

Disassembly of Waste Electrical and Electronic Equipment (WEEE) Manual

EU Waste Electronic and Electrical Equipment Directive require producers to provide information of the different electronic and electrical materials and components found in their products at its end-of-life, and disassembly references to treatment and recycling facilities.

1. Product information
2. Materials and components list for selective treatment
3. Disassembly tools
4. Disassembly references

The following information is intended only for the use of recognized treatment and recycling facilities.

Section 1: Product information

Model name(s)— The product models are grouped together in series and are mechanically equivalent

Lexmark MX32x

MX321adn, MX321adw, MB2338adw

Lexmark MX42x

MX421ade, MB2442adwe

Lexmark MX52x

MX521de, MX521ade, MB2546adwe,
MX522adhe

Lexmark MX62x

MX622ade, MX622adhe, MB2650adwe

Section 2: Materials and components list for selective treatment

Table 2: Materials and components list for selective treatment

Description	Count	Notes
Polychlorinated biphenyls (PCB) containing capacitors	0	N/A
Mercury containing components, such as switches or backlighting lamps	0	N/A
Batteries	1	***** <u>Total Count = 1</u> ***** Lithium Manganese Oxide coin cell located on the Controller card
Printed circuit boards greater than 10 cm ²	multiple	***** <u>Total Count = 11</u> ***** For details, see Annex B ***** <u>Options:</u> 1 – Hard disk drive 1 – Wireless module card 1 – 250/ 550 Sheet Tray ***** Note: Fax is standard for MX-B467F
Toner cartridges, liquid and pasty, as well as colour toner	2	1 – Toner cartridge 1 – Imaging unit
<u>Plastic component(s)</u> that may contain BFR (brominated [§] flame retardants)	multiple	***** <u>Count = 33</u> ***** For details, See Annex A ***** <u>Options:</u> +5 – for each 250/ 550 Paper handling *****
Note (§) - This product may contain plastic parts with brominated flame retardants. Recycler should treat these parts separately. See section 4.3 Disclaimer.		
Asbestos waste and components which contain asbestos	0	N/A
Cathode ray tubes	0	N/A
Chlorofluorocarbons (CFC), Hydrochlorofluorocarbons (HCFC) or Hydrofluorocarbons (HFC), Hydrocarbons (HC)	0	N/A
Gas discharge lamps	0	N/A
Liquid Crystal Display (LCD) greater than 100 cm ² and those back-lighted with Gas discharge lamps	0	N/A
External electrical cables	1	Power cord located on the back lower left quadrant
Components containing refractory fibres	0	N/A
Components containing radioactive substances	0	N/A
Electrolyte capacitors containing substances of concern (<i>capacitors with height > 25 mm, diameter > 25 mm or proportionately similar volume</i>)	1	Capacitor located on Power Supply
Electrical and Electronic (EE) Customer Replaceable Paper handling devices	multiple	See Customer Replaceable Paper handling devices For details, See Annex C
Electrical and Electronic (EE) Customer Replaceable Internal/External Card options	multiple	See External Card options For details, See Annex D

Section 3: Common Tools for Disassembly

Table 3.1 - Disassembly tools

Item	Description
1	#2 Phillips screwdriver, magnetic
2	Wire cutter
3	E-clip puller or small flat-head screwdriver
4	Standard slotted head screwdriver





Section 4: Disassembly references

4.1 Removal procedure(s)

WEEE materials and components removal procedures are available upon request.

Please Contact: recycling@lexmark.com

4.2 Graphical illustration of material's and component's location

-  LCD > 100 cm²
-  PCBs > 10 cm²
-  Printer components containing Brominated flame retardants
-  Battery

4.3 Disclaimer

Statement on WEEE Bromine Levels

Manufacturer is compliant with the European Directive 2012/19/EU and European Commission's mandated technical specification CLC/TS 50625-3-1:2015 stating that plastic containing brominated flame retardants (BFR) must be removed from any separately collected WEEE (Article 8, Annex VII) if total bromine concentration in the fraction is known to be >2000 ppm, or expected to be >2000 ppm, or if it is not declared. Concentrations of bromine <2000 ppm are acceptable for reuse and do not require separation, so that the re-use and recycling of components or whole appliances is not hindered per Annex II, Section 3 of the WEEE Directive (2002/96/EU), and Annex VII, Section 3 of the WEEE Directive (2012/19/EU).

