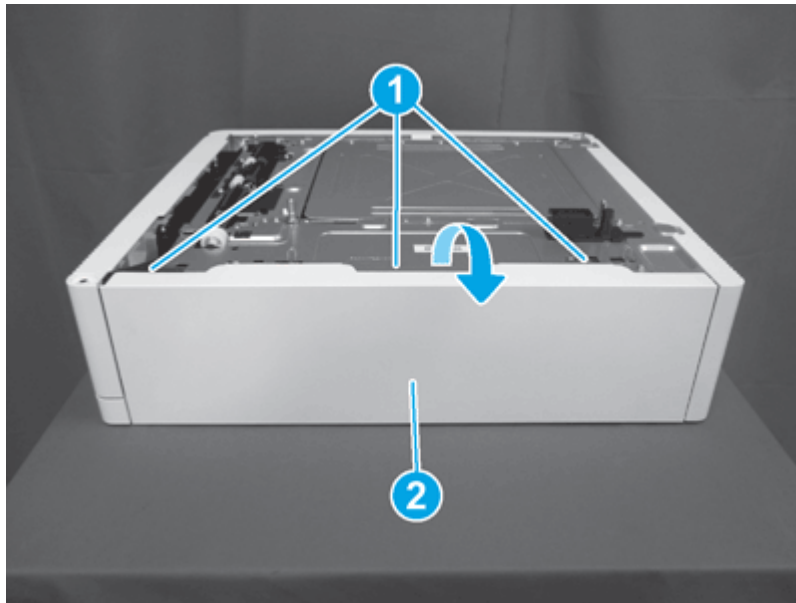
Send a print job from the host computer to the 550-sheet paper feeder. Verify that a page prints.

1. Remove the rear cover (550-sheet paper feeder)

Follow these steps to remove the rear cover (550-sheet paper feeder).

- Release three tabs (callout 1), and then rotate the top of the rear cover (callout 2) out and away from the paper feeder to remove it.

Figure 5-1857 Remove the rear cover



2. Remove the right door link (550-sheet paper feeder)

Follow these steps to remove the right door link (550-sheet paper feeder).

1. Open the right door.

2. Slightly flex the slot in the lower edge of the right door (callout 1) and release the end of the link (callout 2) from the door.


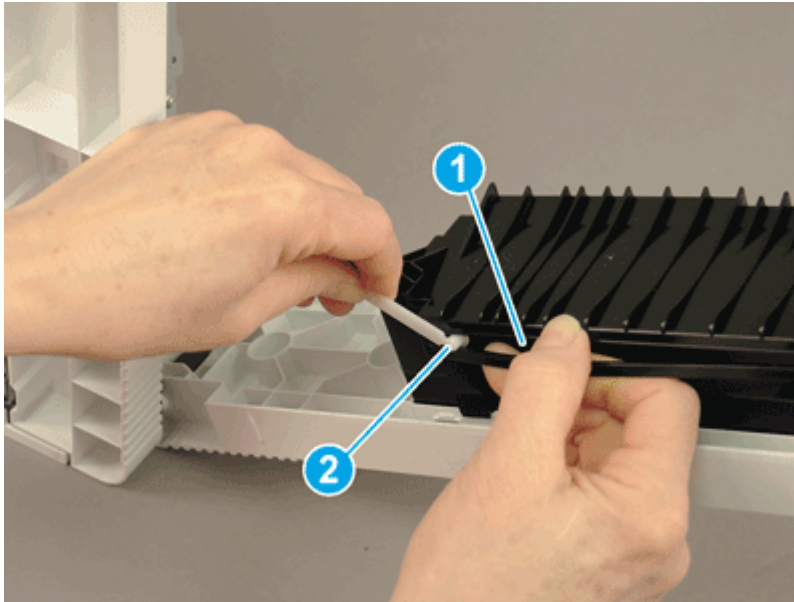
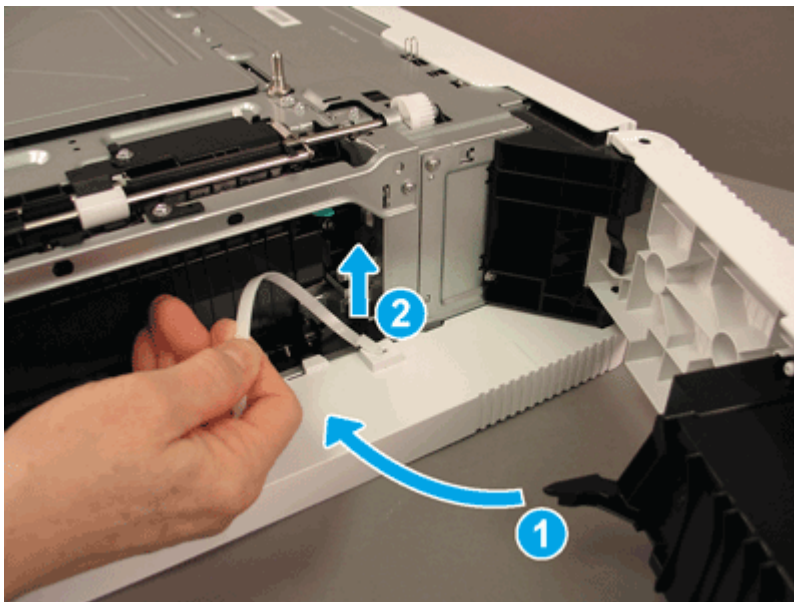
 **TIP:** Position the paper feeder with the back side facing down on a flat surface to allow easier access to the lower edge of the door.

Figure 5-1858 Release the link from the door



3. Rotate the link so that the tab on the link (callout 1) aligns with the opening in the paper feeder. Lift the link up (callout 2) to remove it.

Figure 5-1859 Remove the link

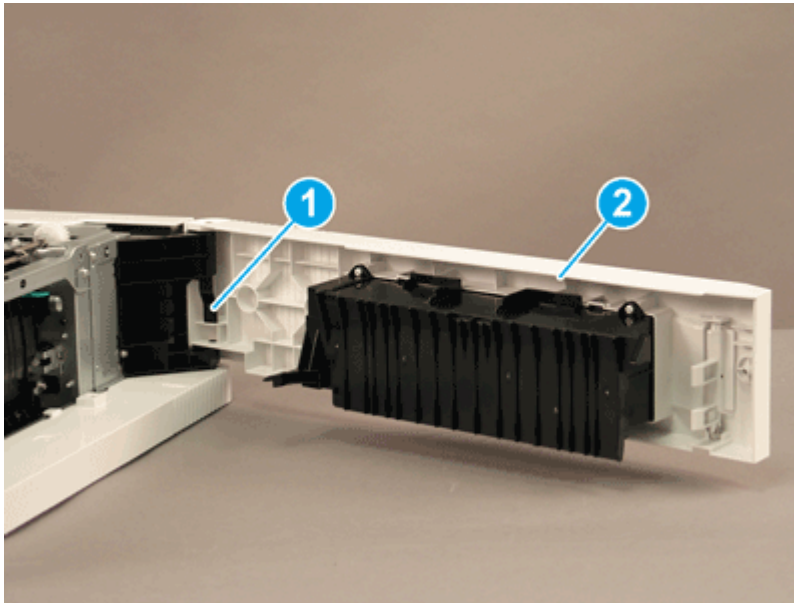


3. Remove the right door (550-sheet paper feeder)

Follow these steps to remove the right door (550-sheet paper feeder).

- Release one tab (callout 1), and then slide the right door (callout 2) up to remove it

Figure 5-1860 Release one tab and remove the right door

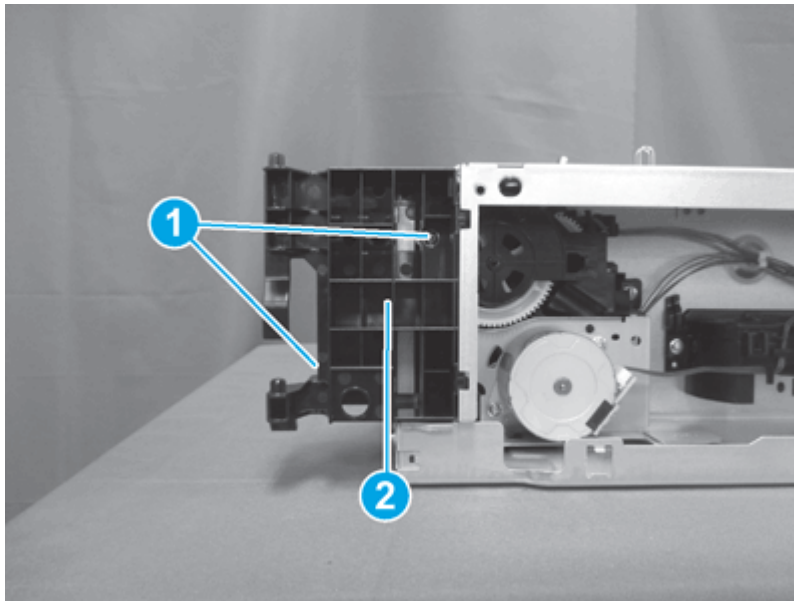


4. Remove the drive assembly

Follow these steps to remove the drive assembly.

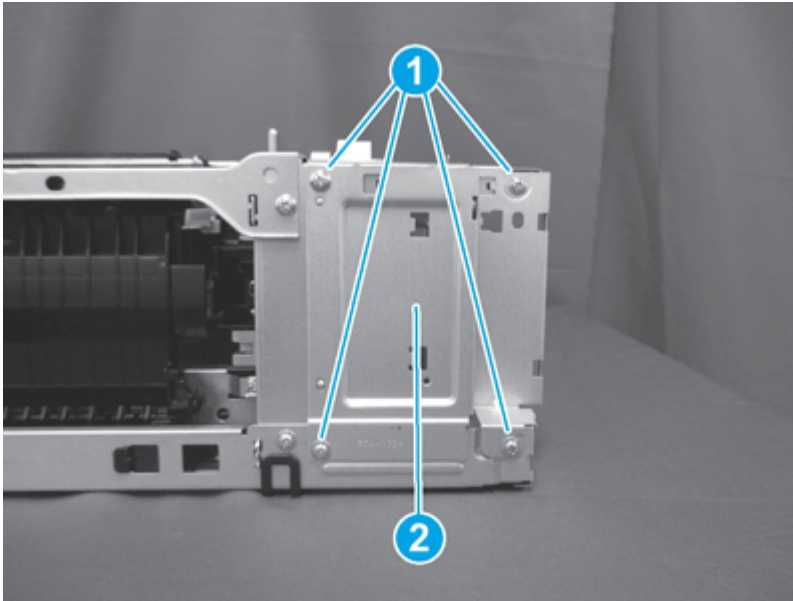
1. Remove two screws (callout 1), and then remove the hinge (callout 2).

Figure 5-1861 Remove two screws and the hinge



2. Remove four screws (callout 1), and then remove the plate (callout 2).

Figure 5-1862 Remove four screws and the plate



3. Disconnect one connector (callout 1), remove two screws (callout 2), and then remove the drive assembly (callout 3).


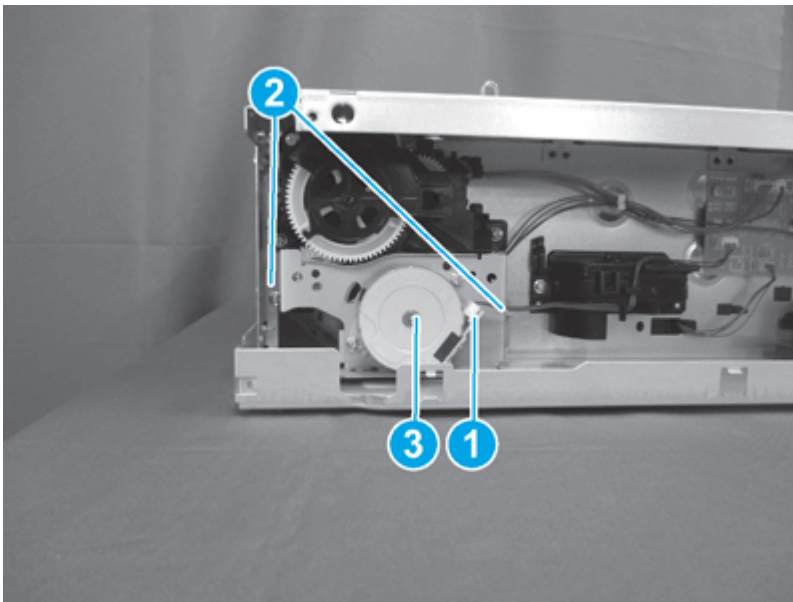
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1863 Remove two screws and the drive assembly



5. Remove the lifter drive assembly

Follow these steps to remove the lifter drive assembly.

1. Open the latch to disconnect one flat cable (callout 1), and then disconnect one connector (callout 2). Remove the flat cable (callout 3) from the cable guides (callout 4).


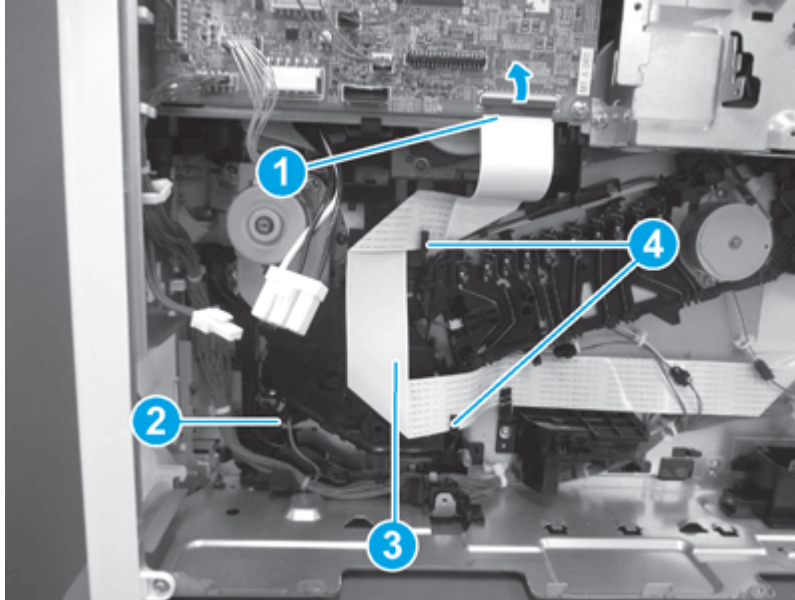
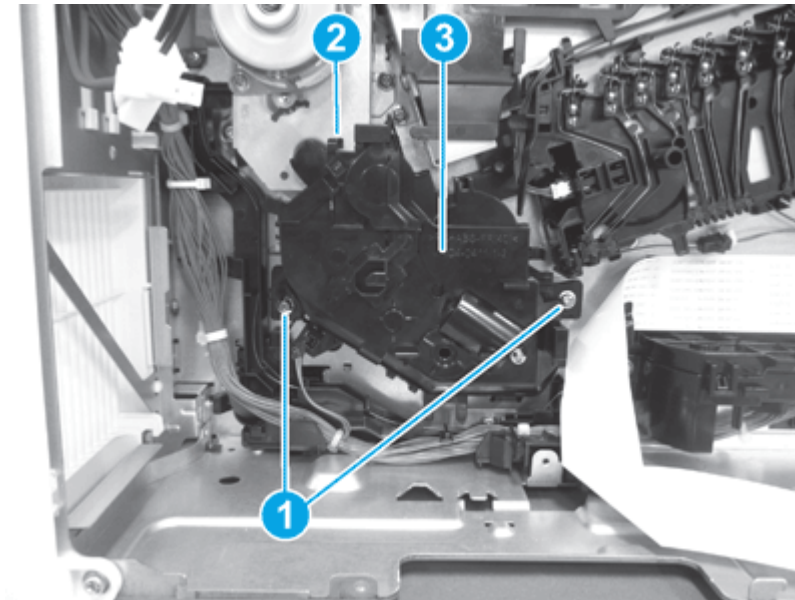
 **TIP:** When reinstalling the flat cable, open the latch, install the flat cable, and then close the latch to secure the cable.

Figure 5-1864 Disconnect two connectors



2. Remove two screws (callout 1), release one tab (callout 2), and then remove the lifter drive assembly (callout 3).


Figure 5-1865 Remove the lifter drive assembly



6. Unpack the replacement assembly



Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.


 **NOTE:** HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>


2. Unpack the replacement part from the packaging.

 **CAUTION:**  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

 **IMPORTANT:** Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

 **NOTE:** If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.


 **NOTE:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Paper feed assembly (550-sheet paper feeder)


Learn how to remove and replace the paper feed assembly in the 550-sheet paper feeder.

Mean time to repair: 20 minutes

Service level: Advanced

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.
-  **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.
-
- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-97 Part information

Part number	Part description
RM2-5145-000CN	Paper feed assembly

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

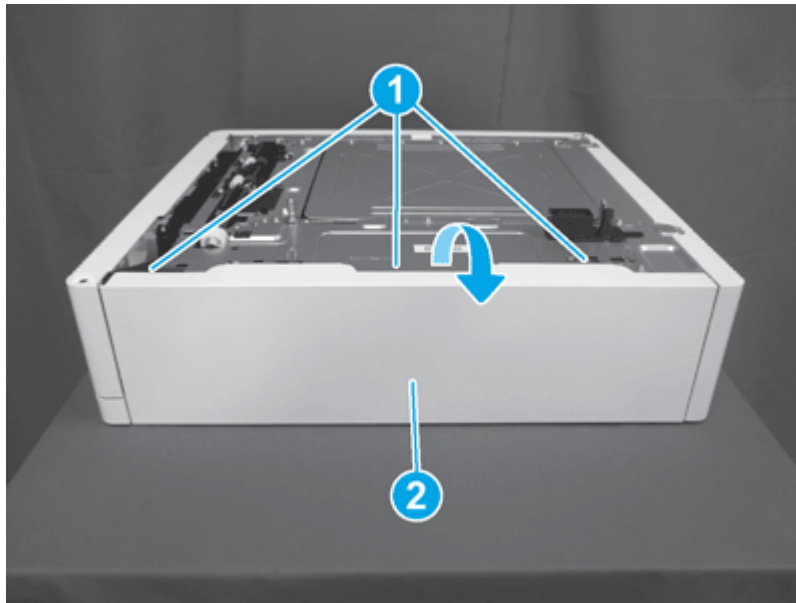
Send a print job from the host computer to the 550-sheet paper feeder. Verify that a page prints.

1. Remove the rear cover (550-sheet paper feeder)

Follow these steps to remove the rear cover (550-sheet paper feeder).

- Release three tabs (callout 1), and then rotate the top of the rear cover (callout 2) out and away from the paper feeder to remove it.

Figure 5-1866 Remove the rear cover



2. Remove the right door link (550-sheet paper feeder)

Follow these steps to remove the right door link (550-sheet paper feeder).

1. Open the right door.

2. Slightly flex the slot in the lower edge of the right door (callout 1) and release the end of the link (callout 2) from the door.


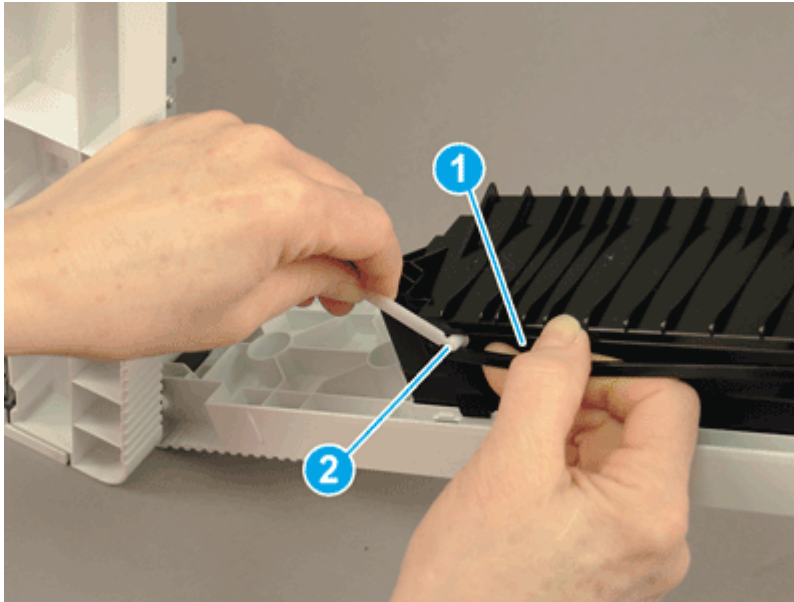
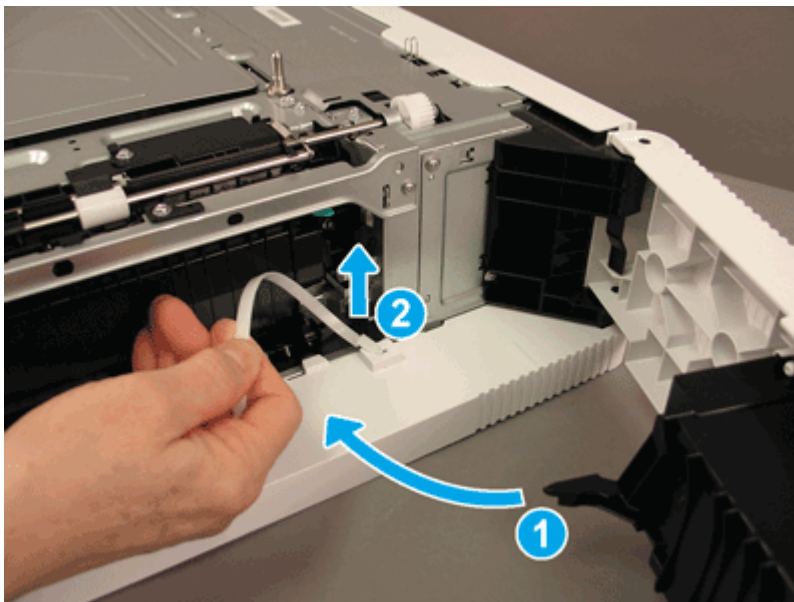
 **TIP:** Position the paper feeder with the back side facing down on a flat surface to allow easier access to the lower edge of the door.

Figure 5-1867 Release the link from the door



3. Rotate the link so that the tab on the link (callout 1) aligns with the opening in the paper feeder. Lift the link up (callout 2) to remove it.

Figure 5-1868 Remove the link

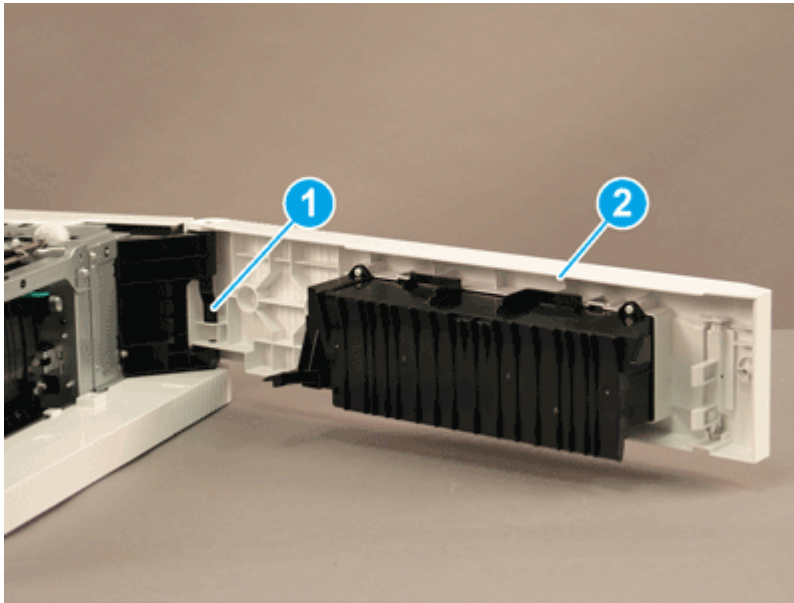


3. Remove the right door (550-sheet paper feeder)

Follow these steps to remove the right door (550-sheet paper feeder).

- Release one tab (callout 1), and then slide the right door (callout 2) up to remove it

Figure 5-1869 Release one tab and remove the right door

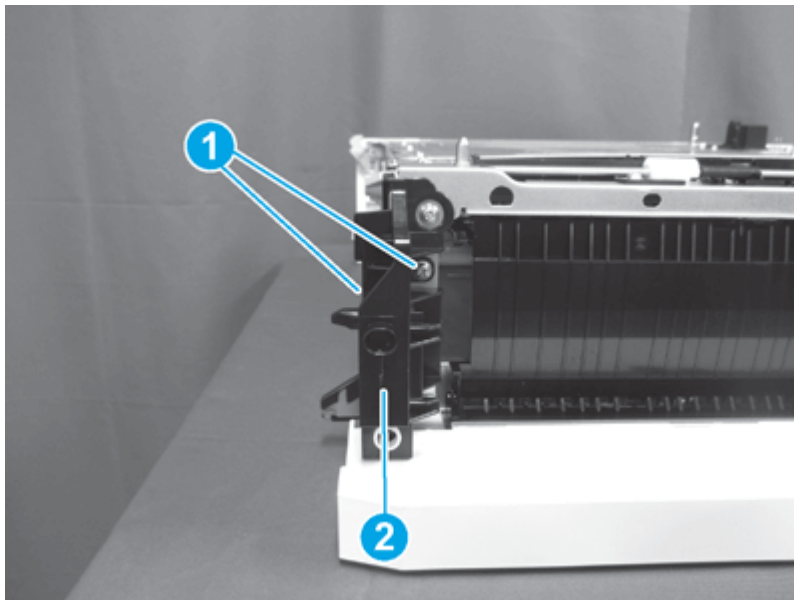


4. Remove the right lower cover

Follow these steps to remove the right lower cover.

1. Remove the 550-sheet paper feeder tray.
2. Remove two screws (callout 1), and then remove the front inner cover (callout 2).

Figure 5-1870 Remove two screws and the front inner cover



3. Release one tab (callout 1), and then slide the right lower cover (callout 2) toward the front of the paper feeder to remove it.


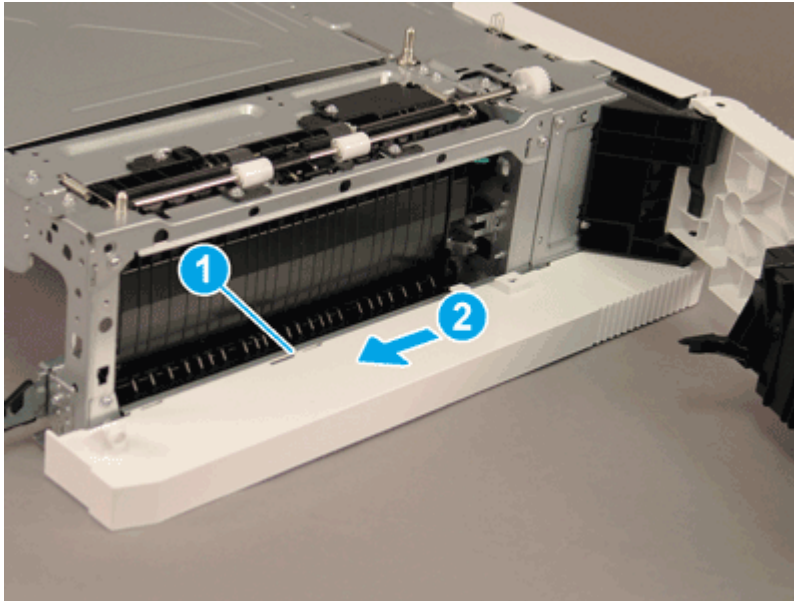
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1871 Remove the right lower cover



5. Remove the lifter drive assembly

Follow these steps to remove the lifter drive assembly.

1. Open the latch to disconnect one flat cable (callout 1), and then disconnect one connector (callout 2). Remove the flat cable (callout 3) from the cable guides (callout 4).


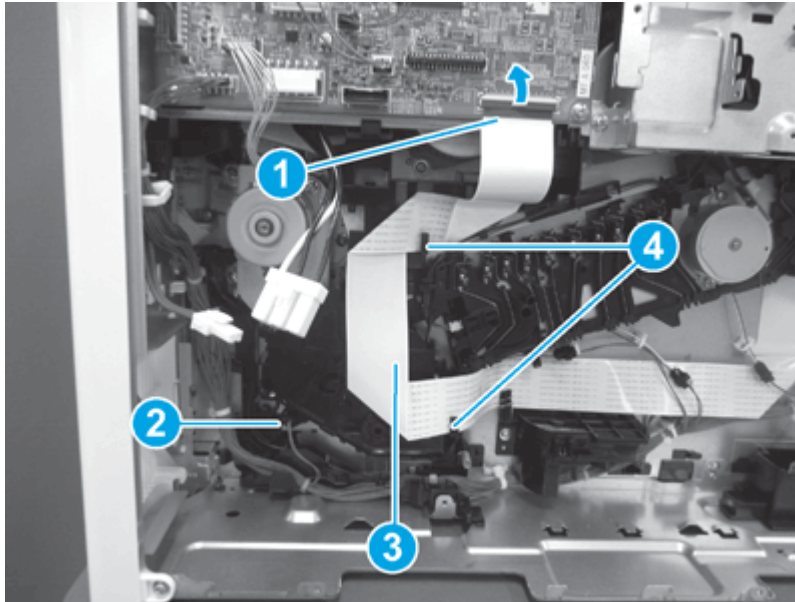
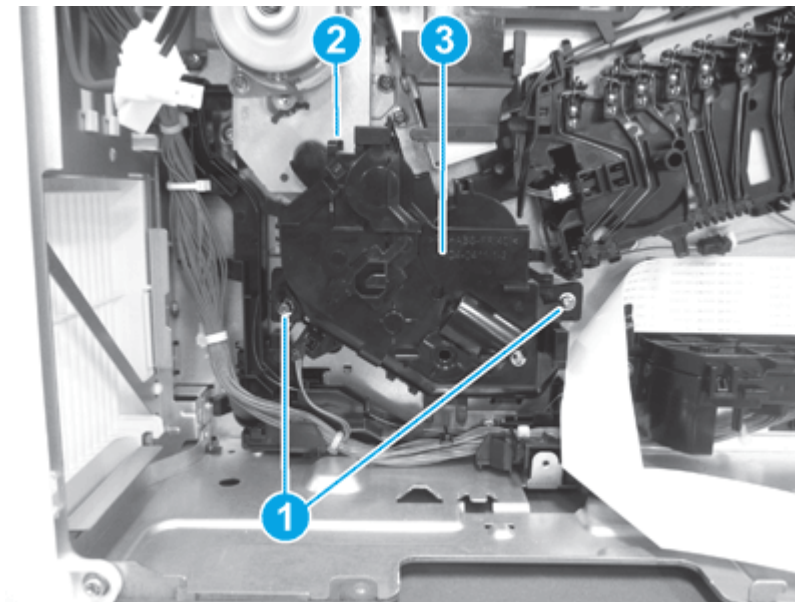
 **TIP:** When reinstalling the flat cable, open the latch, install the flat cable, and then close the latch to secure the cable.

Figure 5-1872 Disconnect two connectors



2. Remove two screws (callout 1), release one tab (callout 2), and then remove the lifter drive assembly (callout 3).

Figure 5-1873 Remove the lifter drive assembly

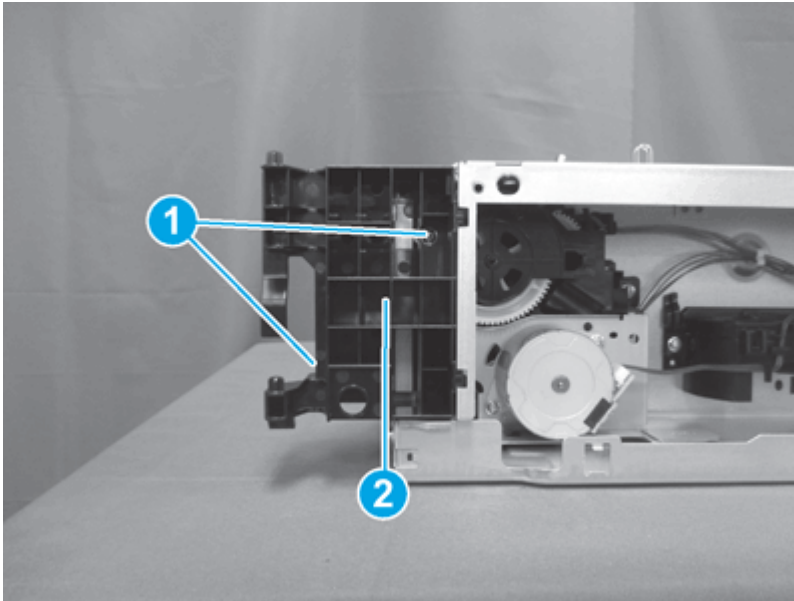


6. Remove the drive assembly

Follow these steps to remove the drive assembly.

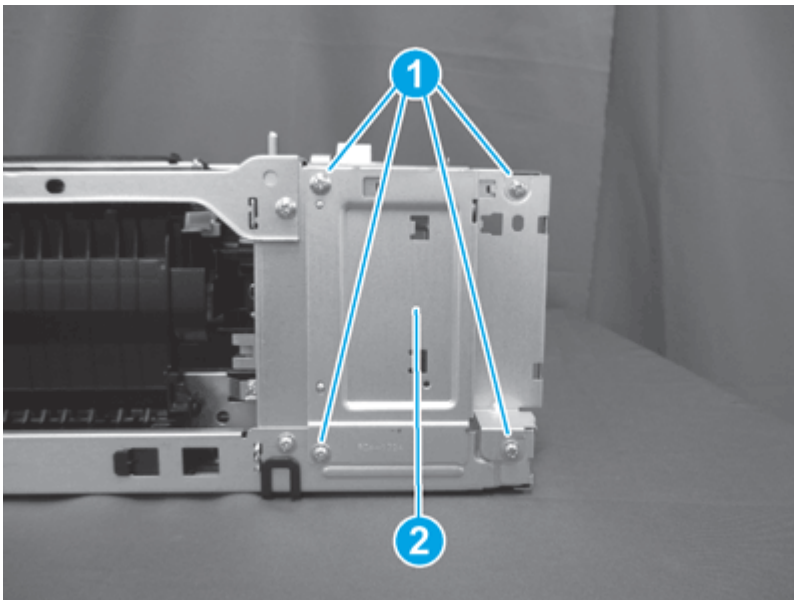
1. Remove two screws (callout 1), and then remove the hinge (callout 2).

Figure 5-1874 Remove two screws and the hinge



2. Remove four screws (callout 1), and then remove the plate (callout 2).

Figure 5-1875 Remove four screws and the plate



3. Disconnect one connector (callout 1), remove two screws (callout 2), and then remove the drive assembly (callout 3).


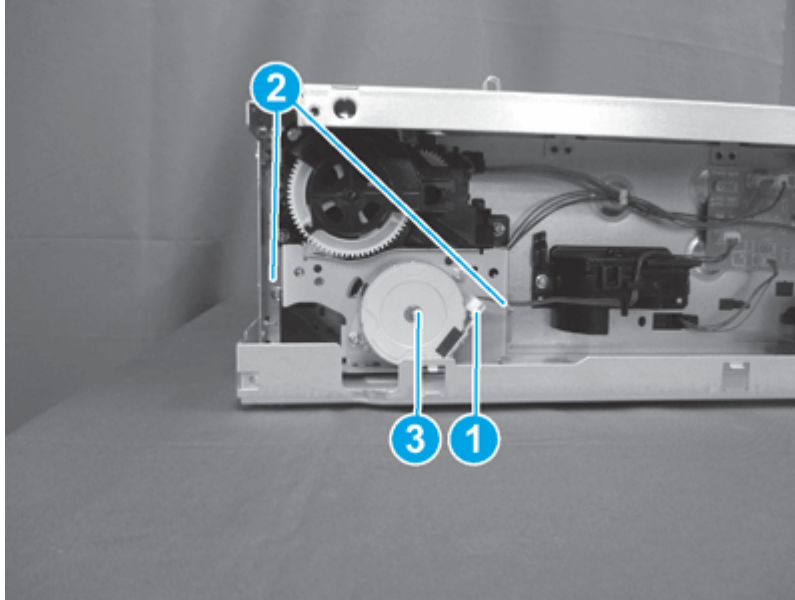
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1876 Remove two screws and the drive assembly

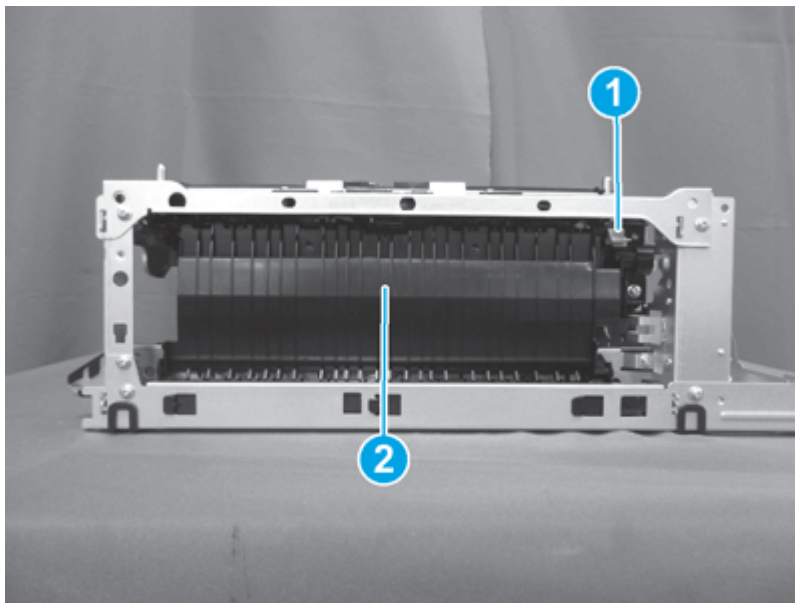


7. Remove the paper feed assembly

Follow these steps to remove the paper feed assembly.

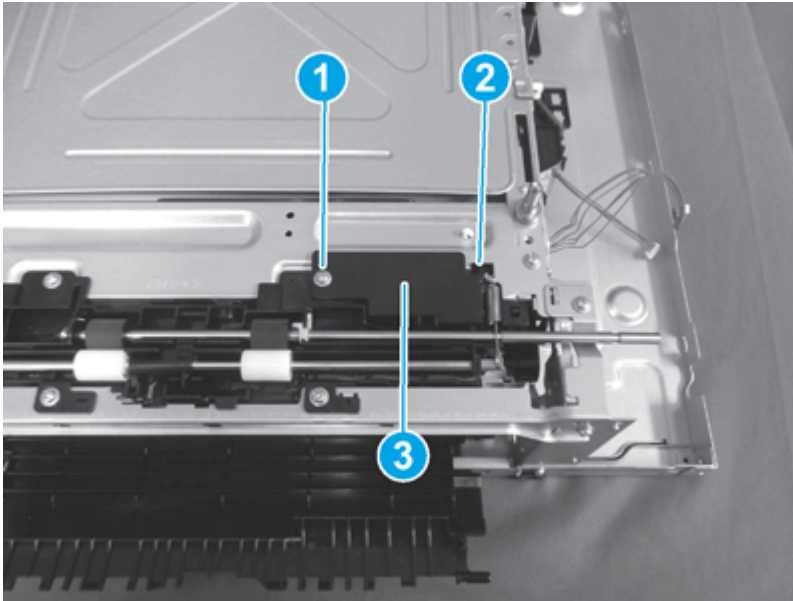
1. Pull the jam removal lever (callout 1), and then open the feed guide (callout 2).

Figure 5-1877 Open the feed guide



2. Remove one screw (callout 1), release one tab (callout 2), and then remove the connector cover (callout 3).

Figure 5-1878 Remove one screw and the connector cover



3. Disconnect one connector (callout 1), and then unhook two springs (callout 2). Remove three screws (callout 3), and then remove the paper feed assembly (callout 4).


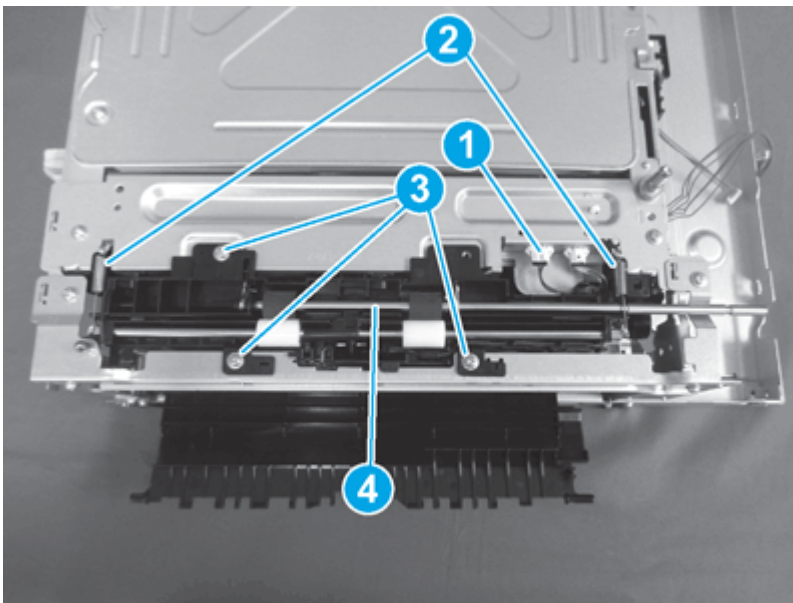
 **TIP:** Reverse the removal steps to install the assembly.


Figure 5-1879 Remove the paper feed assembly



8. Unpack the replacement assembly



Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.


 **NOTE:** HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>


2. Unpack the replacement part from the packaging.

 **CAUTION:**  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

 **IMPORTANT:** Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

 **NOTE:** If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.


 **NOTE:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

9. Removal and replacement: Paper pickup assembly (550-sheet paper feeder)

Learn how to remove and replace the paper pickup assembly in the 550-sheet paper feeder.


Mean time to repair: 20 minutes

Service level: Advanced

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.

 **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.

- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-98 Part information

Part number	Part description
RM2-5154-000CN	Paper pickup assembly

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

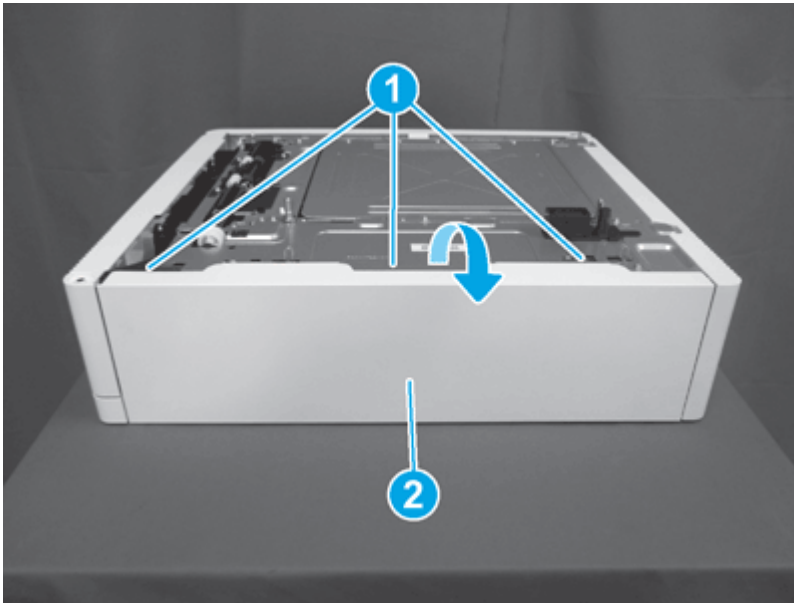
Send a print job from the host computer to the 550-sheet paper feeder. Verify that a page prints.

1. Remove the rear cover (550-sheet paper feeder)

Follow these steps to remove the rear cover (550-sheet paper feeder).

- Release three tabs (callout 1), and then rotate the top of the rear cover (callout 2) out and away from the paper feeder to remove it.

Figure 5-1880 Remove the rear cover



2. Remove the right door link (550-sheet paper feeder)

Follow these steps to remove the right door link (550-sheet paper feeder).

1. Open the right door.

2. Slightly flex the slot in the lower edge of the right door (callout 1) and release the end of the link (callout 2) from the door.


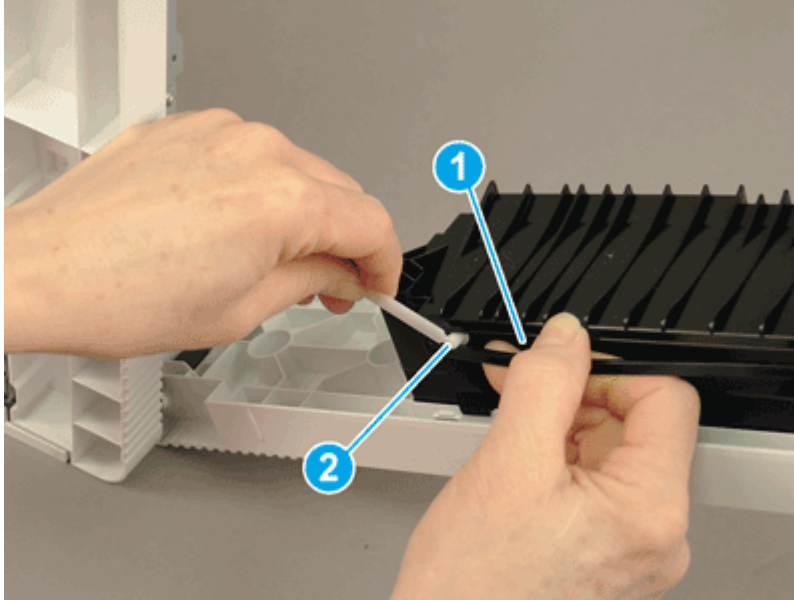
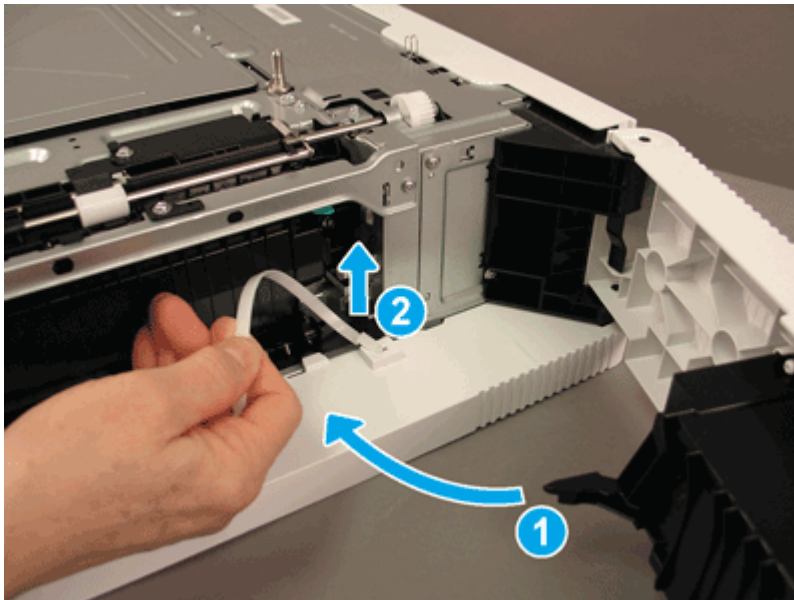
 **TIP:** Position the paper feeder with the back side facing down on a flat surface to allow easier access to the lower edge of the door.

Figure 5-1881 Release the link from the door



3. Rotate the link so that the tab on the link (callout 1) aligns with the opening in the paper feeder. Lift the link up (callout 2) to remove it.

Figure 5-1882 Remove the link

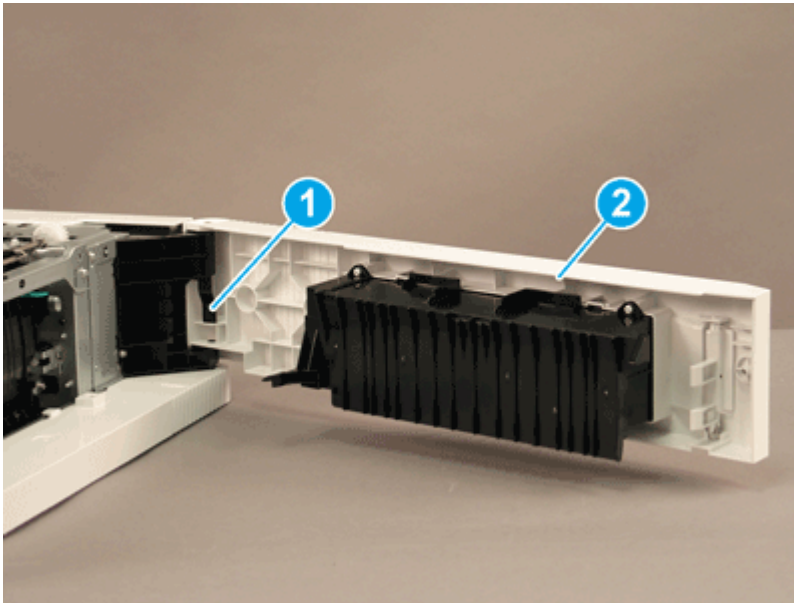


3. Remove the right door (550-sheet paper feeder)

Follow these steps to remove the right door (550-sheet paper feeder).

- Release one tab (callout 1), and then slide the right door (callout 2) up to remove it

Figure 5-1883 Release one tab and remove the right door

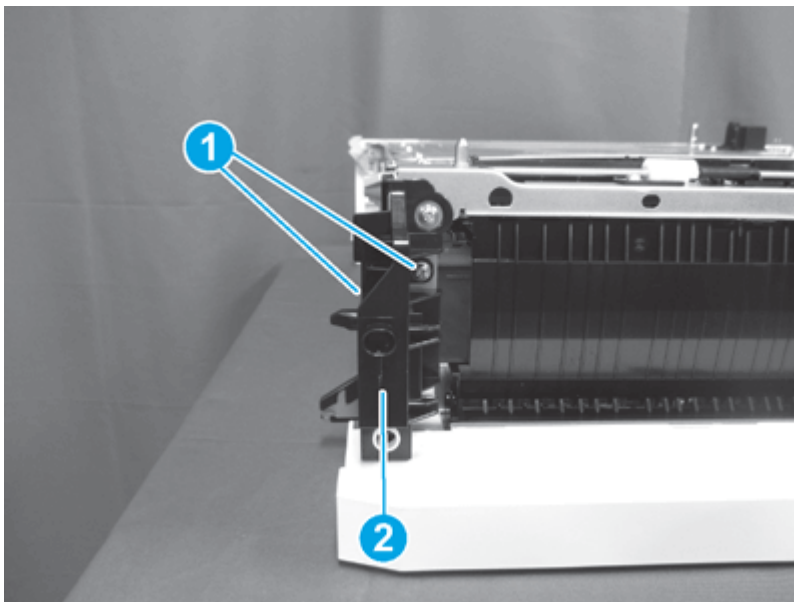


4. Remove the right lower cover

Follow these steps to remove the right lower cover.

1. Remove the 550-sheet paper feeder tray.
2. Remove two screws (callout 1), and then remove the front inner cover (callout 2).

Figure 5-1884 Remove two screws and the front inner cover



3. Release one tab (callout 1), and then slide the right lower cover (callout 2) toward the front of the paper feeder to remove it.


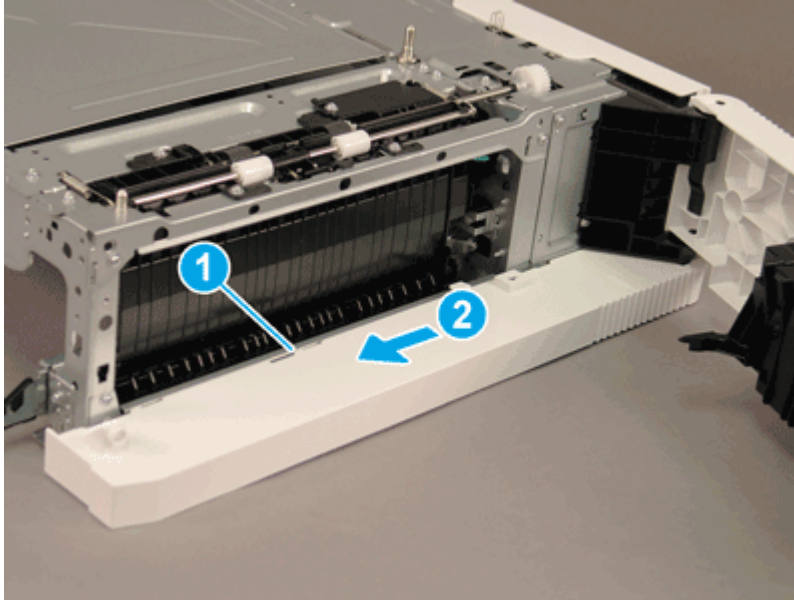
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1885 Remove the right lower cover

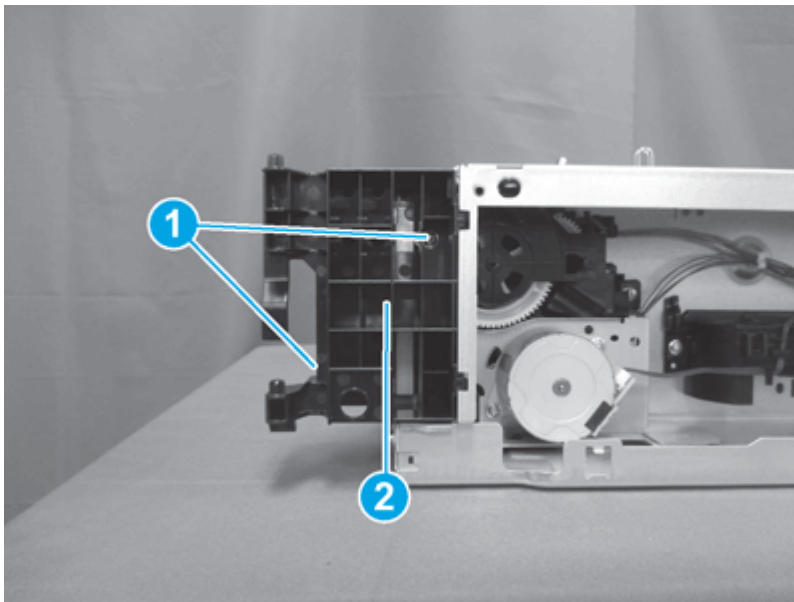


5. Remove the drive assembly

Follow these steps to remove the drive assembly.

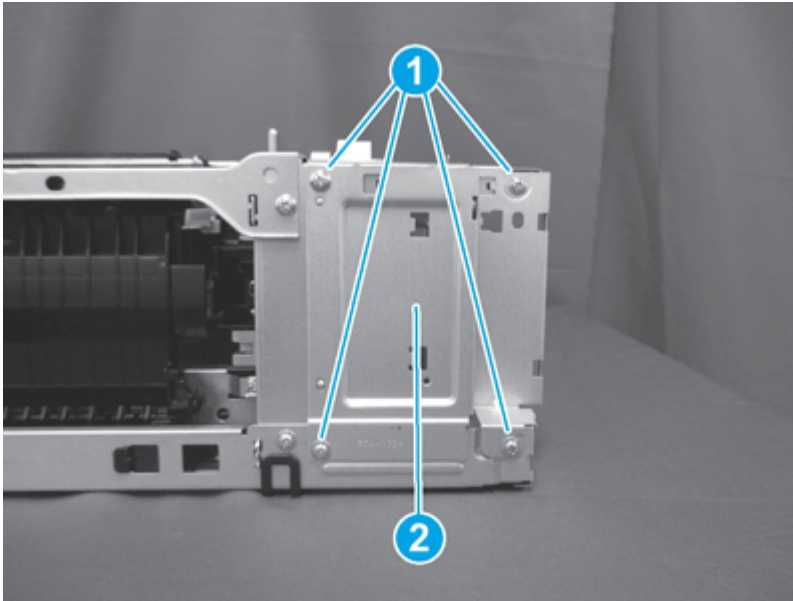
1. Remove two screws (callout 1), and then remove the hinge (callout 2).

Figure 5-1886 Remove two screws and the hinge



2. Remove four screws (callout 1), and then remove the plate (callout 2).

Figure 5-1887 Remove four screws and the plate



3. Disconnect one connector (callout 1), remove two screws (callout 2), and then remove the drive assembly (callout 3).


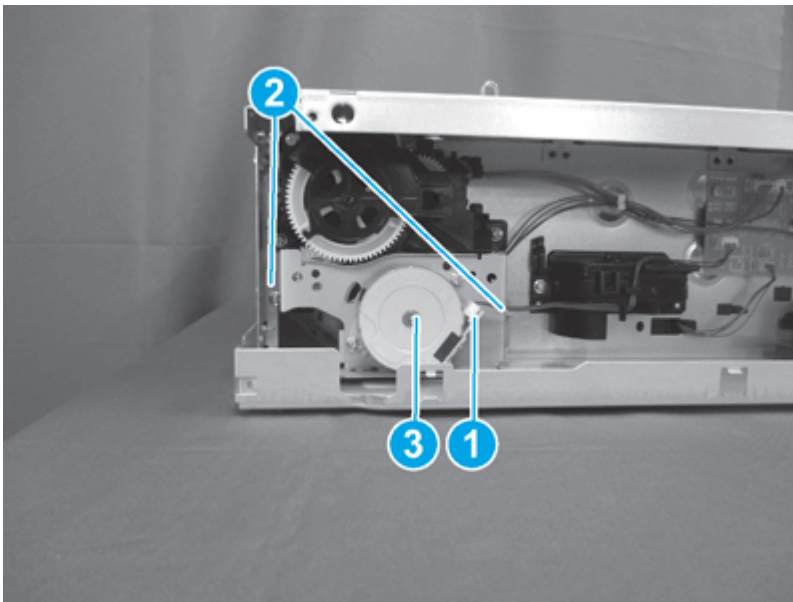
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1888 Remove two screws and the drive assembly



6. Remove the lifter drive assembly

Follow these steps to remove the lifter drive assembly.

1. Open the latch to disconnect one flat cable (callout 1), and then disconnect one connector (callout 2). Remove the flat cable (callout 3) from the cable guides (callout 4).


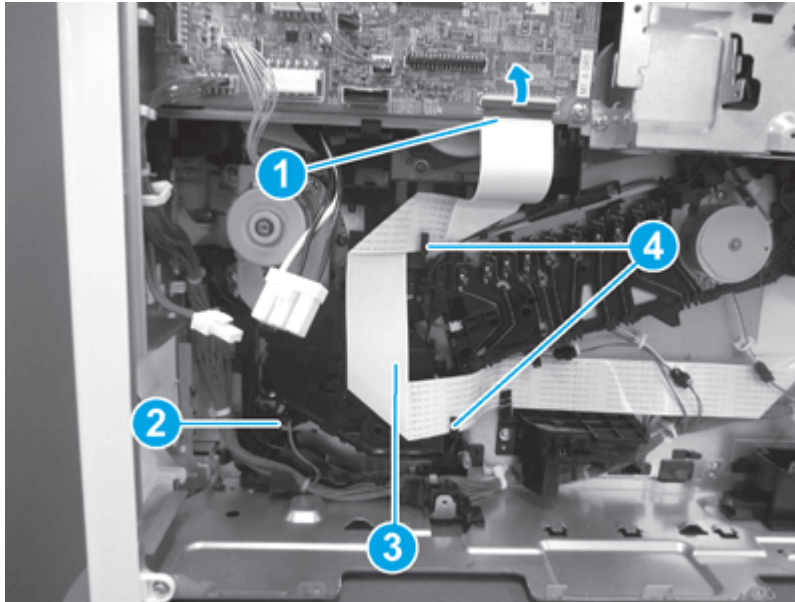
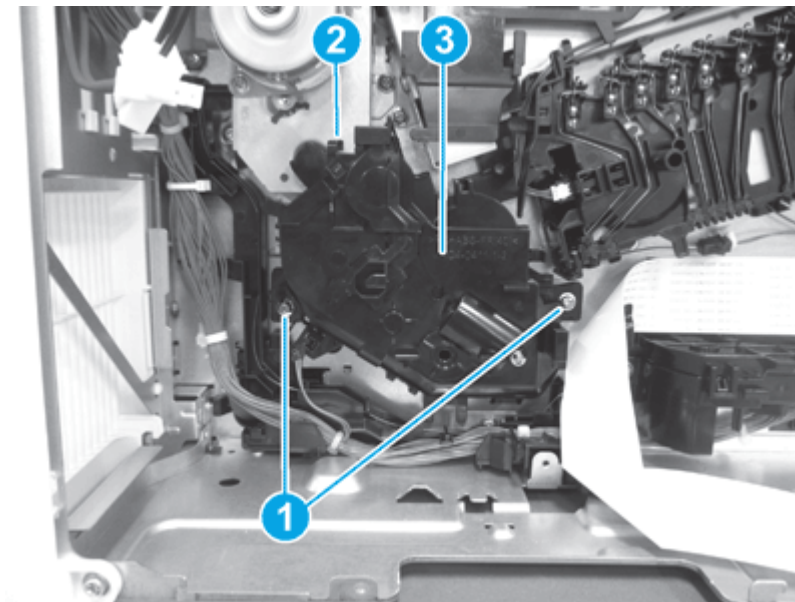
 **TIP:** When reinstalling the flat cable, open the latch, install the flat cable, and then close the latch to secure the cable.

Figure 5-1889 Disconnect two connectors



2. Remove two screws (callout 1), release one tab (callout 2), and then remove the lifter drive assembly (callout 3).

Figure 5-1890 Remove the lifter drive assembly

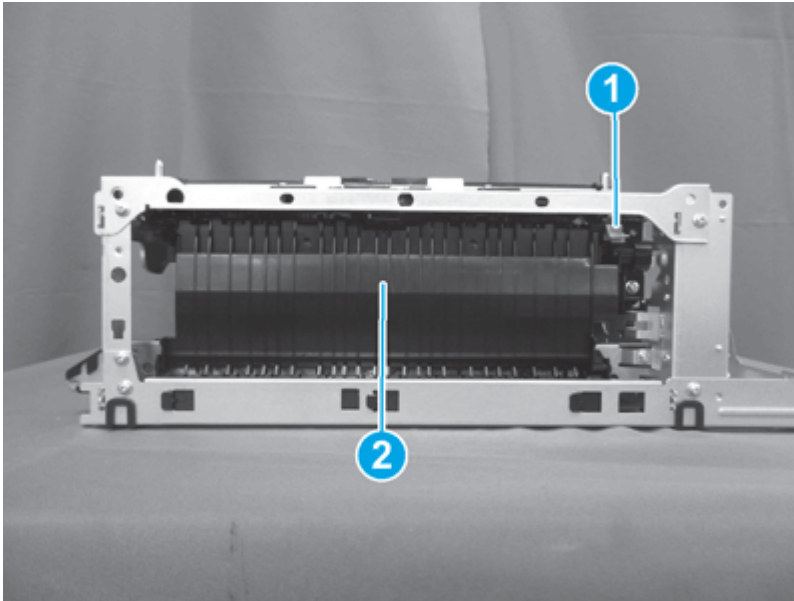


7. Remove the paper feed assembly

Follow these steps to remove the paper feed assembly.

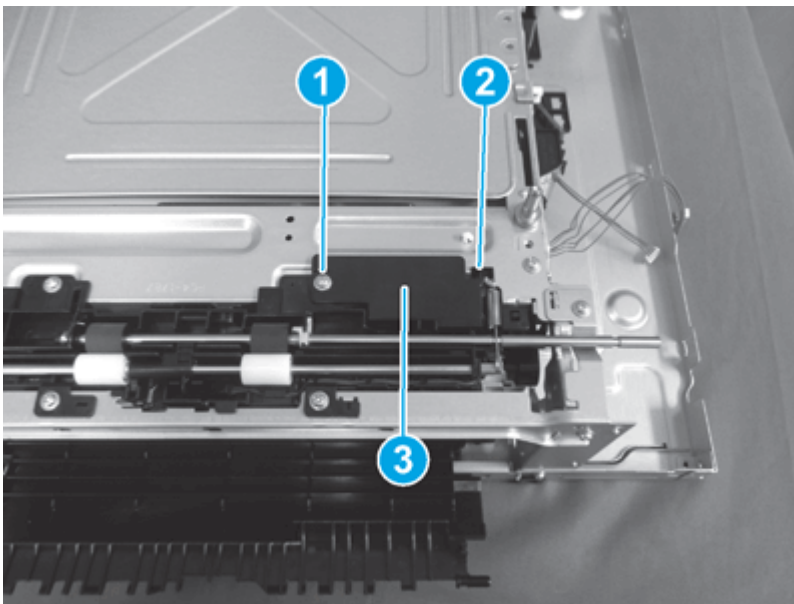
1. Pull the jam removal lever (callout 1), and then open the feed guide (callout 2).

Figure 5-1891 Open the feed guide



2. Remove one screw (callout 1), release one tab (callout 2), and then remove the connector cover (callout 3).

Figure 5-1892 Remove one screw and the connector cover



3. Disconnect one connector (callout 1), and then unhook two springs (callout 2). Remove three screws (callout 3), and then remove the paper feed assembly (callout 4).


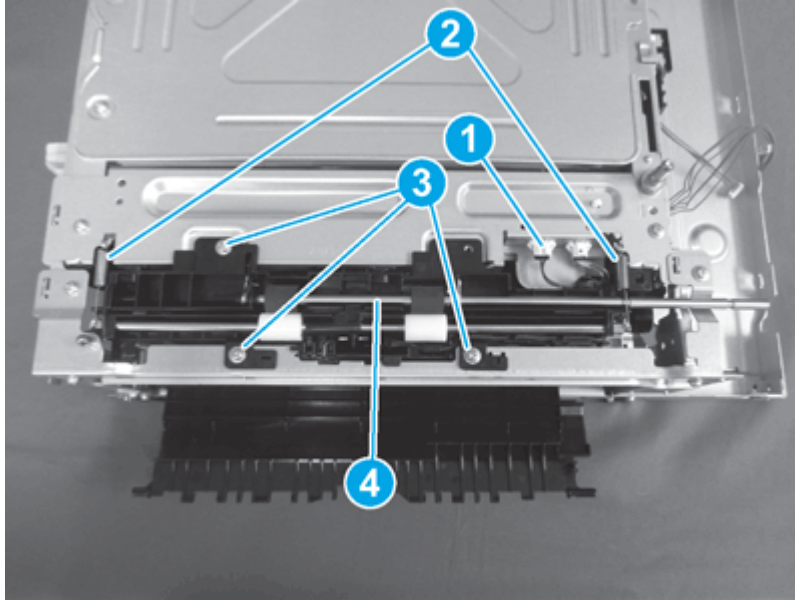
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1893 Remove the paper feed assembly

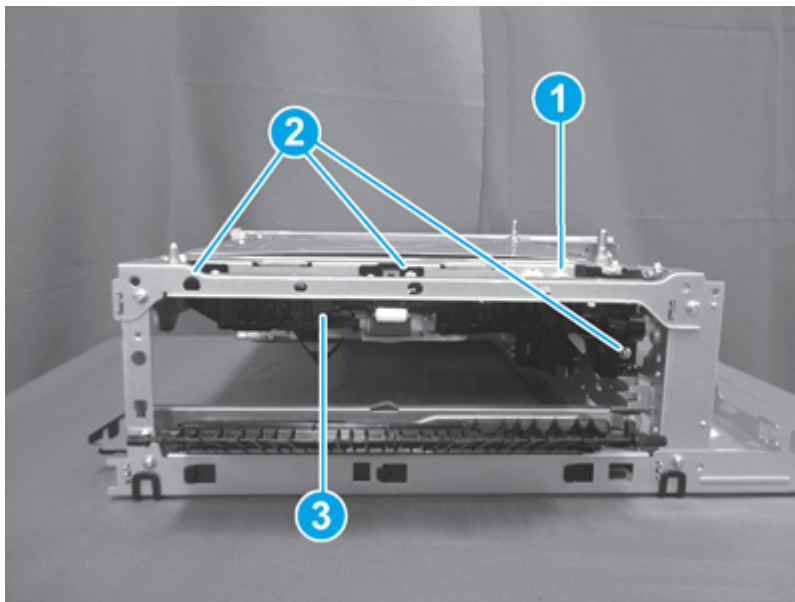


8. Remove the paper pickup assembly

Follow these steps to remove the paper pickup assembly.

1. Disconnect one connector (callout 1), remove three screws (callout 2), and then remove the paper pickup assembly (callout 3).

Figure 5-1894 Remove the paper pickup assembly

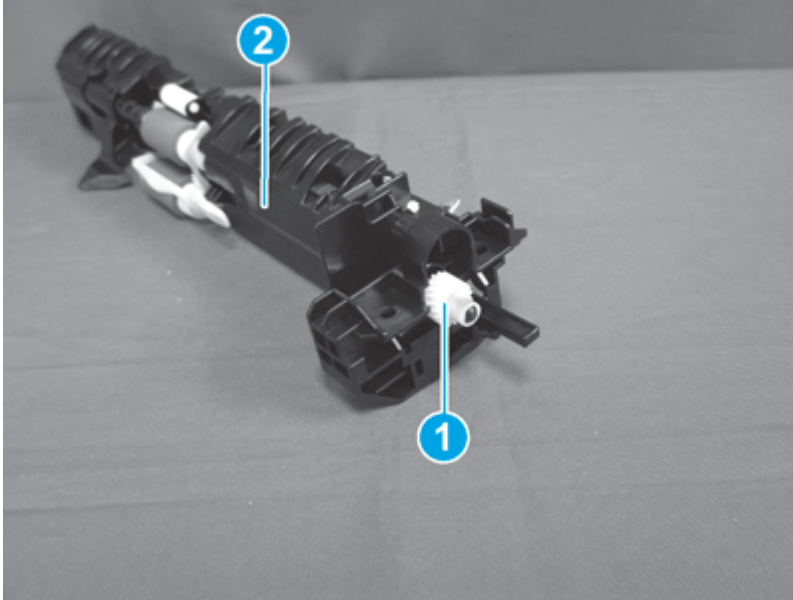


2. Remove the gear (callout 1) from the paper pickup assembly (callout 2).

 **TIP:** Install the gear on the replacement paper pickup assembly.

Reverse the removal steps to install the assembly.

Figure 5-1895 Remove the gear



9. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.




NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Paper pickup assembly (550-sheet paper feeder)

Learn how to remove and replace the paper pickup assembly in the 550-sheet paper feeder.


Mean time to repair: 20 minutes

Service level: Advanced

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.

 **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.

- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-99 Part information

Part number	Part description
RM2-5154-000CN	Paper pickup assembly

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test


Send a print job from the host computer to the 550-sheet paper feeder. Verify that a page prints.

Removal and replacement: Paper feeder controller PCA (550-sheet paper feeder)

Learn how to remove and replace the paper feeder controller PCA in the 550-sheet paper feeder.

Mean time to repair: 20 minutes

Service level: Advanced

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.

⚠ WARNING! To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.

- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-100 Part information

Part number	Part description
RM2-8491-000CN	Feeder controller PCB assembly

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

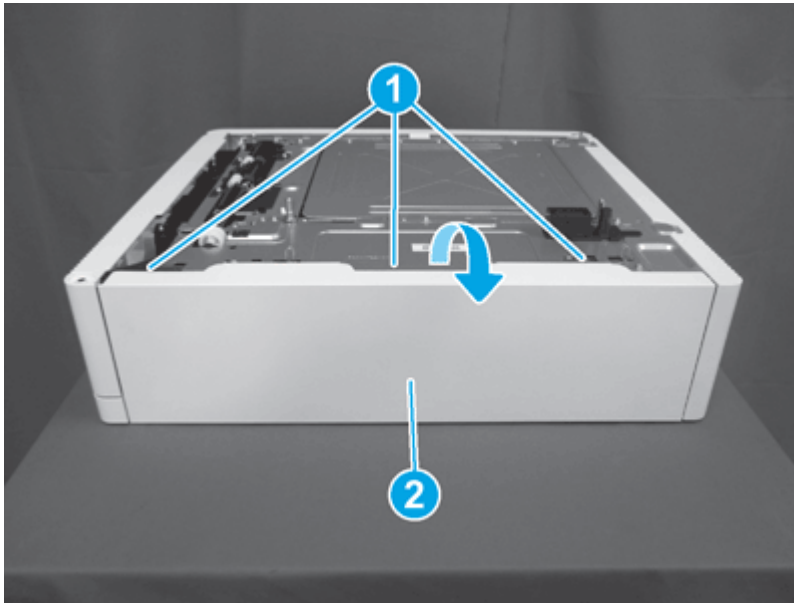
Send a print job from the host computer to the 550-sheet paper feeder. Verify that a page prints.

1. Remove the rear cover (550-sheet paper feeder)

Follow these steps to remove the rear cover (550-sheet paper feeder).

- Release three tabs (callout 1), and then rotate the top of the rear cover (callout 2) out and away from the paper feeder to remove it.

Figure 5-1896 Remove the rear cover



2. Remove the paper feeder controller PCA (550-sheet paper feeder)

Follow these steps to remove the paper feeder controller PCA (550-sheet paper feeder).

- Disconnect all of the connectors on the paper feeder controller PCA. Remove two screws (callout 1), release one tab (callout 2), and then remove the paper feeder controller PCA (callout 3).


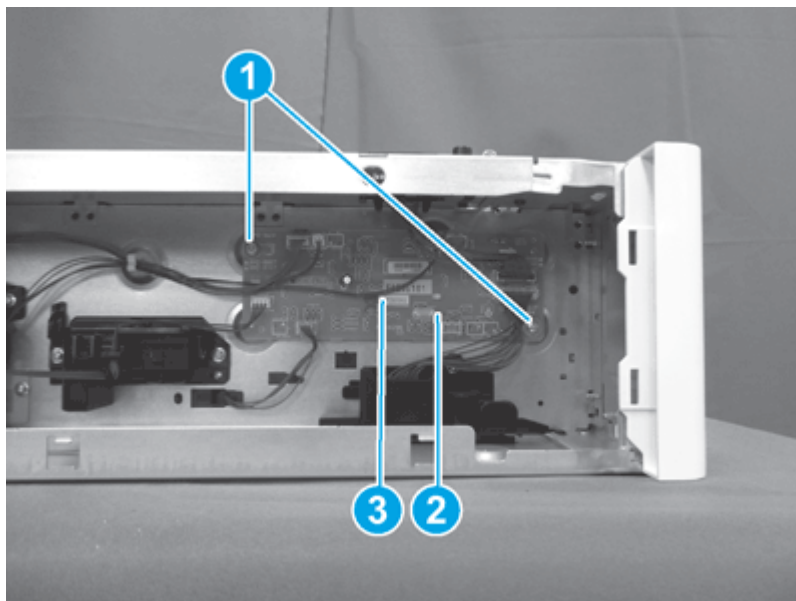
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1897 Remove the paper feeder controller PCA



3. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Size-detect switch (550-sheet paper feeder)

Learn how to remove and replace the size-detect switch on the 550-sheet paper feeder.

Mean time to repair: 20 minutes

Service level: Advanced



IMPORTANT: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.
- ⚠ **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.
- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to

www.hp.com/buy/parts

Table 5-101 Part information

Part number	Part description
WC2-5762-000CN	Switch, push

Required tools

- No special tools are needed to remove or install this assembly.

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

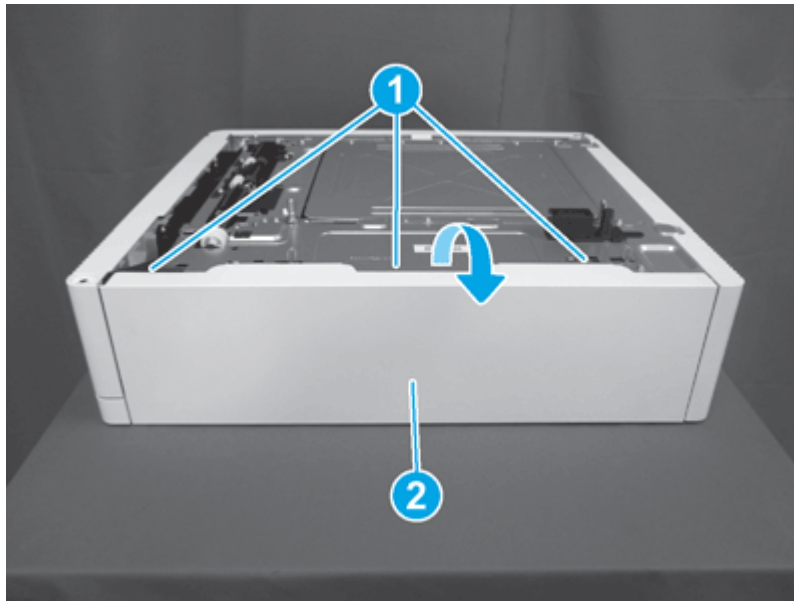
Send a print job from the host computer to the 550-sheet paper feeder. Verify that a page prints.

1. Remove the rear cover (550-sheet paper feeder)

Follow these steps to remove the rear cover (550-sheet paper feeder).

- Release three tabs (callout 1), and then rotate the top of the rear cover (callout 2) out and away from the paper feeder to remove it.

Figure 5-1898 Remove the rear cover



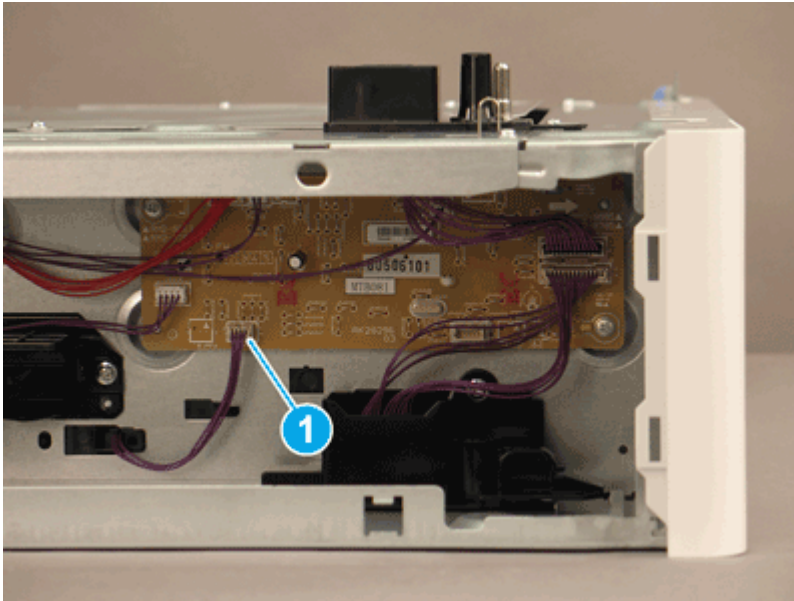
2. Remove the size-detect switch (550-sheet paper feeder)

Follow these steps to remove the size-detect switch (550-sheet paper feeder).

1. Remove the paper tray.

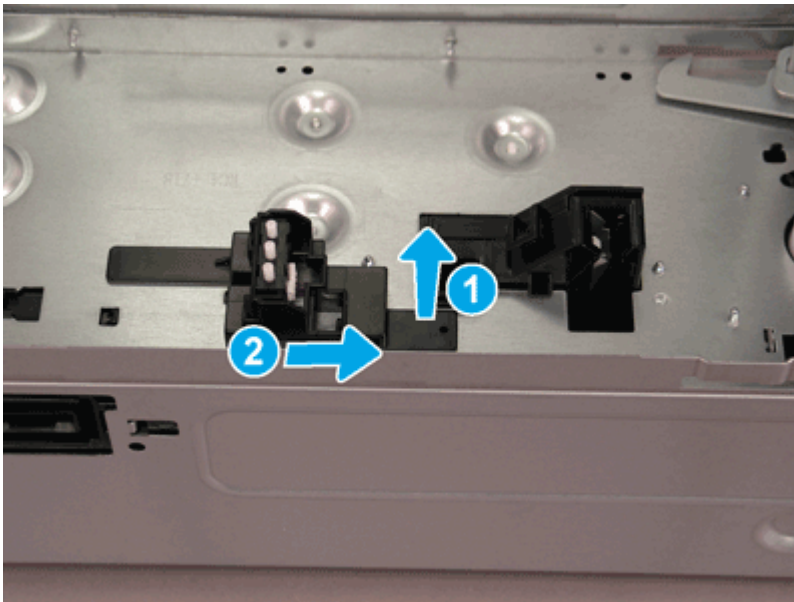
2. At the rear of the paper feeder, disconnect one connector (callout 1).

Figure 5-1899 Disconnect one connector



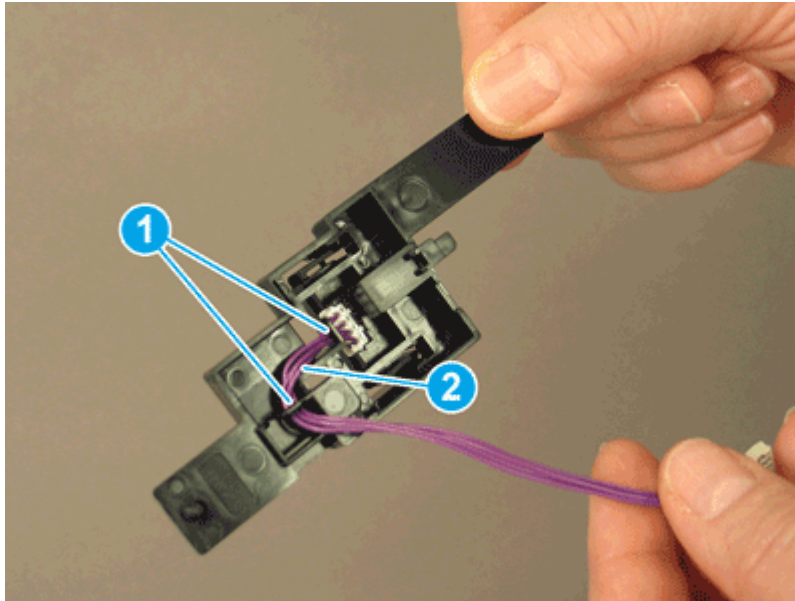
3. Inside the paper tray opening, release one tab (callout 1), and then slide the size-detect switch holder to the right to remove it.

Figure 5-1900 Remove the holder



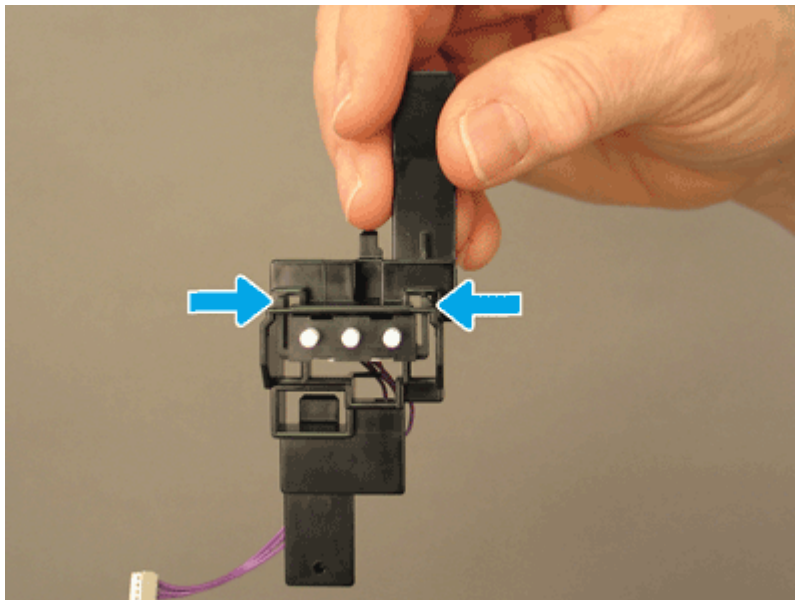
4. On the back of the holder, release the wires (callout 1) from the guides (callout 2).

Figure 5-1901 Release the wires



5. Release two tabs, and then remove the size-detect switch from the holder.

Figure 5-1902 Remove the size-detect switch



6. Disconnect one connector (callout 1).


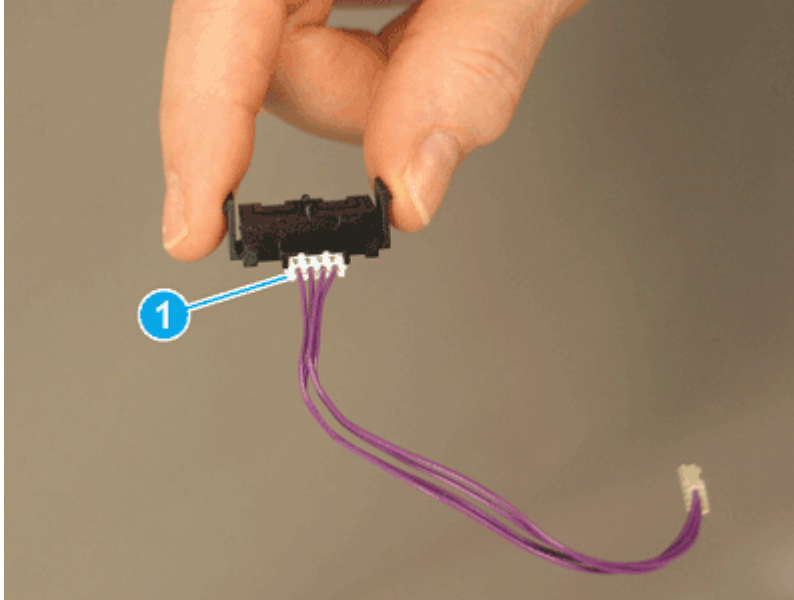
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1903 Disconnect one connector



3. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.




NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Upper drawer holder and cable assembly (550-sheet paper feeder)

Learn how to remove and replace the upper drawer holder and cable assembly on the 550-sheet paper feeder.


Mean time to repair: 20 minutes

Service level: Advanced

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.

 **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.

- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-102 Part information

Part number	Part description
RC4-7680-000CN	Holder, drawer, upper
RM2-8880-000CN	Option upper cable assembly

Required tools

- Small, flat-blade screwdriver

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

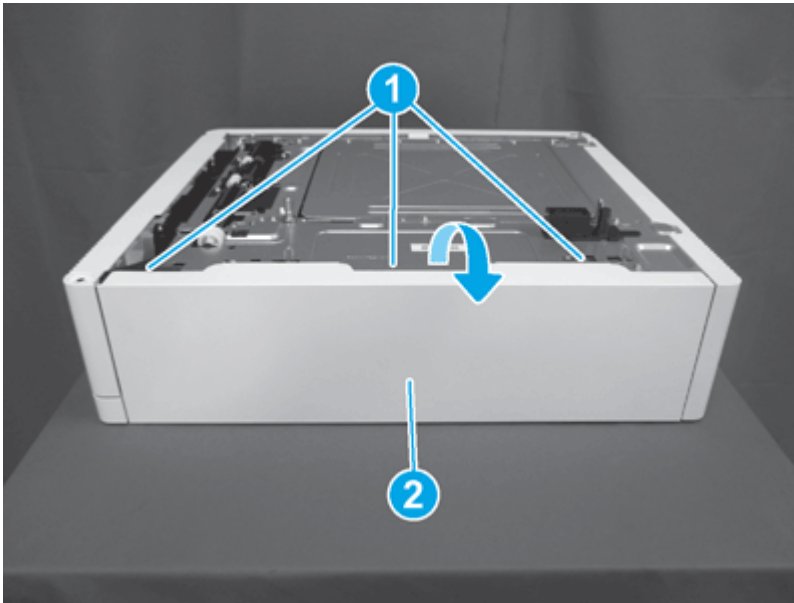
Send a print job from the host computer to the 550-sheet paper feeder. Verify that a page prints.

1. Remove the rear cover (550-sheet paper feeder)

Follow these steps to remove the rear cover (550-sheet paper feeder).

- Release three tabs (callout 1), and then rotate the top of the rear cover (callout 2) out and away from the paper feeder to remove it.

Figure 5-1904 Remove the rear cover

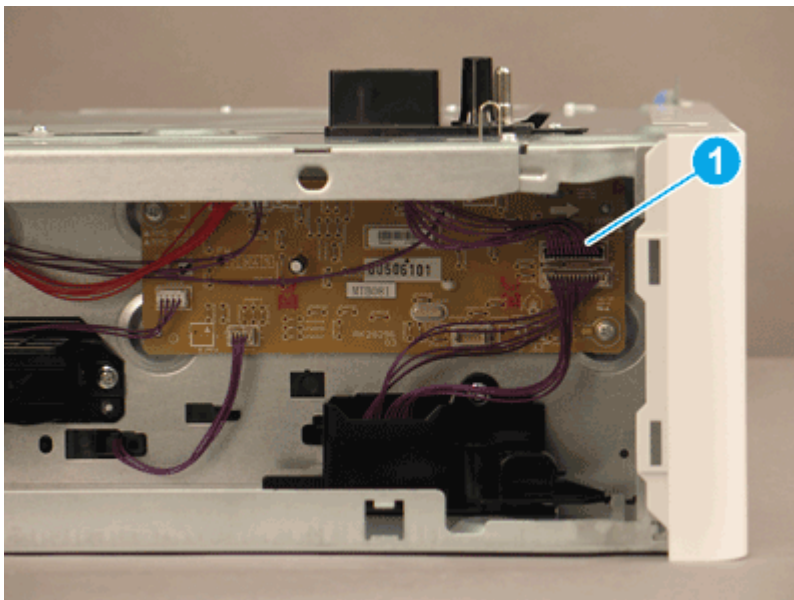


2. Remove the upper drawer holder and cable assembly (550-sheet paper feeder)

Follow these steps to remove the upper drawer holder and cable assembly (550-sheet paper feeder).

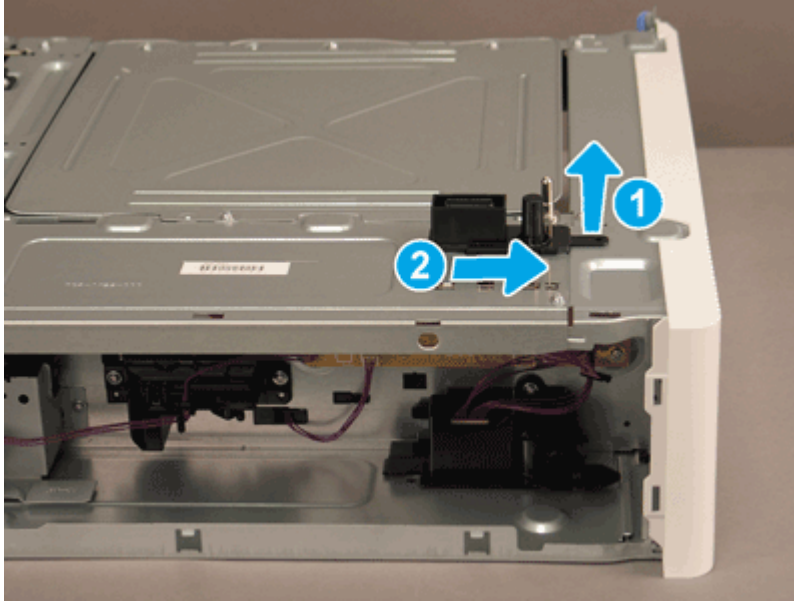
1. At the rear of the paper feeder, disconnect one connector (callout 1).

Figure 5-1905 Disconnect one connector



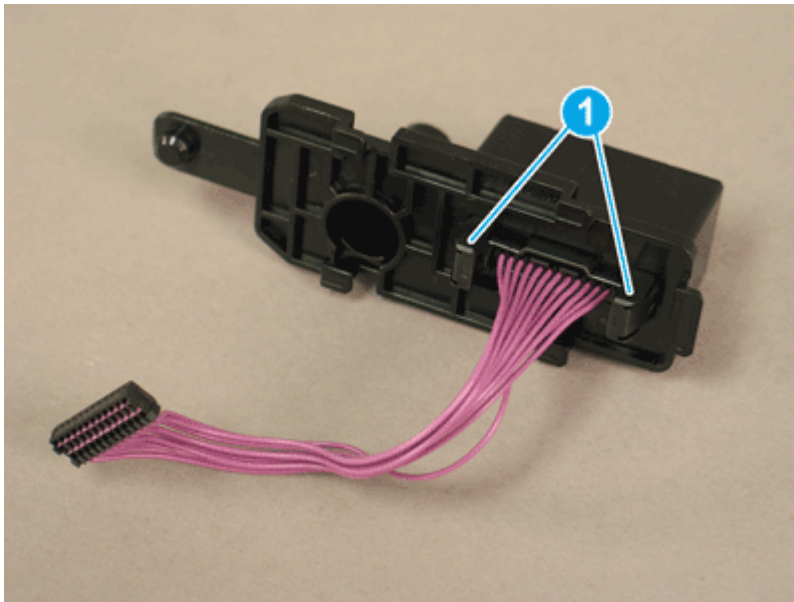
2. At the top of the paper feeder, lift one tab (callout 1), and then slide the upper drawer holder to the right to remove it.

Figure 5-1906 Remove the holder



3. Use a small, flat-blade screwdriver to release two tabs (callout 1).

Figure 5-1907 Release two tabs



4. Remove the cable assembly from the drawer holder.


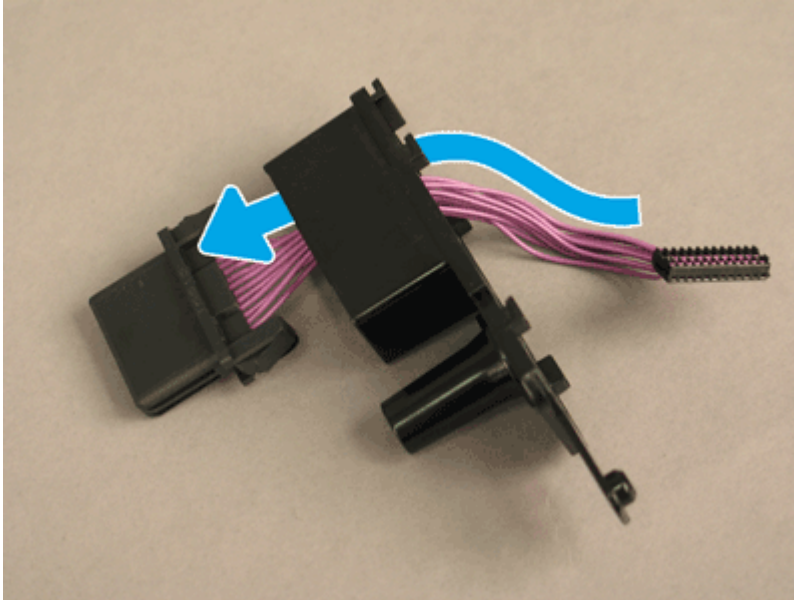
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1908 Remove the cable assembly



3. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.




NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Lower drawer holder and cable assembly (550-sheet paper feeder)

Learn how to remove and replace the lower drawer holder cable assembly on the 550-sheet paper feeder.


Meant time to repair: 20 minutes

Service level: Advanced

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.

 **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.

- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-103 Part information

Part numbers	Part description
RM2-8881-000CN	Option lower cable assembly

Required tools

- Small, flat-blade screwdriver
- #2 Phillips screwdriver with a magnetic tip

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

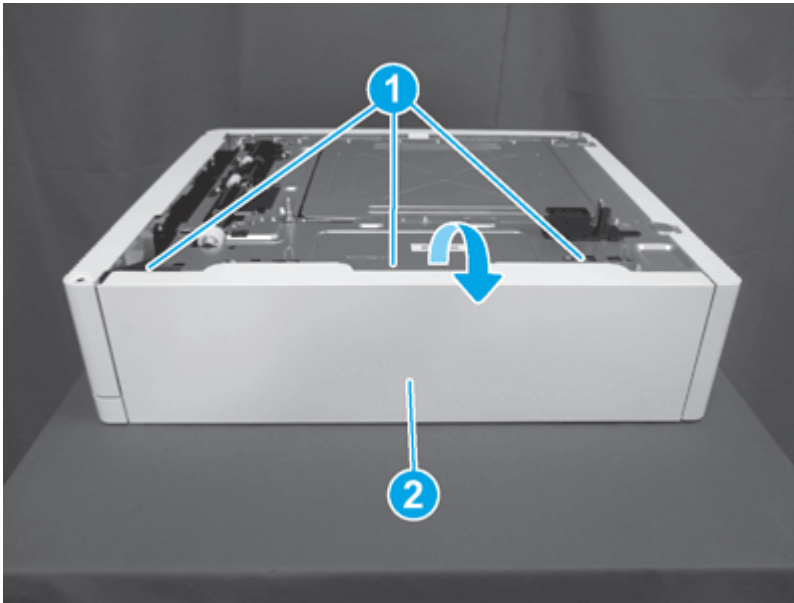
Send a print job from the host computer to the 550-sheet paper feeder. Verify that a page prints.

1. Remove the rear cover (550-sheet paper feeder)

Follow these steps to remove the rear cover (550-sheet paper feeder).

- Release three tabs (callout 1), and then rotate the top of the rear cover (callout 2) out and away from the paper feeder to remove it.

Figure 5-1909 Remove the rear cover

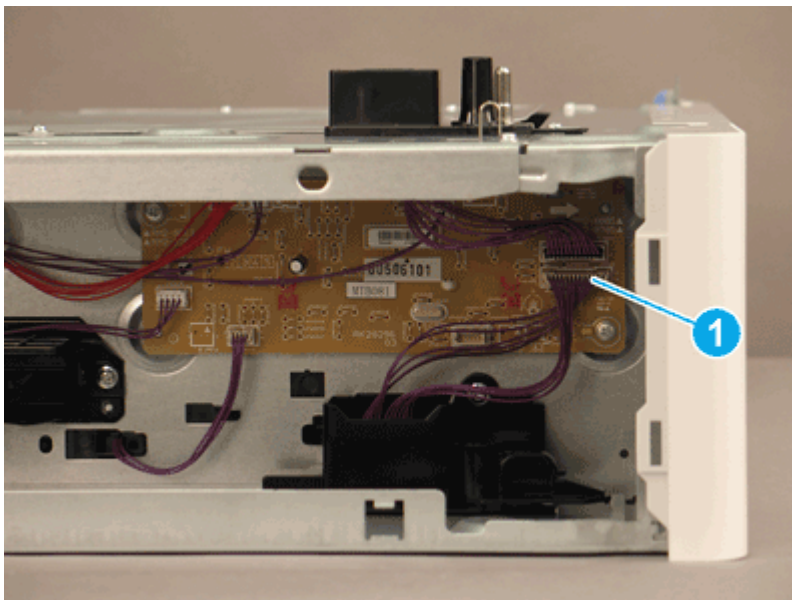


2. Remove the lower drawer holder cable assembly (550-sheet paper feeder)

Follow these steps to remove the lower drawer holder cable assembly (550-sheet paper feeder).

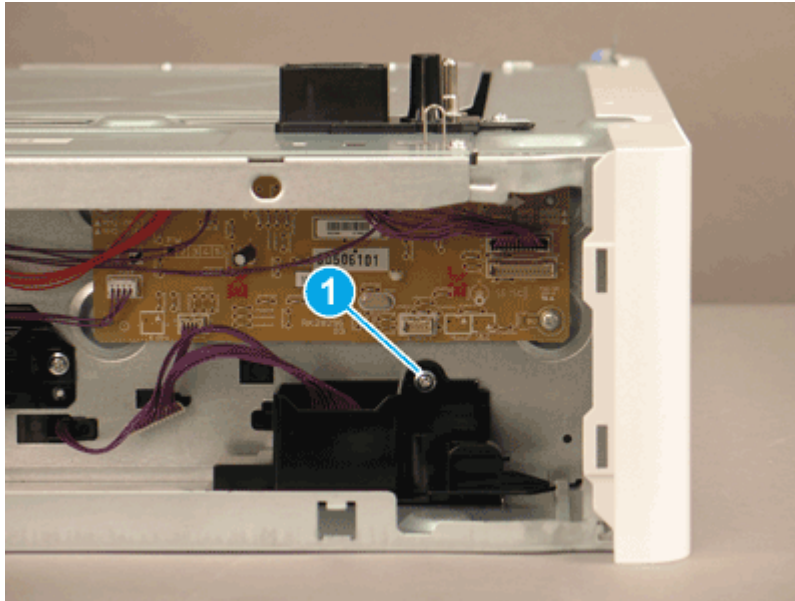
1. At the rear of the paper feeder, disconnect one connector (callout 1).

Figure 5-1910 Disconnect one connector



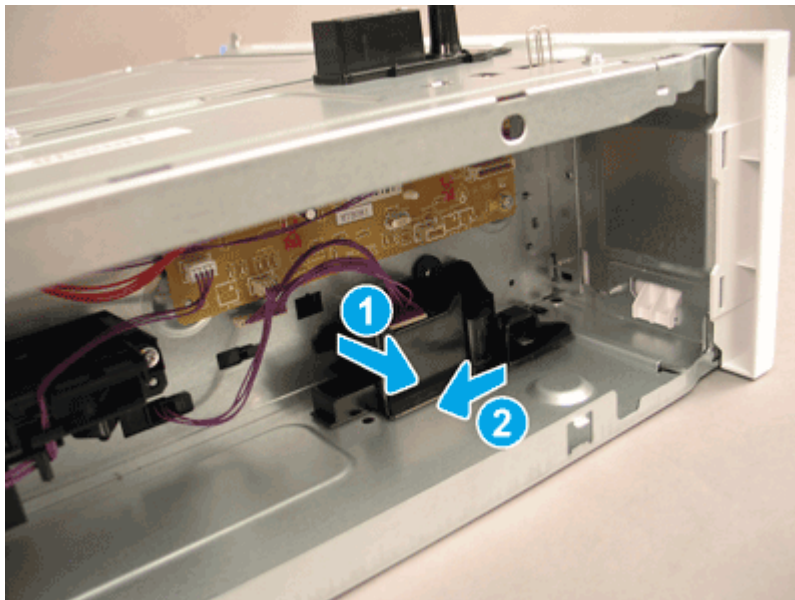
2. Remove one screw (callout 1).

Figure 5-1911 Remove one screw



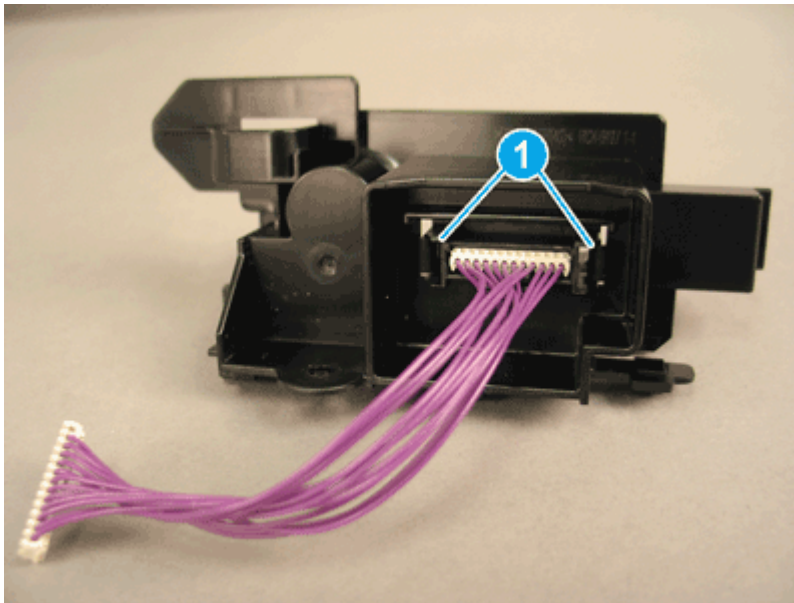
3. Release one tab (callout 1), and then slide the drawer holder to the left to remove it.

Figure 5-1912 Remove the drawer holder



4. Use a small, flat-blade screwdriver to release two tabs (callout 1).

Figure 5-1913 Release two tabs



5. Remove the cable assembly from the drawer holder.


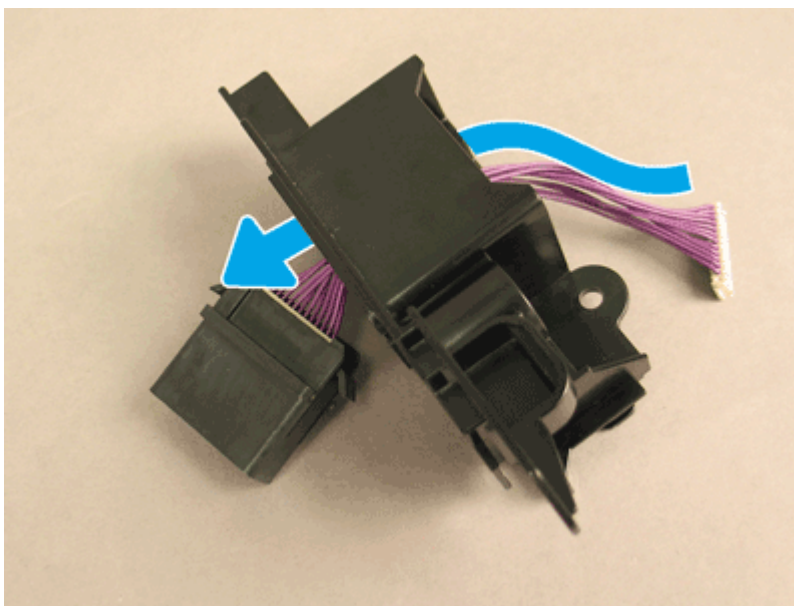
 **TIP:** Reverse the removal steps to install the assembly.


Figure 5-1914 Remove the cable assembly





3. Unpack the replacement assembly


Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.

 **NOTE:** HP recommends responsible disposal of the defective part.


2. Unpack the replacement part from the packaging.

 **CAUTION:**  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

 **IMPORTANT:** Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

 **NOTE:** If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

 **NOTE:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Input device- 1x550-sheet paper feeder with stand


Learn how to remove and replace the 1x550-sheet paper feeder parts and assemblies.

Removal and replacement: Left cover (1x550-sheet paper feeder with stand)


Learn how to remove and replace the left cover on the 1x550-sheet paper feeder with stand.

Mean time to repair: 10 minutes

Service level: Intermediate

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.
-  **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.
-
- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-104 Part information

Part number	Part description
RC5-0387-000CN	Cover, left

Required tools

- No special tools are needed to remove or install this assembly.

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

No post service test is available for this assembly.

1. Remove the left cover (1x550-sheet paper feeder with stand)

Follow these steps to remove the left cover (1x550-sheet paper feeder with stand).

1. Open the front door.
2. Release five tabs (callout 1), and then remove the left cover (callout 2).


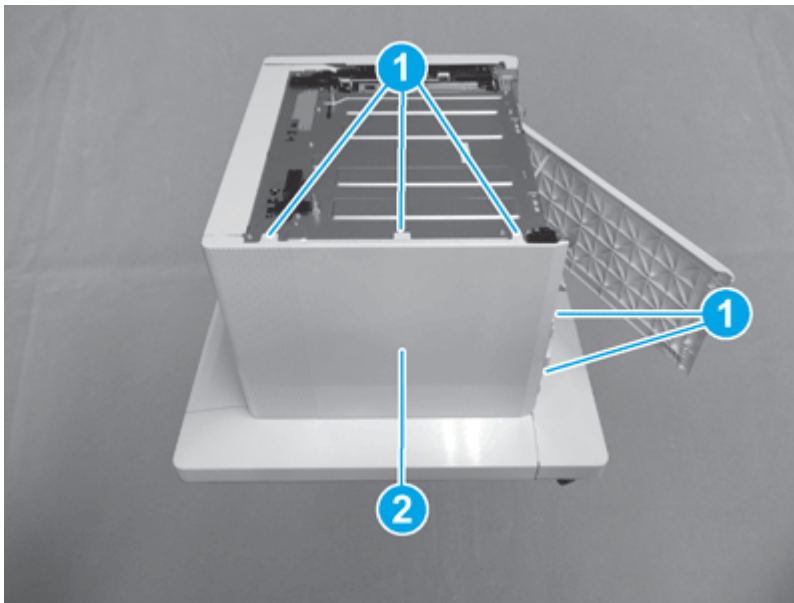
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1915 Remove the left cover



2. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Right door link (1x550-sheet paper feeder with stand)

Learn how to remove and replace the link on the right door on the 1x550-sheet paper feeder with stand.

Mean time to repair: 10 minutes

Service level: Intermediate



IMPORTANT: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.



WARNING! To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.

- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-105 Part information

Part number	Part description
RC4-9824-000CN	Link, door

Required tools

- No special tools are needed to remove or install this assembly.

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

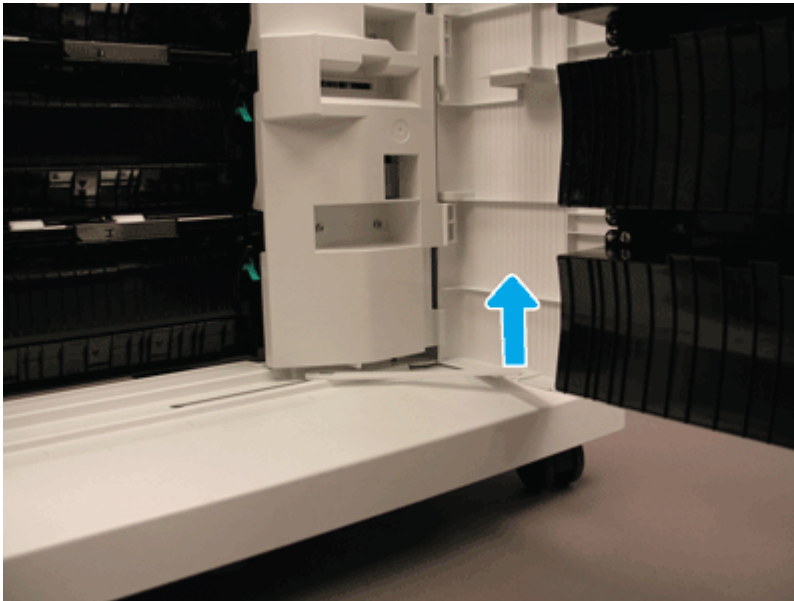
No post service test is available for this assembly.

1. Remove the right door link

Follow these steps to remove the right door link.

1. Lift the end of the link arm up and out of the right door.

Figure 5-1916 Lift the link arm end



2. Slide the end of the link arm on the paper feeder stand to the left, all the way to the end of the slot (callout 1). Lift the link arm up (callout 2) to remove it.


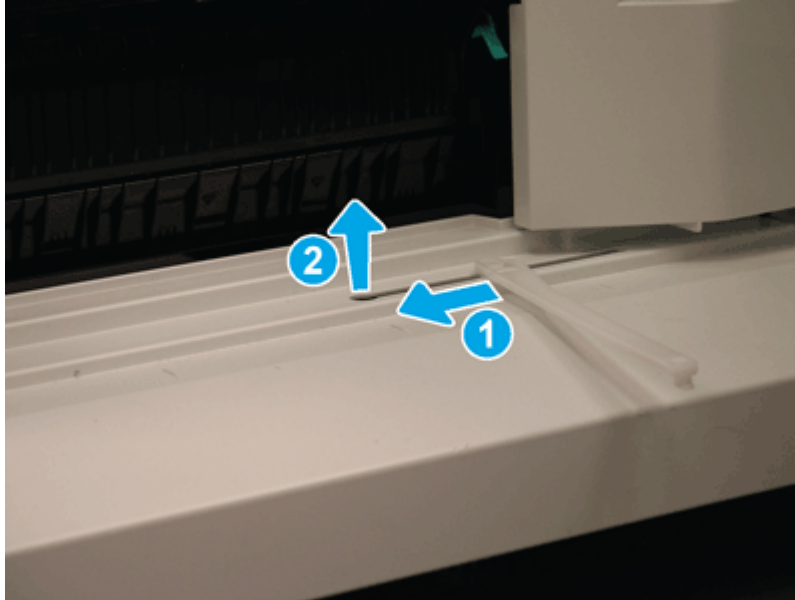
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1917 Remove the link arm



2. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.




NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Right door (1x550-sheet paper feeder with stand)

Learn how to remove and replace the right door on the 1x550-sheet paper feeder with stand.

Mean time to repair: 10 minutes

Service level: Intermediate

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.
- ⚠ **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.
- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-106 Part information

Part number	Part description
RM2-1226-000CN	Right door assembly

Required tools

- No special tools are needed to remove or install this assembly.

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

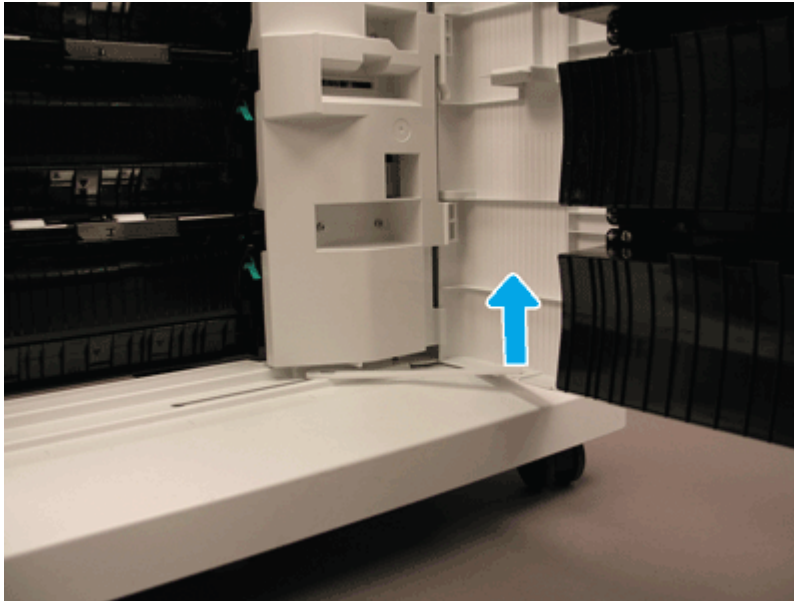
No post service test is available for this assembly.

1. Remove the right door link

Follow these steps to remove the right door link.

1. Lift the end of the link arm up and out of the right door.

Figure 5-1918 Lift the link arm end



2. Slide the end of the link arm on the paper feeder stand to the left, all the way to the end of the slot (callout 1). Lift the link arm up (callout 2) to remove it.


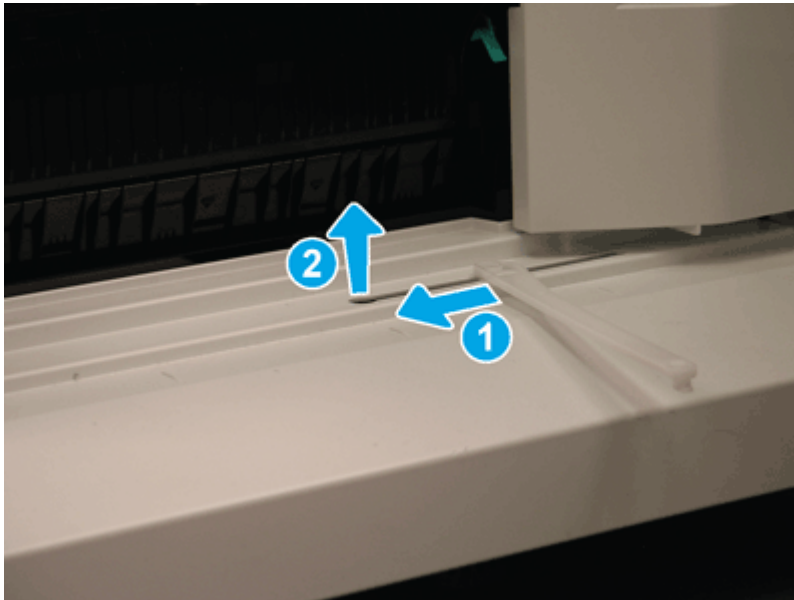
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1919 Remove the link arm



2. Remove the right door (1x550-sheet paper feeder with stand)

Follow these steps to Remove the right door (1x550-sheet paper feeder with stand).

- Release one tab (callout 1), and then lift up (callout 2) to remove the right door (callout 3).


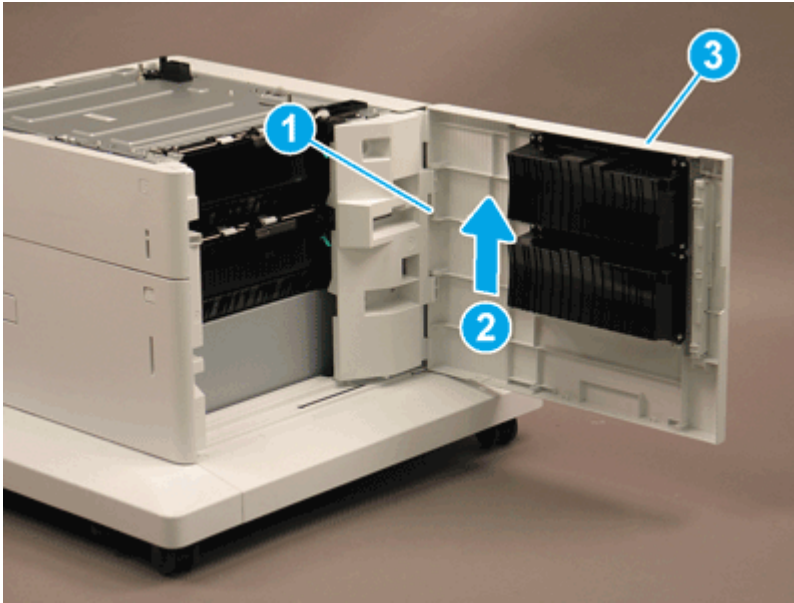
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1920 Remove the right door



3. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.




IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.


 **NOTE:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Rear cover (1x550-sheet paper feeder with stand)

Learn how to remove and replace the rear cover on the 1x550-sheet paper feeder with stand.


Mean time to repair: 10 minutes

Service level: Intermediate

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.

 **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.

- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-107 Part information

Part number	Part description
RC5-0386-000CN	Cover, rear

Required tools

- No special tools are needed to remove or install this assembly.

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

No post service test is available for this assembly.

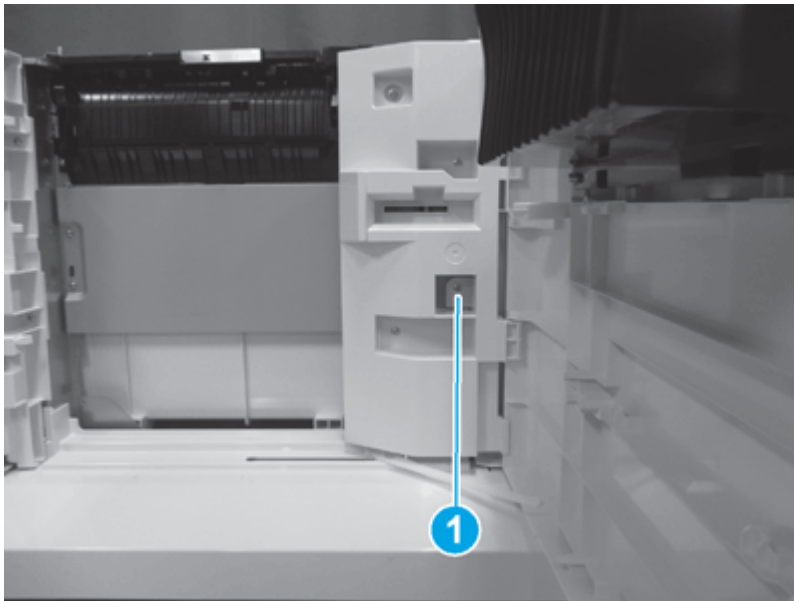
1. Remove the rear cover (1x550-sheet paper feeder with stand)

Follow these steps to remove the rear cover (1x550-sheet paper feeder with stand).

1. Open the right door.

2. Remove one screw (callout 1).

Figure 5-1921 Remove one screw



3. Release three tabs (callout 1), and then remove the rear cover (callout 2).


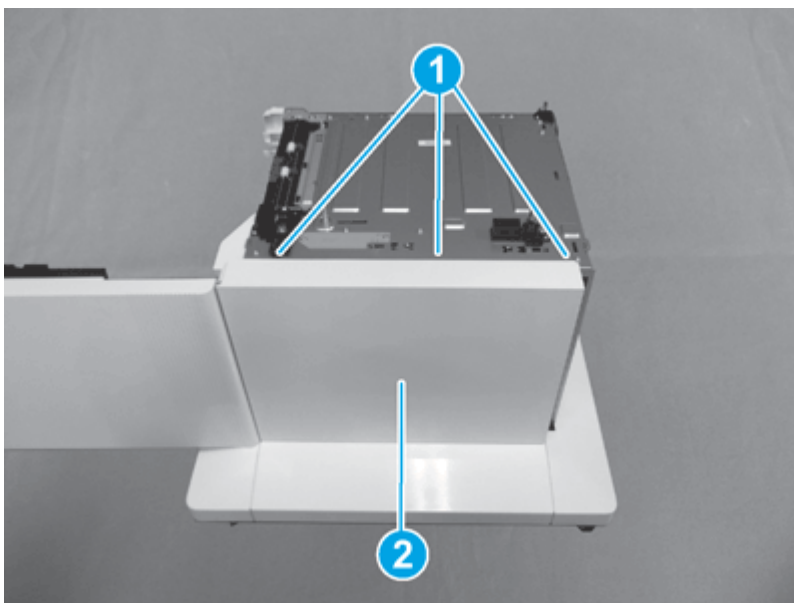
 **TIP:** Reverse the removal steps to install the assembly.


Figure 5-1922 Remove the rear cover





2. Unpack the replacement assembly


Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.

 **NOTE:** HP recommends responsible disposal of the defective part.


2. Unpack the replacement part from the packaging.

 **CAUTION:**  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

 **IMPORTANT:** Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

 **NOTE:** If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.


 **NOTE:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Front door (1x550-sheet paper feeder with stand)

Learn how to remove and replace the front door on the 1x550-sheet paper feeder with stand.


Mean time to repair: 10 minutes

Service level: Intermediate

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.

 **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.

- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-108 Part information

Part number	Part description
RC5-0405-000CN	Door, stock

Required tools

- No special tools are needed to remove or install this assembly.

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

No post service test is available for this assembly.

1. Remove the front door (1x550-sheet paper feeder with stand)

Follow these steps to remove the front door (1x550-sheet paper feeder with stand).

1. Open the front door.
2. Slide the front door (callout 1) up to release it. Remove two links (callout 2), and then remove the roller (callout 3). Transfer these parts to the replacement door.


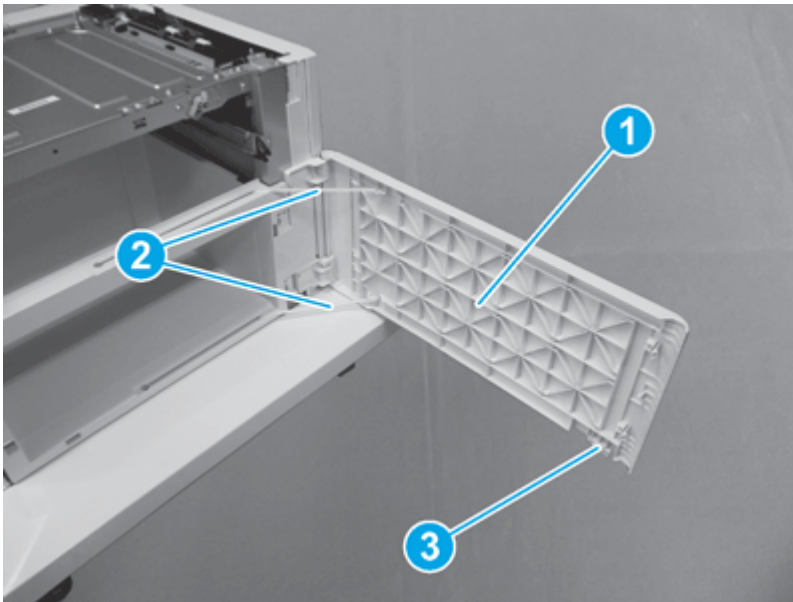
 **TIP:** Reverse the removal steps to install the assembly.


Figure 5-1923 Remove the front door



2. Unpack the replacement assembly



Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.


 **NOTE:** HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>


2. Unpack the replacement part from the packaging.

 **CAUTION:**  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

 **IMPORTANT:** Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

 **NOTE:** If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.


 **NOTE:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Left lower cover (1x550-sheet paper feeder with stand)

Learn how to remove and replace the left lower cover on the 1x550-sheet paper feeder with stand.


Mean time to repair: 10 minutes

Service level: Intermediate

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.

 **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.

- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-109 Part information

Part number	Part description
RC5-0385-000	Cover, left lower

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

No post service test is available for this assembly.

1. Remove the left cover (1x550-sheet paper feeder with stand)

Follow these steps to remove the left cover (1x550-sheet paper feeder with stand).

1. Open the front door.
2. Release five tabs (callout 1), and then remove the left cover (callout 2).


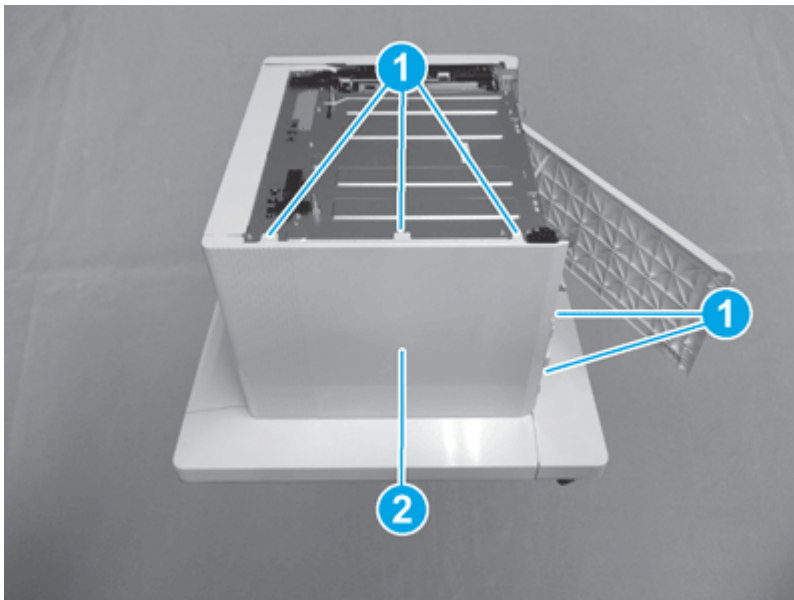
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1924 Remove the left cover



2. Remove the left lower cover (1x550-sheet paper feeder with stand)

Follow these steps to remove the left lower cover (1x550-sheet paper feeder with stand).

- Remove two screws (callout 1), and then release two tabs (callout 2). Release two bosses (callout 3), and then remove the left lower cover (callout 4).


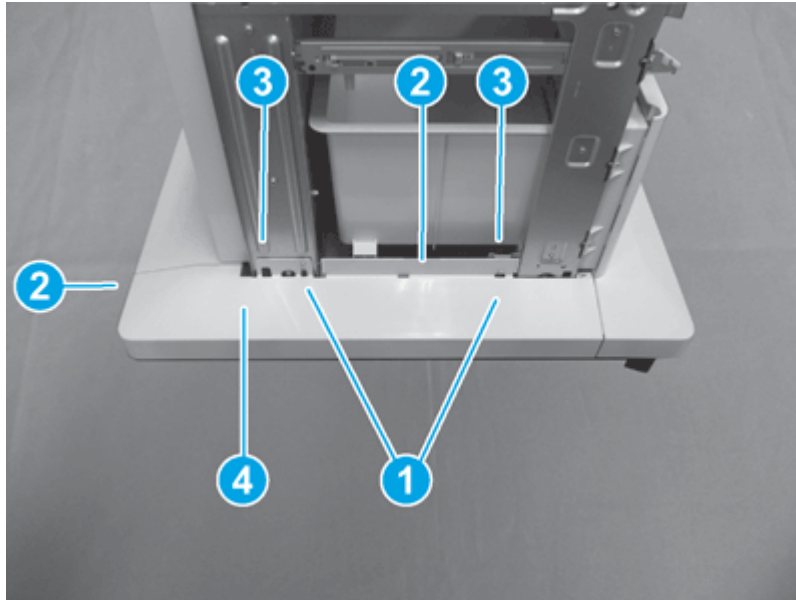
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1925 Remove the left lower cover



3. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Right lower cover (1x550-sheet paper feeder with stand)

Learn how to remove and replace the right lower cover for the 1x550-sheet paper feeder with stand.

Mean time to repair: 10 minutes

Service level: Intermediate

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.
- ⚠ **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.
- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-110 Part information

Part number	Part description
RC5-0384-000CN	Cover, right lower

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

No post service test is available for this assembly.

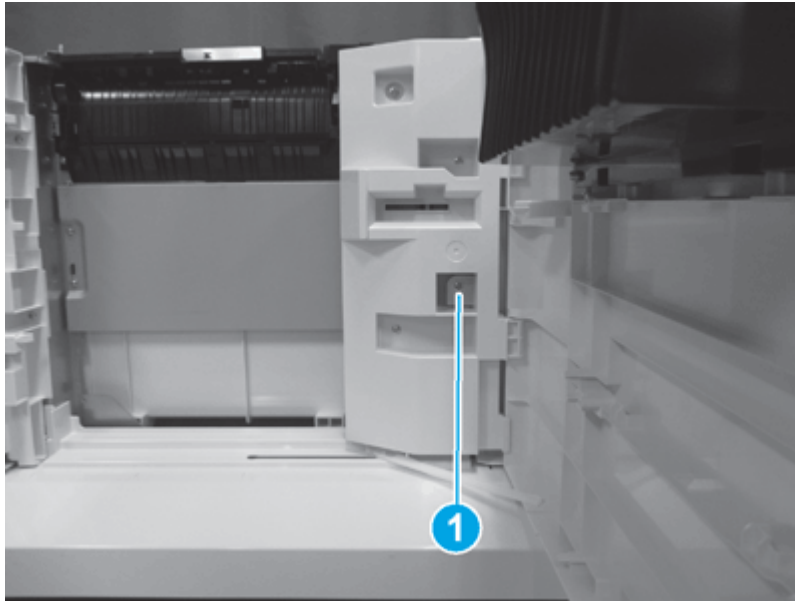
1. Remove the rear cover (1x550-sheet paper feeder with stand)

Follow these steps to remove the rear cover (1x550-sheet paper feeder with stand).

1. Open the right door.

2. Remove one screw (callout 1).

Figure 5-1926 Remove one screw



3. Release three tabs (callout 1), and then remove the rear cover (callout 2).


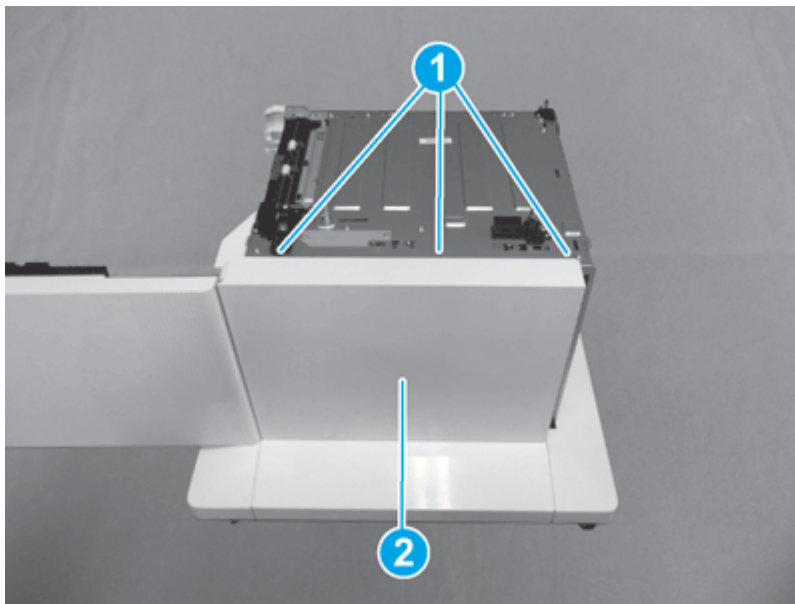
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1927 Remove the rear cover



2. Remove the front door (1x550-sheet paper feeder with stand)

Follow these steps to remove the front door (1x550-sheet paper feeder with stand).

1. Open the front door.

- Slide the front door (callout 1) up to release it. Remove two links (callout 2), and then remove the roller (callout 3). Transfer these parts to the replacement door.


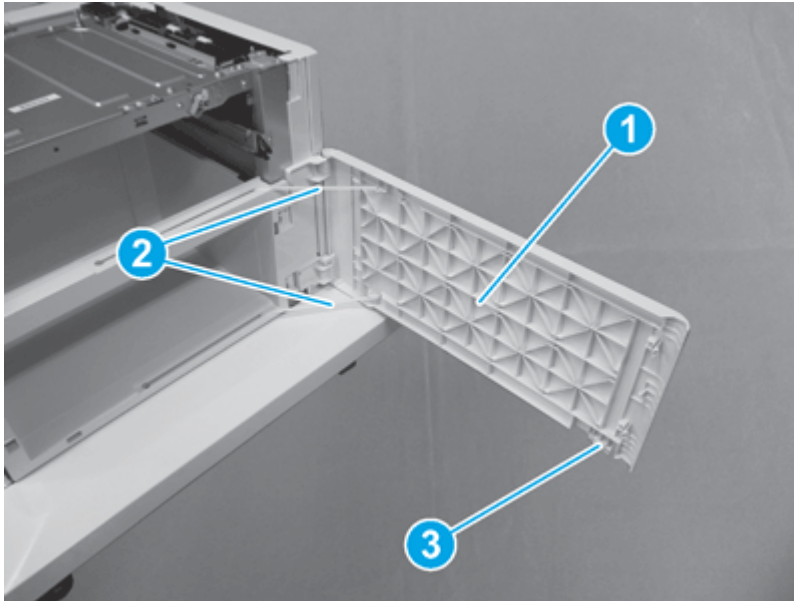
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1928 Remove the front door



3. Remove the right door (1x550-sheet paper feeder with stand)

Follow these steps to Remove the right door (1x550-sheet paper feeder with stand).

- Release one tab (callout 1), and then lift up (callout 2) to remove the right door (callout 3).


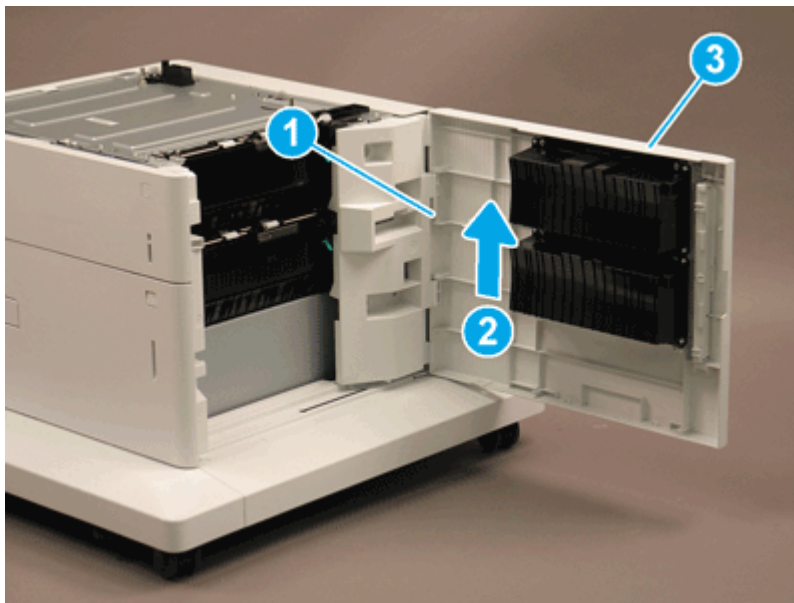
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1929 Remove the right door

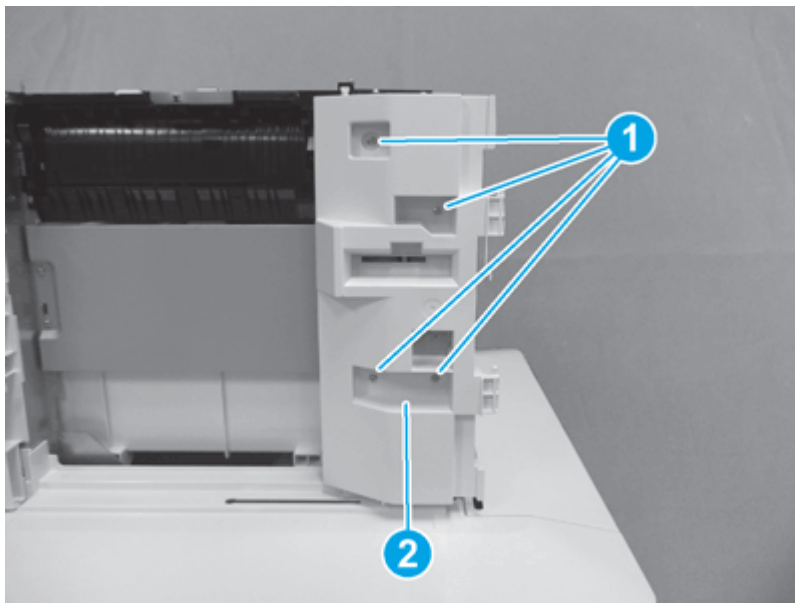


4. Remove the right lower cover (1x550-sheet paper feeder with stand)

Follow these steps to remove the right lower cover (1x550-sheet paper feeder with stand).

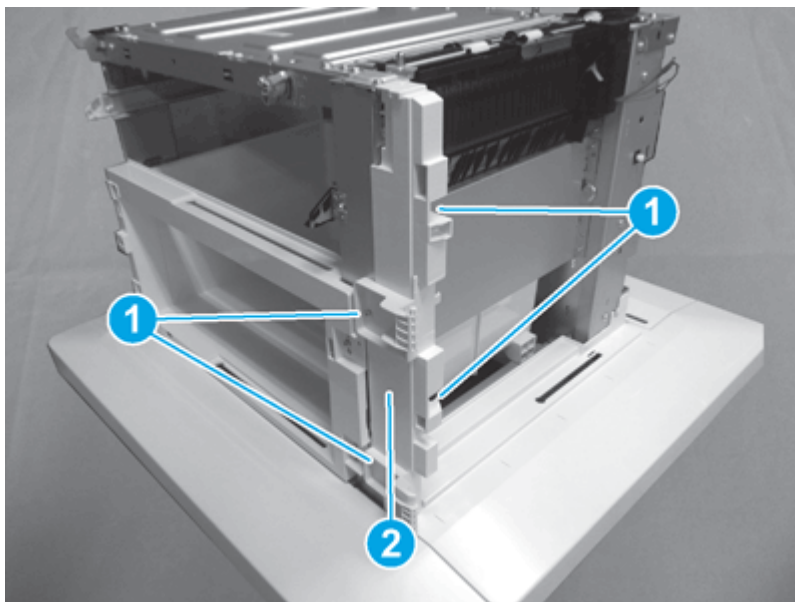
1. Remove four screws (callout 1), and then remove the hinge (callout 2).

Figure 5-1930 Remove four screws and the hinge



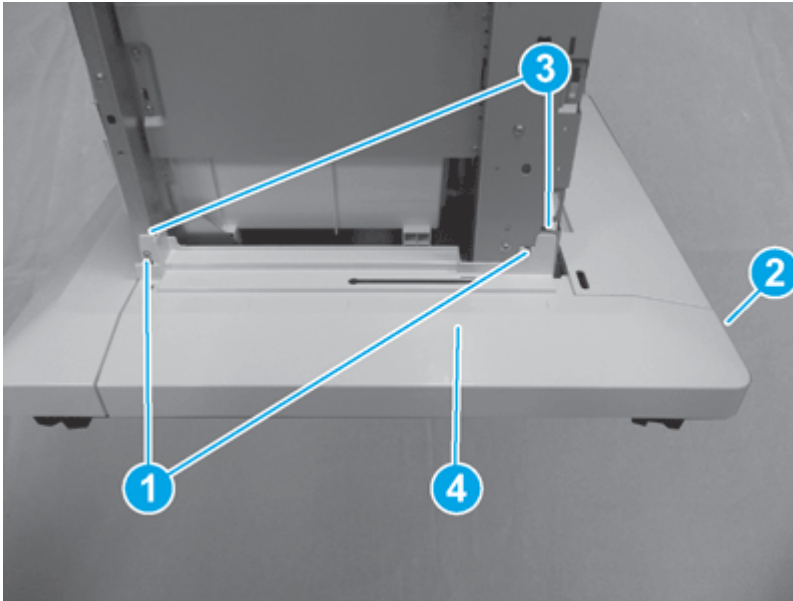
2. Remove four screws (callout 1), and then remove the inner cover (callout 2).

Figure 5-1931 Remove four screws and the inner cover



3. Remove two screws (callout 1), and then release one tab (callout 2). Release two bosses (callout 3), and then remove the right lower cover (callout 4).

Figure 5-1932 Remove the right lower cover



5. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

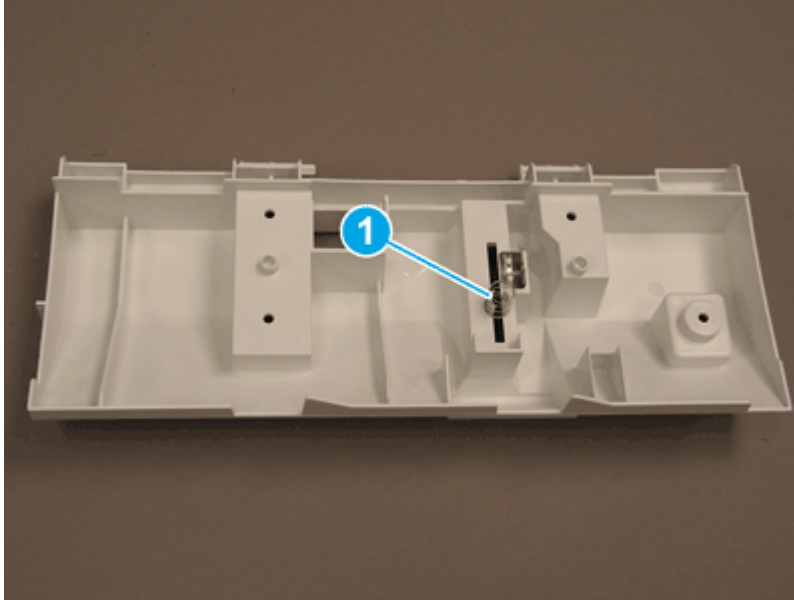
6. Reverse the removal steps to install the assembly

Also use the following **special installation instructions**.

Right lower cover

- Before reinstalling the hinge, make sure that the spring (callout 1) on the back of the part is in the correct position.

Figure 5-1933 Check spring position




 **NOTE:** Continue to reverse the removal steps to finish installing the assembly.

Removal and replacement: Rear lower cover (1x550-sheet paper feeder with stand)

Learn how to remove and replace the rear lower cover for the 1x550-sheet paper feeder with stand.


Mean time to repair: 10 minutes

Service level: Intermediate

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.

 **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.

- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-111 Part information

Part number	Part description
RC5-0399-000CN	Cover, rear lower

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

No post service test is available for this assembly.

1. Remove the front door (1x550-sheet paper feeder with stand)

Follow these steps to remove the front door (1x550-sheet paper feeder with stand).

1. Open the front door.
2. Slide the front door (callout 1) up to release it. Remove two links (callout 2), and then remove the roller (callout 3). Transfer these parts to the replacement door.


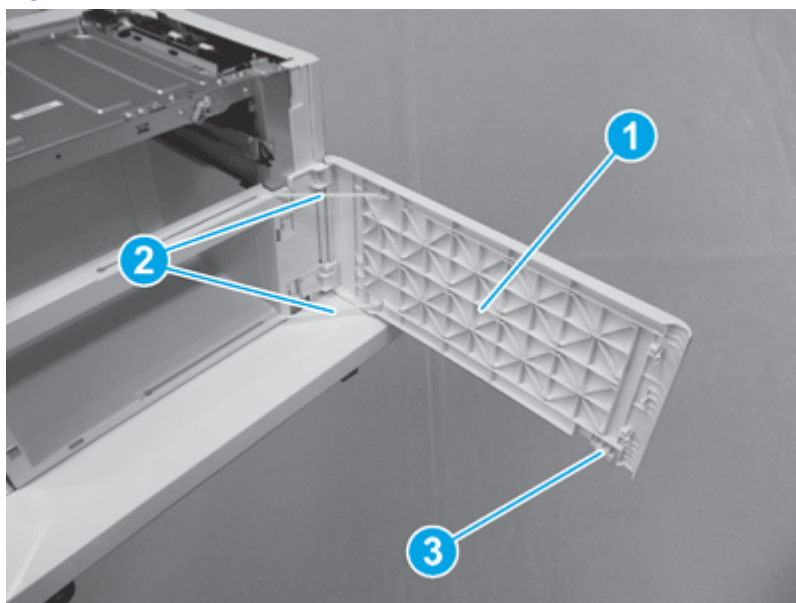
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1934 Remove the front door



2. Remove the right door (1x550-sheet paper feeder with stand)

Follow these steps to Remove the right door (1x550-sheet paper feeder with stand).

- Release one tab (callout 1), and then lift up (callout 2) to remove the right door (callout 3).


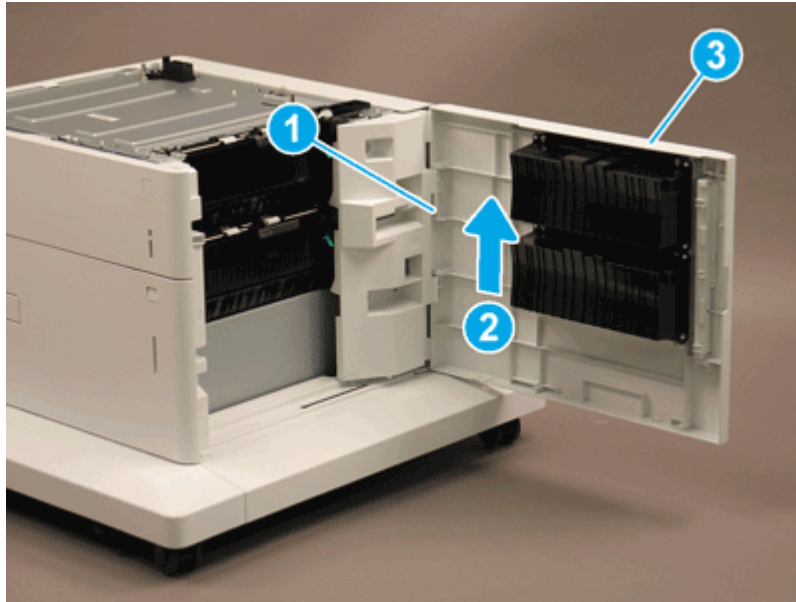
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1935 Remove the right door



3. Remove the left cover (1x550-sheet paper feeder with stand)

Follow these steps to remove the left cover (1x550-sheet paper feeder with stand).

1. Open the front door.
2. Release five tabs (callout 1), and then remove the left cover (callout 2).


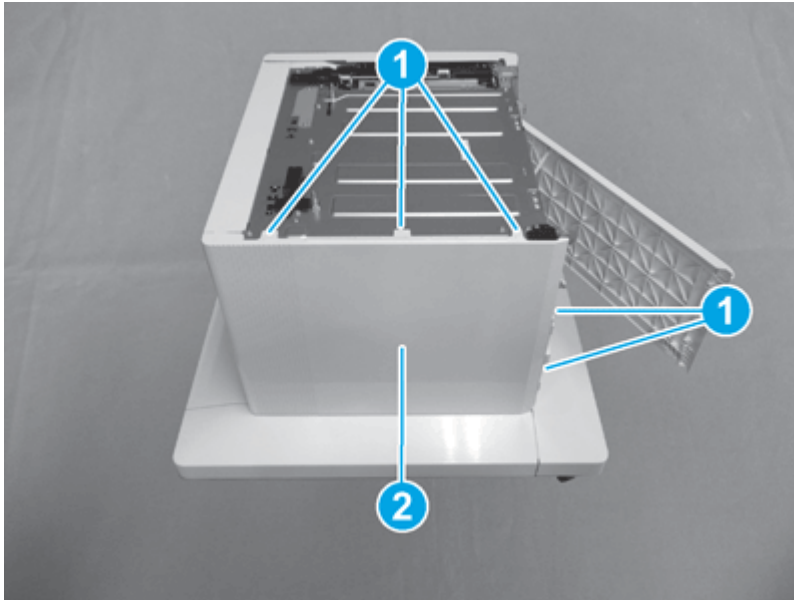
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1936 Remove the left cover



4. Remove the left lower cover (1x550-sheet paper feeder with stand)

Follow these steps to remove the left lower cover (1x550-sheet paper feeder with stand).

- Remove two screws (callout 1), and then release two tabs (callout 2). Release two bosses (callout 3), and then remove the left lower cover (callout 4).


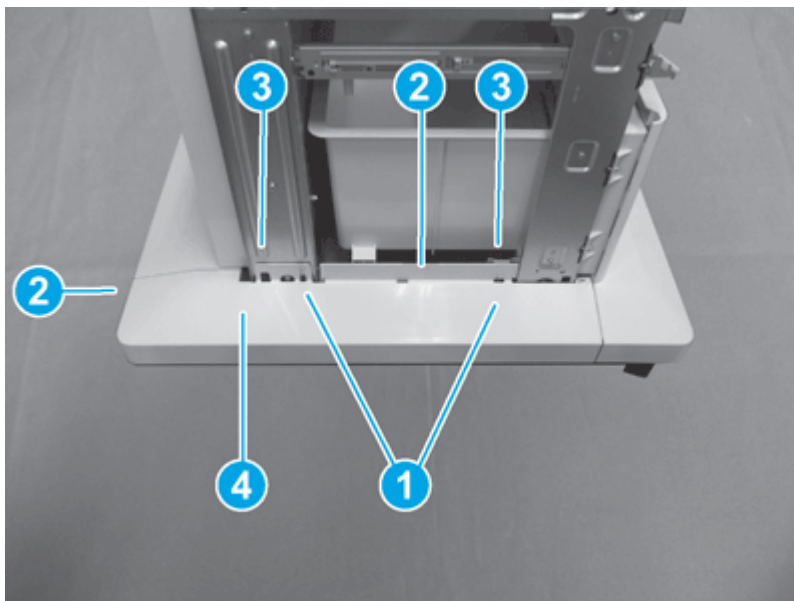
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1937 Remove the left lower cover

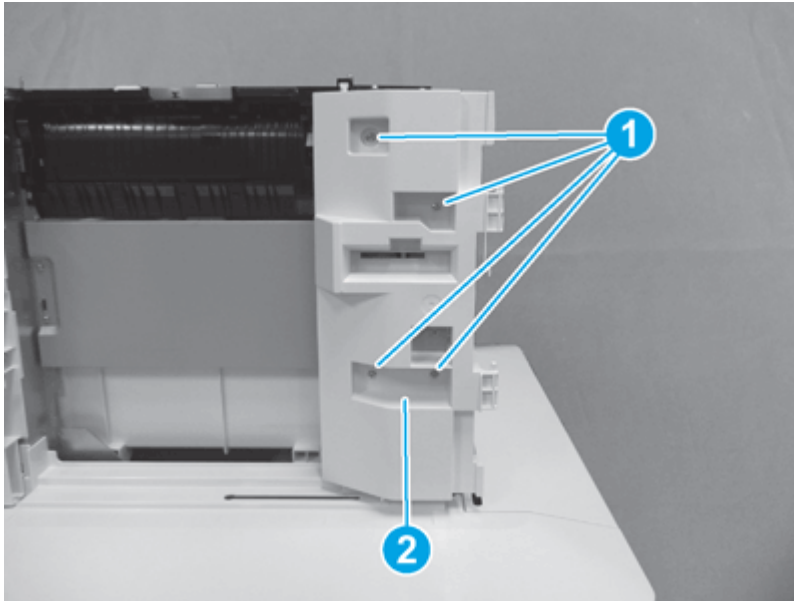


5. Remove the right lower cover (1x550-sheet paper feeder with stand)

Follow these steps to remove the right lower cover (1x550-sheet paper feeder with stand).

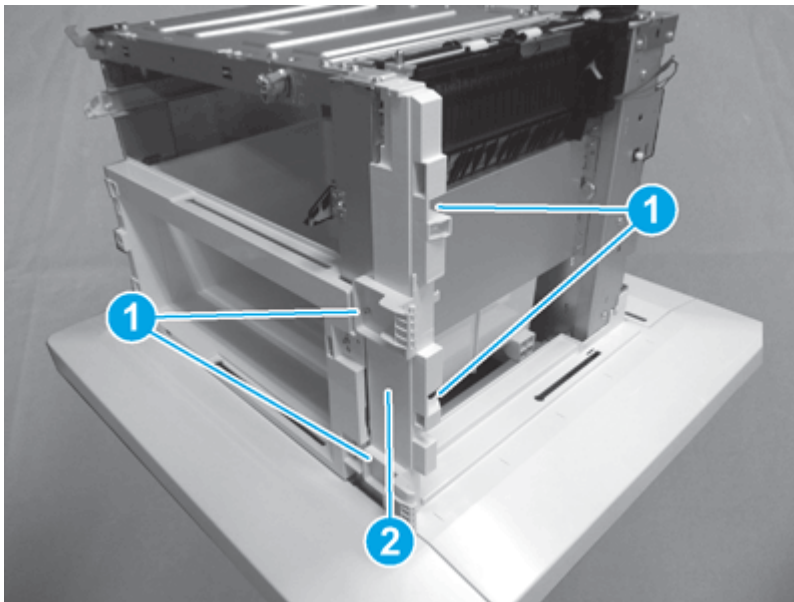
1. Remove four screws (callout 1), and then remove the hinge (callout 2).

