Product End-of-Life Disassembly Instructions

Product Category: Storage Enclosures
Marketing Name / Model [List multiple models if applicable.]
HP/3PAR Drive Chassis 16-Disk (QL322A)
HP/3PAR Drive Chassis 16-Disk (QL243A)
Name / Model #3
Name / Model #4
Name / Model #5

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	18 to 26
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		10
External electrical cables and cords		2
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

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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)
Phillips Screwdriver	#1
Screwdriver	Slotted
Description #3	plier
Description #4	
Description #5	

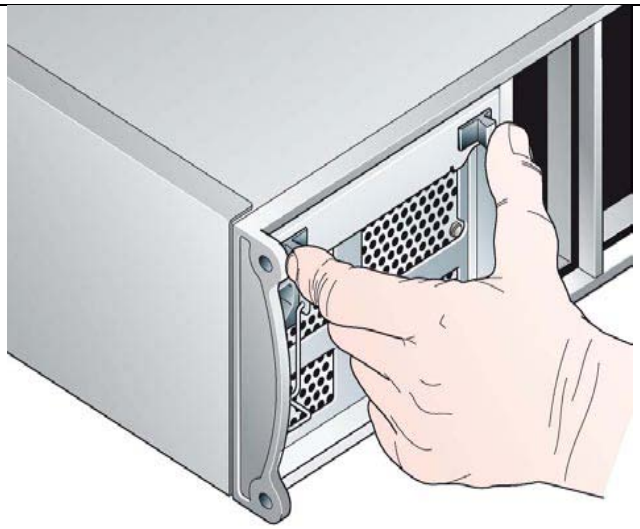
3.0 Product Disassembly Process

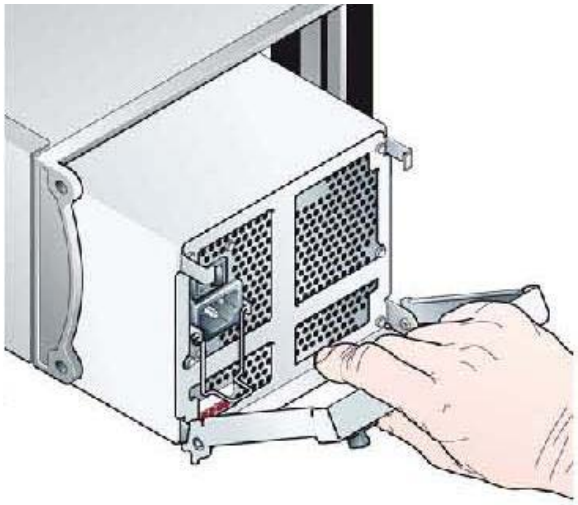
3.1 List the basic steps that should typically be followed to remove components and materials requiring selective treatment:

1. SBOD unit from the System
2. Remove the Power Supplies from Back Side
3. Remove the IO modules from the Back Side
4. Remove the Hard Drives from the Front Side
5. Remove the Control Panel from Back Side
6. Remove Center Plane from Chassis
7.
8.

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).

