

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 group together in series and are mechanically equivalent

Lexmark MX532adwe

Lexmark MX632adwe

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>Minimum Count = 12</u> ***** For details, see Annex B ***** <u>Options:</u> 1 – Hard disk drive 1 – 250/ 550 Sheet Tray ***** Note: Fax is standard |
| 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>Minimum Count = 24</u> ***** For details, See Annex A ***** <u>Options:</u> <u>+5</u> – 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

Please note: Graphic illustrations contained in this document may differ slightly from actual components

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 (without options) | |
| 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

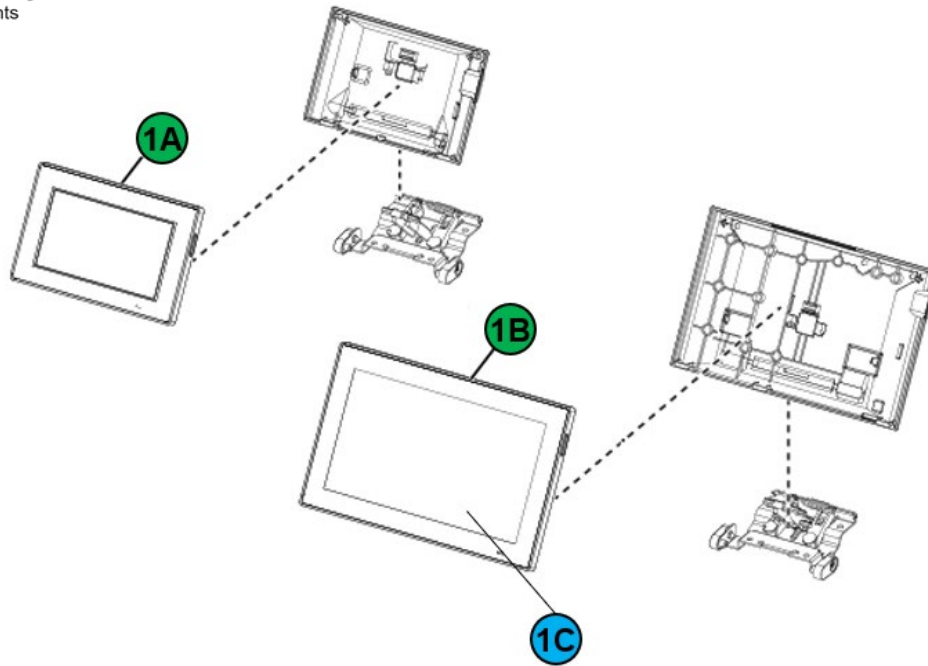


Figure 6.1: Control Panel

| Table 6: Control Panel - Printed Circuit Boards >10cm² and Plastic with Brominated flame retardants | |
|--|---|
| Item | Description |
| 1A | Control panel display assembly UICC board |
| 1B | Control panel display assembly UICC board |
| 1C | 7" LCD display |
| Table Component Count (without options) | |
| LCD>100cm ² = 1 | |
| PCBs>10cm ² = 1 | |
| BFR Plastics = 0 | |
| Battery = 0 | |

