Product End-of-Life Disassembly Instructions

Product Category: Workstation 1U Chassis

Marketing Name / Model [List multiple models if applicable.]
HP ZCentral 4R Workstation/FCLSA-2001

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 Inc. products to remove components and materials requiring selective treatment, as defined by EU directive 2012/19/EC, Waste Electrical and Electronic Equipment (WEEE).

NOTE: Recyclers should sort plastic materials into resin streams for recycling based on the ISO 11469 plastic marking code on the plastic part. For any questions on plastic marking or identification of location of parts or components requiring selective treatment, please contact HP's Sustainability Contact.

1.0 Items Requiring Selective Treatment

1.1 Items listed below are classified as requiring selective treatment. An "X" in the list of components and parts indicates the product contains the component or part requiring selective treatment

Item Description	Components and parts requiring selective treatments	Quantity of items included in product
Printed Circuit Boards (PCB) or Printed Circuit Assemblies (PCA) with a surface greater than 10 sq cm	☒ Main board (MB) PCB*1 ☐ Solid state drive (SSD) PCB ☐ Wireless WAN module (WWAN) PCB ☐ Touch module PCB ☒ Power supply PCB*4 ☒ External Keyboard (KB)*1 ☒ External Mouse*1 ☒ Graphic card PCB*1 ☒ Memory PCB *1 ☒ FIO Module PCB*1 ☒ HDD PCB*1 ☒ Riser transfer card PCB*1	12
Batteries, excluding Li-Ion batteries. This includes standard alkaline, coin or button style batteries	☒ RTC/CMOS battery ☐ Others: _____	1
Li-Ion batteries. Includes all Li-Ion batteries if more than one is provided with the product (such as a detachable notebook keyboard battery, etc.)	Li-ion battery(ies) are attached to the product by: ☐ screws ☐ snaps ☐ adhesive ☐ other. Explain _____	0

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Item Description	Components and parts requiring selective treatments	Quantity of items included in product
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	☐ Panel LCD	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	☒ Power Supply capacitor(s) or condenser(s)	1
External electrical cables and cords	☒ AC power cord ☐ Audio, video or data cables ☐ Other: _____	1
Gas Discharge Lamps		0
Plastics containing Brominated Flame Retardants (not including external electrical cables and cords, 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
Components containing chlorofluorocarbons (CFC), hydrochlorofluorocarbons (HCFC) or hydrofluorocarbons (HFC), hydrocarbons (HC)		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 requirin selective treatment can be removed.

Tool Description	Tool Size (if applicable)
Screwdriver	Philip #1 or #2
Screwdriver	Torx T15
Screwdriver	Torx T10

Heatgun	N/A
Suction cup	N/A

3.0 Product Disassembly Process

3.1 List the basic steps that should typically be followed to remove components and materials requiring selective treatment including the required steps to remove the external enclosure.

1. Open access panel
2. Remove the cage from host up
3. Use PH1 screwdriver to loose the screws and remove the heatsink
4. Rotate the handle and open it up
5. Remove the CPU from the board
6. Remove memory from MB
7. Remove Graphic card from host up
8. Use PH1screwdriver to loose the screws
9. Press the Graphic card's latch and Remove it. The Graphic card area>10 sq cm
10. Use PH1 screwdriver to loose the screws and remove the PCIe card. See below PCIe Card PCB area>10 sq cm.
11. Use PH1 screwdriver to loose the screws and remove the cable
12. Use PH1 screwdriver to loose the screws and remove the iron
13. Use PH1 screwdriver to loose the screws and remove the iron.
14. Disconnect fan cable from MB.
15. Remove the fans
16. Disconnect cables from convert board
17. Use PH1 screwdriver to loose the screws and remove the iron
18. Press the button and remove the cable
19. Disconnect all cables from MB
20. Use PH1 screwdriver to loose the screws from board.
21. Remove MB from chassis
22. Remove the battery from the system board
23. Use PH1 screwdriver to loose the screws and remove the led flatiron
24. Press the bottom
25. Remove the HDD
26. Press the convert board latch
27. Remove convert board from the cage, See below PCB area>10 sq cm.
28. Press the PSU's latch on chassis and remove the PSU from chassis
29. Disconnect the speaker cable
30. Loose the 2 screws of speaker and remove it
31. Remove the front UI/Audio ASSY cable from hook
32. Disconnect front UI/Audio ASSY cable from PCA
33. Press the 4 latch and remove the front UI/Audio ASSY cable from FIO module
34. Loose the 4 screws of PCA and remove the PCA from FIO module. See below PCA area>10 sq cm.
35. Press the latch and remove the SD card holder from FIO module
36. Press the latch and remove the bezel from FIO module
37. Remove two small air ducts
38. Remove air duct
39. Remove rack hand brackets by screwdriver T15
40. Remove CABLE, GFX POWER, 8PIN, Z4 G4 RACK WS
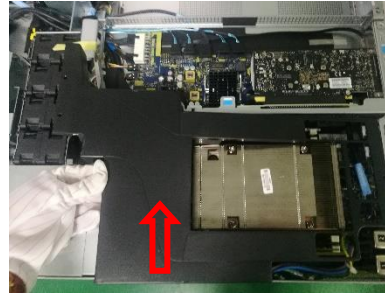41. Remove internal AC cable by drill to rivets