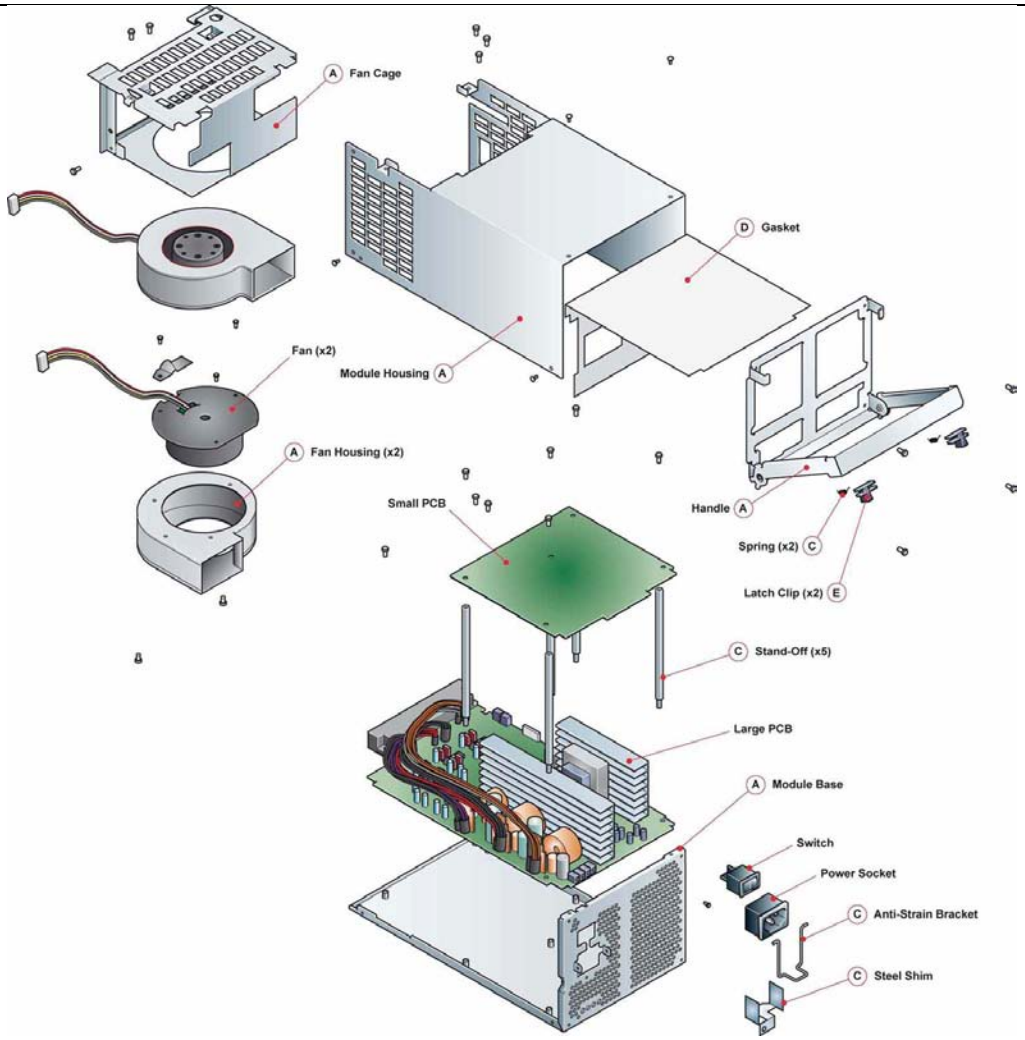
Disassembling SBOD Power Supplies (PS):
At the rear of the Drive chassis, grasp each latch between the thumb and forefinger of each hand. Squeeze thumb and forefinger together to release the latch. Pull the latches forward to cam the module out of the enclosure. Grip the latch handles and withdraw the module.





Use the following diagram for power supply disassembly:
AC PSU:

PSG instructions for this template are available at EL-MF877-01



Item Material
A Sheet Metal
B Plastic
C Steel
D Polycarbonate
E ABS

Item	Materials	Hazards
Power Socket	Polycarbonate, steel...	
Switch	Polycarbonate, steel...	
Fan	Steeel, iron, plastic, PCB, copper	Lead
Large PCB	Copper, aluminium alloy...	Lead
Small PCB	Copper, aluminium alloy...	Lead

Remove Chassis cover screws.

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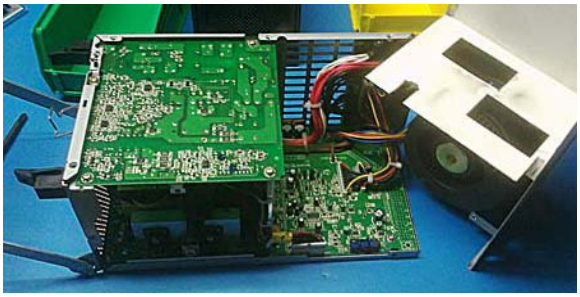
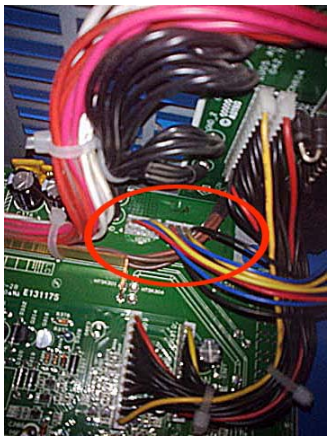
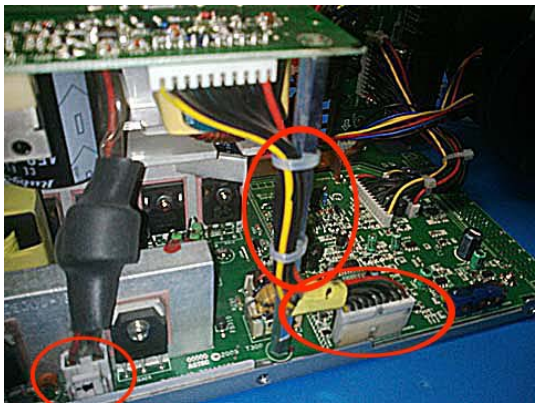
Disconnect Fan connectors.