Section 7: Imaging ADF

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

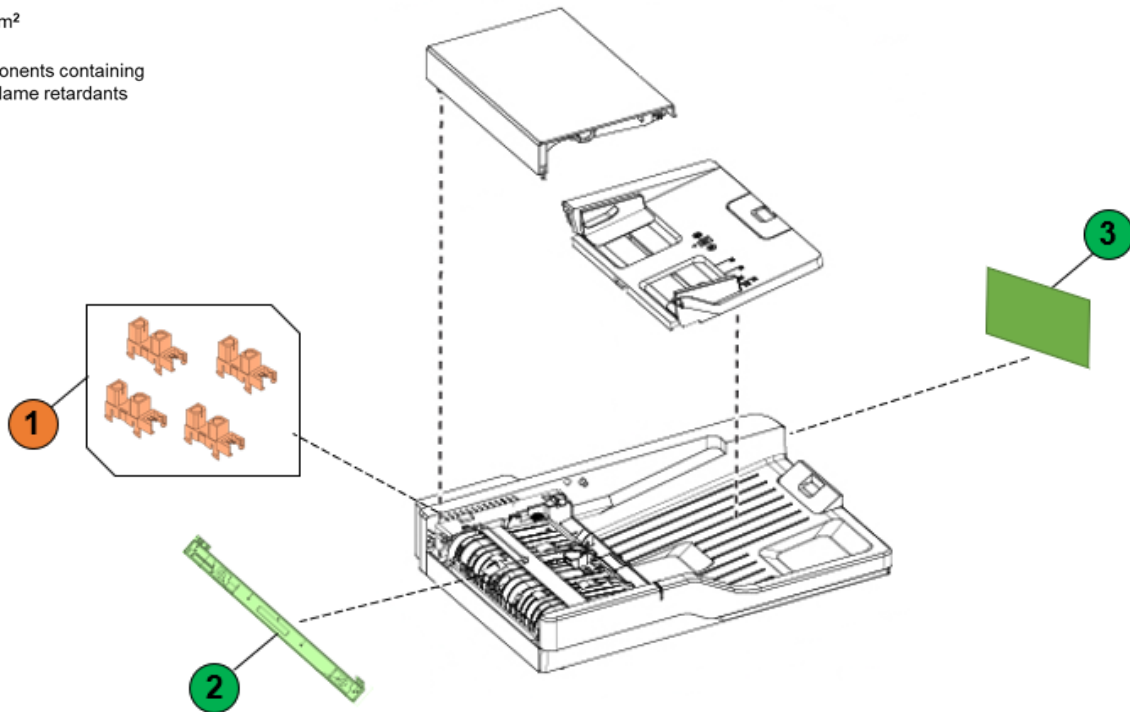


Figure 7.1: Imaging ADF

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

| Item | Description |
|------|--|
| 1 | ADF sensors (photo) x 4 |
| 2 | ADF CIS Scanbar PCBA within the ADF assembly |
| 3 | ADF Card within the ADF assembly |

Table Component Count (without options)

| | |
|------------------------|-----|
| LCD>100cm ² | = 0 |
| PCBs>10cm ² | = 2 |
| BFR Plastics | = 4 |
| Battery | = 0 |

Section 8: Flatbed Scanner

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

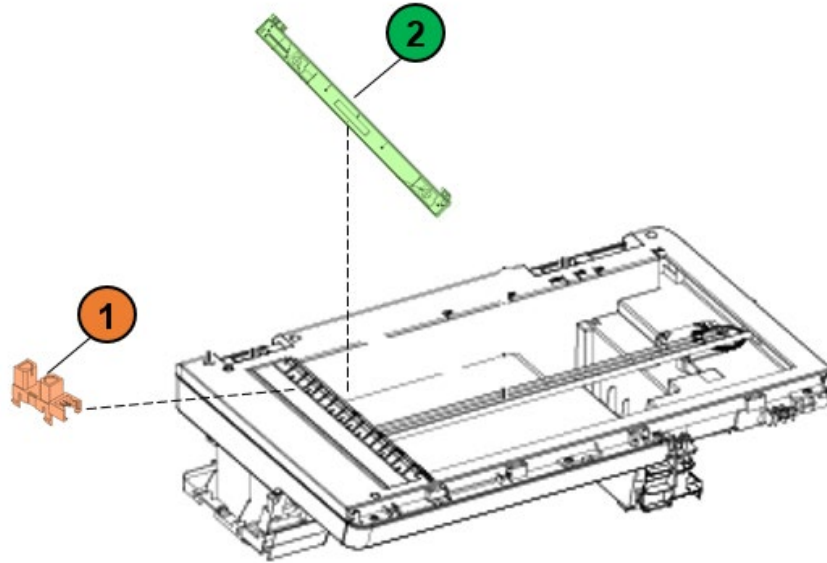


Figure 8.1: Imaging ADF

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

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

Table Component Count (*without options*)

