Product End-of-Life Disassembly Instructions

Product Category: Networking Equipment
Marketing Name / Model [List multiple models if applicable.]
HP FF 12916 Switch AC Chassis(JG632A)

Purpose: The document is intended for use by end-of-life recyclers or treatment facilities. It provides the basic instructions for the disassembly of HP products to remove components and materials requiring selective treatment, as defined by EU directive 2002/96/EC, Waste Electrical and Electronic Equipment (WEEE).

1.0 Items Requiring Selective Treatment

1.1 Items listed below are classified as requiring selective treatment.
1.2 Enter the quantity of items contained within the product which require selective treatment in the right column, as applicable.

Item Description	Notes	Quantity of items included in product
Printed Circuit Boards (PCB) or Printed Circuit Assemblies (PCA)	With a surface greater than 10 sq cm	5
Batteries	All types including standard alkaline and lithium coin or button style batteries	0
Mercury-containing components	For example, mercury in lamps, display backlights, scanner lamps, switches, batteries	0
Liquid Crystal Displays (LCD) with a surface greater than 100 sq cm	Includes background illuminated displays with gas discharge lamps	0
Cathode Ray Tubes (CRT)		0
Capacitors / condensers (Containing PCB/PCT)		0
Electrolytic Capacitors / Condensers measuring greater than 2.5 cm in diameter or height		0
External electrical cables and cords		0
Gas Discharge Lamps		0
Plastics containing Brominated Flame Retardants weighing > 25 grams (not including PCBs or PCAs already listed as a separate item above)		0
Components and parts containing toner and ink, including liquids, semi-liquids (gel/paste) and toner	Include the cartridges, print heads, tubes, vent chambers, and service stations.	0
Components and waste containing asbestos		0
Components, parts and materials containing refractory ceramic fibers		0
Components, parts and materials containing radioactive substances		0

2.0 Tools Required

List the type and size of the tools that would typically be used to disassemble the product to a point where components and materials requiring selective treatment can be removed.

Tool Description	Tool Size (if applicable)
Screw driver	2#

3.0 Product Disassembly Process

3.1 List the basic steps that should typically be followed to remove components and materials requiring selective treatment:

1. Unscrew the screws on air filters 2, and then remove the air filters from the chassis.
2. Unscrew the screws on wire channels 3, and then remove the wire channels from the mounting bracket 4.
3. Unscrew the screws on mounting bracket 4,and then remove the mounting bracket from the chassis.
4. Remove the bottom cover 5 from the chassis 1.
5. Unscrew the screws on blank front panel 6, and then remove the blank front panel from the chassis.
6. Unscrew the screws on line card board panel 7, and then remove line card board panel 7 from the chassis.
7. Unscrew the screws on main card board panel 8, and then remove line main board panel 8 from the chassis.
8. Remove the film 9 from the chassis.
9. Remove the film 10 from the chassis.
10. Unscrew the screws on power frame 11,and then remove the power frame 11 from the chassis.
11. Unscrew the screws on fan frame 12, and then remove fan frame 12 from the chassis.
12. Unscrew the screws on fan frame 13, and then remove fan frame 13 from the chassis.
13. Unscrew the screws on net board panel 14, and then remove net board panel 14 from the chassis.
14. Unscrew the screws on net blank panel 15, and then remove net blank panel 15 from the chassis.
15. Remove the film 16 from the chassis.
16. Unscrew the screws on the holder 17, and then remove the holder 17 from the chassis.
17. Unscrew the screws on the part 18, and then remove the part 18 from the chassis.
18. Unscrew the screws on PCB 19,and then remove PCB 19 from the part 20.
19. Unscrew the screws on PCB 21, and then remove PCB 21.
20. Unscrew the screws on part 5-2,and then remove part 5-2 from part 5-1.
21. Remove part 5-4 from part 5-2.
22. Remove part 5-3 from part 5-2.
23. Remove shielding finger 6-2 from blank panel 6-1.
24. Remove film 6-3 from blank panel 6-1.
25. Unscrew the screws on top crashworthy bridge 7-2,and then remove top crashworthy bridge 7-2 from panel 7-7.
26. Remove shielding finger 7-3 from panel 7-7.
27. Remove film 7-4 from panel 7-7.
28. Unscrew the screws on heat sink 7-1,and then remove heat sink 7-1 from panel 7-7.
29. Unscrew the screws on pcb 7-5, and then remove pcb 7-5.
30. Unscrew the screws on guiding set 6,and then remove guiding set 7-6 from pcb 7-5.
31. Remove battery from pcb 7-5.
32. Unscrew the screws on top crashworthy bridge 8-3,and then remove top crashworthy bridge 8-3 from panel 8-9.
33. Unscrew the screws on heat sink 8-1,and then remove heat sink 8-1 from panel 8-9.
34. Unscrew the screws on heat sink 8-2,and then remove heat sink 8-2 from panel 8-9.
35. Remove shielding finger 8-5 from front panel 8-4.
36. Remove film 8-6 from front panel 8-4.
37. Unscrew the screws on front panel 8-4,and then remove the front panel 8-4 from panel 8-9.
38. Unscrew the screws on pcb 8-8,and then remove pcb 8-8.
39. Unscrew the screws on guiding set 8-7,and then remove guiding set 8-7 from pcb 8-8.
40. Remove shielding finger 11-2 from front part 11-1.
41. Unscrew the screws on part 11-3,and then remove the part 11-3 from part 11-1.
42. Unscrew the screws on part 11-4,and then remove the part 11-4 from part 11-1.
43. Unscrew the screws on part 11-5,and then remove the part 11-5 from part 11-1.
44. Unscrew the screws on pcb 11-6, and then remove pcb 11-6.
45. Unscrew the screws on pcb 11-7, and then remove pcb 11-7.
46. Unscrew the screws on reinforce board 12-1,and then remove reinforce board 12-1 from fan frame 12-9.
47. Unscrew the screws on fan 12-2, and then remove fan 12-2 from fan frame 12-9.
48. Unscrew the screws on fan 12-3, and then remove fan 12-3 from fan frame 12-9.
49. Unscrew the screws on pcb 12-4, and then remove pcb 12-4.