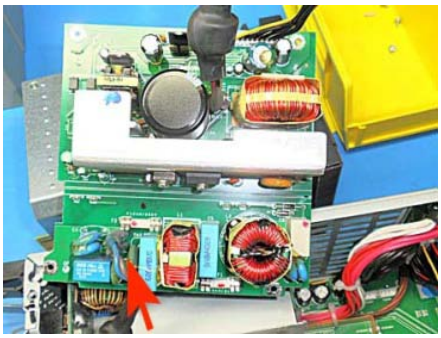


Remove 4 screws from the small PCBA.

Cut the tie wraps and disconnect from large PCBA.



Disconnect from switch PCBA.



Remove Support Tray.

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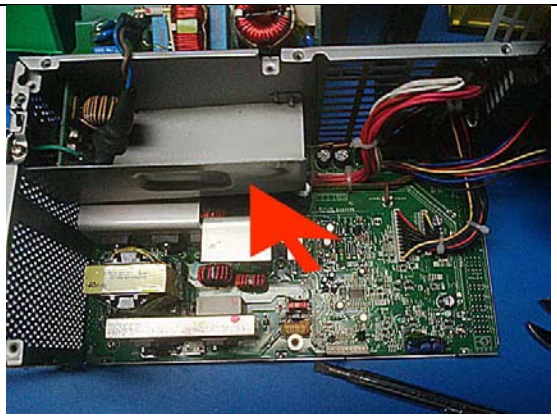
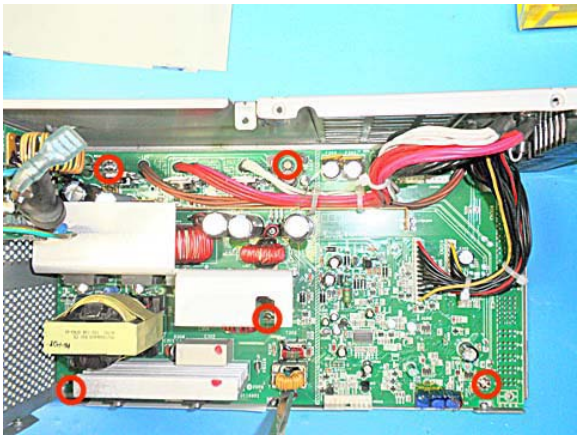


Remove the large capacitor from the Small PCBA.

Remove the Connector PCBA

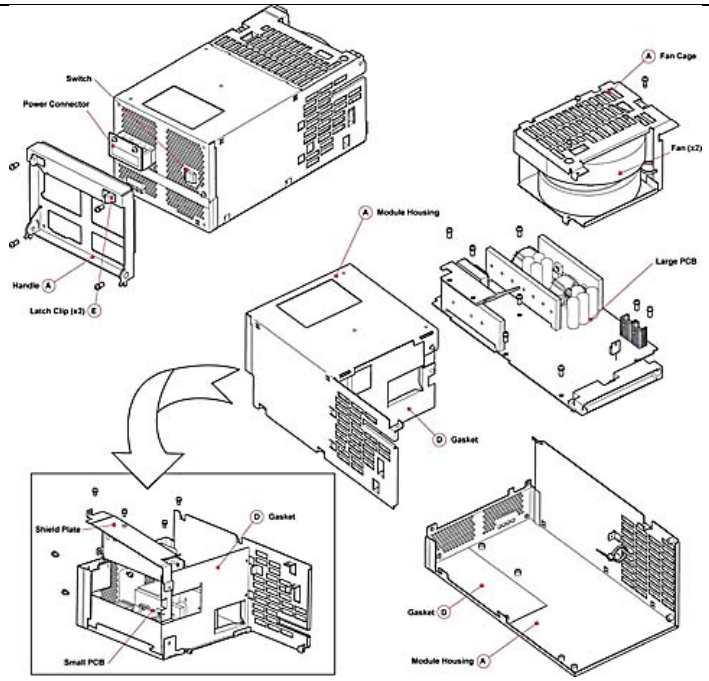
Remove standoffs and the large PCBA screws.



Remove the 4 caps from the main PCBA.