Figure 5-1938 Remove four screws and the hinge



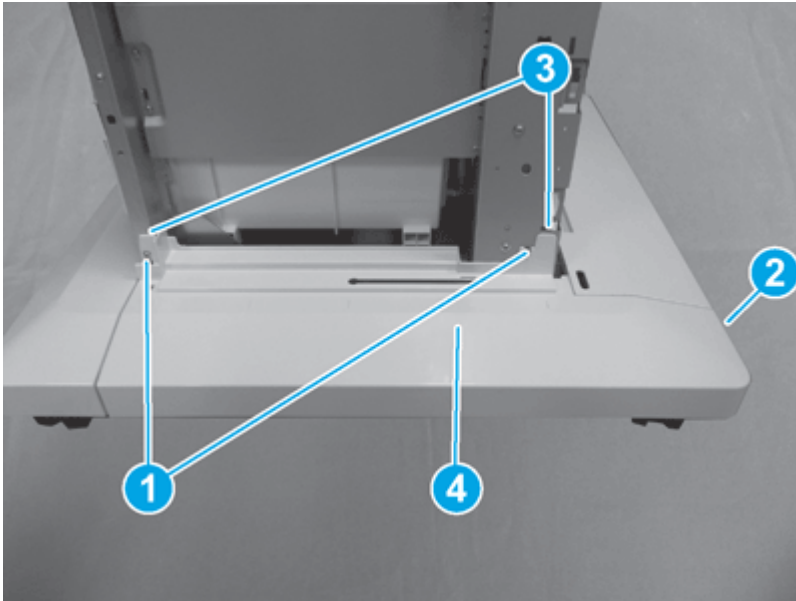
2. Remove four screws (callout 1), and then remove the inner cover (callout 2).

Figure 5-1939 Remove four screws and the inner cover



3. Remove two screws (callout 1), and then release one tab (callout 2). Release two bosses (callout 3), and then remove the right lower cover (callout 4).

Figure 5-1940 Remove the right lower cover

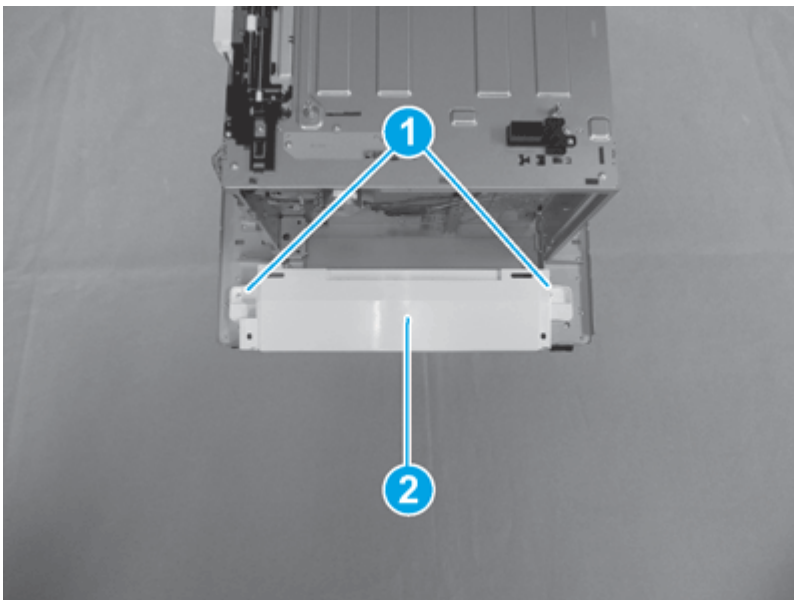


6. Remove the rear lower cover

Follow these steps to remove the rear lower cover.

- Remove two screws (callout 1), and then remove the rear lower cover (callout 2).

Figure 5-1941 Remove the rear lower cover



7. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

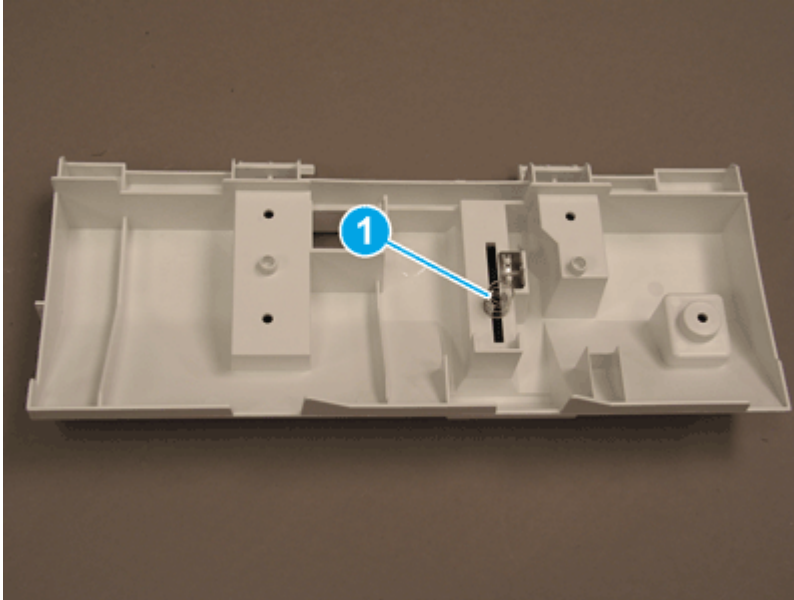
8. Reverse the removal steps to install the assembly


Also use the following **special installation instructions**.

Right lower cover

- Before reinstalling the hinge, make sure that the spring (callout 1) on the back of the part is in the correct position.

Figure 5-1942 Check spring position




 **NOTE:** Continue to reverse the removal steps to finish installing the assembly.

Removal and replacement: Front lower cover (1x550-sheet paper feeder with stand)

Learn how to remove and replace the front lower cover for the 1x550-sheet paper feeder with stand.

Mean time to repair: 10 minutes

Service level: Intermediate

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.
- ⚠ **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.
- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-112 Part information

Part number	Part description
RC5-0383-000CN	Cover, front lower

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

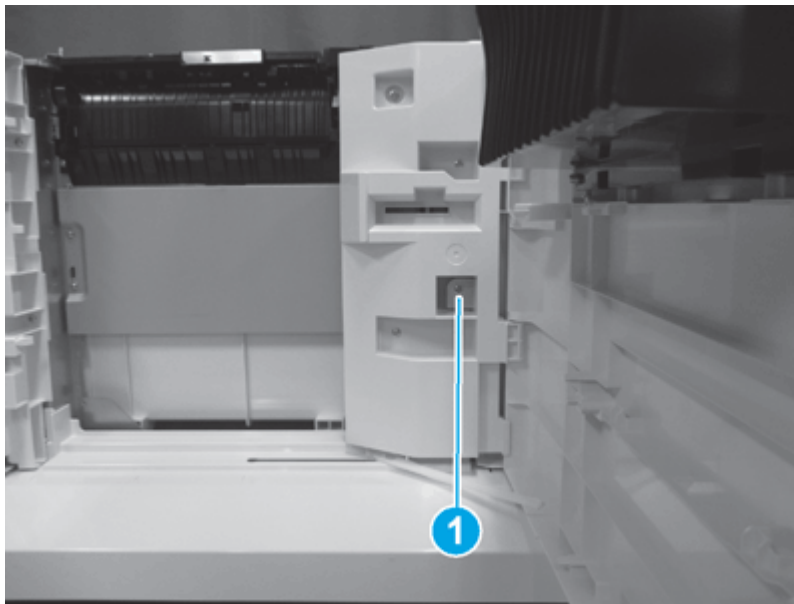
No post service test is available for this assembly.

1. Remove the rear cover (1x550-sheet paper feeder with stand)

Follow these steps to remove the rear cover (1x550-sheet paper feeder with stand).

1. Open the right door.
2. Remove one screw (callout 1).

Figure 5-1943 Remove one screw



3. Release three tabs (callout 1), and then remove the rear cover (callout 2).


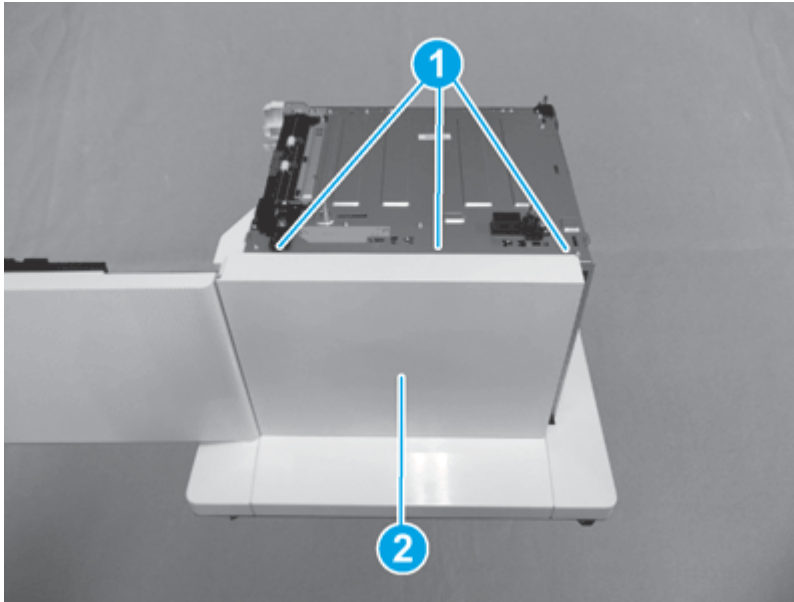
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1944 Remove the rear cover



2. Remove the front door (1x550-sheet paper feeder with stand)

Follow these steps to remove the front door (1x550-sheet paper feeder with stand).

1. Open the front door.
2. Slide the front door (callout 1) up to release it. Remove two links (callout 2), and then remove the roller (callout 3). Transfer these parts to the replacement door.


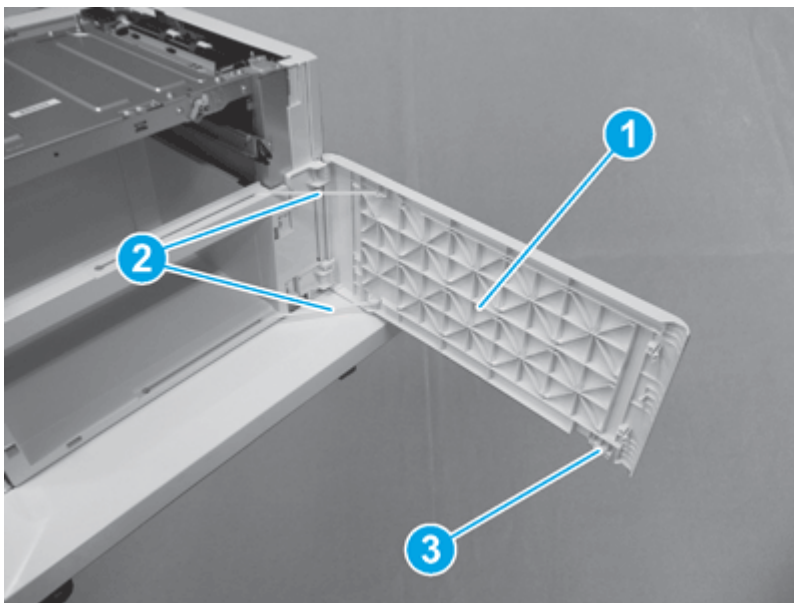
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1945 Remove the front door



3. Remove the right door (1x550-sheet paper feeder with stand)

Follow these steps to Remove the right door (1x550-sheet paper feeder with stand).

- Release one tab (callout 1), and then lift up (callout 2) to remove the right door (callout 3).


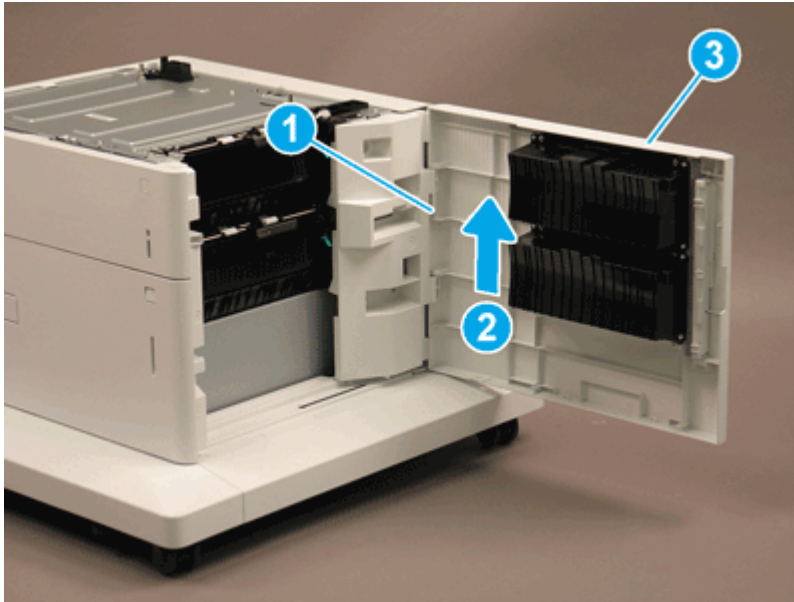
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1946 Remove the right door



4. Remove the left cover (1x550-sheet paper feeder with stand)

Follow these steps to remove the left cover (1x550-sheet paper feeder with stand).

1. Open the front door.
2. Release five tabs (callout 1), and then remove the left cover (callout 2).


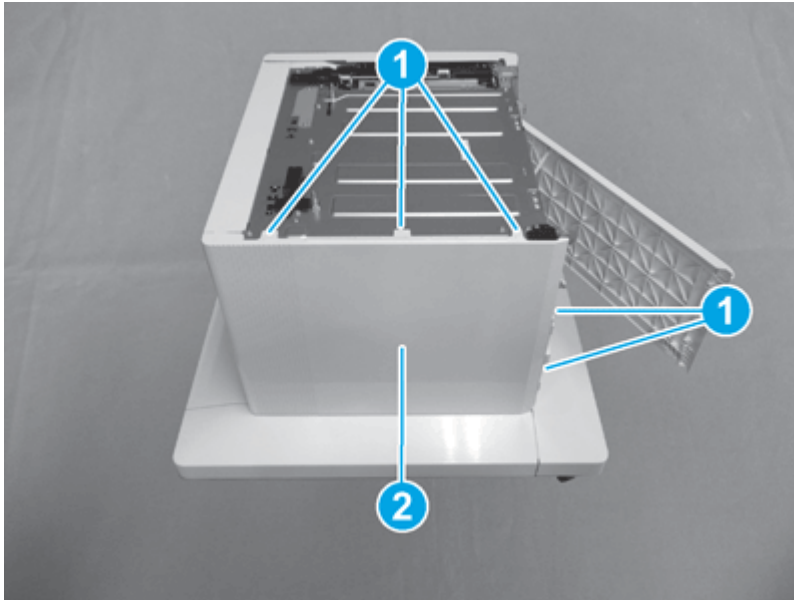
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1947 Remove the left cover

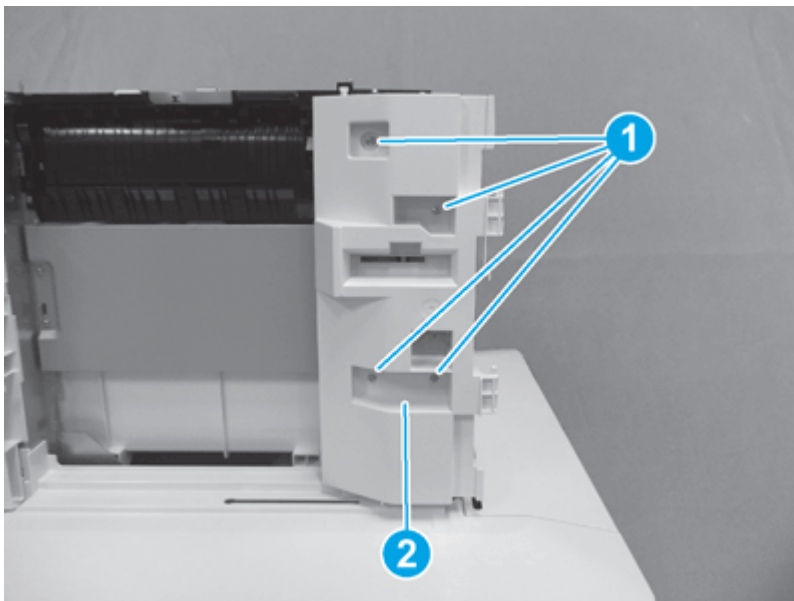


5. Remove the right lower cover (1x550-sheet paper feeder with stand)

Follow these steps to remove the right lower cover (1x550-sheet paper feeder with stand).

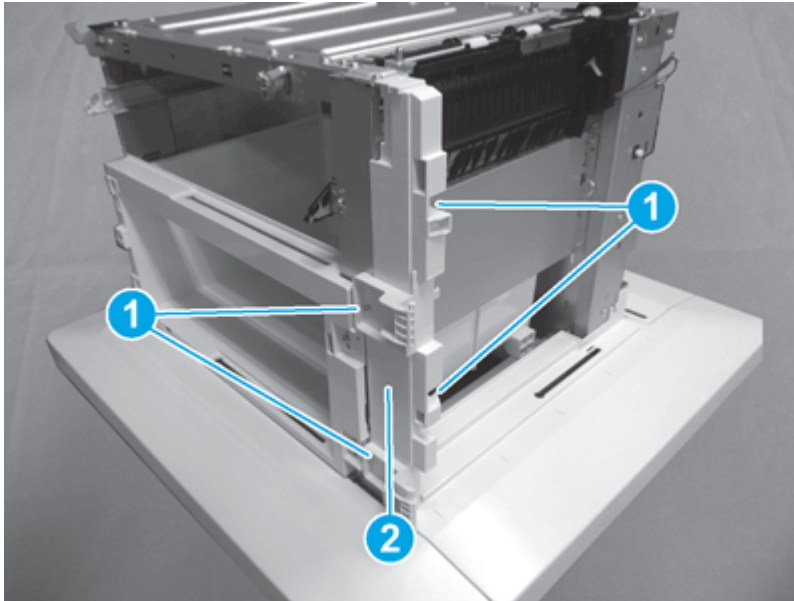
1. Remove four screws (callout 1), and then remove the hinge (callout 2).

Figure 5-1948 Remove four screws and the hinge



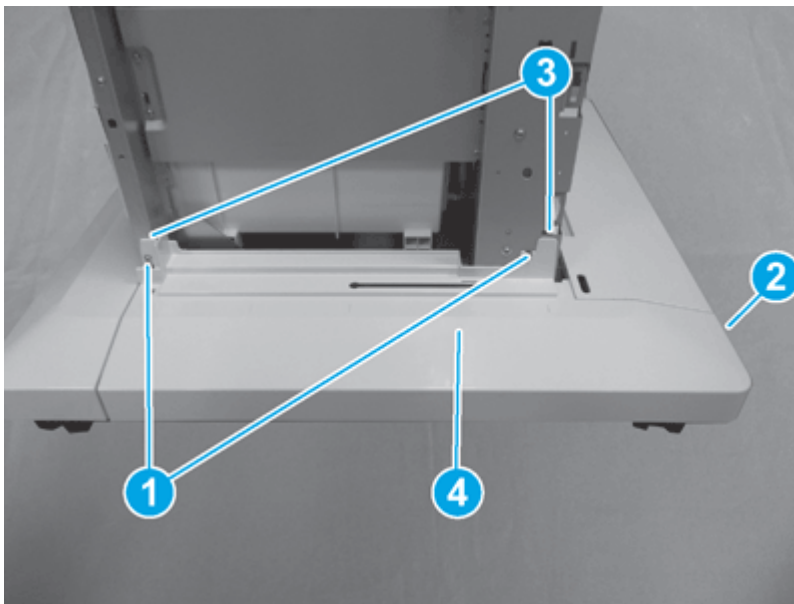
2. Remove four screws (callout 1), and then remove the inner cover (callout 2).

Figure 5-1949 Remove four screws and the inner cover



3. Remove two screws (callout 1), and then release one tab (callout 2). Release two bosses (callout 3), and then remove the right lower cover (callout 4).

Figure 5-1950 Remove the right lower cover

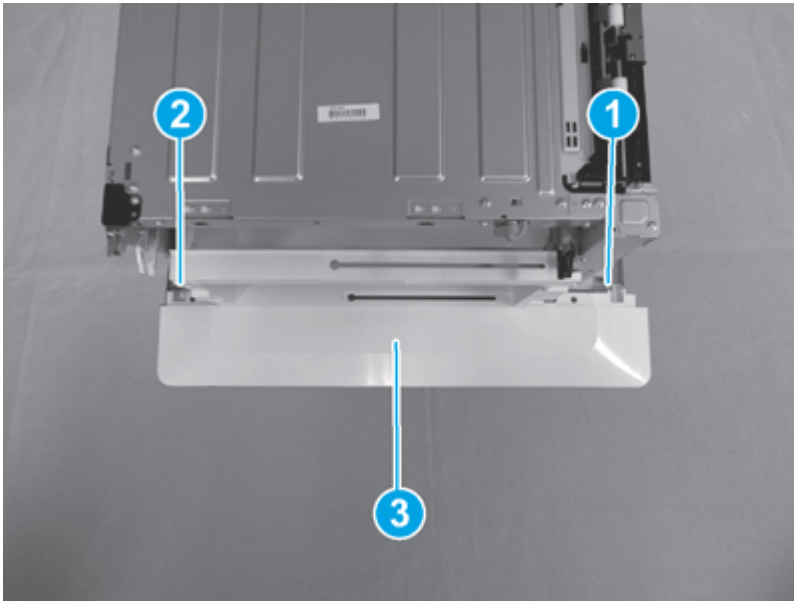


6. Remove the front lower cover

Follow these steps to remove the front lower cover.

- Remove one screw (callout 1), release one tab (callout 2), and then remove the front lower cover (callout 3).

Figure 5-1951 Remove the front lower cover



7. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

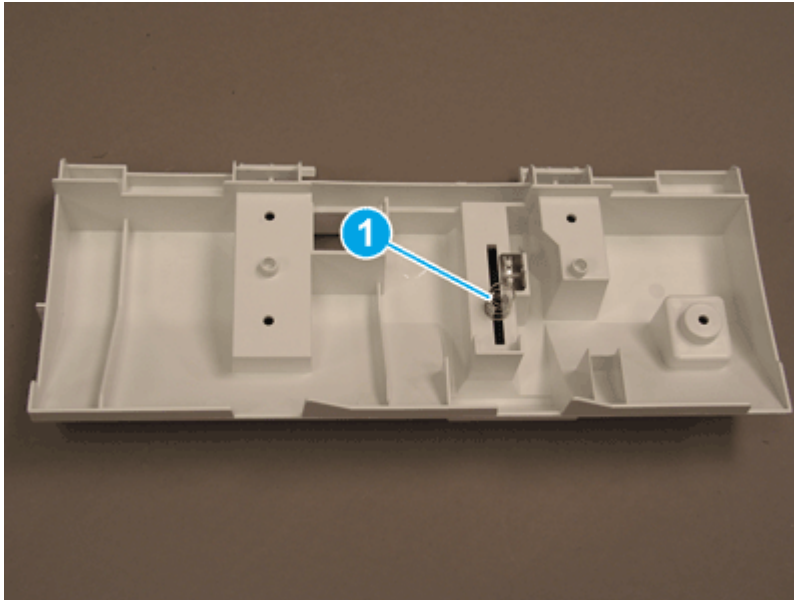
8. Reverse the removal steps to install the assembly

Also use the following **special installation instructions**.

Right lower cover

- Before reinstalling the hinge, make sure that the spring (callout 1) on the back of the part is in the correct position.

Figure 5-1952 Check spring position




 **NOTE:** Continue to reverse the removal steps to finish installing the assembly.

Removal and replacement: Right door switch (1x550-sheet paper feeder with stand)

Learn how to remove and replace the right door switch on the 1x550-sheet paper feeder with stand.


Mean time to repair: 10 minutes

Service level: Intermediate

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.

 **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.

- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-113 Part information

Part number	Part description
WC2-5803-000CN	Switch, push

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

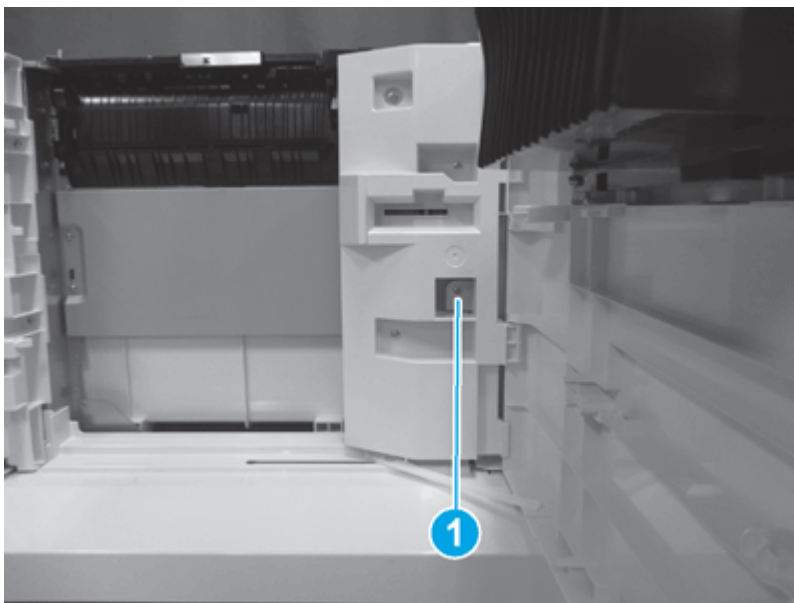
Close the right door. Verify that no door-open messages display on the control panel.

1. Remove the rear cover (1x550-sheet paper feeder with stand)

Follow these steps to remove the rear cover (1x550-sheet paper feeder with stand).

1. Open the right door.
2. Remove one screw (callout 1).

Figure 5-1953 Remove one screw



3. Release three tabs (callout 1), and then remove the rear cover (callout 2).


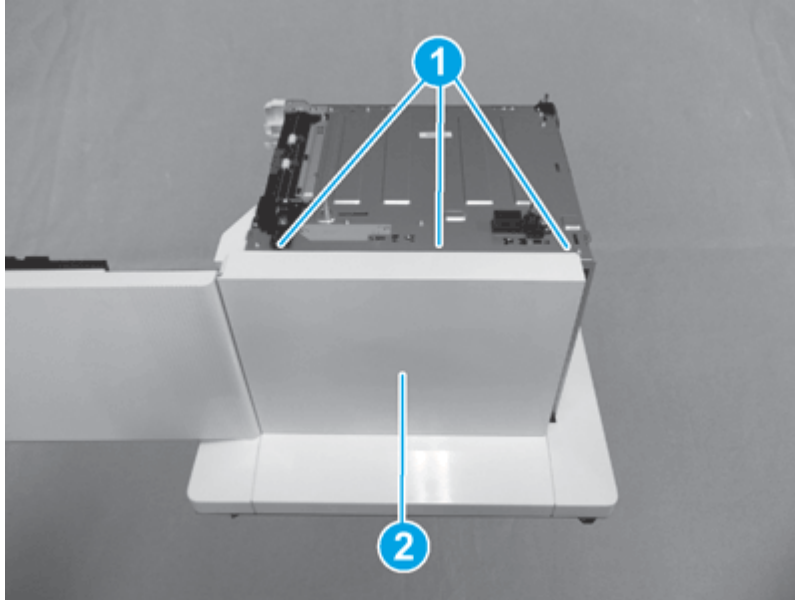
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1954 Remove the rear cover



2. Remove the right door (1x550-sheet paper feeder with stand)

Follow these steps to Remove the right door (1x550-sheet paper feeder with stand).

- Release one tab (callout 1), and then lift up (callout 2) to remove the right door (callout 3).


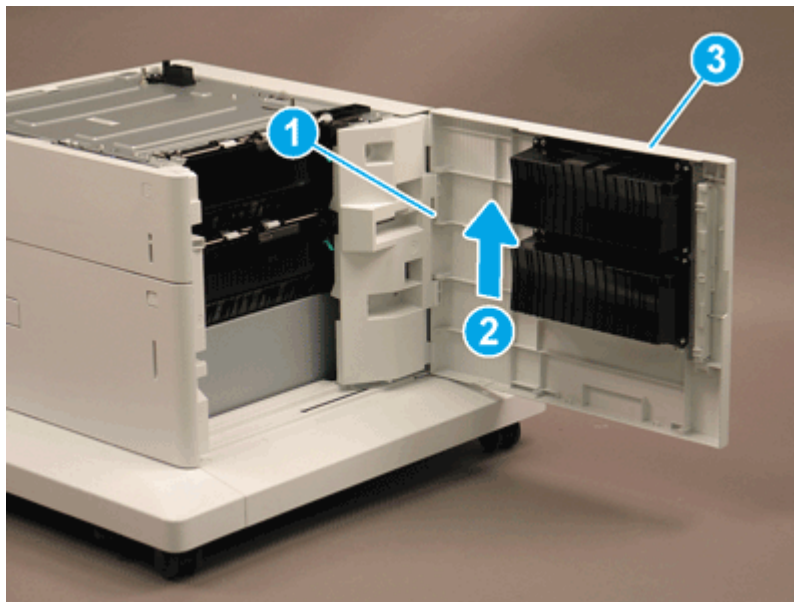
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1955 Remove the right door

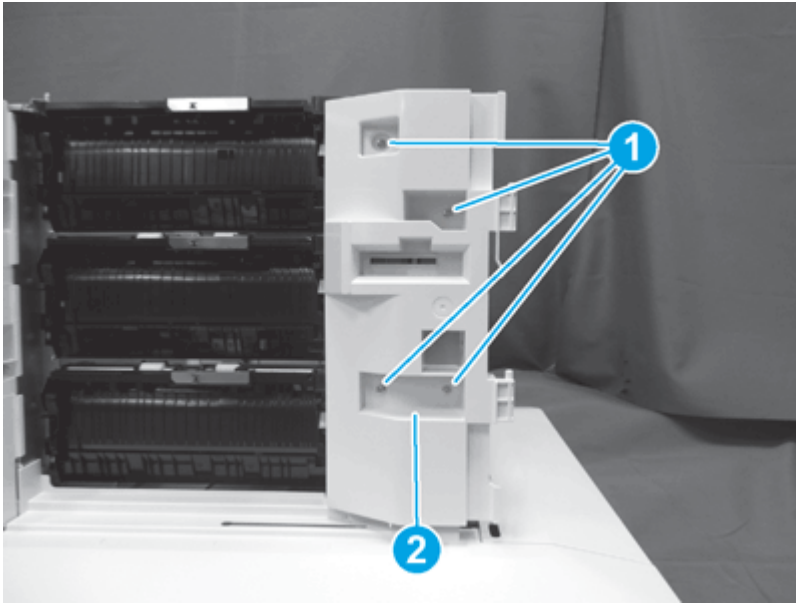


3. Remove the right door switch (1x550-sheet paper feeder with stand)

Follow these steps to remove the right door switch (1x550-sheet paper feeder with stand).

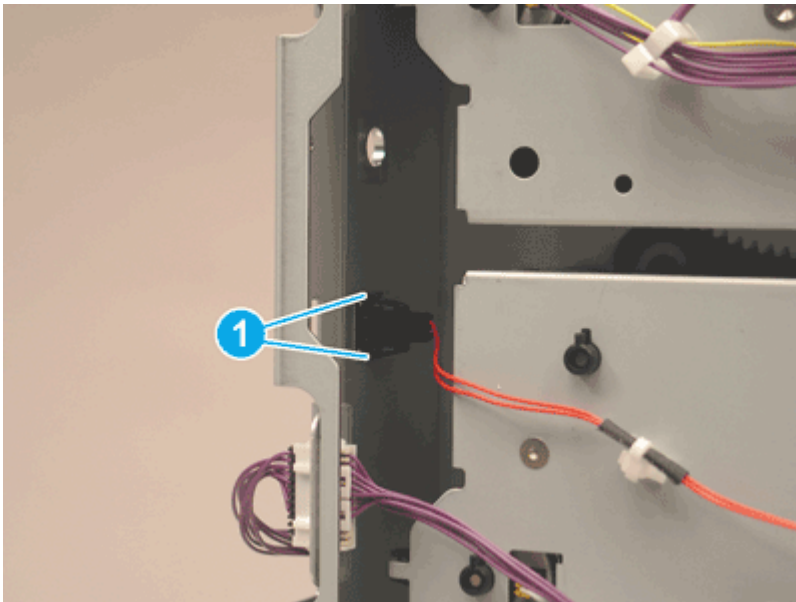
1. Remove four screws (callout 1), and then remove the hinge (callout 2).

Figure 5-1956 Remove four screws and the hinge



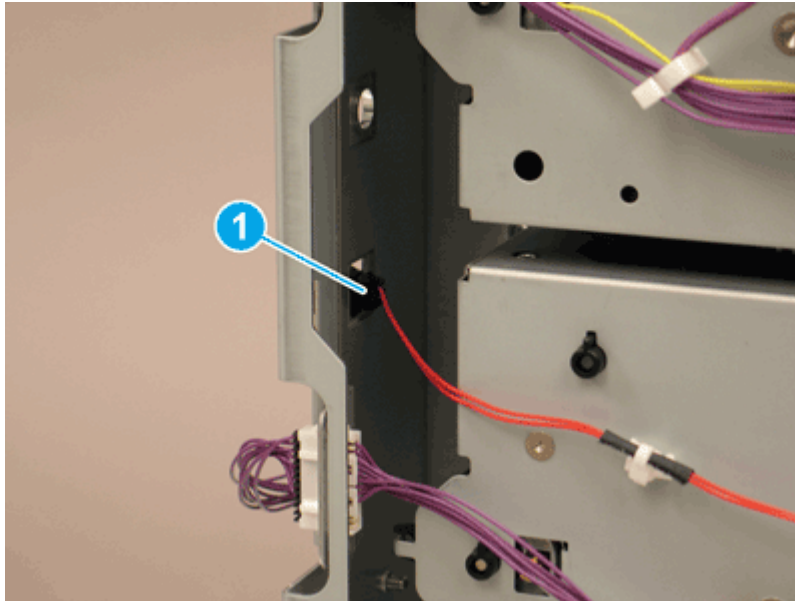
2. At the back of the paper feeder, release two tabs (callout 1) and release the switch through the opening in the sheet metal.

Figure 5-1957 Release two tabs



3. Disconnect one connector (callout 1), and then remove the right door switch.

Figure 5-1958 Disconnect one connector



4. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

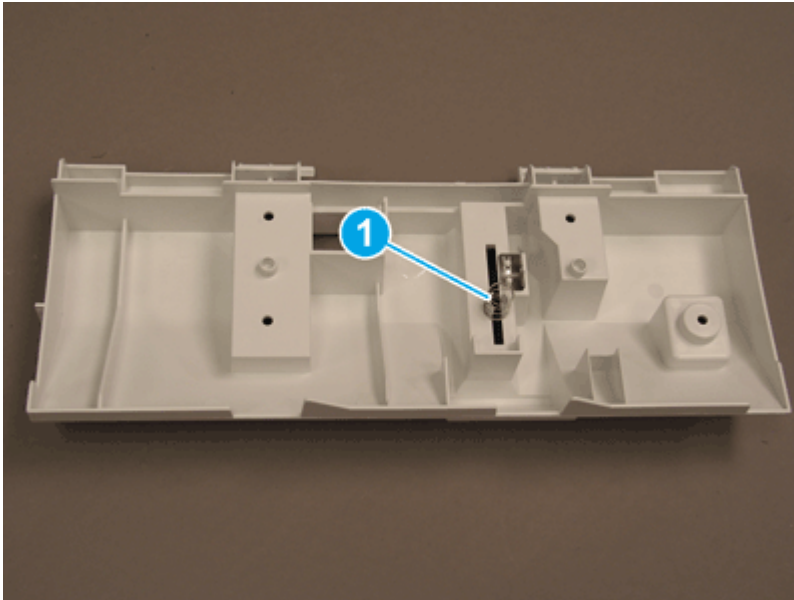
5. Reverse the removal steps to install the assembly

Also use the following **special installation instructions**.

Right lower cover

- Before reinstalling the hinge, make sure that the spring (callout 1) on the back of the part is in the correct position.

Figure 5-1959 Check spring position




 **NOTE:** Continue to reverse the removal steps to finish installing the assembly.

Removal and replacement: Size sensor (1x550-sheet paper feeder with stand)

Learn how to remove and replace the size sensor on the 1x550-sheet paper feeder with stand.


Mean time to repair: 20 minutes

Service level: Advanced

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.

 **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.

- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-114 Part information

Part number	Part description
RM2-0857-000CN	Size sensor assembly

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

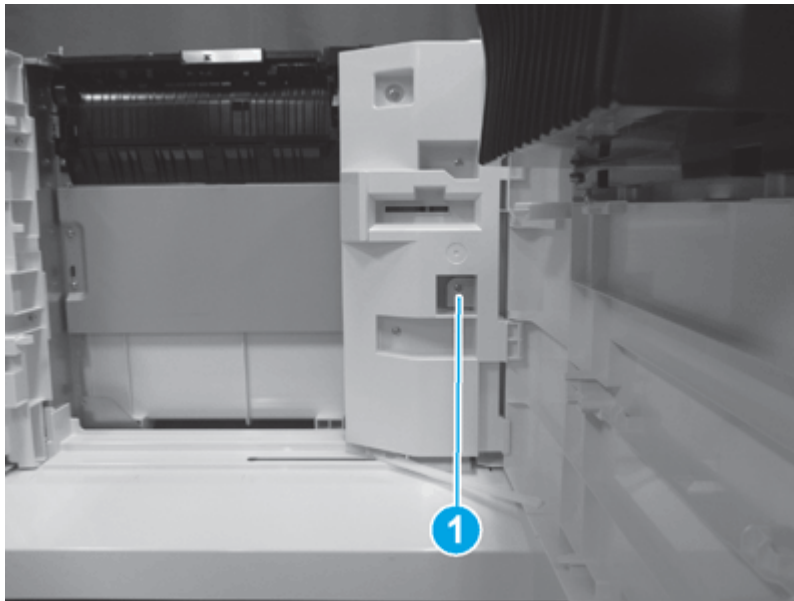
Install the paper tray and verify that the printer detects the correct size of paper in the tray.

1. Remove the rear cover (1x550-sheet paper feeder with stand)

Follow these steps to remove the rear cover (1x550-sheet paper feeder with stand).

1. Open the right door.
2. Remove one screw (callout 1).

Figure 5-1960 Remove one screw



3. Release three tabs (callout 1), and then remove the rear cover (callout 2).


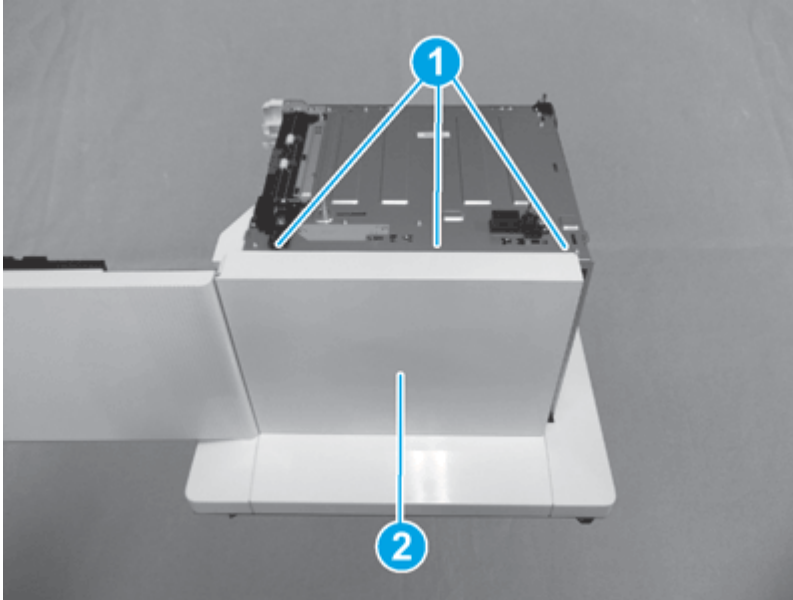
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1961 Remove the rear cover

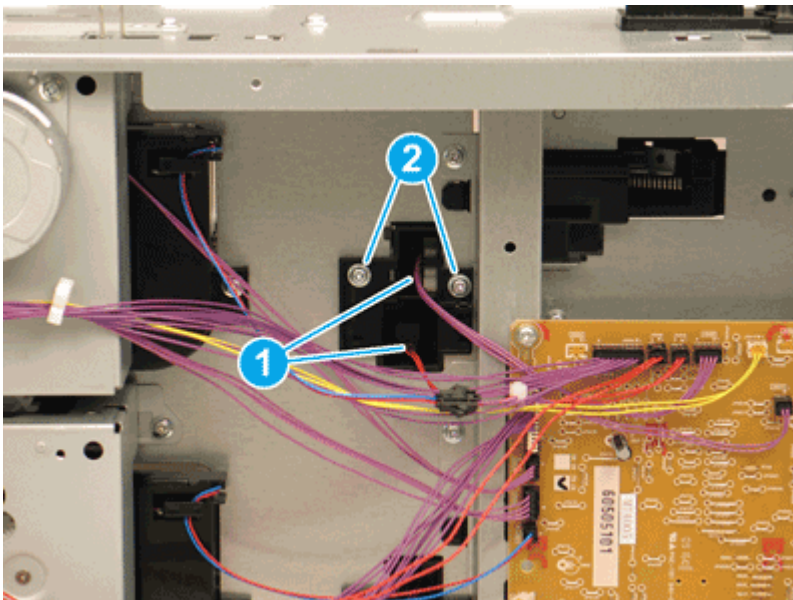


2. Remove the size sensor (1x550-sheet paper feeder with stand)

Follow these steps to remove the size sensor (1x550-sheet paper feeder with stand).

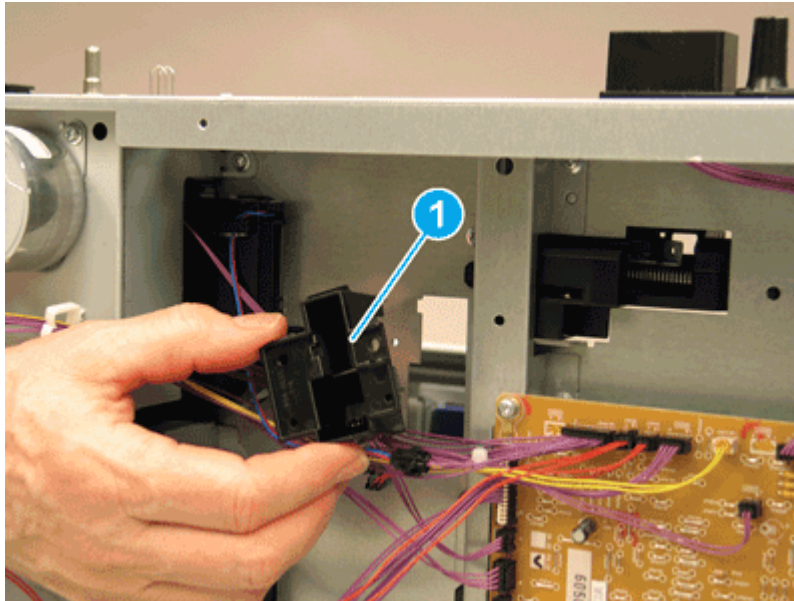
1. Remove the paper tray.
2. At the back of the feeder, disconnect two connectors (callout 1), and then remove two screws (callout 2).

Figure 5-1962 Disconnect two connectors and remove two screws



3. Remove the size sensor (callout 1).

Figure 5-1963 Remove the size sensor



3. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.




NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Lower drawer holder and cable assembly (1x550-sheet paper feeder with stand)

Learn how to remove and replace the drawer connector holder and cable assembly on the 1x550-sheet paper feeder with stand.

Mean time to repair: 20 minutes

Service level: Advanced

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.
- ⚠ **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.
- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-115 Part information

Part number	Part description
RC4-8914-000CN	Holder, drawer connector
RM2-9286-000CN	Drawer upper cable assembly

Required tools

- #2 Phillips screwdriver with a magnetic tip
- Small, flat-blade screwdriver

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

Send a print job from the host computer to the 1x550-sheet paper feeder. Verify that a page prints.

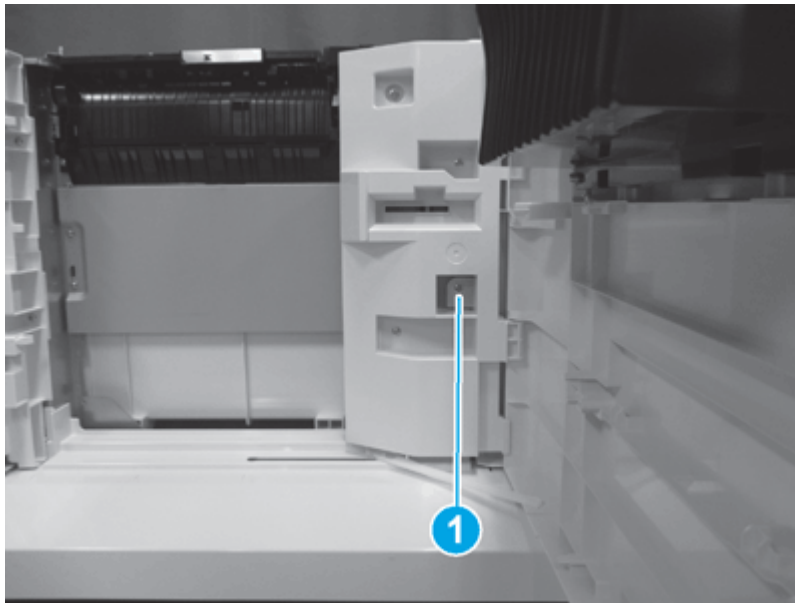
1. Remove the rear cover (1x550-sheet paper feeder with stand)

Follow these steps to remove the rear cover (1x550-sheet paper feeder with stand).

1. Open the right door.

2. Remove one screw (callout 1).

Figure 5-1964 Remove one screw



3. Release three tabs (callout 1), and then remove the rear cover (callout 2).


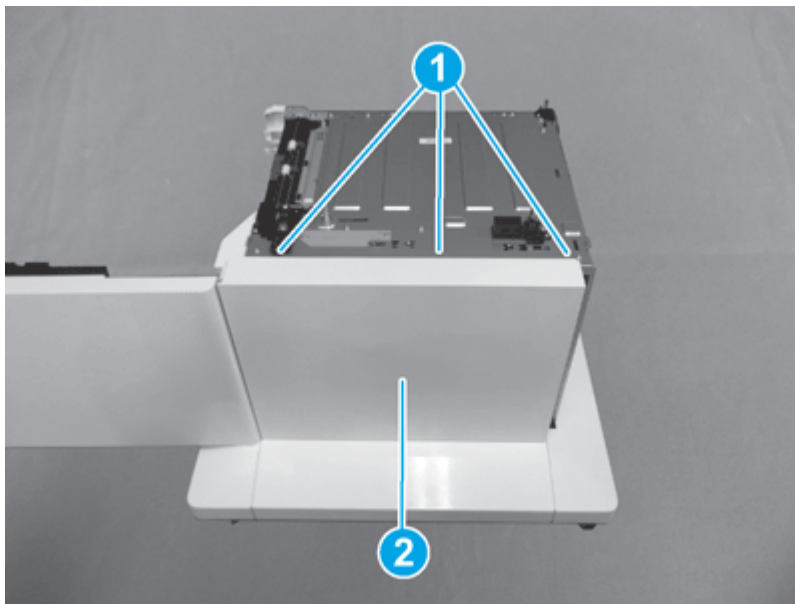
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1965 Remove the rear cover

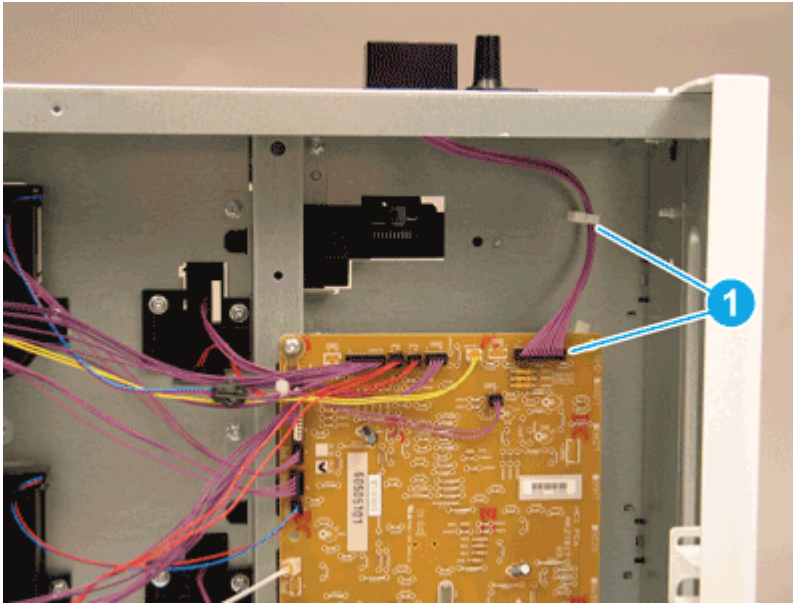


2. Remove the drawer connector holder and cable assembly (1x550-sheet paper feeder with stand)

Follow these steps to remove the drawer connector holder and cable assembly (1x550-sheet paper feeder with stand).

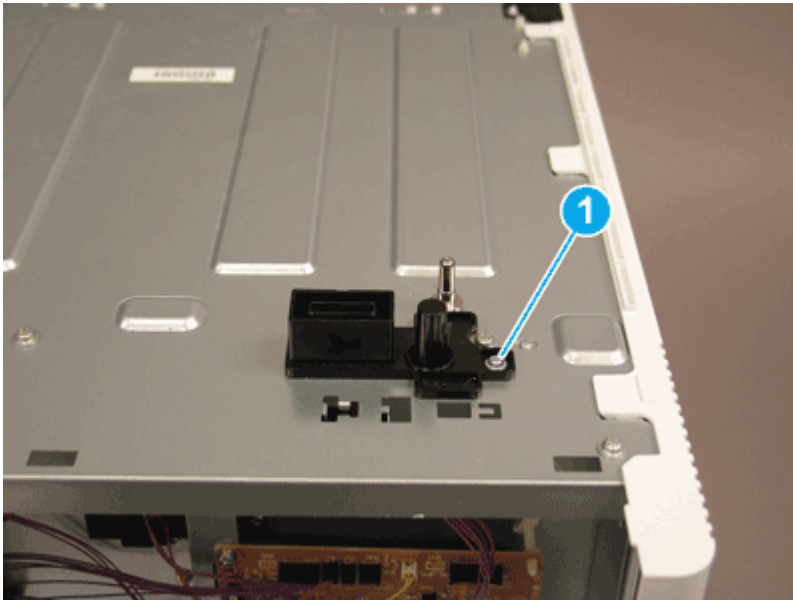
1. At the back of the feeder, disconnect one connector and release one retainer (callout 1).

Figure 5-1966 Disconnect one connector and release retainer



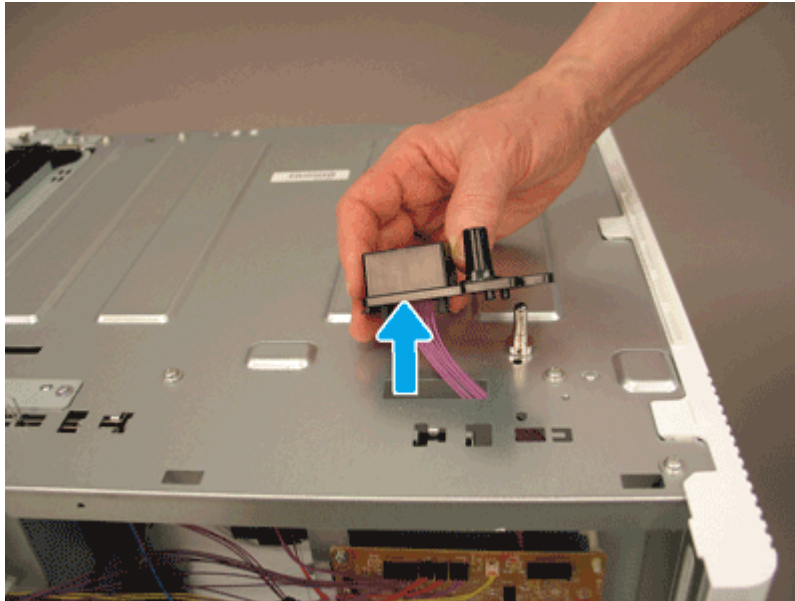
2. At the top of the paper feeder, remove one screw (callout 1).

Figure 5-1967 Remove one screw



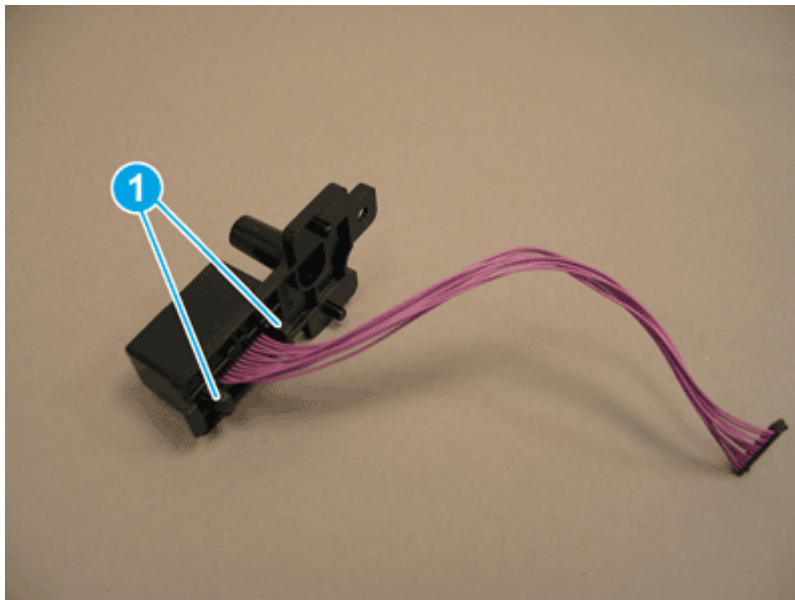
3. Lift the drawer connector holder and cable assembly away from the feeder to remove them.

Figure 5-1968 Remove the drawer connector holder and cable assembly



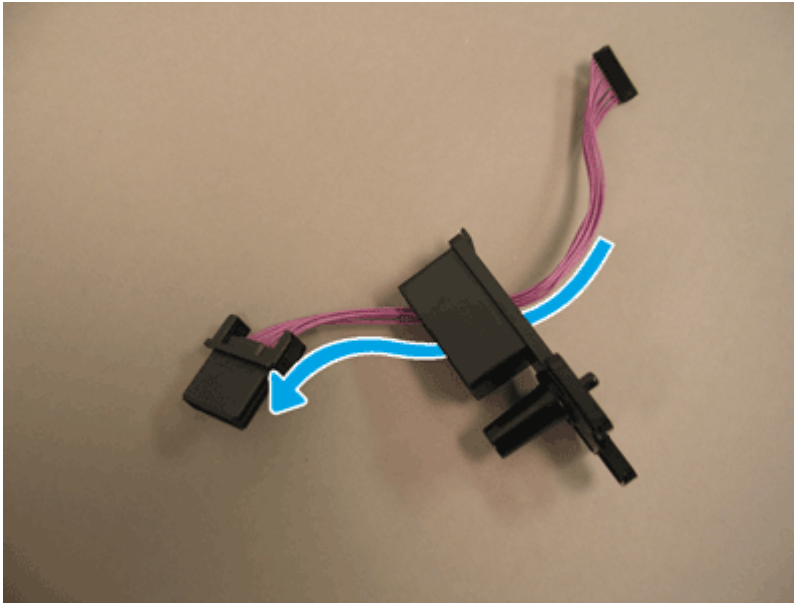
4. Use a small, flat-blade screwdriver to release two tabs (callout 1).

Figure 5-1969 Release two tabs



5. Remove the cable assembly from the drawer connector holder.

Figure 5-1970 Remove the cable assembly



3. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.




NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Auto-close assembly (1x550-sheet paper feeder with stand)

Learn how to remove and replace the auto-close assembly for the 1x550-sheet paper feeder with stand.


Mean time to repair: 20 minutes

Service level: Advanced

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.

 **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.

- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-116 Part information

Part number	Part description
RM2-0856-000CN	Auto close assembly

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

Slowly install the paper tray in the paper feeder. Verify that the auto-close assembly catches and pulls the tray completely closed.

1. Remove the auto-close assembly (1x550-sheet paper feeder with stand)

Follow these steps to remove the auto-close assembly (1x550-sheet paper feeder with stand).

1. Remove the paper tray.
2. Remove one screw (callout 1), and then remove the auto-close assembly (callout 2).


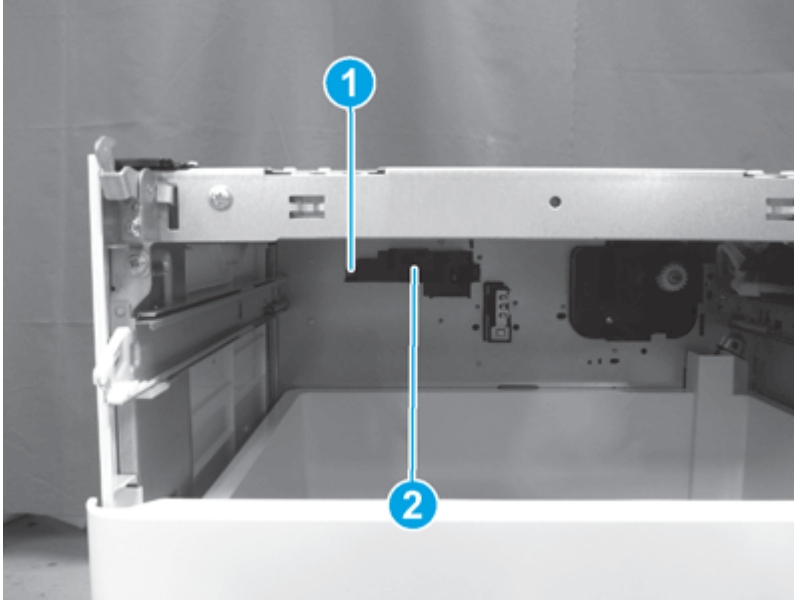
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1971 Remove the auto-close assembly



2. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.




NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Paper pickup assembly (1x550-sheet paper feeder with stand)

Learn how to remove and replace the paper pickup assembly for the 1x550-sheet paper feeder with stand.


Mean time to repair: 20 minutes

Service level: Advanced

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.

 **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.

- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-117 Part information

Part number	Part description
RM2-1235-000CN	Paper pickup assembly

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

Send a print job from the host computer to the 1x550-sheet paper feeder with stand. Verify that a page prints.

1. Remove the right door (1x550-sheet paper feeder with stand)

Follow these steps to Remove the right door (1x550-sheet paper feeder with stand).

- Release one tab (callout 1), and then lift up (callout 2) to remove the right door (callout 3).


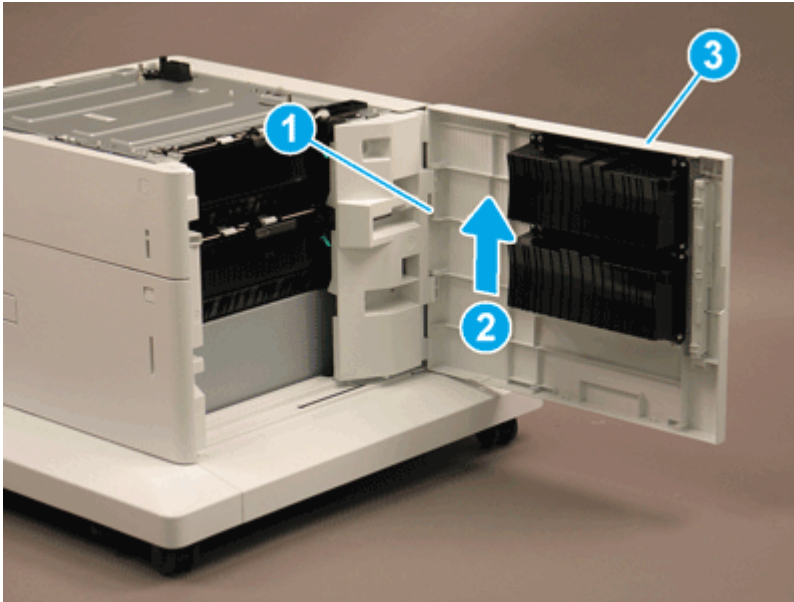
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1972 Remove the right door

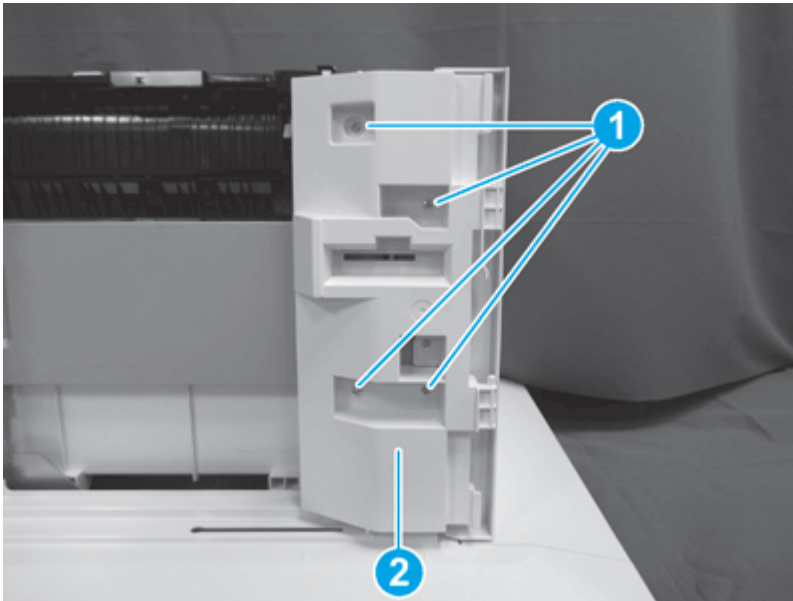


2. Remove the paper pickup assembly (1x550-sheet paper feeder with stand)

Follow these steps to remove the paper pickup assembly (1x550-sheet paper feeder with stand).

1. Remove the paper tray.
2. Remove four screws (callout 1), and then remove the hinge (callout 2).

Figure 5-1973 Remove four screws and the hinge



3. Disconnect one connector (callout 1), remove two screws (callout 2), and then remove the paper pickup assembly (callout 3).


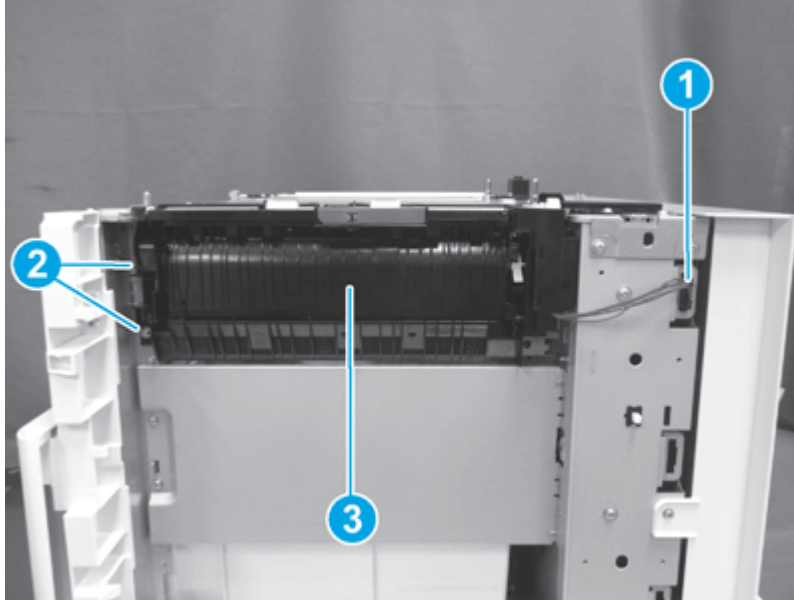
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1974 Remove the paper pickup assembly



3. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

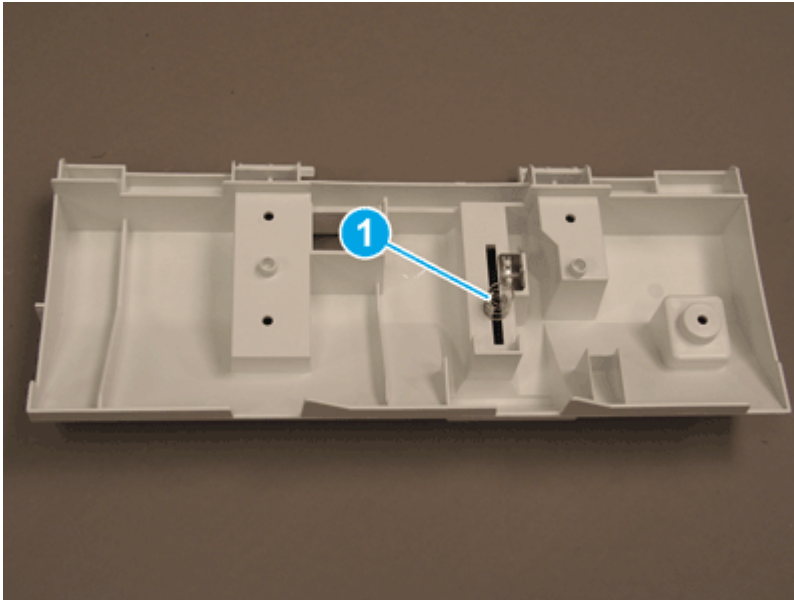
4. Reverse the removal steps to install the assembly


Also use the following **special installation instructions**.

Right lower cover

- Before reinstalling the hinge, make sure that the spring (callout 1) on the back of the part is in the correct position.

Figure 5-1975 Check spring position




 **NOTE:** Continue to reverse the removal steps to finish installing the assembly.

Removal and replacement: Feed motor (1x550-sheet paper feeder with stand)

Learn how to remove and replace the feed motor for the 1x550-sheet paper feeder with stand.


Meant time to repair: 20 minutes

Service level: Advanced

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.

 **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.

- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-118 Part information

Part number	Part description
RK2-7831-000CN	Motor, stepping

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

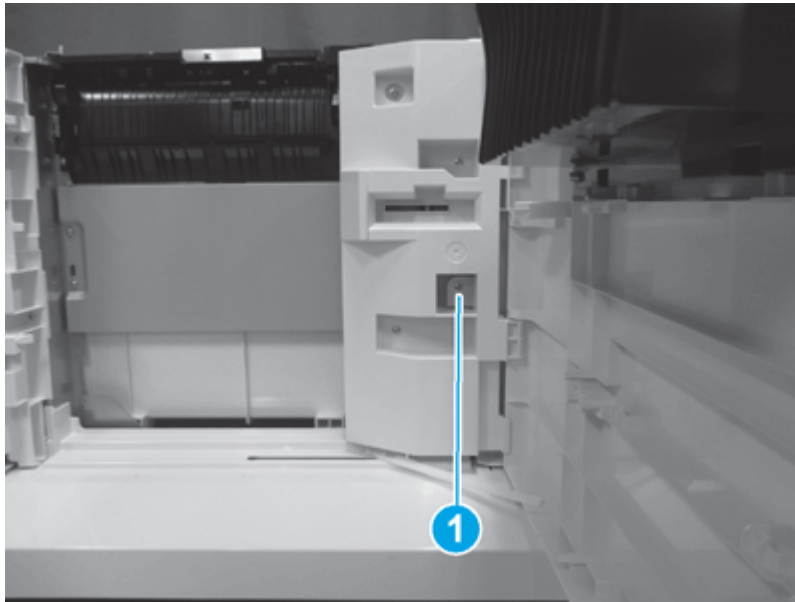
Send a print job from the host computer to the 1x550-sheet paper feeder with stand. Verify that a page prints.

1. Remove the rear cover (1x550-sheet paper feeder with stand)

Follow these steps to remove the rear cover (1x550-sheet paper feeder with stand).

1. Open the right door.
2. Remove one screw (callout 1).

Figure 5-1976 Remove one screw



3. Release three tabs (callout 1), and then remove the rear cover (callout 2).


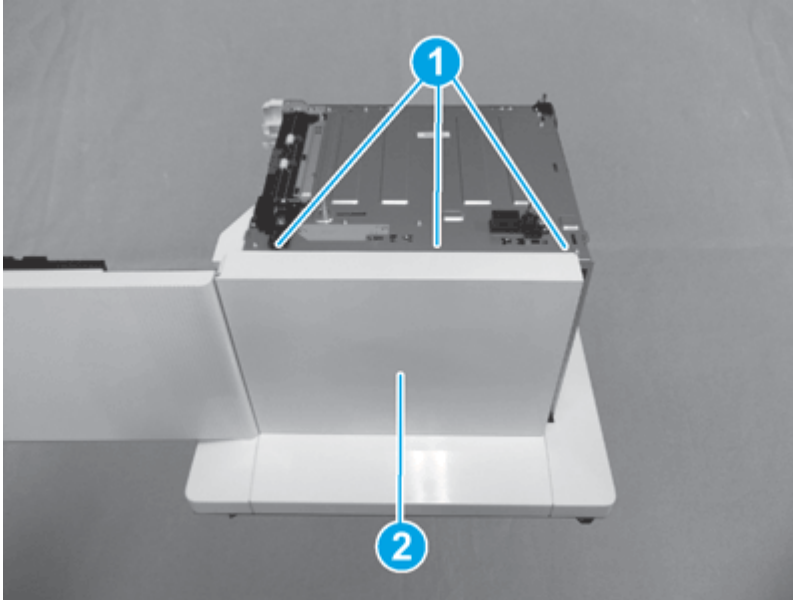
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1977 Remove the rear cover



2. Remove the feed motor (1x550-sheet paper feeder with stand)

Follow these steps to remove the feed motor (1x550-sheet paper feeder with stand).

- Disconnect one connector (callout 1), remove two screws (callout 2), and then remove the feed motor (callout 3).


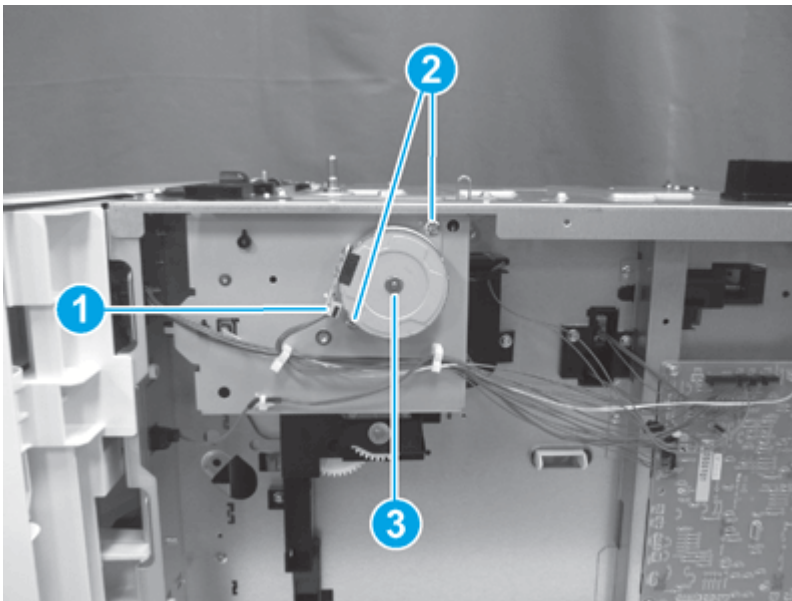
 **TIP:** Reverse the removal steps to install the assembly.


Figure 5-1978 Remove the feed motor



3. Unpack the replacement assembly



Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.


 **NOTE:** HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>


2. Unpack the replacement part from the packaging.

 **CAUTION:**  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

 **IMPORTANT:** Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

 **NOTE:** If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.


 **NOTE:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Drive assembly (1x550-sheet paper feeder with stand)

Learn how to remove and replace the drive assembly for the 1x550-sheet paper feeder with stand.


Mean time to repair: 20 minutes

Service level: Advanced

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.

 **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.

- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-119 Part information

Part number	Part description
RM2-1222-000CN	Drive assembly

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

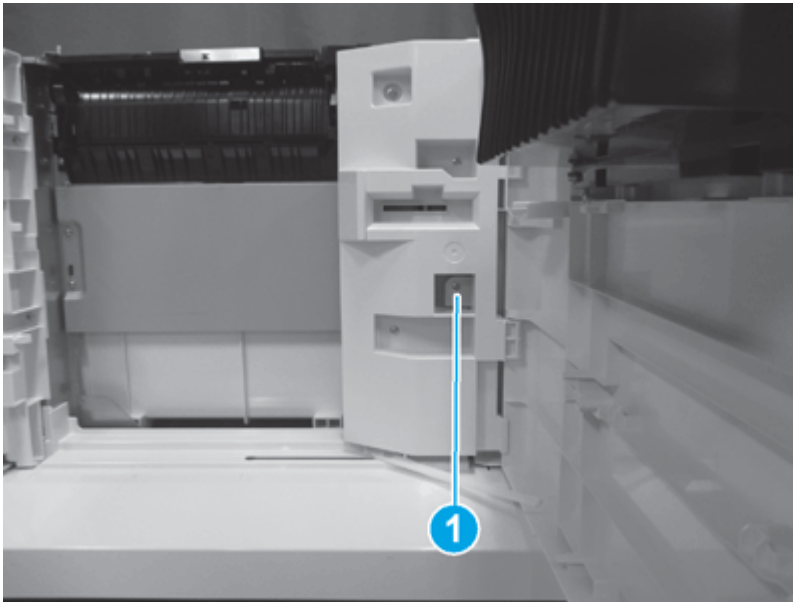
Send a print job from the host computer to the 1x550-sheet paper feeder with stand. Verify that a page prints.

1. Remove the rear cover (1x550-sheet paper feeder with stand)

Follow these steps to remove the rear cover (1x550-sheet paper feeder with stand).

1. Open the right door.
2. Remove one screw (callout 1).

Figure 5-1979 Remove one screw



3. Release three tabs (callout 1), and then remove the rear cover (callout 2).


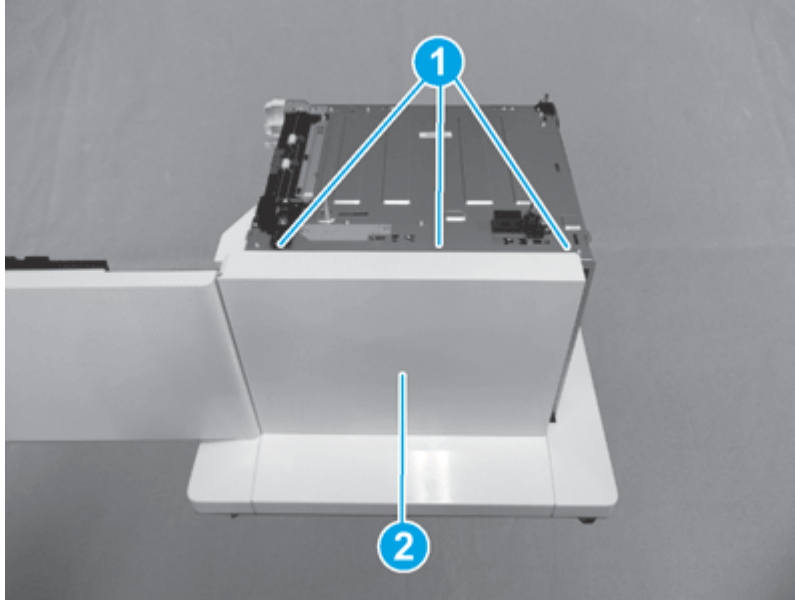
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1980 Remove the rear cover



2. Remove the feed motor (1x550-sheet paper feeder with stand)

Follow these steps to remove the feed motor (1x550-sheet paper feeder with stand).

- Disconnect one connector (callout 1), remove two screws (callout 2), and then remove the feed motor (callout 3).


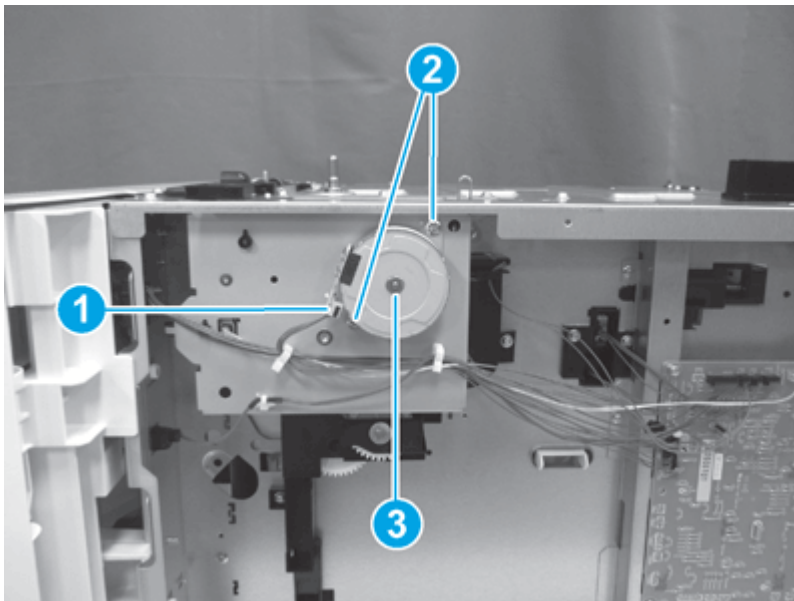
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1981 Remove the feed motor

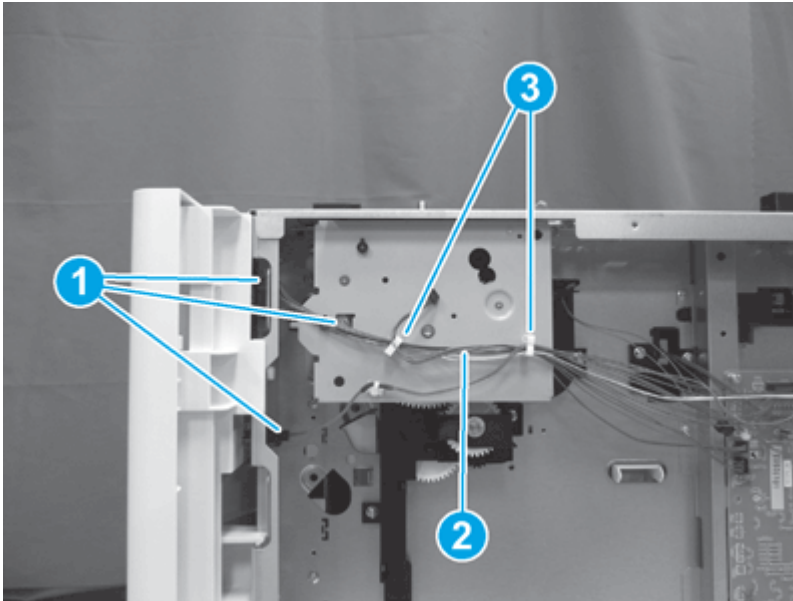


3. Remove the drive assembly (1x550-sheet paper feeder with stand)

Follow these steps to remove the drive assembly (1x550-sheet paper feeder with stand).

1. Disconnect three connectors (callout 1), and then release the cable (callout 2) from the retainers (callout 3).

Figure 5-1982 Disconnect three connectors



2. Release the retainer (callout 1), remove three screws (callout 2), and then remove the drive assembly (callout 3).


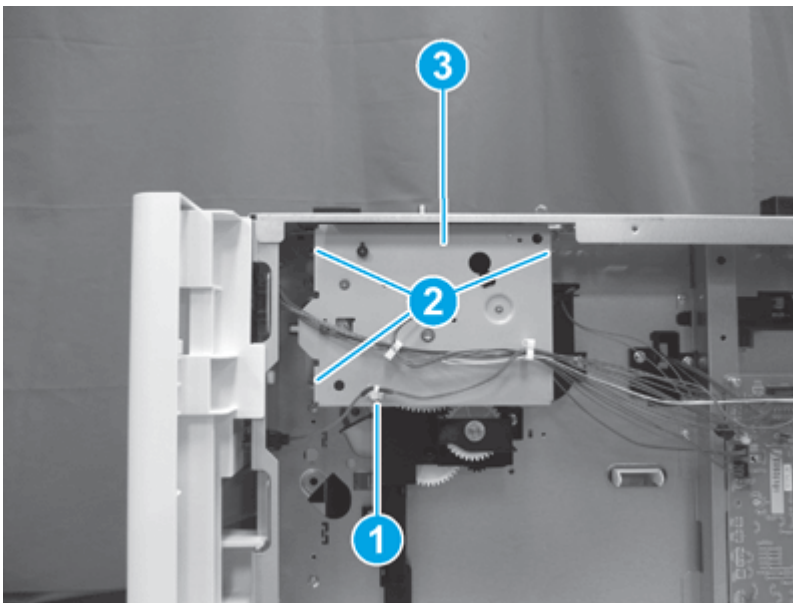
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1983 Remove the drive assembly



4. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Pickup alienation holder (1x550-sheet paper feeder with stand)

Learn how to remove and replace the pickup alienation holder for the 1x550-sheet paper feeder with stand.

Mean time to repair: 20 minutes

Service level: Advanced



IMPORTANT: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.



WARNING! To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.

- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-120 Part information

Part number	Part description
RM2-1223-000CN	Estrangement holder assembly

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

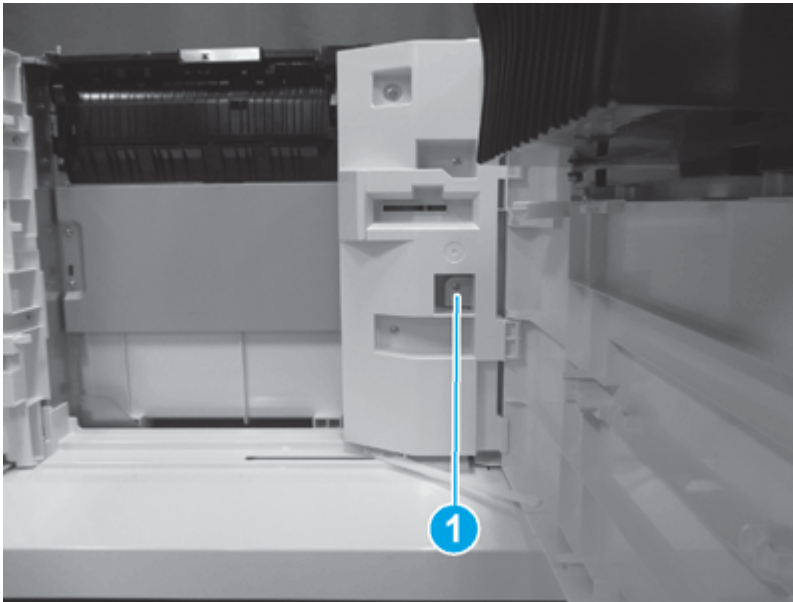
Send a print job from the host computer to the 1x550-sheet paper feeder with stand. Verify that a page prints.

1. Remove the rear cover (1x550-sheet paper feeder with stand)

Follow these steps to remove the rear cover (1x550-sheet paper feeder with stand).

1. Open the right door.
2. Remove one screw (callout 1).

Figure 5-1984 Remove one screw

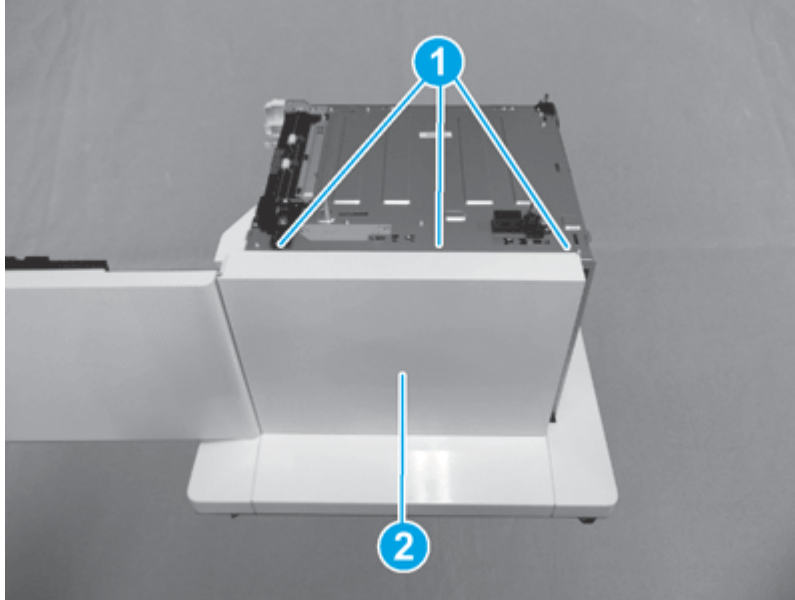


3. Release three tabs (callout 1), and then remove the rear cover (callout 2).



TIP: Reverse the removal steps to install the assembly.

Figure 5-1985 Remove the rear cover



2. Remove the feed motor (1x550-sheet paper feeder with stand)

Follow these steps to remove the feed motor (1x550-sheet paper feeder with stand).

- Disconnect one connector (callout 1), remove two screws (callout 2), and then remove the feed motor (callout 3).


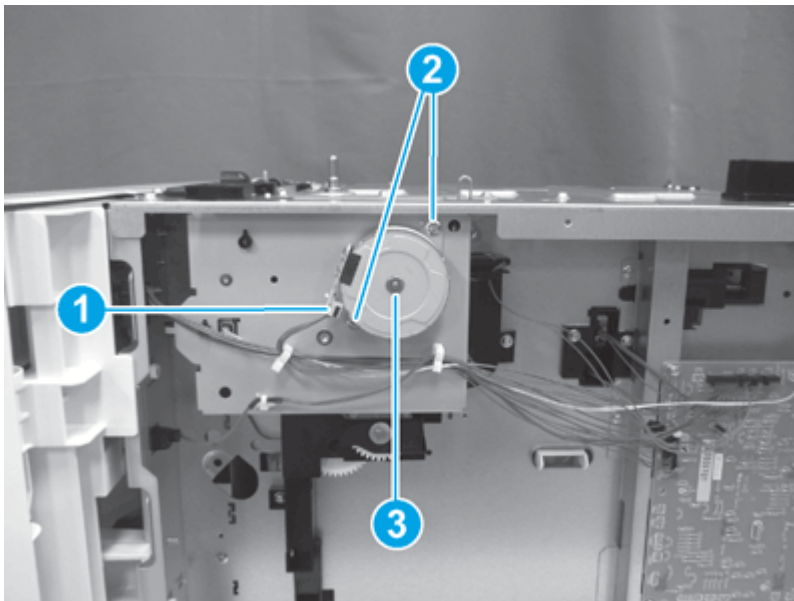
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1986 Remove the feed motor

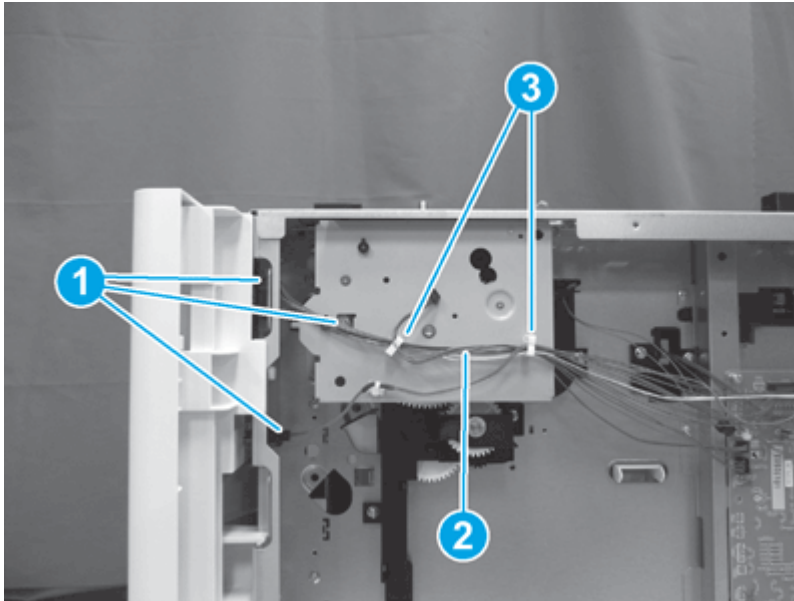


3. Remove the drive assembly (1x550-sheet paper feeder with stand)

Follow these steps to remove the drive assembly (1x550-sheet paper feeder with stand).

1. Disconnect three connectors (callout 1), and then release the cable (callout 2) from the retainers (callout 3).

Figure 5-1987 Disconnect three connectors



2. Release the retainer (callout 1), remove three screws (callout 2), and then remove the drive assembly (callout 3).


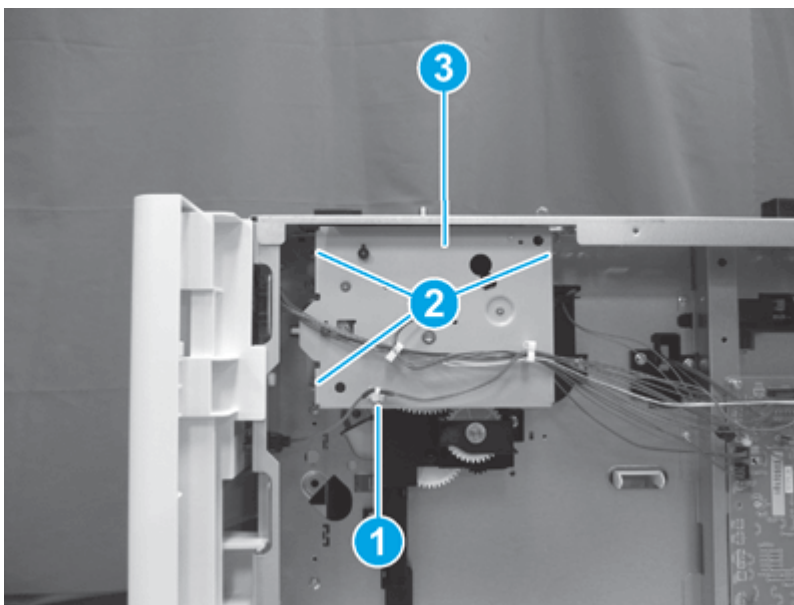
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1988 Remove the drive assembly

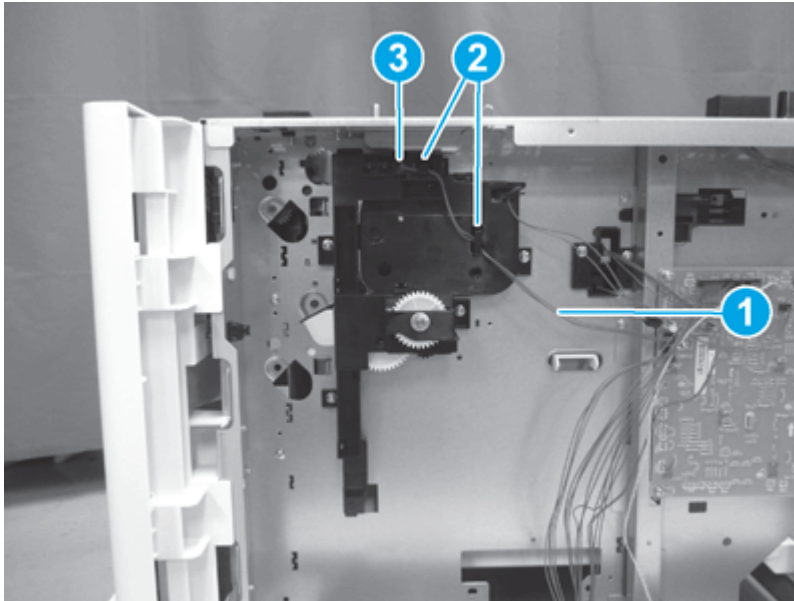


4. Remove the pickup alienation holder (1x550-sheet paper feeder with stand)

Follow these steps to remove the pickup alienation holder (1x550-sheet paper feeder with stand).

1. Release the cable (callout 1) from cable guides (callout 2), and then disconnect one connector (callout 3).

Figure 5-1989 Disconnect one connector



2. Remove four screws (callout 1), and then remove the pickup alienation holder (callout 2).


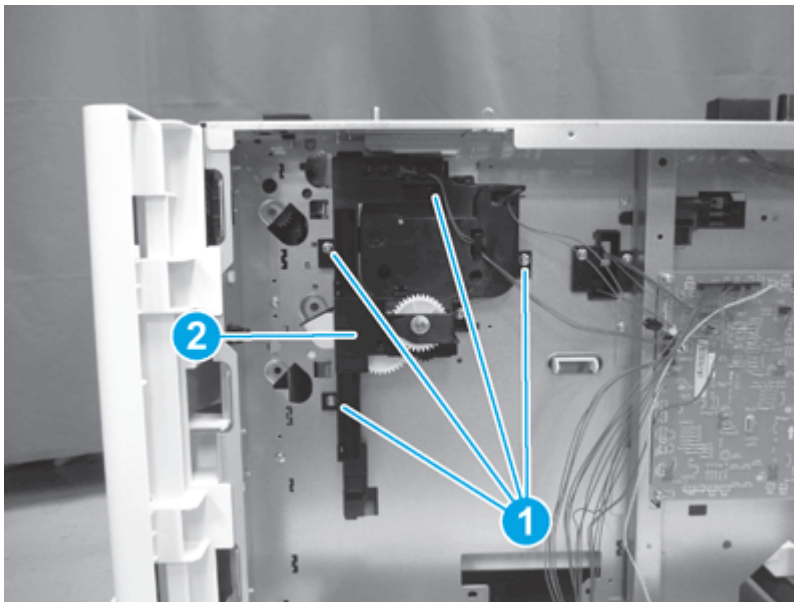
 **TIP:** Reverse the removal steps to install the assembly.


Figure 5-1990 Remove four screws and the pickup alienation holder



5. Unpack the replacement assembly



Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.


 **NOTE:** HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>


2. Unpack the replacement part from the packaging.

 **CAUTION:**  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

 **IMPORTANT:** Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

 **NOTE:** If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.


 **NOTE:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Lifter drive assembly (1x550-sheet paper feeder with stand)

Learn how to remove and replace the lifter drive assembly for the 1x550-sheet paper feeder with stand.


Mean time to repair: 20 minutes

Service level: Advanced

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.

 **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.

- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-121 Part information

Part number	Part description
RM2-2091-000CN	Lifter drive assembly

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

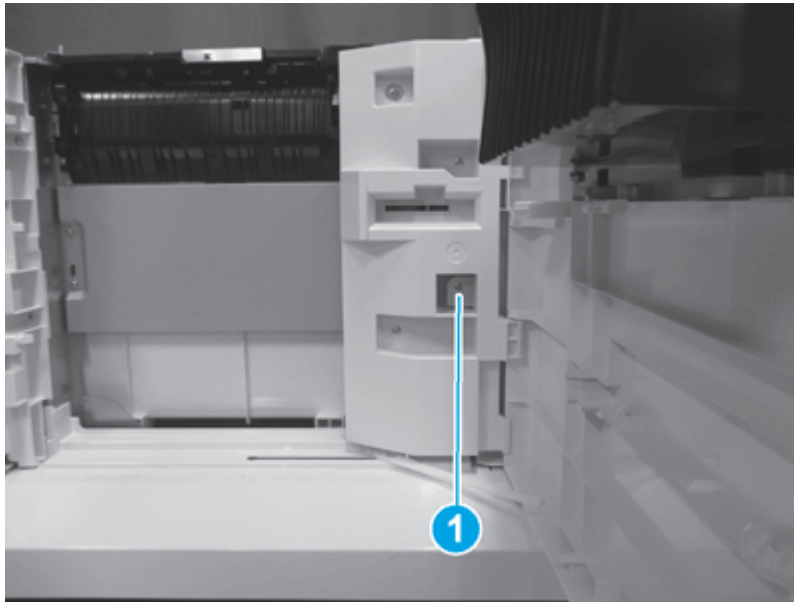
Send a print job from the host computer to the 1x550-sheet paper feeder with stand. Verify that a page prints.

1. Remove the rear cover (1x550-sheet paper feeder with stand)

Follow these steps to remove the rear cover (1x550-sheet paper feeder with stand).

1. Open the right door.
2. Remove one screw (callout 1).

Figure 5-1991 Remove one screw



3. Release three tabs (callout 1), and then remove the rear cover (callout 2).


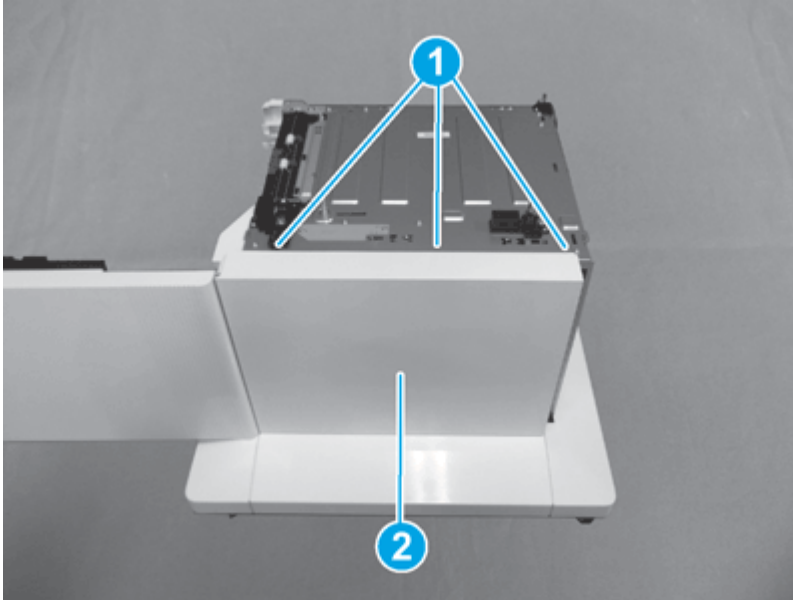
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1992 Remove the rear cover



2. Remove the feed motor (1x550-sheet paper feeder with stand)

Follow these steps to remove the feed motor (1x550-sheet paper feeder with stand).

- Disconnect one connector (callout 1), remove two screws (callout 2), and then remove the feed motor (callout 3).


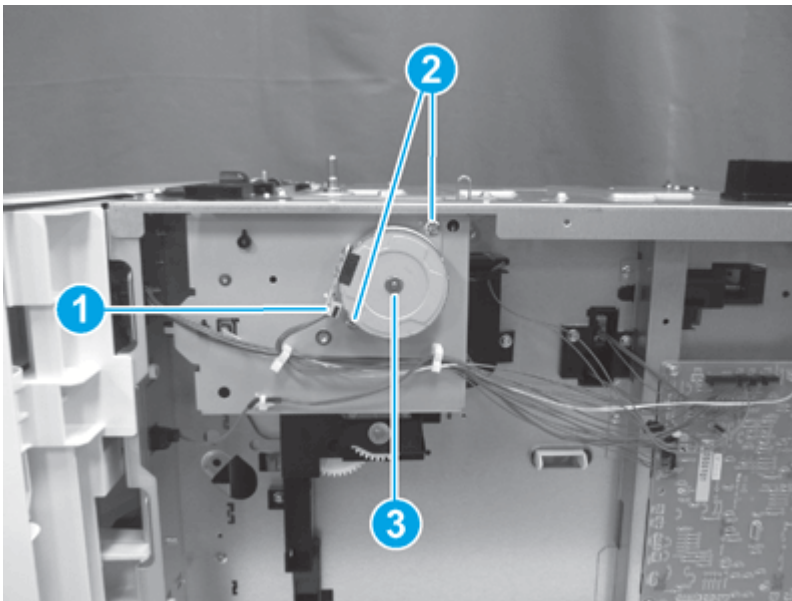
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1993 Remove the feed motor

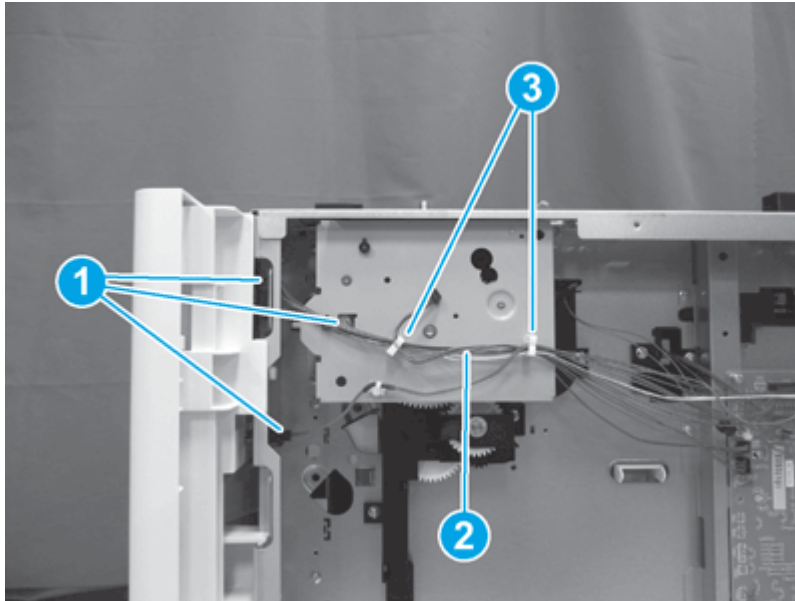


3. Remove the drive assembly (1x550-sheet paper feeder with stand)

Follow these steps to remove the drive assembly (1x550-sheet paper feeder with stand).

1. Disconnect three connectors (callout 1), and then release the cable (callout 2) from the retainers (callout 3).

Figure 5-1994 Disconnect three connectors



2. Release the retainer (callout 1), remove three screws (callout 2), and then remove the drive assembly (callout 3).


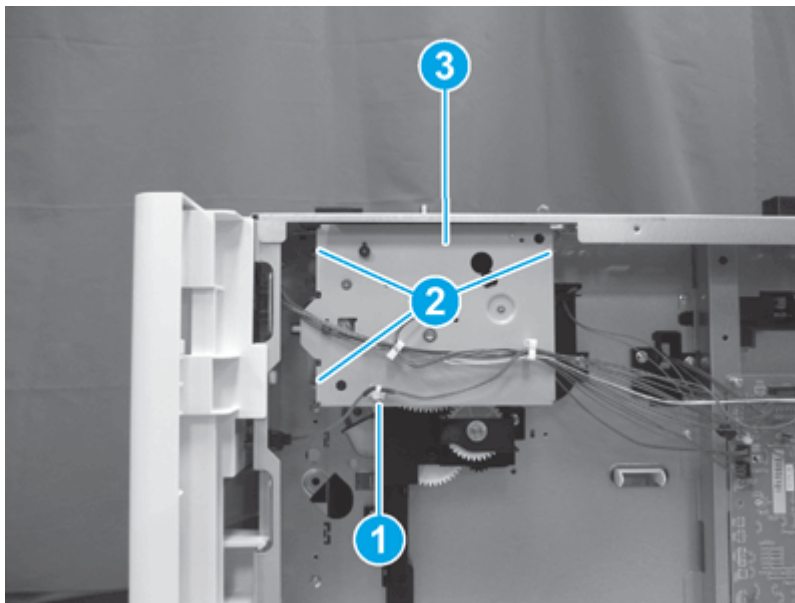
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1995 Remove the drive assembly

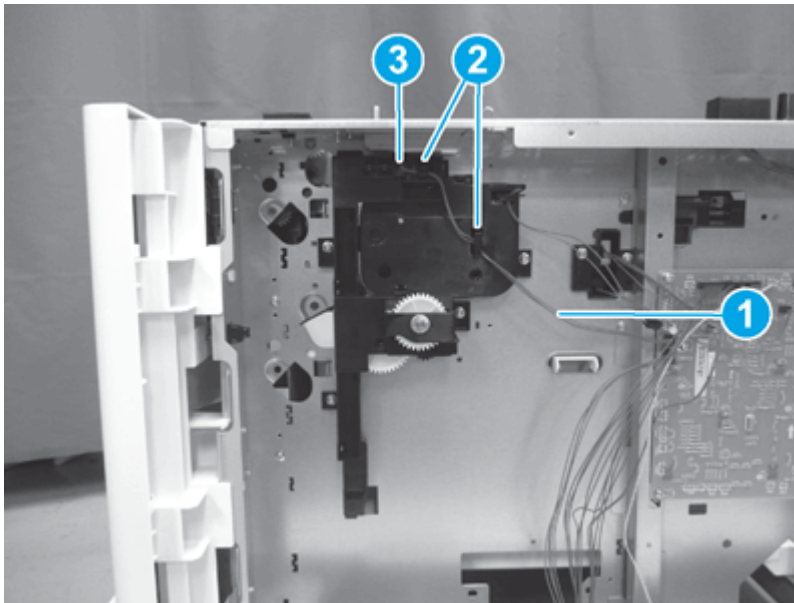


4. Remove the pickup alienation holder (1x550-sheet paper feeder with stand)

Follow these steps to remove the pickup alienation holder (1x550-sheet paper feeder with stand).

1. Release the cable (callout 1) from cable guides (callout 2), and then disconnect one connector (callout 3).

Figure 5-1996 Disconnect one connector



2. Remove four screws (callout 1), and then remove the pickup alienation holder (callout 2).


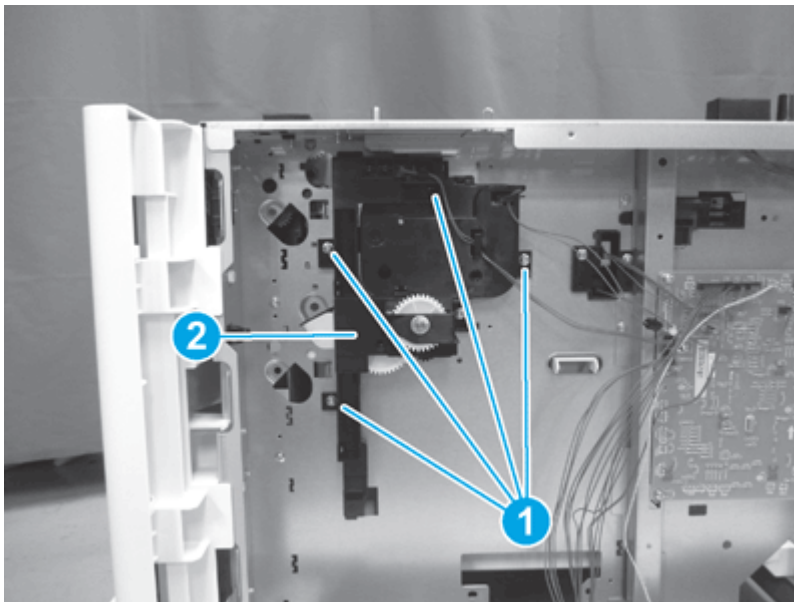
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1997 Remove four screws and the pickup alienation holder



5. Remove the lifter drive assembly (1x550-sheet paper feeder with stand)

Follow these steps to remove the lifter drive assembly (1x550-sheet paper feeder with stand).

- Disconnect one connector (callout 1), remove two screws (callout 2), and then remove the lifter drive assembly (callout 3).


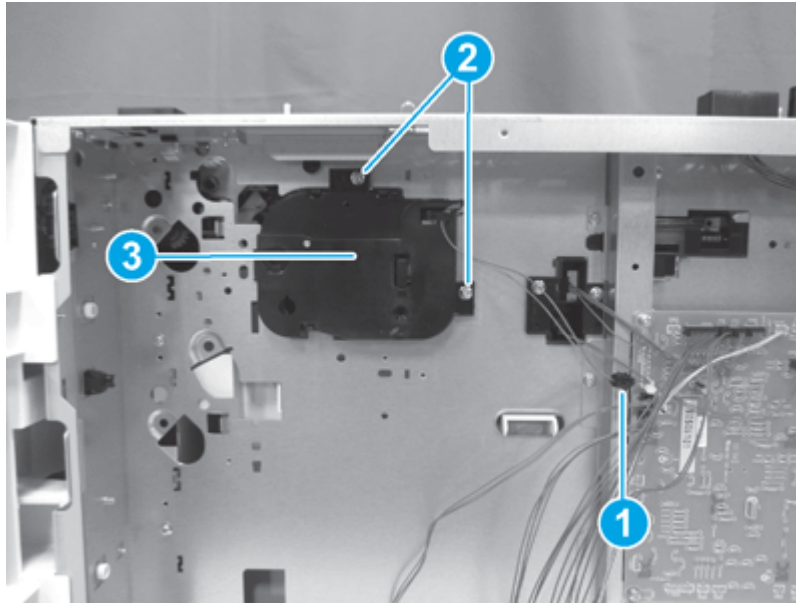
 **TIP:** Reverse the removal steps to install the assembly.


Figure 5-1998 Remove three screws and the lifter drive assembly



6. Unpack the replacement assembly



Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.


 **NOTE:** HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.

 **CAUTION:**  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

 **IMPORTANT:** Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Controller PCA (1x550-sheet paper feeder with stand)

Learn how to remove and replace the controller PCA for the 1x550-sheet paper feeder with stand.

Mean time to repair: 20 minutes

Service level: Advanced



IMPORTANT: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.
- ⚠ **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.
- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-122 Part information

Part number	Part description
RM2-8482-000CN	Paper deck controller PCB assembly

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

Send a print job from the host computer to the 1x550-sheet paper feeder with stand. Verify that a page prints.

1. Remove the left lower cover (1x550-sheet paper feeder with stand)

Follow these steps to remove the left lower cover (1x550-sheet paper feeder with stand).

- Remove two screws (callout 1), and then release two tabs (callout 2). Release two bosses (callout 3), and then remove the left lower cover (callout 4).


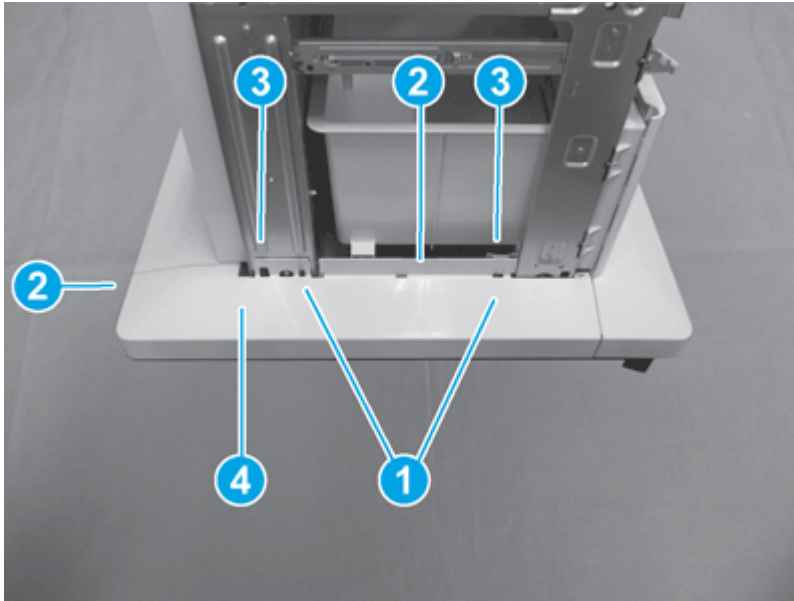
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-1999 Remove the left lower cover



2. Remove the controller PCA (1x550-sheet paper feeder with stand)

Follow these steps to remove the controller PCA (1x550-sheet paper feeder with stand).

- Disconnect all of the connectors on the controller PCA. Remove two screws (callout 1), release two tabs (callout 2), and then remove the controller PCA (callout 3).


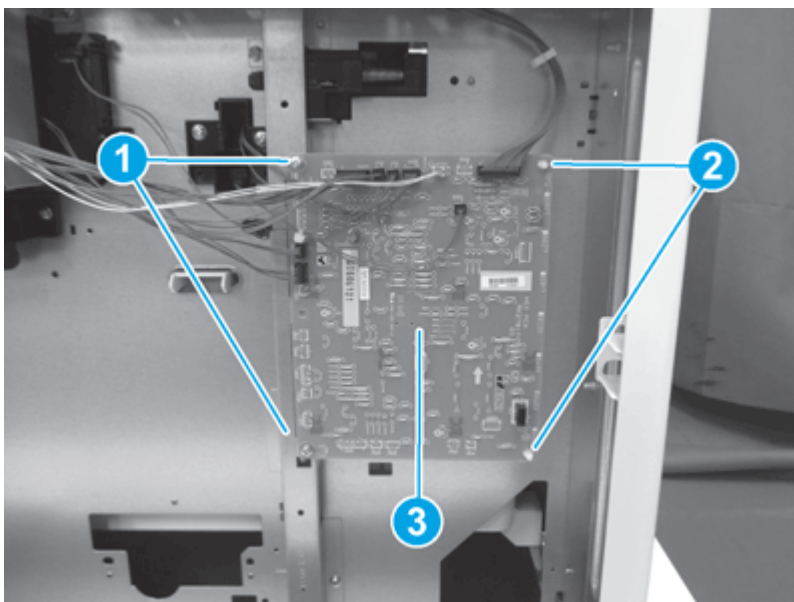
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2000 Remove the controller PCA



3. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Input device - 3x550-sheet paper feeder with stand

Learn how to remove and replace the 3x550-sheet paper feeder parts and assemblies.

Removal and replacement: Caster covers (3x550-sheet paper feeder with stand)

Learn how to remove and replace the caster covers on the 3x550-sheet paper feeder with stand.

Mean time to repair: 10 minutes

Service level: Intermediate



IMPORTANT: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.



WARNING! To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.

- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-123 Part information

Part number	Part description
RC5-0417-000CN	Cover, caster, right
RC5-0418-000CN	Cover, caster, left

Required tools

- No special tools are needed to remove or install this assembly.

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

No post service test is available for this assembly.

1. Remove the caster cover (3x550-sheet paper feeder with stand)

Follow these steps to remove the caster cover (3x550-sheet paper feeder with stand).

- Slide the caster cover away from the printer to remove it.


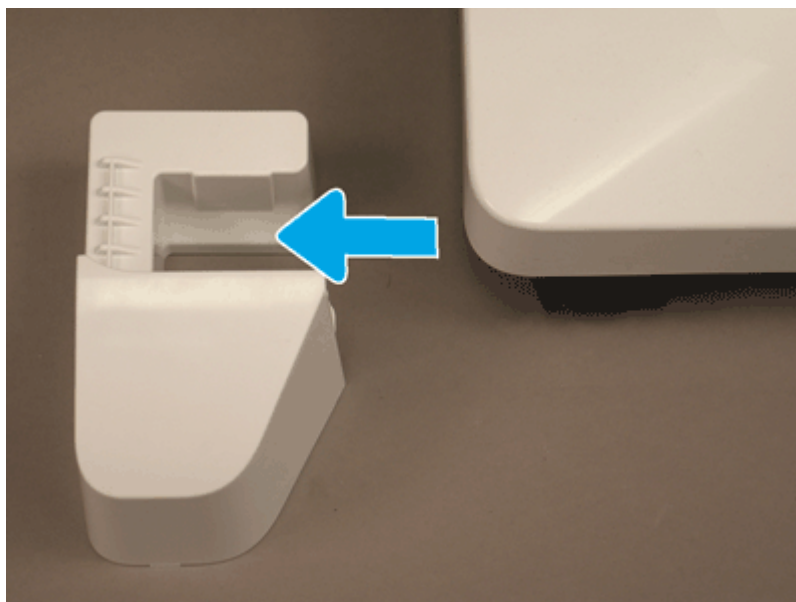
 **NOTE:** The figure below shows the left caster cover. The procedure is the same for the right caster cover.

Figure 5-2001 Remove the caster cover



2. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

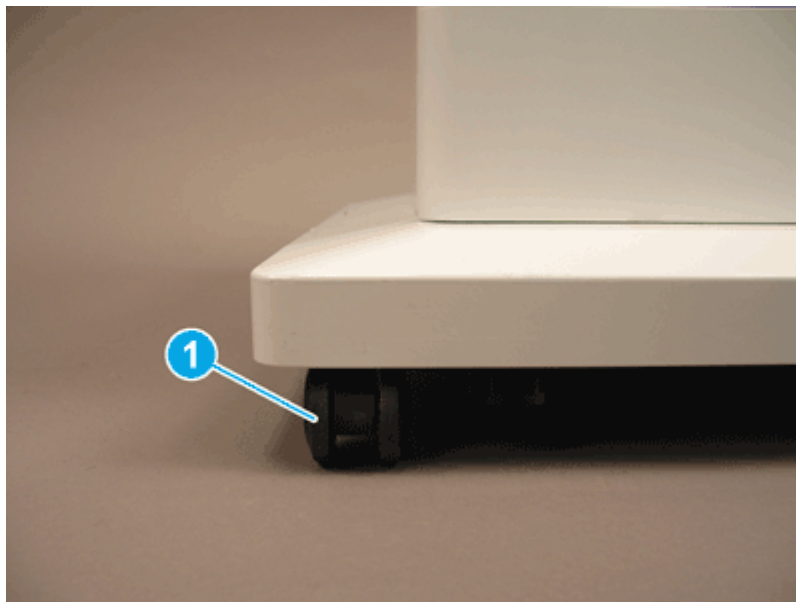
3. Reverse the removal steps to install the assembly

Also use the following **special installation instructions**.

Caster cover (3x550-sheet paper feeder with stand)

- Before installing the caster cover, position the caster wheel (callout 1) so that it faces the front of the printer.

Figure 5-2002 Position the caster wheel




 **NOTE:** Continue to reverse the removal steps to finish installing the assembly.

Removal and replacement: Left cover (3x550-sheet paper feeder with stand)

Learn how to remove and replace the left cover on the 3x550-sheet paper feeder with stand.

Mean time to repair: 10 minutes

Service level: Intermediate

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.
- ⚠ **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.
- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-124 Part information

Part number	Part description
RC5-0387-000CN	Cover, left

Required tools

- No special tools are needed to remove or install this assembly.

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

No post service test is available for this assembly.

1. Remove the left cover (3x550-sheet paper feeder with stand)

Follow these steps to remove the left cover (3x550-sheet paper feeder with stand).

- Release five tabs (callout 1), and then remove the left cover (callout 2).


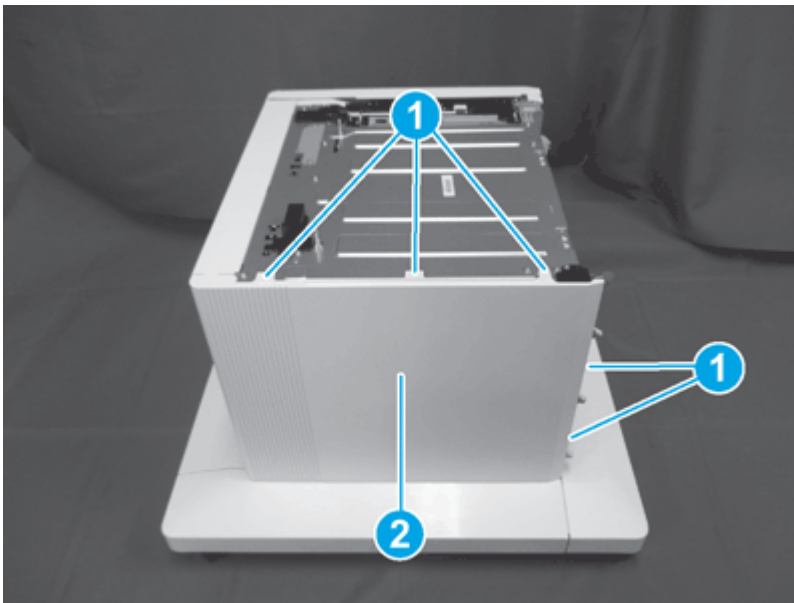
 **TIP:** Reverse the removal steps to install the assembly.


Figure 5-2003 Remove the left cover



2. Unpack the replacement assembly



Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.


 **NOTE:** HP recommends responsible disposal of the defective part.


<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.


 **CAUTION:**  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly.

Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

 **IMPORTANT:** Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

 **NOTE:** If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.


 **NOTE:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Right door link (3x550-sheet paper feeder with stand)

Learn how to remove and replace the link on the right door on the 3x550-sheet paper feeder with stand.


Mean time to repair: 10 minutes

Service level: Intermediate

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.

 **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.

- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-125 Part information

Part number	Part description
RC4-9824-000CN	Link, door

Required tools

- No special tools are needed to remove or install this assembly.

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

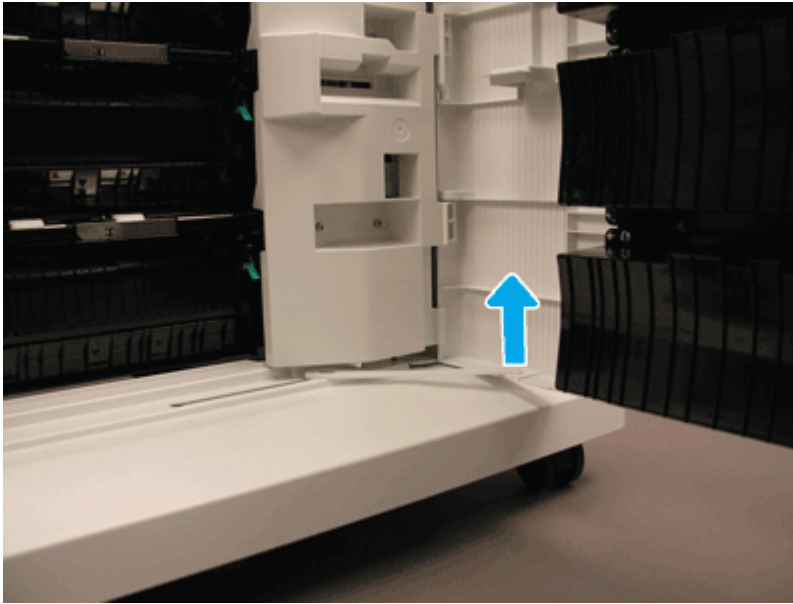
No post service test is available for this assembly.

1. Remove the right door link (3x550-sheet paper feeder with stand)

Follow these steps to remove the right door link (3x550-sheet paper feeder with stand).

1. Lift the end of the link arm up and out of the right door.

Figure 5-2004 Lift the link arm end



2. Slide the end of the link arm on the paper feeder stand to the left, all the way to the end of the slot (callout 1). Lift the link arm up (callout 2) to remove it.


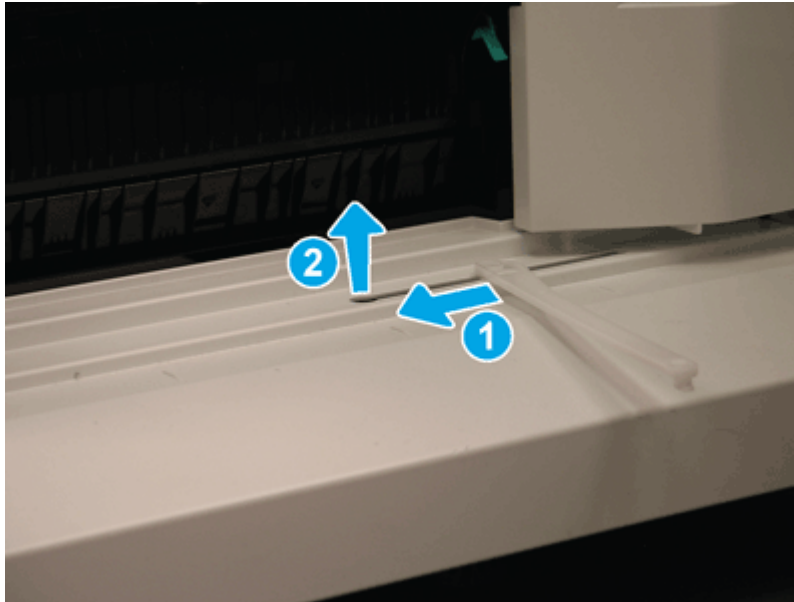
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2005 Remove the link arm



2. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.




NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Right door (3x550-sheet paper feeder with stand)

Learn how to remove and replace the right door on the 3x550-sheet paper feeder with stand.

Mean time to repair: 10 minutes

Service level: Intermediate

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.
- ⚠ **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.
- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-126 Part Information

Part number	Part description
RM2-1230-000CN	Right door assembly

Required tools

- No special tools are needed to remove or install this assembly.

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

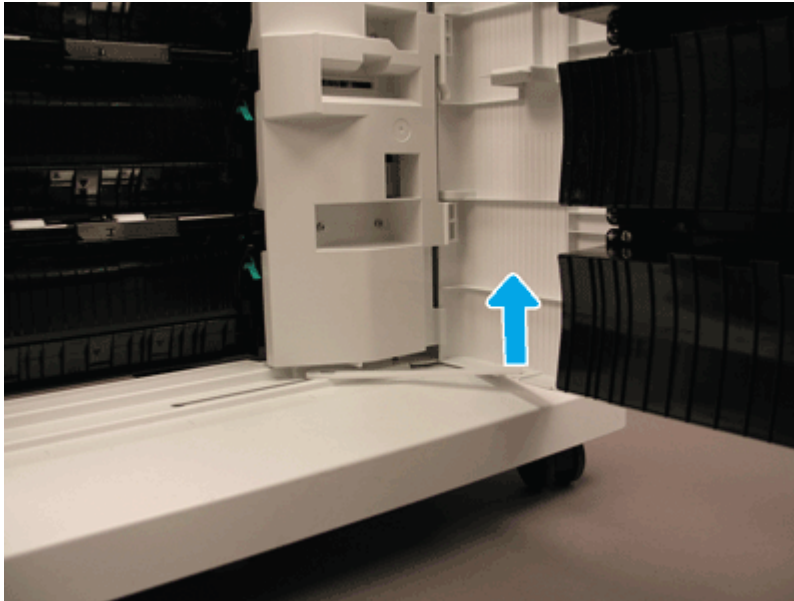
No post service test is available for this assembly.

1. Remove the right door link (3x550-sheet paper feeder with stand)

Follow these steps to remove the right door link (3x550-sheet paper feeder with stand).

1. Lift the end of the link arm up and out of the right door.

Figure 5-2006 Lift the link arm end



2. Slide the end of the link arm on the paper feeder stand to the left, all the way to the end of the slot (callout 1). Lift the link arm up (callout 2) to remove it.


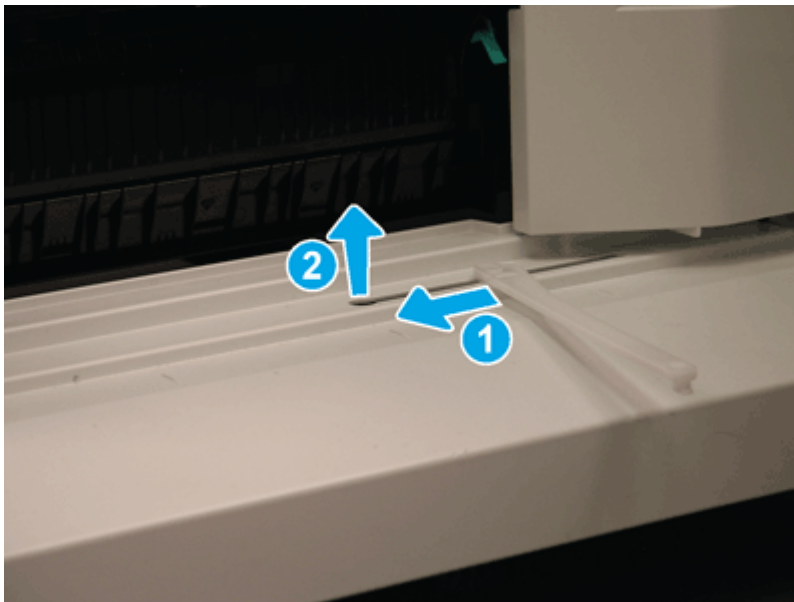
 **TIP:** Reverse the removal steps to install the assembly.


Figure 5-2007 Remove the link arm



2. Remove the right door (3x550-sheet paper feeder with stand)

Follow these steps to remove the right door (3x550-sheet paper feeder with stand).

- Release one tab (callout 1), and then lift up (callout 2) to remove the right door (callout 3).

 **NOTE:** The following figure shows 2,500-sheet paper feeder with stand. The procedure is also correct for the 3x550-sheet feeder with stand.


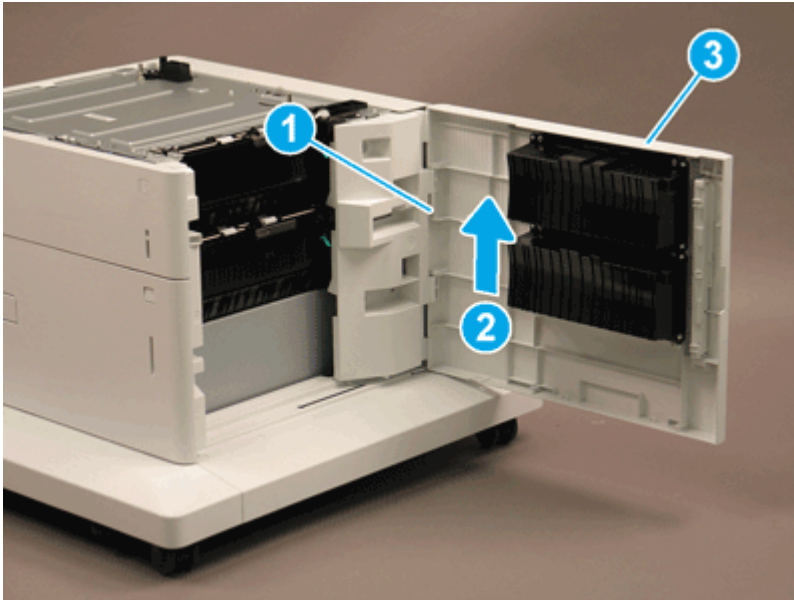
 **TIP:** Reverse the removal steps to install the assembly.


Figure 5-2008 Remove the right door



3. Unpack the replacement assembly



Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.


 **NOTE:** HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>


2. Unpack the replacement part from the packaging.

 **CAUTION:**  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

 **IMPORTANT:** Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

 **NOTE:** If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.


 **NOTE:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Rear cover (3x550-sheet paper feeder with stand)

Learn how to remove and replace the rear cover on the 3x550-sheet paper feeder with stand.


Mean time to repair: 10 minutes

Service level: Intermediate

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.

 **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.

- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-127 Part information

Part number	Part description
RC5-0386-000CN	Cover, rear

Required tools

- No special tools are needed to remove or install this assembly.

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

No post service test is available for this assembly.

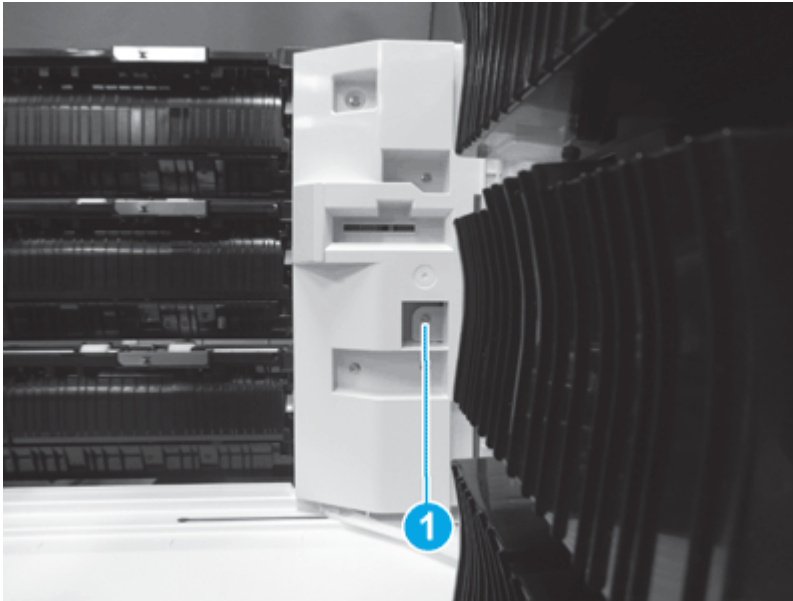
1. Remove the rear cover (3x550-sheet paper feeder with stand)

Follow these steps to remove the rear cover (3x550-sheet paper feeder with stand).

1. Open the right door.

2. Remove one screw (callout 1).

Figure 5-2009 Remove one screw



3. Release three tabs (callout 1), and then remove the rear cover (callout 2).


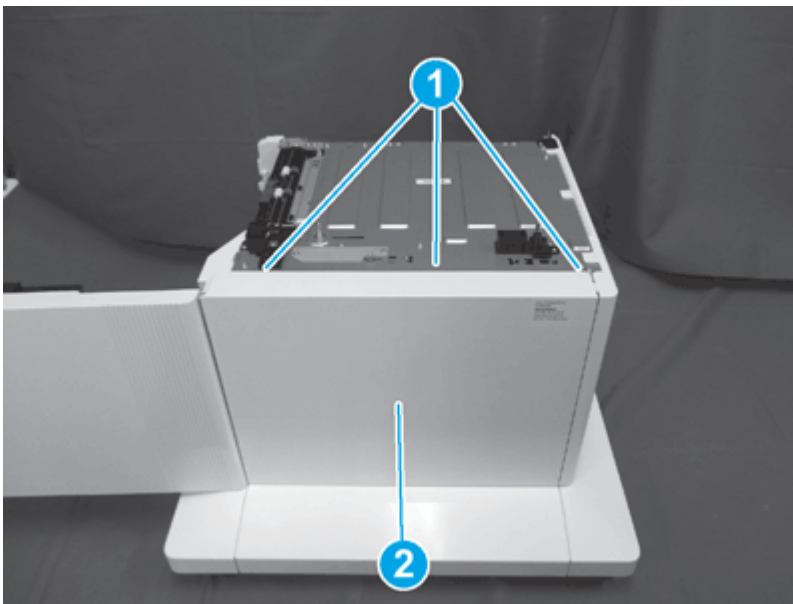
 **TIP:** Reverse the removal steps to install the assembly.


Figure 5-2010 Remove the rear cover





2. Unpack the replacement assembly


Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.

 **NOTE:** HP recommends responsible disposal of the defective part.


2. Unpack the replacement part from the packaging.

 **CAUTION:**  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

 **IMPORTANT:** Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

 **NOTE:** If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.


 **NOTE:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Left lower cover (3x550-sheet paper feeder with stand)

Learn how to remove and replace the left lower cover on the 3x550-sheet paper feeder with stand.


Mean time to repair: 10 minutes

Service level: Intermediate

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.

 **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.

- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-128 Part information

Part number	Part description
RC5-0385-000	Cover, left lower

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

No post service test is available for this assembly.

1. Remove the left cover (3x550-sheet paper feeder with stand)

Follow these steps to remove the left cover (3x550-sheet paper feeder with stand).

- Release five tabs (callout 1), and then remove the left cover (callout 2).


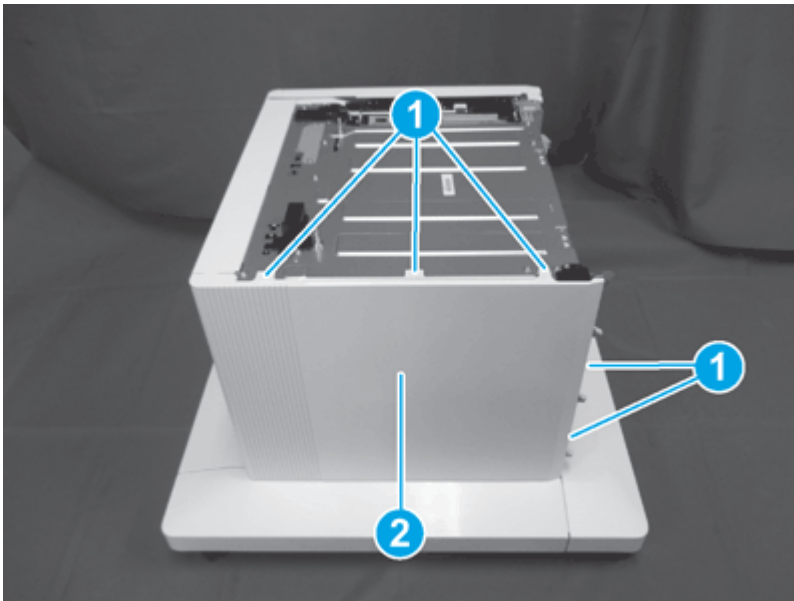
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2011 Remove the left cover



2. Remove the left lower cover (3x550-sheet paper feeder with stand)

Follow these steps to remove the left lower cover (3x550-sheet paper feeder with stand).

- Remove two screws (callout 1), and then release two tabs (callout 2). Release two bosses (callout 3), and then remove the left lower cover (callout 4).


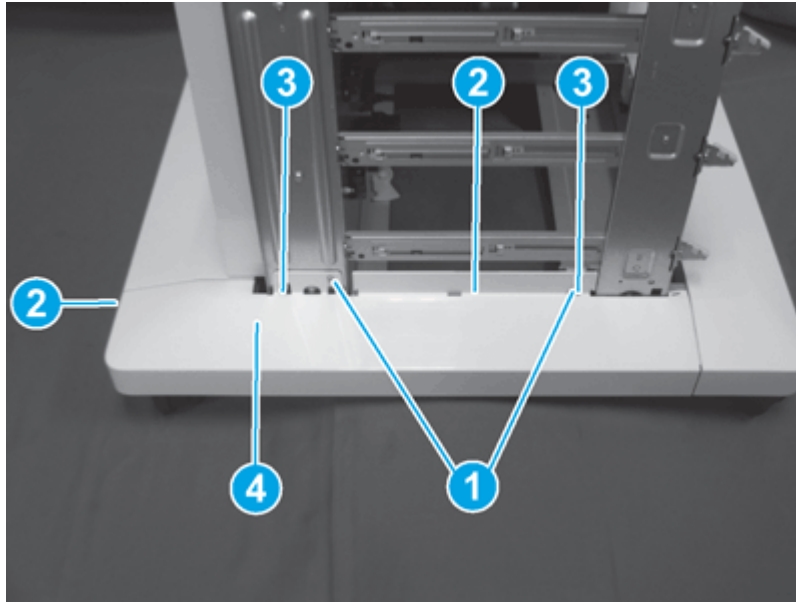
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2012 Remove the left lower cover



3. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.




NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Right lower cover (3x550-sheet paper feeder with stand)

Learn how to remove and replace the right lower cover for the 3x550-sheet paper feeder with stand.

Mean time to repair:

Service level:

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.
- ⚠ **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.
- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-129 Part information

Part number	Part description
RC5-0384-000CN	Cover, right lower

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

No post service test is available for this assembly.

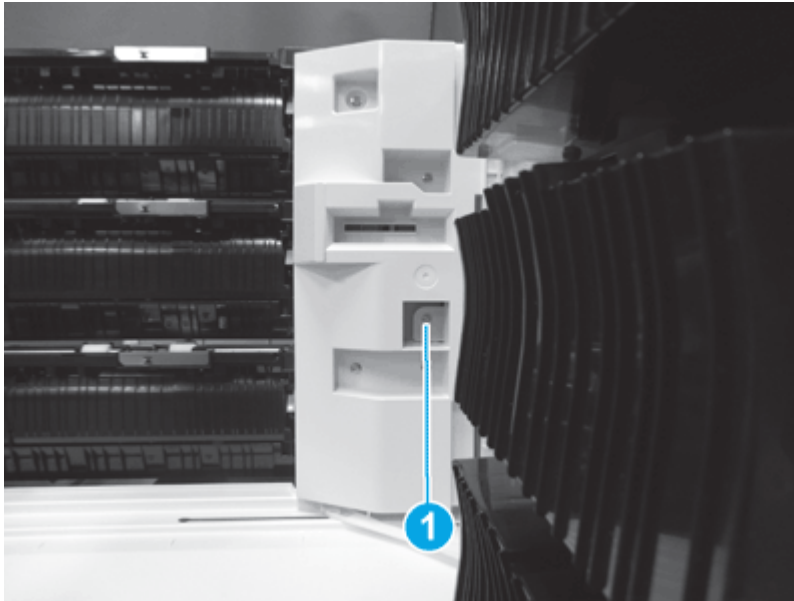
1. Remove the rear cover (3x550-sheet paper feeder with stand)

Follow these steps to remove the rear cover (3x550-sheet paper feeder with stand).

1. Open the right door.

2. Remove one screw (callout 1).

Figure 5-2013 Remove one screw



3. Release three tabs (callout 1), and then remove the rear cover (callout 2).


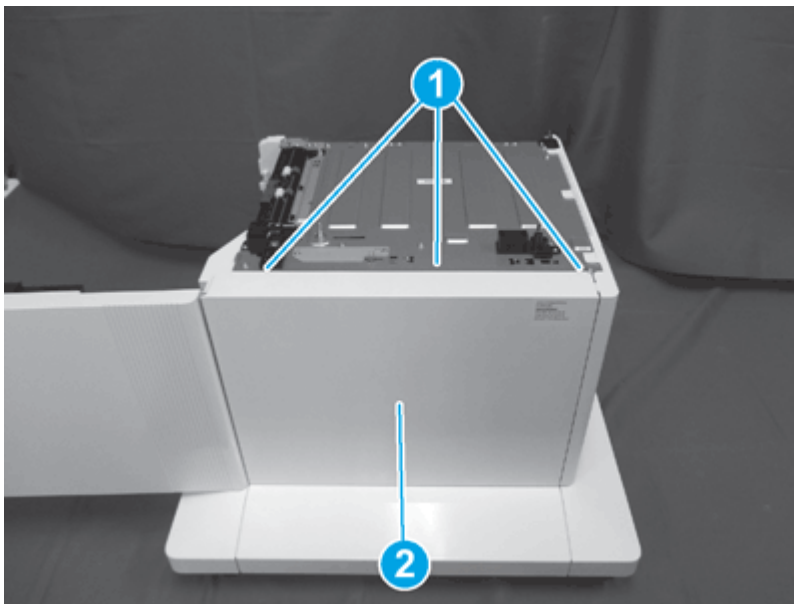
 **TIP:** Reverse the removal steps to install the assembly.


Figure 5-2014 Remove the rear cover



2. Remove the right door (3x550-sheet paper feeder with stand)

Follow these steps to remove the right door (3x550-sheet paper feeder with stand).

- Release one tab (callout 1), and then lift up (callout 2) to remove the right door (callout 3).

 **NOTE:** The following figure shows 2,500-sheet paper feeder with stand. The procedure is also correct for the 3x550-sheet feeder with stand.


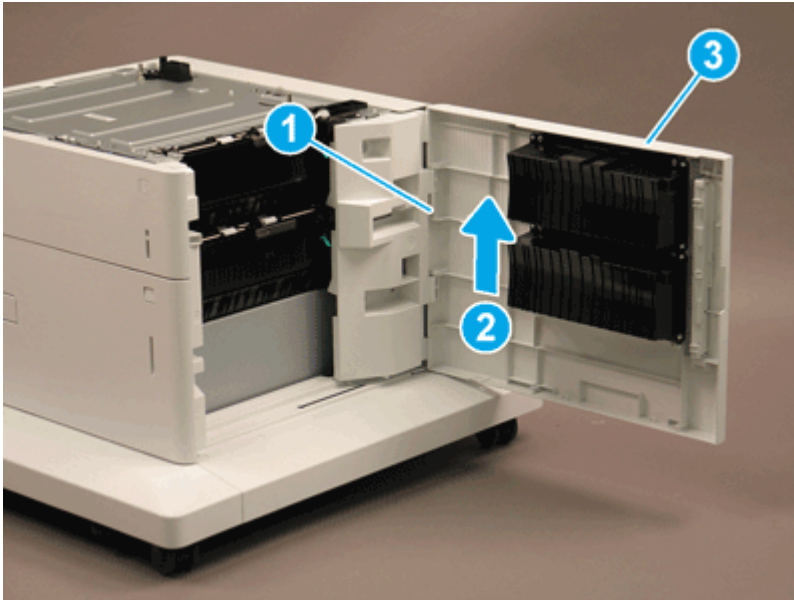
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2015 Remove the right door

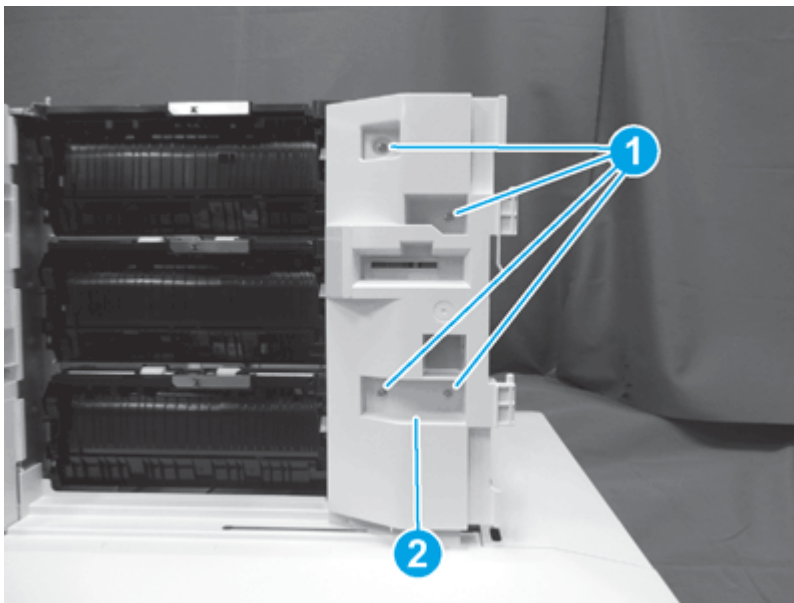


3. Remove the right lower cover (3x550-sheet paper feeder with stand)

Follow these steps to remove the right lower cover (3x550-sheet paper feeder with stand).

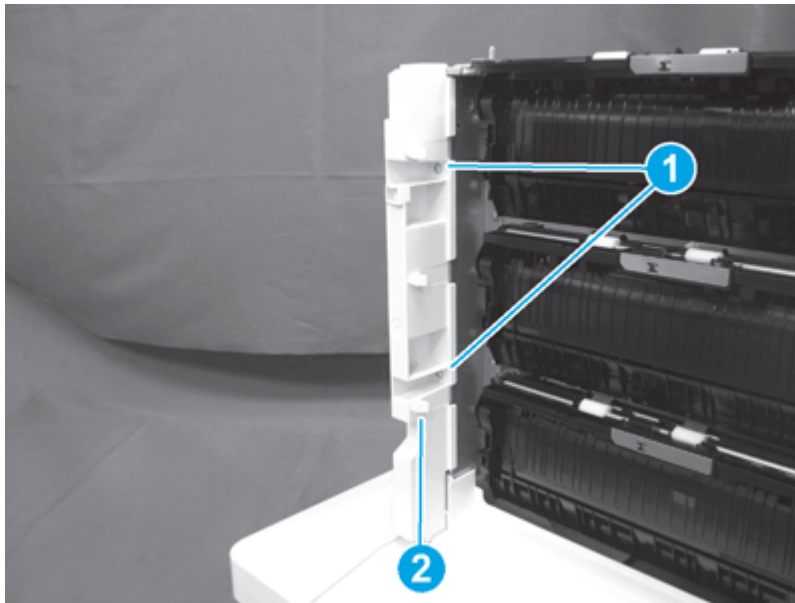
1. Remove four screws (callout 1), and then remove the hinge (callout 2).

Figure 5-2016 Remove four screws and the hinge



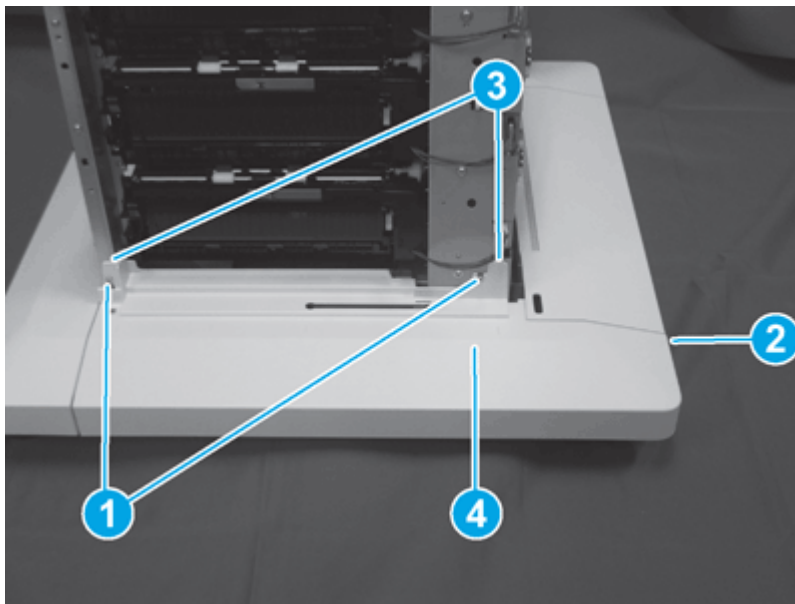
2. Remove two screws (callout 1), and then remove the inner cover (callout 2).

Figure 5-2017 Remove two screws and the inner cover



3. Remove two screws (callout 1), and then release one tab (callout 2). Release two bosses (callout 3), and then remove the right lower cover (callout 4).

Figure 5-2018 Remove the right lower cover



4. Unpack the replacement assembly



Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.


2. Unpack the replacement part from the packaging.

 **CAUTION:**  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

 **IMPORTANT:** Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

 **NOTE:** If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.


 **NOTE:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Rear lower cover (3x550-sheet paper feeder with stand)

Learn how to remove and replace the rear lower cover for the 3x550-sheet paper feeder with stand.


Mean time to repair: 10 minutes

Service level: Intermediate

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.

 **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.

- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-130 Part information

Part number	Part description
RC5-0399-000CN	Cover, rear lower

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

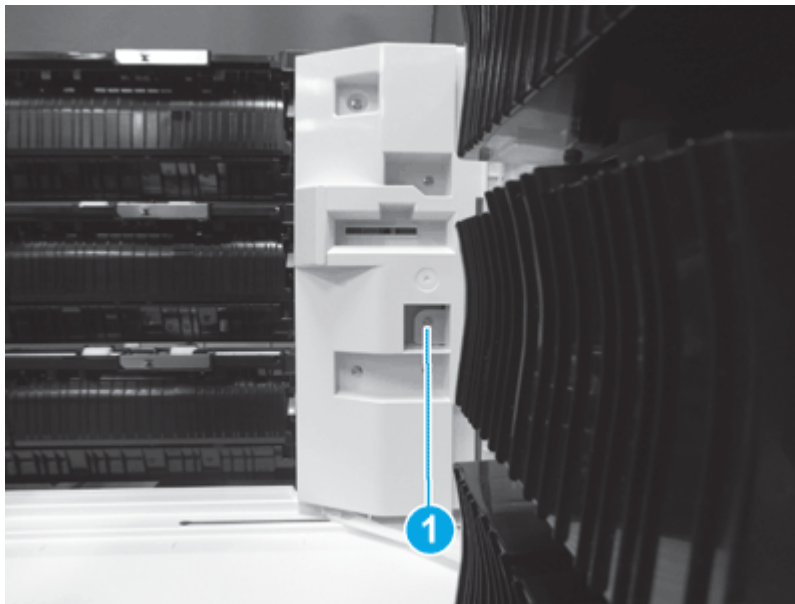
No post service test is available for this assembly.

1. Remove the rear cover (3x550-sheet paper feeder with stand)

Follow these steps to remove the rear cover (3x550-sheet paper feeder with stand).

1. Open the right door.
2. Remove one screw (callout 1).

Figure 5-2019 Remove one screw



3. Release three tabs (callout 1), and then remove the rear cover (callout 2).


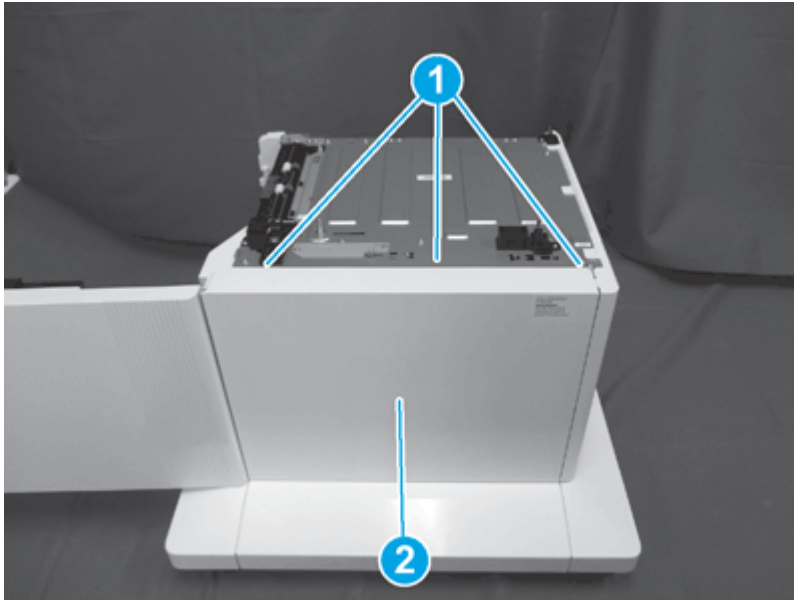
 **TIP:** Reverse the removal steps to install the assembly.


Figure 5-2020 Remove the rear cover



2. Remove the right door (3x550-sheet paper feeder with stand)

Follow these steps to remove the right door (3x550-sheet paper feeder with stand).

- Release one tab (callout 1), and then lift up (callout 2) to remove the right door (callout 3).

 **NOTE:** The following figure shows 2,500-sheet paper feeder with stand. The procedure is also correct for the 3x550-sheet feeder with stand.