50. Remove shielding finger 12-5 from fan frame 12-9.
51. Remove film 12-6 from fan frame 12-9.
52. Remove film 12-7 from fan frame 12-9.
53. Remove film 12-8 from fan frame 12-9.
54. Unscrew the screws on reinforce board 13-2,and then remove reinforce board 13-2 from fan frame 13-5.
55. Unscrew the screws on fan 13-3, and then remove fan 13-3 from fan frame 13-5.
56. Unscrew the screws on fan 13-1, and then remove fan 13-1 from fan frame 13-5.
57. Unscrew the screws on pcb 13-4, and then remove pcb 13-4.
58. Remove shielding finger 13-6 from fan frame 13-5.
59. Remove film 13-7 from fan frame 13-5.
60. Remove film 13-8 from fan frame 13-5.
61. Unscrew the screws on top crashworthy bridge 14-2,and then remove the top crashworthy bridge 14-2 from panel 14-9.
62. Unscrew the screws on heat sink 14-1,and then remove heat sink 14-1 from panel 14-9.
63. Unscrew the screws on pcb 14-6,and then remove pcb 14-6.
64. Remove shielding finger 14-5 from panel 14-9.
65. Remove film 14-4 from panel 14-9.
66. Remove wrench 14-3 from panel 14-9.
67. Unscrew the screws on part 14-7,and then remove part 14-7 from pcb 14-6.
68. Unscrew the screws on guiding set 14-8,and then remove guiding set 14-8 from pcb 14-6.
69. Remove shielding finger 15-2 from blank panel 15-1.
70. Remove film 15-3 from blank panel 15-1.

3.2 Optional Graphic. If the disassembly process is complex, insert a graphic illustration below to identify the items contained in the product that require selective treatment (with descriptions and arrows identifying locations).

