# **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 MX632 MX632adwe, XM3350

### **Section 2:** Materials and components list for selective treatment

<u>Table 2:</u> 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</u> = <u>1</u>
		Lithium Manganese Oxide coin cell located on the Controller card
Printed circuit boards greater than 10 cm <sup>2</sup>	multiple	**************************************
		For details, see Annex B
		Options:  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
Plastic component(s) that may contain BFR (brominated§ flame	multiple	******
retardants)  Note (§) - This product may contain plastic parts with brominated flame retardants. Recycler should treat these parts separately. See section 4.3 Disclaimer.		Minimum Count = 24  For details, See Annex A  ********  Options:  +5 - for each 250/ 550  Paper handling  ***********************************
Asbestos waste and components which contain asbestos	0	N/A
Cathode ray tubes Chlorofluorocarbons (CFC), Hydrochlorofluorocarbons (HCFC) or	0	N/A N/A
Hydrofluorocarbons (HFC), Hydrocarbons (HC) Gas discharge lamps	0	N/A
Liquid Crystal Display (LCD) greater than 100 cm <sup>2</sup> and those backlighted 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 (capacitors with height > 25 mm, diameter > 25 mm or proportionately similar volume)	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

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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

CD > 100 cm<sup>2</sup>

PCBs > 10 cm<sup>2</sup>

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).

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# Section 5: Supplies

- CD > 100 cm<sup>2</sup>
- PCBs > 10 cm<sup>2</sup>
- Printer components containing Brominated flame retardants

Battery

Battery



Figure 5.1: Toner Cartridge



Figure 5.2: Imaging Unit

	<b>6:</b> Supplies – Printed Circuit Boards >10cm <sup>2</sup> and Plastic with Brominated retardants
Item	Description
	None
Table Composition  LCD>100cm² = PCBs>10cm² = BFR Plastics =	0

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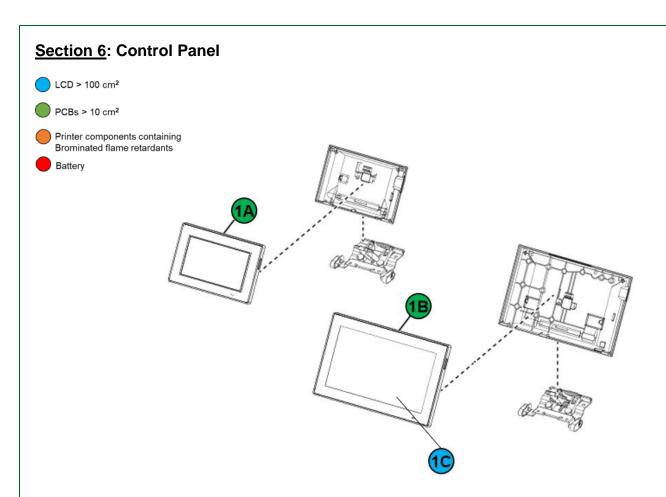


Figure 6.1: Control Panel

	<b>Table 6:</b> Control Panel - Printed Circuit Boards >10cm <sup>2</sup> 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 <sup>2</sup> = 1  PCBs>10cm <sup>2</sup> = 1  BFR Plastics = 0  Battery = 0		