42. Remove metal bracket of internal AC cable
43. Remove 2.5"HDD rail
44. Remove EMI shield and metal bracket
45. Remove cable bracket by screwdriver T15
46. Remove M2 bracket by screwdriver T15
47. Remove USB Cable
48. Remove audio cable
49. Remove Fans
50. Press latch to Remove Cable, HDD PWR Signal-Bay0-1, Z4 G4 Rack WS
51. Remove HDD cable bracket by screwdriver T15
52. Remove HDD cable1-3 from metal bracket
53. Remove cable safety interlock Switch bracket by screwdriver T15
54. Remove Cable, Safety Interlock Switch, Z4 G4 Rack WS byScrewdriver Philip #1
55. Remove LED cable assembly by screwdriver T15
56. Remove LED Light pipe
57. Press the PSU's latch to remove PSU from Chassis
58. USE PH1 to unscrew five screws to loosen top cover
59. Slide top cover to unhook bottom chassis before top cover removal
60. Remove top cover from bottom chassis
61. Remove the Mylar from top cover by hand-pulling
62. Use PH1 to unscrew six screws to loosen PCBA from bottom chassis
63. Disconnect fan cable connector and LED cable connector from PCBA
64. Remove PCBA away from bottom chassis
65. Heat the solder of the Electrolytic Capacitors of greater than 2.5cm in diameter or height and Remove it
66. Remove the Mylar from bottom chassis by hand pulling
67. Use PH1 to unscrew two screws to loosen handle released module from bottom chassis
68. Use PH1 to unscrew on cross screw and tool#3 to unscrew one torx screw
69. Remove metal handle away from handle-released module
70. Slide handle-released module awany from bottom chassis.
71. No more treatment for bottom chassis and fan bracket
72. Identity PCBA > 10 cm2 for further treatment (DC-DC board: 33.79 cm2)
73. Identity PCBA > 10 cm2 for further treatment (AUX board:20.77 cm2).
74. Identity PCBA > 10 cm2 for further treatment (main board: 135 cm2).
75. Identity PCBA > 10 cm2 for further treatment (EMI board: 63.45 cm2).
76. Identity PCBA > 10 cm2 for further treatment (UP board: 13.64 cm2).
77. Identity electrolyte capacitor > 2.5 cm for further treatment (Length: 4 cm).

3.2 Location of components requiring selective treatment. The photos and/or graphics below identify the location of the parts or components requiring selective treatment within the main unit. For End-of-Life product disassembly instructions of external accessories including external power supply (EPS), external keyboard (KB) external mouse and external cables and cords, refer to the following URL: End-of-Life Product Disassembly Instructions (hp.com)