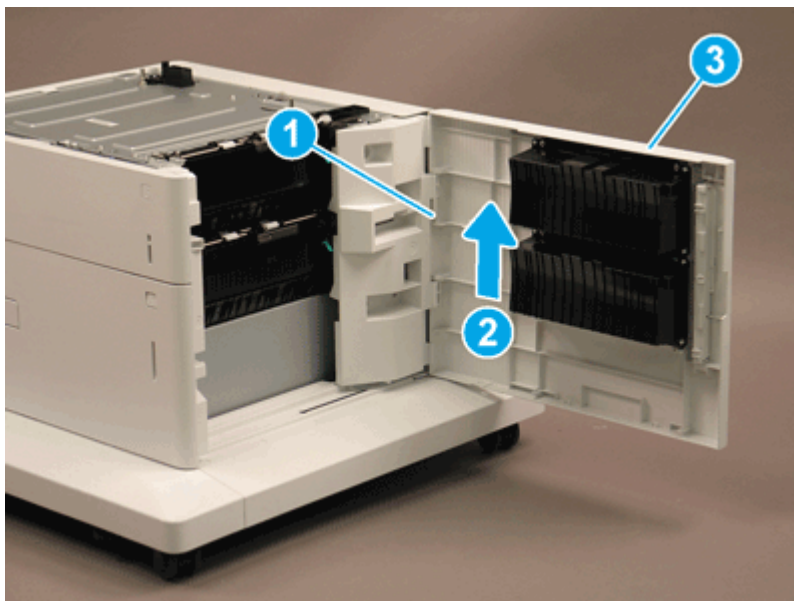
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2021 Remove the right door



3. Remove the left cover (3x550-sheet paper feeder with stand)

Follow these steps to remove the left cover (3x550-sheet paper feeder with stand).

- Release five tabs (callout 1), and then remove the left cover (callout 2).


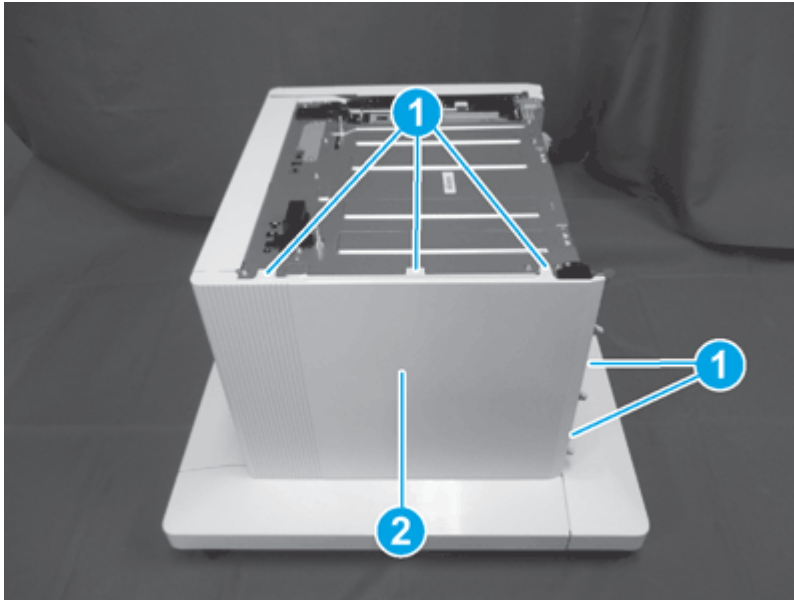
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2022 Remove the left cover



4. Remove the left lower cover (3x550-sheet paper feeder with stand)

Follow these steps to remove the left lower cover (3x550-sheet paper feeder with stand).

- Remove two screws (callout 1), and then release two tabs (callout 2). Release two bosses (callout 3), and then remove the left lower cover (callout 4).


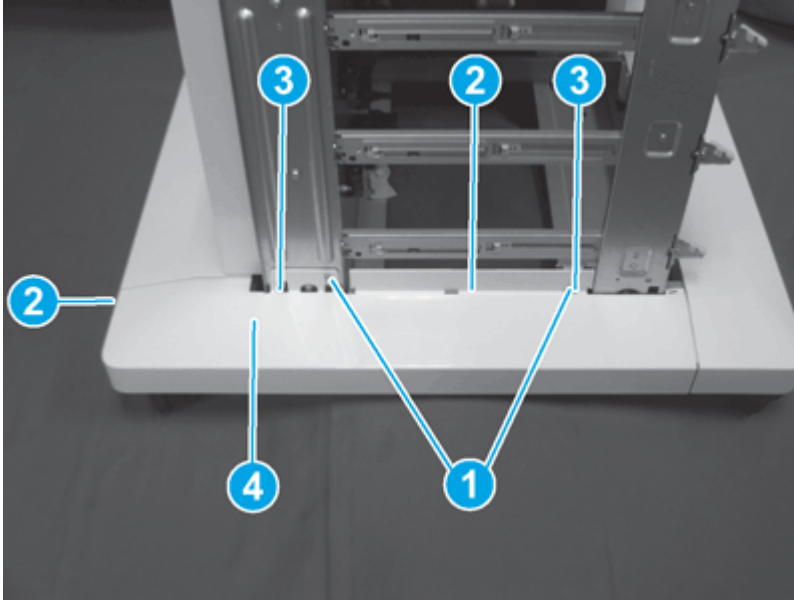
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2023 Remove the left lower cover

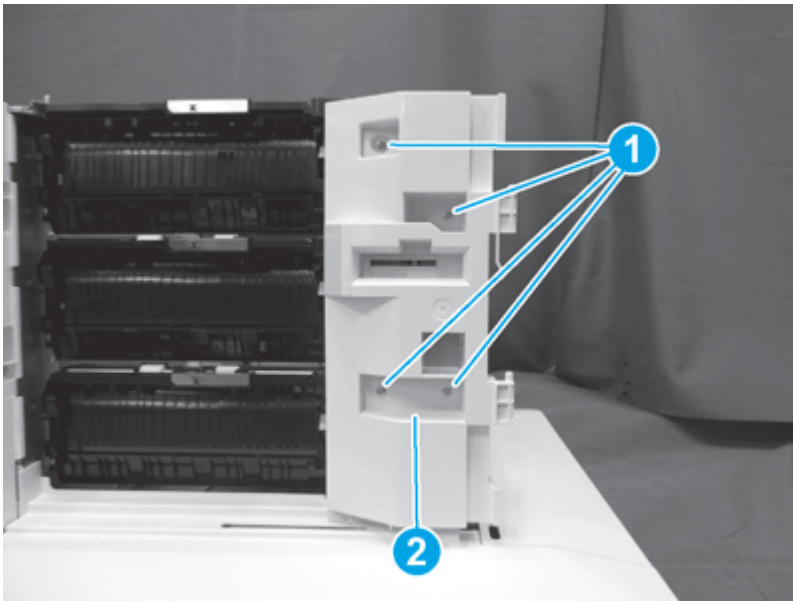


5. Remove the right lower cover (3x550-sheet paper feeder with stand)

Follow these steps to remove the right lower cover (3x550-sheet paper feeder with stand).

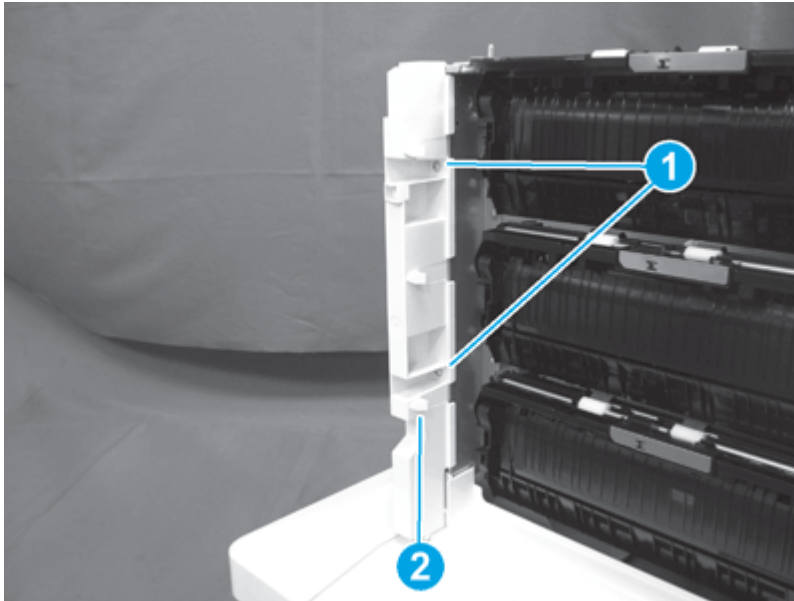
1. Remove four screws (callout 1), and then remove the hinge (callout 2).

Figure 5-2024 Remove four screws and the hinge



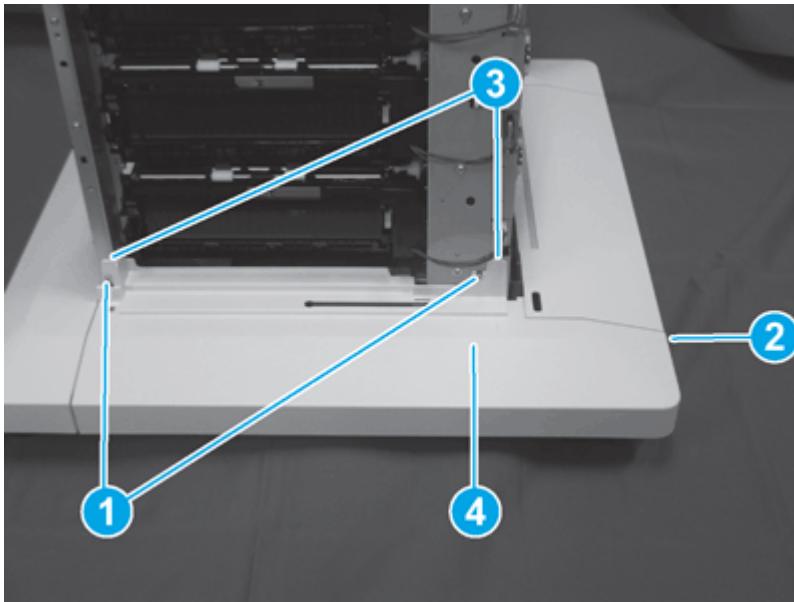
2. Remove two screws (callout 1), and then remove the inner cover (callout 2).

Figure 5-2025 Remove two screws and the inner cover



3. Remove two screws (callout 1), and then release one tab (callout 2). Release two bosses (callout 3), and then remove the right lower cover (callout 4).

Figure 5-2026 Remove the right lower cover

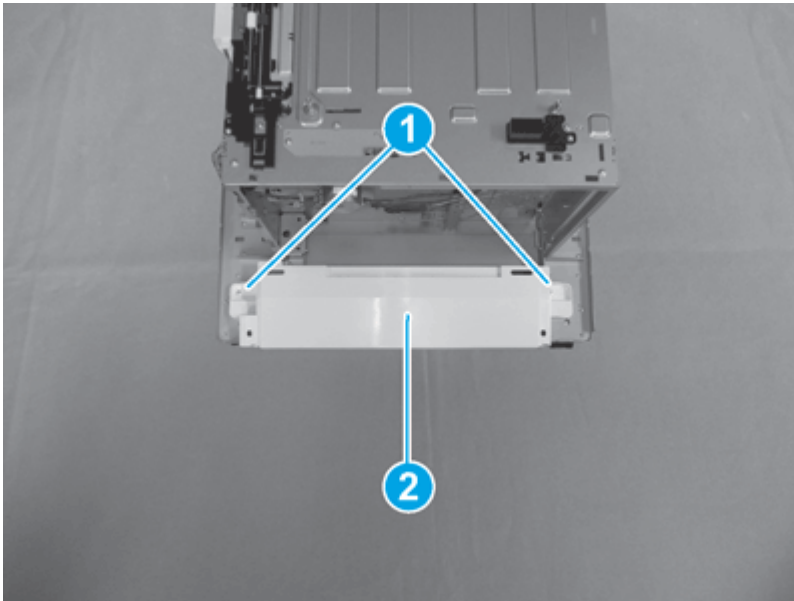


6. Remove the rear lower cover

Follow these steps to remove the rear lower cover.

- Remove two screws (callout 1), and then remove the rear lower cover (callout 2).

Figure 5-2027 Remove the rear lower cover



7. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.




NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Front lower cover (3x550-sheet paper feeder with stand)

Learn how to remove and replace the front lower cover for the 3x550-sheet paper feeder with stand.


Mean time to repair: 10 minutes

Service level: Intermediate

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.

 **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.

- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-131 Part information

Part number	Part description
RC5-0383-000CN	Cover, front lower

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

No post service test is available for this assembly.

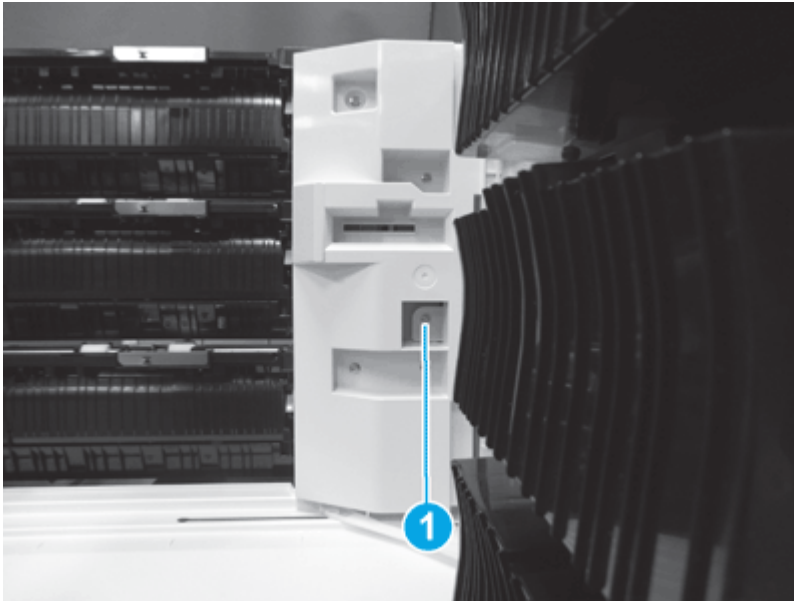
1. Remove the rear cover (3x550-sheet paper feeder with stand)

Follow these steps to remove the rear cover (3x550-sheet paper feeder with stand).

1. Open the right door.

2. Remove one screw (callout 1).

Figure 5-2028 Remove one screw



3. Release three tabs (callout 1), and then remove the rear cover (callout 2).


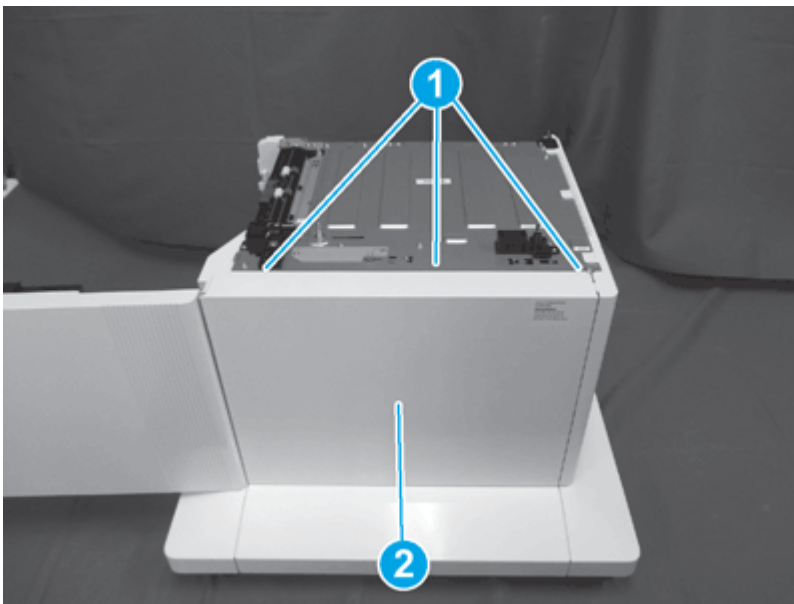
 **TIP:** Reverse the removal steps to install the assembly.


Figure 5-2029 Remove the rear cover



2. Remove the right door (3x550-sheet paper feeder with stand)

Follow these steps to remove the right door (3x550-sheet paper feeder with stand).

- Release one tab (callout 1), and then lift up (callout 2) to remove the right door (callout 3).

 **NOTE:** The following figure shows 2,500-sheet paper feeder with stand. The procedure is also correct for the 3x550-sheet feeder with stand.


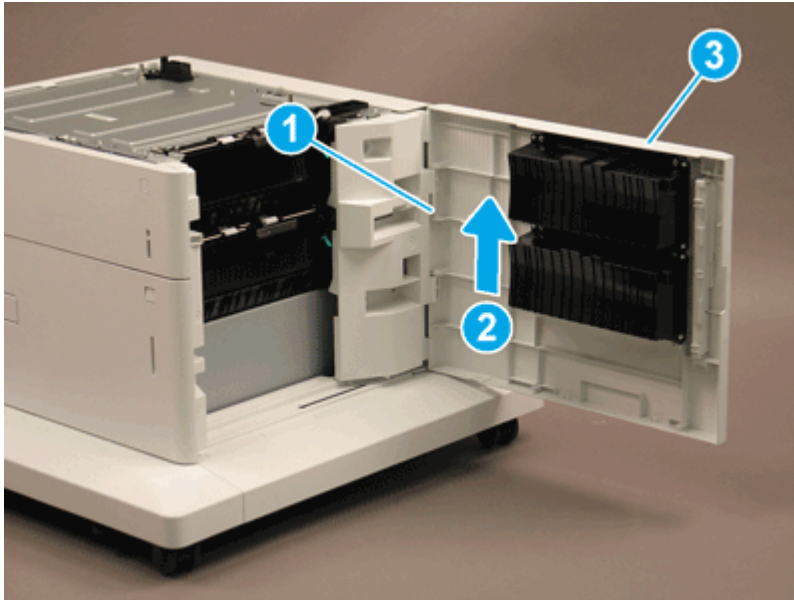
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2030 Remove the right door



3. Remove the left cover (3x550-sheet paper feeder with stand)

Follow these steps to remove the left cover (3x550-sheet paper feeder with stand).

- Release five tabs (callout 1), and then remove the left cover (callout 2).


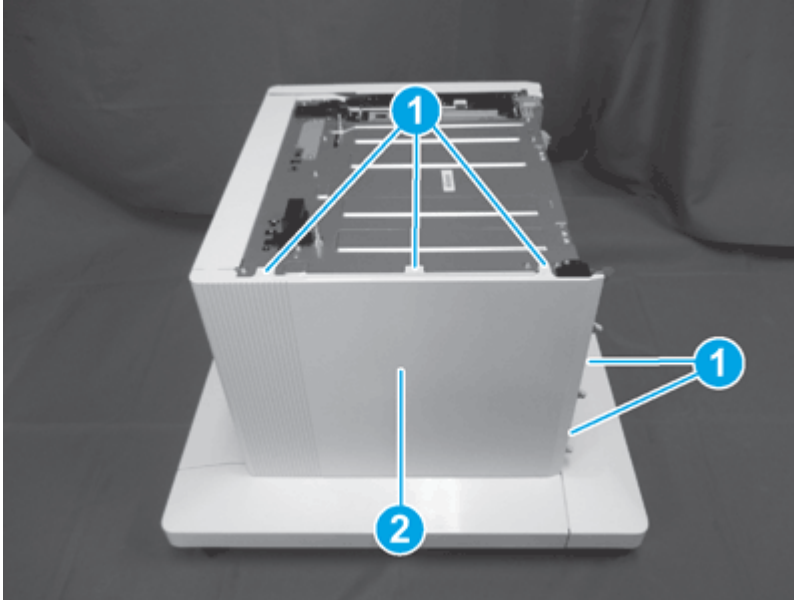
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2031 Remove the left cover



4. Remove the left lower cover (3x550-sheet paper feeder with stand)

Follow these steps to remove the left lower cover (3x550-sheet paper feeder with stand).

- Remove two screws (callout 1), and then release two tabs (callout 2). Release two bosses (callout 3), and then remove the left lower cover (callout 4).


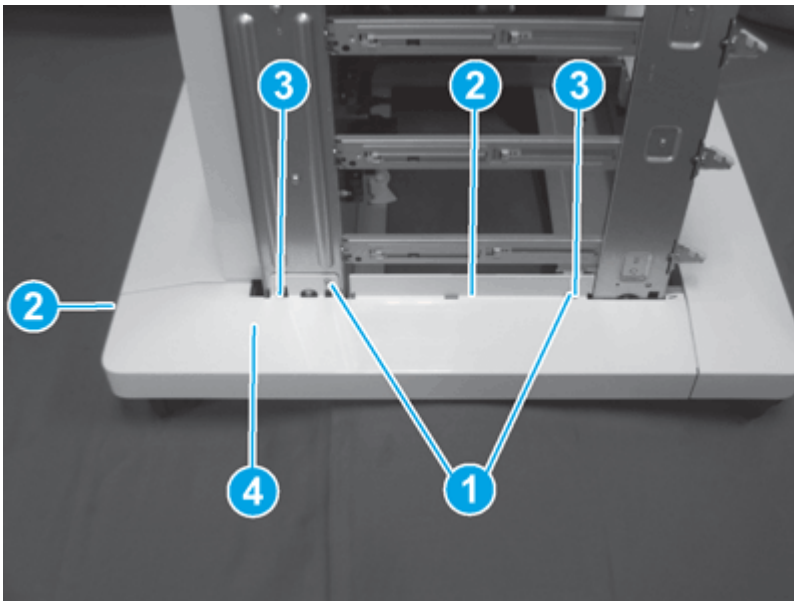
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2032 Remove the left lower cover

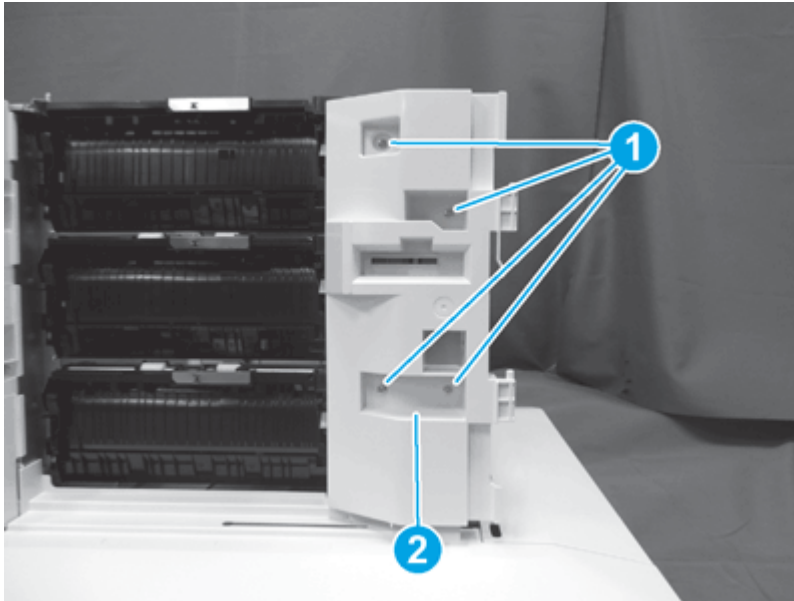


5. Remove the right lower cover (3x550-sheet paper feeder with stand)

Follow these steps to remove the right lower cover (3x550-sheet paper feeder with stand).

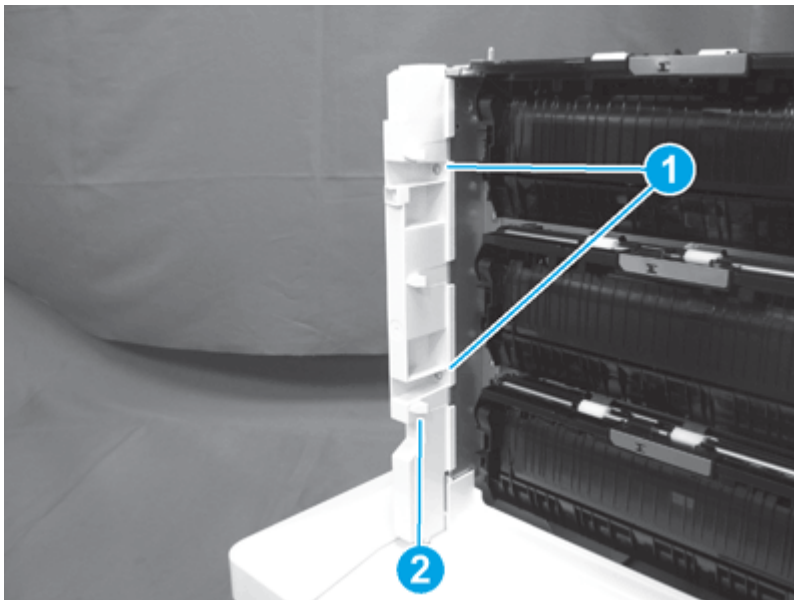
1. Remove four screws (callout 1), and then remove the hinge (callout 2).

Figure 5-2033 Remove four screws and the hinge



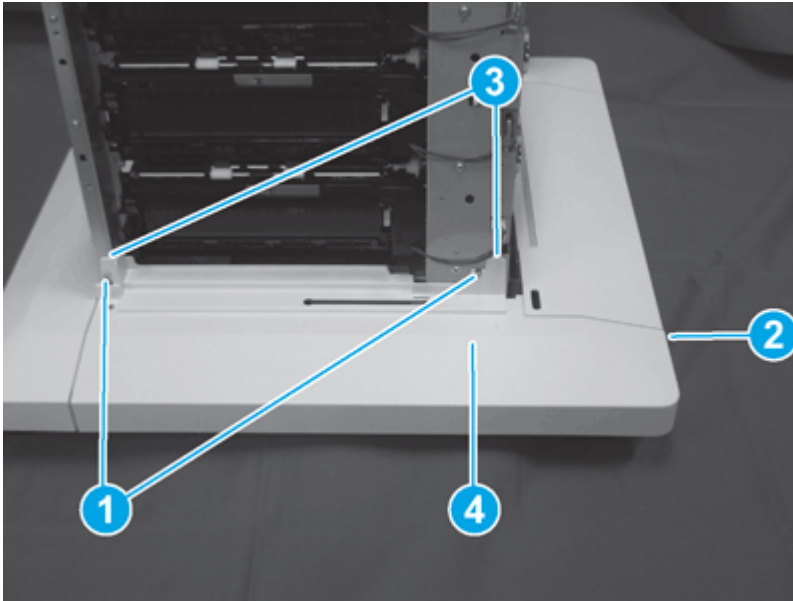
2. Remove two screws (callout 1), and then remove the inner cover (callout 2).

Figure 5-2034 Remove two screws and the inner cover



3. Remove two screws (callout 1), and then release one tab (callout 2). Release two bosses (callout 3), and then remove the right lower cover (callout 4).

Figure 5-2035 Remove the right lower cover

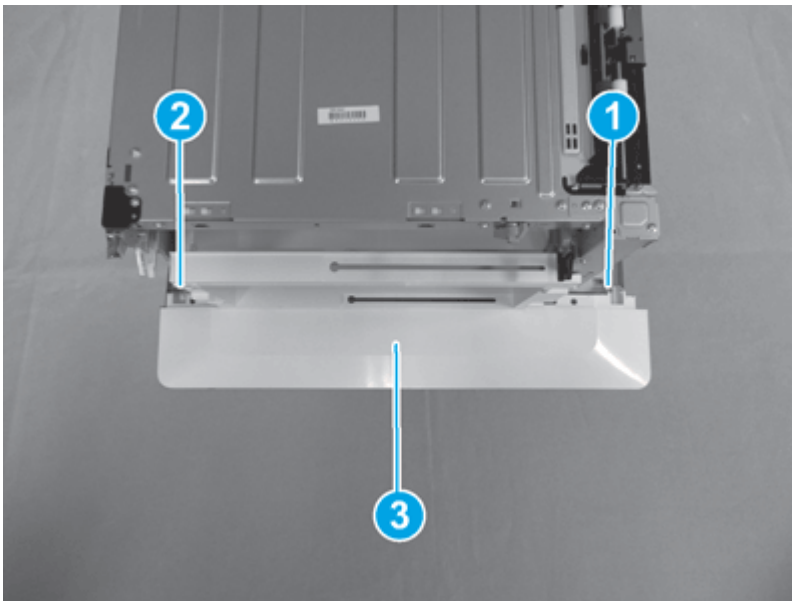


6. Remove the front lower cover

Follow these steps to remove the front lower cover.

- Remove one screw (callout 1), release one tab (callout 2), and then remove the front lower cover (callout 3).


Figure 5-2036 Remove the front lower cover



7. Unpack the replacement assembly



Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.


 **NOTE:** HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>


2. Unpack the replacement part from the packaging.

 **CAUTION:**  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

 **IMPORTANT:** Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

 **NOTE:** If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.


 **NOTE:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Right door switch (3x550-sheet paper feeder with stand)

Learn how to remove and replace the right door switch on the 3x550-sheet paper feeder with stand.


Mean time to repair: 10 minutes

Service level: Intermediate

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.

 **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.

- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-132 Part information

Part number	Part description
WC2-5803-000CN	Switch, push

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

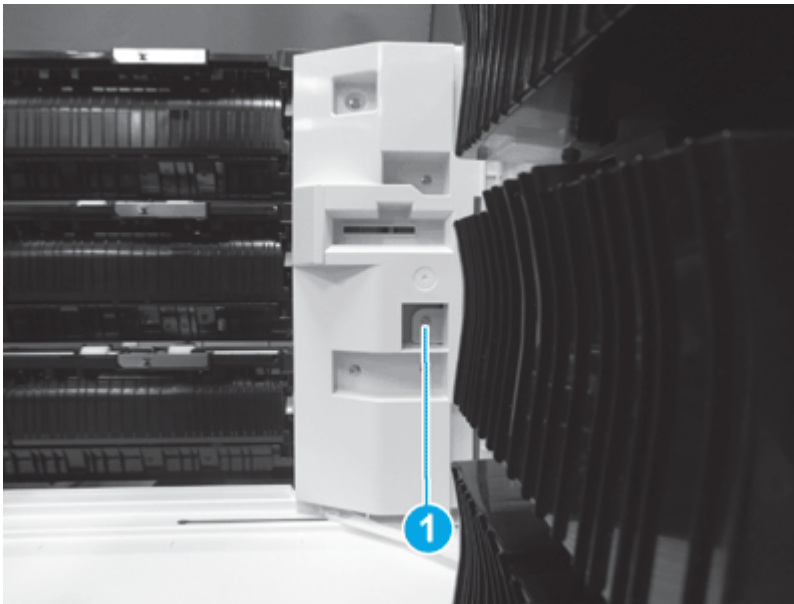
Close the right door. Verify that no door-open messages display on the control panel.

1. Remove the rear cover (3x550-sheet paper feeder with stand)

Follow these steps to remove the rear cover (3x550-sheet paper feeder with stand).

1. Open the right door.
2. Remove one screw (callout 1).

Figure 5-2037 Remove one screw



3. Release three tabs (callout 1), and then remove the rear cover (callout 2).


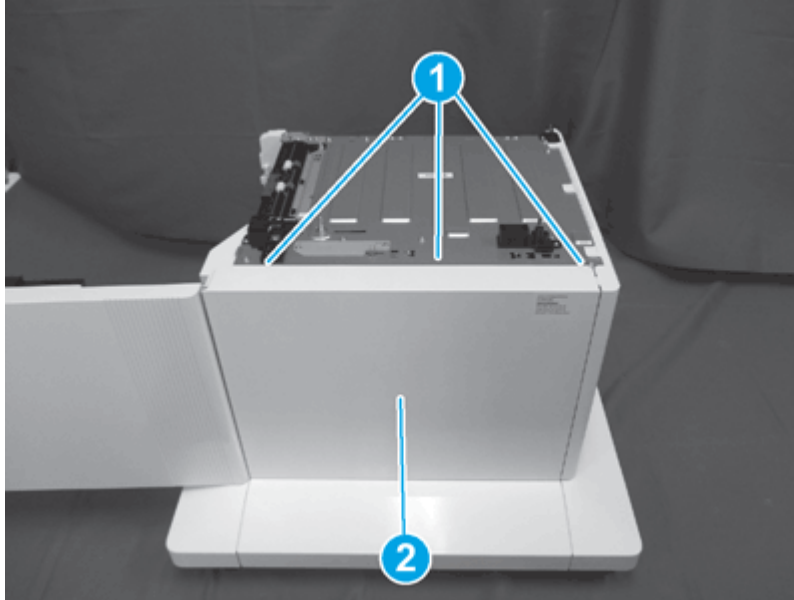
 **TIP:** Reverse the removal steps to install the assembly.


Figure 5-2038 Remove the rear cover



2. Remove the right door (3x550-sheet paper feeder with stand)

Follow these steps to remove the right door (3x550-sheet paper feeder with stand).

- Release one tab (callout 1), and then lift up (callout 2) to remove the right door (callout 3).

 **NOTE:** The following figure shows 2,500-sheet paper feeder with stand. The procedure is also correct for the 3x550-sheet feeder with stand.


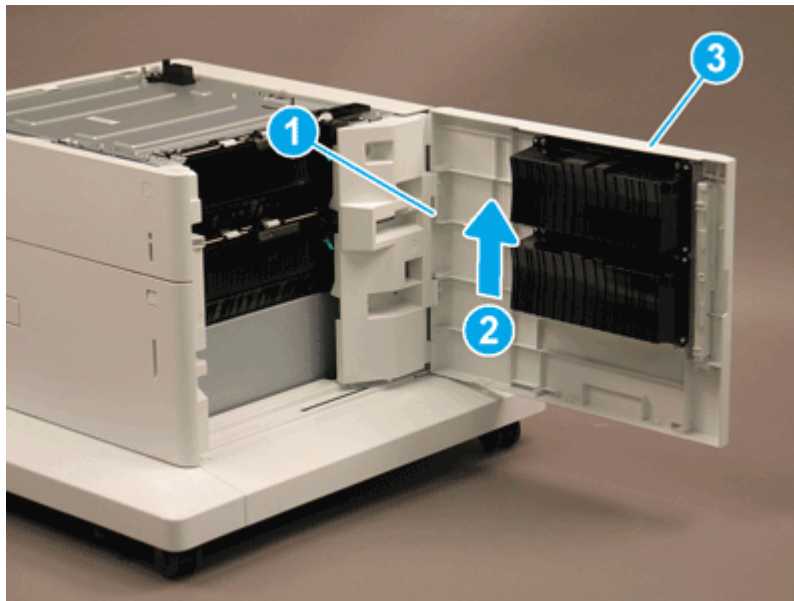
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2039 Remove the right door

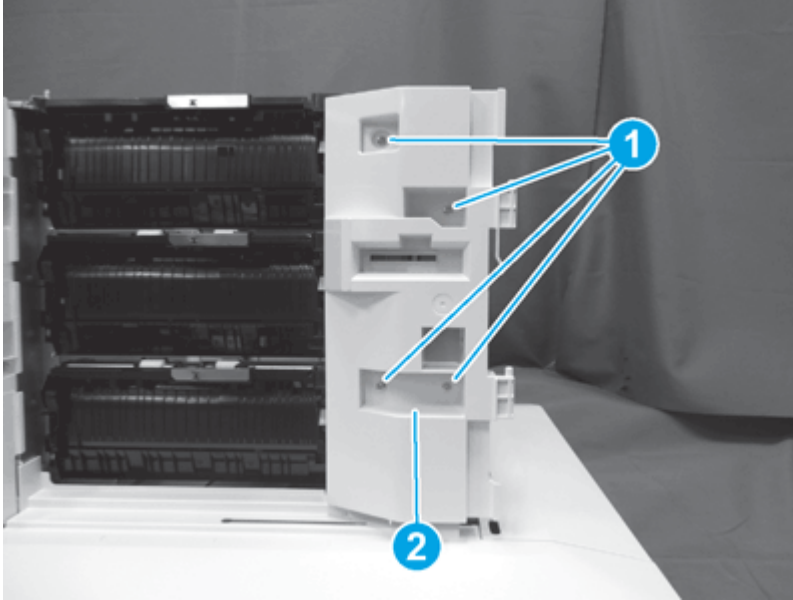


3. Remove the right door switch (3x550-sheet paper feeder with stand)

Follow these steps to remove the right door switch (3x550-sheet paper feeder with stand).

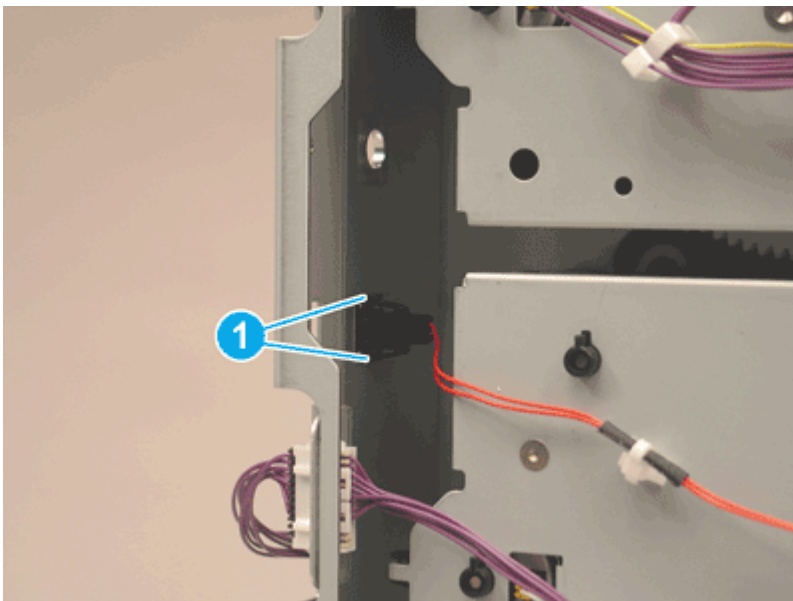
1. Remove four screws (callout 1), and then remove the hinge (callout 2).

Figure 5-2040 Remove four screws and the hinge



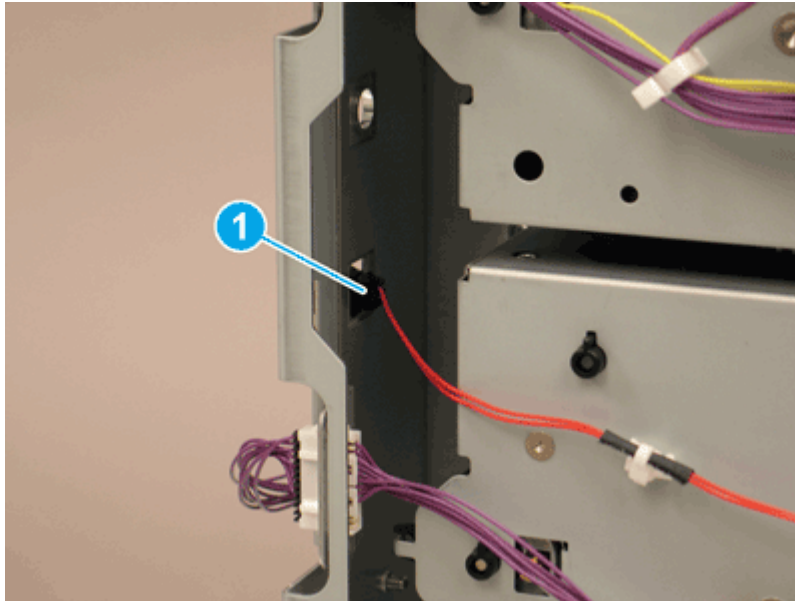
2. At the back of the paper feeder, release two tabs (callout 1) and release the switch through the opening in the sheet metal.

Figure 5-2041 Release two tabs



3. Disconnect one connector (callout 1), and then remove the right door switch.

Figure 5-2042 Disconnect one connector



4. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.




NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Size sensor (3x550-sheet paper feeder with stand)

Learn how to remove and replace the size sensor on the 3x550-sheet paper feeder with stand.

Mean time to repair: 20 minutes

Service level: Advanced

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.
- ⚠ **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.
- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-133 Part information

Part number	Part description
RM2-0857-000CN	Size sensor assembly

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

Install the paper tray and verify that the printer detects the correct size of paper in the tray.

1. Remove the rear cover (3x550-sheet paper feeder with stand)

Follow these steps to remove the rear cover (3x550-sheet paper feeder with stand).

1. Open the right door.

2. Remove one screw (callout 1).

Figure 5-2043 Remove one screw



3. Release three tabs (callout 1), and then remove the rear cover (callout 2).


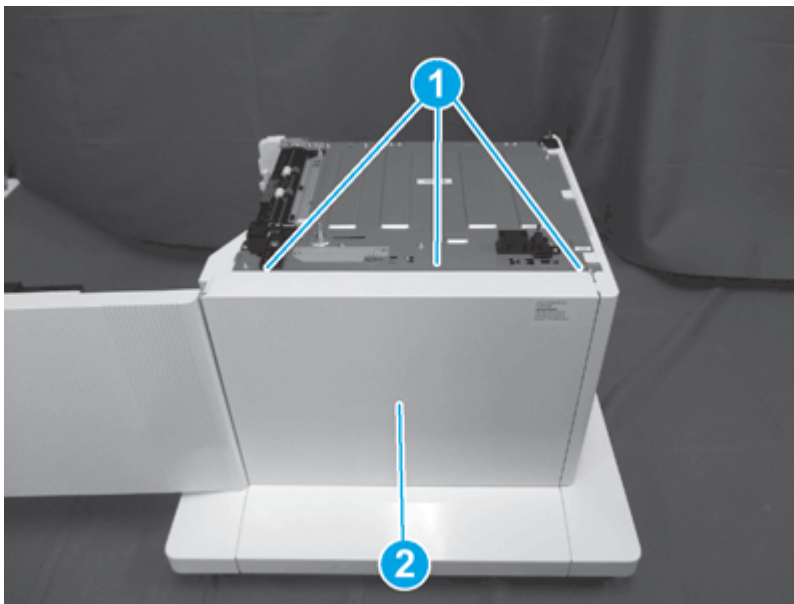
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2044 Remove the rear cover



2. Remove the size sensor (3x550-sheet paper feeder with stand)

Follow these steps to remove the size sensor (3x550-sheet paper feeder with stand).

1. Remove the paper tray for the size sensor you are replacing.

2. At the back of the feeder, disconnect two connectors (callout 1), and then remove two screws (callout 2).


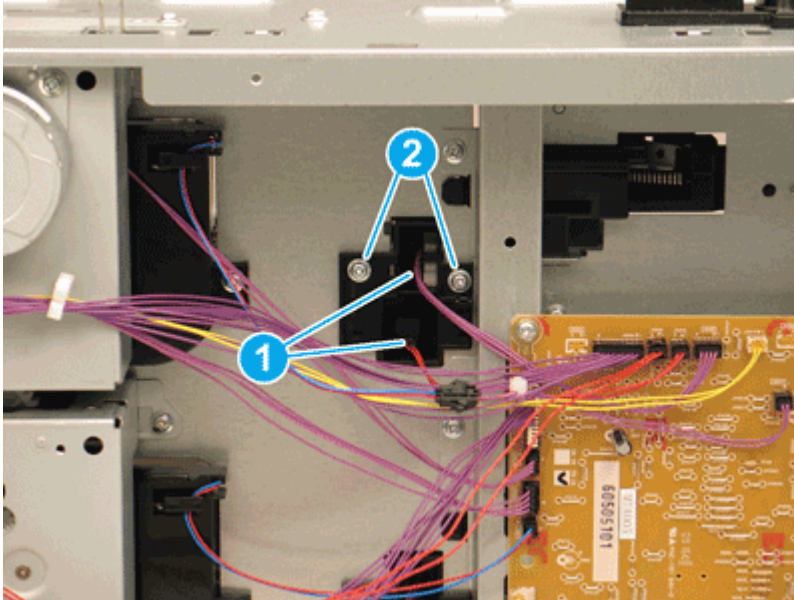
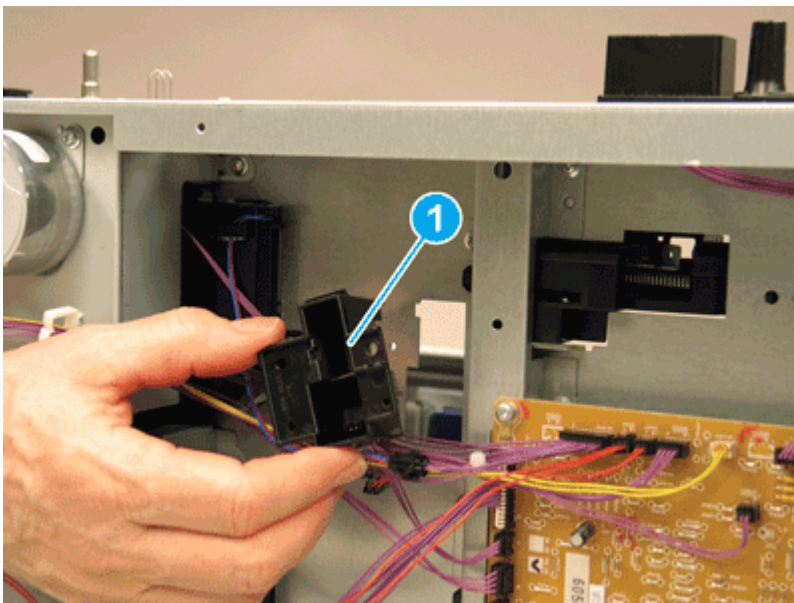
 **NOTE:** The figures below show the Tray 3 size sensor. The procedure is the same for all of the size sensors.

Figure 5-2045 Disconnect two connectors and remove two screws



3. Remove the size sensor (callout 1).

Figure 5-2046 Remove the size sensor



3. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Drawer connector holder and cable assembly (3x550-sheet paper feeder with stand)

Learn how to remove and replace the drawer connector holder and cable assembly on the 3x550-sheet paper feeder with stand.

Mean time to repair: 20 minutes

Service level: Advanced



IMPORTANT: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.



WARNING! To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.

- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-134 Part information

Part number	Part description
RC4-8914-000CN	Holder, drawer connector
RM2-9286-000CN	Drawer upper cable assembly

Required tools

- #2 Phillips screwdriver with a magnetic tip
- Small, flat-blade screwdriver

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

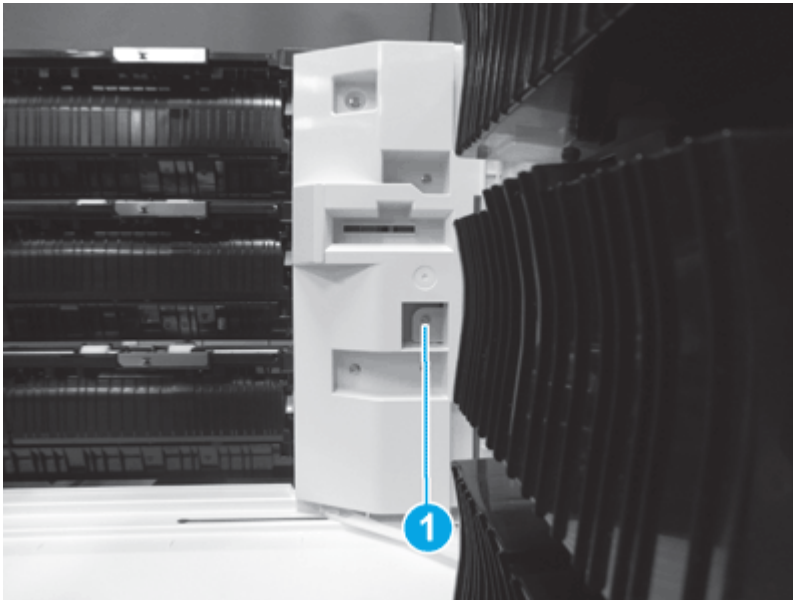
Send a print job from the host computer to the 3x550-sheet paper feeder. Verify that a page prints.

1. Remove the rear cover (3x550-sheet paper feeder with stand)

Follow these steps to remove the rear cover (3x550-sheet paper feeder with stand).

1. Open the right door.
2. Remove one screw (callout 1).

Figure 5-2047 Remove one screw



3. Release three tabs (callout 1), and then remove the rear cover (callout 2).


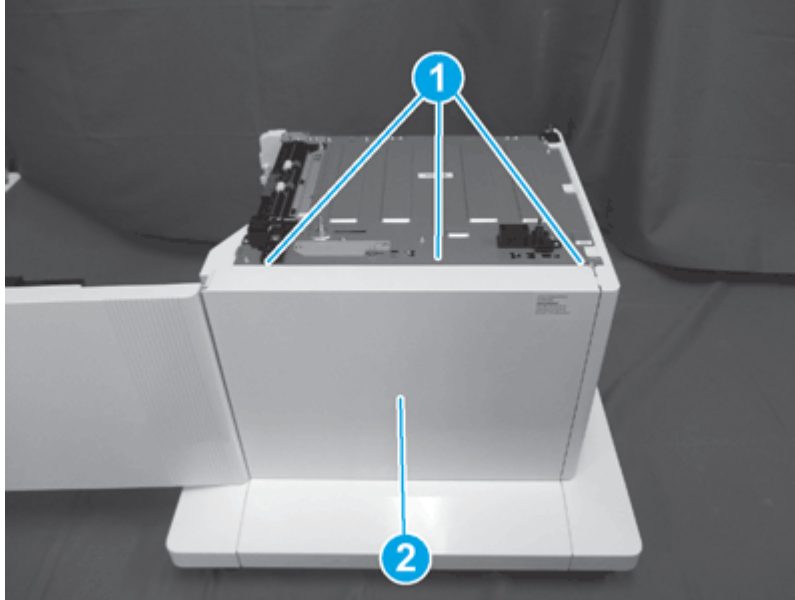
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2048 Remove the rear cover

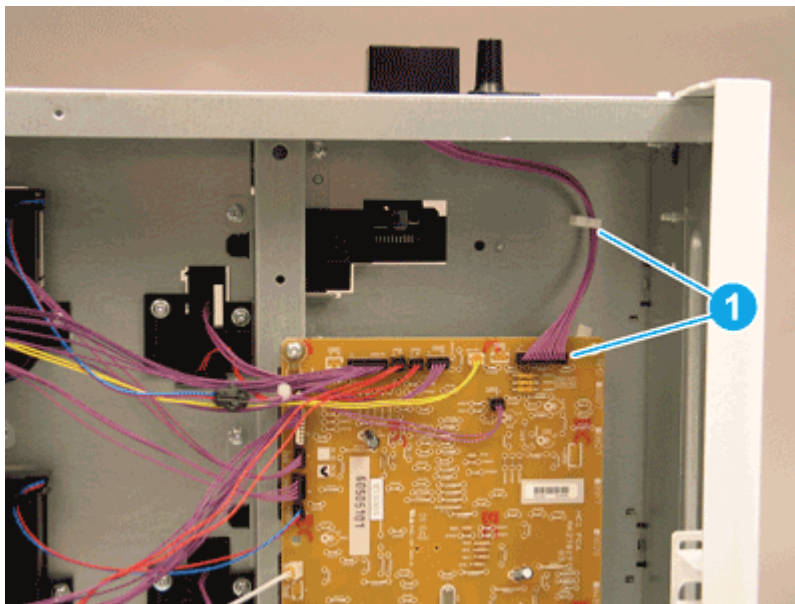


2. Remove the drawer connector holder and cable assembly (3x550-sheet paper feeder with stand)

Follow these steps to remove the drawer connector holder and cable assembly (3x550-sheet paper feeder with stand).

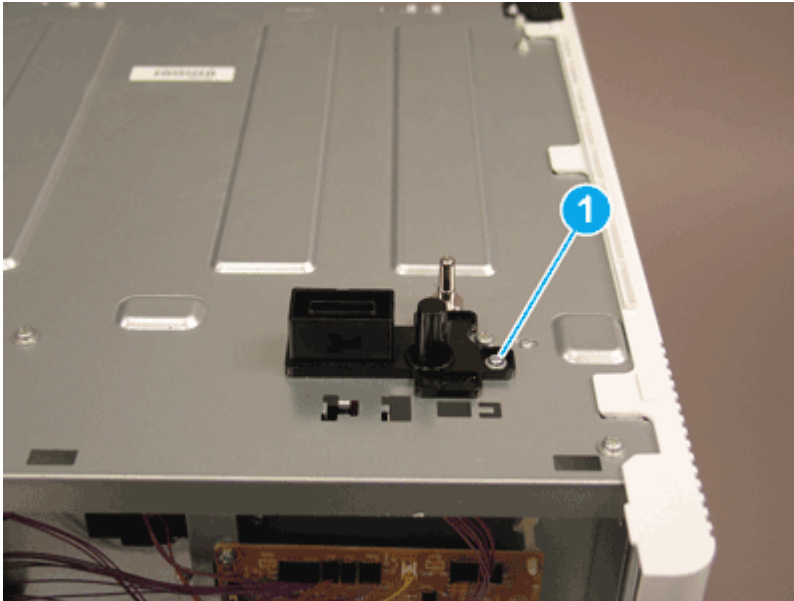
1. At the back of the feeder, disconnect one connector and release one retainer (callout 1).

Figure 5-2049 Disconnect one connector and release retainer



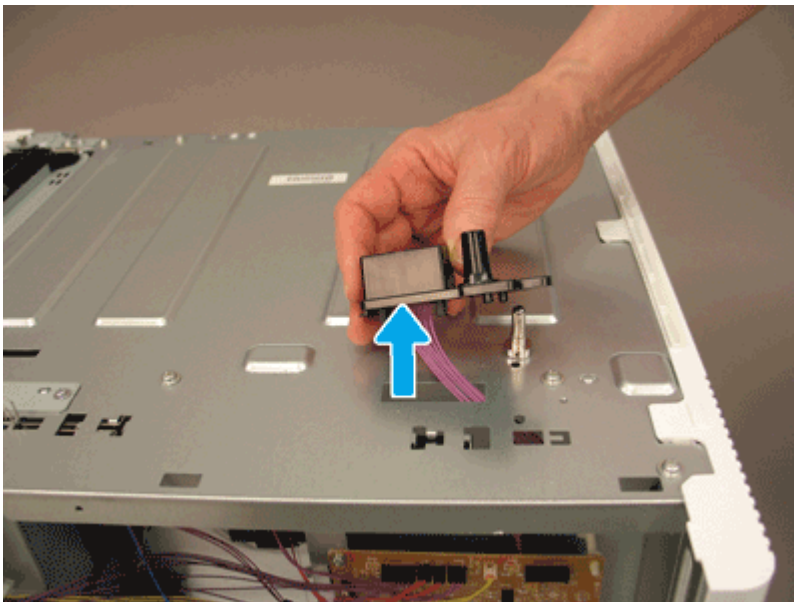
2. At the top of the paper feeder, remove one screw (callout 1).

Figure 5-2050 Remove one screw



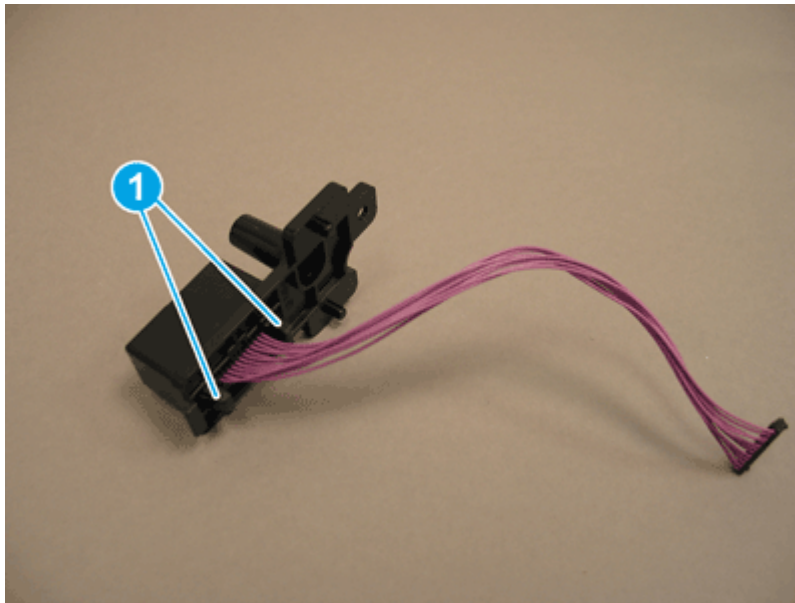
3. Lift the drawer connector holder and cable assembly away from the feeder to remove them.

Figure 5-2051 Remove the drawer connector holder and cable assembly



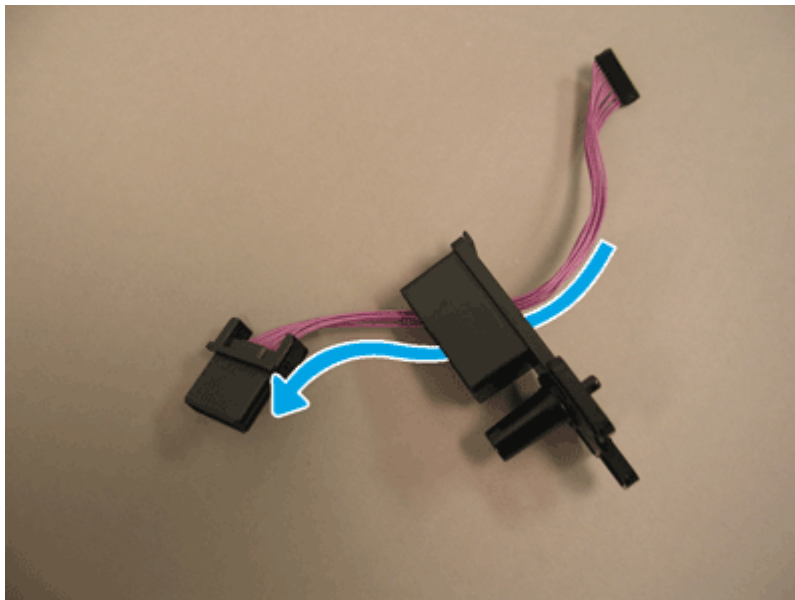
4. Use a small, flat-blade screwdriver to release two tabs (callout 1).

Figure 5-2052 Release two tabs



5. Remove the cable assembly from the drawer connector holder.

Figure 5-2053 Remove the cable assembly



3. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.



1. Dispose of the defective part.





NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>


2. Unpack the replacement part from the packaging.

 **CAUTION:**  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

 **IMPORTANT:** Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

 **NOTE:** If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.


 **NOTE:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Auto-close assemblies (3x550-sheet paper feeder with stand)

This document provides the procedures to remove and replace the auto-close assemblies for the 3x550-sheet paper feeder with stand.


Mean time to repair: 20 minutes

Service level: Advanced

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.

 **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.

- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-135 Part information

Auto-close assemblies (3x550-sheet paper feeder with stand) part number	
RM2-0856-000CN	Auto close assembly

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

- Connect the printer power cable.
- Turn the printer power on.


Post service test

Slowly install the paper tray in the paper feeder. Verify that the auto-close assembly catches and pulls the tray completely closed.

1. Remove the auto-close assembly (3x550-sheet paper feeder with stand)

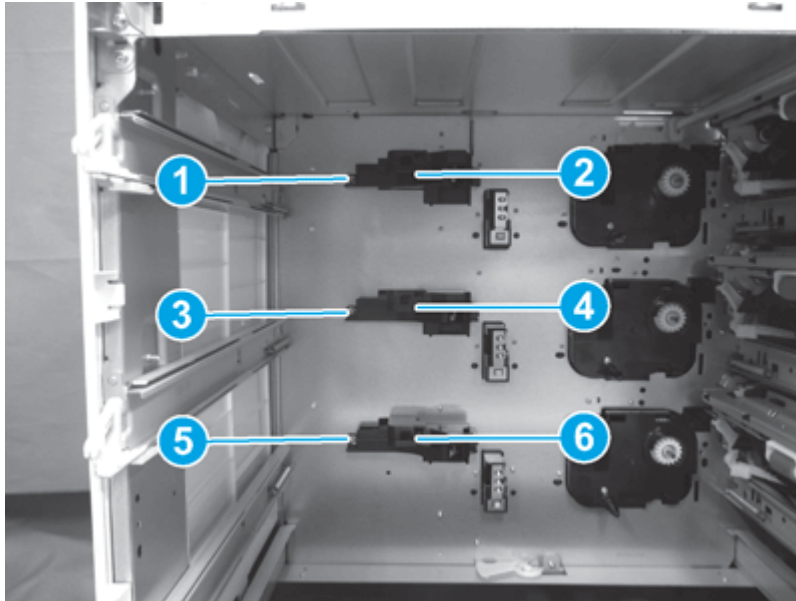
Follow these steps to remove the auto-close assembly (3x550-sheet paper feeder with stand).

1. Remove all of the paper trays.
2. Do one of the following, depending upon which auto-close assembly you are removing:

 **TIP:** Reverse the removal steps to install the assembly.

- a. Tray 3 auto-close assembly:** Remove one screw (callout 1), and then remove the auto-close assembly (callout 2).
- b. Tray 4 auto-close assembly:** Remove one screw (callout 3), and then remove the auto-close assembly (callout 4).
- c. Tray 5 auto-close assembly:** Remove one screw (callout 5), and then remove the auto-close assembly (callout 6).


Figure 5-2054 Remove the auto-close assemblies



2. Unpack the replacement assembly



Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.


 **NOTE:** HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>


2. Unpack the replacement part from the packaging.

 **CAUTION:**  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

 **IMPORTANT:** Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

 **NOTE:** If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.


 **NOTE:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Paper pickup assemblies (3x550-sheet paper feeder with stand)

Learn how to remove and replace the paper pickup assemblies for the 3x550-sheet paper feeder with stand.


Mean time to repair: 20 minutes

Service level: Advanced

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.

 **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.

- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-136 Part information

Part number	Part description
RM2-1235-000CN	Paper pickup assembly

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

- Connect the printer power cable.
- Turn the printer power on.


Post service test

Send a print job from the host computer to the 3x550-sheet paper feeder with stand. Verify that a page prints.

1. Remove the right door (3x550-sheet paper feeder with stand)

Follow these steps to remove the right door (3x550-sheet paper feeder with stand).

- Release one tab (callout 1), and then lift up (callout 2) to remove the right door (callout 3).

 **NOTE:** The following figure shows 2,500-sheet paper feeder with stand. The procedure is also correct for the 3x550-sheet feeder with stand.


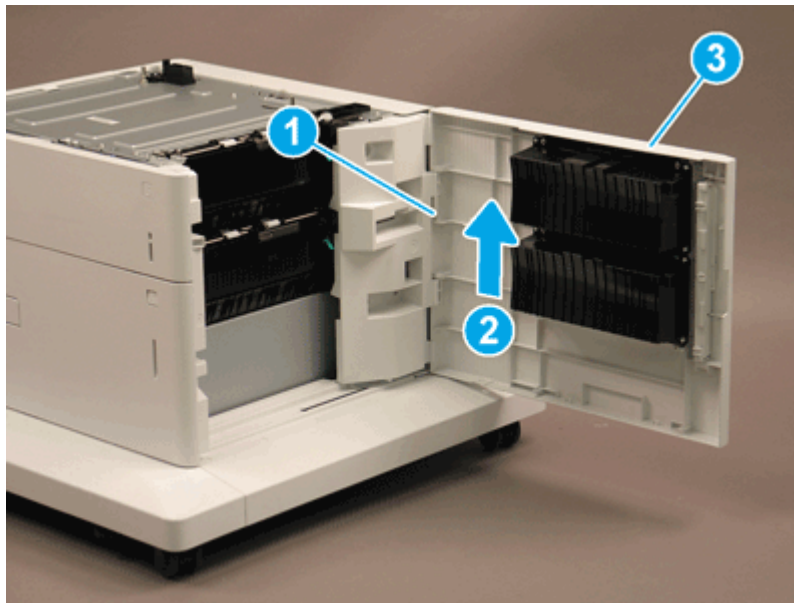
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2055 Remove the right door

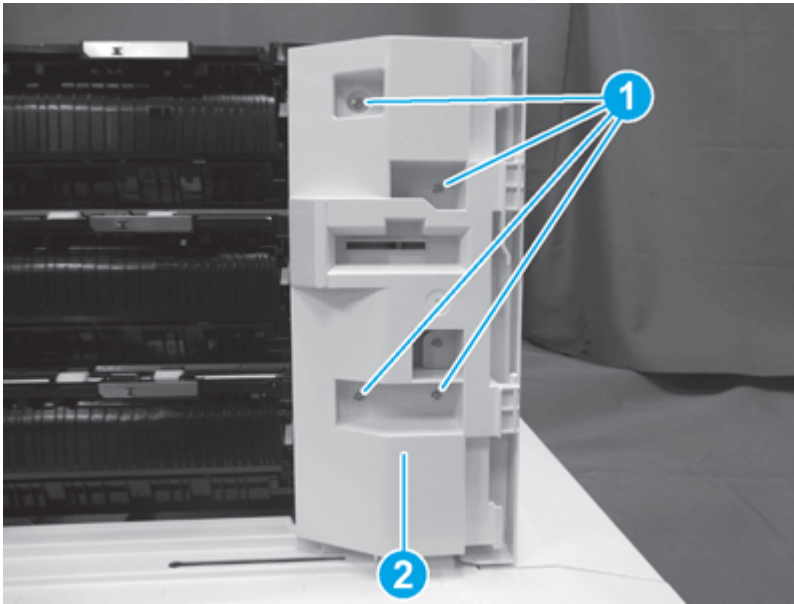


2. Remove the paper pickup assembly (3x550-sheet paper feeder with stand)


Follow these steps to remove the paper pickup assembly (3x550-sheet paper feeder with stand).

1. Remove all of the paper trays.
2. Remove four screws (callout 1), and then remove the hinge (callout 2).

Figure 5-2056 Remove four screws and the hinge



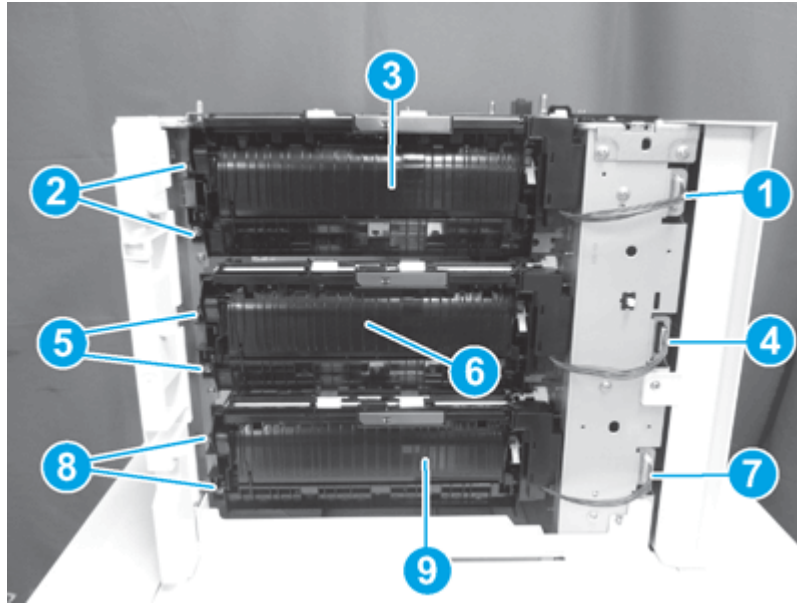
3. Do one of the following, depending upon which paper pickup assembly you are removing:

 **TIP:** Reverse the removal steps to install the assembly.

- a. **Tray 3 paper pickup assembly:** Disconnect one connector (callout 1), remove two screws (callout 2), and then remove the paper pickup assembly (callout 3).
- b. **Tray 4 paper pickup assembly:** Disconnect one connector (callout 4), remove two screws (callout 5), and then remove the paper pickup assembly (callout 6).

- c. **Tray 5 paper pickup assembly:** Disconnect one connector (callout 7), remove two screws (callout 8), and then remove the paper pickup assembly (callout 9).

Figure 5-2057 Remove the paper pickup assemblies



3. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.




NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Feed motors (3x550-sheet paper feeder with stand)

Learn how to remove and replace the feed motors for the 3x550-sheet paper feeder with stand.


Mean time to repair: 20 minutes

Service level: Advanced

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.

 **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.

- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-137 Part information

Part number	Part description
RK2-7831-000CN	Motor, stepping

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

Send a print job from the host computer to the 3x550-sheet paper feeder with stand. Verify that a page prints.

1. Remove the rear cover (3x550-sheet paper feeder with stand)

Follow these steps to remove the rear cover (3x550-sheet paper feeder with stand).

1. Open the right door.

2. Remove one screw (callout 1).

Figure 5-2058 Remove one screw



3. Release three tabs (callout 1), and then remove the rear cover (callout 2).


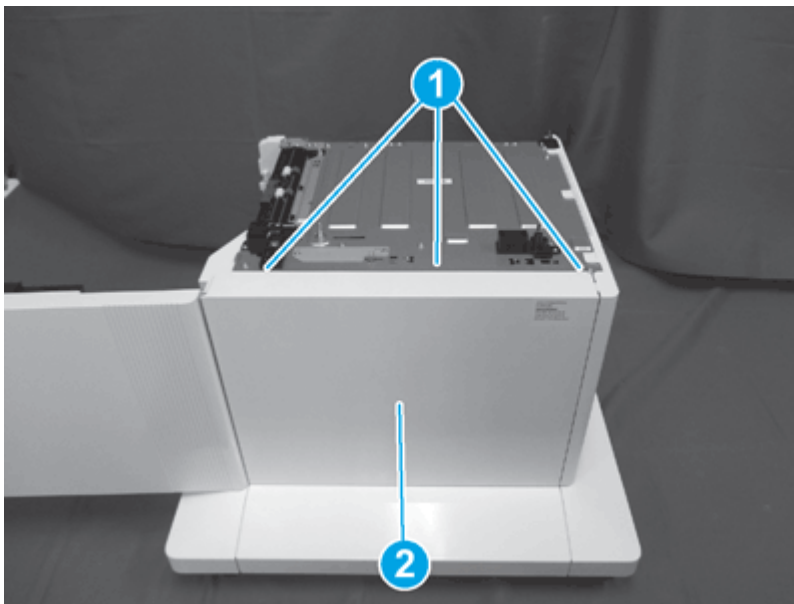
 **TIP:** Reverse the removal steps to install the assembly.


Figure 5-2059 Remove the rear cover



2. Remove the feed motor (3x550-sheet paper feeder with stand)

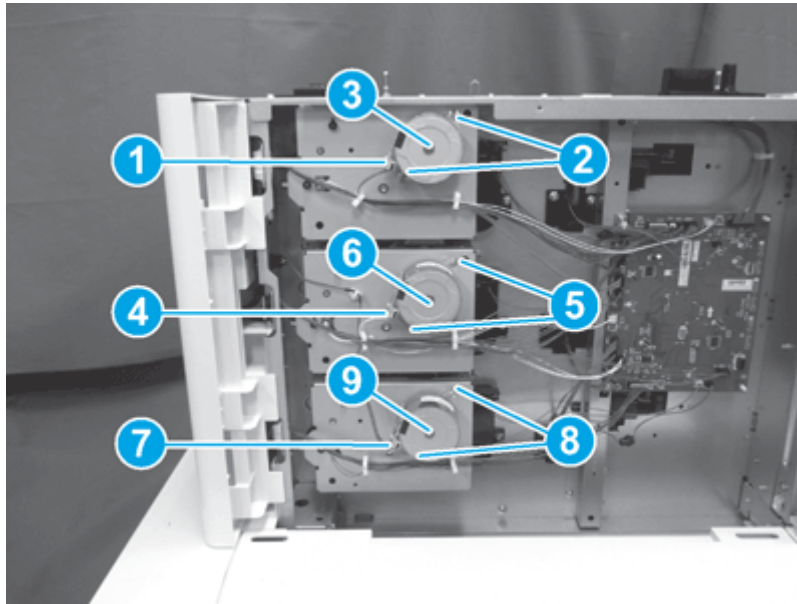
Follow these steps to remove the feed motor (3x550-sheet paper feeder with stand).

- Do one of the following, depending upon which feed motor you are removing:

 **TIP:** Reverse the removal steps to install the assembly.

- a. **Tray 3 feed motor:** Disconnect one connector (callout 1), remove two screws (callout 2), and then remove the feed motor (callout 3).
- b. **Tray 4 feed motor:** Disconnect one connector (callout 4), remove two screws (callout 5), and then remove the feed motor (callout 6).
- c. **Tray 5 feed motor:** Disconnect one connector (callout 7), remove two screws (callout 8), and then remove the feed motor (callout 9).


Figure 5-2060 Remove the feed motors



3. Unpack the replacement assembly



Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.


 **NOTE:** HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.

 **CAUTION:**  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

 **IMPORTANT:** Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

 **NOTE:** If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Drive assemblies (3x550-sheet paper feeder with stand)

Learn how to remove and replace the drive assemblies for Trays 3 and 5 in the 3x550-sheet paper feeder with stand.

Mean time to repair: 20 minutes

Service level: Advanced



IMPORTANT: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.

WARNING! To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.

- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-138 Part information

Part number	Part description
RM2-1222-000CN	Drive assembly

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

Send a print job from the host computer to the 3x550-sheet paper feeder with stand. Verify that a page prints.

1. Remove the rear cover (3x550-sheet paper feeder with stand)

Follow these steps to remove the rear cover (3x550-sheet paper feeder with stand).

1. Open the right door.
2. Remove one screw (callout 1).

Figure 5-2061 Remove one screw



3. Release three tabs (callout 1), and then remove the rear cover (callout 2).


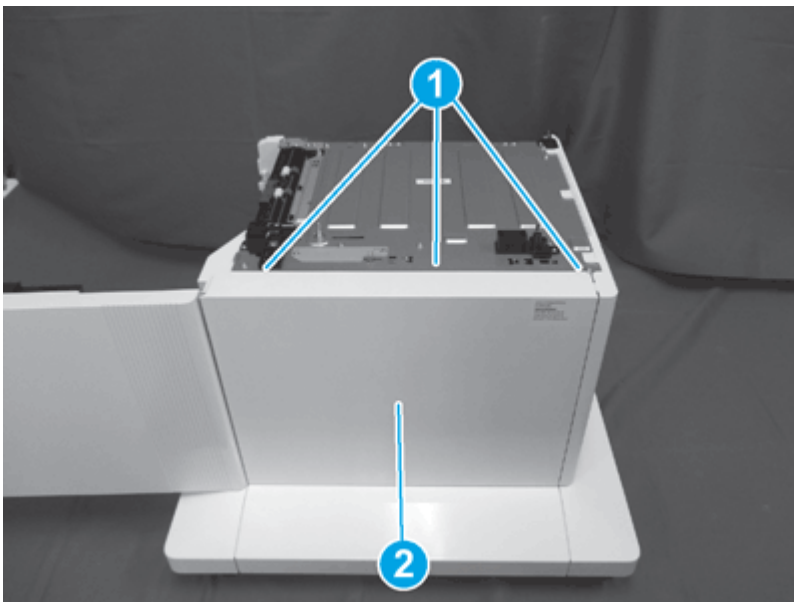
 **TIP:** Reverse the removal steps to install the assembly.


Figure 5-2062 Remove the rear cover



2. Remove the feed motor (3x550-sheet paper feeder with stand)

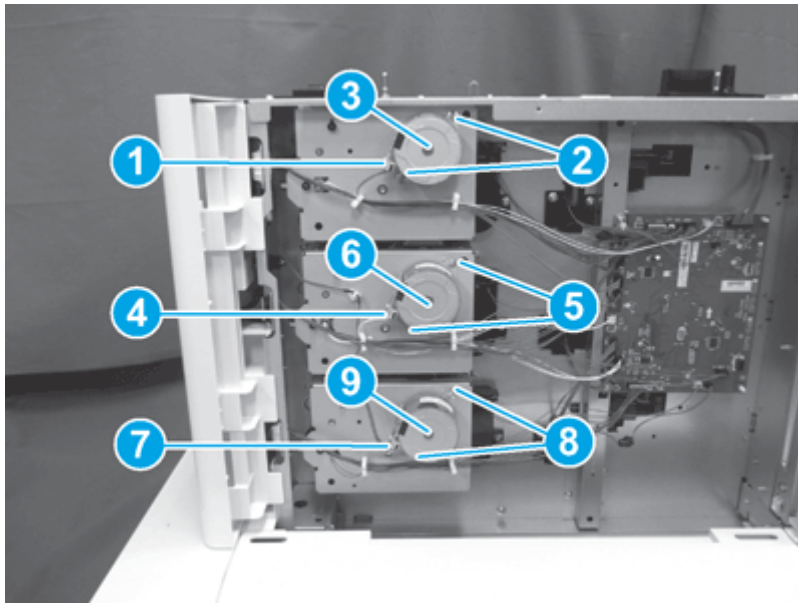
Follow these steps to remove the feed motor (3x550-sheet paper feeder with stand).

- Do one of the following, depending upon which feed motor you are removing:

 **TIP:** Reverse the removal steps to install the assembly.

- Tray 3 feed motor:** Disconnect one connector (callout 1), remove two screws (callout 2), and then remove the feed motor (callout 3).
- Tray 4 feed motor:** Disconnect one connector (callout 4), remove two screws (callout 5), and then remove the feed motor (callout 6).
- Tray 5 feed motor:** Disconnect one connector (callout 7), remove two screws (callout 8), and then remove the feed motor (callout 9).

Figure 5-2063 Remove the feed motors



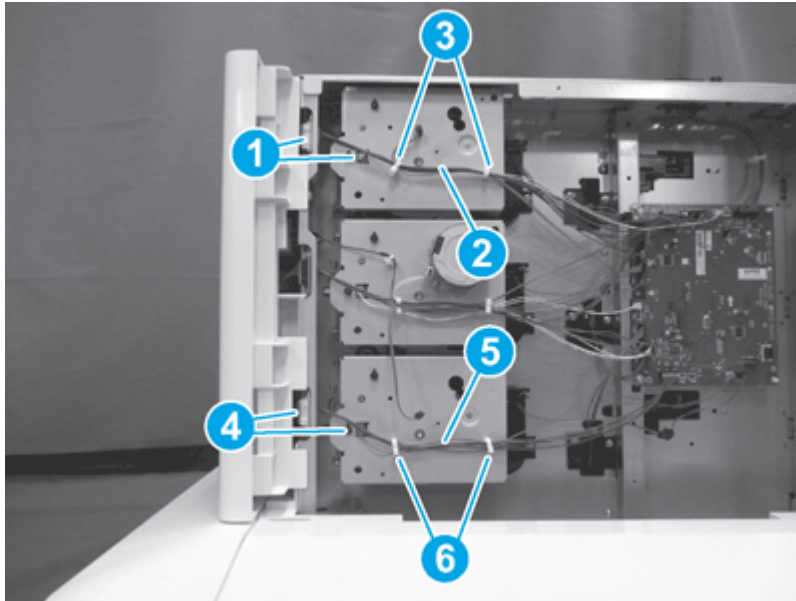
3. Remove the drive assembly (Tray 3 or 5) (3x550-sheet paper feeder with stand)

Follow these steps to remove the drive assembly (Tray 3 or 5) (3x550-sheet paper feeder with stand).

1. Do one of the following, depending upon which drive assembly you are removing:
 - Tray 3 drive assembly:** Disconnect two connectors (callout 1), and then release the cable (callout 2) from the retainers (callout 3).

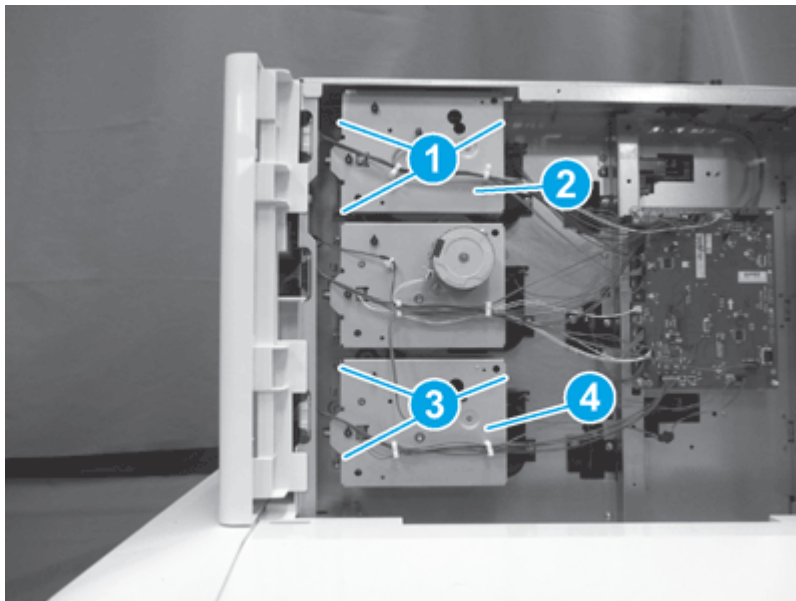
- b. **Tray 5 drive assembly:** Disconnect two connectors (callout 4), and then release the cable (callout 5) from the retainers (callout 6).

Figure 5-2064 Disconnect two connectors



- 2. Do one of the following, depending upon which drive assembly you are removing:
 - a. **Tray 3 drive assembly:** Remove three screws (callout 1), and then remove the drive assembly (callout 2).
 - b. **Tray 5 drive assembly:** Remove three screws (callout 3), and then remove the drive assembly (callout 4).

Figure 5-2065 Remove the drive assembly



4. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Drive assembly (Tray 4) (3x550-sheet paper feeder with stand)

Learn how to remove and replace the drive assembly for Tray 4 in the 3x550-sheet paper feeder with stand.

Mean time to repair: 20 minutes

Service level: Advanced

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.



WARNING! To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.

- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-139 Part information

Part number	Part description
RM2-1222-000CN	Drive assembly

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

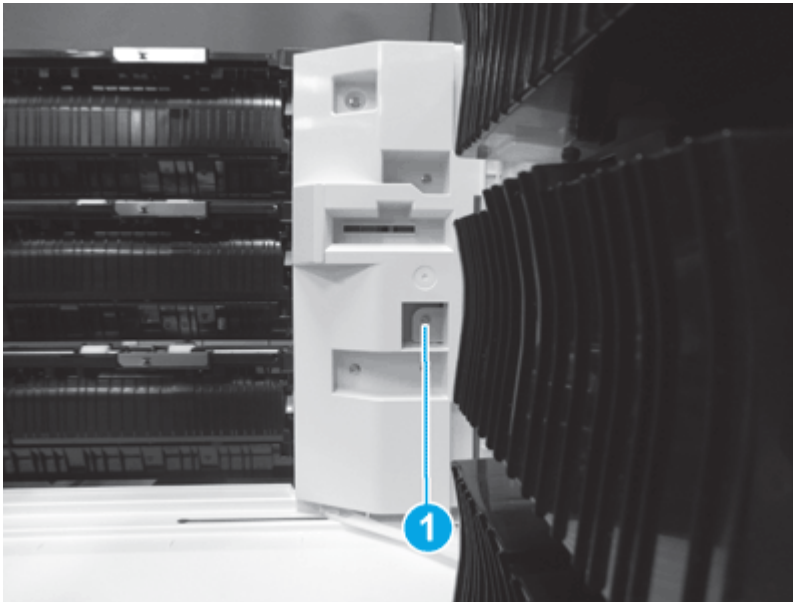
Send a print job from the host computer to the 3x550-sheet paper feeder with stand. Verify that a page prints.

1. Remove the rear cover (3x550-sheet paper feeder with stand)

Follow these steps to remove the rear cover (3x550-sheet paper feeder with stand).

1. Open the right door.
2. Remove one screw (callout 1).

Figure 5-2066 Remove one screw



3. Release three tabs (callout 1), and then remove the rear cover (callout 2).


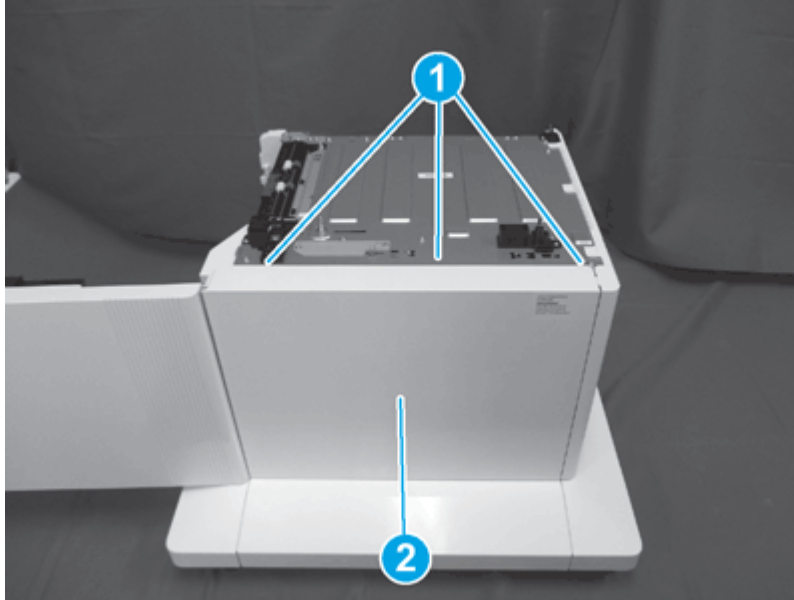
 **TIP:** Reverse the removal steps to install the assembly.


Figure 5-2067 Remove the rear cover



2. Remove the Tray 4 feed motor (3x550-sheet paper feeder with stand)

Follow these steps to remove the Tray 4 feed motor (3x550-sheet paper feeder with stand).

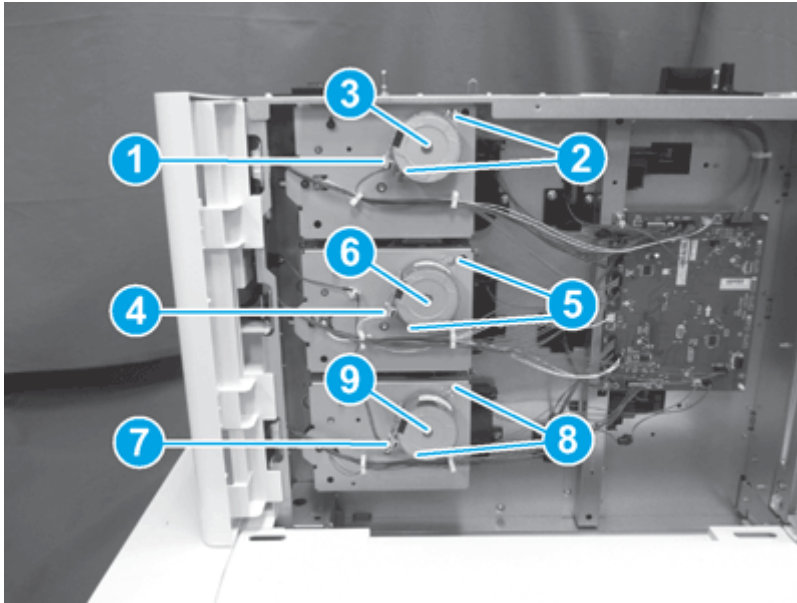
- Do one of the following, depending upon which feed motor you are removing:

 **TIP:** Reverse the removal steps to install the assembly.

- Tray 3 feed motor:** Disconnect one connector (callout 1), remove two screws (callout 2), and then remove the feed motor (callout 3).
- Tray 4 feed motor:** Disconnect one connector (callout 4), remove two screws (callout 5), and then remove the feed motor (callout 6).

- c. **Tray 5 feed motor:** Disconnect one connector (callout 7), remove two screws (callout 8), and then remove the feed motor (callout 9).

Figure 5-2068 Remove the feed motors

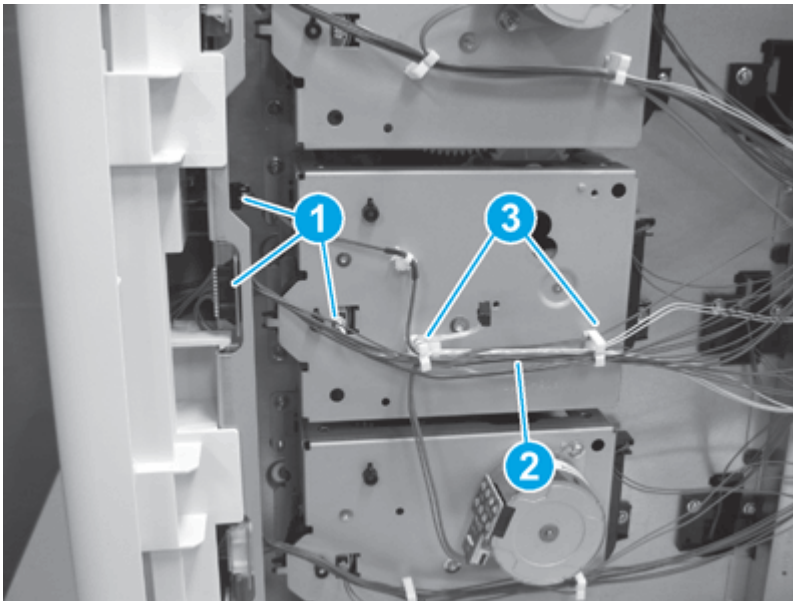


3. Remove the drive assembly (3x550-sheet paper feeder with stand)

Follow these steps to remove the drive assembly (3x550-sheet paper feeder with stand).

1. Disconnect three connectors (callout 1), and then release the cable (callout 3) from the retainers (callout 2).

Figure 5-2069 Disconnect three connectors



2. Release the retainer (callout 1), remove three screws (callout 2), and then remove the drive assembly (callout 3).


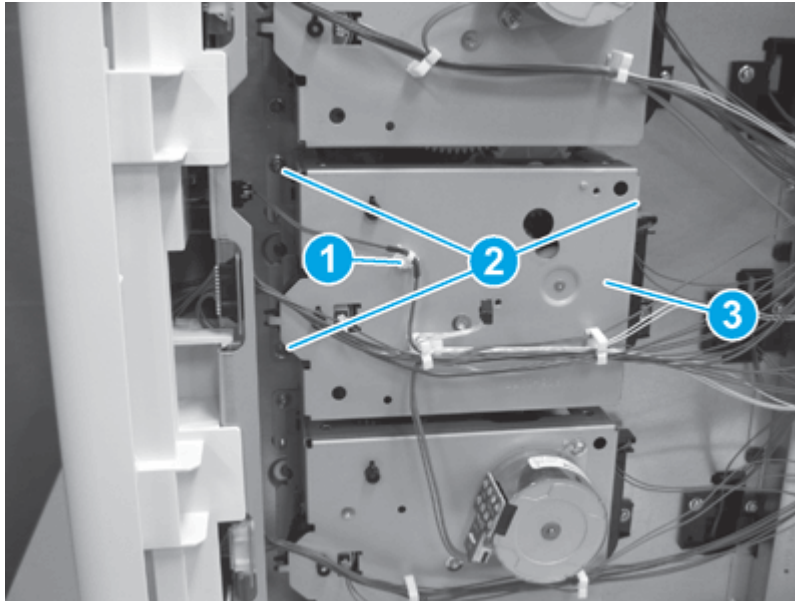
 **TIP:** Reverse the removal steps to install the assembly.


Figure 5-2070 Remove the drive assembly



4. Unpack the replacement assembly



Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.


 **NOTE:** HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.

 **CAUTION:**  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

 **IMPORTANT:** Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

 **NOTE:** If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

- To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Pickup alienation holder (Tray 4) (3x550-sheet paper feeder with stand)

Learn how to remove and replace the pickup alienation holder for the 3x550-sheet paper feeder with stand.

Mean time to repair: 20 minutes

Service level: Advanced



IMPORTANT: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.
- WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.
- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-140 Part information

Part number	Part description
RM2-1223-000CN	Estrangement holder assembly

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

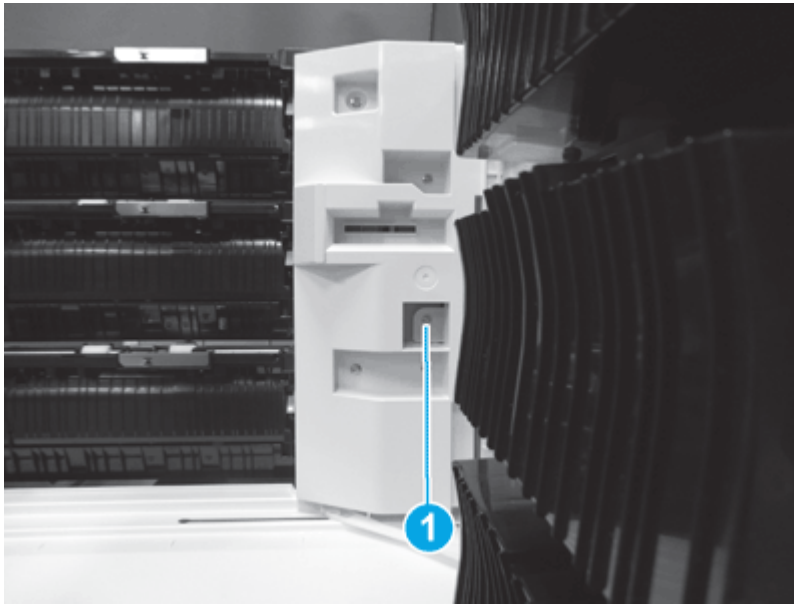
Send a print job from the host computer to the 3x550-sheet paper feeder with stand. Verify that a page prints.

1. Remove the rear cover (3x550-sheet paper feeder with stand)

Follow these steps to remove the rear cover (3x550-sheet paper feeder with stand).

1. Open the right door.
2. Remove one screw (callout 1).

Figure 5-2071 Remove one screw



3. Release three tabs (callout 1), and then remove the rear cover (callout 2).


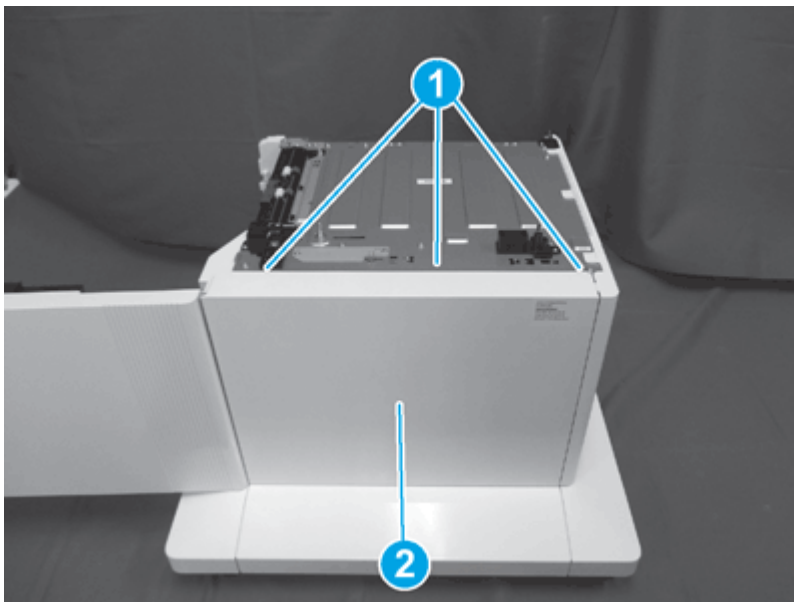
 **TIP:** Reverse the removal steps to install the assembly.


Figure 5-2072 Remove the rear cover



2. Remove the feed motor (3x550-sheet paper feeder with stand)

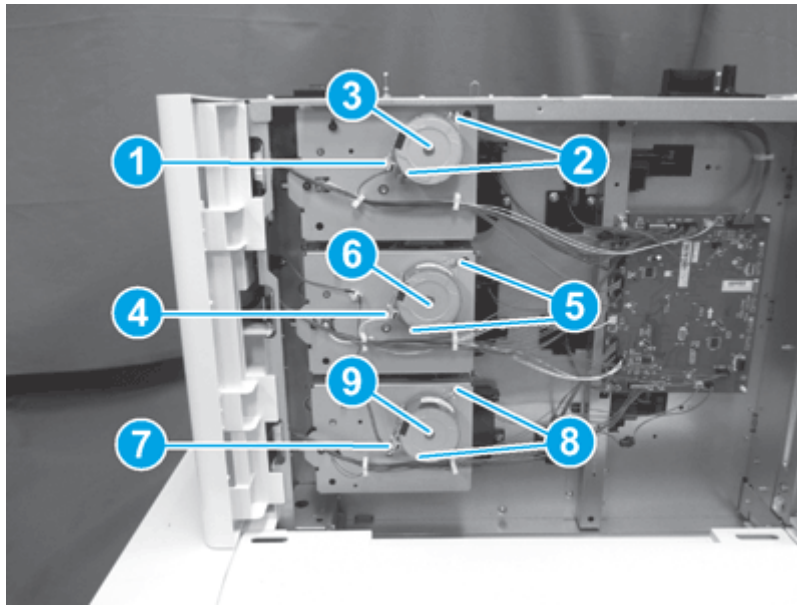
Follow these steps to remove the feed motor (3x550-sheet paper feeder with stand).

- Do one of the following, depending upon which feed motor you are removing:

 **TIP:** Reverse the removal steps to install the assembly.

- Tray 3 feed motor:** Disconnect one connector (callout 1), remove two screws (callout 2), and then remove the feed motor (callout 3).
- Tray 4 feed motor:** Disconnect one connector (callout 4), remove two screws (callout 5), and then remove the feed motor (callout 6).
- Tray 5 feed motor:** Disconnect one connector (callout 7), remove two screws (callout 8), and then remove the feed motor (callout 9).

Figure 5-2073 Remove the feed motors



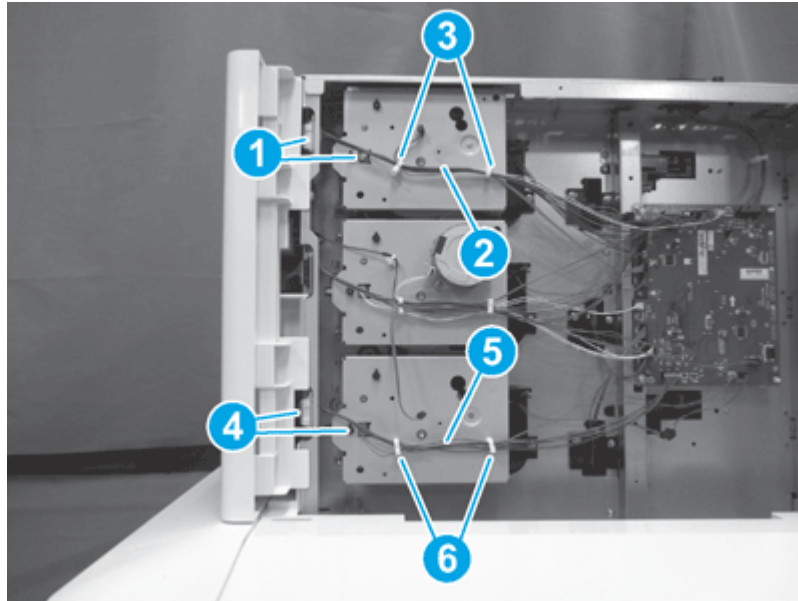
3. Remove the drive assembly (Tray 3 or 5) (3x550-sheet paper feeder with stand)

Follow these steps to remove the drive assembly (Tray 3 or 5) (3x550-sheet paper feeder with stand).

1. Do one of the following, depending upon which drive assembly you are removing:
 - Tray 3 drive assembly:** Disconnect two connectors (callout 1), and then release the cable (callout 2) from the retainers (callout 3).

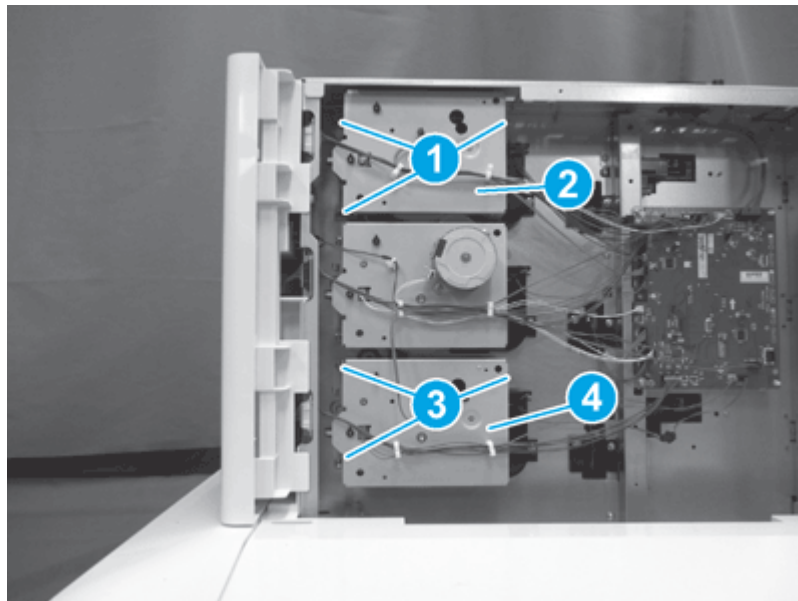
- b. **Tray 5 drive assembly:** Disconnect two connectors (callout 4), and then release the cable (callout 5) from the retainers (callout 6).

Figure 5-2074 Disconnect two connectors



- 2. Do one of the following, depending upon which drive assembly you are removing:
 - a. **Tray 3 drive assembly:** Remove three screws (callout 1), and then remove the drive assembly (callout 2).
 - b. **Tray 5 drive assembly:** Remove three screws (callout 3), and then remove the drive assembly (callout 4).

Figure 5-2075 Remove the drive assembly

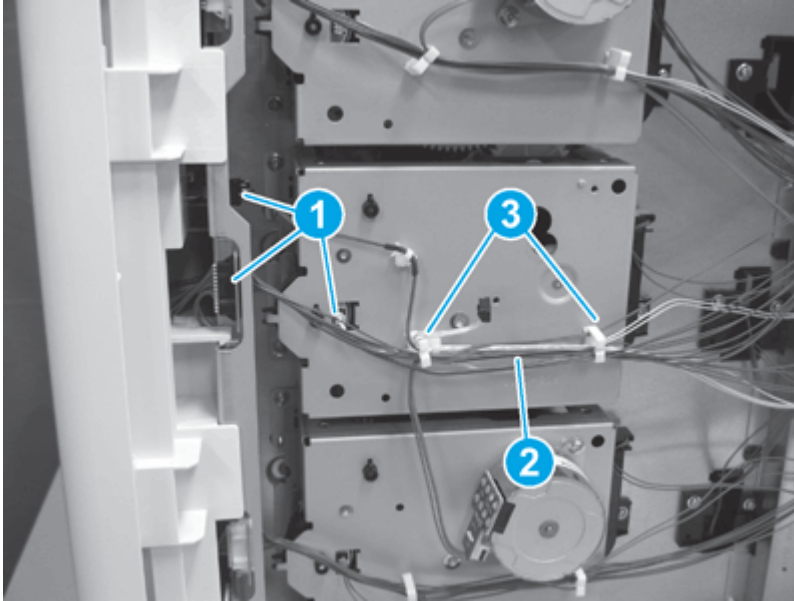


4. Remove the drive assembly (3x550-sheet paper feeder with stand)

Follow these steps to remove the drive assembly (3x550-sheet paper feeder with stand).

1. Disconnect three connectors (callout 1), and then release the cable (callout 3) from the retainers (callout 2).

Figure 5-2076 Disconnect three connectors



2. Release the retainer (callout 1), remove three screws (callout 2), and then remove the drive assembly (callout 3).


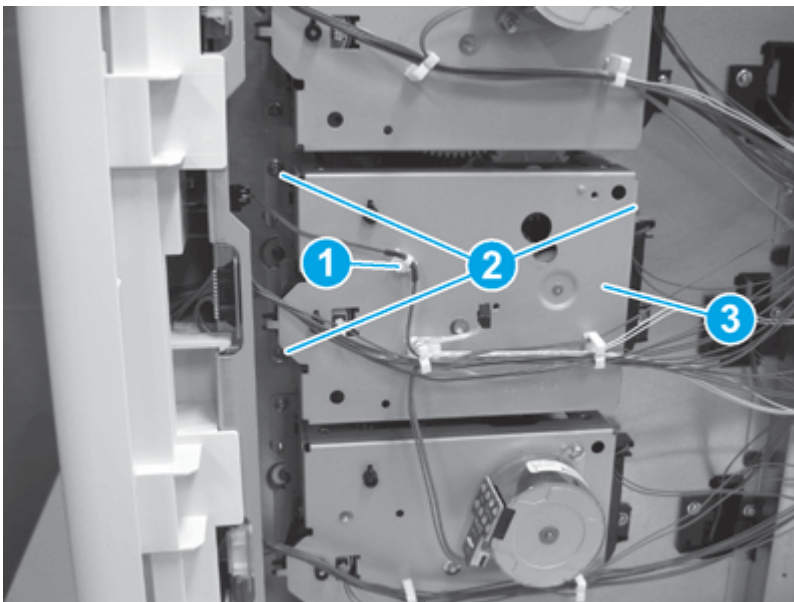
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2077 Remove the drive assembly

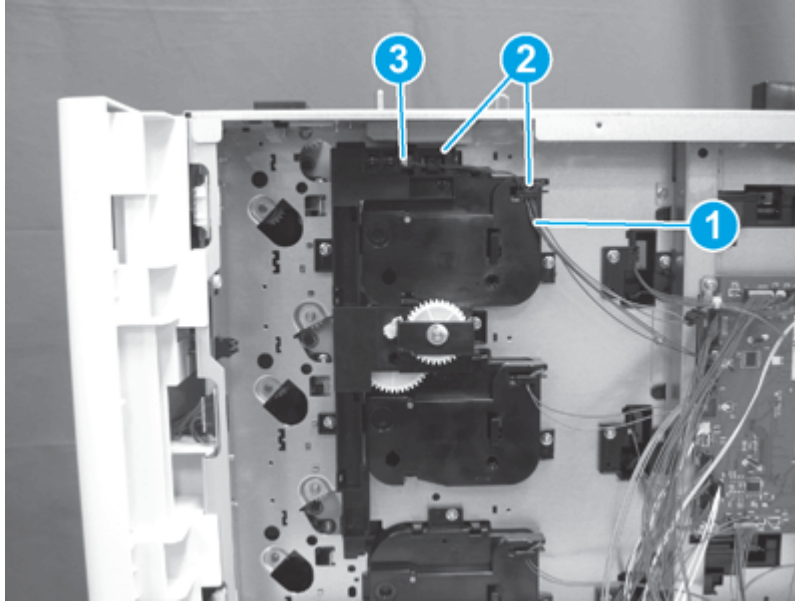


5. Remove the pickup alienation holder (3x550-sheet paper feeder with stand)

Follow these steps to remove the pickup alienation holder (3x550-sheet paper feeder with stand).

1. Release the cable (callout 1) from cable guides (callout 2), and then disconnect one connector (callout 3).

Figure 5-2078 Disconnect one connector



2. Remove four screws (callout 1), and then remove the pickup alienation holder (callout 2).


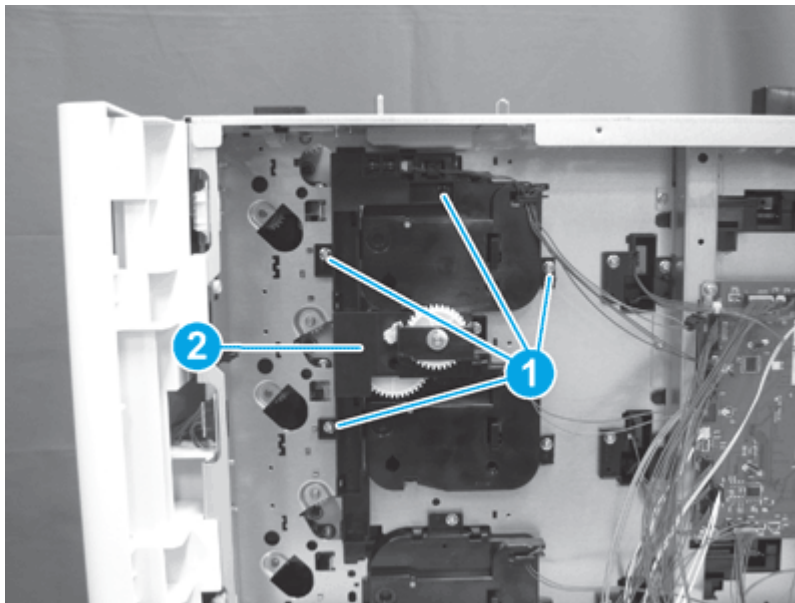
 **TIP:** Reverse the removal steps to install the assembly.


Figure 5-2079 Remove four screws and the pickup alienation holder



6. Unpack the replacement assembly



Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.


 **NOTE:** HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>


2. Unpack the replacement part from the packaging.

 **CAUTION:**  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

 **IMPORTANT:** Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

 **NOTE:** If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.


 **NOTE:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Lifter drive assemblies (Trays 3 and 4) (3x550-sheet paper feeder with stand)

Learn how to remove and replace the lifter drive assemblies for Trays 3 and 4 in the 3x550-sheet paper feeder with stand.


Mean time to repair: 20 minutes

Service level: Advanced

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.

 **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.

- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-141 Part information

Part number	Part description
RM2-2091-000CN	Lifter drive assembly

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

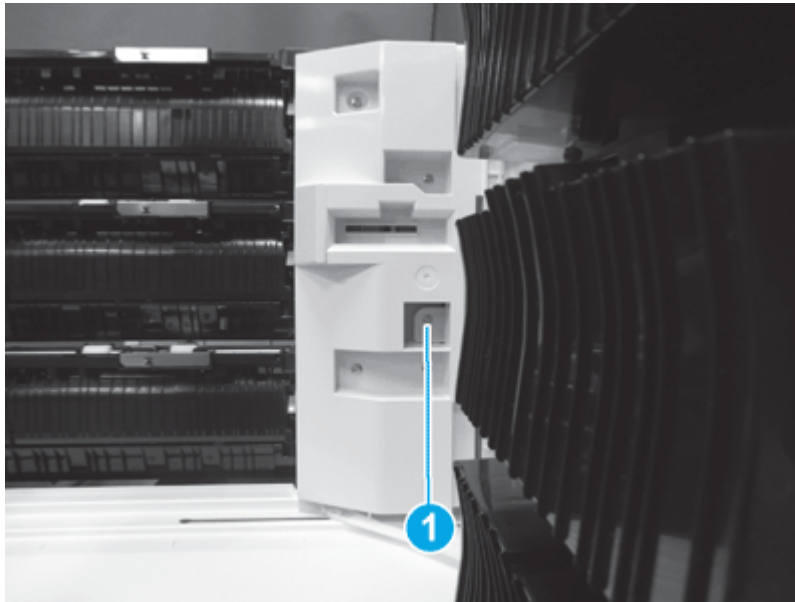
Send a print job from the host computer to the 3x550-sheet paper feeder with stand. Verify that a page prints.

1. Remove the rear cover (3x550-sheet paper feeder with stand)

Follow these steps to remove the rear cover (3x550-sheet paper feeder with stand).

1. Open the right door.
2. Remove one screw (callout 1).

Figure 5-2080 Remove one screw



3. Release three tabs (callout 1), and then remove the rear cover (callout 2).


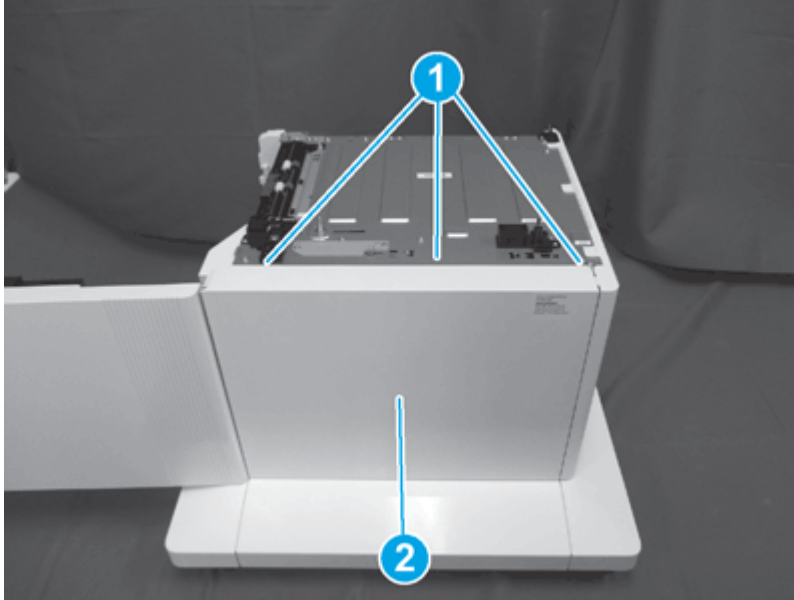
 **TIP:** Reverse the removal steps to install the assembly.


Figure 5-2081 Remove the rear cover



2. Remove the feed motors (Trays 3, 4, and 5) (3x550-sheet paper feeder with stand)

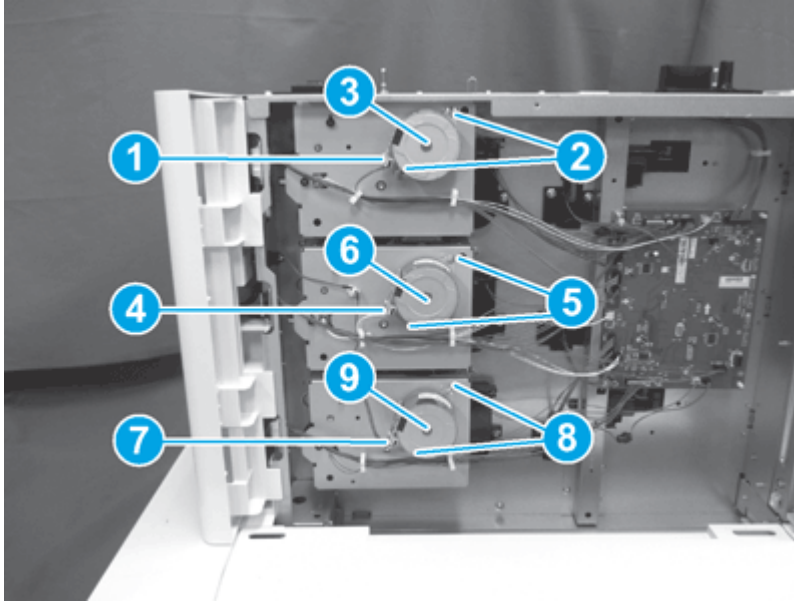
Follow these steps to remove the feed motors (Trays 3, 4, and 5) (3x550-sheet paper feeder with stand).

- Do one of the following, depending upon which feed motor you are removing:

 **TIP:** Reverse the removal steps to install the assembly.

- Tray 3 feed motor:** Disconnect one connector (callout 1), remove two screws (callout 2), and then remove the feed motor (callout 3).
- Tray 4 feed motor:** Disconnect one connector (callout 4), remove two screws (callout 5), and then remove the feed motor (callout 6).
- Tray 5 feed motor:** Disconnect one connector (callout 7), remove two screws (callout 8), and then remove the feed motor (callout 9).

Figure 5-2082 Remove the feed motors

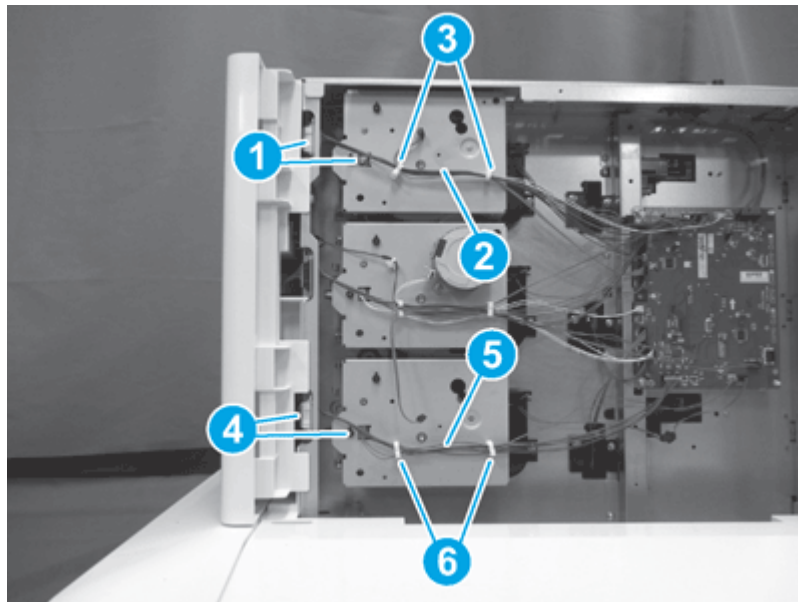


3. Remove the drive assemblies (Trays 3 and 5) (3x550-sheet paper feeder with stand)

Follow these steps to remove the drive assemblies (Trays 3 and 5) (3x550-sheet paper feeder with stand).

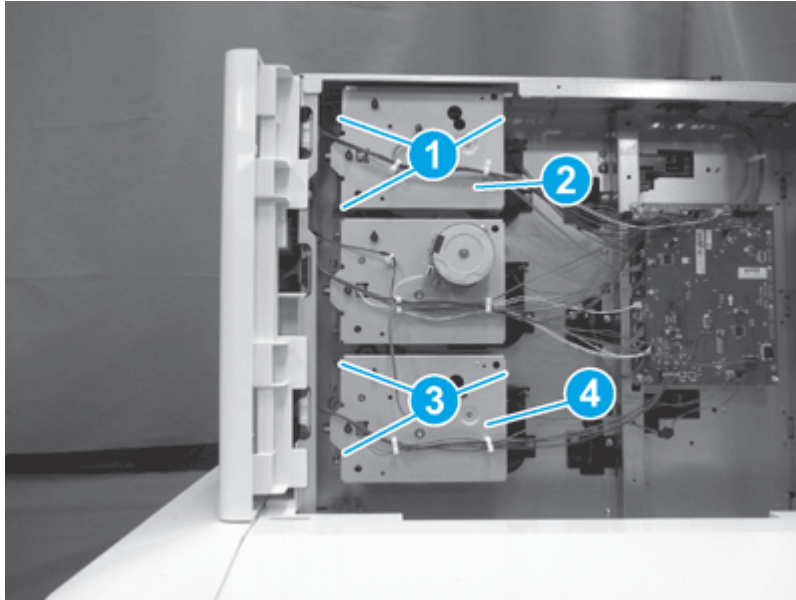
1. Do one of the following, depending upon which drive assembly you are removing:
 - a. **Tray 3 drive assembly:** Disconnect two connectors (callout 1), and then release the cable (callout 2) from the retainers (callout 3).
 - b. **Tray 5 drive assembly:** Disconnect two connectors (callout 4), and then release the cable (callout 5) from the retainers (callout 6).

Figure 5-2083 Disconnect two connectors



2. Do one of the following, depending upon which drive assembly you are removing:
 - a. **Tray 3 drive assembly:** Remove three screws (callout 1), and then remove the drive assembly (callout 2).
 - b. **Tray 5 drive assembly:** Remove three screws (callout 3), and then remove the drive assembly (callout 4).

Figure 5-2084 Remove the drive assembly

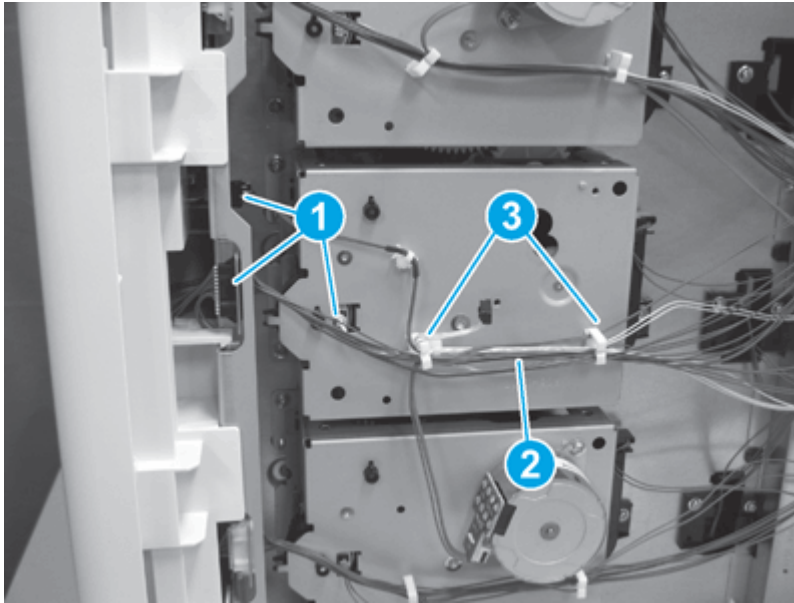


4. Remove the drive assembly (Tray 4) (3x550-sheet paper feeder with stand)

Follow these steps to remove the drive assembly (Tray 4) (3x550-sheet paper feeder with stand).

1. Disconnect three connectors (callout 1), and then release the cable (callout 3) from the retainers (callout 2).

Figure 5-2085 Disconnect three connectors



2. Release the retainer (callout 1), remove three screws (callout 2), and then remove the drive assembly (callout 3).


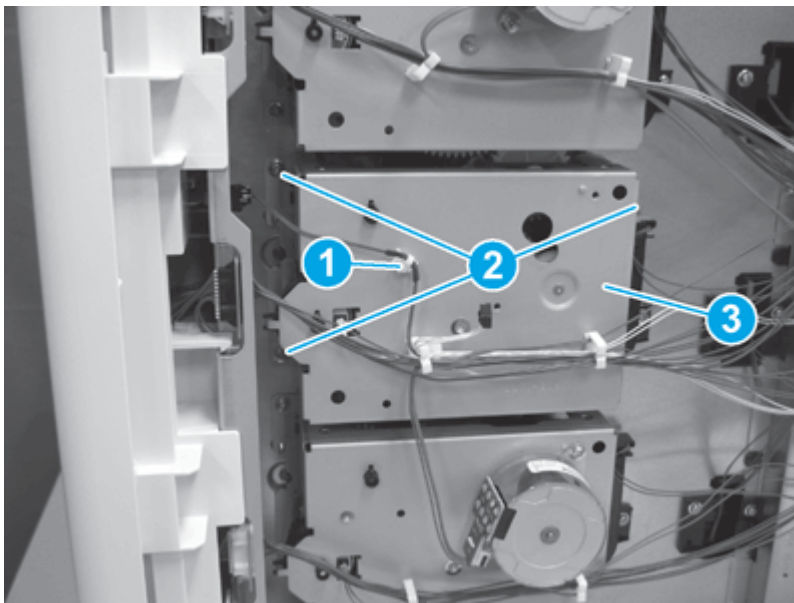
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2086 Remove the drive assembly

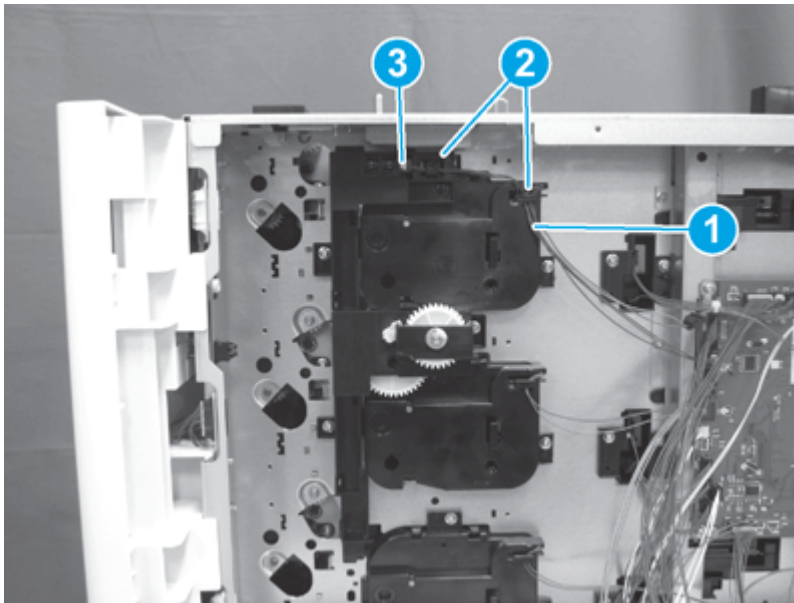


5. Remove the pickup alienation holder (3x550-sheet paper feeder with stand)

Follow these steps to remove the pickup alienation holder (3x550-sheet paper feeder with stand).

1. Release the cable (callout 1) from cable guides (callout 2), and then disconnect one connector (callout 3).

Figure 5-2087 Disconnect one connector



2. Remove four screws (callout 1), and then remove the pickup alienation holder (callout 2).


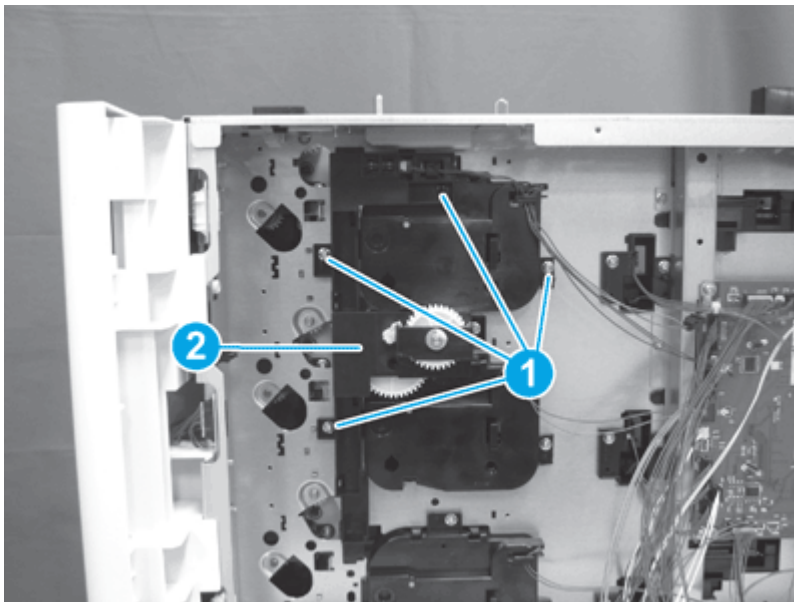
 **TIP:** Reverse the removal steps to install the assembly.


Figure 5-2088 Remove four screws and the pickup alienation holder



6. Remove the lifter drive assembly (Trays 3 and 4) (3x550-sheet paper feeder with stand)

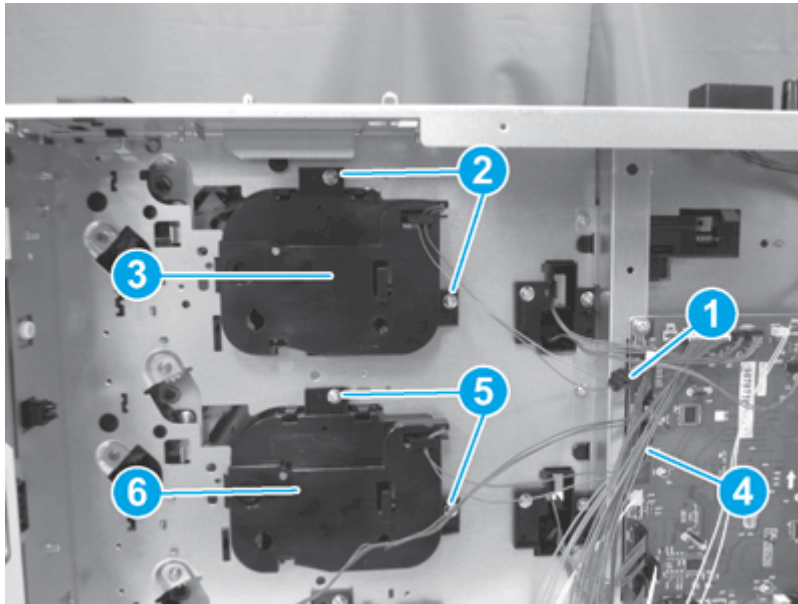
Follow these steps to remove the lifter drive assembly (Trays 3 and 4) (3x550-sheet paper feeder with stand).

- Do one of the following, depending upon which lifter drive assembly you are removing:

 **TIP:** Reverse the removal steps to install the assembly.

- Tray 3 lifter drive assembly:** Disconnect one connector (callout 1), remove two screws (callout 2), and then remove the lifter drive assembly (callout 3).
- Tray 4 lifter drive assembly:** Disconnect one connector (callout 4), remove two screws (callout 5), and then remove the lifter drive assembly (callout 6).


Figure 5-2089 Remove the lifter drive assembly assemblies



7. Unpack the replacement assembly



Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.


 **NOTE:** HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>


2. Unpack the replacement part from the packaging.

 **CAUTION:**  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

 **IMPORTANT:** Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

 **NOTE:** If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

- To install an assembly, reverse the removal steps.


 **NOTE:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Lifter drive assemblies (Tray 5) (3x550-sheet paper feeder with stand)

Learn how to remove and replace the lifter drive assembly for Tray 5 in the 3x550-sheet paper feeder with stand.


Mean time to repair: 20 minutes

Service level: Advanced

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.

 **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.

- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-142 Part information

Part number	Part description
RM2-2091-000CN	Lifter drive assembly

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

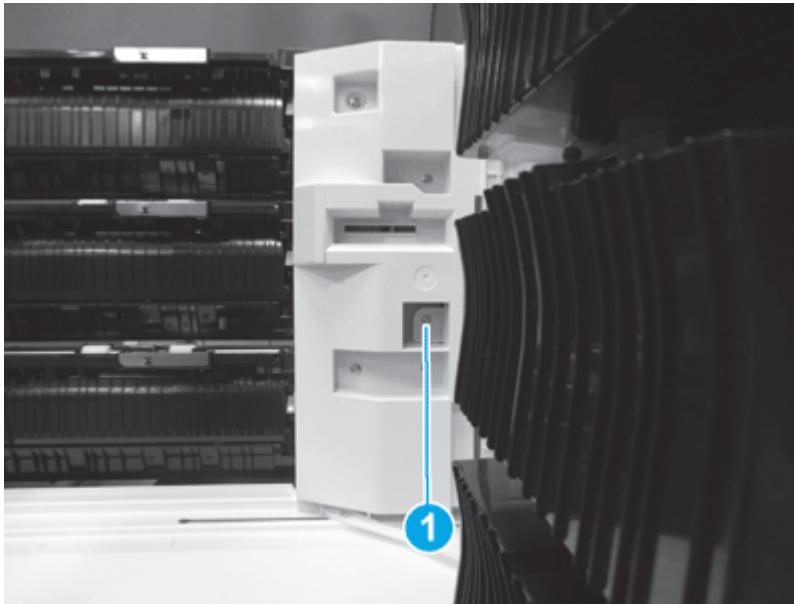
Send a print job from the host computer to the 3x550-sheet paper feeder with stand. Verify that a page prints.

1. Remove the rear cover (3x550-sheet paper feeder with stand)

Follow these steps to remove the rear cover (3x550-sheet paper feeder with stand).

1. Open the right door.
2. Remove one screw (callout 1).

Figure 5-2090 Remove one screw



3. Release three tabs (callout 1), and then remove the rear cover (callout 2).


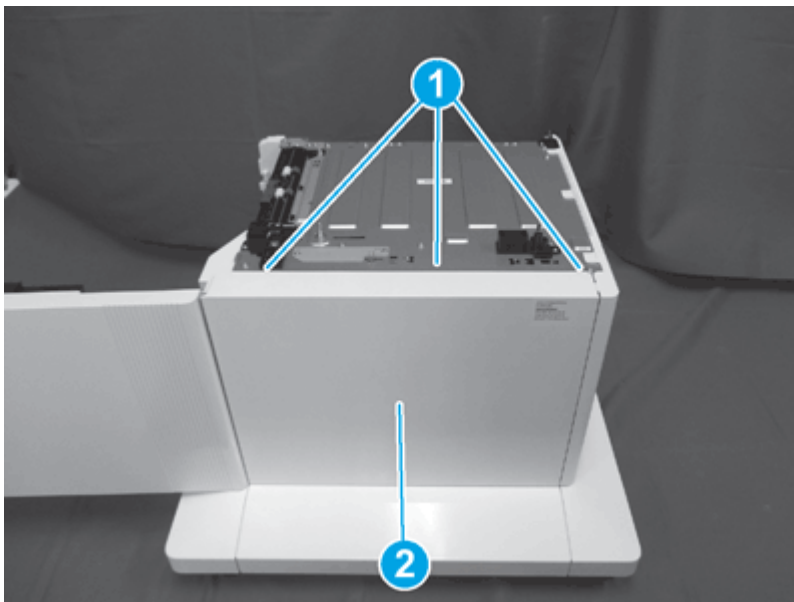
 **TIP:** Reverse the removal steps to install the assembly.


Figure 5-2091 Remove the rear cover



2. Remove the feed motor (Tray 5) (3x550-sheet paper feeder with stand)

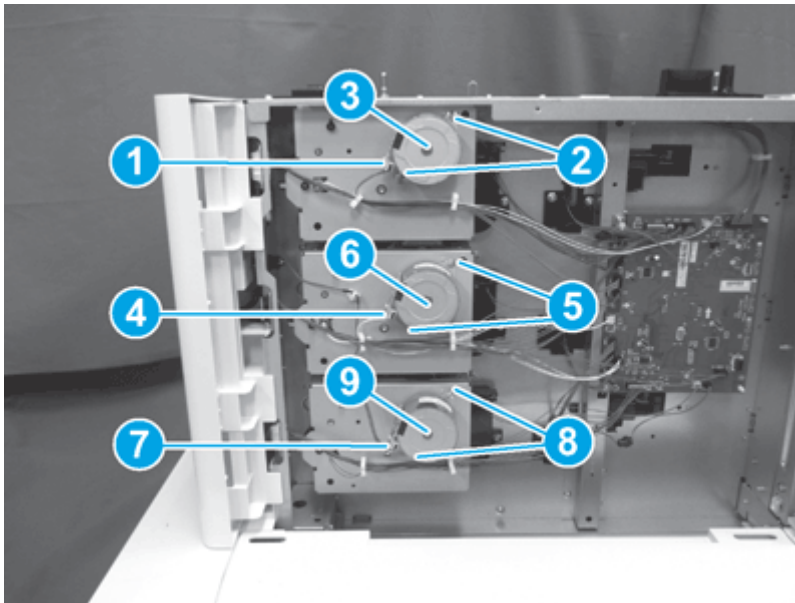
Follow these steps to remove the feed motor (Tray 5) (3x550-sheet paper feeder with stand).

- Do one of the following, depending upon which feed motor you are removing:

 **TIP:** Reverse the removal steps to install the assembly.

- Tray 3 feed motor:** Disconnect one connector (callout 1), remove two screws (callout 2), and then remove the feed motor (callout 3).
- Tray 4 feed motor:** Disconnect one connector (callout 4), remove two screws (callout 5), and then remove the feed motor (callout 6).
- Tray 5 feed motor:** Disconnect one connector (callout 7), remove two screws (callout 8), and then remove the feed motor (callout 9).

Figure 5-2092 Remove the feed motors



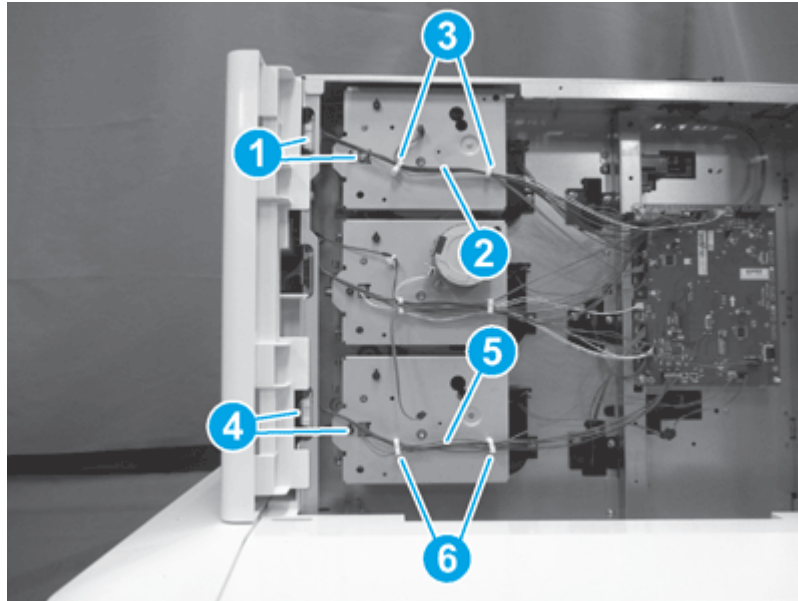
3. Remove the drive assembly (Tray 5) (3x550-sheet paper feeder with stand)

Follow these steps to remove the drive assembly (Tray 5) (3x550-sheet paper feeder with stand).

1. Do one of the following, depending upon which drive assembly you are removing:
 - Tray 3 drive assembly:** Disconnect two connectors (callout 1), and then release the cable (callout 2) from the retainers (callout 3).

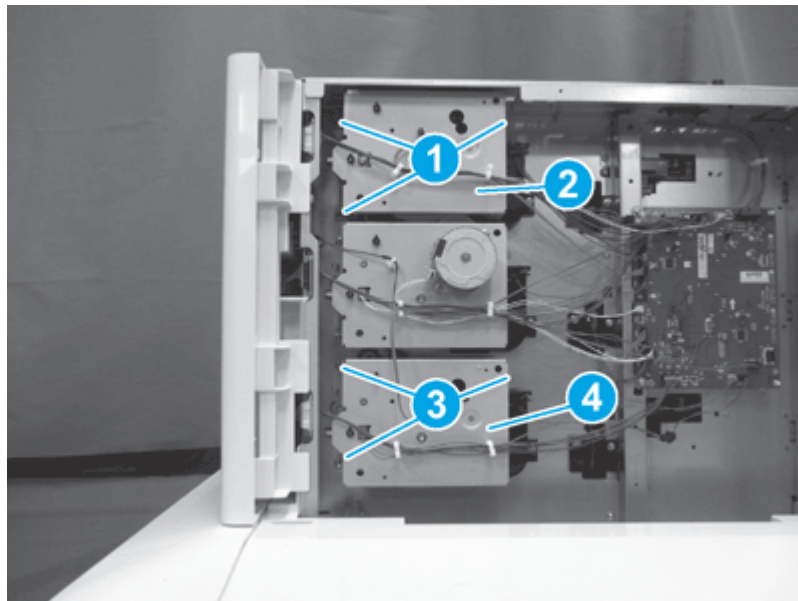
- b. **Tray 5 drive assembly:** Disconnect two connectors (callout 4), and then release the cable (callout 5) from the retainers (callout 6).

Figure 5-2093 Disconnect two connectors



- 2. Do one of the following, depending upon which drive assembly you are removing:
 - a. **Tray 3 drive assembly:** Remove three screws (callout 1), and then remove the drive assembly (callout 2).
 - b. **Tray 5 drive assembly:** Remove three screws (callout 3), and then remove the drive assembly (callout 4).

Figure 5-2094 Remove the drive assembly



4. Remove the lifter drive assembly (Tray 5) (3x550-sheet paper feeder with stand)

Follow these steps to remove the lifter drive assembly (Tray 5) (3x550-sheet paper feeder with stand).

- Disconnect one connector (callout 1), remove two screws (callout 2), and then remove the lifter drive assembly (callout 3).


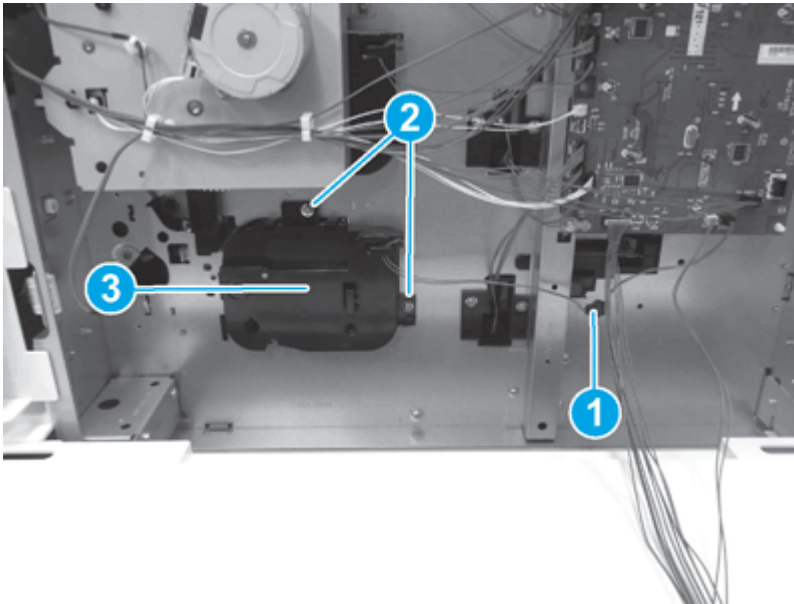
 **TIP:** Reverse the removal steps to install the assembly.


Figure 5-2095 Remove three screws and the lifter drive assembly



5. Unpack the replacement assembly



Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.


 **NOTE:** HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>


2. Unpack the replacement part from the packaging.

 **CAUTION:**  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

 **IMPORTANT:** Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

 **NOTE:** If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.


 **NOTE:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Controller PCA (3x550-sheet paper feeder with stand)

Learn how to remove and replace the controller PCA for the 3x550-sheet paper feeder with stand.


Mean time to repair: 20 minutes

Service level: Advanced

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.

 **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.

- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-143 Part information

Part number	Part description
RM2-8483-000CN	Paper deck controller PCB assembly

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

Send a print job from the host computer to the 3x550-sheet paper feeder with stand. Verify that a page prints.

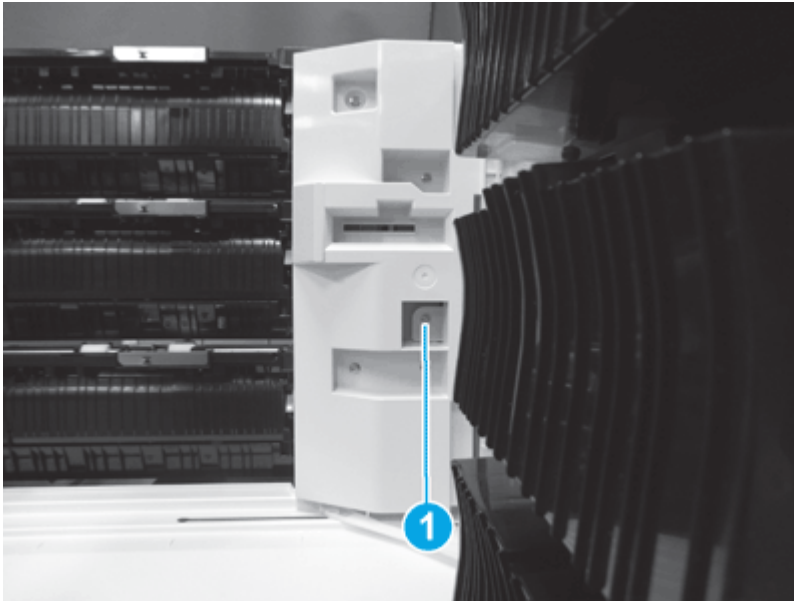
1. Remove the rear cover (3x550-sheet paper feeder with stand)

Follow these steps to remove the rear cover (3x550-sheet paper feeder with stand).

1. Open the right door.

2. Remove one screw (callout 1).

Figure 5-2096 Remove one screw



3. Release three tabs (callout 1), and then remove the rear cover (callout 2).


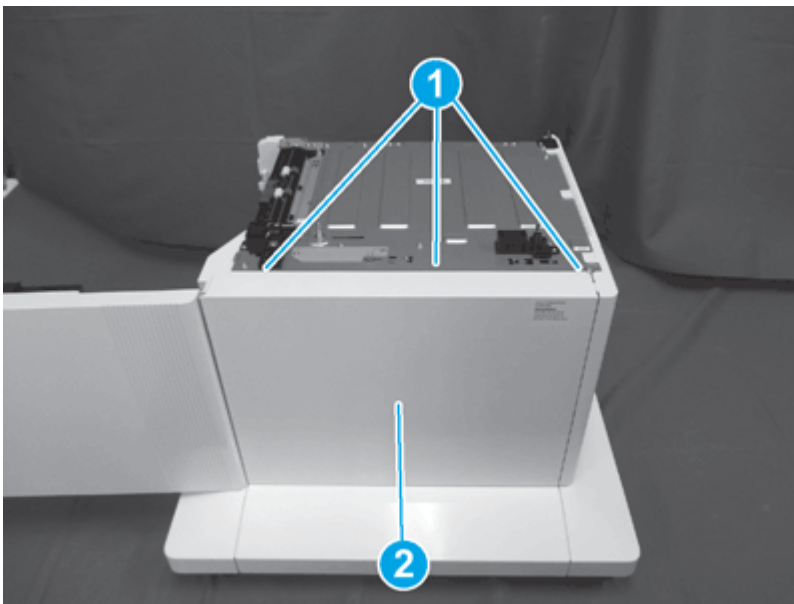
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2097 Remove the rear cover



2. Remove the controller PCA (3x550-sheet paper feeder with stand)

Follow these steps to remove the controller PCA (3x550-sheet paper feeder with stand).

- Disconnect all of the connectors on the controller PCA. Remove two screws (callout 1), release two tabs (callout 2), and then remove the controller PCA (callout 3).


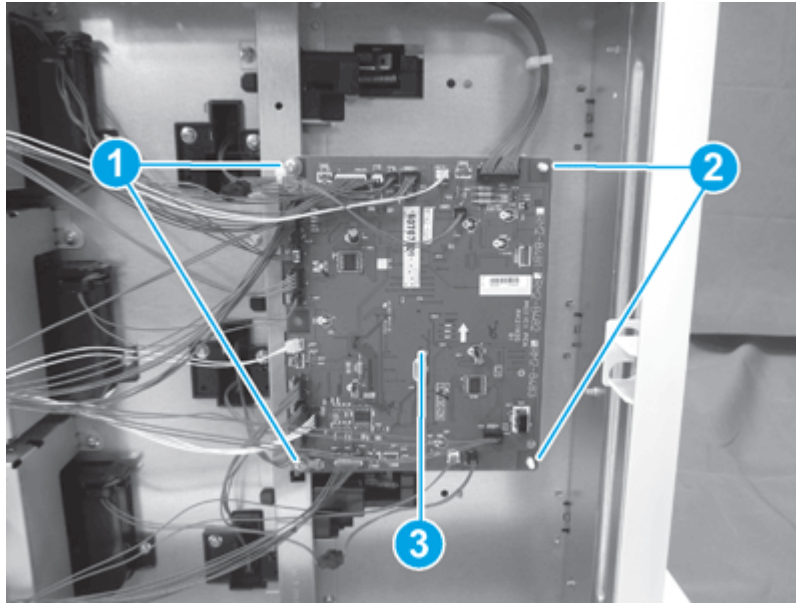
 **TIP:** Reverse the removal steps to install the assembly.


Figure 5-2098 Remove the controller PCA



3. Unpack the replacement assembly



Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.


 **NOTE:** HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.

 **CAUTION:**  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

 **IMPORTANT:** Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

 **NOTE:** If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Input device - 2,550-sheet feeder with stand

Learn how to remove and replace the 2,550-sheet paper feeder with stand parts and assemblies.

Removal and replacement: Left cover (2,550-sheet paper feeder with stand)

Learn how to remove and replace the left cover on the 2,550-sheet paper feeder with stand.

Mean time to repair: 10 minutes

Service level: Intermediate



IMPORTANT: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.
- ⚠ **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.
- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-144 Part information

Part number	Part description
RC5-0387-000CN	Cover, left

Required tools

- No special tools are needed to remove or install this assembly.

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

No post service test is available for this assembly.

1. Remove the left cover (2,550-sheet paper feeder with stand)

Follow these steps to remove the left cover (2,550-sheet paper feeder with stand).

- Release five tabs (callout 1), and then remove the left cover (callout 2).


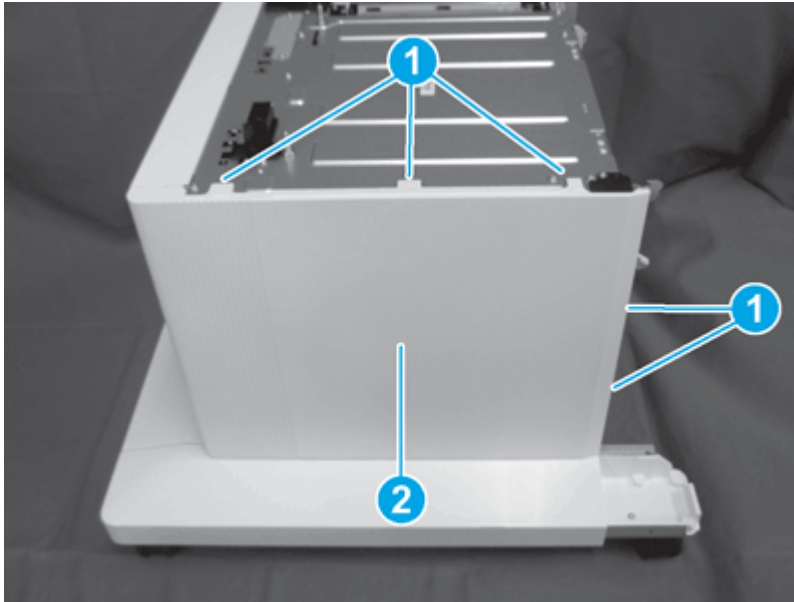
 **TIP:** Reverse the removal steps to install the assembly.


Figure 5-2099 Remove the left cover



2. Unpack the replacement assembly



Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.


 **NOTE:** HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.

 **CAUTION:**  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

 **IMPORTANT:** Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

 **NOTE:** If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Right door link (2,550-sheet paper feeder with stand)

Learn how to remove and replace the link on the right door on the 2,550-sheet paper feeder with stand.

Mean time to repair: 10 minutes

Service level: Intermediate



IMPORTANT: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.
- ⚠ **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.
- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-145 Part information

Part number	Part description
RC4-9824-000CN	Link, door

Required tools

- No special tools are needed to remove or install this assembly.

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

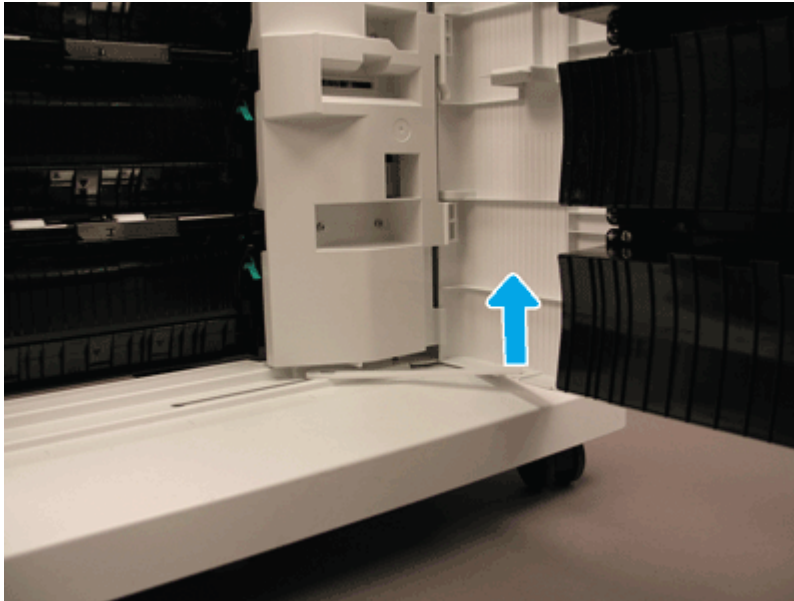
No post service test is available for this assembly.

1. Remove the right door link

Follow these steps to remove the right door link.

1. Lift the end of the link arm up and out of the right door.

Figure 5-2100 Lift the link arm end



2. Slide the end of the link arm on the paper feeder stand to the left, all the way to the end of the slot (callout 1). Lift the link arm up (callout 2) to remove it.


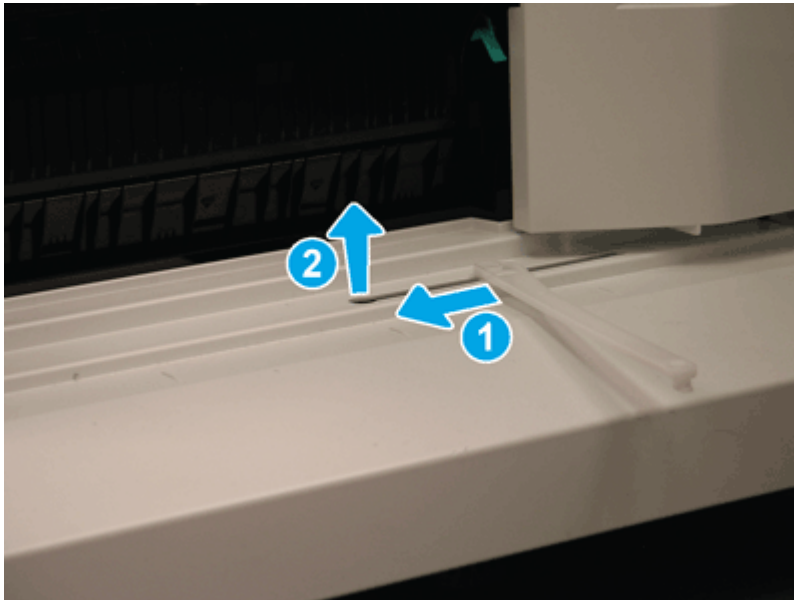
 **TIP:** Reverse the removal steps to install the assembly.


Figure 5-2101 Remove the link arm



2. Unpack the replacement assembly



Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.


 **NOTE:** HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>


2. Unpack the replacement part from the packaging.

 **CAUTION:**  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

 **IMPORTANT:** Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

 **NOTE:** If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.


 **NOTE:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Right door (2,550-sheet paper feeder with stand)

Learn how to remove and replace the right door on the 2,550-sheet paper feeder with stand.


Mean time to repair: 10 minutes

Service level: Intermediate

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.

 **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.

- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-146 Part information

Part number	Part description
RM2-1218-000CN	Right door assembly

Required tools

- No special tools are needed to remove or install this assembly.

