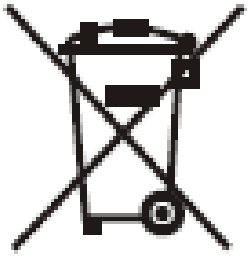
Waste Electrical and Electronic Equipment Directive (WEEE) Compliance Assessment Report



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Introduction

Manufacturer:	AVISION INC.
Address:	No. 20, Yanxin 1st Road., Baoshan Township, Hsinchu County, Hsinchu Science Industrial Park, Taiwan (R.O.C.)
Equipment:	Scanner
Type Designation:	AD8150N
Report Date:	6/1/2023
Description	The product as described in this report was found to based the requirements of recast WEEE directive (2012/19/EC) Article 11-Recovery and Article 15-Information treatment facilities to disclose Recycle, Reuse and Recovery rate and its disassembly information. This report are including below contents: (1) Product information (2) Product disassembly method (3) Recycle, Reuse and Recovery rate evaluation
Assessment Result:	Reuse and recycling Rate = 98.53% Recovery Rate = 99.78%

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1. Product Information:

Dimension(W×D×H):460×444×328 mm
Weight: 25kg
Accessories: Power Cord, USB Cable

2. WEEE Category

The products falling under categories 6 of WEEE directive Annex III,

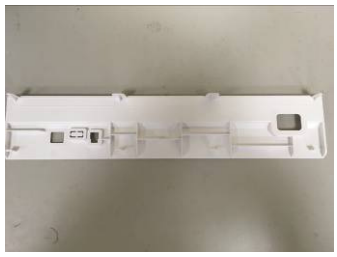
- the rate of recovery shall be increased to a minimum of 75 by an average weight per appliance, and

- component, material and substance reuse and recycling shall be increased to a minimum of 55 by an average weight per appliance;

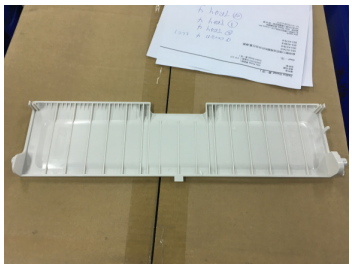
3. Dismantling Process

Step 1: Unloosen the tenon to take out Top Cover(051-9281-0)

Step 2: Unloosen the tenon to take out Bottom Rear Cover(051-A386-0)

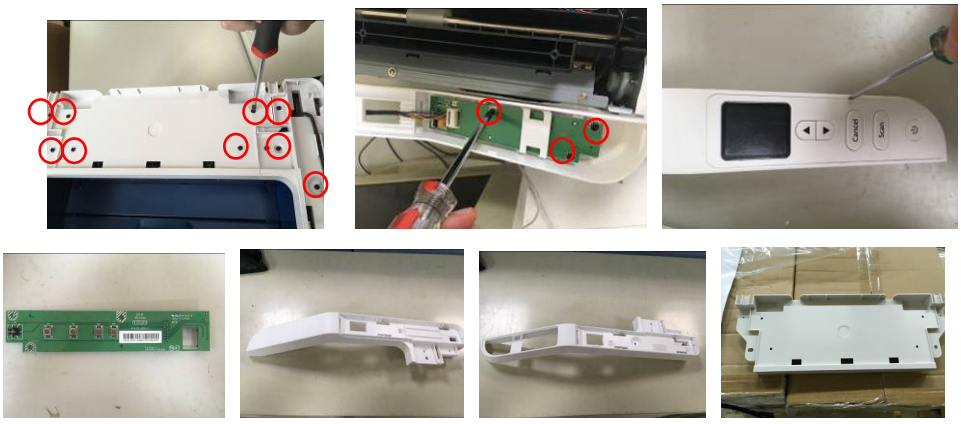
Step 3: Unloosen the tenon to take out ID Cover(051-9253-0)

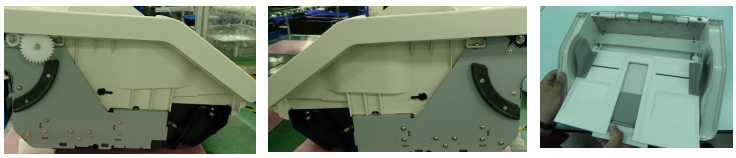
Step 4: Use screwdriver and unloosen the tenon to remove Back ID Cover (051-9254-0) and Top ID Cover(051-9255-0)



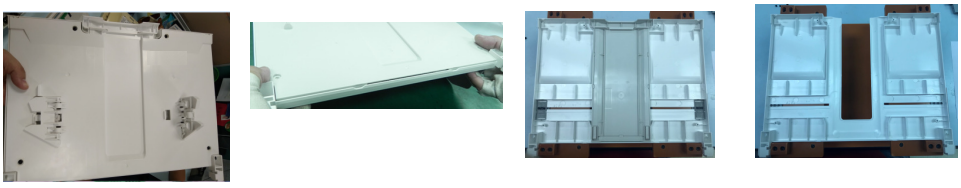
Step 5: Use screwdriver and unloosen the tenon to remove Buttons, Upper Left/Right Case (051-9283-0/ 051-9282-0), Upper Middle Case(051-9284-0) and PCBA(UIA216/004-2988-9)



Step 6: Open the Upper Base Ass'y and open Lock to separate Output Tray Ass'y.

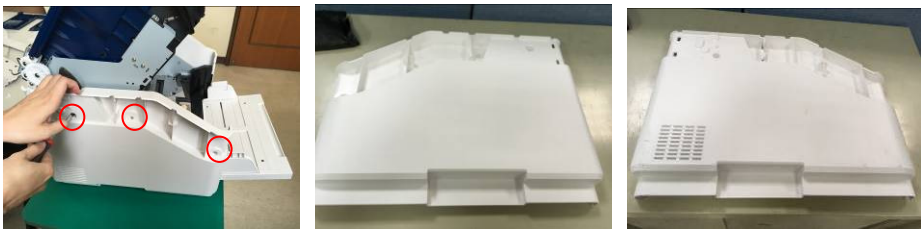


Step 7: Use a screwdriver to remove Exit Upper/Lower Case/ (051-9271-0, 051-9270-0) and other plastic parts.