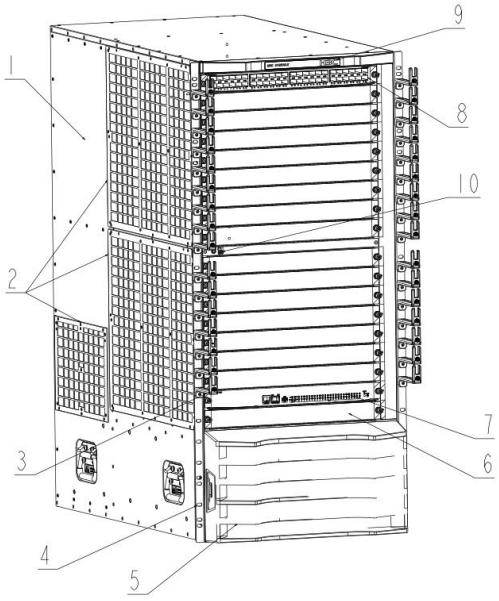

Figure 1 Treatments to the product（front view）

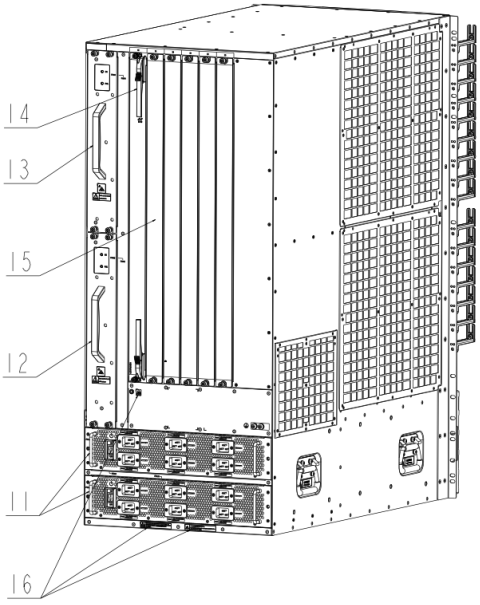

Figure 2 Treatments to the product (rear view)

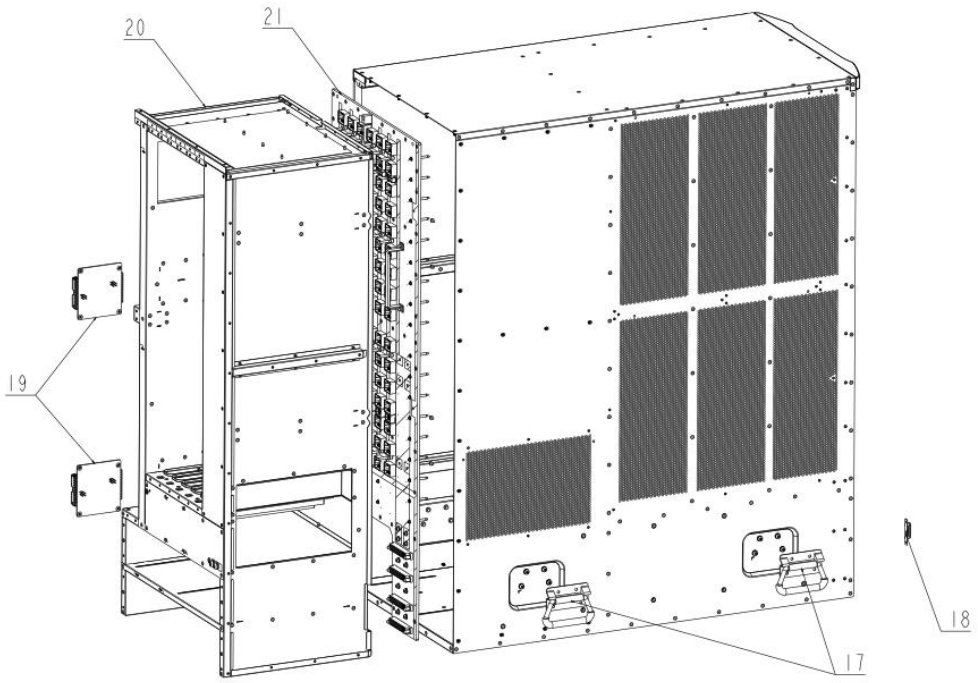

Figure 3 Treatments to the product (rear view)