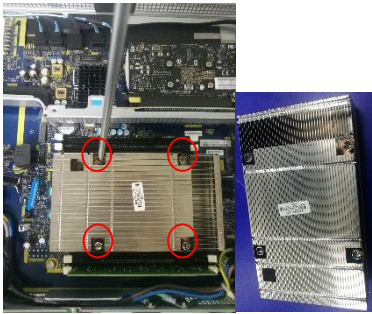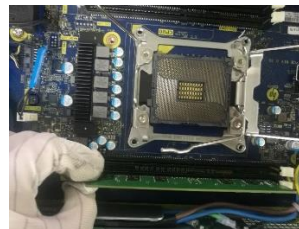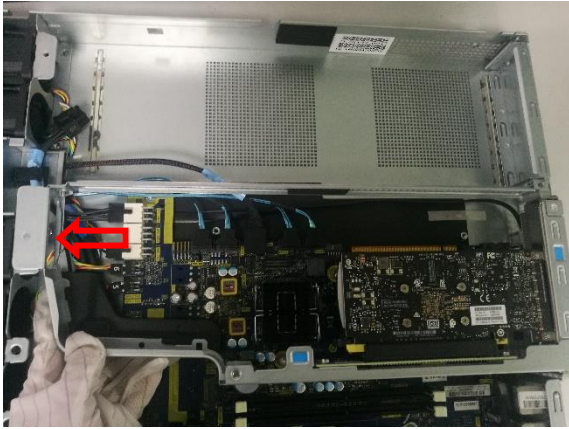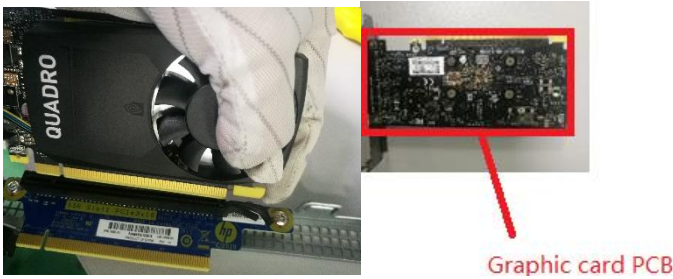| Step1 Open access panel	Step2 Remove the cage from host up.
Step3 Use PH1 screwdriver to loose the screws and remove the heatsink	Step4 Rotate the handle and open it up.
Step5 Remove the CPU from the board	Step6 Remove memory from MB.
	See below Memory PCB area>10 sq cm.

Step7 Remove Graphic card from host up 	**Step8** Use PH1screwdriver to loose the screws
Step9 Press the Graphic card's latch and Remove it. The Graphic card area>10 sq cm Graphic card PCB	**Step10** Use PH1 screwdriver to loose the screws and remove the Riser transfer card . See below the card PCB area>10 sq cm.
Step11 Use PH1 screwdriver to loose the screws and remove the cable 	**Step12** Use PH1 screwdriver to loose the screws and remove the iron
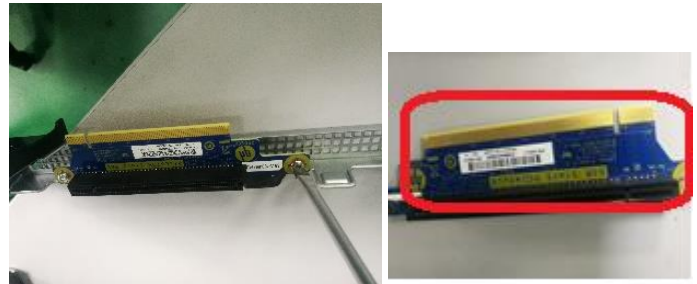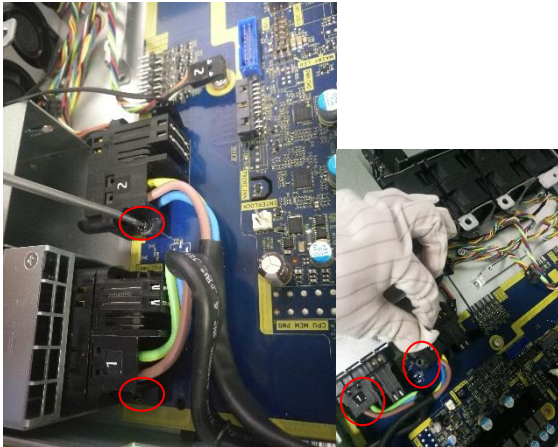
Step13 Use PH1 screwdriver to loose the screws and remove the iron.	**Step14** Disconnect fan cable from MB.
Step15 Remove the fans	**Step16** Disconnect cables from convert board.
Step17 Use PH1 screwdriver to loose the screws and remove the iron	**Step18** Press the button and remove the cable
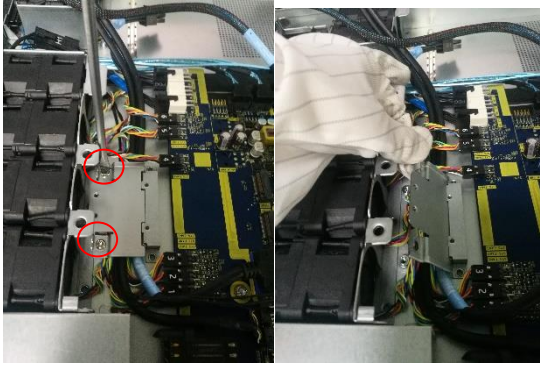
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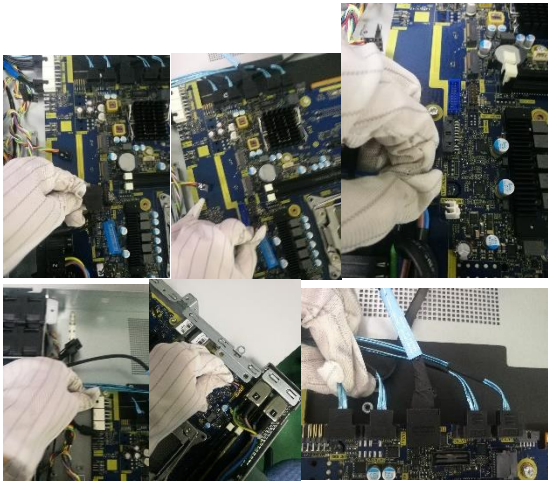
Step19 Disconnect all cables from MB	Step20 Use PH1 screwdriver to loose the screws from board.
Step21 Remove MB from chassis	Step22 Remove the battery from the system board
Step23 Use PH1 screwdriver to loose the screws and remove the led flatiron 	Step24 Press the bottom
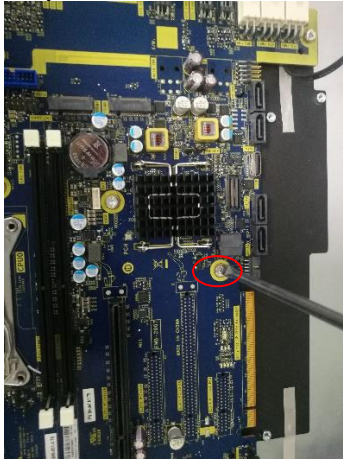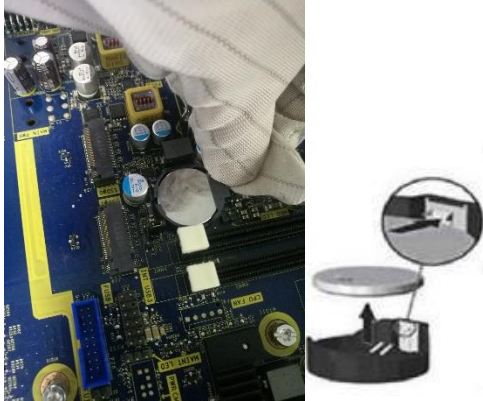
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Step25 Remove the HDD	Step26 Press the convert board latch