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# Section 7: Imaging ADF

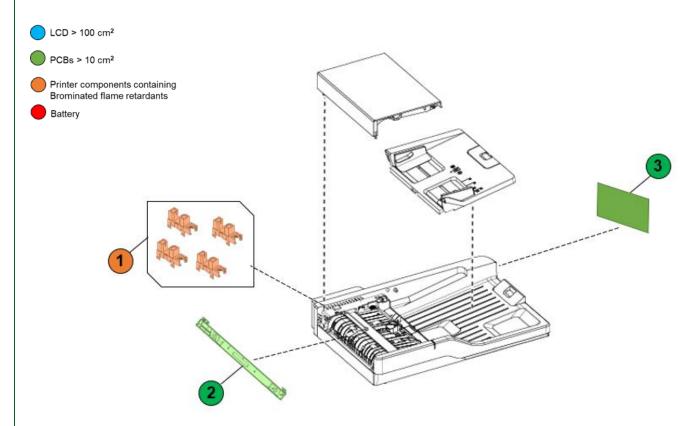


Figure 7.1: Imaging ADF

	<u>Table 7:</u> Imaging ADF - Printed Circuit Boards >10cm <sup>2</sup> 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 <sup>2</sup> = 0  PCBs>10cm <sup>2</sup> = 2  BFR Plastics = 4  Battery = 0	

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# **Section 8: Flatbed Scanner**

- CD > 100 cm<sup>2</sup>
- PCBs > 10 cm<sup>2</sup>
- Printer components containing Brominated flame retardants
- Battery

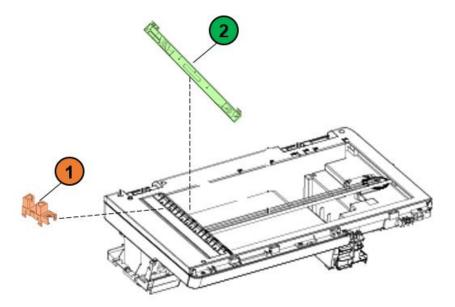


Figure 8.1: Imaging ADF

<u>Table 8</u> : Imaging ADF - Printed Circuit Boards >10cm <sup>2</sup> and Plastic with Brominated flame retardants	
Item	Description
1	Image sensor within Flatbed scanner assembly
2	CIS Scanbar PCBA within Flatbed scanner frame
Table Co LCD>100 PCBs>10 BFR Plas Battery	$cm^2 = 1$

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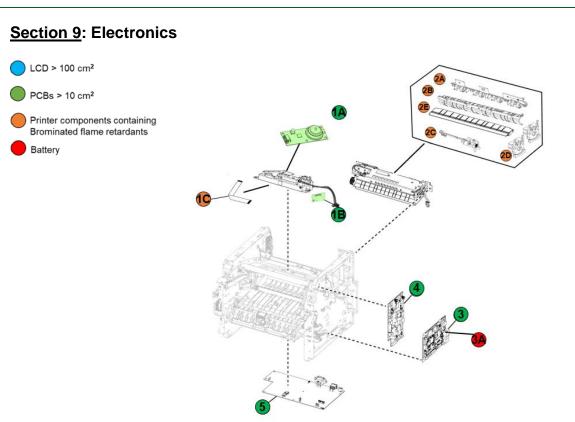


Figure 9.1: Electronics

flame retardants	
Item	Description
1 <b>A</b>	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>100cm <sup>2</sup> = 0  PCBs>10cm <sup>2</sup> = 5  BFR Plastics = 7  Battery = 1	

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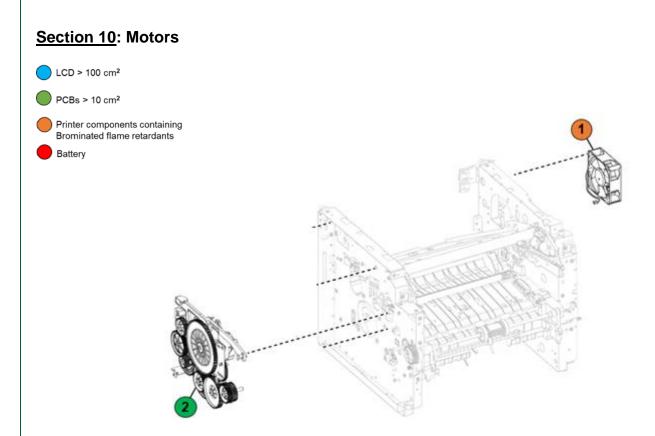