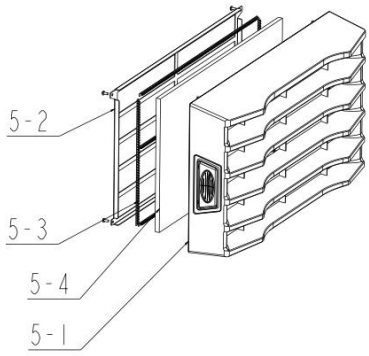

Figure 4 Treatments to bottom cover 5

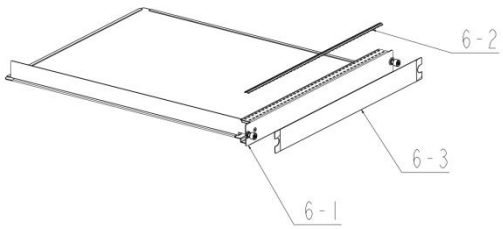

Figure 5 Treatments to blank panel 6

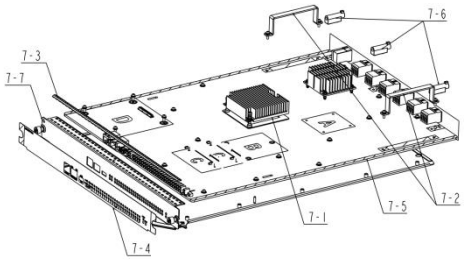

Figure 6 Treatments to main processing unit 7

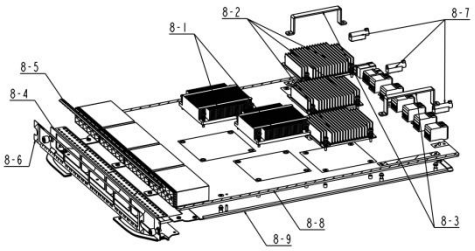

Figure 7 Treatments to line card board 8

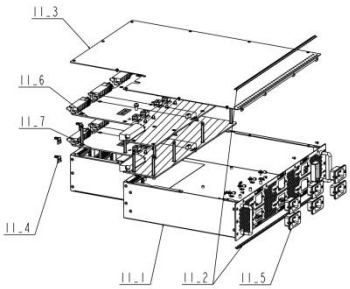

Figure 8 Treatments to power frame 11

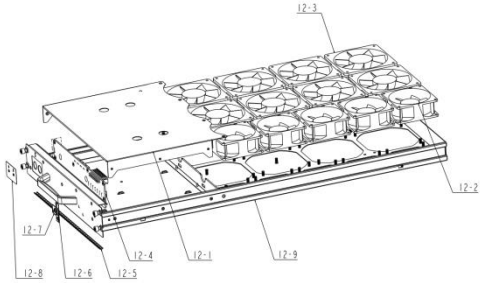

Figure 9 Treatments to fan frame 12

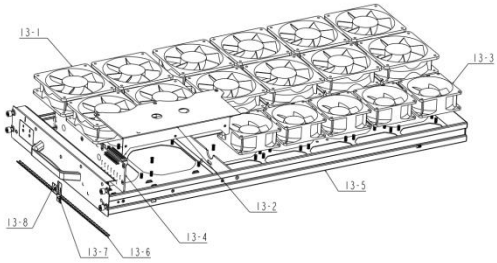

Figure 10 Treatments to fan frame 13

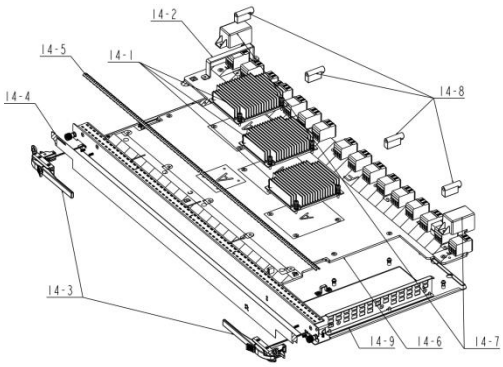

Figure 11 Treatments to net board panel 14

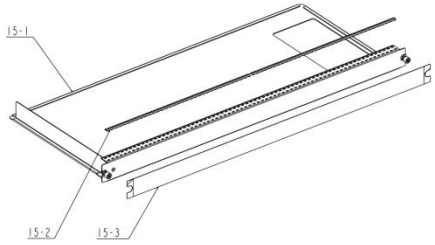

Figure 12 Treatments to net blank panel 15

3.3 Material of the facility built.

Facility	Components	Material	Weight(g)	Weight percentage	Selective treatment for materials and components	Details
1		Fe	20630	22.9%		Fe recycling
2						
	2-1	Fe	6	0.007%		Fe recycling
	2-2	Pla, Fe	351	0.39%		Pla&Fe recycling
	2-3	Fe	5	0.006%		Fe recycling
	2-4	Fe	219	0.243%		Fe recycling
	2-5	PA	4	0.004%		Pla recycling
	2-6	PU	5	0.006%		Pla recycling
	2-7	Fe	8	0.009%		Fe recycling
	2-8	Pla, Fe	1021	1.134%		Pla& Fe recycling
3		Al	853	0.948%		Al recycling
4		Fe	1720	1.911%		Fe recycling
5						
	5-1	PC+ABS	602	0.669%		Pla recycling
	5-2	Fe	219	0.243%		Fe recycling
	5-3	PA	4	0.004%		Pla recycling
	5-4	PU	5	0.006%		Pla recycling
6						
	6-1	Fe	2180	2.422%		Fe recycling
	6-2	Be-Cu	4.3	0.005%		Cu recycling
	6-3	PC	6.9	0.008%		Pla recycling
7						
	7-1	Al, Fe, Pla	162	0.18%		Al&Fe&Pla recycling
	7-2	Fe	48.0	0.053%		Fe recycling
	7-3	Be-Cu	1.7	0.002%		Cu recycling
	7-4	PC	4.0	0.004%		Pla recycling
	7-5	Complex PWB	1788.7	1.987%	The surface of PCB is greater than 10 square centimeters	
	7-6	Zn	48.0	0.053%		Zn recycling
	7-7	Fe	2057.6	2.286%		Fe recycling
8						
	8-1	Al	356	0.396%		Al recycling
	8-2	Al	474	0.527%		Al recycling
	8-3	Fe	48	0.053%		Fe recycling
	8-4	Fe	328	0.364%		Fe recycling
	8-5	Be-Cu	1.7	0.002%		Cu recycling
	8-6	PC	1.5	0.002%		Pla recycling
	8-7	Zn	48.0	0.053%		Zn recycling
	8-8	Complex PWB	3139.6	3.488%	The surface of PCB is greater than 10 square centimeters	