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

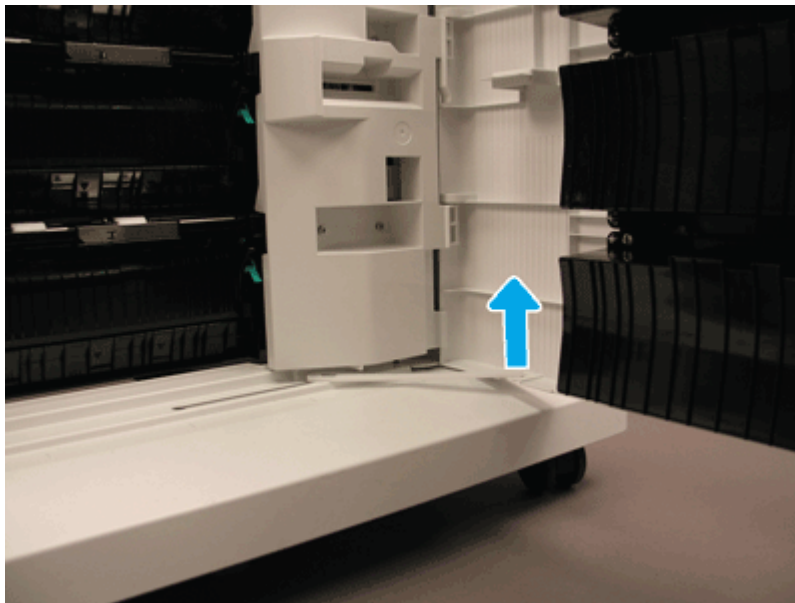
No post service test is available for this assembly.

1. Remove the right door link arm (2,550-sheet paper feeder with stand)

Follow these steps to remove the right door link arm (2,550-sheet paper feeder with stand).

1. Lift the end of the link arm up and out of the right door.

Figure 5-2102 Lift the link arm end



2. Slide the end of the link arm on the paper feeder stand to the left, all the way to the end of the slot (callout 1). Lift the link arm up (callout 2) to remove it.


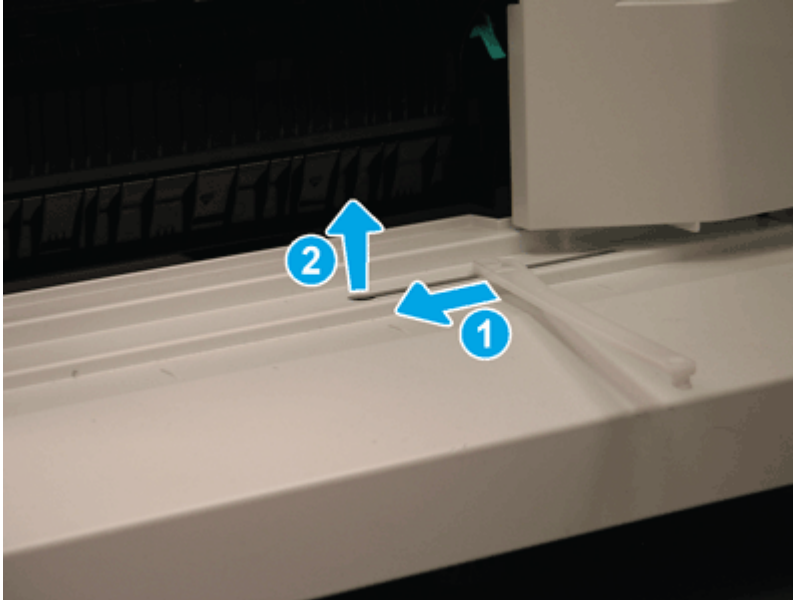
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2103 Remove the link arm



2. Remove the right door (2,550-sheet paper feeder with stand)

Follow these steps to remove the right door (2,550-sheet paper feeder with stand).

- Release one tab (callout 1), and then lift up (callout 2) to remove the right door (callout 3).


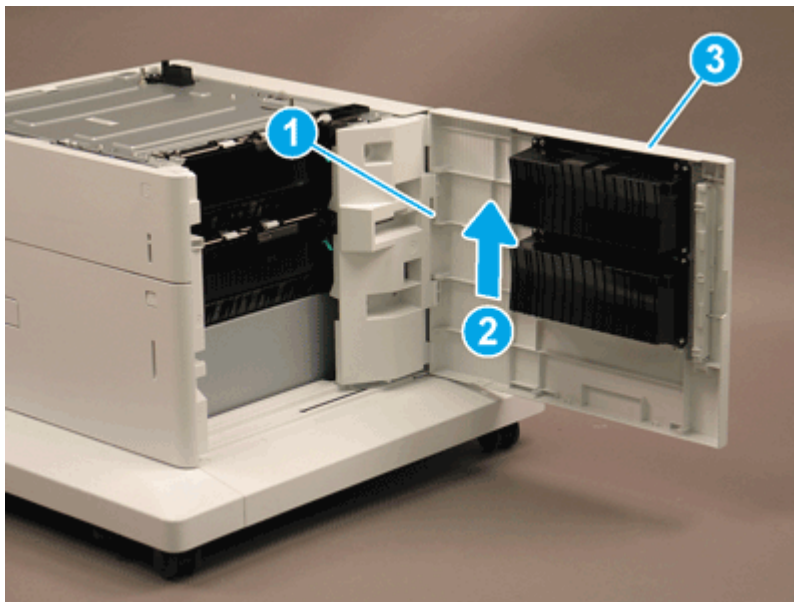
 **TIP:** Reverse the removal steps to install the assembly.


Figure 5-2104 Remove the right door



3. Unpack the replacement assembly



Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.


 **NOTE:** HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>


2. Unpack the replacement part from the packaging.

 **CAUTION:**  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

 **IMPORTANT:** Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

 **NOTE:** If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.


 **NOTE:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Rear cover (2,550-sheet paper feeder with stand)

Learn how to remove and replace the rear cover on the 2,550-sheet paper feeder with stand.


Mean time to repair: 10 minutes

Service level: Intermediate

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.

 **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.

- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-147 Part information

Part number	Part description
RC5-0386-000CN	Cover, rear

Required tools

- No special tools are needed to remove or install this assembly.

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

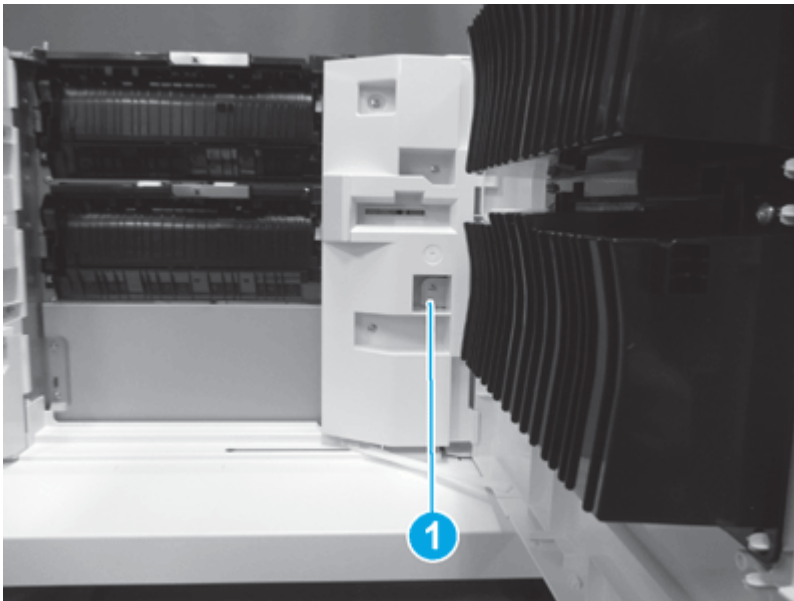
No post service test is available for this assembly.

1. Remove the rear cover (2,550-sheet paper feeder with stand)

Follow these steps to remove the rear cover (2,550-sheet paper feeder with stand).

1. Open the right door.
2. Remove one screw (callout 1).

Figure 5-2105 Remove one screw

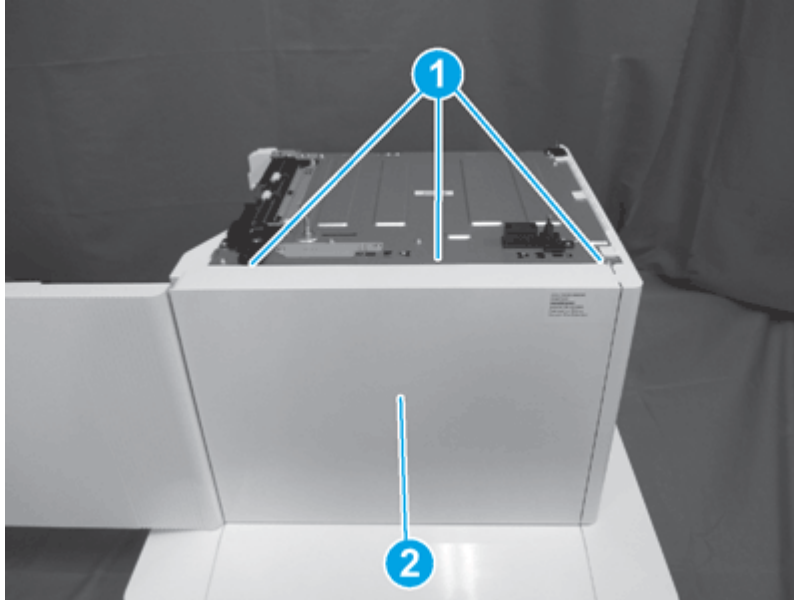


3. Release three tabs (callout 1), and then remove the rear cover (callout 2).



TIP: Reverse the removal steps to install the assembly.

Figure 5-2106 Remove the rear cover



2. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.




NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Left lower cover (2,550-sheet paper feeder with stand)


Learn how to remove and replace the left lower cover on the 2,550-sheet paper feeder with stand.

Mean time to repair: 10 minutes

Service level: Intermediate

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.
-  **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.
- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-148 Part information

Part number	Part description
RC5-0385-000	Cover, left lower

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

No post service test is available for this assembly.

1. Remove Tray 4 (2,550-sheet paper feeder with stand)

Follow these steps to remove Tray 4 (2,550-sheet paper feeder with stand).

1. Open Tray 4.
2. Press the right and left release levers at the base of the tray (callout 1), and then pull Tray 4 (callout 2) away from the feeder to remove it.


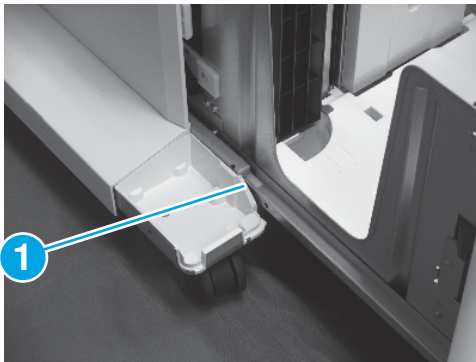
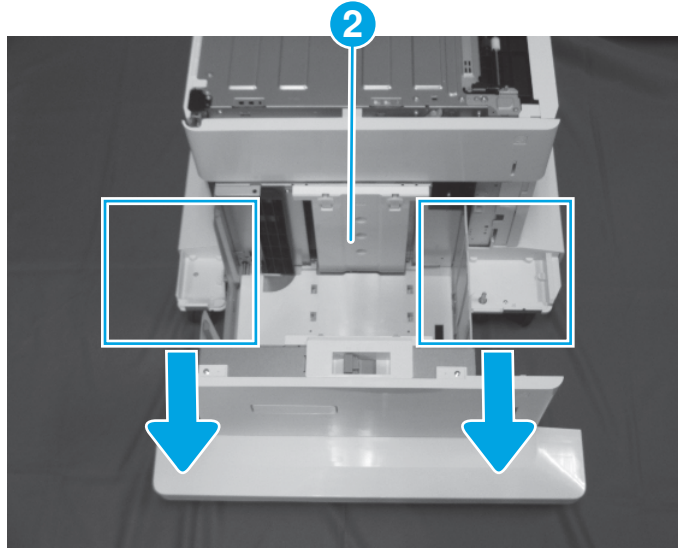
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2107 Remove Tray 4



2. Remove the left cover (2,550-sheet paper feeder with stand)

Follow these steps to remove the left cover (2,550-sheet paper feeder with stand).

- Release five tabs (callout 1), and then remove the left cover (callout 2).


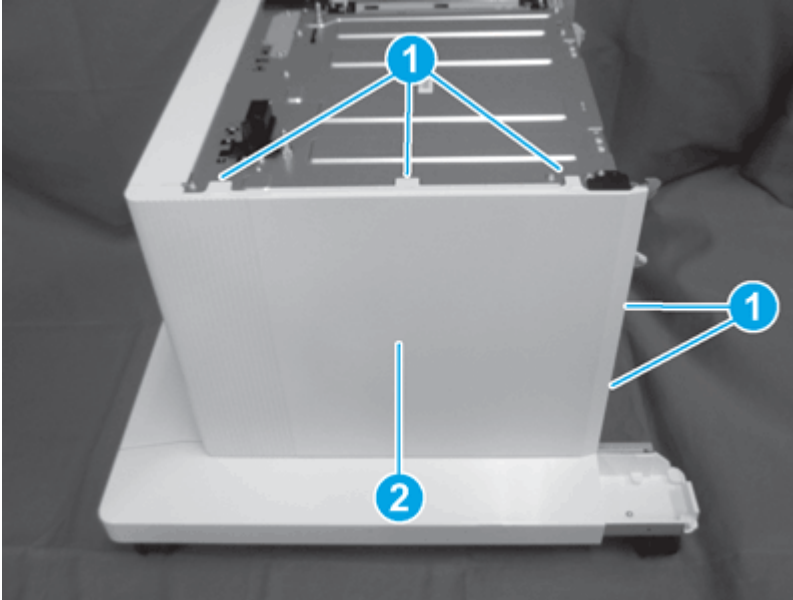
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2108 Remove the left cover



3. Remove the left lower cover (2,550-sheet paper feeder with stand)

Follow these steps to remove the left lower cover (2,550-sheet paper feeder with stand).

- Remove two screws (callout 1), and then release two tabs (callout 2). Release two bosses (callout 3), and then remove the left lower cover (callout 4).


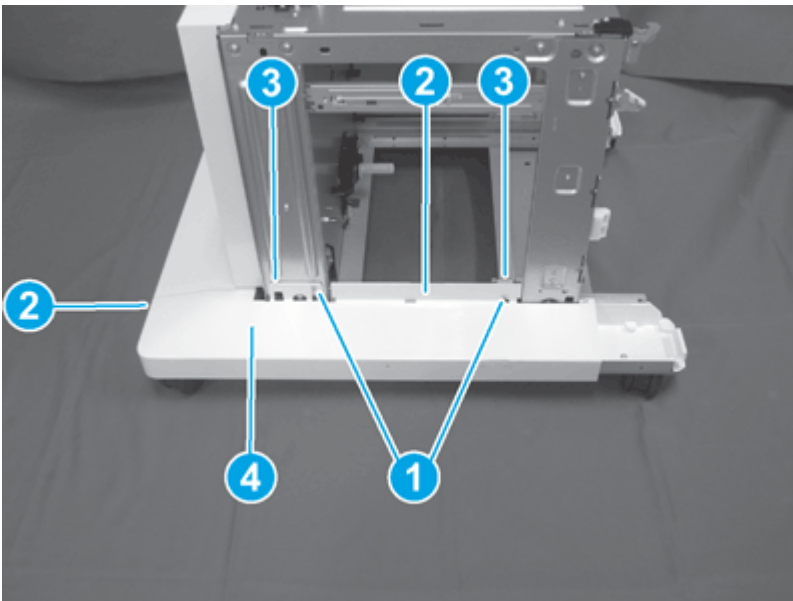
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2109 Remove the left lower cover



4. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Right lower cover (2,550-sheet paper feeder with stand)

Learn how to remove and replace the right lower cover for the 2,550-sheet paper feeder with stand.

Mean time to repair: 10

Service level: Intermediate



IMPORTANT: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.



WARNING! To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.

- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-149 Part information

Part number	Part description
RC5-0384-000CN	Cover, right lower

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

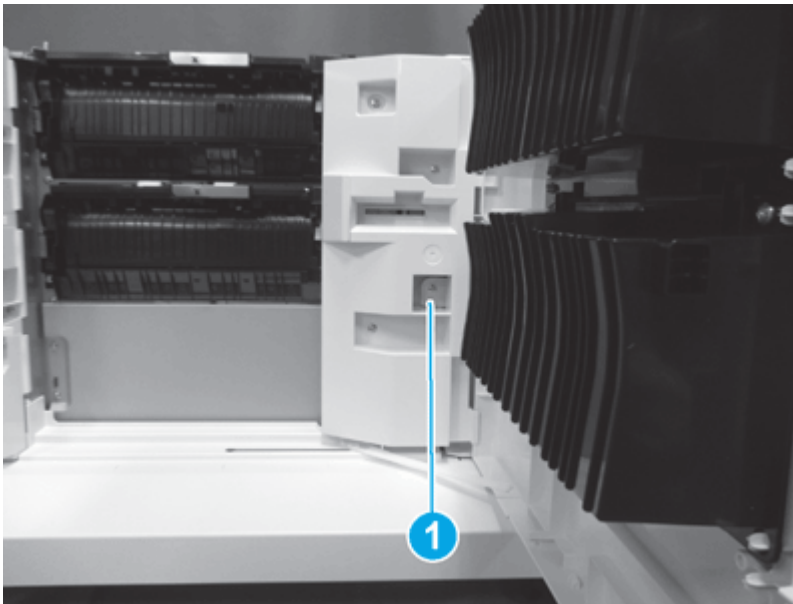
No post service test is available for this assembly.

1. Remove the rear cover (2,550-sheet paper feeder with stand)

Follow these steps to remove the rear cover (2,550-sheet paper feeder with stand).

1. Open the right door.
2. Remove one screw (callout 1).

Figure 5-2110 Remove one screw

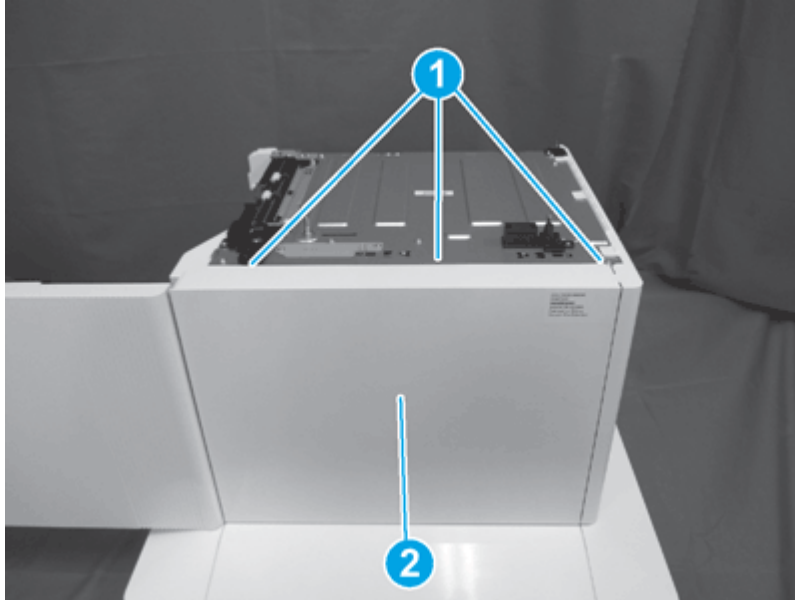


3. Release three tabs (callout 1), and then remove the rear cover (callout 2).



TIP: Reverse the removal steps to install the assembly.

Figure 5-2111 Remove the rear cover



2. Remove the right door (2,550-sheet paper feeder with stand)

Follow these steps to remove the right door (2,550-sheet paper feeder with stand).

- Release one tab (callout 1), and then lift up (callout 2) to remove the right door (callout 3).


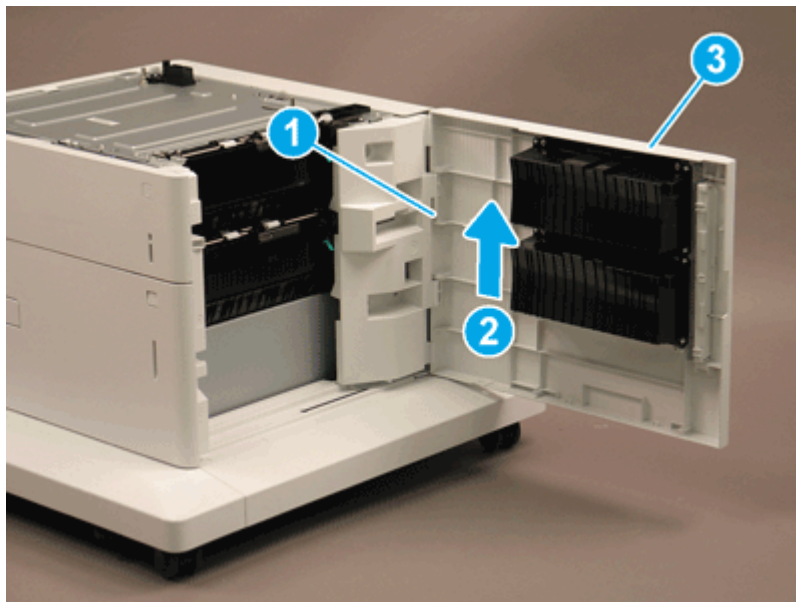
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2112 Remove the right door

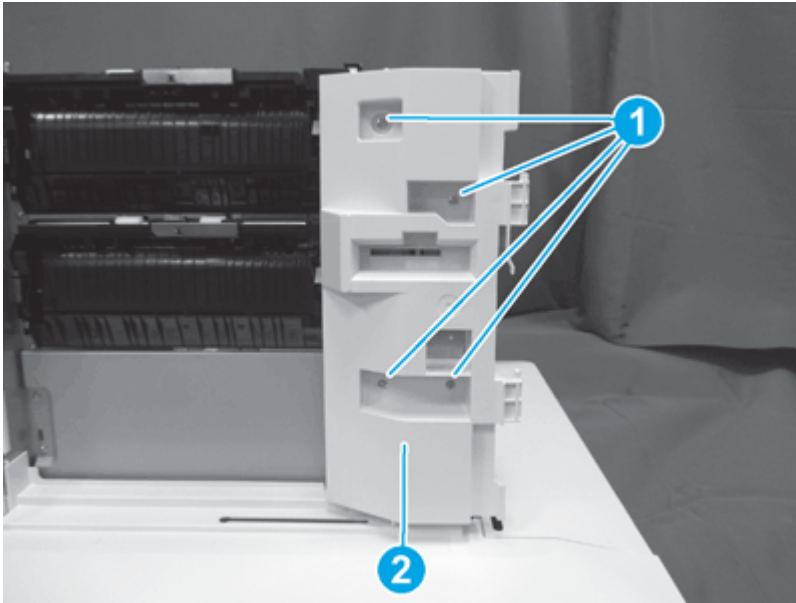


3. Remove the right lower cover (2,550-sheet paper feeder with stand)

Follow these steps to remove the right lower cover (2,550-sheet paper feeder with stand).

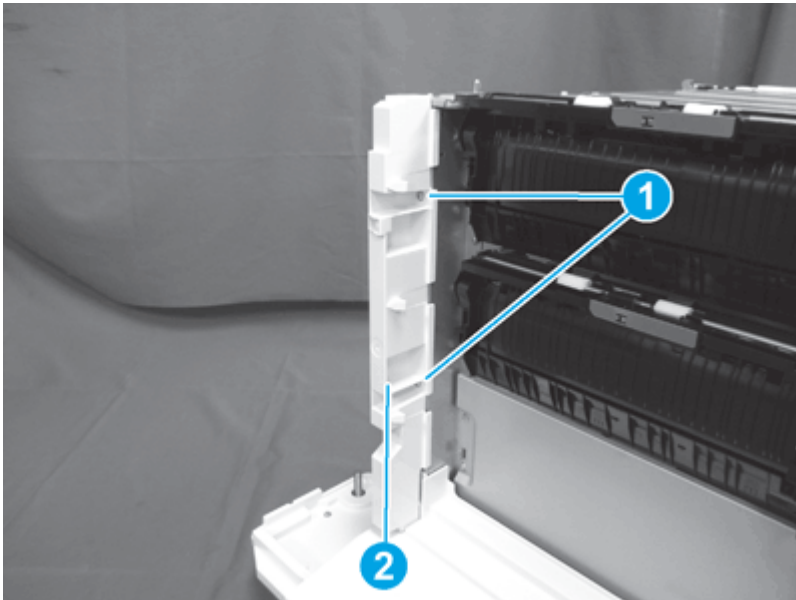
1. Remove four screws (callout 1), and then remove the hinge (callout 2).

Figure 5-2113 Remove four screws and the hinge



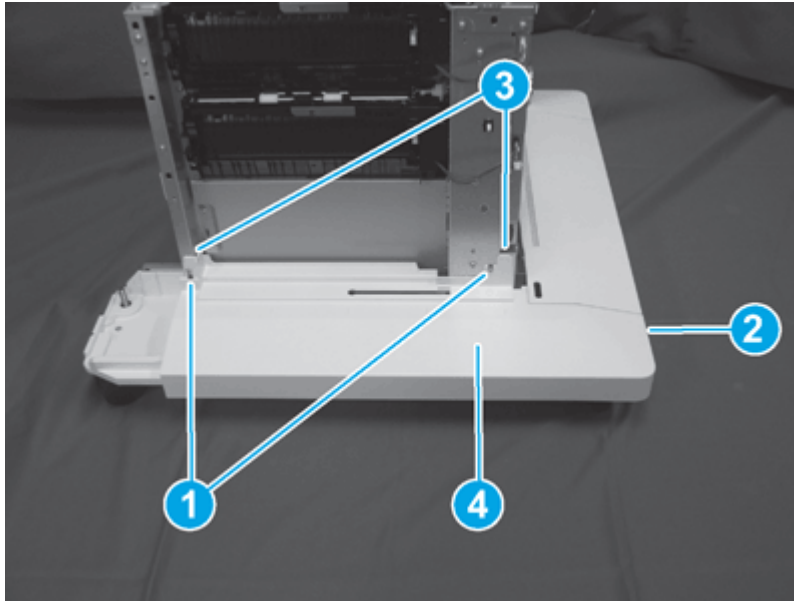
2. Remove two screws (callout 1), and then remove the inner cover (callout 2).

Figure 5-2114 Remove two screws and the inner cover



3. Remove two screws (callout 1), and then release one tab (callout 2). Release two bosses (callout 3), and then remove the right lower cover (callout 4).

Figure 5-2115 Remove the right lower cover



4. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.




NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Rear lower cover (2,550-sheet paper feeder with stand)

Learn how to remove and replace the rear lower cover for the 2,550-sheet paper feeder with stand.

Mean time to repair: 10 minutes

Service level: Intermediate

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.
- ⚠ **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.
- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-150 Part information

Part number	Part description
RC5-0399-000CN	Cover, rear lower

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

No post service test is available for this assembly.

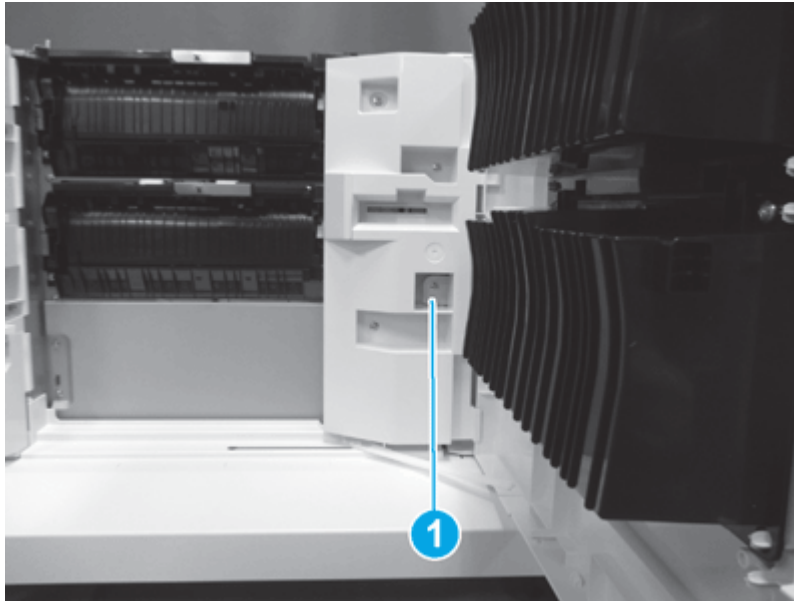
1. Remove the rear cover (2,550-sheet paper feeder with stand)

Follow these steps to remove the rear cover (2,550-sheet paper feeder with stand).

1. Open the right door.

2. Remove one screw (callout 1).

Figure 5-2116 Remove one screw



3. Release three tabs (callout 1), and then remove the rear cover (callout 2).


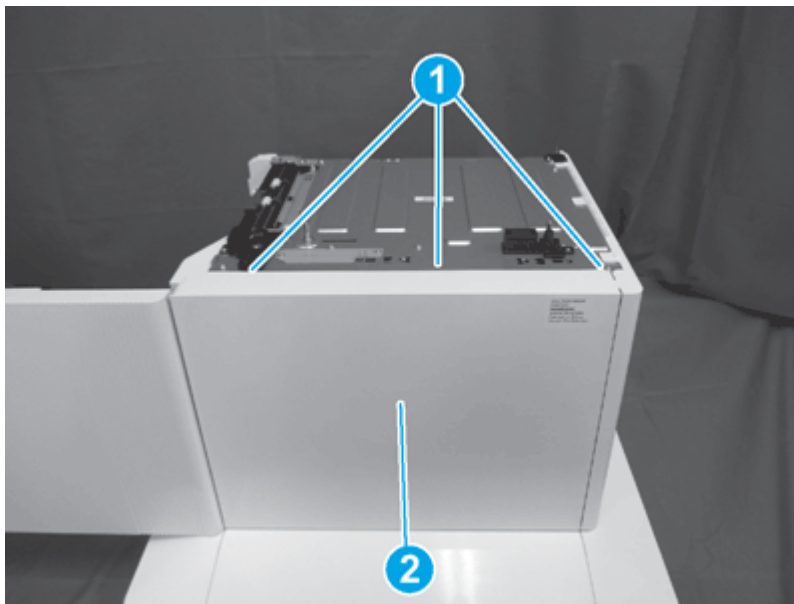
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2117 Remove the rear cover



2. Remove the right door (2,550-sheet paper feeder with stand)

Follow these steps to remove the right door (2,550-sheet paper feeder with stand).

- Release one tab (callout 1), and then lift up (callout 2) to remove the right door (callout 3).


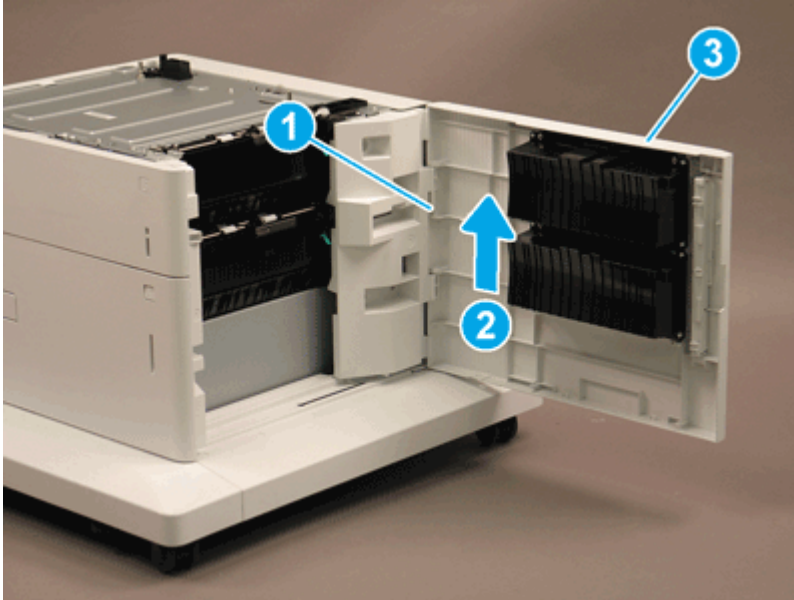
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2118 Remove the right door



3. Remove the left lower cover (2,550-sheet paper feeder with stand)

Follow these steps to remove the left lower cover (2,550-sheet paper feeder with stand).

- Remove two screws (callout 1), and then release two tabs (callout 2). Release two bosses (callout 3), and then remove the left lower cover (callout 4).


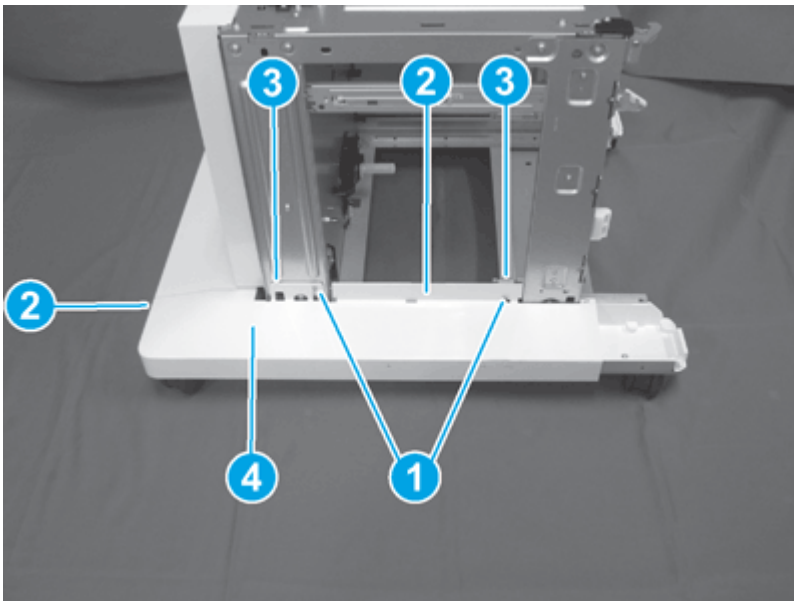
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2119 Remove the left lower cover

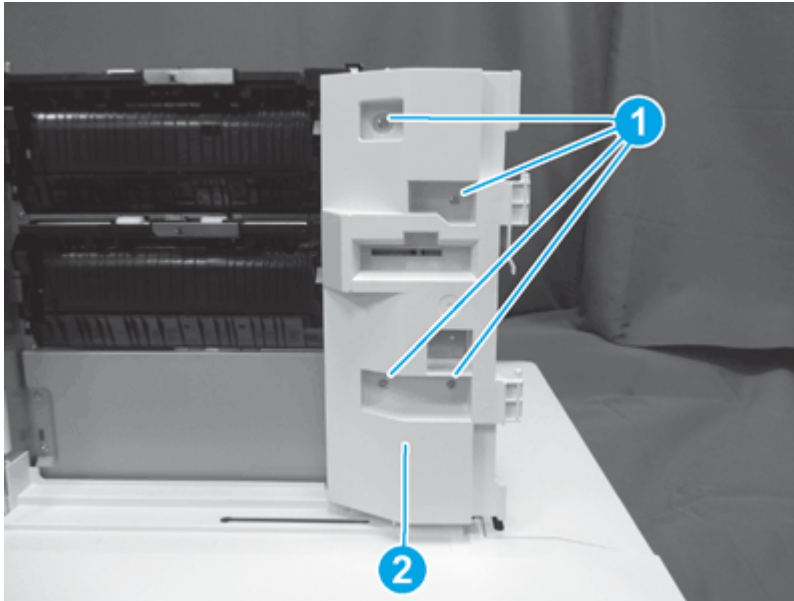


4. Remove the right lower cover (2,550-sheet paper feeder with stand)

Follow these steps to remove the right lower cover (2,550-sheet paper feeder with stand).

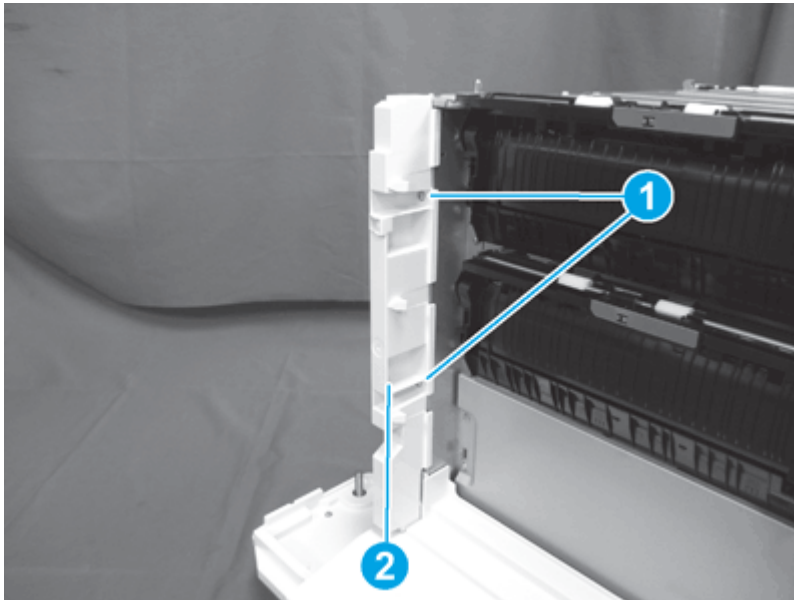
1. Remove four screws (callout 1), and then remove the hinge (callout 2).

Figure 5-2120 Remove four screws and the hinge



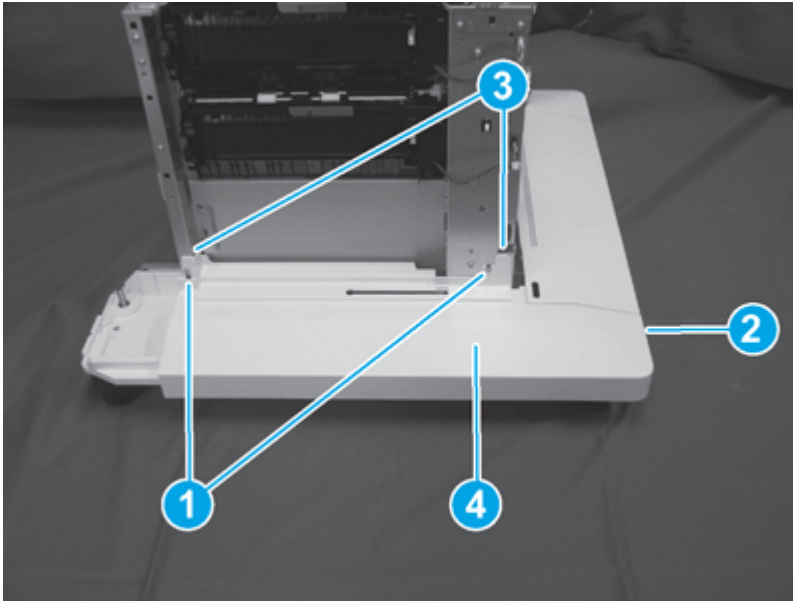
2. Remove two screws (callout 1), and then remove the inner cover (callout 2).

Figure 5-2121 Remove two screws and the inner cover



3. Remove two screws (callout 1), and then release one tab (callout 2). Release two bosses (callout 3), and then remove the right lower cover (callout 4).

Figure 5-2122 Remove the right lower cover

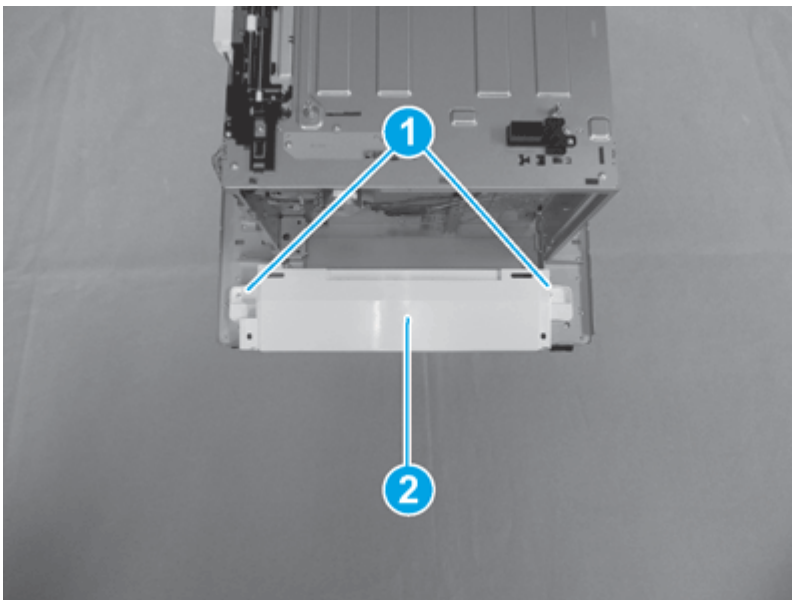


5. Remove the rear lower cover

Follow these steps to remove the rear lower cover.

- Remove two screws (callout 1), and then remove the rear lower cover (callout 2).


Figure 5-2123 Remove the rear lower cover



6. Unpack the replacement assembly



Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.


 **NOTE:** HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>


2. Unpack the replacement part from the packaging.

 **CAUTION:**  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

 **IMPORTANT:** Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

 **NOTE:** If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.


 **NOTE:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Right door switch (2,550-sheet paper feeder with stand)

Learn how to remove and replace the right door switch on the 2,550-sheet paper feeder with stand.


Mean time to repair: 20 minutes

Service level: Advanced

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.

 **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.

- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-151 Part information

Part number	Part description
WC2-5803-000CN	Switch, push

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

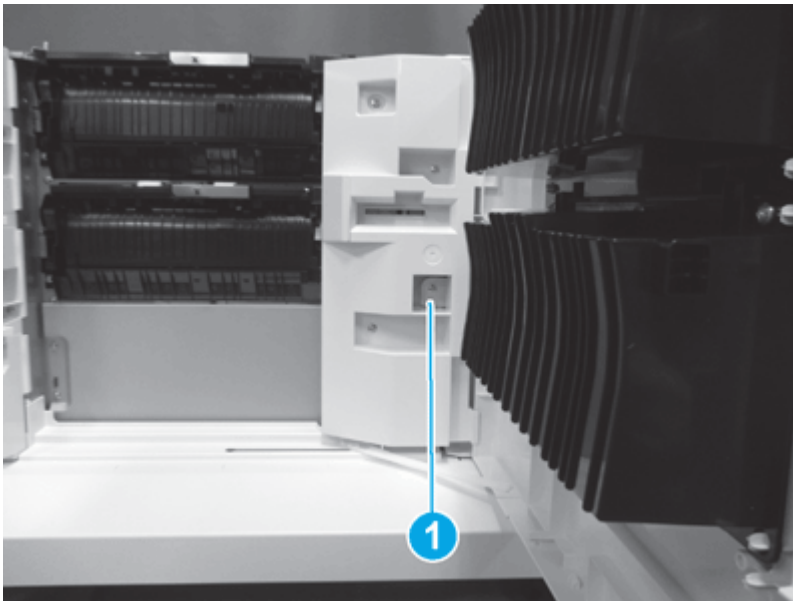
Close the right door. Verify that no door-open messages display on the control panel.

1. Remove the rear cover (2,550-sheet paper feeder with stand)

Follow these steps to remove the rear cover (2,550-sheet paper feeder with stand).

1. Open the right door.
2. Remove one screw (callout 1).

Figure 5-2124 Remove one screw

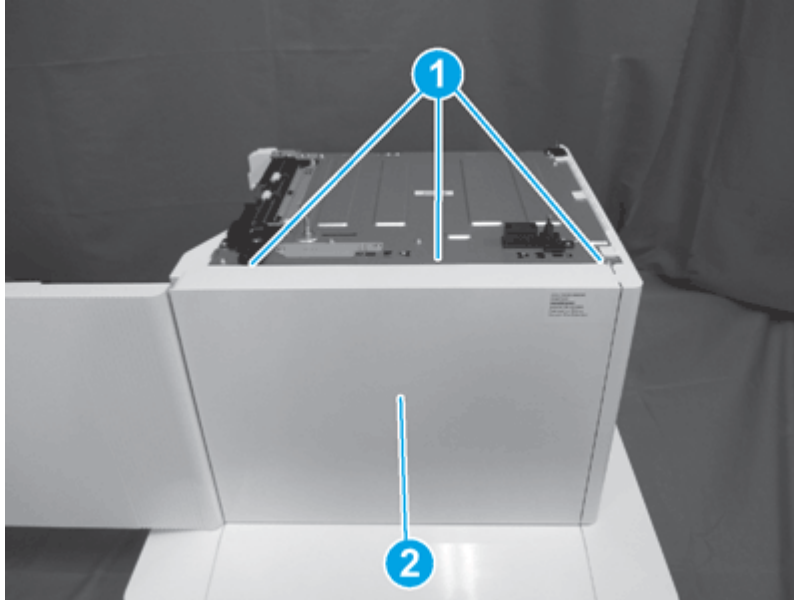


3. Release three tabs (callout 1), and then remove the rear cover (callout 2).



TIP: Reverse the removal steps to install the assembly.

Figure 5-2125 Remove the rear cover



2. Remove the right door (2,550-sheet paper feeder with stand)

Follow these steps to remove the right door (2,550-sheet paper feeder with stand).

- Release one tab (callout 1), and then lift up (callout 2) to remove the right door (callout 3).


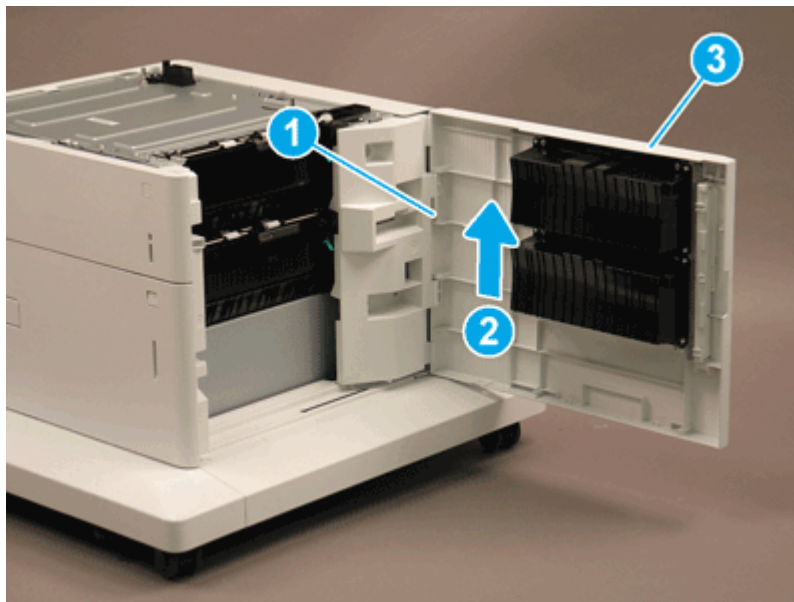
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2126 Remove the right door

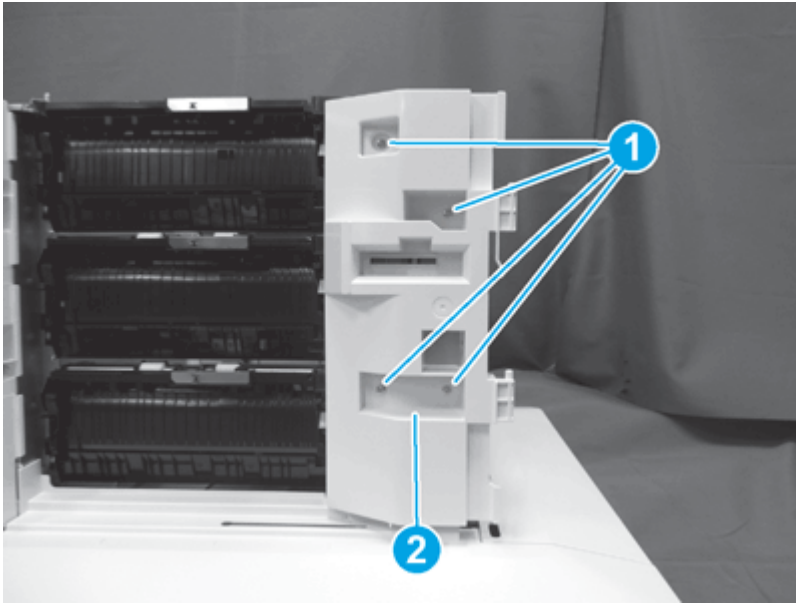


3. Remove the right door switch (2,550-sheet paper feeder with stand)

Follow these steps to remove the right door switch (2,550-sheet paper feeder with stand).

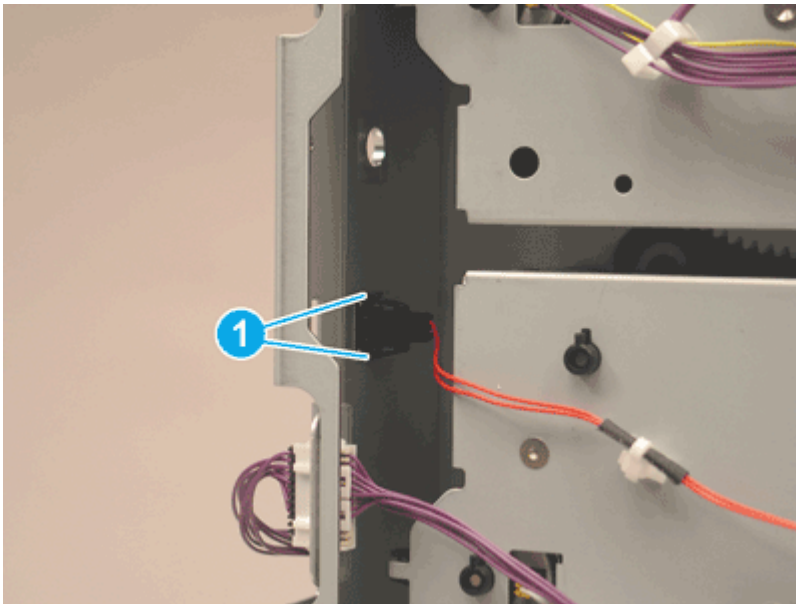
1. Remove four screws (callout 1), and then remove the hinge (callout 2).

Figure 5-2127 Remove four screws and the hinge



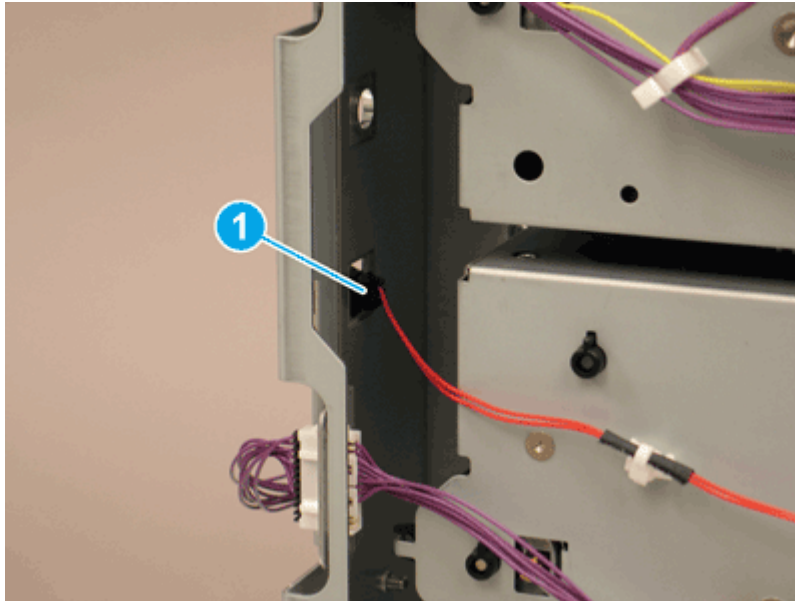
2. At the back of the paper feeder, release two tabs (callout 1) and release the switch through the opening in the sheet metal.

Figure 5-2128 Release two tabs




3. Disconnect one connector (callout 1), and then remove the right door switch.

Figure 5-2129 Disconnect one connector



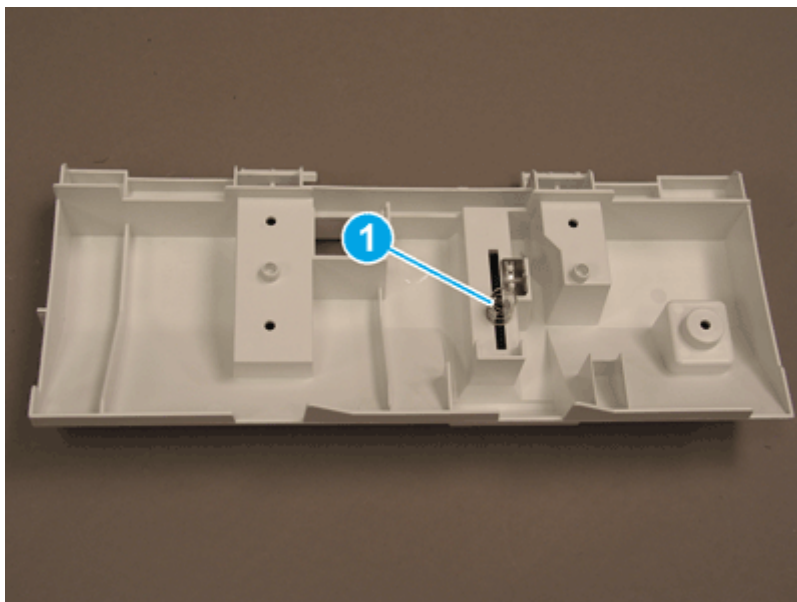
4. Reverse the removal steps to install the assembly. Also use the following special installation instructions.

 **NOTE:** Continue to reverse the removal steps to finish installing the assembly.

Special installation instructions: Right door switch

- Before reinstalling the hinge, make sure that the spring (callout 1) on the back of the part is in the correct position.

Figure 5-2130 Check spring position



4. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Size sensor)Tray 3) (2,550-sheet paper feeder with stand)

Learn how to remove and replace the size sensor on Tray 3 of the 2,550-sheet paper feeder with stand.

Mean time to repair: 20 minutes

Service level: Advanced



IMPORTANT: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.



WARNING! To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.

- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-152 Part information

Part number	Part description
RM2-0857-000CN	Size sensor assembly

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

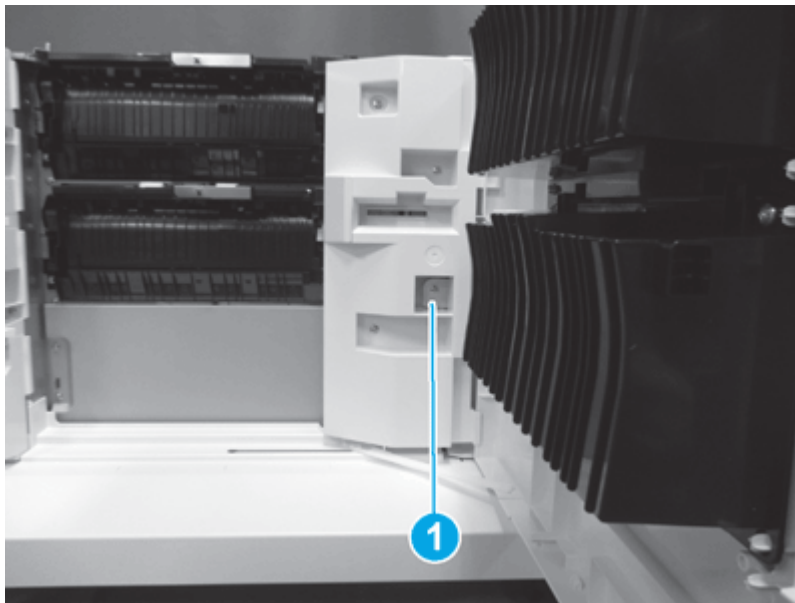
Install the paper tray and verify that the printer detects the correct size of paper in the tray.

1. Remove the rear cover (2,550-sheet paper feeder with stand)

Follow these steps to remove the rear cover (2,550-sheet paper feeder with stand).

1. Open the right door.
2. Remove one screw (callout 1).

Figure 5-2131 Remove one screw



3. Release three tabs (callout 1), and then remove the rear cover (callout 2).


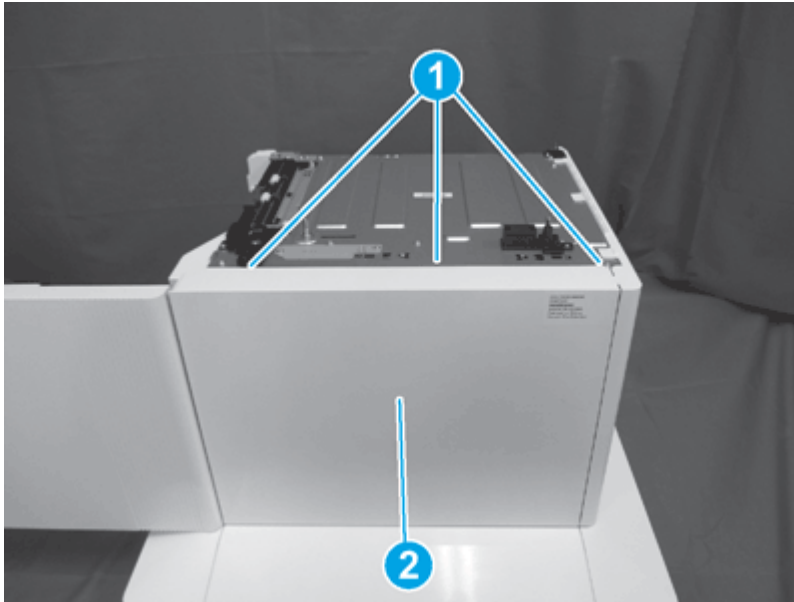
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2132 Remove the rear cover

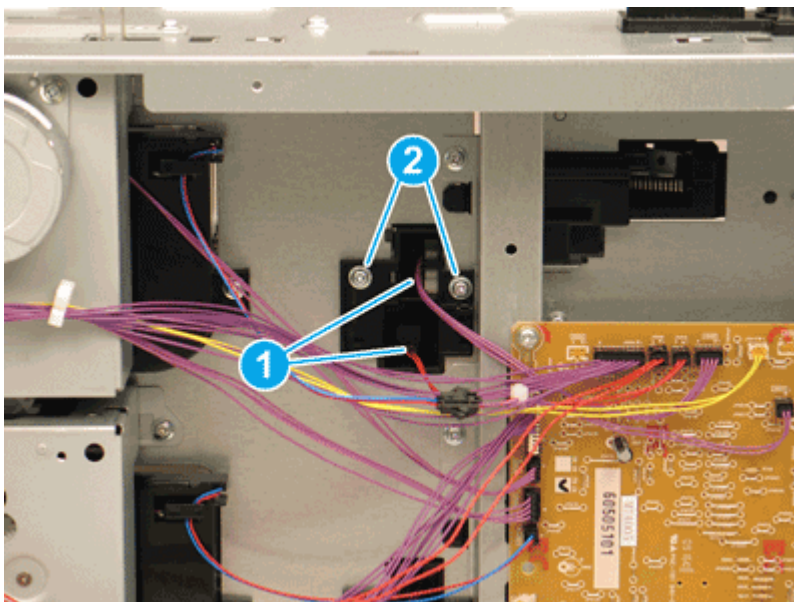


2. Remove the size sensor (Tray 3) (2,550-sheet paper feeder with stand)

Follow these steps to remove the size sensor (Tray 3) (2,550-sheet paper feeder with stand).

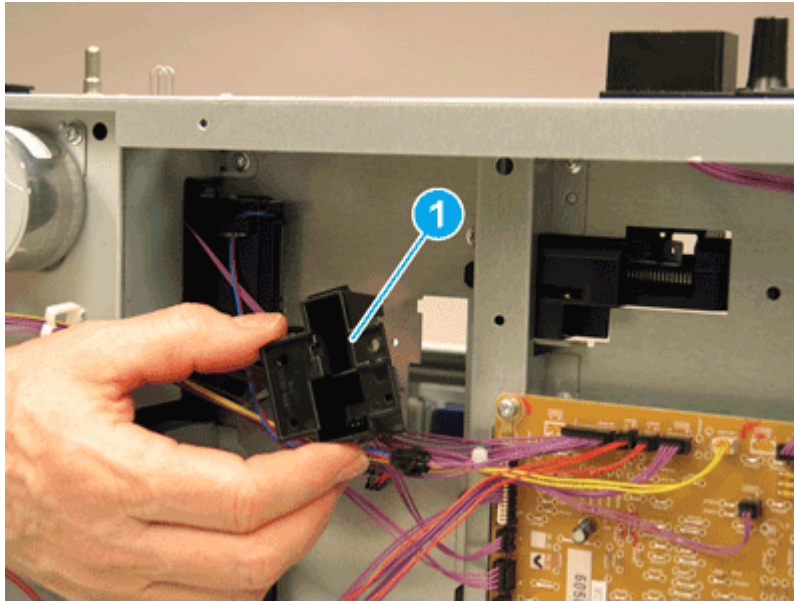
1. Remove Tray 3.
2. At the back of the feeder, disconnect two connectors (callout 1), and then remove two screws (callout 2).

Figure 5-2133 Disconnect two connectors and remove two screws



3. Remove the size sensor (callout 1).

Figure 5-2134 Remove the size sensor



3. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.




NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Size sensor (Tray 4) (2,550-sheet paper feeder with stand)

Learn how to remove and replace the size sensor on Tray 4 of the 2,550-sheet paper feeder with stand.

Mean time to repair: 20 minutes

Service level: Advanced

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.
- ⚠ **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.
- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-153 Part information

Part number	Part description
RM2-0921-000CN	Size sensor assembly

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

Install the Tray 4 and verify that the printer detects the correct size of paper in the tray.

1. Remove Tray 4 (2,550-sheet paper feeder with stand)

Follow these steps to remove Tray 4 (2,550-sheet paper feeder with stand).

1. Open Tray 4.
2. Press the right and left release levers at the base of the tray (callout 1), and then pull Tray 4 (callout 2) away from the feeder to remove it.


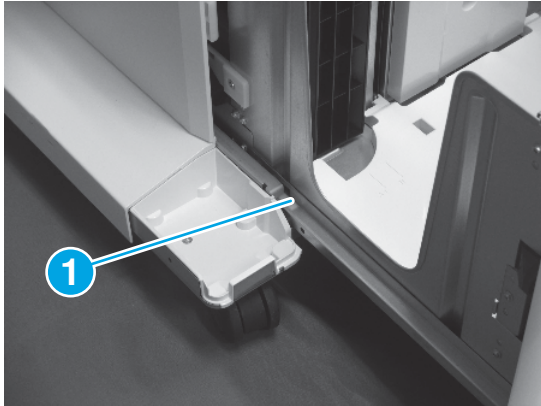
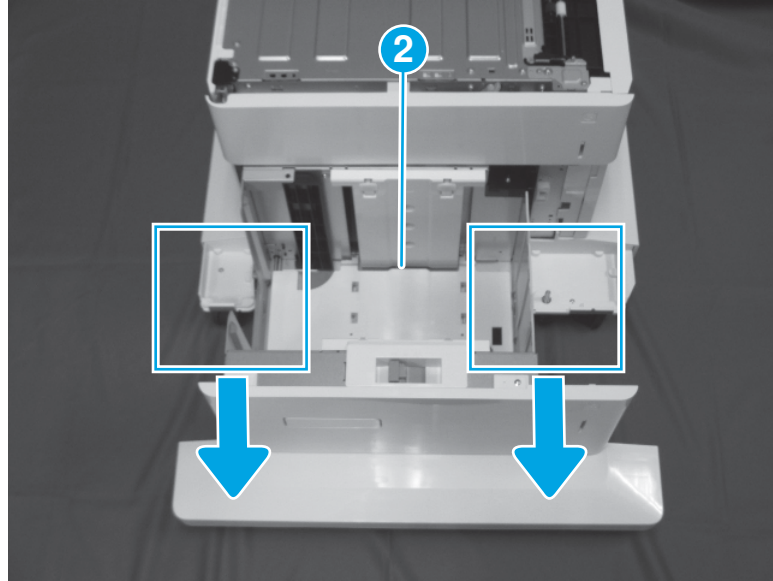
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2135 Remove Tray 4



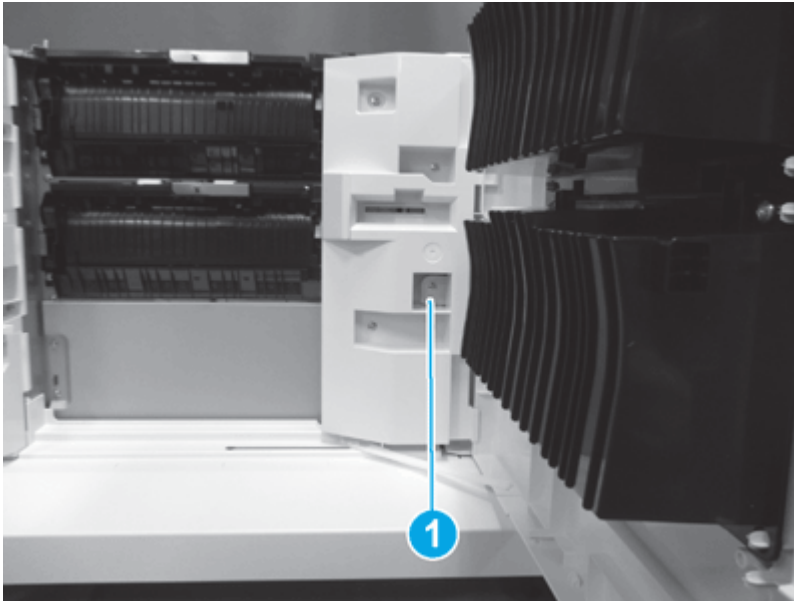
2. Remove the rear cover (2,550-sheet paper feeder with stand)

Follow these steps to remove the rear cover (2,550-sheet paper feeder with stand).

1. Open the right door.

2. Remove one screw (callout 1).

Figure 5-2136 Remove one screw



3. Release three tabs (callout 1), and then remove the rear cover (callout 2).


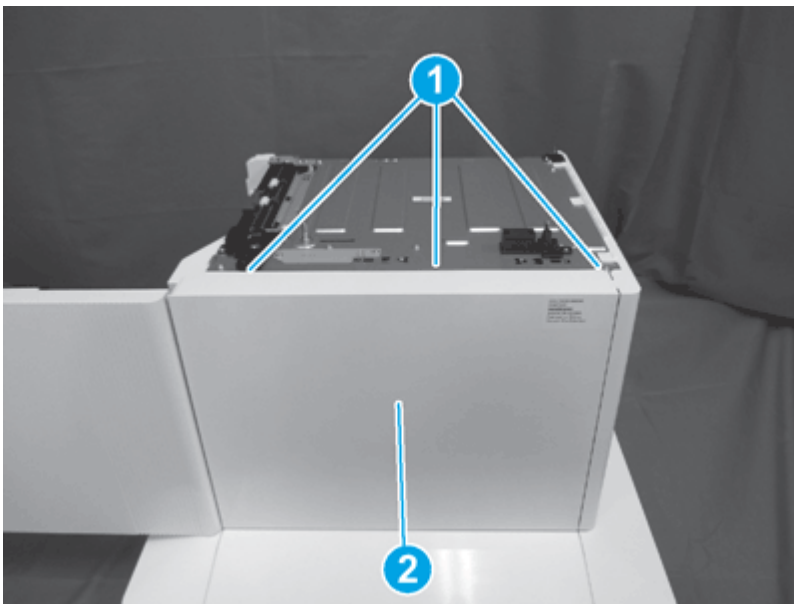
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2137 Remove the rear cover

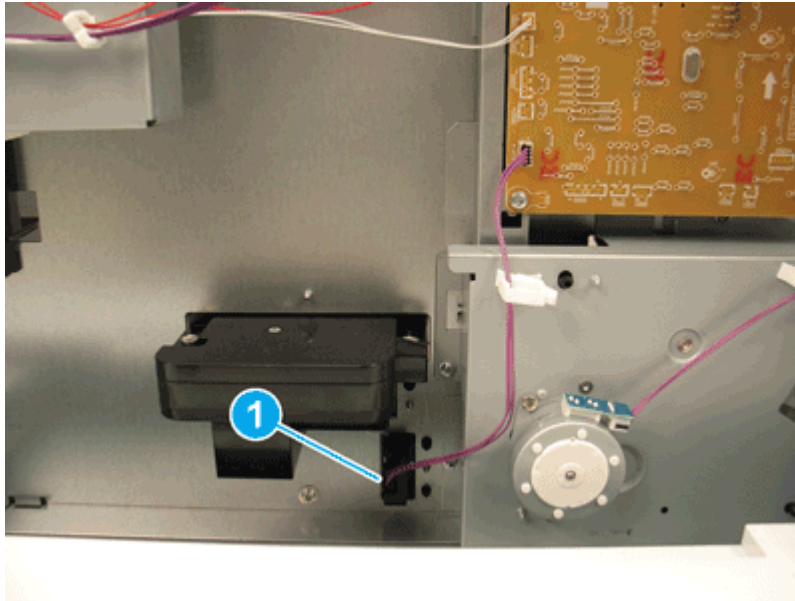


3. Remove the size sensor (Tray 4) (2,550-sheet paper feeder with stand)

Follow these steps to remove the size sensor (Tray 4) (2,550-sheet paper feeder with stand).

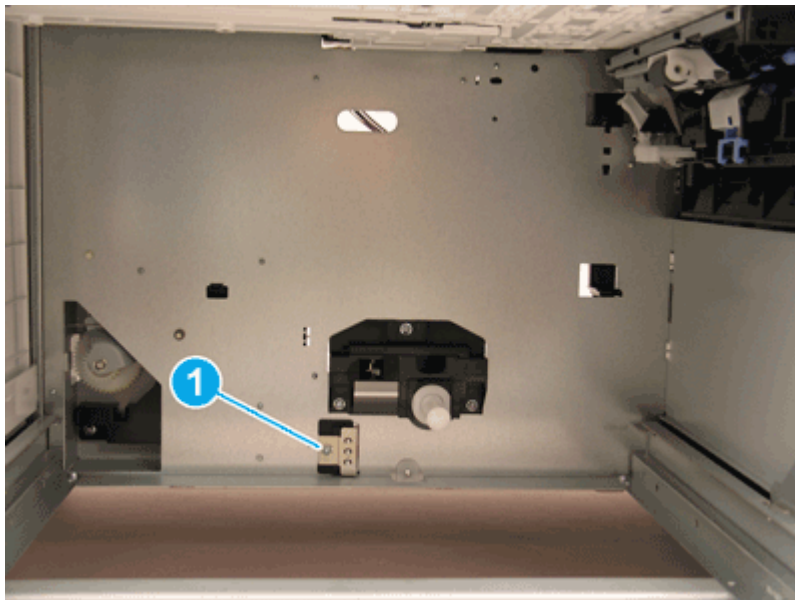
1. At the back of the feeder, disconnect one connector (callout 1).

Figure 5-2138 Disconnect one connector



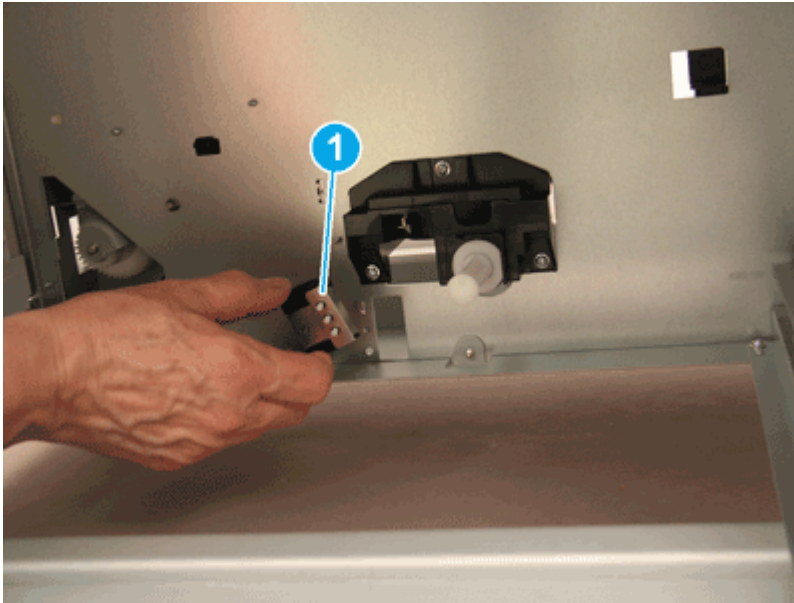
2. Inside the paper tray opening, remove one screw (callout 1).

Figure 5-2139 Remove one screw



3. Remove the size sensor (callout 1).

Figure 5-2140 Remove the size sensor



4. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.




NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Drawer connector and cable assembly (2,550-sheet paper feeder with stand)

Learn how to remove and replace the drawer connector holder and cable assembly on the 2,550-sheet paper feeder with stand.


Mean time to repair: 20 minutes

Service level: Advanced

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.

 **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.

- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-154 Part information

Part number	Part description
RC4-8914-000CN	Holder, drawer connector
RM2-9286-000CN	Drawer upper cable assembly

Required tools

- #2 Phillips screwdriver with a magnetic tip
- Small, flat-blade screwdriver

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

Send a print job from the host computer to the 2,500-sheet paper feeder. Verify that a page prints.

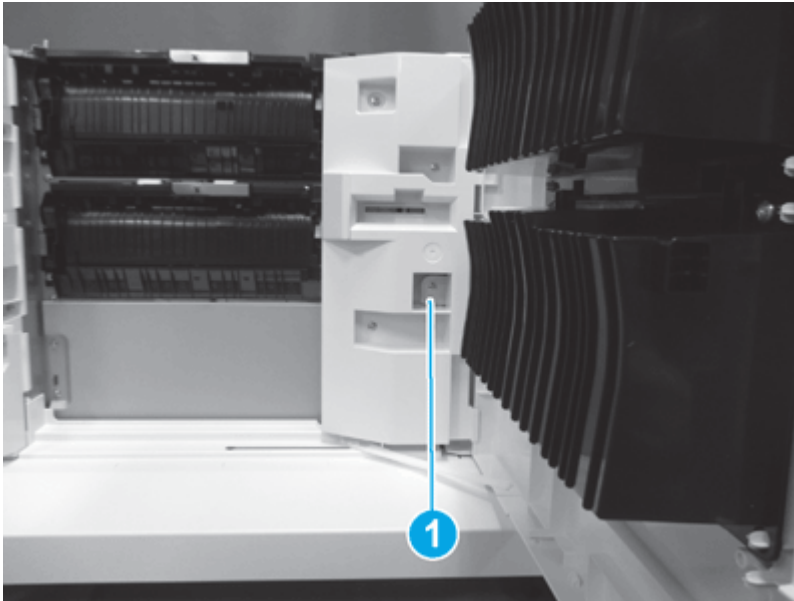
1. Remove the rear cover (2,550-sheet paper feeder with stand)

Follow these steps to remove the rear cover (2,550-sheet paper feeder with stand).

1. Open the right door.

2. Remove one screw (callout 1).

Figure 5-2141 Remove one screw



3. Release three tabs (callout 1), and then remove the rear cover (callout 2).


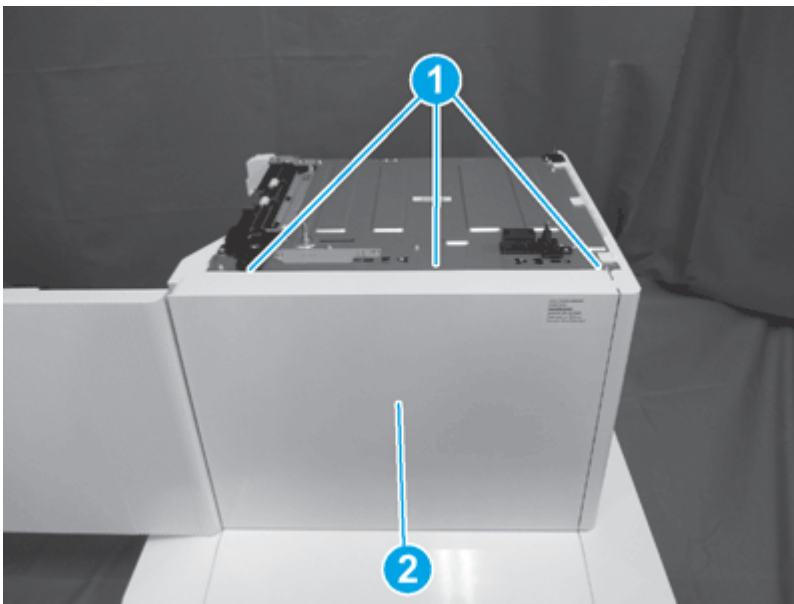
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2142 Remove the rear cover

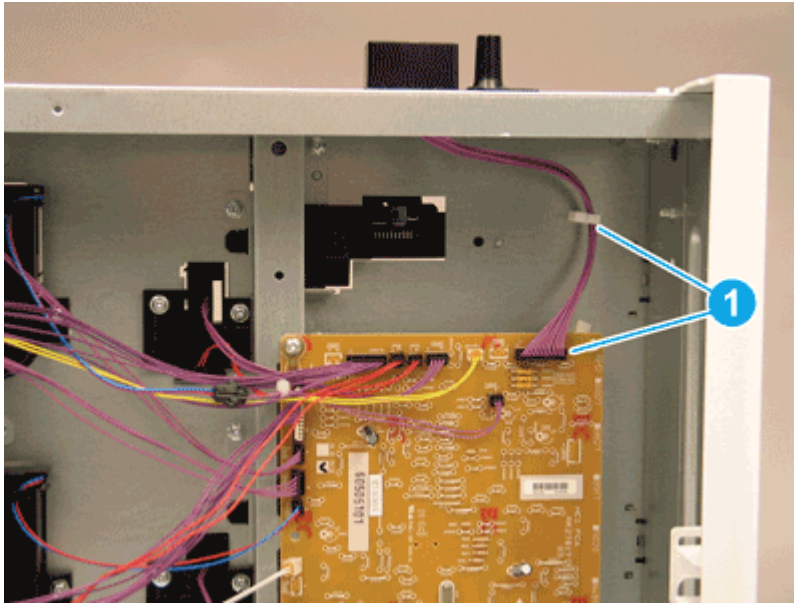


2. Remove the drawer connector holder and cable assembly (2,550-sheet paper feeder with stand)

Follow these steps to remove the drawer connector holder and cable assembly (2,550-sheet paper feeder with stand).

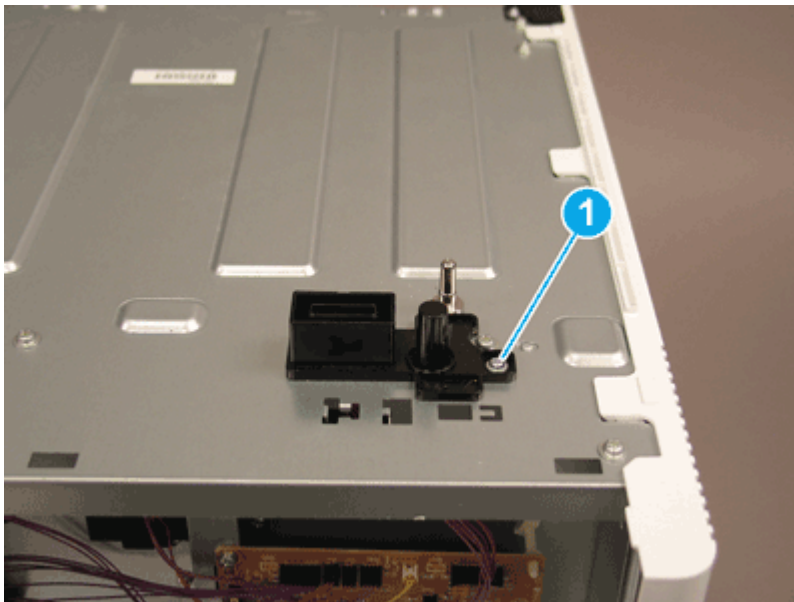
1. At the back of the feeder, disconnect one connector and release one retainer (callout 1).

Figure 5-2143 Disconnect one connector and release retainer



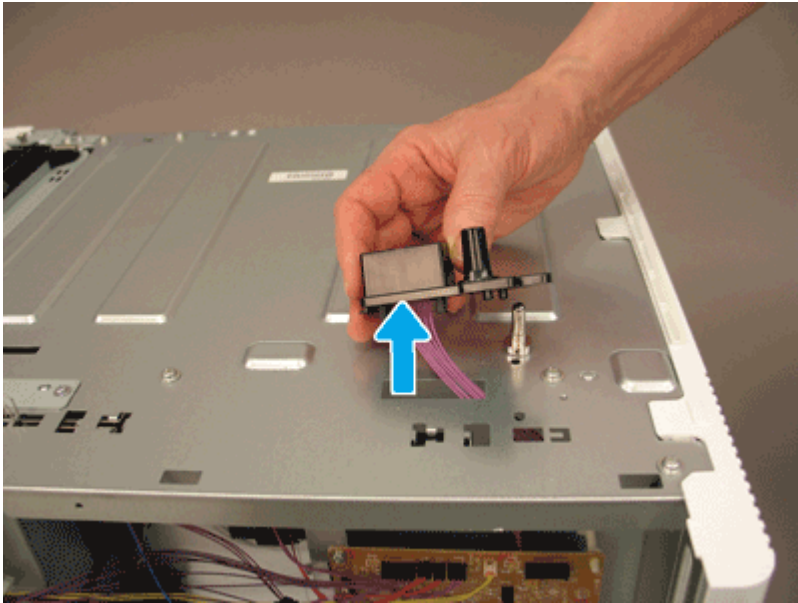
2. At the top of the paper feeder, remove one screw (callout 1).

Figure 5-2144 Remove one screw



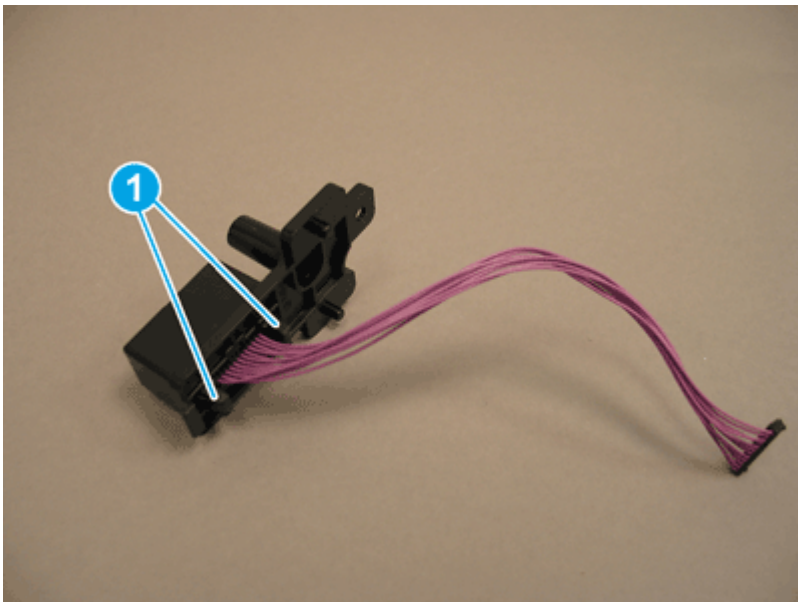
3. Lift the drawer connector holder and cable assembly away from the feeder to remove them.

Figure 5-2145 Remove the drawer connector holder and cable assembly



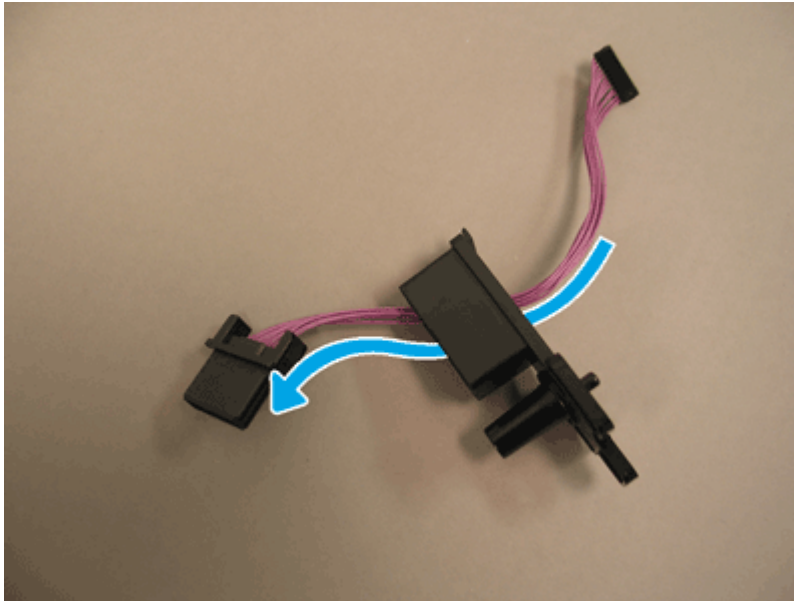
4. Use a small, flat-blade screwdriver to release two tabs (callout 1).

Figure 5-2146 Release two tabs



5. Remove the cable assembly from the drawer connector holder.

Figure 5-2147 Remove the cable assembly



3. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.




NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Auto-close assembly (Tray 3) (2,550-sheet paper feeder with stand)

Learn how to remove and replace the auto-close assembly for Tray 3 in the 2,550-sheet paper feeder with stand.

Mean time to repair: 20 minutes

Service level: Advanced

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.
- ⚠ **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.
- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-155 Part information

Part number	Part description
RM2-0856-000CN	Auto close assembly

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

Slowly install the paper tray in the paper feeder. Verify that the auto-close assembly catches and pulls the tray completely closed.

1. Remove the auto-close assembly (Tray 3) (2,550-sheet paper feeder with stand)

Follow these steps to remove the auto-close assembly (Tray 3) (2,550-sheet paper feeder with stand).

1. Remove all of the paper trays.
2. Remove one screw (callout 1), and then remove the auto-close assembly (callout 2).


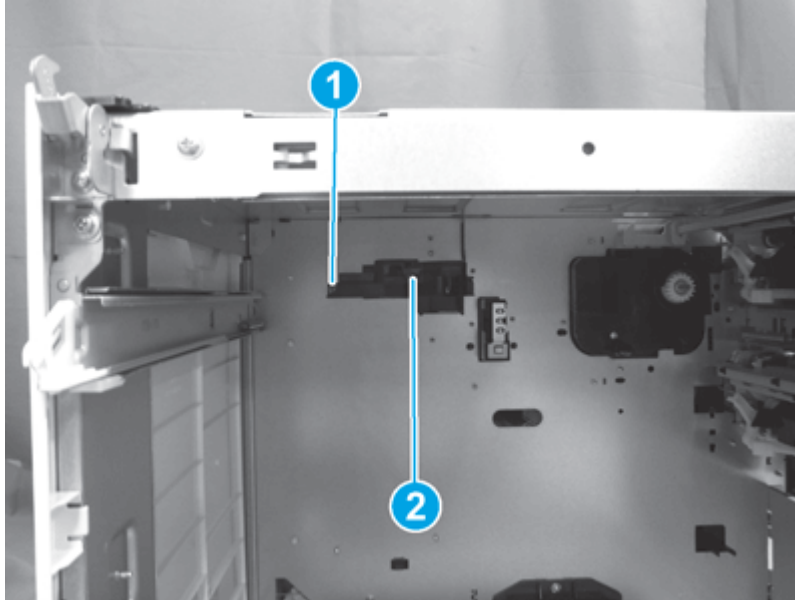
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2148 Remove the auto-close assembly



2. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.




NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Auto-close assembly (Tray 4) (2,550-sheet paper feeder with stand)

Learn how to remove and replace the tray auto-close assembly for Tray 4 in the 2,550-sheet paper feeder with stand.

Mean time to repair: 20 minutes

Service level: Advanced

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.
- ⚠ **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.
- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-156 Part information

Part number	Part description
RM2-0918-000CN	Tray auto close assembly

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

Slowly install the paper tray in the paper feeder. Verify that the auto-close assembly catches and pulls the tray completely closed.

1. Remove the auto-close assembly (Tray 4) (2,550-sheet paper feeder with stand)

Follow these steps to remove the auto-close assembly (Tray 4) (2,550-sheet paper feeder with stand).

1. Remove all of the paper trays.
2. Remove three screws (callout 1), and then remove the tray auto-close assembly (callout 2).


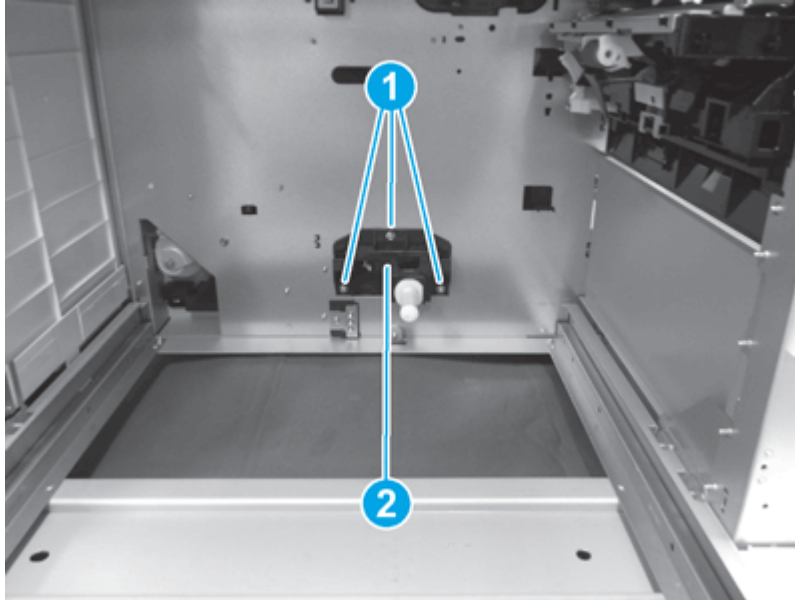
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2149 Remove the tray auto-close assembly



2. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.




NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Paper pickup assemblies (2,550-sheet paper feeder with stand)

Learn how to remove and replace the paper pickup assemblies for the 2,550-sheet paper feeder with stand.

Mean time to repair: 20 minutes

Service level: Advanced

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.
- ⚠ **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.
- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-157 Part information

Part number	Part description
RM2-1235-000CN	Paper pickup assembly

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

Send a print job from the host computer to the 2,500-sheet paper feeder with stand. Verify that a page prints.

1. Remove the right door (2,550-sheet paper feeder with stand)

Follow these steps to remove the right door (2,550-sheet paper feeder with stand).

- Release one tab (callout 1), and then lift up (callout 2) to remove the right door (callout 3).


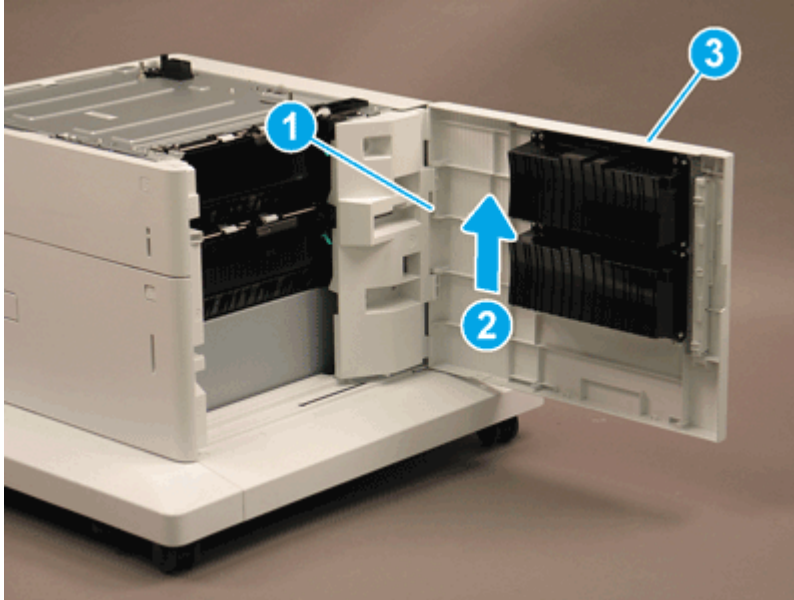
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2150 Remove the right door

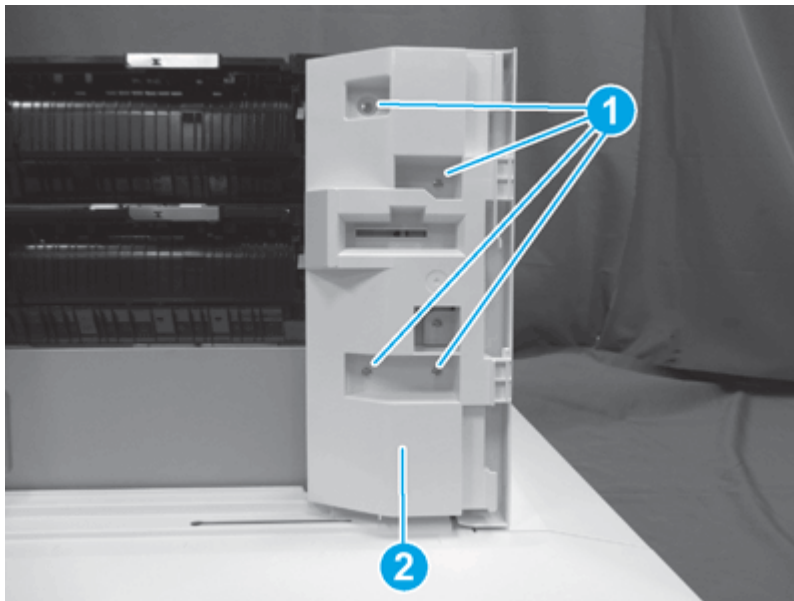


2. Remove the paper pickup assembly (2,550-sheet paper feeder with stand)


Follow these steps to remove the paper pickup assembly (2,550-sheet paper feeder with stand).

1. Remove all of the paper trays.
2. Remove four screws (callout 1), and then remove the hinge (callout 2).

Figure 5-2151 Remove four screws and the hinge

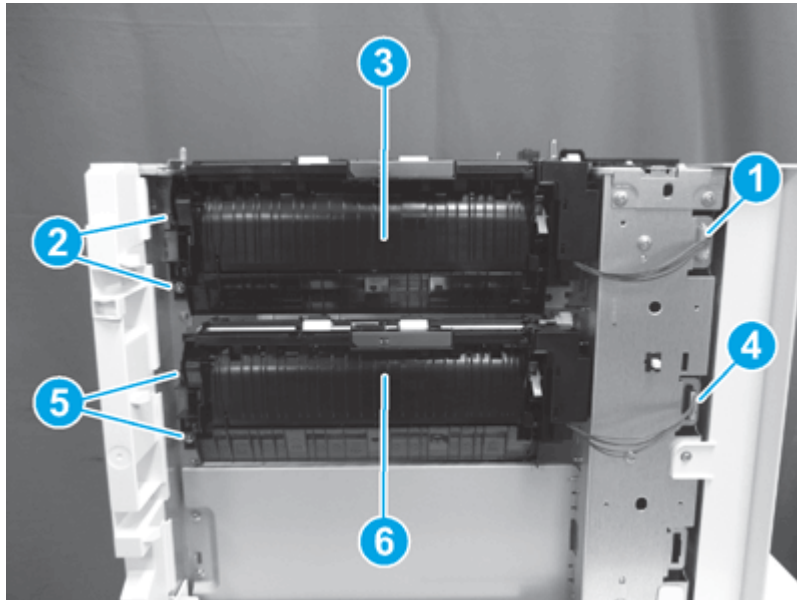


3. Do one of the following, depending upon which paper pickup assembly you are removing:

 **TIP:** Reverse the removal steps to install the assembly.

- a. **Tray 3 paper pickup assembly:** Disconnect one connector (callout 1), remove two screws (callout 2), and then remove the paper pickup assembly (callout 3).
- b. **Tray 4 paper pickup assembly:** Disconnect one connector (callout 4), remove two screws (callout 5), and then remove the paper pickup assembly (callout 6).


Figure 5-2152 Remove the paper pickup assemblies



3. Unpack the replacement assembly



Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.


 **NOTE:** HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>


2. Unpack the replacement part from the packaging.

 **CAUTION:**  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

 **IMPORTANT:** Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

 **NOTE:** If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.


 **NOTE:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Tray lifter motor drive assembly(2,550-sheet paper feeder with stand)

Learn how to remove and replace the tray lifter motor drive assembly for the 2,550-sheet paper feeder with stand.


Mean time to repair: 20 minutes

Service level: Advanced

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.

 **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.

- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-158 Part information

Part number	Part description
RM2-0915-000CN	Tray lifter motor drive assembly

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

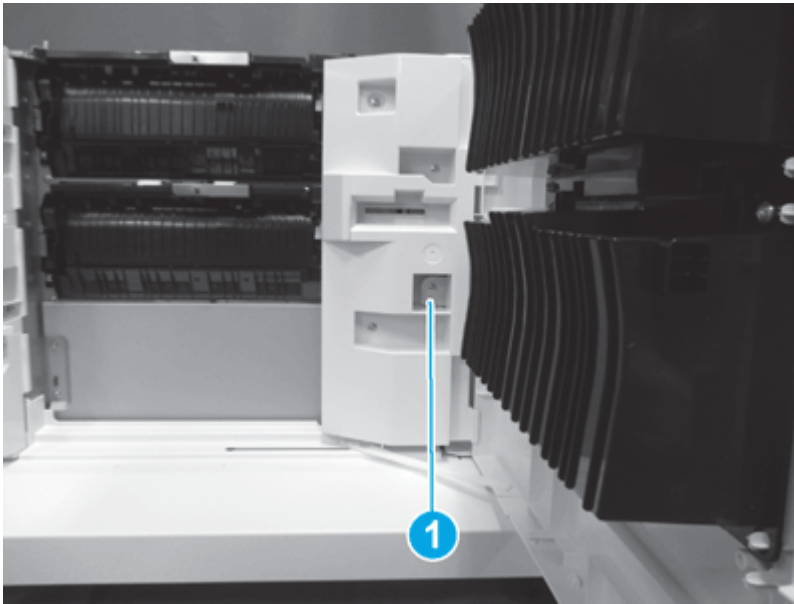
Send a print job from the host computer to the 2,500-sheet paper feeder with stand. Verify that a page prints.

1. Remove the rear cover (2,550-sheet paper feeder with stand)

Follow these steps to remove the rear cover (2,550-sheet paper feeder with stand).

1. Open the right door.
2. Remove one screw (callout 1).

Figure 5-2153 Remove one screw



3. Release three tabs (callout 1), and then remove the rear cover (callout 2).


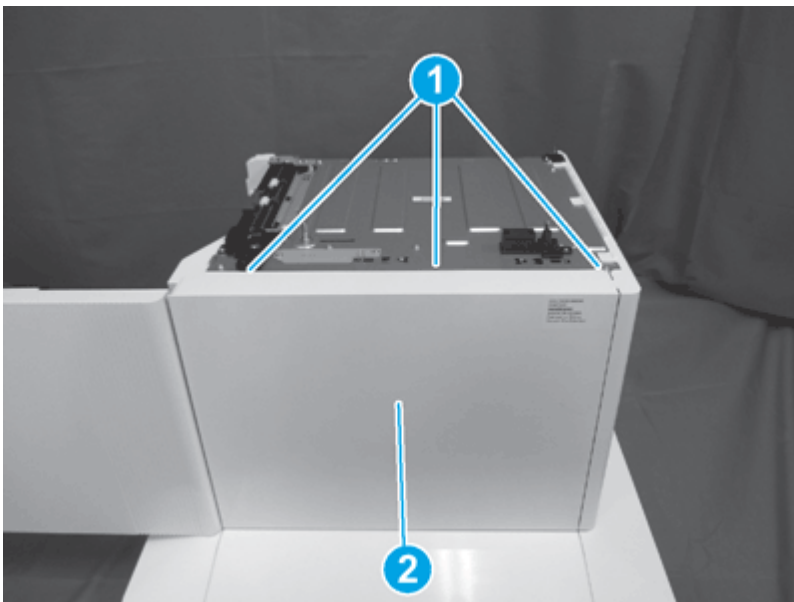
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2154 Remove the rear cover



2. Remove the left cover (2,550-sheet paper feeder with stand)

Follow these steps to remove the left cover (2,550-sheet paper feeder with stand).

- Release five tabs (callout 1), and then remove the left cover (callout 2).


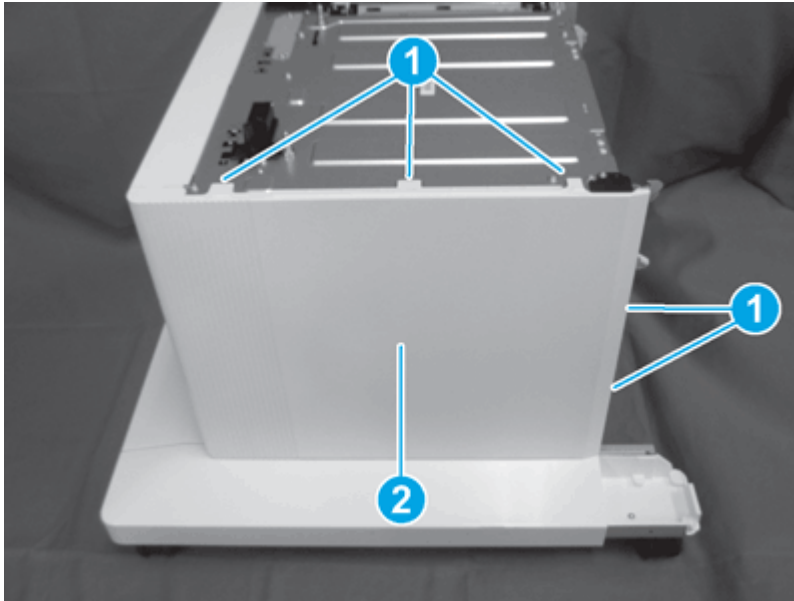
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2155 Remove the left cover

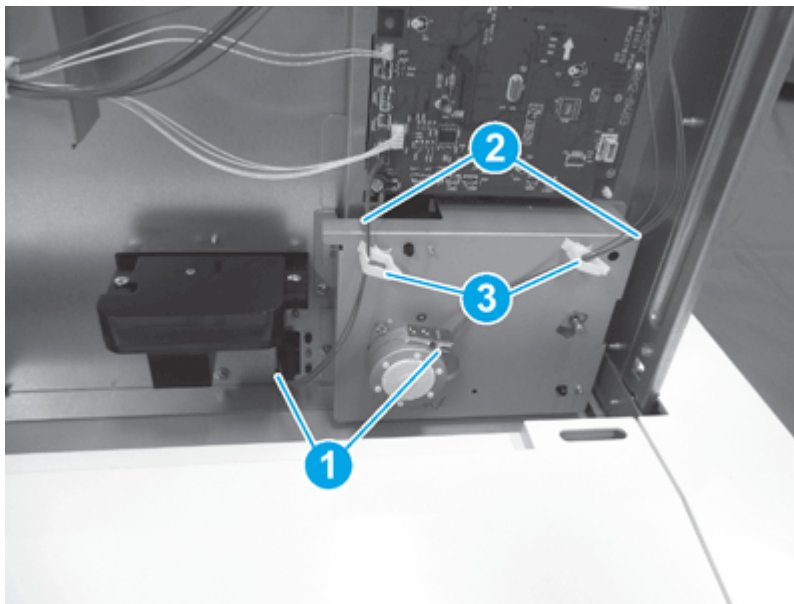


3. Remove the tray lifter motor drive assembly (2,550-sheet paper feeder with stand)

Follow these steps to remove the tray lifter motor drive assembly (2,550-sheet paper feeder with stand).

1. Disconnect two connectors (callout 1), and then release the cables (callout 3) from the retainers (callout 2).

Figure 5-2156 Disconnect two connectors



2. Remove three screws (callout 1), and then remove the tray lifter motor drive assembly (callout 2).


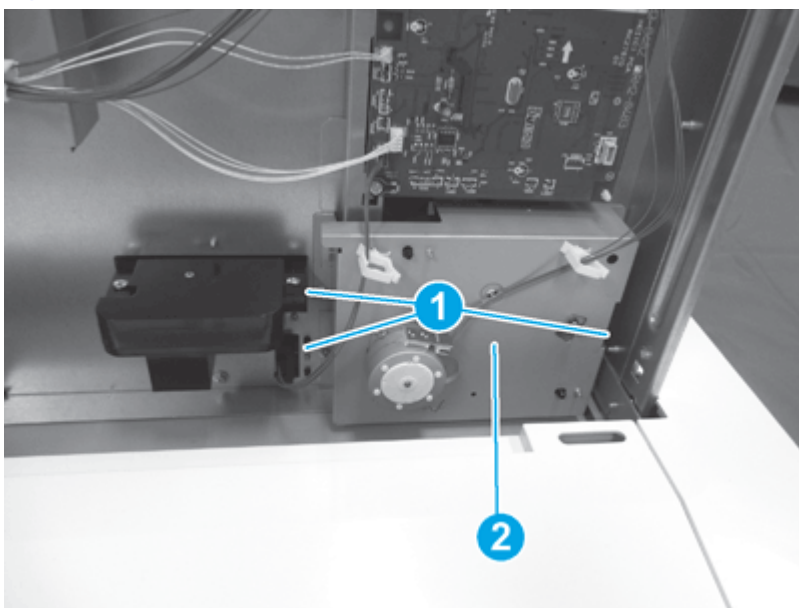
 **TIP:** Reverse the removal steps to install the assembly.


Figure 5-2157 Remove the tray lifter motor drive assembly



4. Unpack the replacement assembly



Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.


 **NOTE:** HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>


2. Unpack the replacement part from the packaging.

 **CAUTION:**  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

 **IMPORTANT:** Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

 **NOTE:** If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.


 **NOTE:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Feed motors (2,550-sheet paper feeder with stand)

Learn how to remove and replace the feed motors for the 2,550-sheet paper feeder with stand.


Mean time to repair: 20 minutes

Service level: Advanced

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.

 **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.

- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-159 Part information

Part number	Part description
RK2-7831-000CN	Motor, stepping

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

Send a print job from the host computer to the 2,500-sheet paper feeder with stand. Verify that a page prints.

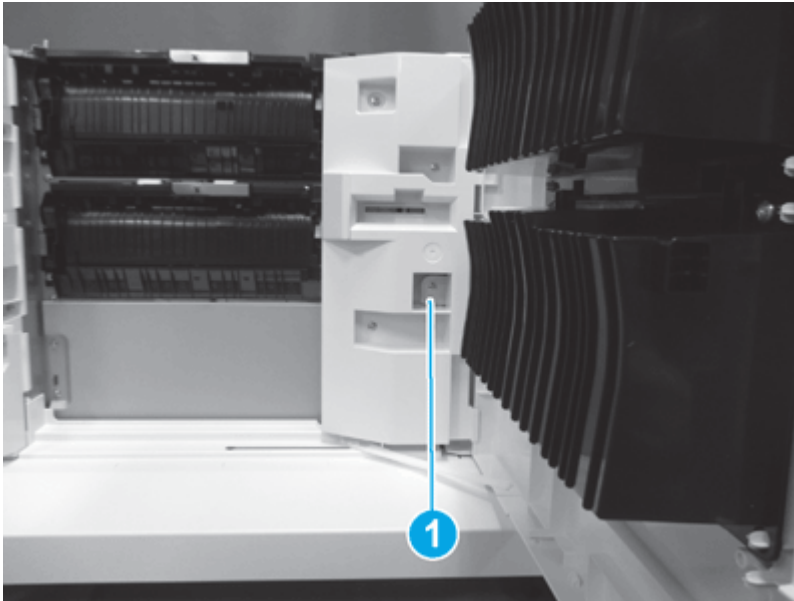
1. Remove the rear cover (2,550-sheet paper feeder with stand)

Follow these steps to remove the rear cover (2,550-sheet paper feeder with stand).

1. Open the right door.

2. Remove one screw (callout 1).

Figure 5-2158 Remove one screw



3. Release three tabs (callout 1), and then remove the rear cover (callout 2).


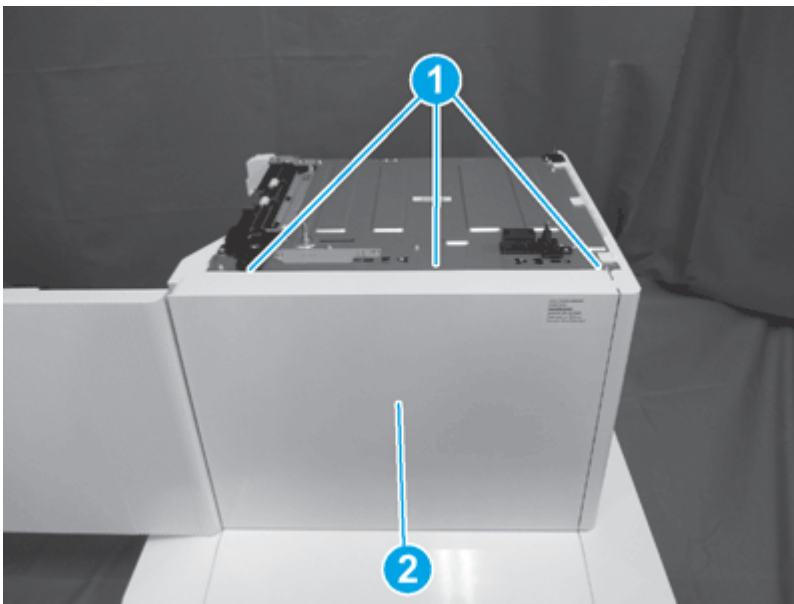
 **TIP:** Reverse the removal steps to install the assembly.


Figure 5-2159 Remove the rear cover



2. Remove the feed motor (2,550-sheet paper feeder with stand)

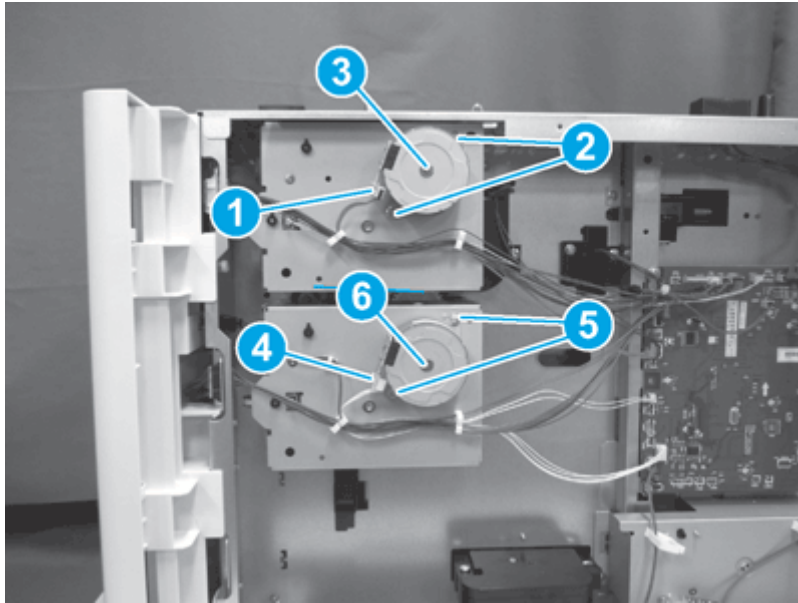
Follow these steps to remove the feed motor (2,550-sheet paper feeder with stand).

- Do one of the following, depending upon which feed motor you are removing:

 **TIP:** Reverse the removal steps to install the assembly.

- a. **Tray 3 feed motor:** Disconnect one connector (callout 1), remove two screws (callout 2), and then remove the feed motor (callout 3).

Figure 5-2160 Remove the feed motors



- b. **Tray 4 feed motor:** Disconnect one connector (callout 4), remove two screws (callout 5), and then remove the feed motor (callout 6).

3. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.




IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.


 **NOTE:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Drive assembly (Tray 3) (2,550-sheet paper feeder with stand)

Learn how to remove and replace the drive assembly for Tray 3 in the 2,550-sheet paper feeder with stand.


Mean time to repair: 20 minutes

Service level: Advanced

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.

 **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.

- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-160 Part information

Part number	Part description
RM2-1222-000CN	Drive assembly

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

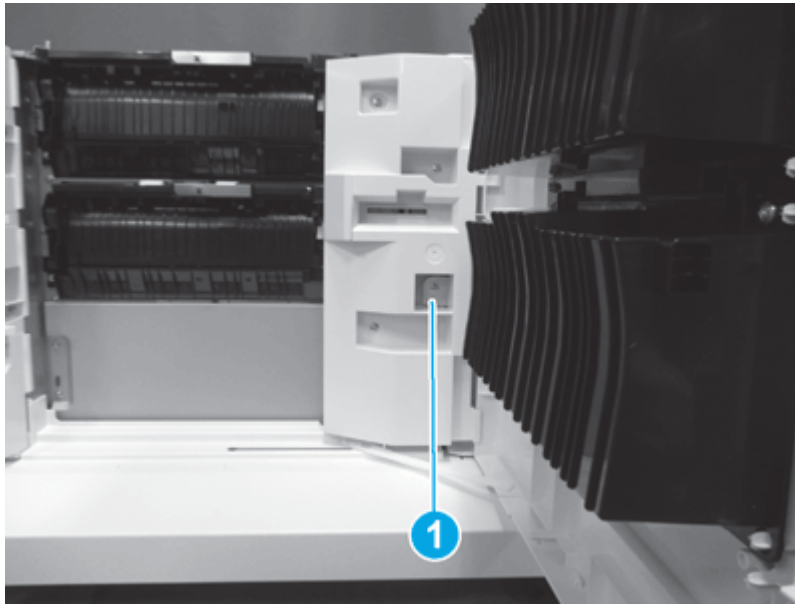
Send a print job from the host computer to the 2,500-sheet paper feeder with stand. Verify that a page prints.

1. Remove the rear cover (2,550-sheet paper feeder with stand)

Follow these steps to remove the rear cover (2,550-sheet paper feeder with stand).

1. Open the right door.
2. Remove one screw (callout 1).

Figure 5-2161 Remove one screw



3. Release three tabs (callout 1), and then remove the rear cover (callout 2).


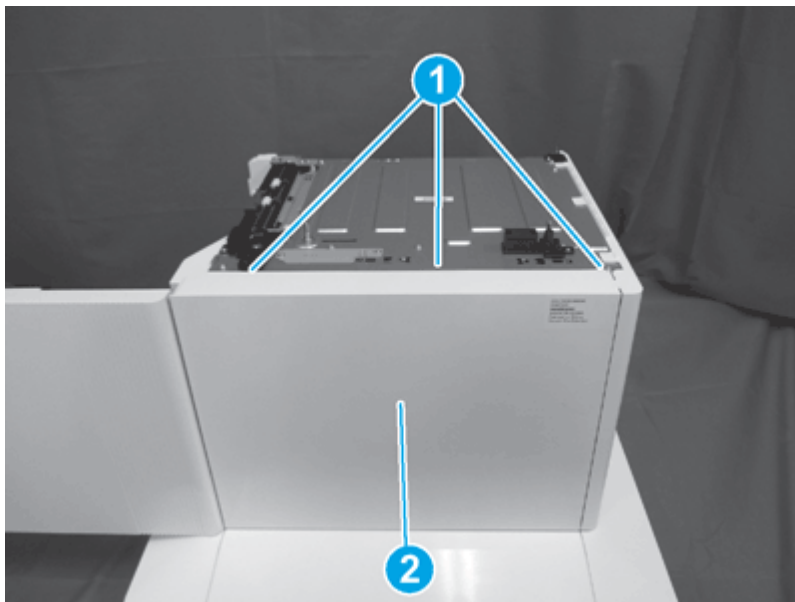
 **TIP:** Reverse the removal steps to install the assembly.


Figure 5-2162 Remove the rear cover



2. Remove the Tray 3 feed motor (2,550-sheet paper feeder with stand)

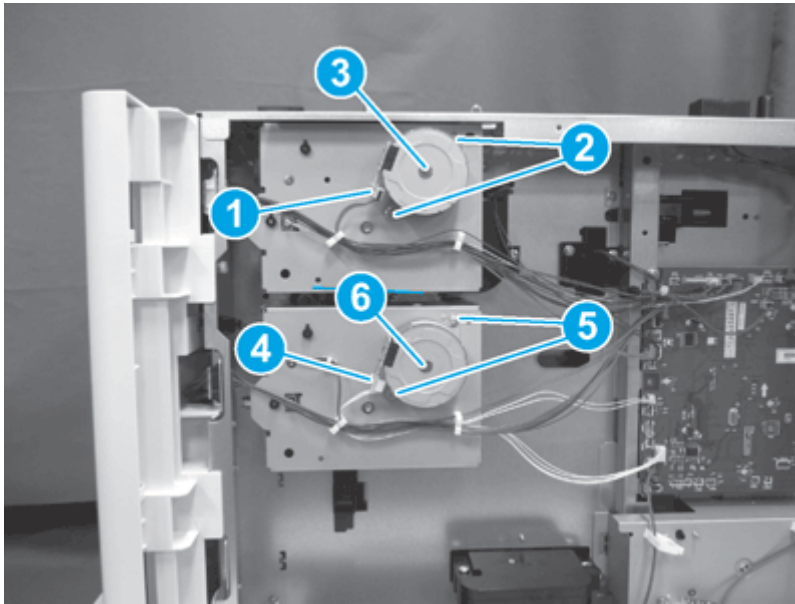
Follow these steps to remove the Tray 3 feed motor (2,550-sheet paper feeder with stand).

- Do one of the following, depending upon which feed motor you are removing:

 **TIP:** Reverse the removal steps to install the assembly.

- Tray 3 feed motor:** Disconnect one connector (callout 1), remove two screws (callout 2), and then remove the feed motor (callout 3).
- Tray 4 feed motor:** Disconnect one connector (callout 4), remove two screws (callout 5), and then remove the feed motor (callout 6).

Figure 5-2163 Remove the feed motors

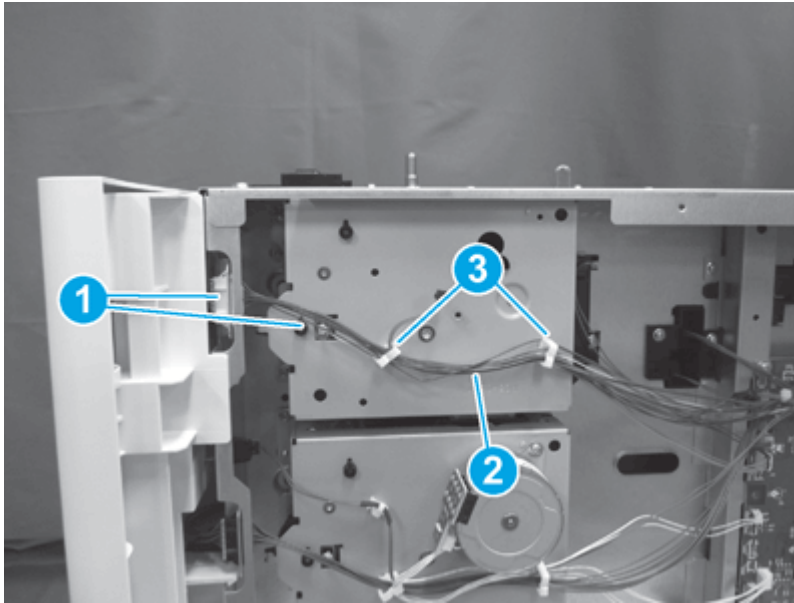


3. Remove the drive assembly (Tray 3) (2,550-sheet paper feeder with stand)

Follow these steps to remove the drive assembly (Tray 3) (2,550-sheet paper feeder with stand).

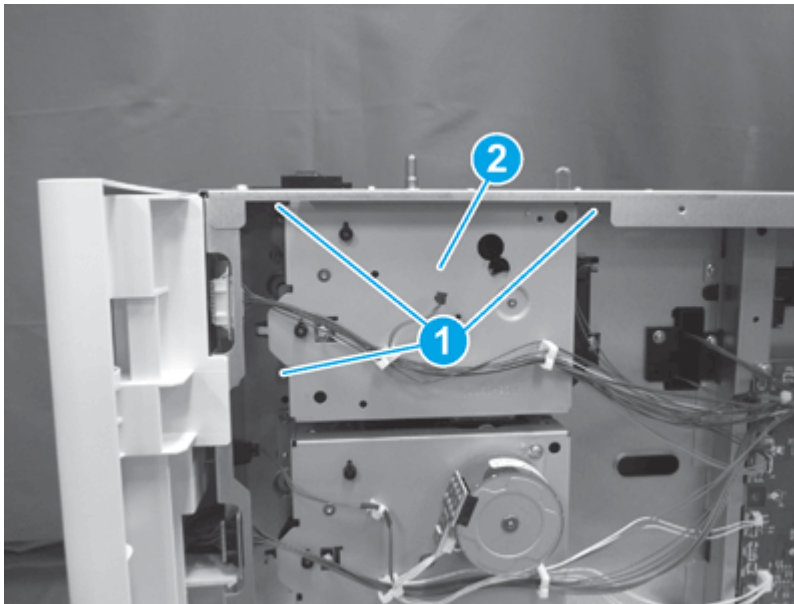
1. Disconnect two connectors (callout 1), and then release the cable (callout 2) from the retainers (callout 3).

Figure 5-2164 Disconnect two connectors



2. Remove three screws (callout 1), and then remove the drive assembly (callout 2).

Figure 5-2165 Remove the drive assembly



4. Unpack the replacement assembly



Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.


2. Unpack the replacement part from the packaging.

 **CAUTION:**  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

 **IMPORTANT:** Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

 **NOTE:** If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.


 **NOTE:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Drive assembly (Tray 4) (2,550-sheet paper feeder with stand)

Learn how to remove and replace the drive assembly for Tray 4 in the 2,550-sheet paper feeder with stand.


Mean time to repair: 20 minutes

Service level: Advanced

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.

 **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.

- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-161 Part information

Part number	Part description
RM2-1222-000CN	Drive assembly

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

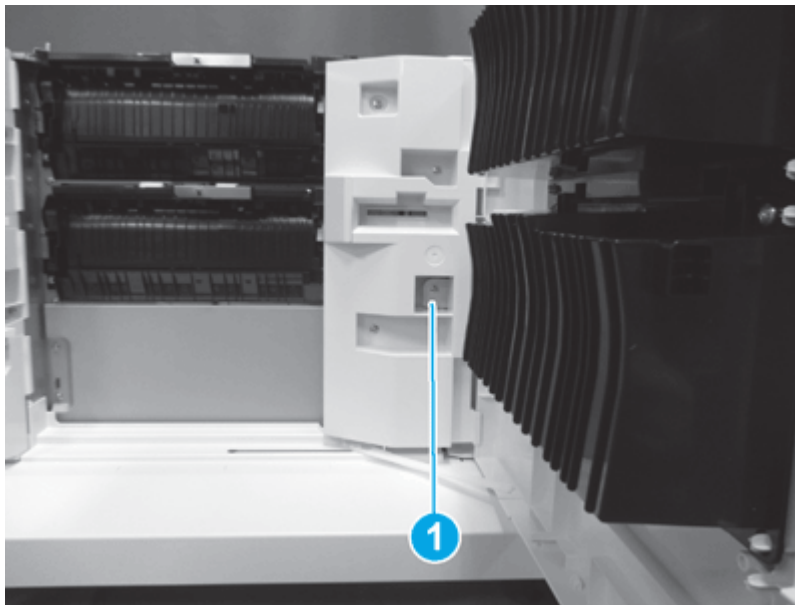
Send a print job from the host computer to the 2,500-sheet paper feeder with stand. Verify that a page prints.

1. Remove the rear cover (2,550-sheet paper feeder with stand)

Follow these steps to remove the rear cover (2,550-sheet paper feeder with stand).

1. Open the right door.
2. Remove one screw (callout 1).

Figure 5-2166 Remove one screw



3. Release three tabs (callout 1), and then remove the rear cover (callout 2).


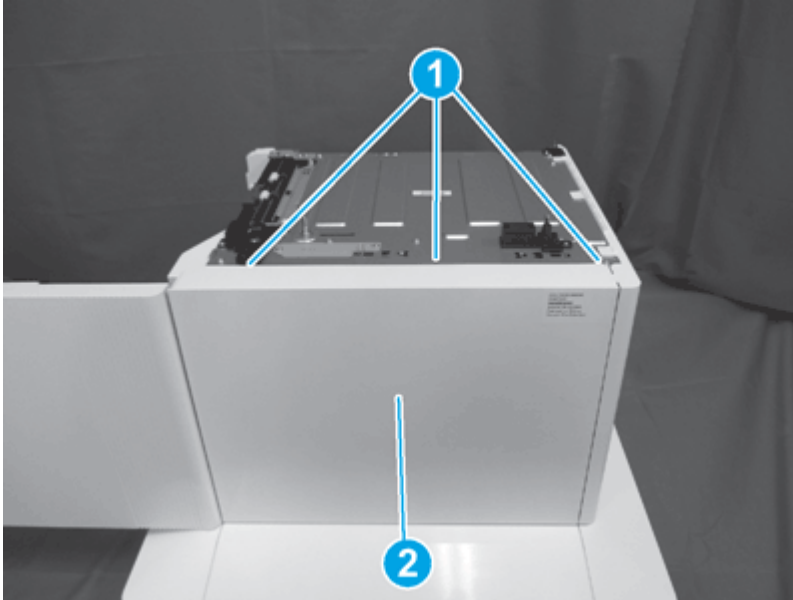
 **TIP:** Reverse the removal steps to install the assembly.


Figure 5-2167 Remove the rear cover



2. Remove the Tray 4 feed motor (2,550-sheet paper feeder with stand)

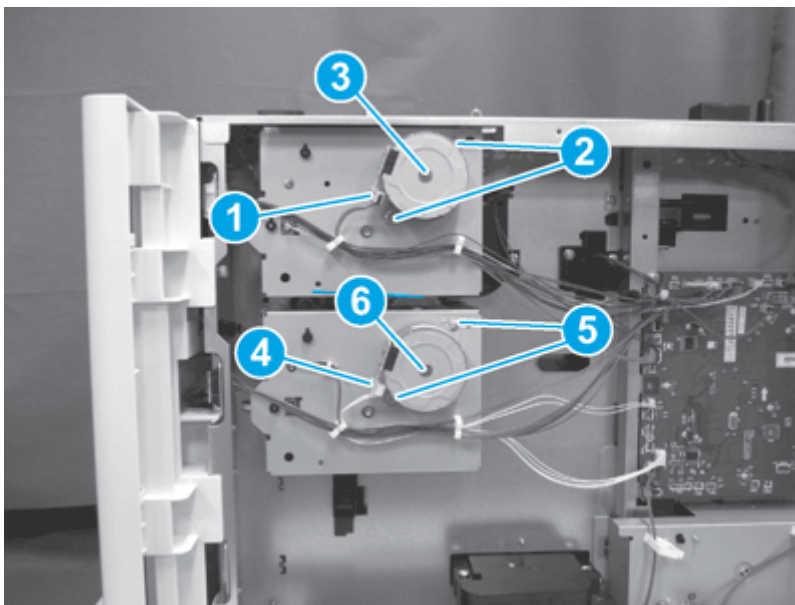
Follow these steps to remove the Tray 4 feed motor (2,550-sheet paper feeder with stand).

- Do one of the following, depending upon which feed motor you are removing:

 **TIP:** Reverse the removal steps to install the assembly.

- Tray 3 feed motor:** Disconnect one connector (callout 1), remove two screws (callout 2), and then remove the feed motor (callout 3).
- Tray 4 feed motor:** Disconnect one connector (callout 4), remove two screws (callout 5), and then remove the feed motor (callout 6).

Figure 5-2168 Remove the feed motors

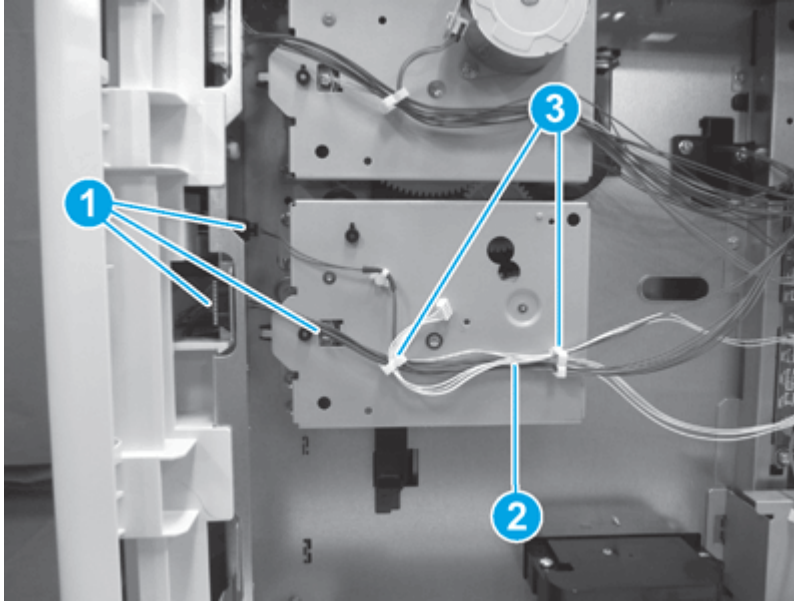


3. Remove the drive assembly (Tray 4) (2,550-sheet paper feeder with stand)

Follow these steps to remove the drive assembly (Tray 4) (2,550-sheet paper feeder with stand).

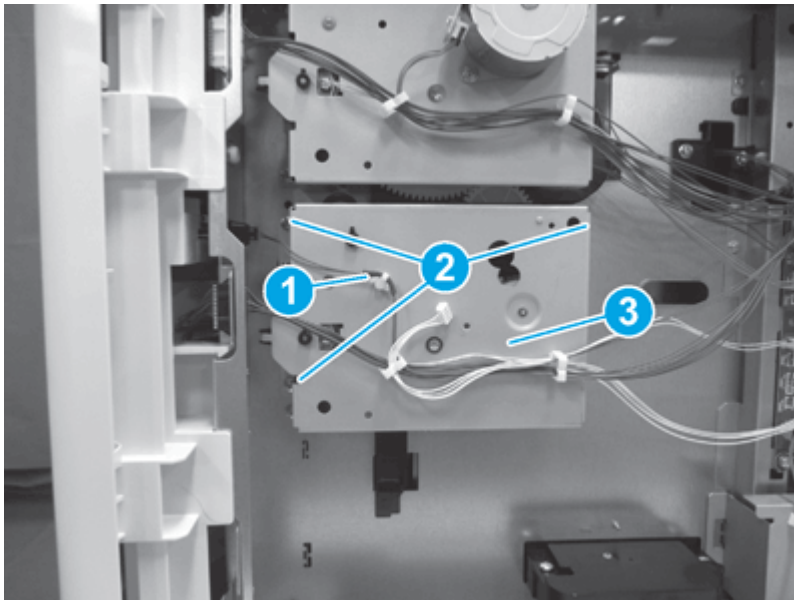
1. Disconnect three connectors (callout 1), and then release the cable (callout 2) from the retainers (callout 3).

Figure 5-2169 Disconnect three connectors



2. Remove the cable clamp (callout 1) from the drive assembly, remove three screws (callout 2), and then remove the drive assembly (callout 3).


Figure 5-2170 Remove the drive assembly



4. Unpack the replacement assembly



Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.


 **NOTE:** HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>


2. Unpack the replacement part from the packaging.

 **CAUTION:**  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

 **IMPORTANT:** Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

 **NOTE:** If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.


 **NOTE:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Pickup alienation holder (2,550-sheet paper feeder with stand)

Learn how to remove and replace the pickup alienation holder for the 2,550-sheet paper feeder with stand.


Mean time to repair: 20 minutes

Service level: Advanced

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.

 **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.

- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-162 Part information

Part number	Part description
RM2-1223-000CN	Estrangement holder assembly

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

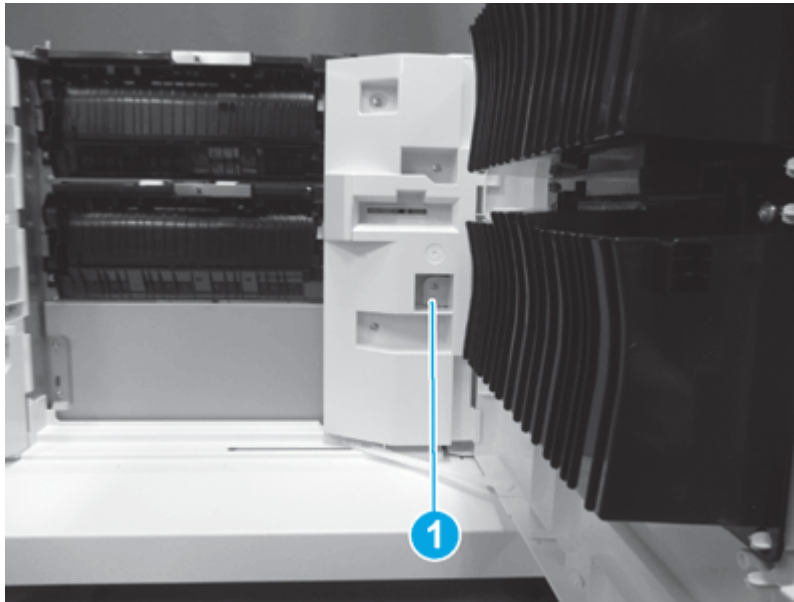
Send a print job from the host computer to the 2,500-sheet paper feeder with stand. Verify that a page prints.

1. Remove the rear cover (2,550-sheet paper feeder with stand)

Follow these steps to remove the rear cover (2,550-sheet paper feeder with stand).

1. Open the right door.
2. Remove one screw (callout 1).

Figure 5-2171 Remove one screw



3. Release three tabs (callout 1), and then remove the rear cover (callout 2).


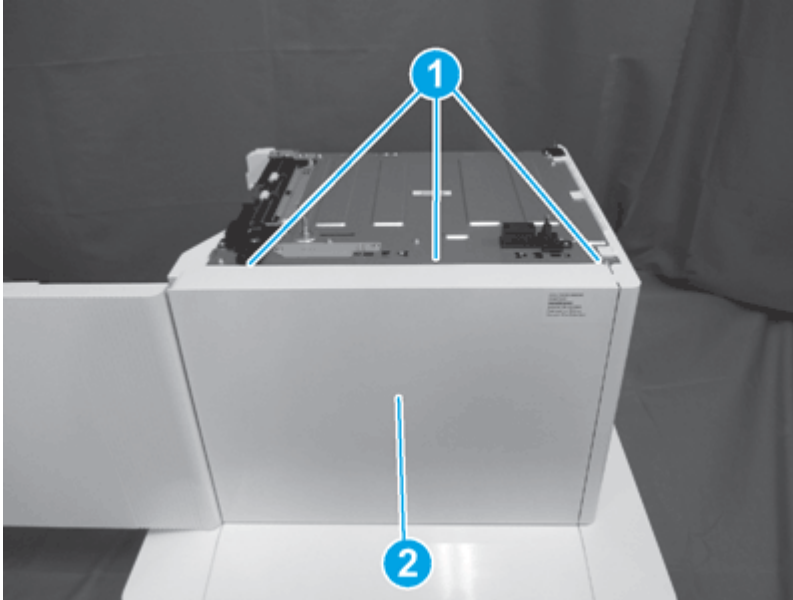
 **TIP:** Reverse the removal steps to install the assembly.


Figure 5-2172 Remove the rear cover



2. Remove the feed motors (Trays 3 and 4) (2,550-sheet paper feeder with stand)

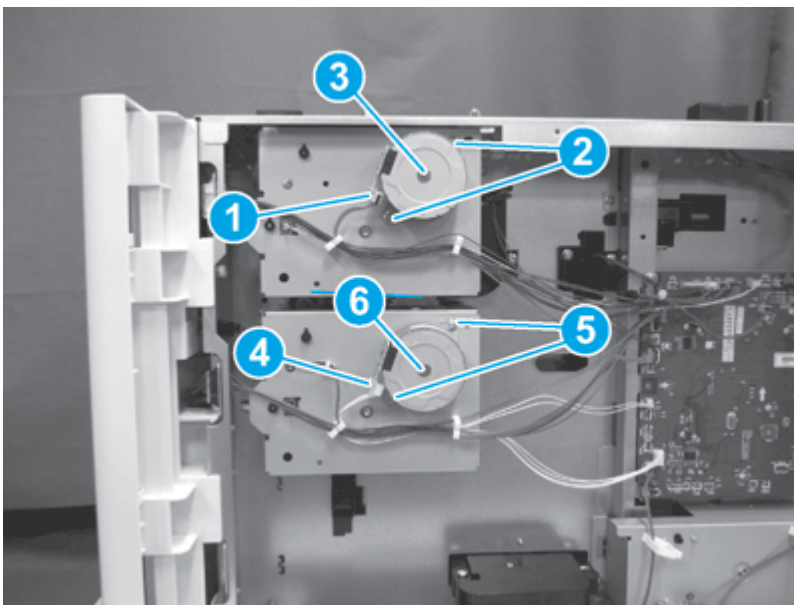
Follow these steps to remove the feed motors (Trays 3 and 4) (2,550-sheet paper feeder with stand).

- Do one of the following, depending upon which feed motor you are removing:

 **TIP:** Reverse the removal steps to install the assembly.

- Tray 3 feed motor:** Disconnect one connector (callout 1), remove two screws (callout 2), and then remove the feed motor (callout 3).
- Tray 4 feed motor:** Disconnect one connector (callout 4), remove two screws (callout 5), and then remove the feed motor (callout 6).

Figure 5-2173 Remove the feed motors

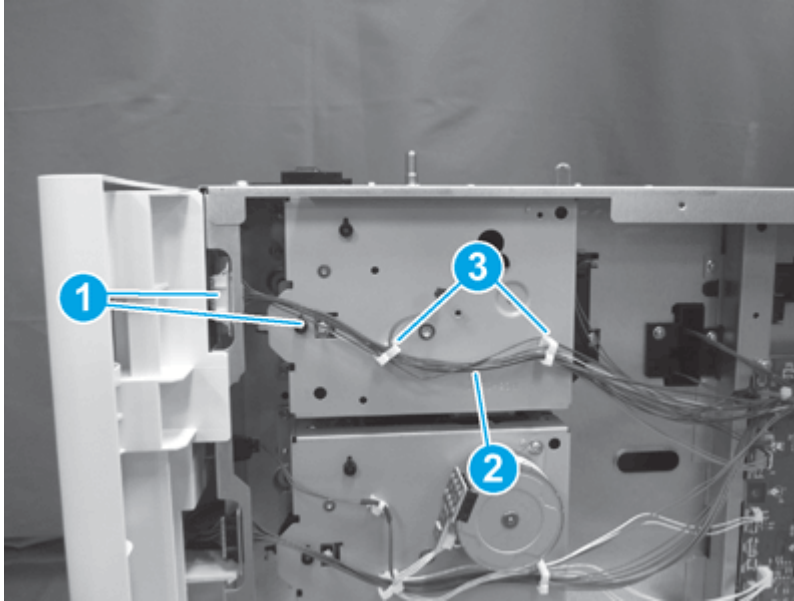


3. Remove the drive assembly (Tray 3) (2,550-sheet paper feeder with stand)

Follow these steps to remove the drive assembly (Tray 3) (2,550-sheet paper feeder with stand).

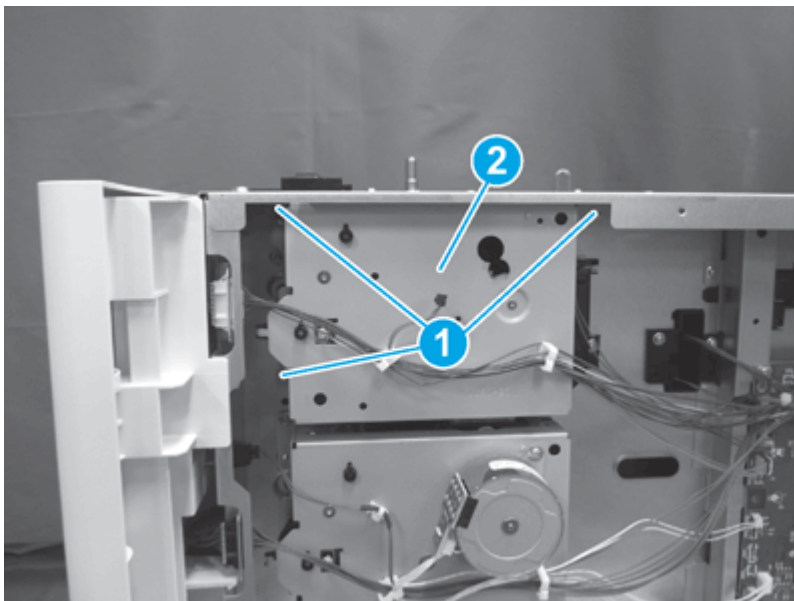
1. Disconnect two connectors (callout 1), and then release the cable (callout 2) from the retainers (callout 3).

Figure 5-2174 Disconnect two connectors



2. Remove three screws (callout 1), and then remove the drive assembly (callout 2).

Figure 5-2175 Remove the drive assembly

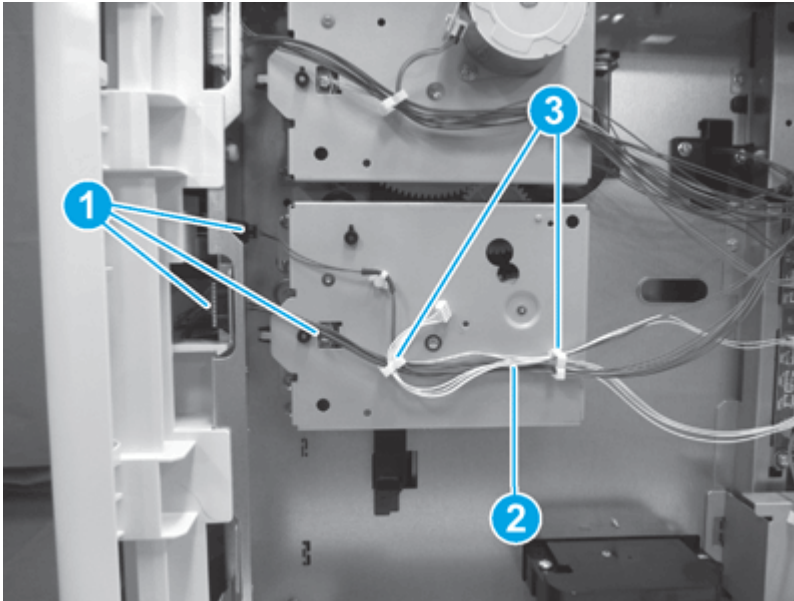


4. Remove the drive assembly (Tray 4) (2,550-sheet paper feeder with stand)

Follow these steps to remove the drive assembly (Tray 4) (2,550-sheet paper feeder with stand).

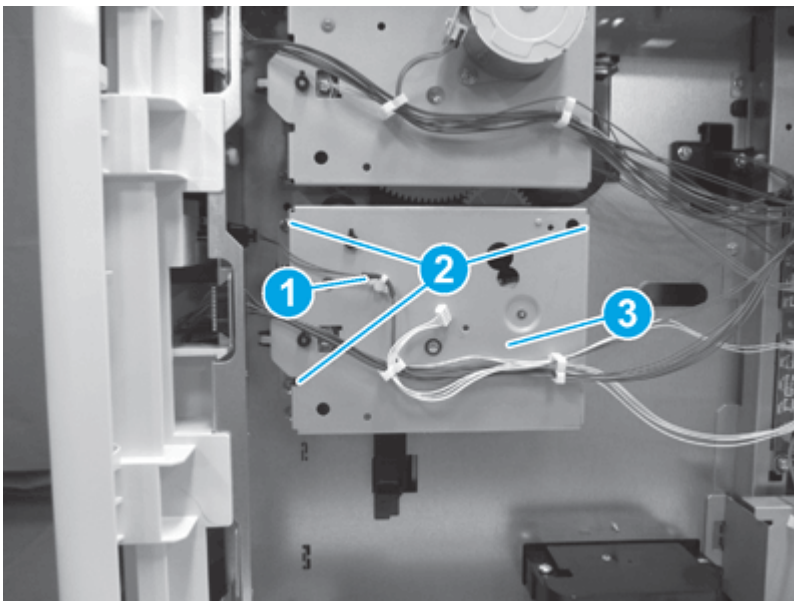
1. Disconnect three connectors (callout 1), and then release the cable (callout 2) from the retainers (callout 3).

Figure 5-2176 Disconnect three connectors



2. Remove the cable clamp (callout 1) from the drive assembly, remove three screws (callout 2), and then remove the drive assembly (callout 3).

Figure 5-2177 Remove the drive assembly

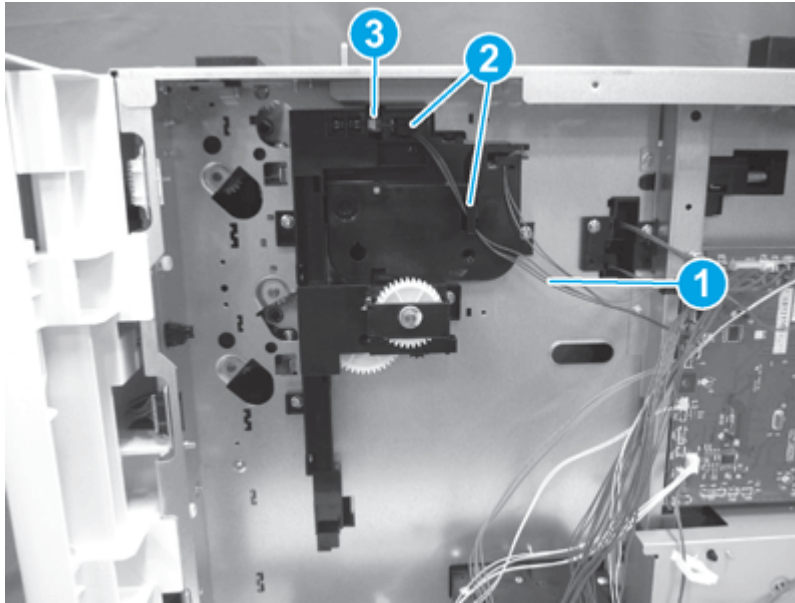


5. Remove the pickup alienation holder (2,550-sheet paper feeder with stand)

Follow these steps to remove the pickup alienation holder (2,550-sheet paper feeder with stand).

1. Release the cable (callout 1) from cable guides (callout 2), and then disconnect one connector (callout 3).

Figure 5-2178 Disconnect one connector



2. Remove four screws (callout 1), and then remove the pickup alienation holder (callout 2).


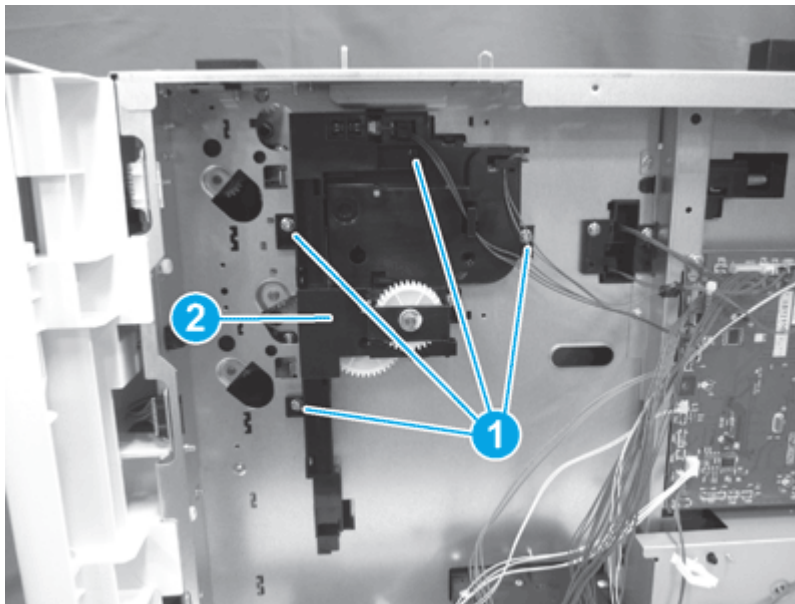
 **TIP:** Reverse the removal steps to install the assembly.


Figure 5-2179 Remove four screws and the pickup alienation holder



6. Unpack the replacement assembly



Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.


 **NOTE:** HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>


2. Unpack the replacement part from the packaging.

 **CAUTION:**  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

 **IMPORTANT:** Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

 **NOTE:** If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.


 **NOTE:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Lifter drive assembly (2,550-sheet paper feeder with stand)

This document provides the procedures to remove and replace the lifter drive assembly for Tray 5 in the 2,550-sheet paper feeder with stand.


Mean time to repair: 20 minutes

Service level: Advanced

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.

 **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.

- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-163 Part information

Part number	Part description
RM2-2091-000CN	Lifter drive assembly

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

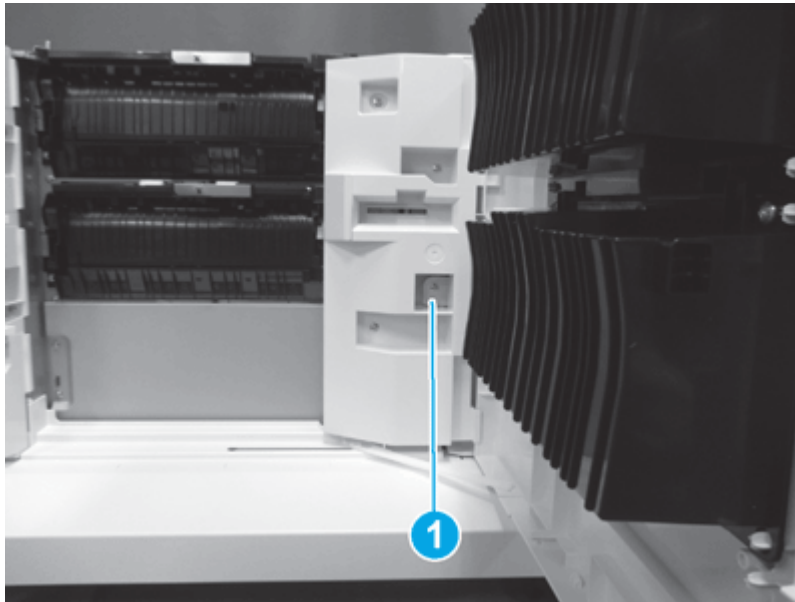
Send a print job from the host computer to the 2,500-sheet paper feeder with stand. Verify that a page prints.

1. Remove the rear cover (2,550-sheet paper feeder with stand)

Follow these steps to remove the rear cover (2,550-sheet paper feeder with stand).

1. Open the right door.
2. Remove one screw (callout 1).

Figure 5-2180 Remove one screw



3. Release three tabs (callout 1), and then remove the rear cover (callout 2).


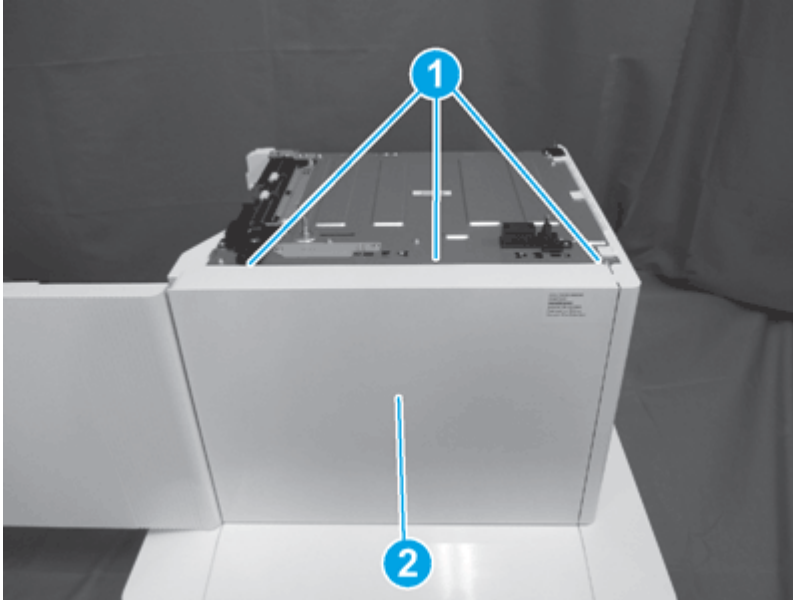
 **TIP:** Reverse the removal steps to install the assembly.


Figure 5-2181 Remove the rear cover



2. Remove the feed motors (Trays 3 and 4) (2,550-sheet paper feeder with stand)

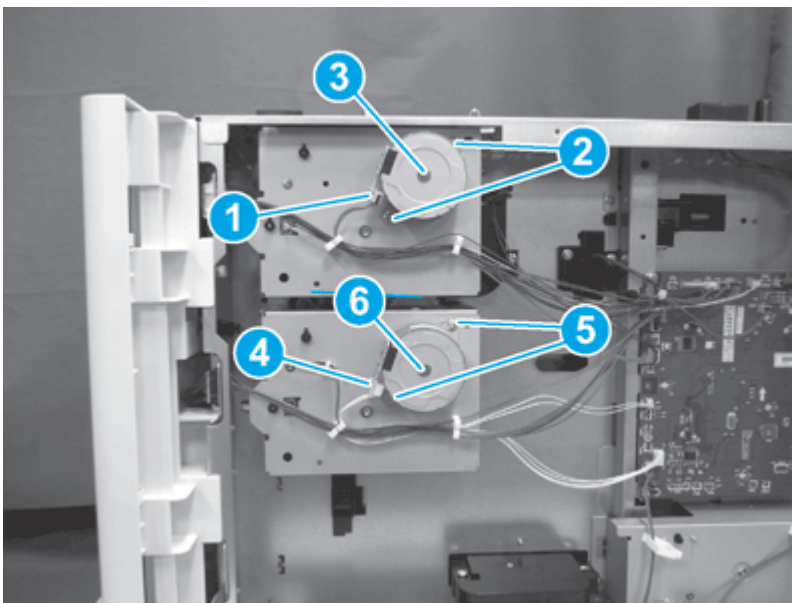
Follow these steps to remove the feed motors (Trays 3 and 4) (2,550-sheet paper feeder with stand).