HDD PCB | |
Step27 Remove convert board from the cage, See below PCB area>10 sq cm.	Step28 Press the PSU's latch on chassis and remove the PSU from chassis
Figure29 Disconnect the speaker cable	Figure30 Loose the 2 screws of speaker and remove it
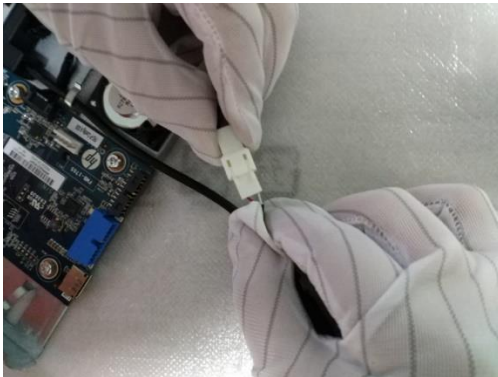
Figure31 Remove the front UI/Audio ASSY cable from hook 	Figure32 Disconnect front UI/Audio ASSY cable from PCA
Figure33 Press the 4 latch and remove the front UI/Audio ASSY cable from FIO module 	Figure34 Loose the 4 screws of PCA and remove the PCA from FIO module. See below PCA area>10 sq cm.
Figure35 Press the latch and remove the SD card holder from FIO module 	Figure36 Press the latch and remove the bezel from FIO module
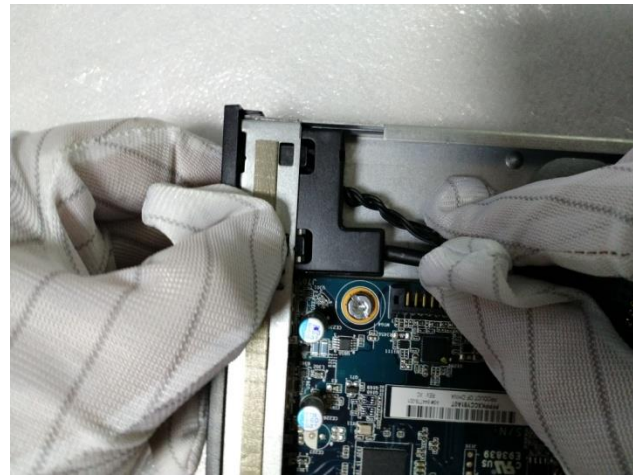
last updated May-2022