Figure 10.1: Motors

	<u>Table 10</u> : Motors - Printed Circuit Boards >10cm <sup>2</sup> and Plastic with Brominated flame retardants
Item	Description
1	Cooling Fan
2	Main drive gearbox BLDC motor board
LCD> PCBs: BFR P	Component Count (without options)  100cm² = 0 >10cm² = 1  Plastics = 1  y = 0

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# Section 11: Sensors 1

LCD > 100 cm<sup>2</sup>

PCBs > 10 cm<sup>2</sup>

Printer components containing Brominated flame retardants

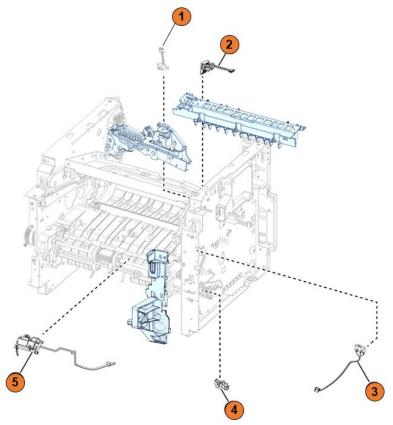


Figure 11.1: Sensors 1

Table 11: Sensors 1 - Printed Circuit Boards > 10cm <sup>2</sup> and Plastic with Brominated flar	me
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>100cm<sup>2</sup> = 0 PCBs>10cm<sup>2</sup> = 0 BFR Plastics = 5

= 0 Battery

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#### Section 12: Sensors 2

LCD > 100 cm<sup>2</sup>

PCBs > 10 cm<sup>2</sup>

Printer components containing Brominated flame retardants

Battery

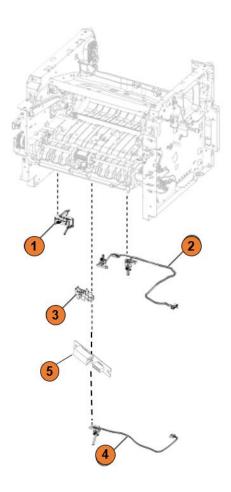


Figure 12.1: Sensors 2

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

	name retardants	
Item	Description	
1	Sensor (Trailing edge)	
2	Sensor (Duplex and input) 2x	
3	Sensor (Paper present)	
4	Sensor (Index)	

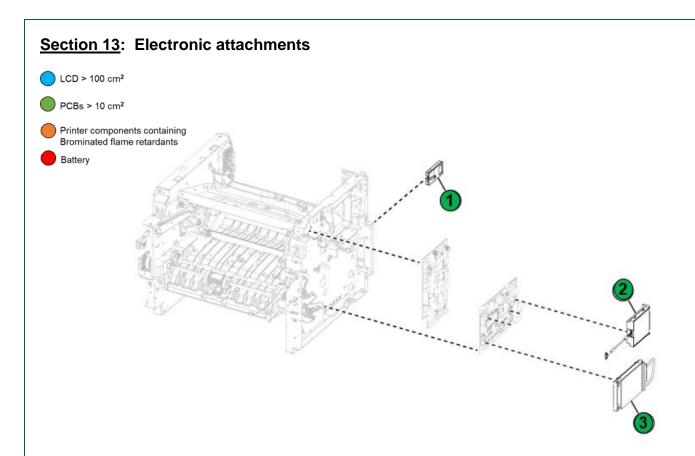
#### **Table Component Count** (without options)

Sensor (Toner density kit)

 $LCD>100cm^2 = 0$   $PCBs>10cm^2 = 0$   $BFR \ Plastics = 6$  Battery = 0

5

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**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)
LCD>10 PCBs>1 BFR Pla	omponent Count (without options) $00cm^2 = 0$ $10cm^2 = 2$ astics = 0 = 0