- Do one of the following, depending upon which feed motor you are removing:

 **TIP:** Reverse the removal steps to install the assembly.

- Tray 3 feed motor:** Disconnect one connector (callout 1), remove two screws (callout 2), and then remove the feed motor (callout 3).
- Tray 4 feed motor:** Disconnect one connector (callout 4), remove two screws (callout 5), and then remove the feed motor (callout 6).

Figure 5-2182 Remove the feed motors

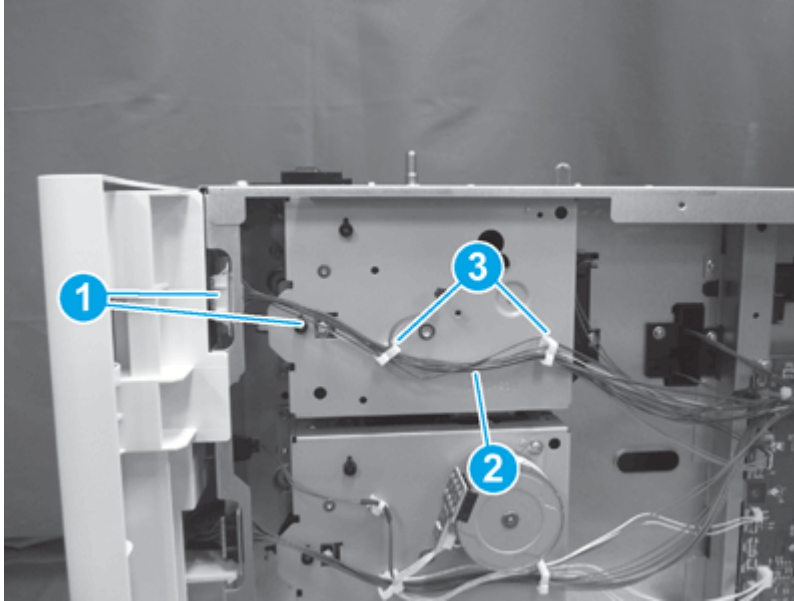


3. Remove the drive assembly (Tray 3) (2,550-sheet paper feeder with stand)

Follow these steps to remove the drive assembly (Tray 3) (2,550-sheet paper feeder with stand).

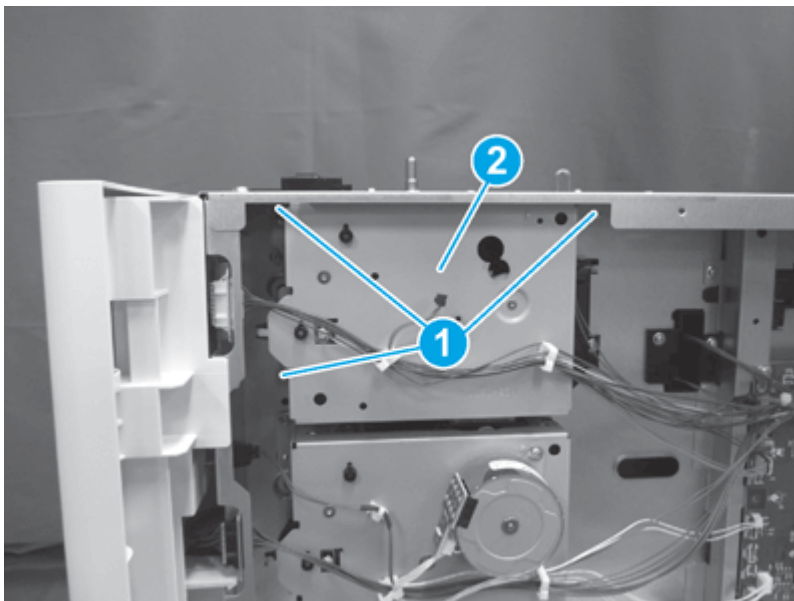
1. Disconnect two connectors (callout 1), and then release the cable (callout 2) from the retainers (callout 3).

Figure 5-2183 Disconnect two connectors



2. Remove three screws (callout 1), and then remove the drive assembly (callout 2).

Figure 5-2184 Remove the drive assembly

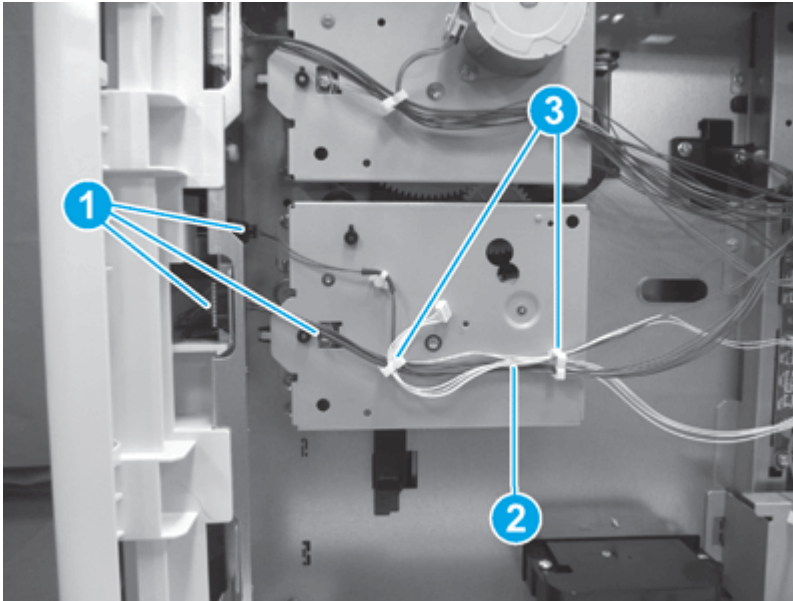


4. Remove the drive assembly (Tray 4) (2,550-sheet paper feeder with stand)

Follow these steps to remove the drive assembly (Tray 4) (2,550-sheet paper feeder with stand).

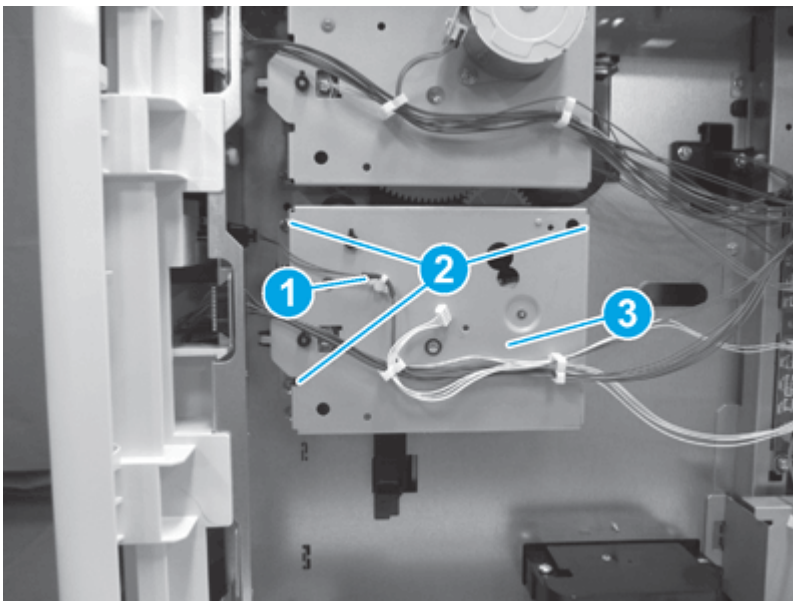
1. Disconnect three connectors (callout 1), and then release the cable (callout 2) from the retainers (callout 3).

Figure 5-2185 Disconnect three connectors



2. Remove the cable clamp (callout 1) from the drive assembly, remove three screws (callout 2), and then remove the drive assembly (callout 3).

Figure 5-2186 Remove the drive assembly

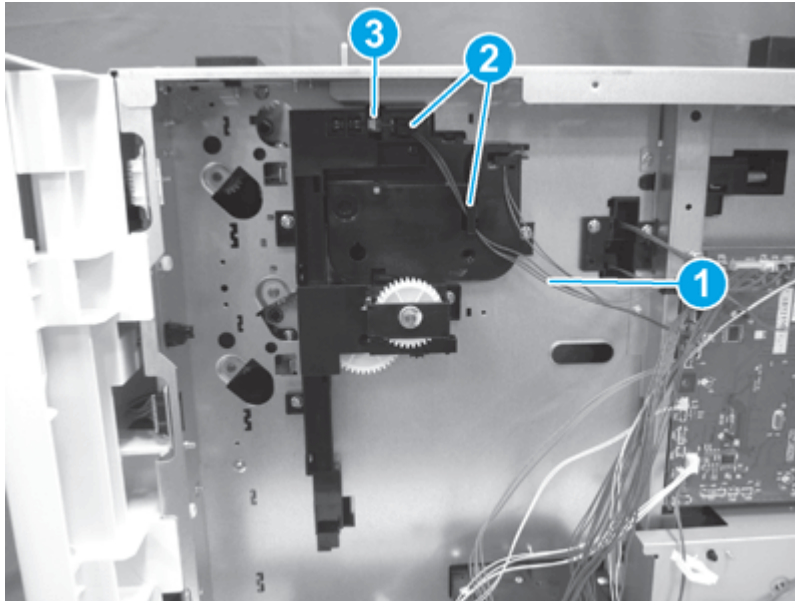


5. Remove the pickup alienation holder (2,550-sheet paper feeder with stand)

Follow these steps to remove the pickup alienation holder (2,550-sheet paper feeder with stand).

1. Release the cable (callout 1) from cable guides (callout 2), and then disconnect one connector (callout 3).

Figure 5-2187 Disconnect one connector



2. Remove four screws (callout 1), and then remove the pickup alienation holder (callout 2).


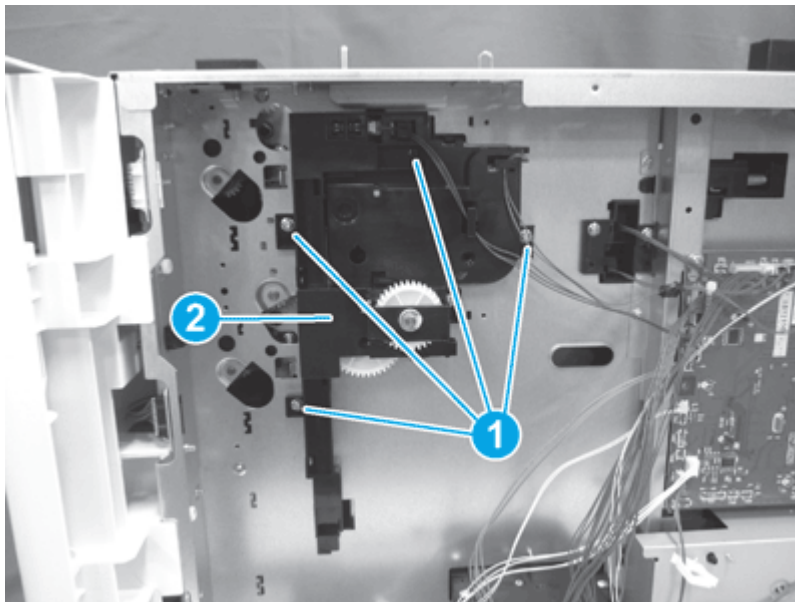
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2188 Remove four screws and the pickup alienation holder



6. Remove the lifter drive assembly (2,550-sheet paper feeder with stand)

Follow these steps to remove the lifter drive assembly (2,550-sheet paper feeder with stand).

- Disconnect one connector (callout 1), remove two screws (callout 2), and then remove the lifter drive assembly (callout 3).


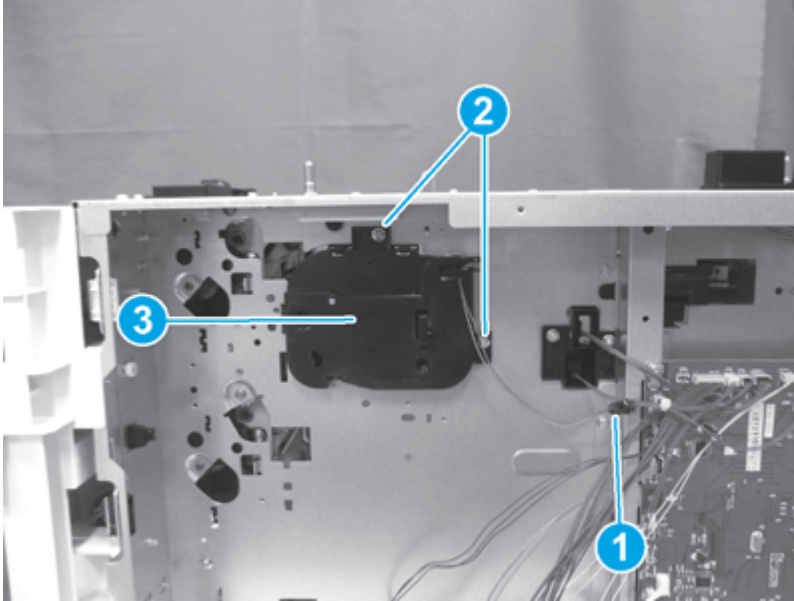
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2189 Remove three screws and the lifter drive assembly



7. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.




IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.


 **NOTE:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Controller PCA (2,550-sheet paper feeder with stand)


Learn how to remove and replace the controller PCA for the 2,550-sheet paper feeder with stand.

Mean time to repair: 20 minutes

Service level: Advanced

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.
-  **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.
- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-164 Part information

Part number	Part description
RM2-8481-000CN	Paper deck controller PCB assembly

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

Send a print job from the host computer to the 2,500-sheet paper feeder with stand. Verify that a page prints.

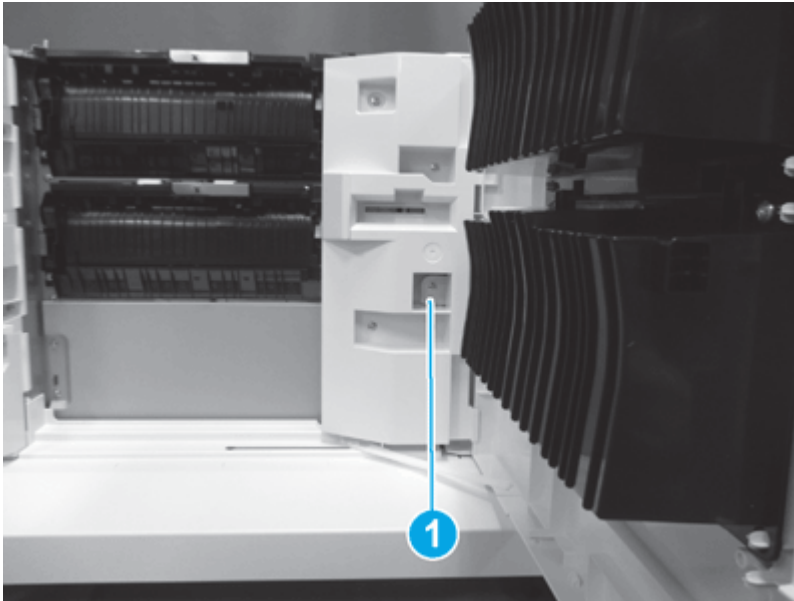
1. Remove the rear cover (2,550-sheet paper feeder with stand)

Follow these steps to remove the rear cover (2,550-sheet paper feeder with stand).

1. Open the right door.

2. Remove one screw (callout 1).

Figure 5-2190 Remove one screw



3. Release three tabs (callout 1), and then remove the rear cover (callout 2).


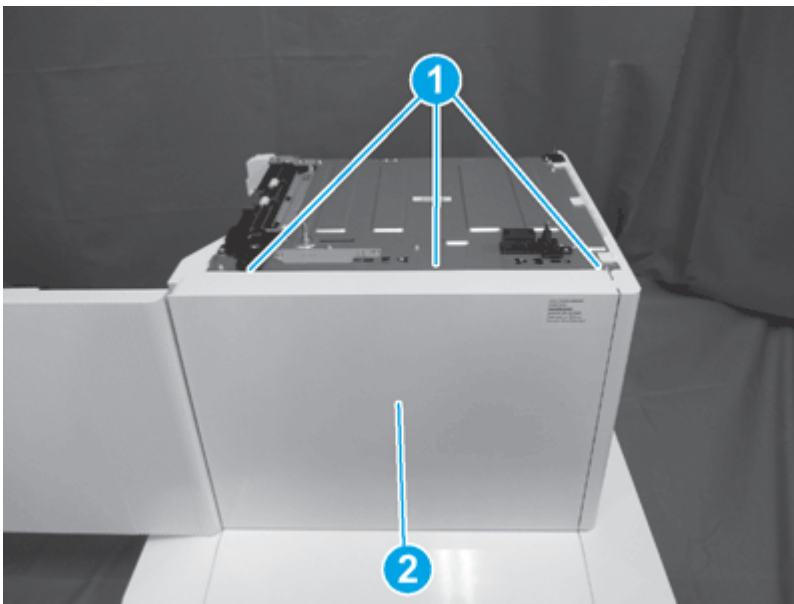
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2191 Remove the rear cover



2. Remove the controller PCA (2,550-sheet paper feeder with stand)

Follow these steps to remove the controller PCA (2,550-sheet paper feeder with stand).

- Disconnect all of the connectors on the controller PCA. Remove two screws (callout 1), release two tabs (callout 2), and then remove the controller PCA (callout 3).


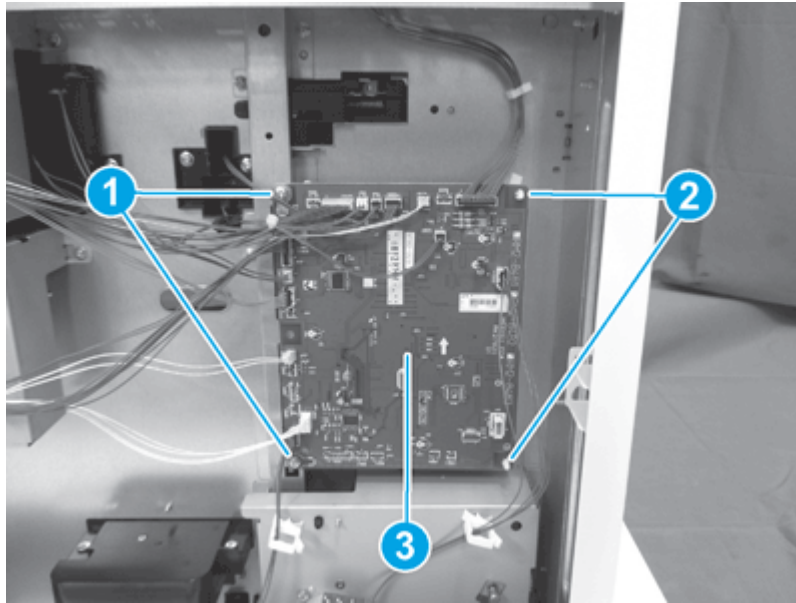
 **TIP:** Reverse the removal steps to install the assembly.


Figure 5-2192 Remove the controller PCA



3. Unpack the replacement assembly



Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.


 **NOTE:** HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.

 **CAUTION:**  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

 **IMPORTANT:** Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

 **NOTE:** If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Output device - 3-bin staple stacker multi-bin mailbox

Learn how to remove and replace the 3-bin staple stacker multi-bin mailbox parts and assemblies.

Removal and replacement: Stapler/stacker (Flow M681z/Flow M682z/Flow E67660z)

Learn how to remove and replace the stapler/stacker.

Mean time to repair: 25 minutes

Service level: Advanced



IMPORTANT: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Disconnect the power cable.

⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-165 Part information

Part number	Part description
P1B13-67901	2-bin stapler/stacker

Required tools

- #2 Phillips screwdriver with a magnetic tip
- Small flat-blade screwdriver

After performing service

Turn the printer power on


- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Send a print job to the printer requiring stapling and collation to verify that the stapler/stacker correctly functions.

1. Remove the control panel (M681/M682/E67550/E67560/E67650/E67660)

Follow these steps to remove the control panel (M681/M682/E67550/E67560/E67650/E67660).

 **NOTE:** This step is for the M681/M682/E67550/E67560/E67650/E67660 printers. For the M652/M653/E65050/E65060/E65150/E65160 printers, skip this step.

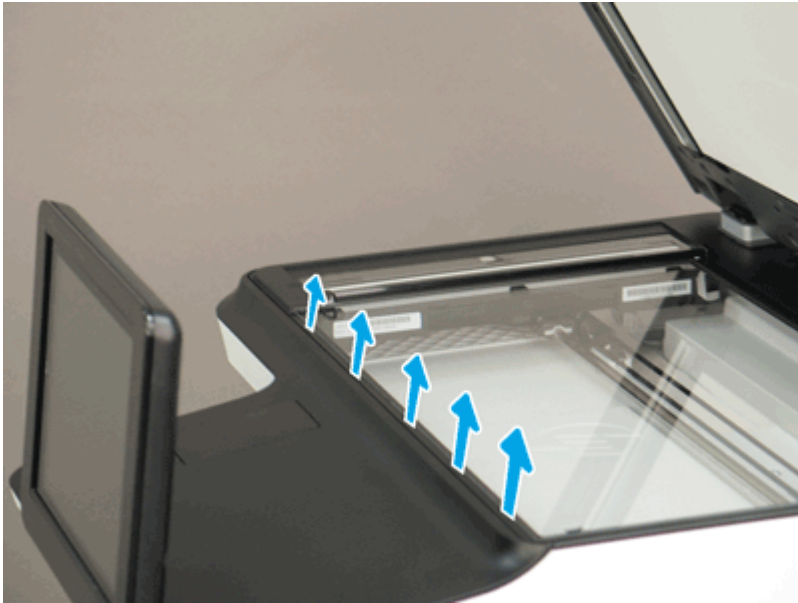
1. Tilt the control panel forward (callout 1), and then open the document feeder (callout 2).

Figure 5-2193 Tilt the control panel forward and open the document feeder



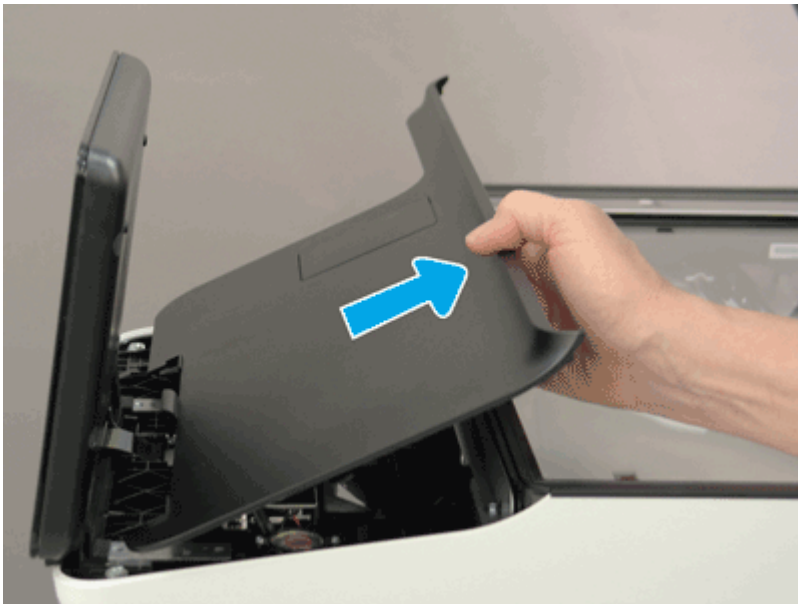
2. Beginning at the right side of the control-panel cover, carefully release five tabs along the top edge of the cover.

Figure 5-2194 Release five tabs



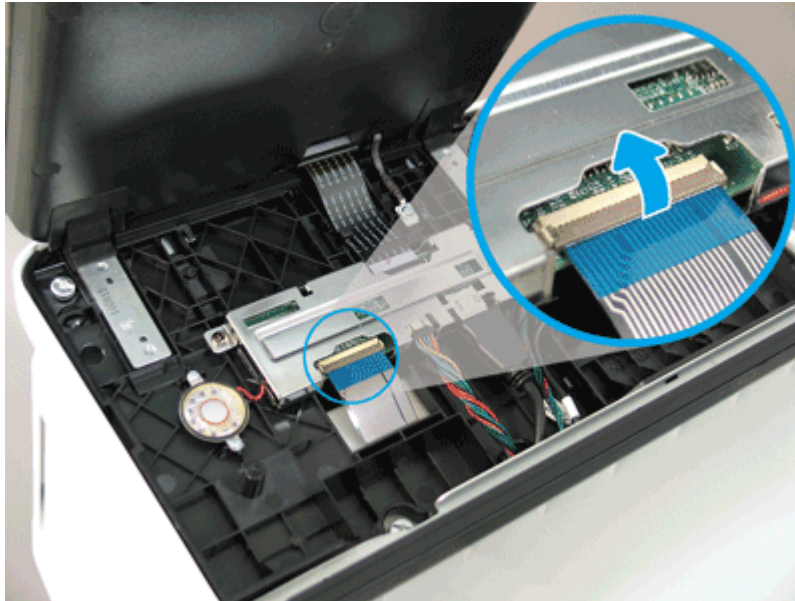
3. Continue to rotate the top edge of the cover away from the printer, and then remove the cover.

Figure 5-2195 Remove the cover



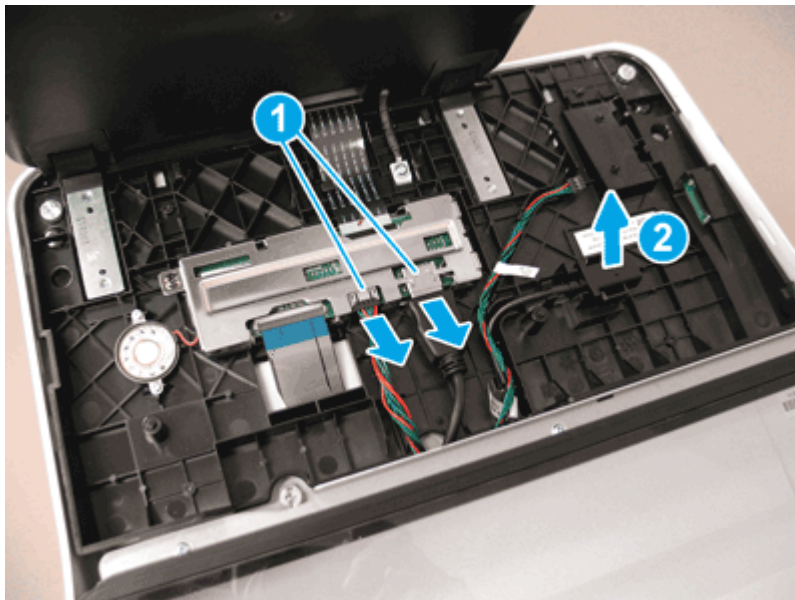
4. **Keyboard models only:** Lift up on the small, gray gate to release the keyboard flat cable.

Figure 5-2196 Disconnect the keyboard flat cable (keyboard models only)



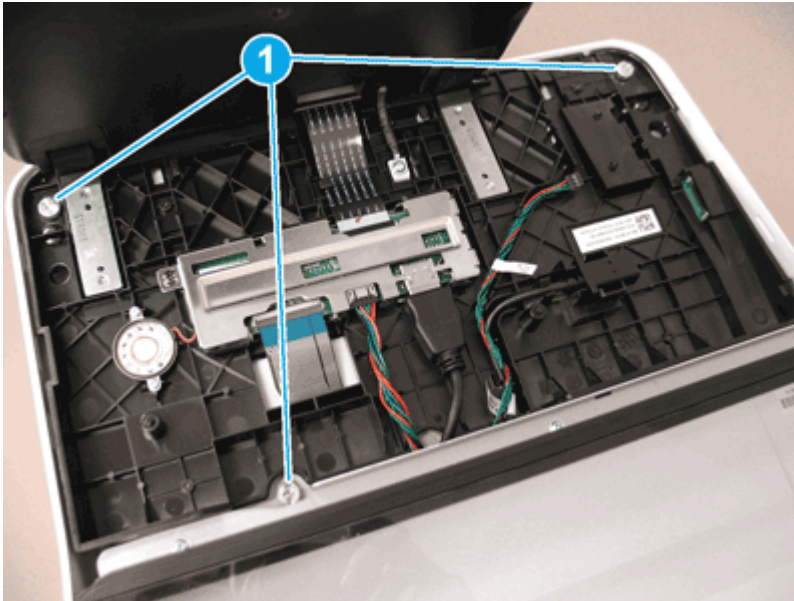
5. Disconnect two connectors (callout 1), and then release the USB cable (callout 2) from the holder.

Figure 5-2197 Disconnect connectors



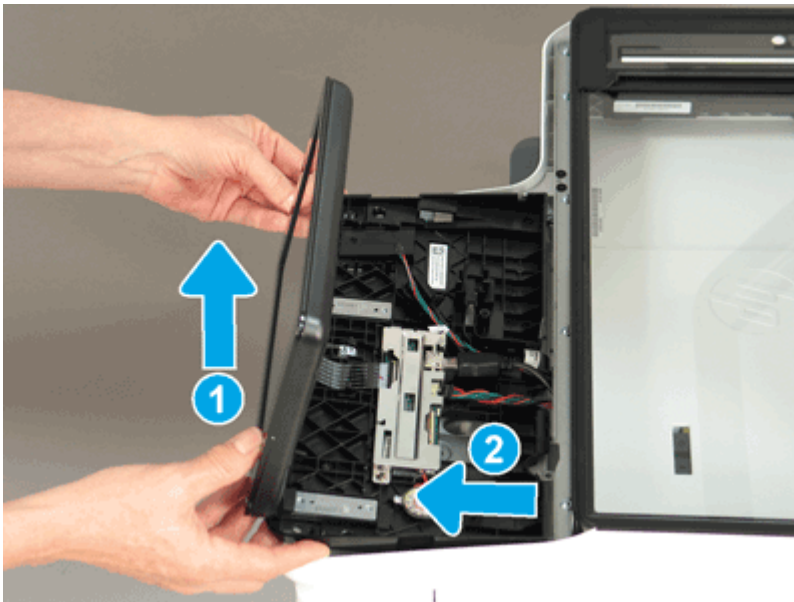
6. Remove three thumbscrews (callout 1).

Figure 5-2198 Remove three thumbscrews



7. Lift the front of the control panel off of the printer (callout 1), and then slide it toward the front of the printer (callout 2) to remove it.

Figure 5-2199 Remove the control panel

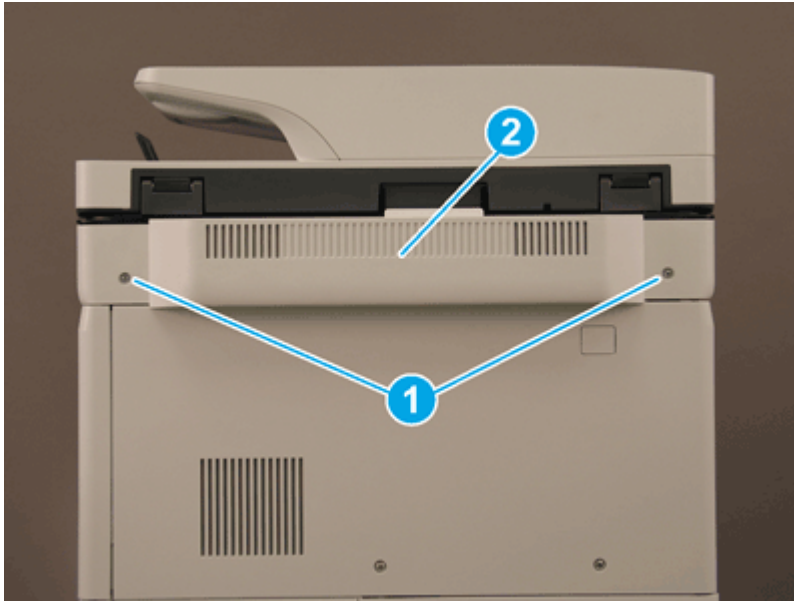


2. Remove the document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660)

Follow these steps to remove the document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660).

1. Remove two screws (callout 1), and then remove the scanner control board (SCB) cover (callout 2).

Figure 5-2200 Remove the SCB cover



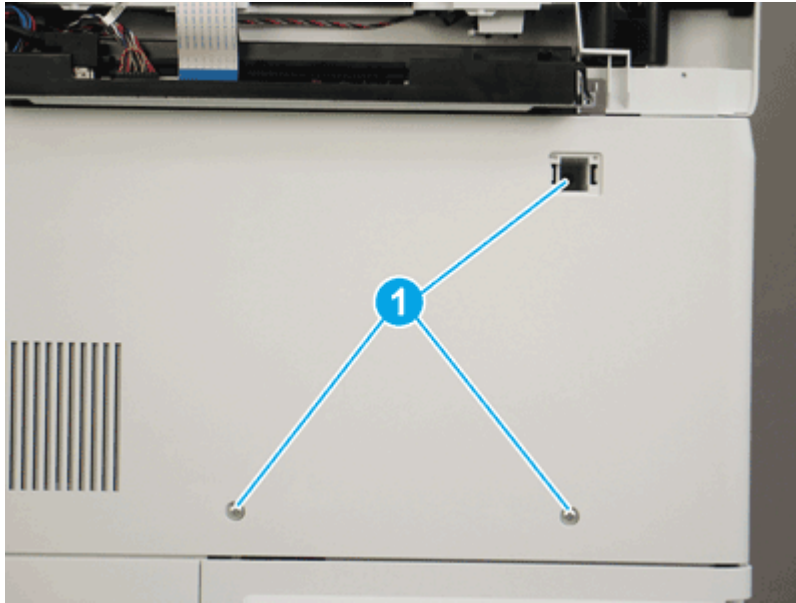
2. Flow M681z and Flow M682z models only: Do the following:
 - a. At the back of the printer, remove one small cover (callout 1).

Figure 5-2201 Remove the small cover



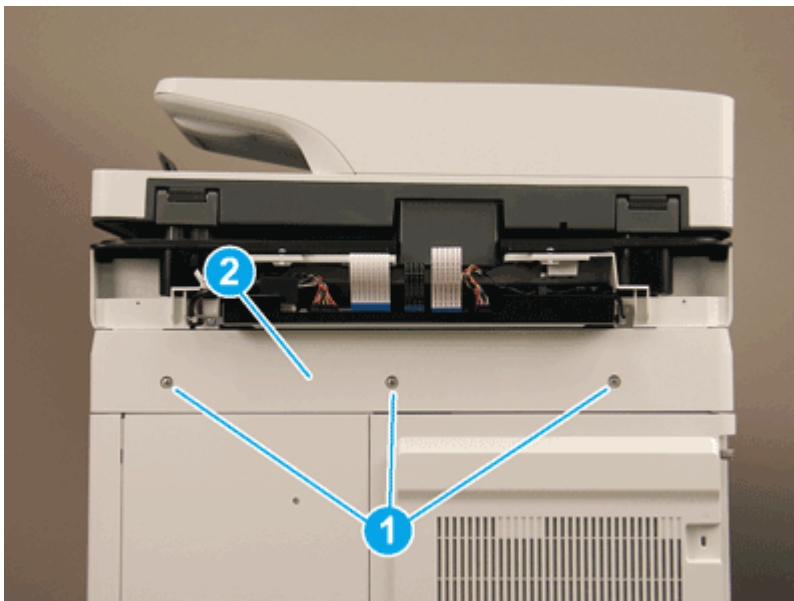
- b. **Flow M681z and Flow M682z only**: Remove three screws (callout 1), and then remove the stapler/stacker rear cover (callout 2).

Figure 5-2202 Remove the stapler/stacker rear cover



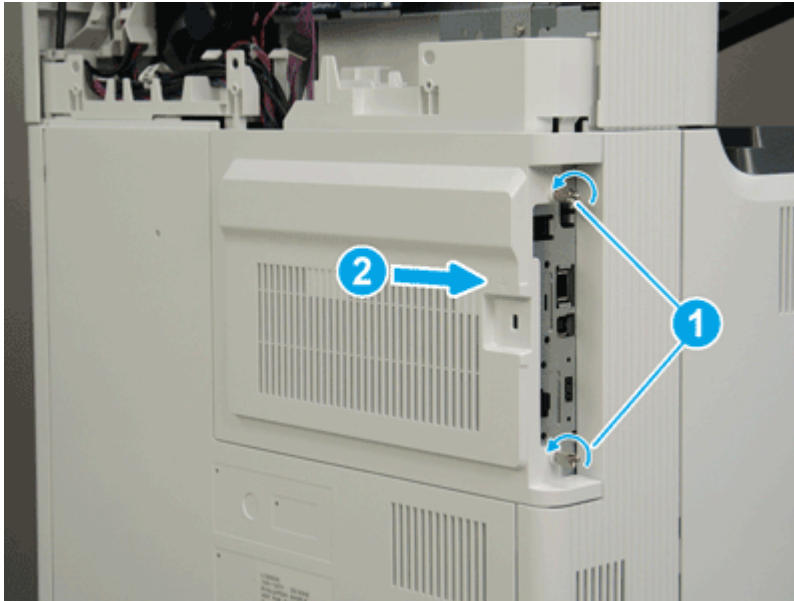
- 3. **M681dh, M681f, M682dh, and Flow M681f models only**: Remove three screws (callout 1), and then remove the upper rear cover (callout 2).

Figure 5-2203 Remove the upper rear cover



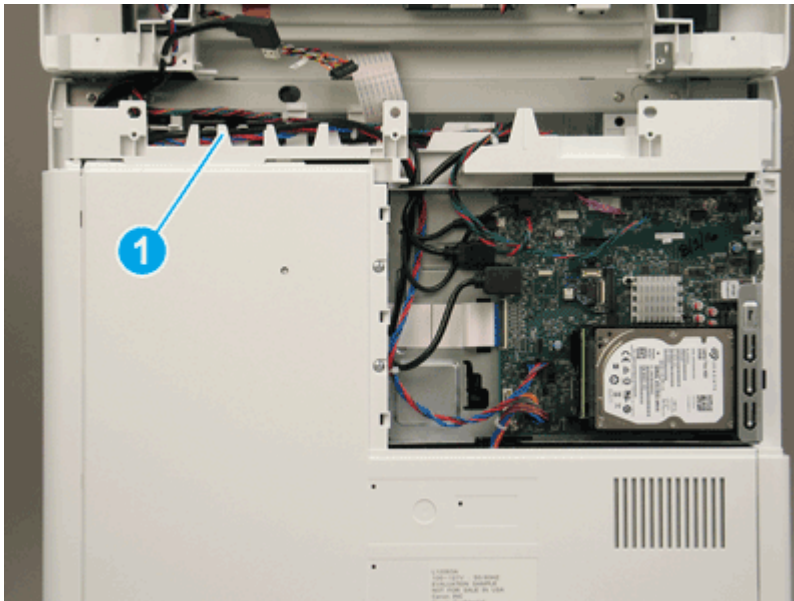
4. Loosen two thumbscrews (callout 1), and then slide the formatter cover away from the printer to remove it (callout 2).

Figure 5-2204 Remove the formatter cover



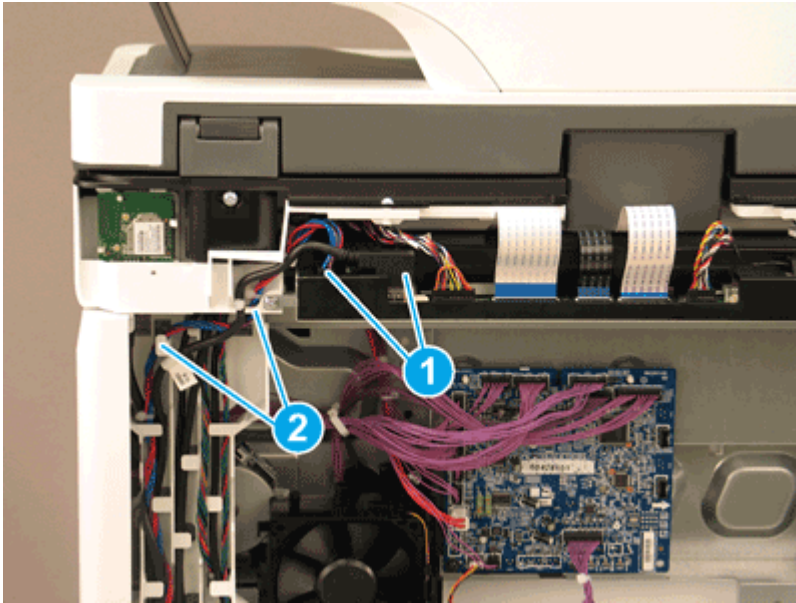
5. The remaining figures in this procedure show the Flow M682z model. While the cable routing (callout 1) on the M681dh, M681f, M682dh, and Flow M681f models is different, the removal procedures are the same for all models.

Figure 5-2205 Cable routing for M681dh, M681f, and Flow M681f



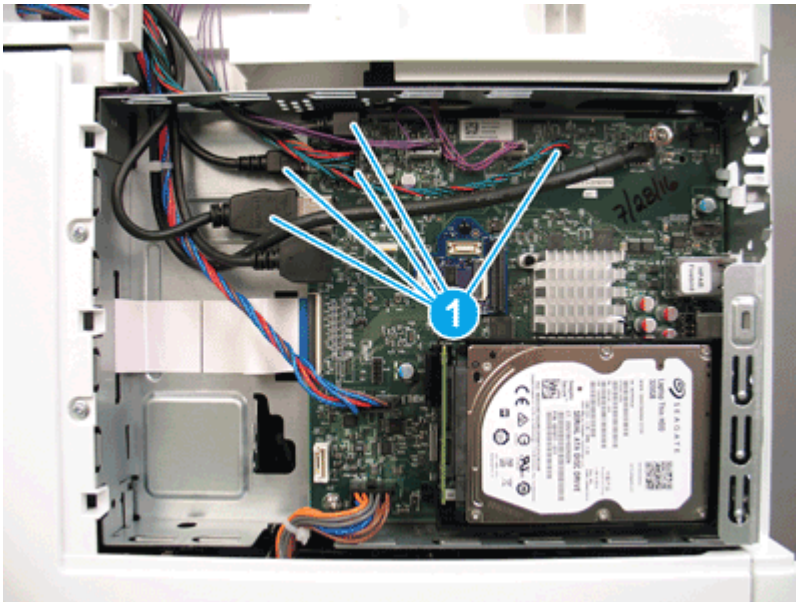
6. Disconnect two connectors (callout 1) on the SCB, and then release the cables from the guides (callout 2).

Figure 5-2206 Disconnect two connectors



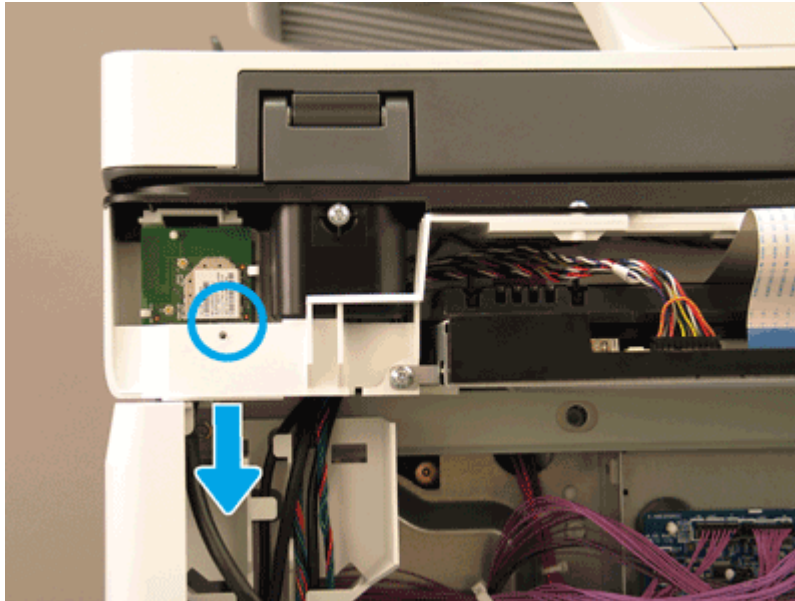
7. Disconnect five connectors on the formatter (callout 1).

Figure 5-2207 Disconnect five connectors



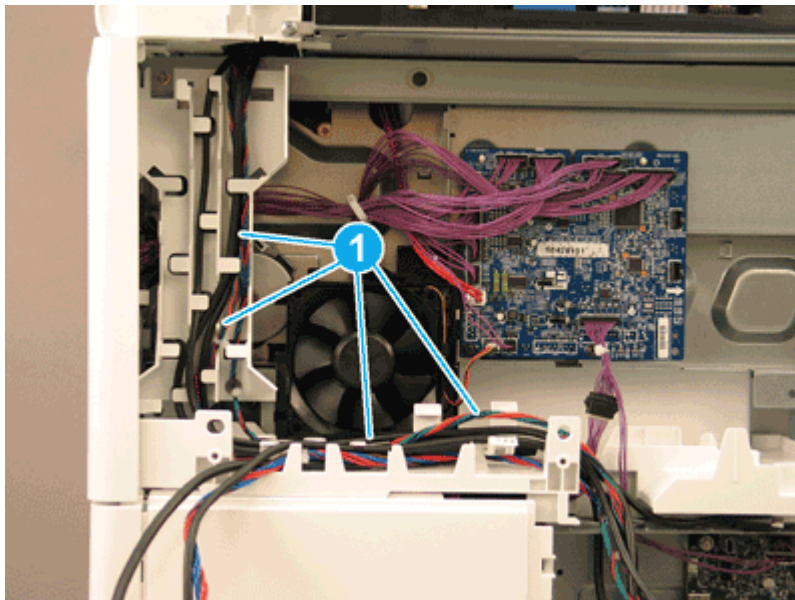
8. **Flow M682z only:** Gently pull down on the cable to disconnect the wireless connector.

Figure 5-2208 Disconnect the wireless connector



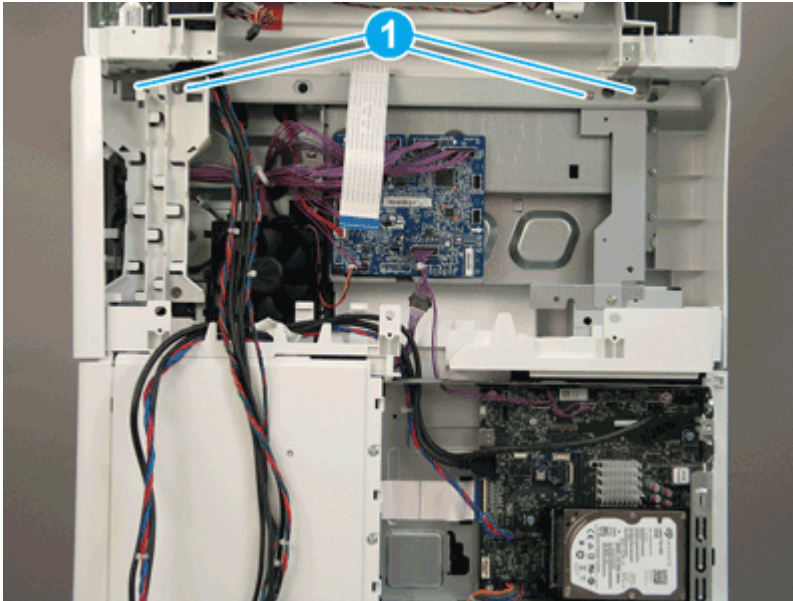
9. Release all of the cables from the cable guides (callout 1).

Figure 5-2209 Release the cables



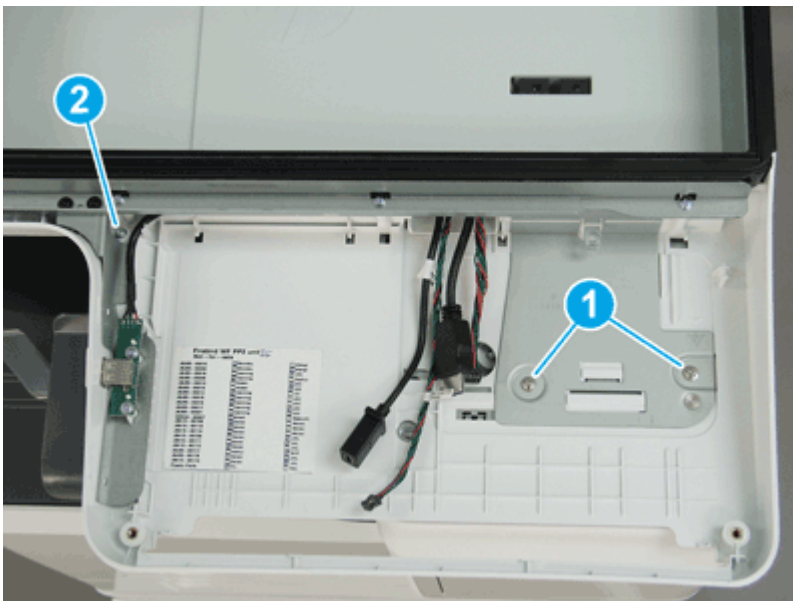
10. At the back of the printer, remove four screws (callout 1).

Figure 5-2210 Remove four screws



11. On the top of the image scanner assembly, at the location where the control panel was removed, remove two sheet metal screws (callout 1). **Flow M681z and Flow M682z only:** Remove one self-tapping screw (callout 2).

Figure 5-2211 Remove three screws



12. Lift the document feeder and image scanner off of the printer to remove them.

Figure 5-2212 Remove the document feeder and image scanner



3. Remove the stapler/stacker

Follow these steps to remove the stapler/stacker.

1. Open the front door.

Figure 5-2213 Open the front door



2. Open the stapler door.

Figure 5-2214 Open the stapler door



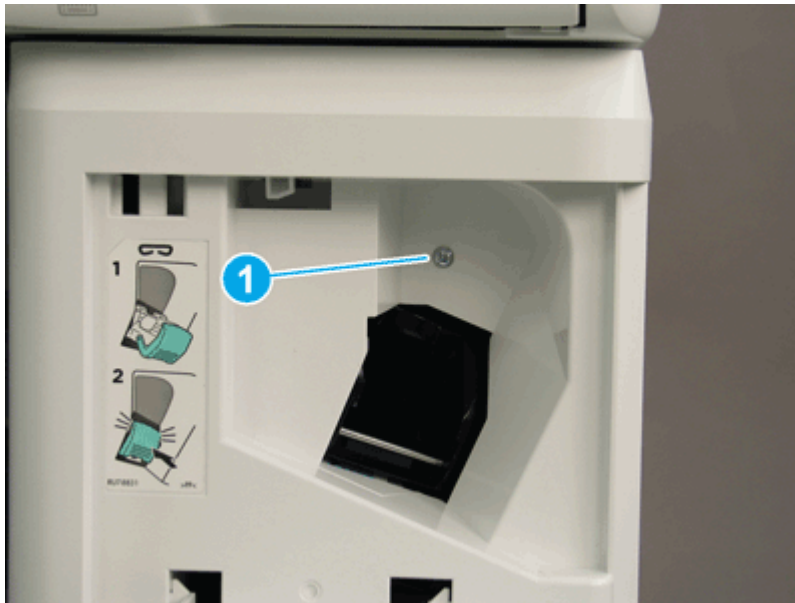
3. Release the latch, and then remove the staple cartridge.

Figure 5-2215 Remove the staple cartridge



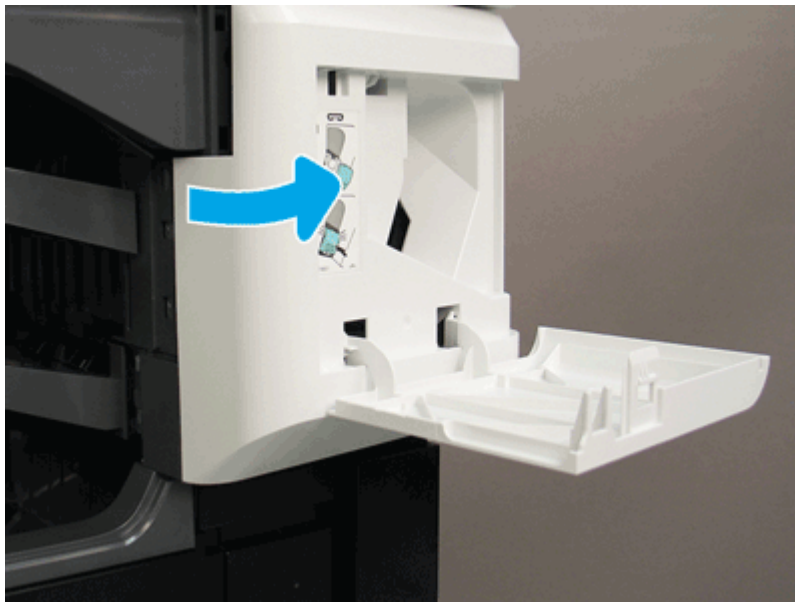
4. Remove one screw (callout 1).

Figure 5-2216 Remove one screw



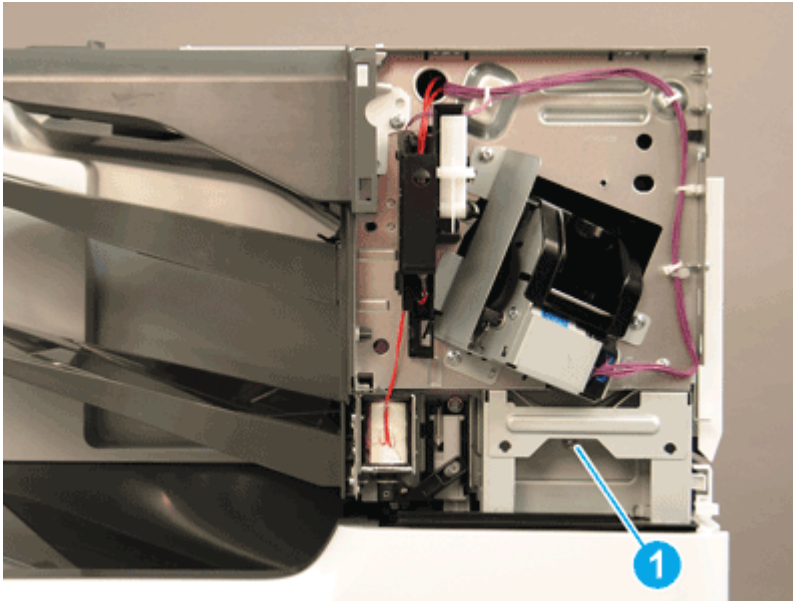
5. Rotate the stapler cover to the right to remove it.

Figure 5-2217 Remove the stapler cover



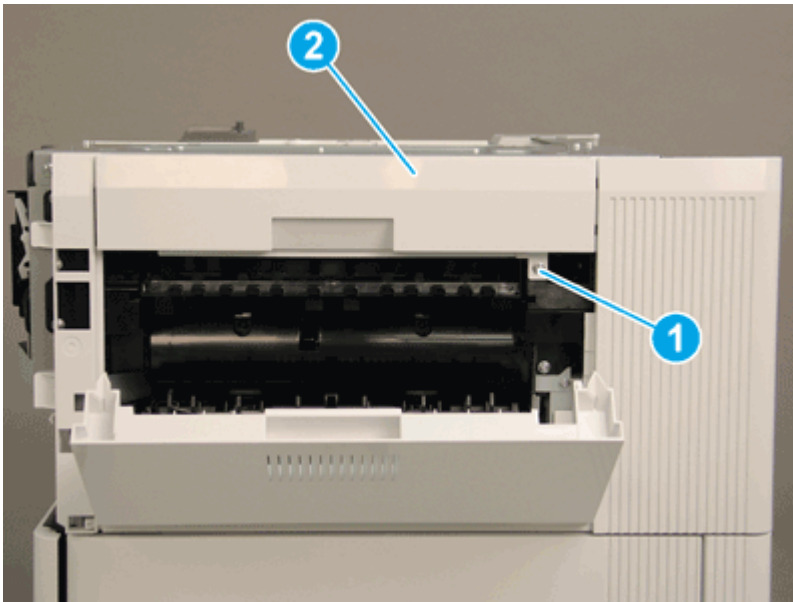
6. Remove one screw (callout 1).

Figure 5-2218 Remove one screw



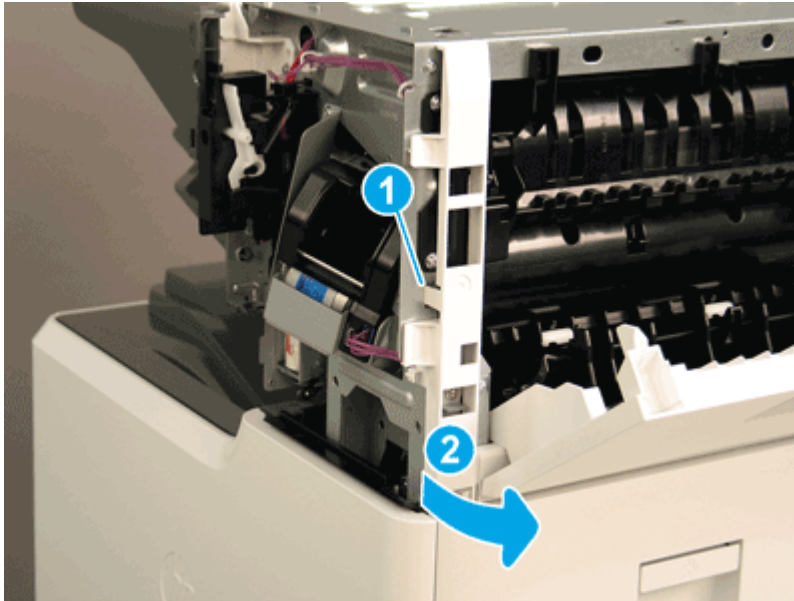
7. At the right side of the printer, remove one screw (callout 1), and then remove the stapler/stacker right upper cover (callout 2).

Figure 5-2219 Remove the stapler/stacker right upper cover



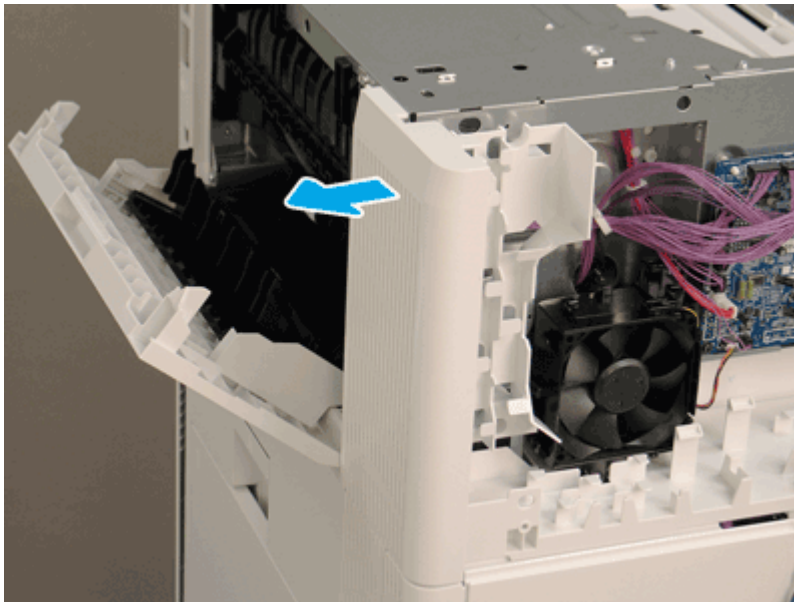
8. Release one tab (callout 1), and then rotate the stapler rear cover away from the printer (callout 2) to remove it.

Figure 5-2220 Remove the stapler rear cover



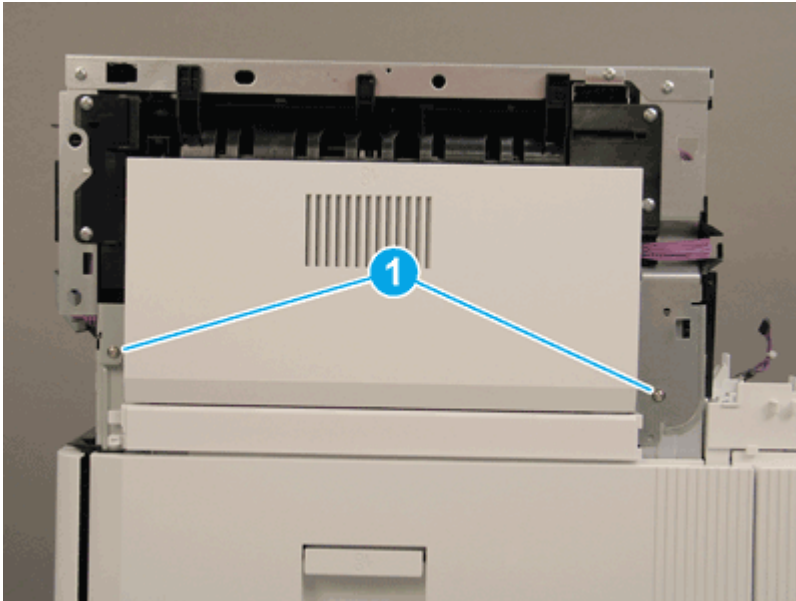
9. Pull the stapler/stacker rear corner cover away from the printer to remove it.

Figure 5-2221 Remove the stapler/stacker rear corner cover



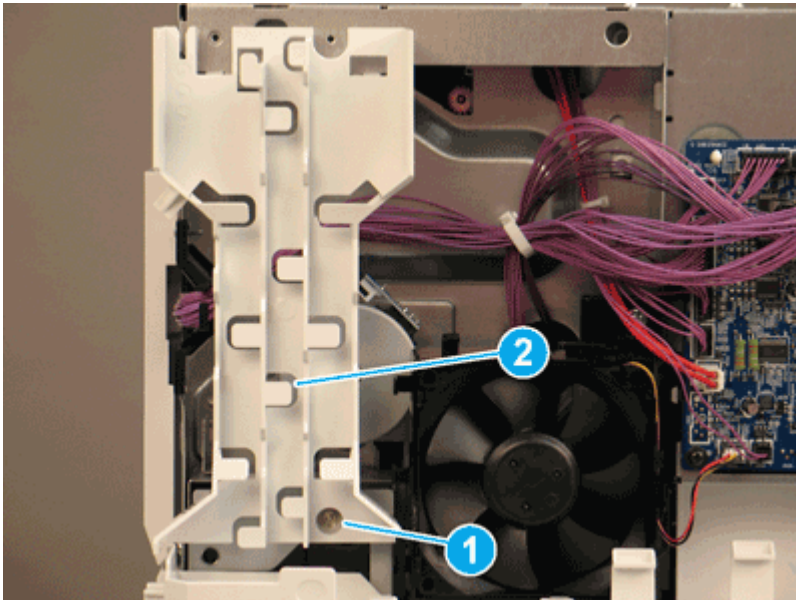
10. Remove two screws (callout 1).

Figure 5-2222 Remove two screws



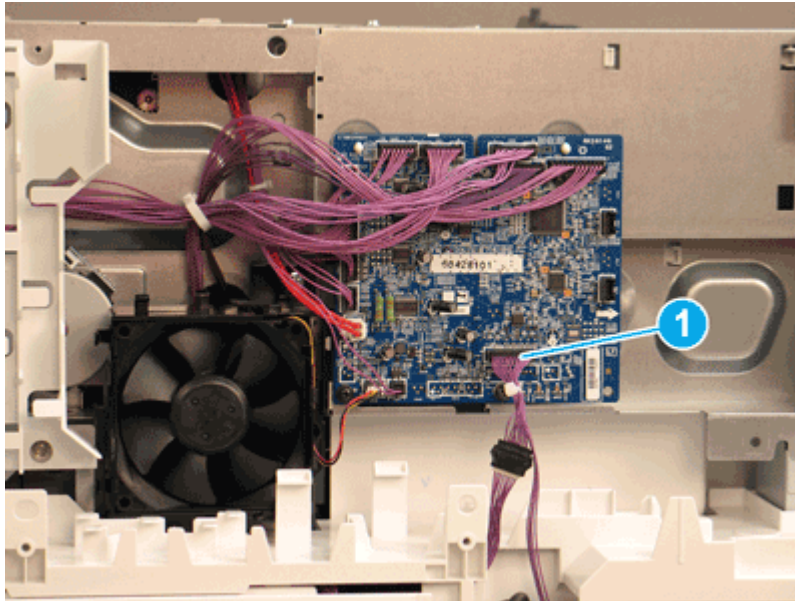
11. At the back of the printer, remove one screw (callout 1), and then remove the cable guide (callout 2).

Figure 5-2223 Remove the cable guide



12. Disconnect one connector on the stapler/stacker PCA (callout 1).

Figure 5-2224 Disconnect one connector



13. Remove two screws (callout 1).


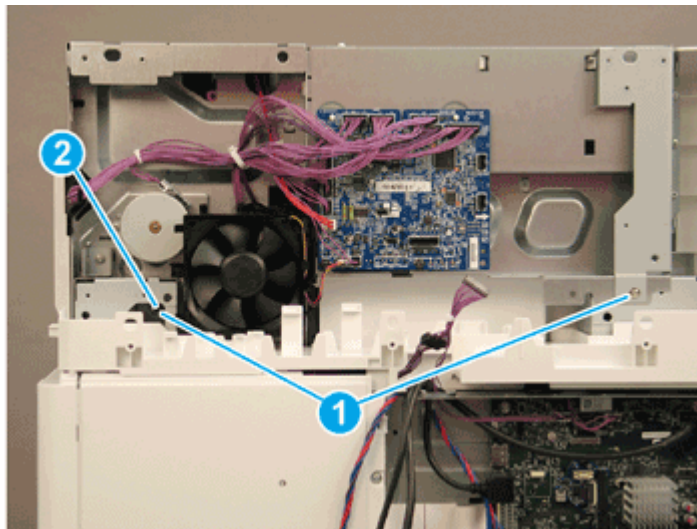
 **TIP:** The screw on the left (callout 2) is longer than the other screw. Make sure that this screw is installed in the correct location.

Figure 5-2225 Remove two screws



14. Lift the stapler/stacker away from the printer.


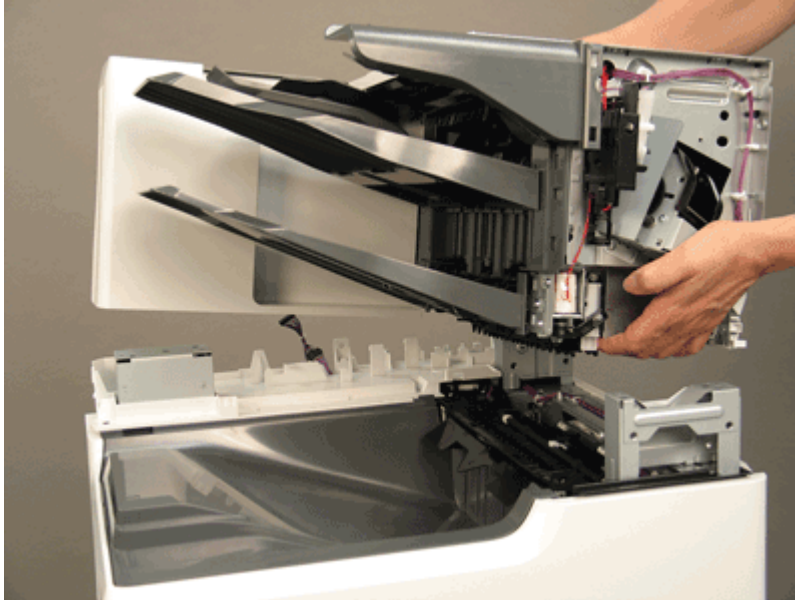
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2226 Remove the stapler/stacker



4. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

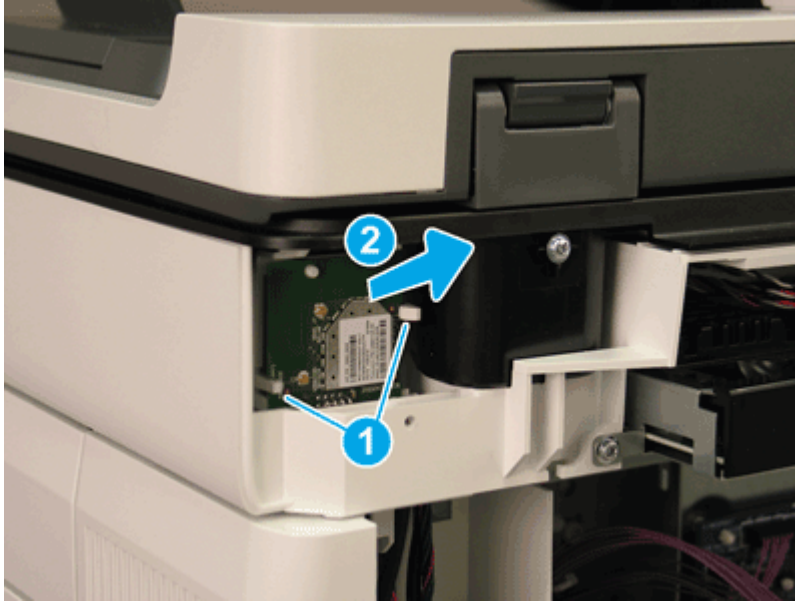
5. Reverse the removal steps to install the assembly

Also use the following **special installation instructions**.

Document feeder and image scanner

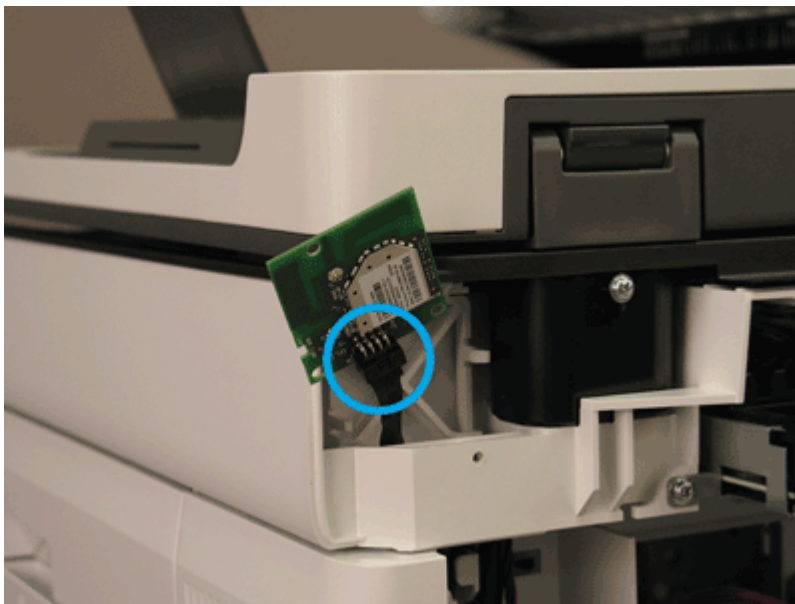
1. **Flow M682z only** : When reconnecting the wireless card cable, do the following:
 - a. Release two tabs (callout 1), and then remove the wireless card (callout 2).

Figure 5-2227 Remove the wireless card



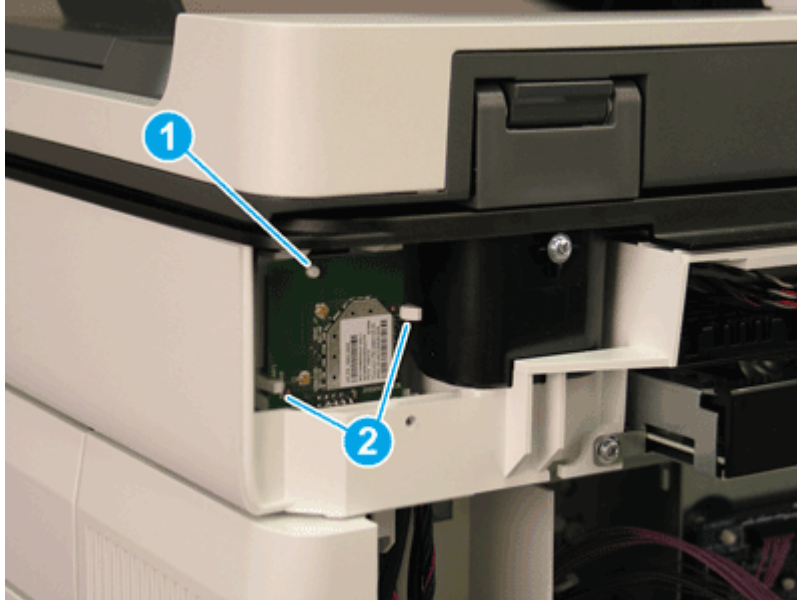
- b. Connect the cable to the wireless card (callout 1).

Figure 5-2228 Connect the wireless card connector



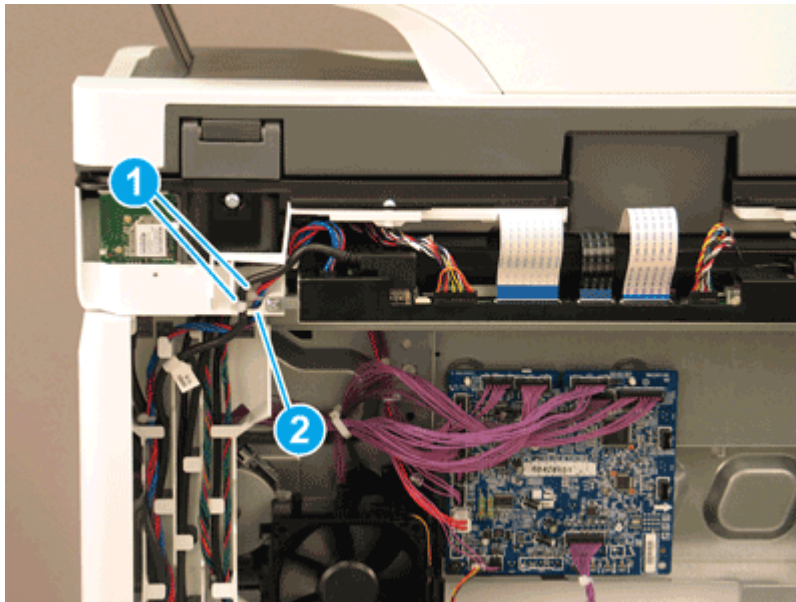
- c. Reinstall the wireless card. Make sure that the hole in the card is positioned over the peg (callout 1), and that the card is under the two tabs (callout 2).

Figure 5-2229 Reinstall the wireless card



2. When reinstalling the SCB cables, make sure that the wire retainers (callout 1) on the cables are positioned above the plastic guide (callout 2).

Figure 5-2230 Install the SCB cables



Removal and replacement: Rear cover (3-bin stapler/stacker)

Learn how to remove and replace the rear cover on the 3-bin stapler/stacker.

Mean time to repair: 5 minutes

Service level: Basic



IMPORTANT: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.

⚠ WARNING! To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.

- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-166 Part Information

Part number	Part description
RC4-7406-000CN	Cover, rear front

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

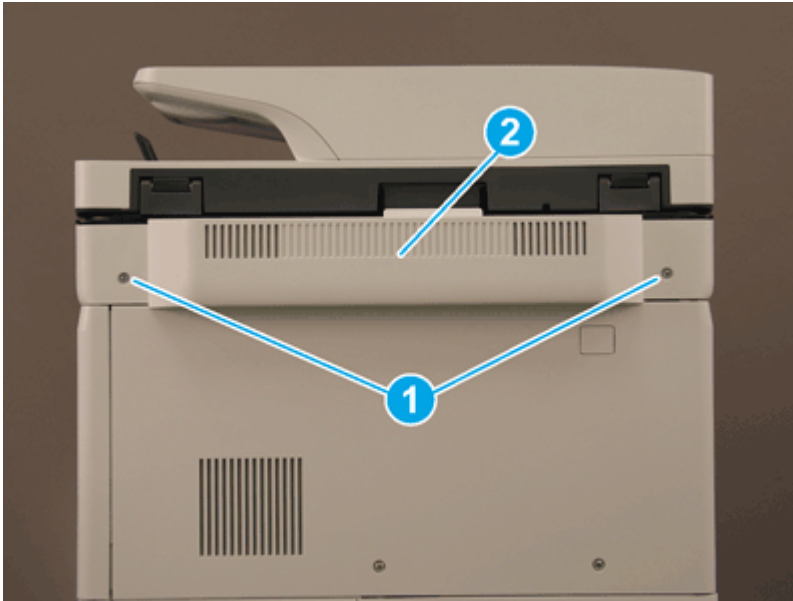
No post service test is available for this assembly.

1. Remove the rear cover (3-bin stapler/stacker)

Follow these steps to remove the rear cover (3-bin stapler/stacker).

1. At the back of the printer, remove two screws (callout 1), and then remove the image scanner rear cover (callout 2).

Figure 5-2231 Remove two screws



2. Remove one screw cover (callout 1).

Figure 5-2232 Remove one screw cover

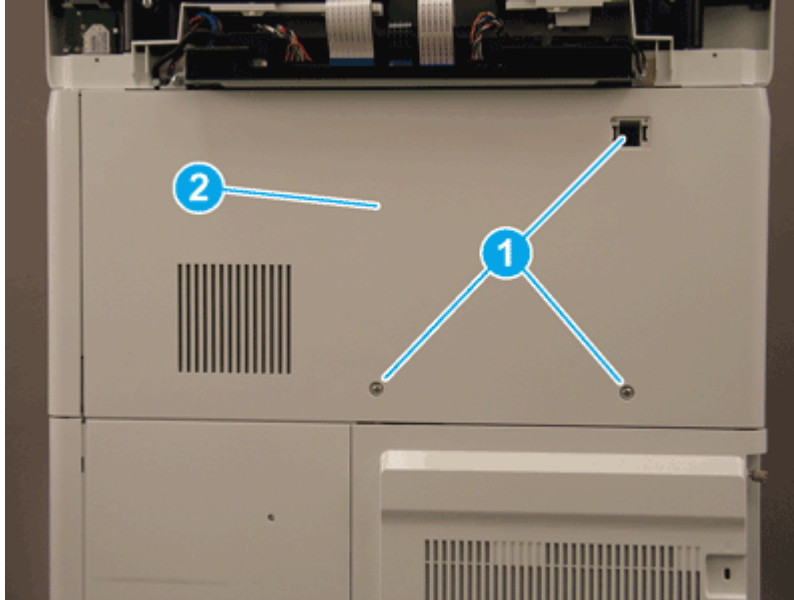


3. Remove three screws (callout 1), and then remove the rear cover (callout 2).



TIP: Reverse the removal steps to install the assembly.

Figure 5-2233 Remove three screws and the rear cover



2. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.




NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Right door (3-bin stapler/stacker)

Learn how to remove and replace the right door on the 3-bin stapler/stacker.

Mean time to repair: 5 minutes

Service level: Basic

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.
- ⚠ **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.
- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-167 Part information

Part number	Part description
RM2-6807-000CN	Right door assembly

Required tools

- No special tools are needed to remove or install this assembly.

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

No post service test is available for this assembly.

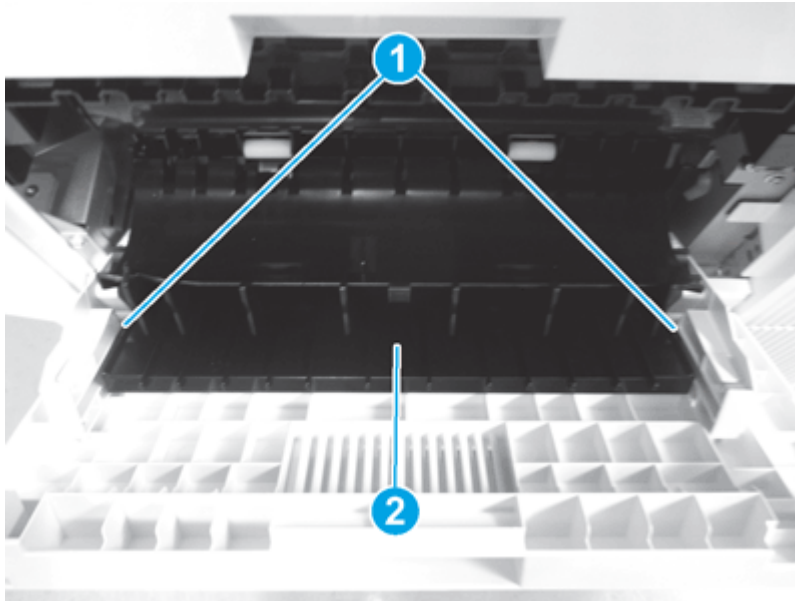
1. Remove the right door (3-bin stapler/stacker)

Follow these steps to remove the right door (3-bin stapler/stacker).

1. Open the right door.

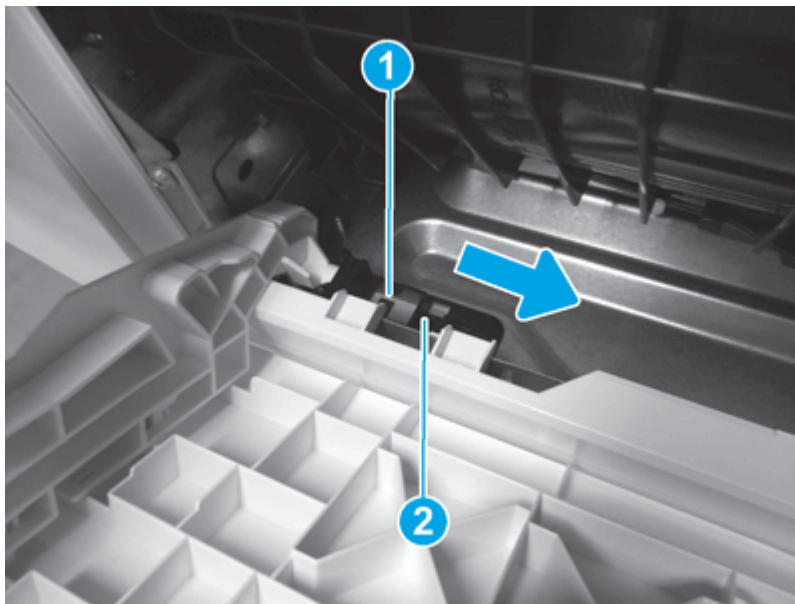
2. Release two shafts (callout 1), and then raise the feed guide (callout 2).

Figure 5-2234 Raise the feed guide



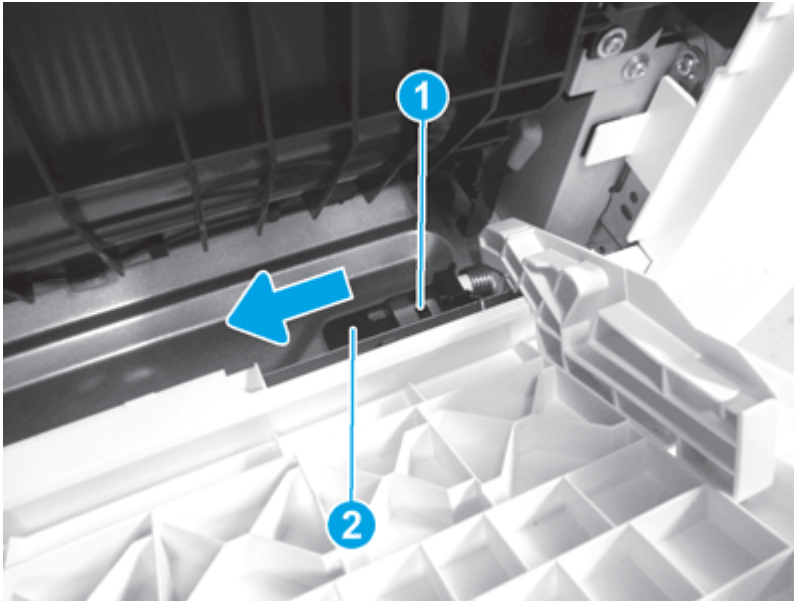
3. On the left side of the door, release one tab (callout 1), and then slide the bracket (callout 2) to the right to remove it.

Figure 5-2235 Remove the left bracket




4. On the right side of the door, release one tab (callout 1), and then slide the bracket (callout 2) to the left to remove it.

Figure 5-2236 Remove the right bracket



5. Release the left hinge pin (callout 1), and then slide the door to the left to release the right hinge pin (callout 2).

 **NOTE:** The spring on the right hinge pin (callout 2) is not captive. Do not lose the spring.


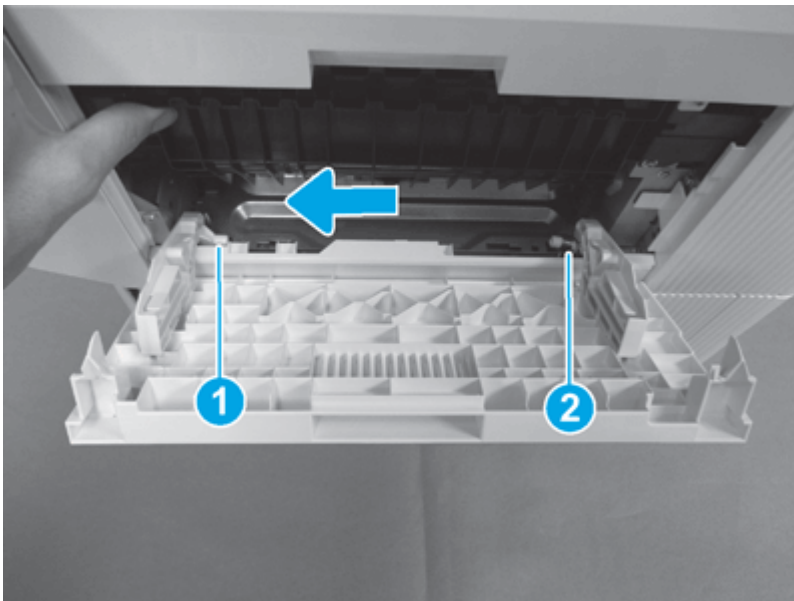
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2237 Remove the right door



2. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Right upper cover (3-bin stapler/stacker)

Learn how to remove and replace the right upper cover on the 3-bin stapler/stacker.

Mean time to repair: 5 minutes

Service level: Basic



IMPORTANT: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.



WARNING! To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.

- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-168 Part information

Part number	Part description
RC4-7409-000CN	Cover, right upper

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

No post service test is available for this assembly.

1. Remove the right upper cover (3-bin stapler/stacker)

Follow these steps to remove the right upper cover (3-bin stapler/stacker).

1. Open the right door.
2. Remove one screw (callout 1), release one tab (callout 2), and then remove the right upper cover (callout 3).


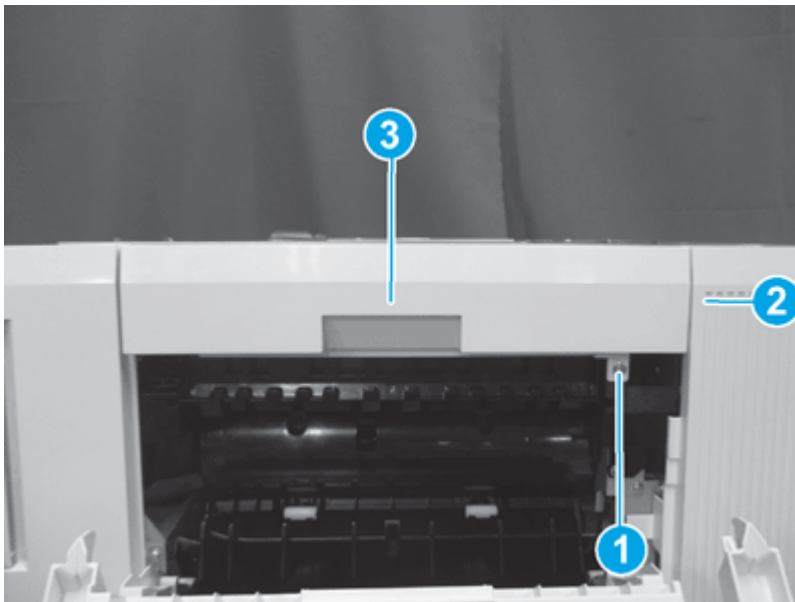
 **TIP:** Reverse the removal steps to install the assembly.


Figure 5-2238 Remove the right upper cover



2. Unpack the replacement assembly



Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.


 **NOTE:** HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>


2. Unpack the replacement part from the packaging.

 **CAUTION:**  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

 **IMPORTANT:** Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

 **NOTE:** If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

 **NOTE:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.


Removal and replacement: Staple door (3-bin stapler/stacker)

Learn how to remove and replace the stapler door.

 [View a video of how to remove and replace the stapler door.](#)


Mean time to repair: 5 minutes

Service level: Basic

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Disconnect the power cable.

 **WARNING!** To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-169 Part information

Part number	Part description
RC4-9575-000CN	Stapler door

Required tools

- No special tools are needed to remove or install this assembly.

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

No post service test is available for this assembly.

1. Remove the stapler door (3-bin stapler/stacker)

Follow these steps to remove the stapler door (3-bin stapler/stacker).

1. Open the stapler door.

Figure 5-2239 Open the stapler door



2. Press inward to release two hinge pins (callout 1), and then pull the stapler door away from the printer (callout 2) to remove it.


 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2240 Remove the stapler door



2. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Staple cover (3-bin stapler/stacker)

Learn how to remove and replace the stapler cover.



[View a video of how to remove and replace the stapler cover.](#)

Mean time to repair: 5 minutes

Service level: Basic



IMPORTANT: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Disconnect the power cable.

⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-170 Part information

Part number	Part description
RC4-7405-000CN	Stapler cover

Required tools

- No special tools are needed to remove or install this assembly.

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

No post service test is available for this assembly.

1. Remove the staple cover (3-bin stapler/stacker)

Follow these steps to remove the staple cover (3-bin stapler/stacker).

1. Open the front door.

Figure 5-2241 Open the front door



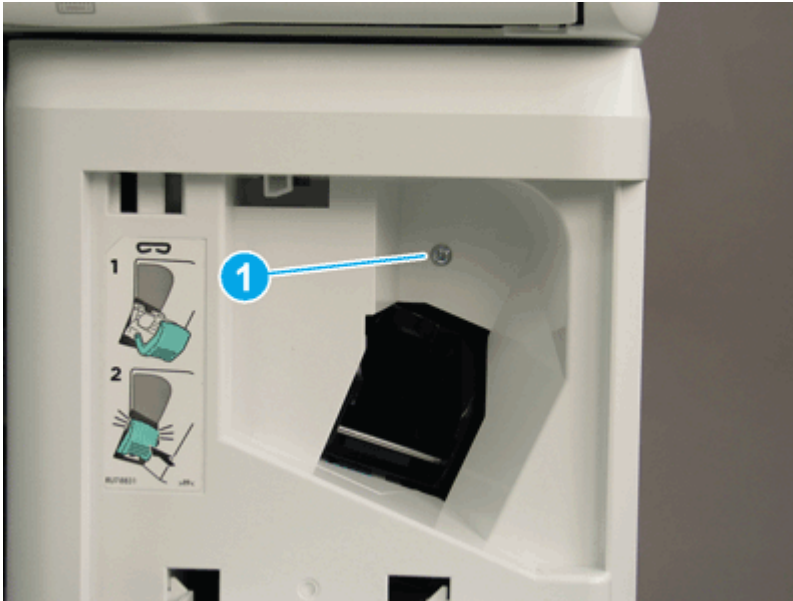
2. Open the stapler door.

Figure 5-2242 Open the stapler door



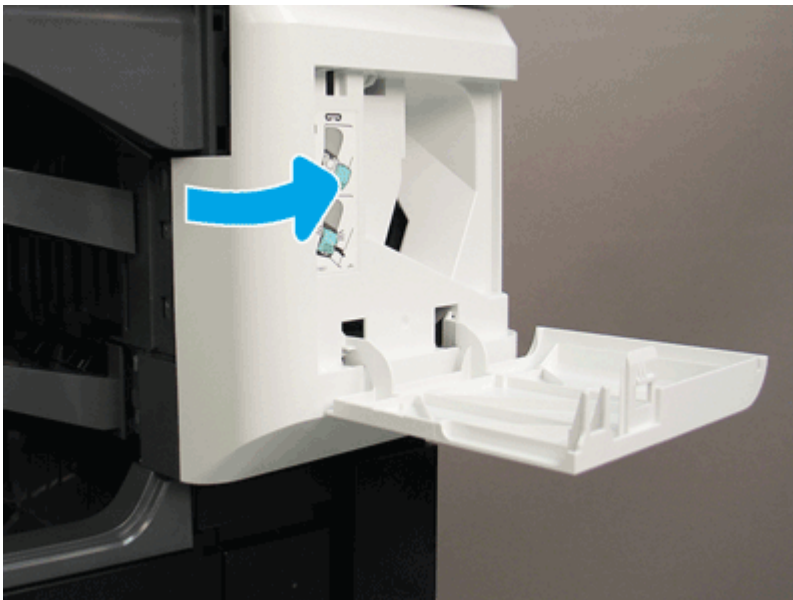
3. Remove one screw (callout 1).

Figure 5-2243 Remove one screw



4. Release one tab on the left side of the cover, and then rotate it away from the printer to remove it.

Figure 5-2244 Remove the stapler cover



2. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.





NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>


2. Unpack the replacement part from the packaging.

CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT:  Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE:  If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE:  When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

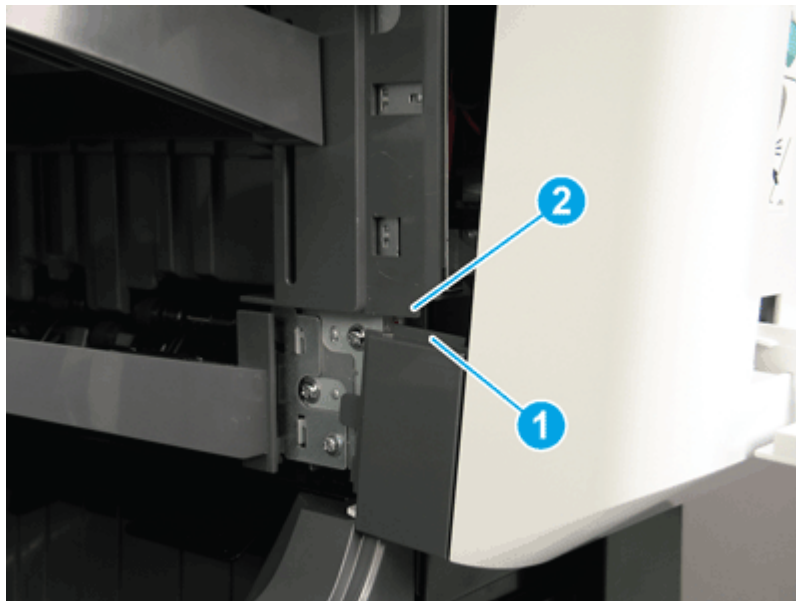
3. Reverse the removal steps to install the assembly


Also use the following **special installation instructions**.

Stapler cover

- When reinstalling the stapler cover, position the tab on the cover (callout 1) behind the edge of the cover (callout 2) on the printer.

Figure 5-2245 Position the tab



NOTE:  Continue to reverse the removal steps to finish installing the assembly.

Removal and replacement: Stapler

Learn how to remove and replace the stapler.



[View a video of how to remove and replace the stapler.](#)

Mean time to repair: 5 minutes

Service level: Basic



IMPORTANT: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Disconnect the power cable.

⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cable before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-171 Part information

Part number	Part description
RM2-1193-000CN	Stapler assembly

Required tools

- No special tools are needed to remove or install this assembly.

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Print a multi-page document and select the stapling option. Verify that the document is correctly stapled.

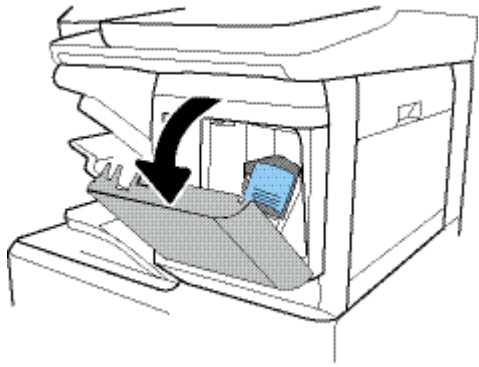
1. Remove the staple cartridge

Follow these steps to remove the staple cartridge.

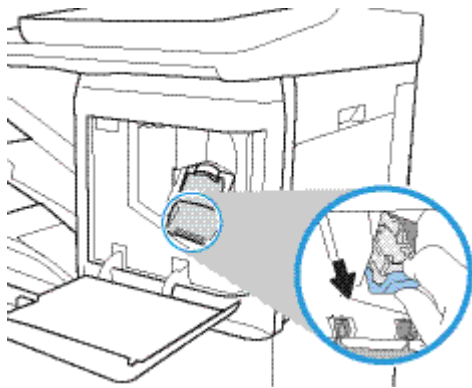
1. Open the staple-cartridge door.



NOTE: Opening the staple-cartridge door disables the stapler.



2. Grasp the colored tab on the staple cartridge, and then pull the staple cartridge straight out.



2. Remove the staple cover (3-bin stapler/stacker)

Follow these steps to remove the staple cover (3-bin stapler/stacker).

1. Open the front door.

Figure 5-2246 Open the front door



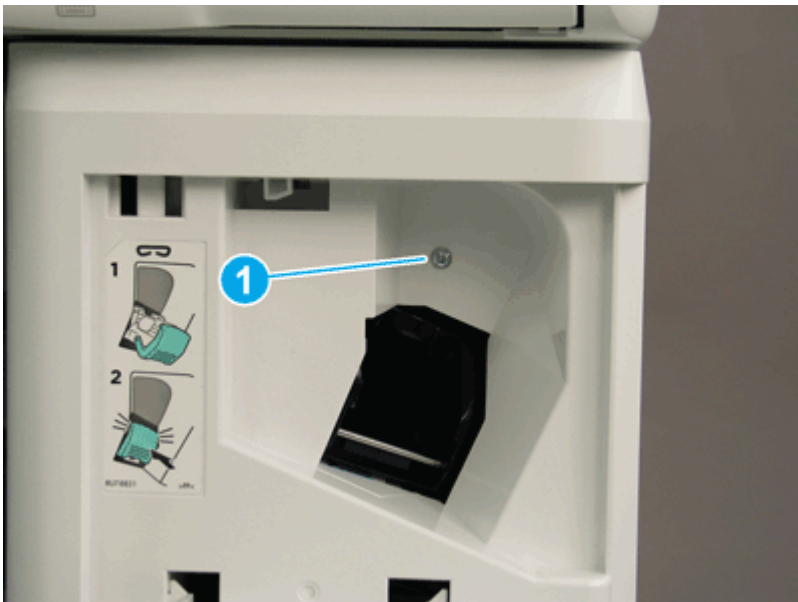
2. Open the stapler door.

Figure 5-2247 Open the stapler door



3. Remove one screw (callout 1).

Figure 5-2248 Remove one screw



4. Release one tab on the left side of the cover, and then rotate it away from the printer to remove it.

Figure 5-2249 Remove the stapler cover



3. Remove the stapler

Follow these steps to remove the stapler.

- Disconnect two connectors (callout 1), remove three screws (callout 2), and then lift the stapler away from the printer to remove it.


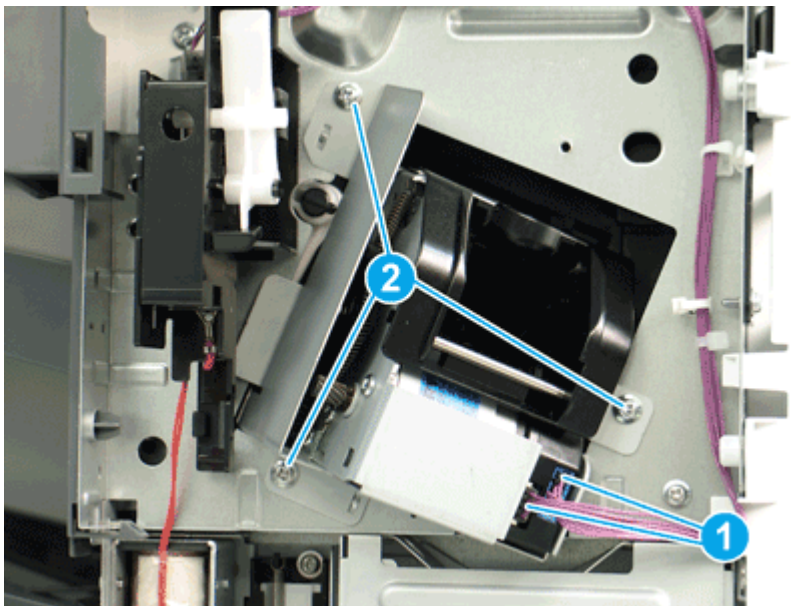
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2250 Remove the stapler



4. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

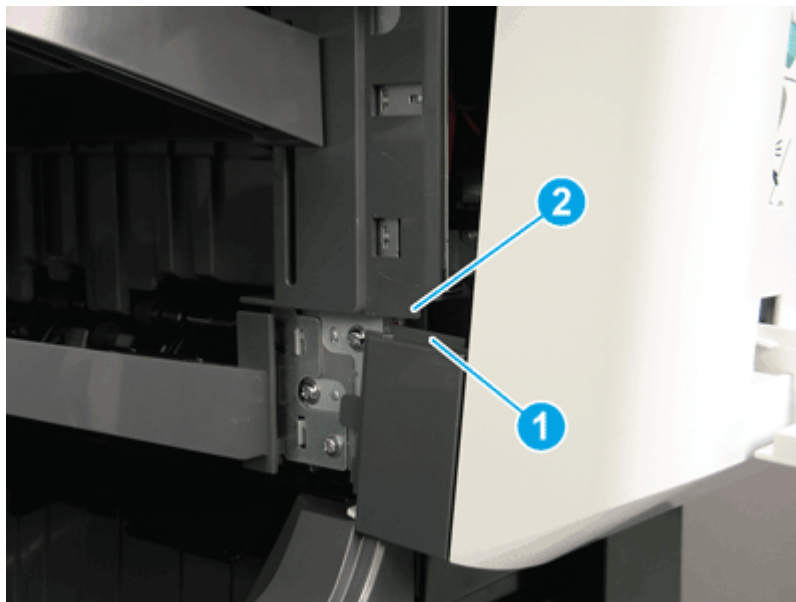
5. Reverse the removal steps to install the assembly

Also use the following **special installation instructions**.

Stapler cover

- When reinstalling the stapler cover, position the tab on the cover (callout 1) behind the edge of the cover (callout 2) on the printer.

Figure 5-2251 Position the tab




 **NOTE:** Continue to reverse the removal steps to finish installing the assembly.

Removal and replacement: Right front cover (3-bin stapler/stacker)

learn how to remove and replace the right front cover on the 3-bin stapler/stacker.

Mean time to repair: 5 minutes

Service level: Basic

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.
- ⚠ **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.
- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-172 Part information

Part number	Part description
RC4-9586-000CN	Cover, right front

Required tools

- No special tools are needed to remove or install this assembly.

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

No post service test is available for this assembly.

1. Remove the staple cover (3-bin stapler/stacker)

Follow these steps to remove the staple cover (3-bin stapler/stacker).

1. Open the front door.

Figure 5-2252 Open the front door



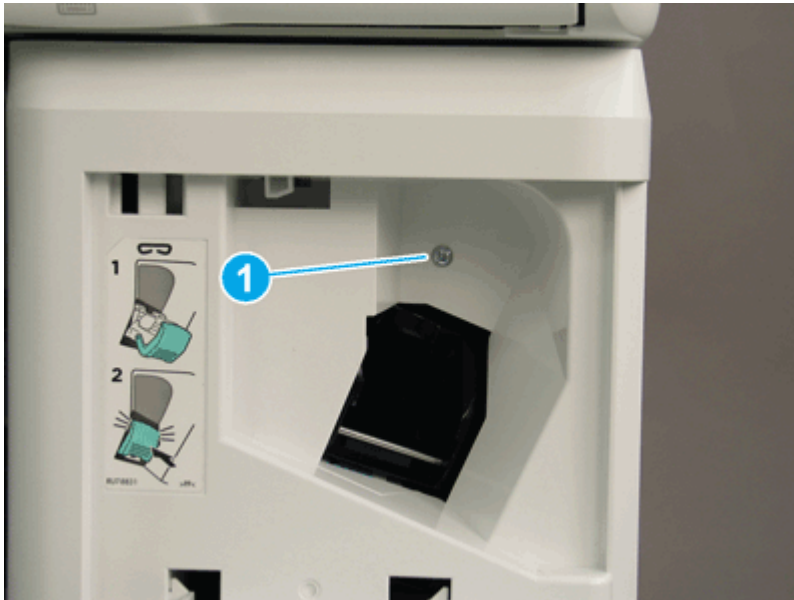
2. Open the stapler door.

Figure 5-2253 Open the stapler door



3. Remove one screw (callout 1).

Figure 5-2254 Remove one screw



4. Release one tab on the left side of the cover, and then rotate it away from the printer to remove it.

Figure 5-2255 Remove the stapler cover



2. Remove the right front cover (3-bin stapler/stacker)

Follow these steps to remove the right front cover (3-bin stapler/stacker).

- On the back of the staple cover, remove one screw (callout 1), and then remove the right front cover (callout 2).


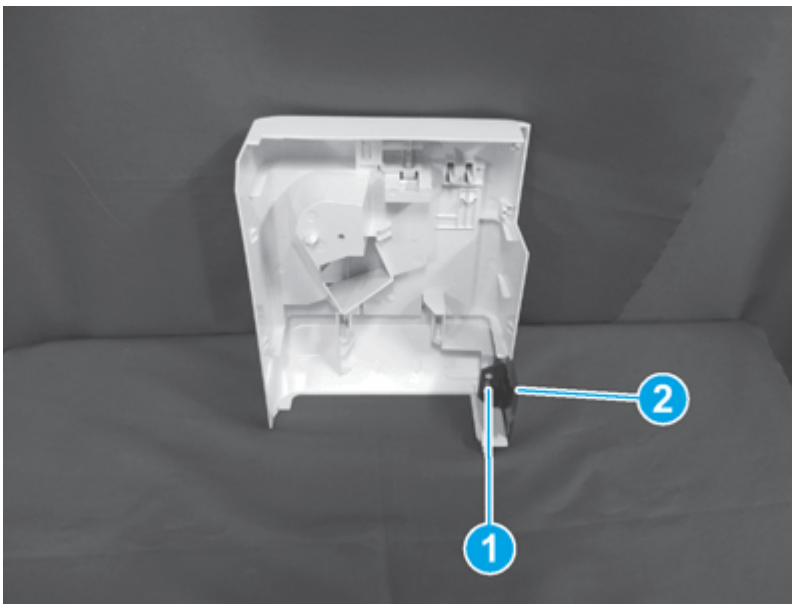
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2256 Remove the right front cover



3. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

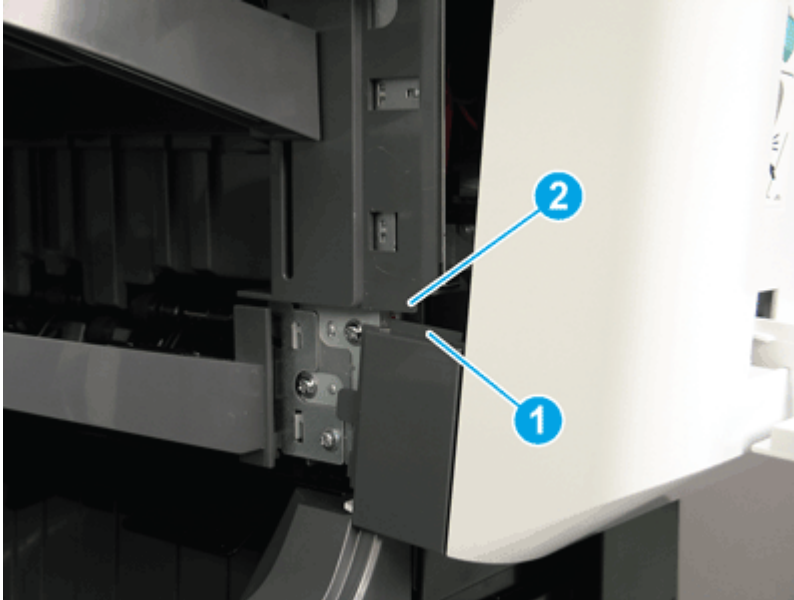
4. Reverse the removal steps to install the assembly

Also use the following **special installation instructions**.

Stapler cover

- When reinstalling the stapler cover, position the tab on the cover (callout 1) behind the edge of the cover (callout 2) on the printer.

Figure 5-2257 Position the tab




 **NOTE:** Continue to reverse the removal steps to finish installing the assembly.

Removal and replacement: Rear inner cover (3-bin stapler/stacker)

Learn how to remove and replace the rear inner cover on the 3-bin stapler/stacker.

Mean time to repair: 5 minutes

Service level: Basic

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.
- ⚠ **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.
- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-173 Part information

Part number	part description
RC4-7407-000CN	Cover, rear inner

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

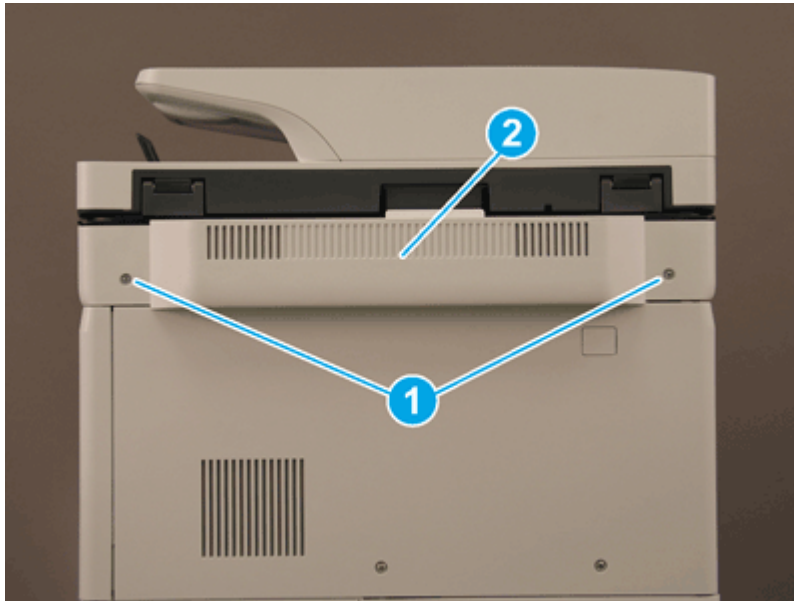
No post service test is available for this assembly.

1. Remove the rear cover (3-bin stapler/stacker)

Follow these steps to remove the rear cover (3-bin stapler/stacker).

1. At the back of the printer, remove two screws (callout 1), and then remove the image scanner rear cover (callout 2).

Figure 5-2258 Remove two screws



2. Remove one screw cover (callout 1).

Figure 5-2259 Remove one screw cover



3. Remove three screws (callout 1), and then remove the rear cover (callout 2).


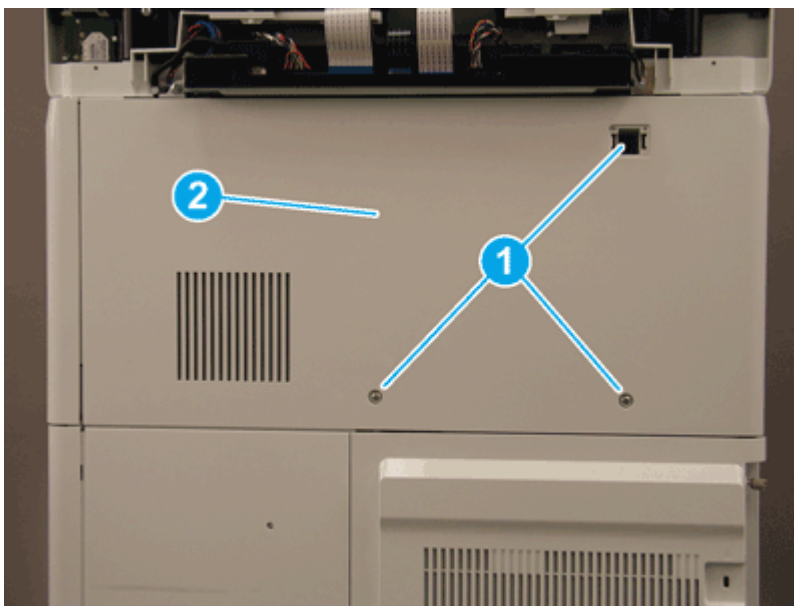
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2260 Remove three screws and the rear cover



2. Remove the rear inner cover (3-bin stapler/stacker)

Follow these steps to remove the rear inner cover (3-bin stapler/stacker).

- Remove one screw (callout 1), release three tabs (callout 2), and then remove the rear inner cover (callout 3).


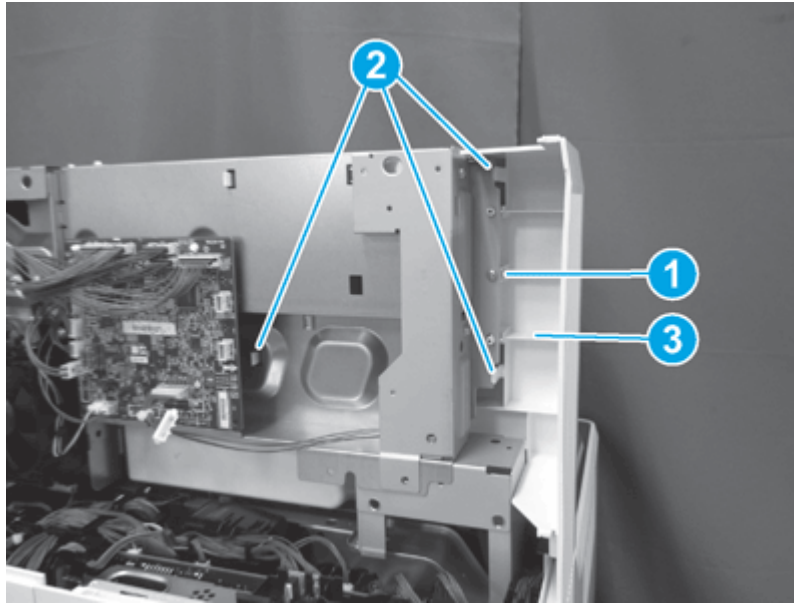
 **TIP:** Reverse the removal steps to install the assembly.


Figure 5-2261 Remove the rear inner cover



3. Unpack the replacement assembly



Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.


 **NOTE:** HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.

 **CAUTION:**  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

 **IMPORTANT:** Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

 **NOTE:** If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Rear corner cover (3-bin stapler/stacker)

Learn how to remove and replace the right corner cover on the 3-bin stapler/stacker.

Mean time to repair: 5 minutes

Service level: Basic

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.

⚠ WARNING! To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.

- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-174 Part information

Part number	Part description
RC4-7408-000CN	Cover, rear corner

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

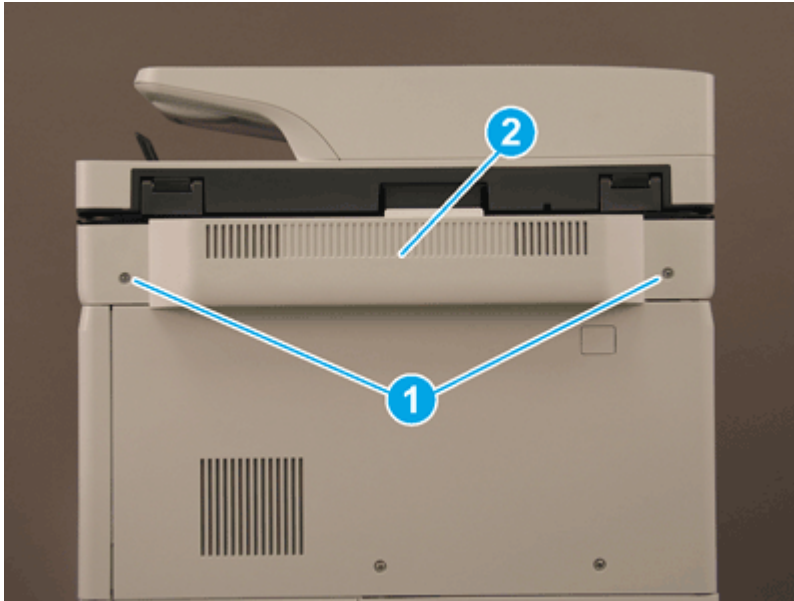
No post service test is available for this assembly.

1. Remove the rear cover (3-bin stapler/stacker)

Follow these steps to remove the rear cover (3-bin stapler/stacker).

1. At the back of the printer, remove two screws (callout 1), and then remove the image scanner rear cover (callout 2).

Figure 5-2262 Remove two screws



2. Remove one screw cover (callout 1).

Figure 5-2263 Remove one screw cover



3. Remove three screws (callout 1), and then remove the rear cover (callout 2).


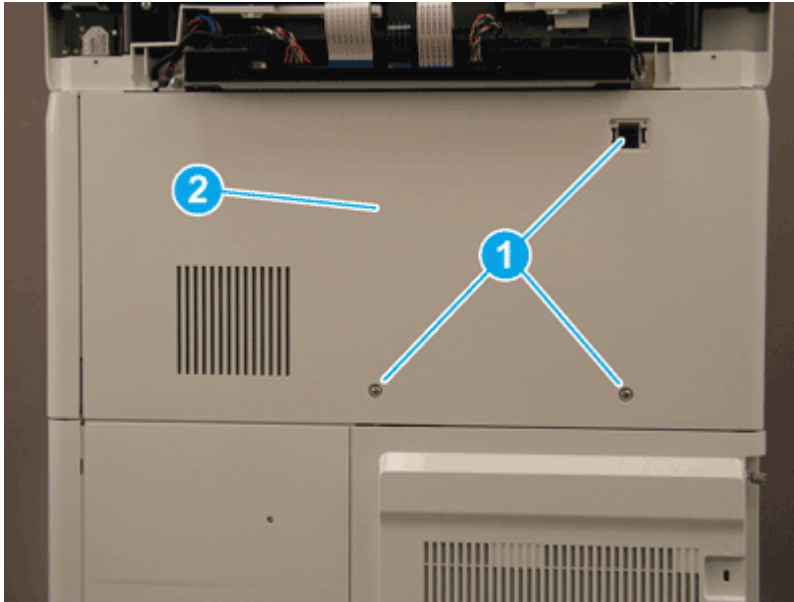
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2264 Remove three screws and the rear cover



2. Remove the right upper cover (3-bin stapler/stacker)

Follow these steps to remove the right upper cover (3-bin stapler/stacker).

1. Open the right door.
2. Remove one screw (callout 1), release one tab (callout 2), and then remove the right upper cover (callout 3).


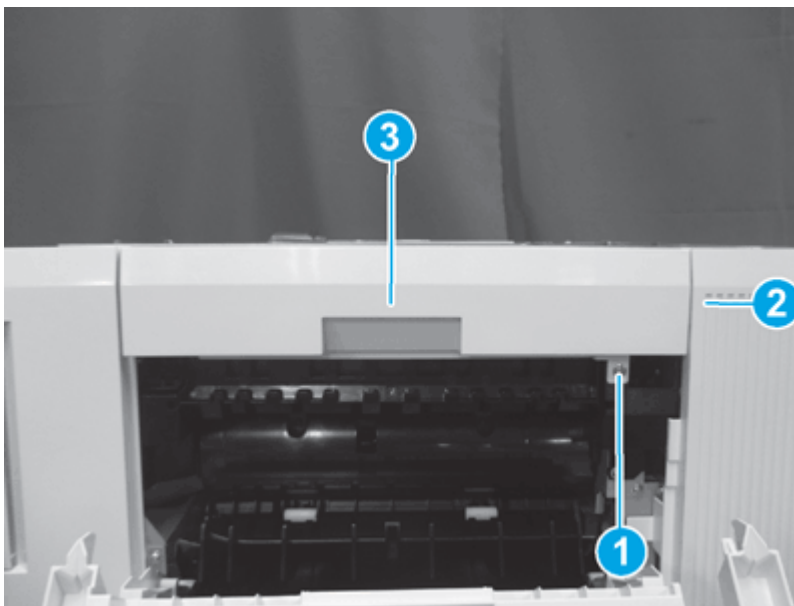
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2265 Remove the right upper cover



3. Remove the right corner cover (3-bin stapler/stacker)

Follow these steps to remove the right corner cover (3-bin stapler/stacker).

- Release two tabs (callout 1), and then remove the right corner cover (callout 2).


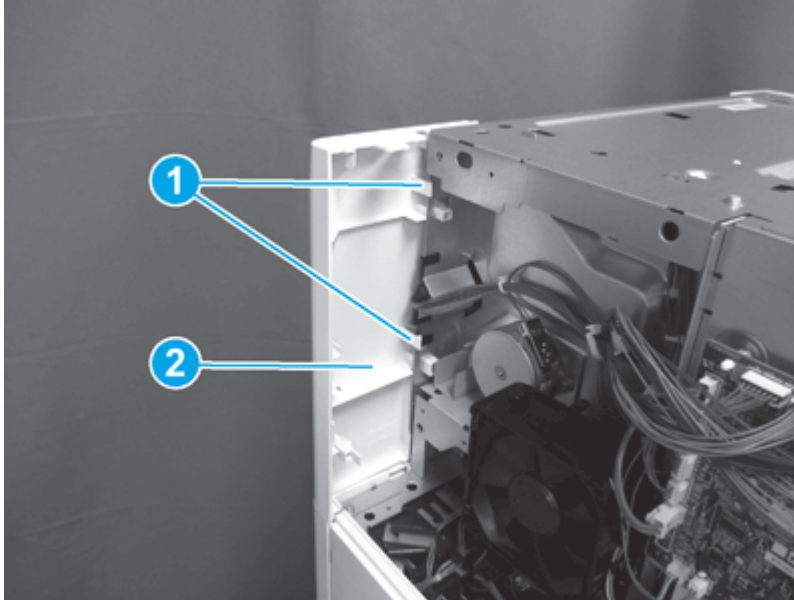
 **TIP:** Reverse the removal steps to install the assembly.


Figure 5-2266 Remove the right corner cover



4. Unpack the replacement assembly



Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.


 **NOTE:** HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.

 **CAUTION:**  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

 **IMPORTANT:** Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

 **NOTE:** If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Jogger cover (3-bin stapler/stacker)

Learn how to remove and replace the jogger cover on the 3-bin stapler/stacker.



[View a video of how to remove and replace the jogger cover.](#)

Mean time to repair: 5 minutes

Service level: Basic



IMPORTANT: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.
- ⚠ **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.
- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-175 Part information

Part number	Part description
RC4-7411-000CN	Cover, jogger

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

No post service test is available for this assembly.

1. Remove the staple cover (3-bin stapler/stacker)

Follow these steps to remove the staple cover (3-bin stapler/stacker).

1. Open the front door.

Figure 5-2267 Open the front door



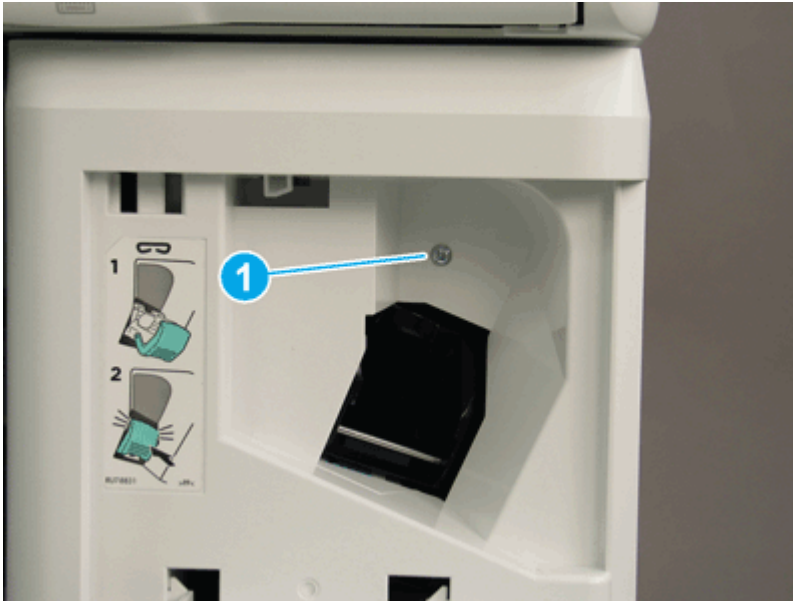
2. Open the stapler door.

Figure 5-2268 Open the stapler door



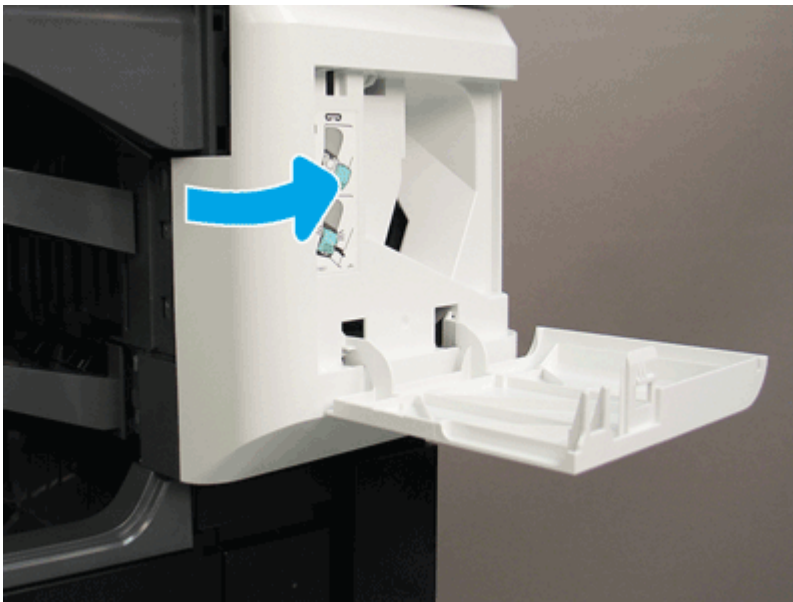
3. Remove one screw (callout 1).

Figure 5-2269 Remove one screw



4. Release one tab on the left side of the cover, and then rotate it away from the printer to remove it.

Figure 5-2270 Remove the stapler cover



2. Remove the jogger cover (3-bin stapler/stacker)

Follow these steps to remove the jogger cover (3-bin stapler/stacker).

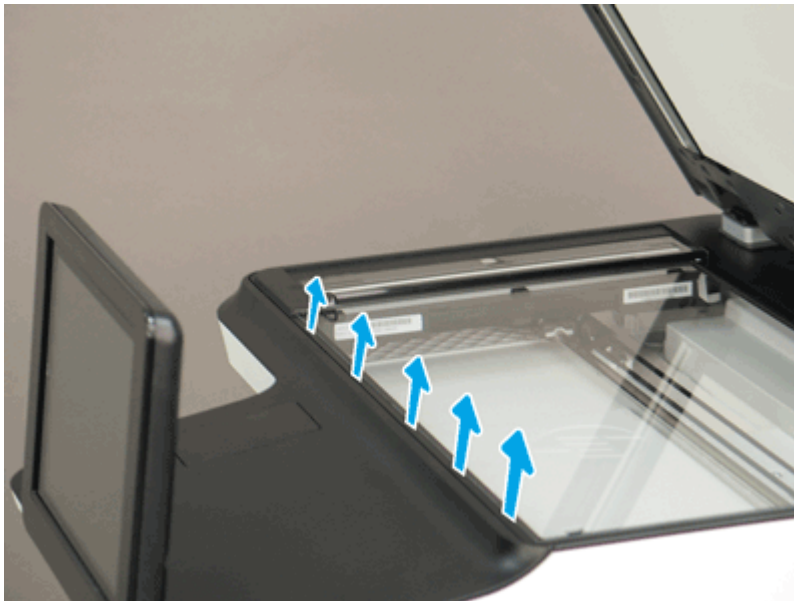
1. If the control panel is not fully tilted forward, tilt it forward now (callout 1) until it stops. Open the document feeder (callout 2).

Figure 5-2271 Tilt the control panel and open the document feeder



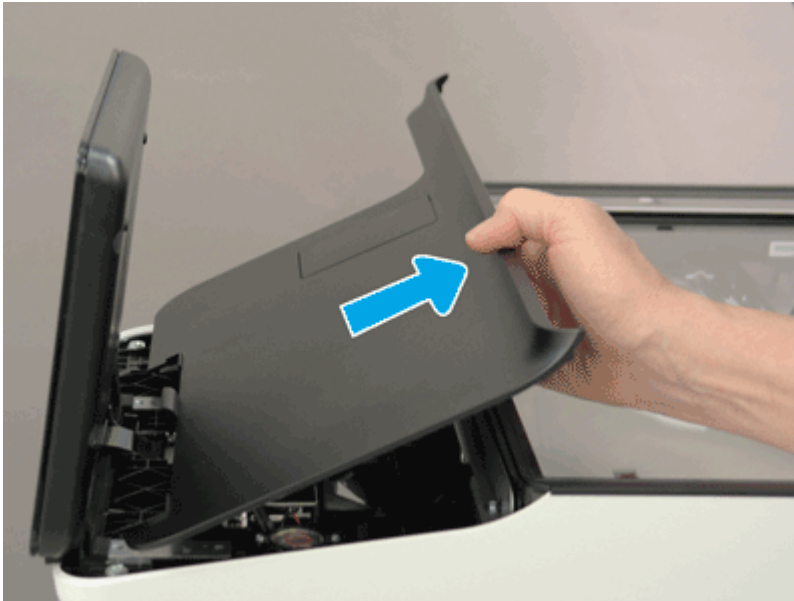
2. Beginning at the right side of the control-panel cover, carefully release five tabs along the top edge of the cover.

Figure 5-2272 Release five tabs



3. Continue to rotate the top edge of the cover away from the printer, and then remove the cover.

Figure 5-2273 Remove the cover



4. Use a thin-shaft, magnetized screwdriver to remove one screw (callout 1).


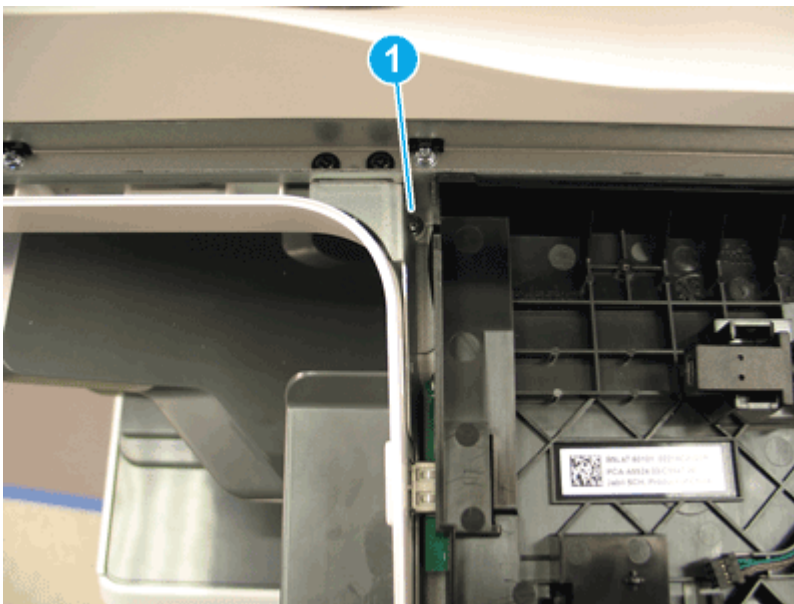
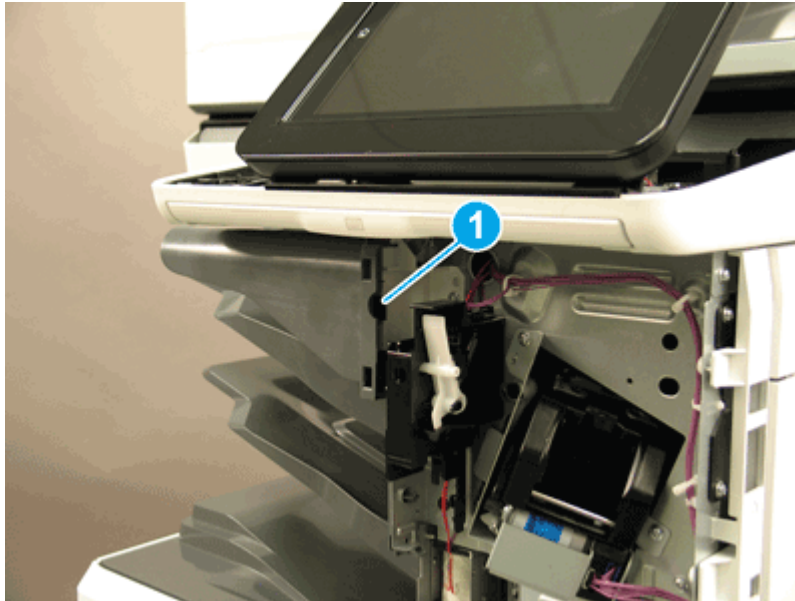
 **TIP:** If necessary, remove the control panel to gain better access to this screw.

Figure 5-2274 Remove one screw



5. Release one tab (callout 1).

Figure 5-2275 Release one tab



6. Slide the jogger cover to the left to remove it.


 **TIP:** Reverse the removal steps to install the assembly.


Figure 5-2276 Remove the jogger cover




3. Unpack the replacement assembly


Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.

 **NOTE:** HP recommends responsible disposal of the defective part.


2. Unpack the replacement part from the packaging.

CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT:  Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE:  If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE:  When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

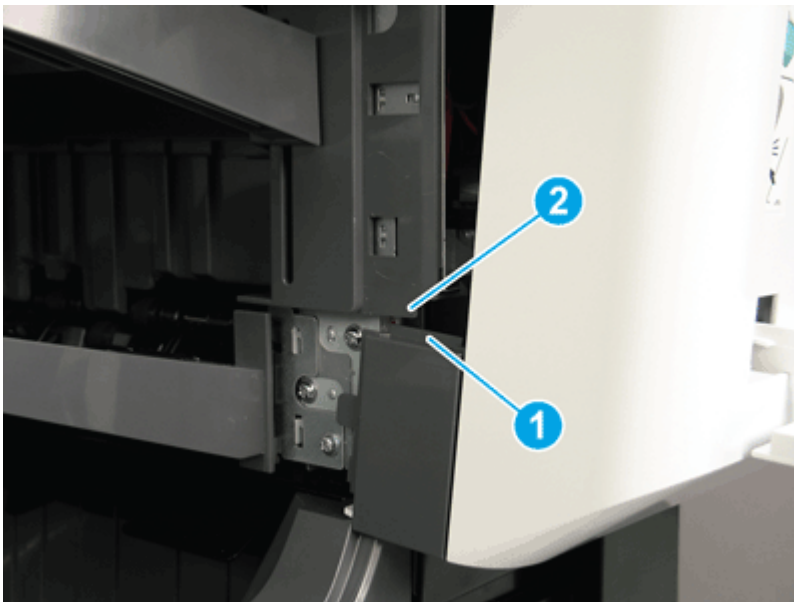
4. Reverse the removal steps to install the assembly


Also use the following **special installation instructions**.

Stapler cover

- When reinstalling the stapler cover, position the tab on the cover (callout 1) behind the edge of the cover (callout 2) on the printer.

Figure 5-2277 Position the tab




NOTE:  Continue to reverse the removal steps to finish installing the assembly.

Removal and replacement: Staple rear cover (3-bin stapler/stacker)

Learn how to remove and replace the staple rear cover on the 3-bin stapler/stacker.


Mean time to repair: 5 minutes

Service level: Basic

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.

 **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.

- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-176 Part Information

Part number	Part description
RC4-7412-000CN	Cover, staple rear

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

No post service test is available for this assembly.

1. Remove the staple cover (3-bin stapler/stacker)

Follow these steps to remove the staple cover (3-bin stapler/stacker).

1. Open the front door.

Figure 5-2278 Open the front door



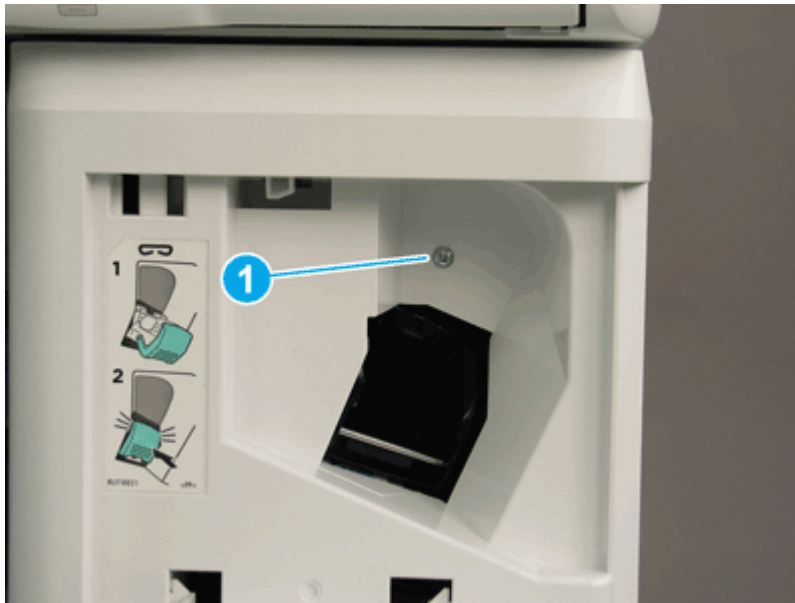
2. Open the stapler door.

Figure 5-2279 Open the stapler door



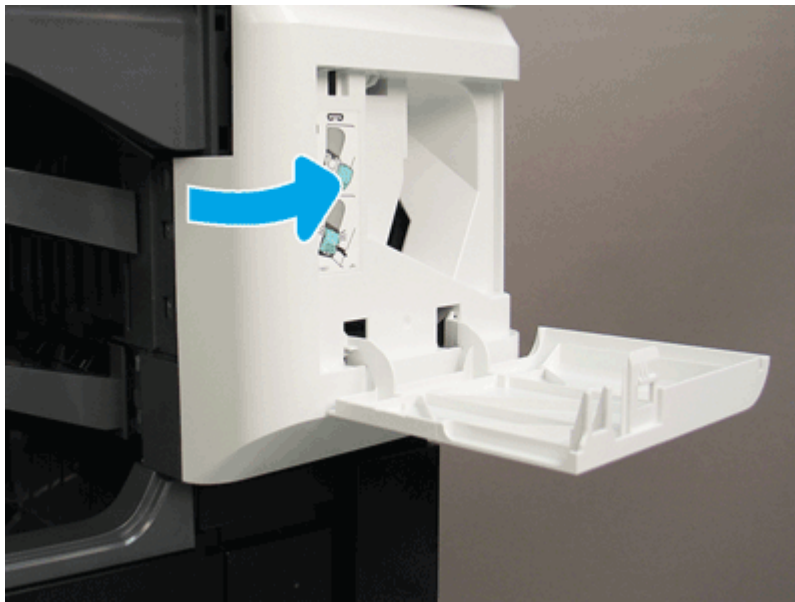
3. Remove one screw (callout 1).

Figure 5-2280 Remove one screw



4. Release one tab on the left side of the cover, and then rotate it away from the printer to remove it.

Figure 5-2281 Remove the stapler cover

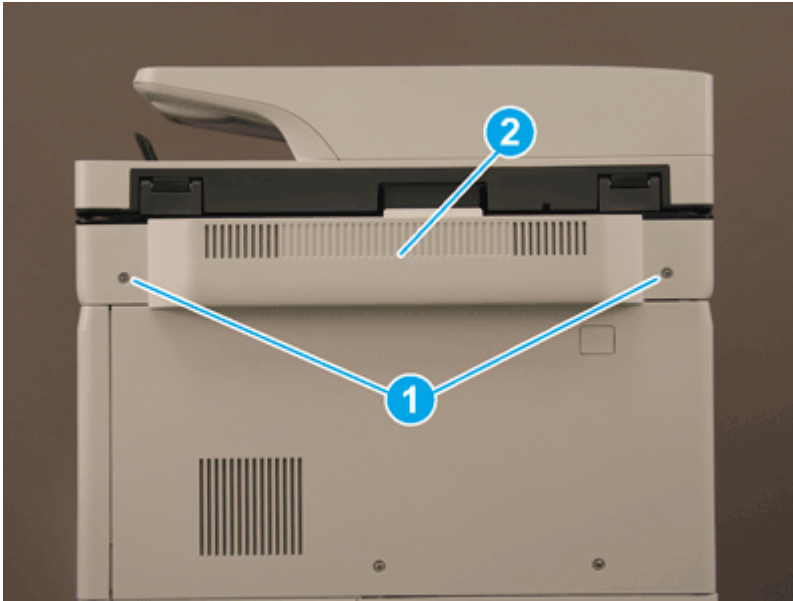


2. Remove the rear cover (3-bin stapler/stacker)

Follow these steps to remove the rear cover (3-bin stapler/stacker).

1. At the back of the printer, remove two screws (callout 1), and then remove the image scanner rear cover (callout 2).

Figure 5-2282 Remove two screws



2. Remove one screw cover (callout 1).

Figure 5-2283 Remove one screw cover



3. Remove three screws (callout 1), and then remove the rear cover (callout 2).


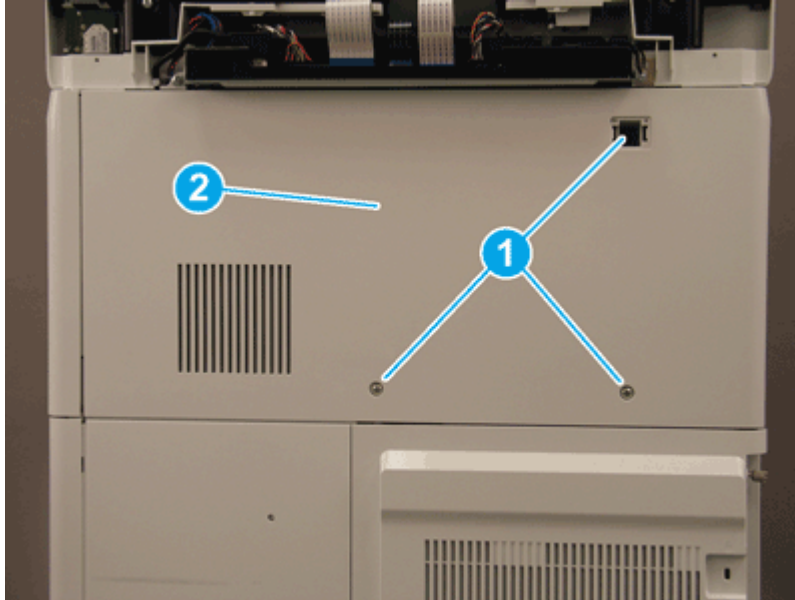
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2284 Remove three screws and the rear cover



3. Remove the right upper cover (3-bin stapler/stacker)

Follow these steps to remove the right upper cover (3-bin stapler/stacker).

1. Open the right door.
2. Remove one screw (callout 1), release one tab (callout 2), and then remove the right upper cover (callout 3).


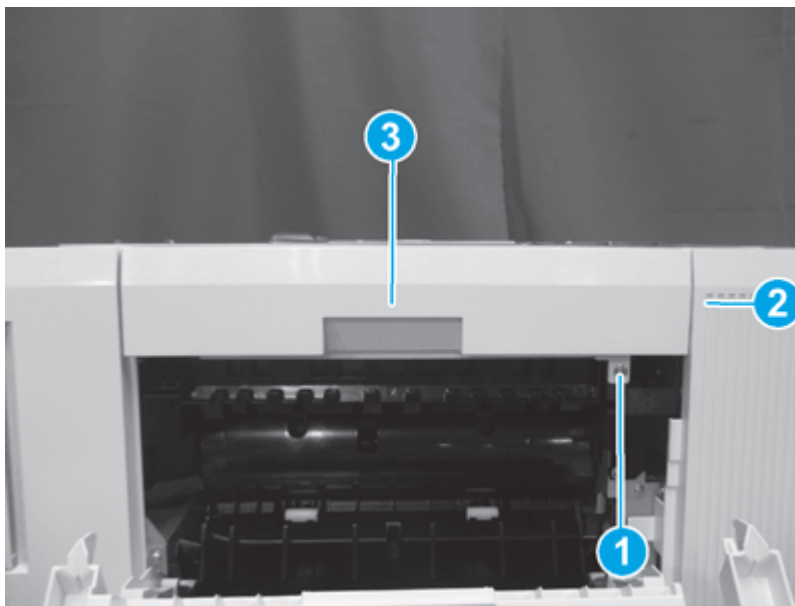
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2285 Remove the right upper cover



4. Remove the right corner cover (3-bin stapler/stacker)

Follow these steps to remove the right corner cover (3-bin stapler/stacker).

- Release two tabs (callout 1), and then remove the right corner cover (callout 2).


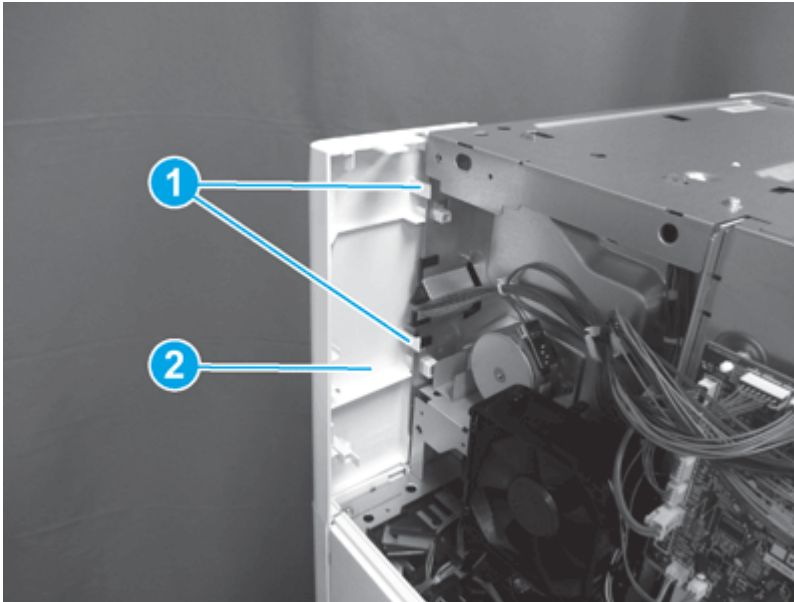
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2286 Remove the right corner cover



5. Remove the staple rear cover (3-bin stapler/stacker)

Follow these steps to remove the staple rear cover (3-bin stapler/stacker).

- Release one tab (callout 1), and then rotate the stapler rear cover away from the printer (callout 2) to remove it.


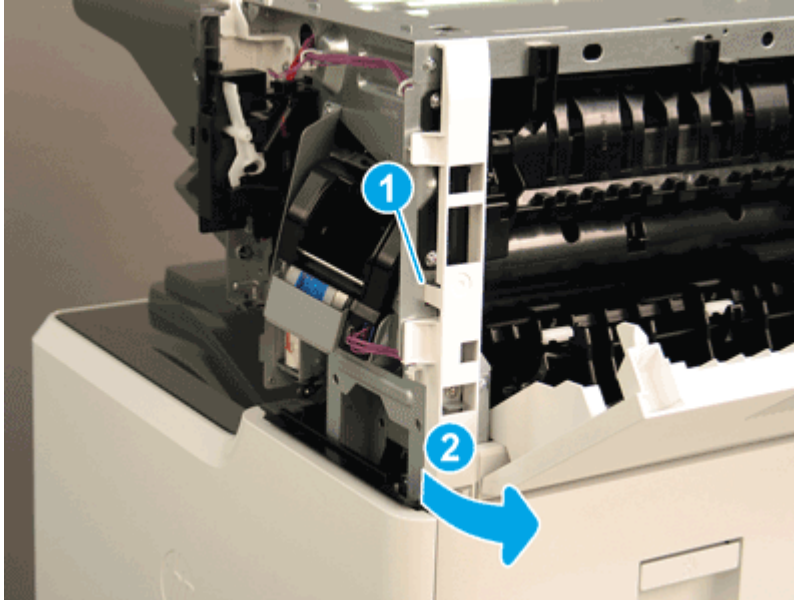
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2287 Remove the staple rear cover



6. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

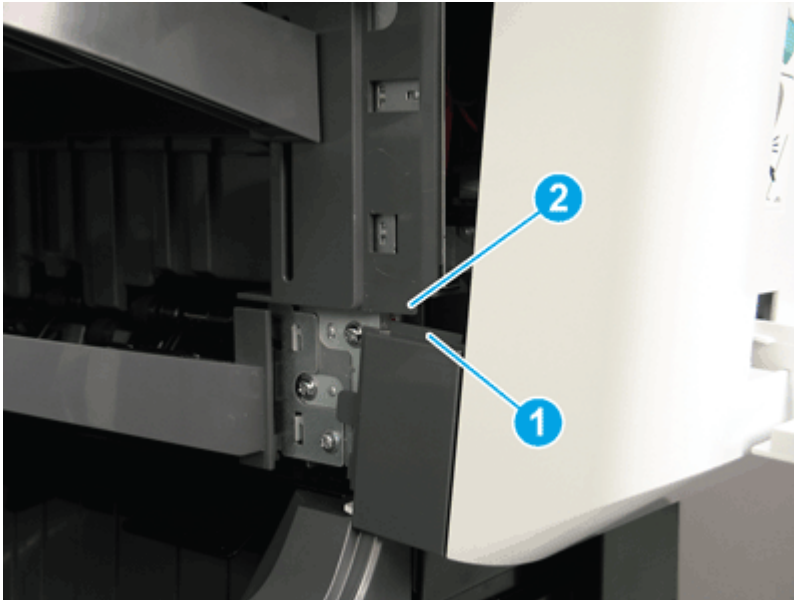
7. Reverse the removal steps to install the assembly

Also use the following **special installation instructions**.

Stapler cover

- When reinstalling the stapler cover, position the tab on the cover (callout 1) behind the edge of the cover (callout 2) on the printer.

Figure 5-2288 Position the tab




 **NOTE:** Continue to reverse the removal steps to finish installing the assembly.

Removal and replacement: Right lower cover (3-bin stapler/stacker)

Learn how to remove and replace the right lower cover on the 3-bin stapler/stacker.

Mean time to repair: 5 minutes

Service level: Basic

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.
- ⚠ **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.
- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-177 Part information

Part number	Part description
RC4-9439-000CN	Cover, right lower

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

No post service test is available for this assembly.

1. Remove the staple cover (3-bin stapler/stacker)

Follow these steps to remove the staple cover (3-bin stapler/stacker).

1. Open the front door.

Figure 5-2289 Open the front door



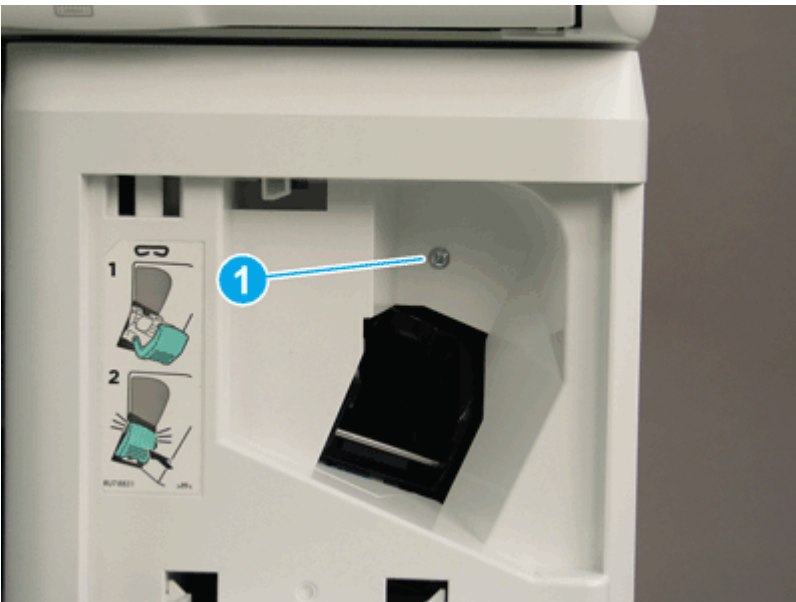
2. Open the stapler door.

Figure 5-2290 Open the stapler door



3. Remove one screw (callout 1).

Figure 5-2291 Remove one screw



4. Release one tab on the left side of the cover, and then rotate it away from the printer to remove it.

Figure 5-2292 Remove the stapler cover

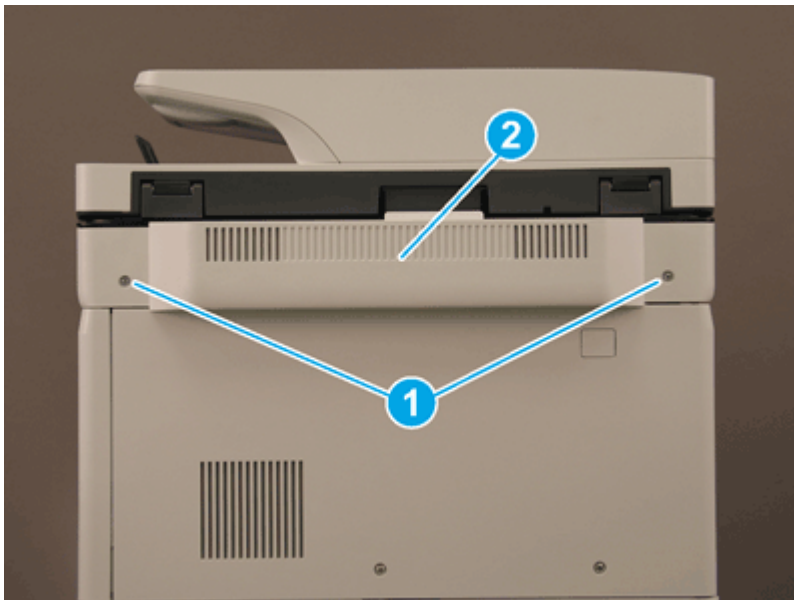


2. Remove the rear cover (3-bin stapler/stacker)

Follow these steps to remove the rear cover (3-bin stapler/stacker).