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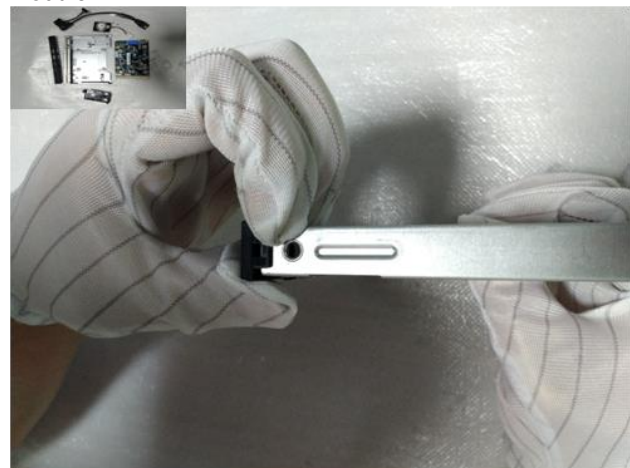
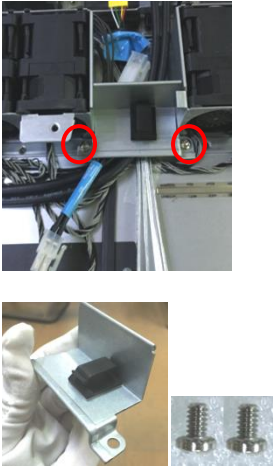|	
Step37 Remove two small air ducts 	Step38 Remove air duct
Step39 Remove rack hand brackets by screwdriver T15 	Step40 Remove CABLE, GFX POWER, 8PIN, Z4 G4 RACK WS.
Step41 Remove internal AC cable by drill to rivets 	Step42 Remove metal bracket of internal AC cable
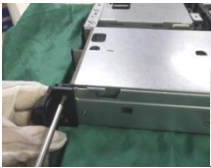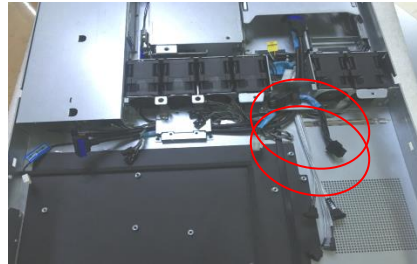
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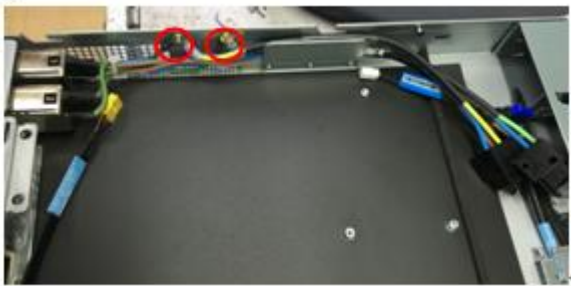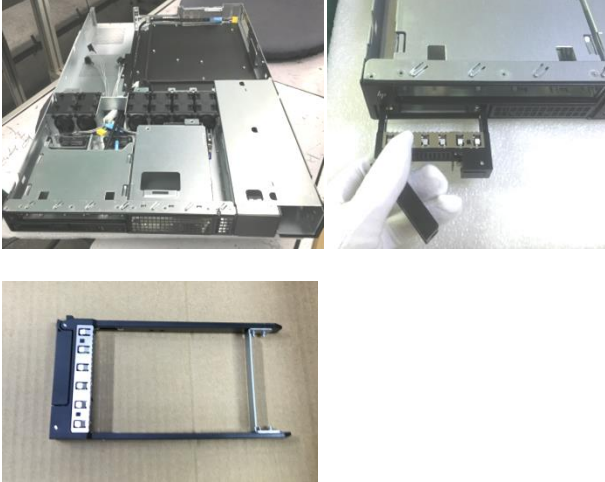
Step43 Remove 2.5"HDD rail	Step44 Remove EMI shield and metal bracket
Step45 Remove cable bracket by screwdriver T15	Step46 Remove M2 bracket by screwdriver T15
Step47 Remove USB Cable	Step48 Remove audio cable
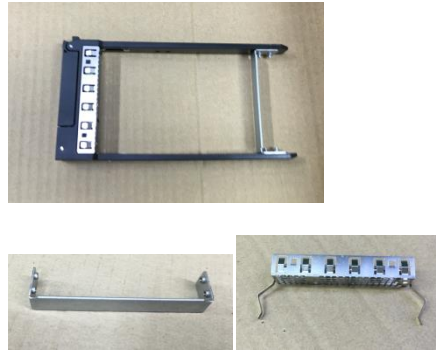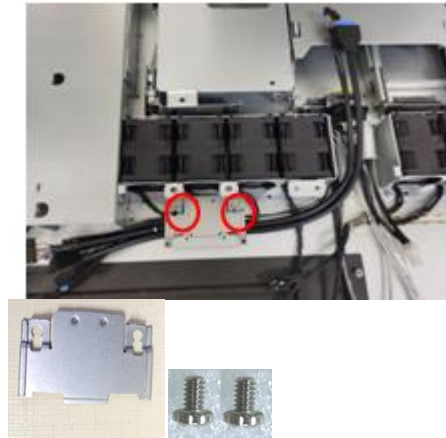
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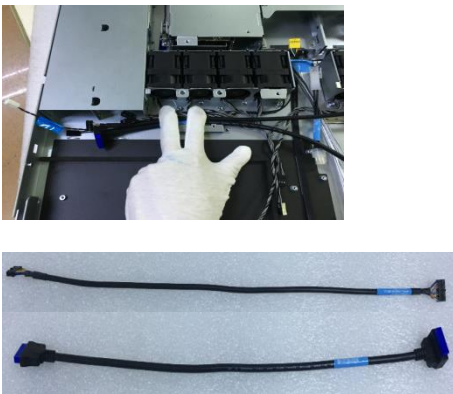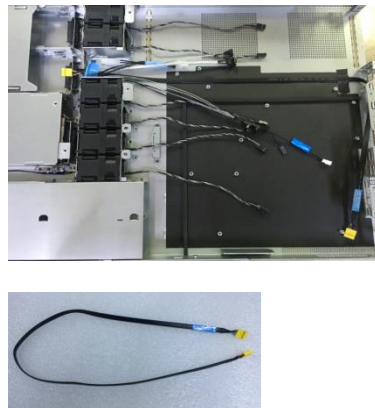