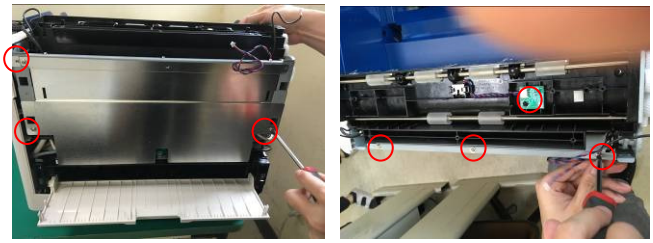


Step 8: Unloosen the tenon to remove ID Left/Right Top Cover (051-9256-0& 051-9257-0)

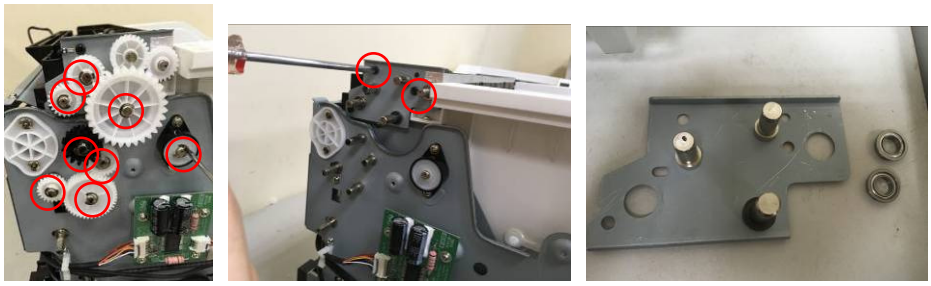
Step 9: Use screwdriver to take out ID Left/Right Bottom Cover (051-9258-0 &051-9259-0)



Step 10 : Use screwdriver to take out Plate and PCBA(BBA81/004-3273-9)

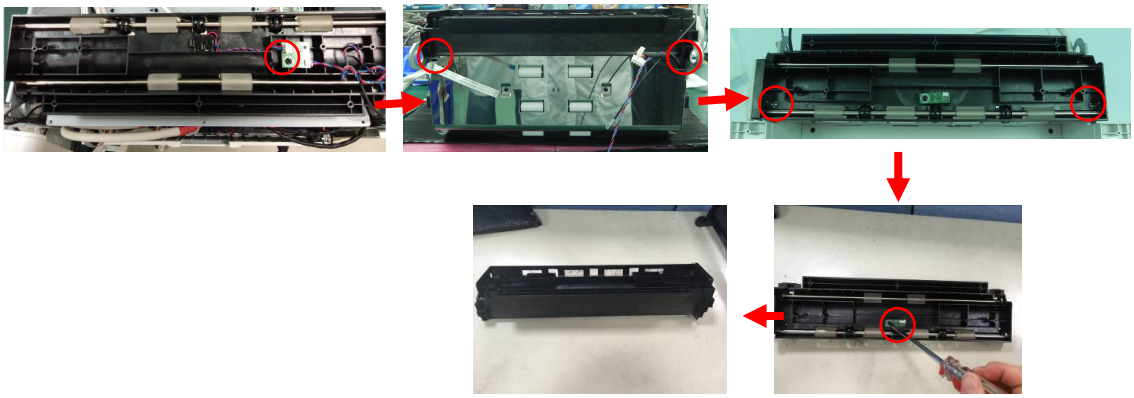


Step 11: Use screwdriver to remove Mount.

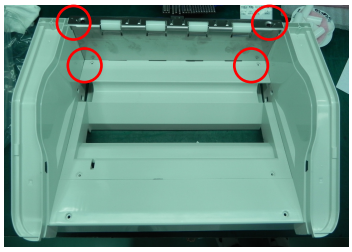
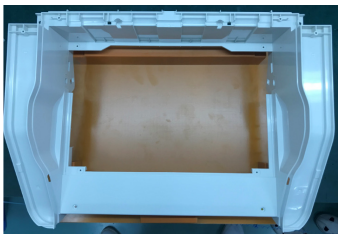
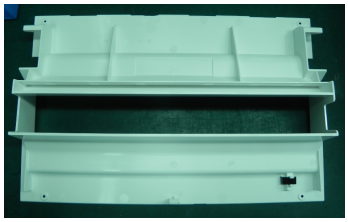


Step 12: Use screwdriver and open the Feeding Ass'y.

Take out Roller and Sensor to Feeding Out Case(051-9783-0)



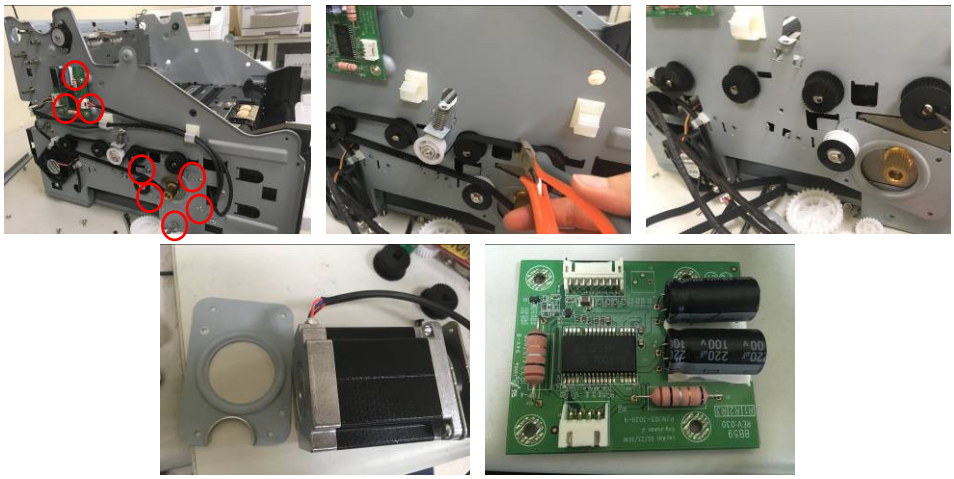
Step 13: Use screwdriver to take out Upper Case(051-9285-0) , Upper Middle Cover (051-9286-0).

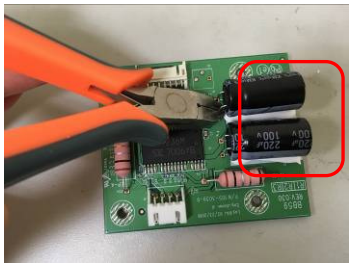
Step 14: Use screwdriver and unloosen the tenon to separate Ass'y Upper Base and A'ssy Lower Base.

Lower Base Ass'y

Step 1: Use screwdriver and cut Belt to remove Motor, Plate , PCBA(BBA59/004-3039-9)

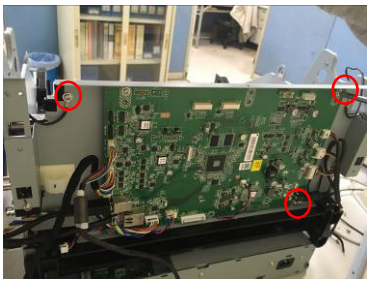


Step 2: Cut the pin to take out Capacitors.