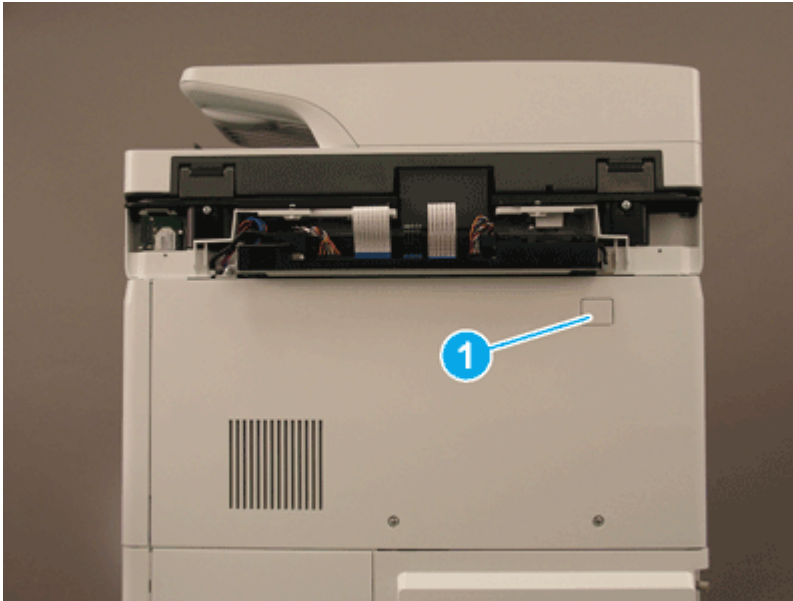
1. At the back of the printer, remove two screws (callout 1), and then remove the image scanner rear cover (callout 2).

Figure 5-2293 Remove two screws



2. Remove one screw cover (callout 1).

Figure 5-2294 Remove one screw cover



3. Remove three screws (callout 1), and then remove the rear cover (callout 2).


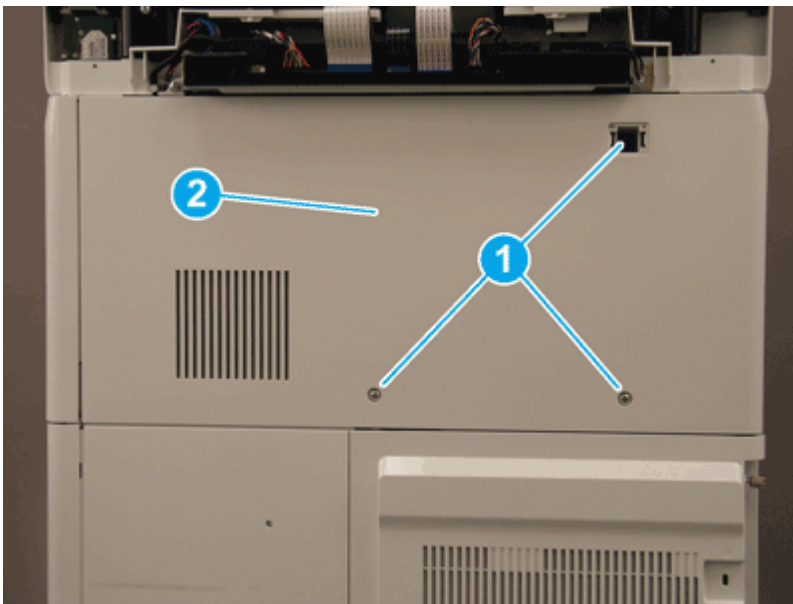
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2295 Remove three screws and the rear cover



3. Remove the right upper cover (3-bin stapler/stacker)

Follow these steps to remove the right upper cover (3-bin stapler/stacker).

1. Open the right door.

2. Remove one screw (callout 1), release one tab (callout 2), and then remove the right upper cover (callout 3).


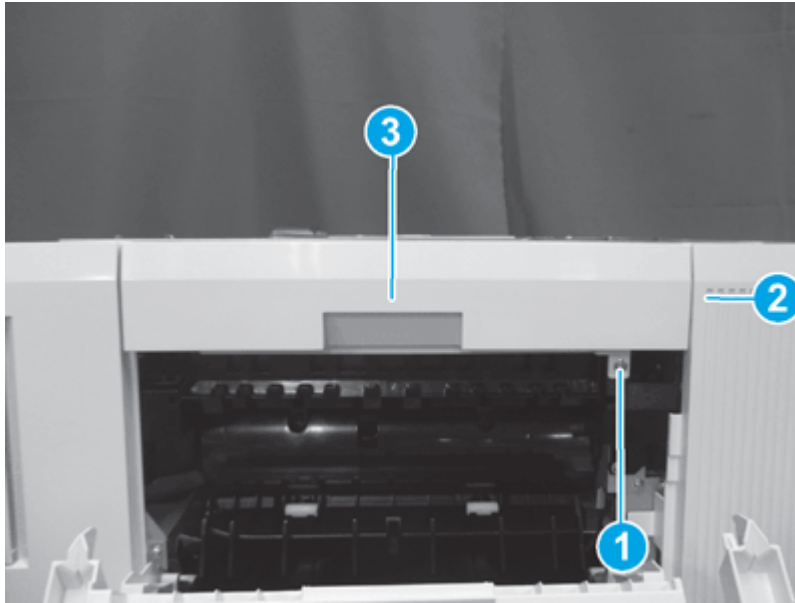
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2296 Remove the right upper cover



4. Remove the right corner cover (3-bin stapler/stacker)

Follow these steps to remove the right corner cover (3-bin stapler/stacker).

- Release two tabs (callout 1), and then remove the right corner cover (callout 2).


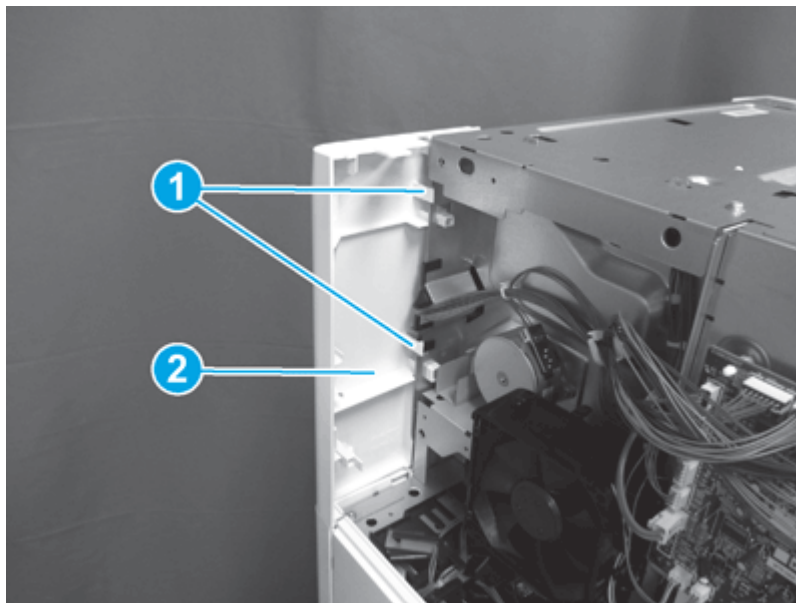
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2297 Remove the right corner cover



5. Remove the staple rear cover (3-bin stapler/stacker)

Follow these steps to remove the staple rear cover (3-bin stapler/stacker).

- Release one tab (callout 1), and then rotate the stapler rear cover away from the printer (callout 2) to remove it.


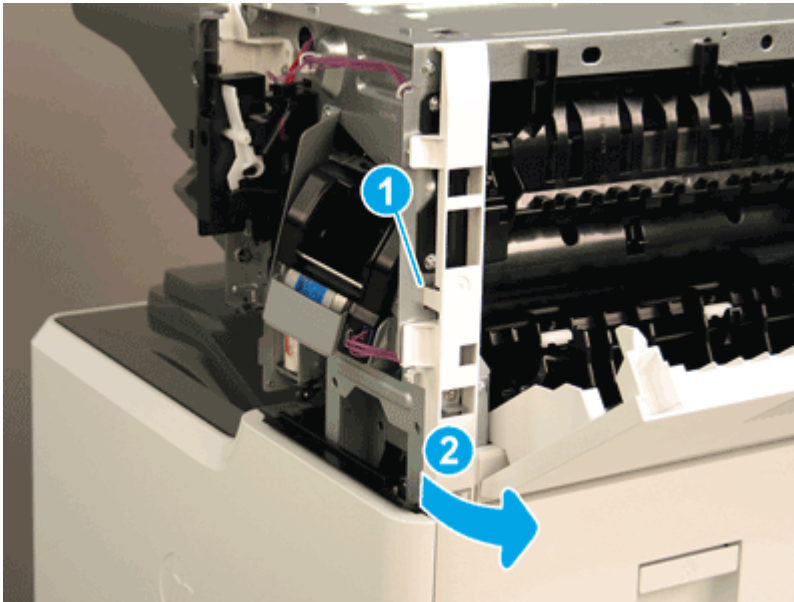
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2298 Remove the staple rear cover



6. Remove the right lower cover (3-bin stapler/stacker)

Follow these steps to remove the right lower cover (3-bin stapler/stacker).

- Release one tab (callout 1), and then slide the right lower cover (callout 2) toward the back of the printer to remove it.


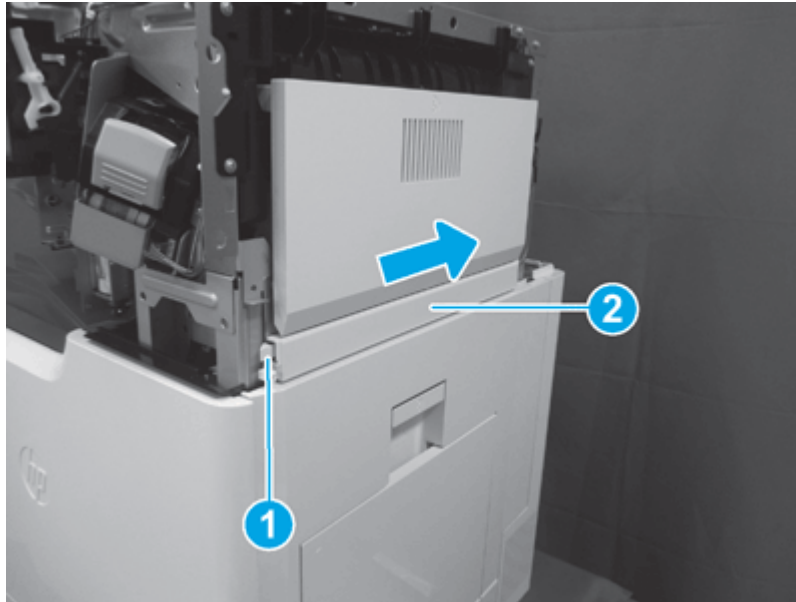
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2299 Remove the right lower cover



7. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

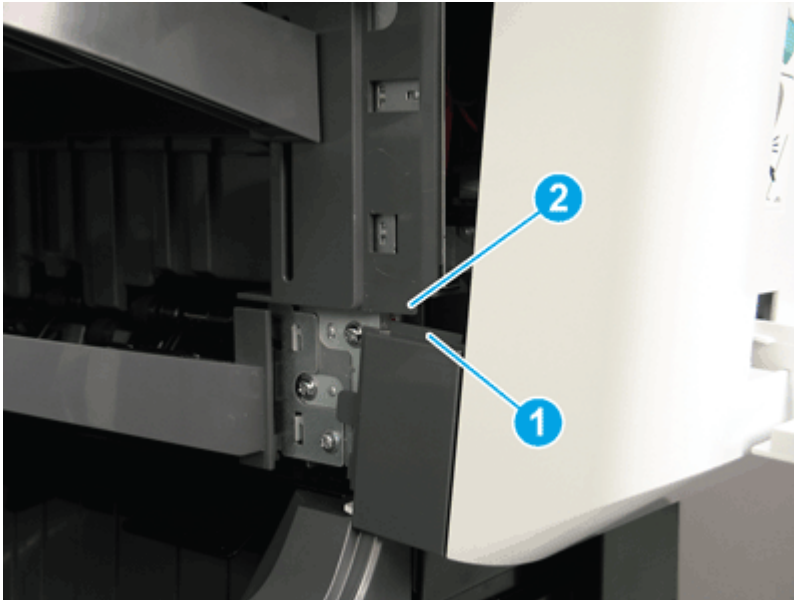
8. Reverse the removal steps to install the assembly

Also use the following **special installation instructions**.

Stapler cover

- When reinstalling the stapler cover, position the tab on the cover (callout 1) behind the edge of the cover (callout 2) on the printer.

Figure 5-2300 Position the tab




 **NOTE:** Continue to reverse the removal steps to finish installing the assembly.

Removal and replacement: Staple door lock arm (3-bin stapler/stacker)

Learn how to remove and replace the staple door lock arm on the 3-bin stapler/stacker.

Mean time to repair: 10 minutes

Service level: Basic

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.
- ⚠ **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.
- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-178 Part information

Part number	Part description
RC4-9576-000CN	Arm, staple door lock

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

No post service test is available for this assembly.

1. Remove the staple cover (3-bin stapler/stacker)

Follow these steps to remove the staple cover (3-bin stapler/stacker).

1. Open the front door.

Figure 5-2301 Open the front door



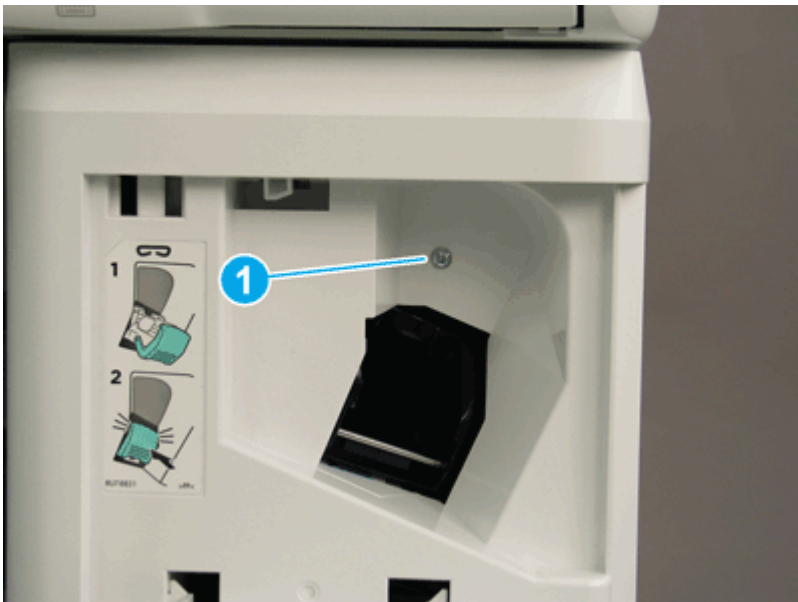
2. Open the stapler door.

Figure 5-2302 Open the stapler door



3. Remove one screw (callout 1).

Figure 5-2303 Remove one screw



4. Release one tab on the left side of the cover, and then rotate it away from the printer to remove it.

Figure 5-2304 Remove the stapler cover

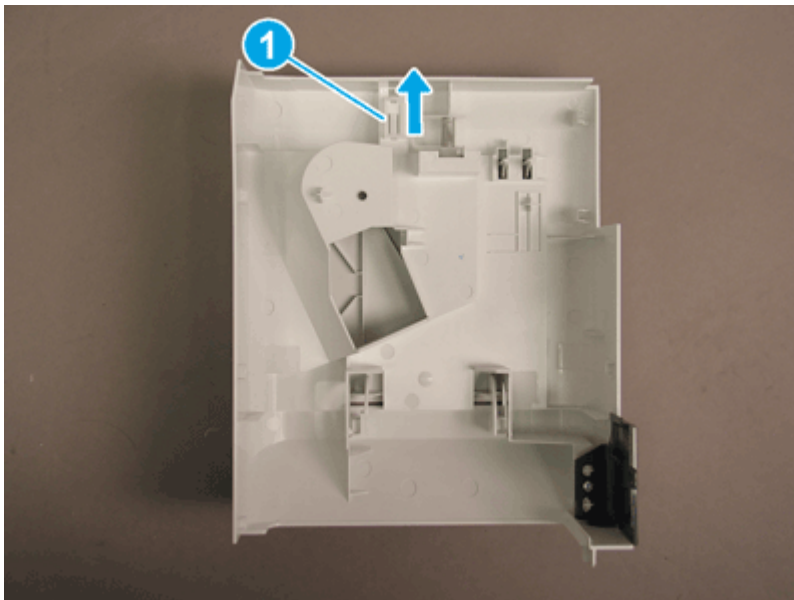


2. Remove the staple door lock arm (3-bin stapler/stacker)

Follow these steps to remove the staple door lock arm (3-bin stapler/stacker).

1. On the back of the staple cover, release one tab (callout 1), and then slide the lock arm up to release it.

Figure 5-2305 Release one tab and slide the lock arm



2. Squeeze the edges of the lock arm (callout 1) to compress the spring and release the tab, and then rotate the lock arm away from the staple cover to remove it.


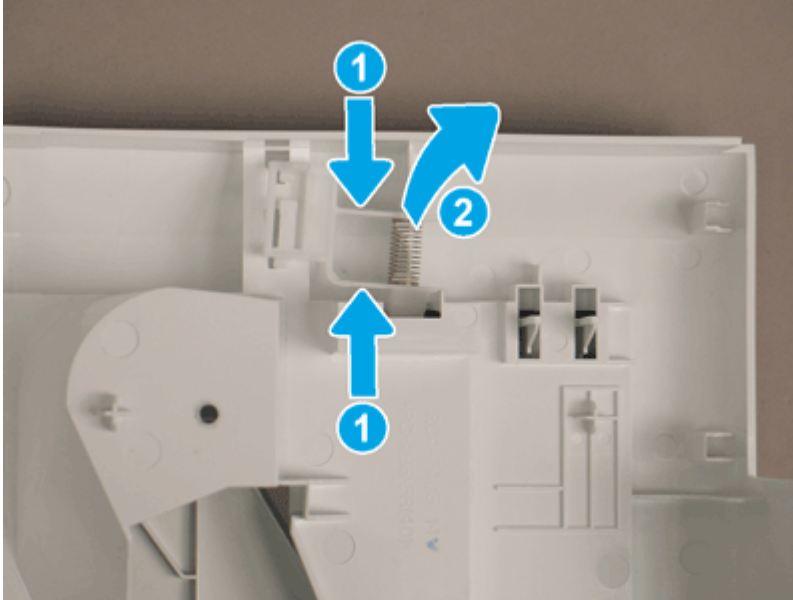
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2306 Remove the staple door lock arm



3. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

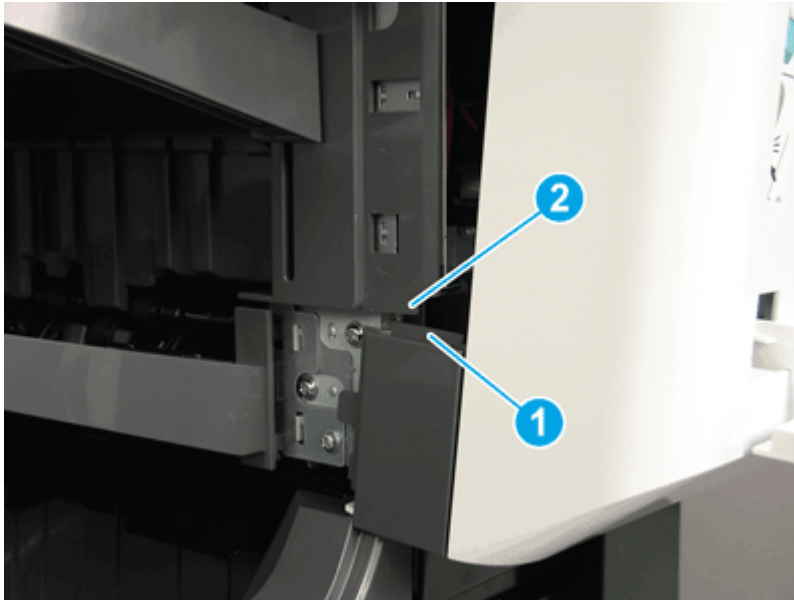
4. Reverse the removal steps to install the assembly

Also use the following **special installation instructions**.

Stapler cover

- When reinstalling the stapler cover, position the tab on the cover (callout 1) behind the edge of the cover (callout 2) on the printer.

Figure 5-2307 Position the tab




 **NOTE:** Continue to reverse the removal steps to finish installing the assembly.

Removal and replacement: Tray assembly (3-bin stapler/stacker)

Learn how to remove and replace the tray assembly on the 3-bin stapler/stacker.

Mean time to repair: 5 minutes

Service level: Basic

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.
- ⚠ **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.
- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-179 Part information

Part number	Part description
RM2-1196-000CN	Tray assembly

Required tools

- No special tools are needed to remove or install this assembly.

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

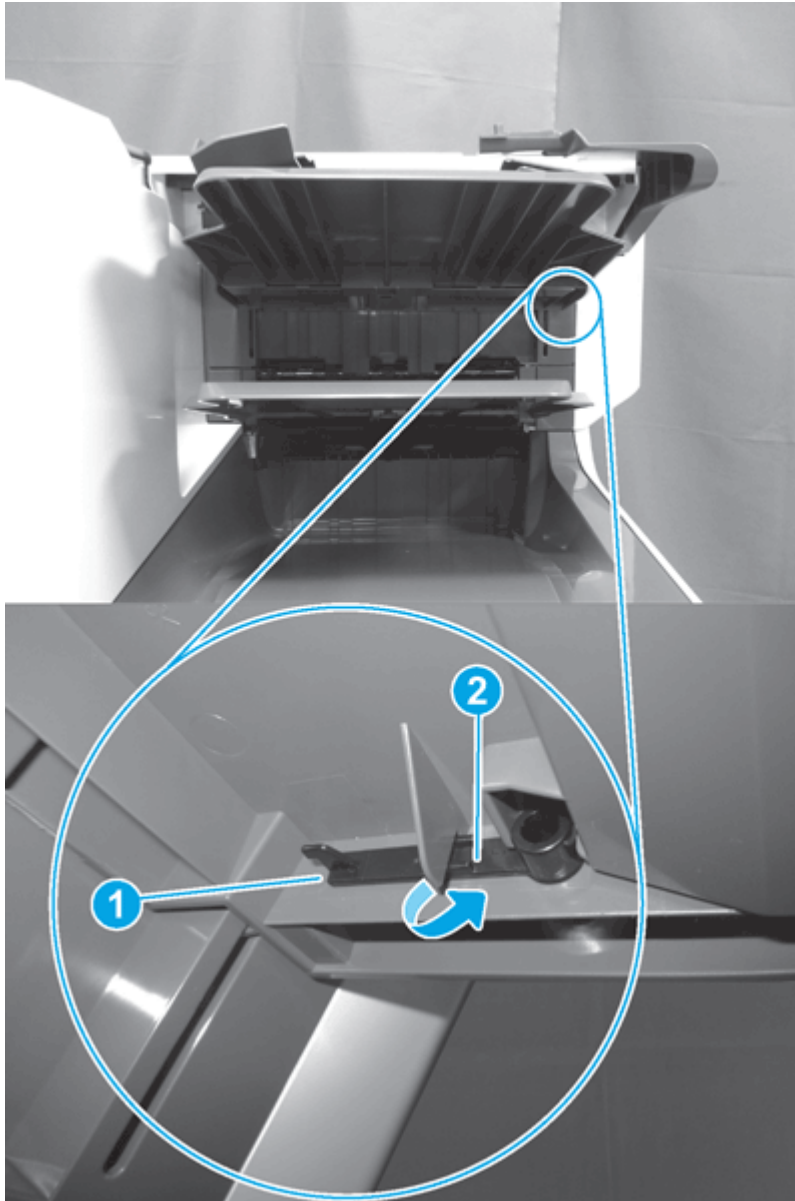
No post service test is available for this assembly.

1. Remove the tray assembly (3-bin stapler/stacker)

Follow these steps to remove the tray assembly (3-bin stapler/stacker).

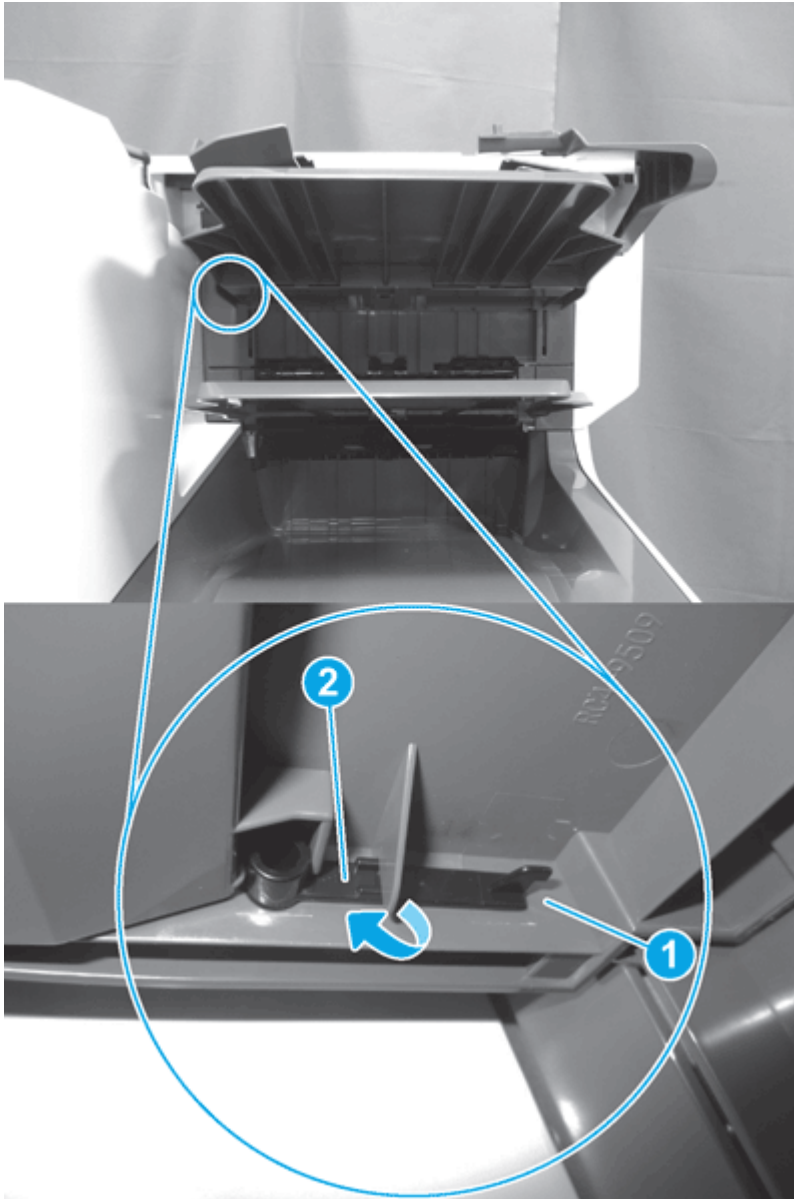
1. Release one boss (callout 1), rotate the front locking pin (callout 2) down to release it, and then remove the locking pin.

Figure 5-2308 Remove the front locking pin



2. Release one boss (callout 1), rotate the rear locking pin (callout 2) down to release it, and then remove the locking pin.

Figure 5-2309 Remove the rear locking pin



3. Lift the tray assembly (callout 1) away from the printer to remove it.


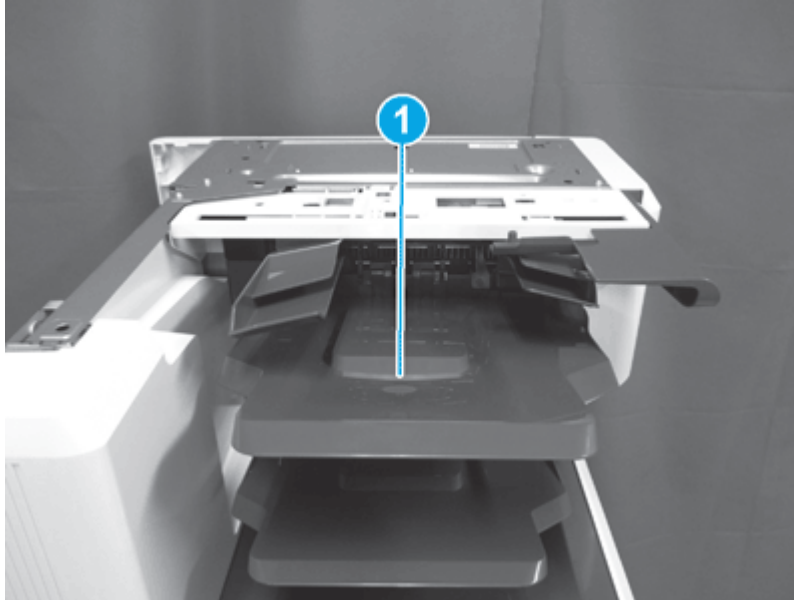
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2310 Remove the tray assembly



2. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.




NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Tray pin (3-bin stapler/stacker)

Learn how to remove and replace the tray pin on the 3-bin stapler/stacker.

Mean time to repair: 5 minutes

Service level: Basic

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.
- ⚠ **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.
- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-180 Part information

Part number	Part description
RC5-0353-000CN	Pin, tray fixed

Required tools

- No special tools are needed to remove or install this assembly.

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

No post service test is available for this assembly.

1. Remove the tray pin (3-bin stapler/stacker)

Follow these steps to remove the tray pin (3-bin stapler/stacker).

1. To remove the front locking pin, release one boss (callout 1), rotate the locking pin (callout 2) down to release it, and then remove the locking pin.


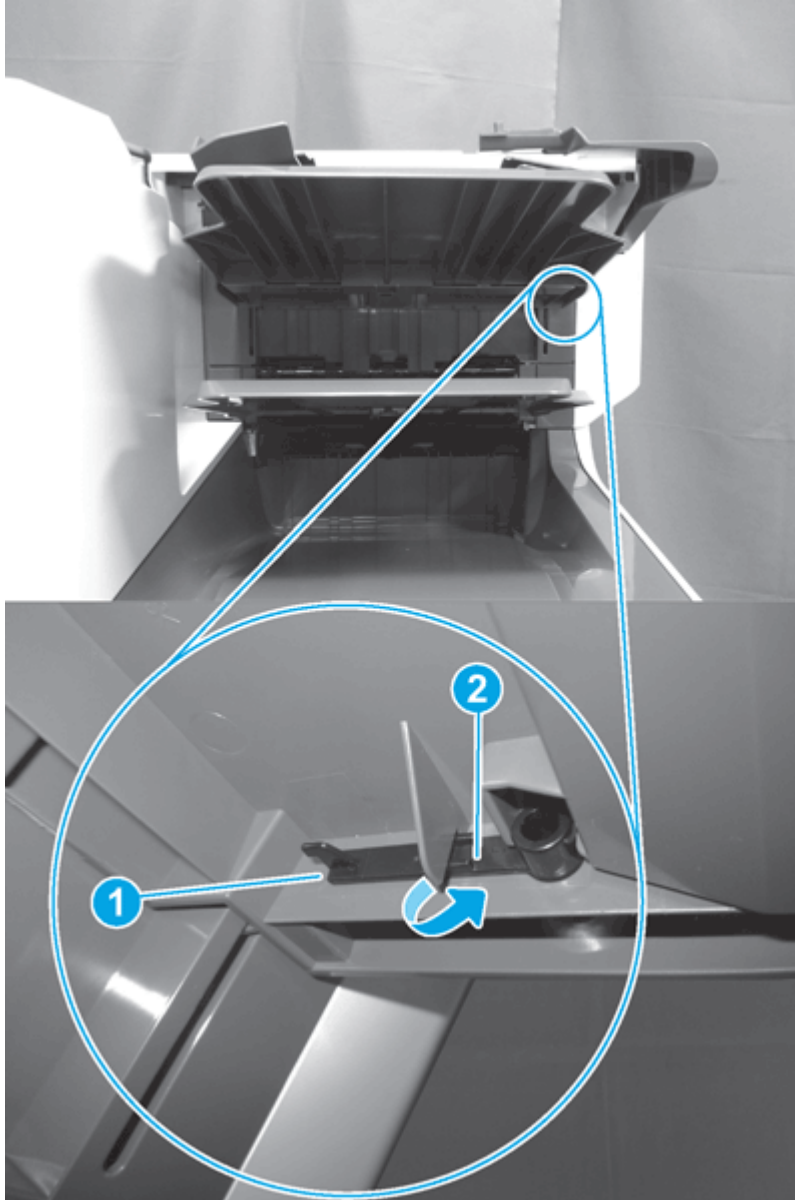
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2311 Remove the front locking pin



2. To remove the rear locking pin, release one boss (callout 1), rotate the locking pin (callout 2) down to release it, and then remove the locking pin.


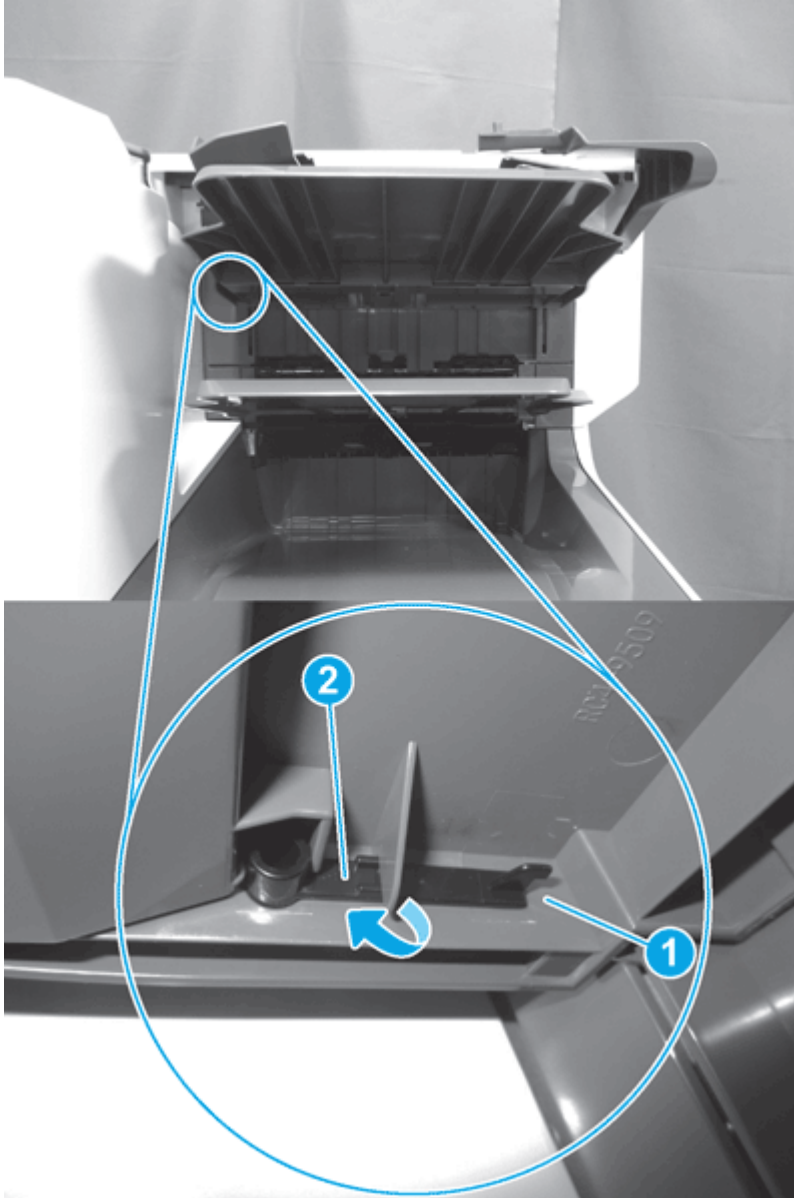
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2312 Remove the rear locking pin



2. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.


<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>


2. Unpack the replacement part from the packaging.




CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly.

Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

 **IMPORTANT:** Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

 **NOTE:** If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.


 **NOTE:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Jogger (3-bin stapler/stacker)

Learn how to remove and replace the jogger on the 3-bin stapler/stacker.


Mean time to repair: 15 minutes

Service level: Intermediate

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.

 **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.

- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-181 Part information

Part number	part description
RM21066-000CN	Jog assembly

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

No post service test is available for this assembly.

1. Remove the staple cover (3-bin stapler/stacker)

Follow these steps to remove the staple cover (3-bin stapler/stacker).

1. Open the front door.

Figure 5-2313 Open the front door



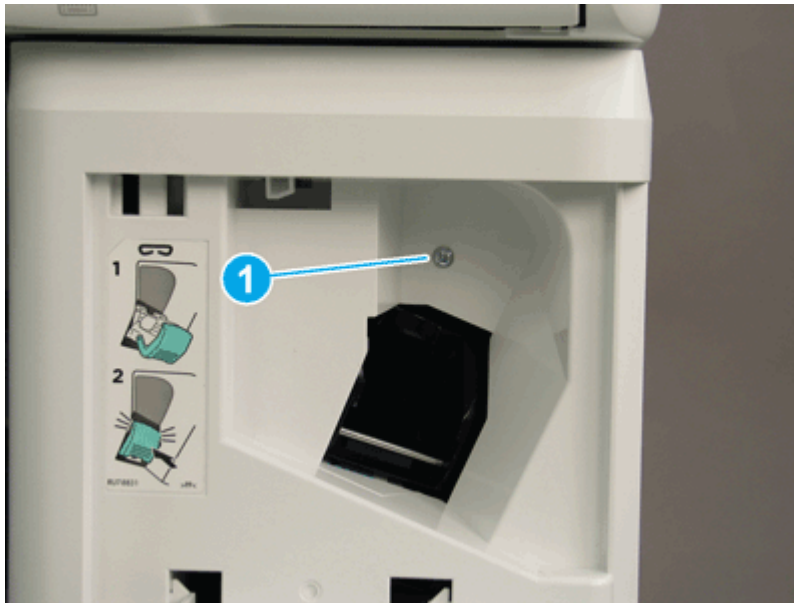
2. Open the stapler door.

Figure 5-2314 Open the stapler door



3. Remove one screw (callout 1).

Figure 5-2315 Remove one screw



4. Release one tab on the left side of the cover, and then rotate it away from the printer to remove it.

Figure 5-2316 Remove the stapler cover



2. Remove the jogger cover (3-bin stapler/stacker)

Follow these steps to remove the jogger cover (3-bin stapler/stacker).

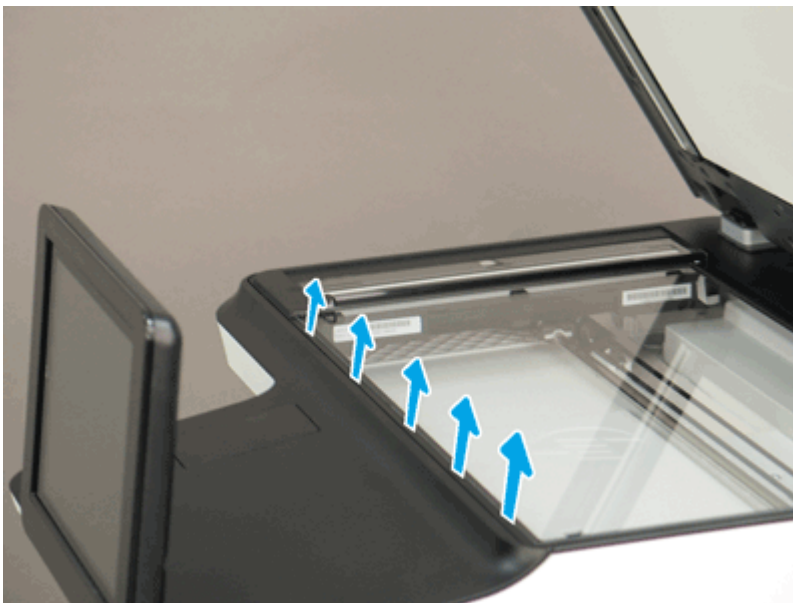
1. If the control panel is not fully tilted forward, tilt it forward now (callout 1) until it stops. Open the document feeder (callout 2).

Figure 5-2317 Tilt the control panel and open the document feeder



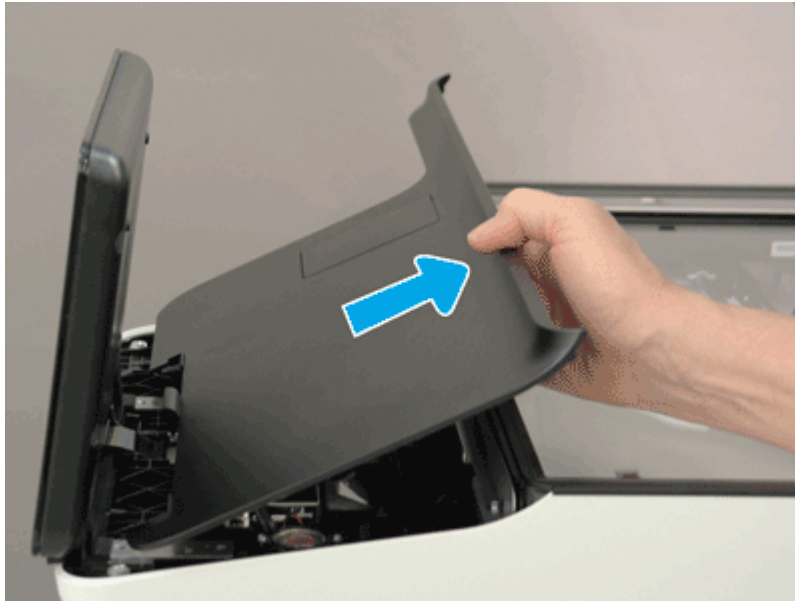
2. Beginning at the right side of the control-panel cover, carefully release five tabs along the top edge of the cover.

Figure 5-2318 Release five tabs



3. Continue to rotate the top edge of the cover away from the printer, and then remove the cover.

Figure 5-2319 Remove the cover



4. Use a thin-shaft, magnetized screwdriver to remove one screw (callout 1).


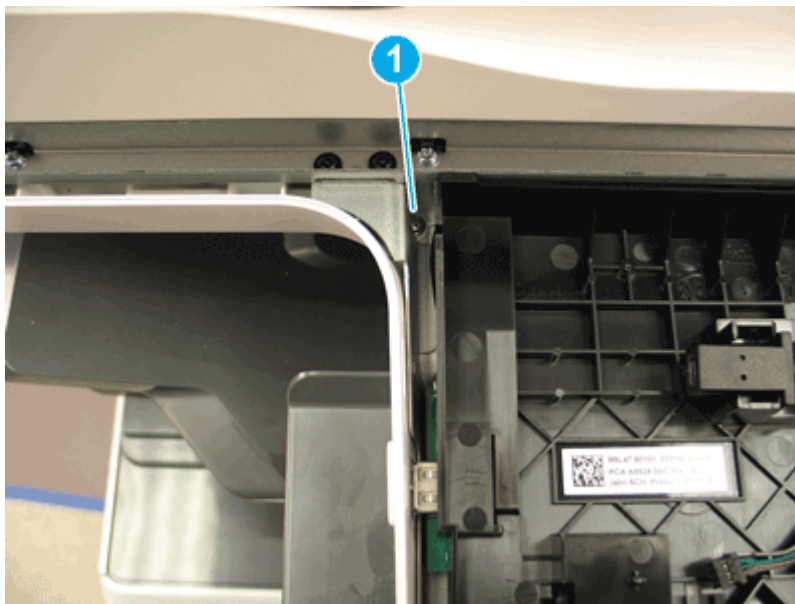
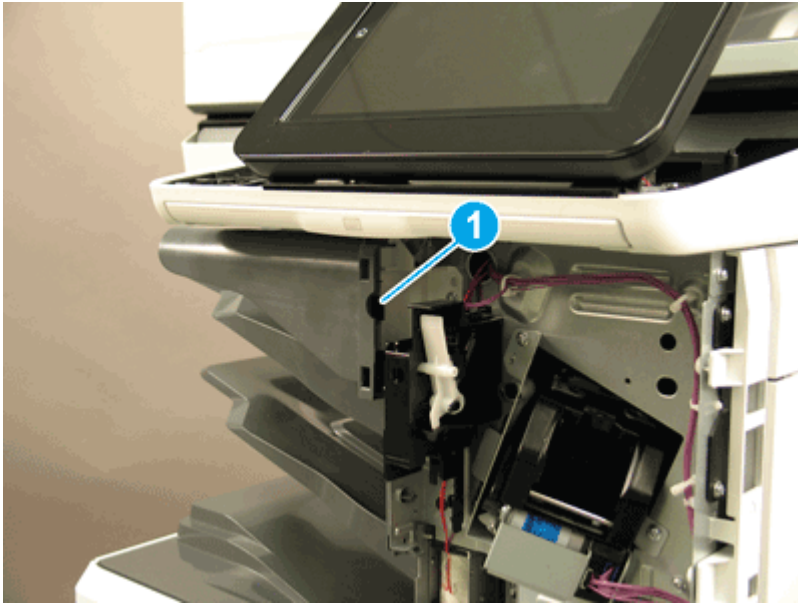
 **TIP:** If necessary, remove the control panel to gain better access to this screw.

Figure 5-2320 Remove one screw



5. Release one tab (callout 1).

Figure 5-2321 Release one tab



6. Slide the jogger cover to the left to remove it.


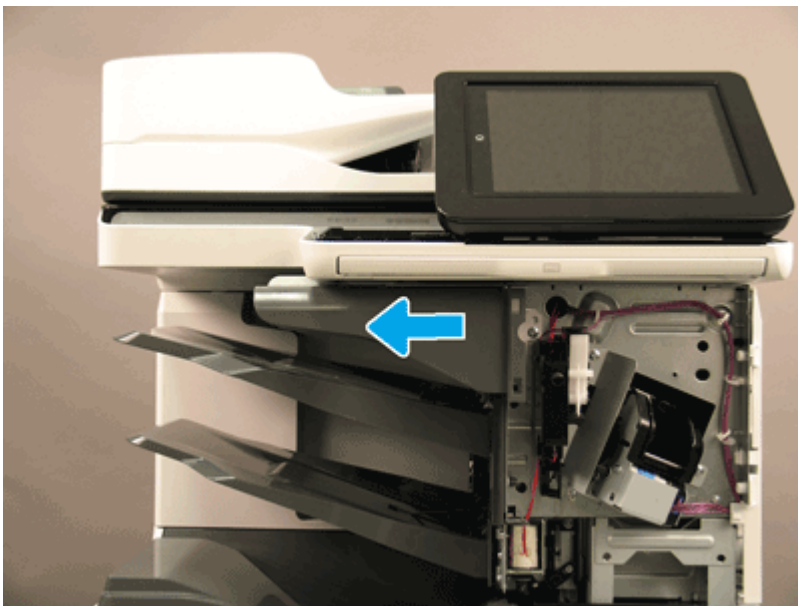
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2322 Remove the jogger cover

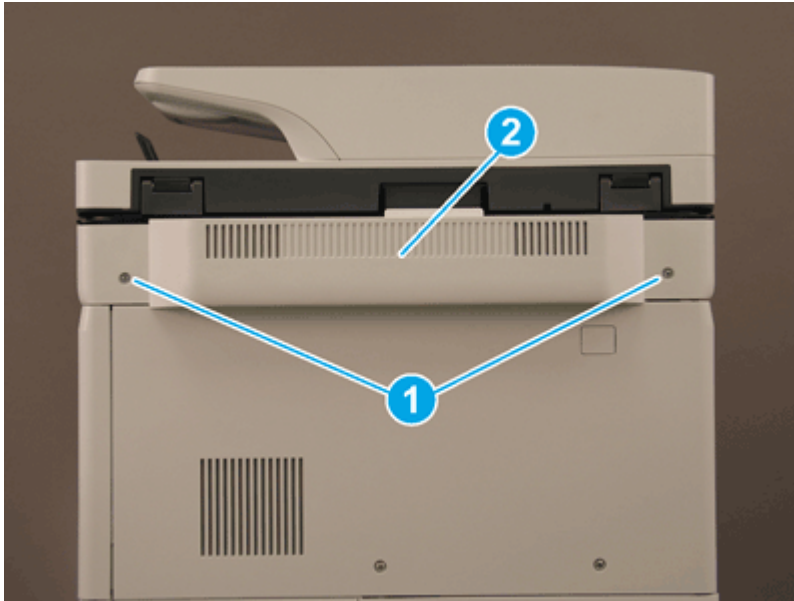


3. Remove the rear cover (3-bin stapler/stacker)

Follow these steps to remove the rear cover (3-bin stapler/stacker).

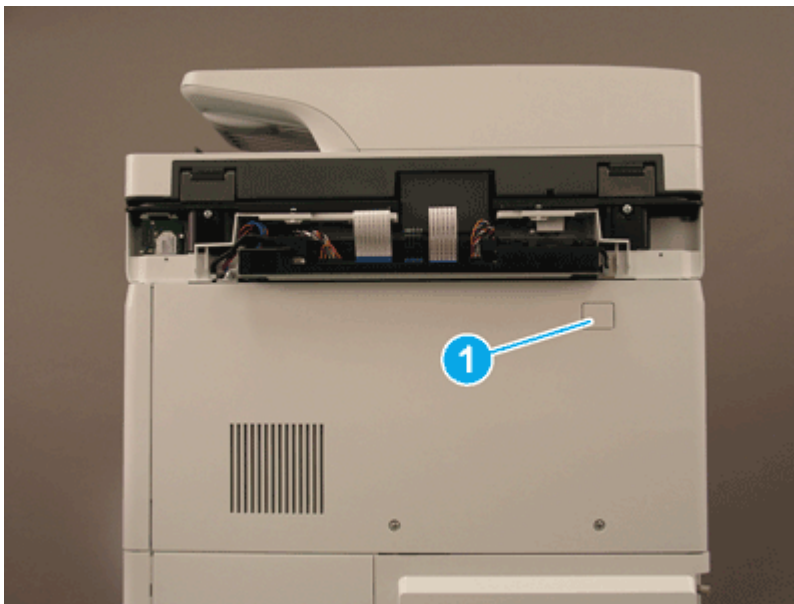
1. At the back of the printer, remove two screws (callout 1), and then remove the image scanner rear cover (callout 2).

Figure 5-2323 Remove two screws



2. Remove one screw cover (callout 1).

Figure 5-2324 Remove one screw cover



3. Remove three screws (callout 1), and then remove the rear cover (callout 2).


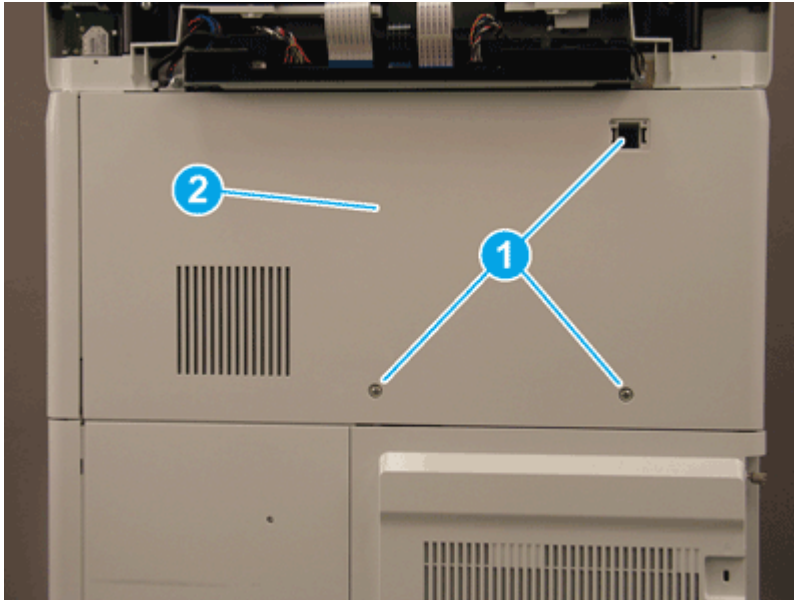
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2325 Remove three screws and the rear cover

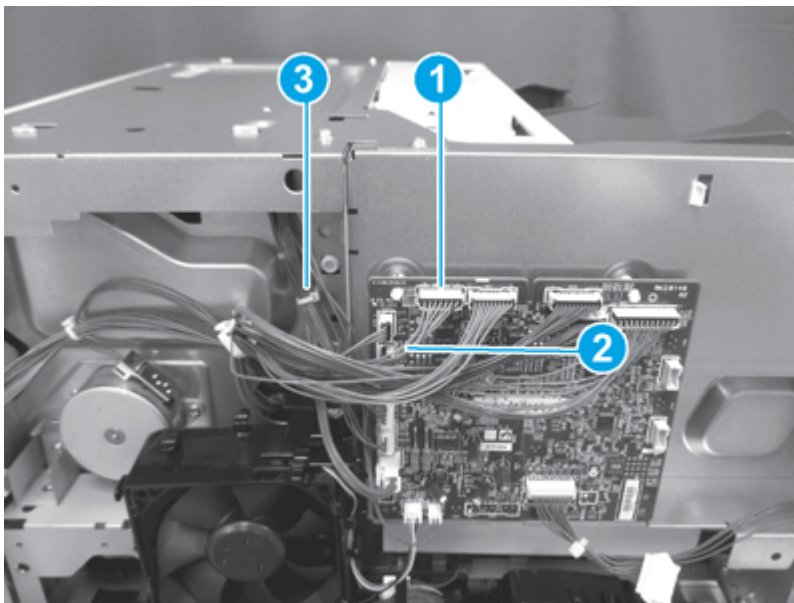


4. Remove the jogger (3-bin stapler/stacker)

Follow these steps to remove the jogger (3-bin stapler/stacker).

1. At the rear of the 3-bin stapler/stacker, disconnect one connector (callout 1), and then release the cable (callout 2) from the retainer (callout 3).

Figure 5-2326 Disconnect one connector



2. At the front of the 3-bin stapler/stacker, remove one screw (callout 1), and then slide the jogger (callout 2) away from the stapler/stacker to remove it.


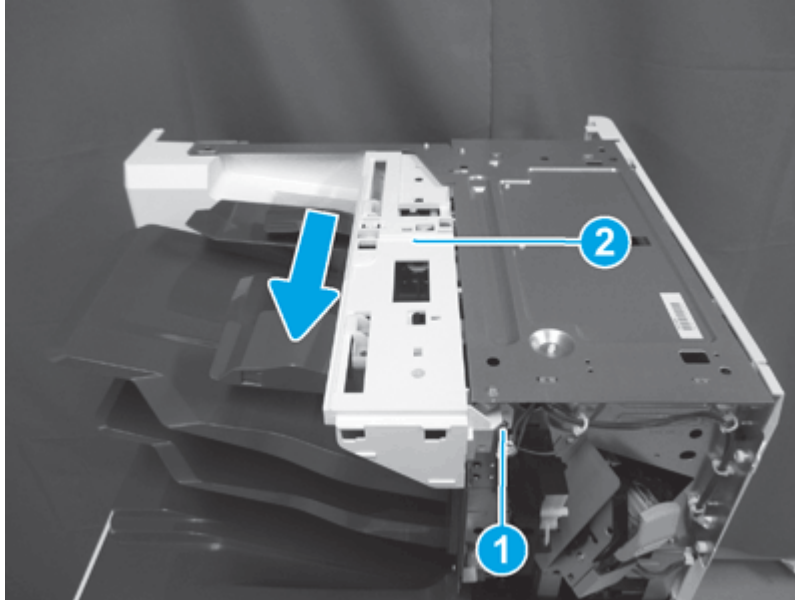
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2327 Remove one screw and the jogger



5. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

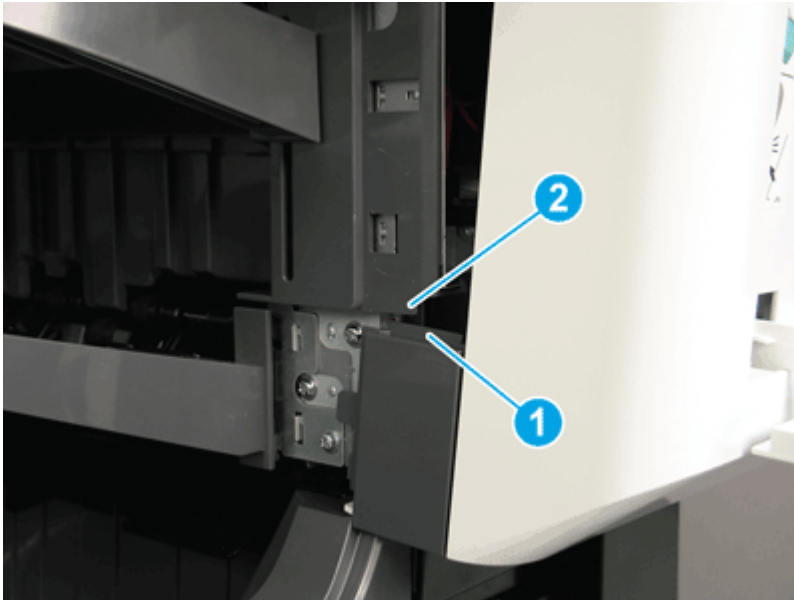
6. Reverse the removal steps to install the assembly

Also use the following **special installation instructions**.

Stapler cover

- When reinstalling the stapler cover, position the tab on the cover (callout 1) behind the edge of the cover (callout 2) on the printer.

Figure 5-2328 Position the tab




 **NOTE:** Continue to reverse the removal steps to finish installing the assembly.

Removal and replacement: Stacking wall cover (3-bin stapler/stacker)

Learn how to remove and replace the stacking wall cover on the 3-bin stapler/stacker.

Mean time to repair: 15 minutes

Service level: Intermediate

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.
- ⚠ **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.
- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-182 Part information

Part number	Part description
RM2-1057-000CN	Stacking wall assembly

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

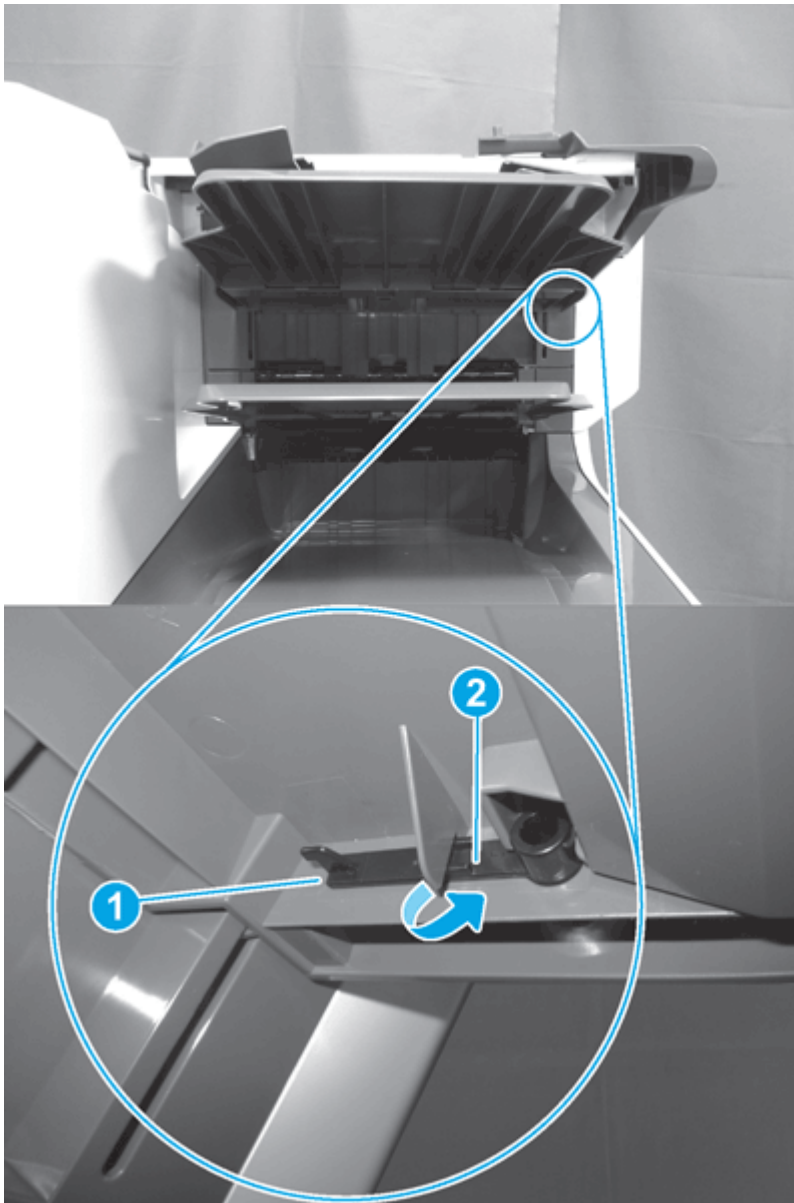
No post service test is available for this assembly.

1. Remove the tray assembly (3-bin stapler/stacker)

Follow these steps to remove the tray assembly (3-bin stapler/stacker).

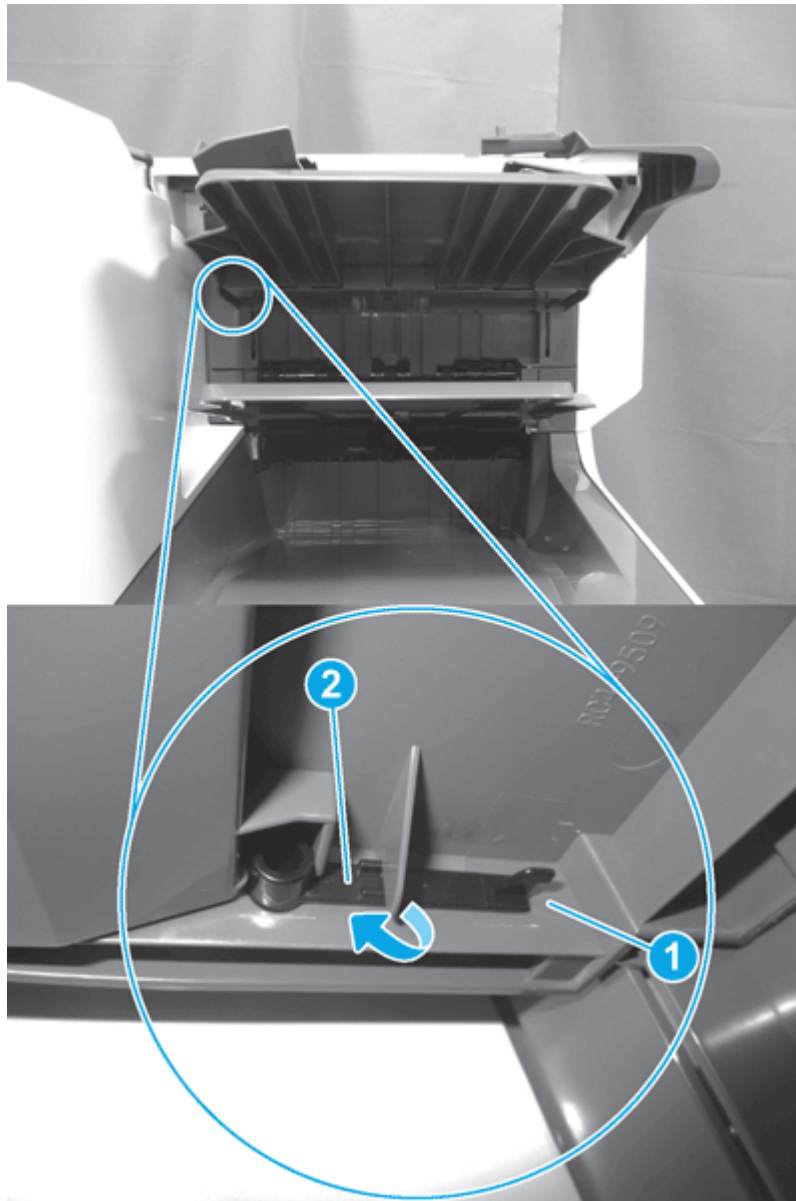
1. Release one boss (callout 1), rotate the front locking pin (callout 2) down to release it, and then remove the locking pin.

Figure 5-2329 Remove the front locking pin



2. Release one boss (callout 1), rotate the rear locking pin (callout 2) down to release it, and then remove the locking pin.

Figure 5-2330 Remove the rear locking pin



3. Lift the tray assembly (callout 1) away from the printer to remove it.


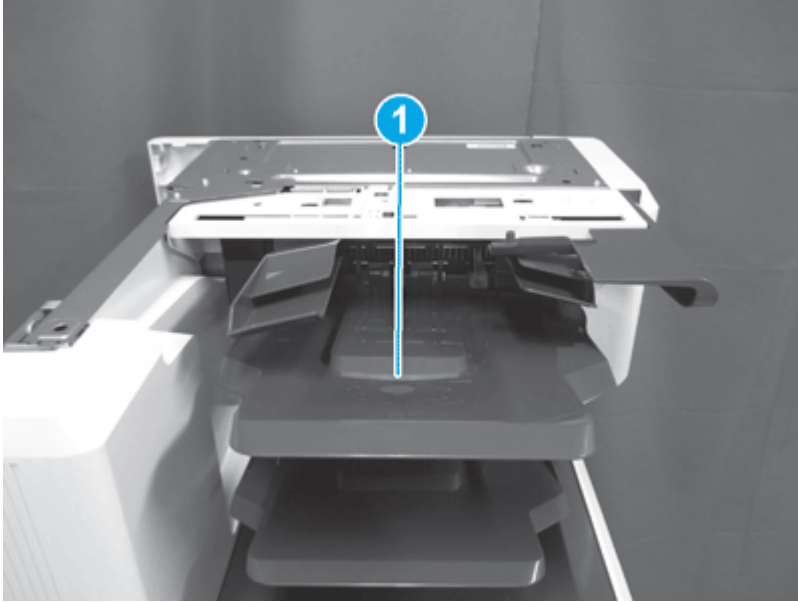
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2331 Remove the tray assembly



2. Remove the staple cover (3-bin stapler/stacker)

Follow these steps to remove the staple cover (3-bin stapler/stacker).

1. Open the front door.

Figure 5-2332 Open the front door



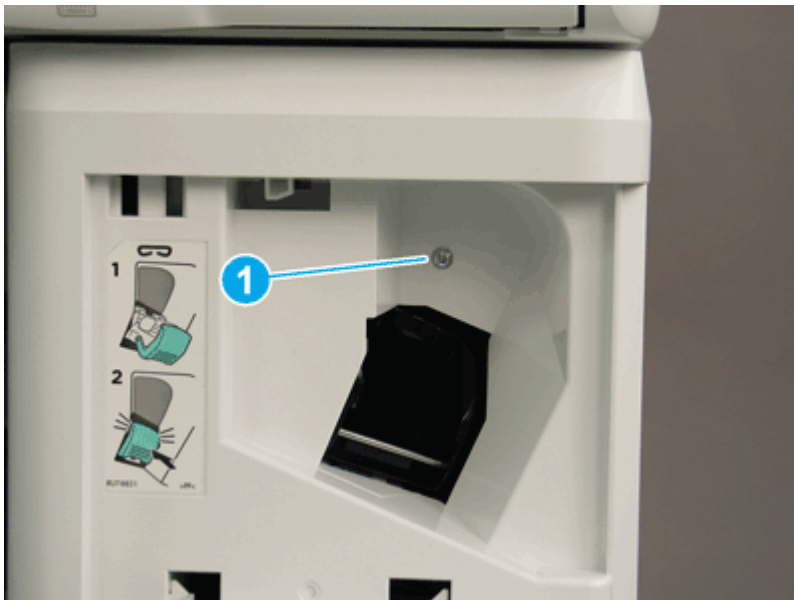
2. Open the stapler door.

Figure 5-2333 Open the stapler door



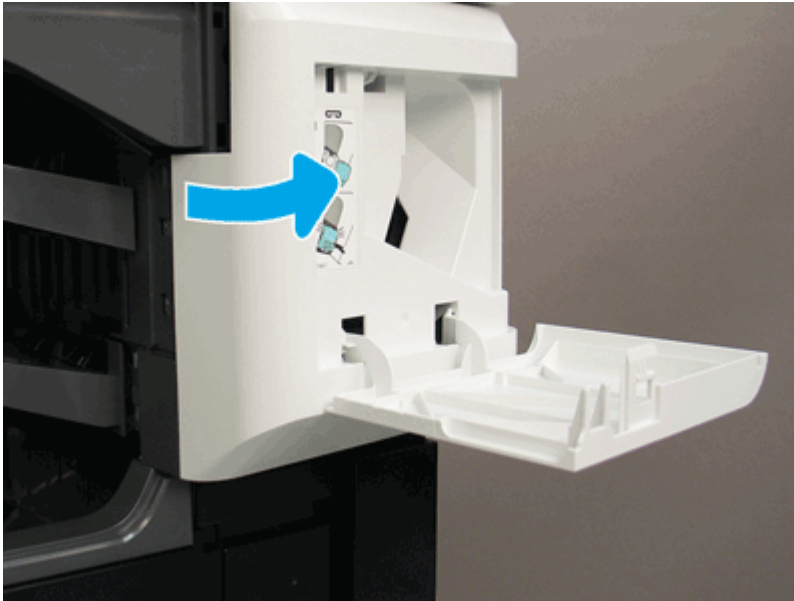
3. Remove one screw (callout 1).

Figure 5-2334 Remove one screw



4. Release one tab on the left side of the cover, and then rotate it away from the printer to remove it.

Figure 5-2335 Remove the stapler cover

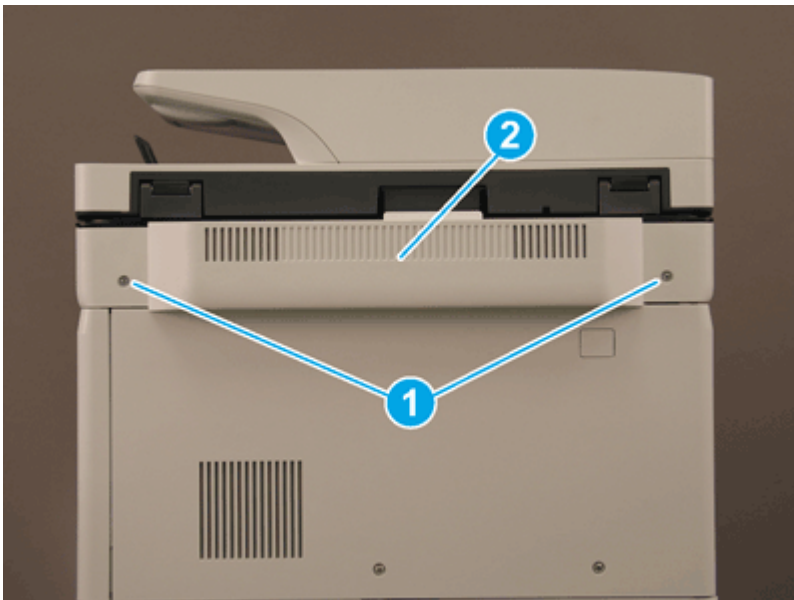


3. Remove the rear cover (3-bin stapler/stacker)

Follow these steps to remove the rear cover (3-bin stapler/stacker).

1. At the back of the printer, remove two screws (callout 1), and then remove the image scanner rear cover (callout 2).

Figure 5-2336 Remove two screws



2. Remove one screw cover (callout 1).

Figure 5-2337 Remove one screw cover



3. Remove three screws (callout 1), and then remove the rear cover (callout 2).


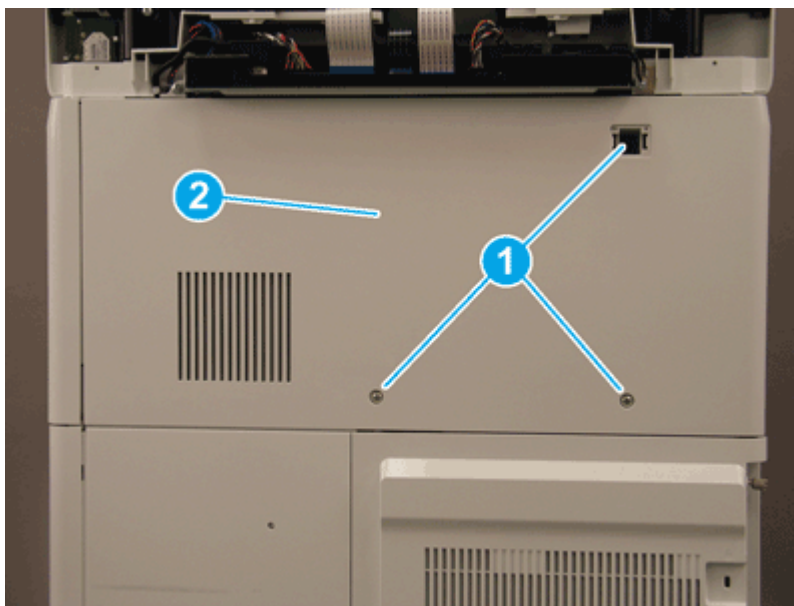
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2338 Remove three screws and the rear cover



4. Remove the rear inner cover (3-bin stapler/stacker)

Follow these steps to remove the rear inner cover (3-bin stapler/stacker).

- Remove one screw (callout 1), release three tabs (callout 2), and then remove the rear inner cover (callout 3).


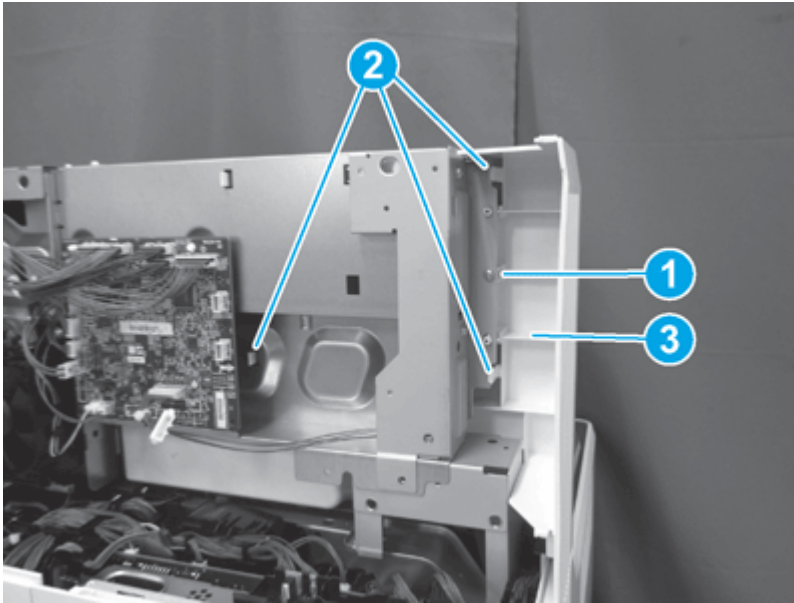
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2339 Remove the rear inner cover

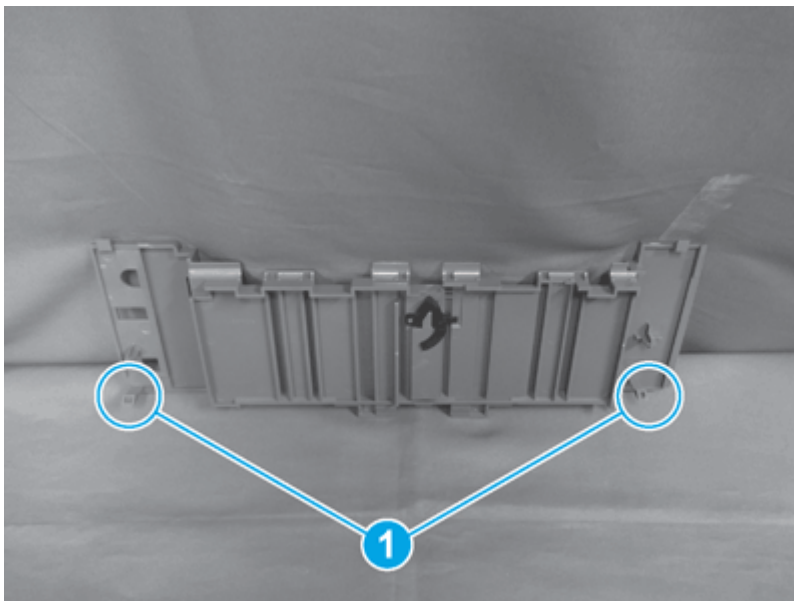


5. Remove the stacking wall cover (3-bin stapler/stacker)

Follow these steps to remove the stacking wall cover (3-bin stapler/stacker).

1. Before removing the stacking wall cover, note the location of the two tabs (callout 1) on the back of the cover.

Figure 5-2340 Tab locations



2. Release two tabs (callout 1), and then remove the stacking wall cover (callout 2).


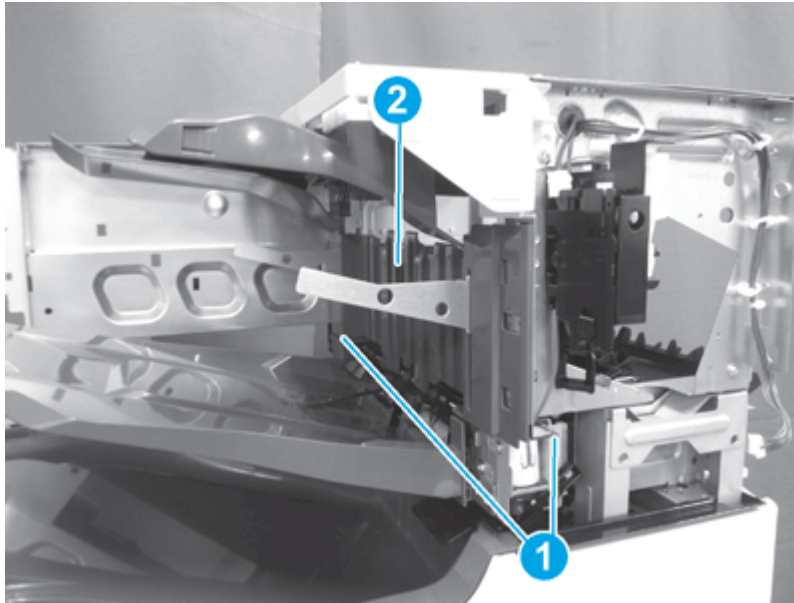
 **TIP:** Reverse the removal steps to install the assembly.


Figure 5-2341 Remove the stacking wall cover



6. Unpack the replacement assembly



Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.


 **NOTE:** HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>


2. Unpack the replacement part from the packaging.

 **CAUTION:**  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

 **IMPORTANT:** Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

 **NOTE:** If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

 **NOTE:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

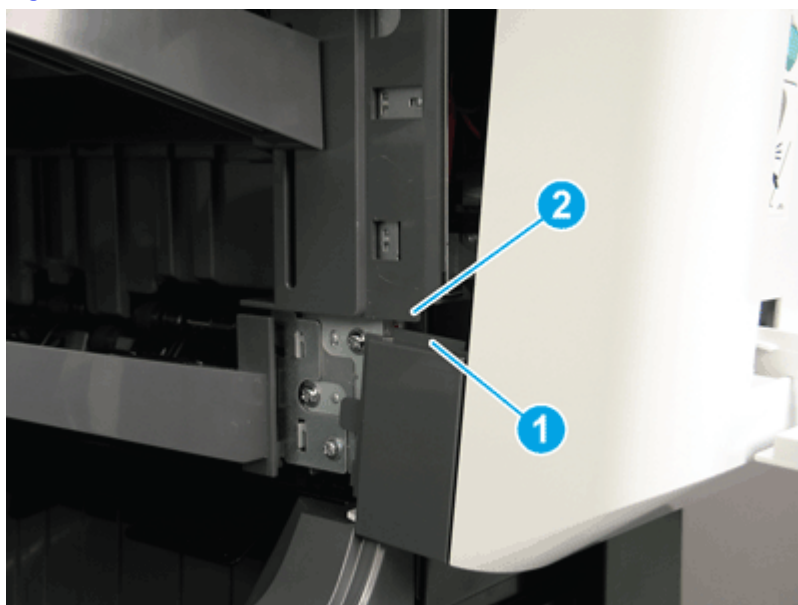
7. Reverse the removal steps to install the assembly

Also use the following **special installation instructions**.

Stapler cover

- When reinstalling the stapler cover, position the tab on the cover (callout 1) behind the edge of the cover (callout 2) on the printer.

Figure 5-2342 Position the tab



 **NOTE:** Continue to reverse the removal steps to finish installing the assembly.


Removal and replacement: Upper feed assembly (3-bin stapler/stacker)

Learn how to remove and replace the upper feed assembly on the 3-bin stapler/stacker.

 [View a video of how to remove and replace the upper feed assembly.](#)

Mean time to repair: 5 minutes

Service level: Basic

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.

⚠ WARNING! To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.

- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-183 Part information

Part number	Part description
RM2-6810-000CN	Upper paper feed assembly

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

No post service test is available for this assembly.

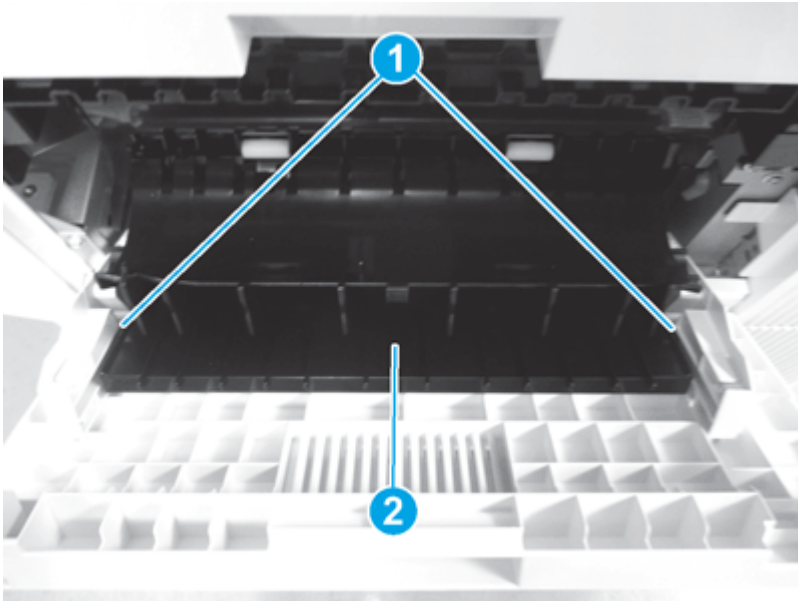
1. Remove the right door (3-bin stapler/stacker)

Follow these steps to remove the right door (3-bin stapler/stacker).

1. Open the right door.

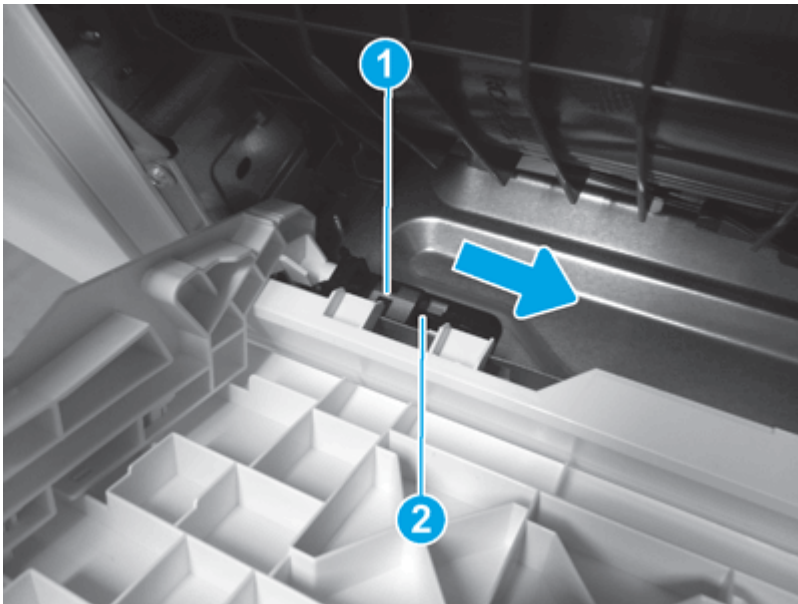
2. Release two shafts (callout 1), and then raise the feed guide (callout 2).

Figure 5-2343 Raise the feed guide



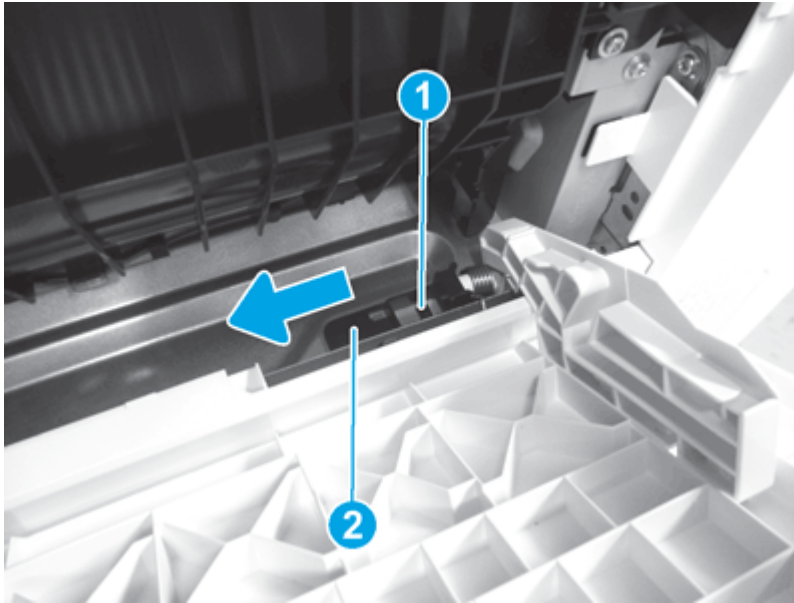
3. On the left side of the door, release one tab (callout 1), and then slide the bracket (callout 2) to the right to remove it.

Figure 5-2344 Remove the left bracket




4. On the right side of the door, release one tab (callout 1), and then slide the bracket (callout 2) to the left to remove it.

Figure 5-2345 Remove the right bracket



5. Release the left hinge pin (callout 1), and then slide the door to the left to release the right hinge pin (callout 2).

 **NOTE:** The spring on the right hinge pin (callout 2) is not captive. Do not lose the spring.


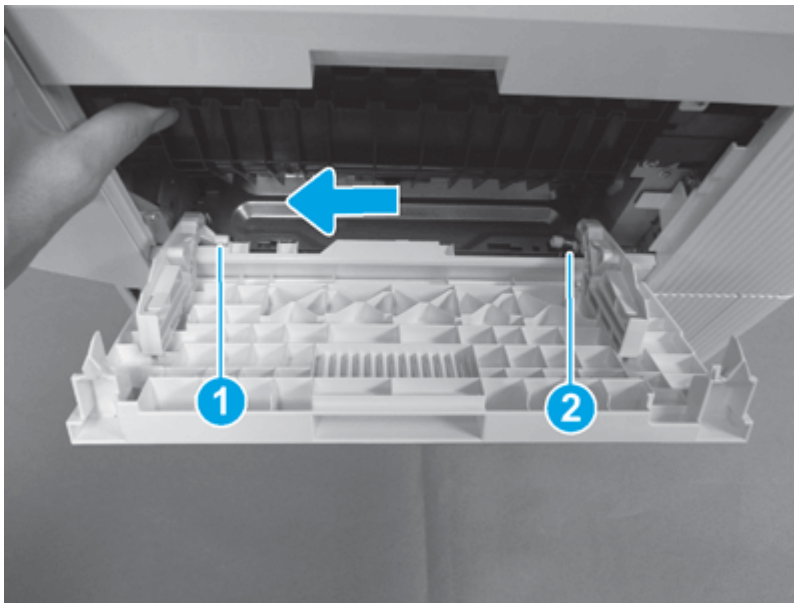
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2346 Remove the right door



2. Remove the staple cover (3-bin stapler/stacker)

Follow these steps to remove the staple cover (3-bin stapler/stacker).

1. Open the front door.

Figure 5-2347 Open the front door



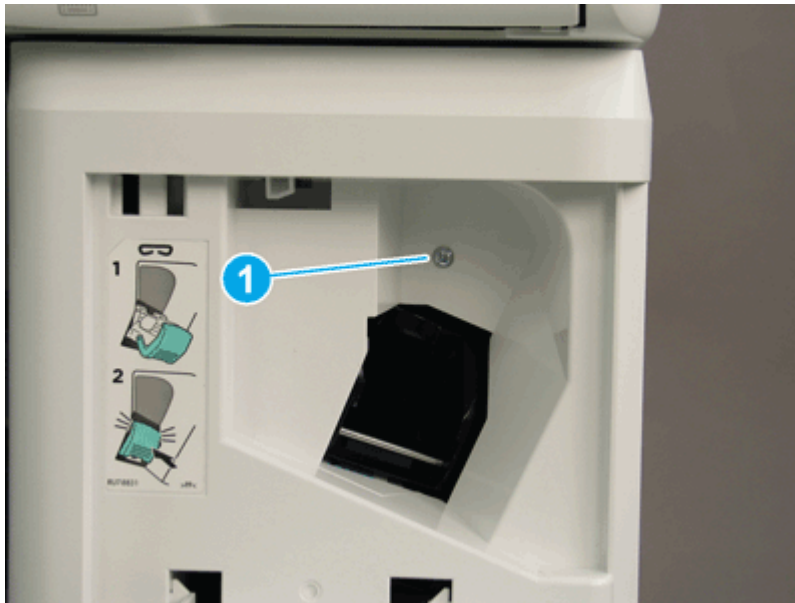
2. Open the stapler door.

Figure 5-2348 Open the stapler door



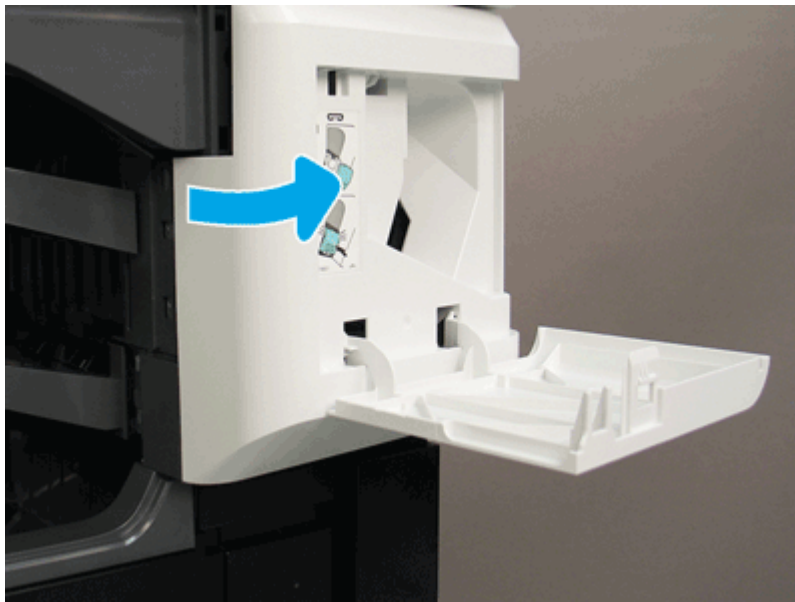
3. Remove one screw (callout 1).

Figure 5-2349 Remove one screw



4. Release one tab on the left side of the cover, and then rotate it away from the printer to remove it.

Figure 5-2350 Remove the stapler cover



3. Remove the stapler (3-bin stapler/stacker)

Follow these steps to remove the stapler (3-bin stapler/stacker).

- Disconnect two connectors (callout 1), remove three screws (callout 2), and then lift the stapler away from the printer to remove it.


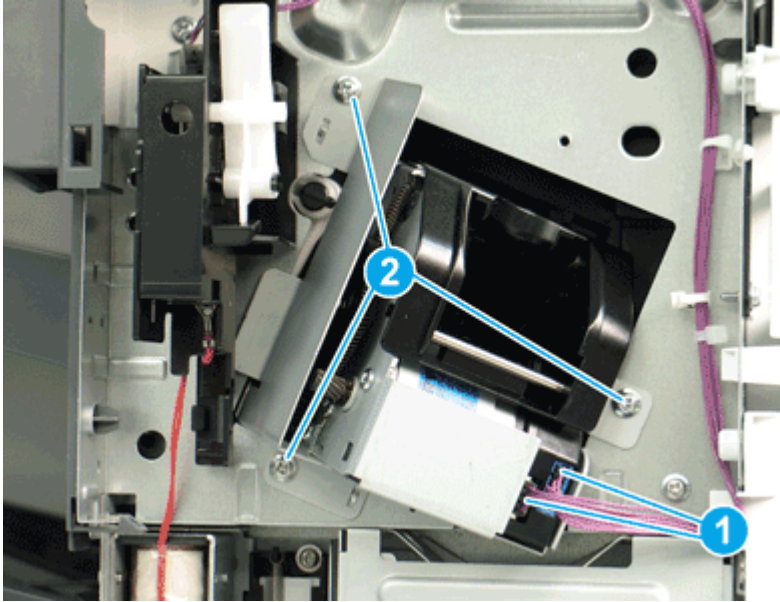
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2351 Remove the stapler

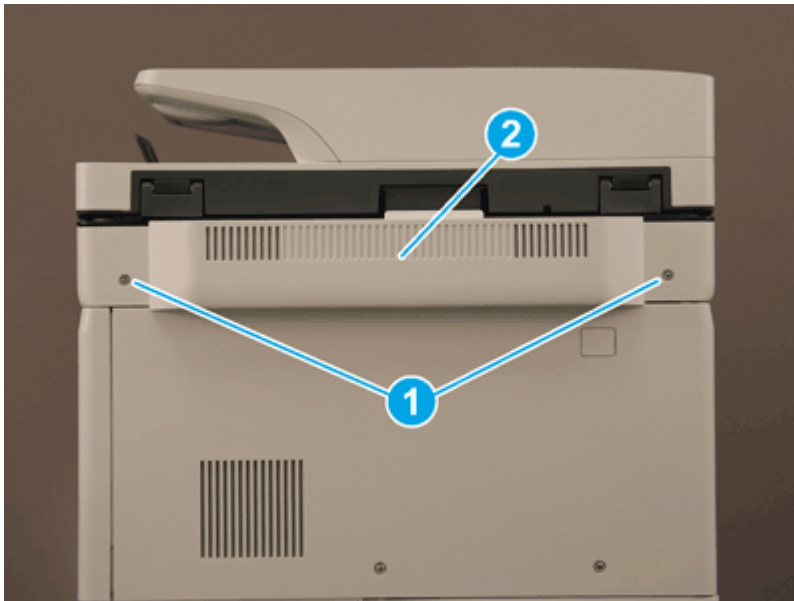


4. Remove the rear cover (3-bin stapler/stacker)

Follow these steps to remove the rear cover (3-bin stapler/stacker).

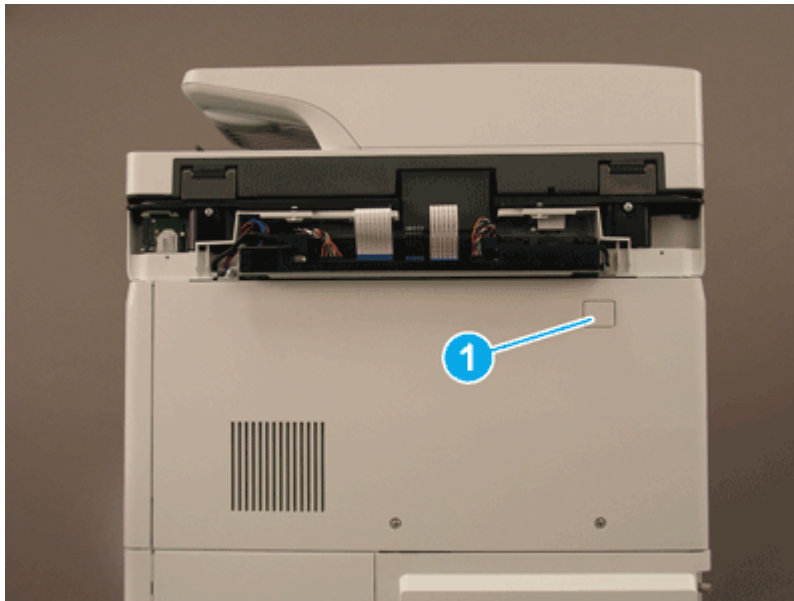
1. At the back of the printer, remove two screws (callout 1), and then remove the image scanner rear cover (callout 2).

Figure 5-2352 Remove two screws



2. Remove one screw cover (callout 1).

Figure 5-2353 Remove one screw cover



3. Remove three screws (callout 1), and then remove the rear cover (callout 2).


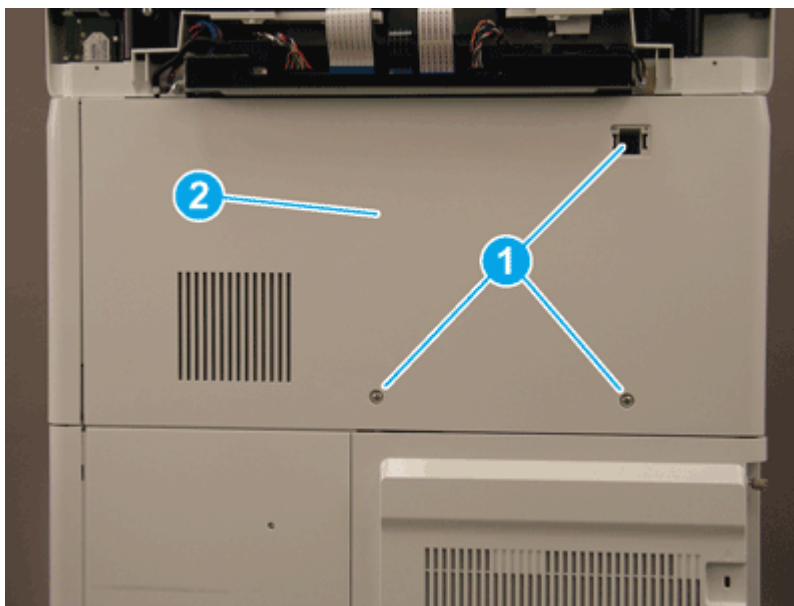
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2354 Remove three screws and the rear cover



5. Remove the right upper cover (3-bin stapler/stacker)

Follow these steps to remove the right upper cover (3-bin stapler/stacker).

1. Open the right door.

2. Remove one screw (callout 1), release one tab (callout 2), and then remove the right upper cover (callout 3).


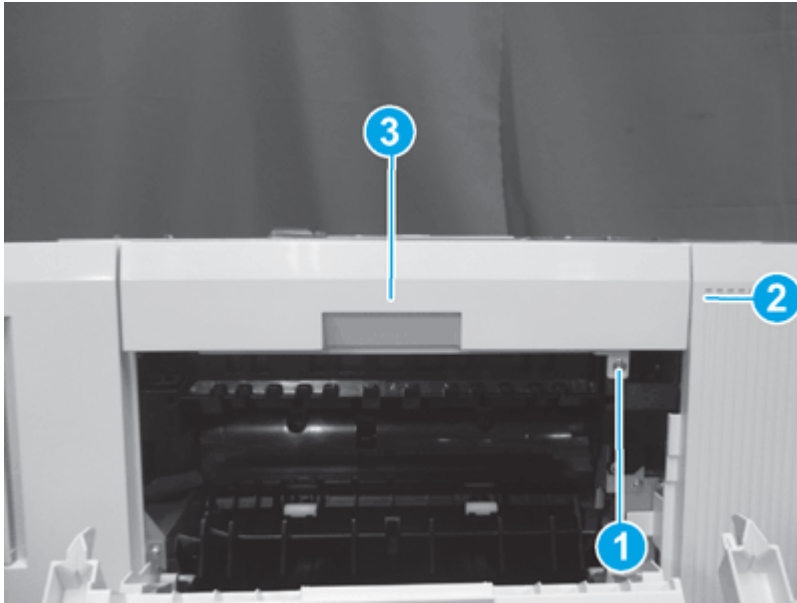
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2355 Remove the right upper cover



6. Remove the right corner cover (3-bin stapler/stacker)

Follow these steps to remove the right corner cover (3-bin stapler/stacker).

- Release two tabs (callout 1), and then remove the right corner cover (callout 2).


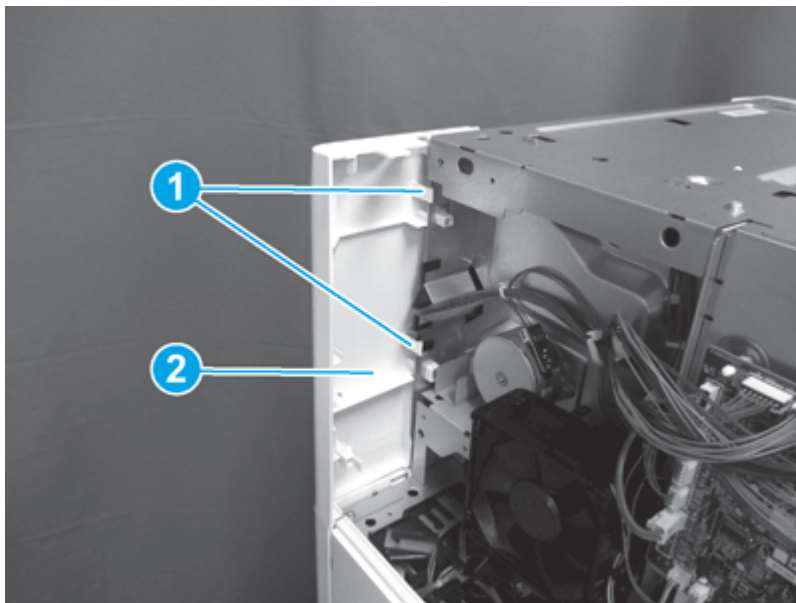
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2356 Remove the right corner cover



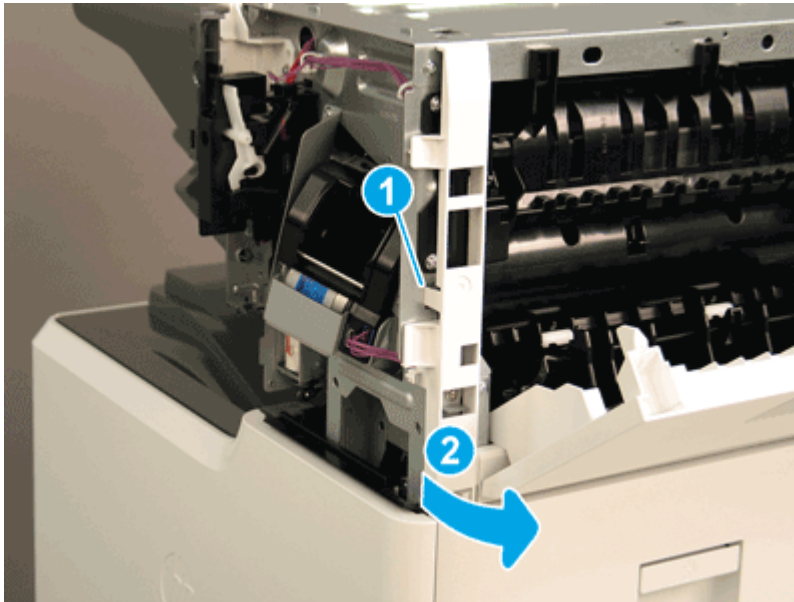
7. Remove the staple rear cover (3-bin stapler/stacker)

Follow these steps to remove the staple rear cover (3-bin stapler/stacker).

- Release one tab (callout 1), and then rotate the stapler rear cover away from the printer (callout 2) to remove it.

 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2357 Remove the staple rear cover

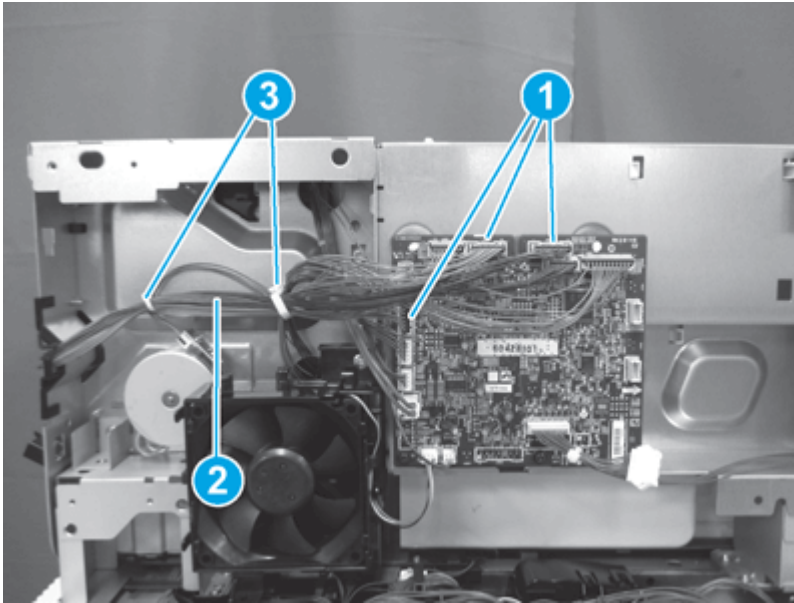


8. Remove the upper feed assembly (3-bin stapler/stacker)

Follow these steps to remove the upper feed assembly (3-bin stapler/stacker).

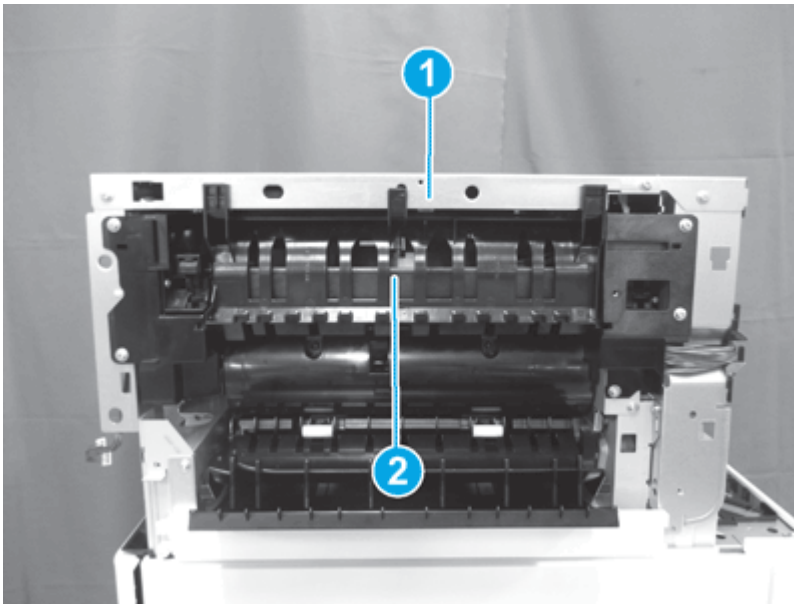
1. At the rear of the 3-bin stapler/stacker, disconnect three connectors (callout 1), and then release the cables (callout 2) from the retainers (callout 3).

Figure 5-2358 Disconnect three connectors



2. Release one tab (callout 1), and then remove the guide (callout 2).

Figure 5-2359 Remove the guide



3. Remove six screws (callout 1), and then remove the upper feed assembly (callout 2).


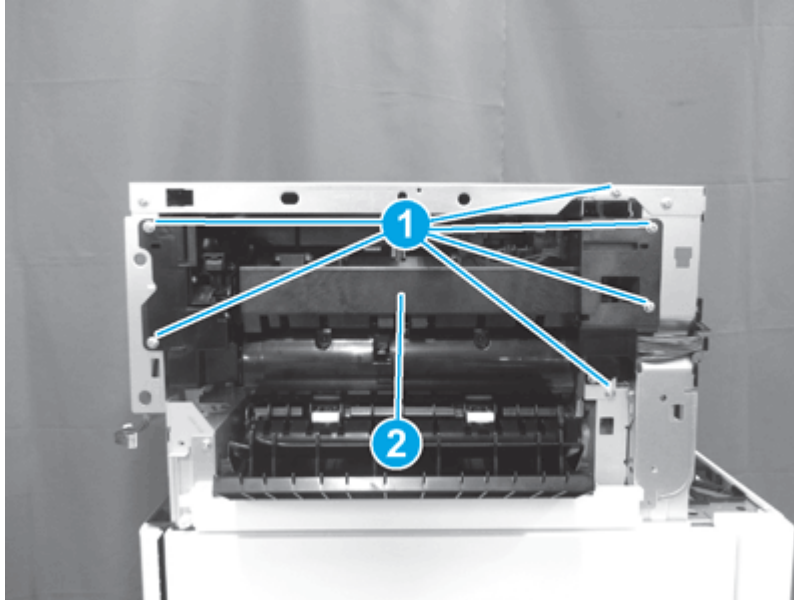
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2360 Remove the upper feed assembly



9. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

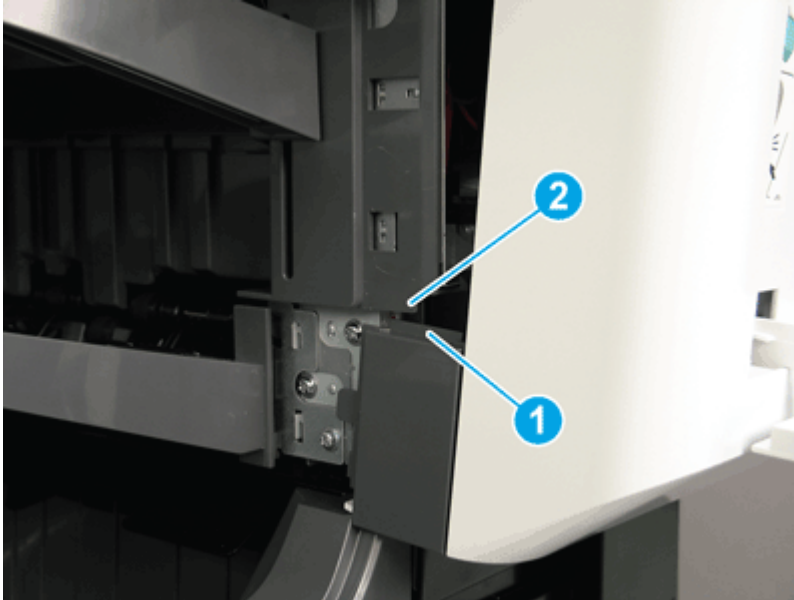
10. Reverse the removal steps to install the assembly

Also use the following **special installation instructions**.

Stapler cover

- When reinstalling the stapler cover, position the tab on the cover (callout 1) behind the edge of the cover (callout 2) on the printer.

Figure 5-2361 Position the tab



 **NOTE:** Continue to reverse the removal steps to finish installing the assembly.


Removal and replacement: Fan (3-bin stapler/stacker)

Learn how to remove and replace the fan on the 3-bin stapler/stacker.

 [View a video of how to remove and replace the fan.](#)


Mean time to repair: 10 minutes

Service level: Intermediate

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.

 **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.

- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-184 Part information

Part number	Part description
RK2-8153-000CN	Fan

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

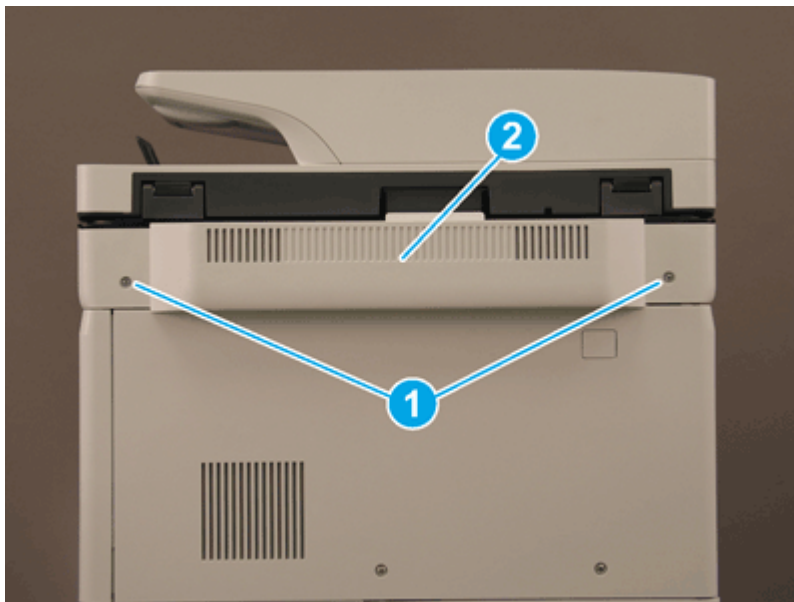
No post service test is available for this assembly.

1. Remove the rear cover (3-bin stapler/stacker)

Follow these steps to remove the rear cover (3-bin stapler/stacker).

1. At the back of the printer, remove two screws (callout 1), and then remove the image scanner rear cover (callout 2).

Figure 5-2362 Remove two screws



2. Remove one screw cover (callout 1).

Figure 5-2363 Remove one screw cover



3. Remove three screws (callout 1), and then remove the rear cover (callout 2).


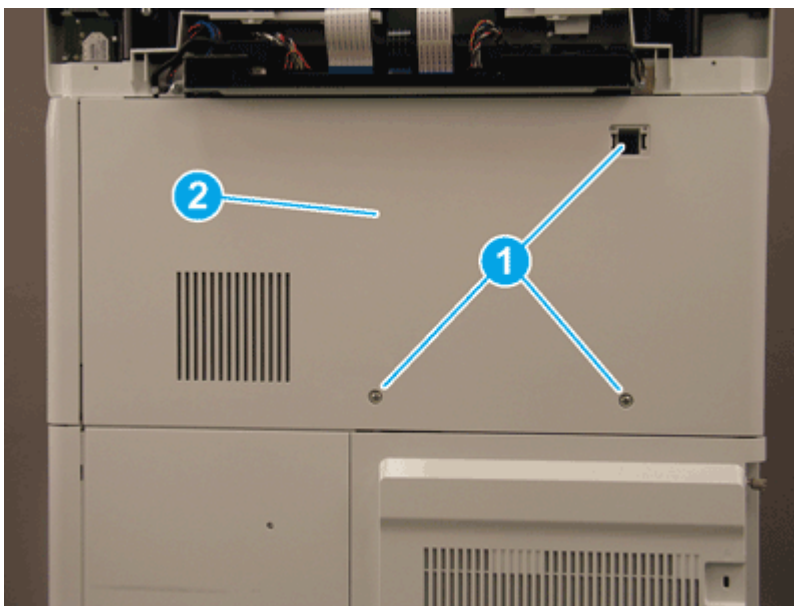
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2364 Remove three screws and the rear cover

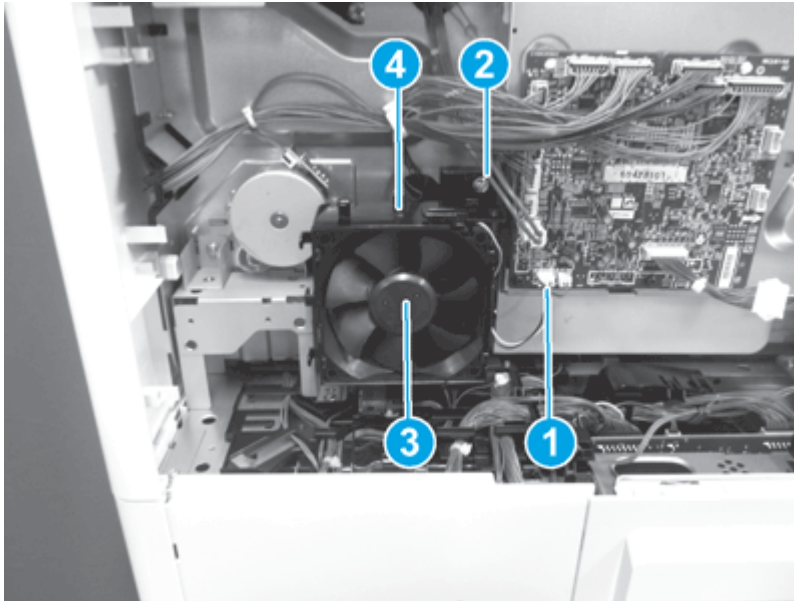


2. Remove the fan (3-bin stapler/stacker)

Follow these steps to remove the fan (3-bin stapler/stacker).

1. Disconnect one connector (callout 1), remove one screw (callout 2), and then remove the fan (callout 3) together with the fan holder (callout 4).

Figure 5-2365 Remove the fan holder and fan



2. Release two tabs (callout 1), and then remove the fan (callout 2) from the holder (callout 3).


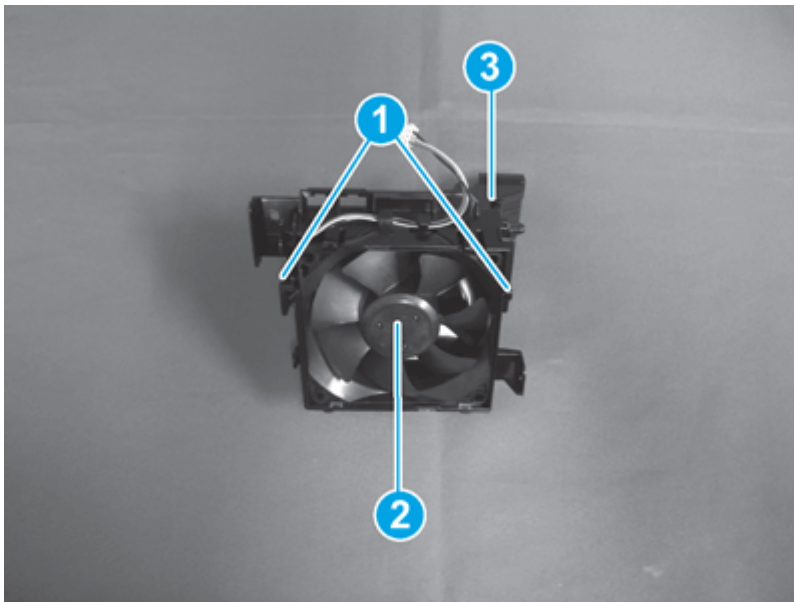
 **TIP:** Reverse the removal steps to install the assembly.


Figure 5-2366 Remove the fan



3. Unpack the replacement assembly



Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.


 **NOTE:** HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>


2. Unpack the replacement part from the packaging.

 **CAUTION:**  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

 **IMPORTANT:** Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

 **NOTE:** If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.


 **NOTE:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Lower feed assembly (3-bin stapler/stacker)


Learn how to remove and replace the lower feed assembly on the 3-bin stapler/stacker.

Mean time to repair: 30 minutes

Service level: Advanced

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.
-  **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.
-
- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-185 Part information

Part number	Part description
RM2-6813-000CN	Lower paper feed assembly

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

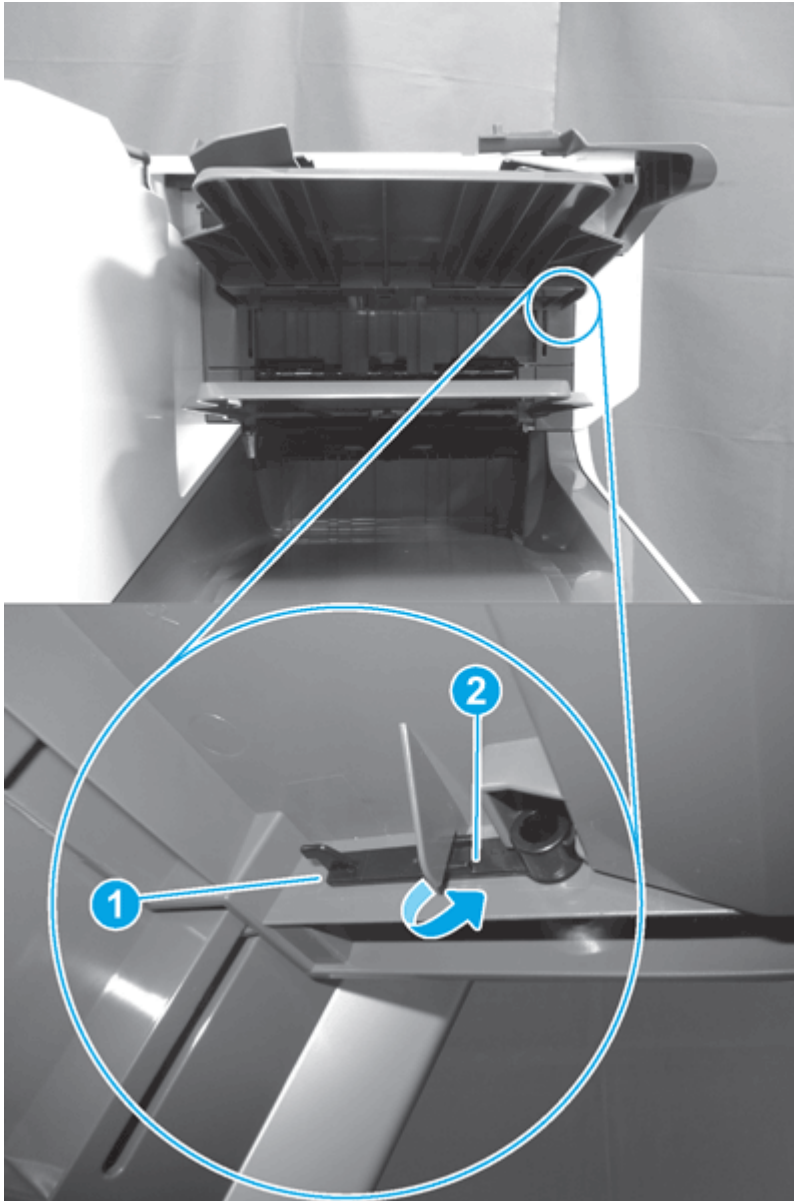
No post service test is available for this assembly.

1. Remove the tray assembly (3-bin stapler/stacker)

Follow these steps to remove the tray assembly (3-bin stapler/stacker).

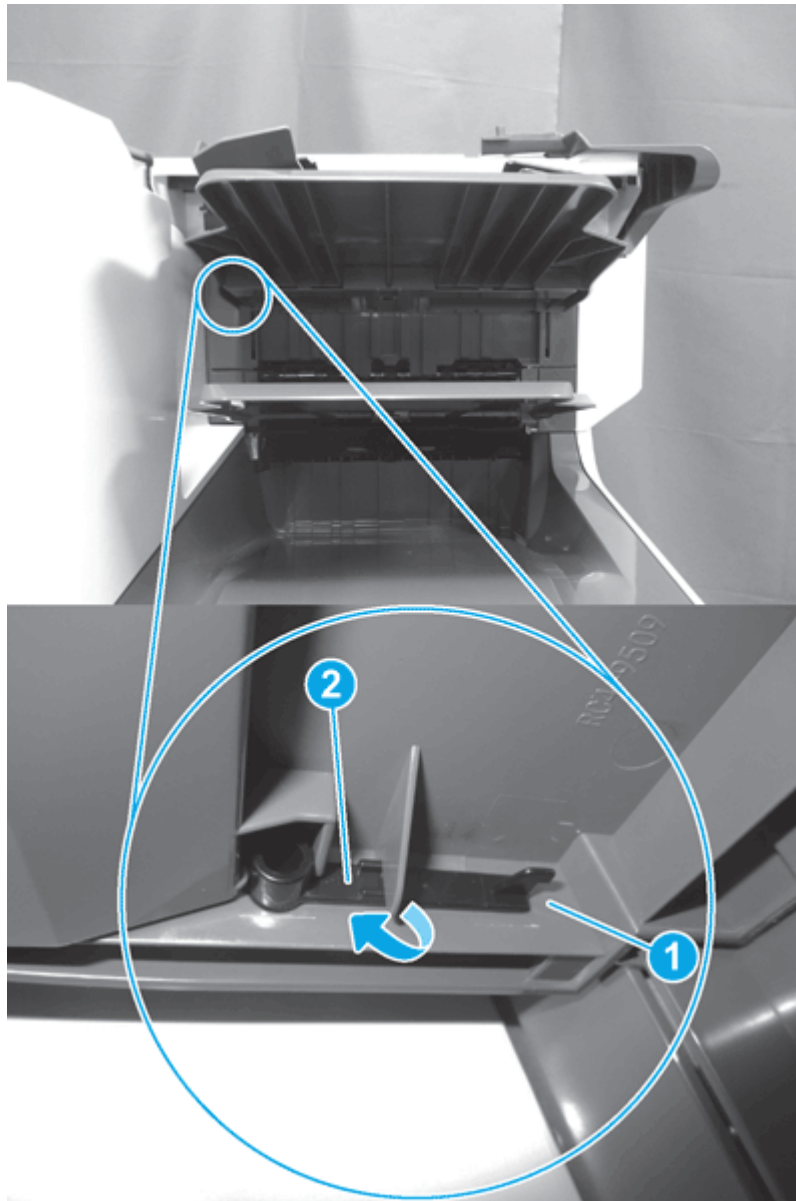
1. Release one boss (callout 1), rotate the front locking pin (callout 2) down to release it, and then remove the locking pin.

Figure 5-2367 Remove the front locking pin



2. Release one boss (callout 1), rotate the rear locking pin (callout 2) down to release it, and then remove the locking pin.

Figure 5-2368 Remove the rear locking pin



3. Lift the tray assembly (callout 1) away from the printer to remove it.


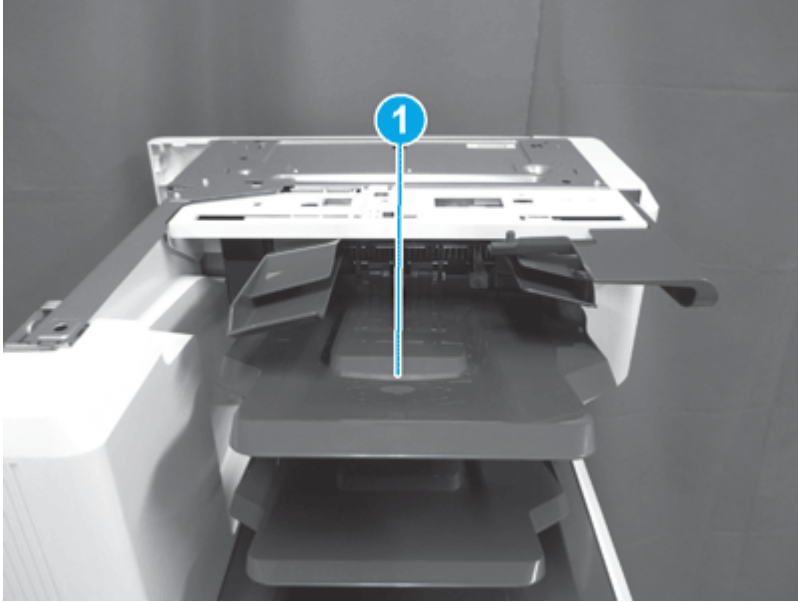
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2369 Remove the tray assembly

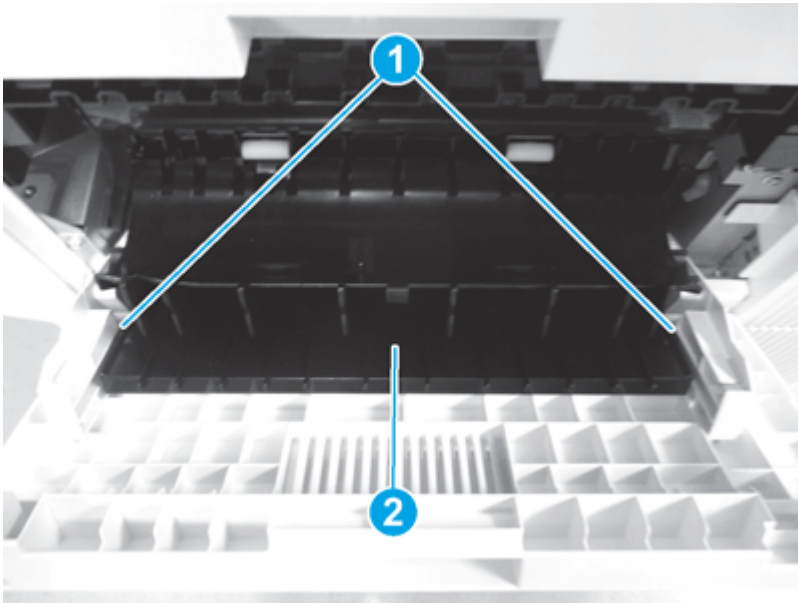


2. Remove the right door (3-bin stapler/stacker)

Follow these steps to remove the right door (3-bin stapler/stacker).

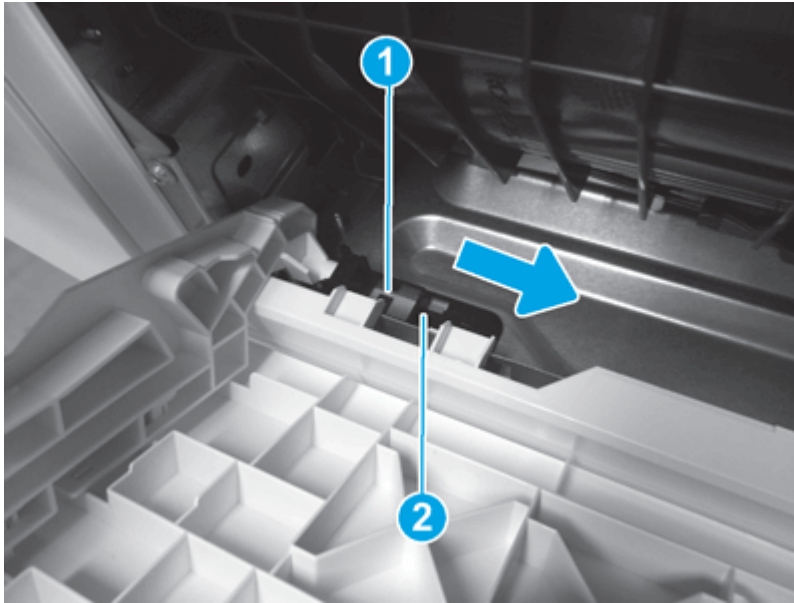
1. Open the right door.
2. Release two shafts (callout 1), and then raise the feed guide (callout 2).

Figure 5-2370 Raise the feed guide



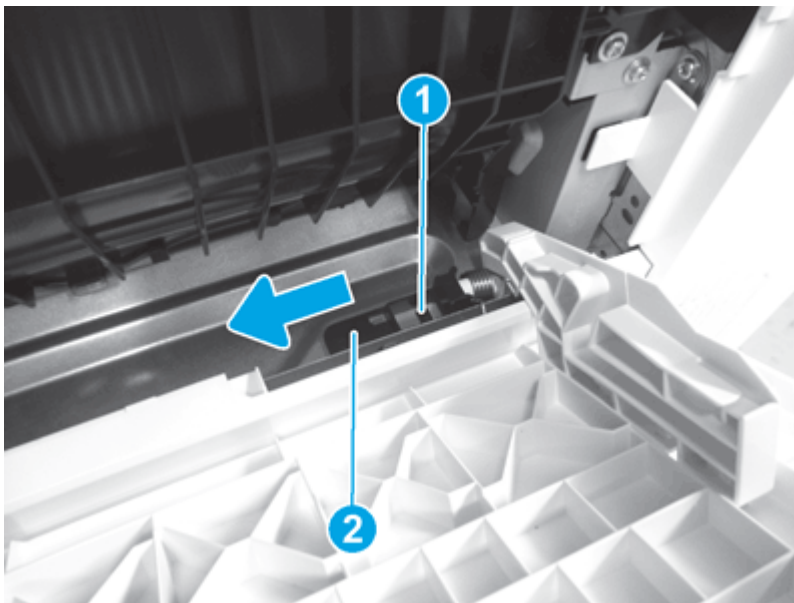
3. On the left side of the door, release one tab (callout 1), and then slide the bracket (callout 2) to the right to remove it.

Figure 5-2371 Remove the left bracket




4. On the right side of the door, release one tab (callout 1), and then slide the bracket (callout 2) to the left to remove it.

Figure 5-2372 Remove the right bracket



5. Release the left hinge pin (callout 1), and then slide the door to the left to release the right hinge pin (callout 2).

 **NOTE:** The spring on the right hinge pin (callout 2) is not captive. Do not lose the spring.


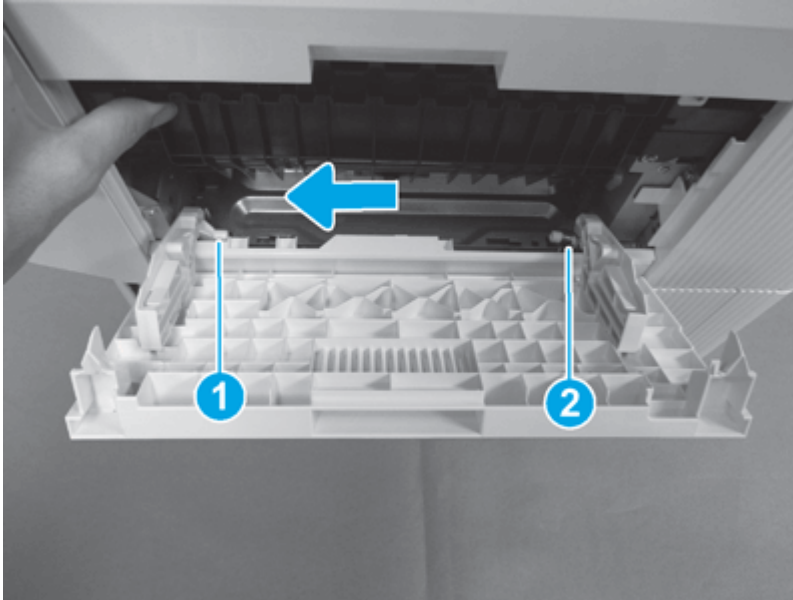
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2373 Remove the right door



3. Remove the staple cover (3-bin stapler/stacker)

Follow these steps to remove the staple cover (3-bin stapler/stacker).

1. Open the front door.

Figure 5-2374 Open the front door



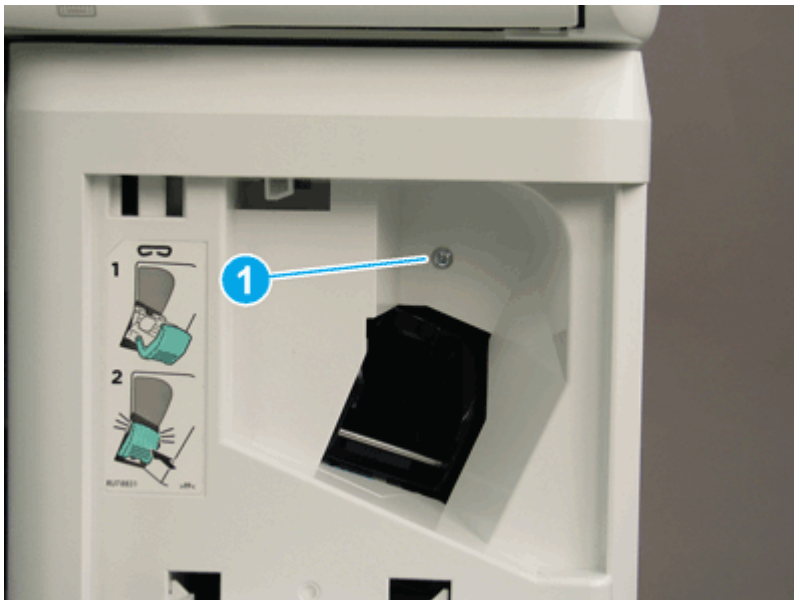
2. Open the stapler door.

Figure 5-2375 Open the stapler door



3. Remove one screw (callout 1).

Figure 5-2376 Remove one screw



4. Release one tab on the left side of the cover, and then rotate it away from the printer to remove it.

Figure 5-2377 Remove the stapler cover



4. Remove the stapler

Follow these steps to remove the stapler.

- Disconnect two connectors (callout 1), remove three screws (callout 2), and then lift the stapler away from the printer to remove it.


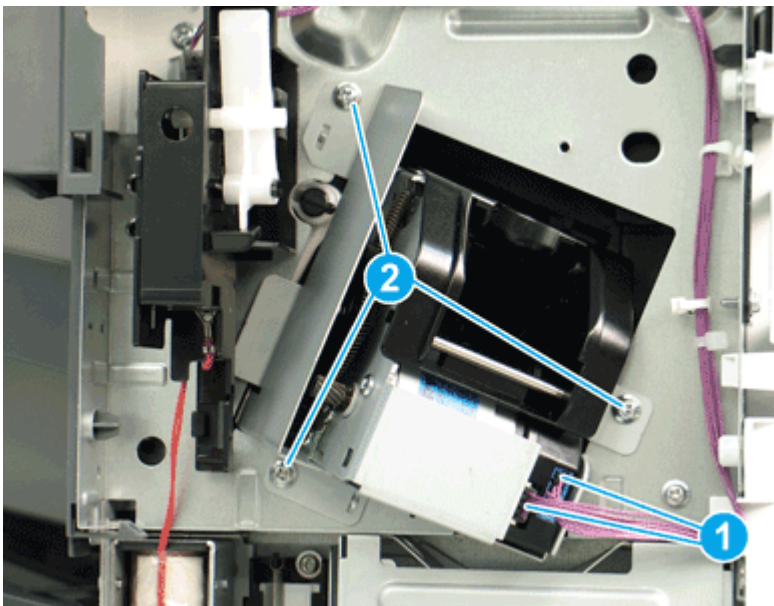
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2378 Remove the stapler

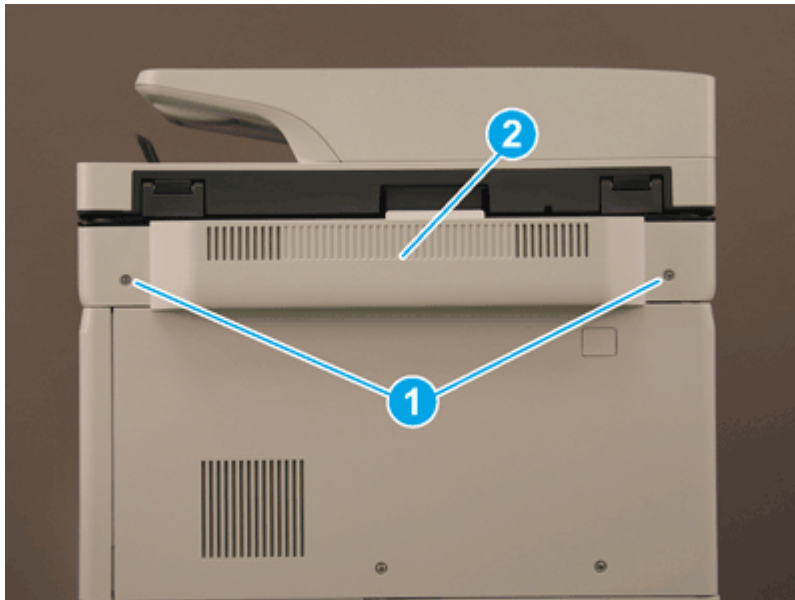


5. Remove the rear cover (3-bin stapler/stacker)

Follow these steps to remove the rear cover (3-bin stapler/stacker).

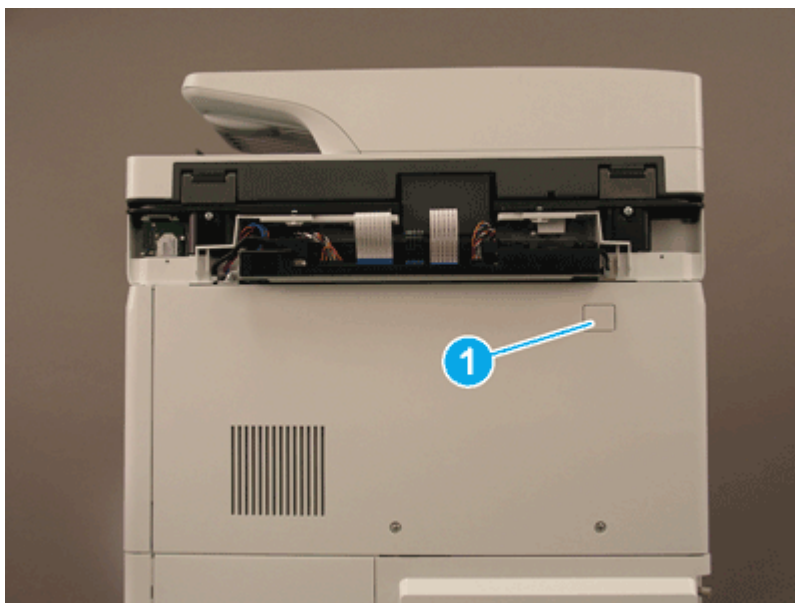
1. At the back of the printer, remove two screws (callout 1), and then remove the image scanner rear cover (callout 2).

Figure 5-2379 Remove two screws



2. Remove one screw cover (callout 1).

Figure 5-2380 Remove one screw cover



3. Remove three screws (callout 1), and then remove the rear cover (callout 2).


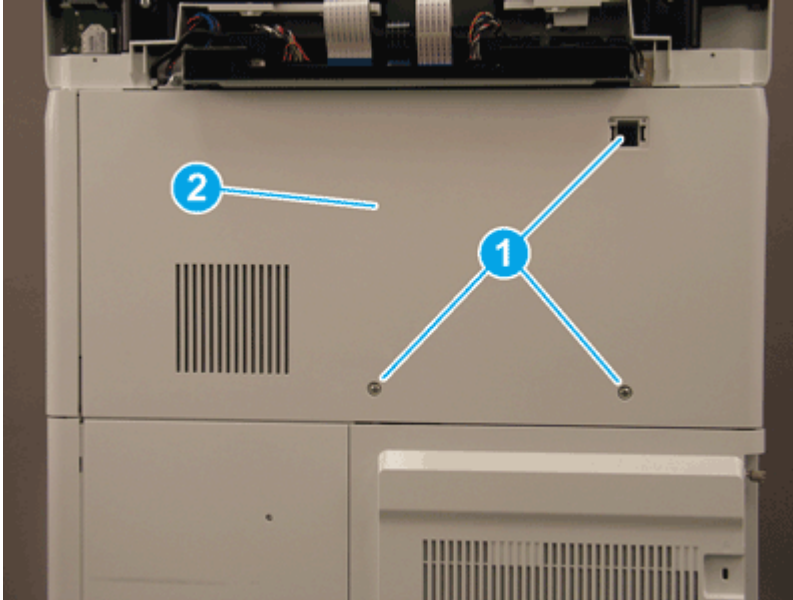
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2381 Remove three screws and the rear cover



6. Remove the rear inner cover (3-bin stapler/stacker)

Follow these steps to remove the rear inner cover (3-bin stapler/stacker).

- Remove one screw (callout 1), release three tabs (callout 2), and then remove the rear inner cover (callout 3).


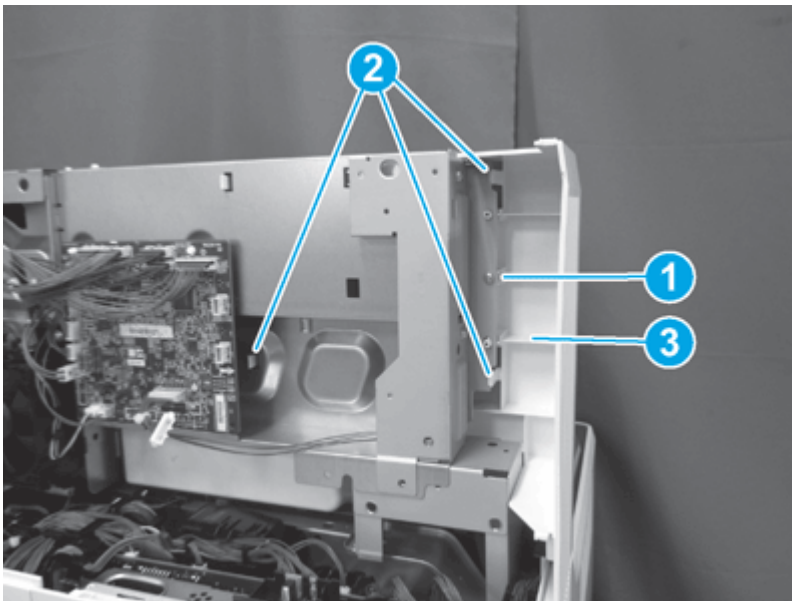
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2382 Remove the rear inner cover

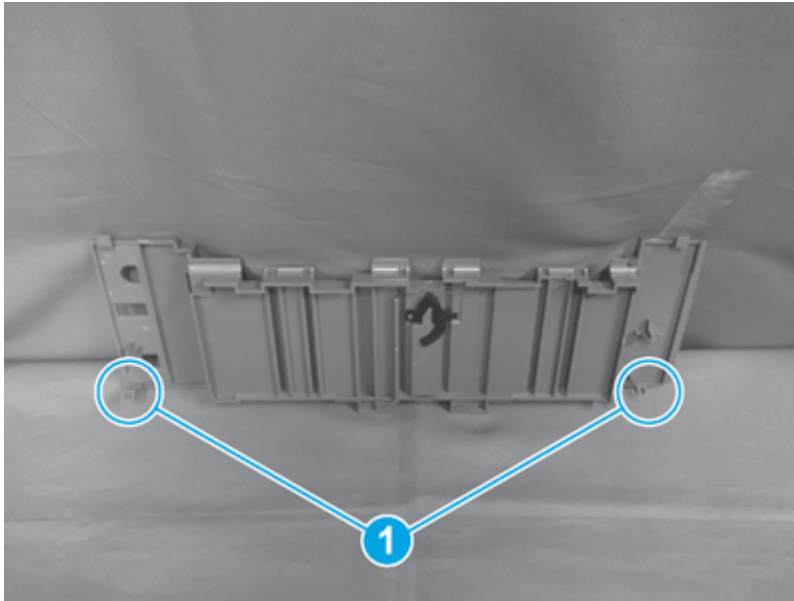


7. Remove the stacking wall cover (3-bin stapler/stacker)

Follow these steps to remove the stacking wall cover (3-bin stapler/stacker).

1. Before removing the stacking wall cover, note the location of the two tabs (callout 1) on the back of the cover.

Figure 5-2383 Tab locations



2. Release two tabs (callout 1), and then remove the stacking wall cover (callout 2).


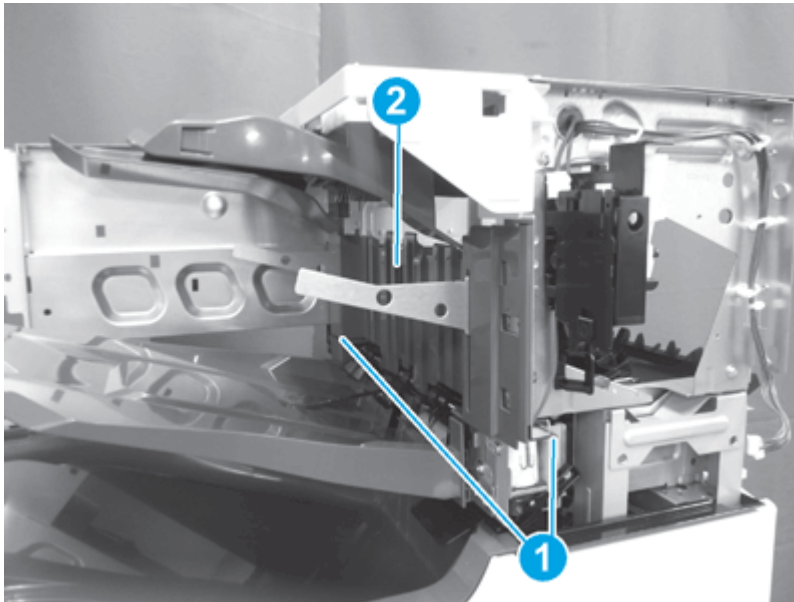
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2384 Remove the stacking wall cover

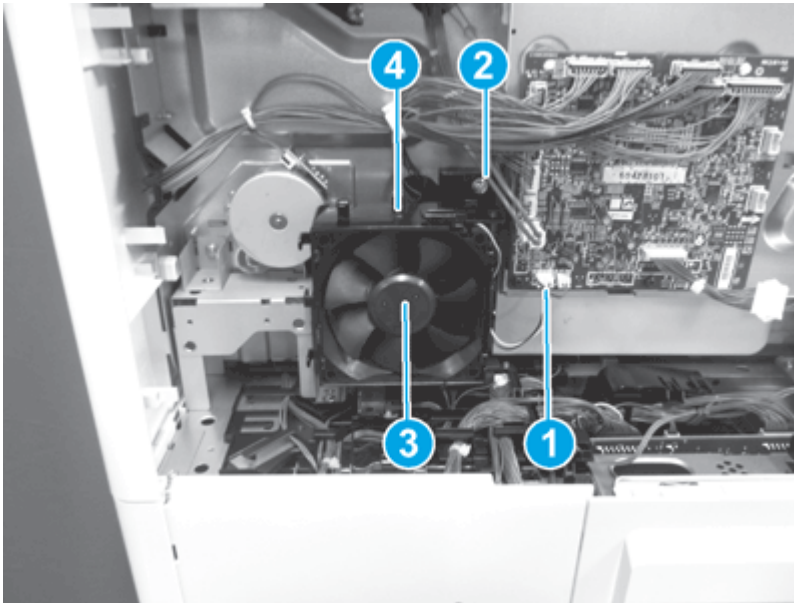


8. Remove the fan (3-bin stapler/stacker)

Follow these steps to remove the fan (3-bin stapler/stacker).

- Disconnect one connector (callout 1), remove one screw (callout 2), and then remove the fan (callout 3) together with the fan holder (callout 4).

Figure 5-2385 Remove the fan holder and fan



9. Remove the right upper cover (3-bin stapler/stacker)

Follow these steps to remove the right upper cover (3-bin stapler/stacker).

1. Open the right door.
2. Remove one screw (callout 1), release one tab (callout 2), and then remove the right upper cover (callout 3).


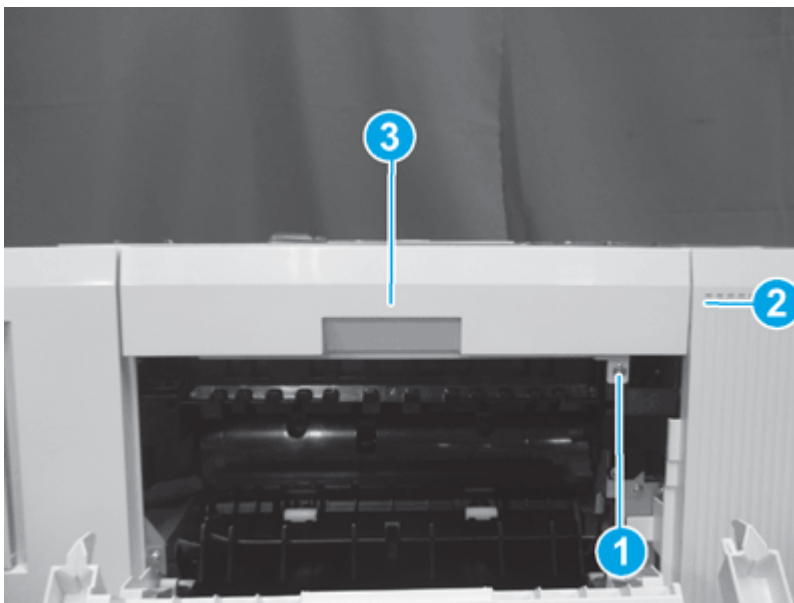
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2386 Remove the right upper cover



10. Remove the right corner cover (3-bin stapler/stacker)

Follow these steps to remove the right corner cover (3-bin stapler/stacker).

- Release two tabs (callout 1), and then remove the right corner cover (callout 2).


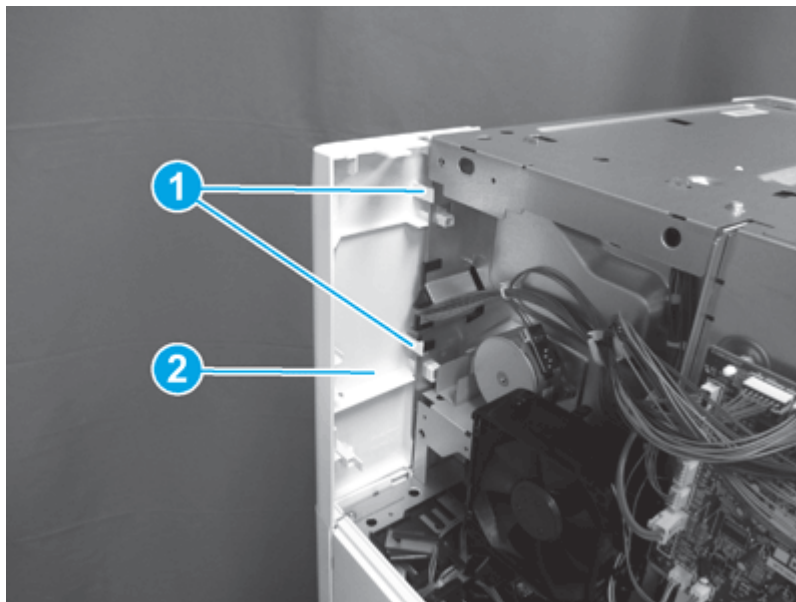
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2387 Remove the right corner cover

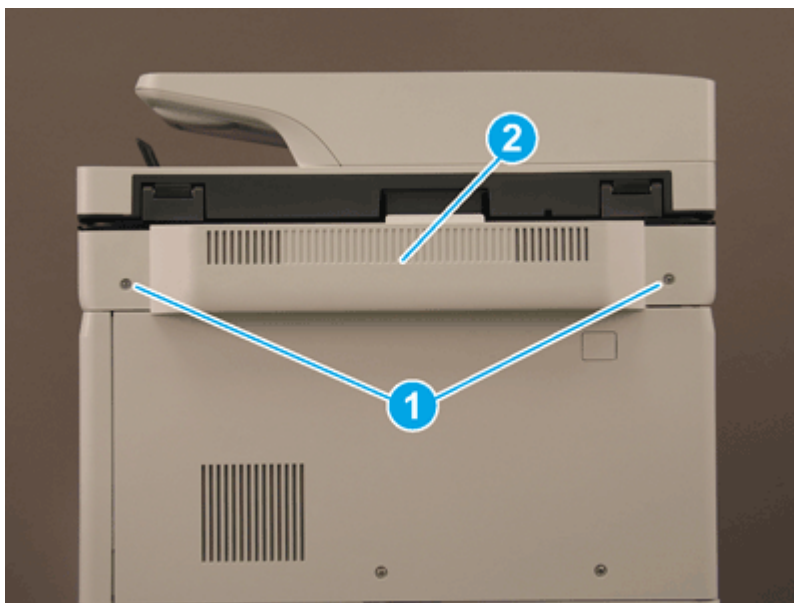


11. Remove the rear cover (3-bin stapler/stacker)

Follow these steps to remove the rear cover (3-bin stapler/stacker).