Section 5: Supplies

- LCD > 100 cm²
- PCBs > 10 cm²
- Printer components containing Brominated flame retardants
- Battery



Figure 5.1: Toner Cartridge



Figure 5.2: Imaging Unit

Table 6: Supplies – Printed Circuit Boards >10cm² and Plastic with Brominated flame retardants

Item	Description
--	None
Table Component Count (<i>without options</i>)	
LCD>100cm ²	= 0
PCBs>10cm ²	= 0
BFR Plastics	= 0
Battery	= 0

Section 6: Control Panel

- LCD > 100 cm²
- PCBs > 10 cm²
- Printer components containing Brominated flame retardants
- Battery

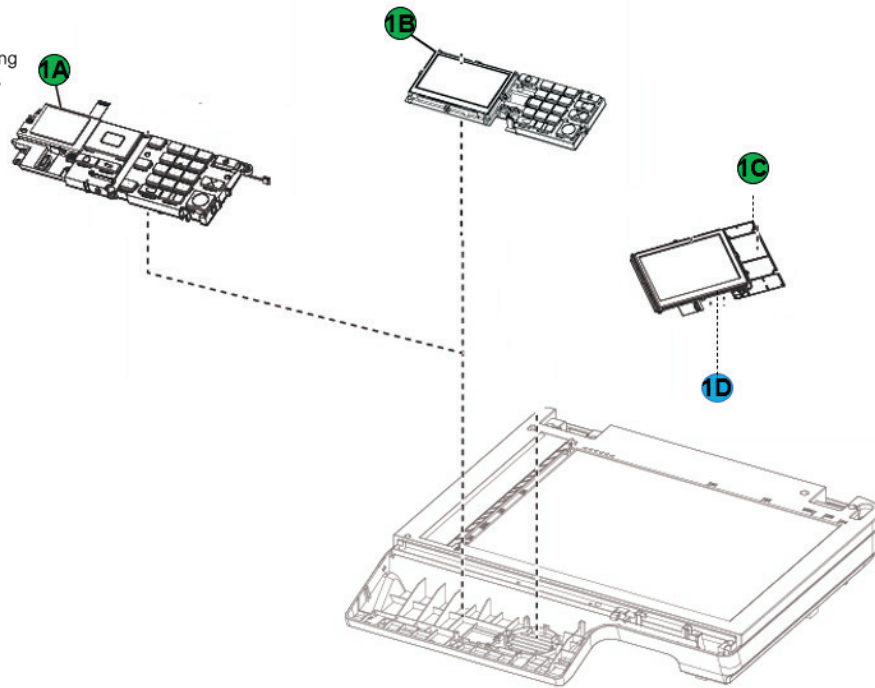


Figure 6.1: Control Panel

Table 6: Control Panel - Printed Circuit Boards >10cm² and Plastic with Brominated flame retardants

Item	Description
1A	2.4 in LCD Control panel display assembly UICC board
1B	4.3 in LCD Control panel display assembly UICC board
1C	7 in LCD Control panel display assembly UICC board
1D	7 in LCD display

Table Component Count (*without options*)

LCD>100cm² = 1
 PCBs>10cm² = 1
 BFR Plastics = 0
 Battery = 0

Section 7: Imaging ADF

- LCD > 100 cm²
- PCBs > 10 cm²
- Printer components containing Brominated flame retardants
- Battery

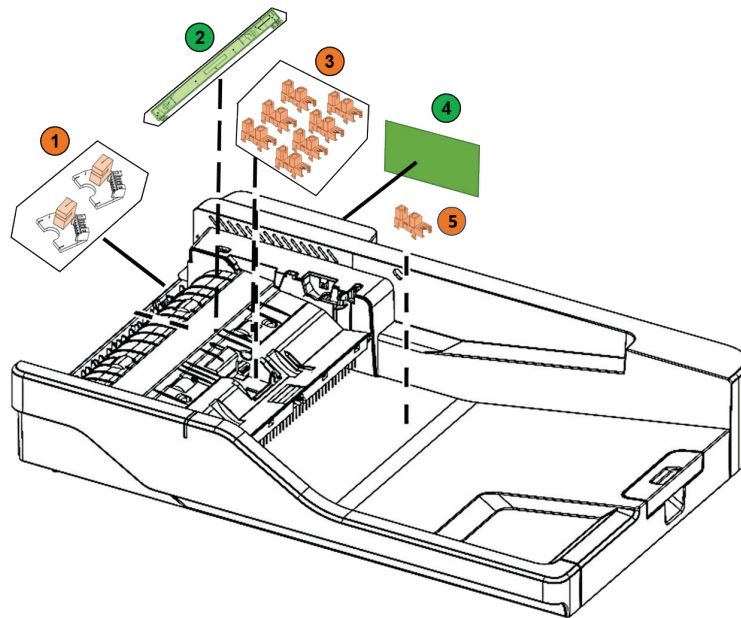


Figure 7.1: Imaging ADF

Table 7: Imaging ADF - Printed Circuit Boards >10cm² and Brominated Plastic Components