	8-9	Fe	1675	1.861%		Fe recycling
9		PC	0.9	0.001%		Pla recycling
10		PET	0.1	0.001%		Pla recycling
11						

	11-1	Fe	5604	6.227%		Fe recycling
	11-2	Be-Cu	3.2	0.003%		Cu recycling
	11-3	Fe	1636	1.818%		Fe recycling
	11-4	Al	6.96	0.008%		Al recycling
	11-5	Pla, Cu	60	0.067%		Pla&Cu recycling
	11-6	Complex PWB	750	0.833%	The surface of PCB is greater than 10 square centimeters	
	11-7	Complex PWB	750	0.833%	The surface of PCB is greater than 10 square centimeters	
12						
	12-1	Fe	827	0.919%		Fe recycling
	12-2	Pla, Fe	1225	1.361%		Pla&Fe recycling
	12-3	Pla, Fe	2640	2.933%		Pla&Fe recycling
	12-4	Complex PWB	462	0.513%	The surface lf PCB is greater than 10 square centimeters	
	12-5	Be-Cu	1.7	0.002%		Cu recycling
	12-6	PET	0.1	0.0001%		Pla recycling
	12-7	PET	0.2	0.0002%		Pla recycling
	12-8	PC	0.6	0.0007%		Pla recycling
	12-9	Fe	2659	2.954%		Fe recycling
13						
	13-1	Pla, Fe	3960	4.4%		Pla&Fe recycling
	13-2	Fe	271	0.301%		Fe recycling
	13-3	Pla, Fe	1225	1.361%		Pla&Fe recycling
	13-4	Complex PWB	462	0.513%	The surface lf PCB is greater than 10 square centimeters	
	13-5	Fe	2400	2.667%		Fe recycling
	13-6	Be-Cu	1.7	0.002%		Cu recycling
	13-7	PET	0.1	0.0001%		Pla recycling
	13-8	PET	0.2	0.0002%		Pla recycling
14						
	14-1	Al	516	0.573%		Al recycling
	14-2	Fe	24.3	0.027%		Fe recycling
	14-3	Zn	283	0.003%		Zn recycling
	14-4	PC	4.1	0.004%		Pla recycling
	14-5	Be-Cu	1.7	0.002%		Cu recycling
	14-6	Complex PWB	2076.9	2.307%		
	14-7	Fe	100	0.111%		Fe recycling
	14-8	Zn	64	0.071%		Zn recycling
	14-9	Fe	2190	2.433%		Fe recycling
15						
	15-1	Fe	2180	2.42%		Fe recycling
	15-2	Be-Cu	4.3	0.005%		Cu recycling
	15-3	PC	6.9	0.008%		Pla recycling
16		PET	0.6	0.0007%		Pla recycling
17		Fe, Pla	600	0.67%		Fe&Pla

						recycling
18		Fe	9.7	0.01%		Fe recycling
19		Complex PWB	800	0.889%	The surface lf PCB is greater than 10 square centimeters	
20		Fe	12842	14.269%		Fe recycling
21		Complex PWB	5000	5.55%	The surface lf PCB is greater than 10 square centimeters	
Cables						
		Pla, Cu	710	0.79%		Pla&Cu recycling

4. Revised record

Date	Version	Author	Modify content
2013.09.11	V0	Feng Junnan	Initial version