1. At the back of the printer, remove two screws (callout 1), and then remove the image scanner rear cover (callout 2).

Figure 5-2388 Remove two screws



2. Remove one screw cover (callout 1).

Figure 5-2389 Remove one screw cover



3. Remove three screws (callout 1), and then remove the rear cover (callout 2).


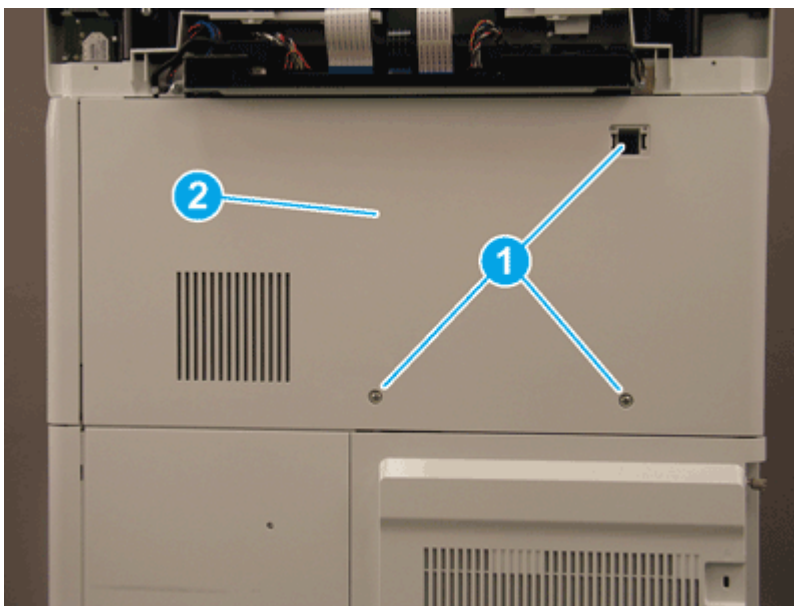
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2390 Remove three screws and the rear cover



12. Remove the staple rear cover (3-bin stapler/stacker)

Follow these steps to remove the staple rear cover (3-bin stapler/stacker).

- Release one tab (callout 1), and then rotate the stapler rear cover away from the printer (callout 2) to remove it.


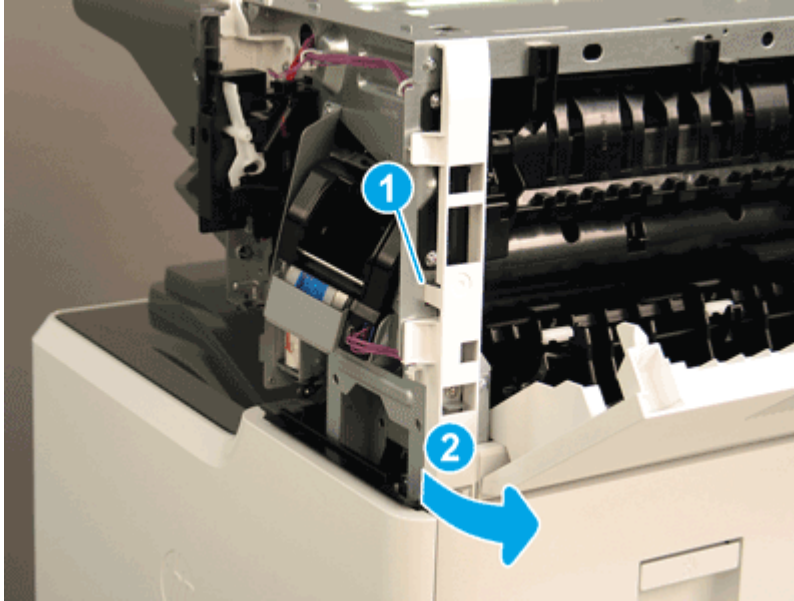
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2391 Remove the stapler rear cover

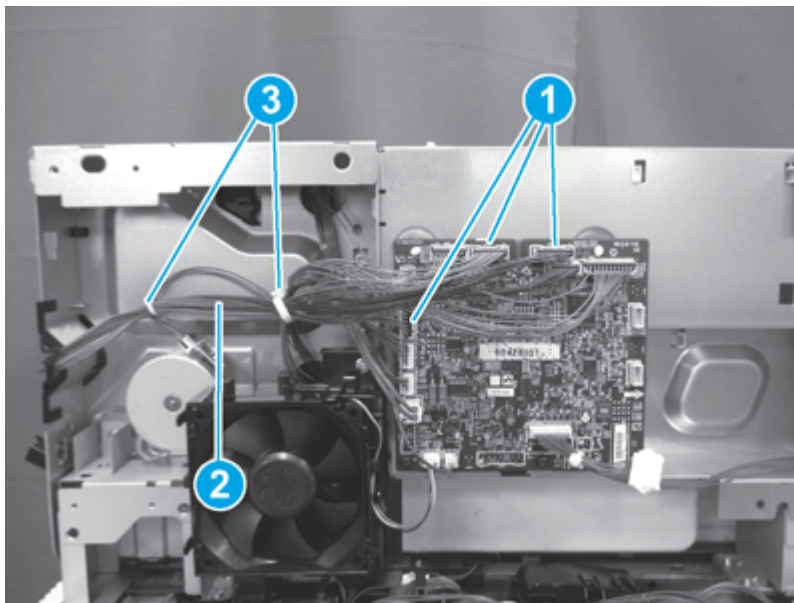


13. Remove the upper feed assembly (3-bin stapler/stacker)

Follow these steps to remove the upper feed assembly (3-bin stapler/stacker).

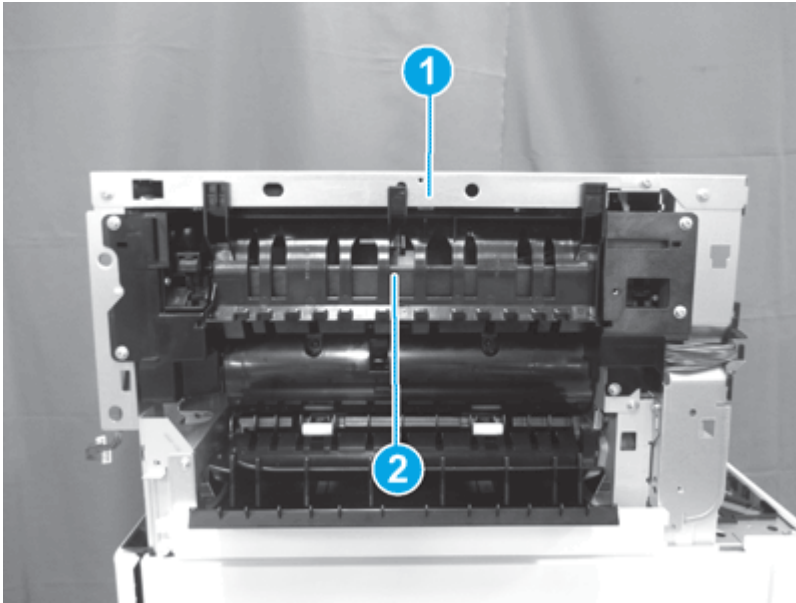
1. At the rear of the 3-bin stapler/stacker, disconnect three connectors (callout 1), and then release the cables (callout 2) from the retainers (callout 3).

Figure 5-2392 Disconnect three connectors



2. Release one tab (callout 1), and then remove the guide (callout 2).

Figure 5-2393 Remove the guide



3. Remove six screws (callout 1), and then remove the upper feed assembly (callout 2).


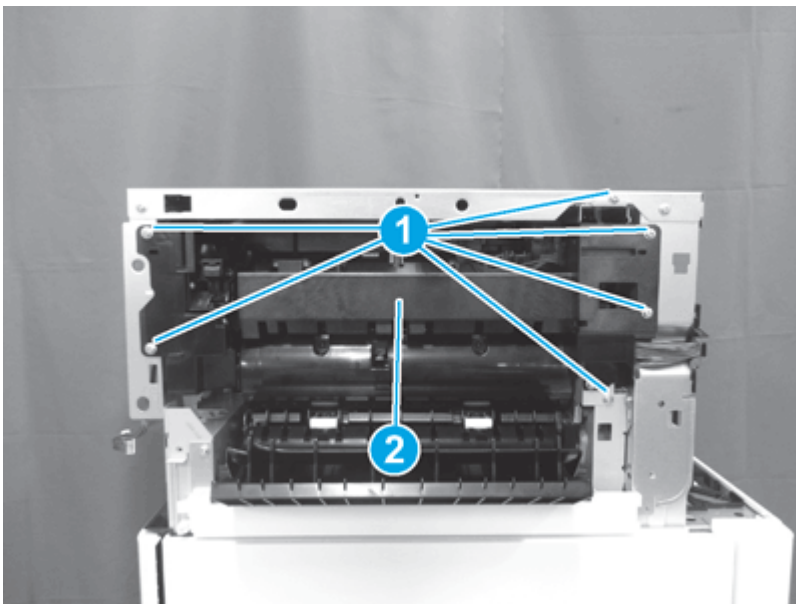
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2394 Remove the upper feed assembly

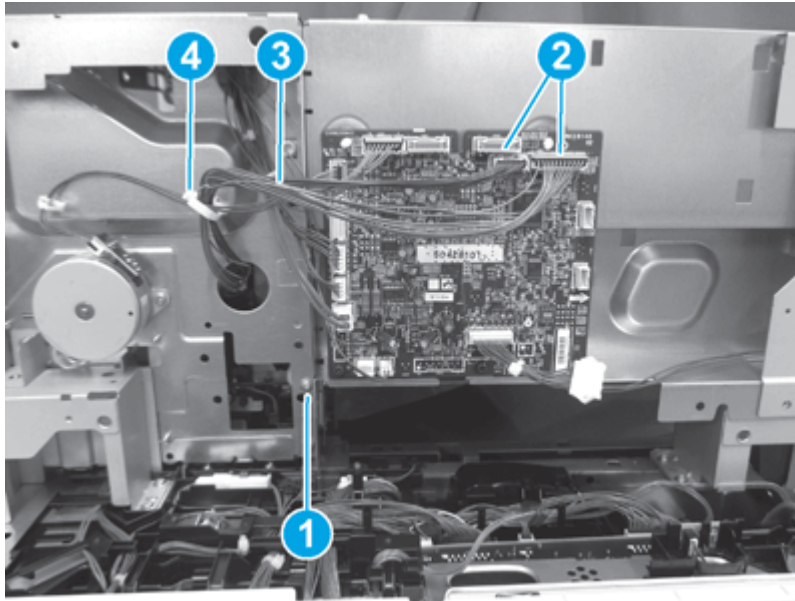


14. Remove the lower feed assembly (3-bin stapler/stacker)

Follow these steps to remove the lower feed assembly (3-bin stapler/stacker).

1. Remove one screw (callout 1), disconnect two connectors (callout 2), and then release the cable (callout 3) from the retainer (callout 4).

Figure 5-2395 Remove one screw and disconnect two connectors



2. Remove three screws (callout 1), and then remove the lower feed assembly (callout 2).


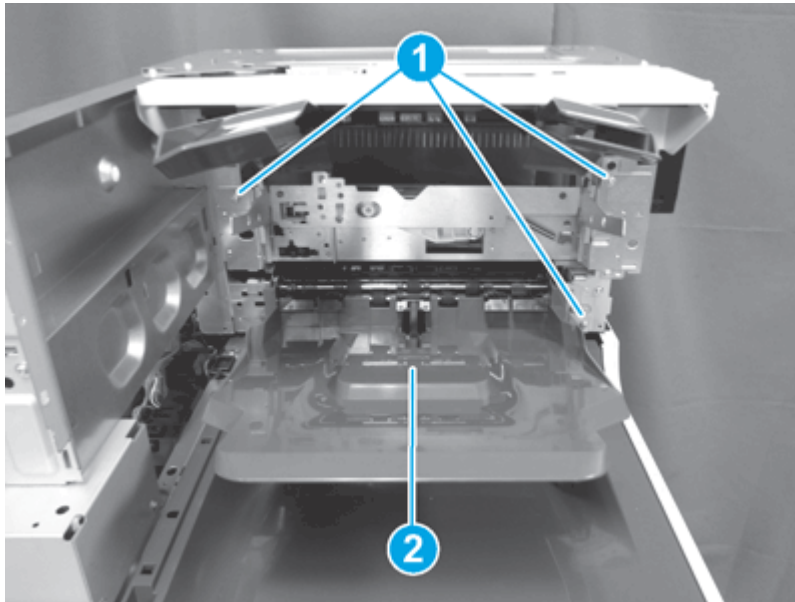
 **TIP:** Reverse the removal steps to install the assembly.


Figure 5-2396 Remove the lower feed assembly



15. Unpack the replacement assembly



Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.


 **NOTE:** HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>


2. Unpack the replacement part from the packaging.

 **CAUTION:**  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

 **IMPORTANT:** Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

 **NOTE:** If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

 **NOTE:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

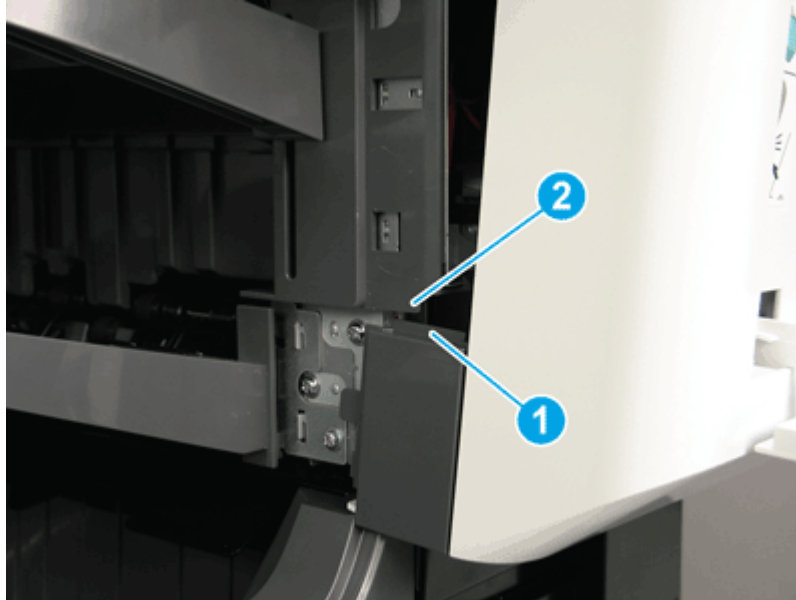
16. Reverse the removal steps to install the assembly


Also use the following **special installation instructions**.

Stapler cover

- When reinstalling the stapler cover, position the tab on the cover (callout 1) behind the edge of the cover (callout 2) on the printer.

Figure 5-2397 Position the tab



 **NOTE:** Continue to reverse the removal steps to finish installing the assembly.


Removal and replacement: Solenoid assembly (3-bin stapler/stacker)

Learn how to remove and replace the solenoid assembly on the 3-bin stapler/stacker.

 [View a video of how to remove and replace the solenoid assembly.](#)

Mean time to repair: 10 minutes

Service level: Intermediate

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.
- ⚠ **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.
- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-186 Part information

Part number	Part description
RM21040-000CN	Solenoid assembly

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

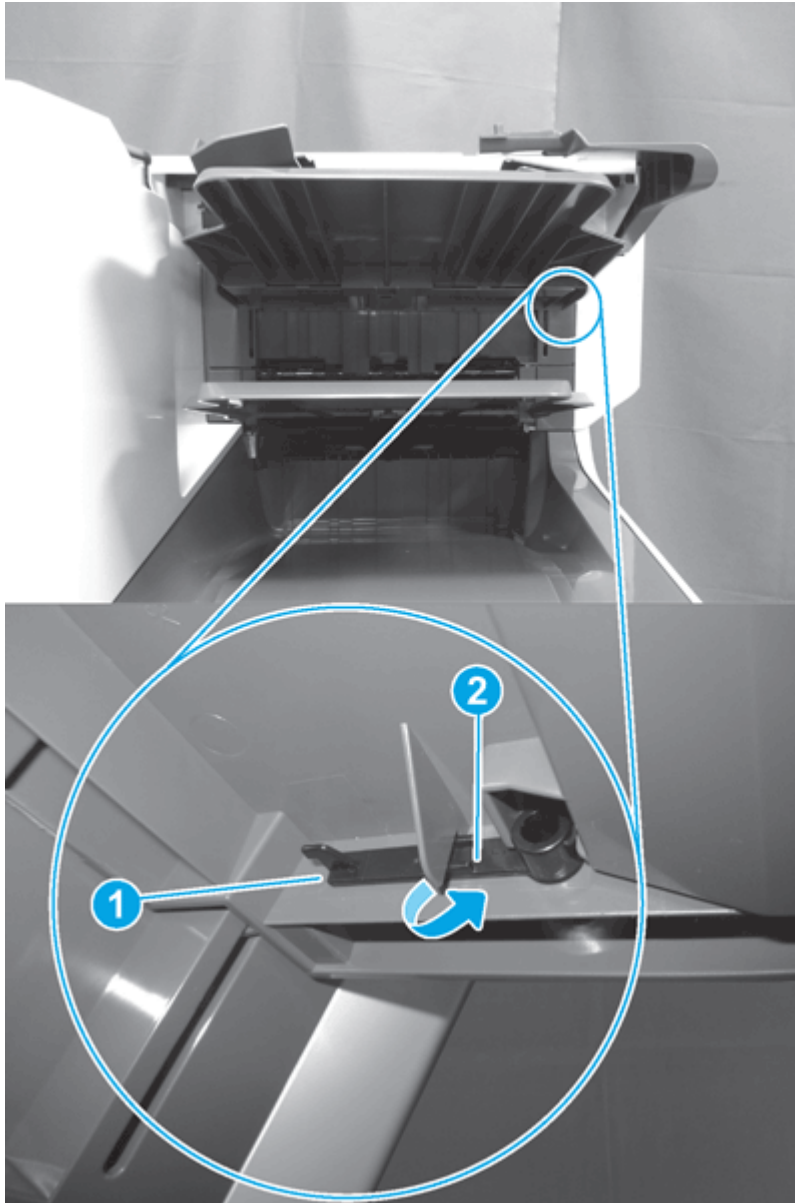
No post service test is available for this assembly.

1. Remove the tray assembly (3-bin stapler/stacker)

Follow these steps to remove the tray assembly (3-bin stapler/stacker).

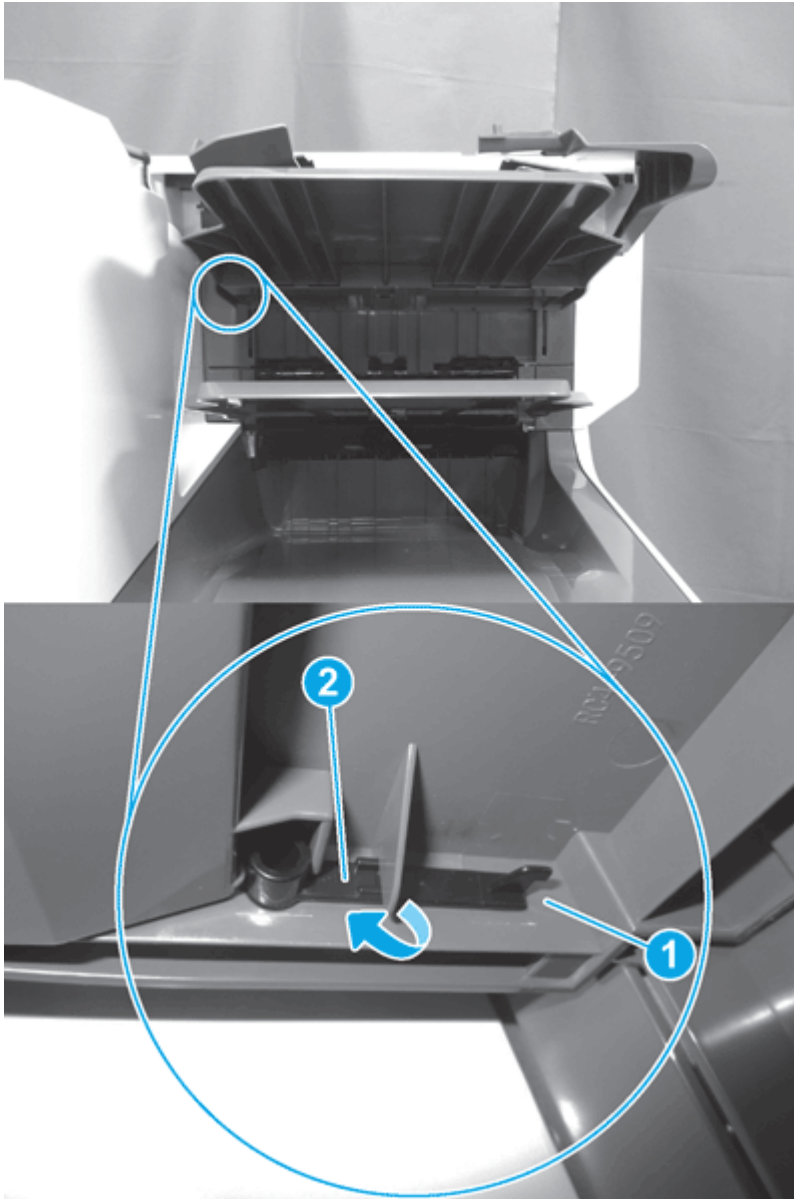
1. Release one boss (callout 1), rotate the front locking pin (callout 2) down to release it, and then remove the locking pin.

Figure 5-2398 Remove the front locking pin



2. Release one boss (callout 1), rotate the rear locking pin (callout 2) down to release it, and then remove the locking pin.

Figure 5-2399 Remove the rear locking pin



3. Lift the tray assembly (callout 1) away from the printer to remove it.


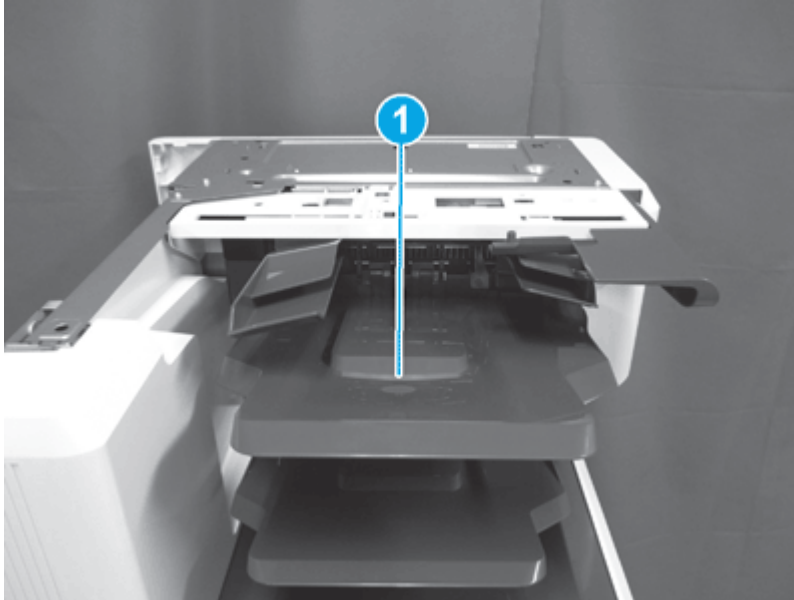
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2400 Remove the tray assembly



2. Remove the staple cover (3-bin stapler/stacker)

Follow these steps to remove the staple cover (3-bin stapler/stacker).

1. Open the front door.

Figure 5-2401 Open the front door



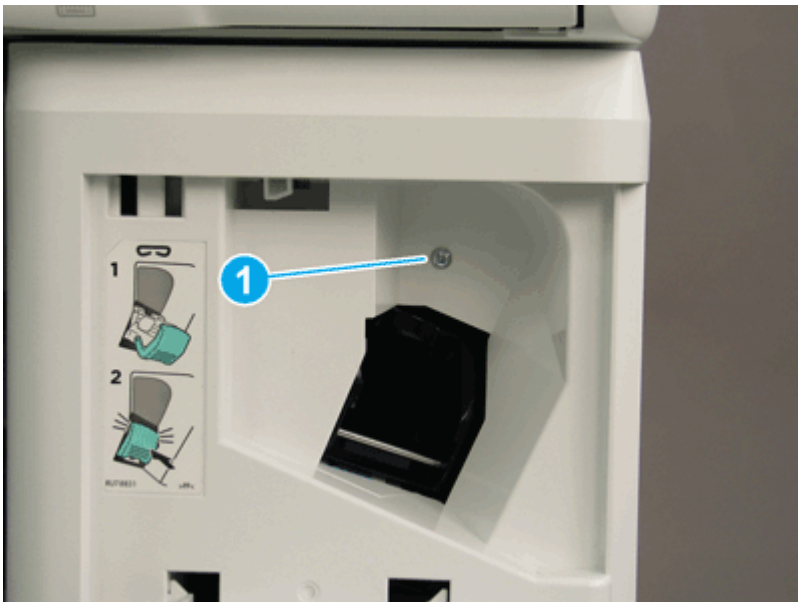
2. Open the stapler door.

Figure 5-2402 Open the stapler door



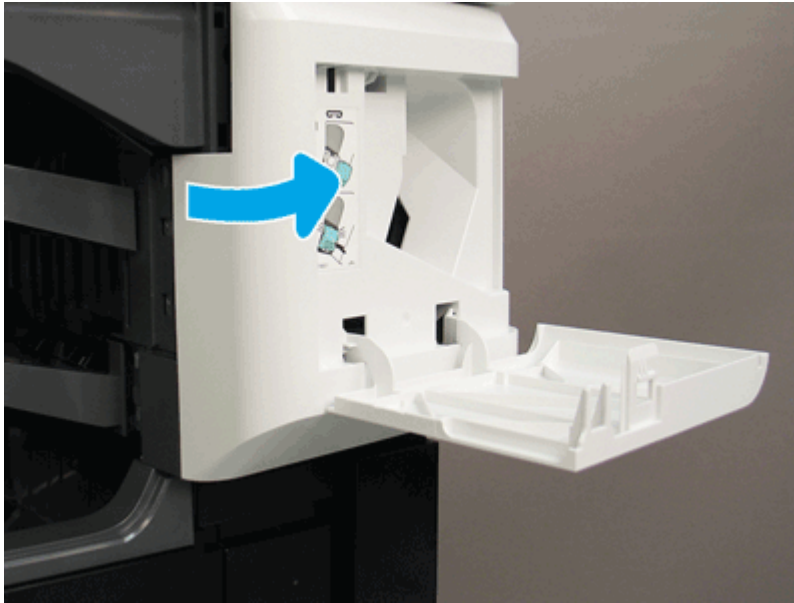
3. Remove one screw (callout 1).

Figure 5-2403 Remove one screw



4. Release one tab on the left side of the cover, and then rotate it away from the printer to remove it.

Figure 5-2404 Remove the stapler cover



3. Remove the jogger cover (3-bin stapler/stacker)

Follow these steps to remove the jogger cover (3-bin stapler/stacker).

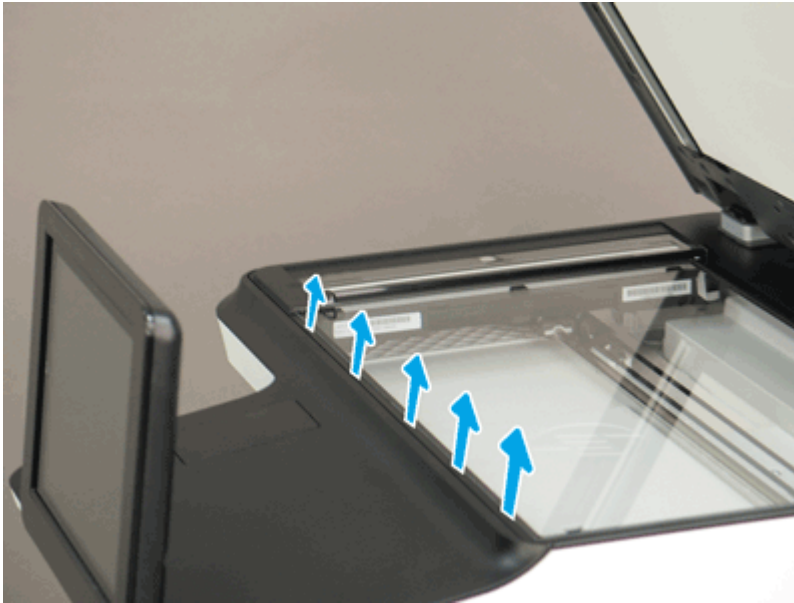
1. If the control panel is not fully tilted forward, tilt it forward now (callout 1) until it stops. Open the document feeder (callout 2).

Figure 5-2405 Tilt the control panel and open the document feeder



2. Beginning at the right side of the control-panel cover, carefully release five tabs along the top edge of the cover.

Figure 5-2406 Release five tabs



3. Continue to rotate the top edge of the cover away from the printer, and then remove the cover.

Figure 5-2407 Remove the cover



4. Use a thin-shaft, magnetized screwdriver to remove one screw (callout 1).


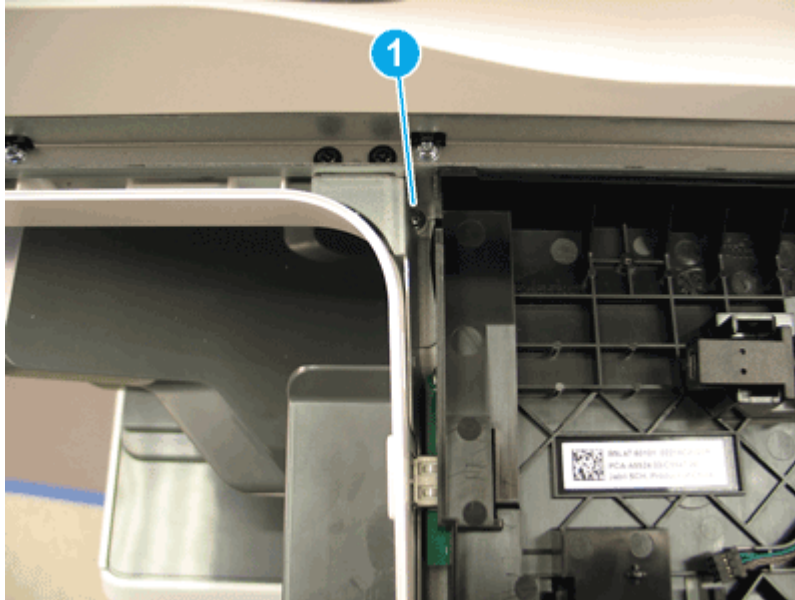
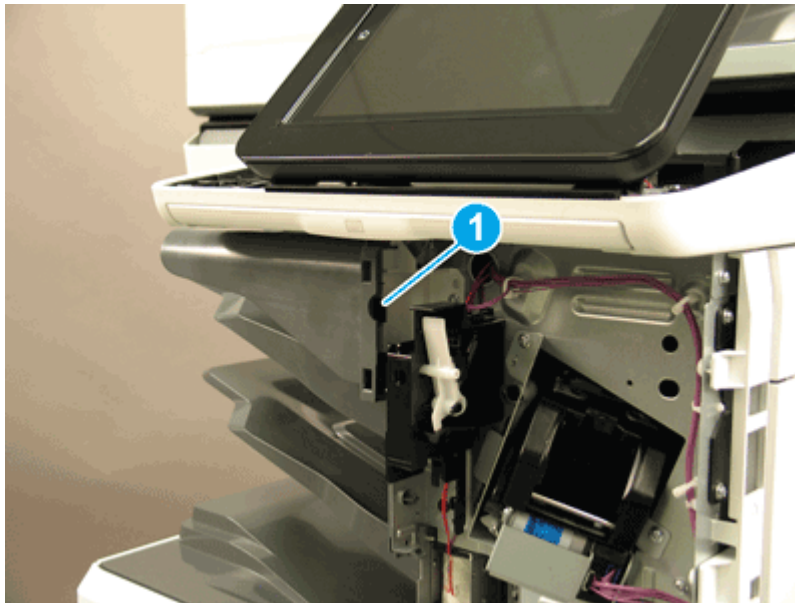
 **TIP:** If necessary, remove the control panel to gain better access to this screw.

Figure 5-2408 Remove one screw



5. Release one tab (callout 1).

Figure 5-2409 Release one tab



6. Slide the jogger cover to the left to remove it.


 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2410 Remove the jogger cover

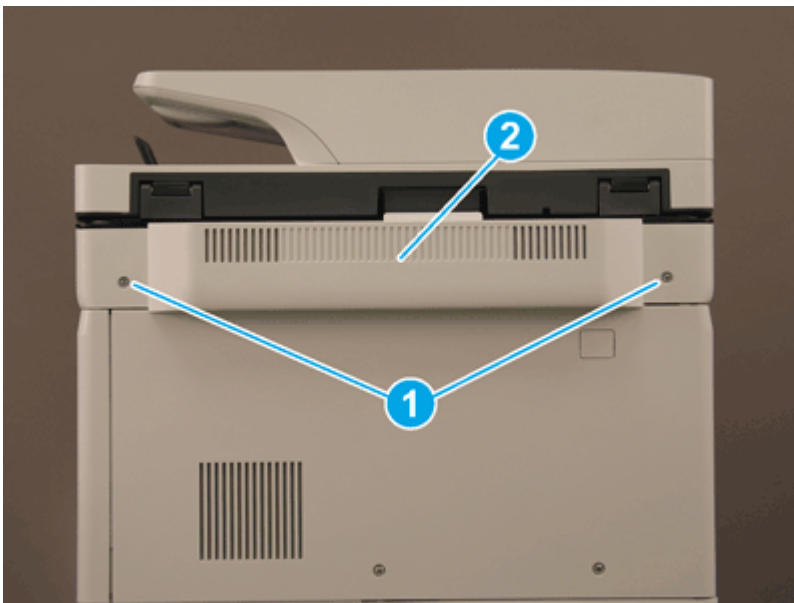


4. Remove the rear cover (3-bin stapler/stacker)

Follow these steps to remove the rear cover (3-bin stapler/stacker).

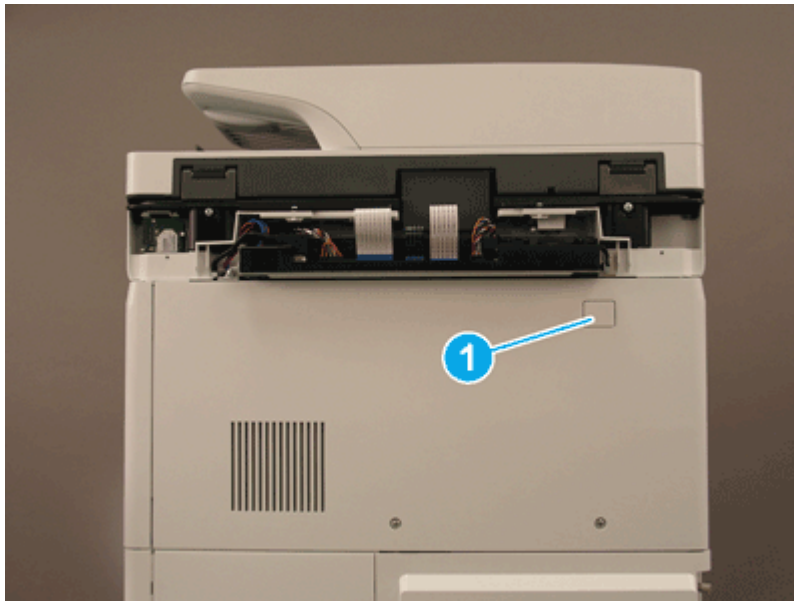
1. At the back of the printer, remove two screws (callout 1), and then remove the image scanner rear cover (callout 2).

Figure 5-2411 Remove two screws



2. Remove one screw cover (callout 1).

Figure 5-2412 Remove one screw cover



3. Remove three screws (callout 1), and then remove the rear cover (callout 2).


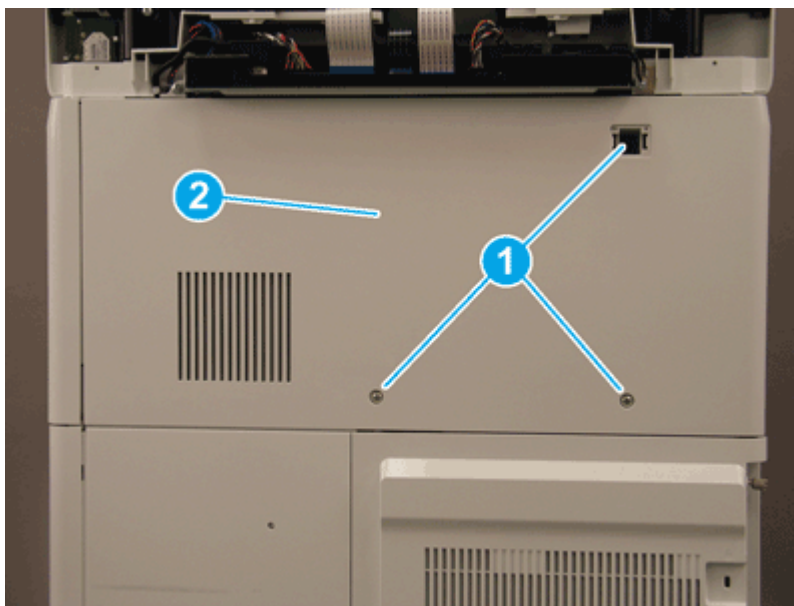
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2413 Remove three screws and the rear cover



5. Remove the rear inner cover (3-bin stapler/stacker)

Follow these steps to remove the rear inner cover (3-bin stapler/stacker).

- Remove one screw (callout 1), release three tabs (callout 2), and then remove the rear inner cover (callout 3).


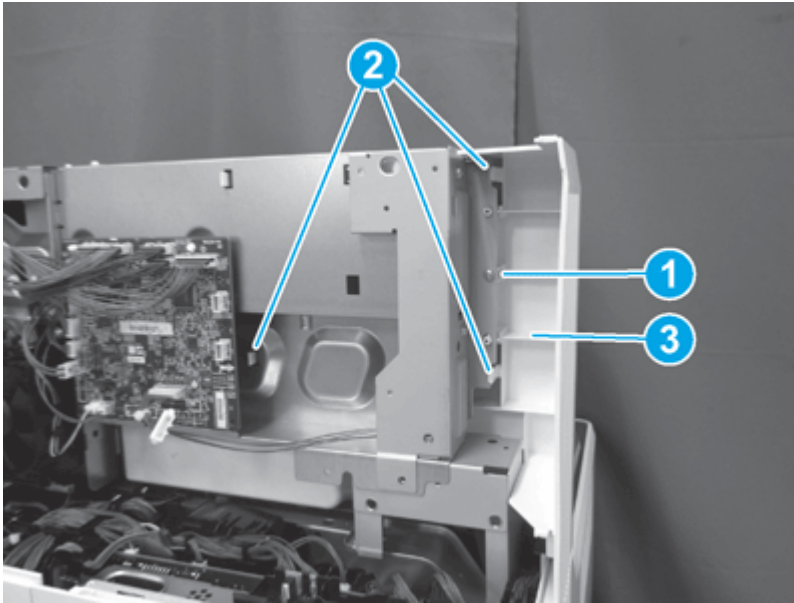
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2414 Remove the rear inner cover

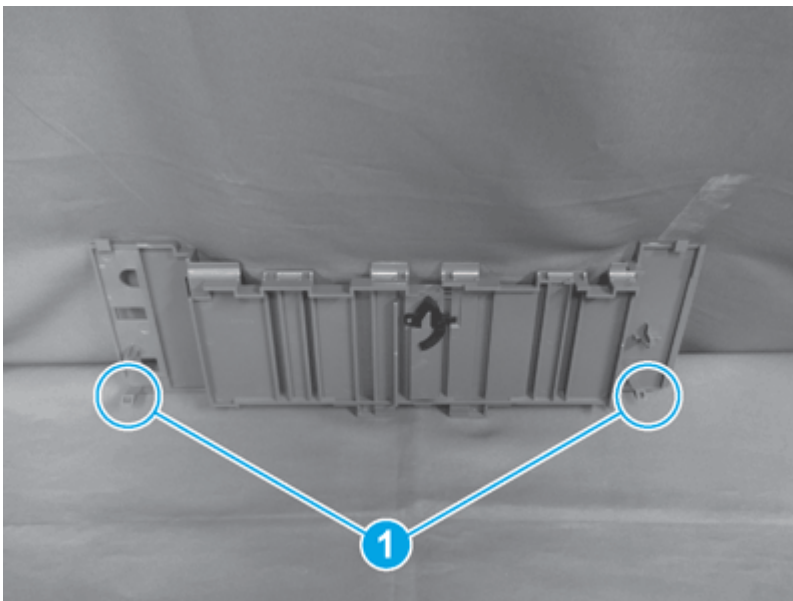


6. Remove the stacking wall cover (3-bin stapler/stacker)

Follow these steps to remove the stacking wall cover (3-bin stapler/stacker).

1. Before removing the stacking wall cover, note the location of the two tabs (callout 1) on the back of the cover.

Figure 5-2415 Tab locations



2. Release two tabs (callout 1), and then remove the stacking wall cover (callout 2).


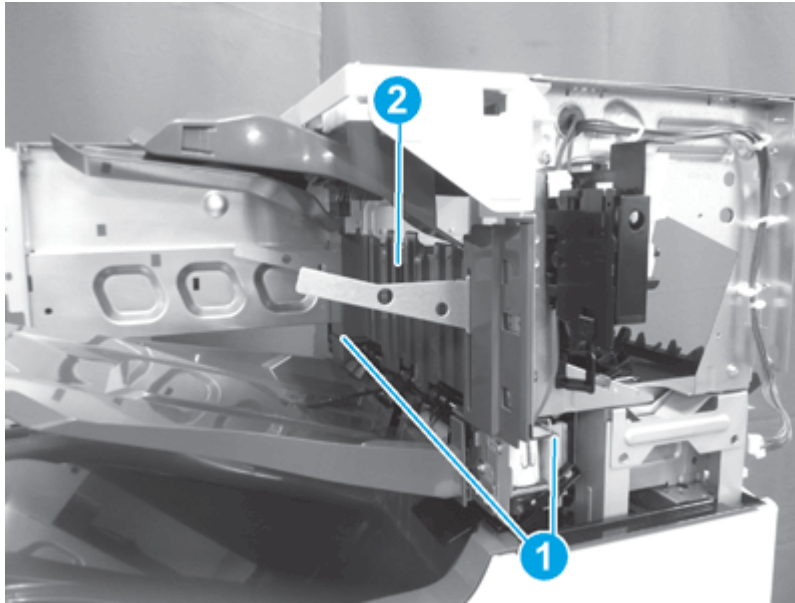
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2416 Remove the stacking wall cover

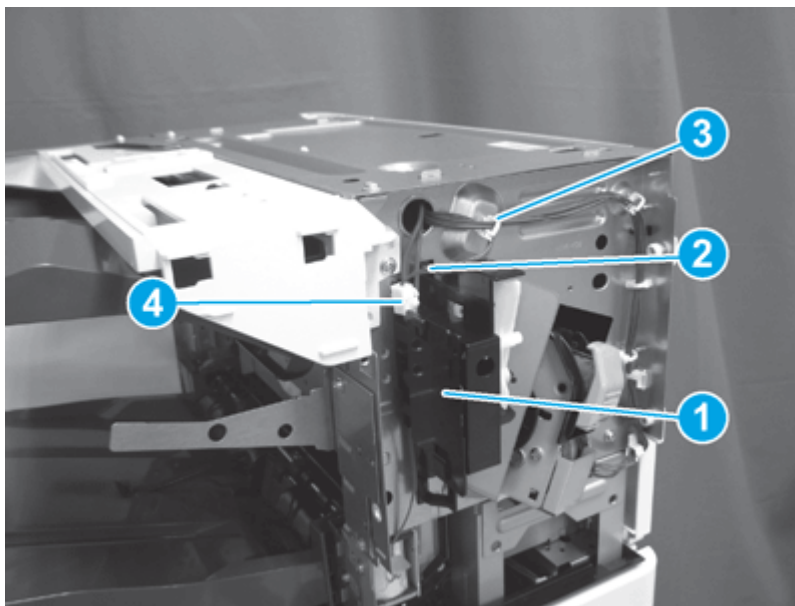


7. Remove the solenoid assembly (3-bin stapler/stacker)

Follow these steps to remove the solenoid assembly (3-bin stapler/stacker).

1. Remove one cover (callout 1), release the cables (callout 2) from the retainer (callout 3), and then disconnect one connector (callout 4).

Figure 5-2417 Remove one cover and disconnect one connector



2. Remove three screws (callout 1), and then remove the solenoid assembly (callout 2).


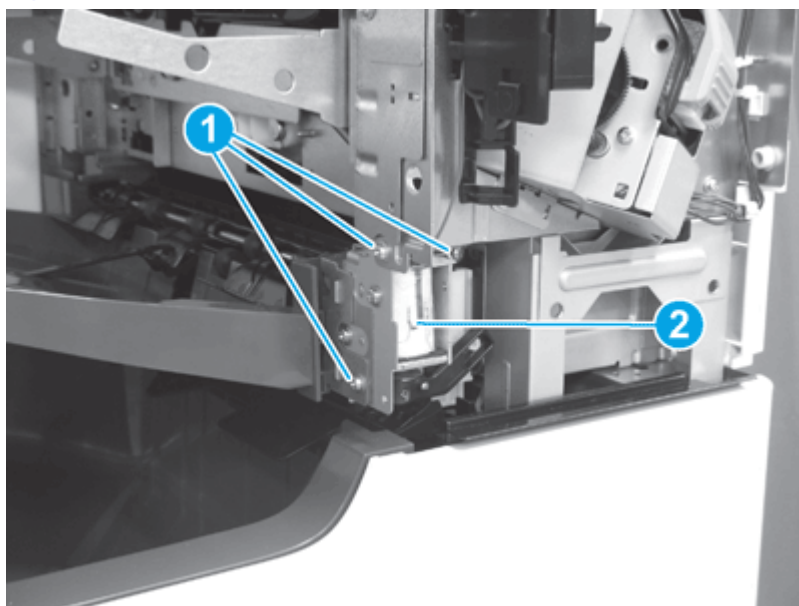
 **TIP:** Reverse the removal steps to install the assembly.


Figure 5-2418 Remove the solenoid assembly



8. Unpack the replacement assembly



Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.


 **NOTE:** HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>


2. Unpack the replacement part from the packaging.

 **CAUTION:**  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

 **IMPORTANT:** Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

 **NOTE:** If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

 **NOTE:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

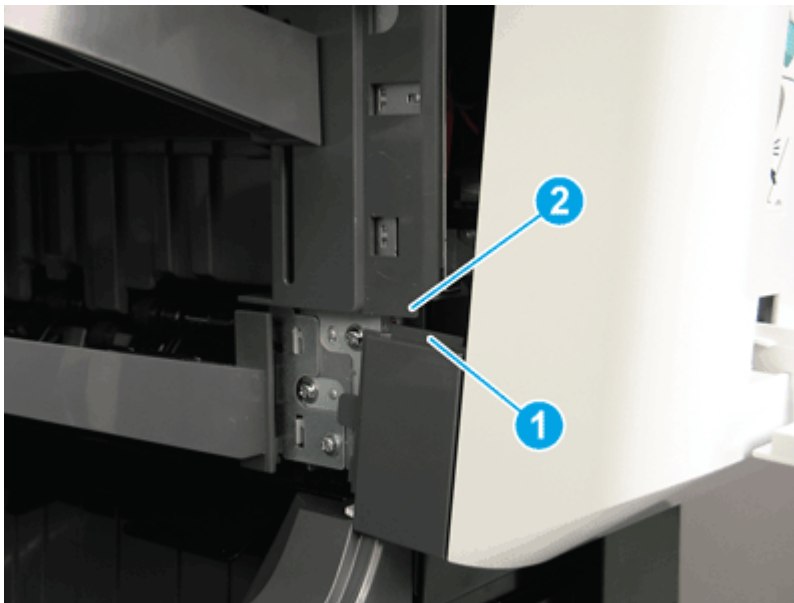
9. Reverse the removal steps to install the assembly


Also use the following **special installation instructions**.

Stapler cover

- When reinstalling the stapler cover, position the tab on the cover (callout 1) behind the edge of the cover (callout 2) on the printer.

Figure 5-2419 Position the tab




 **NOTE:** Continue to reverse the removal steps to finish installing the assembly.

Removal and replacement: Microswitch (3-bin stapler/stacker)

Learn how to remove and replace the microswitch on the 3-bin stapler/stacker.


Mean time to repair: 10 minutes

Service level: Intermediate

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.

 **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.

- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-187 Part information

Part number	Part description
WC4-5171-000CN	Microswitch

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

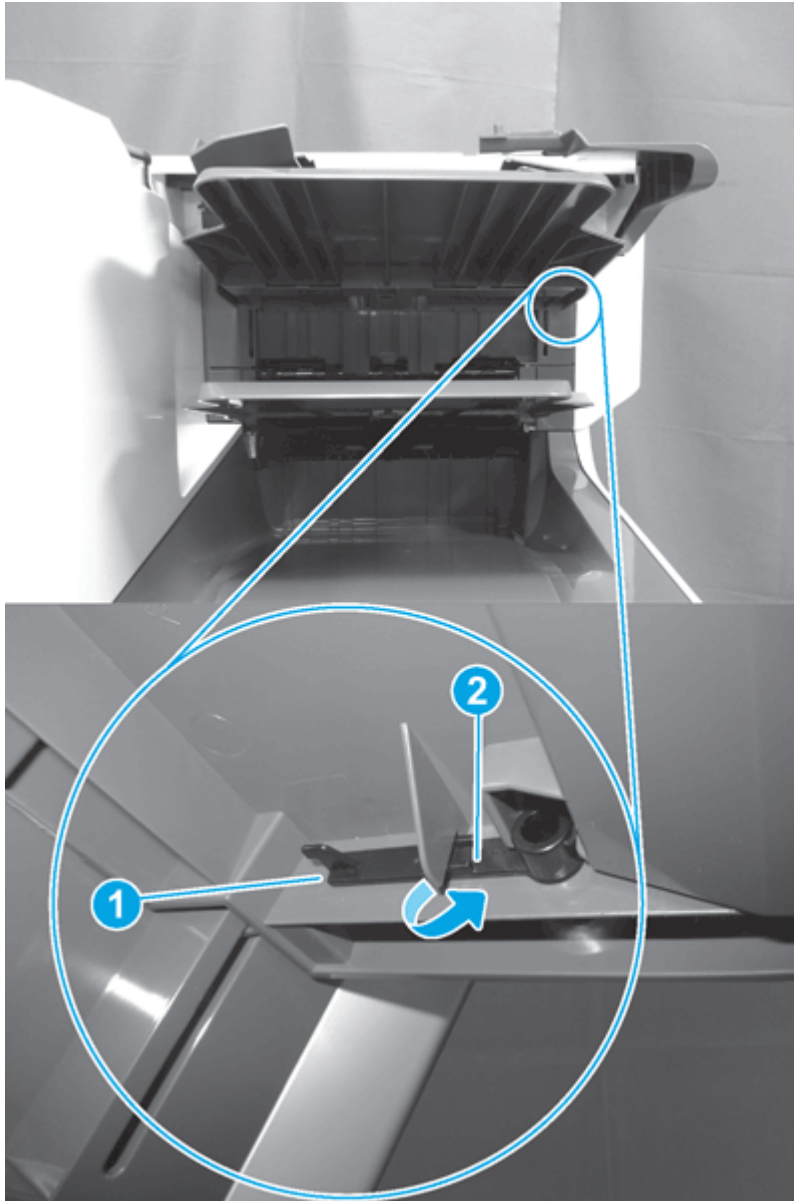
No post service test is available for this assembly.

1. Remove the tray assembly (3-bin stapler/stacker)

Follow these steps to remove the tray assembly (3-bin stapler/stacker).

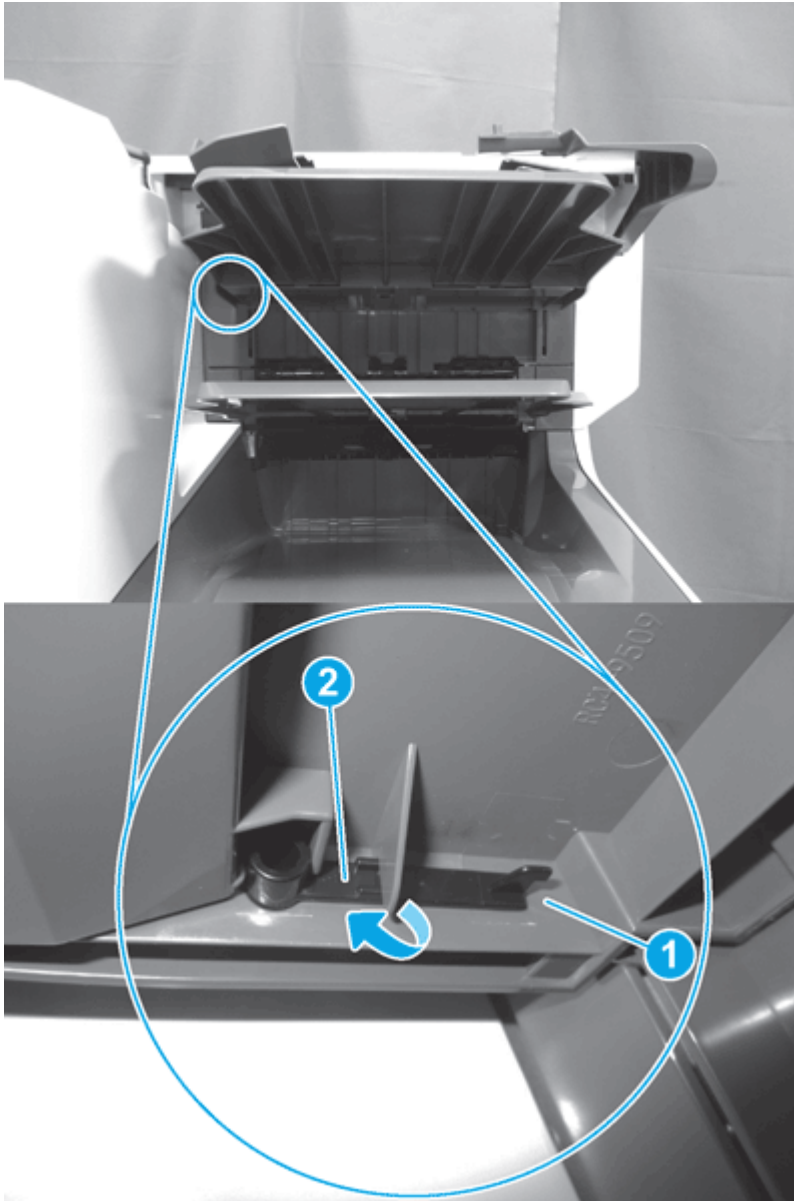
1. Release one boss (callout 1), rotate the front locking pin (callout 2) down to release it, and then remove the locking pin.

Figure 5-2420 Remove the front locking pin



2. Release one boss (callout 1), rotate the rear locking pin (callout 2) down to release it, and then remove the locking pin.

Figure 5-2421 Remove the rear locking pin



3. Lift the tray assembly (callout 1) away from the printer to remove it.


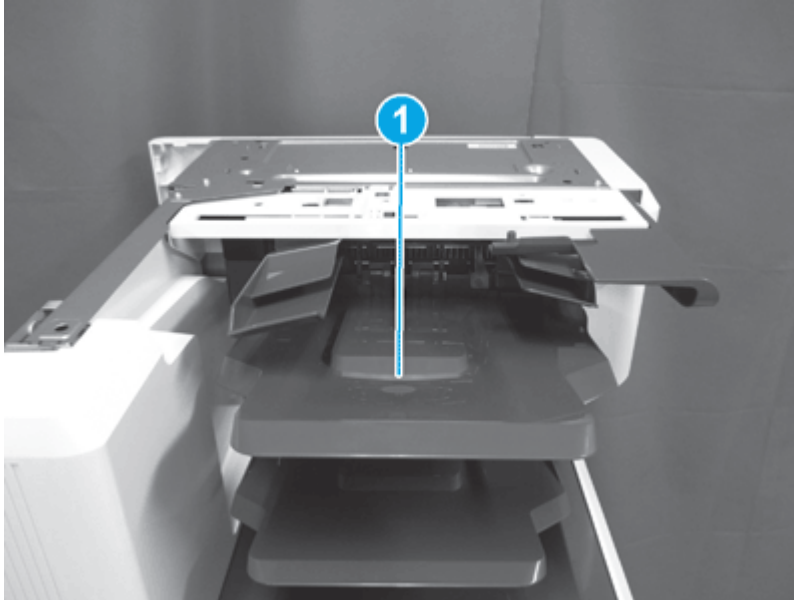
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2422 Remove the tray assembly



2. Remove the staple cover (3-bin stapler/stacker)

Follow these steps to remove the staple cover (3-bin stapler/stacker).

1. Open the front door.

Figure 5-2423 Open the front door



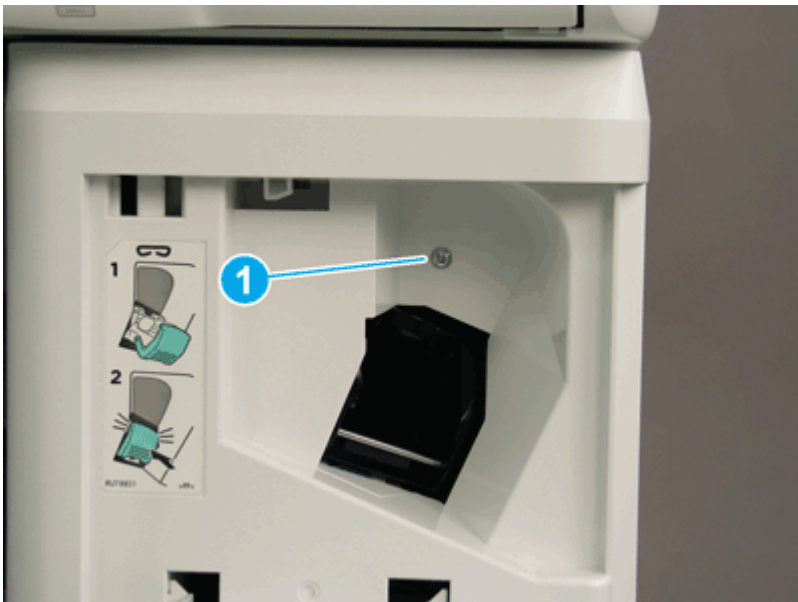
2. Open the stapler door.

Figure 5-2424 Open the stapler door



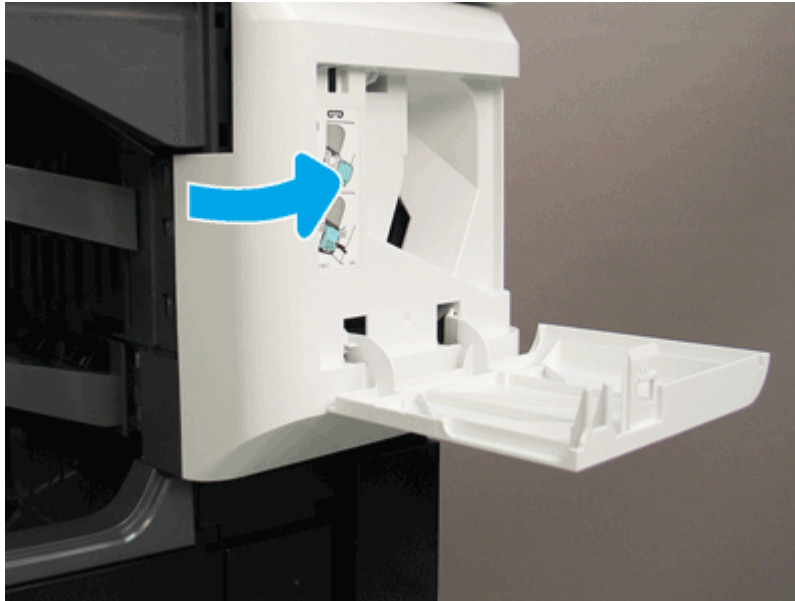
3. Remove one screw (callout 1).

Figure 5-2425 Remove one screw



4. Release one tab on the left side of the cover, and then rotate it away from the printer to remove it.

Figure 5-2426 Remove the stapler cover



3. Remove the jogger cover (3-bin stapler/stacker)

Follow these steps to remove the jogger cover (3-bin stapler/stacker).

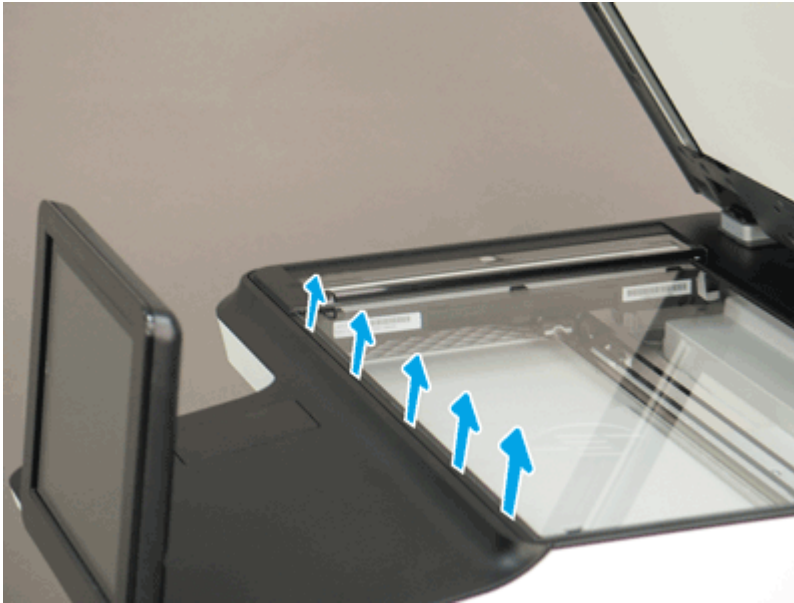
1. If the control panel is not fully tilted forward, tilt it forward now (callout 1) until it stops. Open the document feeder (callout 2).

Figure 5-2427 Tilt the control panel and open the document feeder



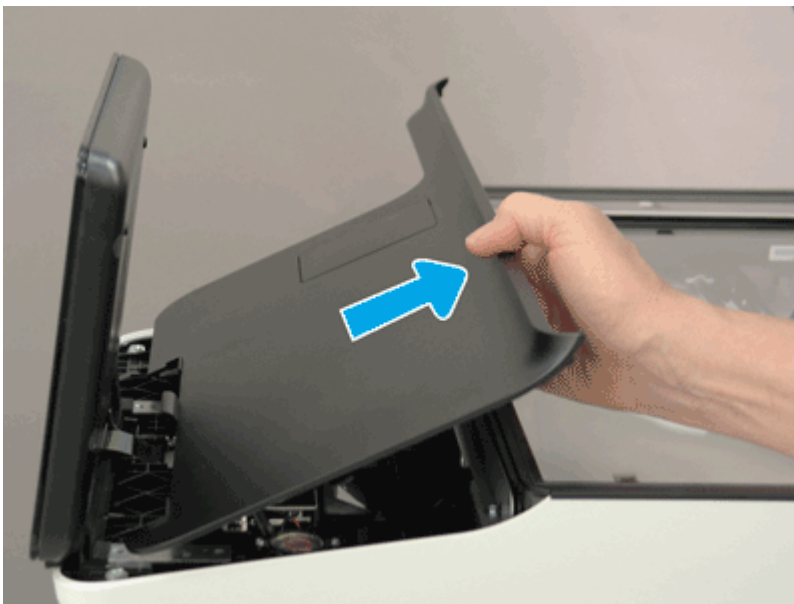
2. Beginning at the right side of the control-panel cover, carefully release five tabs along the top edge of the cover.

Figure 5-2428 Release five tabs



3. Continue to rotate the top edge of the cover away from the printer, and then remove the cover.

Figure 5-2429 Remove the cover

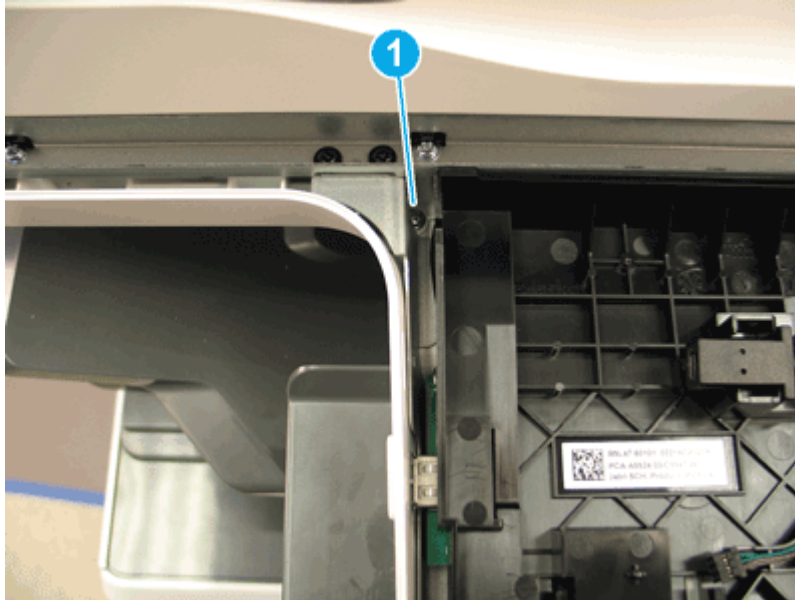


4. Use a thin-shaft, magnetized screwdriver to remove one screw (callout 1).



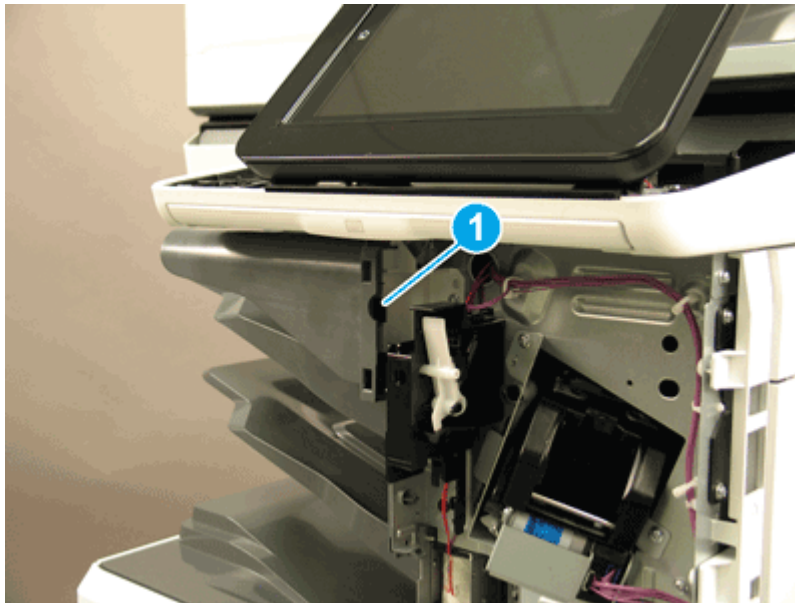
TIP: If necessary, remove the control panel to gain better access to this screw.

Figure 5-2430 Remove one screw



5. Release one tab (callout 1).

Figure 5-2431 Release one tab



6. Slide the jogger cover to the left to remove it.


 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2432 Remove the jogger cover

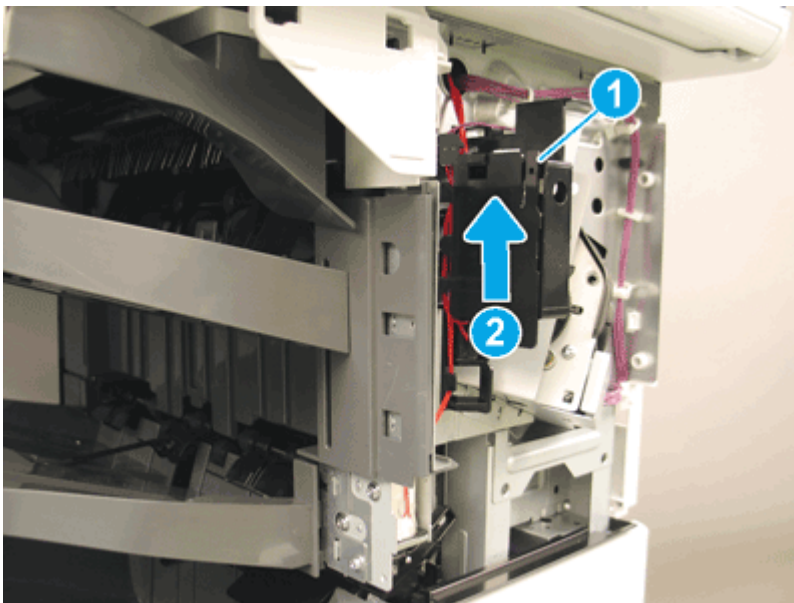


4. Remove the microswitch (3-bin stapler/stacker)

Follow these steps to remove the microswitch (3-bin stapler/stacker).

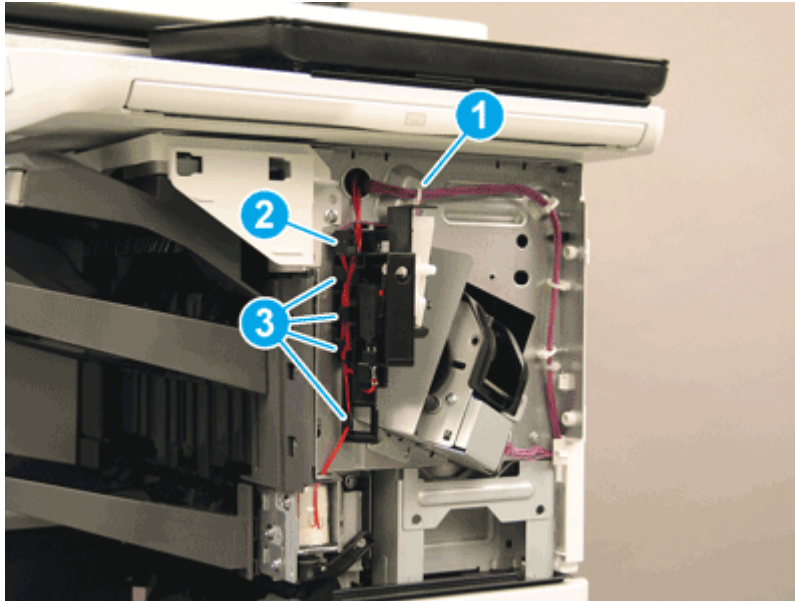
1. Release one tab (callout 1), and then slide the cover up (callout 2) to remove it.

Figure 5-2433 Remove one cover



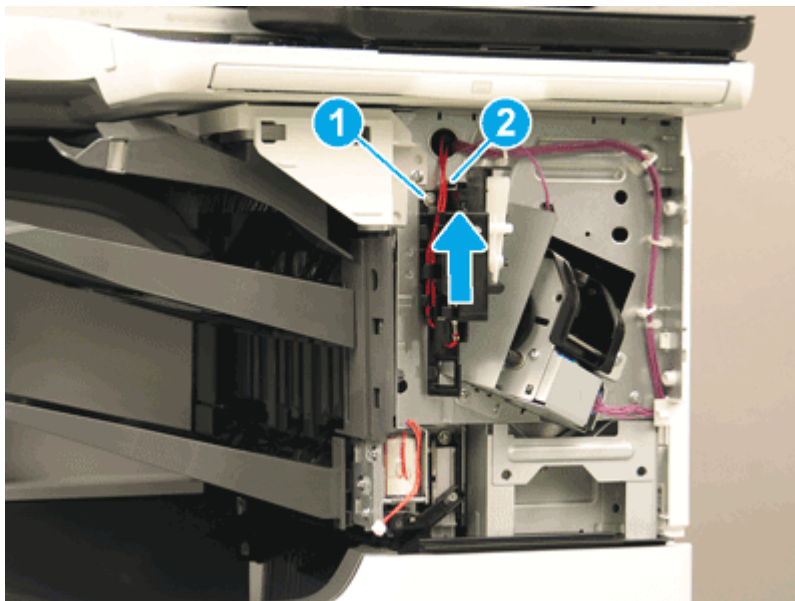
2. Release one retainer (callout 1), disconnect one connector (callout 2), and then release the wire harness from the guides (callout 3).

Figure 5-2434 Disconnect one connector



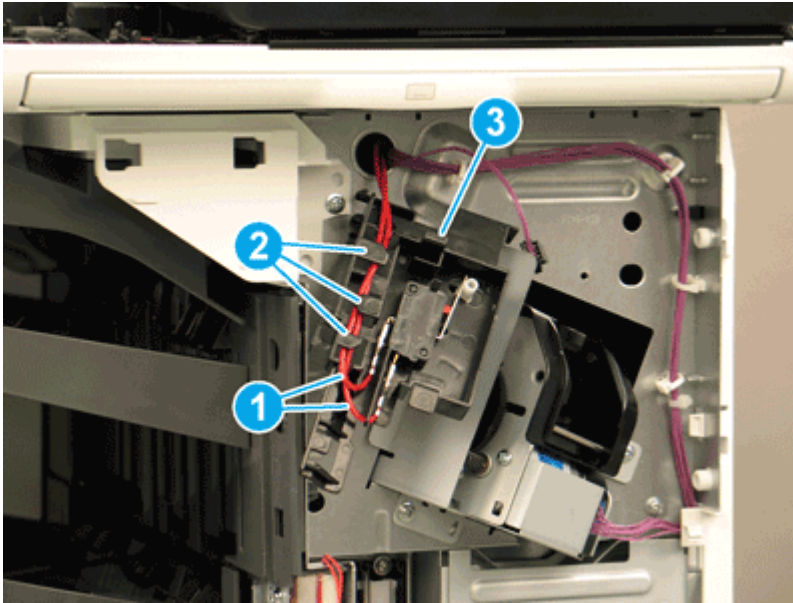
3. Remove one screw (callout 1), release one tab (callout 2), and then slide the guide up (callout 3) to release it from the sheet-metal frame.

Figure 5-2435 Release the guide



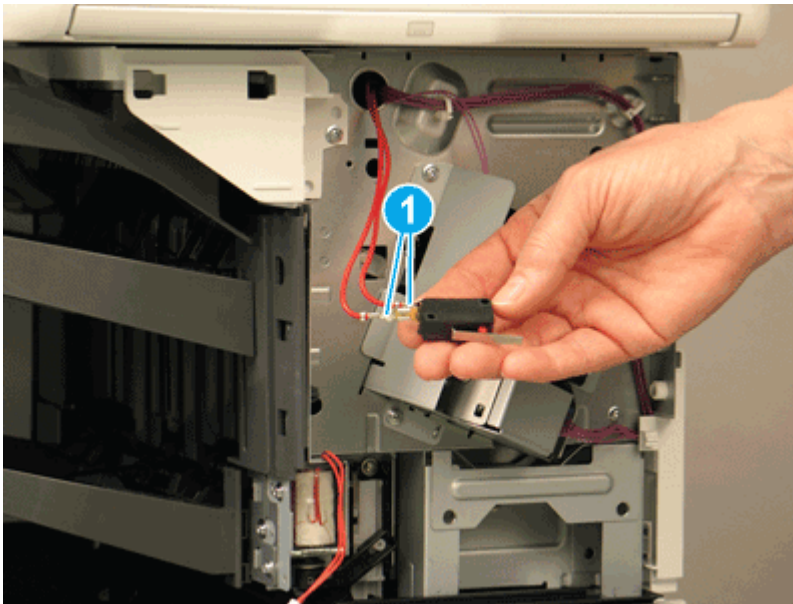
4. Release the cables (callout 1) from the guides (callout 2), and then release one tab (callout 3) to release the microswitch from the guide.

Figure 5-2436 Release the microswitch



5. Disconnect two connectors (callout 1).


Figure 5-2437 Disconnect two connectors




5. Unpack the replacement assembly


Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.

 **NOTE:** HP recommends responsible disposal of the defective part.


2. Unpack the replacement part from the packaging.

CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT:  Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE:  If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE:  When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

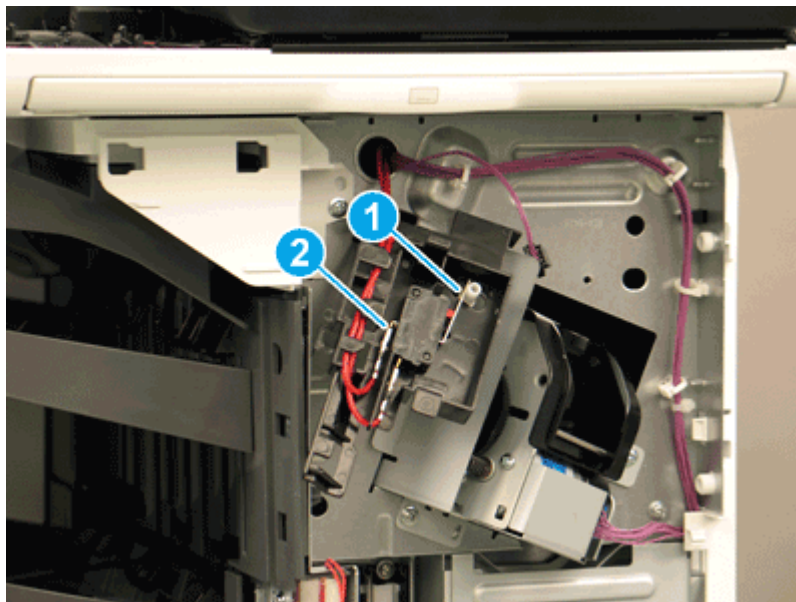
6. Reverse the removal steps to install the assembly

Also use the following **special installation instructions**.

Microswitch

- When reinstalling the microswitch, make sure that the silver arm (callout 1) is positioned correctly against the white shaft. Also, make sure that the shorter cable (callout 2) is connected to the upper connector.

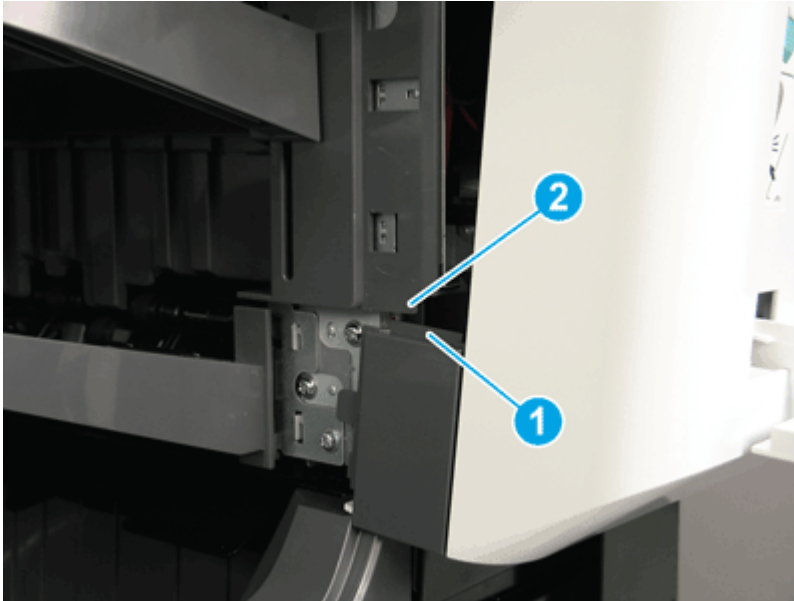
Figure 5-2438 Check the silver arm and connector




Stapler cover

- When reinstalling the stapler cover, position the tab on the cover (callout 1) behind the edge of the cover (callout 2) on the printer.

Figure 5-2439 Position the tab



 **NOTE:** Continue to reverse the removal steps to finish installing the assembly.


Removal and replacement: Feed motor (3-bin stapler/stacker)

Learn how to remove and replace the feed motor on the 3-bin stapler/stacker.

 [View a video of how to remove and replace the motor.](#)

Mean time to repair: 20 minutes

Service level: Advanced

 **IMPORTANT:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.
- ⚠ **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.
- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-188 Part information

Part number	Part description
RK2-8149-000CN	Motor, stepping, DC

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

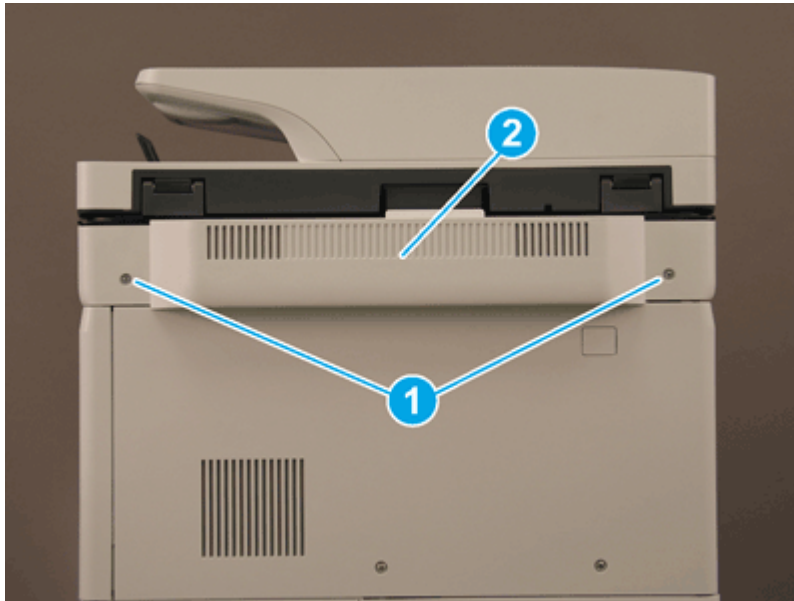
No post service test is available for this assembly.

1. Remove the rear cover (3-bin stapler/stacker)

Follow these steps to remove the rear cover (3-bin stapler/stacker).

1. At the back of the printer, remove two screws (callout 1), and then remove the image scanner rear cover (callout 2).

Figure 5-2440 Remove two screws



2. Remove one screw cover (callout 1).

Figure 5-2441 Remove one screw cover



3. Remove three screws (callout 1), and then remove the rear cover (callout 2).


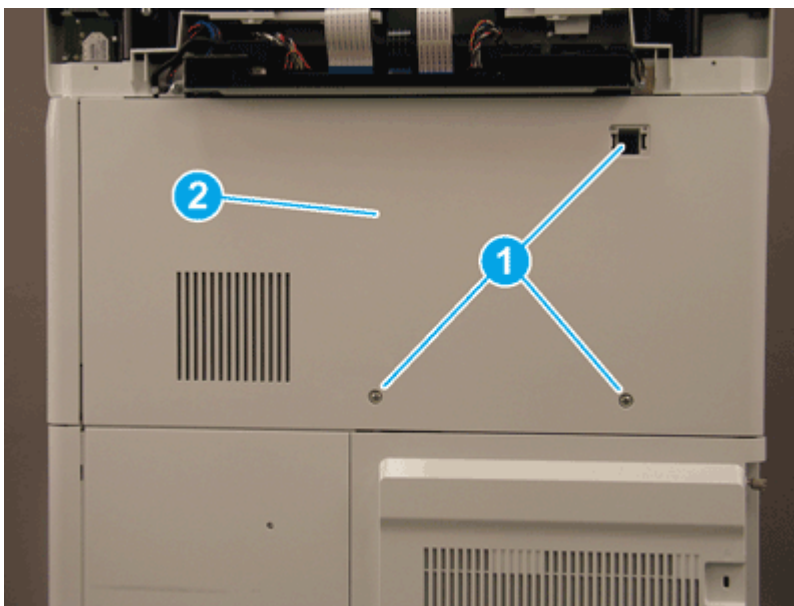
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2442 Remove three screws and the rear cover

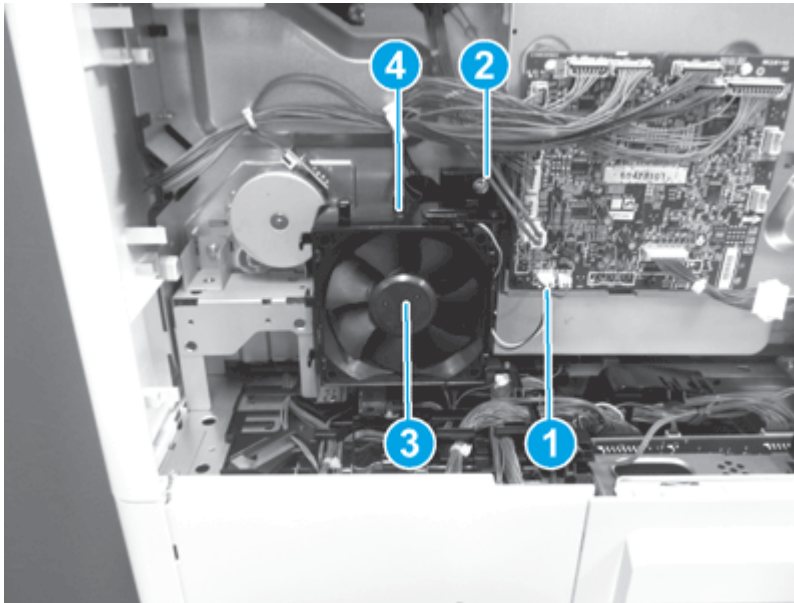


2. Remove the fan (3-bin stapler/stacker)

Follow these steps to remove the fan (3-bin stapler/stacker).

- Disconnect one connector (callout 1), remove one screw (callout 2), and then remove the fan (callout 3) together with the fan holder (callout 4).

Figure 5-2443 Remove the fan holder and fan



3. Remove the feed motor (3-bin stapler/stacker)

Follow these steps to remove the feed motor (3-bin stapler/stacker).

- Disconnect one connector (callout 1), remove two screws (callout 2), and then remove the feed motor (callout 3).


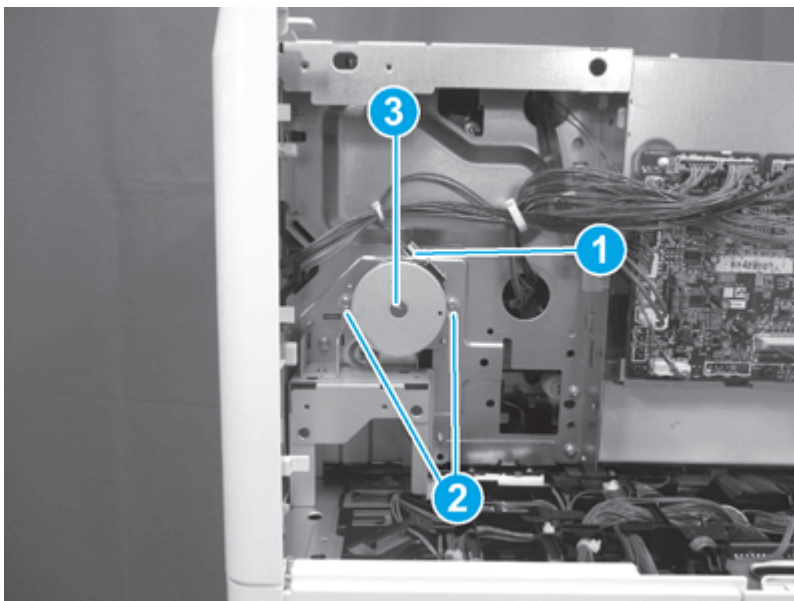
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2444 Remove the feed motor



4. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Controller PCA (3-bin stapler/stacker)

Learn how to remove and replace the controller PCA on the 3-bin stapler/stacker.



[View a video of how to remove and replace the controller PCA.](#)


Mean time to repair: 10 minutes

Service level: Intermediate



IMPORTANT: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Before performing service

- Turn the printer power off. A shutting-down message appears on the control-panel display.
-  **WARNING!** To avoid damage to the printer, turn the power off and wait until the printer shuts down before removing the power cable.
- Disconnect the power cable after the printer is completely shut down (the control-panel display is blank).

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 5-189 Part Information

Part number	Part description
RM2-8689-000CN	Staple stacker PCB assembly

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

- Connect the printer power cable.
- Turn the printer power on.

Post service test

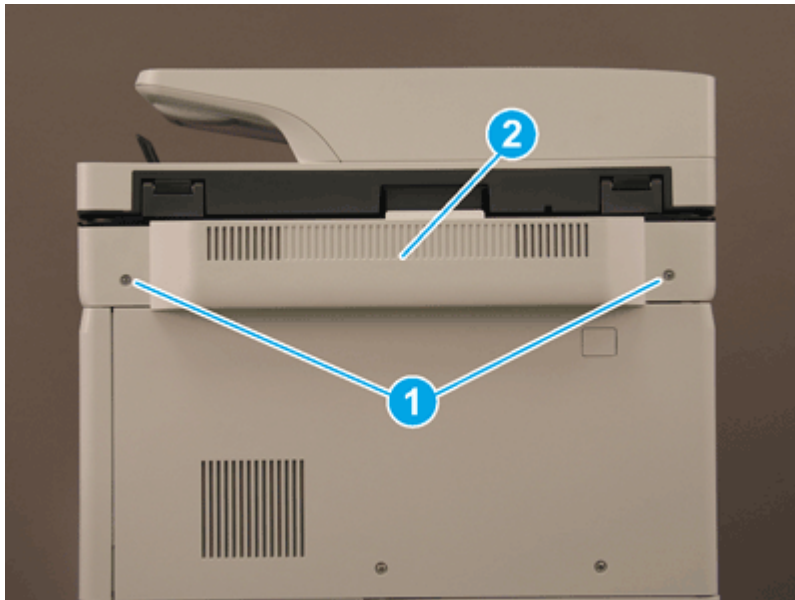
No post service test is available for this assembly.

1. Remove the rear cover (3-bin stapler/stacker)

Follow these steps to remove the rear cover (3-bin stapler/stacker).

1. At the back of the printer, remove two screws (callout 1), and then remove the image scanner rear cover (callout 2).

Figure 5-2445 Remove two screws



2. Remove one screw cover (callout 1).

Figure 5-2446 Remove one screw cover



3. Remove three screws (callout 1), and then remove the rear cover (callout 2).


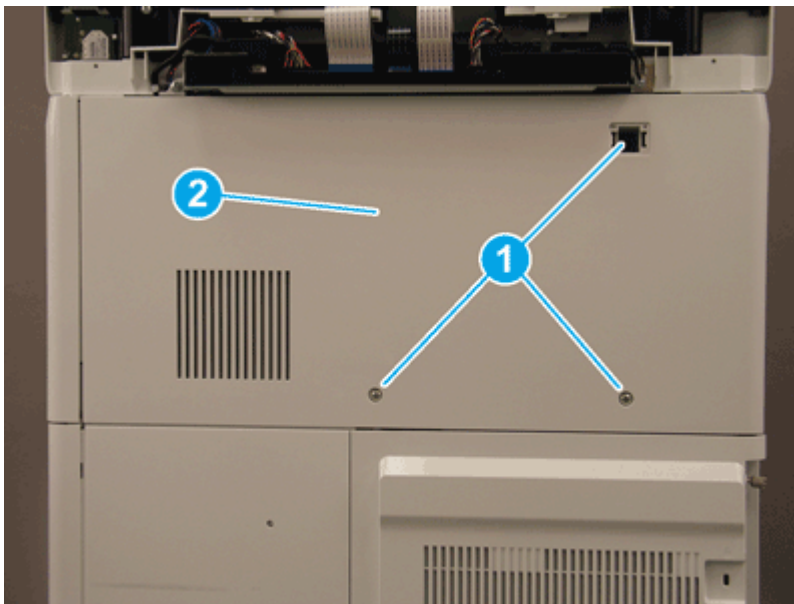
 **TIP:** Reverse the removal steps to install the assembly.

Figure 5-2447 Remove three screws and the rear cover



2. Remove the controller PCA (3-bin stapler/stacker)

Follow these steps to remove the controller PCA (3-bin stapler/stacker).

- Disconnect all of the connectors on the controller PCA. Remove one screw (callout 1), release two tabs (callout 2), and then remove the controller PCA (callout 3).


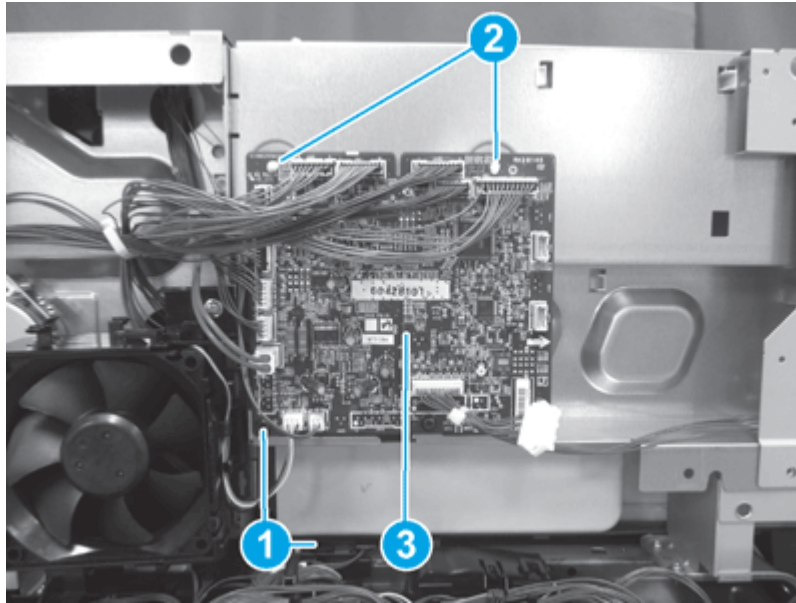
 **TIP:** Reverse the removal steps to install the assembly.


Figure 5-2448 Remove the controller PCA



3. Unpack the replacement assembly



Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.


 **NOTE:** HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.

 **CAUTION:**  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

 **IMPORTANT:** Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

 **NOTE:** If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

6 Parts and diagrams

Printer parts information including exploded assembly diagrams and part number lists.

Related documentation and software

Learn about HP access to additional service and support information.

HP service personnel, go to one of the following Web-based Interactive Search Engines (WISE) sites:

Americas (AMS)

- [WISE - English](#)
- [WISE - Spanish](#)
- [WISE - Portuguese](#)
- [WISE - French](#)

Asia Pacific / Japan (APJ)

- [WISE - English](#)
- [WISE - Japanese](#)
- [WISE - Korean](#)
- [WISE - Chinese \(simplified\)](#)
- [WISE - Chinese \(traditional\)](#)
- [WISE - Thai](#)

Europe / Middle East / Africa (EMEA)

- [WISE - English](#)

Order parts by authorized service providers

Find information about ordering parts and supplies for the printer.

Ordering

Order parts by authorized service providers.

Table 6-1 Ordering

Item or provider	Description
Order supplies and paper	www.hp.com/go/suresupply
Order parts from authorized service providers	www.hp.com/buy/parts or partsurfer.hp.com
Order through service or support providers	Contact an HP-authorized service or support provider.
Order using the HP Embedded Web Server (EWS)	To access, in a supported web browser on your computer, enter the printer IP address or host name in the address/URL field. The EWS contains a link to the HP SureSupply web site, which provides options for purchasing Original HP supplies.

Supplies and accessories

Learn about the supplies and accessories available for the printer.

To order cartridges, visit <http://www.hp.com> (some portions of the HP Web site are available in English only). Ordering cartridges online is not supported in all countries/regions. However, many countries/regions have information about ordering by telephone, locating a local store, and printing a shopping list. In addition, go to hp.com/supplies to obtain information about purchasing HP products in your country/region.

Use only the replacement cartridges that have the same cartridge number as the cartridge that is being replaced. Find the cartridge number in the following places:

- On the label of the cartridge that is being replaced.
- On a sticker inside the printer. Open the cartridge door to locate the sticker.
- Open the printer software (**HP Printer Assistant**), and then click **Shop > Shop For Supplies Online**.
- Open the HP Embedded Web Server (EWS), and then click **Tools > Supply Status** (under the **Product Information** item).

Table 6-2 Supplies

Item	Description	Cartridge number	Part number
HP 655A Black LaserJet Toner Cartridge (M652/M653/E65050/E65060/E65150/ E65160)	Standard-capacity replacement black cartridge	655A	CF450A
HP 655A Cyan LaserJet Toner Cartridge (M652/M653/E65050/E65060/E65150/ E65160)	Standard-capacity replacement cyan cartridge	655A	CF451A
HP 655A Yellow LaserJet Toner Cartridge (M652/M653/E65050/E65060/E65150/ E65160)	Standard-capacity replacement yellow cartridge	655A	CF452A
HP 655A Magenta LaserJet Toner Cartridge (M652/M653/E65050/E65060/E65150/ E65160)	Standard-capacity replacement magenta cartridge	655A	CF453A

Table 6-2 Supplies (continued)

Item	Description	Cartridge number	Part number
HP 656X Black LaserJet Toner Cartridge (M652/M653/E65050/E65060/E65150/ E65160)	High-capacity replacement black cartridge	656X	CF460X
HP 656X Cyan LaserJet Toner Cartridge (M652/M653/E65050/E65060/E65150/ E65160)	High-capacity replacement cyan cartridge	656X	CF461X
HP 656X Yellow LaserJet Toner Cartridge (M652/M653/E65050/E65060/E65150/ E65160)	High-capacity replacement yellow cartridge	656X	CF462X
HP 656X Magenta LaserJet Toner Cartridge (M652/M653/E65050/E65060/E65150/ E65160)	High-capacity replacement magenta cartridge	656X	CF463X
HP 657X Black LaserJet Toner Cartridge (M681/M682/E67550/E67560/E67650/ E67660)	High-capacity replacement black cartridge	657X	CF470X
HP 657X Cyan LaserJet Toner Cartridge (M681/M682/E67550/E67560/E67650/ E67660)	High-capacity replacement cyan cartridge	657X	CF471X
HP 657X Yellow LaserJet Toner Cartridge (M681/M682/E67550/E67560/E67650/ E67660)	High-capacity replacement yellow cartridge	657X	CF472X
HP 657X Magenta LaserJet Toner Cartridge (M681/M682/E67550/E67560/E67650/ E67660)	High-capacity replacement magenta cartridge	657X	CF473X
HP Staple Cartridge Refill	Replacement staple cartridges for the M681z/M682z/E67660z models	Not applicable	J8J96A (new) J7Z09-67933 (service)

Table 6-3 Accessories

Item	Description	Part number
HP Color LaserJet 550-sheet Paper Tray	Optional 550-sheet paper feeder NOTE: The printer supports up to two 1 x 550-sheet paper feeders unless other input devices are present.	P1B09A
HP Color LaserJet 550-sheet Paper Tray with Stand	Optional 550-sheet paper feeder with stand	P1B10A
HP Color LaserJet 3x550-sheet Paper Tray with Stand	Optional 3x550-sheet paper feeder with stand	P1B11A
HP Color LaserJet High Capacity Paper Feeder with Stand	Optional 2,000-sheet paper feeder and 550-sheet paper feeder with stand to support the printer	P1B12A

Table 6-3 Accessories (continued)

Item	Description	Part number
HP LaserJet Keyboard Overlay Kit for Simplified Chinese & Traditional Chinese (Flow models only)	Language-specific adhesive overlay for the physical keyboard	A7W12A
HP LaserJet Keyboard Overlay Kit for Swedish (Flow models only)	Language-specific adhesive overlay for the physical keyboard	A7W14A
HP 1GB DDR3 x32 144-Pin 800MMHz SODIMM	Optional DIMM for expanding the memory	E5K48A
HP Trusted Platform Module (TPM)	Automatically encrypts all data that passes through the printer	F5S62A
HP Foreign Interface Harness (FIH)	Optional port for connecting third-party devices	B5L31A
HP LaserJet MFP Analog Fax Accessory 500	Optional fax accessory for the dh model	CC487A
HP Jetdirect 2900nw Print Server	USB wireless print server accessory	J8031A
HP Jetdirect 3000w NFC/Wireless Accessory	Wi-Fi direct accessory for “touch” printing from mobile devices	J8030A
HP Internal USB ports	Two internal USB ports for connecting third-party devices	B5L28A

Customer self-repair parts

Learn about printer customer self-repair parts.

Customer self-repair (CSR) parts are available for many HP LaserJet printers to reduce repair time.



NOTE: More information about the CSR program and benefits can be found at www.hp.com/go/csr-support and www.hp.com/go/csr-faq.

Genuine HP replacement parts can be ordered at www.hp.com/buy/parts or by contacting an HP-authorized service or support provider. When ordering, one of the following will be needed: part number, serial number (found on back of printer), product number, or printer name.

- Parts listed as **Mandatory:** Self-replacement are to be installed by customers, unless you are willing to pay HP service personnel to perform the repair. For these parts, on-site or return-to-depot support is not provided under the HP printer warranty
- Parts listed as **Optional:** Self-replacement can be installed by HP service personnel at your request for no additional charge during the printer warranty period.

Table 6-4 Customer self-repair (CSR) parts

Item	Description	Self-replacement options	Part number
1x550 Sheet Feeder Kit	Replacement 1x550-sheet feeder	Mandatory	P1B09-67901
Secure Hard Disk Drive	Replacement hard disk drive	Mandatory	B5L29-67903
HP 1GB DDR3 x32 144-Pin 800MHz SODIMM	Replacement memory DIMM	Mandatory	E5K48-67902
Analog Fax Accessory 500 Kit	Replacement fax board	Mandatory	CC522-67929

Table 6-4 Customer self-repair (CSR) parts (continued)

Item	Description	Self-replacement options	Part number
HP Trusted Platform Module kit	Replacement trusted platform module	Mandatory	B5L31-67902
HP Foreign Interface Harness kit	Replacement foreign interface harness	Mandatory	F5S62-61001
HP Jetdirect 2900nw Print Server	Replacement USB wireless print server accessory	Mandatory	J8031-61001
HP Jetdirect 3000w NFC/Wireless Accessory	Replacement Wireless Direct Print accessory for "touch" printing from mobile devices	Mandatory	J8030-61001
Scanner white backing	Replacement white plastic backing for the scanner	Mandatory	5851-7206
Control-panel kit	Replacement touchscreen control panel	Mandatory	5851-7210
Retention Clip Assembly	Replacement retention clips that are behind the scanner white backing	Mandatory	5851-7207
ADF Maintenance Kit	Maintenance kit for the document feeder	Mandatory	5851-7202
U.S. English Keyboard Kit	Replacement keyboard for Flow models	Mandatory	B5L47-67019
U.K. English Keyboard Kit	Replacement keyboard for Flow models	Mandatory	B5L47-67020
Keyboard Overlay Kit French, Italian, Russian, German, U.K. Spanish	Replacement keyboard overlay for Flow models	Mandatory	5851-6019
Keyboard Overlay Kit U.S. Spanish	Replacement keyboard overlay for Flow models	Mandatory	5851-6020
Keyboard Overlay Kit Swiss French, Swiss German, Danish	Replacement keyboard overlay for Flow models	Mandatory	5851-6021
Keyboard Overlay Kit Simplified Chinese, Traditional Chinese	Replacement keyboard overlay for Flow models	Mandatory	5851-6022
Keyboard Overlay Kit Spanish, Portuguese	Replacement keyboard overlay for Flow models	Mandatory	5851-6023
Keyboard Overlay Kit Japanese (KG and KT)	Replacement keyboard overlay for Flow models	Mandatory	5851-6024

Related documentation and software

Learn about HP access to additional service and support information.

HP service personnel, go to one of the following Web-based Interactive Search Engines (WISE) sites:

Americas (AMS)

- [WISE - English](#)
- [WISE - Spanish](#)
- [WISE - Portuguese](#)

- [WISE - French](#)

Asia Pacific / Japan (APJ)

- [WISE - English](#)
- [WISE - Japanese](#)
- [WISE - Korean](#)
- [WISE - Chinese \(simplified\)](#)
- [WISE - Chinese \(traditional\)](#)
- [WISE - Thai](#)

Europe / Middle East / Africa (EMEA)

- [WISE - English](#)

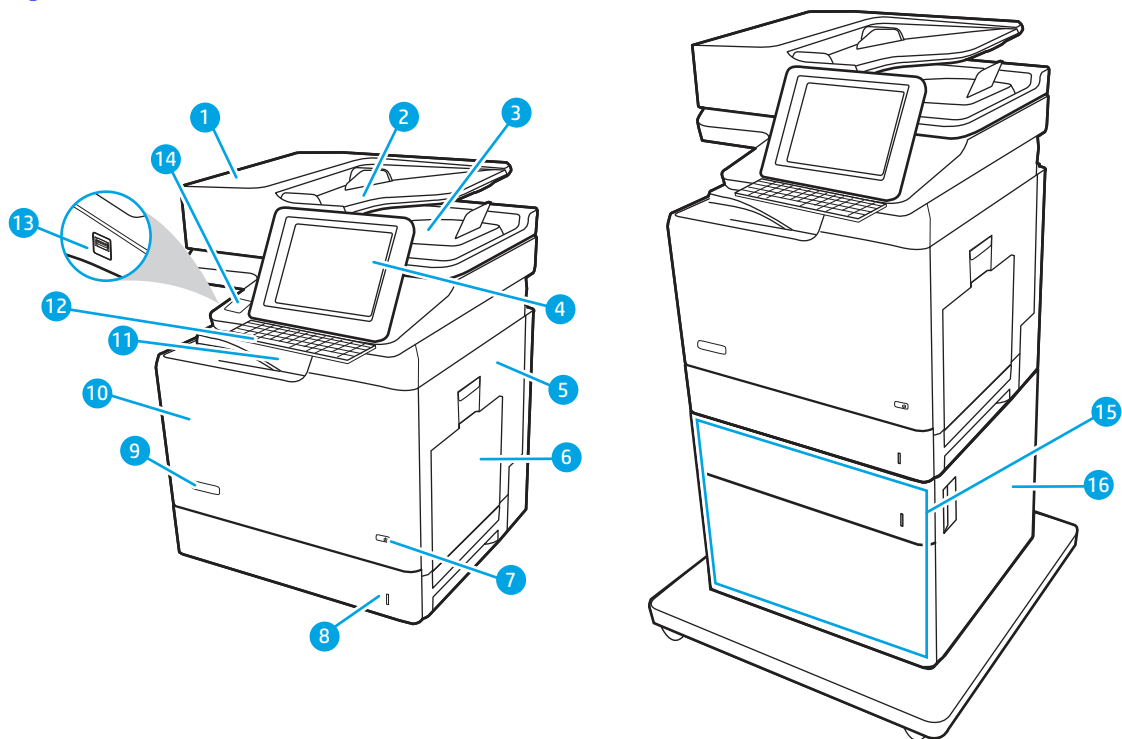
Assembly locations

Learn about the base printer assemblies.

Printer front view (M681/M682/E67550/E67560/E67650/E67660)

Identify the parts on the front of the printer (MFP).

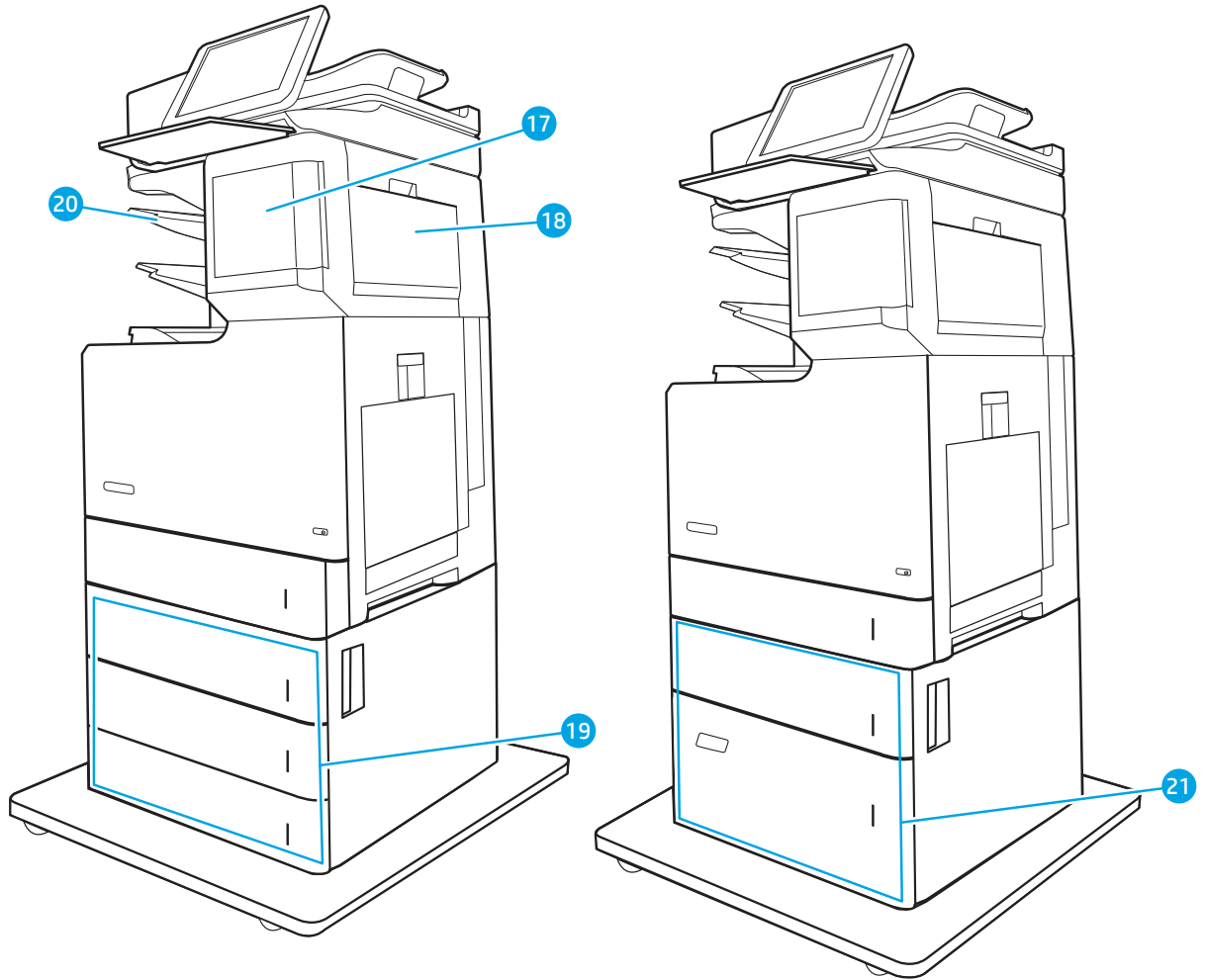
Figure 6-1 Printer front view (MFP 1 of 2)



Number	Description
1	Document-feeder cover (access for clearing jams)

Number	Description
2	Document-feeder input tray
3	Document-feeder output bin NOTE: When feeding long paper through the document feeder, extend the paper stop at the right side of the output bin.
4	Control panel with color touchscreen display (tilts up for easier viewing)
5	Right door (access to the fuser and for clearing jams)
6	Tray 1
7	On/off button
8	Tray 2
9	Model name
10	Front door (access to the toner cartridges)
11	Standard output bin
12	Physical keyboard (Flow models only). Pull the keyboard straight out to use it. CAUTION: Close the keyboard when it is not in use.
13	Easy-access USB port (on the side of the control panel) Insert a USB flas drive for printing or scanning without a computer or to update the printer firmware. NOTE: An administrator must enable this port before use.
14	Hardware integration pocket (for connecting accessory and third-party devices)
15	1x550-sheet paper feeder with stand
16	Lower-right door (access for clearing jams)

Figure 6-2 Printer front view (MFP 2 of 2)

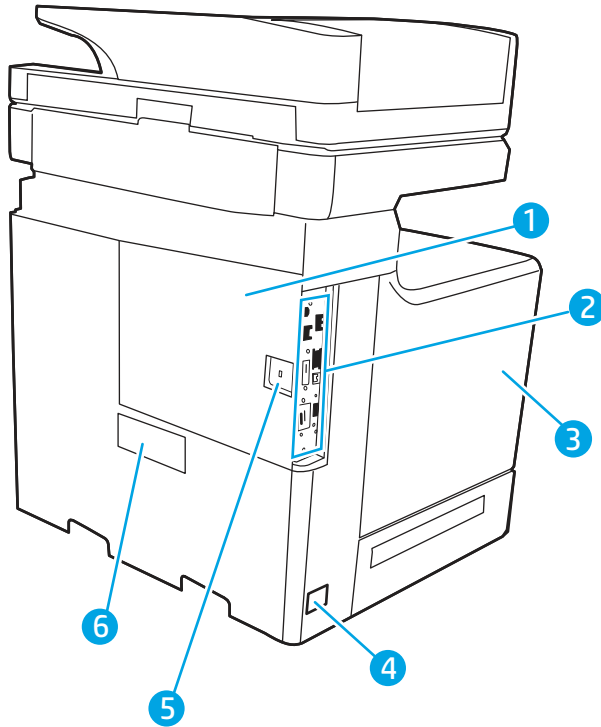


Number	Description
17	Stapler-cartridge door (z models only)
18	Stapler/stacker-right door (z models only) (access for clearing jams)
19	3x550-sheet paper feeder with stand
20	2-bin stapler/stacker
21	High-capacity paper feeder and 550-sheet paper feeder with stand

Printer back view (M681/M682/E67550/E67560/E67650/E67660)

Identify the parts on the front of the printer (MFP).

Figure 6-3 Printer back view (MFP)

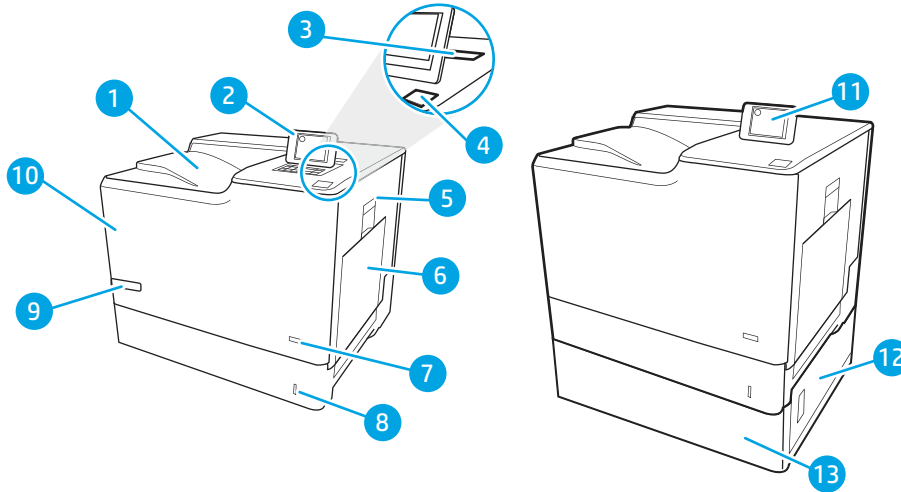


Number	Description
1	Formatter cover
2	Formatter (contains the interface ports)
3	Left door (access to the toner-collection unit)
4	Power connection
5	Slot for a cable-type security lock
6	Serial number and product number label

Printer front view (M652/M653/E65050/E65060/E65150/E65160)

Identify the parts on the front of the printer (SFP).

Figure 6-4 Printer front view (SFP)

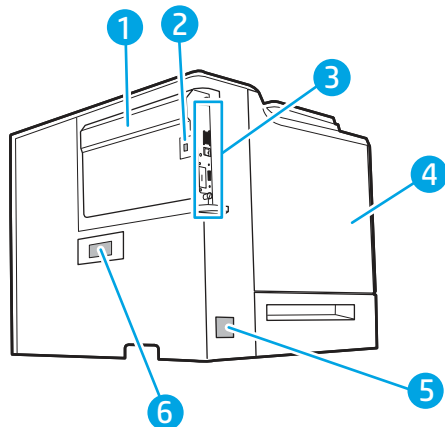


Number	Description
1	Output bin
2	Control panel with color graphical display and keypad (M652 models only)
3	Hardware integration pocket for connecting accessory and third-party devices
4	Easy-access USB port Insert a USB flas drive for printing without a computer or to update the printer firmware. NOTE: An administrator must enable this port before use.
5	Right door (access to the fuser and for clearing jams)
6	Tray 1
7	On/off button
8	Tray 2
9	Model name
10	Front door (access to the toner cartridges)
11	Control panel with color touchscreen display (M653 models only)
12	Lower-right door (access for clearing jams)
13	1 x 550-sheet paper feeder, Tray 3 (included with the M653x model, optional for the other models)

Printer back view (M652/M653/E65050/E65060/E65150/E65160)

Identify the parts on the front of the printer (SFP).

Figure 6-5 Printer back view (SFP)





Number	Description
1	Formatter cover
2	Slot for a cable-type security lock
3	Formatter (contains the interface ports)
4	Left door (access to the toner-collection unit)
5	Power connection
6	Serial number and product number label

How to use parts lists and diagrams

Learn how to use the parts lists and diagrams.

The figures in this chapter show the major sub-assemblies in the printer and their component parts. A parts list table follows each exploded view assembly diagram. The table lists the item number, the associated part number, and the description of each part. If a part is not listed in the table, then it is not a field replacement unit (FRU).

 **NOTE:** Be sure to order the correct part. When looking for part numbers for electrical parts, pay careful attention to the voltage that is listed in the part description. Doing so will make sure that the selected part number is for the correct printer model.

 **NOTE:** The abbreviation “PCA” stands for “printed circuit-board assembly.” Components described as a PCA might consist of a single circuit board or a circuit board plus other parts, such as cables and sensors.

Document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660 only)

Parts diagram and part list for the document feeder and image scanner.

Figure 6-6 Document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660 only)

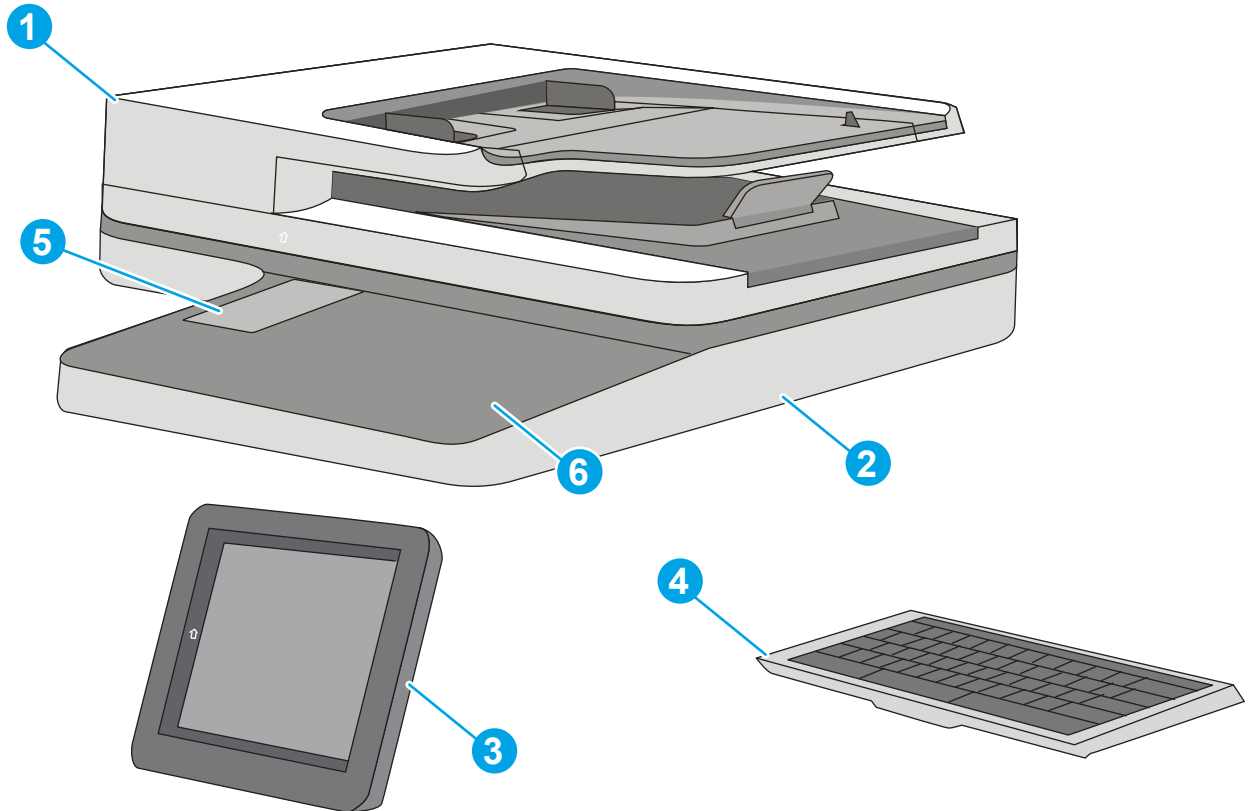


Table 6-5 Document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660 only)

Ref No	Part number	Description	Qty
1	5851-7203	Document feeder (non-Flow models) kit; includes white backing and retention clips	1
1	5851-7204	Document feeder (Flow models) kit; includes white backing and retention clips	1
2	J8A10-67901	Image scanner kit; includes white backing and retention clips, and rear cover	1
3	B5L47-67018	Control panel kit, M681/M682/E67550/E67560/E67650/E67660	1
4	B5L47-67019	Keyboard US (Flow models)	1
4	B5L47-67020	Keyboard UK (Flow models)	1
5	B5L46-40021	Cover, HIP	1
6	J8J63-60137	Cover, control panel	1
Not shown	J8J63-60109	Scan control board cage (non-Flow models)	1

Table 6-5 Document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660 only) (continued)

Ref No	Part number	Description	Qty
Not shown	J8A08-60103	Scan control board cage (Flow models)	1
Not shown	5851-7764	Scanner control board (SCB) - Enterprise	1
Not shown	5851-7347	Scanner control board (SCB) - Flow series	1
Not shown	5851-7207	White backing retention clip kit	1
Not shown	RC4-9423-000CN	Cover, USB	1
Not shown	5851-7205	ADF hinge kit	1
Not shown	5851-7202	LaserJet ADF roller kit	1
Not shown	5851-7202	LaserJet ADF white backing, A4, kit	1
Not shown	J8A10-60113	Cable, HDMI	1
Not shown	J8A10-60111	Cable, WU USB control panel	1
Not shown	J8A10-60114	Cable, HIP control panel	1
Not shown	J8A10-60112	Cable, sideband control panel	1
Not shown	J8A10-60110	Cable, SCB-formatter power	1
Not shown	J8A10-60110	Cable, SCB-formatter HDMI	1
Not shown	5851-6019	Keyboard overlay kit (FR, IT, RU, DE, ES: UK Kybd)	1
Not shown	5851-6020	Keyboard overlay kit (FR-CN, ES-LA, ES: US Kybd)	1
Not shown	5851-6021	Keyboard overlay kit (FR-SW, DE-SW, DA: UK Kybd)	1
Not shown	5851-6022	Keyboard overlay kit (ZHTW, ZHCN)	1
Not shown	5851-6023	Keyboard overlay kit (ES/PT)	1
Not shown	5851-6024	Keyboard overlay kit (JA-KG, JA-KT)	1

Parts and diagrams: Covers (M652/M653/E65050/E65060/E65150/E65160)

Parts diagram and parts list for the SFP printer covers.

Figure 6-7 Covers (M652/M653/E65050/E65060/E65150/E65160)

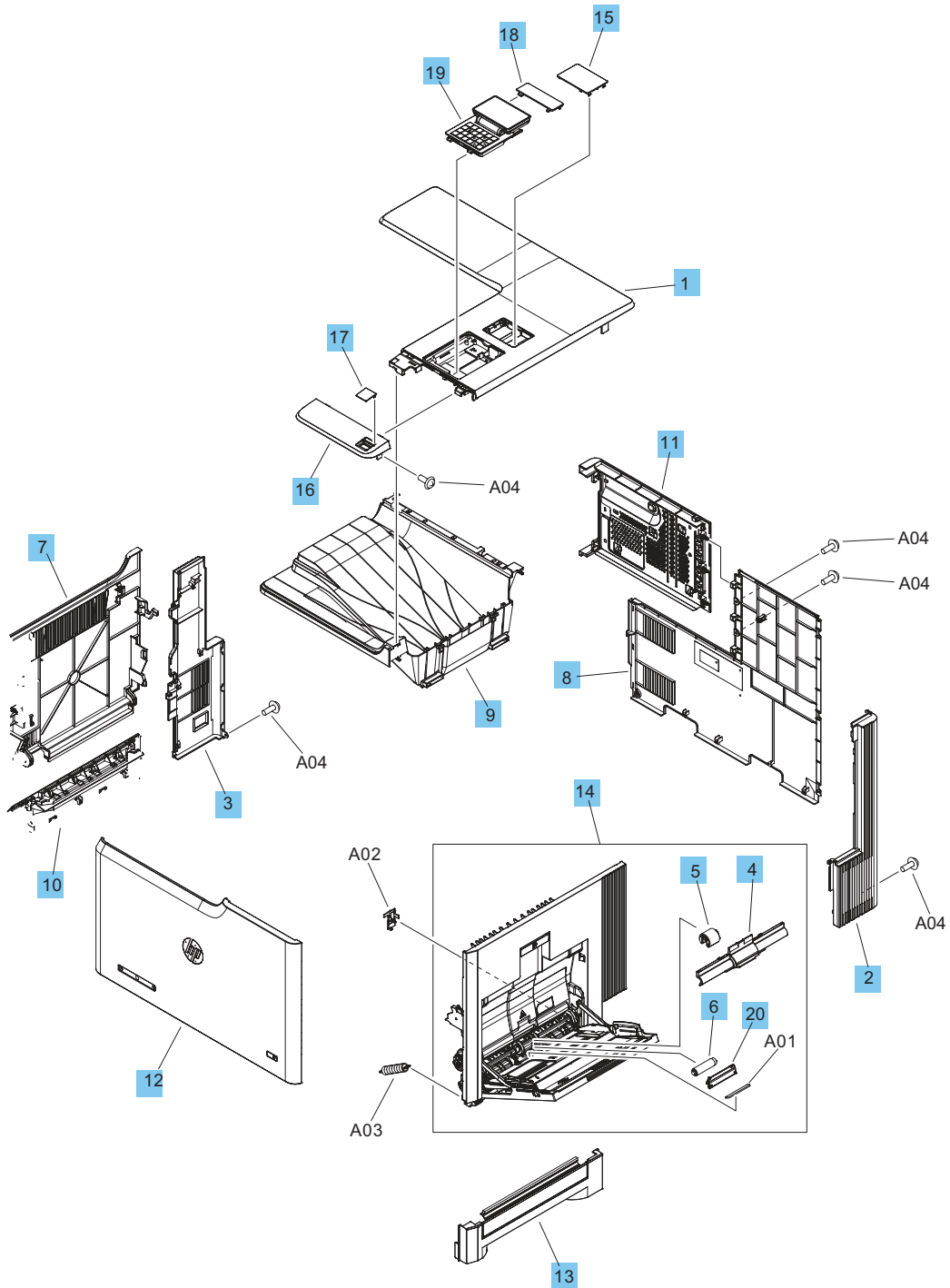


Table 6-6 Covers (M652/M653/E65050/E65060/E65150/E65160)

Ref No	Part number	Description	Qty	Removal/replacement
1	RC4-6429-000CN	Cover, top	1	See Removal and replacement: Top cover (M652/M653/E65050/E65060/E65150/E65160) .
2	RC4-6425-000CN	Cover, right rear	1	See Removal and replacement: Right rear cover .
3	RC4-6858-000CN	Cover, left rear	1	See Removal and replacement: Left rear cover .
4	RC4-7318-000CN	Cover, Tray 1 roller	1	Not applicable
5	RL2-0034-000CN	Roller, pickup, Tray 1	1	See Removal and replacement: Tray 1 pickup roller .
6	RL2-0079-000CN	Roller, separation, Tray 1	1	See Removal and replacement: Tray 1 separation roller .
7	RL2-1500-000CN	Door, left	1	See Removal and replacement: Left door .
8	RM2-1951-000CN	Rear cover assembly	1	See Removal and replacement: Rear cover .
9	RM2-1953-000CN	Output bin assembly	1	See Removal and replacement: Output bin .
10	RM2-1958-000CN	Left handle assembly	1	See Removal and replacement: Left handle .
11	RM2-6657-000CN	Formatter cover assembly	1	See Removal and replacement: Formatter cover .
12	RM2-6658-000CN	Front door assembly	1	See Removal and replacement: Front door .
13	RM2-6659-000CN	Right handle assembly	1	See Removal and replacement: Right handle .
14	RM2-6622-000CN	Right door assembly	1	See Removal and replacement: Right door .
15	RC4-0213-000CN	Cover, HIP	1	Not applicable
16	RC5-3356-000CN	Cover, blanking	1	Not applicable
17	RC4-9423-000CN	Cover, USB	1	Not applicable
18	RC4-8239-000CN	Cover, control panel back	1	Not applicable
19	RM2-1267-010CN	Control panel assembly 68.6 mm (2.7 in)	1	See Removal and replacement: Control panels (M652/M653/E65050/E65060/E65150/E65160) .
19	5851-7252	Control panel kit 109.2 mm (4.3 in)	1	See Removal and replacement: Control panels (M652/M653/E65050/E65060/E65150/E65160) .

Table 6-6 Covers (M652/M653/E65050/E65060/E65150/E65160) (continued)

Ref No	Part number	Description	Qty	Removal/replacement
19	5851-7975	Control panel 68.6 mm (2.7 in) inch with keypad	1	See Removal and replacement: Control panels (M652/M653/E65050/E65060/E65150/E65160) .
20	RC5-1892-000CN	Guide, NIP	1	Not applicable

Parts and diagrams: Covers (M681/M682/E67550/E67560/E67650/E67660)

Parts diagram and parts list for the MFP printer covers.

Figure 6-8 Covers (M681/M682/E67550/E67560/E67650/E67660)

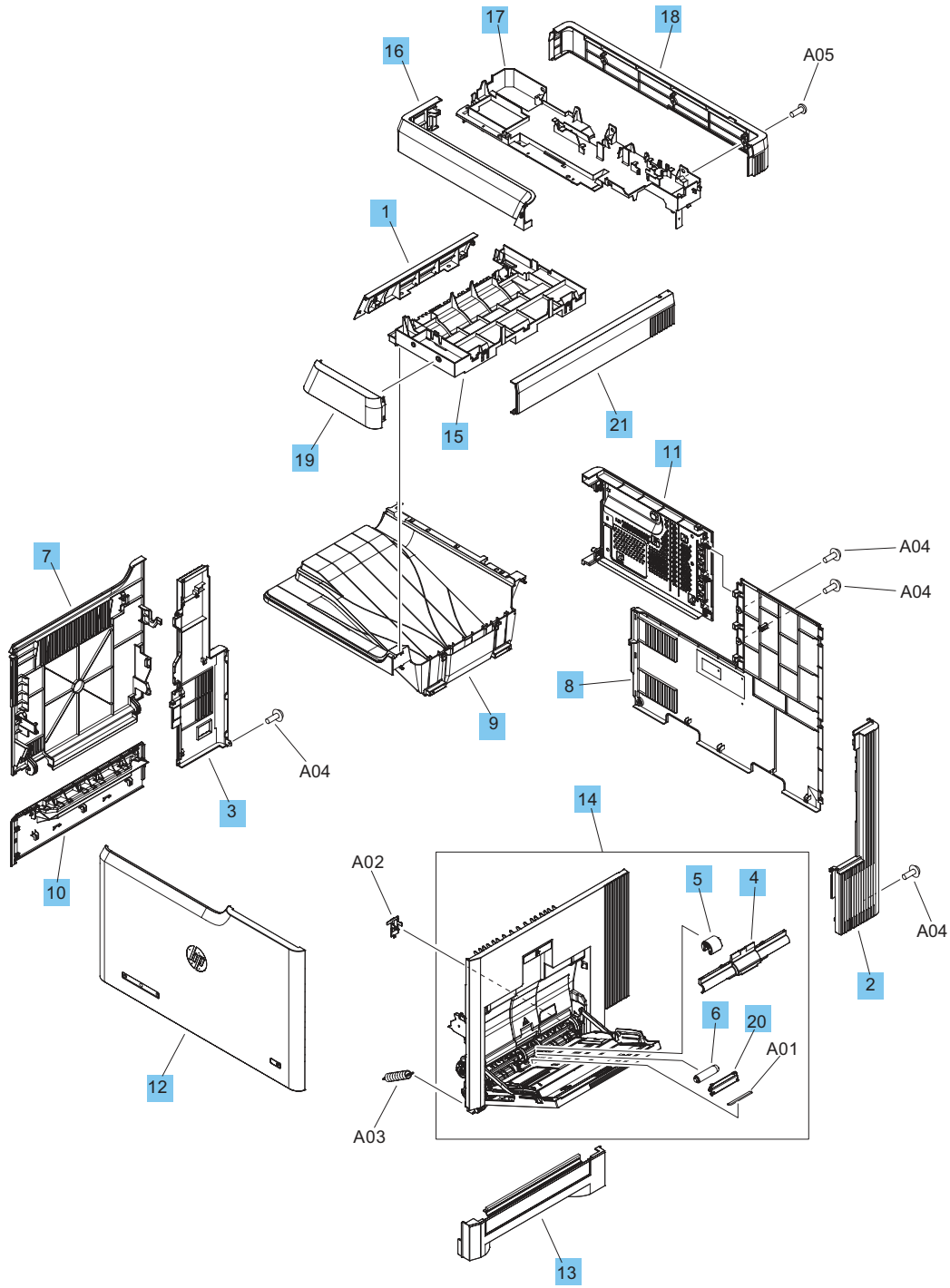


Table 6-7 Covers (M681/M682/E67550/E67560/E67650/E67660)

Ref No	Part number	Description	Qty	Removal/replacement
1	RC4-6865-000CN	Cover, top	1	See Removal and replacement: Top cover (M681dn/M681/M682dn/Flow M681f/E67650dh) .
2	RC4-6425-000CN	Cover, right rear	1	See Removal and replacement: Right rear cover .
3	RC4-6858-000CN	Cover, left rear	1	See Removal and replacement: Left rear cover .
4	RC4-7318-000CN	Cover, Tray 1 roller	1	Not applicable
5	RL2-0034-000CN	Roller, pickup, Tray 1	1	See Removal and replacement: Tray 1 pickup roller .
6	RL2-0079-000CN	Roller, separation, Tray 1	1	See Removal and replacement: Tray 1 separation roller .
7	RL2-1500-000CN	Door, left	1	See Removal and replacement: Left door .
8	RM2-1951-000CN	Rear cover assembly	1	See Removal and replacement: Rear cover .
9	RM2-1953-000CN	Output bin assembly	1	See Removal and replacement: Output bin .
10	RM2-1958-000CN	Left handle assembly	1	See Removal and replacement: Left handle .
11	RM2-6657-000CN	Formatter cover assembly	1	See Removal and replacement: Formatter cover .
12	RM2-6658-000CN	Front door assembly	1	See Removal and replacement: Front door .
12	RM2-1975-000CN	Front door assembly (E65150/E65160/E67650/E67660)		See Removal and replacement: Front door .
13	RM2-6659-000CN	Right handle assembly	1	See Removal and replacement: Right handle .
14	RM2-6622-000CN	Right door assembly	1	See Removal and replacement: Right door .
15	RC4-6859-000CN	Cover, output bin	1	See Removal and replacement: Face-down front cover (M681dn/M681/M682dn/Flow M681f/E67650dh) .
15	RM2-1975-000CN	Cover, output bin (E65150/E65160/E67650/E67660)		Not applicable
16	RC4-6860-000CN	Cover, front	1	See Removal and replacement: Front cover (M681dn/M681/M682dn/Flow M681f/E67650dh) .

Table 6-7 Covers (M681/M682/E67550/E67560/E67650/E67660) (continued)

Ref No	Part number	Description	Qty	Removal/replacement
17	RC4-6861-000CN	Cover, main	1	See Removal and replacement: Main cover (M681dn/M681/M682dn/Flow M681f/E67650dh) .
18	RC4-6862-000CN	Cover, rear	1	See Removal and replacement: Rear upper cover (M681dn/M681/M682dn/Flow M681f/E67650dh) .
19	RC5-1842-000CN	Cover, output bin, front	1	Not applicable
20	RC5-1892-000CN	Guide, NIP	1	Not applicable
21	RC5-1843-000CN	Cover, right	1	See Removal and replacement: Right cover (M681dn/M681/M682dn/Flow M681f/E67650dh) .

Parts and diagrams: Internal components (1 of 6)

Parts diagram and parts list for the internal printer parts.

Figure 6-9 Internal components (1 of 6)

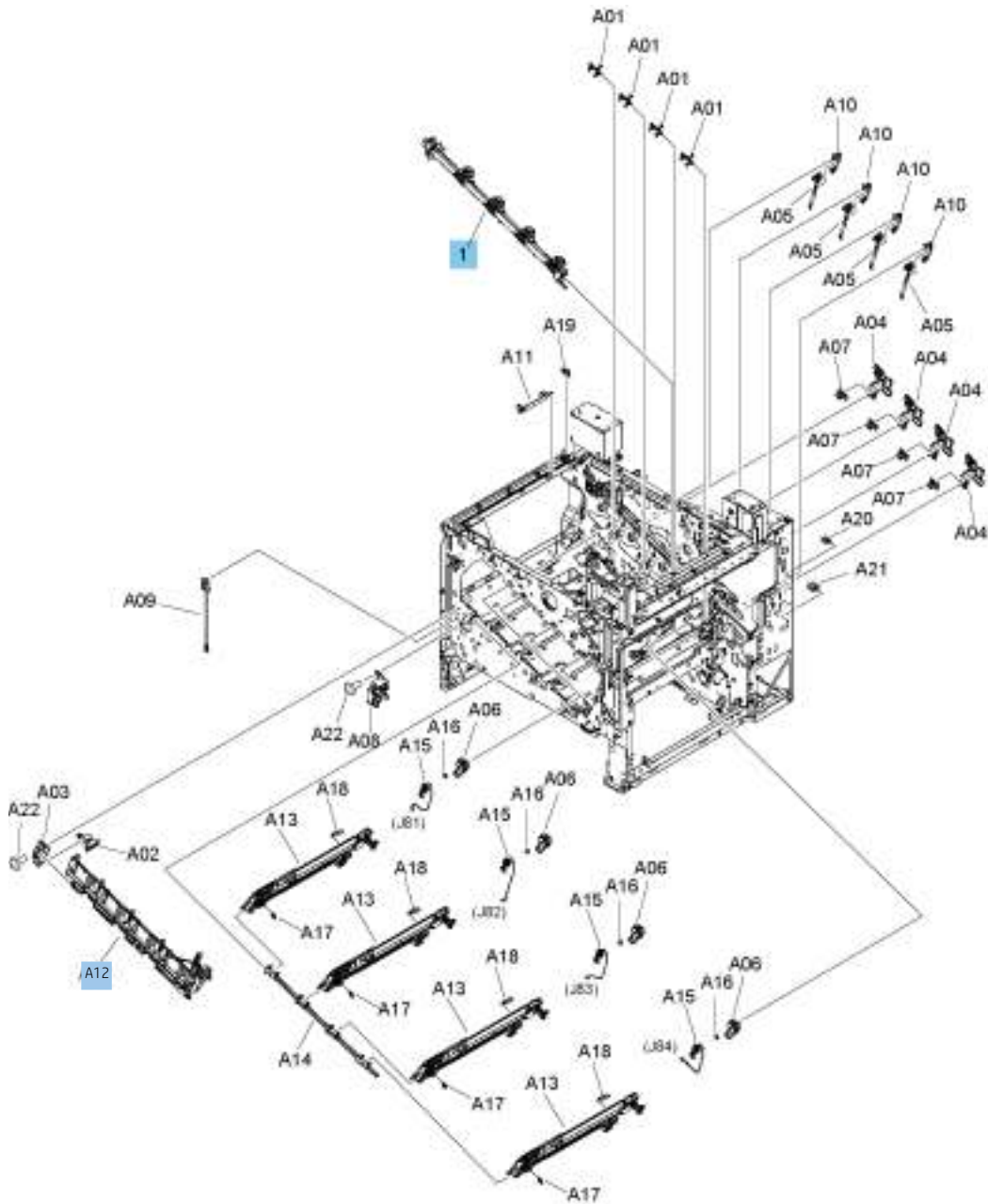


Table 6-8 Internal components (1 of 6)

Ref No	Part number	Description	Qty	Removal/replacement
1	RM2-6620-000CN	Toner carry assembly	1	See Removal and replacement: Toner carry assembly.
A12	RL2-1504-000CN	Door-Inner	1	Not applicable

Parts and diagrams: Internal components (2 of 6)

Parts diagram and parts list for the internal printer parts.

Figure 6-10 Internal components (2 of 6)

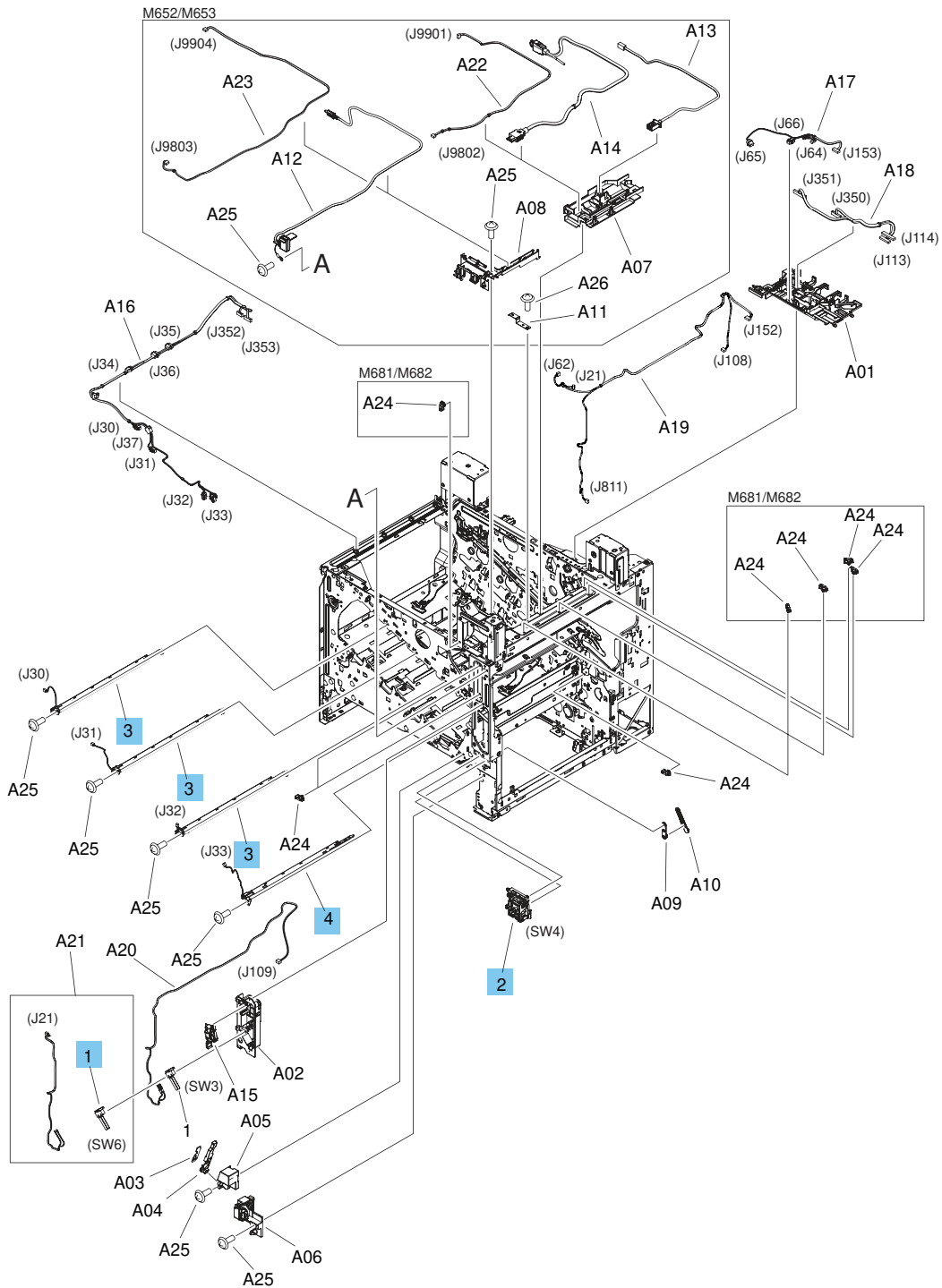


Table 6-9 Internal components (2 of 6)

Ref No	Part number	Description	Qty	Removal/replacement
1	RM2-6545-000CN	Microswitch	2	Not applicable
2	RM2-1947-000CN	Power supply switch assembly	1	See Removal and replacement: Power switch PCA .
3	RM3-7046-000CN	Pre-exposure PCA assembly (CMY)	1	See Removal and replacement: Pre-exposure PCA assembly (cyan, magenta, or yellow) .
4	RM3-7047-000CN	Pre-exposure PCA assembly (K)	1	See Removal and replacement: Pre-exposure PCA assembly (black) .

Parts and diagrams: Internal components (3 of 6)

Parts diagram and parts list for the internal printer parts.

Figure 6-11 Internal components (3 of 6)

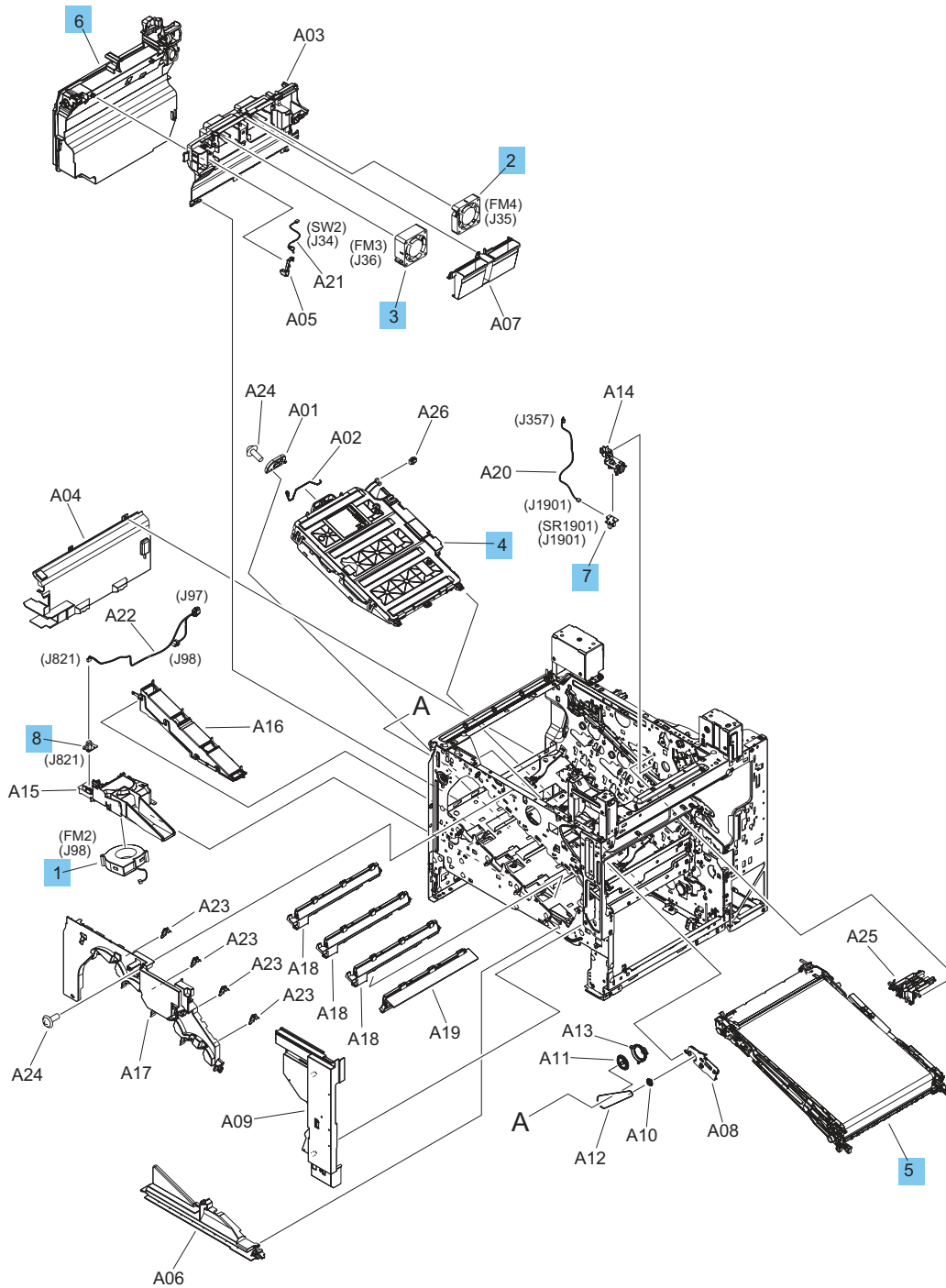


Table 6-10 Internal components (3 of 6)

Ref No	Part number	Description	Qty	Removal/replacement
1	RK2-6124-000CN	Fan	1	See Removal and replacement: Cartridge fan.
2	RK2-7949-000CN	Fan	1	See Removal and replacement: Left upper front and left upper rear fans.
3	RK2-7951-000CN	Fan	1	See Removal and replacement: Left upper front and left upper rear fans.
4	RM2-1237-000CN	Laser scanner assembly	1	See Removal and replacement: Laser scanner.
5	P1B93-67901	Image Transfer Belt (ITB) (part of LaserJet image transfer and roller kit)	1	See Removal and replacement: Intermediate transfer belt (ITB).
5	P1B93-69001	Intermediate Transfer Belt PM Kit <i>(For Managed Print Service (MPS))</i>	1	Part is for MPS only.
6	RM2-6613-000CN	Toner collection unit	1	See Removal and replacement: Toner collection unit (TCU).
7	RM2-7157-000CN	Estrangement detect PCA assembly	1	See Removal and replacement: Estrangement detect PCA.
8	RM2-8440-000CN	Environmental sensor PCA assembly	1	See Removal and replacement: Environmental sensor PCA.

Parts and diagrams: Internal components (4 of 6)

Parts diagram and parts list for the internal printer parts.

Figure 6-12 Internal components (4 of 6)

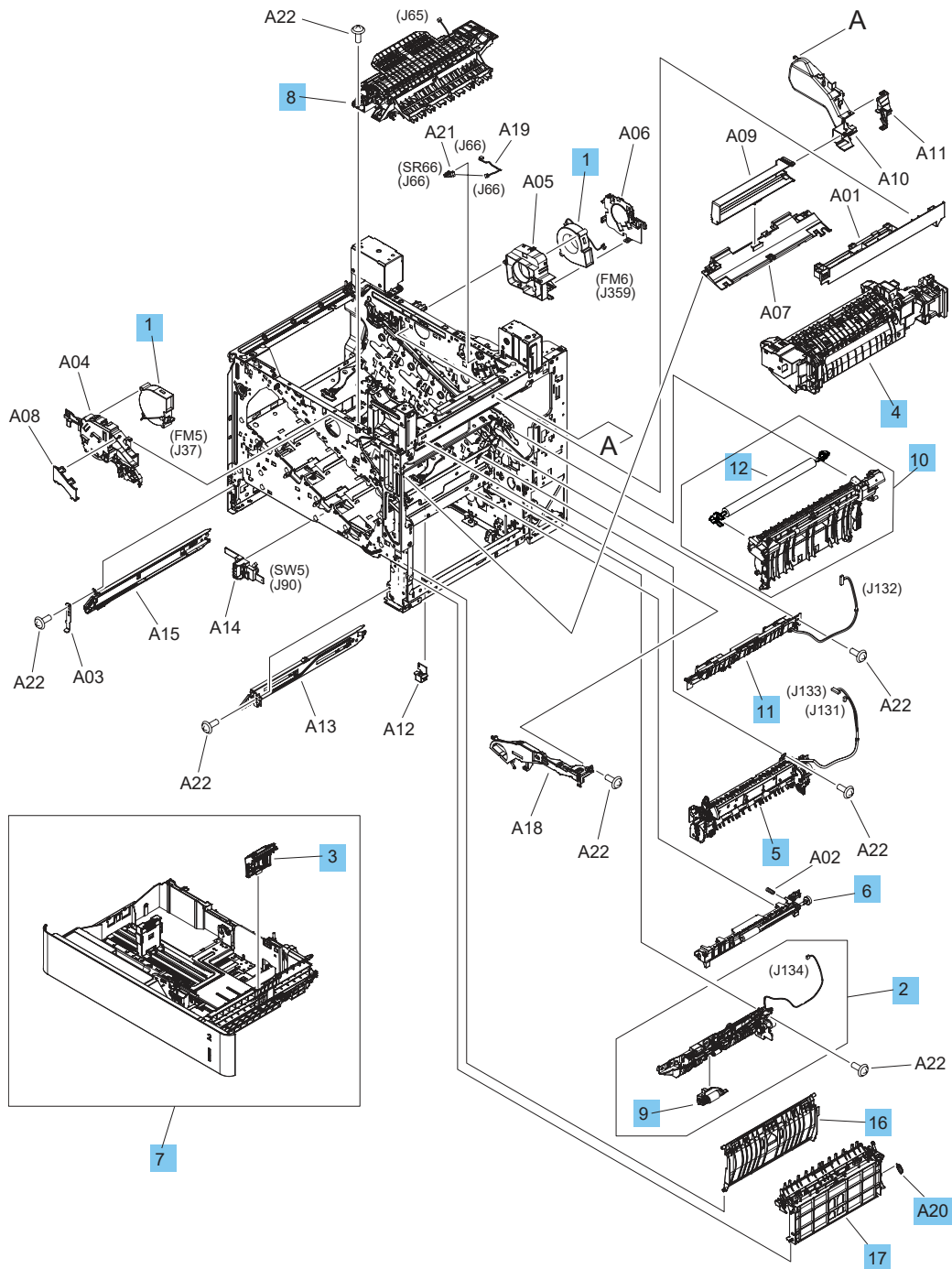


Table 6-11 Internal components (4 of 6)

Ref No	Part number	Description	Qty	Removal/replacement
1	RK2-6124-000CN	Fan	2	See Removal and replacement: Front fan. See Removal and replacement: Rear fan.
2	RM2-6556-000CN	Paper pick-up assembly	1	See Removal and replacement: Pickup assembly.
3	J7Z98-67902	Separation roller assembly	1	See Removal and replacement: Trays 2 and 3 pickup and separation rollers.
4	RM2-1928-000CN	Fuser assembly, 110-127V	1	See Removal and replacement: Fuser.
4	RM2-1929-000CN	Fuser assembly, 220-240V	1	See Removal and replacement: Fuser.
5	RM2-1957-000CN	Registration assembly	1	See Removal and replacement: Registration assembly.
6	RM2-1957-000CN	Feed roller assembly	1	See Removal and replacement: Feed roller assembly.
7	RM2-6684-000CN	Cassette assembly (Tray 2)	1	See Removal and replacement: Tray 2 and optional 550-sheet Trays 3-5.
8	RM2-6621-000CN	Paper delivery assembly	1	See Removal and replacement: Delivery assembly (M652/M653/E65050/E65060/E65150/E65160). See Removal and replacement: Delivery assembly (M681/M682/E67550/E67560/E67650/E67660).
9	J7Z98-67902	Paper pickup roller assembly	1	See Removal and replacement: Trays 2 and 3 pickup and separation rollers.
10	RM2-6682-000CN	Secondary transfer assembly	1	See Removal and replacement: Secondary transfer assembly.
11	RM2-7160-000CN	Density detect assembly	1	See Removal and replacement: Registration density sensor.
12	P1B93-67901	Secondary transfer roller assembly (part of LaserJet image transfer roller kit)	1	See Removal and replacement: Secondary transfer roller.
12	P1B93-69001	Intermediate Transfer Belt PM Kit <i>(For Managed Print Service (MPS))</i>	1	Part is for MPS only.

