

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 MS32x series

MS321dn, B2338dw

Lexmark MS42x series

MS421dn, MS421dw, B2442dw, M1242

Lexmark MS52x series –

MS521dn, B2546dn, M1246

Lexmark MS62x series –

MS621dn, MS621dw, B2650dn, M3250

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 = 7</u> For details, see Annex B ***** <u>Options:</u> 1 – 250/ 550 Sheet Tray *****
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 ^s flame retardants)	multiple	***** <u>Minimum Count = 18</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 fibers	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 reuse 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

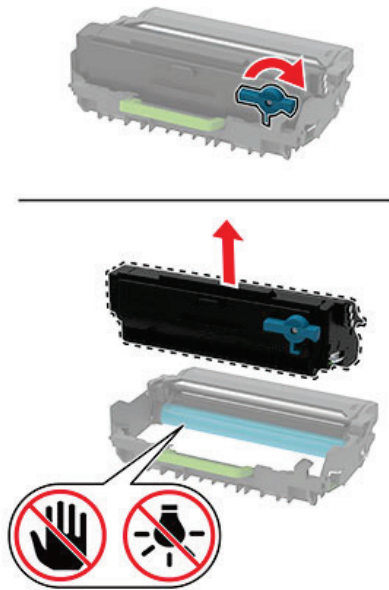


Figure 5.2: Imaging Unit

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

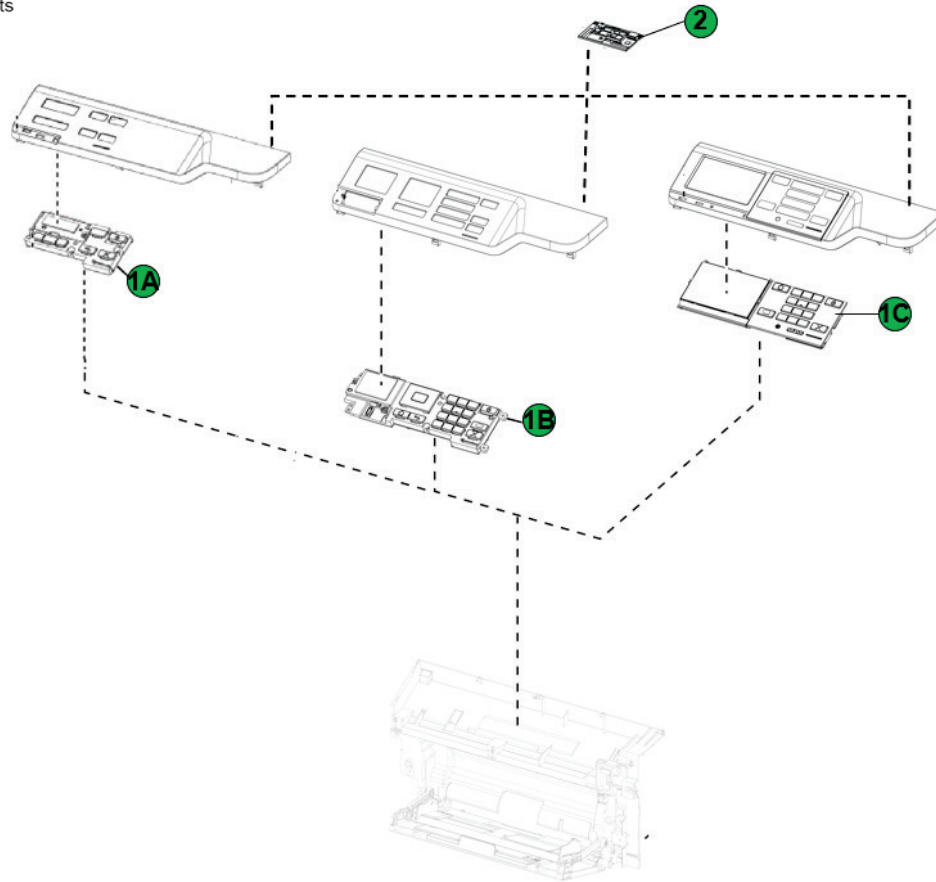


Figure 6.1: Control Panel

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

Item	Description
1A	2 line APA LCD Control panel display assembly
1B	2.4in LCD Control panel display assembly
1C	4.3in LCD Control panel display assembly
2	Integrated wireless card