Item	Description
1	ADF motor sensors x 2
2	ADF CIS Scanbar PCBA within the ADF assembly
3	ADF paperpath sensors x 7
4	ADF Card within the ADF assembly
5	ADF Image sensor within the ADF assembly

Table Component Count (without options)

LCD>100cm ²	= 0
PCBs>10cm ²	= 2
BFR Plastics	= 10
Battery	= 0

Section 8: Flatbed Scanner

- LCD > 100 cm²
- PCBs > 10 cm²
- Printer components containing Brominated flame retardants
- Battery

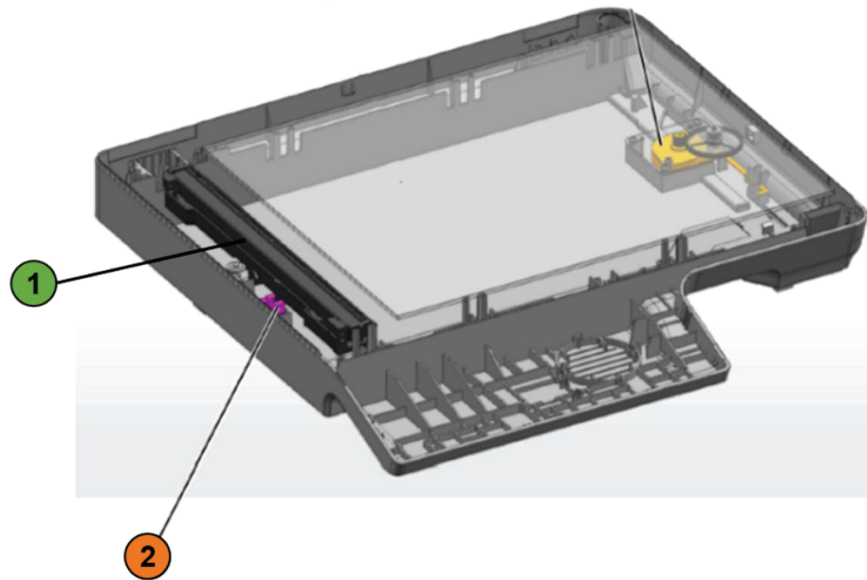


Figure 8.1: Imaging ADF

Table 8: Imaging ADF - Printed Circuit Boards >10cm² and Plastic with Brominated flame retardants

Item	Description
1	CIS Scanbar PCBA within Flatbed scanner frame
2	Image sensor within Flatbed scanner assembly

Table Component Count (*without options*)

LCD>100cm² = 0
 PCBs>10cm² = 1
 BFR Plastics = 1
 Battery = 0

Section 9: Electronics 1

- LCD > 100 cm²
- PCBs > 10 cm²
- Printer components containing Brominated flame retardants
- Battery

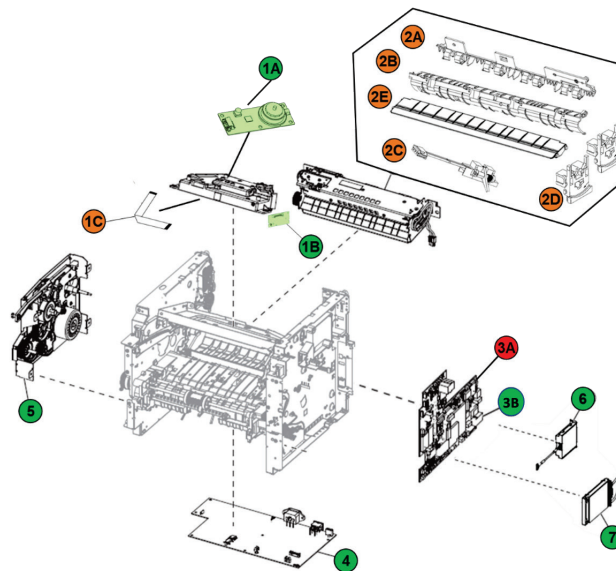


Figure 9.1: Electronics 1

Table 9: Electronics 1- Printed Circuit Boards >10cm² and Plastic with Brominated flame retardants

Item	Description
1A	Printhead card within the assembly
1B	Printhead driver card
1C	Printhead Tape
2A	Fuser – Guide - Lower Exit
2B	Fuser – Guide - Upper Exit
2C	Fuser – Passthru sensor/ Fuser exit sensor
2D	Fuser – Guide – Aligner Assembly (x2)
2E	Fuser – Guide – Lower input
3A	Battery within the Controller board
3B	Controller board
4	Power supply
5	Main drive gearbox BLDC motor board
6	Fax card
7	Hard disk drive (optional)

Table Component Count (without options)