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

Section 9: Electronics

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

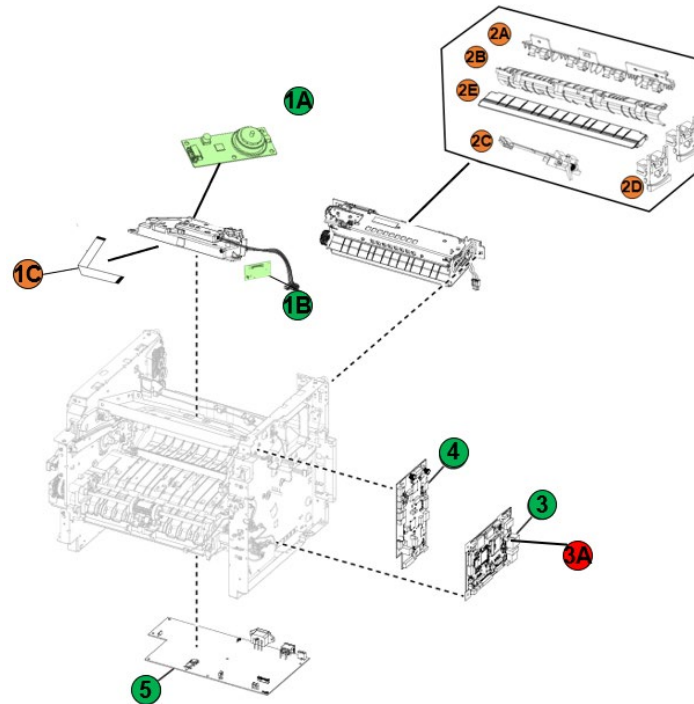


Figure 9.1: Electronics

Table 9: Electronics - 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 |
| 3 | Controller board |
| 3A | Battery within the Controller board |
| 4 | Engine board |
| 5 | Power supply |

Table Component Count (without options)

LCD>100cm² = 0
 PCBs>10cm² = 5
 BFR Plastics = 7
 Battery = 1

Section 10: Motors

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

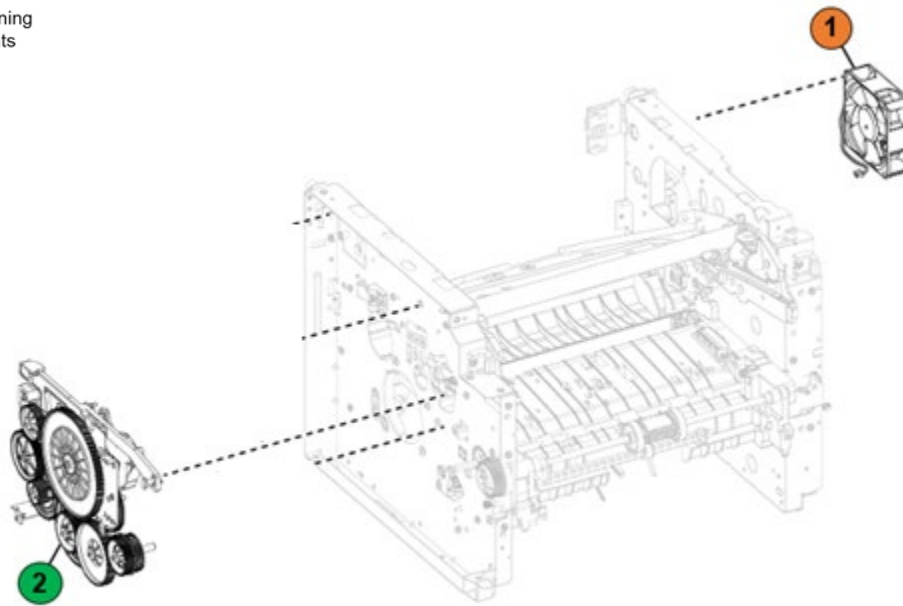


Figure 10.1: Motors

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

| Item | Description |
|------|-------------------------------------|
| 1 | Cooling Fan |
| 2 | Main drive gearbox BLDC motor board |

Table Component Count (*without options*)