DC PSU:

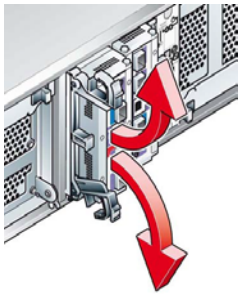
Remove the power supply from the drive chassis using the same method as AC PSU:



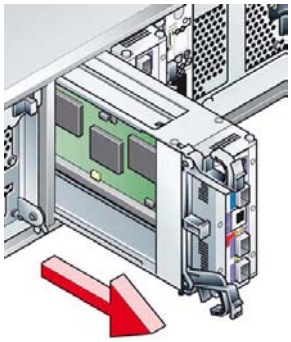
Use the same legend as AC PSU.

Disassembling SBOD IO Modules:

At the rear of the drive chassis, grasp each latch between the thumb and forefinger of each hand. Squeeze thumb and forefinger together to release the latch. Pull the latches forward to cam the module out of the enclosure.

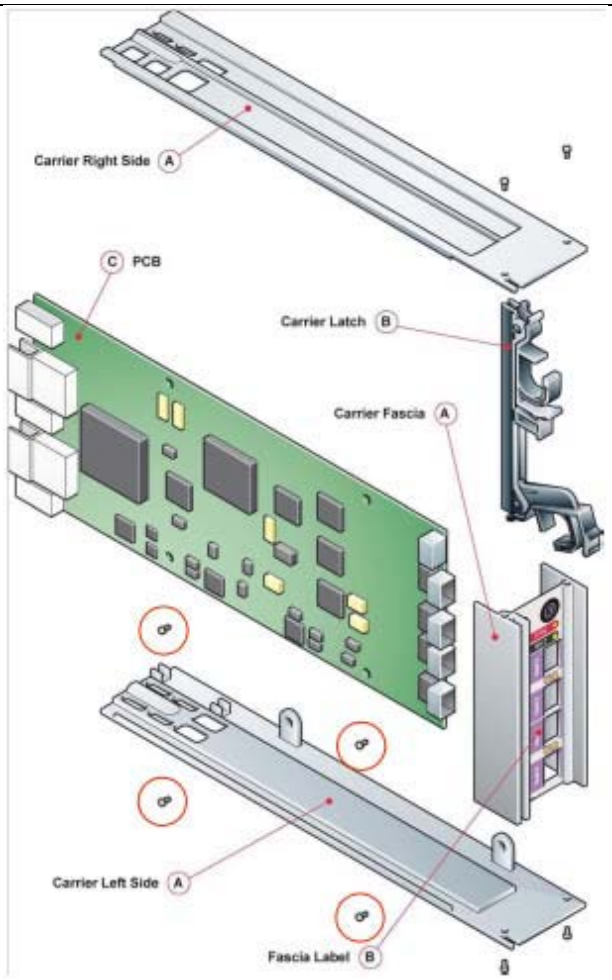


Grip the latch handles and withdraw the module.



Item	Material	Hazards
A	Aluminium Alloy	
B	Polycarbonate	
C	PCB	Lead
All Screws, nuts and washers are zinc plated steel		

Remove PCBA by removing the four screws from the bottom of the IOM.



Disassembling Hard Drive Modules:	
Release the carrier handle by pressing the latch in the handle towards the right 	Withdraw the module from the drive bay. 
To remove hard drive: remove the 2 screws from the rear PCBA (if present) and remove the 4 screws from the bottom.	