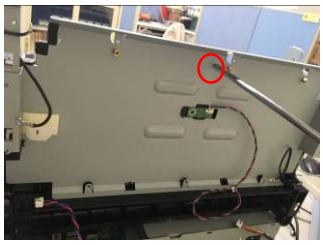


Step 3: Use screwdriver to take out PCBA(BBA57/004-2996-9)

Step 4: Use screwdriver to remove PCBA(MBA872/004-3407-9)




Step 5: Use screwdriver to remove Mount

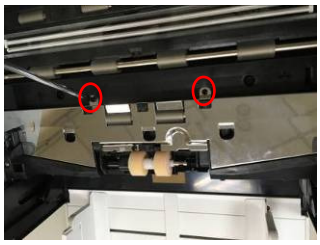


Step 6: Take out the Holder

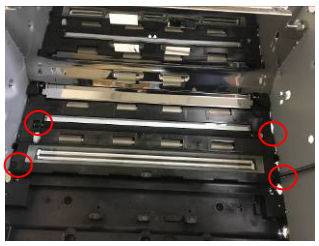
Step 7: Open and Press to take out Cover.


Step 8: Use screwdriver to remove Plate.

Step 9: Use screwdriver to remove Plates and Rollers



Step 10: Use screwdriver and unloosen the tenon to remove Cover.

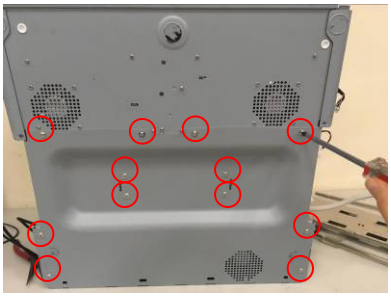
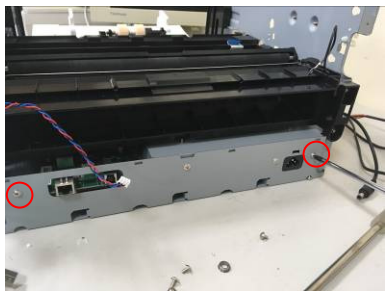


Step 11: Unloosen the tenon to remove Plate.

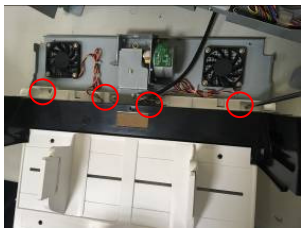
Step 12: Unloosen the tenon to remove the Case(051-8894-0)

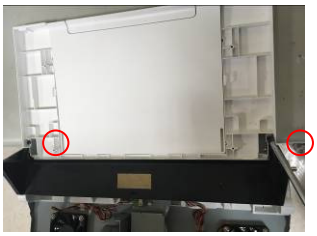

Step 13: Take out Rubber Stand.

Step 14: Use screwdriver to take out Mount.

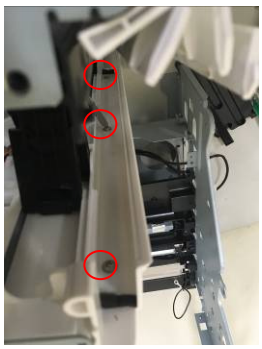
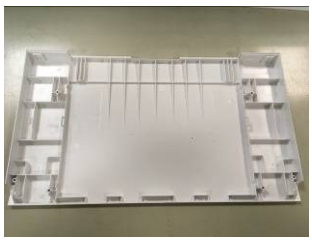



Step 15: Use screwdriver to remove Motor and Fans.




Step 16: Use screwdriver to remove Input Tray Down(051-A354-0) and Extend Tray Middle(051-A339-0)

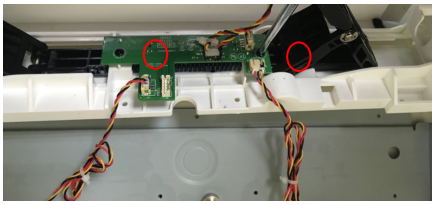
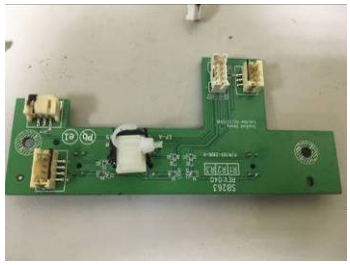




Step 17: Use screwdriver to push the pin, and then remove Case (051-9287-0) and Bracket(051-8924-0)



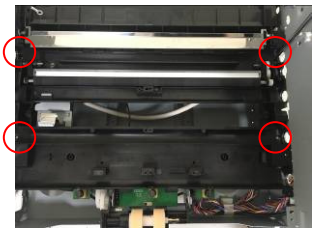
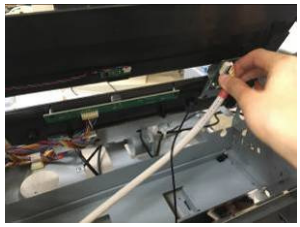
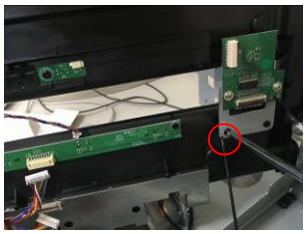
Step 18: Use screwdriver and unplug the cables to remove PCBA(SBA295/004-3375-9).

Step 19: Use screwdriver to remove PCBA(SBA296/ 004-3376-9)

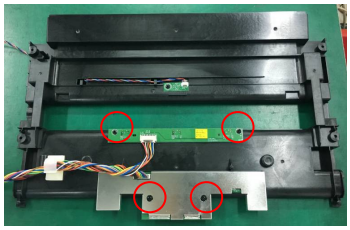



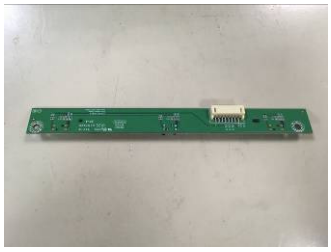
Step 20: Use screwdriver to remove Input Tray Up(051-A335-0)


Step 21: Use screwdriver and unplug the cables to separate Ass'y Lower Case.