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

Section 11: Sensors 1

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

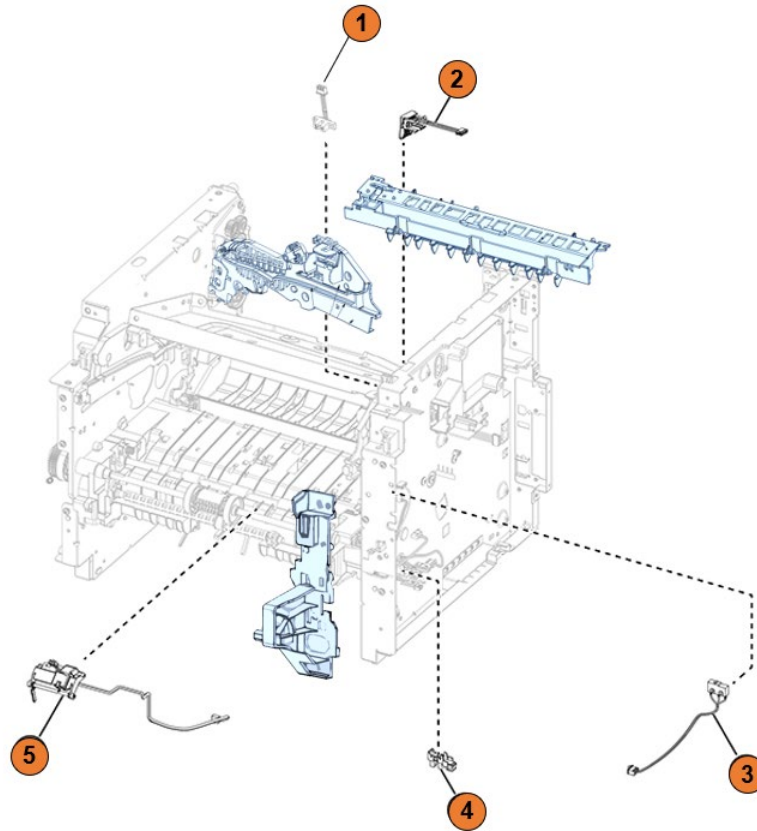


Figure 11.1: Sensors 1

Table 11: Sensors 1 - Printed Circuit Boards >10cm² and Plastic with Brominated flame retardants

| Item | Description |
|------|------------------------------------|
| 1 | Sensor (cartridge barrel) |
| 2 | Toner cartridge smart chip contact |
| 3 | Sensor (front door) |
| 4 | Sensor (tray present) |
| 5 | Sensor (MPF paper present) |

Table Component Count (without options)

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

Section 12: Sensors 2

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

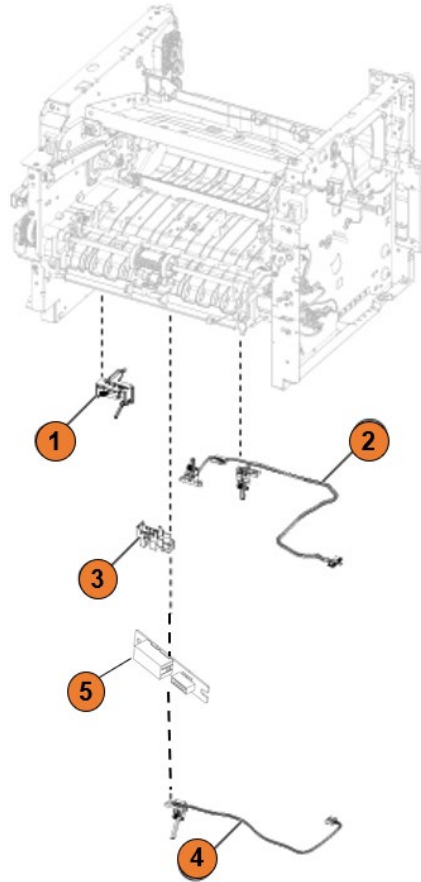


Figure 12.1: Sensors 2

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

| Item | Description |
|------|------------------------------|
| 1 | Sensor (Trailing edge) |
| 2 | Sensor (Duplex and input) 2x |
| 3 | Sensor (Paper present) |
| 4 | Sensor (Index) |
| 5 | Sensor (Toner density kit) |

Table Component Count (*without options*)