LCD>100cm² = 0
 PCBs>10cm² = 7
 BFR Plastics = 8
 Battery = 1

Section 10: Electronics 2

- LCD > 100 cm²
- PCBs > 10 cm²
- Printer components containing Brominated flame retardants
- Battery

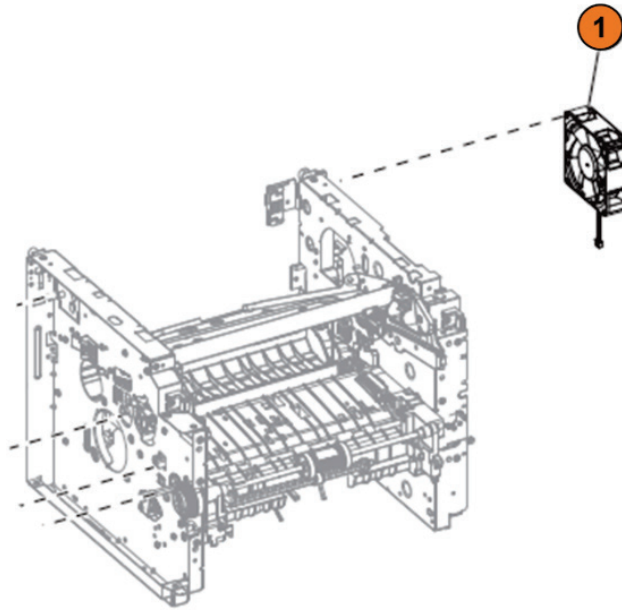


Figure 10.1: Electronics 2

Table 10: Electronics 2 - Printed Circuit Boards >10cm² and Plastic with Brominated flame retardants

Item	Description
1	Cooling Fan

Table Component Count (without options)

LCD>100cm ²	= 0
PCBs>10cm ²	= 0
BFR Plastics	= 1
Battery	= 0

Section 11: Electronics 3

- LCD > 100 cm²
- PCBs > 10 cm²
- Printer components containing Brominated flame retardants
- Battery

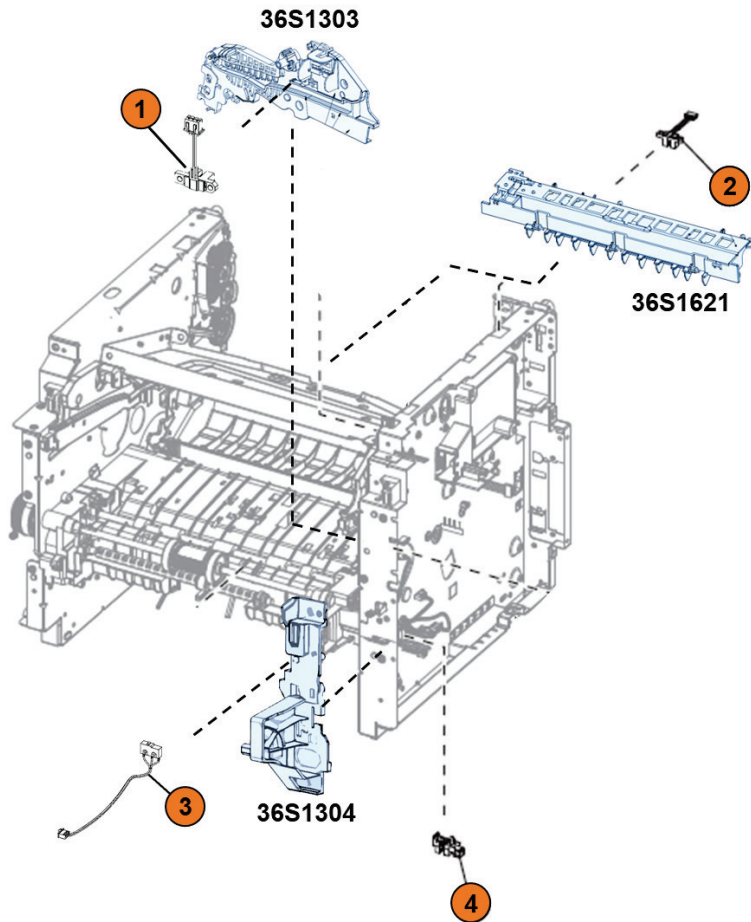


Figure 11.1: Electronics 3

Table 11: Electronics 3 - Printed Circuit Boards >10cm² and Plastic with Brominated flame retardants

Item	Description
1	Cartridge barrel sensor kit attached to Guide
2	Sensor (bin full) attached to Guide
3	Sensor (front door) attached to Mounting bracket
4	Sensor (tray present) attached to Guide

Table Component Count (without options)