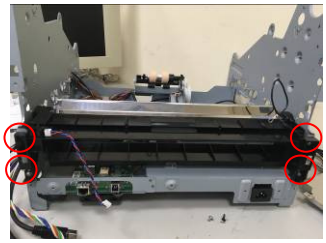
Step 22: Use screwdriver to remove PCBA(SBA262/004-2998-9). Unloosen the tenon and use solder iron to take out PCBA(SBA261/004-2997-9).



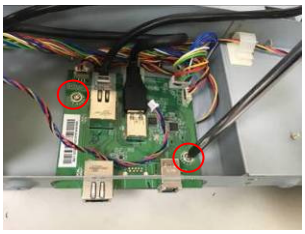



Step 23: Use screwdriver to remove Case (051-A152-0)

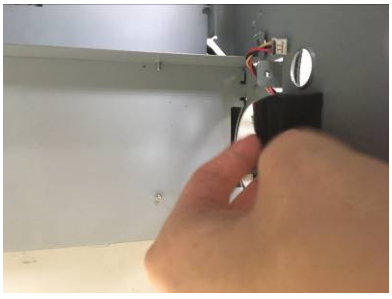

Step 24: Use screwdriver and unloosen the tenon to remove Case (051-8887-0)



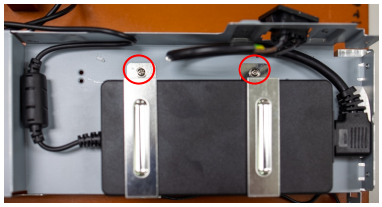
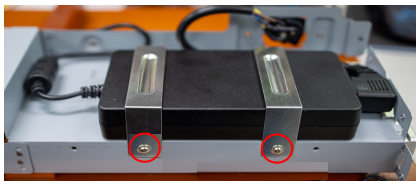
Step 25: Use screwdriver and unplug the cables to remove PCBA(BBA75/004-3223-9)




Step 26: Take out Sponge.

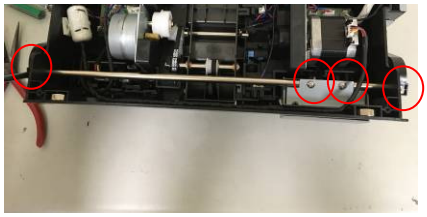


Step 27: Use screwdriver to remove Power Adapter.

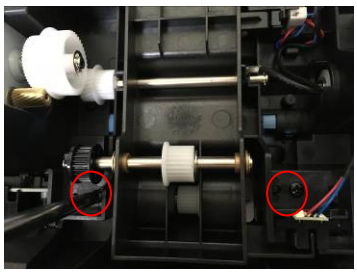
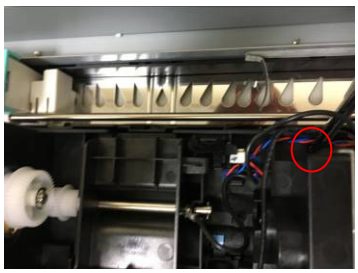



Upper Base Ass'y

Step 1: Unscrew the joint to remove Latch Hook and Shaft.

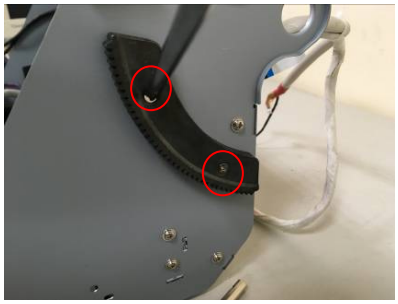


Step 2: Unscrew the joint/ disconnect the wire to separate the ADF Roller Ass'y.

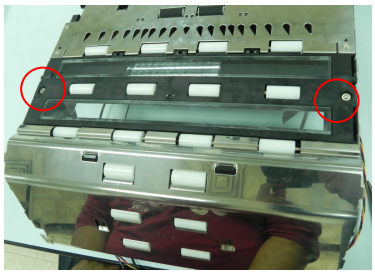




Step 3: Unscrew the joint to remove PCBA(SBA294/004-3374-9)

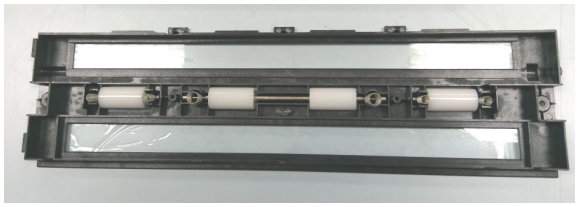

Step 4 : Unscrew the joint to remove Rack.



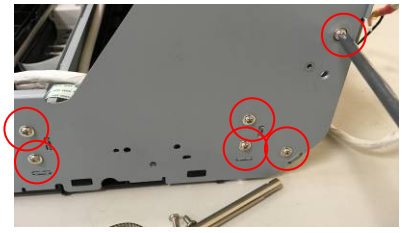
Step 5: Use screwdriver to remove Ass'y Idle Roller Holder.



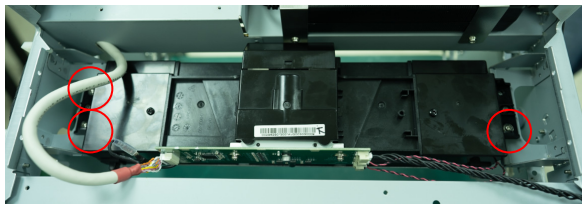
Step 6: Unloosen the tenon to remove all parts(Spring/Roller/Shaft/Glass/Holder Glass Upper(051-8875-0))



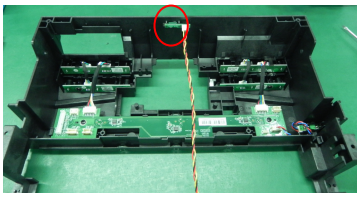
Step 7: Unscrew the joint to take out Plate.

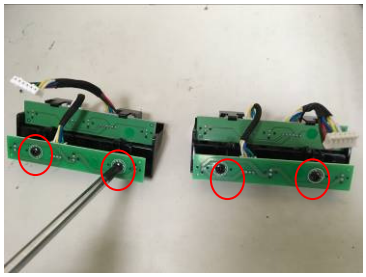


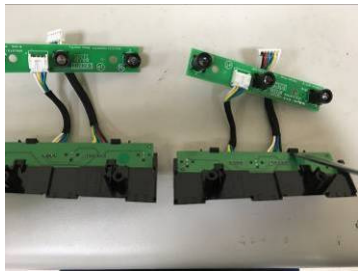
Step 8: Unscrew the joint to take out Ass'y Optical.