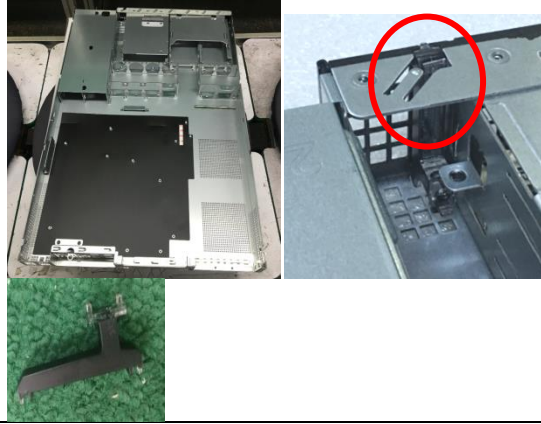| Step49 Remove Fans	Step50 Press latch to Remove Cable, HDD PWR Signal-Bay0-1, Z4 G4 Rack WS
Step51 Remove HDD cable bracket by screwdriver T15	Step52 Remove HDD cable1-3 from metal bracket
Step53 Remove cable safety interlock Switch bracket by screwdriver T15	Step54 Remove cable, Safety Interlock Switch, Z4 G4 Rack WS by Screwdriver Philip #1
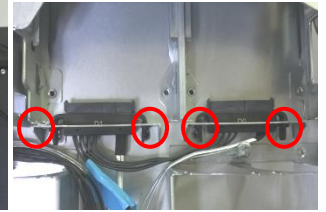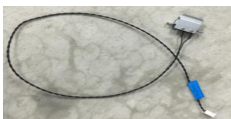
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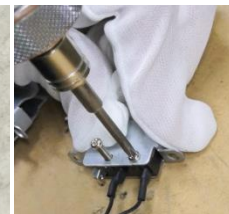
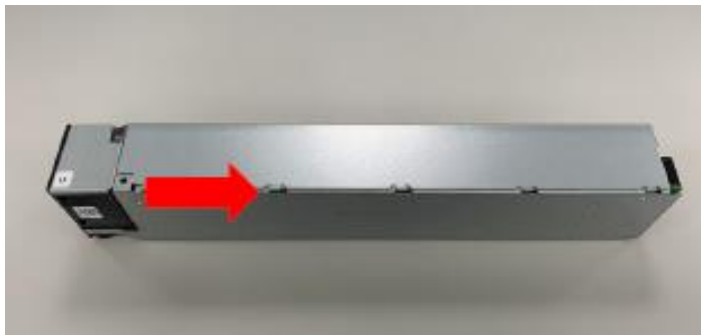|	
Step55 Remove LED cable assembly by screwdriver T15	Step56 Remove LED Light pipe
Step57 Press the PSU's latch to remove PSU from Chassis	Step58 USE PH1 to unscrew five screws to loosen top cover
Step59 Slide top cover to unhook bottom chassis before top cover removal	Step60 Remove top cover from bottom chassis