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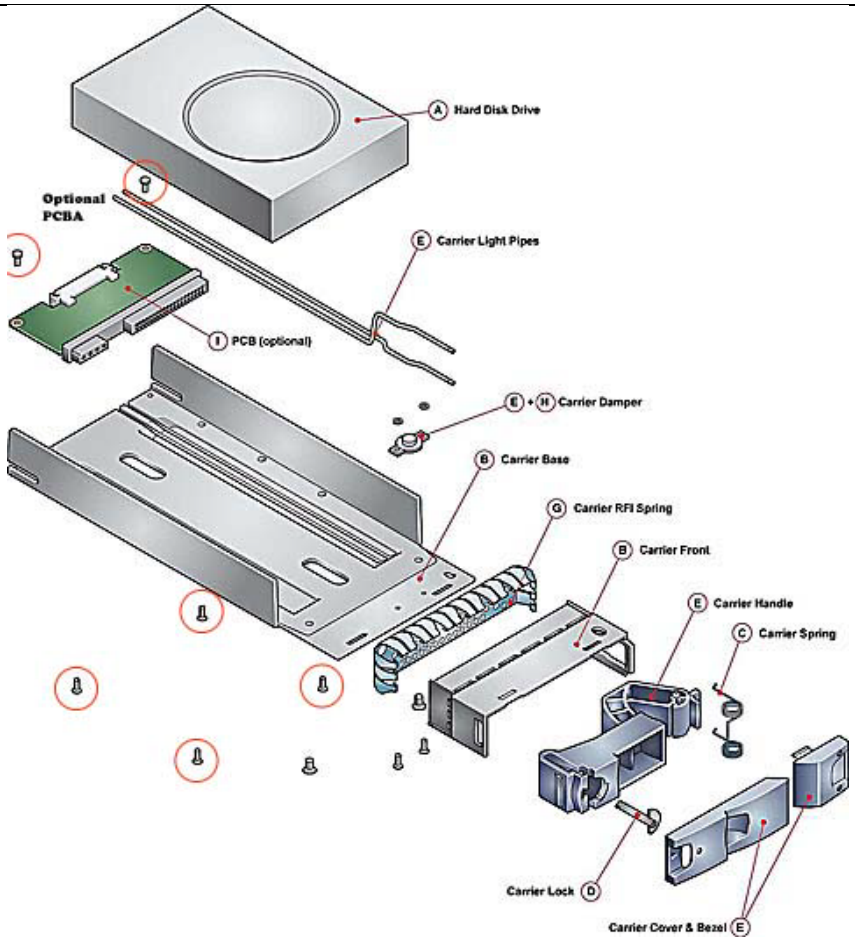
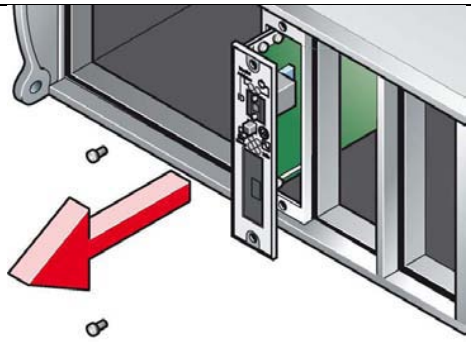
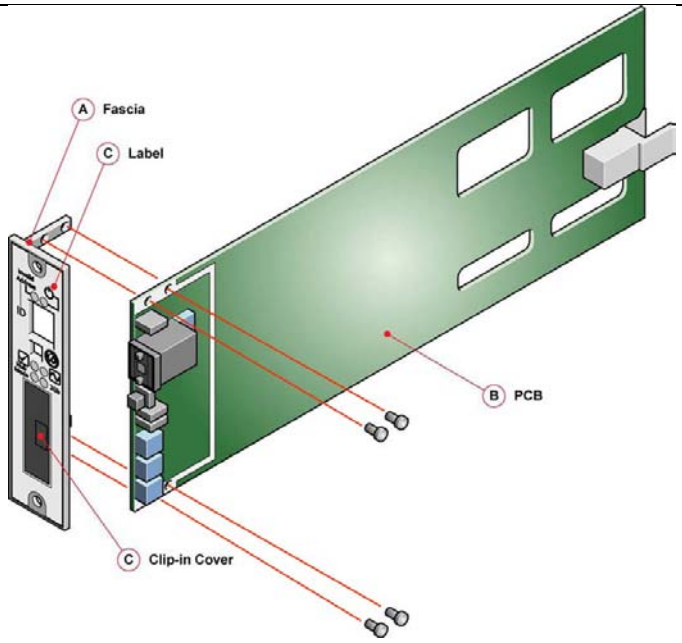


Item	Material	Hazards
A	Hard Disk Drive	
B	Aluminium alloy A380	
C	Plain spring steel	
D	Zinc alloy 3	
E	Polycarbonate	
G	Beryllium copper 190 alloy XHM. ASTM B194 1996	Lead
H	Silicon Grease	
I	PCB	Lead
All Screws, nuts and washers are zinc plated steel		

Disassembling Control Panel:	
At the rear of the drive chassis, remove the two screws shown and pull out the PCBA.	Remove the four screws from the PCBA to bracket assy to remove the PCBA.