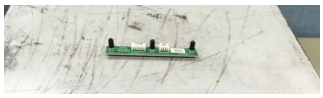


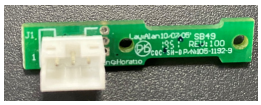
Step 9: Unloosen the tenon /use screwdriver and unplug the cables to remove PCBA (SBA308/004-3494-9, SBA264/004-3016-9, SBA265/004-3017-9)



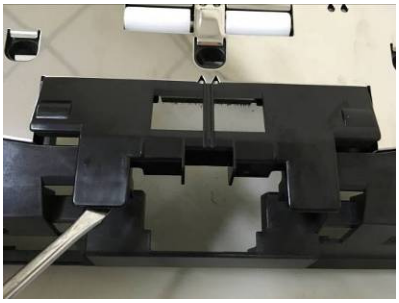




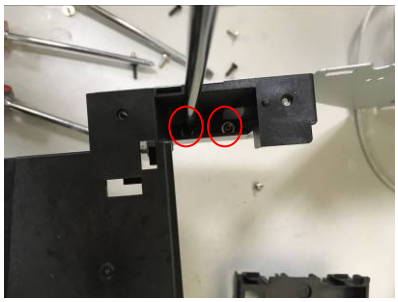




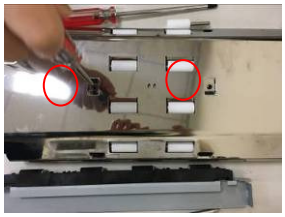
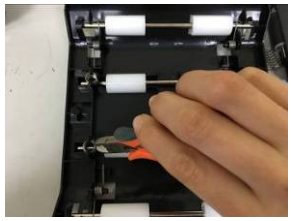
Step 10: Unloosen the tenon to remove Cover and Plate.



Step 11: Use screwdriver to remove Base Case(051-A352-0)



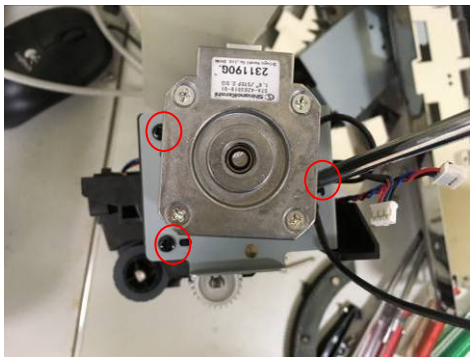
Step 12: Use screwdriver and take out spring to remove Roller, Shaft and Holder.

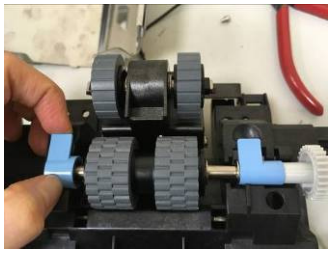
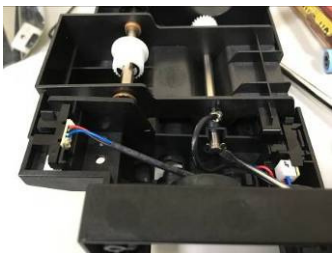

Step 13: Use screwdriver/ unloosen the tenon to take out Roller, Holder and Plate.



Step 14: Use screwdriver to take out Motor from ADF Roller Ass'y

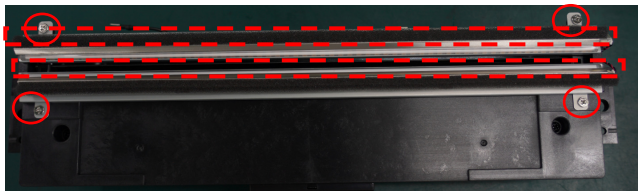



Step 15: Open the Lock to take out Roller. Unplug the cables /unloosen the tenon to remove Case(051-8872-0) .

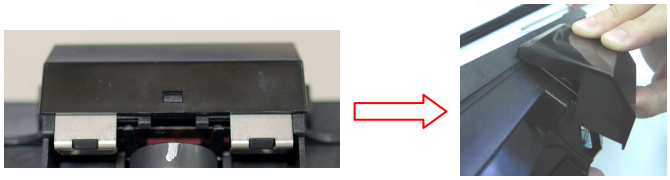




Ass'y Optical

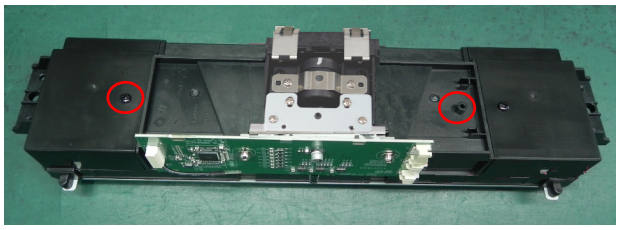
Step 1: Use screwdriver to take out Ass'y Lamp Mount and tear off the Sponge.



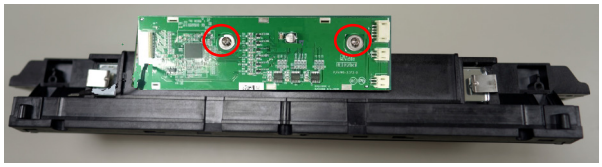
Step 2: Take out the Cover.



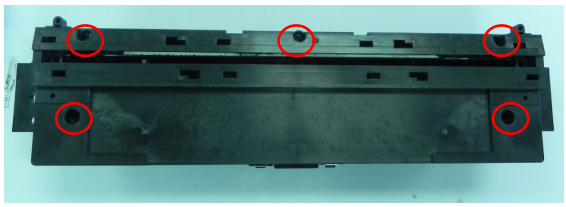
Step 3: Use screwdriver to take out Cover R/L



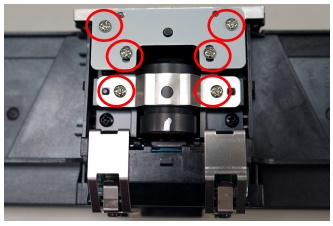
Step 4: Use screwdriver to remove PCBA (CBA410/004-3373-9)



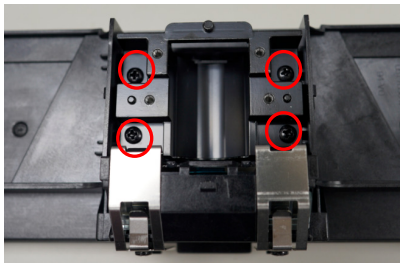
Step 5: Use screwdriver to take out the Case(051-8909-0)



Step 6: Use screwdriver to take out the Plate, CCD Fixer, Lens and Clamp.