LCD>100cm² = 0
 PCBs>10cm² = 0
 BFR Plastics = 6
 Battery = 0

Section 13: Electronic attachments

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

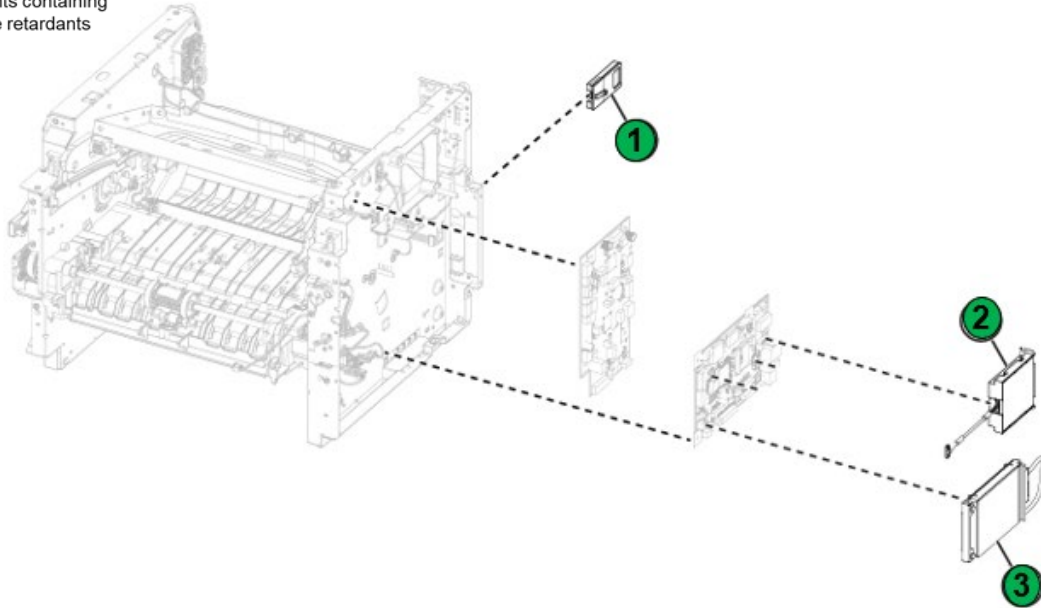


Figure 13.1: Electronic attachments

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

| Item | Description |
|------|-----------------------|
| 1 | Wireless card |
| 2 | Fax card |
| 3 | Hard drive (optional) |

Table Component Count (*without options*)

LCD>100cm² = 0
 PCBs>10cm² = 2
 BFR Plastics = 0
 Battery = 0

Section 14: For Reference Only (Customer Replaceable Paper handling devices)

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

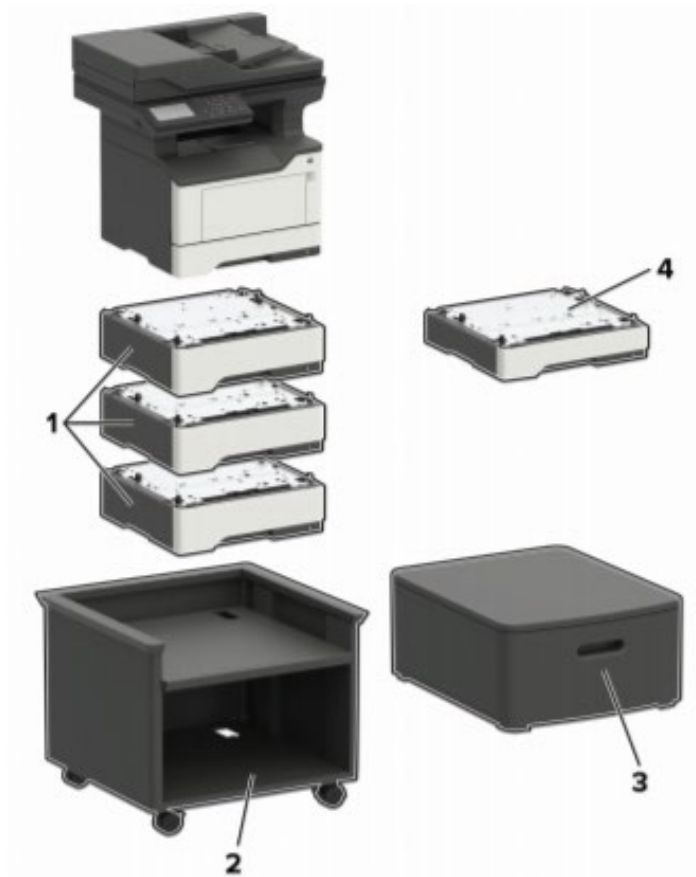


Figure 14.1: Customer Replaceable Paper Handling Devices

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 15: 250 / 550 Paper Handling Options