LCD>100cm² = 0
 PCBs>10cm² = 0
 BFR Plastics = 4
 Battery = 0

Section 12: Electronics 4

- LCD > 100 cm²
- PCBs > 10 cm²
- Printer components containing Brominated flame retardants
- Battery

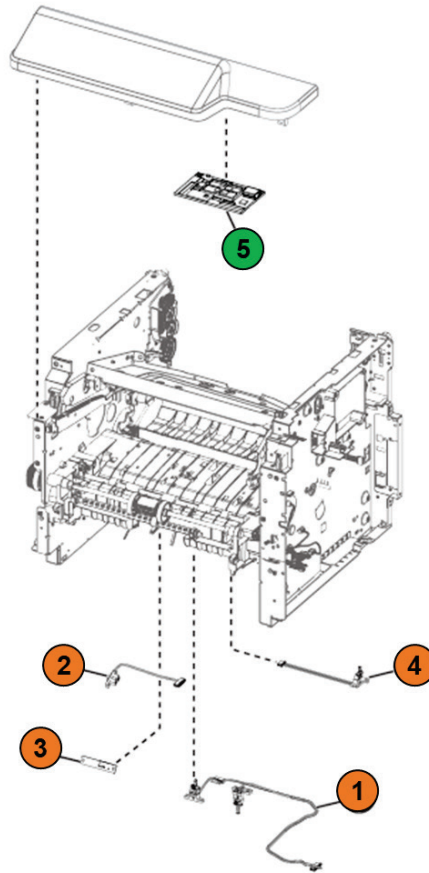


Figure 12.1: Electronics 4

Table 12: Electronics 4 - Printed Circuit Boards >10cm² and Plastic with Brominated flame retardants

Item	Description
1	Sensor (duplex and input)
2	Sensor (trailing edge)
3	Sensor (toner density)
4	Sensor (narrow media)
5	Wireless module card (This part is not applicable to MX-B467F)

Table Component Count (*without options*)

LCD>100cm² = 0
 PCBs>10cm² = 0
 BFR Plastics = 4
 Battery = 0

Section 13: MPF (Multi-purpose feeder)

- LCD > 100 cm²
- PCBs > 10 cm²
- Printer components containing Brominated flame retardants
- Battery

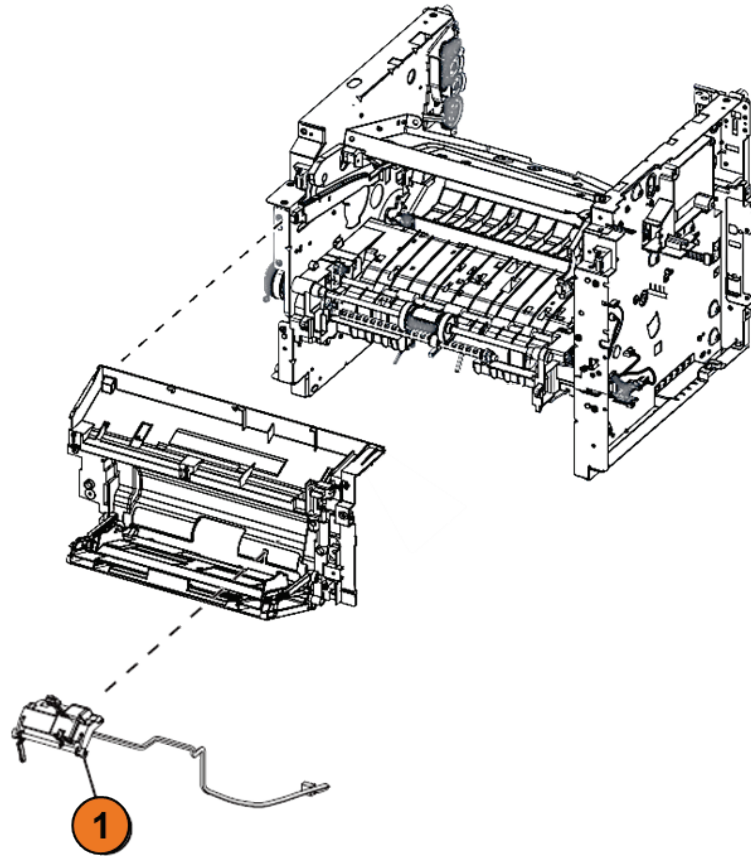


Figure 13.1: MPF (Multi-purpose feeder)

Table 13: MPF - Printed Circuit Boards >10cm² and Plastic with Brominated flame retardants

Item	Description
1	Sensor (MPF paper present)

Table Component Count (*without options*)

LCD>100cm² = 0
 PCBs>10cm² = 0
 BFR Plastics = 1
 Battery = 0

Section 14: Paper transport

- LCD > 100 cm²
- PCBs > 10 cm²
- Printer components containing Brominated flame retardants
- Battery