Table 6-11 Internal components (4 of 6) (continued)

Ref No	Part number	Description	Qty	Removal/replacement
16	RM2-6650-000CN	Guide Assembly	1	Not applicable
17	RM2-6651-000CN	Upper Guide Assembly	1	Not applicable
A20	RU9-2364-000CN	Spring	1	Not applicable
Not shown	3GY25-67901	Kit-fixed tray guide	1	Not applicable

Parts and diagrams: Internal components (5 of 6)

Parts diagram and parts list for the internal printer parts.

Figure 6-13 Internal components (5 of 6)

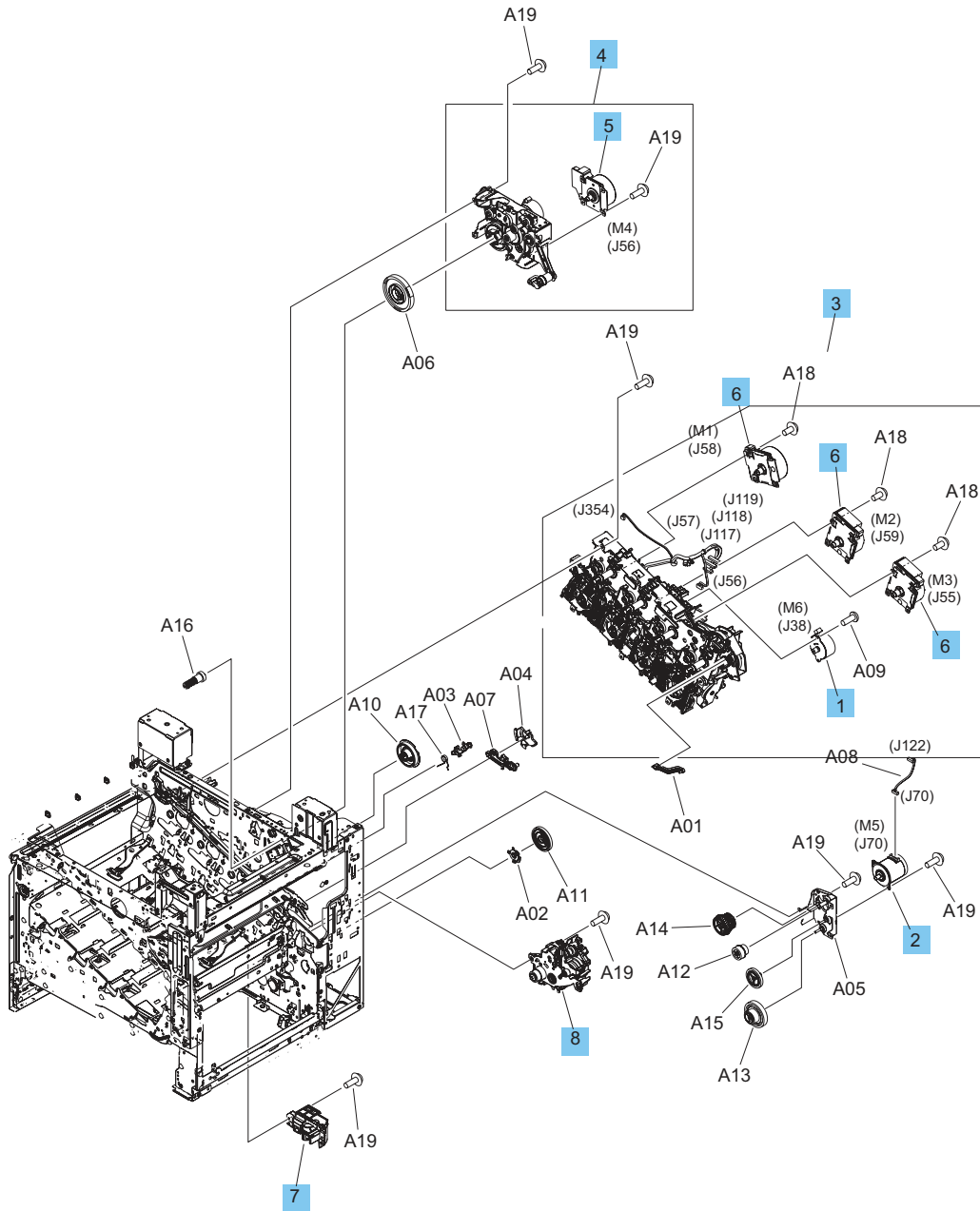


Table 6-12 Internal components (5 of 6)

Ref No	Part number	Description	Qty	Removal/replacement
1	RK2-6027-000CN	Motor, stepping (M6)	1	See Removal and replacement: Developer alienation motor.

Table 6-12 Internal components (5 of 6) (continued)

Ref No	Part number	Description	Qty	Removal/replacement
2	RK2-7757-000CN	Motor, stepping	1	See Removal and replacement: Pickup motor .
3	RM2-1927-000CN	Main drive assembly	1	See Removal and replacement: Main drive assembly .
4	RM2-1934-000CN	Fuser drive assembly	1	See Removal and replacement: Fuser drive assembly .
5	RM2-1955-000CN	Fuser motor drive assembly	1	See Removal and replacement: Fuser motor .
6	RM2-1956-000CN	Drum motor assembly	1	See Removal and replacement: Drum motor 1 .
7	RM2-5147-000CN	Auto close assembly	1	Not applicable
8	RM2-6669-000CN	Lifter drive assembly	1	See Removal and replacement: Lifter drive assembly .

Parts and diagrams: Internal components (6 of 6)

Parts diagram and parts list for the internal printer parts.

Figure 6-14 Internal components (6 of 6)

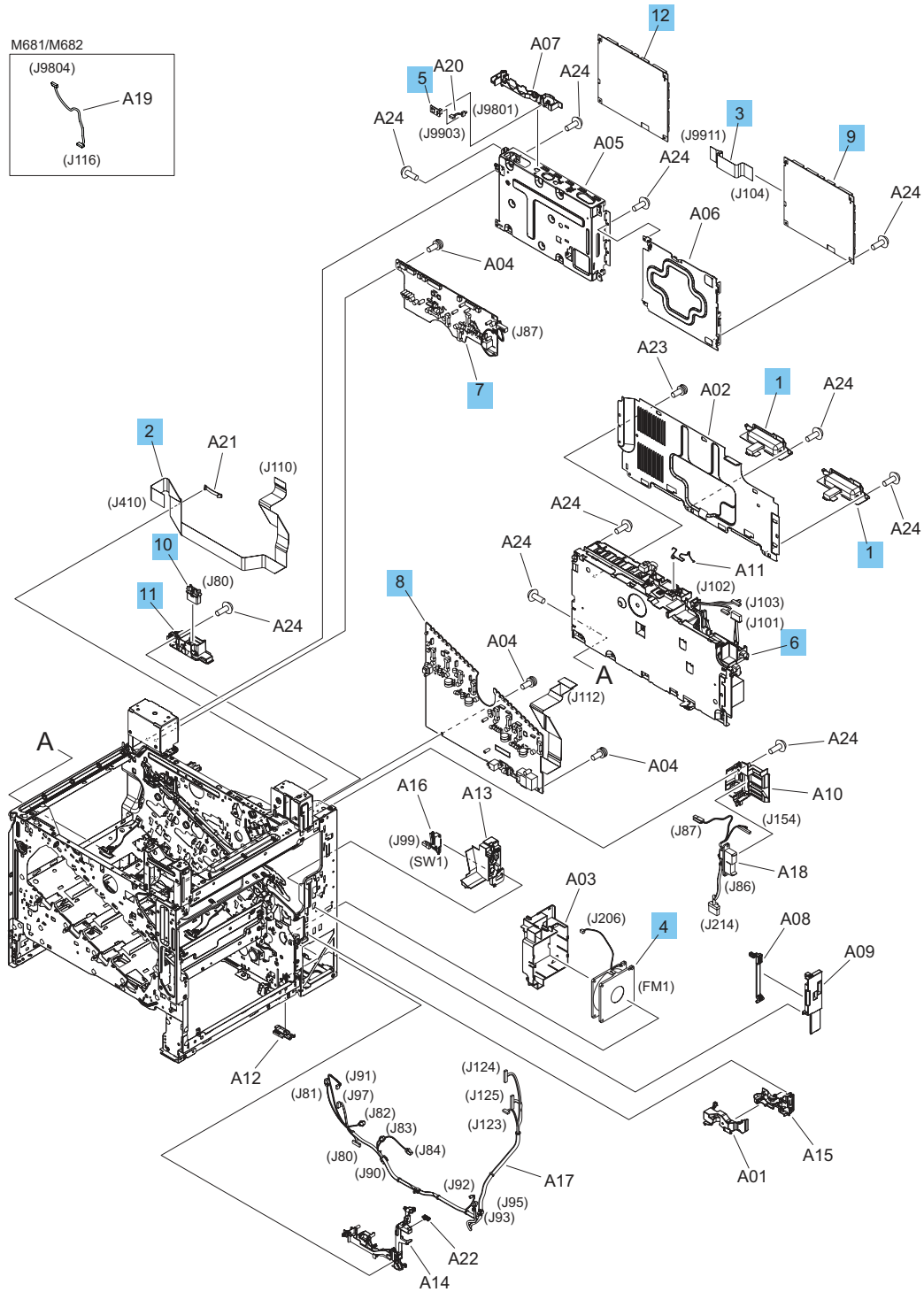


Table 6-13 Internal components (6 of 6)

Ref No	Part number	Description	Qty	Removal/replacement
1	RC4-9410-000CN	Handle, rear	2	Not applicable
2	RK2-7768-000CN	Cable, flexible flat	1	Not applicable
3	RK2-7776-000CN	Cable, flexible flat	1	Not applicable
4	RK2-7953-000CN	Fan	1	See Removal and replacement: Power supply fan
5	RM2-7138-000CN	Memory PCA	1	Not applicable
6	RM2-8421-000CN	Low-voltage power supply, 110-127V	1	See Removal and replacement: Low-voltage power supply (LVPS)
6	RM2-8422-000CN	Low-voltage power supply, 220-240V	1	See Removal and replacement: Low-voltage power supply (LVPS)
7	RM2-8424-000CN	High-voltage power supply, HVPS (T)	1	See Removal and replacement: Upper high-voltage power supply (HVPS)
8	RM3-7006-000CN	High-voltage power supply, HVPS (D)	1	See Removal and replacement: Lower high-voltage power supply (HVPS)
9	RM3-7030-000CN	DC controller PCA, M652/M653	1	See Removal and replacement: DC controller PCA
9	RM3-7031-000CN	DC controller PCA, M681/M682	1	See Removal and replacement: DC controller PCA
9	RM3-7603-000CN	DC controller PCA, E65150/E65160	1	See Removal and replacement: DC controller PCA
9	RM3-7606-000CN	DC controller PCA, E67650/E67660	1	See Removal and replacement: DC controller PCA
10	VS1-7258-012CN	Connector	1	See Removal and replacement: Drawer connector and holder
11	RC4-6497-000CN	Holder, drawer connector	1	See Removal and replacement: Drawer connector and holder
12	J7Z98-60001	Formatter (M652/M653)	1	See Removal and replacement: Formatter
12	J7Z98-67904	Formatter (M652/M653; India/China)	1	See Removal and replacement: Formatter
12	J8A10-60001	Formatter (M681/M682)	1	See Removal and replacement: Formatter
12	J8A10-67902	Formatter (M681/M682; India/China)	1	See Removal and replacement: Formatter

Table 6-13 Internal components (6 of 6) (continued)

Ref No	Part number	Description	Qty	Removal/replacement
12	3GY03-67901	Formatter (E65150/E65160)	1	See Removal and replacement: Formatter
12	3GY31-67901	Formatter (E67650/E67660)	1	See Removal and replacement: Formatter
12	3GY03-67902	Formatter (E65150/E65160; India/China)	1	See Removal and replacement: Formatter
Not shown	3GY31-67902	Kit-PEFS (E67650/E67660; India/China)	1	Not applicable
Not shown	3GY32-67901	Kit-PEFS	1	Not applicable

Parts and diagrams: 550-sheet paper feeder covers

Parts diagram and parts list for the 550-sheet paper feeder.

Figure 6-15 550-sheet paper feeder covers

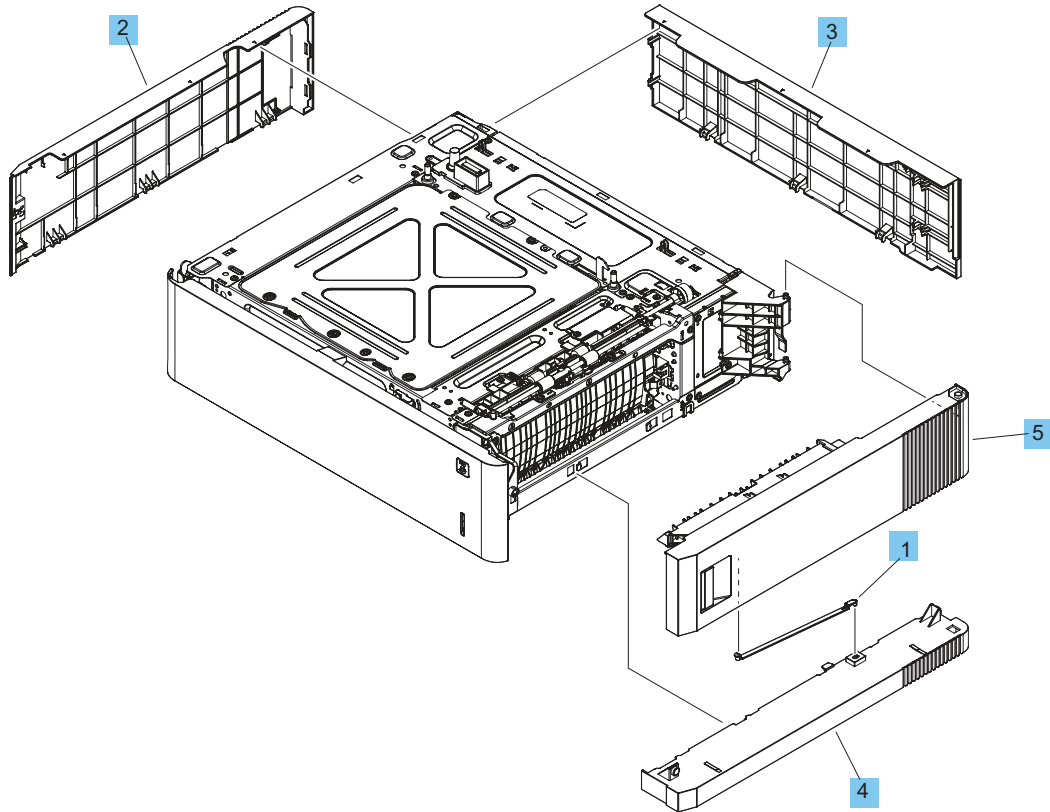


Table 6-14 550-sheet paper feeder covers

Ref No	Part number	Description	Qty	Removal/replacement
1	RC4-1778-000CN	Link, door, right (550-sheet feeder)	1	See Removal and replacement: Right door link (550-sheet paper feeder) .
2	RC4-7682-000CN	Cover, left (550-sheet feeder)	1	See Removal and replacement: Left cover (550-sheet paper feeder) .
3	RC4-7683-000CN	Cover, rear (550-sheet feeder)	1	See Removal and replacement: Rear cover (550-sheet paper feeder) .
4	RC4-7684-000CN	Cover, right lower (550-sheet feeder)	1	See Removal and replacement: Right lower cover (550-sheet paper feeder) .
5	RM2-6937-000CN	Door assembly, right (550-sheet feeder)	1	See Removal and replacement: Right door (550-sheet paper feeder) .

Parts and diagrams: 550-sheet feeder stand main body

Parts diagram and parts list for the 550-sheet feeder stand.

Figure 6-16 550-sheet feeder stand main body

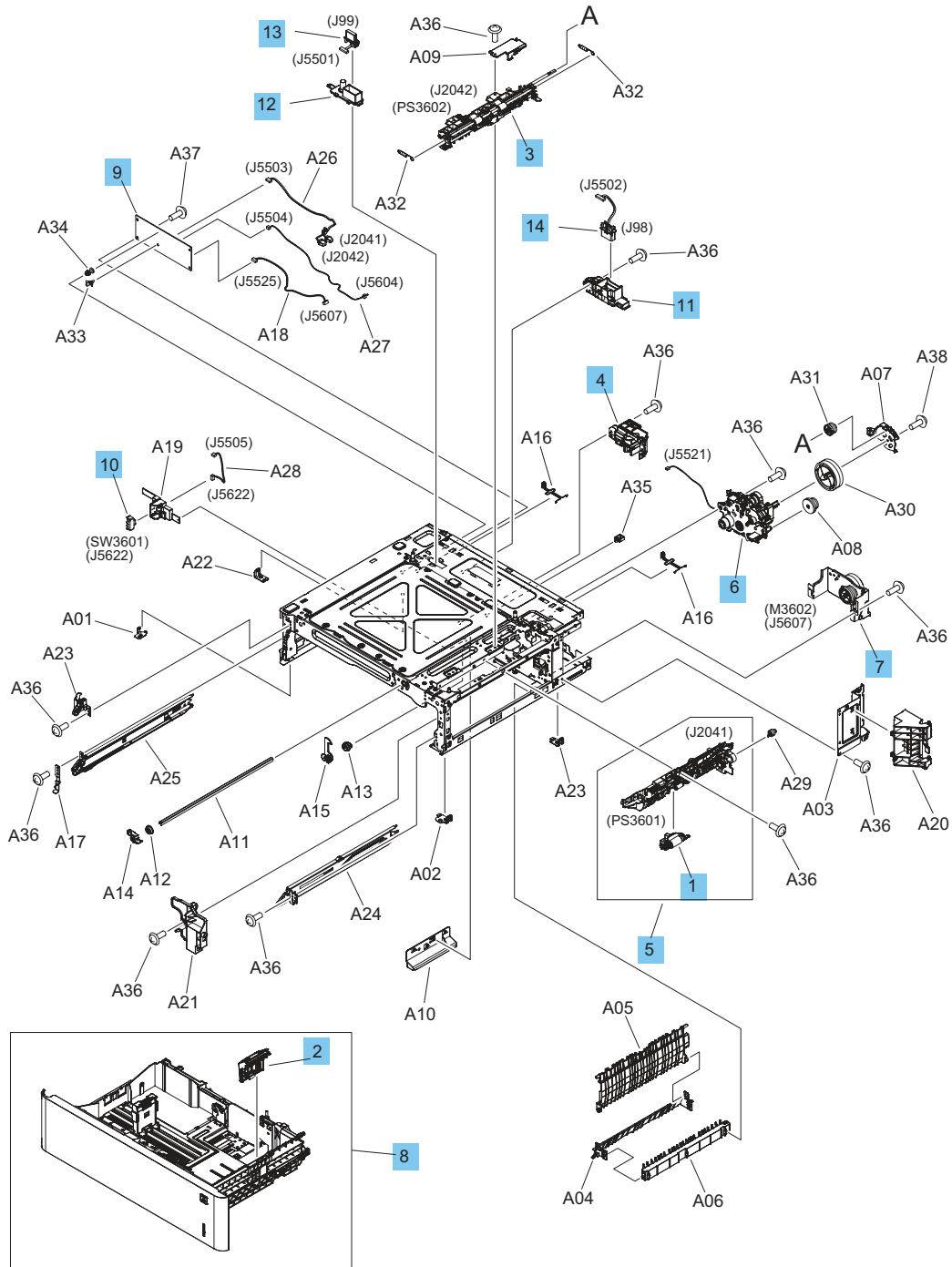


Table 6-15 550-sheet feeder stand main body

Ref No	Part number	Description	Qty	Removal/replacement
1	J7Z98-67902	Pickup roller assembly (550-sheet feeder; part of LaserJet Trays 2-5 Roller Kit)	1	See Removal and replacement: Trays 3-5 paper feeder stand pickup and separation rollers .
2	J7Z98-67902	Separation roller assembly (550-sheet feeder; part of LaserJet Trays 2-5 Roller Kit)	1	See Removal and replacement: Trays 3-5 paper feeder stand pickup and separation rollers .
3	RM2-5145-000CN	Paper feed assembly (550-sheet feeder)	1	See Removal and replacement: Paper feed assembly (550-sheet paper feeder) .
4	RM2-5147-000CN	Auto-close assembly (550-sheet feeder)	1	See Removal and replacement: Auto-close assembly (550-sheet paper feeder) .
5	RM2-5154-000CN	Paper pickup assembly (550-sheet feeder)	1	See Removal and replacement: Paper pickup assembly (550-sheet paper feeder) .
6	RM2-6933-000CN	Lifter drive assembly (550-sheet feeder)	1	See Removal and replacement: Lifter drive assembly (550-sheet paper feeder) .
7	RM2-6934-000CN	Drive assembly (550-sheet feeder)	1	See Removal and replacement: Drive assembly (550-sheet paper feeder) .
8	RM2-6935-000CN	Cassette assembly (550-sheet feeder)	1	See Removal and replacement: Tray 2 and optional 550-sheet Trays 3-5 .
9	RM2-8491-000CN	Feeder controller PCA (550-sheet feeder)	1	See Removal and replacement: Paper feeder controller PCA (550-sheet paper feeder) .
10	WC2-5762-000CN	Switch, push (550-sheet feeder)	1	See Removal and replacement: Size-detect switch (550-sheet paper feeder) .
11	RC4-6497-000CN	Holder, drawer connector (550-sheet feeder)	1	Not applicable
12	RC4-7680-000CN	Holder, drawer, upper (550-sheet feeder)	1	See Removal and replacement: Upper drawer holder and cable assembly (550-sheet paper feeder) .
13	RM2-8880-000CN	Option upper cable assembly (550-sheet feeder)	1	See Removal and replacement: Upper drawer holder and cable assembly (550-sheet paper feeder) .

Table 6-15 550-sheet feeder stand main body (continued)

Ref No	Part number	Description	Qty	Removal/replacement
14	RM2-8881-000CN	Option lower cable assembly (550-sheet feeder)	1	See Removal and replacement: Lower drawer holder and cable assembly (550-sheet paper feeder) .

Parts and diagrams: 1x550-sheet feeder and stand covers

Parts diagram and parts list for the 1x550-sheet feeder and stand.

Figure 6-17 1x550-sheet feeder and stand covers

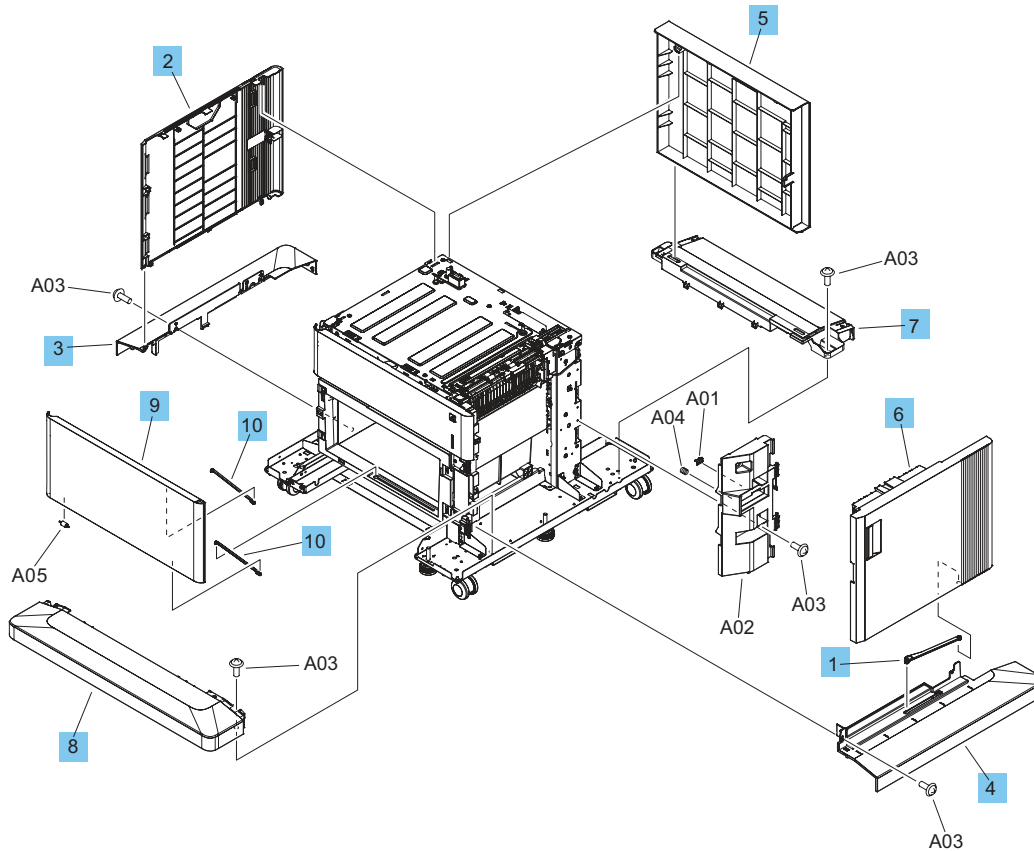


Table 6-16 1x550-sheet feeder and stand covers

Ref No	Part number	Description	Qty	Removal/replacement
1	RC4-9824-000CN	Link, door (1x550-sheet feeder)	1	See Removal and replacement: Right door link (1x550-sheet paper feeder with stand) .
2	RC5-0387-000CN	Cover, left (1x550-sheet feeder)	1	See Removal and replacement: Left cover (1x550-sheet paper feeder with stand) .
3	RC5-0385-000CN	Cover, left lower (1x550-sheet feeder)	1	See Removal and replacement: Left lower cover (1x550-sheet paper feeder with stand) .
4	RC5-0384-000CN	Cover, right lower (1x550-sheet feeder)	1	See Removal and replacement: Right lower cover (1x550-sheet paper feeder with stand) .

Table 6-16 1x550-sheet feeder and stand covers (continued)

Ref No	Part number	Description	Qty	Removal/replacement
5	RC5-0386-000CN	Cover, rear (1x550-sheet feeder)	1	See Removal and replacement: Rear cover (1x550-sheet paper feeder with stand) .
6	RM2-1226-000CN	Right door assembly (1x550-sheet feeder)	1	See Removal and replacement: Right door (1x550-sheet paper feeder with stand) .
7	RC5-0399-000CN	Cover, rear lower (1x550-sheet feeder)	1	See Removal and replacement: Rear lower cover (1x550-sheet paper feeder with stand) .
8	RC5-0383-000CN	Cover, front lower (1x550-sheet feeder)	1	See Removal and replacement: Front lower cover (1x550-sheet paper feeder with stand) .
9	RC5-0405-000CN	Door, stock (1x550-sheet feeder)	1	See Removal and replacement: Front door (1x550-sheet paper feeder with stand) .
10	RC4-1778-000CN	Link, door (1x550-sheet feeder)	2	See Removal and replacement: Right door link (1x550-sheet paper feeder with stand) .

Parts and diagrams: 550-sheet feeder and stand main body

Parts diagram and parts list for the 550-sheet feeder and stand.

Figure 6-18 550-sheet feeder and stand main body

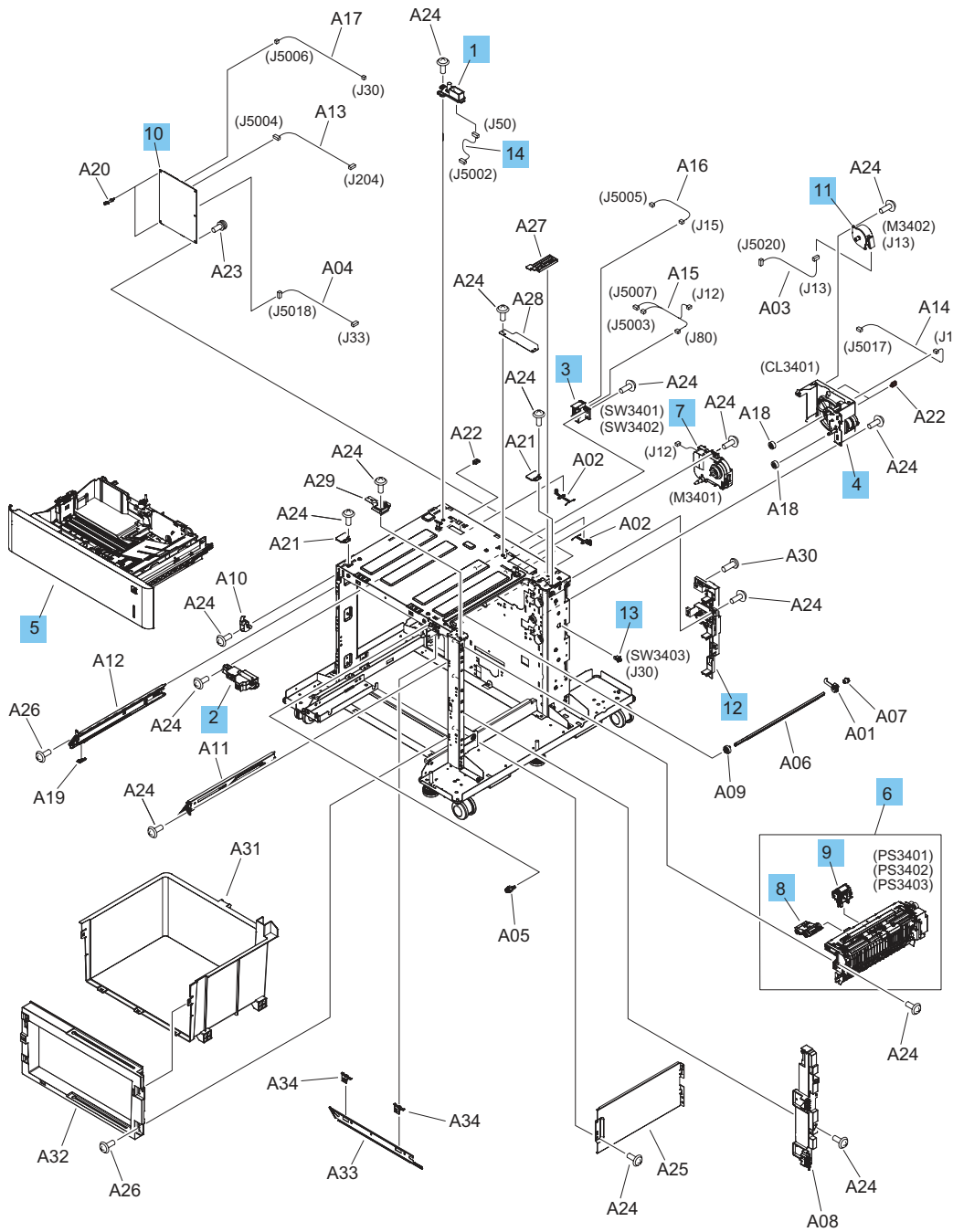


Table 6-17 550-sheet feeder and stand main body

Ref No	Part number	Description	Qty	Removal/replacement
1	RC4-8914-000CN	Holder, drawer connector (1x550-sheet feeder)	1	See Removal and replacement: Lower drawer holder and cable assembly (1x550-sheet paper feeder with stand) .
2	RM2-0856-000CN	Auto-close assembly (1x550-sheet feeder)	1	See Removal and replacement: Auto-close assembly (1x550-sheet paper feeder with stand) .
3	RM2-0857-000CN	Size sensor assembly (1x550-sheet feeder)	1	See Removal and replacement: Size sensor (1x550-sheet paper feeder with stand) .
4	RM2-1222-000CN	Drive assembly (1x550-sheet feeder)	1	See Removal and replacement: Drive assembly (1x550-sheet paper feeder with stand) .
5	RM2-1219-000CN	Cassette assembly (tray; 1x550-sheet feeder)	1	See Removal and replacement: Tray 2 and optional 550-sheet Trays 3-5 .
6	RM2-1235-000CN	Paper pickup assembly (1x550-sheet feeder)	1	See Removal and replacement: Paper pickup assembly (1x550-sheet paper feeder with stand) .
7	RM2-2091-000CN	Lifter drive assembly (1x550-sheet feeder)	1	See Removal and replacement: Drive assembly (550-sheet paper feeder) .
8	J7Z98-67902	Pickup roller assembly (1x550-sheet feeder; part of LaserJet Tray 2-5 Roller Kit)	1	See Removal and replacement: Trays 2 and 3 pickup and separation rollers .
9	J7Z98-67902	Separation roller assembly (1x550-sheet feeder; part of LaserJet Tray 2-5 Roller Kit)	1	See Removal and replacement: Trays 2 and 3 pickup and separation rollers .
10	RM2-8482-000CN	Paper deck controller. PCA	1	See Removal and replacement: Controller PCA (1x550-sheet paper feeder with stand) .
11	RK2-7831-000CN	Motor, stepping (1x550-sheet feeder)	1	See Removal and replacement: Feed motor (1x550-sheet paper feeder with stand) .
12	RM2-1223-000CN	Estrangement holder assembly (1x550-sheet feeder)	1	See Removal and replacement: Pickup alienation holder (1x550-sheet paper feeder with stand) .
13	WC2-5803-000CN	Switch, push (1x550-sheet feeder)	1	See Removal and replacement: Right door switch (1x550-sheet paper feeder with stand) .

Table 6-17 550-sheet feeder and stand main body (continued)

Ref No	Part number	Description	Qty	Removal/replacement
14	RM2-9286-000CN	Drawer upper cable assembly (1x550-sheet feeder)	1	See Removal and replacement: Lower drawer holder and cable assembly (1x550-sheet paper feeder with stand) .

Parts and diagrams: 3x550-sheet feeder and stand covers

Parts diagram and parts list for the 3x550-sheet feeder and stand.

Figure 6-19 3x550-sheet feeder and stand covers

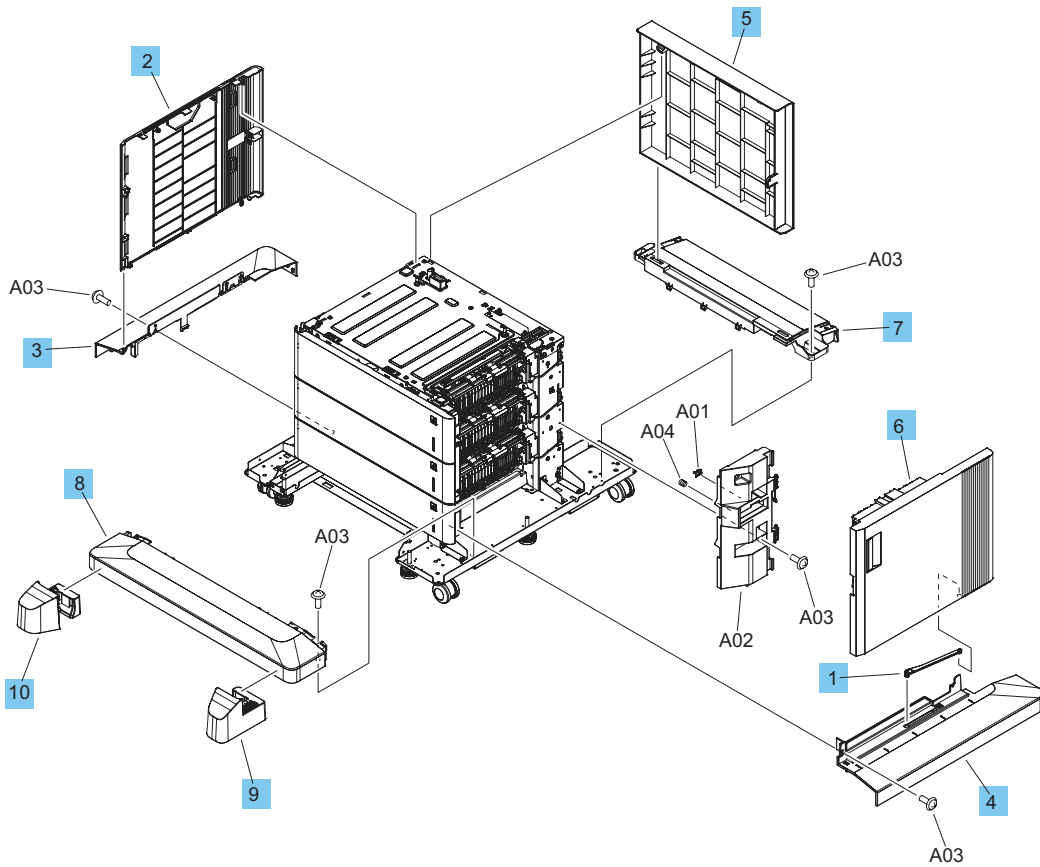


Table 6-18 3x550-sheet feeder and stand covers

Ref No	Part number	Description	Qty	Removal/replacement
1	RC4-9824-000CN	Link, door (3x550-sheet feeder)	1	See Removal and replacement: Right door link (3x550-sheet paper feeder with stand) .
2	RC5-0387-000CN	Cover, left (3x550-sheet feeder)	1	See Removal and replacement: Left cover (3x550-sheet paper feeder with stand) .
3	RC5-0385-000CN	Cover, left lower (3x550-sheet feeder)	1	See Removal and replacement: Left lower cover (3x550-sheet paper feeder with stand) .

Table 6-18 3x550-sheet feeder and stand covers (continued)

Ref No	Part number	Description	Qty	Removal/replacement
4	RC5-0384-000CN	Cover, right lower (3x550-sheet feeder)	1	See Removal and replacement: Right lower cover (3x550-sheet paper feeder with stand) .
5	RC5-0386-000CN	Cover, rear (3x550-sheet feeder)	1	See Removal and replacement: Rear cover (3x550-sheet paper feeder with stand) .
6	RM2-1230-000CN	Right door assembly (3x550-sheet feeder)	1	See Removal and replacement: Right door (3x550-sheet paper feeder with stand) .
7	RC5-0399-000CN	Cover, rear lower (3x550-sheet feeder)	1	See Removal and replacement: Rear lower cover (3x550-sheet paper feeder with stand) .
8	RC5-0383-000CN	Cover, front lower (3x550-sheet feeder)	1	See Removal and replacement: Front lower cover (3x550-sheet paper feeder with stand) .
9	RC5-0417-000CN	Cover, caster, right	1	See Removal and replacement: Caster covers (3x550-sheet paper feeder with stand) .
10	RC5-0418-000CN	Cover, caster, left	2	See Removal and replacement: Caster covers (3x550-sheet paper feeder with stand) .

Parts and diagrams: 3x550-sheet feeder and stand main body

Parts diagram and parts list for the 550-sheet feeder with stand.

Figure 6-20 3x550-sheet feeder and stand main body

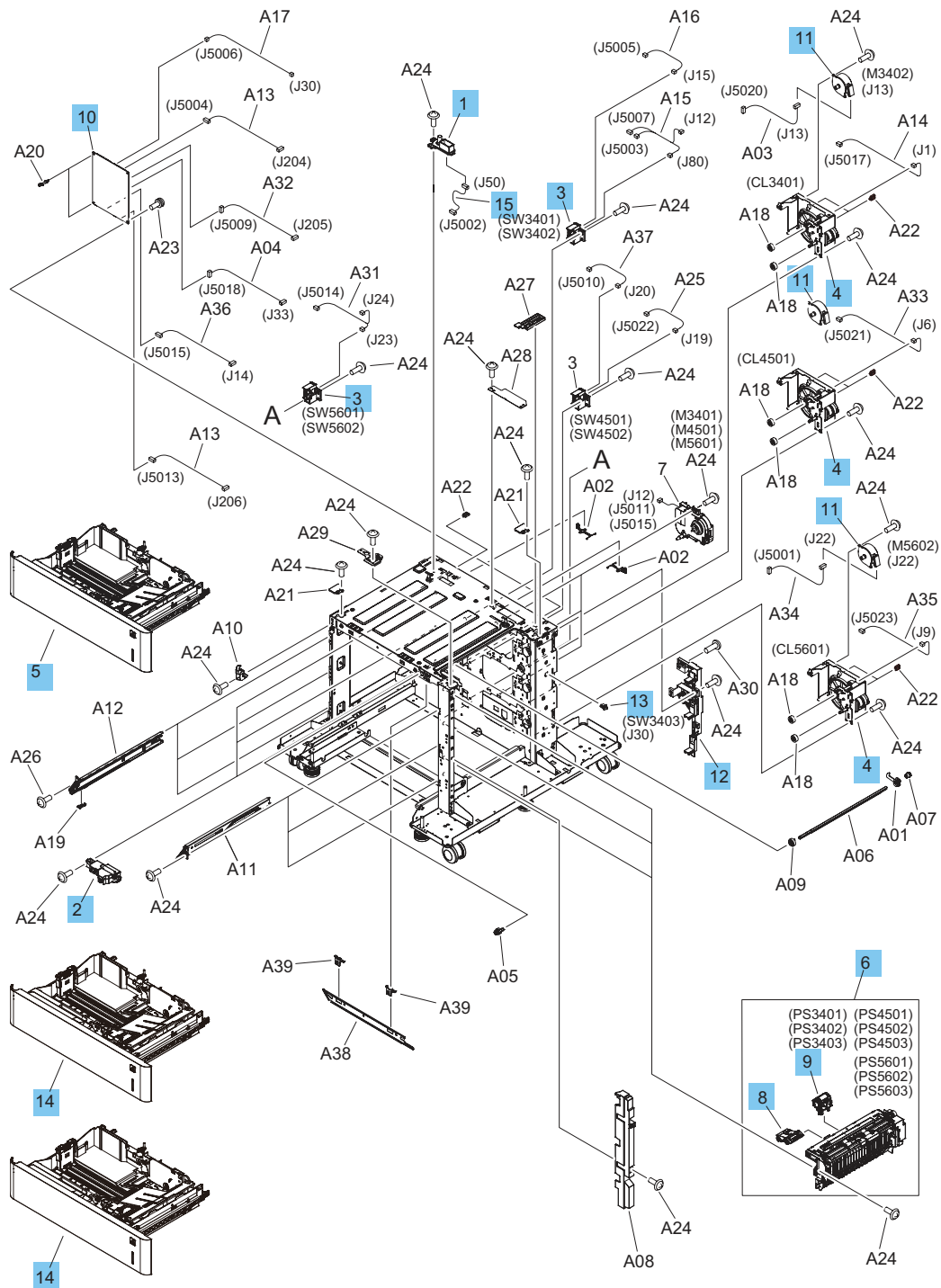


Table 6-19 3x550-sheet feeder and stand main body

Ref No	Part number	Description	Qty	Removal/replacement
1	RC4-8914-000CN	Holder, drawer connector (3x550-sheet feeder)	1	See Removal and replacement: Drawer connector holder and cable assembly (3x550-sheet paper feeder with stand) .
2	RM2-0856-000CN	Auto-close assembly (3x550-sheet feeder)	3	See Removal and replacement: Auto-close assemblies (3x550-sheet paper feeder with stand) .
3	RM2-0857-000CN	Size sensor assembly (3x550-sheet feeder)	3	See Removal and replacement: Size sensor (3x550-sheet paper feeder with stand) .
4	RM2-1222-000CN	Drive assembly (3x550-sheet feeder)	3	See Removal and replacement: Drive assemblies (3x550-sheet paper feeder with stand) .
5	RM2-1219-000CN	Cassette assembly (upper tray; 3x550-sheet feeder)	1	See Removal and replacement: Tray 2 and optional 550-sheet Trays 3-5 .
6	RM2-1235-000CN	Paper pickup assembly (3x550-sheet feeder)	3	See Removal and replacement: Paper pickup assemblies (3x550-sheet paper feeder with stand) .
7	RM2-2091-000CN	Lifter drive assembly (3x550-sheet feeder)	3	See Removal and replacement: Lifter drive assemblies (Trays 3 and 4) (3x550-sheet paper feeder with stand) . See Removal and replacement: Lifter drive assemblies (Tray 5) (3x550-sheet paper feeder with stand) .
8	J7Z98-67902	Pickup roller assembly (3x550-sheet feeder; part of LaserJet Tray 2-5 Roller Kit)	3	See Removal and replacement: Trays 3-5 paper feeder stand pickup and separation rollers .
9	J7Z98-67902	Separation roller assembly (3x550-sheet feeder; part of LaserJet Tray 2-5 Roller Kit)	3	See Removal and replacement: Trays 3-5 paper feeder stand pickup and separation rollers .
10	RM2-8483-000CN	Paper deck controller. PCA	1	See Removal and replacement: Controller PCA (3x550-sheet paper feeder with stand) .
11	RK2-7831-000CN	Motor, stepping (3x550-sheet feeder)	2	See Removal and replacement: Feed motors (3x550-sheet paper feeder with stand) .

Table 6-19 3x550-sheet feeder and stand main body (continued)

Ref No	Part number	Description	Qty	Removal/replacement
12	RM2-1223-000CN	Estrangement holder assembly (3x550-sheet feeder)	1	See Removal and replacement: Pickup alienation holder (Tray 4) (3x550-sheet paper feeder with stand) .
13	WC2-5803-000CN	Switch, push (3x550-sheet feeder)	1	See Removal and replacement: Right door switch (3x550-sheet paper feeder with stand) .
14	RM2-1231-000CN	Cassette assembly (middle/lower tray; 3x550-sheet feeder)	2	See Removal and replacement: Tray 2 and optional 550-sheet Trays 3-5 .
15	RM2-9286-000CN	Drawer upper cable assembly (1x550-sheet feeder)	1	See Removal and replacement: Drawer connector holder and cable assembly (3x550-sheet paper feeder with stand) .

Parts and diagrams: 2,550-sheet paper feeder covers

Parts diagram and parts list for the 2,550-sheet paper feeder.

Figure 6-21 2,550-sheet paper feeder covers

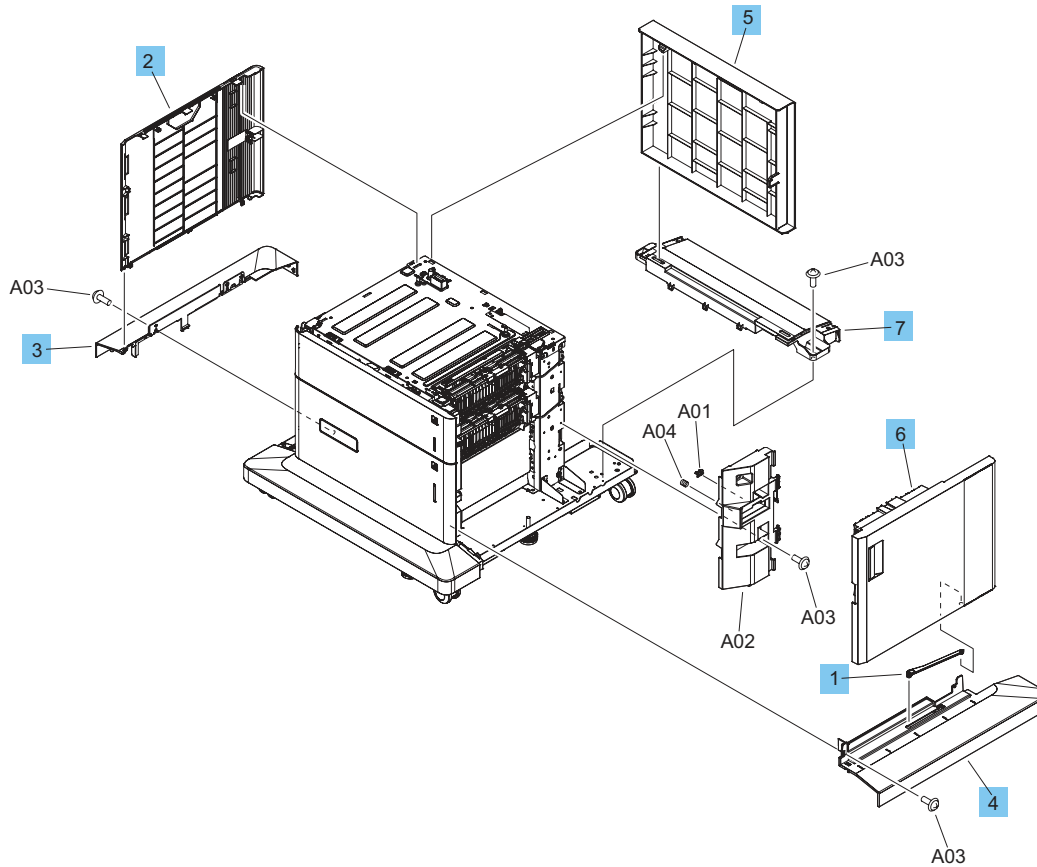


Table 6-20 2,550-sheet paper feeder covers

Ref No	Part number	Description	Qty	Removal/replacement
1	RC4-9824-000CN	Link, door (2,550-sheet feeder)	1	See Removal and replacement: Right door link (2,550-sheet paper feeder with stand) .
2	RC5-0387-000CN	Cover, left (2,550-sheet feeder)	1	See Removal and replacement: Left cover (2,550-sheet paper feeder with stand) .
3	RC5-0385-000CN	Cover, left lower (2,550-sheet feeder)	1	See Removal and replacement: Left lower cover (2,550-sheet paper feeder with stand) .
4	RC5-0384-000CN	Cover, right lower (2,550-sheet feeder)	1	See Removal and replacement: Right lower cover (2,550-sheet paper feeder with stand) .

Table 6-20 2,550-sheet paper feeder covers (continued)

Ref No	Part number	Description	Qty	Removal/replacement
5	RC5-0386-000CN	Cover, rear (2,550-sheet feeder)	1	See Removal and replacement: Rear cover (2,550-sheet paper feeder with stand) .
6	RM2-1218-000CN	Right door assembly (2,550-sheet feeder)	1	See Removal and replacement: Right door (2,550-sheet paper feeder with stand) .
7	RC5-0399-000CN	Cover, rear lower (2,550-sheet feeder)	1	See Removal and replacement: Rear lower cover (2,550-sheet paper feeder with stand) .

Parts and diagrams: 2,550-sheet feeder stand main body

Parts diagram and parts list for the 2,550-sheet feeder stand.

Figure 6-22 2,550-sheet feeder stand main body

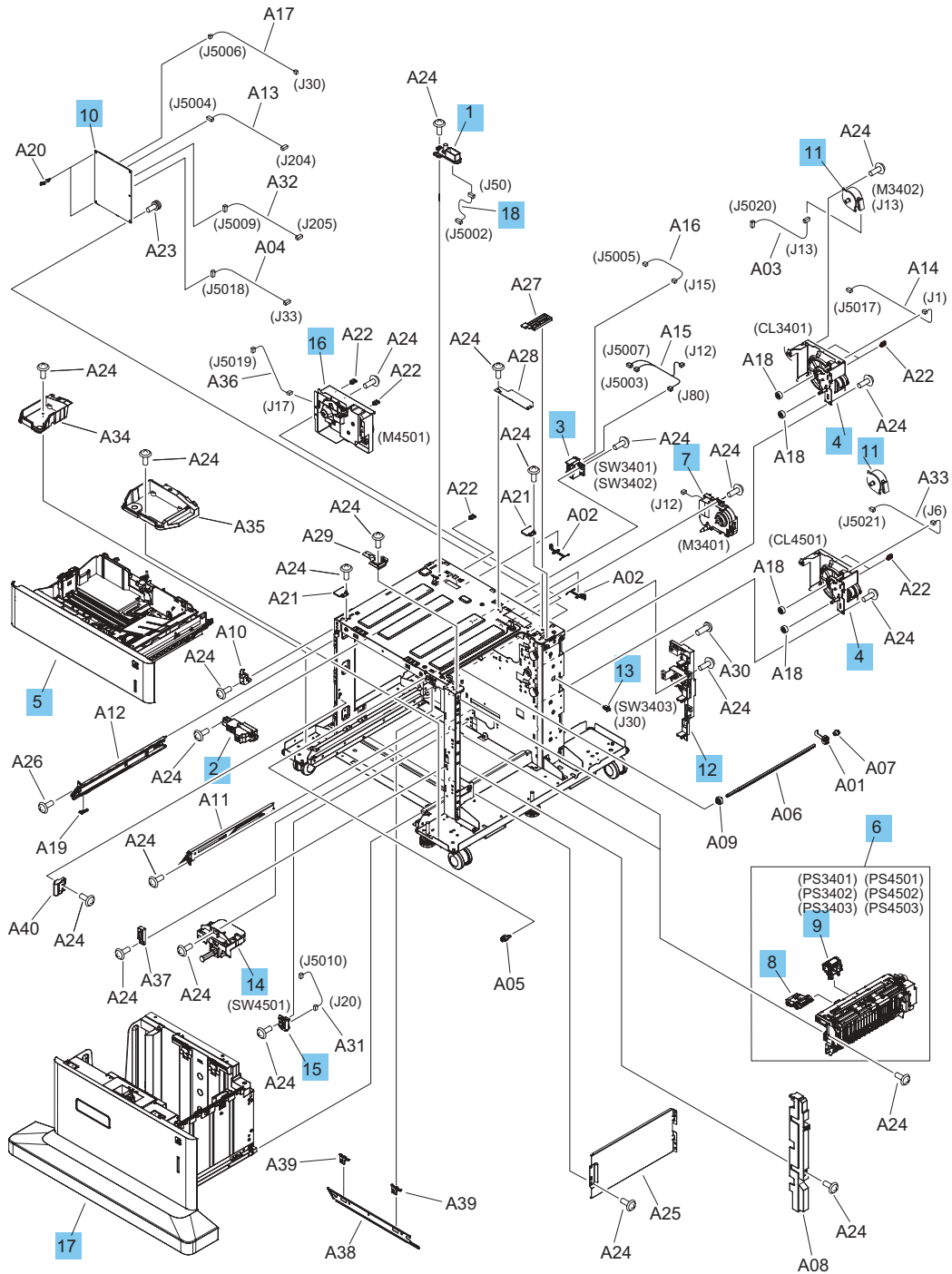


Table 6-21 2,550-sheet feeder stand main body

Ref No	Part number	Description	Qty	Removal/replacement
1	RC4-8914-000CN	Holder, drawer connector (2,550-sheet feeder)	1	See Removal and replacement: Drawer connector and cable assembly (2,550-sheet paper feeder with stand) .
2	RM2-0856-000CN	Auto-close assembly (2,550-sheet feeder)	1	See Removal and replacement: Auto-close assembly (Tray 3) (2,550-sheet paper feeder with stand) .
3	RM2-0857-000CN	Size sensor assembly (2,550-sheet feeder)	1	See Removal and replacement: Size sensor (Tray 3) (2,550-sheet paper feeder with stand) .
4	RM2-1222-000CN	Drive assembly (2,550-sheet feeder)	2	See Removal and replacement: Drive assembly (Tray 3) (2,550-sheet paper feeder with stand) . See Removal and replacement: Drive assembly (Tray 4) (2,550-sheet paper feeder with stand) .
5	RM2-1219-000CN	Cassette assembly (2,550-sheet feeder)	1	See Removal and replacement: Tray 4 (2,500-sheet paper feeder with stand) .
6	RM2-1235-000CN	Paper pickup assembly (2,550-sheet feeder)	2	See Removal and replacement: Paper pickup assemblies (2,550-sheet paper feeder with stand) .
7	RM2-2091-000CN	Lifter drive assembly (2,550-sheet feeder)	1	See Removal and replacement: Lifter drive assembly (2,550-sheet paper feeder with stand) .
8	J7Z98-67902	Pickup roller assembly (2,550-sheet feeder; part of LaserJet Tray 2-5 Roller Kit)	2	See Removal and replacement: Trays 3-5 paper feeder stand pickup and separation rollers .
9	J7Z98-67902	Separation roller assembly (2,550-sheet feeder; part of LaserJet Tray 2-5 Roller Kit)	2	See Removal and replacement: Trays 3-5 paper feeder stand pickup and separation rollers .
10	RM2-8481-000CN	Paper deck controller PCA (2,550-sheet feeder)	1	See Removal and replacement: Controller PCA (2,550-sheet paper feeder with stand) .
11	RK2-7831-000CN	Motor, stepping (2,550-sheet feeder)	1	See Removal and replacement: Feed motors (2,550-sheet paper feeder with stand) .

Table 6-21 2,550-sheet feeder stand main body (continued)

Ref No	Part number	Description	Qty	Removal/replacement
12	RM2-1223-000CN	Estrangement holder assembly (2,550-sheet feeder)	1	See Removal and replacement: Pickup alienation holder (2,550-sheet paper feeder with stand) .
13	WC2-5803-000CN	Switch, push (2,550-sheet feeder)	1	See Removal and replacement: Right door switch (2,550-sheet paper feeder with stand) .
14	RM2-0918-000CN	Tray auto-close assembly (2,550-sheet feeder)	1	See Removal and replacement: Auto-close assembly (Tray 4) (2,550-sheet paper feeder with stand) .
15	RM2-0921-000CN	Size sensor assembly (2,550-sheet feeder)	1	See Removal and replacement: Size sensor (Tray 4) (2,550-sheet paper feeder with stand) .
16	RM2-0915-000CN	Tray lifter motor drive assembly (2,550-sheet feeder)	1	See Removal and replacement: Tray lifter motor drive assembly(2,550-sheet paper feeder with stand) .
17	RM2-1220-000CN	Tray assembly (2,550-sheet feeder)	1	See Removal and replacement: Tray 4 (2,500-sheet paper feeder with stand) .
18	RM2-9286-000CN	Drawer upper cable assembly (2,550-sheet feeder)	1	See Removal and replacement: Drawer connector and cable assembly (2,550-sheet paper feeder with stand) .

Parts and diagrams: 2-bin stapler/stacker covers

Parts diagram and parts list for the 2-bin stapler/stacker.

Figure 6-23 2-bin stapler/stacker covers

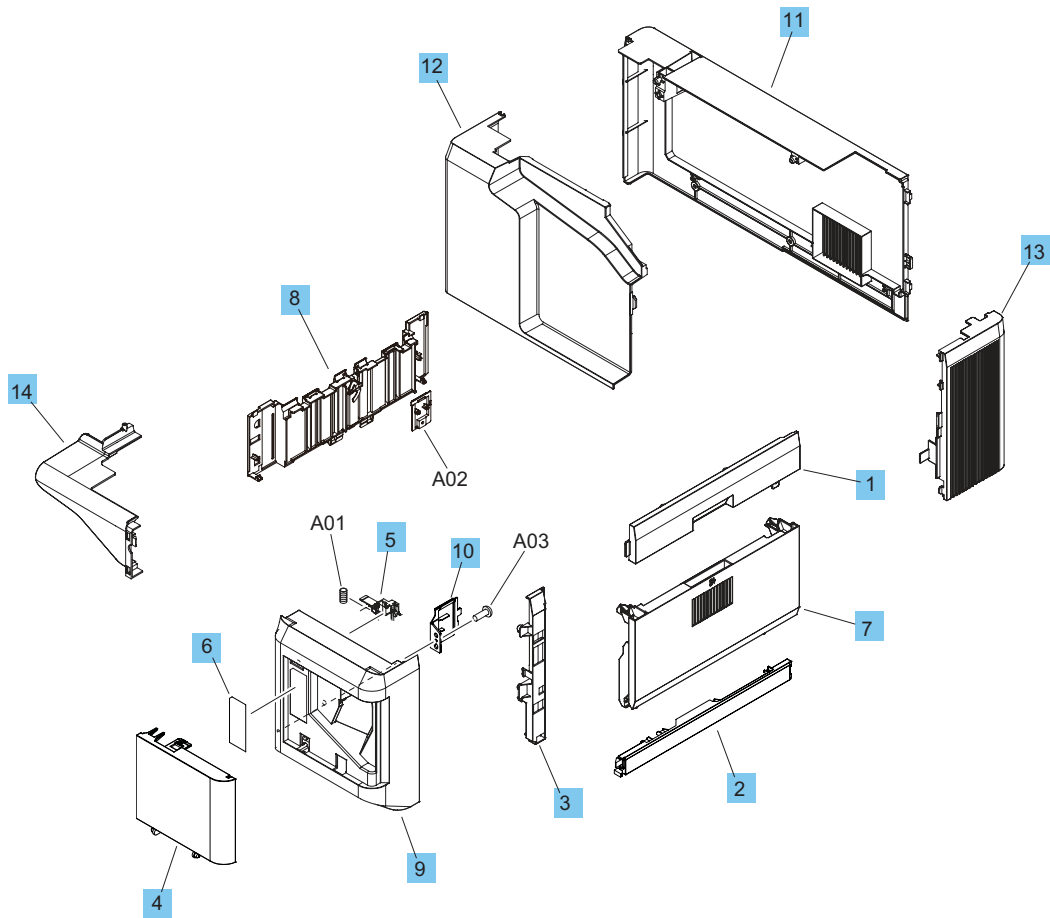


Table 6-22 2-bin stapler/stacker covers

Ref No	Part number	Description	Qty	Removal/replacement
1	RC4-7409-000CN	Cover, right upper (stapler/stacker)	1	See Removal and replacement: Right upper cover (3-bin stapler/stacker) .
2	RC4-9439-000CN	Cover, right lower (stapler/stacker)	1	See Removal and replacement: Right lower cover (3-bin stapler/stacker) .
3	RC4-7412-000CN	Cover, staple rear (stapler/stacker)	1	See Removal and replacement: Staple rear cover (3-bin stapler/stacker) .
4	RC4-9575-000CN	Door, staple (stapler/stacker)	1	See Removal and replacement: Staple door (3-bin stapler/stacker) .

Table 6-22 2-bin stapler/stacker covers (continued)

Ref No	Part number	Description	Qty	Removal/replacement
5	RC4-9576-000CN	Arm, staple door lock (stapler/stacker)	1	See Removal and replacement: Staple door lock arm (3-bin stapler/stacker) .
6	RU7-8831-000CN	Label, staple exchange OPE. (stapler/stacker)	1	Not applicable
7	RM2-6807-000CN	Right door assembly (stapler/stacker)	1	See Removal and replacement: Right door (3-bin stapler/stacker) .
8	RM2-1057-000CN	Stacking wall assembly (stapler/stacker)	1	See Removal and replacement: Stacking wall cover (3-bin stapler/stacker) .
9	RC4-7405-000CN	Cover, staple (stapler/stacker)	1	See Removal and replacement: Staple cover (3-bin stapler/stacker) .
10	RC4-9586-000CN	Cover, right front (stapler/stacker)	1	See Removal and replacement: Right front cover (3-bin stapler/stacker) .
11	RC4-7406-000CN	Cover, rear front (stapler/stacker)	1	See Removal and replacement: Rear cover (3-bin stapler/stacker) .
12	RC4-7407-000CN	Cover, rear inner (stapler/stacker)	1	See Removal and replacement: Rear inner cover (3-bin stapler/stacker) .
13	RC4-7408-000CN	Cover, rear corner (stapler/stacker)	1	See Removal and replacement: Rear corner cover (3-bin stapler/stacker) .
14	RC4-7411-000CN	Cover, jogger (stapler/stacker)	1	See Removal and replacement: Jogger cover (3-bin stapler/stacker) .

Table 6-23 2-bin stapler/stacker main body (continued)

Ref No	Part number	Description	Qty	Removal/replacement
3	RK2-8153-000CN	Fan (stapler/stacker)	1	See Removal and replacement: Fan (3-bin stapler/stacker) .
4	RM2-1066-000CN	Jogger assembly (stapler/stacker)	1	See Removal and replacement: Jogger (3-bin stapler/stacker) .
5	RM2-6815-000CN	Lower paper feed assembly (stapler/stacker)	1	See Removal and replacement: Lower feed assembly (3-bin stapler/stacker) .
6	RM2-6810-000CN	Upper paper feed assembly (stapler/stacker)	1	See Removal and replacement: Upper feed assembly (3-bin stapler/stacker) .
7	RM2-1193-000CN	Stapler assembly (stapler/stacker)	1	See Removal and replacement: Stapler .
8	RM2-1196-000CN	Tray assembly (stapler/stacker)	1	See Removal and replacement: Tray assembly (3-bin stapler/stacker) .
9	WC4-5171-000CN	Microswitch (stapler/stacker)	1	See Removal and replacement: Microswitch (3-bin stapler/stacker) .
10	RM2-1040-000CN	Solenoid assembly (stapler/stacker)	1	See Removal and replacement: Solenoid assembly (3-bin stapler/stacker) .
11	RM2-8689-000CN	Staple stacker PCA (stapler/stacker)	1	See Removal and replacement: Controller PCA (3-bin stapler/stacker) .
Not shown	P1B13-67901	Stapler/stacker whole unit replacement (WUR)	1	See Removal and replacement: Stapler/stacker (Flow M681z/Flow M682z/Flow E67660z) .

Alphabetical parts list

Table 6-24 Alphabetical parts list

Description	Part number	Table and page
ADF hinge kit	5851-7205	Document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660 only) on page 1971
Arm, staple door lock (stapler/stacker)	RC4-9576-000CN	2-bin stapler/stacker covers on page 2013
Auto close assembly	RM2-5147-000CN	Internal components (5 of 6) on page 1988
Auto-close assembly (1x550-sheet feeder)	RM2-0856-000CN	550-sheet feeder and stand main body on page 2001
Auto-close assembly (2,550-sheet feeder)	RM2-0856-000CN	2,550-sheet feeder stand main body on page 2011
Auto-close assembly (3x550-sheet feeder)	RM2-0856-000CN	3x550-sheet feeder and stand main body on page 2006
Auto-close assembly (550-sheet feeder)	RM2-5147-000CN	550-sheet feeder stand main body on page 1996
Cable, HDMI	J8A10-60113	Document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660 only) on page 1971
Cable, HIP control panel	J8A10-60114	Document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660 only) on page 1971
Cable, SCB-formatter HDMI	J8A10-60110	Document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660 only) on page 1971
Cable, SCB-formatter power	J8A10-60110	Document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660 only) on page 1971
Cable, WU USB control panel	J8A10-60111	Document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660 only) on page 1971
Cable, flexible flat	RK2-7768-000CN	Internal components (6 of 6) on page 1991
Cable, flexible flat	RK2-7776-000CN	Internal components (6 of 6) on page 1991
Cable, sideband control panel	J8A10-60112	Document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660 only) on page 1971
Cassette assembly (2,550-sheet feeder)	RM2-1219-000CN	2,550-sheet feeder stand main body on page 2011

Table 6-24 Alphabetical parts list (continued)

Description	Part number	Table and page
Cassette assembly (550-sheet feeder)	RM2-6935-000CN	550-sheet feeder stand main body on page 1996
Cassette assembly (Tray 2)	RM2-6684-000CN	Internal components (4 of 6) on page 1986
Cassette assembly (middle/lower tray; 3x550-sheet feeder)	RM2-1231-000CN	3x550-sheet feeder and stand main body on page 2006
Cassette assembly (tray; 1x550-sheet feeder)	RM2-1219-000CN	550-sheet feeder and stand main body on page 2001
Cassette assembly (upper tray; 3x550-sheet feeder)	RM2-1219-000CN	3x550-sheet feeder and stand main body on page 2006
Connector	VS1-7258-012CN	Internal components (6 of 6) on page 1991
Control panel 68.6 mm 2.7 in inch with keypad	5851-7975	Covers (M652/M653/E65050/E65060/E65150/E65160) on page 1974
Control panel assembly 68.6 mm 2.7 in	RM2-1267-010CN	Covers (M652/M653/E65050/E65060/E65150/E65160) on page 1974
Control panel kit 109.2 mm 4.3 in	5851-7252	Covers (M652/M653/E65050/E65060/E65150/E65160) on page 1974
Control panel kit, M681/M682/E67550/E67560/E67650/E67660	B5L47-67018	Document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660 only) on page 1971
Cover, HIP	B5L46-40021	Document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660 only) on page 1971
Cover, HIP	RC4-0213-000CN	Covers (M652/M653/E65050/E65060/E65150/E65160) on page 1974
Cover, Tray 1 roller	RC4-7318-000CN	Covers (M652/M653/E65050/E65060/E65150/E65160) on page 1974
Cover, Tray 1 roller	RC4-7318-000CN	Covers (M681/M682/E67550/E67560/E67650/E67660) on page 1977
Cover, USB	RC4-9423-000CN	Document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660 only) on page 1971
Cover, USB	RC4-9423-000CN	Covers (M652/M653/E65050/E65060/E65150/E65160) on page 1974
Cover, blanking	RC5-3356-000CN	Covers (M652/M653/E65050/E65060/E65150/E65160) on page 1974

Table 6-24 Alphabetical parts list (continued)

Description	Part number	Table and page
Cover, caster, left	RC5-0418-000CN	3x550-sheet feeder and stand covers on page 2003
Cover, caster, right	RC5-0417-000CN	3x550-sheet feeder and stand covers on page 2003
Cover, control panel	J8J63-60137	Document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660 only) on page 1971
Cover, control panel back	RC4-8239-000CN	Covers (M652/M653/E65050/E65060/E65150/E65160) on page 1974
Cover, front	RC4-6860-000CN	Covers (M681/M682/E67550/E67560/E67650/E67660) on page 1977
Cover, front lower (1x550-sheet feeder)	RC5-0383-000CN	1x550-sheet feeder and stand covers on page 1998
Cover, front lower (3x550-sheet feeder)	RC5-0383-000CN	3x550-sheet feeder and stand covers on page 2003
Cover, jogger (stapler/stacker)	RC4-7411-000CN	2-bin stapler/stacker covers on page 2013
Cover, left (1x550-sheet feeder)	RC5-0387-000CN	1x550-sheet feeder and stand covers on page 1998
Cover, left (2,550-sheet feeder)	RC5-0387-000CN	2,550-sheet paper feeder covers on page 2008
Cover, left (3x550-sheet feeder)	RC5-0387-000CN	3x550-sheet feeder and stand covers on page 2003
Cover, left (550-sheet feeder)	RC4-7682-000CN	550-sheet paper feeder covers on page 1993
Cover, left lower (1x550-sheet feeder)	RC5-0385-000CN	1x550-sheet feeder and stand covers on page 1998
Cover, left lower (2,550-sheet feeder)	RC5-0385-000CN	2,550-sheet paper feeder covers on page 2008
Cover, left lower (3x550-sheet feeder)	RC5-0385-000CN	3x550-sheet feeder and stand covers on page 2003
Cover, left rear	RC4-6858-000CN	Covers (M652/M653/E65050/E65060/E65150/E65160) on page 1974
Cover, left rear	RC4-6858-000CN	Covers (M681/M682/E67550/E67560/E67650/E67660) on page 1977
Cover, main	RC4-6861-000CN	Covers (M681/M682/E67550/E67560/E67650/E67660) on page 1977
Cover, output bin	RC4-6859-000CN	Covers (M681/M682/E67550/E67560/E67650/E67660) on page 1977

Table 6-24 Alphabetical parts list (continued)

Description	Part number	Table and page
Cover, output bin (E65150/E65160/E67650/E67660)	RM2-1975-000CN	Covers (M681/M682/E67550/E67560/E67650/E67660) on page 1977
Cover, output bin, front	RC5-1842-000CN	Covers (M681/M682/E67550/E67560/E67650/E67660) on page 1977
Cover, rear	RC4-6862-000CN	Covers (M681/M682/E67550/E67560/E67650/E67660) on page 1977
Cover, rear (1x550-sheet feeder)	RC5-0386-000CN	1x550-sheet feeder and stand covers on page 1998
Cover, rear (2,550-sheet feeder)	RC5-0386-000CN	2,550-sheet paper feeder covers on page 2008
Cover, rear (3x550-sheet feeder)	RC5-0386-000CN	3x550-sheet feeder and stand covers on page 2003
Cover, rear (550-sheet feeder)	RC4-7683-000CN	550-sheet paper feeder covers on page 1993
Cover, rear corner (stapler/stacker)	RC4-7408-000CN	2-bin stapler/stacker covers on page 2013
Cover, rear front (stapler/stacker)	RC4-7406-000CN	2-bin stapler/stacker covers on page 2013
Cover, rear inner (stapler/stacker)	RC4-7407-000CN	2-bin stapler/stacker covers on page 2013
Cover, rear lower (1x550-sheet feeder)	RC5-0399-000CN	1x550-sheet feeder and stand covers on page 1998
Cover, rear lower (2,550-sheet feeder)	RC5-0399-000CN	2,550-sheet paper feeder covers on page 2008
Cover, rear lower (3x550-sheet feeder)	RC5-0399-000CN	3x550-sheet feeder and stand covers on page 2003
Cover, right	RC5-1843-000CN	Covers (M681/M682/E67550/E67560/E67650/E67660) on page 1977
Cover, right front (stapler/stacker)	RC4-9586-000CN	2-bin stapler/stacker covers on page 2013
Cover, right lower (1x550-sheet feeder)	RC5-0384-000CN	1x550-sheet feeder and stand covers on page 1998
Cover, right lower (2,550-sheet feeder)	RC5-0384-000CN	2,550-sheet paper feeder covers on page 2008
Cover, right lower (3x550-sheet feeder)	RC5-0384-000CN	3x550-sheet feeder and stand covers on page 2003
Cover, right lower (550-sheet feeder)	RC4-7684-000CN	550-sheet paper feeder covers on page 1993
Cover, right lower (stapler/stacker)	RC4-9439-000CN	2-bin stapler/stacker covers on page 2013

Table 6-24 Alphabetical parts list (continued)

Description	Part number	Table and page
Cover, right rear	RC4-6425-000CN	Covers (M652/M653/E65050/E65060/E65150/E65160) on page 1974
Cover, right rear	RC4-6425-000CN	Covers (M681/M682/E67550/E67560/E67650/E67660) on page 1977
Cover, right upper (stapler/stacker)	RC4-7409-000CN	2-bin stapler/stacker covers on page 2013
Cover, staple (stapler/stacker)	RC4-7405-000CN	2-bin stapler/stacker covers on page 2013
Cover, staple rear (stapler/stacker)	RC4-7412-000CN	2-bin stapler/stacker covers on page 2013
Cover, top	RC4-6429-000CN	Covers (M652/M653/E65050/E65060/E65150/E65160) on page 1974
Cover, top	RC4-6865-000CN	Covers (M681/M682/E67550/E67560/E67650/E67660) on page 1977
DC controller PCA, E65150/E65160	RM3-7603-000CN	Internal components (6 of 6) on page 1991
DC controller PCA, E67650/E67660	RM3-7606-000CN	Internal components (6 of 6) on page 1991
DC controller PCA, M652/M653	RM3-7030-000CN	Internal components (6 of 6) on page 1991
DC controller PCA, M681/M682	RM3-7031-000CN	Internal components (6 of 6) on page 1991
Density detect assembly	RM2-7160-000CN	Internal components (4 of 6) on page 1986
Document feeder (Flow models) kit; includes white backing and retention clips	5851-7204	Document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660 only) on page 1971
Document feeder (non-Flow models) kit; includes white backing and retention clips	5851-7203	Document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660 only) on page 1971
Door assembly, right (550-sheet feeder)	RM2-6937-000CN	550-sheet paper feeder covers on page 1993
Door, left	RL2-1500-000CN	Covers (M652/M653/E65050/E65060/E65150/E65160) on page 1974
Door, left	RL2-1500-000CN	Covers (M681/M682/E67550/E67560/E67650/E67660) on page 1977
Door, staple (stapler/stacker)	RC4-9575-000CN	2-bin stapler/stacker covers on page 2013
Door, stock (1x550-sheet feeder)	RC5-0405-000CN	1x550-sheet feeder and stand covers on page 1998

Table 6-24 Alphabetical parts list (continued)

Description	Part number	Table and page
Door-Inner	RL2-1504-000CN	Internal components (1 of 6) on page 1979
Drawer upper cable assembly (1x550-sheet feeder)	RM2-9286-000CN	550-sheet feeder and stand main body on page 2001
Drawer upper cable assembly (1x550-sheet feeder)	RM2-9286-000CN	3x550-sheet feeder and stand main body on page 2006
Drawer upper cable assembly (2,550-sheet feeder)	RM2-9286-000CN	2,550-sheet feeder stand main body on page 2011
Drive assembly (1x550-sheet feeder)	RM2-1222-000CN	550-sheet feeder and stand main body on page 2001
Drive assembly (2,550-sheet feeder)	RM2-1222-000CN	2,550-sheet feeder stand main body on page 2011
Drive assembly (3x550-sheet feeder)	RM2-1222-000CN	3x550-sheet feeder and stand main body on page 2006
Drive assembly (550-sheet feeder)	RM2-6934-000CN	550-sheet feeder stand main body on page 1996
Drum motor assembly	RM2-1956-000CN	Internal components (5 of 6) on page 1988
Environmental sensor PCA assembly	RM2-8440-000CN	Internal components (3 of 6) on page 1984
Estrangement detect PCA assembly	RM2-7157-000CN	Internal components (3 of 6) on page 1984
Estrangement holder assembly (1x550-sheet feeder)	RM2-1223-000CN	550-sheet feeder and stand main body on page 2001
Estrangement holder assembly (2,550-sheet feeder)	RM2-1223-000CN	2,550-sheet feeder stand main body on page 2011
Estrangement holder assembly (3x550-sheet feeder)	RM2-1223-000CN	3x550-sheet feeder and stand main body on page 2006
Fan	RK2-6124-000CN	Internal components (3 of 6) on page 1984
Fan	RK2-6124-000CN	Internal components (4 of 6) on page 1986
Fan	RK2-7949-000CN	Internal components (3 of 6) on page 1984
Fan	RK2-7951-000CN	Internal components (3 of 6) on page 1984
Fan	RK2-7953-000CN	Internal components (6 of 6) on page 1991
Fan (stapler/stacker)	RK2-8153-000CN	2-bin stapler/stacker main body on page 2015
Feed roller assembly	RM2-1957-000CN	Internal components (4 of 6) on page 1986
Feeder controller PCA (550-sheet feeder)	RM2-8491-000CN	550-sheet feeder stand main body on page 1996

Table 6-24 Alphabetical parts list (continued)

Description	Part number	Table and page
Formatter (E65150/E65160)	3GY03-67901	Internal components (6 of 6) on page 1991
Formatter (E65150/E65160; India/China)	3GY03-67902	Internal components (6 of 6) on page 1991
Formatter (E67650/E67660)	3GY31-67901	Internal components (6 of 6) on page 1991
Formatter (M652/M653)	J7Z98-60001	Internal components (6 of 6) on page 1991
Formatter (M652/M653; India/China)	J7Z98-67904	Internal components (6 of 6) on page 1991
Formatter (M681/M682)	J8A10-60001	Internal components (6 of 6) on page 1991
Formatter (M681/M682; India/China)	J8A10-67902	Internal components (6 of 6) on page 1991
Formatter cover assembly	RM2-6657-000CN	Covers (M652/M653/E65050/E65060/E65150/E65160) on page 1974
Formatter cover assembly	RM2-6657-000CN	Covers (M681/M682/E67550/E67560/E67650/E67660) on page 1977
Front door assembly	RM2-6658-000CN	Covers (M652/M653/E65050/E65060/E65150/E65160) on page 1974
Front door assembly	RM2-6658-000CN	Covers (M681/M682/E67550/E67560/E67650/E67660) on page 1977
Fuser assembly, 110-127V	RM2-1928-000CN	Internal components (4 of 6) on page 1986
Fuser assembly, 220-240V	RM2-1929-000CN	Internal components (4 of 6) on page 1986
Fuser drive assembly	RM2-1934-000CN	Internal components (5 of 6) on page 1988
Fuser motor drive assembly	RM2-1955-000CN	Internal components (5 of 6) on page 1988
Guide Assembly	RM2-6650-000CN	Internal components (4 of 6) on page 1986
Guide, NIP	RC5-1892-000CN	Covers (M652/M653/E65050/E65060/E65150/E65160) on page 1974
Guide, NIP	RC5-1892-000CN	Covers (M681/M682/E67550/E67560/E67650/E67660) on page 1977
Handle, rear	RC4-9410-000CN	Internal components (6 of 6) on page 1991
High-voltage power supply, HVPS (D)	RM3-7006-000CN	Internal components (6 of 6) on page 1991

Table 6-24 Alphabetical parts list (continued)

Description	Part number	Table and page
High-voltage power supply, HVPS (T)	RM2-8424-000CN	Internal components (6 of 6) on page 1991
Holder, drawer connector	RC4-6497-000CN	Internal components (6 of 6) on page 1991
Holder, drawer connector (1x550-sheet feeder)	RC4-8914-000CN	550-sheet feeder and stand main body on page 2001
Holder, drawer connector (2,550-sheet feeder)	RC4-8914-000CN	2,550-sheet feeder stand main body on page 2011
Holder, drawer connector (3x550-sheet feeder)	RC4-8914-000CN	3x550-sheet feeder and stand main body on page 2006
Holder, drawer connector (550-sheet feeder)	RC4-6497-000CN	550-sheet feeder stand main body on page 1996
Holder, drawer, upper (550-sheet feeder)	RC4-7680-000CN	550-sheet feeder stand main body on page 1996
Image Transfer Belt (ITB) (part of LaserJet image transfer and roller kit)	P1B93-67901	Internal components (3 of 6) on page 1984
Image scanner kit; includes white backing and retention clips, and rear cover	J8A10-67901	Document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660 only) on page 1971
Intermediate Transfer Belt PM Kit	P1B93-69001	Internal components (3 of 6) on page 1984
Intermediate Transfer Belt PM Kit	P1B93-69001	Internal components (4 of 6) on page 1986
Jogger assembly (stapler/stacker)	RM2-1066-000CN	2-bin stapler/stacker main body on page 2015
Keyboard UK (Flow models)	B5L47-67020	Document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660 only) on page 1971
Keyboard US (Flow models)	B5L47-67019	Document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660 only) on page 1971
Keyboard overlay kit (ES/PT)	5851-6023	Document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660 only) on page 1971
Keyboard overlay kit (FR, IT, RU, DE, ES: UK Kybd)	5851-6019	Document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660 only) on page 1971
Keyboard overlay kit (FR-CN, ES-LA, ES: US Kybd)	5851-6020	Document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660 only) on page 1971

Table 6-24 Alphabetical parts list (continued)

Description	Part number	Table and page
Keyboard overlay kit (JA-KG, JA-KT)	5851-6024	Document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660 only) on page 1971
Keyboard overlay kit (ZHTW, ZHCN)	5851-6022	Document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660 only) on page 1971
Kit-PEFS	3GY32-67901	Internal components (6 of 6) on page 1991
Kit-PEFS (E67650/E67660; India/China)	3GY31-67902	Internal components (6 of 6) on page 1991
Kit-fixed tray guide	3GY25-67901	Internal components (4 of 6) on page 1986
Label, staple exchange OPE. (stapler/stacker)	RU7-8831-000CN	2-bin stapler/stacker covers on page 2013
Laser scanner assembly	RM2-1237-000CN	Internal components (3 of 6) on page 1984
LaserJet ADF roller kit	5851-7202	Document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660 only) on page 1971
LaserJet ADF white backing, A4, kit	5851-7202	Document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660 only) on page 1971
Left handle assembly	RM2-1958-000CN	Covers (M652/M653/E65050/E65060/E65150/E65160) on page 1974
Left handle assembly	RM2-1958-000CN	Covers (M681/M682/E67550/E67560/E67650/E67660) on page 1977
Lifter drive assembly	RM2-6669-000CN	Internal components (5 of 6) on page 1988
Lifter drive assembly (1x550-sheet feeder)	RM2-2091-000CN	550-sheet feeder and stand main body on page 2001
Lifter drive assembly (2,550-sheet feeder)	RM2-2091-000CN	2,550-sheet feeder stand main body on page 2011
Lifter drive assembly (3x550-sheet feeder)	RM2-2091-000CN	3x550-sheet feeder and stand main body on page 2006
Lifter drive assembly (550-sheet feeder)	RM2-6933-000CN	550-sheet feeder stand main body on page 1996
Link, door (1x550-sheet feeder)	RC4-1778-000CN	1x550-sheet feeder and stand covers on page 1998
Link, door (1x550-sheet feeder)	RC4-9824-000CN	1x550-sheet feeder and stand covers on page 1998
Link, door (2,550-sheet feeder)	RC4-9824-000CN	2,550-sheet paper feeder covers on page 2008

Table 6-24 Alphabetical parts list (continued)

Description	Part number	Table and page
Link, door (3x550-sheet feeder)	RC4-9824-000CN	3x550-sheet feeder and stand covers on page 2003
Link, door, right (550-sheet feeder)	RC4-1778-000CN	550-sheet paper feeder covers on page 1993
Low-voltage power supply, 110-127V	RM2-8421-000CN	Internal components (6 of 6) on page 1991
Low-voltage power supply, 220-240V	RM2-8422-000CN	Internal components (6 of 6) on page 1991
Lower paper feed assembly (stapler/stacker)	RM2-6815-000CN	2-bin stapler/stacker main body on page 2015
Main drive assembly	RM2-1927-000CN	Internal components (5 of 6) on page 1988
Memory PCA	RM2-7138-000CN	Internal components (6 of 6) on page 1991
Microswitch	RM2-6545-000CN	Internal components (2 of 6) on page 1982
Microswitch (stapler/stacker)	WC4-5171-000CN	2-bin stapler/stacker main body on page 2015
Motor, stepping	RK2-7757-000CN	Internal components (5 of 6) on page 1988
Motor, stepping (1x550-sheet feeder)	RK2-7831-000CN	550-sheet feeder and stand main body on page 2001
Motor, stepping (2,550-sheet feeder)	RK2-7831-000CN	2,550-sheet feeder stand main body on page 2011
Motor, stepping (3x550-sheet feeder)	RK2-7831-000CN	3x550-sheet feeder and stand main body on page 2006
Motor, stepping (M6)	RK2-6027-000CN	Internal components (5 of 6) on page 1988
Motor, stepping, DC (stapler/stacker)	RK2-8149-000CN	2-bin stapler/stacker main body on page 2015
Option lower cable assembly (550-sheet feeder)	RM2-8881-000CN	550-sheet feeder stand main body on page 1996
Option upper cable assembly (550-sheet feeder)	RM2-8880-000CN	550-sheet feeder stand main body on page 1996
Output bin assembly	RM2-1953-000CN	Covers (M652/M653/E65050/E65060/E65150/E65160) on page 1974
Output bin assembly	RM2-1953-000CN	Covers (M681/M682/E67550/E67560/E67650/E67660) on page 1977
Paper deck controller PCA (2,550-sheet feeder)	RM2-8481-000CN	2,550-sheet feeder stand main body on page 2011
Paper deck controller. PCA	RM2-8482-000CN	550-sheet feeder and stand main body on page 2001

Table 6-24 Alphabetical parts list (continued)

Description	Part number	Table and page
Paper deck controller, PCA	RM2-8483-000CN	3x550-sheet feeder and stand main body on page 2006
Paper delivery assembly	RM2-6621-000CN	Internal components (4 of 6) on page 1986
Paper feed assembly (550-sheet feeder)	RM2-5145-000CN	550-sheet feeder stand main body on page 1996
Paper pick-up assembly	RM2-6556-000CN	Internal components (4 of 6) on page 1986
Paper pickup assembly (1x550-sheet feeder)	RM2-1235-000CN	550-sheet feeder and stand main body on page 2001
Paper pickup assembly (2,550-sheet feeder)	RM2-1235-000CN	2,550-sheet feeder stand main body on page 2011
Paper pickup assembly (3x550-sheet feeder)	RM2-1235-000CN	3x550-sheet feeder and stand main body on page 2006
Paper pickup assembly (550-sheet feeder)	RM2-5154-000CN	550-sheet feeder stand main body on page 1996
Paper pickup roller assembly	J7Z98-67902	Internal components (4 of 6) on page 1986
Pickup roller assembly (1x550-sheet feeder; part of LaserJet Tray 2-5 Roller Kit)	J7Z98-67902	550-sheet feeder and stand main body on page 2001
Pickup roller assembly (2,550-sheet feeder; part of LaserJet Tray 2-5 Roller Kit)	J7Z98-67902	2,550-sheet feeder stand main body on page 2011
Pickup roller assembly (3x550-sheet feeder; part of LaserJet Tray 2-5 Roller Kit)	J7Z98-67902	3x550-sheet feeder and stand main body on page 2006
Pickup roller assembly (550-sheet feeder; part of LaserJet Trays 2-5 Roller Kit)	J7Z98-67902	550-sheet feeder stand main body on page 1996
Pin, tray fixed (stapler/stacker)	RC5-0353-000CN	2-bin stapler/stacker main body on page 2015
Power supply switch assembly	RM2-1947-000CN	Internal components (2 of 6) on page 1982
Pre-exposure PCA assembly (CMY)	RM3-7046-000CN	Internal components (2 of 6) on page 1982
Pre-exposure PCA assembly (K)	RM3-7047-000CN	Internal components (2 of 6) on page 1982
Rear cover assembly	RM2-1951-000CN	Covers (M652/M653/E65050/E65060/E65150/E65160) on page 1974
Rear cover assembly	RM2-1951-000CN	Covers (M681/M682/E67550/E67560/E67650/E67660) on page 1977
Registration assembly	RM2-1957-000CN	Internal components (4 of 6) on page 1986
Right door assembly	RM2-6622-000CN	Covers (M652/M653/E65050/E65060/E65150/E65160) on page 1974

Table 6-24 Alphabetical parts list (continued)

Description	Part number	Table and page
Right door assembly	RM2-6622-000CN	Covers (M681/M682/E67550/E67560/E67650/E67660) on page 1977
Right door assembly (1x550-sheet feeder)	RM2-1226-000CN	1x550-sheet feeder and stand covers on page 1998
Right door assembly (2,550-sheet feeder)	RM2-1218-000CN	2,550-sheet paper feeder covers on page 2008
Right door assembly (3x550-sheet feeder)	RM2-1230-000CN	3x550-sheet feeder and stand covers on page 2003
Right door assembly (stapler/stacker)	RM2-6807-000CN	2-bin stapler/stacker covers on page 2013
Right handle assembly	RM2-6659-000CN	Covers (M652/M653/E65050/E65060/E65150/E65160) on page 1974
Right handle assembly	RM2-6659-000CN	Covers (M681/M682/E67550/E67560/E67650/E67660) on page 1977
Roller, pickup, Tray 1	RL2-0034-000CN	Covers (M652/M653/E65050/E65060/E65150/E65160) on page 1974
Roller, pickup, Tray 1	RL2-0034-000CN	Covers (M681/M682/E67550/E67560/E67650/E67660) on page 1977
Roller, separation, Tray 1	RL2-0079-000CN	Covers (M652/M653/E65050/E65060/E65150/E65160) on page 1974
Roller, separation, Tray 1	RL2-0079-000CN	Covers (M681/M682/E67550/E67560/E67650/E67660) on page 1977
Scan control board cage (Flow models)	J8A08-60103	Document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660 only) on page 1971
Scan control board cage (non-Flow models)	J8J63-60109	Document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660 only) on page 1971
Scanner control board (SCB) - Enterprise	5851-7764	Document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660 only) on page 1971
Scanner control board (SCB) - Flow series	5851-7347	Document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660 only) on page 1971
Separation roller assembly (550-sheet feeder; part of LaserJet Trays 2-5 Roller Kit)	J7Z98-67902	550-sheet feeder stand main body on page 1996
Secondary transfer assembly	RM2-6682-000CN	Internal components (4 of 6) on page 1986

Table 6-24 Alphabetical parts list (continued)

Description	Part number	Table and page
Secondary transfer roller assembly (part of LaserJet image transfer roller kit)	P1B93-67901	Internal components (4 of 6) on page 1986
Separation roller assembly	J7Z98-67902	Internal components (4 of 6) on page 1986
Separation roller assembly (1x550-sheet feeder; part of LaserJet Tray 2-5 Roller Kit)	J7Z98-67902	550-sheet feeder and stand main body on page 2001
Separation roller assembly (2,550-sheet feeder; part of LaserJet Tray 2-5 Roller Kit)	J7Z98-67902	2,550-sheet feeder stand main body on page 2011
Separation roller assembly (3x550-sheet feeder; part of LaserJet Tray 2-5 Roller Kit)	J7Z98-67902	3x550-sheet feeder and stand main body on page 2006
Size sensor assembly (1x550-sheet feeder)	RM2-0857-000CN	550-sheet feeder and stand main body on page 2001
Size sensor assembly (2,550-sheet feeder)	RM2-0857-000CN	2,550-sheet feeder stand main body on page 2011
Size sensor assembly (2,550-sheet feeder)	RM2-0921-000CN	2,550-sheet feeder stand main body on page 2011
Size sensor assembly (3x550-sheet feeder)	RM2-0857-000CN	3x550-sheet feeder and stand main body on page 2006
Solenoid assembly (stapler/stacker)	RM2-1040-000CN	2-bin stapler/stacker main body on page 2015
Spring	RU9-2364-000CN	Internal components (4 of 6) on page 1986
Stacking wall assembly (stapler/stacker)	RM2-1057-000CN	2-bin stapler/stacker covers on page 2013
Staple stacker PCA (stapler/stacker)	RM2-8689-000CN	2-bin stapler/stacker main body on page 2015
Stapler assembly (stapler/stacker)	RM2-1193-000CN	2-bin stapler/stacker main body on page 2015
Switch, push (1x550-sheet feeder)	WC2-5803-000CN	550-sheet feeder and stand main body on page 2001
Switch, push (2,550-sheet feeder)	WC2-5803-000CN	2,550-sheet feeder stand main body on page 2011
Switch, push (3x550-sheet feeder)	WC2-5803-000CN	3x550-sheet feeder and stand main body on page 2006
Switch, push (550-sheet feeder)	WC2-5762-000CN	550-sheet feeder stand main body on page 1996
Toner carry assembly	RM2-6620-000CN	Internal components (1 of 6) on page 1979
Toner collection unit	RM2-6613-000CN	Internal components (3 of 6) on page 1984
Tray assembly (2,550-sheet feeder)	RM2-1220-000CN	2,550-sheet feeder stand main body on page 2011
Tray assembly (stapler/stacker)	RM2-1196-000CN	2-bin stapler/stacker main body on page 2015

Table 6-24 Alphabetical parts list (continued)

Description	Part number	Table and page
Tray auto-close assembly (2,550-sheet feeder)	RM2-0918-000CN	2,550-sheet feeder stand main body on page 2011
Tray lifter motor drive assembly (2,550-sheet feeder)	RM2-0915-000CN	2,550-sheet feeder stand main body on page 2011
Upper Guide Assembly	RM2-6651-000CN	Internal components (4 of 6) on page 1986
Upper paper feed assembly (stapler/stacker)	RM2-6810-000CN	2-bin stapler/stacker main body on page 2015
White backing retention clip kit	5851-7207	Document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660 only) on page 1971

Numerical parts list

Table 6-25 Numerical parts list

Part number	Description	Table and page
3GY03-67901	Formatter (E65150/E65160)	Internal components (6 of 6) on page 1991
3GY03-67902	Formatter (E65150/E65160; India/China)	Internal components (6 of 6) on page 1991
3GY25-67901	Kit-fixed tray guide	Internal components (4 of 6) on page 1986
3GY31-67901	Formatter (E67650/E67660)	Internal components (6 of 6) on page 1991
3GY31-67902	Kit-PEFS (E67650/E67660; India/China)	Internal components (6 of 6) on page 1991
3GY32-67901	Kit-PEFS	Internal components (6 of 6) on page 1991
5851-6019	Keyboard overlay kit (FR, IT, RU, DE, ES: UK Kybd)	Document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660 only) on page 1971
5851-6020	Keyboard overlay kit (FR-CN, ES-LA, ES: US Kybd)	Document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660 only) on page 1971
5851-6022	Keyboard overlay kit (ZHTW, ZHCN)	Document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660 only) on page 1971
5851-6023	Keyboard overlay kit (ES/PT)	Document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660 only) on page 1971
5851-6024	Keyboard overlay kit (JA-KG, JA-KT)	Document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660 only) on page 1971
5851-7202	LaserJet ADF roller kit	Document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660 only) on page 1971
5851-7202	LaserJet ADF white backing, A4, kit	Document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660 only) on page 1971
5851-7203	Document feeder (non-Flow models) kit; includes white backing and retention clips	Document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660 only) on page 1971
5851-7204	Document feeder (Flow models) kit; includes white backing and retention clips	Document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660 only) on page 1971

Table 6-25 Numerical parts list (continued)

Part number	Description	Table and page
5851-7205	ADF hinge kit	Document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660 only) on page 1971
5851-7207	White backing retention clip kit	Document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660 only) on page 1971
5851-7252	Control panel kit 109.2 mm 4.3 in	Covers (M652/M653/E65050/E65060/E65150/E65160) on page 1974
5851-7347	Scanner control board (SCB) - Flow series	Document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660 only) on page 1971
5851-7764	Scanner control board (SCB) - Enterprise	Document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660 only) on page 1971
5851-7975	Control panel 68.6 mm 2.7 in inch with keypad	Covers (M652/M653/E65050/E65060/E65150/E65160) on page 1974
B5L46-40021	Cover, HIP	Document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660 only) on page 1971
B5L47-67018	Control panel kit, M681/M682/E67550/E67560/E67650/E67660	Document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660 only) on page 1971
B5L47-67019	Keyboard US (Flow models)	Document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660 only) on page 1971
B5L47-67020	Keyboard UK (Flow models)	Document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660 only) on page 1971
J7Z98-60001	Formatter (M652/M653)	Internal components (6 of 6) on page 1991
J7Z98-67902	Paper pickup roller assembly	Internal components (4 of 6) on page 1986
J7Z98-67902	Pickup roller assembly (1x550-sheet feeder; part of LaserJet Tray 2-5 Roller Kit)	550-sheet feeder and stand main body on page 2001
J7Z98-67902	Pickup roller assembly (2,550-sheet feeder; part of LaserJet Tray 2-5 Roller Kit)	2,550-sheet feeder stand main body on page 2011
J7Z98-67902	Pickup roller assembly (3x550-sheet feeder; part of LaserJet Tray 2-5 Roller Kit)	3x550-sheet feeder and stand main body on page 2006
J7Z98-67902	Pickup roller assembly (550-sheet feeder; part of LaserJet Trays 2-5 Roller Kit)	550-sheet feeder stand main body on page 1996

Table 6-25 Numerical parts list (continued)

Part number	Description	Table and page
J7Z98-67902	Separation roller assembly (550-sheet feeder; part of LaserJet Trays 2-5 Roller Kit)	550-sheet feeder stand main body on page 1996
J7Z98-67902	Separation roller assembly	Internal components (4 of 6) on page 1986
J7Z98-67902	Separation roller assembly (1x550-sheet feeder; part of LaserJet Tray 2-5 Roller Kit)	550-sheet feeder and stand main body on page 2001
J7Z98-67902	Separation roller assembly (2,550-sheet feeder; part of LaserJet Tray 2-5 Roller Kit)	2,550-sheet feeder stand main body on page 2011
J7Z98-67902	Separation roller assembly (3x550-sheet feeder; part of LaserJet Tray 2-5 Roller Kit)	3x550-sheet feeder and stand main body on page 2006
J7Z98-67904	Formatter (M652/M653; India/China)	Internal components (6 of 6) on page 1991
J8A08-60103	Scan control board cage (Flow models)	Document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660 only) on page 1971
J8A10-60001	Formatter (M681/M682)	Internal components (6 of 6) on page 1991
J8A10-60110	Cable, SCB-formatter HDMI	Document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660 only) on page 1971
J8A10-60110	Cable, SCB-formatter power	Document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660 only) on page 1971
J8A10-60111	Cable, WU USB control panel	Document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660 only) on page 1971
J8A10-60112	Cable, sideband control panel	Document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660 only) on page 1971
J8A10-60113	Cable, HDMI	Document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660 only) on page 1971
J8A10-60114	Cable, HIP control panel	Document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660 only) on page 1971
J8A10-67901	Image scanner kit; includes white backing and retention clips, and rear cover	Document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660 only) on page 1971
J8A10-67902	Formatter (M681/M682; India/China)	Internal components (6 of 6) on page 1991

Table 6-25 Numerical parts list (continued)

Part number	Description	Table and page
J8J63-60109	Scan control board cage (non-Flow models)	Document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660 only) on page 1971
J8J63-60137	Cover, control panel	Document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660 only) on page 1971
P1B93-67901	Image Transfer Belt (ITB) (part of LaserJet image transfer and roller kit)	Internal components (3 of 6) on page 1984
P1B93-67901	Secondary transfer roller assembly (part of LaserJet image transfer roller kit)	Internal components (4 of 6) on page 1986
P1B93-69001	Intermediate Transfer Belt PM Kit	Internal components (3 of 6) on page 1984
P1B93-69001	Intermediate Transfer Belt PM Kit	Internal components (4 of 6) on page 1986
RC4-0213-000CN	Cover, HIP	Covers (M652/M653/E65050/E65060/E65150/E65160) on page 1974
RC4-1778-000CN	Link, door (1x550-sheet feeder)	1x550-sheet feeder and stand covers on page 1998
RC4-1778-000CN	Link, door, right (550-sheet feeder)	550-sheet paper feeder covers on page 1993
RC4-6425-000CN	Cover, right rear	Covers (M652/M653/E65050/E65060/E65150/E65160) on page 1974
RC4-6425-000CN	Cover, right rear	Covers (M681/M682/E67550/E67560/E67650/E67660) on page 1977
RC4-6429-000CN	Cover, top	Covers (M652/M653/E65050/E65060/E65150/E65160) on page 1974
RC4-6497-000CN	Holder, drawer connector	Internal components (6 of 6) on page 1991
RC4-6497-000CN	Holder, drawer connector (550-sheet feeder)	550-sheet feeder stand main body on page 1996
RC4-6858-000CN	Cover, left rear	Covers (M652/M653/E65050/E65060/E65150/E65160) on page 1974
RC4-6858-000CN	Cover, left rear	Covers (M681/M682/E67550/E67560/E67650/E67660) on page 1977
RC4-6859-000CN	Cover, output bin	Covers (M681/M682/E67550/E67560/E67650/E67660) on page 1977
RC4-6860-000CN	Cover, front	Covers (M681/M682/E67550/E67560/E67650/E67660) on page 1977

Table 6-25 Numerical parts list (continued)

Part number	Description	Table and page
RC4-6861-000CN	Cover, main	Covers (M681/M682/E67550/E67560/E67650/E67660) on page 1977
RC4-6862-000CN	Cover, rear	Covers (M681/M682/E67550/E67560/E67650/E67660) on page 1977
RC4-6865-000CN	Cover, top	Covers (M681/M682/E67550/E67560/E67650/E67660) on page 1977
RC4-7318-000CN	Cover, Tray 1 roller	Covers (M652/M653/E65050/E65060/E65150/E65160) on page 1974
RC4-7318-000CN	Cover, Tray 1 roller	Covers (M681/M682/E67550/E67560/E67650/E67660) on page 1977
RC4-7405-000CN	Cover, staple (stapler/stacker)	2-bin stapler/stacker covers on page 2013
RC4-7406-000CN	Cover, rear front (stapler/stacker)	2-bin stapler/stacker covers on page 2013
RC4-7407-000CN	Cover, rear inner (stapler/stacker)	2-bin stapler/stacker covers on page 2013
RC4-7408-000CN	Cover, rear corner (stapler/stacker)	2-bin stapler/stacker covers on page 2013
RC4-7409-000CN	Cover, right upper (stapler/stacker)	2-bin stapler/stacker covers on page 2013
RC4-7411-000CN	Cover, jogger (stapler/stacker)	2-bin stapler/stacker covers on page 2013
RC4-7412-000CN	Cover, staple rear (stapler/stacker)	2-bin stapler/stacker covers on page 2013
RC4-7680-000CN	Holder, drawer, upper (550-sheet feeder)	550-sheet feeder stand main body on page 1996
RC4-7682-000CN	Cover, left (550-sheet feeder)	550-sheet paper feeder covers on page 1993
RC4-7683-000CN	Cover, rear (550-sheet feeder)	550-sheet paper feeder covers on page 1993
RC4-7684-000CN	Cover, right lower (550-sheet feeder)	550-sheet paper feeder covers on page 1993
RC4-8239-000CN	Cover, control panel back	Covers (M652/M653/E65050/E65060/E65150/E65160) on page 1974
RC4-8914-000CN	Holder, drawer connector (1x550-sheet feeder)	550-sheet feeder and stand main body on page 2001
RC4-8914-000CN	Holder, drawer connector (2,550-sheet feeder)	2,550-sheet feeder stand main body on page 2011
RC4-8914-000CN	Holder, drawer connector (3x550-sheet feeder)	3x550-sheet feeder and stand main body on page 2006

Table 6-25 Numerical parts list (continued)

Part number	Description	Table and page
RC4-9410-000CN	Handle, rear	Internal components (6 of 6) on page 1991
RC4-9423-000CN	Cover, USB	Document feeder and image scanner (M681/M682/E67550/E67560/E67650/E67660 only) on page 1971
RC4-9423-000CN	Cover, USB	Covers (M652/M653/E65050/E65060/E65150/E65160) on page 1974
RC4-9439-000CN	Cover, right lower (stapler/stacker)	2-bin stapler/stacker covers on page 2013
RC4-9575-000CN	Door, staple (stapler/stacker)	2-bin stapler/stacker covers on page 2013
RC4-9576-000CN	Arm, staple door lock (stapler/stacker)	2-bin stapler/stacker covers on page 2013
RC4-9586-000CN	Cover, right front (stapler/stacker)	2-bin stapler/stacker covers on page 2013
RC4-9824-000CN	Link, door (1x550-sheet feeder)	1x550-sheet feeder and stand covers on page 1998
RC4-9824-000CN	Link, door (2,550-sheet feeder)	2,550-sheet paper feeder covers on page 2008
RC4-9824-000CN	Link, door (3x550-sheet feeder)	3x550-sheet feeder and stand covers on page 2003
RC5-0353-000CN	Pin, tray fixed (stapler/stacker)	2-bin stapler/stacker main body on page 2015
RC5-0383-000CN	Cover, front lower (1x550-sheet feeder)	1x550-sheet feeder and stand covers on page 1998
RC5-0383-000CN	Cover, front lower (3x550-sheet feeder)	3x550-sheet feeder and stand covers on page 2003
RC5-0384-000CN	Cover, right lower (1x550-sheet feeder)	1x550-sheet feeder and stand covers on page 1998
RC5-0384-000CN	Cover, right lower (2,550-sheet feeder)	2,550-sheet paper feeder covers on page 2008
RC5-0384-000CN	Cover, right lower (3x550-sheet feeder)	3x550-sheet feeder and stand covers on page 2003
RC5-0385-000CN	Cover, left lower (1x550-sheet feeder)	1x550-sheet feeder and stand covers on page 1998
RC5-0385-000CN	Cover, left lower (2,550-sheet feeder)	2,550-sheet paper feeder covers on page 2008
RC5-0385-000CN	Cover, left lower (3x550-sheet feeder)	3x550-sheet feeder and stand covers on page 2003
RC5-0386-000CN	Cover, rear (1x550-sheet feeder)	1x550-sheet feeder and stand covers on page 1998
RC5-0386-000CN	Cover, rear (2,550-sheet feeder)	2,550-sheet paper feeder covers on page 2008

Table 6-25 Numerical parts list (continued)

Part number	Description	Table and page
RC5-0386-000CN	Cover, rear (3x550-sheet feeder)	3x550-sheet feeder and stand covers on page 2003
RC5-0387-000CN	Cover, left (1x550-sheet feeder)	1x550-sheet feeder and stand covers on page 1998
RC5-0387-000CN	Cover, left (2,550-sheet feeder)	2,550-sheet paper feeder covers on page 2008
RC5-0387-000CN	Cover, left (3x550-sheet feeder)	3x550-sheet feeder and stand covers on page 2003
RC5-0399-000CN	Cover, rear lower (1x550-sheet feeder)	1x550-sheet feeder and stand covers on page 1998
RC5-0399-000CN	Cover, rear lower (2,550-sheet feeder)	2,550-sheet paper feeder covers on page 2008
RC5-0399-000CN	Cover, rear lower (3x550-sheet feeder)	3x550-sheet feeder and stand covers on page 2003
RC5-0405-000CN	Door, stock (1x550-sheet feeder)	1x550-sheet feeder and stand covers on page 1998
RC5-0417-000CN	Cover, caster, right	3x550-sheet feeder and stand covers on page 2003
RC5-0418-000CN	Cover, caster, left	3x550-sheet feeder and stand covers on page 2003
RC5-1842-000CN	Cover, output bin, front	Covers (M681/M682/E67550/E67560/E67650/E67660) on page 1977
RC5-1843-000CN	Cover, right	Covers (M681/M682/E67550/E67560/E67650/E67660) on page 1977
RC5-1892-000CN	Guide, NIP	Covers (M652/M653/E65050/E65060/E65150/E65160) on page 1974
RC5-1892-000CN	Guide, NIP	Covers (M681/M682/E67550/E67560/E67650/E67660) on page 1977
RC5-3356-000CN	Cover, blanking	Covers (M652/M653/E65050/E65060/E65150/E65160) on page 1974
RK2-6027-000CN	Motor, stepping (M6)	Internal components (5 of 6) on page 1988
RK2-6124-000CN	Fan	Internal components (3 of 6) on page 1984
RK2-6124-000CN	Fan	Internal components (4 of 6) on page 1986
RK2-7757-000CN	Motor, stepping	Internal components (5 of 6) on page 1988
RK2-7768-000CN	Cable, flexible flat	Internal components (6 of 6) on page 1991

Table 6-25 Numerical parts list (continued)

Part number	Description	Table and page
RK2-7776-000CN	Cable, flexible flat	Internal components (6 of 6) on page 1991
RK2-7831-000CN	Motor, stepping (1x550-sheet feeder)	550-sheet feeder and stand main body on page 2001
RK2-7831-000CN	Motor, stepping (2,550-sheet feeder)	2,550-sheet feeder stand main body on page 2011
RK2-7831-000CN	Motor, stepping (3x550-sheet feeder)	3x550-sheet feeder and stand main body on page 2006
RK2-7949-000CN	Fan	Internal components (3 of 6) on page 1984
RK2-7951-000CN	Fan	Internal components (3 of 6) on page 1984
RK2-7953-000CN	Fan	Internal components (6 of 6) on page 1991
RK2-8149-000CN	Motor, stepping, DC (stapler/stacker)	2-bin stapler/stacker main body on page 2015
RK2-8153-000CN	Fan (stapler/stacker)	2-bin stapler/stacker main body on page 2015
RL2-0034-000CN	Roller, pickup, Tray 1	Covers (M652/M653/E65050/E65060/E65150/E65160) on page 1974
RL2-0034-000CN	Roller, pickup, Tray 1	Covers (M681/M682/E67550/E67560/E67650/E67660) on page 1977
RL2-0079-000CN	Roller, separation, Tray 1	Covers (M652/M653/E65050/E65060/E65150/E65160) on page 1974
RL2-0079-000CN	Roller, separation, Tray 1	Covers (M681/M682/E67550/E67560/E67650/E67660) on page 1977
RL2-1500-000CN	Door, left	Covers (M652/M653/E65050/E65060/E65150/E65160) on page 1974
RL2-1500-000CN	Door, left	Covers (M681/M682/E67550/E67560/E67650/E67660) on page 1977
RL2-1504-000CN	Door-Inner	Internal components (1 of 6) on page 1979
RM2-0856-000CN	Auto-close assembly (1x550-sheet feeder)	550-sheet feeder and stand main body on page 2001
RM2-0856-000CN	Auto-close assembly (2,550-sheet feeder)	2,550-sheet feeder stand main body on page 2011
RM2-0856-000CN	Auto-close assembly (3x550-sheet feeder)	3x550-sheet feeder and stand main body on page 2006
RM2-0857-000CN	Size sensor assembly (1x550-sheet feeder)	550-sheet feeder and stand main body on page 2001

Table 6-25 Numerical parts list (continued)

Part number	Description	Table and page
RM2-0857-000CN	Size sensor assembly (2,550-sheet feeder)	2,550-sheet feeder stand main body on page 2011
RM2-0857-000CN	Size sensor assembly (3x550-sheet feeder)	3x550-sheet feeder and stand main body on page 2006
RM2-0915-000CN	Tray lifter motor drive assembly (2,550-sheet feeder)	2,550-sheet feeder stand main body on page 2011
RM2-0918-000CN	Tray auto-close assembly (2,550-sheet feeder)	2,550-sheet feeder stand main body on page 2011
RM2-0921-000CN	Size sensor assembly (2,550-sheet feeder)	2,550-sheet feeder stand main body on page 2011
RM2-1040-000CN	Solenoid assembly (stapler/stacker)	2-bin stapler/stacker main body on page 2015
RM2-1057-000CN	Stacking wall assembly (stapler/stacker)	2-bin stapler/stacker covers on page 2013
RM2-1066-000CN	Jogger assembly (stapler/stacker)	2-bin stapler/stacker main body on page 2015
RM2-1193-000CN	Stapler assembly (stapler/stacker)	2-bin stapler/stacker main body on page 2015
RM2-1196-000CN	Tray assembly (stapler/stacker)	2-bin stapler/stacker main body on page 2015
RM2-1218-000CN	Right door assembly (2,550-sheet feeder)	2,550-sheet paper feeder covers on page 2008
RM2-1219-000CN	Cassette assembly (2,550-sheet feeder)	2,550-sheet feeder stand main body on page 2011
RM2-1219-000CN	Cassette assembly (tray; 1x550-sheet feeder)	550-sheet feeder and stand main body on page 2001
RM2-1219-000CN	Cassette assembly (upper tray; 3x550-sheet feeder)	3x550-sheet feeder and stand main body on page 2006
RM2-1220-000CN	Tray assembly (2,550-sheet feeder)	2,550-sheet feeder stand main body on page 2011
RM2-1222-000CN	Drive assembly (1x550-sheet feeder)	550-sheet feeder and stand main body on page 2001
RM2-1222-000CN	Drive assembly (2,550-sheet feeder)	2,550-sheet feeder stand main body on page 2011
RM2-1222-000CN	Drive assembly (3x550-sheet feeder)	3x550-sheet feeder and stand main body on page 2006
RM2-1223-000CN	Estrangement holder assembly (1x550-sheet feeder)	550-sheet feeder and stand main body on page 2001
RM2-1223-000CN	Estrangement holder assembly (2,550-sheet feeder)	2,550-sheet feeder stand main body on page 2011
RM2-1223-000CN	Estrangement holder assembly (3x550-sheet feeder)	3x550-sheet feeder and stand main body on page 2006
RM2-1226-000CN	Right door assembly (1x550-sheet feeder)	1x550-sheet feeder and stand covers on page 1998

Table 6-25 Numerical parts list (continued)

Part number	Description	Table and page
RM2-1230-000CN	Right door assembly (3x550-sheet feeder)	3x550-sheet feeder and stand covers on page 2003
RM2-1231-000CN	Cassette assembly (middle/lower tray; 3x550-sheet feeder)	3x550-sheet feeder and stand main body on page 2006
RM2-1235-000CN	Paper pickup assembly (1x550-sheet feeder)	550-sheet feeder and stand main body on page 2001
RM2-1235-000CN	Paper pickup assembly (2,550-sheet feeder)	2,550-sheet feeder stand main body on page 2011
RM2-1235-000CN	Paper pickup assembly (3x550-sheet feeder)	3x550-sheet feeder and stand main body on page 2006
RM2-1237-000CN	Laser scanner assembly	Internal components (3 of 6) on page 1984
RM2-1267-010CN	Control panel assembly 68.6 mm 2.7 in	Covers (M652/M653/E65050/E65060/E65150/E65160) on page 1974
RM2-1927-000CN	Main drive assembly	Internal components (5 of 6) on page 1988
RM2-1928-000CN	Fuser assembly, 110-127V	Internal components (4 of 6) on page 1986
RM2-1929-000CN	Fuser assembly, 220-240V	Internal components (4 of 6) on page 1986
RM2-1934-000CN	Fuser drive assembly	Internal components (5 of 6) on page 1988
RM2-1947-000CN	Power supply switch assembly	Internal components (2 of 6) on page 1982
RM2-1951-000CN	Rear cover assembly	Covers (M652/M653/E65050/E65060/E65150/E65160) on page 1974
RM2-1951-000CN	Rear cover assembly	Covers (M681/M682/E67550/E67560/E67650/E67660) on page 1977
RM2-1953-000CN	Output bin assembly	Covers (M652/M653/E65050/E65060/E65150/E65160) on page 1974
RM2-1953-000CN	Output bin assembly	Covers (M681/M682/E67550/E67560/E67650/E67660) on page 1977
RM2-1955-000CN	Fuser motor drive assembly	Internal components (5 of 6) on page 1988
RM2-1956-000CN	Drum motor assembly	Internal components (5 of 6) on page 1988
RM2-1957-000CN	Feed roller assembly	Internal components (4 of 6) on page 1986
RM2-1957-000CN	Registration assembly	Internal components (4 of 6) on page 1986

Table 6-25 Numerical parts list (continued)

Part number	Description	Table and page
RM2-1958-000CN	Left handle assembly	Covers (M652/M653/E65050/E65060/E65150/E65160) on page 1974
RM2-1958-000CN	Left handle assembly	Covers (M681/M682/E67550/E67560/E67650/E67660) on page 1977
RM2-1975-000CN	Cover, output bin (E65150/E65160/E67650/E67660)	Covers (M681/M682/E67550/E67560/E67650/E67660) on page 1977
RM2-2091-000CN	Lifter drive assembly (1x550-sheet feeder)	550-sheet feeder and stand main body on page 2001
RM2-2091-000CN	Lifter drive assembly (2,550-sheet feeder)	2,550-sheet feeder stand main body on page 2011
RM2-2091-000CN	Lifter drive assembly (3x550-sheet feeder)	3x550-sheet feeder and stand main body on page 2006
RM2-5145-000CN	Paper feed assembly (550-sheet feeder)	550-sheet feeder stand main body on page 1996
RM2-5147-000CN	Auto close assembly	Internal components (5 of 6) on page 1988
RM2-5147-000CN	Auto-close assembly (550-sheet feeder)	550-sheet feeder stand main body on page 1996
RM2-5154-000CN	Paper pickup assembly (550-sheet feeder)	550-sheet feeder stand main body on page 1996
RM2-6545-000CN	Microswitch	Internal components (2 of 6) on page 1982
RM2-6556-000CN	Paper pick-up assembly	Internal components (4 of 6) on page 1986
RM2-6613-000CN	Toner collection unit	Internal components (3 of 6) on page 1984
RM2-6620-000CN	Toner carry assembly	Internal components (1 of 6) on page 1979
RM2-6621-000CN	Paper delivery assembly	Internal components (4 of 6) on page 1986
RM2-6622-000CN	Right door assembly	Covers (M652/M653/E65050/E65060/E65150/E65160) on page 1974
RM2-6622-000CN	Right door assembly	Covers (M681/M682/E67550/E67560/E67650/E67660) on page 1977
RM2-6650-000CN	Guide Assembly	Internal components (4 of 6) on page 1986
RM2-6651-000CN	Upper Guide Assembly	Internal components (4 of 6) on page 1986
RM2-6657-000CN	Formatter cover assembly	Covers (M652/M653/E65050/E65060/E65150/E65160) on page 1974

Table 6-25 Numerical parts list (continued)

Part number	Description	Table and page
RM2-6657-000CN	Formatter cover assembly	Covers (M681/M682/E67550/E67560/E67650/E67660) on page 1977
RM2-6658-000CN	Front door assembly	Covers (M652/M653/E65050/E65060/E65150/E65160) on page 1974
RM2-6658-000CN	Front door assembly	Covers (M681/M682/E67550/E67560/E67650/E67660) on page 1977
RM2-6659-000CN	Right handle assembly	Covers (M652/M653/E65050/E65060/E65150/E65160) on page 1974
RM2-6659-000CN	Right handle assembly	Covers (M681/M682/E67550/E67560/E67650/E67660) on page 1977
RM2-6669-000CN	Lifter drive assembly	Internal components (5 of 6) on page 1988
RM2-6682-000CN	Secondary transfer assembly	Internal components (4 of 6) on page 1986
RM2-6684-000CN	Cassette assembly (Tray 2)	Internal components (4 of 6) on page 1986
RM2-6807-000CN	Right door assembly (stapler/stacker)	2-bin stapler/stacker covers on page 2013
RM2-6810-000CN	Upper paper feed assembly (stapler/stacker)	2-bin stapler/stacker main body on page 2015
RM2-6815-000CN	Lower paper feed assembly (stapler/stacker)	2-bin stapler/stacker main body on page 2015
RM2-6933-000CN	Lifter drive assembly (550-sheet feeder)	550-sheet feeder stand main body on page 1996
RM2-6934-000CN	Drive assembly (550-sheet feeder)	550-sheet feeder stand main body on page 1996
RM2-6935-000CN	Cassette assembly (550-sheet feeder)	550-sheet feeder stand main body on page 1996
RM2-6937-000CN	Door assembly, right (550-sheet feeder)	550-sheet paper feeder covers on page 1993
RM2-7138-000CN	Memory PCA	Internal components (6 of 6) on page 1991
RM2-7157-000CN	Estrangement detect PCA assembly	Internal components (3 of 6) on page 1984
RM2-7160-000CN	Density detect assembly	Internal components (4 of 6) on page 1986
RM2-8421-000CN	Low-voltage power supply, 110-127V	Internal components (6 of 6) on page 1991
RM2-8422-000CN	Low-voltage power supply, 220-240V	Internal components (6 of 6) on page 1991

Table 6-25 Numerical parts list (continued)

Part number	Description	Table and page
RM2-8424-000CN	High-voltage power supply, HVPS (T)	Internal components (6 of 6) on page 1991
RM2-8440-000CN	Environmental sensor PCA assembly	Internal components (3 of 6) on page 1984
RM2-8481-000CN	Paper deck controller PCA (2,550-sheet feeder)	2,550-sheet feeder stand main body on page 2011
RM2-8482-000CN	Paper deck controller. PCA	550-sheet feeder and stand main body on page 2001
RM2-8483-000CN	Paper deck controller. PCA	3x550-sheet feeder and stand main body on page 2006
RM2-8491-000CN	Feeder controller PCA (550-sheet feeder)	550-sheet feeder stand main body on page 1996
RM2-8689-000CN	Staple stacker PCA (stapler/stacker)	2-bin stapler/stacker main body on page 2015
RM2-8880-000CN	Option upper cable assembly (550-sheet feeder)	550-sheet feeder stand main body on page 1996
RM2-8881-000CN	Option lower cable assembly (550-sheet feeder)	550-sheet feeder stand main body on page 1996
RM2-9286-000CN	Drawer upper cable assembly (1x550-sheet feeder)	550-sheet feeder and stand main body on page 2001
RM2-9286-000CN	Drawer upper cable assembly (1x550-sheet feeder)	3x550-sheet feeder and stand main body on page 2006
RM2-9286-000CN	Drawer upper cable assembly (2,550-sheet feeder)	2,550-sheet feeder stand main body on page 2011
RM3-7006-000CN	High-voltage power supply, HVPS (D)	Internal components (6 of 6) on page 1991
RM3-7030-000CN	DC controller PCA, M652/M653	Internal components (6 of 6) on page 1991
RM3-7031-000CN	DC controller PCA, M681/M682	Internal components (6 of 6) on page 1991
RM3-7046-000CN	Pre-exposure PCA assembly (CMY)	Internal components (2 of 6) on page 1982
RM3-7047-000CN	Pre-exposure PCA assembly (K)	Internal components (2 of 6) on page 1982
RM3-7603-000CN	DC controller PCA, E65150/E65160	Internal components (6 of 6) on page 1991
RM3-7606-000CN	DC controller PCA, E67650/E67660	Internal components (6 of 6) on page 1991
RU7-8831-000CN	Label, staple exchange OPE. (stapler/stacker)	2-bin stapler/stacker covers on page 2013
RU9-2364-000CN	Spring	Internal components (4 of 6) on page 1986
VS1-7258-012CN	Connector	Internal components (6 of 6) on page 1991

Table 6-25 Numerical parts list (continued)

Part number	Description	Table and page
WC2-5762-000CN	Switch, push (550-sheet feeder)	550-sheet feeder stand main body on page 1996
WC2-5803-000CN	Switch, push (1x550-sheet feeder)	550-sheet feeder and stand main body on page 2001
WC2-5803-000CN	Switch, push (2,550-sheet feeder)	2,550-sheet feeder stand main body on page 2011
WC2-5803-000CN	Switch, push (3x550-sheet feeder)	3x550-sheet feeder and stand main body on page 2006
WC4-5171-000CN	Microswitch (stapler/stacker)	2-bin stapler/stacker main body on page 2015

A

Review the certificates of volatility for the printer.

Certificate of Volatility

Review the certificates of volatility for the printers.

Figure A-1 Certificate of Volatility (1 of 2; M652/M653/E65050/E65060/E65150/E65160)

Hewlett-Packard Certificate of Volatility				
Model: HP Color LaserJet Enterprise M65x series HP Color LaserJet Managed E650xx series HP Color LaserJet Managed E651xx series		Part Number: Enterprise J7Z98A=M652N J7Z99A=M652DN J8A04A=M653DN J8A05A=M653X J8A06A=M653DH Managed L3U55A=E65050DN L3U56A=E65060DN 3GY03A=E65150DN 3GY04A=E65160DN		Address: Hewlett Packard Company 11311 Chinden Blvd Boise, ID 83714
Volatile Memory				
Does the device contain volatile memory (Memory whose contents are lost when power is removed)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes please describe the type, size, function, and steps to clear the memory below				
Type (SRAM, DRAM, etc): DDR3 - DRAM	Size: 1GB	User Modifiable: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Function: Operation system and print/scan buffer	Steps to clear memory: When the printer is powered off the memory is erased.
Type (SRAM, DRAM, etc):	Size:	User Modifiable: <input type="checkbox"/> Yes <input type="checkbox"/> No	Function:	Steps to clear memory:
Type (SRAM, DRAM, etc):	Size:	User Modifiable: <input type="checkbox"/> Yes <input type="checkbox"/> No	Function:	Steps to clear memory:
Non-Volatile Memory				
Does the device contain non-volatile memory (Memory whose contents are retained when power is removed)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes please describe the type, size, function, and steps to clear the memory below				
Type (Flash, EEPROM, etc): IOD EEPROM	Size: 32KB	User Modifiable: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Function: Store customer setting data for backup/restore	Steps to clear memory: There are no steps to clear this data.
Type (Flash, EEPROM, etc): SPI Flash	Size: 4MB	User Modifiable: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Function: Contains the boot code and factory product configuration data required for the device to function. User modifications 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):	Size:	User Modifiable: <input type="checkbox"/> Yes <input type="checkbox"/> No	Function:	Steps to clear memory:
Mass Storage				
Does the device contain mass storage memory (Hard Disk Drive, Tape Backup)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes please describe the type, size, function, and steps to clear the memory below				
Type (HDD, Tape, etc): HDD	Size: 320GB	User Modifiable: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Function: OS and user data	Steps to clear memory: Firmware update
Type (HDD, Tape, etc): EMMC	Size: 8GB	User Modifiable: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Function: OS and user data	Steps to clear memory: Firmware update

Figure A-2 Certificate of Volatility (2 of 2; M652/M653/E65050/E65060/E65150/E65160)

USB	
Does the item accept USB input and if so, for what purpose (i.e Print Jobs, device firmware updates, scan upload)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes please describe below	
Print jobs, HP digitally signed firmware upgrades, 3rd party application loading. USB ports can be disabled.	
Can any data other than scan upload be sent to the USB device)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes please describe below	
Diagnostic service logs can be uploaded. Print files can be printed via a USB thumb drive.	

RF/RFID	
Does the item use RF or RFID for receive or transmit of any data including remote diagnostics. (e.g. Cellular phone, Bluetooth) <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes please describe below	
Purpose:	
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)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes please describe below:	
Purpose: WiFi Direct Print	
Frequency: 2.4 GHz	Bandwidth: 2401 - 2495 MHz; depending on selected channel in 2.4GHz band. 5180 - 5825 MHz; depending on selected channel in 5GHz band.
Modulation:	Effective Radiate Power (ERP):
Specifications: 802.11 b/g/n	

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)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes please describe below:	
Purpose: Device Beaconing, Secure Print Apps	
Frequency: 2.4 GHz	Bandwidth: 2400-2483.5 MHz; depending on selected channel.
Modulation:	Effective Radiate Power (ERP):
Specifications: BTLE4.0 compliant	

Other Capabilities	
Does the device employ any other method of communications such as a Modem to transmit or receive any data whatsoever? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes please describe below:	
Purpose:	
Specifications:	

Figure A-3 Certificate of Volatility (1 of 2; M681/M682/E67550/E67560/E67650/E67660)

Hewlett-Packard Certificate of Volatility					
Model: HP Color LaserJet Enterprise M68x series HP Color LaserJet Managed E6750xx series HP Color LaserJet Managed E676xx series		Part Number: Enterprise J8A17A=M682Z J8A11A=M681F J8A13A=M681Z J8A17A=M682Z		Managed L3U70A=E67560Z L3U66A=E67550DH 3GY31A=E67650DH 3GY32A=E67660Z	Address: Hewlett Packard Company 11311 Chinden Blvd Boise, ID 83714
Volatile Memory					
Does the device contain volatile memory (Memory whose contents are lost when power is removed)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes please describe the type, size, function, and steps to clear the memory below					
Type (SRAM, DRAM, etc): DDR3 - DRAM	Size: 2GB- Ent 2.5GB - Flow	User Modifiable: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Function: Operation system and print/scan buffer	Steps to clear memory: When the printer is powered off the memory is erased.	
Type (SRAM, DRAM, etc):	Size:	User Modifiable: <input type="checkbox"/> Yes <input type="checkbox"/> No	Function:	Steps to clear memory:	
Type (SRAM, DRAM, etc):	Size:	User Modifiable: <input type="checkbox"/> Yes <input type="checkbox"/> No	Function:	Steps to clear memory:	
Non-Volatile Memory					
Does the device contain non-volatile memory (Memory whose contents are retained when power is removed)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes please describe the type, size, function, and steps to clear the memory below					
Type (Flash, EEPROM, etc): IOD EEPROM	Size: 32KB	User Modifiable: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Function: Store customer setting data for backup/restore	Steps to clear memory: There are no steps to clear this data.	
Type (Flash, EEPROM, etc): SPI Flash	Size: 4MB	User Modifiable: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Function: Contains the boot code and factory product configuration data required for the device to function. User modifications 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):	Size:	User Modifiable: <input type="checkbox"/> Yes <input type="checkbox"/> No	Function:	Steps to clear memory:	
Mass Storage					
Does the device contain mass storage memory (Hard Disk Drive, Tape Backup)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes please describe the type, size, function, and steps to clear the memory below					
Type (HDD, Tape, etc): HDD	Size: 320GB	User Modifiable: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Function: OS and user data	Steps to clear memory: Firmware update	
USB					
Does the item accept USB input and if so, for what purpose (i.e Print Jobs, device firmware updates, scan upload)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes please describe below					
Print jobs, HP digitally signed firmware upgrades, 3rd party application loading. USB ports can be disabled.					
Can any data other than scan upload be sent to the USB device? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes please describe below					
Diagnostic service logs can be uploaded. Print files can be printed via a USB thumb drive.					

Figure A-4 Certificate of Volatility (2 of 2; M681/M682/E67550/E67560/E67650/E67660)

USB	
Does the item accept USB input and if so, for what purpose (i.e Print Jobs, device firmware updates, scan upload)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes please describe below	
Print jobs, HP digitally signed firmware upgrades, 3rd party application loading. USB ports can be disabled.	
Can any data other than scan upload be sent to the USB device)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes please describe below	
Diagnostic service logs can be uploaded. Print files can be printed via a USB thumb drive.	

RF/RFID	
Does the item use RF or RFID for receive or transmit of any data including remote diagnostics. (e.g. Cellular phone, Bluetooth) <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes please describe below	
Purpose:	
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)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes please describe below:	
Purpose: WiFi Direct Print	
Frequency: 2.4 GHz	Bandwidth: 2401 - 2495 MHz; depending on selected channel in 2.4GHz band. 5180 - 5825 MHz; depending on selected channel in 5GHz band.
Modulation:	Effective Radiate Power (ERP):
Specifications: 802.11 b/g/n	

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)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes please describe below:	
Purpose: Device Beaconing, Secure Print Apps	
Frequency: 2.4 GHz	Bandwidth: 2400-2483.5 MHz; depending on selected channel.
Modulation:	Effective Radiate Power (ERP):
Specifications: BTLE4.0 compliant	

Other Capabilities	
Does the device employ any other method of communications such as a Modem to transmit or receive any data whatsoever? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes please describe below:	
Purpose:	
Specifications:	

Glossary of terms

802.11

802.11 is a set of standards for wireless local area network (WLAN) communication, developed by the IEEE LAN/MAN Standards Committee (IEEE 802).

802.11b/g/n

802.11b/g/n can share the same hardware and use the 2.4 GHz band. 802.11b supports bandwidth up to 11 Mbps, 802.11n supports bandwidth up to 150 Mbps. 802.11b/g/n devices might occasionally suffer interferences from microwave ovens, cordless telephones, and Bluetooth devices.

AC

An electric current that reverses its direction many times a second at regular intervals. For example, the 110V line current found in a typical US electrical wall receptacle.

AC Control Module (PageWide)

The AC Control Module controls the heating elements in the airflow assembly. Functions include voltage monitoring (ensuring correct operation in a low-quality-power environment), isolation (low voltage heater control signals are isolated from the high voltage AC power for safety), AC switching (power is switched on/off to the heater), and heating element configuration (heating element configuration is changed between series and parallel for temperature predictability).

ADF

An Automatic Document Feeder (ADF) is a device that automatically feeds an original sheet (or multiple sheets) of paper into the image scanner. The document feeder is a component of the integrated scanner assembly (ADF and image scanner).

Airflow System (PageWide)

The airflow system conditions the printed pages to avoid page curling due to the ink on the page. The airflow system functionally consists of a fan and heating elements. The pressurized air is blown on the page through the nozzles that are placed on the paper path of the airflow system between print and eject zone.

BOOTP

Bootstrap Protocol. A network protocol used by a network client to obtain its IP address automatically. This is usually done in the bootstrap process of computers or operating systems running on them. The BOOTP servers assigns an IP address from a pool of addresses to each client. BOOTP enables "diskless workstation" computers to obtain an IP address prior to loading any advanced operating system.

CCD

A Charged Coupled Device (CCD) is the scanner module which enables a scan job. A CCD locking mechanism is used to hold the CCD module to prevent any damage when the printer is moved.

CIS

A Contact Image Sensor (CIS) scanner captures an image using the printer'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 Charged Coupled Device (CCD) sensors that cover the entire page width.

Collation

Collation is a process of printing a multiple-copy job in sets. When collation is selected, the device prints an entire set before printing additional copies.

Control Panel

The control panel is a flat, typically vertical panel or screen where the user can control and/or monitor the printer. The control panel is found on the front of the printer.

Coverage

Coverage is the printing term used for a toner usage measurement on printing. For example, 5% coverage means that an A4 sided paper has about 5% image or text on it. If the paper or original has complicated images or a large amount of text, the coverage will be higher and at the same time, a toner usage will be as much as the coverage.

DC

An electric current flowing in one direction only. Typically, a low voltage load current supplied to an electrical assembly.

DCC

The DC controller (DCC) controls the operation of the printer sub-systems and electrical components. The DCC sends out various signals to operate motors, solenoids, and other printer components based on the print command and image data that the host computer sends the formatter.

Default

The value or setting that is in effect when a printer is unboxed, reset, or initialized.

DHCP

Dynamic Host Configuration Protocol (DHCP) is a client-server networking protocol. A DHCP server provides configuration parameters specific to the DHCP client host requesting, generally, information required by the client host to participate on an IP network. The DHCP also provides a mechanism for allocation of IP addresses to client hosts.

Digital Send Software

Digital send software allows a multi-function printer (MFP) to scan and send information quickly and securely to email, network folders, other printers, and fax services.

DIMM

A Dual Inline Memory Module (DIMM) is a small circuit board that holds memory. The DIMM stores all data within the printer, such as printing data and received fax data.

DPI

Dots Per Inch (DPI) is a measurement of resolution that is used for scanning and printing. Generally, higher DPI results in a higher resolution (more visible detail in the image and a larger file size).

Duplex

A mechanism that automatically turns over a sheet of paper so that the printer can print (or scan) on both sides of the paper. A printer equipped with a duplex unit can print on both sides of the paper during one print cycle.

Duty Cycle

Duty cycle is the page quantity which does not affect printer performance for a month. Generally, the printer has the lifespan limitation such as pages per year. The lifespan means the average capacity of print-outs, usually within the warranty period. For example, if the duty cycle is 48,000 pages per month the printer limit is 2,400 pages a day (assuming 20 working days/month).

Dynamic Security

Dynamic Security is a toner cartridge design and process for authenticating genuine HP supplies. HP printers use toner cartridges that have security chips or electronic circuitry. Cartridges using a non-HP chip, or modified chip, or non-HP circuitry might not work (now or in the future).

e-Duplex

Single-pass electronic duplex (e-Duplex) printer use two separate scan modules to scan the front-side and back-side of an e-duplex copy job page in a single pass through the document feeder.

EMC

EMC is a measure of a device's ability to operate as intended in its shared operating environment while, at the same time, not affecting the ability of other equipment within the same environment to operate as intended.

EMI

EMI is the electromagnetic energy which affects the functioning of an electronic device. Electronic devices (like printers) are a source of EMI. Because it is rare for electronics to operate in isolation, products are generally engineered to function in the presence of some amount of EMI.

eMMC

An embedded Multi-Media Card is a compact memory device consisting of NAND flash memory and a simple storage controller.

Emulation

Emulation is a technique of one machine obtaining the same results as another. An emulator duplicates the functions of one system with a different system, so that the second system behaves like the first system. Emulation focuses on exact reproduction of external behavior. This is different from simulation, which concerns an abstract model of the system being simulated, often considering its internal state.

EPS

Encapsulated PostScript (EPS) is a PostScript (PS) code file which is used for storing font and vector graphic image information.

ESD

An electrostatic discharge (ESD) is a sudden flow of electricity between two electrically charged objects caused by contact, an electrical short, or dielectric breakdown. Discharge of built up static electricity.

Ethernet

Ethernet is a frame-based computer networking technology for local area networks (LANs). It defines wiring and signaling for the physical layer, and frame formats and protocols for the media access control (MAC)/data link layer of the OSI model. Ethernet is mostly standardized as IEEE 802.3. Ethernet has become the most widespread LAN technology in use during the 1990s to present.

Ferrite

A ferrite is used to reduce the amount of radio frequency noise (or interference) in a wire or cable. A ferrite enables proper EMC/EMI performance for regulatory purposes.

FFC

Flat Flexible Cables (FFCs) are designed for Printed Circuit Assembly (PCA) to PCA connections (for example, connecting a fax PCA to the formatter).

FIH

A Foreign Interface Harness (FIH) is a port that enables HP multifunction printers (MFPs) to use third-party devices to extend the capabilities of the MFP.

Firmware

The formatter stores the printer firmware. A remote firmware upgrade process is used to overwrite and upgrade the firmware.

Flash memory

Flash memory is non-volatile, meaning it retains stored data even when the power is turned off.

Flow integrated scanner assembly

A printer scanner assembly that includes a slide-out external physical keyboard.

Formatter (LaserJet)

The formatter controls printer functions like receiving and processes print data, developing and coordinating data placement and timing with the DC controller PCA, storing font and customer configuration information, communicating with the host computer, and monitoring control panel functions and relaying printer status information through the control panel.

FTP

FTP stands for File Transfer Protocol. FTP is a protocol designed for transferring files over the Internet. Files stored on an FTP server can be accessed using an FTP client, such as a web browser, FTP software program, or a command line interface.

Fuser Unit

The fuser unit is part of a laser printer that adheres the toner onto the printed page. It consists of a heat roller and a pressure roller. After toner is transferred onto the paper, the fuser unit applies heat and pressure to make sure that the toner stays on the paper permanently (which is why paper is warm when it comes out of a laser printer).

Gateway

A connection between computer networks, or between a computer network and a telephone line. A gateway is used to connect two different computer networks, especially a connection to the Internet.

Grayscale

Shades of gray that represent light and dark portions of a color image printed in monochrome. Colors are represented by a range of gray shades from white to black.

Halftone

Halftone is a way of reproducing a photograph or other image in which the various tones of gray or color are produced by variously sized dots of ink or toner. Halftone simulates grayscale by varying the number of dots. Highly colored areas consist of a large number of dots, while lighter areas consist of a smaller number of dots.

HDD

A Hard-Disk Drive (HDD) (commonly referred to as a hard drive or hard disk) is a non-volatile storage device which stores digitally-encoded data on rapidly rotating platters with magnetic surfaces.

IEEE

The Institute of Electrical and Electronics Engineers (IEEE) is an international non-profit, professional organization for the advancement of technology related to electricity.

Image scanner

The image scanner (or Sub Scanner Assembly) contains the components to digitally scan an original source document. The image scanner is a component of the integrated scanner assembly (ADF and image scanner).

IP address

An Internet Protocol (IP) address is a unique number that a device uses in order to identify and communicate with other devices on a network utilizing the Internet Protocol standard.

IPM

The Images Per Minute (IPM) is a method of measuring the speed of a printer. An IPM rate indicates the number of single-sided sheets a printer can complete in one minute.

IPP

The Internet Printing Protocol (IPP) defines a standard protocol for printing and managing print jobs, media size, resolution, etc. IPP can be used locally, or over the internet to reach hundreds of printers. IPP also supports access control, authentication, and encryption, making it a capable and secure printing solution.

ISA

The Integrated Scanner Assembly (ISA) includes the document feeder and image scanner.

ISO

The International Organization for Standardization (ISO) is an international standard-setting body composed of representatives from national standards bodies. It produces world-wide industrial and commercial standards.

JBIG

Joint Bi-level Image Experts Group (JBIG) is an image compression standard with no loss of accuracy or quality. It was designed for compression of binary images, particularly for faxes, but can also be used for other images.

JPEG

Joint Photographic Experts Group (JPEG) is a commonly used standard method of loss compression for photographic images. It is the format used for storing and transmitting photographs on the World Wide Web.

LDAP

The Lightweight Directory Access Protocol (LDAP) is a networking protocol for querying and modifying directory services running over TCP/IP.

LED

A Light-Emitting Diode (LED) is a semiconductor device that can indicate the status of a printer (formatter LEDs) or a component in a contact image sensor (CIS) scanner that helps capture an image.

LEDM

Low end data model (LEDM) provides one consistent data representation method and defines the dynamic and capabilities tickets shared between clients and devices, as well as the access protocol, event, security, and discovery methods.

LPDC

Late point differentiation configuration (LPDC) allows the channel partner to configure the speed to the printer depending on the customer's order. LPDC configuration is stored on the Trusted Platform Module (TPM).

LVPS - SMPS

Low Voltage Power Supplies (LVPS) and Switching Mode Power Supplies (SMPS) supply direct current (DC) voltages to various printer components and assemblies.

MAC address

Media Access Control (MAC) address is a unique identifier associated with a network adapter. MAC address is a unique 48-bit identifier usually written as 12 hexadecimal characters grouped in pairs (for example, 00-00-0c-34-11-4e). This address is usually hard-coded into a Network Interface Card (NIC) by the manufacturer and used as an aid for routers trying to locate machines on a large network.

MEt

HP Memory Enhancement technology (MEt) effectively doubles the standard memory through a variety of font- and data-compression methods. MEt is available only in Printer Command Language (PCL) mode; it is not functional when printing in PostScript (PS) mode.

MFP

A Multi Function Printer (MFP) is a printer that incorporates multiple functionalities in a single physical body. For example, an MFP printer can scan, digitally send, fax, copy, and print.

MHV

Miniature High Voltage (MHV) is designed for high voltage applications of BNC connectors (DC voltage between 500 V and 5 kV).

Modem

A device that modulates a carrier signal to encode digital information, and also demodulates such a carrier signal to decode transmitted information.

MPCA (PageWide)

The MPCA integrates both formatter (LaserJet) and engine control electronics (DC controller) into a single assembly. The Main PCA (MPCA) controls printer functions like receiving and processes print data, developing and coordinating data placement, storing font and customer configuration information, communicating with the host computer, and monitoring control panel functions and relaying printer status information through the control panel.

NAND

NAND is not an acronym (the term is short for **NOT AND** a Boolean operator and logic gate). NAND (flash) memory is non-volatile, meaning it retains stored data even when the power is turned off.

NVRAM

Nonvolatile random access memory (NVRAM) is used to store I/O and information about the print environment configuration (stored data even when the power is turned off).

OPC

Organic Photo Conductor (OPC) is a mechanism that makes a virtual image for print using a laser beam emitted from a laser printer. It is usually green or rust colored and has a cylinder shape. An imaging unit containing a drum slowly wears the drum surface during its usage in the printer, and it should be replaced appropriately due to wear from contact with the cartridge development brush, cleaning mechanism, and paper.

Originals

The first example of something, such as a document, photograph, or text which is copied, reproduced, or translated to produce additional copies. The original itself is not copied or derived from something else.

PCA

Printed Circuit Assembly (PCA). Once the printed circuit board (PCB) is complete, electronic components must be assembled to form a functional printed circuit assembly or PCA.

PCL

Printer Command Language (PCL) is a Page Description Language (PDL) developed by HP as a printer protocol. PCL has become an industry standard. Originally developed for early Inkjet printers, PCL has been released in varying levels for thermal, dot matrix printers and laser printers.

PDF

Portable Document Format (PDF) is a proprietary file format developed by Adobe Systems. A PDF represents two dimension documents in a device independent and resolution independent format.

PJL

Printer job language (PJL) is an integral part of printer configuration, in addition to the standard PCL and PostScript (PS). With standard cabling, the printer can use PJL to perform a variety of functions like dynamic I/O switching, context-sensitive switching, and isolation of print environment settings from one print job to the next.

PML

Printer management language (PML) allows remote configuration of the printer and status read-back from the printer through the I/O ports.

PostScript (PS)

PostScript (PS) is a Page Description Language (PDL) and programming language used primarily in electronic and desktop publishing. PostScript is run in an interpreter to generate an image.

PPM

Pages Per Minute (PPM) is a method of measurement for determining how fast a printer works, meaning the number of pages a printer can produce in one minute.

Print Media

Media like paper, envelopes, labels, and transparencies which can be used in a printer, scanner, fax, or copier.

Printer Driver

A program used to send commands and transfer data from the computer to the printer.

Printhead (PageWide)

The printhead converts the digital firing instructions from the printer electronics into properly formed and timed microscopic drops of the four ink colors.

Printhead Wiper (PageWide)

The printhead wiper system keeps the printhead nozzles firing correctly throughout the life of the printer 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 and when the printer is idle.

Protocol

A convention or standard that controls or enables the connection, communication, and data transfer between two computing endpoints.

RAM

Random Access Memory (RAM) is the printer memory device where the data in current use is kept so it can be quickly retrieved by the device's processor. This memory is an important factor in avoiding errors and printing documents properly. Printer memory is used to store, and process print jobs as they are sent to the printer from a

computer. After printing, the job is cleared from the memory to make room for more print jobs. Printer memory is directly linked to two print characteristics: speed and print quality. More memory allows you to print faster and print larger, high-quality graphics.

REDI sensor

An optical reflective edge detection interrupter (REDI) sensor. Usually used in conjunction with mirrors to sense the presence or absence of paper in the paper path. These sensors are carefully aligned and calibrated at the factory, so care must be taken when servicing these sensors.

Resolution

The sharpness of an image is measured in Dots Per Inch (DPI). The higher the DPI, the greater the resolution.

SCB

The Scanner Control Board (SCB) controls the functions of the image scanner components in the Sub Scanner Assembly (SSA).

Service fluid and aerosol management systems (PageWide)

There are two types of service fluid, shipping fluid and ink. The service fluid management system is contained entirely within the duplex module. Service fluid is discharged as droplets from the printhead, and then collected in a container inside the duplex module. Some of the droplets are called aerosol because they are lighter than air. Aerosol can float inside the printer and collect on the lens of optical sensors, producing false failures. The aerosol management system transports the aerosol and collects it in a safe place. Aerosol management consists of an aerosol fan, mounted on the rear wall of the air flow assembly, which creates air flow that pulls the aerosol through the holes in the platen and into the aerosol filter inside the duplex module.

SFP

A single-function printer only processes print jobs sent from a host computer or from an USB port on the printer.

SMB

Server Message Block (SMB) is a network protocol mainly applied to share files, printers, serial ports, and miscellaneous communications between nodes on a network. SMB also provides an authenticated inter-process communication mechanism.

SMTP

Simple Mail Transfer Protocol (SMTP) is the standard for email transmissions across the internet. SMTP is a relatively simple, text-based protocol, where one or more recipient of a message is specified, and the message text is transferred. It is a client server protocol where the client transmits an email message to the server.

SODIMM

Small outline dual in-line memory module (SODIMM) is a thin profile memory storage device (a smaller alternative to a standard DIMM device).

SSA

The Sub-Scanner Assembly is the image scanner component of the Integrated Scanner Assembly (ISA, which includes the document feeder and the image scanner).

Subnet Mask

The subnet mask is used in conjunction with the network address to determine which part of the address is the network address and which part is the host address.

TCP/IP

The Transmission Control Protocol (TCP) and the Internet Protocol (IP) are the set of communications protocols that implement the protocol stack on which the internet and most commercial networks run.

TIFF

Tagged Image File Format (TIFF) is a variable-resolution bit mapped image format. TIFF describes image data that typically come from scanners. TIFF images use tags, keywords defining the characteristics of the image that is included in the file. This flexible and platform-independent format can be used for pictures that have been made by various image processing applications.

Toner Cartridge

A bottle or container that holds toner, which is used in a machine like a printer. Toner is a powder used in laser printers and photocopiers. The toner forms the text and images on printed paper. Toner can be fused by a combination of heat/pressure from the fuser, causing it to bind the fibers in the paper.

TPM

The HP Trusted Platform Module (TPM) is a security accessory for printers. The TPM strengthens protection of encrypted credentials and data stored on your printer. Certificate private keys are both generated by and protected by the TPM. Once installed, the printer and the TPM are sealed, and the printer owns the TPM. The TPM may not be moved to another device without losing its ownership from the original printer. Installing a TPM accessory might necessitate a firmware upgrade. The TPM prevents the printer from starting if the TPM is missing. If the TPM is removed from the printer, a control-panel error message appears indicating that the TPM is missing.



NOTE: The TPM is not a service part for some printer models. Check the printer service manual to determine if the TPM is a replaceable service part.

TWAIN

An industry standard for scanners and software. By using a TWAIN compliant scanner with TWAIN-compliant software, a scan can be initiated from the program. TWAIN is an image capture API for Microsoft Windows and Apple Macintosh operating systems.

URL

Uniform Resource Locator (URL) is the global address of documents and resources on the internet. The first part of the address indicates what protocol to use. The second part specifies the IP address or the domain name where the resource is located.

USB

Universal Serial Bus (USB) is a standard that was developed by the USB Implementers Forum, Inc., to connect computers and peripherals. Unlike the parallel port, USB is designed to concurrently connect a single computer USB port to multiple peripherals.

Walk-up USB

Some printers support direct printing from a USB flash drive (the walk-up USB port is usually near the control panel).

Watermark

A watermark is a recognizable image or pattern in paper that appears lighter when viewed by transmitted light. Watermarks were first introduced in Bologna, Italy in 1282. Watermarks have been used by paper makers to identify their product, and also on postage stamps, currency, and other government documents to discourage counterfeiting.

XPS

XML Paper Specification (XPS) is a specification for a Page Description Language (PDL) and a new document format developed by Microsoft. This has benefits for portable document and electronic documents. It is an XML-based specification based on a new print path and vector-based, device-independent document format.

ZIF Connector

Zero insertion force (ZIF) connectors use a mechanical locking method to secure Flat Flexible Cables (FFCs) to a Printed Circuit Assembly (PCA).