Table Component Count (*without options*)

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

Section 7: Electronics 1

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

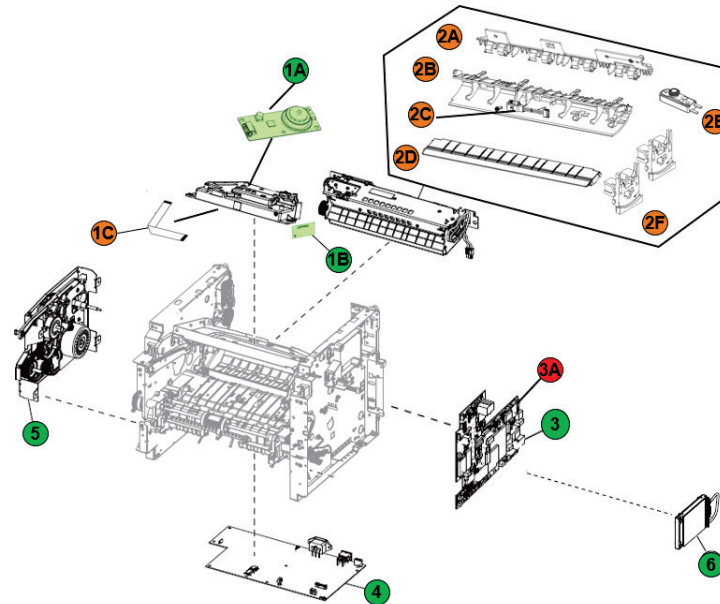


Figure 9.1: Electronics 1

Table 7: 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 - Upper Exit
2B	Fuser – Guide - Lower Exit
2C	Fuser – Passthru sensor/ Fuser exit sensor
2D	Fuser – Guide – Lower input
2E	Sensor Fuser TCO
2F	Fuser – Guide – Aligner Assembly (x2)
3A	Battery within the Controller board
3	Controller board
4	Power supply
5	Main drive gearbox BLDC motor board
6	Hard disk drive (MS622 optional)

Table Component Count (without options)