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

CD > 100 cm<sup>2</sup>

PCBs > 10 cm<sup>2</sup>

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				

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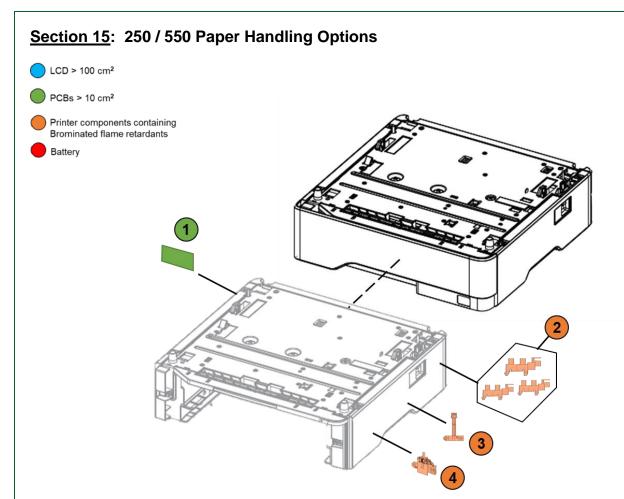


Figure 15.1: 250/550 Paper Handling Options

	<u>Table 15</u> : 250/550 Paper Handling Options - Printed Circuit Boards >10cm <sup>2</sup> 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>100cm <sup>2</sup> = 0  PCBs>10cm <sup>2</sup> = 0  BFR Plastics = 0  Battery = 0						

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

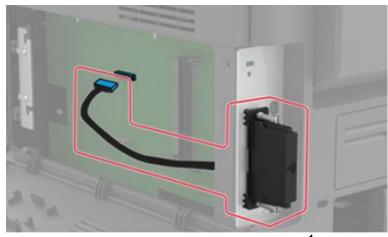


Figure 15.1 External Print Servers<sup>1</sup>

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

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 $\underline{\textbf{Annex A}} - \textbf{Printer components with Brominated} \\ \S \ \textbf{Flame Retardants}$ 

1	Fuser – Guide - Lower Exit Fuser – Guide - Upper	PET-(GF+MD)40				
	Fuser – Guide - Upper	FR(17)	1	X	Х	<u>Electronics</u>
2	Exit	PET-(GF+MD)40 FR(17)	1	Х	X	<u>Electronics</u>
3	Fuser – Passthru sensor/ Fuser exit sensor	N/A	1	X	X	<u>Electronics</u>
4	Fuser – Guide – Aligner Assembly (x2)	PET-(GF+MD)40 FR(17)	2	X	X	<u>Electronics</u>
5	Fuser – Guide – Lower input	PET-(GF+MD)40 FR(17)	1	X	Χ	<u>Electronics</u>
6	Printhead Tape	N/A	1	X	X	<u>Electronics</u>
7	Cooling fan	N/A	1	X	X	<u>Motors</u>
8	Sensor (cartridge barrel)	N/A	1	X	X	Sensors 1
9	Toner cartridge smart chip contact	N/A	1	X	Χ	Sensors 1
10	Sensor (front door)	N/A	1	Χ	Χ	Sensors 1
11	Sensor (MPF Paper present)	N/A	1	X	Χ	Sensors 1
12	Sensor (tray present)	N/A	1	X	Χ	Sensors 1
13	Sensor (Trailing edge)	N/A	1	Χ	Χ	Sensors 2
14	Sensor (Duplex and input)	N/A	2	X	Χ	Sensors 2
15	Sensor (Paper present)	N/A	1	Χ	Χ	Sensors 2
16	Sensor (Index)	N/A	1	X	X	Sensors 2
17	Sensor (Toner density kit)	N/A	1	X	Χ	Sensors 2
18	ADF sensors (photo)	N/A	4	X	X	Imaging ADF
19	Photointerrupter sensor within Flatbed scanner frame	N/A	1	Х	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						

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# $\underline{\textbf{Annex B}} - \text{Printed Circuit Boards} > 10 \text{cm}^2$

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

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

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

### 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
2	41X4177	Wireless card	X	Controller board

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