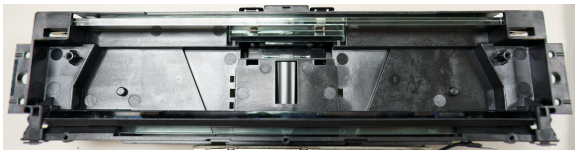


Step 7: Use screwdriver to take out the Lens Holder.



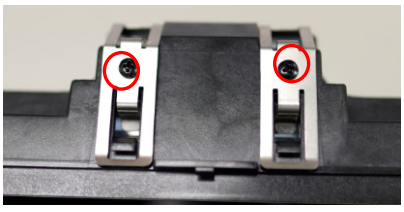
Step 8: Use screwdriver to take out the Clamp.

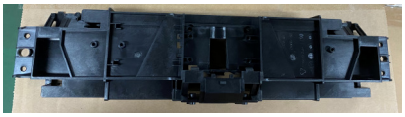
Step 9: Unloosen the tenon to remove Mirror.



Step 10: Take out the Clamps and Mirror.

Step 11: Use screwdriver to take out the Clamp, Mirror and Chassis(051-9479-0).





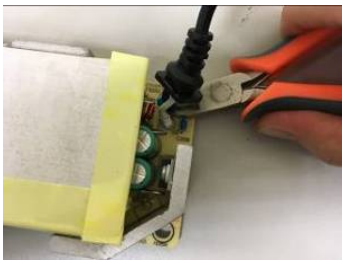
Power Adapter

Step 1: Take out Rubber Stand.

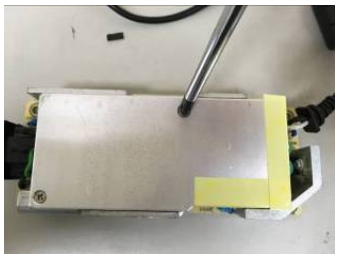
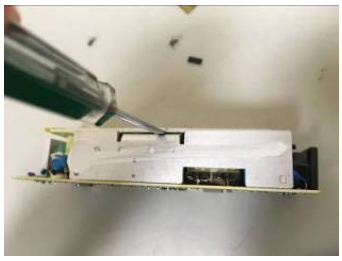
Step 2: Use screwdriver to remove Upper Cover and Bottom Cover.

Step 3: Take out Al sheet and Mylar.

Step 4: Cut down the cable.

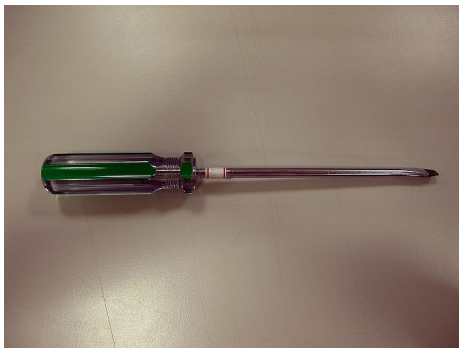
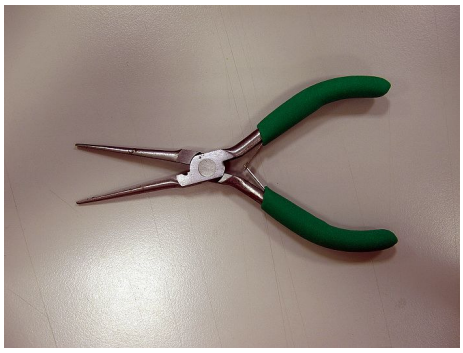


Step 5: Use screwdriver / unloosen the tenon to take out PCBA and Plate.

Step 6: Cut down the Capacitor.


4. Disassembly Tool

(1)	(2)
	
Screwdriver	**Screwdriver**
(3)	**(4)**
	
Blade	**Pliers**

5. Part List

No.	Name	Material	Qty.	Weight (g)	Characteristic
1	BUTTON,POWER	ABS	1	0.80	Recycle
2	BUTTON,UP DOWN	ABS	2	1.70	Recycle
3	LOCK,BEARING	POM	2	2.00	Recycle
4	BUTTON,SCAN	ABS	1	1.50	Recycle
5	BUTTON,CANCEL	ABS	1	1.50	Recycle
6	GUIDE,INPUT EXTEND	ABS	2	12.80	Recycle
7	SUPPORT,OUTPUT TRAY	ABS	2	17.60	Recycle
8	HOLDER,STOPPER	POM	1	9.60	Recycle
9	HOOK	POM	2	20.40	Recycle
10	GUIDE,STABLE RIGHT	PC	1	11.90	Recycle
11	GUIDE,STABLE LEFT	PC	1	12.20	Recycle
12	COVER,LCM	ABS	1	13.00	Recycle
13	SUPPORT,INPUT TRAY LINK SHORT	POM	2	26.00	Recycle
14	GUIDE,EXTEND LEFT	ABS	1	13.50	Recycle
15	GUIDE,EXTEND RIGHT	ABS	1	13.50	Recycle
16	STOPPER	ABS	1	15.00	Recycle
17	COVER,WINDOW DOWN	ABS	1	15.00	Recycle
18	COVER,WINDOW MIDDLE	ABS	3	46.80	Recycle
19	LATCH,HOOK	ABS	1	16.00	Recycle
20	GUIDE,INPUT RIGHT	ABS	1	17.00	Recycle
21	HOLDER,REVERSE ROLLER	PC+11%CF	1	17.10	Recycle
22	GUIDE,INPUT LEFT	ABS	1	17.30	Recycle
23	LOCK,RACK,SWITCH	POM	1	2.30	Recycle
24	HOUSING, BOTTOM, SHIELD INK	ABS	1	18.00	Recycle
25	COVER,REVERSE ROLLER	ABS	1	18.50	Recycle
26	GUIDE,ADF	ABS	1	21.00	Recycle
27	SUPPORT,INPUT TRAY LINK LONG	POM	2	58.80	Recycle
28	GUIDE,SIDE RIGHT	ABS	1	29.70	Recycle