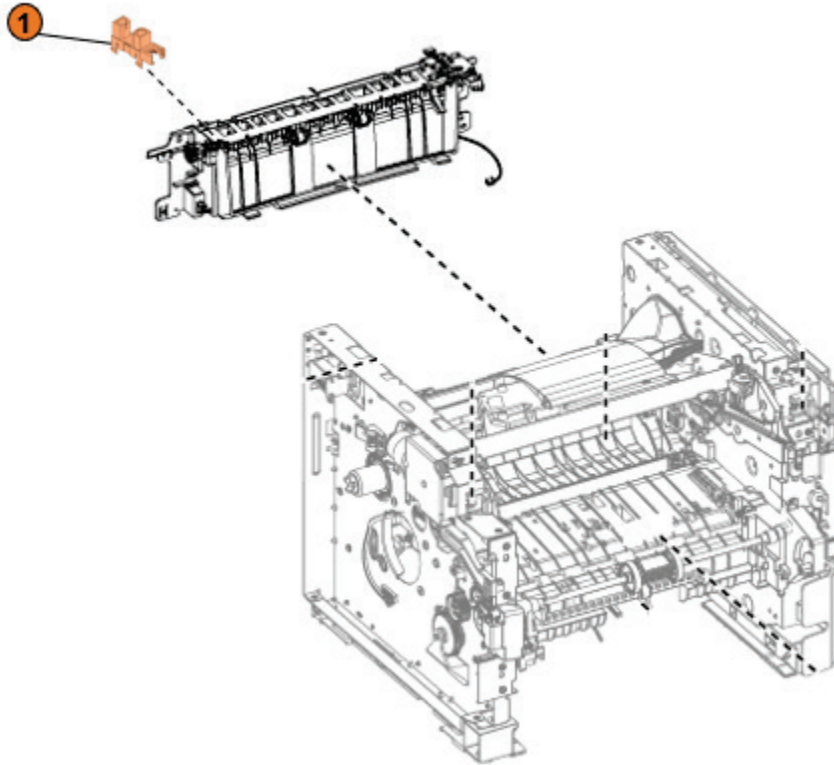


Figure 14.1: Paper transport

Table 14: Paper transport - Printed Circuit Boards >10cm² and Plastic with Brominated flame retardants

Item	Description
1	Sensor (Photointerrupt)
Table Component Count (without options)	
LCD>100cm ²	= 0
PCBs>10cm ²	= 0
BFR Plastics	= 1
Battery	= 0

Section 15: For Reference Only (Customer Replaceable Paper handling devices)

- LCD > 100 cm²
- PCBs > 10 cm²
- Printer components containing Brominated flame retardants
- Battery

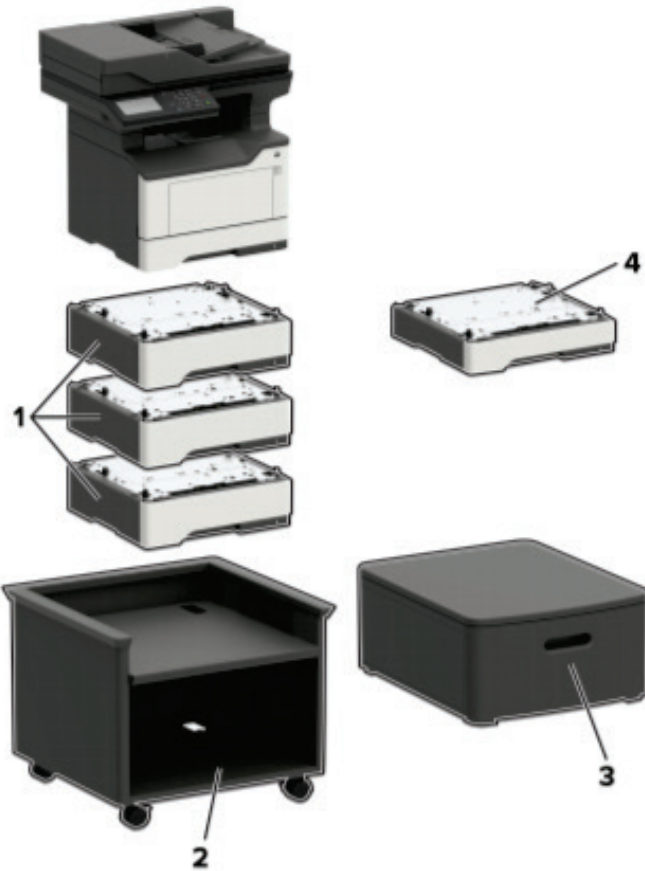


Figure 14.1: Customer Replaceable Paper Handling Devices

Table 14: For Reference Only (Customer Replaceable Paper Handling Devices)