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| Step61 Remove the Mylar from top cover by hand-pulling	Step62 Use PH1 to unscrew six screws to loosen PCBA from bottom chassis.
Step63 Disconnect fan cable connector and LED cable connector from PCBA	Step64 Remove PCBA away from bottom chassis.
Step65 Heat the solder of the Electrolytic Capacitors of greater than 2.5cm in diameter or height and Remove it	Step66 Remove the Mylar from bottom chassis by hand pulling

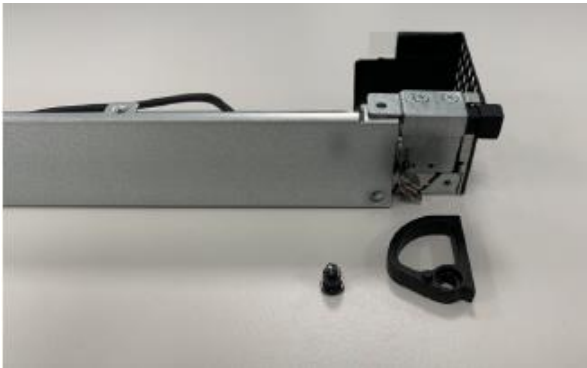HP Inc. instructions for this template are available at EL-MF877-01
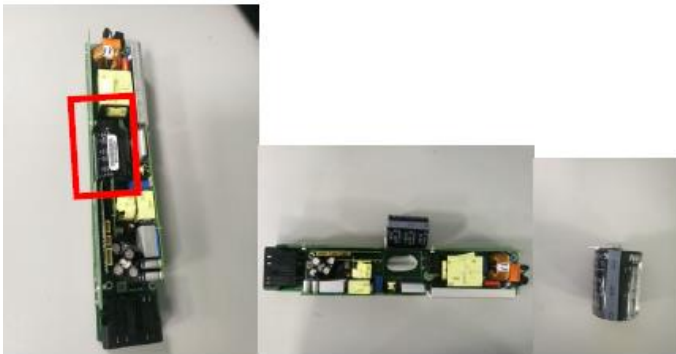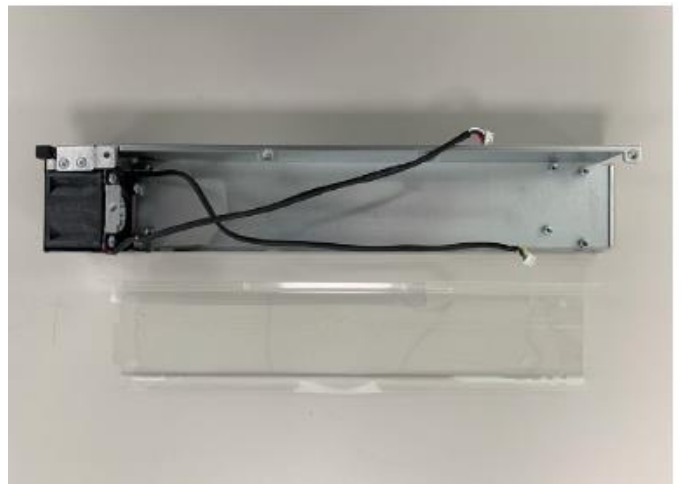
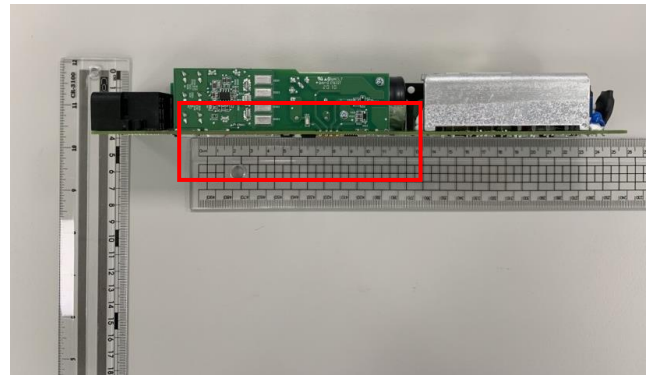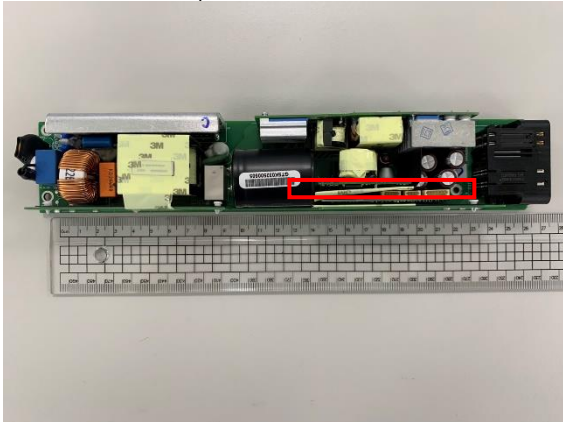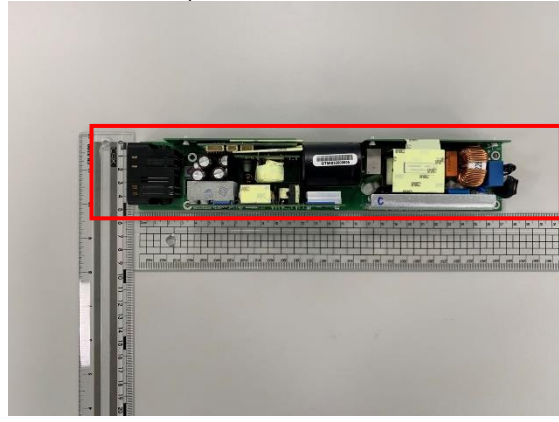|	
Step67 Use PH1 to unscrew two screws to loosen handle released module from bottom chassis	Step68 Use PH1 to unscrew on cross screw and tool#3 to unscrew one torx screw
Step69 Remove metal handle away from handle-released module	Step70 Slide handle-released module awany from bottom chassis.
Step71 No more treatment for bottom chassis and fan bracket	Step72 Identity PCBA > 10 cm2 for further treatment (DC-DC board: 33.79 cm2).