No.	Name	Material	Qty.	Weight (g)	Characteristic
29	GUIDE,SIDE LEFT	ABS	1	29.70	Recycle
30	HOUSING, UPPER,SHIELD INK	ABS	1	31.50	Recycle
31	BRACKET,PICKUP	PC+11%CF	1	44.20	Recycle
32	HOLDER,IDLE ROLLER	PC+20%GF	2	94.00	Recycle
33	TRAY, EXTEND,INPUT OUT	ABS	1	53.00	Recycle
34	FIXER,STOPPER	ABS	1	56.10	Recycle
35	BRACKET,INPUT TRAY TRACK RIGHT	PC+ABS	1	58.90	Recycle
36	BRACKET,INPUT TRAY TRACK LEFT	PC+ABS	1	58.90	Recycle
37	COVER,PAPER GUIDE	PC+11%CF	1	60.00	Recycle
38	COVER,BOTTOM REAR	ABS	1	69.80	Recycle
39	HOLDER,IDLE ROLLER	ABS	1	72.00	Recycle
40	TRAY, EXTEND,OUTPUT	ABS	1	77.30	Recycle
41	COVER,ID TOP	ABS	1	106.00	Recycle
42	COVER,ID OUTPUT TRAY BACK	ABS	1	107.00	Recycle
43	TRAY, EXTEND,INPUT MIDDLE	ABS	1	110.00	Recycle
44	COVER,ID RIGHT TOP	ABS	1	118.00	Recycle
45	CASE,UPPER RIGHT	ABS	1	119.00	Recycle
46	COVER,ID LEFT TOP	ABS	1	119.00	Recycle
47	BRACKET,INPUT MAIN TRAY	ABS	1	127.00	Recycle
48	CASE,ADF & MOTOR	PC+30%GF	1	130.00	Recycle
49	CASE,UPPER LEFT	ABS	1	138.00	Recycle
50	HOLDER,GLASS UPPER	PC+11%CF	1	141.50	Recycle
51	CASE,UPPER MIDDEL	ABS	1	146.00	Recycle
52	CASE,PAPER PATH BACK	PC+ABS	1	175.00	Recycle
53	CASE,INPUT BOTTOM GEARBOX	ABS	1	180.00	Recycle
54	CASE,PAPER PATH IN	PC+30%GF	1	186.00	Recycle
55	TRAY, INPUT,UP	ABS	1	196.00	Recycle
56	TRAY, INPUT,DOWN	ABS	1	234.70	Recycle

No.	Name	Material	Qty.	Weight (g)	Characteristic
57	COVER,TOP	ABS	1	235.00	Recycle
58	CASE,EXIT LOWER	ABS	1	243.50	Recycle
59	CASE,FEEDING OUT	PC+20%GF	1	258.30	Recycle
60	COVER,ID BACK	PC+ABS	1	264.00	Recycle
61	CASE,EXIT UPPER	ABS	1	281.90	Recycle
62	COVER,UPPER MIDDLE	ABS	1	307.00	Recycle
63	CASE,PAPER PATH OUT	PC+20%GF	1	368.00	Recycle
64	CASE,BASE	PC+30%GF	1	442.00	Recycle
65	COVER,ID RIGHT BOTTOM	ABS	1	490.00	Recycle
66	COVER,ID LEFT BOTTOM	ABS	1	491.00	Recycle
67	CASE,UPPER	ABS	1	530.60	Recycle
68	LIGHT COVER,ADF LED	PC	4	33.20	Recycle
69	CHASSIS, OPTICAL, ADF	PC+20%GF	2	378.00	Recycle
70	CASE,ADF LAMP MOUNT	PC+30%GF	2	206.00	Recycle
71	COVER,SEAL R	ABS	2	39.00	Recycle
72	COVER,SEAL L	ABS	2	39.00	Recycle
73	COVER,SEAL F	ABS	2	20.80	Recycle
74	COVER,LENS	ABS	2	19.26	Recycle
75	ROLLER,IDLE,CORE	POM	4	9.60	Recycle
76	BRACKET	SECC	2	46.40	Recycle
77	CLAMP	SUS301	18	34.00	Recycle
78	COVER,BOTTOM	SECC	1	559.00	Recycle
79	GUIDE,PAPER	SUS304	1	2.00	Recycle
80	HOLDER	Metal	13	295.90	Recycle
81	MOUNT	SECC	11	1,545.90	Recycle
82	PLATE	Metal	17	3,329.50	Recycle
83	PLATE, LINK	SECC	2	676.40	Recycle
84	PLATE, MIRROR	SUS304	1	10.00	Recycle
85	SHEET, METAL	SECC	1	372.55	Recycle
86	SHELL	Metal	2	397.15	Recycle
87	SUPPORT	SECC	6	861.50	Recycle
88	CHASSIS, OPTICAL	Aluminum	4	118.92	Recycle
89	GEAR	Metal	5	305.02	Recycle
90	SHAFT	Metal	16	579.80	Recycle
91	SPRING	Metal	47	30.00	Recycle

No.	Name	Material	Qty.	Weight (g)	Characteristic
92	BELT, CLOSE	CR	6	13.95	Energy Recovery
93	DAMPER	Silicone	5	3.08	Energy Recovery
94	PAD	Silicone	3	0.20	Energy Recovery
95	ROLLER, FEED	PU	9	1,887.70	Recycle
96	ROLLER, IDLE	Rubber	8	78.80	Energy Recovery
97	RUBBER STAND	Silicon	6	18.50	Energy Recovery
98	SPONGE	Sponge	19	7.22	Energy Recovery
99	MIRROR	GLASS	10	356.70	95% Recycle + 5% Landfill
100	GLASS	GLASS	6	211.50	95% Recycle + 5% Landfill
101	Motor	Metal	2	2,002.59	Recycle
102	FAN	Metal	4	94.8	Recycle
103	LENS	Metal	2	146.60	Recycle
104	SCREW(Cross)	Metal	400	265.68	Recycle
105	Wires & Cables	-	43	1,222.00	Recycle
106	PCBA	PCB Complex	1	21.90	80% Recycle + 20% Energy Recovery
107	PCBA	PCB Complex	1	21.97	80% Recycle + 20% Energy Recovery
108	PCBA	PCB Complex	1	61.36	80% Recycle + 20% Energy Recovery
109	PCBA	PCB Complex	1	12.19	80% Recycle + 20% Energy Recovery
110	PCBA	PCB Complex	2	12.10	80% Recycle + 20% Energy Recovery
111	PCBA	PCB Complex	1	6.90	80% Recycle + 20% Energy Recovery
112	PCBA	PCB	1	29.71	80% Recycle +