Item	Description
1	550-sheet tray
2	Adjustable printer stand*
3	Swivel cabinet*
4	250-sheet tray

Options marked with (*) are non-Electrical and electronic units

Section 16: 250 / 550 Paper Handling Options

- LCD > 100 cm²
- PCBs > 10 cm²
- Printer components containing Brominated flame retardants
- Battery

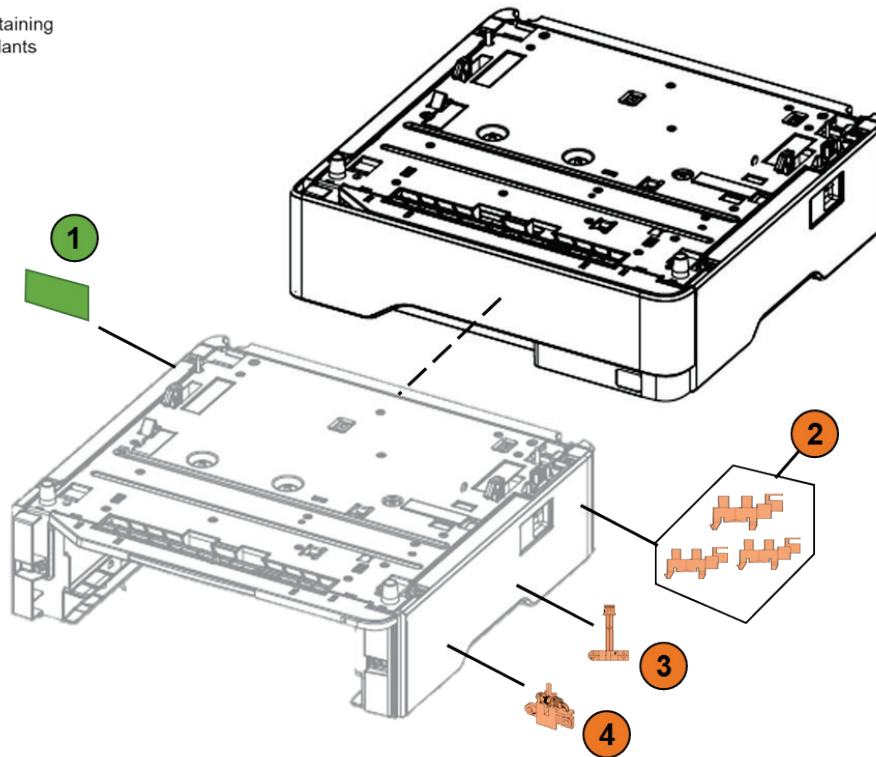


Figure 16.1: 250/550 Paper Handling Options

Table 16: 250/550 Paper Handling Options - Printed Circuit Boards >10cm² and Plastic with Brominated flame retardants

Item	Description
1	PHO card
2	Photointerrupter sensor x 3
3	CBM sensor
4	Trailing edge sensor

Table Component Count (*without options*)

LCD>100cm² = 0
 PCBs>10cm² = 1
 BFR Plastics = 5
 Battery = 0

Section 17: For Reference Only (Customer Replaceable External Card Options)

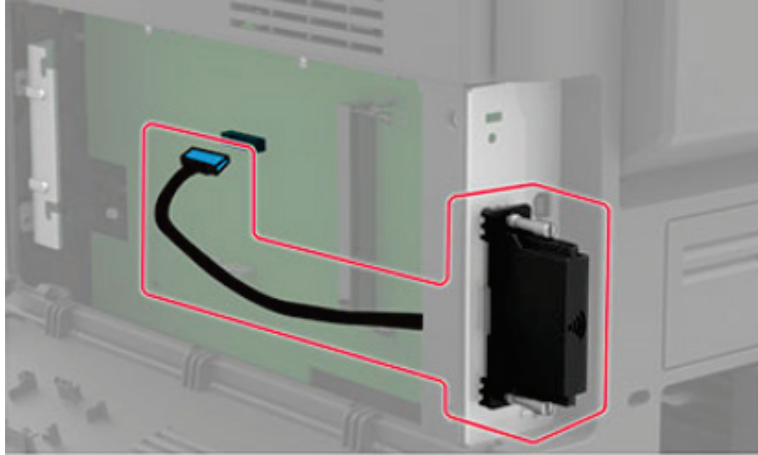


Figure 17.1 External Print Servers¹

Note 1: Illustration shows actual options and their typical locations and mounting at the rear side of the printer. However, this does not show the actual printer model.