LCD>100cm² = 0
 PCBs>10cm² = 6
 BFR Plastics = 8
 Battery = 1

Section 8: Electronics 2

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

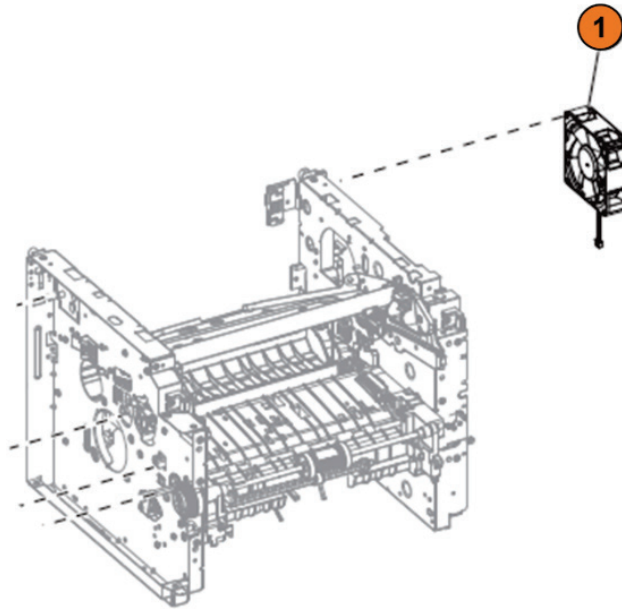


Figure 10.1: Electronics 2

Table 8: 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 9: Electronics 3

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

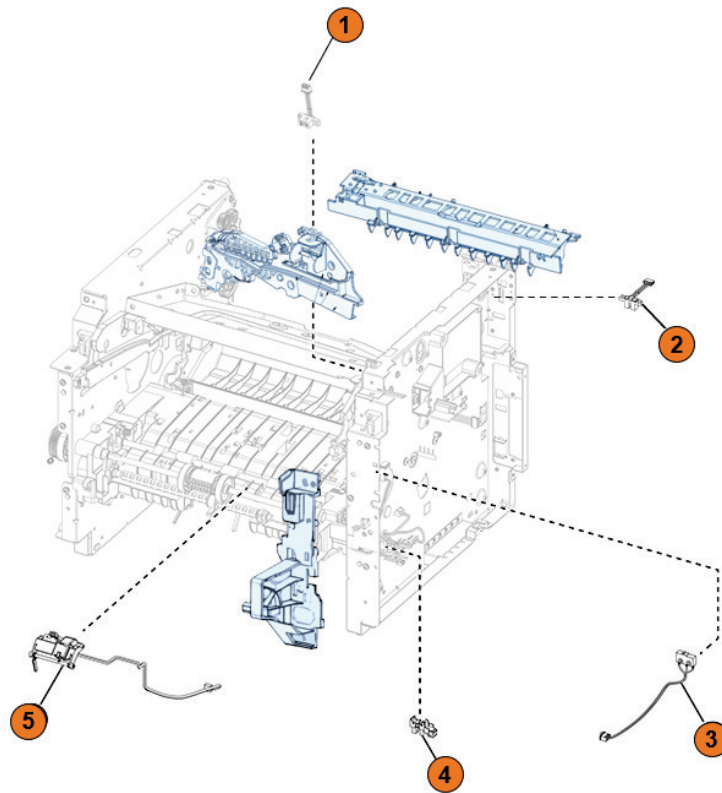


Figure 11.1: Electronics 3

Table 9: 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)
3	Sensor (front door)
4	Sensor (tray present) attached to Guide
5	Sensor (MPF paper present)

Table Component Count (*without options*)

LCD>100cm ²	= 0
PCBs>10cm ²	= 0
BFR Plastics	= 5
Battery	= 0

Section 10: Electronics 4

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

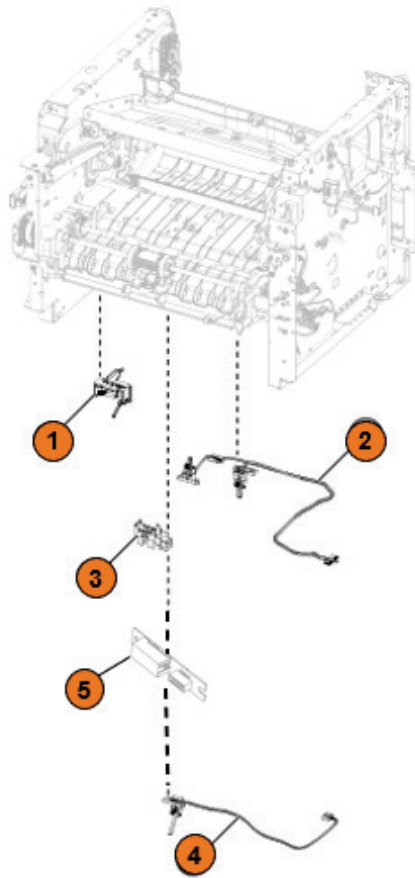


Figure 12.1: Electronics 4

Table 10: 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 11: Paper transport