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

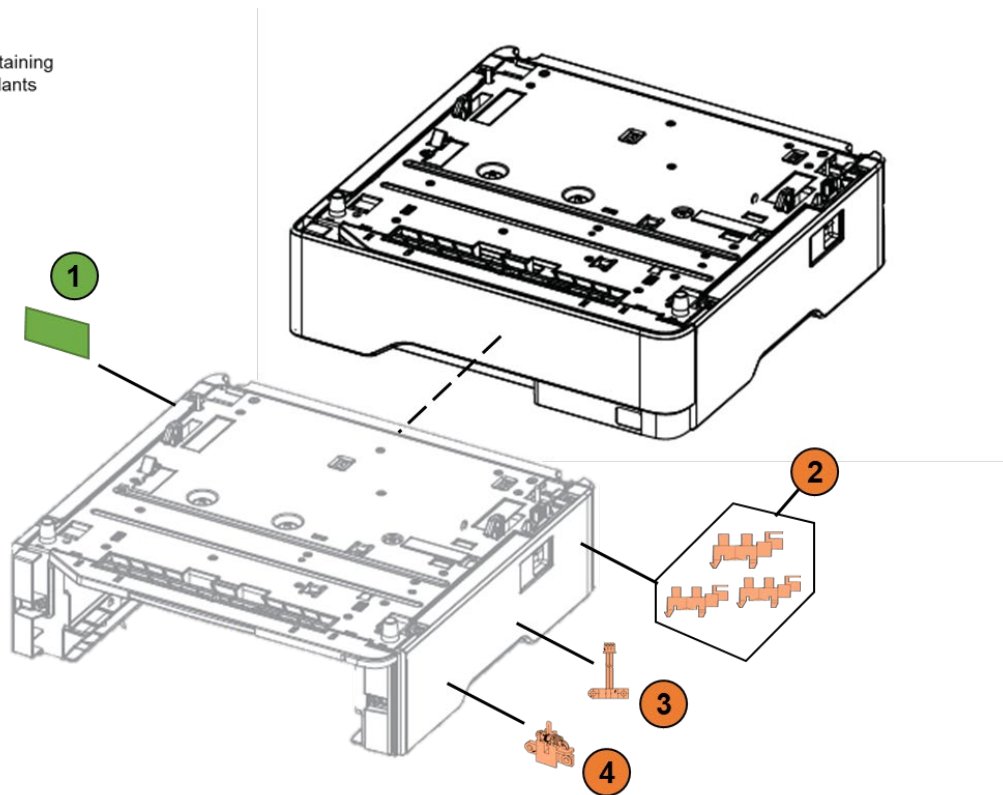


Figure 15.1: 250/550 Paper Handling Options

Table 15: 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 = 0
 BFR Plastics = 0
 Battery = 0

Section 16: For Reference Only (Customer Replaceable External Card Options)