Annex A – Printer components with Brominated^S Flame Retardants

Item	Description	Parts Marking	Qty	MX32x	MX42x MX52x	MX62x	Location
1	Fuser – Guide - Lower Exit	PET-(GF+MD)40 FR(17)	1	X	X	X	Electronics 1
2	Fuser – Guide - Upper Exit	PET-(GF+MD)40 FR(17)	1	X	X	X	Electronics 1
3	Fuser – Passthru sensor/ Fuser exit sensor	N/A	1	X	X	X	Electronics 1
4	Fuser – Guide – Aligner Assembly (x2)	PET-(GF+MD)40 FR(17)	2	X	X	X	Electronics 1
5	Fuser – Guide – Lower input	PET-(GF+MD)40 FR(17)	1	X	X	X	Electronics 1
6	Printhead Tape	N/A	1	X	X	X	Electronics 1
7	Cooling fan	N/A	1	X	X	X	Electronics 2
8	Cartridge barrel sensor kit	N/A	1	X	X	X	Electronics 3
9	Sensor (bin full)	N/A	1	X	X	X	Electronics 3
10	Sensor (front door)	N/A	1	X	X	X	Electronics 3
11	Sensor (tray present)	N/A	1	X	X	X	Electronics 3
12	Sensor (duplex and input)	N/A	1	X	X	X	Electronics 4
13	Sensor (trailing edge)	N/A	1	X	X	X	Electronics 4
14	Sensor (toner density)	N/A	1	X	X	X	Electronics 4
15	Sensor (narrow media)	N/A	1	X	X	X	Electronics 4
16	Sensor (MPF paper present)	N/A	1	X	X	X	MPF
17	Sensor (Photo)	N/A	1	X	X	X	Paper transport
18	ADF motor sensors x 2	N/A	2	X	X	X	Imaging ADF
19	ADF Image sensor within the ADF assembly	N/A	1	X	X	X	Imaging ADF
20	ADF paperpath sensors x 7	N/A	7	X	X	X	Imaging ADF
21	Photointerrupter sensor within Flatbed scanner frame	N/A	1	X	X	X	Flatbed Scanner
22	Photointerrupter sensor within the Base tray assembly x 3	N/A	3	optional	optional	optional	250 / 550 Paper Handling Options
23	CBM sensor within the Base tray assembly	N/A	1	optional	optional	optional	250 / 550 Paper Handling Options
24	Trailing edge sensor within the Base tray assembly	N/A	1	optional	optional	optional	250 / 550 Paper Handling Options
Minimum Count (without options) =			25				

Annex B – Printed Circuit Boards >10cm²

Item	Description	Qty	MX32x	MX42x MX52x	MX62x	Location
1A	2.4 in Control panel display assembly	1	X			Control panel
1B	4.3 in Control panel display assembly	1		X		Control panel
1C	7 in Control panel display assembly	1			X	Control panel
2	Printhead card within the assembly	1	X	X	X	Electronics 1
3	Printhead driver card	1	X	X	X	Electronics 1
4	Controller board	1	X	X	X	Electronics 1
5	Power supply	1	X	X	X	Electronics 1
6	Main drive gearbox BLDC motor board	1	X	X	X	Electronics 1
7	Hard disk drive (HDD)	1	Optional	Optional	Optional	Electronics 1
8	Fax card	1	X	X	X	Electronics 1
9	Wireless module card	1	Optional	Optional	Optional	Electronics 4
10	PHO card within the Base tray assembly	1	X	X	X	250 / 550 Paper Handling Options
12	ADF Card within the ADF assembly	1	X	X	X	Imaging ADF
13	ADF CIS Scanbar PCBA within the ADF assembly	1	X	X	X	Imaging ADF
14	CIS Scanbar PCBA within Flatbed scanner frame	1	X	X	X	Flatbed Scanner
Minimum Count (without options) =		11				

Annex C – Electrical and Electronic (EE) Customer Replaceable Paper handling devices

Item	PN	Description	MX32x, MX42x, MX52x MX62x	Locations
1	36S2910	550-sheet tray	X	Paper handling devices
2	36S2920	550-sheet lockable tray		
3	36S3110	250-sheet tray		
4	36S3120	550-sheet tray		

Annex D – Electrical and Electronic (EE) Customer Replaceable Internal/ External Card Options

Item	PN	Description	MX32x	MX42x MX52x	MX62x	Locations
1	57X9801	Memory options	X	X	X	Attached to Controller board
2	57X0185	Security card			X	
3	40C9200 40C9201 40C9202	Firmware cards (Forms and Bar code, Prescribe, IPDS)		X	X	
4	57X9810 57X9812 57X9814 57X9815	Font cards	X	X	X	
5	27X0900 27X0901 27X0912	Interface cards			X	
6	27X6410	Print Server			X	External option