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

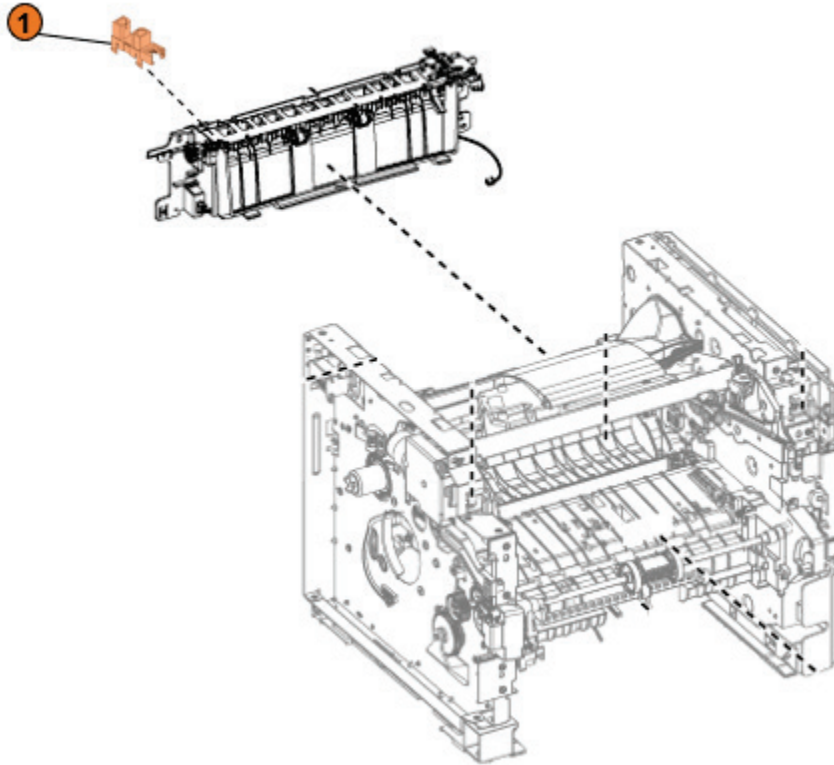


Figure 13.1: Paper transport

Table 11: 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 12: For Reference Only (Customer Replaceable Paper handling devices)

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



Figure 12.1: Customer Replaceable Paper Handling Devices

Table 12: 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 13: 250 / 550 Paper Handling Options

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

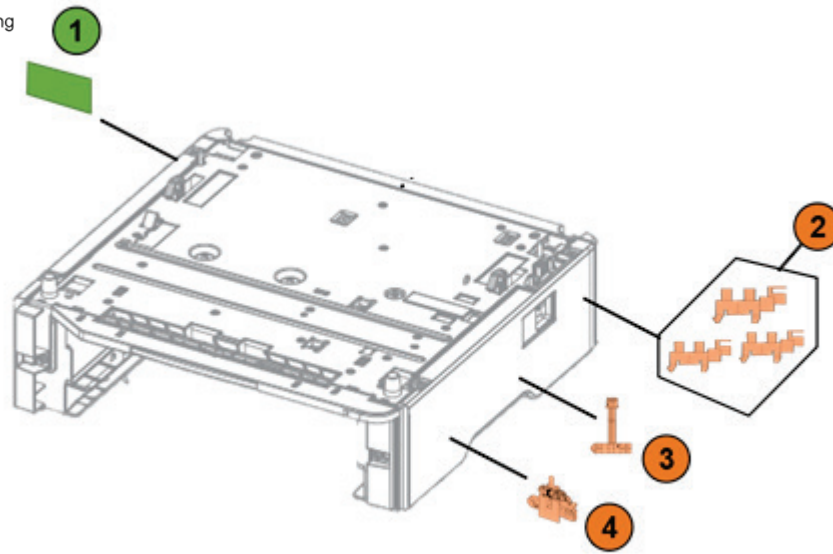


Figure 13.1: 250/550 Paper Handling Options

Table 13: 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 14: For Reference Only (Customer Replaceable External Card Options)