Template Revision **D**

last updated May-2022

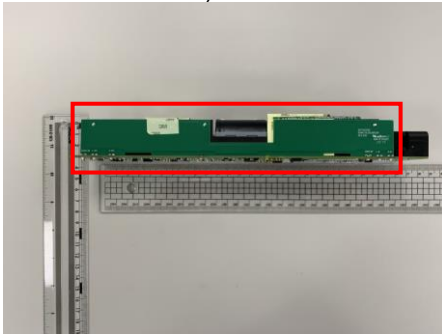HP Inc. instructions for this template are available at EL-MF877-01

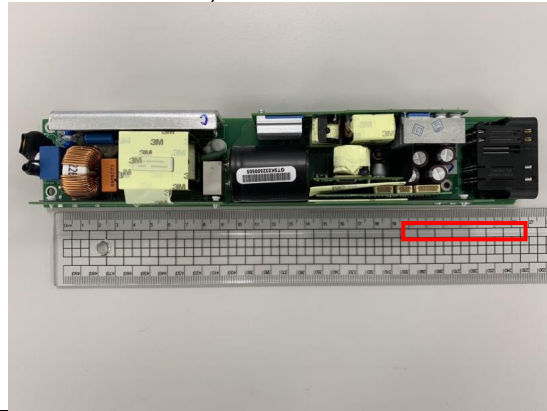| Step73 Identity PCBA > 10 cm² for further treatment (AUX board:20.77 cm²).	Step74 Identity PCBA > 10 cm² for further treatment (main board: 135 cm²).
Step75 Identity PCBA > 10 cm² for further treatment (EMI board: 63.45 cm²).	Step76 Identity PCBA > 10 cm² for further treatment (UP board: 13.64 cm²).
Step77 Identity electrolyte capacitor > 2.5 cm for further treatment (Length: 4 cm).	

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