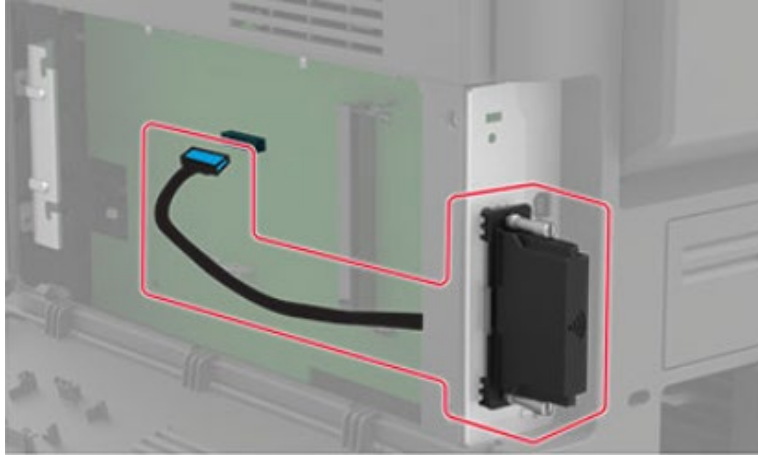


Figure 15.1 External Print Servers¹

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 | MX532 | MX632 | Location |
|--|---|-------------------------|-----------|----------|----------|--|
| 1 | Fuser – Guide - Lower Exit | PET-(GF+MD)40 FR(17) | 1 | X | X | Electronics |
| 2 | Fuser – Guide - Upper Exit | PET-(GF+MD)40 FR(17) | 1 | X | X | Electronics |
| 3 | Fuser – Passthru sensor/ Fuser exit sensor | N/A | 1 | X | X | Electronics |
| 4 | Fuser – Guide – Aligner Assembly (x2) | PET-(GF+MD)40 FR(17) | 2 | X | X | Electronics |
| 5 | Fuser – Guide – Lower input | PET-(GF+MD)40 FR(17) | 1 | X | X | Electronics |
| 6 | Printhead Tape | N/A | 1 | X | X | Electronics |
| 7 | Cooling fan | N/A | 1 | X | X | Motors |
| 8 | Sensor (cartridge barrel) | N/A | 1 | X | X | Sensors 1 |
| 9 | Toner cartridge smart chip contact | N/A | 1 | X | X | Sensors 1 |
| 10 | Sensor (front door) | N/A | 1 | X | X | Sensors 1 |
| 11 | Sensor (MPF Paper present) | N/A | 1 | X | X | Sensors 1 |
| 12 | Sensor (tray present) | N/A | 1 | X | X | Sensors 1 |
| 13 | Sensor (Trailing edge) | N/A | 1 | X | X | Sensors 2 |
| 14 | Sensor (Duplex and input) | N/A | 2 | X | X | Sensors 2 |
| 15 | Sensor (Paper present) | N/A | 1 | X | X | Sensors 2 |
| 16 | Sensor (Index) | N/A | 1 | X | X | Sensors 2 |
| 17 | Sensor (Toner density kit) | N/A | 1 | X | X | Sensors 2 |
| 18 | ADF sensors (photo) | N/A | 4 | X | X | Imaging ADF |
| 19 | Photointerrupter sensor within Flatbed scanner frame | N/A | 1 | X | X | Flatbed Scanner |
| 20 | Photointerrupter sensor within the Base tray assembly x 3 | N/A | 3 | Optional | Optional | 250 / 550 Paper Handling Options |
| 21 | CBM sensor within the Base tray assembly | N/A | 1 | Optional | Optional | 250 / 550 Paper Handling Options |
| 22 | Trailing edge sensor within the Base tray assembly | N/A | 1 | Optional | Optional | 250 / 550 Paper Handling Options |
| Minimum Count (without Options) = | | | 24 | | | |

Annex B – Printed Circuit Boards >10cm²

| Item | Description | Qty | MX532 | MX632 | Location |
|--|---|-----------|----------|----------|--|
| 1A | Control panel display assembly UICC board | 1 | X | | Control panel |
| 1B | 7" Control panel display assembly UICC board | 1 | | X | Control panel |
| 2 | Printhead card within the assembly | 1 | X | X | Electronics |
| 3 | Printhead driver card | 1 | X | X | Electronics |
| 4 | Controller board | 1 | X | X | Electronics |
| 5 | Power supply | 1 | X | X | Electronics |
| 6 | Engine board | 1 | X | X | Electronics |
| 7 | Main drive gearbox BLDC motor board | 1 | X | X | Motors |
| 8 | Hard disk drive (HDD) | 1 | Optional | Optional | Electronics attachments |
| 9 | Fax card | 1 | X | X | Electronics attachments |
| 10 | Wireless module card | 1 | X | X | Electronics attachments |
| 11 | PHO card within the Base tray assembly | 1 | Optional | Optional | 250 / 550 Paper Handling Options |
| 12 | ADF Card within the ADF assembly | 1 | X | X | Imaging ADF |
| 13 | ADF CIS Scanbar PCBA within the ADF assembly | 1 | X | X | Imaging ADF |
| 14 | CIS Scanbar PCBA within Flatbed scanner frame | 1 | X | X | Flatbed Scanner |
| Minimum Count (without Options) = | | 12 | | | |

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

| Item | PN | Description | All models | Locations |
|------|---------|----------------|------------|------------------------|
| 1 | 38S3110 | 550-sheet tray | Optional | Paper handling devices |
| 2 | 38S2910 | 250-sheet tray | | |

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

| Item | PN | Description | All models | Locations |
|------|---------|-------------------|------------|------------------------------|
| 1 | 40X9934 | Printer hard disk | Optional | Attached to Controller board |
| 2 | 41X4177 | Wireless card | X | |