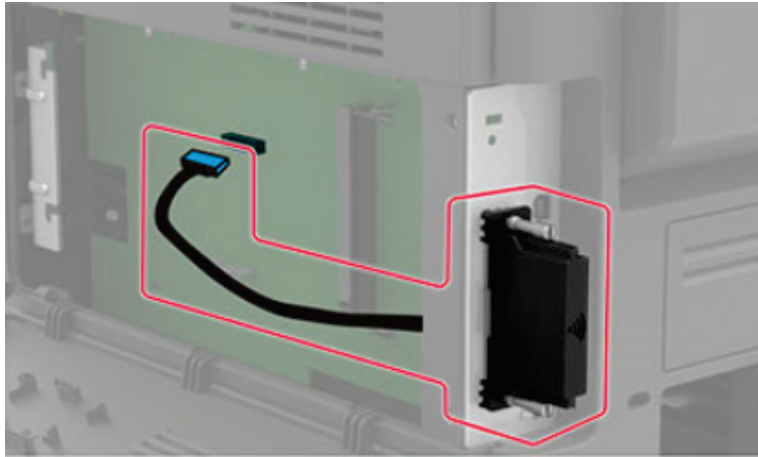


Figure 14.1 External Print Servers¹

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	MS32x MS42x	MS52x MS62x	MS62x	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	Sensor Fuser TCO	N/A	1	X	X	X	Electronics 1
8	Cooling fan	N/A	1	X	X	X	Electronics 2
9	Cartridge barrel sensor kit	N/A	1	X	X	X	Electronics 3
10	Sensor (bin full)	N/A	1	X	X	X	Electronics 3
11	Sensor (front door)	N/A	1	X	X	X	Electronics 3
12	Sensor (tray present)	N/A	1	X	X	X	Electronics 3
13	Sensor (MPF paper present)	N/A	1	X	X	X	Electronics 3
14	Sensor (Trailing edge)	N/A	1	X	X	X	Electronics 4
15	Sensor (Duplex and input) 2x	N/A	2	X	X	X	Electronics 4
16	Sensor (Paper present)	N/A	1	X	X	X	Electronics 4
17	Sensor (Index)	N/A	1			X	Electronics 4
18	Sensor (Toner density kit)	N/A	1	X	X	X	Electronics 4
19	Sensor (Photointerrupt)	N/A	1	X	X	X	Paper transport
20	Photointerrupter sensor within the Base tray assembly x 3	N/A	3	Optional	Optional	Optional	250 / 550 Paper Handling Options
21	CBM sensor within the Base tray assembly	N/A	1	Optional	Optional	Optional	250 / 550 Paper Handling Options
22	Trailing edge sensor within the Base tray assembly	N/A	1	Optional	Optional	Optional	250 / 550 Paper Handling Options
Minimum Count (without options) =			19				

Annex B – Printed Circuit Boards >10cm²

Item	Description	Qty	MS32x MS42x	MS52x MS62x	MS62x	Location
1A	2 line APA Control panel display assembly	1	X			Control panel
1B	2.4 in LCD Control panel display assembly	1		X		Control panel
1C	4.3 in. LCD Control panel display assembly	1			X	Control panel
2	Integrated wireless card (B2338dw, B2442dw, B2546dw, MS421dw, B2650dw)	1	X	X	Optional	Control panel
3	Printhead card within the assembly	1	X	X	X	Electronics 1
4	Printhead driver card	1	X	X	X	Electronics 1
5	Controller board	1	X	X	X	Electronics 1
6	Power supply	1	X	X	X	Electronics 1
7	Main drive gearbox BLDC motor board	1	X	X	X	Electronics 1
8	Hard drive	1			X	Electronics 1
9	PHO card within the Base tray assembly	1	Optional	Optional	Optional	250 / 550 Paper Handling Options
Minimum Count (without options) =		7				

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

Item	PN	Description	MS32x, MS42x, MS52x MS62x	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	MS32x MS42x	MS52x MS62x	MS62x	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	