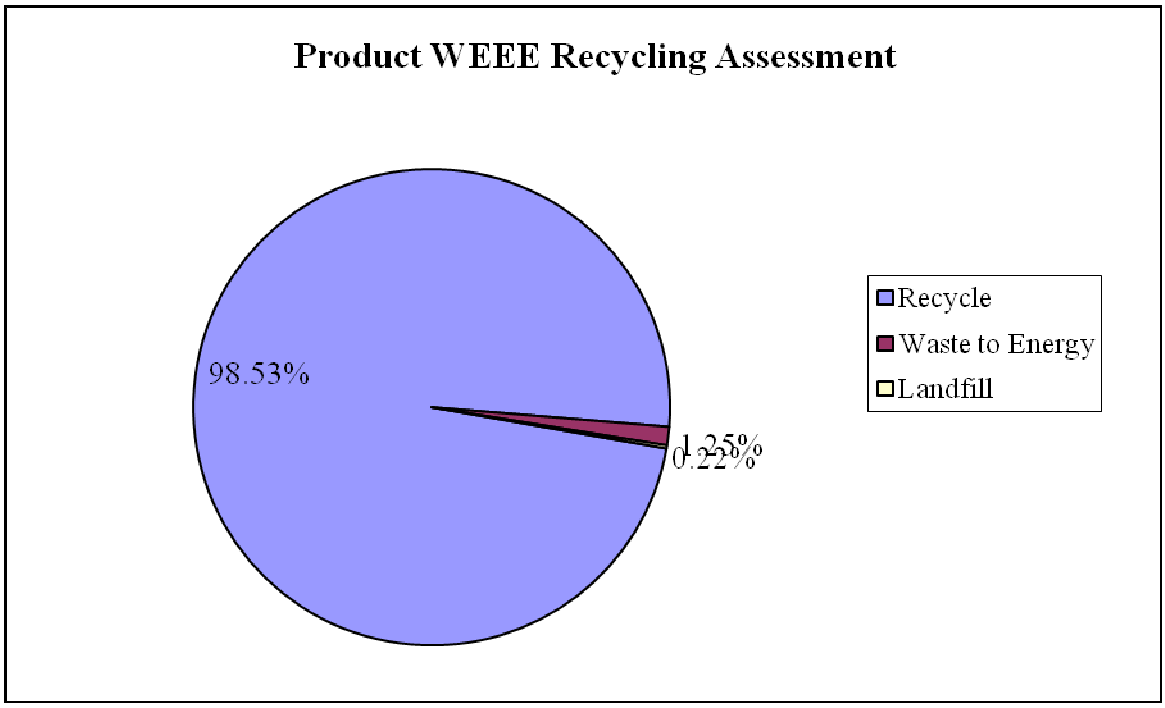
No.	Name	Material	Qty.	Weight (g)	Characteristic
		Complex			20% Energy Recovery
113	PCBA	PCB Complex	1	49.20	80% Recycle + 20% Energy Recovery
114	PCBA	PCB Complex	1	9.51	80% Recycle + 20% Energy Recovery
115	PCBA	PCB Complex	2	74.60	80% Recycle + 20% Energy Recovery
116	PCBA	PCB Complex	1	36.30	80% Recycle + 20% Energy Recovery
117	PCBA	PCB Complex	1	4.60	80% Recycle + 20% Energy Recovery
118	PCBA	PCB Complex	1	16.20	80% Recycle + 20% Energy Recovery
119	PCBA	PCB Complex	1	257.00	80% Recycle + 20% Energy Recovery
120	PCBA	PCB Complex	1	1.30	80% Recycle + 20% Energy Recovery
121	Upper Cover	Plastic	1	55.50	Recycle
122	Lower Cover	Plastic	1	52.00	Recycle
123	Al sheet	Metal	1	41.00	Recycle
124	PCBA	PCB Complex	1	327.00	80% Recycle + 20% Energy Recovery
125	Cap.	-	3	25.00	Energy Recovery

6. 3R Assessment

Item	Main Material	Characteristic	Weight (g)	Percent (%)
1	Metal	Recycle	11714.71	47.36%
2	Plastic	Recycle	10140.46	41.00%
3	Glass	95% Recycle	539.79	2.18%
		5% Landfill	28.41	0.11%
4	CCFL	95% Recycle	0.00	0.00%
		5% Landfill	0.00	0.00%
5	Silicon	Energy Recovery	21.78	0.09%
6	Cables	Recycle	1222.00	4.94%
7	Sponge	Energy Recovery	7.22	0.03%
8	Rubber	Energy Recovery	92.75	0.37%
9	PCBA	80% Recycle	753.47	3.05%
		20% Energy Recovery	188.37	0.76%
10	Capacitance over 2.5cm	Landfill	25.00	0.10%
11	LCD	Recycle	0.00	0.00%
Total weight			24733.96 g	100.00%
Recycling Rate (Reuse＋Recycle)			24370.43 g	98.53%
Energy Recovery			310.12 g	1.25%
Recovery Rate (Reuse＋Recycle＋Energy Recovery)			24680.55 g	99.78%

7. WEEE Compliance

Item	Weight（g）	Percentage
Recycle	24370.43	98.53%
Waste to Energy	310.12	1.25%
Landfill	53.41	0.22%



8. WEEE ANNEX VII

—As the following substances, mixtures and components have to be removed from any separately collected WEEE:

No.	Name	Qty.	Weight (g)	Annex VII Materials
1	PCBA	1	21.9	Printed circuit board is greater than 10 square centimetres
2	PCBA	1	21.97	Printed circuit board is greater than 10 square centimetres
3	PCBA	1	61.36	Printed circuit board is greater than 10 square centimetres
4	PCBA	1	12.19	Printed circuit board is greater than 10 square centimetres
5	PCBA	2	12.1	Printed circuit board is greater than 10 square centimetres
6	PCBA	1	6.9	Printed circuit board is greater than 10 square centimetres
7	PCBA	1	29.71	Printed circuit board is greater than 10 square centimetres
8	PCBA	1	49.2	Printed circuit board is greater than 10 square centimetres
9	PCBA	1	9.51	Printed circuit board is greater than 10 square centimetres
10	PCBA	2	74.6	Printed circuit board is greater than 10 square centimetres
11	PCBA	1	36.3	Printed circuit board is greater than 10 square centimetres
12	PCBA	1	4.6	Printed circuit board is greater than 10 square centimetres
13	PCBA	1	16.2	Printed circuit board is greater than 10 square centimetres
14	PCBA	1	257	Printed circuit board is greater than 10 square centimetres
15	PCBA	1	1.3	Printed circuit board is greater than 10 square centimetres
16	PCBA,Adapter	1	327	Printed circuit board is greater than 10 square centimetres
17	Cap.	3	25	Electrolyte capacitors with substances of concern

No.	Name	Qty.	Weight (g)	Annex VII Materials
18	External Power Cord	2	239	External electric cables

*Materials exhibiting hazardous characteristics or those requiring special handling are those materials defined under Annex VII of the EU WEEE Directive 2012/19/EU and subsequent updates.