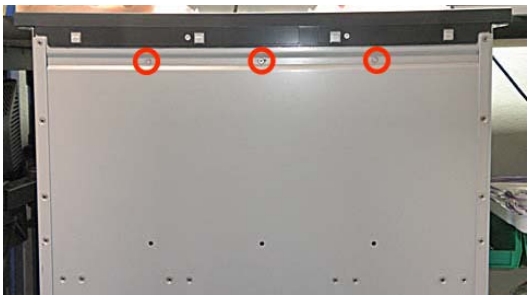
Item	Material	Hazards
A	Aluminium Alloy 380	
B	PCB	Lead
C	Polycarbonate	
All Screws, nuts and washers are zinc plated steel		



Disassembling Center Plane (aka Mid-Plane) PCBA:

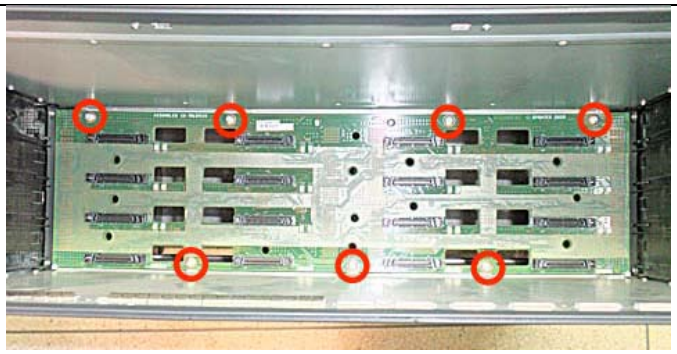
Remove the EMI fingers from all of the drive bays.

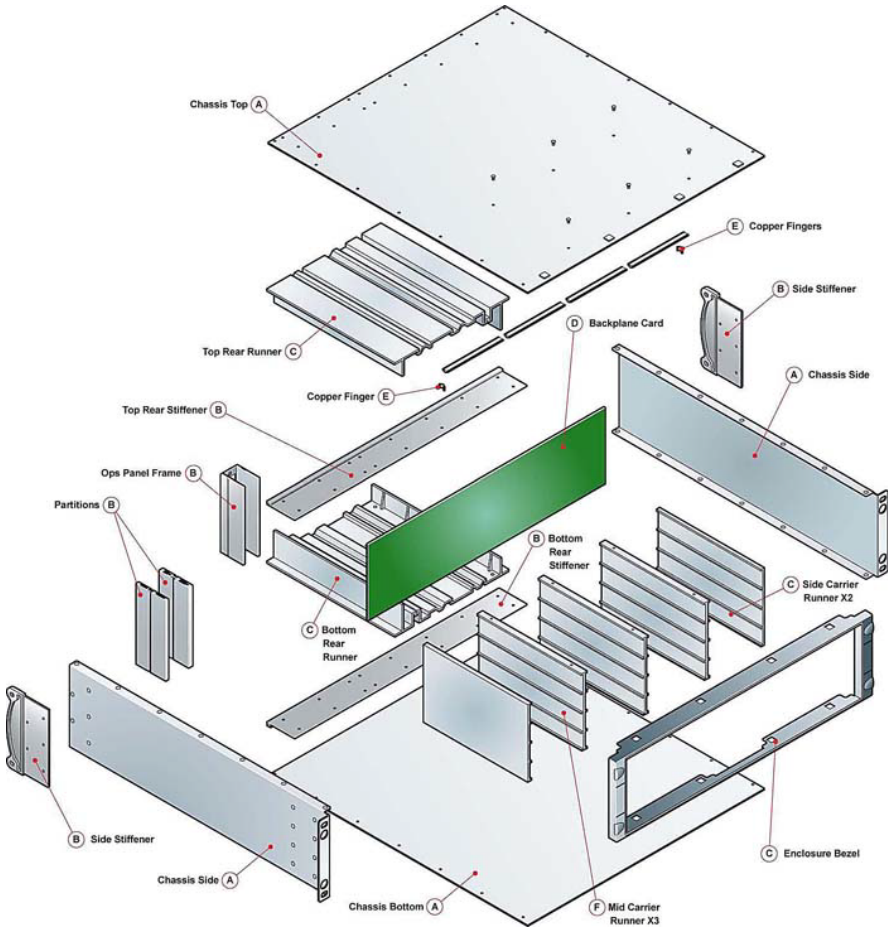
Remove one drive wall screw from each drive wall from the top, and one screw from each drive wall the bottom.



Remove the three mid drive-walls.

Remove the midplane screws to remove the midplane.





Item	Material	Hazards
A	ZINTEC A/F	
B	Aluminium	
C	Polycarbonate	
D	PCB	Lead
E	Tin-lead plate Copper ECP 0613/08 bright tin plate	Lead
F	Polycarbonate with aluminium inserts	
	Gaskets	
All Screws, nuts and washers are zinc plated steel		

PSG instructions for this template are available at EL-MF877-01